OFFICIAL GAZETTE

UNITED STATES PATENT OFFICE

MAY & JUNE
VOL. 706 & 707

1956

MICRO PHOTO INC
CLEVELAND 3 OHIO

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
May 1, 1956 Volume 706 Number 1

PATENTS

NOTICES

Adjudicated Patent

(C. A. Ill.) Lewis Patent No. 2,208,374 (178—7.5), for a television receiving system. Claims 1, 2, and 4 *Held* valid but not infringed. *Lewis* v. *Avco Manufacturing Corporation et al.*, 228 F.2d 919; 108 USPQ 147.

Disclaimers

2,650,156.—*Eric Shelton-Jones*, London, England. SURFACE FINISHING OF ALUMINUM AND ITS ALLOYS. Patent dated Aug. 25, 1953. Disclaimer filed Mar. 27, 1956, by the assignee, *Aluminum Company of America*.

Hereby disclaims the terminal part of the term of said patent subsequent to Jan. 3, 1956.

2,650,157.—*William C. Cochran*, New Kensington, Pa. BRIGHTENING ALUMINUM. Patent dated Aug. 25, 1953. Disclaimer filed Mar. 27, 1956, by the assignee, *Aluminum Company of America*.

Hereby disclaims the terminal part of the term of said patent subsequent to Jan. 3, 1956.

Patents Available for Licensing or Sale

2,699,050. Dustpan With Control Handle. George Mackay. Correspondence to William H. Atkinson, 1304–5 Humboldt Bank Building, 785 Market St., San Francisco 3, Calif.

2,724,125. Device for Locking Toilet Seat and Seat Cover to a Toilet Bowl. Henry L. Williams, Box 95, Gardiner, Oreg.

2,724,221. Fish Hook Sharpener. Loren E. Shaw, 400 Raywood Ave., Montebello, Calif.

2,736,253. Synchronized Control for Tractor Cultivators. James T. M. Holt, 1209 E. Hillsboro, Tyler, Tex.

2,738,031. Watchmaker's Oil Cup. William D. Pyle, 1105 Church St., Indianapolis, Ind.

2,738,621. Flower Pot (Side Watering, With Built-in Reservoir). Hermann R. Abbrecht, 822 Suffield Road, Birmingham, Mich.

2,738,767. Combined Currycomb and Grooming Device for Removing Hair From Animals. Carl Rosenquist, 558 North Main St., Randolph, Mass.

General Electric Company is prepared to grant non-exclusive licenses under the following 33 patents, on reasonable terms to domestic manufacturers.

Applications for license under the following 8 patents may be addressed to: General Electric Company, Patent Counsel, Chemical and Metallurgical Division, 1 River Road, Schenectady 5, N. Y.

2,195,122. Stabilization of Polyvinyl Formal.

2,216,020. Extrudable Polyvinylal Resinous Composition.

2,285,418. Condensation Products of a Urea, an Aliphatic Aldehyde and a Chlorinated Acetamide.

2,297,290. Synthetic Rubberlike Composition.

2,469,879. Preparation of Boron Compounds.

2,579,329. Trimethylol Phenol Compound and Derivatives Thereof.

2,628,178. Oxygenated Polymerizable Acrylic Acid Type Esters and Methods of Preparing and Polymerizing the Same.

2,717,235. Method of Preparing Sulfur Hexafluoride.

Applications for license under the following 25 patents may be addressed to: General Electric Company, Appliance and Television Receiver Division, Appliance Park, Louisville 1, Ky.

Re. 22,307. Washing Machine.

2,681,520. Latch and Release Device.

2,697,558. Waste Disposal Apparatus With Secondary Waste Reducer.

2,704,063. Tilting Backsplash Structure for Ranges.

2,711,503. Single Phase Motor Control Relay.

2,720,953. Drive Mechanism for Automatic Washing Machine and the Like.

2,720,955. Centrifugally Operated Clutch for Washing Machines.

2,721,026. Blade Seal for Rotary Pump.

2,721,029. Sound Damping Arrangement.

2,721,248. Tube Welder.

2,721,280. Electric Driving Means.

2,721,451. Drain Pan.

2,724,243. Freezing Trays.

2,724,244. Freezing Tray.

2,724,247. Multi-Purpose Air Conditioner.

2,724,753. Bimetal Thermostatic Switch.

2,725,723. Automatic Refrigerator Control.

2,728,197. Defrosting Control for Refrigerating System.

2,728,199. Secondary System for Fresh Food Door Compartment.

2,728,203. Refrigerator Having a Freezer Compartment in the Door.

2,728,428. Automatic Transmission and Brake for Clothes Washer and the Like.

2,728,481. Clothes Drier.

2,728,883. Motor Protection Device.

2,729,778. Motor Protection Device.

2,729,963. Clothes Wringer Release Mechanism.

New Applications Received During March 1956

Patents	6,583
Designs	445
Plants	3
Reissues	19
Total	7,050

Issue

Patents	808—No.	2,743,442 to No.	2,744,249, incl.
Designs	56—No.	177,548 to No.	177,603, incl.
Plants	3—No.	1,472 to No.	1,474, incl.
Reissues	2—No.	24,146 to No.	24,147, incl.
Total	869		

CONDITION OF PATENT APPLICATIONS AS OF MARCH 30, 1956

Total number of pending applications (excluding Designs)	219,645
Total number of pending Design applications	6,977
Total number of applications awaiting action (excluding Designs)	123,900
Total number of Design applications awaiting action	2,491
Date of oldest new application	Nov. 23, 1954
Date of oldest amended application	Nov. 6, 1953

ROSA, M. C., Director, Patent Examining Operation

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 44, 46, 48, 51, 54, 69, 70
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 10, 18, 22, 28, 45, 47.
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE.	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	3-7-55	6-14-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	6-17-55	1-13-55
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	7-13-55 6-10-55	3-29-54 8-6-54
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths		
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	6-21-55	12-10-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic Amides, Amines, General Organic Processes	5-18-55 7-6-55	6-9-54 3-4-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	2-24-55	6-1-54
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	6-13-55	6-1-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	12-17-54	1-20-54
10. (VI) BOYD, S., Firearms; Ordnance; Ammunition; Explosive Charge Making		
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	7-13-55 4-4-55	9-8-54 11-17-53
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls		
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	3-23-55	2-10-54
14. (III) MANIAN, J. C. (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	3-11-55 7-1-55	4-7-54 4-7-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	5-16-55	2-2-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders		
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	4-27-55	7-19-54
18. (VI) BLUM, A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	2-15-55 6-3-55	5-14-54 7-8-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners		
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	6-7-55 7-5-55	5-20-54 4-20-54
21. (III) MADER, R. C., Textiles		
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	6-17-55 11-23-54	7-12-54 11-6-53
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education		
24. (III) DRACOPOULOS, P. T. (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	5-10-55	12-2-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	7-1-55	7-2-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	7-15-55 7-6-55	1-3-55 10-8-54
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making		
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Coupilngs; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	5-26-55	8-24-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	4-12-55	1-3-55
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	9-19-55	9-13-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	4-21-55	10-26-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	6-17-55	12-3-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	7-13-55	3-9-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	6-10-55	3-8-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	6-6-55	10-20-54
36. (V) McFADYEN, A. D., Measuring and Testing	4-7-55	1-31-55
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	6-9-55	10-6-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g., Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	7-1-55	11-1-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	7-25-55	5-11-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	7-1-55	1-3-55
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	4-1-55	4-14-54
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	1-10-55	7-19-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	5-18-55	7-15-54
44. (II) EVANS, N. H., Antennas; Automatic Pilots; Directive Radio Systems; Mass Spectrometers; Nuclear Batteries; Nuclear Resonant Devices; Neutron Detecting and Measuring; Radar; Sonar; Torpedoes	1-3-55	1-28-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	6-14-55	1-6-55
46. (II) WILES, W. G., Actinide Series (e. g., fissionable) Compounds; Sintered Metal Stock; Explosives; Power Plants (part); Metallurgy (part); Blasting; Surgery (part); Radioactive Medicines; Irradiation Chemistry; Carbon Chemistry (part)	3-10-55 7-13-55	8-20-54 12-6-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles		
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	3-10-55	4-12-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	5-2-55	10-1-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	6-20-55	4-15-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	6-24-55	4-2-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	5-11-55	7-15-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	7-15-55	12-2-54
54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	4-25-55	4-30-54
55. (VII) KLINE, J. R., Surgery; Dentistry; Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	3-11-55	3-24-54
56. (I) KEELY, J. E. (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	7-1-55	12-20-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	10-11-55	8-11-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	7-1-55	4-5-54
59. (I) HENKIN, B. (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	5-19-55	5-19-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	6-10-55	1-3-55
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	6-7-55	10-1-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	6-10-55	7-6-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	6-29-55	4-26-54
66. (V) LISANN, I. (BUCHLER, M., acting), Geometric Instruments; Automatic Weighing Scales; Acoustics	5-16-55	4-6-54
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	5-10-55	2-28-55
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	5-16-55	11-27-53
70. (II) BREWRINK, J. L., Security laws administration.	6-1-55	1-11-55
CLASS. DIVS. I (VII) LANHAM, B. E., Paper Making	7-1-55	2-2-55
CLASS. DIVS. II (II) LADY, J. E., Oscillators; Amplifiers	8-29-55	1-31-55
CLASS. DIVS. III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	6-24-55	12-27-54
CLASS. DIVS. IV (VI) SMITH (Mrs.), M. P., Harrows; Plows; Earth Rollers	7-1-55	6-2-55
CLASS. DIVS. V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	8-18-55	9-22-55
DESIGNS (III) A—BREHM, G. L., Industrial Arts	8-5-55	9-12-55
DESIGNS (III) B—GRAY, M. A., Household, Personal and Fine Arts		

The following divisions have been abolished: 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during May 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1953*.

Patents ..... Numbers 2,156,257 to 2,160,804, inclusive

DECISIONS IN PATENT AND TRADEMARK CASES

Commissioner's Decision

IN RE APPLICATION FILED JANUARY 20, 1956

PRACTICE—RULE 52—PAPERS IN NON-PERMANENT INK.

Held that, if papers in non-permanent ink are filed, they should be accepted conditionally, subject to the prompt submission of a duplicate in permanent ink.

CROCKER, *Assistant Commissioner:*

This is a reference by the Application Branch for instructions as to whether an associate power of attorney accompanying the application papers should be refused acceptance under Rule 52(a), for the reason that it is not written or printed in permanent ink. The referral states that the paper is in "ditto," that the ink used in that duplicating process is non-permanent, and that the instant case is one of a series in which similar powers of attorney have been presented.

Rule 52(a) provides that "All papers which are to become a part of the permanent records of the Patent Office must be legibly written or printed in permanent ink." By order or rule, this requirement has been in effect for at least 75 years. Application papers and amendments written in ink which did not successfully stand the tests applied to determine permanency have in the past been refused admission as parts of the permanent records. *Ex parte Ritter*, 1891 C. D. 242; *Ex parte Blaubach*, 1898 C. D. 193; *Ex parte Burns*, 1902 C. D. 362; *Ex parte Webster*, 1902 C. D. 456.

While the permanency requirement of the rule is no less important today than it was when first made, the present practice is less rigid in some respects. Section 714.07 of the Manual of Patent Examining Procedure states that, if an amendment in other than permanent ink is filed, it is entered, but a permanent copy is required to be filed. It would appear that the reasons warranting relaxation with respect to amendments are equally applicable to other papers to form a part of the permanent records of this Office. However, the paper in non-permanent ink should be accepted, subject to the prompt submission of a duplicate in permanent ink. It is not intended by so ruling that the requirement of Rule 52 should be considered as waived in all cases, for if it should be found that the files of this Office are being cluttered with too many papers in non-permanent ink, it may become necessary to revert to the prior practice referred to above. In this connection it should be noted that Federal specifications for ink intended for the permanent records of the Government were promulgated by the Federal Specifications Board, and that these specifications (TT–I–521) describe various tests for determining whether the ink will be faded by the action of light or chemicals. No paper written in ink which fails to meet those specifications should be considered as acceptable under Rule 52(a).

Accordingly, the Application Branch is authorized to accept conditionally the associate power of attorney mentioned in the referral, subject to the prompt submission of a duplicate in permanent ink.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

2,126,364, A. E. Apel, et al., Boat, **filed** Dec. 9, 1953, D. C., W. D. Mo. (Kansas City), Doc. 8877, *Arno A. Apel* v. *Sid Street, Jr. and Sid Street Motor Co., Inc.* Judgment for plaintiff against defendant Sid Street, Jr.; judgment favor defendant Sid Street Motor Co., Inc. (notice Mar. 21, 1956). Same, **filed** Mar. 26, 1956, D. C. N. J. (Camden), Doc. 260/56, *Arno A. Apel* v. *Richard M. Sooy.*

2,303,639, E. K. Smith, Vacuum tube construction; **2,489,937**, same, Cathode structure for gas tubes; **2,489,938**, same, Hot cathode grid control gas tube, **filed** Aug. 11, 1954, D. C., N. D. Ill. (Chicago), Doc. 54c1161, *Electrons, Inc.* v. *Taylor Tubes, Inc.* Consent judgment: patents held valid and infringed; injunction issued Mar. 15, 1956.

2,278,383, P. Rosenblatt, Display device, **appeal** filed Dec. 12, 1955, C. C. A., 2nd Cir., Doc. 23915, *Alb, Inc.* v. *Noma Electric Corp. et al.* Judgment of District Court affirmed Mar. 26, 1956.

2,307,726, D. M. Holstein, Card holder, **filed** May 19, 1954, D. C., S. D. N. Y., Doc. 93/171, *Syracuse Ornamental Co., Inc.* v. *F. W. Woolworth Co.* Stipulation and order of dismissal with prejudice Mar. 20, 1956.

2,313,382, M. M. Kistner, Steam hand iron; **2,384,839**, same, Steam-electric pressing and ironing device, **filed** June 6, 1955, D. C., S. D. Fla. (Tampa), Doc. 2778–T, *Merrill M. Kistner* v. *Webb's City, Inc. and Landers, Frary & Clark.* Consent judgment; patent No. 2,313,382 and particularly claims 1 and 8 held valid and infringed by defendant Landers, Frary and Clark; patent No. 2,384,839 and particularly claims 3, 8, 9, 13, 15, and 16 held valid and infringed by above-named defendant Mar. 12, 1956.

2,351,204, Harvey and Birch, Silica refractories, **filed** Mar. 21, 1956, D. C., W. D. Pa. (Pittsburgh), Doc. 14424, *Cambria Clay Products Co.* v. *Harbison-Walker Refractories Co.*

2,384,839. (See 2,313,382.)

2,398,382, D. A. Lyon, Method for coating optical elements, **filed** May 6, 1949, D. C., W. D. N. Y. (Buffalo), Doc. 4168, *Dean A. Lyon* v. *Bausch & Lomb Optical Co.* Judgment favor plaintiff; complaint dismissed Mar. 20, 1956.

2,401,472, A. W. Franklin, Structural unit; **2,451,725**, same, Method of making a structural unit; **2,622,054**, same, Method of making an electrical unit; **2,647,852**, same, Design forming and attaching method, **filed** Mar. 20, 1956, D. C., S. D. N. Y., Doc. 108/51, *Albert W. Franklin* v. *General Electric Co.*

2,409,236, O. H. Banker, Method of making roller cages, **filed** Mar. 29, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c583, *New Products Corp.* v. *Outboard, Marine & Mfg. Co.*

2,427,209, E. W. Hagadorn, Electrically heated tool; **2,452,259**, F. D. Pabis, Electric burning-in knife, **filed** Mar. 26, 1956, D. C., N. D. N. Y. (Utica), Doc. 6050, *Finishine Laboratories, Inc.* v. *Mohawk Furniture Finishing Products.*

2,438,854, J. G. Jakobsen, Method and material for the production of toy balloons, **filed** Dec. 2, 1952, D. C. N. J. (Newark), Doc. 1170/52, *Niels B. Bach* v. *Harry Margolis et al.* Patent held invalid Mar. 26, 1956.

2,451,725. (See 2,401,472.)

2,452,259. (See 2,427,209.)

2,488,507, Burdick and Glenn, Synthetic star rubies and star sapphires, and process for producing same, **filed** Dec. 5, 1953, D. C., S. D. N. Y., Doc. 89/390, *W. C. Von Clemm* v. *Union Carbide and Carbon Corp.* Consent judgment: patent held valid and infringed (notice Mar. 23, 1956).

2,489,937. (See 2,303,639.)

2,489,938. (See 2,303,639.)

2,506,075, O. Morris, Magnetized article, **filed** Mar. 3, 1952, D. C., S. D. N. Y., Doc. 73/352, *Hollywood Associates, Inc.* v. *Owen Morris & Co.* Consent judgment for injunction against plaintiff (notice Mar. 14, 1956). Same, **filed** Aug. 20, 1951, D. C., S. D. N. Y., Doc. 69/80, *Owen Morris* v. *Alva Pen Co. et al.* Consent judgment for injunction against Hollywood Associates, Inc. which corporation is represented by defendants (notice Mar. 14, 1956).

2,512,995, J. Berger, Stroller having removable chair; **2,516,774**, L. Gottfried, Convertible high chair, **filed** Sept. 26, 1950, D. C., E. D. Pa. (Philadelphia), Doc. 11404, *Stroll-O-Chair Corp.* v. *The Westmoreland Metal Mfg. Co. Inc. et al.* Stipulation dismissing action Mar. 15, 1956.

2,513,169. (See Des. 171,045.)

2,516,774. (See 2,512,995.)

2,538,925, J. J. Steffan, Door jamb; **2,661,064**, same, Door-frame, **appeal** filed Oct. 14, 1955, C. C. A., 8th Cir., Doc. 15445, *Julius A. Steffan et al.* v. *Len A. Maune Co. et al.*

2,607,577, A. A. Straub, Convector for gas heaters, **filed** Mar. 22, 1956, D. C., N. D. Ohio (Cleveland), Doc. 32641, *A. A. Straub Co., Inc.* v. *Lee Wilson Engineering Co., Inc.*

2,622,054. (See 2,401,472.)

2,647,852. (See 2,401,472.)

2,654,917, J. Greaves, Storage bin, **filed** Mar. 21, 1956, D. C. Nebr. (Omaha), Doc. 28–L, *Joseph Greaves* v. *Huyck Grain Co. et al.*

2,661,064. (See 2,538,925.)

2,673,016, J. Gerbe, Bag distending apparatus, **filed** Feb. 3, 1955, D. C., E. D. Mich. (Detroit), Doc. 14096, *Clear-View Packaging Co. et al.* v. *Famour Cleaners and Dyers, Inc.* Decree for plaintiff Mar. 16, 1956. Same, **filed** Mar. 26, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c569, *Irving Wolf et al.* v. *General Cleaner Products Co., Inc.*

2,681,412, M. Webster, Whip antenna structure, **filed** Mar. 2, 1955, D. C., N. D. Calif. (San Francisco), Doc. 34482, *Marvin Webster* v. *Bay Electronics.* Consent decree for injunction against defendants from further patent infringements Mar. 22, 1956.

2,693,926, J. Tatko, Pallet, platform or the like, **filed** May 31, 1955, D. C. N. J. (Newark), Doc. 490/55, *Tatko Brothers Slate Co., Inc.* v. *Bergen Bluestone Co., Inc.* Action settled and dismissed Mar. 23, 1956.

2,697,925, N. H. Goodman, Tights and method of making same, **filed** Feb. 14, 1955, D. C., S. D. N. Y., Doc. 98/377, *Triumph Hosiery Mills, Inc.* v. *Challenge Products Inc.* Consent judgment; defendant enjoined Mar. 21, 1956.

2,714,289, G. R. S. Charles, Ornamental beaded necklace, **filed** Mar. 27, 1956, D. C. Md. (Baltimore), Doc. 8800, *The Richelieu Corp.* v. *McCrory Stores Corp.* Same, **filed** Mar. 30, 1956, D. C., S. D. N. Y., Doc. 108/200, *Lapin Products Inc. et al.* v. *The Richelieu Corp. et al.*

2,720,045, G. Miller, Transparency viewer combined ejector and light switch, **filed** Mar. 1, 1956, D. C., District of Columbia, Doc. 923/56, *Arrow Metal Products Co. et al.* v. *Gustave Miller.*

2,725,356, O. M. Lombardi, Swimming pool cleaner device and method, **filed** Mar. 26, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19718–Y, *Poolmaster, Inc., et al.* v. *Sherman Engineering Co. et al.*

Des. 141,518, Porthouse and McIntosh, Sealing disk for nursing units, bottles, and containers, **filed** Mar. 21, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16376, *The Pyramid Rubber Co.* v. *Meyer Epstein.*

Des. 170,295, Ziskin and Billig, Canister or similar article, **filed** Mar. 26, 1956, D. C., S. D. N. Y., Doc. 108/118, *The Kromex Corp.* v. *May Department Stores Inc.*

Des. 171,045, W. M. Noe, Safety belt buckle; **2,513,169**, O. H. Griswold, same, **filed** Aug. 30, 1954, D. C., S. D. Calif. (Los Angeles), Doc. 17144–HW, *Maximoff Research Co.* v. *Associated Suppliers Co. et al.* Design patent No. 171,045 held invalid; complaint dismissed Mar. 13, 1956.

Des. 171,058, R. Semensohn, Brooch or similar article, **filed** Sept. 20, 1954, D. C., S. D. N. Y., Doc. 95/381, *Marcel Boucher et Cie* v. *Circle Jewelry Products Co.* Consent judgment: defendant enjoined Mar. 21, 1956.

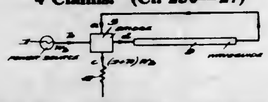
Des. 177,051, Jones and Crowle, Sandal, **filed** Mar. 23, 1956, D. C. N. J. (Newark), Doc. 238/56, *Nu-Dell Plastics Corp.* v. *Lapin Products, Inc.*

REISSUES

MAY 1, 1956

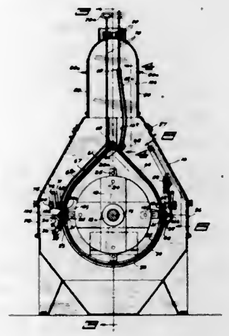
Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,146
WAVE GUIDE ACCELERATOR SYSTEM
Robert Bruce Robertson-Shersby-Harvie, Buntingford, England, assignor to National Research Development Corporation, London, England, a British corporation
Original No. 2,698,381, dated December 28, 1954, Serial No. 120,703, October 11, 1949. Applicant for reissue October 28, 1955, Serial No. 543,639
Claims priority, application Great Britain October 18, 1948
4 Claims. (Cl. 250—27)



4. Electromagnetic waveguide structure comprising a non-dissipative waveguide bridge assembly having a pair of conjugate input arms and a pair of output arms, a utilisation waveguide connected to one of said output arms, a feedback waveguide connected between the output of said utilisation waveguide and one of said input arms, a source of wave energy connected to the other of said input arms and power dissipative means connected to the other of said output arms, the output arm connected to said utilisation waveguide being positioned at a point on said bridge at which the inputs from said input arms combine to feed said utilisation waveguide, the output arm connected to said dissipative means being positioned at a point on said bridge at which the inputs from said input arms cancel one another in the steady state condition.

24,147
HAMMER MILL WITH PLURAL SCREENS OF DIFFERENT MESH
Howard C. Jacobson, Minneapolis, Minn.
Original No. 2,640,650, dated June 2, 1953, Serial No. 149,403, March 13, 1950. Application for reissue November 23, 1954, Serial No. 476,099
8 Claims. (Cl. 241—89)



6. A hammer mill having in combination, a housing, a rotatable shaft in said housing, a plurality of pivotally mounted swinging beater blades secured to said shaft, a substantially semi-cylindrical screen disposed at one location about said beater blades, means supporting said screen for easy removal thereof, a second screen entirely at one side of said housing and at one side of a vertical plane through the axis of said shaft and at another location about said beater blades, said second screen comprising small openings spaced a small distance from each other both horizontally and vertically and surrounded by solid material and removable means securing said second screen in place, said second screen being of different mesh than said first mentioned screen.

PLANT PATENTS

GRANTED MAY 1, 1956

Owing to the fact that almost all of the illustrations of the plant patents are in colors, it is not practicable to print a cut of the drawing.

1,472
PEACH TREE
Grant Merrill, Red Bluff, Calif.
Application March 17, 1955, Serial No. 495,078
1 Claim. (Cl. 47—62)

A new and distinct variety of peach tree, as illustrated and described, which bears large, yellow fleshed, freestone fruit characterized by a late ripening period, a bright yellow exterior color mottled and streaked with red adjacent the base, and relatively juicy flesh which does not darken upon exposure to air; further characterized—in comparison to the Merrill Fiesta peach—by fruit which is nearly as well exteriorly colored and almost as juicy of flesh, but ripens usually about thirty days later; and additionally characterized—in comparison to the Elberta peach—by a ripening period usually about seventy days later.

1,473
PEACH TREE
Grant Merrill, Red Bluff, Calif.
Application March 18, 1955, Serial No. 495,365
1 Claim. (Cl. 47—62)

A new and distinct variety of peach tree, substantially as illustrated and described, which is of moderate vigor, and a regular bearer of large freestone fruit having yellow skin with a red blush and yellow flesh mottled and streaked with red next to the stone; characterized by a relatively late ripening period of the fruit; further characterized—in comparison to the Merrill Fiesta peach—by ripening usually about twenty days later but having somewhat less exterior color; and—additionally characterized—in comparison to the Elberta peach—by ripening usually about sixty days later; the fruit sizing easily, being relatively juicy, firm and meaty—with little mealiness when eating ripe—sub-acid to mild in flavor, of excellent shipping quality, and not darkening upon exposure to air.

1,474
AVOCADO TREE
J M Allred, Jr., Baldwin Park, Calif.
Application February 24, 1953, Serial No. 338,631
1 Claim. (Cl. 47—62)

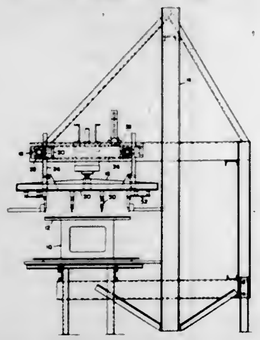
The new and distinct variety of avocado tree substantially as herein shown and described, distinguished as to novelty, by its ripening period in the early fall; medium sized fruit of medium green background speckled with light yellowish green specks that are close together at the lower end of the fruit and become less pronounced and further apart as the stem end is approached, disappearing almost entirely at the immediate area surrounding the button, when fruit is fully matured; having a skin that is thin, pliant, tough, and smooth but not glossy, the skin adhering tightly to the flesh; the fruit borne on short length stems; the fruit having a medium size relatively loose seed, and rich yellow flesh that gradually changes to a light green color near the skin, has practically no fiber, and has a butter-like consistency.

PATENTS

GRANTED MAY 1, 1956

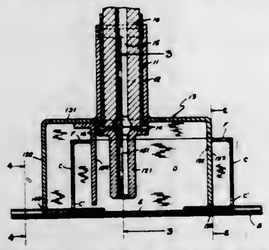
GENERAL AND MECHANICAL

2,743,442
MULTIPLE STAPLING MACHINE
Clarence J. Davies, Detroit, Mich., assignor to National Automotive Fibres, Inc., Detroit, Mich., a corporation of Delaware
Application January 18, 1954, Serial No. 404,479
9 Claims. (Cl. 1—3)



1. A stapling machine comprising a frame, a work supporting table on said frame, said frame including a column and a platen support overlying said table, a vertically movable platen carried by said platen support, two pairs of rack and pinion sets interconnecting said platen support and platen, all of the racks of said sets being rigidly connected together and extending vertically, the two pinions of each pair of sets being fixed to a single shaft, and chain and sprocket means connecting the two shafts, power means connecting said platen support and platen for moving said platen vertically, and a plurality of staplers carried by said platen.

2,743,443
SHIELD STRUCTURE FOR EXPLOSIVELY ACTUATED TOOLS
Robert T. Catlin, Trumbull, and John Clarke Sinex, Milford, Conn., assignors to Remington Arms Company, Bridgeport, Conn., a corporation of Delaware
Application November 18, 1954, Serial No. 469,652
6 Claims. (Cl. 1—44.5)



1. A shield for a powder actuated stud driving tool adapted to facilitate the attachment to a work face of a fitting comprising side walls and end walls, said shield comprising an open-face boxlike structure having a perimeter adapted to engage the work face, there being in a wall of said shield slots adapted to receive the side walls of said fitting and define a plate received between said side walls, and a baffle within said shield adapted to interiorly engage an element of an end wall of said fitting and together with said plate locate said fitting transversely and laterally in said shield.

2,743,444
NAIL DRIVER
Bertram M. Thomas, Maple Shade, N. J.
Application November 14, 1955, Serial No. 546,389
3 Claims. (Cl. 1—47)



1. A nail set comprising a cylindrical body having a bore opening into one end thereof and coaxial therewith with the body being formed with a transverse notch communicating with said bore, and a wire spring having one end anchored in said notch and the other end formed as a straight piece extending across said notch and into said bore whereby it is adapted to function as a yieldable detent.

2,743,445
FLEXIBLE CARTRIDGE OR REFILL FOR STAPLING MACHINES
Hershey Lerner, Bayside, N. Y., assignor to Swingline, Inc., New York, N. Y., a corporation of New York
Application March 17, 1953, Serial No. 342,940
7 Claims. (Cl. 1—56)



2. As a new article of manufacture, a pliable staple element strip comprising a multiplicity of metal staple elements adapted to be formed into U-shaped staples, said elements of said strip being aligned substantially in the same plane longitudinally of said strip and independent of each other and each being of appreciably greater length than its breadth and thickness, adjacent elements of said strip having their adjacent sides disposed transversely of said strip and in juxtaposition, a thin flexible continuous synthetic plastic resilient layer adhered to adjacent elements of said strip, said layer

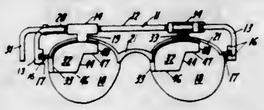
having less inherent cohesive strength than the adhesive bond thereof to said elements, said layer constituting resiliently swinging connections between said adjacent staple elements of said strip, and said resiliently swinging connections constituting resilient link means for said adjacent elements to permit twisting of said strip at said connections.

2,743,446
ACTION FRONT ARMORED VEST
Ralph W. Persico and Louis Cugini, Philadelphia, Pa., assignors to the United States of America as represented by the Secretary of the Army
Application April 13, 1953, Serial No. 348,601
1 Claim. (Cl. 2—2.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)



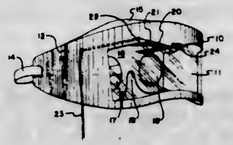
An armored vest comprising a back and front sections, the front sections being secured to the back section and overlapping each other a substantial distance with their respective free edges extending beyond the center line of the front of the vest, said front sections formed of laminated material sufficiently thick and stiff to normally lie in overlapped relationship, a vertically-extending flap of relatively thin material secured to the inner face of one front section at a distance from the free edge thereof of greater than the width of the flap and of a length substantially the same as the length of the section, fastener means mounted on and extending throughout the free edge of the flap, and complementary fastening means secured to the outer face of the other front section, whereby a transverse sliding movement between the two sections is permitted.

2,743,447
DRIVING GLASSES
Leroy W. Young, Arvada, Colo.
Application March 23, 1953, Serial No. 343,880
1 Claim. (Cl. 2—13)



Glasses for use while driving at night on highways to reduce the glare of oncoming light sources comprising a center support piece, saddle members adjustably secured to said center piece, end pieces adjustably secured to said saddle members, projections on said end pieces for engagement with the bows of a wearer's eye glasses for supporting said center piece and saddle members in horizontal position adjacent the wearer's eyes, a forwardly extending projection on said saddle members, a pivot rod rotatably mounted in said forwardly extending projections, lens support frames for engagement with said pivot rod whereby rotation of said rod moves said lens alternately to a first position of use in front of the wearer's eyes and to an out-of-way position out of the wearer's field of view, and an irregularly shaped lens in said support frame of material adapted to reduce the glare of oncoming automobile headlights, said lens having a horizontal edge, a first boundary edge above and disposed with respect to said horizontal edge at an angle substantially corresponding to the angle of perspective view of a highway center line as observed from the driver's seat of an automobile travelling down one side of the highway, and a second boundary edge intersecting said angularly disposed edge and parallel with said horizontal edge, said second boundary edge in part defining a projection of said lens extending beyond the line of projection for said first named boundary edge, said lens projection being useful to reduce the glare of light sources directly ahead.

2,743,448
GOGGLES TOY
Hugo R. Carlson, Los Angeles, Calif.
Application February 1, 1954, Serial No. 407,313
3 Claims. (Cl. 2—14)

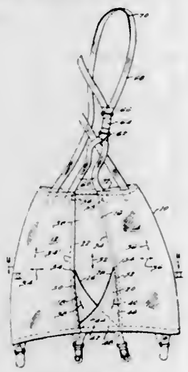


3. A goggles toy for children comprising a body member having an opening in the front thereof, a transparent windshield mounted in said opening, said body member having a pair of sides extending rearwardly from opposite sides of said opening, an adjustable elastic head band having its opposite ends attached to the ends of said sides, a frame extending transversely between said sides and positioned substantially rearwardly from said windshield, said frame having a pair of circular eye openings and a nose opening adapted to fit over the bridge of the nose of the wearer, a top extending across the entire area from the top of said frame to the front of said body member, said top having a curved rear edges adapted to fit against the forehead of the wearer, a shaft rotatably mounted in an opening in said body member above said windshield and in an opening in said frame above said nose opening, a windshield wiper blade attached to the front end of said shaft and extending in front of said windshield, a string adapted upon pressure being exerted thereon to move said windshield wiper in one direction and means adapted upon the release of pressure on said string to move said wiper in the opposite direction to simulate the action of an automatic windshield wiper.

2,743,449
MATERNITY GARMENT
Alma I. Sheldon, Jackson, Mich., assignor to S. H. Camp and Company, Jackson, Mich., a corporation of Michigan
Application December 11, 1952, Serial No. 325,431
4 Claims. (Cl. 2—41)

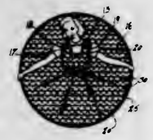
1. A maternity girdle characterized by its support and smoothing effects to the thigh and buttocks without compressing the abdominal region, comprising a back panel, side panels, a narrow front panel connected to and constituting an extension of said side panels at the lower front portions thereof and below the abdominal region, said side panels having upper front corner portions at the waist line, straps connected to said corners and extending diagonally upward to a common point of support adapted to be located at a point slightly below and between the breasts of the wearer, shoulder straps connected to said back panel and adapted to extend diagonally over the shoulders of the wearer to a common point of at-

tachment adapted to be located between the breasts, and a narrow upright connection strap secured to and inter-



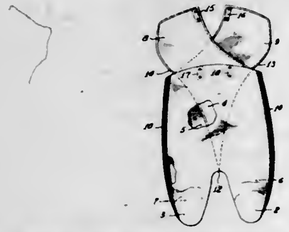
connecting said common points of support and attachment.

2,743,450
REVERSIBLE GARMENT
William Kling, New York, N. Y.
Application May 18, 1954, Serial No. 430,601
1 Claim. (Cl. 2—74)



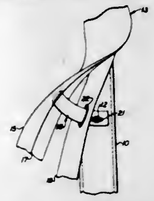
A reversible quilted pullover garment comprising a tubular upper portion constituting a vest and a tubular lower portion constituting a skirt connected at its upper end to the lower end of the upper portion, each portion consisting of two outer layers and an intermediate layer of material stitched together, said upper portion having side seams and neck and arm openings, with piping along the edges of said openings on both outer layers, said lower portion having side seams aligned with the side seams in the upper portion, the connection between the upper and lower portions including a seam composed of the folded-over ends of said portions nested within each other concealing the end edges thereof and rows of stitching holding the folded-over ends together, the folds having the same appearance on both outer layers, the side seams being of the same construction and appearance as the end seam.

2,743,451
INFANT'S GARMENT
Phyllis L. Meyers, Los Angeles, Calif.
Application September 28, 1953, Serial No. 382,755
1 Claim. (Cl. 2—83)



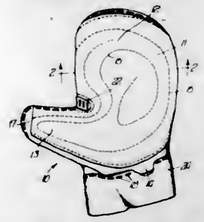
An infant's garment including an integral front body section provided with a pair of leg and foot portions, a back comprising two sections, each section of which is provided with a leg and a foot portion, the marginal edges of complementary leg and foot portions of the front body section and the back being secured together and the side marginal edges of the front body section being secured to a side marginal edge of a back section; the two sections of the back overlapping to provide a double thickness area of substantially triangular form, the apex of which is at the crotch and the base of which is at the garment top; said front body section formed with an upper transverse marginal edge adapted to extend between the armpits of the wearer of the garment, and an extended width flap for each section of the back adapted to overlie the shoulders of the wearer and be secured to the front body section.

2,743,452
COMBINED NECKTIE AND RETAINING TAB
Nelson J. Waterbury, New York, N. Y.
Application December 4, 1953, Serial No. 396,108
1 Claim. (Cl. 2—145)



A combined necktie and retaining tab comprising a forepart, a tail part, a longitudinal stitched seam on the rear side of said forepart, an elongated tab having one end disposed within said seam and vertically stitched to the rear side of said forepart by said seam stitching and extending substantially at right angles thereto, a horizontal button hole in said tab adjacent the free end thereof, an elongated vertical aperture in said tail part of a length greater than the width of said tab and disposed substantially opposite the point of attachment of said tab to said forepart when said tie is tied whereby said tab may extend through said aperture and be detachably secured to a button on the shirt of the wearer to maintain said tie in substantially normal position.

2,743,453
FOUNDRYMAN'S GLOVE
Isadore Singer, Chicago, Ill., assignor to Singer Glove Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application October 7, 1953, Serial No. 384,610
4 Claims. (Cl. 2—158)



1. A protective work glove comprising a forward hand receiving member formed in its entirety of flexible material and consisting of a first palm and finger panel and a second knuckle panel bridging opposite margins of the same, said first panel having plural laminations including a layer of combustion resistant material secured in external covering relation to a large portion of the area thereof, said opposite margins of said first panel being substantially spaced from one another rearwardly of

said second panel to provide an open throat of substantial width adjacent the rear extremity of said first panel, and a flexible wrist band of substantial width secured to said first panel across said rear extremity thereof, said wrist band being of sufficient girth to bridge said open throat in a loose outline.

2,743,454
INSULATED SOUND TRANSMITTING EAR CELLS FOR A CAP
Robert L. Woodbury, Washington, D. C., assignor to the United States of America as represented by the Secretary of the Army
Application March 17, 1954, Serial No. 416,968
2 Claims. (Cl. 2—172)
(Granted under Title 35, U. S. Code (1952), sec. 266)



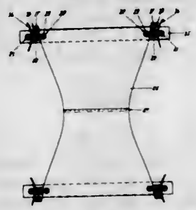
1. A flexible sound transmitting thermally insulating ear cell for a cap or the like comprising a flexible pocket formed of an outer flexible sheet of closely woven wind-resistant fabric and an inner flexible sheet of thin coarse foraminous fabric, means securing said sheets of the pocket together near their marginal edges, and a thick insert of cellular rubberlike material arranged within the pocket and between said sheets and conforming to the shape of the pocket and substantially filling it, the thickness of said insert being considerably greater than the combined thicknesses of said sheets, said insert having a multiplicity of spaced apertures extending therethrough of a diameter substantially smaller than the thickness of said insert, whereby sound is readily transmitted through said apertures and appreciable heat loss by convection therethrough is prevented.

2,743,455
FOLDING HAT BRIM
Vernon Langness, Minneapolis, Minn.
Application May 29, 1953, Serial No. 358,323
1 Claim. (Cl. 2—177)



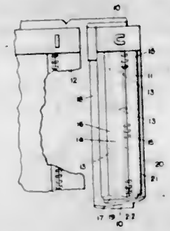
In a hat, the combination which comprises a substantially semi-spherical hat crown, spaced tubular elements secured to the outer surface of said crown, and positioned adjacent the lower edge thereof, plates having hubs thereon positioned with the hubs between said tubular elements, and an endless ring of elastic material extended through said tubular elements and hubs of the plates for retaining the plates in assembled relation on the hat crown, said hubs being square in cross section and having right angularly related side surfaces and the distances of the side surfaces from the axes of the hubs being equal to the distance from the axes of the hubs to the outer surface of the hat crown with the plates extended or nested against the crown, and the distance from edges of the hubs at the meeting points of the side surfaces to the axes thereof being greater than the distance of the axes of the hubs to the outer surface of the crown, the side surfaces of the hubs being positioned to coact with the surface of the hat crown to selectively retain the plates in horizontally disposed outwardly extended position or in vertically disposed position wherein the plates are nested against the outer surface of the crown.

2,743,456
DETACHABLE BELTS AND CROTCHES
Elizabeth M. Yarnell, Rahway, N. J.
Application February 2, 1954, Serial No. 407,655
1 Claim. (Cl. 2—224)



A crotch member having a tunnel formation at least at the opposite ends thereof, a band inserted at each end through the said tunnel formation, the said band being of a length greater than the width of said crotch, the ends of the said band being folded over at the outer face of the said crotch and fastening means disposed on the said band to fasten the folded-over ends of the said bands to the main body of the latter through one sheet of the said crotch member, the said band having additional fastening means at the portion of the said band which extends out of the said tunnel formation, the said additional fastening means being adapted to fasten the said band and thereby also the said crotch to supporting means.

2,743,457
ZIPPER FLY CLOSURE FOR GARMENTS
Samuel F. Stein, Milton, Pa.
Application August 10, 1953, Serial No. 373,257
1 Claim. (Cl. 2—234)



A garment fly closure comprising an overlapping fly member; a zipper tape having a row of zipper elements secured at the outer edge thereof; said tape being attached to said fly member by a line of stitching extending longitudinally along the inner side of said row of zipper elements; said fly member and the adjacent fore part of the garment each having a folded outer edge; said fly member comprising a ply at the underside thereof in contiguous relation with an underply extending inwardly from said folded outer edge of said fore part of the garment; the folded outer edge of said fly member being secured to said fore part adjacent the folded outer edge thereof; a plurality of transversely extending rows comprising grouped stitches across the width of said fly member; said rows being suitably spaced in relation to one another; the individual stitches of the respective rows being disposed substantially longitudinally with respect to the length of said fly member; said transversely extending rows of the stitches providing rigidity to said fly member substantially over the area extending from the line of attachment of the zipper tape to said overlap-

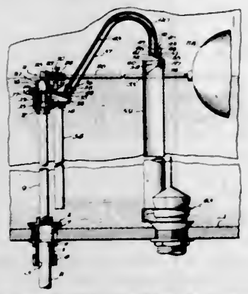
ping fly member to a point suitably adjacent to the folded outer edge of said overlapping fly member; the arrangement being such that exposure of the zipper elements with respect to the overlapping fly member is substantially obviated.

2,743,458
JACKETED BONING MATERIAL AND METHOD OF MAKING SAME
Franklin Dick, New York, N. Y., assignor to Richard A. Fisch, Long Island City, N. Y.
Application August 5, 1953, Serial No. 372,478
3 Claims. (Cl. 2—256)



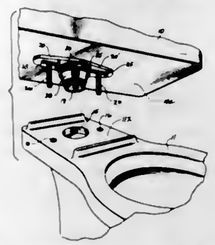
1. As an article of manufacture, a jacketed boning material for stiffening garments comprising a fabric jacket enclosing a core of stiff thermoplastic strip material having an internal fibrous structure and comprising a mixture of two incompatible thermoplastic materials having similar thermal softening points, said fabric jacket comprising two longitudinal sewed edges extending laterally from the edges of said thermoplastic strip, said jacket being tightened upon and secured to said strip by a series of stitches extending through the central region of fabric jacket and the strip, each stitch of said series splitting the strip material longitudinally for a substantial distance and serving to expand the resultant parts of the boning toward the sewed edges, a first portion of the strip on one side of the series of stitches being movable with respect to the second portion on the other side of the series of stitches but the movement thereof being limited by the jacket and by the fibrous structures connecting the first and second portions and extending between the stitches where the adjacent splits produced by the separate stitches are not continuous with respect to one another.

2,743,459
COMBINED SUPPLY VALVE AND REFILL TUBE
Edward G. Schmidt, La Grange, and Axel B. Nelson, Chicago, Ill., assignors to Crane Co., Chicago, Ill., a corporation of Illinois
Application January 27, 1953, Serial No. 333,444
3 Claims. (Cl. 4—57)



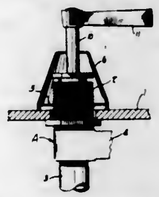
1. In a flush tank, the combination comprising an upstanding overflow tube and a float actuated inlet supply valve, both mounted in the flush tank, a refill tube of flexible material such as rubber attached to said supply valve and extending towards the overflow tube, clip-on means positioning the outlet end of the said refill tube on said overflow tube for fluid discharge thereinto, said latter positioning means comprising a one-piece resilient member of substantially double S formation and disposed so that the first part of the first S-portion and second part of the second S-portion receive the lower edge portion of the refill tube and upper edge portion of the overflow tube respectively within the openings of the said double S-formation, the bottom edge of the refill tube and top edge of the overflow tube being abuttable with the insides of the said first part of the first S-portion and second part of the second S-portion respectively, the resilient member of double S-formation being formed so that the inside abuttable surface of the first part of the first S is on a higher level than the inside abuttable surface of the second part of the second S whereby to limit the bottom edge of the refill tube to a predetermined spacing above the overflow tube, the first part of the first S and second part of the second S being adapted to frictionally engage a portion of the wall of the refill tube above the said bottom edge thereof and the wall of the overflow tube below the top edge thereof respectively for retention of the refill tube in mounted relation on said overflow tube.

2,743,460
ADJUSTABLE CONNECTOR FOR TANK AND BOWL OF A CLOSE COUPLED WATER-CLOSET COMBINATION
Leonard W. Youngstrom and Lee W. Pearl, Seattle, Wash.
Application August 3, 1953, Serial No. 371,967
6 Claims. (Cl. 4—68)



1. In a water closet, in combination, a water tank having a flush valve nipple extended downwardly from its bottom wall, a bowl having a shelf on which said tank is supported and formed with an opening into which the said nipple extends and with anchor bolt holes spaced from the said opening, and an adjustable connector securing the tank to the bowl, said connector comprising a pair of plates, each with a hole in its inner end portion through which the nipple extends, the said plate ends being independently rotatable and disposed flatly together adjacent the bottom of the tank, bolts mounted in the outer end portions of the plates and extended downwardly through the anchor bolt holes of the said bowl shelf, a nut threaded onto the nipple and tightened against the said plates to secure them to the nipple and nuts applied to said bolts and tightened against the underside of the shelf.

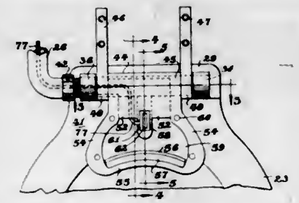
2,743,461
INSERT NUT AND FLANGE
Ernest J. Urbas, Cleveland, Ohio, assignor to The Guarantee Specialty Manufacturing Company, Cleveland, Ohio
Application July 3, 1952, Serial No. 297,120
1 Claim. (Cl. 4—191)



In combination, a valve fixture comprising a threaded upper portion to pass through the ledge of a sink or the like, for connection with a supply pipe, a valve stem in

said threaded portion and projecting upwardly therefrom, a handle on said stem, and an escutcheon surrounding said threaded portion for housing same and adapted to engage at its lower end with said ledge, the upper end of the escutcheon having an opening through which the valve stem extends upwardly to receive its handle, and a ring nut formed into a flat body having an opening to receive said threaded upper portion of the fixture and formed with a thread section at the periphery of the opening interengaging the fixture threaded portion to screw downwardly therein against the sink ledge, said ring nut being also formed with a peripheral flange extending at right angles from the plane of the flat body and fitting into the lower end of the escutcheon and said flange having a smooth outer surface frictionally binding against the inner wall of the latter to hold the escutcheon in place in engagement with said ledge.

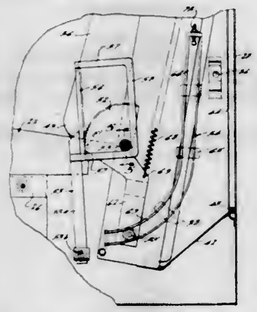
2,743,462
HINGE AND VENT ASSEMBLY FOR TOILET BOWLS
Carl W. McMillan, Reno, Nev.
Application February 25, 1953, Serial No. 338,688
7 Claims. (Cl. 4—213)



1. In combination with a toilet bowl, a hinge and vent assembly for the seat of the bowl, said assembly including a transversely disposed tubular supporting member positioned above and adjacent the rear of the bowl, means connecting the supporting member to the bowl, a seat hinge member having a tubular portion rotatably mounted on said supporting member, said hinge member having a horizontal portion extending outwardly and laterally from the tubular portion and including an upper wall and a spaced bottom wall, the space between said walls constituting an air passage communicating with the interior of said tubular supporting member, said lower wall terminating in an upwardly flared outer end, said horizontal portion having a transverse portion positioned in front of the flared end of said lower wall and extending downwardly and rearwardly to form a fluid trap therewith, and means connecting a seat to said hinge member, said fluid trap providing means for preventing splashings from the bowl entering the air passage when the seat is in its raised or lowered position.

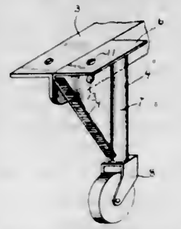
2,743,463
FOLDABLE BERTH
Roger Guido Cudini, Birmingham, Mich., assignor to Moynahan Bronze Company, Flat Rock, Mich., a corporation of Michigan
Application April 16, 1952, Serial No. 282,571
14 Claims. (Cl. 5—43)

1. In a furniture unit, a stationary frame, a seat member supported by said stationary frame, a movable frame, a back member and a berth member supported on opposite sides of said movable frame, the movable frame being adjustable between an upper position in which said seat and back are in cooperative relation to form a sofa and a lower position in which said berth member is in operative position; and means supporting said movable frame on said stationary frame for movement between its two positions, said means comprising a first member fixed to one of said frames and a second member pivoted to the other frame, said second member extending upwardly from said pivot and supporting said first member for rolling movement along said second member so that said first member engages said second member at varying



distances from the pivot point of said second member, whereby rotational movement of said movable frame will simultaneously impart translatory movement thereto in a substantially vertical direction, the locus of points of engagement of said members having an angular displacement about the pivot axis of said second member.

2,743,464
BEDFRAME HAVING SPECIAL SUPPORT LEG
Leslie K. Jackson, Cleveland, Ohio, assignor to Harvard Mfg. Company, Cuyahoga County, Ohio, a corporation of Ohio
Application August 6, 1953, Serial No. 372,619
8 Claims. (Cl. 5—310)



1. In a bedframe, a cross rail; a side rail; a support leg having a horizontal top flange, an integral vertically extending substantially tubular portion of substantially 360° in circumference open at the bottom for direct receipt of caster means, a web portion having a slanted edge, said tubular portion being reentrant upon said web portion, and a reinforcing flange on said edge of said web portion; means extending through said web portion and said cross rail to position said support leg, and means engaging said side rail to said top flange.

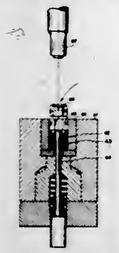
2,743,465
BOAT AND METHOD OF MAKING SAME
Dick Vogel, Bemidji, Minn.
Application December 9, 1953, Serial No. 397,130
4 Claims. (Cl. 9—6)



2. A carvel type boat-hull having a substantially unobstructed interior surface defined by a plurality of elongated strips secured together in edge to edge abutting relationship with the opposing transverse extremities of the edges spaced apart defining longitudinal extending

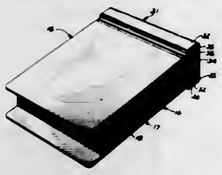
recesses, plastic material completely filling said recesses and coating the interior surface of said hull, said plastic material causing said hull to retain the desired original shape imparted thereto without the aid of additional longitudinally spaced transversely extending ribs.

2,743,466
METHOD OF MAKING SKIRTED NUTS
John H. Friedman, Tiffin, Ohio, assignor to The National Machinery Company, Tiffin, Ohio, a corporation of Ohio
Application January 4, 1951, Serial No. 204,407
3 Claims. (Cl. 10—86)



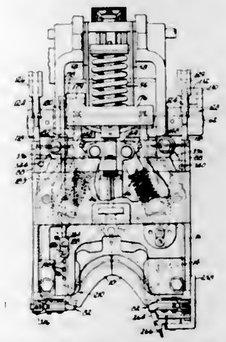
1. A method of making a skirted nut blank having a portion with an exterior surface polygonal in cross-section and a skirt having an exterior surface substantially circular in cross-section, comprising piercing a length of metal stock in a polygonal die to form a pierced blank polygonal in cross-section throughout its length with an axial opening extending into the blank from one end face, engaging said one end face of said pierced blank against an axially extending and inwardly inclined annular die surface engaging the outer edge of said one end face, applying pressure to the opposite end of said blank, moving said blank by such pressure axially along said die surface while maintaining the said axial opening substantially free of obstructions to radially inwardly flow and displacing the metal of the blank adjacent said one end face radially inwardly during such axial movement to form an extending skirt with an exterior surface substantially circular in cross-section.

2,743,467
BOOK BINDER AND MACHINE FOR ASSEMBLING SAME
Arthur R. Gustafson, Chicago, Ill.
Continuation of application Serial No. 213,143, February 28, 1951. This application February 14, 1952, Serial No. 271,585
23 Claims. (Cl. 11—1)



1. A book binder comprising two generally rectangular covers adapted to be disposed on opposite sides of a stack of papers to be bound into book form, said covers each having two slots extending inwardly from two opposite edges thereof, said slots being spaced inwardly equal and appreciable distances from third edges of said covers so as to define anchoring tabs on the contiguous corners of said covers, said slots in corresponding side edges of said covers being paired in opposing relation to each other, an elongated U-shaped end cap disposed in straddling relation to said third edges of said covers and having two spaced legs thereon extending over the contiguous ends of said respective covers and said slots therein, two elongated panels on said cap integrally formed on said respective legs, said panels being disposed in underlying relationship to the respective legs and in overlying relationship to the respective covers and said slots therein, said panels each having two slots extending inwardly from the opposite ends thereof and individually alined with said cover slots, two U-shaped binding strips each comprising an elongated shank and two lateral toes integrally formed on opposite ends thereof, said strips being assembled with said covers and said end cap with said shanks extending through said respective pairs of slots in said covers and the contiguous slots in said end cap panels, said binding strip toes being interposed between the contiguous portions of said end cap panels and said end cap legs to extend toward said third edge of the respective covers, two elongated tie rods disposed between said respective legs and their associated panels, said rods having hooks at opposite ends which extend around the adjacent end portions of the binding shanks which protrude through said slots in said end cap panels.

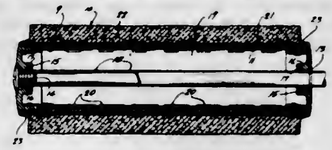
2,743,468
LASTING MACHINES
Philip E. Burby, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application March 15, 1955, Serial No. 494,324
17 Claims. (Cl. 12—12.4)



6. In a lasting machine, means for working the toe end portion of an upper of a shoe on a last into lasted position, grippers for gripping at the opposite sides of the last respectively binder material extending around the toe end of the shoe, means for feeding binder material around the toe of the shoe from one gripper to the other gripper, means for moving said grippers lengthwise of the shoe for pulling the binder to apply it to the upper, gripper closing means operable in response to movement of the grippers by said moving means to close one gripper before the other for imparting an additional feeding movement to the binder material before the other gripper closes on the binder, means for modifying the action of said closing means to vary the length of binder material applied to the upper, and means for moving the grippers widthwise of the shoe at a predetermined time after the operation of the gripper closing means.

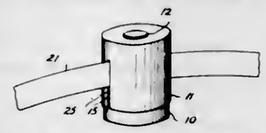
2,743,469
ROLLER-TYPE PAINT APPLICATORS
Franklin D. Ditch, Sheboygan, Wis., assignor to Thomas Industries Inc., a corporation of Delaware
Application March 10, 1950, Serial No. 148,867
9 Claims. (Cl. 15—128)

1. In a roller-type paint applicator including a perforate open-ended cylinder adapted to receive a quantity of paint for application to a surface, a fabric sleeve having a deep outer fibrous pile and mounted on said cylinder to receive the paint from said cylinder, a metallic screen in the form of a cylinder secured within said sleeve and adapted to support the same against collapse to thereby facilitate assembly upon said cylinder and to support the same upon assembly on said cylinder to



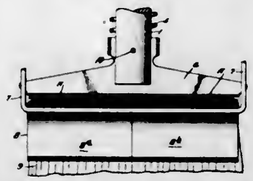
allow for distribution of the paint over the surface of the sleeve, said fabric sleeve having reinforced substantially rigid annular end portions offset inwardly in longitudinal alignment with said screen to position the screen within the sleeve, and rotatably mounted means closing and supporting said cylinder and sealing the annular end portions of said sleeve thereagainst.

2,743,470
TYPEWRITER RIBBON REINKING DEVICE
Ruth Goldie Horowitz, Detroit, Mich.
Application July 6, 1953, Serial No. 366,212
4 Claims. (Cl. 15—138)



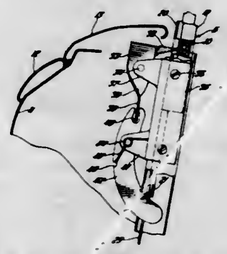
1. A device of the class described comprising a housing having a slot for moving a typewriter ribbon therethrough, an inking pad having a slot, said inking pad being carried by said housing, means carried by said housing for controlling excessive saturation of ink on said ribbon, a slotted cover for enclosing said ribbon within said slots of said housing and said inking pad, said cover having an ink chamber, and means carried by said cover for regulating the flow of ink from said chamber into said slot of said inking pad.

2,743,471
MOP AND MOUNTING TUBE ASSEMBLY
Kathryn B. Forrester, Northfield, Ill.
Application October 17, 1950, Serial No. 190,466
5 Claims. (Cl. 15—228)



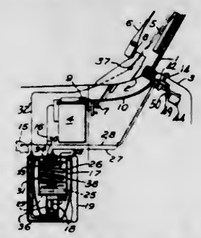
1. In a mop including an elongated head portion and a clamping bracket of relatively small cross section, the combination comprising a resilient, hollow flexible tube running longitudinally of said head and attached thereto by said bracket, said tube being open-ended and of relatively large internal diameter with the major part of the periphery thereof unattached except along the limited area of attachment by said bracket and with the remote interior surface substantially spaced from the area of attachment for providing a substantially core-less tube having a void interior permitting the tube to be flattened on the application of pressure thereto by said head, and a mop body secured about said tube, said mop body being composed of at least one flexible absorbent and elongated sheet draped over said tube and having a narrow transverse central portion provided with a plurality of flat contiguous pleats secured against separation and providing loose folds at the free end portions of the sheet.

2,743,472
SIDE WINDOW WIPER
Philip M. Alef, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 17, 1952, Serial No. 326,533
8 Claims. (Cl. 15—250)



1. Apparatus of the character described, including: a slidable window; a wiper member mounted for movement between wiping position in engagement with the window surface and retracted position out of engagement therewith; cam guide means; and actuating means comprising a follower engaging said cam guide means for moving said wiper between wiping and retracted positions as a function of sliding movement of said window.

2,743,473
COMBINED WASHER AND WINDSHIELD CLEANER
John R. Oishei, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y.
Application July 3, 1952, Serial No. 297,007
36 Claims. (Cl. 15—250.4)

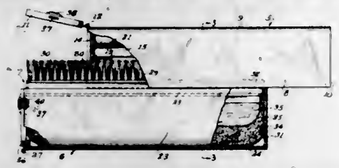


33. A windshield cleaner system comprising means for spraying a solvent onto an associated windshield for an interval and then stopping, a wiper and a motor for actuating the wiper, control means for said motor, and means interconnecting said control means and said solvent spraying means for operating said spraying means and said wiper motor conjointly to operate said wiper when the solvent is being sprayed onto the windshield and including means operable automatically to arrest the wiper after said spraying means has stopped.

2,743,474
SHOESHINE KIT
Carl E. Johnson, Los Angeles, Calif.
Application June 1, 1953, Serial No. 358,915
2 Claims. (Cl. 15—258)

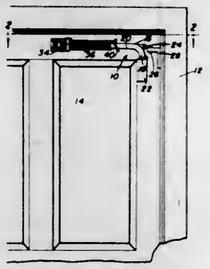
1. A shoe shine kit comprising a unit provided with a rigid back having shoe polishing means on opposite sides, said back being generally rectangular and having two

pairs of spaced longitudinal ribs extending through the entire length of the longitudinal edges of said back, first and second elongated U-sectioned members, each member having two parallel channels extending through the entire length of the respective member to slidingly interfit with one pair of said longitudinal ribs by sliding said member onto said back from end-to-end of said back, a fixed end-cover closing off one end of each member and abutting against one end of said back when said member is axially slid over and onto said back, a hinged end-cover for closing off the other end of said member after said back is slid into said member, and locking means for each respective end-cover for positively interlocking said back



with each of said members; whereby said members are capable of acting as hand grips for said back and as protective covers for said shoe polishing means when both of said members are mounted on said back, one of said U-sectioned members having two side-walls having said channels and a top interconnecting said side-walls, a plurality of longitudinal partition members mounted on the inner surface of said top and constituting an integral part of said top, said partition members extending from the open end of said first member through the greater part of the length of said top for defining a plurality of longitudinal storage compartments adjacent to said top and a transverse shelf at the closed end of said member.

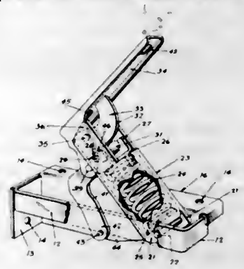
2,743,475
DOOR CONTROL
William M. MacNerland, Chicago, Ill.
Application June 27, 1952, Serial No. 295,868
12 Claims. (Cl. 16—51)



9. A door closing and checking device including a tube comprising first and second legs angularly related to one another, means closing the ends of said tube, a plunger rod slidably disposed in said second leg and projecting exteriorly thereof for attachment to a door, a piston slidably disposed in said first leg for displacing fluid within the leg upon inward and outward movement of the plunger rod, and resilient means within said tube connecting said piston and plunger rod for cooperating movement toward and away from one another during the operation of the device.

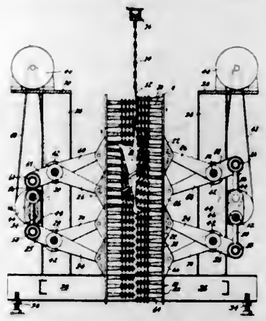
2,743,476
LIFT HINGE FOR AUTOMOBILES
Alonzo R. Turner, Cottage Grove, Wis., assignor to Turner Corporation, Fort Atkinson, Wis., a corporation of Wisconsin
Application July 20, 1950, Serial No. 174,897
6 Claims. (Cl. 16—141)

1. A lift hinge assembly for pivotally mounting a cover member upon the body of an automobile in such manner as to retain the cover member counter-balanced in any position between fully closed and fully open positions, said hinge assembly including a hollow mounting frame adapted to be fixed to the body, a housing pivotally mounted adjacent one end within the hollow and adjacent one end of the mounting frame, a cam arm adapted to be affixed to the cover member, means for pivotally connecting the cam arm adjacent one end thereof to an end of the housing, a cam carried by the cam arm and provided with a cam face, a cam follower



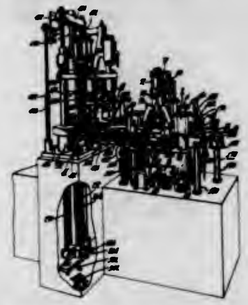
slidably mounted in the housing and provided with a roller in contacting engagement with the cam face, a compression spring carried in the housing and in engagement with said cam follower to force the roller against and maintain it in continuous pressure engagement with the cam face, said cam, cam follower and spring being so constructed and arranged as to counter-balance the weight of the cover member and maintain it in any position to which it is manually moved, and a concavity in the cam face to receive the roller when the cover member is moved to closed position.

2,743,477
POULTRY PICKING MACHINE
Seth S. Barker and Allen W. Sharp, Ottumwa, Iowa, assignors to Barker Poultry Equipment Co., Ottumwa, Iowa, a corporation of Iowa
Application February 6, 1951, Serial No. 209,564
6 Claims. (Cl. 17—11.1)



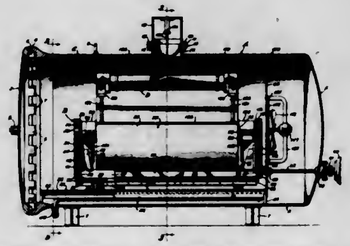
1. In a machine for picking fowl as they are conveyed along a predetermined path, a plurality of movable members disposed along one side of said predetermined path, said movable members being disposed adjacent each other and being movable in planes parallel to each other, means operatively associated with said movable members for moving alternate ones of said movable members in one direction while simultaneously moving the movable members between said alterante ones in the opposite direction, said movable members having picking means thereon adapted to engage the body of the fowl and pick the feathers therefrom, and a plurality of movable members with picking means thereon on the opposite side of said predetermined path similar to the movable members on the one side and operable similarly.

2,743,478
AUTOMATIC MOLDING APPARATUS
Lorraine C. Harlow, Greenfield, and Quincy E. Smith, Indianapolis, Ind., assignors to Radio Corporation of America, a corporation of Delaware
Application October 31, 1951, Serial No. 254,034
16 Claims. (Cl. 18—5.3)



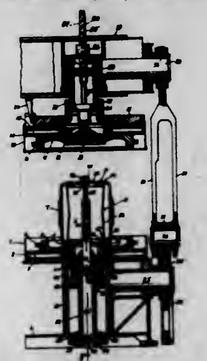
1. A phonograph record manufacturing apparatus comprising a pair of molding platens having an open and a closed position, means responsive to the opening of said platens for positioning a record label on one of said platens, a cycle control cam shaft, means responsive to the opening of said platens for actuating said cam shaft, means actuated by said cam shaft for positioning a record label on the other of said platens, means actuated by said cam shaft for applying a quantity of moldable material between said platens after said labels have been positioned, means actuated by said cam shaft for closing said platens after application of said moldable material, means responsive to the closing of said platens for performing a timed cycle of heating and cooling operations on said material while said platens are closed, means responsive to said time cycle means for opening said platens, means actuated by said cam shaft for removing the molded record from between said platens and for transferring the record to a finishing station, and means actuated by said cam shaft for performing finishing operations on said record.

2,743,479
APPARATUS FOR VULCANIZING RUBBER MATERIAL
Daniel Rhee, Rehoboth, Mass., and Donald Cockburn, Warren, R. I., assignors to Rhee Elastic Thread Corporation, Warren, R. I., a corporation of Rhode Island
Application April 9, 1953, Serial No. 347,731
7 Claims. (Cl. 18—6)



5. A rubber vulcanizing apparatus comprising an autoclave closed at one end and having a door at the opposite end thereof to provide access to the autoclave interior, a partition mounted within said autoclave to divide the interior into a load receiving space and an outer space, heating means disposed in said outer space, a carriage movable into and out of the load receiving space of said autoclave, a sheet rubber supporting cylinder mounted longitudinally of and grounded to said carriage, a semi-cylindrical electrode mounted within and insulated from said autoclave with said electrode being generally concentric to the rubber supporting cylinder when said carriage is positioned within said autoclave, grounding flap means extending along the length of said carriage and said autoclave when said carriage is positioned within said autoclave and selectively engageable between said carriage and said autoclave to ground said carriage along substantially its entire length to said autoclave, and means for connecting said electrode and said autoclave to a high-frequency generator whereby a high-frequency electric field will be produced between said electrode and said cylinder.

2,743,480
TIRE CURING PRESS
Paul A. Frank, Akron, Ohio
Application June 5, 1951, Serial No. 230,009
6 Claims. (Cl. 18—17)

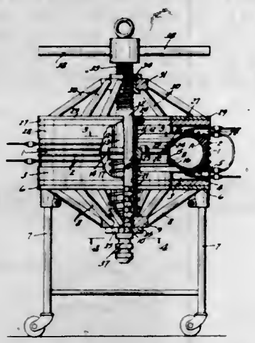


1. Apparatus for forming flat-built tires into tire form and then vulcanizing the same into finished condition, comprising; a pair of opposed annular mold sections and supports therefor, means for relatively moving said mold sections between separated and closed positions, at least one of said mold sections having a central opening therethrough which forms with its support a well of which such opening is the mouth, a radially expansible and contractible tire-forming device disposed substantially in its entirety in such well, means acting on one end of said device to move the same while in radially contracted condition to a position projecting substantially in its entirety centrally from such well toward the other mold section and telescoping within an uncured tire in pulley-band form which is adapted to be positioned coaxially between said mold sections while said forming device is in such well, fluid pressure actuated means constantly and resiliently maintaining the opposite ends of said device spaced apart while said device is in such well and during movement of said device as aforesaid, said fluid pressure actuated means beng effective, during relative movement of said mold sections to closed position and while the other mold section contacts the other end of said device, to yieldably oppose with substantially constant force relative movement of such ends of device toward each other, and latch means for predeterminedly positioning such one end of said device with respect to said one mold section in the projected position of said device.

2,743,481
TIRE RETREADING APPARATUS
Earle W. Hawkinson, Minneapolis, Minn., assignor to Paul E. Hawkinson Company, Minneapolis, Minn., a corporation of Minnesota
Application December 27, 1954, Serial No. 477,631
4 Claims. (Cl. 18—18)

1. In a device of the class described, a pair of opposed circular horizontally disposed mold sections, the lower

of said sections comprising a table for the reception of a tire to be treated between said sections, a guide sleeve extending axially upwardly from said table, a screw element extending axially through said sleeve and having screw threaded engagement with one of said mold sections, means for locking said screw element against axial movement with respect to the other of said mold

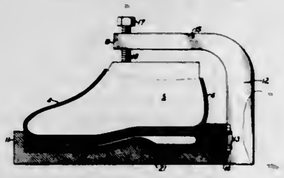


sections, a curing rim comprising a pair of upper and lower detachable rim sections, the lower of said rim sections having a central hub axially slidably mounted on said sleeve, means locking said lower rim section against rotation on said guide sleeve and yielding means interposed between said table and said lower rim section biasing said rim section in a direction axially away from said lower mold section.

2,743,482
RUBBER HYDROCHLORIDE FILM
George W. Ferner, Cuyahoga Falls, Ohio, assignor, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio
No Drawing. Application February 20, 1953, Serial No. 338,147
3 Claims. (Cl. 18—47.5)

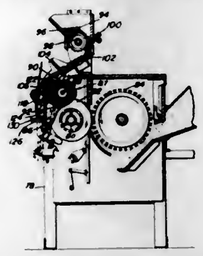
3. Rubber hydrochloride film which is molecularly oriented and contains dissolved therein over one per cent of solid dialkyl ether and more than is soluble in the unoriented rubber hydrochloride.

2,743,483
METHOD FOR PRODUCING RUBBER SOLED SHOES
Carlo P. Parisi, Santiago, Chile
Application September 23, 1952, Serial No. 311,041
4 Claims. (Cl. 18—59)



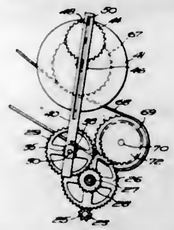
2. A method of producing a rubber base shoe after preparing the upper part of the shoe and placing it on a last, comprising inserting a hollow sole and heel portion into a cavity in a mold which latter has the configuration of the sole and heel of the finished shoe, said hollow sole and heel portion consisting of a bag of previously vulcanized rubber and containing in its interior a substance capable of generating a fluid by the action of heat and having a covering of a layer of unvulcanized rubber, and applying heat to the mold to vulcanize the external layer of unvulcanized rubber together with an expansion of the fluid in the internal bag of vulcanized rubber to thereby fill the cavity of the mold and to bond the layer to the upper part of the shoe.

2,743,484
TRASH REMOVER
Charlie J. Raynor, Rocky Mount, N. C.
Application June 16, 1953, Serial No. 361,904
5 Claims. (Cl. 19—56)



1. A trash remover for a linter comprising a roll box, a plurality of saws rotating on an axis substantially parallel to the axis of said roll box, said saws including edge portions extending into said roll box, a perforate cylinder rotatably mounted substantially co-axial within said roll box on an axis substantially parallel to the axis of the saws, a rotary conveyor engaging the inner peripheral surface of the perforate cylinder and extending longitudinally thereof, and suction means in communication with the perforate cylinder for applying a longitudinal suctional force within said cylinder to withdraw trash therefrom.

2,743,485
SLUBBING MECHANISM
George Partington, Pawtucket, R. I.
Application September 30, 1952, Serial No. 312,197
4 Claims. (Cl. 19—143.5)



1. The combination in a spinning frame provided with drawing rolls of a slub control arm, a ratchet mechanism, said slub control arm being operably connected through the ratchet mechanism to certain of said drawing rolls, a planetary gear system comprising sun and planet gears and means connecting said planet gear to said slub control arm for irregularly actuating said slub control arm which intermittently and irregularly actuates certain of said drawing rolls through said ratchet mechanism to form irregularly positioned thickness variations of a non-repeat character in yarn operated upon by said drawing rolls.

2,743,486
VEHICLE PARKING DEVICE AND SYSTEM OF PARKING
Floyd E. Grayek, Scranton, Pa.
Application August 11, 1954, Serial No. 449,046
7 Claims. (Cl. 20—1.13)

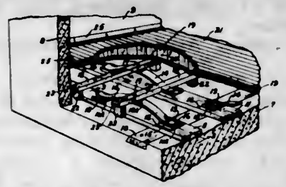
1. In a vehicle parking system for use in a building structure having at least one lower and one upper floor, means permitting transfer of vehicles from one floor

to another floor thereof, said means comprising an inclined ramp having beveled upper and lower edges, said upper floor having a circular opening therein to accommodate the upper end of said ramp, said upper edge being of a contour to fit said opening, a support mem-



ber having notches at the upper end thereof, said ramp being rotatably mounted in said support member, and means to lock said ramp in any predetermined peripheral position with respect to said opening, said locking means comprising an adjustable pin adapted to engage any one of said notches.

2,743,487
RESILIENT FLOOR CONSTRUCTION
Leo E. Kuhlman, Detroit, Mich.
Application April 18, 1951, Serial No. 221,647
1 Claim. (Cl. 20—6)



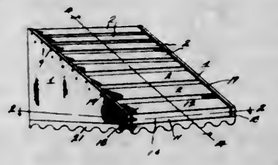
A floor construction for a building having fixed side walls, comprising a concrete sub-floor, sleepers embedded in said sub-floor, with their upper surfaces flush with the upper surface of said sub-floor, perpendicular, cross-members secured to said sleepers in parallel, spaced relation, and resting on said concrete sub-floor, a plurality of small, substantially square bearing plates, each having upstanding side walls, secured in spaced relation to said cross-members, a finished floor, spaced floor joists for supporting said finished floor, said joists being arranged perpendicularly to said cross-members and parallel to said sleepers, a plurality of arcuate springs secured at their centers, to said joists, each spring having its respective ends slidable on one of said bearing plates, and spaced, depending stop members, having direct load-carrying capacity, carried by and positioned beneath said joists and offset laterally from said springs and spaced from said bearing plates, whereby the flexing of said springs is limited and the vertical load on said finished floor and joists, is evenly distributed to the sub-floor, when said finished floor is moved a predetermined distance downwardly by an imposed load.

2,743,488
SEALED DOOR CONSTRUCTION FOR DRYERS AND THE LIKE
John R. Thygeson, Abington Township, Pa., assignor to Proctor & Schwartz, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application May 25, 1953, Serial No. 357,125
6 Claims. (Cl. 20—16)



1. In a door assembly comprising a frame member and a door member hinged at one edge to said frame for swinging movement therein, a seal construction between the free edge of the door member and the confronting surface of the frame member comprising a first continuous longitudinal resilient strip secured to one of said members and having a portion thereof biased transversely outward to define at least one continuous protruding longitudinal sealing surface, a second continuous longitudinal resilient strip secured to the other member and having a portion biased outwardly for over-center engagement beyond said continuous protruding sealing surface of said first strip, and means to limit over-center movement of said strip beyond said protruding sealing surface to thereby maintain said strips in continuous sealing engagement with each other.

2,743,489
METALLIC AWNINGS
Albert C. Ferguson, Jacksonville, Fla.
Application February 12, 1952, Serial No. 271,140
3 Claims. (Cl. 20—57.5)



1. A metallic awning comprising vertically disposed triangularly shaped side members, a plurality of cross members disposed in the same transverse inclined plane having their ends connected to said side members, a depending flange along the upper edge of each member and a U-shaped channel member along the lower edge of each member having its outer wall in overlapping engagement with the depending flange of the next adjacent member, said channel being of such width as to provide an open trough between the members, the bottom wall of said trough being disposed at an angle to the plane of said member.

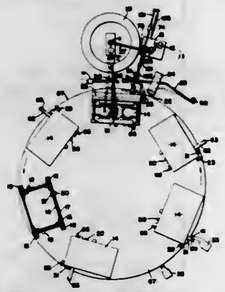
2,743,490
AWNING
A. B. Scott and Stanley E. Wyrozumski, Hammond, Ind., assignors to Bee Chemical Company, Chicago, Ill., a corporation of Illinois
Application February 28, 1952, Serial No. 273,858
2 Claims. (Cl. 20—57.5)



1. An awning comprising a unitary rigid framework having rigidly connected upper and lower side and front members lying in side and front vertical planes with the upper members lying in a plane at an angle to horizontal, the framework including vertical back members adapted to be secured to the wall of a building with the framework projecting therefrom, corrugated translucent sheets covering and secured to the front and sides of the framework and mounted with the corrugations extending vertically and terminating in top edges lying in the plane of the upper members of the framework, the lower edges of the front and sides sloping at an acute angle to the main planes of the front and sides to provide scalloped edges, and a flat corrugated top sheet fitting over the top of the framework and mounted with the corrugations extending from front to rear, the rear edge of the top sheet abutting the wall on which the framework is mounted

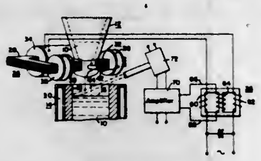
and the front edge of the top sheet projecting beyond the top edge of the front sheet to form air vents between its corrugations and the top edge of the front sheet.

2,743,491
FOUNDRY EQUIPMENT
Otto Carter Berry, Cleveland, Ohio
Application October 20, 1953, Serial No. 387,104
7 Claims. (Cl. 22—77)



3. A foundry apparatus comprising, a conveyor with a casting machine thereon equipped with a mold, a source of molten metal, a power-driven pump provided with a movable adjustment mechanism capable of controlling the volume of metal delivered to said mold by said pump in a single charge, delivery means capable of delivering said metal from said pump to said mold, and an adjustable means on said casting machine engageable with said adjustment mechanism to set the same to deliver a predetermined volume of metal to said mold, as said casting machine is passing said pump and receiving its charge of metal.

2,743,492
APPARATUS FOR CONTROLLING THE FLOW OF MOLTEN METAL
Rufus Easton, Schenectady, N. Y., assignor to Allegheny Ludlum Steel Corporation, Brackenridge, Pa., a corporation of Pennsylvania
Application April 20, 1953, Serial No. 349,673
5 Claims. (Cl. 22—79)



1. Apparatus for controlling the flow of a stream of molten metal from a tundish of refractory material having an orifice therein into a mold disposed to receive such metal, the combination therewith of a pair of electrodes disposed in substantial alignment on opposite sides of the orifice for passing an electrical current through the stream of molten metal flowing therethrough, magnetic poles disposed on opposite sides of the orifice displaced 90° from the pair of electrodes for developing a magnetic flux through the stream of molten metal for cooperating with the flow of current between the electrodes to produce a positive force on the stream, reactive means connected to control the magnetic flux between the magnetic poles, means responsive to the level of the molten metal in the mold for providing a direct current signal indicative of said level, and means for impressing a measure of the direct current signal on the reactive means to thereby provide a positive control of the magnetic flux to control the positive force applied to the stream of molten metal as the metal flows through the orifice.

2,743,493
INGOT MOLD INSERT MAT
William E. Schmertz and Harrison D. Sterick, Pittsburgh, Pa.
Application August 31, 1951, Serial No. 244,524
11 Claims. (Cl. 22—139)

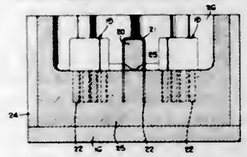


1. An ingot mold insert comprising a single strip of sheet metal arranged into a mat formed of several convolutions of the strip in face-to-face relation, said strip having laterally projecting offset portions over a part only of the entire area of the strip constituting each convolution effective in each convolution to keep the principal area of the convolutions out of contact whereby crevices and pockets are formed between the convolutions.

2,743,494
METHOD FOR THE CONTINUOUS CASTING OF METAL
Irving Rossi, Morristown, N. J., assignor to Continuous Metalcast Co., Inc., Wilmington, Del., a corporation of Delaware
No Drawing. Application November 9, 1953, Serial No. 391,135
2 Claims. (Cl. 22—200.1)

1. A method for the continuous casting of metal which comprises pouring molten metal continuously at a constant rate into one end of a casting mold, withdrawing solidified metal continuously at a constant rate of at least two hundred inches per minute from the other end of said mold, advancing said mold with said solidified metal at the same rate at which the solidified metal is being withdrawn, so that there is no relative motion between the solidified metal and the mold during the advancing stroke of the mold, and retracting said mold at a constant rate which is never greater than the rate at which the mold is advanced.

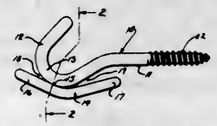
2,743,495
METHOD OF MAKING A COMPOSITE CUTTER
Stone E. Eklund, Torrance, Calif., assignor to The National Supply Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application May 7, 1951, Serial No. 225,043
3 Claims. (Cl. 22—202)



1. The method of making a tool having a cemented tungsten carbide cutter, comprising the steps of: inserting at least the portion of the cutter to be disposed in a mold cavity in a preformed nickel jacket, said portion being entirely covered by the jacket; mounting the jacketed portion of the cutter in a mold cavity so that the jacketed portion only extends into the mold cavity; filling the mold cavity with molten steel to fuse the nickel jacket to both the cutter and to the steel; and cooling the molten steel, cutter and jacket to unite them integrally.

2,743,496
SELF-LOCKING ROPE HOOK
Richard N. Looker, Milwaukee, Wis.
Application June 5, 1953, Serial No. 359,835
2 Claims. (Cl. 24—130)

1. A rope hitch for a clothes line comprising a threaded shank, a bill, an arcuate connecting bight portion forming with said bill and shank a hook, a bar bent intermediate its ends defining angularly extending arms, said arms forming an obtuse angle with one another, and means rigidly securing one of said arms within the obtuse angle to the lower outer surface of



said bight portion the arms lying substantially in the same plane as the hook, and said arms projecting in opposite direction from said bight portion and diverging angularly therefrom defining in conjunction with the outer arcuate face of the bight portion front and rear narrowing wedge throats.

2,743,497
SLIDE BUCKLE
Frank L. Davis, College Point, N. Y., assignor to Davis Aircraft Products Inc., New York, N. Y., a corporation of New York
Application March 25, 1953, Serial No. 344,606
1 Claim. (Cl. 24—196)



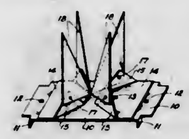
A slide buckle comprising a one-piece sheet metal channel having a flat back wall and substantially parallel side flanges extending upwardly therefrom, a stationary non-rotatable cross-bar rigidly connecting said side flanges near one end of the channel, means for connecting a strap with the opposite end portion of the channel, said side flanges having straight, longitudinally extending slots therein close to and substantially parallel with the flat back wall of the channel with the plane of the upper edges of said slots intersecting said cross-bar, said slots extending in a plane between said cross-bar and back wall and with ends of the same close to said cross-bar, a flat non-rotatable bar extending across the channel and having flat end extensions slidably engaged in said slots, a strap holding non-rotatable, sleeve engaged about that portion of said slidable bar between the side flanges and slidably engageable at its ends with the inner faces of said side flanges, a strap having a looped portion disposed within the channel and extending about said sleeve and between said sleeve and said stationary cross-bar, with both portions of the loop confined between said cross-bar and the back wall of the channel and extending outwardly from that end of the channel, the cross-bar holding the outer turn of the loop of the strap displaced across the end of the sleeve toward the back wall and the back wall confining both turns of the loop so engaged about the sleeve and cross-bar and in described position extending outward from the end of the channel, the ends of said flat bar projecting through the slots in the side flanges, and finger buttons on the projecting ends of the sliding cross-bar and in sliding engagement with the outer sides of said side flanges for guiding said flat bar in straight sliding relation toward and away from the stationary cross-bar and enabling manual adjustment of said slide bar in respect to the rigid cross-bar.

2,743,498
JEWELRY CLASP
John P. McVinney, Providence, R. I., assignor to Coro, Inc., a corporation of Rhode Island
Application June 28, 1954, Serial No. 439,605
5 Claims. (Cl. 24—252)



3. In a jewelry clasp, a base having a central section, an ornament mounting support extending upwardly from the rear edge of the section, and wings extending upwardly from the sides of the section and having terminal ears with aligned pivot openings, said central section including a rear portion having a recess opening and a forward portion having an abutment, and a jaw having an upper portion, spaced bars depending from the upper portion and having laterally extending pivot pins at their lower ends seated in the ear pivot openings, and an intermediate spring tongue depending from the upper portion and slidably seating on said abutment and tensioned thereby for closing movement of said jaw towards an ornament mounted on said support, the lower terminal of the spring tongue extending into the recess opening upon opening movement of the jaw, said lower terminal having a stop engageable with the central section rear portion for limiting opening movement of the spring tongue.

2,743,499
ENAMELING STAND
Arthur H. Edgerton, Rocky River, Ohio
Application December 12, 1952, Serial No. 325,612
5 Claims. (Cl. 25—153)



5. An enameling stand comprising a rectangular base, depending integral legs thereon, upright sheet metal work supporting arms mounted on said base, each arm having a lineal work supporting edge inclined towards the base and disposed in convergent relation with the longitudinal center line of the base, and means for adjusting said arms towards and away from each other along the longitudinal center line of the base, whereby circular work pieces of various size may be supported on the inclined convergent lineal edges of said arms.

2,743,500
FORGING METHOD AND APPARATUS
Sverre Berg, Erie, Pa., assignor to Erie Forge Company, Erie, Pa., a corporation of Delaware
Application December 7, 1950, Serial No. 199,710
16 Claims. (Cl. 29—6)

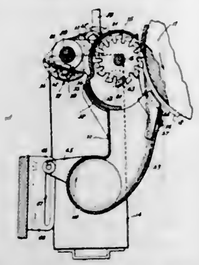


3. Apparatus for forging crank shafts comprising a vertical press having a cross head carrying the upper half of a pin forming die intermediate the upper halves of journal forming dies, guides in the cross head and journal dies permitting sliding of the journal dies toward the

pin die, a bed slidably carrying the lower halves of the journal dies, and a ram carrying the lower half of the pin die, and a pair of horizontal presses, said presses being laterally spaced apart so as to exert forces on spaced horizontal axes and arranged so the axes are respectively at each side of the axis of the journal dies and said presses having rams engaging the outer ends of the journal dies for moving the same toward each other and having strain members extending along the outside of the journal and pin dies, whereby the space along the axis of the crank shaft is unobstructed.

16. The method of forging a crank shaft from a billet having a portion to be formed into a crank pin, portions laterally spaced from each end thereof to be formed into journals, and intermediate portions connecting the pin and journal portions to be formed into webs or crank throws which comprises, gripping the journal portions of the billet between journal forming dies under pressure crosswise of the journals, moving the pin portion of the billet in the direction to offset the same while maintaining the gripping pressure on the journal dies and moving the journal dies and the journal portions of the billet gripped between the dies endwise toward each other along the axis of the shaft, the rate of movement of the journal portions of the billet being substantially at the rate of movement of the pin portions of the billet times the tangent of the angle between the web and journal portions of the billet.

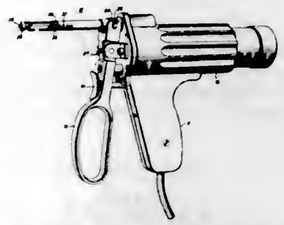
2,743,501
SAW CHIP COLLECTOR
Paul L. Tollison, North Plainfield, and Charles L. Ricards, South Plainfield, N. J., assignors to Wood Newspaper Machinery Corporation, Plainfield, N. J., a corporation of Virginia
Application January 22, 1953, Serial No. 332,676
5 Claims. (Cl. 29—21)



1. A saw chip collector comprising a substantially cylindrical hollow body portion, a curved lead-in portion extending from said body portion with a gradually increasing radius of curvature and terminating in a section of substantially infinite radius, and means for mounting said chip collector on a stereotype plate trimming saw housing with its terminal section positioned to intercept in a substantially tangential direction any chips thrown by a saw in the saw housing when the collector is mounted on the saw housing and the saw is in cutting engagement with a stereotype plate.

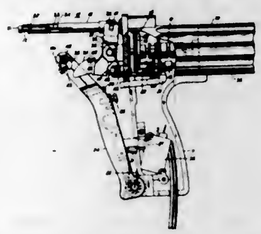
2,743,502
WIRE CONNECTING TOOL
Frank Reck, Flushing, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application June 30, 1951, Serial No. 234,643
6 Claims. (Cl. 29—33)

1. A wiring tool for cutting and stripping an insulated wire, and for wrapping a portion thereof on a terminal, that comprises a shaft, and a sleeve mounted thereon for relative movement with respect thereto, said shaft having on one end a notched projection, one notch face thereof comprising part of a wrapping head, a portion of said face comprising the shaft part of an insulation mutilating means, and an edged projection spaced from said end comprising part of a wire cutting means; and the sleeve having on the corresponding end a shoulder opposite said notch face and defining therewith a wrapping head, a portion of the sleeve adjacent the shoulder, opposite said shaft part of the mutilating means and defining therewith insulating, mutilating and stripping means, and a shouldered slot spaced from said sleeve end,



opposite the edged projection and defining therewith the wire cutting means; means for imparting relative movement to said shaft and sleeve to allow the insertion of an insulated wire in said device and also for imparting different relative movement to said shaft and sleeve for simultaneously cutting the wire, mutilating the insulation preparatory to stripping, and securing the wire in the winding head, a motor, and means for connecting said motor to rotate said shaft and sleeve for simultaneously stripping the wire and wrapping a portion thereof on a terminal.

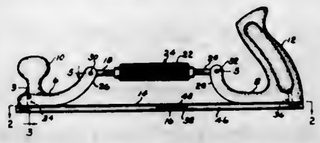
2,743,503
WIRE CONNECTING TOOL
Rudolph F. Mallina, Hastings on Hudson, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application December 30, 1952, Serial No. 328,713
3 Claims. (Cl. 29—33)



1. A wiring tool for connecting an insulated wire to a terminal that comprises a housing, a wiring head including a rotatable spindle and a rotatable sleeve longitudinally movable on said spindle, the spindle and the sleeve having cooperating portions for receiving a wire when the sleeve is in one extreme longitudinal position, for cutting the wire to length and for mutilating a portion of the insulation when the sleeve is in the other extreme longitudinal position, and for wrapping a stripped portion of the wire on a terminal while simultaneously stripping the insulating therefrom when the sleeve is in an intermediate longitudinal position, a motor, a clutch for connecting the motor to the spindle and the sleeve, an operating lever pivoted to the housing and biased away from said housing, and a linkage between the lever and the sleeve including a bellcrank pivoted to the housing and having at one end a connection to the sleeve and at the other end a cam surface, a follower on the operating lever for contacting said cam surface to rotate the bellcrank in one direction and thus move the sleeve from said one to said other extreme position upon movement of the lever toward the

housing, biasing springs on the housing for resisting rotation of the bellcrank, a depression on the bellcrank adjacent the cam surface for receiving the follower to allow slight retrograde rotation of the bellcrank by the biasing springs to move the sleeve to said intermediate position, and means on the lever for making contact with means on the housing to initiate operation of the clutch and the motor to rotate the spindle and the sleeve.

2,743,504
FILE GUARDS
Cornelius F. Hoyt, Rochester, N. Y.
Application November 3, 1954, Serial No. 466,524
7 Claims. (Cl. 29—80)



1. A file guard comprising a resilient sheet metal elongated channel section, said channel section having a central portion with rolled edges along the side edges thereof, said guard adapted to be held against the back of an elongated flat rectangular section file, said guard being of a width approximately double the width of the file for which it is adapted, and said rolled side edges being of a diameter slightly less than the thickness of the file whereby a common plane tangential to said rolled edges lies behind the outer file surface.

2,743,505
JOINTS FOR COAXIAL CABLE
William George Hill, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application April 14, 1951, Serial No. 221,007
Claims priority, application Great Britain April 18, 1950
3 Claims. (Cl. 29—155.5)



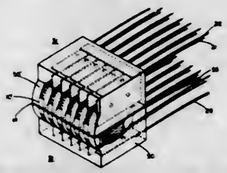
3. The method of making a flexible electrical connecting joint between a longitudinally folded outer conductor of a coaxial cable and a longitudinally seamed malleable tubular member of similar outside and inside diameters to said conductor, comprising expanding for a short distance one end of said tubular member so that its inside diameter is approximately equal to the outside diameter of said outer conductor, opening up said tubular member along its longitudinal seam, slipping said tubular member over said outer conductor so that the expanded end acts as a socket with respect to said outer conductor, and soldering or sealing the expanded end of the tubular member on said outer conductor.

2,743,506
METHOD OF MANUFACTURING RECTIFIER CELLS
Benjamin Solow, Philadelphia, Pa., assignor to International Resistance Company, Philadelphia, Pa., a corporation of Delaware
Application February 23, 1952, Serial No. 273,030
7 Claims. (Cl. 29—155.5)



1. The method of making a plurality of rectifier cells from laminated sheet stock comprising a relatively non-brittle base metal lamina and an overlying brittle and easily fracturable valving lamina, which comprises milling through said valving lamina circular grooves having inner sloping side walls and substantially flat bottoms of appreciable width to define frusto-conical cell buttons with ribbons of the base metal exposed in the bottoms of said grooves and punching through said base metal lamina by pressure applied only within the boundaries of said exposed ribbons appreciably outward of the inner margins thereof so that the valving lamina is not shattered thereby, to form a plurality of separate cell units each having a disc of base metal superposed by a concentric frusto-conical portion in which the material of said valving lamina is offset inwardly of the edge of said base metal disc.

2,743,507
METHOD OF MAKING MAGNETIC TRANSDUCER HEADS
Otto Kornei, Cleveland Heights, Ohio, assignor, by mesne assignments, to Clevite Corporation, Cleveland, Ohio, a corporation of Ohio
Original application June 8, 1951, Serial No. 230,455. Divided and this application February 18, 1953, Serial No. 337,463
5 Claims. (Cl. 29—155.5)

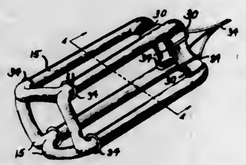


1. The method of making a multitrack magnetic transducer head comprising the steps of: forming a first and a second sub-assembly each by providing a plurality of magnetic pole pieces having a pair of pole tip faces, winding coil means about a plurality of said pole pieces, holding all of said pole pieces in a mold in parallel closely spaced side-by-side relationship with their pole tip faces approximately aligned in a plane, while holding said pole pieces in said mold casting a hardenable liquid material into said mold, causing said liquid material to harden to firmly hold said pole pieces in said defined positional relationship, removing from said mold the block of hardened material having embedded in it said positioned pole pieces, lapping said approximately aligned pole tip faces to substantially perfectly align them in a plane; providing thin, non-magnetic spacer means; holding said first and second sub-assemblies in contact with opposite sides of said spacer means and with the pole tip faces of one sub-assembly in registration with the pole tip faces of the other sub-assembly forming a plurality of substantially closed magnetic paths each having at least one of said wound pole pieces; applying hardenable liquid casting material to said two sub-assemblies while holding them in said position; and causing said casting material to harden into a unitary block.

2,743,508
COIL FORMING METHOD
Max Isaacson, Dayton, Ohio, assignor to Globe Industries, Inc., Dayton, Ohio, a corporation of Ohio
Application June 20, 1951, Serial No. 232,641
8 Claims. (Cl. 29—155.57)

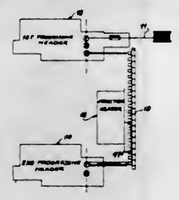
6. The method of manufacturing a motor stator comprising forming a plurality of individual stator laminations having coil slots adjacent their inner periphery, preforming stator coils upon a mandrel so as to have a cross sectional configuration at the one end of the coils which

is complementary to the configuration of the projected cross sections of the stator slots, applying a bonding material to the coils thereby retaining the formation of the



coils, removing the coils from the mandrel and thereafter sliding the individual stator laminations endwise onto said coils.

2,743,509
METHOD OF MAKING COMPRESSOR BLADES
Robert G. Friedman, Tiffin, Ohio, assignor to The National Machinery Company, Tiffin, Ohio, a corporation of Ohio
Application December 30, 1952, Serial No. 328,604
2 Claims. (Cl. 29—156.8)



1. A method of extruding and forging elongated metal blanks having a stem portion of one cross section and a root section spaced therefrom of larger cross section comprising, the steps of extruding said stem portion of small cross section from a blank having substantial uniform cross section larger than said stem cross section and smaller than said large root portion, conveying said extruded blank so that the unextruded portion of the blank extends laterally from a conveyor, heating the entire unextruded portion of the blank as the conveyor moves the unextruded portion of the blank through a heating device, confining the extreme end of the heated unextruded portion of the blank in a die corresponding to the diameter of the unextruded portion, confining the extruded stem portion in a die corresponding to the extruded stem diameter, and exerting pressure longitudinally on said heated confined unextruded portion of the blank, whereby the heated unconfined portion of the unextruded portion is upset by the pressure to provide the enlarged upset root portion.

2,743,510
INFLATABLE FABRIC SEGMENT OF CURVED CONFIGURATION AND THE METHOD OF MAKING THE SAME
Paul Mauney, Kings Mountain, N. C., and Charles J. Ford, Lake Cable, Canton, Ohio, assignors, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio
Application October 19, 1953, Serial No. 386,830
3 Claims. (Cl. 28—74)

1. An inflatable fabric segment capable of assuming a curved configuration upon inflation, said fabric segment comprising a double ply construction in which the plies are substantially superposed and joined together by a plurality of substantially inextensible tie threads woven partially into each of the plies for restricting the extent of separability of the plies, one of said plies being woven from untreated raw nylon threads and the other being woven from treated and pre-stressed nylon such that on being subjected to heat and pressure, the first ply will be stretched and the other will remain unaffected; and



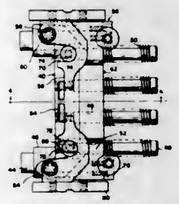
a vulcanized rubber coating applied to the outermost surfaces of each ply.

2,743,511
SCOURING PAD AND FILAMENT
Anthony L. Genovese, Odenton, Md., assignor to The National Plastic Products Company, Odenton, Md., a corporation of Maryland
Application November 5, 1952, Serial No. 318,884
4 Claims. (Cl. 28—78)



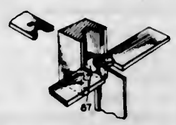
4. A scouring pad comprising a mass of thermoplastic fibers, each of said fibers having a body portion and at least three longitudinally and continuously extending fins formed integral with said body portion, said fins being defined by edges formed with sharp corners suitable for abrasive purposes wherein each of said fibers is twisted to simulate a plurality of filaments wound together.

2,743,512
APPARATUS FOR FINNING PIPE
Robert F. Moyer, Providence, R. I., assignor, by mesne assignments, to National-U. S. Radiator Corporation, a corporation of Maryland
Application August 22, 1951, Serial No. 243,054
10 Claims. (Cl. 29—202)



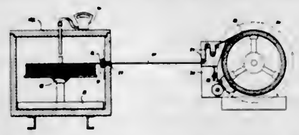
1. Apparatus for assembling sleeved fins on pipe in which the sleeves of the fins are partially telescoped by the application of substantially equal forces to each fin as it is telescoped over the sleeve of the preceding fin which comprises: means for supporting a pipe from one end only thereof, a carriage movable longitudinally of the pipe from the unsupported end toward its supported end, means for advancing said carriage continuously at a uniform speed, a fin seating member carried by said carriage shaped to engage a fin to be assembled on the pipe, guide means on said carriage mounting said fin seating member for movement relative to said carriage parallel to the line of advance of said carriage, spring means opposing movement of said fin seating member rearwardly of the direction of advance of said carriage, a pivot support for said fin seating member having its axis perpendicular to the path of advance of said carriage, and lock means for said fin seating member effective to lock said fin seating member against swinging movement about the axis of its pivot support, said lock means being releasable upon predetermined movement of said fin seating member relative to said carriage.

2,743,513
METHOD OF MAKING SLIDE FASTENER CHAIN
Max H. Lange, New York, N. Y., assignor to Sarah R. Morse
Original application September 30, 1947, Serial No. 776,906, now Patent No. 2,639,755, dated May 26, 1953. Divided and this application April 6, 1953, Serial No. 356,861
4 Claims. (Cl. 29—410)



1. In the method of making slide fastener chain, the steps of progressively shearing elements from the end of a strip of metal, holding each sheared element by a three point support after the shearing and without removing the element from the tools which sheared it and thereafter clamping it securely to a tape.

2,743,514
METHOD OF REINFORCING CONCRETE UNITS
George P. Duecy, Everett, Wash.
Application June 1, 1953, Serial No. 358,669
5 Claims. (Cl. 29—452)



1. The process of reinforcing a pre-cast concrete unit which comprises, subjecting a tensioning band to a controlled heat of predetermined degree for a period of sufficient duration to cause the band to be relieved of stresses, readjusting the temperature of the band to a predetermined lower degree for application, applying the band about the concrete unit under tension, securing it at its ends and allowing it to gradually cool.

2,743,515
WELD BACKINGS AND METHOD OF WELDING BY USE OF SAME
Fred Davis, Lynn, William Bernard Penn, Marblehead, and Daniel Wood Puffer, Melrose, Mass., assignors to General Electric Company, a corporation of New York
No Drawing. Application November 9, 1951, Serial No. 255,752
9 Claims. (Cl. 29—491)

3. The method of welding comprising the steps of placing edges of the parts to be joined in juxtaposition to form a seam, applying a coating comprising a self-supporting dimethyl silicone compound which possesses resiliency and plasticity along the back surfaces of the parts adjacent the seam, and heating the parts at the seam to fuse their juxtaposed edges to form a weld therebetween.

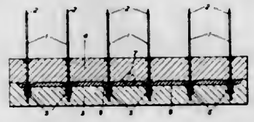
4. A coating composition for use in forming weld backings, said composition comprising (1) tantalum hydride, (2) a plastic reaction product of dimethylpolysiloxane and a compound selected from the group consisting of boron oxide and boric acids, and (3) a solvent for said product, said composition containing less than two-tenths of one percent of water.

6. A weld backing comprising powdered tantalum hydride in a dispersion medium of a self-supporting, resilient and plastic reaction product of dimethylpolysiloxane and a compound selected from the group consisting of boron oxide and boric acids.

2,743,516
PRODUCTION OF COMPOSITE MATERIAL FOR THE MANUFACTURE OF PLAIN BEARINGS
Peter G. Forrester and George D. Denyer, Alperton, Wembley, England, assignors to The Glacier Metal Company Limited, Alperton, Wembley, England, a British company
No Drawing. Application June 2, 1952, Serial No. 291,306
13 Claims. (Cl. 29—528)

1. A method of manufacturing composite material consisting of a hard aluminium alloy backing and a soft aluminium alloy facing layer bonded to the backing and containing at least 7% of tin, which comprises heating the backing to a temperature substantially below its melting point and applying on to the backing a layer of molten soft aluminium alloy containing at least 7% of tin and heated substantially above the melting point of the hard alloy, the relative thicknesses of the layers and the relative temperatures being such that superficial melting of the backing takes place to produce a strong bond and rapid cooling and solidification of the tin-containing facing layer is brought about to obviate substantial diffusion of tin into the backing layer.

2,743,517
MANUFACTURE OF HYPODERMIC NEEDLES
Samuel James Everett, Thornton Heath, England, assignor to S. & R. J. Everett & Company Limited, Thornton Heath, England, a British company
Application May 1, 1953, Serial No. 352,489
Claims priority, application Great Britain May 6, 1952
7 Claims. (Cl. 29—528)



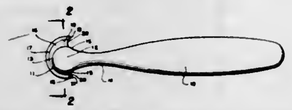
1. A process of securing hypodermic needles into mounts by which they may be attached to a hypodermic syringe, by means of soft metal bushes surrounding the shafts of each needle, the bushes being swaged into bores in said mounts comprising casting a plurality of said bushes around a like number of said needles simultaneously on one continuous runner at points intermediate the ends of said needles, sliding said needles axially in said bushes to position said bushes at the rear ends of said needles, fitting a mount over each of said bushes, swaging said bushes into intimate contact with said needles and said mounts, and separating said bushes from said runner.

2,743,518
METHOD OF MANUFACTURING A SHEET METAL SOCKET ELEMENT
Victor F. Zahodiakin, Summit, N. J.
Application July 17, 1953, Serial No. 368,606
23 Claims. (Cl. 29—539)



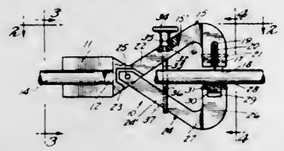
1. A process of forming socket elements from sheet material, comprising drawing metal to cup shape thereby forming an upstanding wall symmetrical about an axis, shearing the end of said wall on a plane perpendicular to said axis, and slicing off a further section of said wall by a cutter moving in a direction perpendicular to said axis and with the cutting edge of the cutter at an angle to said plane thereby producing a top edge portion of the upstanding wall sloping progressively forward thereof.

2,743,519
CUTTER FOR FACILITATING PEELING OF CITRUS FRUITS
Charles James Hazelton, Tulsa, Okla.
Application June 17, 1955, Serial No. 516,205
5 Claims. (Cl. 30—24)



1. A fruit cutter of the class described including a handle provided with a curved cutting head at one end, said head having a convexed peripheral base merging into the handle at opposite sides thereof, a curved blade extending outwardly and centrally from the base, said blade having end portions of different widths, and said base providing shoulder means disposed on opposite sides of the blade for limiting the inward penetration of the blade into the fruit.

2,743,520
ROD CUTTING DEVICE
Earl A. Hofmaster, Mankato, Minn.
Application December 20, 1954, Serial No. 476,174
1 Claim. (Cl. 30—102)



A rod cutting device comprising structure defining an arcuate axially-extending seat adapted to receive the rod to be cut and rotatable with respect thereto about the axis of said rod, a fixed jaw rigidly secured at its inner end to one end of said structure and projecting generally longitudinally outwardly therefrom, said fixed jaw comprising an arm portion adapted to be disposed in adjacent laterally spaced relationship with said rod and an offset head at its outer end extending generally at right angles to said arm portion to extend across said rod radially outwardly spaced therefrom, a movable jaw disposed in substantially common planes with said fixed jaw and pivotally secured at its inner end adjacent the inner end of said fixed jaw for swinging movements toward and away from said fixed jaw, an adjustable bolt connecting said fixed and movable jaws for controlling the movement of said movable jaw with respect to said fixed jaw, said movable jaw including a head at its outer end in oppositely disposed relationship to said first-mentioned head and adapted to extend across said rod radially outwardly spaced therefrom on the opposite side thereof from said first-mentioned head, said fixed an movable jaws being rotatable with said structure about the axis of said rod, a cutting element carried by one of said heads at right angles to the axis of said seat and adapted to engage said rod in cutting relationship at right angles to the axis thereof, and a pair of laterally spaced parallel pressure rollers connected to the other of said heads for rotation with respect thereto about axes disposed generally parallel to the axis of said rod when said rod is being cut, said pressure rollers being adapted to engage the outer surface of said rod which is adapted to extend parallel to said pressure rollers in centrally disposed offset relationship therewith and to be supported in the valley between said pressure rollers; whereby adjustment of said bolt to move said heads toward each other brings said cutting element into cutting relationship with said rod, and upon rotation of said structure and said jaws with respect to said rod, said rod is cut at right angles to the axis thereof.

2,743,521
RADIALLY CUTTING TUBE CUTTER HAVING ADJUSTABLE TOOL
William F. Oberhuber and Ernest Wollin, Philadelphia, and Alfred P. Goetze, Huntingdon Valley, Pa.
Application July 29, 1953, Serial No. 370,972
2 Claims. (Cl. 30—106)



1. In a cutter for tubes, a plug having a longitudinal slot, adapted to extend into a tube to be cut, having near its forward end an external shoulder directed rearwardly and having a shank at the rear adapted to be received into the chuck of a rotary tool, a forward thrust bearing race surrounding the plug and normally engaging the shoulder, a collar surrounding the plug rearwardly of the forward thrust bearing race and forming a rearward thrust bearing race, thrust bearing elements between the forward thrust bearing race and the collar, the collar, forward thrust bearing race and thrust bearing elements being movable along the plug, a spring abutment adjustably secured to the plug rearwardly of the collar, a spiral compression spring surrounding the plug and acting between the spring abutment and the collar, a tool bar extending longitudinally through the slot and having a tool mounting at its forward end, a tool secured in the tool mounting and extending radially, a pivot on the collar pivotally mounting the tool bar, cam means at the forward end of the plug acting between the plug and the tool bar to urge the tool bar outwardly when the collar moves rearwardly, a cam extension on the tool bar rearwardly of the pivot, and a pin extending across the slot secured to the plug and acting against the cam extension to urge the tool radially inwardly when the collar moves forward.

2,743,522
PRUNING ATTACHMENT FOR WEED PULLER
John A. Overhouse and Matt Ristila, Lansing, Mich.
Application October 25, 1954, Serial No. 464,327
3 Claims. (Cl. 30—253)

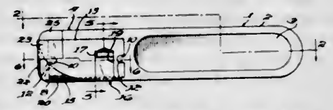
1. A pruning attachment for weed pulling tools or the like of the type including a staff having clamping jaws at one end thereof and a handle at the opposite end,

operating means adjacent said handle and connections by which said jaws are closed by manipulation of said operating means; said attachment comprising a pair of pivotally connected shearing blades insertable between said jaws when in open position and means for attaching said blades respectively to said jaws including an up-



turned hook portion at the lower end and a rear edge of each blade for engaging the end of the corresponding jaw over the adjacent outer face thereof, and means for retaining such engagement whereby shearing may be performed by the actuation of said jaws by said operating means

2,743,523
CARTON OPENING KNIFE
Robert Honey, Los Angeles, Calif.
Application June 27, 1955, Serial No. 518,144
4 Claims. (Cl. 30—286)



1. A means for holding a backed razor blade with resultant formation of a knife means; said holding means comprising a handle component including a hand grip portion and a blade holding portion formed as a longitudinal extension of the hand grip portion and having on one side thereof a bearing face for one side of a backed razor blade and a socket in which the back component at said one side of the razor blade is received, a holding member overlying the blade engaging portion of said handle component and including a bearing face engaging the opposite side of a razor blade positioned on said handle component with the back component thereof disposed in said socket; said holding member having a clearance cut therein for reception of the opposite side of the razor blade back component, interengaging means on said handle component and said holding means effective to maintain them in aligned position; said blade engaging faces of said handle component and said holding means being similarly cut away to expose the end portion of the cutting edge of the razor blade, and spring clip means detachably securing said holding means and said handle component clampingly engaging a razor blade therebetween; said clip means including a resilient, slotted guard element normally guarding the exposed edge of a razor blade clamped between said handle component and said holding means.

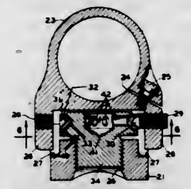
2,743,524
TOOLS
Sundel Doniger, New York, N. Y.
Application August 8, 1955, Serial No. 526,995
5 Claims. (Cl. 30—342)

1. A tool comprising a handle body having a mandrel at its forward end and screw threads to the rear of said mandrel, a collar having threads for screwing onto the threads of said body and having a hollow for receiving said mandrel, said hollow being larger than said mandrel



and receiving the mandrel loosely therein, and a blade having a shank engageable between said collar and mandrel in said hollow.

2,743,525
TELESCOPE SIGHT MOUNT
Marcus Leupold, Portland, Oreg., assignor to Leupold & Stevens Instruments, Inc., Portland, Oreg., a corporation of Oregon
Application January 7, 1954, Serial No. 402,625
8 Claims. (Cl. 33—50)



1. An elevation adjusting device for a telescope sight comprising an elevation screw having a threaded stem and a large head providing an overhanging flange, a plurality of radial click ridges on the lower surface of said flange, a base having a threaded opening for reception of said stem, a click spring socket extending into said base beneath the overhanging flange of said head, a coil spring compressed in said socket, and a click element slidably mounted in said socket and urged against said ridges by said spring, the head of said elevation screw having a plurality of radially extending capstan openings therein and a coaxial socket in the upper surface thereof into which said capstan openings extend, said capstan openings being equally spaced and there being an odd number thereof, said base having a laterally open recess in the upper surface thereof into which the head of said screw may be depressed, the lateral opening of said recess having an angular width with respect to the center of said screw greater than the angular spacing of said capstan openings.

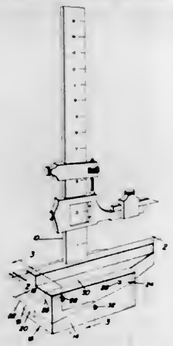
2,743,526
DETACHABLE TOP MOUNT
Jessie T. Ivy, Seattle, Wash.
Application September 16, 1954, Serial No. 456,597
4 Claims. (Cl. 33—50)



1. A telescope mount of the character described comprising a base block adapted to be disposed upon and fixed to a gun frame, and a collar that is adapted for mounting on said base block and to be secured about a telescope barrel; said collar having leg portions at its opposite sides, depending along opposite sides of the base block with clearance that permits limited lateral

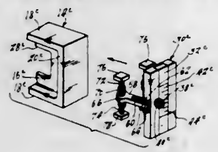
adjustment of the collar relative to the base block, adjusting screws threaded inwardly through said leg portions of the collar, in axial alignment, and having conically tapered inner end portions, and said base block being longitudinally channeled centrally of its top surface and to its full length providing an open sighting passage through which the gun sights are visible and provided with correspondingly tapered sockets containing the tapered ends of said adjusting screws therein, and said screws being equipped at their outer ends with means for effecting their adjustment whereby the transverse position of the collar relative to the base block is established.

2,743,527
HEIGHT GAGE
Donald I. Gens, Silver Creek, N. Y.
Application August 3, 1953, Serial No. 372,008
1 Claim. (Cl. 33—169)



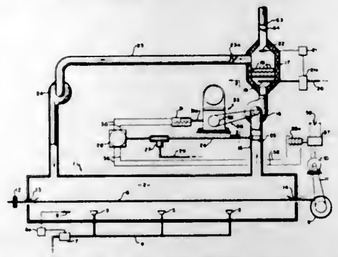
The combination with a height gage having a horizontal flat bottom portion, of an oblong base member, an oblong base plate imposed on said base member, said base plate and base member having slidably engaged upwardly inclined bottom and top faces, respectively, for sliding adjustment of said base plate vertically on said base member, said base plate tapering in longitudinal section to provide a horizontal top thereon, said top being provided with a longitudinal horizontal recess slidably receiving said bottom portion for horizontal adjustment of said bottom portion in different vertically adjusted positions of said base plate, and dove-tail tongue and groove sliding connections between said base member and base plate for guiding said base plate in adjustment thereof.

2,743,528
ADJUSTABLE PITCH FOR LEVELING INSTRUMENTS
Vincent F. Posthauer, Sr., Glen Oaks, N. Y.
Application September 20, 1954, Serial No. 457,275
6 Claims. (Cl. 33—207)



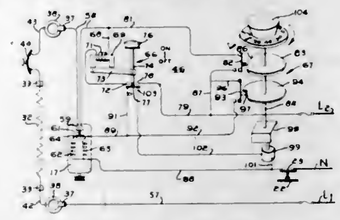
1. An adjustable pitch-gauging attachment for a spirit level comprising means connectable to a level at one end thereof, and a plate in engagement with said means and adjustable transversely of the level beyond one side thereof into engagement with an inclined surface the pitch of which is to be established, said means including a base plate, clamping arms carried by said base plate at opposite sides thereof and swingable toward and away from the opposite faces of the level when the base plate is positioned against one end of the level, and means on said arms engageable with the level to hold the base plate in position thereagainst.

2,743,529
DRYING OVEN AND OPERATION THEREOF
Cletus T. Hayes, Philadelphia, Pa., assignor to Oxy-Catalyst, Inc., a corporation of Pennsylvania
Application July 6, 1954, Serial No. 441,327
12 Claims. (Cl. 34—35)



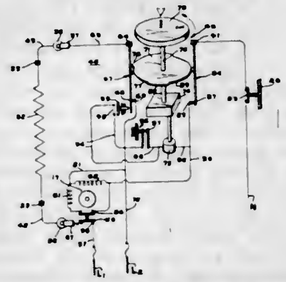
1. In the operation of a drying oven wherein combustible vapors are evolved, the process of eliminating and utilizing said vapors comprising the steps of flowing air from the atmosphere into the oven and in contact with the material being dried to produce a first resultant mixture of combustible vapors and drying air, passing said first resultant mixture over an oxidation catalyst to catalytically oxidize the combustible vapors therein and to produce a second resultant mixture at an elevated temperature substantially free of combustible vapors, recirculating at least a portion of said second resultant mixture into the oven, continuously analyzing said first resultant mixture to detect the concentration of combustible vapors therein, and regulating the flow of drying air into the oven in accordance with the thus detected vapor concentration so as to maintain a predetermined vapor concentration in said first resultant mixture less than that which will produce an explosive mixture but sufficient when said vapors are oxidized at the surface of said oxidation catalyst to maintain said catalyst at an efficient temperature of operation.

2,743,530
CONTROL FOR CLOTHES DRIERS
Thomas R. Smith and Colby Weston Steward, Newton, Iowa, assignors to The Maytag Company, Newton, Iowa, a corporation of Delaware
Application April 14, 1952, Serial No. 282,093
10 Claims. (Cl. 34—45)



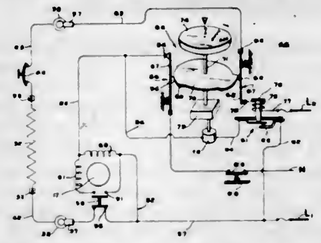
1. In control mechanism for a clothes drier having a rotatable drum, the combination of drive means for said rotatable drum, a heating element carried by said drum for evaporating the moisture in the clothes, a manually operated holding relay for energizing said heating element and said drive means, and a fixed temperature responsive thermostat mounted on said drum and responsive to the temperature therein for deenergizing said heating element and said holding relay, said relay being operative upon deenergization to terminate operation of said drive means.

2,743,531
CONTROL CIRCUIT FOR CLOTHES DRIER
Colby Weston Steward, Newton, Iowa, assignor to The Maytag Company, Newton, Iowa, a corporation of Delaware
Application May 3, 1952, Serial No. 285,852
1 Claim. (Cl. 34—45)



In a control mechanism for a drying apparatus having a drive motor, a timer motor and heating means, the combination of an energizing circuit for said heating means, energizing circuits for each of said drive and timer motors, a single-pole double-throw switch closing said heating means circuit and opening said timer motor circuit, a cam controlling said switch, and a normally open thermostatic switch controlling said timer motor and said cam.

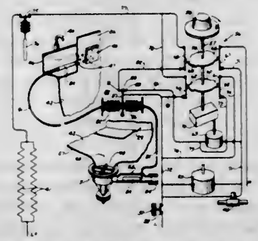
2,743,532
CLOTHES DRIER AUTOMATIC CONTROL CIRCUIT
Colby Weston Steward, Newton, Iowa, assignor to The Maytag Company, Newton, Iowa, a corporation of Delaware
Application May 3, 1952, Serial No. 285,851
2 Claims. (Cl. 34—45)



1. In a control mechanism for a drying apparatus, heating means, a first switch controlling said heating means, a drive motor, a timer control including a timer motor in parallel with said drive motor, a second switch controlling said drive and timer motors, said timer control having a single cam controlling said first and second switches, a normally open third switch in series with said timer motor, a relay coil in series with said heating means, said relay coil controlling said third switch, and means responsive to a predetermined high temperature for deenergizing said heating means and said relay to close said third switch and energize said timer motor.

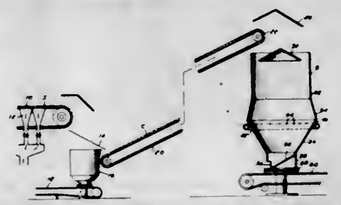
2,743,533
AUTOMATIC CONTROL FOR CLOTHES DRIERS
Thomas R. Smith, Newton, Iowa, assignor to The Maytag Company, Newton, Iowa, a corporation of Delaware
Application May 1, 1953, Serial No. 352,443
13 Claims. (Cl. 34—45)

1. In control apparatus for a vapor condensing type clothes drier, the combination of means for agitating the clothes, a casing surrounding said means to provide a drying chamber, means for heating the clothes in said chamber to evaporate the moisture therefrom, condenser means for receiving a cooling medium for condensing the vapor evaporated from the clothing by absorbing the heat from said vapor, an inlet and an outlet for said cooling medium, a timer for initiating the drying operation, circuit means responsive to a difference in temperature of the cooling medium between said inlet and said outlet, a



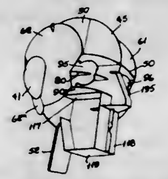
first switch controlled by said timer for conditioning said circuit means for control over said heating means, a second switch controlled by said timer for de-energizing said timer to transfer control of said heating means from said timer to said circuit means, said circuit means operative to transfer control of said heating means back to said timer upon a decrease in the rate of heat absorbed by said cooling medium.

2,743,534
APPARATUS FOR COOLING SINTER
Martin L. Cover, Allen Park, Mich.
Application September 29, 1952, Serial No. 312,017
9 Claims. (Cl. 34—174)



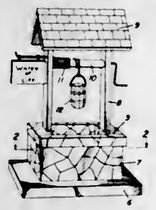
7. In a sinter cooling apparatus of the type to receive sinter from a continuous, open, conveyor, a cooling bin positioned to receive partially cooled sinter from the top pass of the conveyor comprising a stationary cylindrical container open at the top and bottom and having a substantially widened portion centrally located adjacent a plurality of circumferentially spaced air inlets for cooling air.

2,743,535
HEAD FORM FOR ARTISTS' AND SCULPTORS' USE
Emily Grace Hanks, New York, N. Y.
Application August 26, 1952, Serial No. 306,405
12 Claims. (Cl. 35—26)



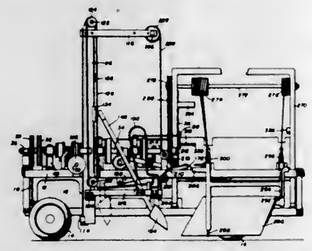
1. A head form for artists comprising a series of vertically disposed sheets spaced from each other to represent various vertical planes of the human head and means connecting said sheets together, the spacing between the sheets being adapted to permit the application of molding material therein.

2,743,536
EDUCATIONAL AND AMUSEMENT DEVICE
Theodore E. Anderson, Litchfield, Minn.
Application December 4, 1952, Serial No. 324,006
4 Claims. (Cl. 35—49)



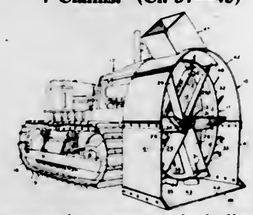
1. An educational and amusement device comprising an imitation well including a bucket adapted for lowering into and raising out of the well, a stationary magnet carried by the bucket, a track in the well leading from an entrance therein to a position underlying the bucket, and magnetically attracted objects mounted for movement along the track into the path of lowering movement of the bucket for lifting an attracted object from the well.

2,743,537
SELF-LOADING SHOVEL DITCHING MACHINE
Cyrus P. Duffy, Brooklyn, N. Y.
Application May 5, 1947, Serial No. 746,055
5 Claims. (Cl. 37—4)



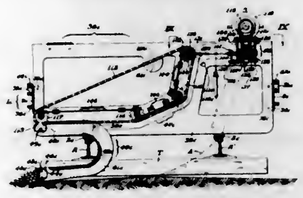
1. An excavating machine including a supporting frame, a shovel mounted on said frame and having a handle extending longitudinally therefrom, means for imparting a substantially vertical rectilinear reciprocation to said handle, further means for effecting an arcuate movement of said shovel during operation of said first means, a common driving mechanism for both means, said further means including a cable secured at one end to said shovel handle and having its other end secured to said frame, mechanism intermediate the ends of said cable for periodically applying a lateral movement to said cable for arcuately moving said shovel.

2,743,538
SNOW REMOVAL APPARATUS
Floyd L. Linzy, Batavia, N. Y., assignor to A. Yates Dowell, Washington, D. C.
Application February 8, 1952, Serial No. 270,597
7 Claims. (Cl. 37—43)



1. Snow removal apparatus including an elongated casing open at its forward end and having a discharge opening located rearwardly thereof, a drive shaft disposed axially of said casing, a rotor fixed on said drive shaft within said casing adjacent the forward end thereof, said rotor comprising a hub, a plurality of radially extending blades, means for removably and adjustably securing said blades to said hub, a shroud ring secured to the outer ends of said blades, a plurality of cutting blades secured to the outer periphery of said shroud ring and within the confines of the casing, said cutting blades serving to cut an annular groove in the snow and said radially extending blades serving to cut and comminute the snow inwardly of said groove and move the same rearwardly in said casing, a fan rotor fixed to said shaft rearwardly of said first mentioned rotor and comprising a hub and radially extending fan blades, means for removably and adjustably securing said fan blades to said hub, means on said casing for removably securing the same to a propelling vehicle and means to couple said shaft to a power take-off shaft on said vehicle whereby upon forward movement of said casing and rotation of said rotors snow will be cut, comminuted and discharged through said discharge opening.

2,743,539
ADJUSTMENT MECHANISM FOR KICKER-TYPE BALLAST REMOVER
Samuel R. Hursh, Bala-Cynwyd, and Clarence J. Reigh, Altoona, Pa.
Application February 19, 1953, Serial No. 337,744
12 Claims. (Cl. 37—104)

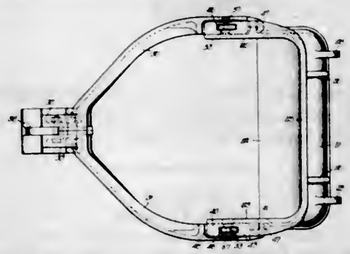


1. In apparatus for removing ballast from cribs between adjacent ties of a railway track, a wheeled car having a frame with a clearspace between side longitudinals; at least two carriages extending crosswise within the clearspace between the side longitudinals of the car frame, said carriages being slidably engaged with said longitudinals so as to be shiftable along the car between adjacent pairs of cribs; means on the car for so shifting the carriages; arms hung from pivots on the respective carriages and constrained to swing within the clearspace of the car frame for oscillation transversely of the car; power means on the carriages for concurrently swinging the arms contrariwise; and ballast displacing elements connected to the distal ends of the arms and operative, as the arms are swung outwardly, to displace the ballast from centers of different cribs beneath opposite track rails onto the shoulders of the track bed.

2,743,540
SLUSHING SCRAPER WITH DETACHABLE BAIL ARMS
Thomas C. Whisler, Alameda, Calif., assignor to American Brake Shoe Company, New York, N. Y., a corporation of Delaware
Application February 14, 1952, Serial No. 271,549
6 Claims. (Cl. 37—147)

1. In a scraper bucket, in combination, a body member of one-piece construction substantially U-shaped in plan and providing a digging lip portion along the bottom edge, said body member having forwardly extending side arm portions, each side arm portion at the forward terminal end thereof having a horizontal groove in its outer wall, an upstanding ledge disposed in the groove at right angles

thereto and substantially vertically of the body member, a pair of bail arms for the body member, one being disposed on each side thereof and adapted to have releasable connection with the side arm portions respectively, each bail arm at the terminal end to be connected with a side arm portion having a tongue on its inside wall and which terminates in a hook-shaped extension, whereby each bail arm is assembled with its tongue in a groove and with its hook-shaped extension in engagement with the respective



upstanding ledge, each side arm portion at its forward terminal end having a vertical opening intersecting the groove therein, the said tongue on each bail arm also being provided with a vertical opening and which is so disposed that said opening aligns with the opening in its respective side arm portion when the parts are assembled, and means for locking the parts in assembled relation including a wedge adapted to be inserted in the aligned openings.

2,743,541
PRESS PLATES
Roy M. Schultz, Chicago, Ill., assignor of one-half to Davis Press Pad Co., Chicago, Ill., a corporation of Illinois, and, by mesne assignments, one-half to Bishop David Freeman Co., a corporation of Illinois
Application March 10, 1953, Serial No. 341,425
6 Claims. (Cl. 38—66)



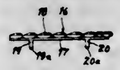
5. For use in a garment steam press, a steam diffuser construction of generally rigid material extending substantially as one piece from any point thereof in all directions toward the edges thereof, said construction having a large number of tortuous passages therethrough whose physical dimensions remain substantially constant under all operating conditions, said construction being static and having no movable parts and including at each tortuous passage an apertured plate portion, the aperture at each such plate portion being freely accessible on one side of said plate portion and being covered by an individual, imperforate hooded portion on the other side of said plate portion which is spaced therefrom and is in proximity thereto and forms therewith lateral openings to provide passage terminations extending generally along the surface of the plate.

2,743,542
IRONING ACCESSORY
Ronald B. Drummond, Capistrano Beach, Calif.
Application January 13, 1955, Serial No. 481,613
1 Claim. (Cl. 38—97)



A sheath for use with a steam iron that minimizes the tendency of said iron to impart a glossy sheen to fabrics when brought into pressing contact therewith, that consists of: a pliable sheet of fabric material capable of withstanding the temperature of steam discharged from said iron, yet which material is sufficiently porous to permit passage of said steam therethrough, said material being initially of a generally oval configuration and having at one end thereof along its major axis a first dart stitched inwardly from the edge thereof to conform to the forward edge of said iron and having at the other end thereof second and third darts disposed on opposite sides of the major axis thereof stitched inwardly to conform to the rear end of said iron so that a part of said sheet of material defines a flat, substantially triangular, base portion that extends completely over the pressing surface of said iron and so that the remainder of said sheet of material extends upwardly over the sides thereof in a substantially conforming position around a portion of the body of said iron, said material having a surface of such physical characteristics that it does not impart a glossy finish to the fabric being pressed when brought into frictional contact therewith; an elongate tape, the two edges of which are stitched to said sheet of material substantially along the entire edge thereof to define a confined space, access to which is available between the ends of said tape; and a drawstring that movably extends throughout said confined space with the free ends of said drawstring extending outwardly from said space between the ends of said tape, said drawstring ends being adapted to be tied together to securely maintain said sheath in conforming position on said steam iron.

2,743,543
ORNAMENTAL ATTACHMENTS FOR EYEGLASS FRAMES
Ruth M. Goddard, New York, N. Y., assignor to Milton E. Brown & Co., New York, N. Y.
Application October 5, 1954, Serial No. 460,383
1 Claim. (Cl. 41—10)



An ornamental attachment for eyeglass frames, easily manually engageable with and disengageable from such engagement with ordinary types of eyeglass frames without structural modification of the frames for this purpose, that comprises an initially separate composite front assembly comprised of a plurality of ornamental elements and a relatively fragile mounting for supporting said ornamental elements in a generally arcuate display relationship; a substantially flat, similarly generally arcuate, relatively rugged rear supporting element; fastening means substantially permanently attaching said front assembly to said rear supporting element whereby substantial structural rigidity, strength, and resistance to bending are imparted to the integrated unit; said rear supporting element being provided with a plurality of integrally formed, resiliently tensioned, U-shaped clip elements facing in a common direction and adapted to being received upon marginal portions of eyeglass frames peripheral to a lens in the frames for detachably mounting the attachment upon said frames.

2,743,544
ASSEMBLY BRACKETS
Charles S. Wilson, Long Beach, N. Y.
Application December 17, 1953, Serial No. 398,793
3 Claims. (Cl. 41—34)

1. In combination, a framework, a decorative insert, said insert including a rim portion, the outer periphery of said rim being undercut to form a shoulder extending outwardly from one of said opposed faces, said one of said faces being formed with a depression, said framework including framing sections arranged to form a seat re-

ceiving said decorative insert, said framing sections lying beneath said shoulder and within the undercut, said framing sections confining said decorative insert against move-



ment in the plane of said framework, and clamp means including a first section engaged within said depression and a second section engaging said framing section.

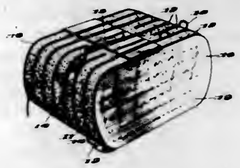
2,743,545
FISHING PLUG
Eldred Seneker, Mount Vernon, Mo.
Application April 22, 1954, Serial No. 424,823
1 Claim. (Cl. 43—42.48)



An artificial fish attracting and catching bait comprising a plug characterized by a body tapering rearwardly from the leading toward the trailing end and having a head of distinctive and unique surface configuration and construction, said head being oblong in both top and bottom plan and provided with a nose portion, the forward transverse end of the nose portion having a flat blunt terminal tip which is rectangular in elevation, said top and nose portion being of a width equal to the cross-section of the over-all head, the cross-section of the body portion being less than that of said head, the top of said head being of inverted V-shaped cross-section and providing a central lengthwise ridge and cheek-forming substantially vertical sides and the outwardly sloping surfaces thereof merging into said vertical sides and converging with said ridge, said sloping surfaces being slightly recessed and thus concave, said nose portion being flat and triangular in rear of said tip with its apex coincident with the adjacent end of the ridge, and the rear portion of the top of the head constituting a junctional crown and being likewise triangular with its apical end joining the adjacent end of said ridge and having its basal end merging into the dorsal surface of the body, said ridge being arcuate in side elevation and thus concave lengthwise, the bottom of said head being arcuate in side elevation, uninterruptedly smooth and concave in a lengthwise direction, the radius of the arc which defines the concavity of the ridge differing from the radius of the arc which defines and determines the degree of concavity of said bottom, the crest of the first named arc curving and being disposed downwardly and the crest of the second named arc curving and being disposed upwardly.

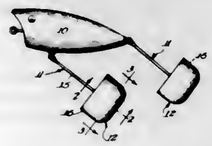
2,743,546
LEADER-KEEPERS
Thomas Dean Crist, Tucson, Ariz.
Application October 18, 1951, Serial No. 251,849
2 Claims. (Cl. 43—54.5)

1. A leader keeper comprising an integral piece of sponge-like material having the general shape of a parallelepiped with two opposing ends being rounded, said integral piece of sponge-like material being provided with a plurality of parallel slits disposed in each rounded end, the slits of one end being substantially aligned with the slits of the other end, said slits adapted to receive and



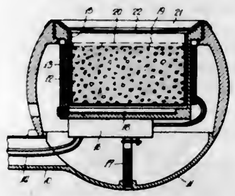
nest a leader when wrapped around said leader-keeper, and said sponge-like material constituting means for clamping the leader within the slits.

2,743,547
HOOK GUARD
Harry A. Horst, Davenport, Iowa
Application February 11, 1953, Serial No. 336,274
10 Claims. (Cl. 43—54.5)



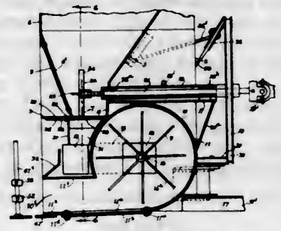
1. A guard for a hook structure comprising a cup-shaped housing of relatively rigid material having a bottom wall and integral peripheral side walls curvingly merging with the bottom wall and adapted to turnably receive the tine portions of a hook structure to be guarded within said peripheral walls, and resilient means for holding a guarded hook structure in the housing in position engaging said bottom wall, said resilient means being secured on the bottom wall of the housing in position to latchingly engage said tine portions in response to relative turning movement of the housing with respect to the hook structure.

2,743,548
METHOD OF VAPORIZING A MIXTURE OF ORGANIC INSECTICIDES IN VENTILATED ROOMS
David H. Christopher, Levittown, N. Y., and Philip J. Spear, Amherst, Mass., assignors to American Aerovap, Inc., New York, N. Y., a corporation of New York
Application February 12, 1951, Serial No. 210,596
5 Claims. (Cl. 43—129)



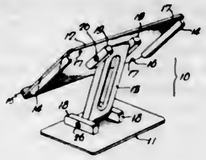
1. The method of maintaining substantially free from insect life a ventilated room suitable for occupancy by human beings which comprises constantly evaporating thereinto, by controlled application of heat, a mass, the vaporizable components of which consist essentially of a mixture of at least 25 per cent of lindane and another organic insecticide that is solid at room temperature and that has a vapor pressure much lower than that of the lindane.

2,743,549
CROP DUSTING MACHINES
Carl Bauer, Winnipeg, Manitoba, Canada
Application June 20, 1952, Serial No. 294,750
8 Claims. (Cl. 43—148)



1. In a crop dusting machine, in combination, a fan casing having a rearwardly directed outlet duct, a driven fan within the casing, a dust receiving hopper having the bottom thereof provided with a discharge outlet, a chamber underlying the outlet into which discharging dust is centrally gravitated, said chamber having a restricted, rear inlet for atmospheric air and similar opposing air ducts leading from the opposite sides of the chamber and opening centrally through the sides of the fan casing.

2,743,550
BOOK SUPPORT OR LECTURN
Joseph J. Felice, Ridley Park, Pa.
Application July 16, 1954, Serial No. 443,827
6 Claims. (Cl. 45—80)



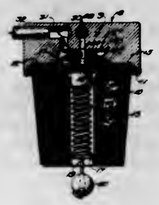
1. In a book support or lecturn comprising a base member and a support table having relative movement with respect to each other; a first pair of spaced parallel lugs secured to said base and projecting upwardly therefrom, a second pair of spaced parallel lugs secured to the underside of the support table and depending downwardly therefrom, a connecting link extending between said base and said table and terminating at its opposite ends between said pairs of lugs, the width of the opposite ends of said connecting link being slightly less than the spacing between said pairs of lugs and the said opposite ends of the link and the pairs of lugs each having axially aligned bores extending transversely therethrough, sleeve members mounted in the opposite ends of the link bores and in the lug bores for axial movement relatively to each other, said sleeves being each secured against rotation in its bore and having its outer end face offset outwardly from the link and lugs respectively with the end faces of the sleeves at opposite sides of the link disposed in confronting frictional engagement with the end faces of the corresponding adjacent lug sleeves, a member extending through the lug and link sleeves at each end of the link, and fastening means on the member for securing the confronting end faces of the sleeves in frictional contact and exerting a friction force between the said confronting faces of the sleeve members required to retain the connecting link in selected relative positions with respect to said pairs of lugs on the base and table while permitting manual adjustment of said parts relative to one another to selectively position the table relative to said base without manipulation of said fastening means.

2,743,551
DRAFTING TABLE PAPER CREASE-PROOF ATTACHMENT
Chong-Hung Zee, New York, N. Y.
Application February 3, 1954, Serial No. 407,941
1 Claim. (Cl. 45—131)



A drafting table paper crease-proof attachment securable to the edge of a drafting table, said edge being adjacent to a draftsman; said attachment comprising a metal trough having approximately cylindrical surface inside and being secured to the end portions of said edge of said table and being mounted flush with the top of said table, a beveled edge extending approximately the entire length of said edge of said table and being connected by a smooth circular curve which is formed by cutting said edge of said table, so as to form a longitudinal slot between said trough and said edge of said table, and a compartment being underneath the drafting board of said table and constituting a continuation of said slot for sheltering a drawing sheet.

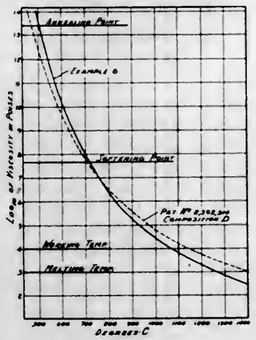
2,743,552
AUTOMATIC IRRIGATION DEVICES
Edwin J. Hunter, Riverside, Calif.
Application November 22, 1952, Serial No. 322,120
16 Claims. (Cl. 47—1)



1. An automatic irrigation device, comprising a hollow, ceramic cell closed at its lower end; a transparent inspection tube extending from said cell; a valve structure including a body, a hollow stem extending therefrom, a yieldable plug surrounding said stem and arranged to be inserted in said inspection tube to form with said tube and ceramic cell a sealed chamber adapted to be filled with water; said valve structure having a water inlet and outlet and a diaphragm isolating said valve structure from said sealed chamber, said diaphragm being sensitive to vacuum pressures within said chamber applied thereon through said hollow stem for controlling flow through said valve structure.

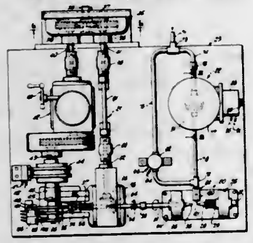
3. A vacuum sensitive valve structure for automatic irrigation devices, comprising: a body member defining a cavity and including an inlet port directed into said cavity and an outlet leading therefrom; a diaphragm forming a wall of said cavity and disposed to control flow therein through said inlet port; means urging said diaphragm to close said inlet port, said diaphragm being sensitive to vacuum pressure on its side opposite from said inlet port to open said port against the urging of said means, the area of said diaphragm subjected to fluid pressure when said inlet port is closed being less than the area so subjected when said inlet port is open; and a back pressure valve element controlling flow from said cavity to said outlet tending to maintain a predetermined fluid pressure on said diaphragm upon opening of said inlet port to augment the vacuum pressure thereon, whereby a greater vacuum pressure is required to open said inlet port than is required to maintain it open.

2,743,553
METAL SEALING GLASS AND SEAL
William H. Armistead, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a corporation of New York
Application November 26, 1951, Serial No. 258,163
8 Claims. (Cl. 49—92.5)



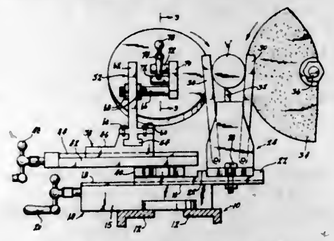
1. A glass which consists essentially of 65% to 75% SiO_2, 15% to 22% B_2O_3, 1% to 4% Al_2O_3, and at least two alkali metal oxides including K_2O and Li_2O in the indicated proportions selected from the group consisting of 6% to 10.5% K_2O, up to 2% Na_2O and 0.2% to 1.5% Li_2O, the total alkali metal oxides being 7.5% to 11%.

2,743,554
APPARATUS FOR BLAST ETCHING ELECTRICAL DEVICES
Edgar G. Dailey, Collingswood, N. J., and Julius Warshaw, Clifton Heights, and William B. Pegram, Swarthmore, Pa., assignors to International Resistance Company, Philadelphia, Pa., a corporation of Delaware
Application April 19, 1952, Serial No. 283,202
6 Claims. (Cl. 51—15)



1. Apparatus for making electrical resistors from a cylindrical core of insulating material with at least a portion of its surface coated with a layer of resistance material comprising, in combination, a relatively fixed nozzle to deliver a blast of abrasive-laden gaseous medium along a relatively fixed and narrow path having substantially sharply defined margins; a pair of opposed, axially slidable and rotatable chucks for receiving and holding therebetween said core; spring means biasing said chucks in one axial direction to a starting position and simultaneously one toward the other; a cam follower on one of said chucks; a rotary cam against which said spring means biases said cam follower and contoured to slide said cam follower-carrying chuck forward transverse of the path from the starting position in the opposite direction against the spring biasing; drive means to rotate one of said chucks at a predetermined speed in all axial positions; a common power source for said rotating means and said cam to synchronize the operation thereof; speed change means interposed between said power source and said cam to vary the speed of the latter relative to the speed of the rotating means; a gang of cam-operated electrical switch means having a plurality of operating cams coaxially mounted and rotatable in synchronism with said chuck-driving cam; a conduit system for supplying abrasive laden gaseous medium to said nozzle and including a solenoid control valve selectively to permit and cut off flow of abrasive-laden gaseous medium through said nozzle; and an electrically operated clutch located between said cams and power source; one of said cam-operated switch means being adapted to control operation of said solenoid valve and another of said cam-operated switch means being adapted to control operation of said clutch, whereby said chucks are reciprocated cyclically and while emission of abrasive-laden gaseous medium through the nozzle is prevented during spring return movement of said chucks.

2,743,555
CENTERLESS GRINDING ATTACHMENT FOR LATHES
Keith Irvine, Valley Stream, N. Y.
Application May 4, 1954, Serial No. 427,541
2 Claims. (Cl. 51—103)

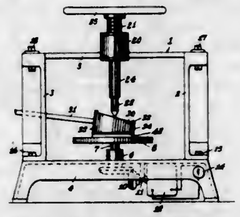


1. A centerless grinding unit for attachment to a lathe comprising in combination with the compound slide structure and the grooved trackway constituting the cross slide structure of a lathe, a wheel support adjustable mounted on the compound slide structure and a work rest mounted on the cross slide structure, the mounting of the wheel support consisting of a slot T-shaped in cross-section in the compound slide structure, an upstanding mounting plate with a horizontal base and a rib therebeneath slidably engaged in the slot, said plate having a central opening therein, a bolt and slot connection between the base and compound slide structure for adjusting the position of the mounting plate on the compound slide structure, a shaft-supporting device including perforated ears connected to said mounting plate, the connection between the device and plate including a threaded spindle connected at one end to the device with its other end extended through the opening in the mounting plate and a nut on the threaded end of the spindle, a shaft journalled in said perforated ears, a regulating wheel supported on one end of said shaft, and a crank secured to the other end of the shaft for rotating the same.

2,743,556
APPARATUS FOR AND METHOD OF MACHINING VALVE WEDGE WITH DISC GRINDER
John Powers Van Steenberg, New York, N. Y.
Application March 19, 1953, Serial No. 343,442
7 Claims. (Cl. 51—125)

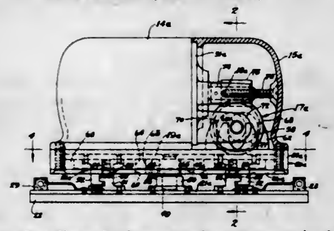
4. A gate valve wedge refacing apparatus comprising a frame, point contact bearing means carried by the frame, a flat abrasive disc of the same size as the face of the wedge to be refaced, means for rotating the abrasive disc, the abrasive disc carried by the frame with the center of the disc in alignment with the axis of the point contact bearing means, adjustable means to vary the spacing between the point contact means and the abrasive disc, and wedge stop means adapted to hold the wedge against rotation with the disc, the wedge surface adapted to be positioned against the abrasive disc and

centered thereon by alignment of the edge thereof, the point contact means adapted to be moved into contact with the other face of the wedge by the adjustable means



to hold the wedge in centered relationship with the abrasive disc providing even grinding pressure over the wedge face.

2,743,557
ELECTRICALLY DRIVEN ABRADING DEVICES
George A. Larson, Rockford, Ill.; Alice R. Larson, executrix of said George A. Larson, deceased
Application January 10, 1951, Serial No. 205,377
13 Claims. (Cl. 51—170)



1. In an abrading device, a prime mover including a housing and a rotary drive shaft extending therefrom, an elongated base upon one portion of which said housing is carried in sealed relationship thereto, transmission gearing over another portion of said base drivingly connected with said shaft, a cover providing a chamber for said transmission gearing in sealed relation to the aforesaid housing and base, a slide reciprocable in a guideway provided in said base, means drivingly connecting said slide with said transmission gearing for reciprocation, a second slide with which the first mentioned slide is in superposed abutting relation reciprocable in another guideway provided in said base below the first-mentioned guideway, means drivingly connecting said second slide with said transmission gearing for reciprocation in timed relation to said first mentioned slide but in the opposite direction, and abrading pad holder means disposed in spaced relation to and below said base and rigidly connected with one of said slides for reciprocation therewith, the other of said slides functioning merely as a counterweight in relation to the pad-holder operating slide to reduce vibration.

2,743,558
ABRADING TOOL
Elmore W. Hagadorn, Solvay, N. Y., assignor to Finishine Laboratories, Inc., Syracuse, N. Y., a corporation of New York
Application August 26, 1954, Serial No. 452,343
10 Claims. (Cl. 51—187)



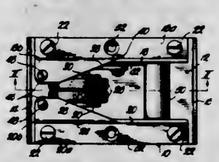
2. In combination, a block of semi-resilient fibrous material, a casing mounted on the upper portion of said block, a fluid reservoir in said casing, and valve means operable upon the application of pressure to said casing to permit conrtolled amounts of fluid to flow from said reservoir into said block.

2,743,559
ABRASIVE BANDS
Albert L. Ball and Stanley E. Lull, Worcester, Mass., assignors to Bay State Abrasive Products Company, Westboro, Mass., a corporation of Massachusetts
Application April 10, 1953, Serial No. 347,932
8 Claims. (Cl. 51—188)



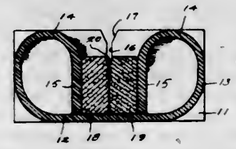
1. An endless, flexible abrasive band comprising an endless base and a spirally wound abrasive strip adhesively secured to said base, said strip having thereon a plurality of abrasive blocks.

2,743,560
KNIFE SHARPENER
William R. Spaulding, Kansas City, Mo.
Application February 15, 1954, Serial No. 410,287
2 Claims. (Cl. 51—210)



1. A knife sharpener comprising an elongated shaft; means mounting the shaft for rotation on its longitudinal axis; a pair of grinding elements; means mounting the elements on the shaft for rotation therewith; means holding the elements spaced-apart for reception of a knife therebetween; ratchet means operably coupled with the shaft for restraining the same against rotation in one direction; a pair of spaced guide rollers for the knife; and means mounting the rollers above and for free rotation on a pair of corresponding parallel axes disposed to one side of the axis of rotation of the shaft and perpendicularly to a plane through the latter axis, said parallel axes being spaced in a direction parallel to said axis of rotation of the shaft to accommodate the knife between the rollers.

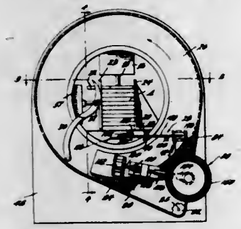
2,743,561
KNIFE SHARPENER
Charles M. Franks, Fort Lauderdale, Fla.
Application November 30, 1953, Serial No. 394,931
1 Claim. (Cl. 51—214)



A knife sharpener comprising a substantially rectangular frame having a pair of oppositely disposed spaced and

substantially parallel rectangular side walls, each of said side walls having a slot formed therein extending inwardly from an edge of each of said side walls, said slots being aligned with each other, said frame including a substantially rectangular base disposed between and fixedly secured to the adjacent sides of said side walls the proximate edges thereof oppositely disposed with respect to said first edges, said base having its respective ends bent laterally to form a pair of spaced end walls having the edges thereof fixedly secured to said adjacent sides of said side walls, each of said end walls terminating in an inwardly reverted free end, said free ends being positioned in spaced confronting relationship, said base, said end walls and said reverted ends thereof being formed of a resilient material, a pair of substantially rectangular abrasive blocks mounted on said base in side-by-side abutting relation with the plane of abutment registering with said aligned slots, said blocks having their respective ends engaging against marginal areas of said side walls adjacent said slots, and said free ends of said side walls engaging against the remotely positioned sides of said blocks to constantly bias said blocks for relative movement toward each other.

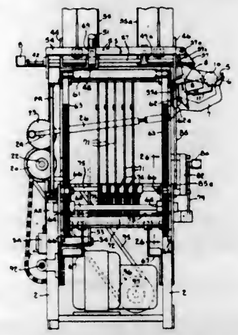
2,743,562
TAPING MACHINE
John H. Dawson, Sumter, and Evander McIver Ervin, Florence, S. C.
Application December 12, 1950, Serial No. 200,426
13 Claims. (Cl. 53—77)



1. In a wrapping machine, in combination, a support for an article to be wrapped, means for encircling said article with adhesive tape having a free end, said means including an element to which the free end of the tape may be adhesively attached, means for severing the tape and adhesively attaching the free end from supply of the tape to said element, and a device for detaching the free end from supply of the tape from said element and adhesively attaching the same to an article carried on said support, said element comprising two rod members normally positioned to overlie the tape, said severing means having a cutting edge movable towards said tape to cut the tape and to wipe the adhesive surface of the severed free end from supply onto the rod member overlying it.

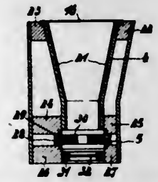
2,743,563
RECEPTACLE LOADER
Julius Jorgensen, Detroit, Mich., and Arnold R. Buchholz, Watertown, Wis., assignors to Brandt Automatic Cashier Company, Watertown, Wis., a corporation of Wisconsin
Application July 13, 1953, Serial No. 367,503
11 Claims. (Cl. 53—160)

1. In a machine for filling receptacles of varying sizes with packages of coins of different denominations or tokens of varying sizes, the combination of a table, adjustable means for positioning a receptacle of a size for the denomination of coin package being handled so that its open end faces said table, means for delivering a predetermined number of coin packages of a particular denomination or size to said table in a row, means for moving the row of coin packages into the positioned receptacle, selectively settable means for lowering said receptacle step by step as the rows of coins are deposited tier by tier into said receptacle, means for carrying the loaded receptacle to a point of delivery, said selectively



settable means determining the amount said receptacle is lowered for any particular coin denomination, and operator controlled means for selecting the particular settable means for the coin denomination being handled.

2,743,564
APPARATUS FOR WRAPPING FRUIT
Willem Sybrand van Dok, Enkhuizen, Netherlands
Application October 5, 1951, Serial No. 249,971
3 Claims. (Cl. 53—227)

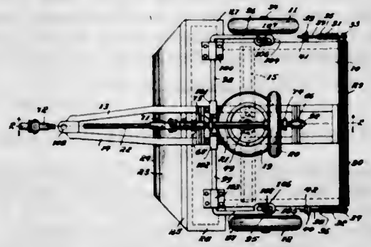


1. Fruit wrapping apparatus comprising in combination: a hollow tube open at each end and disposed in a substantially vertical position; means for causing a succession of individual fruits to fall through said tube; means operating in timed relation to said first mentioned means for delivering a succession of wrapping sheets across the upper end of said tube, so that each fruit in its fall through the tube carries the wrapping sheet with it, becomes partially wrapped therein, and forms a trailing wrapper portion; a first ring rotatably mounted adjacent the lower end of said tube; resilient means disposed around and extending radially inwardly from the inner periphery of the ring to engage and retard the downward progress of the partially wrapped fruit; means for rotating said ring; and a second non-rotatable ring spaced vertically below the first ring and including a resilient center portion to engage and further retard the downward progress of the partially wrapped fruit and to resist rotary motion thereof so that the rotating upper ring completes the wrapping operation by relatively twisting the trailing portion of the wrapper while the fruit is in continuous downward motion.

2,743,565
STALK AND BRUSH CUTTING ASSEMBLY WITH FRICTION DRIVE
Marion E. Dow, Conway, Ark.
Application March 3, 1953, Serial No. 340,113
1 Claim. (Cl. 55—62)

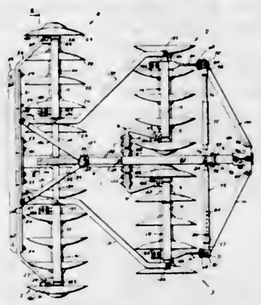
In a stubble cutter, the combination which comprises a horizontally disposed platform, a vertically positioned shaft journalled in said platform, a cutter bar carried by the lower end of the shaft and positioned to travel in a

horizontal plane below the platform, a horizontally disposed friction wheel mounted on the upper end of the shaft, a vertically disposed coacting friction wheel positioned above the horizontally disposed friction wheel, said vertically disposed friction wheel being arranged in driving relation with respect to said horizontally disposed friction wheel, and said vertically disposed friction wheel being shiftable across the entire width of the horizontally disposed wheel, vertically disposed supporting members mounted on said platform in spaced relation to each other and said support members being arranged on opposite side of said friction wheels, a horizontally disposed shaft journalled at its opposite ends in said supporting members for journalling said vertically disposed coacting friction



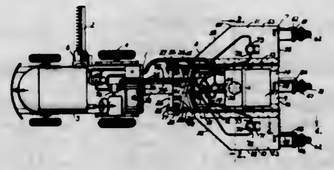
wheel on the platform, means for shifting said vertically disposed coacting friction wheel on said horizontally disposed shaft across the center of the horizontally disposed friction wheel on the vertically disposed shaft, ground engaging wheels mounted on the sides of the platform, a clevis on said platform extending forwardly thereof for connecting the platform to a towing vehicle, a drive shaft connected to said horizontally disposed shaft for driving said vertically disposed coacting friction wheel by the towing vehicle, means on said vertically disposed supporting members for vertically adjusting said vertical friction wheel with respect to said horizontal friction wheel so as to vary the pressure exerted by said vertical wheel on said horizontal wheel, and a downwardly extended gate hinged to the rear edge of said platform.

2,743,566
DISC HARROW
Kenneth Douglas Priestley, Campbell, Calif.
Application July 14, 1950, Serial No. 176,561
19 Claims. (Cl. 55—83)



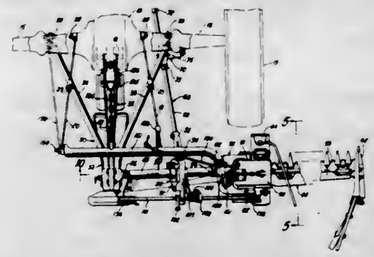
19. In a four gang disc harrow, a pair of front gangs and a pair of rear gangs with the gangs of each pair disposed on opposite sides of the central longitudinal horizontal axis of said harrow, a frame, vertical pivot means at first points adjacent the inner discs of said front pair of gangs swingably securing said front gangs to said frame at corresponding points adjacent to but on opposite sides respectively of said axis, and vertical pivot means at second points adjacent the outer discs of said rear pair of gangs swingably securing said rear gangs to said frame, said frame being substantially rigid between said first and second points whereby said gangs swing in horizontal planes about their pivot means.

2,743,567
MULTIPLE UNIT CONTOUR MOWER
Fred P. Martin, Topeka, Kans.
Application July 19, 1954, Serial No. 444,126
4 Claims. (Cl. 56—6)



1. A rotary mower apparatus including, a plurality of open bottom housings arranged in side by side relation, hinged means connecting adjacent sides of the housings for relative hinging movement about an axis substantially longitudinally of the direction of travel of the mower apparatus, said hinged means extending substantially adjacent the forward and rearward ends of said housings, ground-engaging wheels arranged at the forward end of one of the housings, at least one ground-engaging wheel arranged at the rearward end of each of said one and the other of the housings with the wheel at the rearward end of the other of said housings adjacent the side thereof remote from the hinge means, means adjustably supporting the housings on the ground-engaging wheels and operable for varying the heighth of said housings from the terrain over which the mower apparatus operates, said ground-engaging wheel at the rearward end of said other housing cooperating with the hinge means in supporting said other housing for following the contour of the terrain, a rotary cutter unit supported by each of the housings and each having a cutting element mounted for rotation about a vertical axis and operable to cut grass and the like, and power means operably connected to the rotary cutter units for driving same to effect cutting of grass and the like by the cutting elements, said rotary cutter units having a spacing relative to the radius of cut of the respective cutting elements and the hinged means connecting the housings whereby there is an overlap of the swath cut by adjacent cutting elements.

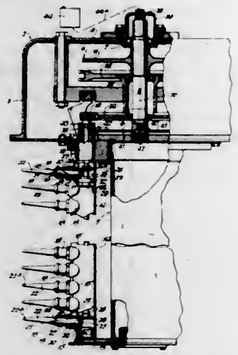
2,743,568
MOWER ATTACHMENT FOR TRACTORS
Lee E. Elfes, Birmingham, Mich., assignor to Harry Ferguson, Inc., Detroit, Mich., a corporation of Delaware
Application August 21, 1952, Serial No. 305,635
11 Claims. (Cl. 56—25)



1. In a mower attachment for a tractor having a pair of laterally spaced draft links trailingly pivoted thereon for vertical movement by a power lift device on the tractor, the combination comprising a mounting frame, means

for detachably connecting the mounting frame to the tractor in a fixed position thereon, a laterally extending drag bar pivoted to the frame for vertical and fore-and-aft swinging movement, a laterally extending mower bar pivoted to the outer end of the drag bar for swinging movement in a vertical plane, and means connected to the mower bar and the drag bar and adapted to be detachably connected to at least one of the draft links for swinging the drag bar and the mower bar upwardly by operation of the power lift device, said means being yieldable when said drag bar swings in a fore-and-aft movement.

2,743,569
COTTON PICKER DRUM STRUCTURE WITH LUBRICATING MEANS
Fred W. Barbknecht, Palos Heights, Ill., and Delos A. Walker, Memphis, Tenn., assignors to International Harvester Company, a corporation of New Jersey
Application March 4, 1954, Serial No. 414,196
3 Claims. (Cl. 56—44)



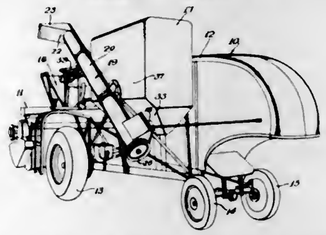
1. In a cotton picker machine of the type having a drum including a plurality of upright hollow support bars, each bar having an upright bore with a closed lower end, and a vertical row of generally horizontal cylindrical lubricant-permeable bearing means on each bar, each bearing means having an inner end communicating with the bore of the associated bar and having an outer end, and a spindle rotatably mounted in each said bearing means, a lubrication system for said bearing means comprising a reservoir for containing a supply of lubricant and a free flowing conduit connection between said reservoir and the bore of each of said bars whereby a quantity of lubricant may be introduced into the reservoir during an idle period of the machine sufficient to simultaneously fill the bores of all of said bars so as to cause lubricant in the bores to migrate therefrom through all of the bearing means of the entire vertical row communicating therewith whereby to permeate all of said bearing means and flow through said bearing means out of their outer ends and thus flush out dirt and the like therefrom.

2,743,570
TOPPING DEVICE FOR LAWN MOWERS
James D. Clements, Richmond, Ind.
Application September 13, 1952, Serial No. 309,495
1 Claim. (Cl. 56—238)



In a topping device, a pair of spaced-apart hanger members, a shaft having its ends journalled in the hanger members, a hub member located near each end of the shaft, blade members extending between and let into the hub members, a yieldable tread member positioned on each of the hub members and confining the ends of the blade members against centrifugal displacement, means formed on the shaft at the central portion thereof providing posts into which the blades are removably secured, with a tie strap extending between and secured to the hanger members with the lower edge of the tie strap being in substantial shearing relation with the blade members, with the topping device being adapted to attachment with a lawn mower within the limits thereof, with the yieldable tread members being engaged by the rotating reel blades of the lawn mower, and with the blade members of the topping device being rotated in a direction opposite to that of the rotating reel blades of the lawn mower through engagement of the reel blades with the yieldable tread members of the topping device.

2,743,571
GRAIN TANK DISCHARGE CONVEYOR FOR HARVESTERS
Glen O. Turnbull, Geneseo, Ill., and Clarence C. Evers, Davenport, Iowa, assignors to International Harvester Company, a corporation of New Jersey
Application October 9, 1952, Serial No. 313,965
7 Claims. (Cl. 56—473.5)

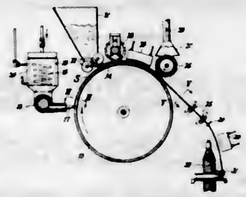


1. A grain tank and discharge elevator therefor for use in conjunction with a field traversing agricultural implement comprising a grain tank having an opening in the lower end thereof, a discharge elevator, means mounting said discharge elevator intermediate the ends thereof on to said grain tank, and hinge means in said means mounting for swinging movement of the elevator in two directions, said discharge elevator having one end thereof communicating with the grain tank opening in a first position of the discharge elevator, said discharge elevator having an upper grain delivery portion spaced upwardly and laterally outwardly of said grain tank in the first position of said discharge elevator, and said hinge means arranged and constructed to permit swinging movement of said discharge elevator to a second substantially upright position adjacent said grain tank with the one end in non-communicating positions with respect to said grain tank opening and to permit subsequent swinging movement of said discharge elevator to a third fore and aft tilted position.

2,743,572
TEXTILE YARN PRODUCING APPARATUS
Johannes Nathanael Hiensch, Swarthmore, Pa., assignor to Textile Machinery Corporation, Wilmington, Del., a corporation of Delaware
Application October 2, 1951, Serial No. 249,304
17 Claims. (Cl. 57—34)

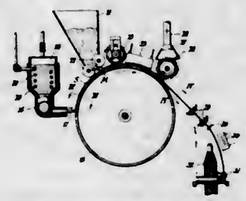
11. In apparatus for producing textile yarns, a continuously-rotating cylinder; a group of laterally-spaced means for depositing fluent tacky foundation material upon the revolving surface of the cylinder; means beyond the depositing means in the direction of cylinder rotation, for applying a relatively deep layer of textile fibers over the foundation strands formed on the cylinder; means

beyond the fiber-applying means for setting the material of the strands; means beyond the setting means for removing the excess non-adhering fibers from the strands; means beyond the excess fiber-removing means for detaching the strands from the cylinder; drafting means be-



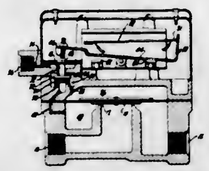
yond the detaching means for drawing the strands; means beyond the drafting means for softening the foundation material of the strands; and means beyond the softening means for twisting the strands and collecting them as individual yarns.

2,743,573
METHODS OF PRODUCTION OF TEXTILE YARNS
Johannes Nathanael Hiensch, Swarthmore, Pa., assignor to Textile Machinery Corporation, Wilmington, Del., a corporation of Delaware
Application September 11, 1951, Serial No. 246,064
7 Claims. (Cl. 57—164)



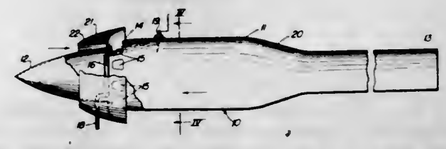
1. A continuous method of producing textile yarn which comprises the steps of forming a fine foundation strand of fluent tacky carrier material of uniform thickness and surface area for capacity to trap and retain a definite constant quantity of textile fibers; applying textile fibers in excess quantity to the strand; setting the foundation material of the strand; removing the excess non-adhering fibers from the strand; and twisting the fiber-coated strand into yarn.

2,743,574
TWO-WAY FAST ACTING BIMETAL CONTROL ELEMENT
Donald H. McCorkle, Berkeley, Calif., assignor to D. H. McCorkle Company, Berkeley Calif., a corporation of California
Application April 13, 1953, Serial No. 348,275
1 Claim. (Cl. 60—23)



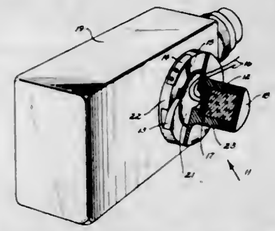
A heat motor comprising a first normally flat bimetal strip, means positionally anchoring one end thereof, a second normally flat bimetal strip secured to the outer end of said first strip in inverted relation to said first strip and being thereby adapted to warp in a direction opposite to that of said first strip under the influence of heat, electrical means for heating said strips including a resistance winding wrapped around said strips, said first strip having a greater number of turns of said winding disposed thereabout than said second strip, whereby said first strip may be heated more rapidly than said second strip, electrical insulation means disposed between said winding and said strips, and heat insulation means disposed in embracing relation to said second strip and the turns of said winding disposed thereabout, whereby said second strip may cool more slowly than said first strip upon de-energization of said electrical means.

2,743,575
VALVELESS INTERMITTENT COMBUSTOR WITH AUTOMATIC FLOW CONTROL
Witold B. Brzozowski, Montreal-Outremont, Quebec, Canada
Application March 24, 1951, Serial No. 217,387
4 Claims. (Cl. 60—35.6)



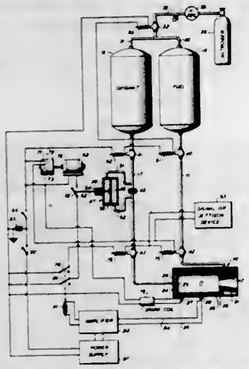
1. A valveless combustor comprising a tube having a closed end and an open end, a shoulder connecting the body of said tube with said closed end, said shoulder being provided with openings therein, a separate annular collar substantially coaxial therewith and spaced from said tube surrounding said shoulder openings, said collar comprising a forward entrance passage constructed and arranged to intermittently admit air into and withhold air from said tube and a rearwardly disposed exhaust passage constructed and arranged to eject deflected combustion products, said shoulder openings constructed and arranged to intermittently channel air into said combustion tube from said collar entrance passage and direct combustion products from said tube against said exhaust passage for propulsive expulsion.

2,743,576
PROPELLANT IMPELLED TURBINE
Sydney Robert Crockett, China Lake, Calif., assignor to the United States of America as represented by the Secretary of the Navy
Application February 28, 1952, Serial No. 274,043
4 Claims. (Cl. 60—35.6)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A motor comprising a container for a combustible propellant; a pressure chamber connected to said container to receive therefrom combustion gases when the propellant is ignited; a turbine rotor connected to the chamber and driven by said gases; said rotor provided with control ports permitting gas to escape from the pressure chamber; and governor means responsive to the angular velocity of said rotor to control the extent of opening of said control ports to maintain the angular velocity of the rotor substantially constant.

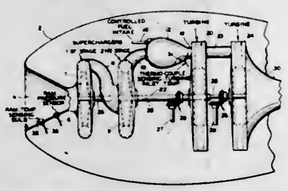
2,743,577
ROCKET ENGINE CONTROL
Emil A. Malick, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application June 2, 1952, Serial No. 291,205
17 Claims. (Cl. 60—39.09)



4. In a starting system for a rocket engine including a combustion chamber, a source of fuel, a source of oxidant, and valved conduit means for supplying said fuel and said oxidant to said combustion chamber; the improvement comprising, in combination, valve control means for passing said fuel and said oxidant into said combustion chamber at a first preselected rate, a flame detecting device positioned in said chamber, and means responsive to the detection of flame by said flame detecting device for adjusting said valve control means to pass said fuel and said oxidant into said combustion chamber at a second preselected rate, said second rate being greater than said first rate.

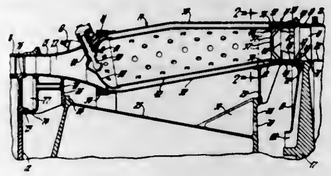
16. In a rocket engine adapted to be launched from an aircraft, a starting system comprising, in combination, a source of fuel, a source of oxidant, valved conduit means for supplying said fuel and said oxidant to said combustion chamber, first valve control means for passing said fuel and said oxidant to said combustion chamber, release mechanism to jettison said rocket engine from the aircraft, and means to actuate said release mechanism to jettison said rocket engine at a preselected time interval following initial passage of said fuel and oxidant to said combustion chamber.

2,743,578
TURBOJET ENGINE CONTROL SYSTEM
Edward J. Hazen, Westwood, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application November 24, 1950, Serial No. 197,422
20 Claims. (Cl. 60—39.28)



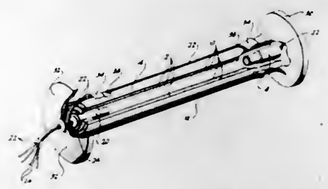
9. For use in determining the maximum permissible operating temperature for an aircraft engine having fuel and air intakes, a combustion chamber, and a turbine driven by the exhaust gases from said chamber; a control mechanism comprising first means for deriving a first control voltage in response to the temperature of said air intake, turbine speed sensing means, an inductive coupling device to derive a second control voltage, said device actuated by said turbine speed sensing means to vary said second control voltage with changes in said speed, air inlet temperature sensing means to actuate said device so as to vary said second control voltage with changes in the air inlet temperature, means for integrating said voltages to obtain a third control voltage proportional to maximum permissible operating temperature.

2,743,579
GAS TURBINE ENGINE WITH TURBINE NOZZLE COOLED BY COMBUSTION CHAMBER JACKET AIR
Arthur W. Gaubatz, Indianapolis, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 2, 1950, Serial No. 193,687
3 Claims. (Cl. 60—39.36)



1. A gas turbine engine comprising, in combination, a combustion apparatus comprising a plurality of flame tubes mounted in spaced generally parallel relation, a nozzle box located at and supporting the discharge end of the combustion apparatus, the nozzle box comprising inner and outer rings and struts extending between the rings, and a turbine nozzle mounted in the nozzle box comprising inner and outer shrouds and vanes extending between the shrouds, the discharge ends of the flame tubes being mounted on the nozzle shrouds, and the struts being disposed at the discharge ends of the flame tubes, each strut defining an abutment engaging the discharge ends of the adjacent flame tubes through a portion of the length of the strut and each strut being spaced from the adjacent flame tubes through the remaining portion of the length of the strut to provide a passage for cooling air from the combustion apparatus between the flame tubes over the struts.

2,743,580
IGNITER FOR ROCKET MOTORS
Sidney Loeb, Los Angeles, Calif., assignor, by mesne assignments, to Hughes Aircraft Company, a corporation of Delaware
Application October 7, 1952, Serial No. 313,493
7 Claims. (Cl. 60—39.82)



6. An igniter for igniting a rocket motor solid propellant having a central opening and, comprising a roll of ignitable material disposed on and bonded to one surface of a sheet of cellulose acetate, squibs centrally positioned within the ends of said roll, means for effecting burning of said equibs at a desired instant to ignite said material, and resilient means affixed to said roll for releasable engagement within the opening of said propellant.

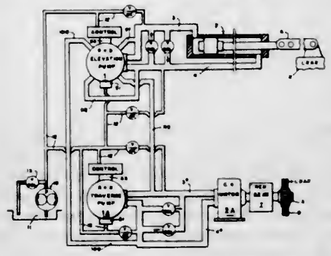
2,743,581
HYDRAULIC FLYWHEEL
Clarence J. Coberly, San Marino, Calif., assignor to Kobe, Inc., Huntington Park, Calif., a corporation of California
Application February 4, 1955, Serial No. 486,124
11 Claims. (Cl. 60—51)



2. In combination: a source of operating fluid under pressure; an operating-fluid consuming device connected to said source and normally consuming operating fluid therefrom at a predetermined rate; and means interposed between said source and said device and actuable by operating fluid flow from said source to said device and responsive to a decrease in the rate of operating fluid flow to said device below said predetermined rate for increasing the pressure of the operating fluid delivered to said device.

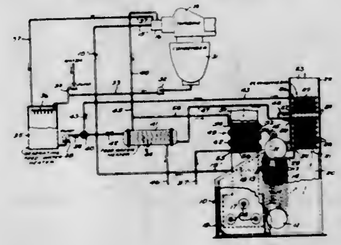
11. A method of maintaining substantially constant the rate of flow of operating fluid from a source of such fluid to a device utilizing same despite any tendency for said device to receive operating fluid at a variable rate, including the steps of: removing energy from the operating fluid flowing to said device and storing such energy as kinetic energy when said device tends to receive operating fluid at a high rate; and transferring energy from said stored kinetic energy to the operating fluid flowing to said device when said device tends to receive operating fluid at a low rate.

2,743,582
HYDRAULIC TRANSMISSION HAVING DITHERING MEANS
Ernst Wiedmann, Summit, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a corporation of Wisconsin
Application August 6, 1951, Serial No. 240,593
12 Claims. (Cl. 60—53)



1. A hydraulic transmission comprising a hydraulic motor, a pump for supplying liquid to said motor to energize the same and having a drive shaft for connection to a source of power, fluid channels connecting said motor to said pump and forming therewith a hydraulic circuit, means for controlling the delivery of liquid from said pump to said motor, a dither cylinder connected to each side of said circuit, a dither piston fitted in each of said cylinders and adapted during reciprocation thereof to pump limited volumes of liquid out of and into the side of the circuit to which its cylinder is connected, and an eccentric arranged upon said shaft for reciprocating said pistons at high speed to cause them to pump in opposite phase and thereby create pulsations of high frequency and of opposite phase in opposite sides of said circuit.

2,743,583
HEAT EXCHANGE SYSTEM FOR POWER GENERATORS
Julius H. Bayard, Charleston, S. C., assignor to Foster Wheeler Corporation, New York, N. Y., a corporation of New York
Application April 22, 1950, Serial No. 157,543
6 Claims. (Cl. 60—67)

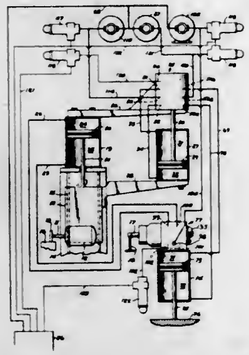


1. A vapor generating apparatus comprising a setting having a combustion chamber, firing means provided in said chamber for producing gases of combustion, a combustion gas outlet in said setting, vapor generating surface within said setting and in heat exchange relationship with gases of combustion flowing from said chamber to said gas outlet, an economizer disposed in heat exchange relationship with combustion gases flowing from the setting gas outlet, said economizer having a first section and a second section, each of said economizer sections having a liquid inlet and a liquid outlet, the outlet of said second economizer section being in communication with the vapor generating surface for supplying liquid thereto, a source of feed liquid, a heater having an inlet in communication with said source of liquid for receiving and heating the liquid and having an outlet for discharging the heated liquid from the heater, the outlet of said heater being in communication with the liquid inlet of said second economizer section for providing heated feed liquid thereto, means receiving a portion of the feed liquid from said source for by-passing said portion of liquid around the heater and conducting it to the inlet of said first economizer section, feed liquid control means for proportioning the relative amounts of feed liquid to the heater and to the inlet of the first economizer section, and means communicating the outlet of said first economizer section with the inlet of said second economizer section.

2,743,584
HYDRAULIC CONTROL SYSTEM FOR DUPLICATING TOOLS
Orel Le Roy Rosebrook, Monterey Park, Calif., assignor to True-Trace Corporation, El Monte, Calif., a corporation of California
Application May 4, 1953, Serial No. 352,896
7 Claims. (Cl. 60—97)

1. A hydraulic control system for controlling the movement of a cutting tool in response to movement of a stylus-operated valve of the type having a hydraulic pressure port and an exhaust port, said system comprising three cylinders each containing a piston with relative movement between piston and cylinder and providing a pair of chambers in each cylinder one on each side of the

piston, a movable member adapted to have the cutting tool mounted thereon, said movable member being supported by the piston of a first of the cylinders, a second of the cylinders being fixed relative to said movable member, a control valve means operated by the piston of said second cylinder, said control valve means comprising a pair of valves each having a pressure port and an exhaust port, and means for moving said pair of valves in unison, said last-named means being attached to the last-named piston, the third of the cylinders being movable and carrying the stylus-operated valve and having its piston fixed relative to the first cylinder, a pair of fluid conduits each separately communicable with the pressure port of the stylus-operated valve in dependence on the valve position



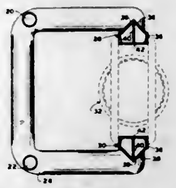
and leading to the respective chambers of the first cylinder, a pair of fluid conduits each separately communicable with the pressure port of a first of said pair of valves in dependence on the valve position and leading to the respective chambers of the second cylinder, a pair of fluid conduits each separately communicable with the pressure port of the second of said pair of valves in dependence on the valve position and leading to the respective chambers of the third cylinder, a first fluid pressurizing means with a conduit leading therefrom to the pressure port of the first of said pair of valves, a second fluid pressurizing means with a conduit leading therefrom to the pressure port of the second of said pair of valves and a third fluid pressurizing means with a conduit leading therefrom to the pressure port of the stylus-operated valve.

2,743,585
DRIVING AND PULLING OF PILES, PILE PLANKS, TUBING, AND THE LIKE
Francois Berthet, Algiers, Algeria, and Jacques Desvaux, Paris, France
Application October 31, 1950, Serial No. 193,202
Claims priority, application France November 4, 1949
8 Claims. (Cl. 61—73)



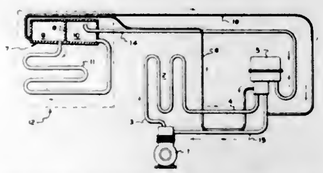
1. Apparatus for actuating piles, tubing, sheetpiling and like elements, comprising at least one source of alternating impulses adapted to be permanently bodily connected with said element throughout the actuation thereof, said source being balanced with respect to the axis of said element and adapted to generate simultaneously both linear alternating impulses directed axially of said element and rotary alternating impulses in a plane normal to said axis, a pair of similar axially aligned rotatable members, means for securing the members to the element with the members mounted for rotation about an axis extending diametrically of the element and perpendicular to the axis of the element with the members spaced at substantially the same distance from the axis of the element on opposite sides thereof, the center of gravity of each member being eccentric to the axis of rotation thereof, and means for rotating the members about their axis in unison in opposite directions with the centers of gravity of the pair of members in phase with each other.

2,743,586
PILE DRIVER HAMMER LEAD
William R. Fairchild, Hattiesburg, Miss.
Application July 26, 1952, Serial No. 301,077
2 Claims. (Cl. 61—74)



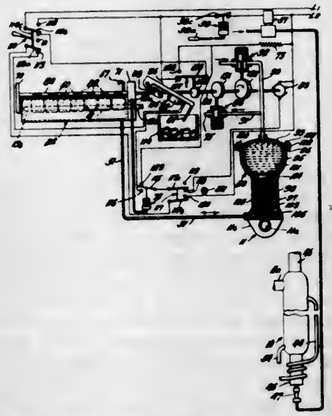
1. In a pile driver, hammer leads comprising angle bar supporting posts rigidly secured in spaced parallel relationship, hammer guides adjacent and attached to the supporting posts embodying channel members each having a web and side wall flanges, the channel members being positioned with the outer faces of the webs in spaced and opposed parallel relationship and the edges of the side wall flanges of each channel being secured to the flange edges of its adjacent angle bar supporting post, and a rigid reinforcing member secured to and extending from the inner face of the web of each channel member to the vertex of the angle of its adjacent angle bar supporting post and secured thereto.

2,743,587
CONTROL FOR REFRIGERATING APPARATUS
Earl F. Hubacker, Louisville, Ky., assignor to General Electric Company, a corporation of New York
Application November 12, 1954, Serial No. 468,265
19 Claims. (Cl. 62—3)



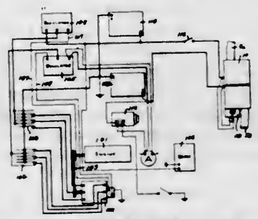
1. Refrigerating apparatus including a compressor, a condenser, an evaporator, a line connecting said compressor, said condenser, and said evaporator to permit refrigerant flow from said compressor through said condenser to said evaporator during the normal refrigerating cycle, a suction line connecting said evaporator and said compressor to permit refrigerant flow from said evaporator to said compressor during the normal refrigerating cycle, means in said first line between said condenser and said evaporator to regulate the flow of refrigerant to said evaporator, and means to bypass said regulating means to reverse the flow of refrigerant through said evaporator to defrost said evaporator, said bypass means stopping reverse flow and restoring normal flow through said regulating means and said evaporator in response to a predetermined pressure in said evaporator during reverse flow therethrough.

2,743,588
ICE MAKER
Victor G. Dreier, Evansville, Ind., assignor to Servel, Inc., New York, N. Y., a corporation of Delaware
Application March 5, 1953, Serial No. 340,447
11 Claims. (Cl. 62—7)



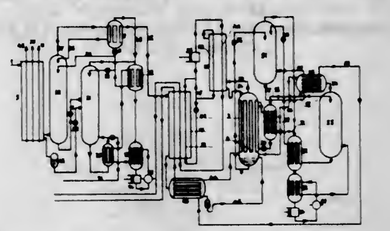
1. An ice mold having an ice forming compartment therein, means for supplying a measured quantity of water to the interior of said compartment to be frozen therein, means for supplying cooling medium to the exterior of said compartment to freeze said water, and means for supplying a measured quantity of heating medium to the exterior of said compartment to free the ice from the interior thereof, said water supply means, said cooling medium supply means and said heating medium supply means being interconnected in a manner that the freezing of water in the compartment energizes the heating medium supply means and deenergizes the cooling medium supply means, and the supplying of a measured quantity of water to the interior of the compartment causes withdrawal of a measured quantity of heating medium from the exterior of the compartment.

2,743,589
VEHICLE REFRIGERATING APPARATUS
Leon L. Knempel, Cincinnati, Ohio, assignor to Keco Industries, Inc., Cincinnati, Ohio, a corporation of Ohio
Application December 10, 1949, Serial No. 132,265
15 Claims. (Cl. 62—117.1)



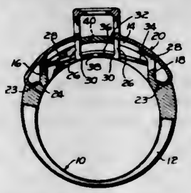
8. In an air conditioning unit for use in an automobile or the like, an evaporator, a condenser, a compressor, refrigerant flow connections between said evaporator, condenser and compressor, a direct current motor for operating said compressor, a variable speed power unit, a pair of alternators driven by said variable speed power unit for generating alternating current, a pair of rectifiers for rectifying the alternating current generated by said alternators, regulators for regulating the excitation of said alternators, means for connecting the output of said rectifiers in series so as to obtain a source of power having a voltage equal to the sum of the voltages of said alternators, and means for supplying said rectified current to said direct current motor.

2,743,590
METHOD FOR THE FRACTIONATION OF GAS MIXTURES
Jacques Grunberg, Outremont, Quebec, Canada, assignor to L'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procedes Georges Claude, Paris, France
Application November 29, 1952, Serial No. 323,258
2 Claims. (Cl. 62—175.5)



1. A method for the condensation at low temperature of the more easily condensable portion of a gaseous mixture comprising, cooling and partially liquefying the compressed gas mixture by heat exchange with at least one cold expanded output component, rectifying under pressure the gaseous residue of the above mentioned partial liquefaction, said rectification yielding on one hand a gas made up with the less condensable portion of the gaseous mixture and on the other hand a liquid, expanding said liquid and rectifying it, under a lower pressure than the one for the first said rectification, in a device receiving also the liquid resulting from the above mentioned partial liquefaction of the compressed gas mixture, this second rectification yielding on one hand the most condensable portion of the gaseous mixture and on the other hand a gas, which is then compressed, cooled by heat exchange with the same gas before its compression, liquefied by heat exchange with the more condensable portion of the gas mixture, then cooled by heat exchange with the gas resulting from the second rectification, then divided in three portions of which two are used as washing liquids for the two mentioned rectifications and the third expanded and used as a cooling mean to partly condense in an indirect contact the mentioned gas yielded by the first rectification, the resulting liquid being used as a reflux in this rectification.

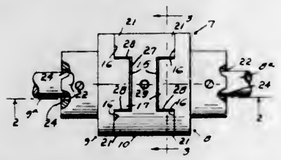
2,743,591
TWO-PART EXPANSIBLE RING
Paul Graf, Pacific Palisades, Calif.
Application November 30, 1953, Serial No. 395,141
10 Claims. (Cl. 63—15.6)



1. An adjustable finger ring comprising: a continuous ring having a generally circular base section and an upper section forming an elongated recess in a portion

of the inner circumference of said ring extending axially from side to side thereof, a movable setting member overlying said upper section and having a pair of side walls extending downwardly on each side of said upper section covering said recess and having inner edges conforming to the inner contour of the base section of said ring when said setting is in a contracted position, spring means urging said setting member into said contracted position where said side walls fully cover said recess, and means on said ring and on said setting covered by said side walls and forming bearing surfaces for opposing portions of said spring means.

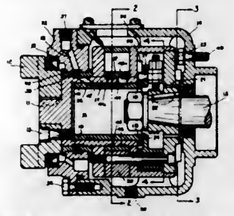
2,743,592
FLEXIBLE SHAFT COUPLING
John Nagy, Trenton, N. J., assignor of one-half to Rose Herbacsek, Trenton, N. J.
Application May 24, 1954, Serial No. 431,822
2 Claims. (Cl. 64—9)



1. A flexible shaft coupling of the character described comprising a pair of corresponding end coupling sections and an intermediate coupling section, said coupling being adapted to be disposed between adjacent ends of shafts to be coupled, means provided in said end coupling sections for securing the adjacent shaft ends thereto, said end coupling sections having adjacently disposed faces provided with corresponding lugs, said lugs being segment shaped, the lugs of each end section being circumferentially spaced relatively to one another, said intermediate coupling section having end faces each provided with a number of circumferentially spaced segment shaped lugs corresponding to the number of lugs of each end coupling section, said intermediate coupling section being interposed between the end coupling sections and the lugs of the intermediate coupling section interfitting between the lugs of the end coupling sections whereby said coupling sections will be caused to rotate as a unit, said coupling sections each being circular in cross section, and the lugs of said intermediate coupling section being thicker in a direction longitudinally of the coupling than the lugs of the end coupling sections, whereby outer faces of the lugs of the end coupling sections are spaced from adjacent faces of the intermediate coupling section to provide longitudinally and circumferentially spaced gaps between portions of the end coupling sections and said intermediate coupling section, said lugs of the intermediate and end coupling sections being of a circumferential width less than the spacing between said lugs to provide clearance gaps between the radial side walls of the interfitting lugs to permit a limited lost motion or radial movement of either end coupling section relative to the intermediate coupling section.

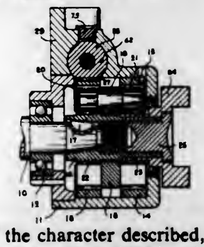
2,743,593
HYDRAULIC AUTOMATIC TIMER
Waldemar O. Bischoff, South Hadley Falls, Mass., assignor to American Bosch Arma Corporation, a corporation of New York
Application May 23, 1952, Serial No. 289,610
3 Claims. (Cl. 64—25)

1. In a device of the character described, a housing adapted to be secured to a fuel injection pump, a rotor in said housing adapted to be operatively connected to the drive shaft of said fuel injection pump, a cylindrical rotary valve member in said housing, means for operatively connecting said rotary valve member to an engine for effecting rotary motion of said rotary valve member, a cylindrical valve member in telescoping relation with said rotary valve member and pivotally adjustable relative thereto, fluid pockets in said rotor, vane members on said rotary valve member and extending into said fluid pockets for effecting rotation of said rotor upon rotation of said rotary valve member, and means connected to said rotary valve member for effecting relative pivotal adjust-



ment between said cylindrical rotary valve member and said cylindrical valve member, said means for effecting relative adjustment being centrifugally actuated, said cylindrical valve member having vane members also having a pair of annular grooves, one of said grooves being in communication with said fluid pockets on one side of each of said vane members and the other of said grooves being in communication with said fluid pockets on the opposite side of said vane members, and said valve member having passages communicating with said annular grooves.

2,743,594
TIMING DEVICE FOR FUEL INJECTION APPARATUS
Harry O. Hill, Lansing, and Robert S. Johnson, Lake Odessa, Mich., assignors to American Bosch Arma Corporation, a corporation of New York
Application August 8, 1951, Serial No. 240,922
5 Claims. (Cl. 64—25)

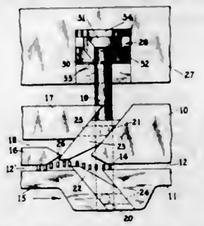


1. In a device of the character described, a drive shaft, a shaft adapted to be driven by said drive shaft and means for operatively connecting said shafts and adjusting the angular relationship between said drive shaft and said driven shaft, said means comprising a pair of ring gears, a pair of connected gears each engaging one of said ring gears, one of said connected gears being operatively connected to said drive shaft, the other of said connected gears operatively connecting its respective ring gear and said driven shaft and means for varying the phase relationship of said ring gears to thereby adjust the angular relationship between said drive shaft and said driven shaft.

2,743,595
CAM MEANS FOR KNITTING MACHINES
Frederick C. Wiesinger, Philadelphia, Pa., assignor to Jacquard Knitting Machine Company, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application February 2, 1955, Serial No. 485,690
6 Claims. (Cl. 66—50)

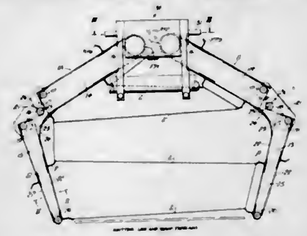
1. In an independent needle knitting machine the combination of knitting instrumentalities having butts, cams

defining differentiating pathways within which said butts may be guided selectively, there being relative movement between said cams and instrumentalities, and a gate cam means for changing the path of the butts from one pathway to another which comprises a cam having components of movement, one in the direction of movement of the



instrumentalities and the other in the direction of relative movement between the instrumentalities and cams and means for moving said gate cam so that the last mentioned component of movement shall be equal to the speed of relative movement between the instrumentalities and cams, but in the opposite direction.

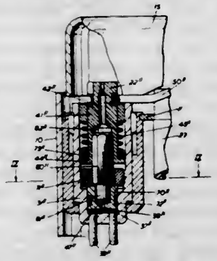
2,743,596
APPARATUS FOR DELIVERING WEFT THREADS FOR INCORPORATION IN FABRIC BEING KNITTED
Harold C. Noe, Upper Montclair, N. J., assignor to Kidde Manufacturing Co., Inc., Bloomfield, N. J., a corporation of Delaware
Application September 4, 1952, Serial No. 307,741
34 Claims. (Cl. 66—84)



1. Apparatus for delivering weft threads to be incorporated in fabric being knitted comprising coacting flexible members having means thereon for engaging a thread, means for moving said members first in paths to draw the thread out in lengths, and means for then moving said members in paths to relax the lengths terminating adjacent the fabric.

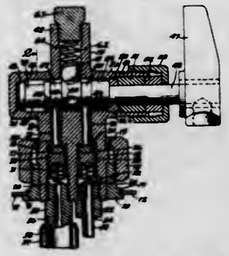
2,743,597
COMPRESSED GAS-FUELLED CIGARETTE LIGHTERS
Stanley Herbert Newman, New York, N. Y.
Application August 31, 1953, Serial No. 377,569
Claims priority, application Great Britain September 1, 1952
7 Claims. (Cl. 67—7.1)

1. A cigarette lighter of the type which employs as fuel a compressed inflammable gas, which comprises a pressure container adapted to hold a supply of the compressed fuel in the liquid state, and a combined valve and burner assembly supported by a wall of the container, the said assembly including a cup-shaped hollow supporting member, a plug disposed in the interior of the supporting member, a disc-shaped absorbent pad held in compression in the interior of the supporting member below the plug, an externally screwthreaded driving nut screwed into a cooperating internal screwthread formed in the supporting member, the driving nut overlying the plug and pressing it downwardly to compress the absorbent pad, the degree of compression of the pad being adjustable by screwing the driving nut up and down, a wick supported at its outer end by the cup-shaped supporting member in contact with at least the periphery of the inner surface of the absorbent pad, the wick extending through the wall of the cup-shaped supporting member into the interior of the container, and the plug being formed with a transverse gas passage whose inner end is covered by the central region of the outer surface of the absorbent pad, a resilient valve member overlying the outer end of the gas passage, an axially movable hollow plunger extending within the cup-shaped supporting member and inwardly spring biased, the inner end of the plunger extending through an aperture in the driving nut and bearing on the resilient valve member



to hold it in sealing engagement with the outer end of the gas passage and thus to prevent the escape of gas through the passage, mechanism for moving the plunger axially outwards to release the resilient valve member and permit the escape of gas from the passage, the plunger being formed at its outer end with a burner jet communicating with its bore to which the gas escaping from the gas passage passes when the resilient valve member is released, and the plunger being rotatable about its longitudinal axis which is coaxial with the screwthread axis of the driving nut, and including a sliding connection between the plunger and the driving nut which permits the axial movement of the plunger relatively to the driving nut, but which prevents relative rotation between the plunger and the driving nut, whereby rotation of the plunger rotates the driving nut and so varies the compression of the absorbent pad to provide regulation of the size of the lighter flame at the burner jet.

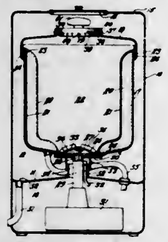
2,743,598
POSITIVE CONTROL VALVE FOR GASOLINE LANTERN
Carl Bramming, Nashville, Tenn., assignor to Aladdin Industries, Incorporated, Nashville, Tenn., a corporation of Illinois
Application May 19, 1951, Serial No. 227,179
3 Claims. (Cl. 67—41)



3. A starting valve mechanism for selectively controlling the flow of atomized fuel and liquid fuel from a tank to a vapor type burner, said valve mechanism comprising

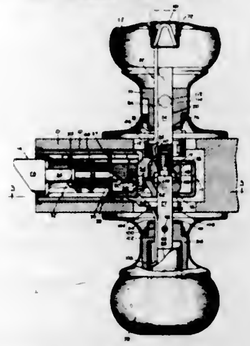
an outlet conduit for carrying fuel to the burner, a first inlet conduit for conveying atomized fuel from the tank, a second inlet conduit for conveying liquid fuel from the tank, first and second inlet valves connected between said outlet conduit and said respective inlet conduits, each of said inlet valves having a valving member movable between open and closed positions and a spring biasing said member toward said closed position, an outlet valve connected in said outlet line, said outlet valve having a valving element movable between open and closed positions, an actuator shaft rotatable into first, second, and third positions, detent means for releasably holding said shaft in said positions, first and second inlet valve cams on said shaft, first and second cam followers operable by said first and second inlet valve cams for positively opening said first and second inlet valving members, and means operable by said shaft for positively closing said outlet valving element, said first inlet valve cam and said first cam follower being constructed and arranged for positively opening said first inlet valve member in said first position of said shaft while permitting closure of said first inlet valve in said second and third positions of said shaft, said second inlet valve cam and said second follower being constructed and arranged for positively opening said second inlet valve in said second position of said shaft while permitting closure of said second inlet valve in said first and third positions of said shaft, said means being constructed and arranged for positively closing said outlet valving element in said third position of said shaft while opening said valving element in said first and second positions of said shaft.

2,743,599
APPARATUS FOR WASHING CLOTHES
Tord Erik Daniel Bilde, Karl Erik Hjelm, and Rolf Bertil Johannes Hultberg, Stockholm, Sweden, assignors to Aktiebolaget Elektrolux, Stockholm, Sweden, a corporation of Sweden
Original application June 30, 1949, Serial No. 102,362. Divided and this application August 21, 1951, Serial No. 242,822
Claims priority, application Sweden July 2, 1948
8 Claims. (Cl. 68—21)



1. Washing apparatus comprising a container having a space for holding laundry, said container including a bottom formed with a first opening and an upstanding section providing a side wall and a top end, said upstanding section having a second opening at the upper part thereof, said first opening being positioned substantially at the center of the bottom at a region thereof intersected by the vertical axis of said container, means including an inner flexible liner within said container for contracting the space, means including an agitator at the vicinity of the first opening which projects upwardly into the space for agitating laundry therein, means for conducting liquid to the space, said liner being of generally cylindrical form having the extreme upper end thereof fixed to the upper part of the upstanding section at the vicinity of the second opening and below the latter, said liner at the bottom having an opening in alignment with the first opening of said container, means for securing said liner to the bottom of said container at the immediate vicinity of the first opening, said liner in its fully extended position being closely adjacent to and bearing against the inside wall surface of said container, and an apertured disc at the first opening which is secured to the bottom of said container at the immediate vicinity of said agitator, said apertured disc having at least a part thereof disposed alongside of and offset laterally of said agitator to facilitate draining of liquid at the first opening.

2,743,600
TUBULAR LOCK
Frederic K. Heyer, Stamford, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn., a corporation of Connecticut
Application April 6, 1950, Serial No. 154,319
13 Claims. (Cl. 70—146)

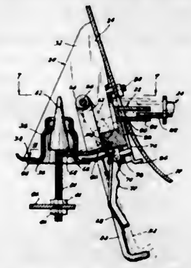


1. In a tubular lock of the class described, a casing, a latch bolt slidable in said casing, inner and outer spindle portions aligned with each other, a knob on each of said spindle portions, inside and outside rollbacks mounted in said casing and actuated by said inner and outer spindle portions for retracting said latch bolt, a push piece for locking the outside rollback when pushed into a predetermined position, a push button carried by said inner knob, means slidable relatively to the outside of said inner spindle portion and movable with said push button when said push bottom is depressed for moving said push piece into locking engagement with said outside rollback, a cam in said outside knob, a push piece actuator mounted exteriorly of said outer spindle portion and movable upon actuation of said cam and slidable relatively to the outer peripheral surface of said outer spindle portion for engaging said push piece, and means for actuating said cam so that said push piece may be pushed out of said predetermined position and out of locking engagement with said outside rollback.

2,743,601
HOOD LATCH LOCKING DEVICE FOR AUTOMOBILES
Meyer Diugatch, New York, N. Y.
Application August 16, 1954, Serial No. 450,051
3 Claims. (Cl. 70—240)

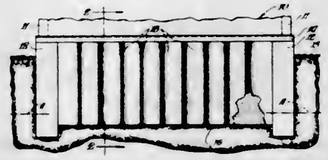
1. In a hood latch locking device the combination, with an automotive vehicle hood latch including a swingable latching yoke carried by a hood and a yoke-engaging latch element carried by the stationary member of the vehicle, of a lock cylinder rotatably mounted on the hood, a plate mounted on the hood inwardly from said cylinder, means movably mounted on the plate to shift between a first position in the path of swinging movement of the yoke and a second position clear of said yoke, and a pin carried by the lock cylinder for shifting said first means between said positions thereof, responsive to rotation of the cylinder by a user, said first-named means comprising a slide including a flat body slidably

mounted upon said plate, said slide further including a bifurcated head at one end projecting in the direction of the lock cylinder, and including at its other end a locking



projection extending in an opposite direction from the head, the bifurcations of said head being engageable by the said pin to shift the slide upwardly and downwardly responsive to rotation of the cylinder.

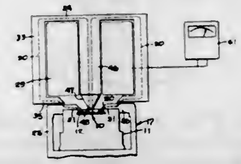
2,743,602
INSULATED FOUNDATION CONSTRUCTION
Wilbur L. Dunn, Macon, Ga.
Application June 24, 1950, Serial No. 170,069
2 Claims. (Cl. 72—77)



1. A building foundation construction comprising a plurality of spaced piers extending into the ground below the frost line, a plurality of horizontal load supporting beams carried on said piers, the beams being disposed to form a horizontal enclosure, means for insulating the ground underneath said enclosure from the adjacent ground comprising an insulating barrier coextensive with said enclosure, said barrier including a plurality of vertically disposed fibrous insulating panels having lower portions extending into the ground below the frost line, upper portions on said panels, means connecting said upper portions of said panels to said supporting beams, said panels including laterally spaced vertical edge portions in contiguous relation with said piers, a plurality of corrugated insulating sheets disposed outwardly of the enclosure, adjacent to and substantially coextensive with the panels, said corrugated sheets forming air pockets between the sheets and said panels, and means connecting said sheets to said horizontal beams for supporting said sheets in an upright position.

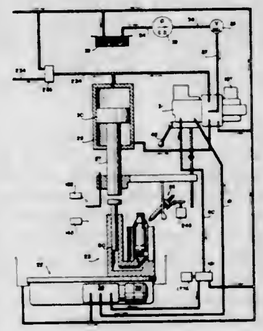
2,743,603
APPARATUS FOR TESTING TIMERS OR THE LIKE
Parker B. Wickham, Janesville, Wis., assignor to Gibbs Manufacturing and Research Corporation, Janesville, Wis., a corporation of Wisconsin
Application September 13, 1952, Serial No. 309,487
10 Claims. (Cl. 73—5)

1. Apparatus for testing a fuze having a generally cylindrical carrier and a magnetic angularly oscillatable pallet element having a hub and arms extending therefrom with said hub mounted on said carrier near one end thereof to oscillate back and forth about the axis of said carrier, said apparatus including a chuck comprising a tubular housing for receiving and enclosing said carrier and forming at one end thereof an annular radially inwardly extending magnetic flange disposed adjacent the pallet end of said carrier, a pair of teeth extending from said flange radially inwardly thereof, the outer ends of the arms of said pallet element oscillating toward and away from said teeth, means for rotating said chuck about the axis of said carrier enclosed thereby, a stationary magnet structure positioned adjacent said radially inwardly extending flange of said chuck with its axis paralleling the chuck axis, said magnet structure comprising a magnetic casing and a coil disposed therein, said casing forming at one end thereof a flange extending in parallel with



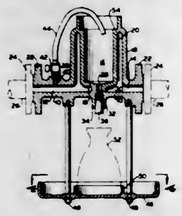
said chuck flange and spaced therefrom by a narrow gap, a magnetic core extending along said chuck axis through said coil and terminating adjacent the hub of said pallet element, said core being spaced radially from said teeth and forming therewith and with said flanges and said magnetic casing a magnetic flux circuit, the reluctance of said flux circuit being varied by the oscillation of said pallet element relative to said teeth, and means responsive to the variation of said reluctance for indicating the frequency of oscillation of said pallet element.

2,743,604
APPARATUS FOR HYDROSTATICALLY TESTING ROCKET BODIES OR OTHER OPEN-ENDED CONTAINERS
Henry E. Stein, Worthington, and Henry V. Mog and John W. Stertzer, Columbus, Ohio, assignors to The Denison Engineering Company, Columbus, Ohio
Application April 29, 1952, Serial No. 284,876
20 Claims. (Cl. 73—49.4)



1. Rocket body hydrostatic testing apparatus comprising, in combination, a hydraulic power cylinder with a piston and ram; a plurality of rocket body holders; means operated in timed relation with said ram to successively dispose said holders adjacent said ram; means for securing a rocket body in fluid tight relationship on each holder; means for filling the bodies with fluid after they have been secured to said holders; and means including a plunger and fluid containing cylinder communicating with the interior of said bodies through said holders, said plunger being of predetermined size relative to the piston of said power cylinder and registering with said ram when the holders are disposed adjacent thereto, said plunger being operated by said ram to increase the pressure on the fluid within the body adjacent the ram.

2,743,605
PIPELINE VISCOSIMETER
Harry Gamlen, San Francisco, Calif., assignor to Gamlen Chemical Company, San Francisco, Calif., a corporation of California
Application April 26, 1954, Serial No. 425,687
2 Claims. (Cl. 73—55)



1. A device of the type described for oil burning apparatus comprising a fuel oil supply line, a cup-like container of predetermined volume, a discharge orifice of predetermined size for said container, plug means and means removably disposing the same in blocking relation with said orifice, first conduit means interconnecting adjacent sections of said supply line including means for constraining oil moving therethrough to pass in surrounding relation with said container, second conduit means adapted to introduce oil into said container from said first conduit means, and a valve forming part of said second conduit means to control the flow of oil from said first conduit means into said container.

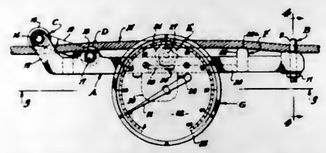
2,743,606
HYDRAULIC TENSION SENSING AND INDICATING MEANS
Louis Q. Webber, Long Beach, Calif., assignor to Martin-Decker Corporation, Long Beach, Calif., a corporation of Delaware
Application January 28, 1953, Serial No. 333,685
6 Claims. (Cl. 73—144)



1. A cable tension sensing and indicating device comprising: an elongated rigid body; cable guiding rollers mounted on said body for engaging one side of the cable to support the body with the major portion thereof opposite the other side of the cable; rollers on said body mounted inwardly of said first mentioned rollers for engaging said other side of said cable; a rocker arm pivoted on said body between said second named rollers; a cable offsetting roller mounted on said rocker arm and extending from one side of said body for engaging said other side of said cable between said second named rollers; an expansible chamber mounted on the other side of said body; said chamber including a flexible diaphragm; and a pressure plate engaged with and operated by said rocker arm; said plate engaging said diaphragm.

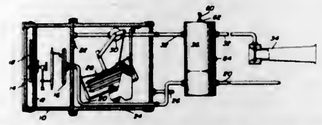
2,743,607
CABLE TENSION INDICATOR
Elmer L. Decker, Long Beach, Calif., assignor to Martin-Decker Corporation, Long Beach, Calif., a corporation of Delaware
Application August 17, 1951, Serial No. 242,273
10 Claims. (Cl. 73—144)

1. A tension indicator for a load-sustaining line, comprising an elongated body member having an opening extending longitudinally thereof, means forming a plurality of surfaces at spaced points along said body member for contacting the same side of said line, means supporting one of said surface forming means in outwardly offset relation to and between the other of said surface forming means including an arm integral at one end with said body member within said opening and connected at its



other end with said means forming said one surface, for resiliently resisting movement thereof; a gauge carried by said body member, means operating responsive to movement of said arm for operating said gauge, and means on said body member longitudinally spaced from said surface forming means for holding said line in contact with said surfaces.

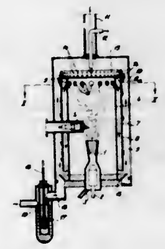
2,743,608
AIRSPEED INDICATOR WITH ALTITUDE CORRECTION
Cecil M. Hunter, Tulsa, Okla.
Application March 15, 1954, Serial No. 416,290
4 Claims. (Cl. 73—182)



1. For use with an airspeed indicator responsive to differential pressure having means connected thereto for correcting said indicator for various altitudes, said means including a Venturi tube for inducing suction and a bellows arrangement connected to said Venturi tube responsive to suction induced by said Venturi tube, and valve means connected to said bellows by a linkage for actuation thereby, an airspeed controlled valve connected to said valve means for said means for correcting said indicator, said valve comprising a housing, said housing being provided with a central chamber, a transverse bore in said housing, a first longitudinal bore extending from said chamber connected to said transverse bore, a second transverse bore in said housing, a second longitudinal bore extending from said chamber connected to said second transverse bore, a diaphragm mounted in said chamber adjacent the bottom thereof, said diaphragm extending across and closing said chamber preventing communication between said first longitudinal bore and said second longitudinal bore, a ball in said chamber above said diaphragm, and said housing having an opening communicating said chamber with the atmosphere, said ball when moved by said diaphragm preventing fluid communication between said first longitudinal bore and said opening, said first transverse bore being interconnected between said belows arrangement and said Venturi tube, said second transverse bore being interconnected between said indicator and the Pitot tube therefor.

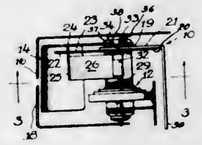
2,743,609
CALORIMETERS
Pierre Schuller, Decazeville, France, assignor to Usines Chimiques & Metallurgiques de Decazeville (Societe Anonyme), Decazeville, France, a company of France
Application April 29, 1952, Serial No. 284,884
Claims priority, application France May 7, 1951
4 Claims. (Cl. 73—190)

4. In a calorimeter for measuring the heat content of a fuel, a combustion chamber provided with means for burning a fuel therein, a pair of inner and outer substantially vertically disposed cylindrical walls arranged concentrically around the combustion chamber, said walls being spaced radially apart from each other to define between each other an annular gap, means for conveying combustion gases from the combustion chamber and introducing them into the lower end of the gap so that such gases flow upwardly in the gap between the walls, means



for exhausting such gases from the upper end of the gap, means for introducing liquid into the upper end of the gap and causing it to flow in a sheet over the outer surface of the inner wall so that the liquid streams down the outer surface of the inner wall in direct contact relation with the upwardly flowing gases, means for collecting the liquid at the lower end of the gap and means for determining the temperature elevation of said liquid in the collecting means.

2,743,610
HYGROMETER
Ernest H. Seibert, Chicago, Ill., assignor, by mesne assignments, to Cory Corporation, a corporation of Delaware
Application September 1, 1950, Serial No. 182,677
3 Claims. (Cl. 73—337)



1. In a humidity indicator, a hygroscopic element consisting of two thin, rectilinear strips one of which is a thin flat strip of moisture absorbent material and the other a thin flat coextensive strip of metal adhesively united into an integral unit disposed in a straight line position when the humidity is normal, a scale for designating the humidity in the surrounding atmosphere of a room or other enclosure, an indicating pointer associated with the scale for visually indicating on the scale the humidity present, a lever arm extending longitudinally of said element and pivotally mounted for horizontal movement and provided adjacent one end with an elongated slot, a rotatably mounted slotted post attached to the indicating pointer, one end of said element being secured to the slotted post and indicating pointer and the other end having a projecting part freely supported and longitudinally movable in the elongated slot whereby said element is free to curve convexly or concavely from its normal straight line position upon the absorption of a greater or lesser quantity of moisture than normal, with such curvature being transmitted to the post and by it to the indicating pointer, said arm being adjusted to set said element to a desired initial position.

2,743,611
TANK THERMOMETER
Robert W. Freeman, East Orange, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a corporation of New Jersey
Application December 9, 1954, Serial No. 474,105
5 Claims. (Cl. 73—363)



1. The combination with a bimetallic tank thermometer including a hollow stem housing a staff, a casing secured to said staff and enclosing a scale plate and a pointer mounted on said staff, and suspension means for lowering said stem and casing into a medium whose temperature is to be measured; of a notched disk secured to said staff within said casing, a locking lever pivotally supported within said casing and engageable and disengageable with respect to said disk to lock said staff against, and unlock it to permit, angular movement, spring means normally biasing the locking lever into disengaged position with respect to the disc, and inertia-responsive means housed within said casing for engaging said locking lever and causing it to move into engagement with said disk.

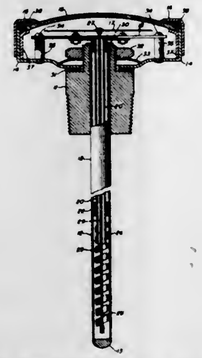
2,743,612
THERMOMETER
Earl R. Kebbon, Chatham, and Robert W. Freeman, East Orange, N. J., assignors to Weston Electrical Instrument Corporation, Newark, N. J., a corporation of New Jersey
Application November 16, 1953, Serial No. 392,252
7 Claims. (Cl. 73—367)



1. The combination with a bimetallic tank thermometer including a hollow stem housing a staff carrying an indicating mechanism within a casing and supporting means for suspending said thermometer within a tank; a peripherally notched disc secured to said staff, latch means normally biased away from locking engagement with the disc, actuating means movable from a first inoperative position to a second operative position where it urges the latch means into engagement with the disc,

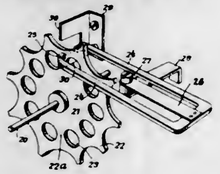
and restraining means normaliy holding the actuating means in the inoperative position, said restraining means being rendered ineffective upon a sharp jerk being applied to the suspension means.

2,743,613
BIMETALLIC THERMOMETER
Earl R. Kebbon, Chatham, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a corporation of New Jersey
Application November 13, 1952, Serial No. 320,256
2 Claims. (Cl. 73—367)



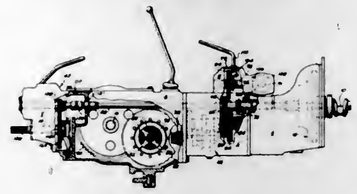
1. A bimetallic thermometer comprising a cup-shaped case having a central opening in the base, a transparent cover closing the case, a mounting nut having a first portion exterior of the case, a threaded second portion passing through said opening into said case, a second nut within said case threaded on said second portion, said second nut and said first portion being greater in diameter than said opening and said second portion being smaller in diameter than said opening, a spring washer on said second portion held by said second nut in yielding frictional contact with the interior surface of the case base, a protective shell passing through an axial hole in the mounting nut and secured to said mounting nut, posts having ends secured to the case base and extending toward the cover, a scale plate carrying temperature markings and removably secured to said posts, a tubular member having one end adjustably secured to the scale plate and the other end extending into said shell, a portion of the wall of said tubular member having intermediate its ends an outwardly spaced lug, a bimetallic coil having one end portion secured to the lug and extending under it and outwardly of the body of the tubular member, a staff having one end secured to the other end of the coil, said staff extending through the coil and through a central hole in the scale plate, and a pointer secured to the staff and cooperating with the temperature markings carried by the scale plate.

2,743,614
MECHANICAL OSCILLATORS
Cecil Frank Clifford, Bath, England
Application July 10, 1951, Serial No. 236,019
Claims priority, application Great Britain July 15, 1950
10 Claims. (Cl. 74—1.5)



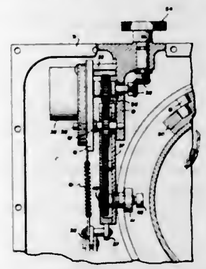
1. A mechanical oscillator having an oscillating member, a complementary member coupled by magnetic flux to said oscillating member, means providing a restoring force for the oscillating member, said oscillating member having a repose position substantially midway between its extreme positions during oscillation, means associated with one of said members and disposed symmetrically on both sides of the repose position of the oscillating member for modifying the reluctance between the oscillating member and the complementary member to thereby modify said restoring force to effect isochronism of said oscillating member.

2,743,615
VEHICLE DRIVE AND POWER TAKE-OFF MECHANISM
Beverly W. Keese, Oshkosh, Wis., assignor, by mesne assignments, to Rockwell Spring and Axle Company, Coraopolis, Pa., a corporation of Pennsylvania
Application September 29, 1950, Serial No. 187,575
5 Claims. (Cl. 74—15.63)



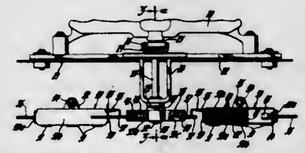
1. In a vehicle drive mechanism, a variable speed transmission unit and housing therefor, said housing having first and second compartments separated by an interior dividing wall, a lubricant receiving cup fixed in an exterior wall of said housing which is longitudinally spaced from said dividing wall, a clutch connected hollow transmission driving shaft extending through said first compartment, means journalling said hollow shaft in said cup and said dividing wall, a constantly driven power take-off drive shaft extending through said hollow shaft and said second compartment and connected at one end to an engine power shaft, and means for feeding lubricant from said second compartment through said hollow shaft into said lubricant receiving cup which delivers it into said first compartment.

2,743,616
DRIVE MECHANISM FOR SCANNING DEVICES
Harold N. Hayward, Urbana, Ill., and Herman M. Diener, Washington, D. C.
Application November 7, 1950, Serial No. 194,544
2 Claims. (Cl. 74—31)
(Granted under Title 35, U. S. Code (1952), sec. 266)



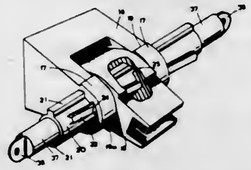
1. A drive mechanism for rotary scanning devices comprising a rotatable wheel-like mounting for a scanning device, an elliptical track attached to said mounting with the short axis in a vertical plane and the long axis along the rim of the wheel, said track including rounded end blocks each of which is adjustable in the direction of said long axis, a motor adapted to rotate continuously in one direction, a toggle-like assembly comprising a lever having one end rotatably connected to the housing of the motor and having a friction driving means rotatably mounted at the other end thereof; gear means carried by said lever and connecting the motor and the friction driving means, said friction driving means rotatably engaging the elliptical track to impart motion to said mounting in one direction when engaging the lower side of the elliptical track, and in the opposite direction when engaging the upper portion of the track, said toggle assembly further comprising a spring actuated means adapted to bias said lever in one or the other of opposite directions about its axis of rotation, thereby maintaining the friction driving means successively in contact with the lower and upper track portions.

2,743,617
WINDSHIELD WIPER CABLE TENSIONING APPARATUS
Clarence P. McClelland, Royal Oak, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 19, 1951, Serial No. 206,835
12 Claims. (Cl. 74—96)



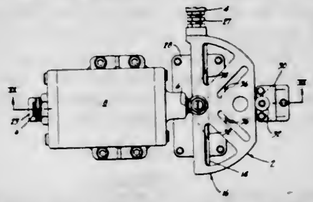
12. Windshield wiper cable tensioning apparatus of the character described, including: a support member having an abutment, a compression spring on said support member one end of which spring rests against said abutment; a slide member, means mounting the slide member on said support member, a portion of the slide member engaging one end of said spring, said members being slidably movable relative to each other to compress and release said spring; and releasable means for compressing said support member to engage said slide member and thereby lock said members in one of a plurality of positions to hold said spring under varying degrees of compression.

2,743,618
OPERATING THE FLAPS OF AIRCRAFT WINGS
Henry Romaine Watson and Frederick Ralph Elliott, Coventry, England, assignors to Sir W. G. Armstrong Whitworth Aircraft Limited, Coventry, England
Application January 11, 1954, Serial No. 403,148
Claims priority, application Great Britain March 20, 1953
4 Claims. (Cl. 74—99)



1. For an aircraft wing having a flap hinged along one edge, hinging means including a number of coacting pairs of brackets which are secured along the adjacent edges of the wing and flap and which have coaxial eyes, each coacting pair of brackets having a hinge pin carried in its eyes and provided with at least two splines which are mutually inclined to one another, one of said splines being slidingly received in a slot provided in the wing bracket and the other of said splines being slidingly received in a slot provided in the flap bracket, and means for simultaneously moving the hinge pins axially to turn the flap.

2,743,619
PIVOTAL CAM PLATE MECHANISM
Sherman Z. Dushkes, Redwood City, and George J. Willey, Vallejo, Calif.
Application August 2, 1954, Serial No. 447,449
5 Claims. (Cl. 74—110)
(Granted under Title 35, U. S. Code (1952), sec. 266)



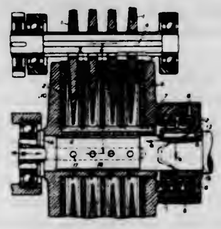
1. Pivotal cam mechanism comprising a reciprocable carrier, a cam plate pivotally mounted on the carrier, a cam follower reciprocable toward and away from said plate, and means urging said follower toward the plate, said follower engagement causing said cam plate to pivot during said carrier reciprocation.

2,743,620
ELECTRICAL APPARATUS
Bertram A. Schwarz and Manfred G. Wright, Kokomo, Ind., assignors to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application August 30, 1950, Serial No. 182.186
15 Claims. (Cl. 74—128)



1. A mechanism including a ratchet wheel provided with ratchet teeth, a stop wheel, means including a slip coupling connecting the ratchet wheel and the stop wheel, a transmitting mechanism connected to the stop wheel, a pivoted ratcheting device for said ratchet wheel including a pivoted arm, a pawl mounted upon said pivoted arm, means for oscillating said arm through a stroke, means for engaging said pawl with said ratchet teeth when said arm moves in one direction and for disengaging said pawl from said ratchet teeth prior to the end of such a stroke, and a stopping device co-operating with the stop wheel to stop its rotation.

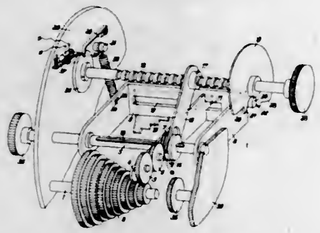
2,743,621
INFINITELY VARIABLE FRICTION WHEEL GEARS
Josef Beier, Schlosspark, Austria
Application November 1, 1950, Serial No. 193.419
Claims priority, application Austria November 2, 1949
15 Claims. (Cl. 74—199)



1. An infinitely variable friction wheel gear comprising a driving shaft, a plurality of driving wheels operatively connected with the driving shaft, a driven shaft, a plurality of driven wheels operatively connected with the driven shaft and each having a relatively restricted area thereof disposed closely adjacent to an area of corre-

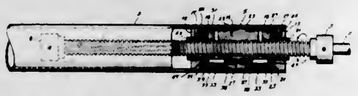
sponding size on a co-operating driving wheel, means enabling films of a liquid having a high viscosity to form between the said areas on the co-operating driving and driven wheels, and means including resilient means and a plurality of cooperating cam elements for causing the said areas to apply a specific pressure to the respective liquid films located between them which will cause the viscosity of the liquid in each film to increase at least several hundredfold and thereby enable the films to transmit power from the driving to the driven shaft, said cam elements being responsive to the load on said driven shaft, and said resilient means applying pressure independently of the load on said driven shaft.

2,743,622
SETTING DEVICE FOR PRICE INDICATOR FOR LIQUIDS
Wilhelm Haupt, Schwenningen (Neckar), Germany, assignor to Kienzle Apparate G. m. b. H., Villingen (Schwarzwald), Germany, a firm
Application July 9, 1952, Serial No. 297,823
Claims priority, application Germany August 10, 1951
7 Claims. (Cl. 74—348)



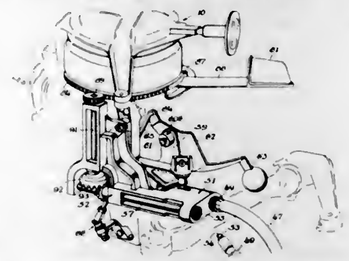
1. A setting device for a price indicator for liquids passed through a flow meter, comprising a set of stepped gear wheels adapted to be driven by the liquid flow meter, at least one adjustable gear wheel, a screw spindle which is adjustable from the exterior, and a cam disc drivingly connected therewith, said spindle and disc being adapted to impart to the adjustable wheel swinging and axial shifting motions, for bringing said adjustable wheel progressively step by step into engagement with any selected wheel of the set of stepped wheels.

2,743,623
SCREW ACTUATORS
Willis L. Wells, Clayton, Mo., assignor to Lambert Engineering Company, St. Louis, Mo., a corporation of Missouri
Application September 16, 1954, Serial No. 456,554
5 Claims. (Cl. 74—424.8)



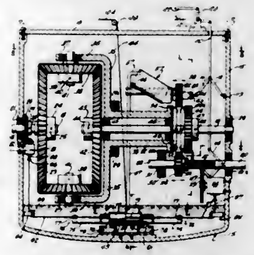
1. In a screw drive having a rotary screw, an axially-movable driven element and a stop limiting travel of the driven element; a nut assembly comprising an internally-threaded body cooperable with said screw, said body being axially fixed and rotatably journaled relative to said driven element, a pair of cooperating ratchet elements keyed respectively to said driven element and said body, spring means normally biasing said ratchet elements into driving engagement with one another, and actuating means carried by said nut assembly for engagement with said limit stop, said actuating means being coupled to separate said ratchet elements free of driving engagement with one another upon engagement of said actuating means with said limit stop.

2,743,624
REMOTE CONTROL FOR OUTBOARD MOTORS
Simon E. Schroeder, Oshkosh, Wis.
Application December 5, 1951, Serial No. 260,013
6 Claims. (Cl. 74—472)



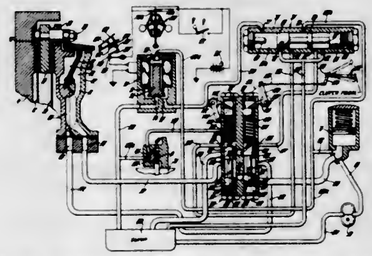
1. In combination with an outboard motor having means on the motor at the rear of the boat for controlling the throttle and other means on the motor at the rear of the boat including a handle extension for local operation for controlling the shifting of the gears to forward, reverse or neutral position, remote control mechanism actuated by the operator from a position remote from the rear of the boat and motor for operating the throttle control means and the gear shift control means, including a housing mounted on the interior of the boat at a position remote from the motor and a pair of control members on said housing each having a connection to its control means on the motor for controlling the throttle and the shifting of the gears from said remote position, said connection for controlling the shifting of the gears from the remote position including means for disconnecting said connection from the means on the motor for shifting the gears for local operation of the handle extension.

2,743,625
POWER TRANSMISSION MECHANISM
Gray Hamilton Moffett, North Bellmore, N. Y.
Application May 17, 1955, Serial No. 508,918
6 Claims. (Cl. 74—752)



1. A transmission device for transmitting power from a driver shaft to a driven shaft comprising, a transmission housing having an oil reservoir, a planetary gear train having a front and rear spaced-apart vertically disposed bevel gear said rear gear being actuated from said front gear by a pair of spaced-apart horizontally disposed bevel gears, a driver shaft secured to said front vertical gear and disposed through the front wall of the transmission housing, an auxiliary driven shaft secured to the rear vertical gear and journaled in the rear wall of said housing, a tubular carrier having bifurcated arms secured to said horizontally disposed bevel gears and having an integral gear at the end of the tube, said auxiliary shaft being disposed through said tubular carrier, a gear secured to said auxiliary shaft in spaced relation to said carriage gear, a synchronizing drum secured to both the carrier gear and to the auxiliary shaft gear, hydraulic gear pump means having a gear adapted to selectively engage said carrier gear and said auxiliary shaft gear, a driven shaft having a spline gear in its periphery, a driven shaft gear secured to the driven shaft and adapted to engage selectively said carrier gear and said auxiliary shaft gear, linkage means for simultaneously and selectively engaging said oil pump gear and said driven shaft gear to respectively said carrier gear and said auxiliary shaft gear, and oil valve means for restricting automatically pumped oil from said hydraulic gear pump.

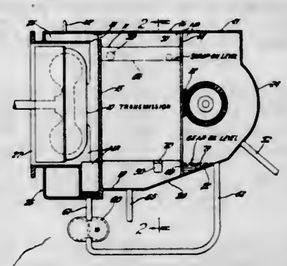
2,743,626
TRANSMISSION AND CONTROLS
Hans O. Schjolin, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 20, 1952, Serial No. 288,966
22 Claims. (Cl. 74—472)



14. In combination in a vehicle, a two speed transmission including a pair of clutches and a pressor plate adapted to alternately engage and release said clutch plates, a clutch actuating servo including a piston and a pair of pressure chambers associated with said piston, a fluid pressure source, a clutch pedal, a pair of clutch control valves adapted to be actuated by movement of said clutch pedal in one direction to deliver fluid pressure to both of said pressure chambers, said clutch control valves being fluid pressure biased to tend to move to a position to exhaust both of said servo pressure chambers, an additional valve effective in one position to deliver fluid pressure to one of said clutch control valves to prevent motion of said valve and effective is a second position to deliver fluid pressure to the other of said clutch control valves to prevent movement of said other control valve upon release of said clutch pedal, means yieldably biasing said additional valve to assume one of said positions, a fluid pressure chamber associated with said additional valve, said additional valve being responsive to fluid pressure delivered to said pressure chamber to assume the other of said positions, master valve means for controlling the admission of fluid pressure to said last-mentioned pressure chamber, a governor for controlling said master valve, and an accelerator pedal actuated overcontrol for rendering said governor ineffective.

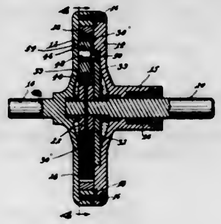
2,743,627
SUMPS FOR TANK AND OTHER SIMILAR TYPES OF VEHICLE TRANSMISSIONS
Howard W. Christenson, Indianapolis, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 14, 1952, Serial No. 314,630
8 Claims. (Cl. 74—606)

1. In a vehicle having transmission components, a plurality of compartments housing said components, a first of said compartments containing fluid in addition to transmission components, a second of said compartments being substantially closed to atmosphere and having a passage communicating with said first compartment near the bottoms thereof, and means for developing air pressure in said second compartment to force liquid therefrom into said first compartment, the level of liquid in



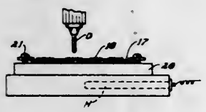
the second compartment being determined by the height of said passage above the bottom thereof.

2,743,628
TORQUE-CONVERTING COUPLINGS
Frank L. Scharaffa, East Boston, Mass., assignor to National Engineering Corp., Boston, Mass., a corporation of Massachusetts
Application April 6, 1951, Serial No. 219,540
8 Claims. (Cl. 74—794)



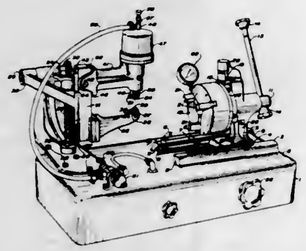
1. A torque-converter comprising a hollow casing, a shaft extending rotatably through a wall of said casing and having an end portion within the hollow of the casing, a gear fixed on said end portion of said shaft, a member rotatable on said shaft within the hollow of the casing, internal gear teeth on said casing arranged in the form of a circular rack on the peripheral wall of the hollow of the casing, each pair of adjacent internal gear teeth on said casing defining a groove between the teeth of each said pair, a plurality of planetary gears rotatably mounted on said rotatable member, each of said planetary gears having peripheral teeth of which some always are in mesh with said internal gear teeth on the casing and some always are in mesh with the teeth of said gear on said shaft, each pair of adjacent teeth of each of said planetary gears defining a groove between the teeth of each said pair of planetary gear teeth, and a substantial body of liquid permanently sealed within the hollow of the casing, said hollow of the casing having opposite side wall portions closely confining the portions of said planetary gears and internal gear teeth of the casing which at any time are in mesh, with said confining wall portions closing the opposite ends of the grooves between the teeth which are in mesh, whereby liquid in the grooves between the said meshing teeth becomes trapped therein by said confining wall portions of the casing, there being clearance cracks between said confining walls of the casing and the confined portions of said planetary gears and internal gear teeth of such thinness that said trapped liquid can escape from said grooves through said clearance cracks only if and when the trapped liquid is subjected to a pressure in excess of a predetermined pressure.

2,743,629
METHOD OF MAKING TOOLS AND DIES
Peter Pellegrino and S. William Pellegrino, Rochester, N. Y., assignors to Photo Color Process Corporation, Rochester, N. Y., a corporation of New York
Application November 18, 1952, Serial No. 321,252
4 Claims. (Cl. 76—107)



1. The method of making tools such as dies and the like which comprises preparing a master drawing of a tool layout, photographically copying the drawing to the final scale desired, in a light sensitive emulsion carried on a substantially rigid transparent support, developing the image in the emulsion while on the support to provide a photographic negative, photographically printing the negative image on a metal sheet carried on a self-supporting sheet of plastic material and coated with a photolithographic resist, developing the image in the resist to render the resist selectively removable by etching in accordance with the image thereon, etching the metal layer substantially down to the plastic sheet as determined by the solubility of the resist, superimposing the sheet on a metal block and using the sheet as a template to drill holes through the sheet and into the metal block.

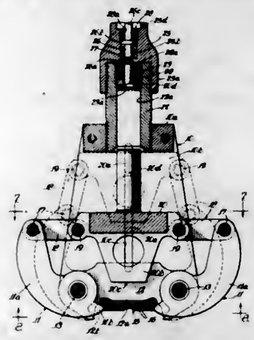
2,743,630
PISTON RECONDITIONING DEVICES
Earl W. Tillis, Elkhart, Ind.
Application September 4, 1952, Serial No. 307,791
6 Claims. (Cl. 80—5.1)



1. In a piston knurling machine, in combination, a knurling roller, said knurling roller having a cylindrical bore, a bearing having an exterior surface shaped like the equatorial zone of a sphere, said bearing being received in the cylindrical bore of said knurling roller and supporting said knurling roller for universal tilting movement said knurling roller being freely rotatable on said bearing, and means yieldably supporting said bearing for limited up and down movement.

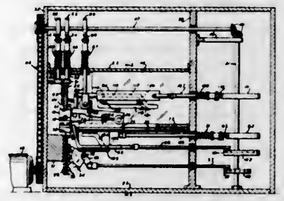
2,743,631
CARTRIDGE ACTUATED SEALING TOOL
Chester M. MacChesney, Chicago, Ill., assignor to Acme Steel Company, Chicago, Ill., a corporation of Illinois
Application January 22, 1953, Serial No. 332,660
3 Claims. (Cl. 81—9.1)

1. The combination in a sealing tool for forming a joint between strap ends, of stationary cutting dies adapted to engage one side of the strap ends, relatively movable jaws adapted upon movement toward each other to engage the other side of said strap ends and to deform the edges of said strap ends in cooperation with said cutting dies, means actuated by an explosive charge for effecting said relative movement, and means actuated by



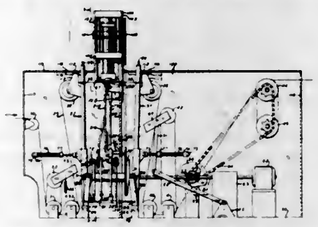
said last named means upon further movement thereof for ejecting the deformed strap ends from said jaws.

2,743,632
JACKET STRIPPING APPARATUS
William L. Ames, Mystic, Conn., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application July 17, 1953, Serial No. 368,787
9 Claims. (Cl. 81—9.51)



1. In an apparatus for stripping the jacket from the core of jacketed cordage, the combination of means for clamping the cordage at spaced points thereon to support a section of the cordage therebetween, means positioned between said spaced points for weakening a portion of the jacket on one side thereof, means opposed to the jacket-weakening means for gripping the other side of the weakened portion of the jacket, and means for moving said gripping means laterally to cause the jacket to be stripped from the core.

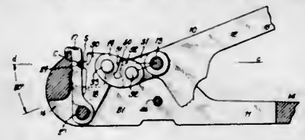
2,743,633
APPARATUS FOR REMOVING JACKET SECTIONS FROM JACKETED ARTICLES
Paul R. Powell, Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application July 17, 1953, Serial No. 368,785
15 Claims. (Cl. 81—9.51)



1. An apparatus for stripping the jacket from the core of an elongated jacketed article, which comprises means

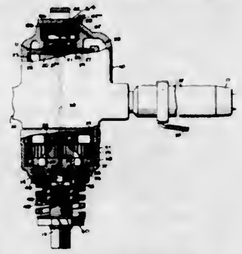
for weakening a portion of the jacket on one side of the core, means opposed to the jacket-weakening means for gripping the opposite side of the weakened portion of the jacket, means for moving the gripping means away from the core to pull the weakened portion of the jacket from the core, means adjacent to the gripping means and engageable with the article for preventing lateral movement of the core during the movement of the gripping means away from the core, stripping elements adjacent to the gripping means and movable in opposite directions, means for moving the separated portions of the core and the jacket into the paths of movement of the stripping elements, and means for actuating the stripping elements in opposite directions to continue the stripping of the jacket from additional portions of the core.

2,743,634
FLEXIBLE TOGGLE LINK ACTUATED CRIMPING TOOL
Carroll A. Badeau, Westfield, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a corporation of New Jersey
Application October 2, 1951, Serial No. 249,310
6 Claims. (Cl. 81—15)



2. A crimping tool including a fixed die element and a shiftable die element, a toggle for actuating the shiftable die element, said toggle including a work arm and a normally rigid link pivoted at one end to the shiftable die element and at its other end pivoted to the arm, said link in the part thereof between its pivotal connections with the die element and arm being slotted to form a spring link capable of shortening the normal distance between its pivotal connections when the shiftable die element is restrained from further movement and the toggle continues to move towards its dead center position.

2,743,635
CLUTCH DRIVE MECHANISM FOR PORTABLE POWER OPERATED NUT SETTERS AND THE LIKE
Ernest H. Shaff, Hamilton, Ind., assignor, by mesne assignments, to Gardner-Denver Company, a corporation of Delaware
Application June 5, 1952, Serial No. 291,917
6 Claims. (Cl. 81—52.4)



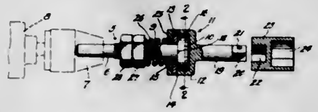
5. In a power driven tool, a tool spindle, drive means for the spindle including a clutch automatically disengageable under overload comprising a driving clutch element, a driven clutch element slidably but non-rotatably connected with the spindle, and spring means normally restraining disengagement of the clutch elements, lockout means including a transversely shiftable member on the spindle and a shoulder on the driven clutch element respectively interengageable to hold the clutch element disengaged, and means effective upon disengagement of the clutch to move said member into holding relation to said shoulder.

2,743,636
DRIVE MECHANISM FOR PORTABLE POWER OPERATED SCREW DRIVERS AND THE LIKE
Ernest H. Shaff, Hamilton, Ind., assignor, by mesne assignments, to Gardner-Denver Company, a corporation of Delaware
Application June 5, 1952, Serial No. 291,916
10 Claims. (Cl. 81—52.4)



1. In a tool for driving a fastening element, a drive mechanism comprising, in combination, a spindle, a kick-out type clutch having normally engaged driving and driven clutch elements, one of said clutch elements being constrained to axial movement upon said spindle, lockout means including a member carried by said spindle and movable in a generally radial direction with respect thereto for engagement with said one clutch element upon initial disengagement of said clutch, and an actuator for said lockout means supported for relative axial movement into and out of holding relation to said member, said actuator being operative upon disengagement of said clutch to move said member into locking engagement with said one clutch element to prevent re-engagement of said clutch, said actuator being normally biased for movement into non-holding relation to said member.

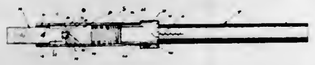
2,743,637
TORQUE WRENCH ADAPTER FOR POWER TOOLS
Ernest L. Redmon, Columbus, Ohio
Application December 21, 1954, Serial No. 476,805
3 Claims. (Cl. 81—52.4)



1. A torque wrench adapter comprising a shaft formed at one end for insertion within the chuck of a rotary hand tool and having an intermediate, externally screw-threaded region thereon, said shaft at the opposite end thereof being provided with a diametrically enlarged disk head having a flat, annular, inner surface; a hollow clutch drum of non-adjustable, unitary construction rotatable on and enclosing the disk head of said shaft and having an end wall formed with an opening through which said shaft extends, said end wall having a flat, annular, inner surface arranged for frictional engagement with the annular inner surface of the disk head of said shaft; stop means threadedly carried in an open position for longitudinal adjustment on the intermediate region of said shaft; spring means carried on said shaft between said stop means and the end wall of said clutch drum for holding the annular inner surface of said disk head in frictional, non-slipping, torque-transmitting engagement with the annular inner surface of the end wall of said clutch drum, said head slipping and turning relative to said drum when predetermined torque forces are applied to the interengaging surfaces thereof; and a second shaft carried by and extending axially outwardly from said clutch drum

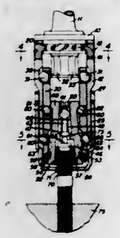
at the end thereof opposite the said end wall and formed at the outer end thereof with a multiangular extension to drivingly receive a socket-type wrench head.

2,743,638
TORQUE-LIMITING WRENCH
Robert Glen Woods, South Gate, Calif., assignor to Jo-Line Tools Inc., South Gate, Calif., a corporation of California
Application September 7, 1954, Serial No. 454,459
6 Claims. (Cl. 81—52.4)



1. A torque-limiting wrench, comprising: an elongated handle; a head member pivotally secured to the front portion of said handle, said head being formed with load-engaging means; a plunger member axially slidably carried by said handle rearwardly of said head and axially spaced therefrom; resilient means interposed between said handle and said plunger member for constantly urging the latter forwardly toward said head; and, a pivot element interposed between the rear of said head member and the front of said plunger member, one end of said pivot element being beveled relative to its sides and the member adjacent said beveled end being formed with a complementary depression for receiving said beveled end.

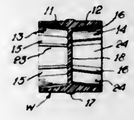
2,743,639
STUD SETTER
Maurice J. Lynch, Rochester, N. Y., assignor, by mesne assignments, to Farrel-Birmingham Company, Incorporated, Ansonia, Conn., a corporation of Connecticut
Application September 25, 1952, Serial No. 311,372
14 Claims. (Cl. 81—53)



1. A stud setter comprising a rotary drive member, an outer shell rotatable relative to said drive member, a sleeve slidable axially and rotatable in said outer shell, a plurality of work-gripping jaws movable axially and radially in said sleeve, a cam member carried by said sleeve and operable upon movement of said jaws axially inward of said sleeve to move said jaws into gripping position, means to couple said jaws and sleeve for rotary and axial movement together, and a clutch between said outer shell and said drive member engaged by subsequent inward movement of the sleeve axially of said outer shell to transmit the rotation of said rotary drive member to said sleeve and jaws.

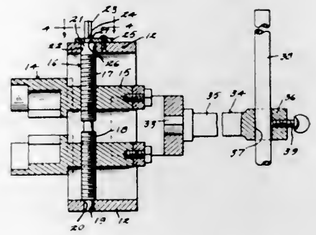
2,743,640
SAFETY WRENCH FOR ELECTRICAL FUSES
Leo L. Verkuil, Norwalk, Conn.
Application March 25, 1953, Serial No. 344,618
5 Claims. (Cl. 81—64)

5. A safety fuse wrench for rigid wedging manually onto the periphery of the head of a screw-threaded fuse, said wrench being non-distortable in the direction of the axis about which it is to be turned whereby wedging pressure may be manually applied to it at a part thereof fixedly remote from where the wrench it to be wedged onto the fuse, said wrench comprising a molded sleeve-like relatively rigid body of relatively rigid insulating material having an external substantially cylindrical surface providing a relatively rigid hand-grip at one end of the sleeve for turning the wrench and having at the other end of the sleeve fuse-head engaging portions in the form of an internal coaxial inwardly tapered and substantially frusto-



conical surface which is sub-divided by six longitudinally extending and equi-angularly spaced grooves which have the shape in cross-section of a truncated angle and which provide longitudinal thinned wall portions in the said relatively rigid insulating material of the sleeve-like body which portions may distort without fracture when intervening thicker and rigid frusto-conical wall portions are non-uniformly strained in radial direction by unsymmetrical fuse heads.

2,743,641
ADJUSTABLE WRENCH, INCLUDING RIGHT AND LEFT THREAD SLIDING JAW ADJUSTING MEANS
Lloyd P. Stricklett and Joseph W. Horvath, Racine, Wis., assignors to New Tools Co., Inc., Racine, Wis., a corporation of Wisconsin
Application March 8, 1954, Serial No. 414,683
2 Claims. (Cl. 81—163)



1. A wrench comprising a body member formed of parallel side walls, end walls secured to said side walls, a pair of socket forming members slidably engaging the forward edges of said side walls, a pair of rearwardly projecting flanges carried by each member engaging the outer faces of said side walls for holding said members against turning, a polygonal shank integral with each member and slidably engaging between said side walls, a shank adjusting screw shaft rotatably carried by said end walls and engaging through said shanks, means holding said shaft against endwise movement, adjustable locking means carried by said shanks and engaging the opposite or rear edges of said side walls, and a U-shaped socket fixed to said side walls and projecting rearwardly therefrom, said socket having a polygonal opening in the bight thereof.

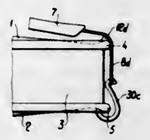
2,743,642
EXTENSION HANDLE FOR BOX WRENCHES
Jack H. Randall, Jr., Nampa, Idaho
Application February 9, 1954, Serial No. 409,076
4 Claims. (Cl. 81—177)

2. A handle extension for conventional box wrenches comprising an elongated shaft, a nut fixedly attached to each end of said shaft as a longtudinal extension thereof for receiving a socketed end of a conventional box wrench whereby such a wrench will extend at right angles to the



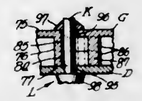
shaft, and means for releasably retaining such end of a box wrench on said nut.

2,743,643
TAILPIECE FOR STRING INSTRUMENT
Otto Petrus Bramson, Stockholm, Sweden
Application March 27, 1952, Serial No. 278,788
11 Claims. (Cl. 84—302)



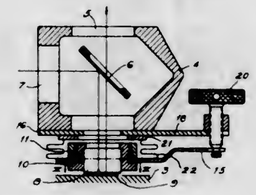
1. A portable string instrument, particularly a violin, having a belly, a back, and a frame interposed between said belly and back, a first junction between said frame and said belly, a second junction between said frame and said back, said back defining a natural nodal zone adjacent said second junction, strings, a tail piece, pliant ties connected at their one ends to said tail piece and being slidably supported on said first junction, a rigid anchoring member engaging the outside of the said back over a contact surface restricted to the said nodal zone, said anchoring means being otherwise spaced from said belly and from said second junction, the opposite ends of said ties being retained by said anchoring member, said ties and said anchoring member being held in their positions under tension by the string tension so as to be free from said frame, and said tail piece being held by said string tension in a position free of said belly.

2,743,644
MOLDED PLASTIC STRING INSTRUMENT
David J. Rosenheim, Deal, N. J., assignor to Lapin Products, Inc., Newark, N. J., a corporation of New York
Application October 2, 1950, Serial No. 187,857
3 Claims. (Cl. 84—305)



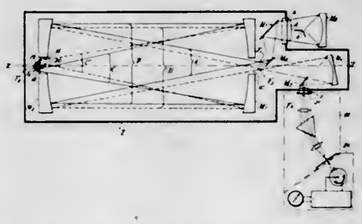
1. In a musical instrument construction, a musical instrument head, comprising a pair of spaced head portions adhered to each other, one of said head portions having integral hollow bosses abutted and adhered to the other of said head portions, metal bushings extending through said hollow bosses, and keys revolubly mounted in said bushings, said bosses and metal bushings being split and said metal bushings having tail portions extending through the split sides of said bosses.

2,743,645
INTERFEROMETRIC APPARATUS FOR EXAMINING THE STRUCTURE OF REFLECTING SURFACES
Lars Evald Holger Larsson and Karl Erik Nicolaus Rydström, Eskilstuna, Sweden, assignors to Aktiebolaget C. E. Johansson, Eskilstuna, Sweden, a Swedish company
Application August 20, 1952, Serial No. 305,364
2 Claims. (Cl. 88—14)



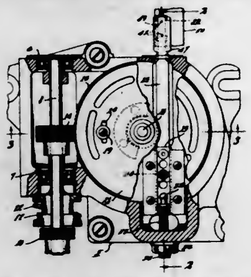
2. An interferometric apparatus for examining the structure of reflecting surfaces, comprising a housing, an interference plate made of a transparent material and having a reflecting and partly transparent layer, an open-ended bellows made of an elastic material attached at one end to said housing, a holder for said interference plate attached to the other end of said bellows for allowing tilting movement of said interference plate relatively to said housing and thus for supporting said plate in such arbitrary position relatively to the reflecting surface to be examined as to form an interference space between the reflecting and partly transparent layer on said interference plate and the reflecting surface to be examined, and means for projecting a beam of light from said housing into said interference space, said bellows enclosing the path of the light beam between said housing and said interference plate.

2,743,646
OPTICAL INSTRUMENT HAVING THROUGH-AND-RETURN LIGHT PATH
John D. Strong, Baltimore, Md.
Application May 17, 1952, Serial No. 288,373
17 Claims. (Cl. 88—14)



1. An image-forming optical instrument comprising means to define a light source, image-forming means positioned to receive light from the source, reflecting means positioned to return to the image-forming means light from the source imaged by the image-forming means, means to interrupt at a periodic rate other than the rate of modulation of said source the passage of light over the path extending from the image-forming means to the reflecting means and back to the image-forming means, and a detector positioned adjacent an image of the source as formed successively by the image-forming means, reflecting means and image-forming means, said detector being responsive to light modulated at said periodic rate and unresponsive to light modulated at the rate of modulation of said source.

2,743,647
TELEVISION MOTION PICTURE PROJECTOR MECHANISM
John J. Hoehn, Pennsauken Township, Camden County, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application April 27, 1953, Serial No. 351,273
10 Claims. (Cl. 88—18.4)



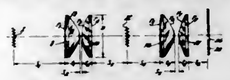
1. A film pull-down mechanism comprising a casing, a pinion gear within said casing, a cam gear in mesh with said pinion gear, a cam attached to one side of said gear, said cam having a groove therein, a cam plate mounted on the other side of said gear, a follower positioned in the groove of said cam, a follower abutting said cam plate, a claw unit attached to said first mentioned follower for producing rectilinear motion thereof in one direction, and means interconnecting said claw unit and said second mentioned follower for producing rectilinear motion of said claw unit at right angles to the first mentioned motion of said claw unit, said groove having two radially decreasing portions and two radially increasing portions for moving said claw unit twice in the same direction during one revolution of said cam gear.

2,743,648
OPTICAL SYSTEM FOR IMAGE PROJECTION DEVICES
Donald J. Parker, West Collingswood, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application October 31, 1952, Serial No. 317,868
1 Claim. (Cl. 88—24)

An optical system having numerical data substantially as set forth in the following table:

Curvature	Thickness or air separation	Refractive Index n_e
	$s_1=1.65''$	
$r_1=8.23''$	$t_1=0.472''$	1.478
r_2=vertex radius of curvature of the surface defined by the curve $x=y^2/1.328$		
	$s_2=0.035''$	
$r_3=1.08''$	$t_2=0.313''$	1.478
$r_4=\infty$	$s_3=1.15''$	
	$s_4=1.05''$	
$r_5=8.23''$	$t_3=0.472''$	1.478
r_6=vertex radius of curvature of the surface defined by the curve $x=y^2/1.328$		
	$s_5=0.168''$	
r_7=vertex radius of curvature of the surface defined by the curve $x=y^2/2$		
	$t_4=0.300$	1.523
$r_8=\infty$	$s_6=0.67$	

where r_1, r_2 . . . represent the radii or the vertex radius of the generating curve of the surface of the lenses, t_1, t_2 . . . represent the thickness of the lenses along the optical axis, s_1, s_2 represents the air separation of the several features of the system, and x and y are the parameters of a system of Cartesian coordinates whose x axis



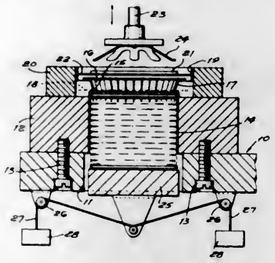
coincides with the optical axis of the system and whose origin is at the vertex of the generating curve.

2,743,649
OPHTHALMIC LENSES
William Phillips, Middlesex, N. J., assignor of one-fourth to Bozena Marie Phillips, one-fourth to Edward H. Phillips, one-fourth to Edwin D. Phillips, and one-fourth to Josephine Bernice Phillips, all of Middlesex, N. J.
Application September 4, 1951, Serial No. 244,979
7 Claims. (Cl. 88—54)



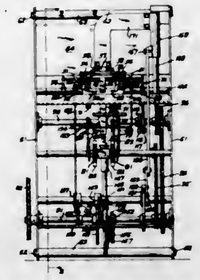
1. As an article of manufacture, a one-piece, multifocal monocentric axis lens characterized by at least two curved surfaces of different radii constituting a distance field and a reading field, both said fields extending the full width of the lens, the reading field having a convex top border ledge portion extending a substantial distance to opposite sides of the optical center of the lens, said convex border ledge portion defining a substantial portion of the lower border of the distance field, the optical center of both fields being coincident and being at the center of the top border ledge of the reading field, the thickness of the lens in the reading field at said optical center being greater than that for the distance field and the relative thickness of the lens in the adjacent portions of the fields changing along said border ledge outwardly from said center to points where the surfaces of the fields merge and the thickness of the lens becomes the same for both fields, the points of mergence of the fields being inwardly from the side edges of the lens whereby optical jump is reduced to a minimum.

2,743,650
APPARATUS FOR FOLDING SHEET MATERIAL OVER AN EDGE OF A BLANK
Maurice M. Balsam, New York, N. Y.
Application March 9, 1953, Serial No. 341,195
5 Claims. (Cl. 93—36.6)



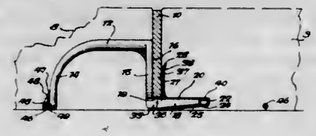
1. Apparatus for folding sheet material about an edge of a blank, comprising, in combination, support means formed with an opening passing therethrough; one-way guide means having a shape corresponding to that of the blank and being arranged on said support means about said opening thereof to guide a blank only toward said opening, said guide means having an inner yieldable portion located opposite said opening and shaped so as to yieldably expand only when the blank engages said yieldable portion during movement toward said opening, said yieldable portion of said guide means extending about the latter and being substantially continuous, and said yieldable portion of said guide means gradually decreasing in size up to a predetermined plane as it approaches said opening and suddenly increasing in size substantially at said predetermined level, said yieldable portion of said guide means being in the form of a sheet of springy material formed with a plurality of slits extending inwardly from an edge of said sheet distant from said opening to form a plurality of springy tongues, said tongues being bent inwardly at an angle of approximately 90° at said plane and having springy free end portions diverging from each other in a direction extending from said plane away from said opening of said support means; a plate movably mounted in said opening of said support means for free movement toward and away from said yieldable portion of said guide means; and pressure means operatively connected to said plate for urging the same toward said yieldable portion of said guide means, whereby sheet material portions extending beyond the blank will be folded over the outer edge thereof during movement past said yieldable portion of said guide means and whereby said plate under the influence of said pressure means urges blanks successively moved past said yieldable portion of said guide means against each other and toward said yieldable portion.

2,743,651
CARTON SETTING UP MACHINE
William H. Wilcox, Stockton, Calif., assignor to Fibreboard Products Inc., San Francisco, Calif., a corporation of Delaware
Application August 31, 1953, Serial No. 377,324
15 Claims. (Cl. 93—51)



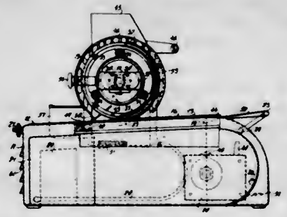
1. A machine for setting up a carton blank of the type having a bottom panel, a first pair of opposite walls hingedly connected to said bottom panel each of which is formed with a lock forming cut adjacent each end thereof providing a deflectable wall portion adjacent such end, and a second pair of opposite walls hingedly connected to said bottom panel and extending transversely with respect to said first pair of walls, each of said second pair of walls having a hingedly connected end flap adjacent each end thereof having a locking tab adapted to be received in an opening formed at each lock forming cut when the deflectable wall portion adjacent such cut is deflected outwardly; comprising a form having a first pair of opposite side members, each of said side members having recessed portions adapted to accommodate deflectable wall portions of the first pair of carton walls when said wall portions are deflected to provide the tab receiving openings in each of said first pair of carton walls, a second pair of opposite side members extending transversely with respect to said first pair of opposite side members cooperable with said second pair of opposite carton walls, means for folding said carton walls upwardly adjacent said side members to effect setting up of all of said carton walls and bending of said end flaps adjacent said first pair of side members, and means comprising a pair of movable deflecting fingers adjacent each side member of said first pair of side members with each of said fingers pivoted about an axis adjacent such side member for swinging movement in a substantially normal direction opposite and adjacent a recessed portion of such side member for deflecting said deflectable carton wall portions into said recessed portions to form said tab receiving openings.

2,743,652
LOAD-TRANSFER DEVICES FOR HIGHWAY JOINTS
Alan E. Brickman, Buffalo, N. Y., assignor, by mesne assignments, to Acme Highway Products Corporation, Buffalo, N. Y., a corporation of New York
Application October 25, 1951, Serial No. 253,082
4 Claims. (Cl. 94—8)



1. In a load-transfer device for a road joint between two adjacent pavement slabs separated by a joint filler, said load-transfer device including an upright member having a face formed to abut against one face of the joint filler and having an anchoring member extending outwardly therefrom to be embedded in one pavement slab and a spade extending laterally from the lower portion of said upright member in a direction opposite from said anchoring member to extend below said filler and a part of the other slab, that improvement which includes a cover member fitting about said spade, and a spring unit formed of a single piece of wire having the intermediate portion thereof formed in a loop extending along the sides and lower portion of said spade and pivoted on the upper portion of said cover member, the ends of said spring unit forming legs which extend upwardly from said pivotal connection in spaced relation to said upright member, and a projection on said spade with which said loop engages to hold said cover member in place on said spade and to bias said spring unit to yieldingly urge said legs toward said face of said upright member.

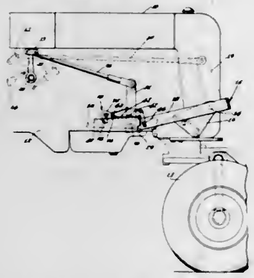
2,743,653
PHOTOGRAPHIC CONTACT PRINTING APPARATUS
Walter David Kennedy and Sidney Alfred Joseph Fenton, London, England, assignors, by mesne assignments, to Chemische Fabriek L. van der Grinten, N. V., Venlo, Netherlands, a corporation of the Netherlands
Application March 4, 1953, Serial No. 340,244
Claims priority, application Great Britain March 7, 1952
1 Claim. (Cl. 95—77.5)



In a contact photoprinting apparatus, a rollable exposure member comprising a curved light-pervious panel

having an outer surface convex in one direction and straight in the transverse direction, a support providing a track on which said member is rollable bodily to and fro along a path substantially tangent to said surface between a feeding position at a backward part of said track and a working position at a forward part thereof, a flexible apron for applying to said surface sheet material to be exposed through said panel, said apron having a portion held to said surface and having a terminal portion anchored to a forward part of said support so that the apron extends tangentially forward from said surface to said terminal portion to receive sheet material laid thereover, when said member is in feeding position, and is wrapped about said surface by the forward rolling of said member to working position, said track sloping downwardly from said forward part towards said backward part thereof so as to bias said member to roll backwardly to said feeding position under gravity from any location away from that position, releasable locking means at a forward part of said support for holding said member releasably in said working position against the bias of said sloping track, a timing device on said support, and means operated by said timing device after a predetermined period of its operation for releasing said locking means and thus causing said member to roll to said feeding position.

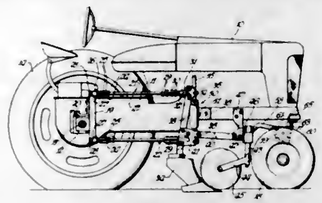
2,743,654
IMPLEMENT ATTACHING APPARATUS FOR TRACTORS
Wylie A. Mason, Jr., Memphis, Tenn., assignor to International Harvester Company, a corporation of New Jersey
Application May 19, 1954, Serial No. 430,775
8 Claims. (Cl. 97—47.14)



1. In implement attaching apparatus for tractors wherein a socket member is provided on the tractor for cooperative connection with a complementary shaft member on the implement, and wherein releasable latching means is associated with the socket member and cooperable with the shaft to lock the parts against relative displacement, means pivotally connecting said socket member to the tractor for rocking movement thereof, power means on the tractor operatively connected to said socket member for adjusting the position of the latter about its pivot axis, and a latch actuating member anchored to a part on the tractor and operatively connected to said latching means for releasing the latter in response to rocking said socket member in one direction.

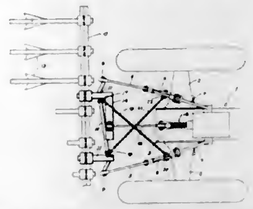
2,743,655
TRACTOR MOUNTED IMPLEMENT
Clarence J. Rafferty, Memphis, Tenn., assignor to International Harvester Company, a corporation of New Jersey
Application June 15, 1953, Serial No. 361,469
7 Claims. (Cl. 97—47.22)

1. In a push type implement adapted for mounting upon a tractor having a longitudinally extending body, dirigible front wheels, a transverse rear axle structure and spaced rear drive wheels, a first pair of vertically spaced generally parallel links pivotally connected to the rear axle structure and extending forwardly therefrom at the side of the tractor body, a vertically extending tool support having a tool at its lower end and to which the forward end of each of said links is pivotally connected, and a second pair



of generally parallel links extending laterally from the tractor, said second pair of links being pivotally connected at vertically spaced locations to the tractor and to the tool support for swinging about horizontal and vertical axes to cause the tool support to remain in a vertical position and to stabilize said support against tilting about a longitudinal axis during vertical movement thereof.

2,743,656
CRANK UNIT FOR AUTOMATIC ADJUSTMENT OF IMPLEMENTS
Frank M. Fraga, Fresno, Calif.
Continuation of application Serial No. 145,174, February 20, 1950. This application November 3, 1952, Serial No. 318,499
2 Claims. (Cl. 97—47.65)

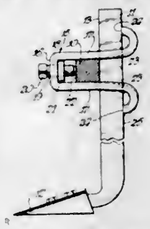


1. A leveling draft hitch for attaching implements to a tractor equipped with a pair of transversely spaced draft links trailingly pivoted thereon for lateral swinging movement relative thereto, said hitch comprising, in combination, a transversely extending implement frame member, crank shaft supporting means rigid with the frame member, a crank shaft having opposed end cranks turnably supported in the frame member and normally set in substantially horizontal alinement in a transverse vertical plane, said cranks having pivoting engagement with the trailing ends of the tractor draft links, and means between the crank shaft and the draft links to rotate the crank shaft in a direction to lower the frame member on one side upon an accompanying lateral shift of the member to said side.

2,743,657
IMPLEMENT CLAMP
George M. Kriegbaum, Homewood, Ill., assignor to International Harvester Company, a corporation of New Jersey
Application April 20, 1953, Serial No. 349,861
6 Claims. (Cl. 97—198.1)

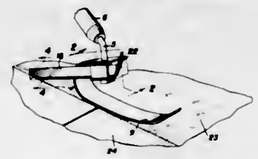
1. For use with agricultural implements and the like, a clamp for securing a beam to a standard comprising a U-shaped member having a transverse head portion and spaced arms adapted to slidably receive the beam therebetween near the head for adjustment of the clamp longitudinally thereof, said arms having elongated aligned slots

formed therein to slidably receive the standard for adjustment relative thereto, said arms being spaced approximately the width of said beam and bent outwardly from a location medially of its ends, the ends of said arms being rolled outwardly and rearwardly to a point over-



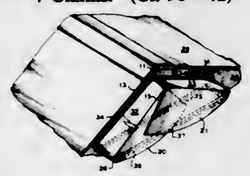
lapping the slots with the terminal faces thereof engageable with the standard, and extensible means carried by the head and engageable with the beam, said means being extensible to press the beam against the standard and the standard against the terminal faces of said arms.

2,743,658
LAWN EDGER AND TRIMMER
John Wynstra, Lynden, Wash.
Application January 14, 1952, Serial No. 266,301
4 Claims. (Cl. 97—227)



2. A lawn edger comprising a handle including a depending tang, a runner having an upwardly curved front end, a substantially flat, ground engaging portion and an upwardly curved heel portion terminating in a forwardly extending top section, said tang extending through said top section and being rigidly secured thereto, a U-shaped blade holder disposed on the underside of said flat section and including a web extending transversely across said top section and legs depending from said web, said tang extending loosely through said web for limited transverse movement of the holder with respect to the top section and a clamping plate detachably secured to the free end of said tang abutting the free ends of said legs, a terminal flange on said top section closing the front of said holder, said web being wider than said top section, and a blade clamped between one of said legs, an edge of said heel portion and said terminal flange by said clamping plate, said blade extending rearwardly and downwardly behind said heel portion.

2,743,659
AIR VENT HOOD
Richard F. Peters, Austin, Tex.
Application March 7, 1952, Serial No. 275,325
7 Claims. (Cl. 98—42)



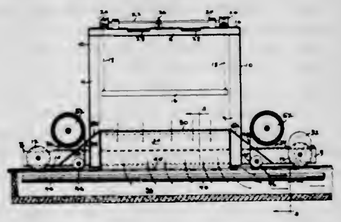
1. An air vent hood for attachment to the gable wall of a building comprising a one piece sheet metal structure having oppositely inclined roof portions, flanges extending upwardly from one edge of each roof portion for securing said hood to said wall, overlapping leaves extending downwardly from the opposite edge of said roof portions, downwardly and inwardly extending flanges at the outer ends of said roof portions, a horizontally disposed screen including a frame supported by said last named flanges and fastening means extending through said leaves and into said frame to secure said screen in place.

2,743,660
FLOOR FURNACE GUARD
Louis A. Scherff, Wichita Falls, Tex.
Application July 24, 1953, Serial No. 370,043
1 Claim. (Cl. 98—103)



For use in combination with a floor furnace having a grate thereover substantially level with the floor in which the furnace is installed, a floor furnace guard comprising a rectangular base frame of parallel rods, arcuate rods secured to the ends of said rectangular base frame and positioned thereabove, at least one intermediate arcuate rod secured to the side rods of said base frame and extending thereabove, all of said arcuate rods being of the same configuration and curved at their highest portions, a perforated covering over said arcuate rods and across the end rods, and depending projections at opposite corners of said frame arranged to be received within corresponding corners of said grate.

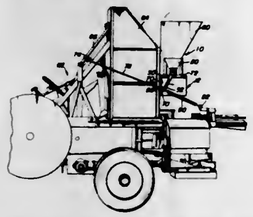
2,743,661
FLEXIBLE VALVE FOR MOBILE SPRAY BOOTHS
Arthur C. Schanz, Montclair, N. J., assignor to ACF Industries, Incorporated, a corporation of New Jersey
Application June 14, 1952, Serial No. 293,561
2 Claims. (Cl. 98—115)



1. In combination with a mobile paint spray booth mounted on wheels running on rails and an open-topped discharge trough beneath the rails coextensive with the path of movement of the booth, said booth including longitudinal sill members extending beyond the ends thereof to provide a base portion and having an open grille floor adjacent the bottom, an outlet duct member depending from said open grille floor of the booth in constant communication with said discharge trough during movement of the booth for exhaust of paint overspray therefrom into the discharge trough, a spring actuated reel mounted on each end of said base portion exteriorly of the booth adjacent opposite ends of said outlet duct member, and a flat continuous flexible valve member closing each section of the open top of the discharge trough between opposite ends thereof and each end of said outlet duct member beyond the con-

fines of the booth, said flexible valve members having their inner end portions longitudinally separated from each other a distance at least equal to the length of said outlet duct member and connected with and wound around said reels whereby to be extensible and retractable with movement of the booth to maintain said sections of the discharge trough that are beyond the confines of the booth in any relative position of the latter closed at all times.

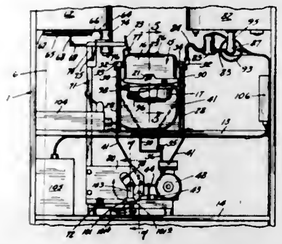
2,743,662
SALT DISPENSER FOR HAY BALERS
Lawrence B. Pietrok, Stayton, and James O. Phelps and Phillip G. Pietrok, Lyons, Oreg., assignors to Lyons Salt Dispenser Inc., Stayton, Oreg., a corporation of Oregon
Application May 19, 1952, Serial No. 288,624
1 Claim. (Cl. 99—235)



In combination with a hay baler including a hay receiving hopper with a vertical side wall having a horizontally elongated opening therein, and an actuating arm for a compression plunger, a salting attachment comprising a pair of aligned spaced vertical plates mounted on said side wall of the hopper at each end of the opening therein, an elongated downwardly sloping plate interconnecting the pair of vertical plates and having the lower edge thereof abutting the side wall of the hopper at the lower edge of the opening whereby the sloping plate forms a chute for guiding salt through the entire length of the opening into the interior of the hopper, a salt storage bin mounted on said pair of vertical plates and extending transversely thereof in overlying relation to the upper portion of the sloping plate, said bin having upwardly diverging plates terminating in spaced relation at their lower ends for forming a discharge slot, a cylindrical dispensing and measuring roller rotatably mounted on the upper end of said pair of plates with a portion of the periphery thereof received in the discharge slot thereby forming a closure therefor, said roller having a longitudinally elongated groove in the periphery thereof, said groove being equal to the length of the discharge slot for receiving a predetermined quantity of salt through the discharge slot, a laterally extending arm connected to said roller, spring means for urging the roller to a position for dumping salt from the groove onto the sloping plate, and a flexible member interconnecting said lateral arm and the plunger actuating arm for rotating said cylinder for moving the groove from a dumping position to a position in alignment with the discharge slot for receiving another quantity of salt for dispensing onto the plate throughout the length thereof whereby the salt will be discharged evenly across substantially the entire width of the hay hopper for thoroughly intermingling the salt and hay.

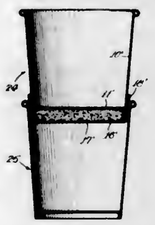
2,743,663
APPARATUS FOR POPPING CORN
Herman A. Bruntjen, Minneapolis, Minn., assignor to Edwin A. Polzin, Minneapolis, Minn.
Application February 16, 1951, Serial No. 211,311
11 Claims. (Cl. 99—238.1)

1. In a corn popping machine of the class described, a receptacle for the reception of liquids and unpopped corn, means mounting said receptacle for oscillatory and popped corn discharging tilting movements, means for delivering a predetermined quantity of liquid and unpopped corn to the receptacle, mechanism for imparting oscillatory movements to the receptacle during the popping operation, means for maintaining said receptacle



at a predetermined temperature during the popping operation, the last said means including a heating element associated with said receptacle and a thermostatic control element therefor, and means for maintaining a definite predetermined substantially cooler temperature in said receptacle during idle periods of the popping mechanism.

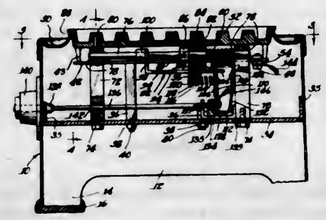
2,743,664
DISPOSABLE COFFEE BREWER
Sheldon Dale, Chicago, Ill., assignor to Cory Corporation, Chicago, Ill., a corporation of Delaware
Application January 23, 1952, Serial No. 267,809
3 Claims. (Cl. 99—295)



1. A beverage brewing unit disposable in part or in its entirety after use comprising a first receptacle having side walls and a bottom wall formed integrally with said side walls and spaced upwardly from the lower edge of said side walls to form the upper wall of a chamber adapted to receive a charge of beverage flavoring material therein, said bottom being perforate to distribute uniformly over said chamber liquid poured into said receptacle, said receptacle being composed of waterproof paper with the side walls tapering inwardly from the mouth to the closed end of the receptacle to form a frustum of a cone, a closure for the bottom side of said chamber composed of a filter sheet stretched over the lower edge of said side walls and having a diameter greater than that of said side walls at the lower edge thereof to be foldable back upon the outer surface thereof, a charge of beverage flavoring material in said chamber and a frusto-conical band of the same conicity as the side walls and of a diameter to receive therein the lower end portion of said side walls and the folded-back portion of said filter sheet, and a second receptacle of waterproof paper, said second receptacle having an open top, a closed imperforate bottom, and side walls near the top thereof in the form of a frustum of an inverted cone, the side walls of said second receptacle at least near the top having generally the same conicity as the band encircling said first receptacle with an inside diameter just very slightly larger than the outside diameter of said band to receive said band and

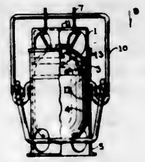
the encircled portion of said first receptacle therein for a frictional, disengageable joining of said two receptacles into a single unit.

2,743,665
WAFFLE BAKER
David A. Gustafson, Elgin, Ill., assignor to McGraw Electric Company, Elgin, Ill., a corporation of Delaware
Application May 2, 1952, Serial No. 285,716
10 Claims. (Cl. 99—331)



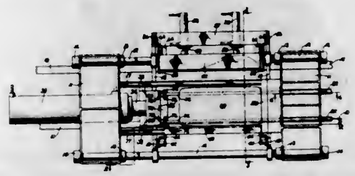
1. A waffle iron or similar cooking utensil comprising a base, a cooking plate having a predetermined coefficient of thermal expansion, means for heating said cooking plate to cook a batter thereon, means for supporting said heating means from said base adjacent said plate, a fixed reference member, means for detachably fastening said fixed reference member to said cooking plate, a second reference member, means having a coefficient of expansion different from that of said cooking plate for maintaining said second reference member spaced from said first reference member, a movable reference member, means for detachably fastening said movable reference member to said cooking plate, means controlled by relative movement between said movable reference member and one of the first two mentioned reference members for controlling operation of said heating means, and means independent of said plate for supporting at least one of said reference members from said base to support said cooking plate.

2,743,666
EGG COOKER
William Arthur Prescott, New Haven, Conn.
Application December 14, 1953, Serial No. 397,934
1 Claim. (Cl. 99—440)



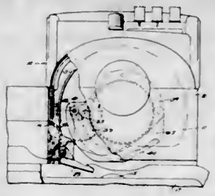
In an egg cooking and serving device the combination with a base member, of a bearing surface around the interior periphery and below the topmost extremity of the said base member, of an internal cylindrical portion in the said base member immediately above the said bearing surface, of a top member, of an exterior cylindrical surface on the said top member to fit within the said cylindrical portion of the base, of an interior portion of the said top member which opens to the bottom of the said top member, of an escapement to the said interior portion from the exterior of the said top member, of a spring member, conforming in shape to the exterior of the said top member for sealing the said escapement, and a clamp detachably arranged to the said base member and adapted to apply a force to the said spring member whereby all the members will be securely held together.

2,743,667
COMPRESSES
Cecil F. White, Fresno, Calif.
Application March 20, 1953, Serial No. 343,677
7 Claims. (Cl. 100—232)



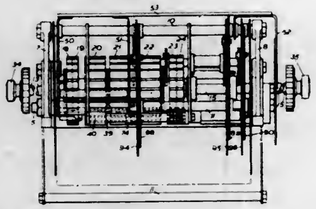
1. In a compress for cotton and the like having a frame providing a bale compressing station therein, and means defining a bale chamber at the compressing station, said means including a compression platen having a compression face mounted for horizontal reciprocal movement toward and from the bale chamber whereby bales are compressed in the chamber, the improvement which comprises bale supporting bar means pivotally mounted for swinging in a vertical direction on the compression face of the compression platen for unitary reciprocal movement with the compression platen and substantially horizontally extended therefrom beneath the bale chamber, and support means mounted in the frame in spaced relation to the compression platen and in continuous supporting relation to the bar means precluding downward pivotal movement of the bar means from the bale chamber.

2,743,668
POSTAGE PRINTING DIE PROTECTION MEANS
Walter J. Hanson, Port Chester, N. Y., and Alva G. Russell, Stamford, Conn., assignors to Pitney-Bowes, Inc., Stamford, Conn., a corporation of Delaware
Application September 4, 1952, Serial No. 307,866
4 Claims. (Cl. 101—91)



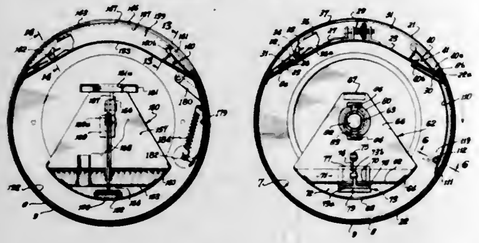
1. In a value printing device having a rotary printing drum carrying a printing die thereon, said die having a value indicating part and a casing surrounding said drum and having an opening adjacent the drum periphery to permit printing contact of a workpiece with said drum; means defining a printing location opposite a portion of said opening; means for protecting said printing die against the taking of fraudulent impressions while in the vicinity of said opening comprising a shutter mounted on said drum and shiftable relative to the die between a protecting position closely overlying and covering at least substantial portion of the value indicating part of the printing surface of the die to prevent the taking of an impression of the covered portion, and a retracted position clear of the die surface to permit the taking of an impression; and means to shift the shutter to protecting position when said die portion is near said opening but not at printing position.

2,743,669
MACHINES FOR PRINTING AND ISSUING POSTAL ORDERS AND LIKE FORMS
Vernon Watkins Sparrow, Denham, Buckinghamshire, England, assignor to General Register Corporation, Long Island City, N. Y., a corporation of New York
Application February 7, 1951, Serial No. 209,732
Claims priority, application Great Britain February 14, 1950
6 Claims. (Cl. 101—93)



1. A machine for printing and issuing forms or the like comprising means for feeding a portion of a supply strip to a printing position, two sets of value printing devices, means for adjusting one set of said printing devices, means controlled by the adjustment of the first set of said printing devices to adjust correspondingly the second set of said printing devices but to non-linearly related values, the last named means comprising cams adjusted simultaneously with the first set of printing devices in response to operation of the means for adjusting said one set of said devices and means including feelers controlled by said cams for adjusting said second set of said printing devices, and means for actuating said two sets of value printing devices to print upon said positioned portion of said supply strip.

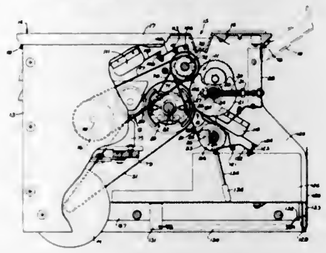
2,743,670
ROTARY PRINTING DRUM FOR DUPLICATING MACHINES
Richard W. Bailey, Pasadena, Calif., assignor to Milo Harding Company, Los Angeles, Calif., a partnership composed of Milo M. Harding and James M. Harding
Original application July 21, 1949, Serial No. 105,942, now Patent No. 2,697,397, dated December 21, 1954. Divided and this application July 16, 1951, Serial No. 236,984
13 Claims. (Cl. 101—119)



1. A rotatable printing drum for a duplicating machine, having heads and a shell comprising a perforate cylindrical portion adapted to have a stencil sheet secured thereon, and a radially inwardly spaced imperforate portion offset from said perforate portion, said drum being adapted to have a body of ink distributed in a layer over the inner surface of said shell for passage through said shell and said stencil, rotation of said shell causing said ink layer to move on said surface toward the rear end of the stencil; and means comprising a fixed plate inwardly spaced from said shell and extending over the rear of the perforate portion thereof, and a gate pivoted adjacent the forward edge of said plate, optionally operable to close the opening between said plate and said shell and divert the ink layer to the inside surface of said plate.

6. In a rotatable printing drum for a duplicating machine: a pair of spaced heads connected by a shell, said shell comprising a perforate discontinuous cylindrical portion and a radially inwardly spaced portion joining the ends thereof; means forming channels in said inwardly spaced portion connecting said ends for facilitating ink movement within the drum in response to rotation thereof; and optionally operable means to control passage of ink through said shell, comprising a bodily movable plate extending over a part of said cylindrical portion, means mounting said plate for bodily movement toward said shell and into contact therewith throughout its area and away from said cylindrical portion to provide a passageway open at both ends between said plate and said cylindrical portion; and means for moving said plate.

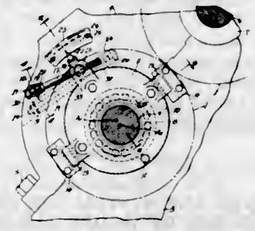
2,743,671
SHEET TRIPPED ENDORSING MACHINE
Carl Weber, Otto D. Doerner, William G. Mantonya, and Ernst H. Doerner, Chicago, Ill., assignors to Cummins-Chicago Corp., Chicago, Ill., a corporation of Illinois
Application June 27, 1951, Serial No. 233,816
5 Claims. (Cl. 101—235)



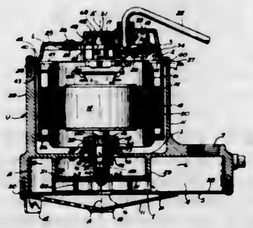
1. In a check endorsing machine, in combination, an intermittently rotatable printing drum, a continuously rotating impression roll mounted in opposed relation to said drum, continuously driven feed mechanism for carrying checks through a printing position between said drum and said roll to receive a printed impression from the drum, trip means operable in response to the approach of a check to printing position for initiating the rotation of said drum, other trip means positioned for engagement by the leading edge of the check as it emerges from between the drum and roll and operative upon such engagement to initiate the operation of means for interrupting the rotation of said drum, said other trip means being further operative to prevent reinitiation of the rotation of the drum until the trailing edge of the check emerges from between the drum and roll.

2,743,672
IMPRESSION ADJUSTING MECHANISM FOR PRINTING PRESSES
Charles A. Harless, Riverside, Conn., and Emory W. Worthington, Hastings on Hudson, N. Y., assignors to R. Hoe & Co., Inc., Bronx, N. Y., a corporation of New York
Application October 1, 1952, Serial No. 312,618
6 Claims. (Cl. 101—247)

1. In a printing machine having a frame structure, and an eccentric bushing rotatably mounted therein for adjustably supporting a cylinder shaft, the combination with the eccentric bushing of means for rotatively adjusting its position in the frame and means for locking it in adjusted position, comprising a pair of wedge members, a frame structure slidably mounting the wedge members for movement transversely of the eccentric bushing and along a path intersecting the eccentric bushing, and screw means for drawing the said wedge members together to exert locking pressure against the eccentric bushing and for separating the wedge members to release the eccentric bushing for rotary adjustment.



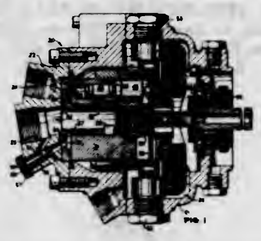
2,743,673
PUMP-MOTOR UNIT
Herbert W. Kaatz and Harold F. Enyeart, Elyria, Ohio, assignors to The American Crucible Products Company, Lorain, Ohio, a corporation of Ohio
Application August 1, 1950, Serial No. 177,012
12 Claims. (Cl. 103—87)



1. A submersible pump and motor unit comprising a generally cylindrical housing formed open at both ends and having a longitudinal axis and an integral transverse partition intermediate the ends of the housing, said partition having a central aperture within a longitudinally necked part of said partition along said axis, said partition dividing the interior of said housing into a motor chamber on one side of the partition and a pump chamber on the other side, a bearing located in said aperture and supported therein, a shaft coaxial of said axis and passing through and supported in said bearing, a rotor carried by said shaft in said motor chamber, an impeller carried by said shaft in said pump chamber, a motor cover closing said motor chamber, a stator coacting with said rotor, and a pump cover closing said pump chamber and coacting with said impeller, said partition having an integral annular skirt depending therefrom toward said impeller and open at the end adjacent said impeller and forming an air pocket below said bearing.

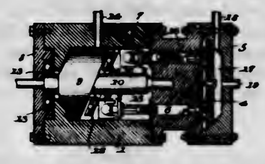
2,743,674
SUPERCHARGED AIRCRAFT PUMP
Edwin L. Shaw, Columbus, Ohio, assignor to The Denison Engineering Company, Columbus, Ohio, a corporation of Ohio
Application August 26, 1952, Serial No. 306,399
2 Claims. (Cl. 103—162)

1. In a fluid pressure energy translating device, a casing having inlet and outlet ports; a cylinder barrel disposed for rotation in said casing, said cylinder barrel having piston chambers with sections of different sizes; valving means disposed between the portion of said casing containing said inlet and outlet ports and said cylinder barrel, said valving means having a cavity formed therein which cooperates with said cylinder barrel to form an intermediate pressure manifold, a high pressure port in said valving means communicating with said outlet port, means connecting the larger sections of said piston chambers alternately with said inlet port and said intermediate pressure manifold and the smaller sections of said piston chambers alternately with said intermediate pressure manifold and said high pressure port upon rotation of said



cylinder barrel; piston elements with sections corresponding in sizes to the sections of said piston chambers disposed for reciprocation therein; cam means for controlling the reciprocation of said pistons; a passage extending from said intermediate pressure manifold to said inlet port; and a relief valve in said passage.

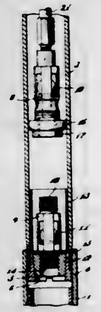
2,743,675
HIGH PRESSURE PUMP
Manuel Valcarcel Rey, Havana, Cuba
Application November 5, 1954, Serial No. 467,133
Claims priority, application Cuba December 8, 1953
1 Claim. (Cl. 103—173)



An improved pump comprising in combination a front cover plate with a depression in one face thereof and having a discharge opening in the periphery thereof communicating with said depression, a pump head to which said cover plate is firmly attached with the depression facing the pump head, a circular disk in said depression centrally attached to the pump head and having a plurality of perforations therethrough, said perforations being equally spaced on the circumference of a circle having the longitudinal axis of the pump as a center, said pump head having a plurality of passages extending therethrough, said perforations in said disk being longitudinally aligned with said passages through the pump head, a spring actuated check valve in the end of each of said passages adjacent said disk and a hollow cylindrical piston having a check valve therein slidably mounted at the other end of each of said passages, a pump body having an inner and substantially cylindrical chamber therein, the end of each of said pistons being closed and projecting into said chamber, spring means around said pistons urging said pistons to the projecting position, and each piston having a small opening in the end thereof which projects into said chamber, a centrally located horizontal shaft in said chamber, said pump head having a recess in the face adjacent the pump body in which one end of said shaft is journaled, a rear cover plate attached to the opposite end of said pump body from said pump head and having an opening therein through which the other end of said shaft passes out of said chamber, a cam mounted on said shaft within said chamber, a ball bearing attached to the face of said cam towards said pistons, a plurality of guides reciprocally slidable on the wall of said cylindrical chamber against which said ball bearing bears and into which the ends of said pistons projecting

into said chamber are received, said pump body having an opening in the wall thereof communicating with said chamber.

2,743,676
PUMPING APPARATUS FOR WELL PIPE LINE
Leslie H. Lewis, East Orleans, Mass.
Application February 17, 1955, Serial No. 488,891
5 Claims. (Cl. 103—180)



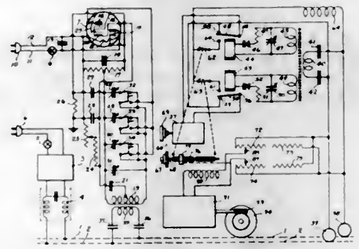
1. For pumping out a well pipe line, a pumping valve assembly including housings detachably connected together, one housing having a circumferential cup washer bearing on the inside of the pipe line for pumping upwardly, and the other housing having a sleeve projecting upwardly beyond the upper end of said other housing for pressing said cup washer inwardly out of contact with the pipe line when the housings are connected together, whereby the pumping valve assembly may be easily lifted out of the pipe line without the cup washer catching on pipe joints and without lifting water.

2,743,677
BUOYANT PUMP ROD AND BOOSTER VALVE FOR OIL WELL PUMPS
Charles T. Fleming, Taft, Calif.
Application October 19, 1951, Serial No. 252,090
1 Claim. (Cl. 103—229)



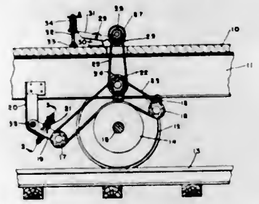
A standing valve construction including a hollow standing valve body having an axial bore therethrough adapted for slidably receiving a pump sucker rod of a diameter substantially less than the diameter of the bore in the valve body, a disk frictionally fitted in and closing the bore at the upper end of the valve body and having a peripheral flange of reduced cross-section overlying and resting on said closed end of the valve body, said disk having a port therethrough opening into the bore of the valve body, a valve cage including a sleeve portion at its lower end and in the bore of which the disk is frictionally fitted, said sleeve portion having a counterbore at the junction of the sleeve portion and valve body and in which the flange of said disk is engaged, said sleeve portion being threadedly connected to the valve body to clamp the flange in the counterbore, and a check valve member slidingly disposed in said cage and selectively seated on said disk to close the port in the latter, and said valve cage, said disk and said check valve having aligned central bores through which the sucker rod is slidable.

2,743,678
METHOD OF AND SYSTEM FOR THE REMOTE CONTROL OF MODEL RAILROADS
Earl Roger Hibbard, Portland, Oreg., assignor of one-half to Alvin D. Wert, Portland, Oreg.
Application July 11, 1950, Serial No. 173,214
7 Claims. (Cl. 104—151)



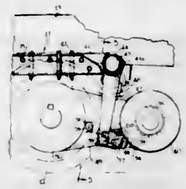
1. A system for controlling the operation of an electric reversible device from a remote position, comprising a source of currents of diverse frequency characteristics, a pair of polarity reversing switching means connecting said electric device to one of said currents in opposite polarities, electrically operated switch-actuating means for each switching means, a pair of tuned circuits each connected to one of said switch-actuating means, each tuned circuit being responsive to a different frequency of said current, means in the circuit of each switch-actuating means for rendering the latter responsive to said current, and means releasably connecting each tuned circuit to its corresponding current, whereby selectively to actuate said pair of switching means for controlling the reversible operation of said device.

2,743,679
RAIL VEHICLE GENERATOR DRIVE
Edgar K. Lofton, Dayton, Ohio, assignor to The Dayton Rubber Company, a corporation of Ohio
Application November 15, 1951, Serial No. 256,407
5 Claims. (Cl. 105—105)



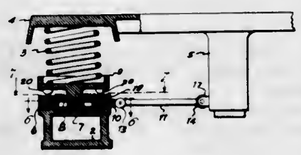
3. In combination in a generator drive wheeled vehicle, a generator mounted above the floor of said vehicle, a pulley attached to the shaft on said generator for driving same, a belt driving said generator pulley extending downward through an opening in the floor of said vehicle and engaging a pulley on a shaft mounted for rotation beneath said floor and secured to the vehicle frame, means for adjusting the tension of said belt, a second pulley on said last-mentioned shaft for driving same, and belt means driven by a flat pulley on a wheel of said vehicle driving said second pulley on said shaft, wherein said belt means comprises a V-belt having its wide outside surface in contact with said flat pulley.

2,743,680
MOUNTING FOR GENERATOR ON RAILWAY CAR TRUCK
Albert G. Dean and Walter B. Dean, Narberth, Pa., assignors to The Budd Company, Philadelphia, Pa., a corporation of Pennsylvania
Application May 18, 1953, Serial No. 355,658
4 Claims. (Cl. 105—106)



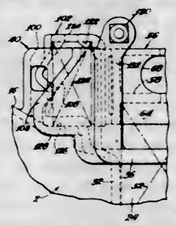
4. A generator support for mounting a generator on a truck frame, comprising in combination with a truck frame having side members and depending pedestal guides for a wheel axle, a longitudinally projecting part carried by each side member of the truck frame, a turnable cross beam carried at its ends in resilient elastic elements on said longitudinally extending parts, a generator mounted on said cross beam so as to be swingable on and beneath it, a belt operating on pulleys on the generator shaft and an axle, and resilient means between the generator mount and a pedestal for adjusting the tension on said belt.

2,743,681
LATERAL MOTION DAMPING DEVICE
William T. Rossell, New York, N. Y., assignor to Transit Research Corporation, New York, N. Y., a corporation of New York
Application January 4, 1952, Serial No. 265,035
5 Claims. (Cl. 105—193)



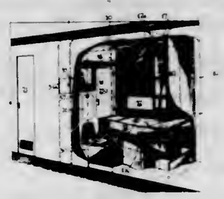
1. In a motion damping device for two main members movable vertically and laterally with respect to each other, a spring separating said members and resistant to all relative movements therebetween, a friction device having at least two friction elements, one of which is attached to one of said members and the other to the other of said members, said friction elements being in contact without pressure when said main members are in normal static position with respect to each other and also when said members move relatively laterally through predetermined slight distances out of normal static position, and a rocking lever supported by one of said members and acting as a seat for said spring, said lever being rockable against one of said friction elements in response to relative lateral movements of said members in excess of said slight distance to impose pressure between said elements, and a link connecting one of said elements with the other of said members for movement thereof with respect to the other of said elements.

2,743,682
CAR TRUCK
Robert B. Cottrell, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application September 29, 1950, Serial No. 187,409
2 Claims. (Cl. 105—197)



1. In a railway car truck, a one-piece cast steel side frame comprising a single beam member having a substantially horizontal central portion and upwardly diverging end portions, journal boxes at the remote extremities of said end portions, said central portion having a spring seat comprising a horizontal wall extending slightly beyond the inboard and outboard sides of said beam member, said seat having stepped-up portions at opposite ends, inboard and outboard upstanding walls connected at their lower ends to the inboard and outboard edges of said wall and curved toward each other at opposite ends and merging into the inboard and outboard sides of the end portions, substantially vertical extensions at opposite ends of said central portion projecting upwardly therefrom, each extension comprising a wall, a bolster having ends disposed between said extensions, means on the bolster and extensions for guiding movement of the bolster, removable stop means connected to said extensions for abutment with the top side of said bolster for maintaining the bolster and side frame in assembled relationship, whereby the same may be handled as a unit for quick wheel change, a plurality of springs on the seat of substantially equal height and supporting the bolster, said bolster having a central portion and upwardly offset portions at opposite sides of said central portion, all of said portions of the bolster seating on said springs, and walls on said upwardly offset portions of the bolster surrounding the upper extremities of the springs seated thereagainst.

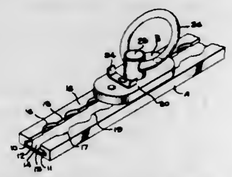
2,743,683
BEDROOM ACCOMMODATIONS FOR PASSENGER VEHICLES
George W. Calhoun, Havertown, Pa., assignor to The Budd Company, Philadelphia, Pa., a corporation of Pennsylvania
Application April 19, 1952, Serial No. 283,184
12 Claims. (Cl. 105—315)



1. In a vehicle such as a railway sleeping car having longitudinal side walls and a longitudinal aisle with rooms on at least one side thereof, a room defined by a side wall, an aisle wall, and longitudinally spaced transverse walls, a toilet in one corner of the room on the aisle side requiring standing or sitting knee space or both in front thereof, said toilet facing the long way in said room, a doorway in

said aisle wall leading into said room forward of said toilet and near the center of length of the room, a door in said doorway, a rigid bed frame mounted in said room for movement between a stowed position and a horizontal use position, said bed being arranged in use with its longer dimension disposed in the direction of the length of the room, the bed also being of such length and width in relation to the length and width of the room that a side and an end thereof, if extended, would obstruct the space above said toilet, the side of said bed being cut away from one end for such distance along the side as to leave the vertical space above the toilet and the full width of the toilet for at least standing space distance in front thereof clear for use of the toilet and for manipulation of the bed, and a longitudinally thin enclosure, as for wardrobe or wash basin facilities, disposed on a wall at the bottom end of the bed, said enclosure, together with the bed, when down in the use position, taking substantially all of the length of the room between opposite transverse walls and the toilet being set back by the depth of the enclosure to provide additional space at the cut-out portion of the bed and to minimize the length of the cut-out in the bed.

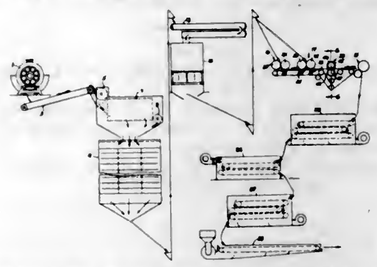
2,743,684
TIE-DOWN TRACK FITTING
Edwin C. Elsner, Glendale, Calif., assignor to Gordon D. Brown, Beverly Hills, Calif.
Application July 12, 1952, Serial No. 298,513
10 Claims. (Cl. 105—369)



1. A fastening device, comprising: an elongate body; a central stud slidably supported in said body, and end studs on opposite sides of the central stud fixedly supported on said body, each of said studs having an end head portion and reduced shank portion; a recess in said body surface on the side of said studs; latch means including a member supported for movement to a position within said recess and a position projecting therefrom beyond said body surface; means resiliently biasing said member toward said latter position; and means for applying a pulling force to said central stud.

2,743,685
APPARATUS FOR MANUFACTURING A CEREAL FOOD PRODUCT
Douglas Hale, University City, Mo., and Ellsworth J. Carpenter, Battle Creek, Mich., assignors to Ralston Purina Company, St. Louis, Mo., a corporation of Missouri
Original application July 27, 1949, Serial No. 107,004, now Patent No. 2,600,532, dated June 17, 1952. Divided and this application August 28, 1950, Serial No. 181,804
3 Claims. (Cl. 107—2)

1. Apparatus for manufacturing a cereal food product comprising a first and a second means for shredding cooked cereal grain and forming the shreds into a latticelike network, each of said shredding means comprising a pair of rolls having annular and generally transverse network-forming grooves, the annular grooves being deeper than the transverse grooves, said first and said second shredding means being positioned so that the networks delivered thereby become superimposed, a slitter for slitting the superimposed networks into ribbons, and a pair of forming rolls positioned to receive the resultant superimposed ribbons, one of the forming rolls having transverse ridges for cutting the superimposed ribbons and



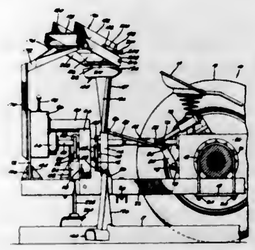
forming hollow bodies therefrom each consisting of two layers of network sealed together where cut.

2,743,686
COMBINATION TRASH RECEPTACLE AND BURNER UNIT
Oscar Samuelson, Baltimore, Md.
Application July 21, 1952, Serial No. 299,959
3 Claims. (Cl. 110—19)



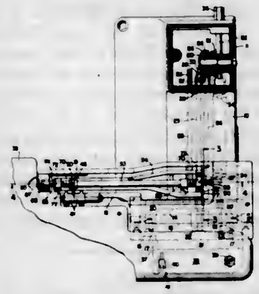
3. In a combination trash receptacle and burner unit, a base having front and rear walls inclined upwardly and inwardly toward each other, and a top wall joined to said front and rear walls, and a portable burner enclosure disposed on said base, said burner enclosure including oppositely disposed front and rear doors extending to said base, each of said doors swinging open to expose the interior of said burner enclosure, said burner enclosure being manually removable from said base to expose the top wall thereof.

2,743,687
MACHINE FOR DEPOSITING TUBES IN THE RIDGE BETWEEN FEEDER DITCHES AND FURROWS
Herbert G. Hopkins, Yuma, Ariz.
Application December 3, 1953, Serial No. 396,009
12 Claims. (Cl. 111—5)



1. A machine for depositing tubes in a ridge between feeder ditches and furrows comprising a tractor, a frame attached to the tractor, power transmitting mechanism supported by said frame and actuated by said tractor, a rotatable shaft supported by said frame and rotated by said mechanism, a hub on the shaft, at least one spoke on said hub extending radially therefrom, a tube-receiving and depositing carrier on the free end of said spoke for digging a trench in the ridge formed by the construction of the feeder ditch, tube holding and releasing means on the carrier for holding the tube until the trench has been dug, and a tube magabine supported by said frame conveying tubes to said carrier.

2,743,688
BLINDSTITCH SEWING MACHINE RIDGE FORMER MECHANISMS
Frank Parry, Trumbull, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application October 22, 1954, Serial No. 463,915
9 Claims. (Cl. 112—176)



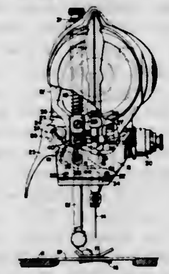
9. In a blindstich sewing machine having stitch-forming instrumentalities and a work-supporting arm, a ridge-forming mechanism carried by said work-supporting arm and comprising, a rock frame having a pair of axially aligned sockets, a pair of bearing inserts secured one in each rock frame socket and arranged in spaced relation each presenting an inboard extremity facing one another, a rock shaft, a work-engaging ridge forming element carried by said rock shaft, first bearing means formed in the inboard extremity of each bearing insert and arranged in operative engagement one with each extremity of said rock shaft to define a first axis of oscillation thereof, second bearing means formed in the outboard extremity of each bearing insert, and means carried by said work-supporting arm and arranged in operative engagement with said second bearing means to define a second axis which is parallel to the first axis of oscillation of said rock shaft and which is disposed within the axially projected area of said rock shaft.

2,743,689
SEWING MACHINE LOOP-TAKERS
Gerhard G. Ruemmler, Roselle, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application February 2, 1954, Serial No. 407,676
4 Claims. (Cl. 112—228)



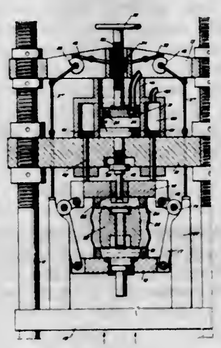
1. A circularly moving loop-taker of the type adapted to cooperate with a stationary bobbin case having a peripheral bearing rib, said loop-taker comprising a body portion having raised sidewalls providing a bobbin case accommodating concavity, a flexible gib member defining with said sidewalls a yielding raceway for said bobbin case bearing rib, said gib member having a forward leading extremity and a rearward trailing extremity, means clamping the leading extremity of said gib member to said body portion sidewall, means guiding the trailing extremity of said gib member for yielding movements axially of said rotary loop-taker body portion, and a stop means limiting the extent of flexing of the free extremity of said gib member.

2,743,690
PRESSER DEVICE FOR SEWING MACHINES
Eugene O. Mayer, South Norwalk, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application October 9, 1953, Serial No. 385,096
3 Claims. (Cl. 112—237)



1. In a sewing machine having a hollow sewing head, a face-plate closing said sewing head, and a work presser device mounted in said sewing head, an adjustable embroidering stop-cam shiftably supported on said face-plate and disposed within said hollow sewing head, an abutment member carried by said presser device and disposed for engagement with said stop-cam, an arm constituting a handle extending from said stop-cam, said arm terminating in a finger grip portion disposed to extend beyond one edge of said face-plate, said edge of the face-plate being formed with a finger grip accommodating indentation.

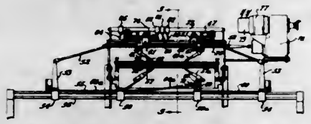
2,743,691
APPARATUS FOR FORMING ARTICLES FROM HOLLOW BLANKS
Pierre Cuq, Issy-les-Moulineaux, France, assignor to L'Emboutissage Hydraulique Moderne, Paris, France, a corporation of France
Application June 14, 1950, Serial No. 167,949
Claims priority, application France June 18, 1949
7 Claims. (Cl. 113—44)



1. Apparatus for forming articles from a hollow sheet metal blank closed at one end and open at its other end comprising a pair of spaced parallel plates, a flexible wall of closed cross section extending between said plates, rings carried by the respective plates and having openings diverging toward each other, a die in said flexible wall adapted to received a blank filled with liquid and having a matrix shaped to conform to the exterior shape of the

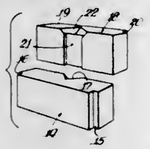
article to be formed, said die having tapered ends engageable in sealing relation with said rings in the respective openings thereof, a first set of cams for moving said plates toward each other to engage said tapered ends in said openings, means entering the open end of the blank when said tapered ends engage said openings to seal the interior of the blank against leakage of fluid around such means, mechanical means associated with the die and being movable for exerting a force against a portion of the blank other than said open end thereof for changing the shape of the blank into a finished article, a plunger movable through said sealing means to control the pressure of the liquid in the blank as the capacity of the blank varies incident to the changing of the shape thereof, and means for operating said plunger comprising a second set of cams acting to control at each moment of the stroke of the apparatus, the pressure and volume of the liquid in the blank, the profile of the cams of the second set being such that the pressure in the blank is sufficiently great during the stroke of the apparatus to prevent the walls of the blank from moving inwardly and is insufficient to cause a stretching of the metal of the blank, and means for exerting within the blank when the shaping is practically ended, a sufficiently high pressure to wholly apply the wall of the shaped article against the inner surface of the die and into the small recesses eventually existing in the said surface.

2,743,692
STRIP WELDING MACHINE
Karl F. Wietzel and William V. Dovenbarger, Zanesville, and Harry La Tour, Middletown, Ohio, assignors to Armco Steel Corporation, Middletown, Ohio, a corporation of Ohio
Application August 11, 1950, Serial No. 178,932
14 Claims. (Cl. 113—59)



1. In a strip welding machine, a frame, a support on said frame, two torches mounted on said support and arranged for translation along a joint to be welded, said torches having translation ranges along said support in a welding pass which overlap in the central region of said joint whereby a central portion of the joint will be acted upon by both torches, means for translating said torches along said support from the center of said joint to be welded outwardly simultaneously in opposite directions in a welding pass, common driving means for said translating means, and connection between said driving means and one of said torches for delaying the translation of said last named torch in its welding pass until the other has been translated past said central portion of the joint.

2,743,693
TRANSISTOR ASSEMBLY JIG
William A. Schaper, Phoenix, Ariz., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Application November 22, 1954, Serial No. 470,317
5 Claims. (Cl. 113—99)



1. Apparatus for supporting a plurality of semiconductor wafers, and for further supporting a pair of pellets of alloying material adjacent each of the wafers with the pellets of each such pair being disposed directly opposite one another adjacent the opposite sides of the corresponding wafer to be simultaneously fused thereto, said apparatus including a holder of heat resistant material comprising a longitudinal member having a plurality of transverse brackets affixed thereto and spaced therealong with a fixed distance between each succeeding one of said brackets; and a series of assembly jigs adapted to be supported along said holder between successive ones of said brackets, each of said assembly jigs comprising, a first block of heat resistant material adapted to extend longitudinally of said holder and to be supported thereon between a pair of said brackets, said first block having a notch for receiving one of the pellets formed in the edge thereof that constitutes the inner upper edge when said first block is supported in said holder, a second block of heat resistant material adapted to extend longitudinally of said holder and to be supported thereon between said pair of brackets opposite to said first block, said second block having a slot in a surface thereof for receiving one of the wafers and to be adjacent said notch in said first block when said blocks are supported in said holder, and said second block having a notch for receiving one of the pellets formed in an edge thereof adjacent said slot to be opposite said notch in said first block when said blocks are supported in said holder.

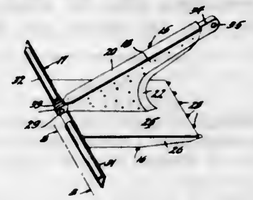
2,743,694
WELDED SHIP HULL CONSTRUCTION
John A. McAleer, Weymouth, Mass.
Application February 26, 1952, Serial No. 273,436
1 Claim. (Cl. 114—79)



A welded hull structure comprising a shell of generally curvilinear cross section, said shell comprising longitudinally extending plate members, seam welds extending longitudinally therebetween, angle straps overlying and welded to said seam welds, chord members constituting frame elements positioned within said shell spaced from each other and from the shell, the spacing from the shell being greater than the depth of the angle straps, said frame elements extending transversely of the shell, web members positioned perpendicular to the shell and to said chord members and welded to each and certain of said web members welded to the angle straps, other of said web members being positioned intermediate said straps and free of attachment thereto whereby said chord members and said webs form open girders and coact with the skin to contribute structural rigidity to the hull components.

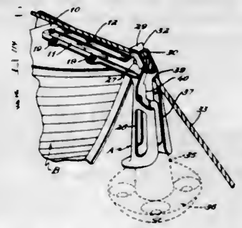
2,743,695
NON-TILTING ANCHOR
Kingston Miller Bowman, Brookmont, Md.
Application January 14, 1952, Serial No. 266,433
17 Claims. (Cl. 114—207)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. In an anchor, a fluke structure having a digging end and a crown end; a shank joined to said fluke structure adjacent the crown end thereof; and a pair of elongated rigid members fixedly connected at their end portions to said fluke structure at the crown end thereof and extending outwardly and transversely therefrom on opposite sides thereof in the same general plane of the fluke structure, said rigid members having primary forwardly facing working faces lying only in a common plane which is normal to the general plane of the fluke structure, said planar working faces forming the only portion of said members having any substantial area facing the digging end of said fluke structure, said planar faces having



a width which is substantially less than the length of said faces, the length of said planar faces being such that they protrude outwardly beyond the side edges of the fluke structures at the widest point thereof, the extensions beyond said side edges each being a minimum length which is substantially equivalent to at least from 0.5 to 1.03 times the distance from the center line of the shank to one of said side edges of the fluke structure at its widest point so that said planar faces will provide righting torque if the anchor is canted away from a level position while being dragged.

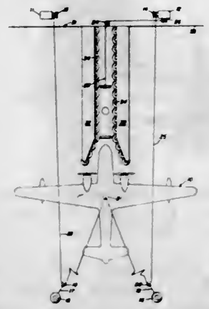
2,743,696
ANCHOR HOLDER
George Earl Maxwell, White Bear Lake, Minn.
Application October 19, 1953, Serial No. 386,773
10 Claims. (Cl. 114—210)



1. An anchor holder including an elongated tubular body having an upper end, means adapted for securing said tubular body to a boat, a continuous slot means extending longitudinally through said tubular body, a pulley supported at the upper end of said tubular body and an anchor rope extending through said tubular body and removable through said slot.

2,743,697
APPARATUS FOR BEACHING SEAPLANES
Henry Gibbons Cooper, United States Navy, and Merton Hough Dickinson, Fairfield, Conn.
Application May 17, 1950, Serial No. 162,572
5 Claims. (Cl. 114—230)
(Granted under Title 35, U. S. Code (1952), sec. 266)

3. In seaplane beaching apparatus for use with a seaplane having a pickup hook attached to the underside thereof, in combination, beaching means including a pair of finger piers, a sloping submerged track extending between said finger piers, a ramp car movable upon said track, a cradle car mounted upon said ramp car, for guiding and stopping the forward motion of said seaplane and placing said plane in a predetermined manner on said cradle car, and positioning means for moving the seaplane to a beached position after stoppage and placement on said cradle car said stopping means including a pair of adjustable winches, a plurality of water buoyant supports, cable guides mounted on said supports, a cable extending between said winches and passing through said guides, a pickup hook depending from



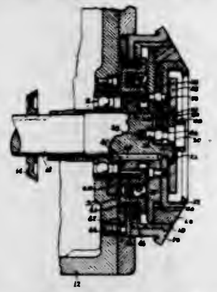
said seaplane adapted to engage automatically said cable between said guides on movement of said seaplane toward said cradle car, and means for releasing said hook on positioning of said seaplane over said cradle, and said seaplane positioning means including a winch and an additional cable connecting said winch to each of said seaplane and ramp car.

2,743,698
LOWER UNIT FOR BOAT MOTORS OF THE TYPE HAVING DOWNWARDLY DIRECTED DRIVE SHAFTS
Joseph S. Leonard and Harry T. Owens, North Miami, Fla.
Application October 19, 1953, Serial No. 386,780
8 Claims. (Cl. 115—16)



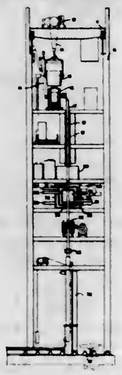
1. In a boat motor of the type having a drive shaft extending substantially vertically downwardly, and a dirigible casing surrounding said drive shaft the lower portion of said casing constituting a muffler having perforations in its front side, a lower unit therefor comprising a housing about the lower portion of said drive shaft below said muffler portion fixed relative to said casing so as to be dirigible therewith, said housing comprising spaced top and bottom plates perpendicular to said drive shaft, and a U-shaped side wall between said plates and connected thereto having its bight portion forward, and being open at the rear, a rudder extending downwardly from the lower face of said bottom plate in the medial longitudinal vertical plane of said housing secured to said bottom plate, said rudder including a stem extending upwardly forward of the muffler portion of said housing, a supporting plate fixed to said casing above said muffler portion engaging said stem, and a propeller within said housing directly mounted on the lower end of said drive shaft.

2,743,699
DISPLACEMENT INDICATOR
John C. Hollis, Fond du Lac, Wis., assignor to Giddings & Lewis Machine Tool Company, Fond du Lac, Wis., a corporation of Wisconsin
Application July 28, 1954, Serial No. 446,195
10 Claims. (Cl. 116—115)



1. A dial-type displacement indicator comprising, in combination, a shaft rotatable through angles proportional to displacements of a movable member, a dial and a counterweight journaled for rotation relative to said shaft, gear means connecting said dial to rotate in one direction when said counterweight is turned in the opposite direction relative to said shaft to thereby permit indexing of the dial, the moments of inertia of said dial and counterweight being proportioned in the same ratio as the mechanical advantage afforded by said gear means, an index ring carried by said dial and rotatable relative thereto, a scale journaled by said index ring and rotatable relative to the latter, differential gear means interconnecting said shaft and scale to rotate in timed relation, gearing on said index ring, said differential gear means including means meshing with the gearing on said index ring to hold the latter stationary as said scale and dial rotate relative thereto.

2,743,700
CONTINUOUS METAL PRODUCTION AND CONTINUOUS GAS PLATING
Harry A. Toulmin, Jr., Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
Original application September 10, 1949, Serial No. 115,033, now Patent No. 2,657,457, dated November 3, 1953. Divided and this application April 14, 1953, Serial No. 348,726
4 Claims. (Cl. 118—48)



1. In continuous casting and gaseous metal plating apparatus for melting and continuously casting molten metal by flowing said metal into a mold and continuously withdrawing the hot metal as a solidified continuous length casting, the combination with means for holding and pouring molten metal including an open-ended vertically disposed fluid cooled mold, of a gaseous metal plating chamber having passageways therethrough for the passage of hot solidified metal as withdrawn from said mold, said chamber being arranged to fit closely about said hot solidified metal casting, and conduit means communicating with said chamber for introducing a heat-decomposable gaseous metal compound into said chamber and in contact with said hot metal casting as the same is drawn from said mold and through said chamber, and power-driven means for withdrawing said casting from the mold and through said plating chamber.

2,743,701
ANIMAL HOIST
William H. Boyd, Sacramento, Calif.
Application June 7, 1954, Serial No. 434,781
1 Claim. (Cl. 119—100)



An animal hoist comprising a substantially centrally pivoted pair of tongs, the lower portion of said tongs including a pair of outwardly bowed arms, each of said arms including an internally threaded boss at the lower extremity thereof, a pair of clamps pivotally mounted on opposite sides of said arms and extending downwardly beyond said bosses, each of said clamps including a linear portion and an arcuate portion, and means engageable in said bosses and in abutment with said linear portions for urging said clamps toward each other.

2,743,702
CHOKE COLLAR
Michael Sullivan, Youngstown, Ohio
Application April 6, 1955, Serial No. 499,633
9 Claims. (Cl. 119—106)



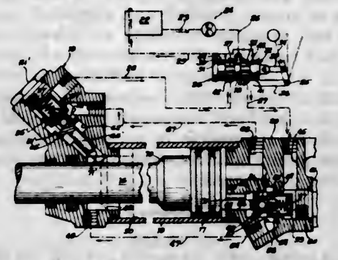
2. A choke collar for animals comprising a chain having ends, ring means adapted to be engaged by said chain ends, and lead means for engaging said ring means, said ring means comprising a plurality of rings to form a closed loop in one position of said chain and rings, one of said rings having a U-shaped portion including an open loop, whereby one of said rings may pass through the other ring to thereby break the chain loop and permit disengagement of said choke collar from the neck of said animal, and means preventing said one ring from passing through said other ring comprising a locking member extending across the loop of said U-shaped member.

2,743,703
PNEUMATIC ACTUATOR HAVING TANDEM POWER CYLINDERS
Leonidas C. Miller, Los Angeles, Calif.
Application July 7, 1952, Serial No. 297,481
9 Claims. (Cl. 121—38)



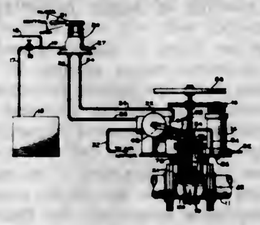
1. In a reciprocating pneumatic actuator for a power tool, the combination of: a cylindrical housing member comprising a pair of cylindrical shells, means removably connecting the shells coaxially end to end, a tubular piston rod member extending coaxially into both of said shells and projecting through one end of the housing member, a barrier element clamped between adjacent ends of said shells and cooperating with said shells and said piston rod member to define a forward chamber and a rear chamber, a pair of pistons fixed on the piston rod member, each of the pistons being mounted within one of the chambers and forming a sliding seal within one of the shells, the tubular piston rod member having a first port in a wall thereof communicating with the forward port of the forward chamber and a second port in a wall thereof communicating with the second chamber, and means including a spear tube mounted at the other end of the housing member projecting axially into the interior of the tubular piston rod member for introducing fluid pressure therein.

2,743,704
AUTOMATIC STOP FOR FLUID MOTOR.
Oscar H. Banker, Evanston, Ill., assignor to New Products Corporation, Chicago, Ill., a corporation of Delaware
Application October 14, 1954, Serial No. 462,266
8 Claims. (Cl. 121—38)



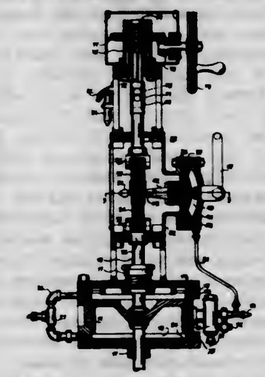
1. A fluid operated motor comprising a cylinder, a piston reciprocable in the cylinder, a source of fluid under pressure, a main control valve for the fluid under pressure, and a shuttle valve, means extending into the path of movement of the piston and connected to the shuttle valve to move the valve in timed relation to the movement of the piston, said means being adapted to be contacted by the piston just prior to the end of the stroke of the piston, said shuttle valve being connected hydraulically in series between the main control valve and the piston and controlling the application of fluid under pressure to the piston in its movement toward the shuttle valve, such that communication between the piston and the fluid under pressure from the main control valve is automatically cut off when the piston reaches a predetermined position in the cylinder, a check valve in the shuttle valve adapted to be opened by the fluid in the cylinder, said shuttle valve having an opening therein adapted to connect the interior of the cylinder with the check valve, and means operated by pressure fluid in the cylinder for moving the shuttle valve to increase the size of the said opening.

2,743,705
FLUID REGULATOR FOR A POWER-DRIVEN REMOTELY-CONTROLLED VALVE
Sidney P. Johnson, Washington, D. C.
Application October 10, 1952, Serial No. 314,235
3 Claims. (Cl. 121—39)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A fluid pressure apparatus for reciprocating a driven member, said apparatus comprising a source of fluid pressure, a fluid pressure motor, a circuit communicating said source with said motor, a valve for reversing the flow through said circuit, and fluid pressure control means disposed in said circuit, said control means including a valve casing, a disc valve rotatably mounted in said casing, and linkage drivably connecting said disc with said driven member, said linkage being adapted to progressively rotate said disc in opposite directions and in amounts proportionately responsive to successive reciprocations of said driven member, said disc being peripherially provided with a separated pair of annular recesses and said casing being provided with a pair of ports communicating each recess with both said supply and said motor, whereby each recess forms a passageway for communicating said motor and said source, said flow through the passageways being reversible in response to said reversing valve, one of said passageways being formed with a reduced section adapted upon disc rotation to throttle its supply port for automatically reducing the advance rate of said driven member, and the other passageway being formed for venting full flow from the motor when the supply port of the first passageway is so throttled.

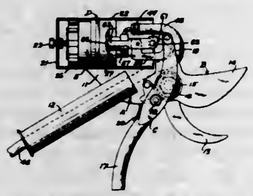
2,743,706
AUTOMATIC LOCKING MEANS FOR FLUID PRESSURE OPERATED DEVICES
Vincent V. Veenschoten, Erie, Pa., assignor, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa., a corporation of Delaware
Application August 16, 1954, Serial No. 450,194
2 Claims. (Cl. 121—40)



1. The combination with a control device having an axially movable stem secured thereto, a fluid pressure motor operably connected to the stem, a source of fluid pressure for the motor, a pilot valve for controlling the

flow of fluid under pressure to the motor, and means for operating the pilot valve in response to varying demands of a condition controlled by the control device, of means for locking the control device in the position occupied at the time fluid pressure failure occurs, said means comprising a plurality of axially extending fixed plates, a plurality of axially extending plates secured to and movable with said stem, normally the fixed and movable plates being in slightly spaced apart relation, movable abutment means adapted to bring the fixed and movable plates into locking frictional contact, spring means constantly urging the abutment means towards locking position, fluid pressure responsive means opposing said spring means and operative to hold the abutment means against movement at normal fluid pressure for operating the motor, and means connecting the fluid pressure responsive means with the fluid pressure source whereby upon fluid pressure failure the abutment means will be immediately moved to locking position to hold the control device in the position it occupied at the time of fluid pressure failure.

2,743,707
FLUID SERVOMOTOR ACTUATED TOOL
Robert Kellersman, Salem, Oreg.
Application January 27, 1953, Serial No. 333,464
4 Claims. (Cl. 121—41)



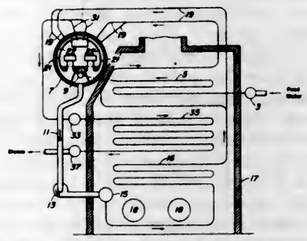
1. In a pneumatically operated tool of a type having a working part adapted to be moved from a rest position to a working position, the combination comprising: a cylinder having a cylinder head; a piston unit slidably disposed in said cylinder, said piston unit comprising an upper body portion and a lower body portion secured to and movable with one another in said piston; a central interior cavity formed in said piston unit between said upper and lower body portions; a fluid-tight transverse resilient diaphragm extending across said cavity defining upper and lower chambers, said upper chamber vented to atmosphere, said lower chamber in communication with the head side of said cylinder; a centrally disposed fluid inlet bore formed through the lower body portion of said piston unit for connecting said lower chamber with a compressory source of fluid under pressure located exteriorly of said piston and cylinder; at least one exhaust port formed through said lower body portion connecting said lower chamber with atmosphere; an exhaust valve member mounted on said resilient diaphragm normally urged into seated engagement with said exhaust port by said resilient diaphragm for closing communication between said lower chamber and said port, said valve member movable from seated to unseated position with respect to said exhaust port against resistance of said resilient diaphragm, said valve member formed with a central bore having a valve seat in registry with said inlet bore of said lower body portion establishing communication between said inlet port and said lower chamber; an inlet valve stem having a diameter substantially less than the diameter of said inlet bore disposed slidably in said bore defining an open passage between said rod and the interior walls of said bore; a valve head mounted on the inner end of said stem movable reciprocally into and out of seating engagement with said valve seat of said valve member; inlet valve actuating means located exteriorly of said cylinder connected to said stem for reciprocating said piston rod and associated valve head out of normal seating engagement with said valve seat of said valve member for establishing fluid communication to the cylinder head side of said cylinder from said compressory source via said air inlet bore, said central bore in said valve member, and said lower chamber; means associated with said inlet valve actuating means for selectively restricting movement of said stem relative to movement of said piston unit within said cylinder under influence of fluid pressure to cause said valve head to engage said valve seat and to cause said valve member to unseat with respect to said exhaust port against the resisting force of said diaphragm to open communication between the head side of said cylinder and said exhaust ports via said lower chamber; and means operatively connecting said piston unit to the working part of said tool.

2,743,708
CONTROL FOR PNEUMATIC HOIST
John C. Lungerhausen, Grand Haven, Mich., assignor, by mesne assignments, to Gardner-Denver Company, a corporation of Delaware
Application October 5, 1951, Serial No. 249,849
5 Claims. (Cl. 121—46.5)



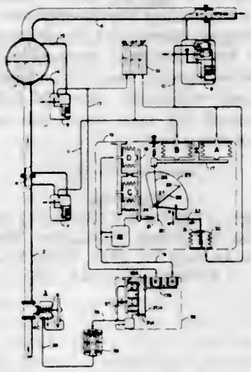
1. In a hoist having a reversible pressure fluid operated motor and a reversing valve therefor, a control mechanism for the valve comprising, in combination, a pair of pressure fluid responsive actuators each including a cylinder having communication with a source of pressure fluid, and a piston in said cylinder adapted for engagement with the reversing valve, said actuators being disposed in opposed relation with respect to the reversing valve and operative together to hold the reversing valve in neutral position, and a pendant control device for said actuators including an exhaust valve for each of said actuator cylinders alternatively operable to render one of said actuators ineffective to permit the other actuator to shift the reversing valve, and further including a safety valve interposed between said exhaust valves and the atmosphere to prevent operation of the mechanism until said safety valve and one of said exhaust valves are opened.

2,743,709
EQUALIZING THE TEMPERATURE OF HIGH PRESSURE BOILER DRUM WALLS
Wilbur H. Armacost, Scarsdale, N. Y., assignor to Combustion Engineering, Inc., New York, N. Y., a corporation of Delaware
Application April 12, 1952, Serial No. 281,968
8 Claims. (Cl. 122—411)



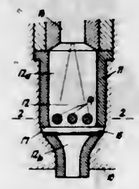
1. In combination with a steam generator, a generally horizontal steam and water drum having its interior divided by a partition means into an outer substantially annular compartment generally coaxial with and extending longitudinally of the drum with the inner wall surface of said drum forming the outer wall thereof and also into an inner compartment, said inner compartment being filled to a predetermined height with water, the first mentioned outer compartment being coextensive with the upper portion of said drum and extending on each side of the drum at least below the level of the water therein, said partition being fluidly sealed to said drum with communication between said first mentioned outer compartment and said inner compartment established through a plurality of openings in said partition, a steam generating circuit having its inlet projecting into the inner compartment to a point below the predetermined water level therein and its outlet projecting into said first mentioned outer compartment, and pump means associated with said generator in a manner to pump water from said inner compartment into said first mentioned outer compartment.

2,743,710
CONTROL SYSTEMS
Jack F. Shannon, Euclid, Ohio, assignor to Bailey Meter Company, a corporation of Delaware
Application November 6, 1952, Serial No. 318,992
12 Claims. (Cl. 122—451.2)



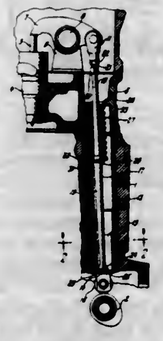
1. A fluid pressure relay of the force-position-balance type, including in combination, a first force-balance beam pivoted intermediate its ends, a first pair of substantially similar expansible-contractible fluid pressure receiving chambers mounted to have their movable walls opposingly act upon the beam at opposite sides of the pivot, unbalance of the chamber forces acting upon said beam tending to angularly position it about its pivot, an adjustable loading means for the beam; a second force-balance beam pivoted intermediate its ends, a second pair of substantially similar expansible-contractible fluid pressure receiving chambers mounted to have their movable walls opposingly act upon the second beam at opposite sides of its pivot, unbalance of the second chamber forces acting upon said second beam tending to angularly position it about its pivot, a second adjustable loading means for the second beam; a fluid pressure nozzle-baffle couple having one element positioned by the first beam and the other element positioned by the second beam, a supply of pressure fluid for the couple, relative position of the elements of the couple controlling bleed of supply pressure fluid to the atmosphere thus establishing an output control fluid pressure from the relay, adjustable sensitivity means arranged to bias the positioning of one of the couple elements by its positioning beam, and fluid pressure responsive means arranged to position the said sensitivity means thus establishing the proportional band of the relay in accordance with remotely established fluid pressure values impressed upon the said fluid pressure responsive means.

2,743,711
DIESEL COMPRESSION IGNITION ENGINES
Victor R. Gross, Stuttgart-Unterturkheim, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application April 2, 1952, Serial No. 280,009
Claims priority, application Germany April 5, 1951
11 Claims. (Cl. 123—32)



1. A diesel internal combustion engine of the injection type comprising a main combustion chamber, a precombustion chamber having an enlarged and a reduced cross sectional portion, an injection nozzle opening into said enlarged cross sectional portion, and several pin-like insertion members extending across said precombustion chamber, said insertion members being located exclusively in a region intermediate said enlarged and reduced portions thereby leaving a free enlarged portion of said precombustion chamber having an axial length of at least about half the axial distance from said injection nozzle to said main combustion chamber.

2,743,712
PUSH ROD AND RETURN SPRING MOUNTING THEREON
Kenneth L. Hulsing, Plymouth, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application July 17, 1952, Serial No. 299,367
1 Claim. (Cl. 123—90)



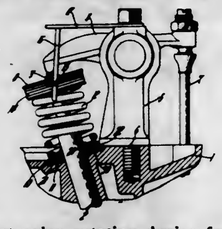
In a valve actuating mechanism for an internal combustion engine having a cylinder head and a rocker mounted thereon, said cylinder head including a push rod opening therein and a stationary spring retaining abutment located in said opening above the bottom of said cylinder head, a push rod passing through said opening and operatively connected to said rocker, said push rod having opposite end portions and a shank portion extending between the opposite end portions, said shank portion being oppositely tapered from an enlarged section midway the shank ends, a shoulder formed on the enlarged shank section, and a spring seated at one end against said abutment and at the other end against said shoulder yieldably opposing movement of said push rod toward said rocker.

2,743,713
VALVE GEAR MECHANISM
Robert C. Russell, South Euclid, Ohio, assignor to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application March 11, 1953, Serial No. 341,650
20 Claims. (Cl. 123—90)



1. A valve operating mechanism comprising threadingly engaged screw and nut members, a spring normally biasing said screw and nut members apart, and cam actuated means, for rotating one of said members in only one direction, including a one-way spring clutch member.

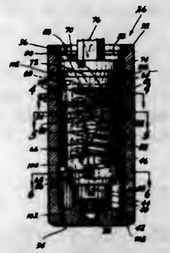
2,743,714
BEARING
Clarence E. Hanson, Jr., and Paul L. Vermaire, Grand Rapids, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 4, 1953, Serial No. 352,822
7 Claims. (Cl. 123—90)



6. In a poppet valve rotating device for use on an internal combustion engine or the like having a cylinder head, a poppet valve with a stem reciprocably and rotatably guided in the had, a valve return spring embracing the valve stem, a retainer securing one end of the spring to the valve stem for effecting longitudinal movement of the valve stem in opposition to the return spring, a coil cltuch spring embraceably gripping said retainer and terminating at one of its ends in an out-turned portion, a pin fixed to the head and extending slidably through said portion at an acute angle to the axis of the stem, and a thrust bearing between the opposite end of said return spring and the head, said bearing including a pair of raceways, a plurality of balls spacedly separating said raceways and a cage laterally separating said balls, said cage being in the form of an annular disk and having sufficient curvature from the plane normal to the axis thereof to effect a frictional snubbing engagement thereby with said raceways.

2,743,715
MECHANICAL SELF-ADJUSTING VALVE LIFTER
Glenn T. Randol, Mountain Lake Park, Md.
Application March 23, 1953, Serial No. 344,077
20 Claims. (Cl. 123—90)

1. A valve lifter reciprocably interposed in a cylinder between a selected valve and a cam on the camshaft of an internal-combustion engine, said lifter including: a piston member actuatable by said cam, said member having a cylindrical longitudinal bore closed at one end and open at the other; a plunger slidably mounted in the cylindrical bore of said piston, said plunger terminating at its upper end in an extension for operatively acting on the end of the stem of said valve; preloaded spring means operably interposed between the piston and plunger to bias them apart; means for converting limited axial move-



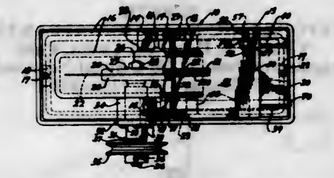
ment of said plunger relative to the piston member into minute relative rotating movement therebetween; and helically wound coil spring means operably disposed between said plunger and piston member normally accommodating relative movement therebetween and radially deformable for effecting a temporary interlock between the aforesaid piston member and plunger responsive to rotational movement aforesaid induced by the initial cam-actuated lift axial movement of said piston member to open said valve.

2,743,716
ARCHERY ARROW RETAINING DEVICE
Peter M. Wendt, Milwaukee, Wis.
Application January 19, 1953, Serial No. 331,796
5 Claims. (Cl. 124—41)



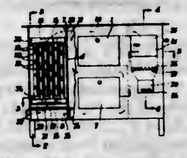
2. A device for temporarily retaining an arrow shaft in nocked and ready position on a bow wherein the arrow is biased in a forward direction by the bow string, said device including a fixed arrow rest positioned on the side of said bow, a fixed abutment member positioned on the side of said bow above said arrow rest, movable wedging means directed rearwardly of said bow and positioned between said arrow rest and said abutment, said abutment member preventing upward movement of said wedging means along the longitudinal axis of said bow, said wedging means having a friction surface engaging said arrow shaft, the distance between said abutment and said arrow shaft positioned on said rest being less than the maximum depth of said wedging means whereby the friction surface of said wedging means will be urged against said arrow under the forward bias of the bow string, and means for automatically moving said wedging means out of the path of the arrow when the arrow shaft is drawn rearwardly as the bow is moved from ready position to full draw and for so holding said wedging means until it is manually reset.

2,743,717
LAPIDARY SAWS
Harold G. Wilkin, Ferndale, Mich.
Application March 30, 1954, Serial No. 419,790
6 Claims. (Cl. 125—13)



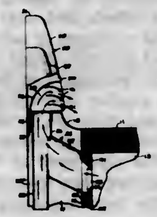
3. In a lapidary saw, a saw element including a rotatable saw blade, a pair of ways, a saw table including an upwardly disposed work resting abutment slidably and tiltably telescoped on one way and slidably supported on top of the other way, said saw table having a V-slot therein accommodating said saw blade when said table is slidably advanced and manually tilted in angular relationship to present work held thereon at selected angles into cutting relationship with said saw blade.

2,743,718
KITCHEN RANGE
Josef Kindig, Kirchberg an der Pielach, Austria
Application September 16, 1952, Serial No. 309,838
Claims priority, application Austria October 10, 1951
2 Claims. (Cl. 126—5)



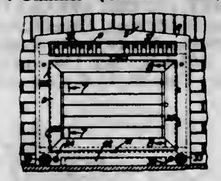
1. A kitchen range comprising top-, bottom-, front-, back- and side-walls, means within the range forming a combustion chamber, an ashpit below said combustion chamber, an outlet flue, a water heating chamber disposed laterally of said combustion chamber and an oven disposed between said combustion chamber and said water heating chamber, a duct overlying said oven connecting directly said combustion chamber with the top of said water heating chamber and a first damper means in said duct for closing said duct into said water heating chamber, means communicating the bottom of the latter with said flue, and a slide having slots arranged at and extending substantially throughout the entire bottom area of said water heating chamber and a plate, having slots similar to that of said slide, immovably secured across substantially the entire bottom area of said water heating chamber, said slide being movable relative said plate in order to bring said slots in and out of register with each other, said slide being adapted to control the passage between said water heating chamber and said outlet flue, means forming a passage adjacent said water heating chamber and said oven and second damper means between said passage and said outlet flue, said last named passage communicating with said overlying duct, and a fuel feed door disposed in said front wall in front of said combustion chamber and having air admission means, an intermediate wall disposed parallel to said back wall and forming with the latter a duct communicating said ashpit with said combustion chamber, a third damper means arranged at and extending along said intermediate wall, said air admission means being adapted to control the flow of over-fire air into said combustion chamber, and said water heating chamber having therein a plurality of horizontally disposed heat exchange tubes equally and closely distributed in said water heating chamber.

2,743,719
COOKSTOVES
Herbert M. Reeves, Kankakee, Ill., assignor to Florence Stove Company, Gardner, Mass., a corporation of Massachusetts
Application October 9, 1951, Serial No. 250,433
1 Claim. (Cl. 126—21)



In a cookstove having a body including side panels adapted to be installed flush against the wall of a room and having a back wall positioned forwardly of the rear edges of said panels to define an air circulating space extending across the back of the stove body and opening upwardly along the rear edge of the stove body, an oven in the stove body spaced forwardly of the back wall, said back wall having an opening for venting the hot gases from said oven, a flue box supported in said space, said flue box having a pair of ducts communicating respectively with the oven vent opening and with said space and discharging through a common outlet disposed within the opening for the air space, a backguard extending along the rear edge of the stove body, and a deflector plate on said backguard overlying the opening for said air space and the outlet for said flue box, said deflector plate extending substantially the full length of said opening and having its rear edge portion disposed in a common plane with the rear edges of the said panels, the front edge portion of said deflector plate being spaced substantially above the top of the stove to define a forwardly opening passage for both the gas discharged from the flue box and the air discharge from said air circulating space.

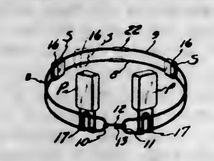
2,743,720
SPACE HEATER FOR USE WITH A FIREPLACE
Lewis L. Dollinger, Rochester, N. Y.
Application May 19, 1951, Serial No. 227,153
4 Claims. (Cl. 126—121)



1. A space heater adapted to be mounted inside a fireplace for use therein, comprising an outer shell and an inner shell, each of said shells having bottom, side, back and top walls and being closed except at its front, said inner shell being nested in said outer shell with its several walls spaced from the several corresponding walls of said outer shell to define an air space between said shells, a front plate secured to the front faces of the bottom, top and side walls of both the inner and outer shells to close said air space, said inner shell serving as a fire-box, said front plate having an air-inlet opening therethrough communicating with said air space adjacent the bottom thereof, said front plate having an air-discharge opening therethrough communicating with said air space adjacent the top thereof, said front plate having an opening therethrough communicating with the inside of said inner shell to permit introduction of fuel into said fire-box, a door

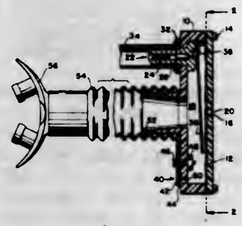
hinged on said front plate for closing the last-named opening, said door comprising a plurality of transparent slats made of heat-resistant material and mounted in said door for rotation on parallel horizontal axes, means for simultaneously adjusting said slots from a closed position in which they extend generally in a common plane with adjacent end faces slightly spaced from each other to open positions in which said slats are inclined to said common plane, the end faces of said slats, when said slats are in their closed position, being inclined to said common plane so that adjacent end faces of adjacent slats diverge from one another inwardly from front to back of said slats when said slats are in open position, the top walls of said shells having registering openings therethrough, and a flue pipe open at both ends and sealed in said registering openings to extend through said air space, said flue pipe communicating at its inner end with said fire-box.

2,743,721
BELT SUPPORT OR HERNIA STAY
Frank V. Murphy, Bay City, Mich.
Application September 23, 1954, Serial No. 457,883
3 Claims. (Cl. 128—104)



1. A rupture stay comprising, an elongated support member formed of vertically spaced connected metallic strands, the free ends of which form continuous closed loops, means for releasably connecting said loops, pressure pad assemblies adjustably mounted on one of said strands, each assembly including a metallic resilient frame with horizontally spaced apart projecting wound sections slidable on said strands and around said loops to dispose the selected pad assembly on a selected strand, and a resilient tongue forming a part of said metallic frame and engageable with the opposite strand to that on which said frame is slidably mounted for tensioning said pressure pads.

2,743,722
FREE DIVING APPARATUS
William B. McLean, China Lake, Calif.
Application November 10, 1954, Serial No. 468,173
7 Claims. (Cl. 128—142)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. Free diving apparatus for an under water diver comprising a chamber, valve means for admitting high pressure gas into said chamber when the pressure within the chamber is less than the ambient pressure of the water, conduit means for conducting high pressure breathable gas from a source of said valve means, and means associated with the chamber for permitting the contents of the chamber to escape when the pressure within the chamber is greater than the ambient pressure of the water, and means for communicating the interior of the chamber with the lungs of the diver, the combined volume of the chamber and communicating means being substantially less than the normal lung capacity of the average human.

2,743,723
HYPODERMIC INJECTION APPARATUS
George N. Hein, San Carlos, Calif.
Application June 3, 1954, Serial No. 434,155
15 Claims. (Cl. 128—215)



12. An apparatus for use in connection with hypodermic injections, said apparatus comprising a body, means for mounting a syringe barrel and needle adjacent thereto so that the latter extends into said body, means for producing a vacuum within said body to draw the skin of the patient upwardly into the same and thus penetrate the skin by the needle and a trigger for releasing said last-named means for operation.

2,743,724
INJECTION APPARATUS
Rijk Gispen, Utrecht, Netherlands, assignor to Rijks Instituut voor de Volksgezondheid, Utrecht, Netherlands, a research institute of the Netherlands
Application June 27, 1952, Serial No. 295,925
Claims priority, application Netherlands January 7, 1952
4 Claims. (Cl. 128—216)



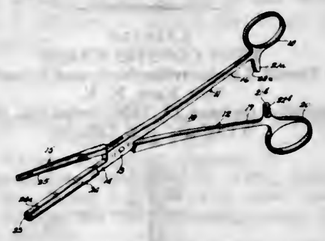
1. An intermediate unit for use with a hypodermic syringe and a hypodermic needle carried by a sleeve, said unit comprising a body having one end shaped to receive the nozzle of the syringe and having its other end shaped to receive the needle sleeve, said body being formed with a longitudinal passage for the transfer of injection liquid from said syringe to said needle, and a non-return valve carried by said unit for controlling the flow of liquid through said passage.

2,743,725
DIAPER
Loraine S. Matthews, Silver City, N. Mex.
Application February 7, 1955, Serial No. 486,571
4 Claims. (Cl. 128—284)



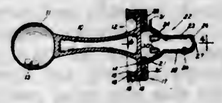
1. A diaper comprising an outer panel, a bib panel secured to said outer panel along one edge, a liner panel integrally joined to said outer panel oppositely to said bib panel, and a padding panel integrally formed with said liner panel, said liner panel and said outer panel being adapted to be folded upon each other with said padding panel lying therebetween.

2,743,726
SURGICAL INSTRUMENT
Herman R. Grieshaber, Chicago, Ill.
Application May 28, 1953, Serial No. 357,941
6 Claims. (Cl. 128—321)



1. Surgical forceps comprising a pair of complemental jaw segments operatively connected to one another for movement into and out of gripping relation; a portion of one of said segments being nested within and partially encompassed by a portion of said other segment, when said segments are in gripping relation, and a resilient pliable member mounted on the encompassing jaw segment and in spaced overling relation with the gripping surface thereof; said segments having the gripping surfaces thereof in spaced relation with respect to one another when said jaw segments are in gripping relation.

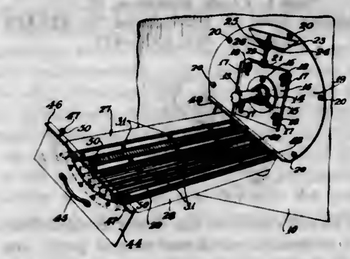
2,743,727
ORTHODONTIC PACIFIER
Walter H. Griesinger, Portland, Oreg.
Application October 25, 1954, Serial No. 464,405
1 Claim. (Cl. 128—360)



A pacifier comprising an elongated handle, an imperforate disc concentrically secured to an end of said handle and lying in a plane normal to the direction of elongation of the handle, an externally threaded, peripheral flange on said disc, a centrally apertured, internally threaded cap separably threaded onto said flange, and a feeding nipple comprising a teat portion, a breast portion from which said teat portion protrudes, and an outwardly extending, annular flange on said breast portion, said feeding nipple protruding axially through the aperture in said cap, and the flange therein being clamped between said cap and said disc.

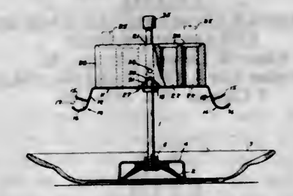
2,743,728
DRAWER TYPE CYLINDER CONCAVE FOR THRESHERS
Dwight B. Carlson, Rapids City, Ill., assignor to International Harvester Company, a corporation of New Jersey
Application June 12, 1953, Serial No. 361,281
2 Claims. (Cl. 130—27)

1. A supporting means for a drawer element comprising a housing, spaced apart fixed first and second ways in said housing, said first way including spaced elements having a slot therebetween, and adjustable screw means arranged and constructed to move parallel to said slot, said second way including a V shape projection, a drawer element including a projecting lip along one edge thereof adapted to engage the slot in the first way, and an outwardly opening V shape member projecting along a spaced apart parallel edge of said drawer element and adapted to slidably engage the V shape projection on the second way, whereby the drawer element may have slidable engagement with the housing and may be fixedly positioned within said housing by extending the adjustable screw means to effect a movement of the concave



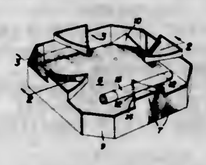
and its outwardly opening V shape member into edging relationship with said second way.

2,743,729
ASH TRAY ATTACHMENT
Beatrice Butler, San Francisco, Calif.
Application October 19, 1953, Serial No. 386,765
1 Claim. (Cl. 131—235)



An ash tray attachment comprising a shaft, means for removably securing said shaft to an ashtray, a horizontal strip secured to said shaft, a butt holder swingable about said shaft above said strip and normally resting on the same, said holder having compartments therein extending therethrough for admitting cigarette butts thereinto; and an angular plate arranged on the strip about the shaft, said butt holder having an angular indentation extending across the same, said angular plate entering said indentation and holding said butt holder aligned with said strip.

2,743,730
ASH TRAY
Lex L. Heaton, Anderson, S. C.
Application January 21, 1952, Serial No. 267,331
2 Claims. (Cl. 131—240)



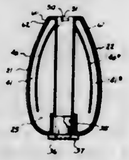
2. An ash tray including a bottom and upstanding side walls, a plurality of cigarette supporting elements projecting inwardly from said side walls at spaced points around said ash tray in overlying relation to the bottom of the ash tray, said supporting elements terminating short of the center of said ash tray, said elements each comprising a pair of arms integral with a side wall of said tray at spaced points therealong, said arms converging toward one another, the free ends of said arms being joined to one another and the upper edges of said arms being dished to form a cigarette receiving trough, said elements being disposed above said side walls, and a connecting web integrally formed with said side walls and united with the inner ends of said arms to form the base of a triangle in which said arms comprise the sides.

2,743,731
HAIR STRAND CURLER
Paul L. Cleek, Kewanee, Ill.
Application April 27, 1954, Serial No. 425,819
6 Claims. (Cl. 132—42)



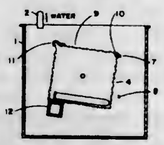
1. A hair strand curler of the character described comprising, in combination, first and second parts, one part having a hole therein and the other part having a portion adapted to slip frictionally engage the hole, one of said parts having a surface for forming a curl in the hair, and the other part having an extension for winding the hair around said surface and the extension, the longitudinal axes of the hole and said extension being substantially in a common plane.

2,743,732
COMBINATION RAZOR HOLDER AND SHAVING CREAM DISPENSER
Elmer S. Lovasz, Chicago, Ill.
Application July 6, 1953, Serial No. 366,154
5 Claims. (Cl. 132—80)



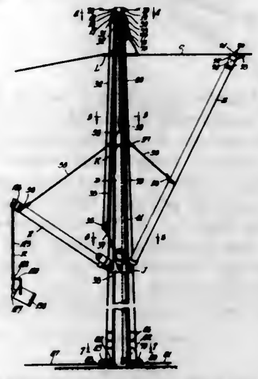
2. For a shaving cream dispenser having a bulbular-shaped container having a top and a bottom including resilient side and end walls: means in said container for accommodating a conventional razor, said container having adjacent the upper regions of each of said side walls means defining apertures, and slidable gate means manually operable and effective to open and close said apertures so that the contents of said container may be removed therefrom through said apertures responsive to a squeezing manual force applied to the walls of said container when said slidable gate means is in its open position.

2,743,733
AUTOMATIC TEST TUBE WASHER
Lawrence E. Sacks, Berkeley, and John A. Garibaldi, San Francisco, Calif.
Application November 2, 1951, Serial No. 254,621
2 Claims. (Cl. 134—56)
(Granted under Title 35, U. S. Code (1952), sec. 266)



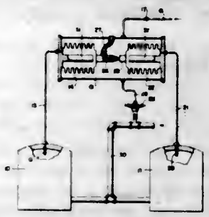
1. A vessel-cleaning apparatus comprising a tank, a rotatable support for vessels to be cleaned positioned in said tank, means for introducing liquid into said tank, a syphon connected to said tank, said syphon cooperating with the liquid being introduced whereby the tank is periodically filled and emptied thus to clean said vessels, a hollow body attached to said rotatable support, said hollow body cooperating with the liquid level in said tank whereby to rotate the support to a position wherein the mouths of the vessels are up during the latter portion of the filling cycle and to rotate the support to a position wherein their mouths are down during the latter portion of the emptying cycle.

2,743,734
TENT CONSTRUCTION
St. John Terrell, Lambertville, N. J., and Ernest Chandler, New York, N. Y.
Application October 27, 1950, Serial No. 192,556
6 Claims. (Cl. 135—1)



1. In a tent construction, a center pole centrally supporting the canvas top, said center pole having a collar loosely fitting thereon and slidable upwardly and downwardly on said center pole and a plurality of quarter poles extending obliquely upwardly and outwardly from said collar on said center pole substantially above the audience level and supporting the canvas top at their upper ends, a slide ring slidable upwardly and downwardly on said center pole, said slide ring being positioned above said collar and mounted on said center pole and being attached to the canvas top at a position above the sliding collar and independent adjustment cables extending along said center pole one of which is connected to said collar and the other of which is connected to said slide ring for adjusting the height of the canvas top and height of the lower ends of the quarter poles.

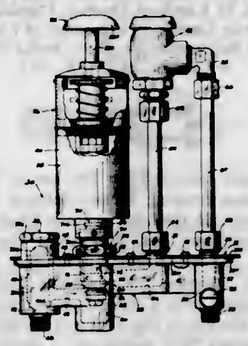
2,743,735
CONTROL APPARATUS RESPONSIVE TO THE EXTREME MAGNITUDE OF ONE OF A PLURALITY OF VARIABLES
Robert C. Du Bois, Fairfield, Conn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application October 8, 1954, Serial No. 461,103
10 Claims. (Cl. 137—85)



1. Apparatus for producing an indication of the magnitude of one of a plurality of variables which represents an extreme condition comprising, an enclosed chamber having a fluid supplied thereto through a restricted passage, an escape port from said chamber, a throttling member for said port, and a plurality of fluid pressure

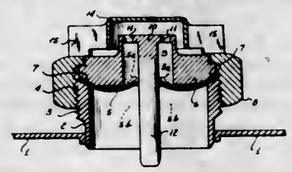
deflectable units each of which is positioned within said chamber to variably adjust the relative position of said throttling member with respect to said port so that the pressure condition in said chamber balances the extreme of the fluid pressure acting on one of said deflectable units which is effective to control the escape of fluid from said chamber.

2,743,736
WATER SUPPLY UNITS FOR GLASS WASHERS AND THE LIKE
Thomas H. Corbett, Chicago, Ill.
Original application September 15, 1952, Serial No. 309,609, now Patent No. 2,693,852, dated November 9, 1954. Divided and this application January 5, 1954, Serial No. 402,383
2 Claims. (Cl. 137—215)



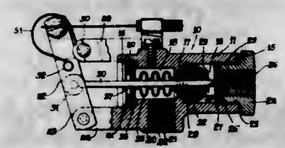
1. In a unit for supplying water for a predetermined time interval in a glass washer or the like, an elongated manifold casting having a top, bottom walls, and vertical side and end walls and having a generally flat upper face for locating said casting in its position of use, said casting having four upstanding connecting nipples formed on its upper wall, said casting having a strainer chamber formed beneath the first of said nipples and having an inlet opening at the lower end thereof, a strainer located in said strainer chamber and having an element engaging said first nipple to hold the strainer in place, said casting having a valve inlet chamber and a valve outlet chamber located one above the other and beneath the second of said nipples, and said valve inlet chamber having a passage connecting the same with said strainer chamber, a valve fixed to the second nipple and located in said valve inlet and outlet chambers for controlling flow therebetween, a passage extending from said outlet chamber to the third nipple, a distributing chamber located beneath and connected to the fourth nipple and having an outlet, and a vacuum breaker connected between and supported above the third and fourth nipples.

2,743,737
SAFETY VALVE FOR TANKS
Andre F. Textor, Sussex, N. J.
Application November 24, 1954, Serial No. 470,971
9 Claims. (Cl. 137—493)



1. A safety valve for a tank comprising a tubular threaded nipple having a diaphragm seat, a vented clamping disk overlying said seat and having a complementary diaphragm seat, a flexible resilient diaphragm the peripheral margin of which is interposed between said seats, a nut cooperating with the threads of the nipple to clamp the diaphragm between said seats and form a substantially hermetic seal therewith, and a post rigid with the clamping disk and extending through a perforation in the diaphragm to normally form a hermetic seal therewith, said diaphragm being distendable in opposite directions axially with the post under differential pressures at opposite sides of the diaphragm to enlarge the perforation therein and thereby to break the seal between the post and the diaphragm and permit the passage of air between them.

2,743,738
VALVE—TWO-WAY
Samuel G. Johnson, Fort Wayne, Ind., assignor to International Harvester Company, a corporation of New Jersey
Application March 4, 1952, Serial No. 274,755
5 Claims. (Cl. 137—625.4)

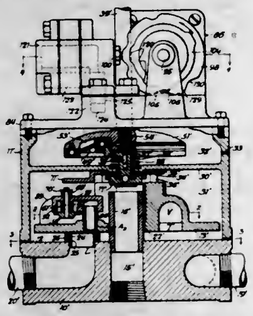


1. Valve structure comprising: a valve body having a first axial bore formed therein extending inwardly from one end of the body and a second axial bore of smaller diameter and in axial alignment with said first bore extending from the opposite end of the body to said first bore to form a first annular shoulder, said second axial bore being counterbored to form a second annular shoulder; inlet conduit means connected to said body and extending into said first bore to form a third annular shoulder axially spaced from and coaxially with said first and second shoulders; an inlet passageway opening into said second bore intermediate said first and second shoulders; an outlet passageway leading from said first bore intermediate said first and third shoulders; a valve stem extending through said second bore and into said first bore having a ball-like head rigidly secured to the valve stem adjacent one end thereof and disposed within said first bore, the diameter of said head being slightly less than the diameter of said first bore, said stem being axially movable between a first position wherein said head abuts said first shoulder and a second position wherein said head abuts said third shoulder; and sealing means attached to said body opposite said inlet conduit means for closing the end of said second bore opposite said first shoulder including a disc having its peripheral edge confined on said second shoulder and having a central opening for loosely receiving said valve stem, said sealing means further including an elongatable cylinder surrounding said valve stem and extending between and being integrally formed with said disc and said head.

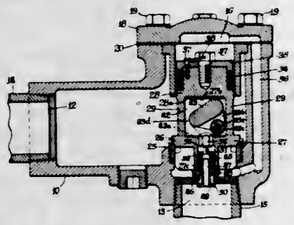
2,743,739
MULTIPORT VALVES
Harry Mansen, Chicago, Ill., assignor to Elgin Softener Corporation, Elgin, Ill., a corporation of Illinois
Original application December 29, 1944, Serial No. 570,271, now Patent No. 2,644,484, dated July 7, 1953. Divided and this application August 1, 1952, Serial No. 302,064
17 Claims. (Cl. 137—627)

1. In a plate type valve comprising a ported body member, a ported stem plate adapted to effect different communications between the ports in the body member in different positions of the plate, and a cover member on the body member enclosing the plate, one of said members

having a pressure port normally communicating with the inside of the cover member, whereby said stem plate is normally held seated under pressure, one of the ports in the body member being a low pressure drain port, said stem plate having a port provided therein communicating with said last named port, a pressure relief valve comprising an inverted generally L-shaped fitting entered in said last named stem plate port and having a relief valve member seating upwardly to cover a port in the bottom of the cross-portion thereof, said relief valve member having a stem extending through the cross-portion of said fitting, and spring means cooperating with the projecting upper end portion of said stem normally to hold the relief valve member seated, and means for turning the plate from one position to another including a part movable downwardly with respect to said plate to operate the relief valve stem to unseat the relief valve member against the action of said spring means and against pressure inside the cover member for relief of pressure on said plate prior to movement thereof.

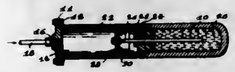


2,743,740
END VALVE FOR STEAM TRAIN LINE
Edward B. Moore, La Grange Park, William R. Peterson, Oaklawn, and Henry E. Stack, Berwyn, Ill., assignors to Vapor Heating Corporation, Chicago, Ill., a corporation of Delaware
Application December 24, 1951, Serial No. 263,038
7 Claims. (Cl. 137—630.15)



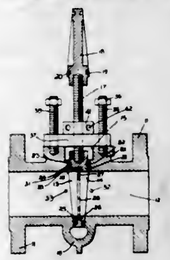
1. A train line valve comprising a housing having two ports and a cylinder portion, a stationary valve seat centrally aligned with said cylinder portion and defining a main passageway between said ports within the housing, a main valve structure including a piston element reciprocable in said cylinder and a main valve element connected with said piston and operable to open and close said main passageway at said valve seat and having top and bottom sides, either of which is selectively usable as a high pressure side of the main valve element, a self-closing bleeder valve carried by said valve element beneath the bottom side thereof and having an end portion projecting through said top side, the bleeder valve being effective, when open, to provide a bleeder passageway through the main valve element, the construction being such that when fluid pressure is applied to the top side of the main valve element it is pressed firmly in its closed position and when high pressure is applied to the bottom side thereof such pressure tends to displace the main valve element from its seat, means defining a duct leading from said cylinder at a location above said piston to a portion of said main passageway below said main valve element, whereby the fluid pressure exerted against the bottom side of the main valve is also exerted against said piston to oppose the aforementioned displacement of said main valve element from its seat, and a manually operable rotary cam for engaging the top surface of the main valve element and having alternate closed-valve and open-valve positions, said cam being provided with a portion for engaging and opening the bleeder valve preliminary to opening the main valve element.

2,743,741
HYDRAULIC ACCUMULATOR
Lewis R. Ord, St. Lambert, Quebec, Canada, assignor to Techron Limited, a company of Canada
Application September 29, 1952, Serial No. 312,049
4 Claims. (Cl. 138—31)



1. A hydraulic accumulator for use in hydraulic systems, comprising housing means defining a first closed chamber wherein all available space is filled with a liquid, a plunger penetrating and glanded in the wall of said chamber, and movable thereinto towards a position of equilibrium, to compress the contained liquid, said housing means defining also a second closed chamber having a port for connection to the hydraulic system and for admission of pressure fluid therefrom, a pressure-responsive member within said second chamber, exposed on one face to system pressure and of an effective area many times the effective area of the plunger within its chamber, to be moved by such pressure towards a position of equilibrium, and an operative connection between said pressure-responsive member and said plunger, to balance the total force on one against the total force on the other, and so to move them into and to maintain them mutually in their positions of equilibrium, and to transmit movement of the pressure-responsive member under the influence of increase in system pressure to the plunger to further compress the liquid which fills the first chamber, and vice versa, to transmit stored pressure in the first chamber to the pressure-responsive member upon decrease of system pressure, to maintain pressure in the second chamber, and in the connected system, elevated.

2,743,742
LINE BLIND
Oliver W. Muff, Los Angeles, Calif., assignor of five-sixths to Robinson Orifice Fitting Company, Los Angeles, Calif., a corporation of Nevada
Application July 14, 1952, Serial No. 298,655
5 Claims. (Cl. 138—44)



1. A device of the class described comprising a body having an inlet and an outlet and a laterally open seat

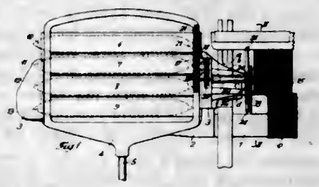
therebetween, a flow-controlling member receivable in the laterally open seat, a threaded stem on the flow-controlling member, a nut on the stem, studs on the body adjacent the stem, and a lug slidably and swingably mounted on one stud having recesses to receive the other stud and stem when the lug is swung thereagainst, said lug being adapted to optionally assume a position on either side of the nut whereby upon rotation of the nut the flow-controlling member may be optionally forced toward or away from its seat.

2,743,743
LEAK DETECTING AND SEALING DEVICE
Charles I. Galloup, Amarillo, Tex.
Application January 22, 1948, Serial No. 3,743
5 Claims. (Cl. 138—97)



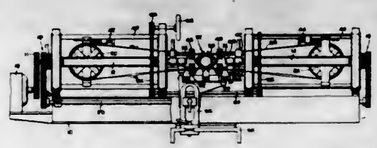
1. A casing leak detecting and sealing device comprising a supporting member, a pliable pressure responsive leak sealing element, a resilient means releasably securing said pressure responsive sealing element to the supporting member whereby said pressure responsive leak sealing element will remain in the vicinity of the leak and the supporting member will be detached from the leak sealing element when a leak is encountered and the supporting member is withdrawn from the casing, and a substantially rigid frame secured to the supporting member, the pressure responsive sealing element being positioned about the frame, said frame being withdrawable with the supporting member.

2,743,744
WEFT THREAD SEPARATOR FOR DROP BOX LOOMS
Georg Wiget, Arbon, Switzerland, assignor to Societe Anonyme Adolphe Saurer, Arbon, Switzerland, a joint-stock company of Swiss law
Application June 28, 1952, Serial No. 296,114
Claims priority, application Switzerland July 3, 1951
4 Claims. (Cl. 139—170.6)



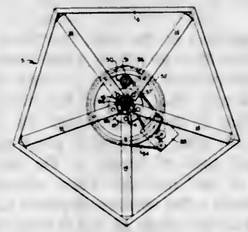
1. Weft thread separator for drop box looms including a slay, a drop box on said slay, a shuttle race in front of said drop box, and a plurality of shuttles in said drop box and adapted to be driven along said shuttle race, comprising in combination, a thread separating member, said member including a hub portion and radially extending arms to form passages, one for each shuttle, flexibly connected with said hub portion, said hub portion being supported for rotation at a distance from said drop box on the shuttle race side of said drop box, and means for rotating said separating member for successive registration of said passages with the shuttle race.

2,743,745
DOUBLE-CUT POWER BAND SAW MACHINE
Arnold L. Teague, Arroyo Grande, Calif.
Application September 20, 1954, Serial No. 456,935
10 Claims. (Cl. 143—17)



7. In a driven bandsaw machine for cutting a workpiece, an endless bandsaw blade, means to rotate said saw blade in a loop with saw edges on two loop sides facing in opposite directions, means to hold said workpiece inside said saw blade loop, adjustable blade-guiding means to train said saw blade loop upon said workpiece, and means to rotate said saw blade about an axis passing in the plane of said loop through said workpiece to urge both said saw edges against said workpiece.

2,743,746
ROTATABLE MULTIPLE TOOL SUPPORT
Robert T. B. Davison, Acton, William J. J. Gordon, Cambridge, and Carleton S. Marden, Boston, Mass., assignors to Arthur D. Little, Inc., Cambridge, Mass., a corporation of Massachusetts
Application December 3, 1953, Serial No. 395,946
9 Claims. (Cl. 144—1)

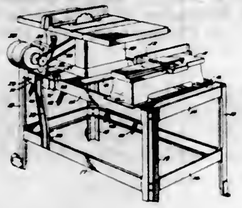


3. A multiple support comprising a base having an outwardly projecting arm, a pyramidal-shaped member rotatably supported on said arm so that its adjoining side faces may be brought selectively to a horizontal position wherein they provide work-supporting surfaces, a motor mounted on said arm within said table member, driving means for rotating said table member, a clutch connecting said motor and driving means, releasable locking means normally holding said member with one face in horizontal position, and means for releasing said locking means and engaging said clutch so as to rotate said member to bring another face to horizontal position.

2,743,747
POWER TOOL BENCH WITH ADJUSTABLE MOTOR POSITION
Norvin H. Franks, Chicago, Ill., assignor to Sturdi-Bilt Steel Products, Inc., Chicago, Ill., a corporation of Illinois
Application March 29, 1954, Serial No. 419,151
3 Claims. (Cl. 144—1)

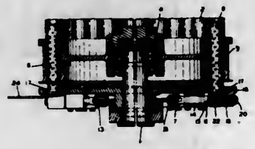
1. In a power tool bench including side rails having vertically extending webs and inwardly extending bottom flanges, tool supporting bars extending between the side rails and resting on the flanges with their ends spaced from the webs, clamps to secure the end portions of the bars to the flanges, the bars being adapted to support a plurality of power tools in side-by-side relationship, a motor mounting comprising a slide mounted on one of the side rails for sliding movement therealong and having a

flange hooked over the top of the web to pass between the web and the ends of the bars, a motor carried by the



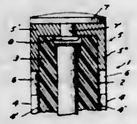
slide, and detachable driving means to connect the motor selectively to power tools on the bars.

2,743,748
DEVICE FOR FABRICATING CORK COMPOSITION AND SIMILAR ARTICLES
Charles H. Campbell, Lancaster Township, Lancaster County, and Luther E. Gaenzle and Rex A. Young, Lancaster, Pa., assignors to Armstrong Cork Company, Lancaster, Pa., a corporation of Pennsylvania
Application September 29, 1952, Serial No. 312,076
3 Claims. (Cl. 144—21)



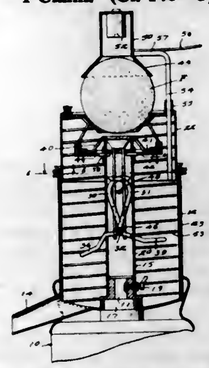
1. In an apparatus of the type described, the elements comprising a tube through which a rod is progressively advanced a predetermined distance, cutting means to sever the end of said rod when the rod has advanced a predetermined distance in the tube, means for advancing said rod through said tube, a movable plate positioned over the longitudinal path of travel of the rod through the tube, the side of said movable plate adjacent to the end of said rod having a flat surface disposed on substantially the same plane as the plane of the cutting knife, a clamping surface carried by said movable plate for engagement with the side of said rod to urge the rod firmly into engagement with the rod-advancing means, and means for moving said movable plate radialy with respect to the longitudinal axis of the rod to present either the flat surface to the end of the rod or the clamping surface to the side of the rod.

2,743,749
TOOL HANDLE WITH ROTATABLE CAP STRUCTURE
Glenn W. Lowry, Fairborn, Ohio
Application January 30, 1953, Serial No. 334,260
1 Claim. (Cl. 145—61)



A screw driver handle having a generally cylindrical gripping portion, said gripping portion having a reduced end portion, said reduced end portion providing an abutment shoulder at its juncture with said gripping portion, a hollow cylindrical cap fitted over said reduced end portion and abutting said abutment shoulder, means fixedly securing said cap to said reduced end, said cap having a smooth, unbroken, outer side wall surface flush with said gripping portion, said cap having a flat end wall overlying the end of said gripping portion and having a central aperture therethrough, a disk having a stud projecting axially from the center thereof and extending rotatably through said end wall aperture rotatably attaching said disk to said cap, the end of said gripping portion having a central recess receiving the end of said stud, said disk having the peripheral edge thereof terminating flush with said cylindrical side wall surface of said cap, said disk and said cylindrical side wall surface of said cap serving to protect the palm of the hand of a user of the handle as the handle is rotated and the end of the handle engages the palm of the hand.

2,743,750
FRUIT JUICER HAVING A CORING MEMBER AND ROTATABLE BLADES
George E. Wilson, Fort Lauderdale, Fla., assignor to Wilson Juicer Corporation, Fort Lauderdale, Fla., a corporation of Florida
Application August 7, 1953, Serial No. 372,880
1 Claim. (Cl. 146—3)

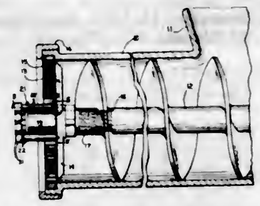


A fruit juicing machine comprising a base, a power member in said base having a vertical shaft, an upright cylindrical housing carried by said base, a tubular coring member fixed to said shaft coaxial of said housing, said coring member having a pair of diametrically disposed longitudinal openings, a cylindrical slide member telescoping in said housing, a pair of juice extracting blades rockably carried by said coring member, a blade operating lever carried by each blade and extending outwardly of an opening, a lower fruit seat fixed to said slide member, an upper fruit seat, means slidably supporting said upper seat on said slide member for vertical movement relative to the latter, a lever rocking means loosely engaging about said coring member, means dependingly and rotatably supporting said lever rocking means from said slide member, means for rotating said lever rocking means with said coring member, a core supporting plunger loose in said coring member, means dependingly carried by said plunger engageable with the inner portions of said levers for rocking said levers outwardly to blade retracting position upon upward movement of said slide member, means for moving said plunger upwardly with upward movement of said slide member, resilient means constantly biasing said housing and said slide member for movement away from each other, and a juice delivery spout carried by said housing.

2,743,751
BEARING STRUCTURE FOR THE SHAFT OF A FEED SCREW OF A MEAT GRINDING MACHINE
John A. Klod, Chicago, Ill.
Application June 16, 1953, Serial No. 362,074
3 Claims. (Cl. 146—182)

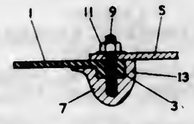
1. A bearing structure for the shaft of a feed screw of a meat grinder having a perforated plate through

which ground meat is forced by said feed screw and through an opening of which said shaft projects comprising a bearing cage for said shaft providing elongated



elements carried by and extending from said plate and embracing said shaft and disposed in spaced relation with respect to each other and each providing a bearing surface for said shaft.

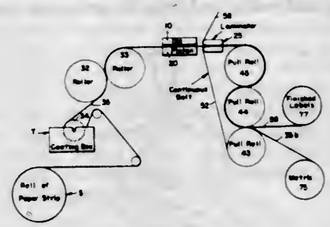
2,743,752
FLEXIBLE LIQUID CONTAINERS
Harvey Grinstead Hawkins, deceased, late of Tettenhall, Wolverhampton, England, by Eileen Jenny Hawkins, administratrix, Wightwick, Wolverhampton, and Thomas Trevor Tudge, Tettenhall, Wolverhampton, England, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain
Application January 11, 1954, Serial No. 403,252
Claims priority, application Great Britain November 22, 1950
2 Claims. (Cl. 150—8)



1. A fluid tight closure between an ancillary rigid fitting and the apertured wall of a flexible container for liquid which comprises a thickened resilient rim adjacent the edge of the aperture integral with the resilient wall of the flexible container, a rigid member clampingly engaging said fitting, the clamping surfaces of the member and the fitting being substantially complementary in shape to the external surface configurations of the thickened rim in contact with the clamping surfaces so that the clamping surfaces will engage the thickened rim about substantially all of its external surface with the exception of that portion of the thickened rim which is integral with the wall of the container, said clamping member and said fitting being clamped together to place the thickened rim under compression, and means being provided for limiting the compression of the thickened rim by the clamping member and the fitting.

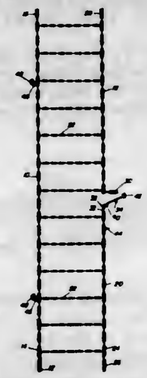
2,743,753
APPARATUS FOR MAKING PRESSURE SENSITIVE LABELS
Eliot D. Graves, Pasadena, and Murray McDougal, Glendale, Calif., assignors to Contact Products, Inc., Pasadena, Calif., a corporation of California
Original application September 20, 1946, Serial No. 698,376. Divided and this application March 20, 1950, Serial No. 150,622
5 Claims. (Cl. 154—1)

1. In apparatus for cutting labels from an elongated label forming strip and adhering them to an elongated label backing sheet, a platen, a label cutting die disposed over and mounted for movement relative to the platen, a laminating element, strip moving means for moving the backing strip through the laminating element, said latter means also being operable to move the label forming strip between the platen and die with the adhesive coated surface of the latter strip disposed towards the die and thence through the laminating element to cause the label forming strip to adhere to the backing strip, and means for stripping the matrix portion of the label forming strip surrounding the cut labels from the backing strip after said strips have passed through said laminating element; said label forming die comprising separate sets of



cutting blades, the first set defining the end portions of a label outline and the second set being spaced from the first set and defining the remainder of the label outline; said second set of blades being positioned to engage the label forming strip only after the leading end portion of the label to be finally cut thereby has become adhered to the backing sheet in said laminating element.

2,743,754
TIRE CHAINS
Gordon A. Maresh, Eau Claire, Wis.
Application June 5, 1953, Serial No. 359,906
3 Claims. (Cl. 152—213)

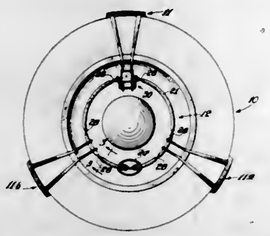


1. A tire chain comprising a first circumferential chain having releasable end couplings, a second circumferential chain of two sections having spaced inner adjacent ends, cross-chains connecting the two sections to the first chain, said pair of sections having outer ends, and means for coupling the outer ends of said pair of sections together, releasable coupling means between the inner adjacent ends of said pair of sections, and swivels carried by said first chain adjacent the ends thereof whereby the first chain may be engaged by hand'e means for positioning the first chain over and behind a tire.

2,743,755
TRACTION DEVICE FOR VEHICLE WHEELS
Robert H. Fullerton, Newton, N. J., assignor to August Heinle, Dover, N. J.
Application September 21, 1953, Serial No. 381,282
4 Claims. (Cl. 152—219)

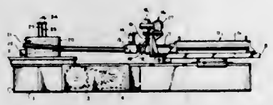
1. A traction device for removable mounting on the tire of a vehicle wheel; said device comprising several

traction elements each adapted to embrace the periphery of the tire, a common split locking ring disposed at the outside of the vehicle wheel and having its ends oppositely threaded, a turnbuckle including connected together, oppositely coiled springs threaded on said ends of the split ring, a locking link pivotally connected between said ring and one of said traction elements for radially releasing and drawing in said one traction element relative to said ring, and means securing the others of said traction



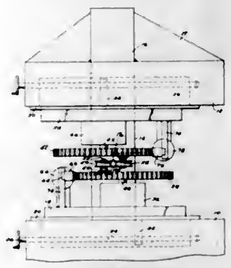
elements to said ring so that, after said one traction element has been radially drawn in by said locking link to hold said traction elements on the periphery of the tire, said turnbuckle provides for further tightening of the traction elements on the tire and forms a resilient coupling between said ends of the split locking rings, whereby such further tightening urges the traction elements against the tire with an adjustably yieldable force to prevent damage to the tire.

2,743,756
METHOD OF FORMING STRIP METAL STOCK INTO SHAPES FOR MAKING ANNULAR MEMBERS
Joseph A. Fredericks, Parma, Ohio, assignor to The Cyril Bath Company, Cleveland, Ohio, a corporation of Ohio
Application July 20, 1953, Serial No. 368,879
2 Claims. (Cl. 153—40)



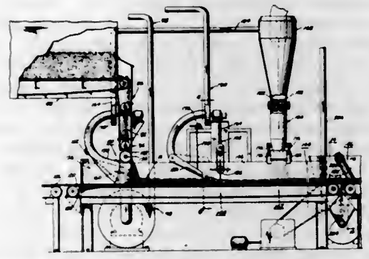
1. The method of forming strip metal stock into spiral shape comprising laying a length of strip metal stock, progressively from one end of the length to the other end of the length, generally flatwise against a spiral forming surface while exerting an endwise pull on the length of stock at said other end so as to stretch form the length of stock against said surface, concurrently wipe forming the length of stock against said surface and, during the forming operations, maintaining the line of pull on the unwrapped portion of the length of stock deflected generally edgewise of the stock from the slope line of the trailing portion of the spiral surface at the instantaneous point of tangency in a direction toward the level of said one end sufficiently to provide a uniformly distributed internal stress in the spirally formed strip operative to urge the strip to twist slightly throughout its length in a direction to cause the ends of the spirally formed portion to swing toward each other endwise of the spiral, controlling the amount of said deflection and thereby said internal stress so that the internal stress is just sufficient so that, if the end portions of the stock are cut off so as to relieve a single complete spiral turn, the severed ends of said complete turn will be caused to swing by said internal stress into alignment with each other in a direction circumferentially of the spiral.

2,743,757
BENDING APPARATUS
Henry L. Terwilliger, Detroit, Mich., assignor to Calumet and Hecla, Inc., Calumet, Mich., a corporation of Michigan
Application December 13, 1954, Serial No. 474,840
14 Claims. (Cl. 153—46)



1. Bending apparatus comprising a pair of roller carriers, means mounting said roller carriers for rotation from a rest position about spaced parallel axes, a roller on each of said carriers, said rollers having their axes parallel to each other and to the axes of rotation of said carriers, each of said rollers being located eccentrically of its own carrier but with its axis coincident with the axis of rotation of the other carrier when said carriers are in rest position.

2,743,758
FIBER MAT FORMING APPARATUS AND METHODS
Curt Uschmann, Lebanon, Oreg., assignor to Cascades Plywood Corporation, Portland, Oreg., a corporation of Delaware
Application November 13, 1950, Serial No. 195,267
23 Claims. (Cl. 154—1)



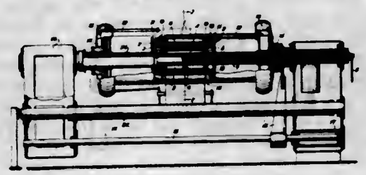
1. Apparatus for forming a mat from fibrous material including a substantial proportion of relatively fine dust fibers interspersed among relatively coarse and heavy body fibers, said apparatus comprising a generally horizontal collecting surface, fiber dispersing means operatively disposed above said collecting surface and operable to shower fibrous material thereon in a steady stream of intermingled dust fibers and body fibers, conveyor means operable to effect relative progressive movement between said collecting surface and said dispensing means, edgewise of said surface, air-moving means mounted directly above said collecting surface generally adjacent to said dispersing means and directed at the fiber stream emanating therefrom generally crosswise thereof, said air-moving means being operable to create airflow having a carrying force sufficient to deflect a substantial proportion of the fine dust fibers from the course of said stream to a course of fall offset therefrom, thereby to deposit superposed fine dust fiber and coarse body fiber layers on the moving collecting surface.

2,743,759
METHOD OF MAKING A CORRUGATED FABRIC DUCT
Jack Norman Snow, Downey, Fred Alton Greenwald, South Gate, and William Charles Ticknor, Whittier, Calif., assignors, by mesne assignments, to National Motor Bearing Co., Inc., Redwood City, Calif., a corporation of California
Application November 1, 1954, Serial No. 466,012
17 Claims. (Cl. 154—8)



1. The method of making flexible corrugated fabric ducts comprising the following steps: forming a generally cylindrical tube by spirally wrapping a rectangularly-woven elastomer-impregnated fabric on a rigid generally cylindrical mandrel; spirally winding a non-expansible filament around the fabric at a substantially constant pitch and securing the ends of said filament to said tube so as to prevent displacement thereof relative to said tube; introducing gas under pressure between said fabric tube and said mandrel to loosen said tube from said mandrel and to force out away from said mandrel the portions of said tube that lie between successive turns of said filament; moving one end of said tube longitudinally toward its other end to produce a substantially uniform spiral corrugation in said fabric with the filament lying in the trough thereof; and curing the elastomer in the corrugated tube.

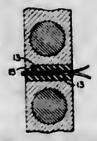
2,743,760
METHOD AND APPARATUS FOR BUILDING TIRE CASINGS
Richard Beckadolph and Walter Niclas, Hannover, Germany, assignors to Firma Continental Gummi-Werke, A.-G., Hannover, Germany
Application March 5, 1953, Serial No. 340,544
9 Claims. (Cl. 154—9)



1. An apparatus for use in the building of tire casings comprising a segmented tire building drum, annular means adjacent the ends of said drum for receiving the portion of fabric underlying the bead cores and said cores; means for increasing the diameter of said main drum; axially movable and radially expansible segmented auxiliary drums at opposite ends of said main tire building drum and mounted coaxially therewith; means for expanding the diameter of said auxiliary drums beyond the maximum diameter of said main drum; means for reducing the diameter of said auxiliary drums, when expanded, to that of said main drum; means for telescoping at least one at a time of said auxiliary drums being expanded to a diameter beyond the maximum diameter of said main drum over said main drum; means for withdrawing said auxiliary drums from said main drum; and means for reducing the diameter of said main drum, when expanded, to its initial size.

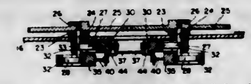
6. The method of building a pneumatic tire casing in a tire building apparatus comprising wrapping a tire fabric with its central portion around a main tire building drum and its marginal portions around auxiliary drums coaxially arranged on opposite ends of said main tire building drum, placing prefabricated bead cores about said main tire building drum on said tire fabric adjacent the ends of said main tire building drum, expanding the main tire building drum radially into tight engagement with said fabric and cores, expanding one of said auxiliary drums radially beyond the radial diameter of the tire building drum, axially telescoping one of said expanded auxiliary drums over said main tire building drum, thereby folding one marginal portion of said fabric over the core adjacent said expanded auxiliary drum and over the central portion of said fabric, withdrawing said expanded auxiliary drum and expanding the other auxiliary drum, axially telescoping said other expanded auxiliary drum over said tire building drum, thereby folding the other marginal portion of said tire fabric over the second core adjacent said other auxiliary drum and over the central portion of said tire fabric on said tire building drum, withdrawing said other expanded auxiliary drum and removing the completely built tire from the tire building drum.

2,743,761
HEAT SEALER
James E. Snyder, Akron, Ohio, and Clarence M. Carson, Lakeland, Fla., assignors, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio
Application October 20, 1953, Serial No. 387,238
5 Claims. (Cl. 154—42)



1. A heat-sealing device which includes a jaw of heat-conducting metal with means for supplying heat thereto, with the pressure surface of the jaw covered, at least in part with heat-conducting resilient material which is an integral part of the jaw, said heat-conducting resilient material having a heat transfer rate of at least 1.40 B. t. u./hour/square foot/degree F./inch.

2,743,762
HEAT SEALING MACHINE
Herbert L. Reitzes, Los Angeles, Calif., assignor to Globe Products-Heat Seal Corporation, a corporation of California
Application May 25, 1953, Serial No. 357,052
11 Claims. (Cl. 154—42)

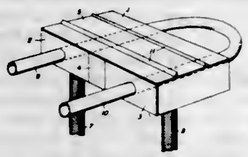


1. In means for conveying an article in a given direction, a first pair of opposed transfer bars, a second pair of opposed transfer bars, means supporting the bars of each pair for longitudinal movement in one direction in engagement with each other and for movement in an opposite direction out of engagement with each other, said pairs of bars being adjacently disposed at the same region along the path of travel of the article, means synchronizing said pairs of bars to move oppositely to each other, and actuating means for moving said bars.

2,743,763
APPARATUS FOR JOINING THE ENDS OF MAGNETIC SOUND TAPE
Hugo Westerkamp, Koeln-Poll, Germany
Application May 13, 1953, Serial No. 354,728
5 Claims. (Cl. 154—42)

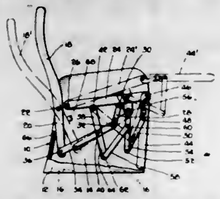
1. Apparatus for joining the ends of magnetic sound tapes, comprising a press having a press die and a table

consisting of a flat, smooth metal plate, two bus bars for high current supporting said plate at two ends and an insulating block mounted between the bus bars, the central



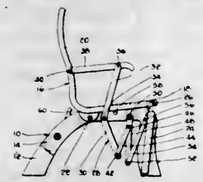
portion of the table located beneath the die resting upon said block, said plate being provided with lateral bearing surfaces for the alignment of the side edges of the tape ends to be joined.

2,743,764
ARTICLE OF REPOSE FOR SUPPORTING THE BODY OF A PERSON
Anton Lorenz, Buffalo, N. Y.
Application October 22, 1952, Serial No. 316,276
14 Claims. (Cl. 155—106)



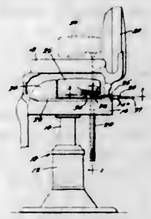
1. An article of repose for supporting the body of a person, comprising: a support, a structure including a movable seat, a movable back-rest and means coordinating the movements of said seat with movements of said back-rest, said structure being rockably mounted on said support and being part of a constrained linkage having a plurality of movable links and at least one stationary link, said stationary link being included in said support, the other part of said constrained linkage comprising a leg-rest swingably mounted on the front portion of said seat, a controlling arm pivoted to said movable seat, a controlling bar pivoted at different regions thereof to said controlling arm and to a member of said structure other than said seat, the pivotal connection between said controlling bar and said controlling arm being below the pivotal connection between said controlling arm and said seat, and means interposed between said controlling arm and said leg-rest for effecting movement of the latter in coordination with said controlling arm.

2,743,765
RECLINING ARTICLE OF FURNITURE
Anton Lorenz, Buffalo, N. Y.
Application January 21, 1953, Serial No. 332,376
17 Claims. (Cl. 155—106)



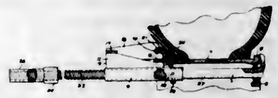
1. An article of repose for supporting the body of a person, comprising: a support, a structure including a seat, a back-rest member, said back-rest member and said seat being interconnected for controlling movements in dependence on each other, said structure being swingably mounted on said support, a leg-rest swingably mounted on the front portion of said seat, a guiding element pivoted to said support, means between said guiding element and a member of said structure for effecting movements of said guiding element in coordination with said member of the structure, a controlling arm pivoted to said support, a controlling bar pivoted at one of its ends to said controlling arm, the other end of said controlling bar being pivoted to said guiding element, and means interposed between said controlling arm and said leg-rest for effecting movement of the latter in coordination with said controlling arm.

2,743,766
AUXILIARY SEAT FOR BARBER CHAIRS
John Bartman, Sterling, Kans.
Application February 26, 1954, Serial No. 412,822
1 Claim. (Cl. 155—132)



In a barber's chair having a transversely divided seat one section of which may be elevated to provide a seat for a child, the combination of a pair of spaced parallel downwardly extending rods for said one section, a parallel series of forwardly facing equally spaced transverse notches on said rods, downwardly extending tubes to receive the lower ends of said rods, coil springs within said tubes biasing said rods towards upward movement to raise said one section, a transversely movable latch bar forwardly of said bars engageable with a selected horizontal pair of said notches to restrain said rods against movement within said tubes and spring means for biasing said latch rearwardly for engagement with said rod notches, said latch bar including a rearwardly extending operating arm provided with a knee engaging yoke whereby forward pressure of a knee against said yoke and the tension of its spring means will disengage said latch from said notches to permit movement of said one section.

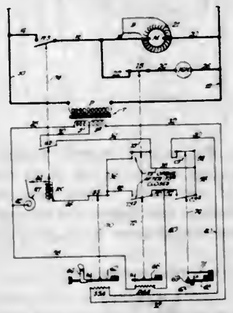
2,743,767
RIM CLAMP AND JACK DEVICE FOR TIRE TOOLS
Claude W. Martin, Gold Hills, Oreg.
Application January 2, 1952, Serial No. 264,542
5 Claims. (Cl. 157—1)



5. A leverage jack for tire removing tools comprising a bar, a jaw on one end of the bar adapted to engage the outer periphery on one side of a wheel rim, a jaw device slidable on said bar and adapted to engage the outer periphery of the other side of said wheel rim, releasable means to clamp said jaws against said opposite sides of the wheel rim and to hold the same in place, said movable jaw device including a pair of spaced bars transverse with respect to said first bar, the transverse bar nearer the free end of the first named bar being arcuate with its concave side facing said first named bar, a pair of clamping plates on the ends of said transverse bars extending generally parallel with and on opposite sides of said first bar, each

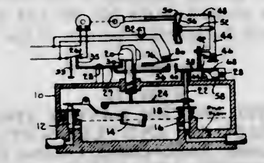
of said plates having a socket on the end thereof facing toward the first named jaw for engagement with the wheel rim, the spacing between said sockets and said arcuate transverse bar being sufficient for the insertion of the leverage member of a tire removing tool therebetween, the inside edge of said arcuate bar providing a leverage abutment for said tool.

2,743,768
OIL BURNER SAFETY CONTROL
Paul Schell, Elkhart, Ind., assignor to Penn Controls, Inc., Goshen, Ind., a corporation of Indiana
Application December 13, 1952, Serial No. 325,797
7 Claims. (Cl. 158—28)



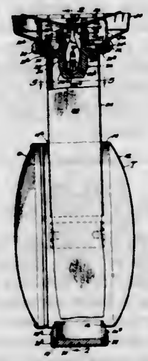
1. In an oil burner control mechanism to control a burner motor and its ignition means in response to a call for heat by a room thermostat; said burner control mechanism comprising a primary circuit, a transformer connected therewith and having a secondary provided with a center tap, a room thermostat switch, an initial room thermostat circuit connected across said secondary and controlled by said room thermostat switch, a main switch, burner motor and ignition circuits controlled thereby, a relay coil in said initial room thermostat circuit for closing said main switch and operable upon energization by closure of said room thermostat switch to initiate operation of the burner motor and its ignition mechanism, a delayed safety switch actuator and combustion switch contacts in said initial room thermostat circuit, said combustion switch contacts being closed in the absence and opened in the presence of combustion, a safety switch in said initial room thermostat circuit normally closed but opened by said safety switch actuator upon energization thereof for a predetermined period of time, holding contacts closed as a result of energization of said relay coil and connected to said initial room thermostat circuit at a junction between said relay coil and said combustion switch contacts and with said center tap of said transformer to reduce energization of said relay coil, said room thermostat switch and safety switch being located in said initial circuit on the coil side of said junction and said safety switch actuator being located in said initial circuit on the other side of said junction, a normally open combustion switch which is closed in the presence of combustion, a pair of transfer switches for transferring the circuit from said room thermostat switch to said holding switch through said normally open combustion switch whereby opening thereof due to combustion failure will break the relay holding circuit, one of said transfer switches being normally closed and in said initial room thermostat circuit on the coil side of said junction, the other of said transfer switches being normally open and in a circuit with said normally open combustion switch which circuit shunts said normally closed transfer switch, and a circuit including a delayed action actuator for said transfer switches, the circuit of said delayed action actuator being from one side of said secondary and through said normally open combustion switch and said holding switch to said center tap of said secondary and being energized by closure of said normally open combustion switch.

2,743,769
FUEL AND AIR SUPPLY CONTROL FOR BURNERS
Roy W. Johnson, William A. Biermann, and Stanley E. Burghduff, Milwaukee, Wis., assignors to A-P Controls Corporation, Milwaukee, Wis., a corporation of Wisconsin
Application June 14, 1954, Serial No. 436,486
7 Claims. (Cl. 158—28)



1. An air and fuel supply controlling system comprising, a fan for supplying combustion air to a burner, a valve housing, a valve in said housing adapted to control flow of fuel from the housing to a burner, manually operable means operatively connected to said valve for regulating the valve to provide various flow rates, a switch wired in circuit with the fan, means operatively connecting the manual means and the switch to close the switch at all flow rates above a predetermined flow rate and to open the switch when the manual means is actuated to decrease the flow rate below the predetermined rate, means operatively connected to the valve and operable to hold the valve closed independently of the manual means in one position and movable to another position in which it does not affect the valve, means biasing said holding means to said one position, and means connected to said holding means and operable in opposition to said biasing means to move the holding means to said another position in response to air pressure on the delivery side of the fan.

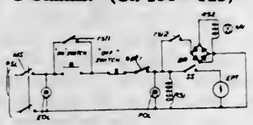
2,743,770
FUEL BURNER VALVE AND CLEANER CONSTRUCTION
Carl Bramming, Anderson, Ind., assignor to Aladdin Industries, Incorporated, Nashville, Tenn., a corporation of Illinois
Application August 17, 1950, Serial No. 180,063
3 Claims. (Cl. 158—120)



1. In a burner for liquid fuel, the improvement comprising a housing defining a chamber with a pair of oppositely disposed aligned orifices through which fuel is discharged, a reciprocating carriage having a pair of oppositely directed pricker pins alternately operable

to enter the orifices as the carriage is moved between extreme positions and in the intermediate position being withdrawn from the orifices, a fuel intake port in the housing and having an axis oriented transversely to the direction of motion of the member, a valve extending within the chamber and adapted in the closed position to seat against the intake port, screw means associated with the valve operable to shift the same toward and away from the intake port upon many rotations thereof, the valve having an eccentric portion within the confines of the chamber, a pin extending across the chamber in generally parallel relation to the valve, and a link having a head portion received in the carriage and a forked portion pivoted on the last pin and in straddling engagement with the eccentric portion of the valve.

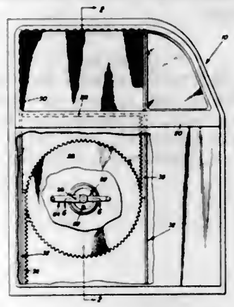
2,743,771
GAS BURNER SYSTEM HAVING TIME CONTROLLED AIR AND FUEL SUPPLY
Christopher Erskine Eadon-Clarke, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application September 18, 1951, Serial No. 247,173
Claims priority, application Great Britain September 22, 1950
2 Claims. (Cl. 158—123)



1. Heating equipment for metal working comprising a gas burner, a low pressure gas source, a relatively high pressure compressed air source, an injector for mixing said gas and air having a separate air inlet, a separate gas inlet and common outlet for the mixture, a pipeline connecting said air source to said air inlet, a pipeline connecting said gas source to said gas inlet and a pipline connecting said outlet to said burner, said air inlet and said common outlet forming two parts of a Venturi tube so arranged within the body of said injector that fast moving air passing from one part of the Venturi tube to the other draws gas into the injector and imparts thereto a pressure greater than that at which said gas is supplied from the gas source, a shut-off valve in said pipeline connecting said air source to said inlet, a switch having circuit closing contacts, electromagnetic means for actuating said shut-off valve, electrically operated timing means, contacts operated by said timing means, a circuit for said timing means including said switch contacts, a circuit for controlling the energization of said electro-magnetic means including said switch contacts and the contacts operated by said timing means, and an adjustable valve in said pipeline connecting said gas source to said gas inlet for providing a pilot flame for said burner when said shut-off valve is closed.

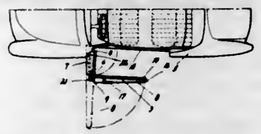
2,743,772
COMBINED VEHICLE WINDOW GLASS AND SCREEN
Effie M. Peck, Attleboro, Mass.
Application March 31, 1953, Serial No. 345,791
1 Claim. (Cl. 160—103)

In a vehicle having a door provided with a window opening and a compartment, a window panel and a screen panel, parallel to each other and movable out of and into said compartment into and from closing relation to said opening, means for moving said window panel into opening position and the screen panel into closing relation comprising a drive shaft in said compartment extending out of said door, and having a drive pinion fast thereon for moving said window panel, a rotary sleeve on said shaft extending out of said door, a drive pinion on said sleeve and in said compartment for moving said screen panel, said sleeve being slidable in opposite directions on said shaft into two positions, clutch members on said pinions engaged and disengaged by sliding of said sleeve into said two positions and drivingly connecting the first



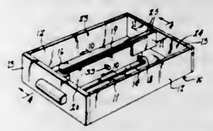
named pinion to the second named pinion when said members are engaged, an operating hand crank on said shaft outwardly of said door, a lever fixed on said shaft outwardly of said door for sliding the sleeve, and means for locking the lever to the door in either position of said sleeve.

2,743,773
TWO-DOOR AUTOMOBILE WITH FOLDING DOORS
Axel Hugo Welertz, Malmo, Sweden
Application February 23, 1954, Serial No. 412,009
Claims priority, application Sweden March 18, 1953
4 Claims. (Cl. 160—213)



1. The combination comprising an autocar body having on each side a single door opening outwards and comprising a front portion hinged at its front edge to said car body and a rear portion hinged at its front edge to the rear edge of said front portion, said rear portion of said door being of greater width than said front portion, and means comprising a link rod connecting a fixed point on said rear portion of said door to a fixed point on said car body and forming together with said car body and said door portions and their respective hinges a parallelogram having the meeting ends of its sides articulated to one another at said points and at points on the axes of said hinges for imparting parallel motion to said relatively wider rear portion of said door in relation to said car body when opening and closing said door.

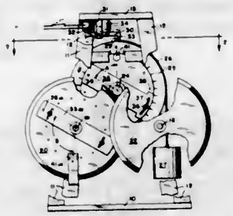
2,743,774
EXTENSIBLE PARTITIONS FOR DRAWERS AND THE LIKE
Violet Pinto, Bronx, N. Y.
Application July 27, 1953, Serial No. 370,392
2 Claims. (Cl. 160—351)



1. A drawer partition comprising a flat base having a groove extending along the center thereof, an upright

channeled post on said base at one end of said groove, spaced guide members on the base at the other end of said groove, a pair of contiguous slats seated in said groove and constituting a partition wall, the ends of said slats being disposed in the channel in said post and in the space between said guide members.

2,743,775
GRAVITY ACTUATED DELAY TIMER
Orson L. Mitchell, Inyokern, Calif.
Application January 23, 1953, Serial No. 333,021
7 Claims. (Cl. 161—1)
(Granted under Title 35, U. S. Code (1952), sec. 266)



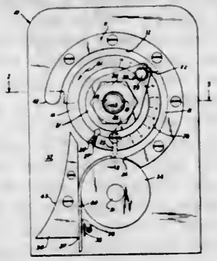
1. A timing device comprising a shaft, a flywheel affixed to the shaft, pairs of spaced rotatably supported disks disposed at opposite sides of the flywheel, each pair frictionally engaging the shaft and supporting same for rotation thereon, the disks being rotatable in response to rotation of the flywheel and shaft, at an angular velocity less than that of the shaft, a flexible member trained about the periphery of the flywheel having one end detachably connected to the flywheel, a weight suspended by the other end of the flexible member, an arresting platform adapted to arrest movement of the weight as it descends in response to gravitational force, latching means for latching the flywheel against rotation with the weight disposed above the platform, means for releasing the latching means to permit the weight to angularly accelerate the flywheel as the weight descends toward the platform, the first named end of the flexible member being detachable from the flywheel in response to engagement of the weight with the platform, whereby the flywheel may thereafter spin with the energy imparted thereto by the weight, and angularly movable electric switch actuator means driven at a desired angular velocity relative to the angular velocity of the flywheel adapted to actuate an electric switch at a predetermined time interval after actuation of the means for releasing the latching means.

2,743,776
BIAS-CUTTING MACHINE
David N. Judelson, New York, N. Y.
Application June 13, 1955, Serial No. 515,134
14 Claims. (Cl. 164—61)



2. A bias-cutting machine comprising a relatively flat mandrel, a cutter rotatable about an axis and disposed at one side and angularly of said mandrel, and windup mechanisms for pulling a tube of material over said relatively flat mandrel and past said cutter, said windup mechanisms including a pulling roller journaled for rotation about an axis spaced above said mandrel and in end to end alignment with the axis of said cutter.

2,743,777
APPARATUS FOR CUTTING A STRIP INTO PORTIONS OF A PREDETERMINED LENGTH
Maurice M. Balsam, New York, N. Y.
Application March 9, 1953, Serial No. 341,196
3 Claims. (Cl. 164—68)

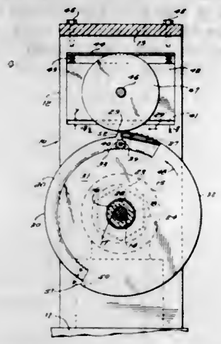


1. Strip cutting apparatus comprising, in combination, support means having an arcuate substantially continuous surface located at a predetermined radial distance from a predetermined axis; a disc having a radius smaller than said radial distance and being turnably mounted at its center on said support means for rotation about said axis so as to provide an arcuate space between said disc and arcuate surface; turning means connected to said disc for rotating the same about said axis; a moving member fixed to said disc for turning movement therewith and extending from said disc into said arcuate space to engage a strip at a predetermined part of said arcuate surface and move the strip along said arcuate surface upon rotation of said disc; a cutting blade also fixed to said disc for rotation therewith and also extending into said arcuate space toward said arcuate surface, said cutting blade being located at a predetermined angular distance from said moving member so as to arrive and cut the strip at said part of said surface after said moving member has moved a predetermined distance beyond said part of said surface; and adjusting means connected to said moving member for adjusting the angular distance between the same and said cutting blade, said adjusting means being in the form of a plate carrying said moving member and being releasably connected to said disc for adjustable movement about said axis so as to adjust the position of said moving member with respect to said cutting blade.

2,743,778
ADJUSTABLE BAND CUTTING APPARATUS
Maurice M. Balsam, New York, N. Y.
Application November 12, 1952, Serial No. 320,043
4 Claims. (Cl. 164—201)

1. Roller apparatus for use with a device for cutting bands of predetermined, adjustable lengths from a continuous strip, said roller apparatus comprising, in combination, a hollow sleeve having a central axis; a pair of discs each having a central axis coincident with said sleeve axis and each being fixed to said sleeve, said discs being spaced from each other and each having a first arcuate peripheral portion located at a greater radial distance from said sleeve axis than a second peripheral portion extending between the ends of said first peripheral portion, and said first and second peripheral portions of said discs being located opposite and in alignment with each other; a plate located between said discs and being turnably mounted on said sleeve for movement about said axis thereof, said plate having a first arcuate peripheral portion located at the same radial distance from said sleeve axis as said first peripheral portions of said discs, and said plate having a

second, toothed, arcuate peripheral portion located at a smaller radial distance from said sleeve axis than said first peripheral portion of said plate; a pinion turnably mounted on one of said discs and being located between said discs and in mesh with said toothed peripheral portion of said plate; manual turning means operatively connected



to said pinion for turning the same to locate said first peripheral portion of said plate in overlapping relation with and at a predetermined distance beyond one end of said first peripheral portion of said discs; and cutting means bridging the distance between said discs and being fixed to said first peripheral portions of the latter adjacent an end opposite said one end thereof.

2,743,779
METHOD OF CEMENTING WELLS
Cicero C. Brown, Houston, Tex.
Application April 28, 1951, Serial No. 223,630
8 Claims. (Cl. 166—21)

1. The method of forming a cement plug for sealing off a sub-surface formation within a well bore having a standing fluid column therein including, introducing cement into the well bore below the formation and directing said cement into the sub-surface formation surrounding the bore, then reducing the pressure of the standing fluid column on the cement by lifting a portion of the fluid column above the cement upwardly within the well bore to permit the formation pressure to partially displace the cement back toward the well bore to consolidate the cement into a solid plug, and thereafter maintaining the pressure conditions of the formation and the remainder of the fluid column in equilibrium and constant until the cement has set.

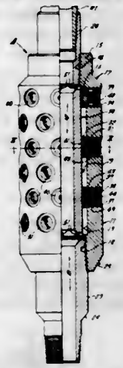
2,743,780
WELL PACKERS
Cicero C. Brown, Houston, Tex.
Application February 20, 1950, Serial No. 145,252
15 Claims. (Cl. 166—120)

1. A well packer including, a tubular support adapted to be lowered within a well casing, an anchoring assembly slidably mounted on said support and including a slip carrying sleeve, casing gripping slips laterally slidable in said sleeve, and a slip expanded slidable on said support and relative to said sleeve to expand said slips, connecting means releasably connecting said support to said sleeve for holding said sleeve against longitudinal movement on said support, means on said sleeve for holding it stationary in said casing, means for holding said expander against movement toward said slips during the lowering of the packer into the well casing whereby said anchoring slips are prevented from moving into gripping position with the well casing while said support and anchoring assembly are connected, release of said connecting means permitting a longitudinal movement of said support relative to said sleeve and also permitting relative movement of said slips and said expander into engagement with each other for moving said slips into gripping engagement with the well casing, an annular radially expansible seal member having connection with said slip carrying sleeve and movable longitudinally therewith, said holding means for said slip expander comprising an annular radially expansible seal member having connection with said slip expander and movable longitudinally therewith, said



seal members being sealingly engageable with the support and the well casing within which the support and the assembly are lowered, and means on the support adapted to engage and coact with the bores of the seal members to impart a radially outward movement to said members when the support is moved longitudinally of the anchoring assembly and members, whereby efficient sealing engagement between the members and the well casing and support is assured.

2,743,781
HYDRAULIC ANCHOR TOOL
John J. Lane, Dallas, Tex., assignor to The Gulberson Corporation, Dallas, Tex., a corporation of Delaware
Application August 25, 1952, Serial No. 306,227
11 Claims. (Cl. 166—212)

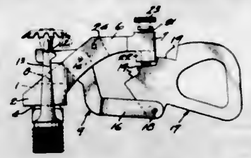


1. In a tool for anchoring pipe in a well, a hydraulic anchor tooth comprising: a cylindrical body; an annular shoulder on one end of the body; a beveled tooth portion on the other end of the body, said tooth portion being concave at its outer end.

2,743,782
RELEASABLE PLUG FOR AUTOMATIC SPRINKLERS
Cosimo L. Occhipinti, Redondo Beach, Calif.
Application November 12, 1954, Serial No. 468,417
8 Claims. (Cl. 169—39)

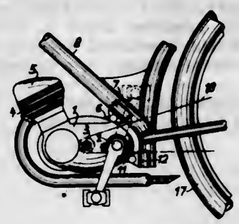
1. A plug device for fire extinguishing sprinklers having an outlet and a frame above and opposite said outlet

comprising a base adapted to cover the sprinkler outlet, a bearing element adapted to engage the sprinkler frame opposite said outlet, and means to adjustably connect said bearing element to said base for quick and firm locking



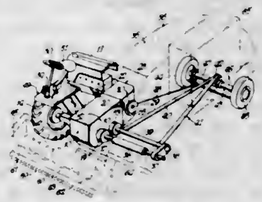
of the same in position on the sprinkler, said adjustable means including a pair of arms, said base being on one arm and said bearing element on the other arm, and a fusible pivot connecting said arms.

2,743,783
MOUNTING OF MOTOR CYCLE DRIVING UNIT
Alfred Kreidler, Stuttgart, Germany
Application December 10, 1951, Serial No. 260,834
Claims priority, application Germany December 18, 1950
7 Claims. (Cl. 180—33)



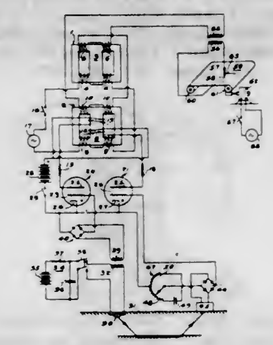
1. A motor cycle comprising in combination, a wheeled frame, a down tube forming part of said frame a rear wheel arranged in said frame, a driving unit separate from said frame comprising a motor, a chain sprocket and a pedal axle, a chain coupling said unit with said rear wheel and a pair of mounting supports fixed to said down tube, one of said supports being located in a plane above the horizontal plane containing said pedal axle, the other support being arranged at a lower level and nearer to the rear wheel than the first and in a vertical plane extending to the rear of said pedal axle, the two supports being so arranged as to be capable of taking up the moments arising around the longitudinal axis of the driving unit, those caused by the one-sided chain pull around a vertical axis and also the moments arising around the transverse axis of said driving unit.

2,743,784
IMPLEMENT CARRIER
Elof K. Karlsson, Moline, Ill., assignor to International Harvester Company, a corporation of New Jersey
Application June 12, 1953, Serial No. 361,123
1 Claim. (Cl. 180—53)



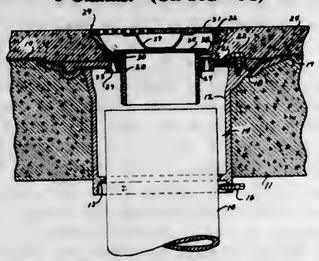
An implement carrier comprising a longitudinally extending differential housing, a short transverse axle projecting from one side of said differential housing, a first traction wheel mounted on said short axle and flanking that side of the differential housing, an extended transversely disposed axle on the other side of said differential housing and in axial alignment with said short axle, a second traction wheel mounted on said extended axle and spaced from said differential housing a greater distance than the spacing of the first traction wheel from said differential housing, a longitudinally extending frame structure journaled on said extended axle at one end and having a wheel support at the other end thereof, a transversely disposed engine carried on and at right angles to said differential housing at one thereof and longitudinally aligned with and spaced from the first traction wheel, a drive housing connecting the engine to the differential housing, a power take-off element in line with said engine and extending out from said drive housing opposite the joining to said engine, an operator's station mounted over the first traction wheel and supported on said differential housing, and engine and drive control means positioned on said operator's station whereby implements may be easily mounted on said implement carrier with good operator visibility and convenience of implement drive.

2,743,785
APPARATUS FOR MAKING SEISMIC SURVEYS
Frederick W. Lee, Owings Mills, Md.
Application August 20, 1951, Serial No. 242,775
4 Claims. (Cl. 181—.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)



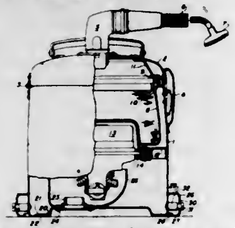
4. A system for recording the time interval between two events closely connected in point of time, one of which events is the operation of a device for producing seismic vibrations and the other of which events is the reception of said vibrations at a device for detecting seismic vibrations, transformer means having at least one primary winding, two secondary windings, and two oppositely wound independent saturation control windings, said primary winding being connected to a source of alternating potential, said secondary windings being connected in phase opposition and to an output means, a first input means connected to one of said saturation control windings and a second input means connected to the other of said saturation control windings whereby the first of said saturation control windings saturates said transformer means upon the occurrence of one of said events and the other of said saturation control windings cancels the saturated condition of said transformer means upon the occurrence of the other of said events, said output being connected to a marking means, one of said input means being connected to said device for producing seismic vibrations, and the other of said input means being connected to said device for detecting said seismic vibrations.

2,743,786
TESTING PLUG FOR FLOOR DRAIN
Lawrence N. Boosey, Talladega, Ala.
Application April 29, 1954, Serial No. 426,471
6 Claims. (Cl. 182—31)



5. In a floor drain, a drain pipe, a hub portion fitting over the drain pipe, a safety membrane or pan surrounding the hub portion and having a peripheral portion extending above the hub portion, a clamping ring cooperating with the hub portion to hold the safety membrane in place around the hub portion and having seepage holes opening into the hub, a strainer having a shank screwed into the clamping ring, a disintegrating gasket fitting about the shank and covering the seepage holes and against which the strainer is adapted to fit snugly, a perforate strainer cover, and a removable test plate fitting water tight between the cover and the body of the strainer.

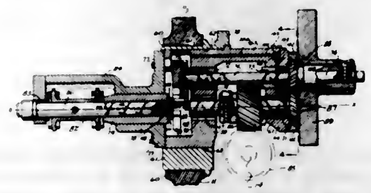
2,743,787
AIR SUPPORTED CLEANER WITH DIFFUSER
Werner G. Seck, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application April 7, 1954, Serial No. 421,493
12 Claims. (Cl. 183—37)



9. In a suction cleaner comprising a casing, a filter in the casing, an air inlet in the casing, an air exhaust port on the underside of the casing and a motor fan unit arranged to draw air through the air inlet and filter and to discharge such air under pressure from the casing through the air exhaust port, the combination of a supporting structure on the casing comprising an annular barrier projecting below the casing around the exhaust port enclosing an area on the underside of the casing to define an air cushion forming chamber between the underside of the casing and a supporting surface, a deflector associated with the barrier in spaced relation thereto to form an annular upwardly directed air exhaust throat around the barrier, and means floatingly mounting the deflector on the casing.

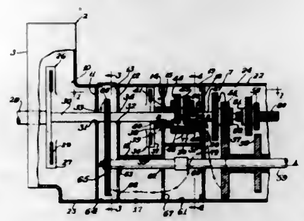
2,743,788
AUTOMATIC LUBRICATING SYSTEMS FOR SHAFTS
Willy Borberg, North White Plains, N. Y., assignor to International Projector Corporation, Bloomfield, N. J., a corporation of Delaware
Original application November 25, 1949, Serial No. 129,315, now Patent No. 2,689,021, dated September 14, 1954. Divided and this application June 20, 1952, Serial No. 294,540
10 Claims. (Cl. 184—6)

1. In a lubricating system, the combination with a shaft, having means formed interiorly thereof to draw lubricant from a supply and discharge it at the periphery of the shaft at a point remote from the supply; and means formed peripherally of the shaft to return the lubricant towards the supply; of a collecting means comprising a groove



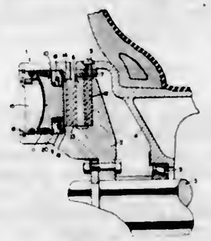
formed circumferentially of the shaft; a collar rotatable with the shaft, said collar having a radial jet opening communicating with the lubricant collecting groove to draw the lubricant therefrom and return it to the supply.

2,743,789
LUBRICATION SYSTEM FOR TRACTOR CHANGE-SPEED GEAR TRANSMISSION
Henry A. Ferguson, Lombard, Ralph C. Boyle, Chicago, and Joseph F. Ziskal, Brookfield, Ill., assignors to International Harvester Company, a corporation of New Jersey
Application August 13, 1953, Serial No. 373,946
20 Claims. (Cl. 184—11)



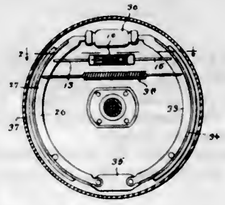
1. In a transmission oiling system for a tractor comprising a longitudinal tubular housing, a plurality of transverse bulkheads within and spaced longitudinally of said housing and connected thereto and defining a plurality of compartments therein, power transmitting means in each compartment and comprising shaft means operatively interconnecting the same and extending through aligned apertures in the upper sections of said bulkheads, a countershaft extending through aligned apertures in said bulkheads at a level below said shaft means, meshing gear means on said shaft means and said countershaft in remotely disposed compartments, each compartment having a lower portion containing lubricant to a predetermined level, the intervening compartments between said remote compartments having apertures in the lower portions thereof affording communication therebetween and communicating with one of said remote compartments through an aperture in the lower portion of the bulkhead of said one remote compartment, said other remote compartment having a lubricant passage through the bulkhead separating it from the next adjacent compartment at a height above said predetermined level to prevent excessive transfer of all of the lubricant from one end of the housing to the other when the tractor is inclined to the horizontal, but accommodating transfer of lubricant between said one and communicating compartment, and said other compartments when the lubricant level exceeds a predetermined maximum.

2,743,790
BRAKE WITH SOFT STEEL RETURN SPRING
Carl E. Bricker, Akron, Ohio, assignor, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio
Application March 27, 1953, Serial No. 344,963
3 Claims. (Cl. 188—152)



1. Brake mechanism for applying a decelerating force to a rotatable braking surface, said mechanism comprising a block of material opposed to the rotatable surface and normally spaced therefrom, support means retaining said block against movement in the direction of rotation of said surface while permitting movement toward said surface, block-moving means for moving said block from a retracted position into frictional engagement with said rotating surface, said block having an expendible brake lining subjected to wear by such frictional engagement and thereby reducing the dimension of said block, and a metallic spring mounted between said support and said block in opposed compressed relation to said block-moving means and arranged to hold said block in its retracted position, with the lining out of engagement with said rotatable surface by a determinate space independent of such wear, said spring being of material having such elastic properties as to take permanent set when compressed by movement of said block toward said braking surface over a distance exceeding the determinate clearance space therebetween but to fully recover from compressive movement not exceeding such determinate clearance space.

2,743,791
DEVICE TO PREVENT OVER EXPANSION OF BRAKE SHOES IN HYDRAULIC BRAKE SYSTEMS
Omar Lee Asburry, Jr., Roanoke, Va.
Application November 6, 1952, Serial No. 319,121
3 Claims. (Cl. 188—78)



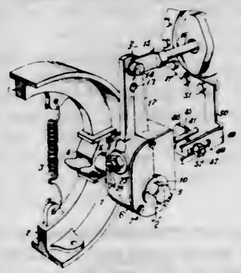
1. In a device for preventing the over expansion of the brake shoes in hydraulic brake systems, the combination which comprises an elongated bracket, a stationary anchor mounted in and extended from one end of said bracket, an adjustable anchor slidably mounted in and extended from the opposite end of the bracket, a spring connecting the adjustable anchor to the stationary anchor, a nut threaded on the adjustable anchor for limiting outward movement thereof from the bracket and pins on extended ends of the anchors for connecting the anchors to brake shoes in brake drums of brake systems.

2,743,792
ROTARY MOTION RESISTING DEVICE
Richard B. Ransom, South Bend, Ind.
Application October 11, 1951, Serial No. 250,917
8 Claims. (Cl. 188—90)



1. A rotary motion resisting device comprising a series of discs arranged in spaced face to face relationship, means interconnecting alternate ones of the discs for rotation together, means connecting the remaining discs for rotation together, grooves lying at an angle to radii therethrough on the faces of the discs with the grooves on adjacent faces of adjacent discs angling in opposite directions, and a liquid which will wet the surfaces of the discs filling the spaces between them to transmit torque between the discs.

2,743,793
DEVICE OR MECHANISM FOR AUTOMATICALLY OR MANUALLY ADJUSTING AUTOMOTIVE VEHICLE BRAKES
Kirkland B. MacDougall, Benton, Pa.
Application September 5, 1951, Serial No. 245,114
10 Claims. (Cl. 188—196)

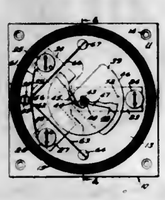


6. In a slack adjusting mechanism for mounting on a cam shaft, a casing, a worm gear within said casing adapted for turning with said cam shaft, a worm in said casing meshing with said worm gear, a ratchet associated with said worm and turning therewith, a pawl supported for rotation on the rotary axis of the ratchet and worm and operatively engaged with teeth of said ratchet, a lever arm constituting an operating element for oscillating said casing and for rocking the worm gear, and means for yieldably holding the pawl axially into gripping engagement with the teeth of the ratchet and thereby allowing movement of the pawl to adjusted positions relative to the ratchet when the pawl is turned in one direction.

2,743,794
UNIVERSAL MARINE ENGINE STARTER SWITCH
Charles M. Bowersmith, Oakland, Calif., assignor to Carl G. Day, Berkeley, Calif.
Application July 7, 1952, Serial No. 297,532
6 Claims. (Cl. 200—18)

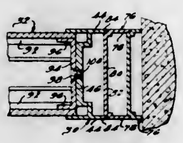
1. In an engine starter motor switch, in combination, a flat plate base panel of insulating material, a circular casing member attached to a surface of said panel and forming therewith a closed cylindrical cavity, a massive starter motor bar contact attached to said plate with-

in said cavity and provided with conductor connector means, a pair of battery terminal bar contacts attached to said panel and radially disposed with respect to a terminal portion of said starter motor contact, a massive rotatable quadrant contact pivotally mounted in contact with said terminal portion of the starter motor contact and adapted to engage inner terminal portions of said battery contacts with peripheral side portions thereof,



an auxiliary contact mounted along the longitudinal axis of said starter motor contact and between said battery contacts, a contact carried by each of said battery contacts and having a terminal portion adjacent said pin contact, and means actuated by said rotatable quadrant contact for causing selective engagement of said pin contact with one of said contacts carried by one of said battery contacts when said quadrant contact is in engagement with the other of said battery contacts.

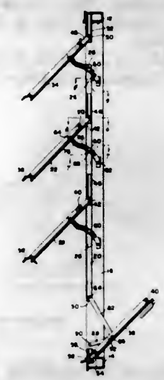
2,743,795
BATH ENCLOSURE
Samuel Taubman, Detroit, Mich.
Application July 21, 1950, Serial No. 175,107
2 Claims. (Cl. 189—46)



2. In a closure for a bath tub, shower or the like, having a wall channel member adapted to extend along a wall and having a portion disposed in spaced relation to the wall, a fill channel for filling the space between the wall and the wall channel member and adapted to nest with said wall channel, said fill channel having spaced parallel leg portions and a web portion integrally connecting said leg portions and offset relative thereto so that each leg portion is disposed wholly to one side of a plane including the inner face of the offset part of the web portion.

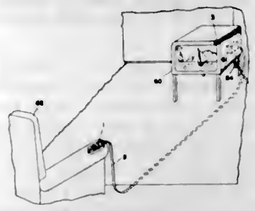
2,743,796
AWNING WINDOW STRUCTURE
Walter Focht, Jr., Willow Grove, John Gurniak, Philadelphia, and Leonard Starr, Elkins Park, Pa., assignors to Michael Flynn Manufacturing Company, Philadelphia, Pa., a corporation of Pennsylvania
Application December 1, 1953, Serial No. 395,506
16 Claims. (Cl. 189—67)

1. An awning window construction comprising a substantially rectangular frame having vertical side members, an elongated operating bar mounted for vertical sliding movement on and in the plane of each side member, means for raising and lowering said operating bars, vertically spaced ventilators, means slidably connecting the upper ends of said ventilators to said operating bars, brace bars terminally pivoted to said frame side members and to said ventilators intermediate the upper and lower ends thereof, and ventilator-actuating means slidably connecting said brace bars to said operating bars whereby



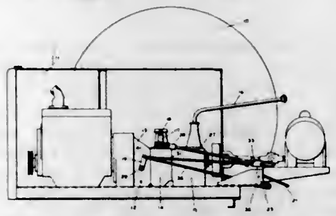
raising and lowering said operating bars will close and open said ventilators in unison.

2,743,797
ELECTRICALLY OPERATED REMOTE CONTROL SYSTEM
Ranald O. Whitaker, Perkasie, Pa.
Application June 3, 1955, Serial No. 513,103
12 Claims. (Cl. 192—.02)



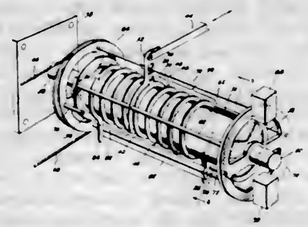
1. In an arrangement for remote operation of a device, a motor having a winding normally energized from an A. C. power line and a shading winding inductively coupled thereto, clutch means for mechanically coupling said device to said motor and including an actuating electromagnet, and a remote control switch operable to complete a circuit through said shading winding and said electromagnet to effect concurrent operation of said motor and energization of said clutch electromagnet by the induced current of said shading winding.

2,743,798
COMBINATION CLUTCH AND GEAR SHIFT CONTROL FOR MIXER UNITS
John H. Apel and Donn W. Duffey, Columbus, Ohio, assignors to The Jaeger Machine Company, Columbus, Ohio, a corporation of Ohio
Application February 15, 1955, Serial No. 488,226
15 Claims. (Cl. 192—3.5)



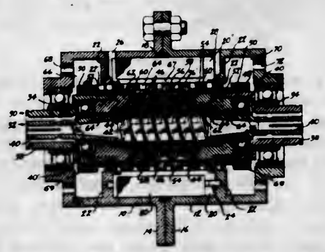
1. In combination with a mixer unit having a rotatable mixing drum, a driving transmission for the drum including a driving clutch unit which is normally engaged and a forward and reverse unit, a single operating lever, and mechanism for connecting said lever to said clutch unit and forward and reverse unit so that movement of the lever in either direction from normal clutch-engaged position disengages the clutch and actuates the forward and reverse unit to drive the drum in a selected direction, and means for automatically returning said lever to clutch-engaging position and re-engaging the clutch.

2,743,799
SELECTIVELY REVERSIBLE AND IRREVERSIBLE CONTROL MECHANISMS
Donald D. Maxson, Trenton, N. J., assignor to Chase Aircraft Company, Inc., West Trenton, N. J., a corporation of New York
Application October 16, 1951, Serial No. 251,600
10 Claims. (Cl. 192—8)



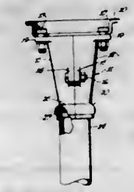
3. In a mechanical control system the combination comprising: a movable control surface subject to external loads; means for moving said surface to adjust its position; and means for selectively locking or unlocking the control surface in its adjusted position against movement by external loads while constantly permitting full freedom of further adjustment by said moving means.

2,743,800
MAGNETIC FLUID CLUTCH WITH COOLING MEANS
Harry Levinson, George H. Stoner, and Edward N. Tangen, Seattle, Wash., assignors to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application November 18, 1950, Serial No. 196,502
16 Claims. (Cl. 192—21.5)



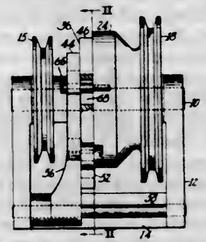
1. The magnetic fluid clutch comprising coacting clutch rotors arranged concentrically and each comprising a nonmagnetic rotor body portion of cylindrical form, one such body portion being hollow and the other being received therewithin to define an annular magnetic fluid space therebetween, ferromagnetic clutch plate elements of annular form permanently bonded concentrically upon said nonmagnetic rotor body portions respectively, said ferromagnetic plate elements projecting generally radially from their respective body portions into said magnetic fluid space in overlapping interleaved closely spaced relationship, one of said nonmagnetic cylindrical rotor body portions comprising a nonmagnetic segmented cylindrical sleeve portion adjoining the fluid space and carrying correspondingly segmented clutch plate elements of such rotor, a complemental cylindrical backing portion adapted to bear against the side of said sleeve portion opposite its plate elements, detachable means connected to said backing portion and engaging the ends of said sleeve segments to press the same radially against said cylindrical backing portion, means cooperating with said rotors to contain magnetic fluid in said space between said nonmagnetic body portions and thereby between said ferromagnetic plates, magnetic fluid contained in said space, and magnetic field producing means energizable to set up a magnetic field lengthwise through said magnetic fluid space, hence through said ferromagnetic plates in series, whereby said nonmagnetic rotor body portions tend to deter straying of such field from said space.

2,743,801
GUIDE FOR MATERIAL DISPENSER
Ellwood L. Faust, Richmond, and Robert R. Harter, Fountain City, Ind., assignors to International Harvester Company, a corporation of New Jersey
Application June 25, 1953, Serial No. 364,107
5 Claims. (Cl. 193—25)



1. In guide mechanism for use with the supply hoppers of fertilizer distributors and the like, in combination, a rigid tubular receiving spout having an annular groove formed in the interior surface thereof adjacent its lower end, a cylindrical tube of deformable material having its upper end receivable in the lower end of the spout and conforming to the shape thereof, a frustoconical non-deformable clamping ring insertable in the upper end of said tube, the outer diameter of the large end of said ring being greater than the inner diameter of the tube to form an annular rib on the tube receivable in the groove in said spout to prevent displacement of the tube from the spout.

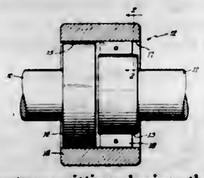
2,743,802
CLUTCHES
Fred V. Hart, Marblehead, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application January 7, 1953, Serial No. 329,943
9 Claims. (Cl. 192—27)



1. A roll type clutch comprising a drive member, a driven member, a roll for connecting said drive and driven members, a roll carrier for moving said roll into and out of driving position and arranged to turn with said driving and driven members, means acting on said roll carrier to turn it in a direction to move said roll into driving position, and means operative automatically at a predetermined time in the rotation of said roll carrier for impart-

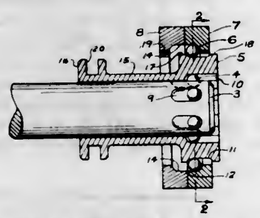
ing a blow to the roll carrier to move it in a direction opposite to the direction of rotation of said driven member to carry the roll out of driving position.

2,743,803
TORQUE LIMITING DEVICE
Ernest A. Ferris, Oak Park, Ill., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application November 7, 1951, Serial No. 255,301
9 Claims. (Cl. 192—41)



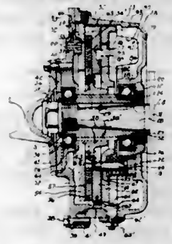
1. In a torque transmitting device, the combination of a driving member, a driven member, expansible means normally connected with one of said members for transmitting torque to and from the member, and wedging means operably connected between the other member and said expansible means for transmitting torque between the other member and said expansible means and effective when the torque reaches a predetermined value to expand said expansible means to break the connection thereof with said one member.

2,743,804
CLUTCH
Albert O. Roberts, Dearborn, Mich.
Application May 10, 1950, Serial No. 161,178
2 Claims. (Cl. 192—48)



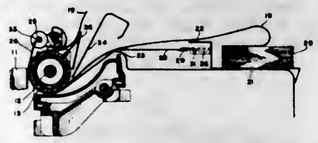
1. A coupling adapted to selectively transfer torque from a driving member to one of a number of driven members through concentric portions thereof, said driving member and driven members being rotatable about a common axis, comprising a driving shaft, a cylindrical sleeve disposed over said driving shaft and coupled therewith to permit selective movement of said cylindrical sleeve axially along said driving shaft, an outwardly extending cylindrical carrier member formed on said sleeve and having flattened unobstructed cam portions which provide a symmetric polygonal cam surface on the periphery of said carrier, a lug extending outwardly adjacent each side of said cam surface, a plurality of hollow cylindrical driven members having their inner surfaces of the same diameter and rotatable about the axis of the driving member, said driven members being juxtaposed so that their inner surfaces provide a substantially continuous inner cylindrical face, a plurality of identical outer spherical balls disposed one on each flattened cam portion between said lugs and preloaded between the cam portion and the inner surface of one of said driven members for limited rotary and axial rolling movement relative to said carrier member about the axis thereof, and shifting means communicating with said sleeve and adapted to shift said sleeve axially along said driving shaft to selectively couple one of said driven members with said driving shaft through said outer balls.

2,743,805
SAFETY CLUTCH
John Arthur Lindberg and Wilbur Vincent Thelander, Toledo, Ohio, assignors to Dana Corporation, Toledo, Ohio, a corporation of Virginia
Application August 16, 1951, Serial No. 242,056
5 Claims. (Cl. 192—82)



1. In a clutch, the combination with a casing, a driven member in said casing, a driving member in said casing rotatable therewith and movable axially thereof, and temperature responsive means for positioning said driving member axially of said casing and in driving relation with respect to said driven member, said temperature responsive means having a longitudinal bore therethrough and being adapted to disrupt the driving connection between said driving and driven member in response to the heat generated by abnormal slipping between said members, of means projectable from the exterior of said casing for indicating disruption of the driving connection, said means comprising a sleeve spring member retained in the bore in said temperature responsive means by exerting an expansive force against the walls of the bore therein.

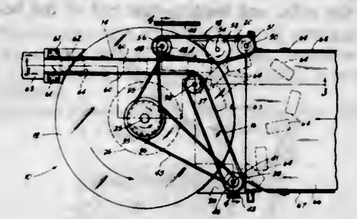
2,743,806
STRIP FEEDING APPARATUS
Kenneth D. Haines, Dayton, Ohio, assignor to The Standard Register Company, Dayton, Ohio, a corporation of Ohio
Application March 15, 1951, Serial No. 215,834
6 Claims. (Cl. 197—133)



5. In a typewriting or like machine, a frame, a platen rotatably mounted in the frame, a support for a pack of record forms, said forms being interconnected as a continuous strip folded about transverse division lines to define the pack, the leading end of said strip being guided in a loop around said platen, strip feeding devices on the platen engaging the strip for unison advancement thereof with rotation of the platen, and flexible tensioned bands looped about said platen and holding the leading end of the strip in intimate contact with the platen.

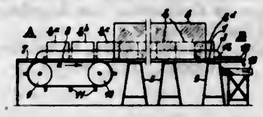
2,743,807
UNSCRAMBLER CONSTRUCTION
Duane R. McKune, Dunedin, Fla., assignor, by mesne assignments, to Minute Maid Corporation, New York, N. Y., a corporation of Florida
Application December 27, 1949, Serial No. 135,186
5 Claims. (Cl. 198—30)

1. Unscrambler construction comprising, in combination, a relatively large rotatably mounted disc, a first driven belt having a can engaging run extending across a portion of said disc, a second driven belt having a can engaging run extending across a portion of said disc, said can engaging runs being disposed at no less than 45° relation to each other and spaced apart at the closest points of approach to provide a can passage, said passage being over said disc, and a pair of opposed fence elements extending across a portion of said disc terminating at said



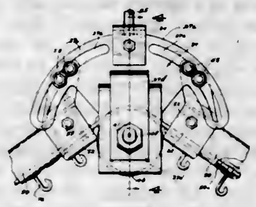
can passage and adapted to receive cans one at a time at said can passage and to guide received cans in single file to discharge, the can influencing movements of said disc and said two can engaging runs being directionally convergent at different speeds toward said can passage.

2,743,808
TRANSPORT PATH COMPRISING SIGNAL DEVICES
Cornelis Frederik Veenemans, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application November 19, 1952, Serial No. 321,482
Claims priority, application Netherlands January 15, 1952
2 Claims. (Cl. 198—40)



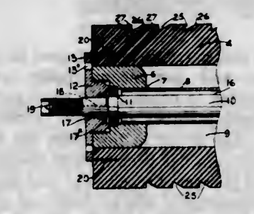
1. A transport system and signal device for a plurality of articles over a predetermined path, comprising means to directly propel said articles over said path, said articles being further propelled indirectly by said means over said path, said signal device co-acting with at least one of the indirectly propelled articles to signal acoustically any deviation from the prescribed movement of said articles and comprising a metal receptacle, a plurality of metal balls in front of the article to be removed first before the other articles in said transport system, said metal balls being adapted to fall successively from said path into said receptacle.

2,743,809
CHAIN GUIDE STRUCTURE
Paul W. Pearson, Chicago, Ill., assignor to Verner G. Ellen, Minneapolis, Minn.
Application September 27, 1950, Serial No. 186,947
9 Claims. (Cl. 198—177)



1. A conveyor structure having in combination, a pair of tubular members having slots in their lower sides, a chain having plain oblong links with alternate links in planes at right angles to each other adapted to move through said tubular members, carrying members on certain of said links adapted to pass through said slots, a pair of second members to which said tubular members are respectively secured, a third member having spaced side portions, rollers respectively carried by said side portions having supporting peripheries, and means for securing said second members to said third member at opposite sides of said rollers respectively, alternate links of chain passing between said rollers and alternate links of said chain riding on said cylindrical surfaces.

2,743,810
IDLER ROLLER FOR ENDLESS FLEXIBLE BELT CONVEYORS
Bernard Martin Armstrong, Newnham-on-Severn, Great Britain, assignor to Conveying Developments Limited, Cardiff, Wales, Great Britain, a British company
Application August 25, 1951, Serial No. 243,677
Claims priority, application Great Britain April 1, 1949
6 Claims. (Cl. 198—192)

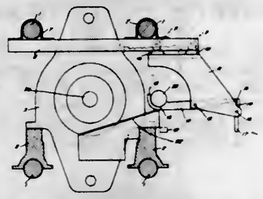


1. In an idler roller for use in supporting the load carrying run of an endless flexible belt conveyor at a load receiving position, the provision of a hollow tubular wall member, a rigid shaft of straight configuration throughout its entire length extending through the interior of said member and projecting beyond opposite ends thereof, a supporting member extending within the interior of the wall member at each end thereof only, and supporting said wall member at its two ends only from said shaft, said wall member intermediate its two ends being formed solely of a non-metallic elastic resilient material which is itself inherently adapted to permit of the wall member being deformed inwardly of the roller under the impact of an external load and to permit of said wall member returning to its initial shape on removal of the load, the hollow interior of the wall member being sealed from the surrounding atmosphere without being specially pressure inflated so that an annular enclosed air space is provided adjacent the interior of said wall member adapted to assist the same in absorbing gravitationally delivered load impacts, said wall member being of sufficient radial thickness as to preclude deformation thereof under such impacts on to any rigid part within the interior thereof despite the absence of special pressure inflation of said annular air space, and bearing means at each end of said roller supporting the two ends thereof for rotation about a common axis co-axial with the central axis of said shaft.

2,743,811
LOADING DEVICE FOR HOT EXTRUSION PRESSES
Jean Delcroix, L'Isle Adam, France, assignor to Comptoir Industriel d'Etirage et Profilage de Metaux, Paris, France, a corporation of France
Application February 19, 1953, Serial No. 337,833
Claims priority, application France March 20, 1952
2 Claims. (Cl. 207—2)

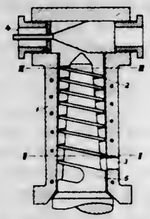
1. In a horizontal extrusion press including a container having an axial bore located on the longitudinal axis of the press, a die closing one end of the bore, a ram movable toward and away from the container, a plunger fixed to the ram and located on the longitudinal axis of the press and adapted to enter the bore of the container, a device for loading ingots into said container comprising a carriage adapted to be moved transversely of the press to a position between said container and plunger and in line with said plunger and bore, a table pivotally mounted on

said carriage on an axis extending parallel to the longitudinal axis of the press, said table having a flat supporting surface for supporting a sheet of glass-like lubricant placed thereon and a gutter located adjacent the edge of the table facing the press, said gutter extending parallel to the longitudinal axis of the press and adapted to hold an ingot, the width of said table in the direction of movement of said carriage being at least equal to the peripheral length of the ingot, a latching member on said table, a



latch pivoted on said carriage and adapted to engage said latching member, and cam means rigidly connected to said ram and adapted to contact said latch and disengage it from said latching member after said carriage has been moved to bring said gutter in line with the bore of the container and said ram has been moved toward said container so that said plunger is received in said gutter, whereby said table automatically tilts to drop said gutter below the level of the bore in said container while said carriage remains stationary.

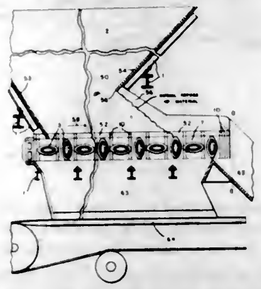
2,743,812
ARRANGEMENT TO BE USED FOR EXTRUSION OF METALS
Ture A. Ljungberg, Sandtringe-Stuvsta, Sweden, assignor to Allmanna Svenska Elektriska Aktiebolaget, Vasteras, Sweden, a corporation of Sweden
Application October 23, 1952, Serial No. 316,520
Claims priority, application Sweden October 30, 1951
3 Claims. (Cl. 207—4)



1. An extrusion press for the production of metal rods, tubes, core coverings and like articles, comprising a rotary extrusion screw thread externally tapered in the direction of movement of the extrusion metal, a stationary, tubular casing enclosing the screw thread and internally tapered in the same direction, and a core for the screw thread so tapered that the cross-sectional capacity of the space enclosed by said core and by adjacent parts of the screw thread and by the internal surface of the casing increases progressively in the direction of movement of the metal in the press.

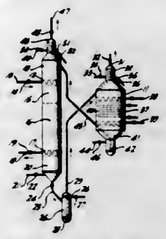
2,743,813
MATERIALS SEPARATING MEANS
Lewis C. Erickson, Duluth, Minn., assignor of twenty-five per cent to Lester E. Erickson, twenty-five per cent to Carl Erickson, and twenty-five per cent to Charles Eisenberg
Application April 25, 1951, Serial No. 222,779
10 Claims. (Cl. 209—106)

10. The method of separating finer material from coarser material through the use of a bed of spaced parallel rolls of elliptical cross section driven in one direction with an approximately 90° phase separation between adjacent rolls, which comprises driving said rolls while maintaining the bed so nearly horizontal that rotation of the rolls will not clear the bed of pieces resting between the rolls, and loading that end of the bed away



from which the tops of the rolls move with a mass so deep that rotation of the rolls will, while agitating the load to let finer pieces work down, move along the bed and over the other end thereof pieces too large to pass between the rolls.

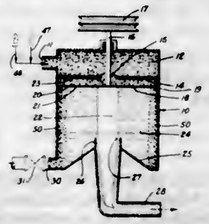
2,743,814
PROCESS AND APPARATUS FOR THE ELUTRIATION OF SOLIDS
Clyde H. O. Berg, Long Beach, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California
Application January 7, 1950, Serial No. 137,406
20 Claims. (Cl. 209—132)



1. A method for the conveyance and elutriation of granular solids containing solids fines which comprises submerging the inlet of an elongated conveyance zone with a bed of said solids to be conveyed, passing a conveyance fluid through said bed and through said conveyance zone at a rate sufficient to convey said solids therethrough, applying a force against the solids discharging therefrom thereby maintaining said solids during conveyance in the presence of a concurrent conveyance fluid flow in the form of a moving substantially compact mass of said solids having substantially their at-rest bulk density, flowing at least a portion of the discharging compact mass of granular solids into an elutriation zone at an intermediate point to form and maintain a downwardly moving accumulation of said solids therein below said intermediate point, passing an elutriation fluid upwardly through said accumulation of solids, controlling the elutriation fluid flow rate at a value insufficient to fluidize said solids but sufficient to form and maintain said accumulation of solids as an expanded bed of non-fluidized solids having a bulk density less than said at-rest bulk density of said solids and to establish and maintain a fluidized suspension of solids fines above said intermediate point in said elutriation zone whereby an active classifying transfer of solids exists between said expanded bed and fluidized suspension of fines, removing solids fines from said aerated suspension at the top of said

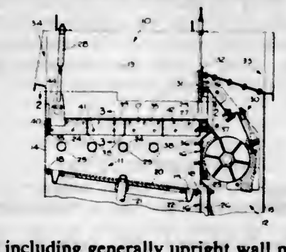
elutriation zone, and separately withdrawing substantially fines-free solids by gravity from the bottom of said elutriation zone.

2,743,815
CONTINUOUS CENTRIFUGAL JIG SEPARATOR
Norris Goodwin, San Francisco, Calif., assignor to Centrijig Corporation, San Francisco, Calif., a corporation of California
Application September 10, 1952, Serial No. 308,800
14 Claims. (Cl. 209—211)



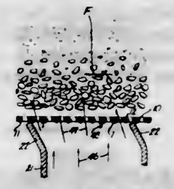
1. The method of selectively separating a heavy mineral from a large volume of lighter mineral, comprising the following steps: forming a slurry of the minerals to be separated having a density of 60% solids by weight, adding thereto a mineral blanket material having a specific gravity intermediate of the specific gravity of the minerals to be separated and a particle size approximating the finest particle of the lighter mineral sufficient to form a blanket at least 4 particles thick in the open chamber, rotating said material to give it a peripheral speed of at least 1,000 feet per minute, peripherally feeding said rotating material into a circular open chamber to permit the formation and maintenance of a free vortex, maintaining a live bed of blanket material adjacent the wall of the open chamber, wherein the particles thereof are in free rolling contact, removing the lighter minerals from the central portion of said free vortex of said chamber, removing the heavier mineral and blanket material from the perimeter of said chamber at the bottom thereof, separating said blanket material from said heavier mineral, and returning the blanket material for reuse.

2,743,816
JIGGING APPARATUS
Harold C. Medley, Blacklick, Ohio, assignor to The Jeffrey Manufacturing Company, a corporation of Ohio
Application May 7, 1953, Serial No. 353,631
4 Claims. (Cl. 209—455)



1. A jig including generally upright wall means cooperating to form a jig cell adapted to contain jigging fluid, screen means separating said cell into an upper compartment in which materials to be separated are stratified and a lower hutch compartment, means for causing said jigging fluid to pulsate through said screen means, said screen means being spaced at its sides from said jig cell wall means, generally upright perforate wall means below said spaced screen means adjacent the sides thereof and spaced from said jig cell wall means, and compressible closure means interposed between said jig cell wall means and said perforate wall means and spaced below the top of the latter whereby some of said pulsating jigging fluid is caused to flow between said perforate wall means and said jig cell wall means and closely adjacent the latter.

2,743,817
PNEUMATIC SEPARATOR
Merrill N. Musgrave, Seattle, Wash., and Axel L. Westberg, Dundee, and Virgil B. Fansher and Elmer L. Blomberg, Newberg, Oreg.
Application July 9, 1951, Serial No. 235,806
4 Claims. (Cl. 209—474)



1. A classifier and separator for a heterogeneous mass of units of varying weights, comprising an elongated screen disposed fixedly in a generally horizontal plane, and extending from a feed end to a discharge end, having a multitude of perforations each formed with a burr outstanding on the screen's under side, and each burr located at the side of its perforation nearer the screen's discharge end, the size of the perforations being small enough to support the mass of material on the screen in the form of a blanket which is rather uniformly several units deep, means to supply the heterogeneous mass upon the screen at the feed end thereof, means to direct a continuous air blast upwardly through the screen's perforations, as jets, with force sufficient to maintain the units in the mass dancing, and so to stratify them according to weight, and by the directional effect of the burrs on such air blast to advance the dancing mass towards the discharge end, and means adjacent the discharge end to segregate the different strata.

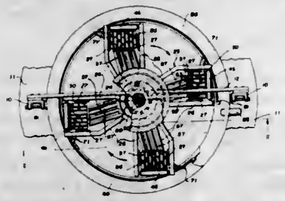
2,743,818
CONTINUOUS PARTITION CHROMATOGRAPHY
Takeru Higuchi, Madison, Wis., assignor to The C. P. Hall Company of Illinois, Chicago, Ill., a corporation of Ohio
Application September 6, 1951, Serial No. 245,407
3 Claims. (Cl. 210—42.5)



1. The continuous process of separating two materials, one of which is more polar than the other, in a two-phase liquid system, the phases being immiscible with one another, utilizing the partition coefficients of the two materials, the partition coefficients of the two materials being different, which process comprises using a bed of adsorbent to which one of the phases and only one of the phases adheres, and moving the bed continu-

ously countercurrently to eluant which forms the other phase and is drawn off as eluate, introducing the two materials into the system as a liquid intermediate the location of the introduction of the eluant and the location of the removal of the eluate and a substantial distance from each of said locations, dissolving one of the materials into the phase which adheres to the adsorbent while maintaining countercurrent flow between the two phases and withdrawing the other material from the system dissolved in the eluate, and keeping the two phases in contact with one another between the location of the introduction of the two materials and the locations of withdrawal of the adsorbent and eluate while moving them countercurrently for a sufficient distance on both sides of the location at which the two materials are introduced into the system to effect substantially complete separation of the materials by solution in the respective phases.

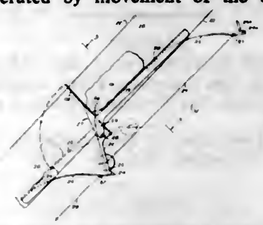
2,743,819
PROCESS OF LEACHING ORES AND A CENTRIFUGE FOR USE THEREWITH
Tolstoy L. Binswanger, Carlsbad, N. Mex.
Application March 30, 1951, Serial No. 218,468
4 Claims. (Cl. 210—68)



2. A centrifuge for use in the process of leaching ores comprising a rotor revoluble on a vertical axis and embodying a plurality of filter units uniformly separated in a circular series therearound, each filter unit comprising a plurality of cross-sectionally triangular endless belts and guide pulleys therefor retaining the belts in substantial lateral edge contact, the guide pulleys being arranged to dispose the belts with their inner faces in vertical planes tangential to their arcs of bodily rotation with their leading edges nearest the axis of rotation, a pair of concentrically arranged hoppers mounted on the rotor in surrounding relation to the axis of the latter, downwardly and rearwardly directed conductors leading from the hoppers to the belts so as to discharge the hopper contents onto the belts, the hoppers being designed for the reception of coarse and fine waste material, pans disposed between the runs of the filter belts and having open sides facing the axis of bodily rotation, means for discharging the contents of the pans, and means for receiving the filtered material retained on the faces of the belts.

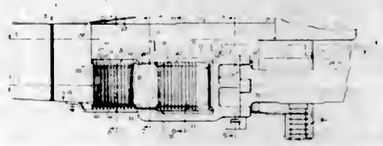
2,743,820
UNIT DISPENSING DEVICES
John Winn, Chicago, Ill., assignor to Wynnwood Corp., Winnetka, Ill., a corporation of Illinois
Application June 18, 1952, Serial No. 294,252
14 Claims. (Cl. 211—49)

1. An article dispensing chute comprising an inclined frame for supporting the articles, a plurality of barriers movably mounted on the frame to form a plurality of separate article storage units, each of said barriers being movable into proximity to the lower adjacent storage unit to provide a surface for conveying articles from one storage unit to the next and being movable into an article intercepting position to form one of the article storage units, latch means mounted on each of the barriers, catch means cooperating with each of the latch means normally to hold each barrier in the article intercepting position, each of said catches being connected to and operated by movement of the barrier forming



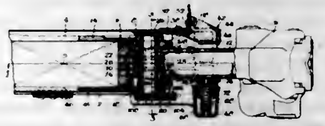
the adjacent lower storage unit, and means secured to the barrier for normally urging the barriers into article intercepting positions.

2,743,821
DRAFT GEAR WITH SWIVEL COUPLER
Albert G. Dean, Narberth, Pa., assignor to The Budd Company, Philadelphia, Pa., a corporation of Pennsylvania
Continuation of abandoned application Serial No. 130,161, November 30, 1949. This application November 4, 1952, Serial No. 318,658
16 Claims. (Cl. 213—46)



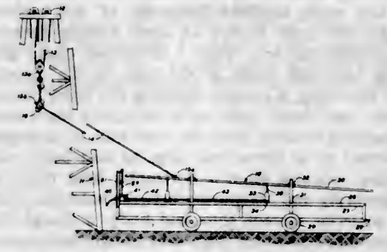
1. In a draft gear arrangement, in combination, a railway car underframe having a longitudinally extending pocket to receive the gear, said pocket having inner and outer abutments, and a draft gear comprising an inner spring, a yoke, and an outer spring and being disposed in said pocket with the springs under precompression between said abutments and the yoke, the yoke embracing the outer spring and having a vertically wide part at its inner end disposed between said springs, said inner end part of the yoke being supported on the bottom of said pocket for vertical swinging movement of its outer end, and the outer end of the pocket which receives the yoke and the outer spring being vertically flared to permit the vertical swinging movement of the yoke about its inner end support, such swinging movement of the yoke being restrained by the springs acting against the wide inner end part of the yoke as it twists between the springs.

2,743,822
COUPLER SUPPORT
Frank H. Kayler, Alliance, Ohio, assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application February 6, 1952, Serial No. 270,240
17 Claims. (Cl. 213—60)



2. A coupler mounting comprising a sill structure, a yoke having top and bottom walls and having intermediate walls connected thereto and diverging forwardly from their connection to said top and bottom walls, said top wall having substantially parallel guide surfaces above the intermediate walls, said bottom wall having substantially parallel guide surfaces below the intermediate walls, a coupler shank projecting between said top and bottom walls and pivotally connected thereto, a support structure carried by the sill structure, said support structure having substantially parallel side walls presenting guide surfaces substantially parallel to and facing the related guide surfaces of the top and bottom walls, said side walls having lower guide surfaces merging with the related rear guide surfaces and having other guide surfaces diverging forwardly from the lower guide surfaces to accommodate passage of the diverging yoke walls between said diverging guide surfaces during assembly and disassembly of the yoke with respect to said support structure, slots through the side walls below their horizontal center plane and below said lower and diverging guide surfaces, and a support plate removably positioned in said slots below and supporting the bottom wall of said yoke, and demountable abutments fixed to the sill structure and engageable with the plate to prevent accidental disassembly of the plate.

2,743,823
AUTOMATIC RACKING DEVICE
James P. Breedlove, Mentone, Tex.
Application April 8, 1953, Serial No. 347,461
2 Claims. (Cl. 214—2.5)



1. In rod racking apparatus and the like, the combination of an inclined trough having its longitudinal axis inclined to the horizontal so as to receive and guidingly support a rod suspended at its upper end and lowered onto said trough, and to slide and guide the lower end of such rod from the upper end to the lower end of the trough; means hingedly supporting said trough for rotation between a receiving position to receive, guide and support a rod and a dumping position to dump such rod; fluid pressure means adapted to rotate said trough and to hold it in its receiving position; a normally open valve for admitting pressure to said fluid pressure means to so rotate and hold said trough; valve operating means including a lever disposed adjacent the upper end of said trough to lie athwart the path of travel of the upper end of a rod and to contact the same when such upper end is lowered into said trough, said valve operating means also including means connecting said lever with said valve to close the valve and relieve pressure momentarily from said fluid pressure means when the upper end of a rod has been deposited in said trough.

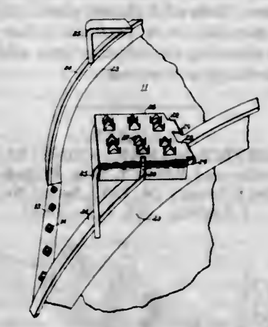
2,743,824
MACHINE FOR USE IN HARVESTING CROPS
Evander McIver Ervin, Florence, S. C.
Substituted for abandoned application Serial No. 140,655, January 26, 1950. This application June 14, 1954, Serial No. 436,352
7 Claims. (Cl. 214—5.5)

1. A crop binding machine comprising two endless belt conveyers, the upper runs of said conveyers positioned end to end in substantially the same horizontal plane, the vertical runs of said conveyers positioned to provide a crop receiving space between the mutually facing faces of said vertical runs, a stringing mechanism having a reciprocating needle element, means for supporting said



mechanism relative to said conveyers to position said needle element for movement transversely of said space, actuating means for said element, said element acting to string together harvested crops forced downwardly through said space.

2,743,825
ANCHORING PLATE
William J. Koehler, Babylon, N. Y.
Application June 6, 1952, Serial No. 292,023
2 Claims. (Cl. 214—10.5)

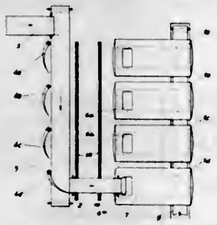


1. An anchoring device comprising a substantially rectangular plate having a plurality of upstanding integral claws each terminating in a plurality of points and projecting from one face only thereof, a pair of integral lips spaced a predetermined distance one from the other and depending from one edge only of said plate, and a pair of ears integrally extending from both ends of the plate, said ears being adapted to be bent in the direction of the lips aforesaid whereby they cooperate with said lips in clampingly engaging the plate to an associated supporting structure.

2,743,826
APPARATUS FOR THE TREATMENT OF TOBACCO
Johann Aschenwald, Munich, Germany; Maria Aschenwald and Josef Dirscherl, heirs of said Johann Aschenwald, deceased, assignors of one-half to Hauni Maschinenfabrik Korber & Co., G. m. b. H., Hamburg-Bergedorf, and one-half to Maschinenbau Aktiengesellschaft Baicke, Bochum, Westphalia, Germany
Application August 30, 1949, Serial No. 113,240
1 Claim. (Cl. 214—16)

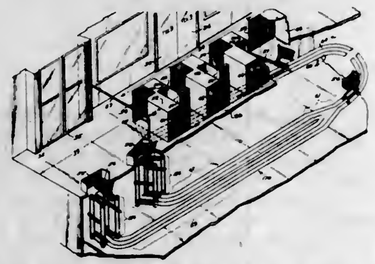
In an apparatus for treatment of tobacco, a plurality of vacuum chambers arranged horizontally in a row alined charge gates in the upper portion of said chambers, alined discharge gates in the bottom portion of said chambers, a supply conveyor substantially parallel to said line of charge gates and at considerable distance therefrom, a discharge conveyor substantially parallel to said line of discharge gates adjacent the opposite end of said vacuum chambers from said charge gates and below the same, a conveyor band substantially perpendicular to said supply conveyor and for transporting tobacco

to said supply conveyor, a charging conveyor for conveying tobacco from said supply conveyor to said charge gates in a direction transverse to said supply conveyor, a frame supporting said charging conveyor, wheels on said frame, fixed tracks for supporting said wheels and running parallel to said line of charge gates between said supply conveyor and said charge gates to allow said charging conveyor to be moved on said tracks to any of said



charge gates, a discharge spout connected with the discharge end of said charging conveyor to convey the tobacco into the charge gates and horizontal arms pivotally mounted beside said supply conveyor one for each of said vacuum chambers and at the opposite side of said supply conveyor from said charge gates, said arms being individually movable to a position across said supply conveyor for diverting the tobacco from said supply conveyor to said charging conveyor.

2,743,827
SELF-SERVICE MARKET CONSTRUCTION
Peter Winokur and Edwin J. Ellis, Philadelphia, Pa.
Application February 24, 1951, Serial No. 212,608
5 Claims. (Cl. 214—16.1)



1. A system for the transfer and storage of wheeled carts including a cart-feeding zone having a plurality of cart-feeders, each cart-feeder adapted to transfer an individual cart, a cart-dispensing zone, a plurality of cart-dispensers in said cart-dispensing zone, said cart-feeding and cart-dispensing zones spaced from each other at generally the same level, a cart-storage area beneath the level of the cart-feeding and cart-dispensing zones, a conveyor for moving wheeled carts on said cart-storage area, said conveyor having a cart-storing and cart-conveying section in operative alignment with the plurality of cart-feeders, said cart-storing and cart-conveying section constructed and arranged to receive a plurality of carts in series relationship to each other, a plurality of cart-storing and cart-conveying portions in alignment with said cart-storing and cart-conveying section and each of said portions aligned with a cart-dispenser, each of said portions constructed and arranged to receive at least one cart, a cart-operated switch interconnecting said cart-storing and cart-conveying section with the plurality of cart-storing and cart-conveying portions, said switch being automatically switchable from one of said cart-storing and cart-conveying portions to another after a cart passes thereover whereby the cart next disposed on the cart-storing and cart-conveying section will be conveyed to a different cart-storing and cart-conveying portion than the cart which immediately preceded it across the switch, an electrically-actuated control mechanism for effecting cart removal, one cart at a time, from the plurality of cart-feeders to the cart-storing and cart-conveying section, and an electrically-actuated control mechanism for effecting cart transfer from the conveyor to the cart-dispensing zone.

2,743,828
SELF-LOADING TRANSPORT VEHICLE AND DUMP GATE THEREFOR
Dale I. Hayes, Spokane, Wash., assignor to American Zinc, Lead and Smelting Company, St. Louis, Mo., a corporation of Maine
Application January 17, 1955, Serial No. 482,009
12 Claims. (Cl. 214—78)

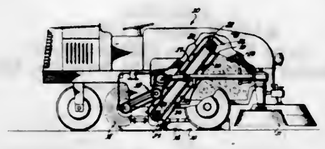


1. In a self loading transport having a load receiving body comprising a rear wall, side walls formed to the rear wall and having lower circular edges curving upwardly and rearwardly toward the rear wall, and means joining said side walls together forwardly of said curving lower edges, the body having an open bottom between said means and the rear wall, a U-shaped dump gate pivoted on said side walls at the axis of the circular edges and providing a closure covering the open bottom of the body, said dump gate being swingable rearwardly into overlapping relation with the rear wall, a U-shaped trough pivoted at its lower rear edge to said body, said trough being rockable from a horizontal load receiving position upwardly and rearwardly between said side walls to crowd material thereon into said body, a trough like shovel extending forwardly from said trough and pivoted at its lower rear edge to the trough, said shovel being rockable from a horizontal load receiving position upwardly and rearwardly between the side walls of the trough to crowd material thereon into the trough, means on the shovel engaging the trough when the shovel is rocked upwardly beyond a certain angle with respect to the trough, to rock the trough and shovel upwardly and rearwardly together, a sheave unit on the shovel, a pull cable anchored to said dump gate and extending rearwardly and upwardly behind the rear wall and then forwardly around the sheave unit and then rearwardly, said cable being operable to raise the shovel and trough about their pivots, a latch normally holding the dump gate in closing position, a trip for opening the latch, the pull of the cable on the dump gate acting against the shovel weight upon opening the latch to swing the dump gate rearwardly into overlapping relation with said rear wall, and means connecting the dump gate to the trough operable to return the dump gate to closing position upon forward and downward movement of said trough to its load receiving position.

2,743,829
SWEEPER CONVEYORS
Louis M. Ballard, Duarte, Calif., assignor to Wayne Manufacturing Company, Pomona, Calif., a corporation of California
Application December 24, 1951, Serial No. 263,089
4 Claims. (Cl. 214—83.36)

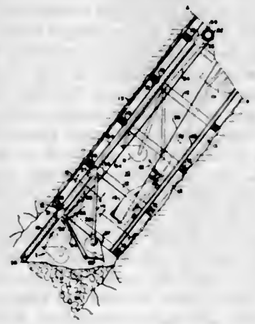
1. In a street sweeper, a debris chamber having an opening in an upper portion thereof, an inclined ramp along which debris may be elevated toward said opening

for delivery into said chamber, and means for elevating debris along said ramp into the chamber, said elevating means including a pair of inclined laterally spaced endless flexible rubber belts, toothed sprocket wheels mounting said belts for endless movement, rubber teeth carried by said belts and engaging the teeth of said sprocket wheels, some of said teeth being formed separately from and removably attached to the belt, angle irons extending transversely between and across said belts at spaced loca-



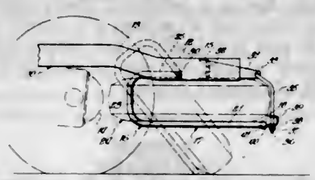
tions therealong, rubber squeegee elements carried by said angle iron and movable upwardly along the upper side of said ramp to advance the debris therealong, studs embedded in and bonded to said removable belt teeth and projecting therefrom through openings in said belt and then through openings in said angle irons, nuts threaded onto said studs to fasten said angle irons and removable teeth to the belts, and plates attached to said studs and embedded in said removable teeth.

2,743,830
INCLINED SHAFT MUCKING APPARATUS
Leonard J. Bares, San Leandro, Calif., assignor to Foley Brothers Inc., a corporation of New York
Application March 5, 1954, Serial No. 414,412
8 Claims. (Cl. 214—90)



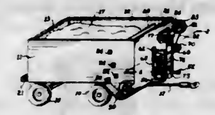
1. In apparatus for the removal of muck from the bottom of an inclined shaft having ground supporting members set against the hanging wall of said shaft, a monorail secured to said members and held thereby adjacent the hanging wall of the shaft and extending up the shaft from the bottom thereof, a crawl assembly supported on the monorail and adapted to be driven therealong, a rigid downwardly extending arm pivotally connected at one end to the crawl assembly, a mucking bucket pivotally connected to the other end of said arm, means for driving the crawl on the monorail, and means for pivoting the bucket on said arm and for pulling the bucket and arm to a position adjacent to the crawl, said crawl driving means and said bucket pivoting means being supported adjacent the hanging wall of the shaft, whereby the entire mucking bucket assembly may be elevated from the shaft foot wall and a car for carrying muck may be lowered thereunder into position to receive muck from the mucking bucket.

2,743,831
TUBULAR TIRE CARRIER
Walter J. Fisher and Cleo B. Sheerin, Fort Wayne, Ind., assignors to International Harvester Company, a corporation of New Jersey
Application February 7, 1952, Serial No. 270,424
4 Claims. (Cl. 214—454)



1. A tire carrier construction for vehicles having a longitudinal frame including a pair of transversely spaced side sill members comprising, a tire carrier frame structure including a single, integral tubular member having a substantially V-shaped section disposed longitudinally with respect to said frame, a vertical section extending normally toward said vehicle frame from one end of each leg of said V-shaped section, said vertical sections being adapted to abut the tire to be carried and limit the movement of the tire in one direction, and a pair of sections spaced from and substantially parallel to said V-shaped section, each of said last-mentioned sections having one end joining one vertical section and its opposite end pivotally connected to a respective side sill member whereby the tire carrier frame structure is swingable about a transverse horizontal axis with respect to the vehicle frame from a first position wherein the tire may be placed on or removed from the tire carrier frame structure to a clamped position, each of said last-mentioned sections extending longitudinally toward said apex and transversely from a respective vertical section whereby said transverse horizontal axis is longitudinally spaced between the apex of said V-shaped section and said vertical sections; and clamping means for releasably maintaining said tire carrier frame structure in said clamped position including a supporting member having one end pivotally connected to said vehicle frame and its opposite end provided with a threaded portion, said supporting member having a U-shaped bracket slidably mounted thereon, one leg of said bracket having a hooked-shaped extension engageable with the apex of said V-shaped section, and a clamping nut cooperable with said threaded portion and abutting said bracket for moving said bracket along said supporting member.

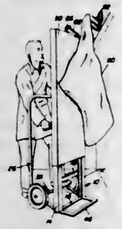
2,743,832
PICKUP TRAILER DISCHARGE CONVEYOR
Benjamin Oscar Kappelmann, Phoenix, Ariz.
Application December 27, 1954, Serial No. 477,654
1 Claim. (Cl. 214—519)



In a pickup trailer having a front panel and sides connected thereto, a transverse discharge trough mounted adjacent the lower edge of said front panel having an arcuate portion and a rearwardly and upwardly sloping portion to receive discharge from the floor of said trailer, a screw conveyor mounted in said trough including a support tube fixed to one of said sides and projecting toward the discharge end of said trough to an intermediate position therein, a drive shaft journaled in a self-aligning bearing carried on one of said sides, a first bearing supported in the outer end of said support tube adapted to rotatably engage an intermediate portion of said drive

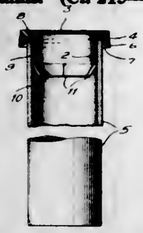
shaft including a cut-away portion to allow limited vertical radial shifting of said shaft, a screw support tube rigidly secured to said drive shaft adjacent to said first bearing, a second bearing located between the outside of said support tube and said screw support tube adjacent said one of said sides, a screw blade fixed on said screw support tube having a periphery closely conforming to said trough when said drive shaft is in normal downward position in said first bearing, and means for applying driving power to the outer end of said drive shaft adjacent said self-aligning bearing.

2,743,833
LIFT CART
James F. Peterson, Deadwood, Oreg., assignor to N & P Enterprises, Inc., Eugene, Oreg., a corporation of Oregon
Application May 11, 1953, Serial No. 353,943
4 Claims. (Cl. 214—651)



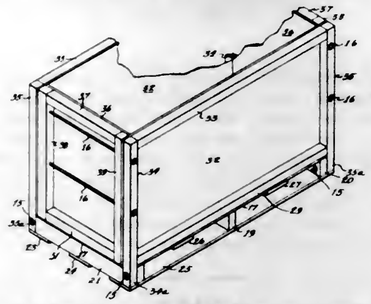
1. A cart comprising a substantially flat longitudinally extending frame, a pair of skids extending in spaced parallel relation to said frame, angulated front end portions of said skids securing said skids to the forward portion of said frame, said front end portions extending rearwardly in angular relation to said frame, rear end portions securing said skids to said frame at a point remote to the forward portion of the frame, wheels mounted on said angulated front end portions, a substantially flat bed telescopically mounted on said frame, a winch mounted on said frame intermediate the ends thereof, a sheave mounted adjacent the rear end of said frame, a second sheave mounted on the underside of the bed adjacent the front end thereof, a third sheave mounted on the rear end of said bed, a flexible tension member secured on said winch and entrained over said sheaves in sequence, a hook socket fixed to said bed in aligned relation with said third sheave, said flexible tension member extending through said socket, and a hook secured to the free end of said flexible tension member.

2,743,834
STOPPER
Harold W. Williams, Pawling, N. Y.
Application March 7, 1952, Serial No. 275,267
4 Claims. (Cl. 215—47)



4. A stopper of the kind described consisting of a single, molded piece of a thermo-plastic material that is pliable at ordinary temperatures, which stopper includes an end portion having an end wall and an overhanging section with a depending flange having a frustro-conical edge for engaging the edge of a container as the stopper is inserted in the container, and a plug portion for insertion in the container having a cylindrical section of substantially uniform wall thickness and a tapering end section of substantially uniform wall thickness substantially equal to the wall thickness of the cylindrical portion, the tapering section having a slot therethrough extending from the free edge thereof to the juncture of the tapering section with the cylindrical section.

2,743,835
KNOCK-DOWN CRATE
Arlen B. Looney, Spokane, Wash.
Application February 13, 1953, Serial No. 336,715
3 Claims. (Cl. 217—12)



3. In a knock-down crate, a floor unit composed of a rectangular floor sheet, frame pieces including pieces at the ends of said floor sheet on which said sheet is secured, the end frame pieces and the sheet being provided with re-entrant corners, border strips secured on top of said sheet along the side and end edges thereof the border strips on the floor sheet along the side edges thereof extending to the re-entrant corners but the border strips on the floor sheet at the end edges thereof terminating short of the re-entrant corners whereby the ends of the border strips are spaced apart at said re-entrant corners and a portion of the top of the floor sheet is exposed at each end of each end border strip, side panels resting on said floor sheet, each panel comprising a sheet the lower edge of which rests on the floor sheet just inside the side border strip thereon, a top strip and end strips fixed to the outer face of the side panel sheet at its edges, the end strips extending downwardly beyond the floor sheet and seated in said re-entrant corners, bolts extending through the portions of said end strips that are seated in said re-entrant corners and through the adjacent frame pieces to hold the side panels down on the floor sheet, end panels resting on said floor sheet just inside the end border strips, said end panels each comprising a sheet of the same height as the side panel sheets and having its vertical edges abutting the side panel sheets, a top strip and two end strips secured to the end panel sheet, the end strips extending to the floor sheet at the ends of the end border strips, and bolts extending through the side panels and their end strips and through the end strips of the end panels outside the end sheets near the tops of said panels clamping the side panels against the vertical edges of the end panels, whereby each side panel sheet and each end panel sheet rests on the bottom sheet to provide a smooth interior.

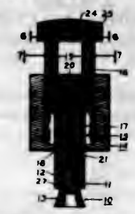
2,743,836
MILK BOTTLE CONTAINER AND CARRIER
George Roberts, Uniondale, N. Y.
Application May 29, 1952, Serial No. 290,638
1 Claim. (Cl. 217—19)

Weatherproof means to receive delivery of milk bottles comprising a box-like container of solid material, a cover of solid material hinged to the top edge of said container, an open, box-like bottle carrier having a square-shaped bottom and four sides, said carrier being dimensioned to nest within said container, a pair of L shaped divider members, the first of said pair having two of its edges permanently attached along the vertical centerline of two adjacent walls of said carrier and the second of said pair having two of its edges permanently attached along the



vertical centerline of the two remaining walls, the bottom edges of each of said dividers being attached to the bottom of said carrier, the folded edges of said dividers being adjacent, means for fastening said dividers to each other along the length of said fold, and a bail like handle member extending along the centerline of the outer side of a pair of oppositely faced walls of said carrier and permanently affixed thereto.

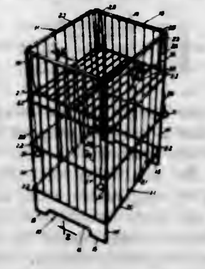
2,743,837
LEAD SLEEVE EXPANDING DEVICE
Leon J. Cook, Monticello, Ill.
Application June 1, 1953, Serial No. 358,695
4 Claims. (Cl. 218—19)



1. A tool for anchoring a nut into a wall opening by expanding a soft metal sleeve between the nut and the wall opening, said tool comprising a cylindrical wall engaging casing having a restricted opening in the inner end wall thereof, a generally T-shaped member having its upper head portion mounted on the other end wall of the cylindrical wall engaging casing and a lower cylindrical threaded portion thereof projecting through the restricted opening in the end wall of the cylindrical wall engaging casing, a reciprocal driving member comprising a bifurcated cylindrical portion mounted in the cylindrical wall engaging casing, said driving member having a restricted lower cylindrical extension projecting through the restricted opening in the inner end wall and surrounding the lower cylindrical portion of the T-shaped member, the bifurcated portion of the driving member straddling the upper portion of the T-shaped member, said driving member having mounted on the end of the bifurcated portion a hammer engaging plate.

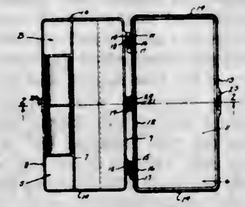
2,743,838
ADJUSTABLE DISPLAY BASKET
James F. Peterson, Eugene, Oreg., assignor to N. & P. Enterprises, Inc., Eugene, Oreg., a corporation of Oregon
Application October 4, 1954, Serial No. 460,110
2 Claims. (Cl. 220—6)

1. A display basket comprising four quadrilateral, upright, wire frames hingedly connected together along their upright edges to define a collapsible, walled enclosure of rectangular cross-section and open at its top and at its bottom, said upright frames each comprising laterally extending wires and upright wires all welded to each other at their intersecting points and having the upright wires placed inside of the lateral wires, a rectangular, bottom-forming frame having a smooth periphery, and a plurality of suspension means adjustably suspending said bottom-forming frame within said enclosure, each of said suspension means comprising a chain attached at one end to said bottom-forming frame at the periphery thereof and a keyhole slot means affixed to the upper edge of the re-



spectively adjacent upright frame above the point of attachment of the chain to the bottom-forming frame, said chain passing outwardly through said keyhole slot means and being adjustably retained thereby whereby said bottom-forming frame may be adjustably positioned at various heights without removing the contents of the basket, and an opposed pair of said upright frames each comprising a pair of ground-engaging stirrup means positioned respectively beneath a pair of said keyhole slot means and into which the feet of a person may be inserted to hold the basket while a pair of said chains are being pulled upwardly.

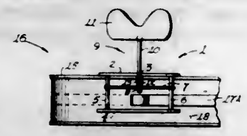
2,743,839
HINGE CONSTRUCTION FOR BOXES
Harold D. Hulterstrum, Baraboo, Wis., assignor to Flambeau Plastics Corporation, Baraboo, Wis., a corporation
Application February 23, 1954, Serial No. 411,643
2 Claims. (Cl. 220—31)



1. In a box or like container having a body including a rear wall and a cover for the body, mating hinge barrels carried by the rear wall and the cover adjacent to their opposite ends, said hinge barrels including mating hinge pins and hinge seats so constructed and arranged that the pins are received in said seats upon the lateral movement of the cover relative to the wall in one direction and the pins are moved out of engagement with said seats by movement of the cover laterally of said wall in the opposite direction, and companion members carried by said cover and the wall normally in longitudinal alignment and abutting relation preventing lateral shifting of the cover and the body and mating hinge barrels relative to one another when said hinge pins are received in said hinge seats, said cover and said wall being flexible relative to one another, whereby the companion members can be

shifted out of longitudinal alignment to permit the lateral shifting of the cover relative to said body to unseat the hinge pins.

2,743,840
CAN OPENER
Wesley Hudman, Los Angeles, Calif.
Application May 12, 1952, Serial No. 287,269
1 Claim. (Cl. 220—52)



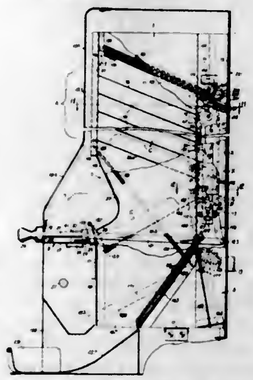
An improved can opener for use in opening a can of the type which has a projecting upper edge and which is sealed by a weak tearable junction, with a virtually vertical wall of the can, of a virtually lateral sealing strip having a free engageable end, comprising: base means including an upper longitudinal flat member having an inner concave edge curved in a predetermined manner about an imaginary vertical axis and provided with a vertical aperture adjacent the center thereof, and including an intermediate longitudinal flat member also curved in said predetermined manner about said imaginary vertical axis and provided with a vertical aperture adjacent the center thereof and larger than the vertical aperture in the upper flat member, and including a lower flat member also curved in said predetermined manner about said imaginary vertical axis; said upper flat member, said intermediate flat member and said lower flat member being vertically spacedly mounted with respect to each other to comprise said base means and said vertical apertures in said upper flat member and said intermediate flat member being vertically aligned with respect to each other to comprise vertical aperture means within said base means; vertical spindle means carried in the vertical aperture means for rotation and for limited vertical movement with respect to the base means, said spindle means being provided with an upper shaft portion rotatably and vertically slidably positioned in the vertical aperture in the upper flat member of the base means and being provided with an enlarged lower shaft portion larger than the aperture in the upper flat member and rotatably and vertically slidably positioned in the vertical aperture in the intermediate flat member and extending downwardly into the region between the intermediate flat member and the lower flat member of the base means, said enlarged lower shaft portion being provided with longitudinal open-ended slot means at the bottom thereof cooperable to removably engage the free engaging end of a virtually lateral can sealing strip, and the upper end of said upper shaft portion being provided with actuating handle means, whereby said handle means can be forcibly rotated to remove the sealing strip from a can sealed thereby and to wind said sealing strip around said enlarged lower shaft portion, and whereby said sealing strip can be removed from engagement with said enlarged lower shaft portion and said open-ended slot means therein by relative upward movement of said spindle means with respect to the aperture means in the base means; and engaging guide means effectively carried by the inner concave edge of said upper flat member of said base means and effectively slidably cooperable with respect to an upwardly projecting edge of a can, whereby the base means and the vertical spindle means will be supported and carried in the proper can opening relationship with respect to the lateral sealing strip and will effectively cooperate to wind said sealing strip on the spindle means during the can opening operation in a spiral lying in a virtually horizontal plane.

2,743,841
VENT FOR METAL HOUSING FOR ELECTROLYTIC CAPACITORS
Roelof Dirk Bügel, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application April 18, 1952, Serial No. 283,152
Claims priority, application Netherlands June 9, 1951
3 Claims. (Cl. 220—89)



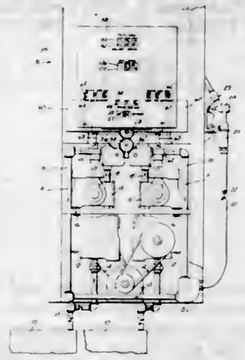
1. A housing for a wound electrolytic capacitor comprising a container for the capacitor winding being provided with an opening in a wall portion thereof, a hollow tubular member fitting loosely in said opening to provide a restricted gas passage between said member and the wall, said member provided with a radially outwardly extending flange on the outside of and spaced from said wall, a mass having a low melting point positioned in and sealing the bore of said tubular member, an annular seal clamped between said flange and the wall portion and loosely surrounding said tubular member and comprising a gas-tight first washer of resilient material in direct contact with said wall portion, and a second washer of fluid-tight but gas permeable material superimposed on said first washer, and engaging said flange, said tubular member being provided on its inner end with the radially outwardly extending flange engaging the inner surface of the wall around the opening in non-sealing relation.

2,743,842
VENDING MACHINE
Benjamin W. Fry, Ladue, Mo., assignor, by mesne assignments, to National Vendors Inc., a corporation of Missouri
Application April 5, 1952, Serial No. 280,718
17 Claims. (Cl. 221—86)



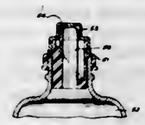
1. In a vending machine for vending individual articles, an article dispensing device comprising means for supporting a plurality of article-supporting shelves in a generally vertically spaced array, said means including a plurality of movable shelf supports, one for each of the shelves in the array, and means for simultaneously moving said shelf supports to effect release of the lower shelf of the array to allow it to fall away from the array and so to effect lowering of the remaining shelves in the array a distance corresponding to the spacing of the shelves in the array, means for holding a reserve supply of shelves above the array, and means for releasing a shelf from said reserve upon lowering of the shelves in the array to become the uppermost shelf of the array.

2,743,843
APPARATUS FOR DISPENSING SELECTED MIXTURES OF TWO LIQUIDS
Harvey N. Bliss, Windsor, Conn., assignor to Veeder-Root Incorporated, Hartford, Conn., a corporation of Connecticut
Application August 8, 1952, Serial No. 303,349
7 Claims. (Cl. 222—26)



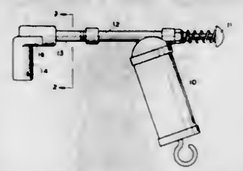
1. In an apparatus for dispensing selected mixtures of two different liquids, a dispensing nozzle; means for supplying a selected proportion of one liquid to the nozzle comprising a first pump, a first meter, a first control valve, and interconnecting conduit means; means for supplying a selected proportion of a second liquid to the nozzle comprising a second pump, a second meter, a second control valve and interconnecting conduit means; manually settable means connected to the first and second control valves for varying the proportion of the two liquids dispensed; a single cost register for registering the combined cost of both liquids dispensed; a pair of variators driven respectively by the first and second meters for producing a variable drive proportional to the price of the liquid dispensed thrrough each meter; and differential gearing connecting the output shafts of the two variators to the single cost register.

2,743,844
POURING SPOUT WITH CAP AND DRIP RETURN
Jay Gould Livingstone, Akron, Ohio
Original application December 1, 1949, Serial No. 130,432, now Patent No. 2,681,039, dated June 17, 1952. Divided and this application May 27, 1952, Serial No. 290,227
16 Claims. (Cl. 222—111)



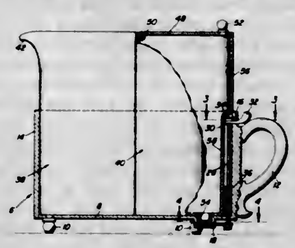
1. An adapter for a vessel containing liquid, which comprises an outlet passage along one side of which liquid is adapted to flow during a pouring operation, the opposite side of the outlet passage being open at least toward the lower portion thereof, a wall surrounding the outlet passage, a channel between said wall and the outlet passage which leads to said opening, the bottom of the channel at the opening being lower than any other portion of the channel's bottom when the vessel is in the upright position, and a removable closure cap having a portion of its inner surface forming a seal with the top surface of the wall.

2,743,845
TWISTER RING OILER
Rudolph W. Jones, Sr., Macon, Ga.
Application July 20, 1953, Serial No. 368,881
4 Claims. (Cl. 222—117)



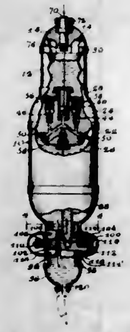
4. In a twister ring oiler, an arcuate head, said head being hollow for reception of a lubricant, an inlet pipe connected to the top of said head and communicating with the hollow interior for the introduction of a lubricant into said head, said head being formed of shape-retaining material and being convex on the side adjacent said inlet pipe and concave on the side outwardly away from said inlet pipe, a flange on top of said head extending beneath said inlet pipe, said head being provided with a lubricant discharge opening for discharging lubricant on the convex side thereof, said inlet pipe being provided with a lubricant discharge opening on the bottom thereof for discharging lubricant beneath said flange, and a sponge rubber covering surrounding said head and said flange, said covering being provided with lubricant discharge openings respectively in registry with the discharge opening in said head and the discharge opening in said inlet pipe.

2,743,846
SUGAR AND CREAM SERVER AND DISPENSER
Duane J. Walker, Steubenville, Ohio, assignor of forty per cent to William T. Reed, Waverly, Ohio
Application February 24, 1955, Serial No. 490,197
4 Claims. (Cl. 222—129)



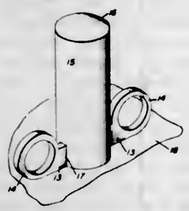
1. A multipurpose serving and dispensing utensil for kitchen and table use comprising, in combination, a cup-like receiver circular in cross-section and having a bottom and an integral upstanding marginal wall, said wall provided on its outer peripheral surface with an outstanding handgrip, a first insertable and removable semicylindrical receptacle having its lower portion fitted telescopically into one-half portion of said receiver, a second semicylindrical receptacle also telescopically fitted into the remaining half portion of said receiver, said receptacles having flat back portions in back-to-back contact and convex wall portions conformably fitting and contacting cooperating conformingly shaped arcuate portions of said marginal wall, said first receptacle having a pouring spout at its upper end and constituting a cream pitcher, said second receptacle being adapted to contain and also dispense sugar and having a restricted discharge neck at its bottom, the bottom of said receiver having a discharge opening and a depending discharge neck aligned with said opening, said first named neck telescoping into said second named neck, and common valve means for said necks operably mounted in the second named neck.

2,743,847
DISPENSING APPARATUS
Geza Pollak, Montreal, Quebec, Canada
Application June 7, 1952, Serial No. 292,244
5 Claims. (Cl. 222—133)



1. A dispensing apparatus comprising in combination a main valve block of annular configuration, a first cylindrical enclosure member mounted on one end of said block in axial alignment therewith, a second cylindrical enclosure member mounted on the other end of said block in axial alignment therewith, a first cap on the end of said first enclosure member remote from said block, cap means mounted on said second enclosure member remote from said block; the block, enclosure members, cap and cap means being of overall cylindrical shape and in axial alignment thereby forming a continuous stream-lined body; the block forming with the first enclosure member and first cap a first liquid chamber, the block forming with the second enclosure member and the cap means a second liquid chamber, the block being provided with a passage having an axially aligned portion constituting a pump cylinder leading to the first chamber and another portion constituting a fluid passage leading from the second chamber to the pump chamber, a check valve in said passage, said block also being formed to have a connecting passage leading from said first chamber to said pump chamber, a check valve in said connecting passage adjacent to said first chamber, the first cap enclosing an axial plunger passage, a piston in said cylinder and a piston rod leading from said piston to within said plunger passage, spring means in the plunger passage urging said piston rod to piston- retracted position and a manually operable plunger protruding from said first cap and engageable with said piston rod to force said piston against the spring means in an active stroke, said second cap means being provided with valve means for permitting introduction of fluid into said second chamber and for dispensing fluid therefrom.

2,743,848
SALT SHAKER
Thomas C. Estes and Evelyn M. Estes, Dallas, Tex.
Application March 8, 1954, Serial No. 414,642
4 Claims. (Cl. 222—173)



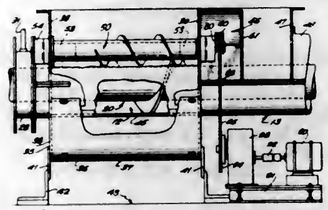
1. A shaker comprising: a container for mounting on a support in direct contact therewith and rockable on its bottom, a dispensing closure on the container, a slidably removable cover for the container adapted to rest on the support, and coacting means on the cover and the container for maintaining the latter in an upright position on the support.

2,743,849
STOPPER FOR A RESILIENT DISPENSER
William D. Elsas, Kew Gardens, N. Y.
Application November 5, 1952, Serial No. 318,943
1 Claim. (Cl. 222—205)



A stopper for the neck of a bottle, said stopper being hollow and having a cylindrical side wall, a closed bottom and an open top, said cylindrical side wall having a fold extending into the interior of the stopper and forming a groove extending from the bottom of the stopper to the top thereof, said groove having formed therein an opening located intermediate its ends and communicating with the interior of the stopper, and a tube having a lower portion extending into the bottle and an upper portion located within that portion of the groove which extends between the bottom of the stopper and said opening, said tube having an upper end fitting into said opening.

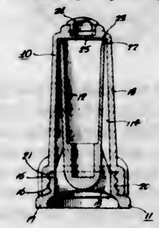
2,743,850
MATERIAL AGITATING AND FEED RATE CONTROLLING SCREW ARRANGEMENT FOR FEEDER HOPPERS
Carl C. Hamilton, Cuyahoga Falls, Ohio, assignor to The Babcock & Wilcox Company, New York, N. Y., a corporation of New Jersey
Application November 29, 1952, Serial No. 323,259
4 Claims. (Cl. 222—238)



1. In combination with a feeder hopper constructed and arranged to contain a supply of compactible material and having a discharge trough extending along its bottom, and feeder means extending along the trough to discharge material flowing from the hopper into the trough; agitating means for breaking up the material for readier removal by the feeder means comprising, in combination, a pair of screws rotatably mounted in said trough in substantially parallel relation to said feeder means on either side of the latter; and variable speed, reversible driving means for rotating said screws.

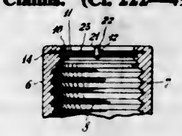
2,743,851
CONDIMENT SHAKER
Albert E. G. Sellers, Radnor, Pa.
Application December 11, 1953, Serial No. 397,547
2 Claims. (Cl. 222—457.5)

1. A dispenser for finely divided material comprising an annular base having an upstanding cylindrical portion provided interiorly with a smooth surface defining a large central discharge opening for the material, a container for the material closed at the bottom and open at the top disposed coaxially of the base, said container being at least at the bottom portion thereof of smaller diameter than said base discharge opening, a web secured to said base extending diametrically across said base discharge opening and upwardly above said base fixed to said container at the bottom and sides thereof interconnecting said base and container and supporting the latter relative to the base in a vertical position with the lower portion of the container terminating within the upper portion of said base discharge opening, said web being of



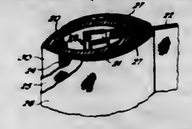
the minimum thickness required to support said container and base relative to each other to provide minimum obstruction to passage of the material through the discharge opening, a cover closed at the top and open at the bottom secured to the base and surrounding the container to provide thereabout an enclosed space in open communication with said discharge opening, the said cover having a smooth inner surface terminating adjacent its open end in an annular shoulder coextensive with and arranged to seat upon the upper end surface of the cylindrical portion of the base to provide a flush joint between the smooth inner surfaces of the cover and base for the unobstructed flow of material from the top of the container to the discharge opening.

2,743,852
CLOSURE CAP FOR COLLAPSIBLE CONTAINERS
Santiago M. Alberdi, Jr., Montes de Oca, Argentina
Application May 25, 1951, Serial No. 228,220
5 Claims. (Cl. 222—494)



1. A closure cap for collapsible containers including an externally screw threaded nozzle, said closure cap comprising a hollow body including a skirt portion internally threaded for screwing onto said nozzle and being open at one end, the other end of said hollow body defining a relatively large mouth, a diaphragm of resilient sheet material located inside said hollow body and extending over said mouth, said diaphragm being perforated to define a central relatively small orifice and a plurality of slits radiating from said orifice in mutually substantially equi-angular relationship and extending to points spaced inwardly of the perimeter of said diaphragm to define an annular imperforate marginal portion and a plurality of substantially triangular outwardly deflectable tongues having apices directed towards said orifice, and fixing means securing said marginal portion in position in said hollow body, a sealing spider for said orifice and plurality of slits, said sealing spider being located inside said hollow body adjacent said diaphragm and having a central boss and a plurality of legs, said central boss being in alignment and extending into said orifice and said plurality of legs extending into said plurality of slits.

2,743,853
PADDING FOR SLEEVE PRESSING MACHINES
Russell G. McLagan, Milford, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a corporation of Ohio
Application November 6, 1952, Serial No. 319,106
3 Claims. (Cl. 223—57)



1. In a pressing machine a sleeve-supporting buck having an elongated body including two transversely convex wall portions joined along two adjacent longitudinal edges to provide a V-shaped edge portion extending substantially the full length of said body, padding for said body comprising a layer of matted material completely overlying said wall portions, and an element superimposed on that part of said layer along and adjacent to said edge portion, said element being V-shaped in transverse section to overlie and conform in contour to said edge portion, said element being formed from rubber material and extending laterally towards but short of the opposite side of said body remote from said edge portion.

2,743,854
SHIRT BODY PRESSING MACHINE
Louis N. Strike, Salt Lake City, Utah
Application May 11, 1953, Serial No. 353,979
9 Claims. (Cl. 223—57)

8. A machine for pressing shirt bodies and the like, said machine comprising, in combination, a frame having a dressing station at one end and a pressing station at the opposite end, horizontal, straight track means extending through and between the stations, hollow buck means adapted to mount a shirt body and movable along the track means between said two stations, means to move the buck means from one station to the other, said latter means located at each end of the track means and being opposed to each other, means to operate said opposed means alternately to move the buck means along the track means first in one direction and then in the other, a normally-closed source of heated shirt-pressing air, means to couple said source of air to the buck when the carriage is at the pressing station, a pair of pressing platens at the pressing station and normally spaced to receive the buck therebetween, and means to move the pressing platens to pressing position against the front and back of a shirt draped on said buck means.

2,743,855
GARMENT HANGER
J Gene Hochfelder, Merrick, N. Y., assignor to Bogene Incorporated, Lebanon, Pa., a corporation of Pennsylvania
Application February 17, 1955, Serial No. 488,788
1 Claim. (Cl. 223—85)

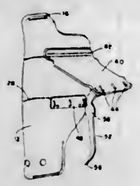
A hanger for a crinoline skirt which has been rolled into an elongated generally frusto-conical shape comprising an

elongated tubular bag made of flexible sheet material and of substantially frusto-conical shape having its wider end open and being seamed continuously across its opposite end and along at least one side, a hook-receiving loop secured to one of said ends, said bag being adapted



to be drawn over the rolled skirt, the cross section of said bag adjacent the closed end corresponding generally to the cross section of the upper portion of the rolled skirt, and a relatively stiff cuff secured around said open end whereby the bag tends to grip the rolled skirt and hold it in place after insertion therein.

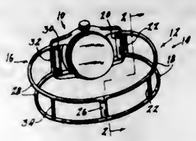
2,743,856
BELT-SUPPORTED PISTOL HOLDER
Sumner W. Adams, Visalia, Calif., assignor to Allen A. Sanborn, Porterville, Calif.
Application May 18, 1954, Serial No. 430,510
2 Claims. (Cl. 224—3)



1. The improvement in a pistol holster to be worn on a belt, comprising: a holster housing having on its body abutting face a flap fixedly secured to the housing at the upper margin of the flap, said flap having near its lower edge a plurality of juxtaposed, spaced-apart slots and a metal plate riveted to said housing at the level of said slots having a plurality of D-rings formed thereon in position to be inserted in said slots, a thong-like keeper member secured at one end to said flap and having its other end portion tapered and treated with a stiffening agent and of a size so that it may be threaded through said D-rings when they are positioned in said slots to secure the flap in place and said keeper member having an enlarged intermediary portion limiting the extent of the keeper member which can be inserted in said D-rings so that a loop remains between the D-rings and the secured end of the keeper member engageable by the fingers for withdrawal of the keeper member to unfasten the flap, and said flap having a channel-like shape vertically intermediate its upper and lower edges of a size to accommodate such a belt.

2,743,857
SAFETY WRIST WATCH BRACELET BAND
Abraham Gold, Herman Gold, and Herman Bogin, New York, N. Y., assignors to Gold Bros. Inc., New York, N. Y., a corporation of New York
Application December 4, 1953, Serial No. 396,116
1 Claim. (Cl. 224—4)

A wrist watch band of the bracelet type comprising a wrist-encircling body composed of a pair of arcuately-shaped band sections, each band section comprising a pair of spaced parallel rods with a transversely disposed sleeve connecting one end of each pair of rods, telescopically arranged and movable pins mounted in the ends of said sleeves for interlocking with sockets in a wrist watch casing, the opposite ends of the rods of said sections being pivotally and detachably connected, said connection including a transversely disposed sleeve at said opposite ends of the rods of one of said sections, and opposed pointed jaws on said opposite ends of the rods of the other band section



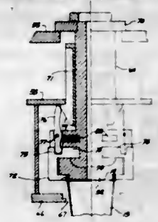
for interlocking with the ends of said latter sleeve, and a resilient transversely disposed brace between said jaw carrying rods, intermediate their ends, said resilient brace serving as a fulcrum upon exerting pressure in opposite directions upon the braced rods at a point between said brace and the sleeve connected end of said jaw carrying section whereby said jaws may be sprung out of the ends of said last-named sleeve.

2,743,858
ELECTRIC CABLES OR OTHER INSULATED ELECTRIC CONDUCTORS
George Donald Clothier, Newcastle-on-Tyne, England
Application August 2, 1950, Serial No. 177,199
Claims priority, application Great Britain August 9, 1949
15 Claims. (Cl. 226—24)



13. Apparatus for manufacturing electric cables or other insulated conductors of the kind in which a metal sheath is insulated from at least one conducting core within it by pulverulent insulating material, comprising a ram within the sheath tube having at least one feed opening in its operative head, means for causing the insulating material in powder form to flow within the sheath tube past the ram and through such feed opening into the end of the sheath tube, means for imparting relative longitudinal reciprocating movement to the ram and the sheath tube whereby the ram head is caused to apply a compressive thrust to the powder column in the end of the sheath tube, a frictional abutment in operative engagement with one of the two elements comprising the ram and the sheath tube and opposing the compressive thrust of the ram on the powder column, the said abutment being adapted to yield when such thrust exceeds a predetermined value, and valve means located adjacent to the ram head for controlling the flow of powder through the said feed opening, such valve means including at least one member movable relatively to the ram head for intermittently closing the feed opening.

2,743,859
CAPPING MACHINE AND METHOD
Kaiji Negoro, Rockford, Ill., assignor to Dairy Containers, Inc., Rockford, Ill., a corporation of Illinois
Application October 3, 1952, Serial No. 312,986
21 Claims. (Cl. 53—39)



1. The method of capping and sealing paperboard cartons with paperboard caps which consists in coating said cartons and the carton engaging side of the caps with a thermoplastic material that becomes tacky when heated whereby to waterproof the same while preparing the same for heat sealing, coating the other side of the caps with a thermosetting material that waterproofs the material but does not become tacky when heated, whereby to avoid adhesion to a heated capper, and applying the caps to the cartons under localized heat and pressure.

2,743,860
APPARATUS FOR DISTRIBUTING MATERIALS AND DEPOSITING METERED QUANTITIES THEREOF INTO CONTAINERS
Walter E. Saxe, Pasadena, Calif., assignor to The Conveyor Company, Los Angeles, Calif., a corporation of California
Application January 27, 1953, Serial No. 333,473
15 Claims. (Cl. 226—94)



1. In a distributing system for a granular material, the combination of: a bin for the material having the form of a closed loop; conveyor means in said bin for continuously circulating the material around said loop to maintain it in a fluid state, said conveyor means being continuous throughout said loop; means for discharging the material from said bin at one or more points on said loop; and scale means connected to said bin and including an indicator for indicating the weight of material in said bin.

2,743,861
FOLDING STAIRS
George Mattis, Oakland, and Stanley Rapp, Menlo Park, Calif.; said Rapp assignor to said Mattis
Application December 29, 1952, Serial No. 328,282
4 Claims. (Cl. 228—30)



1. Improved folding stairs adapted for mounting within a shallow rectangular recess in a vertical wall and comprising two pairs of parallel bars, a plurality of rigid plates each having one surface thereof comprising stair treads pivotally mounted on said pairs of bars and spaced apart equal distances along said bars to form a movable parallelogram pivotable between a retracted position with said plates in vertical planar alignment and an operated position with said plates in parallel spaced disposition, the uppermost of said plates having a pair of extensions thereon for pivotal mounting within the recess in said wall, a pair of foldable links pivotally mounted upon the front corners of said uppermost plate and adapted for pivotal connection at the opposite ends thereof within the recess in said wall above said extensions, and a pair of braces pivotally joined to one pair of said bars and extending downwardly therefrom for pivotal mounting within the recess in said wall below said extensions whereby said stairs are retractable into the recess in said wall and rotatably movable therefrom into operated position providing a rigid stairway, and said plates having a length parallel to said wall substantially equal to the width of the recess therein and a combined width equal to the height of said wall recess whereby said plates close said wall recess in retracted position.

2,743,862
FOLDING DISPLAY BOX
Richard E. Paige, New York, N. Y.
Application January 22, 1953, Serial No. 332,640
3 Claims. (Cl. 229—8)



1. A foldable display box comprising a back portion, side portions respectively connected to the opposite sides of said back portion, a front portion connected between said side portions, said front portion having a display opening therein and being folded to overlie the back portion, a glue flap on the front portion connected to the opposite side portion, foldable end closure flaps connected to the back and side portions and adapted when opened to provide access to the box, top and bottom display flaps respectively hingedly connected to said front portion and adapted to be brought over the opening in the front portion and secured together, a side display flap connected to the other side portion and foldable inwardly over the front portion and under the top and bottom display flaps, and another side display flap foldable out of the display opening and hinged to one side thereof opposing the first mentioned side display flap and foldable inwardly under said top and bottom display flaps.

2,743,863
CENTER PIECE DIVIDER FOR EGG CASES
Isador Glaser, Bronx, N. Y.
Application March 16, 1953, Serial No. 342,644
1 Claim. (Cl. 229—27)

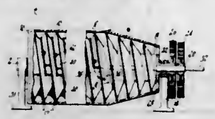
A shipping case for eggs and the like having side and end walls and a bottom closure, a vertically disposed Z-shaped partition between the side walls and hingedly connected thereto, an integral horizontally disposed brac-

ing member for the side walls hingedly connected to the partition, said bottom closure comprising end flaps integrally connected to the bottom edges of said end walls and foldable upward, each of said end flaps extending substantially one half the length of the case and having a central, longitudinal opening dividing said flaps into two substantially equal halves, and side flaps integrally connected to the bottom edges of said side walls and foldable upward, each of said side flaps extending substantially the width of the case and having a central longitudinal fold line whereby the outer portions of said side flaps may be



folded upwardly into the case through said openings in said end flaps and brought into juxtaposition with each other, said end flaps having transverse fold lines permitting the same to be folded upwardly on each side of said juxtaposed outer portions of said side flaps whereby to reinforce said case intermediate said side walls and said juxtaposed outer portions of said side flaps and to divide the bottom of the case into partitions, one of said end flaps at the end thereof abutting the end of said bracing member when said flap is folded upwardly along said transverse fold lines.

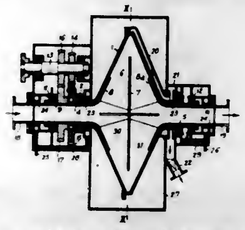
2,743,864
CENTRIFUGE WITH INCLINED CONVEYOR BLADE AND VANES FOR RAPID COLLECTION OF FINE PARTICLES FROM SUSPENSIONS
Sanford C. Lyons, Bennington, Vt., assignor to Bird Machine Co., South Walpole, Mass., a corporation of Massachusetts
Application March 5, 1954, Serial No. 414,435
6 Claims. (Cl. 233—7)



1. In a centrifuge comprising a bowl rotatable about its axis, said bowl having end openings spaced inward from the circumference to maintain a pool of a liquid suspension in the bowl during the operation thereof, a helicoidal conveyor blade rotatably mounted within the bowl with its peripheral edge adjacent to the wall of the bowl, at least one of the turns of said blade being transversely inclined with said peripheral edge trailing, and means for driving said bowl and blade at slightly different speeds of rotation.

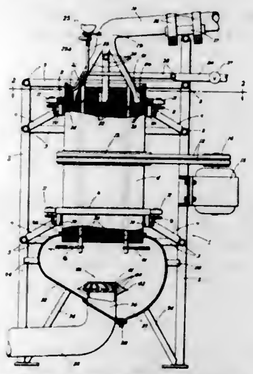
2,743,865
CENTRIFUGAL SEPARATOR
Johan E. A. Graae, St. Germain-en-Laye, France
Application November 7, 1952, Serial No. 319,307
Claims priority, application France May 24, 1952
7 Claims. (Cl. 233—7)

1. In a centrifugal apparatus for effecting the separation of mixtures of solids and fluids and to ensure a continuous discharge of the denser constituents of the mixtures; the combination of a rotated centrifuge chamber, vanes rotatably mounted within said chamber and having their peripheral edges closely adjacent to the internal surfaces of said chamber, means driving said vanes at a rotational speed slightly different than that of said chamber, inlet means for supplying a mixture to be centrifugally separated to said chamber at a location disposed adjacent the axis of rotation of said chamber, and discharge passages of substantial cross-sectional area extending radially inward from wide spaced apart locations at the periphery of said chamber toward said axis of rotation and terminating at locations radially outward



with respect to said location of the inlet means so that said vanes scrape the deposits of the denser constituents of the mixture from the internal surface of said chamber and convey the scraped deposits into said discharge passages for discharge through the latter by reason of the difference in centrifugal potential at the radially outer and inner ends of said discharge passages.

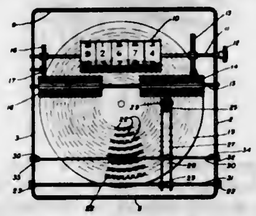
2,743,866
CENTRIFUGAL AMALGAMATOR
Dale E. Wahler and Leon P. Wahler, Stockton, Calif., and Gerard V. Smith, Fayetteville, Ark.; said Smith assignor to said Dale E. Wahler and said Leon P. Wahler
Application December 10, 1954, Serial No. 474,554
8 Claims. (Cl. 233—14)



1. A centrifugal amalgamator comprising a frame, an open-ended cylinder journaled on the frame and disposed in an upstanding position, means to rotate the cylinder, the latter having an internal wall adapted to retain mercury by centrifugal force upon rotation of the cylinder, means to feed mercury and ore pulp into the rotating cylinder in succession and adjacent the upper end thereof, means to separately introduce a liquid into said rotating cylinder against said internal wall below said feeding means, a receiving bowl at the lower end of the cylinder, and an outlet from the bowl above the bottom of the latter whereby to define an amalgam receiving pocket in the bowl below said outlet.

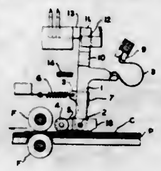
2,743,867
INTEGRATING COUNTER MECHANISM
Germain Gervais, Riviere-a-Pierre, Quebec, Canada
Application September 4, 1953, Serial No. 378,590
5 Claims. (Cl. 235—61)

5. A counter mechanism comprising a synchronous electric motor, a face wheel secured to the shaft of said motor and having a plurality of concentric spaced crowns of gear teeth of increasing diameter, a counter, a first shaft mounting said counter parallel to said face wheel, a small diameter and a large diameter gears secured to said counter shaft on each side of said counter, a second shaft parallel to said first shaft, spaced longitudinally grooved cylinders freely rotatable on said second shaft, one of said cylinders directly meshing with said large diameter gear wheel, and intermediate pinion meshing with the other of said cylinders and with said small diam-



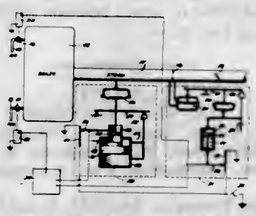
eter gear wheel, said cylinders extending respectively in front of and substantially opposite each half of said face wheel, and a selector pinion transversely displaceable respectively to said face wheel and adapted to come in meshing engagement with either one of said cylinders and with a selected one of said crowns whereby the speed ratio of said counter to said motor may be adjustably varied depending on the selected position of said selector pinion with respect to the crowns of said face wheel and depending also on which one of said cylinders, said selector pinion is engaging.

2,743,868
CARD SENSING MECHANISM
William Wockenfuss, Brooklyn, N. Y., assignor to Burroughs Corporation, a corporation of Michigan
Application April 8, 1953, Serial No. 347,596
9 Claims. (Cl. 235—61.11)



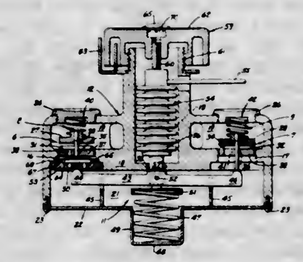
6. A sensing device for a perforated record card comprising an oscillatable sensing bell crank, an oscillatable holder, a pivot common to said bell crank and said holder, limiting means on said bell crank and said holder to limit their relative oscillations, over-the-center spring means operative to urge said holder into at least one of two operative positions, spring means constantly yieldingly urging said bell crank into sensing position to bear against the surface of a record card in which there may be perforations in line with said bell crank, said bell crank upon encountering a perforation, being urged therein by said spring means, whereupon said holder is oscillated by said limiting means from said one operative position in which said over-the-center means opposes said bell crank spring means to said second operative position of said holder and a second operative position of said over-the-center means wherein the over-the-center means yieldingly retains said holder in said second operative position even after the encountered perforation has passed beyond said bell crank, and reset means cooperating with said holder and over-the-center means to return said holder and said over-the-center means to their first operative positions and retain them in the first position independent of the movement of said sensing bell crank.

2,743,869
COMBUSTION CONTROL SYSTEM
Charles H. Smoot, Chicago, Ill., assignor to Republic Flow Meters Company, Chicago, Ill., a corporation of Illinois
Application June 3, 1953, Serial No. 359,331
5 Claims. (Cl. 236—24.5)



2. A combustion control system for a steam boiler having fuel and air supply means and a steam outlet comprising a first control device responsive to flow of steam through the steam outlet and constructed to produce a first control force changing substantially instantaneously and proportionately with changes in steam flow, a second control device responsive to steam pressure in the steam outlet and constructed to produce a second control force proportional to steam pressure, means in the second control device to introduce a time delay into response of the second control force to changes in steam pressure, control means for the air supply means responsive solely to the first control force, and control means for the fuel supply means responsive to both the first and second control forces.

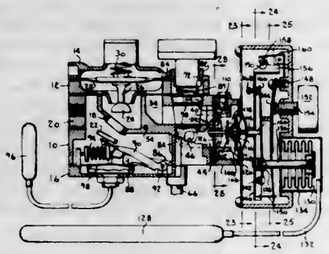
2,743,870
THERMOSTATICALLY OPERATED FUEL VALVE FOR HEAT APPLIANCES
Donald F. Drow, Los Angeles, Calif., assignor to Minneapolis-Honeywell Regulator Company, a corporation of Delaware
Application May 8, 1952, Serial No. 286,715
14 Claims. (Cl. 236—48)



3. A thermostatically controlled fuel control device for burners of heat appliances, first and second valves connected in parallel flow relation, a spring connected to each of said valves for urging same to closed position, a lever connected to said valves for movement thereof to open position against the resistance of said springs, temperature responsive actuator means movable in accordance with temperature changes connected to said lever intermediate the connections of said lever to said valves, an overcenter snap acting device mounted in the connection between said lever and said first valve to effect a snap opening and closing of said first valve and offering a predetermined resistance to its actuation in a valve opening direction, the comparative resistance of said springs and snap acting device cooperating with the comparative mechanical advantage afforded by the connections of said

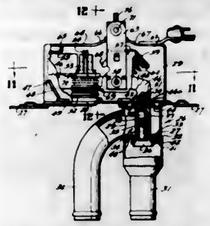
snap device and valves to said lever to produce upon movement of said actuator means in one direction in response to a decreasing temperature a snap opening of said first valve to provide a minimum fuel flow to the appliance burner followed by a graduated opening of said second valve proportional to change in temperature and upon return movement of said actuator means in response to increasing temperature a graduated movement of said second valve to closed position followed by a snap closing of said first valve.

2,743,871
GAS FLOW CONTROL
Ferdinand F. Heiser, Lourdes V. McCarty, and Reno L. Vicenzi, Milwaukee, Wis., assignors to A-P Controls Corporation, Milwaukee, Wis., a corporation of Wisconsin
Application December 14, 1954, Serial No. 475,174
9 Claims. (Cl. 236—48)



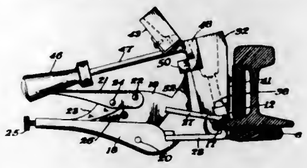
1. A gas flow control comprising, a valve body, a valve stem in said body, two valves carried by said stem in axially spaced relationship, two valve seats in the body positioned so each of said valves will seat on one of the seats, said stem being connected to one of said valves by lost motion means so that movement of the stem in the valve closing direction will act to seat said one valve first and continued movement of the stem in the closing direction will act to seat the other valve while the lost motion means takes up the motion difference between the one valve and the stem, both of said valves having a common outlet and a common inlet, a by-pass conduit connecting said inlet to the space between the valves so that closure of said one valve interrupts the major flow from the inlet to the outlet while a minor flow continues through said conduit, closure of both of said valves being effective to shut off all flow from the inlet to the outlet, thermostatic means operable to move said stem to open both valves, close both valves, or close only the one valve in response to temperature conditions at a remote location, said thermostatic means including means defining a variable volume chamber, a feeler bulb connected to said chamber by means of a capillary tube, a temperature responsive charge in said tube, bulb and chamber, a lever pivotally mounted in the body and operatively connected to said stem, means connecting said chamber to said lever to move the lever in the valve closing direction as the temperature at the bulb increases, means biasing the lever in the valve opening direction, a cam member, a cam follower member, one of the members being carried by said lever and the other member being mounted in said body, said cam member being formed to increase the resistance to valve closing movement of the lever abruptly at a position corresponding to seating of said one valve and to resist opening movement of the lever from the position in which both valves are seated, said cam and follower members thus requiring a build-up of force to pass the resistance points with the result that the lever snaps to the full closed position of the valves or to a position opening both valves.

2,743,872
HEATER VALVE MECHANISM
Charles W. Wood and Paul F. Early, Dayton, Ohio, assignors to Standard-Thomson Corporation, Dayton, Ohio, a corporation of Delaware
Application September 18, 1950, Serial No. 185,486
24 Claims. (Cl. 236—92)



1. In a space heating system, a valve to control the flow of a heating medium to an air heater, a lever mounted on a fixed support, means for operatively connecting said valve with said lever at a point spaced from the pivotal axis thereof, a temperature responsive element connected with said lever to impart valve actuating movement thereto, a compression spring pivotally connected with said lever to resist the movement thereof by said temperature responsive element, and pivotal means for adjusting said spring to different angular positions with relation to said lever the pivotal axes of the compression spring and the pivotal means for adjustment thereof being closely adjacent to minimize the variation in compression of the spring with movement of the pivotal means.

2,743,873
RAIL BOND AND APPARATUS FOR ATTACHING SAME
Donald J. Burke, Cleveland, Ohio, assignor to Erico Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application October 19, 1950, Serial No. 190,987
13 Claims. (Cl. 238—14.15)

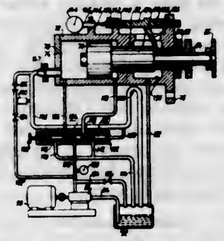


6. A conductor assembly adapted to be cast-welded to a generally horizontal surface such as the foot of a rail, for example, comprising a conductor, a sheet metal mold cap mounted on an end of said conductor comprising a sheet metal well apertured on one side for insertion of such conductor end therein closely fitting such aperture, sheet metal wing portions flanged outwardly of such aperture adapted to engage and brace said conductor in this region, and flat tabs flanged out laterally of said cap from the lower edge of the same adapted to rest on the upper surface of the foot of such rail with such lower edge likewise flush therewith in sealing engagement with such surface.

2,743,874
DISK TYPE GRINDING APPARATUS FOR FIBROUS MATERIALS
Arne Johan Arthur Asplund, Hoglandet, Bromma, Sweden
Application July 19, 1952, Serial No. 299,878
7 Claims. (Cl. 241—32)

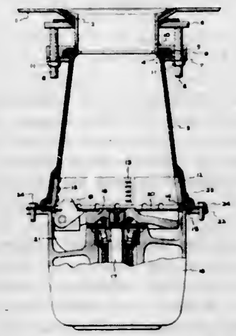
1. A grinding apparatus for fibrous materials, including a stationary grinding disk, a rotatable grinding disk for cooperation therewith, the rotatable grinding disk being carried by an axially movable shaft to thereby control

the spacing of the rotatable disk relative to the stationary disk and to control the compressive pressure exerted by the disks on material introduced between them, a housing in which a piston is slidable, a piston in said housing, the piston having an extended end portion located externally of the housing and coupled to the axially movable shaft, stop means for limiting the movements of the piston in a



direction toward the grinding disks, a fluid pressuse system for introducing fluid under pressure into the housing at both ends of the piston, and means for indicating movements of the piston comprising a slidable member mounted on the housing and having a projecting element in engagement with the piston, spring means for maintaining said element in engagement with the piston, and an indicating instrument coupled to said slidable member.

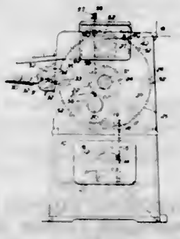
2,743,875
WASTE DISPOSAL APPARATUS
Bernard J. Brezosky, Louisville, and Norman G. Ferguson, Middletown, Ky., assignors to General Electric Company, a corporation of New York
Application December 16, 1954, Serial No. 475,626
4 Claims. (Cl. 241—100.5)



1. Waste disposal apparatus comprising a housing providing a comminuting chamber having a top opening for the admission of waste material, said housing being adapted to be supported with said opening in alignment with a sink drain opening, a stationary shredding element secured to the inner surface of said housing adjacent the bottom of said chamber, a rotary impeller element mounted at the bottom of said chamber and arranged for cooperation with said stationary element in the comminution of waste material, said housing being formed of elastomeric material whereby the impact of waste material thrown against said housing by said impeller element is cushioned and absorbed by deformation of said elastomeric material.

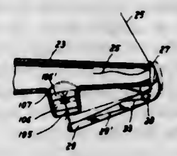
2,743,876
WINDING MACHINE FOR BRASS BOBBINS
Reginald Samuel Needham, Littleover, England
Application November 19, 1952, Serial No. 321,379
6 Claims. (Cl. 242—35.5)

1. A brass bobbin winding machine comprising a carrier mounted for rotary movement, drive means to rotate the carrier, a number of bobbin spindles removably supported by the carrier parallel to its axis of rotation, a number of bobbins supported side by side on each of the spindles, means feeding a corresponding number of threads one into each bobbin on one of the spindles, means acting thereafter to rotate such spindle about its own axis, means operatively connected intermediate the



drive means and the carrier to impart intermittent movement to the carrier, means measuring the length of thread wound on to the bobbins effective to stop operation of the further means rotating the spindle after the requisite length of thread has been wound thereon, and means connecting the measuring means with the drive means to initiate the intermittent movement of the carrier when such spindle rotation is stopped.

2,743,877
CLAMPING DEVICE FOR AUTOMATIC COIL WINDING MACHINE
Stefan Fürst, Munchen-Gladbach, Rhineland, Germany, assignor to Walter Reiners, Munchen-Gladbach, Rhineland, Germany
Application February 2, 1953, Serial No. 334,433
3 Claims. (Cl. 242—35.6)

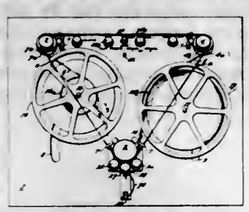


1. Clamping device for gripping a thread in any condition comprising a suction tube forming part of means for carrying a thread to a knotter on an automatic coil winding machine, a suction mouth at one end of the said suction tube, a lid closing or opening the suction mouth, operating means for closing the lid actuated by the difference of air pressure between the inside and the outside of the suction tube with an enlarged power transmission and operating means working independently of the condition of the clamping device for closing the lid when no difference of air pressure between the inside and the outside of the suction tube is maintained.

2,743,878
MAGNETIC SOUND-RECORDING AND REPRODUCING MACHINE
Earl E. Masterson, Palmyra, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Original application June 29, 1948, Serial No. 35,892, now Patent No. 2,658,398, dated November 10, 1953. Divided and this application April 1, 1952, Serial No. 279,894
6 Claims. (Cl. 242—55)

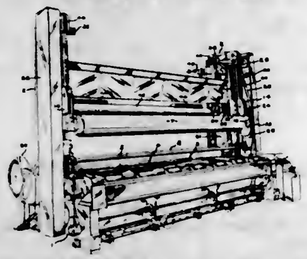
1. A power drive system comprising: a driving pulley, a plurality of spaced-apart idler speed-pulleys of substantially duplicate rim diameters, an endless belt connecting said driving pulley with rims of corresponding diameter on said speed-pulleys, an endless elastic band

connecting said driving pulley with rims of another diameter on said speed-pulleys, and driven means connected in



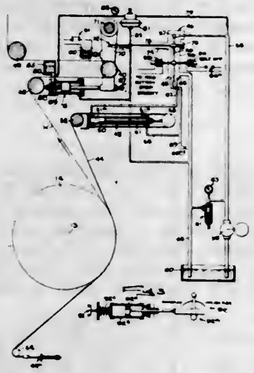
power take-off relation with respect to said elastic band along at least a portion of the path thereof.

2,743,879
REWIND MACHINE RIDING ROLLER
Felix Saco, Wantaugh, and Leonard Rockstrom, Manhasset, N. Y., assignors to Cameron Machine Company, Brooklyn, N. Y., a corporation
Application November 3, 1953, Serial No. 390,002
19 Claims. (Cl. 242—66)



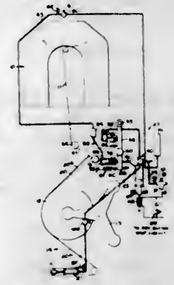
1. A web roll winding machine including a top pressure roller displaceable by the accumulation of wound material, endless means connected to said roller at each end and travelling in similar paths to support and raise and lower said roller, counterweights connected to said endless means within their paths to balance the weight of said roller, and means to hold said endless means in tension to restrain movements of the roller independently of movement of the endless means.

2,743,880
TENSION CONTROL SYSTEM FOR PRINTING PRESS
Henry L. McWhorter, Hinsdale, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a corporation of Illinois
Application August 14, 1952, Serial No. 304,405
1 Claim. (Cl. 242—75)



In a tension control system for maintaining a desired tension in a running web fed from a paper roll, the combination comprising a brake belt peripherally engaging the roll to apply a braking force thereto, a double-acting pressure fluid actuator connected to said belt for tensioning and slacking off the latter, a source of pressure fluid and a sump, a pressure fluid regulator supplied by said source and having a movable jet pipe for applying fluid to the ends of said actuator alternatively in accordance with the position of the jet pipe, a floating roller for engaging a loop in the running web, means for mounting said roller for bodily movement in response to changes in loop tension, means for biasing the roller in a direction to elongate the loop, and means for coupling the jet pipe in the regulator to said roller so that a departure in loop tension from the desired value causes movement of the jet pipe to produce a corrective change in braking force, the end of said actuator employed for slacking off having a restricted connection to said sump.

2,743,881
WEB TENSION CONTROL
Henry L. McWhorter, Hinsdale, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a corporation of Illinois
Application February 9, 1953, Serial No. 335,762
22 Claims. (Cl. 242—75)



3. In a tension control system for maintaining a desired tension in a running web fed from a paper roll, the combination comprising a brake belt peripherally engaging the roll to apply a braking force thereto, a pressure fluid actuator connected to said belt for tensioning the latter, a variable pressure regulator having a control element and having a connection with a source of pressure fluid for applying fluid to said actuator at a pressure corresponding to the position of the control element, a floating roller for engaging a loop in the running web, means including a source of adjustable bias for mounting said roller for bodily movement in response to changes in loop tension, means for coupling the control element of the regulator to said roller so that a change in tension in the loop from an equilibrium value causes a corrective change in braking force, and stops for limiting the range of movement of the floating roller to about one-quarter of an inch.

2,743,882
WEB TENSION CONTROL
Dennis H. Knowles, Western Springs, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a corporation of Illinois
Original application February 9, 1953, Serial No. 335,762. Divided and this application January 5, 1954, Serial No. 402,334
3 Claims. (Cl. 242—75)

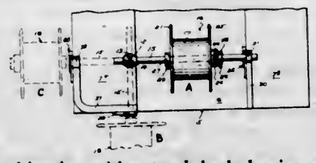
1. In a tension control system for maintaining a desired tension in a running web fed from a paper roll, the combination comprising a brake belt peripherally engaging the roll to apply a braking force thereto, a pneumatic actuator connected to said belt for tensioning the same, a variable pneumatic pressure regulator having a control

rod and a poppet valve operated thereby and in which the output pressure is a direct function of the position of the control rod, said regulator having a source of air pressure connected to its input, means for connecting the pneumatic actuator to the output of said regulator, a floating roller for engaging a loop in the running web, means for mounting said roller for bodily movement and



having means for biasing the roller in a direction to increase the size of the loop, means for coupling the control rod of the regulator to said roller so that a change in tension in the loop causes a corrective change in braking force, and means including an auxiliary piston in said regulator connected to said poppet valve and acted upon by the input air pressure for assisting in opening said poppet valve.

2,743,883
WIRE DISPENSING REEL FOR SERVICE TRUCKS
Gilbert Farmer, Fort Lauderdale, Fla.
Application March 29, 1955, Serial No. 497,593
4 Claims. (Cl. 242—90)



1. In combination with a truck body having a generally rectangular body well and laterally spaced storage housings, a cable supporting and dispensing reel adjustably supported upon the truck, a shaft for rotatably supporting the reel, means carried by one housing whereby to pivotally support the shaft in a manner to swing in a horizontal arc with its supported reel, means for limiting the swinging movement of the shaft and the reel whereby to dispose the reel in overlying relation to the well, means to limit the swinging movement of the shaft and the reel whereby the reel is disposed in a position parallel to one outer side of the truck, and means to limit the swinging movement of the shaft and the reel whereby the reel is disposed parallel to the rear end of the truck, a latch device carried by each of the limit means for retaining the shaft in each of the positions of adjustment whereby to dispense the cable either directly from the rear of the truck, to dispense the cable forwardly along the side of the truck or for dispensing the cable laterally across the rear of the truck, the reel being provided with one removable end whereby to install a coil of cable upon the reel, and stop collars disposed upon the shaft whereby to adjustably hold the reel against sliding upon the shaft.

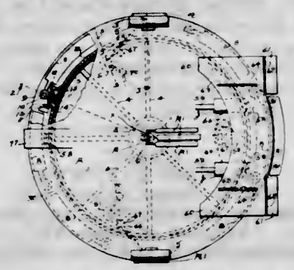
2,743,884
FISH TAPE THREADER
George E. Briggs, Palo Alto, Calif.
Application August 25, 1953, Serial No. 376,413
2 Claims. (Cl. 242—96)

1. In combination with an electrician's fish tape reel having peripheral guide flanges including opposite, annular, spaced apart, beaded edges between said flanges, a tape threader slidably disposed between said guide flanges for guiding a tape tangentially from and onto said reel, said threader comprising an elongated bar seating chordally between said flanges within the confines of said beaded edges and having a longitudinal passage therethrough for guiding the fish tape onto the reel, said bar being wider



than the space between said beaded edges so that said edges retain the bar in the reel.

2,743,885
ROTOR AND WING AIRCRAFT
Adolphe C. Peterson, Minneapolis, Minn.
Application May 7, 1953, Serial No. 353,481
23 Claims. (Cl. 244—7)

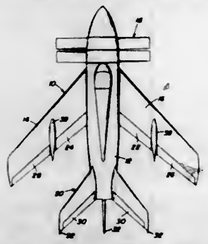


1. In an aircraft, a rotor carrying air foil unit having an upper sheathing wall exposed on the upper surface to the ambient air in flight and a lower sheathing wall exposed on its under surface to the ambient air in flight and an intermediate framing structure to which said sheathing walls are attached, the said air foil unit having a circular plan form and of large diameter relative to its depth transversely of said plan form; an annular mounting race formed circumferentially of said intermediate framing structure and substantially in the plane of the circumferential periphery of said air foil unit; an annular mounting ring and a bearing mounting for the mounting ring formed on the said annular mounting race for rotation of the mounting ring about the said annular mounting race as a support therefor in rotation; a plural number of air foils spaced about the mounting ring and each having anchorage at its root end in the mounting ring, the anchorage of each air foil including a pivot on an axis substantially transversely and vertically of the plane of the mounting ring on which the air foil is oscillative substantially in the plane of rotation of the mounting ring to place it alternatively in a retracted position between the said upper and lower sheathing walls, and within the external circumferential periph ery of the said air foil unit, or in a position extended substantially radially outwardly from the said air foil unit.

2,743,886
VERTICAL CLIMBING AIRPLANE
Ivan H. Driggs, Montgomery County, Md., Abraham Hyatt, Washington, D. C., and Frampton E. Ellis, Jr., Montgomery County, Md.
Application July 8, 1952, Serial No. 297,796
5 Claims. (Cl. 244—7)
(Granted under Title 35, U. S. Code (1952), sec. 266)

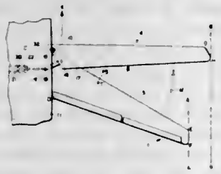
1. A heavier than air craft comprising a streamline body, a dual unit, single axis, a counter rotating propeller

at the forward end of said body, an empennage at the rear end of said body and having aerodynamic surfaces in the slipstream of said propeller, a wing projecting laterally of said body at a point between said propeller and said empennage, said propeller being rotatable about an axis substantially coincident with the longitudinal axis of said streamline body, said axes being substantially vertical during vertical flight and substantially horizontal



during horizontal flight, cruising ailerons mounted on the outer end portions of said wing and spaced laterally from the propeller slipstream and means to operate said cruising ailerons, hovering ailerons mounted on the inboard portion of said wing and in the propeller slipstream to control the craft while hovering and while in vertical flight, and means operable independently of said cruising aileron operating means for actuating said hovering ailerons.

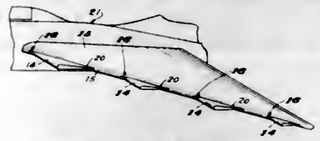
2,743,887
SPLIT AIRCRAFT WING
Willy A. Fiedler, Oxnard, Calif.
Application November 12, 1952, Serial No. 320,164
3 Claims. (Cl. 244—43)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. An aircraft structure designed to reduce safe minimum speed in high speed aircraft which comprises a fuselage, swept back wings extending laterally from both sides of said fuselage, each of said wings having in combination therewith an auxiliary forewing fitting snugly against the upper forward surface thereof, each of said forewings being pivotally mounted on a fixed axis located closely adjacent the leading edge of said swept back wings and in the innermost portion of said forewings, said axes sloping forwardly of a plane defined by the Y and Z principle axes of the aircraft and upwardly and laterally inward toward the plane defined by the X and Z principle axes whereby said forewings are pivotally movable in an arc forward and downward away from the surface of said swept back wings with greatest relative movement at the outer portion of said forewings, and means for controlling pivotal movement of said forewings about said pivotal axes.

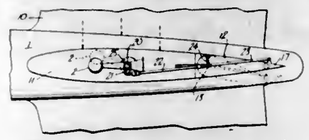
2,743,888
VARIABLE WING
Alexander M. Lippisch, Cedar Rapids, Iowa, assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application October 20, 1951, Serial No. 252,251
4 Claims. (Cl. 244—43)

1. Means for reducing drag and increasing the lift of a wing comprising a plurality of slots formed in the leading edge of said wing, a plurality of vertical pins mounted in said wing, a plurality of winglets pivotally supported by said vertical pins and with each winglet receivable within one of said slots, said winglets pivotally



supported by said pins at the corner of the winglet which is adjacent the leading edge of the wing and also nearest the fuselage and actuating means connected to said winglets to move them from a first retracted position to a projected position.

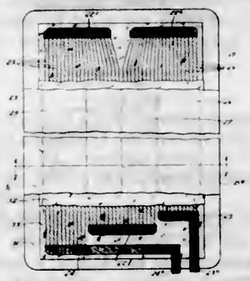
2,743,889
AIRCRAFT STABILIZING CONTROL MECHANISM
Roland J. White, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application May 31, 1952, Serial No. 290,993
16 Claims. (Cl. 244—76)



1. Stabilizing control mechanism for an airplane having a yaw control surface movable relative to the airplane, comprising a single inertia weight element, means guiding said element for displacement relative to the airplane in a direction laterally of the airplane by abrupt yawing of the airplane, means operatively connecting said single inertia weight element and the yaw control surface, said single inertia weight element being operable by such displacement to effect swinging of the yaw control surface relative to the airplane in opposition to force of the air stream on the yaw control surface and in a direction to oppose such yawing movement of the airplane, and retarding means connected directly to said single inertia weight element for conjoint movement therewith and operable to exert on said element, during movement thereof relative to the airplane, a force substantially independent of the degree of displacement of said single inertia weight element relative to the airplane but produced by movement of said element, retarding such movement of said element relative to the airplane and correspondingly effecting a substantial lag in movement of the yaw control surface relative to the airplane behind such yawing of the airplane which effected displacement of said single inertia weight element.

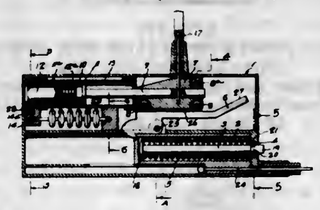
2,743,890
ELECTRICALLY HEATED PROTECTIVE COVERING FOR AIRCRAFT
Albert M. La Rue, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a corporation of New York
Application July 31, 1952, Serial No. 301,923
8 Claims. (Cl. 244—134)

3. An electrically heated thin flexible anti-icing covering comprising a sheet-like body of elastic rubber-like material, an inner face of the covering adapted for attachment to a structure at a surface thereof, an outer face on the covering spaced from said inner face, one of said faces constituting a heating face of the covering, electrical heating means including a plurality of electrical resistance heating wires imbedded in said body, flexible conductor means for connecting said heating wires to a source of electrical heating current, said heating wires being disposed in closely spaced-apart relationship and along substantially parallel paths in the body, each of said heating wires being crinkled along its length providing a plurality of interconnected undulations in each inch of length of the heating wire, all the undulations in said heating wires having substantially all portions therein equidistant from said heating face, and said body including a thin continuous layer of elastic rubber-like dielectric material directly



contacting and entirely surrounding all the heating wires and insulating each heating wire from an adjacent heating wire throughout their respective lengths, said layer elastically maintaining all said undulations in their undulated configuration and in their equidistant relation to said heating face so that said undulations are locally and individually extensible and contractible together with said layer of said dielectric material, and a stretchable reinforcing fabric sheet overlying all said heating wires and being disposed intermediate said layer of dielectric material and said heating face.

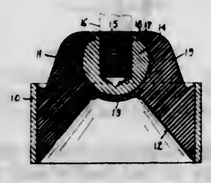
2,743,891
BAROMETRIC PARACHUTE RELEASE
John A. Gaylord, Pacific Palisades, Calif.
Application October 12, 1953, Serial No. 385,516
3 Claims. (Cl. 244—150)



1. A barometric release for a parachute comprising, a shuttle casing, means for attaching a jerk line to said shuttle casing, a precompressed spring within said shuttle casing, a trip member normally restraining movement of said shuttle casing under influence of said precompressed spring, a dashpot connected to said trip member, said dashpot having a vacuum chamber and an air inlet to said vacuum chamber, a valve member controlling the flow to said passage, a diaphragm responsive to atmospheric pressure attached to said member and said casing, and means for adjusting said member to open said passage at a predetermined pressure.

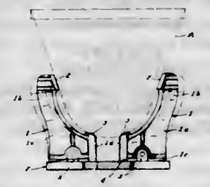
2,743,892
SHOCK MOUNT
Walter J. Mordarski, Meriden, and William H. Spencer, East Haven, Conn., assignors to The Connecticut Hard Rubber Company, New Haven, Conn., a corporation of Connecticut
Application April 3, 1953, Serial No. 346,722
2 Claims. (Cl. 248—24)

1. A shock-absorbing mounting comprising an outer hollow member, an inner member having its outer surface in spaced relation to the outer member and partly embraced therewithin, a body of resilient material between said members and bonded to both thereof, the lower surface of said body being inclined upwardly and inwardly in substantially cone-frustum form terminating in a web portion forming the top of the lower surface, and the upper surface of the body being inclined upwardly and inwardly at a steeper angle than the lower surface to give the body a greater axial dimension adjacent said inner member than adjacent the outer member, said



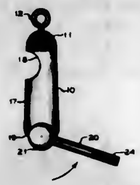
outer member being unobstructed at both ends thereof to permit the body of resilient material to be forced through the lower open end of said member under load, the lower portion of said inner member being of substantial spherical shape lying above said outer member when said inner member is not under load, and being supported from below by the said web portion of the resilient material, the lower spherical portion of said inner member being rabbeted at the top to provide a recess to receive a portion of the resilient material.

2,743,893
PORTABLE CINDER POT STAND
William Johnston, Jr., Bedford, Pa.; Peter J. Spangler and H. Alan Floyd, executors of said William Johnston, Jr., deceased
Application June 14, 1948, Serial No. 32,757
2 Claims. (Cl. 248—146)



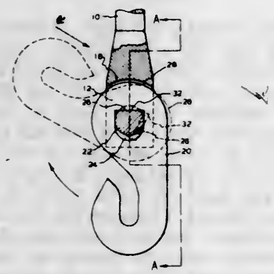
1. A sectional cinder pot stand of massive structure comprising a base and a cooperative group of pot-engaging arms mounted on horizontal pivots on said base, the mounting of said arms being a free pivotal bolster and socket mounting between each of the said arms adjacent the lower end thereof and the said base for simple removal of lifting of each said arm individually from said base, the said pot-engaging arms being extended upwardly from their said pivot points to swing convergently and divergently between pot-receiving and pot-supporting positions, said arms each including a contact member extended outwardly beyond the pivot point of the arm and the weight distribution of the arms being such as to cause the upper ends thereof to swing outwardly under gravity bringing the said contact members into rest position on the base to define the divergent pot-receiving position of the arms as a group, and said arms also each including a pot-carrying member extended inwardly of the pivot point of each of the said arms that moves downwardly into rest position on the said base under the weight of a cinder pot thereon, with swinging movement of the arms as a group into convergent position of the upper ends thereof to engage the wall of the cinder pot and with elevation of the said outwardly extended contact members of the arms.

2,743,894
QUICK DETACHABLE ARTICLE CARRIERS
Anders Kristoffer Arne Östnäs, Nyköping, Sweden
Application September 8, 1951, Serial No. 245,718
1 Claim. (Cl. 248—317)



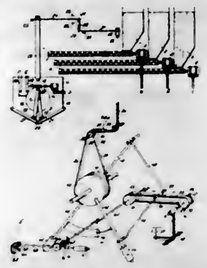
An article carrier comprising a sleeve of resilient material, a plus closure for one end of said sleeve, an eye secured to said plug and extending axially therefrom, an aperture in the wall of said sleeve adjacent said closure, a slot extending from said aperture to the opposite end of said sleeve, a constriction in the opposite end of said sleeve, a cooperating member comprising a shank having a ball at one end thereof, said ball being of a diameter to pass through said aperture and be slidably received in said sleeve, said ball being larger in diameter than said constriction, said shank being shorter than the distance between said aperture and the opposite end of said sleeve, said shank being screw threaded for securing the same to an article to be carried whereby said ball and said constriction form a ball and socket joint to support said article, the relative diameters of the opposite end of said sleeve and said shank being such as to permit swinging movement of said shank through an angle greater than forty-five degrees with respect to the axis of said sleeve and into engagement with the end of said sleeve to provide a leverage for forcing said ball through said constriction to detach said article for use.

2,743,895
SWING HOOK
Robert L. Tygh, Clarklake, Mich.
Application January 20, 1950, Serial No. 139,560
4 Claims. (Cl. 248—341)



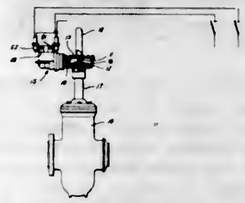
1. A swing joint comprising a first joint part having a pair of spaced opposed legs having aligned circular openings therethrough, a cylindrical pivot pin rotatable in said openings and having a medial transverse chordal recess, and a second joint part rotatable with said pivot pin between said legs and having a transverse hole therethrough of which all the dimensions are at least as great as the diameter of said pivot pin, said hole being bounded on a side thereof by a flat surface adapted to contact the bottom of said chordal recess so that said pivot pin and second joint part will turn together as a unit in operation.

2,743,896
AUTOMATIC WEIGHER FOR MIXTURES
Johannes Ewardus Nauta, Overveen, Netherlands
Application September 3, 1952, Serial No. 307,640
Claims priority, application Netherlands
September 5, 1951
1 Claim. (Cl. 249—14)



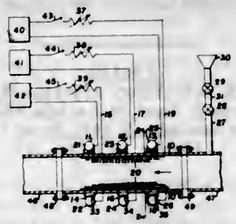
In a multiple materials batching apparatus, the combination of a multiple materials weighing vessel to receive different materials to be batched; a series of storage vessels for different materials; supplying means intermediate the storage vessels bins and the hopper weighing vessel for supplying and cutting off different materials; a weighing device for the weighing vessel including a movable electrical brush responsive to the total weight of materials in the weighing vessel; a series of fixed electrical contacts cooperating consecutively with said movable electrical brush; a series of connecting members, each constituting an electrical connection between a fixed contact and an adjacent fixed contact; plugs to be connected with any one of said fixed contacts and operating said supplying means consecutively so that the different materials of the storage vessel will be supplied into the weighing vessel consecutively; and means controlled by said switching plugs to interrupt the electrical connection between a fixed contact cooperating with the plug and an adjacent fixed contact.

2,743,897
UNITARY POWER OPERATOR FOR OPENING AND CLOSING VALVES
Lynn T. Elliott and James N. Morrell, Houston, Tex.
Application November 28, 1952, Serial No. 322,934
15 Claims. (Cl. 251—59)



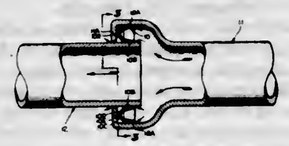
1. An apparatus which comprises, in combination, a main valve including a valve stem to be moved to open and close the main valve; a unitary valve operator assembly mounted on said main valve and including a reversible rotary fluid motor, power transmitting means connected to the motor and including an output shaft, selector valve means connected to the motor and actuatable to reverse the direction of fluid flow through the motor, a limit valve in series with said selector valve means and controlling flow through the motor, a rotatable part carried by the assembly, drive means connecting said rotatable part to one of said motor and power transmitting means at a point within the assembly and independently of any mechanism for connecting said output shaft to said stem, a cam element carried by the assembly and adapted upon movement to engage said limit valve to close the latter, cooperating actuating parts connecting between the cam element and rotatable part providing for such movement of the cam element responsive to rotation of the rotatable part and causing said cam element to engage said limit valve to close the same after said motor has rotated a predetermined number of revolutions in one direction, and flow conducting means connected to said selector valve means in parallel with said limit valve for by-passing fluid around the limit valve to rotate the motor in a direction opposite to said one direction while the limit valve is closed; and means connecting the output shaft to said stem to move the latter to open and close said main valve responsive to actuation of said motor.

2,743,898
MAGNETIC VALVE FOR CONTROL OF FLUID OR FLUIDIZED SOLIDS FLOW
William H. King, Jr., Florham Park, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application October 30, 1953, Serial No. 389,280
7 Claims. (Cl. 251—139)



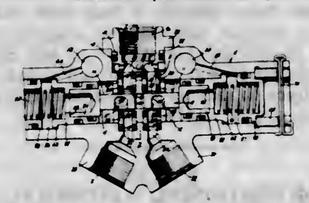
1. In a conduit defining a flow path for fluids and for substantially non-magnetizable fluidized solids, a means for controlling flow through said conduit, comprising a longitudinally limited section of said conduit, a series of at least two magnets disposed exteriorly of said conduit in spaced relation one to another longitudinally of said conduit section and intermediate the ends thereof, each of said magnets adapted to establish a magnetic field through said section, a plurality of discrete, magnetizable, solid particles disposed within said conduit section, and substantially maintained therein subject to the force fields of said magnets, and means for varying the total force of said magnetic fields and of the individual magnetic fields so as to vary the distribution pattern of said particles between a substantially annular pattern adapted to pass fluids and fluidized non-magnetic solids through said section, and a substantially diametric pattern adapted to intercept said fluids and fluidized solids.

2,743,899
IRRIGATION PIPE JOINT WITH VALVED GASKET
Wilbur C. Kinney, Vista, Calif.
Application October 15, 1951, Serial No. 251,369
1 Claim. (Cl. 251—149)



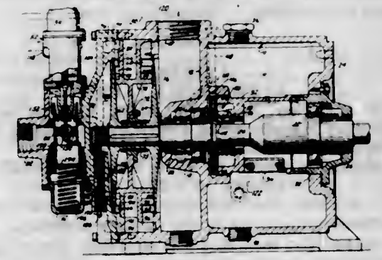
In an arrangement of the character described, an inner pipe section, an outer coaxially arranged pipe section, said outer pipe section having a ring-shoped flanges, a gasket member disposed between said inner and outer pipe sections, said gasket member comprising a pair of radially spaced flanges engaging respectively the inner and outer pipe sections and having a pair of web members angularly disposed relative to said flanges, with said web members intersecting generally on a circle, said web members engaging said ring-shaped flange normally on a line contact and on said circle, and the combined lengths of said web members being substantially equal to the radial spacing between the coaxially arranged inner and outer pipe sections, said web members being deformable to fulcrum about said line contact and to become wedged between said inner and outer pipe sections upon application of pressure within said inner pipe section above a predetermined amount.

2,743,900
SLIDE VALVE
Theodore H. Holzer and Donald C. Asbury, Glendale, Calif., assignors, by mesne assignments, to The Parker Appliance Company, Cleveland, Ohio, a corporation of Ohio
Application November 28, 1952, Serial No. 322,861
2 Claims. (Cl. 251—174)



1. In a fluid valve, the combination of: a body member having a cylindrical bore therein, a ported slide element extending axially in the bore and having parallel surfaces, the slide element also having curved edge portions engaging the cylindrical bore, a pair of duplicate shoes axially insertable into the cylindrical bore and adapted to be positioned on opposite sides of the slide element, each shoe having a ported face for sealing contact with one of said parallel surfaces on the slide element, each shoe also having a curved surface shaped to conform to said cylindrical bore, the body member and said shoes having aligned transverse openings communicating with said ported surfaces of said shoes, a plurality of tubes, each tube having one end sealed to one of the transverse openings, respectively, in said shoes, a sealing ring encircling each of the tubes to seal it with respect to one of the transverse openings in the body member, respectively, each tube having a central flange fitting into said aligned transverse openings to serve as a key to prevent axial movement of the shoes, and means whereby the slide element may be shifted axially within said cylindrical bore.

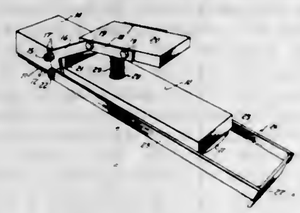
2,743,901
FLUID TURBINE
George H. Garraway, Reading, Pa.
Application February 11, 1950, Serial No. 143,783
4 Claims. (Cl. 253—52)



1. In a fluid turbine governor system, said turbine including a motive fluid entry conduit, a housing including a throttle valve chamber, a piston type throttle

reciprocable in said chamber and operable in different positions to admit different amounts of fluid to said turbine motive fluid entry conduit, a cylinder coaxial with said throttle, isolated from said throttle chamber, a piston reciprocable within said cylinder, means connecting said piston to said throttle to cause movement of the latter in response to movements of the former, a reciprocable control valve coaxial with the piston and spaced from one end thereof, governor means connected to said valve to establish its position in accordance with turbine speed, a source of hydraulic medium controlled by said governor and controlling said valve, said valve according to its position controlling admission and discharge of hydraulic medium to and from said cylinder above and below said piston, said piston having a central bore closed at one end and open at its other end adjacent said valve, elastic means in said bore acting between said piston and valve, coaxial with both, to exert a force on said valve as a function of piston position, said elastic means including a thimble on one end thereof and urged into valve contact thereby, said thimble being slidable in said bore and forming therewith a dashpot, said dashpot allowing only slow movement of said thimble relative to said piston upon rapid movements of said piston in said cylinder whereby the elastic force on said valve is altered, transiently, upon rapid movements of said throttle and piston.

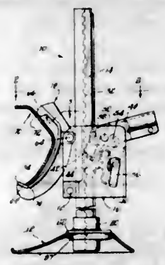
2,743,902
TOOL FOR POSITIONING MATCHED PLANKING
Reese W. Porter, Bismarck, N. Dak.
Application January 9, 1952, Serial No. 265,583
3 Claims. (Cl. 254—15)



1. A device for aligning matched planking comprising an elongate base member, an anchor plate coextensive with and affixed to the underside of said base member, a bell crank pivoted to said base member on each side thereof, an elongate substantially U-shaped draw bar whose legs are disposed one on each side of said base member in normal parallelism therewith, each of said legs being pivoted at its end to an arm of said bell crank for rotation in an arc of at least 180°, a spring biased treadle affixed to the other arms of said bell cranks above said base member and adapted, upon depression, to actuate said bell cranks to effect longitudinal displacement of said draw-bar in relation to said base member and means on the free end of said draw-bar for engaging a length of planking.

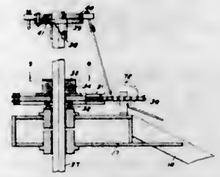
2,743,903
AUTOMOBILE JACK
Millard B. Lucker, St. Joseph, Mich., assignor to Auto Specialties Manufacturing Company, St. Joseph, Mich., a corporation of Michigan
Application August 16, 1950, Serial No. 179,825
8 Claims. (Cl. 254—133)

1. In a lifting jack including a jack strut and a load lifting housing mounted on the strut for movement therealong, a load rest including a transversely extending wall and a reinforcing rib disposed substantially perpendicular to said wall, an aperture formed in said reinforcing rib substantially below an upper end of said wall and above the vertical center point of said wall, pin means passing through said aperture and connected to the load lifting housing for pivotally mounting the load rest on the housing, and an abutment formed on said wall adjacent the upper end thereof and above said pin means for engaging a bumper, the lower end of said wall having



an upwardly and outwardly extending bumper retaining and supporting portion, said abutment and bumper retaining portion contacting an associated bumper at only two spaced apart points and holding the remaining portions of the bumper face out of contact with said load rest.

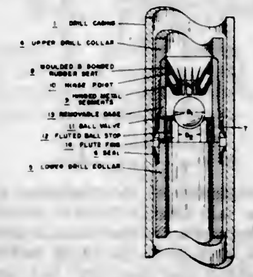
2,743,904
EXCEXCAVATING APPARATUS
Loren F. Scott, Melvindale, Mich.
Application November 7, 1950, Serial No. 194,482
11 Claims. (Cl. 255—19)



1. In an apparatus for digging footing excavations, a cylindrical bucket which is split axially into two generally semi-cylindrical half sections pivotally connected at their upper ends for pivotal movement about an axis perpendicular to the axis of the bucket, said bucket sections each having at its lower end a bottom wall, said bottom walls being provided with blades for cutting into the ground when the bucket is rotated on its axis and driven downwardly, said bottom walls being pivotally connected with the side walls of said bucket sections, and hydraulic means for pivoting said bottom walls upwardly and downwardly and said two bucket sections radially towards and away from each other.

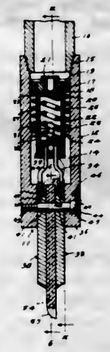
2,743,905
IMPROVED SEALING VALVE ASSEMBLY
John E. Eckel, Tulsa, Okla., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application December 18, 1952, Serial No. 326,621
3 Claims. (Cl. 255—28)

3. A removable drill collar for a string of drilling casing comprising a tubular member adapted to fit slidably within said casing, an inverted frusto-conical valve seat of flexible resilient material positioned within and fastened to said tubular member, said valve seat having a central opening at its lower end, a plurality of circumferentially arranged rigid ribs embedded in said valve seat material, the upper end of each of said ribs being pivotally fastened to said tubular member, a ball shaped valve element freely movable within said tubular member, said valve element having a diameter greater than the opening of said valve seat whereby said ribs will move outward to enlarge said opening sufficiently to pass said element when a downward force is exerted thereon, but will move inwardly to prevent upward return of said element when an upward force exerted on said element places said element in sealing engagement with said valve seat, a stop member positioned within said tubular member below said valve seat and arranged to prevent further downward travel of said valve element after it has passed through said opening, and at least one resilient seal fixed to the



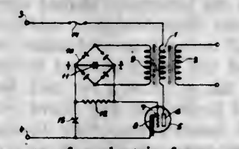
exterior of said tubular member in a manner sealing the annulus between said casing and said tubular member, said seal acting in conjunction with said valve element and valve seat to prevent upward movement of fluid past said drill collar within said casing, whereby fluid pressure exerted below said drill collar will raise the drill collar through the casing.

2,743,906
HYDRAULIC UNDERREAMER
William E. Coyle, Cotton Valley, La.
Application May 8, 1953, Serial No. 353,804
4 Claims. (Cl. 255—74)



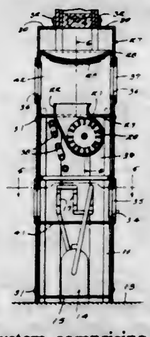
1. A reaming tool comprising an elongated body member having an upper end detachably secured to the lower end of a drill pipe, said body member having a bore in the upper portion thereof communicating with the drill pipe for receiving a circulating fluid under pressure therefrom, a piston slidably mounted in the upper portion of said bore, a pair of reamer blades, means swingably connecting said reamer blades adjacent inner ends thereof to the body member below the piston, means including links connecting the blades to the piston for swinging the blades outwardly to radially extended positions when the piston is displaced downwardly, and spring means urging said piston toward the upper end of said bore for drawing said blades inwardly to retracted positions longitudinally of the tool, said body member having transversely spaced slots disposed below the bore thereof and separated from one another by a part of the body member, said slots having upper ends opening into said bore and having other portions opening downwardly from another part of the body member and radially outwardly thereof, said inner ends of the reamer blades and the lower ends of said links being swingably disposed in said slots, and a stationary blade forming the lower end of the body member and having an upper end disposed between the inner ends of said reamer blades and constituting said first mentioned part of the body member, the outer ends of said reamer blades straddling an exposed lower portion of the stationary blade when the reamer blades are in retracted positions.

2,743,907
PULSE GENERATOR FOR ELECTRIC FENCES
Frantz Christensen, Gentofte, and Adam Johan Ludvig Leopold, Hellerup, Denmark
Application July 6, 1953, Serial No. 366,264
Claims priority, application Denmark July 31, 1952
9 Claims. (Cl. 256—10)



1. A pulse generator for electric fences comprising a transformer having a primary winding, and a secondary winding and having a step up ratio from commercial supply voltage to powerful shock voltage between said two windings, said secondary winding being permanently connected between an electric fence and ground, said primary winding being included in a feeding circuit connected to an alternating current source, means being provided in said feeding circuit for recurrently rendering said feeding circuit conductive for short periods of time starting and ending at predetermined points of the cycle of the alternating current feeding voltage and for keeping said feeding circuit non-conductive for relatively long intervals therebetween, to thereby couple the fence directly to the alternating current source by way of the transformer during each of said short periods of time.

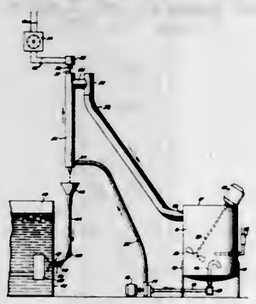
2,743,908
HIDE AWAY AIR CONDITIONER
Talman Horace Tanner, San Antonio, Tex.
Application August 10, 1953, Serial No. 373,280
1 Claim. (Cl. 257—9)



A heat transfer system comprising a unit for installation between a pair of studs in a partition wall, said unit comprising a frame having an elongated substantially rectangular bottom plate to the corners of each of which is secured, respectively, a vertically extending angle member, an elongated substantially rectangular top plate having an opening formed therein, said top plate being secured to said angle members adjacent the upper ends thereof, a substantially vertical end wall fixedly secured to each end of said top plate and the top portions of said angle members, an elongated substantially rectangular baffle wall extending between and supported on said end walls adjacent the top edge thereof, said baffle wall being concave-convex about its longitudinal axis with

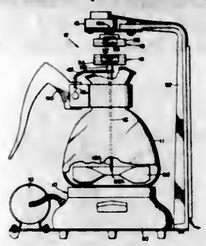
the concave side thereof facing said top plate, said frame having opposed open sides and ends and being disposed in said partition wall with said ends thereof and said end walls positioned in said partition wall adjacent a pair of wall studs with the sides of said frame opening in opposite sides of said partition wall, a cover plate for each of said open sides of said frame, means fixedly securing the upper end of each of said cover plates to opposite sides of said partition wall, each of said cover plates having a pair of vertically spaced openings formed therein, said openings in one of said plates being aligned with the openings formed in the other of said plates, an air cooling unit mounted on said bottom plate and having its evaporating coil projecting upwardly therefrom in register with the lowermost aligned openings to cool air drawn inwardly therethrough, a substantially rectangular partition wall secured to said angle members between said unit and coil and positioned below said lowermost openings, a fan, a housing for said fan, means fixedly securing said housing to said frame with the discharge end of said housing projecting through said opening formed in said top plate whereby air cooled by said unit and coil is discharged upwardly for impingement against said baffle which deflects said air toward and for passage through said uppermost openings formed in said cover plates, air heating means, and means supporting said air heating means on said frame intermediate said top plate and said lowermost openings, said air heating means heating air drawn through said lowermost openings, said air heating means comprising a sinusoidal element having the convolutions thereof extending at an obtuse angle with respect to adjacent portions of said top wall and being positioned adjacent the intake side of said fan, said fan discharging said heated air against said baffle and through said uppermost openings formed in said cover plates.

2,743,909
SLURRY FEEDER
Joseph P. Lawlor, Ames, Iowa
Application August 25, 1953, Serial No. 376,500
8 Claims. (Cl. 259—42)



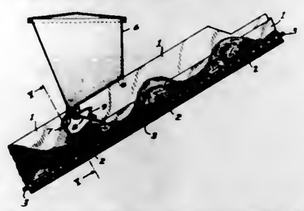
1. In slurry feed apparatus, a slurry tank, a constant pressure head vessel equipped with an overflow and a discharge port spaced therebelow, means for feeding slurry to said vessel at a flow rate substantially greater than the rate of flow of the slurry through said discharge port, whereby the level of the slurry in said vessel is maintained at a relatively constant elevation with the result that a substantially constant pressure head is provided at said discharge port and a valve arranged with said discharge port for controlling the flow of slurry therethrough, said vessel having also an inlet port adjacent said discharge port and in substantial alignment with said valve, said inlet port receiving slurry from said slurry feeding means, the flow of slurry through said inlet port from said slurry feeding means being effective to wash said valve with the result that the caking of slurry thereon is prevented.

2,743,910
LIQUID DISPENSER WITH STIRRING MEANS
John B. Melville, Torrance, Calif.
Application March 19, 1954, Serial No. 417,417
2 Claims. (Cl. 259—108)



1. In an arrangement of the character described, a base, a stove on said base, a bracket attached to said base and extending upwardly therefrom, a container resting on said stove, a motor mounted on said bracket, rotatable means within said container and supported on said container for rotation about a stationary axis thereon, a first magnet rotatively driven by said motor, a cooperating magnet attached to said rotatable means and spaced from said first magnet by an air gap to allow the container and rotatable means therein to be freely moved onto and from said stove.

2,743,911
METHOD AND APPARATUS OF PRODUCING FILLING MATERIALS TO BE USED TOGETHER WITH HYDRAULIC CEMENTS
Karl Robert Lejmark, Timmernabben, Sweden
Application February 18, 1953, Serial No. 337,604
Claims priority, application Sweden October 22, 1952
6 Claims. (Cl. 259—147)

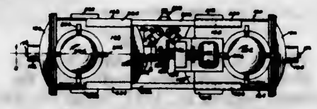


1. The method of simultaneously conveying and aerating a comminuted light weight material, such as wood waste, and mixing the same with a binding material, consisting in feeding the material to the bottom end of an inclined chute and subjecting the material to the impact of a succession of spaced, upwardly traveling scrapers, thereby producing upward movement of the material, causing the scrapers to travel at a speed above that assumed by the material and to cut through and thereby agitate the material in their passage, introducing into the moving and agitated stream of material a quantity of binding material to be mixed therewith, and utilizing the moving stream to determine the rate of addition of the binding material.

2,743,912
APPARATUS FOR MIXING AND DISPENSING AN ADHESIVE PLASTICIZED MATERIAL
Max M. True, Tulsa, Okla.
Application March 17, 1953, Serial No. 342,952
4 Claims. (Cl. 259—169)

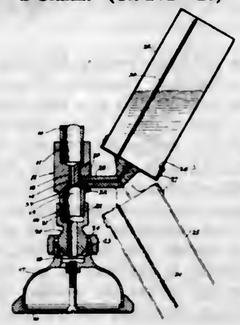
1. Apparatus for mixing and dispensing an adhesive plasticized material comprising a pair of mixing containers, a drive shaft extending through each container, a mixing element mounted on each drive shaft within its respective container, drive means carried by one of the containers and operatively connected to the drive shaft

thereof, telescopically interengaging means carried by the containers for detachably connecting said containers together and aligning the drive shafts with one another, a socket on one of said containers adaptable for receiving



a lever whereby to facilitate guiding said intergaging means into telescopic engagement and detachable coupling means carried by the drive shafts for connecting the drive shafts and rotating them in unison.

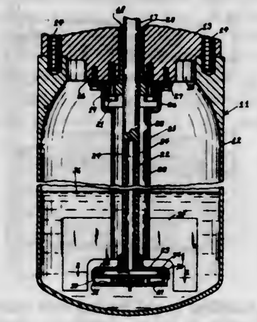
2,743,913
LIQUID DETERGENT DISPENSING SHOWER FIXTURE
Emanuel G. Gundlach, Ebenezer, N. Y.
Application March 24, 1953, Serial No. 344,376
1 Claim. (Cl. 261—18)



A liquid detergent dispensing device for use in conjunction with a shower fixture, comprising a fitting adapted to connect said shower fixture with a source of water under pressure and providing a mixing chamber, means arranged to discharge said water in the form of a jet into said mixing chamber to produce a subatmospheric pressure therein, an air inlet passage leading from said mixing chamber to the atmosphere and arranged to draw atmospheric air into said mixing chamber, said fitting also being provided in its side wall with a horizontally extending internally threaded opening extending from said air inlet passage to the exterior of said fitting, a liquid detergent container provided at one end with a laterally extending externally threaded hollow stem providing a passage leading from the outer end of said stem to the interior of said container, said externally threaded stem being screwed into said internally threaded opening whereby said container can be swung about the axis of said stem to an upright position to permit gravity flow of liquid detergent into said mixing chamber and to a pendent position in which such gravity flow is cut off, and means for venting said container when in said upright position.

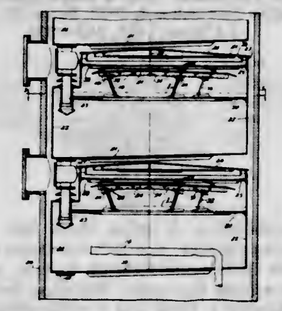
2,743,914
GAS-LIQUID MIXING APPARATUS
Edward H. Epprecht, Takoma Park, Md., assignor to American Instrument Company, Inc., Silver Spring, Md.
Application September 27, 1950, Serial No. 187,037
4 Claims. (Cl. 261—87)

1. An apparatus for mixing gas and liquid comprising a closed vessel adapted to receive the liquid and gas to be mixed, a hollow shaft extending sealingly and rotatably through the upper wall portion of the vessel, the upper portion of the shaft being apertured, whereby the bore of the shaft is in communication with the space in the upper portion of the vessel, a disc member secured to the lower end portion of said shaft, and an aspirator secured to said disc member at a location spaced from the shaft axis, said aspirator comprising a body formed with a passage having a relatively constricted intermediate portion and outwardly flaring opposite ends communicating with said intermediate portion, said disc member being



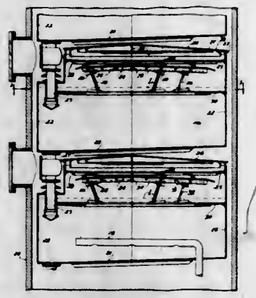
formed with a further passage connecting the bore of the shaft to said relatively constricted passage portion of the aspirator, the respective opposite ends of the aspirator body being open to the lower portion of the vessel, whereby rotation of the shaft causes liquid in the lower portion of the vessel to pass through said aspirator and to aspirate gas from the upper portion of the vessel into the liquid.

2,743,915
EQUIPMENT FOR USE IN TREATING OIL BY STEAM STRIPPING
Bruce De Haven Miller and Charles E. McMichael, Louisville, Ky., assignors, by mesne assignments, to National Cylinder Gas Company, Chicago, Ill., a corporation of Delaware
Application June 13, 1952, Serial No. 293,461
3 Claims. (Cl. 261—121)



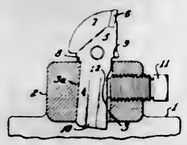
1. Equipment for use in steam stripping treatment of oil comprising a vessel having upright side walls and adapted to receive oil up to a level providing a body of liquid oil only partially filling the vessel, an inlet for introducing stripping steam into the vessel below said level under conditions promoting expansion of steam in the oil and resultant acceleration of masses of liquid oil in a plurality of directions, a splash plate in the vessel well above said level for breaking up masses of liquid oil projected from said body by the steam and having an edge spaced from a side wall of the vessel to provide an exit passage for steam and vaporized oil constituents, and a deflector for preventing surging of liquid oil up said side wall of the vessel in the region of the space between said side wall and said edge of the splash plate, said deflector projecting inwardly from the side wall of the vessel at an elevation below said level.

2,743,916
STEAM STRIPPING EQUIPMENT
Louis P. Bornwasser, Louisville, Ky., assignor, by mesne assignments, to National Cylinder Gas Company, Chicago, Ill., a corporation of Delaware
Application June 13, 1952, Serial No. 293,463
3 Claims. (Cl. 261—121)



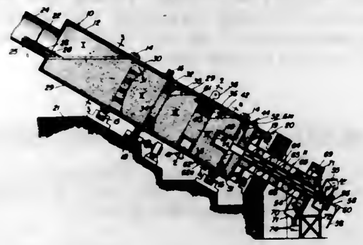
1. In an oil treating vessel having side walls and adapted to receive oil up to a level providing a body of oil only partially filling the vessel, a splash plate in the central region of the vessel well above said level and having its edges spaced from the side walls, an inlet for introducing stripping steam into the vessel below said level, a hood at the top of the vessel above the splash plate, a skirt depending from the hood in a position spaced slightly inwardly from the side walls of the vessel, and fins projecting downwardly from the lower surface of the hood in the region thereof overlying the space within the side walls of the vessel, said fins being spaced inwardly from said skirt.

2,743,917
SOCKET-MOUNTED CUTTER BIT AND SET SCREW ARRANGEMENT
Claude B. Krekeler and Armin O. Bruestle, Cincinnati, Ohio, assignors to The Cincinnati Mine Machinery Company, Cincinnati, Ohio, a corporation of Ohio
Application November 4, 1952, Serial No. 318,600
4 Claims. (Cl. 262—33)



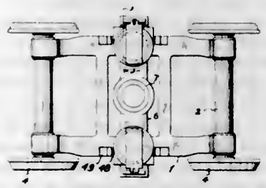
1. In combination, a cutter chain link including a socket forming member, said socket forming member having a socket forming perforation therein, said perforation having a front face and a rear face, and an integral cutter bit having a head and a solid shank demarked from said head by a rearwardly projecting shoulder, said shank extending into said perforation with the rearward edge of said shank contacting the rear face of said perforation throughout their common length, said shank having its forward edge spaced from the front face of said perforation and beveled at an angle of from 1 to 10 degrees with respect to the rearward edge thereof in a flat plane extending substantially from the free edge of said shank to a position adjacent said head so as to approach said rearward edge in the direction of said head, said socket forming member having a set screw therein opening through the front face of said perforation for contact with the beveled forward edge of said shank, the axis of said set screw being substantially perpendicular to the beveled edge of said shank, said set screw having a substantially flat nose the surface of which parallels the beveled edge of said shank, whereby to produce a wedging action tending to draw said shank further into said socket, said action being resisted by the engagement of said shoulder with the upper surface of said socket forming member.

2,743,918
HIGH ANGLE ROTARY KILNS
Holger Struckmann, Bethlehem, Pa.
Application August 21, 1951, Serial No. 242,888
9 Claims. (Cl. 263—33)



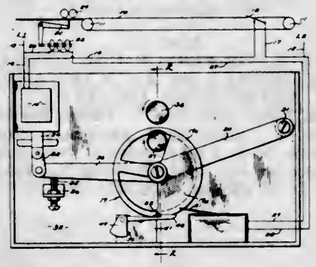
1. Apparatus for heat treating flowable solid material comprising a cylindrical rotatable kiln, means for supporting the kiln with its axis at a high angle to the horizontal whereby said material flows downwardly through the kiln by gravity, means for rotating the kiln, means for maintaining the kiln substantially full of material, and a ring dam extending inwardly from the kiln wall dividing the space therein occupied by said material into compartments and restricting the flow of material past the dam to the central area of the kiln, whereby a free surface of material is maintained on the downstream side of the dam and above the opening therethrough on which free surface cascading of material occurs as the kiln rotates.

2,743,919
FRICTION DAMPING DEVICE
William T. Rossell, New York, N. Y., assignor to Transit Research Corporation, New York, N. Y., a corporation of New York
Application December 17, 1951, Serial No. 262,012
3 Claims. (Cl. 267—9)



1. A spring and snubbing assembly comprising a load imposing and a load receiving member adapted to move vertically with respect to each other, a spring separating said members, a spring cap between said spring and said load imposing member, said spring cap having a rocker outwardly of said spring and substantially offset from the axis of said spring whereby it tends to tilt in response to the weight of said load imposing member on said spring, side by side friction elements carried by said load imposing member, an extension on said spring cap acting as a lever transmitting the force of the tilting tendency of said spring cap against one of said friction elements thereby pressing it against the other element in proportion to the loading of said load imposing member on said spring, and a link connecting another of said friction elements with said load receiving member for sliding said second element on said first element as said members move with respect to each other.

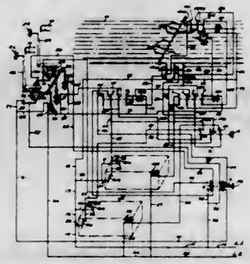
2,743,920
PROPORTIONAL MEASURING TIMER
John R. Petre, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a corporation of Ohio
Application December 19, 1952, Serial No. 326,943
11 Claims. (Cl. 270—80)



1. In apparatus of the type wherein operating means performs an operation proportionate to article length on each of a series of articles moving in succession on a conveyor towards and past said operating means, trip means adjacent said conveyor and adapted to be actuated by passage of each said article thereby, timing control means including a rotatable driven member, said driven member having a first and a second concentric peripheral driven surface, a first driving member, means for rotating said first driving member continuously at a speed in ratio to the speed of said conveyor, a second driving member, means for rotating said second driving member continuously at a speed differing from that of the first driving member, said driving members being rotatable on fixed axes, means responsive to passage of the leading edge of an article past said trip means for moving said driven member to produce a first driving engagement between said first driving member and the first driven surface of said driven member whereby to start said driven member from a rest position, means responsive to travel of the trailing edge of an article past said trip means for terminating said first driving engagement and for moving said driven member to institute a second driving engagement between said second driving member and said second driven surface of said driven member, actuating means carried by said driven member, means effective on said operating means and operatively responsive to said actuating means for causing operation of said operating means, said second peripheral driven surface having a cut away discontinuity therein at idle position whereby, when said discontinuity comes to registry with said second driving means, said second driving engagement is terminated.

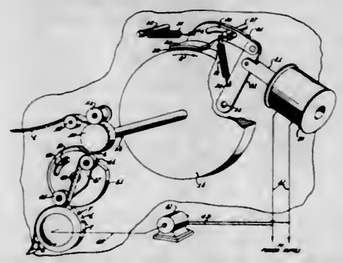
2,743,921
LANE CONTROL FOR FOLDING MACHINE
Edwin H. Spreckelmeier, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a corporation of Ohio
Application February 15, 1952, Serial No. 271,780
8 Claims. (Cl. 270—81)

1. Coupling means for a multi-lane folder of the type comprising a first lane, first folding means for articles traveling on said lane, first operating means for causing actuation of said first folding means, and a first timer responsive to article travel on said lane and effective to energize said first operating means, and likewise comprising a second lane, a second folding means for articles traveling in said second lane, second operating means for causing actuation of said second folding means, and a second timer responsive to article travel in said second lane and effective to energize said second operating means, said first operation means including a first movable actuator operatively effective, when moved, to cause folding movement of said first folding means, and a first solenoid operatively effective on said first actuator to produce actuation thereof when said first solenoid is energized, said second operating means including a second movable actuator operatively effective, when moved, to cause folding movement of said second folding means, and a second solenoid operatively effective on said second actuator to produce actuation thereof when said second solenoid is energized, said coupling means also including a third operating means including a movable member operatively effective, when moved, to abut and cause simultaneous movement of said first and second actuators, and a third solenoid operatively effective on said movable member when said third solenoid is energized, a coupling switch situated between said first lane and said second



lane, and sensitive to the passage of an overlapping article, electric circuit means operatively responsive to actuation of said coupling switch by said overlapping article and effective to energize said first timer, and other electric circuit means operatively connected to said first timer and said third operating means, whereby passage of such overlapping article actuates said coupling switch, energizes said first timer to institute timing operation thereof, and eventually causes operation of said third operating means to operate said first and second folding means simultaneously, and means for rendering one said timer and said first and second operating means ineffective during a timing and folding operation on such overlapping article.

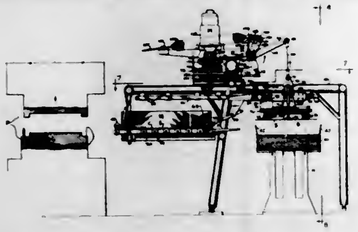
2,743,922
FILM DRIVE MECHANISM
John J. Hoehn, Merchantville, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application March 9, 1953, Serial No. 341,222
7 Claims. (Cl. 271—2.3)



1. A flywheel accelerator comprising a solenoid, an armature for said solenoid, an arm connected to said armature and adapted to be moved therewith in a direction tangential to said flywheel when said solenoid is energized, a friction pad on said arm, said pad being adapted to contact the rim of said flywheel, means for moving said arm and pad in the reverse direction to the movement of said arm and pad caused by the energization of said solenoid, means for holding said friction pad at a substantially fixed position with respect to said flywheel during a predetermined movement of said arm and pad responsive to the energization of said solenoid, and means

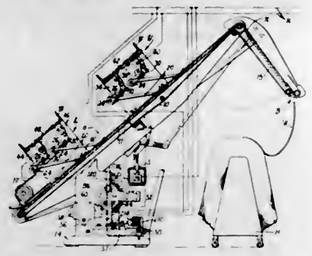
in contact with said arm for releasing said pad from said flywheel at the end of said predetermined movement of said arm by said solenoid, said first and second mentioned means returning said pad to said flywheel contacting position when said solenoid is de-energized.

2,743,923
SHEET-HANDLING MEANS
Michael Watter, Philadelphia, Pa., assignor to The Budd Company, Philadelphia, Pa., a corporation of Pennsylvania
Application August 15, 1952, Serial No. 304,578
26 Claims. (Cl. 271—18)



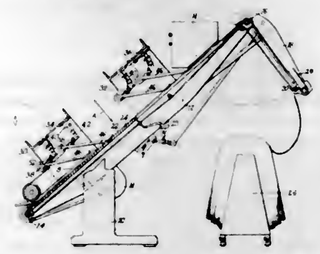
1. Sheet-handling means comprising in combination, sheet-pickup means for adherently engaging and parting sheets from a stack of sheets and adherently holding the parted sheets in position for excess sheets, if any, to be returned to the stack, means, other than the lifting means, for detecting the number of sheets adherently held, and means for removing excess sheets, if any, from those which are held by said sheet-pickup means while still in position for excess sheets to be returned to the stack.

2,743,924
CONTROL SYSTEM FOR WORKPIECE TREATING MACHINES
Richard M. Elliott, Beverly, and Edmund S. Lee III, South Hamilton, Mass., assignors to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application August 19, 1953, Serial No. 375,275
28 Claims. (Cl. 271—68)



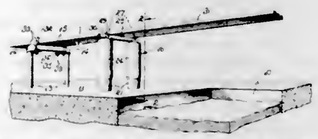
1. In a work treating machine having conveyor means, a control system comprising first and second detector stations spaced apart along said conveyor means, said stations being positioned so that a conveyed workpiece first passes by the first station, said first station including means for sensing only the passage of the trailing edge of the conveyed workpiece independently of said second station and said second station including means for sensing only the passage of the leading edge of the workpiece independently of said first station, and a control mechanism having first and second means for varying a condition at constant rates which are independently actuated in response to the sensings by the first and second detector stations respectively, the rate of variation caused by said first means being proportional to the rate of the conveyed workpiece and in the same ratio thereto as a fixed amount of said condition is to the distance between said stations, whereby when said condition has been varied to a predetermined value a selected intermediate portion of the workpiece has arrived at a predetermined point in relation to said machine.

2,743,925
MACHINES FOR PERFORMING OPERATIONS WITH RESPECT TO ARTICLES AND CONTROL MECHANISMS THEREFOR
Richard M. Elliott and John L. Minto, Beverly, Mass., assignors to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application July 25, 1952, Serial No. 300,895
7 Claims. (Cl. 271—68)



1. Control apparatus adapted for use with a workpiece conveyor to initiate the operation of a device upon passage of a predetermined fractional length of a workpiece past a station on said conveyor, said control apparatus comprising, in combination, trailing-edge and leading-edge detector means adapted for association with a conveyor for response to the passage respectively of the trailing edge of a workpiece past a first station and of the leading-edge of the workpiece past a second station on said conveyor, said second station being spaced from the first station in the direction of movement of workpieces on the conveyor, a device controllable by a control voltage to effect switching action in response to change of said control voltage from a non-operating value to a predetermined operating value, means for supplying to said device a control voltage at a predetermined non-operating value, circuit means controlled by said detector means and arranged upon response of either of said detector means to change said control voltage toward the operating value at an initial rate, being one of two predetermined rates corresponding to the two said detector means, and at a final rate upon response of the other of said detector means, said final rate being the sum of said two predetermined rates.

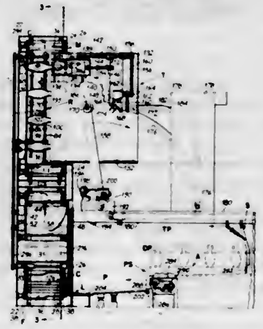
2,743,926
SPRINGBOARD AND MOUNTING THEREFOR
Conrad J. Klein, Fresno, Calif.
Application June 1, 1953, Serial No. 358,913
8 Claims. (Cl. 272—66)



1. A portable springboard support adapted for releasable mounting on a pair of substantially parallel posts comprising a pair of mounting sleeves adapted for slidable mounting on such posts, a spring housing positioned in circumscribing relation to each of the mounting sleeves, a spring stop in circumscribing relation to each of the

mounting sleeves within their respective spring housings mounted in fixed position intermediate opposite ends of their respective mounting sleeves, a telescopic member slidably mounted on corresponding ends of each of the spring housings and each having a closed end in spaced relation to the end of the spring housing on which it is mounted, a compression spring mounted within each of the spring housings each having an end engaged with its housing's respective spring stop and an opposite end engaged with the closed end of the telescopic member mounted thereon, and a rigid rest member interconnecting the telescopic members in substantially parallel relation.

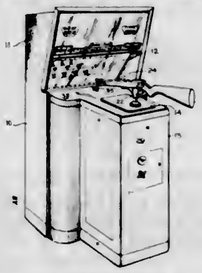
2,743,927
CONVERTIBLE BOWLING PIN SPOTTING MACHINE
Morehead Patterson, New York, N. Y., assignor to American Machine & Foundry Company, a corporation of New Jersey
Application February 3, 1950, Serial No. 142,183
11 Claims. (Cl. 273—43)



7. In a bowling pin spotting machine operative to spot a selected type of pin on a bowling alley, a pin elevator, a pin distributing mechanism, triangularizing mechanism adjustable to handle different types of pins associated with said distributor and provided with a plurality of pin holders for receiving a selected type of bowling pins from said distributor and for supporting said selected type of bowling pins in substantially triangular pin playing arrangement, adjusting means for each of said holders for adapting said holders to receive and support a different type of bowling pin, means for delivering said triangularized selected type of pin to the playing deck of a bowling alley, motion transmitting means for substantially simultaneously operating said adjusting means for all of said holders, adjustable pin guiding elements coacting with said elevator, motion transmitting means for changing the operative positions of said elements to conform with the size of said different type of pin, and selectively operable means for operating said motion transmitting means of all of said adjusting means of said holders and said motion transmitting means of said elements for converting said machine from one capable of handling said selected type of pin into a machine capable of handling and spotting said different type of bowling pin.

2,743,928
TARGET PRACTICING AND AMUSEMENT DEVICE
Lyndon A. Durant, Chicago, Ill., assignor to General Patent Corporation, Chicago, Ill., a corporation of Illinois
Application November 16, 1954, Serial No. 469,159
4 Claims. (Cl. 273—101.2)

1. In a target practicing apparatus, the combination with a simulated rifle, of a mounting for the rifle comprising a structure carrying the rifle for movement through a horizontal plane and a vertical plane, means operable on said structure to vary the freedom of movement of said rifle through said planes, said last-named means including a shaft end portion included as a part of said



rifle mounting structure, and a yoke embracing said end shaft portion and comprising a fixed member and a member adjustable relative to the fixed member to frictionally engage said shaft end portion.

2,743,929
GOLF TARGETS
Orson P. Smith, Seattle, Wash.
Application September 10, 1954, Serial No. 455,248
1 Claim. (Cl. 273—181)



A golf practice apparatus of the character described, comprising a plurality of targets arranged on a golf course at varying distances, from a teeing area and positioned in such manner as to permit them to be struck by balls driven from the teeing area, electrically operated hit indicators corresponding to the various targets located adjacent the teeing area, a normally open electric circuit for the respective targets and for each of said hit indicators, each of said targets comprising a frame defining a target area, an electrically conductive plate mounted thereby within the target area and faced toward the teeing area and having a circuit connection with one side of its respective hit indicator, a plurality of circuit wires disposed across the face of the plate in close relationship thereto and to each other but not touching, each of said wires having a circuit connection with a circuit wire leading to the other side of the hit indicator and each wire being adapted upon being struck by a ball, as driven from the teeing area, to be pressed against the plate to momentarily close the energizing circuit of the corresponding hit indicator, a shunt connection between the circuit connections leading from said wires and plate, a normally open switch in said shunt connection, a solenoid connected in and operable incident to the momentary closing of the hit indicator circuit to effect the closing of said switch of the shunt connection thus to maintain an energizing circuit through the hit indicator, and a normally closed switch in said hit indicator circuit, adapted to be manually opened thus to deenergize the solenoid to open the shunt circuit and to reset the hit indicator.

2,743,930
BALL-CATAPULTING GOLF PRACTICE CLUB
Candido Jacuzzi, Lafayette, Calif.
Application December 16, 1953, Serial No. 398,580
3 Claims. (Cl. 273—193)

3. A club comprising a golf club-like shaft, ball-carrier means disposed at the lower end of said shaft to rotatably whirl said ball by swinging movement of said club and to release said ball along a path tangential to the

low point of the arc of movement of said means, and ground-contacting and ball-impacting lever means pivot-



ally attached to said ball carrier means and adapted to abruptly propel said ball from said carrier means when said low point is reached.

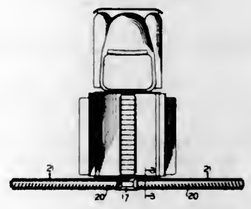
2,743,931
PRACTICE OR PLAY BALL AND METHOD OF MAKING SAME
Robert W. Pooley, South Bend, Ind., and Robert C. Kohrn, Cranston, R. I., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application February 26, 1953, Serial No. 339,072
6 Claims. (Cl. 273—199)



1. As a new article of manufacture, a practice or play ball comprising an inner spherical core formed of a flexible compressible resilient closed-cell expanded uniform mixture of a thermoplastic resin selected from the group consisting of polyvinyl chloride and copolymers of a major proportion of vinyl chloride and a minor proportion of another copolymerizable monomer, a vulcanized rubbery copolymer of an aliphatic conjugated diolefin hydrocarbon and another copolymerizable monomer, said rubbery copolymer before vulcanization being compatible with said resin, and high-boiling organic liquid plasticizer for said resin, said core having a density of not over 8 pounds per cubic foot, and a thin continuous unexpanded plastic shell surrounding said core, said shell comprising a layer of plasticized thermoplastic resin selected from the group consisting of polyvinyl chloride and copolymers of a major proportion of vinylchloride and a minor proportion of another copolymerizable monomer deposited directly on said core by drying from a solution of said resin and a high-boiling organic liquid plasticizer therefor in a volatile organic solvent, said layer being directly and integrally bonded to said core, said shell constituting from 20 to 40% by weight and from 1 to 4% by volume of the ball, being capable of taking and maintaining sharp surface pattern definition over a long period of time, being tough and highly wear-resistant, protecting said core against failure in service, being flexible and tenaciously adherent to said core, being so flexible that the ball has substantially the playing behavior of the core alone, and permitting deformation of said core indefinitely in play without separation or cracking of said shell.

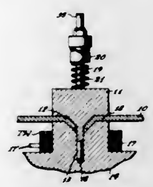
2,743,932
SPREADER
Ralph C. Wester, Plain City, Ohio, assignor, by mesne assignments, to William M. Quinn, Sidney, Ohio
Application September 7, 1950, Serial No. 183,613
3 Claims. (Cl. 275—2)

1. An attachment for a truck having a body with means for discharging material therefrom at the rear thereof, comprising a hopper for receiving the material, a pair of spreading units, each spreading unit including an endless belt for receiving the material fed from the hopper, a frame attached to said truck supporting the belt for movement transversely of the truck, each of said spreading units extending in opposite directions from the hopper which is at the center of the truck, each of said spreading units including a fixed inner section and an outer section hinged thereto so that it can be swung upwardly, means for directing material from the belt off an edge thereof, said means comprising baffles extending



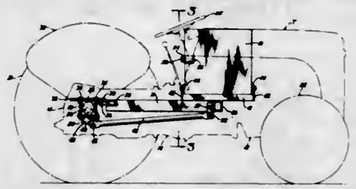
over the belt in angular relation thereto, said baffles arranged in independent groups carried by the sections, a support being provided for each group of baffles and comprising a pivoted bar which will permit movement of the baffles away from the belt, and resilient means for yieldingly mounting said support adjacent said belt to permit upward yielding of said baffles away from the belt so as to prevent clogging of material between the belt and baffles, to prevent undue wear on the belt, and to normally urge said pivoted bar in one direction to cause said baffles to be in cooperation with the belt.

2,743,933
AUTOMATIC TEMPERATURE AND PRESSURE CONTROL CIRCUIT FOR SHEET METAL FORMING TOOLS
Charles H. Baines, Redondo Beach, Calif., assignor to Harbo Manufacturing Co., Venice, Calif., a copartnership
Application September 14, 1953, Serial No. 380,065
10 Claims. (Cl. 219—3)



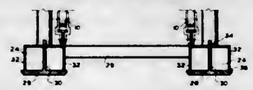
1. In a tool for forming sheet metal including a source of electrical energy connected to a heater to raise said metal to a predetermined temperature and connected to an actuating means for operating the tool to form the metal after said predetermined temperature has been attained, a control circuit comprising in combination: means for rendering said actuating means inoperative until said predetermined temperature is reached; temperature regulating means for indicating and maintaining said predetermined temperature once it has been reached; means responsive to said regulating means for disconnecting the actuating means from said source in the event said predetermined temperature is not maintained; and means for disconnecting said heater from said source after a given time interval, responsive to said last named means.

2,743,934
TANK SUPPORT STRUCTURE FOR USE ON TRACTORS OR THE LIKE
John Malet Chambers, Blackdown Hill, Leamington Spa, and James Curtis McNeice, Lillington, Leamington Spa, England, assignors to Massey-Harris-Ferguson (Sales) Limited, a British company
Application December 4, 1953, Serial No. 396,161
5 Claims. (Cl. 280—5)



1. For use with a tractor having laterally extending rear axle housings, the combination of a pair of auxiliary tanks for insecticide or the like with means for supporting said tanks substantially midway along opposite sides of the tractor, said supporting means including a pair of L-shaped arms adapted at their aft ends for pivotal connection to the upper side of respective ones of the axle housings with their shorter portions turned transversely outward from either side of the tractor, a pair of frames receiving said tanks and carried by respective ones of said arms on their shorter portions, a pair of struts adapted to be pivoted at their aft ends to the lower sides of respective ones of the axle housings and converging forwardly for pivotal connection with the forward portion of the corresponding arm, and a cross bar extending transversely of the tractor and connected at its opposite ends to said tanks to prevent splaying and twisting of said arms and struts, whereby said arms, struts and cross bar support said tanks by tension, compression and tension, respectively, and are free of bending stresses.

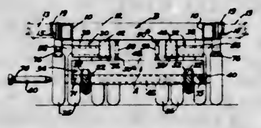
2,743,935
PILE DRIVER SKID RUNNER
William R. Fairchild, Hattiesburg, Miss.
Application July 26, 1952, Serial No. 301,078
1 Claim. (Cl. 280—28)



In a pile driver, a supporting base in the form of a horizontal elongated skid having spaced apart box-like runners, each runner composed of an inverted T bar having a base and an intermediate flange, and an angle bar positioned on each side of the intermediate flange extending in substantially parallel relationship along the length of the runner, one of the flange edges of each angle bar being secured to the sides of the intermediate flange and the other flange edges of each of the angle bars being secured to the base flange of the inverted T bar, the upper surface of the angle bar flanges which are secured to the sides of the intermediate flange forming the upper surface of the runner, said upper surface of the runner providing an area for a walkway for workmen moving from one end of the pile driver frame to the other end.

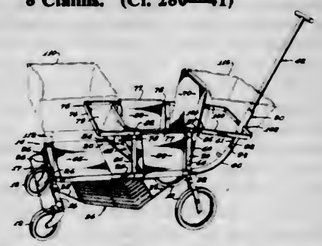
2,743,936
VARIABLE WIDTH LOAD CARRIER
Henry W. Bigge, Oakland, Calif.
Application October 2, 1953, Serial No. 383,757
6 Claims. (Cl. 280—34)

1. In a load carrying vehicle adapted for use on the highways the combination of: a load carrying frame, a plurality of independently mounted wheel units to support said frame, trunnion means cooperating with said wheel units and said frame to provide for each of said wheel units more than one supporting position outwardly from a fore and aft center line of said frame, said trun-



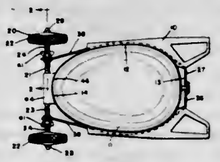
nion means comprising in subcombination two trunnion assemblies mounted one above the other and coupling means between said two assemblies, said coupling means comprising sockets on one trunnion assembly engaging corresponding projections on another.

2,743,937
CONVERTIBLE STROLLER
Isadore Ginsberg, Los Angeles, Calif.
Application July 26, 1954, Serial No. 445,665
8 Claims. (Cl. 280—41)



1. A stroller comprising: a substantially rectangular sub-structure having a pair of supporting front wheels mounted thereon and a pair of arms pivotally connected to the rear corners of the sub-structure, the arms having a pair of supporting rear wheels mounted on their lower ends and extending vertically above the sub-structure, the sub-structure including a longitudinally extending central bar disposed below the pivotal connections of said arms; a horizontally disposed seat including a supporting bracket slidably carried on said central bar; a back hingedly connected to the seat for folding from a substantially upright vertical position to a substantially horizontal position, the back being slidably connected to said arms at points spaced slightly above said pivotal connections; and means for detachably attaching the back to said arms at points spaced above said points of slidable connection.

2,743,938
OUTBOARD MOTOR TRUCK
Clifford L. Nash, St. Paul, Minn.
Application September 21, 1953, Serial No. 381,358
5 Claims. (Cl. 280—47.13)



1. In combination with the body of an outboard motor, a band encircling said motor, said band having its ends spaced from one another, openings at the ends of said band, an axle extending through said openings, a thrust member engaging said axle near its center and said body, and means acting between the ends of said band and said

low point of the arc of movement of said means, and ground-contacting and ball-impacting lever means pivot-



ally attached to said ball carrier means and adapted to abruptly propel said ball from said carrier means when said low point is reached.

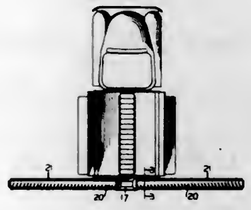
2,743,931
PRACTICE OR PLAY BALL AND METHOD OF MAKING SAME
Robert W. Pooley, South Bend, Ind., and Robert C. Kohrn, Cranston, R. I., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application February 26, 1953, Serial No. 339,072
6 Claims. (Cl. 273—199)



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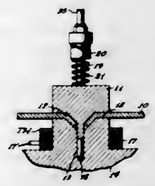
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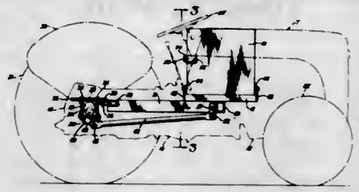
over the belt in angular relation thereto, said baffles arranged in independent groups carried by the sections, a support being provided for each group of baffles and comprising a pivoted bar which will permit movement of the baffles away from the belt, and resilient means for yieldingly mounting said support adjacent said belt to permit upward yielding of said baffles away from the belt so as to prevent clogging of material between the belt and baffles, to prevent undue wear on the belt, and to normally urge said pivoted bar in one direction to cause said baffles to be in cooperation with the belt.

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Charles H. Baines, Redondo Beach, Calif., assignor to Harbo Manufacturing Co., Venice, Calif., a copartnership
Application September 14, 1953, Serial No. 380,065
10 Claims. (Cl. 219—3)



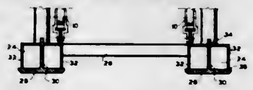
1. In a tool for forming sheet metal including a source of electrical energy connected to a heater to raise said metal to a predetermined temperature and connected to an actuating means for operating the tool to form the metal after said predetermined temperature has been attained, a control circuit comprising in combination: means for rendering said actuating means inoperative until said predetermined temperature is reached; temperature regulating means for indicating and maintaining said predetermined temperature once it has been reached; means responsive to said regulating means for disconnecting the actuating means from said source in the event said predetermined temperature is not maintained; and means for disconnecting said heater from said source after a given time interval, responsive to said last named means.

2,743,934
TANK SUPPORT STRUCTURE FOR USE ON TRACTORS OR THE LIKE
John Malet Chambers, Blackdown Hill, Leamington Spa, and James Curtis McNeice, Lillington, Leamington Spa, England, assignors to Massey-Harris-Ferguson (Sales) Limited, a British company
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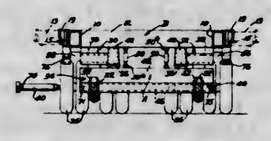
2,743,935
PILE DRIVER SKID RUNNER
William R. Fairchild, Hattiesburg, Miss.
Application July 26, 1952, Serial No. 301,078
1 Claim. (Cl. 280—28)



In a pile driver, a supporting base in the form of a horizontal elongated skid having spaced apart box-like runners, each runner composed of an inverted T bar having a base and an intermediate flange, and an angle bar positioned on each side of the intermediate flange extending in substantially parallel relationship along the length of the runner, one of the flange edges of each angle bar being secured to the sides of the intermediate flange and the other flange edges of each of the angle bars being secured to the base flange of the inverted T bar, the upper surface of the angle bar flanges which are secured to the sides of the intermediate flange forming the upper surface of the runner, said upper surface of the runner providing an area for a walkway for workmen moving from one end of the pile driver frame to the other end.

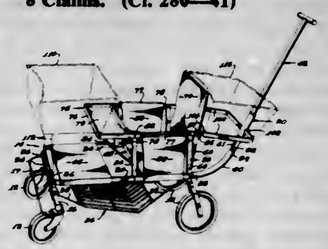
2,743,936
VARIABLE WIDTH LOAD CARRIER
Henry W. Bigge, Oakland, Calif.
Application October 2, 1953, Serial No. 383,757
6 Claims. (Cl. 280—34)

1. In a load carrying vehicle adapted for use on the highways the combination of: a load carrying frame, a plurality of independently mounted wheel units to support said frame, trunnion means cooperating with said wheel units and said frame to provide for each of said wheel units more than one supporting position outwardly from a fore and aft center line of said frame, said trun-



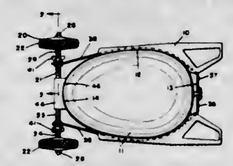
nion means comprising in subcombination two trunnion assemblies mounted one above the other and coupling means between said two assemblies, said coupling means comprising sockets on one trunnion assembly engaging corresponding projections on another.

2,743,937
CONVERTIBLE STROLLER
Isadore Ginsberg, Los Angeles, Calif.
Application July 26, 1954, Serial No. 445,665
8 Claims. (Cl. 280—41)



1. A stroller comprising: a substantially rectangular sub-structure having a pair of supporting front wheels mounted thereon and a pair of arms pivotally connected to the rear corners of the sub-structure, the arms having a pair of supporting rear wheels mounted on their lower ends and extending vertically above the sub-structure, the sub-structure including a longitudinally extending central bar disposed below the pivotal connections of said arms; a horizontally disposed seat including a supporting bracket slidably carried on said central bar; a back hingedly connected to the seat for folding from a substantially upright vertical position to a substantially horizontal position, the back being slidably connected to said arms at points spaced slightly above said pivotal connections; and means for detachably attaching the back to said arms at points spaced above said points of slidable connection.

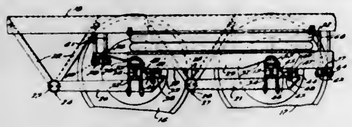
2,743,938
OUTBOARD MOTOR TRUCK
Clifford L. Nash, St. Paul, Minn.
Application September 21, 1953, Serial No. 381,358
5 Claims. (Cl. 280—47.13)



1. In combination with the body of an outboard motor, a band encircling said motor, said band having its ends spaced from one another, openings at the ends of said band, an axle extending through said openings, a thrust member engaging said axle near its center and said body, and means acting between the ends of said band and said

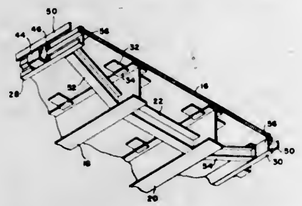
axle and drawing the ends of the band together to clamp the band about the body and wheels rotatably supported by said axle.

2,743,939
TANDEM AXLE WHEEL SUSPENSION FOR AUTOMOTIVE VEHICLES
Frederick M. Reid, Grosse Pointe, and Hans Locker, Utica, Mich., assignors to Fruehauf Trailer Company, Detroit, Mich., a corporation of Michigan
Application February 13, 1953, Serial No. 336,774
14 Claims. (Cl. 280—104.5)



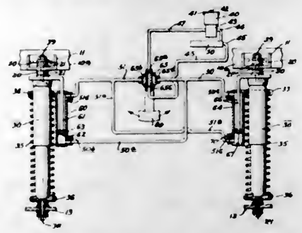
1. In combination with a vehicle chassis and tandem axles, a suspension including a torque arm below and secured to each of said axles, means for securing one end of each torque arm to said vehicle chassis, said last-mentioned securing means permitting limited movement of said torque arm about a vertical axis, a beam spaced above said axles and extending therebetween, resilient means between said beam and said vehicle chassis, whereby the beam is permitted angular movement with respect to both said chassis and said axles in a vertical direction, a cushioning member held by the other end of each of said torque arms, said beam being supported at spaced points by said cushioning members, the cushioning members being so shaped as to permit independent limited lateral movement of said axles under and relative to said beam, and means carried by said beam for at least partially supporting said vehicle chassis.

2,743,940
TRAILER FRAME AND FLOOR CONSTRUCTION
Charles I. Bohlen, Doylestown, Pa., assignor, by mesne assignments, to Fruehauf Trailer Company, Detroit, Mich., a corporation of Michigan
Application August 19, 1952, Serial No. 305,161
1 Claim. (Cl. 280—106)



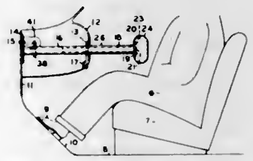
A floor construction for a trailer comprising a main frame including a pair of spaced, parallel longitudinally extending beams, a pair of longitudinally extending outer rails spaced from both sides of said beams, each of said outer rails including an upper channel opening in the direction of said beams, a lower channel opening in a direction opposite to that of the upper channel, a common leg between said channels and a shoulder in said upper channel, pairs of angularly disposed trusses terminally secured to said beams and to the web portions of the lower channels of said outer rails, and a single deck flooring supported on said beams and in the upper channels of said outer rails with the free longitudinal edges of said flooring bearing against the shoulder in the upper channel, said outer rails being lighter and structurally weaker than said beams, and said trusses being spaced along the length of the trailer at such distances apart that the stresses in said outer rails due to a uniformly distributed load on the floor do not exceed the yield point of the material of said outer rails.

2,743,941
AUTOMATIC BANKING DEVICE FOR VEHICLES
Brooks Walker, Piedmont, Calif.
Application January 6, 1954, Serial No. 402,532
4 Claims. (Cl. 280—112)



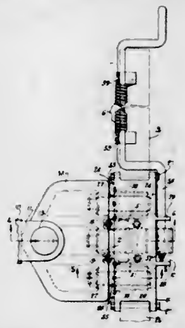
1. A vehicle, including in combination a frame; ground-engaging front and rear wheels; structure on which said wheels are mounted; resilient means between said structure and said frame, through which said structure and wheels support said frame, a power steering system for the front wheels carried by said frame including a hydraulic system with a pump, a booster cylinder, and hydraulic fluid; compensating means operated by said hydraulic system for acting on said resilient means on both sides of said vehicle to increase and reduce the resilient force thereof, said compensating means including a piston and bypass means operated by motion of said piston so that the fluid continues to circulate through said hydraulic system to said compensating means and back to said hydraulic system even after the piston has reached the approximate limit of its travel; and centrifugal force-controlled valve means on said hydraulic system for controlling the distribution of fluid to said compensating means, said centrifugal force-controlled valve operating to provide more resilient support per inch of travel between said frame and said structure on the outer side of said vehicle when said vehicle is rounding an unbanked turn and simultaneously operating to reduce the resilient force per inch of travel between said frame and said structure on the inside side of said vehicle, the fluid pressure being available to the power steering system at all times, due to said bypass means.

2,743,942
VEHICLE PASSENGER SAFETY GUARD
Albert F. Walters, Kansas City, Mo.
Application February 27, 1953, Serial No. 339,439
2 Claims. (Cl. 280—150)



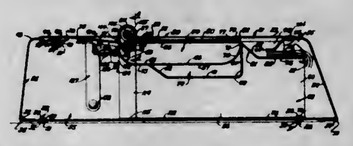
1. A safety guard having its base mounting plate mounted on the fire wall of a vehicle and extended toward a passenger seated in the vehicle to space him from the windshield of the vehicle when the vehicle is suddenly stopped comprising, a base mounting plate, a central mounting plate, said central mounting plate engaging the dash panel of the vehicle, a pair of tubular members, said pair of tubular members being spaced parallel, one end of each tubular member being connected to said base mounting plate, the opposite end of each tubular member being connected through said central mounting plate, a pair of telescoping tubular members, said pair of telescoping tubular members being slidable in said pair of tubular members, one end of each telescoping tubular member being extended from said pair of tubular members and said central mounting plate, a guard plate member, said guard plate member being connected to the extended ends of said telescoping tubular members, a cushion, said cushion being secured to said guard plate member, a centrally spaced tubular member, said centrally spaced tubular member being centrally spaced between said pair of telescoping tubular members, an internally threaded member, a screw member, one end of said centrally spaced tubular member being secured to said guard plate member, the opposite end of said centrally spaced tubular member being secured to said internally threaded member, said screw member engaging said internally threaded member, said screw member telescoping said centrally spaced tubular member, one end of said screw member projecting from said internally threaded member, the projected end of said screw member being pivotally connected with said mounting plate, an actuator, and said actuator rotatively engaging said screw.

2,743,943
THREE PRONG RESILIENT COUPLING DEVICE
John R. Furrer, Milwaukee, Wis., assignor to ACF Industries, Incorporated, a corporation of New Jersey
Application February 8, 1952, Serial No. 270,632
9 Claims. (Cl. 280—485)



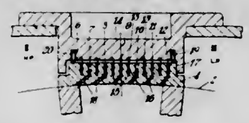
3. In a coupling device for vehicles of the type in which an end of one vehicle is supported by the adjacent end of another vehicle, a pair of separable mating male and female members, one of said members being rigidly secured to an end of a vehicle, pivot means securing the other member to the adjacent end of a second vehicle for limited rotation about a vertical axis, resilient means associated with said pivot means for permitting limited universal movement of said pivoted member, a central draft tongue and a pair of laterally spaced stems projecting longitudinally from said male member, a transverse notch in a horizontal surface of said tongue, said female member having a central recess to receive said draft tongue and a pair of laterally spaced openings to receive said stems, a latch pivotally mounted within said recess and adapted to lockably engage said notch, said latch having an operating arm portion, crank means pivotally suspended from the trailer unit and engaging said operating arm whereby said latch may be manually moved into locking engagement with said notch, resilient means normally urging said crank means upwardly for moving said latch into holding engagement with said notch, said tongue being pivotally mounted for rotation about its longitudinal axis to permit relative transverse rotation between said male and female members, and resilient means associated with said spaced openings for yieldably limiting vertical movement of said stems within said openings.

2,743,944
AUTOGRAPHIC REGISTERS
Allen B. Cooke, Danville, Ill.
Application June 17, 1953, Serial No. 362,283
3 Claims. (Cl. 282—18)



1. An autographic register comprising an elongated metal box having side, top, and bottom walls, and having a bottom pivoted closure at each end, said top wall having a rectangular opening, a writing support closely spaced below the top wall and carried by the side walls beneath said opening, and having a diagonal front extension leading to a lower part for supporting carbons, an upper and a lower feed roller carried by said side walls, and engaging each other at the writing support end, a ticket directing and supporting shield carried by said side walls and beginning beside the lower roller and curving downward to a horizontal portion, receiving the full length of a ticket to be torn off at said lower roller, said shield having a central portion narrower than the tickets, to leave the ticket exposed on its lower side at each edge of the ticket, said shield having a horizontal lower portion at each side, and extending over the major portion of the length of the shield, said side walls having openings extending on each side to said lower portion, and said openings being as long as said lower portion, exposing the major portion of the ticket edge for grasp, the said upper roller having feed discs, and the said lower roller having knurled surfaces engaging the tickets, and said tickets having perforations located lowermost on the lower roller when the ticket is in position for writing, so that the user may reach in the side apertures at either side to grasp the ticket supported upon said horizontal shield above the lower portions thereof, to tear off the ticket against the lower roller.

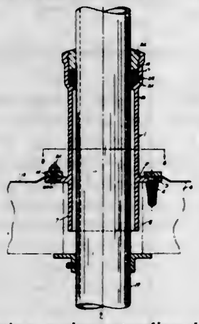
2,743,945
HEAT EXCHANGER SEALING DEVICES
Max Bentele, Charles Stewart Lowthian, and William Allan Russell, Newcastle-upon-Tyne, England, assignors to C. A. Parsons & Company Limited, Newcastle-upon-Tyne, England
Application November 15, 1952, Serial No. 320,796
Claims priority, application Great Britain November 16, 1951
5 Claims. (Cl. 285—1)



1. A pressure compensated sliding seal between high and low pressure sides in a rotary regenerative heat exchanger comprising a housing fixed to an outer casing, a rotor, the housing having a recess facing the rotor, a sliding seal mounted in said recess and having an arcuate rotor engaging face and a rear face, the rear face of the seal being separated from the bottom of said recess by a gap, means subdividing said gap into a plurality of substantially gas-tight compartments each extending parallel to the axis of said rotor engaging face and said seal

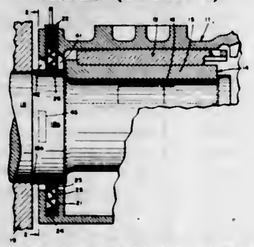
having separate passageways extending therethrough from each compartment and opening in said rotor engaging face.

2,743,946
SLEEVES FOR PIPING PASSING THROUGH A FLOOR OR ROOF
John H. Schmid, Erie, Pa., and Fred Heiles, Floral Park, N. Y., assignors to J. A. Zurn Mfg. Co., Erie, Pa., a corporation of Pennsylvania
Application September 19, 1951, Serial No. 247,208
2 Claims. (Cl. 285—31)



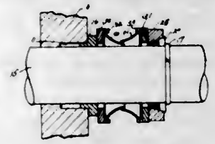
1. In combination, a pipe extending through a hole in a flat roof and a cylindrical sleeve concentrically disposed around said pipe to prevent water from flowing around said pipe to the floors below and to provide lateral support for said pipe, said sleeve being of substantially uniform diameter throughout its length and made of heavy rigid cast metal and having an inside diameter slightly larger than the outside diameter of said pipe, an outwardly directed, circumferentially disposed flange attached to the outside of said sleeve intermediate the ends thereof, said sleeve extending below said flange a substantial distance and extending through said hole a substantial distance, said flange having circumferentially spaced holes therein, some of said holes being counterbored from below and other of said holes being countersunk from above, a rigid clamping ring above said flange clamping flashing material to said flange, said clamping ring having circumferentially spaced apertures registering with said counterbored holes, bolts extending therethrough with their heads disposed in said counterbores, said countersunk holes receiving screws clamping said flange to said roof, the upper end of said sleeve being belled outward, and caulking material between said belled out portion and said pipe forming a seal therebetween, said sleeve being adapted to engage the outer surface of said pipe to give lateral support thereto.

2,743,947
JOURNAL BOX SEAL WITH FLOATING SLEEVE
Curtis D. Foss, Los Angeles, Calif.
Application January 7, 1952, Serial No. 265,333
9 Claims. (Cl. 286—6)



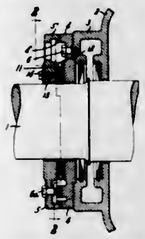
4. Means for effecting a fluid-tight seal between a railway car journal box having a dust guard slot at one end and an axle projecting into said box, a metal sleeve in said box at the dust guard end thereof surrounding said axle, a seal ring mounted within said sleeve adjacent one end thereof for engaging said axle, and a flexible seal member surrounding said sleeve and mounted in said dust guard slot, said flexible seal member engaging the periphery of said sleeve in a region axially spaced from said seal ring.

2,743,948
ROTARY SEAL
August H. Heinrich, Euclid, Ohio, assignor to Metal Seal & Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application October 24, 1952, Serial No. 316,702
6 Claims. (Cl. 286—11)



2. A fluid seal for a rotary shaft comprising in combination, a fixed abutment defining a portion of a fluid chamber and having an opening through which the shaft extends, a radially flexible abutment loosely disposed about the shaft in axially spaced relation from the fixed abutment, means for clamping said flexible abutment against the shaft in response to an axial force acting thereon, a pair of annular members freely surrounding the shaft between the abutments and each adapted to be urged respectively in opposite axial directions against the fixed abutment and the clamping means, and a pair of resiliently flexible sleeves freely surrounding the shaft and coacting in axially compressed relation between said annular members to exert an axial force in opposite directions against the respective annular members and thereby provide a fluid seal between the shaft extension and the fluid chamber.

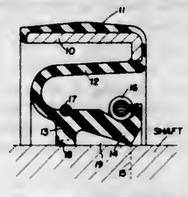
2,743,949
SEAL FOR ROTARY SHAFTS OF GAS-COOLED MACHINES
Friedrich Müllner, Mannheim-Feudenheim, Germany, assignor to Brown, Boveri & Cie., Aktiengesellschaft, Mannheim, Germany, a joint-stock company
Application May 11, 1953, Serial No. 353,985
Claims priority, application Germany July 12, 1952
2 Claims. (Cl. 286—22)



1. A shaft seal for use with an enclosed gas-filled machine casing housing a rotor on a shaft which extends to the exterior of the casing, said shaft seal comprising a pair of ring members arranged around and normal to the shaft, means securing one of said ring members to the casing, means securing the other of said ring members to the ring member which is secured to the casing, said ring members being secured against relative angular displacement, the opposed radial faces of said ring members being each provided with a circumferential set of wedge shaped projections forming radially extending slots

between the sides of said projections, the opposed sides of adjacent projections of each said ring member being parallel to each other, and the respective sets of projections on said ring members being circumferentially staggered, sets of sealing bodies disposed respectively in the slots of said ring members with the inner ends of said sealing bodies in surface contact with the surface of the shaft and with adjacent faces of said sets of sealing bodies in contact, the sealing bodies of one set being circumferentially staggered with respect to the sealing bodies of the other set in accordance with the circumferential staggering of said sets of projections, spring means individual to and bearing at one end against the sealing bodies of one set and mounted in circumferentially spaced bores in the ring member supporting that set for yieldingly urging said adjacent faces of said bodies into contact with each other, plug means retaining the other ends of said springs in said bores and means surrounding said sets of sealing bodies for urging the inner ends of the same into engagement with the surface of the shaft.

2,743,950
SHAFT SEAL
Fred A. Helfrecht, Redwood City, and Vanderveer Voorhees, Los Altos, Calif., assignors to National Motor Bearing Co., Inc., Redwood City, Calif., a corporation of California
Application July 12, 1951, Serial No. 236,394
5 Claims. (Cl. 288—2)



1. In a shaft seal of the type having a rigid case member and a flexible sealing member secured to said rigid case member and having a narrow flexible sealing lip adapted to contact a shaft, said seal having a flexible diaphragm interconnecting said lip and said case; a guide ring integral with the sealing member and composed of identical material with its inner surface adapted to encircle and lie adjacent said shaft, said guide ring being connected to an intermediate portion of said diaphragm so that flexing can occur between said guide ring and said rigid case member and also between said guide ring and said sealing lip; and a ring of rigid material on the opposite side of said diaphragm from said guide ring and directly in line therewith and backing up said guide ring for maintaining the circular shape of said seal even when it is subjected to unequal radial shaft pressures, as when said shaft is rotating about an axis eccentric to its center.

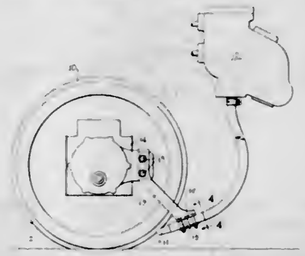
2,743,951
FLUID SEAL
Frank W. Ayres, Menlo Park, Calif., and Fred A. Helfrecht, deceased, late of Redwood City, Calif., by Wilma M. Helfrecht, executrix, Redwood City, Calif., assignors to National Motor Bearing Company, Inc., Redwood City, Calif., a corporation of California
Application March 30, 1953, Serial No. 345,398
10 Claims. (Cl. 288—3)

1. A shaft seal for retaining lubricant in a bearing while simultaneously excluding abrasive and corrosive foreign matter therefrom, including in combination a flexible sealing element having an annular body portion that is generally rectangular in cross section with its axial faces recessed in toward each other to provide two axially spaced apart sealing lips on the radially inner axial face, an outer lip to exclude foreign matter and an inner lip to retain the lubricant; said sealing element having a diaphragm portion extending radially outward from the axially and radially outer side of said body portion and then forming a generally conical portion for substantially the full axial extent of said sealing element; a spring in the outer axial recess of said body portion; an annular case for said sealing element extending around the out-



side thereof for the axial extent of said seal and having radial faces on opposite sides of said sealing element, the outer radial face having a multiplicity of perforations around its circumference for freeing the outer face of liquid and other foreign matter, the radial face on the inner side thereof having a plurality of circumferentially-spaced axially-extending spacer elements.

2,743,952
SANDING NOZZLE FOR WHEELED VEHICLES
Walter B. Dean, Narberth, Pa., assignor to The Budd Company, Philadelphia, Pa., a corporation of Pennsylvania
Application November 19, 1952, Serial No. 321,464
3 Claims. (Cl. 291—46)

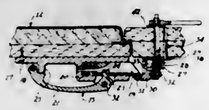


1. Sanding means for a wheeled vehicle provided with a sand trap on the body for supplying said with air under pressure and a wheel support bearing structure, in combination, a journal box supporting a wheel axle, a flexible expansible nozzle connected to said sand trap, and a support carried by said journal box for said nozzle near the end of the nozzle at a wheel tread to keep the end of the nozzle accurately in proper position and to produce sufficient vibration to prevent the formation of large obstructions in the nozzle, the support loosely embracing the nozzle to allow flexing and distension of the nozzle to break up sand congestion in the nozzle.

2,743,953
LATCH KEEPER FOR REFRIGERATOR DOORS
Maria V. Marra, Brooklyn, N. Y., and Lucian John De Bonis, Milwaukee, Wis.
Application January 7, 1953, Serial No. 330,133
1 Claim. (Cl. 292—340)

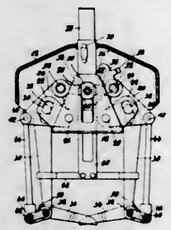
A keeper for a refrigerator latch comprising a body portion having a flange adapted to seat against the outer surface of a refrigerator wall, a keeper element in said body portion for engagement with the outer end of a latch bolt, means for adjusting and securing said keeper element in said body portion, a plurality of pins secured to

said flange and adapted to extend into holes in a refrigerator wall, said body portion having a threaded aperture therein, a threaded bolt secured in said aperture in said body portion independently of said keeper element and adapted to extend through an opening in a refrigerator wall and freely pass therethrough when released, a removable pin securing said threaded bolt against rotation and axial displacement in said aperture, a reduced end portion extending beyond the threaded portion of said



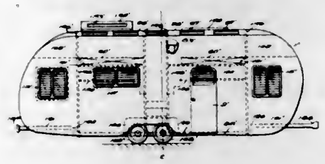
bolt, a releasable nut adapted for threaded engagement with said bolt, and straight handle means rigidly secured to said nut and laterally extending from one side of the nut in a common plane therewith to provide with the nut means, when released from the bolt, by which hammer blows can be made upon the reduced end portion of the bolt to dislodge the bolt from the opening in the refrigerator wall, whereby the keeper element and the body portion can be readily displaced from the outer surface of the refrigerator wall.

2,743,954
CLUTCHING TONG
Karl Bertil Östlund, Soderfors, Sweden, assignor to Stora Kopparbergs Bergslags Aktiebolaget, Falun, Sweden, a joint-stock company
Application July 16, 1951, Serial No. 237,035
8 Claims. (Cl. 294—113)



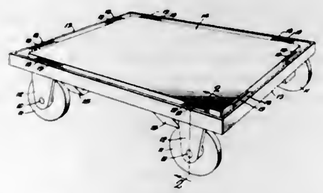
1. Automatic clutching tongs comprising a carrier, a horizontally disposed spindle supported by and in fixed position with respect to said carrier, a yoke having a limited vertical movement with respect to said spindle, at least two links each pivotally attached at one end to said spindle, a triangular crank pivotally attached at one angle thereof to the other end of each of said links, each of said cranks being pivotally attached at another angle thereof to said yoke so that in the raised position of said yoke relative to said spindle the central axes of said links are at small acute angles to the vertical plane through said spindle and in the lowered position of said yoke relative to said spindle are at greater acute angles approaching right angles to said plane, a rod pivotally attached to the third angle of each triangular crank, at least two gripping arms pivotally connected to said yoke and extending downwardly, co-operating slots abutments in said yoke and in each of said triangular cranks and a co-operating stop secured to each of said gripping arms limiting the relative movement thereof, a claw clutch pivotally attached to the ends of both a rod and an arm in each pair thereof, means for securing said yoke in its raised position with respect to said carrier and means for releasing said securing means to permit said yoke to move downwards with respect to said carrier thereby urging said claw clutch to closed position.

2,743,955
HOUSEKEEPING STRUCTURES
Corwin D. Willson, Flint, Mich.
Application March 8, 1951, Serial No. 214,542
15 Claims. (Cl. 296—23)



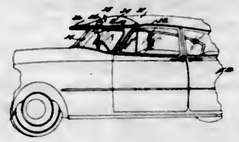
15. A two-story housekeeping road vehicle body for common highway transit and having upper and lower story compartments and partitions between the compartments, said upper and lower story compartments including portions of full standing height and portions of less than full standing height, bed platforms in said portions of said upper story compartments of less than full standing height serving as bottoms for said upper story compartments and ceilings for the said portions of said lower story compartments of full standing height, beds on said platforms, said upper story compartments having a walkway of full standing height extending alongside said beds lengthwise thereof at a level lower than said bed platforms, two of said partitions extending in spaced relation crosswise of the body in the upper story between said beds, panels extending from said bed platforms down to said walkway and serving to wall said walkway of full standing height below said platforms, each of five of said compartments having a doorway in one of said partitions, and a passageway of full standing height extending directly between the five doorways to permit private passage from any one of said five compartments to and into another thereof without invading the privacy of the other three compartments.

2,743,956
MAGNETIC CUSHIONING SUPPORT FOR VEHICLES
Harry Birkenstein, Jr., Highland Park, Ill.
Application December 11, 1952, Serial No. 325,492
7 Claims. (Cl. 296—35)



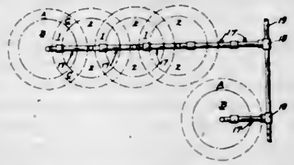
1. In a vehicle structure of the character described, a plurality of wheels for said vehicle adapted to move it over a surface supporting the same, a perimetric frame carried by said wheels and being supported thereby, a vehicle body mounted within said perimetric frame and being spaced from the sides and ends thereof, means for supporting said body within said frame for generally free horizontal movement with respect thereto, and a plurality of opposed pairs of horizontally aligned magnets along the sides and ends of said perimetric frame, one magnet of each pair being carried by said body and the other by said frame, the repelling forces developed between the magnets of each pair being operative to floatingly maintain said body in a predetermined horizontal relation with respect to said frame.

2,743,957
VEHICLE RAIN VISOR
David A. Sherman, Monroe, La.
Application September 3, 1953, Serial No. 378,308
2 Claims. (Cl. 296—95)



1. A rain visor for attachment to a vehicle when the vehicle is parked in a drive-in theater, comprising a frame including first and second legs each having their adjacent ends bifurcated, a link pivotally connecting said bifurcated ends together, a collar secured to each of said legs, a sleeve slidably mounted on said legs between said collars, a coil spring circumposed on one of said legs and abutting said sleeve, each of said legs extending when attached transversely of the vehicle and including a finger disposed normal thereto, an arm pivotally connected to each of said fingers, a clamp connected to each of said arms for engagement with a gutter of a vehicle, a buckle connected to each of said arms, a flexible cover of water repellent material having hems for receiving said legs and arms, said cover being wider at its rear than at its front for engaging a vehicle, there being a channel arranged in the rear portion of said cover, and a belt extending through said channel and connected to said buckles.

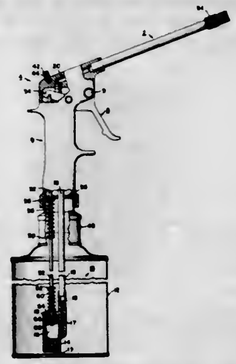
2,743,958
IRRIGATION SYSTEM BY SPRINKLING AND A SPRINKLER DEVICE
Jacobus M. Landry, Summerland, British Columbia, Canada
Application June 23, 1952, Serial No. 295,080
13 Claims. (Cl. 299—18)



1. In an irrigation system by sprinklers the steps of arranging the sprinklers in series, turning the sprinklers by intermittent movement to sprinkle a substantially circular area, spacing the centers of rotation of said sprinklers in said series at a distance about equal to the radius of the circle of sprinkling by a sprinkler, and varying the speed of turning of said sprinklers during each revolution at the overlapping portions of the circles of sprinkling, so as to compensate for the differences in water discharge at various portions of said circles.

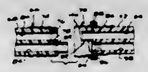
2,743,959
PAINT MARKING APPARATUS
Charles J. Nelson and Evan S. Nelson, Iron Mountain, Mich.
Application August 5, 1954, Serial No. 448,094
1 Claim. (Cl. 299—97)

In a paint marking gun apparatus comprising reciprocating pump means, a conduit communicating with said pump means and having an end spaced from said pump means, a symmetrical reversible nozzle piece having a central annular flange portion and two oppositely extending end portions of smaller diameter and having an orifice extending therethrough, said end portions being externally threaded, the external diameter of said threaded end portions being less than the inner diameter of the end of said conduit, a removable collar surrounding said nozzle piece and in threaded engagement with the end of said conduit and having an inner shoulder arranged to clamp either side of said flange portion of the nozzle piece releasably against said end of the conduit with its corresponding threaded end portion extending into said conduit and with its other threaded end portion projecting



from the collar, said orifice having a central restricted bore within said flange portion tapering into enlarged bores within said threaded end portions, a hollow cap having an internally threaded end adapted to screw onto the projecting threaded end portion of said nozzle piece, and a ram rod secured within said cap and adapted to enter said restricted bore when said cap is screwed thereon.

2,743,960
MULTIPLE CONDUIT HOSE
Sam Kamin, Houston, Tex.
Application September 14, 1954, Serial No. 456,018
2 Claims. (Cl. 299—104)

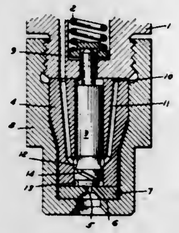


1. A multiple conduit hose comprising longitudinally extending partition wall disposed diametrically across the hose bore to define liquid conducting conduits, the hose wall of at least one of said conduits having longitudinal rows of spaced apertures transversely therethrough to define perforations through which liquid flowing through said one conduit may escape as a spray, means for detachably coupling one end of said hose to the adjoining end of another similar hose, and manually operable valve means operatively connected to and interposed between said hose and a source of liquid supply whereby the liquid may be selectively introduced into at least one of said conduits.

2,743,961
NEEDLE NOZZLE FOR INTERNAL COMBUSTION ENGINES
Rudolf L'Orange, Glatten, near Freudenstadt in Wurttemberg, Germany
Application October 29, 1951, Serial No. 253,656
1 Claim. (Cl. 299—107.6)

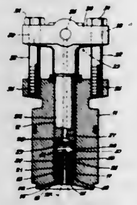
A fuel injection nozzle for internal combustion engines, comprising a holder having a fuel passage therein, an elongated needle guide projecting outwardly from said holder and having a longitudinal bore extending to the outer end of said needle guide, a nozzle plate extending across the outer end of said needle guide and having a fuel atomizing port communicating with said bore and an annular seat surrounding said port, an annular groove in the inner end of said needle guide communicating

with the fuel passage in said holder, circularly arranged fuel passages in said needle guide communicating with said annular groove and terminating in intake ports communicating with the bore at a point spaced axially inwardly of the bore from the outer end thereof, a needle having a sliding fit in the bore and having a portion between said intake ports and said fuel atomizing port closely fitting the bore, said needle having a reduced outer end portion provided with an end surface engageable with said annular seat to close said fuel atomizing port and forming an annular chamber around said re-



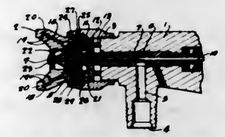
duced end portion at the outer end of said bore, a fuel passage in said needle extending from said intake port to said annular chamber and being in the form of a groove in the outer surface of said needle extending helically with respect to the axis thereof, and means for clamping together said needle guide, nozzle plate and holder comprising a coupling sleeve surrounding said needle guide and having an outer end turned radially inwardly to overlie and abut the outer end of said nozzle plate, and a releasable connection between the outer end of said holder and the inner end of said sleeve.

2,743,962
INJECTION NOZZLE
Thomas M. Dressler, Chicago, Ill., assignor to International Harvester Company, a corporation of New Jersey
Application November 24, 1954, Serial No. 471,034
2 Claims. (Cl. 299—107.6)



1. In an injection nozzle, a seat member having inner and outer ends, an outwardly facing valve seat at the outer end and a bore communicating between said seat and the inner end of such member, a portion of said bore adjacent the inner end of the seat member being threaded; an elongated valve pintle having inner and outer ends with a valve head upon the outer end thereof of cooperable with said seat, and a shank of less transverse area than said bore extending from the valve head inwardly through said bore beyond the inner end of the valve seat member, the pintle being axially retracted while the head is on the valve seat but being axially advanceable under the influence of liquid fuel pressure in said bore upon the head to lift the head from said valve seat; spring seat means upon the inner end of said pintle in spaced relation axially thereof from the inner end of the valve seat member; a coiled axially compressible spring coaxially about the pintle and held captive under compression between the spring seat means and said valve seat member for urging the pintle endwise retractively to press the valve head against the valve seat; a tubular valve stop member exteriorly threaded and screwed into the threads of the seat member bore concentrically about the pintle, said stop member extending from the valve seat member into spaced proximity with the spring seat means for engagement thereby to limit endwise advancement of the pintle attendant to lifting the valve head from the valve seat, said stop member being rotatable in the threaded bore portion to selectively determine the proximity thereof from the spring seat means of the retracted pintle; axially intermeshable elements respectively upon the ends of the spring seat means and the tubular stop member, said meshable elements being adapted to transmit rotary movement to the tubular stop member from the spring seat means while being also adapted to accommodate axial reciprocation of the spring seat means relatively to the stop member; and a spring seat member interposed between said spring and the inner end of said valve seat member and containing a threaded bore surrounding the tubular stop member and turned onto the threaded portion of said stop member to adapt said spring seat member to serve as a lock nut cooperable with the valve seat member for retaining the tubular stop member in selected axial adjustment.

2,743,963
SPRAY GUN AIR CAP
Donald J. Peeps, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a corporation of Ohio
Application May 11, 1954, Serial No. 428,915
4 Claims. (Cl. 299—140.1)

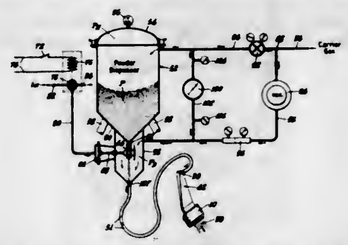


1. In an air cap for a spray gun, a main body member, horns on the forward end of the member, said horns ported for the discharge of spray shaping air jets, a coupling nut constituting in part the outer wall of an air passage to the horns, the coupling nut at its forward end engaging the member and threaded at its rearward end to hold the air cap on the spray gun, air passable retaining means rotatably connecting the body member to the coupling nut, an O-ring adjacent to the retaining means, radially spaced cylindrical surfaces on the body member and the coupling nut between which the O-ring is loosely lodged and adjoining coplanar radial surfaces of the body member and the coupling nut against the adjacent edges of which the forward face of the O-ring is held in sealing relation by the flow of air to the horns to prevent any leakage of air from the connection between the body member and the coupling nut.

2,743,964
REFRACTORY-METAL BODY SCARFING PNEUMATIC POWDER DISPENSING APPARATUS
Fred Moesinger, Jr., Morristown, N. J., assignor, by mesne assignments, to Union Carbide and Carbon Corporation, a corporation of New York
Original application April 18, 1950, Serial No. 156,652, now Patent No. 2,622,048, dated December 16, 1952. Divided and this application April 11, 1952, Serial No. 281,841
5 Claims. (Cl. 302—53)

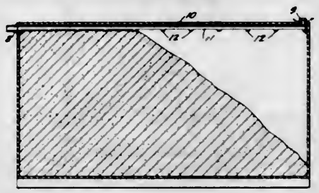
1. A powder dispenser including a closed powder hopper having a restricted powder outlet in the bottom thereof, a tube depending from such outlet, a powder shut-off valve associated with said tube between the hopper bottom outlet and the bottom of said depending tube, a closed powder pick-up chamber containing said depending

tube, said pick-up chamber having a funnelled bottom with an outlet spaced below the tube, a gas-borne powder delivery hose connected to said pick-up chamber outlet, a powder-carrier gas supply pipe connected to said powder pick-up chamber, means for adjusting the pressure of such gas to pick up the powder from said depending tube and



carry it through the outlet therebelow and on through said gas-borne powder delivery hose, a compressed gas supply pipe connected to said hopper above the powder therein, and means for adjusting the pressure of such compressed gas to force the powder from said hopper through its restricted powder outlet and the tube depending therefrom into said pick-up chamber.

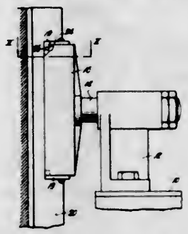
2,743,965
BIN FILLING APPARATUS
David F. Mattson and Albert Leigh Paulsen, Minneapolis, Minn., assignors to Atkinson Bulk Transport Company, Minneapolis, Minn., a corporation of Minnesota
Application June 24, 1953, Serial No. 363,900
9 Claims. (Cl. 302—59)



1. Bin filling apparatus having in combination a substantially closed elongated bin adapted to receive pulverulent materials therewithin, said bin having a top portion and an inlet adapted to admit pulverulent material therethrough and an air outlet disposed remotely from said material inlet, and an elongated tubular member mounted within said bin adjacent its top portion and extending along the same longitudinally of said bin and being connected to said inlet, said tubular member having open longitudinal lower portions along its entire length to adapt the same to completely fill said bin when a substantially solid stream of fluidized pulverulent material is propelled inwardly through said inlet.

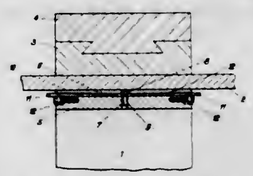
2,743,966
OILLESS ELEVATOR GUIDE SHOE GIB
John G. McKernan, Kansas City, Mo.
Application February 18, 1952, Serial No. 272,107
1 Claim. (Cl. 308—3)

An oilless elevator guide shoe comprising an elongated, U-shaped body having a bight and a pair of side walls each initially separate from said bight, and each having an outermost, longitudinal edge, there being a single, polygonal cavity in the inner face of each side wall respectively and in the inner face of said bight intermediate the ends of the body, the cavity in the bight spanning the distance between the side walls and communicating with the cavities in the side walls, the cavities of the side walls being open along corresponding edges, extending from said edges to the cavity in the bight, and being coextensive in length with the latter, the lengths of the cavities being appreciably less than the length of the body, and the ends of the cavities being closed; a plurality of pins releasably connecting the side walls with the bight; and three separate, flat, interengaging, solid plates of pure graphite, each completely filling one of said cavities, the plates



being flush with said inner faces of the bight and the side walls, presenting a U-shaped bearing surface extending through a portion of the length of the body, said body being of laminated canvas, steeped in phenol formaldehyde resin and subjected to high pressure, rendering the same appreciably more resistant to wear than said graphite plates.

2,743,967
MACHINE TOOL WEAR COMPENSATING APPARATUS
Wilhelm Lappe, Berlin-Britz, Germany, assignor to Firma Fritz Werner Aktiengesellschaft, Berlin-Marienfelde, Germany
Application June 10, 1953, Serial No. 360,652
Claims priority, application Germany June 27, 1952
14 Claims. (Cl. 308—3)

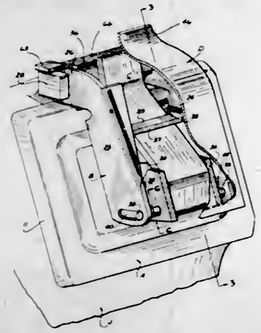


1. In a machine tool, in combination, a support having a guiding face and a pair of projecting guides extending along opposite side edges of said guiding face and including said side edges; a carriage slidably engaging said guiding face of said support and having a pair of opposite side extensions respectively extending about said projecting guides of said support, each extension having an inner face directed toward said guiding face and spaced from the projecting guide about which said extension is located; a pair of elongated contact members respectively located between said inner faces of said extensions and said projecting guides and slidably engaging the latter; and a pair of wedge members located between and engaging said inner face of each extension and each contact member respectively to provide a uniform sliding contact between said projecting guides and contact members so as to eliminate play between said support and carriage.

2,743,968
CLOSURE DEVICE
Dan A. Christensen, Palo Alto, and Antone D. Martin, Menlo Park, Calif., assignors to National Motor Bearing Co., Inc., Redwood City, Calif., a corporation of California
Application March 22, 1954, Serial No. 417,692
17 Claims. (Cl. 308—47)

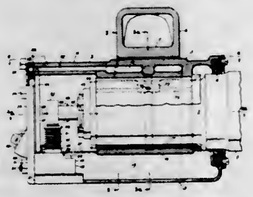
1. In combination with a lubricant container having an entrance, a cover device adapted to provide a leak tight seal for said entrance comprising a lid corresponding in

shape to the entrance of the container, hinge means having a hinge pivot by which it is pivoted on said container and having means by which it is pivotally secured to said lid, a flat spring slidingly mounted in said hinge means having one end positioned to engage said container at



a point offset from said hinge pivot, and lever means secured to the other end of said spring and operable to engage said hinge means to pry said last mentioned end of said spring away from the pivotal lid means and said one end of said spring is forced into operative engagement with said container to hold the lid firmly closed.

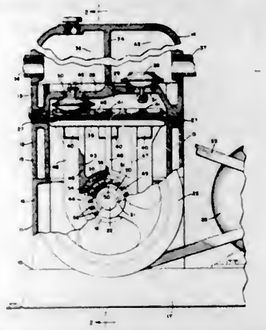
2,743,969
LUBRICATING MECHANISM FOR RAILWAY CAR AXLE
Glenn F. Couch, Buffalo, N. Y., assignor to The Symington-Gould Corporation, Depew, N. Y., a corporation of Maryland
Application January 22, 1951, Serial No. 207,147
2 Claims. (Cl. 308—84)



1. In a lubricating mechanism, the combination with a railway car axle, a journal box and a lid closing an opening therein, of a lined bearing encircling said axle within said journal box, a pump in said journal box and having a body secured to said lid, intercommunicating ways formed in said lid and journal box and leading from said pump to an inner surface of said bearing, a reservoir in said ways, spaced intake and exhaust valves in said pump body, a piston in said body and selectively operating said valves for charging said reservoir through said ways, anti-friction means projecting from and eccentrically mounted on said axle for actuating said pump, and a safety valve in said pump body and separate from said ways, said safety valve permitting escape of lubricant from said pump on attainment of a predetermined pressure in said ways.

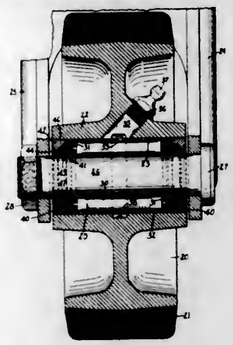
2,743,970
CAST CONNECTING ROD COMPRISING BALL BEARING
Richard T. Cornelius, Minneapolis, Minn.
Application October 12, 1950, Serial No. 189,781
3 Claims. (Cl. 308—184)

1. A connecting rod comprising a ball bearing having an outer race, a covering of sheet material encircling the outer surface of said race, said covering being constructed of compressible material, a metal band encircling said covering and holding the same applied to said ball bearing and a one piece cast boss formed on said rod extending



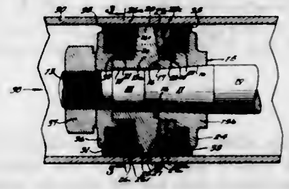
completely about said band, covering a portion of said race at the ends thereof and engaging said portion to completely enclose said band and covering.

2,743,971
SEALED WHEEL MOUNTINGS
Michael Kramcsak, Jr., Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a corporation of Connecticut
Application May 28, 1952, Serial No. 290,491
10 Claims. (Cl. 308—187.1)



1. In a wheel mounting, the combination of a wheel hub having a longitudinal bore of uniform section for the greater part of its length, a resilient compressible thin walled liner of less length than the hub held in place in the intermediate portion of said bore and adapted for containing a supply of lubricant, an axle located in said bore, anti-friction rollers of less length than said liner arranged between the liner and the axle, an O-ring stretched over the axle so as to be in tight contact with an axle portion disposed axially outwardly of an end of said liner, a washer having a radially outer part abutting the adjacent end of the liner, said washer having a clearance aperture for the axle which clearance aperture enables lubricant to move along the axle toward the O-ring, and an end plate rigidly fixed within the end of said bore beyond said washer so as to turn with the wheel, said end plate and said washer in cooperation with each other presenting a chamber in which said O-ring is accommodated with clearance at the sides and at the outer periphery, whereby lubricant may form a dust-blocking coating over the sides and the outer periphery of the O-ring, said end plate having a thin radially inner part and a thick radially outer rim secured in the bore and abutting the washer, and said end plate being provided with an axle-receiving opening of greater diameter than the axle but of substantially less diameter than the outer diameter of the O-ring, thereby providing a constricted opening through which lubricant may escape from said chamber.

2,743,972
PISTON
John W. MacClatchie, Saugus, Calif.
Application January 26, 1952, Serial No. 268,414
9 Claims. (Cl. 309—23)



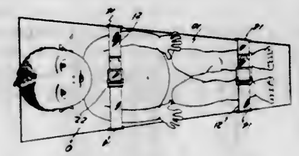
1. In a pump piston: a hub having a radial flange intermediate the ends thereof; annular members mounted on said hub with said flange forming a backing element for said annular members, and a resilient packing element mounted on said hub in mutually contacting relation with one of said annular members, each of said annular members being split in at least one place so that it is adapted to be forced radially outward when pressure is applied to the packing element, the split in each of said annular members being in disalignment with respect to the split in the next adjacent annular member, the annular member adjacent said resilient packing element being provided with a hole adjacent the split in the next adjacent annular member, and a portion of said resilient packing element filling the splits in said annular members.

2,743,973
SPACER AND EXPANDER RING
Douglas W. Hamm, Muskegon, Mich., assignor to Muskegon Piston Ring Company, Muskegon, Mich., a corporation of Michigan
Application April 28, 1953, Serial No. 351,555
1 Claim. (Cl. 309—45)



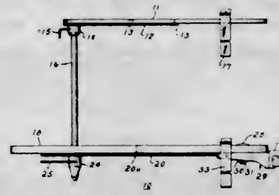
An expander and spacer for piston rings comprising, a parted, generally circular band of thin ribbon, metallic stock having, lengthwise thereof, a successive series of openings with transverse sections between successive openings, and a tongue extending radially outward from one end of each opening integral with an adjacent transverse section, and longitudinal sections of a preselected substantially narrow width integrally connecting said transverse sections at the ends thereof, connecting sections at each side of said expander and spacer having a transverse slot therethrough, said slots being staggered at opposite side edges of said expander and spacer, said expander and spacer at its ends at the parting thereof having cooperating tongues in side by side pressure engagement, and means at said parting for holding said tongues from lateral movement with respect to each other.

2,743,974
CIRCUMCISION BOARD
Maurice Black, Saginaw, Mich.
Application September 28, 1953, Serial No. 382,539
8 Claims. (Cl. 311—5)



1. In an operating board, an elongated support surface on which a child may be secured in prone position including side wall sections for said board on which said board may be supported, substantially longitudinally disposed track means formed in said side wall sections, opposed strap brackets slidable longitudinally on said track means and adjustable lengthwise on said support surface, and adjustable strap means spanning said brackets to secure a child in position on said board.

2,743,975
LATERAL SURGICAL POSITION ATTACHMENT
Charles M. Stiefvater, Kearny, Nebr.
Application June 25, 1954, Serial No. 439,179
2 Claims. (Cl. 311—10)

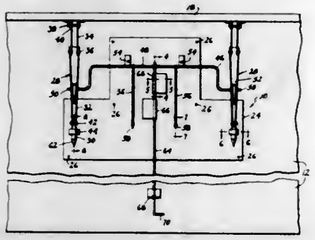


1. An operating table surgical accessory comprising a first arm support member to receive and support one arm, socket receiving means carried on the underface of said first arm support member, a second arm support member to receive and support one arm positioned below and in a plane parallel to and spaced from that of said first arm support member, longitudinal slot means centrally positioned on said second arm support member, retaining means positioned on the underface of said second arm support member in vertical alignment with said longitudinal slot means, connecting means secured at one end to the socket means carried by said first arm support member and the opposite end secured to said retaining means for vertical movement with respect thereto, and horizontal movement in the longitudinal slot means, and mounting means carried by said second arm support member for detachably securing same to a body supporting member.

2,743,976
COLLAPSIBLE SUPPORTING DEVICES FOR DROP LEAVES
Paul S. Gaston, Washington, D. C.
Application July 15, 1954, Serial No. 443,554
3 Claims. (Cl. 311—19)

1. The combination of a side support, a drop leaf hingedly attached to said side support, and collapsible means for sustaining said drop leaf in an operative position, said means comprising a mounting plate secured to the underside of said drop leaf, a plurality of articulated

foldable struts extending obliquely from the side support to the mounting plate in mutually spaced relation. each strut having a lower end pivoted to the side support and an upper end operatively connected to the mounting plate, means connecting said struts together and engageable with the mounting plate for locking the struts against folding, said last mentioned means comprising a locking



rod having a U-shaped intermediate portion and coaxial end portions pivotally connected to the struts, and a stop provided on the mounting plate and engageable by the intermediate portion of said rod, and means carried by the mounting plate for releasing the locking means, whereby the struts may be folded and the drop leaf swung downwardly relative to said side support.

2,743,977

IMPROVEMENTS IN END EXTENSION TABLES

Glenn H. Norquist, Jamestown, N. Y.

Application September 10, 1954, Serial No. 455,259

7 Claims. (Cl. 311—55)



1. A refectory table including in combination, an apron frame, table legs connected to the apron frame, a main table top section overlying the apron frame and vertically adjustable in floating relation thereto, an extensible end wing table top section shiftable to and from retracted position beneath the main table top section and to and from extended position and planular relation with respect to one end of the main table top section, means for guiding the floating movement of the main table top section in parallel relation to the apron frame, and means for supporting said end wing section in retracted and extended positions and for guiding the shifting movement thereof to and from retracted and extended positions, said wing supporting and guiding means including a pair of cantilever rails each presenting a head section secured to the underface of the wing section and a tail section projecting beyond the rear end edge of the wing section, rail notches formed in the upper edge of the apron frame for supporting said cantilever rails and guiding the shifting movement thereof, a frame member fixed to said apron frame below the main table top section and extending substantially at right angles to said cantilever rails, and a pair of metal guide brackets fixed to said frame member and presenting a pair of guide channels in which the tail sections of said cantilever rails are designed to telescope, each of said cantilever rails presenting a reduced head end portion designed to seat within the rail notch when the end wing section is in retracted position and an abutment shoulder adjacent thereto operative to abut the adjacent apron frame to thereby releasably retain the cantilever rail and the end wing section attached thereto in retracted position.

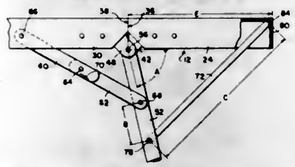
2,743,978

LEG AND BRACE CONSTRUCTION FOR FOLDING TABLE WITH DROP LEAVES

Charles Shore, Cheltenham, Pa., assignor to Falco Products Co., Philadelphia, Pa., a corporation of Pennsylvania

Original application February 26, 1953, Serial No. 339,039. Divided and this application December 28, 1955, Serial No. 555,848

5 Claims. (Cl. 311—90)



1. A folding table comprising a substantially rectangular central section having a flat top member and a depending peripheral skirt having side and end portions, a pair of drop leaves each including a flat top member and a peripheral skirt having side portions and inner and outer end portions, means pivotally attaching the inner end skirt portion of each drop leaf to the end skirt portion of the central table section adjacent the lower edges of said end skirt portions, legs pivoted to said central table section, means to releasably lock the legs in fully erected positions, and means to support the drop leaves in extended positions, said support means including an elongated brace member for each drop leaf which is pivoted at one of its ends to each leg member, the free end of said elongated brace member being movable in an arc around its pivot point which intersects the outer end skirt portion of the drop leaf when the leg member is locked in its fully extended position, and in this position the free end of the elongated brace member bears against the corner formed between the outer end skirt portion of the drop leaf and the top member thereof thereby urging the latter into planar alignment with the top member of the central table section.

2,743,979

FRAME CONSTRUCTION FOR LIGHT-WEIGHT TABLE

Charles Shore, Philadelphia, Pa., assignor to Falco Products Co., Philadelphia, Pa., a corporation of Pennsylvania

Application February 26, 1953, Serial No. 339,039

4 Claims. (Cl. 311—105)



1. In a light-weight table, a section comprising a metallic frame including a channel and depending skirt, a fibrous board fitting into said channel, and means securing said board in said frame, said meanse including spaced indentations in one leg of said channel extending into one surface of said board, the inner face of one of said channel legs being serrated.

2,743,980

SPRING-ON SPRING-TIGHT EDGE FACING MOLDING

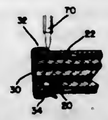
Frank Hobbs, Seattle, Wash., assignor to Colotrym Company, Seattle, Wash., a corporation of Washington

Application January 12, 1953, Serial No. 330,691

2 Claims. (Cl. 311—107)

1. The combination with a table member forming a flat working surface having an exposed nosing edge, of

a spring-on facing molding having an upright concavo-convex wall of greater width than said edge covering said edge, having a top flange covering the upper face of said working surface adjacent said edge and having a bottom flange covering the underside of said table member adjacent said edge, said concavo-convex wall, top flange and bottom flange of said molding being formed of a single strip of resilient metal and the top and bottom flanges being spread from their normal position whereby the table member is resiliently clamped by said molding, the extreme edge portion of said top flange being declivous and extending obliquely from the remainder of said top flange and exposing a depending sharp edge corner having single line contact with said face of said



working surface, said working surface having a score parallel to said edge in which said sharp edge corner is positioned, said bottom flange consisting of an acclivous portion joined by a declivous camming portion forming the inner edge of said bottom flange, the joinder of said acclivous and declivous portions of said bottom flange forming an upstanding ridge, pressing in line contact against the underside of said working surface, on a line spaced the same distance from said wall as said sharp edge corner, and said ridge and depending corner normally being spaced a lesser distance apart than the upper and lower surfaces of said table member so that the molding must be sprung into place by the use of said declivous camming bottom flange portion.

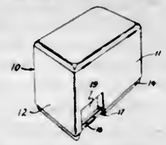
2,743,981

FREEZER CABINET WITH EXTERNALLY ACCESSIBLE MACHINERY COMPARTMENT

Robert E. Moore, Amana, Iowa, assignor to Amana Refrigeration, Inc., Amana, Iowa, a corporation of Iowa

Application November 5, 1952, Serial No. 318,809

5 Claims. (Cl. 312—214)



1. In a top-opening, chest-type freezer cabinet, an outer casing and an inner liner therefor providing interior space within said cabinet, said outer casing comprising a front wall, a back wall, side walls, and a bottom, said bottom having an opening therein defined by edges spaced from the said front and side walls and extending to said back wall, a housing covering said opening and providing space for a freezer machinery unit, said housing having front and side vertical walls, said back wall having an opening therein adjacent to and affording access to said housing, and means securing the vertical walls of said housing to said edges and said back wall exclusively whereby the sole support for said housing is derived from said bottom and back cabinet walls.

2,743,982

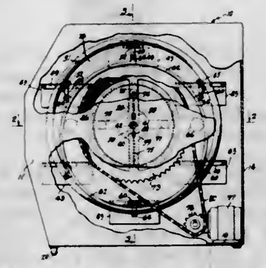
FILING CABINET

Joseph Stingl, Stratford, Conn., assignor to The Ferris Manufacturing Company, Stratford, Conn., a corporation of Connecticut

Application June 10, 1953, Serial No. 360,709

3 Claims. (Cl. 312—267)

1. A filing cabinet for cards comprising a housing including spaced upright end walls, connecting front and rear side walls between them and a top wall, a retractable closure at the upper portion of the front wall hinged adjacent its lower edge to swing forwardly and downwardly to an open position to permit access to the cabinet, means to hold the opened closure in a substantially horizontal position to form a work supporting shelf, a pair of upright longitudinally spaced rotary supports in the housing adjacent the end walls, a series of elongated open topped trays extending between and pivotally mounted at their opposite ends in the supports, said pivotal mounting means for each tray comprising a pivot pin secured to each end of the tray and extending through the adjacent rotary support, a bearing for each pin on the



support comprising a cross bar secured to one side of the support, an elongated bearing for the pin mounted in the bar, a crank arm secured to each pin between the rotary support and the adjacent end wall of the housing, a rotatable control ring pivotally connected to each crank arm on the pivot pins in the adjacent support at a distance spaced from the axes of these pins, means mounting each ring to rotate about an axis offset laterally from the axis of rotation of the supports a distance equal to the distance said pivotal connections to the crank arms are spaced from the axes of the pins, and means whereby the supports and the rings may be rotated to bring any tray into an accessible position immediately to the rear of the work supporting shelf.

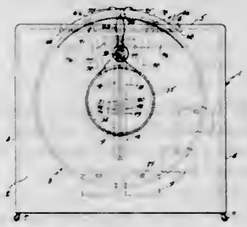
2,743,983

ROTARY CARD FILING CABINET

Joseph Stingl, Stratford, Conn., assignor to The Ferris Manufacturing Company, Stratford, Conn., a corporation of Connecticut

Application December 15, 1952, Serial No. 326,078

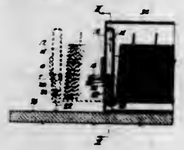
5 Claims. (Cl. 312—267)



2. A filing device for cards comprising a pair of laterally spaced upright rotary supports, a series of trays adapted to carry a plurality of record cards in an upright position, means pivotally mounting the trays on and extending transversely between the supports arranged about the peripheries of these supports, said mounting means comprising a pivotal support at each end of a tray, the pivotal support at one end of each tray comprising a shaft, a transverse bar secured to one end of the shaft and to one end of the tray, a bar carrying a bearing for the shaft, the adjacent upright support being provided with an elongated slot through which the bar may pass when located longitudinally of the slot and then be turned to lie across

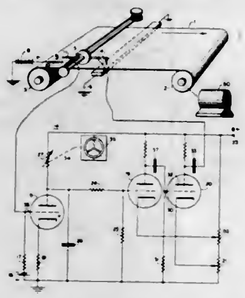
the slot, means securing the bar to a side of the support in a position extending transversely of the slot, a laterally extending arm secured to the shaft on the opposite side of the support from the tray, an upright ring, means mounting the ring to rotate about an axis spaced laterally of that of the supports, and means pivotally connecting the free end of each arm to the ring.

2,743,984
FILE DRAWER SUPPORT
James E. Guthrie, Kansas City, Mo.
Application September 28, 1953, Serial No. 382,776
6 Claims. (Cl. 312—317)



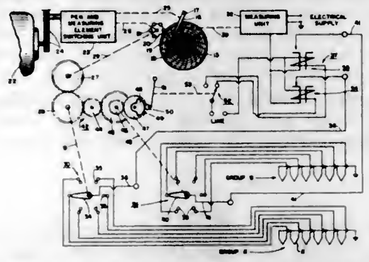
1. For a file drawer slidably mounted in a case for opening by pulling outwardly to a position spaced above an underlying base and having an outermost end wall and a bottom wall provided with an opening adjacent the end wall, a combination pull and support comprising a handle shiftably carried by said end wall; a supporting leg within the drawer; and means connecting the leg to said handle for movement to and from a position within said opening and resting on said base upon shifting of the handle while the drawer is pulled out.

2,743,985
REMOTE MEASURING DEVICE
Thomas F. Jones, Roxbury, Mass.
Application September 25, 1950, Serial No. 186,625
4 Claims. (Cl. 346—33)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A device for indicating and recording the magnitude of a remote independent variable comprising: a recorder including a recording medium; a recording element for marking the recording medium responsive to a voltage pulse, and means for causing an excursion of said recording element across the recording medium; a saw-tooth voltage generator including resistance and capacitance elements one of which is variable to vary the slope of the waveform of the generated saw-tooth voltage; means for varying the variable element of said saw-tooth generator in accordance with the magnitude of said remote variable; biased amplifier means coupled to the output of said saw-tooth voltage generator operative to generate an output pulse responsive to the attainment of a predetermined voltage level by said saw-tooth voltage; means synchronizing said recording element excursion and said saw-tooth generator; and means connecting the output of said pulse generator to said recording element for marking said recording medium.

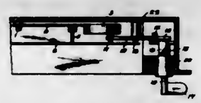
2,743,986
INDUSTRIAL MULTI-RECORD SYSTEM
Mead Bradner, Foxboro, Mass., assignor to The Foxboro Company, Foxboro, Mass., a corporation of Massachusetts
Application December 8, 1954, Serial No. 473,959
1 Claim. (Cl. 346—46)



For use in an industrial multi-record recorder wherein: a recording member is successively positioned over a chart to recording positions corresponding respectively with the values of variable conditions whose behaviors are to be recorded; marking means is carried by said recorder to apply color intermittently to said chart to mark thereon the successive recording positions of said recording member; color changing mechanism is provided in fixed location spaced from said chart and cooperatively associated with said marking means; an electrical switching system wherein a plurality of variable condition electrical measuring elements are automatically and serially connected to a common measuring circuit, said system comprising, in combination, a gear train assembly comprising a first gear driven by said color changing mechanism, a second gear driven by said first gear and in one-to-one relation therewith, a third, idler gear driven by said second gear, a fourth gear driven by said idler gear and in one-to-one relation with said second gear, a fifth gear, smaller than and unitary with said fourth gear, a sixth gear driven by said fifth gear and in speed step-down relation therewith, a cam which is operated by said fifth gear and formed in reduced relation to a full circle in accordance with said step-down relation of said fifth gear, and an electrical switch operable by said cam, a pair of multi-contact switches one of which is operated by said second gear and the other of which is operated by said fourth gear, with the contacts of one of said switches provided as switch connection points for one group of electrical measuring elements, and the contacts of the other of said multi-contact switches provided as switch connection points for another group of said electrical elements, a switch output connection for each of said multi-contact switches, means associated with each of said multi-contact switches for automatically and serially connecting the contacts thereof with the said output connection therefor, an output circuit common to said switches, means including said cam for automatically and serially connecting said multi-contact switch output connections to said common output circuit, and means for operatively connecting said output circuit and said recording member whereby said chart is provided with more distinguishable records than there are different colors provided.

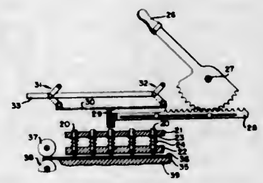
2,743,987
RECORDING DEVICES FOR VEHICLES
Karl Meer, Villingen, Black Forest, Germany, assignor to Kienzle Apparate G. m. b. H., Villingen, Black Forest, Germany, a company of Germany
Application June 28, 1952, Serial No. 296,207
Claims priority, application Germany July 7, 1951
7 Claims. (Cl. 346—64)

1. A recording device for a vehicle, comprising, in combination, a casing adapted to be mounted in the vehicle; sheet means mounted for movement in said casing and adapted to continuously receive markings thereon during its movements; marking means mounted in said casing for oscillation relative to and in contact with said sheet means for marking on the same, said marking means being oscillated within a range of oscillation by the movement of the vehicle; stop means



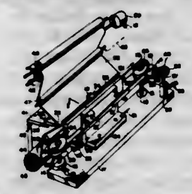
for limiting the range of oscillation of said marking means; and manually operable means mounted on said casing for selectively confining the oscillation of said marking means to different portions of said range of oscillation and with respect to said sheet means, whereby the conditions of operation of the vehicle by different operators may be indicated by the marking made on said sheet means by said oscillating marking means.

2,743,988
DUPLICATING APPARATUS FOR MAKING MAGNETIC RECORDS
Charles S. Allyn, Jr., Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a corporation of Maryland
Application March 18, 1950, Serial No. 150,457
13 Claims. (Cl. 346—74)



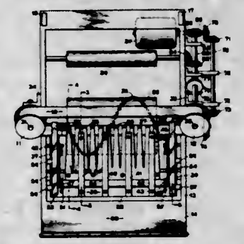
1. A recording element for use in a duplicating apparatus which records the same data on magnetizable record members, the recorded data being in the form of a pattern of discrete magnetic marks which, by their relative location in the pattern, represent the data, consisting of a supporting member and a plurality of individual permanent magnets mounted only at predetermined positions thereon which are necessary to produce the particular pattern of magnetic marks having the required relative positions to represent the data to be recorded, said magnets having record-member-engaging portions and being capable of producing the same pattern of magnetic marks on each of the record members merely by contact therewith.

2,743,989
FACSIMILE RECORDER
Stanley P. Clurman, New York, and Hugh C. Ressler, Bayside, N. Y., assignors to Faximile, Inc., New York, N. Y., a corporation of Delaware
Application June 10, 1952, Serial No. 292,758
6 Claims. (Cl. 346—74)



1. A recording mechanism comprising a fixed linear member, means for moving a recording medium across and in contact with said linear member, the motion of said medium being transverse to said linear member, a belt movable in a path at an angle to said linear member, a plurality of electrode holders disposed on said belt, each of said holders having a raised portion and a relieved portion, a flat flexible blade having one end secured to said raised portion and extending over the relieved portion, said blade having a straight marking edge at its free end offset from the plane of the blade and disposed to contact the linear member during movement of the belt.

2,743,990
FACSIMILE RECORDER
George H. Leonard, Darien, Conn., assignor to Faximile, Inc., New York, N. Y., a corporation of Delaware
Application August 8, 1952, Serial No. 303,439
11 Claims. (Cl. 346—101)



1. A recorder comprising a rotatable rigid electrode, means supporting an elongated flexible blade in contact with said electrode for marking a recording medium therebetween, a plurality of spring loaded arms disposed parallel to one side of the blade pressing the blade against the electrode in a direction parallel to the face of the blade, and a plurality of closely spaced spring elements disposed parallel to and along the face of the blade and pressing the face of the blade in a direction perpendicular to the face of the blade.

CHEMICAL

2,743,991
PROCESS FOR DYEING TEXTILES MADE FROM ACRYLONITRILE-CONTAINING POLYMERS
Archie G. Schoonover, South Charleston, Theophilus A. Feild, Jr., Charleston, and John H. Purse, South Charleston, W. Va., assignors to Union Carbide and Carbon Corporation, a corporation of New York
No Drawing. Application March 23, 1951, Serial No. 217,317
15 Claims. (Cl. 8—55)

1. Process for dyeing textile articles made from polyacrylonitriles and copolymers of acrylonitrile with another singly unsaturated compound containing an olefinic double bond, which comprises treating such an article with an aqueous solution containing a small amount of a compound yielding cuprous ions and a water-soluble dyestuff selected from the class consisting of the acid-type and the direct-type dyestuffs and heating the article in said solution at a temperature of at least 175° F. for at least 15 minutes, said dye-containing solution having a pH between around 2.0 and 7.0.

2,743,992

PROCESS FOR DYEING TEXTILES MADE FROM ACRYLONITRILE-CONTAINING POLYMERS

Archie G. Schoonover, South Charleston, Theophilus A. Feild, Jr., Charleston, and John H. Purse, South Charleston, W. Va., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application August 23, 1952, Serial No. 306,068

4 Claims. (Cl. 8—55)

1. Process for dyeing textile articles made from polyacrylonitriles and copolymers of acrylonitrile with at least one other polymerizable compound containing a single olefinic double bond, which comprises treating such an article with an aqueous dyebath having a pH within the range from 2.0 to 7.0 and containing a water-soluble dyestuff selected from the class consisting of the acid-type, direct-type and water-soluble acetate-type dyestuffs, and slowly adding to said aqueous dyebath successive small amounts of a compound yielding cuprous ions while heating the article in the dyebath containing cuprous ions at a temperature of at least 175° F. for at least 15 minutes.

2,743,993

PROCESS FOR DYEING ACRYLONITRILE-CONTAINING TEXTILE ARTICLES

William W. Rankin, Charleston, W. Va., assignor to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application August 23, 1952, Serial No. 306,058

14 Claims. (Cl. 8—55)

1. Process for dyeing textile and other articles made from resinous polyacrylonitriles and copolymers of acrylonitrile with at least one other polymerizable compound containing a single olefinic double bond with a water-soluble dyestuff and a water-dispersible dyestuff, which comprises treating such an article for at least 10 minutes with an aqueous dyebath maintained at a temperature of from around 175° F. to a temperature near but substantially below the strain-release temperature of such article, said dyebath containing at least one water-dispersible acetate-type dystuff and at least one water-soluble dyestuff selected from the class consisting of the acid-type, the direct-type and the water-soluble acetate-type dyestuffs, thereafter adjusting the pH of the bath to between 2 and 7, and, while the dyebath is at a temperature within the said range, slowly adding thereto small successive amounts of an aqueous liquid containing cuprous ions until the article attains the desired shade of color.

2,743,994

METHOD OF PRODUCING SHAPED ARTICLES FROM POLYMERIC MATERIALS

David W. Chaney and Rodger L. Schaefer, Decatur, Ala., assignors to The Chemstrand Corporation, Decatur, Ala., a corporation of Delaware

No Drawing. Application September 24, 1953, Serial No. 382,190

20 Claims. (Cl. 18—54)

1. A process for producing shaped articles from polymeric materials comprising, dissolving a polymer containing at least 80% by weight of acrylonitrile and up to 20% of a mono-olefinic monomer copolymerizable therewith in a solvent therefor, extruding the solution into a coagulating medium, stretching the article so produced to orient the polymer molecules at a temperature not exceeding 100° C. and for a period of time less than 15 seconds, relaxing the article, and crystallizing the article in a relaxed state by subjecting the article to a temperature of at least 100° C. for a period of at least 15 seconds.

2,743,995

METHOD OF SAMPLE BURNING FOR MICRO-CHEMICAL COMBUSTION ANALYSIS

Paul H. Sherrick, Winnetka, Ill., assignor to E. H. Sargent & Co., a corporation of Illinois

Application October 2, 1952, Serial No. 312,835

6 Claims. (Cl. 23—230)



5. The method of sample burning for micro-chemical analysis of a sample contained in a combustion tube having a sample burning section, a preheating section adjacent one end of the sample section, a sweeping section adjacent the other end of the sample section, and a section containing a catalyst adjacent the other end of the sweeping section which comprises the steps of: heating the preheating section to a predetermined temperature; thereafter heating the sample burning section to a predetermined temperature lower than the temperature of the preheating section; then heating the sweeping section to a predetermined temperature lower than the temperature of the sample burning section; maintaining the temperature of the preheating section higher than the temperature of the sample burning section and the temperature of the sample burning section higher than the temperature of the sweeping section during generation of any sample vapors in the sample burning section thus producing a forward moving thermal-gradient in the combustion tube in the direction toward the catalyst section from the preheating and sample burning sections; heating the catalyst section to a predetermined temperature lower than the temperature of the sweeping section; and maintaining the temperature of the catalyst section lower than the temperature of the sweeping section during generation of any sample vapors in the sample burning section and until substantially all of the sample vapors have moved into the catalyst section.

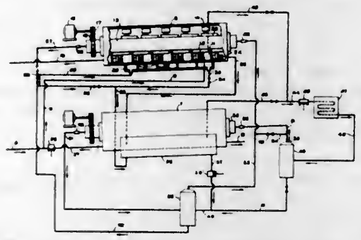
2,743,996

MULTI-STAGE CRYSTALLIZATION APPARATUS

Karl H. Hachmuth, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Original application July 11, 1949, Serial No. 104,048, now Patent No. 2,593,300, dated April 15, 1952. Divided and this application December 3, 1951, Serial No. 259,657

8 Claims. (Cl. 23—273)



1. A continuous multi-stage crystallizer which comprises an inclined, elongated stationary cylindrical chamber, said chamber having a series of baffles positioned transversely across the bottom thereby forming a series of transverse troughs, a rotatable cylinder of smaller diameter than said chamber axially positioned within said chamber, a plurality of paddles secured to and extending radially outward from said rotatable cylinder to the wall of said chamber, a cooling jacket surrounding a lower portion of said chamber, a series of longitudinal troughs on said rotatable cylinder formed by vanes extending radially outward from and axially along said rotatable cylinder for a distance greater than the width of said transverse troughs, said longitudinal troughs having an opening in the end nearest the higher end of said apparatus, a product outlet in the lower end of said chamber for removing a lower-melting fraction, a product outlet in the higher end of said chamber for removing a higher-melting fraction, a feed inlet in said chamber intermediate the ends thereof, and means for heating the rotatable cylinder.

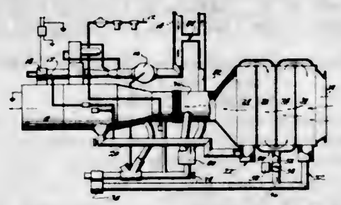
2,743,997

FREEZE PREVENTION IN JET AIRCRAFT PURGE GAS GENERATORS

Henry A. Geisler, Indianapolis, Ind., assignor to Stewart-Warner Corporation, Chicago, Ill., a corporation of Virginia

Application March 19, 1953, Serial No. 343,373

2 Claims. (Cl. 23—281)



1. A purge gas generating system adapted for use in an aircraft which has a source of air under pressure, a ram and a duct leading therefrom serving as a source of cooling air, and duct work leading to spaces to be purged, the combination comprising: means forming a conduit having an inlet adapted for connection to said source of air under pressure, said conduit having an outlet connection; sealed combustion chamber means having an air inlet, a fuel inlet and an outlet for products of combustion, said combustion chamber air inlet being connected to said conduit outlet connection, means for supplying fuel to said fuel inlet, means forming a heat exchanger having a plurality of gas passes therein connected in series, means connecting one end of said series to said combustion chamber outlet, means adapted for connecting the other end of said series to said duct work leading to spaces to be purged, means forming an air passage through said heat exchanger such that air in said passage is in heat exchange relation to said passes, means for connecting one end of said air passage to said cooling air duct, bypass means connected between one end of said series and an intermediate portion thereof for short-circuiting some of said passes, valve means in said bypass for opening and closing the same, means sensitive to the temperature of the products of combustion downstream of said passes for opening and closing said valve as the temperature of said temperature sensitive means respectively falls below and rises above approximately 45° F.

2,743,998

APPARATUS FOR THE CATALYTIC CRACKING OF HYDROCARBON OILS

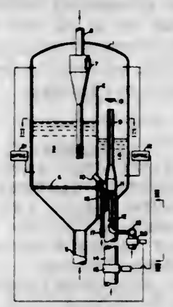
Karel Swart, Karel Lambertus Hagemans, and Pieter Otto, The Hague, Netherlands, assignors to Shell Development Company, New York, N. Y., a corporation of Delaware

Application February 21, 1955, Serial No. 489,598

Claims priority, application Netherlands February 23, 1954

4 Claims. (Cl. 23—288)

1. A fluidized catalyst reactor having an internal stripping zone which comprises in combination a single cylindrical vessel having top and bottom closures and designed to operate with a given working level range of fluidized bed of catalyst; a vertical partition within said vessel sealed to the bottom thereof and extending upward within said vessel to a point above the working level range in said vessel but short of the top of said vessel, thereby dividing the horizontal cross section of said vessel in the lower portion only into two separate and isolated zones or compartments referred to as the reaction zone and stripping zone, respectively; at least one exit line at the top of said vessel for withdrawing a mixture of vaporous products and stripping gas evolved from the respective zones; at least one inlet line for the introduction of catalyst into said reaction zone; at least one outlet line at the bottom of said stripping zone and adapted for the withdrawal of catalyst from said zone and said vessel; a plurality of inclined standpipes open at their upper ends below the working level range in the reaction zone, said inclined standpipes passing through said partition and connecting with vertical riser lines; said vertical riser lines extending upward within said stripping zone to a point above the working level range but below the top of said partition; pressure-sensing elements in said reaction zone and stripping zone above and below said working level range adapted to continually sense the differential pressures due to catalyst bed height in each of said zones; automatically controlled valve means in said last-mentioned catalyst outlet line; a steam line having flow control regulating means discharging upwardly into the bottom of each of said vertical riser lines in said stripping zone; an automatic control mechanism arranged to regulate the flow of steam in said riser lines in response to changes in differential pressure sensed by said pressure-sensing elements in the reaction zone; an automatic control mechanism arranged to regulate said first-mentioned automatic control valve means in said catalyst withdrawal line in response to changes in differential pressure sensed by said pressure-sensing elements in the stripping zone.



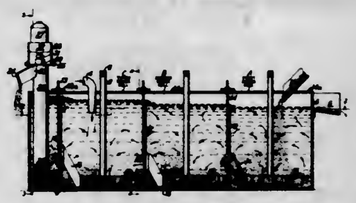
2,743,999

COUNTERCURRENT LEACHING METHOD AND APPARATUS

Tolstoy L. Binswanger, Carlsbad, N. Mex.

Application September 21, 1951, Serial No. 247,695

14 Claims. (Cl. 23—310)



1. Process for countercurrent leaching of soluble crystallizable solid inorganic salts from solids containing said salts as leachable components and other non-leachable solid components to form a concentrated crystallizable solution and spent solids comprising continuously pass-

ing a leach liquor countercurrently to said solids maintained as a dilute suspension in said liquor in a plurality of leaching stages whereby the leach liquor in each stage increases progressively in concentration of solute from a last stage to a first stage wherein a saturated solution of crystallizable solids is formed continuously adding lean leach liquor to the last stage and withdrawing said concentrated leach liquor from the first stage, continuously adding the solids to be leached to the first stage and withdrawing spent solids from the last stage, turbulently agitating the solids suspension within the leach liquor in each stage to evenly resuspend and distribute the solids as a dilute suspension in the total solution in each stage while continuously passing a minor portion of the fluid flow produced in said agitation countercurrently into an adjacent stage with respect to said leach liquor flow from the first agitated stage into the next stage in a series, continuously separating a substantially saturated crystallizable solution of inorganic salt at one end of the system from the first stage and continuously separating a concentrate of the exhausted insoluble solid residue from an opposite end of said system adjacent to a last stage.

2,744,000

METHOD OF CLEANING AND/OR ETCHING SEMICONDUCTING MATERIAL, IN PARTICULAR GERMANIUM AND SILICON

Karl O. Seiler, Nurnberg, Germany, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application February 19, 1954, Serial No. 411,538
Claims priority, application Germany February 21, 1953
7 Claims. (Cl. 41—42)

1. A method of etching semi-conductive materials selected from the group consisting of germanium and silicon comprising directing a stream of etching gas thereat, the gas being selected from the group consisting of chlorine and hydrogen chloride, and producing therewith a readily removable reaction product.

2,744,001

POLISHING MATERIAL AND METHOD OF MAKING SAME

Cameron G. Harman and Ralph Rose, Columbus, Ohio, assignors, by mesne assignments, to Rare Earths, Incorporated, Pompton Plains, N. J., a corporation

No Drawing. Application September 8, 1950, Serial No. 183,911
11 Claims. (Cl. 51—308)

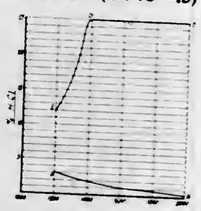
1. A polishing material consisting essentially of vitreous silica and a rare earth oxide.

2,744,002

PROCESS OF MAKING POWDERED IRON IN A DISCRETE CRYSTALLINE FORM

Henry L. Crowley, South Orange, N. J., assignor, by mesne assignments, to Republic Steel Corporation, Cleveland, Ohio, a corporation of New Jersey

Application August 24, 1953, Serial No. 375,927
4 Claims. (Cl. 75—.5)



1. The process of making moldable crystalline iron having predetermined physical properties useful in powder metallurgy, comprising the steps of treating in a reducing zone a solid starting material comprising at least one of the oxides of iron having an atomic ratio of oxygen to iron of at least one, by passing through said reducing zone in contact with the solid material therein a reducing gas containing hydrogen, as an essential active reducing ingredient, and hydrogen chloride, the active hydrogen chloride concentration of said reducing gas being at least about as great as that represented by the line AB in Fig. 2 of the drawing and not more than about 6%, maintaining the temperatures in said zone within the range of about 1200° F. to about 2000° F., and maintaining contact between said reducing gas and said starting material for a time sufficient to reduce substantially all the iron oxide content of said starting material to metallic iron.

2,744,003

PROCESS OF PRODUCING COBALT IN FINE POWDER FORM

Felix A. Schaufelberger, Yonkers, and Edward S. Roberts, New York, N. Y., assignors to Chemical Construction Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application November 1, 1952, Serial No. 318,332
1 Claim. (Cl. 75—.5)

A method of producing elemental cobalt as a powder of fine, uniform particle size which comprises: preparing a concentrated slurry of cobalt carbonate suspended in water, the solids content being not more than 50%, treating said slurry by subjecting it to a temperature of 100°–500° F., a pressure not exceeding about 1000 p. s. i. g. and a partial pressure of at least about 100 p. s. i. g. of non-sulfidizing reducing gas whereby said suspended cobalt carbonate is reduced; agitating said slurry during treatment; continuing treatment until reduction is substantially complete; cooling resultant slurry and collecting elemental cobalt.

2,744,004

METHOD OF LOWERING THE CARBON CONTENT OF HIGH CARBON FERROCHROMIUM

Alan R. Fraser, Sault Ste. Marie, Ontario, Canada, assignor to Chromium Mining & Smelting Corporation, Limited, Sault Ste. Marie, Ontario, Canada, a corporation of Canada

No Drawing. Application January 27, 1953, Serial No. 333,595
8 Claims. (Cl. 75—26)

1. A method of lowering the carbon content of high carbon ferrochromium which comprises comminuting high carbon ferrochromium, establishing a fluidized bed of said high carbon ferrochromium by blowing upwardly through a body thereof a stream of oxidizing gas, maintaining said fluidized bed at a temperature of from 900° C. to 1400° C. for a time sufficient to oxidize a substantial portion of the carbon and metal of said ferrochromium and to remove said carbon from said ferrochromium as an oxide of carbon, and thereafter treating said partially oxidized ferrochromium at an elevated temperature in a strongly reducing atmosphere of reducing gas for a time sufficient to reduce a substantial portion of the metal oxide content of the ferrochromium to metal.

2,744,005

PROCESS OF ACCELERATING THE FINAL PORTION OF THE DIRECT REDUCTION OF IRON OXIDE TO METALLIC IRON

Ford L. Coolman, Wadsworth, and Marion Ernest Graham, Parma, Ohio, assignors, by mesne assignments, to Republic Steel Corporation, Cleveland, Ohio, a corporation of New Jersey

No Drawing. Application November 20, 1951, Serial No. 257,414
1 Claim. (Cl. 75—34)

The process of accelerating the removal of the final 20% of the oxygen of iron oxide in the direct reduction of

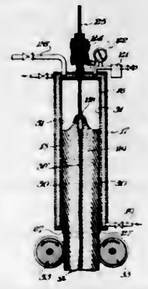
iron oxide-containing material to produce elemental iron, which comprises the steps of removing from the iron oxide present at least about 80% of the oxygen thereof to produce a semi-reduced material by the use of a reducing gas which is substantially free of hydrogen halides and halogen in any form which is capable of reaction with hydrogen to form hydrogen halide, thereafter, and while said semi-reduced material is in a reducing zone, contacting said semi-reduced material with a gaseous medium containing hydrogen as an active reducing agent and containing gaseous HCl in a concentration from about 1% to about 8⅓% by volume based upon the total of hydrogen plus HCl, while maintaining said semi-reduced material in said reducing zone during the final reduction thereof in the temperature range of about 600° C. to about 900° C.

2,744,006

METHOD OF PRODUCING REFRACTORY METALS

Charles H. Winter, Jr., and Evan L. Anderson, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

Application November 8, 1951, Serial No. 255,372
9 Claims. (Cl. 75—84)



1. A process for producing a refractory metal selected from the group consisting of titanium, zirconium, hafnium, columbium, molybdenum, tungsten and tantalum, which comprises reacting, at temperatures ranging from about 750–1400° C., an alkaline earth reducing metal selected from the group consisting of magnesium, calcium, barium and strontium, with a volatile halide of said refractory metal, the halogen component of which has an atomic number above 9, effecting the reaction within a closed reactor having a reaction zone maintained out of contact with the internal walls of said reactor, during the reaction forcibly charging the reducing metal in the form of a continuous, elongated solid into said reactor and an atmosphere of the volatile halide reactant present therein, maintaining the same out of contact with the reactor internal surfaces and the reactant end portion thereof in said reaction zone and in substantial proximity to and above the refractory metal reaction product being formed and deposited in the reactor, subsequently removing said product from said reactor and subjecting it to purification treatment.

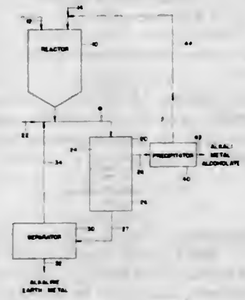
2,744,007

PROCESS OF RECOVERING ALKALINE EARTH METAL FROM ALKALI METAL-ALKALINE EARTH MIXTURES

Albert Philip Giraitis, Arthur Frederick Limper, and Wilford Harold Thomas, Baton Rouge, La., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware

Application December 11, 1952, Serial No. 325,457
6 Claims. (Cl. 75—99)

1. A method for recovering values from a mixture of alkali and alkaline earth metals, which method includes the steps of reacting the mixture of said metals with an excess of a lower aliphatic alcohol, and after the reaction with the alkali metal is substantially completed the combination therewith of the improvement of stratifying the reaction mixture over a liquid denser than this mixture



but inert to and not denser than the alkaline earth metal to cause the alkaline earth metal in the reaction mixture to settle down into said liquid, separating the lower alkaline-earth-metal-carrying liquid, and removing the alkaline earth metal from the separated liquid.

2,744,008

LEAD-COPPER-SILVER ALLOYS AND PROCESS FOR PRODUCING SAME

Raymond E. Hammeras, Whittier, Calif., and Elver F. Bowdish, Tacoma, Wash., assignors to Bowdish and Associates, Inc., Los Angeles, Calif., a corporation of California

No Drawing. Continuation of application Serial No. 221,939, April 19, 1951. This application November 3, 1954, Serial No. 466,688
20 Claims. (Cl. 75—166)

14. A process of making an alloy consisting essentially of lead and at least one metal selected from the group consisting of copper and silver, and in which the lead content is from 30% to 70%, the copper and silver, when either is the only metal selected from said group, comprising the remainder of said alloy and the copper and silver, when both are selected from said group, being respectively 25% to 44% copper and 6% to 25% silver, which comprises heating and agitating a molten mixture of lead and the metal or metals selected from said group under a protective flux composed essentially of hematite ore until the temperature of the mixture is raised to from 1800° F. to 2600° F.

2,744,009

Ni-Cr HARD FACING ALLOYS

Lloyd F. Bowne, Jr., Livingston, N. J., and Peter Payson, New York, N. Y., assignors to Crucible Steel Company of America, New York, N. Y., a corporation of New Jersey

No Drawing. Application July 30, 1951, Serial No. 239,388
4 Claims. (Cl. 75—171)

1. A nickel base alloy containing about: 0.8 to 1.8% carbon, 1.3 to 2.5% boron, the sum of carbon and boron aggregating at least 2.2%, 20 to 27% chromium, up to 0.5% silicon, up to 5% each of copper and iron, up to 2% cobalt, up to 2% of metal of the group molybdenum and tungsten, and the balance substantially nickel, characterized in having a melting point under 2150° F., a room temperature hardness within the range of about Rockwell "C" 32 to 62, combined with high corrosion resistance and high hardness at elevated temperatures.

2,744,010

HIGH TEMPERATURE Co-Cr ALLOYS

Samuel R. Calaway, Huntington Woods, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

No Drawing. Application February 12, 1951, Serial No. 210,630
4 Claims. (Cl. 75—171)

3. A high temperature creep-resistant alloy characterized by high room-temperature ductility consisting of 0.05% to 1.0% carbon, 0.3% to 1.25% manganese, 0.3% to 1.1% silicon, 12.0% to 15.0% nickel, 18.0% to 24.0% chromium, 8.0% to 12.0% tungsten, 0.0% to 5.5% iron, 0.015% to 0.09% boron, and the balance cobalt plus incidental impurities.

2,744,011

PROCESS FOR THE MANUFACTURE OF SINTERED ARTICLES

Robert Lionel Samuel and George Albert Samuel, Acton, London, England, assignors to Diffusion Alloys Limited, London, England, a British company

No Drawing. Application April 6, 1951, Serial No. 219,768
Claims priority, application Great Britain April 11, 1950
9 Claims. (Cl. 75—204)

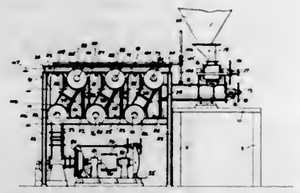
1. A process for the manufacture of sintered articles which comprises forming a paste by mixing a sinterable inorganic powder selected from the group consisting of metal powders and metallic carbide powders with a volatile liquid carrier and a flux which is an organic silicon compound selected from the group consisting of silicones and organic silicates which is soluble in said liquid carrier and which acts as a solvent for substances which insulate and prevent intergranular contact of the particles of the powder, forming said paste into an article of the desired shape and subjecting the article to a sintering temperature below the melting point of the powder particles thereof.

2,744,012

PULPING APPARATUS

Alvar Bylund, Stockholm, Sweden, assignor to A. B. Defibrator, Stockholm, Sweden, a corporation of Sweden

Application April 13, 1953, Serial No. 348,231
4 Claims. (Cl. 92—6)



1. In an apparatus for producing pulp comprising a closed system defining a path of flow for the material to be treated, a feeding device for introducing material into said path of flow, abrading means for the material interposed in said path of flow and a discharge device for removing the treated material from said path of flow; means for subjecting the raw material to a prolonged treatment in the course of flow from said feeding device to said abrading means, said means comprising a series of interconnected oppositely inclined tubes with their axis of inclination in a substantially horizontal plane, the lower end of the first one of said tubes being connected to said feeding device and the upper end of the last one of said tubes being connected to said abrading means and the upper ends of the intermediate ones of said tubes being connected to the lower end of the adjoining tube, the tubes being arranged in two connected groups, one of said groups consisting of a plurality of said tubes which all incline in the same direction and which are all on the same horizontal level, the second of said groups consisting of tubes which all incline in an opposite direction to those in the first group and which are all on the same horizontal level, and conveyor means within said tubes for transporting the material from said lower ends to said upper ends.

2,744,013

ARTIFICIAL BOARD

Rodger M. Dorland and Paul E. Roberts, Toronto, Ontario, Canada

No Drawing. Application September 30, 1952, Serial No. 312,418
Claims priority, application Canada May 9, 1952
8 Claims. (Cl. 92—21)

1. A process for making artificial board which comprises the steps of adding a water soluble, precipitable, phenolic resin to a slushed fibre formed from defibrated wood in the amount of 0.5 to 3% of the dry weight of the fibre, precipitating said resin onto the fibres, de-watering the fibres, consolidating the fibres under heat and pressure to form a substantially rigid hardboard, impregnating both surfaces of said hardboard with a drying oil in the amount of 1 to 6% to permeate only the portion of the hardboard which is adjacent to the surface, the combined amount of resin and drying oil being between 2 and 8% and baking the impregnated board in the presence of oxygen.

2,744,014

PROCESS OF SEPARATING PROTEINS AND VITAMINS FROM STARCH WASTE WATER

Lucien H. Greathouse, Burns Ashby Smith, Helen M. Robinson, and Chester H. Haydel, New Orleans, La., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application August 26, 1952, Serial No. 306,517
1 Claim. (Cl. 99—2)
(Granted under Title 35, U. S. Code (1952), sec. 266)

A process for recovering proteins and vitamins from the waste fruit water from the manufacture of sweet potato starch, which process comprises: lowering the residual starch content of the waste fruit water to less than about 0.2% of the weight of the fruit waters; adjusting the calcium ion content to at least 0.01 molar; adding acid to adjust the pH to substantially the point of least solubility of the proteins present; heating the resulting mixture to from 75 to 100° C. to coagulate the proteins and vitamins; and separating the formed coagulum.

2,744,015

FEED PRODUCT

Tetsuo Katsube, Ishioka-cho, Ibaragi-ken, Japan, assignor of one-half to Kosuke Matsukata, Yokohama, Japan

No Drawing. Application May 12, 1953, Serial No. 354,623
8 Claims. (Cl. 99—9)

1. A process for preparation of a nutritive feed for domestic animals which comprises isolating inoculant of nitrogen-fixing *Bacillus Clostridium butyricum* from plants belonging to the family of Fabaceae, cultivating the inoculant in a sterile aqueous culture medium containing materials from vegetable sources as essential ingredients, stabilizing the grown culture fluid by adsorbing said fluid on an adsorbent, and making up a ration with the stabilized culture fluid carried on said adsorbent.

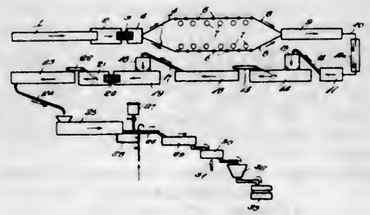
2,744,016

METHOD FOR THE MANUFACTURE OF APPLE SAUCE

Eugene G. Grab, Silver Spring, Md.

Application September 10, 1951, Serial No. 245,903
7 Claims. (Cl. 99—101)

1. The continuous method of converting apples to apple sauce, comprising removing the blossom ends of unpeeled and uncored apples, coating the apples with an aqueous solution containing an oxidation inhibitor, chopping the unpeeled and uncored apples into small pieces in which the seeds and stems are substantially free from the apple meat, washing and removing stems and seeds from the apple meat in an aqueous solution containing an



oxidation inhibitor, shredding the apple meat, cooking the shredded apple meat continuously with steam under pressure, adding sugar and finishing to a final product.

2,744,017

REMOVAL OF SUGARS BY ENZYMATIC PROCESS

Robert Russel Baldwin, East Orange, N. J., assignor to Ben L. Sarett, Chicago, Ill.

No Drawing. Application August 15, 1950, Serial No. 179,652
20 Claims. (Cl. 99—150)

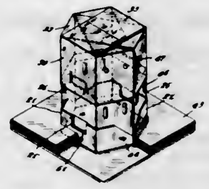
1. The process of removing glucose from a food product containing glucose and a proteinaceous substance which comprises admixing said food product in the presence of water with a stoichiometric excess of hydrogen peroxide and a nonviable enzyme system having glucose oxidase and catalase activity whereby said glucose is converted to gluconic acid.

2,744,018

FRUIT BOX

George B. Brebner, Terre Haute, Ind., assignor to Wabash Fibre Box Co., Terre Haute, Ind., a corporation of Indiana

Application August 7, 1950, Serial No. 178,078
3 Claims. (Cl. 99—171)



1. In a method of packing a fruit box having a box-body, a bottomless liner therefor, and a cover provided with foldable flaps along its edges, said liner and cover being formed of foldable corrugated board the steps of supporting said cover in inverted position which its flaps supported laterally to extend vertically upwardly to define a tray, arranging in such tray the fruit which is to constitute the top layer when the box is subsequently opened, inserting the liner between the fruit and the cover flaps, filling the liner with fruit, and lowering the box-body in inverted position over the liner and cover-flaps.

2,744,019

PROCESS OF PACKAGING DRIED FRUIT

James E. Snyder and Ruby J. Swartz, Akron, Ohio, assignors, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio

No Drawing. Application July 18, 1952, Serial No. 299,737
4 Claims. (Cl. 99—171)

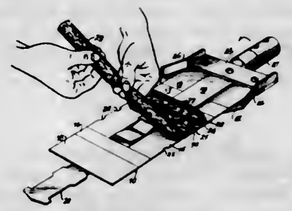
1. The process of preparing a package of dried fruit consisting essentially of the steps of preparing a bag from a web of heat-sealable thermoplastic film, processing the dried fruit by coating said fruit with a water solution of about .05 to about 5.0% by weight of a phosphatide, drying said fruit, placing said fruit in the bag and closing the bag by heat-sealing the mouth thereof to effect a complete package.

2,744,020

PACKAGING METHOD

Oscar E. Seiferth, Madison, Wis., assignor to Oscar Mayer & Co., Inc., Chicago, Ill., a corporation of Illinois

Original application October 21, 1950, Serial No. 191,366, now Patent No. 2,686,929, dated August 24, 1954. Divided and this application February 17, 1954, Serial No. 410,830
8 Claims. (Cl. 99—174)



1. A method of forming a package of sausage links which comprises rotating a generally rectangular supporting blank to wind thereabout a predetermined length of filled sausage casing, dividing the casing into a plurality of successive sausage links and imparting a twist in the casing between each of said links and the next succeeding link, arranging alternate links in side-by-side row forming relation on opposite faces of the supporting blank with the areas of the casing connecting the links positioned along the edges of the supporting blank, folding portions of the blank over the row of links on each side of the supporting blank to retain the links on the blank, and enclosing the assembled links and supporting blank in an outer wrapper.

2,744,021

PROCESS OF MAKING REFRACTORY BRICK AND BRICK

Eduard Bargezi, Radentheln, Carinthia, Austria, assignor to General Refractories Company, Philadelphia, Pa.

No Drawing. Application February 14, 1952, Serial No. 271,650
Claims priority, application Austria June 4, 1951
7 Claims. (Cl. 106—59)

1. In the process of producing refractory brick from synthetic magnesia, the steps which consist in adding to the magnesia iron oxide and a material which will adjust the lime-silica weight ratio to between 0.4 and 0.8 to 1, sintering the magnesia and completing the sintering after these additions have been made, adding to the magnesia

at any stage before the end of sintering another sesquioxide of the class which consists of each and both of the sesquioxides alumina and Cr_2O_3, until the mix contains 1 to 4% ferric oxide, 3 to 6.5% of the other sesquioxide and 1 to 7% of silica plus lime, thus producing bonding properties, and molding the mix into brick.

2,744,022

PLASTER COMPOSITIONS AND PRODUCTS

Michele Croce, Narberth, and Clarence G. Shuttleworth, Paoli, Pa., assignors to Certain-Teed Products Corporation, Ardmore, Pa., a corporation of Maryland

No Drawing. Application July 30, 1952, Serial No. 301,809
6 Claims. (Cl. 106—110)

1. A composition convertible by water addition into a settable plastic mass, said composition consisting essentially of calcined gypsum plaster, comminuted unexpanded vermiculite and sections of textile glass fiber strands, the length of said sections of textile glass fiber being between one quarter inch and one inch and comprising not substantially less than .02% and not substantially more than 1.0% by weight of the total weight of said unexpanded vermiculite, said textile glass strands and said calcined gypsum plaster, each of said sections of textile glass fiber strands being composed of a plurality of individual textile glass filaments bonded together in substantially parallel relationship in said strand by a water softenable binder, said binder being sufficiently weak to enable substantial separation of said strands into individual filaments throughout said plaster as an incident to the agitation of said composition with water, the particular degree of comminution and the grade and amount of said unexpanded vermiculite being such that when heated to the calcining temperature of said gypsum plaster said vermiculite shall have substantially the same total amount of expansion as would 3½% to 7½% of high grade vermiculite of minus 28 mesh commercial grade.

2,744,023

ADHESIVE COMPOSITION

Siegfried Glaubert, Le Pecq, France

No Drawing. Application March 5, 1952, Serial No. 275,010
4 Claims. (Cl. 106—148)

2. An improved casein glue composition characterized by high resistance to heat and moisture, rapid hot cure and low vapor pressure when mixed with water comprising protein adhesive material including at least one-third casein by weight, about 44 per cent calcium carbonate on weight of protein adhesive and about 26 per cent on weight of protein adhesive material of approximately the following analysis:

	Per cent
CaNCN	57–68
$Ca(OH)_2$	16
CaO	4
Graphite	14
Silica and alumina	3

said ingredients being finely divided and in intimate admixture.

2,744,024

ALKALI CONVERSION OF BARK

Eduard Farber, Washington, D. C., assignor, by mesne assignments, to Union Lumber Company, San Francisco, Calif., a corporation of California

No Drawing. Application November 22, 1954, Serial No. 470,524
8 Claims. (Cl. 106—163)

1. The process which comprises intimately mixing particulate fibrous whole bark and particulate alkali metal hydroxide in proportions requisite to provide from about 1 to about 10 parts by weight of alkali metal hydroxide for each 10 parts by weight of bark, and heating said dry mixture to a temperature of from about 100° C. to about 150° C. until the bark particles begin to coalesce to form a generally plastic product which is substantially non-fibrous.

2,744,025

CELLULOSE ESTER COMPOSITIONS PLASTICIZED WITH POLYESTERS OF SUBERIC ACID

Charles P. Albus, Easton, Pa., and Donald E. Sargent, Schenectady, N. Y., assignors to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application November 16, 1951, Serial No. 256,816
5 Claims. (Cl. 106—179)

1. A composition of matter consisting essentially of a water-insoluble lower aliphatic ester of cellulose containing, in a plasticizing amount, a polyester of suberic acid with an ether glycol selected from the group consisting of diethylene glycol, triethylene glycol, and dipropylene glycol, said polyester being a liquid and having a molecular weight ranging from 590 to 1100.

2,744,026

CELLULOSE ACETATE-BUTYRATE PLASTICIZED WITH A DI-ALKYL SUBERATE

Charles P. Albus, Easton, Pa., and Donald E. Sargent, Schenectady, N. Y., assignors to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application November 16, 1951, Serial No. 256,817
3 Claims. (Cl. 106—181)

1. A composition of matter comprising cellulose acetate butyrate containing, in a plasticizing amount, an ester selected from the group consisting of di-n-hexyl suberate and di-n-octyl suberate.

2,744,027

AZO PIGMENT PRODUCTION

William S. Struve, Carneys Point, N. J., and Albert D. Reldinger, Wilmington, Del., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 26, 1952, Serial No. 322,831
8 Claims. (Cl. 106—289)

1. As a new insoluble azo pigment, the co-precipitated metallized salts of a mixture of from 5% to 75% of the dye from diazotized 2-chloro-4-amino-anisole-5-sulfonic acid with 3-hydroxy-2-naphthoic acid and from 95% to 25% of the dye from diazotized 2-chloro-4-amino-toluene-5-sulfonic acid with 3-hydroxy-2-naphthoic acid.

2,744,028

METHOD FOR PREPARATION OF COMPOSITE PIGMENTS

William Grave, Livingston, N. J., assignor to National Lead Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application April 23, 1952, Serial No. 283,992
8 Claims. (Cl. 106—300)

1. Method for the preparation of a rutile titanium dioxide composite pigment which comprises: forming an aqueous slurry of an alkaline earth metal sulphate, forming a titanium sulphate solution, initially boiling one portion amounting to between 5% and 50% of said titanium sulphate solution in the presence of said slurry, thereby forming a mixture of precipitated titanium values and said alkaline earth metal sulphate, combining the remaining portion of said titanium sulphate solution with said mixture and further boiling the combination to substantially completely precipitate the remaining titanium values, filtering and washing the combined precipitated titanium values and alkaline earth metal sulphate and subsequently calcining the combined precipitate at a temperature from 900° C. to 1000° C. thereby forming a rutile titanium dioxide composite pigment.

2,744,029

PREPARATION OF WATER DISPERSIBLE TITANIUM DIOXIDE PIGMENT

Franklin L. Kingsbury, New Brunswick, N. J., assignor to National Lead Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application May 24, 1952, Serial No. 289,900
6 Claims. (Cl. 106—300)

6. In a process for making a water dispersible titanium dioxide pigment material from a calcined titanium dioxide hydrate in which the titanium dioxide pigment material is calcined and wet milled the steps of: flocculating the calcined wet milled pigment material in the presence of a volatile organic flocculating agent comprising a carboxylic acid selected from the group consisting of formic acid, and acetic acid to produce a titanium dioxide flocculent; heating said flocculent to a temperature from about 110° C. to about 180° C. to dry said flocculent and simultaneously volatilize and remove any traces of said organic flocculating agent therefrom; and then milling said dried flocculent to produce a water dispersible titanium dioxide pigment material.

2,744,030

PROCESS FOR TREATING SEA URCHIN TESTS

Ernest Toms and Eva Mae Toms, Pacific Grove, Calif.

No Drawing. Application March 1, 1954, Serial No. 413,476
4 Claims. (Cl. 117—3)

1. In a process for treating sea urchin tests of the Phylum Echinodermata the steps of boiling the sea urchins as they come from the sea in a solution containing an alkali metal carbonate, bleaching the tests in a solution containing a bleaching agent, washing and drying the tests, and then uniformly saturating and permeating the tests with a liquid solidifiable light transmitting medium.

2,744,031

SHEET HAVING A TRANSFERABLE COATING CONTAINING MAGNETIZABLE MATERIAL

Robert E. Mumma, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a corporation of Maryland

No Drawing. Application October 15, 1949, Serial No. 121,635
10 Claims. (Cl. 117—36)

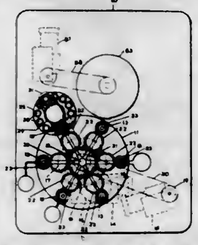
1. A transfer sheet including, in combination, a base sheet through which a printing or marking impression may be made; and a pressure-transferable magnetizable coating on a surface thereof, which may be locally transferred by placing the transfer sheet onto an undersheet so the transfer sheet coating is in contact therewith and making a printing or marking impression through said transfer sheet, and said coating being of waxy material having dispersed therein fine particles of magnetizable material, the magnetizable material being of microscopic particle size and constituting the major portion by weight of the weight of the entire coating.

2,744,032

METHOD OF AND APPARATUS FOR APPLYING A HARD ALLOY COATING TO THE SEATING SURFACES OF VALVES FOR INTERNAL COMBUSTION ENGINES

Frank W. W. Highfield, Malvern Wells, England, assignor to The Austin Motor Company Limited, Northfield, Birmingham, England

Application July 13, 1953, Serial No. 367,606
Claims priority, application Great Britain July 23, 1952
6 Claims. (Cl. 117—43)



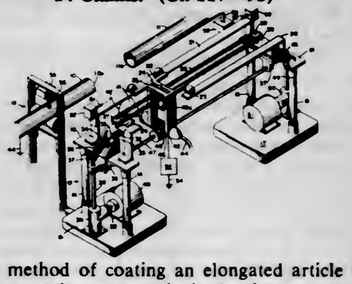
1. The method of applying a hard alloy coating to the seating surface of an internal combustion engine valve, which comprises applying the hard alloy in solid form to the seating surface of the valve, and then applying heat by electric high frequency induction heating to said alloy and to said valve to melt said alloy and to effect skin heating of the seating surface of said valve to cause fusion or welding to take place between said alloy and said seating surface of said valve.

2,744,033

METHOD AND APPARATUS FOR SPRAY COATING OF ARTICLES

James W. Juvinall, Brendonwood, Ind., assignor to Ransburg Electro-Coating Corp., a corporation of Indiana

Application November 28, 1951, Serial No. 258,561
14 Claims. (Cl. 117—93)



1. The method of coating an elongated article having a critical area along a marginal edge by means of electrostatic deposition of atomized coating material particles by an electrostatic field existing between the article and an electrode spaced from the article which comprises moving the article, with the marginal edge leading, in a path passing adjacent the electrode, moving the electrode generally parallel to said path and in the direction of movement of the article as the critical area becomes the terminus of said field to coat said area and then continuing the movement of the article without so moving the electrode to coat immediately following areas of the article.

2,744,034

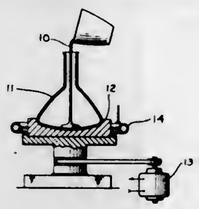
METHOD OF FLASHING GLASS ARTICLES

Robert H. Dalton and Raymond O. Voss, Corning, N. Y., assignors to Corning Glass Works, Corning, N. Y., a corporation of New York

Application March 7, 1952, Serial No. 275,378
5 Claims. (Cl. 117—97)

1. The method of flashing, which comprises heating a previously formed hollow glass article to a temperature

between its strain point and its softening point, said article having a generally flat portion, arranging such article with said flat portion generally horizontal and with its mouth uppermost, centrally depositing on the inner surface of the flat portion of such article a quantity of a molten glass having a softening point sufficiently below the annealing point of the glass article so that it can be maintained in a molten condition in contact with



the article without causing excessive deformation or warping of said article and an expansion coefficient not differing by more than 10×10^{-7} per °C. from that of the glass article, the viscosity of the molten glass being not over about 100 poises, and spreading the molten glass over said flat portion by rotating the article about a vertical axis passing centrally through such flat portion to cause the molten glass to flow under the influence of centrifugal force.

2,744,035

TEXTILE DECORATING WITH COMPOSITIONS COMPRISING AN AQUEOUS ACETIC ACID SOLUTION OF A RESINOUS POLYAMINE AND HEXAHYDRO-1,3,5-TRIACRYLYL-S-TRIAZINE

Jean C. Fierstein, Brooklyn, and Emanuel R. Lieberman, Woodside, N. Y., Zeno W. Wicks, Jr., Glen Rock, N. J., and Henry Yuska, Kew Gardens, N. Y., assignors to Interchemical Corporation, New York, N. Y., a corporation of Ohio

No Drawing. Application May 4, 1953, Serial No. 352,978
9 Claims. (Cl. 117—161)

1. The method of decorating textiles which comprises: (1) applying to the textile a pigmented coloring composition comprising pigment dispersed in aqueous acetic acid solution at a pH less than 6 of (*a*) a resinous polyamine containing at least 1.5% nitrogen which is the reaction product of an aliphatic amine containing at least two nitrogen atoms having reactive hydrogen with a resinous epoxide having an epoxide equivalent of 225 to 1000 and at least one 1,2-epoxide group per molecule and having alternating aliphatic chains and aromatic nuclei united through ether oxygen, and (*b*) hexahydro-1,3,5-triacrylyl-s-triazine and (2) heating the textile.

2,744,036

COATED NICKEL WELDING ELECTRODE

George Raymond Pease, Scotch Plains, and Theodore Ephraim Kihlgren, Berkeley Heights, N. J., assignors to The International Nickel Company, Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application October 29, 1951, Serial No. 253,756
Claims priority, application Great Britain September 11, 1951
11 Claims. (Cl. 117—206)

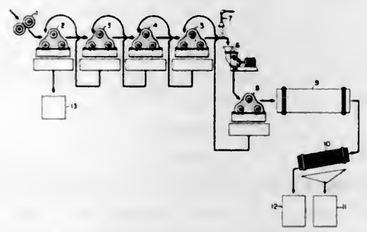
1. A coated arc-welding electrode comprising a core containing about 3.75% to about 4.75% titanium, about 0.07% to about 0.15% magnesium, about 0.3% to about 0.6% aluminum, up to about 0.05% carbon and the balance essentially nickel; and a flux coating covering said core containing a dry flux comprising essentially about 45% to about 50% calcium carbonate, about 52% to about 47% cryolite and about 2% to about 4% bentonite, and a binder for said dry flux in said flux coating comprising a baked mixture of sodium silicate in an amount equivalent to a 42.5° Bé. aqueous sodium silicate solution amounting to about 10% to about 20% by weight of said dry flux and invert sugar in an amount equivalent to a 43 Bé. aqueous invert sugar solution amounting to about 1% to about 3% by weight of said dry flux sufficient to bind said dry flux as a flux coating on said core; said electrode being characterized by enabling the obtaining of iron-containing fusion deposits possessing improved soundness and ductility and having easily removable slags on nickel-clad ferrous metals and on ferrous metals.

2,744,037

PITH SEPARATION AND SUGAR RECOVERY FROM BAGASSE

Elbert C. Lathrop, Peoria, Ill., assignor to the United States of America as represented by the Secretary of Agriculture

Application February 2, 1953, Serial No. 334,766
4 Claims. (Cl. 127—43)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. The method comprising adjusting the moisture content of raw sugar cane bagasse to within the range of 65 to 85 percent by weight, passing said bagasse to a zone of transverse rubbing wherein the individual fibrous fragments of bagasse are forced transversely across each other to effect internal scouring and scrubbing within said zone and to loosen adhering pith particles therefrom, expressing sugar-containing juice from said treated bagasse to a moisture content of below 52 percent, drying said treated bagasse and separating loosened pith particles therefrom by screening.

2,744,038

METHOD OF PREVENTING OXIDATION OF OILS IN ELECTRICAL EQUIPMENT

John Harry Osvald Lindhe, Nynashamn, Sweden, assignor to Aktiebolaget Nynas Petroleum, Nynashamn, Sweden, a company of Sweden

No Drawing. Application July 10, 1952, Serial No. 298,199
4 Claims. (Cl. 148—6.17)

1. A method of rendering copper and iron surfaces of electrical equipment catalytically inactive towards oxidizable hydrocarbon mineral oils, which comprises treating the said metal surfaces with a mineral oil containing dissolved therein from about 0.0002% to 0.5% of a phosphorous compound, calculated as phosphorous in per cent by weight of oil and selected from the class consisting of triisobutylphosphite, triisoamylphosphite and the correponding triisothiophosphites, for a period of from about 1 to 5 hours and at a temperature between about 50 and 200° C., to form a phosphorous-containing coating on the metal surfaces, removing the phosphorous compound-containing oil from the apparatus and supplying an oil containing an alkylated phenol as inhibitor to the apparatus.

2,744,039

PROCESS OF SOLID PHASE BONDING OF METALS

Sidney Siegel, Sharon, Mass., assignor to Metals & Controls Corporation, Attleboro, Mass., a corporation of Massachusetts

No Drawing. Application October 17, 1951, Serial No. 251,813
4 Claims. (Cl. 148—11.5)

1. In the solid phase bonding of a pair of different malleable metals of substantially different hardness at normal room temperature wherein the softer metal hardens substantially as temperature is reduced, squeezing the metals together and concomitantly effecting an increase in the area of the mating surfaces thereof to such an extent as to bond the metals together with the softer metal refrigerated below normal room temperature sufficiently that its hardness under refrigeration is increased to a value substantially greater than its hardness value at said normal room temperature and substantially nearer to that of the other metal.

2,744,040

PROCESS OF PREPARING IRON POWDER FOR MAGNETIC CORES

George O. Altmann, Westfield, N. J., assignor to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application March 25, 1952, Serial No. 278,483
4 Claims. (Cl. 148—104)

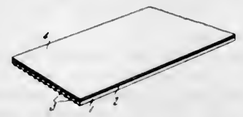
1. The process of improving the electromagnetic properties of carbonyl iron powders which comprises subjecting comminuted, pulverulent iron powder obtained by thermal decomposition of pentacarbonyl iron having a carbon content of at least 0.1% to a coating treatment with a silicone resin, reducing the treated powder with hydrogen at a temperature ranging between 450° C. and 600° C. for a period of time until the carbon content of the iron powder is reduced so as not to exceed 0.05% by weight of the treated powder, mixing the reduced powder with a binder and then forming a core from said mixture.

2,744,041

ADHESIVE SHEETING

Dolfe J. Balchen, Paterson, N. J., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

Application June 6, 1955, Serial No. 513,386
3 Claims. (Cl. 154—53.5)



2. A pressure-sensitive adhesive tape comprising a backing element composed of a sheet of paper, a plurality of longitudinally extending spaced glass fiber yarns disposed parallel to the edges of the tape and positioned on one surface of said paper, and a film of polyethylene fusion-bonded directly to said yarns and to the surface of said paper between said yarns, and a water-insoluble normally tacky and pressure-sensitive adhesive of the rubber-resin type on the other surface of said paper.

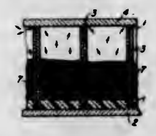
2,744,042

LAMINATED PANELS

Henry A. Pace, Akron, Ohio, assignor, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio

Application June 21, 1951, Serial No. 232,691
4 Claims. (Cl. 154—75)

1. The method of preparing a laminated sandwich structure comprising the steps of (1) placing a thin layer of a foamable mixture prepared from a foamable alkyd resin having an acid number of 35 to 45 and an isocyanate blowing agent on a facing sheet and pressing a rigid uniform honeycomb spacer element embodying a plurality of open-ended cells into the foamable mixture, (2) placing another facing sheet on top of the



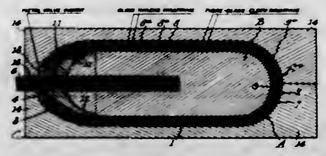
spacer element and confining the sandwich structure between limiting platen members, and, (3) completing the sandwich structure by expanding the foamable mixture until the interstices of the spacer element are substantially completely filled with foam and the spacer walls are adhesively joined thereby to each other and to the facing sheets.

2,744,043

METHOD OF PRODUCING PRESSURE CONTAINERS FOR FLUIDS

Einar M. Ramberg, Bethlehem, Pa., assignor to Fels & Company, Philadelphia, Pa., a corporation of Pennsylvania

Application January 23, 1950, Serial No. 140,101
3 Claims. (Cl. 154—83)



1. The method of making a container for fluid under pressure which comprises applying to a removable core a pre-formed part of a shape to constitute an end insert in the finished container, circumferentially applying over said core and over said pre-formed part a plurality of laminations of non-metallic fibrous yarns in at least two differing arrangements with respect to the longitudinal axis of the core, at least some of said yarns being applied to said pre-formed part radially inwardly of the radially outermost part of said pre-formed part whereby to interlock said yarns and said pre-formed part against relative movement axially of said core, the laminations in one of said arrangements each comprising at least two radially spaced layers of non-metallic yarns helically wound under substantial tension and the laminations in another of said arrangements comprising yarns applied circumferentially at a different angle with respect to said longitudinal axis, binding said yarns in an integral structure with a settable bonding medium and with the laminations overlaying and axially interlocking with said pre-formed part, removing said core and leaving said pre-formed part in the end of and interlocked to said container.

2,744,044

LAMINAR PRODUCT AND METHOD OF MAKING THE SAME

Harry A. Toulmin, Jr., Dayton, Ohio, assignor to Midland Chemical Corporation, Dayton, Ohio, a corporation of Delaware

Application June 18, 1953, Serial No. 362,613
18 Claims. (Cl. 154—101)

1. A thin, compressed laminar structure for use as building material and the like, consisting of a top stratum having a decorative exposed surface and locked, by an initially liquid blend of a reactive resinous condensation

product of a polyhydric alcohol and a polycarboxylic acid with from 5 to 50 parts by weight of a vinyl-substituted heterocyclic tertiary amine per 100 parts of the condensation product, to a reinforcing and supporting stratum of



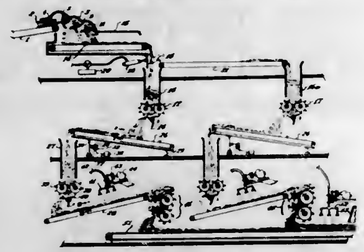
glass fibers in which contiguous fibers are bonded together by the hardened blend, said blend being distributed through the glass fiber stratum and disposed at the surface thereof between the strata.

2,744,045

APPARATUS AND PROCESS FOR CONTINUOUSLY FEEDING AND SPRAYING WOOD WOOL AND LIKE MATERIALS

Howard W. Collins, Hebron, Ohio, assignor to Peoples Research and Manufacturing Company, Columbus, Ohio, a corporation of Ohio

Application May 13, 1954, Serial No. 429,455
4 Claims. (Cl. 154—101)



4. A process for feeding and coating wood wool and like fibrous material preparatory to forming it into panels, which comprises the steps of providing bales of compacted fibrous material, breaking open the bales and fluffing-up the fibres, collecting the fluffed-up fibres in a surge hopper, continuously feeding the fibres from the surge hopper and distributing them in an oscillatory motion across the mouth of a gravity chute, continuously removing the fibres from the bottom of the gravity chute and forming them into a relatively uniform layer, moving the layer in a path of travel and applying a cementitious slurry to the moving layer, and thereafter working the fibres to coat them individually with the cementitious slurry, and subsequently reforming the fibres into a uniform layer for subsequent compacting and heat treatment.

2,744,046

METHOD OF MAKING PAPER-COVERED FOLDING BOX BLANKS

Richard N. Ware, Jr., and Moss B. Christian, Tallulah, La., assignors to Chicago Mill and Lumber Company, Chicago, Ill., a corporation of Delaware

Application May 8, 1953, Serial No. 353,827
9 Claims. (Cl. 154—118)



1. The method of making folding box blanks composed of wood veneer pieces covered by paper sheets which form hinges between the wood veneer pieces which comprise, stacking pieces of wood veneer in side-by-side adjoining relation, advancing the bottommost pieces in each stack as a row of spaced parallel pieces with the grain of the wood in each piece extending transversely of the row, adhesive coating the top and bottom faces of each piece in the advancing row, covering the coated faces with paper, pressing the paper onto the coated faces, and severing the paper adjacent the trailing end of the wood veneer pieces to provide the blank.

2,744,047

PROCESS OF PREPARING DECORATIVE LAMINATES

Angelo P. Ingrassia and Edward T. Ruffin, Laurel, Miss., assignors to Masonite Corporation, Laurel, Miss., a corporation of Delaware

No Drawing. Application June 2, 1952, Serial No. 291,288
5 Claims. (Cl. 154—132)

1. Process of preparing a dense fibrous lignocellulose sheet comprising forming hydrolyzed lignocellulose fibers into a porous sheet having a density of about 0.4 to about 0.8 and a moisture content of substantially zero, applying to the surfaces of the dry sheet a sufficient amount of an aqueous resin mixture to provide from about 2% to about 8% of moisture on and in the sheet, said resin mixture comprising from about 90% water and 10% resin to about 30% water and 70% resin, subjecting the sheet to heat and pressure sufficient to obtain a final density within the range of from about 1.2 to about 1.42 in the pressed sheet and to cure the resin to insoluble state, said pressing temperature being in excess of 100° C., and then cooling the compressed sheet while under pressure to a temperature below about 100° C.

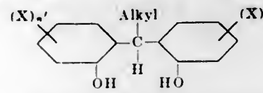
2,744,048

SUBSTITUTED ALKYL-DIPHENYLMETHANE ANTHELMINTIC COMPOSITIONS

Arthur Henry Craige, Jr., Plainfield, Ind., assignor to Allied Laboratories, Inc., Kansas City, Mo., a corporation of Delaware

No Drawing. Application January 5, 1953, Serial No. 329,746
4 Claims. (Cl. 167—53.1)

1. An anthelmintic animal and poultry feed composition, comprising a stock and poultry feed, containing an effective quantity of a compound represented by the following formula:



in which X represents a halogen selected from the group consisting of chlorine and bromine, said halogen substituents being arranged symmetrically, and n' represents a whole integer from 1 to 4, and Alkyl represents an alkyl radical selected from the group consisting of methyl, ethyl, propyl, butyl and amyl.

2,744,049

STABILIZED DENTAL CREAMS

Gerhard Martin Salzmann, Franklin Lakes, N. J., and Robert Joseph Schiraldi, New York, N. Y., assignors to Colgate-Palmolive Company, a corporation of Delaware

No Drawing. Application July 18, 1952, Serial No. 299,744
8 Claims. (Cl. 167—93)

1. A dental cream comprising a water-insoluble calcium phosphate polishing agent, an organic detergent, water and a humectant, and having incorporated therein at least about ½% by weight of a partial glyceryl ester of a higher fatty acid as an agent to stabilize the cream against hardening in tubes, separation of liquids from solids and formation of graininess.

2,744,050

PROCESSES FOR INCREASING THE YIELD OF ENZYMES

Elmer A. Weaver, Fort Washington, Pa., assignor to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application January 23, 1952, Serial No. 267,907
6 Claims. (Cl. 195—66)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A process for increasing the yield of a starch-converting enzyme selected from the group consisting of maltase and a-amylase, comprising culturing an Aspergillus fungus selected from the group consisting of *Aspergillus niger* and *Aspergillus oryzae*, respectively, killing the resulting cells by application to the resulting culture of a lethal chemical which kills the microorganisms cultured, prevents contamination with extraneous organisms, and does not inactivate the said enzyme being sought, said lethal chemical being selected from the group consisting of ammonium bifluoride, sodium ethyl mercurithiosalicylate, and the sodium salt of 2,4,6-trichlorophenol, aging the culture containing the dead cells for a period of about from one to thirty days, comminuting the aged culture containing the aged, dead cells, and separating maltase and a-amylase, respectively, as the starch-converting enzyme from the comminuted, aged culture.

2,744,051

TREATMENT OF FUEL OIL WITH AN ALKYL PYRROLE

William T. Robinson, Hollywood, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application August 25, 1951, Serial No. 243,743
3 Claims. (Cl. 196—23)

2. A process for improving the storage stability of fuel oil containing liquid components causing discoloration of the fuel oil and which form sediment during storage of the fuel oil, which comprises adding to the fuel oil from about 0.001% to about 5% by weight of an alkylated pyrrole, maintaining the oil in contact with said alkylated pyrrole until sediment formation has occurred, and thereafter removing the resultant sediment from the oil.

2,744,052

HYDROGENATION OF HYDROCARBON OILS, TUNGSTEN, MOLYBDENUM, AND NICKEL CONTAINING CATALYSTS THEREFOR AND THEIR PREPARATION

Kenzie Nozaki, El Cerrito, Calif., assignor to Shell Development Company, New York, N. Y., a corporation of Delaware

No Drawing. Application March 28, 1955, Serial No. 497,417
16 Claims. (Cl. 196—24)

1. Process for the hydrogenation of aromatics and sulfur-bearing hydrocarbon oils which comprises contacting the aromatics and sulfur-bearing hydrocarbon oil under hydrogenation conditions of pressure above about 20 atmospheres and temperature between about 360 and 450° C. in the presence of added hydrogen with a supported tungsten-molybdenum-nickel catalyst prepared by impregnating an alumina carrier with soluble compounds of tungsten, molybdenum and nickel convertible to the oxides upon calcination, the mole ratio of nickel to molybdenum being between ¼ and ⅔ to 1, the mole ratio of tungsten to molybdenum being between ¼ and 1 to 1, and the total metals content being above about 8% by weight, calcining to convert the metal compounds to the corresponding oxides, and partially sulfiding by treatment for at least ½ hour at a temperature below about 215° C. but above about 110° C. with a mixture of hydrogen and hydrogen sulfide in a mole ratio between 1:1 and 40:1.

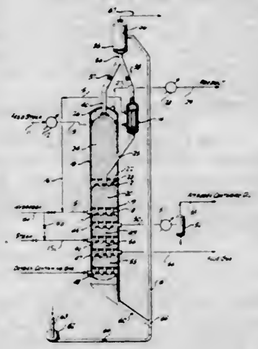
6. Process for the preparation of a catalyst having high activity for the hydrogenation of aromatics in aromatic and sulfur-bearing hydrocarbon oils which comprises impregnating an alumina carrier with soluble compounds of tungsten, molybdenum, and nickel convertible to the oxides upon calcination, the mole ratio of said metals being about 1:1:1, and the total metals content being above 8% by weight, calcining to convert the metal compounds to the corresponding oxides, further impregnating the calcined material with molybdenum to bring said mole ratio to about 1:2:1, again calcining to convert the further incorporated molybdenum to the oxide, and partially sulfiding by treatment for at least ½ hour at a temperature below about 210 but above about 110° C. with a mixture of hydrogen and hydrogen sulfide in a mole ratio between 1:1 and 40:1.

2,744,053

HYDROCARBON CONVERSION PROCESS, INCLUDING PRELIMINARY NITROGEN REMOVAL BY ADSORPTION

Nicholas L. Kay, Inglewood, Grant W. Hendricks, Brea, and Ross A. Hanson, Fullerton, Calif., assignors to Union Oil Company of California, Los Angeles, Calif., a corporation of California

Application April 26, 1951, Serial No. 223,062
6 Claims. (Cl. 196—28)



1. A process for the catalytic conversion of a mineral oil distillate boiling below about 700° F. and containing between about 0.01% and 5.0% by weight of nitrogen in the form of organic bases, which comprises flowing a compact bed of granular catalyst through a relatively cool sorption zone, then through a regeneration zone wherein said catalyst is subjected to combustion-regeneration and is reheated to at least the temperature of the hereinafter specified conversion zone, dividing the resulting regenerated catalyst into a first stream and a second stream, flowing said first stream through a cooling zone and then into said sorption zone, flowing said second stream through a relatively hot conversion zone and then into said sorption zone, countercurrently contacting said distillate in vapor phase first with the combined catalyst streams in said sorption zone at a temperature between about 10° and 200° F. above the 90% boiling point of said distillate, a pressure between about atmospheric and 100 p. s. i. g., and at a flow rate controlled to provide a catalyst/oil ratio between about 0.1 and 20.0 thereby sorbing a major proportion of said nitrogen bases on said catalyst without effecting any substantial degree of conversion, withdrawing nitrogen-lean distillate from said sorption zone, countercurrently contacting said nitrogen-lean distillate with said second catalyst stream in said conversion zone at a temperature between about 750° and 1000° thereby effecting a substantial conversion of said nitrogen-lean distillate, said sorption zone being maintained at a temperature

at least 100° F. lower than said conversion zone, said catalyst comprising a major proportion of at least one adsorptive oxide selected from the group consisting of silica, alumina, and natural clays.

2,744,054
SWEETENING PROCESS USING OXYGEN, ALKALI, AND A PEROXIDE

Willem Johan Pieters, Amsterdam, Netherlands, assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application March 22, 1954, Serial No. 417,917
Claims priority, application Netherlands April 2, 1953
10 Claims. (Cl. 196—29)

10. A method of sweetening hydrocarbon oils contaminated with mercaptans which comprises oxidizing said mercaptans by means of no more than 130% of the stoichiometrical amount of free oxygen in the presence of an aqueous alkali metal hydroxide solution and of a catalytic amount of peroxide.

2,744,055
TREATMENT OF HYDROCARBON DISTILLATES WITH A PHENYLENE DIAMINE, AN ALKYL PHENOLATE AND AIR

Francis C. Moriarty, Birmingham, Mich., and Francis G. Graves, deceased, late of Carmel, Calif., by Elizabeth Bruner Graves, executrix, Carmel, Calif., assignors of one-half to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware, and one-half to California Research Corporation, San Francisco, Calif., a corporation of Delaware

No Drawing. Application January 23, 1952, Serial No. 267,934
10 Claims. (Cl. 196—29)

1. The process of sweetening a sour hydrocarbon distillate which comprises treating said distillate with a phenylene diamine compound in the presence of a sodium phenolate and air.

2,744,056
CATALYTIC CONVERSION PROCESS EMPLOYING AS CATALYST, A HALLOYSITE CLAY ACTIVATED WITH MAGNESIUM OXIDE

William C. Offutt, Edgewood, and Arthur C. Whitaker, Pittsburgh, Pa., assignors to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware

No Drawing. Application September 18, 1952, Serial No. 310,363
6 Claims. (Cl. 196—52)

1. A catalytic conversion process in which a high-boiling hydrocarbon is catalytically cracked in the presence of a catalyst comprising about 2 to 10 per cent by weight of magnesium oxide incorporated on an acid-activated halloysite cracking catalyst, at a temperature of about 700° to 1100° F. to yield a product comprising lower boiling hydrocarbons.

2,744,057
CATALYTIC CONVERSION PROCESS WITH THE USE OF A BASE-EXCHANGED SILICA-ALUMINA CATALYST

Paul H. Emmett, Pittsburgh, Pa., assienor to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware

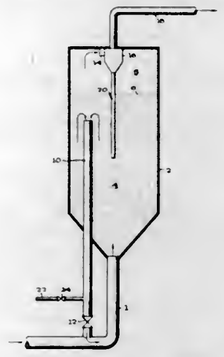
No Drawing. Application September 18, 1952, Serial No. 310,352
7 Claims. (Cl. 196—52)

1. A catalytic conversion process comprising cracking high boiling point hydrocarbons at a temperature of about 700° to 1100° F. in the presence of a cracking catalyst to yield lower boiling point hydrocarbons, said catalyst having been prepared by base-exchanging a metal selected from the group consisting of barium, magnesium, calcium and strontium onto a silica-alumina support selected from the group consisting of synthetic silica-alumina composites, activated montmorillonites, and activated halloysites by contacting the support with a solution containing ions of the metal and of hydrogen, the sum of the pH of the solution after the base-exchange and the Briggs logarithm of the molar metal ion concentration of the solution at the initial time of contact in the base-exchange being maintained in the range of 4 to 8, washing the base-exchange support free of unexchanged ions of the metal, and drying and calcining the base-exchanged support, whereby 0.1 to 2.0 milliequivalents of metal are base-exchanged onto the silica-alumina support per gram of the support.

2,744,058
FLUIDIZED FIXED BED CATALYTIC PROCESS

William C. Offutt, Edgewood, and Ralph W. Helwig, Oakmont, Pa., assignors to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware

Application May 21, 1952, Serial No. 289,106
2 Claims. (Cl. 196—53)

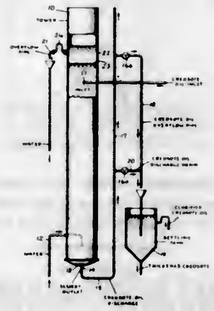


1. In a fluidized fixed bed catalytic destructive hydrogenation process carried out in the presence of hydrogen and in the presence of a dense phase fluidized bed of destructive hydrogenation catalyst contained in a reaction zone maintained at elevated temperature and pressure, wherein a predominantly gaseous, hydrogen and mixed phase hydrocarbon oil feed containing a substantial proportion of difficultly convertible, liquid phase material is charged to the bottom of the reaction zone, and in which a superficial linear gas velocity of less than 0.3 feet per second is employed in the reaction zone, the combination therewith of the improvement comprising avoiding clumping of catalyst due to over-wetting thereof by the liquid portion of the feed, by the steps of removing relatively dry catalyst from the upper portion of the dense phase fluidized catalyst bed, stripping the catalyst thus removed and introducing it directly into the feed in a transport zone prior to the entry of the feed into the reaction zone, the introduction of catalyst being effected at a rate sufficient to maintain a catalyst to oil ratio in the transport zone of between about 2:1 and about 50:1, the gas velocity in the transport zone being substantially greater and the density of the catalyst-feed mixture in the transport zone being substantially less than the velocity and density in the reaction zone, distributing the liquid portion of the feed over a relatively large quantity of catalyst, and then passing the feed and catalyst from the transport zone into the dense phase fluidized catalyst in the low gas velocity, high-density reaction zone.

2,744,059
CONTINUOUS PROCESS FOR CLARIFYING CREOSOTE OILS

Perry E. Mayer, Audubon, Camden, N. J., assignor to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

Application September 23, 1952, Serial No. 311,090
5 Claims. (Cl. 196—146)

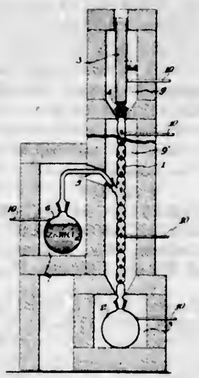


1. A process for treating creosote oils to improve their liquidity which comprises causing countercurrently flowing creosote oil having a "limpid point out" of at least about 40° C. and water to contact each other in direct heat exchanging relationship in a contacting zone whose temperature ranges from an upper limit which is above the "limpid point out" temperature of the oil to a lower limit which is at least about 20° C. below the "limpid point out" temperature of said oil, whereby free draining crystals are formed, and separating the crystals from the oil.

2,744,060
PROCESS FOR SEPARATING HAFNIUM TETRACHLORIDE FROM ZIRCONIUM TETRACHLORIDE

Russell B. Eaton, Landenberg, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

Application October 9, 1952, Serial No. 313,993
7 Claims. (Cl. 202—39)

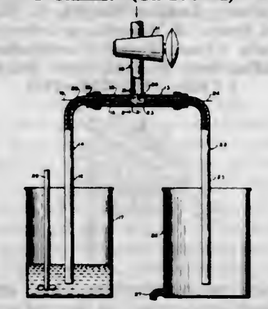


1. A process for separating zirconium and hafnium halides from vaporous mixtures which comprises contacting the mixed halide vapors in a separating zone with a molten alkali metal halide salt in which said halides are soluble, and separately recovering from said zone the separated hafnium and zirconium halides.

2,744,061
COULOMETRIC TITRATION

Donald D. De Ford, Glenview, and James N. Pitts, Jr., Evanston, Ill., assignors to Research Corporation, New York, N. Y., a corporation of New York

Application April 16, 1951, Serial No. 221,248
3 Claims. (Cl. 204—1)



1. An indirect coulometric titration method which comprises forming two streams of a reagent solution from a common source, passing a direct current through said reagent solution between separate electrodes positioned in said two streams on opposite sides of said common source to continuously form an anolyte component in one of said streams and a catholyte component in the other of said streams, passing one of said streams into an unknown batch solution so that chemical reaction occurs between an electrolyte component of the stream and an ingredient of said unknown solution, determining the end point of said reaction and determining the total quantity of electricity used to generate the electrolyte component consumed in said reaction.

2,744,062
PRODUCTION OF METALLIC POWDERS

Peter Robert Marshall, Sheffield, England, assignor to The Birmingham Small Arms Company Limited, Birmingham, England

No Drawing. Application May 15, 1952, Serial No. 288,055
1 Claim. (Cl. 204—10)

The method of producing stainless steel powder, comprising heating stainless steel in massive form and having a carbon content of between 0.1% and 0.27% to a temperature between 500° C. and 800° C. for a period of from one hour to forty hours to form carbides on the grain boundaries thereof, immersing said steel so treated in an electrolytic bath in which said treated steel is at least one of the electrodes in said bath, and passing an electric current between the electrodes in said bath and periodically reversing the direction of flow of said current to make said heat treated steel electrode alternately anode and cathode and thereby induce electrolytic intergranular attack in said steel electrode and dissolution of said heat treated steel and precipitation of the grains thereof.

2,744,063
ELECTRODEPOSITION OF TIN-ANTIMONY-COPPER ALLOYS

Quentin O. Shockley, Indianapolis, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

No Drawing. Application December 11, 1951, Serial No. 261,153
8 Claims. (Cl. 204—44)

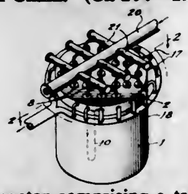
8. An aqueous bath for the electrodeposition of an alloy containing from about 2 to 12% antimony, from about 1 to 8% copper and the balance tin, said bath containing from 50 to 180 g./l. tin as tin fluoborate, from .5 to 20 g./l. antimony as a compound selected from the group consisting of antimony fluoborate, antimony trioxide, antimony trifluoride and potassium antimony tar-

trate, from .5 to 20 g./l. copper as copper fluoborate, from 10 to 40 g./l. boric acid and sufficient fluoboric acid to maintain the pH of said bath below 1.

2,744,064
RE-ENTRANT COOLING REACTOR

Thomas V. Moore, Jackson Heights, N. Y., assignor to the United States of America as represented by the United States Atomic Energy Commission

Application June 14, 1946, Serial No. 676,648
1 Claim. (Cl. 204—193)



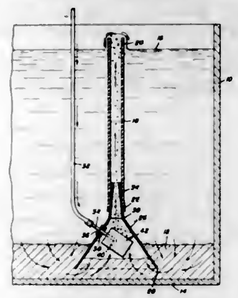
A neutronic reactor comprising a tank open at its top, a body of liquid moderator and thermal neutron fissionable material disposed within the tank, a hollow cover closing the tank and comprising spaced top and bottom walls, a side wall extending about the edges of the top and bottom walls and joining them, and hollow columns extending between the top and bottom so as to form passages through the cover, the bottom wall having a plurality of openings separate from the passages formed by the hollow columns and equal in number thereto; a plurality of U-tubes equal in number to the hollow columns, each U-tube being located in the tank and having one leg of the U connected to an opening in the bottom wall of the cover and the other leg of the U-tube sealed in a hollow column so as to close the passage therein and provide a path for liquid coolant from the exterior of the tank through the cover and from the interior of the tank to the interior hollow within the cover; outlet pipes connected to openings in the side wall spaced about the cover and projecting exteriorly thereof; a discharge header extending around the cover and connected to the outlet pipes; a main liquid coolant source pipe above the top wall of the cover; and means connecting the main source pipe with passages through the hollow columns, wherewith liquid coolant is passed from the main source pipe through the cover into the U-tubes within the tank, then into the hollow cover and finally out through the discharge manifold, whereby the liquid coolant is utilized as radiation shielding during its passage through the hollow cover.

2,744,065
HOME AQUARIUM CIRCULATOR AND AERATOR

Joseph S. Lacey, Washington, D. C.

Application April 13, 1954, Serial No. 422,760
1 Claim. (Cl. 210—16)

A device for aerating and filtering water in an aquarium which comprises a tank containing water and having a bed of aquarium sand or the like over the bottom thereof; said device comprising a cylindrical, open ended water-tube disposed vertically in the tank and having an upper open end disposed vertically above the surface of the water in the tank and a lower open end slightly outwardly flared and positioned above the sand bed, a frustoconical base member having an open base end vertically embedded in the bed of sand above the bottom of the tank and having an open apex end positioned above the bed of sand, an axially tapered, tubular axial extension on the apex end of the base member and integral therewith, said extension being frictionally fitted in the lower end of the water-tube to establish a water and air tight joint between the water-tube and base member, said water-tube being supported in a vertical position by the base member, a side wall of the base member, adjacent the apex end, being formed with an opening, a gasket fitted in the opening, an air tube slidably positioned through the gasket and extending into the base member below the extension and disposed at an acute angle to the axis of the extension and water-tube and having

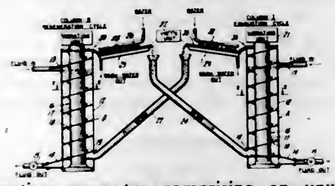


an inner end disposed within the base member, and a porous air stone fixedly circumposed on the inner end of the air tube and disposed within the base member.

2,744,066
ION EXCHANGE METHOD AND APPARATUS FOR CONTINUOUS INTER-ACTION OF LIQUIDS AND SOLIDS

Newton E. Spiess, Jr., Oakdale, Islip, and Martin J. Zenk, Jr., West Islip, N. Y., assignors to National Dairy Research Laboratories, Inc., Oakdale, Islip, N. Y., a corporation of Delaware

Application June 4, 1953, Serial No. 359,556
12 Claims. (Cl. 210—24)



1. Treating apparatus comprising an upwardly inclined support for carrying pieces of a solid material, wall means surrounding the support to define a liquid chamber in which the liquid level envelops the support to a point intermediate its extremes, means for vibrating the support to cause pieces of material to move upwardly therealong and means for introducing liquid into the chamber adjacent the upper end thereof, means to withdraw the liquid at the lower end of the tank, said means to introduce and withdraw liquid being arranged to maintain a liquid level in the tank in which the support is partly submerged, means to receive the solids from the upper end of the support to remove them from the treating apparatus, the last said means being above the liquid level, and means to introduce solids onto the vibratable support adjacent its lower end and below the liquid level.

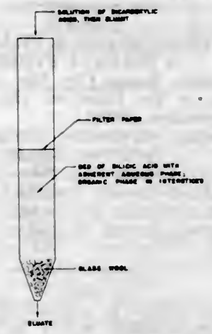
2,744,067
PROCESS OF SEPARATION OF HIGHER MOLECULAR WEIGHT DICARBOXYLIC ACIDS

Takeru Higuchi, Madison, Wis., assignor to The C. P. Hall Company of Illinois, Chicago, Ill., a corporation of Ohio

Application September 6, 1951, Serial No. 245,405
8 Claims. (Cl. 210—42.5)

1. The process of separating two adjacent homologues of the straight-chain alpha, omega-dicarboxylic acids containing six to ten carbon atoms in a two-phase system which includes an aqueous liquid phase and an organic liquid phase, utilizing the partition coefficients of the respective acids, said partition coefficients being different, which process comprises preparing a bed of hydrophilic adsorbent wet with aqueous buffer which is soluble in the aqueous phase and substantially insoluble in the organic phase and has a strength no greater than three molar and a pH of 5.1 to 6.0, and providing organic phase in the bed,

introducing into the bed a solution of a mixture of the acids in solvent which eventually forms part of the organic phase eluate, and while the aqueous phase adheres to the bed, washing the bed with organic eluant immiscible with the aqueous phase and which eventually forms organic phase eluate, thereby dissolving into the aqueous phase



the shorter chain dicarboxylic acid and retaining it there while removing the longer chain dicarboxylic acid from the system dissolved in the organic phase eluate, and maintaining the organic phase in moving contact with the aqueous phase during the washing for a sufficient period to effect substantially complete separation of the two acids.

2,744,068
ODOR STABILIZED LUBRICATING OIL ADDITIVES

John D. Bartleson, Beachwood Village, and Harvey E. Alford, Amherst, Ohio, assignors to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application July 29, 1952, Serial No. 301,609
9 Claims. (Cl. 252—32.7)

1. A method of preparing an additive which comprises reacting a mineral oil of lubricating viscosity with from 2 to 10% phosphorus sulfide at a temperature of 250 to 450° F. for from one-half to ten hours to form a lubricating oil additive, treating the additive with an alkali metal hydroxide followed by treatment with sulfur dioxide to provide an additive resistant to the development of hydrogen sulfide.

2,744,069
COMPOUNDED LUBRICATING COMPOSITIONS

Mintje van Loon, Amsterdam, Netherlands, assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application April 22, 1953, Serial No. 350,525
Claims priority, application Netherlands April 29, 1952
14 Claims. (Cl. 252—40.7)

1. A process for preparing lubricating oil additives which comprises reacting a mixture containing unsubstituted alkali metal alkyl phenates of from 14 to 32 carbon atoms and unsubstituted alkali metal alkyl salicylates of from 15 to 33 carbon atoms, wherein the weight ratio of the phenates to the salicylates is from 1:4 to 1:1, with a halide of a metal of group II of the periodic table of elements having an atomic number from 12 to 56 in a monohydric water-miscible aliphatic alcohol of from 1 to 5 carbon atoms and containing water from 1 to 10% by weight of said alcohol, said halide being present in a quantity from 100 to 130% of that which is stoichiometrically equivalent to the total alkali metal content of said mixture of phenates and salicylates, and with an oxide of a metal of group II of the periodic table of elements having an atomic number from 12 to 56 in a monohydric water-miscible aliphatic alcohol of from 1 to 5 carbon atoms and containing water from 1 to 10% by weight of said alcohol, said oxide being present in a quantity from 90 to 150% of that stoichiometrically required for the formation of the mono-basic salts of said salicylates and said group II metal.

2,744,070
SOLUBLE CUTTING OIL

Edwin R. Baker and Ernest W. Nelson, Ponca City, Okla., assignors to Continental Oil Company, Ponca City, Okla., a corporation of Delaware

No Drawing. Application December 22, 1952, Serial No. 327,459
5 Claims. (Cl. 252—48.8)

1. An improved soluble cutting oil adapted for emulsification with water in the proportion of one volume of soluble oil to from 2 to 100 volumes of water to form a cutting and cooling composition, said soluble oil consisting essentially of a major proportion of a hydrocarbon oil of cutting oil viscosity and minor amounts of an emulsifying agent, a chlorine-containing antiseize agent, and a high sulfur content olefin-derived polysulfide extreme pressure agent prepared by first reacting a nonconjugated olefinic hydrocarbon having from at least 6 to about 30 carbon atoms with about a stoichiometric equivalent of sulfur chloride at a temperature of from about 0 to about 50° C. for a time sufficient to form a di(chloro alkyl)sulfide intermediate but not to exceed about 3 hours in the presence of a water-soluble aliphatic alcohol and then at once condensing said intermediate with a water-soluble inorganic higher polysulfide at about 50 to 100° C. in a mutual solvent for a time not to exceed about four hours, the emulsifying agent being present in amounts between about 10 and 40 per cent sufficient to form a stable emulsion, the antiseize agent being present in amounts sufficient to impart about 2 per cent added chlorine to the oil, and the olefin-derived polysulfide being present in amounts sufficient to impart from 1.25 to 2 per cent added sulfur to the soluble oil.

2,744,071
LUBRICATING OIL ADDITIVES

William C. Hollyday, Jr., Fanwood, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application February 27, 1952, Serial No. 273,780
9 Claims. (Cl. 252—51.5)

1. A lubricating oil composition having outstanding low temperature properties which comprises a major portion of a mineral lubricating oil and a pour point depressing amount of a polyamide, of sufficient molecular weight to be oil soluble, of substantially equimolecular amounts of an amine constituent, selected from the group consisting of diamines having the general formula:

$$R-\underset{H}{N}CH_2CH_2NH_2$$

wherein R is an alkyl group containing from about 8 to 18 carbon atoms, and mixtures thereof, and an acid constituent selected from the group consisting of dibasic acids having the formula: $HOOC-(CH_2)_xCOOH$ wherein x is an integer from about 2 to 8, their anhydrides and mixtures thereof.

2,744,072
PHOSPHOR COATING COMPOSITION

George Meister, Newark, N. J., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application June 24, 1953, Serial No. 363,935
6 Claims. (Cl. 252—301.3)

1. A coating composition for applying luminescent materials to vitreous surfaces comprising a phosphor suspended in a liquid vehicle, said liquid vehicle comprising methyl cellulose, water, a completely water soluble mono-hydroxy alcohol having a boiling point below that

of water and an alkalizing-dispersing agent selected from the group consisting of ammonium hydroxide and a water soluble amine whose boiling point is below that of water, the pH of said composition not exceeding 12, the percentage by weight of said methyl cellulose to said phosphor being from 1 to 3, said phosphor being suspended in said liquid vehicle in the proportions of from 0.25 to 0.5 gram per cubic centimeter, the percentage by volume of said alkalizing-dispersing agent to said vehicle being from 3 to 10, the percentage by volume of said flow agent to said vehicle being not less than 30, and the proportions of said flow agent and water in said composition being such that the viscosity of said composition at 20° C. falls within the range of 100 to 200 cps.

2,744,073

THERMIONIC EMITTER MATERIALS

Francis C. Todd, Columbus, and Eugene N. Wyler, Worthington, Ohio, assignors, by mesne assignments, to The Battelle Development Corporation, Columbus, Ohio, a corporation of Delaware

Application November 22, 1952, Serial No. 321,985
1 Claim. (Cl. 252—521)

A thermionic emitter material consisting essentially of a solid solution of from about 15% to about 35% gadolinium oxide and the balance essentially neodymium oxide.

2,744,074

POLYMERIC ORGANIC ALUMINUM OXIDES AND METHOD FOR PREPARING SAME

Clement W. Theobald, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application April 18, 1951, Serial No. 221,750
11 Claims. (Cl. 260—2)

1. A method for preparing an organic polymeric aluminum compound which comprises reacting an aluminum alkoxide having the formula $Al(OR)_3$ wherein R is an alkyl group containing from 1 to 18 carbon atoms, with an anhydrous carboxylic acid, employing in the reaction at least one molar equivalent of acid per mol of alkoxide, isolating the resulting reaction product and subjecting it to condensation polymerization by heating to a temperature ranging from about 120° C.–350° C. under vacuum until removal of volatile products ceases.

2,744,075

EXPANDED POLYVINYL CHLORIDE PLASTIC CONTAINING WAX

Winston J. Roberts, Akron, Ohio, assignor, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio

No Drawing. Application October 20, 1951, Serial No. 252,415
10 Claims. (Cl. 260—2.5)

1. Closed cell nitrogen expanded stabilized and plasticized polyvinyl chloride plastic sponge containing from 5 to 25 parts per 100 parts of plastic of a solid wax having a melting point between about 120° F. to about 150° F. uniformly dispersed throughout the plastic.

2,744,076

PRODUCTION OF ORGANOPLASTICS IN CELLULAR FORM BY MEANS OF CHEMICAL BLOWING AGENTS

Frederick W. Breuer, Lititz, and Leo L. Tolman, Lancaster Township, Lancaster County, Pa., assignors to Armstrong Cork Company, Lancaster, Pa., a corporation of Pennsylvania

No Drawing. Application April 14, 1951, Serial No. 221,132
13 Claims. (Cl. 260—2.5)

1. A method of making a gas-expanded material which comprises admixing a compound of the group consisting of 4,4,13,13-tetramethyl-N,N′-dinitroso-5,12-diaza-2,15-hexadecanedione; 4,4,11,11-tetramethyl-N,N′-dinitroso-5,10-diaza-2,13-tetradecanedione; and 4,4,9,9-tetramethyl-N,N′-dinitroso-5,8-diaza-2,11-dodecanedione with an organoplastic of the group consisting of styrene polymers and vinyl chloride polymers and decomposing said compound by heat to evolve nitrogen and carbon dioxide and expand said organoplastic material.

2,744,077

RUBBER HYDROCHLORIDE FILM CONTAINING A DIALKYL ETHER

Max H. Thornton, Kansas City, Mo., assignor, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio

No Drawing. Application February 20, 1953, Serial No. 338,140
3 Claims. (Cl. 260—3.5)

1. Rubber hydrochloride film which contains a dialkyl ether in which each alkyl group has at least eight carbon atoms which improves its resistance to the passage of water vapor.

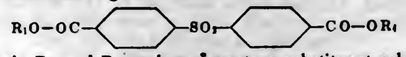
2,744,078

POLYESTERS FROM p, p′-SULFONYL DIBENZOIC ACID CONDENSED WITH A POLYHYDROXY COMPOUND CONTAINING AT LEAST 3 HYDROXY GROUPS

John R. Caldwell, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 3, 1952, Serial No. 313,069
25 Claims. (Cl. 260—22)

1. A process for preparing an incompletely cross-linked soluble polyester comprising (A) condensing a dibasic acidic compound comprising a p,p′-sulfonyl dibenzoic acid diester having the formula:



wherein R_1 and R_4 each represents a substituent selected from the group consisting of β-hydroxyalkyl radical containing from 2 to 4 carbon atoms, a hydroxyalkyl radical containing from 3 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, (B) with a polyoxy compound comprising an aliphatic alcoholic compound containing at least 3 oxy radicals selected from the group consisting of glycerine, β-methylglycerine, sorbitol, pentaerythritol, dipentaerythritol, 1,2,4-trihydroxybutane, 2-methyl-2-hydroxymethyl-1,3-propanediol, and lower alkanoic esters of these compounds wherein the acyl radicals contain from 2 to 4 carbon atoms, the polyoxy compound being employed in such a proportion that there is substantially an equivalent amount of oxy substituents in proportion to the carbalkoxy substituents in the overall combination of the dibasic acidic compounds and the polyoxy compounds, (C) in the presence of a condensing agent selected from the group consisting of the alkali metals, the alkaline earth metals, the oxides of these two groups of metals, the alkoxides containing from 1 to 6 carbon atoms of these two groups of metals, the carbonates and borates of these two groups of metals and litharge, (D) at an elevated temperature of from about 150° to about 250°C, (E) the condensation being conducted in an inert atmosphere with agitation.

2,744,079

ADHESIVE COMPOSITION CONTAINING POLYSILOXANE RUBBER, POLYSILOXANE OIL AND REINFORCING PIGMENT

Frederick L. Kilbourne, Jr., Woodmont, Thomas S. Moroney, Meriden, and Alfred S. Kidwell, Milford, Conn., assignors to The Connecticut Hard Rubber Company, New Haven, Conn., a corporation of Connecticut

No Drawing. Application August 9, 1952, Serial No. 303,618
6 Claims. (Cl. 260—29.1)

1. A pressure-sensitive adhesive material consisting of a mixture of 8 to 5 parts of a heat-stable polydimethylsiloxane oil, from 2 to less than 5 parts of an unvulcanized polydimethylsiloxane rubber which is soluble in the silicone oil, from 1 to 3 parts of reinforcing pigment per 10 parts of rubber-oil mixture selected from the group consisting of silicon dioxide, titanium dioxide, aluminum oxide, zinc oxide, diatomaceous earth, calcium carbonate and carbon black, and from 0.2 to 0.25 part of a curing agent per 10 parts of rubber-oil mixture selected from the group consisting of benzoyl peroxide and tertiary butyl perbenzoate.

2,744,080

AQUEOUS DISPERSION OF VINYLIDENE CHLORIDE POLYMERS CONTAINING HYDROGEN PEROXIDE AS A CORROSION INHIBITOR

Gilbert W. Brant, deceased, late of Buffalo, N. Y., by Bernice Brant Hankovich, administratrix, Buffalo, N. Y., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application September 24, 1951, Serial No. 248,104
2 Claims. (Cl. 260—29.6)

1. A coating composition consisting of (1) an aqueous dispersion resulting from the polymerization in situ of vinylidene chloride polymer-forming monomers in a mixture consisting of water, an anionic dispersing agent, and catalytic amounts of ammonium persulfate and meta sodium bisulfite, and (2) hydrogen peroxide in an amount within the range of from about 0.1% to about 1% by weight, based on the total weight of the dispersion.

2,744,081

COMPOSITIONS COMPRISING ACRYLONITRILE POLYMERS AND TRI (β-CYANOETHYL) NITROMETHANE

Eugene L. Ringwald and Alfred B. Craig, Decatur, Ala., assignors to The Chemstrand Corporation, Decatur, Ala., a corporation of Delaware

No Drawing. Application May 27, 1953, Serial No. 357,896
18 Claims. (Cl. 260—32.4)

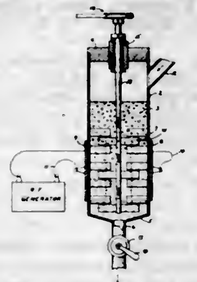
1. A new composition of matter comprising a homogeneous miscible mixture of tri (β-cyanoethyl) nitromethane and an acrylonitrile polymer containing up to 99% of acrylonitrile.

2,744,082

DISSOLUTION OF ACRYLONITRILE POLYMERS

James B. Ballentine, Media, Pa., assignor, by mesne assignments, to The Chemstrand Corporation, Philadelphia, Pa., a corporation of Delaware

Application August 17, 1951, Serial No. 242,392
11 Claims. (Cl. 260—32.6)



1. The method of producing a clear, substantially gel-free and homogeneous solution of an acrylonitrile polymer containing at least 70 percent of acrylonitrile in the polymer molecule comprising the steps of dispersing the polymer in particulate form in a solvent therefor at room temperature, subjecting the dispersion to an electrostatic field maintained by a high voltage alternating current of a frequency of at least 30 megacycles, and heating the polymer particles to a temperature at which dissolution thereof takes place without substantially heating the polymer solution above 100° C. to effect complete dissolution of the polymer particles, the heat of solution of the polymer particles being dissipated in the polymer solution and said polymer solution being maintained at a temperature less than the dissolution temperature of the polymer particles.

2,744,083

METAL AND SULFUR CONTAINING COMPOUNDS AND LUBRICANTS CONTAINING THEM

Leonard E. Moody and Elmer B. Cyphers, Cranford, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application July 23, 1952, Serial No. 300,491
13 Claims. (Cl. 252—33.4)

4. A an improved composition of matter, a derivative, containing both alkaline earth metal and sulfur atoms, of an alkyl phenol having 5 to 20 carbon atoms in the alkyl group wherein the sulfur has been introduced into said derivative by at least one sulfurizing agent selected from the group consisting of sulfur chlorides, elemental sulfur and sulfides of phosphorus, said derivative having been treated with a stabilization agent selected from the group consisting of mercaptobenzothiazole, diphenylguanidine and mixtures thereof in an amount in the range of about 0.1% to 20% by weight based on said derivative, said treatment being carried out at a temperature in the range of 275° to 600° F. for a time sufficient to produce a substantially stable, non-corrosive product.

10. A lubricating oil composition comprising a major proportion of a mineral lubricating oil and about 0.02 to 20% by weight, based on the total composition, of a composition of matter defined by claim 4.

2,744,084

OLEFIN POLYMERIZATION PROCESS USING HYDROGENATED NAPHTHA SOLVENT

William F. Arey, Jr., Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application September 26, 1952, Serial No. 311,811
8 Claims. (Cl. 260—33.6)

1. In the process of polymerizing lower olefins comprising isobutylene with a Friedel-Crafts catalyst at temperatures below 0° C., in the presence of a solvent in which the resulting high molecular weight polymers are at least substantially soluble, the improvement consisting in using as reaction diluent during polymerization a hydrogenated petroleum naphtha having an initial boiling point at least as high as 100° F., and an end point not higher than about 400° F.

2,744,085

PROCESS OF MAKING DISPERSIONS OF POLYMERS

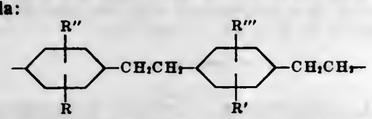
James K. Hubbard, West Chester, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

Application September 15, 1953, Serial No. 380,195
9 Claims. (Cl. 260—33.6)



1. A process which comprises turbulently mixing an organic liquid which does not boil at room temperature

under 1 mm. pressure with the pyrolyzed vapors of a monomeric aromatic compound containing para-methyl substituents, the said monomeric aromatic compound being a member of the class consisting of a hydrocarbon and a halogen substituted hydrocarbon, to form a dispersion of a polymer containing recurring units of the formula:



wherein R, R′, R″ and R‴ represent a member of the class consisting of hydrogen, phenyl, methyl and halogen, the hexagon representing the benzene nucleus.

2,744,086

DYEABLE ACRYLONITRILE FIBER FORMING COMPOSITIONS

David T. Mowry and Alfred B. Craig, Dayton, Ohio, assignors, by mesne assignments, to The Chemstrand Corporation, a corporation of Delaware

No Drawing. Application November 26, 1949, Serial No. 129,688

7 Claims. (Cl. 260—45.4)

1. A dyeable fiber-forming composition comprising a blend of 70 to 98 percent by weight of (A) a polymer of at least 75 percent by weight of acrylonitrile and not more than 25 percent of another polymerizable monoolefinic monomer copolymerizable therewith, and from 2 to 30 percent of (B) a high molecular weight linear polyester formed by the reaction of equimolecular proportions of a glycol and a member of the group consisting of dicarboxylic acids and mixtures of dicarboxylic acids with mono-hydroxymonocarboxylic acids, at least one of said reactants containing a radical of the group consisting of tertiary amino groups having radicals attached thereto of the group consisting of alkyl, aralkyl, and cycloalkyl, and quaternary ammonium groups.

2,744,087

POLYESTER FROM TEREPHTHALIC ACID, ETHYLENE GLYCOL AND POLYETHYLENE GLYCOL

Mark D. Snyder, Harriman, Tenn., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 11, 1951, Serial No. 261,150

5 Claims. (Cl. 260—75)

1. A dyeable polymeric ester derived from terephthalic acid, ethylene glycol and a polyethylene glycol having a formula

$$HO—(CH_2)_2—(O—CH_2CH_2)_n—O(CH_2)_2OH$$

wherein n represents an integer within the range of 1 to 135, said polymeric ester having a softening point of at least 200° C., the said polyethylene glycol being present in amount not more than 10% by weight based on the terephthalic component.

2,744,088

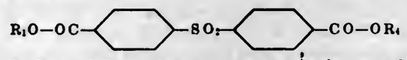
LINEAR POLYESTERS FROM p,p′-SULFONYL DIBENZOIC ACID PLUS ALIPHATIC DIBASIC STRAIGHT CHAIN ACIDS CONDENSED WITH A GLYCOL

John R. Caldwell, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application December 1, 1954, Serial No. 472,509

19 Claims. (Cl. 260—75)

1. A process for preparing a linear polyester softening between about 100° to about 140° C. having exceptional dielectric properties which comprises (A) condensing 1 mole proportion of a p,p′-sulfonyl dibenzoic diester having the formula:



wherein R_1 and R_4 each represents a substituent selected from the group consisting of a β-hydroxyalkyl radical containing from 2 to 4 carbon atoms, an omega-hydroxyalkyl radical containing from 3 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, plus from 1.5 up to about 15 mole proportions of an aliphatic diester selected from the group consisting of those having the following formulas:

$$R_8O—OC—(CH_2)_t—CO—OR_9$$

wherein t represents a positive integer of from 2 to 18, inclusive, and R_8 and R_9 each represents a substituent selected from the group consisting of an omega-hydroxyalkyl radical containing from 2 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, (B) with a dioxy compound selected from the group consisting of those compounds having the following formulas:

$$R_5—O—G—O—R_6$$

and

$$R_5O—(—R_7—O—)_q—R_7—OR_6$$

wherein G represents a divalent alkylene radical derived from a glycol containing from 2 to 10 carbon atoms, R_5 and R_6 each represents a substituent selected from the group consisting of a hydrogen atom and an acyl radical containing from 2 to 4 carbon atoms, R_7 represents an alkylene radical containing from 2 to 4 carbon atoms and q represents a positive integer of from 1 to 10 inclusive, the dioxy compound being employed in such a proportion that there is at least an equivalent amount of oxy substituents in proportion to the carbalkoxy substituents in the overall combination of the diesters and the dioxy compound, (C) in the presence of a catalytic condensing agent (D) at an elevated temperature, (E) the condensation being conducted in an inert atmosphere, and (F) the latter part of the condensation being conducted at a very low pressure of the inert atmosphere, said process encompassing the condensation of only those compounds referred to in (A) and (B) hereinabove.

2,744,089

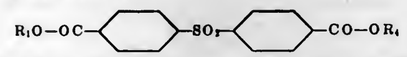
LINEAR HIGHLY POLYMERIC POLYESTERS FROM p,p′-SULFONYL DIBENZOIC ACID AND PENTAMETHYLENE OR HIGHER GLYCOLS

John R. Caldwell, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 3, 1952, Serial No. 313,061

28 Claims. (Cl. 260—75)

1. A process for preparing a linear polyester comprising (A) condensing a p,p′-sulfonyl dibenzoic compound having the formula:



wherein R_1 and R_4 each represents a substituent selected from the group consisting of an omega-hydroxyalkyl radical containing from 3 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, (B) with a dioxy compound having the formula:

$$R_5—O—(CH_2)_p—O—R_6$$

wherein p represents a positive integer of from 5 to 12 inclusive and R_5 and R_6 each represents a substituent selected from the group consisting of a hydrogen atom and an acyl radical containing from 2 to 4 carbon atoms, the

dioxy compound being employed in such proportion that there is at least an equivalent amount of substituents in proportion to the carboxy substituents in the over-all combination of the dibenzoic compound and the dioxy compound, (C) in the presence of an ester-interchange catalyst as a condensing agent, (D) at an elevated temperature, (E) in an inert atmosphere, and (F) conducting the latter part of the condensation at a very low pressure of the inert atmosphere, said process encompassing the condensation of only those compounds referred to in (A) and (B) hereinabove.

2,744,090

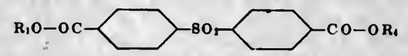
LINEAR POLYESTERS FROM p,p′-SULFONYL DIBENZOIC ACID PLUS CARBONIC OR OXALIC ACID CONDENSED WITH A GLYCOL

John R. Caldwell, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 3, 1952, Serial No. 313,062

23 Claims. (Cl. 260—75)

1. A process for preparing a linear polyester comprising (A) condensing about 10 mole proportions of a p,p′-sulfonyl dibenzoic diester having the formula:



wherein R_1 and R_4 each represents a substituent selected from the group consisting of a β-hydroxy-alkyl radical containing from 2 to 4 carbon atoms, an omega-hydroxyalkyl radical containing from 3 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, plus from about 1 to about 50 mole proportions of an aliphatic diester selected from the group consisting of those having the following formulas:

$$R_8R_9CO_3 \text{ and } R_8OOC—COOR_9$$

wherein R_8 and R_9 each represents a substituent selected from the group consisting of an omega-hydroxyalkyl radical containing from 2 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, (B) with a dioxy compound selected from the group consisting of those compounds having the following formulas:

$$R_5—O—(CH_2)_p—O—R_6$$

and

$$R_5O—(—R_7—O—)_q—R_7—OR_6$$

wherein p represents a positive integer of from 2 to 12, R_5 and R_6 each represents a substituent selected from the group consisting of a hydrogen atom and an acyl radical containing from 2 to 4 carbon atoms, R_7 represents an alkylene radical containing from 2 to 4 carbon atoms and q represents a positive integer of from 1 to 10 inclusive, the dioxy compound being employed in such a proportion that there is at least an equivalent amount of oxy substituents in proportion to the carbalkoxy substituents in the overall combination of the diesters and the dioxy compound, (C) in the presence of a condensing agent selected from the group consisting of the alkali metals, the alkaline earth metals, the oxides of these two groups of metals, the alkoxides containing from 1 to 6 carbon atoms of these two groups of metals, the carbonates and borates of these two groups of metals and lead oxide, (D) at an elevated temperature, (E) the condensation being conducted in an inert atmospheres, and (F) the latter part of the condensation being conducted at a very low pressure of the inert atmosphere, said process encompassing the condensation of only those compounds referred to in (A) and (B) hereinabove.

2,744,091

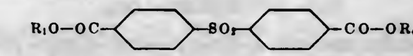
LINEAR POLYESTERS FROM p,p′-SULFONYL DIBENZOIC ACID PLUS ALIPHATIC DIBASIC STRAIGHT CHAIN ACIDS CONDENSED WITH A GLYCOL

John R. Caldwell, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 3, 1952, Serial No. 313,063

24 Claims. (Cl. 260—75)

1. A process for preparing a linear polyester softening at above 180°–200° C. comprising (A) condensing about 10 mole proportions of a p,p′-sulfonyl dibenzoic diester having the formula:



wherein R_1 and R_4 each represents a substituent selected from the group consisting of a β-hydroxyalkyl radical containing from 2 to 4 carbon atoms, an omega-hydroxyalkyl radical containing from 3 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, plus from about 1 up to 7 mole proportions of an aliphatic diester selected from the group consisting of those having the following formulas:

$$R_8O—OC—(CH_2)_t—CO—OR_9$$

wherein t represents a positive integer of from 2 to 18, inclusive, and R_8 and R_9 each represents a substituent selected from the group consisting of an omega-hydroxyalkyl radical containing from 2 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, (B) with a dioxy compound selected from the group consisting of those compounds having the following formulas:

$$R_5—O—(CH_2)_p—O—R_6$$

and

$$R_5O—(—R_7—O—)_q—R_7—OR_6$$

wherein p represents a positive integer of from 2 to 12, R_5 and R_6 each represents a substituent selected from the group consisting of a hydrogen atom and an acyl radical containing from 2 to 4 carbon atoms, R_7 represents an alkylene radical containing from 2 to 4 carbon atoms and q represents a positive integer of from 1 to 10 inclusive, the dioxy compound being employed in such a proportion that there is at least an equivalent amount of oxy substituents in proportion to the carbalkoxy substituents in the overall combination of the diesters and the dioxy compound, (C) in the presence of a condensing agent selected from the group consisting of the alkali metals, the alkaline earth metals, the oxides of these two groups of metals, the alkoxides containing from 1 to 6 carbon atoms of these two groups of metals, the carbonates and borates of these two groups of metals and lead oxide, (D) at an elevated temperature, (E) the condensation being conducted in an inert atmosphere, and (F) the latter part of the condensation being conducted at a very low pressure of the inert atmosphere, said process encompassing the condensation of only those compounds referred to in (A) and (B) hereinabove.

2,744,092

LINEAR POLYESTERS FROM p,p′-SULFONYL DIBENZOIC ACID PLUS ALIPHATIC DIBASIC BRANCHED-CHAIN ACIDS CONDENSED WITH A GLYCOL

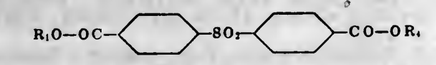
John R. Caldwell, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 3, 1952, Serial No. 313,064

23 Claims. (Cl. 260—75)

1. A process for preparing a linear polyester compris-

ing (A) condensing about 10 mole proportions of a p,p'-sulfonyl dibenzoic diester having the formula:



wherein R_1 and R_4 each represents a substituent selected from the group consisting of a β-hydroxyalkyl radical containing from 2 to 4 carbon atoms, an omega-hydroxyalkyl radical containing from 3 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, plus from about 1 to about 30 mole proportions of an aliphatic diester selected from those having the following formula:

$$R_8O—OC—R_{10}—CO—OR_9$$

wherein R_{10} represents a divalent radical selected from the group consisting of an ethylidene radical and a branched-chain alkylene radical containing from 3 to 12 carbon atoms, and R_8 and R_9 each represents a substituent selected from the group consisting of an omega-hydroxyalkyl radical containing from 2 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, (B) with a dioxy compound selected from the group consisting of those compounds having the following formulas:

$$(R_5—O—(CH_2)—O—R_6)$$

and

$$R_5O—(—R_7—O—)—R_7—OR_6$$

wherein p represents a positive integer of from 2 to 12, R_5 and R_6 each represents a substituent selected from the group consisting of a hydrogen atom and an acyl radical containing from 2 to 4 carbon atoms, R_7 represents an alkylene radical containing from 2 to 4 carbon atoms and q represents a positive integer of from 1 to 10 inclusive, the dioxy compound being employed in such a proportion that there is at least an equivalent amount of oxy substituents in proportion to the carbalkoxy substituents in the overall combination of the diesters and the dioxy compound, (C) in the presence of a condensing agent selected from the group consisting of the alkali metals, the alkaline earth metals, the oxides of these two groups of metals, the alkoxides containing from 1 to 6 carbon atoms of these two groups of metals, the carbonates and borates of these two groups of metals and lead oxide, (D) at an elevated temperature, (E) the condensation being conducted in an inert atmosphere, and (F) the latter part of the condensation being conducted at a very low pressure of the inert atmosphere, said process encompassing the condensation of only those compounds referred to in (A) and (B) hereinabove.

2,744,093

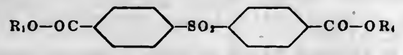
LINEAR POLYESTERS FROM p,p'-SULFONYL DIBENZOIC ACID PLUS ALIPHATIC DIBASIC ETHER ACIDS CONDENSED WITH A GLYCOL

John R. Caldwell, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 3, 1952, Serial No. 313,065

24 Claims. (Cl. 260—75)

1. A process for preparing a linear polyester comprising (A) condensing about 10 mole preparations of a p,p'-sulfonyl dibenzoic diester having the formula:



wherein R_1 and R_4 each represents a substituent selected from the group consisting of a β-hydroxyalkyl radical containing from 2 to 4 carbon atoms, an omega-hydroxyalkyl radical containing from 3 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, plus from about 1 to about 30 mole proportions of an aliphatic diester having the following formula:

$$R_8O—OC—(CH_2)_s—O—(CH_2)_t—CO—OR_9$$

wherein s and t each represents a positive integer of from 1 to 4, inclusive, and R_8 and R_9 each represents a substituent selected from the group consisting of an omega-hydroxyalkyl radical containing from 2 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, (B) with a dioxy compound selected from the group consisting of those compounds having the following formulas:

$$R_5—O—(CH_2)_p—O—R_6$$

and

$$R_5O—(—R_7—O—)_q—R_7—OR_6$$

wherein p represents a positive integer of from 2 to 12, R_5 and R_6 each represents a substituent selected from the group consisting of a hydrogen atom and an acyl radical containing from 2 to 4 carbon atoms, R_7 represents an alkylene radical containing from 2 to 4 carbon atoms and q represents a positive integer of from 1 to 10 inclusive, the dioxy compound being employed in such a proportion that there is at least an equivalent amount of oxy substituents in proportion to the carbalkoxy substituents in the overall combination of the diesters and the dioxy compound, (C) in the presence of a condensing agent selected from the group consisting of the alkali metals, the alkaline earth metals, the oxides of these two groups of metals, the alkoxides containing from 1 to 6 carbon atoms of these two groups of metals, the carbonates and borates of these two groups of metals and lead oxide, (D) at an elevated temperature, (E) the condensation being conducted in an inert atmosphere, and (F) the latter part of the condensation being conducted at a very low pressure of the inert atmosphere, said process encompassing the condensation of only those compounds referred to in (A) and (B) hereinabove.

2,744,094

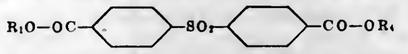
LINEAR POLYESTERS FROM p,p'-SULFONYL DIBENZOIC ACID PLUS AN AROMATIC ACID CONDENSED WITH A GLYCOL

John R. Caldwell, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

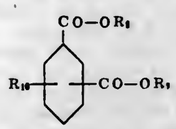
No Drawing. Application October 3, 1952, Serial No. 313,066

24 Claims. (Cl. 260—75)

1. A process for preparing a linear polyester comprising (A) condensing about 10 mole proportions of a p,p'-sulfonyl dibenzoic diester having the formula:



wherein R_1 and R_4 each represents a substituent selected from the group consisting of a β-hydroxyalkyl radical containing from 2 to 4 carbon atoms, an omega-hydroxyalkyl radical containing from 3 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, plus from about 2 to about 24 mole proportions of an aromatic dibasic acid diester having the following general formula:



wherein the two carbalkoxy radicals are in positions with respect to each other selected from the group consisting of the ortho, meta and para positions, R_{10} represents at least one substituent selected from the group consisting of a hydrogen atom, an alkyl radical containing from 1 to 6 carbon atoms, an aryl radical of the benzene series containing from 6 to 9 carbon atoms and a chlorine atom, which substituent (R_{10}) is in a position with respect to the —CO—OR_8 radical selected from the ortho, meta and para positions not already occupied by the —CO—OR_9 radical, and R_8 and R_9 each represents a substituent selected from the group consisting of an omega-hydroxyalkyl radical contaning from 2 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, (B) with a dioxy compound selected from the group consisting of those compounds having the following formulas:

$$R_5—O—(CH_2)_p—O—R_6$$

and

$$R_5O—(—R_7—O—)_q—R_7—OR_6$$

wherein p represents a positive integer of from 2 to 12, R_5 and R_6 each represents a substituent selected from the group consisting of a hydrogen atom and an acyl radical containing from 2 to 4 carbon atoms, R_7 represents an alkylene radical containing from 2 to 4 carbon atoms and q represents a positive integer of from 1 to 10 inclusive, the dioxy compound being employed in such a proportion that there is at least an equivalent amount of oxy substituents in proportion to the carbalkoxy substituents in the overall combination of the diesters and the dioxy compound, (C) in the presence of a condensing agent selected from the group consisting of the alkali metals, the alkaline earth metals, the oxides of these two groups of metals, the alkoxides containing from 1 to 6 carbon atoms of these two groups of metals, the carbonates and borates of these two groups of metals and lead oxide, (D) at an elevated temperature, (E) the condensation being conducted in an inert atmosphere, and (F) the latter part of the condensation being conducted at a very low pressure of the inert atmosphere, said process encompassing the condensation of only those compounds referred to in (A) and (B) hereinabove.

2,744,095

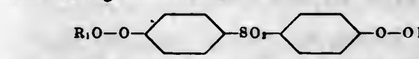
LINEAR POLYESTERS FROM p,p'-SULFONYL DIBENZOIC ACID CONDENSED WITH AN ALIPHATIC ETHER GLYCOL

John R. Caldwell, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 3, 1952, Serial No. 313,067

19 Claims. (Cl. 260—75)

1. A process for preparing a linear polyester which comprises (A) condensing a p,p'-sulfonyl dibenzoic diester having the formula:



wherein R_1 and R_4 each represents a substituent selected from the group consisting of an omega-hydroxy alkyl radical containing from 3 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, (B) with a dioxy compound consisting of from about 30 to 100 mole percent of an aliphatic ether glycol having the following formula:

$$R_5O—(R_7—O)_q—R_7—OR_6$$

wherein R_7 represents an alkylene radical containing from 2 to 4 carbon atoms, q represents a positive integer of from 1 to 10, and R_5 and R_6 each represents a substituent selected from the group consisting of a hydrogen atom and an acyl radical containing from 2 to 4 carbon atoms, and from about 70 to 0 mole percent of a polymethylene glycol having the following formula:

$$R_5O—(CH_2)_p—OR_6$$

wherein p represents a positive integer of from 2 to 12, the dioxy compound being employed at such a proportion that there is at least an equivalent amount of oxy substituents in proportion to the carboxy substituents in the overall combination of the diester and the dioxy compounds, (C) in the presence of a condensing agent selected from the group consisting of the alkali metals, the alkaline earth metals, the oxides of these two groups of metals, the alkoxides containing from 1 to 8 carbon atoms of these two groups of metals, the carbonates and borates of these two groups of metals, and litharge, (D) at an elevated temperature, (E) the condensation being conducted in an inert atmosphere, and (F) the latter part of the condensation being conducted at a very low pressure of the inert atmosphere.

2,744,096

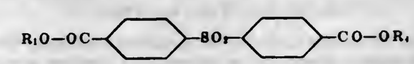
CROSS-LINKED POLYESTERS FROM p,p'-SULFONYL DIBENZOIC ACID AND AN UNSATURATED ALIPHATIC DIBASIC ACID CONDENSED WITH A GLYCOL

John R. Caldwell, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 3, 1952, Serial No. 313,068

24 Claims. (Cl. 260—75)

1. A process for preparing an incompletely cross-linked, soluble interpolyester comprising (A) condensing a combination of dibasic acidic compounds containing from about 10 to about 90 mole percent of a p,p'-sulfonyl dibenzoic acid diester having the formula:



wherein R_1 and R_4 each represents a substituent selected from the group consisting of β-hydroxyalkyl radical containing from 2 to 4 carbon atoms, and omega-hydroxyalkyl radical containing from 3 to 12 carbon atoms and an alkyl radical containing from 1 to 6 carbon atoms, and conversely from about 90 to 10 mole percent of an unsaturated aliphatic dibasic acid selected from the group consisting of maleic acid, maleic anhydride, maleic esters, fumaric acid, fumaric esters, itaconic acid, itaconic anhydride and itaconic esters, which unsaturated dibasic acid esters are derived from alkanols containing from 1 to 4 carbon atoms, (B) with a dioxy compound selected from the group consisting of those compounds having the following formulas:

$$R_5O—(CH_2)_p—OR_6$$

and

$$R_5O—(R_7—O)_q—R_7—OR_6$$

wherein p represents a positive integer from 2 to 12, R_5 and R_6 each represents a substituent selected from the group consisting of a hydrogen atom and an acyl radical containing from 2 to 4 carbon atoms, R_7 represents an alkylene radical containing from 2 to 4 carbon atoms and q represents a positive integer of from 1 to 10 inclusive, the dioxy compound being employed in such a proportion that there is substantially an equivalent amount of oxy substituents in proportion to the carbalkoxy substituents in the overall combination of the dibasic acidic compounds and the dioxy compounds, (C) in the presence of a condensing agent selected from the group consisting of the alkali metals, the alkaline earth metals, the oxides of these two groups of metals, the alkoxides containing from 1 to 6 carbon atoms of these two groups of metals, the carbonates and borates of these two groups of metals and litharge, (D) at an elevated temperature of from about 150° C. to about 250° C., (E) the condensation being conducted in an inert atmosphere with agitation.

2,744,097

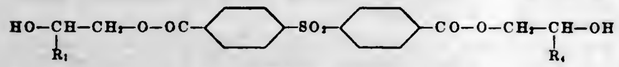
POLYESTERS FROM β-HYDROXYALKYL DIESTERS OF SULFONYL DIBENZOIC ACID CONDENSED WITH A DIHYDROXY COMPOUND

John R. Caldwell, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

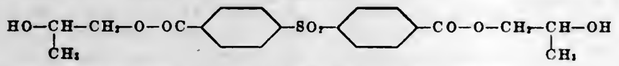
No Drawing. Application October 3, 1952, Serial No. 313,070

11 Claims. (Cl. 260—75)

1. A process for preparing a linear polyester comprising (A) condensing an acid diester having the following general formula:



wherein R_1 and R_4 each represents a member of the group consisting of a hydrogen atom and a methyl radical, (B) with a dioxy compound selected from the group consisting of (1) a dihydroxy sulfone diester having the following general formula:



(2) an aliphatic ether glycol having the following formula:

$$R_5O—(R_7—O)_q—R_7—OR_6$$

wherein R_7 represents an alkylene radical containing from 2 to 4 carbon atoms and q represents a positive integer of from 1 to 10, and R_5 and R_6 each represents a substituent selected from the group consisting of a hydrogen atom and an acyl radical containing from 2 to 4 carbon atoms and (3) a polymethylene glycol having the following formula:

$$R_5O—(CH_2)_p—OR_6$$

wherein p represents a positive integer of from 5 to 12, the dioxy compound being employed in such a proportion that there is at least an equivalent amount of oxy substituents in proportion to the carboxy substituents in the overall combination of the diesters and the dioxy compounds, (C) in the presence of a condensing agent selected from the group consisting of the alkali metals, the alkaline earth metals, the oxides of these two groups of metals, the alkoxides containing from 1 to 8 carbon atoms of these two groups of metals, the carbonates and borates of these two groups of metals, and litharge, (D) at an elevated temperature, (E) the condensation being conducted in an inert atmosphere, and (F) the latter part of the condensation being conducted at a very low pressure of the inert atmosphere.

2,744,098

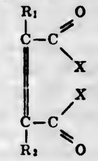
COPOLYMERS OF VINYL COMPOUNDS WITH α,β-UNSATURATED DICARBOXYLIC ACIDS

Richard S. Towne, Plainfield, N. J., assignor to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

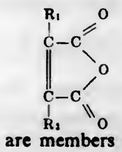
No Drawing. Application October 25, 1951, Serial No. 253,217

12 Claims. (Cl. 260—78.5)

1. The process of preparing low molecular weight copolymers of vinyl compounds with polymerizable dicarboxylic acid compounds which comprises heating to reflux a solution of an α,β-unsaturated dicarboxylic acid compound selected from the class consisting of those corresponding to the general formulae:



and



wherein R_1 and R_2 are members selected from the class consisting of hydrogen, halogen, lower alkyl, aryl, and aralkyl groups, and X represents a member selected from the class consisting of oxyalkyl and oxyaryl groups, in at least one inert solvent-diluent of the group consisting of lower alkyl ketones, alkyl and monocyclic aryl hydrocarbons in the presence of an organic peroxide, adding a polymerizable vinyl compound containing a $>C=CH_2$ group at such a rate that the said α,β-unsaturated dicarboxylic acid compound is in substantially large excess over the said polymerizable vinyl compound while maintaining the temperature at about reflux until copolymerization is complete, and filtering, washing, and drying the copolymer, said solvent-diluent having a boiling point higher than the said polymerizable vinyl compound.

2,744,099

RUBBERY INTERPOLYMERS OF A BUTADIENE-1,3 HYDROCARBON, AN ALKYL ACRYLATE AND A STYRENE HYDROCARBON

George R. Mitchell, Pine Orchard, Conn., and Neil H. Sherwood, Avon Lake, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a corporation of New York

No Drawing. Application September 17, 1952, Serial No. 310,146

8 Claims. (Cl. 260—80.7)

1. A synthetic rubbery interpolymer prepared by polymerizing to a conversion of about 60 percent in aqueous emulsion at a temperature of 40 to 50° F. a monomeric mixture consisting of 81 percent by weight of butadiene-1,3, 10 percent by weight of an alkyl acrylate containing 4 to 8 carbon atoms in the alkyl group and 1 percent by weight of styrene.

2,744,100

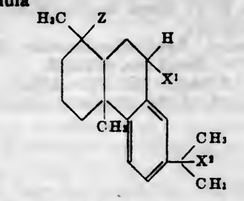
BROMODEHYDROABIETIC ACID DERIVATIVES

Lee A. Subluskey, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 13, 1952, Serial No. 325,891

12 Claims. (Cl. 260—97)

1. As a new composition of matter, a compound having the formula



where Z is selected from the group consisting of methylol, acyloxymethyl, carboxy, and carboalkoxy and X^1 is selected from the group consisting of H, OH, O-acyl, and Br and X^2 is selected from the group consisting of H and Br, where at least one of X^1 and X^2 is Br and acyl in each instance is the acyl radical of a carboxylic acid.

2,744,101

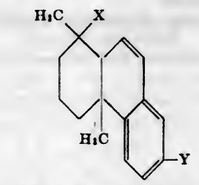
9(10)-DEHYDRO-DEHYDROABIETIC ACID DERIVATIVES

Lee A. Subluskey, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 13, 1952, Serial No. 325,893

8 Claims. (Cl. 260—99)

1. As a new composition of matter, a compound having the formula



where X is selected from the group consisting of methylol, acyloxymethyl, carboxy, and carboalkoxy and Y is selected from the group consisting of isopropyl, isopropenyl, hydroxyl, and acetyl, where acyl is the acyl radical of a carboxylic acid.

2,744,102

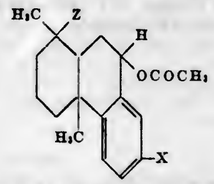
ACETOXYDEHYDROABIETIC ACID DERIVATIVES

Lee A. Subluskey, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 13, 1952, Serial No. 325,892

9 Claims. (Cl. 260—99)

1. As a new composition of matter, a compound having the formula



where Z is selected from the group consisting of methylol, acyloxymethyl, carboxy, and carboalkoxy and X is one of the group consisting of isopropyl, isopropenyl, acetyl, hydroxy, 1-hydroperoxyisopropyl, 1-hydroxyethyl, and 1-hydroxyisopropyl, where acyl is the acyl radical of a carboxylic acid.

2,744,103

SOLID, STABLE DIAZONIUM COMPOUNDS AND PROCESS OF PREPARING THE SAME

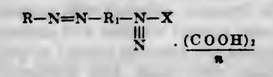
Wilhelm Koch, Offenbach am Main, Germany, assignor to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius & Brüning, Frankfurt am Main, Germany, a corporation of Germany

No Drawing. Application July 1, 1954, Serial No. 440,839

Claims priority, application Germany July 13, 1953

10 Claims. (Cl. 260—141)

5. The diazonium compounds corresponding to the following general formula:



wherein R represents a member selected from the group consisting of nitrobenzene, nitrochlorobenzene, nitrodichlorobenzene and ethoxybenzene, R_1 represents a member selected from the group consisting of dimethoxybenzene, methylmethoxybenzene and naphthalene, X stands for a member selected from the group consisting of chlorine and the monovalent radical of oxalic acid, and n means one of the numbers 1 and 2.

2,744,104

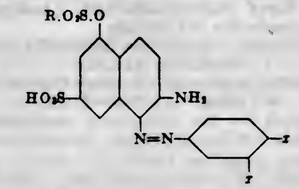
PROCESS OF MAKING COPPER-CONTAINING MONOAZO DYESTUFFS

Hans Ruckstuhl, Basel, and Walter Wehrli, Riehen, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application July 3, 1952, Serial No. 297,178

6 Claims. (Cl. 260—151)

1. A process of preparing a copper-containing monoazo compound, comprising the steps of replacing the amino group by the hydroxy group in an aminoazo dyestuff corresponding to the formula



wherein R stands for an organic radical, one x stands for a member selected from the group consisting of hydrogen, halogen, lower alkyl, lower alkoxy and nitro, the other x being a sulfonic acid group, by means of nitrous acid, treating the thus-obtained hydroxyazo dyestuff with a copper salt in the presence of an oxidizing agent and subsequently with a saponifying agent to split off the sulfonic acid ester group.

2,744,105

AZONITRILES CONTAINING QUATERNARY AMMONIUM SALT GROUPS

Arthur L. Barney, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 10, 1952, Serial No. 287,255

7 Claims. (Cl. 260—192)

1. A quaternary ammonium salt having an acyclic azo, —N=N—, group whose valences are attached to discrete tertiary carbon atoms each of which is attached to (*a*) a cyano group, (*b*) an alkyl radical of one to four carbon atoms, (*c*) a saturated divalent aliphatic hydrocarbon radical of one to six carbon atoms which radical is directly attached to the nitrogen of a quaternary ammonium salt group.

2,744,106

NEW ALKALOID FROM VERATRUM ALBUM AND A METHOD FOR ITS RECOVERY

Robert M. Brooker and Harold A. Nash, Indianapolis, Ind., assignors to Allied Laboratories, Inc., Kansas City, Mo., a corporation of Delaware

No Drawing. Application November 7, 1952, Serial No. 319,432
3 Claims. (Cl. 260—236)

1. The process of separating a crystalline alkaloid from the ether-soluble amorphous residue obtained from *Veratrum album* by extracting ground roots of *Veratrum album* with benzene made alkaline with ammonium hydroxide, extracting the benzene solution with aqueous acetic acid, making the acid extract alkaline and extracting with benzene, evaporating the benzene extract to dryness, extracting the residue with ether and evaporating the ether extract to dryness which comprises subjecting said ether-soluble amorphous residue to a countercurrent distribution treatment employing an acidified aqueous-chlorinated solvent system to effect recovery of an alkaloid, germitetrine B represented by the following partial empirical formula indicating the ester groups,

$$C_{\pi}H_{\pi}O_4N\begin{cases}-OCO.CH_3\\-OCO.CH_3\\-OCO-CH(CH_3)-CH_2CH_3\\-OCO-C(OH)(CH_3)-CHOH-CH_3\end{cases}$$

having a melting point of about 233–234° C. and $(\alpha)_D^{25}$ of −68.0° in pyridine and −17.2° in chloroform, and which on hydrolysis yields one mole each of germine, 2-methylbutyric acid, and 2,3-dihydroxy-2-methylbutyric acid and two moles of acetic acid per mole of germitetrine B.

2,744,107

METHOD FOR THE PREPARATION OF LACTAMS BY THE REARRANGEMENT OF CYCLOALIPHATIC KETOXIMES

Harry Welz, Krefeld, Germany, assignor to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application October 28, 1952, Serial No. 317,353
Claims priority, application Germany October 30, 1951
6 Claims. (Cl. 260—239.3)

1. A method for the preparation of lactams by the re-arrangement of ketoximes of cycloaliphatic hydrocarbons which comprises reacting a solution of sulphur trioxide in cyclic mononitro-hydrocarbons, having a melting point of up to about 65° C., with the oximes at temperatures ranging from the melting point to the decomposition point of the reaction mixture.

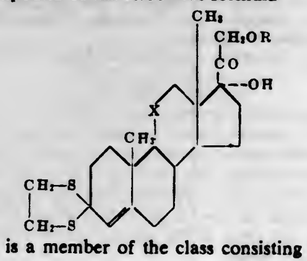
2,744,108

3-ETHYLENE MERCAPTOLES OF 11-OXYGENATED DERIVATIVES OF 17,21-DIHYDROXY-4-PREGNENE-3,20-DIONES

Jack W. Ralls, Morton Grove, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application January 13, 1955, Serial No. 481,687
7 Claims. (Cl. 260—239.5)

1. A compound of the structural formula



wherein R is a member of the class consisting of hydrogen, lower alkanoyl and benzoyl radicals and X is a member of the class consisting of carbonyl and carbinol radicals.

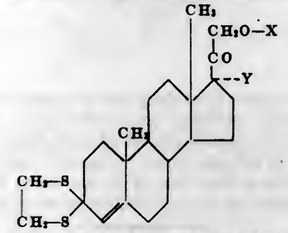
2,744,109

3-ETHYLENE MERCAPTOLES OF 21-HYDROXY-4-PREGNENE-3,20-DIONE, ITS 17-HYDROXY DERIVATIVE AND ESTERS THEREOF

Jack W. Ralls, Morton Grove, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application January 13, 1955, Serial No. 481,688
7 Claims. (Cl. 260—239.5)

1. A compound of the structural formula



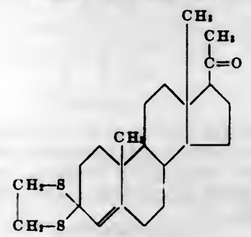
wherein X is a member of the class consisting of hydrogen, benzoyl and lower alkanoyl radicals and Y is a member of the class consisting of hydrogen and hydroxyl radicals.

2,744,110

3-ETHYLENE MERCAPTOLE DERIVATIVES OF PROGESTERONE

Jack W. Ralls, Morton Grove, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application April 22, 1954, Serial No. 425,023
1 Claim. (Cl. 260—239.5)



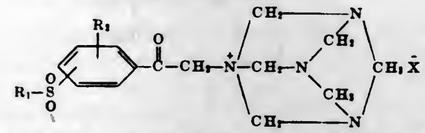
2,744,111

N-(SULFONYLPHENACYL)HEXAMETHYLENETETRAMINIUM HALIDES

Walter A. Gregory, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 16, 1953, Serial No. 337,236
6 Claims. (Cl. 260—248.5)

1. A compound of the formula,



where R_1 is a member of the group consisting of alkyl, halogeno lower alkyl, cyclohexyl, cyclopentyl and vinyl groups, R_2 is a member of the class consisting of hydrogen, halogen, lower alkyl and lower alkoxy radicals, and X is a halogen of the group consisting of chlorine and bromine.

2,744,112

PREPARATION OF OPTICALLY ACTIVE 3-HYDROXY-N-METHYL-MORPHINANES

Karl Vogler, Basel, Switzerland, assignor to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application June 23, 1953, Serial No. 363,655
Claims priority, application Switzerland June 30, 1952
3 Claims. (Cl. 260—285)

1. A process which comprises reacting racemic 1-(p-methoxybenzyl) - 2 - methyl-1,2,3,4,5,6,7,8-octahydroisoquinoline with D-(+)-tartaric acid, fractionally crystallizing the reaction product in a solvent of the group consisting of water, methanol and mixtures of water and methanol, separating the tartrate of 1-(p-methoxybenzyl)-2-methyl-1,2,3,4,5,6,7,8-octahydroisoquinoline crystallizing out first, recrystallizing the same and cyclizing the purified product to form dextrorotatory 3-hydroxy-N-methylmorphinane of high optical purity.

2,744,113

1-ISONICOTINYL-2-ALKENYL-2-ALKYLHYDRAZINE

Herman Herbert Fox, Passaic, N. J., assignor to Hoffmann-La Roche Inc., Roche Park, Nutley, N. J., a corporation of New Jersey

No Drawing. Application June 1, 1954, Serial No. 433,843
6 Claims. (Cl. 260—295)

1. A compound selected from the class consisting of 1-isonicotinyl-2-lower alkenyl-2-lower alkylhydrazine and acid addition salts thereof.

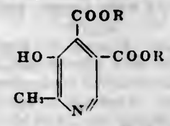
2,744,114

PYRIDOXINE SYNTHESIS

Reuben G. Jones, Indianapolis, Ind., assignor to Eli Lilly and Company, Indianapolis, Ind., a corporation of Indiana

No Drawing. Application May 21, 1952, Serial No. 289,209
2 Claims. (Cl. 260—297.5)

1. A process step in the preparation of pyridoxine which comprises heating with lithium borohydride in an ethereal solvent a compound represented by the formula



wherein R represents a lower alkyl radical, to produce 2 - methyl - 3 - hydroxy - 4,5 - dihydroxymethylpyridine, adding a lower aliphatic alcohol and a mineral acid to the reaction mixture, heating the mixture to convert the boron compounds present to a boric acid ester of the alcohol, separating the boric acid ester, and isolating the 2 - methyl - 3 - hydroxy - 4,5 - dihydroxymethylpyridine.

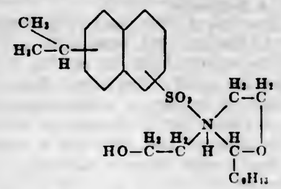
2,744,115

SURFACE ACTIVE COMPOUNDS

William B. Hughes, Bartlesville, Okla., assignor to Cities Service Oil Company, Bartlesville, Okla., a corporation of Delaware

No Drawing. Original application January 31, 1950, Serial No. 141,598. Divided and this application October 25, 1952, Serial No. 316,939
1 Claim. (Cl. 260—307)

A compound of the formula



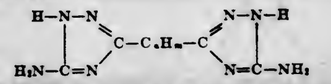
2,744,116

BIS-(AMINOTRIAZOLYL-)-HYDROCARBONS

Randolph Norris Shreve, West Lafayette, Ind., and Robert Koridon Charlesworth, Walnut Creek, Calif., assignors to Purdue Research Foundation, Lafayette, Ind., a corporation of Indiana

No Drawing. Application December 4, 1953, Serial No. 396,344
10 Claims. (Cl. 260—308)

1. A member of the group consisting of compounds having the formula:



wherein *m* and *n* are zero and compounds wherein C_nH_m represent alkylene and aliphatic mono-olefinic hydrocarbon groups containing up to twelve carbon atoms.

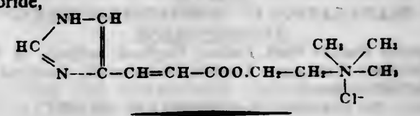
2,744,117

PROCESS FOR PREPARING THE CHOLINE ESTER OF UROCANIC ACID

Vittorio Erspamer, Alberto Vercellone, and Claudio Pasini, Milan, Italy, assignors to Farmaceutici Italia S. A., a corporation of Italy

No Drawing. Application March 31, 1953, Serial No. 346,046
Claims priority, application Italy April 12, 1952
4 Claims. (Cl. 260—309)

1. The process which comprises treating the 2-chloroethyl ester of α-chloro-β(imidoazolyl-4(5))propionic acid with trimethylamine in solution in the presence of at least one apolar solvent, in hot condition and under stirring, in a hermetically closed vessel, to obtain murexine chloride,



2,744,118

PHTHALIMIDOPROPIONYLAMINOETHYL DISULFIDE AND PREPARATION

John Frederick Cavalla, London, England, assignor to Parke, Davis & Company, Detroit, Mich., a corporation of Michigan

No Drawing. Application May 6, 1953, Serial No. 353,451
Claims priority, application Great Britain May 12, 1952
5 Claims. (Cl. 260—326)

1. Process for obtaining bis-(β-alanyl-2-aminoethyl) disulfide which comprises condensing β-phthalimidopropionyl chloride with bis-(β-aminoethyl)-disulfide in the presence of an alkaline agent to obtain bis-(β-phthalimido-propionyl-2-aminoethyl)disulfide and reacting said bis-(β-phthalimidopropionyl-2-aminoethyl)-disulfide with hydrazine.

2. Bis-(β-phthalimidopropionyl-2-aminoethyl)-disulfide.

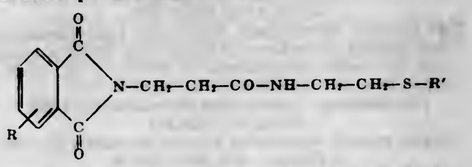
2,744,119

PHTHALYL-ALANYL-MERCAPTOETHYL AMIDES AND PREPARATION THEREOF

Edward Walton, Scotch Plains, N. J., assignor to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey

No Drawing. Application January 6, 1953, Serial No. 329,929
12 Claims. (Cl. 260—326)

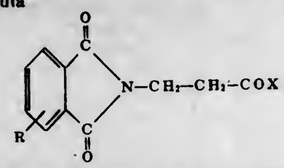
1. A compound of the formula



wherein R is selected from the group consisting of hydro-

gen, alkyl, alkoxy, and halo, and R' is selected from the group consisting of an alkenyl and aralkyl radical having a double bond in the β, γ position relative to the sulfur atom.

3. The process which comprises reacting a compound of the formula



wherein R is selected from the group consisting of hydrogen, alkyl, alkoxy, and halo, and X is halide with an S-substituted-β-aminoethanethiol, wherein the substituted radical is selected from the group consisting of an alkenyl and an aralkyl radical having a double bond in the β, γ position relative to the sulfur atom, to form the corresponding N-substituted-β-alanyl-S-substituted-β-amino-ethanethiol.

2,744,120

1-DEHYDROTESTOLOLACTONE

Josef Fried and Richard W. Thoma, New Brunswick, N. J., assignors to Olin Mathieson Chemical Corporation, New York, N. Y., a corporation of Virginia

No Drawing. Application January 14, 1953, Serial No. 331,333

1 Claim. (Cl. 260—343.2)

1-dehydrotestololactone.

2,744,121

PREPARATION OF SUBSTITUTED TETRAHYDROPYRANS

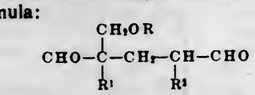
Reginald Harold Hall, Sutton, England, assignor to The Distillers Company Limited, Edinburgh, Scotland, a British company

No Drawing. Application July 14, 1951, Serial No. 236,857

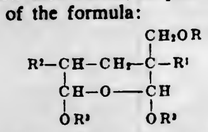
Claims priority, application Great Britain August 1, 1950

13 Claims. (Cl. 260—345.9)

1. A process which comprises reacting a dialdehyde of the formula:



with an alcohol of the formula R^3OH where R and R^3 are radicals selected from the group consisting of lower alkyl, lower alkenyl, lower cycloalkyl and monocyclic aryl hydrocarbons, and R^1 and R^2 are alkyl radicals of not more than 2 carbon atoms, in the presence of a catalyst selected from the group consisting of strong acids and acid-activated earths, to produce a substituted tetrahydropyran of the formula:



wherein R, R^1, R^2 and R^3 have the significance indicated above.

2,744,122

Δ^4-19-NOR-17α-ETHINYLANDROSTEN-17β-OL-3-ONE AND PROCESS

Carl Djerassi, Birmingham, Mich., and Luis Miramontes and George Rosenkranz, Mexico City, Mexico, assignors, by mesne assignments, to Syntex S. A., Mexico City, Mexico, a corporation of Mexico

No Drawing. Application November 12, 1952, Serial No. 320,154

Claims priority, application Mexico November 22, 1951

4 Claims. (Cl. 260—397.4)

4. Δ^4-19-nor-17α-ethinylandrosten-17β-ol-3-one.

2,744,123

ALKYL IODIDE CATALYZED TUNG OIL ISOMERIZATION

Leo A. Goldblatt, New Orleans, La., assignor to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application December 4, 1953, Serial No. 396,353

4 Claims. (Cl. 260—405.6)

(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A process of producing beta-eleostearates by isomerizing alpha-eleostearates which comprises: mixing alpha-eleostearates with from about 0.005 to 0.02 parts by weight of an alkyl iodide of from about 1 to 5 carbon atoms.

2,744,124

PROCESS FOR PREPARING FATTY ACID PARTIAL ESTERS OF POLYHYDRIC ALCOHOLS

William Godfrey Alsop, Summit, N. J., assignor to Colgate-Palmolive Company, Jersey City, N. J., a corporation of Delaware

No Drawing. Application November 28, 1952, Serial No. 323,125

13 Claims. (Cl. 260—410.7)

1. A continuous process of producing polyhydric alcohol esters of fatty acids having a high monoester content which comprises continuously passing a mixture of a polyester of a polyhydric alcohol and a polyhydric alcohol through a reaction zone maintained at a temperature from about 200° to about 350° C. while subjecting the mixture while flowing through said reaction zone to efficient agitation in order to promote intimate admixture of the reactants, regulating the rate of flow of said reaction mixture through said reaction zone so as to provide a hold-up time in said reaction zone not exceeding about 7 minutes but sufficient to reach substantial equilibrium, continuously withdrawing the reaction mixture from said reaction zone and immediately cooling said reaction mixture, thereby obtaining a reaction product rich in fatty acid monoesters of a polyhydric alcohol.

2,744,125

ISOLATION OF FATTY ACIDS FROM GUAYULE RESIN

James W. Meeks and Thomas F. Banigan, Jr., Salinas, Calif., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application April 10, 1953, Serial No. 348,135

4 Claims. (Cl. 260—413)

(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A method of isolating fatty acids from guayule resin which comprises saponifying the resin at a temperature of about from 20 to 100° C. with an aqueous solution of an alkaline reagent, extracting non-saponified substances from the resulting saponification reaction mixture with an organic, water-immiscible fat solvent, acidifying the remaining material to liberate the fatty acids and collecting these fatty acids.

2,744,126

PREPARATION OF LEAD-SODIUM ALLOY AND TETRAETHYLLEAD

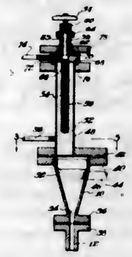
Edwin L. Mattison, Newark, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

Application May 2, 1950, Serial No. 159,575

18 Claims. (Cl. 260—437)

3. The process which comprises passing a stream of molten lead-sodium alloy, containing from 9.9% to 10.1% by weight of sodium, at a temperature of from about 370° C. to about 750° C. through an orifice of less than ½ inch in diameter and then into a violently agitated body of liquid ethyl chloride maintained at a temperature of from about −50° C. to +90° C. in a quenching chamber, employing about 1 part of alloy to from 9 parts to 1 part by weight of ethyl chloride and forming a slurry of unreacted alloy in ethyl chloride in which the alloy is in the form of bright solid particles up to about 8 mesh in size, and then separating the solid alloy particles from the ethyl chloride while they are still bright.

18. A process of making tetraethyl lead, which comprises quenching a molten lead-sodium alloy by introducing it into a body of cold liquid ethyl chloride held in a container at a temperature at which the ethyl chloride does not react with the quenched alloy in said container during the introduction of the molten alloy, and subsequently alkylating the lead of the unreacted, quenched alloy with liquid ethyl chloride.



2,744,127

PROCESS FOR THE MANUFACTURE OF TRIALKYLALUMINIUM COMPOUNDS

Karl Ziegler and Konrad Nagel, Mulheim an der Ruhr, Germany; said Nagel assignor to said Ziegler

No Drawing. Application May 12, 1953, Serial No. 354,626

Claims priority, application Germany May 13, 1952

4 Claims. (Cl. 260—448)

1. Process for the production of aluminium trialkyls free from substantial quantities of halogen which comprises reacting an alkyl halide at a temperature between 30 and 170° C. with a magnesium-aluminium alloy containing from 57 to 65% of magnesium and from 43 to 35% of aluminium in an ether-free reaction mixture and recovering the aluminium trialkyl thus formed.

2,744,128

OLEFINICALLY UNSATURATED PHOSPHATES

Rupert C. Morris, Berkeley, and John L. Van Winkle, San Lorenzo, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application February 29, 1952, Serial No. 274,304

12 Claims. (Cl. 260—461)

1. An ester of an alpha, beta-olefinically unsaturated alcohol and a member of the group consisting of the 2-hydroxy-2-oxo-1,3,2-dioxaphospholanes, 2-hydroxy-2-oxo-1,3,2-dioxaphosphorinanes, and the 2-thiono analogues of these compounds, one of the carbon atoms involved in the olefinic linkage of the said alpha,beta-olefinically unsaturated alcohol being attached directly to the ester oxygen atom.

2,744,129

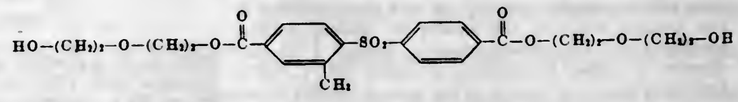
OMEGA HYDROXYALIPHATIC DIESTERS OF SULFONYL DIBENZOIC ACIDS

John R. Caldwell, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 3, 1952, Serial No. 313,071

1 Claim. (Cl. 260—470)

The hydroxyethoxyethyl diester of 6-methyl-4,4'-sulfonyldibenzoic acid having the following formula:



2,744,130

QUATERNARY AMMONIUM MONOMERS AND POLYMERS THEREOF

Hilmer Ernest Winberg, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application April 11, 1952, Serial No. 281,901

2 Claims. (Cl. 260—482)

1. A quaternary ammonium salt of an acid of molecular weight up to 250 wherein the four radicals attached in the cation to nitrogen are (*a*) two alkyl radicals of one to four carbons, (*b*) a methacrylyloxyalkyl radical wherein the alkyl is of two to three carbons, (*c*) an alkyl radical of one to three carbons having a substituent of the class consisting of the carboxyl group and esters thereof with alkanols of one to four carbons.

2,744,131

PROCESS FOR PREPARING THREO-1-PHENYL-1,3-DIACYLOXY-2-AMINO-PROPANE-HYDROCHLORIDES

Alberto Vercellone and Carlo Giuseppe Alberti, Milan, Italy, assignors to Farmaceutici Italia S. A., a corporation of Italy

No Drawing. Application August 29, 1951, Serial No. 244,274

Claims priority, application Italy February 8, 1951

6 Claims. (Cl. 260—487)

2. A process for preparing the 1,3-acetoxy-, 1,3-bisdichloroacetoxy-, 1-dichloroacetoxy-3-acetoxy- and 1-acetoxy-3-dichloroacetoxy compounds of threo-1-phenyl-2-amino-propane hydrochloride, which comprises treating, in an anhydrous medium and at a temperature not higher than 35° C., threo-1-phenyl-2-amino-1,3-propanediol with hydrochloric acid and an acetylating agent taken from the group consisting of acetyl chloride and dichloroacetylchloride.

2,744,132

METHOD OF PRODUCING ALKYL PHOSPHONYL DIHALIDES

John P. Clay, Dugway Proving Ground, Tooele, Utah, assignor to The Board of Higher Education (Hunter College), New York, N. Y.

No Drawing. Application June 7, 1952, Serial No. 292,390

3 Claims. (Cl. 260—543)

1. The process of producing $RPOCl_2$ where R is an alkyl radical containing up to 4 carbons comprising the step of partially hydrolyzing the complex $RCl \cdot PCl_3 \cdot AlCl_3$ in cold concentrated hydrochloric acid, the molal ratio of water to complex being between 7:1 and 11:1.

2,744,133
PROCESS FOR THE PRODUCTION OF LOW-BIURET CONTENT UREA

Charles Cramer, Vaduz, Liechtenstein, assignor to Inventa A. G. fuer Forschung und Patentverwertung, Zurich, Switzerland

No Drawing. Application April 24, 1953, Serial No. 358,955
2 Claims. (Cl. 260—555)

1. In the production of low-biuret content urea by synthesis from CO_2 and NH_3 and decomposition of unconverted primarily formed ammoniumcarbamate, the steps which comprise carrying out said decomposition in two separate stages by first passing an aqueous solution containing said ammoniumcarbamate through a reaction chamber at higher temperature of about 140° C. for a very short time of a fraction of one second, thereby effecting the decomposition of about 90% of ammoniumcarbamate present in the solution, with formation of only 0.2–0.4% of biuret, separating the gaseous and liquid reaction product, and thereafter maintaining the remaining approximately 10% of carbamate contained in the liquid phase at lower temperature of about 78° C. for a period of several minutes, thus obtaining a urea with said low biuret content.

2,744,134
PREPARATION OF ALIPHATIC CARBOXYLIC ACID AMIDES FROM SATURATED ALIPHATIC HYDROCARBONS

Marcus A. Naylor, Jr., Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application July 29, 1950, Serial No. 176,765
6 Claims. (Cl. 260—561)

1. A process for preparing alkanoic amides which comprises introducing an alkane having from 3 to 8 carbon atoms per molecule, sulfur, water and ammonia into a pressure-resistant vessel, and thereafter heating the resultant mixture under superatmospheric pressure at a temperature in the range of 300° C. to 360° C., whereby alkanoic amide formation occurs, and separating from the resulting mixture the said alkanoic amide thus produced.

2,744,135
PROCESS FOR PREPARING THREO-1-P.NITRO-PHENYL-2-ACYLAMINO-1,3-PROPANEDIOLS

Alberto Vercellone and Carlo Giuseppe Alberti, Milan, Italy, assignors to Farmaceutici Italia S. A., a corporation of Italy

No Drawing. Application August 29, 1951, Serial No. 244,273
Claims priority, application Italy January 12, 1951
4 Claims. (Cl. 260—562)

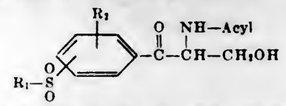
1. A process for preparing threo-1-p-nitrophenyl-2-acetylamino-1,3-propanediol which comprises reacting a threo - 1 - phenyl - 2 - acylamino - 3 - acyloxy - propane-1-ol, selected from the group consisting of threo-1-phenyl-2-acetylamino-3-acetoxy-propane-1-ol and threo-1-phenyl - 2 - chloroacetylamino - 3 - chloroacetoxy - propane-1-ol, with gaseous hydrochloric acid dissolved in an anhydrous organic solvent at a temperature between about 0 and about 30° C., treating the resulting O,O-diacyl hydrochloride with a nitrating agent of the group consisting of fumic nitric acid and mixed nitric and sulphuric acid at a temperature lower than 0° C., separating the resulting 1-p-nitrophenyl-1,3-diacyloxy-2-aminopropane N-nitrate by filtration, alkalizing, at a temperature between 0 to 40° C., to a pH value higher than 8 and recovering threo-1-p-nitrophenyl-2-acylamino-1,3-propanediol.

2,744,136
AMIDES OF SULFONYLSERINOPHENONES

Walter A. Gregory, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 16, 1953, Serial No. 337,235
5 Claims. (Cl. 260—562)

1. A compound of the formula



where R_1 is a member of the class consisting of alkyl, halogeno lower alkyl, cyclohexyl, cyclopentyl and vinyl groups, R_2 is a member of the class consisting of hydrogen, halogen, lower alkyl and lower alkoxy radicals, said acyl being a carboxylic acid acyl radical.

2,744,137
PROCESS FOR THE MANUFACTURE OF N-METHYL-β-CYCLOHEXEN-(1)-YLETHYL-AMINE

Rudolf Grewe, Kiel, Germany, assignor to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application May 26, 1953, Serial No. 357,617
Claims priority, application Germany May 29, 1952
6 Claims. (Cl. 260—563)

1. A process which comprises reacting β-cyclohexen-(1)-yl-ethyl-amine in the presence of a condensing agent selected from the group consisting of zinc chloride and the complex salt of zinc chloride with β-cyclohexen-(1)-yl-ethyl-amine with a ketone of the general formula



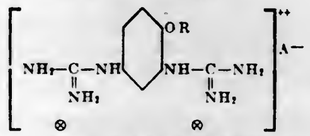
R being selected from the group consisting of the phenyl radical and lower alkyl radicals, to form the corresponding Schiff base, reacting the latter with a methyl ester of a strong inorganic acid and treating the condensation product formed with an alkali metal hydroxide so as to produce N-methyl-β-cyclohexen-(1)-yl-ethyl-amine.

2,744,138
DI-GUANIDINO-PHENOL ETHERS

Aurelio di Marco and Claudio Pasini, Milan, Italy, assignors to Farmaceutici Italia S. A., a corporation of Italy

No Drawing. Application July 17, 1952, Serial No. 299,504
Claims priority, application Italy July 25, 1951
3 Claims. (Cl. 260—565)

1. A compound of the formula:



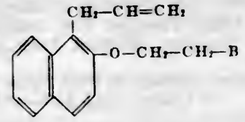
wherein A^{--} is the radical of a strong inorganic, not strongly oxidizing, acid, and R is an alkyl radical with a straight chain having from 8 to 16 carbon atoms.

2,744,139
BASIC ETHERS OF PHENOLS

Stephen B. Binkley, Wheaton, Ill., and Lee C. Cheney, Fayetteville, N. Y., assignors to Bristol Laboratories Inc., Syracuse, N. Y., a corporation of New York

No Drawing. Application February 18, 1953, Serial No. 337,664
5 Claims. (Cl. 260—567.6)

1. A member selected from the group consisting of the free bases, the non-toxic acid addition salts and the non-toxic quaternary salts of ethers having the general formula



where B represents di (lower) alkylamino.

2,744,140
PROCESS FOR THE PREPARATION OF THREO-1-P.NITRO PHENYL-2-AMINO-1,3-PROPANEDIOL

Alberto Vercellone and Carlo Giuseppe Alberti, Milan, Italy, assignors to Farmaceutici Italia S. A., a corporation of Italy

No Drawing. Application August 29, 1951, Serial No. 244,271
Claims priority, application Italy November 28, 1950
5 Claims. (Cl. 260—570.6)

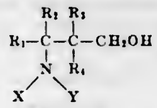
1. A process for preparing threo-1-p-nitrophenyl-2-amino-1,3-propanediol, which comprises reacting, in the presence of an inert organic solvent substantially immiscible with water, 1-phenyl-2-acetylamino-3-acetoxy-propane-1-o1 of any diastereoisomeric form with a dehydrating agent of the group consisting of $COCl_2$, $POCl_3$ and PCl_5, at a temperature between about 0 and about 85° C., treating the reaction product with an agent of the class consisting of water and of aqueous solutions of alkali carbonates in the presence of the said water-immiscible inert organic solvent, treating the resulting N-hydrochloride of threo - 1 - phenyl - 1,3 - diacetoxy - 2 - aminopropane with fumic nitric acid free from nitrous acid at a temperature lower than 0° C., and saponifying the resulting 1 - p - nitrophenyl - 1,3 - diacetoxy - 2 - aminopropane N-nitrate with dilute mineral acid at about 100° C.

2,744,141
METHOD OF PREPARING SATURATED ALIPHATIC BETA-SECONDARY- AND TERTIARY-AMINO ALCOHOLS

Kenyon J. Hayes and Gordon D. Drake, Norwich, N. Y., assignors, by mesne assignments, to The Norwich Pharmacal Company, Norwich, N. Y., a corporation of New York

No Drawing. Application June 26, 1951, Serial No. 233,682
6 Claims. (Cl. 260—584)

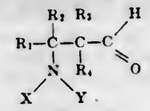
1. The method of preparing a saturated aliphatic beta-amino alcohol of the general formula:



in which:

R_1 is a member of the group consisting of H and lower alkyl
R_2 is a member of the group consisting of H and lower alkyl
R_3 is a member of the group consisting of H and lower alkyl
R_4 is a member of the group consisting of H and lower alkyl
X is a member of the group consisting of H and lower alkyl
Y represents lower alkyl

which comprises reducing a corresponding amino aldehyde of the general formula:



in which:

R_1 is a member of the group consisting of H and lower alkyl
R_2 is a member of the group consisting of H and lower alkyl
R_3 is a member of the group consisting of H and lower alkyl
R_4 is a member of the group consisting of H and lower alkyl
X is a member of the group consisting of H and lower alkyl
Y represents lower alkyl

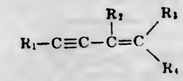
with aluminum isopropoxide in isopropanol at reflux temperature.

2,744,142
REDUCTION PROCESS

William Oroshnik, Plainfield, N. J., assignor to Ortho Pharmaceutical Corporation, a corporation of New Jersey

No Drawing. Application August 8, 1952, Serial No. 303,427
4 Claims. (Cl. 260—611)

1. A process for the reduction of a conjugated en-yne to a diene comprising: treating a compound of the formula



in which each of R_2 and R_4 may be selected from the class consisting of hydrogen and alkyl, aryl, aralkyl, and alkaryl radicals and in which R_1 and R_3 are selected from the group consisting of alkyl substituted cyclohexenyl alkenes, saturated and ethylenically unsaturated aliphatic hydrocarbons, and hydroxy and alkoxy derivatives of saturated and ethylenically unsaturated aliphatic hydrocarbons, with the proviso that one and only one of R_1 and R_3 is an alkyl substituted cyclohexenyl alkene; with a reducing reagent containing chromous hydroxide in suspension in a liquid medium containing a compound having an active hydrogen, the reducing reagent having a pH of at least 7.

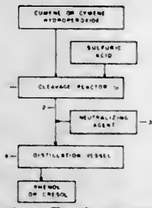
2,744,143
MANUFACTURE OF PHENOLS

Leo J. Filar, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

Application September 2, 1953, Serial No. 378,159
8 Claims. (Cl. 260—621)

1. In a continuous process for production of a phenol by sulfuric acid catalyzed cleavage of a hydroperoxide of the group consisting of cumene hydroperoxide and a cymene hydroperoxide to the corresponding phenol in a cleavage reactor and subsequent separation of said phenol by distillation in a heated distillation vessel in which process continuous neutralization of the cleavage mixture is effected in the flowing stream of cleavage reaction mixture passing from the cleavage reactor to the distillation vessel by the proportionate continuous feeding of a neutralizing amount, based on the flow rates, of a neutralizing agent

to the flowing stream of the cleavage reaction mixture, the improvement which comprises effecting neutralization by means of a neutralizing agent in which at least



80 mole per cent of the effective neutralizing component is the sodium salt of said phenol in aqueous solution of solids concentration in the range of about 10% to about 60% of said solution.

2,744,144

PURIFICATION OF PHENOL

Donald H. Sheffield, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 28, 1953, Serial No. 400,785
6 Claims. (Cl. 260—621)

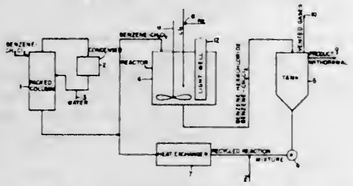
1. The method of purifying phenol obtained in the process of oxidation of an alkyl benzene consisting essentially of cumene and cleavage of the resulting hydroperoxide, and containing a genetic impurity of the group consisting of α-methylstyrene and mesityl oxide which comprises contacting said impure phenol in the liquid phase with a hexane boiling in the range of about 62° C. to about 67° C., allowing the resulting mixture to separate into a phenol phase and a hexane phase, and separating the phenol phase from the hexane phase.

2,744,145

PRODUCTION OF BENZENE HEXACHLORIDE IN IRON REACTION CHAMBERS

Hobert C. Twiehaus and Quentin T. Prindle, New Martinsville, W. Va., assignors to Columbia-Southern Chemical Corporation

Application November 14, 1952, Serial No. 320,477
2 Claims. (Cl. 260—648)



1. A method of preparing benzene hexachloride which comprises additively chlorinating benzene in a liquid mixture containing benzene and chlorine under the influence of an addition chlorination catalyst, maintaining substantially anhydrous conditions in the reaction mixture and performing the chlorination in a reactor having a substantial metallic ferrous surface area in contact with the liquid mixture.

2,744,146

PRODUCTION OF BENZENE HEXACHLORIDE

Frederick C. Dehn, New Martinsville, W. Va., assignor to Columbia-Southern Chemical Corporation, Allegheny County, Pa., a corporation of Delaware

No Drawing. Application May 22, 1952, Serial No. 289,433
8 Claims. (Cl. 260—648)

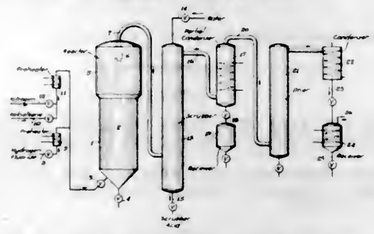
6. A method of producing benzene hexachloride by addition reaction of elemental chlorine and benzene which comprises catalyzing such reaction with an aqueous solution of water soluble metal salt of acetic acid.

2,744,147

FLUORINATION OF HALOALKANES WITH A CATALYST CONTAINING GAMMA ALUMINA

Warren N. Milks, Freeport, Tex., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

Application February 4, 1952, Serial No. 269,728
12 Claims. (Cl. 260—653)



6. A method of fluorinating haloalkanes which comprises passing a vapor mixture of a haloalkane having from one to two carbon atoms, including at least one carbon atom attached to a minimum of two halogens of atomic number not greater than 35, at least one of which is of atomic number from 17 through 35 inclusive, and at least an equimolar proportion of hydrogen fluoride at a reaction temperature greater than 180° C. through a bed of a catalyst consisting essentially of a halide of at least one metal of the group consisting of cobalt, nickel, and chromium impregnated on an activated alumina which always contains gamma alumina and consists preponderantly of at least one member of the group consisting of gamma, chi, and kappa alumina.

2,744,148

PROCESS FOR FLUORINATION OF HALOALKANES USING A HYDROGEN FLUORIDE ACTIVATED CATALYST CONTAINING ALUMINA, A METAL FLUORIDE AND BASIC ALUMINUM FLUORIDE

Robert P. Ruh and Ralph A. Davis, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application February 4, 1952, Serial No. 269,888
15 Claims. (Cl. 260—653)

1. A method of fluorinating haloalkanes which comprises passing a vapor mixture of a haloalkane having from 1 to 2 carbon atoms, including at least one carbon atom attached to a minimum of two halogens of atomic number not greater than 35, at least one of which is of atomic number from 17 through 35 inclusive, and at least an equimolar proportion of hydrogen fluoride at a reaction temperature in the range of 150° to 500° C. through a bed of a catalyst consisting essentially of at least five percent by weight of a basic aluminum fluoride and at least one member of the group consisting of alumina, alumina hydrate, and aluminum fluoride promoted with at least one halide of a metal of the group consisting of chromium, cobalt, nickel, copper, and palladium.

2,744,149

PREPARATION OF m- AND p-CYMENE MIXTURE BY ISOMERIZATION OF CYMENE

Herman I. Enos, Jr., Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application June 29, 1953, Serial No. 364,967
7 Claims. (Cl. 260—668)

1. The process for the production of a mixture of o-, m-, and p-cymene in which the o-cymene content is less than about 5% which comprises subjecting a cymene to contact with 0.1–2 mole per cent aluminum chloride, based on the moles benzenoid materials in the reaction

mixture at 80°–150° C. under isomerizing conditions until the isomerized cymene mixture contains essentially m- and p-cymene and less than about 5% o-cymene based on the total cymene content and separating the mixture from the catalyst.

2,744,150

PREPARATION OF m- AND p-DIISOPROPYLBENZENE

Herman I. Enos, Jr., Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application June 29, 1953, Serial No. 364,965
7 Claims. (Cl. 260—671)

1. The method of preparing a diisopropylbenzene substantially free of o-diisopropylbenzene and trimethylindane which comprises propylating benzene in an alkylation reaction with a propylene-containing gas, containing no higher molecular weight unsaturates, at as low a temperature in the range of 30°–150° C. and in the presence of as small an amount of an alkylation catalyst as will bring about alkylation to a mixture rich in polyisopropylbenzene, separating the polyisopropylbenzenes free of trimethylindane from the by-products of the alkylation reaction, contacting a disproportionation reaction mixture consisting essentially of the polyisopropylbenzenes in admixture with benzene wherein the ratio of isopropyl groups to benzene groups is approximately 2:1 with 0.1 to 2 mole per cent of the disproportionation reaction mixture of aluminum chloride at a temperature in the range of 65°–115° C. to effect a disproportionation reaction, until the disproportionation reaction mixture is enriched in m-diisopropylbenzene and is substantially free of o-diisopropylbenzene and trimethylindane, and separating at least one of the group of m-diisopropylbenzene and p-diisopropylbenzene from the disproportionation reaction mixture by distillation.

2,744,151

CONVERSION OF METHANOL TO HYDROCARBONS AT SUPERATMOSPHERIC PRESSURE OVER MODIFIED METAL MOLYBDITE CATALYSTS

Frank S. Fawcett, Wilmington, Del., and Benjamin W. Howk, West Chester, Pa., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application January 30, 1953, Serial No. 334,376
6 Claims. (Cl. 260—682)

1. A process for preparing a normally solid hydrocarbon wax which comprises introducing methanol into a pressure-resistant reaction vessel, heating the said methanol under superatmospheric pressure without addition of any other reactant at a reaction temperature within the range of 100° to 350° C. in the presence of a catalyst containing a metal molybdite modified with a nickel chromite, continuing said heating until the said methanol is converted, at least in part, to a normally solid essentially hydrocarbon wax, and thereafter separating the said wax from the resulting mixture.

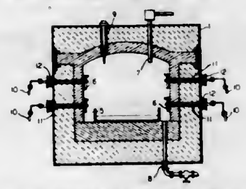
ELECTRICAL

2,744,152

ELECTRIC FURNACE WITH CARBONACEOUS ATMOSPHERE

Samuel R. White, Jr., Ballston Spa, N. Y., assignor to General Electric Company, a corporation of New York

Application October 28, 1954, Serial No. 465,409
6 Claims. (Cl. 13—20)



5. An electrically heated furnace comprising a heating enclosure for receiving articles to be treated, means for introducing into said enclosure a carbonaceous atmosphere containing carbon monoxide, heating means comprising electrical heating elements mounted within said enclosure, conductor elements extending into said enclosure and connected to said heating elements, and a coating of chromium over at least a portion of said conductor elements for reducing the rate of carbon deposit thereon.

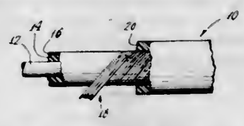
2,744,153

INSULATED WIRE

James E. Flood, Norwich, Conn., assignor to The Plastic Wire & Cable Corporation, Borough of Jewett City, New London County, Conn., a corporation of Connecticut

Application January 23, 1951, Serial No. 207,342
5 Claims. (Cl. 174—121)

1. An insulated electrical conductor comprising a metallic conductor, a primary insulating jacket surrounding and in contact with said conductor, said jacket having a cementitious surface layer, an insulating and strengthening barrier in the form of a serving comprising a plurality of separate, unconnected, substantially parallel filaments of glass filamentary material on said layer, said surface layer including a volatile solvent and having a thickness sufficient to enable embedding of the separate glass filaments therein to varying depths in accordance with the winding tension in the separate fila-



ments before the solvent has evaporated and while the layer is spongy, whereby the tensions on the individual glass filaments are substantially equalized, said filaments being locked in said cementitious surface layer when the solvent is evaporated therefrom, and an outer protective insulating jacket on said filament-embedded cementitious surface layer.

2,744,154

INSULATED FENCE POST

Arthur W. Ludwig, Winlock, Wash.

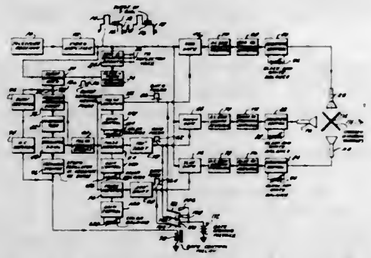
Application May 18, 1953, Serial No. 355,638
3 Claims. (Cl. 174—158)



1. An insulating post for an electric fence having a plurality of spaced parallel electrically charged fence wires, said post comprising a length of metal rod having a plurality of spiral turns formed therein in longitudinally

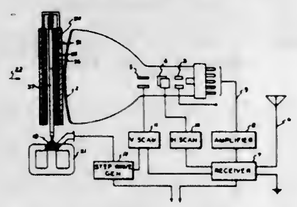
spaced relation therealong, the axes of said spiral turns being parallel and generally perpendicular to said rod, a plurality of insulating sleeves positioned on said rod throughout said turns and the adjacent ends of each of said turns being axially spaced to permit the passage of a respective one of said fence wires between the ends of a respective one of said insulating sleeves over a respective one of said turns.

2,744,155
COLOR OR MONOCHROME TELEVISION RECEIVING SYSTEM
Harry Kihn, Lawrenceville, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application May 1, 1950, Serial No. 159,288
20 Claims. (Cl. 178—5.4)



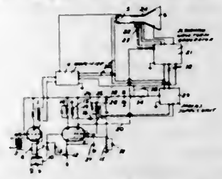
1. In a television receiver adapted to receive a composite color signal including a color component and a control component, said color component comprising a plurality of video signals respectively representative of the colors of a subject, said video signals having a given color recurrence frequency and respectively having mutually distinguishing phases relative to said control component, and said control component comprising a burst of several cycles of a wave having said color recurrence frequency, the combination including: means operable to derive said color component from said composite color signal; means controlled by said control component burst for producing a wave having said color recurrence frequency; means for employing said wave to control the operation of said signal deriving means; and means controlled by said control component burst for rendering said signal deriving means operable.

2,744,156
ELECTRO OPTICAL SCREENS FOR COLOR TELEVISION
Pierre Marie Gabriel Toulon, New York, N. Y., assignor, by direct and mesne assignments, of seventy-five per cent to Products & Licensing Corporation, New York, N. Y., a corporation of Delaware, and twenty-five per cent to Nelson Moore and William D. Hall, as joint tenants
Application May 16, 1950, Serial No. 162,327
7 Claims. (Cl. 178—5.4)



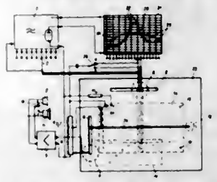
3. In a system for transforming a monochrome image to a polychrome image, a vibrating transparent screen having thereon groups of transparent primary colored lines, the plane of said screen placed substantially parallel with the plane of said monochrome image, optical means located intermediate said monochrome image and said screen for transforming said image into a lined image having separations between the lines thereof, a further optical device located between said screen and the eye of an observer and cooperating with said first optical means for removing said separations between the lines and reconstituting said image and cyclic means for applying intermittent force to said screen.

2,744,157
TELEVISION APPARATUS FOR USE IN RELAY SYSTEMS
Eric John Gargini, Ylewsley, England, assignor to Electric & Musical Industries Limited, Hayes, England, a company of Great Britain
Application February 7, 1952, Serial No. 270,420
Claims priority, application Great Britain February 24, 1951
11 Claims. (Cl. 178—5.8)



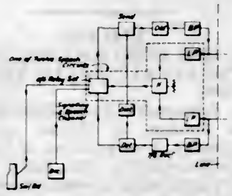
1. In a wired television relay system having a relay station for transmitting video and control signals, a television relay receiver including at least one thermionic valve with a heater, a cathode ray reproducing tube with a heater, a mains supply unit for supplying current to the heaters of said valve and cathode ray tube, and a relay device comprising a coil and contacts, said contacts being connected in circuit with said mains supply unit and signals transmitted by means feeding and control signals to said coil to operate said contacts to switch off the current supply to the heaters of said valve and cathode ray tube.

2,744,158
AUDIOMETER
Walter Grandjot, Bremen, Germany
Application April 20, 1950, Serial No. 157,019
4 Claims. (Cl. 179—1)



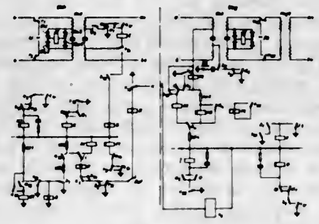
1. In an apparatus for measuring hearing loss, a table for receiving a card on which a plot of hearing loss intensity against frequency may be made, means manually operated for varying the frequency of a tone over substantially the audible hearing range, said means having an arm movable therewith over said card for indicating the frequency at which said manual means is being operated, means manually operated for varying the intensity of said tone at the desired operating frequency, said last means comprising a marking card having holes therein plotted in accordance with hearing loss values for a normal person at different frequencies with reference to a zero line, means for moving said card at right angles to said arm for controlling the intensity of the tone whereby when threshold intensities are being observed, the position of the marking card and holes therein indicate the point of the selected volume at the selected frequency and thereby the hearing loss intensity for the individual on whom the measurements are being made.

2,744,159
MULTIPLEX ELECTRIC SIGNALLING SYSTEM
Esmond Philip Goodwin Wright, George Clifford Hartley, Donald Adams Weir, and Joseph Rice, London, England, assignors to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application February 26, 1951, Serial No. 212,723
Claims priority, application Great Britain February 28, 1950
24 Claims. (Cl. 179—15)



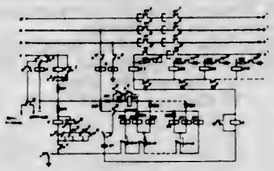
1. Multi-channel carrier telecommunication terminal equipment for a carrier system having a plurality of telecommunication channels and a common signal channel comprising time division multiplex signalling equipment adapted to produce a repetitive cycle of time positioned pulses, means for allotting successive of said pulses for the signals of respective telecommunication channels, means responsive to a call originating on one of said telecommunication channels for transmitting the pulses allotted to that channel over said common signal channel, means for receiving pulses for said signal channel, separate control means for each telecommunication channel connected to said transmitting means and said receiving means, and means operated by said receiving means for actuating said control means to control the pulses transmitted at the time allotted to a telecommunication channel in accordance with signals originating on said telecommunication channel.

2,744,160
CIRCUIT ARRANGEMENT FOR PULSE CONTROLLED TELEPHONE SYSTEMS
Willy Bergholtz and Heinz Plitschka, Stuttgart-Zuffenhausen, Germany, assignors to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application April 30, 1953, Serial No. 352,122
Claims priority, application Germany May 2, 1952
3 Claims. (Cl. 179—16)



1. In an impulse-controlled telephone signalling system utilizing a plurality of two-way impulse repeater stations, a circuit for controlling the directional preference of impulses transmitted between said stations in accordance with the progress of the connection between calling and called stations disposed at opposite termini of said stations respectively, comprising a pair of line wires and a control wire interconnecting said stations, a first of said line wires adapted to become a path for the transmission of forward signals from a first one of said stations to the second one of said stations and the other of said line wires adapted to become a path for the transmission of backward signals from said second station to said first station, separate impulse receiving means at each of said stations, each disposed between said stations and the calling or called stations, respectively, and adapted to respond to forward or backward signals respectively, originating at said calling or called stations, first pulse repeating means at said second stations, an operating circuit for said first repeating means including said first line wire and the impulse receiving means at said first station, said first repeating means adapted to repeat forward signals to said called station, second pulse repeating means at said first station, an operating circuit for said second repeating means including said second line wire and the impulse receiving means at said second station, said second repeating means adapted to repeat backward signals to said calling station, first signal suppressor means at said second station for suppressing operation of said first pulse repeating means, said first suppressor means under control of the impulse receiving means at said second station, whereby forward signals are suppressed during the period backward signals are being received by said last mentioned impulse receiving means, a transfer relay at said first station, an operating path for said transfer relay over both said line wires, said transfer relay under control of said suppressor means, said transfer relay having a contact adapted to disconnect the pulse repeating means at said first station from said first line wire to render said first station in a backward signal receiving condition and delay means to prevent disconnection of said suppressor means until a predetermined time after the receipt of a final backward signal by said second station.

2,744,161
CIRCUIT ARRANGEMENT FOR ALL-RELAY SELECTING EQUIPMENT
Arthur Mehlis, Stuttgart-Zuffenhausen, Wurttemberg-Baden, Germany, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application November 16, 1951, Serial No. 256,688
Claims priority, application Germany November 18, 1950
9 Claims. (Cl. 179—18)

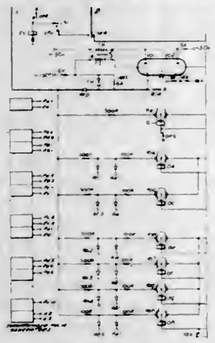


1. In an all-relay switching system for connecting an incoming line with an idle one of the desired numerical groups of outgoing lines, a first group of multi-contact relays, one relay for each group of outgoing lines, a second group of multi-contact relays, one relay for each line of the outgoing groups, means controlled over the incoming line for operating the relay of the first group associated with the desired numerical group of outgoing lines, a test circuit closed thereupon for the winding of a relay of the second group associated with an idle outgoing line in the desired group of outgoing lines, a circuit completed thereupon between the last mentioned line and the incoming line over contacts of the operated relays of the first and second groups, the relays of said first group of relays being two-step relays, the means controlled over the incoming line being responsive to dialing pulses and causing one after the other of the relays of the first group to perform the first step, and means operative upon the performance of the first step by the last relay responding to the final dialing pulse for causing said last relay to perform the second step.

2,744,162
SELECTION SYSTEM FOR ELECTRICAL CIRCUITS OR EQUIPMENTS

Martinus den Hertog and Constantinus de Zeeuw, Antwerp, Belgium, assignors to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware

Application June 14, 1950, Serial No. 168,072
Claims priority, application France June 24, 1949
24 Claims. (Cl. 179—18)

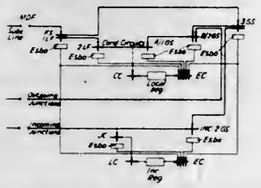


1. Electrical testing equipment for electrically testing among a number of electrical outlets or circuits comprising means effectively for producing a number of recurring electrical pulses, spaced in time, and representing test characteristics, the number of said pulses being greater than the number of said circuits or outlets, a scanning device connected to all of said circuits or outlets, means effectively connecting said pulse producing means to said scanning device at separate times, so as to associate a plurality of test characteristics with each single circuit or outlet, and means for applying a plurality of separate tests to said scanning device for separately checking the identity of each of the plurality of test characteristics associated with said circuit or outlet.

2,744,163
TELEPHONE EXCHANGE EQUIPMENT

Martinus den Hertog, Antwerp, Belgium, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware

Application March 23, 1953, Serial No. 343,871
Claims priority, application Great Britain
January 16, 1950
27 Claims. (Cl. 179—18)



1. An automatic telecommunication exchange comprising a plurality of selector stages, each including a plurality of individual selector switch circuits and common control circuits each normally connected to a number of said individual selector switch circuits, a plurality of register controllers, connecting equipment connected between said register controllers and a plurality of said common control circuits for directly connecting said register controllers and said common control circuits for the control of selection at the associated selecting stages, said connecting equipment comprising connecting switches, each connecting switch being individual to a register controller and connected thereto, said connecting switches being arranged to connect said register controller to the common control circuits of at least one selector stage, means at each selector stage controlled by the associated common control circuit for connecting an individual switch to the individual switch of a succeeding selector stage, and means in each selector stage controlled by said last mentioned means and connected to the register controller which is controlling said selector stage over said connecting equipment for signalling back to said register controller the identity of a common control circuit to which connection is to be made for controlling selection at a succeeding selector stage.

2,744,164
DEVICE FOR CONTROLLING SELECTOR SWITCHES IN AUTOMATIC TELEPHONE SYSTEMS

Hans-Joachim Jabczynski, Berlin-Zehlendorf, Germany, assignor to Siemens & Halske Aktiengesellschaft, Munich, Germany, a corporation of Germany

Application December 1, 1952, Serial No. 323,365
Claims priority, application Germany December 13, 1951
4 Claims. (Cl. 179—18)



1. In an automatic telephone system having groups of lines branching respectively in different traffic directions, each group comprising a plurality of lines, and having a hunting selector switch comprising wipers including a test wiper and drive means for stepping said wipers to seek a line in a desired group and to seize such line if idle, each idle line carrying a potential to mark its idle condition, a circuit arrangement for stopping the hunting operation of said selector switch with its wipers in engagement with an idle line to be seized, said circuit arrangement comprising an electron tube having a cathode connected with said test wiper to conduct to said tube the potential marking the line to be seized as idle, a control relay connected in the plate circuit of said tube, a pair of control electrodes for said tube, and a device for simultaneously connecting to said control electrodes of said tube marker impulses which designate the traffic direction of the idle line to be seized, said device comprising an impulse source for producing said marker impulses, a wiper forming part of said hunting selector switch for connecting said impulse source to one of said control electrodes, and a control switch cooperating with said hunting switch and having a wiper for connecting said impulse source with the other one of said control electrodes, said tube becoming conductive responsive to the simultaneous connection of said marker impulses produced by said source to its control electrodes and connection to the cathode thereof of the potential marking said line to be seized as idle for the purpose of energizing said relay to stop said hunting selector switch with its wipers in engagement with the idle line.

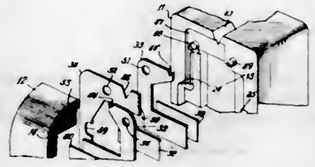
2,744,165
HEAD CONSTRUCTION FOR MAGNETIC RECORDERS AND REPRODUCERS

Benjamin B. Bauer, Oak Park, and Lee Gunter, Jr., Chicago, Ill., assignors to Shure Brothers, Incorporated, Chicago, Ill., a corporation of Illinois

Continuation of application Serial No. 32,558, June 12, 1948. This application May 29, 1950, Serial No. 164,866
4 Claims. (Cl. 179—100.2)

1. In a magnetic transducer head construction, a pair of complementary non-magnetic body members having

mating faces complementarily recessed to receive a magnet, a magnet in said recess, said magnet comprising a para-magnetic core element having a pair of pole pieces and a winding about said core element, said pole pieces being arranged with their end portions in overlapping relationship transversely of the head and spaced apart longitudinally of the head, non-magnetic spacing means between said overlapping portions to form a non-magnetic



gap therebetween, said pole pieces, spacing means and body members being jointly adapted to have a continuous recording medium travel longitudinally thereover transversely of and in engagement with the overlapping portions of said pole pieces, and means for drawing said body members toward each other and clamping said pole pieces and spacing means together under pressure between said body members and thereby fixing the length of said non-magnetic gap.

2,744,166
APPARATUS FOR DUPLICATING MAGNETIC RECORDINGS

Mellor A. Gill, Elmhurst, N. Y.

Application August 11, 1950, Serial No. 178,783
7 Claims. (Cl. 179—100.2)

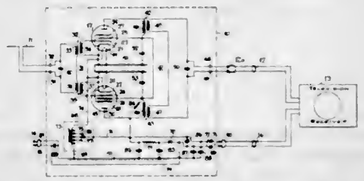


1. Magnetic recording apparatus for duplicating a master record on at least one copy record comprising an electrically conductive cylindrical form having on the surface thereof a helical groove adapted to receive said master record and said copy record in physical and electrical contact with each other throughout the active surface of said master record, a source of alternating current and connections from said source of alternating current to the ends of said form.

2,744,167
BOOSTER AMPLIFIER

Ernest V. Amy, Atlantic Beach, and Julius G. Aceves, New York, N. Y., assignors to Amy, Aceves & King, Inc., New York, N. Y., a corporation of New York

Application December 14, 1950, Serial No. 200,752
5 Claims. (Cl. 179—171)

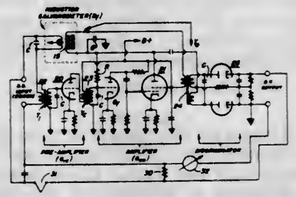


1. A booster amplifier for connecting a further amplifier having a signal circuit for selectively receiving and translating signals in a predetermined frequency band and a power energizing circuit to respectively a source of said signals and a power source, said booster amplifier comprising a signal amplifying circuit for amplifying said signals and including a vacuum tube having a filament, a transformer having an input circuit and an output circuit, said output circuit being connected in series with said filament, means for connecting said signal amplifying circuit in series between said source of signals and said signal circuit and means for connecting said input circuit of said transformer in series between said power source and said power energizing circuit and for thereby causing the current in said power energizing circuit to flow in said input circuit whereby said filament is energized whenever said further amplifier is energized.

2,744,168
D. C. AMPLIFIER

Roswell W. Gilbert, Montclair, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a corporation of New Jersey

Application January 21, 1952, Serial No. 267,463
3 Claims. (Cl. 179—171)



1. A direct current amplifier having a direct current input circuit and a direct current output circuit said amplifier comprising a direct current to alternating current converter consisting of a fixed coil and a movable coil inductively coupled to each other, said movable coil operating in a unidirectional magnetic flux field and movable relative to the fixed coil in response to current flowing in the movable coil thereby to vary the degree of inductive coupling between the coils; an alternating current amplifier having input and output circuits, said amplifier including at least one circuit resonant at a predetermined frequency and resistive regenerative feedback means sufficient with respect to the forward gain of such amplifier to cause oscillation thereof at the said predetermined frequency; circuit elements coupling the converter movable coil to the alternating current amplifier input circuit; circuit elements coupling the converter fixed coil to the alternating current amplifier output circuit; circuit elements connecting the converter movable coil to the said direct current input circuit; and frequency discriminating rectifier means responsive to the frequency of oscillation of the alternating current amplifier and connected to the said direct current output circuit; the recited arrangement being such that direct current applied to the said direct current input circuit results in relative movement between the said movable and fixed coils thereby changing the degree of mutual inductive coupling between these coils and producing a corresponding change in the frequency of oscillation of the alternating current amplifier, said discriminator responding to such change in frequency to produce a corresponding change in the direct current output of the direct current amplifier.

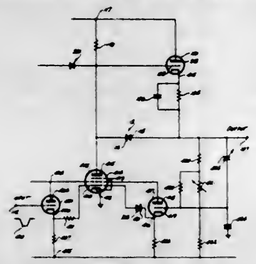
2,744,169
PULSE AMPLIFIER

Charles Reed Deming, Venice, Calif., assignor to Hughes Aircraft Company, Culver City, Calif., a corporation of Delaware

Application February 7, 1955, Serial No. 486,632
5 Claims. (Cl. 179—171)

1. A pulse amplifier circuit comprising a first amplifier having an input circuit and a high-impedance anode output circuit; a second amplifier having an input circuit and a low-impedance cathode output circuit, the input circuit of said second amplifier being connected to the

output circuit of said first amplifier; and a diode, said diode being coupled between said cathode output circuit and said anode output circuit, said diode being poled so as to be conductive when signals in said cathode output



circuit are more positive than said anode output circuit, whereby when signals of widely varying dynamic range are applied to the input circuit of said first amplifier, they appear in substantially undistorted greatly amplified form in said cathode output circuit.

2,744,170
FAULT ALARM ARRANGEMENTS FOR ELECTRIC COMMUNICATION SYSTEMS
Charles Trevor Daly and Robert Castle Jones, London, England, assignors to International Standard Electric Corporation, New York, N. Y.
Application January 22, 1953, Serial No. 332,602
Claims priority, application Great Britain February 4, 1952
5 Claims. (Cl. 179—175.31)



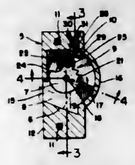
1. An arrangement for locating a defective station of an electric communication system having an attended station and a plurality of unattended stations spaced apart along a given route, comprising a circuit connecting the attended station to each of the unattended stations, means at each of the unattended stations operable in response to the occurrence of a fault thereat for terminating said circuit, and means for measuring at the attended station the resistance of the terminated circuit between the defective station and a second unattended station which is nearer to the attended station than said defective station.

ERRATUM

For Class 200—18 see:
Patent No. 2,743,794

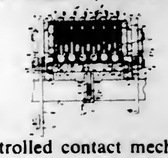
2,744,171
TOGGLE-SWITCH LOCKING DEVICE
Michael A. Del Re, Sr., Norridge, Ill.
Application May 25, 1955, Serial No. 511,042
7 Claims. (Cl. 200—42)

1. A switch-arm locking-device comprising, a mounting providing a clamping ledge, a spring-biased cam journaled on the mounting with its eccentric periphery oppositely spaced from the ledge, pawl and ratchet means for holding the cam in its shifted position, means for



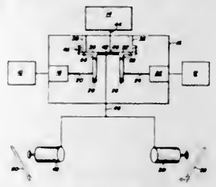
shifting the cam to wedge the switch arm against the ledge, and other means for disengaging the pawl and ratchet means to permit the retraction of the cam.

2,744,172
ELECTRIC CONTROL MECHANISM
William M. Porter, Gardena, and Emerson E. Smith, Downey, Calif., assignors to Brite-Lite Corporation of America, Los Angeles, Calif., a corporation of California
Application December 6, 1949, Serial No. 131,318
6 Claims. (Cl. 200—46)



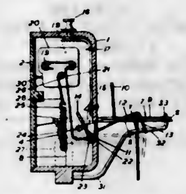
1. A web controlled contact mechanism including circuits for a device, such as an electric sign, to be controlled thereby, and comprising two support sections relatively movable toward and away from each other and arranged to receive a control web movably disposed between said support sections, one of said support sections carrying a plurality of terminal contacts in the form of rotatably mounted rolling contacts and carbon brushes each included in the circuit of a corresponding rolling contact and bearing on the said rolling contact to develop a carbon deposit thereon, and the other said support section having means providing a moving contact movable with the web and with which the rolling contacts engage to selectively complete a control circuit in accordance with the pattern of openings in said web.

2,744,173
AUTOMATIC CRITICAL AERODYNAMIC LIMIT ACTUATOR
Ralph Grosse-Lohmann, Montgomery County, Md.
Application December 18, 1952, Serial No. 326,804
7 Claims. (Cl. 200—52)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. An actuator for producing an electrical signal when the critical aerodynamic limit of an aircraft is closely approached, comprising: an input terminal for connection to a source of electrical energy, an output terminal, a switch having two contacts one of which is connected to said input terminal and the other of which is connected to said output terminal, and means for moving said contacts in a manner such that they come into contact with each other only when the critical aerodynamic limit of the aircraft is closely approached.

2,744,174
YARN DETECTING MECHANISM FOR TEXTILE MACHINE STOP MOTIONS
Charles Stanley Martin and Albert Edward Cooke, Leicester, England, assignors to Trip-Lite Limited, Leicester, England
Application February 17, 1953, Serial No. 337,382
7 Claims. (Cl. 200—61.18)



1. A yarn detecting mechanism for textile machine stop motions, comprising a holder, a support for supporting yarn against the tension thereof, a feeler to rest against a yarn on said support, means mounting the support on said holder for yielding movement in the event of undue increase in yarn tension, means mounting the feeler on said holder for tripping movement in the same direction as the yielding movement of the support upon absence of yarn and upon undue decrease in yarn tension and upon said yielding movement of the support, a snap action over centre device connected to the support to urge it to normal yarn supporting position and upon predetermined yielding movement of said support to move the support towards a yarn discharging position, and stop motion actuating means operable upon tripping movement of said feeler.

2,744,175
ELECTRICAL SAFETY SWITCHES
William Stirling Moore, Batavia, Ohio
Application March 10, 1953, Serial No. 341,447
11 Claims. (Cl. 200—61.47)



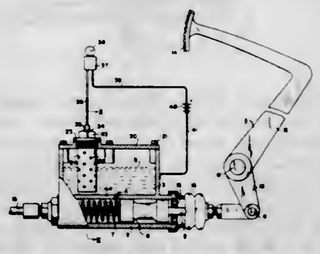
1. A safety switch adapted to be mounted in an automotive vehicle and inserted in the electrical circuit thereof, the switch adapted to open the circuit in response to an impact in the line of vehicle travel or upon overturning of the vehicle, said switch comprising, a switch casing formed of dielectric material having an internal cavity, said cavity being delineated by a pair of spaced, relatively flat side walls, said walls being disposed in a generally vertical plane when the switch casing is mounted in an upright position in a vehicle, said cavity having a peripheral wall joining said spaced side walls, a generally U-shaped mercury cup interposed between said spaced side walls within said cavity, a pool of mercury normally confined within said mercury cup, the cup adapted to discharge the pool of mercury when the switch casing is partially rotated about its axis in said generally vertical plane or subjected to an impact in said line of travel, the cavity being adapted to receive the mercury discharged from the mercury cup, a pair of metallic switch poles projecting through said spaced side walls, said poles being disposed along a generally horizontal axis which passes through said mercury cup, said poles having internal contact areas spaced apart from one another and in contact with said mercury pool at opposite sides, and a mercury trap mounted within the internal cavity and disposed above the mercury cup, said trap comprising a pair of ribs having their upper ends joined to the peripheral wall of the cavity and extending downwardly in inclined planes toward one another, the lower end of one of said ribs terminating short of the other rib and providing an opening, the other rib projecting downwardly beyond the adjoining rib towards the mercury cup and delineating one side of said opening, said projecting rib forming a baffle adapted to guide the mercury into said trap upon manual rotation of the casing, said trap adapted to receive the mercury and discharge the same into said cup upon rotation of the casing to said upright position to close the switch after the same has opened said circuit upon impact or overturn of the vehicle.

2,744,176
SWITCH ACTUATING MECHANISM FOR ELECTRIC TOOLS
Frank A. Kaman, Aurora, Ill., assignor to Thor Power Tool Company, Aurora, Ill., a corporation of Delaware
Application December 15, 1954, Serial No. 475,502
20 Claims. (Cl. 200—61.85)



19. In an electric tool having a hollow handle portion, a reversing switch mounted in the handle portion, a toggle operating member on said switch, a transversely shiftable actuating lever in pivotal engagement with said toggle for movement thereof in forward or reverse directions, and a depressible trigger carried by said handle portion and engageable with said lever in opposite transverse positions of the latter for effecting pivotal movement of the lever in opposite directions whereby said tool is reversible by transverse shifting of said lever.

2,744,177
LIQUID LEVEL SIGNALLING DEVICE
John J. Barber, Scottdale, Pa., assignor to Knock A Bar, Inc., Pittsburgh, Pa., a corporation of Pennsylvania
Application August 6, 1952, Serial No. 302,931
4 Claims. (Cl. 200—84)



1. A float-operated, unidirectional switching means including a substantially closed, electro-conducting container having a filling opening, liquid in the container, an electrical insulating plug closing the filling opening and having an electrical insulating tube extending into the liquid and terminating adjacent the bottom of the container, a permanent magnetic float within the tube adapted to ride substantially on the liquid, said magnetic float being of sufficient strength to resist the buoyancy of the liquid at any level after once making contact with the container, an inwardly turned flange on the tube adapted to engage the float, and an extensible conductor fixed to the mag-

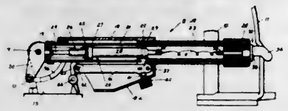
netic float and passing through the plug, said conductor and container being adapted for connection to an electrical circuit whereby upon lowering the level of the liquid, the magnetic float contacts the container to close the circuit which thereafter remains closed regardless of any subsequent liquid level until the plug is lifted to engage the flange with the float and thereby lift the float also.

2,744,178
CONTROL APPARATUS
Curtis R. Eckberg, Port Washington, N. Y.
Application May 24, 1952, Serial No. 289,912
9 Claims. (Cl. 200—138)



1. A control instrument comprising heat radiating means, a first thermally responsive bi-metallic element mounted at one end and associated with said heat radiating means to receive heat radiated therefrom, a second thermally responsive bi-metallic element mounted at one end and associated with said heat radiating means to receive heat radiated therefrom, said first and second bi-metallic elements being associated with each other and positioned with their free ends adjacent to each other whereby similar changes in their temperatures cause them to deflect without relative change in separation of their free ends and dissimilar changes in their temperatures cause them to deflect with change in the relative separation of their free ends, and a movable vane which is opaque to radiant heat mounted with its path of travel passing between said heat radiating means and each of said associated bi-metallic elements.

2,744,179
AIR DISCONNECT SWITCH
Hans P. Schneider, Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application February 2, 1953, Serial No. 334,630
9 Claims. (Cl. 200—146)



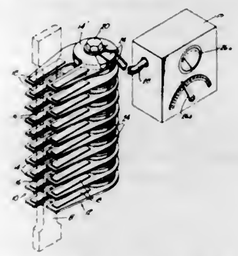
1. An electrical switch comprising a contact structure, a hinge contact, a longitudinally slotted switch blade supported on said hinge contact for movement into and out of contact engagement with respect to said contact structure, an auxiliary conductive path through the interior of said switch blade, an auxiliary contact horn extending from said contact structure that engages said switch blade as it is being moved into and out of contact engagement with said contact structure, said auxiliary contact horn and said auxiliary conductive path through the interior of said switch blade forming a closed circuit before said switch blade is moved out of contact engagement with said contact structure and maintaining said closed circuit after said switch blade is out of contact engagement with said contact structure, said auxiliary conductive path through the interior of said switch blade comprising a follower rod mechanism releasably held against spring pressure, said follower rod mechanism when released, breaking said auxiliary conductive path within said switch blade, a control arm actuated by movement of said switch blade which when said switch blade is moved to open position returns said follower rod mechanism from released position to unreleased position, said control arm having one end pivoted on said hinge contact and another end engageable with said follower within said switch blade through said longitudinal slots.

2,744,180
ELECTRICAL CONTACT OR CIRCUIT COMPONENT
Daniel M. Sullivan, Bridgeport, Conn.
Application March 30, 1953, Serial No. 345,310
19 Claims. (Cl. 200—166)



1. As a new article of manufacture, an electrical circuit component comprising a glass body having an exposed surface and having imbedded in said surface a metal conducting member containing throughout its structure a flux bonded to said body.

2,744,181
EXTENSOMETERS
Stanley E. Rea, Kent, Wash., assignor to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application April 21, 1953, Serial No. 350,050
14 Claims. (Cl. 201—63)



1. Extensometer apparatus comprising a plurality of relatively thin and flexible strip members each having an electrical resistance wire strain gauge element thereon responsive to strip member bending deflection, means supporting said strip members in generally parallel closely spaced relationship projecting in relatively superposed positions from said supporting means, and anti-slide contact elements carried by the respective strips in corresponding locations on projecting end portions thereof to engage the face of a member subject to strain and thereby deflect said strips by different amounts accompanying strain-displacement of said individual contact elements.

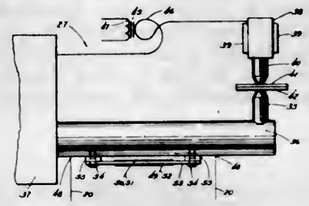
ERRATUM

For Class 219—3 see:
Patent No. 2,743,933

2,744,182
INDICATOR FOR RESISTANCE WELDING
Bernard Gross, San Diego, Calif., assignor to Rohr Aircraft Corporation, Chula Vista, Calif., a corporation of California
Application November 23, 1953, Serial No. 393,787
3 Claims. (Cl. 219—4)

2. Means for indicating the variable pressure applied to two contacting metal sheets by a pair of welding electrodes in engagement with the sheets comprising, in combination: a cantilever support in contact with one of said electrodes and supporting said electrode on the free end

of said support, said support being bent by pressure of the sheets on said one electrode; a normally balanced Wheatstone bridge comprising four strain gages; means supporting said bridge on said cantilever in a manner to increase the resistance of two oppositely disposed strain gages and to simultaneously decrease the resistance of the remaining two strain gages in response to the bending

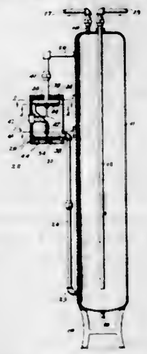


of said cantilever; a source of voltage connected across one diagonal of said bridge; an oscilloscope having horizontal and vertical deflecting plates; an amplifier having its input connected across the other diagonal of said bridge; a circuit connecting the output of said amplifier to said vertical deflecting plates; and a sweep generator connected to said horizontal deflecting plates whereby the beam trace represents the variable welding pressure.

2,744,183
INERT GAS-SHIELDED ARC WELDING
Louis A. Conant, Tonawanda, N. Y., assignor to Union Carbide and Carbon Corporation, a corporation of New York
No Drawing. Application November 13, 1952, Serial No. 320,358
6 Claims. (Cl. 219—8)

1. A refractory metal inert gas-shielded arc welding electrode composed of 1%–10% of additive material which contains at least two oxides selected from the group consisting of barium oxide, calcium oxide, cerium oxide and yttrium oxide, the balance being substantially all tungsten.

2,744,184
ELECTRIC WATER HEATER
Joseph F. Rowley, Buffalo, N. Y.
Application November 4, 1953, Serial No. 390,158
4 Claims. (Cl. 219—38)



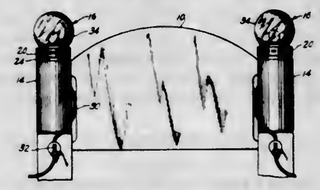
4. In an electric water heater adapted for connection to a water storage tank and convection heating of water in said tank, the combination of a casing, a first water-tube coil within said casing, a second water-tube coil within said casing above said first coil, said second coil being formed of tubing having a greater interior diameter than said first coil and being spaced from said first coil a distance equal to several times the diameter of said tubing, said coils being formed as flat spirals and each coil having an axial outlet and a peripheral inlet, a tubular connection between the outlet of said first coil and the inlet of said second coil, and a plurality of electrical heating elements, one of said elements being removably mounted in contact with a flat face of each of said coils and at least one of said elements being removable from said casing without removing either of said coils from said casing.

2,744,185
ILLUMINATED KNOB
Wayne W. Cawley, Endicott, N. Y., assignor to Cadre Industries Corp., Endicott, N. Y., a corporation of New York
Application August 15, 1952, Serial No. 304,473
3 Claims. (Cl. 240—2)



1. In a knob construction for use with a rotatable spindle, the combination of a cylindrical stator member adapted to be mounted in an opening in a panel, said stator member being of non-conducting material and having a pair of electrically independent current supply contacts fixedly secured thereto, a rotor member disposed substantially concentrically with and projecting outwardly from the forward end of said stator member end providing a manually operable knob, which knob comprises a cylindrical outer shell having a radially extending internal shoulder, said shoulder being rotatably seated against said forward stator member end, said rotor member further comprising a core which extends through said stator member and projects beyond the rearward end thereof, said rotor member having a cavity for receiving an electric lamp, and a pair of contacts carried by said rotor member in positions suitable for conducting current to respective terminals of such lamp, the proportioning and relative arrangement of said lamp contacts and said stator member contacts being such that they will cooperate to provide independent current paths from respective ones of said current supply contacts to one and the other of said lamp contacts during relative rotational movements of said members.

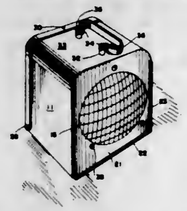
2,744,186
BED POST LIGHT
Sam Kamin, Houston, Tex.
Application June 26, 1953, Serial No. 364,355
1 Claim. (Cl. 240—4)



The combination, with a bed post having a beveled surface extending circumferentially of the upper end thereof, of a bed post light comprising: a one-piece base including a flat, circular body overlying and spaced above the upper end of the post, and a peripheral flange on the body formed as a vertical cylinder constant in inner and outer diameter from end to end thereof, the plane of the body intersecting the cylinder normally to the cylinder

axis intermediate opposite ends of the cylinder, whereby to define on the cylinder between said plane and the lower end of the cylinder a lower end portion of the cylinder depending from the body, said lower end portion being believed at its bottom edge complementarily to the beveled surface of the post to engage the post with the base centered thereupon, said body having a large center opening and a plurality of smaller openings spaced from the center of the body, the intersection of the plane of the body with said cylinder further defining on the cylinder an upper end portion projecting upwardly from the body to cooperate with the body in defining a cup-like formation upon the base; a lamp socket mounted in said center opening; a shade element having a depending circular neck portion engaging in said cup-like formation; and screws extending through the smaller openings and threaded in the upper end of the post with their heads bearing against the upper surface of the body.

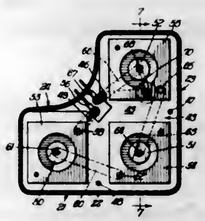
2,744,187
EMERGENCY ELECTRIC LANTERN
Chester J. Moak, Port Huron, Mich., assignor of one-half to Herbert L. Glidden, Roscommon, Mich.
Application April 7, 1954, Serial No. 421,579
2 Claims. (Cl. 240—8.18)



1. An emergency electric lantern comprising a rectangular-shaped housing of a dimension top to bottom and side to side slightly greater than the diameter of a conventional motor-vehicle seal-beam headlight and of a front to rear dimension greater than the axial length of such a headlight, the housing being operatively positionable on either its bottom or one side and having one end open and the other end annularly recessed to receive the headlight lens, a closure for the open end of the housing hinged to the sides of the housing adjacent the bottom, flanges along three sides of the closure for telescopically fitting the housing when the closure is in its closed position, a conventional motor-vehicle seal-beam headlight secured in the housing with its lens disposed in the recessed housing end, a pair of spaced posts on the housing top, a handle hinged to the posts and limited to a one-way swinging between an upright carrying position and a retracted position against the housing top, a switch fixed on the housing top between the posts in position to be operated by a hand grasping the handle in carrying position and to be partially enclosed within the handle in its retracted position against the housing top, and a length of cable having a power line connector on one end and having the other end connected in circuit with the headlight and the switch and storable in the housing when not in use.

2,744,188
PORTABLE HAND LANTERN
Marvin R. Olsen, Glen Ellyn, and Bill Rosinski and Nicholas W. Keller, Chicago, Ill., assignors to Justrite Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application April 1, 1954, Serial No. 420,332
6 Claims. (Cl. 240—10.63)

1. In a portable lantern, a casing adapted to contain a plurality of lantern batteries, a light producing section carried by the casing exteriorly of the same, said casing having a fixed end wall and a releasable end wall, a contact unit adapted for location within the casing adjacent the fixed end wall but being removable for reversing the exposed side of the unit, said contact unit being adapted to coact with the lantern batteries for completing an electric circuit to the light producing section, said unit including a series contact plate, a parallel contact plate and a member of insulating material located between the two contact plates, each of said contact plates comprising a plate of insulating material having a plurality of positive and negative contact elements fixed thereto on the outer surface of the plate and being properly oriented for engagement respectively with certain terminals of said



batteries, metal strips for each contact plate located on the side adjacent the member of insulating material, the metal strips for the series plate electrically connecting the contact elements thereof to form a series circuit, the metal strips for the parallel plate electrically connecting the contact elements thereof to form a parallel circuit, whereby either the series or the parallel contact plate is operative for connecting the batteries in series or in parallel circuit relation depending on which side of the contact unit is disposed for coaction with the batteries, and said releasable end wall when affixed to the casing providing a closure therefor and thereby maintaining the batteries within the said casing.

2,744,189
PORTABLE LAMP
Walter E. Wudyka, Holyoke, Mass.
Application October 4, 1954, Serial No. 460,032
1 Claim. (Cl. 240—10.68)



A portable lamp comprising a casing, said casing being open at the top and having a substantially cylindrical neck, a hollow, substantially cylindrical member secured to the bottom of said casing and extending upwardly therewithin, said cylindrical member being open at the top and terminating below said neck, said casing and cylindrical member being formed of electrically nonconductive material, a substantially semi-cylindrical member of electrically conductive material resiliently fitted within said cylindrical member, a battery resiliently embraced within said semi-cylindrical member, a lateral shelf of electrically conductive material electrically connected to the bottom of said semi-cylindrical member and supporting the bottom of said battery in electrical contact therewith, a dielectric member secured to the upper end of said semicylindrical member, a bulb socket of electrically conductive material secured to said dielectric member at the upper end thereof, an electric lamp within said socket, said lamp and socket extending upwardly

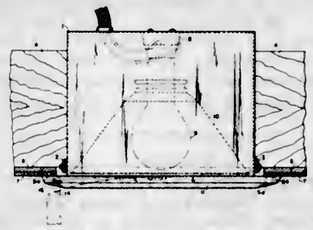
of said neck, a hollow, translucent head member having a hollow cylindrical depending neck portion rotatably received within said casing neck and receiving said lamp upwardly therewithin, means for limiting the displacement of said head member neck outwardly of said casing neck while permitting the rotational movement therebetween, an upwardly and outwardly extending conductor in electrical contact with the upper end of said semicylindrical member, said conductor terminating in the level of said socket, and a lateral cam secured to the inside of said depending head member neck and adapted to move the upper end of said conductor against said socket upon rotation of said head relative to said casing whereby to illuminate said lamp.

2,744,190
LIGHT DIFFUSING SCREENS FOR ELECTRIC DISCHARGE TUBES
Maurice Kilemnik, Paris, France
Application July 26, 1951, Serial No. 238,610
Claims priority, application France August 2, 1950
5 Claims. (Cl. 240—51.11)



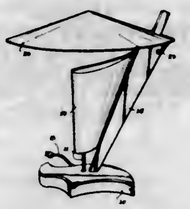
1. A frameless screen of longitudinally extending trough-like form, comprising a former arrangement consisting of at least three similarly shaped, spaced transverse rib plates each generally shaped in conformity with a chosen transverse cross-section for the screen and each including at least two profile portions of predetermined shape, a plurality of longitudinally extending wall elements located between each pair of adjacent rib plates, each wall element being of a transverse cross-section conforming to said predetermined shape of a related profile portion of said rib plates, and at least some of said wall elements being formed of light-transmitting plastic material, and means for positively attaching the ends of said wall elements to said rib plates at the related profile portions of the latter where they conform to the transverse cross-section of said wall elements, whereby each rib plate serves as the sole relatively rigid connection between the wall elements at the opposite sides thereof and the assembly of rib plates and wall elements alone affords a longitudinally extending substantially rigid screen of chosen cross-section.

2,744,191
DOWNLIGHT AND HINGE ASSEMBLY THEREFOR
Robert J. Renaud and William Mack, Pittsburgh, Pa., assignors to Pittsburgh Reflector Company, Pittsburgh, Pa., a corporation of New Jersey
Application May 11, 1953, Serial No. 354,198
3 Claims. (Cl. 240—78)



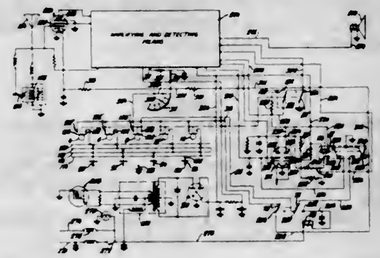
1. A downlight comprising a housing having an open end, a lens frame at the open end of the housing, two leaf springs spaced from each other and extending generally parallel to each other and each secured at one end to said housing adjacent the bottom of the housing when the downlight is installed for use, the other ends of said springs extending in the same direction from the fixed ends and beneath and pivotally engaging portions of the lens frame spaced inwardly from an edge of the frame.

2,744,192
REFLECTOR LAMP
William Rosenthal, Culver City, Calif., assignor to Lynard of California, Inc., Culver City, Calif., a corporation of California
Application January 21, 1953, Serial No. 332,405
5 Claims. (Cl. 240—81)



1. A reflector lamp comprising: a base; a socket adapted to receive an electric bulb projecting upwardly from said base; a support extending upwardly from said base a substantial distance above said bulb and offset to the side thereof; a light gathering and focusing tube having a highly reflective interior surface and a generally conical upwardly divergent shape mounted on said support and enclosing said bulb, said tube extending above said bulb to cover said bulb from view and reflecting substantially all of said light rays from said bulb into an upwardly directed beam; an upper shade mounted on said support in spaced overhanging relationship to said tube and having a highly reflective interior surface, said shade being of shallow conical shape to direct substantially all of said beam outwardly in a wide arc; and an adjustable clamp connecting said shade to said support for pivotal movement in a vertical plane and about an edge of said shade to shift the arc of light from said shade laterally relative to said base.

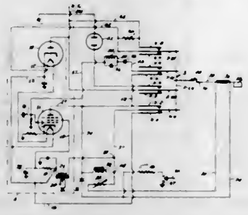
2,744,193
MULTI-BUTTON FAVORITE STATION TUNER
Bertram A. Schwarz, Kokomo, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 29, 1952, Serial No. 268,859
11 Claims. (Cl. 250—20)



1. In radio receiving apparatus, amplifying and detecting means in which signals are developed by the reception of carrier waves, movable tuning means for tuning the receiver over a band of frequencies, indicating means connected to the tuning means to move therewith and indicate the position thereof, means for driving the tuning and indicating means, indexing means to stop the driving means, electron tube means connected to and controlling the indexing means, conductive means connected to the detecting means on which the signal appears and to the electron tube to control the same and cause actuation of

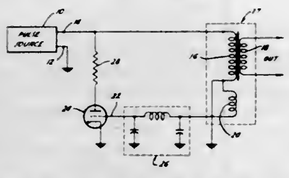
the index means when a carrier is received, a plurality of trolley wires mounted substantially parallel to the path of travel of the indicator, a plurality of adjustable contactors mounted adjacent said wires, each engaging one of said wires and movable along the length thereof, said contactors being engageable by the indicating means as it moves along its path to form switching means therewith, and conductive means connecting the wires, contactors and indicating means in circuit with the amplifying means to control the energization thereof.

2,744,194
ALERT DEVICE FOR ATTACHING TO RADIO RECEIVING SETS
Martin Auerbach, Flushing, N. Y.
Application June 21, 1951, Serial No. 232,772
4 Claims. (Cl. 250—20)



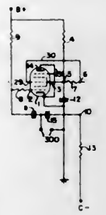
1. An alerting device for attachment to radio receiving sets of the type having a transformer operated loud speaker and at least one audio frequency amplifier tube including a power tube which operates the transformer, comprising shunt means adapted to be connected to shunt out the primary of the loud speaker while permitting the tubes of said set to operate, snap switch means movable manually to connect and disconnect said shunt across the primary of said transformer, bimetallic means responsive to a particular sustained audio frequency tone received by said radio set to snap said switch means from shunt-connecting to shunt-disconnecting position when sensitized by said sustained audio frequency tone, said bimetallic means being insufficiently affected by normal broadcast signals to operate said snap switch, and a degenerating feed back circuit adapted to degeneratively feedback from the output of the power tube to an input of an audio frequency tube all but a predetermined range of frequencies, said snap switch means comprises a multiple pole switch having a first set of contacts disconnecting said shunt and another set of contacts disconnecting the feed back circuit when said switch is operated by said bimetallic means.

2,744,195
POST-PULSE CLIPPING CIRCUIT FOR PULSE MODULATORS
Peter Winokur, Jr., Wyncote, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application April 23, 1952, Serial No. 283,895
5 Claims. (Cl. 250—27)



1. In a pulse modulator circuit including a pulse source having first and second output terminals, said first terminal being normally more negative than said second terminal during the generation of a pulse by said pulse source, and a pulse transformer having a primary winding connected between said two terminals, a post-pulse clipping circuit comprising a gas-discharge electron tube having at least an anode, a cathode and a control grid, a load resistor connected between said anode and said first output terminal, means connecting said cathode to said second output terminal, a trigger winding inductively associated with said primary winding and means connecting said trigger winding to said cathode and said grid, said trigger winding being phased to cause a positive signal to be applied at said grid during the interval that said first terminal is more negative than said second terminal.

2,744,196
PULSE WIDTH DISCRIMINATOR
Conrad H. Hoeppner, Washington, D. C., and Carl Harrison Smith, Jr., Arlington, Va.
Application October 9, 1945, Serial No. 621,402
6 Claims. (Cl. 250—27)
(Granted under Title 35, U. S. Code (1952), sec. 266)

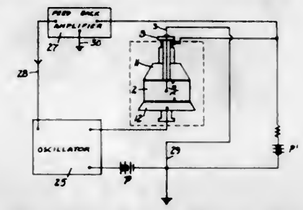


6. A pulse width discriminator comprising a first vacuum tube means having at least an anode, a control grid, and a cathode, a first time constant circuit differentiating and coupling applied pulse signals to the grid of said tube to change the conducting state of said tube in response to a pulse leading edge, said differentiating circuit having a sufficiently long time constant to hold said tube in its changed state for a predetermined period in response to each pulse equal to or exceeding said period, said state changing back in response to a pulse trailing edge occurring during said period, a second time constant circuit connected to the anode of said first tube to produce an integrated pulse having a waveform which increases constantly during the period said first tube's conducting condition is changed, a third time constant circuit receiving and differentiating said applied pulse signals and having a time constant shorter than that of said first time constant circuit, a second vacuum tube means having at least an anode, two control grids and a cathode, means coupling the output of said third time constant circuit to one of the control grids of said second tube, and means coupling the output of said second time constant circuit to the other of said control grids so as to produce at the anode of said second tube pulses only when the output of said third time constant circuit corresponding to the trailing edge of an input pulse occurs in time coincidence with the maximum amplitude attainable by the output of said second time constant circuit.

2,744,197
FREQUENCY STABILIZATION
Roland Marshall Gogolick and James Gilmore Tabler, East Cleveland, Ohio, assignors to Globe-Union Inc., Milwaukee, Wis., a corporation of Delaware
Application May 9, 1951, Serial No. 225,392
9 Claims. (Cl. 250—36)

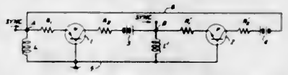
1. In combination with an oscillator generator having input and output circuits, a frequency stabilization device comprising a body made of an electron compound metal alloy characterized by low internal damping of

mechanical vibrations, means supporting said body for vibration including a member engaged with the body at substantially the mass center thereof, a pair of electrodes arranged in closely spaced relation with said body to form first and second capacitors therewith, means for applying constant potential across the thus



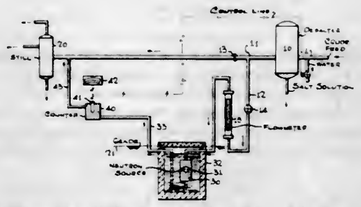
formed capacitors, means connecting the first capacitor in the output circuit of said oscillation generator electrostatically to drive said body to resonance, and means connecting the second capacitor in the input circuit of the generator, thereby to feed back to the generator a synchronizing voltage at the frequency of mechanical resonance of said body.

2,744,198
TRANSISTOR TRIGGER CIRCUITS
Gordon Raisbeck, Morristown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application November 2, 1951, Serial No. 254,569
26 Claims. (Cl. 250—36)



1. A trigger circuit for generating output waves of symmetrical form which comprises a pair of signal translating devices each of which has an input electrode, an output electrode and a common electrode, one of said devices being characterized by voltage-current characteristics which are like those of the other device in shape but opposite in sign, the common electrodes of said devices being directly connected together and to a point of fixed potential, and the output electrode of each device being connected to the input electrode of the other device, whereby the shifts of one of said devices from a cut-off state to a saturation state take place in alternation with like shifts of the other of said devices.

2,744,199
DETERMINATION OF HALOGEN IN OIL STREAMS
Edwin E. Juterbock, Short Hills, and Donald S. McArthur, Elizabeth, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application November 28, 1952, Serial No. 322,932
12 Claims. (Cl. 250—43.5)



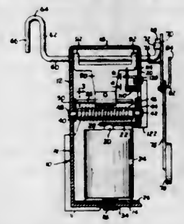
8. An apparatus for measuring the chlorine content of a hydrocarbon oil which comprises in combination a neutron source disposed in an enclosed activation chamber of known free volume, a means including a conduit for feeding oil to the activation chamber at a predetermined rate, means for measuring the rate of oil being fed, a counting chamber of a volume substantially equal to that of said activation chamber, a scintillation tube adapted for counting atomic distintegrations disposed within said chamber, a conduit for passing oil from the activation chamber to the counting chamber, a conduit for withdrawing oil from the counting chamber, and means for recording the count of the scintillation tube.

2,744,200
MULTIPLE MASKED PHOTOCELL STRUCTURE
Clement F. Taylor, Lynn, Mass., assignor to General Electric Company, a corporation of New York
Application March 7, 1952, Serial No. 275,414
11 Claims. (Cl. 250—220)



11. A photocell structure comprising at least one spiral photocell with each convolution thereof spaced radially from adjacent convolutions to define a spiral space between convolutions, and masking means disposed in superposed relation to the photocell, said masking means including a member formed of a light-transmitting material, said member carrying a plurality of light-blocking spots of irregular shape arranged along a spiral path to form a masking path corresponding to the shape of the spiral photocell, said spots being adjustably positioned along said path to vary the spacing therebetween whereby the total area of said masking path may be varied between maximum and minimum values, said masking member being rotatably mounted relative to said photocell such that motion thereof will progressively alter the unmasked area of the photocell substantially along the spiral length thereof.

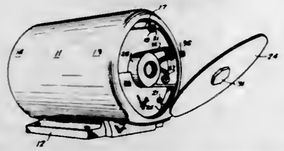
2,744,201
RECIPROCATING ELECTRIC MOTOR
Jules W. Glaser, Yonkers, N. Y.
Application July 28, 1955, Serial No. 524,861
1 Claim. (Cl. 310—32)



A reciprocating electric motor, comprising a housing, a dry cell carried by said housing, an electromagnet mounted in said housing, said electromagnet having a core, a shaft mounted in said housing for angular movement, a support secured at one end to said shaft, a permanent magnet secured to the opposite end of said support, the relative positions of said shaft, permanet magnet and electromagnet being such that they are maintained in axially parallel relationship to each other, both poles of the permanent magnet being disposed adjacent and facing the poles of the electromagnet when the shaft is in a given angular position, thereby providing a relatively closed magnetic circuit betwen the two magnets with only small air gaps between their respective poles, said permanent magnet being adapted to sweep past the electromagnet on oscillatory angular movement of the shaft into and out of said given angular position of said shaft, and a

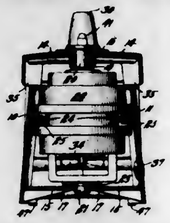
switch connected to said electromagnet and said dry cell closing the circuit between them when the permanent magnet reaches a predetermined position relative to the electromagnet, said electromagnet being provided with a pair of end plates which project laterally from the ends of its core in parallel relation to each other and constitute the poles of said electromagnet, said end plates being situated to receive the permanent magnet between them, and when the shaft is in its said given angular position said end plates are disposed directly opposite and adjacent the poles of the permanent magnet.

2,744,202
MOTOR
Anthony G. Horvath and William H. Kuner, Dayton, and Robert L. Wolfe, Springfield, Ohio, assignors to The Master Electric Company, Dayton, Ohio, a corporation of Ohio
Application September 26, 1951, Serial No. 248,396
11 Claims. (Cl. 310—71)



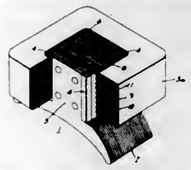
1. A housing for an electric motor, including a field ring, end bells abutting the opposite ends of said ring, boss formations on the inner surfaces of said end bells defining internal tie bolt supports enclosed by said end bells, and tie bolts extending between corresponding supports on said end bells and connecting the assembly comprising said field ring and end bells into a unitary structure, one of said end bells having an opening for common access to said tie bolts.

2,744,203
BLENDER MOTOR SUPPORT
Francesco Collura, New York, N. Y.
Application August 31, 1953, Serial No. 377,342
6 Claims. (Cl. 310—91)



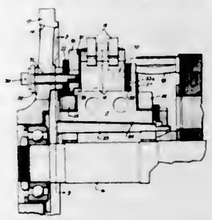
1. A blender of the character disclosed comprising a hollow base composed of upright complementary sections having top and bottom walls with recesses registering to provide openings through the top and bottom walls, a motor having a stator frame with mounting hubs at opposite ends of the same adapted for disposition in said openings, motor mounting cushions disposed in said openings about said mounting hubs and arranged to support the motor with freedom for rotational vibration of the stator, torque resisting cushioning means interposed between the motor and housing sections for damping and yieldingly limiting the extent of said rotational vibration of the stator in the base, a motor shaft extending upwardly through the upper mounting hub, a driver head on the upper end of said motor shaft and means for removably securing the complementary base sections together in the motor supporting and damping relation described.

2,744,204
ELECTRIC COIL
Edward W. McGuiness, South Hamilton, Mass., assignor to General Electric Company, a corporation of New York
Application October 25, 1950, Serial No. 191,996
5 Claims. (Cl. 310—218)



1. A salient pole construction for a dynamoelectric machine comprising a metal core of substantially rectangular cross section, a coating of heat convertible plastisol covering said core, a winding constructed and arranged to encircle said plastisol covered core to insure intimate contact between substantially the full inner periphery of said winding and said core to thereby provide maximum heat conduction therebetween, and means protecting said winding from injury at the corners of said core.

2,744,205
DYNAMOELECTRIC MACHINE CURRENT COLLECTOR SHIELDING BRUSHHOLDER
Irving Kalikow, Swampscott, Mass., assignor to General Electric Company, a corporation of New York
Application August 2, 1951, Serial No. 239,877
10 Claims. (Cl. 310—228)

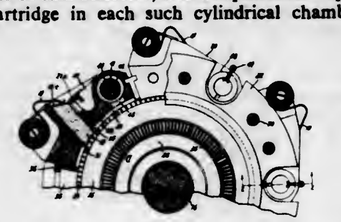


1. A combined brushholder and shield for a rotating annular current collector of a dynamoelectric machine comprising an assembly of arcuate metallic segments spaced around the periphery of said collector and out of contact therewith, electric insulating means interspersed between adjacent segments of said assembly and extending axially along the periphery of the collector, an annular end flange of electrical insulating material secured to said metallic segments at each axial end thereof and forming a running seal with said collector to form a sealed chamber between metallic segments and collector, and a separate brush mounted in good heat conducting relationship with each metallic segment and extending therethrough for contact with said collector in said sealed chamber.

2,744,206
VAPOR GENERATOR CARTRIDGE CHAMBER AND CARTRIDGE FOR DYNAMOELECTRIC MACHINE COLLECTORS
Elmer F. Hansen, Marblehead, Mass., assignor to General Electric Company, a corporation of New York
Application August 2, 1951, Serial No. 239,874
6 Claims. (Cl. 310—228)

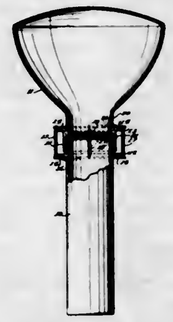
1. For use in a dynamoelectric machine having a rotating annular current collector, brushes and a collector shielding brushholder assembly of arcuate metallic members defining a sealed chamber about said collector, the combination of means including a metallic wall formed in each of said metallic members for defining in each of

said members a cylindrical chamber extending parallel to the axis of said collector, and a replaceable vapor generator cartridge in each such cylindrical chamber and



comprising a vapor forming material, end caps arranged at each axial end of said material and a central rod extending through said material and interconnecting said end caps.

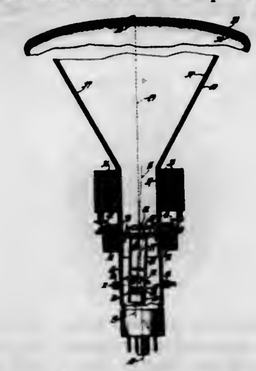
2,744,207
TWO-PIECE TELEVISION PICTURE TUBE
Rollie Hazel Sessions, Port Wentworth, Ga.
Application June 4, 1953, Serial No. 359,615
3 Claims. (Cl. 313—2)



1. A two piece television picture tube comprising an elongated cylindrical electron gun section providing a neck, a fluorescent layer in one end of the neck a bell shaped section, a photosensitive layer in an end of said bell-shaped section, the end of the bell-shaped section in which the photosensitive layer is positioned being mounted in abuting relation with the end of the neck in which the fluorescent layer is positioned, said bell-shaped section having a cylindrical portion with a cylindrical flange extended therefrom and said cylindrical flange positioned to receive an end of the neck, a collar extended around the cylindrical section of the bell shaped section, a similar collar extended around the neck and spaced from the end thereof, rings positioned against the collars and fastening elements extended between the rings.

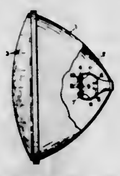
2,744,208
ION TRAP ELECTRON GUN
Lloyd E. Swedlund, Lancaster, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Application December 2, 1949, Serial No. 130,775
7 Claims. (Cl. 313—78)

1. A cathode ray tube comprising an envelope having a tubular portion, an electron gun structure within said tubular envelope portion for producing a mixed beam of electrons and negative ions, said gun structure comprising an electron source and a plurality of tubular electrodes axially spaced from said electron source along the tubular portion of said envelope and mounted on a common axis inclined to and intersecting the axis of said tubular portion with said electron source farthest from the axis of said tubular envelope portion, the proximate ends of an adjacent pair of said electrodes being inclined to said common electrode axis to form an unsymmetrical electrostatic lens between said proximate ends for



changing the direction of the path of said mixed beam to substantially intersect said axis of said tubular envelope portion.

2,744,209
HEADLIGHT UNIT FOR MOTOR VEHICLES
James R. Ferguson, Bristol, Tenn., assignor of one-half to Bristol Steel & Iron Works, Inc., Bristol, Va.-Tenn., a corporation of Virginia
Application July 14, 1952, Serial No. 298,706
5 Claims. (Cl. 313—111)

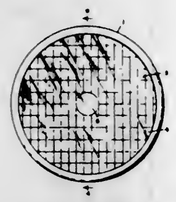


1. A headlight unit comprising a headlight casing with an inside forwardly facing primary reflecting surface, a source of light comprising filament means located within said casing, said casing having a sealed interior space, a lens forming the forwardly facing wall of said casing, a secondary forwardly facing reflector and fog protector means located between said source of light and said lens and within said sealed casing, said secondary reflector and fog protector means including a glass envelope surrounding said filament means, said envelope having a front portion and a layer of reflecting material on the back surface of said front portion forming part of said fog protector means, forwardly facing buttons on the front surface and backwardly facing buttons on the rear surface of said glass envelope front portion, said layer of reflecting material covering said rearwardly facing buttons.

2,744,210
HEADLIGHT UNIT FOR MOTOR VEHICLES
James R. Ferguson, Bristol, Tenn., assignor of one-half to Bristol Steel & Iron Works, Inc., Bristol, Va.-Tenn., a corporation of Virginia
Application July 14, 1952, Serial No. 298,705
3 Claims. (Cl. 313—111)

1. A headlight unit comprising a headlight casing having front and back walls and an inside forwardly facing primary reflecting surface on said back wall, a source of light located within said casing and carried by said back wall, said casing being hermetically sealed, a lens forming said front wall of said casing, a secondary forwardly facing reflector and fog protector means within said casing and spaced from said walls, said means being located between said source of light and said front wall and

comprising a glass disk, supporting means for said disk including separate oppositely disposed members each rigidly secured at one end to said back wall and at its other end to the edge of said disk, each side of said



disk having a centrally disposed button and a plurality of spaced buttons symmetrically arranged in a circle around said centrally disposed button, and a layer of reflecting material covering the back surface of said disk.

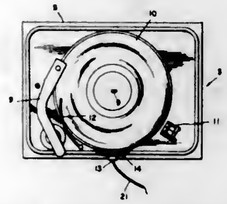
2,744,211
REPLACEABLE CATALYTIC PLUG FOR INTERNAL COMBUSTION ENGINES
Sophia Berkman, New York, N. Y., assignor to Transonic Corporation, New York, N. Y., a corporation of Delaware
Application March 10, 1952, Serial No. 275,728
5 Claims. (Cl. 313—143)



3. A replaceable catalytic spark plug for internal combustion engines comprising an insulator body, a terminal mounted on said insulator body, an electrode projecting from one end of the insulator body and electrically connected to the terminal, a tubular metallic shell surrounding and spaced from the electrode and the adjacent end of the insulator body, a body containing a catalyst for hydrocarbon combustion in the form of a lining in said shell also surrounding and spaced from said electrode and the adjacent end of the insulator body, said lining terminating at a point immediately adjacent but spaced from the end of the shell, a metallic ring mounted in the said end of the shell beyond the end of the lining in electrical contact with the shell and serving to protect the end of the lining, and a second electrode mounted on the ring and projecting to a point spaced a short distance from the first mentioned electrode to provide a spark gap.

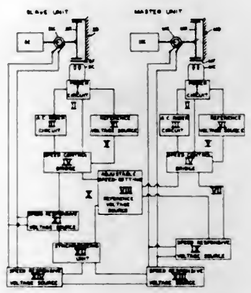
2,744,212
PHONOGRAPH ATTACHMENT FOR ELIMINATING STATIC ELECTRICITY FROM RECORDS
David Baum, Livermore Falls, Maine
Application June 4, 1954, Serial No. 434,612
1 Claim. (Cl. 317—2)

In a record player, an attachment for eliminating static electricity from the record surface including a conducting element connected to a ground and positioned immediately adjacent the peripheral edge of the record, said element being arcuate to conform to the contour of the peripheral edge of the record, the upper terminal of said element being bevelled to preclude the danger of



interference with the automatic operation of the record player.

2,744,213
CONTROL FOR ELECTRIC MACHINERY
Ralph L. Jaeschke, Kenosha, Wis., assignor, by mesne assignments, to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application October 12, 1951, Serial No. 251,011
11 Claims. (Cl. 317—6)

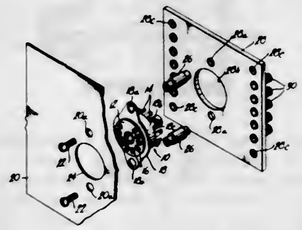


1. A control for synchronizing the operation of two variably energized electrical machines, comprising a power circuit connected to energize the first one of said machines, a gaseous discharge tube connected in said power circuit for varying the energization of said first machine, said tube having a grid and a cathode and a grid-control circuit connected therebetween, said grid-control circuit including a bridge having a plurality of arms, a grid-controlled vacuum tube connected in one of said arms, a first voltage source responsive to the speed of the first machine and a second voltage source responsive to the speed of the second machine, said first and second voltage sources being connected in series opposition to provide a differential voltage responsive to the difference in the respective speeds of said two machines, a power circuit connected to energize said second machine, and means connected to said voltage sources for varying the energization of the power circuit of said second machine in response to said differential voltage.

2,744,214
COMBINED BASE SOCKETS AND TERMINAL BOARDS
Thomas J. Di Marco, Seattle, and Harry W. Heighton, Renton, Wash., assignors to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application February 20, 1953, Serial No. 338,004
10 Claims. (Cl. 317—101)

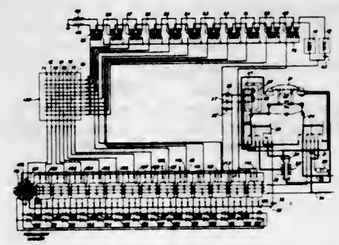
1. In combination, an electric discharge device base socket of the type having an insulating body with soldering lugs projecting from one end face of said body and respectively connected to prong-engageable contacts accessible from the opposite end face thereof, and further

having mounting means fixedly secured to said insulating body, a substantially flat and rigid plate of dielectric material of larger face area than said first end face and having an aperture therein at least approximately as large as said first end face, means connected to said mounting means and said plate fixedly supporting said apertured plate in substantially parallel relationship with said first end face and in a position of registry of said aperture therewith causing said soldering lugs to project



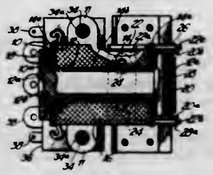
through said plate aperture, and two substantially parallel rows of soldering terminals carried by said dielectric plate, extending along respectively opposite sides of said aperture, said plate soldering terminals projecting from the side of said plate opposite said insulating body substantially to beyond the projecting ends of said soldering lugs to permit mounting of circuit components extending directly between said rows of soldering terminals and between said soldering terminals and said soldering lugs.

2,744,215
ALTERNATING-CURRENT OPERATED RELAY DISTRIBUTOR
Henry E. Hill, Livingston, N. J., and David B. Parkinson, Cleveland Heights, Ohio, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Original application September 10, 1949, Serial No. 115,016, now Patent No. 2,598,695, dated June 3, 1952. Divided and this application March 5, 1952, Serial No. 274,962
6 Claims. (Cl. 317—140)



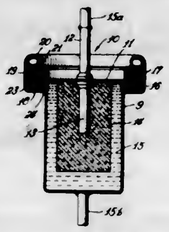
1. A relay stepping circuit comprising a plurality of two-position relays arranged in succession, each having a winding and a control set of contacts, magnetic bias means for each of said relays whereby said contacts remain in either position to which they are actuated until said relays are actuated to the other position, a pair of rectifiers individual to and oppositely connected to one of said contacts of each of said relays, connections from one of said rectifiers to a winding terminal of the preceding relay in said succession, another connection from said other rectifier to a winding terminal of the succeeding relay in said succession of relays, means for supplying an alternating current voltage between one of the winding terminals of all of said relays, and one of the contact members of each of said contacts of each of said relays.

2,744,216
WIDE TEMPERATURE RANGE VIBRATION RESISTANT RELAY OR THE LIKE
Theodore J. Obezarny, Chicago, Ill., assignor to Guardian Electric Manufacturing Co., Chicago, Ill., a corporation of Illinois
Application August 4, 1951, Serial No. 240,419
3 Claims. (Cl. 317—195)



1. A vibration and shock resistant relay operable over a wide temperature range comprising in combination, a yoke of magnetic material having leg portions joined by a transversely extending web, a generally cylindrical magnetic core having an enlarged diameter head portion at its one end and having a connector stub at its other end, said stub being formed by a reduced diameter annular rim extending axially forwardly and radially outwardly from said other end of the core, the outer surface of said rim and the adjacent end of said core serving to define annularly divergent and annularly transverse abutment surfaces of limited radial extent, said web having an outwardly enlarged opening therethrough in axial alignment with said core, said stub extending through said web opening with said core abutment surfaces in contacting engagement with said web, the core being otherwise unsupported, a spool having end discs received over the core member, one of said discs being seated against said enlarged diameter head portion, and an insert of silicone rubber sandwiched between the other disc and the web of the yoke in compressed condition therebetween.

2,744,217
ELECTRICAL APPARATUS
Oliver S. Aikman, Libertyville, Ill., assignor to Fansteel Metallurgical Corporation, a corporation of New York
Application September 29, 1951, Serial No. 248,899
17 Claims. (Cl. 317—230)



1. An electrical device of the type containing a liquid and requiring a hermetic seal, said device comprising a housing of ductile metal, said housing having a portion defining an opening, said portion extending outwardly as an offset to define an annular shoulder, the free end of said portion being curled inwardly upon itself to provide an annular toroidal flange, substantially all of said flange overlying said shoulder, compressible sealing rings of insulating material disposed between the shoulder and flange, an integral electrode assembly including a metal disc, the marginal portion of said disc being disposed between the shoulder and toroidal flange with the disc edge extending beyond the inner shoulder edge and having an insulating ring on each side of said disc portion with

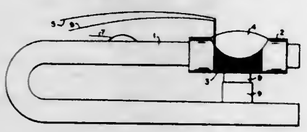
the disc portion overlying said shoulder and being clamped between opposing surfaces of the sealing rings, the disc and sealing rings providing a flexible, insulating, hermetically sealed construction with the inwardly directed flange portion providing a constant compressive force upon the sealing rings and a terminal on the outer surface thereof.

2,744,218
SEALED RECTIFIER UNIT AND METHOD OF MAKING THE SAME
Lester W. Burton, Danvers, and Stuart P. Jackson, Lynn, Mass., assignors to General Electric Company, a corporation of New York
Application December 21, 1954, Serial No. 476,724
10 Claims. (Cl. 317—234)



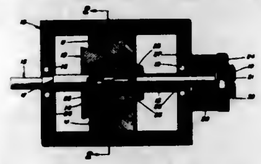
1. A rectifier unit comprising a capsule formed of metallic cups having flanged rims of unequal peripheral extension assembled with the cavities therein facing one another and with the wider portion of one rim overlapping the narrower portion of the other rim to provide externally of said capsule spaced terminal and mounting projections individual to each of said cups, a layer of insulating material between and bonded to the overlapping opposed faces of said flanged rims to form a sealed enclosure in said capsule formed by the cavities in said cups, a rectifier cell having one of its contact surfaces mounted on and electrically connected to one of the inside surfaces of one of sad cups, an electrical conductor insulated along its length and having bare terminals one of which is electrically connected to the other contact surface of said cell and the other of which is connected to an inside surface of the other of said cups, and a potting compound within said one of said cups and totally enclosing said rectifier cell mounted therein and the end portion of said conductor attached to said cell.

2,744,219
BIFILAR TRIODE TRANSISTOR
Harold J. McCreary, Lombard, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Application June 11, 1949, Serial No. 98,605
8 Claims. (Cl. 317—235)



1. In a translating device, a semi-conductive translating element with a base electrode attached thereto; and an emitter and a collector element comprising finely insulated wires of small diameter arranged in a plurality of parallel contiguous rows, crests of said rows being arranged in a plane, the relationship of said rows one to another being such that every other row constitutes said emitter element and therebetween, every other row constituting said collector element, the insulation on said crests in said plane being removed to expose a plurality of parallel line contacts, and a surface of said semi-conductive translating element abutting said plane forming a plurality of line contacts engaging said semi-conductive translating element.

2,744,220
ELECTRICAL CAPACITOR
Benjamin H. Matteson, Corona, Calif., assignor to the United States of America as represented by the Secretary of the Navy
Application June 30, 1952, Serial No. 296,530
1 Claim. (Cl. 317—249)
(Granted under Title 35, U. S. Code (1952), sec. 266)



A variable capacitor comprising a box-shaped housing composed of electrically insulating material, oppositely disposed and spaced stator poles of conducting material fastened to the underside of the top and bottom of the housing, said stator poles being provided with opposed concave sloping surfaces of like area and configuration, a rotor of a truncated conical configuration having opposite sides cut away to provide opposed convex conical segments complementary to and adapted to overlie and underlie the sloping surfaces of the stator poles, the axial length of the rotor being greater than the axial length of the poles, a rotor shaft penetrating the central portion of the rotor for rotatably supporting the rotor within the space between the stator poles and at equal distances therefrom, said shaft having a portion thereof made hollow and being provided with slots extending therethrough, the shaft being rotatably mounted in the housing by rotatable mount means positioned in a pair of opposite walls of the housing, a coaxial shaft slidably mounted within the hollowed portion of the rotor shaft, connecting means passing through the axial slots of the rotor shaft and positively engaged to the rotor and the coaxial shaft for axial adjustment of the rotor on the rotor shaft, said coaxial shaft being of a length to extend in an axial direction beyond the end of the rotor shaft, and an electrically insulated adjusting means connected to the end of the coaxial shaft such that axial adjustment of the rotor may be achieved by singular movement of the adjusting means in order to vary the distance between the rotor and the poles.

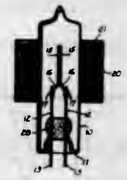
2,744,221
ELECTRICAL CONDENSER
Howard M. Wadsworth, Liverpool, N. Y.
Application January 26, 1953, Serial No. 333,035
3 Claims. (Cl. 317—249)



1. In a trimmer for high frequency oscillating electrical circuits a stationary cylindrical dielectric tube, an outer electrode fixedly mounted thereon, an inner electrode comprising a split hollow cylinder of elastic sheet metal, and means for longitudinally adjusting the inner electrode,

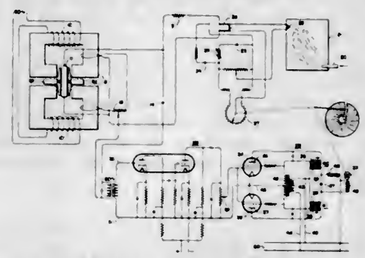
said adjusting means including means to apply axial pressure to the ends of the inner electrode, said inner electrode having means whereby said axial pressure expands it into substantially full surface contact with the interior of the tube.

2,744,222
DYNAMIC CAPACITOR
Hershel Toomim, North Hollywood, and George Henry Hare, Pasadena, Calif., assignors to Beckman Instruments, Inc., South Pasadena, Calif., a corporation of California
Application March 24, 1952, Serial No. 278,176
19 Claims. (Cl. 317—249)



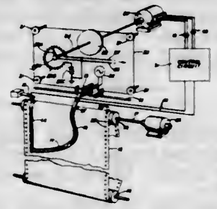
1. In a dynamic capacitor, the combination of: two magnetizable elements having relatively extensive electrically-conductive surfaces; means mounting said elements with said surfaces in close proximity and in spaced-apart relation to form a capacitor, said mounting means including means for resiliently mounting at least one of said elements for free vibrational movement toward and away from the other and for limiting movement of said one element toward the other to maintain said spaced-apart relation therebetween, said elements tending to become magnetized with like polarity along similarly oriented axes when in a magnetic field so that variations in such magnetic field will induce a relative vibrating motion of said elements in a direction transverse to said magnetic axes; and means for applying such a varying magnetic field to said magnetizable elements to induce said vibrating motion.

2,744,223
SERVO SYSTEM, INCLUDING ELECTRICAL INVERTER CIRCUIT
James F. English, Jr., Lakewood, and Anthony J. Hornfeck, Lyndhurst, Ohio, assignors to Bailey Meter Company, a corporation of Delaware
Application November 9, 1950, Serial No. 194,822
8 Claims. (Cl. 318—29)



1. A measuring system including in combination; a thermocouple sensitive to a variable heat condition, a potentiometer system including the thermocouple and a balancing resistance, said potentiometer system producing a D.-C. signal of polarity and magnitude dependent upon the heat condition change; a converter circuit supplied the D.-C. signal including, an electro-magnetic structure whose exciting coil is delivered electrical energy pulsating at a predetermined fixed frequency and magnitude, a magnetically controlled resistance path associated with the flux field of the electro-magnet, and two electrodes connected by the path and delivering a converted signal; a permanent magnetic structure arranged with the path and its electromagnetic flux field so as to aid and retard the magnetization of the path during alternate pulsation cycles of the exciting energy, and means of resonating the wave form of the converted signal to a frequency equal to the predetermined frequency; means for amplifying the pulsating signal; a motor selectively actuated by the pulsating signal; and means positioned by the motor to balance the potentiometer system following an unbalance thereof caused by the variation in its D.-C. signal.

2,744,224
AUTOMATIC CURVE FOLLOWER WITH VIBRATING STYLUS
Hendrik W. Bode, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application March 12, 1952, Serial No. 276,205
5 Claims. (Cl. 318—31)



1. An automatic curve follower adapted to track the boundary between conductive and non-conductive portions of the surface of a chart comprising a holder for the chart, a stylus carriage on which an electrically conductive stylus is carried in contact with said chart, said chart holder and stylus carriage being mounted for relative movement in two rectangular coordinate directions, a driving motor connected to said chart holder for providing movement to the chart according to a predetermined function of time in one of said rectangular coordinate directions, a reversible motor connected to the stylus carriage for providing a reversible movement in the second rectangular coordinate direction, a vibrator to give the stylus vibratory motion across the chart in the second rectangular coordinate direction, a control circuit producing motor directional signals that tend to correct the motion of the reversible drive each time the make and break contact periods of said stylus and said conductive portion are not equal, comprising a stylus circuit one side of which is connected to the stylus and the other of which is arranged to maintain electrical contact with said conductive portion, and means responsive to the relative position of the stylus carriage along the second coordinate direction for providing corresponding variable voltage forms.

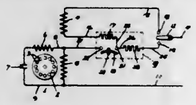
2,744,225
AUTOMATIC CURVE FOLLOWER
Henry C. Rorden, Westfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application February 27, 1952, Serial No. 273,749
4 Claims. (Cl. 318—32)



1. A control circuit for use in an automatic curve follower adapted to track the boundary between conductive and non-conductive portions of the surface of a

chart and which curve follower comprises a holder for the chart, an electrically conductive stylus adapted to make contact with said chart, said chart holder and stylus being mounted for relative movement in two coordinate directions, and a reversible two-phase motor connected to the stylus for providing a reversible movement in one coordinate direction, said control circuit producing the motor directional power to control the drive each time the stylus makes or breaks contact with said conductive portion comprising an electrical stylus circuit one side of which is connected to the stylus and the other side of which is arranged to maintain constant contact with said conductive portion, an electronic switching circuit directly responsive to the making and breaking of contact by the stylus and conductive portion connected to said stylus circuit, said circuit producing signals to drive said stylus in one coordinate direction when the stylus and conductive portions are not in contact and to drive said stylus in the opposite direction when contact is made by said stylus and conductive portion, a synchronous signal frequency converter and amplifier connected to said switching circuit which supplies directional power to the reversible motor and a source of alternating current connected to said signal frequency converter and amplifier.

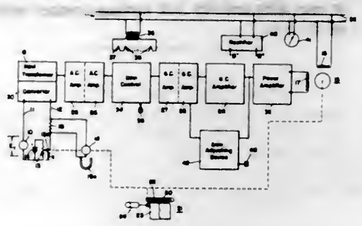
2,744,226
MOTOR PROTECTOR CIRCUIT
Richard E. Seely and James A. Walley, Fort Wayne, Ind., assignors to General Electric Company, a corporation of New York
Application July 25, 1955, Serial No. 524,035
5 Claims. (Cl. 318—221)



1. A multispeed single phase alternating current induction-type motor comprising a pair of running winding sections connected in series, a lead extending from the end of the first of said sections which is electrically remote from the second of said sections, a second lead connected to a point electrically intermediate said sections, said leads being adapted to be selectively connected to one side of a source of power, a third lead extending from the end of said second section which is electrically remote from said first section and adapted to be connected to the other side of the source of power, a bimetallic element connected in series with said sections and electrically located intermediate said point and said second section, and a heating element physically adjacent said bimetallic element and electrically located intermediate said point and said first section.

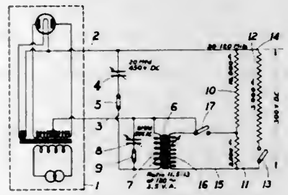
2,744,227
COMPENSATED NULL-BALANCE SERVO SYSTEM
Charles W. Spindler, Jr., Norristown, Pa., assignor to Leeds and Northrup Company, Philadelphia, Pa., a corporation of Pennsylvania
Application March 12, 1953, Serial No. 341,853
11 Claims. (Cl. 318—432)

1. A control system for a transducer including at least two windings for producing torque upon energization of said windings comprising an amplifier having an input circuit for receiving a signal voltage and having an output circuit across which an amplifier output voltage is developed, means for applying to one winding of said transducer said output voltage, means for applying to the other winding of said transducer a second voltage, and means responsive to change in the magnitude of said second voltage for changing the amplitude of said amplifier voltage in direction and to the extent needed to maintain substantially constant, for a given signal voltage applied



to said input circuit, the magnitude of the torque developed by said transducer.

2,744,228
APPARATUS FOR REDUCTION OF AMPLITUDE VARIATION IN PULSATING VOLTAGES
Montford Morrison, Rochester, N. Y.
Application October 1, 1951, Serial No. 249,021
6 Claims. (Cl. 321—10)

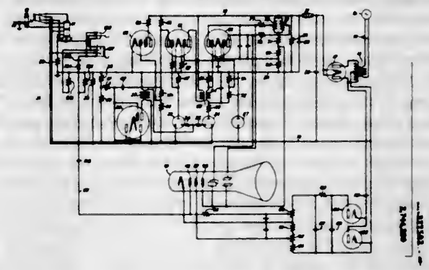


1. In an electrical system for the reduction of amplitude variation in the output voltages of alternating current rectifier organizations, an alternating current rectifier organization producing at its output pulsating voltage having a waveform of a predetermined alternating voltage content and a predetermined constant voltage component, a first load circuit connected to said output and having said voltage waveform impressed upon it, a circuit connected in shunt relation to said first load circuit and including electrical circuit means eliminating substantially only said constant voltage component of said pulsating voltage waveform, magnetic circuit means connected to said circuit connected in shunt reversing the phase of the alternating voltage content of said circuit connected in shunt, a second load circuit connected to said magnetic circuit means and having said reversed alternating voltage content impressed upon it, and said two load circuits connected in series forming a series circuit with the polarities of the alternating voltages of said load circuits opposing, whereby reduction of amplitude variation of said pulsating voltage is caused at the terminals of said series circuit.

2,744,229
POWER SUPPLY SYSTEM
Wilton T. Rea, Manhasset, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application April 13, 1949, Serial No. 110,076, now Patent No. 2,624,805, dated January 6, 1953, which is a division of application Serial No. 515,064, December 20, 1943, now Patent No. 2,480,878, dated September 6, 1949. Divided and this application December 23, 1952, Serial No. 327,502
2 Claims. (Cl. 321—15)

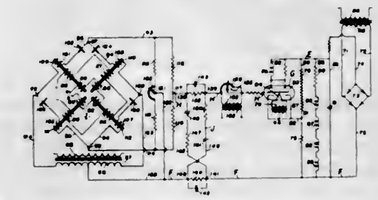
1. In a direct-current power supply system, a source of alternating current, a transformer connected to said source

having a voltage stepping-up secondary winding, means for rectifying positive and negative half-cycles of alternating voltage induced in said secondary winding, means



for doubling and rectifying the alternating voltage across part of said secondary winding, and means for connecting said doubled and rectified voltage in series-aiding relation to the first-mentioned rectified voltage.

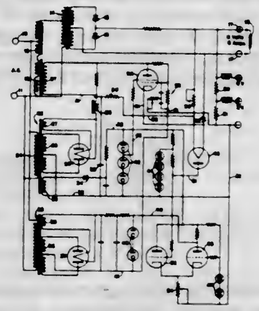
2,744,230
AUTOMATIC CURRENT REGULATING APPARATUS
William Few, Cleveland Heights, and John D. Sauter, Lyndhurst, Ohio, assignors to The Clark Controller Company, Cleveland, Ohio, a corporation of Ohio
Application July 28, 1952, Serial No. 301,292
9 Claims. (Cl. 322—27)



5. A generator output regulating system comprising a closed loop circuit containing a winding; means impressing two opposite potentials on the loop, one always predominating over the other, and one being proportional to the generator output and the two potentials being normally at a predetermined ratio, whereby current flows at all times in the winding due to the predominating potential and will increase or decrease if the generator output changes, regulating means for the generator output actuable by changes of current in the winding, and responsive to increase or decrease the generator output, to restore the predetermined ratio between said two potentials, upon momentary deviation therefrom by a change of either potential.

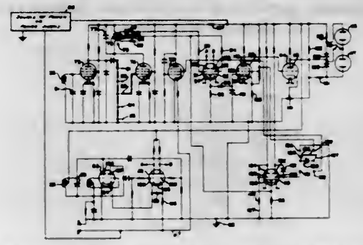
2,744,231
VOLTAGE REGULATOR
Adolph Bunblasky, Ridgefield, and Allen K. Brown, Stamford, Conn., assignors to Sorensen & Company, Incorporated, Stamford, Conn.
Application June 14, 1952, Serial No. 293,531
3 Claims. (Cl. 323—66)

1. A voltage regulator circuit for supplying a constant voltage to a load comprising, input terminals for connection with an alternating current supply, a saturable reactor connected across the input terminals in series with an autotransformer, said saturable reactor controlled by a direct current applied to one winding thereof, a variable impedance diode containing a filamentary cathode which is connected across the load, an amplifying circuit connected between the diode and the direct current winding on the saturable reactor, and a circuit coupled to the input terminals which sends current through the fila-



mentary cathode, the magnitude of said current varying in proportion to the input voltage.

2,744,232
MAGNETIC AND CONDUCTING MATERIALS DETECTOR
Elbert N. Shawhan, Newtown Square, Pa., Matthew J. Relis, Bayside, N. Y., and John Brown, College Park, Md.
Application March 6, 1952, Serial No. 275,210
17 Claims. (Cl. 324—3)
(Granted under Title 35, U. S. Code (1952), sec. 266)

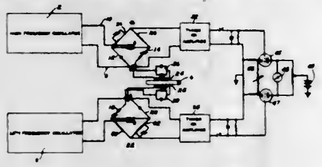


1. An electronic detecting and locating apparatus for indicating the presence and location of conducting and magnetic materials comprising, in combination, means for producing a local sinusoidal magnetic field, means for detecting the disturbance of said locally produced field by hidden conducting and magnetic materials, a square wave generator, said square wave generator producing voltages 180° out of phase and connected to said local sinusoidal magnetic field producing means, a phase discriminator connected to said square wave generator for determining the phase shift between the voltage produced by the disturbance of said locally produced field and said square wave voltage, a reset control for cancelling the effect of the direct pickup of said local magnetic field by said detecting means, means connected to said phase discriminator for signalling the presence of said hidden conducting and magnetic materials, and a source of power for energizing said detecting and locating apparatus.

2,744,233
APPARATUS FOR DETECTING FLAWS IN METAL STOCK
John O. Paivinen, Aldan, Pa., assignor to Associated Spring Corporation, Bristol, Conn., a corporation of Delaware
Application May 26, 1952, Serial No. 290,062
3 Claims. (Cl. 324—34)

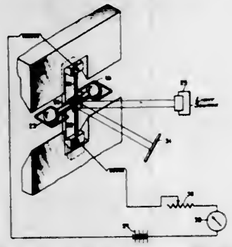
1. Apparatus for indicating the presence of physical defects in elongated metallic stock such as wire, bars, tubes and the like, comprising a source of high radio fre-

quency energy, a source of lower radio frequency energy, two radio frequency bridges respectively connected across the outputs of said sources, two concentric cylindrical induction coils each connected in an arm of one of the bridges and defining an open passage through which the stock may be passed, a parallel tank circuit connected in series with the high frequency coil and tuned to resonance



with the low radio frequency, a parallel tank circuit connected in series with the low frequency coil and tuned to resonance with the high radio frequency, means for amplifying the output of each of the bridges, a difference detector circuit connected to said amplifiers and including means for adjusting the amplified currents, and means for indicating any difference between the amplified currents.

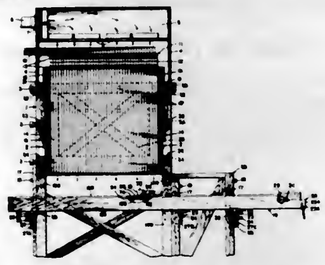
2,744,234
MAGNETIC OXYGEN METERS
Charles Walter Munday, London, Kelvin Richard Peakin, Walton-on-the-Hill, and Michael John Griffiths, Ewell, England, assignors to The Distillers Company Limited, Edinburgh, Scotland, a British company
Application July 23, 1954, Serial No. 445,384
Claims priority, application Great Britain August 11, 1953
11 Claims. (Cl. 324—36)



1. An apparatus for measuring the magnetic susceptibility of gases comprising a cell for receiving the gas whose susceptibility is to be measured, means for producing a non-uniform magnetic field in said cell, a test piece rotatably supported in said cell and in said magnetic field, said test piece varying its position in said cell in accordance with the magnetic susceptibility of said gas, a pair of conductive loops mounted for movement with said test piece, one of said loops being mounted on one side of the axis of rotation of said test piece and the other of said loops being mounted on the opposite side of said axis and said loops lying in a plane which intersects said axis at an angle, and means conductively connecting the ends of said loops.

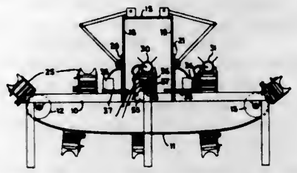
2,744,235
MAGNETIC FIELD EXTRAPOLATING APPARATUS AND METHOD
Gregory Breit, Madison, Wis.
Application February 4, 1946, Serial No. 645,428
24 Claims. (Cl. 324—43)
(Granted under Title 35, U. S. Code (1952), sec. 266)

6. Field extrapolating apparatus for obtaining the magnetic signature of a vessel at a desired depth below the depth at which magnetic measurements have been taken comprising, in combination, an assembly of a number of parallel rows of substantially identical solenoids, the solenoids in each row having their axes parallel and running transverse to the row itself, one end of each of said solenoids lying in the same plane, means for individually and selectively energizing the solenoids in each row with an alternating current in accordance with the measured values of one of a plurality of signatures of a vessel taken in a horizontal measuring plane beneath it, the total field set up by the energization of several rows being substantially similar to the field of the vessel in said measuring plane, a search coil for traversing said field and having its axis disposed with respect thereto so that a voltage is induced therein proportional to one of the components of said total field, recording means connected to said coil for recording said induced voltage, means for moving said coil in said total field whereby the induced voltage recorded therefrom represents the magnetic signature of the vessel at said desired depth, said last mentioned means comprising a carriage for said coil, transporting means for moving said carriage across said total field in a substantially straight line at substantially constant speed, and means for precisely positioning said transporting means in three dimensions with respect to said total field.



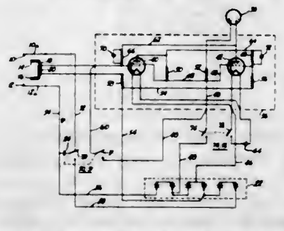
17. The method of securing the magnetic signature of a vessel at a desired second depth below an initial depth at which magnetic measurements have been taken, which comprises, generating a total electro-magnetic field simulating in sign and amplitude the measured magnetic field of the vessel taken in a horizontal measuring plane beneath the keel thereof at said initial depth, said total field being obtained by setting up a plurality of adjacent fields each directly determined by a signature of the vessel taken in adjacent parallel lines in said measuring plane, and determining the strength and sign of said total electromagnetic field at points having definite geometrical relationships therein, the magnitude of points measured in said total field corresponding proportionally to those of points in the magnetic field of said vessel in a plane at said second desired depth.

2,744,236
CONTINUITY TESTER FOR ROCKET MOTORS
O. D. Scarborough, Hastings, Nebr., assignor to the United States of America as represented by the Secretary of the Navy
Application June 18, 1954, Serial No. 437,896
6 Claims. (Cl. 324—51)
(Granted under Title 35, U. S. Code (1952), sec. 266)



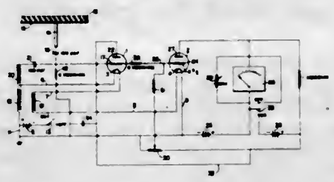
2. An automatic electrical continuity tester for squib detonators of rocket motors comprising; a conveyor belt having a plurality of pairs of upstanding support cradle members each to cradle a rocket motor transversely of said belt, each carrier having electrical wiper strips on the outer face of the corresponding cradle member of each pair adapted to be coupled to the squib detonator of a carried rocket motor; and a test chamber enclosing a portion of said conveyor, said test chamber having entrance and exit doors for admitting and discharging conveyed rocket motors with fluid motors coupled thereto and controlled by fluid valves actuatable by the corresponding cradle member of each pair of carriers to open and close said doors, and said test chamber further having contact means therein connectible to remote instruments and adapted to contact said electrical wiper strips on said carriers whereby rocket motor squib detonators may be tested at safe distances by attendant personnel.

2,744,237
ELECTRICAL CONDUCTOR CONTINUITY TEST APPARATUS
Alexander F. G. Polcuch, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application January 14, 1952, Serial No. 266,399
12 Claims. (Cl. 324—51)



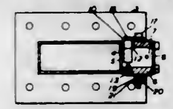
1. A device for testing the continuity of fuses in situ comprising a portable support, a pair of electric contacts carried in spaced-apart relationship by said support for engaging the fuse terminals, magnetic induction pick-up means carried by said support generally intermediate said contacts and offset therefrom laterally for responding selectively to a change of magnetic flux encircling a fuse engaged by such contacts, impulse generating circuit means connected to said contacts and operable for applying a test voltage impulse to a fuse engaged by said contacts, and indicator means connected to said pick-up means for actuation by the response of said pick-up means.

2,744,238
ELECTRONIC THICKNESS GAUGE
Gilbert J. C. Andresen, Stow, Ohio, assignor, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio
Application April 22, 1953, Serial No. 350,465
4 Claims. (Cl. 324—61)



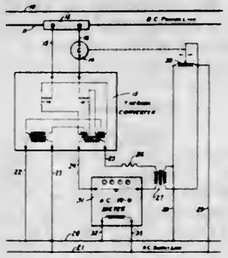
1. An electron gauge for indicating the dielectric property of a material proximal to a single probe electrode of the gauge, which gauge comprises a probe electrode, an electron tube oscillator supplying high frequency electrical energy to said probe electrode, said oscillator including an oscillator triode having a control grid capacitatively coupled to said probe electrode, and a second electron tube having a control grid directly coupled to the control grid of said oscillator triode and having adjustable grid biasing means connected thereto to adjust its operating potential, said control grid of said second electron tube being responsive to the dielectric effect of said probe electrode, whereby the plate current of said second electron tube is a measure of the dielectric effect of a material contacting said probe electrode.

2,744,239
ARRANGEMENT FOR MEASURING THE POWER TRANSMITTED THROUGH AN ELECTROMAGNETIC WAVEGUIDE
John Bernard Setchfield, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application August 20, 1952, Serial No. 305,347
Claims priority, application Great Britain September 7, 1951
5 Claims. (Cl. 324—95)



1. An arrangement for measuring, or indicating, power transmitted through a wave guide, characterized by an aperture formed in a wall of the wave guide, so positioned and dimensioned as to pass only a small fraction of the transmitted power, a rectifier, means mounting said rectifier diametrically across said aperture outside said wave guide, the rectifier being mounted physically parallel and in close proximity to the lines of electric force in said guide.

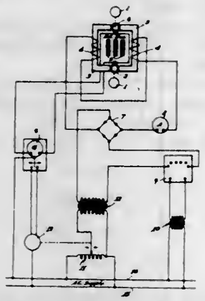
2,744,240
SYSTEM FOR INTEGRATING D. C. VALUES
Guy N. Hughes, Maryville, and Ralph N. Harder, Alcoa, Tenn., assignors to Aluminum Company of America, Pittsburgh, Pa., a corporation of Pennsylvania
Application January 20, 1951, Serial No. 206,956
4 Claims. (Cl. 324—99)



4. In a system for integrating D. C. characteristic values, on an A. C. induction watt-hour meter, the combination comprising a thermal converter for converting A. C. input to thermally produced D. C. output potential, said converter having a pair of output terminals and two pairs of input terminals, the latter being connected in two A. C. supply circuits, a null-type galvanometer-controller having one of its terminals connected to one of the output terminals of said converter, the other terminal of said galvanometer-controller and the other output terminal of said converter being adapted for connection in opposition to an external source of D. C. potential proportional to a characteristic value of a D. C. circuit, and means actuated by said galvanometer-controller for varying the current in the A. C. supply circuit to one pair of said input terminals of said converter so that the D. C. potential of said converter will balance that of the external source of D. C. potential, and an A. C. induction

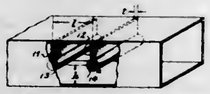
watt-hour meter having its coils connected so as to carry currents corresponding to those supplied in said A. C. supply circuits.

2,744,241
D. C. METERING SYSTEM
Guy N. Hughes, Maryville, Tenn., assignor to Aluminum Company of America, Pittsburgh, Pa., a corporation of Pennsylvania
Application April 15, 1952, Serial No. 282,410
3 Claims. (Cl. 324—117)



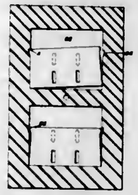
1. A D. C. metering system comprising a multi-part iron magnetic core adapted to be mounted in inductive relation to a D. C. bus with air gaps in said core, a counterinduction winding distributed over said core parts, a variable D. C. supply system for said winding, at least two rotating D. C. armatures located opposite each other in the air gaps in the flux path of said core parts and serving solely as flux detectors and control current generators responsive to the detected flux, a motor for driving said armatures, control means for said variable D. C. supply system, including a normally neutral galvanometer relay connected across said armatures, for varying the D. C. supply to said winding in response to control current generated by said armatures whenever a change in the D. C. bus current causes flux to traverse said core, whereby the current in said winding is regulated in proportion to the current in the D. C. bus and the flux momentarily traversing said core is reduced to zero, and a meter connected in said variable D. C. supply system so as to provide readings proportional to the D. C. bus current.

2,744,242
WAVE GUIDE DELAY LINE
Seymour B. Cohn, Flushing, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware
Application January 4, 1950, Serial No. 136,721
1 Claim. (Cl. 333—31)



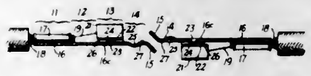
An ultra high frequency delay line for operation at high power, said line comprising a hollow rectangular wave guide having a pair of parallel narrow walls and a pair of parallel broad walls, a series of very thin flat conductive plates, the plates being perpendicular to the walls of the wave guide and being positioned within the wave guide with equal spacings between adjacent plates, each of the plates being substantially rectangular in outline and secured along three edges thereof to the two narrow walls and one of the broad walls with the remaining edge of each plate being spaced from the other of the broad walls, and a circular rod member extending between the narrow walls adjacent each of the plates and positioned in said space between the broad wall and said remaining edge of the corresponding plate, each of the rod members having the longitudinal axis thereof lying in the plane defined by the flat surface of the corresponding plate and being conductively joined to the corresponding plate along said remaining edge of the plate, the diameter of the rod members being appreciably greater than the thickness of the plates and of a size order several times greater than the plate thickness to thereby increase the loading capacity and inductance while reducing voltage breakdown at the free edges of the plates.

2,744,243
SAFETY DEVICE FOR ELECTRICAL RECEPTACLES
Gil H. Menendez, Patchogue, N. Y., assignor, by direct and mesne assignments, of one-third to David Stilwagen, Levittown, one-sixth to Julius Chinman, and one-sixth to Charles A. Hewlett, Woodmere, N. Y.
Application January 7, 1954, Serial No. 402,710
2 Claims. (Cl. 339—36)



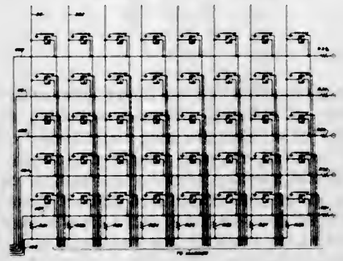
1. A safety cover plate for attachment to an electric outlet receptacle comprising a body having a recess therein forming a peripheral shoulder, a plate secured to said body overlying said recess, said plate having apertures therethrough, gravity actuated slides vertically slidably disposed in said recess and also vertically tiltable edgewise therein, said slides having holes therethrough adapted to be aligned with said apertures when said slides are in a raised position, said slides being constructed of an electrically insulative material, said body having depressions therein at opposite sides of said recess opening into the recess, and projections on said slides engageable with and tiltable in said depressions by tilting of said slides in opposite directions whereby to prevent vertical sliding of said slides into a raised position.

2,744,244
ELECTRICAL CONNECTOR
William L. Schumacher and Earl E. Folkenroth, Harrisburg, Pa., assignors to Aircraft-Marine Products, Inc., Harrisburg, Pa.
Application September 26, 1952, Serial No. 311,576
4 Claims. (Cl. 339—258)



1. An electrical connector for detachable frictional interengagement with a like connector comprising a clip portion, a wire gripping portion at one end thereof, a blade portion extending longitudinally from the other end thereof, said clip portion and said blade presenting a continuous contact surface, said clip portion having a spring clip at each of its opposed side edges, with the free ends of said clips bent toward each other and inwardly toward said contact surface, the terminal edges of said clips being spaced from said contact surface a distance substantially less than the thickness of said blade, a deformation in said clip portion midway between said clips, a deformation in said blade portion, and a guide tab extending longitudinally from a free end portion of said blade and inclined in a direction away from the plane of said contact surface, said parts being arranged and adapted, when two connectors each embodying like parts are interengaged, to bring the spring clips of one connector into conductive and yielding frictional engagement with the blade portion of the other, thereby to press the contact face of one connector into conductive contact with that of the other and to yieldingly retain deformations of one connector in nesting relation with deformations of the other.

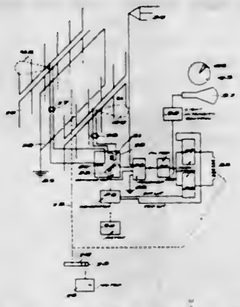
2,744,245
RECTANGULAR COORDINATE REGISTERING CIRCUIT
Frank K. Low, Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Original application January 7, 1950, Serial No. 137,323, now Patent No. 2,623,114, dated December 23, 1952. Divided and this application February 16, 1952, Serial No. 271,911
2 Claims. (Cl. 340—166)



1. In a register circuit, a plurality of relay windings arranged into first groups each including a number of different windings and arranged into second groups each including a number of windings each one from a different first group, a first resistance for each first group, a second resistance for each second group, one side of each winding of each first group connected through its associated first resistance to a potential of one magnitude, the other side of each winding of each second group connected through its associated second resistance to a potential of a different magnitude, whereby each winding carries a holding current limited by both a first and a second resistance, said holding current being insufficient to operate a relay but sufficient to hold a relay operated, means for selectively and momentarily applying said one potential directly to the said one side of all windings of any one first group and for selectively and momentarily and concurrently applying said different potential directly to said other sides of all windings of one or more second groups, whereby only windings common to said latter mentioned first group and second group or groups carry increased current sufficient to operate the relays associated with said common windings, said operated relays remaining operated due to said holding current after the lapse of said momentary period.

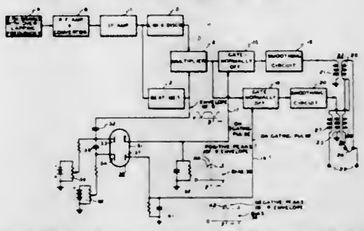
2,744,246
ARRANGEMENT FOR DIRECTED RECEPTION OF RADIO SIGNALS
Carl-Erik Granqvist, Lidingo, Sweden, assignor to Svenska Aktiebolaget Gasaccumulator, Lidingo (near Stockholm), Sweden, a corporation of Sweden
Application November 19, 1951, Serial No. 257,138
6 Claims. (Cl. 343—118)

1. An arrangement for directive reception of radio signals, comprising a plurality of direction antennas arranged in relation to each other so that their directional characteristics are widely apart from each other, means for rotating said antennas at mutually corresponding speed, reflector means mutually separating said antennas, a rotational goniometer, means for feeding the signals emanating from the respective antennas to means in the said rotational goniometer for creating fields in said goniometer with a direction, corresponding to the directions of the signals, received by the said directional antennas, the signals thereby occurring in the output of the goniometer as one single series of signals corresponding to the signals picked up by means of said antennas, and with a frequency determined by the rotation speed



of the goniometer, and with a phase position determined by the incidence direction of the signals picked up by means of the antennas, an indicator for indicating the direction of the received radio frequency signal, and means for subjecting this indicator to a rotating field, means for detecting the output voltage from said goniometer, and means for connecting said detection means output to said indicator.

2,744,247
SYSTEM FOR DERIVING THE MODULATION OF ONE FREQUENCY MODULATED WAVE IN THE PRESENCE OF ANOTHER CO-CHANNEL FREQUENCY MODULATED WAVE
Raymond M. Wilmotte, Washington, D. C., assignor to Padevco, Inc., Washington, D. C., a corporation of Delaware
Application January 24, 1950, Serial No. 140,241
10 Claims. (Cl. 343—206)

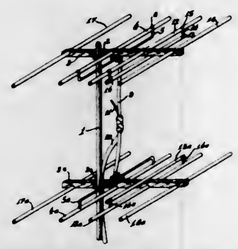


4. In combination, a source of two overlapping frequency modulated waves, the first of said waves having an angular velocity of w radians per second, and the second having an angular velocity of $w+q$ radians per second, and said second wave having an amplitude a times that of the first wave, where a is less than 1, means for deriving from said waves a first signal having an amplitude which is a function of the angular velocity $w(1+a)+qa$ and a further signal having an amplitude which is a function of the angular velocity $w(1-a)-qa$, and means for combining said signals to derive another signal having an amplitude which is a function of the angular velocity $2a(w+q)$ only.

2,744,248
TELEVISION ANTENNA
Sylvester P. Cupec, Bentleyville, Pa.
Application August 30, 1951, Serial No. 244,320
2 Claims. (Cl. 343—815)

1. A television antenna of the stacked Yagi type, comprising a pair of driven elements in spaced parallel rela-

tionship in a vertical plane, each of said driven elements comprising a straight piece of tubing of substantially half wave length at the frequency of the station to which the antenna is tuned and a U-shaped looped piece of tubing of smaller diameter than, and attached to said straight piece and having an over-all distance between legs of substantially 31% of the said wave length and a height of substantially 2.6% of the said wave length, and having central gaps in the base of said U-shaped pieces of tubing,



the lowermost U-shaped pieces of tubing being inverted, said gaps being interconnected by a link to which a transmission line and matching stub are connected at a central portion of said link, and a pair of stacked director elements in spaced parallel relationship to said driven elements and of substantially the same length as the over-all length of said driven elements and having similarly U-shaped looped pieces extending in the same vertical plane, the U-shaped piece of the lower director element being inverted in relation to that of the upper piece.

2,744,249
ANTENNA FEED SYSTEMS
Application January 30, 1953, Serial No. 334,142
Edward H. Shively, Haddonfield, and William S. Brandberg, Delaware Township, Camden County, N. J., assignors to Radio Corporation of America, a corporation of Delaware
7 Claims. (Cl. 343—853)

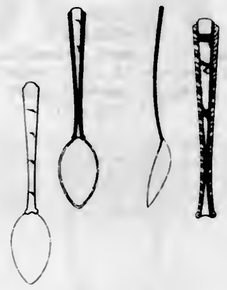


2. An antenna feed system for an antenna array having a plurality of radiating elements occupying an aperture a plurality of wavelengths long comprising: a feed point for said radiating elements displaced from the electrical center of said aperture whereby the number of radiating elements on one side of said feed point is greater than the number of antenna elements on the other side of said feed point, and means coupling equal amounts of power to the two groups of elements either side of said feed point whereby an asymmetrical power distribution along the aperture of said antenna array is obtained.

DESIGNS

MAY 1, 1956

177,548
SPOON OR THE LIKE
Louis Baum, New York, N. Y.
Application October 12, 1954, Serial No. 32,644
Term of patent 7 years
(Cl. D54—12)



177,549
SPOON OR THE LIKE
Louis Baum, New York, N. Y.
Application October 18, 1954, Serial No. 32,695
Term of patent 7 years
(Cl. D54—12)



177,550
BOTTLE
Harold Bloomfield, Chicago, Ill.
Application August 1, 1955, Serial No. 37,232
Term of patent 14 years
(Cl. D58—8)



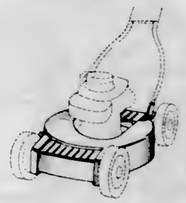
177,551
LAMP BASE
Harold Brandeis, Chicago, Ill., assignor to Rembrandt Lamp Corporation, Chicago, Ill., a corporation of Illinois
Application August 12, 1955, Serial No. 37,433
Term of patent 7 years
(Cl. D48—20)



177,552
GATE VALVE
Austin U. Bryant, Walnut Creek, Calif., assignor to Grove Valve and Regulator Company, Oakland, Calif., a corporation of California
Application May 9, 1955, Serial No. 35,874
Term of patent 14 years
(Cl. D78—1)



177,553
POWER LAWN MOWER
Acial L. Cataline, Lansing, and Lawrence H. Wilson, Detroit, Mich., assignors to Motor Wheel Corporation, Lansing, Mich., a corporation of Michigan
Application August 22, 1955, Serial No. 37,599
Term of patent 7 years
(Cl. D40—1)



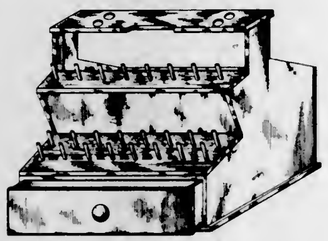
177,554
FINGER RING
Melvin V. Chevers, Plainville, Mass., assignor to Southern Methodist University, a corporation of Texas
Application November 1, 1955, Serial No. 38,675
Term of patent 14 years
(Cl. D45—10)



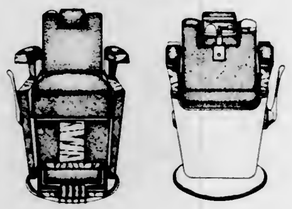
177,555
BADGE OR SIMILAR ARTICLE
Elizabeth J. Dabney, Philadelphia, Pa.
Application March 12, 1954, Serial No. 29,499
Term of patent 14 years
(Cl. D29—2)



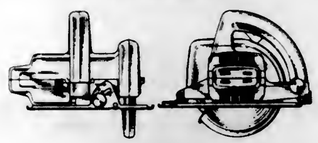
177,556
SEWING BOX
Dominic A. De Santis, Scottdale, Pa.
Application August 26, 1955, Serial No. 37,673
Term of patent 7 years
(Cl. D3—19)



177,557
BARBER CHAIR OR SIMILAR ARTICLE
Clarence Long Dlouhy, Chicago, Ill., assignor to Emil J. Paidar Company, Chicago, Ill., a corporation of Illinois
Application August 5, 1955, Serial No. 37,323
Term of patent 14 years
(Cl. D15—3)



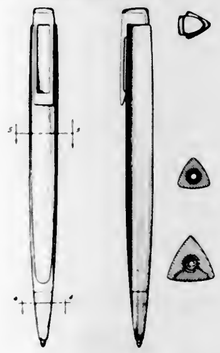
177,558
PORTABLE ELECTRIC HAND SAW
Francis D. Dolan, Toledo, Ohio, assignor to The American Floor Surfacing Machine Company, Toledo, Ohio, a corporation of Ohio
Application May 17, 1955, Serial No. 36,036
Term of patent 14 years
(Cl. D93—3)



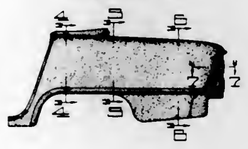
177,559
TUMBLER
George W. Emmert, Winnetka, Ill.
Application November 1, 1954, Serial No. 32,886
Term of patent 7 years
(Cl. D36—8)



177,560
BALL POINT PEN
Robert H. Ensign, Bronxville, N. Y., and Danforth Cardozo, Jr., Weston, Conn., assignors to Scripto, Inc., a corporation of Georgia
Application June 22, 1955, Serial No. 36,625
Term of patent 14 years
(Cl. D74—17)



177,561
AUTOMOBILE FENDER
Virgil M. Exner, and Maurice F. Baldwin, Birmingham, Mich., assignors to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application September 2, 1955, Serial No. 37,770
Term of patent 7 years
(Cl. D14—6)



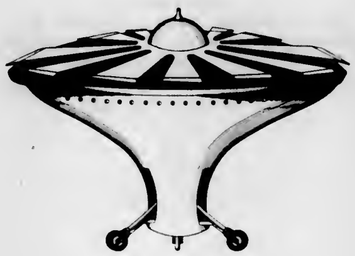
177,562
DOLL OR THE LIKE
Martha W. Fellows, New Castle, N. H.
Application August 16, 1955, Serial No. 37,505
Term of patent 7 years
(Cl. D34—4)



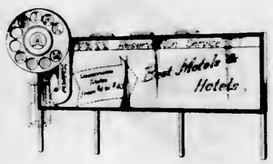
177,563
AIRPLANE OR SIMILAR ARTICLE
Wendell S. Fletcher, South Pasadena, Calif.
Application November 22, 1954, Serial No. 33,189
Term of patent 14 years
(Cl. D71—1)



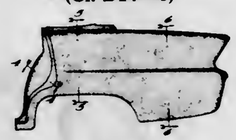
177,564
AIRSHIP
Leonor Zalles Freeland, New York, N. Y.
Application May 6, 1955, Serial No. 35,862
Term of patent 14 years
(Cl. D71—1)



177,565
SIGN BOARD
Robert B. Gibson, Denver, Colo.
Application June 22, 1955, Serial No. 36,631
Term of patent 3½ years
(Cl. D1—12)



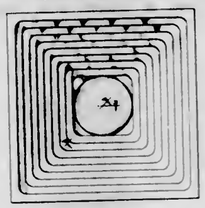
177,566
AUTOMOBILE FENDER
Charles F. Gitschlag, Jr., Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application September 2, 1955, Serial No. 37,766
Term of patent 7 years
(Cl. D14—6)



177,567
COMBINED BABY TROPHY AND COIN BANK OR SIMILAR ARTICLE
Fred Haussman, Lancaster, Tex.
Application October 27, 1955, Serial No. 38,601
Term of patent 14 years
(Cl. D34—11)



177,568
TRANSLUCENT CEILING PANEL
David G. Hills, Hartford, Conn., assignor to Plax Corporation, West Hartford, Conn., a corporation of Delaware
Application May 20, 1954, Serial No. 30,590
Term of patent 14 years
(Cl. D48—23)



177,569
BOTTLE VENDING MACHINE
Clare E. Hodgman, Mamaroneck, N. Y., assignor to The Coca-Cola Company, New York, N. Y., a corporation of Delaware
Application July 21, 1955, Serial No. 37,072
Term of patent 14 years
(Cl. D52—3)



177,570
FOOD JAR
George T. James, Pasadena, Calif., assignor to Gladding, McBean & Co., Los Angeles, Calif., a corporation of California
Application July 9, 1954, Serial No. 31,361
Term of patent 14 years
(Cl. D58—25)



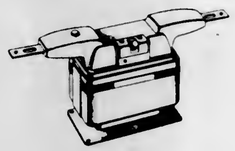
177,571
FOOD AND BEVERAGE SERVER
Robert B. Karoff, New York, N. Y., assignor to Novelty Utilities, Inc., New York, N. Y., a corporation of New York
Application May 11, 1955, Serial No. 35,914
Term of patent 7 years
(Cl. D44—10)



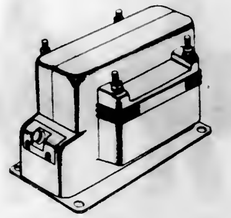
177,572
HEARING AID
Paul D. Kendall, Gates Mills, Ohio
Application January 6, 1954, Serial No. 28,393
Term of patent 3½ years
(Cl. D26—14)



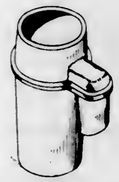
177,573
ELECTRICAL TRANSFORMER
Roger B. Kerr, Marblehead, Mass., assignor to General Electric Company, a corporation of New York
Application December 22, 1955, Serial No. 39,428
Term of patent 14 years
(Cl. D26—15)



177,574
ELECTRICAL TRANSFORMER
Roger B. Kerr, Marblehead, Mass., assignor to General Electric Company, a corporation of New York
Application December 22, 1955, Serial No. 39,448
Term of patent 14 years
(Cl. D26—15)



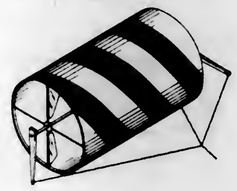
177,575
CUP
Leonard Louik, Pittsburgh, Pa., assignor to Plastic Sales, a partnership of Pennsylvania
Application September 2, 1954, Serial No. 32,137
Term of patent 7 years
(Cl. D44—9)



177,576
ASH TRAY
Julio J. Marsella, North Providence, R. I.
Application December 13, 1954, Serial No. 33,518
Term of patent 3½ years
(Cl. D85—2)



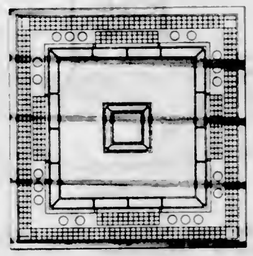
177,577
ROTARY KITE
Henry J. Martin, Saginaw, Mich.
Application August 17, 1953, Serial No. 26,490
Term of patent 7 years
(Cl. D34—15)



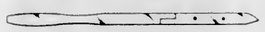
177,578
SUCTION CLEANER SPRAYER ATTACHMENT
Eugene F. Martinec, East Cleveland, Ohio, assignor to Health-Mor, Inc., Chicago, Ill., a corporation of Illinois
Application March 21, 1955, Serial No. 35,137
Term of patent 14 years
(Cl. D62—2)



177,579
GAME BOARD
Daniel P. McMackin and Richard C. Martin, Norwalk, Calif.
Application June 24, 1955, Serial No. 36,675
Term of patent 7 years
(Cl. D34—5)



177,580
COMBINATION ELECTRIC WIRE TOOL
Paul J. Miller, Butte, Mont.
Application March 1, 1955, Serial No. 34,799
Term of patent 14 years
(Cl. D54—13)



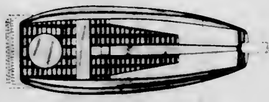
177,581
GOGGLE FRONT
William C. Moeller, Kansas City, Mo., assignor to Parmelee Plastics Company, Kansas City, Mo., a corporation of Missouri
Application August 23, 1954, Serial No. 31,970
Term of patent 14 years
(Cl. D57—1)



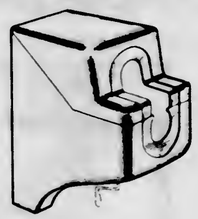
177,582
PAIR OF SPECTACLES
William C. Moeller, Kansas City, Mo., assignor to Parmelee Plastics Company, Kansas City, Mo., a corporation of Missouri
Application September 2, 1954, Serial No. 32,140
Term of patent 14 years
(Cl. D57—1)



177,583
ELECTRIC HAIR CLIPPER
Erdick Nelson, Naperville, Ill.
Application February 2, 1954, Serial No. 28,791
Term of patent 14 years
(Cl. D22—3)



177,584
HAIR AND SCALP TREATMENT CABINET
William D. Nolan, Wichita Falls, Tex.
Application April 4, 1955, Serial No. 35,344
Term of patent 14 years
(Cl. D4—2)



177,585
EXERCISER
Noël Ouellette, Montreal, Quebec, Canada
Application December 6, 1954, Serial No. 33,416
Term of patent 7 years
(Cl. D83—1)



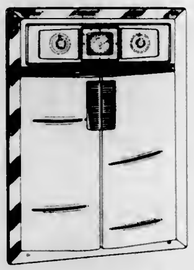
177,586
CASE
Richard C. J. Palson, Medfield, Mass.
Application November 22, 1955, Serial No. 38,993
Term of patent 14 years
(Cl. D58—12)



177,587
LAVATORY
Giovanni Ponti, Milan, Italy, assignor to American Radiator & Standard Sanitary Corporation, Pittsburgh, Pa., a corporation of Delaware
Application July 22, 1954, Serial No. 31,541
Term of patent 14 years
(Cl. D4—2)



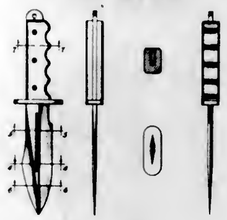
177,588
FRONT OF A WALL OVEN
Alfred J. Przybylowicz, Detroit, Mich., assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application March 11, 1955, Serial No. 35,002
Term of patent 7 years
(Cl. D81—4)



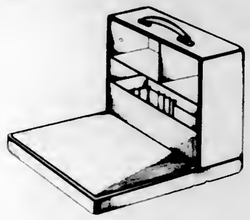
177,589
ROSARY BRACELET
Leopold Quirion, Sherbrooke, Quebec, Canada
Application December 15, 1954, Serial No. 33,564
Term of patent 7 years
(Cl. D45—16)



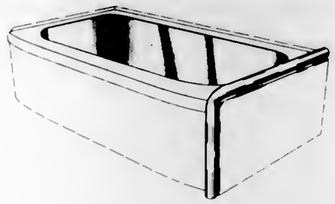
177,590
KNIFE
Walter Doane Randall, Orlando, Fla.
Application August 11, 1954, Serial No. 31,837
Term of patent 14 years
(Cl. D22—3)



177,591
COMPARTMENTED NURSES' BAG
Emily Robinson, Colorado Springs, Colo.
Application May 2, 1955, Serial No. 35,778
Term of patent 14 years
(Cl. D87—5)



177,592
BATH TUB
Clarence J. Rodman, Alliance, Ohio, assignor, by mesne assignments, to AllianceWare, Inc., a corporation of Delaware
Application February 17, 1955, Serial No. 34,563
Term of patent 14 years
(Cl. D4—4)



177,593
LINGERIE HANGER OR THE LIKE
Raymond E. Rutherford, Mount Vernon, Ill.
Application September 15, 1955, Serial No. 37,950
Term of patent 7 years
(Cl. D80—8.5)



177,594
VACUUM CLEANER
Erich Mittelsten Scheid, Wuppertal-Barmen, Germany
Application September 27, 1954, Serial No. 32,447
Claims priority, application Germany April 6, 1954
Term of patent 14 years
(Cl. D9—2)



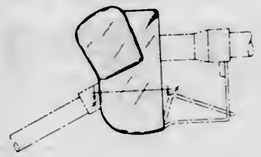
177,595
EMBOSSED TEXTILE FABRIC
Abraham Shurr, New York, N. Y., assignor to Shurr Fabrics Inc., New York, N. Y., a corporation of New York
Application July 27, 1955, Serial No. 37,144
Term of patent 3½ years
(Cl. D92—1)



177,596
FINGER RING
Ronald F. Silver, St. Paul, Minn.
Application September 13, 1955, Serial No. 37,913
Term of patent 14 years
(Cl. D45—10)



177,597
COMBINED BUMPER AND DUST COVER FOR GASOLINE DISPENSING NOZZLE
George H. Sinclair, Richmond Heights, and Wayne H. Rush, St. Louis, Mo.
Application August 12, 1955, Serial No. 37,434
Term of patent 14 years
(Cl. D52—2)



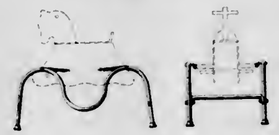
177,598
FLEXIBLE ENVELOPE FOR THE STORAGE OF LIQUIDS
Joel Sisco, Passaic, N. J.
Application August 29, 1955, Serial No. 37,697
Term of patent 14 years
(Cl. D58—2)



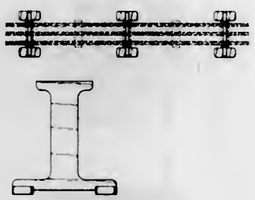
177,599
AUTOMOBILE DOOR HANDLE
Charles A. Stebbins, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 31, 1954, Serial No. 32,092
Term of patent 7 years
(Cl. D10—8)



177,600
HOBBY HORSE FRAME
Furman F. Taylor and Floyd H. Wyman, Westminster, S. C.
Application September 2, 1955, Serial No. 37,780
Term of patent 14 years
(Cl. D34—15)



177,601
MINIATURE RAILROAD TRESTLE STRUCTURE
Lee H. Stevens, Bellflower, Calif.
Application April 22, 1955, Serial No. 35,640
Term of patent 14 years
(Cl. D34—15)



177,602
SMOKING PIPE
Wensan Wang, Setagaya-ku, Tokyo, Japan
Application February 24, 1955, Serial No. 34,669
Claims priority, application Japan November 25, 1954
Term of patent 7 years
(Cl. D85—8)



177,603
ELECTRIC WARMER
Alexander W. Wertepny, Chicago, Ill.
Application May 16, 1955, Serial No. 36,015
Term of patent 3½ years
(Cl. D81—10)



LIST OF REISSUE PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 1ST DAY OF MAY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Jacobson, Howard C. Hammer mill with plural screens of different mesh. Re. 24,147, 5–1–56, Cl. 241—89.
National Research Development Corp.: *See*—
Robertson-Shersby-Harvie, Robert B. Re. 24,146.
Robertson-Shersby-Harvie, Robert B., to National Research Development Corp. Wave guide accelerator system. Re. 24–146, 5–1–56. Cl. 250—27.

LIST OF PLANT PATENTEES

Allred, J M, Jr. Avocado tree. 1,474, 5–1–56, Cl. 47—62.
Merrill, Grant. Peach tree. 1,472, 5–1–56, Cl. 47—62.
Merrill, Grant. Peach tree. 1,473, 5–1–56, Cl. 47—62.

LIST OF DESIGN PATENTEES

Allianceware, Inc.: *See*—
Rodman, Clarence J. 177,592.
American Floor Surfacing Machining Co., The: *See*—
Dolan, Francis D. 177,558.
American Radiator & Standard Sanitary Corp.: *See*—
Ponti, Giovanni. 177,587.
Baldwin, Maurice F.: *See*—
Exner, Virgil M., and Baldwin. 177,561.
Baum, Louis. Spoon or the like. 177,548, 5–1–56, Cl. D54—12.
Baum, Louis. Spoon or the like. 177,549, 5–1–56, Cl. D54—12.
Bloomfield, Harold. Bottle. 177,550, 5–1–56, Cl. D58—8.
Brandeis, Harold, to Rembrandt Lamp Corp. Lamp base. 177,551, 5–1–56, Cl. D48—20.
Bryant, Austin U., to Grove Valve and Regulator Co. Gate valve. 177,552, 5–1–56, Cl. D78—1.
Cardozo, Danforth, Jr.: *See*—
Ensign, Robert H., and Cardozo. 177,560.
Cataline, Acial L., and L. H. Wilson, to Motor Wheel Corp. Power lawn mower. 177,553, 5–1–56, Cl. D40—1.
Chevers, Melvin V., to Southern Methodist University. Finger ring. 177,554, 5–1–56, Cl. D45—10.
Chrysler Corp.: *See*—
Exner, Virgil M., and Baldwin. 177,561.
Gitschlag, Charles F., Jr. 177,566.
Coca-Cola Co., The: *See*—
Hodgman, Clare E. 177,569.
Dabney, Elizabeth J. Badge or similar article. 177,555, 5–1–56, Cl. D29—2.
De Santis, Dominic A. Sewing box. 177,556, 5–1–56, Cl. D3—19.
Diouhy, Clarence L., to Emil J. Paidar Co. Barber chair or similar article. 177,557, 5–1–56, Cl. D15—3.
Dolan, Francis D., to The American Floor Surfacing Machine Co. Portable electric hand saw. 177,558, 5–1–56, Cl. D93—3.
Emmert, George W. Tumbler. 177,559, 5–1–56, Cl. D36—8.
Ensign, Robert H., and D. Cardozo, Jr., to Scripto, Inc. Ball point pen. 177,560, 5–1–56, Cl. D74—17.
Exner, Virgil M., and M. F. Baldwin, to Chrysler Corp. Automobile fender. 177,561, 5–1–56, Cl. D14—6.
Fellows, Martha W. Doll or the like. 177,562, 5–1–56, Cl. D34—4.
Fletcher, Wendell S. Airplane or similar article. 177,563, 5–1–56, Cl. D71—1.
Freeland, Leonor Z. Airship. 177,564, 5–1–56, Cl. D71—1.
General Electric Co.: *See*—
Kerr, Roger B. 177,573.
Kerr, Roger B. 177,574.
General Motors Corp.: *See*—
Przybylowicz, Alfred J. 177,588.
Stebbins, Charles A. 177,599.
Gibson, Robert B. Sign board. 177,565, 5–1–56, Cl. D1—12.
Gitschlag, Charles F., Jr., to Chrysler Corp. Automobile fender. 177,566, 5–1–56, Cl. D14—6.
Gladding, McBean & Co.: *See*—
James, George T. 177,570.
Grove Valve and Regulator Co.: *See*—
Bryant, Austin U. 177,552.
Haussman, Fred. Combined baby trophy and coin bank or similar article. 177,567, 5–1–56, Cl. D34—11.
Health-Mor, Inc.: *See*—
Martinec, Eugene F. 177,578.
Hills, David G., to Plax Corp. Translucent ceiling panel. 177,568, 5–1–56, Cl. D48—23.
Hodgman, Clare E., to The Coca-Cola Co. Bottle vending machine. 177,569, 5–1–56, Cl. D52—3.
James, George T., to Gladding, McBean & Co. Food jar. 177,570, 5–1–56, Cl. D58—25.
Karoff, Robert B., to Novelty Utilities, Inc. Food and beverage server. 177,571, 5–1–56, Cl. D44—10.
Kendall, Paul D. Hearing aid. 177,572, 5–1–56, Cl. D26—14.
Kerr, Roger B., to General Electric Co. Electrical transformer. 177,573, 5–1–56, Cl. D26—15.
Kerr, Roger B., to General Electric Co. Electrical transformer. 177,574, 5–1–56, Cl. D26—15.
Louik, Leonard, to Plastic Sales. Cup. 177,575, 5–1–56, Cl. D44—9.
Marsella, Julio J. Ash tray. 177,576, 5–1–56, Cl. D85—2.
Martin, Henry J. Rotary kite. 177,577, 5–1–56, Cl. D34—15.
Martin, Richard C.: *See*—
McMackin, Daniel P., and Martin. 177,579.
Martinec, Eugene F., to Health-Mor, Inc. Suction cleaner sprayer attachment. 177,578, 5–1–56, Cl. D62—2.
McMackin, Daniel P., and R. C. Martin. Game board. 177,579, 5–1–56, Cl. D34—5.
Miller, Paul J. Combination electric wire tool. 177,580, 5–1–56, Cl. D54—13.
Moeller, William C., to Parmelee Plastics Co. Goggle front. 177,581, 5–1–56, Cl. D57—1.
Moeller, William C., to Parmelee Plastics Co. Pair of spectacles. 177,582, 5–1–56, Cl. D57—1.
Motor Wheel Corp.: *See*—
Cataline, Acial L., and Wilson. 177,553.
Nelson, Erdick. Electric hair clipper. 177,583, 5–1–56, Cl. D22—3.
Nolan, William D. Hair and scalp treatment cabinet. 177,584, 5–1–56, Cl. D4—2.
Novelty Utilities, Inc.: *See*—
Karoff, Robert B. 177,571.
Ouellette, Noël. Exerciser. 177,585, 5–1–56, Cl. D83—1.
Paidar, Emil J., Co.: *See*—
Diouhy, Clarence L. 177,557.
Palson, Richard C. J. Case. 177,586, 5–1–56, Cl. D58—12.
Parmelee Plastics Co.: *See*—
Moeller, William C. 177,581.
Moeller, William C. 177,582.
Plastic Sales: *See*—
Louik, Leonard. 177,575.
Plax Corp.: *See*—
Hills, David G. 177,568.
Ponti, Giovanni, to American Radiator & Standard Sanitary Corp. Lavatory. 177,587, 5–1–56, Cl. D4—2.
Przybylowicz, Alfred J., to General Motors Corp. Front of a wall oven. 177,588, 5–1–56, Cl. D81—4.
Quirion, Leopold. Rosary bracelet. 177,589, 5–1–56, Cl. D45—16.
Randall, Walter D. Knife. 177,590, 5–1–56, Cl. D22—3.
Rembrandt Lamp Corp.: *See*—
Brandeis, Harold. 177,551.
Robinson, Emily. Compartmented nurses' bag. 177,591, 5–1–56, Cl. D87—5.
Rodman, Clarence J., to Allianceware, Inc. Bathtub. 177,592, 5–1–56, Cl. D4—4.
Rush, Wayne H.: *See*—
Sinclair, George H., and Rush. 177,597.
Rutherford, Raymond E. Lingerie hanger or the like. 177,593, 5–1–56, Cl. D80—8.5.
Scheid, Erich M. Vacuum cleaner. 177,594, 5–1–56, Cl. D9—2.
Scripto, Inc.: *See*—
Ensign, Robert H., and Cardozo. 177,560.
Shurr, Abraham, to Shurr Fabrics Inc. Embossed textile fabric. 177,595, 5–1–56, Cl. D92—1.
Shurr Fabrics Inc.: *See*—
Shurr, Abraham. 177,595.
Silver, Ronald F. Finger ring. 177,596, 5–1–56, Cl. D45—10.
Sinclair, George H., and W. H. Rush. Combined bumper and dust cover for gasoline dispensing nozzle. 177,597, 5–1–56, Cl. D52—2.
Sisco, Joel. Flexible envelope for the storage of liquids. 177,598, 5–1–56, Cl. D58—2.

Southern Methodist University: *See*—
Chevers, Melvin V. 177,554.
Stebbins, Charles A., to General Motors Corp. Automobile door handle. 177,599, 5–1–56, Cl. D10—8.
Stevens, Lee H. Miniature railroad trestle structure. 177,601, 5–1–56, Cl. D34—15.
Taylor, Furman F., and F. H. Wyman. Hobby horse frame. 177,600, 5–1–56, Cl. D34—15.
Wang, Wensan. Smoking pipe. 177,602, 5–1–56, Cl. D85—8.
Wertepny, Alexander W. Electric warmer. 177,603, 5–1–56. Cl. D81—10.
Wilson, Lawrence H.: *See*—
Cataline, Acial L., and Wilson. 177,553.
Wyman, Floyd H.: *See*—
Taylor, Furman F., and Wyman. 177,600.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 1ST DAY OF MAY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

A. B. Defibrator: *See*—
Bylund, Alvar. 2,744,012.
ACF Industries, Inc.: *See*—
Furrer, John R. 2,743,943.
Schanz, Arthur C. 2,743,661.
A-P Controls Corp.: *See*—
Heiser, Ferdinand F., McCarty, and Vicenzi. 2,743,871.
Johnson, Roy W., Biermann, Burghduff. 2,743,769.
Aceves, Julius G.: *See*—
Amy, Ernest V., and Aceves. 2,744,167.
Acme Highway Products Corp.: *See*—
Brickman, Alan E. 2,743,652.
Acme Steel Co.: *See*—
MacChesney, Chester M. 2,743,631.
Adams, Sumner W., to A. A. Sanborn. Belt-supported pistol holder. 2,743,856, 5–1–56, Cl. 224—3.
Agriculture, United States of America as represented by the Secretary of: *See*—
Goldblatt, Leo A. 2,744,123.
Greathouse, Lucien H., Smith, Robinson, and Haydel. 2,744,014.
Lathrop, Elbert C. 2,744,037.
Meeks, James W., and Banigan. 2,744,125.
Weaver, Elmer A. 2,744,050.
Aikman, Oliver S., to Fansteel Metallurgical Corp. Electrical apparatus. 2,744,217, 5–1–56, Cl. 317—230.
Aircraft-Marine Products, Inc.: *See*—
Schumacher, William L., and Folkenroth. 2,744,244.
Aktiebolaget C. E. Johansson: *See*—
Larsson, Lars E. H., and Rydström. 2,743,645.
Aktiegolaget Elektrolux: *See*—
Bilde, Tord E. D., Hjelm, and Hultberg. 2,743,599.
Aktiebolaget Nynas Petroleum: *See*—
Lindhe, John H. O. 2,744,038.
Aladdin Industries, Inc.: *See*—
Bramming, Carl. 2,743,598.
Bramming, Carl. 2,743,770.
Alberdi, Santiago M., Jr. Closure cap for collapsible containers. 2,743,852, 5–1–56, Cl. 222—494.
Alberti, Carlo G.: *See*—
Vercellone, Alberto, and Alberti. 2,744,131.
Vercellone, Alberto, and Alberti. 2,744,135.
Vercellone, Alberto, and Alberti. 2,744,140.
Albus, Charles P., and D. E. Sargent, to General Aniline & Film Corp. Cellulose ester compositions plasticized with polyesters of suberic acid. 2,744,025, 5–1–56, Cl. 106—179.
Albus, Charles P., and D. E. Sargent, to General Aniline & Film Corp. Cellulose acetate-butyrate plasticized with a dialkyl suberate. 2,744,026, 5–1–56, Cl. 106—181.
Alef, Philip M., to General Motors Corp. Side window wiper. 2,743,472, 5–1–56, Cl. 15—250.
Alford, Harvey E.: *See*—
Bartleson, John D., and Alford. 2,744,068.
Allegheny Ludlum Steel Corp.: *See*—
Easton, Rufus. 2,743,492.
Allied Chemical & Dye Corp.: *See*—
Mayer, Perry E. 2,744,059.
Allied Laboratories, Inc.: *See*—
Brooker, Robert M., and Nash. 2,744,106.
Craige, Arthur H., Jr. 2,744,048.
Allyn, Charles S., Jr., to The National Cash Register Co. Duplicating apparatus for making magnetic records. 2,743,988, 5–1–56, Cl. 346—74.
Alsop, William G., to Colgate-Palmolive Co. Process for preparing fatty acid partial esters of polyhydric alcohols. 2,744,124, 5–1–56, Cl. 260—410.7.
Altmann, George O., to General Aniline & Film Corp. Process of preparing iron powder for magnetic cores. 2,744,040, 5–1–56, Cl. 148—104.
Aluminum Co. of America: *See*—
Hughes, Guy N. 2,744,241.
Hughes, Guy N., and Harder. 2,744,240.
Amana Refrigeration, Inc.: *See*—
Moore, Robert E. 2,743,981.
American Aerovap, Inc.: *See*—
Christopher, David H., and Spear. 2,743,548.
American Bosch Arma Corp.: *See*—
Bischoff, Waldemar O. 2,743,593.
Hill, Harry O., and Johnson. 2,743,594.
American Brake Shoe Co.: *See*—
Whisler, Thomas C. 2,743,540.
American Crucible Products Co., The: *See*—
Kaatz, Herbert W., and Enyeart. 2,743,673.
American Instrument Co., Inc.: *See*—
Epprecht, Edward H. 2,743,914.
American Laundry Machinery Co., The: *See*—
McLagan, Russell G. 2,743,853.
Petre, John R. 2,743,920.
Spreckelmeier, Edwin H. 2,743,921.
American Machine & Foundry Co.: *See*—
Patterson, Morehead. 2,743,927.
American Steel Foundries: *See*—
Cottrell, Robert B. 2,743,682.
Kayler, Frank H. 2,743,822.
American Zinc, Lead and Smelting Co.: *See*—
Hayes, Dale I. 2,743,828.
Ames, William L., to Western Electric Co., Inc. Jacket stripping apparatus. 2,743,632, 5–1–56, Cl. 81—9.51.
Amy, Aceves & King, Inc.: *See*—
Amy, Ernest V., and Aceves. 2,744,167.
Amy, Ernest V., and J. G. Aceves, to Amy, Aceves & King, Inc. Booster amplifier. 2,744,167, 5–1–56, Cl. 179—171.
Anderson, Evan L.: *See*—
Winter, Charles H., Jr., and Anderson. 2,744,006.
Anderson, Theodore E. Educational and amusement device. 2,743,536, 5–1–56, Cl. 35—49.
Andresen, Gilbert J. C., to The Goodyear Tire & Rubber Co. Electronic thickness gauge. 2,744,238, 5–1–56, Cl. 324—61.
Apel, John H., and D. W. Duffey, to The Jaeger Machine Co. Combination clutch and gear shift control for mixer units. 2,743,798, 5–1–56, Cl. 192—3.5.
Arey, William F. Jr., to Esso Research and Engineering Co. Olefin polymerization process using hydrogenated naphtha solvent. 2,744,084, 5–1–56, Cl. 260—33.6.
Armacost, Wilbur H., to Combustion Engineering, Inc. Equalizing the temperature of high pressure boiler drum walls. 2,743,709, 5–1–56, Cl. 122—411.
Armco Steel Corp.: *See*—
Wietzel, Karl F., Dovenberger, and La Tour. 2,743,692.
Armistead, William H., to Corning Glass Works. Metal sealing glass and seal. 2,743,553, 5–1–56, Cl. 49—92.5.
Armstrong, Bernard M., to Conveying Developments Ltd. Idler roller for endless flexible belt conveyors. 2,743,810, 5–1–56, Cl. 198—192.
Armstrong Cork Co.: *See*—
Breuer, Frederick W., and Tolman. 2,744,076.
Campbell, Charles H., Gaenzle, and Young. 2,743,748.
Army, United States of America as represented by the Secretary of the: *See*—
Persico, Ralph W., and Cugini. 2,743,446.
Woodbury, Robert L. 2,743,454.
Asburry, Omar L., Jr. Device to prevent over expansion of brake shoes in hydraulic brake systems. 2,743,791, 5–1–56, Cl. 188—78.
Asbury, Donald C.: *See*—
Holzer, Theodore H., and Asbury. 2,743,900.
Aschenwald, Maria: *See*—
Aschenwald, Johann. 2,743,826.
Aschenwald, Johann and M., and J. Dirscherl, heirs of said J. Aschenwald, deceased: ½ to Hauni Maschinenfabrik Korber & Co. G. m. b. H., and ½ to Maschinenbau Aktiengesellschaft Balcke. Apparatus for the treatment of tobacco. 2,743,826, 5–1–56, Cl. 214—16.
Asplund, Arne J. A. Disk type grinding apparatus for fibrous materials. 2,743,874, 5–1–56, Cl. 241—32.
Associated Spring Corp.: *See*—
Palvinen, John O. 2,744,233.
Atkinson Bulk Transport Co.: *See*—
Mattson, David F., and Paulsen. 2,743,965.
Auerbach, Martin. Alert device for attaching to radio receiving sets. 2,744,194, 5–1–56, Cl. 250—20.
Austin Motor Co. Ltd., The: *See*—
Highfield, Frank W. W. 2,744,032.
Auto Specialties Mfg. Co.: *See*—
Lucker, Millard B. 2,743,903.
Automatic Electric Laboratories, Inc.: *See*—
McCreary, Harold J. 2,744,219.
Ayres, Frank W., and F. A. Helfrecht, deceased; by W. M. Helfrecht, executrix, to National Motor Bearing Co., Inc. Fluid seal. 2,743,951, 5–1–56, Cl. 288—3.
Babcock & Wilcox Co., The.: *See*—
Hamilton, Carl C. 2,743,850.
Badeau, Carroll A., to The Thomas & Betts Co. Flexible toggle link actuated crimping tool. 2,743,634, 5–1–56, Cl. 81—15.
Bailey Meter Co.: *See*—
English, James F., Jr., and Hornfeck. 2,744,223.
Shannon, Jack F. 2,743,710.
Bailey, Richard W., to Milo Harding Co. Rotary printing drum for duplicating machines. 2,743,670, 5–1–56, Cl. 101—119.
Baines, Charles H., to Harbo Mfg. Co. Automatic temperature and pressure control circuit for sheet metal forming tools. 2,743,933, 5–1–56, Cl. 219—3.
Baker, Edwin R., and E. W. Nelson, to Continental Oil Co. Soluble cutting oil. 2,744,070, 5–1–56, Cl. 252—48.8.
Balchen, Dolfe J., to United States Rubber Co. Adhesive sheeting. 2,744,041, 5–1–56, Cl. 154—53.5.
Baldwin, Robert R., to B. L. Sarett. Removal of sugars by enzymatic process. 2,744,017, 5–1–56, Cl. 99—150.
Ball, Albert L., and S. E. Lull, to Bay State Abrasive Products Co. Abrasive bands. 2,743,559, 5–1–56, Cl. 51—188.
Ballard, Louis M., to Wayne Mfg. Co. Sweeper conveyors. 2,743 829. 5–1–56, Cl. 214—83.36.
Ballentine, James B., to The Chemstrand Corp. Dissolution of acrylonitrile polymers. 2,744,082, 5–1–56, Cl. 260—32.6.
Balsam, Maurice M. Apparatus for folding sheet material over an edge of a blank. 2,743,650, 5–1–56, Cl. 93—36.6.

Balsam, Maurice M. Apparatus for cutting a strip into portions of a predetermined length. 2,743,777, 5–1–56, Cl. 164—68.

Balsam, Maurice M. Adjustable band cutting apparatus. 2,743,778, 5–1–56, Cl. 164—201.

Banigan, Thomas F., Jr.: *See*—
Meeks, James W., and Banigan. 2,744,125.

Banker, Oscar H., to New Products Corp. Automatic stop for fluid motor. 2,743,704, 5–1–56, Cl. 121—38.

Barber, John J., to Knock A Bar, Inc. Liquid level signalling device. 2,744,177, 5–1–56, Cl. 200—84.

Barbknecht, Fred W., and D. A. Walker, to International Harvester Co. Cotton picker drum structure with lubricating means. 2,743,569, 5–1–56, Cl. 56—44.

Bares, Leonard J., to Foley Brothers Inc. Inclined shaft mucking apparatus. 2,743,830, 5–1–56, Cl. 214—90.

Bargexi, Eduard, to General Refractories Co. Process of making refractory brick and brick. 2,744,021, 5–1–56, Cl. 106—39.

Barker Poultry Equipment Co.: *See*—
Barker, Seth S., and Sharp. 2,743,477.

Barker, Seth S., and A. W. Sharp, to Barker Poultry Equipment Co. Poultry picking machine. 2,743,477, 5–1–56, Cl. 17—11.1.

Barney, Arthur L., to E. I. du Pont de Nemours and Co. Azonitriles containing quaternary ammonium salt groups. 2,744,105, 5–1–56, Cl. 260—192.

Bartleson, John D., and H. E. Alford, to The Standard Oil Co. Odor stabilized lubricating oil additives. 2,744,068, 5–1–56, Cl. 252—32.7.

Bartman, John. Auxiliary seat for barber chairs. 2,743,766, 5–1–56, Cl. 155—132.

Bassick Co., The: *See*—
Kramesak, Michael, Jr. 2,743,971.

Battelle Development Corp., The: *See*—
Todd, Francis C., and Wyler. 2,744,073.

Bauer, Benjamin B., and L. Gunter, Jr., to Shure Brothers, Inc. Head construction for magnetic recorders and reproducers. 2,744,165, 5–1–56, Cl. 179—100.2.

Bauer, Carl. Crop dusting machines. 2,743,549, 5–1–56, Cl. 43—148.

Baum, David. Phonograph attachment for eliminating static electricity from records. 2,744,212, 5–1–56, Cl. 317—2.

Bay State Abrasive Products Co.: *See*—
Ball, Albert L., and Lull. 2,743,559.

Bayard, Julius H., to Foster Wheeler Corp. Heat exchange system for power generators. 2,743,583, 5–1–56, Cl. 60—67.

Beckadolph, Richard, and W. Niclas, to Firma Continental Gummi-Werke, A.-G. Method and apparatus for building tire casings. 2,743,760, 5–1–56, Cl. 154—9.

Beckman Instruments, Inc.: *See*—
Toomin, Hershel, and Hare. 2,744,222.

Bee Chemical Co.: *See*—
Scott, A. B., and Wyrozumski. 2,743,490.

Beier, Josef. Infinitely variable friction wheel gears. 2,743,621, 5–1–56, Cl. 74—199.

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Bode, Hendrik W. 2,744,224.
Hill, Henry E., and Parkinson. 2,744,215.
Low, Frank K. 2,744,245.
Mallina, Rudolph F. 2,743,503.
Raisbeck, Gordon. 2,744,198.
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Hazen, Edward J. 2,743,578.

Bentele, Max, C. S. Lowthian, and W. A. Russell, to C. A. Parsons & Co. Ltd. Heat exchanger sealing devices. 2,743,945, 5–1–56, Cl. 285—1.

Berg, Clyde H. O., to Union Oil Co. of California. Process and apparatus for the elutriation of solids. 2,743,814, 5–1–56, Cl. 209—132.

Berg, Sverre, to Erie Forge Co. Forging method and apparatus. 2,743,500, 5–1–56, Cl. 29—6.

Bergholtz, Willy, and H. Piltschka, to International Standard Electric Corp. Circuit arrangement for pulse controlled telephone systems. 2,744,160, 5–1–56, Cl. 179—16.

Berkman, Sophia, to Transonic Corp. Replacable catalytic plug for internal combustion engines. 2,744,211, 5–1–56, Cl. 313—143.

Berry, Otto C. Foundry equipment. 2,743,491, 5–1–56, Cl. 22—77.

Berthet, Francois, and J. Desvaux. Driving and pulling of piles, pileplanks, tubing, and the like. 2,743,585, 5–1–56, Cl. 61—73.

Biermann, William A.: *See*—
Johnson, Roy W., Biermann, and Burghduff. 2,743,769.

Bigge, Henry W. Variable width load carrier. 2,743,936, 5–1–56, Cl. 280—34.

Bilde, Tord E. D., K. E. Hjelm, and R. B. J. Hultberg, to Aktiebolaget Elektrolux. Apparatus for washing clothes. 2,743,599, 5–1–56, Cl. 68—21.

Binkley, Stephen B., and L. C. Cheney, to Bristol Laboratories Inc. Basic ethers of phenols. 2,744,139, 5–1–56, Cl. 260—567.6.

Binswanger, Tolstoy L. Process of leaching ores and a centrifuge for use therewith. 2,743,819, 5–1–56, Cl. 210—68.

Binswanger, Tolstoy L. Countercurrent leaching method and apparatus. 2,743,999, 5–1–56, Cl. 23—310.

Bird Machine Co.: *See*—
Lyons, Sanford C. 2,743,864.

Birkenstein, Harry, Jr. Magnetic cushioning support for vehicles. 2,743,956, 5–1–56, Cl. 296—35.

Birmingham Small Arms Co. Ltd., The: *See*—
Marshall, Peter R. 2,744,062.

Bischoff, Waldemar O., to American Bosch Arma Corp. Hydraulic automatic timer. 2,743,593, 5–1–56, Cl. 64—25.

Bishop David Freeman Co.: *See*—
Schultz, Roy M. 2,743,541.

Black, Maurice. Circumcision board. 2,743,974, 5–1–56, Cl. 311—5.

Blaw-Knox Co.: *See*—
Veenschoten, Vincent V. 2,743,706.

Bliss, Harvey N., to Veeder-Root Inc. Apparatus for dispensing selected mixtures of two liquids. 2,743,843, 5–1–56, Cl. 222—26.

Board of Higher Education (Hunter College), The: *See*—
Clay, John P. 2,744,132.

Bode, Hendrik W., to Bell Telephone Laboratories, Inc. Automatic curve follower with vibrating stylus. 2,744,224, 5–1–56, Cl. 318—31.

Boeing Airplane Co.: *See*—
Di Marco, Thomas J., and Heighton. 2,744,214.
Levinson, Harry, Stoner, and Tangen. 2,743,800.
Polcuch, Alexander F. G. 2,744,237.
Rea, Stanley E. 2,744,181.
White, Roland J. 2,743,889.

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Hochfelder, J Gene. 2,743,855.

Bogin, Herman: *See*—
Gold, Abraham, and H., and Bogin. 2,743,857.

Bohlen, Charles L., to Fruehauf Trailer Co. Trailer frame and floor construction. 2,743,940, 5–1–56, Cl. 280—106.

Boosey, Lawrence N. Testing plug for floor drain. 2,743,786, 5–1–56, Cl. 182—31.

Borberg, Willy, to International Projector Corp. Automatic lubricating systems for shafts. 2,743,788, 5–1–56, Cl. 184—6.

Borg-Warner Corp.: *See*—
Ferris, Ernest A. 2,743,803.

Bornwasser, Louis P., to National Cylinder Gas Co. Steam stripping equipment. 2,743,916, 5–1–56, Cl. 261—121.

Bowdish and Associates, Inc.: *See*—
Hammeras, Raymond E., and Bowdish. 2,744,008.

Bowdish, Elver F.: *See*—
Hammeras, Raymond E., and Bowdish. 2,744,008.

Bowersmith, Charles M., to C. G. Day. Universal marine engine starter switch. 2,743,794, 5–1–56, Cl. 200—18.

Bowman, Kingston M. Non-tilting anchor. 2,743,695, 5–1–56, Cl. 114—207.

Bowne, Lloyd F., Jr., and P. Payson, to Crucible Steel Co. of America. Ni-Cr hard facing alloys. 2,744,009, 5–1–56, Cl. 75—171.

Boyd, William H. Animal hoist. 2,743,701, 5–1–56, Cl. 119—100.

Boyle, Ralph C.: *See*—
Ferguson, Henry A., Boyle, and Ziskal. 2,743,789.

Bradner, Mead, to The Foxboro Co. Industrial multi-record system. 2,743,986, 5–1–56, Cl. 346—46.

Bramming Carl, to Aladdin Industries, Inc. Positive control valve for gasoline lantern. 2,743,598, 5–1–56, Cl. 67—41.

Bramming, Carl, to Aladdin Industries, Inc. Fuel burner valve and cleaner construction. 2,743,770, 5–1–56, Cl. 158—120.

Bramson, Otto P. Tailpiece for string instrument. 2,743,643, 5–1–56, Cl. 84—302.

Brandberg, William S.: *See*—
Shively, Edward H., and Brandberg. 2,744,249.

Brandt Automatic Cashier Co.: *See*—
Jorgensen, Julius, and Buchholz. 2,743,563.

Brant, Gilbert W., deceased, by B. B. Hankovich, administratrix, to E. I. du Pont de Nemours & Co. Aqueous dispersion of vinylidene chloride polymers containing hydrogen peroxide as a corrosion inhibitor. 2,744,080, 5–1–56, Cl. 260—29.6.

Brebner, George B., to Wabash Fibre Box Co. Fruit box. 2,744,018, 5–1–56, Cl. 99—171.

Breedlove, James P. Automatic racking device. 2,743,823, 5–1–56, Cl. 214—2.5.

Breit, Gregory. Magnetic field extrapolating apparatus and method. 2,744,235, 5–1–56, Cl. 324—43.

Breuer, Frederick W., and L. L. Tolman, to Armstrong Cork Co. Production of organoplastics in cellular form by means of chemical blowing agents. 2,744,076, 5–1–56, Cl. 260—2.5.

Brezosky, Bernard J., and N. G. Ferguson, to General Electric Co. Waste disposal apparatus. 2,743,875, 5–1–56, Cl. 241—100.5.

Bricker, Carl E., to The Goodyear Tire & Rubber Co. Brake with soft steel return spring. 2,743,790, 5–1–56, Cl. 188—152.

Brickman, Alan E., to Acme Highway Products Corp. Load-transfer devices for highway joints. 2,743,652, 5–1–56, Cl. 94—8.

Briggs, George E. Fish tape threader. 2,743,884, 5–1–56, Cl. 242—96.

Bristol Laboratories Inc.: *See*—
Binkley, Stephen B., and Cheney. 2,744,139.

Bristol Steel & Iron Works, Inc.: *See*—
Ferguson, James R. 2,744,209.
Ferguson, James R. 2,744,210.

Brite-Lite Corp. of America: *See*—
Porter, William M., and Smith. 2,744,172.

Brooker, Robert M., and H. A. Nash, to Allied Laboratories, Inc. New alkaloid from Veratrum Album and a method for its recovery. 2,744,106, 5–1–56, Cl. 260—236.

Brown, Allen K.: *See*—
Bunblasky, Adolph, and Brown. 2,744,231.

Brown, Boveri & Cie, Aktiengesellschaft: *See*—
Milliner, Friedrich. 2,743,949.

Brown, Cicero C. Method of cementing wells. 2,743,779, 5–1–56, Cl. 166—21.

Brown, Cicero C. Well packers. 2,743,780, 5–1–56, Cl. 166—120.

Brown, Gordon D.: *See*—
Elsner, Edwin C. 2,743,684.

Brown, John: *See*—
Shawhan, Elbert N., Rellis, and Brown. 2,744,232.

Brown, Milton E., & Co.: *See*—
Goddard, Ruth M. 2,743,543.

Bruestle, Armin O.: *See*—
Krekeler, Claude B., and Bruestle. 2,743,917.

Bruntjen, Herman A., to E. A. Polzin. Apparatus for popping corn. 2,743,663, 5–1–56, Cl. 99—238.1.

Brzozowski, Wigold B. Valveless intermittent combustor with automatic flow control. 2,743,575, 5–1–56, Cl. 60—35.6.

Buchholz, Arnold R.: *See*—
Jorgensen, Julius, and Buchholz. 2,743,563.

Budd Co., The: *See*—
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Dean, Albert G. 2,743,821.
Dean, Albert G., and W. B. 2,743,680.
Dean, Walter B. 2,743,952.
Watter, Michael. 2,743,923.

Bugel, Roelof D., to Hartford National Bank and Trust Co. as trustee. Vent for metal housing for electrolytic capacitors. 2,743,841, 5–1–56, Cl. 220—89.

Bunblasky, Adolph, and A. K. Brown, to Sorensen & Co., Inc. Voltage regulator. 2,744,231, 5–1–56, Cl. 323—66.

Burby, Philip E., to United Shoe Machinery Corp. Lasting machines. 2,743,468, 5–1–56, Cl. 12—12.4.

Burghduff, Stanley E.: *See*—
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Burke, Donald J., to Erico Products, Inc. Rail bond and apparatus for attaching same. 2,743,873, 5–1–56, Cl. 238—14.15.

Burroughs Corp.: *See*—
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Burton, Lester W., and S. P. Jackson, to General Electric Co. Sealed rectifier unit and method of making the same. 2,744,218, 5–1–56, Cl. 317—234.

Butler, Beatrice. Ash tray attachment. 2,743,729, 5–1–56, Cl. 131—235.

Bylund, Alvar, to A. B. Defibrator. Pulping apparatus. 2,744,012, 5–1–56, Cl. 92—6.

Cadre Industries Corp.: *See*—
Cawley, Wayne W. 2,744,185.

Caldwell, John R., to Eastman Kodak Co. Polyesters from p,p'-sulfonyl dibenzoic acid condensed with a polyhydroxy compound containing at least 3 hydroxy groups. 2,744,078, 5–1–56, Cl. 260—22.

Caldwell, John R., to Eastman Kodak Co. Linear polyesters from p,p'-sulfonyl dibenzoic acid plus aliphatic dibasic straight chain acids condensed with a glycol. 2,744,088, 5–1–56, Cl. 260—75.

Caldwell, John R., to Eastman Kodak Co. Linear highly polymeric polyesters from p,p'-sulfonyl dibenzoic acid and pentamethylene or higher glycols. 2,744,089, 5–1–56, Cl. 260—75.

Caldwell, John R., to Eastman Kodak Co. Linear polyesters from p,p'-sulfonyl dibenzoic acid plus carbonic or oxalic acid condensed with a glycol. 2,744,090, 5–1–56, Cl. 260—75.

Caldwell, John R., to Eastman Kodak Co. Linear polyesters from p,p'-sulfonyl dibenzoic acid plus aliphatic dibasic straight chain acids condensed with a glycol. 2,744,091, 5–1–56, Cl. 260—75.

Caldwell, John R., to Eastman Kodak Co. Linear polyesters from p,p'-sulfonyl dibenzoic acid plus aliphatic dibasic branched-chain acids condensed with a glycol. 2,744,092, 5–1–56, Cl. 260—75.

Caldwell, John R., to Eastman Kodak Co. Linear polyesters from p,p'-sulfonyl dibenzoic acid plus aliphatic dibasic ether acids condensed with a glycol. 2,744,093, 5–1–56 Cl. 260—75.

Caldwell, John R., to Eastman Kodak Co. Linear polyesters from p,p'-sulfonyl dibenzoic acid plus an aromatic acid condensed with a glycol. 2,744,094, 5–1–56, Cl. 260—75.

Caldwell, John R., to Eastman Kodak Co. Linear polyesters from p,p'-sulfonyl dibenzoic acid condensed with an aliphatic ether glycol. 2,744,095, 5–1–56, Cl. 260—75.

Caldwell, John R., to Eastman Kodak Co. Cross-linked polyesters from p,p'-sulfonyl dibenzoic acid and an unsaturated aliphatic dibasic acid condensed with a glycol. 2,744,096, 5–1–56, Cl. 260—75.

Caldwell, John R., to Eastman Kodak Co. Polyesters from β-hydroxyalkyl diesters of sulfonyl dibenzoic acid condensed with a dihydroxy compound. 2,744,097, 5–1–56, Cl. 260—75.

Caldwell, John R., to Eastman Kodak Co. Omega hydroxyalinhatic diesters of sulfonyl dibenzoic acids. 2,744,129, 5–1–56, Cl. 260—470.

Calhoun, George W., to The Budd Co. Bedroom accommodations for passenger vehicles. 2,743,683, 5–1–56, Cl. 105—313.

California Research Corp.: *See*—
Moriarty, Francis C., and Graves. 2,744,055.

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Calumet and Hecla, Inc.: *See*—
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Cameron Machine Co.: *See*—
Saco Felix, and Rockstrom. 2,743,879.

Camp S. H., and Co.: *See*—
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Campbell, Charles H., L. E. Gaensle, and R. A. Young, to Armstrong Cork Co. Device for fabricating cork composition and similar articles. 2,743,748, 5–1–56, Cl. 144—21.

Carlson, Dwight B., to International Harvester Co. Drawer type cylinder concave for threshers. 2,743,728, 5–1–56, Cl. 130—27.

Carlson, Hugo R. Goggles toy. 2,743,448, 5–1–56, Cl. 2—14.

Carpenter, Ellsworth J.: *See*—
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Carson, Clarence M.: *See*—
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Cascades Plywood Corp.: *See*—
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Catlin, Robert T., and J. C. Sinex, to Remington Arms Co. Shield structure for explosively actuated tools. 2,743,443, 5–1–56, Cl. 1—44.5.

Cavalla, John F., to Parke, Davis & Co. Phthalimidopropionylaminoethyl disulfide and preparation. 2,744,118, 5–1–56, Cl. 260—326.

Cawley, Wayne W., to Cadre Industries Corp. Illuminated knob. 2,744,185, 5–1–56, Cl. 240—2.

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Chambers, John M., and J. C. McNeice, to Massey-Harris-Ferguson (Sales) Ltd. Tank support structure for use on tractors or the like. 2,743,934, 5–1–56, Cl. 280—5.

Chandler, Ernest: *See*—
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Chaney, David W., and R. L. Schaefer, to The Chemstrand Corp. Method of producing shaped articles from polymeric materials. 2,743,994, 5–1–56, Cl. 18—54.

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Chemical Construction Corp.: *See*—
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Chemstrand Corp., The: *See*—
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Chaney, David W., and Schaefer. 2,743,994.
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Binkley, Stephen B., and Cheney. 2,744,139.

Chicago Mill and Lumber Co.: *See*—
Ware, Richard N., Jr., and Christian. 2,744,046.

Chinman, Julius: *See*—
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Christensen, Dan A., and A. D. Martin, to National Motor Bearing Co., Inc. Closure device. 2,743,968, 5–1–56, Cl. 308—47.

Christensen, Frantz, and A. J. L. Leopold. Pulse generator for electric fences. 2,743,907, 5–1–56, Cl. 256—10.

Christenson, Howard W., to General Motors Corp. Sumps for tank and other similar types of vehicle transmissions. 2,743 627, 5–1–56, Cl. 74—606.

Christian, Moss B.: *See*—
Ware, Richard N., Jr., and Christian. 2,744,046.

Christopher, David H., and P. J. Spear, to American Aerovap, Inc. Method of vaporizing a mixture of organic insecticides in ventilated rooms. 2,743,548, 5–1–56, Cl. 43—129.

Chromium Mining & Smelting Corp., Ltd.: *See*—
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Clark Controller Co., The: *See*—
Few, William, and Sauter. 2,744,230.

Clay, John P., to The Board of Higher Education (Hunter College). Method of producing alkyl phosphonyl dihalides. 2,744 132, 5–1–56, Cl. 260—543.

Cleek, Paul L. Hair strand curler. 2,743,731, 5–1–56, Cl. 132—42.

Clements, James D. Topping device for lawn mowers. 2,743,570, 5–1–56, Cl. 56—238.

Clevite Corp.: *See*—
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Clifford, Cecil F. Mechanical oscillators. 2,743,614, 5–1–56, Cl. 74—1.5.

Clothier, George D. Electric cables or other insulated electric conductors. 2,743,858, 5–1–56, Cl. 226—24.

Clurman, Stanley P., and H. C. Ressler, to Faximile, Inc. Facsimile recorder. 2,743,989, 5–1–56, Cl. 346—74.

Coberly, Clarence J., to Kobe, Inc. Hydraulic flywheel. 2 743,581, 5–1–56, Cl. 60—51.

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Cohn, Seymour B., to Sperry Rand Corp. Wave guide delay line. 2,744,242, 5–1–56, Cl. 333—31.

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Columbia-Southern Chemical Corp.: *See*—
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Comptoir Industriel d'Etirage et Profilage de Metaux: *See*—
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Cook, Leon J. Lead sleeve expanding device. 2,743,837, 5–1–56, Cl. 218—19.

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Cooke, Allen B. Autographic registers. 2,743,944, 5–1–56, Cl. 282—18.

Coolman, Ford L., and M. E. Graham, to Republic Steel Corp. Process of accelerating the final portion of the direct reduction of iron oxide to metallic iron. 2,744,005, 5–1–56, Cl. 75—34.

Cooper, Henry G., and M. H. Dickinson. Apparatus for beaching seaplanes. 2,743,697, 5–1–56, Cl. 114—230.

Corbett, Thomas H. Water supply units for glass washers and the like. 2,743,736, 5–1–56, Cl. 137—215.

Cornelius, Richard T. Cast connecting rod comprising ball bearing. 2,743,970, 5–1–56, Cl. 308—184.

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Coro, Inc.: *See—*
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Selbert, Ernest H. 2,743,610.

Cottrell, Robert B., to American Steel Foundries. Car truck. 2,743,682, 5–1–56, Cl. 105—197.

Couch, Glenn F., to The Symington-Gould Corp. Lubricating mechanism for railway car axle. 2,743,969, 5–1–56, Cl. 308—84.

Cover, Martin L. Apparatus for cooling sinter. 2,743,534, 5–1–56, Cl. 34—174.

Coyle, William E. Hydraulic underreamer. 2,743,906, 5–1–56, Cl. 255—74.

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Craige, Arthur H., Jr., to Allied Laboratories, Inc. Substituted alkyl-diphenylmethane anthelmintic compositions. 2,744,048, 5–1–56, Cl. 167—53.1.

Cramer, Charles, to Inventa A. G. fuer Forschung und Patentverwertung. Process for the production of low-biuret content urea. 2,744,133, 5–1–56, Cl. 260—555.

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Crist, Thomas D. Leader-keepers. 2,743,546, 5–1–56, Cl. 43—54.5.

Croce, Michele, and C. G. Shuttleworth, to Certain-Teed Products Corp. Plaster compositions and products. 2,744,022, 5–1–56, Cl. 106—110.

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Crowley, Henry L., to Republic Steel Corp. Process of making powdered iron in a discrete crystalline form. 2,744,002, 5–1–56, Cl. 75—.5.

Crucible Steel Co. of America: *See—*
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Cupec, Sylvester P. Television antenna. 2,744,248, 5–1–56, Cl. 343—815.

Cuq, Pierre, to L'Emboutissage Hydraulique Moderne. Apparatus for forming articles from hollow blanks. 2,743,691, 5–1–56, Cl. 113—44.

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Dalton, Robert H., and R. O. Voss, to Corning Glass Works. Method of flashing glass articles. 2,744,034, 5–1–56, Cl. 117—97.

Daly, Charles T., and R. C. Jones, to International Standard Electric Corp. Fault alarm arrangements for electric communication systems. 2,744,170, 5–1–56, Cl. 179—175.31.

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Davis, Frank L., to Davis Aircraft Products Inc. Slide buckle. 2,743,497, 5–1–56, Cl. 24—196.

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Dawson, John H., and E. M. Ervin. Taping machine. 2,743,562, 5–1–56, Cl. 53—77.

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Dean, Albert G., to The Budd Co. Draft gear with swivel coupler. 2,743,821, 5–1–56, Cl. 213—46.

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Delcroix, Jean, to Comptoir Industriel d'Etirage et Profilage de Metaux. Loading device for hot extrusion presses. 2,743,811, 5–1–56, Cl. 207—2.

Del Re, Michael A., Sr. Toggle-switch locking device. 2,744,171, 5–1–56, Cl. 200—42.

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Den Hertog, Martinus, to International Standard Electric Corp. Telephone exchange equipment. 2,744,163, 5–1–56, Cl. 179—18.

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Di Marco, Thomas J., and H. W. Heighton, to Boeing Airplane Co. Combined base sockets and terminal boards. 2,744,214, 5–1–56, Cl. 317—101.

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Djerassi, Carl, L. Miramontes, and G. Rosenkranz, to Syntex S. A. Δ^4-19-nor-17α-ethinylandrosten-17β-ol-3-one and process. 2,744,122, 5–1–56, Cl. 260—397.4.

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Doerner, Otto D.: *See—*
Weber, Carl, Doerner, Mantonya, and Doerner. 2,743,671.

Dollinger, Lewis L. Space heater for use with a fireplace. 2,743,720, 5–1–56, Cl. 126—121.

Dorland, Rodger M., and P. E. Roberts. Artificial board. 2,744,013, 5–1–56, Cl. 92—21.

Doniger, Sundel. Tools. 2,743,524, 5–1–56, Cl. 30—342.

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Dow Chemical Co., The: *See—*
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Ruh, Robert P., and Davis. 2,744,148.

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Dowell, A. Yates: *See—*
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Dreier, Victor G., to Servel, Inc. Ice maker. 2,743,588, 5–1–56, Cl. 62—7.

Dressler, Thomas M., to International Harvester Co. Injection nozzle. 2,743,962, 5–1–56, Cl. 299—107.6.

Driggs, Ivan H., A. Hyatt, and F. K. Ellis, Jr. Vertical climbing airplane. 2,743,886, 5–1–56, Cl. 244—7.

Drow, Donald F., to Minneapolis-Honeywell Regulator Co. Thermostatically operated fuel valve for heat appliances. 2,743,870, 5–1–56, Cl. 236—48.

Drummond, Ronald B. Ironing accessory. 2,743,542, 5–1–56, Cl. 38—97.

Du Bois, Robert C., to Minneapolis-Honeywell Regulator Co. Control apparatus responsive to the extreme magnitude of one of a plurality of variables. 2,743,735, 5–1–56, Cl. 137—85.

Duecy, George P. Method of reinforcing concrete units. 2,743,514, 5–1–56, Cl. 29—452.

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Duffy, Cyrus P. Self-loading shovel ditching machine. 2,743,537, 5–1–56, Cl. 37—4.

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Barney, Arthur L. 2,744,105.
Brant, Gilbert W. 2,744,080.
Eaton, Russell B. 2,744,060.
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Theobald, Clement W. 2,744,074.
Winberg, Hilmer E. 2,744,130.
Winter, Charles H., Jr., and Anderson. 2,744,006.

Durant, Lyndon A., to General Patent Corp. Target practicing and amusement device. 2,743,928, 5–1–56, Cl. 273—101.2.

Dushkes, Sherman Z., and G. J. Willey. Pivotal cam plate mechanism. 2,743,619, 5–1–56, Cl. 74—110.

Eadon-Clarke, Christopher E., to International Standard Electric Corp. Gas burner system having time controlled air and fuel supply. 2,743,771, 5–1–56, Cl. 158—123.

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Caldwell, John R. 2,744,078.
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Easton, Rufus, to Allegheny Ludlum Steel Corp. Apparatus for controlling the flow of molten metal. 2,743,492, 5–1–56, Cl. 22—79.

Eaton Mfg. Co.: *See—*
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Eaton, Russell B., to E. I. du Pont de Nemours and Co. Process for separating hafnium tetrachloride from zirconium tetrachloride. 2,744,060, 5–1–56, Cl. 202—39.

Eckberg, Curtis R. Control apparatus. 2,744,178, 5–1–56, Cl. 200—138.

Eckel, John E., to Esso Research and Engineering Co. Improved sealing valve assembly. 2,743,905, 5–1–56, Cl. 255—28.

Edgerton, Arthur H. Enameling stand. 2,743,499, 5–1–56, Cl. 25—153.

Eisenberg, Charles: *See—*
Erickson, Lewis C. 2,743,813.

Eklund, Stone E., to The National Supply Co. Method of making a composite cutter. 2,743,495, 5–1–56, Cl. 22—202.

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Elliott, Lynn T., and J. N. Morrell. Unitary power operator for opening and closing valves. 2,743,897, 5–1–56, Cl. 251—59.

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Elliott, Richard M., and J. L. Minto, to United Shoe Machinery Corp. Machines for performing operations with respect to articles and control mechanisms therefor. 2,743,925, 5–1–56, Cl. 271—68.

Ellis, Edwin J.: *See—*
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Elsas, William D. Stopper for a resilient dispenser. 2,743,849, 5–1–56, Cl. 222—205.

Elsner, Edwin C., to G. D. Brown. Tie-down track fitting. 2,743,684, 5–1–56, Cl. 105—369.

Emmett, Paul H., to Gulf Research & Development Co. Catalytic conversion process with the use of a base-exchanged silica-alumina catalyst. 2,744,057, 5–1–56, Cl. 196—52.

English, James F., Jr., and A. J. Hornfeck, to Bailey Meter Co. Servo system, including electrical inverter circuit. 2,744 223, 5–1–56, Cl. 318—29.

Enos, Herman I., Jr., to Hercules Powder Co. Preparation of m- and p-cymene mixture by isomerization of cymene. 2,744,149, 5–1–56, Cl. 260—668.

Enos, Herman I., Jr., to Hercules Powder Co. Preparation of m- and p-diisopropylbenzene. 2,744,150, 5–1–56, Cl. 260—671.

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Erickson, Lewis C., 25% to L. E. Erickson, 25% to C. Erickson, and 25% to C. Eisenberg. Materials separating means. 2,743,813, 5–1–56, Cl. 209—106.

Erico Products, Inc.: *See—*
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Erspamer, Vittorio, A. Vercellone, and C. Pasini, to Farmaceutici Italia S. A. Process for preparing the choline ester of urocanic acid. 2,744,117, 5–1–56, Cl. 260—309.

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Ervin, Evander M. Machine for use in harvesting crops. 2,743,824, 5–1–56, Cl. 214—5.5.

Esso Research and Engineering Co.: *See—*
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Juterbock, Edwin E., and McArthur. 2,744,199.
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Everett, Samuel J., to S. & R. J. Everett & Co. Ltd. Manufacture of hypodermic needles. 2,743,517, 5–1–56, Cl. 29—528.

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Fairchild, William R. Pile driver hammer lead. 2,743,586, 5–1–56, Cl. 61—74.

Fairchild, William R. Pile driver skid runner. 2,743,935, 5–1–56, Cl. 280—28.

Falco Products Co.: *See—*
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Shore, Charles. 2,743,979.

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Farmer, Gilbert. Wire dispensing reel for service trucks. 2,743,883, 5–1–56, Cl. 242—90.

Farrel-Birmingham Co., Inc.: *See—*
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Faust, Ellwood L., and R. R. Harter, to International Harvester Co. Guide for material dispenser. 2,743,801, 5–1–56, Cl. 193—25.

Fawcett, Frank S., and B. W. Howk, to E. I. du Pont de Nemours & Co. Conversion of methanol to hydrocarbons at superatmospheric pressure over modified metal molybdite catalysts. 2,744,151, 5–1–56, Cl. 260—682.

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Feild, Theophilus A., Jr.: *See—*
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Schoonover, Archie G., Feild, and Purse. 2,743,992.

Felice, Joseph J. Book support or lecturn. 2,743,550, 5–1–56, Cl. 45—80.

Fels & Co.: *See—*
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Ferguson, Albert C. Metallic awnings. 2,743,489, 5–1–56, Cl. 20—57.5.

Ferguson, Harry, Inc.: *See—*
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Ferguson, James R., ½ to Bristol Steel & Iron Works, Inc. Headlight unit for motor vehicles. 2,744,209, 5–1–56, Cl. 313—111.

Ferguson, James R., ½ to Bristol Steel & Iron Works, Inc. Headlight unit for motor vehicles. 2,744,210, 5–1–56, Cl. 313—111.

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Few, William, and J. D. Sauter, to The Clark Controller Co. Automatic current regulating apparatus. 2,744,230, 5–1–56, Cl. 322—27.

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Fiedler, Willy A. Split aircraft wing. 2,743,887, 5–1–56, Cl. 244—43.

Fierstein, Jean C., E. R. Lieberman, Z. W. Wicks, Jr., and H. Yuska, to Interchemical Corp. Textile decorating with compositions comprising an aqueous acetic acid solution of a resinous polyamine and hexahydro-1,3,5-triacrylyl-S-triazine. 2,744,035, 5–1–56, Cl. 117—161.

Filar, Leo J., to Hercules Powder Co. Manufacture of phenols. 2,744,143, 5–1–56, Cl. 260—621.

Finishine Laboratories, Inc.: *See—*
Hagadorn, Elmore W. 2,743,558.

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Beckadolph, Richard, and Niclas. 2,743,760.

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Flambeau Plastics Corp.: *See—*
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Florence Stove Co.: *See—*
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Flynn, Michael, Mfg. Co.: *See—*
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Focht, Walter, Jr., J. Gurniak, and L. Starr, to Michael Flynn Mfg. Co. Awning window structure. 2,743,796, 5–1–56, Cl. 189—67.

Foley Brothers Inc.: *See—*
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Forrester, Kathryn B. Mop and mounting tube assembly. 2,743,471, 5–1–56, Cl. 15—228.

Forrester, Peter G., and G. D. Denyer, to The Glacier Metal Co. Ltd. Production of composite material for the manufacture of plain bearings. 2,743,516, 5–1–56, Cl. 29—528.

Foss, Curtis D. Journal box seal with floating sleeve. 2,743,947, 5–1–56, Cl. 286—6.

Foster Wheeler Corp.: *See—*
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Foxboro Co., The: *See—*
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Fraga, Frank M. Crank unit for automatic adjustment of implements. 2,743,656, 5–1–56, Cl. 97—47.65.

Frank, Paul A. Tire curing press. 2,743,480, 5–1–56, Cl. 18—17.

Franks, Charles M. Knife sharpener. 2,743,561, 5–1–56, Cl. 51—214.

Franks, Norvin H., to Sturdi-Bilt Steel Products, Inc. Power tool bench with adjustable motor position. 2,743,747, 5–1–56, Cl. 144—1.

Fraser, Alan R., to Chromium Mining & Smelting Corp., Ltd. Method of lowering the carbon content of high carbon ferrochromium. 2,744,004, 5–1–56, Cl. 75—26.

Fredericks, Joseph A., to The Cyril Bath Co. Method of forming strip metal stock into shapes for making annular members. 2,743,756, 5–1–56, Cl. 153—40.

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Friedman, John H., to The National Machinery Co. Method of making skirted nuts. 2,743,466, 5–1–56, Cl. 10—86.

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Fullerton, Robert H., to A. Heinle, Traction device for vehicle wheels. 2,743,755, 5–1–56, Cl. 152—219.

Furrer, John R., to ACF Industries, Inc. Three prong resilient coupling device. 2,743,943, 5–1–56, Cl. 280—485.

Fürst, Stefan, to W. Reiners. Clamping device for automatic coil winding machine. 2,743,877, 5–1–56, Cl. 242—35.6.

Gaenzle, Luther E.: *See—*
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Shaff, Ernest H. 2,743,636.

Gargini, Eric J., to Electric & Musical Industries Ltd. Television apparatus for use in relay systems. 2,744,157, 5–1–56, Cl. 178—5.8.

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Garraway, George H. Fluid turbine. 2,743,901, 5–1–56, Cl. 253—52.

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Gaubatz, Arthur W., to General Motors Corp. Gas turbine engine with turbine nozzle cooled by combustion chamber jacket air. 2,743,579, 5–1–56, Cl. 60—39.36.

Gaylord, John A. Barometric parachute release. 2,743,891, 5–1–56, Cl. 244—150.

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General Aniline & Film Corp.: *See—*
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Albus, Charles P., and Sargent. 2,744,026.
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General Electric Co.: *See—*
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Gervais, Germain. Integrating counter mechanism. 2,743,867, 5–1–56, Cl. 235—61.

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Gilbert, Roswell W., to Weston Electrical Instrument Corp. D. C. amplifier. 2,744,168, 5–1–56, Cl. 179—171.

Gill, Mellor A. Apparatus for duplicating magnetic recordings. 2,744,166, 5–1–56, Cl. 179—100.2.

Ginsberg, Isadore. Convertible stroller. 2,743,937, 5–1–56, Cl. 280—41.

Giraitis, Albert P., A. F. Limper, and W. H. Thomas, to Ethyl Corp. Process of recovering alkaline earth metal from alkali metal-alkaline earth mixtures. 2,744,007, 5–1–56, Cl. 75—99.

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Glaser, Isador. Center piece divider for egg cases. 2,743,863. 5–1–56, Cl. 229—27.

Glaser, Jules W. Reciprocating electric motor. 2,744,201, 5–1–56, Cl. 310—32.

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Gold Bros. Inc.: *See—*
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Gold, Abraham and H., and Bogin. 2,743,857.

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McWhorter, Henry L. 2,743,881.

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Grab, Eugene G. Method for the manufacture of apple sauce. 2,744,016, 5–1–56, Cl. 99—101.

Graf, Paul. Two-part expansible ring. 2,743,591, 5–1–56, Cl. 63—15.6.

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Coolman, Ford L., and Graham. 2,744,005.

Grandjot, Walter. Audiometer. 2,744,158, 5–1–56, Cl. 179—1.

Granqvist, Carl-Erik, to Svenska Aktiebolaget Gasaccumulator. Arrangement for direct reception of radio signals. 2,744,246, 5–1–56, Cl. 343—118.

Grave, William, to National Lead Co. Method for preparation of composite pigments. 2,744,028, 5–1–56, Cl. 106—300.

Graves, Elliot D., and M. McDougal, to Contact Products, Inc. Apparatus for making pressure sensitive labels. 2,743,753. 5–1–56, Cl. 154—1.

Graves, Elizabeth B., executrix: *See—*
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Graves, Francis G.: *See—*
Moriarty, Francis C., and Graves. 2,744,055.

Grayek, Floyd E. Vehicle parking device and system of parking. 2,743,486, 5–1–56, Cl. 20—1.13.

Greathouse, Lucien H., B. A. Smith, H. M. Robinson, and C. H. Haydel, to the United States of America as represented by the Secretary of Agriculture. Process of separating proteins and vitamins from starch waste water. 2,744,014, 5–1–56, Cl. 99—2.

Greenwald, Fred A.: *See—*
Snow, Jack N., Greenwald, and Ticknor. 2,743,759.

Gregory, Walter A., to E. I. du Pont de Nemours and Co. N-(sulfonylphenacyl) hexamethylenetetraminium halides. 2,744,111, 5–1–56, Cl. 260—248.5.

Gregory, Walter A., to E. I. du Pont de Nemours and Co. Amides of Sulfonylserinophenones. 2,744,136, 5–1–56, Cl. 260—562.

Grewe, Rudolf, to Hoffmann-La Roche Inc. Process for the manufacture of N-methyl-B-cyclohexen-(1)-ylethylamine. 2,744,137, 5–1–56, Cl. 260—563.

Grieshaber, Herman R. Surgical instrument. 2,743,726, 5–1–56, Cl. 128—321.

Griesinger, Walter H. Orthodontic pacifier. 2,743,727, 5–1–56, Cl. 128—360.

Griffiths, Michael J.: *See—*
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Gross, Bernard, to Rohr Aircraft Corp. Indicator for resistance welding. 2,744,182, 5–1–56, Cl. 219—4.

Gross, Victor R., to Daimler-Benz Aktiengesellschaft. Diesel compression ignition engines. 2,743,711, 5–1–56, Cl. 123—32.

Grosse-Lohmann, Ralph. Automatic critical aerodynamic limit actuator. 2,744,173, 5–1–56, Cl. 200—52.

Grunberg, Jacques, to L'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procedes Georges Claude. Method for the fractionation of gas mixtures. 2,743,590. 5–1–56, Cl. 62—175.5.

Guarantee Specialty Mfg. Co., The: *See—*
Urbas, Ernest J. 2,743,461.

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Offutt, William C., and Whitaker. 2,744,056.

Gundlach, Emannel G. Liquid detergent dispensing shower fixture. 2,743,913. 5–1–56, Cl. 261—18.

Gunter, Lee, Jr.: *See—*
Bauer, Benjamin B., and Gunter. 2,744,165.

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Gustafson, Arthur R. Book binder and machine for assembling same. 2,743,467, 5–1–56, Cl. 11—1.

Gustafson, David A., to McGraw Electric Co. Waffle baker. 2,743,665. 5–1–56, Cl. 99—331.

Guthrie, James E. File drawer support. 2,743,984, 5–1–56, Cl. 312—317.

Hachmuth, Karl H., to Phillips Petroleum Co. Multi-stage crystallization apparatus. 2,743,996, 5–1–56, Cl. 23—273.

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Hale, Douglas, and E. J. Carpenter, to Ralston Purina Co. Apparatus for manufacturing a cereal food product. 2,743,685, 5–1–56, Cl. 107—2.

Hall, C. P. Co. of Illinois, The: *See—*
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Higuchi, Takeru. 2,744,067.

Hall, Reginald H., to The Distillers Co. Ltd. Preparation of substituted tetrahydropyrans. 2,744,121, 5–1–56, Cl. 260—345.9.

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Hansen, Elmer F., to General Electric Co. Vapor generator cartridge chamber and cartridge for dynamoelectric machine collectors. 2,744,206, 5–1–56, Cl. 310—228.

Hanson, Clarence E., Jr., and P. L. Vermaire, to General Motors Corp. Bearing. 2,743,714, 5–1–56, Cl. 123—90.

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Harless, Charles A., and E. W. Worthington, to R. Hoe & Co., Inc. Impression adjusting mechanism for printing presses. 2,743,672, 5–1–56, Cl. 101—247.

Harlow, Loraine C., and Q. E. Smith, to Radio Corp. of America. Automatic molding apparatus. 2,743,478. 5–1–56, Cl. 18—5.3.

Harman, Cameron G., and R. Rose, to Rare Earths Inc. Polishing material and method of making same. 2,744,001, 5–1–56, Cl. 51—308.

Hart, Fred V., to United Shoe Machinery Corp. Clutches. 2,743,802, 5–1–56, Cl. 192—27.

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Hawkins, Eileen J., administratrix: *See—*
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Hawkins, Harvey G. deceased, by E. J. Hawkins administratrix, and T. T. Tudge, to Imperial Chemical Industries Ltd. Flexible liquid containers. 2,743,752, 5–1–56, Cl. 150—8.

Hawkinson, Earle W., to Paul E. Hawkinson Co. Tire retreading apparatus. 2,743,481, 5–1–56, Cl. 18—18.

Hawkinson, Paul E., Co.: *See—*
Hawkinson, Earle W. 2,743,481.

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Hayes, Cletus T., to Oxy-Catalyst, Inc. Drying oven and operation thereof. 2,743,529, 5–1–56, Cl. 34—35.

Hayes, Dale I., to American Zinc, Lead and Smelting Co. Self-loading transport vehicle and dump gate therefor. 2,743,828, 5–1–56, Cl. 214—78.

Hayes, Kenyon J., and G. D. Drake, to The Norwich Pharmacal Co. Method of preparing saturated aliphatic beta-secondary-and tertiary-amino alcohols. 2,744,141, 5–1–56, Cl. 260—584.

Hayward, Harold N., and H. M. Diener. Drive mechanism for scanning devices. 2,743,616, 5–1–56, Cl. 74—31.

Hazelton, Charles J. Cutter for facilitating peeling of citrus fruits. 2,743,519, 5–1–56, Cl. 30—24.

Hazen, Edward J., to Bendix Aviation Corp. Turbojet engine control system. 2,743,578, 5–1–56, Cl. 60—39.28.

Heaton, Lex L. Ash tray. 2,743,730, 5–1–56, Cl. 131—240.

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Helfrecht, Fred A., and V. Voorhees, to National Motor Bearing Co., Inc. Shaft seal. 2,743,950, 5–1–56, Cl. 288—2.

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Enos, Herman I., Jr. 2,744,150.
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Heyer, Frederic K., to The Yale & Towne Mfg. Co. Tubular lock. 2,743,600, 5–1–56, Cl. 70—146.

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Hiensch, Johannes N., to Textile Machinery Corp. Methods of production of textile yarns. 2,743,573, 5–1–56, Cl. 57—164.

Highfield, Frank W. W., to The Austin Motor Co. Ltd. Method of and apparatus for applying a hard alloy coating to the seating surfaces of valves for internal combustion engines. 2,744,032, 5–1–56, Cl. 117—43.

Higuchi, Takeru, to The C. P. Hall Co. of Illinois. Continuous partition chromatography. 2,743,818, 5–1–56, Cl. 210—42.5.

Higuchi, Takeru, to The C. P. Hall Co. of Illinois. Process of separation of higher molecular weight dicarboxylic acids. 2,744,067, 5–1–56, Cl. 210—42.5.

Hill, Harry O., and R. S. Johnson, to American Bosch Arma Corp. Timing device for fuel injection apparatus. 2,743,594, 5–1–56, Cl. 64—25.

Hill, Henry E., and D. B. Parkinson, to Bell Telephone Laboratories, Inc. Alternating-current operated relay distributor. 2,744,215, 5–1–56, Cl. 317—140.

Hill, William G., to International Standard Electric Corp. Joints for coaxial cable. 2,743,505, 5–1–56, Cl. 29—155.5.

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Hoehn, John J., to Radio Corp. of America. Television motion picture projector mechanism. 2,743,647, 5–1–56, Cl. 88—18.4.

Hoehn, John J., to Radio Corp. of America. Film drive mechanism. 2,743,922, 5–1–56, Cl. 271—2.3.

Hoeppner, Conrad H., and C. H. Smith, Jr. Pulse width discriminator. 2,744,196, 5–1–56, Cl. 250—27.

Hoffmann-La Roche Inc.: *See*—
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Hofmaster, Earl A. Rod cutting device. 2,743,520, 5–1–56, Cl. 30—102.

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Holliday, William C., Jr., to Esso Research and Engineering Co. Lubricating oil additives. 2,744,071, 5–1–56, Cl. 252—51.5.

Holser, Theodore H., and D. C. Asbury, to The Parker Appliance Co. Slide valve. 2,743,900, 5–1–56, Cl. 251—174.

Honey, Robert. Carton opening knife. 2,743,523, 5–1–56, Cl. 30—286.

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Horowitz, Ruth G. Typewriter ribbon reinking device. 2,743,470, 5–1–56, Cl. 15—138.

Horst, Harry A. Hook guard. 2,743,547, 5–1–56, Cl. 43—54.5.

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Fawcett, Frank S., and Howk. 2,744,151.

Hoyt, Cornelius F. File guards. 2,743,504, 5–1–56, Cl. 29—80.

Hubacker, Earl F., to General Electric Co. Control for refrigerating apparatus. 2,743,587, 5–1–56, Cl. 62—3.

Hubbard, James K., to E. I. du Pont de Nemours and Co. Process of making dispersions of polymers. 2,744,085, 5–1–56, Cl. 260—33.6.

Hudman, Wesley. Can opener. 2,743,840, 5–1–56, Cl. 220—52.

Hughes Aircraft Co.: *See*—
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Hughes, Guy N., and R. N. Harder, to Aluminum Co. of America. System for integrating D. C. values. 2,744,240, 5–1–56, Cl. 324—99.

Hughes, Guy N., to Aluminum Co. of America. D. C. metering system. 2,744,241, 5–1–56, Cl. 324—117.

Hughes, William B., to Cities Service Oil Co. Surface active compounds. 2,744,115, 5–1–56, Cl. 260—307.

Hulsing, Kenneth L., to General Motors Corp. Push rod and return spring mounting thereon. 2,743,712, 5–1–56, Cl. 123—90.

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Hunter, Cecil M. Airspeed indicator with altitude correction. 2,743,608, 5–1–56, Cl. 73—182.

Hunter, Edwin J. Automatic irrigation devices. 2,743,552, 5–1–56, Cl. 47—1.

Hursh, Samuel R., and C. J. Reigh. Adjustment mechanism for kicker-type ballast remover. 2,743,539, 5–1–56, Cl. 37—104.

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International Harvester Co.: *See*—
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Mason, Wylie A., Jr. 2,743,654.
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International Projector Corp.: *See*—
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Isaacson, Max, to Globe Industries, Inc. Coil forming method. 2,743,508, 5–1–56, Cl. 29—155.57.

Ivy, Jessie T. Detachable top mount. 2,743,526, 5–1–56, Cl. 33—50.

Jabczynski, Hans-Joachim, to Siemens & Halske Aktiengesellschaft. Device for controlling selector switches in automatic telephone systems. 2,744,164, 5–1–56, Cl. 179—18.

Jackson, Leslie K., to Harvard Mfg. Co. Bedframe having special support leg. 2,743,464, 5–1–56, Cl. 5—310.

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Jeffrey Mfg. Co., The: *See*—
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Johnson, Carl E. Shoeshine kit. 2,743,474, 5–1–56, Cl. 15—258.

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Johnson, Roy W., W. A. Biermann, and S. E. Burghduff, to A-P Controls Corp. Fuel and air supply control for burners. 2,743,769, 5–1–56, Cl. 158—28.

Johnson, Samuel G., to International Harvester Co. Valve—two-way. 2,743,738, 5–1–56, Cl. 137—625.4.

Johnson, Sidney P. Fluid regulator for a power-driven remotely-controlled valve. 2,743,705, 5–1–56, Cl. 121—39.

Johnston, William, Jr., deceased; P. J. Spangler, and H. A. Floyd, executors. Portable cinder pot stand. 2,743,893, 5–1–56, Cl. 248—241.

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Jones, Thomas F. Remote measuring device. 2,743,985, 5–1–56, Cl. 346—33.

Jorgensen, Julius, and A. R. Buchholz, to Brandt Automatic Cashier Co. Receptacle loader. 2,743,563, 5–1–56, Cl. 53—160.

Judelson, David N. Bias-cutting machine. 2,743,776, 5–1–56, Cl. 164—61.

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Juvinall, James W., to Ransburg Electro-Coating Corp. Method and apparatus for spray coating of articles. 2,744,033, 5–1–56, Cl. 117—93.

Kaats, Herbert W., and H. F. Enyeart, to The American Crucible Products Co. Pump-motor unit. 2,743,673, 5–1–56, Cl. 103—87.

Kalikow, Irving, to General Electric Co. Dynamoelectric machine current collector shielding brushholder. 2,744,205, 5–1–56, Cl. 310—228.

Kaman, Frank A., to Thor Power Tool Co. Switch actuating mechanism for electric tools. 2,744,176, 5–1–56, Cl. 200—61.85.

Kamin, Sam. Multiple conduit hose. 2,743,960, 5–1–56, Cl. 299—104.

Kamin, Sam. Bed post light. 2,744,186, 5–1–56, Cl. 240—4.

Kappelmann, Benjamin O. Pickup trailer discharge conveyor. 2,743,832, 5–1–56, Cl. 214—519.

Karlsson, Elof K., to International Harvester Co. Implement carrier. 2,743,784, 5–1–56, Cl. 180—53.

Katsube, Tetsuo, ¼ to K. Matsukata. Feed product. 2,744,015, 5–1–56, Cl. 99—9.

Kay, Nicholas L., G. W. Hendricks, and R. A. Hanson, to Union Oil Co. of California. Hydrocarbon conversion process, including preliminary nitrogen removal by adsorption. 2,744,053, 5–1–56, Cl. 196—28.

Kayler, Frank H., to American Steel Foundries. Coupler support. 2,743,822, 5–1–56, Cl. 213—60.

Kebbon, Earl R., and R. W. Freeman, to Weston Electrical Instrument Corp. Thermometer. 2,743,612, 5–1–56, Cl. 73—367.

Kebbon, Earl R., to Weston Electrical Instrument Corp. Bimetallic thermometer. 2,743,613, 5–1–56, Cl. 73—367.

Keco Industries, Inc.: *See*—
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Keese, Beverly W., to Rockwell Spring and Axle Co. Vehicle drive and power take-off mechanism. 2,743,615, 5–1–56, Cl. 74—15.63.

Keller, Nicholas W.: *See*—
Olsen, Marvin R., Rosinski, and Keller. 2,744,188.

Kellersman, Robert. Fluid servomotor actuated tool. 2,743,707, 5–1–56, Cl. 121—41.

Kennedy, Walter D., and S. A. J. Fenton, to Chemische Fabriek L. van der Grinten N. V. Photographic contact printing apparatus. 2,743,653, 5–1–56, Cl. 95—77.5.

Kidde Mfg. Co., Inc.: *See*—
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Kienzle Apparate G. m. b. H.: *See*—
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Meer, Karl. 2,743,987.

Kihlgren, Theodore E.: *See*—
Pease, George R., and Kihlgren. 2,744,036.

Kihn, Harry, to Radio Corp. of America. Color or monochrome television receiving system. 2,744,155, 5–1–56, Cl. 178—5.4.

Kilbourne, Frederick L., Jr., T. S. Moroney, and A. S. Kidwell, to The Connecticut Hard Rubber Co. Adhesive composition containing polysiloxane rubber, polysiloxane oil and reinforcing pigment. 2,744,079, 5–1–56, Cl. 260—29.1.

Kilemnik, Maurice. Light diffusing screens for electric discharge tubes. 2,744,190, 5–1–56, Cl. 240—51.11.

Kindig, Josef. Kitchen range. 2,743,718, 5–1–56, Cl. 126—5.

King, William H., Jr., to Esso Research and Engineering Co. Magnetic valve for control of fluid or fluidized solids flow. 2,743,898, 5–1–56, Cl. 251—139.

Kingsbury, Franklin L., to National Lead Co. Preparation of water dispersible titanium dioxide pigment. 2,744,029, 5–1–56, Cl. 106—300.

Kinney, Wilbur C. Irrigation pipe joint with valve gasket. 2,743,899, 5–1–56, Cl. 251—149.

Klein, Conrad J. Springboard and mounting therefor. 2,743,926, 5–1–56, Cl. 272—66.

Kling, William. Reversible garment. 2,743,450, 5–1–56, Cl. 2—74.

Klod, John A. Bearing structure for the shaft of a feed screw of a meat grinding machine. 2,743,751, 5–1–56, Cl. 146—182.

Knock A Bar, Inc.: *See*—
Barber, John J. 2,744,177.

Knowles, Dennis H., to The Goss Printing Press Co. Web tension control. 2,743,882, 5–1–56, Cl. 242—75.

Kobe, Inc.: *See*—
Coberly, Clarence J. 2,743,581.

Koch, Wilhelm, to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius & Bruning. Solid, stable diazonium compounds and process of preparing the same. 2,744,103, 5–1–56, Cl. 260—141.

Koehler, William J. Anchoring plate. 2,743,825, 5–1–56, Cl. 214—10.5.

Kohrn, Robert C.: *See*—
Pooley, Robert W., and Kohrn. 2,743,931.

Kornel, Otto, to Clevite Corp. Method of making magnetic transducer heads. 2,743,507, 5–1–56, Cl. 29—155.5.

Kramesak, Michael, Jr., to The Bassick Co. Sealed wheel mountings. 2,743,971, 5–1–56, Cl. 308—187.1.

Kreidler, Alfred. Mounting of motor cycle driving unit. 2,743,783, 5–1–56, Cl. 180—33.

Krekeler, Claude B., and A. O. Brueatle, to The Cincinnati Mine Machinery Co. Socket-mounted cutter bit and set screw arrangement. 2,743,917, 5–1–56, Cl. 262—33.

Kriegbaum, George M., to International Harvester Co. Implement clamp. 2,743,657, 5–1–56, Cl. 97—198.1.

Kuempel, Leon L., to Keco Industries, Inc. Vehicle refrigerating apparatus. 2,743,589, 5–1–56, Cl. 62—117.1.

Kuner, William H.: *See*—
Horvath, Anthony G., Kuner, and Wolfe. 2,744,202.

Kuhlman, Leo E. Resilient floor construction. 2,743,487, 5–1–56, Cl. 20—6.

Lacey, Joseph S. Home aquarium circulator and aerator. 2,744,065, 5–1–56, Cl. 210—16.

L'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procedes Georges Claude: *See*—
Grunberg, Jacques. 2,743,590.

Lambert Engineering Co.: *See*—
Wells, Willis L. 2,743,623.

Landry, Jacobus M. Irrigation system by sprinkling and a sprinkler device. 2,743,958, 5–1–56, Cl. 299—18.

Lane, John J., to The Gulberson Corp. Hydraulic anchor tool. 2,743,781, 5–1–56, Cl. 166—212.

Lange, Max H., to S. R. Morse. Method of making slide fastener chain. 2,743,513, 5–1–56, Cl. 29—410.

Langness, Vernon. Folding hat brim. 2,743,455, 5–1–56, Cl. 2—177.

Lapin Products, Inc.: *See*—
Rosenheim, David J. 2,743,644.

Lappe, Wilhelm, to Firma Fritz Werner Aktiengesellschaft. Machine tool wear compensating apparatus. 2,743,967, 5–1–56, Cl. 308—3.

Larson, Alice R.: *See*—
Larson, George A. 2,743,557.

Larson, George A., deceased; A. R. Larson, executrix. Electrically driven abrading devices. 2,743,557, 5–1–56, Cl. 51—170.

Larsson, Lars E. H., and K. E. N. Rydström, to Aktiebolaget C. E. Johansson. Interferometric apparatus for examining the structure of reflecting surfaces. 2,743,645, 5–1–56, Cl. 88—14.

La Rue, Albert M., to The B. F. Goodrich Co. Electrically heated protective covering for aircraft. 2,743,890, 5–1–56, Cl. 244—134.

Lathrop, Elbert C., to the United States of America as represented by the Secretary of Agriculture. Pith separation and sugar recovery from bagasse. 2,744,037, 5–1–56, Cl. 127—43.

La Tour, Harry: *See*—
Wietzel, Karl F., Dovenbarger, and La Tour. 2,743,692.

Lawlor, Joseph P. Slurry feeder. 2,743,909, 5–1–56, Cl. 259—42.

Lee, Edmund S., III: *See*—
Elliott, Richard M., and Lee. 2,743,924.

Lee, Frederick W. Apparatus for making seismic surveys. 2,743,785, 5–1–56, Cl. 181—.5.

Leeds and Northrup Co.: *See*—
Spindler, Charles W., Jr. 2,744,227.

Lejmark, Karl R. Method and apparatus of producing filling materials to be used together with hydraulic cements. 2,743,911, 5–1–56, Cl. 259—147.

L'Emboutissage Hydraulique Moderne: *See*—
Cuq, Pierre. 2,743,691.

Leonard, George H., to Faximile, Inc. Facsimile recorder. 2,743,990, 5–1–56, Cl. 346—101.

Leonard, Joseph S., and H. T. Owens. Lower unit for boat motors of the type having downwardly directed drive shafts. 2,743,698, 5–1–56, Cl. 115—16.

Leopold, Adam J. L.: *See*—
Christensen, Frants, and Leopold. 2,743,907.

Lerner, Hershey, to Swingline, Inc. Flexible cartridge or refill for stapling machines. 2,743,445, 5–1–56, Cl. 1—56.

Leupold, Marcus, to Leupold & Stevens Instruments, Inc. Telescope sight mount. 2,743,525, 5–1–56, Cl. 33—50.

Leupold & Stevens Instruments, Inc.: *See*—
Leupold, Marcus. 2,743,525.

Levinson, Harry, G. H. Stoner, and E. N. Tangen, to Boeing Airplane Co. Magnetic fluid clutch with cooling means. 2,743,800, 5–1–56, Cl. 192—21.5.

Lewis, Leslie H. Pumping apparatus for well pipe line. 2,743,676, 5–1–56, Cl. 103—180.

Lieberman, Emanuel R.: *See*—
Fierstein, Jean C., Lieberman, Wicks, and Yuska. 2,744,035.

Lilly, Eli, and Co.: *See*—
Jones, Reuben G. 2,744,114.

Limper, Arthur F.: *See*—
Giraitis, Albert P., Limper, and Thomas. 2,744,007.

Lindberg, John A., and W. V. Thelander, to Dana Corp. Safety clutch. 2,743,805, 5–1–56, Cl. 192—82.

Lindhe, John H. O., to Aktiebolaget Nynas Petroleum. Method of preventing oxidation of oils in electrical equipment. 2,744,038, 5–1–56, Cl. 148—6.17.

Linzy, Floyd L., to A. Y. Dowell. Snow removal apparatus. 2,743,538, 5–1–56, Cl. 37—43.

Lippisch, Alexander M., to Collins Radio Co. Variable wing. 2,743,888, 5–1–56, Cl. 244—43.

Little, Arthur D., Inc.: *See*—
Davison, Robert T. B., Gordon, and Marden. 2,743,746.

Livingstone, Jay G. Pouring spout with cap and drip return. 2,743,844, 5–1–56, Cl. 222—111.

Ljungberg, Ture A., to Allmanna Svenska Elektriska Aktiebolaget. Arrangement to be used for extrusion of metals. 2,743,812, 5–1–56, Cl. 207—4.

Locker, Hans: *See*—
Reid, Frederick M., and Locker. 2,743,939.

Loeb, Sidney, Jr., to Hughes Aircraft Co. Igniter for rocket motors. 2,743,580, 5–1–56, Cl. 60—39.82.

Lofton, Edgar K., to The Dayton Rubber Co. Rail vehicle generator drive. 2,743,679, 5–1–56, Cl. 105—105.

Looker, Richard N. Self-locking rope hook. 2,743,496, 5–1–56, Cl. 24—130.

Looney, Arlen B. Knock-down crate. 2,743,835, 5–1–56, Cl. 217—12.

L'Orange, Rudolf. Needle nozzle for internal combustion engines. 2,743,961, 5–1–56, Cl. 299—107.6.

Lorens, Anton. Article of repose for supporting the body of a person. 2,743,764, 5–1–56, Cl. 155—106.

Lorens, Anton. Reclining article of furniture. 2,743,765, 5–1–56, Cl. 155—106.

Lovass, Elmer S. Combination razor holder and shaving cream dispenser. 2,743,732, 5–1–56, Cl. 132—80.

Low, Frank K., to Bell Telephone Laboratories, Inc. Rectangular coordinate registering circuit. 2,744,245, 5–1–56, Cl. 340—166.

Lowry, Glenn W. Tool handle with rotatable cap structure. 2,743,749, 5–1–56, Cl. 145—61.

Lowthian, Charles S.: *See*—
Bentele, Max, Lowthian, and Russell. 2,743,945.

Lucker, Millard B., to Auto Specialties Mfg. Co. Automobile jack. 2,743,903, 5–1–56, Cl. 254—133.

Ludwig, Arthur W. Insulated fence post. 2,744,154, 5–1–56, Cl. 174—158.

Lull, Stanley E.: *See*—
Ball, Albert L., and Lull. 2,743,559.

Lungerhausen, John C., to Gardner-Denver Co. Control for pneumatic hoist. 2,743,708, 5–1–56, Cl. 121—46.5.

Lynard of California, Inc.: *See*—
Rosenthal, William. 2,744,192.

Lynch, Maurice J., to Farrel-Birmingham Co., Inc. Stud setter. 2,743,639, 5–1–56, Cl. 81—33.

Lyons Salt Dispenser Inc.: *See*—
Pietrok, Lawrence B., Phelps, and Pietrok. 2,743,662.

Lyons, Sanford C., to Bird Machine Co. Centrifuge with inclined conveyor blade and vanes for rapid collection of fine particles from suspensions. 2,743,864, 5–1–56, Cl. 233—7.

MacChesney, Chester M., to Acme Steel Co. Cartridge actuated sealing tool. 2,743,631, 5–1–56, Cl. 81—9.1.

MacClatchie, John W. Piston. 2,743,972, 5–1–56, Cl. 309—23.

MacDougall, Kirkland B. Device or mechanism for automatically or manually adjusting automotive vehicle brakes. 2,743,793, 5–1–56, Cl. 188—196.

Mack, William: *See*—
Renaud, Robert J., and Mack. 2,744,191.

MacNerland, William M. Door control. 2,743,475, 5–1–56, Cl. 16—51

Malick, Emil A., to Phillips Petroleum Co. Rocket engine control. 2,743,577, 5–1–56, Cl. 60—39.09.

Mallina, Rudolph F., to Bell Telephone Laboratories, Inc. Wire connecting tool. 2,743,503, 5–1–56, Cl. 29—33.

Mansen, Harry, to Elgin Softener Corp. Multiport valves. 2,743,739, 5–1–56, Cl. 137—627.

Mantonya, William G.: *See*—
Weber, Carl, Doerner, Mantonya, and Doerner. 2,743,671.

Marden, Carleton S.: *See*—
Davison, Robert T. B., Gorden, and Marden. 2,743,746.

Maresh, Gordon A. Tire chains. 2,743,754, 5–1–56, Cl. 152—213.

Marra, Maria V., and L. J. De Bonis. Latch keeper for refrigerator doors. 2,743,953, 5–1–56, Cl. 292—340.

Marshall, Peter R., to The Birmingham Small Arms Co. Ltd. Production of metallic powders. 2,744,062, 5–1–56, Cl. 204—10.

Martin, Antone D.: *See*—
Christensen, Dan A., and Martin. 2,743,968.

Martin, Charles S., and A. E. Cooke, to Trip-Lite Ltd. Yarn detecting mechanism for textile machine stop motions. 2,744,174, 5–1–56, Cl. 200—61.18.

Martin, Claude W. Rim clamp and jack device for tire tools. 2,743,767, 5–1–56, Cl. 157—1.

Martin-Decker Corp.: *See*—
Decker, Elmer L. 2,743,607.
Webber, Louis Q. 2,743,606.

Martin, Fred P. Multiple unit contour mower. 2,743,567, 5–1–56, Cl. 56—6.

Maschinenbau Aktiengesellschaft Balcke: *See*—
Aschenwald, Johann. 2,743,826.

Mason, Wylie A., Jr., to International Harvester Co. Implement attaching apparatus for tractors. 2,743,654, 5–1–56, Cl. 97—47.14.

Masonite Corp.: *See*—
Ingrassia, Angelo P., and Ruffin. 2,744,047.

Massey-Harris-Ferguson (Sales) Ltd.: *See*—
Chambers, John M., and McNeice. 2,743,934.

Master Electric Co., The: *See*—
Horvath, Anthony G., Kuner, and Wolfe. 2,744,202.

Masterson, Earl E., to Radio Corp. of America. Magnetic sound-recording and reproducing machine. 2,743,878, 5–1–56, Cl. 242—55.

Matsukata, Kosuke: *See*—
Katube, Tetsuo. 2,744,015.

Matteson, Benjamin H., to the United States of America as represented by the Secretary of the Navy. Electrical capacitor. 2,744,220, 5–1–56, Cl. 317—249.

Matthews, Loraine S. Diaper. 2,743,725, 5–1–56, Cl. 128—284.

Mattis, George, and S. Rapp; said Rapp assor. to said Mattis. Folding stairs. 2,743,861, 5–1–56, Cl. 228—30.

Mattison, Edwin L., to E. I. du Pont de Nemours & Co. Preparation of lead-sodium alloy and tetraethyllead. 2,744,126, 5–1–56, Cl. 260—437.

Mattson, David F., and A. L. Paulsen, to Atkinson Bulk Transport Co. Bin filling apparatus. 2,743,965, 5–1–56, Cl. 302—59.

Mauney, Paul, and C. J. Ford, to The Goodyear Tire & Rubber Co. Inflatable fabric segment of curved configuration and the method of making the same. 2,743,510, 5–1–56, Cl. 28—74.

Maxson, Donald D., to Chase Aircraft Co., Inc. Selectively reversible and irreversible control mechanisms. 2,743,799, 5–1–56, Cl. 192—8.

Maxwell, George E. Anchor holder. 2,743,696, 5–1–56, Cl. 114—210.

Mayer, Eugene O., to The Singer Mfg. Co. Presser device for sewing machines. 2,743,690, 5–1–56, Cl. 112—237.

Mayer, Oscar, & Co., Inc.: *See*—
Selferth, Oscar E. 2,744,020.

Mayer, Perry E., to Allied Chemical & Dye Corp. Continuous process for clarifying creosote oils. 2,744,059, 5–1–56, Cl. 196—146.

Maytag Co., The: *See*—
Smith, Thomas R. 2,743,533.
Smith, Thomas R., and Steward. 2,743,530.
Steward, Colby W. 2,743,531.
Steward, Colby W. 2,743,532.

McAleer, John A. Welded ship hull construction. 2,743,694, 5–1–56, Cl. 114—79.

McArthur, Donald S.: *See*—
Juterbock, Edwin E., and McArthur. 2,744,199.

McCarty, Lourdes V.: *See*—
Heiser, Ferdinand F., McCarty, and Vicenzi. 2,743,871.

McClelland, Clarence P., to General Motors Corp. Windshield wiper cable tensioning apparatus. 2,743,617, 5–1–56, Cl. 74—96.

McCorkle, D. H., Co.: *See*—
McCorkle, Donald H. 2,743,574.

McCorkle, Donald H., to D. H. McCorkle Co. Two-way fast acting bimetal control element. 2,743,574, 5–1–56, Cl. 60—23.

McCreary, Harold J., to Automatic Electric Laboratories, Inc. Bifilar triode transistor. 2,744,219, 5–1–56, Cl. 317—235.

McDougal, Murray: *See*—
Graves, Elliot D., and McDougal. 2,743,753.

McGraw Electric Co.: *See*—
Gustafson, David A. 2,743,665.
Schneider, Hans P. 2,744,179.

McGuiness, Edward W., to General Electric Co. Electric coil. 2,744,204, 5–1–56, Cl. 310—218.

McKernan, John G. Oilless elevator guide shoe gib. 2,743,966, 5–1–56, Cl. 308—3.

McKune, Duane R., to Minute Maid Corp. Unscrambler construction. 2,743,807, 5–1–56, Cl. 198—30.

McLagan, Russell G., to The American Laundry Machinery Co. Padding for sleeve pressing machines. 2,743,853, 5–1–56, Cl. 223—57.

McLean, William B. Free diving apparatus. 2,743,722, 5–1–56, Cl. 128—142.

McMichael, Charles E.: *See*—
Miller, Bruce, De Haven, and McMichael. 2,743,915.

McMillan, Carl W. Hinge and vent assembly for toilet bowls. 2,743,462, 5–1–56, Cl. 4—213.

McNeice, James C.: *See*—
Chambers, John M., and McNeice. 2,743,934.

McVinney, John P., to Coro, Inc. Jewelry clasp. 2,743,498, 5–1–56, Cl. 24—252.

McWhorter, Henry L., to The Goss Printing Press Co. Tension control system for printing press. 2,743,880, 5–1–56, Cl. 242—75.

McWhorter, Henry L., to The Goss Printing Press Co. Web tension control. 2,743,881, 5–1–56, Cl. 242—75.

Medley, Harold C., to The Jeffrey Mfg. Co. Jigging apparatus. 2,743,816, 5–1–56, Cl. 209—455.

Meeks, James W., and T. F. Banigan, Jr., to United States of America as represented by the Secretary of Agriculture. Isolation of fatty acids from guayule resin. 2,744,125, 5–1–56, Cl. 260—413.

Meer, Karl, to Kienzle Apparate G. m. b. H. Recording devices for vehicles. 2,743,987, 5–1–56, Cl. 346—64.

Mehlis, Arthur, to International Standard Electric Corp. Circuit arrangement for all-relay selecting equipment. 2,744,161, 5–1–56, Cl. 179—18.

Meister, George, to Westinghouse Electric Corp. Phosphor coating composition. 2,744,072, 5–1–56, Cl. 252—301.3.

Melville, John B. Liquid dispenser with stirring means. 2,743,910, 5–1–56, Cl. 259—108.

Menendez, Gil H., ⅛ to D. Stillwagen, ⅛ to J. Chinman, and ⅛ to C. A. Hewlett. Safety device for electrical receptacles. 2,744,243, 5–1–56, Cl. 339—36.

Merck & Co., Inc.: *See*—
Walton, Edward. 2,744,119.

Metal Seal & Products, Inc.: *See*—
Heinrich, August H. 2,743,048.

Metals & Controls Corp.: *See*—
Siegel, Sidney. 2,744,039.

Meyers, Phyllis L. Infant's garment. 2,743,451, 5–1–56, Cl. 2—83.

Midland Chemical Corp.: *See*—
Toulmin, Harry A., Jr. 2,744,044.

Milks, Warren N., to The Dow Chemical Co. Fluorination of haloalkanes with a catalyst containing gamma alumina. 2,744,147, 5–1–56, Cl. 260—653.

Miller, Bruce D., and C. E. McMichael, to National Cylinder Gas Co. Equipment for use in treating oil by steam stripping. 2,743,915, 5–1–56, Cl. 261—121.

Miller, Leonidas C. Pneumatic actuator having tandem power cylinders. 2,743,703, 5–1–56, Cl. 121—38.

Minneapolis-Honeywell Regulator Co.: *See*—
Drow, Donald F. 2,743,870.
Du Bois, Robert C. 2,743,735.

Minto, John L.: *See*—
Elliott, Richard M., and Minto. 2,743,925.

Minute Maid Corp.: *See*—
McKune, Duane R. 2,743,807.

Miramontes, Luis: *See*—
Djerassi, Carl, Miramontes, and Rosenkrans. 2,744,122.

Mitchell, George R., and N. H. Sherwood, to The B. F. Goodrich Co. Rubbery interpolymers of a butadiene-1,3 hydrocarbon, an alkyl acrylate and a styrene hydrocarbon. 2,744,099, 5–1–56, Cl. 260—80.7.

Mitchell, Orson L. Gravity actuated delay timer. 2,743,775, 5–1–56, Cl. 161—1.

Moak, Chester J., ½ to H. L. Glidden. Emergency electric lantern. 2,744,187, 5–1–56, Cl. 240—8.18.

Moesinger, Fred, Jr., to Union Carbide and Carbon Corp. Refractory-metal body scarring pneumatic powder dispensing apparatus. 2,743,964, 5–1–56, Cl. 302—53.

Moffett, Gray H. Power transmission mechanism. 2,743,625, 5–1–56, Cl. 74—752.

Mog, Henry V.: *See*—
Stein, Henry E., Mog, and Stertzer. 2,743,604.

Moody, Leonard E., and E. B. Cyphers, to Esso Research and Engineering Co. Metal and sulfur containing compounds and lubricants containing them. 2,744,083, 5–1–56, Cl. 252—33.4.

Moore, Edward B., W. R. Peterson, and H. E. Stack, to Vapor Heating Corp. End valve for steam train line. 2,743,740, 5–1–56, Cl. 137—630.15.

Moore, Nelson: *See*—
Toulon, Pierre M. G. 2,744,156.

Moore, Robert E., to Amana Refrigeration, Inc. Freezer cabinet with externally accessible machinery compartment. 2,743,981, 5–1–56, Cl. 312—214.

Moore, Thomas V., to the United States of America as represented by the United States Atomic Energy Commission. Re-entrant cooling reactor. 2,744,064, 5–1–56, Cl. 204—193.

Moore, William S. Electrical safety switches. 2,744,175, 5–1–56, Cl. 200—61.47.

Mordarski, Walter J., and W. H. Spencer, to The Connecticut Hard Rubber Co. Shock mount. 2,743,892, 5–1–56, Cl. 248—24.

Moriarty, Francis C., and F. G. Graves, deceased (by E. B. Graves, executrix), ½ to Universal Oil Products Co., and ½ to California Research Corp. Treatment of hydrocarbon distillates with a phenylene diamine, an alkyl phenolate and air. 2,744,055, 5–1–56, Cl. 196—29.

Moroney, Thomas S.: *See*—
Kilbourne, Frederick L., Jr., Moroney, and Kidwell. 2,744,079.

Morrell, James N.: *See*—
Elliott, Lynn T., and Morrell. 2,743,897.

Morris, Rupert C., and J. L. Van Winkle, to Shell Development Co. Olefinically unsaturated phosphates. 2,744,128, 5–1–56, Cl. 260—461.

Morrison, Montford. Apparatus for reduction of amplitude variation in pulsating voltages. 2,744,228, 5–1–56, Cl. 321—10.

Morse, Sarah R.: *See*—
Lange, Max H. 2,743,513.

Motorola, Inc.: *See*—
Schaper, William A. 2,743,693.

Mowry, David T., and A. B. Craig, to The Chemstrand Corp. Dyeable acrylonitrile fiber forming compositions. 2,744,086, 5–1–56, Cl. 260—45.4.

Moyer, Robert F., to National-U. S. Radiator Corp. Apparatus for finning pipe. 2,743,512, 5–1–56, Cl. 29—202.

Moynahan Bronze Co.: *See*—
Cudini, Roger G. 2,743,463.

Muff, Oliver W., ⅝ to Robinson Orifice Fitting Co. Line blind. 2,743,742, 5–1–56, Cl. 138—44.

Müllner, Friedrich, to Brown, Boveri & Cie, Aktiengesellschaft. Seal for rotary shafts of gas-cooled machines. 2,743,949, 5–1–56, Cl. 286—22.

Muma, Robert E., to The National Cash Register Co. Sheet having a transferable coating containing magnetizable material. 2,744,031, 5–1–56, Cl. 117—36.

Munday, Charles W., K. R. Peakin, and M. J. Griffiths, to The Distillers Co. Ltd. Magnetic oxygen meters. 2,744,234, 5–1–56, Cl. 324—36.

Murphy, Frank V. Belt support or hernia stay. 2,743,721, 5–1–56, Cl. 128—104.

Musgrave, Merrill N., A. L. Westberg, V. B. Fansher, and E. L. Blomberg. Pneumatic separator. 2,743,817, 5–1–56, Cl. 209—474.

Muskegon Piston Ring Co.: *See*—
Hamm, Douglas W. 2,743,973.

N & P Enterprises, Inc.: *See*—
Peterson, James F. 2,743,833.
Peterson, James F. 2,743,838.

Nagel, Konrad: *See*—
Ziegler, Karl, and Nagel. 2,744,127.

Nagy, John, ½ to R. Herbacsek. Flexible shaft coupling. 2,743,592, 5–1–56, Cl. 64—9.

Nash, Clifford L. Outboard motor truck. 2,743,938, 5–1–56, Cl. 280—47.13.

Nash, Harold A.: *See*—
Brooker, Robert M., and Nash. 2,744,106.

National Automotive Fibres, Inc.: *See*—
Davies, Clarence J. 2,743,442.

National Cash Register Co., The: *See*—
Allyn, Charles S., Jr. 2,743,988.
Mumma, Robert E. 2,744,031.

National Cylinder Gas Co.: *See*—
Bornwasser, Louis P. 2,743,916.
Miller, Bruce D., and McMichael. 2,743,915.

National Dairy Research Laboratories, Inc.: *See*—
Spiess, Newton E., Jr., and Zenk. 2,744,066.

National Engineering Corp.: *See*—
Scharaffa, Frank L. 2,743,628.

National Lead Co.: *See*—
Grave, William. 2,744,028.
Kingsbury, Franklin L. 2,744,029.

National Machinery Co., The: *See*—
Friedman, John H. 2,743,466.
Friedman, Robert G. 2,743,509.

National Motor Bearing Co., Inc.: *See*—
Ayres, Frank W., and Helfrecht. 2,743,951.
Christensen, Dan A., and Martin. 2,743,968.
Helfrecht, Fred A., and Voorhees. 2,743,950.
Snow, Jack N., Greenwald, and Ticknor. 2,743,759.

National Plastic Products Co., The: *See*—
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National-U. S. Radiator Corp.: *See*—
Moyer, Robert F. 2,743,512.

National Vendors Inc.: *See*—
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Nauta, Johannes E. Automatic weigher for mixtures. 2,743,896, 5–1–56, Cl. 249—14.

Navy, United States of America as represented by the Secretary of the: *See*—
Crockett, Sydney R. 2,743,576.
Matteson, Benjamin H. 2,744,220.
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Naylor, Marcus A., Jr., to E. I. du Pont de Nemours and Co. Preparation of aliphatic carboxylic acid amides from saturated aliphatic hydrocarbons. 2,744,134, 5–1–56, Cl. 260—561.

Needham, Reginald S. Winding machine for brass bobbins. 2,743,876, 5–1–56, Cl. 242—35.5.

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New Tools Co., Inc.: *See*—
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Newman, Stanley H. Compressed gas-fuelled cigarette lighters. 2,743,597, 5–1–56, Cl. 67—7.1.

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Nozaki, Kenzie, to Shell Development Co. Hydrogenation of hydrocarbon oils, tungsten, molybdenum, and nickel containing catalysts therefor and their preparation. 2,744,052, 5–1–56, Cl. 196—24.

Oberhuber, William F., E. Wollin, and A. P. Goetse. Radially cutting tube cutter having adjustable tool. 2,743,521, 5–1–56, Cl. 30—106.

Obszarny, Thedore J., to Guardian Electric Mfg. Co. Wide temperature range vibration resistant relay or the like. 2,744,216, 5–1–56, Cl. 317—195.

Occhipinti, Cosimo L. Releasable plug for automatic sprinklers. 2,743,782, 5–1–56, Cl. 169—39.

Offutt, William C., and A. C. Whitaker, to Gulf Research & Development Co. Catalytic conversion process employing as catalyst, a halloysite clay activated with magnesium oxide. 2,744,056, 5–1–56, Cl. 196—52.

Offutt, William C., and R. W. Helwig, to Gulf Research & Development Co. Fluidized fixed bed catalytic process. 2,744,058, 5–1–56, Cl. 196—53.

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Olshel, John R., to Trico Products Corp. Combined washer and windshield cleaner. 2,743,473, 5–1–56, Cl. 15—250.4.

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Olsen, Marvin R., B. Rosinski, and N. W. Keller, to Justrite Mfg. Co. Portable hand lantern. 2,744,188, 5–1–56, Cl. 240—10.63.

Ord, Lewis R., to Techron Ltd. Hydraulic accumulator. 2,743,741, 5–1–56, Cl. 138—31.

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Peck, Effie M. Combined vehicle window glass and screen. 2,743,772, 5–1–56, Cl. 160—103.

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Penn, William B.: *See*—
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Peoples Research and Mfg. Co.: *See*—
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Persico, Ralph W., and L. Cugini, to the United States of America as represented by the Secretary of the Army. Action front armored vest. 2,743,446, 5–1–56, Cl. 2—2.5.

Peters, Richard F. Air vent hood. 2,743,659, 5–1–56, Cl. 98—42.

Peterson, Adolphe C. Rotor and wing aircraft. 2,743,885, 5–1–56, Cl. 244—7.

Peterson, James F., to N & P Enterprises, Inc. Lift cart. 2,743,833, 5–1–56, Cl. 214—651.

Peterson, James F., to N & P Enterprises, Inc. Adjustable display basket. 2,743,838, 5–1–56, Cl. 220—6.

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Petre, John R., to The American Laundry Machinery Co. Proportional measuring timer. 2,743,920, 5–1–56, Cl. 270—80.

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Phillips, Josephine B.: *See*—
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Pietrok, Lawrence B., J. O. Phelps, and P. G. Pietrok, to Lyons Salt Dispenser Inc. Salt dispenser for hay balers. 2,743,662, 5–1–56, Cl. 99—235.

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Polcuch, Alexander F. G., to Boeing Airplane Co. Electrical conductor continuity test apparatus. 2,744,237, 5–1–56, Cl. 324—51.

Pollak, Geza. Dispensing apparatus. 2,743,847, 5–1–56, Cl. 222—133.

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Pooley, Robert W., and R. C. Kohrn, to United States Rubber Co. Practice or play ball and method of making same. 2,743,931, 5–1–56, Cl. 273—199.

Porter, Reese W. Tool for positioning matched planking. 2,743,902, 5–1–56, Cl. 254—15.

Porter, William M., and E. E. Smith, to Brite-Lite Corp. of America. Electric control mechanism. 2,744,172, 5–1–56, Cl. 200—46.

Posthauer, Vincent F., Sr. Adjustable pitch for leveling instruments. 2,743,528, 5–1–56, Cl. 33—207.

Powell, Paul R., to Western Electric Co., Inc. Apparatus for removing jacket sections from jacketed articles. 2,743,633, 5–1–56, Cl. 81—9.51.

Prescott, William A. Egg cooker. 2,743,666, 5–1–56, Cl. 99—440.

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Schoonover, Archie G., Feild, and Purse. 2,743,992.

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Rafferty, Clarence J., to International Harvester Co. Tractor mounted implement. 2,743,655, 5–1–56, Cl. 97—47.22.

Raisbeck, Gordon, to Bell Telephone Laboratories, Inc. Transistor trigger circuits. 2,744,198, 5–1–56, Cl. 250—36.

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Ralls, Jack W., to G. D. Searle & Co. 3-ethylene mercaptoles of 21-hydroxy-4-pregnene-3,20-dione, its 17-hydroxy derivative and esters thereof. 2,744,109, 5–1–56, Cl. 260—239.5.

Ralls, Jack W., to G. D. Searle & Co. 3-ethylene mercaptole derivatives of progesterone. 2,744,110, 5–1–56, Cl. 260—239.5.

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Randall, Jack H., Jr. Extension handle for box wrenches. 2,743,642, 5–1–56, Cl. 81—177.

Randol, Glenn T. Mechanical self-adjusting valve lifter. 2,743,715, 5–1–56, Cl. 123—90.

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Rea, Wilton T., to Bell Telephone Laboratories, Inc. Power supply system. 2,744,229, 5–1–56, Cl. 321—15.

Reck, Frank, to Bell Telephone Laboratories, Inc. Wire connecting tool. 2,743,502, 5–1–56, Cl. 29—33.

Redmon, Ernest L. Torque wrench adapter for power tools. 2,743,637, 5–1–56, Cl. 81—52.4.

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Rosenheim, David J., to Lapin Products, Inc. Molded plastic string instrument. 2,743,644, 5–1–56, Cl. 84—305.

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Rossell, William T., to Transit Research Corp. Friction damping device. 2,743,919, 5–1–56, Cl. 267—9.

Rowley, Joseph F. Electric water heater. 2,744,184, 5–1–56, Cl. 219—38.

Rossi, Irving, to Continuous Metalcast Co., Inc. Method for the continuous casting of metal. 2,743,494, 5–1–56, Cl. 22—200.1.

Ruckstuhl, Hans, and W. Wehrli, to Sandoz A. G. Process of making copper-containing monoazo dyestuffs. 2,744,104, 5–1–56, Cl. 260—151.

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Sacks, Lawrence E., and J. A. Garibaldi. Automatic test tube washer. 2,743,733, 5–1–56, Cl. 134—56.

Saco, Felix, and L. Rockstrom, to Cameron Machine Co. Rewind machine riding roller. 2,743,879, 5–1–56, Cl. 242—66.

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Samuelson, Oscar. Combination trash receptacle and burner unit. 2,743,686, 5–1–56, Cl. 110—19.

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Albus, Charles P., and Sargent. 2,744,026.

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Saxe, Walter E., to The Conveyor Co. Apparatus for distributing materials and depositing metered quantities thereof into containers. 2,743,860, 5–1–56, Cl. 226—94.

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Schaper, William A., to Motorola, Inc. Transistor assembly jig. 2,743,693, 5–1–56, Cl. 113—99.

Scharaffa, Frank L., to National Engineering Corp. Torque-converting couplings. 2,743,628, 5–1–56, Cl. 74—794.

Schaufelberger, Felix A., and E. S. Roberts, to Chemical Construction Corp. Process of producing cobalt in fine powder form. 2,744,003, 5–1–56, Cl. 75—5.

Schell, Paul, to Penn Controls, Inc. Oil burner safety control. 2,743,768, 5–1–56, Cl. 158—28.

Scherff, Louis A. Floor furnace guard. 2,743,660, 5–1–56, Cl. 98—103.

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Schjolin, Hans O., to General Motors Corp. Transmission and controls. 2,743,626, 5–1–56, Cl. 74—472.

Schmertz, William E., and H. D. Sterick. Ingot mold insert mat. 2,743,493, 5–1–56, Cl. 22—139.

Schmid, John H., and F. Heiles, to J. A. Zurn Mfg. Co. Sleeves for piping passing through a floor or roof. 2,743,946, 5–1–56, Cl. 285—31.

Schmidt, Edward G., and A. B. Nelson, to Crane Co. Combined supply valve and refill tube. 2,743,459, 5–1–56, Cl. 4—57.

Schneider, Hans P., to McGraw Electric Co. Air disconnect switch. 2,744,179, 5–1–56, Cl. 200—146.

Schoonover, Archie G., T. A. Feild, Jr., and J. H. Purse, to Union Carbide and Carbon Corp. Process for dyeing textiles made from acrylonitrile-containing polymers. 2,743,991, 5–1–56, Cl. 8—55.

Schoonover, Archie G., T. A. Feild, Jr., and J. H. Purse, to Union Carbide and Carbon Corp. Process for dyeing textiles made from acrylonitrile-containing polymers. 2,743,992, 5–1–56, Cl. 8—55.

Schroeder, Simon E. Remote control for outboard motors. 2,743,624, 5–1–56, Cl. 74—472.

Schuller, Pierre, to Usines Chimiques & Metallurgiques de Decazeville (Societe Anonyme). Calorimeters. 2,743,609, 5–1–56, Cl. 73—190.

Schultz, Roy M., ½ to Davis Press Pad Co., and ½ to Bishop David Freeman Co. Press plates. 2,743,541, 5–1–56, Cl. 38—66.

Schumacher, William L., and E. E. Folkenroth, to Aircraft-Marine Products, Inc. Electrical connector. 2,744,244, 5–1–56, Cl. 339—258.

Schwarz, Bertram A., and M. G. Wright, to General Motors Corp. Electrical apparatus. 2,743,620, 5–1–56, Cl. 74—128.

Schwarz, Bertram A., to General Motors Corp. Multi-button favorite station tuner. 2,744,193, 5–1–56, Cl. 250—20.

Scott, A. B., and S. E. Wyrozumski, to Bee Chemical Co. Awning. 2,743,490, 5–1–56, Cl. 20—57.5.

Scott, Loren F. Excavating apparatus. 2,743,904, 5–1–56, Cl. 255—19.

Searle, G. D., & Co.: *See*—
Ralls, Jack W. 2,744,108.
Ralls, Jack W. 2,744,109.
Ralls, Jack W. 2,744,110.

Seck, Werner G., to The Hoover Co. Air supported cleaner with diffuser. 2,743,787, 5–1–56, Cl. 183—37.

Seely, Richard E., and J. A. Walley, to General Electric Co. Motor protector circuit. 2,744,226, 5–1–56, Cl. 318—221.

Seibert, Ernest H., to Cory Corp. Hygrometer. 2,743,610, 5–1–56, Cl. 73—337.

Seiferth, Oscar E., to Oscar Mayer & Co., Inc. Packaging method. 2,744,020, 5–1–56, Cl. 99—174.

Seiler, Karl O., to International Standard Electric Corp. Method of cleaning and/or etching semiconducting material, in particular germanium and silicon. 2,744,000, 5–1–56, Cl. 41—42.

Sellers, Albert E. G. Condiment shaker. 2,743,851, 5–1–56, Cl. 222—457.5.

Seneker, Eldred. Fishing plug. 2,743,545, 5–1–56, Cl. 43—42.48.

Servel, Inc.: *See*—
Dreier, Victor G. 2,743,588.

Sessions, Rollie H. Two-piece television picture tube. 2,744,207, 5–1–56, Cl. 313—2.

Setchfield, John B., to International Standard Electric Corp. Arrangement for measuring the power transmitted through an electromagnetic waveguide. 2,744,239, 5–1–56, Cl. 324—95.

Shaff, Erneat H., to Gardner-Denver Co. Clutch drive mechanism for portable power operated nut setters and the like. 2,743,635, 5–1–56, Cl. 81—52.4.

Shaff, Ernest H., to Gardner-Denver Co. Drive mechanism for portable power operated screw drivers and the like. 2,743,636, 5–1–56, Cl. 81—52.4.

Shannon, Jack F., to Bailey Meter Co. Control systems. 2,743,710, 5–1–56, Cl. 122—451.2.

Sharp, Allen W.: *See*—
Barker, Seth S., and Sharp. 2,743,477.

Shaw, Edwin L., to The Denison Engineering Co. Supercharged aircraft pump. 2,743,674, 5–1–56, Cl. 103—162.

Shawhan, Elbert N., M. J. Relis, and J. Brown. Magnetic and conducting materials detector. 2,744,232, 5–1–56, Cl. 324—3.

Sheerin, Cleo B.: *See*—
Fisher, Walter J., and Sheerin. 2,743,831.

Sheffield, Donald H., to Hercules Powder Co. Purification of phenol. 2,744,144, 5–1–56, Cl. 260—621.

Sheldon, Alma L., to S. H. Camp and Co. Maternity garment. 2,743,449, 5–1–56, Cl. 2—41.

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Nozaki, Kenzie E. 2,744,052.
Pieters, Willem J. 2,744,054.
Swart, Karel, Hagemans, and Otto. 2,743,998.
Van Loon, Mintje. 2,744,069.

Sherman, David A. Vehicle rain visor. 2,743,957, 5–1–56, Cl. 296—95.

Sherrick, Paul H., to E. H. Sargent & Co. Method of sample burning for microchemical combustion analysis. 2,743,995, 5–1–56, Cl. 23—230.

Sherwood, Neil H.: *See*—
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Shively, Edward H., and W. S. Brandberg, to Radio Corp. of America. Antenna feed systems. 2,744,249, 5–1–56, Cl. 343—853.

Shockley, Quentin O., to General Motors Corp. Electrodeposition of tin-antimony-copper alloys. 2,744,063, 5–1–56, Cl. 204—44.

Shore, Charles, to Falco Products Co. Leg and brace construction for folding table with drop leaves. 2,743,978, 5–1–56, Cl. 311—90.

Shore, Charles, to Falco Products Co. Frame construction for light-weight table. 2,743,979, 5–1–56, Cl. 311—105.

Shreve, Randolph N., and R. K. Charlesworth, to Purdue Research Foundation. Bis-(aminotriazolyl-)-hydrocarbons. 2,744,116, 5–1–56, Cl. 260—308.

Shure Brothers, Inc.: *See*—
Bauer, Benjamin B., and Gunter. 2,744,165.

Shuttleworth, Clarence G.: *See*—
Croce, Michele, and Shuttleworth. 2,744,022.

Siegel, Sidney, to Metals & Controls Corp. Process of solid phase bonding of metals. 2,744,039, 5–1–56, Cl. 148—11.5.

Siemens & Halske Aktiengesellschaft: *See*—
Jabczynski, Hans-Joachim. 2,744,164.

Sinex, John C.: *See*—
Catlin, Robert T., and Sinex. 2,743,443.

Singer Glove Mfg. Co.: *See*—
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Singer Mfg. Co., The: *See*—
Mayer, Eugene O. 2,743,690.
Parry, Frank. 2,743,688.
Ruemmler, Gerhard G. 2,743,689.

Smith, Burna A.: *See*—
Greathouse, Lucien H., Smith, Robinson, and Haydel. 2,744,014.

Smith, Carl H., Jr.: *See*—
Hoeppner, Conrad H., and Smith. 2,744,196.

Smith, Emerson E.: *See*—
Porter, William M., and Smith. 2,744,172.

Smith, Gerard V.: *See*—
Wahler, Dale E. and L. P., and Smith. 2,743,866.

Smith, Orson P. Golf targets. 2,743,929, 5–1–56, Cl. 273—181.

Smith, Quincy E.: *See*—
Harlow, Loraine C., and Smith. 2,743,478.

Smith, Thomas R., and C. W. Steward, to The Maytag Co. Control for clothes driers. 2,743,530, 5–1–56, Cl. 34—45.

Smith, Thomas R., to The Maytag Co. Automatic control for clothes driers. 2,743,533, 5–1–56, Cl. 34—45.

Smoot, Charles H., to Republic Flow Meters Co. Combustion control system. 2,743,869, 5–1–56, Cl. 236—24.5.

Snow, Jack N., F. A. Greenwald, and W. C. Ticknor, to National Motor Bearing Co., Inc. Method of making a corrugated fabric duct. 2,743,759, 5–1–56, Cl. 154—8.

Snyder, James E., and C. M. Carson, to The Goodyear Tire & Rubber Co. Heat sealer. 2,743,761, 5–1–56, Cl. 154—42.

Snyder, James E., and R. J. Swartz, to The Goodyear Tire & Rubber Co. Process of packaging dried fruit. 2,744,019, 5–1–56, Cl. 99—171.

Snyder, Mark D., to E. I. du Pont de Nemours and Co. Polyester from terephthalic acid, ethylene, glycol and polyethylene glycol. 2,744,087, 5–1–56, Cl. 260—75.

Societe Anonyme Adolphe Saurer: *See*—
Wiget, Georg. 2,743,744.

Solow, Benjamin, to International Resistance Co. Method of manufacturing rectifier cells. 2,743,506, 5–1–56, Cl. 29—155.5.

Sorensen & Co., Inc.: *See*—
Bunblasky, Adolph, and Brown. 2,744,231.

Spangler, Peter J.: *See*—
Johnston, William, Jr. 2,743,893.

Sparrow, Vernon W., to General Register Corp. Machines for printing and issuing postal orders and like forms. 2,743,669, 5–1–56, Cl. 101—93.

Spaulding, William R. Knife sharpener. 2,743,560, 5–1–56, Cl. 51—210.

Spear, Philip J.: *See*—
Christopher, David H., and Spear. 2,743,548.

Spencer, William H.: *See*—
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Sperry Rand Corp.: *See*—
Cohn, Seymour B. 2,744,242.

Spiess, Newton E., Jr., and M. J. Zenk, Jr., to National Dairy Research Laboratories, Inc. Ion exchange method and apparatus for continuous inter-action of liquids and solids. 2,744,066, 5–1–56, Cl. 210—24.

Spindler, Charles W., Jr., to Leeds and Northrup Co. Compensated null-balance servo system. 2,744,227, 5–1–56, Cl. 318—432.

Spreckelmeier, Edwin H., to The American Laundry Machinery Co. Lane control for folding machine. 2,743,921, 5–1–56, Cl. 270—81.

Stack, Henry E.: *See*—
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Standard Oil Co., The: *See*—
Bartleson, John D., and Alford. 2,744,068.

Standard Register Co., The: *See*—
Haines, Kenneth D. 2,743,806.

Standard-Thomson Corp.: *See*—
Wood, Charles W., and Early. 2,743,872.

Starr, Leonard: *See*—
Focht, Walter, Jr., Gurniak, and Starr. 2,743,796.

Stein, Henry E., H. V. Mog, and J. W. Stertzer, to The Denison Engineering Co. Apparatus for hydrostatically testing rocket bodies or other open-ended containers. 2,743,604, 5–1–56, Cl. 73—49.4.

Stein, Samuel F. Zipper fly closure for garments. 2,743,457, 5–1–56, Cl. 2—234.

Sterick, Harrison D.: *See*—
Schmertz, William E., and Sterick. 2,743,493.

Stertzer, John W.: *See*—
Stein, Henry E., Mog, and Stertzer. 2,743,604.

Steward, Colby W.: *See*—
Smith, Thomas R., and Steward. 2,743,530.

Steward, Colby W., to The Maytag Co. Control circuit for clothes drier. 2,743,531, 5–1–56, Cl. 34—45.

Steward, Colby W., to The Maytag Co. Clothes drier automatic control circuit. 2,743,532, 5–1–56, Cl. 34—45.

Stewart-Warner Corp.: *See*—
Geisler, Henry A. 2,743,997.

Stiefvater, Charles M. Lateral surgical position attachment. 2,743,975, 5–1–56, Cl. 311—10.

Stillwagen, David: *See*—
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Stingl, Joseph, to The Ferris Mfg. Co. Filing cabinet. 2,743,982, 5–1–56, Cl. 312—267.

Stingl, Joseph, to The Ferris Mfg. Co. Rotary card filing cabinet. 2,743,983, 5–1–56, Cl. 312—267.

Stoner, George H.: *See*—
Levinson, Harry, Stoner, and Tangen. 2,743,800.

Stora Kopparbergs Bergslags Aktiebolaget: *See*—
Östlund, Karl B. 2,743,954.

Stricklett, Lloyd P., and J. W. Horvath, to New Tools Co., Inc. Adjustable wrench, including right and left thread sliding jaw adjusting means. 2,743,641, 5–1–56, Cl. 81—163.

Strike, Louis N. Shirt body pressing machine. 2,743,854, 5–1–56, Cl. 223—57.

Strong, John D. Optical instrument having through-and-return light path. 2,743,646, 5–1–56, Cl. 88—14.

Struckmann, Holger. High angle rotary kilns. 2,743,918, 5–1–56, Cl. 263—33.

Struve, William S., and A. D. Reidinger, to E. I. du Pont de Nemours and Co. Azo pigment production. 2,744,027, 5–1–56, Cl. 106—289.

Sturdi-Bilt Steel Products, Inc.: *See*—
Franks, Norvin H. 2,743,747.

Subluskey, Lee A., to Hercules Powder Co. Bromodehydroabietic acid derivatives. 2,744,100, 5–1–56, Cl. 260—97.

Subluskey, Lee A., to Hercules Powder Co. 9(10)-dehydrodehydroabietic acid derivatives. 2,744,101, 5–1–56, Cl. 260—99.

Subluskey, Lee A., to Hercules Powder Co. Acetoxydehydroabietic acid derivatives. 2,744,102, 5–1–56, Cl. 260—99.

Sullivan, Daniel M. Electrical contact or circuit component. 2,744,180, 5–1–56, Cl. 200—166.

Sullivan, Michael. Choke collar. 2,743,702, 5–1–56, Cl. 119—106.

Svenska Aktiebolaget Gasaccumulator: *See*—
Granqvist, Carl-Erik. 2,744,246.

Swart, Karel, K. L. Hagemans, and P. Otto, to Shell Development Co. Apparatus for the catalytic cracking of hydrocarbon oils. 2,743,998, 5–1–56, Cl. 23—288.

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Snyder, James E., and Swartz. 2,744,019.

Swedlund, Lloyd E., to Radio Corp. of America. Ion trap electron gun. 2,744,208, 5–1–56, Cl. 313—78.

Swingline, Inc.: *See*—
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Symington-Gould Corp., The: *See*—
Couch, Glenn F. 2,743,969.

Syntex S. A.: *See*—
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Tabler, James G.: *See*—
Gogolick, Roland M., and Tabler. 2,744,197.

Tangen, Edward N.: *See*—
Levinson, Harry, Stoner, and Tangen. 2,743,800.

Tanner, Talman H. Hide away air conditioner. 2,743,908, 5–1–56, Cl. 257—9.

Taubman, Samuel. Bath enclosure. 2,743,795, 5–1–56, Cl. 189—46.

Taylor, Clement F., to General Electric Co. Multiple masked photocell structure. 2,744,200, 5–1–56, Cl. 250—220.

Teague, Arnold L. Double-cut power band saw machine. 2,743,745, 5–1–56, Cl. 143—17.

Techron Ltd.: *See*—
Ord, Lewis R. 2,743,741.

Terrell, St. John, and E. Chandler. Tent construction. 2,743,734, 5–1–56, Cl. 135—1.

Terwilliger, Henry L., to Calumet and Hecla, Inc. Bending apparatus. 2,743,757, 5–1–56, Cl. 153—46.

Textile Machinery Corp.: *See*—
Hlensch, Johannes N. 2,743,572.
Hlensch, Johannes N. 2,743,573.

Textor, Andre F. Safety valve for tanks. 2,743,737, 5–1–56, Cl. 137—493.

Thelander, Wilbur V.: *See*—
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Theobald, Clement W., to E. I. du Pont de Nemours and Co. Polymeric organic aluminum oxides and method for preparing same. 2,744,074, 5–1–56, Cl. 260—2.

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Badeau, Carroll A. 2,743,634.

Thomas Industries Inc.: *See*—
Ditch, Franklin D. 2,743,469.

Thomas, Wilford H.: *See*—
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Thornton, Max H., to The Goodyear Tire & Rubber Co. Rubber hydrochloride film containing a dialkyl ether. 2,744,077, 5–1–56, Cl. 260—3.5.

Thygeson, John R., to Proctor & Schwartz, Inc. Sealed door construction for dryers and the like. 2,743,488, 5–1–56, Cl. 20—16.

Ticknor, William C.: *See*—
Snow, Jack N., Greenwald, and Ticknor. 2,743,759.

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Todd, Francis C., and E. N. Wyler, to The Battelle Development Corp. Thermionic emitter materials. 2,744,073, 5–1–56, Cl. 252—521.

Tollison, Paul L., and C. L. Ricards, to Wood Newspaper Machinery Corp. Saw chip collector. 2,743,501, 5–1–56, Cl. 29—21.

Tolman, Leo L.: *See*—
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Toms, Ernest and E. M. 2,744,030.

Toomin, Hershel, and G. H. Hare, to Beckman Instruments, Inc. Dynamic capacitor. 2,744,222, 5–1–56 Cl. 317—249.

Toulmin, Harry A., Jr., to The Commonwealth Engineering Co. of Ohio. Continuous metal production and continuous gas plating. 2,743,700, 5–1–56, Cl. 118—48.

Toulmin, Harry A., Jr., to Midland Chemical Corp. Laminar product and method of making the same. 2,744,044, 5–1–56, Cl. 154—101.

Toulon, Pierre M. G., 75% to Products & Licensing Corp., and 25% to N. Moore and W. D. Hall, joint tenants. Electric optical screens for color television. 2,744,156, 5–1–56, Cl. 178—5.4.

Towne, Richard S., to General Aniline & Film Corp. Copolymers of vinyl compounds with α,β-unsaturated dicarboxylic acids. 2,744,098, 5–1–56, Cl. 260—78.5.

Transit Research Corp.: *See*—
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Rossell, William T. 2,743,919.

Transonic Corp.: *See*—
Berkman, Sophia. 2,744,211.

Trico Products Corp.: *See*—
Olshel, John R. 2,743,473.

Trip-Lite Ltd.: *See*—
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True, Max M. Apparatus for mixing and dispensing an adhesive plasticized material. 2,743,912, 5–1–56, Cl. 259—169.

True-Trace Corp.: *See*—
Rosebrook, Orel L. 2,743,584.

Twiehaus, Hobert C., and Q. T. Prindle, to Columbia-Southern Chemical Corp. Production of benzene hexachloride in iron reaction chambers. 2,744,145, 5–1–56, Cl. 260—648.

Tudge Thomas T.: *See*—
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Turnbull, Glen O., and C. C. Evers, to International Harvester Co. Grain tank discharge conveyor for harvesters. 2,743,571, 5–1–56, Cl. 56—473.5.

Turner, Alonzo R., to Turner Corp. Lift hinge for automobiles. 2,743,476, 5–1–56, Cl. 16—141.

Turner Corp.: *See*—
Turner, Alonzo R. 2,743,476.

Tygh, Robert L. Swing hook. 2,743,895, 5–1–56, Cl. 248—341.

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Schoonover, Archie G., Feild, and Purse. 2,743,992.

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Union Oil Co. of California: *See*—
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Elliott, Richard, and Minto. 2,743,925.
Elliott, Richard M., and Lee. 2,743,924.
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United States Atomic Energy Commission, United States of America as represented by the: *See*—
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United States Rubber Co.: *See*—
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Uschmann, Curt, to Cascades Plywood Corp. Fiber mat forming apparatus and methods. 2,743,758, 5–1–56, Cl. 154—1.

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Van Dok, Willem S. Apparatus for wrapping fruit. 2,743,564, 5–1–56, Cl. 53—227.

Van Loon, Mintje, to Shell Development Co. Compounded lubricating compositions. 2,744,069, 5–1–56, Cl. 252—40.7.

Van Steenberg, John P. Apparatus for and method of machining valve wedge with disc grinder. 2,743,536, 5–1–56, Cl. 51—125.

Van Winkle, John L.: *See*—
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Veenemans, Cornelis F., to Hartford National Bank and Trust Co., trustee. Transport path comprising signal devices. 2,743,808, 5–1–56, Cl. 198—40.

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Vercellone, Alberto, and C. G. Alberti, to Farmaceutici Italia S. A. Process for preparing threo-1-phenyl-1,3-diacyloxy-2-amino-propane-hydrochlorides. 2,744,131, 5–1–56, Cl. 260—487.

Vercellone, Alberto, and C. G. Alberti, to Farmaceutici Italia S. A. Process for preparing threo-1-p.nitrophenyl-2-acylamino-1,3-propanediols. 2,744,135, 5–1–56, Cl. 260—562.

Vercellone, Alberto, and C. G. Alberti, to Farmaceutici Italia S. A. Process for the preparation of threo-1-p.nitrophenyl-2-amino-1,3-propanediol. 2,744,140, 5–1–56, Cl. 260—570.6.

Verkuil, Leo L. Safety wrench for electrical fuses. 2,743,640, 5–1–56, Cl. 81—64.

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Hanson, Clarence E., Jr., and Vermaire. 2,743,714.

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Heiser, Ferdinand F., McCarty, and Vicenzi. 2,743,871.

Vogel, Dick. Boat and method of making same. 2,743,465, 5–1–56, Cl. 9—6.

Vogler, Karl B., to Hoffmann-La Roche Inc. Preparation of optically active 3-hydroxy-n-methyl-morphinanes. 2,744,112, 5–1–56, Cl. 260—285.

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Wadsworth, Howard M. Electrical condenser. 2,744,221, 5–1–56, Cl. 317—249.

Wahler, Dale E. and L. P., and G. V. Smith; said Smith assor. to said D. E. and said L. P. Wahler. Centrifugal amalgamator. 2,743,866, 5–1–56, Cl. 233—14.

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Walker, Brooks. Automatic banking device for vehicles. 2,743,941, 5–1–56, Cl. 280—112.

Walker, Delos A.: *See*—
Barbknecht, Fred W., and Walker. 2,743,569.

Walker, Duane J., 40% to W. T. Reed. Sugar and cream server and dispenser. 2,743,846, 5–1–56, Cl. 222—129.

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Walton, Edward, to Merck & Co., Inc. Phthalyl-alanyl-mercaptoethyl amides and preparation thereof. 2,744,119, 5–1–56, Cl. 260—326.

Ware, Richard N., Jr., and M. B. Christian, to Chicago Mill and Lumber Co. Method of making paper-covered folding box blanks. 2,744,046, 5–1–56, Cl. 154—118.

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Watson, Henry R., and F. R. Elliott, to Sir W. G. Armstrong Whitworth Aircraft Ltd. Operating the flaps of aircraft wings. 2,743,618, 5–1–56, Cl. 74—99.

Watter, Michael, to The Budd Co. Sheet-handling means. 2,743,923, 5–1–56, Cl. 271—18.

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219— 3: 2,743,933
4: 2,744,182
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84: 2,744,184
220— 6: 2,743,838
31: 2,743,839
52: 2,743,840
89: 2,743,841
221— 86: 2,743,842
222— 26: 2,743,843
111: 2,743,844
117: 2,743,845
129: 2,743,846
133: 2,743,847
173: 2,743,848
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238: 2,743,850
457.5: 2,743,851
494: 2,743,852
223— 57: 2,743,853
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224— 3: 2,743,856
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226— 24: 2,743,858
94: 2,743,860
228— 30: 2,743,861
229— 8: 2,743,862
27: 2,743,863
233— 7: 2,743,864
2,743,865
14: 2,743,866
235— 61: 2,743,867
61.11: 2,743,868

236— 24. 5: 2,743,869
48: 2,743,870
2,743,871
92: 2,743,872
238—14. 15: 2,743,873
240— 2: 2,744,185
4: 2,744,186
8. 18: 2,744,187
10. 63: 2,744,188
10. 68: 2,744,189
51. 11: 2,744,190
78: 2,744,191
81: 2,744,192
241— 32: 2,743,874
89: Re.24,147
100. 5: 2,743,875
242— 35. 5: 2,743,876
35. 6: 2,743,877
55: 2,743,878
66: 2,743,879
75: 2,743,880
2,743,881
2,743,882
90: 2,743,883
96: 2,743,884
244— 7: 2,743,885
2,743,886
43: 2,743,887
2,743,888
76: 2,743,889
134: 2,743,890
150: 2,743,891
248— 24: 2,743,892
146: 2,743,893
317: 2,743,894
341: 2,743,895
249— 14: 2,743,896
250— 20: 2,744,193
2,744,194
27: Re.24,146
2,744,195
2,744,196
36: 2,744,197
2,744,198
43. 5: 2,744,199
220: 2,744,200

251— 59: 2,743,897
139: 2,743,898
149: 2,743,899
174: 2,743,900
252— 32. 7: 2,744,068
33. 4: 2,744,083
40. 7: 2,744,069
48. 8: 2,744,070
51. 5: 2,744,071
301. 3: 2,744,072
521: 2,744,073
253— 52: 2,743,901
254— 15: 2,743,902
133: 2,743,903
255— 19: 2,743,904
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74: 2,743,906
256— 10: 2,743,907
257— 9: 2,743,908
259— 42: 2,743,909
108: 2,743,910
147: 2,743,911
169: 2,743,912
260— 2: 2,744,074
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29. 1: 2,744,079
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32. 4: 2,744,081
32. 6: 2,744,082
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45. 4: 2,744,086
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260— 78. 5: 2,744,098
80. 7: 2,744,099
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99: 2,744,101
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192: 2,744,105
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239. 3: 2,744,107
239. 5: 2,744,108
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2,744,110
248. 5: 2,744,111
285: 2,744,112
295: 2,744,113
297. 5: 2,744,114
307: 2,744,115
308: 2,744,116
309: 2,744,117
326: 2,744,118
2,744,119
343. 2: 2,744,120
348. 9: 2,744,121
397. 4: 2,744,122
405. 6: 2,744,123
410. 7: 2,744,124
413: 2,744,125
437: 2,744,126
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482: 2,744,130
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543: 2,744,132
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561: 2,744,134
562: 2,744,135
2,744,136
563: 2,744,137
565: 2,744,138
567. 6: 2,744,139
570. 6: 2,744,140
584: 2,744,141
611: 2,744,142

260— 621: 2,744,143
2,744,144
648: 2,744,145
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653: 2,744,147
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668: 2,744,149
671: 2,744,150
682: 2,744,151
261— 18: 2,743,913
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262— 33: 2,743,917
263— 33: 2,743,918
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272— 66: 2,743,926
273— 43: 2,743,927
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193: 2,743,930
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286— 6: 2,743,947
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288— 2: 2,473,950
3: 2,743,951
291— 44: 2,743,952
292— 340: 2,743,953
294— 113: 2,743,954
296— 23: 2,743,955
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299— 18: 2,743,958
97: 2,743,959
104: 2,743,960
107. 6: 2,743,961
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140. 1: 2,743,963
302— 53: 2,743,964
59: 2,743,965
306— 3: 2,743,966
2,743,967
47: 2,743,968
84: 2,743,969
184: 2,743,970
187. 1: 2,743,971
309— 23: 2,743,972
45: 2,743,973
310— 32: 2,744,201
71: 2,744,202
91: 2,744,203
218: 2,744,204
228: 2,744,205
2,744,206
311— 5: 2,743,974
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19: 2,743,976
55: 2,743,977
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105: 2,743,979
107: 2,743,980
312— 214: 2,743,981
267: 2,743,982
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317: 2,743,984
313— 2: 2,744,207
78: 2,744,208
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313— 143: 2,744,211
317— 2: 2,744,212
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230: 2,744,217
234: 2,744,218
235: 2,744,219
249: 2,744,220
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318— 29: 2,744,223
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221: 2,744,226
432: 2,744,227
321— 10: 2,744,228
15: 2,744,229
322— 27: 2,744,230
323— 66: 2,744,231
324— 3: 2,744,232
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61: 2,744,238
95: 2,744,239
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117: 2,744,241
333— 31: 2,744,242
330— 36: 2,744,243
258: 2,744,244
340— 166: 2,744,245
343— 118: 2,744,246
206: 2,744,247
815: 2,744,248
853: 2,744,249
346— 33: 2,743,985
46: 2,743,986
64: 2,743,987
74: 2,743,988
2,743,989
101: 2,743,990

CLASSIFICATION OF DESIGNS

D 1—12: Des. 177,565
D 3—19: Des. 177,556
D 4— 2: Des. 177,584
Des. 177,587
4: Des. 177,592
D 9— 2: Des. 177,594
D10— 8: Des. 177,599
D14— 6: Des. 177,561
Des. 177,566
D15— 3: Des. 177,557

D22— 3: Des. 177,583
Des. 177,590
D26—14: Des. 177,572
15: Des. 177,573
Des. 177,574
D29— 2: Des. 177,555
D34— 4: Des. 177,562
5: Des. 177,579
11: Des. 177,567
15: Des. 177,577

D34—15: Des. 177,600
Des. 177,601
D36— 8: Des. 177,559
D40— 1: Des. 177,553
D44— 9: Des. 177,575
10: Des. 177,571
D45—10: Des. 177,554
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D48—20: Des. 177,551
23: Des. 177,568
D52— 2: Des. 177,597
3: Des. 177,569
D54—12: Des. 177,548
Des. 177,549
13: Des. 177,580
D57— 1: Des. 177,581
Des. 177,582

D58— 2: Des. 177,598
8: Des. 177,550
12: Des. 177,586
25: Des. 177,570
D62— 2: Des. 177,578
D71— 1: Des. 177,563
Des. 177,564
D74—17: Des. 177,560
D78— 1: Des. 177,552

D80— 8: Des. 177,593
D81— 4: Des. 177,588
10: Des. 177,603
D83— 1: Des. 177,585
D85— 2: Des. 177,576
8: Des. 177,602
D87— 5: Des. 177,591
D92— 1: Des. 177,595
D93— 3: Des. 177,558

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE

May 1, 1956 Volume 706 Number 1

TRADEMARKS

NOTICES

Changes of Address

On and after May 1, 1956 communications advising of a change of address of an original registrant, or a change of name or address of a domestic representative of a foreign registrant will not be acknowledged by the Patent Office, but the communication will be placed in the file and the change of address will be entered on the file jacket of the registration.

DAPHNE LEEDS,
Assistant Commissioner of Patents.

Apr. 10, 1956.

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 125,561 (a trademark design), Chicago Steel Post Co., republished by Inland Steel Co., Metallic fence posts; **TM 505,982** (Red Top), Inland Steel Co., Metal fence posts, filed Mar. 20, 1956, D. C., E. D. Wis. (Milwaukee), Doc. 56/c/46, *Inland Steel Co.* v. *United States Steel Corp.*

TM 338,539 (Plexiglas), Röhm & Haas Co., Sheets of solid transparent, resinous material to be used as a glass substitute; **TM 367,998**, same, Synthetic resinous materials in the form of sheets, rods, or tubes, filed Feb. 27, 1956, D. C. N. J. (Newark), Doc. 169/56, *Röhm & Haas Co.* v. *Hetson Paint Mfg. Co. et al.* Consent judgment; trademarks held valid Mar. 15, 1956.

TM 367,998. (See TM 338,539.)

TM 370,142 (Babee Tenda), The Fort Massac Chair Co., republished by The Babee Tenda Corp., Combined tables and chairs for infants and juveniles; **TM 506,986** (Tenda), The Babee-Tenda Corp., same, filed Dec. 11, 1952, D. C., S. D. N. Y., Doc. 81/19, *The Babee-Tenda Corp. et al.* v. *Scharco Mfg. Co., Inc., et al.* Consent decree; judgment for plaintiff; counterclaim dismissed; injunction issued Mar. 21, 1956.

TM 388,146. (See TM 621,438.)

TM 389,794 (Golden Dipt), Meletio Sea Food Co., Inc., Food preparation, for ready mixed breading for pan frying, filed Dec. 30, 1952, D. C., N. D. Ill. (Chicago), Doc. 52c2832. *Meletio Sea Food Co.* v. *Golden Mix, Inc.* Consent decree; trademark held valid; defendant enjoined Mar. 19, 1956.

TM 396,230 ("Dreamies" and design), Sondra Undergarments, Inc., Ladies' underwear, nightgowns, and pajamas, filed Mar. 22, 1956, D. C., S. D. N. Y., Doc. 108/94, *Sondra Undergarments Co. Inc.* v. *Dream Wear Lingerie Inc.*

TM 405,192 (Admiral), Continental Radio and Television Corp., Electric refrigerators; **TM 549,986**, same, Admiral Corp., Radio receiving sets and parts thereof, vacuum or electron

CONDITION OF TRADEMARK APPLICATIONS AS OF APRIL 6, 1956

Total number of applications awaiting action [excluding renewals and Sec. 12 (c)]---------- 9,089
Date of oldest new application---------- Sept. 6, 1955
Date of oldest amended application---------- Dec. 9, 1955

MERCHANT, JOHN, Director, Trademark Examining Operation

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application	
	New	Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	11-30-55	12-27-55
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	9-6-55	12-9-55
III. WENDT, C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	9-15-55	12-13-55
Renewals (All Classes)	2-3-56	3-6-56
Sec. 12 (c) Publications (All Classes)	2-3-56	3-6-56

Applications Filed During Week Ending April 6, 1956—407

Registrations Issued---------- 375—No. 626,028 to No. 626,402
Renewals Issued---------- 45

For the quarter January 1, 1956 through March 31, 1956
Applications filed---------- 5498
Registrations issued---------- 5846
Renewals issued---------- 681
Cancelled under Sec. 8---------- 1916

tubes, etc.; **TM 589,773**, same, Dehumidifiers and humidifiers, and room air conditioners, **filed** Mar. 28, 1956, D. C., S. D. N. Y., Doc. 108/154, *Admiral Corp.* v. *Admarell Air Conditioning Corp. et al.*

TM 405,604 (Beminal), Ayerst, McKenna & Harrison Ltd., Products containing individual or combinations of vitamin B factors with or without other vitamins or minerals, **filed** Feb. 29, 1956, D. C. N. J. (Newark), Doc. 178/56, *American Home Products Corp.* v. *Organic Laboratories, Inc.* Consent decree for injunction Mar. 23, 1956.

TM 418,535 (Lurex), The Dobeckmun Co., Yarn and thread comprised either in whole or in part of laminated film having a metallic appearance, etc., **filed** Mar. 27, 1956, D. C., S. D. N. Y., Doc. 108/146, *The Dobeckmun Co.* v. *M. Lowenstein & Sons Inc.*

TM 504,370 (Chromcraft), American Fixture and Mfg. Co., Furniture—namely, chairs, tables, stools, and racks, **filed** Mar. 23, 1956, D. C. N. J. (Newark), Doc. 239/56, *Chromcraft Corp.* v. *Chromaster Furniture Corp.*

TM 505,982. (See TM 125,561.)

TM 506,866. (See TM 370,142.)

TM 507,668. (See TM 621,438.)

TM 549,906. (See TM 405,192.)

TM 568,466 (Spray net), Helene Curtis Industries, Inc., Wave setting lotion, **filed** Mar. 27, 1956, D. C., S. D. N. Y., Doc. 108/141, *Helene Curtis Industries Inc.* v. *Olin Mathieson Chemical Corp.*

TM 585,034 (Electro), Electro Mfg. Corp., Fluorescent lighting apparatus—namely, lighting fixtures and parts therefor, bed lamps and germicidal lamps, **filed** Mar. 20, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c527, *Electro Lighting Corp.* v. *Luminous Ceilings, Inc.*

TM 588,163. (See TM 589,942.)

TM 589,773. (See TM 405,192.)

TM 589,942 (a trademark design), **TM 588,163** ("Friction Proofing" and design), Wynn Oil Co., Lubricating oils and lubricating oil additives, **filed** Mar. 16, 1956, D. C., N. D. Calif. (San Francisco), Doc. 35323, *Wynn Oil Co.* v. *R. W. Tuttle et al.*

TM 605,905 (Beer Nuts), Brewster Food Service, Shelled and salted peanuts, **filed** Mar. 21, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c540, *Brewster Food Service* v. *Kral Food Products, Inc.*

TM 609,716. (See TM 621,438.)

TM 621,438, TM 507,668 (Fresh), The Pharma-Craft Corp., Deodorant and nonperspirant; **TM 609,716**, same, Deodorant bath soap; **TM 388,146** (Keeps You Fresh as a Daisy), same, Cream preparation to stop perspiration, **filed** Mar. 7, 1956, D. C., S. D. N. Y., Doc. 107/353, *Pharma-Craft Corp.* v. *Model Brassiere Corp. et al.*

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.
As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 681,043. Snia Viscosa Societa Naxionale Industria Applicazioni Viscosa S. p. A., Milan, Italy. Filed Feb. 3, 1955.

UNDATEX

Priority claimed under Sec. 44(d) on Italian application filed Nov. 24, 1954; Reg. No. 122,965, dated Apr. 20, 1955.
For Deeply Crimped Viscose Staple.

SN 683,885. Illinois Agricultural Association, Chicago, Ill. Filed Mar. 21, 1955. COLLECTIVE MARK.



Owner of Reg. Nos. 436,448, 439,023, and others.
For Field Seeds and Hybrid Seed Corn.
First use June 1, 1949.

SN 688,721. Flex-O-Glass, Inc., d. b. a. Warp Brothers, Chicago, Ill. Filed June 2, 1955.

Jiffy-Wrap

For Very Thin Plastic Sheets Used for Wrapping Perishable Goods.
First use April 1955.

SN 688,738. Lawn & Grass Seeds, Inc., Buffalo, N. Y. Filed June 2, 1955.

FAB-U-LAWN

The drawing is lined for the color red.
For Lawn and Grass Seed.
First use Mar. 14, 1955.

SN 693,009. Guy D. Bush, d. b. a. Bush Nursery, Minneapolis, Minn. Filed Aug. 15 1955.

Frosty Morn

For Dwarf Double Mock Orange Shrub.
First use Apr. 15, 1954.

SN 693,362. Bell and Zoller Coal Company, Chicago, Ill. Filed Aug. 19, 1955.

Altamont

For Coal.
First use June 27, 1955.

CLASS 2

SN 690,060. Alton Boxmakers, Inc., Pacific, Mo. Filed June 23, 1955.

TRA-FOLD

For Paperboard Blanks for the Manufacture of Boxes.
First use Mar. 23, 1955.

SN 691,620. Gits Molding Corporation, Chicago, Ill. Filed July 20, 1955.

GITSware

Owner of Reg. Nos. 434,102, 545,789, and others.
For Tumblers and Covers Therefor, Bowls and Covers Therefor, Canisters and Covers Therefor, Cups, Drinking Containers in the Form of Tumblers, Decanters and Covers Therefor, Jugs and Covers Therefor, Salt Shakers, Pepper Shakers, Saucers, Plates, and Toothpick Dispensers.
First use Oct. 4, 1950, on drinking containers in the form of tumblers.

CLASS 3

SN 694,952. Barclay Industries Corporation, Philadelphia, Pa. Filed Sept. 20, 1955.

UTILIPAK

For Plastic Portfolios.
First use Mar. 1, 1954.

CLASS 4

SN 677,219. Heidenberg Lace Net Curtain Co., Closter, N. J. Filed Nov. 24, 1954.

O-MA

For Scouring and Polishing Mitts.
First use Nov. 9, 1954.

SN 693,589. Bay State Abrasive Products Company, Westboro, Mass. Filed Aug. 24, 1955.

BLUE FLASH

For Grinding, Abrasive, Polishing, Cutting-Off, and Knife-Sharpening Wheels.
First use Mar. 15, 1944.

SN 697,038. Sunbeam Corporation, Chicago, Ill. Filed Oct. 24, 1955.

SHAVEMASTER

Owner of Reg. No. 339,993.
For Sharpening Compound.
First use November 1941.

SN 697,044. Sunbeam Corporation, Chicago, Ill. Filed Oct. 24, 1955.

Sunbeam

Owner of Reg. No. 370,742.
For Sharpening Compound.
First use November 1941.

SN 697,095. Hubbs and Howe Company, Buffalo, N. Y. Filed Oct. 25, 1955.

H-H

Owner of Reg. Nos. 537,464 and 531,783.
For Floor Waxes and Dust Controlling Preparation.
First use on or about July 1, 1954.

SN 697,310. Luther Oliver Moser, d. b. a. Moser Furniture Company, Lynchburg, Va. Filed Oct. 28, 1955.

Early Virginian

For Furniture Polish.
First use Sept. 2, 1955.

SN 698,116. American Bio-Standards Corp., New York, N. Y. Filed Nov. 14, 1955.

Pixie

For Cloth Impregnated With Cleaning and Polishing Compound.
First use Oct. 7, 1955.

CLASS 5

SN 676,529. Professional Tape Company, Riverside, Ill., to Professional Tape Company, Inc., Riverside, Ill. Filed Nov. 12, 1954.

TIME

The representation of a portion of the goods is disclaimed apart from the mark as shown.
For Self-Sticking Paper Tape and Labels.
First use on or about Oct. 1, 1954; and on or about July 1, 1951, as to "Time."

SN 697,137. Armour and Company, Chicago, Ill. Filed Oct. 26, 1955.

CASE-WRAP

For Animal Glue Composition.
First use Sept. 22, 1955.

CLASS 6

SN 674,122. American Cyanamid Company, New York, N. Y. Filed Oct. 1, 1954.

AEROLIN

For Bating for Use in the Treatment of Hides in the Manufacture of Leather.
First use Sept. 15, 1954.

SN 675,206. Celanese Corporation of America, New York, N. Y. Filed Oct. 21, 1954.

CELATONE

For Polyvinyl Acetate Emulsions.
First use June 2, 1954.

SN 675,391. Houilleres du Bassin du Nord et du Pas de Calais, Douai, Nord, France. Filed Oct. 25, 1954.

NORSODYNE

Priority claimed under Sec. 44(d) on French Reg. No. 1,691, dated Apr. 24, 1954 (Douai); Natl. Inst. No. 36,030.
For Synthetic Resins for Use in the Manufacture of Adhesive Substances, Varnishes, Enamels, and Paints.

SN 676,038. Calahan & Horsey, Inc., New York, N. Y. Filed Nov. 4, 1954.

ACTIVATOR B. B. X.

For Purposes of this registration only, applicant disclaims the word "Activator" apart from the mark shown.
For Solvents, Combinations of Solvents, and Solutions of Said Solvents Containing Film Forming Resinous Compositions.
First use Mar. 10, 1954.

SN 681,865. Michigan Chemical Corporation, St. Louis, Mich. Filed Feb. 17, 1955.

MC

Owner of Reg. No. 506,521.
For Intermediates for Industrial Use—Namely, Bromoform, 2-Bromothiophene, 2-Chlorothiophene, Cyclopentyl Bromide, 2,5-Dibromothiophene, 2,5-Dichlorothiophene, Diethylaminoethyl Chloride HCl, Dimethylaminoethyl HCl, Dimethylaminopropyl Chloride HCl, Dimethylaminoisopropyl Chloride HCl, Monobromobenzene, Phosphorous Tribromide, 2-Bromopentane, Trimethylenechlorobromide.
First use Oct. 1, 1953; on July 15, 1945, as to the banner and oval.

SN 687,299. The Matheson Company, Inc., East Rutherford, N. J. Filed May 11, 1955.

AQUAWAX

For Water Soluble Material Used as a Histological Embedding Material or Medium To Be Used for Supporting Tissues of Plants and Animals While the Latter Are Being Cut in Microscopically Thin Slices.
First use August 1953.

SN 687,339. The B-Dri Company, Missoula, Mont. Filed May 12, 1955.

SNEAK

For Composition of Aromatic Oils for External Application by Hunters and Trappers for Inhibiting Human Scent.
First use Apr. 16, 1955.

SN 687,571. Gulf Oil Corporation, Pittsburgh, Pa. Filed May 16, 1955.

GULF

The drawing is lined for orange and blue. Owner of Reg. Nos. 342,770 and 344,601.
For Hydraulic Brake Fluid.
First use on or about Nov. 8, 1944.

SN 688,800. Celanese Corporation of America, New York, N. Y. Filed June 3, 1955.

CELLUPHOS

For Organo-Phosphates—Namely, Tributyl Phosphate and Tripropyl Phosphate for General Use in the Industrial Arts.
First use Apr. 4, 1955.

SN 689,126. Eastman Kodak Company, Rochester, N. Y. Filed June 8, 1955.

EPOLENE

For Polyethylene Waxes and Waxes Made From Polyethylene.
First use May 19, 1955.

SN 689,411. Purex Corporation, Ltd., South Gate, Calif. Filed June 13, 1955.



For Product in Dry Form, Having Bleaching, Deodorizing, Disinfectant, Germicidal, and Sanitizing Qualities.
First use Nov. 10, 1954.

SN 689,501. Mangels, Herold Co., Inc., d. b. a. Mangels Herold Co., Baltimore, Md. Filed June 14, 1955.

KING FLUFF

For Rinse Used as a Fabric Softener.
First use May 27, 1955.

SN 689,680. Undertakers Supply Company, Chicago, Ill. Filed June 16, 1955.

TRU-LANOL

For Arterial Embalming Fluid.
First use Nov. 16, 1954.

SN 689,937. General Aniline & Film Corporation, New York, N. Y. Filed June 21, 1955.

MIRADOL

For Photographic Chemicals—Namely, Photographic Developers.
First use Apr. 4, 1955.

SN 690,394. National Chemical Laboratories, Inc., West Palm Beach, Fla. Filed June 28, 1955.

SAFE CIDE

For Insecticide.
First use May 13, 1955.

SN 690,945. Diamond Black Leaf Company, Cleveland, Ohio. Filed July 8, 1955.



The drawing is lined for red. Owner of Reg. Nos. 47,058, 513,110, and others.
For Pesticides, Including Insecticides, Weedicides, Rodenticides, Fungicides, Algacides, Parasiticides, Nematocides, Herbicides, and Ovacides for Agricultural, Horticultural, Veterinary, Poultry, Household, and Sanitary Uses.
First use Apr. 12, 1955.

SN 691,078. Aaron Permut, d. b. a. Solitone Laboratories, Hasbrouck Heights, N. J. Filed July 11, 1955.

SOLITONE

For Dyes and Other Coloring Compositions in Use on Textiles.
First use July 1, 1955.

SN 691,374. Richard D. Johnson, d. b. a. Johnson Water Softener Company, Des Plaines, Ill. Filed July 15, 1955.

HYDROQUEEN

For Preparation for Softening Water.
First use Apr. 29, 1955.

SN 691,660. John H. Calo Company, Incorporated, New York, N. Y. Filed July 21, 1955.

FLORA-PINE

For Terpene Solvent.
First use 1939.

SN 692,781. Heatbath Corporation, Indian Orchard, Mass. Filed Aug. 10, 1955.

DURACOAT

For Acid Solutions for Producing Clear or Colored Chromate Conversion Coatings on Zinc and Cadmium Plated Articles and Zinc Die Castings.
First use January 1954.

SN 693,117. Beckman Instruments, Inc., Fullerton, Calif. Filed Aug. 16, 1955. Sec. 2(f).

BECKMAN

Owner of Reg. No. 596,937.
For Buffer Solutions for Standardization of pH; Water Repellents for Use on Chemical and Electrochemical Glassware; Desiccants for Use Within Spectrophotometer and Other Instrument Housings; and Salt Bridge Solutions for Use in Electrochemical Reference Electrodes.
First use October 1935.

SN 693,849. The Rockwell Spring and Axle Company, Coraopolis, Pa. Filed Aug. 29, 1955.

Standard

For Chemicals for Use in Electroplating Baths.
First use July 22, 1955.

SN 693,870. Tide-Tan Corporation, Dallas, Tex. Filed Aug. 29, 1955.

TIDE TAN

For Chemical Composition for Reducing the Viscosity of Well Drilling Mud.
First use Apr. 15, 1955.

SN 693,911. Gaetjens, Berger & Wirth, Inc., Brooklyn, N. Y. Filed Aug. 30, 1955.

KWIK

For Solution for Making Ready and for Repairing Rubber Offset Blankets Used in the Lithographic Art.
First use July 15, 1955.

SN 694,179. Advance Solvents & Chemical Corporation, New York, N. Y., to Carlisle Chemical Works, Inc., Reading, Ohio. Filed Sept. 6, 1955.



Owner of Reg. No. 592,626.
For Plastic Resinous Compositions; Synthetic Resins Sold to the Paint, Varnish, and Rubber Industries; Hydrocarbon and Other Polymers and Copolymers, Mixtures of Polybutene Polymers and Hydrocarbon Waxes; Wetting and Foaming Agents, Emulsifiers, Softeners and Penetrating Agents; Materials Used as Plasticizers in the Paint and Protective Coating, Rubber, Plastics, Adhesive, and Related Industries, Particularly for Vinyl Resins, Phenol-Aldehyde Resins, Alkyd Resins, Cellulose Derivatives, Acrylic Resins; Stabilizers, Particularly for Halogen-Containing and Vinyl Resins; Rubber Tackifiers.
First use August 1953.

SN 694,190. The Borden Company, New York, N. Y. Filed Sept. 6, 1955.

LEMAC

For Polyvinyl Acetate.
First use Jan. 15, 1954.

SN 694,267. The Standard Oil Company, Cleveland, Ohio. Filed Sept. 6, 1955.

SO-HOT

For Hydrocarbon Lighter Fluid.
First use about Aug. 23, 1955.

SN 694,279. Universal Chemicals Corp., Lonsdale, R. I. Filed Sept. 6, 1955.

FATCHEMCO

For High Molecular Weight Fatty Acids, Fatty Alcohols, Fatty Amines, Fatty Amides and Imidazoline Compounds Having 12 to 40 Carbon Atoms.
First use Jan. 1, 1947.

SN 694,280. Universal Chemicals Corp., Lonsdale, R. I. Filed Sept. 6, 1955.

UNICOTE

For Fatty Cationic, Non-Ionic, and Anionic Compounds Useful as Additives for Improving the Wetting, Coating, Anti-Stripping, and Bonding Properties of Bituminous Substances Such as Asphalt, Tars, and Resins.
First use January 1951.

SN 694,281. Universal Chemicals Corp., Lonsdale, R. I. Filed Sept. 6, 1955.

TOPSALL

For Fatty Cationic, Non-Ionic, and Anionic Compounds Useful as Additives for Improving the Wetting, Coating, Anti-Stripping, and Bonding Properties of Bituminous Substances Such as Asphalt, Tars, and Resins.
First use January 1951.

SN 694,292. Aerocem Limited, London, England. Filed Sept. 7, 1955.

AEROCEM

Owner of British Reg. No. 653,952, dated Nov. 25, 1946.
For Chemical Substances for Use as Wetting and Dispersing Agents in Industrial Processes.

SN 694,297. Badische Anilin- & Soda- Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany. Filed Sept. 7, 1955.

ORTOLAN

For Dyestuffs.
First use June 27, 1955.

SN 694,583. Merck & Co., Inc., Rahway, N. J. Filed Sept. 13, 1955.

MAGCAL

For Magnesium Oxide.
First use Mar. 21, 1955.

SN 694,625. Atlas Powder Company, Wilmington, Del. Filed Sept. 14, 1955.

ATLAS

For Surface Active Agents for Use in Compounding Agricultural Parasiticides, Herbicides, and Fungicides.
First use May 20, 1940.

SN 694,655. Minnesota Mining and Manufacturing Company, St. Paul, Minn. Filed Sept. 14, 1955.

SCOTCHGARD

For Chemical Composition for Application to Various Surfaces To Repel Grease and Oil Therefrom.
First use Aug. 26, 1955.

SN 694,668. Byron E. Pullen, d. b. a. M. P. M. Co., Sandy, Oreg. Filed Sept. 14, 1955.

Blue-Re-Tu

For Liquid Energizer for Batteries.
First use June 28, 1955.

CLASS 7

SN 669,094. Eleanor G. Des Foldes, Los Angeles, Calif., from Eleanor G. Des Foldes, executrix of the estate of Daniel Des Foldes (deceased), d. b. a. Hollywood Ribbon Industries. Filed June 29, 1954. Sec. 2(f).

SPARKLE-TYE

For Ribbon for Tying Packages and the Like.
First use 1949.

SN 669,095. Eleanor G. Des Foldes, Los Angeles, Calif., from Eleanor G. Des Foldes, executrix of the estate of Daniel Des Foldes (deceased), d. b. a. Hollywood Ribbon Industries. Filed June 29, 1954.

DUO-TONE

For Ribbon for Tying Packages and the Like.
First use 1949.

SN 669,096. Eleanor G. Des Foldes, Los Angeles, Calif., from Eleanor G. Des Foldes, executrix of the estate of Daniel Des Foldes (deceased), d. b. a. Hollywood Ribbon Industries. Filed June 29, 1954.

Hollywood

For Ribbon for Tying Packages and the Like.
First use 1947.

SN 669,097. Eleanor G. Des Foldes, Los Angeles, Calif., from Eleanor G. Des Foldes, executrix of the estate of Daniel Des Foldes (deceased), d. b. a. Hollywood Ribbon Industries. Filed June 29, 1954.

Bel-Air

For Ribbon for Tying Packages and the Like.
First use June 11, 1954.

SN 669,098. Eleanor G. Des Foldes, Los Angeles, Calif., from Eleanor G. Des Foldes, executrix of the estate of Daniel Des Foldes (deceased), d. b. a. Hollywood Ribbon Industries. Filed June 29, 1954.

LUSTERAY

For Ribbon for Tying Packages and the Like.
First use June 11, 1954.

CLASS 8

SN 692,535. Oppenheimer Pipes Limited, London, England. Filed Aug. 5, 1955.

ZIPSEAL

For Tobacco Pouches.
First use June 30, 1954; in commerce on July 10, 1954.

CLASS 10

SN 677,994. Science Products Company, Inc., Chicago, Ill. Filed Dec. 8, 1954. Sec. 2(f).

Blossom-set

For Synthetic Plant Hormones for Blossoms and Buds, Used To Induce the Growth of Larger, Earlier Maturing, Meatier, Better Colored, and Often Seedless Fruit.
First use prior to Feb. 23, 1948.

SN 684,007. Arkansas Plant Food Company, North Little Rock, Ark. Filed Mar. 23, 1955.

GREEN STATE

For Fertilizer.
First use Sept. 1, 1954.

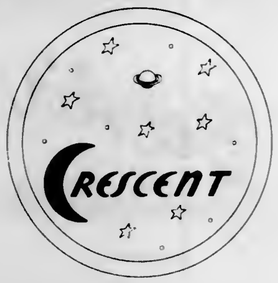
CLASS 11

SN 683,548. Peerless Imperial Co., Inc., Newark, N. J. Filed Mar. 15, 1955.

STERLING IMPRESSION

For Carbon Paper.
First use Apr. 24, 1947.

SN 686,563. Peerless Imperial Co., Inc., Newark, N. J. Filed Apr. 29, 1955.



For Typewriter Ribbons and Inked Ribbons.
First use Jan. 27, 1953.

SN 686,565. Peerless Imperial Co., Inc., Newark, N. J. Filed Apr. 29, 1955.



For Offset Ribbons, Typewriter Ribbons, and Inked Ribbons.
First use July 11, 1940.

SN 690,256. Patrick J. Frawley, Jr., d. b. a. Western Ink Development Co., Los Angeles, Calif., to Paper Mate Manufacturing Company, Culver City, Calif. Filed June 27, 1955.

WIDCO

For Inks and Writing Fluids.
First use May 11, 1955.

CLASS 12

SN 686,546. James Mfg. Co., Fort Atkinson, Wis. Filed Apr. 29, 1955.

COW-MATIC

For Feeding Systems Associated With Milking Stalls.
First use Sept. 4, 1954.

SN 688,677. Skyline Plastic Molding, Inc., Titusville, Pa. Filed June 1, 1955.

NEW YORKER

For Plastic Wall Tile.
First use on or about June 1954.

SN 688,753. Raynor Manufacturing Company, Dixon, Ill. Filed June 2, 1955.

RAYNOR-ETTE

Owner of Reg. No. 529,300.
For Sectional Overhead Doors.
First use Nov. 20, 1953.

SN 691,863. John F. Kain, d. b. a. California Metal Awning Company, Riverside, Calif. Filed July 25, 1955.

SUN-BOSS

For Detachable Metal Awnings.
First use Nov. 6, 1954.

SN 692,149. Lance Awning Corporation, Lake Worth, Fla. Filed July 29, 1955.



For Adjustable Metal Awnings.
First use Jan. 15, 1955.

SN 692,418. Overall Paint and Lead Co., Inc., d. b. a. Overall Paint and Lead, Inc., Cleveland, Ohio. Filed Aug. 3, 1955.

RUBBERTEX

For Caulking Compounds.
First use on or about July 1, 1941.

SN 693,691. The Monarch Cement Company, Humboldt, Kans. Filed Aug. 25, 1955.



For Cement.
First use in the year 1909.

SN 693,778. Southern Venetian Blind Co., Miami, Fla. Filed Aug. 26, 1955.

SOUTHERN SOLAR VANES

For Outside Blind.
First use Feb. 5, 1955.

SN 693,899. Cellactite & British Uralite, Limited, Gravesend, England. Filed Aug. 30, 1955.

NURALITE

Owner of British Reg. No. 720,928, dated Aug. 17, 1953.
For Roofing Sheets, Both Flat and Corrugated, and Preformed Roofing Articles Such as Ridge Caps, Ventilators, Chimney Pots, Flashings, Gutters, Downspouts and the Like, All Formed of a Thermoplastic Material Composed of Fibrous Materials and Bitumen.

SN 694,873. Globe Roofing Products Co., Inc., Whiting, Ind. Filed Sept. 19, 1955.

GOLD MEDAL

For Asphalt Roll Roofings, Asphalt Shingles, Building Papers, and Asphalt Felt.
First use 1935 on asphalt roll roofings.

SN 698 020. Dierks Forests, Inc., Kansas City, Mo. Filed Nov. 10, 1955.

TURTLEBACK

For Fence Posts.
First use Oct. 21, 1955.

SN 699,281. Atlas Plywood Corporation, Boston, Mass. Filed Dec. 2, 1955.

TEXCEN

For Plywood Doors.
First use January 1954.

SN 699,513. Mahogany Importing Company, Los Angeles, Calif. Filed Dec. 6, 1955.

philippanel

For Philippine Mahogany in the Form of Panelling.
First use June 3, 1946.

SN 699,514. Mahogany Importing Company, Los Angeles, Calif. Filed Dec. 6, 1955.

MICO

For Philippine Mahogany in the Form of Lumber, Panelling, Moulding and the Like.
First use June 3, 1946.

SN 699,731. James D. Landers, d. b. a. Nitro Shade and Awning Company, Nitro, W. Va. Filed Dec. 9, 1955.

DURA-TEC

For Metal Awnings.
First use Sept. 1, 1953.

SN 699,782. Curtition Corporation, Los Angeles, Calif. Filed Dec. 12, 1955.

DECORFOLD

For Folding Doors.
First use Oct. 17, 1955.

CLASS 13

SN 670,204. Logan Showers, Inc., d. b. a. Logan Manufacturing Company, Glendale, Calif. Filed July 19, 1954. Sec. 2(f) as to "Logan."



For Shower Heads, Volume Control Valves, Shower Valves, Shower Head and Valve Combinations, Soap Dishes, Soap Dispensers, Pipe Supports, Pipe Hangers, Towel Rails, Grab Bars, Soap Tanks, Pipe Fittings, Pipe Nipples, Threaded Pipe, Anchor Plates, Escutcheons, Acorn Nuts, and Acorn Cone Nuts.
First use on or about Oct. 1, 1952.

SN 672,331. Culligan, Inc., Northbrook, Ill. Filed Aug. 27, 1954.

CUL-LET

Owner of Reg. No. 531,257.
For Chemically Filled Container and Hose Connections Therefor To Be Installed in Toilet Flush Tanks for Introducing a Chemical Solution in Said Tank To Cleanse, Deodorize and Sanitize the Toilet Bowl, and for Refills for Said Device.
First use Feb. 16, 1953.

SN 680,870. Herbert M. Cowan, d. b. a. Hold-Tite Valve Mfg. Co., Brooklyn, N. Y. Filed Feb. 1, 1955.

HOLD-TITE

For Check Valves To Prevent Back Flow in Fuel Oil Lines and Other Conduits, Anti-Hum Valves for Use in Fuel Oil Lines To Prevent Tank Hum, and Anti-Siphon Valves To Prevent Siphoning in Fuel Oil Lines and Other Conduits.
First use Mar. 1, 1952.

SN 683,711. The Reliable Spring and Wire Forms Co., Cleveland, Ohio. Filed Mar. 17, 1955.

SPOT BEAM

For Flashlight Clamp.
First use Feb. 23, 1955.

SN 684,236. Progressive Aluminum Company, Philadelphia, Pa. Filed Mar. 25, 1955.

PACO-PLATE

For Aluminum Foil Plates To Store and Serve Foods and Food Products Heated or Otherwise Therein Which Are Easily Disposable.
First use July 16, 1954.

SN 685,096. The Cleveland Pneumatic Tool Company, Cleveland, Ohio. Filed Apr. 7, 1955.

AEROL

Owner of Reg. Nos. 443,187, 599,942, and others.
For Power Actuated Screws and Nuts Including Antifriction Screws and Nuts, and Parts Thereof and Attachments Therefor.
First use Oct. 31, 1951.

SN 685,376. Industrial Rubber Company, Cincinnati, Ohio. Filed Apr. 12, 1955.

INRUCO

For Hose Couplings.
First use November 1953.

SN 688,796. The Ankr Trim Corporation, Clearwater, Fla. Filed June 3, 1955.

ANKR TRIM

For Carpet Anchoring Grippers.
First use Feb. 4, 1954.

SN 690,702. Great American Sales & Manufacturing Co., South Gate, Calif., now by change of name Great American Manufacturing & Sales Company. Filed July 5, 1955.

Great American

For Pipe Valves, Fittings, and Plumbing Fixtures.
First use summer of 1947.

SN 695,591. Aug. Winkhaus, Telgte, Westphalia, Germany. Filed Sept. 29, 1955.



For Door Bells, Builders' Hardware—i. e., Pin Hinges, Hinges for Doors, Hinges for Windows, Hinges for Furniture, Hinges for Gates, Angle Irons, and Hasps.
First use Feb. 1, 1928.

SN 697,276. Ekco Products Company, Chicago, Ill. Filed Oct. 28, 1955.

EKCOLOY

For Base Metal Bake Pans and Cooking Hollow Ware.
First use on or about Sept. 15, 1955.

SN 697,277. Ekco Products Company, Chicago, Ill. Filed Oct. 28, 1955.

SILVER BEAUTY

For Base Metal Bake Pans and Cooking Hollow Ware.
First use on or about Sept. 15, 1955.

SN 697,389. L. R. Nelson Mfg. Co., Inc., Peoria, Ill. Filed Oct. 31, 1955.

dial a rain

For Lawn Sprinklers.
First use Jan. 28, 1955.

SN 700,494. Wrought Washer Mfg. Co., Milwaukee, Wis. Filed Dec. 22, 1955.

MIL-CARB

For Metal Washers.
First use Feb. 19, 1954.

SN 700,535. South Chester Corporation, Chester, Pa. Filed Dec. 23, 1955.

SNAPNUTS

For Inserts Adapted To Be Received and Maintained in Holes or Apertures for the Purpose of Anchoring Screws and Similarly Threaded Elements Therein.
First use Nov. 22, 1955.

CLASS 15

SN 661,221. Perfect Power Corporation, Chicago, Ill. Filed Feb. 17, 1954.

Perfect "HOUSE" Power

For Gasoline.
First use on or about Jan. 1, 1940.

SN 692,170. Standard Oil Company of California, Wilmington, Del. Filed July 29, 1955.

CHEVRON

Owner of Reg. Nos. 364,683, 416,133, and others.
For Kerosene, Fuel Oil, Furnace Oil, Diesel Fuel, Distillate Useful as a Solvent and for Heating and Internal Combustion Engine Fuel Purposes, Burner Fuel, and Base Oils Useful as Lubricants, as an Ingredient of Lubricants, and as an Ingredient of Nonlubricating Articles of Manufacture.
First use Apr. 21, 1955, on kerosene.

CLASS 16

SN 652,568. United States Plywood Corporation, New York, N. Y. Filed Aug. 31, 1953. Sec. 2(f).

WIZARD with WOOD

For Paints, Lacquers, Sealers, and Blending, Bleaching, Blanching, and Antiquing Agents, All Primarily for Wood and Other Fibrous Products.
First use in or about May 1950.

SN 695,536. Custom Paint and Chemical Co., Inc., Pennsauken, N. J. Filed Sept. 29, 1955.

Yearlon

For Finishes for Floors and Furniture Having Surfaces of Wood and/or Linoleum.
First use Sept. 7, 1955.

SN 697,922. Benjamin Moore & Co., New York, N. Y. Filed Nov 8, 1955.

Benwood FINISHES

Applicant disclaims the word "Finishes" apart from the mark as shown.
For Stains, Varnishes, and Wood Fillers in the Nature of Compositions Comprising a Pigment and Vehicle, for Treating Wooden Surfaces Preparatory to the Application of Paint, Varnish or Shellac.
First use Oct. 19, 1955.

SN 699,315. M. Grumbacher, Inc., New York, N. Y. Filed Dec. 2, 1955.

EDGAR DEGAS

For Artists' Pastels.
First use Dec. 12, 1953.

SN 699,322. Inertol Co., Inc., Newark, N. J. Filed Dec. 2, 1955.

"PONKOTE"

For Protective Coating, That Is: Water-Resistant and Protective Coatings for Masonry and Metal Surfaces (in the Nature of a Paint and Applicable by Brush or Spray).
First use Nov. 14, 1955.

SN 699,339. Socony Paint Products Company, Metuchen, N. J. Filed Dec. 2, 1955.

ALUMICOLOR

For Paint.
First use June 30, 1955.

SN 700,155. W. W. Lawrence & Company, Pittsburgh, Pa. Filed Dec. 15, 1955. Sec. 2(f).

Lawrence

Owner of Reg. Nos. 518,338 and 224,821.
For Paints (Ready Mixed, Semi Paste, and Paste Form); Varnishes; Paint Enamels; Lacquers; Undercoaters in the Nature of Paints, Varnishes, Paint Enamels, and Lacquers; Thinners for Paints, Varnishes, Paint Enamels, and Lacquers; and Paint and Varnish Removers.
First use Jan. 1, 1886.

SN 700,156. W. W. Lawrence & Company, d. b. a. Duquesne Paint Company, Pittsburgh, Pa. Filed Dec. 15, 1955. Sec. 2(f).

NORWOOD

For Paints (Ready-Mixed, Semi-Paste, and Paste Form).
First use on or about Apr. 1, 1906.

CLASS 18

SN 670,447. Vita Laboratories, Inc., Division of Pearson Pharmacal Co., Inc., New York, N. Y. Filed July 22, 1954.

THEABEX

For Standard and Therapeutic Multiple Vitamins in Capsule Form.
First use Feb. 8, 1939.

SN 683,180. Chase Chemical Company, Newark, N. J. Filed Mar. 10, 1955.

CHASOPHEN

For Laxative Preparation.
First use in or about February 1950.

SN 684,704. The Upjohn Company, Kalamazoo, Mich. Filed Mar. 31, 1955.

Hormozyme

Owner of Reg. No. 596,649.
For Hormonal Preparation.
First use Jan. 25, 1955.

SN 684,907. George Zofchak, d. b. a. Tatra Company, Morrisville, Pa. Filed Apr. 4, 1955.

TATRA

For Herb Tea Having Laxative Properties.
First use November 1938.

SN 684,910. George Zofchak, d. b. a. Tatra Company, Morrisville, Pa. Filed Apr. 4, 1955.

RENEX

For Herb Tea Having Diuretic Properties.
First use January 1941.

SN 685,266. Charles E. Frosst & Co., Montreal, Quebec, Canada. Filed Apr. 11, 1955.

RESTROPINAL

Priority claimed under Sec. 44(d) on Canadian application filed Feb. 26, 1955; Reg. No. 101,529, dated Sept. 30, 1955. Owner of U. S. Reg. No. 377,421.
For Antisecretory Pharmaceutical Preparation for the Treatment of Gastro-Intestinal Diseases.

SN 687,959. The S. E. Massengill Company, Bristol, Tenn. Filed May 20, 1955.

PALETS

For Multivitamin Oral Preparation for Treating Vitamin Deficiencies in Children.
First use May 2, 1955.

SN 688,286. The Upjohn Company, Kalamazoo, Mich. Filed May 25, 1955.

Deltasone

For Hormonal Preparation Comprising Delta Cortisone.
First use Feb. 8, 1955.

SN 688,491. Neo-Chemical Corporation of America, New York, N. Y. Filed June 13, 1955.

NEO

For Dietary Supplement Medicinal Preparation in Capsule Form, Pharmaceutical Preparation for Intramuscular Injection for Use in Alleviating the Symptoms of Peptic and Duodenal Ulcers Accompanied With Vitamin C Deficiencies, a Vitamin B Complex Medicinal Preparation in Sphere Form, a Mineral Vitamin Medicinal Preparation in Sphere Form.
First use Feb. 15, 1939.

SN 689,863. The Geo. H. Nowland Company, Cincinnati, Ohio. Filed June 20, 1955. Sec. 2(f).

NOWLAND'S

For Medicines and Ingredients of Medicines—Namely, Alum (Lump), Alum (Powdered), Aromatic Spirits of Ammonia, Aspirin, Borax (Powdered), Boric Acid, Camphorated Oil, Castor Oil, Castor Oil (Odorless and Tasteless), Copperas, Copper Sulfate, Cough Syrup, Epsom Salts, Essence Peppermint, Glycerin, Gum Spirits of Turpentine, Hydrogen Peroxide Solution, Mineral Oil, Quinine Sulfate, Petroleum Jelly, Salt Petre, Senna Leaves, Spirit of Camphor, Sulfur (Flowers of Sulfur), Sweet Oil, Sweet Spirit of Nitre, Toothache Drops, Witch Hazel, Wood Turpentine, Oil of Cloves, Oil of Cinnamon.
First use on or about Jan. 1, 1912.

SN 690,898. Hyman L. Moore, d. b. a. H. L. Moore Chemical Company, New Britain, Conn. Filed July 7, 1955.

ANTI-MAST

For Veterinary Ointment for Treatment of Mastitis.
First use Apr. 15, 1955.

SN 691,560. Robert L. Gaddy, d. b. a. R. L. Gaddy, Pharmacist, Tallahassee, Fla. Filed July 19, 1955. Sec. 2(f).

VITA-PEP

Owner of Reg. No. 504,866.
For Medical Preparation—Namely, Vitamin B Complex Capsules.
First use Oct. 1, 1945.

SN 692,047. S. F. Durst & Company, Inc., Philadelphia, Pa. Filed July 28, 1955.

SENILEX

For Geriatric Tablets Composed of Pentylenetetrazol and Niacin.
First use Oct. 4, 1954.

SN 694,569. The Gland-O-Lac Company, Omaha, Nebr. Filed Sept. 13, 1955.

NO-PIK

Owner of Reg. No. 283,786.
For Compound for Use in Connection With Poultry To Prevent Cannibalism.
First use Jan. 5, 1930.

SN 694,582. Merck & Co., Inc., Rahway, N. J. Filed Sept. 13, 1955.

NICRAZIN

For Coccidiostat for Domesticated Birds.
First use Aug. 18, 1955.

SN 694,689. Anchor Serum Company, South St. Joseph, Mo. Filed Sept. 15, 1955.

Bloat-i-dote

For Veterinary Compound for Use in Treatment of Frothy Bloat in Cows, Sheep, and Goats.
First use Apr. 4, 1955.

SN 694,690. Chester A. Baker Laboratories, Inc., Boston, Mass. Filed Sept. 15, 1955. Sec. 2(f).

BAKER'S P & S LIQUID

Applicant disclaims the word "Liquid" apart from the mark as shown.
For Medicinal Preparations in the Form of a Liquid and Ointment for Use in the Treatment of Skin Conditions.
First use on or prior to Dec. 24, 1948.

SN 694,761. American Home Products Corporation, d. b. a. Wyeth Laboratories, Philadelphia, Pa. Filed Sept. 16, 1955.

AVIACIN

For Penicillin, Dihydrostreptomycin, and Streptomycin, for Veterinary Use.
First use Aug. 1, 1955.

SN 694,889. Eli Lilly and Company, Indianapolis, Ind. Filed Sept. 19, 1955.

SANDRON

For Medicinal Preparation of Reserpine.
First use Jan. 10, 1955.

SN 694,997. Industrial Minerals & Chemical Company, Berkeley, Calif. Filed Sept. 20, 1955.

VETRO-THIAZINE

For Anthelmintic Compound for Cattle, Sheep, Goats, Horses, Swine, and Poultry.
First use Aug. 1, 1955.

SN 695,341. Pharma-Craft Corporation, New York, N. Y. Filed Sept. 26, 1955.

COLDINE

For Cough Syrup.
First use Sept. 16, 1955.

SN 695,464. American Cyanamid Company, New York, N. Y. Filed Sept. 28, 1955.

EXELMIN

For Vermifuge.
First use Sept. 15, 1955.

SN 695,571. Schenley Laboratories, Inc., New York, N. Y. Filed Sept. 29, 1955.

Tevador

For Cardiovascular Adjuvant.
First use Aug. 26, 1955.

SN 695,572. Schenley Laboratories, Inc., New York, N. Y. Filed Sept. 29, 1955.

Arquin

For Cardiovascular Adjuvant.
First use Aug. 26, 1955.

SN 695,693. Cassella Farbwerke Mainkur Aktiengesellschaft, Frankfurt (Main), Fechenheim, Germany. Filed Oct. 3, 1955. Sec. 2(f) as to "Cassella."

CASSELLA

For Antihistamines, Analgesics, Antiepileptics, Antianemics, Antihypertonics, Antispasmodics, Diuretics, and Chemotherapeutic Preparations for Use in the Treatment of Various Diseases, Such as Tuberculosis.
First use Feb. 13, 1950; in commerce on Sept. 1, 1950.

CLASS 19

SN 660,711. Continental Copper & Steel Industries, Inc., New York, N. Y. Filed Feb. 8 1954. Sec. 2(f).



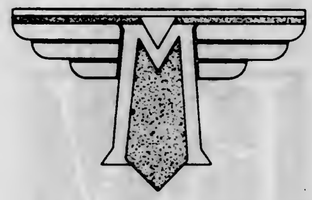
For Motor Boats, Oar Propelled Lifeboats, Hand Propelled Lifeboats, Motor Lifeboats, Inner-Hull Lifeboats, Life Floats, Buoyancy Floats, Life Rafts, Surf Boats, Work Boats, and Skiffs.
First use 1901.

SN 675,381. Gar-Bro Manufacturing Co., d. b. a. Garlinghouse Brothers, Los Angeles, Calif. Filed Oct. 25, 1954.

GAR-BRO

Owner of Reg. No. 389,220.
For Concrete Handling Carts, Industrial Carts, Flat Bed and Material Handling and Hand Pushed Carts, Wheelbarrows, Acetylene Tank Carts, Concrete Power Carts, and Industrial Carts, Self-Powered Type.
First use March 1933 on concrete handling, industrial, flat bed, material handling, and hand pushed carts.

SN 688,295. Ateliers de la Motobecane, Pantin, France. Filed May 26, 1955.



Priority claimed under Sec. 44(d) on French Reg. No. 448,195, dated Dec. 28, 1954 (Seine); Natl. Inst. No. 49,434.
For Bicycles, Motorbikes and Motorcycles, Motor Scooters, and Parts Thereof.

SN 694,498. Modernistic Industries, Gardena, Calif. Filed Sept. 12, 1955.

Aljo

For Trailers Drawn by Automobiles.
First use Mar. 24, 1955.

SN 694,868. Ford Motor Company, Dearborn, Mich. Filed Sept. 19, 1955.

Parklane

For Automobiles.
First use Aug. 25, 1955.

SN 696,197. West Coast Machinery Inc., Stockton, Calif. Filed Oct. 10, 1955.

Westcoaster

Owner of Reg. No. 440,987.
For Battery Powered, Electric Runabout Cars and Trailers Therefor.
First use on or about Sept. 1, 1953.

SN 139. Columbian Bronze Corp., Freeport, N. Y. Filed Jan. 4, 1956.

PENTADYNE

For Marine Propellers.
First use Aug. 1, 1955.

SN 418. Franklin Plastics, Inc., Franklin, Pa. Filed Jan. 10, 1956.

D-FENDER

For Boat Fenders.
First use June 1955.

CLASS 21

SN 652,183. General Armature & Manufacturing Co., Mill Hall, Pa. Filed Aug. 24, 1953.

BALANCED VENTILATED B·V

Owner of Reg. No. 341,754.
For Armatures, Generators, and Starting Motors.
First use Oct. 1, 1936.

SN 670,045. General Motors Corporation, Detroit, Mich. Filed July 15, 1954. Sec. 2(f).

Rigidframe

For Electric Motors.
First use Feb. 15, 1949.

SN 673,961. Compagnie Generale d'Electricite, Paris, France. Filed Sept. 13, 1954.

SAVOISIENNE

Priority claimed under Sec. 44(d) on French Reg. No. 440,015, dated Mar. 15, 1954 (Seine); Natl. Inst. No. 31,351.
For Electric Transformers and Parts Thereof, Capacitors and Parts Thereof, and Electrical Welding Apparatus and Parts Thereof.

SN 674,385. Fisher Radio Corporation, New York, N. Y. Filed Oct. 6, 1954.

Z-MATIC

For Radio Receivers, Television Receivers, Phonographs, Combination Radio Receivers and Phonographs, Combination Radio and Television Receivers and Phonographs, and Replacement Parts for Such Receivers and Phonographs, Radio Tuning Devices, Amplifiers, Controls for Audio Frequency Amplifiers, and Equalizers.
First use Aug. 26, 1954.

SN 678,872. The Lincoln Electric Company, Cleveland, Ohio. Filed Dec. 23, 1954.

IDEALARC

For Power Sources for Electric Arc Welding.
First use on or before Oct. 29, 1954.

SN 680,293. The Okonite Company, Passaic, N. J. Filed Jan. 21, 1955.

RED SADDLE

For Electric Cables.
First use Aug. 6, 1954.

SN 680,647. The Acme Wire Company, Hamden, Conn. Filed Jan. 28, 1955.

HYFILM

For Electrical Insulation.
First use Apr. 23, 1942.

SN 682,208. Telefonbau und Normalzeit Lehner & Co., Frankfurt (Main), Germany. Filed Feb. 23, 1955.

TN

Owner of German Reg. No. 484,306, dated Apr. 14, 1936.
For Telephone Apparatus, Telephone Exchanges, Telephone Systems and Parts Thereof, Telegraph Apparatus, Telegraph Central Stations, Telegraph Systems and Parts Thereof, Electric Means for the Remote Control of Clocks, Electric Signalling and Control Systems for Fire and Burglar Alarm Apparatus and Parts Thereof.

SN 682,902. The Fisher-Pierce Co., Inc., Boston, Mass. Filed Mar. 7, 1955.

nitelighter

For Automatic Photo-Electronic Light Switches.
First use on or about March 1954.

SN 683,500. Goodmans Industries Limited, Wembley, England. Filed Mar. 15, 1955.

AXIETTE

For Wireless and Television Apparatus and Parts Thereof Including Loudspeakers.
First use Dec. 1, 1953.

SN 684,765. Terado Co., St. Paul, Minn. Filed Apr. 1, 1955.

Trav-Electric

For Electrical Converters.
First use May 23, 1949.

SN 685,207. Phelps Dodge Copper Products Corporation, Dover, Del. Filed Apr. 8, 1955.

Spirafil

The lining in the drawing designates the color yellow.
For Electric Cables.
First use on or about Jan. 20, 1955.

SN 685,840. Matsushita Electric Industrial Co., Ltd., Kitakawachi-gun, Osaka Prefecture, Japan. Filed Apr. 19, 1955.

Kadomax

Priority claimed under Sec. 44(d) on Japanese application filed Dec. 11, 1954; Reg. No. 470,560, dated Sept. 13, 1955.
For Radio Receivers, Electro-Phones (Including Pick-Ups), Television Receivers, Wireless Telephone Apparatus (Including Ultra-Short-Wave Wireless Communication Equipment), Wire Telephone Equipment (Including Interphones), Electric Motors (Including Phono-Motors), Electric Fans, Electric Mixers, Electric Vacuum Cleaners, Magnetic Recorders, Public Address Systems (Including Loud Speakers and Microphones), Transformers, Balancers, Condensers, Vacuum Tubes, Electric Lamps, Fluorescent Lamps, Arc Carbons, Dynamo Lamps, Dry Cell Lamps, Dry Cells and Batteries, Wet-Cells, Storage Batteries, Carbon Earthing Rods, Electric Alarm Systems, Electric Hot Plates, Electric Irons, Electric Water-Heaters, Electric Ranges, Electric Toasters, Electric Percolators, Electric Stoves, Electric Foot-Warmers, Electric Soldering Irons, Electric Pads, Electric Wiring Devices—Namely, Sockets, Plugs, and Switches, and Also the Parts and Accessories of All the Items Mentioned Above.

SN 686,108. Sky-Ray Manufacturing Company, McLeansboro, Ill. Filed Apr. 22, 1955.

SKY-RAY

For Television Antennas.
First use about January 1949.

SN 687,284. Hoffman Electronics Corporation, Los Angeles, Calif. Filed May 11, 1955.

Hoffman MARK V

Owner of Reg. No. 521,772.
For Television Receivers and Parts Thereof.
First use Jan. 10, 1952.

SN 689,307. Shirasuna Denki Kabushiki-Kaisha, d. b. a. Shirasuna Denki Mfg. Co. Ltd., Chikusa-ku, Nagoya, Japan. Filed June 10, 1955.

Silver

For Portable Radio Receiving Sets and Structural Parts Thereof.
First use Oct. 30, 1949; in commerce on Jan. 1, 1950.

SN 692,774. Essex Wire Corporation, Detroit, Mich. Filed Aug. 10, 1955.

DARANITE 1890

Owner of Reg. Nos. 524,126, 535,200, and 537,580.
For Insulated Electric Wire, Insulated Electric Cable, and Cord Sets.
First use on or about Jan. 1, 1955.

SN 693,079. Northern Electric Company, Chicago, Ill. Filed Aug. 15, 1955.

LAUREL

For Electric Bed Coverings and Electric Heating Pads.
First use March 1954.

SN 693,779. Sprague Electric Company, North Adams, Mass. Filed Aug. 26, 1955.

TETROC

For Heat Resistant, Insulated Magnet Wire.
First use Aug. 22, 1955.

SN 693,781. Sprague Electric Company, North Adams, Mass. Filed Aug. 26, 1955.

UNIPAK

For Assembly of Various Electrical Capacitors Within a Metal Housing.
First use Aug. 22, 1955.

SN 694,707. Elgin-Neomatic, Inc., Los Angeles, Calif. Filed Sept. 15, 1955.

NEOMITE

For Electric Relays.
First use June 7, 1955.

SN 699,121. Union Carbide and Carbon Corporation, New York, N. Y. Filed Nov. 29, 1955.

NATIONAL

Owner of Reg. Nos. 102,147, 537,257, and others.
For Brushes for Use in Electrical Apparatus and Machines.
First use Aug. 30, 1955.

SN 699,169. A. O. Smith Corporation, Milwaukee, Wis. Filed Nov. 30, 1955.

C-OMATIC

For Automatic Electric Arc Welding Apparatus.
First use Aug. 19, 1955.

SN 699,239. Frederick L. Lefebvre, d. b. a. Cleveland Process Company, Cleveland, Ohio. Filed Dec. 1, 1955.

CLEPCO

For Electric Radiant Heaters and Parts Comprising Resistance Elements, Reflectors, Housings, Contacts, and Insulation, Electric Immersion Heaters and Parts Comprising Resistance Elements, Switch Parts and Sheaths, and Electric Heater Timing Devices and Parts Therefore.
First use on or about May 20, 1953.

SN 700,493. Winchester Electronics, Incorporated, Norwalk, Conn. Filed Dec. 22, 1955.



For Multi-Contact Electrical Connectors, Electrical Connector Hoods and Clamps and Stand-Off and Feed Through Electric Post Terminals.
First use Nov. 2, 1954.

SN 344. The Maico Company, Incorporated, Minneapolis, Minn. Filed Jan. 9, 1956.

Maico

Owner of Reg. Nos. 361,388, 605,856, and others.
For Ear Phones, Tape Recorders, Electronic Magnetic Tape Pick-Ups, and Play Backs.
First use June 1953.

CLASS 22

SN 669,369. Slfo Company, St. Paul, Minn. Filed July 2, 1954.

MAILBAG

For Sack of Wooden Toy Construction Blocks.
First use on Apr. 2, 1954.

SN 671,300. William J. Beer Company, Inc., Brooklyn, N. Y. Filed Aug. 9, 1954.

Tyrolia

Owner of Reg. No. 358,512.
For Skis, Ski Bindings, and Ski Poles.
First use 1950.

SN 676,846. Tak-A-Toy Corporation, Philadelphia, Pa. Filed Nov. 17, 1954.

TOY-A-PEAL

For Toys—Namely, Dolls, Plastic Figures, Harmonicas, Cars, Checker Sets, Paint Sets, Puzzles, Balls, Balloons, and the Like.
First use Nov. 2, 1954.

SN 677,017. Victoria Silk Press, Inc., d. b. a. Vintage Products Company, St. Louis, Mo. Filed Nov. 19, 1954.

ZIMPHONE

For Toy Telephones.
First use Apr. 24, 1953.

SN 679,701. A & H Doll Manufacturing Corporation, Woodside, N. Y. Filed Jan. 11, 1955.

"GREETING DOLL"

Applicant disclaims the word "Doll" apart from the mark as shown.
For Dolls.
First use Oct. 15, 1954.

SN 684,825. The Excello Paper Products Co., d. b. a. Artcraft Paper Products, Cincinnati, Ohio. Filed Apr. 4, 1955.

MAGICPAINT

For Novelty or Toy Type Water Color Pictures Which Are Colored by the Application of Water and Brush.
First use Feb. 14, 1955.

SN 685,066. Wilson Plastics Inc., Sandusky, Ohio. Filed Apr. 6, 1955.

Sea Maid

For Plastic Floats for Fish Nets and Buoys.
First use Feb. 24, 1955.

SN 686,256. Wright & McGill Co., Denver, Colo. Filed Apr. 25, 1955. Sec. 2(f).

WILTLESS WING

Owner of Reg. No. 552,619.
For Artificial Fishing Flies.
First use on or about Dec. 1, 1922.

SN 686,781. Clarence J. Smith, d. b. a. Little America Products Co., Lewistown, Ill. Filed May 3, 1955.

CAST-A-FLY

For Fishing Lures and Auxiliary Devices for Attachment to the Bait End of Lines.
First use Mar. 4, 1949.

SN 689,487. Hassenfeld Bros., Inc., Central Falls, R. I. Filed June 14, 1955.



Applicant disclaims the wording "Fast Action Game."
For Game Played With Sea Shells and Plastic Cups.
First use Feb. 9, 1955.
Subj. to Intf. with SN 691,514.

SN 691,160. The S. K. Smith Company, Chicago, Ill. Filed July 12, 1955.



Without waiver of its common law rights, applicant makes no claim to exclusive right to use the word "Box" apart from the mark as shown.
For Coin and Cash Banks.
First use Jan. 10, 1954.

SN 691,505. Penn Scale Mfg. Co., Inc., Philadelphia, Pa. Filed July 18, 1955.



For Jumping Sticks.
First use Apr. 6, 1955.

SN 691,529. The Wal-Feld Company, Inc., Valley Stream, N. Y. Filed July 18, 1955.

Vision-Song

For Combination Kaleidoscopes and Phonographs.
First use June 1, 1955.

SN 693,144. James Heddon's Sons, Dowagiac, Mich. Filed Aug. 16, 1955.

Mono-cast

For Fishing Rod.
First use July 23, 1955.

SN 693,205. Ernest E. Seeger, d. b. a. Twin-Fish Bait Co., Detroit, Mich. Filed Aug. 16, 1955.

TWIN-FISH

For Artificial Fishing Plug.
First use June 2, 1955.

SN 693,248. James Heddon's Sons, Dowagiac, Mich. Filed Aug. 17, 1955.

Mono-spin

For Fishing Rod.
First use July 23, 1955.

SN 693,355. Aluminum Specialty Company, Manitowoc, Wis. Filed Aug. 19, 1955.

KIDDYKOOK

Owner of Reg. No. 600,716.
For Toy Cooking and Baking Sets and Utensils for Children, Made of Aluminum and/or Like Material.
First use in or about March 1932.

SN 693,416. Fox Products Company, Philadelphia, Pa. Filed Aug. 18, 1955.

kumbak

For Golf Practice Devices.
First use Mar. 15, 1922.

SN 693,424. American Character Doll Co., New York, N. Y. Filed Aug. 22, 1955.

Pretty Baby

For Dolls.
First use July 25, 1955.

SN 693,587. The Andent Company, Washington, D. C. Filed Aug. 24, 1955.



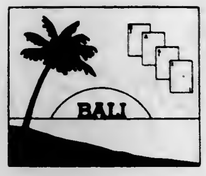
For Game of Skill and Chance Played With Special Cards and Special Dice and Chips and a Device with a Plurality of Spinning Discs and a Special Board.
First use June 27, 1955.

SN 693,690. Richard E. Meyer & Sons, Inc., North Bergen, N. J. Filed Aug. 25, 1955.

SAV-A-REEL

For Buckskin Fishing Reel Pouch.
First use spring of 1955.

SN 693,913. I-S Ultd., Inc., New York, N. Y. Filed Aug. 30, 1955.



For Game Utilizing Playing Cards.
First use July 1, 1954.

CLASS 23

SN 682,496. Sierra Engineering Co., Sierra Madre, Calif. Filed Feb. 28, 1955.

Sierra

For Holders for Drill Bits.
First use Nov. 19, 1954.

SN 682,522. Gebr. Weyersberg, Solingen-Ohligs, Germany. Filed Feb. 28, 1955.

WEYERSBERG

Owner of German Reg. No. 37,724, dated Mar. 13, 1899.
For Mechanic's Hand Tools; Kitchen, Household, Agricultural and Garden Tools, Table Flatware Made of Base Metal; Knives, Scissors, Razors, Pocket Knives, and Sewing Machine Needles.

SN 688,068. John Oster Manufacturing Co., d. b. a. Racine Clipper Co., Milwaukee, Wis. Filed May 23, 1955.

Raycine

For Electric Hair Clippers.
First use June 5, 1950.

SN 688,932. Industrial Brush Company, Arcadia, Calif. Filed June 6, 1955.

TUF-GRIP

For Industrial Power Driven Rotary Washing and Cleaning Brushes.
First use about April 1952.

SN 689,796. Alton Box Board Company, Alton, Ill. Filed June 20, 1955.

TRA-FOLD

For Machines for Forming Paperboard Blanks into Boxes.
First use Mar. 23, 1955.

SN 692,677. Moto-Sway Corp. of America, South Pasadena, Calif. Filed July 1, 1955.

AUTO-ROCK

Owner of Reg. No. 327,290.
For Vehicle Lubricating Equipment.
First use Aug. 20, 1935.

SN 693,463. Hohmann Cutlery, Inc., Palisades Park, N. J. Filed Aug. 22, 1955.

MASTER-ALL

For Kitchen and Table Knives and Kitchen Forks.
First use June 16, 1955.

SN 695,543. Frenchtown Porcelain Company, Trenton, N. J. Filed Sept. 29, 1955.

NICOTE

For Ceramic Pump Parts and Bearings.
First use Aug. 12, 1955.

SN 696,646. Flint & Walling Mfg. Co. Inc., Kendallville, Ind. Filed Oct. 18, 1955.

F & W

For Horsepowers, Windlasses, Vises, Feed-Grinding Mills, Machinery-Transmission Gearing, Reliefs, Hydro-Pneumatic Cylinders, Air-Cylinders, Water-Cylinders, Pump Brackets, Supporting Bearings for Windmills, Working Heads, Internal Combustion Motors, Water, Air, and Combined Pump and Motor Equipment, Water Supply Systems With Controllers and Regulators Therefor.
First use Jan. 1, 1886.

SN 696,847. Andrew Szegvari, d. b. a. Union Process Company, Akron, Ohio. Filed Oct. 20, 1955.

SZEGVARI ATTRITOR

The word "Attritor" is disclaimed as descriptive.
For Device for Bringing Fine Particles Into Close Proximity With One Another and for Subdividing Them.
First use in or about October 1945.

SN 697,077. B & S Manufacturing Co., Sanford, Fla. Filed Oct. 25, 1955.

SMITTY'S

For Hoes and Edgers.
First use May 15, 1954.

SN 698,012. E. W. Bliss Company, Canton, Ohio. Filed Nov. 10, 1955.

SPLICE-A-MATIC

For Strip Butt Welding Machines.
First use June 2, 1955.

SN 700,600. Globe American Corporation, Kokomo, Ind. Filed Dec. 27, 1955.

Globe

For Water Softeners.
First use Dec. 1, 1955.

SN 700,799. Link-Belt Company, Chicago, Ill. Filed Dec. 29, 1955.

LINK-BELT

OSCILLOUVRE

Owner of Reg. Nos. 420,713, 562,989, and others.
For Oscillating Trough Type Dryers and Coolers for Moving Flowable Solid Materials in Heat Exchange Relationship With a Gaseous Drying or Cooling Medium, and Repair and Replacement Parts Thereof.
First use since December 1953.

SN 700,800. Link-Belt Company, Chicago, Ill. Filed Dec. 29, 1955.

LINK-BELT

KAR-FLO

Owner of Reg. Nos. 528,101 and 521,856.
For Apparatus for Imparting Movement to Containers, Such as Railway Cars, To Effect the Movement of Flowable Solids Therein Toward or Away From Slide Openings in the Containers, and Repair and Replacement Parts Thereof.
First use June 28, 1955.

SN 700,801. Link-Belt Company, Chicago, Ill. Filed Dec. 29, 1955.

LINK-BELT

MONOTUBE

Owner of Reg. Nos. 562,988 and 562,989.
For Apparatus for Moving Materials in Heat Exchange Relationship With a Drying or Cooling Fluid, and Repair and Replacement Parts Therefor.
First use March 1954.

SN 34. Controlex Corporation of America, White Plains, N. Y. Filed Jan. 3, 1956.

Controlex

For Mechanical Remote Push-Pull Control Consisting of a Solid, Flexible Steel Blade Moving Between Rows of Steel Balls and Housed in a Flexible Tubing for General Application.
First use Nov. 3, 1955.

SN 213. Pangborn Corporation, Hagerstown, Md. Filed Jan. 5, 1956.

VENTRIJET

For Wet Dust Collectors and Parts Thereof.
First use July 29, 1955.

SN 261. Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Filed Jan. 6, 1956.

METAPHRAM

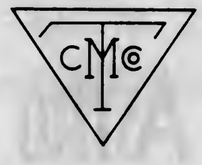
Owner of Reg. No. 108,341.
For Diaphragm Valves and for Fluid Pressure Operated Motors for Actuating Dampers and/or Valves in Heating and Air Conditioning Systems.
First use Dec. 19, 1914.

SN 399. Twentieth Century Mfg. Co., Libertyville, Ill. Filed Jan. 10, 1956.



Owner of Reg. Nos. 412,547 and 418,334.
For Stop Pins, Tool Fixtures, Reamers, Counterbores, Special Cutting Tools, Chucks, and Stops for Use With Punch Press Dies—Namely, Automatic Die Stops and Finger Stops.
First use Aug. 19, 1948, on stop pins, reamers, counterbores, and stops; and as to the mark "TCMCO" since July 1941.

SN 400. Twentieth Century Mfg. Co., Libertyville, Ill. Filed Jan. 10, 1956.



Owner of Reg. Nos. 412,547 and 418,334.
For Stop Pins, Tool Fixtures, Reamers, Counterbores, Special Cutting Tools, Chucks, and Stops for Use With Punch Press Dies—Namely, Automatic Die Stops and Finger Stops.
First use Mar. 8, 1948, on stop pins, reamers, counterbores, and stops; and as to the mark "TCMCO" since July 1941.

SN 464. Victor Vending Corporation, Chicago, Ill. Filed Jan. 10, 1956.

SUPER MART

For Merchandise Vending Machines.
First use Dec. 19, 1955.

SN 479. Campbell-Hausfeld Co., Harrison, Ohio. Filed Jan. 11, 1956.

PRESSURE MAID

No claim is made to the word "Pressure" except as shown.
For Air Compressors, Spray Guns, and Parts Thereof.
First use Aug. 16, 1950.

SN 512. The Reardon Company, St. Louis, Mo. Filed Jan. 11, 1956.

DRAMEX

Owner of Reg. No. 532,793.
For Trowels.
First use Nov. 30, 1955.

SN 513. Reed-Prentice Corporation, Worcester, Mass. Filed Jan. 11, 1956.

REEDMATIC

For Lathes.
First use July 29, 1955.

SN 597. John J. Kacian, Gardner, Mass. Filed Jan. 12, 1956.

SNO DUKE

For Snow Scoops.
First use Dec. 10, 1955.

SN 617. Outboard, Marine & Manufacturing Company, Waukegan, Ill. Filed Jan. 12, 1956.

SNOW-BOY

For Snow Removers.
First use Dec. 22, 1955.

CLASS 26

SN 652,315. Astro Gesellschaft Bielicke & Co., Berlin-Friedenau, Germany. Filed Aug. 26, 1953.

ASTRO

Owner of Reg. No. 573,257.
For Mounted and Unmounted Photographic Lenses, Prisms, and Mirrors; Photographic Objectives and View Finders for Still- and Movie-Picture Cameras; Projecting Lenses; Cameras.
First use January 1922.

SN 686,026. Buxton, Incorporated, Springfield, Mass. Filed Apr. 22, 1955.

Spec-Tainer

Owner of Reg. Nos. 153,132, 509,406, and others.
For Spectacle Cases.
First use Apr. 14, 1955.

SN 686,035. Dayton Aviation Radio and Equipment Corporation, Vandalia, Ohio. Filed Apr. 22, 1955.

DARE

Owner of Reg. No. 598,419.
For Test Equipment for Radio and Electronic Equipment.
First use Apr. 1, 1952.

SN 687,042. C. S. Ashcraft Mfg. Co., Inc., Long Island City, N. Y. Filed May 9, 1955.

CINEX

For Motion Picture Projection Lamps.
First use Mar. 28, 1955.

SN 689,733. Navigation Devices, Inc., Binghamton, N. Y. Filed June 17, 1955.

DART

Applicant disclaims exclusive use of the term "Autopilot System."
For Navigational Devices—Namely, Automatic Pilots and Aircraft Guiding Apparatus.
First use May 22, 1955.

SN 692,330. Walter Irving Green, d. b. a. Wordcrafters Guild, Washington, D. C. Filed Aug. 2, 1955.

SYLLABASCOPE

For Boxes With Sliding Panels and Cards Having Printing Thereon Insertable Into the Boxes To Be Selectively Covered by the Sliding Panels.
First use Mar. 1, 1953.

SN 693,574. Sunwarm, Incorporated, Kingsport, Tenn. Filed Aug. 23, 1955.

COMFORT-EASE

For Thermostats.
First use June 3, 1955.

SN 696,245. Master Specialties, Inc., Chicago, Ill. Filed Oct. 11, 1955.

FOTOMASTER

For Combined Camera Mount and Light Bar.
First use Sept. 8, 1955.

SN 698,602. The Greist Manufacturing Company, New Haven, Conn. Filed Nov. 21, 1955.

MICRO-HEIGHT

For Measuring Gages, Particularly Gages for Measuring Height.
First use June 26, 1953.

SN 698,614. Homeward Products, Inc., Des Moines, Iowa. Filed Nov. 21, 1955.

Tattle-Tale

For Gauges.
First use since Oct. 15, 1955.

SN 700,127. Safe Flight Instrument Corp., White Plains, N. Y. Filed Dec. 16, 1955.

AUTOPOWER

For Apparatus for Controlling Power Output of Aircraft Engines in Response to Flying Conditions.
First use Dec. 1, 1955.

SN 700,595. Fuji Photo Film Co., Ltd., Ashigara-Kamigun, Kanagawa Prefecture, Japan. Filed Dec. 27, 1955.

BIRDIE

Owner of Japanese Reg. No. 400,597, dated July 12, 1951.
For Slide Projector.

SN 700,596. Fuji Photo Film Co., Ltd., Ashigara-Kamigun, Kanagawa Prefecture, Japan. Filed Dec. 27, 1955.

PIPIT

Owner of Japanese Reg. No. 433,868, dated Oct. 31, 1953.
For Color Viewer.

SN 700,766. Joseph B. Walker, d. b. a. Radio Optical Research Co., West Hollywood, Calif. Filed Dec. 28, 1955.

ELECTRA-COLOR

For Optical Apparatus—Namely, Zoom Lenses, Lenses, Lens Systems, Reflecting Elements and Apparatus Associated Therewith.
First use June 10, 1955, on zoom lenses.

SN 700,806. Lee D. Miller, d. b. a. Fashion Accessories, New York, N. Y. Filed Dec. 29, 1955.

CATALINA

For Sunglasses.
First use June 15, 1955.

SN 761. Dresser Industries, Inc., Connersville, Ind. Filed Jan. 16, 1956.

ROOTS-CONNERSVILLE

Owner of Reg. Nos. 153,840 and 617,425.
For Rotary Positive Gas Displacement Meters.
First use in 1947; and at least as early as 1935 as to "Roots Connersville" in a different form.

CLASS 27

SN 684,205. Favre-Leuba Watch & Chronometer Co. Inc., New York, N. Y. Filed Mar. 25, 1955.

For Watches.
First use since Mar. 7, 1955.

SN 691,293. General Time Corporation, New York, N. Y. Filed July 14, 1955.

ROCKET

For Watches.
First use July 21, 1939.

SN 695,038. Societe Anonyme Mido, Bienne, Switzerland. Filed Sept. 20, 1955.

BIORITMO

Owner of Swiss Reg. No. 101,069, dated Nov. 28, 1941.
For Watches and Other Horological Articles, Movements, and Watch Casings, Dials, Horological Accessories.

CLASS 28

SN 688,158. David Karp Company, Inc., New York, N. Y. Filed May 24, 1955.

hanD Kraft

No claim is made to the common English word "Handkraft" per se.
For Finger Rings, Earrings, Necklaces, Bracelets, Brooches, and Watch Attachments—Namely, Watch Straps, Watch Bracelets, and Watch Fobs.
First use in or about June 1950.

SN 693,207. Ronald F. Silver, St. Paul, Minn. Filed Aug. 16, 1955.

For Finger Rings, Earrings, Bracelets.
First use June 30, 1955.

SN 695,548. Jacoby-Bender, Inc., Woodside, N. Y. Filed Sept. 29, 1955. Sec. 2(f).

JEWELERS' BEST

Owner of Reg. No. 530,048.
For Men's and Ladies' Bracelets and Watch Bracelets, Sold Separately From the Watches.
First use June 1948.

SN 452. Speidel Corporation, Providence, R. I. Filed Jan. 10, 1956.

LEOPARD LINKS

For Watch Bracelets (Not Including Watches).
First use Dec. 8, 1955.

SN 453. Speidel Corporation, Providence, R. I. Filed Jan. 10, 1956.

KEY BOARD

For Watch Bracelets (Not Including Watches).
First use Dec. 29, 1955.

SN 454. Speidel Corporation, Providence, R. I. Filed Jan. 10, 1956.

HONEY COMB

For Watch Bracelets (Not Including Watches)
First use Dec. 29, 1955.

SN 455. Speidel Corporation, Providence, R. I. Filed Jan. 10, 1956.

CROSS-FIRE

For Watch Bracelets (Not Including Watches)
First use Dec. 29, 1955.

SN 618. Oneida Ltd., Oneida, N. Y. Filed Jan. 12, 1956.

LILAC TIME

For Silver-Plated Flatware and Hollowware.
First use Dec. 2, 1955.

SN 619. Oneida Ltd., Oneida, N. Y. Filed Jan. 12, 1956.

SUMMIT

For Silver-Plated Flatware and Hollowware.
First use Dec. 2, 1955.

SN 620. Oneida Ltd., Oneida, N. Y. Filed Jan. 12, 1956.

SKYLINE

For Silver-Plated Flatware and Hollowware.
First use Dec. 2, 1955.

CLASS 29

SN 660,969. Stanley Home Products, Inc., Westfield, Mass. Filed Feb. 11, 1954. Sec. 2(f).

E Z WAXER

For Hand Operated Applicators for Applying Wax to Floors.
First use September 1941.

SN 685,638. W. A. Ballinger & Co., San Francisco, Calif. Filed Apr. 18, 1955. Sec. 2(f).

BAKER

For Mops and Mop-Heads.
First use Nov. 11, 1941.

SN 693,477. Modern Faucet Mfg. Co., Los Angeles, Calif. Filed Aug. 22, 1955.

Dish-Quik

Owner of Reg. No. 549,078.
For Combined Detergent Dispenser and Brush.
First use July 20, 1955.

CLASS 30

SN 695,349. Saks & Company, New York, N. Y. Filed Sept. 26, 1955. Sec. 2(f).

SAKS-FIFTH AVENUE

For China and Pottery, and Vases.
First use Sept. 15, 1924.

CLASS 31

SN 698,550. Research Products Corporation, Madison, Wis. Filed Nov. 18, 1955.

RP

Owner of Reg. No. 390,640.
For Filtering Elements for the Removal of Entrained Solid and Liquid Particles From Gases in Engine Air Intake Cleaners, and for Sundry Uses, as in Air Vents, Paint Spray Booth Air Discharges, and the Like.
First use Jan. 21, 1952, on filtering elements for paint spray booth discharges.

CLASS 32

SN 668,583. Cloyd G. Roberson, d. b. a. Dee's Manufacturing Company, Oklahoma City, Okla. Filed June 21, 1954.

BE WISE . . . INSTALL VENETIAN BLINDS
DEE'S

The phrase "Be Wise . . . Install Venetian Blinds" is disclaimed apart from the mark.
For Venetian Blinds.
First use Apr. 10, 1954.

SN 677,501. F. S. Harmon Manufacturing Co., d. b. a. Harmon Manufacturing Company, Tacoma, Wash. Filed Nov. 30, 1954.

TAUT-O-MATIC

For Lounges.
First use Sept. 15, 1954.

SN 683,625. Sealy, Incorporated, d. b. a. Sealy Mattress Company, Chicago, Ill. Filed Mar. 16, 1955.

Con-sealy-bed

Owner of Reg. Nos. 426,168, 578,391, and others.
For Dual Sleeping Equipment.
First use Aug. 15, 1953.

SN 688,031. The General Tire & Rubber Company, Akron, Ohio. Filed May 23, 1955.

Fashon Foam

The registrant specifically disclaims any property or right to the word "Foam," separate and apart from the mark.
Owner of Reg. No. 590,966.
For Mattresses.
First use Apr. 20, 1955.

SN 691,886. Posting Equipment Corporation, Buffalo, N. Y. Filed July 25, 1955.

P.E.C.

For Articles Useful in the Keeping of Business Records and Accounts—Namely, Trays and Boxes for Containing Cards Used With Bookkeeping Machines, Stands and Tables Therefor, and Filing Drawers.
First use on or about July 7, 1951.

SN 693,392. Palace Metal Products, Inc., Brooklyn, N. Y. Filed Aug. 19, 1955.

UTILIDOR

For Steel Wall Cabinets and Base Cabinets for Kitchen and Bathroom Use.
First use Feb. 11, 1955.

SN 693,765. Oxford Metal Spinning Co. Inc., Philadelphia, Pa. Filed Aug. 26, 1955.

OMSCO-LITE

For Smoking Stand With Built-In Cigar Lighter.
First use July 1, 1955.

SN 694,165. The Spring-Air Company, Chicago, Ill. Filed Sept. 2, 1955.

Daisy

For Mattresses; Innerspring Boxsprings; and Dual Sleep Equipment, Being Furniture Such as Sofa Beds, Lounges, Day Beds, and Other Furniture Providing Alternately Sleeping Facilities and Table Facilities or Sleeping Facilities and Seating Facilities.
First use on or about July 13, 1954, on mattresses.

SN 694,605. Sperry Rand Corporation, New York, N. Y. Filed Sept. 13, 1955. Sec. 2(f).

SAFE-CABINET

Owner of Reg. No. 139,955.
For Filing Cabinets and Safes Scientifically Constructed To Protect the Contents Thereof Against the Effects of Excessive Temperature.
First use Sept. 1, 1905.

SN 695,390. Coffee-Ette of America, Inc., Pittsburgh, Pa. Filed Sept. 27, 1955.

Coffee-ette

For Steel Cabinets for Storing Coffee and Serving Equipment Therefor.
First use June 24, 1955.

SN 699,934. Table Rock Furniture Company, Morganton, N. C. Filed Dec. 13, 1955.

TABLE ROCK

For Bedroom Furniture—Namely, Beds, Chests, Night Stands, Dressers, Mirrors, Poudres, Benches, Commodes, Chests on Chests, Vanities, and Chairs.
First use September 1951.

SN 700,010. The Burns & Russell Company of Baltimore City, d. b. a. The Burns & Russell Company, Baltimore, Md. Filed Dec. 15, 1955.

SPECTRA-CAST

Owner of Reg. No. 615,720.
For Table Tops.
First use Nov. 29, 1955.

SN 700,540. Sylcon Management Association, Chicago, Ill. Filed Dec. 23, 1955. COLLECTIVE MARK.

SYL-FIRM

For Mattresses.
First use in 1952.

SN 700,541. Sylcon Management Association, Chicago, Ill. Filed Dec. 23, 1955. COLLECTIVE MARK.

FIRMRITE

For Mattresses.
First use September 1953.

SN 700,718. Douglas Furniture Corporation, Chicago, Ill. Filed Dec. 28, 1955.

Cameo

For Kitchen and Dinette Tables and Chairs.
First use Oct. 3, 1955.

SN 700,719. Douglas Furniture Corporation, Chicago, Ill. Filed Dec. 28, 1955.

Doria

For Kitchen and Dinette Tables and Chairs.
First use Oct. 11, 1955.

SN 700,720. Douglas Furniture Corporation, Chicago, Ill. Filed Dec. 28, 1955.

Swirl

For Kitchen and Dinette Tables and Chairs.
First use Oct. 11, 1955.

SN 700,721. Douglas Furniture Corporation, Chicago, Ill. Filed Dec. 28, 1955.

Italia

For Kitchen and Dinette Tables and Chairs.
First use Sept. 19, 1955.

SN 700,755. Salmanson & Co., Inc., New York, N. Y. Filed Dec. 28, 1955.

ARISTO-LITE

For Articles of Furniture Having Metal Framework—Namely, Chairs, Rockers, Tables With Umbrellas, Tables Without Umbrellas, Serving Tables or Carts, Racks, Bridge Sets, Cots, Chaises, Lounges, Settees, and Gliders, None of Which Are Upholstered.
First use Sept. 5, 1955.

SN 700,890. Dennis Mitchell Industries, Philadelphia, Pa. Filed Dec. 30, 1955.

CLOS-I-TIDY

For Utility Racks.
First use Oct. 15, 1955.

CLASS 34

SN 664,778. Modine Manufacturing Company, Racine, Wis. Filed Apr. 19, 1954.

Airditioner

For Heat Exchange Structures Including a Console Type Air Conditioning Unit for Free Standing Installation; a Concealed Type Air Conditioning Unit for Out-of-Sight, Built-In Installation; an Overhead Type Air Conditioning Unit With or Without a Plenum Chamber for Drop Ceiling, Furred Space, or Closet Installation; a Ceiling Type Air Conditioning Unit for Exposed Ceiling Installation; Each of Said Types of Air Conditioning Units Comprising Heating and/or Cooling Coils and Associated Fin Structure, Motor Driven Blower Units, Filters, and Arranged to Cool, Heat, Ventilate, Filter, Dehumidify, and Circulate Room Air and Fresh Air in Individual Rooms, All Functions Subject to Individual Room Control.
First use Feb. 5, 1954.

SN 670,772. Carl Z. Alexander, Madison, N. J. Filed July 29, 1954.

Percocool

For Central Station Heating and Cooling Units.
First use Nov. 12, 1953.

SN 681,262. Flangeklamp Corporation, Buffalo, N. Y. Filed Feb. 8, 1955.

PERIM-O-THERM
PERIMETER BASEBOARD HEATING

No claim is made to the words "Perimeter Baseboard Heating" apart from the mark as shown.
For Heating and Air Conditioning Ducts, Radiators, and Registers.
First use on or about Jan. 18, 1955.

SN 685,433. Colo-Rite Manufacturing Company, Inc., Greenville, Ala. Filed Apr. 13, 1955.

Colo-Rite

For Gas Burner Apparatus and Component Parts for Use in Curing Tobacco, Drying Potatoes, in Home Barbecue Pits, Etc.
First use May 15, 1954.

SN 690,919. The Wakefield Company, Vermilion, Ohio. Filed July 7, 1955.

Wākon

For Diffuser for Overhead Lighting Systems.
First use May 19, 1955.

SN 691,284. John A. Felder, Webster Groves, Mo. Filed July 14, 1955.

Belnere

For Gas Burning Appliances—Namely, Cooking Ranges, Water Heaters, and Space Heaters.
First use June 24, 1955.

SN 692,066. Kamkap, Inc., New York, N. Y. Filed July 28, 1955.

KAMKAP

For Portable Outdoor Barbecue Grills.
First use 1945.

SN 700,510. Justrite Manufacturing Company, Chicago, Ill. Filed Dec. 23, 1955.

PENDRAGON

For Carbide Lamps.
First use Nov. 15, 1955.

SN 391. Wrought Iron Range Company, St. Louis, Mo. Filed Jan. 9, 1956.

HOME COMFORT
SINCE 1864
ST. LOUIS, MO.

The words "Since 1864" and "St. Louis, Missouri" are disclaimed apart from the mark as shown. Owner of Reg. Nos. 61,357, 588,530, and others.
For Air Conditioning Units.
First use Dec. 29, 1953.

SN 472. Automatic Draft & Stove Co., Inc., Lynchburg, Va. Filed Jan. 11, 1956. Sec. 2(f).

ASHLEY

Owner of Reg. Nos. 588,989, 503,888, and 375,369.
For Heating Systems for Flue-Curing of Tobacco of the Type Comprising a Wood-Burning Furnace, Flues, and Thermostatic Controls; Automatically Controlled Wood Burning Heaters, Brooder Stoves, and Hot Water Heaters; Wood Burning Circulators; and Combination Wood and Coal Heaters.
First use Sept. 15, 1932.

SN 569. Cargocaire Engineering Corporation, New York, N. Y. Filed Jan. 12, 1956.

CARGOCAIRE

For Air Conditioning Units.
First use Dec. 15, 1938.

CLASS 35

SN 686,910. E. F. Houghton & Co., Philadelphia, Pa. Filed May 5, 1955.

Ru-Lea

For Packings, Gaskets, and Seals Used in Connection With Hydraulic and Pneumatic Power Transmission Systems.
First use Apr. 18, 1955.

SN 694,541. Aktiebolaget Davy Robertsons Maskinfabrik, Partille, Sweden. Filed Sept. 13, 1955.

DAROSEAL

Owner of Swedish Reg. No. 77,762, dated Mar. 4, 1955; and U. S. Reg. No. 259,604.
For Piston Rings.

SN 694,725. Maremont Automotive Products, Inc., Chicago, Ill. Filed Sept. 15, 1955.

MAREMONT

Owner of Reg. Nos. 543,246 and 545,453.
For Brake Lining.
First use July 1, 1955.

SN 103. Sterling Automotive Manufacturing Company, Chicago, Ill. Filed Jan. 3, 1956.

STAMCO

For Gaskets for Engines.
First use Apr. 1, 1951.

SN 595. Johns-Manville Corporation, New York, N. Y. Filed Jan. 12, 1956.

FS CUSTOM FOUR STAR

For Brake Linings Separately and Applied to Brake Shoes.
First use Sept. 24, 1954; and as to "Four Star" on brake linings in 1935.

CLASS 36

SN 669,676. Deutsche Grammophon Gesellschaft m. b. H., Hannover, Germany. Filed July 9, 1954.

Polydor

Owner of German Reg. No. 316,613, dated July 2, 1924.
For Phonograph Records of the Grooved Type, Envelopes and Storage Containers Therefor; Phonograph Needles.

CLASS 37

SN 653,940. J. S. Staedtler, Nurnberg, Germany. Filed Sept. 29, 1953.

"THE MOON"

Owner of German Reg. No. 3,713, dated Mar. 7, 1895.
For Pencils, Pens, Erasers, and Penholders.

SN 674,249. House Products Corporation, New York, N. Y. Filed Oct. 4, 1954.

MODE X WHITE



No claim is made to the word "White" apart from the rest of the mark shown.
For Toilet Tissue.
First use May 15, 1929.

SN 681,938. The Parker Pen Company, Janesville, Wis. Filed Feb. 18, 1955.

LLP

For Ball Point Pencils.
First use on or about Feb. 12, 1955.

SN 682,418. Fraser Paper, Limited, Madawaska, Maine. Filed Feb. 28, 1955.

SNOCOTE

For Coated Papers.
First use Sept. 24, 1954.

SN 687,833. Uarco Incorporated, Chicago, Ill. Filed May 18, 1955.

U-R-CARD

For Unit Record Cards for Use in a Business System.
First use Mar. 11, 1955.

SN 690,860. Bell Engraving Co., Inc., New York, N. Y. Filed July 7, 1955.

BELL ENG CO

For Stationery Items—Namely, Writing Papers, Envelopes, Stationery Kits Comprising a Paper Caddy, Writing Paper and Envelopes and Letter Openers.
First use July 1953.

SN 691,211. Gulf States Paper Corporation, Tuscaloosa, Ala. Filed July 13, 1955.

Redbud

The drawing is lined for yellow, but no claim is made to any particular color as a part of the mark.
For Butchers' Paper.
First use on or about May 16, 1955.

SN 694,249. National Paper Corporation of Pennsylvania, New York, N. Y. Filed Sept. 6, 1955.

swanee

Owner of Reg. Nos. 308,289 and 550,669.
For Toilet Tissues, Paper Towels, Facial Tissues, and Paper Napkins.
First use June 3, 1955.

SN 694,484. Golden Fleece Tissue Mills, Inc., New York, N. Y. Filed Sept. 12, 1955.

WHITE PEARL

For Facial Cleansing Tissues.
First use May 19, 1955.

SN 694,666. Amber Haley Powell, Boonville, Mo. Filed Sept. 14, 1955.

Grade-o-graph

For Lesson Grading Books and Practice Record.
First use Feb. 12, 1955.

SN 694,860. The Crayoff Corporation, Pasadena, Calif. Filed Sept. 19, 1955.

CRAYOFFS

For Washable Crayons.
First use on or about June 1948.

SN 694,874. Golden Fleece Tissue Mills, Inc., New York, N. Y. Filed Sept. 19, 1955.

Golden Star

For Facial Cleansing Tissues.
First use Oct. 1, 1954.

SN 694,972. Curtis 1000, Incorporated, West Hartford, Conn. Filed Sept. 20, 1955.

QUALITONE

For White Envelopes of Paper.
First use Nov. 6, 1946.

SN 695,054. J. Widder & Co., New York, N. Y. Filed Sept. 20, 1955.

Widco

Owner of Reg. No. 339,021.
For Albums.
First use February 1946.

SN 695,197. West Virginia Pulp and Paper Company, New York, N. Y. Filed Sept. 22, 1955.

BLENDTONE

Owner of Reg. No. 321,851.
For Printing Papers Including Coated Papers.
First use Oct. 12, 1934.

SN 695,207. Callen Photo Mount Corp., Jersey City, N. J. Filed Sept. 23, 1955.

PLASTI-CAL

For Albums and Photo Mounts.
First use Apr. 2, 1954.

SN 695,325. Master-Craft Corporation, Kalamazoo, Mich. Filed Sept. 26, 1955.

PAY-PAC

For Payroll Record Sheets.
First use on or about Aug. 2, 1955.

SN 695,680. Barkin Expanding Envelope Co. Inc., New York, N. Y. Filed Oct. 3, 1955.



For Stationery Items—Namely, Expanding Portfolios, File Jackets, Expanding and Flat, Document, Attorney, Auditor, and Insurance Envelopes, Expanding and Flat, and Expanding File Pockets, of Paper.
First use Apr. 2, 1952.

SN 695,810. Finch, Pruyn and Company, Inc., Glens Falls, N. Y. Filed Oct. 4, 1955.

MARCY

For Converting and Printing Papers.
First use Jan. 1, 1953.

SN 695,990. Pencraft, Inc., Boston, Mass. Filed Oct. 6, 1955. Sec. 2(f).

PENCRAFT

Owner of Reg. Nos. 343,410 and 546,054.
For Fountain Pens and Ball Pens.
First use November 1935 on fountain pens.

SN 695,995. Rex Income Tax Record Company, Detroit, Mich. Filed Oct. 6, 1955.

REX

For Income Tax Record Books.
First use Sept. 1, 1935.

CLASS 38

SN 658,121. Maurice J. Lacy, d. b. a. Lacy Sales Institute, Newton Center, Mass. Filed Dec. 17, 1953.

Hot Button

For Salesmanship Training Material—Namely, Instruction Booklets, Phonograph Records, Sound Slide Films, Quizzes To Be Used With Sound Slide Film, and Training Manual and Guides.
First use May 10, 1948.

SN 681,133. Paul L. Bowser, d. b. a. Contax Publications, Columbus, Ohio. Filed Feb. 7, 1955.

CONTAX

For Building Trades Magazine Prepared for Distribution by Others.
First use Jan. 6, 1955.

SN 683,498. Gillette Publishing Company, Chicago, Ill. Filed Mar. 15, 1955. Sec. 2(f).

RURAL ROADS

For Magazine Published Bi-Monthly.
First use May 1954.

SN 684,671. Arthur S. McPike, Pittsburgh, Pa. Filed Mar. 31, 1955.

SIOMIJ

For Publication—Namely, a Sales Inspiration Letter Published Periodically and Distributed to Applicant's Personnel.
First use Nov. 9, 1954.

SN 685,241. John N. Wheeler, executor of the estate of Harry C. Fisher, New York, N. Y. Filed Apr. 11, 1955.

MUTT AND JEFF

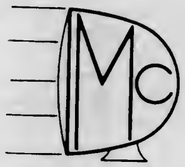
Owner of Reg. No. 102,968.
For Cartoon Strip, Regularly Published in Newspapers.
First use 1908.

SN 687,301. Frank Mayer & Associates, Inc., Milwaukee, Wis. Filed May 11, 1955.

epicolor

For Printed Color Reproductions.
First use on or about Apr. 25, 1955.

SN 689,504. Julian A. McDermott Corp., Corona, N. Y. Filed June 14, 1955.



For Periodical Publication.
First use Apr. 1, 1954.

SN 693,228. M. Norvel Young, d. b. a. 20th Century Christian, Lubbock, Tex. Filed Aug. 16, 1955.

POWER for today

For Periodic Publications Devoted to Religion.
First use Dec. 20, 1954.

SN 694,402. United Brotherhood of Carpenters and Joiners of America, Indianapolis, Ind. Filed Aug. 18, 1955. Sec. 2(f).

THE CARPENTER

For Periodical Publications.
First use Mar. 3, 1905.

SN 694,574. The Hearst Corporation, New York, N. Y. Filed Sept. 13, 1955.

RADIO PATROL

For Newspaper Cartoon Feature.
First use Apr. 16, 1934.

SN 694,647. The Hearst Corporation, New York, N. Y. Filed Sept. 14, 1955.

JERRY ON THE JOB

For Newspaper Cartoon.
First use Dec. 29, 1913.

SN 695,649. Scholastic Corporation, New York, N. Y. Filed Sept. 30, 1955.

Co-ed

For Periodical.
First use Sept. 28, 1955.

SN 699,204. Danforth-Epply Corporation, Wellesley Hills, Mass. Filed Dec. 1, 1955.



For Periodic Bulletins and Letters Furnishing Investment Information and Advice to Subscribers.
First use Oct. 10, 1952.

SN 699,206. Danforth-Epply Corporation, Wellesley Hills, Mass. Filed Dec. 1, 1955.



For Bi-Weekly Bulletins and Periodic Letters Furnishing Investment Information and Advice to Subscribers.
First use June 24, 1953.

SN 699,252. Scholastic Corporation, New York, N. Y. Filed Dec. 1, 1955.

Teleguide

For Column of a Periodical Publication.
First use Nov. 10, 1955.

SN 699,403. Know the Facts, Inc., Washington, D. C. Filed Dec. 5, 1955.

KNOW THE FACTS

For Periodical Publication.
First use July 1, 1955

SN 699,465. Babson Bros. Co., Chicago, Ill. Filed Dec. 6, 1955.

COWCULATOR

For Intermittently Appearing Publication on the Subject of Dairy Herd Improvement.
First use on or about February 1942.

SN 699,482. Dorothy E. Erb, Atchison, Kans. Filed Dec. 6, 1955.



For Advertising Cards.
First use Nov. 26, 1955.

SN 699,488. Forever House, Los Angeles, Calif. Filed Dec. 6, 1955.



For House Plans.
First use Mar. 15, 1955.

SN 699,502. Johnson Research Corporation, Bethpage, N. Y. Filed Dec. 6, 1955.

TRANSEAL

For Printed Transparent Adhesive Sheets, Carrying Lines and Printing, for Application to Surfaces of Various Materials.
First use June 12, 1944.

SN 699,652. National Comics Publications, Inc., New York, N. Y. Filed Dec. 8, 1955.



For Periodical Publication.
First use Nov. 4, 1955.

SN 699,821. Optimist International, St. Louis, Mo. Filed Dec. 12, 1955.

the optimist

Owner of Reg. No. 426,074.
For Periodical Publication.
First use January 1946.

SN 2,033. Myer Halper, d. b. a. Halper Publishing Co., Chicago, Ill. Filed Feb. 3, 1956.

The AGENT

For Trade Publication.
First use Oct. 1, 1930.

CLASS 39

SN 670,051. Kickaway Garments, Inc., Chicago, Ill. Filed July 15, 1954.

STRETCH-EZE

For Women's Apparel—Namely, Panties.
First use July 6, 1954.

SN 674,759. National Shoes, Inc., Bronx, N. Y. Filed Oct. 13, 1954.

Queen Bess

For Hosiery for Women and Misses.
First use Aug. 2, 1954.

SN 682,647. Leisure Lads, Inc., Salisbury, N. C. Filed Mar. 2, 1955.

Leisure Lads

For Children's Clothing—Namely, Shirts, Slacks, Slack Sets, Shorts, Short Sets, Jackets, Suits, Leisure Suits Composed of Shirts and Slacks, Sport Jacket Sets Composed of Jackets and Slacks, Vests, Bobby Suits, Comprising Two-Piece Garments Composed of a Shirt Attached by Means of Buttons to a Pair of Shorts, Cabana Sets, Diaper Sets, Sunsuits, Cardigan Sets, Coats, and Overalls.
First use Jan. 12, 1953.

SN 683,143. Seamprufe Incorporated, New York, N. Y. Filed Mar. 9, 1955. Sec. 2(f).

SHOULDER-EZE

Owner of Reg. No. 324,086.
For Women's Apparel, Comprising Slips, Bloomers, Petticoats, Nightgowns, Pajamas, Chemises, Step-Ins, and Panties.
First use Mar. 1, 1934.

SN 683,276. Charmose Hosiery, Inc., Hatboro, Pa. Filed Mar. 11, 1955.

"Daddy's Girl"

For Children's Dresses.
First use Sept. 1, 1954.

SN 686,272. Best Made Silk Hosiery Company, Quakertown, Pa. Filed Apr. 26, 1955. Sec. 2(f).

Best Made

Owner of Reg. Nos. 192,334 and 560,392.
For Ladies' Hosiery.
First use Feb. 20, 1924.

SN 687,075. Caryl Leslie Creations, Philadelphia, Pa. Filed May 9, 1955.

sheathio

For Panty Girdles.
First use Feb. 25, 1955.

SN 687,754. American Throwing Company, Inc., d. b. a. American Mills, Griffin, Ga. Filed May 18, 1955. Sec. 2(f).

GRIFFIN BRAND

For Infants', Children's, Men's, and Women's Underwear.
First use Mar. 24, 1947.

SN 690,120. Associated Lerner Shops of America, Inc., New York, N. Y. Filed June 24, 1955.



For Female Outer Wear—Namely, Coats, Jackets, and Stoles.
First use May 16, 1955.

SN 690,174. R. H. Macy & Co. Inc., New York, N. Y. Filed June 24, 1955.

PietroBaldi

For Women's Wearing Apparel—Namely, Outer Shirts.
First use Mar. 21, 1955.

SN 694,224. The Gardner Corporation, New York, N. Y. Filed Sept. 6, 1955.

PRAMORAMA

For Children's Snowsuits, Pram Bags, and Pram Suits.
First use Mar. 4, 1955.

SN 696,139. Mortimer D. Goldman, New York, N. Y. Filed Oct. 10, 1955.



For Ladies' and Misses' Wearing Apparel—Namely, Suits, Coats, Dresses, Skirts, Blouses, and Sweaters.
First use on or about Aug. 1, 1953.

SN 700,610. Hollywood-Maxwell Co., Los Angeles, Calif. Filed Dec. 27, 1955.

SHY

For Brassieres.
First use Nov. 28, 1955.

CLASS 40

SN 677,310. Gerardine Ogilby Evans, d. b. a. Gae's Originals, Briarcliff Manor, N. Y. Filed Nov. 26, 1954.

"TWIS-TY-ON"

The drawing is lined for red.
For Decorative Novelty in the Form of a Miniature Santa Claus Designated To Be Worn on a Garment or To Decorate Packages, Etc.
First use April 1954.

CLASS 41

SN 694,177. Lynn Umbrella Mfg. Co., Boston, Mass. Filed Sept. 15, 1955. Sec. 2(f).

LYNN TOPPERS

For Umbrellas.
First use Sept. 15, 1945.

CLASS 42

SN 667,591. Velveray Corporation, New York, N. Y. Filed June 2, 1954.

Velvetex
by Velveray

Owner of Reg. Nos. 287,011, 563,691, and others.
For Plastic Film Used as a Fabric Substitute.
First use Jan. 1, 1936; in October 1929 as to "Velveray."

SN 682,433. Imperial Chemical Industries Limited, London, England. Filed Feb. 28, 1955.

'TERYLENE'
ICI
Polyester Fibre.

No claim is made to the exclusive use of the words "Polyester Fibre." Owner of British Reg. No. 729,595, dated Apr. 27, 1954; and U. S. Reg. Nos. 526,887 and 544,082.
For Bed and Table Covers—Namely, Sheets, Blankets, Bedspreads, Pillow Slips, Quilts, Tablecloths, Silence Cloths, Place Mats, and Napkins, All Made Wholly of Polyester Fibre or Mixtures of Polyester With Other Fibres.

SN 694,747. Spartan Mills, Spartanburg, S. C. Filed Sept. 15, 1955.

STARTEX
decorator

The word "Decorator" is disclaimed apart from the mark as shown. Owner of Reg. Nos. 131,783 and 534,167.
For Kitchen Towels and Toweling, Table Cloths, Napkins, Place Mats, Draperies, and Curtains, All of Cotton or Linen and Blends Thereof.
First use Aug. 9, 1955.

SN 695,021. Plastic Woven Products, Inc., Paterson, N. J. Filed Sept. 20, 1955.

AIR-LITE

Owner of Reg. No. 583,997.
For Plastic Webbing or Woven Furniture Cloth From Saran Used in the Upholstery of Modern and Outdoor Furniture, Such as Yacht, Deck, and Beach Chairs and Other Seating Equipment.
First use Sept. 1, 1953.

CLASS 44

SN 686,846. Precision Instrument Service, Franklin Square, N. Y. Filed May 4, 1955.

DRI-CLAVE

For Medical and Dental Sterilizing and Incubating Equipment.
First use Apr. 11, 1955.

SN 696,628. Johnson & Johnson, New Brunswick, N. J. Filed Nov. 1, 1955.

VELROC

Owner of Reg. No. 580,847.
For Splints and Bandages Including Bandages for Surgical Casts.
First use Oct. 14, 1955.

SN 696,928. Aronab Products Co., San Francisco, Calif. Filed Oct. 24, 1955.

Trims

For Rubber Prophylactics for the Prevention of Contagious Diseases.
First use July 12, 1955.

SN 697,008. The Motloid Company, Chicago, Ill. Filed Oct. 24, 1955.

COLORPAC

For Characterizing Acrylic for Dentures and Teeth.
First use Oct. 1, 1952.

SN 697,901. Clay-Adams, Inc., New York, N. Y. Filed Nov. 8, 1955.

REDI-LANCE

For Sterile Disposable Lancets.
First use Oct. 27, 1955.

SN 698,631. National Hospital Supply Co., Inc., New York, N. Y. Filed Nov. 21, 1955.

NATICO

For Furniture, Chairs, Beds, Cabinets, and All Forms of Dental, Medical, and Surgical Appliances.
First use Feb. 5, 1952.

SN 698,739. Taylor Instrument Companies, Rochester, N. Y. Filed Nov. 22, 1955. Sec. 2(f).

Taylor

Owner of Reg. No. 314,945.
For Clinical Thermometers and Clinical Thermometer Cases.
First use December 1932.

SN 698,951. Beltone Hearing Aid Co., Chicago, Ill. Filed Nov. 28, 1955.

HEAR-N-SEE

For Electronic Hearing Aids Incorporated in Eyeglass Frames.
First use Sept. 22, 1955.

SN 699,039. Zeigler Electronics, Inc., Gardena, Calif. Filed Nov. 28, 1955.

SONOWAVE

For Ultrasonic Wave Generators Used in Ultrasonic Therapy.
First use February 1955.

SN 699,186. Abbott Laboratories, North Chicago, Ill. Filed Dec. 1, 1955.

PENTOTHAL

Owner of Reg. No. 334,340.
For Special Dispersing Closure for Container of Parenteral Solutions.
First use Nov. 2, 1955.

SN 699,288. Binky Baby Products Company, New York, N. Y. Filed Dec. 2, 1955.

Sani-Bite

For Water Cooled Baby Teether and Soother Made of Plastic, Filled With Distilled Water and Permanently Sealed, Used To Soothe Babies' Gums, and Teething Rings.
First use June 1952.

CLASS 45

SN 690,986. White Rock Corporation, Brooklyn, N. Y. Filed July 8, 1955.

Kula Waii

The English translation of the mark is "Golden Juice."
For Carbonated Soft Drinks and Syrups and Extracts Used in Making the Same.
First use May 23, 1955.

SN 700,877. Charles William Midgley, Sacramento, Calif. Filed Dec. 30, 1955.

WOW
"What a THIRSTOPPER!"

For Soft Drinks.
First use Dec. 21, 1955.

CLASS 46

SN 629,348. Bycla Sociedad Anonima Comercial Industrial y Financiera, Buenos Aires, Argentina. Filed May 8, 1952. "Unico" is the Spanish word for "only."

UNICO

For Edible Oils of Vegetable Origin for Seasoning and Cooking Purposes.
First use Sept. 12, 1950.

SN 631,341. Chicken on Wheels, Inc., Lima, Ohio. Filed June 18, 1952.



The expression "We Deliver" is disclaimed apart from the mark shown.
For Prepared and Packaged Fried Chicken Dinners, Including French Fried Potatoes, Vegetable Salad, Biscuit and Honey.
First use December 1949.

SN 661,775. Can-Meat Corp., Verona, N. J. Filed Mar. 1, 1954.

NEERLAND

For Meat—Namely, Canned Ham.
First use Nov. 12, 1952.

SN 663,073. Union Packing Co. (Canada) Ltd., Toronto, Ontario, Canada, to Swift Canadian Co., Limited, Toronto, Ontario, Canada. Filed Mar. 22, 1954.



The drawing is lined for red, but no specific color is claimed.
Owner of Reg. No. 581,030.
For Canned Hams.
First use July 14, 1952.

SN 664,672. Korday Candies, Inc., Brooklyn, N. Y. Filed Apr. 16, 1954.

Hostess Mix

For Hard Candy.
First use Nov. 24, 1953.

SN 669,050. Terry Foods, Inc., Park Ridge, Ill. Filed June 28, 1954.

Terry's

For Frozen Meat Products—Namely, Barbecue Sauce and Sliced Beef, Gravy and Sliced Beef, and Beef Chop Suey.
First use Nov. 20, 1953; the word "Terry's" was first used on or about June 1948.

SN 669,166. H. Bahlsens Keksfabrik K. G., Hannover, Germany. Filed June 30, 1954. Sec. 2(f).

LEIBNIZ

For Alimentary Pastes; Candies; Cakes, Tarts, Pies; Biscuits; Cocoa; Rye, Wheat, and Oatmeal Flour; Pudding Powder; Honey, Jam, Jellies; Gingerbread; Fresh, Dried, and Preserved Vegetables; Fresh, Dried, Smoked, and Canned Fish; Fresh and Preserved Eggs; Mayonnaise; Jelly Powder; Sausages; Fresh, Dried, and Preserved Fruits; Malt, Malt Sugar; Icings and Chocolate, Marchpane, Sugar Mass, Jams and Fruit Fillings for Wafers, Tarts, and the Like; and Cookies.
First use 1904 on biscuits and cookies.

SN 676,843. Stuart M. Stebbings, De Pere, Wis. Filed Nov. 17, 1954.

CHEEZOLEE

For Mixture of Oleomargarine and Cheese for Use as a Spread.
First use Oct. 1, 1954.

SN 681,024. McCormick & Company, Incorporated, Baltimore, Md. Filed Feb. 3, 1955.



For Vanilla Extract.
First use Jan. 14, 1955.

SN 681,756. Michael Dumne, Muskegon, Mich. Filed Feb. 16, 1955.



No rights are claimed in the words "Cranberry-Kraut" or the representation of the goods apart from the mark as shown.
For Canned Cranberry-Kraut.
First use Jan. 20, 1955.

SN 682,788. Earl B. Doolin, d. b. a. Circle D Foods, Dallas, Tex., to Circle D Foods Inc., Dallas, Tex. Filed Mar. 4, 1955.



For Corn Chips.
First use Sept. 17, 1954.

SN 682,813. Morris B. Mandelbaum, d. b. a. M. B. M. Import Co., Newark, N. J. Filed Mar. 4, 1955.



For Canned Cooked Hams.
First use on or about Nov. 30, 1954.

SN 684,430. J. William Horsey Corporation, Plant City, Fla. Filed Mar. 29, 1955.

Kingsway

Owner of Reg. No. 348,170.
For Canned Orange Juice.
First use in the year 1927.

SN 684,974. Santiago Development Corporation, New York, N. Y. Filed Apr. 5, 1955.

ANEVA

For Cereal Mix Consisting of Rolled Wheat Germ, Vitamin Enriched for Human Use.
First use Mar. 25, 1953.

SN 685,478. Ammon E. Cramer, d. b. a. Barbara Fritchie Chocolates, Frederick, Md. Filed Apr. 14, 1955.

LOVE BUGS

For Candy.
First use Nov. 3, 1953.

SN 686,117. Cleo Vidmar, d. b. a. Texas Pie Company, Fort Worth, Tex. Filed Apr. 22, 1955.



For Baked and Fried Fruit Pies.
First use Sept. 1, 1954.

SN 686,770. The National Sales Council of Pennsylvania, Inc., d. b. a. Nasco Foods, Hazleton, Pa. Filed May 3, 1955.



For Dry Milk Shake Base Composed of Sugar, Dextrose, Cocoa, Non-Fat Dry Milk Solids, Vegetable Stabilizer, Whole Dry Eggs, and Salt.
First use on or about June 15, 1953.

SN 687,675. Chattanooga Bakery, Inc., Chattanooga, Tenn. Filed May 17, 1955.

MOON PIE

No claim is made to the word "Pie" apart from the mark as shown. Owner of Reg. No. 604,020.
For Bakery Products, Specifically Marshmallow Sandwiches and Pie.
First use Jan. 1, 1917.

SN 688,357. Richard W. Ruth, d. b. a. Richard Ruth & Company, East Cleveland, Ohio. Filed May 26, 1955.



The drawing is lined for red. The name "Carolyn Ruth's" is that of a living person whose consent is of record.
For Frozen Cookie Dough.
First use on or about Nov. 1, 1954.

SN 688,700. B. N. S. International Sales Corporation, New York, N. Y. Filed June 2, 1955. Sec. 2(f).

BAUER-BRAND

For Prepared Meat Products, i. e., Cooked Ham.
First use Jan. 20, 1950.

SN 689,637. Muir-Roberts & Burningham, Incorporated, Salt Lake City, Utah, now by change of name to Muir-Roberts Co., Inc. Filed June 16, 1955. Sec. 2(f).

MT. NEBO

Owner of Reg. No. 521,376.
For Fresh Deciduous Fruits.
First use Nov. 22, 1948.

SN 689,864. The Geo. H. Nowland Company, Cincinnati, Ohio. Filed June 20, 1955. Sec. 2(f).

NOWLAND'S

For Ground and Whole Spices, Pickling Spices, Poultry Seasoning, Sausage Seasoning, Seasoning Herbs, Dehydrated Vegetables, Food Flavoring Extracts, Imitation Flavorings for Foods, Food Colors, Oil Flavors for Food, Barbecue Sauce, Pepper Sauce, Worcestershire Sauce, Seeds for Culinary Use, Saccharine for Food Sweetening, Tea, Vegetable Salts, Cream Tartar for Food Purposes, and Raw Popcorn.
First use on or about Jan. 1, 1912.

SN 690,032. Perkins Products Company, Chicago, Ill. Filed June 22, 1955.

Toss

Owner of Reg. No. 514,405.
For Salad Dressing Mix.
First use on or about Aug. 25, 1954.

SN 690,444. The Early & Daniel Co., Cincinnati, Ohio. Filed June 29, 1955.

TUXEDO

Owner of Reg. Nos. 551,433 and 108,126.
For Feeds and Grain for Livestock, Poultry, and Domestic Animals—Namely, Baby Chicks, Broilers, Pullets, Turkey Poults, Tom Turkeys, Hen Turkeys, Calves, Dairy Cows, Steers, Pigs, Hogs, Sows, Horses, Goats, Rabbits, Pigeons, and Dogs.
First use Mar. 30, 1913, on feeds for horses.

SN 690,611. Eatmor Cranberries, Inc., Chicago, Ill. Filed July 1, 1955.



Owner of Reg. No. 521,297.
For Cranberry Sauce, Either Strained or Whole-Berry, and Cranberry Jelly; Fresh and Frozen Cranberries.
First use September 1939.

SN 691,171. Topps Chewing Gum, Incorporated, Brooklyn, N. Y. Filed July 12, 1955.

BUFFALO BILL

For Chewing Gum—Namely, Bubble Gum.
First use June 29, 1955.

SN 691,173. Topps Chewing Gum, Incorporated, Brooklyn, N. Y. Filed July 12, 1955.

CALAMITY JANE

For Chewing Gum—Namely, Bubble Gum.
First use June 29, 1955.

SN 691,174. Topps Chewing Gum, Incorporated, Brooklyn, N. Y. Filed July 12, 1955.

DANIEL BOONE

For Chewing Gum—Namely, Bubble Gum.
First use June 29, 1955.

SN 691,175. Topps Chewing Gum, Incorporated, Brooklyn, N. Y. Filed July 12, 1955.

SITTING BULL

For Chewing Gum—Namely, Bubble Gum.
First use June 29, 1955.

SN 691,176. Topps Chewing Gum, Incorporated, Brooklyn, N. Y. Filed July 12, 1955.

KIT CARSON

For Chewing Gum—Namely, Bubble Gum.
First use June 29, 1955.

SN 691,177. Topps Chewing Gum, Incorporated, Brooklyn, N. Y. Filed July 12, 1955.

JESSIE JAMES

For Chewing Gum—Namely, Bubble Gum.
First use June 29, 1955.

SN 691,178. Topps Chewing Gum, Incorporated, Brooklyn, N. Y. Filed July 12, 1955.

WILD BILL HICKOK

For Chewing Gum—Namely, Bubble Gum.
First use June 29, 1955.

SN 691,179. Topps Chewing Gum, Incorporated, Brooklyn, N. Y. Filed July 12, 1955.

LEWIS & CLARK

For Chewing Gum—Namely, Bubble Gum.
First use June 29, 1955.

SN 691,200. Empire Coffee Company, St. Louis, Mo. Filed July 13, 1955.

DAY AND NIGHT

For Coffee.
First use Oct. 20, 1911.

SN 691,774. Osceola Foods, Inc., Osceola, Ark. Filed July 22, 1955.

Merry B

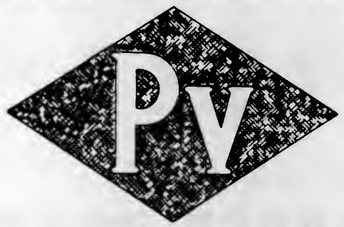
For Oleomargarine.
First use July 14, 1955.

SN 691,816. The Associated Merchandising Corporation, New York, N. Y. Filed July 25, 1955.

CANDYTUFT

For Assorted Candies and Salted Nuts.
First use Apr. 9, 1947.

SN 692,077. F. H. Peavey & Company, d. b. a. King Midas Flour Mills, Minneapolis, Minn. Filed July 28, 1955.



The drawing is lined for orange but color is not claimed as an essential characteristic of the mark. Owner of Reg. No. 21,191.
For Wheat Flour.
First use November 1947.

SN 692,137. The Halo-Star Corporation, Chicago, Ill. Filed July 29, 1955.

Toy

For Frozen Flavored Water Ice.
First use June 1, 1954.

SN 692,163. Reddi-Wip, Inc., Los Angeles, Calif. Filed July 29, 1955.

Reddi wip

Owner of Reg. Nos. 560,710, 577,075, and others.
For Combination Stabiliser and Flavoring for Expanded Food Topping.
First use on or before Apr. 29, 1955.

SN 693,717. Jos. Martinson & Co., Inc., New York, N. Y. Filed Sept. 13, 1955. Sec. 2(f).

MARTINSON'S COFFEE

No claim is made to the word "Coffee" apart from the mark shown.
For Coffee.
First use March 1902.

SN 693,922. Daniel W. Mikesell, Inc., Dayton, Ohio. Filed Aug. 30, 1955. Sec. 2(f).

"Mike-sells"

For Potato Chips, Pretzels, French Fried Popcorn, Chili Powder, Dill Pickles, and Salad Dressing.
First use 1914 on potato chips.

SN 694,220. Wolffe H. Feinstone, Indianapolis, Ind. Filed Sept. 6, 1955.

SAVORICE

For Rice.
First use June 30, 1955.

SN 694,676. Standard Brands Incorporated, New York, N. Y. Filed Sept. 14, 1955.

Hunt Club

Owner of Reg. Nos. 344,267 and 372,136.
For Dog Food.
First use January 1933.

SN 695,337. Northwester Sales, Inc., Lubbock, Tex. Filed Sept. 26, 1955.

Iddy-Biddy

For Dressed Poultry.
First use Sept. 10, 1954.

SN 695,728. Hygrade Food Products Corporation, Detroit, Mich. Filed Oct. 3, 1955.

MORNING GLORY

For Bacon.
First use Aug. 7, 1939.

SN 695,751. Pillsbury Mills, Inc., Minneapolis, Minn. Filed Oct. 3, 1955.

Kit

For Preparation for Making Cake Including a Cake Mix, a Frosting Mix, and a Cake Pan.
First use Sept. 7, 1955.

SN 695,867. Pearl Wolf & Milton Wolf, Boston, Mass. Filed Oct. 4, 1955.

FUDG-MASTER

For Milk Chocolate Fudge Sauce.
First use Sept. 21, 1955.

SN 695,976. Eastern States Farmers' Exchange, Incorporated, West Springfield, Mass. Filed Oct. 6, 1955.

DARIMORE

For Feed for Dairy Cattle.
First use Sept. 19, 1955.

SN 696,013. The Borden Company, New York, N. Y. Filed Oct. 7, 1955.

POLAR CLUB

For Ice Cream.
First use June 1, 1920.

SN 696,096. All American Nut Co., Inc., Downey, Calif. Filed Oct. 10, 1955.



For Peanut Butter.
First use Sept. 8, 1955.

SN 696,102. Sam Barbich, Delano, Calif. Filed Oct. 10, 1955.

ADRIATIC

For Fresh Grapes.
First use Sept. 6, 1955.

CLASS 47

SN 694,465. F. Pirrone & Sons, Inc., Salida, Calif. Filed Aug. 19, 1955. Sec. 2(f).

P

Pirrone

Owner of Reg. No. 392,443.
For Wine.
First use Oct. 1, 1939.

CLASS 48

SN 681,401. The Bartels Brewing Company, Kingston, Pa. Filed Feb. 10, 1955. Sec. 2(f).

Bartels
THERE'S NO ONE BETTER

Owner of Reg. Nos. 141,863 and 386,635.
For Beer.
First use July 1, 1935.

CLASS 49

SN 684,474. David Sandeman and Son Ltd., London, England. Filed Mar. 29, 1955.

King's Vat

For Whiskey.
First use 1930.
Subj. to Intf. with SN 507 (series of 1956).

SN 685,343. Brown-Forman Distillers Corporation, Louisville, Ky. Filed Apr. 12, 1955.

Brown-Forman's

KING

Owner of Reg. Nos. 319,755 and 312,858.
For Whiskey.
First use July 1, 1950.

SN 687,955. London & Company Inc., Elizabeth, N. J. Filed May 20, 1955.

GOLDEN GLOVES

For Whiskey.
First use May 13, 1955.

SN 691,548. Campbell & Clark Limited, Glasgow, Scotland. Filed July 19, 1955.

David Ross's
Private Cellar

The name "David Ross" appearing in the mark identifies the director of the applicant company. Applicant disclaims the words "Private Cellar" apart from the mark as shown.
For Scotch Whisky.
First use October 1937.

SN 694,803. Heublein, Inc., d. b. a. G. F. Heublein & Bro., Hartford, Conn. Filed Sept. 16, 1955.

STARKA

For Vodka.
First use Sept. 1, 1955.

SN 695,789. Wine Growers Guild, d. b. a. Ceremony Brandy Cellars, Lodi, Calif. Filed Oct. 3, 1955.

CEREMONY

The drawing is lined for gold and the five medals are lined to indicate the color gold. Owner of Reg. Nos. 364,996 and 562,996.
For Brandy.
First use Aug. 30, 1955; July 30, 1938, as to "Ceremony."

SN 700,904. Schenley Industries, Inc., New York, N. Y. Filed Dec. 30, 1955. Sec. 2(f) as to "Schenley."

Sir John
BY
Schenley

Owner of Reg. Nos. 323,937, 553,701, and others.
For Whiskey.
First use Oct. 3, 1955.

SN 507. Muir Mackenzie & Co., Limited, Glasgow, Scotland. Filed Jan. 11, 1956.

KING'S VAT

For Scotch Whisky.
First use in the year 1934.
Subj. to Intf. with SN 684,474.

CLASS 50

SN 687,641. Louis C. Spoer, East Paterson, N. J. Filed May 16, 1955.

"WINDO—SEEN"

For Temporary Decorative Door or Window Panels or Display Poster Panel.
First use Feb. 28, 1955.

SN 687,642. Louis C. Spoer, East Paterson, N. J. Filed May 16, 1955.

"DEK-O-DOR"

For Temporary Decorative Door Panel or Display Poster Panel.
First use Feb. 28, 1955.

SN 687,643. Louis C. Spoer, East Patterson, N. J. Filed May 16, 1955.

"TRIMZ-QUIK"

For Temporary Decorative Window Panel or Display Poster Panel.
First use Feb. 28, 1955.

SN 695,262. Auburn Rubber Company, Inc., Auburn, Ind. Filed Sept. 26, 1955.

Auburnite

For Synthetic Composition Soling.
First use Feb. 4, 1954.

SN 695,264. Auburn Rubber Company, Inc., Auburn, Ind. Filed Sept. 26, 1955.

Nu-Arcolite

For Synthetic Composition Soling.
First use Oct. 8, 1954.

CLASS 51

SN 686,107. Skan Laboratories, Inc., Pasadena, Calif. Filed Apr. 22, 1955.

Rinse Away

For Rinse Concentrate To Be Used Diluted for Rinsing the Hair.
First use Nov. 1, 1952.

SN 687,267. Dodge & Olcott, Inc., New York, N. Y. Filed May 11, 1955.

NEAR YOU

For Perfume Compound.
First use Apr. 20, 1955.

SN 688,448. Olin Mathieson Chemical Corporation, New York, N. Y. Filed May 27, 1955.

HIGH WIDE AND HANDSOME

For Combination Package Containing After Shave Lotion, Cologne, and Lather Shave Preparation.
First use Apr. 7, 1955.

SN 688,450. Olin Mathieson Chemical Corporation, New York, N. Y. Filed May 27, 1955.

TRAIL BLAZERS

For Combination Package Containing After Shave Lotion and Lather Shave Preparation.
First use Apr. 7, 1955.

SN 688,559. James K. Moore, d. b. a. The Ethodont Company, Berkeley, Calif. Filed May 31, 1955.

ETHODONT

For Toothpaste.
First use Mar. 8, 1955.

SN 695,131. Audrea du Val Laboratories, Inc., Mount Prospect, Ill. Filed Sept. 22, 1955.

Jay-Tone

For Skin Freshener.
First use Jan. 1, 1949.

SN 695,134. Audrea du Val Laboratories, Inc., Mount Prospect, Ill. Filed Sept. 22, 1955.

Velvene

For Hand Creme.
First use Jan. 1, 1949.

SN 695,508. Undertakers Supply Company, Chicago, Ill. Filed Sept. 28, 1955.

HEXA-CREME

For Skin Conditioning Cream for Use by Undertakers in the Embalming Process.
First use Aug. 23, 1955.

SN 695,893. Helene Curtis Industries, Inc., Chicago, Ill. Filed Oct. 5, 1955.

VIGNETTE

For Hair Waving Lotion.
First use Sept. 14, 1955.

SN 696,057. The Nestle-Lemur Company, New York, N. Y. Filed Oct. 7, 1955.

PETITE CURL

For Hair Waving Solutions.
First use Sept. 15, 1955.

SN 696,895. Lee-Jon Company, Mount Vernon, N. Y. Filed Oct. 21, 1955.

STRIPES

For Toothpaste.
First use July 5, 1955.

CLASS 52

SN 686,250. Weseg Corporation, San Francisco, Calif. Filed Apr. 25, 1955.

SIR BOSS

For Shampoo.
First use Apr. 18, 1955.

SERVICE MARKS

CLASS 106

SN 689,649. Peerless Finishing Corp., Paterson, N. J. Filed June 16, 1955.

PEER *Fast*

Owner of Reg. Nos. 559,998, 609,733, and 610,077.
For Finishing of Textile Fabrics—Namely, Dyeing, Waterproofing, Deodorizing, and Pre-Shrinking.
First use Feb. 1, 1954.

SN 694,285. Velveray Corporation, New York, N. Y. Filed Sept. 6, 1955.

TUFTONE

For Converting—Namely, Decorating and Printing Woven and Knitted Fabrics of Cotton, Silk, Rayon, Nylon, Wool, Acetate, and Linen, Said Goods Belonging to Other Persons and Not Applicant, and Also Finishing Them by Dyeing the Same by Printing Them With Designs and Colors, by Applying Flock Thereon, by Applying a Suede Finish and by Embossing.
First use Apr. 15, 1955.

CLASS 107

SN 683,453. Sun Oil Company, Philadelphia, Pa. Filed Mar. 14, 1955.

3-STAR EXTRA

For Information Service in the Nature of a News Broadcast Program.
First use Sept. 29, 1947.

SN 689,970. Shaw Artists Corporation, New York, N. Y. Filed June 21, 1955.

"TOP TEN"

For Entertainment in the Form of Variety Shows.
First use Nov. 29, 1954.

CERTIFICATION MARKS

CLASS B

SN 689,150. National Association of Radio and Television Broadcasters, Inc., Wilmington, Del. Filed June 8, 1955.

NARTB TELEVISION CODE BOARD SEAL OF GOOD PRACTICE

The mark certifies that the station presents a balanced television program, and that said station presents no program unsuitable for family viewing. Owner of Reg. Nos. 568,117 and 587,121.
For Broadcasting of Television Programs.
First use June 3, 1955.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

626,028. REPRESENTATION OF 4 YELLOW DIAMONDS SURROUNDING A BLACK DIAMOND. Rayonier Incorporated. SN 675,005. Pub. 2–14–56. Filed 10–18–54.

626,029. BIGGER EARS IN THE FALL ETC. AND DESIGN. United-Hagie Hybrids, Inc. SN 680,984. Pub. 2–14–56. Filed 2–2–55.

CLASS 2

626,030. RUF-GRIP. Bemis Bro. Bag Company. SN 674,217. Pub. 2–14–56. Filed 10–4–54.

626,031. COASTERCLAD "GOOD TO THE FINISH" AND DESIGN. Linwood Corporation. SN 675,641. Pub. 2–14–56. Filed 10–28–54.

626,032. CAN-STAK. Herbert H. Somers. SN 675,837. Pub. 2–14–56. Filed 11–1–54.

626,033. HANKINS CLEVELAND AND DESIGN. The Hankins Container Company. SN 676,192. Pub. 2–14–56. Filed 11–8–54.

626,034. BY BEACON ETC. AND DESIGN. Beacon Plastics Corporation. SN 688,701. Pub. 2–14–56. Filed 6–2–55.

CLASS 3

626,035. CHANEL. Chanel, Inc. SN 678,436. Pub. 2–14–56. Filed 12–16–54.

CLASS 4

626,036. SHOW-OFF. Show-Off, Inc. SN 667,454. Pub. 2–14–56. Filed 6–1–54.

626,037. BEAUTY LUSTER. Beauty Luster, Inc. SN 694,040. Pub. 2–14–56. Filed 9–1–55.

626,038. SCREEN-BAK. Norton Company. SN 694,904. Pub. 2–14–56. Filed 9–19–55.

CLASS 5

626,039. PLASTI-FIX. Wesson Houseware Products Company, Inc. SN 694,614. Pub. 2–14–56. Filed 9–13–55.

CLASS 6

626,040. STA-NU. Wells Chemical Corporation, from Le Roy B. Edwards. SN 640,504. Pub. 5–25–54. Filed 1–8–53.

626,041. BRADCO. Bradford Chemical Company, Inc. SN 651,038. Pub. 12–21–54. Filed 7–29–53.

626,042. SWEETA. Mathieson Chemical Corporation, now by merger and change of name Olin Mathieson Chemical Corporation. SN 653,581. Pub. 9–6–55. Filed 9–22–53.

626,043. SOLO H. American Metallurgical Products Company. SN 661,250. Pub. 2–14–56. Filed 2–18–54.

626,044. PLASTI-BOND. International Minerals & Chemical Corporation. SN 661,277. Pub. 2–14–56. Filed 2–18–54.

626,045. AVOLAN. Farbenfabriken Bayer Aktiengesellschaft. SN 666,102. Pub. 6–28–55. Filed 5–11–54.

626,046. MONOLITE. Imperial Chemical Industries Limited. SN 668,034. Pub. 3–8–55. Filed 6–10–54.

626,047. REPRESENTATION OF A PURITAN ROUNDHEAD. Puritan Chemical Company. SN 676,834. Pub. 2–7–56. Filed 11–17–54.

626,048. NUOPHENE. Nuodex Products Co., Inc. SN 677,596. Pub. 7–5–55. Filed 12–1–54.

626,049. PY-TOX. Carleton Laboratory, Inc., by change of name from Knox Laboratory, Inc. SN 677,717. Pub. 2–14–56. Filed 12–3–54.

626,050. CALSOFIX. Calgon, Incorporated. SN 680,064. Pub. 2–14–56. Filed 1–18–55.

626,051. TERMICIDE. American Termicide Company, Inc. SN 680,655. Pub. 2–14–56. Filed 1–28–55.

626,052. BABY-SWEET. Powsner & Minthorne. SN 683,913. Pub. 2–14–56. Filed 3–21–55.

626,053. PARATREAT. Oklahoma Chemical Company. SN 685,389. Pub. 2–14–56. Filed 4–12–55.

626,054. HYCRYL. Union Bay State Chemical Co., Inc. SN 688,483. Pub. 2–14–56. Filed 5–27–55.

CLASS 7

626,055. BOW CURL. William E. Wright & Sons Company. SN 677,846. Pub. 2–14–56. Filed 12–6–54.

626,056. OAKDALE. Oakdale Cotton Mills. SN 683,982. Pub. 2–14–56. Filed 3–22–55.

626,057. BOUNTY AND DESIGN. Oakdale Cotton Mills. SN 683,983. Pub. 2–14–56. Filed 3–22–55.

CLASS 8

626,058. AAA AND DESIGN. The American Automobile Association (Incorporated). SN 697,888. Pub. 2–14–56. Filed 11–23–55.

CLASS 9

626,059. CHAMP AND DESIGN. Perforating Guns Atlas Corporation. SN 676,755. Pub. 2–14–56. Filed 11–16–54.

626,060. MIGHTY MOUSE. Perforating Guns Atlas Corporation. SN 676,756. Pub. 2–14–56. Filed 11–16–54.

626,061. TRANSLAUNCHER. Goodyear Aircraft Corporation. SN 687,696. Pub. 2–14–56. Filed 5–17–55.

626,062. FRONTIER SIX SHOOTER. American Weapons Corporation. SN 687,755. Pub. 2–14–56. Filed 5–18–55.

626,063. PEACEMAKER SIX SHOOTER. American Weapons Corporation. SN 687,756. Pub. 2–14–56. Filed 5–18–55.

626,064. MATCHORAMA. Universal Match Corporation. SN 688,101. Pub. 2–14–56. Filed 5–23–55.

CLASS 10

626,065. JUNG-LE. The American Compost Corporation, to The International Compost Corporation. SN 685,232. Pub. 2–14–56. Filed 4–11–55.

626,066. DESIGN OF BARN. Chemical Enterprises, Inc. SN 693,528. Pub. 2–14–56. Filed 8–23–55.

CLASS 11

626,067. ALPAD AND DESIGN. Albert Padberg. SN 685,295. Pub. 2–14–56. Filed 4–11–55.

626,068. PLUSWOOD-OSHKOSH-WIS. Pluswood Industries. SN 689,161. Pub. 2–14–56. Filed 6–8–55.

626,069. SERVICE BOARD. Harold R. Jones, Inc. SN 697,684. Pub. 2–14–56. Filed 11–4–55.

CLASS 13

626,070. A AND DESIGN. Anderson Machine Corporation, now by change of name Anderson Screw Products, Inc. SN 671,923. Pub. 2–14–56. Filed 8–19–54.

626,071. ARROWSMITH AND DESIGN. Arrowsmith Tool and Die Corporation. SN 677,377. Pub. 2–14–56. Filed 11–29–54.

626,072. DESIGN OF TRIANGLE. The Fairfacts Company. SN 686,818. Pub. 2–14–56. Filed 5–4–55.

626,073. GOLDEN GATE. Krouse-Doremus Foundry Co. SN 694,070. Pub. 2–14–56. Filed 9–1–55.

CLASS 14

626,074. NICKELOID METALS NM AND DESIGN. American Nickeloid Company. SN 672,620. Pub. 2–14–56. Filed 9–2–54.

626,075. EUTEC BOR. Eutectic Welding Alloys Corporation. SN 692,775. Pub. 2–14–56. Filed 8–10–55.

CLASS 15

626,076. SAVINGS. Savings Oil Company. SN 682,756. Pub. 2–14–56. Filed 3–3–55.

626,077. GLASOL. Specialty Products Company. SN 686,859. Pub. 2–14–56. Filed 5–4–55.

626,078. GLASSCUT. Specialty Products Company. SN 686,860. Pub. 2-14-56. Filed 5-4-55.

626,079. GLASSFLOW. Specialty Products Company. SN 686,861. Pub. 2-14-56. Filed 5-4-55.

626,080. STER-MAR. Esso Standard Oil Company. SN 687,774. Pub. 2-14-56. Filed 5-18-55.

626,081. PANCO WONDERPLATE. Panther Oil & Grease Mfg. Company. SN 688,571. Pub. 2-14-56. Filed 5-31-55.

626,082. QUAKER STATE SUPER BLEND AND DESIGN. Quaker State Oil Refining Corporation. SN 688,668. Pub. 2-14-56. Filed 6-1-55.

CLASS 16

626,083. DEEP-GLEAM. The Lane Company, Inc. SN 672,298. Pub. 10-18-55. Filed 8-26-54.

626,084. THIXO. Burgess Vibrocrafters, Inc., to Superior Paint & Varnish Corporation. SN 684,024. Pub. 8-23-55. Filed 3-23-55.

626,085. CUSTOM-TINT. National Gypsum Company. SN 692,858. Pub. 2-14-56. Filed 8-11-55.

CLASS 17

626,086. IN EVERY CASE. R. G. Sullivan Incorporated. SN 696,485. Pub. 2-14-56. Filed 10-17-55.

CLASS 18

626,087. AVEENO. Musher Foundation Incorporated. SN 634,335. Pub. 2-14-56. Filed 8-22-52.

626,088. PFIZER AND DESIGN. Chas. Pfizer & Co., Inc. SN 646,013. Pub. 2-14-56. Filed 4-27-53.

626,089. CANDICAPS. Chase Chemical Company. SN 652,096. Pub. 2-14-56. Filed 8-21-53.

626,090. "HAPPY FEET." Benjamin F. Breslauer, d. b. a. The A. Breslauer Company. SN 665,012. Pub. 2-14-56. Filed 4-22-54.

626,091. HYDROTOX. Frederick G. Mayer. SN 667,970. Pub. 1-17-56. Filed 6-9-54.

626,092. DERMAPHOR. Gerhard W. Ahrens, d. b. a. Dermaphor Laboratories. SN 672,367. Pub. 2-14-56. Filed 8-30-54.

626,093. SANA BALM. Sana Balm Co. SN 677,530. Pub. 2-14-56. Filed 11-30-54.

626,094. CITROTAL. Wilbrin Laboratories. SN 678,296. Pub. 2-14-56. Filed 12-13-54.

626,095. NUVITE ETC. AND DESIGN. Wilbrin Laboratories. SN 678,297. Pub. 2-14-56. Filed 12-13-54.

626,096. ARTHOVITE. Benjamin H. Silberg, d. b. a. Armail Laboratory. SN 679,188. Pub. 2-14-56. Filed 12-30-54.

626,097. LIFT AND DESIGN. G. B. Rednor Products Co. SN 682,594. Pub. 2-14-56. Filed 3-1-55.

626,098. HYCHEX. Hychex Products. SN 682,927. Pub. 2-14-56. Filed 3-7-55.

626,099. TRIDAL. Lakeside Laboratories, Inc. SN 683,785. Pub. 2-14-56. Filed 3-18-55.

626,100. SIOUXLAND. Milligan & Son, Inc. SN 687,086. Pub. 2-14-56. Filed 5-9-55.

626,101. COCCIVAC. Dorn & Mitchell Laboratories, Inc. SN 687,772. Pub. 2-14-56. Filed 5-18-55.

626,102. PO-K-TABS. Roy S. Lodolyn, d. b. a. Lodolyn Drug Products Co. SN 689,054. Pub. 2-14-56. Filed 6-7-55.

626,103. ANTEMIA. Chicago Pharmacal Company. SN 689,343. Pub. 2-14-56. Filed 6-13-55.

626,104. FINAF. Finaf, Inc. SN 689,478. Pub. 2-14-56. Filed 6-14-55.

626,105. HOLLANDEX. Holland-Rantos Co., Inc. SN 689,572. Pub. 2-14-56. Filed 6-15-55.

626,106. UTERASE. Irving S. Rossoff. SN 689,657. Pub. 2-14-56. Filed 6-16-55.

626,107. VALMID. Eli Lilly and Company. SN 689,850. Pub. 2-14-56. Filed 6-20-55.

626,108. CORBIOT. The Upjohn Company. SN 689,896. Pub. 2-14-56. Filed 6-20-55.

626,109. CARDRASE. The Upjohn Company. SN 689,897. Pub. 2-14-56. Filed 6-20-55.

626,110. PAMOID. The Upjohn Company. SN 689,898. Pub. 2-14-56. Filed 6-20-55.

626,111. EL AND DESIGN. The McCambridge & McCambridge Co. SN 689,950. Pub. 2-14-56. Filed 6-21-55.

626,112. ALGOSON. McNeil Laboratories, Incorporated. SN 690,019. Pub. 2-14-56. Filed 6-22-55.

626,113. ACTIVAGE. Vick Chemical Company. SN 690,107. Pub. 2-14-56. Filed 6-23-55.

626,114. MATROMYCIN. Chas. Pfizer & Co., Inc. SN 690,323. Pub. 2-14-56. Filed 6-27-55.

626,115. STRENALIN. Chas. Pfizer & Co., Inc. SN 690,324. Pub. 2-14-56. Filed 6-27-55.

626,116. INVERSINE. Merck & Co., Inc. SN 690,480. Pub. 2-14-56. Filed 6-29-55.

626,117. WAZINE. Dr. Salsbury's Laboratories. SN 690,489. Pub. 2-14-56. Filed 6-29-55.

626,118. TREAT-RITE. Vulcan Jet & Turbine Corp. SN 690,513. Pub. 2-14-56. Filed 6-29-55.

CLASS 19

626,119. SCHWINN AMERICAN. Arnold, Schwinn & Co. SN 683,574. Pub. 2-14-56. Filed 3-16-55.

626,120. CYL-FLO AND DESIGN. Willard L. Groene. SN 696,144. Pub. 2-14-56. Filed 10-10-55.

CLASS 21

626,121. DI-PROFILER. Engis Equipment Company, to Diamantprodukter Aktiebolag. SN 651,975. Pub. 2-14-56. Filed 8-18-53.

626,122. DELTRON. E. Victor Nelson, d. b. a. Deltron Co., from Deltron Co. SN 666,741. Pub. 2-14-56. Filed 5-20-54.

626,123. COUNTERPOISE RELAY. Cook Electric Company. SN 674,451. Pub. 2-14-56. Filed 10-7-54.

626,124. SUPERTUF. General Cable Corporation. SN 676,493. Pub. 2-14-56. Filed 11-12-54.

626,125. WESTRIC MOTOR-MASTER. Westric Battery Company. SN 676,696. Pub. 2-14-56. Filed 11-15-54.

626,126. WESTON. Weston Electrical Instrument Corporation, to Weston Electrical Instrument Corporation (new corporation). SN 681,231. Pub. 2-14-56. Filed 2-7-55.

626,127. STANTEC. International Standard Electric Corp. SN 683,397. Pub. 2-14-56. Filed 3-14-55.

626,128. HALEON. Voltarc Tubes, Inc. SN 687,331. Pub. 2-14-56. Filed 5-11-55.

626,129. AIR-WAY SANITIZOR. Air-Way Industries, Inc. SN 691,185. Pub. 2-14-56. Filed 7-13-55.

626,130. PAGEMASTER. John R. Scantlin, d. b. a. J. R. Scantlin Electronics, to General Dynamics Corporation. SN 691,326. Pub. 2-14-56. Filed 7-14-55.

626,131. CHARACTRON. General Dynamics Corporation. SN 695,085. Pub. 2-14-56. Filed 9-21-55.

626,132. POWERMATIC. McGraw Electric Company. SN 695,431. Pub. 2-14-56. Filed 9-27-55.

CLASS 22

626,133. READIT. Gilbert Deschatre. SN 661,421. Pub. 2-14-56. Filed 2-23-54.

626,134. SPACEROO. Norman H. Sanger. SN 668,277. Pub. 2-14-56. Filed 6-15-54.

626,135. SWIM-PIPE. Waikiki Equipment Company. SN 676,346. Pub. 2-14-56. Filed 11-9-54.

626,136. THE "MARINO." Michel Casanovas. SN 679,032. Pub. 2-14-56. Filed 12-28-54.

626,137. TREET. Arthur C. Cadogan. SN 679,554. Pub. 2-14-56. Filed 1-7-55.

626,138. TURBO. Sportex GmbH. SN 679,803. Pub. 2-14-56. Filed 1-12-55.

626,139. DOODLEHEAD. Doodlehead, Inc. SN 680,185. Pub. 2-14-56. Filed 1-20-55.

626,140. JUMBLE. George E. Hazard. SN 680,271. Pub. 2-14-56. Filed 1-21-55.

626,141. EMENEE. Emenee Industries, Inc. SN 680,739. Pub. 2-14-56. Filed 1-31-55.

626,142. SPORTEX. Sportex GmbH. SN 680,909. Pub. 2-14-56. Filed 2-1-55.

626,143. MARITIME. Robert L. Seay. SN 680,978. Pub. 2-14-56. Filed 2-2-55.

626,144. THE LITTLEST LUMBERYARD AND DESIGN. Margaret Orcutt. SN 681,621. Pub. 2-14-56. Filed 2-14-55.

626,145. WIP-TOP. Keller Corporation. SN 682,567. Pub. 2-14-56. Filed 3-1-55.

626,146. PEACE GARDEN AND DESIGN. Mary Phillips Buckner, d. b. a. Peace Garden Nursery. SN 682,866 Pub. 2-14-56. Filed 3-7-55.

626,147. CHE'GE GON. Pierson's Tackle Company. SN 684,231. Pub. 2-14-56. Filed 3-25-55.

626,148. LAWMAKERS. Paul E. Taberski. SN 686,235. Pub. 2-14-56. Filed 4-25-55.

626,149. DESIGN OF BABY. Gerber Products Company. SN 686,298. Pub. 2-14-56. Filed 4-26-55.

626,150. MOD-L-STIX. The Vogel Manufacturing Company. SN 686,407. Pub. 2-14-56. Filed 4-27-55.

626,151. CHARLIE BUOY AND DESIGN. George L. Trager, d. b. a. Trager Manufacturing Co. SN 687,739. Pub. 2-14-56. Filed 5-17-55.

626,152. VOKAB. Herbert P. Kakuske, d. b. a. The Vokab Company. SN 688,736. Pub. 2-14-56. Filed 6-2-55.

626,153. PETER PELICAN. Patsie Sinkey Norrick. SN 688,746. Pub. 2-14-56. Filed 6-2-55.

626,154. PELI DANDI. Patsie Sinkey Norrick. SN 688,747. Pub. 2-14-56. Filed 6-2-55.

626,155. PARTI-PUMP. The Pioneer Rubber Company. SN 688,850. Pub. 2-14-56. Filed 6-3-55.

626,156. ECCO. Evans Case Co. SN 688,918. Pub. 2-14-56. Filed 6-6-55.

626,157. MAJOR. The Ohio Bowling & Billiard Supply Co. SN 698,108. Pub. 2-14-56. Filed 11-25-55.

626,158. CLASSIC. The Ohio Bowling & Billiard Supply Co. SN 698,109. Pub. 2-14-56. Filed 11-25-55.

CLASS 23

626,159. FRANKLIN. Franklin Manufacturing Co., Inc. SN 658,058. Pub. 2-14-56. Filed 12-16-53.

626,160. INGERSOLL-RAND PAC-AIR AND DESIGN. Ingersoll-Rand Company. SN 674,466. Pub. 2-14-56. Filed 10-7-54.

626,161. CHAMPION QUALITY CPMC. Champion Pneumatic Machinery Co. SN 675,966. Pub. 2-14-56. Filed 11-3-54.

626,162. VIKING RE-NU-IT. Viking Pump Company. SN 678,830. Pub. 7-26-55. Filed 12-22-54.

626,163. EASY PUSH. Malcolm Arthur Ball, d. b. a. Ball Drainage Co. SN 679,074. Pub. 2-14-56. Filed 12-29-54.

626,164. TAMCO AND DESIGN. Tobin-Arp Manufacturing Company. SN 680,236. Pub. 2-14-56. Filed 1-20-55.

626,165. LINT FREE PNEUMAFIL AND DESIGN. Pneumafil Corporation. SN 691,580. Pub. 2-14-56. Filed 7-19-55.

626,166. KWIKPLATE. American Type Founders, Inc., to American Type Founders Co., Inc. SN 691,655. Pub. 2-14-56. Filed 7-21-55.

626,167. SUPERFLEX WHITIN SPINNING AND DESIGN. Whitin Machine Works. SN 693,223. Pub. 2-14-56. Filed 8-16-55.

626,168. FLEX-SPIN WHITIN WOOL SPINNING AND DESIGN. Whitin Machine Works. SN 693,224. Pub. 2-14-56. Filed 8-16-55.

626,169. HI-PRO WHITIN ROVING AND DESIGN. Whitin Machine Works. SN 693,225. Pub. 2-14-56. Filed 8-16-55.

626,170. QUIK-SET WHITIN AMERICAN SYSTEM ROVING AND DESIGN. Whitin Machine Works. SN 693,226. Pub. 2-14-56. Filed 8-16-55.

626,171. WHITIN SPEED-MATIC FILLING WINDER AND DESIGN. Whitin Machine Works. SN 693,227. Pub. 2-14-56. Filed 8-16-55.

626,172. MINI-SUPERCHARG'R. Zephyr Engineered Products, Inc. SN 694,831. Pub. 2-14-56. Filed 9-16-55.

626,173. FLEXO-HITCH. Ford Motor Company. SN 694,869. Pub. 2-14-56. Filed 9-19-55.

626,174. VISE-GRIP. Petersen Manufacturing Company, Inc. SN 695,019. Pub. 2-14-56. Filed 9-20-55.

626,175. HYDROSPIN. The Cincinnati Milling Machine Co. SN 695,074. Pub. 2-14-56. Filed 9-21-55.

626,176. GRADE-O-MATIC. The Galion Iron Works & Manufacturing Company. SN 695,215. Pub. 2-14-56. Filed 9-23-55.

CLASS 26

626,177. FISCHLUPE. Electroacustic G. m. b. H. SN 661,621. Pub. 2-14-56. Filed 2-25-54.

626,178. ATHENE. Smethurst High-Light Limited. SN 668,786. Pub. 2-14-56. Filed 6-23-54.

626,179. SICO SUPERIOR INSTRUMENT CO AND DESIGN. Superior Instrumenta Co. SN 675,106. Pub. 2-14-56. Filed 10-19-54.

626,180. WESTON. Weston Electrical Instrument Corporation, to Weston Electrical Instrument Corporation (new corporation). SN 681,232. Pub. 2-14-56. Filed 2-7-55.

626,181. WESTON. Weston Electrical Instrument Corporation, to Weston Electrical Instrument Corporation (new corporation). SN 681,234. Pub. 2-14-56. Filed 2-7-55.

626,182. TAYLOR. Taylor Instrument Companies. SN 681,892. Pub. 2-14-56. Filed 2-17-55.

626,183. FLITE POSITIVE AND DESIGN. Dynamic Center Engineering Co., Inc. SN 692,214. Pub. 2-14-56. Filed 8-1-55.

CLASS 27

626,184. CLOCK OF TOMORROW. General Time Corporation. SN 692,931. Pub. 2-14-56. Filed 8-12-55.

CLASS 28

626,185. ROYAL OF PITTSBURGH AND DESIGN. Royal of Pittsburgh, Inc. SN 674,846. Pub. 2-14-56. Filed 10-14-54.

CLASS 29

626,186. MAGIC BRUSH. Dupli-Color Products Co., Inc. SN 657,700. Pub. 2-14-56. Filed 12-9-53.

626,187. ECON-O-CLOTH. Econ-O Cloth. SN 662,617. Pub. 2-14-56. Filed 3-15-54.

CLASS 31

626,188. DUSTGARD. American Rock Wool Corp. SN 686,716. Pub. 2-21-56. Filed 5-3-55.

CLASS 32

626,189. MAUSER. Mauser Kommandit-Gesellschaft. SN 677,516. Pub. 2-14-56. Filed 11-30-54.

626,190. BUNTING "AMERICA'S FINEST" AND DESIGN. The Bunting Company, Inc. SN 682,701. Pub. 2-14-56. Filed 3-3-55.

626,191. CONANT BALL CB 1852 FURNITURE MAKERS AND DESIGN. Conant Ball Company. SN 690,433. Pub. 2-14-56. Filed 6-29-55.

626,192. STYLAIRE. Hamilton Manufacturing Corporation. SN 693,825. Pub. 2-14-56. Filed 8-29-55.

CLASS 33

626,193. B AND DESIGN. Societe Anonyme Henri Desjonqueres, Verrerie de Mers-les-Bains. SN 659,370. Pub. 9-13-55. Filed 1-12-54.

CLASS 34

626,194. HOT-TOSSIE. Hot-Tossie, Inc. SN 670,485. Pub. 2-14-56. Filed 7-23-54.

626,195. VERIFIED LONG LIFE AND DESIGN. Southern California Water Heater Manufacturers Association. SN 687,640. COLLECTIVE MARK. Pub. 2-14-56. Filed 5-16-55.

626,196. TYPHOON. Typhoon Air Conditioning Co., Inc., to Hupp Corporation. SN 688,601. Pub. 2-14-56. Filed 5-31-55.

626,197. EXHAUST MASTER. E. Van Noorden Company. SN 688,604. Pub. 2–14–56. Filed 5–31–55.

CLASS 35

626,198. "CUSHION SEAL." The Haynes Manufacturing Co. SN 676,054. Pub. 2–14–56. Filed 11–4–54.

CLASS 36

626,199. GAVOTTE. Gordon V. Thompson, Limited. SN 672,547. Pub. 2–14–56. Filed 8–31–54.

626,200. CONCERTO. Accordion Manufacturers and Wholesalers Outlet. SN 674,546. Pub. 2–14–56. Filed 10–11–54.

626,201. LONDON FR AND DESIGN. London Records, Inc. SN 674,981. Pub. 2–14–56. Filed 10–18–54.

626,202. JMDS AND DESIGN. Jewish Music Documentary Society, Inc. SN 678,459. Pub. 2–14–56. Filed 12–16–54.

626,203. OPERA. Chicago Musical Instrument Co. SN 686,525. Pub. 2–14–56. Filed 4–29–55.

626,204. FRETLESS WONDER. Gibson, Inc. SN 687,692. Pub. 2–14–56. Filed 5–17–55.

626,205. COUNTRY WESTERN. Gibson, Inc. SN 687,693. Pub. 2–14–56. Filed 5–17–55.

626,206. VANI-TONE. Vanity Fair Electronics Corporation. SN 688,104. Pub. 2–14–56. Filed 5–23–55.

CLASS 37

626,207. SELF SEAL THE DRY SEAL ENVELOPES AND DESIGN. United States Envelope Company. SN 642,184. Pub. 2–14–56. Filed 2–12–53.

626,208. BLUE RIBBON. Rushmore Paper Mills Inc. SN 649,906. Pub. 2–14–56. Filed 7–6–53.

626,209. CHRONOLOG. The National Acme Company. SN 682,170. Pub. 2–14–56. Filed 2–23–55.

626,210. TENSALEX. The Sorg Paper Company. SN 682,200. Pub. 2–14–56. Filed 2–23–55.

626,211. TENSALON. The Sorg Paper Company. SN 682,201. Pub. 2–14–56. Filed 2–23–55.

626,212. CHELTENHAM. Gilbert Paper Company. SN 682,905. Pub. 2–14–56. Filed 3–7–55.

626,213. STERLING. F. L. Russell Corporation. SN 683,622. Pub. 2–14–56. Filed 3–16–55.

626,214. R. David Kahn, Inc. SN 683,778. Pub. 2–14–56. Filed 3–18–55.

626,215. DESIGN OF SEAL. The Chicago Desk Pad Company, Inc. SN 684,717. Pub. 2–14–56. Filed 4–1–55.

626,216. UNITED. United Paper Company. SN 685,322. Pub. 2–14–56. Filed 4–11–55.

626,217. SQUARE OAK. Gulf States Paper Corporation. SN 685,580. Pub. 2–14–56. Filed 4–15–55.

626,218. BLUE SPRUCE. Gulf States Paper Corporation. SN 685,581. Pub. 2–14–56. Filed 4–15–55.

626,219. TRIPSTER. Clara E. Friedman. SN 686,041. Pub. 2–14–56. Filed 4–22–55.

626,220. ROYAL OAK AND DESIGN. Gulf States Paper Corporation. SN 686,303. Pub. 2–14–56. Filed 4–26–55.

626,221. ROYAL OAK. Gulf States Paper Corporation. SN 686,304. Pub. 2–14–56. Filed 4–26–55.

626,222. POMCO AND DESIGN. Potter-McCune Company. SN 686,566. Pub. 2–14–56. Filed 4–29–55.

CLASS 38

626,223. LO MEJOR DEL CATHOLIC DIGEST. The Catholic Digest International Inc., to The Catholic Digest, Inc. SN 639,691. Pub. 2–14–56. Filed 12–18–52.

626,224. SQUEE-ZEL. Chicago Show Printing Company. SN 678,376. Pub. 2–14–56. Filed 12–15–54.

626,225. "FASHION MARKS." Wayne Knitting Mills. SN 682,606. Pub. 2–14–56. Filed 3–1–55.

626,226. THE TRADEMARK REPORTER. The United States Trademark Association. SN 682,839. Pub. 2–14–56. Filed 3–4–55.

626,227. THE TREE LIFE LOG. St. Paul & Tacoma Lumber Co. SN 687,126. Pub. 2–14–56. Filed 5–9–55.

626,228. ECONOMIC TREND LINE STUDIES. Chester D. Tripp, d. b. a. Economic Trend Line Studies. SN 687,650. Pub. 2–14–56. Filed 5–16–55.

626,229. THE QUILL. Sigma Delta Chi, Professional Journalistic Fraternity. SN 688,470. Pub. 2–14–56. Filed 5–27–55.

626,230. THE BRAVE AND THE BOLD AND DESIGN. National Comics Publications, Inc. SN 688,655. Pub. 2–14–56. Filed 6–1–55.

626,231. NAME DAY. Hulda E. Ekenberg. SN 688,808. Pub. 2–14–56. Filed 6–3–55.

626,232. CLOVER BOOKS. Grosset & Dunlap, Inc., d. b. a. McLoughlin Bros. SN 688,817. Pub. 2–14–56. Filed 6–3–55.

626,233. RESALE,. Hitchcock Publishing Company. SN 688,820. Pub. 2–14–56. Filed 6–3–55.

626,234. WOOD WORKING DIGEST AND DESIGN. Hitchcock Publishing Company. SN 688,821. Pub. 2–14–56. Filed 6–3–55.

626,235. MACHINE AND TOOL BLUE BOOK. Hitchcock Publishing Company. SN 689,038. Pub. 2–14–56. Filed 6–7–55.

626,236. THE CUSTOMART PRESS AND DESIGN. Frank Lawson Wright. SN 689,106. Pub. 2–14–56. Filed 6–7–55.

626,237. THE PUBLIC OPINION INDEX FOR INDUSTRY. Opinion Research Corporation. SN 693,644. Pub. 2–14–56. Filed 7–26–55.

CLASS 39

626,238. DIVA. Evan-Picone, Inc. SN 668,715. Pub. 2–14–56. Filed 7–26–54.

626,239. BILLY TAUB. Billy Taub 40th St. Corp. SN 674,298. Pub. 2–14–56. Filed 10–4–54.

626,240. WIL-GARD. The Wilson Rubber Company. SN 679,127. Pub. 2–14–56. Filed 12–29–54.

626,241. ADD-A-SIZE. Tru-Step Hosiery Company. SN 679,539. Pub. 2–14–56. Filed 1–6–55.

626,242. DEE-MURE. Spirite Manufacturing Co., Inc. SN 680,490. Pub. 2–14–56. Filed 1–25–55.

626,243. L'ANGORLANA. Fishel-Cohen, Inc. SN 681,081. Pub. 2–14–56. Filed 2–4–55.

626,244. LADY JORDAN. Jordan Marsh Company. SN 682,806. Pub. 2–14–56. Filed 3–4–55.

626,245. "TUF HIDE." Wollun Products Corporation. SN 683,571. Pub. 2–14–56. Filed 3–15–55.

626,246. THE TY-LO. The United States Shoe Corporation. SN 684,082. Pub. 2–14–56. Filed 3–23–55.

626,247. CORDETTE. Cordette of California. SN 684,401. Pub. 1–3–56. Filed 3–29–55.

626,248. PINCH-PUNCH. Saks & Company. SN 684,884. Pub. 2–14–56. Filed 4–4–55.

626,249. ACRI-MATES. Little Miss English Ltd. SN 685,381. Pub. 2–14–56. Filed 4–12–55.

626,250. GLAMOR-GARDS. Brookville Glove Manufacturing Company, Inc., d. b. a. Brookville Glove Co. SN 685,886. Pub. 2–14–56. Filed 4–20–55.

626,251. THOMSON TAILORED AND DESIGN. Thomson Company. SN 686,114. Pub. 2–14–56. Filed 4–22–55.

626,252. PREP-TANS. Sweet-Orr & Co., Inc. SN 686,495. Pub. 2–14–56. Filed 4–28–55.

626,253. PREP-GREYS. Sweet-Orr & Co., Inc. SN 686,496. Pub. 2–14–56. Filed 4–28–55.

626,254. ELDORADO. L. Greif & Bro., Inc. SN 686,903. Pub. 2–14–56. Filed 5–5–55.

626,255. INVERNESS. The Puritan Sportswear Corp. SN 687,000. Pub. 2–14–56. Filed 5–6–55.

626,256. ZONA LEE. Zona Lee. SN 687,481. Pub. 2–14–56. Filed 5–13–55.

626,257. WORKWELLS. Kushins, Inc. SN 687,789. Pub. 2–14–56. Filed 5–18–55.

626,258. GREEN KITTEN AND DESIGN. H. L. Green Company, Inc. SN 688,038. Pub. 2–14–56. Filed 5–23–55.

626,259. RENA. Nu-Maid Hosiery Mills, Inc. SN 688,174. Pub. 2–14–56. Filed 5–24–55.

626,260. WHIRL A WEVE. A. Chatila & Co. SN 688,305. Pub. 2–14–56. Filed 5–26–55.

626,261. GENUINE TOWEL TREAD SOX AND DESIGN. Dallas Hosiery Mills. SN 688,313. Pub. 2–14–56. Filed 5–26–55.

626,262. RAYS. Kelray Knitting Mills, Inc. SN 688,541. Pub. 2–14–56. Filed 5–31–55.

626,263. DESIGN OF GREEK LETTERS "PHI" AND "PI." Wispese Corp. SN 690,923. Pub. 2–14–56. Filed 7–7–55.

626,264. THE EMBLEM OF BETTER FASHIONS BF AND DESIGN. Bonnie-Frances Lingerie Company, Inc. SN 691,116. Pub. 2–14–56. Filed 7–12–55.

626,265. DRY BOTTOM AND DESIGN. H. Daust Mfg. Co. SN 691,281. Pub. 2–14–56. Filed 7–14–55.

626,266. NEW SLANT. Slif Skin, Inc. SN 691,395. Pub. 2–14–56. Filed 7–15–55.

626,267. LIZIBETANS. Airborne Shoes Limited. SN 693,421. Pub. 2–14–56. Filed 8–22–55.

626,268. BLACK SAPPHIRE. Northwood Fur Farm. SN 693,620. Pub. 2–14–56. Filed 8–24–55.

626,269. BLACK VELVET. Northwood Fur Farm. SN 693,621. Pub. 2–14–56. Filed 8–24–55.

626,270. ROMANUDE. Chipman Knitting Mills. SN 693,663. Pub. 2–14–56. Filed 8–25–55.

626,271. SOLITE. I. B. Kleinert Rubber Company. SN 693,755. Pub. 2–14–56. Filed 8–26–55.

626,272. MEL-O-TOP. Merker Counter Company, Inc. SN 693,758. Pub. 2–14–56. Filed 8–26–55.

626,273. SECRETARY OF THE MONTH. Kay Windsor Frocks, Inc. SN 693,882. Pub. 2–14–56. Filed 8–29–55.

626,274. GLENDOUGLAS. Robert Hall Clothes, Inc. SN 693,990. Pub. 2–14–56. Filed 8–31–55.

626,275. DATON. The Lovable Brassiere Co. SN 694,071. Pub. 2–14–56. Filed 9–1–55.

626,276. ORNELLA. Philip Shlansky & Sons, Inc. SN 694,260. Pub. 2–14–56. Filed 9–6–55.

626,277. SAFINIA. Saks & Company. SN 694,454. Pub. 2–14–56. Filed 9–9–55.

626,278. CHAMBORD. Trefousse Gloves, Inc. SN 694,460. Pub. 2–14–56. Filed 9–9–55.

626,279. SUTTON PARK. Monarch Garment Corp. SN 694,499. Pub. 2–14–56. Filed 9–12–55.

626,280. AAA AND DESIGN. The American Automobile Association (Incorporated). SN 697,893. Pub. 2–14–56. Filed 11–23–55.

626,281. GLEN GUARD. Wm. P. Goldman & Bros. Inc. SN 698,327. Pub. 2–14–56. Filed 11–14–55.

CLASS 40

626,282. EXQUISIT. Schner-Block Company, Inc. SN 675,234. Pub. 2–14–56. Filed 10–21–54.

626,283. WITCH. James J. Barry, Jr., d. b. a. J. J. Barry & Co. SN 679,971. Pub. 2–14–56. Filed 1–17–55.

626,284. KNOBBY TWIST PINS. Knobby Krafters. SN 688,828. Pub. 2–14–56. Filed 6–3–55.

CLASS 42

626,285. SLUMBEREST. Electric Parts Corporation. SN 678,614. Pub. 2–14–56. Filed 12–20–54.

626,286. WEDGMOOR. Woolmark Corporation. SN 680,986. Pub. 2–14–56. Filed 2–2–55.

626,287. CARAZIB. Carlton Mills Company. SN 687,182. Pub. 2–14–56. Filed 5–10–55.

626,288. CILONDA AND DESIGN. Aktiengesellschaft Cilander. SN 688,003. Pub. 2–14–56. Filed 5–23–55.

626,289. BEAV-R-MIX. Amerotron Corporation. SN 688,698. Pub. 2–14–56. Filed 6–2–55.

626,290. ROBERT HALL. Robert Hall Clothes, Inc. SN 690,551. Pub. 2–14–56. Filed 6–30–55.

626,291. GOLD SEAL. Congoleum-Nairn Inc. SN 690,865. Pub. 2–14–56. Filed 7–7–55.

626,292. TWIST SHEEN. J. P. Stevens & Co., Inc. SN 691,168. Pub. 2–14–56. Filed 7–12–55.

626,293. ARAMANGO. Glen Raven Cotton Mills, Inc. SN 693,745. Pub. 2–14–56. Filed 8–26–55.

626,294. REBOUND. Reeves Brothers, Inc. SN 694,151. Pub. 2–14–56. Filed 9–2–55.

626,295. THICKET. Dan River Mills, Incorporated. SN 694,204. Pub. 2–14–56. Filed 9–6–55.

626,296. LOOP THE LOOP. Dan River Mills, Incorporated. SN 694,205. Pub. 2–14–56. Filed 9–6–55.

626,297. THATCH. Dan River Mills, Incorporated. SN 694,206. Pub. 2–14–56. Filed 9–6–55.

CLASS 43

626,298. OAKDALE. Oakdale Cotton Mills. SN 685,546. Pub. 2–14–56. Filed 3–22–55.

626,299. BOUNTY AND DESIGN OF SHIP. Oakdale Cotton Mills. SN 685,547. Pub. 2–14–56. Filed 3–22–55.

626,300. PHANTOM. Durham Hosiery Mills. SN 686,359. Pub. 2–14–56. Filed 4–27–55.

626,301. SURE-MATCH. Bernhard Ulmann Co. Inc. SN 697,757. Pub. 2–14–56. Filed 11–7–55.

626,302. TRU-MATCH. Bernhard Ulmann Co. Inc. SN 697,867. Pub. 2–14–56. Filed 11–7–55.

CLASS 44

626,303. BOTTLE BUDDY. Joseph Struhl Co., Inc., to Struway Products Corp. SN 661,299. Pub. 2–14–56. Filed 2–18–54.

626,304. THE ROYALTY OF HEARING. Zenith Radio Corporation. SN 676,702. Pub. 2–14–56. Filed 11–15–54.

626,305. ALCOFOLD. Institutional Products Corporation. SN 694,427. Pub. 2–14–56. Filed 9–9–55.

626,306. WRIGGELATOR AND DESIGN. Leonard Long, d. b. a. Bator Scientific Products Co. SN 694,722. Pub. 2–14–56. Filed 9–15–55.

CLASS 45

626,307. KN AND DESIGN. Leslie W. Knutson, d. b. a. K-N Sales Co. SN 694,370. Pub. 2–14–56. Filed 9–8–55.

626,308. DESIGN OF SHIELD. International Union of United Brewery, Flour, Cereal, Soft Drink and Distillery Workers of America. SN 695,065. COLLECTIVE MARK. Pub. 2–14–56. Filed 8–5–55.

CLASS 46

626,309. AUNT FANNY'S AND DESIGN. Promotional Enterprises, Inc. SN 624,455. Pub. 2–14–56. Filed 2–2–52.

626,310. SHAKE-UP. Crest Foods Co. SN 651,810. Pub. 12–6–55. Filed 8–14–53.

626,311. SWEET 'N SLIM. Chunky Chocolate Corp., also known as Chunky Chocolate Corporation, to Loft Candy Corporation. SN 652,168. Pub. 2–14–56. Filed 8–24–53.

626,312. D AND DESIGN. D & F Enterprises, to National Dairy Queen Development Co. SN 652,509. Pub. 2–14–56. Filed 8–31–53.

626,313. X-SEA-LNT AND DESIGN. Buffalo Cooked Shrimp Co., Inc., from Buffalo Cooked Shrimp Company. SN 652,829. Pub. 2–14–56. Filed 9–8–53.

626,314. TIGRE ROJO AND DESIGN. Farmers' Rice Growers Cooperative. SN 654,962. Pub. 10–4–55. Filed 10–19–53.

626,315. FRIGID QUEEN. John B. Santus. SN 656,592. Pub. 1–4–55. Filed 11–18–53.

626,316. PROTREA. Grace Chemical Company, to W. R. Grace & Co. SN 663,366. Pub. 2–14–56. Filed 3–26–54.

626,317. THRIFTY MAID. Dixie Home Stores. SN 663,887. Pub. 2–14–56. Filed 4–5–54.

626,318. FLOR-TROP TROPICAL FRUIT ETC. AND DESIGN. Calavo, Inc., now by merger Calavo Growers of California. SN 671,629. Pub. 2–14–56. Filed 8–13–54.

626,319. STUCKEY'S AND DESIGN. Stuckey's, Inc. SN 673,790. Pub. 2–14–56. Filed 9–24–54.

626,320. POLAR BEAR AND DESIGN. Thurston L. Beavis, d. b. a. Beavis Vending Supply Co. SN 676,229. Pub. 2–14–56. Filed 11–8–54.

626,321. PEARFECTION. Severson's Candles. SN 676,668. Pub. 6–28–55. Filed 11–15–54.

626,322. HURST'S DAIRY SUPREME AND DESIGN. Kerney J. Hurst, d. b. a. Hurst's Dairy Supreme. SN 678,400. Pub. 2–14–56. Filed 12–15–54.

626,323. ETOILE DU NORD AND DESIGN. Burrus Mills, Incorporated, d. b. a. Pan American Flour Mills. SN 679,366. Pub. 2-14-56. Filed 1-4-55.

626,324. CURAVIS Co[illegible], Incorporated. SN 680,065. Pub. 2-14-56. Filed 1-18-55.

626,325. ACRONIZE. American Cyanamid Company. SN 680,573. Pub. 2-14-56. Filed 1-27-55.

626,326. DUEX. The Procter & Gamble Company. SN 683,062. Pub. 2-14-56. Filed 3-8-55.

626,327. SMOKIST. Marhoefer Packing Company, Inc. SN 683,216. Pub. 2-14-56. Filed 3-10-55.

626,328. FRENCH BRAND AND DESIGN. Irving Epstein, d. b. a. French Steak Company. SN 683,866. Pub. 2-14-56. Filed 3-21-55.

626,329. WHITE PRANCER. International Milling Company. SN 684,135. Pub. 2-14-56. Filed 3-24-55.

626,330. HOPPIN JON. James P. Spoto, d. b. a. Northwestern Canning & Packing Co. SN 684,488. Pub. 2-14-56. Filed 3-29-55.

626,331. MYLES AND DESIGN. Morton Salt Company. SN 684,672. Pub. 2-14-56. Filed 3-31-55.

626,332. TROPIC STAR. Berelson, Inc. SN 684,920. Pub. 2-14-56. Filed 4-5-55.

626,333. PICA BELLA. Ronald L. Mamlok, d. b. a. R. Mamlok. SN 684,952. Pub. 2-14-56. Filed 4-5-55.

626,334. LA NINFA. Ronald L. Mamlok, d. b. a. R. Mamlok. SN 684,953. Pub. 2-14-56. Filed 4-5-55.

626,335. DOLCOSEAL. Dodge & Olcott, Inc. SN 686,358. Pub. 2-14-56. Filed 4-27-55.

626,336. R & G. R. & G. Distributors, Inc. SN 686,691. Pub. 2-14-56. Filed 5-2-55.

626,337. PIERCO AND DESIGN. The Pierce Oil Products Corporation. SN 687,808. Pub. 2-14-56. Filed 5-18-55.

626,338. EVANGELINE. Evangeline Pepper & Food Products, Inc. SN 687,927. Pub. 2-14-56. Filed 5-20-55.

626,339. CROWN AND DESIGN AND REPRESENTATION OF A CROWN. Farmers' Rice Growers Cooperative. SN 687,929. Pub. 2-14-56. Filed 5-20-55.

626,340. OREGON TRAIL. Northwest Packing Company. SN 688,065. Pub. 2-14-56. Filed 5-23-55.

626,341. FIESTA. Prepared Foods, Inc. SN 688,186. Pub. 2-14-56. Filed 5-24-55.

626,342. APPLEOLA FARMS. Porter L. Crane. SN 688,507. Pub. 2-14-56. Filed 5-31-55.

626,343. SOLPHOS. Meat Industry Suppliers, Inc. SN 688,743. Pub. 2-14-56. Filed 6-2-55.

626,344. CASH REWARD. Martin Produce, Inc. SN 688,831. Pub. 2-14-56. Filed 6-3-55.

626,345. WALBECK. Walter C. Becker, d. b. a. Walbeck Foods. SN 689,018. Pub. 2-14-56. Filed 6-7-55.

626,346. FYNE-SPRED AND DESIGN. Food Fair Stores, Inc. SN 689,031. Pub. 2-14-56. Filed 6-7-55.

626,347. TULIP AND DESIGN OF A TULIP. The Borden Company. SN 689,265. Pub. 2-14-56. Filed 6-10-55.

626,348. VALIO AND DESIGN. Voinvienti-Osuuslike Valio r. l., d. b. a. Valio Co-Operative Butter Export Association. SN 689,320. Pub. 2-14-56. Filed 6-10-55.

626,349. CASERTA. Armour and Company. SN 689,454. Pub. 2-14-56. Filed 6-14-55.

626,350. ST. HELENA. Snively Groves, Inc. SN 689,525. Pub. 2-14-56. Filed 6-14-55.

626,351. MR. ORANGE. Mutual Orange Distributors, now by change of name Pure Gold. SN 689,639. Pub. 2-14-56. Filed 6-16-55.

626,352. MR. LEMON. Mutual Orange Distributors, now by change of name Pure Gold. SN 689,640. Pub. 2-14-56. Filed 6-16-55.

626,353. MR. AVOCADO. Mutual Orange Distributors, now by change of name Pure Gold. SN 689,641. Pub. 2-14-56. Filed 6-16-55.

626,354. MR. GRAPEFRUIT. Mutual Orange Distributors, now by change of name Pure Gold. SN 689,642. Pub. 2-14-56. Filed 6-16-55.

626,355. TASTELATION. Taste Engineering, Inc. SN 689,770. Pub. 2-14-56. Filed 6-17-55.

626,356. CAROLATE. Tom Cox, d. b. a. Good-Health Confections. SN 689,809. Pub. 2-14-56. Filed 6-20-55.

626,357. SEA BREEZE. Kern Foods, Inc. SN 690,086. Pub. 2-14-56. Filed 6-23-55.

626,358. BIG VALUE. Milford Canning Company. SN 690,388. Pub. 2-14-56. Filed 6-28-55.

626,359. PAT 'N MIKE. W. H Hairston, d. b. a. Hairston Produce Company. SN 690,464. Pub. 2-14-56. Filed 6-29-55.

CLASS 47

626,360. NO. 30. Munson G. Shaw Co., Inc. SN 670,808. Pub. 2-14-56. Filed 7-29-54.

626,361. REAL COMPANHIA VELHA. Companhia Geral da Agricultura das Vinhas do Alto Douro, S. A. R. L. SN 681,326. Pub. 2-14-56. Filed 1-19-55.

626,362. DESIGN OF ROSE IN GLASS. Italian Swiss Colony. SN 694,067. Pub. 2-14-56. Filed 9-1-55.

CLASS 48

626,363. DESIGN OF UNICORN. Arthur Guinness Son & Co., Ltd. SN 683,877. Pub. 2-14-56. Filed 3-21-55.

626,364. DESIGN OF INDIAN WOMAN. American Brewery, Incorporated. SN 691,601. Pub. 2-14-56. Filed 7-20-55.

626,365. DESIGN OF SHIELD. International Union of United Brewery, Flour, Cereal, Soft Drink and Distillery Workers of America. SN 695,064. COLLECTIVE MARK. Pub. 2-14-56. Filed 8-5-55.

CLASS 49

626,366. GREEN CIRCLE AND DESIGN. Esbeco Distilling Corporation. SN 693,452. Pub. 2-7-56. Filed 8-22-55.

626,367. BALLERINA AND DESIGN. Max Sobel Wholesale Liquors. SN 694,096. Pub. 2-14-56. Filed 9-1-55.

CLASS 50

626,368. DAY-N-NIGHT. Wendell C. Spear, d. b. a. Spear Engineering Company. SN 657,384. Pub. 2-14-56. Filed 12-3-53.

626,369. SAFETY SCOPE. Western Progress, Inc. SN 679,622. Pub. 2-14-56. Filed 1-7-55.

626,370. SAVE-ALL FARROWER. Ag. Engineering Co. SN 684,376. Pub. 2-14-56. Filed 3-29-55.

626,371. WEST PENN ETC. AND DESIGN. West Penn Closure Corporation. SN 686,346. Pub. 2-14-56. Filed 4-26-55.

626,372. CABANA RAMA. Ernest Chandler, Inc. SN 687,351. Pub. 2-14-56. Filed 5-12-55.

626,373. FLAPPERS. Glostex Products, Inc. SN 694,363. Pub. 2-14-56. Filed 9-8-55.

CLASS 51

626,374. "KERAGENE." Harper Method, to Harper Method, Inc. SN 661,196. Pub. 2-14-56. Filed 2-17-54.

626,375. SUN 'N' SURF. Mathieson Chemical Corporation, now by merger and change of name Olin Mathieson Chemical Corporation. SN 663,928. Pub. 6-21-55. Filed 4-5-54.

626,376. CYNSTIK. Vicdeal, Inc. SN 664,368. Pub. 2-14-56. Filed 4-12-54.

626,377. RÉGÉ-COLOR. Societe Monsavon-L'Oreal, Societe Anonyme, d. b. a. L'Oreal-Paris. SN 674,708. Pub. 2-14-56. Filed 10-12-54.

626,378. SCENTED GOLD. John Badovinac, d. b. a. Badovinac's French Perfume Company and also as Badovinac. SN 675,355. Pub. 2-14-56. Filed 10-25-54.

626,379. "SO NATURAL!" The Realistic Company. SN 675,431. Pub. 2-14-56. Filed 10-25-54.

626,380. FULLER'S QUALITY. Fuller Products Co. SN 675,556. Pub. 2-14-56. Filed 10-27-54.

626,381. SUPER OREAL BLANC. Societe Monsavon-L'Oreal, Societe Anonyme, d. b. a. L'Oreal-Paris. SN 677,612. Pub. 2-14-56. Filed 12-1-54.

626,382. 3 COINS IN THE FOUNTAIN AND DESIGN. Master Merchandise Corp. SN 680,286. Pub. 2-14-56. Filed 1-21-55.

626,383. SARDO. Sardeau. SN 681,303. Pub. 2-14-56. Filed 2-8-55.

626,384. RED TAPE. Max Factor & Co. SN 681,928. Pub. 2-14-56. Filed 2-18-55.

626,385. KAY VEL AND DESIGN. Spaulding B. Settle, Sr., d. b. a. Bedford Distributing Company. SN 683,563. Pub. 2-14-56. Filed 3-15-55.

626,386. WELLA-LUSTRA. The Wella Corporation. SN 684,000. Pub. 2-14-56. Filed 3-22-55.

CLASS 52

626,387. GEOMETRIC DESIGN. Arnold Sampson, d. b. a. E-Z-Est Products Co. SN 670,857. Pub. 2-14-56. Filed 7-30-54.

626,388. LADY AILEEN. Industrial Soap Company. SN 679,845. Pub. 2-14-56. Filed 1-13-55.

Service Marks

CLASS 100

626,389. BILLIARD AND BOWLING INSTITUTE OF AMERICA AND DESIGN. Billiard & Bowling Institute of America. SN 686,800. Pub. 2-14-56. Filed 5-4-55.

CLASS 101

626,390. HIGH FIDELITY CERTIFIED BLUE CHIP ETC. AND DESIGN. Rogers Engraving Co., Inc. SN 685,403. Pub. 2-14-56. Filed 4-12-55.

CLASS 102

626,391. "GOODBYE ANXIETY." A. Gordon Merry, d. b. a. A. Gordon Merry Agency; A. Gordon Merry, Jr., administrator of the estate of A. Gordon Merry, deceased. SN 658,852. Pub. 2-14-56. Filed 12-31-53.

626,392. THE CONGER PLAN ETC. AND DESIGN. Conger Life Insurance Company. SN 682,402. Pub. 2-14-56. Filed 2-28-55.

626,393. ONE STOP BANKING. Fidelity Union Trust Company. SN 689,830. Pub. 2-14-56. Filed 6-20-55.

CLASS 106

626,394. PERMA-SHRUNK. American-London Shrinkers Corporation. SN 684,182. Pub. 2-14-56. Filed 3-25-55.

CLASS 107

626,395. INTERNATIONAL TOASTMISTRESS AND DESIGN. International Toastmistress Clubs, Inc. SN 682,435. COLLECTIVE MARK. Pub. 2-14-56. Filed 2-28-55.

Certification Marks

CLASS A

626,396. SCR CORNER POLE. Structural Clay Products Research Foundation. SN 671,391. Pub. 12-20-55. Filed 8-9-54.

626,397. VIRGINIA ETC. AND DESIGN. Virginia State Chamber of Commerce, Inc. SN 685,538. Pub. 2-14-56. Filed 4-14-55.

626,398. AN. United States Department of the Navy, Material and Services Bureau of Aeronautics. SN 690,508. Pub. 2-14-56. Filed 6-29-55.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 18

626,399. Keystone Laboratories, Inc., d. b. a. Nerv-Aid Company, Memphis, Tenn. SN 692,403. Filed P. R. 8-3-55. Am. S. R. 2-1-56.

NERV-AID

For Preparation in Tablet Form To Relieve Simple Nervousness, Sleeplessness, Restlessness, Nervous Irritability, Excitability, and Nervous Headache.
First use Jan. 13, 1955.

CLASS 46

626,400. Woodford-Warner Corporation, Chicago, Ill., to Beatrice Foods Co., Chicago, Ill. SN 678,899. Filed P. R. 12-23-54. Am. S. R. 12-29-55.

MAKE-A-SHAKE

For Preparation in Powder Form for Making Chocolate Flavored Milk Drinks.
First use Dec. 15, 1954.

626,401. The Borden Company, New York, N. Y. SN 696,014. Filed 10-7-55.

"THE CHAMPAGNE OF SWISS"

For Cheese.
First use Oct. 4, 1954.

Service Mark

CLASS 102

626,402. Jefferson Cleaners, South Arlington, Va. SN 689,978. Filed 6-15-55.

You wear em & mess em
We clean em & press em

For Cleaning, Pressing, and Redyeing of Clothing and Wearing Apparel.
First use October 1932.

TRADEMARK REGISTRATIONS RENEWED

107,062. EL CAPITAN. Cl. 46. 11-9-15.
108,371. DESIGN OF MALTESE CROSS. Cl. 44. 2-1-16.
108,372. GOLD CROSS BRAND. Cl. 44. 2-1-16.
109,837. PUSSY WILLOW. Cl. 42. 4-18-16.
109,838. MADAME BUTTERFLY. Cl. 42. 4-18-16.
110,754. INDESTRUCTIBLE. Cl. 42. 6-13-16.
110,762. TINY TIM. Cl. 46. 6-13-16.
111,105. CHOW CHOW. Cl. 46. 6-27-16.
325,882. MIOGENIC AND DESIGN. Cl. 44. 7-9-35.
329,060. HOUSE OF LOMBARD. Cl. 47. 10-15-35.
329,274. KING'S CROWN. Cl. 46. 10-22-35.
330,338. FUDGKWIK. Cl. 46. 11-26-35.
331,544. INSULBLOX. Cl. 12. 1-14-36.
331,592. ROCKY RIDGE. Cl. 39. 1-14-36.
331,824. KING CAMEL. Cl. 42. 1-21-36.
331,835. A-R MIX. Cl. 12. 1-21-36.
331,923. WORTHMORE. Cl. 46. 1-28-36.
332,444. FIESTA. Cl. 40. 2-11-36.
332,516. "TRAINERS". Cl. 39. 2-18-36.
332,578. DESIGN OF TWO DEERS. Cl. 39. 2-18-36.

333,023. SCANDILEX. Cl. 35. 3–10–36.
333,033. REALASTIC. Cl. 39. 3–10–36.
333,118. ROSESTONE. Cl. 6. 3–10–36.
333,204. CAMEO AND DESIGN. Cl. 46. 3–10–36.
333,617. TAYFYCO ETC. IN CIRCLE. Cl. 14. 3–31–36.
333,805. OLIVER TIRE AND RUBBER CO. AND DESIGN. Cl. 35. 4–7–36.
333,806. ORCO. Cl. 35. 4–7–36.
333,850. PIONEER AND DESIGN. Cl. 46. 4–7–36.
334,014. LIQUID AND DESIGN. Cl. 45. 4–14–36.
334,056. OLIVER AND DESIGN. Cl. 35. 4–21–36.
334,141. VOLTARC. Cl. 21. 4–21–36.
334,173. JUNGLE. Cl. 51. 4–21–36.
334,277. GEM. Cl. 44. 4–28–36.
334,732. "MARVELITE". Cl. 40. 5–12–36.
335,124. SUN GOLDEN OIL. Cl. 15. 5–26–36.
335,231. SEA BLOWN. Cl. 46. 5–26–36.
335,282. JM AND DESIGN. Cl. 23. 6–2–36.
335,423. WALDES ETC. AND DESIGN. Cl. 40. 6–2–36.
335,451. BRASS BAND. Cl. 46. 6–2–36.
335,519. RAMA. Cl. 42. 6–9–36.
335,574. WONDERSOFT. Cl. 37. 6–9–36.
336,219. FASHIONED ON "LINCOLN ROAD". Cl. 39. 6–30–36.
336,295. TROPICAL NIGHT. Cl. 51. 6–30–36.
336,349. VIBREX. Cl. 21. 6–30–36.
336,409. TROPICAL NIGHT. Cl. 51. 7–7–36.

TRADEMARK REGISTRATIONS CANCELED

Section 7

63,320. SANIPURE. Cl. 46. 6–11–07.

Section 8

40,892. AUXILIATOR. Cl. 51. 8–11–03.
54,249. REPRESENTATION OF CROSS. Cl. 44. 6–26–06.
69,039. TARGET GRIP. Cl. 9. 5–19–08.
71,573. BEAR BRAND AND REPRESENTATION OF BEAR. Cl. 46. 12–1–08.
74,531. SHAKER. Cl. 46. 7–20–09.
75,362. "BLISS". Cl. 23. 9–28–09.
141,477. ASCO. Cl. 46. 4–26–21.
229,993. TROJAN WITHIN DIAMOND DESIGN. Cl. 44. 7–12–27.
250,635. HEEP FULL. Cl. 46. 12–11–28.
255,540. VEZ. Cl. 6. 4–23–29.
264,193. PYRAMID AND DESIGN. Cl. 2. 11–19–29.
264,194. RUGBY AND DESIGN. Cl. 2. 11–19–29.
264,195. STAUNCH AND DESIGN. Cl. 2. 11–19–29.
264,196. SPHINX AND DESIGN. Cl. 2. 11–19–29.
264,400. JUNIOR TWINS. Cl. 46. 11–26–29.
265,138. HGF. Cl. 46. 12–17–29.
284,837. THINEX. Cl. 44. 7–7–31.
316,515. G. W. JONES' MONONGAHELA RYE WHISKEY DOUBLE DISTILLED ON COPPER WITHIN CIRCULAR DESIGN. Cl. 49. 8–28–34.
347,596. RECTOPAC. Cl. 21. 6–29–37.
371,849. THERMOIL. Cl. 16. 10–10–39.
381,941. PICADOR AND REPRESENTATION OF PICADOR AND BULL WITHIN OVAL DESIGN. Cl. 46. 10–15–40.
399,669. KERN-ALL. Cl. 46. 1–26–43.
414,869. HIGGINS. Cl. 23. 7–3–45.
415,944. HIGGINS. Cl. 9. 8–21–45.
435,038. VELSICOL V 1068 AND DESIGN. Cl. 6. 12–9–47.
438,689. FETHERWET. Cl. 6. 5–11–48.
518,563. PIE FLAKE. Cl. 46. 12–13–49.
518,564. RAYHART. Cl. 46. 12–13–49.
518,566. BROWN-SALTMAN CALIFORNIA MODERN MODE AND DESIGN. Cl. 32. 12–13–49.
518,567. REVELATION AND DESIGN. Cl. 31. 12–13–49.
518,568. FREE-FLEX. Cl. 35. 12–13–49.
518,569. McCARREN'S AND REPRESENTATION OF TOP HAT, GLOVES AND CANE. Cl. 39. 12–13–49.
518,571. QUALITY E H M CO. Cl. 28. 12–13–49.
518,574. YOU'VE SCRATCHED OURS — NOW WE SCRATCH BACK! AND DESIGN. Cl. 38. 12–13–49.
518,580. STARLINE. Cl. 29. 12–13–49.
518,585. JIGGIN' JIM. Cl. 22. 12–13–49.
518,586. COOK. Cl. 35. 12–13–49.
518,591. MISS SAYLOR'S CRAFTMADE. Cl. 46. 12–13–49.
518,593. BUNKER HILL. Cl. 46. 12–13–49.
518,594. ERA METER CO. Cl. 26. 12–13–49.
518,595. BENJAMIN. Cl. 9. 12–13–49.
518,596. "BENJAMIN FRANKLIN". Cl. 9. 12–13–49.
518,597. H C BENJAMIN. Cl. 9. 12–13–49.
518,598. BENJAMIN. Cl. 9. 12–13–49.
518,608. REPRESENTATION OF SHOE AND HANDS. Cl. 39. 12–13–49.
518,614. REPRESENTATION OF STATUE OF LIBERTY. Cl. 13. 12–13–49.
518,618. DE VORE. Cl. 39. 12–13–49.
518,623. NORGE AND LION EMBLEM. Cl. 31. 12–13–49.
518,624. N AND EMBLEM. Cl. 31. 12–13–49.
518,627. SPECTRIX FASHIONS. Cl. 39. 12–13–49.
518,628. STARDRIFT. Cl. 32. 12–13–49.
518,629. THE SHALI-MART. Cl. 46. 12–13–49.
518,632. CUSTOMAIRE AND REPRESENTATION OF NEEDLE AND SPOOL OF THREAD. Cl. 39. 12–13–49.
518,635. OPPORTUNE. Cl. 46. 12–13–49.
518,636. PATRICK DULUTH AND REPRESENTATION OF TREES. Cl. 39. 12–13–49.
518,637. ARCOLITE. Cl. 39. 12–13–49.
518,639. PAPER CAPER. Cl. 38. 12–13–49.
518,640. REPRESENTATION OF WOMAN CARRYING CLAMS. Cl. 46. 12–13–49.
518,646. STOR-MORE. Cl. 32. 12–13–49.
518,660. HAH. Cl. 28. 12–13–49.
518,666. OLIO ROMINO AND REPRESENTATION OF CHEF. Cl. 46. 12–13–49.
518,674. KENLEE. Cl. 39. 12–13–49.
518,675. QUEEN ELLESSON. Cl. 28. 12–13–49.
518,676. KING ELLESSON. Cl. 28. 12–13–49.
518,677. CIPRA. Cl. 28. 12–13–49.
518,691. CANNA. Cl. 39. 12–13–49.
518,694. GRECIAN. Cl. 26. 12–13–49.
518,696. REPRESENTATION OF CRESCENTS. Cl. 23. 12–13–49.
518,699. "GLAMOUR REST". Cl. 32. 12–13–49.
518,700. SISTERS IN BLACK. Cl. 39. 12–13–49.
518,701. PARSONS PUREAIRE. Cl. 32. 12–13–49.
518,707. WOLVERINE ETC. AND REPRESENTATION OF PIGS AND SHOE. Cl. 39. 12–13–49.
518,718. THE "SUPER-SCIENCE" RELIGION OF SPIRIT! AND SPOOK! Cl. 38. 12–13–49.
518,722. DUCOPA. Cl. 39. 12–13–49.
518,730. FOOTCRAFT. Cl. 39. 12–13–49.
518,735. SL. Cl. 5. 12–13–49.
518,736. VINDEX. Cl. 23. 12–13–49.
518,741. INDIAN SPRING. Cl. 37. 12–13–49.
518,742. REPRESENTATION OF CACTUS. Cl. 1. 12–13–49.
518,743. BUNNIMERE. Cl. 39. 12–13–49.
518,744. TABOTELLE. Cl. 39. 12–13–49.
518,745. MOORE'S AND M WITHIN SHIELD DESIGN. Cl. 31. 12–13–49.
518,747. WOLVERINE. Cl. 23. 12–13–49.
518,749. SPRING JOY. Cl. 1. 12–13–49.
518,753. RIDDELL. Cl. 22. 12–13–49.
518,755. FATSO. Cl. 22. 12–13–49.
518,756. WINTER WONDER. Cl. 39. 12–13–49.
518,757. SILVER LILY. Cl. 46. 12–13–49.
518,762. CHALLENGER. Cl. 26. 12–13–49.
518,764. ACTION. Cl. 22. 12–13–49.
518,770. "MISS NEW LOOK". Cl. 22. 12–13–49.
518,771. QUINTITE. Cl. 1. 12–13–49.
518,772. SILVERMIST. Cl. 32. 12–13–49.
518,773. WYMAN. Cl. 31. 12–13–49.
518,779. COSY NOSY. Cl. 39. 12–13–49.
518,780. ANGELAIRE. Cl. 13. 12–13–49.
518,783. REGAL-X. Cl. 22. 12–13–49.
518,784. THE GOOD FAIRY QUEEN. Cl. 22. 12–13–49.
518,788. ACTUS NEVER LEAK AND REPRESENTATION OF BABY. Cl. 13. 12–13–49.
518,790. CHICO. Cl. 22. 12–13–49.
518,795. META TONE. Cl. 11. 12–13–49.
518,803. "PENA-TREAD" TREADS-OF-STEEL AND REPRESENTATION OF TIRE. Cl. 35. 12–13–49.

518,804. UNIFORMS TAILORED BY "JEFF" AND DESIGN. Cl. 39. 12–13–49.
518,806. NYL-O-VAL. Cl. 39. 12–13–49.
518,807. TINY TROLL. Cl. 39. 12–13–49.
518,808. "RYTWAY". Cl. 13. 12–13–49.
518 809. MILD DUO-COAT AND DESIGN. Cl. 39. 12–13–49.
518 811. SALEM CLOCKS "AMERICA'S FINEST" AND REPRESENTATION OF CLIPPER SHIP WITHIN CIRCULAR DESIGN. Cl. 27. 12–13–49.
518,813. MIS-A-SIP AND REPRESENTATION OF GLASS. Cl. 38. 12–13–49.
518 822. RADIOTIME. Cl. 38. 12–13–49.
518,824. AMCREST. Cl. 28. 12–13–49.
518 835. YOUNG-FAIR TOGS AND REPRESENTATION OF BOY AND GIRL. Cl. 39. 12–13–49.
518,837. BEAUTYSEAL FUR STORAGE AND DESIGN. Cl. 105. 12–13–49.
518 839. BEAUTIFUR AND DESIGN. Cl. 103. 12–13–49.
518,841. BIASTRAIT. Cl. 39. 12–13–49.
518,842. RON LAVIN (RUM) GOLD LABEL ETC. AND DESIGN. Cl. 49. 12–13–49.
518,843. LAVIN RUM ETC. AND DESIGN. Cl. 49. 12–13–49.
518,844. REPRESENTATION OF MAN OPERATING TRACTOR. Cl. 23. 12–13–49.
518 845. ANDERSON. Cl. 34. 12–13–49.
518 846. SEALED HEAT. Cl. 34. 12–13–49.
518,850. SPEEDY CLEAN. Cl. 23. 12–13–49.
518,851. TRU-FLO WITHIN CIRCULAR DESIGN. Cl. 46. 12–13–49.
518,853. MODERN AND DESIGN. Cl. 23. 12–13–49.
518,855. GUIDO'S. Cl. 44. 12–13–49.
518,858. TU-AN-FRO. Cl. 22. 12–13–49.
518,864. MINOTRAPPER. Cl. 22. 12–13–49.
518 865. SHILLITO'S NEEDLE KNIT. Cl. 39. 12–13–49.
518,867. SANI-TERRY. Cl. 42. 12–13–49.
518,868. TENDER-SEALED VALLEY FORGE AND REPRESENTATION OF TURKEY. Cl. 46. 12–13–49.
518,869. KOHLER KOTE. Cl. 15. 12–13–49.
518,870. NU WAY JUSFLUSH. Cl. 39. 12–13–49.
518,872. SPEEDY-CRUST. Cl. 46. 12–13–49.
518,875. FILIPINA. Cl. 39. 12–13–49.
518,876. ZIP-A-PART. Cl. 39. 12–13–49.
518,877. SUDS ME. Cl. 42. 12–13–49.
518,882. MEMBER OF MICHIGAN DENTAL LABORATORY GUILD WITHIN CIRCULAR DESIGN. Cl. 44. 12–13–49.
518,886. MONTE CARLO. Cl. 15. 12–20–49.
518,889. ELECTRO VAPOR AND REPRESENTATION OF LIGHTNING BOLT. Cl. 34. 12–20–49.
518,901. JOAN KENLEY. Cl. 39. 12–20–49.
518,905. THE ORIGINAL DIESEL CENTURY OIL BURNER. Cl. 34. 12–20–49.
518,907. AUDIOID. Cl. 21. 12–20–49.
518,913. FLURAFLEX. Cl. 21. 12–20–49.
518,915. KOLYNOS JOLLY. Cl. 50. 12–20–49.
518,916. ST BERNARD. Cl. 46. 12–20–49.
518,919. PEDAL PACER. Cl. 22. 12–20–49.
518,925. FLOOD-O-LITE AND DESIGN. Cl. 21. 12–20–49.
518,927. N. V. DE SPHINX V/H PETRUS REGOUT & CO MAASTRICHT AND REPRESENTATION OF SPHINX. Cl. 33. 12–20–49.
518,931. HOOK-IT-TIE. Cl. 40. 12–20–49.
518,933. THE MAGIC WINDOW AND REPRESENTATION OF STARS. Cl. 21. 12–20–49.
518,934. SPOT-O-GRAPH. Cl. 44. 12–20–49.
518,939. E. W. DOUBET HYBRIDS AND REPRESENTATION OF EAR OF CORN. Cl. 1. 12–20–49.
518,940. TELEMETROSCOPE. Cl. 26. 12–20–49.
518,941. PEARLTONE. Cl. 34. 12–20–49.
518,949. ATOMIC. Cl. 3. 12–20–49.
518,955. COMFORTZONE. Cl. 34. 12–20–49.
518,958. UNICORN. Cl. 7. 12–20–49.
518,976. INSTA-CLIP. Cl. 26. 12–20–49.
518,991. CUMBERLAND. Cl. 22. 12–20–49.
518,992. EBROK. Cl. 21. 12–20–49.
518,994. SNC AND DESIGN. Cl. 21. 12–20–49.
518,996. STERIL-MASTER. Cl. 44. 12–20–49.
518,999. HOT-SHOT. Cl. 22. 12–20–49.
519,001. MONTICELLO. Cl. 34. 12–20–49.
519 002. MOUNT VERNON. Cl. 34. 12–20–49.
519,003. M WITHIN OVAL DESIGN. Cl. 28. 12–20–49.
519,004. KIDDIE DIGGERS. Cl. 28. 12–20–49.
519.008. GAHNA GOAT-CALFETTE. Cl. 1. 12–20–49.
519,010. AMBASSADOR. Cl. 26. 12–20–49.
519,011. GLOBE TROTTER. Cl. 26. 12–20–49.
519,012. NEW LOOK. Cl. 26. 12–20–49.
519 013. RADIANT. Cl. 26. 12–20–49.
519,020. ALBATRUM. Cl. 15. 12–20–49.
519,021. CERATRUM. Cl. 15. 12–20–49.
519,022. H. MILWARD & SONS HELIX NEEDLES ETC. AND REPRESENTATION OF CLIPPER SHIP WITHIN RECTANGULAR DESIGN. Cl. 40. 12–20–49.
519,023. DAHLIA DIAMONDS AND DESIGN. Cl. 28. 12–20–49.
519,026. REPRESENTATION OF WINGED OVAL. Cl. 15. 12–20–49.
519 027. MANHATTAN. Cl. 1. 12–20–49.
519,032. DAIRY-VAC. Cl. 21. 12–20–49.
519,035. KOMPA-KIT. Cl. 2. 12–20–49.
519,037. TOPSALL DOUBLE DUTY LUBRICANTS "TOPS FOR LUBRICATION" AND REPRESENTATION OF TOP WITHIN OVAL DESIGN. Cl. 15. 12–20–49.
519,039. "SIR JOHN". Cl. 39. 12–20–49.
519,040. WESCONIX. Cl. 21. 12–20–49.
519 041. BARDEN. Cl. 1. 12–20–49.
519,046. CUNISPHERE. Cl. 21. 12–20–49.
519 047. DIVINING ROD. Cl. 21. 12–20–49.
519,051. "HORNET". Cl. 22. 12–20–49.
519,052. JET-LINE AND REPRESENTATION OF JET. Cl. 21. 12–20–49.
519,054. KATE GREENAWAY. Cl. 30. 12–20–49.
519,057. ROLLER-SMITH. Cl. 21. 12–20–49.
519,058. J. A. V. A. Cl. 46. 12–20–49.
519,059. "AEQUITAS" AND AE WITHIN TRIANGULAR DESIGN. Cl. 26. 12–20–49.
519,060. VIS-A-RAY DURO TEST AND DESIGN. Cl. 21. 12–20–49.
519,067. DIACITE. Cl. 44. 12–20–49.
519,068. DURACITE. Cl. 44. 12–20–49.
519,070. JIFFY. Cl. 26. 12–20–49.
519,071. LOTEX. Cl. 1. 12–20–49.
519,072. CSDM AND REPRESENTATION OF CROSS. Cl. 15. 12–20–49.
519,073. HI TOTEM. Cl. 26. 12–20–49.
519,076. HARD J P FINN AND DESIGN. Cl. 12. 12–20–49.
519,077 BLOCK HOUSE. Cl. 40. 12–20–49.
519,078. HARMAN. Cl. 28. 12–20–49.
519,088. HOLIDAY. Cl. 26. 12–20–49.
519 090. POLY-MITE. Cl. 21. 12–20–49.
519,091. LAMBCO AND DESIGN. Cl. 16. 12–20–49.
519,093. G AND DESIGN. Cl. 28. 12–20–49.
519,097. STOWAWAY. Cl. 3. 12–20–49.
519,100. ATCO WITHIN DIAMOND DESIGN. Cl. 34. 12–20–49.
519,101. ATLAS. Cl. 34. 12–20–49.
519,102. DIAMOND AND DESIGN. Cl. 34. 12–20–49.
519,103. WANDS AND DESIGN. Cl. 34. 12–20–49.
519,110. JENDOE. Cl. 3. 12–20–49.
519,112. EPP WITHIN DIAMOND DESIGN. Cl. 26. 12–20–49.
519,113. LOOM LORE. Cl. 43. 12–20–49.
519,114. SAY LIN MIL AND DESIGN. Cl. 43. 12–20–49.
519,116. CONTINENTAL AND REPRESENTATION OF GLOBE AND STARS. Cl. 11. 12–20–49.
519,117. BEAUTILITY. Cl. 3. 12–20–49.
519,118. KNITILITY. Cl. 3. 12–20–49.
519,121. WILLY WOOLY AND DESIGN. Cl. 43. 12–20–49.
519,123. SEL FIT. Cl. 28. 12–20–49.
519,130. MODERNE. Cl. 2. 12–20–49.
519,132. NEO-FORME. Cl. 44. 12–20–49.
519,136. WEAR CHEK AND REPRESENTATION OF CHECK MARK. Cl. 35. 12–20–49.
519,139. U-FLY IT. Cl. 22. 12–20–49.
519,140. EGG D'OUVRES. Cl. 33. 12–20–49.
519,141. H HARDY AND DESIGN. Cl. 1. 12–20–49.
519,142. KWIK KOOL. Cl. 31. 12–20–49.
519,143. THE HOUSE OF TOMORROW. Cl. 12. 12–20–49.

Section 18

227,954. LORD CALVERT. Cl. 45. 5–17–27. Canc. 6543.
341,410. KASHMOOR. Cl. 39. 12–8–36. Canc. 6622.
349,868. H. R. H. Cl. 49. 9–7–37. Canc. 6542.
363,031. NICHOLAS. Cl. 49. 12–6–38. Canc. 6580.
385,769. LILLIAN RUSSELL. Cl. 39. 3–18–41. Canc. 6577.

413,048. GLASHINE. Cl. 4. 4–3–45. Canc. 6557.
425,423. CHATEAU DE JON. Cl. 47. 11–19–46. Canc. 6531.
584,719. VISIONEERING. Cl. 100. 1–12–54. Canc. 6468.
601,016. LOVE SONG. Cl. 23. 1–18–55. Canc. 6608.
578,805. IRVAN FASHION. Cl. 39. 8–18–53. Intf. 5248.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

114,890. WALK OVER AND DESIGN. Cl. 39. 1–9–17. Geo. E. Keith Company, Brockton, Mass. Amended to appear:

Walk Over

329,022. DESIGN OF ANCHOR. Cl. 33. 10–15–35. Salem Glass Works. Anchor Hocking Glass Corporation, Lancaster, Ohio. Corrected: In line 2 of the renewal certificate, "Pennsylvania" should be *Ohio*.

331,665. DUROBAR. Cl. 21. 1–14–36. National Electric Screen Corporation. Gardner Manufacturing Co., Horicon, Wis. Corrected: In the certificate, lines 2 and 16; in the heading and signature to the statement; and in line 1 of the statement, "Co." should be *Corporation*.

333,367. A. P. L. Cl. 18. 3–17–36. Ayerst, McKenna & Harrison, Ltd. Division of American Home Products Corporation, doing business as Ayerst Laboratories, New York, N. Y. Corrected: In line 3 of the renewal certificate, after "Laboratories," *Division of American Home Products Corporation*, should be inserted.

333,631. VASELINE CAMPHOR ICE ETC. AND DESIGN. Cl. 18. 3–31–36. Chesebrough Manufacturing Company, Consolidated. Chesebrough-Pond's Inc., New York, N. Y. Amended to appear:



352,718. DESIGN OF INDIAN HEAD ETC. Cl. 23. 12–7–37. Blackhawk Mfg. Co., Milwaukee, Wis. Amended: In lines 7 and 8 of the statement "and wrench sets" is deleted.

424,871. BLACKHAWK. Cl. 23. 10–29–46. Blackhawk Mfg. Co., Milwaukee, Wis. Amended: In lines 6 to 11 of the statement "socket wrenches; box wrenches; open end wrenches; ratchet wrenches; screw driving wrenches; torque indicating wrenches; tire rim wrenches; universal joint wrenches; pliers;" is deleted.

569,369. DESIGN—HEXAGON WITHIN A CIRCLE ETC. Cl. 23. 1–20–53. Blackhawk Mfg. Co., Milwaukee, Wis. Amended: In lines 7 to 12 of the statement "socket wrenches; box wrenches; open end wrenches; ratchet wrenches; screw driving wrenches; torque indicating wrenches; tire rim wrenches; universal joint wrenches; pliers;" is deleted.

578,454. ISMAEL TOCORNAL AND DESIGN. Cl. 47. 8–11–53. Vina San Jose Tocornal, Santiago, Chile. Amended: In the certificate, lines 2 and 13; in the heading and signature to the statement; and in line 1 of the statement, "Comunidad" is deleted.

601,979. ALL WEATHER "JAC" AND DESIGN. Cl. 39. 2–8–55. Central Sportwear Mfg. Co., Inc., Boston, Mass. Amended to appear:

"ALL WEATHER JAC"

604,054. DEPOS-OFF AND DESIGN. Cl. 52. 3–29–55. Sam A. Pactor, doing business as Sam Pactor Products, Indianapolis, Ind. Amended to appear:

DEPOS-OFF

612,253. VELVETENE. Cl. 46. 9–13–55. Anderson, Clayton & Co., Sherman, Tex. Corrected: In the certificate, line 3 (second occurrence), and in line 1 of the printed copy of the registration, "Texas" should be *Delaware*.

614,555. HOPKINS SULF-A-SILE. Cl. 46. 10–18–55. Hopkins Agricultural Chemical Co., Madison, Wis. Corrected: In line 1, column 2 of the printed copy of the registration, "preservatives" should be *additives*.

614,609. NORCROSS. Cl. 1. 10–25–55. Earl W. Garrison, Bridgeton, N. J. Corrected: In line 4 of the certificate and line 3 of the printed copy of the registration "Bridgetown" should be *Bridgeton*.

618,366. GOLDEN GIRL. Cl. 46. 12–27–55. Ghiselli Bros., Inc., San Francisco, Calif. Corrected: In the certificate, lines 2 and 13, and in line 1 of the printed copy of the registration, "Chiselli" should be *Ghiselli*.

618,840. DESIGN (ARROWS). Cl. 6. 1–10–56. Pest Control Limited, now by change of name to Fisons Pest Control Limited, Bourn, England. Corrected: In the certificate, lines 4 and 14, and in line 3 of the printed copy of the registration, "Fisous" should be *Fisons*.

621,484. PANTRY PIE ETC. AND DESIGN. Cl. 46. 2–14–56. Pyplan Company, Bloomfield, N. J. Corrected: In line 3 of the second column of the printed copy of the registration "609,677" should be *609,667*.

623,283. IT'S VAC-U-MADE. Cl. 46. 3–13–56. V. La Rosa & Sons, Inc., Brooklyn, N. Y. Corrected: In lines 2 and 13 of the certificate, and in line 1 of the printed copy of the registration, "Larosa" should be *La Rosa*.

623,570. MILLONARIO. Cl. 42. 3–20–56. Neuss, Hesslein & Co., Inc., New York, N. Y. Corrected: In column 2, line 1, of the printed copy of the registration (second occurrence), "for" should be *of*.

TRADEMARK REGISTRATIONS—NEW CERTIFICATES

New Certificates issued under sections 7(c), 7(f), 7(g) of the Trademark Act of 1946 for the unexpired term of the original registrations.

358,590. FLING. Cl. 51. R & S Dime Stores Inc. 7–19–38. New Cert. Sec. 7(c), to The Kendall Company, Walpole, Mass., 5–1–56.

402,155. ESQUIRE PROPHYLACTICS. Cl. 44. Crown Rubber Company, assignor to Harry Goldstein, doing business as Crown Drug & Sundries Company. 7–6–43. New Cert. Sec. 7(c), to Julius Schmid, Inc., New York, N. Y. 5–1–56.

523,817. CHINC. Cl. 12. The Allan Corporation. 4–11–50. New Cert. Sec. 7(c), to Allan Cheney, Trenton, N. J., 5–1–56.

538,056. SETEBAID. Cl. 18. William G. Eckert, doing business as Setebaid Company. 2–20–51. New Cert. Sec. 7(c), to Glenn C. Matteson, Portland, Oreg., 5–1–56.

542,675. DU KANE. Cl. 21. Operadio Manufacturing Co. 5–22–51. New Cert. Sec. 7(c), to Du Kane Corporation, St. Charles, Ill., 5–1–56.

569,503. DIAX. Cl. 26. Erich Student, doing business as "Studiophot". 1–20–53. New Cert. Sec. 7(c), to Walter Voss, doing business as Diax-Kamera-Werk, Ulm-Donau, Germany, 5–1–56.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 6

406,549. Apr. 11, 1944. Richard W. Taylor, Boston, Mass. Pub. by registrant.

RTW

For Finishing Compounds for Use in the Manufacture or Treatment of Textile Fibres and Fabrics, Natural and Synthetic, Also Leather, Paper and Cork Goods, Including Sulphonated and Saponified Vegetable and Animal Oils, Tallows and Fats, Emulsified Mineral Oils, Sizes, Softeners, Water Repellents, Penetrants, Wettingout Agents, Solvents and the Like, for the Purpose of Improving the Appearance of the Goods by Giving Lustre and Depth of Shade, or for Imparting Softness, or for Providing More Body or Stiffness or for Rendering the Goods Water Repellent or Water Absorbent.

CLASS 11

29,290. Dec. 8, 1896. American Writing Machine Company, Ilion, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

"INVINCIBLE"

For Typewriter Ribbons, Typewriter Carbon Papers, Typewriting Writing Papers, Typewriter Oil, Notebooks, Pencils, and Typewriter Rubber Erasers.

58,672. Dec. 18, 1906. Wyckoff, Seamans & Benedict, Ilion, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

Regal

For Carbon Paper and Typewriter Ribbons.

120,779. Mar. 5, 1918. Remington Typewriter Company, Ilion and New York, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

RIVAL

For Carbon Paper.

262,537. Oct. 15, 1929. Remington Typewriter Company, Ilion and New York, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

REMRANDCO

For Ribbons for Typewriters and Other Writing or Printing Machines.

343,333. Feb. 16, 1937. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

Patrician

For Typewriter Ribbons.

365,241. Feb. 28, 1939. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

REMRANDCO

For Carbon Paper.

CLASS 21

411,715. Jan. 30, 1945. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

VERICON

For Electron Discharge Devices Including Radio and Television Tubes.

CLASS 23

395,147. May 12, 1942. A. Dalkin Co., Chicago, Ill. Pub. by American Machine & Foundry Company, New York, N. Y.

ADCO

For Vending Machines.

CLASS 32

317,262. Sept. 18, 1934. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

CUSHIONER

For Chairs, Particularly Posture Chairs for Use in Offices, Households, Etc.

353,855. Jan. 18, 1938. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

ZEPHYR

For Chairs, Particularly Posture Chairs.

CLASS 37

18,844. Jan. 13, 1891. Wyckoff, Seamans & Benedict, New York, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

W S & B PARAGON LINEN

For Writing and Typewriter Paper.

18,845. Jan. 13, 1891. Wyckoff, Seamans & Benedict, New York, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

WS & B REGENT LINEN

For Writing and Typewriter Paper.

211,505. Apr. 13, 1926. Remington Typewriter Company, Ilion and New York, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

REMTICO

For Typewriter Paper.

CLASS 52

417,835. Nov. 20, 1945. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

REM-MOVER

The word "Mover" is disclaimed apart from the mark as shown.

For Liquid Hand Cleaner and Hand Cleansing Cream for Removing Hectograph Carbon Ink and Similar Inks and Chemical Stains.

LIST OF REGISTRANTS OF TRADEMARKS

AG. Engineering Co., Chestertown, Md. 626,370, pub. 2–14–56. Cl. 30.
A. & R. Lettuce Co.: *See*—
Aiello, Peter F., & Co.
Accordion Manufacturers and Wholesalers Outlet, Chicago, Ill. 626,200, pub. 2–14–56. Cl. 36.
Actus Corp., The, Mount Vernon, N. Y. 518,788, canc. Cl. 13.
Ahrens, Gerhard W., d. b. a. Dermaphor Laboratories, Brooklyn, N. Y. 626,092, pub. 2–14–56. Cl. 18.
Aiello, Peter F., & Co., San Jose, to A. & R. Lettuce Co., Salinas, Calif. 329,274, ren. 10–22–55. Cl. 46.
Airborne Shoes Ltd., Leicester, England. 626,267, pub. 2–14–56. Cl. 39.
Air-Way Industries, Inc., Toledo, Ohio. 626,129, pub. 2–14–56. Cl. 21.
Aktiengesellschaft Cilander, Herisau, Switzerland. 626,288, pub. 2–14–56. Cl. 42.
Allan Corp., The, to Allan Cheney, Trenton, N. J. 523,817, new cert. Cl. 12.
American Automobile Association (Inc.), The, Washington, D. C. 626,058, pub. 2–14–56. Cl. 8.
American Automobile Association (Inc.), The, Washington, D. C. 626,280, pub. 2–14–56. Cl. 39.
American Brewery, Inc., Baltimore, Md. 626,364, pub. 2–14–56. Cl. 48.
American Carbon Paper Mfg. Co., Ennis, Tex. 519,116, canc. Cl. 11.
American Compost Corp., The, to The International Compost Corp., Cumberland, Md. 626,065, pub. 2–14–56. Cl. 10.
American Cyanamid Co., New York, N. Y. 626,325, pub. 2–14–56. Cl. 46.
American-London Shrinkers Corp., New York, N. Y. 626,394, pub. 2–14–56. Cl. 106.
American Machine & Foundry Co.: *See*—
Dalkin, A., Co.
American Metallurgical Products Co., Pittsburgh, Pa. 626,043, pub. 2–14–56. Cl. 6.
American Nickeloid Co., Peru, Ill. 626,074, pub. 2–14–56. Cl. 14.
American Rock Wool Corp., Wabash, Ind. 626,188, pub. 2–21–56. Cl. 31.
American Stores Co., Philadelphia, Pa. 141,477, canc. Cl. 46.
American Termicide Co., Inc., Atlanta, Ga. 626,051, pub. 2–14–56. Cl. 6.
American Type Founders Co., Inc.: *See*—
American Type Founders, Inc.
American Type Founders, Inc., to American Type Founders Co., Inc., Elizabeth, N. J. 626,166, pub. 2–14–56. Cl. 23.
American Weapons Corp., Burbank, Calif. 626,062–3, pub. 2–14–56. Cl. 9.
American Writing Machine Co., Ilion, by Sperry Rand Corp., New York, N. Y. 29,290, 12(c) pub. 5–1–56. Cl. 11.
Amerotron Corp., New York, N. Y. 626,289, pub. 2–14–56. Cl. 42.
Anchor Hocking Glass Corp.: *See*—
Salem Glass Works.
Anderson, Clayton & Co., Sherman, Tex. 612,253, cor. Cl. 46.
Anderson Machine Corp., Jamestown, N. Y., now by change of name Anderson Screw Products, Inc. 626,070, pub. 2–14–56. Cl. 13.
Anderson, Marshall: *See*—
Randolph Marketing Co.
Anderson Screw Products, Inc.: *See*—
Anderson Machine Corp.
Anderson Stove Co., Inc., Anderson, Ind. 518,845–6, canc. Cl. 34.
Apex Specialties Co.: *See*—
Carson, George M.
Archer Projects, Inc., Chicago, Ill. 519,143, canc. Cl. 12.
Arizona Barite Co., Mesa, Ariz. 518,742, canc. Cl. 1.
Armour and Co., Chicago, Ill. 626,349, pub. 2–14–56. Cl. 46.
Armsil Laboratory: *See*—
Silberg, Benjamin H.
Arnold, Schwinn & Co., Chicago, Ill. 626,119, pub. 2–14–56. Cl. 19.
Arrowsmith Tool and Die Corp., Los Angeles, Calif. 626,071, pub. 2–14–56. Cl. 13.
Artcraft Optical Co., Inc., Rochester, N. Y. 519,088, canc. Cl. 26.
Associated Distributors, Inc.: *See*—
Savage, Inc.
Associated Merchandising Corp., The, New York, N. Y. 518,824, canc. Cl. 28.
Associated Needlecrafts, New York, N. Y. 519,117–18, canc. Cl. 3.
Atlas Heating and Ventilating Co., Ltd., San Francisco, Calif. 519,100–1, canc. Cl. 34.
Atwell Creations: *See*—
Atwell, Harry N.
Atwell, Harry N., d. b. a. Atwell Creations, Milwaukee, Wis. 518,585, canc. Cl. 22.
Auburn Rubber Corp., Auburn, Ind. 518,637, canc. Cl. 39.
Ayerst Laboratories: *See*—
Ayerst, McKenna & Harrison, Ltd., Division of American Home Products Corp.
Ayerst, McKenna & Harrison, Ltd., Division of American Home Products Corp., d. b. a. Ayerst Laboratories, New York, N. Y. 333,367, cor. Cl. 18.
Azzarello, Jas. V., El Centro, Calif. 519,058, canc. Cl. 46.
B-L Electric Mfg. Co., The, St. Louis, Mo. 347,596, canc. Cl. 21.
Baartman & Koning N. V., Sassenheim, Netherlands. 518,749, canc. Cl. 1.
Badovinac: *See*—
Badovinac, John.
Badovinac, John, d. b. a. Badovinac's French Perfume Co., and also as Badovinac, Seattle, Wash. 626,378, pub. 2–14–56. Cl. 51.
Badovinac's French Perfume Co.: *See*—
Badovinac, John.
Ball Drainage Co.: *See*—
Ball, Malcolm A.
Ball, Malcolm A., d. b. a. Ball Drainage Co., Elgin, Ill. 626,163, pub. 2–14–56. Cl. 23.
Barry, J. J., & Co.: *See*—
Barry, James J., Jr.
Barry, James J., Jr., d. b. a. J. J. Barry & Co., Chicago, Ill. 626,283, pub. 2–14–56. Cl. 40.
Bator Scientific Products Co.: *See*—
Long, Leonard.
Beacon Plastics Corp., Newton, Mass. 626,034, pub. 2–14–56. Cl. 2.
Beatrice Foods Co.: *See*—
Woodford-Warner Corp.
Beau Brummell Ties, Inc.: *See*—
Weisbaum Bros., Brower Co., The.
Beauty Luster, Inc., Shreveport, La. 626,037, pub. 2–14–56. Cl. 4.
Becker, Walter C., d. b. a. Walbeck Foods, Kennett Square, Pa. 626,345, pub. 2–14–56. Cl. 46.
Bedford Distributing Co.: *See*—
Settle, Spaulding B., Sr.
Beenstock, Jack N., d. b. a. Standard Kiddies Sportswear, Brooklyn, N. Y. 518,876, canc. Cl. 39.
Belmont Clothes, Inc., Baltimore, Md. 518,722, canc. Cl. 39.
Bemis Bro. Bag Co., St. Louis, Mo. 626,030, pub. 2–14–56. Cl. 2.
Benjamin Air Rifle Co., St. Louis, Mo. 518,595–8, canc. Cl. 9.
Berelson, Inc., San Francisco, Calif. 626,332, pub. 2–14–56. Cl. 46.
Billiard & Bowling Institute of America, Philadelphia, Pa. 626,389, pub. 2–14–56. Cl. 100.
Blackhawk Mfg. Co., Milwaukee, Wis. 352,718. Am. 7(d). Cl. 23.
Blackhawk Mfg. Co., Milwaukee, Wis. 424,871. Am. 7(d). Cl. 23.
Blackhawk Mfg. Co., Milwaukee, Wis. 569,369. Am. 7(d). Cl. 23.
Blaw-Knox Co., Pittsburgh, Pa. 518,889, canc. Cl. 34.
Bliss, E. W., Co., Brooklyn, N. Y. 75,362, canc. Cl. 23.
Bliss Syrup Refining Co., Kansas City, Mo. 71,573, canc. Cl. 46.
Bodle, R. D., Co., also d. b. a. Valley Fruit Canning Co., Seattle, Wash. 250,635, canc. Cl. 46.
Bonnie-Frances Lingerie Co., Inc., New Orleans, La. 626,264, pub. 2–14–56. Cl. 39.
Borden Co., The, New York, N. Y. 626,347, pub. 2–14–56. Cl. 46.
Borden Co., The, New York, N. Y. 626,401. Cl. 46.
Borg-Warner Corp., Chicago, Ill. 518,623–4, canc. Cl. 31.
Bracke-Selb X-Ray Co., Inc., New York, N. Y. 518,934, canc. Cl. 44.
Bradford Chemical Co., Inc., Bradford, Pa. 626,041, pub. 12–21–54. Cl. 6.
Breslauer, A., Co., The: *See*—
Breslauer, Benjamin F.
Breslauer, Benjamin F., d. b. a. The A. Breslauer Co., New York, N. Y. 626,090, pub. 2–14–56. Cl. 18.
Brill & Brill, New York, N. Y. 519,110, canc. Cl. 3.
British Belting & Asbestos Ltd.: *See*—
Scandinavia Belting Co.
Brookville Glove Co.: *See*—
Brookville Glove Mfg. Co., Inc.
Brookville Glove Mfg. Co., Inc., d. b. a. Brookville Glove Co., Brookville, Pa. 626,250, pub. 2–14–56. Cl. 39.
Brown-Saltman: *See*—
Brown-Saltman Furniture Co.
Brown-Saltman Furniture Co., South Gate, Calif., from Brown-Saltman. 518,566, canc. Cl. 32.
Brunswick-Balke-Collender Co., The, Chicago, Ill. 518,783, canc. Cl. 22.
Brunswick-Balke-Collender Co., The, Chicago, Ill. 519,130, canc. Cl. 2.
Buckner, Mary P., d. b. a. Peace Garden Nursery, Lemont, Ill. 626,146, pub. 2–14–56. Cl. 22.
Buffalo Cooked Shrimp Co.: *See*—
Buffalo Cooked Shrimp Co. Inc.
Buffalo Cooked Shrimp Co. Inc., Buffalo, N. Y., from Buffalo Cooked Shrimp Co. 626,313, pub. 2–14–56. Cl. 46.
Bunting Co., Inc., The, Philadelphia, Pa. 626,190, pub. 2–14–56. Cl. 32.
Burgess Vibrocrafters Inc., to Superior Paint & Varnish Corp., Chicago, Ill. 626,084, pub. 8–23–55. Cl. 16.
Burlington Industries, Inc.: *See*—
Mallinson, H. R., & Co.
Mallinson, Hiram R.
Burnham & Morrill Co., Portland, Maine. 518,640, canc. Cl. 46.

Burrus Mills, Inc., d. b. a. Pan American Flour Mills, Dallas, Tex. 626,323, pub. 2–14–56. Cl. 46.
Burson Knitting Co., Rockford, Ill. 518,618, canc. Cl. 39.
Cadogan, Arthur C., Rock Island, Ill. 626,137, pub. 2–14–56. Cl. 22.
Calavo Growers of California: *See*—
Calavo, Inc.
Calavo, Inc., Los Angeles, Calif., now by merger Calavo Growers of California. 626,318, pub. 2–14–56. Cl. 46.
Calgon, Inc., Pittsburgh, Pa. 626,050, pub. 2–14–56. Cl. 6.
Calgon, Inc., Pittsburgh, Pa. 626,324, pub. 2–14–56. Cl. 46.
California Cotton Mills Co., Oakland, Calif. 518,958, canc. Cl. 7.
Carbonneau Industries, Grand Rapids, Mich. 519,052, canc. Cl. 21.
Carleton Laboratory, Inc., Evanston, Ill., by change of name from Knox Laboratory, Inc. 626,049, pub. 2–14–56. Cl. 6.
Carlton Mills Co., Philadelphia, Pa. 626,287, pub. 2–14–56. Cl. 42.
Carson, George M., d. b. a. Apex Specialties Co., New York, N. Y. 518,694, canc. Cl 26.
Carson, George M., d. b. a. Apex Specialties Co., New York, N. Y. 519,010–13, canc. Cl. 26.
Casanovas, Michel, Nice, France. 626,136, pub. 2–14–56. Cl. 22.
Cast's, Edna, Garden of the Setting Sun: *See*—
Garden of the Setting Sun, Inc.
Catholic Digest, Inc., The: *See*—
Catholic Digest International Inc., The.
Catholic Digest International Inc., The, New York, N. Y., to The Catholic Digest, Inc., St. Paul, Minn. 626,223, pub. 2–14–56. Cl. 38.
Central Sportwear Mfg. Co., Inc., Boston, Mass. 601,979. Am. 7(d). Cl. 39.
Century Engineering Corp., Cedar Rapids, Iowa. 518,905, canc. Cl. 34.
Champion Pneumatic Machinery Co., Princeton, Ill. 626,161, pub. 2–14–56. Cl. 23.
Chandler, Ernest, Inc., New York, N. Y. 626,372, pub. 2–14–56. Cl. 50.
Chanel, Inc., New York, N. Y. 626,035, pub. 2–14–56. Cl. 3.
Chase Chemical Co., Newark, N. J. 626,089, pub. 2–14–56. Cl. 18.
Chatila, A., & Co., Brooklyn, N. Y. 626,260, pub. 2–14–56. Cl. 39.
Chemical Enterprises, Inc., New York, N. Y. 626,066, pub. 2–14–56. Cl. 10.
Cheney, Allan: *See*—
Allan Corp., The.
Chesebrough Mfg. Co., Consolidated. Chesebrough-Pond's Inc., New York, N. Y. 333,631. Am. 7(d). Cl. 18.
Chesebrough-Pond's Inc.: *See*—
Chesebrough Mfg. Co., Consolidated.
Chicago Desk Pad Co., Inc., The, Chicago, Ill. 626,215, pub. 2–14–56. Cl. 37.
Chicago Musical Instrument Co., Chicago, Ill. 626,203, pub. 2–14–56. Cl. 36.
Chicago Pharmacal Co., Chicago, Ill. 626,103, pub. 2–14–56. Cl. 18.
Chicago Show Printing Co., Chicago, Ill. 626,224, pub. 2–14–56. Cl. 38.
Chipman Knitting Mills, Easton, Pa. 626,270, pub. 2–14–56. Cl. 39.
Chunky Chocolate Corp., also known as Chunky Chocolate Corp., Brooklyn, to Loft Candy Corp., Long Island City, N. Y. 626,311, pub. 2–14–56. Cl. 46.
Cincinnati Equipment Sales Co., Cincinnati, Ohio. 518,853, canc. Cl. 23.
Cincinnati Milling Machine Co., The, Cincinnati, Ohio. 626,175, pub. 2–14–56. Cl. 23.
Cohen Bros. Corp., d. b. a. Smartsport, New York, N. Y. 341,410, canc. Cl. 39.
Cohen, Joseph H., & Sons, Inc.: *See*—
Weitz, S., & Co., Inc.
Colonial Chemical Co., Inc., Seattle, Wash. 518,771, canc. Cl. 1.
Companhia Geral da Agriculture das Vinhas do Alto Douro, S. A. R. L., Oporto, Portugal. 626,361, pub. 2–14–56. Cl. 47.
Compania Swift de Montevideo, S. A., Montevideo, Uruguay. 519,072, canc. Cl. 15.
Conant Ball Co., Gardner, Mass. 626,191, pub. 2–14–56. Cl. 32.
Conger Life Insurance Co., Miami, Fla. 626,392, pub. 2–14–56. Cl. 102.
Congoleum-Nairn Inc., Kearny, N. J. 626,291, pub. 2–14–56. Cl. 42.
Conlon-Moore Corp., Joliet, Ill. 519,001–2, canc. Cl. 34.
Consolidated Foods Corp.: *See*—
Western Grocer Co.
Continental Fruit Packing Co. Ltd., The, London, England. 381,941, canc. Cl. 46.
Cook, A. D., Inc., Lawrenceburg, Ind. 518,586, canc. Cl. 35.
Cook Electric Co., Chicago, Ill. 626,123, pub. 2–14–56. Cl. 21.
Cook, Emory G., Long Island, N. Y. 518,907, canc. Cl. 21.
Cordette of California, Los Angeles, Calif. 626,247, pub. 1–3–56. Cl. 39.
Costigan, Raymond J., West Hartford, Conn. 518,811, canc. Cl. 27.
Covina Citrus Association, Covina, Calif. 518,916, canc. Cl. 46.
Cox, Tom, d. b. a. Good-Health Confections, Saugus, Calif. 626,356, pub. 2–14–56. Cl. 46.
Crane, Porter L., Wolcott, N. Y. 626,342, pub. 2–14–56. Cl. 46.
Crest Foods Co., Ashton, Ill. 626,310, pub. 12–6–55. Cl. 46
Crown Drug & Sundries Co.: *See*—
Crown Rubber Co.
Crown Rubber Co., to Harry Goldstein, d. b. a. Crown Drug & Sundries Co., to Julius Schmid, Inc., New York, N. Y. 402,155, new cert. Cl. 44.
Crucible Steel Co. of America, New York, N. Y. 518,869, canc. Cl. 15.
Curtiss Chemicals, La Salle, Ill. 413,048, canc. Cl. 4.
D & F Enterprises, St. Paul, Minn., to National Dairy Queen Development Co., Davenport, Iowa. 626,312, pub. 2–14–56. Cl. 46.
Dabs Creations, Inc., Chicago, Ill. 519,035, canc. Cl. 2.
Daikin, A., Co., Chicago, Ill., by American Machine & Foundry Co., New York, N. Y. 395,147, 12(c) pub. 5–1–56. Cl. 23.
Dallas Hosiery Mills, Dallas, Ga. 626,261, pub. 2–14–56. Cl. 39.
Dan River Mills, Danville, Va. 626,295–7, pub. 2–14–56. Cl. 42.
Daust, H., Mfg. Co., St. Louis, Mo. 626,265, pub. 2–14–56. Cl. 39.
Davis Cheese Co., Plymouth, Wis. 264,400, canc. Cl. 46.
De Bernardi, D. F., & Co., Inc., San Francisco, Calif. 518,666, canc. Cl. 46.
Decomart Co.: *See*—
Specht, Lisa M.
Deltron Co.: *See*—
Nelson, E. Victor.
Dermaphor Laboratories: *See*—
Ahrens, Gerhard W.
Deschatre, Gilbert, Rio de Janeiro, Brazil. 626,133, pub. 2–14–56. Cl. 22.
Deutschmann, Tobe, Corp., Wilmington, Del., and Canton, Mass. 518,940, canc. Cl. 26.
Dewhirst, John, & Co. Ltd., Elland, England. 519,121, canc. Cl. 43.
Diamantprodukter Aktiebolag: *See*—
Engis Equipment Co.
Diax-Kamera-Werk: *See*—
Student, Erich.
Dickson Mfg. Co., Providence, R. I. 518,677, canc. Cl. 28.
Diederich, Frank, Woodbine, Iowa. 519,077, canc. Cl. 40.
Dixie Home Stores, Greenville, S. C. 626,317, pub. 2–14–56. Cl. 46.
Dodge & Olcott, Inc., New York, N. Y. 626,335, pub. 2–14–56. Cl. 46.
Doodlehead, Inc., Croton-on-Hudson, N. Y. 626,139, pub. 2–14–56. Cl. 22.
Dorn & Mitchell Laboratories, Inc., Birmingham, Ala. 626,101, pub. 2–14–56. Cl. 18.
Doubet, Edward W., Hanna City, Ill. 518,939, canc. Cl. 1.
DuKane Corp.: *See*—
Operadio Mfg. Co.
Dupli-Color Products Co., Inc., Chicago, Ill. 626,186, pub. 2–14–56. Cl. 29.
Durham Hosiery Mills, Durham, N. C. 626,300, pub. 2–14–56. Cl. 43.
Duro-Test Corp.: *See*—
Jewel Incandescent Lamp Co.
Duro-Test Corp., North Bergen, N. J. 519,060, canc. Cl. 21.
Dynamic Center Engineering Co., Inc., Lawrenceville, Ga. 626,183, pub. 2–14–56. Cl. 26.
E-Z-Est Products Co.: *See*—
Sampson, Arnold.
Eckert, William G., d. b. a. Setebald Co., to Glenn C. Matteson, Portland, Oreg. 538,056, new cert. Cl. 18.
Econ-O Cloth, Chicago, Ill. 626,187, pub. 2–14–56. Cl. 29.
Economic Trend Line Studies: *See*—
Tripp, Chester D.
Edwards, LeRoy B.: *See*—
Wells Chemical Corp.
Ekenberg, Hulda E., Los Angeles, Calif. 626,231, pub. 2–14–56. Cl. 38.
El Capitan Products, Inc.: *See*—
Gerhart, R. L.
Electric Parts Corp., Chicago, Ill. 626,285, pub. 2–14–56. Cl. 42.
Electroacustic G. m. b. H., Kiel, Germany. 626,177, pub. 2–14–56. Cl. 26.
Ellesson, G. M., Co., Chicago, Ill. 518,675–6, canc. Cl. 28.
Ely, George L., St. Petersburg, Fla. 584,719, canc. Cl. 100.
Emenee Industries, Inc., New York, N. Y. 626,141, pub. 2–14–56. Cl. 22.
Engis Equipment Co., Chicago, Ill., to Diamantprodukter Aktiebolag, Hagersten, Sweden. 626,121, pub. 2–14–56. Cl. 21.
Enso-Gutzeit Osakeyhtiö, Jaaski, Finland. 519,076, canc. Cl. 12.
Epp Products, Inc., Baltimore, Md. 519,112, canc. Cl. 26.
Epstein, Irving, d. b. a. French Steak Co., Swoyersville, Pa. 626,328, pub. 2–14–56. Cl. 46.
Era Meter Co., Chicago, Ill., from Era Meter Co. 518,594, canc. Cl. 26.
Esbeco Distilling Corp., Stamford, Conn. 626,366, pub. 2–7–56. Cl. 49.
Esso Standard Oil Co., Wilmington, Del., and New York, N. Y. 519,026, canc. Cl. 15.
Esso Standard Oil Co., New York, N. Y. 626,080, pub. 2–14–56. Cl. 15.
Eutectic Welding Alloys Corp., Flushing, N. Y. 626,075, pub. 2–14–56. Cl. 14.
Evangeline Pepper & Food Products, Inc., St. Martinsville, La. 626,338, pub. 2–14–56. Cl. 46.
Evan-Picone, Inc., New York, N. Y. 626,238, pub. 2–14–56. Cl. 39.
Evans Case Co., North Attleboro, Mass. 626,156, pub. 2–14–56. Cl. 22.
Everedy Co., The, Frederick, Md. 518,850, canc. Cl. 23.
Exhibit Supply Co., Chicago, Ill. 518,790, canc. Cl. 22.
Factor, Max, & Co., Hollywood, Calif. 626,384, pub. 2–14–56. Cl. 51.
Fairfacts Co., The, Trenton, N. J. 626,072, pub. 2–14–56. Cl. 13.

Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. 626,045, pub. 6–28–55. Cl. 6.
Farmers' Rice Growers Cooperative, San Francisco, Calif. 626,314, pub. 10–4–55. Cl. 46.
Farmers' Rice Growers Cooperative, San Francisco, Calif. 626,339, pub. 2–14–56. Cl. 46.
Felmore Co., Inc., Providence, R. I. 519,004, canc. Cl. 28.
Fidelity Union Trust Co., Newark, N. J. 626,393, pub. 2–14–56. Cl. 102.
Finaf, Inc., South Charleston, W. Va. 626,104, pub. 2–14–56. Cl. 18.
Fishel-Cohen, Inc., New York, N. Y. 626,243, pub. 2–14–56. Cl. 39.
Fisons Pest Control Ltd.: *See*—
Pest Control Ltd.
Food Fair Stores, Inc., Philadelphia, Pa. 626,346, pub. 2–14–56. Cl. 46.
Ford Motor Co., Dearborn, Mich. 626,173, pub. 2–14–56. Cl. 23.
Foster, Babette, New York, N. Y. 519,139, canc. Cl. 22.
Franek, Eugene P., d. b. a. Franek's Wholesale Liquor, New Orleans, La. 425,423, canc. Cl. 47.
Franek's Wholesale Liquor: *See*—
Franek, Eugene P.
Franklin Mfg. Co., Inc., Westmont, N. J. 626,159, pub. 2–14–56. Cl. 23.
Freihofer Vienna Baking Co., The, Philadelphia, Pa. 74,531, canc. Cl. 46.
French Steak Co.: *See*—
Epstein, Irving.
Friedman, Clara E., New York, N. Y. 626,219, pub. 2–14–56. Cl. 37.
Fuller, D. B., & Co., Inc.: *See*—
Vandam, Albert H., Co., Inc.
Fuller Products Co., Chicago, Ill. 626,380, pub. 2–14–56. Cl. 51.
Galef, J. L., & Son, Inc., New York, N. Y. 518,886, canc. Cl. 15.
Gallon Iron Works & Mfg. Co., The, Gallon, Ohio. 626,176, pub. 2–14–56. Cl. 23.
Garden of the Setting Sun, Inc., also d. b. a. Edna Cast's Garden of the Setting Sun, Mecca, Calif. 518,629, canc. Cl. 46.
Gardner Mfg. Co.: *See*—
National Electric Screen Corp.
Garrison, Earl W., Bridgeton, N. J. 614,609, cor. Cl. 1.
Geist, Irving, to Joan Kenley, Inc., New York, N. Y. 518,674, canc. Cl. 39.
General Cable Corp., New York, N. Y. 626,124, pub. 2–14–56. Cl. 21.
General Dynamics Corp.: *See*—
Scantlin, John R.
General Dynamics Corp., San Diego, Calif. 626,131, pub. 2–14–56. Cl. 21.
General Finance Corp.: *See*—
Liberty Products Mfg. Co., Inc.
General Mills, Inc., Wilmington, Del., and Minneapolis, Minn. 519,071, canc. Cl. 1.
General Time Corp., New York, N. Y. 626,184, pub. 2–14–56. Cl. 27.
Gerber Products Co., Fremont, Mich. 626,149, pub. 2–14–56. Cl. 22.
Gerhart, R. L., to El Capitan Products, Inc., Lancaster, Pa. 107,062, ren. 11–9–55. Cl. 46.
Ghiselli Bros., Inc., San Francisco, Calif. 618,366, cor. Cl. 46.
Gibbs, Ruth, Inc., Flemington, N. J. 518,784, canc. Cl. 22.
Gibson, Inc., Kalamazoo, Mich. 626,204–5, pub. 2–14–56. Cl. 36.
Gilbert Paper Co., Menasha, Wis. 626,212, pub. 2–14–56. Cl. 37.
Gillinder Brothers, Inc., Port Jervis, N. Y. 518,941, canc. Cl. 34.
Gilman Paper Co., New York, N. Y. 264,193–6, canc. Cl. 2.
Gittis, Herman, Philadelphia, Pa. 518,949, canc. Cl. 3.
Glen Raven Cotton Mills, Inc., Glen Raven, N. C. 626,293, pub. 2–14–56. Cl. 42.
Glostex Products, Inc., Chicago, Ill. 626,373, pub. 2–14–56. Cl. 50.
Goldman & Freiman Bottling Co., Inc., Baltimore, Md. 227,954, canc. Cl. 45.
Goldman, Wm. P., & Bros. Inc., New York, N. Y. 626,281, pub. 2–14–56. Cl. 39.
Goldstein, Harry: *See*—
Crown Rubber Co.
Goldstein, Jeff, Inc., New York, N. Y. 518,804, canc. Cl. 39.
Good-Health Confections: *See*—
Cox, Tom.
Goodyear Aircraft Corp., Akron, Ohio. 626,061, pub. 2–14–56. Cl. 9.
Grace Chemical Co., to W. R. Grace & Co., New York, N. Y. 626,316 pub. 2–14–56. Cl. 46.
Grace, W. R., & Co.: *See*—
Grace Chemical Co.
Great Northern Paper Co., Millinocket, Maine, and Boston, Mass. 518,741, canc. Cl. 37.
Green Co., Inc., The, Kansas City, Mo. 519,093, canc. Cl. 28.
Green, H. L., Co., Inc., New York, N. Y. 626,258, pub. 2–14–56. Cl. 39.
Greif, L., & Bro., Inc., Baltimore, Md. 626,254, pub. 2–14–56. Cl. 39.
Groene, Willard L., Phoenix, Ariz. 626,120, pub. 2–14–56. Cl. 19.
Grosset & Dunlap, Inc., d. b. a. McLoughlin Bros., New York, N. Y. 626,232, pub. 2–14–56. Cl. 38.
Guinness, Arthur, Son & Co., Ltd., London, England. 626,363, pub. 2–14–56. Cl. 48.
Gulf States Paper Corp., Tuscaloosa, Ala. 626,217–18, pub. 2–14–56. Cl. 37.
Gulf States Paper Corp., Tuscaloosa, Ala. 626,220–1, pub. 2–14–56. Cl. 37.
Haberman, Wm., Corp., New York, N. Y. 518,632, canc. Cl. 39.
Hachmeister Inc., Pittsburgh, Pa. 518,851, canc. Cl. 46.
Hairston Produce Co.: *See*—
Hairston, W. H.
Hairston, W. H., d. b. a. Hairston Produce Co., Dallas, Tex. 626,359, pub. 2–14–56. Cl. 46.
Hall, Robert, Clothes, Inc., New York, N. Y. 626,274, pub. 2–14–56. Cl. 39.
Hall, Robert, Clothes, Inc., New York, N. Y. 626,290, pub. 2–14–56. Cl. 42.
Hamel, Lewis E., Co., Inc., Rochester, N. Y. 518,864, canc. Cl. 22.
Hamilton Mfg. Corp., Columbus, Ind. 626,192, pub. 2–14–56. Cl. 32.
Hanauer, Albert M., Pittsburgh, Pa. 316,515, canc. Cl. 49.
Hankins Container Co., The, Cleveland, Ohio. 626,033, pub. 2–14–56. Cl. 2.
Hansen, Hans, Solvsmedie A/S, Kolding, Denmark. 518,660, canc. Cl. 28.
Hansen's, Chr., Laboratory, Inc.: *See*—
Wilson, Margaret M.
Hardy Plastics & Chemical Corp., Brooklyn, N. Y. 519,141, canc. Cl. 1.
Harman Watch Co., Inc., New York, N. Y. 519,078, canc. Cl. 28.
Harper Method, Rochester, to Harper Method, Inc., New York, N. Y. 626,374, pub. 2–14–56. Cl. 51.
Harper Method, Inc.: *See*—
Harper Method.
Harper-Wyman Co., Chicago, Ill. 518,773, canc. Cl. 31.
Harrington & Richardson Arms Co., Worcester, Mass. 69,039, canc. Cl. 9.
Harris, B. W., Mfg. Co., Inc., St. Paul, Minn. 518,756, canc. Cl. 39.
Hartness, Ray A.: *See*—
Love-Ford Fruit Co.
Hayes, James H., New York, N. Y. 518,764, canc. Cl. 22.
Haynes Mfg. Co., The, Cleveland, Ohio. 626,198, pub. 2–14–56. Cl. 35.
Hazard, George E., Rochester, N. Y. 626,140, pub. 2–14–56. Cl. 22.
Higgins Industries, Inc., New Orleans, La. 414,869, canc. Cl. 23.
Higgins Industries, Inc., New Orleans, La. 415,944, canc. Cl. 9.
Himmelstein, Irvan, New York, N. Y. 578,805 canc. Cl. 39.
Hitchcock Publishing Co., Wheaton, Ill. 626,233–5, pub. 2–14–56. Cl. 38.
Holland-Rantos Co., Inc., New York, N. Y. 626,105, pub. 2–14–56. Cl. 18.
Hopkins Agricultural Chemical Co., Madison, Wis. 614,555, cor. Cl. 46.
Hornet Inc., Elyria, Ohio. 519,051, canc. Cl. 22.
Hot-Tossie, Inc., Chicago, Ill. 626,194, pub. 2–14–56. Cl. 34.
Huber, J. M., Corp., Red Bank, N. J., and New York, N. Y. 519,041, canc. Cl. 1.
Hupp Corp.: *See*—
Typhoon Air Conditioning Co., Inc.
Hurst, Kerney J., d. b. a. Hurst's Dairy Supreme, Jackson, Miss. 626,322, pub. 2–14–56. Cl. 46.
Hurst's Dairy Supreme: *See*—
Hurst, Kerney J.
Hychex Products, Chicago, Ill. 626,098, pub. 2–14–56. Cl. 18.
Imperial Chemical Industries Ltd., Millbank, London, England. 626,046, pub. 3–8–55. Cl. 6.
Industrial Soap Co., St. Louis, Mo. 628,388, pub. 2–14–56. Cl. 52.
Ingersoll-Rand Co., Phillipsburg, N. J. 626,160, pub. 2–14–56. Cl. 23.
Institutional Products Corp., New York, N. Y. 626,305, pub. 2–14–56. Cl. 44.
International Cellucotton Products Co., Chicago, Ill., to Kimberly-Clark Corp., Neenah, Wis. 335,574, ren. 6–9–56. Cl. 37.
International Compost Corp., The: *See*—
American Compost Corp., The.
International Industrial Sales Co.: *See*—
Sleight, Roland E.
International Milling Co., Minneapolis, Minn. 626,329, pub. 2–14–56. Cl. 46.
International Minerals & Chemical Corp., Chicago, Ill. 626,044, pub. 2–14–56. Cl. 6.
International Standard Electric Corp., New York, N. Y. 626,127, pub. 2–14–56. Cl. 21.
International Toastmistress Clubs, Inc., Huntington Park, Calif. 626,395, pub. 2–14–56. Cl. 107.
International Union of United Brewery, Flour, Cereal, Soft Drink and Distillery Workers of America, Cincinnati, Ohio. 626,308, pub. 2–14–56. Cl. 45.
International Union of United Brewery, Flour, Cereal, Soft Drink and Distillery Workers of America, Cincinnati, Ohio. 626,365, pub. 2–14–56. Cl. 48.
Interstate Aircraft and Engineering Corp.: *See*—
Interstate Engineering Corp.
Interstate Engineering Corp., formerly known as Interstate Aircraft and Engineering Corp., El Segundo, Calif. 518,567 canc. Cl. 31.
Italian Swiss Colony, San Francisco, Calif. 626,362, pub. 2–14–56. Cl. 47.
Jackson Chamber of Commerce, Jackson, Miss. 518,574, canc. Cl. 38.
Jefferson Cleaners, South Arlington, Va. 626,402. Cl. 103.
Jeffrey Mfg. Co. (1946), The: *See*—
Jeffrey Mfg. Co., The.

Jeffrey Mfg. Co., The, to The Jeffrey Mfg. Co. (1946), Columbus, Ohio. 335,282, ren. 6–2–56. Cl. 23.
Jelke, John F., Chicago, Ill. 518,563, canc. Cl. 46.
Jewel Incandescent Lamp Co., East Newark, to Duro-Test Corp., North Bergen, N. J. 336,349, ren. 6–30–56. Cl. 21.
Jewish Music Documentary Society, Inc., New York, N. Y. 626,202, pub. 2–14–56. Cl. 36.
Johnson & Johnson, New Brunswick, N. J. 54,249, canc. Cl. 44.
Jones, Harold R., Inc., Eugene, Oreg. 626,069, pub. 2–14–56. Cl. 12.
Jordan Marsh Co., Boston, Mass. 626,244, pub. 2–14–56. Cl. 39.
Juati, H. D., & Son, Inc., Philadelphia, Pa. 519,067–8, canc. Cl. 44.
Juvenile Shoe Corp. of America, The, Aurora and St. Louis, Mo. 518,700, canc. Cl. 39.
K-N Sales Co.: *See*—
Knutson, Leslie W.
Kahn, David, Inc., North Bergen, N. J. 626,214, pub. 2–14–56. Cl. 37.
Kakuske, Herbert P., d. b. a. The Vokab Co., Janesville, Wis. 626,152, pub. 2–14–56. Cl. 22.
Kay Windsor Frocks, Inc., Boston, Mass. 626,273, pub. 2–14–56. Cl. 39.
Keller Corp., Brooklyn, N. Y. 626,145, pub. 2–14–56. Cl. 22.
Keith, Geo. E., Co., Brockton, Mass. 114,890. Am. 7(d). Cl. 39.
Kelray Knitting Mills, Inc., New York, N. Y. 626,262, pub. 2–14–56. Cl. 39.
Kendall Co., The: *See*—
R & S Dime Stores Inc.
Kenley, Joan, Inc.: *See*—
Geist, Irving.
Mitchell & Weber, Inc.
Kent-Moore Organization, Inc., Detroit, Mich. 519,070, canc. Cl. 26.
Kern Foods, Inc., Cincinnati, Ohio. 626,357, pub. 2–14–56. Cl. 46.
Keystone Laboratories, Inc., d. b. a. Nerv-Aid Co., Memphis, Tenn. 626,399. Cl. 18.
Kimberly-Clark Corp.: *See*—
International Cellucotton Products Co.
Kleinert, I. B., Rubber Co., New York, N. Y. 332,444, ren. 2–11–56. Cl. 40.
Kleinert, I. B., Rubber Co., New York, N. Y. 332,516, ren. 2–18–56. Cl. 39.
Kleinert, I. B., Rubber Co., New York, N. Y. 334,277, ren. 4–28–56. Cl. 44.
Kleinert, I. B., Rubber Co., New York, N. Y. 626,271, pub. 2–14–56. Cl. 39.
Knobby Krafters, Attleboro, Mass. 626,284, pub. 2–14–56. Cl. 40.
Knox Laboratory, Inc.: *See*—
Carleton Laboratory, Inc.
Knutson, Leslie W., d. b. a. K-N Sales Co., Longview, Tex. 626,307, pub. 2–14–56. Cl. 45.
Kokomo Sanitary Pottery Corp., Kokomo, Ind., and Chicago, Ill. 518,614, canc. Cl. 13.
Kono Mfg. Co., The, Woodside, N. Y. 519,073, canc. Cl. 26.
Krouse-Doremus Foundry Co., Clifton, N. J. 626,073, pub. 2–14–56. Cl. 13.
Kushins, Inc., Santa Rosa, Calif. 626,257, pub. 2–14–56. Cl. 39.
Lactona Inc., St. Paul, Minn. 518,580, canc. Cl. 29.
Lakeside Laboratories, Inc., Milwaukee, Wis. 626,099, pub. 2–14–56. Cl. 18.
Lambert Corp., Houston, Tex. 519,091, canc. Cl. 16.
Lane Co., Inc., The, Altavista, Va. 626,083, pub. 10–18–55. Cl. 16.
LaRosa, V., & Sons, Inc., Brooklyn, N. Y. 623,283, cor. Cl. 46.
Lavin Distillery Co. Inc., Havana, Cuba. 518,842–3, canc. Cl. 49.
Lazarus, F. and R., and Co., The: *See*—
Shillito, John, Co., The.
Lee, H. D., Mercantile Co., The, Salina, Kans., and Kansas City, Mo. 265,138, canc. Cl. 46.
Liberty Products Mfg. Co., Inc., Kansas City, Mo., from General Finance Corp., to General Finance Corp. 518,844, canc. Cl. 23.
Lilly, Ell, and Co., Indianapolis, Ind. 626,107, pub. 2–14–56. Cl. 18.
Limberg, Wayne, Plymouth, Wis. 519,032, canc. Cl. 21.
Linwood Corp., Evanston, Ill. 626,031, pub. 2–14–56. Cl. 2.
Liquid Carbonic Corp., The, Chicago, Ill. 334,014, ren. 4–14–56. Cl. 45.
Little Miss English Ltd., New York, N. Y. 626,249, pub. 2–14–56. Cl. 39.
Lodolyn Drug Products Co.: *See*—
Lodolyn, Roy S.
Lodolyn, Roy S., d. b. a. Lodolyn Drug Products Co., Lakewood, Ohio. 626,102, pub. 2–14–56. Cl. 18.
Loewengart & Co., New York, N. Y. 519,008, canc. Cl. 1.
Loft Candy Corp.: *See*—
Chunky Chocolate Corp.
Lombardy Wine Corp. of New York, New York, N. Y. 329,060, ren. 10–15–55. Cl. 47.
London Records, Inc., New York, N. Y. 626,201, pub. 2–14–56. Cl. 36.
Long, Leonard, d. b. a. Bator Scientific Products Co., Atlanta, Ga. 626,306, pub. 2–14–56. Cl. 44.
L'Oreal-Paris: *See*—
Societe Monsavon-L'Oreal, Societe Anonyme.
Lovable Brassiere Co., The, Atlanta, Ga. 626,275, pub. 2–14–56. Cl. 39.
Love-Ford Fruit Co., Pharr, Tex., from R. A. Hartness. 518,564, canc. Cl. 46.
Ludlin Products Co., Chicago, Ill. 518,919, canc. Cl. 22.
Lundgren, Carl J., New York, N. Y. 518,996, canc. Cl. 44.
Lyman Gun Sight Corp., The, Middlefield, Conn. 518,762, canc. Cl. 26.
Mallinson, H. R., & Co.: *See*—
Mallinson, Hiram R.
Mallinson, H. R., & Co., New York, N. Y., to Burlington Industries, Inc., Greensboro, N. C. 109,837–8, ren. 4–18–56. Cl. 42.
Mallinson, Hiram R., to H. R. Mallinson & Co., New York, N. Y., to Burlington Industries, Inc., Greensboro, N. C. 110,754, ren. 6–13–56. Cl. 42.
Mamlok, R.: *See*—
Mamlok, Ronald L.
Mamlok, Ronald L., d. b. a. R. Mamlok, San Mateo, Calif. 626,333–4, pub. 2–14–56. Cl. 46.
Manufacture d'Horlogerie de Bethune, Bethune, France. 519,059, canc. Cl. 26.
Marhoefer Packing Co., Inc., Chicago, Ill. 626,327, pub. 2–14–56. Cl. 46.
Mark Knitting Mills, Bergenfield, N. J. 518,806, canc. Cl. 39.
Marks & Rosenfeld, Inc., New York, N. Y. 519,140, canc. Cl. 33.
Marshall Canning Co.: *See*—
Western Grocer Co.
Martin Produce, Inc., Salinas, Calif. 626,344, pub. 2–14–56. Cl. 46.
Master Merchandise Corp., New York, N. Y. 626,382, pub. 2–14–56. Cl. 51.
Mathieson Chemical Corp., New York, N. Y., now by merger and change of name Olin Mathieson Chemical Corp. 626,042, pub. 9–6–55. Cl. 6.
Mathieson Chemical Corp., New York, N. Y., now by merger and change of name Olin Mathieson Chemical Corp. 626,375, pub. 6–21–55. Cl. 51.
Matteson, Glenn C.: *See*—
Eckert, William G.
Mauser Kommandilt-Gesellschaft, Koeln-Ehrenfeld, Germany. 626,189, pub. 2–14–56. Cl. 32.
Mayer, Frederick G., South Norwalk, Conn. 626,091, pub. 1–17–56. Cl. 18.
McAbee Industries, Inc., Westport, Conn. 518,841, canc. Cl. 39.
McCambridge & McCambridge Co., The, Riverdale, Md. 626,111, pub. 2–14–56. Cl. 18.
McCarren, Charles R., d. b. a. McCarren's, Butler, Pa. 518,569, canc. Cl. 39.
McCarren's: *See*—
McCarren, Charles R.
McClung, C. M., & Co., Knoxville, Tenn. 518,991, canc. Cl. 22.
McGraw Electric Co., Elgin, Ill. 626,132, pub. 2–14–56. Cl. 21.
McLoughlin Bros.: *See*—
Grosset & Dunlap, Inc.
McMillan Bros., Laconner, to San Juan Islands Cannery, Mount Vernon, Wash. 335,231, ren. 5–26–56. Cl. 46.
McNeil Laboratories, Inc., Philadelphia, Pa. 626,112, pub. 2–14–56. Cl. 18.
Meat Industry Suppliers, Inc., Chicago, Ill. 626,343, pub. 2–14–56. Cl. 46.
Merck & Co., Inc., Rahway, N. J. 626,116, pub. 2–14–56. Cl. 18.
Merker Counter Co., Inc., Haverhill, Mass. 626,272, pub. 2–14–56. Cl. 39.
Merry, A. Gordon, deceased, d. b. a. A. Gordon Merry Agency, Huntington, W. Va.; A. Gordon Merry, Jr., administrator. 626,391, pub. 2–14–56. Cl. 102.
Merry, A. Gordon, Agency: See—
Merry, A. Gordon.
Merry, A. Gordon, Jr.: *See*—
Merry, A. Gordon.
Michigan Sugar Co., Saginaw, Mich. 333,850, ren. 4–7–56. Cl. 46.
Michigan Dental Laboratory Guild, Kalamazoo, Mich. 518,882, canc. Cl. 44.
Michigan Tank & Furnace Corp., Dearborn, Mich. 518,955, canc. Cl. 34.
Milford Canning Co., Milford, Ill. 626,358, pub. 2–14–56. Cl. 46.
Milk Cooling Equipment Co., Grand Rapids, Mich. 519,142, canc. Cl. 31.
Miller Electronics: *See*—
Miller, Harold R.
Miller, Harold R., d. b. a. Miller Electronics, Northampton, Mass. 519,047, canc. Cl. 21.
Milligan & Son, Inc., Sioux City, Iowa. 626,100, pub. 2–14–56. Cl. 18.
Minot Flour Mill Co., Minot, N. Dak. 518,635, canc. Cl. 46.
Mitchell, F. O., & Bro., to F. O. Mitchell & Bro. Inc., Perryman, Md. 110 762, ren. 6–13–56. Cl. 46.
Mitchell, F. O., & Bro. Inc.: *See*—
Mitchell, F. O., & Bro.
Mitchell & Weber, Inc., to Joan Kenley, Inc., New York, N. Y. 518,901, canc. Cl. 39.
Mohawk Rubber Co., The, Akron, Ohio. 518,568, canc. Cl. 35.
Monarch Garment Corp., New York, N. Y. 626,279, pub. 2–14–56. Cl. 39.
Moore, William S., d. b. a. Moore's of Ohio, Newark, Ohio. 518,745, canc. Cl. 31.
Moore's of Ohio: *See*—
Moore, William S.
Morgan Furniture Co., Asheville, N. C. 518,772, canc. Cl. 32.
Morse, Edward H., Attleboro, Mass. 518,571, canc. Cl. 28.
Morton Salt Co., Chicago, Ill. 626,331, pub. 2–14–56. Cl. 46.
Motif Jewelers, Detroit, Mich. 519,003, canc. Cl. 28.
Moyses, Harry E., d. b. a. Vytex Laboratories, New York, N. Y. 284,837, canc. Cl. 44.
Musher Foundation Inc., New York, N. Y. 626,087, pub. 2–14–56. Cl. 18.

Mutual Orange Distributors, Redlands, Calif., now by change of name Pure Gold. 626,351–4, pub. 2–14–56. Cl. 46.
N. V. Kristal-, Glas- en Aardewerkfabrieken "de Sphinx" voorheen Petrus Regout & Co., Maastricht, Netherlands. 518,927, canc. Cl. 33.
National Acme Co., The, Cleveland, Ohio. 626,209, pub. 2–14–56. Cl. 37.
National Comics Publications, Inc., New York, N. Y. 626,230, pub. 2–14–56. Cl. 38.
National Dairy Queen Development Co.: *See*—
D & F Enterprises.
National Electric Screen Corp. Gardner Mfg. Co., Horicon, Wis. 331,665, cor. Cl. 21.
National Gypsum Co., Buffalo, N. Y. 626,085, pub. 2–14–56. Cl. 16.
National Sewing Machine Co., Belvidere, Ill. 518,736, canc. Cl. 23.
National Wax Co., Chicago, Ill. 438,689, canc. Cl. 6.
Needle Industries Ltd., Birmingham, Studley, Redditch, England. 519,022, canc. Cl. 40.
Neff, Grace V., Chicago, Ill. 519,054, canc. Cl. 30.
Nelson, E. Victor, d. b. a. Deltron Co., Long Beach, Calif., from Deltron Co. 626,122, pub. 2–14–56. Cl. 21.
Neo-Beauty Line Co. Ltd., Montreal, Quebec, Canada. 519,132, canc. Cl. 44.
Nerv-Aid Co.: *See*—
Keystone Laboratories, Inc.
Neuss, Hesslein & Co., Inc., New York, N. Y. 623,570, cor. Cl. 42.
Newman, Leo, New York, N. Y. 518,627, canc. Cl. 39.
New York Coal Co., Columbus, Ohio. 519 027, canc. Cl. 1.
Nicholas & Co., Inc., Importers, New York, N. Y. 363,031, canc. Cl. 49.
Norlee Undergarment Inc., New York, N. Y. 518,691, canc. Cl. 39.
Norrick, Patsie S., Seattle, Wash. 626,153–4, pub. 2–14–56. Cl. 22.
Northwest Packing Co., Portland, Oreg. 626,340, pub. 2–14–56. Cl. 46.
Northwestern Canning & Packing Co.: *See*—
Spoto, James P.
Northwood Fur Farm, Cary, Ill. 626,268–9, pub. 2–14–56. Cl. 39.
Norton Co., Troy, N. Y. 626,038, pub. 2–14–56. Cl. 4.
Nu-Maid Hosiery Mills, Inc., Darby, Pa. 626,259, pub. 2–14–56. Cl. 39.
Nuodex Products Co., Inc., Elizabeth, N. J. 626,048, pub. 7–5–55. Cl. 6.
Oakdale Cotton Mills, Jamestown, N. C. 626,056–7, pub. 2–14–56. Cl. 7.
Oakdale Cotton Mills, Jamestown, N. C. 626,298–9, pub. 2–14–56. Cl. 43.
Ohio Bowling & Billiard Supply Co., The, Cleveland, Ohio. 626,157–8, pub. 2–14–56. Cl. 22.
Oklahoma Chemical Co., Oklahoma City, Okla. 626,053, pub. 2–14–56. Cl. 6.
Olin Mathieson Chemical Corp.: *See*—
Mathieson Chemical Corp.
Oliver Tire & Rubber Co., Oakland, Calif. 333,805–6, ren. 4–7–56. Cl. 35.
Oliver Tire & Rubber Co., Oakland, Calif. 334,056, ren. 4–21–56. Cl. 35.
Operadio Mfg. Co., to DuKane Corp., St. Charles, Ill. 542,675, new cert. Cl. 21.
Opinion Research Corp., Princeton, N. J. 626,237, pub. 2–14–56. Cl. 38.
Orcutt, Margaret, Manhattan Beach, Calif. 626,144, pub. 2–14–56. Cl. 22.
Ostby and Barton Co., Providence, R. I. 519,123, canc. Cl. 28.
Pacific Coast Condensed Milk Co., Seattle, Wash. 63,320, canc. Cl. 46.
Pactor, Sam A., d. b. a. Sam Pactor Products, Indianapolis, Ind. 604,054. Am. 7(d). Cl. 52.
Pactor, Sam, Prdoucts: *See*—
Pactor, Sam A.
Padberg, Albert, Wuppertal-Sonnborn, Germany. 626,067, pub. 2–14–56. Cl. 11.
Pagano, Guido, New York, N. Y. 518,855, canc. Cl. 44.
Pan American Flour Mills: *See*—
Burrus Mills, Inc.
Panther Oil & Grease Mfg. Co., Fort Worth, Tex. 626,081, pub. 2–14–56. Cl. 15.
Parsons Co., The, to Parsons Corp., Detroit, Mich. 518,701, canc. Cl. 32.
Parsons Corp.: *See*—
Parsons Co., The.
Patrick-Duluth Co., Duluth, Minn. 518,636, canc. Cl. 39.
Peace Garden Nursery: *See*—
Buckner, Mary P.
Peck & More, Inc., Chicago, Ill. 518,839, canc. Cl. 103.
Pena-Tread, Inc., Marshfield, Wis. 518,803, canc. Cl. 35.
Perforating Guns Atlas Corp., Houston, Tex. 626,059–60, pub. 2–14–56. Cl. 9.
Pest Control Ltd., now by change of name to Fisons Pest Control Ltd., Bourn, England. 618,840, cor. Cl. 6.
Petersen Mfg. Co., Inc., De Witt, Nebr. 626,174, pub. 2–14–56. Cl. 23.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 626,088, pub. 2–14–56. Cl. 18.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 626,114–15, pub. 2–14–56. Cl. 18.
Pierce Oil Products Corp., The, East Rochester, N. Y. 626,337, pub. 2–14–56. Cl. 46.
Pierson's Tackle Co., Grand Rapids, Mich. 626,147, pub. 2–14–56. Cl. 22.
Pioneer Rubber Co., The, Willard, Ohio. 626,155, pub. 2–14–56. Cl. 22.
Platt Luggage, Inc., Chicago, Ill. 519,097, canc. Cl. 3.
Pluswood Industries, Oshkosh, Wis. 626,068, pub. 2–14–56. Cl. 12.
Pneumafil Corp., Charlotte, N. C. 626,165, pub. 2–14–56. Cl. 23.
Pollak, Henry, Inc., New York, N. Y. 518,875, canc. Cl. 39.
Polymeros, Donald P., d. b. a. The "Poly-Mite" Mfg. Co., Minneapolis, Minn. 519,090, canc. Cl. 21.
"Poly-Mite" Mfg. Co., The: *See*—
Polymeros, Donald P.
Pope, Eddie, Montrose, Calif. 518,999, canc. Cl. 22.
Potter-McCune Co., McKeesport, Pa. 626,222, pub. 2–14–56. Cl. 37.
Powaner & Minthorne, Buffalo, N. Y. 626,052, pub. 2–14–56. Cl. 6.
Prepared Foods, Inc., Lafayette, Ind. 626,341, pub. 2–14–56. Cl. 46.
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U. S. GOVERNMENT PRINTING OFFICE 0——1956

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
May 8, 1956 Volume 706 Number 2

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NOTICES

Erratum

In the Index of Patents 1955, the list of patentees under National Research Corporation erroneously includes Ronald H. Barker, Thomas H. S. Burns et al., Spencer S. D. Jones, Denis G. Melrose, Harry R. Ricardo, Leonard A. Sayce, and John C. West. These patentees should properly have been listed under National Research Development Corporation.

Adjudicated Patents

(D. C. Miss.) Stephens Patent No. 2,226,449 (139—1), for a method of repairing textile fabrics, *Held* infringed. *National Multiweaving Company, Inc., et al.* v. *O'Keefe*, 138 F. Supp. 151; 108 USPQ 205.

(D. C. R. I.) Matarazzo Patent No. 2,420,322 (99—193), for preserving peeled white potatoes. Claims 1 and 2 *Held* not infringed. *Matarazzo* v. *Isabella*, 138 F. Supp. 86; —USPQ —.

(D. C. Mo.) Harrison Patent No. 2,562,092 (20—57.5), for an awning construction. Claim 11 *Held* not infringed. *Koolvent Metal Awning Corp.* v. *Kool-Vent Metal Awning Corp. of Mo.*, 138 F. Supp. 95; — USPQ —.

(D. C. Ark.) Long Patent No. 2,650,628 (144—34), for a tree feller and land clearing attachment, *Held* invalid. *Long* v. *Arkansas Foundry Co.*, 137 F. Supp. 835; — USPQ —.

(D. C. Mo.) Houseman Reissue Patent No. 20,975 (20—57.5), for a metal awning. Claims 16, 17, and 18 *Held* invalid and not infringed. *Id.*

Disclaimers

2,705,171.—*Frank A. Ziherl*, Mayfield, Ohio. FOG SPRAY APPLICATOR. Patent dated Mar. 29, 1955. Disclaimer filed Apr. 9, 1956, by the assignee, *Z and W Machine Products, Inc.*

Hereby enters this disclaimer to all of the claims of said patent.

Re. No. 24,037.—*George W. Willits*, Hinsdale, Ill. HOLDER. Patent dated July 12, 1955. Disclaimer filed Apr. 6, 1956, by the assignee, *Johnson & Johnson*.

Hereby enters this disclaimer to claims 1 and 2 of said patent.

Patents Available for Licensing or Sale

2,740,224. Live Bait Protector. Lloyd W. Heiderich, 4066 Quincy St., St. Louis 16, Mo.

Des. Pat. 166,403. Sling Shot (Right and Left Handed, With Comfortable Grip for Accurate Shooting). Harold D. McColl, Box 466, Douglas, Wyo.

Well Surveys, Incorporated, is prepared to grant non-exclusive licenses for radioactivity well logging under any or all of the following 68 patents on reasonable terms. Applications for license should be addressed to: Chief Patent Attorney, Well Surveys, Inc., P. O. Box 2656, Tulsa, Okla.

2,219,273. Well Logging by Measurements of Radioactivity.
2,219,274. Well Survey Method and Apparatus.
2,273,215. Well Surveying Method and Apparatus.
2,275,747. Well Survey Method and Apparatus.
2,275,748. Well Survey Method and Apparatus.
2,285,809. Well Surveying Method and Apparatus.
2,285,840. Well Survey Method and Apparatus.
2,289,926. Well Survey Method and Apparatus.
2,296,176. Well Survey Method and Apparatus.
2,302,247. Well Surveying Method and Apparatus.
2,303,688. Well Surveying Method and Apparatus.
2,305,150. Electrical Terminal.
2,308,361. Well Logging Method and Device.
2,309,835. Well Logging Apparatus and Method Thereof.
2,315,355. Well Surveying Method and Apparatus.
2,316,576. Well Surveying Method and Apparatus.
2,320,643. Well Surveying Method and Apparatus.
2,320,890. Method of Geophysical Prospecting.
2,320,892. Method of Geophysical Prospecting.
2,323,484. Well-Logging Method and Apparatus.
2,349,225. Well Logging Instrument.
2,349,712. Well Logging Method and Device.
2,349,753. Method and Apparatus for Geophysical Exploration.
2,351,028. Well Surveying Method and Apparatus.
2,353,619. Geophysical Prospecting.
2,361,389. Well Survey Method and Apparatus.
2,368,532. Well Survey Method and Apparatus.
2,376,196. Ionization Chamber.
2,376,821. Well Logging Instrument.
2,390,433. Well Survey Method and Apparatus.
2,390,931. Well Logging Method.
2,390,965. Central Electrode Support.
2,398,324. Well Surveying.
2,432,066. Commutator Design.
2,470,224. Ionization Chamber.
2,472,153. Method and Apparatus for Detecting Radiations.
2,479,518. Recording Apparatus for Correlating Measurements in Accordance With Depth.
2,480,674. Neutron Method of Porosity Logging.
2,480,808. Multigrid Ionization Chamber.
2,484,493. Method and Apparatus for Measuring Hardness and Intensity of Penetrating Radiation.
2,488,491. Well Logging Null Recorder.

New Applications Received During March 1956

Patents	6,583
Designs	445
Plants	3
Reissues	19
Total	7,050

Issue

Patents	853	No. 2,744,250 to No. 2,745,102, incl.
Designs	53	No. 177,604 to No. 177,656, incl.
Plants	4	No. 1,475 to No. 1,478, incl.
Reissues	1	No. 24,148
Total	911	

2,502,617. Alternating Current Ionization Chamber.
2,507,351. Transmitting of Information in Drill Holes.
2,508,772. Method of Geophysical Prospecting.
2,513,086. Well Survey Method and Apparatus.
2,515,500. Method and Apparatus for Producing Neutron Logs of Drill Holes.
2,515,501. Neutron Well Logging.
2,515,502. Neutron Well Logging.
2,515,534. Method and Apparatus for Producing Neutron Logs of Drill Holes.
2,515,535. Method and Apparatus for Neutron Well Logging.
2,515,745. Neutron Log.
2,543,532. Multiplex Well Logging System.
2,543,675. Method and Apparatus for Adjusting Spacing Between Neutron Source and Detector.
2,543,676. Method and Apparatus for Neutron Well Logging.
2,573,329. Capacitative Commutator.
2,583,904. Method for Neutron Well Logging.
2,583,976. Method for Neutron Well Logging.
2,604,600. Radiation Detector.
2,606,295. High-Efficiency Ionization Chamber.
2,636,994. Spectrometer.
2,645,723. Method and Apparatus for Increasing Speed of Well Logging.
2,659,011. Method and Apparatus for Compensation for the Effects of Temperature and Voltage Fluctuations on Scintillation Counters.
2,689,918. Static Atmosphere Ion Accelerator for Well Logging.
2,691,741. Detector for Neutron Well Logging.
2,705,289. Casing Collar Locator.
2,711,084. Refrigeration System for Well Logging Instruments.
2,712,081. Method for Neutron Well Logging.
2,740,898. Method and Apparatus for Detecting Neutrons in the Presence of Other Radiations.

CONDITION OF PATENT APPLICATIONS AS OF MARCH 30, 1956

Total number of pending applications (excluding Designs)	219, 645
Total number of pending Design applications	6, 977
Total number of applications awaiting action (excluding Designs)	123, 900
Total number of Design applications awaiting action	2, 491
Date of oldest new application	Nov. 23, 1954
Date of oldest amended application	Nov. 6, 1953

ROSA, M. C., Director, Patent Examining Operation

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 55, 59, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 44, 46, 48, 51, 54, 69, 70
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 10, 18, 22, 28, 45, 47.
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE.	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Oldest Application: Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	3-7-55	6-14-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	6-17-55	1-13-55
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	7-13-55	3-29-54
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	6-10-55	8-6-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	6-21-55	12-10-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic Amides, Amines, General Organic Processes	5-18-55	6-9-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	7-6-55	3-4-54
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	2-24-55	6-1-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	6-13-55	6-1-54
10. (VI) BOYD, S., Firearms; Ordnance; Ammunition; Explosive Charge Making	12-17-54	1-20-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	7-13-55	9-8-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	4-4-55	11-17-53
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	3-23-55	2-10-54
14. (III) MANIAN, J. C. (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	3-11-55	4-7-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	7-1-55	4-7-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	5-16-55	2-2-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	4-27-55	7-19-54
18. (VI) BLUM, A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	2-15-55	5-14-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	6-3-55	7-6-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	6-7-55	5-20-54
21. (III) MADER, R. C., Textiles	7-5-55	4-20-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	6-17-55	7-12-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	11-23-54	11-6-53
24. (III) DRACOPOULOS, P. T. (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	5-10-55	12-2-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	7-1-55	7-2-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	7-15-55	1-3-55
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	7-6-55	10-8-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	5-26-55	8-24-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	4-12-55	1-3-55
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	9-19-55	9-13-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application	
	New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	4-21-55	10-28-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	6-17-55	12-3-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	7-13-55	3-9-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	6-10-55	3-8-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	6-6-55	10-20-54
36. (V) McFADYEN, A. D., Measuring and Testing	4-7-55	1-31-55
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	6-9-55	10-6-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g., Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	7-1-55	11-1-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	7-25-55	5-11-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	7-1-55	1-3-55
41 (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	4-1-55	4-14-54
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	1-10-55	7-19-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	5-18-55	7-15-54
44. (II) EVANS, N. H., Antennas; Automatic Pilots; Directive Radio Systems; Mass Spectrometers; Nuclear Batteries; Nuclear Resonant Devices; Neutron Detecting and Measuring; Radar; Sonar; Torpedoes	1-3-55	1-28-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	6-14-55	1-6-55
46. (II) WILES, W. G., Actinide Series (e. g., fissionable) Compounds; Sintered Metal Stock; Explosives; Power Plants (part); Metallurgy (part); Blasting; Surgery (part); Radioactive Medicines; Irradiation Chemistry; Carbon Chemistry (part)	3-10-55	8-20-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	7-13-55	12-6-54
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	3-10-55	4-12-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	5-2-55	10-1-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	6-20-55	4-15-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	6-24-55	4-2-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	5-11-55	7-15-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	7-15-55	12-2-54
54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	4-25-55	4-30-54
55. (VII) KLINE, J. R., Surgery; Dentistry; Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	3-11-55	3-24-54
56. (I) KEELY, J. E. (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	7-1-55	12-20-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	10-11-55	8-11-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	7-1-55	4-5-54
59. (I) HENKIN, B. (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	5-19-55	5-19-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	6-10-55	1-3-55
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	6-7-55	10-1-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	6-10-55	7-6-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	6-29-55	4-26-54
66. (V) LISANN, I. (BUCHLER, M., acting), Geometric Instruments; Automatic Weighing Scales; Acoustics	5-16-55	4-6-54
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	5-10-55	2-28-55
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	5-16-55	11-27-53
70. (II) BREWRINK, J. L., Security laws administration.		
CLASS. DIVS. I (VII) LANHAM, B. E., Paper Making	6-1-55	1-11-55
CLASS. DIVS. II (II) LADY, J. E., Oscillators; Amplifiers	7-1-55	2-2-55
CLASS. DIVS. III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	8-29-55	1-31-55
CLASS. DIVS. IV (VI) SMITH (Mrs.), M. P., Harrows; Plows; Earth Rollers	6-24-55	12-27-54
CLASS. DIVS. V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	7-1-55	6-2-55
DESIGNS (III) A—BREHM, G. L., Industrial Arts	8-18-55	9-22-55
DESIGNS (III) B—GRAY, M. A., Household, Personal and Fine Arts	8-5-55	9-12-55

The following divisions have been abolished: 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during May 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1953*.

Patents ..... Numbers 2,156,257 to 2,160,804, inclusive

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

1,627,184. (See 2,029,778.)

1,627,185. (See 2,029,778.)

1,672,163. (See 2,029,778.)

1,715,283, W. A. Fletcher, Communicating circuits, **filed** May 28, 1952, Ct. Cls., Doc. 268/52, *William Arthur Fletcher* v. *The United States*. Petition dismissed Jan. 31, 1956.

1,744,016, A. P. Steckel, Metal rolling; **1,779,195**, same, Method and apparatus for rolling thin sheet like material, **filed** Mar. 28, 1949, Ct. Cls., Doc. 49085, *The Union National Bank of Youngstown* v. *The United States*. Petition dismissed Dec. 28, 1955. Same, **filed** Aug. 15, 1949, Ct. Cls., Doc. 49281, *The Union National Bank of Youngstown* v. *The United States*. Decree as above.

1,779,195. (See 1,744,016.)

1,949,322, O'Hara and Herring, Switch, **filed** Feb. 26, 1951, D. C., E. D. Mich. (Detroit), Doc. 10366, *Bernard O'Hara et al.* v. *Essex Wire Corp.* Stipulation and order of dismissal with prejudice Dec. 30, 1955.

2,029,778, 1,627,185, 1,672,163, H. E. Krammer, Aircraft; **1,627,184**, same, Sectional flying boat, **filed** July 5, 1949, Ct. Cls., Doc. 49225, *Henry E. Krammer* v. *The United States*. Petition dismissed Oct. 12, 1955.

2,067,919, Harvey and Damitz, Compositions of matter and methods and steps of making and using the same; **2,128,247**, same, Process of treating cashew nut shell liquid, **filed** June 5, 1952, D. C. N. J. (Newark), Doc. 536/52, *The Harvel Corp. et al.* v. *Colloid Chemical Laboratories, Inc., et al.* Stipulation and order of dismissal Mar. 28, 1956.

2,104,532, R. Sommer, Non-skid tire, **filed** Apr. 5, 1956, D. C., S. D. N. Y., Doc. 108/264, *Robert Sommer* v. *Hoffman-Porsche Car Corp. et al.*

2,128,247. (See 2,067,919.)

2,133,716, H. L. Reitzes, Sealing means, **filed** Aug. 18, 1950, D. C., E. D. Pa. (Philadelphia), Doc. 11284, *Globe Products Heat Seal Corp.* v. *Sullivan Heat Sealing Equipment Co. et al.* Action dismissed Apr. 5, 1956.

2,145,577, 2,191,746, J. A. H. Barkeij, Combustion chamber in cylinder heads of internal combustion engines; **2,173,681**, same, Internal combustion engine; **2,522,921**, same, Combustion chamber for internal combustion engines; **2,714,858**, Kepka and Barkeij, Rotary compressors or pumps, in combination with hydraulic controls, etc., **filed** Mar. 21, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19702–PH, *Jean A. H. Barkeij* v. *Lockheed Aircraft Corp.*

2,165,140, M. T. Harvey, Compositions of matter and methods and steps of making and using the same, **filed** June 17, 1954, D. C. N. J. (Newark), Doc. 500/54, *The Harvel Corp. et al.* v. *Colloid Chemical Laboratories, Inc., et al.* Stipulation and order of dismissal Mar. 28, 1956.

2,173,681. (See 2,145,577.)

2,191,746. (See 2,145,577.)

2,226,449, F. C. Stephens, Method of repairing textile fabrics, **filed** Apr. 6, 1956, D. C. Colo (Denver), Doc. 5335, *National Multiwearing Co., Inc.* v. *Colorado Rewearing Co.*

2,282,654, W. L. Horner, Apparatus for determining fluid contents of solids; **2,327,642**, same, Method and apparatus for measuring porosity of solids; **2,345,535**, same, Method of determining porosity; **2,361,844**, same, Method for determining fluid contents of solids; **2,617,296**, J. D. Wisenbaker, Process for treating core samples, **filed** Apr. 9, 1956, D. C., W. D. Tex. (San Antonio), Doc. 2297, *Core Laboratories, Inc.* v. *Petroleum Service and Research Corp.*

2,301,681, B. Rosenberg, Window curtain, **filed** Apr. 10, 1956, D. C., S. D. N. Y., Doc. 108/311, *Cameo Curtains, Inc.* v. *Cortley Curtain Corp.*

2,327,642. (See 2,282,654.)

2,345,535. (See 2,282,654.)

2,361,844. (See 2,282,654.)

2,366,621, H. D. Hineline, Altitude indicating system, **filed** Dec. 28, 1949, Ct. Cls., Doc. 49418, *Harris D. Hineline* v. *The United States*. Petition dismissed; no infringement Mar. 6, 1956.

2,405,866. (See Re. 23,619.)

2,407,498, H. H. Johnson, Shoe; **2,442,007**, same, Shoe with shank spring and stiffener, **filed** Sept. 13, 1954, D. C., E. D. N. Y. (Brooklyn), Doc. 14757, *Maxwell Sachs* v. *Montague Shoe Co., Inc.* Discontinued Mar. 30, 1956.

2,442,007. (See 2,407,498.)

2,447,354, M. A. Morrill, Rotary side delivery rake; **2,472,260**, same, Side delivery rake, **filed** Oct. 5, 1951, D. C., S. D. Calif. (Los Angeles), Doc. 13545–C, *West Coast Sales and Service Co. et al.* v. *Kelly Ryan Equipment Co. et al.* Claims 1 thru 4, 6, 11 thru 14, and 16 thru 23 of Patent No. 2,447,354 and claims 10 and 15 of Patent No. 2,472,260 held valid and infringed by defendant Kelly Ryan Equip. Co.; said defendant restrained from further infringement (notice Mar. 28, 1956).

2,461,975, E. D. Fuller, Method of making flattened thermoplastic tubing of predetermined desired characteristics; **2,461,976**, B. H. Schenk, same; **2,632,206**, R. F. Pierce, Method and apparatus for producing film, **filed** Apr. 2, 1956, D. C., S. D. N. Y., Doc. 108/216, *The Visking Corp.* v. *Chester Packaging Products Corp.*

2,461,976. (See 2,461,975.)

2,472,260. (See 2,447,354.)

2,486,560, R. B. Gray, Transducer and method of making the same, **filed** Apr. 2, 1956, Ct. Cls., Doc. 147/56, *Erie Resistor Corp. et al.* v. *The United States*.

2,494,798, W. J. Dobkin, Folding shelf, **filed** Mar. 30, 1956, D. C. R. I. (Providence), Doc. 1993, *The Nik-O-Lok Co., Inc.* v. *American Coin Lock Co., Inc., et al.*

2,522,921. (See 2,145,577.)

2,565,346, C. H. Braselton, Cosmetic applicator; **2,669,992**, same, Cartridge-type lipstick, **filed** Apr. 2, 1956, D. C., S. D. N. Y., Doc. 108/221, *Coty, Inc.* v. *Revlon Products Corp.*

2,579,323, G. J. Kessenich, Rocket projectile, **filed** Mar. 28, 1955, Ct. Cls., Doc. 127/55, *Gregory J. Kessenich et al.* v. *The United States*. Petition dismissed Nov. 8, 1955.

2,599,168, S. Feldman, Pleated fabric and garment made of same; **Des. 170,012**, same, Skirt or similar article; **2,619,819, 2,622,423, 2,624,186**, same, Knitted garment; **TM 561,593** ("Perma Knit-Pleat" and design), **TM 576,395** ("Flare Knit" and design), Lass O'Scotland, Ltd., Knitted skirts, suits, dresses, blouses, jackets and coats for women, misses, and children, **filed** Apr. 2, 1956, D. C., S. D. N. Y., Doc. 108/209, *Lass O'Scotland, Ltd., et al.* v. *Kimberly Knit Wear, Inc., et al.*

2,604,213, Bales and Monaco, Commercial shelving, **filed** Feb. 17, 1956, D. C. Nebr. (Omaha), Doc. 085, *Lyon Metal Products, Inc.* v. *Omaha Fabricating Co. (Inc.) et al.*

2,609,092. (See 2,565,346.)

2,617,296. (See 2,282,654.)

2,619,819. (See 2,599,168 and Des. 170,012(*b*).)

2,622,423. (See 2,599,168 and Des. 170,012(*b*).)

2,624,186. (See 2,599,168 and Des. 170,012(*b*).)

2,632,206. (See 2,461,975.)

2,667,990. (See Re. 23,830.)

2,685,394, I. Rabinowitz, Boneless ham pressure packer, **filed** Sept. 24, 1954, D. C., E. D. Pa. (Philadelphia), Doc. 17777, *Irving Machinery Co., Inc.* v. *Franklin Provision Co.* Consent decree favor plaintiff Apr. 9, 1956.

2,691,730, Y. T. Lo, Wide band antenna, **filed** Apr. 5, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19782–BH, *Channel Master Patent Corp.* v. *Clear Beam Antenna Corp.*

2,704,730, H. Glatt, Semi-porous coated cloth and articles made therefrom, **filed** May 2, 1955, D. C. N. J. (Newark), Doc. 413/55, *Temp-Resisto Corp.* v. *Samuel Kaplan & Sons, Inc.* Stipulation of dismissal Apr. 5, 1956.

2,714,663. E. A. Ferguson, Jr., Appetite satient; **TM 542,748** (Wafex). E. A. Ferguson, Appetite satient, a composition effective to curb one's appetite for fattening foods, **filed** Feb. 29, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16314, *Edgar A. Ferguson, Jr., et al.* v. *Frank Anderson Inc. et al.* Consent judgment Apr. 6, 1956.

2,714,858. (See 2,145,577.)

2,722,159. F. Budreck, Anti-glare rear vision mirror, **filed** Mar. 30, 1956, D. C., E. D. Mich. (Detroit), Doc. 15523, *Monarch Tool & Machinery Co.* v. *Nelmor Corp.*

2,735,739. (See Des. 168,288.)

2,737,422. J. H. Barnes, Trim and protective member for attachment to an automobile tire and wheel assembly, **filed** Apr. 4, 1956, D. C. N. J. (Newark), Doc. 293/56, *James H. Barnes* v. *Tyre-Trim Co., Inc.*

Re. 23,619 (of **2,405,866**), C. E. Weller, Electrical heating apparatus, **filed** July 24, 1953, D. C., N. D. Ill. (Chicago), Doc. 53c1636, *Weller Mfg. Co.* v. *Drake Electric Works, Inc.* Decree on stipulation; patent held valid; defendant enjoined Apr. 3, 1956.

Re. 23,830 (of **2,667,990**), A. B. Mojonnier, Dispensing mechanism with time controlled flow, **filed** Feb. 19, 1954, D. C., N. D. Ill. (Chicago), Doc. 54c277, *The Mojonnier Dowson Co.* v. *U. S. Dairies Sales Corp. et al.* Consolidated with cause 55c137 Feb. 28, 1955: Order of judgment; patent Reissue No. 23,830 held invalid; complaint dismissed Feb. 21, 1956. Same, **filed** Jan. 25, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c137, *Julius A. Zinn, Jr.* v. *Albert B. Mojonnier et al.* Order consolidating cause 54c277 with this cause; said consolidated causes to proceed under 54c277 Feb. 28, 1955: Order of judgment; patent Reissue No. 23,830 held invalid; complaint dismissed Feb. 21, 1956.

Des. 168,288. D. A. Cameron, Self-service display container: **2,735,739.** D. Patriarca, Self-server display cabinet, **filed** Mar. 19, 1956, D. C., N. D. Calif. (San Francisco), Doc. 35331, *Patriarca Mfg. Co.* v. *Alfred A. Benedetti.* Same, Doc. 35,332, *Patriarca Mfg. Inc.* v. *Melvin Sosnick et al.* Same, **filed** Mar. 26, 1956, D. C., N. D. Calif. (San Francisco), Doc. 35349, *Patriarca Mfg. Inc.* v. *Alfred Austruy.*

Des. 170,012(a). (See 2,599,168.)

Des. 170,012(b), S. Feldman, Skirt or similar article; **2,619,819, 2,622,423, 2,624,186,** same, Knitted garment, **filed** Apr. 2, 1956, D. C., S. D. N. Y., Doc. 108/225, *Knit Wear Patents Inc.* v. *Rosanna Knitted Sportswear Inc.*

REISSUES

MAY 8, 1956

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,148
MANUFACTURE OF SYNTHESIS GAS
Paul W. Garbo, Freeport, N. Y., assignor to Hydrocarbon Research, Inc., New York, N. Y., a corporation of New Jersey
Original No. 2,526,652, dated October 24, 1950, Serial No. 700,819, October 2, 1946. Application for reissue September 5, 1951, Serial No. 245,120
13 Claims. (Cl. 48—196)

12. In the high temperature manufacture of synthesis gas composed essentially of hydrogen and carbon monoxide by the reaction of reactants comprising a hydrocarbon and an oxygen-containing gas, the steps which comprise separately preheating said reactants, supplying the preheated reactants to an open, unpacked reaction zone free from granular packing and having a low ratio of internal surface to volume, said ratio being less than 1 when said surface and said volume are computed in terms of feet as the linear unit of measurement, whereby to inhibit the production of free carbon, said preheated reactants being supplied in relative quantities operative for the production of a reaction product con-



taining essentially carbon monoxide and hydrogen, and maintaining said reaction zone at a temperature of at least 2100° F. and a pressure of a least 200 lbs. per sq. in. gauge.

PLANT PATENTS

GRANTED MAY 8, 1956

Owing to the fact that almost all of the illustrations of the plant patents are in colors, it is not practicable to print a cut of the drawing.

1,475
WALNUT TREE
Charles Edward Sullivan, Yuba City, Calif.
Application March 22, 1955, Serial No. 496,088
1 Claim. (Cl. 47—62)

A new and distinct variety of walnut tree, substantially as illustrated and described, characterized—in comparison to the Hartley and Franquette walnuts by the beginning of production of nuts in a relatively early year of growth and at least by the sixth year thereof; and further characterized—especially in comparison to said Hartley walnut—by the heavier bearing of nuts which are large, well filled, of better quality, and attractive appearance; and additionally characterized by nuts which are relatively free from blight and sunburn and which crack-out readily, by foliage which leafs out late in spring, approximately two weeks later than the Payne walnut and just ahead of the Hartley walnut, and by a mid-season harvest in the fall between said Payne and Hartley walnuts.

1,476
WALNUT TREE
Charles Edward Sullivan, Yuba City, Calif.
Application March 22, 1955, Serial No. 496,089
1 Claim. (Cl. 47—62)

A new and distinct variety of walnut tree, substantially as illustrated and described, characterized by being an early, prolific bearer of particularly large size, extremely well filled nuts of consistently excellent quality which have a relatively high percentage of meat to shell by weight, and being relatively free from blight and sunburn; and further characterized—in comparison to the Payne walnut—by leafing out later in the spring, and harvesting in late summer at substantially the same time but bearing nuts which are at least twice the size, and of better quality.

1,477
LANTANA PLANT
Ronald Regan, Monterey Park, Calif., assignor to Monrovia Nursery Co., Monrovia, Calif., a corporation of California
Application June 7, 1955, Serial No. 513,923
1 Claim. (Cl. 47—60)

The new and distinct variety of lantana plant, substantially as herein shown and described, characterized especially by its abundance of faintly aromatic flowers and its combination of the prostrate, trailing growth habit of *Lantana callowiana* Goldrush, with the orange-red flower coloration of *Lantana camara* Radiation.

1,478
LANTANA PLANT
Ronald Regan, Monterey Park, Calif., assignor to Monrovia Nursery Co., Monrovia, Calif., a corporation of California
Application June 7, 1955, Serial No. 513,924
1 Claim. (Cl. 47—60)

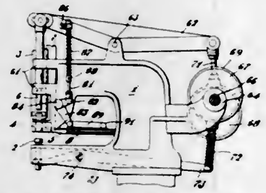
The new and distinct variety of lantana plant, substantially as herein shown and described, characterized especially by its abundance of faintly aromatic flowers and its combination of the prostrate, trailing growth habit of *Lantana callowiana* Goldrush, with the phlox pink flower coloring of *Lantana camara* Christine.

PATENTS

GRANTED MAY 8, 1956

GENERAL AND MECHANICAL

2,744,250
JEWEL SETTING MACHINE
Paul Butler Montague, Melrose, Mass., assignor to The Standard Rivet Company, South Boston, Mass., a corporation of New Hampshire
Application June 13, 1955, Serial No. 514,868
6 Claims. (Cl. 1—3)



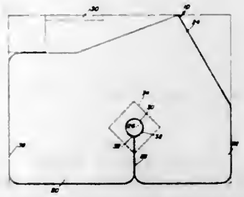
1. For stapling a jewel to sheet material, apparatus comprising means for supporting the material at a stapling position, means for feeding a jewel to said position, a plunger guided on a path to said position for driving a staple over said jewel and through said material, a drive member connected to said plunger for driving said plunger to said position thereby stapling the jewel to the material, a yielding linkage connected between said drive member and feeding means, and a stop for arresting the jewel feeding means short of the path of said plunger, said linkage being arranged to cause said feed means to deliver the jewel to said stapling position in advance of stapling and said linkage being arranged to yield to the force of the plunger transmitted through a staple to the feeding means after said feeding means is arrested and while said member moves said plunger to stapling position.

2,744,251
AUTOMATIC INSERTER FOR SUTURING CLIPS
Leonhard Vollmer, New York, N. Y.
Application June 4, 1953, Serial No. 359,619
6 Claims. (Cl. 1—49.1)



1. An automatic inserter for suturing clips comprising a box-like frame, depressible tong parts connected to opposite sides of the box-like frame and having specially formed ends adapted to receive and retain a suturing clip, a magazine slide assembly mounted within the box-like frame and extending longitudinally between the tong parts, means co-acting between the slide assembly and the tong parts and operable upon the slide assembly as the tong parts are depressed to cause advancement of the magazine slide assembly, said co-acting means including a second box-like frame and said second box-like frame aligned with the first box-like frame and slidably receiving said magazine slide assembly to guide the lower end thereof, said magazine slide assembly being adapted to contain a column of suturing clips and having means for retaining the column of suturing clips while permitting the advancement of the lowermost clip as the slide assembly is advanced to deliver the lowermost clip to the specially formed end of the tong parts, automatic release means on said magazine operable by said co-acting means when the magazine slide assembly has been advanced to its clip delivery position to release the magazine and the lowermost clip to the specially formed ends of the tong parts, return spring means connected between the first mentioned box-like frame and the slide assembly for normally urging the slide assembly to its retracted position, said tong parts being operative with further closing pressure after the slide assembly has been released to close the clip upon the skin or work parts being joined together.

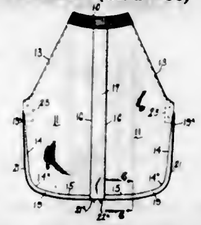
2,744,252
BEAUTICIAN'S CAPE
Mary A. Cansler, Canadian, Tex.
Application June 1, 1954, Serial No. 433,342
1 Claim. (Cl. 2—50)



A beautician's cape comprising an enlarged flat sheet of flexible material having parallel end edges, and a pair of side edges with one side edge perpendicular to the end edges and the other side edge having a portion parallel to the one side edge and a pair of angularly disposed edges converging to a point disposed in offset relation to the center of the sheet of material, said sheet of material having a neck receiving opening therein with the opening being disposed closer to the one side edge than the other side edge and disposed between imaginary lines passing through the center of the sheet of material and through the offset point with the imaginary lines being parallel to the end edges of the sheet of material, said sheet of material having an entrance slit extending from the neck opening to said one side edge, an upstanding annular collar extending from the edge of said neck opening, said collar having a slit in alignment with said entrance slit and forming a continuation thereof, a plurality of circumferentially spaced snap fastener elements on said collar adjacent each edge of the slit for adjustably securing the collar in encircling relation to the neck of a wearer, a reinforcing sheet of fibrous material underlying the area of the enlarged sheet of material adjacent the neck opening, and a covering sheet of flexible material of the same size as the reinforcing sheet underlying said reinforcing sheet with the reinforcing sheet and the covering sheet being secured to the enlarged sheet of material, the edges of the entrance slit being disposed in overlapping relation when the sheet of material is donned by a wearer whereby the sheet of material will be supported by the collar with

the sheet of material draping downwardly therefrom in a generally conical shape with the end edge remote from the neck opening being disposed forwardly and to one side of the wearer and said point on the other side edge being disposed forwardly and to the other side of the wearer.

2,744,253
CONVERTIBLE GARMENT
Mollie S. Freedman, New Haven, Conn.
Application December 11, 1953, Serial No. 397,554
2 Claims. (Cl. 2—80)



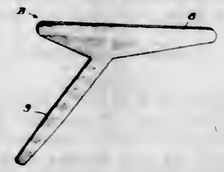
2. In a garment convertible from a legged form to a bag form, the combination of elongate front and rear sections for lengthwise suspension from the waist of the wearer, each section having upper side edge portions converging toward the waist of the wearer, said upper side edge portions being permanently secured to one another to enclose the lower body of the wearer, said edge portions curving outwardly at the junction of the latter with lower substantially straight side edge portions of the sections, each junction forming an obtuse angle at one side of each section and the junctions providing a crotch area in the legged form of the garment, and each section having a bottom edge merging with said lower side edge portions, a first fastening means on the front section arranged along substantially one-half of the bottom edge and the corresponding lower side edge portion, a second fastening means on the front section arranged along substantially the other half of the bottom edge and the corresponding lower side edge portion, a third fastening means on the rear section arranged along substantially one-half of the bottom edge and the corresponding lower side edge portion, the last-mentioned side edge portion and part of the bottom edge corresponding to the first-mentioned side edge portion and part of the bottom edge of said front section, and a fourth fastening means on the rear section arranged along substantially the other half of the bottom edge and the corresponding lower side edge portion, the first and second fastening means cooperating with the third and fourth fastening means, respectively, to effect a garment of bag form, the first fastening means cooperating with the second and the third with the fourth, on folding each section on itself along a longitudinal median fold line, to effect a garment of legged form.

2,744,254
GARMENT PAD TO CORRECT LOW SHOULDERS
Sol Drescher, Hewlett Harbor, and Harry Bryer, New York, N. Y.
Application January 15, 1953, Serial No. 331,377
1 Claim. (Cl. 2—93)



A flat elongated alteration pad of substantially uniform thickness having one longitudinal edge concavely curved and the other longitudinal edge convexly curved, said longitudinal edges being connected at one end by a substantially straight transverse edge extending at substantially right angles to the longitudinal edges, the other ends of the curved edges being connected by a second end edge which extends at substantially right angles to the direction of the first mentioned end edge, the first mentioned end edge being adapted to be fitted into the shoulder seam of a garment, the concavely curved edge being adapted to be fitted into the rear seam of the sleeve, and the second named end edge being adapted to be fitted into the side seam below the sleeve opening of the garment, said pad comprising an inner stiffening layer and two outer layers stitched together in substantially parallel relationship to each other, said inner layer being relatively thin and being formed from a substantially creaseless, shrinkproof, grainless, unwoven fibrous textile fabric which is resilient in all directions, said outer layers being formed of a soft padding material thicker than the said inner layer, and the width and length of said pad being many times the thickness of said pad, whereby it may cover a large surface area of a garment without adding appreciably to the garment thickness.

2,744,255
SHIRT COLLAR STAY
Socrates G. Portias, Los Angeles, Calif.
Application July 22, 1954, Serial No. 445,087
1 Claim. (Cl. 2—132)

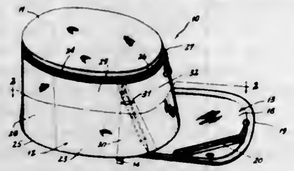


A stay for a shirt collar of the type embodying a turn down lapel forming a ridge along its upper margin with a crease on its under side leading from the end of the collar; said stay comprising an elongated strip adapted to be positioned in said crease to underlie the lapel ridge, said strip having a straight upper margin to extend along the underside of the collar ridge a substantial part of the length thereof in abutting relation thereto, and having an outer end for positioning adjacent the end of the crease, and an integral tongue projecting obliquely downward and forward from the lower margin of said strip intermediate the ends thereof; the outer end portion of said strip constituting a cantilever like elongated bracket integrally connected with and projecting forwardly from the base of said tongue coplanar therewith; said bracket and tongue having outer ends spaced relative to each other and terminating on a plane extending substantially perpendicular to the straight upper margin of said strip so that the outer end of said bracket will be at least nearly vertically aligned with the outer end of said tongue.

2,744,256
CAP HAVING A PLURALITY OF POCKETS
George B. Slotkin and Clarice Ann Creely, St. Louis County, Mo.
Application November 28, 1952, Serial No. 322,914
1 Claim. (Cl. 2—195)

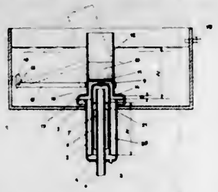
In a headgear having a substantially vertical crown and a substantially horizontally stiff visor, a plurality of linings in said crown, and a plurality of varying sized pockets about the periphery of said crown defined by two adjacent linings, one of said last-named linings being on the outside of said crown, said pockets having closed bottoms and sides formed by fastening said two linings theretogether and being open at the top, said pockets

having at least one closure means therefore comprising a crown zipper which is adapted to close and open selected pockets without opening others upon partial operation and open and close all of said pockets upon complete operation, and a pocket in said visor constituted by an



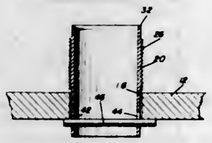
outer lining fastened to a base for said visor at its outer edges, said lining having a pocket opening therein spaced from said edges which is provided with a zippered closing means and at least one dip-pocket in the crown formed by an opening in the outer lining at a level lower than said crown zipper to receive articles therein.

2,744,257
WATER CLOSET FLUSHING TANK
Josef Vymer, Prague, Czechoslovakia
Application May 7, 1954, Serial No. 428,297
3 Claims. (Cl. 4—43)



1. A universal air seal flushing device, comprising a tank, a siphoning trap mounted in the bottom of the tank and including a discharge tube, a downwardly opening siphon cap over said discharge tube and a trap tube around said cap and extending above the bottom of the tank, a covering bell loosely seated on the top of said siphon cap, and a float rigidly connected with said covering bell and containing a ballast of variable weight, said float having a smaller diameter than the lower part of the covering bell and extending above a predetermined maximum height of the surface of the liquid in the tank, said covering bell together with the float being adapted to be automatically lifted by the buoyancy of the covering bell and of the submerged part of the float when the surface of the liquid in the tank rises above said predetermined maximum height.

2,744,258
FLUSH VALVE AND VALVE OUTLET
Andrew W. Harkness, South Glens Falls, N. Y.
Application January 29, 1954, Serial No. 406,931
1 Claim. (Cl. 4—52)



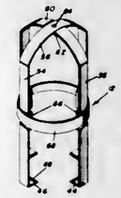
A flush valve outlet for attachment to the apertured bottom wall of a flush tank comprising, a tubular sleeve adapted to extend through the opening, means detachably connected to the upper end of said sleeve and adapted to engage the upper surface of the bottom wall of the tank, and means at the lower end of the sleeve for selectively engaging the lower surface of the bottom wall of the tank, said means at the lower end of the sleeve extending laterally, said means including a transverse removable pin extending through diametrically aligned apertures in the sleeve with one of the apertures being elongated to permit insertion of the pin from the interior of the sleeve.

2,744,259
FLUSH-VALVE TANK-BALL
George W. Dague, Oklahoma City, Okla.
Application December 1, 1954, Serial No. 472,278
2 Claims. (Cl. 4—52)



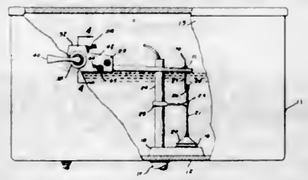
1. In a device of the class described, the combination with a valve base provided with a depending extension and a valve seat, of a ball valve adapted to engage said valve seat, a tubing closed at its bottom and open at its top extending entirely through and above said ball valve, said tubing having its lower end extending at all times below said depending extension, a rod having its lower end extending only a short distance into the top portion of said tubing, means supporting said rod in a fixed position on said valve base, and a pull chain and means attaching said chain to the upper part of said tubing.

2,744,260
VALVE BALL CAGE
Andrew W. Harkness, South Glens Falls, N. Y.
Application February 11, 1954, Serial No. 409,735
1 Claim. (Cl. 4—57)



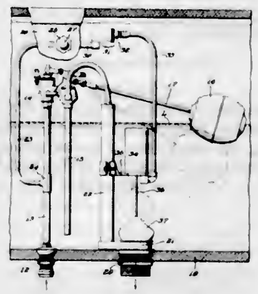
In combination with a flush tank outlet having a peripheral flange and a valve seat extending through and secured to the bottom of a flush tank, a sealing gasket between the bottom of the tank and the peripheral flange, a valve ball positioned on said valve seat, a flexible lift member connected to said valve ball, and a cage forming an enclosure for guiding movement of the valve ball, said cage including a pair of inverted U-shaped strap members having perpendicularly disposed bight portions and parallel leg portions, a recess formed in the bight portion of one of said strap members for positioning the bight portion of the other strap member in perpendicular relation, fastening means securing the bight portions together, a slidable ring encircling said leg portions for urging the leg portions towards each other, the free end of each leg portion being inturned and provided with a sharpened edge penetrating into the sealing gasket for securing the cage in enclosing relation to the valve ball when the ring is moved towards the free ends of the leg portions, the central portion of each of said leg portions having an inwardly extending recess for positioning and receiving said ring for retaining the leg portions in substantially parallel relation and permitting outward spreading of the legs for removing the cage when the ring is moved to the upper end thereof.

2,744,261
TOILET FLUSH CONTROL
Eugene M. Gram, Scranton, Pa.
Application April 23, 1954, Serial No. 425,187
4 Claims. (Cl. 4—67)



3. In a flush tank, a valve seat in the bottom of the tank, a ball valve engageable on said seat and vertically movable therefrom, a lever pivoted to said tank, means connecting said lever to said ball valve, an operating shaft journaled in said tank, a cam arm secured to said shaft and being engageable with said lever to elevate the ball valve responsive to rotation of said shaft, said cam arm having opposed portions of different lengths, whereby the ball valve will be elevated by different amounts for different directions of rotation of said shaft, a float lever pivoted to said tank adjacent said cam arm, a depending float secured to said float lever, and release means on said float lever engageable with said cam arm responsive to downward rotation of said float lever when said cam arm is in its ball valve-elevating position.

2,744,262
VALVE OPERATING MECHANISM
Albert B. Boyd, Drexel Hill, Pa.; Margaretta Boyd Ritter, administratrix of said Albert B. Boyd, deceased
Application May 27, 1953, Serial No. 357,801
5 Claims. (Cl. 4—67)



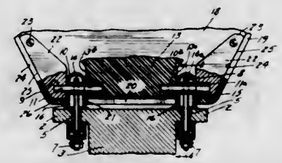
1. In a tank containing water and air above said water, and having a flush valve disposed below the water level, a combined valve operating and vacuum breaking mechanism comprising reciprocating means for operating the valve, a hydraulic cylinder for operating the reciprocating means to open the flush valve, a liquid supply line, control means for opening and closing said liquid supply line, an overbalanced rocker valve, located wholly above said water level, said rocker valve comprising a container having an inlet opening connected to said control means, said container having an outlet opening connected to said hydraulic cylinder, and said container having a relief opening therein and having an overbalanced valve normally closing the inlet opening with the relief opening open, said overbalanced valve including an actuator member responsive to incoming fluid flow to open the inlet opening and close the relief opening causing actuation of said hydraulic cylinder thereby opening said flush valve.

2,744,263
COMBINED BATHTUB SHELF AND HEAD REST
Pauline B. Kraft, Evansville, Ind.
Application December 19, 1952, Serial No. 326,885
1 Claim. (Cl. 4—185)



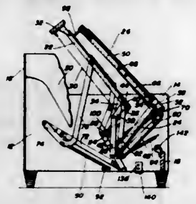
A combined shelf and head rest for use on a bath tub in shampooing the hair comprising a flat rigid panel of a length to extend transversely over a bath tub with its ends resting on the rim of the tub, said panel having a central, integral rigid head rest portion depending therefrom and concaved longitudinally of the panel for supporting a head, said panel and head rest portion being of skeleton form for drainage purposes and including a pair of longitudinal side rods and a longitudinal center rod, and a pair of bifurcated bolts straddling said center rod and slidable along the same into engagement with the sides of the tub to secure said panel to the tub, and nuts on the furcations of said bolts for clamping the same to said center rod in engagement with said sides of the tub.

2,744,264
TOILET SEAT AND COVER THEREFOR
Peter J. Sperzel, Minneapolis, Minn., assignor to Sperzel Company, Minneapolis, Minn., a corporation of Minnesota
Original application August 17, 1953, Serial No. 374,789. Divided and this application April 28, 1955, Serial No. 504,419
4 Claims. (Cl. 4—234)



1. In a toilet seat and cover, a pair of laterally spaced bearing brackets adapted to be secured to a rearwardly projecting supporting shelf portion of a conventional toilet bowl, said brackets having laterally aligned openings therethrough, said seat having a longitudinally projecting anchoring portion having the side edges thereof snugly received between said bearing brackets, a pair of laterally spaced hinge brackets secured to said cover, said bearing brackets being snugly received between said hinge brackets, a pair of hinge pintles, said pintles comprising a pair of laterally aligned first elements rigidly secured to and laterally projecting one each outwardly from an opposite edge of said anchoring portion and a pair of laterally aligned second elements rigidly secured to said hinge brackets and laterally projecting one each inwardly therefrom, one each of said first and second elements being tubular, said tubular first and second elements telescopically receiving the other second and first element, respectively, for rotation thereon, said telescoping portions of said elements being journalled in the openings of the bearing brackets for rotation therein.

2,744,265
CONVERTIBLE FURNITURE
Joseph R. Thomas, Chicago, Ill.
Application July 23, 1954, Serial No. 445,299
17 Claims. (Cl. 5—13)



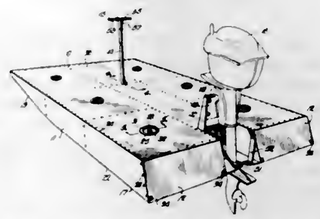
15. In convertible furniture having a restricted space between a fixed front board and the bottom of a forwardly and downwardly extending back rest, the method of mounting a foldable seat and bed frame therein which is longer than the said space so that a portion of the frame must be housed below and behind the lower edge of the front board but is of a height less than the said space, swinging the front end of the folded sections upwardly and rearwardly so that the front end of the folded bed frames will continue upwardly and the rear end of the connected frames will swing forwardly below the lower end of the back rest to an intermediate set position between the back rest and the front board and free from contact with both of them, and unfolding the sections from their set position by moving the outer section forwardly in a reverse direction to the swinging movement over the top of the front board until the sections are in alignment with one of the sections inverted in the seat position.

2,744,266
CONVERTIBLE SEAT-BED
Frank E. Kaehn, Fort Lauderdale, Fla., assignor of one-half to Louis H. Solonche, Paterson, N. J.
Application April 13, 1955, Serial No. 501,102
5 Claims. (Cl. 5—18)



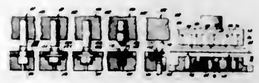
5. A convertible seat-bed, comprising a substantially rectangular supporting framework having two sides, a rear and a front, a lower frame resting upon said framework in the closed position of the seat-bed and having two sides and a rear enclosed by the two sides and the rear of the framework in said closed position, at least two spaced parallel links connected with said framework and said lower frame and located in the space between a side of the framework and an adjacent side of the lower frame in said closed position, an upper frame located upon said lower frame in said closed position and being substantially of the same size, a rack carried by a side of said upper frame, a shaft carried by said framework adjacent and parallel to the front thereof, a pinion carried by said shaft and meshing with said rack, said rack extending horizontally for guiding said upper frame in a forward horizontal movement away from said lower frame to an open position in which said upper frame is beyond said lower frame, said framework having a guide extending along one side of said lower frame parallel to and on a lower level than said rack, a roller depending from said upper frame and rolling upon said guide, said roller being located adjacent the rear of the framework in said closed position, a coiled spring extending substantially in the direction of said links in said closed position and located between the front and the rear of the framework, said spring having a rear end connected to said lower frame and a front end connected to said framework, said links and said spring being adapted to swing said lower frame to the level of said upper frame, and a hook-and-pin device connected with said upper frame and said lower frame and interengaging during the forward movement of the upper frame to said open position, whereby further movement of the upper frame will actuate said links and said spring and swing said lower frame to the level of the upper frame after it has been cleared by the upper frame.

2,744,267
WATER SCOOTER
Horace H. Roby, Springfield, Mo.
Application July 7, 1954, Serial No. 441,769
2 Claims. (Cl. 9—1)



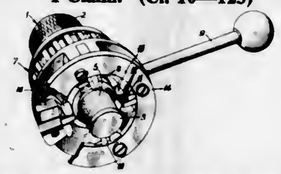
1. In a water vehicle adapted to be propelled through the water in a selected direction, a hollow body having a top surface, a bottom surface and circumferential side walls forming a float platform having a forward end and a trailing end, the bottom surface at the forward end being upwardly inclined, as least one portion of said body adjacent the bottom surface open to receive water, a buoyant float member in said body having an external volume less than the internal volume of said body whereby water will accumulate in said body when said vehicle is stationary, and at least one drain aperture formed closely adjacent the bottom surface additional to and differing from said first open body portion in the trailing end of said body through which the accumulated water in said body is returned to the exterior thereof when said vehicle is set in motion.

2,744,268
METHOD OF MAKING LOCK WASHERS
Robert W. Beart, Park Ridge, Ill., assignor to Illinois Tool Works, Chicago, Ill., a corporation of Illinois
Application June 12, 1953, Serial No. 361,270
9 Claims. (Cl. 10—72)



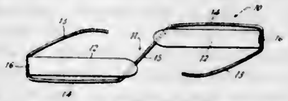
1. A method of making a washer from a generally annular blank having predetermined internal and external diameters and tooth elements on the inner margin thereof; and comprising coning the blank by application of pressure to the central portion thereof, forming the coned blank into substantially cylindrical form, and then expanding the toothed margin of the substantially cylindrical blank to stretch the margin outwardly and provide a washer having internal and external diameters greater than the said predetermined internal and external diameters of the blank and with the tooth elements disposed exteriorly of the washer.

2,744,269
PIPE THREADING DIE HEAD ASSEMBLY
Karl K. Kerr, Lakewood, Ohio, Edward J. Kleber, Jr., Niagara Falls, N. Y., and Samuel H. S. Raub, Cleveland, Ohio, assignors to Union Carbide and Carbon Corporation, a corporation of New York
Application November 20, 1951, Serial No. 257,232
1 Claim. (Cl. 10—123)



A die head assembly for threading impervious carbon and graphite pipe to any desired length comprising a stepped-diameter cylindrical mandrel having a threaded portion near the rear end thereof, a reduced diameter expandable arbor section at the front end thereof for insertion into said pipe, and means for expanding said arbor section to engage the interior of said pipe; a die head having at least four chasers symmetrically and circumferentially disposed and rigidly secured thereto, and a plurality of pusher teeth on each of said chasers for rotatably engaging said threaded portion of said mandrel; at least one individually-mounted single cutting tooth rigidly secured to each of said chasers and projecting inwardly immediately in advance of said pusher teeth to cut said pipe, there being a total of at least five such cutting teeth positioned to cut symmetrically to full thread profile and successive cutting teeth arranged to cut progressively deeper whereby a thread of full depth is developed on said pipe in less than one-and-one-half revolutions of said die head; said die head pusher teeth having the same pitch as said cutting teeth and a pitch diameter equal to the pitch diameter of said cutting teeth positioned to cut said pipe to full depth.

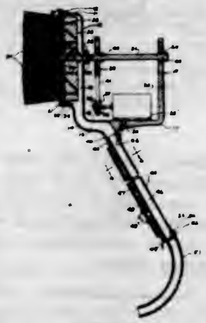
2,744,270
FLEXIBLE MEMBRANE SHOE TREE
Charles Moses, Long Beach, N. Y.
Application November 9, 1953, Serial No. 390,902
4 Claims. (Cl. 12—128.4)



1. In a shoe tree, a sole engaging base member in the form of a strip, an upwardly disposed toe portion having a top central portion at the forward end of said base member, an upper flexible membrane and opposed side flexible membranes for supporting the vamp of a shoe, said opposed side membranes having free ends, said membranes having the greatest degree of flexibility at said free ends, said membranes directed towards the central portion of said shoe tree, and a shank portion extending upwardly and rearwardly from the rear end of said base member, said membranes adapted to engage the toe and vamp portions of a shoe when said shoe tree is inserted in a shoe.

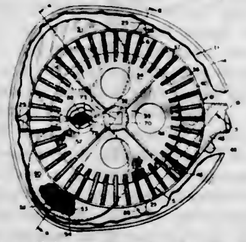
2,744,271
POWER OPERATED FOUNTAIN BRUSH
Frank P. Florence, Detroit, Mich.
Application November 27, 1953, Serial No. 394,580
3 Claims. (Cl. 15—29)

3. A power brush comprising a casting including when in position for use on a wall a hollow upright annular housing with an open face, a horizontally disposed platform rearwardly thereof, a formed fluid delivery conduit depending at one end downwardly from said platform with its other end communicating with the interior of said housing, an upright pedestal on said platform transversely apertured at its upper end and spaced from said housing, a hollow straight handle communicatively joined at one end to said conduit extending angularly downward from said platform and at its other end adapted for connection to a pressure fluid source, a horizontally arranged rotatable



shaft journaled through said housing and the aperture in said pedestal, a circular apertured brush head loosely mounted within said housing and secured to said shaft and occupying the greater portion of the interior of said housing, a series of bristles on said head projecting from said housing, and a motor secured upon said platform in driving relation with said shaft.

2,744,272
AIR-DRIVEN FLOOR POLISHER
William T. Theis, North Hollywood, and Leland W. Green, Malibu, Calif., assignors to Interstate Engineering Corporation, El Segundo, Calif., a corporation of California
Application November 2, 1950, Serial No. 193,704
3 Claims. (Cl. 15—49)

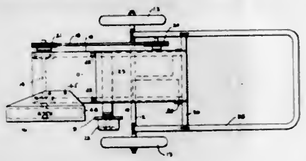


1. In a floor polisher, a housing having an open lower end and having an air exhaust port thereabove, a chassis plate member mounted in said housing and including a tubular neck projecting through the housing, said chassis plate being formed to provide a circular recess on its upper side for the reception of a turbine wheel, said chassis plate having a port therethrough from the lower side to said recess, means providing a passage between said last-mentioned port and said neck, a turbine wheel rotatably mounted on said chassis plate and positioned in said recess, a rotary brush wheel rotatably mounted on the underside of and carried by said chassis plate, and drive means operatively connecting said turbine wheel and said brush wheel.

2,744,273
RAILWAY TRACK CLEANER
John H. Carl, Syracuse, N. Y.
Application June 16, 1952, Serial No. 293,749
1 Claim. (Cl. 15—55)

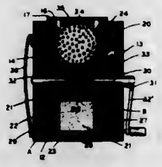
A railway track cleaner comprising a frame, a motor mounted on the frame at one end thereof, a brush ar-

bor journalled in the frame at the opposite end thereof, an axle extending transversely of the frame in proximity to said motor, a pair of ground wheels mounted on the ends of the axle in spaced relation to the sides of the frame, a track engaging guide wheel mounted on the frame



for vertical adjustment toward and from the same and being arranged intermediate one of said ground wheels and the frame, a circular brush mounted on one end of said arbor in registration with said guide wheel, and motion transmitting means connecting the motor to said arbor to effect rotation thereof.

2,744,274
BALL WASHING APPARATUS
Justino Procario, Canton, and Paul F. Procario, Kent, Ohio
Application July 20, 1953, Serial No. 368,983
6 Claims. (Cl. 15—97)



1. A portable golf ball washer including a housing, a generally cup-shaped mass of spongy absorbent material having a body portion and a generally perpendicularly extending rim flange terminating in an open end, the cup-shaped mass mounted in the housing, a second mass of spongy absorbent material mounted in the housing adjacent the rim flange open end and substantially closing said open end, a third mass of spongy absorbent material mounted telescoped within and spaced from the cup-shaped mass rim flange between the cup-shaped mass body portion and second mass forming a continuous passage within the cup-shaped mass rim flange and between the cup-shaped mass body portion and the second mass, at least one of the second and third masses being mounted for rotation in reference to the housing, means for rotating said one mass, and the housing having an opening formed therein in communication with the continuous passage to permit the insertion of a golf ball into said passage and the removal therefrom.

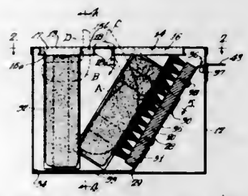
2,744,275
MAINTENANCE KIT FOR FIREARMS
Bernard B. Geltner, Chicago, Ill.
Application November 29, 1951, Serial No. 258,831
4 Claims. (Cl. 15—118)

4. A kit for cleaning firearms comprising a supporting member, receptacles hingedly connected to the bottom of said supporting member on the opposite sides thereof and adapted to swing outwardly therefrom, one of said receptacles being a normally closed receptacle and adapted to receive therewithin a lubricant, the other of said receptacles adapted to support a removable cleaning element, an elongated articulated member formed of a plurality of sections connected together, one of said sections connected to said supporting member, another of said sections having a slotted portion adapted to removably support the cleaning element, said sections being collapsed upon each other and adapted when so collapsed, to lie



adjacent each other and said supporting member and to be confined between said receptacles to form a compact unit.

2,744,276
RECEPTACLE HAVING SCRUBBING BRUSHES FOR CLEANING GOLF CLUB HEADS
Ersyl F. Chambless, Chicago, Ill.
Application December 8, 1954, Serial No. 473,779
4 Claims. (Cl. 15—123)



2. A device for cleaning golf club heads, comprising: a rectangular shaped receptacle for holding cleaning fluid; a set of brushes forming a U-shaped scrubbing channel; a frame for removably holding said brushes within said receptacle, including a horizontal portion engageable with one wall and spaced from a pair of opposed walls forming the receptacle, a second portion extending from said horizontal portion, inclined relative to the bottom of said receptacle, and engageable with a second wall opposite said one wall, a U-shaped bracket attached to the inclined portion and rigidly supporting the brushes whereby said scrubbing channel also is inclined relative to the bottom of said receptacle, and arms connected with said bracket and cooperable with said opposed walls to prevent lateral displacement of said frame and brushes in said receptacle; a receptacle cover; a substantially rectangular guide passage in said cover leading to said channel; a shield flange around the periphery of said passage to protect the shaft of clubs passing therethrough; and resilient stop means held on said horizontal portion adjacent the bottom of said channel, whereby the head of a club being reciprocated therein for cleaning is protected against injury.

2,744,277
ROTARY BRUSH ASSEMBLY
Ruben O. Peterson, University Heights, Ohio, assignor to The Osborn Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application November 7, 1952, Serial No. 319,273
4 Claims. (Cl. 15—181)

4. A rotary brush assembly comprising a tubular core member having a non-circular outer surface, a plurality

of annular sheet metal discs mounted thereon having brush material tufts secured thereto and extending therefrom, the endmost said discs having their inner peripheral edge portions laterally offset toward each other and shaped to conform to the non-circular contour of said core member on which they are seated, thereby locking said core member and discs together for rotation as a unit; and an-



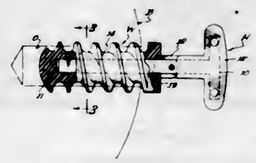
nular sheet metal end plates welded to the outer sides of said endmost discs, said end plates having flat faces and outwardly bulged circumferential portions adapted to engage and support the inner portions of adjacent tufts, the ends of said tubular core member being secured to said respective end plates to hold the assembly together but not extending axially beyond the planes of the outer faces of said end plates.

2,744,278
FOLDABLE TOOTHBRUSH CONSTRUCTION
Harry Roth, Bronx, N. Y.
Application February 28, 1952, Serial No. 273,797
4 Claims. (Cl. 15—185)



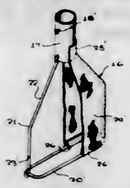
1. A foldable toothbrush construction comprising a handle part having side portions and a bottom portion forming a cavity therebetween, at least one of the side portions having an end section cut free from the bottom portion adjacent one end thereof for transverse inward displacement over the bottom portion, a brush part pivotally connected to one end of said handle part and pivotable into the cavity between the side portions, said brush part having a camming surface engageable by the end section upon inward displacement thereof, whereby the brush part may be urged outwardly toward its operative position upon depressing the end section.

2,744,279
FINGERGRIP WIPER FOR BOWLING BALLS
William E. Heber, Long Beach, Calif.
Application October 14, 1954, Serial No. 462,242
1 Claim. (Cl. 15—210)



A bowling ball finger grip wiper comprising a flat base member having a stem thereon; a plastic handle molded about the upper portion of said member and said stem; and an elongated foam rubber wiper molded about and under the lower portion of said stem, said wiper having a helical passage extending longitudinally through its exterior, said wiper being oval shaped in cross-section and of such cross-sectional area as to allow it to be compressably thrust into said finger grip with a cleansing tissue intermediate said wiper and the surface of said finger grip whereby said wiper and said tissue may be rotated by said handle relative to the surface of said finger grip in order to cleanse said grip.

2,744,280
MOP ATTACHMENT
Hanson C. Craig, Louisville, Ky.
Application November 28, 1952, Serial No. 322,895
4 Claims. (Cl. 15—229)



4. In a mop shield, a shield frame comprising an elongated loop having opposed ends, side members having upper and lower ends, said lower ends being secured to the opposed ends of the loop, a sleeve to which the upper ends of the side members are secured, said side members having parallel lower portions and converging upper portions, and a shield body having an upper end secured to the sleeve and an open lower end secured around and to said loop, said shield body enclosing and engaging said side members, said shield body being of flexible material.

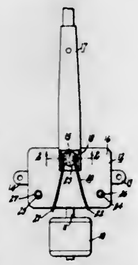
2,744,281
CELLULOSIC SPONGE CLEANING IMPLEMENT
George J. Zinggeler, Rochester, N. Y.
Application February 12, 1952, Serial No. 271,228
2 Claims. (Cl. 15—244)



1. A cellulosic sponge cleaning implement comprising, in combination, a wire frame composed of a single relatively stiff section of wire having a sharp U-bend, and coextensive legs substantially uniformly spaced extending from said bend, tie means embracing said legs at a point remote from said U-bend for retaining said legs from spreading and maintaining such uniform spacing, said legs extending beyond said tie means and forming at least in part a handle, and cellulosic sponge material of normally rectangular block form and having a normal relaxed thickness between opposed faces many times the spacing between said legs between said U-bend and tie means, said sponge being secured between said legs, said U-bend and said tie means, the relaxed lengthwise-dimension of said cellulosic sponge being substantially the distance between said U-bend and tie means, and said legs extending along opposite grooves wholly formed by compression of said cellulosic sponge along lengthwise medians of the opposite faces of said cellulosic sponge material, said sponge material being divided into two parts along a plane, lying, when said material is relaxed, midway between and parallel with said opposite faces, whereby any transverse section through said material and legs exhibits symmetry with respect to an

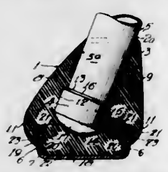
axis passing through the centers of both legs, and an axis transverse thereto passing between said legs, said divided parts being further subdivided, when said material is relaxed, by longitudinal slits extending parallel with said faces and midway between the outer face of each part and said other face.

2,744,282
WINDSHIELD WIPER MECHANISM
John W. Dyer, Pendleton, and James H. Flatt and Brooks H. Short, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 15, 1952, Serial No. 314,872
4 Claims. (Cl. 15—255)



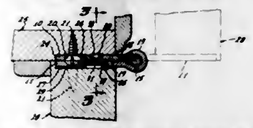
1. In combination, oscillatable windshield cleaning means comprising a windshield cleaner and and oscillatable member, said member and said cleaner being interconnected for simultaneous movement, drive means operatively connected to said member for oscillating the same throughout a predetermined stroke, a U-shaped spring having diverging arm portions, the base of said spring being anchored to said oscillatable cleaning means, and a pair of spaced abutment member located adjacent opposite ends of the oscillatory stroke of said spring, each of which is engageable with one of said spring arms during a portion of cleaner travel whereby the abruptness of movement reversals of said cleaner is reduced.

2,744,283
SHOE FOR A FURNITURE LEG
Richard G. Reineman, Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, a corporation of Delaware
Application January 25, 1954, Serial No. 405,845
5 Claims. (Cl. 16—42)



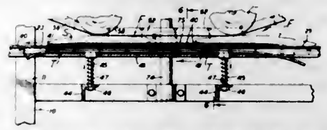
5. A shoe for use with a furniture leg comprising; a body of resilient material having a substantially horizontal bottom surface and a bore for tightly receiving the end of a furniture leg, said body having an annular groove in its underside adjacent its periphery, a glide of non-resilient material having a substantially horizontal floor engaging surface and an upwardly and inwardly inclined circumferential flange portion terminating at its upper extremity in a rim inclined upwardly and slightly outwardly and positioned in said groove, said groove having substantially the same shape as said flange but with an inner diameter slightly larger than the inner diameter of said flange so that the resilient material confined by said flange is compressed thereby and acts to hold the glide in position below the bottom of the bore, and said bore extending below the level of said rim and terminating substantially over the center of said glide.

2,744,284
ADJUSTABLE DOOR HINGE
Judson P. McMillan, Los Angeles, Calif.
Application April 12, 1952, Serial No. 282,045
3 Claims. (Cl. 16—131)



1. A hinge for swinging closures comprising: two pivotally interconnected leaves, at least one of said leaves having an outer face to lie against a mounting surface when the hinge is installed for use, said leaf having holes to receive screws for attachment of the leaf to said surface and also having at least one threaded hole; and a spacer screw in said threaded hole for adjustment of the outer end of the screw into pressure contact with said mounting surface, said screw having an enlargement at said outer end to provide a plane surface to minimize deformation of the mounting surface, said screw being adapted at its inner end for tool-actuated rotational adjustment, said one leaf having a recess on its outer face around said threaded hole to receive said enlargement at a retracted position of said spacer screw.

2,744,285
FISH SKINNING MACHINE
Andrew L. Christiansen, Compton, Calif., assignor of one-half to Wilbur S. Simpson, Los Angeles, Calif.
Application April 10, 1953, Serial No. 347,933
4 Claims. (Cl. 17—2)

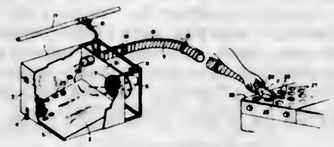


1. A fish skinning machine, comprising: a feed conveyor for feeding pieces of fish in a predetermined path with the skin of each fish piece against a first face of the conveyor and with the tail portion of each fish piece leading, said conveyor including a plurality of plates for supporting the fish pieces, certain of said plates having apertures therein through which the tail portions extend; elongate resilient gripping means operative to grip each tail portion against the opposite face of the conveyor; an endless presser belt movable in the direction of movement of the conveyor and operative to press the fish pieces flat against said first face to cause the skins thereof to move in a plane parallel to the plane of the conveyor; and a circular knife rotatable in a plane parallel to and spaced from said first face a distance substantially equal to the thickness of the skin, said knife being operative to slice through the fish pieces, as the latter are fed past the knife, so as to separate the skins from the flesh.

2,744,286
REMOVAL OF MOLDED ARTICLES
James S. Carpenter, Chardon, John C. Shutt, Wickliffe, and John H. Winchester, Euclid, Ohio, assignors, by mesne assignments, to The Eagle-Picher Company, Cincinnati, Ohio, a corporation of Ohio
Application October 26, 1951, Serial No. 253,435
10 Claims. (Cl. 18—2)

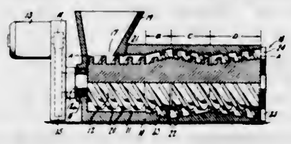
1. The method of removing semi-rigid molded articles from within mold cavites which comprises mechanically

partially dislodging such article from its respective mold cavity, and simultaneously directing a jet of compressed air into the interstice thus formed between such article and the wall of such cavity while subjecting the body of such article to the pull of suction thereby completely to dislodge and remove such article from such cavity.



5. A tool of the character described comprising a portable suction head, a pry member mounted on said head and protruding beyond the mouth of the latter, and an air jet nozzle mounted on said head adjacent said pry member and directed in the same general direction parallel thereto.

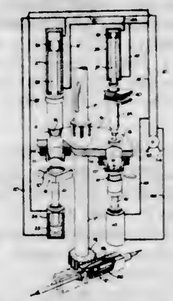
2,744,287
MILL
Clarence M. Parshall and Paul Geyer, Detroit, Mich., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application September 24, 1952, Serial No. 311,243
8 Claims. (Cl. 18—12)



2. A mill comprising, a rotor, a stationary barrel providing a bore in which the rotor is adapted to be rotated, means for rotating said rotor, longitudinally extending helical grooves in said rotor, longitudinally extending grooves in the bore of said barrel, the helical grooves in said rotor decreasing to substantially zero depth at at least one point along its length, the grooves in said bore decreasing to substantially zero depth at at least one point along its length spaced from said one point on said rotor, said grooves being co-extensive at least between said one point on said rotor and said one point in said bore of said barrel whereby the grooves together form a continuous passage through the mill through which the stock may pass whereby all the stock must pass through the shear plane developed between the rotating rotor and the stationary barrel.

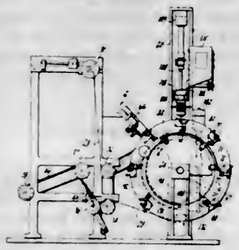
2,744,288
MOULDING APPARATUS
Nathan Fienberg, Caulfield, Victoria, and Alan Reginald Calder, Newport, Victoria, Australia, assignors to A. C. I. Plastics Proprietary Limited, Melbourne, Victoria, Australia, a company of Victoria
Application July 24, 1950, Serial No. 175,633
Claims priority, application Australia July 25, 1949
2 Claims. (Cl. 18—20)

2. Moulding apparatus for the compression moulding of plastic materials comprising a ring mould carrier supported for angular movements about a vertical axis, a plurality of alternative ring-shaped mould members supported on said carrier with their axes disposed vertically, means operable to actuate said mould carrier intermittently whereby said ring-shaped mould members are successively moved to and arrested at a moulding station, a vertically movable plunger member arranged at the moulding station and normally disposed above the level of the upper ends of the ring-shaped mould members, said plunger member being adapted to enter the operative ring-shaped mould member and seat against the inner surface thereof, said plunger member and said ring mould member together forming the male portion of the mould, a vertically movable lower mould member of female form arranged coaxially below said plunger member and normally disposed below the level of the lower ends of the ring-shaped mould members, said lower mould member being formed in its upper surface with a cavity of sufficient capacity to hold the amount of moulding material required



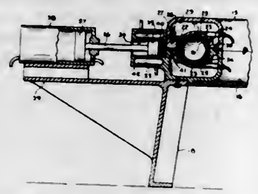
to form an article in the mould, said ring-shaped mould member being adapted to operate as a slidable piston in the lower mould member thereby to seal the cavity in the latter before the mould is fully closed and means operable to move said plunger and said lower mould member substantially in unison and in opposite directions whereby after each ring-shaped mould member arrives at the moulding station, said upper and lower members are projected to engage said ring-shaped mould member and are retracted prior to the next operation of the carrier.

2,744,289
MACHINE FOR MOLDING A SUCCESSION OF BEADS ON A WIRE
Hans H. Wanders, Hingham, Mass.
Application April 18, 1952, Serial No. 283,083
2 Claims. (Cl. 18—21)



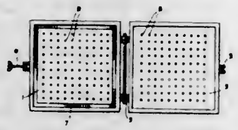
1. A machine of the class described comprising a support, a wheel rotatable on said support, said wheel having a circumferential wire-receiving groove therein, a series of separate molds spaced at intervals along the circumference of said wheel, each said mold having a bottom part fixed on said wheel and a cover part carried by said wheel and movable radially outward and aside to open the mold, means for imparting step-by-step rotation to said wheel to move said molds successively to a molding station with a dwell after each such move, injection means carried by said support and including an injector nozzle movable to and from a position of operative engagement with the mold at said molding station, means operating in timed relation with the wheel-turning means to move said injector nozzle to and from engagement with the mold at the molding station between successive advances of the wheel, and means for automatically closing each said mold as it approaches said molding station and opening the same after it has left the molding station.

2,744,290
APPARATUS FOR APPLYING TREAD RUBBER TO TIRE CARCASSES
William G. Corson, Akron, Ohio
Application April 9, 1951, Serial No. 220,024
12 Claims. (Cl. 18—30)



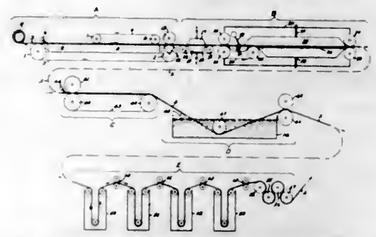
9. Apparatus for applying plastic tread material to a tire casing having spaced annular bead portions, comprising a mold including relatively fixed and relatively movable mating cavity mold parts, the mold cavity having annular non-skid tread-forming portions in corresponding radially outer wall portions of the mold parts joined at mating parting surfaces of the same, a collapsible core for reception in the casing, means for centering the tire casing and core in the mold cavity to have an annular space of substantially uniform depths between said annular tread-forming portions of the mold parts and the outer peripheral portion of the tire casing, mating recess portions being provided in said mating parting surfaces of said outer wall portions defining inlet means communicating with said annular space and having inlet ends presented outwardly of the mold, housing means including at least one housing part mounted on said mold, said at least one housing part and cooperating portions of said mold sections defining at least one pressure chamber communicating with said annular space directly through said inlet means and having an outwardly presented material-loading opening, said housing means also having at least one plunger means for reception in a corresponding said pressure chamber through said material-loading opening, said plunger means and housing part being relatively reciprocable, and power means for relatively reciprocating said housing part and plunger means to pressurize plastic tread material previously loaded in said chamber and thereby to force the material through said inlet means into said annular space for filling the same.

2,744,291
PRODUCTION OF POROUS SHAPED ARTICLES FROM THERMOPLASTIC MATERIALS
Fritz Stastny, Weinheim an der Bergstrasse, and Karl Buchholz, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany
Application April 16, 1952, Serial No. 282,681
Claims priority, application Germany April 19, 1951
11 Claims. (Cl. 18—48)



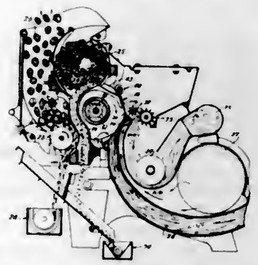
1. A process for the production of a porous shaped article from a synthetic thermoplastic substance which comprises incompletely filling an enclosing mold having a cavity of the desired shape with a minor proportion of the mold volume of a finely divided synthetic thermoplastic substance containing a volatile organic liquid absorbed therein and homogeneously dispersed throughout the particles thereof, said thermoplastic substance being insoluble in said liquid and said liquid having a boiling point lower than the softening point of the thermoplastic substance, said proportion of said thermoplastic substance when expanded being sufficient to fill said mold, said mold permitting the escape of gases but being capable of retaining the thermoplastic substance, and heating said liquid-containing thermoplastic substance to a temperature above the boiling point of the liquid and above the softening point of the thermoplastic substance to such a degree as to cause the latter to expand and fill the mold and to thereby form a porous article of cohered expanded particles of said thermoplastic substance having the desired shape in said mold.

2,744,292
REGENERATED CELLULOSE SHEETS AND PROCESS OF PRODUCING THE SHEETS
Paul H. Schlosser and Reid Logan Mitchell, Shelton, Wash., assignors to Rayonier Incorporated, Shelton, Wash., a corporation of Delaware
Application February 10, 1953, Serial No. 336,136
11 Claims. (Cl. 18—48)



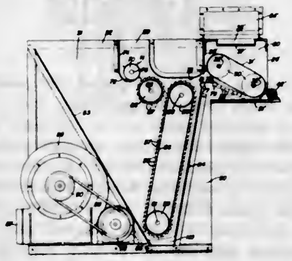
1. The process of forming regenerated cellulosic sheets which comprises subjecting a continuously moving sheet of cellulose pulp to treatment with an aqueous solution of sodium hydroxide to form alkali cellulose in sheet form and then with carbon bisulfide to form cellulose xanthate which in sheet form, compressing the sheet of fibrous cellulose xanthate into a dense sheet, and reacting the dense sheet of cellulose xanthate with an acid regenerating solution to form a sheet consisting largely of regenerated cellulose and having residual cellulose fibrous residues dispersed therein.

2,744,293
LINT AND FIBER CLEANER
Vivion A. Johnson, Indianola, Miss.
Application December 2, 1950, Serial No. 198,885
5 Claims. (Cl. 19—59)



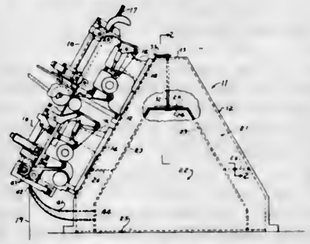
1. In apparatus for removing foreign material from cotton or other fiber, the combination of a relatively thin movable support having marginal teeth, means for moving said support to cause fiber to adhere to said teeth, and deflector means having portions thereof in close proximity to at least one side of said movable support adjacent said teeth, whereby foreign material is separated from the fiber by impact with said portions, said deflector means including a grooved roller, a deflecting rib and a knife blade each adapted to contact a portion of the fiber being carried by said teeth to thereby separate the foreign material from said fiber by impact.

2,744,294
FEEDER MECHANISM FOR TEXTILE MACHINES
Francis M. Buresh, Blandford, Mass., and Howard H. Langdon, Rochester, N. Y.; said Langdon assignor, by mesne assignments, to Curlator Corporation, Rochester, N. Y., a corporation of New York
Application January 13, 1950, Serial No. 138,504
11 Claims. (Cl. 19—67)



3. A feeder mechanism for a textile machine comprising a hopper for fibrous material, an endless conveyor mounted to travel through the material in the hopper and having pins thereon to pick up bunches of the material from the hopper, a stripper member having pins thereon mounted to engage and pull out the bunches of material carried by the pins of the conveyor, a feed box having an entry port at one end communicating with the hopper and an exit port at its opposite end and having a flow extending between said ports, an endless foraminous belt mounted in said feed box with its lower reach inclined to the floor of the feed box and converging toward the floor from entry to exit port, means disposed beyond said foraminous belt in the direction of air flow for sucking air over both the stripper member and the conveyor through the entry port and through said foraminous belt to pick material off the pins and deliver it between the belt and the floor of the feed box, and means for moving the belt to feed such material on to the exit port.

2,744,295
SUCTION DUCT SYSTEM FOR VARIABLE DRAFTING HEADS
Andrew A. Spisak, Cleveland, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a corporation of Ohio
Application February 18, 1953, Serial No. 337,545
9 Claims. (Cl. 19—130)



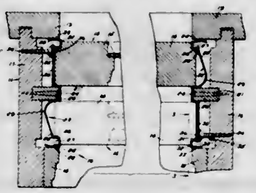
1. In combination a suction header including a primary suction duct and a secondary suction duct parallel thereto, fiber draft control units mounted on said suction header, spaced therealong with suction connections to said primary suction ducts for subjecting fibers in said control units to suction control, for compacting and promoting interfiber adhesion thereof, spaced adjustable valves between said ducts for causing substantially uniform suction head in said primary duct along the length thereof to equalize substantially the suction acting in said draft control units, and an exhaust fan connected to said secondary air duct for creating a suction head therein exceeding that required in any draft control unit.

2,744,296
GYRATING AND SLIDING PIVOT WINDOW WITH RETRACTIBLE WEATHER BAR
John P. Travis, Dallas, Tex.
Application February 9, 1955, Serial No. 487,175
9 Claims. (Cl. 20—42)



1. A closure construction comprising a facade element, an opening in said facade element, said opening having a plurality of sides, portions of said facade element adjacent two oppositely disposed sides of said opening constituting jamb portions for a closure element, a closure element pivotally and slidably mounted in said opening, said closure element having a plurality of side edges, portions of each side of said closure element adjacent two opposite side edges thereof extending outwardly beyond the sides of said opening and overlapping said jamb portions when said closure element is in its closed position, means for pivotally and slidably mounting said closure element in said opening comprising a pivot carried by one of said elements and slidably connected to said other element, said pivot being slidable in a direction perpendicular to the side edges of said closure element when said closure element is in its closed position and being disposed substantially midway between said two opposite side edges of said closure element.

2,744,297
COMBINATION GUIDE AND WEATHERSTRIP FOR SLIDING WINDOW CONSTRUCTIONS
Raymond G. Baker, Plymouth, and Leon E. Willett, Detroit, Mich., assignors to Chamberlin Company of America, Detroit, Mich., a corporation of Michigan
Application July 13, 1953, Serial No. 367,436
10 Claims. (Cl. 20—52.2)



1. In combination with a window assembly having spaced first and second side jamb members, first and second stops respectively secured to each jamb member in spaced relationship laterally of the jamb member, first and second weatherstrips respectively anchored on the first stops and having flexible wing sections extending toward the second stops in lateral spaced relationship to the adjacent jamb members, the flexible wing section adjacent the first jamb member being biased to flex in a direction away from the first jamb member and the flexible wing section adjacent the second jamb member being biased to flex in a direction toward the second jamb member, a sash positioned between the wing sections and having bars at opposite sides respectively engageable with the free edge portions of the wing sections, and nonyielding stop means acting on the outer side of the second wing section and

adjustable in a direction to urge the sash toward the first wing section and thereby placing the first wing section under tension.

2,744,298
GYRATING AND SHIFTABLE PIVOT WINDOW WITH STATIONARY WEATHER BARS
John P. Travis, Dallas, Tex.
Application May 25, 1955, Serial No. 510,991
6 Claims. (Cl. 20—53)



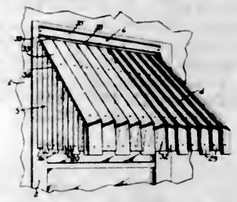
1. A closure construction comprising a facade element, a rectangular opening in said facade element, two opposite sides of said opening constituting jamb portions for a closure, a closure for said opening engaging said jamb portions when in its closed position, aligned pivots one on each of two opposite side edges of said closure, said pivots being positioned centrally of said opposite side edges of said closure, a first pair of links of substantially equal length at each of the two remaining sides of said opening, the links of each of said first pairs of links being pivoted together at one end and to a side of said opening by the same pivot means, a second pair of links at each of said remaining sides of said opening, said links of each of said second pairs of links being pivoted together at one end and to said closure by the adjacent one of said aligned pivots, and the other ends of the links of said first pair being pivoted to the links of said second pair at points equidistant from the adjacent aligned pivot, and stationary weather bars at the sides of said opening to which the closure is pivoted.

2,744,299
GYRATING AND SHIFTABLE PIVOT WINDOW WITH RETRACTIBLE WEATHER BARS
John P. Travis, Dallas, Tex.
Application May 25, 1955, Serial No. 510,992
7 Claims. (Cl. 20—53)



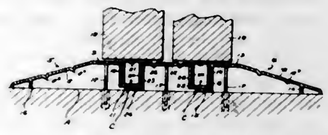
1. A closure construction comprising a facade element, a rectangular opening in said facade element, two opposite sides of said opening constituting jamb portions for a closure, a closure for said opening engaging said jamb portions when in its closed position, aligned pivots one on each of two opposite side edges of said closure, said pivots being positioned centrally of said opposite side edges of said closure, a first pair of links of substantially equal length at each of the two remaining sides of said opening, the links of each of said first pairs of links being pivoted together at one end and to a side of said opening by the same pivot means, a second pair of links at each of said remaining sides of said opening, said links of each of said second pairs of links being pivoted together at one end and to said closure by the adjacent one of said aligned pivots, and the other ends of the links of said first pair being pivoted to the links of said second pair at points equidistant from the adjacent aligned pivot.

2,744,300
AWNING STRUCTURE AND METHOD OF MAKING SAME
Nicholas L. Etten, Cedar Falls, Iowa, assignor to Chamberlain Corporation, Waterloo, Iowa, a corporation of Iowa
Application February 17, 1951, Serial No. 211,547
3 Claims. (Cl. 20—57.5)



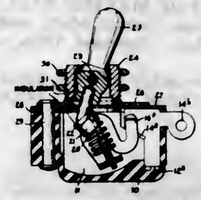
1. In an awning, a pair of spaced end panels having aligned upper edges in an inclined plane, and a top structure secured to said end panels and comprising: a plurality of slats disposed generally in said inclined plane and extending in generally parallel relation to said upper edges, the upper surface of each slat being inclined with respect to said inclined plane with one side edge of each slat being higher than the other side edge thereof, and said slats being overlapped with the lower side edge portions of certain ones of said slats underlying the upper side edge portions of adjacent slats, and upstanding flanges on the lower side edges of said certain ones of said slats for providing channels for flow of water to the lower end of said top structure.

2,744,301
SECTIONAL THRESHOLD FOR SLIDING DOORS
Gilbert A. Viola, Jr., Miami, Fla.
Application August 31, 1953, Serial No. 377,497
2 Claims. (Cl. 20—64)



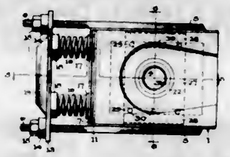
1. The combination with multiple sliding doors and a sectional threshold, the threshold formed in multiple sections including inner and outer sections and an intermediate section, the outer and inner sections each having an elevated flat tread portion and an outwardly and downwardly inclined portion that terminates at substantially a floor level, the flat tread portions at one side being bent downwardly at a right angle to form a channel wall and then outwardly at a right angle to form a flange, the walls and the flanges of the inner and outer sections being parallel and extending for the full length of the threshold, the intermediate section being of inverted channel form having a flat tread portion that is elevated to be flush with the first named flat treads and side walls that are parallel with the side walls of the inner and outer sections, the side walls of the intermediate section being bent outwardly at a right angle to form mating flanges with the flanges of the inner and outer sections, one flange of the intermediate section underlying the flange of the inner section and the other flange of the intermediate section overlying the flange of the outer section, the sliding doors having their lower ends overlying the major portions of the flat treads and with each door being provided with an inverted channel bar along its bottom edge for the full length thereof, the overlying flanges of the sections defining the spacing apart of the channel forming walls of the adjacent section to form a guide for the sliding reception of the channel bars with the channel bars engaging within the channels of the threshold for their major depth, the channel forming walls being provided with weep holes adjacent the overlying flanges.

2,744,302
ELECTRICAL SNAP SWITCHES
Alvin W. Krieger, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application December 12, 1952, Serial No. 325,649
3 Claims. (Cl. 200—67)



1. In a high capacity single pole, single throw on and off electric snap switch, in combination, a molded base of arc-resisting insulating material having a recess opening to the upper surface thereof, said recess having a pair of substantially parallel opposite side walls, a pair of stationary contacts each being positioned partly within one of said side walls and having a portion formed with a beveled edge and extending into said recess, said stationary contacts being adapted for connection to an electric circuit to be controlled, a resilient bridging contactor pivotally supported within said recess and having a pair of opposed approximately parallel end portions biased laterally outwardly for engagement thereof jointly with said side walls and said stationary contacts sequentially, and operating means including a manually operable lever to effect pivotal snap movement of said contactor to thereby effect sliding movement of said end portions against said side walls and said stationary contacts, the arrangement being such that said end portions engage said stationary contacts with a greater degree of pressure than the degree of pressure thereof against said side walls.

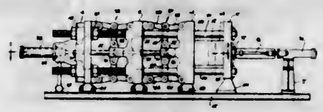
2,744,303
TROUGH FOR TRANSFERRING MOLTEN METAL
James E. Dore, Spokane, Wash., assignor to Kaiser Aluminum & Chemical Corporation, Oakland, Calif., a corporation of Delaware
Application July 29, 1954, Serial No. 446,544
10 Claims. (Cl. 22—79)



1. In a molten metal transfer trough having a metal shell and a lining of refractory material, means for applying compressive pressure to at least one end of said refractory lining in a direction longitudinally with respect to the trough.

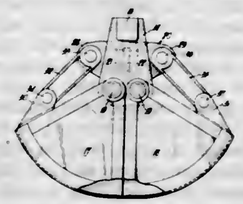
2,744,304
TANDEM TOGGLE PRESS
Joseph I. Kaul, Toledo, Ohio, assignor, by mesne assignments, to National Lead Company, New York, N. Y., a corporation of New Jersey
Application December 20, 1952, Serial No. 327,103
15 Claims. (Cl. 22—92)

15. A die casting machine, comprising a fixed member having a fixed die plate secured thereto, an end frame or crab disposed in spaced relation to said fixed member, a sliding member disposed between the end frame and fixed member and having a movable die plate secured thereto for movement between a position in which the die plates are in close contact and a position in which the die plates are out of engagement and spaced apart to permit the ejection of an article cast therebetween, and means connecting the sliding member to the end frame for moving the movable die plate away from the fixed die plate to the position which permits the ejection



of the cast article therefrom, said means including a plurality of toggle linkages, a crosshead for actuating each toggle linkage, and means connected to said crossheads for moving the same to actuate the toggle linkages, the last means being operable to move said crossheads sequentially such that in opening direction the crosshead most closely adjacent the end frame is moved later than the other crossheads and before the associated toggle linkages of the latter are completely collapsed, and means for injecting molten material between the die plates.

2,744,305
BUCKET ATTACHMENT FOR INGOT STRIPPERS AND THE LIKE
Ervin A. Drill, Duluth, Minn.
Application November 15, 1951, Serial No. 256,469
6 Claims. (Cl. 22—95)

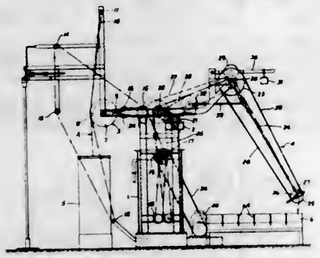


2. A bucket attachment for strippers and the like, which have a pair of tong arms and a vertically movable ram, comprising a pair of hangers adapted to be engaged with the tong arms for carrying the attachment, a pair of bucket halves hinged to said hangers and having inner edges adapted to mate so that said halves when brought together form a receptacle, a head adapted to receive the lower end of the ram, pivoted means in said head adapted to fix the head to the ram and being releasable from the ram on actuation by the tong arms, and links pivoted to opposite sides of said head and to the outer edges of said bucket halves, whereby vertical movement of said head with respect to said hangers opens and closes said bucket halves.

2,744,306
NOVEL MACHINE FOR TREATING NETTING
John Walter Ecroyd Haller, Belfast, Northern Ireland, assignor to The Linen Thread Company Limited, Glasgow, Scotland, a British company
Application April 18, 1952, Serial No. 282,970
5 Claims. (Cl. 26—1)

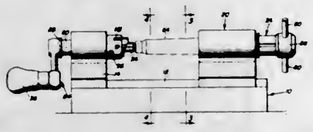
1. A machine for use in continuously setting the knots of lengths of netting of varying widths, and especially fishnets formed of thermo-sensitive synthetic resin twines, said machine comprising a hot, aqueous bath means maintained at a temperature sufficient to heat-set the knots of the netting when the netting is passed through said

bath means, driving means to effect the passage of netting continuously through said machine, tensioning means adapted to continuously tension the net lengthwise dur-



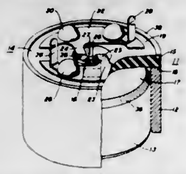
ing its passage through said hot, aqueous bath means, and a guide means adapted to maintain the net in a laterally condensed ribbon-like or rope-like form during passage of the netting through said bath means.

2,744,307
CARTRIDGE CASE TRIMMER
Gerald T. Smiley, Clipper Gap, Calif.
Application January 15, 1953, Serial No. 331,463
3 Claims. (Cl. 29—1.32)



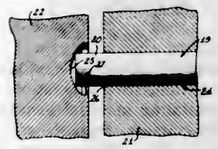
1. A cartridge case trimmer comprising an elongated base, a cartridge case holder positioned adjacent one end of said base and adapted to frictionally engage the head of a cartridge case, a first tool mounted in said cartridge case holder for axially sliding movement and being rotatable for reaming the primer pocket of a cartridge case, a tool support rigidly affixed adjacent the other end of said base, means for securing said cartridge case holder to said base in selected positions thereon toward and away from said tool support, a second tool, said second tool including a shaft slidably and rotatably received in said tool support and provided with an abutment collar for limiting inward sliding movement of the shaft toward said holder, a pilot secured to the inner end of said shaft for reaming the inside of a cartridge case neck, a cutter blade carried by said shaft and having portions for simultaneously chamfering the inside and trimming the end of a cartridge case neck, and means for imparting sliding and rotary movement to said shaft.

2,744,308
SEMI-CONDUCTOR TRANSLATING DEVICE AND METHOD OF MANUFACTURE
George T. Loman, Berkeley Heights, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application November 17, 1950, Serial No. 196,141
5 Claims. (Cl. 29—25.3)



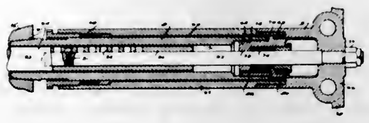
5. In the manufacture of a semiconductive translator, the steps which comprise securing a thin resilient metal plate on an insulating support member at at least two points, severing the plate between the two mounting points to form two electrically independent sections, bending opposed portions of the sections out of the plane of said plate to a predetermined separation on a plane intersecting the portion of their edges having the greatest separation from the plane of the plate, and contacting a semiconductive surface with said edges.

2,744,309
METHOD OF MAKING BALL STUDS
Matthew P. Graham, Detroit, Mich., assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application December 20, 1950, Serial No. 201,740
4 Claims. (Cl. 29—148.4)



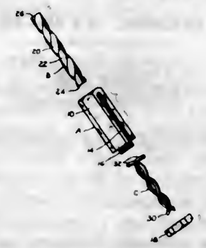
1. The method of forming a ball stud or the like comprising machining a rod to form external threads of reduced diameter on the end of the rod, contemporaneously forming a tapered shank portion adjacent said threaded portion and tapering radially outwardly from substantially the diameter of the threaded portion to the diameter of the unmachined rod, shaving a portion of said rod adjacent the large end of said tapered shank portion to form a machined cylindrical shank portion free from surface blemishes, cutting off the machined end portion of said rod stock length to form a blank including said threaded end, said tapered shank and said shaved cylindrical shank, inserting the cylindrical end portion of said blank in a bevel-mouthed die, and cold forming a rounded head on the end of the blank while forcing a shaved portion of the blank against the beveled mouth of said die to expand the metal of said shaved portion abruptly radially outwardly to form a finished annular, radially outwardly curved ball bearing race between the head and the adjacent shank portion.

2,744,310
APPARATUS FOR HANDLING A FITTING UNDER PRESSURE
Jay P. Gould, La Canada, Calif.
Application September 17, 1951, Serial No. 247,005
4 Claims. (Cl. 29—213)



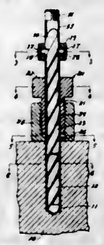
1. A tool for operating and handling an instrument carrier relative to a base releasably carrying the carrier and having a flow controlling valve thereon including, a housing applicable to the valve establishing a chamber in communication with the valve, a rod slidably carried by the housing to rotate and reciprocate relative thereto, fluid pressure operated equalizing means between the rod and housing, and coupling means on the rod operable through the valve and into coupled engagement with the carrier to rotate it and to move it longitudinally through the valve when released from the base.

2,744,311
DRILL EXTRACTOR
Eleanor Nipken and Walter Nipken, Irvington, N. J., assignors to The Walton Company, West Hartford, Conn., a corporation of Connecticut
Application June 21, 1951, Serial No. 232,831
8 Claims. (Cl. 29—240)



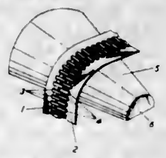
8. A broken drill extractor comprising a guide member having opposed spiral flutes in the sides thereof, spiral fingers fitting with said flutes, a holder surrounding said guide member and fingers and retaining the said fingers within the flutes, and means for adjustably securing the said guide member and fingers to the holder.

2,744,312
BROKEN DRILL EXTRACTOR
David L. Conger, Middle Haddam, Conn., assignor to The Walton Company, Hartford, Conn., a corporation of Connecticut
Application October 6, 1951, Serial No. 250,125
3 Claims. (Cl. 29—256)



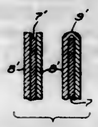
1. A broken drill extractor comprising a guide member having spiral flutes in the sides thereof, a pair of spiral fingers fitting within said flutes, a holder having an opening extending longitudinally therethrough for adjustably receiving said guide member with the spiral fingers in said flutes, fastening means on said holder for adjustably securing the said guide member and fingers thereto, and a jack member co-axial with the holder and threaded thereto.

2,744,313
METHOD OF MANUFACTURING SLIDING CLASP FASTENERS
Geoffrey Warburton, Cardiff, and William J. P. Clarke, Glamorgan, Wales, assignors to Aero Zipp Fasteners Limited, London, England, a British company
Application April 19, 1955, Serial No. 502,449
Claims priority, application Great Britain November 9, 1954
20 Claims. (Cl. 29—408)



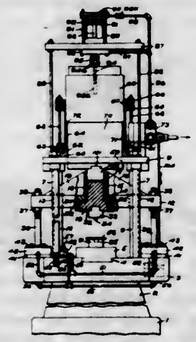
1. A method of manufacturing a sliding clasp fastener which, at least in part, is curved in the general plane of the fastener stringers, comprising the steps of imparting a curvature to at least one of the stringers by stretching at least a part thereof, and applying a material to the said stringer which substantially maintains the curvature imparted to the stringer by the stretching.

2,744,314
METHOD OF MAKING MULTIPLY METAL
Joseph Kinney, Jr., Carnegie, Pa.
Application August 9, 1950, Serial No. 178,414
3 Claims. (Cl. 29—471.5)



1. A method of producing multiply metal in strip or sheet form and including at least one ply of soft metal sandwiched between two plies of hard metal bonded throughout the contacting surfaces thereof, which consists in rolling plates of each such metal; processing such plates to remove oxide and other foreign material from the rolled surfaces thereof to be bonded; assembling the plates so processed into a bonding assembly with a rolled and processed surface of each soft metal plate engaging a rolled and processed surface of a hard metal plate; forcing the contacting surfaces of the plates of such assembly into gas-excluding engagement with each other by applying pressure to such assembly of such p. s. i. of plate surface to cause the surface of each soft metal plate to distort and substantially conform to the contour of the surface of the hard metal plate engaged thereby, such force progressively decreasing from the central portion to the edges of the plates included in the assembly; sealing the entire marginal edge of the plates of the assembly while maintaining the assembly under such pressure by edge welding the assembly around the entire marginal edge thereof; heating the assembly to a hot working temperature of the hard metal included therein; and subjecting the assembly to a rolling reduction of at least 3% while so heated and while the assembly is so sealed; and then severing the sealed edges of the assembly.

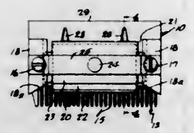
2,744,315
METHOD AND APPARATUS FOR DIE-FORGING ARTICLES FROM BLANKS OF NORMALLY RIGID MATERIAL
Reginald P. Fitzgerald, Braintree, Mass., assignor to Pneumatic Drop Hammer Company, Braintree, Mass., a corporation of Massachusetts
Application November 15, 1951, Serial No. 256,575
15 Claims. (Cl. 29—553)



1. The method of die-forging articles from blanks of normally rigid material which comprises placing a blank

between complementary dies, moving the dies into tight clamping engagement with the blank to prevent shifting of the blank with respect to the dies when the dies are struck a heavy blow, and while the dies still clamp the blank causing a heavy mass falling a short distance to impinge upon the dies with the said mass so related to the said distance that the pressure wave curve produced is of a wavy trapezoidal shape as distinguished from a generally parabolic shape.

2,744,316
HAIR TRIMMER
Andrew M. Koonz, Plymouth, Conn.
Application November 17, 1953, Serial No. 392,577
2 Claims. (Cl. 30—31)



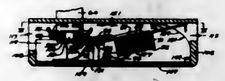
1. A hair trimmer including a body member comprising a block of material having a substantially flat front surface and a transversely and convexly curved back wall surface, one longitudinal edge portion of the block forming a hand grip and the block provided with a longitudinal slot opening through the opposite edge, a comb removably mounted in the slot with its teeth projecting from the open side of the slot, a bar secured to the front of the body and extending longitudinally thereof and spaced above said front surface, a cutter blade mounted on said surface under the bar with its cutting edge on top of the comb teeth, a clamping plate on the blade, means on the bar for pressing the plate against the blade to hold it, and the convexly curved back wall surface of the body forming a rocking surface on which the angle of the teeth with respect to the surface on which the hair is being trimmed may be varied.

2,744,317
SAFETY RAZOR AND BLADE CHANGER THEREFOR
Philip H. Borden, Stratford, Conn., assignor to Central Industrial Corporation, Memphis, Tenn., a corporation of Tennessee
Application April 9, 1951, Serial No. 219,950
31 Claims. (Cl. 30—40)



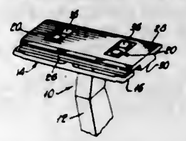
31. In a razor blade changing mechanism, a blade housing unit adapted for insertion in a casing, including a first chamber for receiving used blades, a second chamber for containing new blades and substantially in abutment with said first chamber, a passageway extending across said chambers, said first chamber having an open entry portion, said second chamber having an open discharge portion, the open entry portion and the open discharge portion being remote from one another and connected by said passageway.

2,744,318
RAZOR BLADE CHANGING MECHANISM
Philip H. Borden, Orange, Conn., assignor to Central Industrial Corporation, Memphis, Tenn., a corporation of Tennessee
Continuation of application Serial No. 144,278, February 15, 1950. This application March 23, 1953, Serial No. 343,952
19 Claims. (Cl. 30—40)



3. Razor blade changing mechanism comprising a blade housing magazine, and stripper means connected to and projecting from one end of the top of said magazine, said magazine having an upstanding transverse wall adjacent the other end of said top, a longitudinal access opening in said top and a transverse discharge opening above said wall communicating with said access opening remote from said stripper means.

2,744,319
SAFETY RAZOR AND BLADE ASSEMBLY
Bertram S. Cutler, Green Village, N. J.
Application January 17, 1952, Serial No. 266,892
9 Claims. (Cl. 30—66)



8. A blade assembly for use in safety razors and the like comprising a generally rectangular blade portion having thereon at least one shaving edge, a protective housing for said blade portion for mounting said blade assembly in operative relation on a safety razor having therein a blade retaining portion, a pair of longitudinal slots in said blade portion, a pair of transverse T-shaped slots positioned in said protective housing so as to coincide at least in part with said blade slots and to engage corresponding mounting lugs on the safety razor whereby said blade is automatically positioned in a protected position within said housing during installation and removal of said blade assembly.

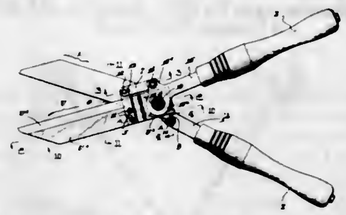
2,744,320
KNIFE
Vincent J. Palermo, Detroit, Mich.
Application May 19, 1953, Serial No. 355,987
3 Claims. (Cl. 30—138)



1. A knife comprising a handle having a front extension, a knife blade projecting forwardly from said extension and having a cutting edge and a back edge, a tubular telescopic sheath for said knife blade including an inner section fixed on said extension and an outer section telescoping over the inner section for movement forwardly and rearwardly to sheath and expose said blade and having an open front end through which said blade extends when exposed, a blade sharpener fixed in the front end of said outer section and movable thereby along said cutting edge, said blade being pivoted at one end in said extension and swingable on its pivot toward and from said sharpener to engage its cutting edge with said sharpener and disengage said cutting edge from said sharpener, spring means attached in said front end of said outer

section and bearing against the back edge of the knife blade to swing said blade towards said sharpener, and cam and roller devices, respectively, coengaging in response to rearward movement of said outer section to swing said knife blade away from said sharpener, one of said devices being mounted on said blade and the other of said devices being fixed in the front end of said outer section for movement therewith relative to the device mounted on said knife blade.

2,744,321
SHEARING ACTION DEVICE
David Howard Keiser, Jr., West Lawn, Pa.
Application January 13, 1956, Serial No. 559,006
16 Claims. (Cl. 30—237)



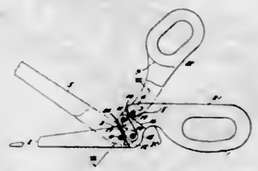
1. Shears comprising in combination with an integrally combined cutting blade and handle member, of a cooperating cutting blade unit having a loose pivotal connection with said member, spring means arranged in interposed relation between a cutting edge including portion of the unit and its pivotal connection with said member, a unit operating handle movably mounted in reciprocable relation with the handle of said member, and connecting means arranged between said unit and unit operating handle in such manner as to effect positive tilting and axial movement of said cutting edge including portions of the unit during the cutting operation of the shears.

2,744,322
PRUNING IMPLEMENT
Gustaf Gustafson, Yakima, Wash.
Application September 29, 1953, Serial No. 383,007
1 Claim. (Cl. 30—249)



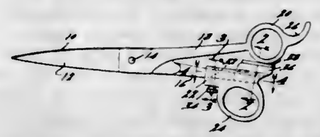
A pruning implement comprising a tubular pole, a hook-shaped fixed blade secured to the upper end of said pole, a movable blade pivoted to and coacting with said hook-shaped blade, a sleeve fixed to the lower end of said pole, a slot in said sleeve, a tubular operating handle slidably fitted on said sleeve, an operating block in said sleeve, a shaft secured to said block extending within and coaxial with said pole, said shaft being secured to said movable blade, and means interconnecting said block and said handle so that upon relative movement of said handle and said sleeve said shaft will move relative to said pole to actuate said movable blade, and a stop secured to said block extending through said slot in said sleeve, said block having a recess therein, said means comprising an anchor member secured to the end of said sleeve, a pulley wheel journalled in said anchor member, other pulley wheels journalled in said block and seated in said recess, and a line secured at one end to said anchor member and at the other end to said handle, said line being entrained about all of said pulley wheels, a lower collar secured at the lowest end of said pole to said pole and to said sleeve, an upper collar mounted on said shaft, and a spring biasing said upper collar and said lower collar to resiliently urge said lower collar against said block, and resiliently urging said handle to engage said stop.

2,744,323
SHEARS
Stanley Kuhlman, Toledo, Ohio
Application September 3, 1953, Serial No. 378,273
1 Claim. (Cl. 30—251)



A pair of shears comprising: a unitary relatively stationary member having a cutting edge portion and a handle portion with a susbtantially transverse groove between said handle and said cutting edge portion, a pair of pivot pins mounted on opposite sides and ends of said groove, a movable member having a cutting edge, said member being pivoted near one of its ends on the pivot mounted on the cutting portion side of said groove, a third pivot pin mounted at said one end of said movable cutting member with said one end being notched opposite said groove, a movable handle pivoted near one of its ends on said pivot pin mounted on the handle portion side of said groove, a forth pivot pin mounted at said one end of said movable handle with said one end being notched opposite said groove, and a link located in said groove and said notches and connected to said third and fourth pivot pins, whereby movement of said movable handle away from said stationary handle portion moves said movable cutting edge away from said stationary cutting edge and vice versa.

2,744,324
BARBER SHEARS
George J. Chuba, Detroit, Mich.
Application May 16, 1955, Serial No. 508,530
2 Claims. (Cl. 30—271)

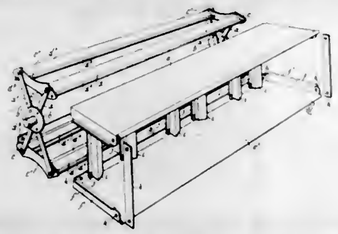


1. A scissors comprising a pair of pivoted blades having rearwardly extending, divergent shank portions, a finger loop on one of said shank portions, a thumb loop on the other of said shank portions, said thumb loop being a separate entity and longitudinally adjustable on the shank with which it is associated, and a longitudinal resilient bumper on said thumb loop extending in the direction of said finger loop and engageable therewith in all adjustable positions of said thumb loop.

2,744,325
STORAGE RACKS FOR CHEESES
John Gordon Robinson Eales, Dudley, and Eric Hale, Kempshott, Basingstoke, England, assignors to Co-Operative Wholesale Society Limited, Manchester, England, a British society
Application June 23, 1953, Serial No. 363,626
Claims priority, application Great Britain June 5, 1953
2 Claims. (Cl. 31—49)

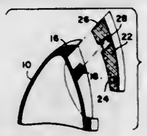
1. A reversible cheese storage rack comprising a skeleton frame including spaced, upper and lower longitudinal

frame members, end members supporting the longitudinal members in spaced relation, and trunnions secured centrally of said end members and extending outwardly therefrom for mounting the same so to be capable of rotation about a horizontal axis, and a cheese-holder which is movable into and which is removable from the frame and including upper and lower horizontal shelves and vertical frame members secured at their ends along one



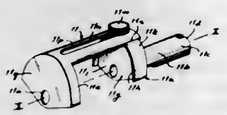
longitudinal edge of the shelves to maintain the shelves in spaced relationship and provided with inclined faces to form a supporting cradle for a cylindrical cheese during the turning operation, the opposite longitudinal face of the holder being open to permit insertion of the cheese bodies into the holder, and means securing the holder to the skeleton frame to give extra rigidity thereto, the upper shelf becoming the lower shelf when the skeleton frame is inverted.

2,744,326
REPLACEABLE ENAMEL FACING FOR CROWNS AND METHOD OF MAKING SAME
Morris Chaiken and Jack M. Weinstein, Philadelphia, Pa.
Application June 18, 1954, Serial No. 437,781
7 Claims. (Cl. 32—12)



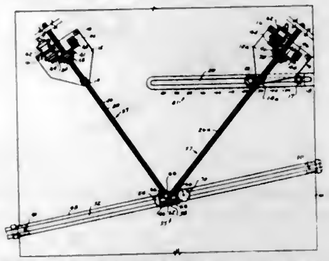
1. In a crown for a tooth, a backing plate molded in a predetermined position with the crown, the biting surface of the crown including a lip overhanging the backing plate at a predetermined upward angle, a porcelain facing having an upper beveled edge of depth and inclination corresponding to those of the lip and means removably and replaceably securing the facing to the backing whereby the upper beveled edge of the facing contacts the lip, said means including at least one prong extending from the backing plate at an upward inclination parallel to that of the lip and a socket extending through the inner surface of the facing at a downward inclination parallel to the prong and receiving the latter.

2,744,327
GUARD-HOOD FOR PARALLELLY SPACED APART DENTAL TEETH GRINDING DISCS
Samuel Birnbaum, Ossining, N. Y.
Application December 9, 1954, Serial No. 474,086
7 Claims. (Cl. 32—59)



1. In a rotary cutting means formed with a hand manipulated drill head and having spaced apart parallelly aligned grinding discs mounted to turn on a mandrel extending through said head, a base element comprising a tubular ended anchoring member for frictionally mounting on said drill head, a sector shaped rest extending from said anchoring member to overhang one of the grinding discs, said rest formed with a peripheral flange to serve as a guard-hood for said grinding disc, and a manual length adjustment fastener means carried by said rest for securing a shielding guard to serve as a second hood for the other of said grinding discs.

2,744,328
ELECTRIC DEVIATION GAGE FOR SHORAN STRAIGHT LINE INDICATORS
Boris S. Maximoff, Chicago, Ill., assignor to the United States of America as represented by the Secretary of the Air Force
Application April 21, 1952, Serial No. 283,498
4 Claims. (Cl. 33—1)



1. In a Shoran Straight Line Computer including means establishing fixed reference points on a substantially plane surface corresponding to signal stations, means pivotally and adjustably related to said means establishing fixed reference points to establish a point on said substantially plane surface corresponding to the instantaneous position of a craft relative to the signal stations, and track means arranged on said substantially plane surface corresponding to the predetermined path of the craft, a support means mounted on said track means for movement thereon, a guide means on said support means transverse of said track means, a slide mounted in said guide means having magnetic means at each end thereof and pivotally con nected to said means pivotally and adjustably related at the point established thereby corresponding to the instantaneous position of the craft relative to the signal stations, electromagnetic means arranged to either side of said guide means in spaced aligned relation and so connected to form a bridge, and a source of power to said bridge, whereby on deviation of the craft from its predetermined path there is a corresponding movement of the slide in the guide means to unbalance the bridge and provide a signal proportional to the deviation of the craft from its predetermined path.

2,744,329
CONSTANT PRESSURE SCRIBER
Raymond C. Way and Merle L. Downs, Dayton, Ohio, assignors to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
Application May 5, 1954, Serial No. 427,760
1 Claim. (Cl. 33—18)

A scribing device for power driven machine tools to scribe lines at various heights on the workpiece, said device comprising an elongated tubular member threaded at both ends and having an uppermost large diameter section and a lower communicating smaller diameter section, an elongated nut threaded into said lower smaller diameter section, said nut having a smooth walled central bore extending lengthwise therethrough, a scriber tool slidably mounted in the bore of said nut, said tool having an enlarged head portion of larger diameter than said bore and an integral elongated shank which slidably fits

in said bore and is adjustably positioned in said tubular member by threading in or out of said nut, said scriber tool being arranged to slidably extend from the lower end of said nut, said shank terminating in a tapered extremity defining a scribing needle contact point, a coil spring disposed in said tubular member and arranged in said uppermost large diameter section and urging said scriber tool



to extend outwardly of said tubular member and seat said enlarged head portion against the inner end of said nut, a cap threadedly engaged in the uppermost end of said tubular member and abutting the upper end of said coil spring, said cap being screwed inwardly or outwardly of the tubular member for increasing or decreasing pressure exerted by said coil spring on the head portion of said scriber tool.

2,744,330
MARKING INSTRUMENT
Frederick B. T. Siems, Baltimore, Md.
Application April 14, 1952, Serial No. 282,109
16 Claims. (Cl. 33—34)



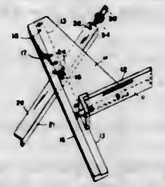
1. A marking instrument for producing short, fine linear impressions on a drafting surface comprising a marking means having a marking portion positioned to contact said drafting surface in marking position, said marking means being provided with at least one substantially planar surface extending from said marking portion, movable means for normally supporting said marking means in spaced relation to said drafting surface, said movable means being arranged to permit movement of said marking means to said marking position on said surface, and stationary ink-feeding means positioned adjacent said planar surface of said marking means and arranged to form with said planar surface a capillary reservoir for marking ink, said ink-feeding means having an end extending beyond said marking portion toward said drafting surface when said marking means is in normal position whereby said portion is supplied with a limited quantity of ink upon passing said end.

2,744,331
GUN SIGHTS
Florian Smecko, Madison, Wis.
Application September 9, 1954, Serial No. 455,020
10 Claims. (Cl. 33—58)



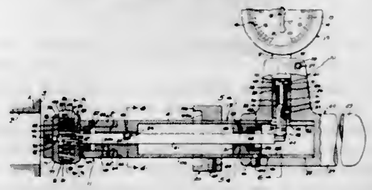
10. A gun sight for a gun barrel which comprises, a tubular member for aligned engagement with a rearward portion of said gun barrel, means for adjusting said tubular member relative to the bore of said gun barrel, sight means disposed within the interior of said tubular member, a sleeve rotatably carried by said tubular member and a vertical bore through said tubular member and said sleeve over said sight means whereby selectively to admit light to said sight means.

2,744,332
RAFTER TOOL
Robert E. Day, Worcester, Mass.
Application November 2, 1954, Serial No. 466,288
5 Claims. (Cl. 33—93)



1. A tool for determining rafter angle and length comprising a square having a horizontal arm with a lower edge and a vertical arm rigidly mounted on said horizontal arm and having a portion extending downwardly therefrom with a vertical inner edge and a vertical outer edge parallel thereto, and a portion extending upwardly therefrom with a vertical outer edge continuous with said outer edge of said lower portion and having therein a line continuous with said inner edge of said lower portion, an alining arm having a lower alining edge, said arm being mounted on said vertical arm portion for pivotal movement and releasable clamping means for mounting said alining arm for pivotal movement on said vertical arm portion in one of a plurality of predetermined positions spaced from said horizontal arm lower edge.

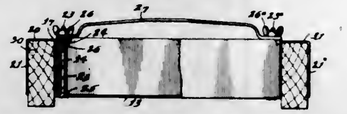
2,744,333
BORE GAUGING INSTRUMENT
Andrew Eisele, Detroit, Mich.
Application August 30, 1951, Serial No. 244,295
4 Claims. (Cl. 33—178)



1. A measuring head for a bore gauge of the type having an elongated hollow casing containing motion-transmitting mechanism operatively connected to a dial indicator, said measuring head comprising a head body having a longitudinal bore therein configured to receive the end of said casing and having a transverse bore therein disposed with its axis at right angles to said longitudinal bore and communicating with said longitudinal bore, said transverse bore extending entirely through said body from side to side thereof, a fixed measuring member mounted in said transverse bore and extending entirely through said body from side to side thereof, said fixed measuring member having a smaller bore therein coaxial with said transverse bore, a movable measuring member reciprocably mounted in said smaller bore with its outer end projecting therefrom and having a contact portion therein adapted to operatively engage said motion-transmitting mechanism, said fixed measuring member having an opening in the side thereof communicating with said contact

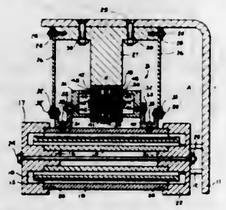
portion and receiving said motion-transmitting mechanism, said measuring members having bore-contacting portions on their outer ends, said movable measuring member having a cross bore therein disposed transversely to its axis of reciprocation, and a yieldingly-urged lateral motion take-up device reciprocably mounted in said cross bore and yieldingly engaging the side wall of said smaller bore in said fixed measuring member.

2,744,334
STUD SPACER GAUGE
Stephen C. Jondole, Chicago, Ill.
Application June 9, 1952, Serial No. 292,451
10 Claims. (Cl. 33—180)



1. A gauge comprising a pair of end plates spacing means rigidly connected to the end plates and maintaining said plates in spaced parallel relationship, and a pair of substantially L-shaped gauge members secured to the spacing means with each member having one leg of the L lying in spaced parallel relationship to a different one of the end plates to form therewith a substantially U-shaped channel extending transversely of the spacing means with the channels being adapted to receive and support a pair of studs in laterally spaced parallel relationship.

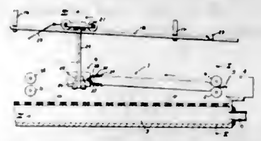
2,744,335
GRAVITY PENDULUM DEVICE
Bernard Litman, New York, N. Y., assignor to American Bosch Arma Corporation, a corporation of New York
Application June 14, 1951, Serial No. 231,489
5 Claims. (Cl. 33—220)



5. In a device of the character described, a pendulum weight, means for attaching said pendulum weight to the object whose tilt from the vertical in a predetermined plane is to be detected, said attaching means allowing axial displacement of said weight while resisting movement thereof in a direction perpendicular to said axial displacement and an armature assembly carried by said weight, said armature assembly comprising a pair of coaxial, telescoping cylinders, and a solenoid winding between said cylinders, said cylinder being of magnetizable material and said solenoid winding having a center tap, and electrical means having a center tap constantly energizing said solenoid and correction voltage means between said center taps.

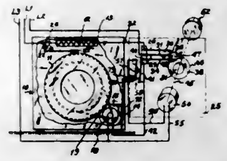
2,744,336
THREADING APPARATUS FOR A TUBULAR DRIER
David T. Milne, Fredericksburg, Va., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application April 4, 1952, Serial No. 280,687
6 Claims. (Cl. 34—21)

6. The method of lacing a sausage casing drier comprising the steps of extruding a length of flattened sausage casing through a first pair of rolls, attaching the end of said extruded casing to a linearly moving carriage, inducing gas under elevated pressure to the casing from the carriage, simultaneously transferring the carriage and the



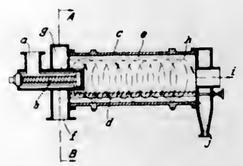
casing from the first pair of rolls to a second pair of rolls, and inserting the inflated casing in said second rolls to entrap the gas in the substantially straight casing between the rolls.

2,744,337
CONTROL APPARATUS
Estel C. Raney, Fort Lauderdale, Fla., assignor to Ranco Incorporated, Columbus, Ohio, a corporation of Ohio
Application March 27, 1953, Serial No. 344,968
5 Claims. (Cl. 34—45)



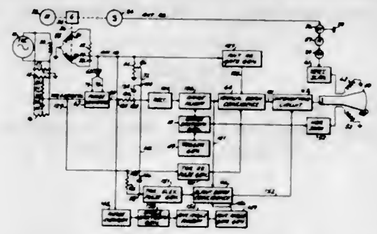
1. In a clothes drier having a revolving clothes basket, a heating unit, a fan for moving air into heat exchange relation with said heating unit and through said basket, and an electric motor for driving said fan and basket, the combination of means to control said motor comprising, a timer device adapted to be set to operate for a predetermined period and then cause said motor to be inoperative, said timer device including electrically controlled driving means, switch means to control energization of said driving means and including a switch member movable to first and second switching positions to energize and deenergize said driving means, respectively, a thermally responsive element for moving said member from said second to said first position in response to a predetermined condition of the air passing from said basket, said element being ineffective to move said member from said first to said second position, and means operative substantially simultaneously with deenergization of said motor to move said switch member from said first to said second position.

2,744,338
APPARATUS FOR DRYING FRIABLE MATERIAL
Walter Rothe, Hamburg, Germany, assignor to Braunschweigische Maschinenbauanstalt A. G., Braunschweig, Germany, a German Federal Republic
Application May 7, 1953, Serial No. 353,604
1 Claim. (Cl. 34—58)



An apparatus for drying friable material comprising inlet and discharge housings, a horizontally-extending open-ended cylindrical drum mounted for high speed rotation between said inlet and discharge housings, a screw conveyor mechanism mounted in the inlet housing centrally thereof and extending in said drum, said conveyor mechanism having radial discharge openings to direct the flow of the material toward the inner wall surface of the drum, said inlet housing having a cycloidal formation surrounding said conveyor mechanism and a side opening adjacent the radial discharge openings of the conveyor mechanism for directing a flow of gas under high pressure into the end of said drum and the material from said radial openings of the conveyor mechanism horizontally and spirally toward the inner wall surface of said drum while said drum is under high speed rotation, said discharge housing having a centrally-disposed discharge tube communicating with the other end of the drum to discharge the gas stream therefrom, a scraper device extending longitudinally through said drum and between the inlet and outlet housings for scraping the material from the inner surface of the drum and for advancing the material toward the discharge housing, said discharge housing having an opening surrounding the centrally-disposed discharge tube through which the material is delivered to the discharge housing.

2,744,339
RADAR SIMULATOR
George R. Paine, Pleasantville, N. Y., assignor to General Precision Laboratory Incorporated, a corporation of New York
Application July 24, 1952, Serial No. 300,669
10 Claims. (Cl. 35—10.4)



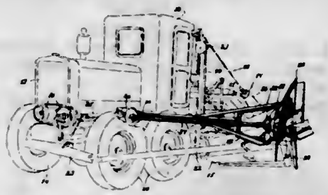
1. A V-beam radar simulator comprising, means for generating a first potential the magnitude of which is proportional to the slant range of a simulated target, a cathode ray tube including an intensifying electrode and having deflection circuits for scanning said cathode ray tube in mutually perpendicular directions, a sawtooth voltage generator for providing a scanning potential for one of said deflection circuits, means including said scanning potential and said first potential for generating a train of pulses the time of occurrence of which with respect to deflection of the cathode ray beam in one direction is proportional to the magnitude of said first potential, means for generating an antenna azimuth potential the phase of which varies in proportion to the constantly changing angle of a simulated radar antenna, means for generating a target direction potential the magnitude of which is proportional to the ground range and the phase of which is proportional to the azimuth of a simulated target, means for deriving a height potential from said antenna azimuth potential the magnitude of which is proportional to the height of said simulated target, means for producing a vector sum potential from said target direction potential and a potential whose magnitude is equal to said height potential and whose phase is advanced 90° with respect thereto, and means for inhibiting imposition of the pulses of said train of pulses on said intensifying electrode except during those intervals in which said vector sum potential bears a selected phase relation with respect to said antenna azimuth potential.

2,744,340
FOOTWEAR AND METHODS OF MAKING THE SAME
Albert J. Gerber, Ladue, Mo., assignor to Gerber Plastic Company, St. Louis, Mo., a corporation of Missouri
Application April 17, 1953, Serial No. 349,360
8 Claims. (Cl. 36—11.5)



1. The method of making footwear which comprises providing a two-part mold which when closed provides a cavity adapted to form a sole-element of substantial thickness, coating the interior surfaces of the mold cavity with a film of a heat curable resin, providing a section of fabric tape treated to provide a surface coating of a substance capable of creating a bond with the resin, inserting a piece of the treated tape into the mold in facewise contiguity to one of the coated mold-faces, filling the mold cavity with an already foamed heat curing resin, subjecting the mold to heat whereby to cure the resin to form a sole-element having the tape integrally bonded to the film on said coated mold-face, and removing the sole-element from the mold.

2,744,341
SNOW BLOWER ATTACHMENT FOR ROAD GRADER WINGS
Raymond M. Ulrich, Roanoke, Ill., assignor to Ulrich Foundation, Inc., a corporation of Delaware
Application December 8, 1952, Serial No. 324,648
2 Claims. (Cl. 37—43)

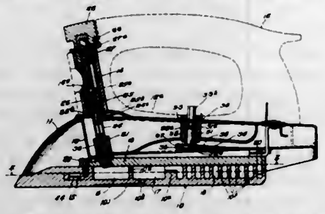


1. The combination for a road grader having a leveling wing comprising a support mounting adapted to be secured to the upper outer corner of the wing, said support mounting having a flat vertical surface, a bearing base rotatably carried by the flat surface of said mounting, a shaft carried by said bearing base, a fan mounted on one end of said shaft, a transmission gear box rotatably mounted in a frame adapted to be secured to the road grader, a shaft interconnecting said gear box with said first shaft, and a generally triangular guide frame connected between two spaced points on the bearing base and a point on the gear box to cause rotation of said gear box and of said base whenever the position of the leveling wing is changed.

2,744,342
STEAM IRON
Philip J. More, Evanston, Ill., assignor to Birtman Electric Company, a corporation of Illinois
Application April 19, 1952, Serial No. 283,219
4 Claims. (Cl. 38—77)

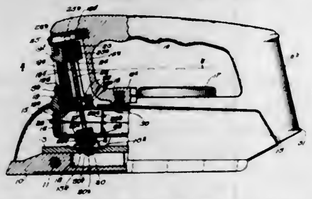
1. In a steam iron, a steam chamber, a valve passage communicating therewith and having a bottom provided with an annular flange, a movable valve closure for closing the passage, said closure including a hollow body having its lower end adapted to contact the flange around the opening therein to close the passage, a separate elon-

gated member extending through the hollow body, said member substantially filling the flange opening when fully extended, complementary threaded portions on the iron and on the elongated member engaging to direct the member into and out of the opening, engaging means extending from the elongated member, the hollow body being provided with longitudinal slots below the upper end thereof for engagement by said means, said slots extending from a point at least as far from the lower end of the hollow body as the engaging means are from the lower end of the elongated member to a point spaced from the end of the hollow body a distance less than the dis-



tance from the engaging means to the end of the elongated member, a projection on the elongated member, spring means seated on said projection and contacting the hollow body thereby urging said hollow body downwardly biasing the upper ends of the slots against the engaging means when the lower end of the hollow body is out of contact with the flange, the combination of the engaging means, slots, and spring means causing longitudinal movement of the elongated member and the hollow body when the lower end of the hollow body is not contacting the flange and the said combination causing rotational movement of the hollow body on the flange when said lower end of the hollow body contacts the flange.

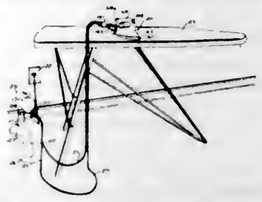
2,744,343
STEAM IRON
Philip J. More, Evanston, and John B. McCord, Chicago, Ill., assignors to Birtman Electric Company, a corporation of Illinois
Application January 15, 1954, Serial No. 404,276
4 Claims. (Cl. 38—77)



1. In a steam iron including a water reservoir, a steam generator, a valve between the reservoir and generator and a handle including a hollow front post, apparatus comprising: a fill tube extending upwardly of the reservoir into the hollow post and having an opening for filling the reservoir with water, said fill tube having an area adjacent to the opening of crescent-shaped hollow cross-section with the ends of the crescent located on opposite sides of and rearwardly of said opening; and valve operating means within said hollow post substantially entirely exteriorly of the fill tube.

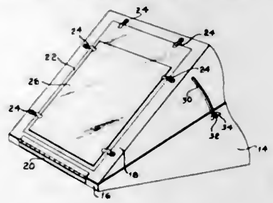
2,744,344
PRESSING IRON CAPABLE OF BEING CONVERTED TO A STEAM IRON
Ivar Jepson, Oak Park, Ill., assignor to Sunbeam Corporation, Chicago, Ill., a corporation of Illinois
Application October 28, 1950, Serial No. 192,671
14 Claims. (Cl. 38—77)

1. In a pressing iron, a sole plate having a generally U-shaped electric heating element embedded therein, a cover plate, said cover plate and said sole plate including the portion of said sole plate having said electric heating element embedded therein defining a steam generating chamber adjacent the bight portion and between the legs of said U-shaped heating element, means interconnecting the pressing surface of said sole plate and said steam generating chamber for transmitting steam when produced in said steam generating chamber to said pressing surface, a water supply conduit extending along one leg of said heating element and having one end thereof terminating within said steam generating chamber at a point remote



from said bight portion, a conduit coupling member supported on said iron so as to be accessible from the outside of said iron and connected to the other end of said conduit, and a flexible capillary tube capable of interconnecting said coupling member and an external source of water which water is caused to flow along said capillary tube by virtue of a suitable pressure head whereby water may be supplied to said steam generating chamber for conversion into steam, the length and bore of said capillary tube being such relative to the pressure head of said source causing flow through said tube of at least 0.35 ounce per minute.

2,744,345
VIEWER
Robert J. Janning, Dayton, Ohio
Application June 1, 1953, Serial No. 358,839
4 Claims. (Cl. 40—152.2)

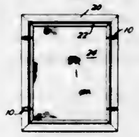


1. A viewer utilizing daylight for viewing colored films provided with a base, a light reflecting mirror fixedly mounted upon the base, said base having a pair of laterally disposed side members extending upwardly from the sides of the base, a transparent film supporting member, means for adjustably supporting the transparent film supporting member in an angular relation with respect to the mirror, said means having downwardly projecting flanges, one on each side thereof, and means for adjustably securing the flanges to the laterally disposed upwardly directed side members.

2,744,346
PICTURE FRAME SECURING DEVICE
William Auerbach-Levy, New York, N. Y.
Application June 24, 1952, Serial No. 295,370
4 Claims. (Cl. 40—156)

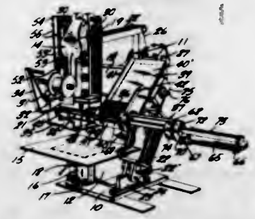
1. A picture frame securing device for use with an inner frame and an outer frame comprising: a first pivotal element, a second pivotal element, and mounting means; said mounting means including a surface engageable with one of said frames and threaded means for maintaining said surface in contact with said frame; said first pivotal element being arranged for pivotal motion

about an axis substantially perpendicular to said surface; said second pivotal element being interconnected for relative rotation with said first pivotal element by a pintle, the axis of which is substantially parallel to said surface; said second pivotal element having a tongue engageable



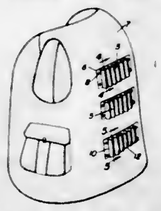
with the other of said frames; and resilient means interconnecting said first and second pivotal elements, serving to urge said second pivotal element to rotate about said pintle with respect to said first pivotal element whereby said tongue is brought to bear upon said other frame.

2,744,347
SLUG-CHANGING PRESS
James Verzera, New York, N. Y., assignor to Olsenmark Corporation, a corporation of New York
Application August 12, 1954, Serial No. 449,340
4 Claims. (Cl. 41—7)



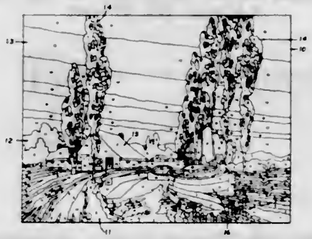
1. Imprinting apparatus for articles comprising means including a reciprocable imprinting head for marking said articles, an elongated U-shaped chuck for holding an indicia-carrying slug rotatably secured to said head, a U-shaped guiding element on each side of said chuck and carried by said head, said guiding elements being positioned with the legs thereof inclined upwardly, means associated with said apparatus and said apparatus and said chuck for moving the chuck from a position in alignment with said guiding elements to an imprinting position with its legs extending downwardly, an inclined hopper for holding a plurality of slugs with the indicia upward and in parallel alignment with said chuck, and means including a pusher rod and actuating means therefor for moving the slugs individually from said hopper through one of said guiding elements and into said chuck when the latter is in said inclined position.

2,744,348
CAMOUFLAGE HOLDER FOR HUNTING GARMENTS
George F. Smith, Port Arthur, Tex.
Application March 24, 1953, Serial No. 344,419
2 Claims. (Cl. 41—10)



1. A camouflage comprising a body garment, a plurality of rows of tubular members secured to the back of the garment in vertically aligned relation with respect to each other, the lowermost row of members having closed bottoms, and stalks of vegetation supported in an upstanding position in said members and with the upper ends of said stalks terminating in the region of the head of a person wearing the garment to conceal the upper portion of the body of the person.

2,744,349
METHOD OF PAINTING IN THE REPRODUCTION OF PAINTINGS
Ralph E. Groesman, Decatur, Ill.
Application January 28, 1954, Serial No. 406,865
1 Claim. (Cl. 41—26)



A method of reproducing paintings comprising the following steps; producing on a surface an outline of a painting and the elements therein and providing outlines of a plurality of areas each corresponding to a portion of the painting having substantially uniform coloration throughout that portion with an ink having a linseed oil and lecithin base, and then successively painting said areas in correspondence with the original painting with coloring matter having a linseed oil and lecithin base with a resulting absorption of the ink in said outlines by the coloring matter.

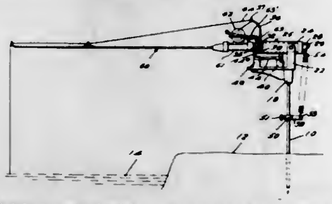
2,744,350
ROLLER FISH NET
Wilfred M. Bass, Fort Myers, Fla.
Application June 22, 1954, Serial No. 438,544
3 Claims. (Cl. 43—9)



1. For use in combination with a trawler net adapted to operate near the bed of a body of water including a net bag having an open mouth, a pair of vanes connected adjacent the open mouth of the net, floats connected to a top portion of the mouth of the net operable to hold the mouth in an open position, a lower leading edge portion of the net mouth extending in advance of the top portion thereof during operation of the trawler net, said lower leading edge portion having spaced intermediate parts; a roller drag assembly including a flexible axle for operable connection to said vanes, said axle having spaced intermediate portions, a plurality of flexible connecting elements secured to said spaced intermediate portions of said axle and to spaced intermediate parts of the lower leading edge portion of the net mouth, a plurality of freely rotatable drag rollers interposed between pairs of said flexible connecting

elements and journaled on said flexible drag axle, said drag rollers having a substantially elliptical shape providing unimpeded towing of said net and the minimum resistance when changing the direction of tow of said net, said drag rollers including a plurality of arcuate elements joined at opposite ends and defining an open framework elliptical roller, said rollers being journaled on the axle and presenting relatively little resistance to movement of the net when towed through the water.

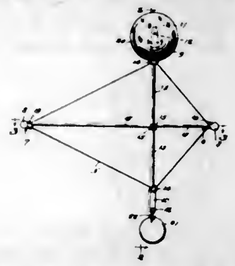
2,744,351
FISHING POLE HOLDER
Thomas H. Smith, Oklahoma City, Okla.
Application October 15, 1953, Serial No. 386,186
1 Claim. (Cl. 43—16)



In a fishing pole holder, a standard, an elongated head plate mounted horizontally on the top end of said standard, a pair of transversely spaced arms rising from the rear end of said plate, a tubular socket member pivotally mounted between said arms intermediate its ends and having its forward end open to receive the butt of a fishing pole, a pair of transversely spaced ears rising from said plate forwardly from said arms, an elongated latch arm pivotally supported at its rear end in said ears, a reverted bill formed at the upper side of the forward end of said latch arm, a pivot pin projecting laterally from the forward end of said socket member, an upward and forwardly curved trigger element supported on said pivot pin, a hook formed at the end of said trigger element below said pivot pin and normally engaged with said bill, a finger formed at the upper end of said trigger element for the passage thereabout of the fishing line in advance of a reel mounted on said butt, another ear projecting from the rear end of said socket member, a clamp element secured on said standard, a coil spring extending between the latter ear and the clamp element and acting to exert a downward pull on the rear end of said socket member and to snap its forward end portion and the pole upwardly when a strike on the line exerts a pull on the trigger element and causes the hook on the latter to be disengaged from the said bill, a second coil spring positioned beneath the latch arm forwardly of said ears and acting to constantly urge the latch arm upwardly into position for the bill to be engaged by the hook of the trigger element, a stop element mounted on the under side of said socket member to limit the upward movement of the latch arm under the urge of said second spring, still another coil spring on the outer end portion of said pivot pin and having one of its ends secured thereto and its other end extending across the forward side of said trigger element to urge the latter into its normally set upright position, and a second stop element for holding the trigger element in its set position under the urge of said another coil spring.

2,744,352
WATER KITE
Arvid R. Holgerson, Sacramento, Calif.
Application May 18, 1954, Serial No. 430,583
5 Claims. (Cl. 43—43.13)

1. A fishing kite comprising a body constructed of semi-rigid sheet material wide at a point intermediate its ends with circular tips forming the front and rear ends thereof, arms formed integral with said body extending laterally from the side edges thereof at the wide portion of said body, a weight secured to one of said arms, a float se-



cured to the other arm adapted to hold the kite vertically within a body of water, and a fishing line bridle secured to the body.

2,744,353
MULTIPLE RECEPTACLE FOR FISHING TACKLE
James R. Adams, Los Angeles, Calif.
Application December 6, 1952, Serial No. 324,544
2 Claims. (Cl. 43—54.5)



1. A receptacle unit for the retention of fishing tackle items such as leaders, hooks, sinkers, flies and similar accessories, comprising a receptacle having a bottom wall, a continuous side wall, and an open end; a hub member supported by said bottom wall within the receptacle in spaced relation to said side wall; a spool having a hollow body adapted to be rotatably and slidably telescoped on said hub member; said receptacle providing an annular space for the reception of said items between said side wall and said hollow body when the latter is mounted on said hub member; said hollow body being adapted to have leaders and the like wound thereon; said hub member being hollow; said bottom wall having an opening therein registering with the bore of said hollow member; a second receptacle having a bottom wall, a continuous side wall and an open end; a hub member supported by the bottom wall of said second receptacle; said last named hub member being slidably extended through said opening into the bore of said first mentioned hub member; said continuous side walls providing an annular space therebetween for reception of such items, and a flange on said hollow body member for closing the open ends of said receptacles.

2,744,354
SPINNING MUSICAL TOY
Alexander E. Watkins, Los Angeles, and George Marsden, Glendale, Calif.
Application November 4, 1952, Serial No. 318,546
9 Claims. (Cl. 46—60)



1. A diabolo, comprising: a hollow, double conical body providing a V-shaped peripheral groove adapted to receive an operating cord; end members for said body and defining therewith air chambers at the ends of the diabolo, each end member having air inlet openings and

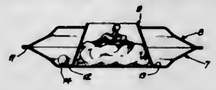
a recess in its inner face, each end member having integral, substantially radial vanes permanently secured to said body member and spacing the end member from a base portion of the body and defining a plurality of substantially radial air exhaust openings; a plate disposed in said recesss and having holes therein; retainer means on each end member engaging a said plate to retain the same in a said recess; and sound-producing means carried by said plate to be operated by air passing through said holes.

2,744,355
ADVERTISING AND TOY AIRCRAFT BLANK
Bruce E. Del Mar, Los Angeles, Calif.
Application January 22, 1953, Serial No. 332,731
2 Claims. (Cl. 46—79)



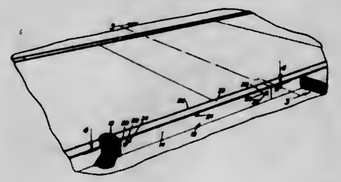
1. A material blank adapted for the manual fabrication therefrom of a toy airplane, comprising: a generally pentagonal sheet of flexible material formed with a base-edge, a generally outwardly-convex edge portion lying opposite to the base-edge, the apex-region of the convex-edge lying substantially medially of said convex edge; an inwardly-extending interruption and reversal of said convex edge-portion arranged in said apex-region so as to divide said convex edge-portion into a pair of lateral, segmental portions and lateral edges joining the termini of said base-edge to the adjacent termini of said convex edge-portions; each of the imaginary lines joining each terminus of the base-edge to the inner end of said inwardly extending interruption defining in the sheet with the adjacent one of said segmental portions and with the adjacent one of said lateral edges, a sheet-portion which is laterally infoldable towards the one face of said sheet about the adjacent imaginary line and into juxtaposition with said other sheet portion; an aperture through said sheet in each junction-region of said convex edge with one of said lateral edges and adapted for mutual registration upon overlapping of the infolded, juxtaposed sheet portions at a point lying spacedly outwardly from said face; said sheet having an aperture therethrough beneath said point; and tensile means mounted on the one face of said sheet adjacent the last-said aperture and adapted to be threaded through said apertures to protrude from the opposite face when the apertures are all in registry so as to secure said infolded portions together and dually constitute graspable means for enabling launching of the toy airplane by the human hand.

2,744,356
PARACHUTE CARRYING AERIAL DISK
John W. Killinger, Walnut Creek, and Marie Demis, Michael C. Demis, and Charles W. Payne, Napa, Calif.
Application June 4, 1953, Serial No. 359,578
1 Claim. (Cl. 46—86)



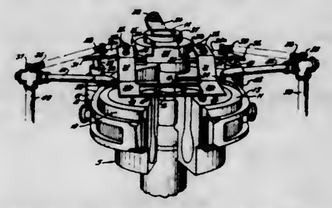
A toy comprising two similar plate-like members, having their concave surfaces facing one another and joined at their peripheral edges to form a hollow circular figure having flat, parallel sidewalls formed by the bottoms of the plate-like members, a coaxial, truncated conical receptacle mounted at the center of the structure extending from one sidewall to the other and having an opening through one sidewall, a parachute having a weight thereon in said receptacle for free release from said receptacle, and a ball free to roll within said toy, said toy being adapted to being sailed into the air and said ball being adapted to cause the toy to follow an erratic path.

2,744,357
LAWN EDGING DEVICE
Fred F. Foote, Falls Church, Va.
Application November 3, 1954, Serial No. 466,595
6 Claims. (Cl. 47—33)



1. A lawn and border edging device comprising an elongated channel member having aligned holes therethrough, an elongated T-shaped blade received in said channel member and having an upper cross member cooperating with said channel member to form opposed cutting surfaces, vertically extending slots in said T-shaped blade, and pins extending between said aligned holes in said channel member engaged in said slots to restrain the amount of movement of said T-shaped blade relative to said channel member.

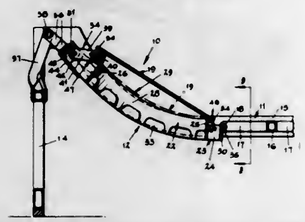
2,744,358
APPARATUS FOR FORMING PASTE MOLD GLASSWARE
George E. Rowe, Wethersfield, Conn., assignor to Emhart Manufacturing Company, Hartford, Conn., a corporation of Delaware
Application April 10, 1953, Serial No. 347,981
7 Claims. (Cl. 49—18)



1. In a glassware forming machine, a blow mold comprising a pair of openable and closable halves and having a molding cavity open at the top of the mold when the halves thereof are closed, a glass blank or parison transfer tongs comprising a pair of openable and closable jaws mounted to close in a plane directly above and in axial alignment with the mold when the halves of the latter are closed, yieldable means arranged constantly to urge said jaws from their open to their closed positions, operating means for the mold halves operable to move them only part way from their fully open to their fully closed positions, thereafter to move them the remainder of the way to their fully closed positions, and to return them from their fully closed to their fully open positions, rigid projecting elements fixed to the tongs jaws to move therewith, and other rigid projecting elements fixed to the mold halves to move therewith and to co-act with the first named rigid elements to permit said tongs jaws to be moved by

said yieldable means from their open to their closed positions in response to movements of said mold halves from their fully open positions only part way to their fully closed positions and to open said tongs jaws against the action of said yieldable means in response to return movements of said mold halves to their fully open positions.

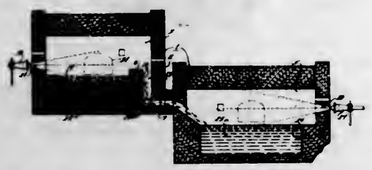
2,744,359
METHOD AND APPARATUS FOR BENDING GLASS SHEETS OR PLATES
Joseph E. Jendrisak, Rossford, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio
Application March 27, 1951, Serial No. 217,726
15 Claims. (Cl. 49—67)



1. In apparatus for bending sheets or plates of glass, a mold of ring type having a shaping surface of the desired outline, said mold being oriented so that one end is elevated above the other, stationary means at the lower end of the mold engageable by an edge of a sheet to be bent to locate the lower end of the sheet with respect to said shaping surface, and means movably mounted at the upper end of the mold engageable by and supporting the upper end of the sheet in spaced relation above said mold and operable to lower the sheet onto the shaping surface of the mold during the bending of said sheet.

12. In apparatus for bending glass sheets or plates into conformity with a mold shaping surface, a sheet edge locator comprising a frame mounted adjacent said mold shaping surface and a ceramic member carried by said frame to contact said sheet edge when operatively mounted on said mold shaping surface.

2,744,360
METHOD OF MAKING ARTICLES FROM FUSIBLE MATERIALS
Walter Collini, Vineland, N. J.
Application March 13, 1952, Serial No. 276,339
4 Claims. (Cl. 49—85)



1. The method of producing articles of variegated color from mixtures of fusible materials, each said mixture having ingredients of different color imparting characteristics, which comprises arranging a plurality of superposed layers of said mixtures to provide a charge, fusing successive top layers of said charge, causing the successive, newly-formed, fused top layers of said charge to flow off from the remainder of said charge, collecting said flowed-off layers in a fused mass having portions of variegated colors by reason of said ingredients, and molding discrete parts of said variegated mass into said articles before said portions have become diffused throughout said mass.

2,744,361
SCOURING GUN
Arnold W. G. Larson and Nordahl T. Flaten, Minneapolis, Minn., assignors to Tobin-Arp Manufacturing Company, Minneapolis, Minn., a corporation of Minnesota
Application May 14, 1954, Serial No. 429,723
4 Claims. (Cl. 51—11)



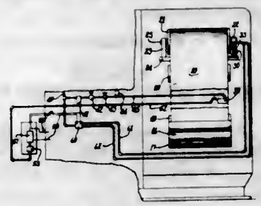
1. A scouring gun comprising a barrel, a tubular element rigid with an outer portion of said barrel and providing a chamber, a plug rigid with an outer portion of said tubular element and having an outlet contiguous with said chamber, a conveying pipe for slurry leading by way of a first passage outwardly of the barrel to said chamber, a conveying pipe for air leading by way of a second passage outwardly of said barrel past the chamber to said plug outlet, a venturi in said chamber in spaced relation to said tubular element and in contiguous relation to said first passage and said plug outlet, and a member situated inwardly of the plug between an outer portion of said venturi and the inner end of said plug cooperating with the venturi to separate the chamber from said second passageway and said plug outlet save for spaced ports through said member, an outer surface of said member being in proximate relation with the inner end of said plug and said venturi being responsive to flow of air under pressure through said second passage to the plug outlet to induce flow of slurry by way of said first passage, said chamber and said ports into said plug outlet.

2,744,362
BELT SANDER
Fred L. Gordo, Los Angeles, and John G. Stinde, Lawndale, Calif.
Application July 13, 1953, Serial No. 367,640
5 Claims. (Cl. 51—135)



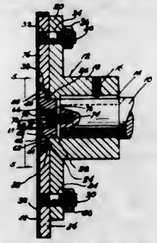
1. A belt driving mechanism, comprising: a channel-shaped base member adapted to be mounted on the case of an electric motor; fastening means encircling the case of the motor for rigidly securing said base member thereon; said base member having a bored boss across one end in a plane traversing the shaft of said motor; a post having a horizontal end fitting said boss, said post extending rearwardly from said boss, then curving upwardly and forwardly and then extending vertically; said post defining a plane perpendicular to and traversing said base member, an idler pulley supported from the vertical portion of said post; a drive pulley adapted to mount on the shaft of said electric motor; a belt device connecting said pulleys; a work table tiltably supported from said base member and disposed forwardly of the forward reach of said belt device; and a backing member supported from said base member and disposed behind the forward reach of said belt device in the vicinity of said table.

2,744,363
DEVICE FOR CONTROLLING BELT ALIGNMENT
David Gluck, Toronto, Ontario, Canada, assignor to Houdaille Industries, Inc., Detroit, Mich., a corporation of Michigan
Application November 18, 1953, Serial No. 392,928
3 Claims. (Cl. 51—139)



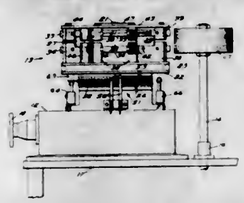
3. A system for effecting continuous lateral oscillation of a web, comprising means for shifting said web selectively in opposite lateral directions, oppositely acting cylinder and piston means operable to actuate said shifting means to shift the web in the respective opposite directions and having one pressure line for supplying pressure thereto to shift the web toward an extreme lateral direction and having a second pressure line for supplying pressure thereto to shift the web away from said extreme lateral direction, a solenoid valve controlling supply of the pressure to said pressure lines and operable in de-energized condition thereof to supply pressure to one of said lines and operable in an energized condition thereof to supply pressure to the other of said lines, edge sensing means cooperable with an edge of the web and actuated by movement of the web to said extreme lateral position, electric means controlled by said edge sensing means and controlling energization of said solenoid valve and operative to energize and deenergize said valve in response to actuation and deactuation of said edge sensing means to condition said solenoid valve alternately to shift said web away from said extreme position when the web actuates said edge sensing means and to shift said web toward said extreme position after the edge sensing means has been deactuated, whereby the web continually oscillates toward and away from said extreme position under the control of the edge sensing means.

2,744,364
GRINDING DISK
Julian F. Behrendt and Ignatius F. Behrendt, Cicero, Ill.
Application December 1, 1954, Serial No. 472,352
6 Claims. (Cl. 51—197)



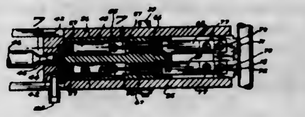
6. In combination a rotatable flat metal backing member having a flat surface, said backing member having a central opening and a tapered wall adjacent said opening, an abrasive disc bonded to the flat surface of said metal backing member, said abrasive disc having an annular depressed portion and a central opening in said depressed portion, said depressed portion having an outer wall complementary to the wall of said backing member so that same is positioned thereagainst, a centering member adapted to nest within said depressed portion and hold said abrasive disc against said backing member.

2,744,365
MACHINE TOOL AND CHUCK THEREFOR
Warren H. Parker, Oakland, Calif., assignor of one-third to Charles W. Butler and one-third to Charles Bork, both of Oakland, Calif.
Application April 3, 1953, Serial No. 346,723
7 Claims. (Cl. 51—237)



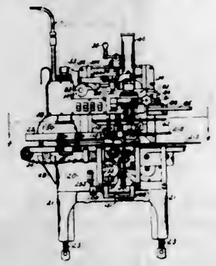
1. An improved chuck comprising a shaft, a base plate mounted for rotation about said shaft, a plurality of pairs of contact plates mounted upon said base plate for rotation therewith and said pairs of plates each being mounted to slide radially of said base plate, an adjusting cone mounted upon said shaft and controllably movable longitudinally thereof in contact with the inner ends of said contact plates for adjusting the radial position thereof, locking means upon said base plate for securing said contact plates in the radial position determined by said adjusting cone, a plurality of electromagnets disposed upon said base plate with one between the plates of each pair of contact plates, and rotational electrical contacts connected to said electromagnets for energizing same to produce magnetic fields whereby magnetic materials are held against said contact plates to rotate with said chuck.

2,744,366
STEADY REST
Ewald A. Arp, Minneapolis, Minn.
Application September 18, 1952, Serial No. 310,337
6 Claims. (Cl. 51—238)



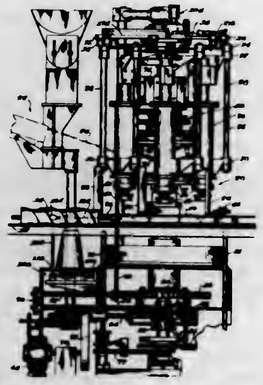
1. A steady rest for precluding deflection of a cylindrical member being acted upon by a working element operative upon said cylindrical member at a first side thereof to progressively reduce its diameter while exerting a force against and transversely of the cylindrical member, comprising a frame, cooperatively operative first and second devices upon said frame in adjacent, parallel relation to each other for engaging first and second longitudinally spaced surfaces of said cylindrical member in adjacent relation to each other at a second side of the cylindrical member opposite said first side, and first and second means independently operable upon said first and second devices, respectively, for progressively urging the first and second devices to be moved against said first and second longitudinally spaced surfaces, respectively, with reduction of the diameter of said cylindrical member under pressure less than the force exerted by the working element and precluding retraction of said first and second devices by reason of said force, said first and second means being operative to preclude retraction of said first and second devices, respectively, when engaged against said first and second longitudinally spaced surfaces, respectively, of the cylindrical member at locations which are of relatively great diameter while said working element is operative upon said second and first longitudinally spaced surfaces, respectively, of the cylindrical member at locations which are of comparatively smaller diameter.

2,744,367
BOTTLE CAPPING MACHINE
Isaac L. Wilcox, Fulton, Nathaniel S. Cole, Baldwinsville, and Herman Pesch, Fayetteville, N. Y., assignors to Oswego Falls Corporation, Fulton, N. Y., a corporation of New York
Application March 27, 1951, Serial No. 217,788
5 Claims. (Cl. 53—67)



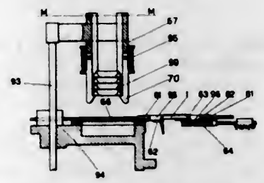
5. A bottle capping machine comprising a turret operable to advance a procession of bottles to and past a cap applying mechanism, a bottle conveyor operable to advance a procession of bottles to a transfer station, a transfer actuating member operable in timed relation to said turret to transfer a bottle on said conveyor to the turret, a latch member operable upon the presence of a bottle at said transfer station to operatively connect said actuating member to said transfer, means for supporting a supply of caps, a cap transfer mechanism operable to transfer caps from said supply to the tops of bottles being advanced by said turret, said cap transfer mechanism including a suction cup, a source of vacuum and a vacuum valve, motion transmitting means operable upon movement of said bottle transfer member to actuate said valve to connect the source of vacuum to said suction cup.

2,744,368
CLOSURE APPLYING APPARATUS
Arthur C. Everett, Quincy, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a corporation of Massachusetts
Application April 8, 1954, Serial No. 421,722
10 Claims. (Cl. 53—67)



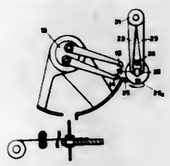
1. In a closure applying machine, in combination, closure applying means adapted to apply a screw closure to a container, means for feeding successive containers from a supply thereof into operative relation to the closure applying means, closure supply means, means for withdrawing closures from the supply means and transferring the same to the applying means for application to a container, said transfer means being movable from a path in alignment with the closure supply means to a second path in alignment with the applying means, control means including means for detecting the absence of a container at a selected position in the feeding of the containers to the closure applying means, and means responsive to said detecting means for preventing movement of the transfer means into said second path in alignment with the applying means whereby to prevent transfer of a closure to the applying means when the absence of a container is detected.

2,744,369
STACKING MECHANISM FOR WRAPPED ARTICLES
Ariosto Seragnoli, Bologna, Italy
Application April 15, 1952, Serial No. 282,302
3 Claims. (Cl. 53—159)



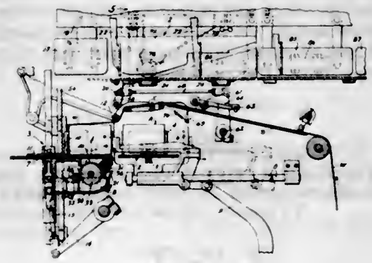
1. A mechanism for stacking wrapped articles which comprises toothed grasping means for laterally holding an article and wrapper; a vertically extending magazine for containing the wrapped articles in stacked position; grill-like article-supporting means underneath the magazine; means for transporting the grasping means with the laterally held article and wrapper to a position underneath the magazine; means for releasing the stacked articles down upon the laterally held wrapped article; hook-like engaging means passing into the toothed members and the grill-like member for engaging the underside of the supported wrapped article and lifting the wrapped article together with the entire stack of articles into stacked position.

2,744,370
MECHANISM FOR WRAPPING CARAMELS, PASTILLES AND ARTICLES OF SIMILAR SHAPE
Ariosto Seragnoli, Bologna, Italy
Application April 6, 1951, Serial No. 219,613
6 Claims. (Cl. 53—228)



1. In an article-wrapping machine, a feeding means for feeding a sheet of material for forming wrappers for the articles; a distributing means for positioning each of the articles in said machine; gripping means for holding together a wrapper and an article; means for transporting said gripping means together with the article and wrapper; folding means for folding the wrapper to U-shape about the article when said article and wrapper are transported; a first set of pincers for grasping said article and U-shaped wrapper; means for removing said gripping means; folding means for folding one leg of the U-shaped wrapper underneath the article; a stationary folder and guide; means for moving said first set of pincers in order to transport the article and partially folded wrapper along said folder and guide for folding and retaining the remaining leg of the wrapper underneath the article to form a tubular wrapper; a second set of pincers for grasping said article and wrapper at the end of the folder and guide; means for releasing the first set of pincers from the article and wrapper; rotary twisting means; means for moving the second set of pincers to transport the article and folded wrapper to said twisting means; ruffling means located between the article while it is in the said last position and said twisting means, and means for moving said ruffling means to ruffle the tubular wrapper and for moving said twisting means to twist an end of the tubular wrapper about the article; and means for releasing the wrapped article from the second set of pincers.

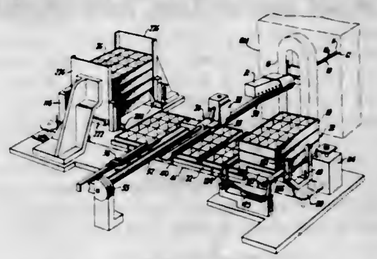
2,744,371
WRAPPING MACHINES
William Hoppe, Longmeadow, Mass., assignor to Package Machinery Company, a corporation of Massachusetts
Application January 29, 1952, Serial No. 268,787
3 Claims. (Cl. 53—230)



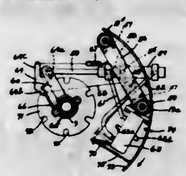
1. In a wrapping machine of the type having means for at least partially encircling an article with the end portion of a web of wrapping material and including a transfer means movable from an article receiving position to a position of alignment with a folding channel; a knife, means to move said knife against the outer face of the web to sever the web along a line spaced from the so-encircled article when the transfer means is in said second-mentioned position, a reservoir for adhesive, an adhesive applying roll and an adhesive supply roll to supply adhesive from the reservoir to said applying roll, said reservoir, adhesive supply roll and adhesive applying rolls being mounted as a unit on said transfer means for movement therewith to position said applying roll, when the transfer means is in said second-named position, on the opposite side of the web from the knife and spaced therefrom, the stroke of the knife being sufficient to carry the severed end portion of the wrapper into contact with said applying roll and means, powered by the movement of the transfer member, to drive said rolls upon movement of the transfer member from said first to said second position.

2,744,372
ARTICLE HANDLING DEVICE
Burton L. Cleaveland, Fern Creek, Ky., and Ralph A. Englert, Montoursville, and Gilbert A. Larson, Emporium, Pa., assignors to Sylvania Electric Products, Inc., a corporation of Massachusetts
Continuation of application Serial No. 129,414, November 25, 1949. This application August 2, 1955, Serial No. 525,847
26 Claims. (Cl. 53—246)

24. An article handling device including a conveyor having a path along which said articles move, an article receiving device having article receiving areas arranged longitudinally and transversely of said device, an article transfer element of a size and positioned to pick up only one article at a time from said path and convey it to an area on the receiving device, means connected to said element for energizing and deenergizing the same, said deenergization means operating to release an article from the element at each area, and means to effect relative shifting of the article transfer element and the article receiving device longitudinally and transversely of the transfer element so that all article receiving areas of the receiving device will be reached by the article transfer element.



2,744,373
CARTON SEALING APPARATUS
Richard D. Hull and Seddon C. Nelson, Fredericksburg, Va., assignors to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application September 8, 1952, Serial No. 308,352
6 Claims. (Cl. 53—374)

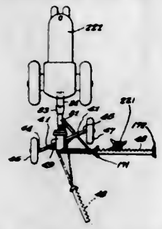


2. Carton sealing apparatus comprising a fixed support; a turret journaled on the fixed support; a plurality of carton receiving platforms spaced about the turret; a compression plate which is secured to the turret in a substantially parallel and spaced relation with respect to each of the platforms; means for imparting relative movement between the compression plate and each of the platforms comprising a ratchet secured to the fixed support; a pawl positioned to cooperate with the ratchet; a normally contracted expandable means connecting the pawl and the turret; means for normally causing the pawl to engage the ratchet; manually controlled means for expanding the said connecting means to cause a predetermined amount of rotation of the turret about the fixed support; and means for automatically withdrawing the pawl from its engagement with the ratchet and for restoring the connecting means to its normally contracted condition following each increment of turret rotation.

2,744,374
RECIPROCATING CUTTING ASSEMBLY WITH TRACTOR MOUNTABLE HITCH STRUCTURE
George R. Louthan, Manteno, Ill., assignor to Sears, Roebuck and Co., Chicago, Ill., a corporation of New York
Application August 9, 1951, Serial No. 241,143
2 Claims. (Cl. 56—25)

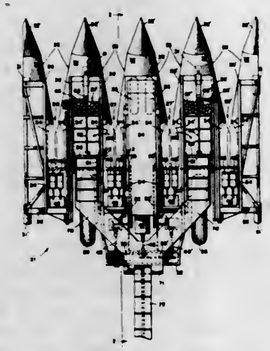
1. An implement-carrying device adapted for connection to a tractor having a power take-off and comprising a longitudinal draft beam adapted to be disposed at the rear of the tractor and to extend generally longitudinally rearwardly thereof, means affording an articulated connection between said beam and said tractor, an axle beam having a ground-engaging wheel at each end and secured to said draft beam in angular relation thereto so that said wheels are disposed in parallelism for forward motion but are axially displaced one rearwardly of the other, a transverse beam pivotally connected substantially to the rearward end of said longitudinal beam and extending

sideways thereof and rearwardly of the foremost of said wheels, a cutting mechanism pivotally supported on the free end of said transverse beam, means affording a



driving connection between said power take-off and said cutting mechanism, said transverse beam being adapted to swing rearwardly upon said cutting mechanism engaging an obstruction in its path of travel.

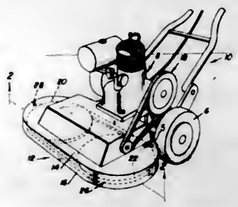
2,744,375
CORN HARVESTING PICKING ROLLS
Max Kidder, Monmouth, Ill.; Maude F. Kidder, administratrix of said Max Kidder, deceased
Application January 30, 1952, Serial No. 269,090
8 Claims. (Cl. 56—104)



1. In a corn harvester, the combination of a carrying frame and a pair of cooperating picking rolls in parallel spaced relation for receiving ear carrying corn stalks therebetween, said rolls comprising each a shaft turnably supported on the frame and a helical element forming a coil coaxially encircling the shaft and mounted thereon in position disposed outwardly of the shaft, the coils comprising said helical elements having minimum diameter at one end for receiving corn stalks therebetween, the diameter of the coils progressively increasing to a maximum inwardly of said ends to form a stalk receiving zone, and said coils having uniform diameter to form a corn picking zone inwardly of said receiving zone.

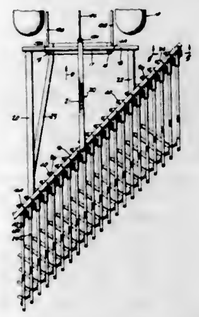
2,744,376
LAWN MOWER
William M. Miner, Wagoner, Okla.
Application November 1, 1954, Serial No. 466,050
1 Claim. (Cl. 56—244)

In combination, a support, a cutter assembly mounted for operation on said support and embodying a pair of substantially duplicate coplanar pulleys mounted for rotation on said support, said pulleys having peripheral grooves therein, an endless belt mounted on said pulleys and operable in the cooperating grooves of the respective pulleys, said belt being made up of duplicated upper and lower complemental sections, and a plurality of cooperating cutters, each cutter comprising a shank which is L-shaped in edge elevation and embodies a horizontal attaching portion fitted and fixed between adjacent surfaces of said belt sections, a depending vertical complemental portion joined with said horizontal attaching portion and paralleling the outer peripheral surface of the



lowermost belt section and depending below the bottom of said last namd belt section, and an integral cutting blade carried by the lower end of said vertical depending portion and projecting radially beyond said peripheral surface and having a terminal pointed beak, said blade and beak having cooperating cutting edges.

2,744,377
SIDE DELIVERY RAKE
Floyd McCall and Lloyd McCall, Romoland, Calif.
Application September 21, 1953, Serial No. 381,377
9 Claims. (Cl. 56—376)

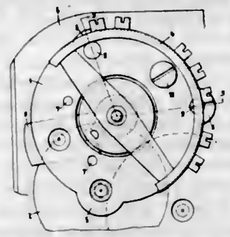


1. In a side delivery hay raking device of the character described, a supporting frame, a plurality of individually spaced tines mounted on said frame in a line extending at an angle to the direction of movement of said device, each one of said tines having a compound curvature, lying generally on a continuous spiral and having the lower extreme thereof making an acute angle with the plane of the ground and spaced immediately above the ground to rake hay which lies on the ground, and a plurality of flat, resilient elements interconnected between said frame and corresponding tines and providing the sole support for said tines.

2,744,378
PALLET BRIDGE FOR WATCH OR CLOCK MOVEMENTS
Friedrich Meyer, Grenchen, Switzerland, assignor to Felsa A. G., Grenchen, Switzerland
Application July 21, 1953, Serial No. 369,412
Claims priority, application Switzerland August 7, 1952
9 Claims. (Cl. 58—104)

1. A pallet bridge for use in a timepiece movement including a pillar plate, a composite lever-cylinder escapement including an escape wheel and a lever driven by the escape wheel, and a balance adapted to be driven by the lever, the pallet bridge having a ring shape and coaxial with the balance axis, the escape wheel and the lever pivoted in the pillar plate and in the pallet bridge, at least two lugs extending from the periphery

of the pallet bridge each having an opening therein, at least two feet carried by the pillar plate, the feet engaging in the openings and serving to orient the pallet bridge in position on the pillar plate, two pins fixed to the pallet bridge and adapted to limit the movement of the lever,



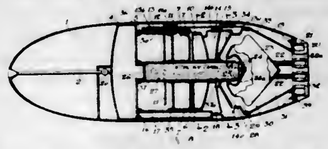
at least one of these pins being placed within the limits of the escape wheel, and a screw securing the pallet bridge to the pillar plate, the feet positioned so that a line drawn therebetween and a line drawn between the pivots of the escape wheel and the lever are on either side of the balance wheel pivot.

2,744,379
EXPANSIBLE BAND WITH DUAL PURPOSE LATCH
Louis E. Valcourt, East Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a corporation of Rhode Island
Application December 9, 1954, Serial No. 474,060
6 Claims. (Cl. 59—79)



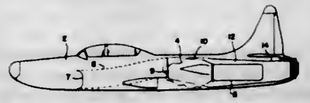
1. In an expansible metal linkage or bracelet comprising a plurality of link-units each consisting in an outer tubular link-element and an inner link-element telescopically slidable therein, with resilient means for normally maintaining said link-units in contracted relationship, the combination of a hook at the end of said slidable link-element engageable with means at the end of an adjacent outer link-element, and a latch pivotally mounted adjacent the free end of said hook on said inner link-element, said latch being movable to engage its forward end with said hook, said latch having an abutment at its rearward end normally positioned in an aperture in said inner link-element, said latch being movable about its axis to disengage its forward end from the hook and to project the abutment on its rearward end beyond the outer face of the inner link-element and into engagement with the end of the outer link-element when said inner link-element is slidably extended relatively thereto whereby to positively lock said latch in open position for convenient manipulation to couple and uncouple said link-units.

2,744,380
METHOD OF GENERATING JET POWER THROUGH SULFIDE REACTION
Edward B. McMillan, Wakefield, and Dudley F. Straubel, Malden, Mass.
Application October 2, 1946, Serial No. 700,650
17 Claims. (Cl. 60—35.4)



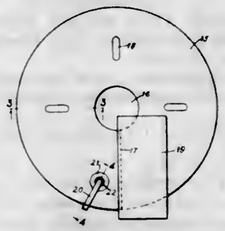
1. The process of creating and projecting finished jet material comprising supplying to a combustion zone a burst of reducing agent reactants in molten form under high pressure, said reactants consisting essentially of compounds of sulfur with at least one member of the group consisting of lithium, sodium, potassium, rubidium, cesium, hydrogen, calcium, strontium, barium, beryllium, magnesium, zinc, cadmium, aluminum, and boron, injecting an oxidant into said burst of reducing agent reactants at a rate and in a manner to effect an immediate and intimate mixture and explosive rate interaction with said reducing agent reactants to generate a great mass per unit of time of gas-like interaction products of low average molecular weight, retarding the escape of said mass of gas-like products to establish a high pressure and projecting said gas-like products in a high velocity jet by said pressure.

2,744,381
JET POWER PLANT FOR AIRCRAFT
Paul E. Geisel, Philadelphia, Pa., assignor to Arsene N. Lucian, Llanerch, Pa.
Application June 25, 1953, Serial No. 363,980
4 Claims. (Cl. 60—35.6)



1. In an aircraft, means for producing a stream of high velocity propulsion gases, exhaust means conducting said stream of high velocity propulsion gases, a shroud pipe for conducting an annular stream of air around said propulsion gas conducting means extending beyond the downstream end of said gas conducting means, said shroud pipe confining said air stream to define an outer stream boundary, and means positioned adjacent to the downstream end of said shroud pipe, defining a cross-sectional area less than that defined by said shroud pipe and having its downstream end portion extending beyond the downstream end of said shroud pipe for diverting outwardly from the axis of the air stream at least some of the stream forming air.

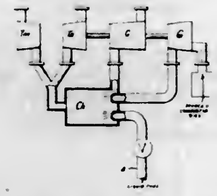
2,744,382
REMOVABLE INFLATABLE PROTECTIVE CLOSURE FOR JET ENGINE
Benjamin Sokol, Valley Stream, and August Di Florio, Rosedale, N. Y., assignors to Republic Aviation Corporation, Suffolk County, N. Y., a corporation of Delaware
Application June 21, 1954, Serial No. 437,930
5 Claims. (Cl. 60—39.09)



1. The combination with a jet engine having a housing with an air intake opening, a rotary shaft centrally disposed in the opening and a supporting frame having a journal for the outer end of the shaft and fixed to the housing, of an inflatable protective closure adapted to be removably disposed in the opening in abutting contact with the frame to thereby fill and close the opening comprising a hollow longitudinally circular tube having unconnected ends disposed adjacent each other, a flap secured to one end of the tube and adapted to overlap the

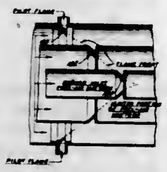
other end of said tube thereby completing an annulus, and means for inflating the tube to expand it both radially and laterally against the wall of the housing and the frame, the ends of said tube being separable for removal from said opening by one of its ends.

2,744,383
GAS TURBINE PLANT
Marcel Henri Louis Sédille, Paris, France, assignor to Societe Rateau (Societe Anonyme), Paris, France, a company of France
Application November 3, 1952, Serial No. 318,477
Claims priority, application France March 29, 1941
1 Claim. (Cl. 60—39.15)



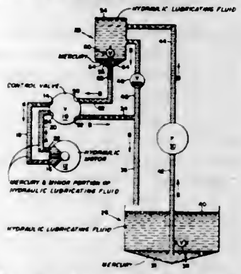
In a gas turbine plant, the combination of a motive turbine for delivering useful power, a rotary air compressor mechanically separated from said motive turbine for supplying the latter with air under pressure, a combustion chamber adapted to heat this air before its admission into said turbine and arranged between the delivery side of said air compressor and the inlet side of said turbine, a source of combustible gas, at least one rotary combustible gas compressor mechanically separated from said motive turbine and the inlet side of which is connected to said source of combustible gas, said compressor being adapted to force the combustible gas into said combustion chamber under the pressure prevailing inside said chamber, an auxiliary turbine supplied with hot air under pressure from said combustion chamber, said auxiliary turbine being mechanically separated from said motive turbine and being adapted to drive both said air and said combustible gas compressors at a rotary speed substantially equal to the value of the operating point of said compressors at maximum efficiency, piping means for delivering an extra amount of thermal energy in form of a liquid fuel into said combustion chamber, and valve means on said piping means for regulating the amount of extra fuel supply to said combustion chamber.

2,744,384
BURNER CONSTRUCTION FOR HIGH VELOCITY GASES
Robert H. Loughran, Playa del Rey, Calif., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Continuation of application Serial No. 118,296, September 28, 1949. This application August 9, 1952, Serial No. 303,599
2 Claims. (Cl. 60—39.72)



1. In a combustion chamber construction for a ramjet power plant, a duct through which high velocity air flows, a plurality of nozzle means for injecting fuel into said duct to mix with said air, means in the form of a solid frustro-conical shield extending away from the wall of the duct and located downstream of the fuel injecting means, the maximum constriction of the duct caused by the shield occurring downstream of the air flow, said shield accelerating the fuel-air stream at said restriction whereby upon ignition of the stream the velocity of flame propagation is less than the stream velocity so that upstream flame propagation is eliminated, means adjacent the downstream face of said shield for igniting the fuel-air mixture including a pilot flame emitting passageway, means for supplying said passageway with a continuous flame of high intensity comprising a mixing chamber and means for supplying said chamber with a fuel under pressure and a combustion supporting fluid under pressure, electrical means for igniting said last mentioned fuel and combustion supporting fluid in said chamber prior to their being emitted through said passageways, at least one other duct located within said first mentioned duct, said other duct including passage means in the wall thereof providing communication from the outside to the inside thereof, a flange extending inwardly from the wall of said other duct and located upstream of said passage means to form a flamespreader, said passage means and said flange being located downstream of said shield whereby the flame propagates across the space between the walls of said ducts and is received by said passage means to provide a pilot flame for said other duct.

2,744,385
HYDRAULIC SYSTEM
Werner W. Hohenner, Camarillo, Calif.
Application January 7, 1954, Serial No. 402,833
7 Claims. (Cl. 60—53)
(Granted under Title 35, U. S. Code (1952), sec. 266)

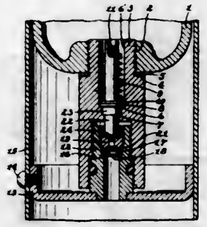


1. In a hydraulic system, a hydraulic motor, valve means for controlling flow of hydraulic fluid to said motor, conduit means between said motor and valve means, a first mixture of immiscible hydraulic fluids circulating under pressure from said control valve to said motor and back to said control valve, at least one of said fluids having a low compression factor and at least another of said fluids having lubricating properties, the amount of the former predominating over the amount of the latter on a volumetric basis, a second mixture disposed in another portion of said system, said mixture containing the same ingredients as said first mixture, said second mixture predominating on a volumetric basis in said fluid having lubricating properties, means for circulating exit fluid from said control valve to said second mixture, means for removing from said second mixture a third mixture of said fluid ingredients predominating in said fluid having a low compression factor on a volumetric basis, means for delivering said third mixture under pressure to the intake of said control valve, and means for selectively changing the proportion of said one and said another fluids in the mixture fed to said control valve.

ERRATUM

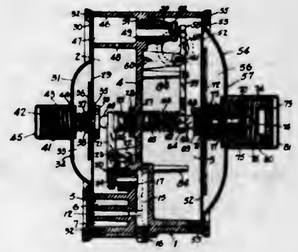
For Class 62—1 see:
Patent No. 2,744,809

2,744,386
DISPENSING VALVE FOR HIGH PRESSURE FLUID STORAGE FLASKS
Larry L. Gerwig, Elmira Heights, N. Y., assignor to Bendix Aviation Corporation, a corporation of Delaware
Application January 9, 1953, Serial No. 330,567
3 Claims. (Cl. 62—1)



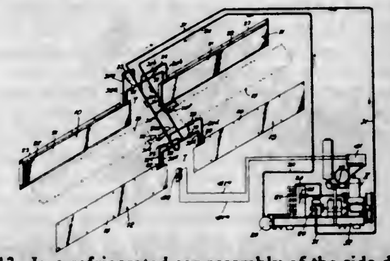
1. A dispensing valve structure for a flask containing compressed gas comprising a hollow stem rigidly attached to the flask, a pair of stepped internal annular shoulders in said stem having flat surfaces facing toward the flask, the larger shoulder constituting a valve seat, an imperforate disc of slightly elastic material normally resting on said seat and bulging outward under the pressure of the gas in the flask; a valve lifter having a flat head normally resting on the smaller shoulder in said stem, and held thereby in position to limit the outward bulging of the valve disc and thus prevent working or frilling of its rim, a nipple threaded into the outer end of said stem, and an abutment in the nipple in position to engage the valve lifter and cause it to raise the valve disc off its seat.

2,744,387
LIQUID FUEL VAPORIZER
Daniel J. Reed and James H. Tanner, Milwaukee, Wis., assignors, by mesne assignments, to John M. Stover, Oklahoma City, Okla.
Application August 4, 1952, Serial No. 302,586
5 Claims. (Cl. 62—1)



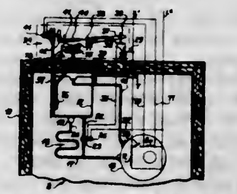
5. An apparatus for vaporizing liquid fuel which comprises a hollow casing defining an internal vaporizing chamber wherein liquid fuel is vaporized and a pressure regulating chamber, an inlet fuel passage disposed within the casing and serving to conduct liquid fuel from a source of supply to the vaporizing chamber, said inlet fuel passage extending generally coextensively with at least a substantial portion of said vaporizing chamber, a heating chamber disposed within the casing in heat conductive relation with both the vaporizing chamber and the inlet fuel passage but removed from the pressure regulating chamber to retard passage of heat to the regulating chamber and serving to conduct a heated fluid to heat fuel in the vaporizing chamber and to also initially heat fuel as the same flows within the inlet fuel passage to the vaporizing chamber, and discharge means to carry off vaporized fuel from said vaporizing chamber to the pressure regulating chamber.

2,744,388
REFRIGERATING CAR STRUCTURE
Herman W. Kleist, Chicago, Ill., assignor to Dole Refrigerating Company, Chicago, Ill., a corporation of Illinois
Continuation of application Serial No. 197,279, November 24, 1950. This application August 9, 1954, Serial No. 448,568
14 Claims. (Cl. 62—4)



13. In a refrigerated car assembly of the side door type, a plurality of refrigerating plates positioned within the car, there being one such plate on each side wall of the car at each side of the side doors of the car, each said plate having an upper portion and a refrigerant coil housed therein, and a lower portion constituted by a sheet metal extension of the plate, said lower portion extending adjacent the floor of the car and being adapted to constitute a support for the plate as a whole, and a temperature-transmitting member in heat transfer relation with the rest of the plate, said car including a work compartment, a compressor and condenser positioned within said work compartment and motor means for actuating it, a pressure duct extending from said condenser to said plates and a return duct extending from said plates to said compressor, whereby a volatile refrigerant is cycled through the plates in response to operation of the compressor, said refrigerant coil being rectangular in cross-section.

2,744,389
DEFROSTER CONTROL FOR REFRIGERATING SYSTEMS
Estel C. Raney, Delaware, Ohio, assignor to Ranco Incorporated, Columbus, Ohio, a corporation of Ohio
Application October 15, 1952, Serial No. 314,807
6 Claims. (Cl. 62—4)

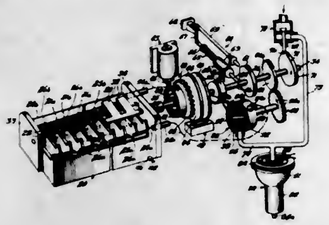


4. The combination of a refrigerating mechanism having a cabinet and a cooling unit in said cabinet, means forming a conduit for directing air from the exterior of said cabinet into heat exchange relation with said cooling unit, said conduit arranged to be substantially blocked by the condensation and freezing of moisture from air passed therethrough and affected by subfreezing temperatures of said cooling unit, and means responsive to the presence of said frozen moisture to initiate a defrosting cycle in said cooling unit.

2,744,390
ICE MAKER
Earnest W. Partsch, Galesburg, Ill., assignor to Servel, Inc., New York, N. Y., a corporation of Delaware
Application October 26, 1954, Serial No. 464,830
13 Claims. (Cl. 62—7)

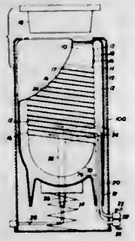
1. In an automatic ice maker, a stationary freezing mold including exterior side and end walls and a plu-

rality of interior partition walls dividing the mold into a plurality of aligned open-topped ice-forming compartments, means for filling with water a first set of said ice-forming compartments to the exclusion of a second set of said ice-forming compartments, means for filling with water the second set of compartments to the exclusion of the first set, means for alternately freezing



water first in one and then in the other set of ice-forming compartments, and said plurality of ice-forming compartments being arranged in said freezing mold in a manner that ice-forming compartments of each set are sandwiched with ice-forming compartments of another set, whereby the filling with water of one set of compartments thaws ice free of another set of compartments.

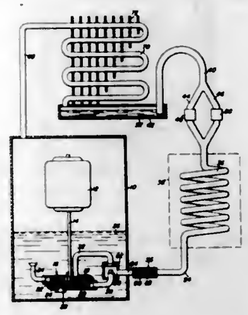
2,744,391
APPARATUS FOR FREEZING, COOLING BEVERAGES OR COMESTIBLES
Gerald Newenham Deane, Buenos Aires, Argentina
Application August 3, 1951, Serial No. 240,132
3 Claims. (Cl. 62—99)



1. A cooling unit, for use in the production of ice or in freezing or cooling beverages or comestibles, comprising, in combination, a vessel receiving the medium to be cooled, said vessel having inner and outer walls spaced apart with the space between such walls evacuated, an evaporating coil formed of glass tubing surrounding and fused to the inner wall of said vessel with its end portions extending through and fused to the outer wall of the vessel, said coil being spaced apart from the inner surface of said oufer wall and having its outer surface at its side remote from the medium in the vessel mirrored to minimise radiation losses, and means for connecting the ends of said coil to pipes included in a refrigerant circuit, the evacuated space between the walls of the vessel insulating the inner wall of said vessel and said coil against the transmission of heat thereto from outside the outer wall of the vessel.

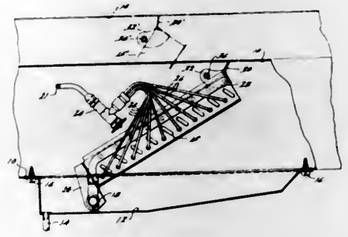
2,744,392
JET OPERATED REFRIGERATOR
Raymond Ridgley, Marysville, Wash.
Application December 3, 1954, Serial No. 472,919
5 Claims. (Cl. 62—117.65)

4. A refrigeration system comprising an enlarged tank, a quantity of circulating liquid in said enlarged tank, a condenser communicating with the upper portion of said enlarged tank, a liquid refrigerant receiver tank communicating with said condenser, an evaporator, a supply conduit interconnecting said receiver tank and evaporator, a pump mounted in the lower portion of said enlarged tank and immersed in said circulating liquid, means for driving said pump, a jet nozzle, a pressure conduit connected between said pump and nozzle, a housing enclosing said nozzle, a suction conduit interconnecting said nozzle housing and the discharge end of the evaporator for exhausting refrigerant gas from the evaporator, a discharge



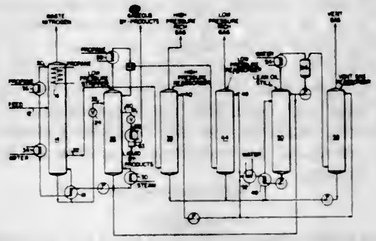
conduit extending from said housing for discharging the mixed refrigerant gas and circulating liquid into the lower portion of said enlarged tank below the surface of the liquid, said refrigerant gases separating from the upper surface of the circulating liquid and passing into the condenser, and a discharge pump positioned in said discharge conduit, means for driving said discharge pump thereby discharging the mixture from the nozzle housing.

2,744,393
HEAT EXCHANGE COIL ASSEMBLY
Richard L. Brugler, Trotwood, and De Witt Davis, Sr., Dayton, Ohio, assignors to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application July 23, 1953, Serial No. 369,817
2 Claims. (Cl. 62—140)



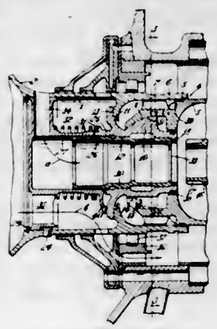
1. A device for cooling air including a duct providing an air passage and having an outer wall provided with an opening and a heat exchange assembly mounted on said duct; said heat exchange assembly comprising a condensate collecting pan secured to said duct around the periphery of said opening and extending outwardly from said outer wall, said pan serving as a closure for said opening, a pipe extending transversely of said pan outwardly of said outer wall and pivotally mounted in said pan for rotation about the axis of said pipe, a flat refrigerant evaporator coil positioned within said duct by insertion through said opening, means supporting said coil on said pipe for pivotal movement therewith to accommodate the initial installation of said coil in said duct at a preselected inclination to said duct and manifold means secured to said coil and said pipe for movement therewith, said manifold means defining a refrigerant flow connection between said coil and said pipe.

2,744,394
SEPARATION OF GASEOUS MIXTURES BY FRACTIONATION
Roger H. Newton, Winchester, Mass., assignor to Badger Manufacturing Company, Cambridge, Mass., a corporation of Massachusetts
Application June 2, 1953, Serial No. 359,110
7 Claims. (Cl. 62—175.5)



1. A method for separating nitrogen from raw natural gas, including subjection of the gas to continuous fractionation with addition as reflux of n-pentane, the pressure being adjusted to a value in excess of critical for the nitrogen-methane binary and at which two phases exist for the binaries of pentane with each of nitrogen and methane, the temperature range and the amount of reflux added being adjusted to remove substantially all of the nitrogen overhead, continuous withdrawal as bottoms of a liquid containing methane and pentane, and continuous withdrawal of a sidestream immediate between the raw gas inlet and the bottoms consisting of substantially pure methane.

2,744,395
SHAFT COUPLING
Bernard Sidney Massey and Denis George Bush, Bristol, England, assignors to The Bristol Aeroplane Company Limited, Bristol, England, a British company
Application June 18, 1953, Serial No. 362,632
Claims priority, application Great Britain June 23, 1952
8 Claims. (Cl. 64—9)



1. A coupling for connecting together two shafts subject to slight misalignment, one at least of which shafts is hollow, said coupling comprising internally and externally toothed parts fixedly carried on the two shafts respectively, said toothed parts being in rotational driving engagement with one another while permitting slight angular misalignment between the shafts, a first coupling part fixedly carried by one of the shafts at its end adjacent the other shaft, said first coupling part having a part spherical surface, a second coupling part attached to the other shaft at its end adjacent the first said shaft in a manner permitting rotation relatively to said shafts but not axial withdrawal in relation to said other shaft, said second coupling part having a complementary part spherical surface in overlapping relationship with the part spherical surface of said first coupling part, and said first and second coupling parts being cut away in a manner allowing said part spherical surfaces to be moved axially into said overlapping relationship and then locked against withdrawal from their overlapping relationship by partial rotation of the second coupling part relatively to the shafts, toothed means on said second coupling part engageable by a tool inserted through said hollow shaft to rotate said second coupling part and locking means located within a hollow end portion of, and carried by, one of said shafts at its end adjacent the other shaft, for releasably locking said second coupling part against rotation relatively to said shafts at least when said first and second coupling parts are locked against withdrawal from their overlapping relationship, said locking means including a slidable member movable between an operative position in which said second coupling part and said first coupling part are locked against withdrawal from their overlapping relationship and an inoperative position in which said second coupling part is free to rotate relatively to said shafts, and resilient means urging said slidable member into its operative position, said slidable member having a surface engageable by a tool inserted through said hollow shaft to rotate said second coupling part to move said slidable member to its inoperative position against the action of said resilient means and thereby free said second coupling part for rotation by the tool.

2,744,396
WHEEL MOUNTING
Michael J. Nagy and Donald M. Threewit, Inglewood, Calif., assignors to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application April 17, 1953, Serial No. 349,362
1 Claim. (Cl. 64—28)

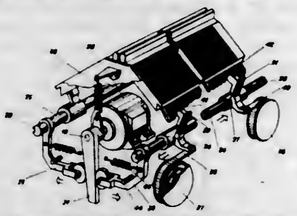


In combination with a rotatable shaft having an annular member mounted thereon for rotation thereby, means for locating and positioning said member on said shaft comprising a groove extending transversely across one face of said member and intersecting the axis of said shaft, a transverse pin extending through the axis of said shaft opposite said groove and parallel therewith, and U-shaped springs mounted in said member astraddle said groove and having the legs thereof recessed in said member on each side of said groove, said pin being retained within the bights of said springs on each side of said shaft and urged by said springs into said groove.

2,744,397
WIDENING MECHANISM FOR STRAIGHT KNITTING MACHINES
Lorenzo Franceschini, Florence, Italy, assignor to Officine Galileo Societa per Azioni, Florence, Italy, an Italian corporation
Application August 21, 1951, Serial No. 242,908
Claims priority, application Italy August 29, 1950
14 Claims. (Cl. 66—70)

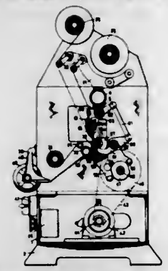
1. In a knitting machine, a needle bed, a plurality of spaced needles supported in said bed, an electrical motor, a rockable shaft operatively connected to said mo-

tor, at least one needle pusher member carried by said shaft for moving said needles to knitting position, and



mechanical means for automatically adjusting the position of said pusher member with respect to said needles.

2,744,398
WARP KNITTING MACHINE
Walter Scheibe, Oberursel (Taunus), Germany
Application April 28, 1952, Serial No. 284,699
Claims priority, application Germany April 28, 1951
11 Claims. (Cl. 66—86)



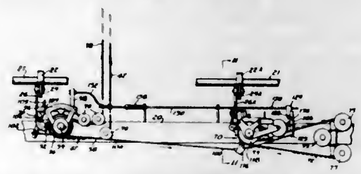
1. A warp knitting machine having a needle bar, a plurality of latch needles provided therein, means for moving said needle bar in substantially vertical direction, and means for operatively supporting said needle bar in the machine, a comb-shaped needle bed for guiding the latch needles in their reciprocating movement, a stitch comb, pegs on said stitch comb adapted to extend between the said latch needles to keep down the stitches, means for reciprocating the said stitch comb on the latch side of the needles, and abutments on the said stitch comb for engaging the latches and thus preventing their closing at a predetermined point of their upward movement.

2,744,399
YARN FEEDING MECHANISM FOR KNITTING MACHINES
Bertram Henry West, Rothley, Leicester, England, assignor to G. Stibbe & Co. Limited, Leicester, England, a British company
Application June 9, 1955, Serial No. 514,141
Claims priority, application Great Britain June 18, 1954
8 Claims. (Cl. 66—132)



1. For a knitting machine equipped with a plurality of feeders, a yarn feeding mechanism comprising, in combination, a single positively driveable yarn measuring roller consisting of a frusto-conical inner portion having a surface adapted to enhance the frictional grip of a yarn wrapped therearound and a parallel-sided outer portion adjoining the small end of the said inner portion, said parallel-sided portion having a smooth surface to permit of slippage between the latter and the yarn in the event of it being engaged thereby for the purpose specified, and automatic yarn tension controlling means in the form of a rocking compensator furnished with depending guide means adapted to locate a lap of the yarn around the measuring roller and also with an upwardly directed guide to engage the run of the said yarn betwee nthe said depending guide means and a feeder of a knitting machine, the said controlling means being thereby influenced by variations in tension of the yarn during knitting.

2,744,400
MECHANISM FOR AUTOMATICALLY ADJUSTING KNITTING MACHINES TO KNIT STOCKINGS OF DIFFERENT SIZES
Morris H. Boyer, Boyertown, Pa., assignor to Danita Hosiery Manufacturing Co., Inc., Philadelphia, Pa., a corporation of Delaware
Application December 9, 1952, Serial No. 324,970
8 Claims. (Cl. 66—155)

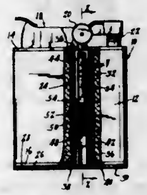


1. An auxiliary control mechanism for controlling the operation of a full fashioned stocking knitting machine of the type which includes a main pattern chain, main control buttons carried by said main pattern chain, operating levers located in the path of movement of, and adapted to be actuated by, said buttons, driving means for propelling said chain to bring said buttons into engagement with said levers, and means operatively connecting said operating levers to corresponding operating parts of the knitting machine, said auxiliary control mechanism including an auxiliary pattern chain, propelling means for moving said auxiliary pattern chain, auxiliary control buttons on said auxiliary pattern chain, a single selector arm adapted to be selectively located in the path of, and to be engaged and moved by said auxiliary control buttons, propelling means for moving said auxiliary pattern chain to bring said auxiliary control buttons into engagement with said selector arm, and actuating means operatively connecting said selector arm and the driving means of said main pattern chain, said actuating means being operable by movement of said selector arm to arrest the movement of said main pattern chain during engagement of said selector arm by said auxiliary control buttons.

2,744,401
CIGARETTE LIGHTER AND FLINT SUPPLY INDICATOR THEREFOR
Alexander Salzer, New York, N. Y.
Application October 30, 1953, Serial No. 389,249
1 Claim. (Cl. 67—7.1)

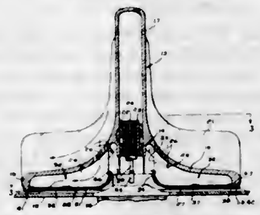
In a cigar and cigarette lighter, a casing having top and bottom walls with aligned openings therein, a flint wheel supported on the top wall of the casing over the opening therein, an internally threaded cylindrical flint tube housing fixedly mounted in the casing and extending from the top to the bottom walls and opening through the opening in the bottom wall of the casing, a smooth-walled flint tube substantially coextensive in length with

the housing and freely slidable in the direction of its length into and out of the housing, said flint tube having diametrically opposed longitudinal slots, a cylinder inside said flint tube for housing the flints of the lighter and for guiding same to the flint wheel, said cylinder having slots aligned with the slots in the flint tube, and flint follower means threadedly engaged with the housing and mounted in the cylinder, said follower means engaging the flint tube on movement thereof out of the housing so as to signify, by the extent to which the flint tube can be pulled outwardly, the amount of flint remaining within the cylinder, said follower means including a follower threadedly engaged with the housing, a spring supported on said follower, a flint support tip carried by said spring,



the follower being formed with a circular center portion housed in the cylinder and engaged by the spring, diametrically opposed lugs on the follower projecting through the slots in said cylinder and flint tube, said lugs having arcuate outer end surfaces threaded to effect engagement with the threads of the housing, indicia spaced along the surface of the flint tube adjacent one of its longitudinal slots, the slots in said flint tube being closed at their inner ends to define abutments engageable with the lugs to limit outward movement of the flint tube, and a cap rigidly connected to the outer end of the flint tube closing the outer ends of the slots of said flint tube and disposed exteriorly of the casing to facilitate grasping of the flint tube.

2,744,402
AGITATOR FOR WASHING MACHINES
Thomas R. Smith, Newton, Iowa, assignor to The Maytag Company, Newton, Iowa, a corporation of Delaware
Application April 14, 1952, Serial No. 282,092
6 Claims. (Cl. 68—133)



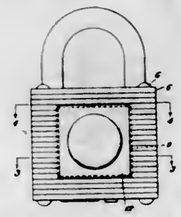
1. A washing machine comprising a tub having a bottom portion and side portions for retaining fabrics and washing fluid therein, an agitator supported in spaced relation to said bottom portion for relative movement thereto, said agitator comprising a central portion and a base member attached to said central portion, a cavity formed on the underside of said base member adjacent said bottom portion, upstanding agitating vanes carried on said base member, apertures in said base member between said upstanding vanes for passage of fluid into said cavity, a cover plate removably attached to said base member on the underside thereof, means within said cavity to restrict movement of fluid entering said cavity through said apertures, an opening in said cover plate for exit of said fluid from said cavity, and filter means within said cavity for arresting movement of foreign particles carried by fluid entering said cavity through said apertures.

2,744,403
MOUNTING ARRANGEMENT FOR PIVOTAL WRINGER ROLL
Nicholas L. Etten, Cedar Falls, Iowa, assignor, by mesne assignments, to Chamberlain Corporation, Waterloo, Iowa, a corporation of Iowa
Original application November 23, 1945, Serial No. 630,178, now Patent No. 2,589,354, dated March 18, 1952. Divided and this application January 16, 1952, Serial No. 266,729
4 Claims. (Cl. 68—244)



1. In a wringer, a frame, cooperative pressure rolls in said frame, one of said rolls being tiltable endwise, a hollow core in said one roll, a supporting shaft extending through said hollow core, a substantially spheroidal unit on said shaft, and coacting means connecting the hollow core and said unit to cause the roll and shaft to rotate together but permit the roll to tilt relatively to the shaft.

2,744,404
LAMINATED LOCK BODY
Norman J. Vile, New Britain, Conn., assignor to The Eagle Lock Company, Terryville, Conn., a corporation of Connecticut
Application February 23, 1952, Serial No. 273,000
4 Claims. (Cl. 70—52)

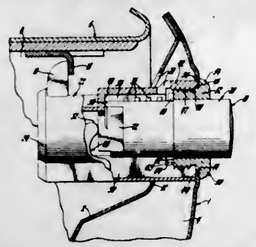


4. For a laminated lock body, a plurality of identical laminations adapted to be secured together and forming a portion of the lock body, said laminations having identical notches in their corresponding edges, the side edges of the notches being undercut, said undercut extending from said corresponding edges, whereby, when the said laminations are assembled, there is provided a recess in the lock body having undercut side edges adapted to receive the opposite edges of a name plate disposed in said recess.

2,744,405
DOOR LOCK AND MOUNTING FOR INSTRUMENT PANEL COMPARTMENT
Clarence P. McClelland, Royal Oak, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 1, 1952, Serial No. 318,187
10 Claims. (Cl. 70—81)

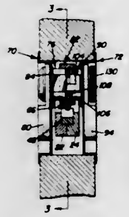
10. A latching mechanism adapted to secure a panel having an aperture therethrough to a stationary frame, said mechanism comprising a housing member adapted to be disposed at said aperture and having a threaded portion thereon, a sleeve member having a threaded portion thereon cooperatively engaging said first threaded portion and thereby securing said sleeve member to said housing member, one of said members having a cavity therein adapted to receive a tool for unscrewing said threaded portions and thereby releasing said members from said opening, op-

posed shoulders projecting from said members and being adapted to clamp said panel therebetween when said threaded portions are in engagement, a bolt projecting from said housing member and being adapted to engage said stationary frame, a key actuated lock cylinder disposed within said cavity and having a pin retractably projecting therefrom, said lock cylinder being operatively as-



sociated with said bolt, annular shoulder means on each of said members positioned to form an annular recess adapted to receive said pin when said pin is in the extended position and to thereby retain said lock cylinder in said cavity, and a passage through one of said members adapted to permit a tool to pass therethrough and depress said retractable pin and thereby release said lock from said cavity.

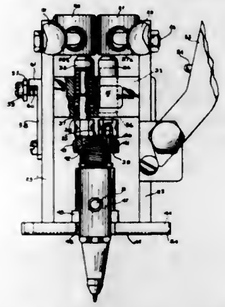
2,744,406
SLIDING DOOR LOCK
Joseph C. Labrie, Miami, Fla.
Application March 27, 1953, Serial No. 345,075
2 Claims. (Cl. 70—96)



1. A combined locking and actuating assembly comprising a pair of coaxial tubular members provided with interfitting adjacent ends presenting an elongated housing, means for rotating said housing, a bolt actuating cam carried by said housing provided with a circumferential slot, locking means received in said housing including an element projecting from the housing through the slot in said cam, said locking means including a key controlled barrel, said barrel having a groove within which said element is journalled, said locking means also including mechanism for imparting rotational movement of said barrel to said element.

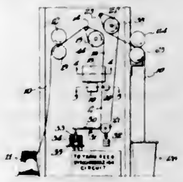
2,744,407
INJECTOR TESTING DEVICE
Frederick B. Kruger, Verona, and Raymond H. Rossomme and Joseph A. Stein, Pittsburgh, Pa., assignors to Bacharach Industrial Instrument Company, a corporation of Pennsylvania
Application October 24, 1952, Serial No. 316,644
9 Claims. (Cl. 73—49.7)

1. In a fluid pressure applying device provided with a pressure source for use in determining the serviceability of a unit injector having inlet and outlet fluid connections comprising a frame, a head having a pair of recesses therein and detachably secured to said frame, a pair of plungers yieldably slidable within the recesses in said head and one of which is provided with a passage therethrough, a fluid conductor between said pressure source and the passage in said plunger, a gauge connected to said conductor adjacent said head, a socket having an opening therethrough secured to the end of said last-mentioned plunger, a second socket having a sealing member therein secured to the end of said second plunger, a support on



said frame upon which a unit injector may be placed for service testing, and cam means secured to said head operably arranged for engaging said open socket with the inlet connection and for engaging said socket containing the sealing member with the outlet connection of said unit injector.

2,744,408
APPARATUS FOR CONTINUOUSLY DETERMINING MASS PER UNIT LENGTH
John S. Seney, Henrico County, Va., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application October 25, 1950, Serial No. 191,973
5 Claims. (Cl. 73—67)

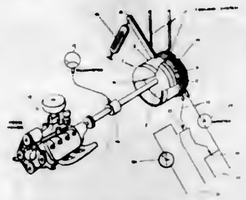


1. An apparatus for determining mass per unit length of yarn or the like which comprises two supports spaced a fixed distance apart, yarn feeding means for advancing yarn over said supports under constant tension, a photoelectrical circuit responsive to vibrations of the yarn passing between said supports for transforming said vibrations into electrical oscillations of corresponding frequency, yarn vibrating means responsive to said oscillations for maintaining the yarn in continuous vibration at its natural frequency as it passes between said supports, convertor means for generating a direct current voltage proportional to said frequency, and an electronic potentiometer responsive to said voltage and calibrated to read directly in mass per unit length of the yarn.

2,744,409
ELECTROMAGNETIC DYNAMOMETER
Harry D. Wintle, Jr., and George E. Strom, Northampton, Mass.
Application September 14, 1953, Serial No. 380,073
3 Claims. (Cl. 73—134)

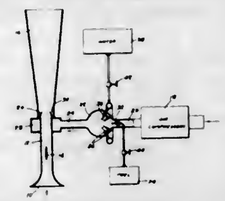
1. An electromagnetic dynamometer comprising a rotatable magnetic member mounted on a shaft and a closely spaced relatively stationary magnetic member, a mass of relatively movable contiguous magnetic particles in the space between said members, an electrical winding positioned on said stationary member, a source of energizing

current, means coupled between said winding and said source of energizing current for controllably varying the current applied to said winding, whereby a correspondingly varying magnetic field is produced across said space, a torque measuring means coupled to said relatively stationary member, an electrically controlled timing device,



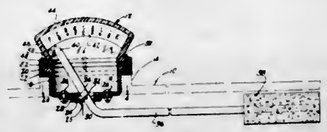
switching means coupling said winding and said timing device to said source of energizing current, whereby upon closing said switching means said energizing current is simultaneously applied to said winding and timing device, so that the time it is required to apply a given energizing current to the winding may be observed.

2,744,410
INDUCTION TYPE WIND TUNNEL
Rowland E. Browning, Fairview Park, Ohio
Application March 13, 1952, Serial No. 276,432
2 Claims. (Cl. 73—147)
(Granted under Title 35, U. S. Code (1952), sec. 266)



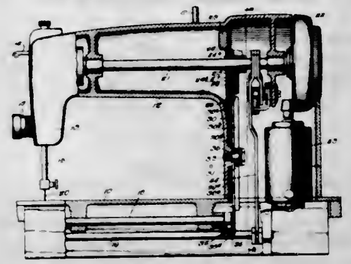
1. In a wind tunnel, a tubular section, an annular chamber formed at one end of said section and having an annular outlet opening thereto, a tubular test section having an inlet opening to atmosphere and an outlet end traversing said chamber and forming with said outlet opening a constricted annular Venturi, a conduit supplying gases under pressure to said chamber and said Venturi to induce flow of air through said test section, a combustion chamber in said conduit, means for supplying air under pressure to said combustion chamber, a burner in said combustion chamber, and means for spraying water into said combustion chamber posterior to said burner.

2,744,411
LIQUID LEVEL GAUGE
Lorn La Vern Spencer, Sr., Croswell, Mich.
Application May 13, 1955, Serial No. 508,215
2 Claims. (Cl. 73—317)



1. A liquid level gauge for mounting in a threaded opening of a tank, comprising a generally cylindrical plug of cup shape having external threads adapted to engage the threads of said opening, said plug including a bottom formed with a center opening, the plug further including a disc secured to and underlying said bottom and offset downwardly from the bottom, the disc having a slot formed therein, the plug including an outwardly directed flange and a sealing gasket underlying said flange, for sealably mounting the plug in said opening of the tank; a dome-like, transparent cover having an outwardly directed peripheral flange overlying the flange of the plug; gasket means interposed between the flanges of the cover and plug respectively, said flanges being connected to provide a seal between the cover and plug; a scale within said cover calibrated to show liquid levels in a descending order, said scale being disposed for viewing of the same through the cover; an elongated arm including an angular extension at one end, said extension being pivotally connected to said disc and extending within the center opening of the plug and through said slot, the extension having a free end disposed to traverse said scale to indicate the liquid level within the tank responsive to swinging of the arm to different positions within the tank; and a float on the arm within the tank, for shifting the arm about the pivot axis thereof responsive to movement of the float with the rising or falling level of liquid within the tank.

2,744,412
SHUTTLE DRIVE MECHANISM FOR A SEWING MACHINE
Charles H. Sparklin, Chicago, Ill., assignor to Birtman Electric Company, a corporation of Illinois
Application February 25, 1950, Serial No. 146,226
3 Claims. (Cl. 74—66)

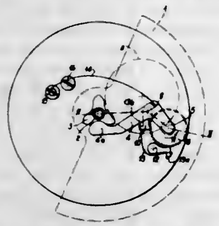


1. In a sewing machine including a shuttle drive shaft, a power shaft, an eccentric fixed thereto including a flat plate having an outwardly extending substantially circular eccentric flange providing a bearing surface and a pitman having one end rotatably engaging said flange bearing surface and the other end engaging said shuttle drive shaft for rotation thereof, said eccentric being provided with a hollow interior bounded by said circular flange and a closed end opposite said flange, an oil wick within said interior, and a cover plate closing the opening defined by said flange, the cover plate extending beyond said eccentric to provide a counterweight for the eccentric.

2,744,413
OSCILLATORY CAM RATCHET DRIVE
Emile Schneider, Porrentruy, Switzerland, assignor to Societe Horlogere de Porrentruy, Phenix Watch Co. S. A., Porrentruy, Switzerland, a Swiss firm
Application February 3, 1953, Serial No. 334,885
Claims priority, application Switzerland February 20, 1952
3 Claims. (Cl. 74—126)

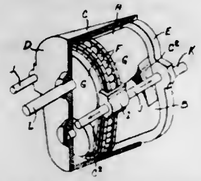
1. In a transmission gearing especially for the self-winding mechanism of a timepiece, a frame, an oscillatory star-shaped cam pivotally mounted on said frame, a ratchet wheel rotatably mounted on the frame with its axis of rotation spaced from and parallel to the axis of said cam, a lever pivotally mounted coaxially with said ratchet wheel and having a free end engageable with the periphery of said star-shaped cam, spring means yieldably urging said lever into engagement with said cam, a driving pawl pivotally mounted on said lever, and engag-

ing said ratchet wheel to drive said wheel in a predetermined direction, said lever normally engaging said star-shaped cam between two points thereof and being oscillatable by movement of said star-shaped cam in either direction to advance said ratchet wheel through the action



of said driving pawl, a retaining pawl pivotally mounted on said frame and engaging said ratchet wheel to hold said wheel against retrograde movement, and a floating spring blade secured at one end to one of said pawls and engaging the other of said pawls to urge both pawls into engagement with the ratchet wheel.

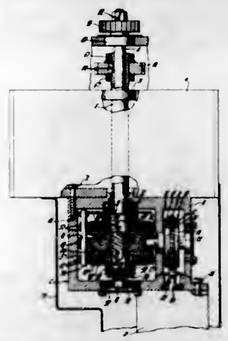
2,744,414
TRANSMISSION SPEED CHANGER
Antonina Alexeev, New York, N. Y.
Application January 26, 1953, Serial No. 333,054
14 Claims. (Cl. 74—216.3)



1. A variable speed power transmission comprising a pair of cones rotatably mounted on parallel axes with the reduced ends of the cones facing in opposite directions, a flexible raceway surrounding the cones in the form of a loop lying in a plane generally normal to said axes, a series of anti-friction rolling elements rollable in the raceway and disposed in generally abutting relation around the cones, means supporting the raceway for movement parallel to said axes, whereby said series of elements is movable to different axial positions along the cones, and catches on each cone spaced around the periphery thereof and each engageable with one of said elements through part of a revolution of the cone, said series of elements substantially filling the raceway around the loop to form a driving medium interconnecting the cones through the catches.

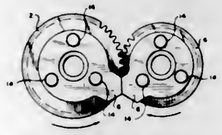
2,744,415
SERVOMOTOR
Arthur W. Gaubatz, Indianapolis, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application September 29, 1950, Serial No. 187,413
12 Claims. (Cl. 74—388)

1. A servomotor comprising, in combination, an output shaft, a control shaft coaxial therewith, two friction clutches, each comprising at least one driven member and at least one driving member, the driven members being coupled to the output shaft for rotation therewith, power means for rotating the driving members of the clutches in opposite directions, and a thrust member coupled to the said shafts for rotation with one of the shafts and so as to be displaced axially of the shafts by relative rotation of the shafts, the thrust member being disposed to deliver balanced axial thrust to both clutches when the shafts are in equal angular positions and to deliver increased thrust to one clutch and decreased thrust to the



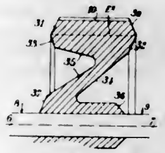
other clutch when displaced by relative rotation of the shafts to unbalance the friction of the clutches and effect a follow-up movement of the output shaft.

2,744,416
DIFFERENTIAL STOP MECHANISM
Leon Feigin, Queens, N. Y., assignor to Aviation Engineering Division, Avien-Knickerbocker, Inc., Woodside, N. Y.
Application November 10, 1953, Serial No. 391,158
1 Claim. (Cl. 74—414)



A differential gear stop mechanism comprising a pair of meshing gears having a gear ratio other than an integer, a stop member formed of a flat plate affixed to each of said gears, each of said stop members being characterized by a pair of faces meeting at an obtuse angle, each of said faces being oriented to meet the corresponding face of said other stop on a line substantially at right angles to a line common to the center of each of said gears.

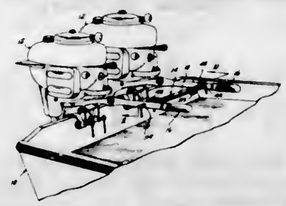
2,744,417
MACHINE GEAR WHEELS
Robert Auguste Huguenin, Paris, France
Application November 24, 1950, Serial No. 197,345
Claims priority, application France October 24, 1950
2 Claims. (Cl. 74—434)



1. A gear wheel comprising a thick disc having peripheral teeth, said disc having annular troughs extending into the same from opposite sides thereof and said disc further including a hub defining portion having a journalling aperture therethrough, the sides of the hub defining portion being inclined toward one another and of unequal length and angle of inclination, the respective troughs having different radii from the center of the disc and walls of unequal length, and the side surfaces of the disc between the outermost wall of each trough and the

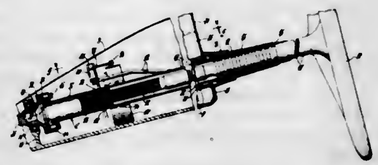
teeth each presenting multiple faces at least one of which on each side of the disc is inclined outwardly and another of which is inclined inwardly toward the teeth.

2,744,418
COUPLING DEVICE FOR TWIN OUTBOARD MOTORS
Wallace E. Weber, Miami, Fla.
Application August 1, 1952, Serial No. 302,102
5 Claims. (Cl. 74—480)



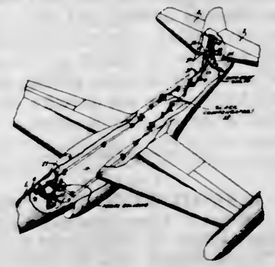
3. A device for coupling together the handles of side by side outboard motors to provide for joint steering thereof, comprising: an elongated, tubular, open ended body extendable between said handles; ball members seated in and closing the body at its opposite ends and movable universally relative to the body; a resiliently compressible block disposed within the body intermediate the opposite ends thereof; a flexible element connected at one end to the center of one of the ball members and extending through the block, said element being engaged with that end of the block remote from said one ball member; a second flexible element connected to the center of the other ball member and extending through said block, said second flexible element being engaged at its other end with the other end of the block, to resiliently compress the block responsive to pull exerted on either flexible element by its associated ball member in a direction away from the body and thereby set up a force opposing said pull and tending to center the ball elements in their associated ends of the body; and means for connecting the ball members to said handles, said means including tongues on the ball members projecting in a direction away from the body, and bifurcated connecting elements attached to the tongues and adapted for connection to said handles.

2,744,419
STEERING COLUMN ASSEMBLY
Charles A. Chayne, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application February 9, 1951, Serial No. 210,254
15 Claims. (Cl. 74—493)



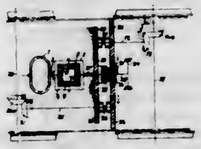
1. In a steering column structure, a steering column, a facing secured to one end of said steering column, a steering shaft rotatably mounted and supported within said steering column, a steering wheel shaft, means to connect the steering wheel shaft to the steering shaft to transmit rotary movement and to permit relative axial sliding, locking means movable between an engaged and a disengaged position to lock said steering wheel shaft in a plurality of adjusted positions, and a sleeve on said facing partially covering said locking means in all positions.

2,744,420
CABLE SLACK COMPENSATOR
John D. Pigford, Los Angeles, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application July 11, 1952, Serial No. 298,229
1 Claim. (Cl. 74—501.5)



In a cable control system including a control element, a responsive element spaced therefrom, and a pair of cables attached to and extending between said elements and rigged under a predetermined initial tension for transmitting movements of the control element to the responsive element, the combination of an extensible and contractible slack compensator connected into each of the cables and comprising a pair of elongated telescoping members having interengaging abutments thereon to limit extension of said compensator, and a spring engaged with said members for urging said compensator to contract, the force exerted by said spring in the fully extended position of said compensator being less than the initial rigging tension of the cables, whereby said compensator is fully extended under the initial rigging tension.

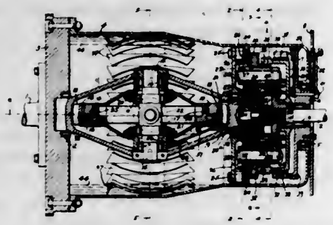
2,744,421
POWER TRANSMISSION FOR VEHICLES, PARTICULARLY RAIL VEHICLES WITH INDIVIDUAL AXLE DRIVE
Ernst Lammerz, Essen, Germany, assignor to Fried. Krupp Lokomotivfabrik, Essen, Germany
Application July 10, 1950, Serial No. 172,907
Claims priority, application Germany July 30, 1949
4 Claims. (Cl. 74—665)



1. In a power transmitting arrangement for use in connection with a vehicle, particularly a rail vehicle having at least one first and one second axle adapted to be driven individually or in multiple, in at least two speeds in each direction of travel, in combination a non-reversible prime mover having a driving shaft, a fluid drive comprising an impeller drivingly connected with said driving shaft of said prime mover, and a turbine wheel, a mechanical gear transmission for positively conveying driving power from said fluid drive to both said axles simultaneously or to either one only of said axles, said gear transmission comprising an input shaft drivingly connected with said turbine wheel of said fluid drive, a first and a second output shaft; power distributing gear means interposed between said input shaft and said first and second output shaft; first gear means associated with said first output shaft and second gear means associated with said second output shaft; direction shifting means operable for selectively effecting driving connection between said first and second gear means and said first and second axle respectively

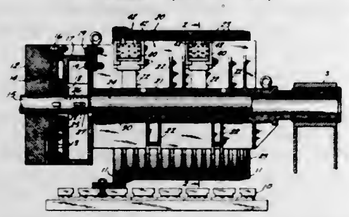
for movement in one direction, and connection between said first and second gear means and said second and first axle respectively for travel in opposite direction; brake means associated with said first output shaft, and free wheel means interposed between said first output shaft and said first gear means associated therewith, said brake means serving in conjunction with said free wheel means for shifting speed by holding said first output shaft stationary, and transmitting power only from said second output shaft by way of said second gear means, dependent on the position of said direction shifting means, either to said first axle for travel in one direction or to said second axle for travel in the opposite direction.

2,744,422
INFINITE RATIO SELECTOR
Milton T. Finch, Sunland, Calif.
Application May 24, 1952, Serial No. 289,749
14 Claims. (Cl. 74—751)



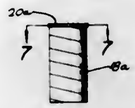
1. An infinite variable ratio power transmission mechanism including a driving shaft, a driven shaft, a flywheel housing fixed on the driving shaft, a pair of gyroscopic rotors rotatably mounted within a frame which is rotatably mounted within said housing, peripheral vanes on the rotors, hydraulic and lubricating fluid in the housing adapted to provide fluid coaction between said housing and rotor vanes, a set of bevelled gears drivingly interconnecting said rotors for balanced action and power transmission, a set of sun gears connected to said frame and in mesh with a set of planetary gears which are drivingly engaged with said housing, said planetary gears being rotatably mounted on said driven shaft to thereby provide an operative driving connection between said housing and driven shaft.

2,744,423
AUTOMATIC BORING MILL
Eugene Edera and Samuel Raphael John Stokvis, Great Neck, N. Y.
Application August 6, 1952, Serial No. 302,942
4 Claims. (Cl. 77—57)



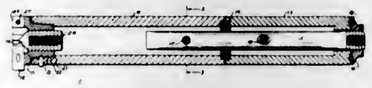
1. In a machine tool having an axially movable tool driving means rotating relatively to a coaxial work piece, the combination of a plurality of tool holders adapted to mount a tool for engaging the internal surface of the work piece, a plurality of corresponding substantially radial guides therefor spaced axially and radially, a shaft movable axially and driven by said axial tool driving means, said shaft having a plurality of racks extending lengthwise thereof, a plurality of radial spindles, a pinion on each spindle meshing with one of said racks for rotating the corresponding said spindle, and an axially threaded connection between said spindle and said tool holders, whereby axial movement of said tool driving means advances said tool holders toward said work piece.

2,744,424
DRILL GUIDE BUSHING
W. Reuen Fisher, North Branch, Mich.
Application January 10, 1952, Serial No. 265,754
3 Claims. (Cl. 77—62)



1. In a drill guide bushing of the class described adapted for use with a rigid retainer having a smooth bore formed therethrough of uniform diameter from end to end and through which a rotating body is adapted to be projected, a tubular liner for said bore comprising a spirally wound body of flexible, resilient, wear-resisting metal of uniform thickness from end to end, said body being spirally wound to an outside diameter uniform throughout its length and slightly larger than the bore through said retainer; the outside diameter of said spirally wound body being reducible, in response to force, to snugly engage in the bore of said retainer, said windings of said liner, when said liner is positioned in said bore, engaging at opposed edges to form a smooth bore through said liner, the coils of said liner, upon release of the reducing force, moving toward the original outside diameter for frictionally engaging at the periphery the surface of said bore for retaining said liner in fixed relation to said retainer.

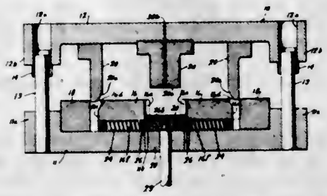
2,744,425
REAMER
Arthur Wragg, South Amherst, Ohio
Application December 7, 1954, Serial No. 473,556
12 Claims. (Cl. 77—76)



1. An adjustable self-centering reamer comprising, first and second tubular holders, a reamer head, reamer blades in said head, said first tubular holder supporting said reamer head at one end thereof and being fastened to said second tubular holder at the other end thereof, said other end and said second tubular holder having co-operating bearing means generally maintaining said holders in end to end relationship and allowing radial movement therebetween, a drive rod pivotally pinned to each of said holders and located co-axially of the holders and extending entirely through and outwardly beyond the end of the second tubular holder, a nut on said extending end of said rod, and bearing means between the nut and the second tubular holder.

2,744,426
APPARATUS FOR COINING METAL PARTS
George Albert Lyon, Detroit, Mich.
Continuation of abandoned application Serial No. 560,488, October 26, 1944. This application December 28, 1949, Serial No. 135,451
2 Claims. (Cl. 78—60)

1. In combination in a die apparatus for shaping to a predetermined perimeter metal blanks which differ from such perimeter, a press bed, a plurality of radially movable elongated die members of substantial width spaced a limited distance above said bed, said die members having their inner ends cooperatively shaped and related to receive a blank edgewise therebetween for compressing it to said predetermined perimeter, means for driving said die members radially inwardly, a spider structure disposed above said bed and underlying the forward portions of the die members and having respective radiating arms substantially narrower than the respective die members underlying each of said die members in longitudinal centered relation, shoulder means on the spider at each side of each of said arms and facing rearwardly relative to the respective die members, each die member having shoulder



means on its rear portion opposing the spider shoulders opposite thereto, respective pairs of compression return springs engaging endwise between the respective shoulders and shoulder means in the space under each of the respective die members and with the associated radiating arm maintaining the respective pair of springs separated and in balanced thrust relation to the shoulder means engaged thereby, said springs normally acting to return said die members radially outwardly to non-operating position, and means cooperating in spaced relation with the opposite sides of the respective arms to retain the respective pairs of springs against lateral displacement relative to the associated arms.

2,744,427
PIPE BENDING DEVICE WITH AN ANGULARLY ADJUSTABLE HANDLE
Anthony Albert, Hayward, Calif.
Application November 27, 1953, Serial No. 394,637
2 Claims. (Cl. 81—15)



1. A pipe bending device comprising a hickey adapted for engagement with pipe and the like to bend same, an axle, a yoke keyed to said axle and connected to said hickey in rotatable relation thereto, a ratchet wheel keyed to said axle, a spring loaded pawl engaging said ratchet wheel and mounted for rotation about an axis normal to that of said ratchet wheel whereby opposite ratchet actions are obtainable, and a handle mounted at one end on said axle about said pawl and restrained thereby whereby said handle is disposable at any desired angle to said hickey.

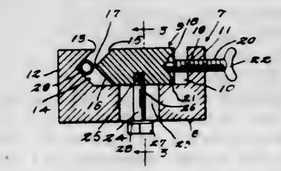
2,744,428
CRIMPING TOOL WITH A PLURALITY OF MOVABLE DIES OPERABLE SINGLY OR TOGETHER
William R. Evans, Oberlin, Pa., assignor to Aircraft-Marine Products, Inc., Harrisburg, Pa.
Application September 4, 1952, Serial No. 307,810
5 Claims. (Cl. 81—15)

4. A tool for securing electrical connectors to a conductor of the type wherein a plurality of dies cooperate to deform the connector and conductor therebetween thus crimping the connector and conductor together in an efficient electrical connection and including: a head member, a first die mounted in said head member, a plurality of movable dies slidably mounted in said head member so as to be movable toward or away from said first die, means for actuating said movable dies, and releasable means for independently securing each of said movable



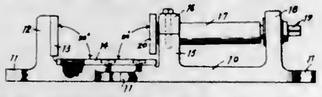
dies to said actuating means, whereby the movable dies may be operated simultaneously or individually.

2,744,429
TOOL FOR AND METHOD OF FORMING A FLOW RESTRICTION IN A CONDUIT
John S. Seely, Augusta, Ga.
Application June 18, 1952, Serial No. 294,292
3 Claims. (Cl. 81—15)



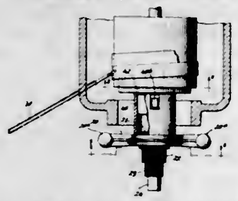
1. A tool for forming a flow restriction in a tubular conduit portion comprising an elongated body member having a cavity formed therein opening outwardly of the top and side walls of said body portion and defining an end wall at one end of said cavity provided with a threaded bore extending therethrough, said cavity forming an end wall at the opposite end thereof constituting a stationary tool jaw having inclined top and bottom surfaces on the inner side of said stationary jaw, said inclined surfaces merging inwardly from the top and bottom of said cavity and extending from side to side of said body portion, a block constituting a movable section of said tool loosely disposed in the cavity for movement longitudinally thereof, said block being of a width substantially corresponding to the width of said body portion and of a length substantially less than the length of said cavity, one end of said block being provided with outwardly converging substantially flat faces forming a movable jaw and defining a groove forming edge at the merging outer ends of said faces, said groove forming edge extending from side to side of said block, the opposite end of said block having a socket formed therein and opening outwardly thereof, and a feed screw extending threadedly through the threaded opening of the first mentioned end wall and provided with an unthreaded stem portion at its inner end rotatably disposed in said socket whereby rotation of the feed screw in one direction will advance the movable jaw toward said stationary jaw, said tool being adapted to be applied to a portion of a tubular conduit for positioning the conduit portion transversely in the cavity in a seated position against the faces of the stationary jaw and between the stationary jaw and movable jaw, said edge of the movable jaw being disposed at the level of the merging inner ends of the stationary jaw faces and substantially parallel thereto when the block is disposed in the cavity in engagement with the feed screw and resting on said body portion, whereby said edge of the movable jaw will press a groove into the tubular conduit when the movable jaw is advanced toward the stationary jaw for forming an elongated restricted bore portion in said conduit constituting a flow restrictor.

2,744,430
MACHINE-TOOL VISE HAVING AN EXTENDIBLE AND DOWNWARDLY SLOPING SUPPORT FOR A MOVABLE JAW
Bernard A. McLaughlin, Santa Clara, and Ernest W. Keahey, Saratoga, Calif.
Application August 25, 1953, Serial No. 376,408
6 Claims. (Cl. 81—22)



1. In a precision machine-tool vise, the combination of a supporting base, a surfaced work-supporting plate disposed at a forward end of said base, a stationary jaw mounted upon said base at said forward end and having a surfaced work-engaging plate disposed upstandingly at a precision angle to the plane of said work-supporting plate, a tubular member, a movable work-engaging jaw cooperating with said stationary jaw and mounted on said tubular member, a pedestal intermediate the ends of said base and providing a guide and support for said tubular member, said tubular member being slidably mounted upon said intermediate pedestal for movement in a direction downwardly inclined toward said stationary jaw, said work-engaging jaw being mounted upon a forward end of said tubular member, an operating screw, a second pedestal mounted upon a rear end of said base and forming a support and bearing for said operating screw, said operating screw being mounted for rotation on its axis in said rear pedestal for axially advancing and retracting said tubular member, and means connecting said tubular member with said screw, whereby upon a turning of said screw said movable work-engaging jaw will be moved in said inclined direction toward a vertex of said precision angle between said stationary jaw and work-supporting plate.

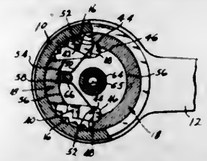
2,744,431
GEAR OPERATED WRENCH WITH ROTARY IMPACT MEANS
Emilio Scime, Brooklyn, N. Y.
Application December 16, 1954, Serial No. 475,761
2 Claims. (Cl. 81—52.3)



1. A tool for disengagement of jammed, locked planetary gear trains of automatic, automotive transmissions and the like, comprising in combination, a sledge member and a counter member, said former engaging one of said gears of said gear train and said latter engaging another one of said gears, means for engagement with said gear consisting of splines provided in said sledge member and means adapted to impart and transmit impact therethrough to the gear train, said counter member counterbalancing said impact and the shock thereof said arrangement being adapted to effect unjamming and unlocking of said gear train by such impact and shock.

2,744,432
REVERSIBLE RATCHET WRENCH
Theodore Otto Rueb, Lincolnwood, Ill., assignor to Sherman-Klove Company, Chicago, Ill., a corporation of Delaware
Application July 27, 1954, Serial No. 445,947
4 Claims. (Cl. 81—62)

1. A ratchet wrench including an annular member having a cylindrical bore provided with ratchet teeth, a turning head rotatably mounted in said bore and having a socket therein, opposite rocker seats adjacent the periphery thereof, pawls for coaction with said teeth and having rounded ends seated in said rocker seats, said pawls being provided with pawl shifting shoulders which extend diametrically across said rounded ends, a leaf spring having its ends resting on said shoulders and its central portion located in said socket, a selector disc covering said socket and designed to be given partial rotative movement relative to said head, said selector disc having



a projection engaging said central portion of said spring to shift one of said ends inwardly and the other end thereof outwardly relative to said shoulders for rendering one of said pawls ineffective and the other effective respectively, or vice versa upon opposite partial rotative movement of said selector disc, said socket having a radially inward projection past which a portion of said spring snaps to retain said spring in either of said positions and a shank on said head for rotating a wrench socket or the like.

2,744,433
GUITAR KEYBOARD
David N. Rooms, Bartlesville, Okla.
Application July 13, 1953, Serial No. 367,592
5 Claims. (Cl. 84—315)



1. In combination, a guitar having a fretted string-equipped fingerboard, and a remote-type keyboard removably mounted on said fingerboard and comprising adapter means characterized by transverse and longitudinal rows of keys, string depressors, one for each key, and an operating connection between each depressor and its complemental key, each operating connection embodying a rigid conduit, a flexible push-pull shaft slidable in said conduit and having its ends projecting beyond the respective ends of the conduit and provided with screw threaded terminal connectors, each key being in the form of a button having a screw threaded socket member, each depressor being in the form of a head having a screw threaded socket member, said terminal connectors being screwed into and thus joined with their respective socket members.

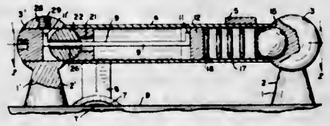
2,744,434
MULTIPURPOSE POCKET-SIZE HARMONICA WITH SELECTIVE KEY-CHANGE MEANS
Olaf J. Olson, San Pedro, Calif.
Application September 8, 1952, Serial No. 308,417
9 Claims. (Cl. 84—377)



1. A harmonica comprising an encased centrally located body, said body having at least twelve wind cells each with diametrically opposite top and bottom reed slots

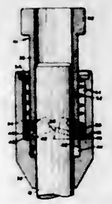
and graduated reeds mounted in said slots permitting the playing of a twelve-tone chromatic scale, inividual relatively narrow slide bars mounted on the top and bottom sides of said body, individual stop-buttons carried by the outer ends of said slide bars, and individual correspondingly narrow lateral shutters carried by each bar and arranged to selectively open and close predetermined reed slots, permitting the player to play an uninterrupted chromatic scale, a major scale and to control accidental sharps and flats at will in conjunction with the major scale.

2,744,435
APPARATUS FOR MOUNTING KEYS, PADS AND THE LIKE OF MUSICAL INSTRUMENTS
Thomas M. Anderson, Melrose Park, and Byron E. Good, Franklin Park, Ill.
Application April 18, 1955, Serial No. 501,762
16 Claims. (Cl. 84—380)



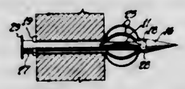
1. A musical instrument of the wind family comprising a tubular-like body having at least one hole therein, at least a pair of posts mounted in spaced relation on said body, a hollow rod journaled and rockably supported between said posts, said rod having connected thereto for movement therewith valve means adapted for cooperation with the hole, means within the hollow rod for tensioning the rod and valve means whereby an adjusted bias is provided to maintain the valve means in its normal position with respect to the hole, and manually operated means for rocking said rod and valve means to overcome said bias.

2,744,436
FASTENER WITH PIVOTED ROD ENGAGING DOGS
Milburn M. Ross, Wichita, Kans.
Application March 23, 1953, Serial No. 344,037
2 Claims. (Cl. 85—36)



1. Lock means for use in conjunction with a tooling pin to retain material to be worked in a jig, which comprises, in combination: an outer member adapted in one end portion to engage a jig member and with a hole therethrough, said hole having an end portion A of constant diameter of such size to snugly receive a tooling pin, a continuing portion B of constant diameter greater than said diameter of said portion A and a continuing portion C of constant diameter greater than said diameter of said portion B; an inner member having a hole therethrough telescopically and snugly mounted in said portion B, said inner member being too large to fit into said portion A, having a pair of oppositely disposed transverse slots communicating with said hole through the walls thereof at a point in said inner member so that when said lock means is fully retracted said slot openings overlap the junction of said portions B and C, and said inner member being adapted to and said hole therein being of such size to snugly receive said tooling pin passed therein from said portion A; a dog in each of said slots, said dogs being narrow in radial length and less than the distance from said pin when inserted to the inner wall of said portion C, arcuate in circumferential length, concavo-convex, blunt on their inner edge, and mounted with said convex side toward said portion A, projecting into said hole in said inner member, tiltably mounted to allow passage of said tooling pin therebetween, pivotally engaged in their outer portions with said outer member at point of junction between said portions B and C and being adapted on extension of said lock means to be tilted outwardly by the face of said slots on said portion B side of said hole in said outer member; a first flat ring slidably mounted around said inner member in the annular space between said inner member and said portion C, said ring being in contact with the sides of said dogs away from said portion B; a spiral spring mounted around said inner member in said portion C in contact on one end with said first ring and adapted to exert force on said dogs to continually urge same inwardly against a tooling pin to grip said pin and to keep said lock means retracted; a second flat ring mounted in said outer member and around said inner member, said second ring in contact with the other end of said spring, means incorporated in said outer member to hold said second ring in said outer member; and a flange on the outer end portion of said inner member adapted for gripping said inner member to extend said lock means to release same from a tooling pin therein.

2,744,437
PENETRATING AND EXPANDING FASTENER
Wayne E. Murphy, Salem, Oreg.
Application November 2, 1951. Serial No. 254,583
5 Claims. (Cl. 85—40)

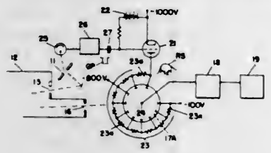


1. A wall fixture comprising a wall piercing member having a sharpened point and a rearwardly facing shoulder forming a stop adjacent said point, said piercing member also having a shank and a driving head in the form of a segmented flange, a longitudinally slotted tube engaging around said shank, the slots in said tube terminating adjacent the ends of the tube to provide a tube having unslotted end portions, an unslotted end portion of said tube abutting said shoulder, the radially extending segments of said driving head extending through said slots whereby said driving head may be caused to engage the surface of the wall, the walls of said tube being comprised of a plurality of deformable strips of greater length that said shank separated by said slots and extending longitudinally of the tube between said unslotted end portions, said strips being adapted to bow radially outward behind said wall when said tube is driven against said shoulder.

2,744,438
METHODS OF AND SYSTEMS FOR SPECTROCHEMICAL ANALYSIS
David W. Steinhaus and Henry M. Crosswhite, Jr., Baltimore, Md., assignors to Leeds and Northrup Company, Philadelphia, Pa., a corporation of Pennsylvania
Application February 4, 1952, Serial No. 269,742
22 Claims. (Cl. 88—14)

5. A method of spectrographically analyzing a specimen material which comprises periodically exciting said material by successive spark discharges periodically to produce emission of radiation including air lines, background lines, spark lines and arc lines, selecting a portion

of the total time interval between successive spark discharges during which the radiation from air lines and background lines is of insubstantial magnitude, and effecting by integration of the radiation emitted during the



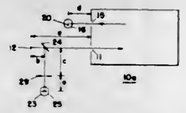
successive selected portions of the total time intervals a spectrographic record which is characterized by suppression of air and background lines and by selective recording of spark or arc lines of the specimen material.

2,744,439

SPECTROMETER SYSTEMS TO COMPENSATE FOR THE WANDERING OF LIGHT RAYS

George C. Hill, Jr., Philadelphia, Pa., assignor to Leeds and Northrup Company, Philadelphia, Pa., a corporation of Pennsylvania

Application August 10, 1951, Serial No. 241,258
5 Claims. (Cl. 88—14)



5. An optical system for a spectrometer to compensate for the wandering of source light rays comprising a spectrometer having entrance and exit slit means, source means of radiation disposed for directing radiation to the entrance slit of said spectrometer, analyzing-radiation-responsive means disposed to receive dispersed radiation from the exit slit of said spectrometer, reference-radiation-responsive means disposed to receive undispersed radiation from said source, and slit means including at least one slit structure disposed in the radiation path between said source and said reference-radiation-responsive means, said foregoing means of said optical system being physically positioned in accordance with the equation:

$$\frac{x}{y}=\frac{b+c}{a}$$

with x and y determined as follows: when $x=e$, then $y=d$. and when $x=p$, then $y=s$, and where:

a is the distance from the source means of radiation to the entrance slit means of the spectrometer,

$b+c$ is the distance from the source means of radiation to the first slit structure of said slit means in the path of radiation directed to the reference-radiation-responsive means,

e is the distance between the first slit structure of said slit means and the reference-radiation-responsive means,

d is the distance between the exit slit means of the spectrometer and the analyzing-radiation-responsive means,

p is the width of a sensitive surface of said analyzing-radiation-responsive means, and

s is the slit width of a second slit structure of said slit means in the path of radiation directed to and adjacent the reference-radiation-responsive means,

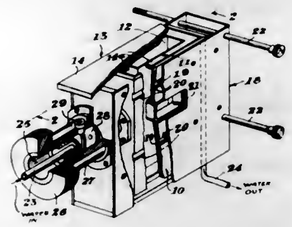
to effect a match between the intensity vs. lateral motion curves of said analyzing-radiation-responsive means and said reference-radiation-responsive means.

2,744,440

CELL HOLDER FOR A SPECTROPHOTOMETER

Ross Elmore Robertson and David Neville Glew, Ottawa, Ontario, Canada, assignors to National Research Council, Ottawa, Ontario, Canada, a body corporate of Canada

Application July 19, 1954, Serial No. 444,328
10 Claims. (Cl. 88—14)



1. A cell holder for a spectrophotometer comprising an outer box-like water-tight compartment of which the walls include a layer of a thermal insulating material, means for conveying a liquid into the outer compartment, means for conveying a liquid out of the outer compartment, an inner box-like compartment assembled within the outer compartment, the inner compartment having an opening through which a cell can be placed within it, a space between the walls of the outer compartment and the walls of the inner compartment sufficient for flow of liquid therebetween, said space substantially surrounding all walls of the inner compartment, and a thermal insulating cover for said opening in the inner compartment.

2,744,441

OPHTHALMIC PERIMETERS

George Edward Cox, Wellington, New Zealand

Application May 6, 1952, Serial No. 286,357
9 Claims. (Cl. 88—20)



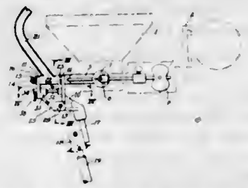
1. An ophthalmic perimeter for use in testing eyes comprising an arc, a series of holes formed in the arc, said holes being arranged at fixed intervals along the arc and extending from the front face to the rear face of the latter, plungers mounted for movement in said holes, the forward extremities thereof having a contrasting effect with said arc and means acting normally to maintain the plungers in a rearward position so that the forward extremities thereof are sunk in the holes sufficiently to be in shadow and substantially invisible to the eye under test when positioned adjacent the center of curvature of the arc and having its line of sight fixed on a fixation point at a predetermined offset location with respect to said forward extremities, and the plungers being selectively movable to a forward position so as to bring the said extremities out of shadow and into view.

2,744,442

APPARATUS FOR STEREOSCOPIC PROJECTION IN AERIAL MAPPING

Ralph E. Mosher, Pittsburgh, and Robert A. Stiveson, Latrobe, Pa., assignors to Robert A. Cummings, Jr., Pittsburgh, Pa.

Application October 29, 1954, Serial No. 465,526
4 Claims. (Cl. 88—24)



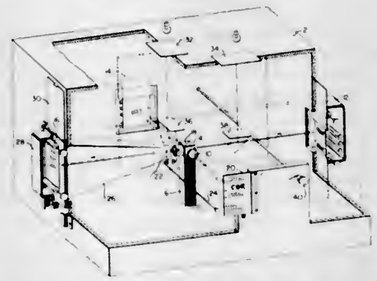
1. Apparatus for stereoscopic projecting comprising a series of projectors mounted longitudinally of an adjustable supporting bar for reception of a series of pictures taken from an aeroplane, each said picture in the series after the first being a continuation of the preceeding picture, a bracket pivotally mounted on each projector for movement in a vertical plane, a second bracket trunnioned on each first named bracket for pivotal movement in a vertical plane at right angles to the plane of movement of the first bracket, a plurality of projectors heads a supporting arm pivotally mounted at its lower end of each said first named bracket trunnion within the associated second named bracket and having its upper end overlying the projector, a projector head being secured to the upper end of said supporting arm for directing light onto the picture in said associated projector, means on each said second named bracket for engagement with the projector head supporting arm for pivotally adjusting the associated second named bracket and projector head relative to the projector, and an arm depending from each said second named bracket for selective pivotal rotation of both brackets and associated projector head relative to the projector.

2,744,443

PHOTOGRAPHIC COPYING DEVICE

Rene A. Higonnet and Louis M. Moyroud, Cambridge, Mass., assignors to Graphic Arts Research Foundation, Inc., Cambridge, Mass., a corporation of Delaware

Application April 23, 1952, Serial No. 283,926
4 Claims. (Cl. 88—24)



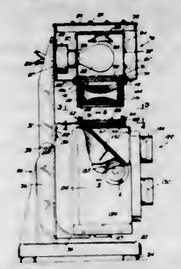
1. Apparatus for composing visual matter upon a sensitized sheet including the combination of a support for the sheet, optical projection means for exposing the sheet including a reflector element having a partially transmitting, partially reflecting surface, a support for a first component sheet bearing visual matter to be composed and reference marks in fixed relationship, said matter and marks being in position for projection through said surface upon the sensitized sheet, a support for a second component sheet bearing visual matter to be composed and reference marks in fixed relationship and in position for projection upon the sensitized sheet by reflection from said surface, a viewing sheet in position to receive the light from the first component sheet reflected by said surface and from the second component sheet projected through said surface and having guide marks thereon, and means for independently moving the component sheets to change the relative positions of the respective projections upon the sensitized and viewing sheets by registration of the projected reference marks with the guide marks on the viewing sheet.

2,744,444

CAMERA CONVERTIBLE INTO A SLIDE PROJECTOR AND AN ATTACHMENT FOR EFFECTING SUCH CONVERSION

Harold Breitman, Flushing, N. Y.

Application May 10, 1951, Serial No. 225,538
6 Claims. (Cl. 88—26)



3. In a slide projection camera combination including a projection attachment comprising a frame, a projection lamp and a slide holder carried by the frame, and means on the frame to direct light from the projection lamp through the slide holder downwardly: a modified focusable twin-lens reflex camera having a picture-taking system and a large aperture, optically unobstructed view-finding system, said view-finding system including an eye opening at the top of the camera and a scene opening at the front of the camera, a separate hood for shielding the eye opening, a pane of frosted glass permanently carried by said hood, means rapidly detachably securing said hood to said camera over the eye opening against lateral and vertical movement with the pane at the focus of the view-finding system, whereby the hood and thus the pane of frosted glass can be rapidly removed in use of the camera in said slide projection camera combination, means blocking the view-finding system optically from the picture-taking system of the camera, and means on the camera cooperating with means on the frame for rapidly detachably securing the camera to the frame with the eye opening disposed in line with the slide holder and on the side of the same opposite from the side on which light is directed through the slide holder.

2,744,445

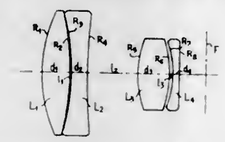
PHOTOGRAPHIC AND PROJECTION OBJECTIVE OF THE PETZVAL TYPE

Arnold Werfell, Yverdon, Switzerland, assignor to Paillard S. A., Sainte-Croix, Switzerland, a corporation of Switzerland

Application October 6, 1954, Serial No. 460,650
Claims priority, application Switzerland November 4, 1953
3 Claims. (Cl. 88—57)

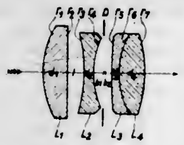
1. A photographic objective comprising two converging achromatic groups, each of said groups comprising two lenses, the lenses of each group being separated by an air space at least 1% of the total focal length of the objective, and each group being separated by an air space not greater than 75%, and not less than 60% of the total focal length of the objective, the first of said groups being the front group and the second of said groups being the

rear group, each lens of said groups having a first and a second radius of curvature, the second radius of the first lens of the front group having an absolute value between approximately 1.5 and 1.7 times as great as the total focal length of the objective, the first radius of the first lens of the front group being greater than 80% of the total focal length of the objective, the first radius of the second lens of the front group having an absolute value between approximately 1.3 and 1.5 times as great as the total focal length of the objective, the second radius of the first lens of the front group and the first radius of the second lens of the front group having an absolute value between approximately 1.3 and 2.0 times as great as the first radius of the first lens of the front group, the second radius of the second lens of the front group having an absolute value between approximately 3.0 and 4.5 times as great as the first radius of the first lens of the front group and between approximately 3.0 and 4.5 times as great as the total focal length of the objective, the second radius of the first lens of the rear group having and absolute value between approximately 1.08 and 1.30 times as great as its first radius, the first radius of the



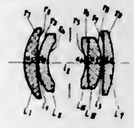
first lens of the rear group having an absolute value of between approximately 0.5 and 0.7 times as great as the total focal length of the objective, the first radius of the second lens of the rear group having an absolute value between approximately 0.5 and 0.7 times as great as the total focal length of the objective, the second radius of the second lens of the rear group having an infinite value, the respective thicknesses of the first lens of the front group, of the second lens of the front group, and of the first lens of the rear group having values of between 10% and 25% of the total focal length of the objective, the thickness of the second lens of the rear group having a value between 2% and 5% of the total focal length of the objective, the index of refraction of the second lens of the rear group being greater than 1.72 and greater than the respective indices of refraction of the first and second lenses of the front group and of the first lens of the rear group, the second lens of the front group and the second lens of the rear group having Abbé numbers greater than 25 and less than 56, and the first lens of the front group and the first lens of the second group having Abbé numbers greater than the Abbé numbers of their respective second lenses and less than 60.

2,744,446
SPHERICALLY, CHROMATICALLY, AND ASTIGMATICALLY CORRECTED THREE COMPONENT OBJECTIVE
Harry Zöllner, Jena, Germany, assignor to VEB Optik Carl Zeiss Jena, Jena, Germany
Application February 10, 1953, Serial No. 367,793
1 Claim. (Cl. 88—57)



Three component objective for purposes of photography and projection, this objective being corrected spherically, chromatically and astigmatically and containing a single dispersive lens enclosed by axially air-spaced collective members, the member of the object side consisting of a collective single lens and the member of the image side consisting of two lenses cemented together, the cemented surface being collective and convex to the object, the sum of the refractive indices of all lenses lying between 6.42 and 6.53, the sum of the Abbe numbers of all lenses lying between 185 and 188, the arithmetic mean of the refractive indices of the front lens and of the rear lens lying between 1.64 and 1.67, the arithmetic mean of the Abbe numbers of the front lens and of the rear lens lying between 52 and 54, with regard to a focal length of 100 of the objective, the product of this focal length and the quotient of the refractive index of the front lens, reduced by 1, and the radius of curvature of the outside surface of this lens lying between 1.68 and 1.73, the axial distance between said outside surface and the front surface of said dispersive lens lying between 16.4 and 16.6 and the radius of curvature of said cemented surface lying between 32.2 and 33.

2,744,447
PHOTOGRAPHIC OBJECTIVE COMPRISING FOUR AIR SPACED MENISCUS SHAPED COMPONENTS
Johannes Berger, Heidenheim (Brenz), Württemberg, and Günther Lange, Königsbronn, Württemberg, Germany, assignors to Carl Zeiss, Heidenheim (Brenz), Württemberg, Germany
Application June 14, 1954, Serial No. 436,348
10 Claims. (Cl. 88—57)



1. Photographic objective, consisting of four meniscus-shaped elements, of which the two outer are collective and the two inner dispersive, whereby the latter surround the diaphragm and turn their concave surfaces towards this, the dispersive element lying immediately in front of the diaphragm being an uncemented lens and the element lying immediately behind the diaphragm consisting of two lenses of opposite refractive power cemented to one another, and the following conditions being fulfilled:

$$d_{II} \leqq 0.9 d_{III}$$

$$0.1 \cdot f \leqq d_{II} + d_{III} \leqq 0.3 \cdot f$$

$$0.03 \cdot f \leqq d_{II} \leqq 0.12 \cdot f$$

$$1.0 \cdot \bar{r}_s \leqq D_s \leqq 2.0 \cdot \bar{r}_s$$

$$0.2 \cdot f \leqq \bar{r}_s \leqq 0.4 \cdot f$$

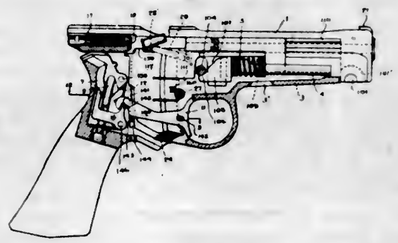
$$0.3 \cdot f \leqq D_s \leqq 0.5 \cdot f$$

$$0.5L \leqq D_s \leqq 0.9 \cdot L \text{ and}$$

$$0.5 D_s \leqq D_z \leqq 0.75 D_s$$

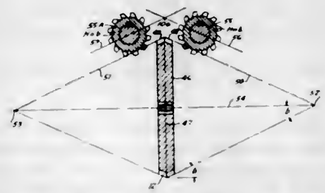
d_{II} being the axial thickness of the second element;
d_{III} being the axial thickness of the third element;
D_s being the vertex distance between the two convex outer surfaces turned away from the diaphragm of the two inner lying dispersive elements;
$\bar{r}_s$ being the arithmetic mean of the absolute amounts of the radii of these two surfaces;
D_z being the vertex distance between the two concave outer surfaces adjacent the diaphragm of the two inner lying dispersive elements;
L being the overall length, i. e. the vertex distance between the first and the last surface of the objective;
f being the focal length of the objective.

2,744,448
AUTOMATIC PISTOL
Edward A. Allen, Westfield, Mass.
Application November 30, 1953, Serial No. 395,077
12 Claims. (Cl. 89—196)



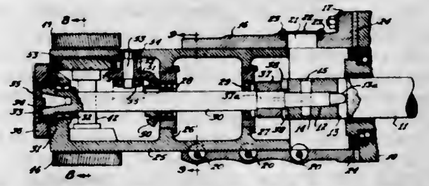
1. An automatic pistol including in combination a frame, a barrel pivoted thereon forwardly of the frame, a breech loading slide carried by said barrel and reciprocably mounted thereon and means interlocking the barrel and frame for limited pivotal movement of the barrel relative to the frame, said interlocking means having yieldable mechanism normally urging said barrel to a lowered position on said frame and said slide forwardly of said barrel, said slide and frame having slidably engaging surfaces operable to raise said slide upwardly of the frame during rearward recoil movement of the same relative to the barrel and to pivot said barrel to an upward position on the frame.

2,744,449
METHOD OF CUTTING FLEXIBLE COUPLINGS
Charles W. Belden and Harley E. Northrop, Westfield, N. Y.
Original application October 30, 1950, Serial No. 192,954. Divided and this application July 21, 1952, Serial No. 300,044
2 Claims. (Cl. 90—4)



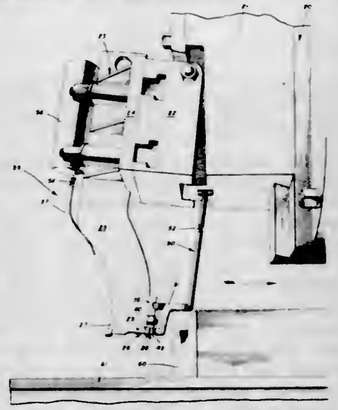
1. In connection with a flexible coupling of the type comprising an outer toothed element having a number of radially inwardly projecting outer teeth in a circular series around an axis of rotation, and an inner toothed element having a like number of outwardly radially projecting inner teeth in a circular series around an axis of rotation; the teeth of the outer element being parallel to its axis; and the teeth of the inner element all meshed with the teeth of the outer element and formed so that the two elements thus meshed may rotate on their axes without either binding or backlash lost motion at the teeth, when their axes are at any angle to each other within the range from zero degrees to a chosen maximum angle; the method of forming the teeth on the inner element which includes: mounting a helical hob for rotational movement and feed movement; mounting a blank, having a disc like peripheral portion, for rotational movement; rotating the hob and blank at tooth generating relative speed and feeding the hob across the peripheral portion of the blank in a rectilinear feed direction, to cause the hob to cut generated teeth in the peripheral portion of the blank at a known pressure angle; guiding the feed of the hob to cause its said rectilinear feed direction to be at an angle to the axis of the blank equal to the said maximum angle multiplied by the value of the cotangent of the known pressure angle.

2,744,450
RIGHT ANGLE ATTACHMENT FOR BORING, DRILLING, AND MILLING MACHINES
John M. Walter, Cincinnati, Ohio, assignor to The G. A. Gray Company, Cincinnati, Ohio, a corporation of Ohio
Application June 13, 1951, Serial No. 231,320
9 Claims. (Cl. 90—15)



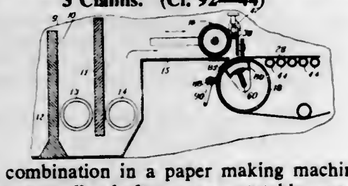
1. An attachment for boring, drilling and milling machines having a traversing head and a rotatable and traversable spindle in said head, comprising a generally tubular body member having means for securing it to said head about said spindle, a generally tubular quill head in telescoping relation with said body member, a long spindle rotatably mounted in said quill head coaxially with said first named spindle and having means at one end for directly connecting it to said first mentioned spindle and having means at its other end for securing a cutter thereto, said quill head carrying also rotatably a short spindle disposed with its axis transverse to that of said long spindle, means for drivingly connecting said short spindle to said long spindle, and means at an end of said short spindle for securing a cutter thereto.

2,744,451
PARTING AND SLOTTING TOOL
Luther E. Lee, Takoma Park, Md.
Application February 28, 1952, Serial No. 274,040
10 Claims. (Cl. 90—33)
(Granted under Title 35, U. S. Code (1952), sec. 266)



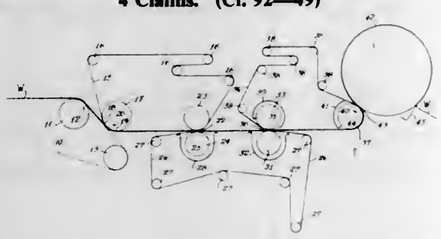
1. In a slotting mechanism for operating upon a workpiece with alternate cutting and return strokes, a bifurcated laterally resilient cutter holder, a plurality of cutters mounted on the holder, means to move the cutters outwardly upon the start of a cutting stroke to engage in a workpiece, means to adjust the extent of the outward movement of said cutters, and means independent of the workpiece to move the cutters inwardly upon the start of a return stroke whereby said cutters pass free of the workpiece during the entire return stroke.

2,744,452
ADJUSTABLE DISTRIBUTING ROLL IN PAPER MAKING MACHINES
Nicholas J. Niks, Munising, Mich.
Application October 16, 1953, Serial No. 386,496
3 Claims. (Cl. 92—44)



1. The combination in a paper making machine of a hollow breast roll, shaft means rotatably supporting said roll, a forming wire passing around said roll and extending horizontally therefrom, a head box for supplying a layer of paper stock to said forming wire, a suction box positioned in said breast roll for effecting variable fluid communication with said layer of paper stock as the same is supported on said forming wire and carried by said breast roll, a slice, a perforated distributing roll, a motor for rotating said distributing roll, said motor and distributing roll being mounted for movement as a unit on a base portion, said base portion having an elongated guideway for slidably supporting said roll and motor unit, and means for moving said roll and motor unit over said guideway to adjustably position said distributing roll with respect to said slice.

2,744,453
REVERSE PRESS ASSEMBLY
Lloyd Hornbostel, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a corporation of Wisconsin
Application September 20, 1950, Serial No. 185,823
4 Claims. (Cl. 92—49)



1. In a paper machine, a press section for removing wet web from a paper machine forming wire and pressing the same, comprising a looped pick-up felt, a suction pick-up roll within the loop of said pick-up felt directing the felt against the web on top of the wire for transferring the web to the underface of the pick-up felt a looped bottom felt, a first press having a horizontal nip defined by an upper press roll within said pick-up felt loop and a lower suction press roll within said bottom felt loop to transfer the web from said pick-up felt to said bottom felt at the press nip, a looped press felt, and a reverse press having a horizontal nip defined by an upper suction roll within said press felt loop and a lower press roll within said bottom felt loop to transfer the web from said bottom felt to said press felt at the reverse press nip, said felts being so positioned that the web is maintained in a substantially horizontal plane during its travel from the wire through said presses.

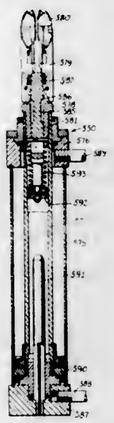
2,744,454
WATER DRAINAGE BLADE FOR PAPER MACHINE
Arthur P. Wagenknecht, Thompsonville, Conn.
Application June 6, 1955, Serial No. 513,429
5 Claims. (Cl. 92—51)

1. Drainage blade construction for the Fourdrinier wire of a paper machine having supports at opposite sides of the wire comprising, base members for securing to said supports, saddle members adjustably mounted on said base members provided with relatively spaced flanges, an elongated support having opposite end extensions between



the flanges of saddle members, means for securing said end extensions in adjusted positions between said flanges, an elongated blade formed from non-metallic material secured to said support having an upper face for underlying said wire and a forward face.

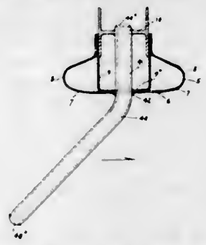
2,744,455
BOTTOM SPINNING MECHANISM, INCLUDING SUPPORT FOR BOTTOM FOR PAPER CONTAINER MAKING MACHINES
Bruno A. Wittkuhns, Summit, and Gilbert F. Hill, Madison, N. J., assignors to National Paper Bottle Co., Inc., New York, N. Y., a corporation of New York
Original application April 26, 1951, Serial No. 223,011. Divided and this application June 16, 1953, Serial No. 370,770
8 Claims. (Cl. 93—55.1)



1. In a bottle shaped container forming machine of the described character having a turntable mounted to rotate in a horizontal plane, a series of container body receiving cells arranged in circumferentially spaced relationship around the peripheral portion of the turntable, several stations arranged successively in spaced relationship adjacent the path of travel of the cells, and including a loading station and a bottom spinning station, driving mechanism associated with the turntable to effect stage-by-stage advance of the cells to and from residence at the successively arranged stations, and mechanism at the loading station operating in synchronism with the driving mechanism to project a wound container body into each cell, with the bottom of the container body uppermost, during the residence of the cells at the loading station; devices at the bottom spinning station comprising a bottom spinning assembly supported above said turntable and including a vertical shaft supported for axial and rotational movement, a spinning head on the lower end of said shaft and formed with a central recess, and an umbrella plate rotatably supported from said shaft and fitting into said central recess, means operative in synchronism with said driving mechanism for displacing said shaft downwardly to effect spinning engagement of said spinning head with the base end and adjacent skirt of the bottom member of a container in a cell residing at said bottom spinning station, resilient

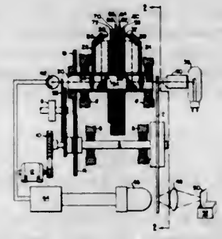
means continuously urging said umbrella plate downwardly out of said recess for steadying engagement from above with the bottom member during the spinning operation, means effective to withdraw said umbrella plate into said recess when said shaft is raised to its inoperative position by said operating means, means continuously rotating said shaft, a bottom support assembly mounted below said turntable and including a plurality of platform supporting segments, a vertical segment supporting member, a support link hingedly connected to each of said segments and pivoted on the upper end of said vertical supporting member, means carrying said supporting member to permit vertical reciprocation of the latter between a lowered inoperative position in which said segments are disposed below the mouth ends of container bodies in said cells and a raised operative position in which said segments are extended into a container body in a cell residing at said bottom spinning station, actuating means for said segments arranged to swing the latter between stowed, substantially vertical positions for extension through the mouth of a container and extended horizontal positions in which said segments define a circular platform, resilient means normally conditioning said actuating means for disposing said segments in said stowed positions, pneumatic operating means for effecting vertical reciprocation of said supporting member in synchronism with said driving mechanism so that said supporting member is disposed in its lowered operative position during advance of said cells to and from said bottom spinning station and is raised to its operative position during the residence of a container body at said bottom spinning station, and pneumatic means operative to condition said actuating means for disposing said segments in their horizontal positions in response to the movement of said supporting member to its raised operative position.

2,744,456
CONDITIONER FOR SMOOTHING AND VIBRATING CONCRETE
Clarence F. Mittelstadt, Wexford, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a corporation of Delaware
Application July 13, 1954, Serial No. 443,046
6 Claims. (Cl. 94—48)



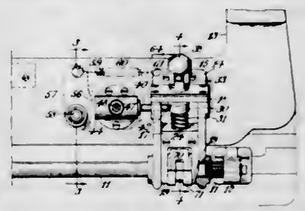
1. A conditioner for smoothing and vibrating concrete by movement over the surface thereof comprising a rigid metal section which extends longitudinally of the conditioner, a metal skin forming a hollow shell substantially coextensive with the rigid metal section having a flat bottom portion spaced downwardly from the rigid metal section and upturned sides secured at their upper edges to said rigid section, means for vibrating the conditioner vertically, and fingers on the conditioner each having an upper shank portion passing through the bottom of the shell and rigidly secured at its upper end to said rigid metal section, and each having a finger portion projecting angularly from the plane of the bottom of the shell, which finger portion is designed to penetrate and move through the concrete on which the flat surface of the shell is engaged.

2,744,457
PHOTOGRAPHIC COMPOSING APPARATUS
Rene A. Higonnet and Louis M. Moyroud, Cambridge, Mass., assignors to Graphic Arts Research Foundation, Inc., Cambridge, Mass., a corporation of Delaware
Application May 8, 1953, Serial No. 353,882
Claims priority, application Great Britain June 9, 1952
11 Claims. (Cl. 95—4.5)



1. Photographic type composing apparatus comprising the combination of a support for the characters to be photographed, a continuously rotating mechanism for moving the characters successively through a projection position, an intermittent flash device to illuminate a selected character in said position, projection means to form an image of said character upon a sensitized sheet, and control means for the flash device, said control means including a number of opaque code members, each code member having a plurality of apertures arranged in a circle about a fixed axis and provision for movement about said axis, selector means for moving a combination of said members corresponding to a selected character to form a light path passing through the code members, a light source, means for projecting a beam of light along said axis, continuously rotating reflector means synchronized with said mechanism to rotate said beam continuously about said axis to scan the apertures, whereby said light path admits the beam at a discrete position thereof, reflector means to deflect the admitted beam into said axis, a photoelectric device in said axis to receive the beam, and a circuit for energizing the flash device actuated by said photoelectric device.

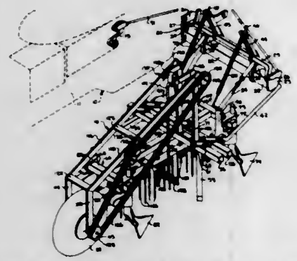
2,744,458
BRAKE AND INDEXING MEANS FOR PRINTING MACHINES
Francis Frederick Cook, Bramber, Steyning, and John Eric Spriggs, London, England, assignors to Pictorial Machinery Limited, London, England, a British company
Application April 25, 1952, Serial No. 284,428
Claims priority, application Great Britain April 27, 1951
5 Claims. (Cl. 95—73)



5. A direct mechanical negative printing machine in which a bed supports a photolithographic plate and a carriage bearing equipment for making exposures of a negative at different parts of the plate surface is arranged to be traversed over the photolithographic plate, and a brake track extends parallel to the traverse of the carriage, a positioning-and-securing mechanism mounted on the carriage, said positioning-and-securing mechanism comprising a plunger projecting outwardly from the car-

riage and adapted to engage against a stop member adjustably secured to the bed at a predetermined position, thereby to locate the carriage accurately relatively to the stop member, operating means for withdrawing the plunger out of engagement with the said stop member, a braking element slidably mounted on the track operating means for bringing and releasably holding the braking element in gripping contact with the track so as to brake the carriage against movement, said braking element operating means including a mechanical connection with said plunger operating means for permitting said plunger operating means to withdraw said plunger only when said braking element is releasably held in gripping contact with the track.

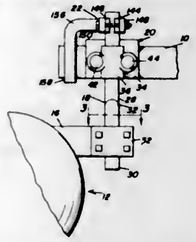
2,744,459
OSCILLATING WEEDER AND CULTIVATOR FOR TRACTORS
Hugh B. Craig, Concord, N. C.
Application December 21, 1953, Serial No. 399,411
4 Claims. (Cl. 97—35)



1. A hoeing attachment for a tractor, said tractor having a universal supporting device provided with a pair of laterally spaced tool bar clamps; said hoeing attachment comprising a pair of laterally spaced horizontal straddle bars fixed to said clamps, at least one transverse support spanning said straddle bars, an I-frame having an elongated shank secured to said transverse support, at least two spaced bearing members depending from and mounted for vertical adjustment on said shank, a rocker shaft journaled in said bearing members, at least one row of spaced inherently resilient tines depending from said rocker shaft, a framework fixed on the transverse support and having a first portion positioned above the rocker shaft and having a second portion thereon disposed to one side of said rocker shaft, a ground wheel journaled in the second portion of said framework, a crank having a shaft thereon journaled in the first portion of said framework, driving connections between said shaft and said ground wheel, an arm fixed to, and extending laterally from, said rocker shaft, and a link connecting said arm with said crank.

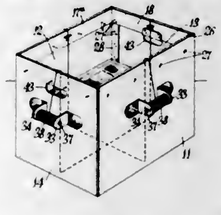
2,744,460
BEAM CLAMP
Harry G. Yetter, Colchester, Ill.
Original application September 29, 1950, Serial No. 187,581. Divided and this application May 18, 1954, Serial No. 430,565
3 Claims. (Cl. 97—198.1)

1. In a disk colter apparatus comprising a downwardly extending disk colter shank attached to a plow bar and having a disk colter bracket secured to its lower end, a bearing housing angularly adjustable with respect to and secured to said bracket, a means for securing said shank to said plow bar to prevent relative movement, said means including a pair of clamping plates disposed on one side of the plow bar, each of said clamping plates being provided with a semi-cylindrical recess, and bolts for clamping said clamping plates about the upper portion of said shank and securing said plates to said bar, an auxiliary clamp including a pair of jaws, said jaws having serrated shank engaging recesses therein, bolts for clamping said jaws on said colter shank, and one of



said jaws being provided with an angulated end for engagement with said plow bar to prevent rotation of said colter shank with respect thereto.

2,744,461
COLLAPSIBLE CONTAINER FOR WASTE PAPER
Frank C. Genco, Buffalo, N. Y.
Application July 5, 1955, Serial No. 520,062
3 Claims. (Cl. 100—34)

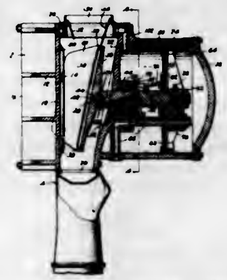


1. A container of foldable material of the class described comprising side and end walls forming a rectilinear enclosure, bottom flaps on each of said walls of less width than the length of the walls between which they are folded to provide a partially open bottom, top flaps on each of said walls adapted to be folded thereagainst and secured thereto to strengthen said container, one end wall and an adjacent side wall being each formed with spaced slit portions adapted to be folded outwardly to provide mounting bracket ears, said ears being formed with aligned apertures to receive a spindle on which a ball of twine may be mounted, there being apertures formed at the tops of the walls opposite said one end wall and adjacent side wall to receive the ends of twine unreeled from said spindles, one pair of opposite walls also being formed with slit portions adjacent the tops thereof to enable the material of the walls to be folded back and provide hand hold openings, whereby the container may be lifted bodily upward from the contents thereof and the bottom flaps may drop to leave said contents on the area on which the container has rested.

2,744,462
STOP CONTROL FOR JAW CRUSHERS
Frank Kammer, Wenatchee, Wash.
Application October 29, 1952, Serial No. 317,410
10 Claims. (Cl. 100—215)

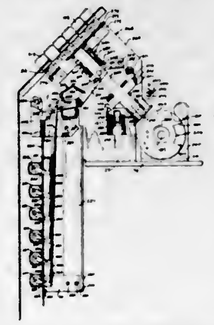
1. In a jaw crusher for fruit, vegetables, and the like products, a fixed frame support, a fixed jaw on said support, a movable jaw, said jaws having opposed working faces, a fluid motor for moving said movable jaw towards and away from the fixed jaw, said fluid motor including a cylinder fixed on said support and a piston connected to said movable jaw, a stop-engaging element rigid with said piston, an adjustable stop mechanism movably positioned within said cylinder, said stop mechanism having a plurality of stop elements selectably engageable

in the path of movement of said stop-engaging element for limiting the closing movements of said movable jaw, said stop elements being of respectively different effective magnitude, whereby to provide respectively different gaps between said jaws, when the latter are closed to their



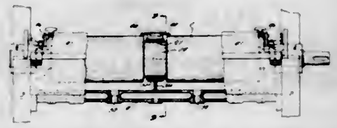
fullest extent, and manually operable means extending exteriorly of said cylinder for selectively disposing said stop elements in the path of movement of said stop-engaging element so that the maximum closure of said jaws may be predetermined in accordance with the characteristics of the product.

2,744,463
TICKET VENDING MACHINE
Lincoln M. Keefe, Woodside, N. Y., assignor to Richard I. N. Weingart, Long Island City, N. Y.
Application August 29, 1950, Serial No. 182,031
17 Claims. (Cl. 101—67)



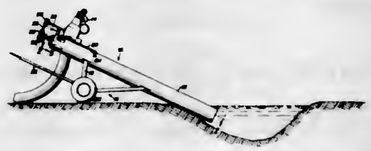
1. In a ticket vending machine, a printing wheel carrying a plurality of type element groups each having a different price, a printing stage, a plurality of normally locked releasable keys each corresponding to a different one of said groups and representing the same price as its corresponding group, said keys being arranged in two banks adjacent to each other, a first bail cooperating with the keys in one of said banks, a second bail cooperating with the keys in the other of said banks, driving means for said printing wheel including reversible mechanism controlled by said bails and set to rotate said wheel a fraction of a revolution in one direction when a key in one of said banks is depressed and its bail is actuated, and set to rotate said wheel a fraction of a revolution in the opposite direction when a key in the other of said banks is depressed; means moving in time with the movement of said wheel and carrying a first engageable means adapted to be arrested by any depressed key in said first bank when said wheel is moving in said first direction for arresting the type element group, corresponding to the depressed key, at said printing stage; said last means also carrying a second engageable means adapted to be arrested by any depressed key in said second bank when said wheel is moving in said opposite direction for arresting a type element group, corresponding to the depressed key, at said printing stage; means to effect a printing operation upon a ticket in said stage, and means to deliver the printed ticket from said machine.

2,744,464
PARTITIONED FOUNTAIN ROTARY INTAGLIO PRINTING MACHINES
Charles A. Harless, Riverside, Conn., assignor to R. Hoe & Co., Inc., New York, N. Y., a corporation of New York
Application May 22, 1951, Serial No. 227,637
4 Claims. (Cl. 101—157)



1. In a rotary intaglio printing machine, and in combination, a printing cylinder having a section of reduced diameter and a printing surface to each side thereof, a fountain comprising ends walls, side walls and a bottom, bearings at the ends of the fountain supporting the cylinder therein, partition means in addition to the said bottom and side walls in sealed relation to the reduced diameter section of the cylinder in sealed relation also to the said bottom and side walls, and dividing the fountain into two separated compartments for inking the respective printing surfaces, a doctor mechanism comprising a reciprocal doctor to each side of the partition, and a cover under the doctors fitting the partition means and having an upwardly extending partition wall positioned between the two said doctors.

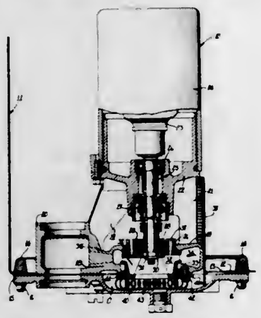
2,744,465
SCREW TYPE PUMP
Frederick H. Springer, Hale Center, Tex.
Application November 7, 1952, Serial No. 319,316
3 Claims. (Cl. 103—87)



1. A portable pump comprising a longitudinal pump cylinder, a wheel supporting frame on an intermediate outer surface portion of said cylinder, power means carried on said cylinder, one end of said cylinder including an end plate closing the end thereof, the other end of said cylinder being open for direct communication with fluid to be pumped, an intermediate partition element disposed in spaced relation from the end member on said cylinder defining a pump chamber with the open end of said cylinder, a fluid outlet in communication with said pump chamber, a pump-drive-shaft extending axially into the pump cylinder between the end plate and intermediate partition element having one end portion extending into the pump chamber and the other end thereof extending exteriorly of the end plate, a pump-drive-shaft tubular bushing member circumposed on the pump-drive-shaft between the end wall and partition member within said pump cylinder, air cooling aperture portions in the pump cylinder in communication with the bushing member, a bearing support assembly carried on the end plate of said pump cylinder in concentric relationship to the pump-drive-shaft, means operatively connecting the pow-

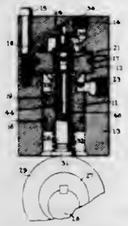
er means to the pump-drive-shaft, fluid packing and support means carried on the partition element and engageable with the bushing member for preventing leakage from the pump chamber past the pump-drive-shaft, an axially extending elongated endless screw pump impeller having a tubular end portion extending over the end portion of the pump-drive-shaft extending into the pump chamber, the other end of the pump impeller having an axial shaft bushing, and a support spider contained in the pump chamber adjacent the open portion of the pump cylinder and rotatably supporting the end of the pump impeller therein.

2,744,466
PUMP INLET GUARD
Le Roy A. Difford, East Cleveland, Ohio, assignor to Thompson Products, Inc., a corporation of Ohio
Application September 25, 1952, Serial No. 311,345
10 Claims. (Cl. 103—103)



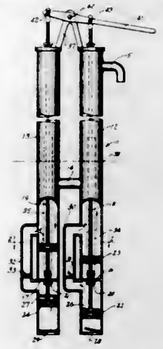
1. A pump inlet guard which comprises a flat metal washer having apertured mounting means at spaced intervals around the periphery thereof and presenting a flat face, a helix of wire having circular coils affixed to the flat face of the washer and depending therefrom to form deformable loops in spaced relation around the washer, said loops being deformable into conformity with an opposed surface.

2,744,467
INLET VALVES FOR HYDRAULIC PUMPS OF THE PLUNGER TYPE
Eugene Bahniuk, Parma Heights, Ohio, assignor to The New York Air Brake Company, a corporation of New Jersey
Application November 26, 1954, Serial No. 471,464
4 Claims. (Cl. 103—153)



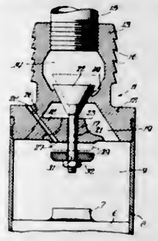
1. The combination of means enclosing a cylinder having a side inlet-flow port; a reciprocable plunger defining a variable volume working-space in said cylinder, and having an extension with a through port adapted to receive inlet flow to said working space from said inlet-flow port in the cylinder; a sleeve valve encircling the extension and independently controlling each of said ports by longitudinal motion of the sleeve relatively to each port; means for reciprocating said plunger between definite limits; a lost-motion connection between the plunger and sleeve affording lost motion less than the plunger stroke by an amount approximating the desired shift of the valve, whereby the plunger shifts the sleeve reversely as the plunger approaches respective limits of its reciprocation, the timing being such that both ports are open substantially throughout the suction stroke and the ports are closed sequentially so that one or the other is closed throughout the displacement stroke; and a valve controlling discharge from said working space.

2,744,468
BALANCED WELL PUMP
William H. Porter, Phoenix, Ariz.
Application December 7, 1954, Serial No. 473,706
2 Claims. (Cl. 103—183)



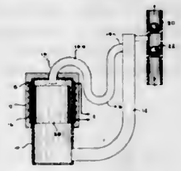
1. A pump comprising a pair of side-by-side cylinders, conduit means interconnecting the intermediate portions of said cylinders, and an outlet conduit connected to the top portion of one of the cylinders, respective partition walls in the lower portions of said cylinders below said conduit means, respective piston rods extending axially through the cylinders and extending slidably and sealingly through the respective partition walls, respective upper and lower pistons on the rods above and below the respective partition walls, a check valve on each lower piston arranged to open when the pressure below the piston exceeds the pressure thereabove, respective check valves in the bottom portions of the cylinders arranged to open responsive to upward movement of the respective lower pistons, respective conduits connecting the spaces between the partition walls and the lower pistons to the spaces above the upper pistons in the respective cylinders, upwardly opening check valves in said last-named conduits, and common operating means pivotally connected to the top portions of the piston rods.

2,744,469
VALVE STRUCTURE FOR PREVENTING AIR LOCK IN PUMPS
Edward J. Schaefer, Fort Wayne, Ind.
Application June 5, 1953, Serial No. 359,805
12 Claims. (Cl. 103—203)



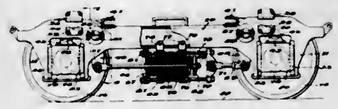
1. In a submersible pump having a discharge outlet, a casing surrounding the pump and extending beyond said outlet whereby to define an upright discharge chamber, a closure member at the upper end of said chamber providing a main fluid discharge passage therefrom and a separate air vent passage for venting air from said chamber to the exterior of the pump, a check valve operably mounted in said closure member for opening and closing said main passage, and valve means comprising a movable disk member operably disposed within said chamber for opening and closing said air vent passage, said check valve being openable and said valve means being closable in response to discharge of working liquid from said chamber whereby to permit venting of air from said chamber until working liquid is discharged through said main passage.

2,744,470
THERMOPUMP
Robert E. Coleman, Wayne Township, Passaic County, N. J., assignor to Jet-Heet, Inc., Englewood, N. J., a corporation of New York
Application July 5, 1952, Serial No. 297,371
12 Claims. (Cl. 103—255)



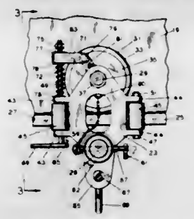
1. In a thermally actuated pump of the type comprising a liquid filled system within which to generate and condense vapor and including means defining a generally vertically disposed chamber, of substantially uniform horizontal cross-section from top to bottom, within which to recurrently collect a body of vapor, the improvement which comprises a float member in said chamber of negligible heat conductivity and of density less than that of the liquid in said system, said float member having a horizontal cross-sectional shape generally conforming to the corresponding internal horizontal cross-sectional shape of said chamber, and said float member being shorter vertically than said chamber and slightly smaller in horizontal cross-section than the corresponding internal cross section of said chamber so that said float member fits closely in said chamber but is freely movable vertically therein and floats with its upper end exposed as vapor is collected in said chamber.

2,744,471
EQUALIZED RAILWAY TRUCK
Harry A. Moeller, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio
Application February 7, 1952, Serial No. 270,316
7 Claims. (Cl. 105—194)



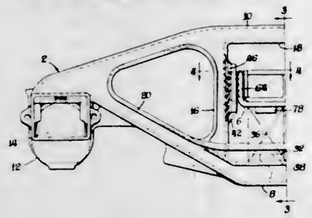
1. In a railway car truck, wheel and axle assemblies spaced longitudinally of said truck, a journal box for each axle assembly, a side frame member arranged longitudinally of the truck movable upwardly and downwardly relative to said journal boxes, said side frame member having transversely spaced side walls connected by a top plate, journal pedestals carried by the side frame member maintaining said journal boxes in said spaced relationship during relative vertical movements of the side frame member with respect to said journal boxes, a bolster arranged transversely of the truck, a center plate on the bolster, means transmitting a load imposed on the center plate onto an intermediate portion of the side frame member, a bell crank lever having its major portion between said side walls with a depending arm extending therebelow, another arm on the bell crank lever overlying one journal box, a pin extending through both of said side walls supporting an intermediate portion of the bell crank lever for rotation relative to the side frame member, a second bell crank lever having its major portion between said side walls with a depending arm extending therebelow, another arm on the second bell crank lever overlying the other journal box, a pin extending through both of said side walls supporting an intermediate portion of the second bell crank lever for rotation relative to the side frame member, horizontally disposed coil spring means arranged under an intermediate portion of said side frame member connected to said depending arms opposing movements of the depending arms away from each other, a cylindrical shaped member embracing said spring means, a bottom web at the intermediate portion of the side frame member connecting said side walls, and lugs attached to the side frame member adjacent said bottom web supporting said cylindrical shaped member.

2,744,472
I-BEAM ROLLER
Percy L. Symons, Portland, Oreg., assignor to Albina Engine & Machine Works, Inc., Portland, Oreg., a corporation of Oregon
Application March 24, 1953, Serial No. 344,433
3 Claims. (Cl. 105—154)



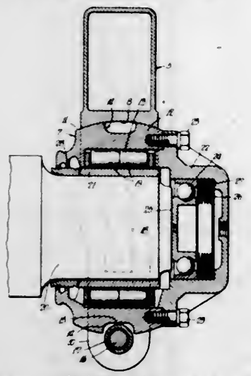
1. A roller device adapted to be mounted on and roll along the lower flanges of an I-beam, comprising two spaced hanger frames adapted to occupy positions adjacent the opposite longitudinal edges of the lower flanges of an I-beam, a wheel supported for rotation about a horizontal axis by each hanger frame and adapted for engagement with the upper face of the adjacent lower flange of the I-beam to support the associated hanger frame from such flange, at least one roller carried by each hanger for rotation about a vertical axis and supported in position for rolling engagement with the longitudinal edge of the adjacent lower flange of the I-beam, a vertical shaft rotatably supported by one frame and having the associated roller journaled thereon, means connecting the hanger frames to hold the rollers in engagement with the longitudinal edges of the lower flanges of the I-beam on which the roller device is mounted, and means for releasably braking at least one of the wheels whereby the device may be maintained stationary on an I-beam, the last-named means including a braking element carried by one end of said shaft and disposed adjacent the associated wheel, and a handle on the other end of said shaft for actuating the shaft to bring said braking element into engagement with said wheel.

2,744,473
CHANGEABLE GAUGE RAILWAY TRUCK
Claus J. Werner Claseen, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application October 11, 1951, Serial No. 250,935
8 Claims. (Cl. 105—178)



1. In a truck, a side frame including tension and compression members and spaced columns integrally connecting said members and defining therewith a bolster opening, a cradle guided for reciprocative movement by said columns, a spring group on said tension member to resiliently support said cradle, said cradle and columns being interconnected by tongues provided on the columns and channels formed in the cradle, each end of said cradle having a pair of spaced convex surfaces, and each column having a pair of spaced concave surfaces one of which extends vertically above the other to receive and engage a pair of said convex surfaces, and a bolster supported upon and interlocked with said cradle, said cradle being U-shaped in top plan view to reversibly engage the bottom and sides of the bolster.

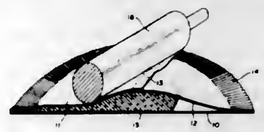
2,744,474
RAILWAY BEARING
Harry R. Reynolds, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a corporation of Connecticut
Application June 12, 1951, Serial No. 231,157
6 Claims. (Cl. 105—223)



1. In a railway antifriction journal bearing, a bearing housing for receiving a journal and antifriction bearing members between the journal and housing, said housing having a generally spherical outer surface to fit a complementary seat on part of a railway truck, said housing having a generally circumferentially extending central groove in the outer spherical surface thereof for receiving means to limit self-alignment of the housing.

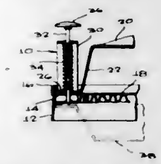
2,744,475
DEVICE FOR ROLLING PASTRY DOUGH
Nancy Ayres, Denver, Colo.
Application December 11, 1953, Serial No. 397,623
3 Claims. (Cl. 107—46)

1. A disposable envelope for use in rolling pastry dough to a predetermined size and shape, comprising a plurality of layers and hand-tearable, smooth, flexible material, one of said layers comprising two sections partially overlapped lying in face engagement with another layer, said layers being peripherally sealed together around an unimpeded area of the desired shape of rolled dough forming a tear line along the inner margin of



said sealed periphery, whereby the upper layers may be completely removed exposing the full area internally of said sealed periphery, said upper layers completely encompassing the area within said sealed periphery and said overlapped sections providing an opening for said envelope.

2,744,476
PIE EDGE CRIMPING AND TRIMMING DEVICE
George S. Suzuki, Honolulu, Territory of Hawaii
Application August 5, 1955, Serial No. 526,659
4 Claims. (Cl. 107—49)

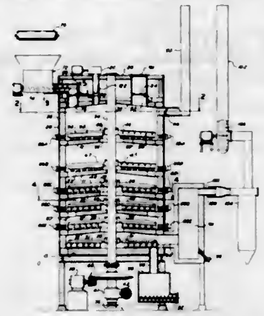


1. A device for trimming and crimping pie crusts, comprising an annular support ring; a trimming flange secured to the outer periphery of and depending from said support ring, said flange flaring slightly in a downward direction; a crimping band fixedly secured to the underside of said ring and formed with a continuous circumferential series of radially extending corrugations; a handle member disposed over the top side of said ring and secured thereto at opposite portions thereof, whereby the handle may be pressed downwardly upon a pie tin containing a covering of pie crust, to effect crimping and trimming of the crust; and means for effecting separation of the device from the crust, said means including an element mounted adjacent said handle for movement relative thereto and downwardly through said ring for engagement with said associated pie tin to provide for relative parting movement between said supporting ring and said associated pie tin when said element is pressed downwardly with the raising of said handle.

2,744,477
INCINERATOR
Henry J. Hartley, Los Angeles, and Clarence S. Rankin, San Francisco, Calif., assignors to Pacific Foundry Company, Ltd., San Francisco, Calif., a corporation of California
Application December 8, 1951, Serial No. 260,744
5 Claims. (Cl. 110—8)

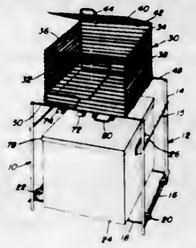
1. An incinerator comprising a closure defining a chamber, at least three spaced superposed hearths within the chamber and cut away so that solids can fall from one hearth to the next lower hearth, the enclosed space above a hearth in an upper portion of the chamber being substantially higher and greater than the enclosed space above each of the hearths in the lower portion of the chamber, a rotatable hollow shaft extending vertically through the hearths, at least one rabble arm for each hearth affixed to the vertical shaft, a rabble arm located above said upper hearth, said rabble arm being hollow and communicating with the hollow interior of the shaft

and having a plurality of air outlets spaced along it in the chamber, said arm above said upper hearth being wedge-shaped in cross section with the narrow portion of the wedge at the leading edge of the arm so as to provide an inclined plane on the top of the arm that coarse solid pieces can ride up and over, means for forcing air through the shaft and out the air outlets in said



arm located above the upper hearth into the chamber, means for feeding material to be incinerated to an upper hearth, means for firing the space above the hearth above which said arm of wedge-shaped cross section is disposed, an outlet in the closure adjacent a lower hearth for conveying combustion gases from the incinerator, and means for sucking gas through the last named outlet to provide a down draft inside the chamber.

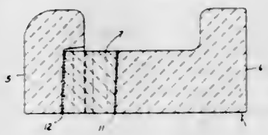
2,744,478
INCINERATOR
Milford F. Dollar, Sheridan, Tex.
Application February 5, 1953, Serial No. 335,354
3 Claims. (Cl. 110—18)



1. A waste materials separator comprising a pair of end members, a lower support extending between said end members, a container received on said lower support, a burner basket, elongated support members on said basket, said support members engaging the tops of said end members, for supporting said burner basket in superimposed relation with respect to said container, a dump bottom in said burner basket, latch means for retaining said dump bottom closed, said latch means being operable to release said dump bottom to dump the residue in said burner basket into said container, a closure for said container, said end members including upstanding tubular corner members, downturned ends on said elongated support members, said downturned ends extending into said tubular members.

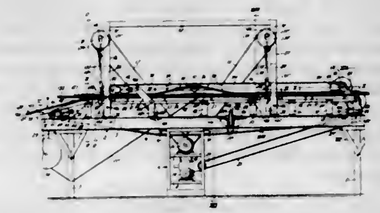
2,744,479
SOAKING PIT CURB
Louis J. Hartle, Pittsburgh, Pa., assignor to Amsler Morton Corporation, Pittsburgh, Pa., a corporation of Pennsylvania
Application August 25, 1954, Serial No. 452,107
8 Claims. (Cl. 110—181)

1. A soaking pit curb formed from a plurality of refractory tiles disposed side by side and having central portions of less height than their ends to form a sand-receiving trough in the curb, each tile comprising substantially abutting inner and outer blocks connected by a vertical key, the tile being divided transversely through said central portion to form said blocks and the outer block including at least the major part of said central portion,



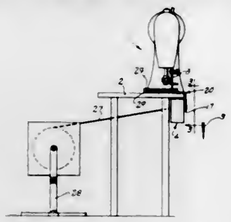
the abutting portions of said blocks being provided with registering recesses extending lengthwise of the tile into the blocks and also through the top of the outer block and the bottom of the inner block and having enlarged inner ends, and said key being disposed in said recesses and having enlarged ends in the enlarged ends of the recesses to hold said blocks together.

2,744,480
CONTINUOUS CORE WRAPPING MACHINE
William F. Richardson, Carthage, Mo., assignor to Flex-O-Lators, Inc., Carthage, Mo., a corporation of Missouri
Application March 30, 1953, Serial No. 345,438
9 Claims. (Cl. 112—2)



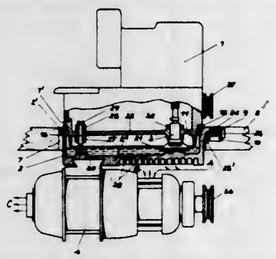
1. A machine for wrapping a continuous core in a pliable cover sheet extending longitudinally of said core, said machine comprising a fixed table having a continuous groove formed therein and adapted to receive said cover sheet in laid-out form thereon parallel to and overlapping said groove with said core superimposed thereon parallel to and above said groove, a first endless chain carried operably by said table and having a reach thereof carried slidably in said groove, a frame member carried by said table and disposed above the groove of said table, a second endless chain carried operably by said frame member and having a reach thereof disposed above and generally parallel to said table groove, whereby said core and cover sheet are clampingly engaged between the confronting reaches of said chains, means operable to drive said chains whereby the confronting reaches thereof are moved in the same direction at equal speeds to propel said core and cover sheet along said table, and a longitudinally tensioned cable having its respective ends secured in fixed relation to said table at points spaced apart longitudinally of the path of said core and respectively closely adjacent the opposite lateral edges of the path of said core, said cable extending over and around said core, a portion of the core-engaging reach of said second chain being trained over a guide carried by said frame member whereby to elevate it above the core to permit the passage of said cable over said core.

2,744,481
TAPE FEEDING DEVICE FOR SEWING MACHINES
Edward H. Blittschau, St. Louis, Mo.
Application January 15, 1954, Serial No. 404,247
3 Claims. (Cl. 112—2)



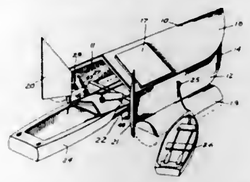
3. In a tape moistening device, a trough having an open top, side walls, and end walls having portions rising above said side walls, said side walls involving a first side wall and a second side wall, said end wall portions having means for supportable connection to a support, a guide roller mounted on and positioned above said first side wall, a compartment within said trough in transverse alignment with said roller, a liquid applying element in said compartment having an upper end projecting above said side walls, said trough being arranged to contain a liquid and said compartment having means providing for transfer of liquid from the trough into said compartment, a tape guide mounted on said second side wall and projecting thereabove in transverse alignment with said liquid applying element, a tape roll outside of and below the trough at the second side wall thereof having a tape threaded through said guide engaging the upper end of the liquid applying element and trained under said roller, and a sewing machine having a table and tape moving means, said table having an underside and said portions of the trough end walls being secured to the underside of the table, another tape guide on the table between the tape moving means and said roller and positioned above the roller with the tape rising from the roller and extending through said other guide to the tape moving means.

2,744,482
SEWING MACHINE
Otto Hess, Ludwigsburg, Wurttemberg, Germany
Application May 28, 1952, Serial No. 290,445
Claims priority, application Germany June 8, 1951
6 Claims. (Cl. 112—258)



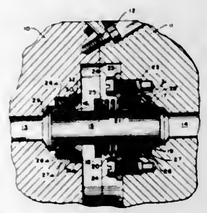
6. In a high speed sewing machine having a base plate forming part of the bottom frame of the machine and provided with a flange, an oil pan comprising a bottom member and side walls with top edges to cooperate with the flange of the bottom frame, means connected to the bottom member and the base plate to secure the oil pan to the bottom frame with a tight connection of the top edges with the flange of the bottom frame, the bottom member with the side walls and the base plate forming a separate chamber for the oil, supporting arms secured to the top edges of the oil pan in spaced relationship acting to support the sewing machine, and the outer surface of the bottom member being provided with a plurality of fins acting to cool the oil in the pan by air streaming past the fins from a fan on a driving motor of the sewing machine secured to the bottom member of the oil pan.

2,744,483
FLOATING BOAT HOUSE
Walter H. Rhindress, Braintree, Mass.
Application August 11, 1954, Serial No. 449,205
1 Claim. (Cl. 114—.5)



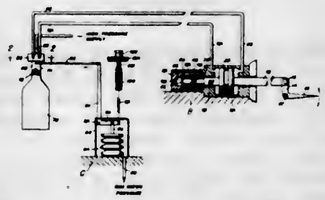
In a floating structure for housing small marine craft of relatively shallow draft, spaced vertical sides, a prow shaped forward portion joined to said vertical sides, spaced struts interposed between said vertical sides and positioned substantially adjacent and slightly below the normal load water level of the structure, said struts defining means for supporting a marine craft within said structure, a roof mounted on said sides and prow shaped portion and forming an enclosed housing therewith, portions secured to the lower edge of said sides along the outer surface thereof for supporting said structure in water, and pulley means secured to said forward portion for receiving a mooring cable therearound, said cable being adapted at one end thereof for securement with a marine craft whereby said craft may be drawn over the struts and into the housing by a manual pull on the other end of said cable.

2,744,484
CONNECTOR
John M. Stockard, Washington, D. C., assignor to the United States of America as represented by the Secretary of the Navy
Application June 13, 1952, Serial No. 293,493
5 Claims. (Cl. 114—20)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A torpedo of the type including a first torpedo section having a first terminal end of a conduit carried thereby and a second torpedo section having a second terminal end of a conduit carried thereby, said sections being separable and said ends being disposed in substantially aligned spaced relationship when said sections are secured together, the improvements in combination with said torpedo, comprising; a conduit connector disposed between said terminal ends, said connector having first and second spherical outer surfaces, one being at each end thereof, means carried by the first section adjacent said first terminal end receiving the first spherical surface and securing the connector thereto for pivotal movement in all directions about the point of pivotation of said first spherical surface, fluid seal means between the first spherical surface and the first section for preventing fluid leakage by same, spring means for maintaining the connector in a desired projecting position from the first section, a bore in the second section adjacent said second terminal end into which the second spherical surface is adapted to move when the members are relatively moved to their secured position, and an O ring surrounding the bore and engaging the second spherical surface for preventing fluid leakage past the O ring.

2,744,485
TORPEDO DEPTH CONTROL
Horace E. Karig, Pasadena, Calif., assignor to the United States of America as represented by the Secretary of the Navy
Application June 10, 1948, Serial No. 32,201
1 Claim. (Cl. 114—25)



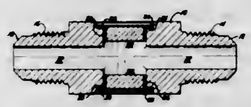
A depth control for torpedoes, comprising a horizontal rudder and fluid pressure means for moving it in opposite direction, a pendulum mounted to swing fore and aft in the torpedo, a source of fluid pressure supply, a pair of jets connected to said supply, a pair of receiving orifices spaced from and aligned with said jets to receive pressure therefrom and connected to the fluid pressure means to operate the latter in opposite directions, a blade formed on the pendulum and movable between the jets and orifices to cover one jet and uncover the one in accordance with the swinging movement of the pendulum, and a closed casing connected to receive outside depth pressure, an evacuated bellows in the casing having a projecting arm, the outside of said bellows receiving said outside pressure, a lever pivotally mounted intermediate its ends to said arm and having one end pivotally connected by linkage means to the pendulum, and adjustable spring tension means connected to the other end of the lever to vary the movement of the pendulum in accordance with the spring setting and the depth pressure received by the casing.

2,744,486
TORPEDO LAUNCHING RACK
Clarence G. Buck, Silver Spring, Md.
Application April 24, 1953, Serial No. 351,061
17 Claims. (Cl. 114—239)
(Granted under Title 35, U. S. Code (1952), sec. 266)



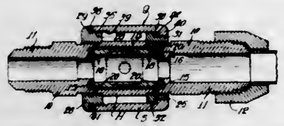
1. A launching rack for a torpedo, wherein an operating mechanism for sequentially releasing an electrically activated torpedo is protected from moisture, comprising; an inclined ramp from which the torpedo rolls by gravity into the sea, a hydraulically operated knife to sever an electrical control cable which activates the torpedo, cradle housings supporting the torpedo about a portion of the torpedo periphery, yieldable arcuate chocks simultaneously releasable and wedgedly retaining the torpedo on said ramp, a cam surface on the chocks, a chock release cam with radially extending arms, a first of said arms engaging the cam surface on the chock to thereby lock the chock in an upright position and prevent the torpedo from rolling down the ramp, a longitudinal shaft extending between the chocks parallel to the torpedo axis, a pinion mounted on said shaft to rotate the shaft, a sear mounted on the ends of said shaft operatively engaging said chock release cam to rotate said first arm on the release cam into the cam surface on the chock, a second arm on said release cam being engaged by the sear as the shaft is rotated counterclockwise for removing the first arm of the release cam from the cam surface on the chock, securing cables and a spring latch for retaining the torpedo in launching position on the ramp, a spring loaded cable release sleeve cooperatively engaging one end of a cable and said sear for locking into and releasing a cable from torpedo retaining condition, a spring loaded cable locking and tension assembly engaging the other end of the cable to tension the cable about the torpedo periphery when the cable release sleeve is engaging said cable, a rack slideably mounted for reciprocation, a pinion drivenly connected to said rack and drivingly connected to said shaft to thereby impart oscillatory motion to said sear, separate hydraulic means and manually operable means for linearly reciprocating said rack, bifurcated linkage for translating reciprocatory movement selectively from one of said means to the rack, said hydraulic means connecting one side of the bifurcated linkage to the rack, said manual means including a foot pedal release handle releasably engaging the other side of the bifurcated linkage and a foot treadle for reciprocating said other side of said linkage after the latter is disengaged by the foot pedal release handle.

2,744,487
LIQUID SIGHT GLASS
Robert T. Moore, Pittsburgh, and George G. Hornung, Latrobe, Pa.
Application August 21, 1953, Serial No. 375,665
1 Claim. (Cl. 116—117)



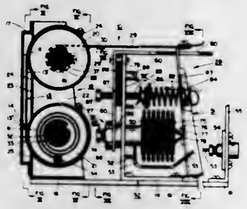
A liquid flow indicator comprising a rigid metal body having a threaded connection at each end to which a pipe may be joined and having wrench-engaging faces integrally formed thereon to enable the joined pipe ends to be made tight, said body having a longitudinal bore extending therethrough and having a transverse bore providing opposed openings into the longitudinal bore, each end of the transverse bore being countersunk to provide an annular shoulder inwardly from the outer end of the bore, a glass button of less diameter than the bore set into each end of the bore, a collar of metal having its coefficient of thermal expansion substantially matched to the glass surrounding the periphery of the glass button and hermetically fused thereto, the collar also being loosely received in the bore, each of said collars having an outwardly-turned flange overlapping the annular shoulder and hermetically joined around its periphery by metal fusion to the body, the outer surfaces of the glass buttons being inset from the surface of the metal body.

2,744,488
LIQUID FLOW INDICATOR
Albert Wittlin, Chicago, Ill.
Application October 11, 1952, Serial No. 314,263
8 Claims. (Cl. 116—117)



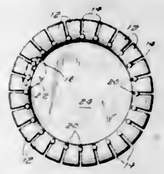
1. A fluid flow indicator, comprising: a pair of spaced coupling members attachable in fluid flow relationship to a fluid line; a transparent sight tube extending between the coupling members through which the fluid is adapted to flow; locking means for interlocking the coupling members and sight tube in fluid tight relationship; a readily removable fluid impervious shield normally surrounding the sight tube but removable to expose the sight tube; and means sealing the shield to the assembly in fluid tight relationship when the shield is in position surrounding the sight tube.

2,744,489
RIBBON INDICATOR INSTRUMENT
Albert L. Gallant, Attleboro Falls, Mass., assignor to The Foxboro Company, Foxboro, Mass., a corporation of Massachusetts
Application May 27, 1953, Serial No. 357,790
1 Claim. (Cl. 116—129)



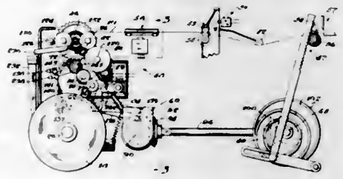
Bearing and support structure for use with indicating instruments of the type wherein a pair of rotatable drums are mounted side-by-side with their axes parallel and adapted for winding a marked indicator ribbon, having its ends secured respectively to said drums, from either of said drums to the other drum so that said ribbon may be positioned in accordance with the magnitude of a variable condition, and wherein scale means are provided adjacent the marking on said ribbon to permit visual reading of the value of said condition, said structure comprising, in combination: a pair of spaced support members mounted on opposite sides of one of said drums, first and second screws extending respectively through said support members and having annular bearing surfaces facing inwardly towards said one drum, each of said screws being formed with a cylindrical recess opening inwardly towards said one drum with said recesses being centrally located with respect to said annular bearing surfaces, a support shaft mounted between said two screws and having cylindrical projecting end portions extending part way into and engaging the side walls of said recesses to permit free longitudinal and rotary movement of said shaft with respect thereto, said shaft passing interiorly of said one drum and being coaxial therewith, and annular bearing means forming a part of said one drum and positioned at each end thereof in circumferential engagement with respective ends of said support shaft, said bearing means having crown portions facing outwardly of said one drum and adapted to contact said annular bearing surfaces on said screws when said screws have been adjusted to position said one drum in alignment with the other of said drums.

2,744,490
SHOPPING INDICATOR
Harry Evanoff, Erie, Pa., assignor to Louis Marx & Company, Inc., New York, N. Y., a corporation of New York
Application March 11, 1954, Serial No. 415,469
5 Claims. (Cl. 116—134)



1. A shopping indicator comprising a hollow peripheral edge portion, said edge portion being slotted, and an integrally molded member including a band portion with integral studs projecting transversely outwardly therefrom, and having integral enlargements at the ends of the studs, said integrally molded member being made of flexible material and being housed in the hollow portion with the studs passing through the slots and with the enlargements outside, said enlargements being too large to pass through the slots.

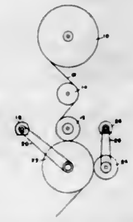
2,744,491
ADHESIVE APPLYING MEANS FOR CONTAINER-FORMING MACHINE
John G. Vergobbi, Quincy, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a corporation of Massachusetts
Application September 25, 1952, Serial No. 311,370
5 Claims. (Cl. 118—6)



1. In a container-forming machine of the type operating in cycles, in combination, adhesive-applying means comprising a roller for applying adhesive in a predetermined pattern onto successive sections of a continuously advanced web, web-feeding means for continuously advancing a web having substantially equally spaced registration marks thereon defining successive container-forming sections comprising a pair of feed rolls normally arranged to continuously feed the web at a rate such as to advance the web a distance slightly less than a predetermined length of a container-forming section each cycle of operation, control means including means for detecting the position of a registration mark at a predetermined time during each cycle, and means responsive to said detecting means when a deviation from a predetermined position is detected for effecting a progressive movement of the feed rolls to cause an additional increment of advance of the web and to provide a net advance of the web a distance slightly more than said predetermined length of a container-forming section during the cycle of operation in which such deviation is detected whereby to assure substantial registration of successive container-forming sections with said adhesive-applying means, said adhesive-applying roller being of a circumference slightly less than the predetermined length of a container-forming section

and driven at a constant rate of speed and adapted to permit slippage of the web relative thereto when the web is advanced at variable speeds a distance greater than said circumference during a cycle of operation.

2,744,492
ROLLER SPEED INDICATING MEANS FOR PAPER COATING MACHINES
Ralph Enzmann and William H. Barrett, International Falls, Minn., assignor to Minnesota and Ontario Paper Company, Minneapolis, Minn.
Application February 8, 1954, Serial No. 408,765
5 Claims. (Cl. 118—10)



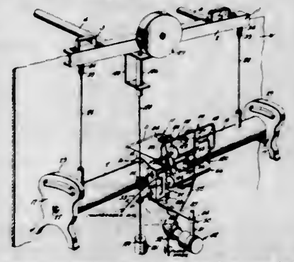
1. The combination of a paper coating apparatus including a film applying roll and a paper supporting roll, of means for indicating the speed relationship of the film applying roll and the paper supporting roll, said means comprising fluid pumps driven by the film applying roll and the paper supporting roll, a liquid container, conduits connecting the container and the pumps in series so that fluid from the container can flow through the pumps and back to the container, a conduit connecting the liquid container to the conduit connecting the pumps, a fluid motor mounted in the conduit connecting the container and the conduit connecting the pumps, said fluid motor having a shaft, an indicator carried by the shaft to indicate the speed relationship between the said rolls.

2,744,493
MACHINE FOR COATING AND SLITTING STRIP ROOFING MATERIAL
Wylie C. Morgan, Oklahoma City, Okla., assignor of forty per cent to Robert H. Vaughn, Sr., Oklahoma City, Okla.
Application December 8, 1953, Serial No. 396,918
2 Claims. (Cl. 118—38)



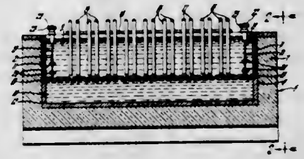
1. A coating applicator comprising an elongated container including a substantially rectangular bottom member, end members secured to said bottom member, front and back members secured to said end members, said front and back members extending in spaced relation to said bottom member to provide front and back slots adapted to receive a strip of sheet material, a doctor blade adjustably mounted on said back member whereby said back slot may be varied, means for supporting a roll of sheet material adjacent said front slot, a cutter support mounted adjacent said back slot, a cutter rotatably mounted on said support and extending across said back slot, a plurality of cutter blades adjustably mounted on said cutter, and means for rotating said cutter to move said cutter blades into and out of alignment with said back slot.

2,744,494
SURFACE TREATING APPARATUS FOR UPRIGHT WALL SURFACES
Stephen P. Chappen, Carbondale, Pa.
Application September 23, 1952, Serial No. 311,131
23 Claims. (Cl. 118—305)



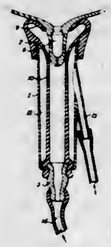
18. In surface treating apparatus for upright wall surfaces, a housing, a spray, said housing being supported solely by a single cable for lowering and lifting said housing, said cable having one end thereof connected to a winding drum in said housing, a reversible fluid motor in said housing carried by said housing for rotating said drum and a single valve means to actuate said spray and said motor.

2,744,495
SALT BATH FURNACE
Alfred L. Boegehold, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 19, 1952, Serial No. 267,259
13 Claims. (Cl. 118—429)



13. A furnace for treating metals by dipping into a layer of fluoride containing molten salt in contact with molten aluminum comprising a tank adapted to hold a lower layer of molten aluminum and an upper layer of molten fluoride salt, said tank having a lining of silicon carbide at least in those portions contacted by said molten salt, and heating means in said tank for maintaining said layers in a molten state.

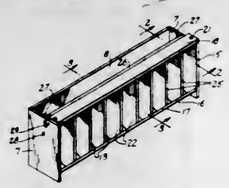
2,744,496
ADJUSTABLE MILKING MACHINE CUPS
Karl Röben, Oelde, Westphalia, Germany, assignor to Westfalia Separator AG., Oelde, Germany, a corporation of Germany
Application July 15, 1952, Serial No. 298,931
Claims priority, application Germany July 23, 1951
2 Claims. (Cl. 119—14.47)



1. In a milking-machine teat-cup assembly having a double-compartment teat cup with a rigid outer cup

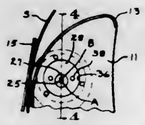
shell; a shaped portion positioned in said outer cup shell having a widened portion of substantially conical form defining an annular chamber positioned axially past the edge of said rigid outer cup shell and of substantially greater cross-sectional width than the cup shell, and a flexible lip positioned substantially at right angles to the axis of the teat cup defining an opening in said widened portion with the ratio of the largest diameter of said widened portion to the diameter of said opening defined by said lip being at least 2.5:1, whereby, upon insertion of a teat, the flexible lip may bend into said widened annular chamber and automatically adjust to the shape and size of the teat.

2,744,497
SELF-FEEDING PIG FEEDER
Milton E. Fisher and Paul C. Fisher, Cedar Falls, Iowa
Application August 7, 1953, Serial No. 373,026
3 Claims. (Cl. 119—53)



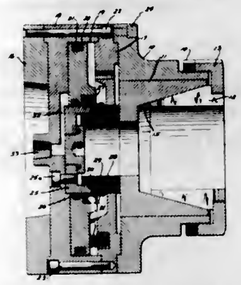
1. In an animal feeder, a pair of end walls, a vertical back wall extending between and secured to said end walls, a bottom plate extending between and secured to said end walls, said bottom wall declining forwardly from said back wall and having a lower end, a top wall spaced above said bottom wall and extending between and secured to said end walls, said top wall having a rear edge spaced forwardly from said back wall, vertical cleats secured to said end walls, said cleats having vertical forward edges spaced rearwardly from said rear edge of the top wall, a vertical feed regulating plate slidably engaged between the rear edge of the top wall and said forward edges of the cleats, said regulating plate having a lower edge and end edges slidably engaged with said end walls, and mounting means acting between an end wall and an end edge of the regulating plate and positioning said regulating plate with its lower edge over and spaced above said bottom wall.

2,744,498
COPY HOLDER
Donald A. Seaver, West Cheshire, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a corporation of Connecticut
Application January 7, 1954, Serial No. 402,715
5 Claims. (Cl. 120—32)



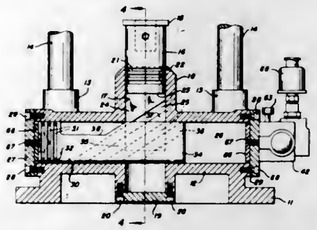
1. In a copy holder comprising a casing having opposite walls, a spindle having one end pivoted in one wall of the casing, a bearing carried by the opposite wall for supporting the opposite end of said spindle, feed-rollers rigidly mounted on said spindle and adapted to engage one side of a sheet of copy, a presser member for engaging the opposite side of said copy, and means for adjusting the position of the bearing in said opposite wall to change the position of the spindle axis relative to said presser member to vary the relative pressure of the feed-rolls on the sheet of copy.

2,744,499
ACTUATORS
Charles J. Mann, Traverse City, Mich.
Application August 12, 1954, Serial No. 449,344
3 Claims. (Cl. 121—38)



1. An actuator having a frame, cylinder means in said frame, a first member, said first member having an annular surface, a second member, said second member being slideably mounted for movement with respect to said first member parallel to the axis of said annular surface, said second member also having an annular surface, said first and second member annular surfaces forming a diverging space therebetween, an actuating member slideably mounted in said frame for movement parallel to said axis, said actuating member having a piston portion cooperating with said cylinder, and also having an annular surface disposed opposite the larger portion of said diverging space, said piston portion annular surface being axially tapering in diameter: force-transmitting means confined between said annular surfaces comprising segments of an annular ring having surfaces thereon disposed to register with said annular surfaces whereby axial movement of said piston in the direction of divergence of the annular surface thereof will induce a component of radially inward movement of said force-transmitting means creating a wedging action causing axial separation of said first and second members.

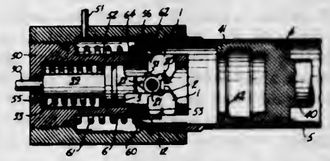
2,744,500
FLUID OPERATED CLAMPING DEVICE WITH MECHANICAL ADVANTAGE
Joseph Verderber, Cleveland, Ohio
Application August 2, 1952, Serial No. 302,331
4 Claims. (Cl. 121—38)



1. In a clamping device, the combination of a body, a horizontal cylinder within said body, a piston slidably contained within said cylinder, angularly extending tongues and grooves associated with said piston, a vertical cylinder in said body, a vertically movable clamping bar slidably contained in said vertical cylinder and forming a fluid motor means therewith at right angles to said piston, angularly extending tongues and grooves provided on said clamping bar and slidably interlocked with said first-named tongues and grooves on said piston in camming relationship thereto, a port communicating with one end of said horizontal cylinder, a second port communicating with the opposite end of said horizontal cylinder, an elevated plate rigidly supported by said body in the path of movement of said

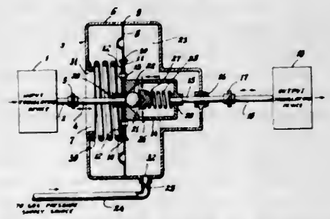
clamping bar, control means for selectively directing fluid under pressure into one or the other of said ports, whereby said piston is displaced and said clamping bar is moved vertically in response thereto, and a passageway between said cylinders for directing fluid under pressure into said vertical cylinder from one of said ports.

2,744,501
TOGGLE LOCK ACTUATOR ASSEMBLY
Richard A. Chace, Bellevue, and George C. Newell, Jr., Seattle, Wash., assignors to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application May 18, 1953, Serial No. 355,522
10 Claims. (Cl. 121—40)



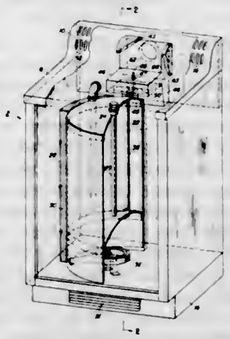
1. In combination with a pressure-fluid-actuated skirted piston, a cylinder wherein said piston is reciprocable, and a head closing an end of said cylinder, means to lock said piston to said head comprising a sleeve projecting axially from the head into position to enter the piston's skirt as the piston approaches the limit of its movement towards the head, said sleeve having at least two radially directed, equiangularly spaced slots, a latch dog slidably mounted for radial movement in each such slot, between a locking position, wherein its outer end is projected outwardly beyond the sleeve, and a retracted position, wherein its outer end is withdrawn beneath the sleeve's outer surface, the outermost portion of each dog being beveled at at least its end which is nearer the head, the inside of the piston's skirt being complementally circumferentially beveled for locking engagement by said dogs when the latter are in their projected position, a plunger guided for axial reciprocation within said sleeve, two toggle arms pivotally mounted upon said plunger and operatively engaged with said dogs to push them outwardly when the toggle arms are rotated into alignment, for locking, or to free the dogs for inward releasing movement, by opposite axial movements of the plunger.

2,744,502
PNEUMATIC CONTROL APPARATUS
William Frantz, Bronxville, N. Y., assignor to Simmonds Aerocessories, Inc., Tarrytown, N. Y., a corporation of New York
Application August 16, 1952, Serial No. 304,690
6 Claims. (Cl. 121—41)



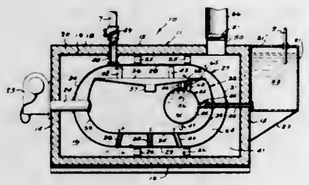
1. A follow-up device for automatically maintaining the position of a controlled member in a predetermined relationship with respect to the position of a controlling member; comprising a rigid housing; a rigid disc-like member disposed within said housing; flexible means joining said disc-like member to the walls of said housing for movement relative to one wall thereof and providing a pressure chamber in the space between said one wall and said disc-like member, said disc-like member moving outwardly with respect to said chamber in response to pressure therein; resilient biasing means in engagement with said disc-like member for urging it inwardly against the chamber pressure; means operatively coupling said disc-like member with said controlled member through said one wall of the housing; inlet means including a constricted orifice for supplying said chamber with a gaseous medium under pressure; an exhaust aperture in said disc-like member; a valve seat within said chamber mounted on said disc-like member in registration with said exhaust aperture; and valve means floating with respect to said disc-like member, said valve means including a valve stem of smaller cross sectional area than said exhaust aperture extending through said aperture into said chamber and supported by said controlling member, and a valve head for said valve seat movable relative to said valve seat in response to movement of said controlling member to alter the pressure in said chamber and unbalance the forces acting on said disc-like member to move said disc-like member until said valve seat and said valve head assume a new equilibrium position.

2,744,503
GAS FIRED TABLE TOP WATER HEATER WITH BUILT-IN DRAFT DIVERTER
Paul R. Millsaps, Ralph T. Morton, and Herman W. Reedy, Chattanooga, Tenn., assignors to Combustion Engineering, Inc., New York, N. Y., a corporation of Delaware
Application February 23, 1952, Serial No. 272,972
5 Claims. (Cl. 122—17)



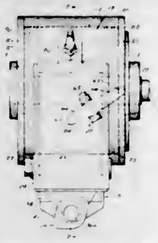
1. In a water heater of the type described, a generally rectangular cabinet of substantially table top height having an opening in the upper portion of the rear wall thereof, a "back splash" formed upon the top of said cabinet adjacent the rear thereof providing a chamber therebeneath open to the interior of said cabinet, a plurality of vent openings in said "back splash," a tank positioned forwardly within said cabinet forming a vent cavity between said tank and the rear wall of said cabinet, said vent cavity communicating with said vent openings, a burner for heating the contents of said tank, a flue for conveying the gases of combustion away from said burner, a draft diverter positioned entirely within said cabinet having a portion thereof positioned within the chamber formed by said "back splash" spaced laterally from an end of said chamber and said cabinet, said diverter being provided with an inlet in communication with the flue, a flue gas outlet in communication with the opening in the rear of the cabinet and a back draft outlet in communication with the vent cavity, said back draft outlet being substantially below said vent openings in the back splash whereby, during a back draft, the gases pass laterally and upwardly from the back draft outlet port causing a reduction in pressure at said outlet.

2,744,504
METHOD AND APPARATUS FOR GENERATING STEAM
Sidney Gellman, Long Beach, N. Y.
Application January 15, 1954, Serial No. 404,263
2 Claims. (Cl. 122—135)



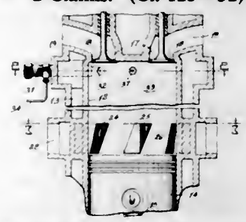
1. In a steam generator, a closed container, a body of liquid substantially filling said container, a reservoir containing a body of cold liquid, a liquid supply conduit connecting the reservoir with said container, heating means for said container, a steam discharge conduit leading from said container, a normally closed pressure operated valve in said steam discharge conduit arranged to open to discharge steam from the container only when the body of liquid within the container has evolved steam and the steam and the body of liquid have reached predetermined high levels of pressure and temperature within the container, said liquid supply conduit having a normally closed valve therein arranged to open only when pressure within said container drops below a predetermined high level so as to permit movement of liquid from the reservoir into said container and replenish the part of the body of liquid in the container reduced by evolution of steam therefrom and discharge of the steam, said heating means comprising a burner having a burner tube, a combustion chamber surrounding said container into which the burner tube discharges, a superheater housing spacedly surrounding said combustion chamber in direct heat exchange relation to said burner tube, said steam discharge pipe opening into said superheater housing, a further steam discharge pipe leading from the interior of said superheater housing, a normally closed valve in said further steam discharge pipe set to open only when the pressure of steam within the superheater housing exceeds the pressure of the steam passing into the superheater housing from said container.

2,744,505
TURBINE-TYPE ENGINE
Elmer W. Sherman, Van Nuys, Calif.
Application October 19, 1953, Serial No. 386,906
5 Claims. (Cl. 123—15)



1. A rotary engine comprising a housing having a single, hollow, cylindrical chamber, end plates for said housing for closing off said chamber, a rotor journaled in said housing, the periphery of said rotor having a cylindrical surface fitting into and in sliding engagement with said chamber, a plurality of firing chambers recessed in said rotor, each of said firing chambers comprising a radially-directed wall beginning at the outer surface of said rotor and an inner wall constituting a smooth, curved surface extending from said wall back to the periphery of said rotor, and two side-walls laterally closing off said chamber, an opening in said housing, a valve chamber closing off said opening, a first fuel-compressing arm pivotally mounted within said valve chamber having a concave cylindrical surface having a radius equal to the radius of said rotor, a second fuel-compressing arm pivotally mounted within said first arm and having a concave cylindrical surface matching the curvature of the inner wall of said firing chamber, spring-biasing means for normally holding said first and second arms away from said rotor, a cam mounted on one side of said rotor and journally mounted within said housing, a gas-seal between said cam, housing, and said rotor, means, including a pivoted arm actuated by said cam and a push rod actuated by said arm and engaging said first fuel-compressing arm, said means simultaneously actuating said first and second arms into fuel-compressing positions of said arms by engaging the concave surfaces of said arms against the cylindrical surface of said rotor and the surfaces of said firing chamber, respectively, the surfaces at the free ends of said arms being shaped to define a portion of the surface of a firing chamber when said arms are actuated by said cam, and a spring-biased vane slidably mounted within said housing for sliding into said combustion chamber, and an exhaust port on the trailing side of said vane for expelling exhaust gases from said chamber through said exhaust port.

2,744,506
TWO-STROKE UNIFLOW-SCAVENGED INTERNAL COMBUSTION ENGINE
Blake Reynolds, Riverside, Conn., assignor to Texaco Development Corporation, New York, N. Y., a corporation of Delaware
Application May 19, 1953, Serial No. 356,025
2 Claims. (Cl. 123—32)



1. In a two-stroke cycle uniflow-scavenged internal combustion engine comprising a cylinder having a reciprocating piston therein, exhaust ports for the cylinder, intake ports in the cylinder for admitting a fresh air charge and displacing waste combustion products through said exhaust ports, each of said intake ports having a flow axis normal to the longitudinal axis of said cylinder and being of generally rectangular cross section and being twisted so that the center line of its top is tangent to an inscribed circle concentric with said cylinder while the center line of its bottom is coincident with a cylinder radius, whereby a portion of the air flowing through each of said ports is caused to swirl rapidly about said cylinder and another portion is caused to fill the central core of said cylinder and equalize axial flow velocity and prevent formation of a vortex and toroidal air motion therein, means for uniformly impregnating with fuel a predetermined portion of the path of the swirling air charge at a controlled rate during the piston compression stroke,

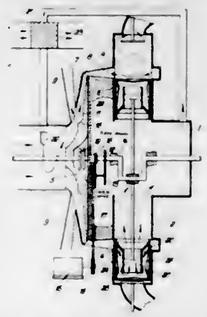
and positive ignition means for igniting the first increment of injected fuel substantially as soon as combustible fuel-air mixture is formed therefrom to establish a flame front to burn succeeding increments of injected fuel.

2,744,507
MEANS FOR TREATING LIQUID FUEL BEFORE ITS INJECTION INTO THE WORKING CYLINDER OF INTERNAL COMBUSTION ENGINES
Eugen Huber, Munich, Germany, assignor to Inconex Handelsges. m. b. H. für industrielle Produkte-Konstruktionen-Export, Stuttgart, Germany, a firm
Application February 7, 1951, Serial No. 209,733
2 Claims. (Cl. 123—32)



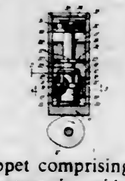
1. A device for the purpose described adapted to be fitted in the head of a cylinder of an internal combustion engine, said device including an injection plug having one end threaded for screwing into the cylinder head, a valve casing projecting axially from the threaded end of the plug and adapted to extend into the compression space of the cylinder, said casing having a frusto-conical valve seat at its free extremity, said plug having an axial fuel inlet passage communicating with said casing, a valve stem reciprocable in the casing and affording a communicating clearance with said casing between said passage and the valve seat end of the casing, a frusto-conical valve on the end of said stem and normally closing on said seat, and heat absorbing fins surrounding the valve casing, said valve stem and casing being so disposed that said communication between the fuel inlet passage and the valve comprises an elongated narrow annular space adapted to maintain fuel accumulated therein in a thin layer while disposed in heat exchange relation with said heat absorbing fins and valve casing.

2,744,508
INTERNAL COMBUSTION ENGINES
Ludwig Elsbett, Salzgitter-Bad, Germany, assignor to Wolfgang Henry Richard Behrens, Cologny-Genf, Switzerland
Application April 17, 1953, Serial No. 349,379
6 Claims. (Cl. 123—41.39)



1. In an internal combustion engine, a crank case having a combustion cylinder thereon, a hollow piston operable in said combustion cylinder, a supporting body having an inlet air passage for admitting air under pressure to the cylinder intermediate the height thereof and directly over the working surface of the piston when the piston is at the bottom dead center level in the cylinder, a centrifugal blower rotatable on said supporting body and delivering air to the air inlet passage, said piston having a side opening adapted to enter into registry with the inlet air passage on the return stroke of the piston to permit the scavenging air to pass through the piston, said piston being open at the bottom to direct air downwardly through the open end of the combustion cylinder and into the crank case at the end of the return stroke of the piston, said crank case having an air discharge opening, the air being delivered to the cylinder in greater quantities than needed for combusion and serving to scavenge the upper part of the combustion cylinder when the piston is in the base of the combustion cylinder, said combustion cylinder having an exhaust valve therein through which the scavenging air may pass when the piston is at the bottom of the stroke.

2,744,509
HYDRAULIC TAPPET
Oscar H. Banker, Evanston, Ill., assignor to New Products Corporation, Chicago, Ill., a corporation of Delaware
Application September 8, 1953, Serial No. 378,837
5 Claims. (Cl. 123—90)

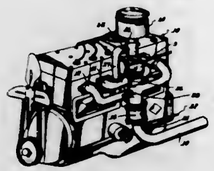


1. A hydraulic tappet comprising a hollow cylindrical body, a plunger structure in said body coacting therewith in defining a compression chamber in the body beneath said structure, said structure comprising a rigid tubular plunger member frictionally engaging the inner wall of said body and having an axial bore surrounded at its top by an annular valve seat and at its bottom by a downwardly facing annular shoulder, a plug member received in said bore and provided with a radially extending shoulder, a spring acting between said body and plug member to urge the shoulder of the latter for axial engagement with the shoulder of said plunger member, the axial length of the plug member in said plunger member bore exceeding the axial length of the bore and the upper extremity of said plug member being predeterminedly spaced above said valve seat when said shoulders are axially engaged, a further separate plunger member disposed above and resting on the top of said plug member, said further member engaging and sealing said valve seat when said shoulders are axially separated, and an annular non-metallic sealing ring on said further plunger member in frictional sealing and braking engagement with the wall of said body to prevent upward overthrow of said further plunger member relative to said plug member and said rigid tubular plunger member, said plug member shoulder having an axial passage communicating said compression chamber through said bore with the space above said tubular plunger member when said shoulders are engaged.

2,744,510
COMPRESSION BRAKING SYSTEM FOR INTERNAL COMBUSTION ENGINES
Edward P. Tyler and Abe E. Goodman, North Hollywood, Calif.
Application April 26, 1952, Serial No. 284,538
4 Claims. (Cl. 123—97)

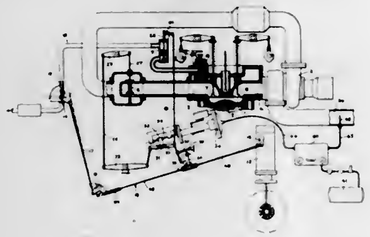
1. A compressive braking attachment for an internal combustion engine comprising in combination: a valve in

the exhaust manifold of said engine; a manually operable control for said exhaust manifold valve; a conduit connected to the intake manifold and adapted to by-pass the fuel intake to said intake manifold; a normally closed



valve in said by-pass conduit; and control means including a pressure responsive actuator fluid connected to said exhaust manifold and mechanically connected to said by-pass valve to open said by-pass valve upon closing of said exhaust manifold valve.

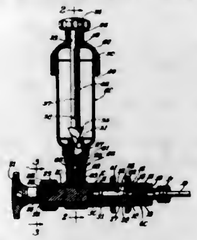
2,744,511
APPARATUS FOR CONTROLLING PROPORTIONATE DELIVERY OF AIR AND GAS TO A SUPERCHARGED INTERNAL COMBUSTION ENGINE
William M. Kauffmann, Hamburg, and George Steven, Kenmore, N. Y., assignors to Worthington Corporation, Harrison, N. J., a corporation of Delaware
Application February 4, 1955, Serial No. 486,152
8 Claims. (Cl. 123—120)



1. In an internal combustion engine including a cylinder, a governor, and having an exhaust outlet manifold, a valve for controlling delivery of air to said cylinder, a gas valve for controlling delivery of gas to said cylinder, means for operating said valves in unison including a pivoted lever, an actuating rod connected to said governor, means connecting said rod and said pivoted lever for actuating the lever by said rod, a manually operable start and stop lever, a slip joint connection between said start and stop lever and said rod, said rod composed of a plurality of sections and a spring tension slip joint connecting the sections of the rod.

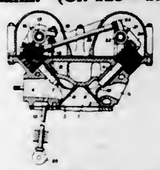
2,744,512
PRIMING DEVICE
George E. Franck, Riverside, Ill., assignor to The Imperial Brass Manufacturing Company, a corporation of Illinois
Application September 11, 1952, Serial No. 309,126
5 Claims. (Cl. 123—187.5)

1. An engine priming device, comprising: a primer casing having an axial cylindrical bore and a restricted portion at the forward end forming a valve seat; means providing communication between the bore and the engine for passage of priming fluid; a check valve yieldingly urged against said valve seat to prevent passage of fluid from the engine into said bore; passage means communicating with the bore intermediate its ends for providing a source of priming fluid; and a plunger reciprocally mounted in said bore for pumping priming fluid therethrough, said plunger having a generally uniform cylindrical shape to displace fluid from within the bore by movement into the bore while being of less



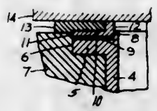
diameter than the bore to provide a passage at all times from the inlet passage means past the plunger to the outlet means communicating with the engine so that fluid may enter the bore during movement of the plunger out of the bore.

2,744,513
OVERHEAD VALVE MEANS FOR INTERNAL COMBUSTION ENGINES
Achille Carlo Sampietro, Detroit, Mich.
Application May 4, 1953, Serial No. 352,816
Claims priority, application Great Britain May 23, 1952
1 Claim. (Cl. 123—191)



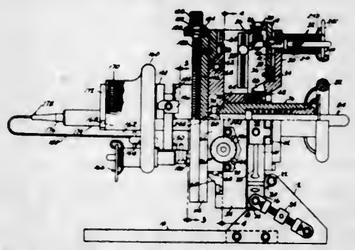
An internal combustion engine comprising at least one cylinder, said cylinder being of the type having a cylinder head provided with a substantially hemispherical combustion chamber having on one side of the cylinder axis an inlet port provided with a poppet valve and on the other side of said axis an exhaust port provided with a poppet valve, a single camshaft arranged at the same side of said cylinder axis as one of said valves, a first rocker mounted on the same side of said cylinder axis as said one valve with its rocking axis lying within the angle bounded by two intersecting planes in which the axes of the said poppet valves lie respectively, said rocker having a first arm for operating said one valve and a second arm which projects towards said axis, a first push-rod mounted for operation by said camshaft and engaging said second arm of said first rocker, a second rocker mounted on the same side of said cylinder axis as the said one valve with its rocking axis lying within the angle bounded by two intersecting planes in which the axes of the said poppet valves lie respectively, said second rocker having a first arm which projects towards said cylinder head and a second arm which projects towards said axis, a second push-rod mounted for operation by said camshaft and engaging said second arm of said second rocker, a third rocker mounted on the same side of said axis as the other of said valves with its rocking axis lying within the angle bounded by two intersecting planes in which the axes of the said poppet valves lie respectively, said third rocker having a first arm for operating said other valve and a second arm which projects away from said cylinder head, and a third push-rod extending across said cylinder head and engaging said first arm of said second rocker and said second arm of said third rocker, said cylinder head being formed with a lateral passage which extends between said first and second push-rods and provides communication between one of said ports and the exterior of said cylinder head.

2,744,514
GASKET PROTECTOR
John P. Vidmar, Crosby, Minn., assignor, by mesne assignments, to Hanna Coal & Ore Corporation, Cleveland, Ohio, a corporation of Delaware
Application July 21, 1953, Serial No. 369,425
10 Claims. (Cl. 123—193)



1. In an internal combustion engine including a cylinder and a detachable head at the combustion end thereof, a compressible gasket disposed about the cylinder at such end and engaged between the same and the head, the head being tightly secured to the cylinder against the thus interposed gasket, and a gasket protector ring bridging the space between the adjacent faces of the cylinder and head inwardly of the gasket to form a protective barrier for the same, said ring having a radially extending portion and an inner flange substantially at right angles, the inner peripheral portion of the gasket being received within the included angle portion of the ring.

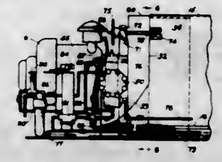
2,744,515
DRESSING APPARATUS
George W. Bruderick, Detroit, Mich.
Application August 14, 1952, Serial No. 304,328
13 Claims. (Cl. 125—11)



1. An apparatus of the class described comprising a base, a tiltable support thereon, a sleeve rotatable on the support, means for holding the sleeve against rotation, stops for limiting rotation and selecting the arc of rotation of the sleeve in either direction, a primary drum carried by the sleeve, a carrier shiftable diametrally on the primary drum, means for limiting movement of the carrier in either direction, means for shifting the carrier, a secondary drum shiftable on the carrier, an auxiliary drum supported for rotation on the secondary drum, adjustable stops for limiting rotation of the auxiliary drum in either direction, means for locking the auxiliary drum to the secondary drum, and means carried by the auxiliary drum for the support of a cutting tool.

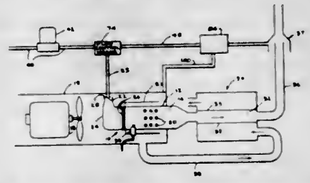
2,744,516
PORTABLE FLUID FUEL BURNING AIR HEATER
Arthur F. Hubbard, Moline, Ill., assignor to American Air Filter Company, Inc., Louisville, Ky., a corporation of Delaware
Application October 13, 1951, Serial No. 251,215
14 Claims. (Cl. 126—110)

12. A heating apparatus comprising: a base; a housing mounted upon said base; a heat exchanger in said housing providing passageways for flow of air to be heated; a fluid fuel burner in the housing associated with said heat exchanger for heating said passageways; a fuel pump mounted on said base adjacent one end of said housing and connected to supply fuel to the burner, said pump having a drive shaft extending transversely of said housing adjacent one end, and said shaft having coupling means adjacent said end; a motor support on said base providing indexing means adjacent said end of the housing; a motor unit having a drive shaft transverse of the end of said first housing with coupling means at at least



one end of said drive shaft; and having indexing means cooperating with the indexing means of the motor support to position said unit with the drive shaft and the coupling means thereon in aligned engagement with the fuel pump shaft coupling means; said motor unit being positioned or removed by movement transverse to the axis of the pump shaft, and said coupling means making engagement and disengagement by said transverse movement.

2,744,517
GAS FIRED HEATING SYSTEM
George N. Miles, Orangeburg, N. Y., assignor to Jet-Heet, Inc., Englewood, N. J., a corporation of New York
Application October 20, 1951, Serial No. 252,268
3 Claims. (Cl. 126—110)

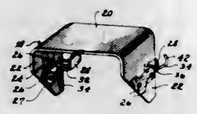


1. In a heating system of the type utilizing as the fuel a combustible gas and comprising (1) a burner, (2) an outlet flue communicating with said burner to carry away gaseous combustion products therefrom, and (3) a combustible gas supply system including an inlet line and a valve in said inlet line, the improvement which comprises a Venturi fitting comprising (1) a body having an inlet opening communicating with said line on the downstream side of said valve, said body also having two outlet openings, one of said outlets being substantially in coaxial alignment with said inlet opening and the other of said outlets being between said inlet and said one outlet and offset from said inlet, and (2) a nozzle inside said body extending from said inlet opening to a point beyond said other outlet, a line connecting said other outlet opening to said burner, a third line connecting said one outlet opening to said flue, and valve means in said third line for closing and opening said third line, whereby to direct gas passing said first-named valve to said burner when said third line is closed and to said flue when said third line is opened.

2,744,518
VENTILATOR DEFLECTOR
Marcus Slobins, Levittown, Pa.
Application October 26, 1954, Serial No. 464,829
3 Claims. (Cl. 126—198)

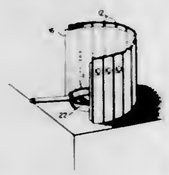
1. In combination with a vertical wall having therein a horizontal ventilating slot, a deflector for rising vapors issuing from said slot comprising a relatively wide roof

portion connected at its ends with depending wing portions abutting said wall above and outside the ends of said slot, elongated guide members secured to the inner walls of said wing portions and extending transversely thereacross, said members having inwardly offset end portions projecting through said slot and forming short lateral connecting portions extending longitudinally of said slot, an oblong opening through each of said short con-



necting portions, and a spring wire finger fastened at one end to the adjacent guide member and projecting at its other end through the opening in the short connecting portion of said guide member and through said slot, each of said openings being of such length longitudinally of said slot as to permit movement therein of said finger, and each of said fingers being spring urged into engagement with the adjacent end edge of said slot for detachably securing said deflector to said wall.

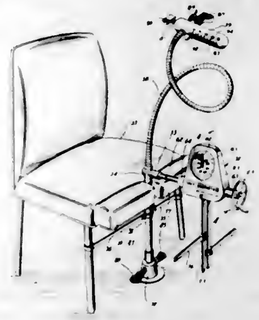
2,744,519
ANTI-SPLASH UNIT FOR COOKING PANS
Norman E. L. Means, Missoula, Mont.
Application July 5, 1952, Serial No. 297,381
4 Claims. (Cl. 126—299)



1. An anti-splash unit for cooking pans, comprising a rectangular and longitudinally flexible member adapted to lie flat on a horizontal support and to be flexed to arcuate form, means providing two opposed open channels at one face of the member and disposed respectively along the two longitudinal margins thereof, and a strip of absorbent paper supported at two opposite margins in said channels and resting on said face between the channels, the member in arcuate form being adapted to stand upright on one of said margins about a cooking pan with said paper facing the pan in position to receive and absorb splashings therefrom, the member being adapted to permit removal of the used paper strip and replacement with a fresh strip in a straight path longitudinally of said channels when positioned flat on said horizontal surface with said face disposed upwardly.

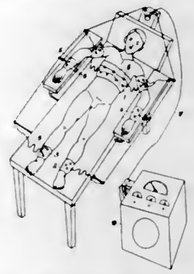
2,744,520
MACHINE FOR TESTING REFLEX ACTION OF HUMANS
Ugo Torricelli, New York, N. Y., assignor to Torricelli Creations, Inc.
Application April 5, 1951, Serial No. 219,492
10 Claims. (Cl. 128—2)

1. A machine for testing and measuring the reflex actions of a human, comprising a vertical support, means mounted thereon for supporting the limb of the human to be tested, a measuring device having an operating arm arrangement engageable with such limb to indicate the amount of the reflex action thereof, and a striking device adapted to engage the limb of a human with a pre-settable amount of striking force to effect the reflex action aforesaid, means for flexibly mounting said striking device upon the vertical support, a contact member forming a part of and adapted to extend laterally from the operating



arm arrangement and means for adjustably positioning such contact member thereon.

2,744,521
METHOD AND SYSTEM FOR OBSERVING MOTION PHENOMENA IN LIVING BODIES
Wolfgang Schmid, Riederau am Ammersee, Germany
Application August 5, 1952, Serial No. 302,757
3 Claims. (Cl. 128—2)



3. Apparatus for observing the circulation of blood in a living organism comprising a plurality of pressure indicating devices, a plurality of means each of which is adapted to position at least one of the plurality of indicating devices in cooperative relation with spaced regions of the living organism, each indicating device having a contact adapted to be moved in accordance with the pressure to which the device is subjected, a plurality of fixed contacts arranged to be engaged successively by the movable contact, and a multifrequency audio generator of which the frequency steps are connected between the movable contact in common and the fixed contacts individually.

2,744,522
PORTABLE AUTOMATIC BED LIFTER AND EXERCISER
Morris Washer, Memphis, Tenn.
Application March 5, 1953, Serial No. 340,496
6 Claims. (Cl. 128—33)



2. In a device for raising and lowering a part of a bed surface, a stationary base member adapted to rest upon horizontally disposed bed structure, a relatively flat tiltable bed-portion-supporting member hingedly connected along one edge thereof to said base member, said edge

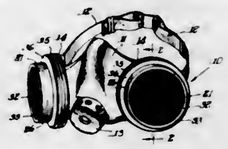
in use normally extending transversely of a bed in the central portion thereof, an upright standard rigidly attached to the rear marginal portion of said base member, a reversible electric motor mounted on said standard, speed reduction means driven by said motor, at least one adjustable amplitude crank-like means driven by said speed reduction means between a lowered position and a raised position, and tension means connecting said crank means to said tiltable member, whereby the latter is raised and lowered by movements of said crank-like means to and from its raised position from and to its lowered position.

2,744,523
FUME AND MIST RESPIRATOR WITH RING MEANS FOR REMOVABLY MOUNTING THE FILTERS
Robert Malcom, Jr., and Willis Z. Whipple, Chicago, Ill., assignors to Chicago Eye Shield Company, Chicago, Ill., a corporation of Illinois
Application May 19, 1954, Serial No. 430,854
5 Claims. (Cl. 128—146)



1. A combined fume and mist respirator comprising a face piece including an exhale valve and a supporting member including an inhale valve, said supporting member being substantially circular and peripherally provided with a screw threaded flange, an annular resilient gasket in the supporting member, a substantially cylindrical fume absorbing cartridge having a substantially cylindrical side wall and perforated end walls and fume absorbing material therein, said fume absorbing cartridge being removably received in the supporting member with one of its end walls engaging the gasket, a substantially circular mist absorbing filter overlying the other end wall of the fume absorbing cartridge, a ring member for marginally and removably holding the mist absorbing filter on the fume absorbing cartridge, and a screw threaded ring screw threadedly secured to the screw threaded flange and having an inwardly extending flange engaging the ring member for removably securing the mist absorbing filter to the fume absorbing cartridge and for removably securing the fume absorbing cartridge in the supporting member in sealing relation with the resilient gasket.

2,744,524
FUME RESPIRATOR WITH CANNISTER HAVING OFFSET WALLS AND RING MOUNTING MEANS
Willis Z. Whipple, Chicago, Ill., assignor to Chicago Eye Shield Company, Chicago, Ill., a corporation of Illinois
Application August 8, 1952, Serial No. 303,293
6 Claims. (Cl. 128—146)



3. A fume respirator comprising a facepiece including an exhale valve and a cartridge supporting member having an inhale valve, said cartridge supporting member being substantially circular and peripherally provided with a screw threaded flange, an annular resilient gasket in the cartridge supporting member, a cartridge including a casing member having substantially circular perforated end walls of different diameters and having substantially cylindrical side wall provided intermediate its ends with an offset bend forming an annular shoulder, the diameter of the side wall being greater between the larger end wall and the annular shoulder than between the smaller end wall and the shoulder, and a granular fume absorbing material packed in and filling the casing member, said cartridge being received in the cartridge supporting member with the larger end wall engaging the annular resilient gasket and with the annular shoulder lying adjacent the outer edge of the screw threaded flange, and a screw threaded ring screw threadedly secured to the screw threaded flange and having an internal flange engaging the annular shoulder of the cartridge for releasably securing the cartridge in the cartridge supporting member and sealing the same against the resilient gasket, said annular shoulder providing rigidity to the cartridge, acting as a baffle for preventing leakage due to channeling of the granular fume absorbing material and providing means for securing and sealing the cartridge in the cartridge supporting member.

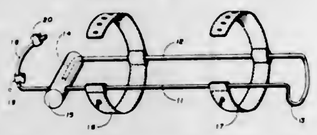
6. A cartridge for a fume respirator including a substantially circular cartridge supporting member peripherally provided with a flange comprising a casing member having substantially circular perforated end walls of different diameters and having a substantially cylindrical side wall provided intermediate its ends with an offset bend forming an annular shoulder, the diameter of the side wall being greater between the larger end wall and the annular shoulder than between the smaller end wall and the shoulder, and a granular fume absorbing material packed in and filling the casing member, said cartridge being adapted to be received in the cartridge supporting member with its annular shoulder lying adjacent the outer edge of the flange, said annular shoulder providing rigidity to the cartridge, acting as a baffle for preventing leakage due to channeling of the granular fume absorbing material and providing means for cooperating with the flange for securing the cartridge in the cartridge supporting member.

2,744,525
RESPIRATOR
Willis Z. Whipple, Chicago, Ill., assignor to Chicago Eye Shield Company, Chicago, Ill., a corporation of Illinois
Application January 15, 1953, Serial No. 331,440
7 Claims. (Cl. 128—146)



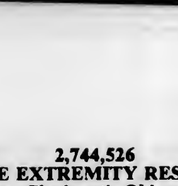
3. A respirator for interchangeably receiving a substantially circular dust filter means or a substantially cylindrical fume absorbing cartridge having an annular shoulder intermediate its ends, comprising a face piece including an exhale valve and a supporting member having an inhale valve, said supporting member being substantially circular and peripherally provided with a screw threaded flange for internally receiving the dust filter means or the fume absorbing cartridge, an annular resilient gasket in the supporting member for sealing the dust filter means or the fume absorbing cartridge, and a screw threaded ring of substantially the same depth as the screw threaded flange screw threadedly secured to the screw threaded flange and having an inwardly extending flange for engaging the outer surface of the substantially circular dust filter means or the annular shoulder of the substantially cylindrical fume absorbing cartridge for removably and interchangeably securing the same in the supporting member in sealing relation with the resilient gasket.

2,744,526
MOBILE EXTREMITY RESTRAINT
Rodger D. Saylors, Cincinnati, Ohio, assignor to Cygnet Associates, Cincinnati, Ohio, an Ohio partnership
Application December 23, 1954, Serial No. 477,185
5 Claims. (Cl. 128—214)



1. An extremity restraint for use in administering intravenous fluid, comprising the combination of two substantially parallel side members adapted for binding to a patient's extremity, a substantially U-shaped cradle member extending downwardly out of the plane of the side members and transverse thereto for holding the inward ends of the side members in spaced relationship, a substantially cylindrical resilient terminating pad extending between the outside ends of the side members, a strain relief member having one end attached to a side member, and a free end extending upwardly out of the plane of the side members, and intravenous tube attachment means spaced along the strain relief member.

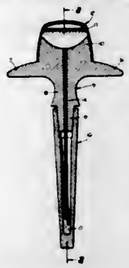
2,744,527
SYRINGES AND SYRINGE MIXERS
Eric Barrett and Altina Barrett, Los Angeles, Calif.; Altina Barrett, administratrix of said Eric Barrett, deceased
Application April 21, 1952, Serial No. 283,354
12 Claims. (Cl. 128—216)



3. An ampoule comprising a body portion having a closeable bore therein, finger wings extending from opposite sides of said body portion, a flexible cap attached to one end of said body portion and within which a fluid is adapted to be contained, said cap being wider in one direction than in another direction perpendicular thereto, pressure on said cap sufficient to deform said cap first produces outward bulging of said cap across its narrower width to increase the internal volume of said cap, further pressure on said cap in the same direction decreasing the internal volume of said cap, and means for closing said body portion bore.

2,744,528
HYPODERMIC SYRINGE
Eric Barrett and Altina Barrett, Los Angeles, Calif.; Altina Barrett, administratrix of said Eric Barrett, deceased
Application October 30, 1951, Serial No. 253,798
12 Claims. (Cl. 128—216)

6. A hypodermic syringe comprising a body portion having a bore therethrough, a cap-like receptacle mounted on said body portion and adapted to have fluid contained therein and fabricated of flexible resilient material and having one cross-sectional dimension greater than a cross-sectional dimension at substantially right angles thereto in a plane perpendicular to said bore so that initial pressure on said receptacle in the direction perpendicular to said plane sufficient to deform said receptacle first produces lateral bulging of the side walls



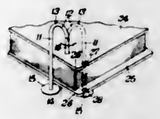
of said receptacle across its narrowest cross-sectional dimension to increase the internal volume thereof.

2,744,529
ANTI-COLIC NURSING DEVICE
Bernard W. Tichy, Westbury, N. Y.
Application September 30, 1953, Serial No. 383,306
9 Claims. (Cl. 128—252)



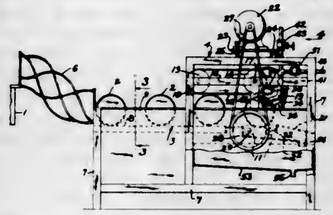
1. An apparatus for use with nursing bottles comprising: a cylindrical member provided with a cylindrical cavity axially deployed; a freely moving ball in said cavity; means to cage said ball in said cavity; a length of flexible tubing; a portion of said tubing being sealed into said cavity so as to provide, in cooperation with said ball, a substantially liquid tight seal; and a weight attached to one end of said tubing.

2,744,530
SEPARABLE RING FASTENER
Charles H. Swenson, Plainfield, N. J., assignor to Union Carbide and Carbon Corporation, a corporation of New York
Application September 12, 1951, Serial No. 246,219
3 Claims. (Cl. 129—1)



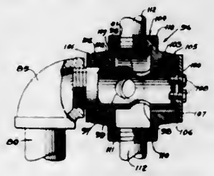
1. The combination with a pair of stiff covers between which perforate sheets are adapted to be held, a separable ring type fastener having a pair of substantially parallel and straight side portions, said covers being perforated adjacent at least one corner thereof, whereby said fastener may have one of its side portions extend through said perforation in each cover and the other side portion remain outside said covers and any sheets therebetween, the corner of said covers adjacent said perforation being rounded on a radius of curvature to enable the side of said fastener outside the covers to be swung through substantially a right angle, one edge of said covers being formed with aligned recesses into which the fastener may be sprung and from which the fastener may be removed by a flexure of said fastener to increase the separation of said side portions.

2,744,531
CONTAINER WASHING APPARATUS
William McK. Martin, San Mateo, and James F. Ryan, Jr., Palo Alto, Calif., assignors to James Dole Engineering Co., San Francisco, Calif., a corporation of Nevada
Application December 17, 1951, Serial No. 262,118
1 Claim. (Cl. 134—125)



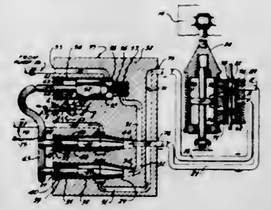
Apparatus for washing a series of spaced apart cylindrically shaped containers comprising means including a rotatable roller for supporting each container on its side and rotating it about its axis, means including an elongated trackway upon which a plurality of spaced apart containers can be supported for conducting said series of containers, an endless conveyor positioned above said trackway with one end thereof adjacent said container supporting means for positively feeding said series of containers onto said supporting means while maintaining them in such spaced apart relationship to cause each container of said series which is next adjacent said supporting means to bump the container on said supporting means and thus effect removal of such supported container from said supporting means, means adjacent the end of said conveyor which is adjacent said supporting means for pivotally mounting the conveyor to provide a floating mounting thereof and thus enhance frictional driving of said spaced containers by said conveyor, means including a stop adjacent the opposite end of said conveyor upon which said opposite end freely rests to fix the spacing between the under reach of said conveyor and said trackway at such opposite end, and means fluid to the successive containers on said supporting means to clean the same.

2,744,532
WASHING MACHINE
Erich R. Zademach, Hillside, N. J., assignor to Metalwash Machinery Company, Elizabeth, N. J., a copartnership
Application October 19, 1954, Serial No. 463,169
3 Claims. (Cl. 134—179)



1. A washing apparatus comprising a housing assembly adapted to receive therewithin the articles to be washed, spray means located within said housing, means for supplying washing solution to said spray means, said spray means including a main pipe located within said assembly and connected to said solution supplying means, a substantially vertical pipe attached to said main pipe, distributor means rotatably mounted on said vertical pipe, a plurality of radially spaced pipes extending outwardly from said distributor means and a plurality of nozzles provided along the length of each of said radially spaced pipes and a bifurcated portion at the end of each of said radially spaced pipes, one branch of said bifurcated portion being aligned with said radially spaced pipes, and a nozzle at each end of said bifurcated portion.

2,744,533
HYDRAULIC FUSE
Warde L. Parker, Los Angeles, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application April 23, 1951, Serial No. 222,437
8 Claims. (Cl. 137—87)



8. A hydraulic fuse comprising a valve casing having a supply passage therethrough adapted to conduct fluid from a source of fluid under pressure to a motor to be driven thereby, a return passage through said casing and adapted to conduct an equal amount of exhausted fluid from said motor to said fluid source, said supply and return passage each having a coaxial section of increased diameter to define a valve chamber intermedaite casing inlet and outlet openings thereof, the passage opening at one end of each of said chambers being flared into said chamber, a tapered valve poppet spring mounted for coaxial movement in each of said chambers within said flared openings from normally corresponding positions during all flow rates through said supply and return passages, an operating rod extending from the end of each valve poppet opposite the tapered end thereof through sealed casing apertures to the exterior of said casing, said operating rods being movable with said poppets, a coaxial shut-off valve chamber in said supply passage adjacent the casing inlet opening thereof, a shut-off valve spring mounted for movement in said chamber from a normal spring loaded fluid passing position to a fluid flow blocking position to shut off the flow of fluid through said supply passage, an operating rod extending from said shut-off valve through a sealed casing aperture to the exterior of said casing, a lever member connected to said operating rods of said valve poppets and engageable with said shut-off valve operating rod to move said shut-off valve against said spring into said flow blocking position in response to movement of said valve poppets from normal corresponding positions when the rate of fluid flow in one of said passages is unequal to the rate of fluid flow in the other said passage.

2,744,534
AIRLINE FILTER AND AUTOMATIC DRAIN VALVE
Delbert G. Faust and Jesse A. Wilson, Jr., Englewood, Colo., assignors to C. A. Norgren Co., a corporation of Colorado
Application August 22, 1952, Serial No. 305,836
5 Claims. (Cl. 137—195)

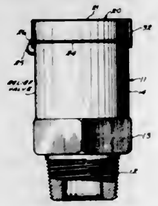
1. In a diaphragm-operated drain valve including a housing enclosing a diaphragm and an interconnected drain valve the improvement which comprises, a reciprocable piston in said housing adapted to rest on the upper surface of said diaphragm, the upper surface of said piston subject to actuating air pressure and the lower surface thereof subject to a reduced pressure whereby to hold the diaphragm in normal undistended position, a plurality of spaced-apart grooves lying on the opposite

side of said diaphragm in said housing, and passage means adapted to permit compressed air to flow into one of said grooves and there remain until the pressure thereof slightly distends said diaphragm exposing the



other said grooves whereby a large area of said diaphragm is exposed to said air pressure and the force of the air distends said diaphragm upwardly displacing said piston and whereby said distention actuates said drain valve.

2,744,535
RELIEF VALVE CAP
John D. Baldwin, Jr., Highland Heights, Ohio, assignor to The Weatherhead Company, Cleveland, Ohio, a corporation of Ohio
Application March 20, 1953, Serial No. 343,655
2 Claims. (Cl. 137—377)



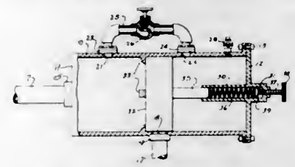
1. In combination a relief valve having a vertically disposed cylindrical outlet body, the outer wall of said body having a groove formed therein adjacent the upper edge of the body, a wire surrounding the body disposed in said groove, a cover for the body having a horizontally disposed imperforate top and a depending circular flange, said flange having a hinge opening, said cover having an inside diameter exceeding the diameter of said wire around the body to provide an annular clearance space between the inside of the flange and the body, said wire having an outwardly extending integrally formed loop portion projecting through said opening in said flange whereby the cover may swing away from closed position over the opening.

2,744,536
SHUT-OFF VALVE
Wilbur G. Buckner, Culver City, Calif.
Application April 30, 1954, Serial No. 426,771
3 Claims. (Cl. 137—413)



1. A valve adapted to shut off the flow of fluid into a tank when the level of fluid in said tank rises to a desired level, which comprises: walls forming a cylindrical channel which is open to said tank at its lower end; an elastic ball normally of slightly larger diameter than said channel and placed so that it can move freely in said channel between upper and lower limiting positions, said ball having a restricted opening along an axis of said ball and being at all times in contact with the walls of said channel; walls integral with the walls forming said channel and forming a chamber above said ball, said restricted opening on the axis of said ball being in open communication at all times with said chamber; an inlet pipe having a cylindrical valve seat at its upper open end, said seat being of substantially smaller diameter than the diameter of said ball and so placed that the ball can contact said valve seat and close the exit of liquid from said pipe when said ball is in its lowest position, said pipe being so placed that said pipe is in open communication with the tank through an opening below said ball when the ball is in an upper position, said ball being so placed and guided that said restricted opening provides a restricted passage from the pipe below said seat to said chamber; and means for controlling the fluid pressure in said chamber.

2,744,537
AUTOMATIC PRESSURE REDUCING CUT OFF VALVE FOR FLUID PRESSURE LINE
Cyrus J. Clark, Tad, W. Va.
Application February 20, 1953, Serial No. 337,970
1 Claim. (Cl. 137—462)

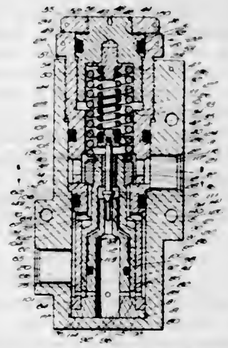


In an automatic cut-off valve, a cylinder having a side wall and first and second end walls, a fluid pressure inlet port in said first end wall, an outlet port in said side wall substantially midway between said end walls, a pair of first and second by-pass ports in said side wall, said first by-pass port being located between said first end wall and said outlet port and said second by-pass port being located between said outlet port and said second end wall, a single by-pass pipe extending between and connecting said by-pass ports, a manual valve connected in said by-pass pipe, a sleeve mounted axially on and extending through said second end wall, said sleeve having an open inner end terminating at a point spaced from and between said second end wall and said outlet port and serving as a piston stop, said sleeve having a closed outer end, stop lugs on said cylinder side wall close to the side of the outlet port facing said first end wall, a piston working in said cylinder between said stop lugs and the inner end of the sleeve and arranged to close the outlet port only when engaged with the stop lugs, and to open the outlet port and close said second by-pass port when engaged with the inner end of the sleeve, a piston rod fixed on a side of the piston and sliding in said sleeve, a compression spring in said sleeve having an inner end engaging the piston rod and having an outer end, and an adjusting screw threaded through the closed outer end of the sleeve having an abutment engaging the outer end of the spring.

2,744,538
HYDRAULIC PRESSURE RELIEF VALVE
Robert Stevenson, Barrington, R. I., assignor to Anco, Inc., a corporation of Rhode Island
Application May 17, 1952, Serial No. 288,461
2 Claims. (Cl. 137—490)

2. In a relief valve for a fluid system, a housing having a cylindrical core provided with an inlet port and an outlet port, a gland secured in said cylindrical core in fluid tight relationship and having a bore and a cut back face having a port connecting said bore with said outlet port, an adjustable nut positioned in said bore in

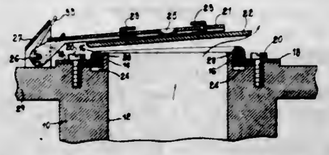
fluid tight relationship, a tubular insert provided with a recessed diameter and an internal collar provided with a first valve seat located in said cylindrical core in fluid tight relationship beneath the bottom of said gland and forming a first chamber between said recess diameter and said cylindrical core, ports in said tubular insert providing a fluid passageway through said tubular insert, a tubular lining having an inside and an outside diameter provided with a first beveled edge on its outside diameter and a second valve seat in the top of its inside diameter, ports in said tubular lining providing a fluid passageway through said tubular lining and located in said cylindrical core, a tubular lifting sleeve provided with a conduit and a second beveled edge approximately midway of its length and having a first valve formed in one end, and located in said cylindrical core between said tubular insert and said tubular lining, forming a fluid tight relationship with said tubular insert below said beveled edge and providing a port formed between the bottom of said tubular lifting sleeve and said lining,



said second beveled edge being aligned opposite said first beveled edge with a second chamber formed between said tubular lifting sleeve and said lining above said means which provides a fluid tight relationship, said conduit connecting said second chamber with said bore, said tubular lifting sleeve forming a third chamber with said tubular insert, said first valve engaging and disengaging said valve seat to open and close said third chamber, a spring located in said bore abutting said adjustable nut and said tubular lifting sleeve, a second valve slidably mounted in said tubular lifting sleeve engaging and disengaging said second valve seat, a second spring located in said bore abutting said adjustable nut and said second valve, said second valve being exposed in the fluid pressure at said tubular lining whereby to be moved from its seat upon a predetermined pressure being present thereat and to permit the fluid under pressure to enter said second chamber and move said lifting sleeve through action on said second beveled edge to actuate said first valve to provide a passageway from said inlet port to said outlet port.

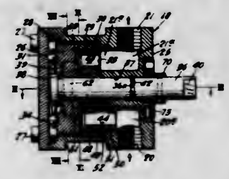
2,744,539
CHECK VALVE
David W. Jones, Commack, N. Y., assignor to Kenyon Instrument Company, Inc., Huntington, N. Y.
Application October 7, 1952, Serial No. 313,535
7 Claims. (Cl. 137—527.4)

4. A check valve for preventing the reverse flow of fluids, which comprises a body having a passage therethrough acting as a conduit for the fluid, the body having in an end surface thereof a recess surrounding one end of the passage, a valve disc opposite said end of the passage and movable to open and close the passage, a gasket of resilient material in said recess and having an annular top surface engageable by the disc in its passage-closing position, said body forming an annular wall between said gasket and passage, and means supporting the gasket in said recess in spaced relation to the bottom thereof and with the disc-engageable portion of the gasket protruding beyond said annular wall and end surface of the body, said



supporting means including a resilient element which allows displacement of the gasket along said annular wall to the bottom of the recess under pressure from the disc and returns the gasket to its normal protruding position upon release of said pressure.

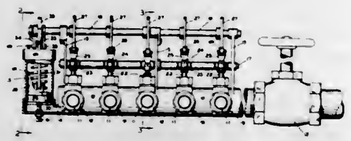
2,744,540
PLATE TYPE HYDRAULIC VALVE
Donald Zaner Erle, Van Nuys, Calif., assignor to Bendix Aviation Corporation, North Hollywood, Calif., a corporation of Delaware
Application January 9, 1953, Serial No. 330,574
11 Claims. (Cl. 137—624)



1. A valve comprising: casing means containing first and second relative slidable members having cooperating contact faces adapted to substantially seal with each other when pressed together, and means for relatively sliding said members between a neutral and an active position with respect to each other; means supporting said first member against movement with respect to said casing in direction away from the second member, the second member having a rear side opposite its contact face, and said casing having a backing face juxtaposed to said rear side and spaced therefrom; said first member having a fluid flow passage therein terminating in a port in its contact face and said second member having a pressure passage therein terminating in a pressure port in its contact face, the said ports being so positioned as to register with each other in said active position of said members and be displaced from each other in said neutral position; means defining a pressure chamber responsive to pressure therein for developing thrust between said second member and said backing face of said casing for urging said second member against said first member; and said second member having a duct therein connecting said pressure chamber to a portion of the contact face of the second member in the path of the port in said first member and adjacent to but spaced from the said pressure port in the second member whereby: fluid can flow from the pressure port in said second member to said pressure chamber only through a leakage path between said faces from said pressure port in said second member to said duct in said neutral position of said members, the leakage path is shortened by overlap of the port in said first member with said duct during approach of the ports in said two members toward each other, said pressure chamber is directly connected to both said ports while said port in said first member is overlapping both said duct and the pressure port in said second member, and fluid can flow from the pressure port in said second member to

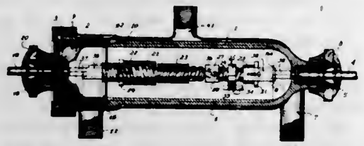
said pressure chamber only through a leakage path of increasing length between said surfaces from the port in said first member to said duct as the port in the first member moves from overlapping relation with said duct into full registration with the pressure port in said second member.

2,744,541
AUTOMATIC CONTROLLING DEVICE FOR BRANCH PIPE LINES
Henry G. Fleischhauer, Portland, Oreg.
Original application June 23, 1948, Serial No. 34,792, now Patent No. 2,641,280, dated June 9, 1953. Divided and this application May 26, 1953, Serial No. 357,543
2 Claims. (Cl. 137—627)



1. A device of the character described for controlling the passage of fluid from a main pipe into branch pipes successively, said device including a main delivery pipe, a shut-off valve for said main pipe, a plurality of branch pipes connected to said main pipe beyond said shut-off valve, said branch pipes spaced close together along said main pipe, a control valve in each of said branch pipes located near said main pipe, means connected with each of said control valves normally holding said control valves closed, a rotatable shaft located outside of said main pipe and said branch pipes, cam members carried by said shaft, means, including cam followers, connecting each of said cam members with said branch pipe control valves respectively, said cam members so positioned as to operate successively and serially to open their respective control valves as said shaft is rotated, a ratchet wheel connected with said shaft, a cylinder, a piston within said cylinder, said cylinder connected to said main pipe and so arranged that fluid pressure in said cylinder will be the same as in that portion of said main pipe where said branch pipes are connected and will cause said piston to move in one direction when said shut-off valve is opened, spring means for returning said piston to starting position when said fluid pressure is relieved upon the closing of said shut-off valve, and a ratchet-engaging element operated by said piston and producing partial rotation of said ratchet wheel whenever said piston is moved by said fluid pressure, whereby when said piston is moved by said fluid pressure caused by the opening of said shut-off valve the resulting partial rotation of said ratchet wheel and said shaft will cause one of said control valves to be opened and a previously-opened valve to return to normal closed position.

2,744,542
MIXING FAUCET FOR SHOWERS AND THE LIKE
Lawrence V. Foster, East Liverpool, Ohio
Application March 27, 1952, Serial No. 278,843
3 Claims. (Cl. 137—630.18)

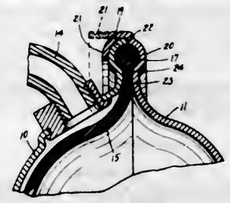


1. A hot and cold water mixing device of the character described comprising a casing having in its inner wall two longitudinally extending ways at either end of which is located an intake port connected to hot and cold water lines respectively and an exhaust port, said intake ports having seats, two valve members which ride in said ways engaging and disengaging the seats of said intake ports, a shaft disposed longitudinally of said casing, a stem extending through one end of said casing, means including said stem for rotating said shaft for simultaneously moving said valves in opposite directions away from said intake ports toward one-another for opening or vice versa for closing both of said valves at one time thereby controlling the combined volume of flow from said intake ports, said shaft being provided with two oppositely threaded portions, said valves threaded to said threaded portions, said shaft slip jointly connected to said stem, a second shaft disposed longitudinally of said casing and swivelly connected to said first mentioned shaft, a second stem slip jointly connected to said second mentioned shaft and extending through the other end of said casing, said second mentioned shaft having a threaded portion, a collar threaded to said threaded portion of said second shaft, said collar having a projection extending into one of said ways, said ways co-operating with said valves and said collar preventing said valves and said collar from rotating with their respective actuating shafts, a positioning spring interconnecting said collar and said casing, one end of said positioning spring being rigidly attached to said casing while the other or moveable end is positioned between two lugs projecting from said collar, other means including said second stem for rotating said second shaft for simultaneously moving said valves in a common direction toward one of said intake ports and away from the other of said intake ports hence gradually increasing to full the volume of flow from one of said intake ports while decreasing to the same degree the volume of flow from the other of said intake ports or vice versa without affecting the combined volume of flow from said intake ports, said second mentioned means being operated independently of first mentioned means, when said valves are away from said seats the elastic force of said positioning spring holds said collar motionless causing said second shaft when rotated to move through said collar thereby moving said valves in unison toward one of said intake ports and away from the other of said intake ports or vice versa, when moving both of said valves against their seats by rotation of first mentioned shaft and when one or the other of said valves reaches its seat first the elastic force in said positioning spring yields to the actuating force allowing said collar to move toward the unseated valve permitting said unseated valve to seat also upon further actuation of said first means, when both of said valves are moved away from said seats by rotation of said first shaft or when the device is turned on the stored elastic force in the depressed positioning spring is released thereby automatically repositioning said valves between said intake ports in such a manner that the individual volume of flow from each individual said intake port is identical to the individual volume of flow being emitted therefrom when the device was last turned off, said automatic readjustment occurring when said valves are moved away from said seats by first mentioned means to a position between said intake ports where the combined volume of flow from said intake ports is equal to the combined volume of flow being emitted therefrom before said valves were last moved into contact with said seats to stop all flow therefrom.

2,744,543
AIR CONTROL UNIT
Francis E. Brady, Jr., Muncie, Ind.
Application September 27, 1954, Serial No. 458,508
2 Claims. (Cl. 137—791)

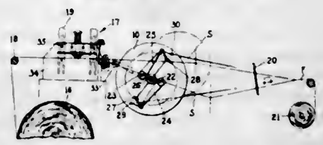
1. In an air control unit a pair of side wall housing elements, each formed with opposed peripheral dished portions, a flexible diaphragm mounted between said elements having a peripheral bead provided with an initially flattened outer face, said bead being of the same

generally circular contour in cross section and initially of a diameter greater than the space between the abutting dished portions of said elements, an annular clamping flange normally extending laterally from one of said dished portions to surround the opposed dished portion and be bent inwardly thereof to embracing and clamping



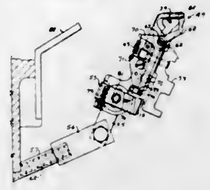
position, and an annular shoulder provided intermediate said flange and its dished portion, said shoulder being positioned in abutting engagement by the outer edge of said opposed dished portion for maintaining said throat portions in spaced relation out of compressing engagement with the flexing perimeter of said diaphragm.

2,744,544
LOOM STOP MOTION
Maurice R. Flamand, Central Falls, R. I., assignor to Draper Corporation, Hopedale, Mass., a corporation of Maine
Application August 28, 1953, Serial No. 377,013
11 Claims. (Cl. 139—354)



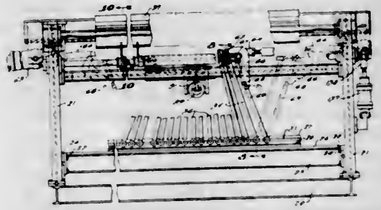
1. In a selvage thread shedding and twisting means for looms which includes a rotating member cooperating with a thread feeding means rotating with said member to prevent twisting of the thread between the member and feeding means, looms stopping means and other means rotatable with said member and feeding means and under control of the selvage threads for actuating said loom stopping means upon failure of a selvage thread.

2,744,545
FILLING DETECTION FOR WEAVING MACHINE
Ralph B. Taylor, Sr., East Cleveland, and Robert Whewell, Jr., Garfield Heights, Ohio, assignors to The Warner & Swasey Company, Cleveland, Ohio, a corporation of Ohio
Application February 11, 1953, Serial No. 336,306
13 Claims. (Cl. 139—374)



1. In a weaving machine of the gripper shuttle type having a lay carrying shuttle guides moving into the shed for shuttle picking, and moving out during the beat-up motion of the lay, a weft thread detector comprising a stationary finger and a pivoted movable finger adapted to be mounted among the shuttle guides, the pivoted finger having a detector arm spaced from the stationary finger but with a tip extending toward the stationary finger to form therewith an additional shuttle guide, a transversely extending arm and a downwardly extending arm, the stationary finger being slotted to receive the tip end of the detector arm of the movable finger, a resilient device secured to the transverse arm of the pivoted finger for biasing the pivoted finger to the closed position with the detector arm of the pivoted finger engaged in the slot in the stationary finger, a catch secured pivotally to the lower end of the downwardly extending arm of the said pivoted finger, a rockable lever having a slot adapted to cooperate with said catch and a telescoping stop motion rod pivoted at one end to the stop motion lever, the rockable lever being joined to the stop motion lever at its other end, the stop motion rod having resilient means for resisting compression of the rod and the stop motion rod being adapted to actuate mechanism for stopping operation of the weaving machine upon longitudinal motion beyond a predetermined distance, the rockable lever being provided with resilient means for causing rotation therein of in opposition to the resilient means opposing compression of the stop motion rod but weaker than the latter so as to be overcome thereby when the stop motion rod is compressed, the stop motion rod being so mounted in relation to the lay as to be compressed and moved toward the stopping position of the stop motion mechanism when the lay is in the out of shed position, whereby the presence of a weft thread within the shuttle guides as the shuttle guides are retracted from the shed causes the deflection of the pivoted finger of the weft thread detector to form a gap for release of the weft thread, such movement being against the force of the resilient means of the pivoted finger, deflecting the lower arm thereof to the position wherein its catch is free to enter the slot in the rockable lever, permitting the latter to give, whereby the stop arm rod is not moved far enough longitudinally to effect stop motion, but in the event of weft thread failure, the failure of the pivoted finger to be deflected as the weft detector is retracted from the shed causes the downwardly extending arm of the pivoted finger to remain in a position blocking rotation of the rockable lever, thus causing increased longitudinal motion of the stop arm rod during the beat-up motion of the lay and thereby causing the weaving machine to be shutdown in response to weft thread failure.

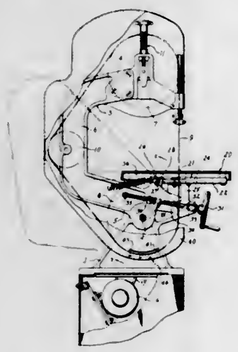
2,744,546
MACHINE FOR BENDING WIRE INTO IRREGULAR SINUOUS FORM
Richard J. Williams, Birmingham, Mich., assignor to American Metal Products Company, Detroit, Mich., a corporation of Michigan
Application June 4, 1952, Serial No. 291,606
24 Claims. (Cl. 140—91)



1. A machine for forming a length of wire into predetermined shape, including, in combination, a plurality of forming links having forming portions about which the wire is bent, link bars disposed between said forming links and pivoted thereto, means for moving the links from extended aligned relationship to predetermined sinuous relationship with the link bars revolved sub-

stantially 90° and the forming links moved outwardly and toward each other parallel to their aligned position substantially in the form in which the wire is to be bent, and stop means carried by the forming links for regulating their relative position at the end of the forming operation to provide a proper shape to the wire and including a predetermined desired over-bend to take care of the spring back which occurs when the formed wire is moved from the links.

2,744,547
TILTING BAND SAW MACHINE
Edward Bruce Sevetz, Sr., West Hartford, Conn., assignor to Hampden Brass and Aluminum Company, Springfield, Mass., a corporation of Massachusetts
Application January 3, 1955, Serial No. 479,429
8 Claims. (Cl. 143—24)



2. In a band saw machine including a base, a frame pivotally connected to the base, at least one saw band supporting wheel rotatably carried by the frame, a saw band supporting wheel rotatably carried by the base and mounted for rotation about the axis of said pivotal connection, and a saw band trained around said wheels; a horizontal work table having an opening for the passage of the cutting run of the saw band, said table being mounted on the base for horizontal reciprocation, a radially directed slot formed in the frame and lying on a given radiant (proceeding from said axis) of the frame, a pin fixed to the table and engaging in said slot, said pin in a given position of the frame being located on said radiant at the intersection of said radiant by a line drawn parallel to the plane of the table from the point at which a radial line, defining with the radiant a predetermined angle of pivotal movement of the frame from said given position, is intersected by a line drawn parallel to said radiant through a point on the table spaced from the intersection of the radiant with the plane of the table, in the direction of the angular movement of the frame, a distance equal to the distance traveled by the point of intersection of the saw band and table in the tilting of the saw band and frame through said predetermined angle of pivotal movement.

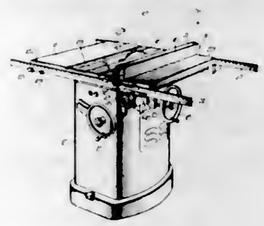
2,744,548
SAW CHAIN AND TOOTH THEREFOR
Henry R. Stephenson and Dewey E. Gommel, Indianapolis, Ind., assignors, by mesne assignments, to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application August 15, 1952, Serial No. 304,618
12 Claims. (Cl. 143—135)

1. A saw chain link carrying a cutter formed to provide a flat, sharpened shank portion and a flat, sharpened toe portion disposed respectively in planes substantially perpendicular to each other, and an intermediate flat,



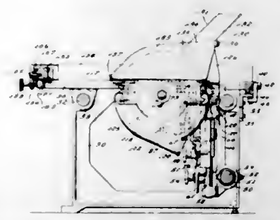
sharpened portion joining said toe portion and said shank portion in abrupt angles.

2,744,549
PRECISION GUIDE FENCE FOR POWER TOOL WORK TABLE
Wallace D. Johnson, Beloit, Wis., assignor to Yates-American Machine Company, Beloit, Wis., a corporation of Delaware
Application May 21, 1953, Serial No. 356,575
17 Claims. (Cl. 143—174)



12. A work gauge adapted for use on a machine tool having a work table and parallel supporting rails at opposite edges of the table, said gauge having a body portion and slotted end portions slidably mounted on the supporting rails, latch plates operable in the slots in each of said end portions, a carrier bar on which the latch plates are mounted, said carrier bar being slidably mounted within the body and end portions of said gauge, means for resiliently urging said carrier bar in a direction to engage the latch plates with the supporting rails, and an operating lever pivotally mounted at one end of the gauge for engaging with the carrier bar and for moving the same to release the latch plates from the supporting rails.

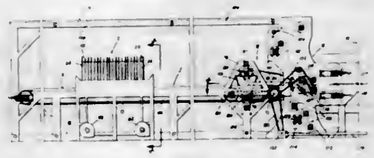
2,744,550
MULTIPLE POSITION WOODWORKING MACHINE
Walter Knapp, Manheim Township, Lancaster County, Pa., assignor to Reamstown Products Company, Reamstown, Pa., a corporation of Pennsylvania
Original application February 12, 1952, Serial No. 271,195. Divided and this application June 1, 1954, Serial No. 433,641
9 Claims. (Cl. 144—134)



7. In a joiner, a work supporting table, a tool motor including a housing and having an arbor extending through one end wall of the housing, a rotary cutter positioned on the arbor, means operatively associated with said table for mounting the tool motor with said

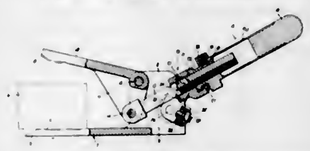
cutter in a predetermined position of elevation and angularity with respect to work supported on said table, and combined work guide means and cutter guard means affixed to said motor housing end wall.

2,744,551
VENEER FEEDER AND CONVEYOR UNIT
Claude A. Burkholder, Fresno, Calif., assignor to General Box Distributors, San Francisco, Calif., a corporation of California
Application August 16, 1954, Serial No. 450,153
14 Claims. (Cl. 144—279)



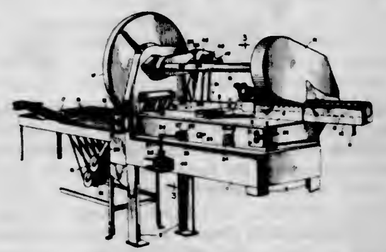
2. Apparatus for continuous-run manufacture of composite sheet material having an intermediate lamination of transversely extending wood veneer sections in a longitudinal row, and outer laminations of paper in longitudinal runs adhesively bonded thereto; said apparatus comprising, in timed driven relation, a longitudinal initial conveyor having an advancing run, means to feed a row of wood veneer sections onto the initial conveyor for advance by said run, a sheet material laminating mechanism disposed adjacent but beyond the delivery end of the initial conveyor, such mechanism feeding the runs of paper and being operative to receive and adhesively bond the row of wood veneer sections therebetween, and a transfer conveyor operative to transfer the row of wood veneer sections from the delivery end of the initial conveyor to said laminating mechanism; said transfer conveyor including a pair of longitudinal, vertically alined endless conveyors having adjacent, cooperating, longitudinal runs driven in the direction of advance; said alined runs being disposed to receive the row of wood veneer sections in frictional engagement therebetween at an initial point rearwardly of the point of delivery of said row from said initial conveyor, and the discharge point of said alined runs being closely adjacent, and delivering said row to, a receiving point in the laminating mechanism.

2,744,552
ADJUSTABLE TOGGLE ACTUATED PAPER CLAMP
Abraham Novick, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a corporation of New York
Application September 26, 1952, Serial No. 311,577
5 Claims. (Cl. 144—302)



1. In a clamping device, a lower jaw comprising a flat plate having two spaced upstanding members, an upper jaw including a flat plate hingedly mounted between said upstanding members of said lower jaw and having a rounded gripping portion adapted to provide line engagement with the object clamped and a pair of downwardly depending members, adjustable toggle means for operating said clamping device including a threaded shaft pivotally connected to said depending members, a block slidably mounted about said shaft, a handle member threadingly engaged on said shaft and having a collar portion, said block having a collar engaging portion longitudinally interlocking said block to said handle, a pair of links connected by a cross-member pivotally supporting said block to said upstanding members of said lower jaw, adjustable stop means supported from said cross-member and adapted to prevent said toggle means from exceeding a position slightly beyond its dead center position.

2,744,553
SLICING MACHINE HAVING MEANS FOR REGULATING THE NUMBER OF SLICES IN A GROUP
Joseph Folk, La Porte, Ind., assignor to U. S. Slicing Machine Company, Inc., La Porte, Ind., a corporation of Indiana
Application May 17, 1951, Serial No. 226,809
2 Claims. (Cl. 146—94)

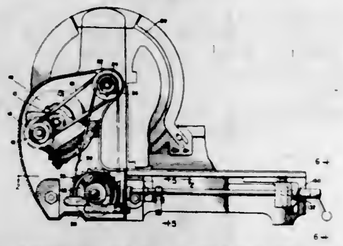


1. A slicing machine comprising a table for supporting a substance to be sliced, a constant speed, continuously rotating knife at one end of the table for cutting the substance, a pusher mounted to move along the table for advancing the substance toward said knife, a continuously moving conveyor extending from said end of the table for receiving successive slices of the substance in shingled arrangement spaced in groups, hydraulic means connected to the pusher for advancing the same at a rate dependent on the rate of delivery of hydraulic fluid to said means, a valve connected for fully interrupting the flow of hydraulic fluid and the advancement of the pusher for thereby grouping the slices received by the conveyer, a solenoid connected to close said valve, a switch operable to energize the solenoid, means on a constantly rotating part of said slicing machine to engage said switch momentarily once per rotation of said part to energize the solenoid, and adjusting means to regulate the speed of said constantly rotating part to adjust the intervals between the successive switch operations to thereby regulate the number of slices in each group received on the conveyor.

2,744,554
SLICING MACHINE CONTROL
Frederick George King, London, England, assignor to U. S. Slicing Machine Company, Inc., La Porte, Ind., a corporation of Indiana
Application March 22, 1951, Serial No. 216,955
Claims priority, application Great Britain September 28, 1950
2 Claims. (Cl. 146—102)

1. In a slicing machine having a continuously rotating knife shaft, a slicing knife secured on the knife shaft, and a reciprocating carriage driven by a carriage shaft which is drivingly coupled to a clutch shaft, control apparatus for selectively driving and braking the movement of the carriage, said apparatus comprising a sprocket rotatably mounted on the clutch shaft, and a chain drive coupling the clutch shaft to the knife shaft to be continuously rotated thereby, said sprocket having a drum part with an inner cylindrical surface, a clutch mounted on the clutch shaft and rotatable therewith, said clutch being within the drum part of the sprocket and having

an expandable band for engagement with the inner cylindrical surface thereof, a clutch operating member mounted on the clutch and adapted to expand the band outwardly, a shiftable member having a part disposed around the clutch shaft and in contact with the clutch operating member, a brake drum mounted on the carriage shaft, a brake band engaging the brake drum for braking the movement of the carriage, and a hand operated member adapted to be selectively moved into any of several operating positions, said hand operated member



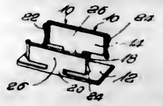
being mechanically coupled to the shiftable member and being operable to move the shiftable member axially of the clutch shaft thereby causing the clutch operating member to expand the band and engage the clutch when the hand operated member is moved into a first of the operating positions, said hand operated member being further mechanically coupled to the brake band and being operable to tighten the brake band upon the brake drum thereby braking the movement of the carriage when the hand operated member is moved into a second of the operating positions.

2,744,555
METHOD OF SIMULTANEOUSLY PHOSPHATING AND CLEANING METAL SURFACES AND COMPOSITION THEREFOR
Andrew Nicholson, Isleworth, Middlesex, and Cyril Frank Wilkinson, Feltham, Middlesex, England, assignors to Parker Rust Proof Company, Detroit, Mich., a corporation of Michigan
No Drawing. Application March 31, 1951, Serial No. 218,696
Claims priority, application Great Britain March 31, 1950
6 Claims. (Cl. 148—6.15)

1. A process for simultaneously cleaning and producing a phosphate coating on the surfaces of metal of the group consisting of iron and zinc and their alloys which comprises the steps of (1) applying to the surface an aqueous solution of an acidic phosphate of an alkali metal in the presence of an accelerator having an effect on the coating action substantially equal to that of about .5 percent to 4 percent chlorate, 1 percent to 10 percent of a hydrocarbon solvent, and a non-ionic oil-in-water emulsifying agent of the polyoxyethylene type having 3 to 25 polyoxyethylene groups therein in an amount sufficient to form a stable emulsion of said solvent, said solution having a pH of from 3.5 to 5.8 and continuing the application until a coating results, and (2) rinsing the coated surface with a dilute solution of chromic acid.

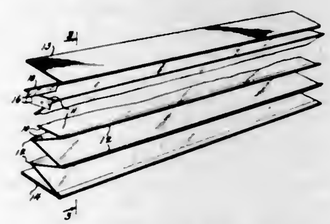
2,744,556
TOP WALL HANDLE INSTALLATION AND HANDLE END HOLDER THEREFOR
Daniel I. Reiter, New York, N. Y.
Application June 8, 1954, Serial No. 435,147
6 Claims. (Cl. 150—33)

1. A one-piece anchor or holder for the end of the strap portion of a pocketbook handle, said anchor or holder comprising a pair of substantially U-shaped arms disposed in space confronting relation to form a tubular socket for receiving an end of a strap portion and having free end edges, said end edges being disposed in slightly side by side overlapping relation and adapted to be moved together to clampingly embrace a strap portion end axially disposed in the socket and a flat body portion supporting



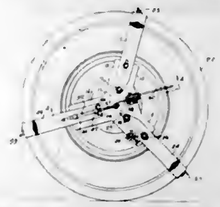
said arms and from which the arms perpendicularly extend, said body portions extending normal to the socket beyond the socket forming confines of the arms to define a bearing washer for the arms.

2,744,557
FOLDABLE FILE
Murray H. Link, Orinda, Calif.
Application February 16, 1953, Serial No. 337,115
2 Claims. (Cl. 150—39)



1. An expandable file for storing strip material comprising a pair of sheets of transparent material that are folded upon each other in zig-zag fashion to form an accordion shaped expandable file having a plurality of elongated and relatively narrow pockets open at both ends, narrow portions of said sheets along said folds being bonded together to form integral four ply ribs at said folds, said ribs having a width greater than the thickness of said four plys to lend shape retaining strength to said pockets when said file is extended for the visual inspection of the contents of said file through the transparent walls of said pockets, and a pair of covers cemented to the end folds of said folded sheets, said covers being substantially co-extensive with said end folds and also lending rigidity to the folded device.

2,744,558
ANTI-SKID DEVICE
Eugene A. Ciavola, Clinton, Mass.
Application December 12, 1952, Serial No. 325,631
1 Claim. (Cl. 152—228)



In an anti-skid device for a vehicle wheel, a plate having first, second, and third rigid radial arms, first, second, and third radial traction arms overlying said first, second, and third fixed arms, respectively, first means securing said first traction arm to said first plate arm for minor radial adjustment of the first traction arm relative to the first plate arm, second means securing said second traction arm to said second plate arm for greater radial adjustment of said second traction arm relative to said second plate

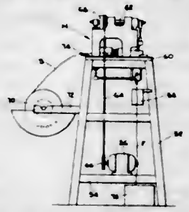
arm, third means securing said third traction arm to said third plate arm for greatest radial adjustment of said third traction arm relative to said third plate arm, said third traction arm being freely slidable radially relative to said plate arm, and toggle lever means mounted on said plate across from said third traction arm at a point between said first and second plate arms and operatively connected to said third traction arm, and releasable detent means mounted on said second plate arm and engageable with said second traction arm for locking said second traction arm in adjusted position.

2,744,559
TUBELESS TIRE VALVE STEM
Ronald W. Leonetti, Cleveland, Ohio, assignor to The Dill Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application February 11, 1953, Serial No. 336,355
1 Claim. (Cl. 152—427)



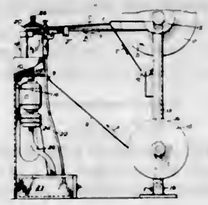
A valve stem adapted for mounting upon a rim for tubeless tires which rim is provided with a standard valve stem opening comprising a hollow body provided internally with means to receive a valve insides, said body at its inner end provided with a head having an opening communicating with the interior of the hollow body, a washer having a central opening of essentially the same diameter as the said body which engages upon the hollow body at its inner portion and also engages said head, said washer having a greater length and a lesser width than the diameter of the standard valve stem opening in the rim with which it is adapted to be assembled, whereby the said washer is insertable through the valve stem opening in the rim when the washer is tilted with respect to said opening, a resilient bushing having a central opening which engages with said hollow body and may be moved along the same, said bushing having an extension adapted to occupy the valve stem opening in the rim on which the tubeless tire is to be mounted, and a nut threaded upon the exterior of said hollow body and adapted to engage the said bushing to compress the same and to draw the said washer against the tire rim, whereby to effect an airtight seal between the valve stem and said rim.

2,744,560
APPARATUS FOR MANUFACTURING SLIDE FASTENER STRINGERS
Max F. Johns and La Moine E. Johns, Bloomfield, N. J., assignors to Conmar Products Corporation, Newark, N. J., a corporation of New Jersey
Application December 15, 1949, Serial No. 133,110
13 Claims. (Cl. 153—1)



1. Apparatus for manufacturing slide fastener stringers comprising a series of fastener elements clamped onto the beaded edge of a tape in spaced relation, said fastener elements each having a head portion formed with a recess on one side and a projection on the other side and a pair of jaws clamped about the beaded edge of the tape, said apparatus comprising means for feeding a tape, means for feeding a continuous strip of fastener element material in a direction perpendicular to the tape, a severing die, a severing punch actuated to cooperate with said die to successively and completely sever fastener elements from the end of the strip as said strip is fed over the die, said die being provided with an aperture therethrough having a wall which corresponds in contour with the contour of a fastener element head portion, said aperture permitting the tape, the punch and a fastener element to pass therethrough with the punch delivering a fastener element to a station directly below the die, the edge of said tape passing through said station so that the jaws of the fastener element are astride the edge of the tape when the punch delivers a severed fastener element to said station, support means movable to said station below the die for receiving, arresting and positionally locating the severed fastener element at said station, clamping means movable to said station for clamping the severed fastener elements successively onto the tape in spaced relation, the wall of the die aperture serving to control the position of a fastener element as it is being delivered to said station, and means for moving said support means and clamping means.

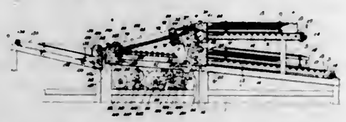
2,744,561
MACHINE FOR USE IN THE MANUFACTURE OF ZIP FASTENERS
Eric Engel Cuckson, Cardiff, Wales, and Arthur L. Jones, St. Mary, New South Wales, Australia, assignors to W. E. Cuckson & Son Limited, Sheffield, England, a British company
Application November 25, 1949, Serial No. 129,296
2 Claims. (Cl. 153—1)



1. In a machine for use in the manufacture of zip fasteners, a tape drum for feeding a tape in a step-by-step manner through the machine, means for feeding a strip of material from which zip fastener interlocking members are to be formed in a step-by-step manner through the machine, a reciprocatable punch for punching interlocking members from the strip of material, means for clamping the interlocking members on to the tape, a stationary shaft, a single driving shaft substantially parallel to said stationary shaft, a plurality of eccentrics fixed to said driving shaft for operating said tape drum, said strip feeding means, said punch and said clamping means in timed relationship to one another, the said punch being arranged to reciprocate in a direction substantially perpendicular to the said driving shaft, and at least a part of said tape drum being arranged for intermittent rotation around said stationary shaft, a die co-operating with said punch, an ejector for urging the strip of material away from said die and against said strip feeding means, a punch presser for urging the punch away from said die and towards the eccentric for operating the punch, a fork on said punch for circumventing the strip material and contacting the punch presser, the said punch having a slot forming a passage for said strip feeding means, and means for reciprocating said strip feeding means in a direction substantially parallel to said driving shaft, the reciprocations of said punch and said strip feeding means

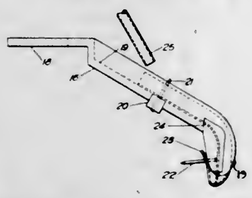
being so timed that when in use the strip is pressed against the die by the punch and clears the strip feeding means, the said strip feeding means performs its return stroke and when the punch recedes from the die, the said strip feeding means performs its feed stroke, the ejector pressing the strip into contact with said strip feeding means.

2,744,562
APPARATUS FOR ASSEMBLING ADVERTISING DISPLAYS
John B. La Rocca, Valley Streams, and James V. La Rocca, Springfield Gardens, N. Y., assignors to Pioneer Mounting & Finishing Co., Inc., New York, N. Y., a corporation of New York
Application June 14, 1950, Serial No. 167,954
8 Claims. (Cl. 154—1.6)



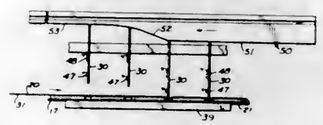
1. Assembling apparatus comprising conveyors each for bearing a stack of blanks to be joined together, one by one from each stack, additional conveyors, one in line with each of the first-named conveyors, to receive the blanks from said stacks, gluing means adjacent one of the additional conveyors, pressing means adjacent the additional conveyors to which the blanks are delivered after passing the gluing means, an operating shaft, comprising rotatable sections at each end, clutches, one for connecting and disconnecting each of said sections, and operating connections between one of said sections and one of said first-named conveyors and the other section and one of said additional conveyors, said apparatus also comprising switches to be engaged by said blanks on the additional conveyors, and electric circuits including a source of power and means for operating said clutches.

2,744,563
COATING DEVICE FOR STRANDS
Fred A. Mennerich, Woonsocket, R. I., assignor to Owens-Corning Fiberglas Corporation, a corporation of Delaware
Application March 2, 1953, Serial No. 339,602
5 Claims. (Cl. 154—1.7)



1. A pad-holding device for grouping a plurality of filaments into strand form comprising a longitudinal member having a tip portion across which filaments are drawn for grouping, said member having a size-saturable pad strip associated therewith and being shaped with a longitudinal groove therein for accommodation of the pad strip therein, said tip portion being gradually narrowed to substantially a blunt point at its end, a pair of pad-securing pins to piercingly engage said pad strip to hold it within the groove, one of said pins being fixed on said member a substantial distance from said tip portion, said one pin projecting vertically upward from the base of said groove and generally perpendicular to said member, the other of said pins extending downwardly from the base of said groove and projecting from the back of said tip portion, said pad strip being held in the groove of said holder by being extended in drawn relationship from behind said tip portion over its end along the length of said groove to said one pin to form a projecting point of fold-over of the pad material.

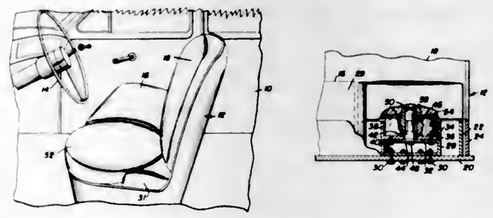
2,744,564
METHOD AND APPARATUS FOR MAKING AUTOMOBILE DOOR PANELS
Ralph E. Woodburn, Southfield Township, Oakland County, Mich.
Application October 22, 1952, Serial No. 316,285
17 Claims. (Cl. 154—41)



1. The method of making a vehicle body door upholstery panel including a number of beads covered with upholstery material, said method including the steps of providing a panel base with raised portions forming cores for the beads and having grooves therebetween, arranging the upholstery cover material over said panel base and pushing said upholstery cover material into the grooves in successive arrangement, the material being pressed down into one groove first and then progressively pressed down into the adjacent and successive grooves, the pressing down being accomplished in one groove at a time, rather than in a simultaneous pressing down operation.

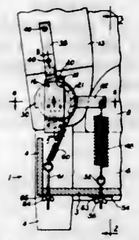
7. A machine for applying upholstery material to beaded base panels, said machine comprising a work table adapted to receive a work panel and to locate the same, a plurality of individually slidable plates having work edges adapted when actuated to push the upholstery material into depressions between said beads when the work panel is located to have said depression aligned with respect to said plates, and means to actuate said plates successively to have the previous plate bring the upholstery material all the way to the bottom of the respective depression on the beaded base panel before the next plate contacts the material over the next depression.

2,744,565
REVOLVABLE VEHICLE SEAT
Benjamin Zwick, Knoxville, Tenn.
Application January 3, 1952, Serial No. 264,722
1 Claim. (Cl. 155—5)



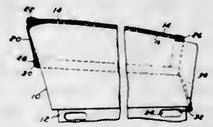
An automobile seat comprising a cushion and a back rest, said cushion being provided with an opening therein, said opening extending inwardly of the cushion from the front edge and one side edge thereof, a cylindrical individual seat portion disposed within said opening, a spindle carried by the frame of the seat, said individual seat portion having a bearing member with a vertical bore therein mounted on said spindle, said spindle extending within a guide member supported on said frame, said guide member rotatably receiving said bearing therein.

2,744,566
BRACKET FOR BACK REST OF ARTICLE OF FURNITURE
Henry Schmidt, Chicago, Ill., assignor to H. Schmidt Mfg. Co., Chicago, Ill., a corporation of Illinois
Application May 10, 1951, Serial No. 225,555
1 Claim. (Cl. 155—160)



A hinge bracket for the back rest of a tilted back chair said hinge bracket comprising a mounting plate for mounting the same on a chair frame, said mounting plate having an axle pin extending therefrom, a disc supported and rotatable on said axle pin, said disc having a peripheral flange comprising a brake drum, there being a gap in the disc of an arcuate extent less than the circumference of the disc, a stop pin extending from the mounting plate into said gap and in the opposite extreme positions of the disc being engaged on the opposite edges of the gap portion of the disc to stop angular movement of the disc, said disc having secured thereto on one side thereof a mounting strap projecting therefrom for mounting a back rest thereon and having secured to the opposite face thereof another mounting strap, a return biasing spring secured to the end of said other mounting strap, an additional pivot pin secured to the mounting plate and parallel to the axle pin and spaced therefrom a distance greater than the radius of the disc, a brake shoe pivoted to said last mentioned pin, spring means for pressing the brake shoe towards the brake drum, hand operated adjusting means for adjusting the force applied by the return biasing spring, and hand operated adjusting means for adjusting the force applied by the said spring means, each of said hand operated means including a turnable member which is turnable to adjust its spring.

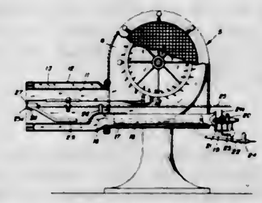
2,744,567
SEAT COVER
Daniel Charles Larkin, Detroit, Mich.
Application May 12, 1953, Serial No. 354,555
5 Claims. (Cl. 155—182)



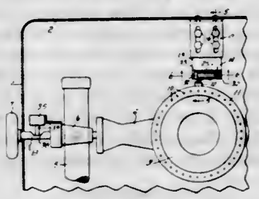
4. In a seat cover for automobiles and the like a top pad, a sponge rubber layer secured to the lower surface of said top pad and coextensive therewith, a skirt depending from the front and side edges of said top pad, said skirt having a width less than the height of the seat to which it is applied, an elastic cord secured to the lower edge of said skirt throughout its entire length and extending beyond the lower rear corners of said skirt, and hook members secured to the ends of said elastic cord.

2,744,568
GAS-OIL CONVERSION BURNER TUBE
Arleigh Q. Johnson, Fulton, Mo.
Application April 21, 1952, Serial No. 283,357
1 Claim. (Cl. 158—11)

In a burner including a fan housing having an outlet side and a burner tube having one end attached to said side and an opposite open fuel delivery end, a sleeve in said tube communicating at one end with said housing through said side and forming with said burner tube an annular gas passageway terminating at and delivering gas to said fuel delivery end of said tube, an enlarged throat extending from said passageway at the attached end of said tube into the bottom of the fan housing, a gas and air mixing tube in the bottom of the housing extending through an opposite side of the housing into said throat, valved control means for supplying gas under pressure to said tube, an oil line extending through said housing and sleeve to said delivery end of said tube, a burner tip on said oil line at the delivery end of said tube, a gas pilot in said sleeve at the delivery end of said tube for igniting gas delivered to said delivery end of said tube, and electrodes in said sleeve for igniting both said burner tip and said pilot.



2,744,569
AUTOMATIC IGNITION MECHANISM FOR GASEOUS FUEL BURNERS
John M. Hoff, Mansfield, Ohio, assignor to The Tappan Stove Company, Mansfield, Ohio, a corporation of Ohio
Application April 1, 1954, Serial No. 420,249
12 Claims. (Cl. 158—115)



1. A burner mechanism for a gaseous fuel range comprising a main burner having a plurality of main jets in an upper surface thereof, an auxiliary jet extending outwardly from a side wall of said burner below the main jets therein and operative when ignited to ignite said main jets, an ignition and control element mounted adjacent said auxiliary jet and directly receiving fuel therefrom, an electric resistance ignition coil carried by said element out of the path of gaseous fuel being emitted by said auxiliary jet, and deflecting means independent of said main burner carried by said element by which said gaseous fuel is deflected into engagement with said ignition coil, whereby said gaseous fuel is ignited by said ignition coil when said coil is energized.

2,744,570
VAPOR COLLECTING AND FLUID PREHEATING SYSTEM FOR EVAPORATORS
Lowell W. Petersen, Homewood, Ill., assignor to Swift & Company, Chicago, Ill., a corporation of Illinois
Application August 11, 1953, Serial No. 373,570
5 Claims. (Cl. 159—46)

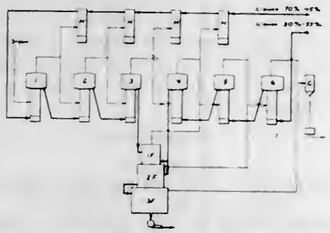
3. A vapor distributing and preheat system suitable for use in an evaporator having a liquid-containing body portion and a vapor head space, said system including a baffle, said baffle defining an upper and lower vapor

space, a preheat area disposed laterally about said upper vapor space, a wall separating said preheat area from said upper vapor space, preheat coils disposed within said preheat area, and vapor distributing means forming



a part of said wall to direct the vapor flowing from said upper vapor space into said preheat area into substantially uniform heat exchange relation with the total area of said preheat coils.

2,744,571
EVAPORATING PROCESS
James Mair, Birmingham, Ala., assignor to Goslin-Birmingham Manufacturing Company, a corporation of Alabama
Application September 28, 1953, Serial No. 382,531
11 Claims. (Cl. 159—47)



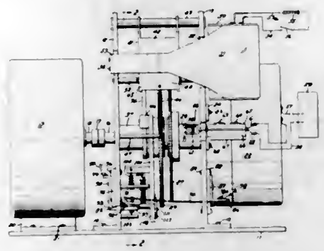
6. In the evaporation of sodium aluminate liquor in a multiple effect system, the process which comprises dividing the liquor feed between a first and a second group of the effects, feeding a portion of the liquor in forward flow with respect to vapor flow through said first group of effects, feeding the other portion of the liquor in backward flow with respect to vapor flow through said second group of effects, and passing the liquor from the last of the first group of effects and the first of the second group of effects through a series of flash tanks whereby the liquor attains full concentration in the liquor flash tanks and out of contact with heat transfer surfaces.

2,744,572
BRACE FOR VENETIAN BLIND CORD LOCKS AND HEAD CHANNELS
Hans K. Lorentzen, Montclair, N. J., assignor to Lorentzen Hardware Mfg. Corp., New York, N. Y., a corporation of New York
Application July 28, 1954, Serial No. 446,341
7 Claims. (Cl. 160—173)



1. A brace for a channel-shaped Venetian blind head bar having its free longitudinal edges formed into open, inwardly turned beads and having a cord-lock body secured to the inside bottom wall of the head bar, said brace comprising: a unitary sheet-metal stamping adapted to be entered into the end of the head bar and having an intermediate portion adapted to span between the sides of the head bar and provided with a laterally projecting flange positionable against the top of the cord-lock body, said brace having a pair of generally parallel side flanges projecting perpendicularly from the intermediate portion and adapted to lie adjacent the sides of the head bar channel, the upper ends of said side flanges being formed for sliding engagement within the beads of the channel, and a resilient finger on the intermediate portion of the brace for making latching engagement with the cord-lock body.

2,744,573
TIME DELAY PROGRAM RELAY
Albert L. Judson and Robert E. Lach, Portland, Oreg., assignors to Iron Fireman Manufacturing Company, a corporation of Oregon
Application February 15, 1954, Serial No. 410,165
4 Claims. (Cl. 161—1)

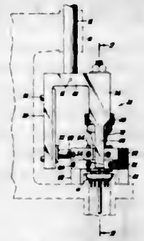


1. In combination, a cam shaft, means supporting said shaft for rotation between limit positions in either direction, a cam secured on said cam shaft to rotate therewith, a first rotational bias means connected with said shaft continuously to urge said shaft towards rotation at one constant speed in one direction towards one of said limit positions, a second drive means, means for energizing said second drive means continuously to rotate at another constant speed in the other direction, transmission means including a coupling means for coupling said second drive means to said cam shaft when said coupling means is energized to drive said cam in said other direction against the bias of said rotational bias means, said transmission means including a lost motion means between said coupling means and said cam, energizing means for said coupling means, said lost motion means including a first resilient means providing a delay in the effectivity of said second drive means in driving said cam for a fixed time period when said coupling is energized, said transmission means including latch means for said lost motion means to incapacitate said resilient means at the end of said fixed time period, stop means for limiting the rotation of said shaft in said one direction, means for limiting the rotation of said shaft in said other direction by said second drive means, a load switch, operating means operable by said cam at a first selected position while said cam is being driven by said second drive means to close said load switch and at another position while said cam is being driven by said first rotational bias means to open said load switch, said operating means including a second resilient means for unlatching said latch means to restore the effectiveness of said lost motion means when said load switch is opened.

2,744,574
UNIVERSAL WAFER STEM CUTTER
Russell Kenneth Fulger, Mill Hall, Pa., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts
Application February 10, 1954, Serial No. 409,379
12 Claims. (Cl. 164—40)

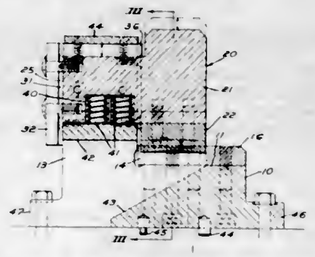
1. A wire shearing mechanism comprising a frame, a non-rotatable shearing die block slidably mounted in the frame, a cooperative shearing die block slidable with said first die block and rotatable with respect thereto, means cooperative with the frame and said rotatable

die block to rotate the same upon relative slidable movement between the two and dies in said blocks, registering



in one position of adjustment of said blocks, for receiving the stock to be cut.

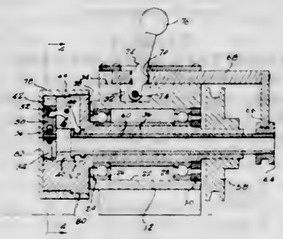
2,744,575
NOTCHING UNIT
Emanuel F. Paxhia, Tonawanda, Raymond J. Metzger, Cheektowaga, and Lynn G. White, Kenmore, N. Y., assignors, by mesne assignments, to Toolset, Incorporated, Buffalo, N. Y., a corporation of New York
Application January 4, 1954, Serial No. 401,962
3 Claims. (Cl. 164—50)



1. Unitary sheet materials notching apparatus for use between the bed and ram of a press comprising a base member including a front notching die portion and a pair of upstanding side walls rearwardly thereof, a punching member including a front notching punch portion in vertical registry with the notching die portion and a rearward shank portion of less width than the front notching punch portion, said shank portion being guided for vertical movement between said upstanding side walls, the marginal portions of the rear of said notching punch portion having sliding bearing against the front surfaces of the upstanding side walls, a retaining member fixed to the rear of said shank portion and having lateral projecting portions for vertical sliding bearing against the rear surfaces of said upstanding side walls, said front notching punch portion extending upwardly beyond said upstanding side walls for engagement by a press ram, said base member having an abutment portion underlying the shank portion of the punching member comprising an integral transverse connection between said upstanding side walls, and compression coil spring means acting between said abutment and said shank portion to retain the punching member yieldably in elevated position, said base member being open at the lower portion of its rear side and having a discharge chute extending rearwardly from said notching die portion and beneath said abutment portion.

2,744,576
PIPE AND TUBING CUTTER
Charles B. Kriegh, Indianapolis, Ind.
Application March 19, 1954, Serial No. 417,463
1 Claim. (Cl. 164—60)

A tube cutter comprising a pedestal having a bore; a tubular spindle rotatably mounted in the bore and projecting at both ends out of the bore; means connected to one of the projecting ends for driving the spindle, a cylindrically shaped, externally threaded head rigid at one end with the other projecting end of the spindle and having an axial work receiving recess communicating at one end with the bore and opening at its other end upon the other end of the head, the head having at least one guideway opening at one end into and extending radially of the recess at said other end of the recess, said guideway opening along one side upon said other end of the head; cutter means slidable radially of the recess in the guideway, said cutter means including a carriage removably engaged in the guideway and a blade connected to the carriage; a tubular work receiving guide mounted in the bore to slide axially of the bore and projecting at one end out of said one end of the spindle and at its other end into said one end of the recess; means carried by the pedestal connected with said one end of the guide for shifting the same axially of the spindle; means connected between the other end of the guide and the cutter means for translating axial

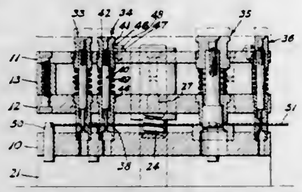


movement of the guide into movement of the cutter means radially of the recess, comprising a bell crank pivoted in the head and having one end extending into the guideway, the carriage having a rearwardly opening notch into which said end of the bell crank extends; a cap enclosing the head, said cap including an end wall closing the open side of the guideway and formed with a work receiving opening coaxial with the recess and guide and communicating with said other end of the recess, the cap further including a cylindrical side wall surrounding the head and having internal threads engaging those of the head, said cap when removed from the head freeing the carriage and blade for withdrawal from the guideway, said carriage, the guideway, said end of the bell crank, and the notch being proportioned to permit said withdrawal by straight line movement of the carriage away from the bell crank in a line paralleling the axis of the spindle; and a work rest spaced from the pedestal to support a work piece extending through said opening, said rest having an abutment providing a stop for said work piece.

2,744,577
PUNCH SET APPARATUS HAVING PUNCH MOUNTED IN VERTICALLY SPACED GENERALLY HORIZONTAL PLATES
Emanuel F. Paxhia, Tonawanda, Raymond J. Metzger, Cheektowaga, and Lynn G. White, Kenmore, N. Y., assignors, by mesne assignments, to Toolset, Incorporated, Buffalo, N. Y., a corporation of New York
Application January 4, 1954, Serial No. 401,961
9 Claims. (Cl. 164—94)

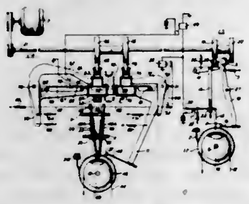
1. Sheet material punching apparatus for use in a punch press having a die receiving bed and a ram reciprocable toward and away from said bed, said apparatus comprising a die plate member securable to said bed and a punch holding member comprising a pair of vertically spaced generally horizontal plates, vertical guide pins fixed to one of said members and slidably engageable with the other, compression spring means acting between said

members to normally retain the punch holding member in an elevated position, a plurality of punching units each comprising a stripper sleeve carried by the lower plate of the punch holding member, a punch extending through said stripper sleeve and having an enlarged upper head



portion vertically slidable in the upper plate of the punch holding member and projecting thereabove to be engaged by said reciprocable ram, and a compression coil spring surrounding the punch and engaging at its upper end against said punch head portion and at its lower end against the stripper sleeve.

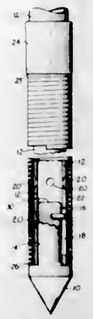
2,744,578
CODE TAPE PERFORATORS
Rudolph F. Mallina, Hastings on Hudson, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application November 2, 1951, Serial No. 254,524
8 Claims. (Cl. 164—115)



2. In combination, a code sensing device comprising a tape bearing code perforations patterned to symbolize the characters of a multicharacter entry, and sensing fingers for exploring said tape for character-symbolizing code patterns, a tape perforator comprising punch pins individually corresponding to the sensing fingers of said code sensing device, electromagnetically operated means controlled by the sensing fingers of said code sensing device in accordance with the character patterns of an entry encountered thereby for individually preparing corresponding punch pins for operation, a continuously operating cam, a punch pin operator normally in uncoupled relation to said cam, and electromagnetically operated means controlled by the sensing fingers of said code sensing device in accordance with a particular one of the character patterns encountered thereby for coupling said punch pin operator to said continuously operating cam.

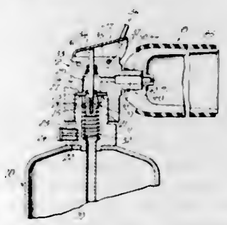
2,744,579
WELL POINT
Carl W. Gerhardt, Dayton, Ohio
Application November 18, 1952, Serial No. 321,140
7 Claims. (Cl. 166—160)

1. In a well point device having a conical point with a shank of smaller cross section than the largest part of the conical point thereby forming a shoulder between the shank and the conical point, a pipe section having a plurality of orifices and a slot formed in the wall of the pipe section, the shank being slidably positioned in one end of the pipe section, a pin fixedly attached in the shank of the conical point, the pin extending from the shank into the slot formed in the wall of the pipe section, the pin being slidably movable within the slot, a collar fixedly attached around the pipe section at a position on the pipe section at a distance from the orifices, and a helical spring encircling the pipe section, one end of the helical spring abutting the collar and the other end of the helical spring



abutting the shoulder of the conical point, the spring being compressible to close the orifices and expandable to open the orifices to any desired degree, the spring also acting as a filter of the fluids flowing through the orifices.

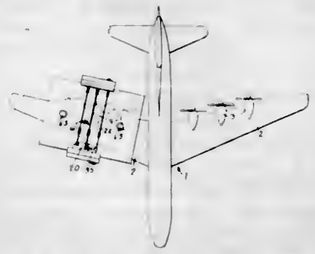
2,744,580
HANDLELESS DISCHARGE HEAD FOR PORTABLE FLUID DISPENSING APPARATUS
Henry H. Schroeder, Jr., Essex Fells, N. J., assignor to Specialties Development Corporation, Belleville, N. J., a corporation of New Jersey
Application July 19, 1952, Serial No. 299,834
1 Claim. (Cl. 169—31)



A handleless discharge head for fire extinguishing apparatus of the type including a receptacle containing a fire extinguishing agent adapted to produce a refrigerating effect upon expansion thereof and having an opening, said head comprising a nipple adapted to be mounted in the opening, a valve body having a vertical bore provided with a valve seat and a portion below said valve seat secured to said nipple and having a horizontal outlet nipple at the front side thereof in communication with said bore, said body having a substantially flat upper end surface formed with an aperture, a vertically movable valve for said valve seat including a valve operating stem having its upper end extending upwardly through said upper end surface aperture of said body, a horizontal forwardly facing discharge directing shield having a cylindrical body portion formed with a bore removably connected to said valve body nipple at the front side thereof and formed with an orifice at the interior thereof in communication with said valve body nipple, a valve stem operating lever having side flanges each formed with an opening adjacent one end thereof, a pin extending through said openings and the upper end of said valve body adjacent the back side thereof extends for pivotally mounting one end of said lever so that said lever extends diametrically across said valve operating stem and is inclined with respect to said valve body upper end surface and has its free end adjacently above the inner end of said discharge shield, and a cylindrical

rubber insulating sleeve fitting over said shield body portion and gripping the same, said discharge shield being the sole element associated with said discharge head which extends laterally outwardly of said head to a point beyond the outer periphery of the receptacle, whereby said discharge shield provides a finger grip for supporting said head and said lever is adapted to be operated by pressing thereon with the thumb to move the same into a horizontal position to unseat said valve, and, when said shield is removed, the remaining elements of said discharge head are within the maximum horizontal cross section area of said receptacle.

2,744,581
SELF-PROPELLED WHEELED HANGAR FOR AIRPLANE WINGS
Ivan O. Cooper, San Mateo, Calif., assignor to California Eastern Airways, Inc., Oakland, Calif., a corporation of Delaware
Application March 13, 1951, Serial No. 215,302
6 Claims. (Cl. 180—1)



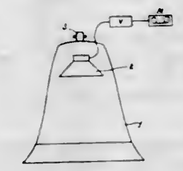
1. A wing hangar having opposed side walls, a top and one open end to enable movement of said hangar longitudinally of a wing of an airplane from the outer end of said wing to a position extending over the engines on said wing, ground wheels supporting said hangar elevated above the ground for movement thereover to said position, means for lowering said hangar to a lowered position on the ground when the latter is in said position including a hoist mechanism connecting said wheels and said hangar for vertical reciprocable movement of said hangar between said lowered position and said elevated position, a member carried by said side walls and extending below the lower edges thereof for engagement with the ground and supporting a portion of the weight of said hangar when said hangar is in said lowered position, said member being flexible to conform to irregularities in the surface contour of the ground when said hangar is in said lower position.

2,744,582
ASPARAGUS HARVESTER
Joe A. Sheppard, Outlook, Wash.
Application July 13, 1953, Serial No. 367,709
1 Claim. (Cl. 180—19)



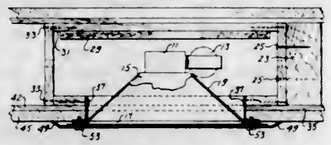
A machine for harvesting asparagus comprising a T-shaped frame having a transverse rear portion and a downwardly extending centrally disposed longitudinal portion, rear drive wheels mounted on said transverse portion of the frame, a steering wheel mounted on said longitudinal portion of the frame adjacent the front end thereof for pivotal movement about substantially a vertical axis for guiding the machine, a power unit mounted upon the longitudinal portion of the frame forwardly of the transverse portion thereof, said power unit having a rearwardly extending horizontal drive shaft with a belt pulley mounted thereon, a power transmission device supported on the longitudinal portion of the frame forwardly of the transverse portion thereof and below the plane of the power unit, said transmission device having a forwardly extending horizontal input shaft with a belt pulley thereon in alignment with the belt pulley on the power unit drive shaft, an endless belt encircling said belt pulleys, said transmission having a rearwardly extending output shaft, and means interconnecting the output shaft of the transmission and the drive wheels for rotating said drive wheels, an arm pivotally supported on said frame adjacent the transmission, an idler pulley mounted on the free end of said arm for engagement with and tensioning of the endless belt, a bellcrank having the apex pivotally supported from said frame transversely of the arm, a rod interconnecting one leg of said bellcrank and said arm, an operating lever pivotally supported on the frame adjacent the rear of the transverse portion thereof for swinging movement in a longitudinal plane, a rod interconnecting the lever and the other leg of the bellcrank, said lever normally extending in an upwardly and rearwardly inclined position with the free end disposed rearwardly of the frame, a flexible trailing line attached to the free end of the lever and being sufficiently long to be disposed on the ground surface whereby the line may be stepped upon when the machine is moving forwardly for moving the idler pulley away from the endless belt for releasing the tension thereon for permitting free rotation of the pulley on the drive shaft and stopping the machine, an elongated continuous load supporting platform mounted on the transverse portion of the frame and extending outwardly beyond the drive wheels for bridging a plurality of rows of asparagus, and control means for said steering wheel including a control wheel rotatably supported adjacent to and beneath the rear edge of the transverse portion of the frame, said control wheel being disposed substantially in a vertical plane and spaced rearwardly of the transverse portion of the frame and platform, and means interconnecting the control wheel and steering wheel for controlling the direction of movement of the machine.

2,744,583
APPARATUS FOR SIMULATING THE SOUND OF A SWINGING BELL
Friedrich Wilhelm Müller, Hamburg-Blankenese, Germany, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application January 9, 1952, Serial No. 265,692
Claims priority, application Germany February 8, 1951
2 Claims. (Cl. 181—.5)



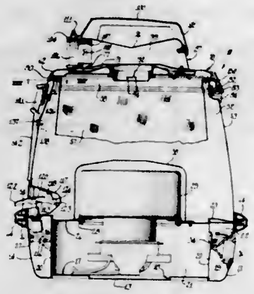
1. Apparatus for simulating the sound produced by a given swinging bell comprising a swingable electro-acoustic system comprising a sound generating member and a sound directing member connected to said sound generating member, and means for applying to said sound generating member an electrical signal corresponding to the sound of said given bell when stationary.

2,744,584
PUBLIC ADDRESS HOUSING ASSEMBLY
James B. Hellon, San Francisco, Calif.
Application June 19, 1952, Serial No. 294,460
4 Claims. (Cl. 181—31)



3. A housing assembly for removably mounting loudspeakers of the type having cones fitted with mounting lips at the cone base within building walls and ceilings comprising, in combination, a box having a loudspeaker accommodating opening in one surface and a plurality of smaller openings in other surfaces thereof, sound absorbent means disposed within the box adjacent to a surface opposed to the loudspeaker opening, said box being adapted to be fitted within a building wall or ceiling with the loudspeaker opening being exposed to a building room, a mounting sleeve having a flange disposed on one end penetrating said loudspeaker opening and secured to said one surface of the box with the flange being spaced from said one surface a distance measured by the thickness of plaster employed on the wall or ceiling in which the box is to be included, said sleeve being adapted to accommodate a loudspeaker with the mounting lip thereof being in juxtaposition with said flange and the loudspeaker extending inwardly of the box and out of contact therewith, a grille abutting said lip, a facing ring abutting the grille, an inwardly turned lip on the facing ring extending radially beyond the grille and sleeve flange and means penetrating the loudspeaker lip, grille, facing ring and the sleeve flange adapted to draw the ring, grille and loudspeaker lip together and to hold the loudspeaker tightly against the sleeve flange and support the loudspeaker and the inwardly turned lip against the plaster.

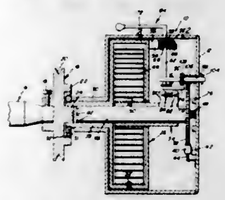
2,744,585
CANNISTER-TYPE VACUUM CLEANER
George M. Kelly, Sturgis, Mich., assignor to Kingston Products Corporation, Kokomo, Ind., a corporation of Indiana
Application February 24, 1954, Serial No. 412,163
23 Claims. (Cl. 183—37)



4. In a cannister-type vacuum cleaner of the type having a housing providing a dirt-separating compartment and a generally horizontal opening thereinto, the improvement of a circumferential inwardly extending flange formed on said housing at the horizontal opening, a cover comprising a sheet-form member shaped to overlie said upper housing member, a hinge and latch between said cover and said upper housing member at opposite sides thereof, whereby said cover is pivotally movable relative to said upper housing, a dirt-separating means in said upper housing including a rubber gasket clamped between said upper circumferential flange and said cover and a motor suction unit discharging filtered air from said upper housing, and inlet means in said cover to said dirt-separating means.

10. In a cannister-type vacuum cleaner as defined in claim 4, said cover providing depending side walls spaced concentrically outwardly of said flange, said flange and said cover having spaced apart opposing surfaces inwardly of said walls for clamping against said rubber gasket, and a peripheral radially outwardly extending flexible lip formed on said gasket overhanging said flange and engaging and sealing against said depending side walls of said cover.

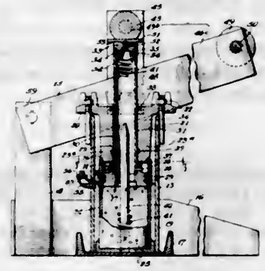
2,744,586
ENGINE STARTER
Frederick R. Blankenburg, Granby, Conn.
Application June 22, 1953, Serial No. 363,090
8 Claims. (Cl. 185—41)



1. A starter assembly for driving an engine crankshaft and storing energy from an engine, said assembly comprising a starter housing including a hub portion, a spring housing in the starter housing including a spring housing hub extending out of the hub of said housing, overrunning clutch means operatively carried on an extending end portion of said spring housing hub for engagement with the engine crankshaft, a shaft reciprocably journalled in said spring housing hub and including means at one end portion for rotatable engagement with a member rotated by the engine crankshaft, a sleeve journalled on said shaft and extending within said spring housing, a coil spring concentrically disposed on said sleeve within the spring housing including an inner end secured to said sleeve and outer end secured to said spring housing, control means engageable with said spring housing permitting rotation thereof for rotating the engine crankshaft, gear means carried on an end portion of said shaft extending out of said sleeve, stop means engageable with said gear means permitting rotation of said shaft in one direction, and clutch engageable drive means engageable with said gear means for rotating said crankshaft and winding said spring.

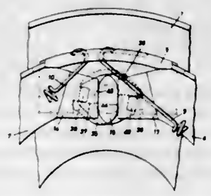
2,744,587
FLUID BUFFER FOR ELEVATORS
Walter Beck, Rock Island, Ill., assignor to Montgomery Elevator Company, a corporation of Illinois
Application September 27, 1952, Serial No. 311,901
6 Claims. (Cl. 187—67)

5. A fluid elevator buffer for use with a vertically reciprocable elevator mechanism, comprising: a base; a fluid reservoir mounted on said base, said fluid reservoir having a smoothly finished top margin; an open topped cylinder mounted in said reservoir with its upper end spaced substantially below the top margin of the reservoir, said cylinder having a plurality of apertures in its side wall; an effectively planar closure member for said fluid reservoir, said closure member having its periphery overlying the reservoir and having a smoothly finished surface to seat on the top margin of the reservoir; a plurality of attaching members sealing said closure member on the reservoir; integral sleeve-like guide means extending downwardly from the closure member into engagement with the top of the cylinder, said guide means having openings adjacent the top of the cylinder providing fluid passages between the cylinder and the reservoir; a piston in the



cylinder; a piston rod secured to the piston and extending through said guide means in the closure member, said piston and piston rod being adapted to be depressed by the descending elevator mechanism; and means biasing said piston and piston rod upwardly.

2,744,588
BRAKE ACTUATOR
Georg Seiler, Heidelberg, and Hans Rutzenhöfer, Mannheim-Friedrichsfeld, Germany, assignors to Deutsche Perrot-Bremse G. m. b. H., Mannheim-Friedrichsfeld, Germany
Application May 21, 1952, Serial No. 289,022
Claims priority, application Germany November 26, 1951
6 Claims. (Cl. 188—78)



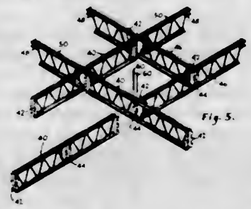
1. A brake, comprising, in combination, a backing plate; a drum arranged rotatably with respect to said backing plate; a plurality of brake shoes movably arranged within said drum between two end positions, said brake shoes frictionally engaging in one of said end positions thereof said drum, said brake shoes having end portions arranged in pairs opposite to one another; a brake shaft rotatably mounted in said backing plate; a floating expanding member radially guided in relation to said brake shaft and arranged between one of said pairs of opposite end portions of said brake shoes; and coupling means between said brake shaft and said expanding member, said coupling means including axial projections arranged on one of said brake shaft and said expanding member, and radial projections arranged on the other of said brake shaft and said expanding member, said axial projections engaging said radial projections, respectively, at points arranged diametrically on each side of said brake shaft when said brake shaft rotates in one direction with respect to said backing plate; a flange rigidly mounted on said brake shaft, said axial projections being formed on said flange, said radial projections being formed on said expanding member; and bearing members forming part of said radial projections, said bearing members extending substantially parallel to the direction of the force exerted during breaking on said expanding member, said bearing members being adapted to contact said axial projections.

2,744,589
WALL-PANEL STRUCTURE
Paul W. Jenkins and Albert A. Brown, Pittsburgh, Pa., assignors to H. H. Robertson Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application October 26, 1951, Serial No. 253,356
2 Claims. (Cl. 189—34)



1. A lightweight elongated unitary panel assembly comprising two spaced apart sheet-metal facing sheets of substantially equal width and length having male and female lips on the side edges thereof, one sheet being flat and the other sheet being shaped to form a relatively few, wide and deep parallel corrugations extended lengthwise of the sheet and spaced uniformly across the width thereof, a plurality of transversely extended metal spacing members, each provided with an inner and outer flange and an intervening web portion, said flanges extending parallel to the plane of the flat facing sheet, the outer flange of each spacing member contacting and being welded to crest portions of the corrugated sheet, the webs of said spacing members being of a width to dispose the inner flange thereof spaced from the flat facing sheet, a layer of fibrous insulating material between the inner flanges of the spacing members and the corrugated facing sheet and at least two layers of substantially rigid preformed insulating members between the inner flanges of the spacing members and the flat facing sheet, and a plurality of fastening members extending through the flat facing sheet, through the substantially rigid insulating members, and through the inner flanges of the spacing members, said two layers of preformed insulating members being slightly compressed over their entire area between the inner facing sheet and the first mentioned insulating layers upon securing of said fastening members.

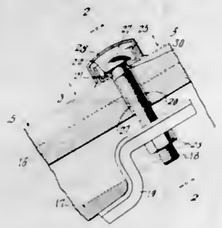
2,744,590
LOAD-SUPPORTING STRUCTURES
Alfred M. Butts, New York, N. Y.
Application December 12, 1950, Serial No. 200,363
6 Claims. (Cl. 189—36)



1. A collapsible load-supporting, horizontally extending grid comprising at least four structurally strong beam-like elements, each said element having two load-transmitting connector members rigidly secured thereto intermediate the ends and on opposite sides thereof and having two load-transmitting end connector members rigidly secured to the opposite ends thereof, each said end connector member of one of said elements having a plurality of surfaces in load-transmitting engagement with surfaces of an intermediate connector member of another of said elements to form at least two laterally spaced load-transmitting sockets comprising vertically offset portions of said connector members, said sockets extending depthwise of said elements for receiving two laterally spaced pins for connecting together said elements, the engaged connector members transmitting vertical load directly to one another, each said element having one of the end connector members thereof secured to one of the intermediate

connector members of another element by means of two laterally spaced pins to form a structural pattern whose center is a closed four-sided figure and whose sides are of equal length and are formed by a portion of the length of each of four said elements, a connector member being located at each corner of said four-sided figure and having one of the two pins associated therewith positioned at the apex of the angle forming said corner and the other of said two pins positioned exteriorly of said figure, and each of said element extending for a substantial part of its length as a projection of a side of said four-sided figure, one end of each said element being thus available for further connection with other elements of similar construction to continue the foregoing structural pattern and to produce a horizontally extending grid covering substantially any desired area, said elements, when secured together by one pin only at each connection, being capable of pivotal movement about a vertical axis relative to one another whereby removal of only the exteriorly positioned pins from the connector members of two opposite corners of said four-sided figure and removal of only the other of said pins from the connector members of the other two corners of said figure permits the collapse of said elements from said four-sided structural pattern to a compact side-by-side arrangement.

2,744,591
DEVICE FOR PREVENTING LEAKAGE AROUND FASTENER HEADS
Alvan D. Simpson, Plainfield, N. J., assignor to The Forming Machine Company of America, Bound Brook, N. J., a corporation of Delaware
Application February 7, 1951, Serial No. 209,858
7 Claims. (Cl. 189—36)



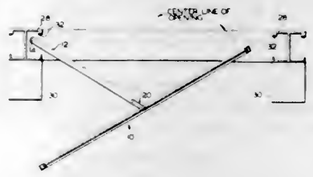
6. In a structural assembly comprising sheet material secured to a supporting sub-stucture in which sheet material there is a hole, a bolt extending through said hole and having a head, a washer comprising a bottom wall abutting one side of said sheet material and having an upstanding continuous side wall, said bottom wall providing a seat for said head and having a hole through which passes said shank, said hole being of a diameter greater than the adjacent portion of the shank, and a cap including a continuous annular skirt telescopically associated with said side wall of the washer, the cap and washer providing between them a receptacle and there being passages from said receptacle to said hole in the bottom wall of the washer, and a plastic sealing compound completely filling said receptacle and said passages and extending into the space between said shank and the wall of said hole in the sheet material in surrounding relation to said shank, and means connecting the shank of the bolt to said substructure.

2,744,592
WAVE-GUIDE WINDOW
Louis C. Remond, Needham, Mass., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts
Application October 29, 1948, Serial No. 57,238
3 Claims. (Cl. 189—36.5)

1. A high-frequency window comprising a glass center and a surrounding metal frame to which the glass is fused, said metal frame being of a composition having approximately the same thermal coefficient of expansion as that of the glass, and being composed of an outer frame portion, and an inner frame portion, said portions being connected by a substantially flat zone of reduced thickness, the entire assembly being essentially flat.



2,744,593
PIVOTED REVERSIBLE WINDOW WITH LATERALLY AND TRANSVERSELY SHIFTABLE PIVOT
John P. Travis, Dallas, Tex.
Application February 16, 1955, Serial No. 488,496
4 Claims. (Cl. 189—66)



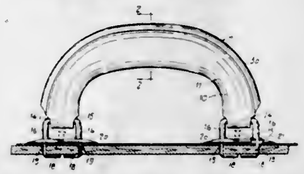
1. A reversible window sash adapted to seal facewise against certain of the grid members composing the facade of a building and forming a rectangular grid opening two opposite sides of which constitute window jambs, one dimension of said grid opening being smaller than the corresponding dimension of the window sash, comprising a pair of arms longer than half the window sash width at the head and stool of the grid opening, said arms each being pivoted at one end adjacent one grid member, and having confronting grooves at their other ends, a window sash having pivots midway of its width pivotally and slidably mounted in said grooves, said grooves in normal position extending either side of the center line of the grid opening, whereby said window sash may be shifted in its plane to clear a grid member, then pivoted outwardly by means of the arms and rotated through an angle of one hundred eighty degrees in the opening.

2,744,594
GYRATING AND SHIFTABLE PIVOT WINDOW WITH RETRACTIBLE WEATHER BARS
John P. Travis, Dallas, Tex.
Application February 16, 1955, Serial No. 488,497
8 Claims. (Cl. 189—69)



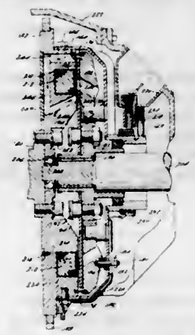
1. A closure construction comprising a facade element, said facade element comprising a rectangular frame, two opposite sides of said frame constituting jamb portions, a member extending across said frame in parallelism to and substantially equidistant from said two opposite sides of said frame to form two closure openings of substantially equal size, said member having spaced jamb portions on one side, a closure for each of said closure openings, each of said closures engaging one of the jamb portions on said member and one of said first mentioned jamb portions when in its closed position, aligned pivots one on each of two opposite edges of each of said closures, said pivots being positioned centrally of said opposite edges of said closures, a first pair of links of equal length at each of the two remaining sides of said frame, said first pair of links being pivoted together at one end and to a side of said frame adjacent said member by the same pivot means, the opposite end of each link being pivotally connected to one of the pivots on the adjacent edge of one of said closures, a second pair of links of equal length at each of the two remaining sides of said frame, said links of said second pair each being pivotally connected at one end to one of the pivots on the adjacent edge of one of said closures and having their other ends pivoted together.

2,744,595
LUGGAGE HANDLE
William Finkelstein, Philadelphia, Pa.
Application February 10, 1954, Serial No. 409,299
1 Claim. (Cl. 190—58)



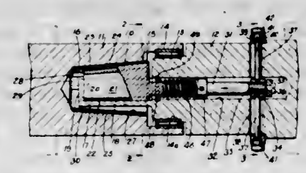
A luggage handle and a luggage handle securing means for joining said handle to a piece of luggage comprised of an inverted U-shaped rod member, said handle pivotally mounted upon said securing means, a base plate having two semi-circular openings therein and being adapted to rest upon the upper surface of the luggage, downwardly extending leg portions of said inverted U-shaped rod member being circular for a portion of their length and semi-circular for the remainder of their length, said semi-circular leg portions being adapted and arranged to interfit with said semi-circular holes in said base plate member and being adapted to extend through holes in a luggage frame and to be bent over on the underside of said frame, and said semi-circular leg portions having the flat chord portions facing one another.

2,744,596
MAGNETIC DRIVE
Howard J. Findley, Cleveland, Ohio, assignor, by direct and mesne assignments, to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Original application June 4, 1949, Serial No. 97,269, now Patent No. 2,519,449, dated August 22, 1950. Divided and this application July 17, 1950, Serial No. 174,229
4 Claims. (Cl. 192—21.5)



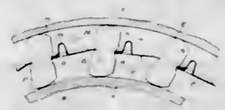
1. A coupling device including at least a pair of coupling members mounted for rotation relative to each other and having radially and circumferentially extending opposed face portions which are normally spaced apart from each other along the axis of said relative rotation so as to define an air gap therebetween, said face portions being relatively movable along said axis to thereby vary said air gap, means adapting one of said members to act as a driving member and adapting the other of said members to apply a driving force to a load, means for establishing a magnetic field across said air gap and thereby drawing said face portions toward each other and at least reducing said air gap, and bonding material comprising finely divided magnetic particles and solid lubricant in said field and also responsive to said field for establishing a lubricated load transmitting bond between said face portions, whereby rotation of said one member at least tends to cause rotation of said other member, said coupling device being further characterized in that at least one of said members is continuously effective during both the presence and the absence of the action of said field establishing means and during both the presence and the absence of relative rotation between said members to maintain enough of said bonding material between said face portions to establish said bond therebetween immediately upon establishment of said field.

2,744,597
CLUTCH MECHANISM
Robert H. Merritt, Los Angeles, Calif.
Application November 6, 1952, Serial No. 319,107
12 Claims. (Cl. 192—35)



1. A clutch mechanism comprising, in combination: a pair of coextensive shaft members adapted for relative rotation; an axial recess in one of such shafts, said recess having a radially inwardly directed surface; anchor means associated with the other of said shafts; an actuating member mounted for axial and circumferential movement on said anchor; an engaging member positioned adjacent said actuating member; unidirectional stop means carried by said engaging member and adapted for association with said anchor means; operating means to move said actuating member into contact with said surface whereby; upon contact of said actuating member with said surface and circumferential rotation thereby, to abut and move said engaging member into contact with said surface.

2,744,598
ONE-WAY ENGAGING MECHANISM
Harry P. Troendly, La Grange Park, Ill., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application February 7, 1952, Serial No. 270,395
8 Claims. (Cl. 192—45.1)



1. In a one-way engaging device, the combination of a pair of concentric races having a plurality of wedging devices disposed therebetween, and a flexible sheet material cage having peripherally spaced openings therein for receiving said wedging devices, said openings being defined by peripherally extending side portions and transversely extending cross pieces having energizing tabs integrally formed therewith and extending into each of said openings for respectively engaging the wedging devices and biasing them toward wedging engagement with said races, and

deformations formed in each of said cross pieces for rigidifying the flexible cage against peripheral buckling between the wedging devices.

2,744,599
CONTROL DEVICE FOR CARTON SET-UP MACHINE

Le Roy F. Carkhuff, Morris, Ill., assignor, by mesne assignments, to The Diamond Match Company, New York, N. Y., a corporation of Delaware

Original application November 23, 1946, Serial No. 711,855, now Patent No. 2,572,800, dated October 23, 1951. Divided and this application October 20, 1951, Serial No. 252,325
4 Claims. (Cl. 192—125)



1. In a machine for setting-up cartons wherein a set-up head is mounted for reciprocation in a predetermined path, an electrical circuit for controlling the operation of the machine including a cut-off switch which is operative to stop the machine, an operating member for said cut-off switch mounted adjacent the path of movement of said head and normally positioned to render said cut-off switch inoperative, an actuating element movably mounted adjacent the path of said head for engagement by a portion of a carton carried on said head, said actuating element being moved by engagement with said carton and remaining in its normal position when there is no carton on the head, and a link means connecting said actuating element and said switch operating member whereby said switch operating member is moved into position to operate said cut-off switch in response to movement of said actuating element.

2,744,600
DEVICE FOR DRIVING OR STOPPING A DRIVEN SHAFT

Hellfried Karl Köhler, Harry Walter Güldner, and Werner Wilhelm Tell, Karl-Marx-Stadt, Germany, assignors to VEB Buchungsmaschinenwerk Karl-Marx-Stadt, Karl-Marx-Stadt, Germany

Application October 14, 1953, Serial No. 385,992
5 Claims. (Cl. 192—148)



1. Device for actuating and stopping a driven shaft carrying the drum of a counting mechanism for bookkeeping machines and the like, comprising, in combination, a stop shaft forming an extension of the driven shaft and determining the position of rest thereof, a plurality of stops on the stop shaft to stop it in different positions, a circular catch plate circumferentially grooved at intervals and rotatably arranged on the stop shaft, a lever secured to the driven shaft, a bearing bolt for the lever, a grooved cam member rotatably disposed on said bearing bolt, a coupling pawl rotatably positioned on the cam member and possessing an inclined portion, means provided on the cam member to draw the nose of the pawl into grooves of the circular catch plate, said grooves being constructed to hold the nose against rotation in both directions, a guide lever fastened to the stop shaft, a roller supported by the guide lever and overlapped by the cam groove, said groove having a portion extending radially to the turning point of the driven shaft and another portion extending radially to the turning point of the cam member and the transition occurring in archlike fashion.

2,744,601
FLEXIBLE CHUTE

William D. Chilton, Royal Oak, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application February 28, 1955, Serial No. 490,997
6 Claims. (Cl. 193—25)



1. A flexible conveyor chute comprising a pair of parallelly spaced elongated plates in the same general plane, a plurality of tie pieces extending across said plates on opposite sides thereof, a plurality of spacers disposed on opposite sides of said plates and spaced along their lengths and interposed between said plates and tie pieces, fastening means securing said spacers and tie pieces and plates together, said spacers having recessed portions forming with said tie plates slots spaced from said elongated plates, a second pair of spaced elongated plates slidingly residing in said slots and forming with the facing edges of the first pair of elongated plates an open conducting passage, said last pair of plates being longitudinally movable in said slots relative to said first pair of plates upon flexure of said conveyor chute.

2,744,602
TABLET COUNTING AND BATCHING DEVICES

Leslie Aldred, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain

Application July 31, 1952, Serial No. 301,865
Claims priority, application Great Britain August 3, 1951
3 Claims. (Cl. 193—38)

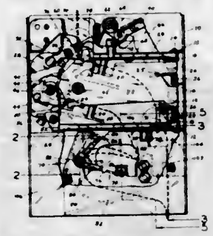


1. In combination with a chute, a device for feeding tablets in single file into said chute which comprises an approximately V-shaped guide disposed at an angle of from 10° to 45° to the horizontal with its lower end adjacent the entrance to said chute, a groove running along the bottom of said guide, said groove being deeper than the tablet diameter and slightly wider than the tablet thickness, a planar guide surface extending from one side of said groove at an angle of from 45° to 90° relative to the vertical center plane of the groove, and means overlying the lower end of said guide adapted to prevent tablets not fully within said groove from jamming the entrance to said chute.

2,744,603
COIN SEPARATORS

Merral P. Haverstick, St. Louis County, Mo., assignor to National Rejectors, Inc., St. Louis, Mo., a corporation of Missouri

Application September 10, 1951, Serial No. 245,837
8 Claims. (Cl. 194—102)



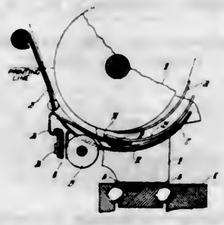
1. In a coin separator that can receive and separate coins of different types and that comprises a passageway for one type of coin, a second passageway for another type of coin, said passageway being at least partially disposed between two spaced walls and being in communication with each other whereby coins of said other type can move into the first said passageway, a pivot adjacent the first said passageway, a bifurcated gate rotatably mounted on said pivot, projections on the ends of the arms of said gate that extend into the first said passageway and define an opening for said gate, said opening of said gate being larger than coins of said one type but being smaller than coins of said other type, said projections on said gate intercepting coins of said other type which are passing through the first said passageway, said second passageway normally directing said coins of said other type so they do not engage said gate, said projections being spaced from said pivot whereby a line defined by said projections is radially spaced from said pivot, said line coacting with lines between said pivot and said projections to define a triangle that has an apex at said pivot which is substantially smaller than one hundred and eighty degrees, said first said passageway normally directing authentic coins of said one type toward the opening of said gate, and stops to limit movement of said gate, said gate being movable between said stops to enable said opening of said gate to define a virtual opening which is larger than said opening of said gate and which can accept and pass substantially all authentic coins of said one type, said virtual opening being larger than a coin of said other type, said gate normally resting against one of said stops, and thereby normally being adjacent one end of said virtual opening, said gate being positioned to intercept, and to be rotated to a coin-accepting position by, said coins of said one type, which are not in register with said opening of said gate, whereby said coins can pass through said opening of said gate.

2,744,604
FORM STOP FOR CARRIAGES

Fred Becker, Queens Village, N. Y., assignor to Underwood Corporation, New York, N. Y., a corporation of Delaware

Application December 26, 1952, Serial No. 328,120
4 Claims. (Cl. 197—140)

1. A lower edge stop means to arrest the lower edge of work sheets inserted in front of the platen of a typewriter or the like, said stop means comprising a guide member having a portion formed for attachment to a machine part stationary with respect to a work sheet and a perforated, curved surface to engage and guide the lower edge of a work sheet, and a stop member having integral projections engageable in perforations of said



guide member, said stop member being resiliently deformable to enable insertion and retention of said projections in said perforations of said guide member.

2,744,605
RIBBON FEEDING AND REVERSING MECHANISM FOR PRINTING MACHINES

John D. Gearheart, Baldwin Park, and Milton V. Scozzafava, Temple City, Calif., assignors to Clary Corporation, a corporation of California

Application May 28, 1953, Serial No. 357,992
6 Claims. (Cl. 197—165)

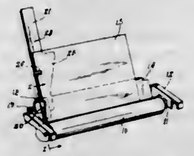


1. A printing ribbon feeding mechanism comprising the combination of a pair of spools for feeding a printing ribbon therebetween, a ratchet wheel, means operatively connecting said ratchet wheel to one of said spools, actuating means for incrementally actuating said ratchet wheel, a retaining pawl normally engaging said ratchet wheel, means operable by said actuating means during actuation of said ratchet wheel for disengaging said pawl, and means for causing re-engagement of said pawl before completion of actuation of said ratchet wheel.

2,744,606
LINE INDICATING DEVICE FOR TYPEWRITERS

Louis Gare, Linden, N. J.

Application June 26, 1952, Serial No. 295,750
8 Claims. (Cl. 197—189)



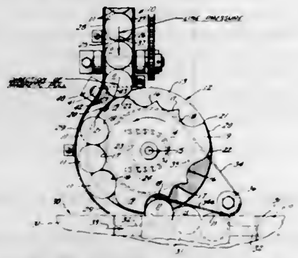
1. An attachment for a typewriting machine for indicating and gaging the distance of the bottom edge of a work-sheet from the writing line on the platen of the typewriting machine, comprising an elongated body of cardboard or the like having a smooth surface, a hook-like portion at one end of the body extending in the same plane as the elongated cardboard body for detachable insertion between the shelf and plate part of a typewriting machine, an extension on said portion for insertion under said plate part of the typewriting machine, and a scale on the surface of the body including a column of successively numbered graduations.

2,744,607
FLOOR CLEAN-UP ARRANGEMENT FOR CONTINUOUS MINER
John D. Russell, Franklin, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application January 28, 1950, Serial No. 141,137
7 Claims. (Cl. 198—9)



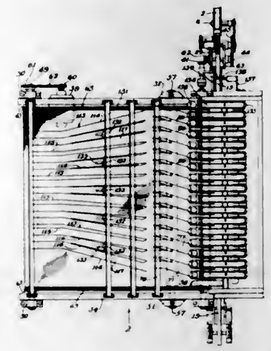
1. A floor clean-up mechanism comprising a support, a front floor engaging frame, pivotal connections between said support and said frame whereby the latter may swing up and down so as to move freely over the mine floor, and gathering devices including housings projecting laterally from the sides of said frame and pivotally mounted on said frame to swing horizontally relative thereto and to tilt in a vertical direction, conveyor scrolls arranged in said housings for moving loose material on the mine floor inwardly toward said frame, pivotal mounting means for said scroll-housings including pivots permitting vertical tilt thereof when said housings are swung forwardly and outwardly relative to said frame and including means for precluding such vertical tilt of said housings when the latter are in their retracted inner positions, and means for raising said frame above the mine floor when said scroll housings are in retracted position.

2,744,608
STAR WHEEL TRANSFER MECHANISM FOR CANS OR THE LIKE
Edgar Ardell, Middletown, and Mitchell S. Wozniak, Portland, Conn., assignors to Emhart Manufacturing Company, Hartford, Conn., a corporation of Delaware
Application July 26, 1954, Serial No. 445,832
6 Claims. (Cl. 198—22)



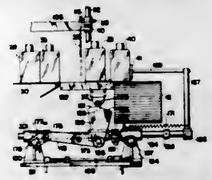
1. In a transfer mechanism for cans and the like, a star wheel mounted to rotate about a vertical axis, said star wheel having a plurality of angularly spaced peripheral abutment portions and a pocket in its periphery at the trailing end of each such abutment portion when the star wheel is rotating in one direction about said vertical axis, said pocket being adapted to at least partially receive a can to be transferred and to support said can therein for transport by the rotating star wheel, conveyor means operatively associated with said star wheel to move cans to be transferred to the periphery of the star wheel in a continuous procession moving along a substantially horizontal path having an open end at the periphery of the star wheel close enough thereto for stoppage temporarily of the procession by the contact of any of the abutment portions of the star wheel with a leading can of the procession in said open end of said path and to permit resumption of forward movement of said leading can when the abutment portion has passed out of contact therewith, and a magnet located adjacent to and at one side of said open end of the path in position to exert a magnetic pull on said leading can, tending to pull it around the axis of rotation of the star wheel in the direction of said rotation.

2,744,609
APPARATUS FOR SEPARATING AND FEEDING ARTICLES
Ray S. Jenney, Robert T. Fetherston, and Glen R. Miller, Battle Creek, Mich., assignors to Kellogg Company, Battle Creek, Mich., a corporation of Delaware
Application November 4, 1950, Serial No. 194,166
13 Claims. (Cl. 198—31)



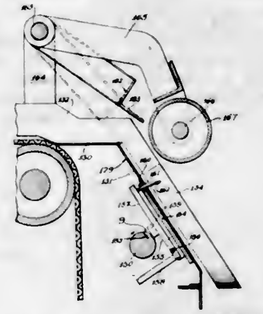
5. A machine for changing series movement of articles to substantially parallel transverse movement thereof which comprises, a series conveyor for continuously carrying a plurality of articles spaced in seriatim, a continuously moving transverse conveyor disposed adjacent and moving transversely to said series conveyor, a plurarity of air jets disposed adjacent the upper pass of said series conveyor for displacing articles from the series conveyor onto the transverse conveyor as they move adjacent the transverse conveyor, a solenoid operated valve for controlling the passage of air under pressure to each air jet, and means for progressively opening the solenoid valves in timed relationship with the passage of articles on said series conveyor adjacent said transverse conveyor, said last-mentioned means comprising a plurality of pairs of light beams and light-sensitive cells disposed parallel to the series conveyor, the light beams traversing the paths of the articles on the series conveyor, an electric circuit connecting the light-sensitive cells and the solenoids whereby interruption of a light beam to a cell actuates a solenoid causing a displacement of an article from the series conveyor.

2,744,610
CONVEYING APPARATUS
John W. Stiles, Miami, Fla.
Application May 14, 1953, Serial No. 355,031
18 Claims. (Cl. 198—32)



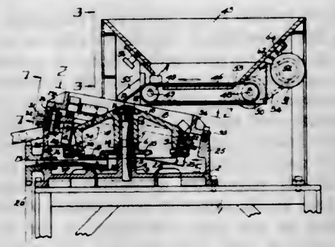
4. In a conveyor mechanism, a feeding belt, a transfer apparatus and a discharge belt, the transfer apparatus being disposed betwen the said feeding and discharge belts for operatively transferring conveyed units from the former to the latter; said apparatus having a movable transfer section operatively movable between forward and rear limiting positions, and a platform having an entrance portion disposed adjacent said feeding belt for receiving units operatively conveyed by the feeding belt, and an exit portion disposed adjacent said discharge belt; the rear limiting position of the transfer section being in the region of said entrance portion; the forward limiting position of said transfer section being in the region of said exit portion, whereby units operatively conveyed by the transfer section will be deposited on said exit portion of the platform, the transfer section being so proportioned that the front portion thereof is disposed at the receiving edge of said discharge belt when said section is at its said forward limiting position; actuating means to move said section forwardly between said limiting positions for an operative transferring movement and rearwardly between said positions for a return movement; said transfer section being movable to an upper level above that of said entrance and exit portions and movable thereacross at said upper level during its said forward transferring movement, whereby units from said entrance portion will be deposited upon said transfer section and carried toward said exit portion, the front portion of the transfer section engaging units operatively positioned on said exit portion to push them towards said discharge belt.

2,744,611
DELIVERY MECHANISM
Ray S. Jenney and Robert T. Fetherston, Battle Creek, Mich., assignors to Kellogg Company, Battle Creek, Mich., a corporation of Delaware
Application September 13, 1950, Serial No. 184,544
10 Claims. (Cl. 198—32)



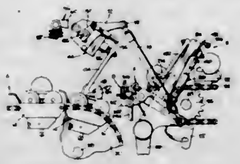
3. A device for delivering in seriatim individual articles charged to said device in spaced rows transverse to the conveyor which comprises, an endless continuously moving conveyor having an upper delivery pass, partitions carried above and adjacent said upper pass disposed substantially parallel to each other and parallel to the upper pass of the conveyor for dividing the space above said upper pass into a plurality of parallel passageways, means for charging said articles onto said conveyor in spaced transverse rows and into said passageways one article from each row to each passageway, a continuously moving transverse conveyor disposed adjacent the discharge end of said passageways, means carried at the discharge end of said passageways for releasing articles in sequence from adjacent passageways to said transverse conveyor in spaced series relationship upon said transverse conveyor, comprising a movable stop finger projecting into each passageway to obstruct the passage of the article in said passageway, and cam means for sequentially withdrawing said fingers from adjacent passageways, said cam means comprising a rotating cam having part of its surface active and part of its surface inactive to withdraw said fingers whereby articles in said passageways are restrained from moving therefrom during the interval between the discharge of the last article of one row and the discharge of the first article of the next row in sequence.

2,744,612
ORIENTER
John G. Kay, Detroit, and John K. Rye, Southfield Township, Oakland County, Mich., assignors, by mesne assignments, to F. Joseph Lamb Company, Detroit, Mich., a corporation of Michigan
Application February 28, 1955, Serial No. 490,974
8 Claims. (Cl. 198—33)



1. An orienter including a base, a cone mounted for rotation thereon onto which workpieces are adapted to be delivered, an annular shelf around the cone supported for rotation on the base, the axes of the cone and shelf being inclined to one another whereby a portion of the shelf is higher and the opposite portion thereof is lower than the adjacent portions of the base of the cone so that workpieces pass from the cone onto the shelf means for turning the cone and shelf, an annular wall on the base extending upwardly around the shelf and having an opening therethrough, an orienting bar supported on the base and inwardly inclined over the shelf to force improperly positioned workpieces thereon back onto the cone, and a plow supported on the base and extending across the shelf to divert workpieces thereon through said opening.

2,744,613
FRUIT TRANSFERRING AND REJECTING MEANS
James M. Hait, San Jose, Calif., assignor, by mesne assignments, to Food Machinery and Chemical Corporation, San Jose, Calif., a corporation of Delaware
Application October 29, 1951, Serial No. 253,627
14 Claims. (Cl. 198—33)



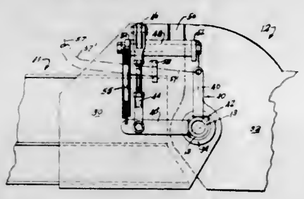
6. In a fruit orienting device, the combination of a continuously moving conveyer, fruit orienting and supporting members carried by said conveyer and upon which fruit is carried during orientation, a second continuously moving conveyer driven in timed relation to said first conveyer, means for transferring fruit from said orienting members to an inspecting station between said first and second mentioned conveyer, fruit probing means at said inspecting station adapted to locate the pit of a fruit, means driven in timed relation to said first mentioned conveyer to vertically raise said probing means when a fruit is at said inspecting station, means for transferring fruit from said inspecting station to said last mentioned conveyer, and means for disabling said last mentioned transfer means when said probing means fails to locate the pit of a fruit.

2,744,614
TENSION MAINTAINING ARRANGEMENT FOR A CONVEYOR CHAIN
John R. Sibley, Sugarcreek Township, Venango County, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application March 1, 1954, Serial No. 413,101
23 Claims. (Cl. 198—109)



1. In an endless chain conveyor, swingable frame parts having lateral swinging movement relative to each other about parallel upright pivots lying in parallel vertical planes extending transversely of the conveyor, an endless conveyor chain guided for orbital circulation with its opposite end portions movable along said relatively swingable frame parts, and take-up means acting on said conveyor chain at one end portion of the conveyor and automatically responsive to swinging movement of the frame part at the opposite end portion of the conveyor for taking up any slack introduced in the chain as said frame part at said opposite end of the conveyor is swung laterally, said take-up means comprising a shiftable take-up element extending longitudinally across said vertical planes between points beyond the remote sides of such planes.

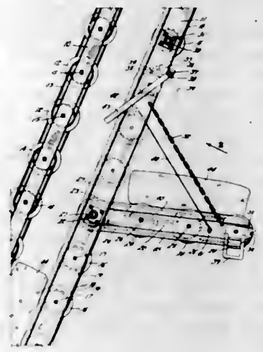
2,744,615
FOLDING CONVEYORS
George T. Ronk, Cedar Rapids, Iowa, assignor to Barnard & Leas Mfg. Co., Inc., Cedar Rapids, Iowa
Application January 24, 1955, Serial No. 483,659
5 Claims. (Cl. 198—115)



1. In a folding conveyor including a loading section; a discharge section; a hinge fixed to said sections to permit the sections to fold, said hinge comprising a first pair of hinge plates fixed to the loading section at the inner end thereof, a second pair of hinge plates fixed to the discharge section adjacent the inner end thereof, said second named plates lying in adjacent parallel planes to said first named plates, and a hollow hinge pin passing through all of said plates and forming a pivot on which said sections fold; a shaft passing through said pin and rotatably supported therein; a lever fixed to one end of said shaft; a locking means carried by one of said plates, said locking means being movable into and out of a locking position; and means operable by said lever to actuate said means.

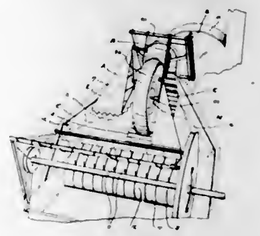
2,744,616
SIDE OUTLETS FOR BAG ELEVATORS
James J. Shields, Denver, Colo.
Application February 13, 1953, Serial No. 336,736
5 Claims. (Cl. 198—127)

1. A side outlet device for a bag elevator of the type having an inclined bag-supporting roller frame consisting of two parallel side members with a series of power-driven spaced-apart conveyor rollers extending horizontally and transversely between said side members, comprising: two hinged gate frame members, there being one gate frame member hinged to and positioned parallel to each of said side members; gate rollers mounted on and extending between said gate frame members in parallel relation to and normally in alignment with and forming an intermediate roller section in said series of



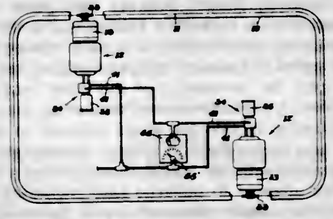
conveyor rollers; and means for swinging said hinged gate members downwardly from said side members to an open position so as to swing said gate rollers out of alignment with said series of conveyor rollers so that a bag traveling up said series of rollers, when said roller section is in the open position, will be conveyed on said gate rollers out of the line of travel of said series.

2,744,617
FORAGE HARVESTERS
Everett P. Collier, Brantford, Ontario, Canada, assignor to Cockshutt Farm Equipment, Limited, Brantford, Ontario, Canada, a corporation of Canada
Application February 17, 1955, Serial No. 488,877
9 Claims. (Cl. 198—166)



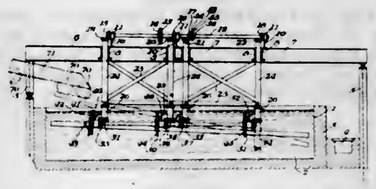
1. In a harvester of the type described having a continuous feed conveyor for transferring material from pick up means towards cutting and delivery means, said feed conveyor being narrower than the said pick up means and having an apron on at least one side of the feed conveyor for guiding part of the material from the pick up means to the feed conveyor, a framework mounted on said harvester above the feed conveyor, a shaft mounted by said framework, means for driving said shaft at a speed independent of the speed of movement of said feed conveyor, a hold down wheel freely mounted on said shaft, adapted to bear on material on the feed conveyor, said hold down wheel being adapted to be driven by the feed conveyor, a crank arm on said at least one side of the feed conveyor connected to the shaft, feeding means supported by the crank arm and actuated by rotation of the crank arm and acting to transfer material on said apron onto said feed conveyor.

2,744,618
MULTIPLE CONVEYOR DRIVE
Clyde W. Seal, Columbus, Ind., assignor, by mesne assignments, to Reliance Electric and Engineering Company, Cleveland, Ohio, a corporation of Ohio
Application July 16, 1954, Serial No. 443,910
7 Claims. (Cl. 198—203)



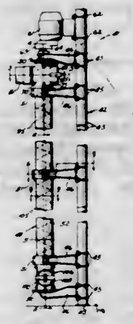
1. In combination with an endless conveyor, a plurality of prime movers arranged at spaced intervals along said conveyor, a speed varying mechanism driven by each prime mover and operatively connected to deliver power to said conveyor, control means for simultaneously increasing or decreasing the output speeds of all of said speed varying mechanisms, a fluid coupling interposed between each of said prime movers and said conveyor, each of said speed varying mechanisms including a control member shiftable to vary the output speed of that mechanism, said control means comprising a fluid motor for each of said mechanisms having a piston drivingly connected to the control member of that mechanism for movement thereof, valve means for each of said motor means oppositely movable to admit fluid under pressure to one side or the other of said piston, pressure-responsive means for each such valve means operably connected to move such valve means in one direction upon a change of fluid pressure therein, means responsive to movement of said piston and operatively connected to move said valve means in the opposite direction, a master pressure-control valve, and conduit means connected to conduct fluid under pressure through said master valve to the pressure-responsive means of each of said valve means.

2,744,619
BATH FURNACE CONVEYING DEVICE
Oscar R. Olson, Pittsburgh, Pa.
Application April 22, 1953, Serial No. 350,374
5 Claims. (Cl. 198—211)



1. A rotary feeder for moving articles to be treated comprising a support carrying a plurality of spaced bearing means, a sleeve means rotatably supported in each of said bearing means, a wheel mounted on said sleeve means and having outwardly open article conveying pockets, a shaft rotatably mounted in said sleeve means, a wheel mounted on said shaft and having outwardly open article conveying pockets co-operating with the pockets of the first wheel, a rotary power source, independent intermediate drive means connected between said rotary power source and said sleeve means and said shaft to rotate their respective wheels independently and at the same speed to permit said outwardly open article conveying pockets to co-operate with each other, and clutch means in said drive means to shift the relative rotary position of said wheels and change the relative position of their outwardly open article conveying pockets to determine the size and number of outwardly open article conveying pockets available for receiving and conveying articles.

2,744,620
SANITARY FLOUR HANDLING SYSTEM
Lewis B. Davis, North Hollywood, and John B. Paulson, Pasadena, Calif., assignors to Read Standard Corporation, a corporation of Delaware
Application June 14, 1951, Serial No. 231,516
13 Claims. (Cl. 198—213)



1. In a material-handling system, the combination of: a frame; a support carried by said frame and provided with a cylindrical flange; a tubular conveying member having a cylindrical end telescoped over and being in circumferential engagement with said cylindrical flange, said tubular conveying member being split longitudinally into a plurality of parts so that it may be detached from said support readily by separating said parts thereof from each other; readily releasable means for securing said parts of said tubular conveying member together; annular sealing means between said cylindrical flange and said end of said tubular conveying member and longitudinal sealing means between said parts of said tubular conveying member.

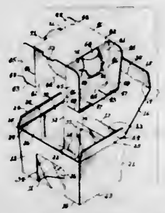
2,744,621
TOOL KIT
Paul A. Kegevic, Springfield, Mo.
Application August 10, 1954, Serial No. 448,805
2 Claims. (Cl. 206—16)



1. A tool kit comprising a case including a bottom and a pair of companion case sections hingedly secured to opposite side edges of the bottom, said case sections being swingable to opposed generally parallel positions substantially at right angles to the bottom and extending above the bottom, means carried by the case sections for securing them in their last-mentioned positions for closing the case, the case sections also adapted to lie substantially in the plane of the bottom in longitudinally extended relation beyond said opposite side edges of the bottom when the case is opened, a drawer housing mounted upon and secured to the bottom between the case sections and having an open side facing longitudinally of the adjacent case section when such case section is in the plane of the bottom, a plurality of drawers mounted within the drawer housing in stacked relation and removable therefrom through said open side of the housing longitudinally of and above said adjacent case section

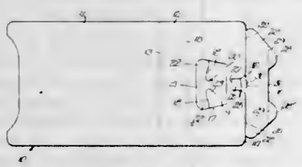
when the case section is in the plane of the bottom, the adjacent case section engaging the drawers and preventing their movement from the housing when the case sections are secured together in opposed substantially parallel relation, and a plurality of tool carrying panels pivotally connected with the bottom and swingable toward and from the case sections longitudinally thereof and adapted to lie upon either case section when the latter are in the plane of the bottom, said panels having lower edges terminating a substantial distance above the bottom so that the panels may clear the top of the drawer housing when swung from one case section toward the other, the case sections maintaining the panels in side by side substantially parallel relation above the housing and between the case sections when the case is closed.

2,744,622
COMBINATION BOX AND CRADLE FOR DECORATED EASTER EGGS AND THE LIKE
George C. Sparks, Philadelphia, Pa.
Application March 25, 1954, Serial No. 418,625
3 Claims. (Cl. 206—45.14)



2. A display carton comprising a container unit including a top wall having a display window opening therein, a plurality of side walls depending from said top wall, one opposed pair of side walls having display window openings therein formed as continuations of said top wall window opening, and a bottom closure hingedly joined at one side to one of said side walls for swinging movement into and out of a closed position extending between the lower ends of said side walls, an insert unit snugly fitted in said container unit and including means for holding an article for display through said top and side wall window openings and a base for disposition in parallel contact with and seated on the bottom closure when the latter is closed, and securing means detachably connecting the opposite side of said bottom closure to said insert base when said closure is closed to maintain said base seated on said closure, whereby incipient opening movement of said closure tilts said insert to bind the latter in said container and prevent further opening of said closure.

2,744,623
COMBINED COLLAR PROTECTOR AND SHIRTBOARD
Arden L. Iverson, Lincolnwood, Ill., assignor to Para-Lux Products Company, Chicago, Ill., a corporation of Illinois
Application November 30, 1953, Serial No. 395,101
5 Claims. (Cl. 206—46)



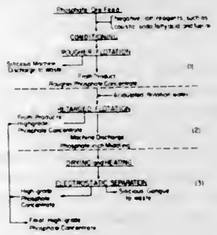
5. A collar protector unit comprising a top panel adapted to be disposed to extend forwardly in overlying relation to the neckband of a man's collar attached shirt, a wing-like bracing member integrally hinged to the forward margin of said panel and adapted to be disposed internally of said neckband in bracing relation to and beneath said panel rearwardly of the throat portion of said neckband, said bracing member comprising integrally connected arms positionable in curved conformity with and behind said throat portion, a toggle locking bridging member integrally hinged between said panel and said bracing member, a forwardly extending lug on the end of said bridging member hinged to said bracing member, said lug adapted to function independently of said bracing member upon the movement of the latter into its operative position, a partially excised anchoring member and tongue assembly in said top panel adapted to be folded upwardly and forwardly with respect thereto into anchoring engagement with the lapels of said collar, said bridging member adapted to underlie said anchoring member in face to face contact therewith upon the movement of said anchoring and bracing members into their operative positions, said lug adapted to place said tongue assembly under tension, and a wedging element associated with the forward edge of said bracing member to wedge the same in its operative position.

2,744,624
PACKAGING DEVICE
Leon E. Hoogstoel and Colin A. Ross, Troy, N. Y., assignors, by mesne assignments, to Norton Company, Worcester, Mass., a corporation of Massachusetts
Application November 12, 1954, Serial No. 468,207
6 Claims. (Cl. 206—65)



6. A package element comprising in combination: a backing member having a plurality of spaced, raised, resilient, pressure-sensitive adhesive-coated areas; a plurality of articles affixed in spaced relationship on said member with those surfaces of such articles which are in contact with said member contacting only the spaced, raised, resilient, pressure-sensitive adhesive-coated areas thereof; and a coating of decorative material applied over and adhering to the adhesive-coated portions of the backing member remaining exposed after said articles are affixed to said member.

2,744,625
CONCENTRATION OF PHOSPHATE ORES
Wesley M. Houston and Harvie W. Breathitt, Jr., Lakeland, Fla., assignors to Minerals & Chemicals Corporation of America, a corporation of Maryland
Application November 27, 1953, Serial No. 394,781
2 Claims. (Cl. 209—12)

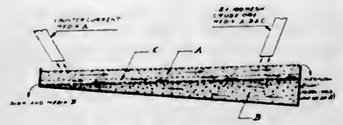


1. A method of concentrating phosphate minerals from their ores which includes the following steps: (1) subjecting the ore in an aqueous pulp to froth-flotation treatment with negative-ion reagents, thereby producing a froth-product which is a rougher concentrate of the phosphate values mixed with some silicious gangue; (2) subjecting the said rougher concentrate to froth flotation treatment in weakly acid flotation water and removing as a part of the final product a froth-product having a low insoluble content, and a machine discharge which is a phosphate-rich middling; (3) drying said middling and subjecting it to electrostatic separation treatment, thereby producing a high-grade phosphate concentrate which can be combined with the previously mentioned froth-product having a low insoluble content, and a silicious gangue which is discarded; thereby producing a final high-grade phosphate concentrate containing a high proportion of the phosphate in the ore.

2,744,626
PROCESS FOR THE REMOVAL OF ASH AND WATER FROM RAW MATERIAL CONTAINING COAL
Wilhelm Reerink, Essen-Bredeney, Walter Müschenborn, Essen, and Erich Nötzold, Essen-Haarzopf, Germany
No Drawing. Application December 15, 1952, Serial No. 326,144
5 Claims. (Cl. 209—49)

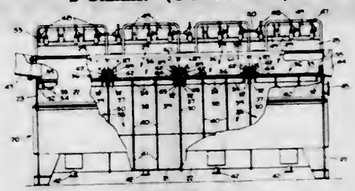
1. A process for removing ash and water from raw material containing fine-grain coal which comprises treating said raw material with a substance selected from the group consisting of oils, tars and bituminous substances, whereby the initial water films on the coal particles are replaced by films of said substance, while simultaneously dispersing the mixture in water, said simultaneous film replacement and water dispersion being carried out by subjecting the pulp to intensive turbulence by imparting thereto movements in opposite directions, at least one of said movements being rotary, then forcing said pulp to flow in radial direction in a constricted current, and finally separating the resulting dispersion into coal concentrate and waste water.

2,744,627
METHOD OF CONCENTRATING ORES
Louis J. Erck, Negaunee, Mich., assignor to The Cleveland-Cliffs Iron Company, Cleveland, Ohio, a corporation of Ohio
Application January 17, 1951, Serial No. 206,448
17 Claims. (Cl. 209—172.5)



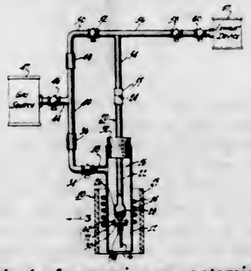
1. The method of producing a concentrate from a crude mine product containing primarily mineral values and gangue which comprises the steps of introducing into a vessel having an upper underflow end and a lower overflow end a non-self-sustaining, freely-flowable, solid-liquid medium having a circulating density less than the density of each the mineral value fraction and the gangue fraction of said mine product, establishing in said medium in the vessel a plurality of layers including a lower heavier layer and an upper lighter layer and an intermediate layer therebetween, adding the said mine product to the thus stratified medium whereby the heavier fraction of the said product travels to and is collected in the lower layer and the lighter fraction is collected in the upper layer, moving the lower layer together with the heavier fraction therein toward the upper end of the vessel, moving the upper layer together with the lighter fraction associated therewith as a stream flowing constantly in the direction of the lower end of the vessel, and toward the upper end of the vessel introducing additional quantities of said medium into contact with the thus flowing stratified body of medium and mine product fractions.

2,744,628
JIGGING APPARATUS
Byron M. Bird, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, a corporation of Ohio
Application October 18, 1952, Serial No. 315,556
2 Claims. (Cl. 209—455)



1. A multiple cell jig including a plurality of generally upright side and transverse wall means forming a plurality of side by side jig cells adapted to contain fluid, screen means adjacent the tops of said cells forming the bottoms of material stratifying chambers and the tops of hutch compartment, means through which fluid in said jig cells may be caused to pulsate upwardly and downwardly, removable frame means extending above said screen means and defining above each hutch compartment a material stratifying chamber, said frame means including opposite side wall means spaced from said jig cell side wall means and above said screen means, and open ended inverted generally U-shaped wall means interconnecting said opposite side wall means and spanning transverse wall means between each of said jig cells.

2,744,629
METHOD AND APPARATUS FOR PROCESSING CHEMICALS
Benjamin H. Vine, Lancaster, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Application June 2, 1952, Serial No. 291,227
9 Claims. (Cl. 210—1)

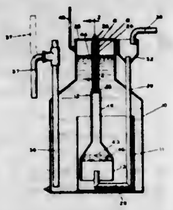


1. The method of preparing uncontaminated chemical material in apparatus having a container provided with a restricted orifice, said method comprising surrounding said container with an atmosphere of inert gas, reducing the pressure above said material to allow a flow of said gas through said orifice and into said container, heating said material to a molten state to allow passage of said gas through said material for removing volatile impurities therefrom, maintaining said reduced pressure above said molten material to retain the material within said container, and thereafter increasing the pressure above the surface of said material to force said material through said orifice and into a heated capsule in the presence of said inert atmosphere.

2,744,630
APPARATUS FOR SEPARATING IMMISCIBLE LIQUIDS
Arthur D. Hughes, Corvallis, Oreg.
Application August 10, 1953, Serial No. 373,341
4 Claims. (Cl. 210—56)

1. In a device for separating two immiscible liquids of different densities, a vessel, partition means in said

vessel dividing the same into a first and a second compartment, said partition means being of substantially lesser height than the height of said vessel, a vertically extending overflow pipe having an inlet in one of said compartments closely adjacent the bottom thereof and an outlet a predetermined distance above the top of said par-



tition means, a vertical separating column having its lower end disposed near the bottom of the other of said compartments, the upper end thereof terminating above the outlet of said overflow pipe, means supporting said separating column for adjusting its relative vertical position, and a feed pipe opening into the bottom of said separating column.

2,744,631
STRAINER FOR DRINKING GLASSES
Robert P. Toombs, Inglewood, Calif.
Application November 4, 1952, Serial No. 318,712
1 Claim. (Cl. 210—163)



A strainer device for use in connection with a drinking glass, comprising: a perforate strainer disc adapted to fit within the glass transversely thereof, said disc having an integral pad at the periphery thereof and a vertical, radially extending slot in said pad; an inverted U-shaped clamping element having legs adapted to frictionally engage the inner and outer surfaces of the side of the glass, one of said legs having a U-shaped portion at its lower end providing upper and lower horizontal portions, a vertical web connecting said horizontal portions and a horizontal slot extending normal to the leg, the width of said vertical slot being of a width substantially equal to the thickness of said web and adapted to receive and frictionally grip the same therein, and said horizontal slot being of a width substantially equal to the thickness of the pad and adapted to receive the same, said upper and lower portions being frictionally engageable against upper and lower surfaces of said pad; and detent means on said pad engageable with an edge of said web to releasably retain said element.

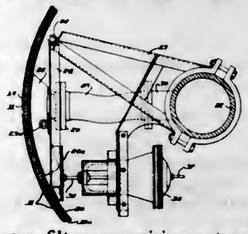
2,744,632
FILTERING SCREEN ASSEMBLY
Alfred W. Gardes, Detroit, Mich., assignor to Indiana Commercial Filters Corporation, a corporation of Indiana
Application December 23, 1950, Serial No. 202,537
7 Claims. (Cl. 210—184)

1. In a filter screen assembly, a pair of tubular filter screens in axial alignment, a pipe extending through both said screens with its outer end closed, means connecting said pipe to the outer ends of the screens, means carried by said pipe imperforate except for said pipe extending therethrough and separating and sealing off the adjacent ends of said screens from each other, and said pipe being



imperforate inside the screen farthest from the closed pipe end and perforate inside the other, the first said means having an opening therein at one end to form an outlet for filtrate from the screen around the imperforate pipe portion.

2,744,633
FILTERS
Claude Saunders, Dry Branch, Ga., assignor to Georgia Kaolin Company, Elizabeth, N. J., a corporation of New Jersey
Application October 2, 1951, Serial No. 249,360
8 Claims. (Cl. 210—199)



1. A continuous filter comprising a transverse hollow bearing supporting member, a filter drum concentric therewith and rotatable thereon, a plurality of side-by-side filter cells disposed on the outer peripheral surface of the filter drum parallel to the axis of rotation of the drum and having leading and trailing edges substantially transverse to the path of rotation of the drum, means for delivering to the drum exterior a material to be filtered, at least one passage through the drum surface into each filter cell adjacent each of the leading and trailing edges thereof and communicating between each filter cell and the interior of the drum, a removable wear plate on the drum interior covering said passages, passages in the wear plate corresponding to the passages in the drum surface and forming therewith means for communicating between the interior of the drum and the filter cell, hanger means on the bearing supporting member extending radially outwardly therefrom to a point adjacent the wear plate, a slidable shoe suspended from the hanger member for rotation thereon, sealing means on the shoe contacting the wear plate and sealing the passages between at least one filter cell and the drum interior at all times and means exerting pressure on the shoe and maintaining substantially uniform contact between the sealing means and the wear plate.

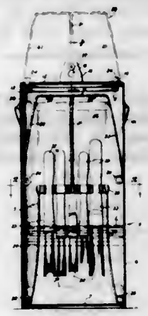
2,744,634
DISPENSING DISPLAY RACK
Albert B. Conley, Jr., San Bernardino, Calif.
Application February 1, 1952, Serial No. 269,545
2 Claims. (Cl. 211—49)

1. A dispensing display rack comprising a support, at least one dispensing rack mounted on said support, a display cabinet mounted on said support and enclosing the upper portion of said dispensing rack and said support, said support including a plurality of spaced vertical standards, a pair of vertically spaced horizontal bars, said



rack having vertically spaced hooks engaging over said bars, said display cabinet having a rear wall secured to the rear of said standards, the front wall of said cabinet being provided with diagonal braces on its rear surface, said diagonal braces being hooked over said bars.

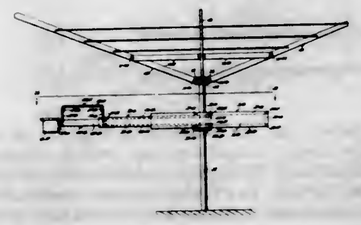
2,744,635
PAINTBRUSH HOLDER AND CONTAINER
Richard E. Hiss, Palos Verdes Estates, Calif.
Application December 8, 1952, Serial No. 324,786
2 Claims. (Cl. 211—66)



1. A brush holder adapted for use in connection with a container containing liquid, comprising: a one-piece cross-bar adapted to extend transversely within the container; longitudinally-spaced spring clip means on said bar for clamping the handles of paint brushes with the bristles of the brushes extending downwardly therefrom; a vertical stem projecting upwardly from said cross-bar; a pair of arms extending laterally outwardly from the upper end of said stem, said arms terminating in downwardly projecting, resilient, outwardly bowed legs having curved feet at their lower ends; and resilient, outwardly bowed legs depending from the ends of said cross-bar and provided with curved feet at their ends, all of said legs being frictionally engageable with the sides of the container so as to maintain the holder in erect position, the feet of the legs depending from the cross-bar being engageable with the bottom of the container to so locate the cross-bar relative to the bottom of the container that the ends of the brush bristles are spaced above said bottom of the container.

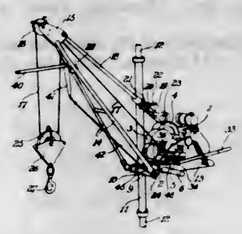
2,744,636
CLOTHES DRIER ATTACHMENT
James Macdonald Mitchell, Old Lyme, Conn.
Application March 31, 1953, Serial No. 345,963
3 Claims. (Cl. 211—108)

1. An article supporting attachment for a clothes drier having a vertical mast mounting radiating arms carrying a series of clothes hanging lines each disposed at a different distance laterally of the axis of the mast comprising an elongated member having a pair of opposing spaced arms adapted to be disposed on opposite sides of a mast and extending laterally to opposite sides thereof and having means for detachably and rotatably securing the member to the mast at a selected height beneath the clothes hang-



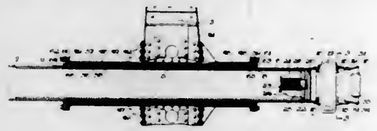
ing lines, extensible clothes container supporting means received between said arms, means on said arms supporting said extensible means for lateral movement relative to the mast and adapted to be selectively supported by the elongated member in different positions beneath the clothes hanging lines of a clothes drier at different distances laterally outwardly of the clothes drier mast.

2,744,637
WINCHES
John Stewart, Brentford, England, assignor to A. C. E. Machinery Limited, Brentford, England
Application December 2, 1952, Serial No. 323,547
Claims priority, application Great Britain December 12, 1951
4 Claims. (Cl. 212—61)



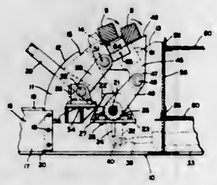
1. A portable jib crane comprising a bracket embodying a plurality of horizontal components, means for mounting a power unit, friction transmission, and winding drum upon some of said components, a vertical post, a vertical sleeve carried by one of said bracket components adapted for engagement over the vertical post, a jib hingedly mounted on the bracket component which carries the sleeve, means adjustably connecting the head of said jib to the said sleeve, a pulley mounted at the head of said jib over which the hoist cable passes directly to the winding drum, an eccentric bushing for the winding drum, a weighted lever for causing partial rotation of said bushing to move the winding drum between operative and inoperative positions, an arm pivotally mounted on the jib and in operative connection with the said weighted lever, the said arm being engaged and rendered operative by a load reaching a predetermined height, and a pawl arranged to support the weighted lever while the winch is operative but which is rocked by movement of the said arm to release the weighted lever to fall and move the winding drum to inoperative position.

2,744,638
CUSHION UNDERFRAME
William K. Durbon, Elmhurst, Ill., assignor, by mesne assignments, to Waugh Equipment Company, New York, N. Y., a corporation of Maine
Application May 9, 1952, Serial No. 286,976
24 Claims. (Cl. 213—8)



1. In a railway car, the combination with the car body and its underframe of a rigid draft and buffing column extending continuously throughout substantially the entire length of the car body and having couplers mounted at its ends, said underframe including hollow structure forming an elongated pocket with its end walls having aligned openings at opposite ends of and of smaller size than said pocket, said column being movable longitudinally relative to said car body through said openings and pocket and having substantially the same size and shape as said end openings, thereby providing an approximately annular space between said column and the surrounding pocket walls, resilient cushioning means located in said annular space and surrounding said column with its opposite ends retained by said pocket end walls, and follower means movable with said column and engaging and compressing said resilient means longitudinally against one of said end walls on movement of said column relative to said car body.

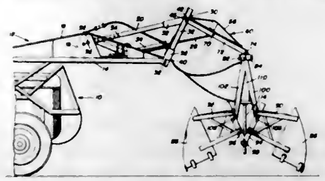
2,744,639
BLOOM TURNING APPARATUS
Frederick H. Evans, Massillon, Ohio, assignor to Evans Enterprises, Inc., Massillon, Ohio, a corporation of Ohio
Application October 15, 1953, Serial No. 386,337
15 Claims. (Cl. 214—1)



1. Apparatus for turning blooms and the like having angularly arranged connected longitudinal faces, said apparatus comprising spaced parallel rails, each rail having an angular notch in its upper surface, lifting levers for pushing a bloom along said rails and depositing it in said notches with one longitudinal face of the bloom upward, oscillatable turning jaws having angular notches therein, and means for oscillating said turning jaws rearwardly to raise the bloom out of said notches in the rails and to position the lower rear corner of the bloom upon the rails adjacent to the notches therein and then forwardly to cause the bloom to rotate upon its longitudinal axis and again deposit the bloom in the notches in the rails with another longitudinal face upward.

2,744,640
BUCKET LINKAGE
Francis M. Somers, Urbana, Ill.
Application December 12, 1952, Serial No. 325,678
10 Claims. (Cl. 214—147)

1. In a hydraulic loader including a vertically swingable boom having a pair of parallel side members, a cross member joining said side members and a hydraulic cylinder pivotally mounted on said cross member and adapted to tilt a bucket pivotally supported between and upon the forward ends of said side members; a bucket replacement for the normal bucket supported on the boom, said bucket replacement comprising a rigid U-shaped frame member having leg portions pivotally attached to the forward ends of said side members, means adjustably securing said frame member to said boom, a vertically swingable support pivotally supported by said frame member and connected to said cylinder to be swung by the



latter, forward and rear hanger frames having upper ends pivotally attached to the forward end of said support, forward and rear bucket forming halves, forward and rear frameworks fixed to and extending upwardly from said bucket forming halves, pivot means securing the forward and rear frameworks to the forward and rear hanger frames, said frameworks having overlapping end portions, and a hydraulic jack cylinder carried by said support and connected to the overlapping end portions of said frameworks for moving the latter about the pivot means selectively toward and away from each other.

2,744,641
HANDLING DEVICE
James Smith, San Leandro, Calif.
Application February 2, 1953, Serial No. 334,600
6 Claims. (Cl. 214—300)

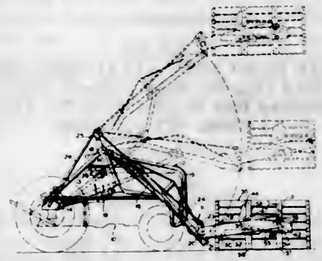


1. In a handling device comprising a table having a movable and a stationary top normally disposed in coplanar relationship; the combination therewith of a stationary cylinder having a base member, a shaft secured to said movable table top and slidably engaging said stationary cylinder, spring means mounted within said stationary cylinder in engagement with said shaft for supporting said movable table top in normal position, a movable cylinder about said stationary cylinder in slidable engagement with same and secured to said shaft, and an outward projection upon said movable cylinder for sliding same and attached shaft longitudinally of said stationary cylinder to vary the relative disposition of said table tops from normal.

2,744,642
CRATE LOADING MECHANISM
Walter W. Sewell and Raymond W. Wilson, Ferndale, Mich., assignors, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application September 18, 1952, Serial No. 310,228
6 Claims. (Cl. 214—313)

4. For use with a receptacle having longitudinally spaced, transversely extending first and second trunnions,

a receptacle dumping device comprising laterally spaced lift arms extending longitudinally of said receptacle to underlie said trunnions and to engage with said first trunnions, dumping arms pivotally attached to said lift arms, respectively, for movement relative thereto about an axis spaced from the engagement of said first trunnions with said lift arms, said dumping arms having slots therein including first vertical portions receiving said



second trunnions and second longitudinal portions into which said second trunnions are moved upon initial pivotal movement of said arms, and power means for effecting pivoted arm movement to elevate said receptacle upon relative arm movement about a pivot axis defined by the other of said trunnions, the relative eccentric pivotal movement of said receptacle and said dumping arms causing entry of said second trunnions into the longitudinal portions of said slots.

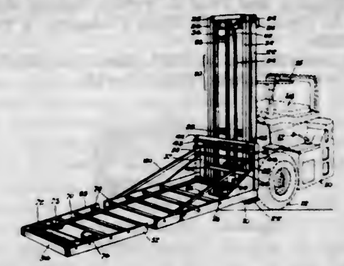
2,744,643
TILTABLE BODY TRAILER
Ronald N. Hipp, Menlo Park, Calif.
Application December 3, 1953, Serial No. 395,951
2 Claims. (Cl. 214—506)



1. A shallow bed trailer body of welded sheet metal construction adapted to carry a grading type tractor, said body comprising a pair of forward units arranged in side-by-side, abutting relation and a pair of rearward units arranged in side-by-side abutting relation, said forward and rearward pairs being arranged in end-to-end abutting relation, said pairs of units being welded together longitudinally and transversely at their abutting sides and ends; said units being formed to provide a deck extending longitudinally and centrally of the trailer body, a pair of oppositely directed channels disposed beneath said deck and extending longitudinally of the trailer body and along its center line, a pair of outer, inverted longitudinal channels serving as side walls of the trailer body and a pair of channels between said deck and outer channels adapted to receive and guide the wheels of a tractor or the like.

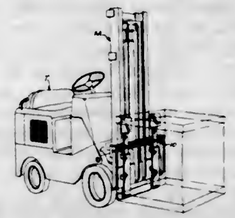
2,744,644
ATTACHMENT FOR LIFTING TRUCK, WITH END LOADING MEANS
Robert F. Hackney and Bernard N. Lyle, Dalton, Ga.
Application January 12, 1954, Serial No. 403,561
9 Claims. (Cl. 214—512)

1. A movable lift truck having a vertical frame, means movable vertically along said frame, power driven means to move said vertically movable means, supporting means on said vertically movable means, a platform pivotally mounted for horizontal movement upon said supporting means, means operable from the truck to cause pivoting of said platform, a rotatable cylinder on the end of said



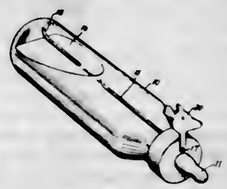
platform, and motor means operable from the truck to rotate said cylinder clockwise or counterclockwise for moving onto or off said platform endwise thereof.

2,744,645
CARTON HOOK ASSEMBLY FOR LIFT TRUCKS
Lee Cirillo, South Euclid, Ohio, assignor to Towmotor Corporation, Cleveland, Ohio, a corporation of Ohio
Application May 8, 1952, Serial No. 286,697
5 Claims. (Cl. 214—651)



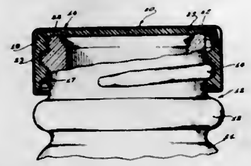
1. A lift truck for handling cartons having a downturned flange around the top thereof comprising a vehicle having a vertical mast structure, a carriage reciprocable on the mast, column means joined to the carriage, an upwardly projecting blade at the upper end of the column means, and shoe means freely slidable on the lower end of the column means for preventing damage to the box and the contents thereof during the lifting operation.

2,744,646
BOTTLE CONSTRUCTION
Henry Blackstone, Northport, N. Y.
Application July 16, 1954, Serial No. 443,889
9 Claims. (Cl. 215—11)



6. In combination, a nursing bottle having an opening at one end, closure means for said end, said closure means including a nipple located substantially on the axis of the bottle, and a breather pipe passing through said closure means at a location radially offset from said nipple and extending to a radially offset location near the bottom of the bottle, both said radial offsets being on the same side of the bottle axis, and eye-catching radially projecting means carried by said closure means predominantly on the side of the bottle in the direction of which said breather pipe is offset.

2,744,647
CLOSURES
Jack M. Wheaton and Fred G. Pellett, Toledo, Ohio, assignors to Owens-Illinois Glass Company, a corporation of Ohio
Application August 14, 1951, Serial No. 241,738
4 Claims. (Cl. 215—43)



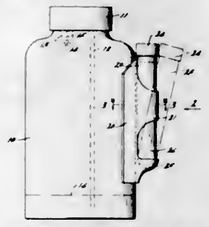
1. The combination comprising a closure and a container formed with a neck and an annular sealing surface, said closure comprising a shell formed of rigid material and an insert formed of a material which is flexible and resilient when formed in thin sections, said shell comprising a flat top portion and a depending marginal skirt, said insert comprising a complementary flat top portion and a depending marginal skirt whereby the insert is securely held within said shell, means formed on the interior surface of the skirt of said insert for removably securing the closure to the neck of the container, said insert being formed with an annular depressed portion on the top surface thereof overlying the sealing surface of the container and thereby providing an annular space between the top of the metal shell and the top of the insert, said annular depressed portion being in the form of a web substantially thinner than the adjoining top portion, the web being of greater width than the underlying sealing surface and of substantially uniform thickness throughout its width and being flexed upwardly into said space when the closure is secured to the neck of the container, the said shell forming a means to oppose downward movement of the skirt of the insert as a whole relative the top portion when the closure is moved down on the container neck to sealing position.

2,744,648
CLOSURE
George H. Scherr, Ralston, Nebr.
Application March 9, 1953, Serial No. 341,096
1 Claim. (Cl. 215—79)



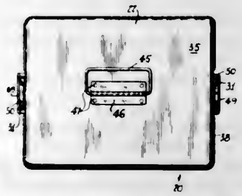
A bottle stopper comprising a main body of compressible material, said body having a first axially directed bore extending therethrough, said first bore being substantially filled with a bacterial filter material, a second axially directed bore in said main body and extending therethrough, said second bore having its wall outwardly recessed at a point adjacent and inwardly spaced from the top of said main body to form a substantially funnel-shaped enlargement in said second bore, said funnel-shaped enlargement having its widest portion adjacent the top of said main body and tapering inwardly toward the bottom of said main body, a thin disc of compressible material cemented to the top of said main body and having a diameter equal to that of the top of said main body, said disc having an essentially X-shaped incision therein in alignment with said first bore and a second essentially X-shaped incision therein in alignment with said second bore and a second thin disc of flexible material cemented to the bottom of said main body and having a diameter equal to the diameter of the bottom of said main body, said second disc having an essentially X-shaped incision therein in alignment with said first bore and an aperture therein in alignment with said second bore.

2,744,649
BOTTLE PILOT TUBE ATTACHING DEVICE
John Chandler Smith, Saginaw, Mich.
Application June 10, 1954, Serial No. 435,730
1 Claim. (Cl. 215—100)



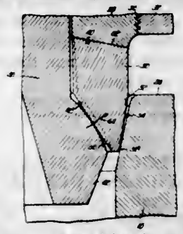
In a device for attaching a pilot tube to a bottle having a curved peripheral surface, a one-piece unit formed of an elastic plastic material and including a base having an attaching surface adapted to be secured to said peripheral surface of said bottle, the marginal side portions of said base being relatively thin and adapted to deflect to conform to the configuration of said bottle surface, a pair of outwardly projecting clip portions integrally joined to said base at a position intermediate the ends thereof, the outer ends of said clip portions curving toward each other and terminating in spaced relationship with respect to each other whereby said clip portions define an open-sided aperture adapted to receive said pilot tube, and an outwardly projecting cup portion integrally joined to said base and defining a recess aligned with said aperture and adapted to receive one end of said pilot tube, said cup portion being positioned on said base in spaced relationship with respect to said clip portions whereby a substantial area of the surface of said pilot tube is exposed when said pilot tube is inserted in said unit, said clip portions being adapted to grip and resiliently support said pilot tube and to yield when pressure is applied to said tube so as to permit said tube to be withdrawn through the open side of said aperture.

2,744,650
SELF-LOCKING BOX STRUCTURE
Carl J. Woessner, East Orange, N. J., assignor to Gibraltar Manufacturing Co., Inc., Jersey City, N. J., a corporation of New Jersey
Application August 17, 1953, Serial No. 374,753
4 Claims. (Cl. 220—4)



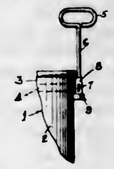
1. A container comprising a pair of complementary substantially similar sections, each section having a bottom wall and a peripheral wall extending substantially at right angles from said bottom wall and terminating in a free smooth edge, said sections being in edge-to-edge contact to constitute a closed container, diagonally opposed tongues extending beyond the free edge of each section from the inside surface of the respective peripheral wall of each section, said tongues of one section, when the sections are in closed relation, being disposed in opposed relation to the tongues on the mating section, the tongues of one section extending into the other section to relatively align the sections, at least two laterally extending loops on one of said sections, at least two upstanding resiliently deflectable lugs on the other of said sections and insertable through said loops when said sections are in closed relation, means on said lugs for automatically effecting lateral deflection of the latter when said sections are arranged in closed relation, and detent means on said lugs and releasably engageable with said loops for holding said lugs in said loops.

2,744,651
PRESSURE VESSEL
Kurt E. B. Bredtschneider, Chicago, Ill., assignor to Crane Co., Chicago, Ill., a corporation of Illinois
Application October 16, 1952, Serial No. 315,111
5 Claims. (Cl. 220—46)



1. In a high pressure vessel having a hollow body member with a circular opening therein of which the upper edge is outwardly and upwardly beveled, a sealing assembly comprising an outer member disposed entirely without said opening, said outer member held in secured relation to said body member, an inner member normally disposed in telescopic relation to said outer member with a portion thereof extending into said opening, axially opposed surfaces on said outer member and said inner member, and an annular sealing ring member disposed between said axially opposed surfaces, said sealing ring member having a lower outer edge engaging said upper edge of said opening in said body member and having a substantial upper portion disposed externally of said opening, said axially opposed surface on said inner member normally engaging said sealing ring member along a line above the line of engagement of said ring member with said upper edge of said opening in said body member, said axially opposed surface on said outer member having a portion facing inwardly for resisting the outward radial movement of the upper surface of said sealing ring member when said sealing ring member is compressed between said axially opposed surfaces.

2,744,652
KEY FOR OPENING CANS
Wilfrid J. McDermott, San Francisco, Calif.
Application March 31, 1953, Serial No. 345,873
1 Claim. (Cl. 220—52)



In combination, a can including a closed end cylindrical body portion having a radially extending outwardly projecting peripheral rim on one end thereof, a flexible strip on said body portion adjacent the rimmed end and disposed substantially parallel thereto for removing said closed end, a key for removing said strip, said key comprising an elongated shank having a finger grip means at one end thereof for rotating the shank, a cylindrical member fixed on the other end of said shank in axial alignment therewith, said shank having a slot formed therein intermediate the finger grip and cylindrical member for threading said flexible strip therethrough when said key is placed in a desired can opening position, said cylindrical member being rotatable with said shank and having a radius substantially greater than the radius of the shank by an amount substantially equal to the distance the rim extends radially beyond the body portion, whereby, when the key is threaded to the flexible strip and placed in the desired can opening position the shank will contact the rim and the cylindrical member will contact the body portion and maintain the shank in substantially parallel relation to the body portion.

2,744,653
CAN OPENER
Beulah Louise Henry, New York, N. Y.
Application April 16, 1953, Serial No. 349,226
1 Claim. (Cl. 220—52)

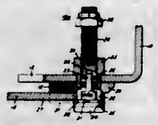


A can opener for opening a can having a tearing strip formed as a part of the peripheral wall thereof, said can opener including a handle having a shank provided with a slot opening through the outer end thereof, a member having an enlarged plate-like inner end and a flat plate portion projecting substantially perpendicularly outwardly from said enlarged inner end, said flat portion having a substantially rectangular opening therethrough outwardly of said enlarged inner end of a width slightly wider, in a direction perpendicularly of said enlarged inner end, than the width of the tearing strip, said member having an opening extending edgewise through said flat plate portion perpendicular to said plate-like inner end and in alignment with another opening extending perpendicularly through said enlarged plate-like inner end, said last mentioned openings receiving and journaling said shank with the slotted portion of the shank extending across said first mentioned opening to receive and retain one end of the tearing strip, said shank being freely rotatable in said last mentioned openings for winding the tearing strip thereon and being removable from said member for removing the wound tearing strip outwardly through the end of the slot, and said enlarged inner end engaging against said handle on one side of said enlarged inner end and being adapted to engage against the head of the can on the other side of said enlarged inner end for guiding the movement of said flat portion about the peripheral wall of the can.

2,744,654
CLOSURE FASTENER AND HINGE CONSTRUCTION
Nathan Swerdlow, Philadelphia, Pa., assignor to General Electric Company, a corporation of New York
Application May 10, 1954, Serial No. 428,652
9 Claims. (Cl. 220—55)

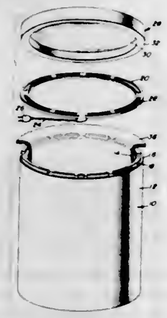
9. In combination, a frame including an internally threaded socket, a cover mounted on said frame, a bolt

extending into said socket through a portion of said cover and being rotatable relative to said cover and to said socket, said bolt comprising a headed shank and a threaded body portion meshing with said internally threaded socket whereby tightening of said bolt is effective to clamp said cover against said frame, a pin pivotally joining said shank to said body and defining an axis



about which said shank and said cover are adapted to pivot when said bolt is loosened, the head of said shank having at least one flattened surface for receiving a torque-applying tool for tightening and loosening said bolt, said flattened surface extending generally parallel to said pivot axis whereby to provide an indication of the position of said axis.

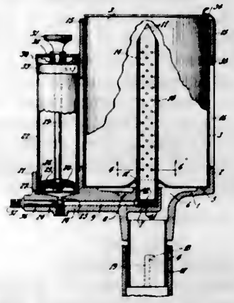
2,744,655
LINED CONTAINER AND CLOSURE THEREFOR
Josef Vnuk, St. Joseph de Sorel, Quebec, Canada
Application September 22, 1953, Serial No. 381,624
1 Claim. (Cl. 220—63)



A sealed container comprising: a plastic cylinder open at its top, spaced axially extending circumferential ribs on top of the cylinder, a plastic closure provided with a depending vertical wall having the lower edge thereof abutting the top of the cylinder, a metallic heating ring interposed between the closure and the cylinder and having slots therein accommodating said ribs, a liner in the cylinder including an inwardly bowed upper portion extending above the top of the container and having a free edge engaging under tension the vertical wall of the cover, and means on said ring whereby said ring may be heated to fuse the adjacent plastic surfaces of the closure and container together and to said ring.

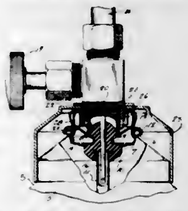
2,744,656
OIL DISPENSING RECEPTACLES
Stanley C. Hope, New York, N. Y., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a corporation of Massachusetts
Application October 9, 1952, Serial No. 313,890
2 Claims. (Cl. 222—82)

1. In a dispensing funnel, having intermediate its ends an endless flange adapted to be engaged by the outer peripheral portion of the lower end wall of a can of lubricating oil and a spout extending downwardly from said flange and communicating with the space within said flange; a tube fixed to the funnel and located inside said flange in upstanding relation and terminating with a pointed upper end adapted to puncture the lower end wall of the can when the latter is thrust downwardly into engagement with said flange, said tube extending upwardly above said flange a distance approximating that between the lower and upper end walls of the can and having its upper outlet end adapted to communicate with



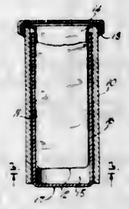
the interior of the can near its upper end wall, and a conduit in said funnel for introducing air under pressure into the lower end of said tube to pass upwardly through the tube and issue into the upper part of the can to aid in expelling the contents of the can through its punctured lower end and into said spout.

2,744,657
ASSEMBLY AND LOCKING MEANS FOR LIQUID HANDLING DEVICES
Louis A. Falligant, Prairie View, Ill., assignor to Prepo Corporation, Edgerton, Wis.
Application July 30, 1953, Serial No. 371,213
5 Claims. (Cl. 222—83)



3. In a device of the class described including a generally cylindrical liquid container with an annular shoulder near the upper end thereof and having a closure cap seated within the opening of the container to close the same and having an elastic grommet providing a sealed outlet for the container, said container having an annular outer ridge concentric with said sealed outlet and said cap having an annular undercut recess beneath said ridge and concentric with respect to said sealed outlet, a valve unit for connection with said container having a threaded base and a hollow needle carried by said base and adapted to enter said sealed outlet to receive the contents of the container, a circular bell-shaped member having a downwardly extended circular flange adapted to be seated on the annular shoulder of said container and having a non-circular center opening, a corresponding non-circular fitting adapted to be secured in the opening of said member and having a central threaded opening to receive the threaded base of said valve unit, the end of said base being movable axially into said member by relative rotation thereof in one direction, spring members having non-circular openings to fit over said fitting within said member and having opposite flexible arms projecting downwardly and normally disposed to enter the recess of said cap, the corresponding arms of the lowermost of said spring members being disposed to be engaged by the end of said base of the delivery tube by rotating the same relative to said member, the arms of said uppermost spring member being engageable by said other arms to be moved in opposite directions of each other and into the undercut recess of said container cap to securely lock the valve unit in an assembled relation with said container, the depending flange of said bell-shaped member being seated on the rim of the container to provide rigidity for the assembly.

2,744,658
CARTRIDGE FOR GREASE GUN
Lawrence E. de S. Hoover, Washington, D. C., assignor to General Cap and Container Corporation, New York, N. Y., a corporation of Delaware
Application September 5, 1952, Serial No. 308,052
1 Claim. (Cl. 222—95)



A cartridge for a grease gun comprising an outer shell of a size and shape to mate with the end of a grease gun, a flexible bag within said shell having an open end attached around the periphery of an end of said shell, both ends of said shell being open, and an inner shell fitting into the other end of said outer shell and around said flexible bag, having one end closed whereby the inner shell may be removed and reversed and used as a ram or plunger to force the contents of said bag into a grease gun.

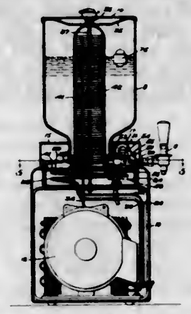
2,744,659
GREASE GUN NOZZLE
Gibbs U. Melchor, Mooresville, N. C.
Application April 8, 1954, Serial No. 421,902
8 Claims. (Cl. 222—125)



1. In a lubrication apparatus having a hand control valve and a first rigid pipe extending therefrom, said first rigid pipe having a flexible pipe fixedly connected to the free end thereof and the flexible pipe having a hydraulic coupling connected to the free end thereof; the combination of a second rigid pipe slidably mounted on the first rigid pipe and being movable longitudinally of the first rigid pipe to encase the flexible pipe to lend rigidity thereto during a lubrication procedure and said second rigid pipe being movable longitudinally of the first rigid pipe to expose the flexible pipe whereby the flexible pipe can be manipulated to cause the hydraulic coupling thereon to be engaged with a grease fitting.

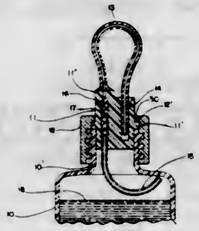
2,744,660
BEVERAGE DISPENSER
William H. Jacobs, Newton, Mass.
Application July 18, 1952, Serial No. 299,562
8 Claims. (Cl. 222—146)

1. A beverage dispenser comprising: a storage tank; a substantially cylindrical refrigerating element mounted vertically in said tank; a restricted chamber surrounding the lower part of said element and communicating with said tank, said chamber having a wall provided with an orifice; a pipe leading into said chamber forming a nozzle adapted to discharge substantially tangentially to said element, and a pump connected so as to draw



beverage out through said orifice and discharge beverage through said nozzle.

2,744,661
FLEXIBLE LIQUID DISPENSING CONTAINER HAVING A REMOVABLE SPOUT ASSEMBLY AND FILTER
Lincoln K. Davis, Brockton, Mass., assignor to The Foxboro Company, Foxboro, Mass., a corporation of Massachusetts
Application February 5, 1953, Serial No. 335,353
3 Claims. (Cl. 222—189)



1. A liquid dispenser unit for dispensing small quantities of liquid and adapted for frequent, periodic use without refilling, comprising, in combination, a flexible container with an opening therein, and a dispensing spout assembly removably mounted in said opening, said dispensing spout assembly comprising a closure plug for said opening with said plug having an opening therethrough, a relatively small, freely flexible, elongated dispensing spout mounted on said plug as a continuation of said plug opening to receive and dispense liquid from said container as said container is squeezed, said spout having a dispensing end that is maintained open at all times to provide constant communication from outside said spout to the interior of said container, and means for preventing leakage from the open dispensing end of said spout when said unit is not in use, said means including a recess in said closure plug for receiving and lightly gripping the outer, dispensing end of said spout to permit said dispensing end to be freely removed and replaced for operation of said unit.

2,744,662
INSECTICIDE—AND LIKE SPRAYING EQUIPMENT
Anthony Pawson Smith and Geoffrey Fletcher, Broadway, Maidstone, England
Application August 3, 1953, Serial No. 372,034
Claims priority, application Great Britain August 7, 1952
3 Claims. (Cl. 222—189)

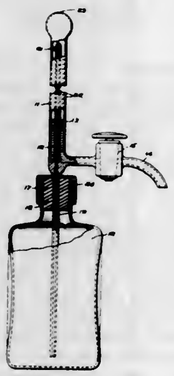
1. A knapsack sprayer for insecticidal liquids comprising a rigid outer casing having an outlet at one end, a flexible bag adapted to fit inside said casing and having an

outlet neck detachably secured in said casing outlet, a liquid inlet pipe communicating with said casing outlet and fitted with a non-return valve through which said bag may be filled with liquid, a liquid outlet pipe communicating with said casing outlet and provided with liquid-flow control means, an air inlet fitted with a non-return valve communicating with the space between the innermost end of said bag and said rigid casing, whereby air



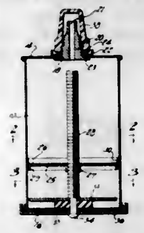
can be compressed into and maintained at a super-atmospheric pressure in said space for the purpose of collapsing said bag and ejecting liquid therefrom when said liquid-flow control means are operated to allow liquid outflow, and supporting means of substantial length projecting substantially axially from said casing outlet into the interior of said rigid casing for holding said bag away from said outlet inside said rigid casing when collapsed.

2,744,663
BURETTE ASSEMBLY
John H. White, Needham, Mass., assignor to Hagan Corporation, Pittsburgh, Pa., a corporation of Pennsylvania
Application November 1, 1950, Serial No. 193,319
2 Claims. (Cl. 222—207)



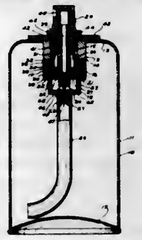
1. In combination a burette and a flexible walled container which container serves both as a pumping means and a reservoir from which liquid may be transferred into said burette, said combination comprising a container having a wall of flexible, resilient material, a stopper in the mouth of the container, said stopper having but a single hole positioned axially therethrough, and a burette extending axially through said single hole into the container, the upper end of said burette being vented to the atmosphere, an inner tube disposed axially throughout substantially the entire length of said burette and extending into said container, said burette having suitable discharge means connected thereto at a point intermediate the closure and the vented end of said burette, whereby manually squeezing the walls of said container forces the liquid therein upwardly through the inner tube into the burette.

2,744,664
DISPENSING GUN
Dugald S. Paterson, Narberth, Pa., assignor to American Flange & Manufacturing Co. Inc., New York, N. Y., a corporation of Delaware
Application July 26, 1950, Serial No. 175,919
1 Claim. (Cl. 222—326)



A dispensing gun comprising a disposable gun body in the form of a light weight sheet metal can having a cylindrical side wall and a top and a bottom permanently affixed by seaming to the ends of said side wall, said top being formed with an opening therethrough and a dispensing nozzle seated in said opening, a plunger mounted for longitudinal movement in said can and having its periphery formed for wiping engagement with the side wall thereof, a screw for actuating said plunger and extending throughout substantially the length of said can, said screw extending through said plunger and being threadedly engaged therewith, a stud of reduced diameter extending from the lower end of said screw and providing a shoulder at the end of the screw threaded portion, a plate within said can mounted on said stud and engaging said shoulder, a compressible gasket surrounding said stud and seated between said plate and the interior of the bottom of said can and engaged by said plate and said bottom, said stud extending outwardly through the bottom of said can into a portion of non-circular outline and a cup shaped actuating member closely overlying the exterior of said bottom and having a side portion extending up past the seam between said bottom and body, said actuating member being formed with a non-circular opening therethrough mating with and receiving said non-circular portion of said stud and means for securing said stud and said actuating member together in fixed relation for joint rotation.

2,744,665
PRESSURIZED CONTAINER VALVE STRUCTURE
George E. Carlson, St. Louis Park, and John Parker Bader and Nathan B. Owen, Minneapolis, Minn., assignors to Viking Valve Company, St. Louis Park, Minn., a corporation of Minnesota
Application June 16, 1951, Serial No. 232,008
2 Claims. (Cl. 222—394)



1. A valve apparatus for controlling flow of fluid from a container, comprising a body having a passageway

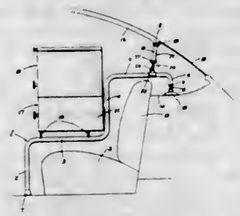
therethrough and providing a valve seat surrounding an inlet side of said passageway to which the interior of said container is open, means supporting said body in said container and precluding flow of fluid past the body save by way of said valve seat constituted as a member providing an annular surface rigid with the container, an internal cylindrical surface contiguous with an exterior margin of said annular surface and a shell including a cylindrical portion engaged against said internal cylindrical surface and an annular shoulder extending interiorly of said cylindrical portion of said shell, said body being secured between said annular surface and annular shoulder, an external surface of said body being engaged against an internal surface of said cylindrical portion and an annular flange upon said body being secured between said annular surface and an end of said cylindrical portion of said shell and engaged with said internal cylindrical surface, a valve member including a valve disposed interiorly of and adjacent said valve seat and a valve stem rigid with said valve extending through said passageway, and a diaphragm having an outer portion thereof surrounding a part of said valve stem spaced from said valve, said diaphragm and valve stem sealing closed a side of said body opposite the valve seat and contiguous with the passageway, said diaphragm being resiliently urged to actuate said valve to cause it normally to be engaged against said valve seat, and there being an outlet through the valve stem past the diaphragm leading from said passageway to a location exterior of said apparatus and said container.

2,744,666
DISPENSER WITH FRICTIONALLY INTERFITTING PARTS IN WHICH A CLOSURE MEMBER IS ROTATABLE ABOUT AN AXIS
William Jacobs and Joseph S. Darling, New York, N. Y.
Application May 28, 1952, Serial No. 290,488
7 Claims. (Cl. 222—545)



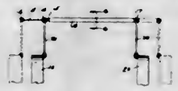
1. A dispenser comprising a hollow container which has a top, said top including a unitary block-like portion which is somewhat compressible and bendable and which is resilient, said block-like portion having a cavity which has a concave longitudinal wall and transverse, planar end walls and which is open at its top, said concave wall having an opening in its bottom portion which communicates with the interior space of said container, and a unitary dispensing member, said dispensing member being somewhat compressible and being resilient and having a radially outwardly extending finger piece, said dispensing member being positioned within and in axial alinement with said cavity with said finger piece extending through the top opening of said cavity, with said end faces respectively frictionally and turnably abutting the respective end walls and with said peripheral face frictionally and turnably abutting said concave wall, said dispensing member having a through-and-through diametrical opening, said dispensing member opening extending between and communicating with the bottom opening in said concave wall and the top opening therein when said finger piece abuts a first side of said top opening therein, said dispensing member opening being out of communication with said bottom opening of said concave wall when said finger piece abuts the second side of said top opening therein, said cavity in transverse cross-section being generally in the shape of a major arc of an oval whose major axis extends between said bottom opening of said concave wall and said top opening therein, said dispensing member being in transverse cross-section generally in the shape of an oval whose major axis is substantially alined with the minor axis of said cavity when said finger piece is in its second-mentioned position, said major axis of said dispensing member being slightly longer than said minor axis of said cavity, whereby said dispensing member is frictionally and compressibly and resiliently and releasably held in its position in which said finger piece is in the second-mentioned position thereof, the major and minor axes of said dispensing member being at least as small respectively as the major and minor axes of the cavity, so as to permit said dispensing member to be moved freely to its position in which said finger piece is in its first-mentioned position.

2,744,667
PORTABLE CABINET STRUCTURE FOR AUTOMOBILES
Roy T. Maloney, Sacramento, Calif.
Application September 28, 1953, Serial No. 382,529
2 Claims. (Cl. 224—29)



1. A portable cabinet structure for mounting in an automobile having a seat and a seat back, said structure including with a cabinet, a frame to support the cabinet directly above and clear of the seat, the frame including a substantially horizontal cabinet supporting unit, legs on the unit to support the same from the floor of the vehicle in front of and clear of the seat, and elements rigid with the unit extending upwardly from between the cabinet and the seat back and provided with means to engage a fixed part of the vehicle adjacent the top of the seat back; the vehicle, behind the seat back being provided with a substantially horizontal deck, and said means including extensions projecting over the seat back from said elements, feet for deck engagement supported from the rear end of the extensions, and detachable and longitudinally adjustable brace units arranged to extend between said extensions and the roof of the vehicle above the extensions.

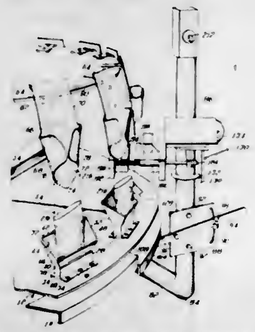
2,744,668
ADJUSTABLE CARRYING HANDLES
Joseph Henigman, Portland, Oreg.
Application May 11, 1953, Serial No. 354,297
1 Claim. (Cl. 224—55)



A carrying handle of the class described comprising in combination a pair of spaced apart circumferentially adjustable and lockable clamping bands, a pair of links pivotally attached at their bottom ends to said bands, a handle pivotally attached at both of its ends to the top ends of said links whereby said handle may be collapsed from an operative position to an inoperative position, said handle comprising a flat elongated bar rolled back on itself at one of its ends and thereby pivotally attached

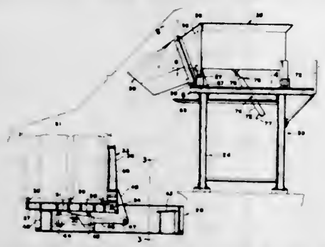
to the top end of one of said links and slidably mounted within a flat hollow sleeve provided with a transverse bearing at one of its ends opposite to the rolled back end of said elongated bar and thereby pivotally attached to the top end of the other of said links whereby said handle may be extended or retracted with variable spacing of said bands with respect to a cylindrical object embraced by them, said bar having a plurality of longitudinally spaced apart apertures formed therein, and said sleeve having at least one depression formed in one of its walls for selective engagement with said apertures for locking said bar and sleeve in various longitudinally adjusted positions with respect to each other in accordance with variable spacing between said clamping bands.

2,744,669
MACHINE FOR PACKAGING MERCHANDISE
Neil W. Ashe, Ralph D. Huskey, Don A. McNaughton, and Calvin P. Bassett, Knoxville, Tenn.
Application July 29, 1952, Serial No. 301,592
16 Claims. (Cl. 53—37)



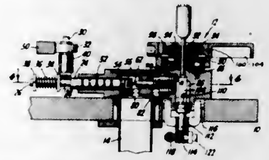
1. A method for packaging and sealing merchandise within a plastic container having an open end, comprising the steps of inserting said merchandise into said container through said open end, supporting said container and its contents on a slide plate having a slot formed therein, sliding said container and its contents over said plate at periodic intervals toward and into a heat sealing unit, sealing the open end of said container, sliding said sealed container and contents over said plate from said unit to said slot, and discharging said sealed container and contents downwardly from said plate through said slot.

2,744,670
APPARATUS FOR FILLING CONTAINERS
Joseph M. Bendot, Steubenville, Ohio, assignor to National Steel Corporation, a corporation of Delaware
Application May 29, 1952, Serial No. 290,734
9 Claims. (Cl. 226—19)



3. In apparatus for charging material into a container having an opening through which material may be charged, the apparatus comprising, in combination, container supporting means including a cradle in a first position to receive such a container, the cradle being tiltable to a second position in which the cradle supports the container in position for receiving material through the opening, and power actuated means operable to tilt the cradle to the first and second positions; a tiltable bin mounted on supporting means in a receiving position for receiving and holding material, the bin having a discharge opening adjacent the forward end and being tiltable upwardly about a first axis adjacent the forward end from the receiving position to a discharge position to discharge the material from the bin through the opening, a spout supported for swinging movement about a second axis parallel with and below the first axis; flexible means connected to the bin and to the spout at points above the axes and holding the spout in a raised position extending outwardly from the discharge opening and outwardly from the second axis whereby gravity urges the spout downwardly about the second axis toward a lowered position, a container supported by the cradle means in the second position; a chute on the bin extending forwardly from the discharge opening into the spout, power actuated means connected to the bin rearwardly of the discharge opening for tilting the bin to the discharging position whereby the spout swings downwardly from the raised position to the lowered position; and stop means in position to engage the spout when swung downwardly to the lowered position, the length of the flexible means being such that the spout engages the stop means before the bin has been tilted all of the way to the discharge position.

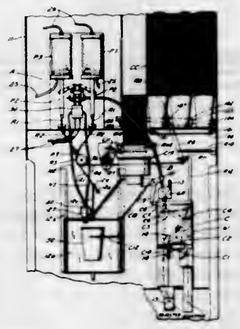
2,744,671
PORT SECTION FOR DOUBLE TURRET SEALEX
John J. Regec and Henry W. Roeber, Emporium, Pa., assignors to Sylvania Electric Products Inc., a corporation of Massachusetts
Application February 12, 1954, Serial No. 409,931
4 Claims. (Cl. 226—20.4)



1. In a container exhausting machine, a turret having a number of port sections each provided with an air inlet and an exhaust duct, all said ducts being adapted to be connected simultaneously to an exhaust pump; a valve mechanism in each port section movable to cut off communication between its inlet and exhaust duct, said valve mechanism comprising a control rod portion and a poppet valve portion with a lost motion connection between the portions, and means urging said poppet valve portion to valve open position; said valve portion, when in said valve open position, being moved to closed position, against the action of said urging means, on excessive flow of fluid past the valve portion.

2,744,672
BEVERAGE DISPENSING MACHINE
Buckley Crist, Plainfield, N. J., assignor, by mesne assignments, of six-sevenths to Buckley Crist, Muncie, Ind., and one-seventh to Edward Leal Haddon, Westfield, N. J.
Application November 10, 1949, Serial No. 126,594
11 Claims. (Cl. 226—46.5)

6. In a machine for dispensing a measured quantity of a liquid beverage into a container to be supplied by the machine, the combination of a source of liquid under pressure to be dispensed, a measuring unit having a differential piston member and a cooperative cylinder member having a small capacity end and relatively large capacity end, a conduit leading from the supply liquid to the small end of the cylinder, a delivery conduit leading from the large end of the cylinder, valve means in the piston operative when closed to confine the pressure liquid to the small end of the cylinder at one side of the piston to advance the piston and when opened to place both ends of the cylinder in liquid communication whereby the pressure liquid is caused to retract the piston, means responsive to the movement of the piston in an advancing direction to open the valve in the piston, additional valve means in the delivery conduit for controlling



the outflow of the liquid displaced from the large end of the cylinder, a filling nozzle operatively connected in the delivery conduit on the downstream side of said additional valve, a cup release means operative when actuated to position a cup in filling relation with the nozzle, means to actuate said cup release means to cause a cup to be positioned in filling relation with the said nozzle, means for actuating said additional valve means to open position, means interlocking said two last mentioned means to assure actuation of said cup release means prior to the actuation of said additional valve means to open position, and means actuated by the piston and responsive to a predetermined movement of said piston to actuate said additional means to closed position.

2,744,673
EMERGENCY FIRE ESCAPE
Chester V. Freeland, San Francisco, Calif.
Application March 29, 1955, Serial No. 497,644
4 Claims. (Cl. 227—18)



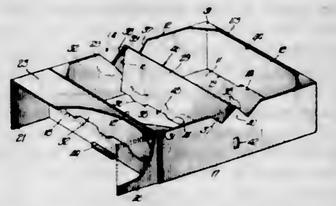
1. In an emergency fire escape, the combination of a length of rope having a window sill engaging hook at one end, a reel upon which said rope may be wound having a hub and end flanges, means carried by an end flange of said reel for securing said window sill engaging hook flat-wise thereupon and preventing an uncoiling of said rope when said hook is so secured, and intermediately disposed annular partitions spaced along the hub of said reel between its end flanges, the spacing of said annular intermediate partitions being sufficient to accommodate a flat spiral coil of said rope and a continuation of the length of rope from a preceding space when being wound upon said reel.

2,744,674
SECTIONAL LADDER
John E. Smith, Huntington, W. Va.
Application September 21, 1954, Serial No. 457,325
1 Claim. (Cl. 228—34)



A sectional ladder comprising a plurality of vertically superposed tubular standards, coupling means joining said standards, the adjacent ends of said standards having notches therethrough opening into said adjacent ends, a cylindrical fitting received in said adjacent ends, said fitting having lugs extending outwardly therefrom received in said notches, a clamp positioned over said adjacent ends and extending therebetween, vertically spaced apertures through said standards, pairs of step sections having an internally threaded end, the other of each of said pairs of step sections having an externally threaded end threadedly engaged in said internally threaded end within said tubular standards, inner collars on said step sections, said collars abutting said standard to lock said step sections to said standard, and outer collars on the outer ends of said step sections spaced from said inner collars, said step sections being knurled.

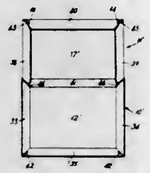
2,744,675
SHIPPING CONTAINER
Walton B. Crane, Woodland Hills, Calif., assignor to Allied Plastics Company, Los Angeles, Calif., a corporation of California
Application April 23, 1952, Serial No. 283,837
4 Claims. (Cl. 229—27)



1. A tray-like paperboard container which is fabricated from a one-piece paperboard blank, the blank being cut and creased to provide a series of integrally connected panels which form when the container is erected, a bottom wall, side walls hinged to the side edges of the bottom wall and end walls extending between opposite ends of the side walls, said end walls each comprising a pair of inner and outer end wall forming panels which are hinged to one another on a transverse crease at the top edge of the end of the container, one of said end wall forming panels being connected to the side wall forming panels by corner webs which are hinged thereto on longitudinal and transverse creases, respectively, and an end wall forming flap hinged to the end of the bottom wall forming panel and disposed in upturned relation to said

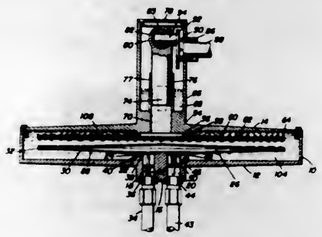
bottom forming panel, said inner and outer end wall forming panels being folded downwardly about the crease hinging the same to one another with said inner panel disposed between and paralleled by said outer panel and flap whereby said flap constitutes an inner part of the end wall and faces the interior of the container and said end wall forming panels and flap being secured in rigid relation to each other.

2,744,676
CONTAINER FOR MERCHANDISE
Marie P. Sealy, Clark Township, Union County, N. J., assignor to Federated Department Stores, Inc., a corporation of Delaware
Application July 24, 1952, Serial No. 300,679
8 Claims. (Cl. 229—44)



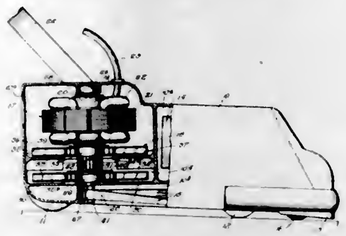
6. A set-up box for merchandise composed of two attached halves, one of said halves comprising a right-angled, rectangularly-shaped body portion, a trapezoidally-formed flap integrally connected along its shortest longitudinal edge to each edge of said body portion and inclining outwardly from said body portion, means connecting the ends of said flaps together to form a receptacle with outwardly flaring side, back and front walls, the front wall of said receptacle having cut-outs provided in its end edges, the outer ends of said cut-outs being closed by the front edges of said side walls to form closed openings in the ends of said front wall, said closed openings being entirely concealed from the exterior of the receptacle by said flap connecting means, the other of said box halves comprising a right angled, rectangularly-shaped body portion having a surface area greater than said first-mentioned body portion and substantially equal to the area defined by the outer edges of said flaps so that it fits within such edges, said second mentioned body portion being hingedly connected along one edge to the back wall of the receptacle, the hinge being along the top edge of said back wall, trapezoidally-formed flaps hingedly connected along their longer longitudinal edges to the remaining edges of said second mentioned body portion and being free of each other at the ends thereof, said last mentioned flaps being normally disposed at an angle to their associated body portion greater than the angle therebetween when the box is closed and having a width substantially equal to the width of said first mentioned flaps, said last mentioned flaps in inoperative position coacting with said second mentioned body portion to enable the boxes to be nested in stacked relation, said last mentioned flaps in operative position being within the receptacle and the second mentioned body portion lying substantially in a plane with the outer edges of the receptacle walls and closing said receptacle, the last mentioned flap on said second mentioned body portion forming the front wall of such other box half having cut-outs provided in its end edges and registrable with the cut-outs in the front wall of said receptacle half in the operative position of said last mentioned flaps, and the other two of said last mentioned flaps forming the side flaps of such other box half having forwardly extending projections movable into the open ends of the cut-outs provided in the front wall of such other box half so as to extend therethrough and detachably engageable with the cut-outs in the front wall of said receptacle half to lock said last mentioned flaps in operative position, said projections being wholly located in concealed condition within the outer periphery of the box in the operative locked position of said last mentioned flaps.

2,744,677
COMPRESSOR
Egon Sorensen, Amherst, Nova Scotia, Canada
Application October 24, 1952, Serial No. 316,651
5 Claims. (Cl. 230—49)



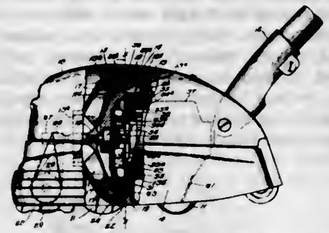
1. A pump operated compressor comprising a sealed substantially constant volume casing member, a pair of sealed normally expanded expansible and contractible variable volume chamber members contained in said casing in sealed relationship from the interior thereof, a substantially non-compressible force transmitting fluid medium contained in said casing in surrounding relationship to said chamber members, the expansion and contraction of one of said chamber members resulting in substantially simultaneous responsive contraction and expansion of the other of said chamber members due to force applied by said one chamber member on said force transmitting fluid medium, a fluid reservoir in communication with the interior of one of the chamber members, power means in said reservoir periodically urging said one of the chamber members in expansion and contraction, fluid inlet and outlet conduits in communication with the interior of the other chamber member, an oppositely directed valve means operatively connected between the other chamber member and one of each of said fluid conduits for permitting alternate filling and exhausting of fluid in said other chamber member in response to expansion and contraction of the one chamber member.

2,744,678
VACUUM CLEANER SUCTION DEVICE
Norman E. Ahlswede, Morton Grove, Ill., assignor to Birtman Electric Company, a corporation of Illinois
Application May 20, 1952, Serial No. 288,884
6 Claims. (Cl. 230—117)



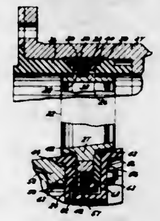
1. In a vacuum cleaner, an essentially vertical suction unit of relatively short length to reduce the overall height of the cleaner comprising a motor including a shaft and a rotor mounted thereon, a multi-stage fan on the shaft on one side of the motor, a commutator on the shaft between two adjacent fan stages, and a shaft bearing positioned within the inlet of the outermost fan stage.

2,744,679
VACUUM CLEANER
Frank S. Howard, Chicago, Ill., assignor to Birtman Electric Company, a corporation of Illinois
Application November 17, 1951, Serial No. 256,874
2 Claims. (Cl. 230—127)



1. In a vacuum cleaner, a centrifugal fan including an impeller rotatable about a central axis and having a substantially circular edge and an outer surface carrying fan blades, the outer surface being of generally convex configuration having a rearwardly extending sharply curved peripheral annular area adjacent to said edge extending over a major portion of said impeller outer surface, a first casing wall portion adjacent to and rearwardly of said edge and forming a part of one side of a fluid exhaust passageway, the fluid exhaust passageway extending over said impeller outer surface and first casing wall portion and rearwardly thereof, a second casing wall portion spaced from said impeller outer surface and first casing wall portion defining the other side of said passageway opposite to said impeller, the second casing wall portion being curved similarly to said impeller and being spaced substantially uniformly therefrom in the region opposite to said peripheral annular area and said edge, and a thread shield extending forwardly from the first casing wall portion substantially parallel to the flow of air in the general area of said shield, the shield extending in an upstream direction and overlapping said edge of said impeller but spaced therefrom a distance sufficient to permit normal play in the impeller, the fluid in said passageway flowing over the outer surface of the impeller and the overlapping extended edge of the shield and thereby establishing a zone of back fluid pressure between the shield and impeller due at least in part to the curvature of said peripheral annular area and corresponding part of said passageway to provide resistance to the entrance of foreign material between the shield and the impeller.

2.744.680
ELECTRICAL HEATING AND MOUNTING OF AXIAL FLOW COMPRESSOR BLADES
Horace S. Rainbow, Donald Paul, and George A. Day, Coventry, England, assignors to Armstrong Siddeley Motors Limited, Coventry, England
Application July 16, 1952, Serial No. 299,298
Claims priority, application Great Britain July 30, 1951
8 Claims. (Cl. 230—132)



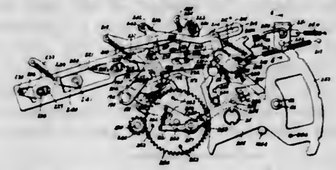
1. An axial flow compressor having a plurality of blades in a row, said blades being made of a metallic, electrical conducting, heat resistant material, coaxial inner and outer rings of insulating material, means supporting said blades by their ends in said rings, and electrical connectors at the remote cylindrical sides of said rings connecting the ends of said blades in series so that they can form resistance heating elements in an electric circuit.

2,744,681
OVERDRAFT DETECTION FOR CRAWL CARRY
George V. Hall, Orange, and Walter S. Oliwa, Summit, N. J., assignors to Monroe Calculating Machine Company, Orange, N. J., a corporation of Delaware
Application December 3, 1952, Serial No. 323,767
10 Claims. (Cl. 235—1)



10. The combination with a register including numeral wheels and crawl tens transfer mechanism between said wheels; of means for establishing a light ray, a light responsive device, a pair of adjustable blocking devices each having an opening therein, a drive transmission for driving the blocking devices respectively in time with a higher and the adjacent lower order numeral wheel, means for impinging a light ray upon the blocking device of the higher order wheel to permit passage of said ray through the opening therein upon movement of said wheel to substantially zero position to thereby impinge said ray on the blocking device of the lower order wheel, a deflecting element movable with each blocking device into the path of said light ray upon movement of the associated wheel in a given direction from zero position to a given registering position to deflect said light ray to impinge on said light responsive device and upon the aforesaid movement of the lower order wheel the tens transfer movement to said higher order wheel being operable to move the opening of the associated blocking device from the path of said light ray, and an electric signaling circuit controlled by said light responsive device.

2,744,682
ACCUMULATOR ENGAGING MECHANISM
Richard E. Busch, North Hollywood, Donald F. O'Connor, San Gabriel, and Milton V. Scozzafava, Temple City, Calif., assignors to Clary Corporation, a corporation of California
Application February 2, 1953, Serial No. 334,632
12 Claims. (Cl. 235—60)



1. In a calculating machine, the combination with differential actuators and accumulator elements normally out of cooperative relation with said actuators, of means including a control member movable from a first position to a second for moving said accumulator elements into cooperative relation with said actuators; an oscillating drive member, means including an interponent normally operatively associated with said drive member and said control member for moving said control member from

said first to said second position during movement of said drive member in one direction, said last mentioned means being effective to maintain said control member in said second position during actuation of said accumulator elements by said actuators, and means operable thereafter by said drive member during movement thereof in said one direction for moving said interponent out of said cooperative association and for returning said control member to said first position.

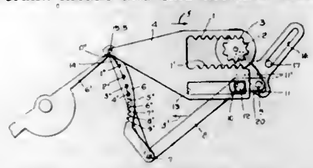
2,744,683
NAVIGATIONAL RESOLVER-INTEGRATOR
John W. Gray, White Plains, N. Y., assignor to General Precision Laboratory Incorporated, a corporation of New York
Application December 16, 1949, Serial No. 133,315
6 Claims. (Cl. 235—61)



3. A computer for use in connection with navigation systems wherein the frequency of an alternating current signal is representative of vehicle speed and a shaft rotational displacement is representative of vehicle direction of motion comprising, a first condenser having a rotor element and two stator elements positioned to be differentially charged by said rotor element said rotor element having a configuration such that the difference in charge produced on said stator elements is the sine of the angular position of said rotor element, means for charging said first condenser by said alternating current signal and means for positioning said rotor element in accordance with said shaft rotation whereby the difference in charges induced on said stator elements produces as an output an electrical quantity which is representative of the product of said signal frequency and the sine of the angular displacement of said shaft rotation, integrating means for producing a time integral of said electrical quantity, an indicator for indicating said time integral, a second condenser having a rotor element and two stator elements positioned to be differentially charged by said rotor elemen said rotor element having a configuration such that the difference in charge produced on said stator elements is the cosine of the position of said rotor element, means for charging said second condenser by said alternating current signal and means for positioning said rotor element in accordance with said shaft rotation whereby the difference in charges induced on said stator elements produces as an output a second electrical quantity which is representative of the product of said signal frequency and the cosine of the angular displacement of said shaft rotation, second integrating means for producing a time integral of said second electrical quantity, a second indicator for indicating said second-mentioned time integral, and cosine correction means for introducing into the first-mentioned integrating means a multiplying factor proportional to the cosine of the displacement of said second indicator.

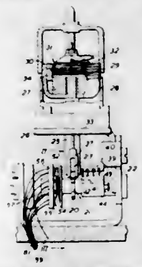
2,744,684
VARIABLE FULCRUM DIFFERENTIAL ACTUATING MECHANISM
Riccardo Buzzi, Milan, Italy, assignor to Italo Rizzieri, Milan, Italy
Application January 9, 1951, Serial No. 205,071
Claims priority, application Italy January 14, 1950
5 Claims. (Cl. 235—79)

1. In a calculating machine the combination of: a multi-order setting mechanism including an ordinal series of setting members settable into predetermined digital value positions, a multi-order actuator including an ordinal series of reciprocable actuator racks, a multi-order register including an ordinal series of rotatable toothed numeral wheels, each actuator rack having two parallel toothed rack sections facing each other and rigidly connected with each other, said rack sections of each actuator rack being capable of alternate operative engagement with diametrically opposite points of the associated toothed numeral wheel, a rotatable driving shaft, an ordinal actuating crank means secured to said driving shaft, an ordinal series of linkages between said actuating crank means and said actuator racks for posi-



tive reciprocation of the latter, each linkage including an adjusting link and a connecting link pivotally connected with each other at one of their ends, the other end of said adjusting link being pivoted to an associated actuator rack, the other end of said connecting link being operatively connected with said actuating crank means, said adjusting link being arranged in settable pivotal engagement intermediate its ends with the associated setting member so as to establish a fulcrum point of said adjusting link adjustable in dependence on the set digital value position of said associated setting member for adjusting the stroke of the associated actuator rack, said actuating crank means imparting to the pivotal connection between said connecting link and said adjusting link a reciprocating movement of a constant amplitude to which a reciprocating movement of a variable amplitude of the rack corresponds, and ordinal controlling means operatively connected with said driving shaft and said actuator racks for engaging one of the rack sections of the actuator racks with the associated toothed numeral wheels during their forward stroke and for engaging the other rack section of the actuator racks with the associated toothed numeral wheels during their return stroke.

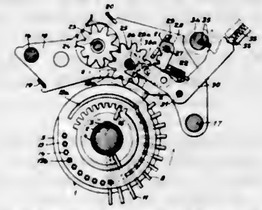
2,744,685
COUNTERS
Donald Rudolf Lambert, Carshalton, and Charles Thomas Arthur Jones, Wallington, England, assignors to Powers-Samas Accounting Machines Limited, London, England, a British company
Application November 17, 1954, Serial No. 469,518
Claims priority, application Great Britain December 7, 1953
4 Claims. (Cl. 235—92)



1. A counter comprising a toothed wheel supported for angular movement about the axis thereof, a permanent magnet, a coil-wound former for connection with a source of alternating current and movable in the airspace of the magnet, an escapement co-operating with

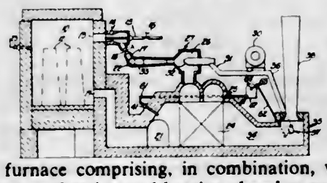
the toothed wheel to effect angular movement thereof by a single tooth increment for each cycle of alternating current applied to the former, a reciprocable connecting element connecting the former with the escapement to effect operation thereof, a first pair and a second pair of electrical brushes connectable in a carry circuit from the counter to a counter of next higher denomination, an insulating member movable angularly with the toothed wheel, and a conductor strip carried by the insulating member to bridge said first pair of brushes when the toothed wheel is in the standing-on-maximum position thereof and the former is in the normally inactive condition thereof, and to bridge the second pair of brushes when the toothed wheel is passing from the standing-on-maximum to the zero position thereof and the former is in the fully active position thereof.

2,744,686
TENS TRANSFER DEVICE FOR CALCULATING MACHINES AND THE LIKE
Erik Konrad Grip, Atvidaberg, Sweden, assignor to Aktiebolaget Atvidaberg-Facit, Atvidaberg, Sweden
Application September 30, 1952, Serial No. 312,364
Claims priority, application Sweden October 11, 1951
7 Claims. (Cl. 235—140)



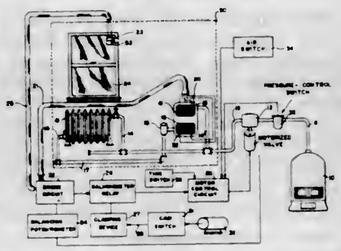
1. A tens transfer device for calculating machines of the type in which subtraction is effected by adding the complement of an item to be accumulated, in which a rotor is displaced axially relative to the accumulator wheels to set the machine for addition or subtraction, the rotor pins effective on the accumulator wheels in the subtractive position being those unoperated when the item is set in the rotor, comprising, in combination, a tens transfer pin for each denominational order except the lowest, means mounting said pins on said rotor for limited axial movement relative thereto, means for causing each transfer pin to follow a predetermined path adjacent the accumulator wheel of the next higher order during at least a portion of the rotation of said rotor, said means causing said transfer pins to follow the said paths whether the machine is set for addition or subtraction, and means associated with each accumulator wheel to move the transfer pin associated with the particular denominational order from said predetermined path into the path of the wheel of next higher denominational order.

2,744,687
FURNACE PRESSURE CONTROL
William H. Dailey, Jr., near Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a corporation of Ohio
Application October 6, 1951, Serial No. 250,090
5 Claims. (Cl. 236—15)



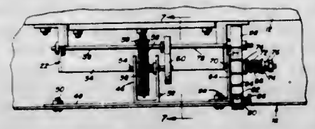
1. A furnace comprising, in combination, wall means forming a combustion and heating chamber and an outlet for flue gases therefrom, burner means for supplying heating gases to said chamber, flue means forming an exhaust flue from said outlet, an ejector in said flue for exhausting flue gases from said chamber, a motive fluid nozzle in said ejector turnably mounted therein whereby to direct said fluid upstream of said flue gases, downstream of said gases, or intermediate there-between, and control means responsive to pressure of said flue gases upstream of said ejector for turning said nozzle to maintain said pressure substantially constant.

2,744,688
AUTOMATIC HEAT CONTROL SYSTEM WITH WARM-UP PERIOD
Alfred A. Ross, Bayside, N. Y.
Application June 23, 1955, Serial No. 517,433
12 Claims. (Cl. 236—46)



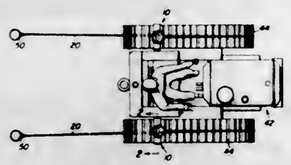
2. An automatic heat control system adapted to select the rate of heat output requisite to prevailing temperature conditions, said system comprising a balanced bridge circuit responsive to changes in prevailing temperature and to heat output of said system to upset the balance of said bridge in an appropriate direction indicative of such changes, means connected to the output of said bridge to detect the direction of unbalance, a valve-operating mechanism, a control circuit responsive to said detection means and coupled to said mechanism for increasing or decreasing the valve opening according to the unbalanced condition of said bridge, periodic switching means to render said detection means intermittently operative to cause said increase or decrease of the valve opening to occur by successive increments at a relatively slow rate, and a time-controlled switch for disabling said control circuit with respect only to a decrease in said valve opening for a predetermined warm-up period.

2,744,689
THERMOSTATIC DAMPER CONTROL
Clinton B. Coselman, Seattle, Wash., assignor to C. B. Coselman, Incorporated, Seattle, Wash., a corporation of Washington
Application July 12, 1955, Serial No. 521,601
4 Claims. (Cl. 236—96)



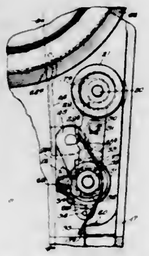
3. A thermostatic damper control comprising a mounting panel, a drive shaft, damper connecting means connecting said drive shaft to a damper, a thermostatic member mounted on said shaft and having one end anchored thereto, a mounting shaft spaced from said drive shaft, a control member rotatably mounted on said mounting shaft, a connecting rod carried by said control member eccentric to said mounting shaft, said thermostatic member having an opposite end connected to said connecting rod.

2,744,690
SELF-TOWING ATTACHMENT FOR TRACK VEHICLES HAVING GROOVED CLEATS
Archie L. McClain, Leesville, La.
Application December 22, 1954, Serial No. 477,058
5 Claims. (Cl. 238—14)



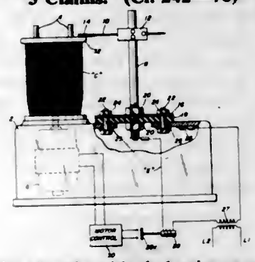
1. A self-towing device for track vehicles of the type having cleats with grooves in the outer surfaces thereof, said self-towing device comprising a pair of generally S-shaped members each including an elongated intermediate portion, and oppositely facing hook portions, one of said hook portions being adapted to engage over a cleat, said intermediate portion having formed on the surface thereof facing said one hook portion a projecting rib of a size of be received in the groove of the cleat, the other of the hook portions being engaged by a tow cable.

2,744,691
BOBBIN WINDER
Frank S. Howard, Chicago, Ill., assignor to Birtman Electric Company, a corporation of Illinois
Application May 1, 1952, Serial No. 285,368
9 Claims. (Cl. 242—22)



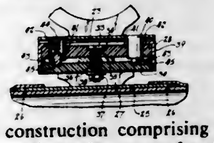
1. In a sewing machine including a driven flywheel, a bobbin winder adjacent to the flywheel comprising a rotatable bobbin supporting member, a first arm rotatable toward the member at the beginning of the winding and then away from the member by wound thread on the bobbin, a second arm carrying the bobbin supporting member and rotatable toward and away from the flywheel to move the bobbin supporting member into and out of contact with the flywheel, a first lever rotatable with the first arm, a second lever rotatable with the second arm, both levers having cooperating wedging surfaces for moving the second arm toward the flywheel to make driving contact of the bobbin supporting member therewith on moving the first arm toward the supporting member, a relatively strong spring between the second lever and second arm urging the second arm toward the flywheel only when both levers are in the wedging engagement with each other, and a relatively weak spring urging the second arm away from the flywheel, said strong spring serving to overcome the weak spring when said levers are in said wedging contact.

2,744,692
AUTOMATIC STOP MECHANISM FOR WIRE DRAWING MACHINE
Edward E. Phillips, Pittsburg, and James V. Shatting, Concord, Calif., assignors to United States Steel Corporation, a corporation of New Jersey
Application August 19, 1954, Serial No. 450,992
3 Claims. (Cl. 242—78)



1. In a wire drawing block having a vertical coiling reel, a motor for rotating said reel, and a motor control circuit for controlling the operation of said motor, the combination therewith of an electrical conductor rod extending upwardly adjacent said reel, a contact arm attached to and projecting from said conductor rod toward said reel in the path of a coil being wound thereon, an electric circuit including said conductor rod, a ground connection, and a relay coil in series, and normally closed contacts operable by said relay coil, said contacts being connected in said motor control circuit.

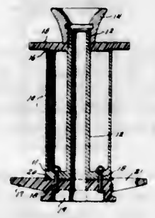
2,744,693
ROTATABLE NON-TANGLING FISHING REEL
Daniel Albert, Brooklyn, N. Y.
Application July 16, 1953, Serial No. 368,419
1 Claim. (Cl. 242—84.1)



A fishing reel construction comprising a reel body, a base structure therefor and means of swivel connection between the reel body and base structure, said reel body including a circular plate, a spool supported on said circular plate, a cage surrounding said spool including a circular plate spaced from the first-named circular plate, and spacing rods connecting said circular plates, said base structure including a U-shaped plate having extensions disposed transversely to the legs and base of the U for connection to a support, and a disk-shaped plate supported by said U-shaped plate, said disk-shaped plate having a central opening therein, said means of swivel connection including a U-shaped plate secured to the spacing rods, a disk-shaped plate depending from the latter U-shaped plate, said latter disk-shaped plate having an opening aligned with the opening in the first-named disk-shaped plate, a swivel bolt extending loosely through the aligned openings in said disk-shaped plates, and means for holding the reel body in swiveled position including spring-pressed plungers depending from said first-named disk-shaped plate, and cooperating depressions on the opposed surface of the second-named disk-shaped plate.

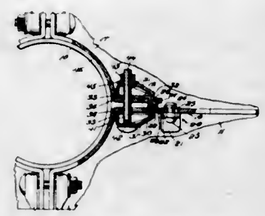
2,744,694
TAKE-UP SPOOL
Aubrey S. Murray, Watauga, Tenn., assignor to North American Rayon Corporation, New York, N. Y., a corporation of Delaware
Application May 13, 1952, Serial No. 287,508
3 Claims. (Cl. 242—124)

2. An article of manufacture consisting of a light weight yarn take-up spool adapted to be rotated at relatively high speeds comprising a hollow, well-balanced, cylindrical body having a relatively thin outer wall upon which yarn is to be wound at high speeds, a hollow core also comprising a cylindrical wall, a bottom member formed integral with the bottom ends of said body and said core, said hollow body and said hollow core being made of aluminum or alloys thereof, the walls of said body and said core each being of uniform thickness and each being finished to a high degree of tolerance, a disc having a diameter greater than that of said body, means for attaching said disc to the bottom member of said body, said disc having means for engaging a driving



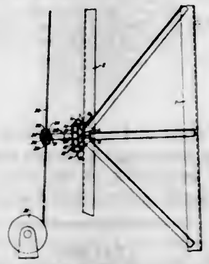
spindle, a second disc having a shoulder fitting into the open end of said hollow body, said second disc having a hole fitting around the free end of said core and means for engaging the portion of said core extending beyond said second disc for pressing said shoulder of said second disc into said hollow body and for pressing said second disc into engagement with said core, said spool body, said core, said first mentioned disc and said second disc all forming a take-up spool that is symmetrical about the axis of rotation thereof so that the take-up spool may be rotated at relatively high speeds without damaging vibration when said first mentioned disc is engaged by the driving spindle.

2,744,695
BEAM HEAD
Robert V. Olson, Attleboro, Mass., assignor to Mossberg Pressed Steel Corporation, a corporation of Massachusetts
Application March 5, 1953, Serial No. 340,436
7 Claims. (Cl. 242—124)



1. A beam head comprising a plate apertured to receive a beam, a hub comprising a plurality of sections each in edgewise contact with said plate and each arched to collectively embrace a beam extending through said aperture and each provided with outwardly extending arms, means securing each section in contact with said plate for bodily movement relative thereto, means to apply contracting pressure substantially at the junction of said arm and arcuate portion of each section for contraction of the hub about the beam.

2,744,696
FAST LINE GUIDE
Charles M. Overton, Charles D. Iddings, and Gerald E. Fountain, Tulsa, Okla., assignors to Lee C. Moore Corporation, Pittsburgh, Pa., a corporation of Pennsylvania
Application April 14, 1955, Serial No. 501,363
5 Claims. (Cl. 242—157)



1. An oil well mast fast line guide, comprising a track adapted to extend horizontally across the back of a mast, the track having a rear surface and a pair of inclined front surfaces converging forward, a carriage provided with rollers engaging said front and rear surfaces for movement lengthwise of the track, and a cluster of substantially horizontal rollers supported by the carriage behind it, said cluster being adapted to receive and engage a fast line to keep it from whipping as it moves axially, and the carriage being movable along the track by lateral movement of said line.

2,744,697
COSMIC RAY ALTIMETER
James A. Van Allen, Iowa City, Iowa, assignor to the United States of America as represented by the Secretary of the Navy
Application June 25, 1952, Serial No. 295,516
11 Claims. (Cl. 244—14)

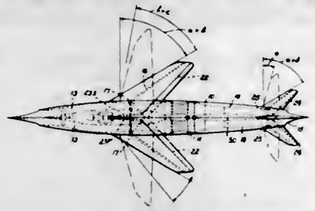


1. In combination with an aerial missile, unshielded means mounted in said missile and responsive to cosmic radiation when said missile is in flight in the upper atmosphere, shielded means mounted in said missle and partially exposed to said cosmic radiation, an electrical circuit for said unshielded means and said shielded means, the voltage output of said circuit being a function of the effectiveness of the shielding of said shielded means, and means responsive to said voltage output for controlling the altitude of said missle.

2,744,698
HIGH SPEED AIRCRAFT WING AND TAIL SURFACES HAVING VARIABLE SWEEPBACK
Leslie Everett Baynes, Hounslow, England, assignor, by mesne assignments, to Baynes Aircraft Interiors Limited, Langley Aerodrome, Buckinghamshire, England
Application March 7, 1950, Serial No. 148,179
Claims priority, application Great Britain March 11, 1949
6 Claims. (Cl. 244—42)

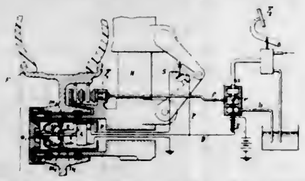
6. An aircraft having a fuselage, two wings constituting the major lifting surfaces in low and high-speed flight, including flaps movable at least in part chordwise of the wings to give increased lift, two tail surfaces, said wings and tail surfaces being hinged to the fuselage about axes which are approximately vertical when the aircraft is in

flight, control means operable while the aircraft is in flight for varying simultaneously the sweep-back of the wings and tail surfaces between an extended position for



said low-speed flight and a swept-back position for said high-speed flight, and means actuating the flaps in response to variation of sweepback of the wings to increase the effective wing chord as the sweep-back angle is reduced.

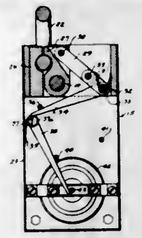
2,744,699
CONTROL SYSTEM FOR AIRCRAFT WHEEL BRAKES AND THE LIKE
René Lucien, Paris, France, assignor to Societe d'Inventions Aeronautiques et Mecaniques S. I. A. M., Fribourg, Switzerland, a corporation of Switzerland
Application December 12, 1952, Serial No. 325,504
Claims priority, application France July 15, 1952
12 Claims. (Cl. 244—111)



1. In a hydraulic braking system for aircraft wheels and the like, the combination with a wheel to be braked mounted on a telescopic shock-absorbing strut having a compass connecting the upper part of the strut to the wheel hub, a brake for the wheel and a pilot-operated brake-control member, of a braking circuit controlled by the brake-control member and communicating with a source of pressure fluid and with the brake, an electromagnetically actuated valve adapted to connect the braking circuit to exhaust to release the brake, an electrical energizing circuit for the valve, an acceleration responsive device mounted coaxially with the wheel and operative by inertia to close and open a switch inserted in the energizing circuit, a shunt circuit by-passing the switch, at least one weight rotatably driven by the wheel, a pivot pin for the weight, a bell-crank lever on the pin having a first arm carrying the weight and a second arm directed radially of the wheel, an actuator slidable axially of the wheel and engaged by the second arm, a first switch inserted in the shunt circuit and operable by the actuator, a spring urging the actuator in a direction to close the first switch until the centrifugal force caused by rotation of the weight with the wheel reaches a value predetermined by the spring, a second switch in the shunt circuit in series with the first, and a mechanical connection between the compass and the second switch to close the latter with the telescopic strut extended and to open it with the strut collapsed.

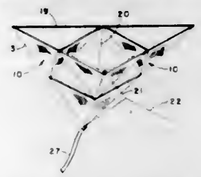
2,744,700
ACTUATING MECHANISM AND PARACHUTE DELIVERY APPARATUS
Werner F. Jehn, Dayton, Ohio
Application September 17, 1954, Serial No. 456,893
7 Claims. (Cl. 244—150)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. An automatic release mechanism comprising a frame, a jaw attached to said frame, a movable jaw rotatably attached to said frame, said jaw and said movable jaw being capable of cooperation to retain a link, a first arm rotatably connected to said movable jaw, a second arm rotatably connected to said frame, said first arm being rotatably connected to said second arm to form a toggle-type linkage, a first spring so associated with said toggle linkage as to tend to cause said linkage to break, a first lever attached to said second arm in such a manner that it rotates with said second arm, a shaft rotatably attached to said frame and having a milled-out portion, the free-end of said first lever being so associated with



said shaft that said first lever is restricted in its movement by said shaft except when the free-end of said first lever is associated with the milled-out portion of said shaft, a second spring associated with said shaft in such a manner that said shaft tends to rotate, a second lever connected to said shaft in such a manner that it rotates with said shaft, a pressure responsive bellows attached to said frame, a rod attached to said bellows, and said second lever being so associated with said rod that said second lever is restricted in its movement by said rod except when said bellows is subjected to a pressure equal to or greater than the set pressure.

2,744,701
TETRAHEDRONAL KITE AND METHOD OF MAKING SAME
Floyd M. Robey, Indianapolis, Ind.
Application January 29, 1953, Serial No. 334,106
2 Claims. (Cl. 244—153)
(Granted under Title 35, U. S. Code (1952), sec. 266)



2. A tetrahedronal-type kite comprising a first pair of triangular frames having rigid sides hingedly joined along a common base; a second pair of triangular frames smaller than said first pair, one triangular frame of said second pair being hingedly joined to the rigid sides of one of said first pair of triangular frames and the other triangular frame of said second pair being hingedly joined to the rigid sides of the other triangular frame of said first pair; a single membrane secured to each of said triangular frames thereby forming a plurality of aerodynamic surfaces; and a brace bar joined to the apexes of each said triangular frames.

2,744,702
KITE
Quentin L. Briggs, Hermosa Beach, Calif., assignor to Super Premiums, Inc.
Application June 13, 1952, Serial No. 293,359
8 Claims. (Cl. 244—154)

1. A kite, comprising: a flat body member formed of a pair of substantially flat sheet members secured in superposed relation; a pair of cross members secured in said body member and projecting laterally therefrom; a pair of wing members; and a marginal reinforcing



wire affixed to each wing member terminating in a pair of attachment elements at the root end of the wing, said elements being removably attached to the extremities of said cross members.

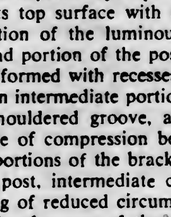
2,744,703
TRAIN ACTUATED RAILROAD SWITCH
Lee William Sessions, Watervliet, N. Y., assignor of one-half to George M. Eames, Albany, N. Y.
Application September 17, 1952, Serial No. 310,005
5 Claims. (Cl. 246—338)



2. In a railroad, the combination with a main line track having fixed rails, of a turn-out track also having fixed rails forming an entrance thereto from said main line; a pair of elongated, horizontal switch bars disposed at an elevation slightly above the top of the rails of said main line track and extending from oppositely disposed points in advance of said entrance to points past said entrance; means pivotally mounting said bars at the advance ends thereof in close proximity to the outer sides of said main line rails to swing towards and partially over the rail adjacent thereto; means connecting the free ends of said bars to swing together in the same direction about said pivotal mountings; whereby when either of said bars swings towards the rail adjacent thereto, the other bar will swing away from the rail adjacent thereto; means, including a first, train-actuated lever in advance of said bars. for swinging said bars towards said turn-out and into a position where one of them will contact the outer sides of the wheels of said train for guiding said train on to said turn-out track; means for automatically locking said bars against counter-swinging movement thereof by pressure of said wheels thereagainst when so swung; and a second, train-actuated lever in advance of said bars and cooperating with said bar-swinging means, when said bars are locked in position to guide said train on to said turn-out track, for swinging said bars in a direction away from said turn-out and into a position where one of them will guide said train past said turn-out.

2,744,704
BASE MOUNTINGS FOR ANTENNA MASTS
Wallace H. Johnson, Toledo, Ohio
Application June 5, 1951, Serial No. 229,929
1 Claim. (Cl. 248—45)

A rotatable mounting for the mast of a directional antenna, comprising: a stationary base having a horizontal flat portion, two spaced bearing apertures in said base, a thrust bearing mounted in one of said apertures in said flat portion, a horizontal plate having a trunnion extending from its lower side and journaled in said thrust bearing, a gear mounted on said trunnion fixed to said plate, a clamp for the end of a mast mounted on the upper side of said plate, a sector gear journaled in the other bearing aperture in said base meshing with said gear on



said trunnion, a lever fixed to said sector gear for rotating it through part of a circle to rotate said plate, coiled spring means acting between said sector gear and said base for normally urging said plate to an extreme position, and means connected to said lever from a remote point for operating said lever to rotate said plate.

2,744,705
RESILIENT SUPPORTS FOR LIGHT TUBES
Kenneth W. Richter, Milwaukee, Wis., assignor to Everbrite Electric Signs Inc., Milwaukee, Wis., a corporation of Wisconsin
Application October 1, 1952, Serial No. 312,470
1 Claim. (Cl. 248—50)

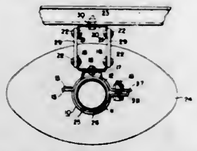


A resilient support for luminous tubes adapted for interposition between a portion of an imperforate frame and the tube to be supported, comprising a right angularly shaped bracket having one leg thereof attachable to the frame and extending in the plane of the frame laterally thereof, the other leg of the bracket being formed with separated aligned eyed portions in a plane at right angles to the axis of the last-mentioned leg of the bracket, a post freely reciprocatably mounted directly through the eyed portions of the bracket with the eyed portions of the bracket loosely engaging opposite end portions of the post, the post having a head portion projecting beyond the adjacent eyed portion of the bracket and formed on its top surface with a recessed seat for supporting a portion of the luminous tube, the undersurface of the head portion of the post on opposite sides of the post being formed with recesses for receiving tube securing means, an intermediate portion of the post being formed with a shouldered groove, and a coiled spring confined in a state of compression between and bearing against the eyed portions of the bracket and surrounding a portion of the post, intermediate convolutions of the coiled spring being of reduced circumference and engaging in the shouldered recess of the post to anchor the spring to the post and to urge the latter to a projected position relative to the bracket, said spring serving as the sole means for connecting the post to the bracket and engaging the bracket only at its opposite extremities.

2,744,706
MUFFLER AND TAILPIPE HANGER
Emanuel J. Gerdy, Cleveland, Ohio
Application February 28, 1952, Serial No. 273,835
3 Claims. (Cl. 248—60)

1. A muffler tailpipe clamp and hanger comprising, a top clamp member having a hinge-flange and a draw-

flange, a bottom clamp member having a hinge-flange and a draw-flange, said hinge-flange of one of said clamp members having a rectangular opening therethrough, the other said hinge-flange dimensioned to extend through said rectangular opening, means to draw the draw-flanges together and thereby clamp cylindrical members between the top and bottom clamp members, a first bracket member pivotally carried by said top clamp member, a second bracket member adapted to be supported from a mounting surface and spaced from said first bracket member, first and second spaced flexible strap members of rectangular cross section to resist twisting thereof, and pivot



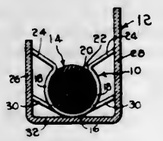
attachment means attaching said first and second flexible members to said first and second bracket members respectively in rectangular form with the two bracket members oppositely disposed, and the two flexible rubberized strap members oppositely disposed, in rectangular relationship, whereby said second bracket member and said clamp members may be swiveled as a universal joint with respect to one another to provide semi-rigid resilient support of a muffler and tailpipe from any suitable mounting surface within reach regardless of the angular relationship of the mounting surface to the tailpipe.

2,744,707
HELICALLY-PREFORMED LASHING FOR CONNECTING CABLES TO MESSENGER STRANDS
Thomas F. Peterson, Shaker Heights, Ohio
Application May 3, 1952, Serial No. 285,989
8 Claims. (Cl. 248—61)



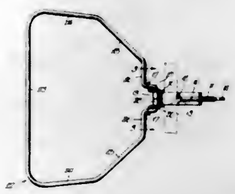
3. A new article of manufacture, comprising a cable and a co-extensive messenger strand lashed thereto, said lashing being of strong, stiff, resilient stock that is helically-preformed to an open pitch of the same hand as said strand and laid in surrounding relation to said cable and strand, the cross-sectional dimension and shape of said stock being such as partially to lie within the interstrand grooves of said messenger strand at its points of crossing the latter.

2,744,708
FASTENING DEVICE
William A. Bedford, Jr., North Scituate, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Boston, Mass., a corporation of Delaware
Application July 21, 1951, Serial No. 237,863
4 Claims. (Cl. 248—73)



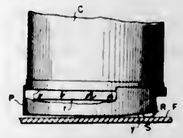
1. A fastening device to retain a tubular member or the like in a channel-shaped receptacle, said device comprising a U-shaped member having opposing flexible arms with medial portions to receive the tubular member therebetween, said arms having outwardly turned ends extending laterally in opposite directions beyond the medial portions of the arms for frictional engagement with opposing wall portions of the channel-shaped receptacle, means extending inwardly from said arm portions to restrict the entrance to the space therebetween, and means having portions extending in opposite directions from the lower portion of the U-shaped member laterally beyond the medial portion of the arms for engagement with each of said opposing wall portions of the receptacle in spaced relation to the outwardly turned ends of the arms.

2,744,709
LIVE FISH BAG HOLDER
John Gronek, Chicago, Ill.
Application March 13, 1953, Serial No. 342,089
2 Claims. (Cl. 248—99)



2. A fish bag holder comprising a bracket having a pair of parallel side members and a pair of wings projecting laterally from one end of said side members, means for securing said bracket to the side of a boat with said side members projecting outwardly from the side of the boat and said wings being located on the outer ends of the side members, a tube connecting said side members together inwardly of said wings, said side members having apertures therein communicating with the interior of said tube, said wings having notches in the upper edges thereof, and a bag frame formed out of a single rod bent to provide a generally looped body portion, a pair of parallel arms spaced apart the same distance as the notches in said wings and extensions extending laterally toward each other from the inner ends of said arms to enter said tube and removably pivot said frame to said bracket, whereby when said frame is lowered into its operative, bag holding position, said arms enter said notches in the upper edges of said wings so as to prevent accidental removal of said extensions from said recesses.

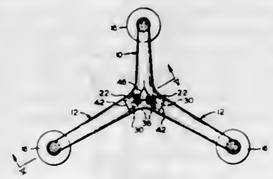
2,744,710
MOVABLE SUPPORT FOR CONTAINERS
Anthony Gerosa, Bronx, N. Y.
Application September 18, 1953, Serial No. 380,980
3 Claims. (Cl. 248—129)



1. A movable support for containers, said support comprising a platform upon which the container is to be seated, a rim member surrounding the platform to which the platform is rigidly secured, said rim member extending above and below the platform, the depending portion of the rim member terminating in an edge adapted to engage a floor over the greater portion of its extent to sustain the platform in a stable manner on the floor and in parallel spaced relation thereto, and the upstanding portion providing a flange adapted to retain a container in position on said platform, a pair of rollers, mounting elements retaining the rollers in spaced axial alignment under the platform and adjacent the rim member wholly within the circumferential boundary

line thereof, said mounting elements locating the roller surfaces at a level slightly above the level of the floor engaging edge of said rim member, and the portion of said rim member adjacent to and on both sides of said rollers being cut away to permit the tipping of said support from rest position to lower said rollers into supporting engagement with the floor for movement of the support thereon.

2,744,711
SUPPORT STAND WITH SPIDER LEGS
William H. Myers, Waterloo, Ind., assignor, by mesne assignments, of one-half to Lewis C. Schaeffer, Fremont, Ind., and one-half to Harry Lemmons, Dallas, Tex.
Application May 16, 1951, Serial No. 226,562
1 Claim. (Cl. 248—165)



A three-legged spider leg stand comprising a pair of similar detachable legs and a third leg having an integral pedestal portion from which said pair of detachable legs are detachably connected and supported thereby, said pair of legs each having a horizontal portion with an abutment shoulder at its inner end and a step down attachment tongue projecting from and beyond said shoulder, a down turned foot portion upon the outer end of each of said legs, said pedestal portion of said third leg having three radial arm portions, one of which is integral with said third leg with the remaining two arm portions presenting complementary shoulder portions to abut with said shoulders of said pair of legs, said remaining two arms having undercut recesses on the underside thereof to receive said attachment tongues with said shoulders in abutting relationship, and means for detachably connecting said tongues in said recess for rigidly mounting all of said legs relative to each other.

2,744,712
EASEL
Franz D. Brandt, Berkeley, Calif.
Application December 8, 1953, Serial No. 396,896
1 Claim. (Cl. 248—166)



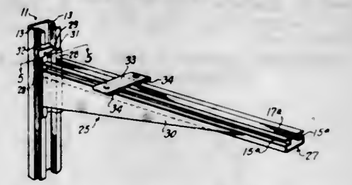
In an easel, a main bracket member, three coplanar channel elements formed in said bracket member and extending at substantial angles relative to each other, respective arms pivotally connected at their ends in the intermediate portions of said channel elements for swinging movement into and out of the channel elements, whereby said channel elements at times receive said arms and limit rotation of said arms beyond the coplanar positions thereof, and whereby said arms define a planar support for an easel board in the coplanar positions of said arms, respective tripod legs pivoted to the ends of said arms, means for clamping said legs to said arms in adjusted positions thereof, a pair of resilient flexible members secured to one of said arms, respective hook elements on the ends of said flexible members adapted to engage the opposite edges of an easel board supported on said arms, and respective easel-supporting hook members on the remaining two arms adapted to at other times supportingly engage the bottom edge of an easel board to support said board in an upright position against said remaining two arms.

2,744,713
COLLAPSIBLE DISPLAY SHELF
Louis S. De Villers, Huntington, N. Y.
Application October 23, 1952, Serial No. 316,423
1 Claim. (Cl. 248—174)



A collapsible display shelf of the character described including an elongated relatively narrow stiff panel of double-wall corrugate paperboard serving as a shelf in combination with a pair of substantially V formed legs of similar paperboard supporting the panel, one at the underside of each end of the panel, wherein each leg includes a pair of horizontally disposed free end flanges extending in opposite directions, one end flange being fixed to the underside surface of the panel near an outer end of the panel and the other end flange being slidably received in a complementary pocket formed upon the underside of the panel at a predetermined distance from the said outer end, wherein each leg is collapsible to a flat position against the underside of the panel upon sliding the slidably received end flange out of the associated pocket, and wherein the panel is characterized by a pair of stiff flange portions integral with the panel and depending one along each longitudinal edge of the panel, the flange portions being slanted slightly outward from the edges of the panel and serving as means for strengthening the panel against collapse as well as a means for nesting the panel with other similar panels upon collapsing the legs to a flat position against the underside of the panel.

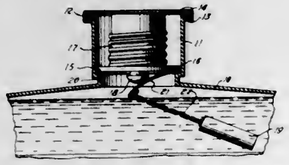
2,744,714
FRAME UNIT AND BRACKET STRUCTURE
Alfred G. Parke, Coldwater, Mich., assignor to L. A. Darling Company, Bronson, Mich., a corporation of Delaware
Application December 27, 1951, Serial No. 263,670
3 Claims. (Cl. 248—245)



1. In a frame unit and support structure which includes at least one upright structural member, and a support carried by said member, the improvement comprising a structural member generally of channel form comprising a web and side walls, and two angle reentrant portions, each forming internal and external shoulders extending lengthwise of the member, said angle reentrant portions comprising arms extending inwardly from the free edges of said side walls which are generally parallel to the web, and arms extending outwardly from the free

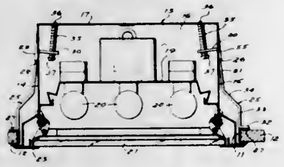
edges of said first-named arms which are generally parallel to the side walls and form a restricted side channel opening, together with a support comprising a supporting part and an engaging means structurally integral with said supporting part, and at an angle thereto, said engaging means having a generally flat body member and a channel shaped projection extending lengthwise thereof and seated in the restricted side opening of said structural member, and a clamping means inserted through an opening in the rear wall of said projection and turned into a retainer, said retainer having a minimum longitudinal dimension greater than the inside spread of said arms forming the restricted opening of said structural member and a maximum transverse dimension no greater than the inside spread of said arms, and extending transversely of said structural member and engaging the internal shoulders formed by said arms generally parallel to the web.

2,744,715
SUPPORTS
Hanoh Charat, Dallas, Tex.
Application October 6, 1952, Serial No. 313,235
2 Claims. (Cl. 248—317)



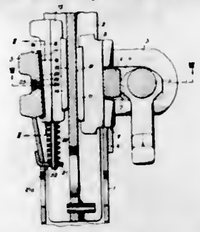
1. A support for holding an article in a radiator having a filler spout provided with an inwardly extending ledge, and a pressure cap adapted to abut said ledge to close and seal said filler spout, including: a continuous thin flat annulus adapted to rest on said ledge and be engaged by said pressure cap and to be contacted by both said ledge and said pressure cap to provide a seal therebetween; a supporting member integral with and formed of the same material as the annulus, and of the same thickness as the annulus, said supporting member extending inwardly from and beyond the inner periphery of the annulus and bendable downwardly below the plane of said annulus, so as to be free of engagement by the pressure cap or the ledge; and a flexible chain connected at one end to the inner end of the inwardly projecting member and hanging free therefrom for freely swingably securing an article to said inner end of said supporting member.

2,744,716
RECESSED LIGHTING FIXTURE AND JACK SUPPORTS THEREFOR
Anthony E. Zingone, New York, N. Y., assignor to Neo-Ray Products, Inc., New York, N. Y., a corporation of New York
Application January 7, 1955, Serial No. 480,545
5 Claims. (Cl. 248—318)



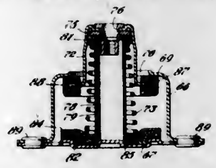
1. In a lighting fixture, a housing having a top wall, opposite side walls and an open bottom, a plurality of jacks arranged on opposite sides of the housing and each having a laterally extending lower end adapted to seat upon building framework for supporting the fixture, said jacks having upwardly extending straight portions provided with inwardly offset upper ends respectively, said straight portions being slidably arranged in openings in the side walls of the housing, and screws threadedly engaging said offset upper ends respectively and swivelly engaging the housing for raising and lowering the jacks to accommodate varying elevations of the framework.

2,744,717
LOCK FOR METALLIC MINE PROPS
Wilhelm Ludwig Gustav Heusner, Bochum, Germany, assignor to Hermann Schwarz K. G., Wattenscheid, Germany
Application August 1, 1951, Serial No. 239,819
Claims priority, application Germany December 16, 1950
6 Claims. (Cl. 248—354)



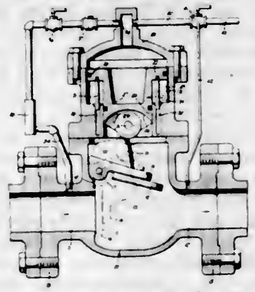
1. In a metallic mine prop assembly: a lower mine prop member and an upper mine prop member telescopically arranged within said lower mine prop member, said upper mine prop member being movably arranged and said lower mine prop member being stationary when said assembly is in its operative position, said upper mine prop member being provided with oppositely located friction surfaces, a first friction member and a second friction member substantially facing each other and respectively frictionally engaging said oppositely located friction surfaces, rigid abutment means supported by said lower prop member and engaging said first friction member to thereby prevent the same from moving downwardly with the downward movement of said upper prop member, yieldable supporting means supported by said lower prop member and yieldably supporting said second friction member to allow the latter to move downwardly with the upper prop member, clamping pressure exerting means including a stationary member connected to the lower prop member and having a surface facing said second friction member, said clamping pressure exerting means also including means arranged for cooperation with said stationary member and to convey pressure to said first and second friction members, and pressure conveying means slidably arranged between and engaged by said second friction member and said surface of said stationary member and having passage means therethrough arranged to store lubricating means and to convey the same to said second friction member.

2,744,718
VIBRATION ISOLATOR
Edwin P. Markowski, Dorchester, and William W. Symonds, Marblehead Neck, Mass., assignors to Barry Controls Incorporated, a corporation of Massachusetts
Application August 29, 1952, Serial No. 307,004
5 Claims. (Cl. 248—358)



1. A vibration isolator comprising a base member adapted for attachment to a supporting member, a load attachment member above said base member and adapted for attachment to a load which is to be supported, an elongate one-piece damper formed of interlocked flexible wires and extending between the base member and a portion of the load attachment member, said damper having a relatively loosely formed portion intermediate its ends, a first lateral projection integral with and adjacent to one end of said damper and formed of tightly compressed interlocked wires, a second lateral projection integral with and adjacent to the other end of said damper and formed of tightly compressed interlocked wires, each of said lateral projections being of substantially greater density than said loosely formed intermediate portion, and means for moving one lateral projection with the load attachment member and relative to the other lateral projection, said means including a main resilient load supporting element which extends longitudinally of said damper, whereby damping is accomplished by the rubbing upon each other of the interlocked wires of said loosely formed intermediate portion caused by such movements of said one lateral projection relative to said other lateral projection and permanent deformation of the loosely formed intermediate portion of the damper is prevented.

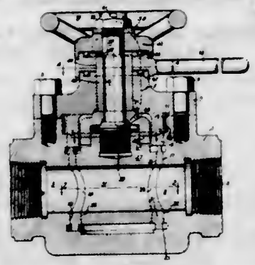
2,744,719
QUICK-OPENING AND QUICK-CLOSING VALVE
Fred W. McRae, Los Angeles, Calif.
Application August 16, 1952, Serial No. 304,706
4 Claims. (Cl. 251—62)



1. A valve comprising a body having an inlet and an outlet arranged substantially in alignment with each other, a transversely arranged valve seat therebetween, a closure swingably mounted in the body adapted to seat upon the valve seat, a cylinder on the body, a piston reciprocable in the cylinder in a direction substantially parallel to the valve seat, a cam on the back of the closure, means on the piston engageable with the cam for forcing the closure into seating position upon the valve seat, said cam having a high point thereon traversed by said means as the closure approaches seating position, the surface on the cam engaged by said means on one side of the high point being arranged at approximately right angles to the direction of movement of the piston when the closure is in fully open position, and the surface of the cam on the other side of the high point engaged by said means being arranged at approximately right angles to the direction of movement of the piston when the closure approaches its seated position whereby reactionary forces on the piston tending to urge it against one side of the cylinder as the closure approaches its seated position are minimized, and means for admitting and releasing pressure to and from the cylinder.

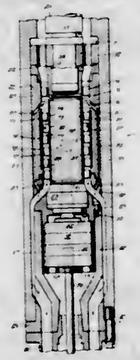
2,744,720
ROTARY VALVE
Hermann Wilms, University City, Mo.
Application April 2, 1953, Serial No. 346,321
12 Claims. (Cl. 251—161)

1. A valve comprising a body having a fluid transmitting passage, a cross passage including an annular seat, a radially resilient hollow plug in the cross passage adapted to effect radial sealing engagement with the body to control the fluid transmitting passage, said plug having a hollow wedge-shaped interior flaring in the direction of said seat, a wedge engaging the wedge-shaped interior of the plug and adapted upon movement into the plug away from said seat to expand the plug into radial sealing engagement with said body, a connection between the wedge and the plug providing for their relative axial movements but substantially coextensive rotary movements as a rotary assembly, said rotary assembly having fluid transmitting passages for registry and nonregistry with the fluid transmitting passage of the body, a first control member adapted to be rotated from outside of the body



and having means passing into the body through said annular seat and including a circular portion engageable for sealing with said seat and also having a driving connection with said rotary assembly for coextensive rotary movements therewith, but allowing for relative axial movements, and a second control member adapted to be rotated from outside of the body and having a screw connection with the wedge, said second control member including a portion reactive against said first control member when the wedge is axially moved into the plug by action of said screw connection, whereby said circular portion of the first control member is reactively forced into engagement with said annular seat when the wedge is driven into the plug to force the plug into radial sealing engagement with said body.

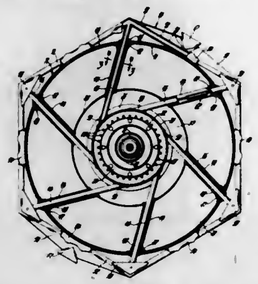
2,744,721
TURBINE
Albert M. Hatch, Marblehead, Mass., assignor, by mesne assignments, to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application November 3, 1954, Serial No. 466,536
5 Claims. (Cl. 253—32)



1. A turbine adapted to be driven by a flowing fluid having abrasive particles of varying sizes suspended therein and comprising concentric relatively rotatable radially spaced sleeve members which together define a turbine chamber, one of said relatively rotatable members

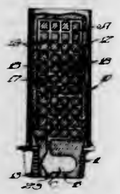
including means defining fluid directing vanes and the other of said members including means defining turbine vanes for receiving energy from the fluid for driving said other member, said one member including means defining centrifuging blades for changing the direction of movement of the fluid so as to centrifuge out the heavier larger sized abrasive particles, and means for by-passing a portion of the fluid containing said larger sized particles past said fluid directing and turbine vanes.

2,744,722
TURBINE BEARING SUPPORT
Nolan B. Orr, Indianapolis, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 6, 1951, Serial No. 219,706
18 Claims. (Cl. 253—39.1)



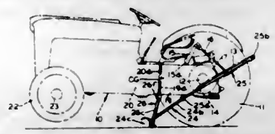
6. A turbine engine comprising, in combination, a stator, a rotor therein, means including a generally cylindrical casing attached to the stator defining a substantially annular passage for flow of motive fluid to or from the turbine, a turbine rotor bearing, a mount for the bearing, a polygonal frame circumscribing the casing, the sides of the frame being attached to the casing, and a strut connected to each corner of the frame and fixed to the bearing mount, the frame and struts constituting a support for the bearing mount and the struts being directed at a substantial angle to the radial direction relative to the axis of the passage, at least part of the support being tubular to provide a passage for conduction of air for cooling the support and structure supported thereby.

2,744,723
CONTROLLED TEMPERATURE FLUID FLOW DIRECTING MEMBER
Milton S. Roush, Painesville, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application December 6, 1949, Serial No. 131,309
2 Claims. (Cl. 253—39.15)



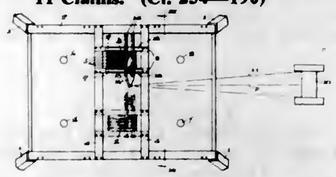
2. A turbine bucket for a gas turbine engine which comprises a vane portion of air foil section and an integral massive root portion at one end of the vane portion, said root portion being hollow to provide a reservoir chamber occupying substantially the entire volume of the root portion, said vane portion having a plurality of small interconnected passages therein, said passages terminating in spaced relation from the root portion to provide a solid base portion on the vane, a single small passage in said solid base portion connecting the interconnected passages with the reservoir chamber, said interconnected passages being separated by solid vane sections rigidifying the vane portion against collapse, a plurality of cooling passages extending through the root portion adjacent the periphery of the reservoir chamber therein, said passages adapted to receive cooling fluid therethrough for dissipating heat from the reservoir, a filling passage extending to the exterior of the bucket and communicating with the reservoir chamber, and a plug sealing said passage, whereby coolant encased in the reservoir can flow through the interconnected passages to dissipate heat from the vane and minimize development of local hot spots in the vane areas.

2,744,724
TRACTOR JACK
Andrew Blaauw and George W. Findley, Birmingham, Mich., assignors to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application December 28, 1953, Serial No. 400,495
2 Claims. (Cl. 254—94)



1. For use with a wheel tractor having a central body, a transverse rear axle housing having laterally spaced portions thereof, and a pair of laterally spaced, power lifted trailing hitch links pivoted to said rear axle housing; a jack comprising a U-shaped stand having arm portions joined by a bight portion, a bracket having an outwardly facing concave portion and a convex hook shaped portion and fixedly secured underside the concave portion on the ends of each arm portion, the length of said arm portions being substantially greater than the ground clearance of said laterally spaced portions of said rear axle housing, a pair of tension links pivotally connected in laterally spaced relation to said bight portion, said links being connectable respectively with said power lifted tractor hitch links, a separable stand having a ground engaging member and an upstanding frame rigid therewith having means on the top thereof for engaging said tractor body at a point forwardly of the center of gravity of the tractor, said stand having an over-all height in excess of the ground clearance of said tractor body, said hooked shaped elements being respectively engageable with laterally spaced portions of said ground engaging member of said separable stand, whereby said stands connect to said hitch links and thereby produce elevation of the tractor front wheels in response to raising movements of said tractor hitch links.

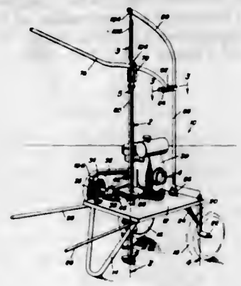
2,744,725
CROWN BLOCK FOR MULTIPLE WELL DRILLING
Homer J. Woolslayer, Cecil Jenkins, and Paul E. Borg, Tulsa, Okla., and Erwin A. Campbell, Wexford, Pa., assignors to Lee C. Moore Corporation, Pittsburgh, Pa., a corporation of Pennsylvania
Application January 28, 1954, Serial No. 406,872
11 Claims. (Cl. 254—190)



1. An oil well derrick crown block for use in drilling a pair of closely spaced wells, comprising a horizontal

shaft shiftable axially on a derrick from a drilling position over a well to a position for drilling a second well, a row of sheaves on the shaft, a fast line sheave, and supporting means for journaling the fast sheave selectively in two different locations lengthwise of said shaft with the outer point of departure at the same edge of the fast sheave in both of said locations remaining in substantially the same predetermined position relative to said row of sheaves, whereby if said shaft is shifted axially a distance equal to twice the distance between a pair of vertical planes that are parallel to the sheaves in said row and that contain the center of the fast sheave in said two locations, a point on the fast sheave diametrically opposite said first-mentioned point can be maintained in the same vertical plane parallel to the sheaves in said row as it was in before the shift.

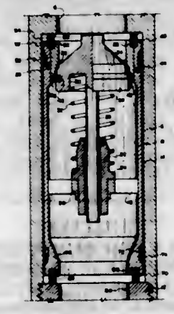
2,744,726
POST HOLE DIGGING MACHINE
Gilford J. Comeaux, Sr., Rayne, La.
Application July 19, 1954, Serial No. 444,011
2 Claims. (Cl. 255—19)



2. A portable post hole digger comprising a wheeled frame including a platform, a motor mounted on said platform, a drive shaft driven by said motor journalled on said platform, a worm gear driven by said drive shaft, a ring gear journalled in said platform, said worm gear drivingly engaging said ring gear, a vertical shaft drivingly engaged by said ring gear extending through said ring gear, an auger on the lower end of said vertical shaft, a standard secured to said platform, a bracket rotatably secured on said vertical shaft, a lever pivotally attached to said standard and said bracket for raising and lowering said vertical shaft independent of rotation of said shaft, said ring gear having a square aperture therethrough, said vertical shaft being square in cross section, said standard having an arcuate upper end portion overlying said bracket, and a spring terminally secured to said upper end portion of said standard and to said lever, said spring being placed in tension upon lowering of said vertical shaft and said auger, the energy stored in said spring when in tension serving to raise said vertical shaft and said auger upon release of said lever.

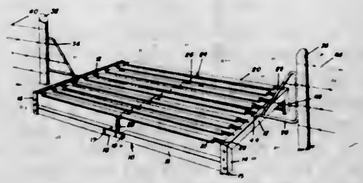
2,744,727
DRILL PIPE FLOAT VALVE
Henry G. Osburn, Oklahoma City, Okla.
Application October 18, 1951, Serial No. 251,887
3 Claims. (Cl. 255—28)

1. In combination with a drill collar having a drill bit secured to the lower end thereof, said drill collar having a fluid passageway therethrough communicating with the fluid passageway of the drill bit and being enlarged adjacent the drill bit to form a downwardly facing annular shoulder above the drill bit, a solid wall tubular body in the enlarged portion of the drill collar fluid passageway, a reciprocable valve in the body, a valve seat in the body for receiving the valve in one position of the valve, and sealing rings protruding from each end of the



body and adapted to contact said annular shoulder and said drill bit around the respective fluid passageways.

2,744,728
FOLDING CATTLE GUARD
Frank G. Melchert, Torrington, and Edward S. MacClean, Cheyenne, Wyo.
Application March 9, 1953, Serial No. 340,964
2 Claims. (Cl. 256—14)



1. In a cattle guard the combination of a pair of elongated end members, each having a normally extending riser at its ends, adapted to be supported on the ground in substantially parallel relation to extend through a gateway, a sectional side rail interconnecting opposed risers, hinge means interconnecting the sections of each side rail, a plurality of depressible flexible straps extending between the end members and normally disposed above the ground for providing an insecure footing for cattle, said hinge means permitting the end members and adjacent sections of the side rails and the ends of the flexible straps to be folded in generally overlying condition for permitting free passage of cattle through the gateway.

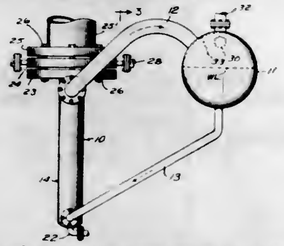
2,744,729
FENCE AND FENCE POST STRUCTURE
Charles R. Potts, Merlin, Oreg.
Application August 23, 1954, Serial No. 451,447
1 Claim. (Cl. 256—59)



A fence post and supporting base therefor, adapted to support a plurality of elongated horizontal fence rails stacked one upon the other and having aligned vertical openings formed therethrough near the end of each of said rails, said supporting base comprising a moulded concrete block adapted to rest upon the ground, a pair of stakes extending diagonally through opposite sides and outwardly from the bottom of said block for anchoring the block to the ground, said fence post comprising a vertical rod turned outwardly at its bottom end and embedded within the base block whereby the rod will be locked against rotation with respect to the base or removal therefrom, the top end of the rod being screw

threaded, an angle iron substantially equal in length to the length of said rod and embedded at its bottom end in said base block and arranged parallel throughout its length to said rod, a plurality of locking plates for locking said angle iron in said parallel relation to the rod, each of said plates having a triangular opening and a circular opening formed therethrough for engagement, respectively, with said angle iron and said rod, and each of said plates being adapted to be arranged between the overlapping ends of said rails and locked therebetween by a nut advanced on said threaded end of the rod.

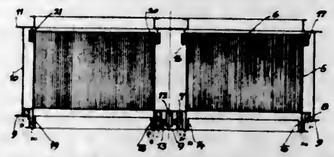
2,744,730
APPARATUS FOR QUENCHING HIGH TEMPERATURE GASES
Gilbert S. Merritt, Long Beach, N. Y., assignor to Foster Wheeler Corporation, a corporation of New York
Application September 30, 1953, Serial No. 383,308
8 Claims. (Cl. 257—1)



1. In gas quenching apparatus wherein gases pass in heat exchange relationship with liquid, a gas quenching vessel, means forming a liquid and vapor space in said quenching vessel, means for introducing liquid into said apparatus to provide the liquid and vapor space with the liquid, gas conducting means in communication with a source of gas to be quenched and with the liquid and vapor space of the vessel to discharge gas into the liquid in said space for intimate mixing of the gas with liquid to provide a gas-liquid mixture in said space, means forming a liquid-vapor disengaging space and a liquid reservoir space, said liquid-vapor disengaging space being in communication with said liquid and vapor space to receive the mixture of gas and liquid from the latter for separting the gas from the liquid, gas outlet means communicating with said liquid-vapor disengaging space to discharge separated gas therefrom, the liquid reservoir space being in communication with the liquid-vapor disengaging space for receiving the separated liquid and with the lower portion of the liquid and vapor space to provide the latter with separated liquid of greater density than the gas-liquid mixture, said liquid reservoir space providing a level of liquid with respect to the gas-liquid mixture in said liquid and vapor space to provide a head of liquid effective to cause both displacement of the gas-liquid mixture upwardly in the liquid and vapor space for flow to the liquid-vapor disengaging space and continuous circulation of the liquid between the liquid reservoir space and the liquid and vapor space, said displacement and circulation being effective both during flow of liquid into the liquid and vapor space from the liquid introducing means and for a predetermined time interval after reduction or cessation of said last mentioned flow of liquid.

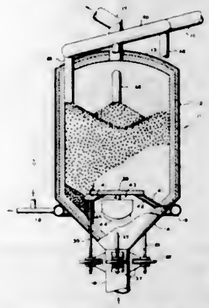
2,744,731
REGENERATIVE HEAT EXCHANGER
Herbert Brandt, Rothemuhle uber Olpe, Germany
Application May 11, 1951, Serial No. 225,769
Claims priority, application Germany May 12, 1950
20 Claims. (Cl. 257—6)

1. A regenerative heat-exchanger comprising in combination, a stationary casing, having channels for a fluid to be cooled and a fluid to be heated, a sheet metal rotor of flexible construction accommodated in said casing and including a plurality of segments movable in said channels, said rotor having a continuous peripheral supporting surface normal to the rotor axis and at the base of



the rotor and a continuous annular bearing supported in said casing, extending around the inner periphery of the casing substantially at the bottom thereof and engaging the supporting surface on the rotor and thus constituting a support for the entire peripheral edge of said rotor.

2,744,732
PEBBLE HEAT EXCHANGE CHAMBER
Louis C. Bearer, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application September 12, 1952, Serial No. 309,253
10 Claims. (Cl. 257—55)

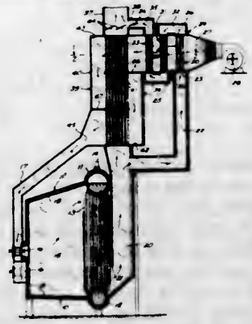


8. An improved pebble heat exchange chamber comprising in combination a closed, elongated, upright shell; pebble inlet conduits in the upper end of and adjacent the side wall of said shell; gaseous effluent outlet means in the upper end portion of said shell; a central pebble outlet in the lower end of said shell; a baffle transversely disposed in the chamber formed within said shell and spaced above said pebble outlet so as to permit the flow of pebbles therearound; gaseous material inlet means in the lower end portion of said shell; and an upright baffle section extending upwardly from the bottom of said shell below said transverse baffle and positioned intermediate the axis of each said pebble inlet and the axis of said pebble outlet conduit.

2,744,733
HEAT EXCHANGE APPARATUS
Allen H. Howes, New Rochelle, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a corporation of New York
Application May 29, 1952, Serial No. 290,626
6 Claims. (Cl. 257—224)

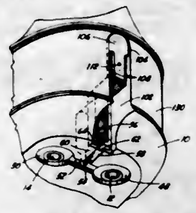
1. A heat exchanger for exchanging heat between fluids from a source of heating fluid and a source of fluid to be heated, said heat exchanger comprising at least two sections connected for providing a fluid path for the fluid to be heated in series, a first section having a first inlet connected to the source of fluid to be heated and having a first outlet for discharging the fluid to be heated from said first section, a second section having a second inlet connected to said first outlet of said first section to receive fluid to be heated from said first section after passage

through the entire first section and having a second outlet for discharging said fluid to be heated from said second section after passage of the fluid to be heated through the latter, heat transfer means in said first and said second sections for conducting heating fluid through their respective sections in heat exchange relationship with said fluid to be heated, the heat transfer means in said first section having an initial portion thereof through which heating fluid first passes in said first section and arranged in the latter in the path of flow of the fluid to be heated as it initially enters the first section through said first inlet, said heat transfer means in said first section having a third inlet communicating with said source of heating



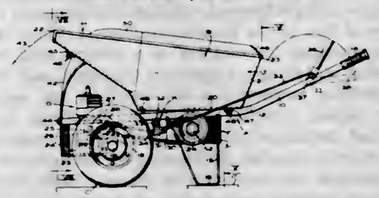
fluid and with said initial portion, said heat transfer means in said first section having a third outlet for discharging the heating fluid after passage through the entire heat transfer means of said first section, the heat transfer means in said second section having an initial portion thereof through which heating fluid first passes in said second section and arranged in the latter in the path of flow of the fluid to be heated before the latter fluid is discharged from said second section through said second outlet, said heat transfer means in said second section having a fourth inlet communicating with said source of heating fluid and with the last-mentioned initial portion, and the last-mentioned heat transfer means having a fourth outlet for discharging heating fluid therefrom.

2,744,734
BEATER EJECTOR
Donald W. Schoen, St. Paul, Minn., assignor, by mesne assignments, to Illinois McGraw Electric Co., a corporation of Illinois
Application September 11, 1953, Serial No. 379,697
12 Claims. (Cl. 259—1)



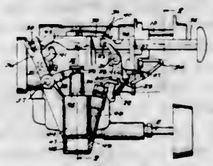
1. Heater ejecting mechanism for a household power unit having a casing defined by outer walls, a drive spindle within the casing and externally accessible at one wall of the casing and retaining means for holding an operated shaft in rotary driving engagement with the spindle at said wall and adapted for disengagement of the shaft by forced relative axial movement of the shaft with respect to the spindle, said ejecting mechanism comprising means in said casing providing a separate ejecting mechanism chamber opening through said one wall adjacent said spindle, a removable cover member for the chamber, an ejecting lever member within the chamber having an ejecting arm projecting through said wall adjacent the spindle and an operating arm projecting outwardly from the chamber and accessible outside the casing, said lever member having a fulcrum portion within the casing, and cooperating means in the casing and on the cover providing a bearing portion pivotally retaining and supporting said fulcrum portion for rotation of the lever between ejecting and non-ejecting positions of said ejecting arm, said bearing portion being automatically opened for free insertion or removal of the lever and its fulcrum portion when said cover is removed.

2,744,735
COMBINED WHEELBARROW AND MIXER
Blaine G. Selvage, Santa Rosa, Calif.
Application November 23, 1953, Serial No. 393,636
6 Claims. (Cl. 259—171)



1. In a combined wheelbarrow and mixer: a supporting frame, including an axle; ground-engaging wheels disposed on this axle to provide a roll-about structure; a tray mounted on the frame; the tray defining a mixing chamber having a pouring spout leading therefrom, through which contents of the chamber may be discharged; stirring paddles disposed in the chamber for mixing the contents thereof; and a drive mechanism for actuating the paddles, and including a motor carried by the frame; the motor being disposed ahead of the axle, and the mixing chamber being located in back of the axle, whereby the motor and chamber will at least partially balance one another; the spout extending laterally beyond the motor in all directions and overlying the motor to protect the latter from above.

2,744,736
ENGINE CARBURETOR WITH A CHOKING AND PRIMING CONTROL
Ralph S. Evinrude, Milwaukee, Wis., assignor to Outboard, Marine & Manufacturing Company, Waukegan, Ill., a corporation of Delaware
Application December 9, 1952, Serial No. 324,940
15 Claims. (Cl. 261—34)



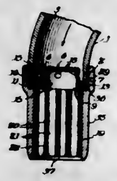
1. In a carburetor having an unbalanced choke valve tending to open responsive to unbalanced pressures and a primer, a single control having connections to the choke valve and the primer for the consecutive operation thereof, the connection of the control to the choke valve comprising a spring whereby the choke valve may open independently of movement of said control in a choke valve closing direction, a spring anchor and means interconnecting said anchor to said control for movement of the anchor in a direction to maintain substantially constant tension on said spring notwithstanding such movement of the control.

2,744,737
APPARATUS FOR SMOKE ABATEMENT AND BY-PRODUCTS RECOVERY
John Van Vliet, Chicago, Ill.
Application December 17, 1952, Serial No. 326,446
6 Claims. (Cl. 261—91)



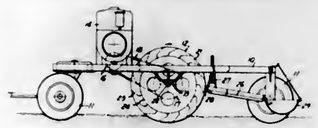
1. Apparatus for separating particles suspended in a gaseous medium which comprises a vertical duct for flow of the medium and particles; means defining a separating chamber; a plurality of baffle means mounted in said chamber at varying angles, said baffle means having active deflecting surfaces disposed substantially normally to the direction of flow of the gaseous medium; a slinger in said chamber mounted for rotation on a vertical axis; means for rotating said slinger; a reservoir for liquid, said slinger being partially immersed in the liquid in the reservoir whereby liquid may be withdrawn therefrom by the slinger and discharged as a substantially horizontal sheet of high velocity droplets intersecting the direction of flow of the medium and impinging on the said baffle surfaces, whereby an intimate permeation of the medium by the liquid is achieved and the particles driven out of the medium, and an outlet duct in communication with said chamber.

2,744,738
AERATOR DEVICE
Julius A. Hjulian, Palos Heights, Ill., assignor to Crane Co., Chicago, Ill., a corporation of Illinois
Application January 27, 1953, Serial No. 333,577
7 Claims. (Cl. 261—115)



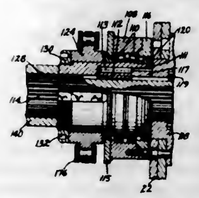
1. An aerator combination or the like comprising conduit means having an end portion, flow restricting means for said conduit means extending across the path of liquid flow therethrough, said flow restricting means having an inner orificed portion substantially upstream from said end portion of the conduit means, the orifices thereof being disposed inwardly in angular relation to the direction of fluid discharge through said end portion of the conduit means and being adapted to permit the passage of liquid through the orificed portion in substantially intercepting jet streams of substantial velocity whereby the liquid is diffused and broken up into fine particles and drawing in fluid such as air from exterior to said conduit means upstream through said end portion thereof for admixture with the liquid and production of an aerated stream flowing from said conduit means, said conduit means being substantially imperforate to the terminus of said end portion of the same said aerator combination being of uniform internal size from the point of discharge substantially to the inner orificed portion, the internal size not being less than a circle within which the inner ends of the orifices of the orificed portion fall, the inner ends of a minimum of two orifices falling adjacent said circle, said aerator combination being sufficiently open across the inside thereof from the point of discharge to said orifices to permit an established and continuous flow of the fluid such as air into the region of the aerator combination into which the inner ends of the said orifices open and the passage therefrom of admixed fluid such as air and liquid during operation of the device.

2,744,739
BEACH SAND CLEANING DEVICE
Joseph C. Evans and Hardin S. Wedmore, Santa Cruz, Calif., assignors, by mesne assignments, to Joseph C. Evans, Santa Cruz, Calif.
Application April 27, 1953, Serial No. 351,292
5 Claims. (Cl. 262—2)



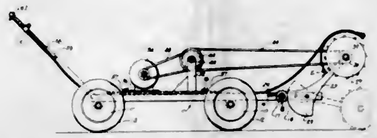
1. In a device for separating refuse from the sand on a beach as the device is moved over the beach, a wheeled frame adapted for movement on the beach, a rotatable drum-like member journalled on said frame in a position such that the axis of the drum-like member is perpendicular to the line of movement of the wheeled frame, said drum-like member comprising a shaft journalled on said frame, a cylindrical screen coaxially aligned on said shaft, and a plurality of blades spaced circumferentially around the periphery of said screen, means for rotating said member in such a direction that the lower half of the member is moving in the same direction as the wheeled frame, said blades having a length substantially equal to the length of said cylindrical screen and being inclined substantially in the direction of rotation of said drum-like member, the blades upon rotation of the drum-like member lifting a layer of sand and refuse from the beach, a substantial portion of the sand passing through the cylindrical screen and back upon the beach, additional sifting means mounted on said framework to the rear of said drum-like member, the additional sifting means being adapted to receive the sand and refuse discharged rearwardly from the drum-like member, and collecting means mounted on said framework to the rear of said additional sifting means, said collecting means being adapted to receive the refuse as it passes from the additional sifting means.

2,744,740
ROTARY CUTTER AND SHAFT MOUNTING FOR A PAVEMENT CUTTER
Charles F. Ball, Franklin, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application April 19, 1950, Serial No. 156,776
5 Claims. (Cl. 262—20)



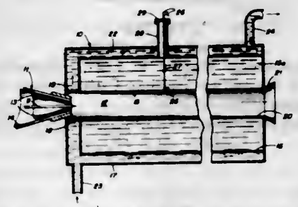
5. In combination, a supporting frame, a bearing mounted in the frame, a sleeve journaled in the bearing and having a smooth bore of a given diameter and a larger diameter bore, an internally splined insert in the larger diameter bore of the sleeve, means in engagement with the insert and the sleeve to hold them against relative rotation, a drive shaft having external splines closely fitting the given diameter smooth bore of the sleeve and engaging the internally splined insert, and drive means supported on and drivingly engaging the sleeve.

2,744,741
ROTARY CUTTER MINING MACHINE WITH BELT DRIVE
John C. Spigarelli, Price, Utah
Application January 5, 1954, Serial No. 402,236
3 Claims. (Cl. 262—26)



1. A mining machine comprising a wheeled chassis, cutter support arms pivotally carried by said chassis adjacent one end thereof for movement in parallel arcuate paths about a common horizontal axis, a cutter carried by said arms on one end thereof for movement therewith, gear means carried by said chassis for rotation about a common horizontal axis lying in the same plane and spaced from said first common axis and operatively connected to the other end of said support arms to move the support arms to a selected position in its arcuate path, a motor mounted on said chassis for movement logitudinally of the chassis, driving means operatively connected between said motor and said cutter to impart rotation to said cutter, and means for securing said motor in its longitudinal path of movement at a position wherein the driving means is adjusted with respect to the spacing between the motor and the cutter when the support arms and cutter are moved to the selected position.

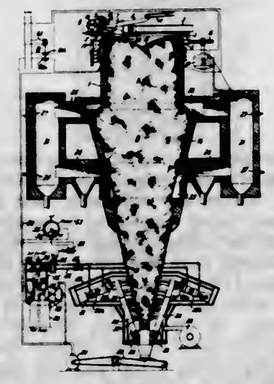
2,744,742
APPARATUS FOR BURNING WIRE METAL
Albert M. Lord, Olmsted Falls, Ohio
Application February 25, 1953, Serial No. 338,927
7 Claims. (Cl. 263—1)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. Apparatus for burning metal in wire form comprising a wire support nozzle, means for moving said wire through the nozzle, means for applying metal fusing gases to the tip of said wire, gas pressure means for spraying the fused metal, a chamber for receiving said sprayed metal, a jacket surrounding said chamber, and a coolant in said jacket, said coolant having a fusing point not less than 800 degrees Fahrenheit and in excess of the ignition point of said metal particles.

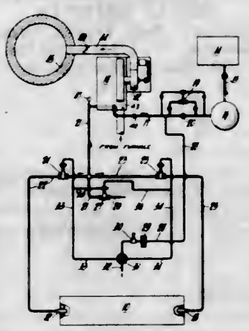
2,744,743
PELLET INDURATING PROCESS AND APPARATUS
Donald Beggs and Ernest G. de Coriolis, Toledo, Ohio, assignors to Erie Mining Company, Hibbing, Minn., a corporation of Minnesota
Application November 5, 1951, Serial No. 254,956
13 Claims. (Cl. 263—29)

1. The combination with a vertical, stationary-walled shaft furnace for heat-treating fluent mineral solid particles descending therethrough in a continuous column, of a probing device associated with the furnace for disintegrating chunks of agglomerated particles in said column, said probing device comprising a plurality of probes located adjacent at least one side of the furnace said probes being movable along a path generally transverse of the major axis of the furnace through correspondingly positioned slots in the furnace wall into the



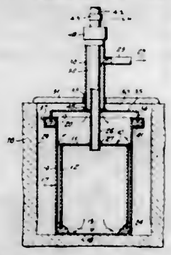
furnace interior and toward the opposite wall of the furnace, and means actuating said probes to effect their advance into and retraction from the interior of the furnace, the displacement rate of said probes, relative to the interior of the furnace, in the advance direction being not substantially greater than the rate of descent of such column through that part of the furnace wherein the probes operate.

2,744,744
METHOD OF INTRODUCING AIR TO BURNERS OF REVERSING TYPE FURNACES
James L. Hartney, Chicago, Ill., assignor to United States Steel Corporation, a corporation of New Jersey
Original application March 9, 1950, Serial No. 148,619, now Patent No. 2,660,419, dated November 24, 1953. Divided and this application May 27, 1953, Serial No. 357,739
6 Claims. (Cl. 263—52)



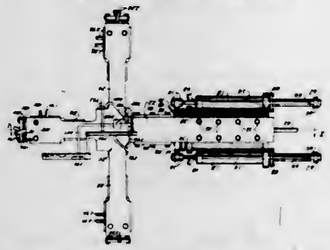
1. A method of introducing air alternately to an opposed pair of burners in a reversing type furnace comprising preheating compressed air, directing such air to the burner through which the furnace is being fired while stopping flow of air to the other burner, and maintaining air flow through the preheating equipment during changeovers to the other burner while flow of air to both burners is stopped.

2,744,745
SEALED ANNEALING APPARATUS
William E. Engelhard, North Arlington, N. J.
Application May 27, 1954, Serial No. 432,829
3 Claims. (Cl. 266—5)



1. A device for annealing work in a gas atmosphere, in the opening of a high temperature furnace, said opening having a bottom and side walls, said device comprising an outer casing adapted to be positioned on the bottom wall of the casing opening and having side walls extending upwardly from the bottom wall of the casing opening in spaced relation to the side walls of said opening, said side walls of the casing defining, at their upper ends an opening, an inner casing adapted to be positioned within the outer casing through said opening, said inner casing having a top wall and side walls depending therefrom, a gas inlet pipe fixed to the top wall of the inner casing and projecting into the interior of the inner casing, a cover plate for the outer casing, complementary means on the upper ends of the side wall of the outer casing and on the perimeter of said cover plate for sealing said upper end and perimeter said cover plate having a medial opening, a sleeve fixed to the cover plate in registry with the opening therein and a gas discharge pipe secured to the sleeve at a point substantially above the point of connection of the sleeve with the cover plate, said pipe discharging into the atmosphere, and means for connection of the gas inlet pipe to a source of supply of gas, whereby gas may be pumped through said pipe and thus through the inner casing, between the inner and outer casing walls and thence between the sleeve and gas inlet pipe and out of the gas discharge pipe to the atmosphere.

2,744,746
MACHINE FOR FORMING AND HEAT TREATING METAL ARTICLES
George C. Batz, Topeka, Kans.
Application June 17, 1952, Serial No. 294,106
12 Claims. (Cl. 266—6)



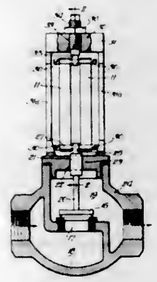
2. In a machine for producing multi-sided metal articles, forming dies for completely forming a heated part, said dies having a plurality of working faces angularly disposed from each other, punches operating along individual paths of movement correspondingly angularly disposed from each other to move through the faces of said forming dies to shear away portions of the parts from the various sides, and means to circulate a coolant in contact with the dies to heat-treat the part.

2,744,747
SHOCK ABSORBER
Helmer L. F. Enlund, Oak Ridge, Tenn.
Application May 1, 1952, Serial No. 285,525
3 Claims. (Cl. 267—1)
(Granted under Title 35, U. S. Code (1952), sec. 266)



3. A shock absorber comprising an upright cylinder; an upper and a lower cylinder head, each head formed with an axial bore and secured in the upper and lower ends of said cylinder, respectively; a piston reciprocable in said cylinder; a plunger rod secured to said piston and extending through the bore formed in said upper cylinder head; an elongated conical extension secured to and extending from said piston toward the lower end of said cylinder; a fluid reservoir formed with a bore at its lower end and positioned adjacent the upper end of said cylinder and in fluid communication with the upper end of said cylinder; pipe means for permitting fluid communication between said fluid reservoir and the lower portion of said cylinder, said pipe means at one end thereof extending through the bore of said lower cylinder head into the lower end of said cylinder and sealed to said lower cylinder head and at its other end sealed into the bore formed in the lower end of said fluid reservoir, the end of said pipe means which extends into the lower end of said cylinder registering with the conical extension of said piston whereby it is progressively constricted upon movement of said conical extension into said pipe means; and a quantity of shock absorbing fluid normally occupying a portion of said fluid reservoir and all space in said shock absorber below said fluid reservoir.

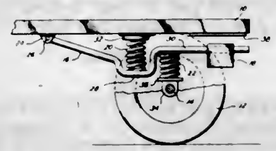
2,744,748
ZERO SCALE SPRING
Irvin E. Wiegers and Harold E. Davis, Hamilton, Ohio, assignors to Hamilton-Thomas Corporation, Hamilton, Ohio, a corporation of Ohio
Application December 22, 1952, Serial No. 327,247
5 Claims. (Cl. 267—1)



1. In an apparatus of the class described, a reciprocably mounted rod, a cross bar carried by said rod, a fixed support spaced from an end of said rod, an adjustable screw extending through said support, a cross bar carried by said screw, said cross bars having releasable clamping means and being arranged in spaced parallel

relation with each other, leaf springs secured between said cross bars by said releasable clamping means whereby the effective length of said leaf springs may be varied.

2,744,749
VEHICLE SUSPENSION MECHANISM
Ludwik F. Fiedor, Houston, Tex.
Application June 11, 1952, Serial No. 292,870
5 Claims. (Cl. 267—20)



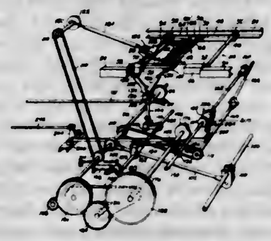
1. In a vehicle having a body and an axle, suspension mechanism comprising a lever, pivotal means connecting one end of the lever to the body at a point longitudinally inwardly of the axle for vertical swinging movement, a weight carried by said lever, and yieldable means located vertically above the lever and extending generally vertically between the lever and body in position to coact with the body and lever to resist relative movement of the body and lever toward each other and vertically below the lever and extending generally vertically between the axle and lever in position to coact with the axle and lever to resist relative movement of the axle and lever toward each other.

2,744,750
STABILIZERS OR CUSHIONING DEVICES FOR RAILWAY TRUCKS
Charles C. Smith, Atchison, Kans., assignor to The Locomotive Finished Material Company, Atchison, Kans.
Application September 6, 1951, Serial No. 245,282
1 Claim. (Cl. 267—67)



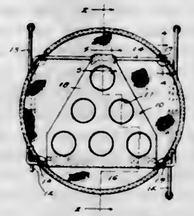
A stabilizing or cushioning device between relatively movable elements, comprising: confronting brackets on the elements, respectively, each provided with a bearing having an open slot and a socket in its outer face; a rigid rod adapted to extend continuously between and through the brackets and to project outwardly beyond the brackets; annular abutments welded on the rod and spaced apart to pass inwardly of the brackets; an inner cushion pad and an inner abutment washer on the rod between each annular abutment and the inner face of each bracket; the rod being simultaneously insertible transversely through the slots into the bearings in both brackets; the rigid annular abutments, inner pads, and inner washers being transversely movable with the rod into operative positions at the inner sides of the brackets, respectively; collars axially slidable on the rod, provided with hubs interfitting with the sockets in, and flanges abutting the outer sides of the bearings, respectively, for holding the rod against transverse removal from the bearings: outer cushion pads and abutment washers on the rod outwardly of and applied to hold said collars into interfitting relation with the brackets; and means for removably securing the outer pads and abutment plates to hold the hubs in the sockets and the collars against the outer sides of the brackets.

2,744,751
PARTITION STRIP FEEDING MECHANISM FOR A PARTITION ASSEMBLING MACHINE
Fred Janz, Jacksonville, Fla., assignor to National Container Corporation, New York, N. Y., a corporation of Delaware
Application August 9, 1952, Serial No. 303,577
25 Claims. (Cl. 271—2.5)



1. In a partition strip feeding mechanism, a support, a member reciprocably mounted on said support, a strip-engaging clement operatively connected to said member for movement therewith, first driving means permanently operatively connected to said member for reciprocating it with one amplitude, second driving means operatively connectable to said member for reciprocating it with an incremental amplitude in addition to said one amplitude, and control means operatively connected to said second driving means and active to render the latter effective and ineffective cyclically on each *n* reciprocations caused by said first driving means, where *n* is an integer greater than one.

2,744,752
CONE-BALL GAME
Daniel Robert Arnold, Lansdale, Pa.
Application August 3, 1953, Serial No. 371,841
3 Claims. (Cl. 273—105)

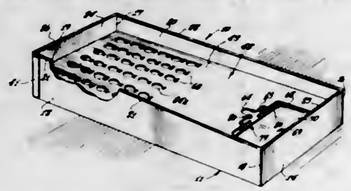


1. A game board comprising a substantially triangular target board having a plurality of openings formed therein and extending therethrough to receive substantially conically shaped playing members thrown thereat, pairs of crossed leg members, a connecting bar integral with a leg member of each pair of said crossed leg members, means connecting the apex of said target board with one of said connecting bars, means pivotally connecting the base of said target board with the other of said connecting members, a ring member mounted on said connecting bars and surrounding said target board, a net fixedly connected with said ring and depending therefrom below said board to catch playing members which miss said target board, and said leg members serving as a support for the entire device.

2,744,753
ROLLING BALL GAME
Harry J. Beethoven, Elmhurst, N. Y.
Application February 5, 1953, Serial No. 335,309
6 Claims. (Cl. 273—125)

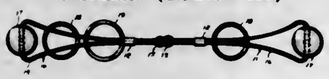
1. A pin-ball game having apertures through which a plurality of balls are adapted to drop comprising a body

portion, a removable top portion containing said apertures, a slidable intermediate portion having registering apertures and a bottom portion removably engageable with said top portion, each of said body, top, intermediate and bottom portions being formed from a unitary blank of cardboard, said body portion blank comprising a pair of longitudinal side and front and rear end walls connected along vertical fold lines and disposed in rectangular arrangement, side and end flaps integrally formed along the upper edges of said side and end walls along horizontal fold lines, said flaps being folded inwardly against their respective sides and ends, said side flaps having vertically spaced, longitudinal slits, said rear end wall flap having an opening, said top portion blank comprising a rectangular surface adapted to fit within said body portion, side and end flaps integrally formed along the sides and ends of said surface along horizontal fold lines, said top portion side and end flaps being folded downwardly and disposed adjacent said body portion side and end flaps, said top portion side flaps having vertically spaced, longitudinal slits aligned with said slits in said body portion side flaps, said rear end flap of said top portion having vertically spaced, horizontal slits aligned with the top and bottom of said opening in said body portion



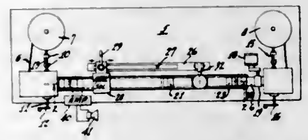
rear end wall, said intermediate portion blank comprising a rectangular surface adapted to fit within said body portion, side and end tongues integrally formed in the sides and ends of said intermediate surface, said end tongue passing through the uppermost of said slits in said top portion rear end flap and said openings in said body portion rear end and flap thereof, said side tongues being disposed within the uppermost of said slits in said top and body portion side flaps, said intermediate surface being of less length than said body portion and said side tongues being of less length than said slits whereby said intermediate portion may be moved longitudinally within said body portion, and said bottom portion blank comprising a rectangular surface adapted to fit within said body portion, a front end flap integrally formed in said surface along a horizontal fold line, side and a rear end tongue integrally formed in the sides and rear end of said surface, said front end flap being folded upwardly and disposed adjacent said front flap of said top portion, said rear end tongue passing through the lowermost of said slits in said top portion rear end flap and through the openings in said body portion rear end and flap thereof, said side tongues passing through the lowermost of said slits in said body and top portion side flaps.

2,744,754
PUZZLE
Yih-Hung Lee, Fitchburg, Mass.
Application August 20, 1953, Serial No. 375,541
3 Claims. (Cl. 273—159)



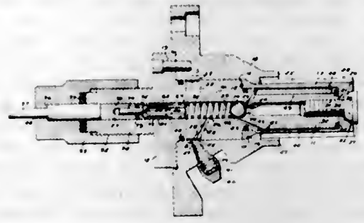
1. A puzzle comprising a pair of flexible strands, means locking the ends of each strand together against an intermediate part thereof to establish first and second loops, each first loop encircling the other first loop and extending therethrough thus to connect them and enable them to be drawn tightly together and loosened, a ball carried by each second loop whose diameter is such that it cannot be passed through a first loop, and a pair of rings carried by said interconnected strands to be slid from end to end thereof, the outside diameter of each of said rings being such that it will pass through either first loop, and its inside diameter being less than that of said balls, and a ring between said pair of rings and slidable from end to end of said interconnected strands, the inside diameter of said last named ring being such as to enable said ball but not said pair of rings to pass therethrough, said rings being located between said balls.

2,744,755
MAGNETIC TAPE EDITING MACHINE
Walter N. Dibbins, Copiague, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application July 21, 1950, Serial No. 175,171
The terminal 15 years of the term of the patent to be granted has been disclaimed
5 Claims. (Cl. 274—4)



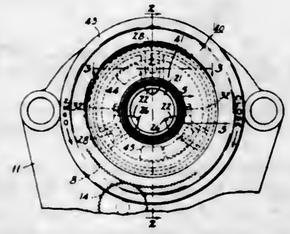
1. A magnetic sound record tape marking machine comprising a frame, a magnetic sound record tape, means for advancing said tape along said frame for visible observation of said tape, a reproducing magnetic head for the record on said tape and mounted on and adjacent one end of said frame, a tape marking unit mounted on said frame and spaced from said head in the direction of movement of said tape, said unit including a tape contacting element, an electrical circuit for actuating said element, means in said electrical circuit for automatically controlling the length of time said contacting element is in contact with said tape, and a mounting for said unit to adjust the position of said unit along said tape at a position at which said element will contact said tape at a point thereon reproduced by said head, said automatic control means including a slow-to-operate relay simultaneously energized with the energization of said electrical circuit for actuating said element and adjusted to break said electrical circuit immediately after said tape contacting element has contacted said tape.

2,744,756
HYDROSTATIC HOLDING DEVICE
George L. Atherholt, Sr., Flint, and George L. Atherholt, Jr., Royal Oak, Mich.
Application November 1, 1954, Serial No. 465,996
21 Claims. (Cl. 279—2)



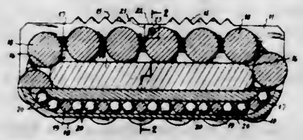
1. A hydrostatic mandrel comprising, a body, a relatively thin walled hollow shell, means securing said shell in overlying relation on said body, said shell having exposed portions adapted to engage a tool, means forming a generally helical passageway between said body and shell, the sides of said passageway being defined at least in part by portions of said body and shell, said body having a chamber, means in said body forming an inlet for introducing a generally incompressible fluid into said chamber, means in said body forming an outlet for the fluid, duct means in said body, said duct means cooperating with said inlet, chamber, helical passageway and outlet to form a continuous passageway system, whereby fluid introduced into said inlet completely fills said system, means closing said inlet and outlet, and pressure forming means in said chamber, whereby to expand said shell for holding engagement with a tool.

2,744,757
SELF-TIGHTENING CHUCK
Anthony R. Chasar, Cleveland, Ohio, assignor to The Oster Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application March 18, 1955, Serial No. 495,127
20 Claims. (Cl. 279—114)



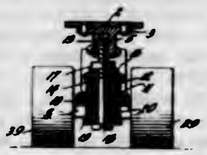
1. A self-tightening and quick-releasing chuck comprising a spindle having a plurality of circumferentially spaced radial ways; means mounting said spindle for rotation about a fixed axis; a scroll mounted on said spindle for rotation about the spindle axis and having a spirally grooved face normal to the spindle axis; a driving member slidably mounted in each of said ways and having teeth meshing with the grooved face of said scroll whereby said member is moved radially in response to turning movement of said scroll with respect to said spindle; a chuck body rotatably mounted on said spindle and provided with a series of radial ways facing the ways of said spindle; a clamping member slidably mounted in each of said ways for radial movement; means for tightening said clamping jaws in response to movement of said chuck body from a neutral position in either direction with respect to said spindle including a cam slot in one of said members and a driving pin carried by the other of said members and fitting in said slot; yieldable means for biasing said chuck body toward said neutral position; and means for tightening and releasing said clamping jaws during rotation of said spindle comprising a rotatable handwheel coaxial with said spindle and mounted for turning movement with respect to said spindle, said handwheel having a relatively heavy circumferentially continuous handgrip portion radially outwardly of said chuck body and said scroll, impact stops on said handwheel and said scroll engageable to limit turning movements of the handwheel with respect to the scroll and providing an impact driving connection between said handwheel and said scroll, rotation of said handwheel in one direction at an angular velocity greater than that of said spindle causing engagement of said impact stops to impart radial movement to the jaws in one direction and retardation of said handwheel during rotation of said spindle to reduce the angular velocity of the handwheel below that of the spindle causing radial movement of the jaws in the opposite direction, whereby said jaws may be tightened and released during rotation of the spindle in either direction without stopping said spindle.

2,744,758
ROLLER DEVICE FOR MOVING LOADS
Samuel Raphael John Stokvis and Eugene Edera, Great Neck, N. Y.
Application April 28, 1953, Serial No. 351,626
8 Claims. (Cl. 280—1)



1. In a dolly for transporting an article over a surface, the combination of a frame of substantially H-shaped cross-section formed of elongated side members and a horizontal platform extending between said side members and secured thereto, said side members each having an endless slot having the longitudinal contour of said platform and spaced uniformly therefrom, transverse rollers projecting below said side members and having axial end extensions guided in the slots in the corresponding side members, and a first and a second series of rolling elements seated respectively in said slots at opposite sides of said axial extensions of said rollers for spacing said axial extensions apart and guiding said rollers in sequence around said platform as the dolly is moved over said surface, said first and second series of rolling elements being mutually independent and sufficiently small in size to extend laterally no further than the adjacent ends of the rollers.

2,744,759
TOE BRAKE FOR ROLLER SKATES
David Sternbergh, York, Pa.
Application May 8, 1953, Serial No. 353,793
10 Claims. (Cl. 280—11.2)



1. A toe-stop attachment for roller skates having a sole plate and a front wheel truck connected therewith by means of a king-pin, said wheel truck including an axle housing and an inclined brace member extending from the axle housing to the sole plate; said attachment comprising an elongated plate terminating at each end in a generally horizontal portion, one of said end portions having an opening for receiving the king-pin for connection to the skate, the other end having means for securing a stop member, and said plate member having an inclined portion intermediate said ends for abutting relationship with said inclined brace member.

2,744,760
COLLAPSIBLE FRAME FOR BABY CARRIAGE
Matilda D. Welsh, La Due, and Frederick Edward Miller, St. Louis, Mo.; said Miller assignor to Welsh Company, St. Louis, Mo., a corporation of Missouri
Application October 30, 1953, Serial No. 389,431
6 Claims. (Cl. 280—36)

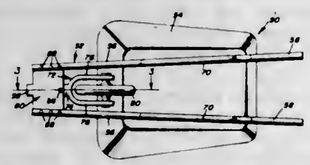
1. A side frame for a baby carriage comprising, an S-bar having its middle portion extending substantially horizontally with its forward portion turned downward and its rear portion turned upward, a similar S-bar having its middle portion substantially horizontal with its forward portion turned upward and its rear portion turned downward, a slidable connection between said middle portions for relative movement of said S-bars, a handle member

connected to move said S-bars relatively at said slidable connection, a base member, movable connections between



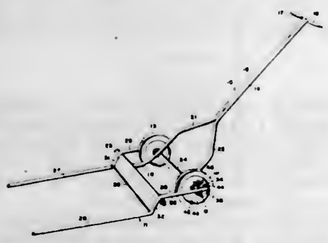
said S-bars and said base member, and a body supporting member connected to said upward-turned portions of said S-bars.

2,744,761
WHEELBARROW WITH SPRING MOUNTED WHEEL
Frank E. Steele, Mercer, Pa.
Application September 24, 1953, Serial No. 382,039
1 Claim. (Cl. 280—47.22)



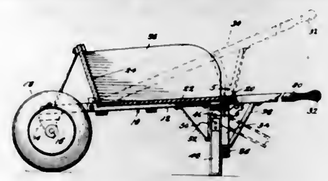
A wheelbarrow construction comprising a supporting frame, a body carried by said supporting frame, said supporting frame including a front cross frame member, a wheel, a fork pivotally connected to said cross frame member, said fork including a pair of rearwardly extending arms, an axle extending between rear ends of said arms, said wheel being mounted on said axle, spring means carried by said cross frame members for urging said wheel to a lowermost position, said front cross frame member having a flat central portion, a fastener carried by said central portion loosely passing vertically through said fork, said spring means including a spring carried by said fastener and urging said fork downwardly towards said central portion, said fork and said central portions having upwardly sloping forward parts, a second spring extending between said forward parts and resisting upward pivoting of said wheel about said fastener.

2,744,762
HAND OPERATED ARTICLE LIFTING AND MOVING DEVICE
William W. Kirk, Weirton, W. Va.
Application February 7, 1952, Serial No. 270,476
7 Claims. (Cl. 280—47.28)



5. A hand operated article lifting and moving device comprising a handle member including a hand engaging portion at one end and a pair of spaced parallel members at its lower end, an axle, a pair of wheels rotatably mounted on the axle, bearing means for rotatably mounting the spaced parallel members relative to the axle between the wheels at intermediate points on the spaced parallel members, an article lifting member including a pair of spaced parallel arms each having an offset portion, a pair of link members, means rotatably mounting each of the link members on the axle adjacent a side surface of a wheel, a slidable connection between each of the link members and one of the lift arms, means for adjusting the degree of the slidable connection, and means carried by the spaced parallel members for contacting the article lifting member upon rotation of the handle member relative to the article lifting member.

2,744,763
WHEEL-BARROW WITH PIVOTED SUPPORTING LEGS
Cecil F. Carter, Quogue, N. Y.
Application June 20, 1952, Serial No. 294,538
1 Claim. (Cl. 280—47.33)

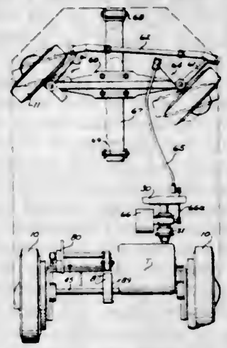


In a wheelbarrow including a bed frame, a supporting wheel carried by said frame at the forward end thereof, and a pair of vertically swingable handle bars pivoted at their forward ends to said bed frame, the provision of a transverse shaft carried by said frame in vertical spaced relation to the underside thereof, a pair of supporting legs each pivotally mounted at its upper end to one end portion of said shaft, whereby to be dependently swingable therefrom in a forward and rearward direction, a stop member affixed to the bottom of each side of said frame immediately forwardly of each of said legs and extending downwardly beyond the pivotal points of said legs whereby said legs abut against said stop members when in a vertical position, and a cross bar dependently carried by said handle bars in abutting relation to the rear sides of said legs when the latter are in a vertical position.

2,744,764
SPRING SUSPENSION FOR AN INDUSTRIAL LIFT TRUCK
Elverton W. Weaver, Cleveland Heights, Ohio, assignor to Towmotor Corporation, Cleveland, Ohio, a corporation of Ohio
Original application May 28, 1947, Serial No. 750,914, now Patent No. 2,625,285, dated January 13, 1953. Divided and this application July 12, 1952, Serial No. 298,543
2 Claims. (Cl. 280—112)

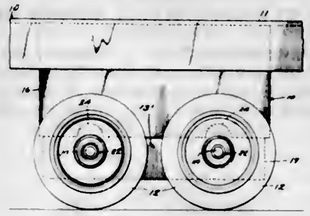
1. In an industrial truck, a frame, a front axle and front drive wheels supporting the front end of the frame, a rear axle having dirigible wheels mounted at each side thereof, a tie rod operatively connecting said dirigible wheels for steering movement from a position normal to the axis of the axle to a position approaching parallelism with the axis of the axle, a single multiple leaf spring connected at its center portion to said rear axle at its center and normal thereto, said single spring and the longitudinal axis of said frame aligned in a vertical plane passing through the center of the rear axle and normal to said rear axle, said spring having a width substantially less than the minimum distance between the said rear wheels when said rear wheels are turned to a position approaching parallelism with the axis of said rear axle, said single spring connected at the ends thereof to

horizontally disposed pins fixed on said frame, whereby said single spring is twisted between its said ends in re-



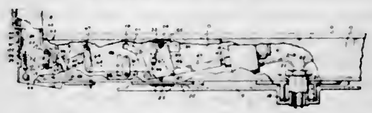
sponse to transverse tilting of the rear axle about the said center thereof.

2,744,765
WHEEL SUSPENSION HAVING COIL SPRINGS AND DUAL AXLE
Peter H. Ferrier, Brookfield, Ill.
Application December 6, 1954, Serial No. 473,100
1 Claim. (Cl. 280—124)



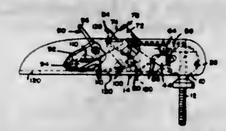
A wheel suspension device comprising an upper casing, a lower casing telescoping and slidable in said upper casing, confronting cup-shaped spring seats carried by said upper and lower casings, a plurality of vertically disposed coil springs seated at the opposite ends thereof in said seats, oppositely extending pairs of cone-shaped axle housings fixed to the opposite sides of said lower casing, axle bearings in the outer ends of said housings, an axle rotatably extending through each pair of housings and bearings, and wheels on the outer ends of each axle.

2,744,766
BUNK FOR LOGGING VEHICLES
Robert B. Davidson, Vaughn, Wash.
Application August 23, 1954, Serial No. 451,663
18 Claims. (Cl. 280—145)



1. In a bunk assembly for a load carrying vehicle, an elongated bunk, a hollow stake mounted pivotally at one end of the bunk, the lower inner side of the stake having an opening therein, locking jaw means mounted movably on the bunk for removable engagement with the said opening when the stake is in load-supporting position, load binder means secured at one end adjacent the side of the bunk opposite the pivoted stake, the outer side plate of the stake having a second opening therein for removably receiving load binder means therein, locking bar means mounted movably on the stake for removable registration with the said second opening, locking bar actuator means mounted pivotally on the stake and engaging the locking bar for moving the latter, and contact means on the locking bar actuator means arranged for engagement through the first opening with the locking jaw means, whereby the latter holds the locking bar means in lock position while simultaneously holding the stake in secured position and whereby the locking jaw means releases the locking bar means simultaneously with its release of the stake.

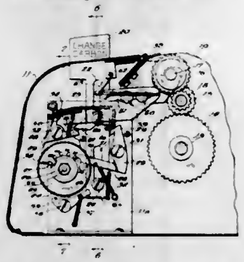
2,744,767
BALL AND SOCKET TYPE HITCH
Floyd R. Kleiman, Lincoln, Nebr.
Application January 9, 1953, Serial No. 330,584
2 Claims. (Cl. 280—512)



2. In a trailer hitch of the spherical ball and socket type: a ball, a frame having forward and rearward ends, a forward half-socket portion rigidly secured to said frame at the forward end of said frame, a rearward half-socket member retaining said ball in operation from moving rearwardly of said hitch, said rearward half-socket member having a concave forward surface providing, when in a hitching position, a substantially spherical ball cavity together with and in cooperation with the concave rearward surface of said forward half-socket portion, said rearward half-socket member having an upper forward portion disposed, when all parts are in a hitching position, a substantial distance forwardly of the rearward portion of said ball and extending forwardly to a point substantially above the center of said cavity, means pivotally mounting said rearward half-socket member on said frame for rotation about an axis disposed behind the concave forward surface of said rearward half-socket member transverse to the forward-to-rearward length of said frame and disposed above a plane extending horizontally through the center of the said ball cavity, whereby a placing of the forward half-socket portion and the rearward half-socket member on said ball causes said rearward half-socket member to rotate automatically into a hitching position under upward pressure from said ball on the said upper forward portion of said rearward half-socket member, and whereby a releasing rotation of said rearward half-socket member downwardly at its forward end will permit release of said ball, and means for releasably holding said rearward half-socket member in a hitching position, said rearward half-socket holding member having a latch-receiving upper rearward surface, a latch disposed behind said rearward half-socket member, said latch having a portion adapted to overlap and engage the latch-receiving surface of said rearward half-socket member, said latch member being pivotally connected to said frame member for rotation about an axis parallel to the pivot axis of said rearward half-socket member, said latch member having an upwardly extending surface adapted to be manually pressed to force the upper end of said latch downwardly and rearwardly, and in which a spring is provided in a position pressing against said frame member and against said latch member respectively for causing said latch member to rotate into a position disposed forwardly at its upper end for engaging the latch-receiving surface of said rearward half-socket member, and in which said latch member has a lock-receiving downwardly facing rearward sur-

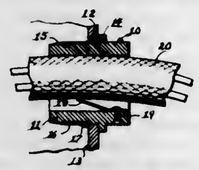
face and a lock member disposed on the rearward side of said latch member, said lock member being pivotally secured to said frame for rotation about an axis parallel to said latch member and having a portion for engaging said lock-receiving surface of said latch member to prevent rotation of the upper end of said latch member rearwardly, and spring means for holding the forward end of said lock member upwardly and in locking engagement with said latch member, and said lock member having a handle portion protruding upwardly therefrom and for facilitating manual rotation thereof.

2,744,768
CARBON CHANGE SIGNALING DEVICE FOR AN AUTOGRAPHIC REGISTER
Louis Jensen, Chicago, Ill., assignor to Uarco, Incorporated, a corporation of Illinois
Application July 3, 1953, Serial No. 366,031
5 Claims. (Cl. 282—1)



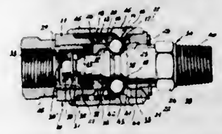
1. A carbon change signaling device for an autographic register having a form-feeding mechanism, comprising: a flag member mounted within the register and releasable from a concealed position in the register to signaling position; spring means urging said flag member toward signaling position; a spring loaded trigger mechanism for engaging and releasably holding said flag member in concealed position; a ratchet member having a stud for tripping said trigger mechanism in one position to release the flag member from concealed position; and drive means actuated by the form-feeding mechanism for advancing the ratchet member step-by-step from an initial position to said one position, whereby the flag will be released after a predetermined number of operations of the form feeding mechanism.

2,744,769
BUSHING MEANS FOR ATTACHING CABLE IN PLATE
Woodrow W. Roeder, Orwigsburg, and Harold C. Roeder, Summit Station, Pa.
Application March 25, 1954, Serial No. 418,540
1 Claim. (Cl. 285—6.5)



In combination, a tubular attaching means adapted to enclose an insulated electrical conductor and form a projecting housing therefor through a hole in the wall of a junction box and a resilient flat gripping finger within said attaching means secured at one end to the interior of the tube of said attaching means, the other end extending at an oblique angle towards the axis of said tube to hold the outer surface of said conductor and restrain withdrawal of said conductor from the tube, said tubular attaching means having an exterior shoulder for engaging one face of said wall, and a peripheral channel which is spaced from said shoulder a distance approximately equal to the thickness of said wall to place the wall of said channel opposite the shoulder in flush engagement with said face of the wall box, a thin resilient split fastener ring seated in said channel having substantially the same width of said channel, the external diameter of said ring about said tubular attaching means being not greater than the external diameter of said attaching means at its end which is opposite said shoulder, said shoulder having an external diameter which is greater than the external diameter of said ring and of said tubular attaching means; said ring being removable from said channel to withdraw the attaching means from the box while the conductor is held fast in said attaching means, and a plurality of resilient straight lugs formed from circumferentially spaced end portions of the material of said ring by bending outwardly at an intermediate portion of said ring, said lugs projecting substantially in a straight line longitudinally and outwardly from the outer surface of said ring adjacent to said shoulder in an angular direction which is in opposed relation to said shoulder, said lugs being adapted to retract when said attaching means is pushed into the hole and snap back into a normally extended position behind the box wall when the attaching means is in place.

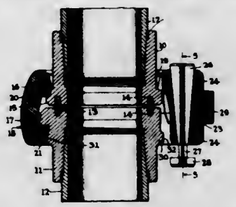
2,744,770
QUICKLY ATTACHABLE SAFETY HOSE COUPLING
Elmer T. Davidson and Louis E. Kilmarx, Jr., Brooklyn, N. Y., assignors to Scovill Manufacturing Company, Waterbury, Conn., a corporation of Connecticut
Application October 3, 1951, Serial No. 249,484
4 Claims. (Cl. 285—169)



1. A female member for a quickly attachable and detachable hose coupling or the like, comprising a tubular body having an entrant end, and external annular groove, a plurality of circumferentially spaced apertures leading from said groove to the inner surface of the tubular body, a locking ball in each aperture, a sleeve slidable on said body and overlying said external groove, said sleeve having an internal rib engaging in the annular groove and an internal shoulder, the body member having an internal shoulder at one end of the annular groove facing the shoulder on the sleeve and an external shoulder adjacent the entrant end, a floating washer having a camming surface disposed in the annular groove, a helical spring disposed in the annular groove and bearing at one end against the internal shoulder on the body and at its other end against the washer to bias the camming surface thereof into engagement with the balls to urge them inwardly in the apertures toward the axis of the body and through said washer engaging the shoulder on the sleeve to bias the sleeve to maintain it in its axial limiting position in proximity to the external shoulder at the entrant end of the body, the internal rib on the sleeve overlying the side of the balls facing the entrant end of the body and having an inner diameter to hold the balls in locking position when the sleeve is at its aforementioned limiting position against a force acting on the balls diagonally outwardly and toward the entrant end of the body, the side of the rib facing away from the body entrant end and the corresponding sides of the apertures being spaced to permit the balls to move outwardly by said rib and move said

washer away from said rib against the action of said spring when a force acting diagonally outwardly and away from the body entrant end is applied to said balls, movement of the sleeve away from its limiting position moving said rib from over the balls to provide a clearance for the radial outward movement of the balls into the annular groove when an axial force is applied to the balls in a direction toward the entrant end of the body.

2,744,771
PIPE COUPLING RING WITH LOCKING MEANS
Milton P. Laurent, Houston, Tex., assignor to Frank A. Rudman, Houston, Tex.
Application February 5, 1951, Serial No. 209,338
4 Claims. (Cl. 285—177)



1. A pipe union comprising: aligned cylindrical elements to be coupled, at least one of which is tubular, one provided with an outer circumferential flange and the other with a plurality of circumferentially-spaced outer radial lugs; means for sealing the juxtaposed ends of said elements; a coupling ring engaging over said flange and lugs, having an inner circumferential flange engaging with the rearward face of said outer flange and a plurality of inner radial lugs engaging with the rearward faces of said outer lugs by axial and rotative movement of said ring, the engaging surfaces of said outer and inner lugs being substantially helically disposed for forcing said elements together upon relative rotation in one direction between said ring and said other element, said ring comprising a plurality of arcuate segments having their adjacent ends hingedly connected together about axes parallel to the longitudinal axis of the union, at least one hinge connection including a tapered hinge pin disposed in correspondingly tapered, substantially aligned bores formed in interfitting segment ends, in order to effect contraction and release of said ring by axial movement of said pin, said other cylindrical element being provided with peripheral portions spaced axially of the said outer radial lugs and clampingly engaged by the inner peripheral faces of the said inner radial lugs on the coupling ring upon contraction of the latter to lock said ring against rotation; and a plurality of impact receiving lugs extending radially outward from the outer periphery of said ring for effecting rotation of the ring relative to the other element by a hammer blow.

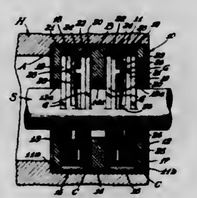
2,744,772
DEVICES FOR EFFECTING A TIGHT FIT BETWEEN A REVOLVING PART AND A FIXED PART
Maxime Amirault, Puteaux, and Paul Destoumieux, Neuilly-sur-Seine, France
Application April 12, 1954, Serial No. 422,630
Claims priority, application France June 8, 1953
5 Claims. (Cl. 286—11)

1. A fluid-seal packing to be fitted between a part having a bearing surface and another part rotating with respect to said first part, comprising an annular resilient membrane having two radially spaced coaxial peripheral portions, a reinforcing ring for rigidly securing one of said peripheral portions of said membrane on said other part, the other peripheral portion of said membrane being formed with a tubular extension directed towards the bearing surface of said first part with an annular front face formed with at least one projecting circular edge for sealing contact with said bearing surface and having a second extension directed away from said bearing surface and including a substantially flat annular rear face, another reinforcing ring en-



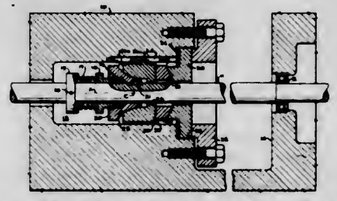
veloping the rear annular face of said tubular extension and partially lining said tubular extension, and a spring located between said first and second reinforcing rings to urge said tubular extension toward said bearing surface until said projecting circular edge engages said bearing surface.

2,744,773
SEAL
Robert Clifborn, Cleveland, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application March 23, 1951, Serial No. 217,261
4 Claims. (Cl. 286—11.15)



4. A double shaft seal which comprises a casing, apertured end plates in said casing, an apertured central plate in said casing between said end plates, spacer sleeves in said casing between said central and end plates and coacting therewith defining a pair of chambers in the casing, a rotating seal ring assembly in each chamber, each seal assembly including split carbon packing rings, opposed inner split carbon sealing rings between said packing rings, ribs on adjacent faces of the inner carbon sealing rings, a metal spring ring between the ribs of the sealing rings, a clamping sleeve contracting the split rings into sealing engagement with a shaft to be sealed, and the spring ring being effective to urge both packing rings of each assembly thereof into axial rubbing sealing engagement with the adjacent faces of the respective central and end plates in the casing.

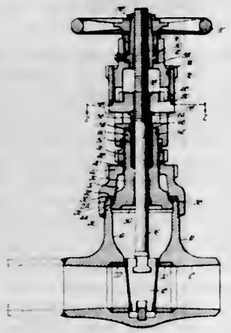
2,744,774
SHAFT-SEAL
Edward B. Wist, Orinda, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application May 6, 1952, Serial No. 286,263
14 Claims. (Cl. 286—11.15)



1. A shaft-seal for sealing a rotatable shaft with respect to a wall comprising: a rotating annular sealing member

in fluid-tight relation to the shaft and rotatable therewith having a first annular working face toward one axial direction; a non-rotating annular sealing member in fluid-tight relation to said wall spaced from said rotating sealing member in the said axial direction and having an annular working face toward said rotating sealing member; and a plurality of intermediate annular sealing members stacked end-to-end between said rotating and stationary sealing members, consecutive intermediate sealing members being in contact along mating annular working faces, one of said intermediate sealing members having a working face in contact with the working face on the rotating sealing member and conforming to the shape thereof and another of said intermediate sealing members having a working face in contact with the working face on the stationary sealing member and conforming to the shape thereof, a first pair of said contacting working faces having surfaces of revolution different parts of which are generated by progressively increasing radii and which are not parts of a sphere to constrain the contacting members to relative rotation on a common axis, a second pair of said contacting working faces being flat and situated in a plane extending transversely to the axis of the shaft to permit relative lateral displacement of the longitudinal axes of the contacting member, and a third pair of said contacting working faces being parts of a sphere to permit relative inclination of the contacting members.

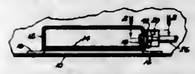
2,744,775
VALVE CONSTRUCTION
Kurt E. B. Bredtschneider, Chicago, Ill., assignor to Crane Co., Chicago, Ill., a corporation of Illinois
Application September 23, 1950, Serial No. 186,337
5 Claims. (Cl. 286—31)



1. In a valve having a body member, an actuating stem, a supporting member for said stem and a stuffing box in said supporting member, a packing assembly for said stem comprising a gland member slidably encompassing said stem and adapted to be moved into operable relation with said stuffing box, a substantially U-shaped pressure plate member adapted to be moved laterally into and out of association with said stem member and to bear against said gland member, a peripheral shoulder on said pressure plate member, a ring member adapted to abut said peripheral shoulder, and an adjustable collar member adapted to abut said ring member on said peripheral shoulder of said pressure plate member and to exert pressure as desired on the latter member.

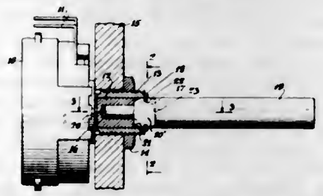
2,744,776
BRACKET FOR ASSEMBLY OF PARTS
Robert L. Brown, Ferndale, Mich.
Application August 11, 1952, Serial No. 303,771
1 Claim. (Cl. 287—20)

A bracket for the assembly of a member into an aperture in a support comprising, a sheet metal body having a central portion provided with a slot through one side thereof, an outwardly bent flange along the longitudinal edge of said central portion opposite the slotted side, integral ribbed intermediate sections at the opposite ends of said central portion, said section diverging outwardly from the plane of said central portion at one side thereof, ribbed arms at the outer ends of said intermediate sections converging inwardly and extending beyond the plane of said central portion at the opposite side of said central portion, tabs at the outer ends of said arms for securing said bracket to the support, one at each side of the aper-



ture in the support, in combination with a member to be received in the aperture, a collar spaced from the outer end of said member, said member received in the slot with said collar abutting the side of said central portion away from the diverging sections and in axial alignment with the opening in the support, whereby application of pressure on the outer surfaces of said arms will produce an approach of said central portion to force the outer end of said member through the aperture in the support by the bending and approach of said arms and said intermediate sections in side by side relation.

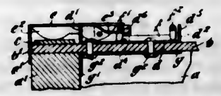
2,744,777
CONTROL COUPLING
George J. Mucher, Rochester, N. H., assignor to Clarostat Mfg. Co., Inc., Dover, N. H., a corporation of New York
Application November 1, 1951, Serial No. 254,301
3 Claims. (Cl. 287—53)



1. In an electrical control in combination a bushing, an operating member rotatable within and having an outer end extending beyond such bushing, said member being formed with a transverse slot extending in line with the axis thereof from a point within the bushing through to the outer end of said member to provide substantially semicircular outer end surfaces for said member—one to each side of said slot—an operating shaft, a solid flattened portion therefor extending in line with its axis and terminating in an outer edge, shoulders extending perpendicular to said outer edge and each constituting substantially one-third of the shaft area at the inner end of said flattened portion, the latter being disposed within the slot of said member with its outer edge bearing in firm contact with the base of such slot, its shoulders extending at right angles to said outer shaft edge in contact with the end surfaces of said member and its side edges in sliding engagement with the bore surface of the bushing and means for retaining said shaft against axial separation with respect to said member.

2,744,778
FASTENING FOR BOXES, CASES, AND THE LIKE
Robert Seymour Cooke, Redditch, England
Application December 22, 1953, Serial No. 399,749
2 Claims. (Cl. 292—250)

1. A fastening for a box comprising, in combination, a bracket adapted to be fixed to a box lid, said bracket having upturned ends and upturned ears at its sides, a catch member having downturned sides pivoted to the ears of said bracket and having a downwardly turned operative extremity adapted to swing over the edge of the box lid, the opposite extremity of said catch member being forked, and a wire loop also pivoted to said bracket and having a



cranked part extending at an angle of less than 90° to the plane of the loop, said cranked part being slidably cooperable with the forked extremity of said catch member to effectuate the pivoting movement of said catch member and to retain said catch member with its downwardly turned operative extremity extending over the edge of the box lid.

2,744,779
DOOR HOLDER
David H. Ellis, Chicago, Ill., assignor to The Oscar C. Rixson Co., Chicago, Ill., a corporation of Illinois
Application August 17, 1953, Serial No. 374,726
5 Claims. (Cl. 292—278)

1. In a door holder, a rail of channel-bar shape, a channel-like inner bar extending along the bosom of said rail and spaced from the side flanges thereof, said inner bar having upstanding side walls, a block slidable along said rail over said inner bar, a leaf spring secured at one end to said block and having a free end overlying said inner bar, a pendant pawl pivotally mounted on a transverse axis at the free end of said leaf spring and hanging freely into the bosom of said inner bar, a transverse stop pin carried by said inner bar in the path of said pawl, said pawl having a notch at its free end adapted to partly embrace said stop pin, a laterally projecting lug on said pawl, and a guide member located adjacent said stop pin at one side of the path of said pawl in position to engage said lug when the pawl is moving in one direction and hold said pawl in tilted position for engaging said stop pin in said notch upon reversal of direction of pawl movement, said guide member projecting a predetermined distance beyond one side of said stop pin in said one direction of movement and terminating in a downwardly sloping top edge surface at the end remote from said stop pin for disengaging from said lug and allowing said pawl to hang free when said lug is moved beyond said guide, said sloping guide edge being adapted to engage said lug and lift said pawl to an oppositely tilted position when said pawl is moved in an opposite direction from the free hanging position.

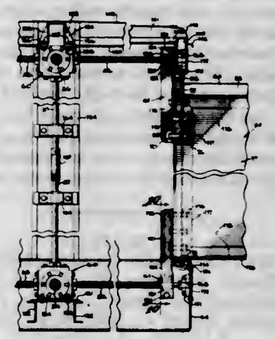
2,744,780
CLAMPING DEVICE
Paul H. Dixon, Rockford, Ill., assignor to Dixon Research, Inc., Rockford, Ill., a corporation of Illinois
Application December 6, 1951, Serial No. 260,241
13 Claims. (Cl. 294—115)

1. A device for clamping a coil comprising, in combination, a support, a first elongated member mounted on said support for endwise sliding and having a longitudinal clamping surface adapted to engage the coil at the outer periphery thereof, a second elongated member perpendicular to said first member and slidably mounted on said support for endwise movement, said second member having a longitudinal clamping surface adapted to engage one end of the coil along a radius thereof, a thin jaw projecting laterally from said first member and having a face on one side opposing the clamping surface on said second member, said one side and the opposite side of said jaw being inclined relative to each other to form a sharpened end adapted to be wedged under said coil, a second jaw projecting laterally from said second member to be inserted in the central opening of said



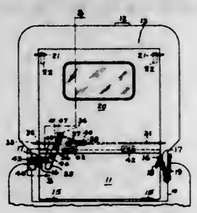
coil and having a face opposing the clamping surface on said first member, a pair of studs, one rigid with and projecting laterally from each of said members adjacent said jaws, and a flexible line having one end anchored to said support and bent around said studs thereby to slide said members and to urge said jaws toward said opposing clamping surfaces when the other end of said line is pulled to lift the coil.

2,744,781
EXPANSIBLE VEHICLE BODY
James J. Black, Cincinnati, Ohio, assignor to Trailmobile, Inc., Chicago, Ill., a corporation of Delaware
Application March 9, 1953, Serial No. 341,281
11 Claims. (Cl. 296—21)



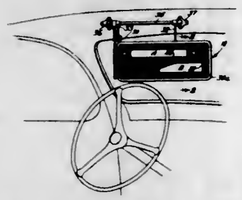
1. An expansible vehicle body comprising a vehicle frame, an expansible housing slidably mounted within said vehicle frame, said housing adapted to be shifted transversely with respect to said vehicle frame, a pair of upper and lower horizontal screw shafts rotatably journalled in said vehicle frame and extending transversely thereof, respective nuts in threaded engagement upon said screw shafts and adapted to be shifted axially along said shafts upon rotation of the shafts, a pair of upper and lower driving members attached to the expansible housing and extending toward said screw shafts, means on said connectors slidably engaging the nuts for advancing the driving members along the axes of the screw shafts, said means providing vertical floating of the driving members relative to the nuts, said connectors shifting said housing transversely along a generally horizontal plane upon rotation of said screw shafts, rollers mounted upon the vehicle frame and in tracking engagement with said housing, said rollers providing a fulcrum support bearing the weight load of said housing with the housing stabilized transversely by said screw shafts along the axes thereof, and means for rotating said screw shafts in unison whereby said nuts are effective to shift said housing transversely of the vehicle frame.

2,744,782
OVERHEAD REAR DOOR AND DOOR LOCKING MEANS FOR A PICK-UP TRUCK
Arno J. Backman, Rochester, Wash.
Application July 19, 1955, Serial No. 522,959
7 Claims. (Cl. 296—50)



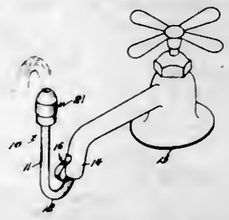
5. Door means for use with a closed type vehicle body having a canopy and having a rear wall provided with a rectangular opening extending from the bottom of the vehicle body to a location near the top of the canopy and having a hinged downwardly opening tail gate closing the lower portion of said opening when the tail gate is in an upright position leaving a back doorway in the canopy above the tail gate; a back door hinged to the canopy adjacent the top of said doorway closing the doorway and overlapping and holding the tail gate when the tail gate is closed; bolts carried by and extending crosswise of the bottom end portion of said door and movable longitudinally into locking engagement with said canopy; a two piece bolt operating handle positioned on the inner side of said door connected with said bolts and swingingly movable in operating said bolts; and a hinge connecting the two parts of said handle and positioned above the bottom end of the door, the lower part of the handle extending downwardly between the tail gate and the door and protruding below the bottom end of the door in providing locking of the door and the tail gate from the exterior of the canopy and said lower handle part pivoting on said hinge and extending into the canopy above the top edge of the tail gate and providing locking of the door and tail gate from the inside of the canopy.

2,744,783
TWIN CONTROL GLARE SHIELDS
Joseph L. Peavey, Meridian, Miss.; Anna Amelia Peavey, executrix of said Joseph L. Peavey, deceased
Application August 29, 1951, Serial No. 244,208
2 Claims. (Cl. 296—97)



1. A glare shield comprising a screen, said screen consisting of two facing sheets of colored transparent material, two tabs of transparent material interposed between said two sheets and two guards extending respectively along opposite outer sides of said transparent sheets, each of said sheets and each of said guards having an opening therein, said openings being in longitudinal alignment, said guards and one of said sheets each having a second opening therein, said second openings being in longitudinal alignment, said screen further comprising two knobs having projecting portions thereon rotatably received in one of said guards and one of said sheets, said projecting portion of each one of said knobs being fixedly connected to one of said tabs, each of said tabs being movable by rotation of one of said knobs into and out of alignment with a side portion of each of said second openings, said tabs being normally out of alinement with said second opening, and a tape secured around the outer perimeter of said screen so as to maintain said sheets and guards in alignment.

2,744,784
BUBBLE FOUNTAIN DEVICE
Donald N. Johnson, Greenwood, R. I.
Application July 6, 1954, Serial No. 441,473
4 Claims. (Cl. 299—9)



1. In combination with a water faucet, a bubble fountain having a body with one end portion thereof adapted to be inserted into the spout of said faucet, a resilient clip on said body to support and hold said inserted end portion against one side of said spout, a bubble head, a U-shape member frictionally received in said head, said body being resiliently held between the arms of said U-shape member for movement relative to said arms.

2,744,785
MOBILE SPRINKLER
Alma J. Lundegreen, Amarillo, Tex.
Application July 13, 1953, Serial No. 367,605
3 Claims. (Cl. 299—52)



1. A sprinkler comprising an elongated pipe having elongated nozzle members disposed at opposite sides thereof at longitudinally spaced points therealong, a plurality of brackets depending from said pipe and rotatably receiving an axle member at their lower free ends, wheels secured to said axle, a balance member extending transversely of said axle and terminating at opposite sides thereof in runner members, said runner members being separately engageable with the ground surface whereby said pipe is disposed in vertically inclined relation to said axle so that the nozzles at one side of said pipe direct liquid over a greater surface area than the nozzles at the other side of the pipe, and means for rotating said wheels and supplying liquid under pressure to said pipe.

2,744,786
DISAPPEARING LAWN SPRINKLERS
Thomas E. Whitehead, Pleasantville, N. J.
Application May 25, 1955, Serial No. 511,030
2 Claims. (Cl. 299—61)

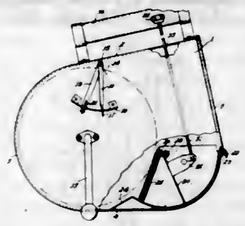
1. In a lawn sprinkler a casing having internal vertical guides extending throughout the greater length of the casing, a weighted piston loosely mounted therein and having a central aperture therethrough, a water metering device located in the piston for regulating the amount of flow of water through the piston, means on the piston cooperating with the aforementioned guides for preventing the turning of the piston within the casing, a flexible rubber tube secured to the upper end of the said piston and provided with spiral grooves on its outer

circumference and substantially throughout its length, the flexible tube sealed at its outer end and provided with an opening slightly below the sealed upper end to form a resultant pocket, the opening extending at substantially right angles to the central axis of the tube and in a direction away from the central casing so the water will be thrown or sprayed away from the sprinkler; a valve closure near the upper end of the piston, an inlet pipe extending within the bottom of said casing, a top for the casing provided with a central orifice of slightly greater internal diameter than the outside diameter of the tube, the bottom of the cap acting as a valve seat, the valve closure being less in outside diameter than the inside diameter of the casing; the piston and rubber tube adapted to rise in the casing when water is admitted



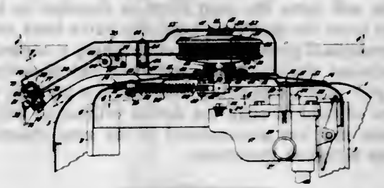
through the casing and to flow around the valve closure and through the aperture in the cap until the piston reaches its full height when the valve closure will press against the aforemetioned valve seat and prevent the water from going out through the opening in the cap around the tube to thereby cause the water to flow only through the rubber tube, and due to the spiral grooves about the tube, the resultant pocket in the closed-off end of the tube and the opening slightly below the pocket, it will cause the tube to bend at substantially right angles where it projects through the cap, extending in a horizontal direction for the greater part of its length, and then assume nearly a vertical position; and the size of the arc in which the tube will swing being dependent upon the amount of flow of water through the metering device.

2,744,787
MEANS FOR FEEDING PARGETING MACHINES WITH THICK PARGETING MATERIAL
Pierre Michel Jean Marie Raymond Daignas, Nice, France
Application June 16, 1953, Serial No. 362,019
Claims priority, application France June 19, 1952
10 Claims. (Cl. 299—63)



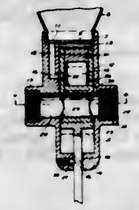
1. In a pargeting machine utilizing semi-liquid and viscous pargeting material and of the type comprising a casing provided with gripping means and into which pargeting material is stored and with a throwing rotor formed with flexible blades which, during the rotation of said rotor are in scraping engagement by their free ends with an abutment which curves them, the releasing of the flexible blades when they escape from said abutment causing a projection of the pargeting material picked up by the ends of said flexible blades; the improvement which comprises a grid-shaped partition removably mounted within the casing, contacting the bottom thereof and substantially tangent to the path followed by the free ends of the flexible blades, whereby a thick pargeting material may be stored into said casing without contacting said flexible blades, and means for urging through said grid a fraction of the stored thick pargeting material when a pargeting operation is to be performed.

2,744,788
SWINGING ARM HOSE RETRIEVER FOR FLUID DISPENSING APPARATUS
Alfred L. Grisé, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a corporation of Massachusetts
Application February 24, 1954, Serial No. 412,237
9 Claims. (Cl. 299—77)



2. Retrieving means for the dispensing hose of fluid dispensing apparatus of the type wherein the housing of the apparatus has an opening through its top wall adapted to be closed by a cover, a cover for closing said opening and adapted to be fixed to said top wall, a bearing fixed to said cover and having a bore extending therethrough substantially at right angles to the cover, a trunnion rotatably received in the bore of said bearing and extending above and below the same, an arm fixed at one end to the trunnion above the cover and extending radially outward therefrom, a crank fixed at one end to said trunnion below the bearing, a spring connected at one end to the other end of said crank and at the other to said cover for yieldingly holding the arm in one predetermined radial position, a spring-actuated winding drum carried by said arm near the inner end thereof, a cable attached at one end to and in part wound upon said drum and extending from the drum outwardly along the arm to the outer end of the latter and adapted for attachment at its other end to the dispensing hose, and stops fixed one to the cable and one to said arm and abutting to limit the extent to which said cable can be retracted by said drum.

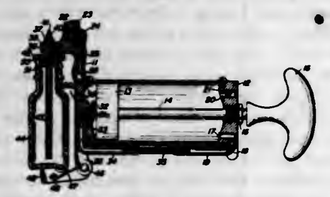
2,744,789
MEASURING SOAP DISPENSER FOR FLUID LINES
Robert T. Sutton, Fort Lauderdale, Fla.
Application March 26, 1954, Serial No. 418,891
4 Claims. (Cl. 299—84)



1. A measuring and dispensing device for liquid soap that is adapted to be mounted within a fluid li- e whereby fluid under pressure dispenses the soap for discharge from a discharge head, the device comprising a body portion that is provided with an elongated chamber for the sliding reception of a valve head, the body portion and the valve head being transversely apertured for the passage of fluid through the device, internally threaded exten-

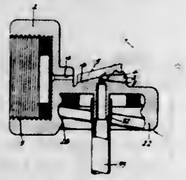
sions formed on the body that are concentric to the apertures and with the extensions being open and communicating with the apertures, the extensions having a threaded connection with an inlet and an outlet fluid line, the valve head provided with a measuring chamber for liquid soap to be dispensed, a reservoir for liquid soap that is supported upon the body and with the body being ported to conduct soap to the measuring chamber, the measuring chamber being ported upon opposite sides to form an inlet and an outlet for the soap, the valve head when shifted to a maximum upper position permitting soap to fill the measuring chamber and establishing a full flow of fluid through the apertures, the valve head when shifted to a maximum lower position serving to dispose the inlet and outlet ports of the measuring chamber in the line of flow of the fluid whereby the fluid under pressure will force the soap from its chamber to be discharged from the discharge head, the valve head when in an intermediate position again establishing a communication between the transverse apertures and disposing the outlet port of the measuring chamber in a position where the flow of fluid through the device will act to withdraw the water that has accumulated in the soap chamber as the soap is forced therefrom.

2,744,790
ATOMIZERS
Eugene O. White, Rochester, N. Y.
Application August 5, 1953, Serial No. 372,574
4 Claims. (Cl. 299—88)



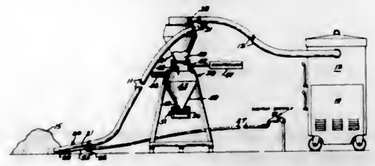
1. In an atomizer, a double acting pump cylinder and piston, said cylinder having heads provided with outlet ports and valve inlet ports, a pair of spaced lugs on each of said heads, one of said heads having thereon an aspirator nozzle and having passageways formed therein for connecting said nozzle with said cylinder and with an external opening located between said lugs of said head, pipe means connected with said opening between said lugs and with the outlet port of the other of said heads between said lugs thereof, eductor means on the first mentioned head having a nozzle positioned for cooperation with said aspirator nozzle and a tube arranged to extend into a reservoir container on said first mentioned head, means for releasably holding said container in cooperation with said eductor means, and manual means for opearting said piston.

2,744,791
ASPIRATOR
Gilbert G. Budwig, North Hollywood, Calif.
Application June 29, 1953, Serial No. 364,835
10 Claims. (Cl. 299—142)



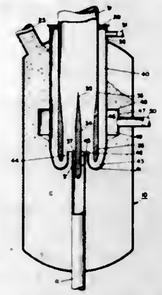
1. A liquid mixing and spraying apparatus, comprising: a body defining a substantially flat impingement surface having an aspiration orifice intersecting surface and a recess at one side of and intersecting said orifice, said recess being substantially semicircular across an axis passing through said orifice, and deepest immediately beyond said orifice to form an acute angle therewith at said axis; the width-to-depth ratio of said recess being approximately two-to-one, and the width of said recess to the diameter of said orifice being a ratio between two-to-one and three-to-one; and a nozzle adapted to direct a spray of liquid obtusely across said impingement surface to impinge adjacent said orifice and spread fan-wise to form a spray sheet covering said orifice and recess.

2,744,792
APPARATUS FOR CONVEYING COMMINUTED MATERIALS
John S. Finn, Burlingame, Calif., assignor, by mesne assignments, to William H. Mead, Oakland, Calif.
Application March 7, 1952, Serial No. 275,360
3 Claims. (Cl. 302—14)



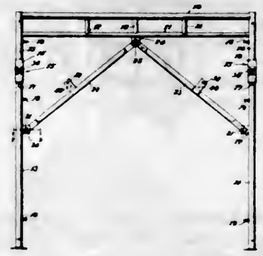
1. An apparatus for moving granular material from one location to another, comprising a pick-up nozzle adapted to receive said granular material in a gaseous suction current said nozzle having a main tube with a pickup opening and a secondary tube connected with said main tube adjacent said pickup opening; a source of water connected to said secondary tube; a conduit connected to the main tube of said nozzle for conveying therethrough said material; suctions means connected to said conduit to induce the flow of a gaseous current therethrough under relatively low pressure conditions; a separation cyclone connected to said conduit; and valve means for passing the separated material out to the atmosphere without seriously affecting said suction current.

2,744,793
APPARATUS FOR ELEVATING CONTACT MATERIAL
John F. McKinney, Jr., Swarthmore, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
Application September 13, 1950, Serial No. 184,601
10 Claims. (Cl. 302—53)



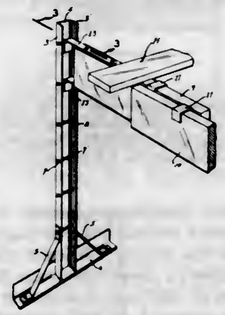
1. Apparatus for elevating granular material from a lower chamber containing a body of the material to an upper chamber which comprises an upright elevating conduit having its lower open end extending through the top of said lower chamber to be positioned therein and its upper end extending into the upper chamber, a fluid conduit extending through the bottom of the lower chamber and having its outlet end positioned within the lower end of the elevating conduit in spaced relation therewith, a sleeve extending through the upper end of the lower chamber concentric with and in spaced relation with the elevating conduit, said sleeve having its upper end closed and its lower portion positioned below the lower end of the elevating conduit, said lower portion of the sleeve extending inwardly toward said fluid conduit and then upwardly in spaced relation with the upper end of the fluid conduit providing an annulus therewith, which is in communication with the granular material and providing also an outer annular fluid space with the elevating conduit which is adjacent said annulus, a deflecting member within the outlet end of the fluid conduit providing an inner annular fluid space adjacent said annulus, means within the body of granular material for supplying fluid pressure thereto to force the material upwardly into said annulus and means for supplying fluid to the inner and outer annular spaces to pick up the granular material from said annulus and move it into and upwardly through the elevating conduit to the upper chamber.

2,744,794
FOLDABLE END-FRAMES FOR SECTIONAL SCAFFOLDINGS
William Byl Sheard, Pleasantville, N. Y., assignor to The Patent Scaffolding Co., Inc., Long Island City, N. Y., a corporation of New York
Application December 7, 1953, Serial No. 396,393
1 Claim. (Cl. 304—2)



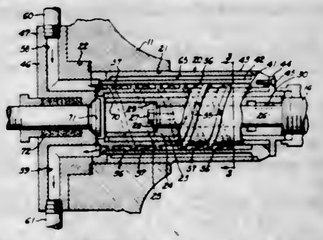
In a foldable end frame for sectional scaffolds, said frame including a horizontal member, a first bracket depending from the median portion of said horizontal member and having a bore, a first upright, a second upright, said uprights depending from and having their upper ends rigidly connected to the ends of said horizontal member, each of said uprights consisting of two hingedly connected sections, the length of the lower of said sections being less than the length of said horizontal member, adjustable locking means for retaining said sections of said uprights in axial alignment, a first diagonal brace having the lower extremity thereof hingedly attached to the lower section of said first upright, a second diagonal brace having the lower extremity thereof hingedly attached to the lower section of said second upright, said braces having bores in the upper extremities thereof registerable with said bore in said first bracket when said sections of said uprights are in axial alignment, and a locking device insertable into said bores of said first bracket and said braces for locking said end frame in erected position, in combination: a second bracket attached to and spaced a predetermined distance from the upper extremity of said first brace, and a third bracket attached to and spaced a predetermined distance from the upper extremity of said second brace, said second and said third bracket each having an opening registerable with said bore in said first bracket when said lower sections of said uprights are folded below said horizontal member, said locking device being insertable into said bore of said first bracket and said openings in said second and said third bracket for locking said end frame in collapsed position.

2,744,795
SCAFFOLDS
James S. McDonough, Hartford, Ill.; Herbert E. McDonough, James E. McDonough, and F. Marvin McDonough, administrators of said James S. McDonough, deceased, assignors to The Finest Scaffold Co., Belleville, Ill., a corporation of Delaware
Application May 27, 1952, Serial No. 290,256
2 Claims. (Cl. 304—2)



1. A scaffold comprising a pair of spaced apart, vertically presented channel members, each channel member having side flanges and a web, a plurality of vertically aligned, spaced bolts extending transversely between the side flanges of each channel substantially throughout its length, a beam, and vertically spaced bolt-engaging members secured on the upper and lower surface of said beam at each of its ends, said bolt-engaging members at each end having vertical depending tongue-like portions at their extremities for downward insertion between a bolt and the channel web of the adjacent channel member for normal disposition in planar parallel relation to the channel web, the tongue-like portion of the lowermost hook member projecting downwardly below the beam, said bolts being spaced from the channel web a distance slightly greater than the thickness of the depending portions of the bolt-engaging members whereby the same will normally be spaced therefrom and upon the imposition of weight on the beam the depending portion of at least one of said members at each end of the beam will be moved into lockingly abutting relation with the adjacent channel web, said members having a width less than the distance between the channel side flange for being normally spaced therefrom.

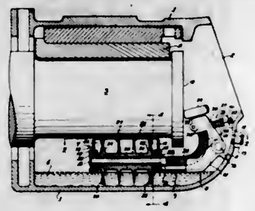
2,744,796
FLUID-COOLED BEARING
Michael E. Walters, Huntington Park, Calif., assignor to Pacific Pumps, Inc., Huntington Park, Calif., a corporation of California
Application January 2, 1953, Serial No. 329,317
8 Claims. (Cl. 308—77)



1. In a fluid-cooled bearing structure, the combination of: a bearing; a housing for said bearing providing cool-

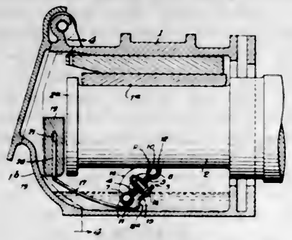
ant inflow and outflow channels in an annular zone around said bearing, said inflow and outflow channels being arranged in alternating relation; and insulating means in said housing in a second annular zone around and external to the first annular zone mentioned.

2,744,797
JOURNAL LUBRICATING DEVICE
Karl A. Klingler, Naperville, Ill.
Application June 10, 1953, Serial No. 360,743
7 Claims. (Cl. 308—90)



1. A journal box lubricating assembly including a rotatable journal and a journal box surrounding said journal, said journal box having lubricant reservoir in the lower portion thereof, a support between the journal and the lower portion of said box, a rotatable lubricant distributing member mounted on said support and adapted to move into said reservoir and into the proximity of said journal for distributing lubricant on said journal, a rotatable driving member carried by said support and engaged with the end face of said journal and means interconnecting said driving member and said first named member for rotation of said first named member in response to rotation of said driving member.

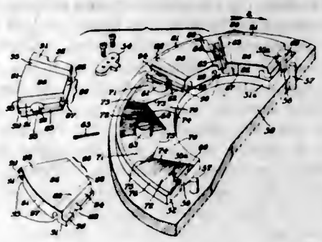
2,744,798
LUBRICATING DEVICE
Verl E. McCoy, La Grange, Ill.
Application November 25, 1952, Serial No. 322,503
14 Claims. (Cl. 308—91)



1. In a lubricating device, a housing, a track, generally rounded members mounted for rotation in and for movement along said track, and openings in said housing in communication with the areas in said housing in which said rounded members are mounted, and a support for said device comprising a base having a generally upstanding portion and a connection between said upstanding portion and said device.

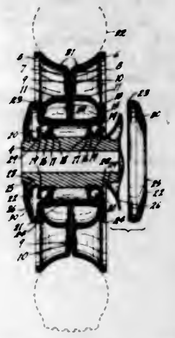
2,744,799
BEARING
Harry A. S. Howarth, Philadelphia, Pa.; Mary Johnston Howarth, administratrix of said Harry A. S. Howarth, deceased
Application April 23, 1952, Serial No. 283,944
35 Claims. (Cl. 308—160)

1. A bearing comprising a base and an adjacent runner element movable relative to said base, a shoe mounted on said base, and tilting means arranged between said base and shoe at an oblique angle to the path of relative



movement of said base and runner for tilting said shoe diagonally to the path of said relative movement.

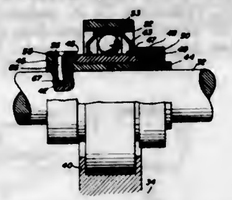
2,744,800
WHEEL AND BEARING ASSEMBLY
John W. Black, Jr., Kalamazoo, Mich., assignor to Pemco Wheel Company, Kalamazoo, Mich.
Application September 27, 1954, Serial No. 458,407
12 Claims. (Cl. 308—187.1)



1. A wheel and bearing assembly comprising a tubular spindle member adapted to be fixedly mounted on a non-rotatable spindle and provided with axially spaced bearing member seats having outwardly facing shoulders at their inner ends, said spindle member having reduced end portions with annular grooves spaced axially inwardly from the reduced portions, wheel members formed as sheet metal stampings and including annular web portions fixedly secured together in side by side relation and outwardly flaring outer portions coacting to constitute a channeled rim and having outwardly offset radially inner portions, outer bearing members having radially outturned flanges at their outer ends lapped upon and fixedly secured to the outer sides of said outwardly offset portions of said wheel members with intermediate portions of the bearing members extending axially inwardly of the offset inner portions of the wheel members, inner bearing members disposed on said bearing member seats of said spindle member, said spindle member being upset into retaining engagement with said inner bearing members with their inner ends in supported engagement with said shoulders, anti-friction bearing elements coacting with outer and inner bearing members, a tubular resilient lubricant chamber wall member disposed between said outwardly offset portions of said wheel members in embracing relation to the axially extending portions of said outer bearing members, closure members having central openings therein receiving the ends of said spindle member and having inwardly directed peripheral flanges detachably engageable with the peripheries of the flanges of said outer bearing members, at least one of said closure members being provided with a lubricant opening, and

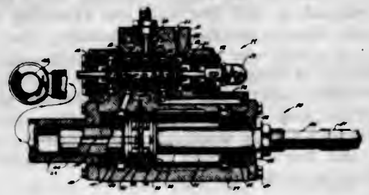
annular resilient seal members engaged in said grooves in said spindle member to project outwardly therefrom into supported sealing engagement with said closure members and constituting a closure for the said lubricant opening.

2,744,801
SLASHER CREEL BEAM BEARING
Edgar H. Granberry, Shawmut, Ala., and John M. Wall, Columbus, Ga., assignors to West Point Manufacturing Company, Shawmut, Ala., a corporation of Alabama
Application January 11, 1955, Serial No. 481,115
8 Claims. (Cl. 308—236)



1. In combination, a sleeve, a pin pivotally mounted on said sleeve, said pin extending normally inside the inner diameter of said sleeve, an anti-friction bearing mounted on said sleeve, and a locking collar fixed to said sleeve to retain said bearing thereon.

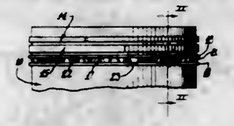
2,744,802
PISTON SEALING ASSEMBLY
Chalmers A. Strayer, Torrance, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application September 19, 1952, Serial No. 310,474
1 Claim. (Cl. 309—4)



In a double acting reciprocating fluid motor including a cylinder, a piston reciprocable therein, and a piston rod connected to the piston, and wherein superatmospheric pressure constantly exists in the cylinder on opposite sides of the piston, the combination comprising: a single pair of spaced circumferential packing ring grooves in the piston; an endless pressure-deformable yielding packing ring in each of said grooves, each of said rings providing a pressure-tight seal between the piston and the opposed inner surface of the cylinder; and passageway means in the piston and piston rod providing communication between the atmosphere and the annular space defined by said rings, the peripheral surface portion of the piston therebetween, and the opposed inner surface of the wall of the cylinder, whereby said rings are constantly deformed toward each other during operation of the motor.

2,744,803
PISTON RINGS
Melvin W. Marien, St. Louis, Mo., assignor to Ramsey Corporation, a corporation of Ohio
Application August 9, 1952, Serial No. 303,465
5 Claims. (Cl. 309—45)

1. A combined expansion and spacer ring for packing ring assemblies which comprises a spring metal ring formed from a strip having continuous parallel edges and having its ends welded together and having axially extending convolutions providing top and bottom supporting surfaces and sloping legs connecting said surfaces, and said top and bottom surfaces being recessed inwardly



from the outer periphery thereof through the thickness of the strip and separating adjacent legs, the terminal ends of said slots providing abutment shoulders adjacent the inner periphery of the ring.

2,744,804
FURNITURE LEG
Richard G. Reineman, Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company
Application February 12, 1954, Serial No. 409,924
4 Claims. (Cl. 311—109)

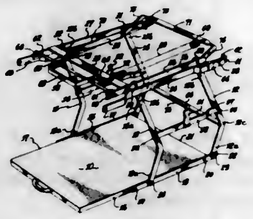


1. A table leg construction comprising, a generally L-shaped flat mounting plate having a central portion and diverging end portions and means defining openings for securing the plate to the underside of a table, a depression in the central portion of the mounting plate forming a downwardly-facing spherically-shaped dome, a hollow tapered leg extending downwardly and outwardly from the plate at a slight angle from a line normal to the plane of the plate and having the hollow portion of its upper end of a diameter to receive a portion of the dome therein, said leg being secured to the plate by welding, and a reinforcing brace comprising a bent U-shaped solid rod extending downwardly from the mounting plate and alongside the leg and having its mid-portion secured to the rear of the leg near its lower end, the ends of said rod being secured to the end portions of said plate at positions rearwardly and to the sides of said dome.

2,744,805
LIFT MECHANISM FOR EXTENDING A HORIZONTAL SUPPORT
Walter Carl McMahan, Escondido, Calif.
Application November 24, 1952, Serial No. 322,221
6 Claims. (Cl. 312—27)

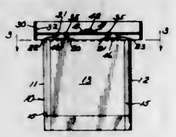
1. In a lift mechanism: a pair of frame members; a pair of rear links pivoted on a common axis by said frame members respectively; a pair of forward links pivoted on a common axis spaced from said first axis and by said frame members respectively; a support; means pivotally connecting the links to the support; those ends of the links attached to the support being forwardly inclined so that when said support is elevated to the level approximating that of said frame members, clearance is provided between

said rear links and the forward ends of said frame members; said frame members having longitudinally extending slots at their forward ends; a latch bar extending between said frame members and guidingly received in said slots; a



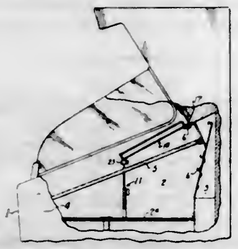
handle carried by the bar substantially centrally thereof; resilient means urging said bar rearwardly of said frame members; and a hook member engaging said bar upon movement of said support to an elevated position, said hook member being carried by said links.

2,744,806
CONVERTIBLE TABLE
Edwin F. Schild, Schiller Park, Ill.
Application June 17, 1954, Serial No. 437,317
3 Claims. (Cl. 312—140.3)



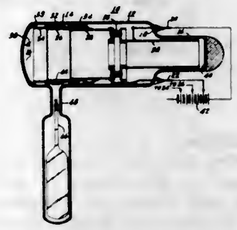
1. A reversible table comprising a base, supporting means adjustably mounted on said base, a top having a deep surface and a shallow surface removably mounted on said supports, said supporting means being of greater height on one portion than another, so that when the shallow surface of the top is to be exposed, said supports are mounted on said base at their position of greater height, and when the deep surface of the top is to be exposed, said supports are mounted on said base at their position of less height, so that the height of the top will be substantially the same for both exposures.

2,744,807
ADJUSTABLE MEZZANINE SHELF FOR REFRIGERATED DISPLAY CASES
George K. Bently, Kendallville, Ind., assignor to McCray Refrigerator Company, Inc., Kendallville, Ind., a corporation of Indiana
Application February 18, 1953, Serial No. 337,521
6 Claims. (Cl. 312—351)



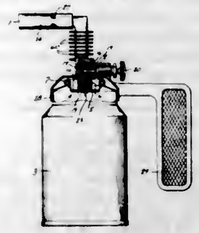
1. In a refrigerated cabinet having a top display compartment with front, back, end and bottom walls, a rear flue for discharging cold air forwardly into the compartment through said back wall, a main produce supporting shelf in said compartment, and means on said rear wall within the compartment for supporting the rear edge of the shelf in various positions relative thereto, the provision of a mezzanine shelf in the rear portion of the compartment above said main shelf adapted to rest at its rear edge on said shelf supporting means in elevated relation to the main shelf, one or more legs for the forward edge of the mezzanine shelf and a guide bar at the lower portion of said lower edge on which the leg is hinged for forward and rearward swinging movements and on which it has adjustable shifting movements lengthwise of the bar.

2,744,808
APPARATUS FOR EVAPORATING CHEMICALS
John E. Ruedy, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application August 27, 1952, Serial No. 306,601
7 Claims. (Cl. 316—30)



1. Apparatus for use in evaporating chemical materials onto a predetermined area within a hollow evacuated container, said apparatus comprising; an insulating tubular support member having an opening at one end for discharging chemical vapor, a first chemical carrier disposed within said support member, said first carrier comprising a conductive circuit including a first loop of wire positioned within said tubular support member and a pair of wires connected to said first loop and extending along said tubular support member and terminating near said opening in a second wire loop adapted to hold a quantity of chemical to be evaporated, and a second chemical carrier positioned in said tubular support member and spaced from said first loop of wire of said first carrier, whereby heating currents may be selectively and inductively established in said first and second carriers to evaporate the chemicals to be carried thereby.

2,744,809
FUEL SYSTEMS FOR LIGHT PORTABLE GAS COMBUSTION BURNERS
Louis A. Falligant, Prairie View, Ill., assignor to Prepo Corporation, a corporation of Delaware
Continuation of application Serial No. 46,917, August 30, 1948. This application December 9, 1952, Serial No. 324,890
The portion of the term of the patent subsequent to July 13, 1971, has been disclaimed and dedicated to the public
2 Claims. (Cl. 62—1)

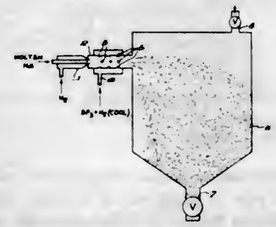


1. A lightweight disposable fuel cartridge for small portable burners such as blowtorches and the like, comprising a thin-walled metal fuel container adapted to

transmit heat readily to the fuel therein as when grasped by the hand of the operator to provide heat for pressurizing the fuel therein, a low pressure inflammable butane-pentane petroleum hydrocarbon liquid fuel partially filling said container, said fuel blend being capable of developing a gage pressure of the order of twenty-five pounds per square inch at 100° F., and non-removable means sealing said container and adapted to receive fuel bleeder means for controlled withdrawal of fuel therefrom, whereby a fuel supply of several hours burning capacity is provided and which can be readily transported, carried, stored and used with safety from fire hazard and from explosion.

CHEMICAL

2,744,810
PRODUCTION OF COMPOUNDS CONTAINING BORON AND HYDROGEN
Carey B. Jackson, Forest Hills, Pa., assignor, by mesne assignments, to Callery Chemical Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application June 8, 1951, Serial No. 230,595
3 Claims. (Cl. 23—14)

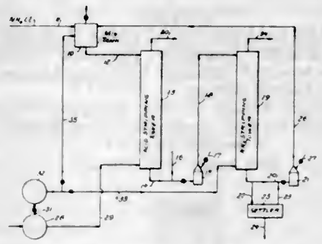


1. A method of making an alkali metal borohydride comprising atomizing, in a closed system, an alkali metal in a current of dry hydrogen at a temperature of about 150° to 350° C., and promptly reacting the atomized metal with a mixture of dry cool hydrogen and boron fluoride introduced into the system, said hydrogen being supplied in an amount not less than stoichiometric proportion and said boron fluoride and alkali metal in a stoichiometric amount for the reaction

$$4X+2H_2+BF_3 \rightarrow XBH_4+3XF$$

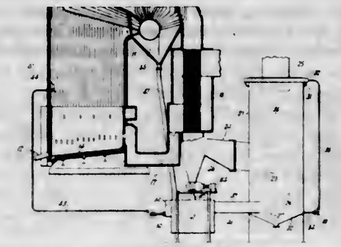
wherein X represents an alkali metal, and separating said borohydride from the other products of reaction.

2,744,811
PROCESS
John F. Haller, Niagara Falls, N. Y., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application June 24, 1953, Serial No. 363,760
8 Claims. (Cl. 23—154)



1. In a cyclic process for separating ammonia and hydrogen chloride from ammonium chloride which includes circulating a melt of a bisulfate containing ammonium chloride successively through a hydrogen chloride stripping zone and an ammonia stripping zone, recovering hydrogen chloride from a vapor stream removed from the hydrogen chloride stripping zone, recovering ammonia from a vapor stream removed from the ammonia stripping zone, and returning the stripped melt to the stripping zone, the improvement which comprises adding to the circulating melt a material which yields phosphate ions in the melt selected from the group consisting of phosphoric acid and soluble inorganic phosphates in an amount sufficient to precipitate metallic impurities present in the melt as phosphates.

2,744,812
COMBINATION OF A FURNACE FOR THE INCINERATION OF RESIDUAL LIQUOR WITH MEANS FOR DISINTEGRATING SOLIDS ENTRAINED IN SAID LIQUOR
James H. Coulter, Jr., Franklin Square, N. Y., and Frank E. Hutton, Wyckoff, N. J., assignors to The Babcock & Wilcox Company, Rockleigh, N. J., a corporation of New Jersey
Application December 1, 1949, Serial No. 130,452
1 Claim. (Cl. 23—262)



The combination comprising walls defining a furnace for the spray incineration of a pulp residual liquor, liquor spray nozzle means positioned in a wall of said furnace, evaporator means for concentrating said liquor prior to its incineration by direct contact with combustion gas resulting from the incineration of concentrated liquor in said furnace, a mixing tank, pump means connecting said mixing tank with said nozzle means, a flow box connecting said evaporator and mixing tank for the gravitational flow of concentrated liquor to said mixing tank, a plurality of stationary plates transversely spaced in a row across the bottom of said flow box in the path of liquor flow, and a plurality of power driven rotary blades positioned to pass through the openings between said stationary plates to crush and thereby limit the individual size of solids in the liquor delivered to said spray nozzle means.

2,744,813
CATALYTIC FURNACE
Herbert Paul, Oberhausen-Holten, Germany, assignor to Ruhrchemie Aktiengesellschaft, Oberhausen-Holten, and Lurgi Gesellschaft fuer Waermetechnik m. b. H., Frankfurt am Main, Heddernheim, Germany, a corporation of Germany
Application October 3, 1952, Serial No. 313,000
Claims priority, application Germany October 6, 1951
15 Claims. (Cl. 23—288)

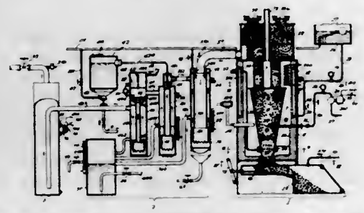
1. A catalyst furnace comprising a substantially enclosed reaction vessel having a fluid inlet and fluid outlet, a multiple number of substantially parallel tube-outlet collecting pipes substantially transversely distributed over a cross-section of said reaction vessel, a multiple number of substantially parallel tube-inlet collecting

pipes substantially transversely distributed over the cross-section of said reaction vessel, a multiple number of parallel heat-exchange media tube bundles extending longitudinally through a portion of said reaction vessel and distributed over the cross-section of said portion, each said tube bundle being connected at one end to a tube-outlet collecting pipe and at the other end to a tube-inlet collecting pipe, each said tube bundle comprising a number of substantially equally spaced parallel tubes, at least one intermediate collector container of substantially greater cross-section than said tube-inlet and



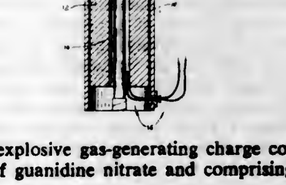
tube-outlet collecting pipes positioned in said reaction vessel and having a heat-exchange media inlet for heat-exchange media from outside said reaction vessel, conduit means connecting said tube-inlet collecting pipes to said intermediate collector container, a main collector container of substantially greater cross-section than said tube-inlet and tube-outlet collecting pipes positioned in said reaction vessel and having a heat exchange media outlet positioned for the passage media out of said reaction vessel, and conduit means connecting said tube-outlet collecting pipes to said main collector container.

2,744,814
APPARATUS FOR THE PRODUCTION OF FIXED GAS FROM FUEL OIL
Charles B. Francis, Pittsburgh, Pa.
Application February 8, 1951, Serial No. 210,005
3 Claims. (Cl. 48—105)



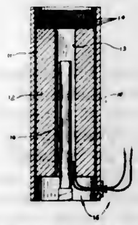
1. Apparatus for converting a carbonaceous liquid into a combustible mixture of fixed gases, said apparatus comprising a combustion chamber, a catalyst chamber having heat-conducting walls in said combustion chamber, a catalyst in said chamber comprising a porous vertical column of particulate metal oxide forming a cracking zone positioned below a pyrolysis zone, the column of catalyst being of greater cross section in the region above the cracking zone than it is in such zone, means for burning fuel in said combustion chamber for heating the catalyst in both of said zones, means for injecting said carbonaceous liquid into the catalyst in said cracking zone, means for supplementing the transfer of heat from said combustion chamber to said cracking zone of said catalyst body, said supplemental heating means comprising a steam superheater in said combustion chamber and a device for the delivery of steam from said superheater into said cracking zone below the region where said carbonaceous liquid is injected, the steam and liquid in the presence of said heated catalyst in the cracking zone reacting to produce vapors and gases that flow to said pyrolysis zone, and a delivery line for leading the gases from the pyrolysis zone, said pyrolysis zone comprising a plurality of pyrolysis tubes including said catalyst and standing in communication between said catalyst chamber and said delivery line.

2,744,815
UNDERGROUND TRAP FOR LEAKS IN GAS PIPES
John Francis Heck, Jr., Natrona Heights, Pa., assignor to New Allegheny Manufacturing Company, Tarentum, Pa., a corporation of Pennsylvania
Application May 12, 1953, Serial No. 354,539
1 Claim. (Cl. 48—193)



A seal for pipes comprising a compressible sealing disk surrounding the pipe in compressing abutting engagement at its major portion with a structure through which the pipe passes, an annular member composed of a pair of semicircular abutting sections having transverse notches in the periphery of each section adjacent their abutting edges, a U-shaped connector having its leg portions engaged in the notches in bridging relation with the abutting edges of the sections, a bolt pasisng through the connector and threaded radially in the abuting edges of said sections and with the inner end of the bolt abuting the pipe to anchor the annular member thereto, an inverted U-shaped channel member straddling the disk and annular member and having a flange positioned behind the disk adjacent the periphery of the latter, said U-shaped member having a vent pipe leading upwardly therefrom, a backing plate between the disk and the annular member, and pressure screws carried by each section of said member and engaging the backing plate to compress the disk adjacent the peripheral portion of the latter against the flange of the U-shaped member to clamp the latter to the structure in a fixed position on the pipe and to compress the remaining portion of the disk against the struc ture.

2,744,816
SOLID GAS-GENERATING CHARGES
Alexander Cantlay Hutchison, Saltcoats, Scotland, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain
Application August 11, 1953, Serial No. 373,498
Claims priority, application Great Britain October 10, 1947
23 Claims. (Cl. 52—.5)



1. A non-explosive gas-generating charge consisting in major part of guanidine nitrate and comprising admixed

therewith, in proportion not exceeding 35 per cent by weight thereof, a phenol containing in addition to at least one phenol hydroxyl group a plurality of substituent groups each consisting of a nitrogen atom attached exclusively to at least one terminal oxygen atom and to one of the nuclear carbon atoms of the phenol; said charge being non-detonatable by a blasting cap and being capable, when a localized portion thereof is heated sufficiently hot to initiate decomposition, of self-sustaining, non-detonating, gas-evolving, exothermic decomposition at pressures lower than 70 atmospheres.

2,744,817
METHOD AND COMPOSITION FOR THE CONTROL OF THE GROWTH OF UNDESIRABLE VEGETATION
Burton V. Toornman, Scotts, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
No Drawing. Application October 13, 1954, Serial No. 462,101
11 Claims. (Cl. 71—2.3)

1. A method for the control of the growth of vegetation which comprises applying to and mixing with a growth medium a growth-inhibiting amount of N,N-diphenyl crotonamide.

2,744,818
LOW VOLATILE HERBICIDAL COMPOSITIONS
William R. Davie, Pittsburgh, Pa., assignor to Pittsburgh Coke & Chemical Company, Pittsburgh, Pa., a corporation of Pennsylvania
No Drawing. Application December 1, 1954, Serial No. 472,525
20 Claims. (Cl. 71—2.6)

1. As a new herbicidal mixture of esters, the mixture of esters having the formula

$$Ar-O-\underset{\displaystyle CH_3}{\underset{|}{C}}H-COOCH_2R$$

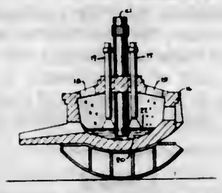
where Ar is an aryl group selected from the group consisting of phenyl, 2-methyl-phenyl, beta naphthyl and the aryl nucleus chlorinated derivatives thereof and R is a mixture of alkyl radicals containing substantial amounts of each of normal, saturated C_6, C_7 and C_8 groups and the 2-methyl isomers thereof.

2,744,819
METHOD FOR THE CONTROL OF UNDESIRED GRASSES
Burton V. Toornman, Scotts, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
No Drawing. Application October 13, 1954, Serial No. 462,102
6 Claims. (Cl. 71—2.6)

1. A method for the control of annual grass weeds which comprises distributing 4-chlorophenyl 4'-chlorobenzenesulfonate in intimate admixture with the soil in close proximity to annual grass seed under ambient conditions normally leading to the germination and growth of such seed, said sulfonate being employed in amount sufficient to suppress the growth of said seed.

2,744,820
METHOD FOR THE PRODUCTION OF IRON AND STEEL
Friedrich Kocks, Duesseldorf, Germany
Application December 2, 1952, Serial No. 323,555
Claims priority, application Germany December 8, 1951
4 Claims. (Cl. 75—11)

4. In a method for the production of iron and steel from iron ores in an electrode operated furnace the steps of gradually supplying the iron ore and the flux onto the surface of an electrically heated iron melt maintained in said furnace in a molten state and at the contents of 1 to about 4.5 per cent carbon, reducing the iron ore continuously by the carbon of the iron melt, continuously replacing the carbon contents of the iron melt by means of a vertically adjustable carbon rod reaching into said



melt, tapping the reduced iron and lifting said vertically adjustable carbon rod prior to said tapping at such a timely rate from the melt that the latter is reduced to the desired carbon contents by additionally supplied ore and thereupon tapping the iron while maintaining a molten sump of a sufficient height to enable the reentrance of the carbon rod after completion of the tapping.

2,744,821
IRON BASE HIGH TEMPERATURE ALLOY
Lee E. Osman, Marblehead, Mass., assignor to General Electric Company, a corporation of New York
No Drawing. Application December 13, 1951, Serial No. 261,576
6 Claims. (Cl. 75—124)

1. A heat-treatable iron base alloy containing, by weight, about 0.03 to 0.4 percent carbon, 0.4 to 1 percent silicon, 1 to 2 percent manganese, 16 to 19 percent chromium, 12 to 36 percent nickel, .8 to 1.2 percent tungsten, 1.75 to 2.25 percent molybdenum, 0.5 to 1.25 percent aluminum, 2 to 2.5 percent titanium; balance iron and incidental impurities which do not materially affect the physical properties of said alloy.

2,744,822
COPPER BASE ALLOYS
James L. Briggs, Jr., Rome, N. Y., and Cyril H. Hanson, Pittsfield, Mass., assignors of one-half to Revere Copper and Brass Incorporated, Rome, N. Y., a corporation of Maryland, and one-half to General Electric Company, Schenectady, N. Y., a corporation of New York
No Drawing. Application July 9, 1951, Serial No. 235,898
6 Claims. (Cl. 75—159)

1. An alloy composed of, approximately, 3.5 to 5% nickel, 0.7 to 2% silicon, 0.3 to 1% iron, the balance essentially all copper, characterized by a high yield strength, and by a high resistance to failure when subjected to stress corrosion as evidenced by ⅜ inch diameter round rods of cast alloy having 16 United States standard screw-threads per inch withstanding without failure a torque load of at least 20 foot pounds while immersed for 15 minutes in a 10% water solution of mercurous nitrate at room temperature.

2,744,823
SALT COMPOSITION
Horace W. Diamond, Chicago, Ill., assignor to Morton Salt Company, Chicago, Ill., a corporation of Illinois
No Drawing. Application September 13, 1954, Serial No. 455,743
8 Claims. (Cl. 99—2)

1. A trace mineralized salt composition comprising a homogeneous mixture of common salt, inorganic trace mineral element compounds, and from about 0.01% to 2.0% of a liquid polyhydric alcohol.

2,744,824

RUMINANT FEED FROM COTTON GIN WASTE

Albert Lent, Tucson, Ariz., assignor to Erly-Fat Livestock Feed Co., a corporation of Arizona

No Drawing. Application November 24, 1952, Serial No. 322,333

4 Claims. (Cl. 99—6)

1. A grain-substitute feed for ruminant animals, including: approximately 50% to 75% by weight of finely ground cotton gin waste of a size that will pass through a screen having a mesh of approximately ⅜ inch; and approximately 50% to 25% by weight of molasses, the same being intimately mixed with the cotton gin waste.

2,744,825

ACYL LACTYLIC ACID PRODUCTS

Jerome B. Thompson and Bruce D. Buddemeyer, Kansas City, Mo., assignors to C. J. Patterson Company, a corporation of Missouri

No Drawing. Original application December 12, 1951, Serial No. 261,382. Divided and this application May 10, 1954, Serial No. 432,011

3 Claims. (Cl. 99—91)

1. A method of retarding apparent staling in yeast leavened baked products which comprises incorporating in the dough prior to baking from .1 to 1.0%, based on the weight of flour, of a fatty acid lactylate composition of the general formula

$$RCO(OCHCO)_nOX$$
$$\quad\quad|$$
$$\quad\quad CH_3$$

wherein RCO is the acyl radical of a fatty acid containing from 16 to 22 carbon atoms, X is a cation and *n* is the average number of lactylic groups present in such lactylate composition ranging from 1 to 8.5.

2,744,826

FLOUR COMPOSITION

Jerome B. Thompson and Bruce D. Buddemeyer, Kansas City, Mo., assignors to C. J. Patterson Company, a corporation of Missouri

No Drawing. Application February 8, 1954, Serial No. 409,058

15 Claims. (Cl. 99—93)

1. A composition of matter comprising flour in intimate admixture with a fatty acid lactylate composition of the formula

$$RCO(OCHCH_3CO)_nOX$$

wherein RCO is an acyl radical of a fatty acid containing from 16 to 24 carbon atoms, *n* is a number of from 1 to 4 and X is a non-toxic cation.

2,744,827

MANUFACTURE AND PRESERVATION OF CHEESE

Alexander T. R. Mattick and Andrei Hirsch, Shinfield, near Reading, England, assignors to National Research Development Corporation, London, England

No Drawing. Application March 3, 1952, Serial No. 274,656

Claims priority, application Great Britain March 7, 1951

8 Claims. (Cl. 99—162)

1. A process of treating cheese to prevent distention thereof comprising adding to cheese a substance selected from the group consisting of nisin and nisin-producing bacterial cultures, thereby inhibiting the growth of spoilage organisms.

2,744,828

PRODUCTION OF IMPROVED DRIED EGG WHITES

Martell M. Gladstone, Chicago, and Benjamin R. Harris, Glencoe, Ill., assignors, by mesne assignments, to Benjamin R. Harris, Chicago, Ill.

No Drawing. Application January 25, 1952, Serial No. 268,346

9 Claims. (Cl. 99—210)

1. In a method of preparing an improved fermented egg white, the steps which comprise subjecting liquid egg whites to the action of ultraviolet rays and then fermenting said liquid egg whites.

2,744,829

TREATMENT OF LIQUID EGG WHITES

Bernard M. Shaffer, Chicago, Ill., assignor, by mesne assignments, to Benjamin R. Harris, Chicago, Ill.

No Drawing. Application July 8, 1950, Serial No. 172,785

20 Claims. (Cl. 99—210)

1. In a method of preparing dried egg whites of improved properties and characteristics, particularly for use in the baking of cakes, the steps which comprise subjecting liquid egg whites to extended fermentation to effect ripening thereof progressively through alkaline, neutral and acid stages, separating the ripened liquid egg whites from the scum which is formed during the fermentation, admixing said ripened liquid egg whites with an amount of a non-toxic acid-reacting material until the mixture has a pH of about 4.8 to about 5.1, adding glycerin, and then drying the resulting mixture, the amount of added glycerin being such that the final dried egg white product contains from about 4% to about 17%, by weight, of glycerin.

2,744,830

SHADING COMPOSITION FOR GREENHOUSES

Richard H. F. Manske, Guelph, Ontario, Canada, assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application July 9, 1952, Serial No. 297,993

2 Claims. (Cl. 106—84)

1. A shading composition consisting essentially of an aqueous solution of 100 parts of 30–35% hydrous ammonia, from 25 to 125 parts of tertiary zinc ortho-phosphate, and from 0.1 to 3% of an alkali metal salt of metasilicic acid, characterized by the ability to deposit a turbid film upon drying, such film being adherent to glass.

2,744,831

INHIBITING ALKALI REACTIVITY OF PORTLAND CEMENT

Walter J. McCoy, Catasauqua, Pa., assignor to Lehigh Portland Cement Company, Allentown, Pa., a corporation of Pennsylvania

No Drawing. Application May 7, 1951, Serial No. 225,057

11 Claims. (Cl. 106—98)

1. In the art of making concrete structures wherein Portland cement containing alkali and a reactive siliceous aggregate are intermixed with water to form a concrete mix and the thus formed concrete mix is permitted to set, the method of inhibiting unwanted expansion of the concrete after the concrete has set which comprises incorporating into the concrete mix prior to the setting of the concrete a small quantity of a salt selected from the group of salts consisting of chloride, carbonate, fluoride, silicate, nitrate, and sulphate, of lithium, and sulphate and oleate of copper; in an amount not exceeding about 1% by weight of the cement but sufficient to inhibit unwanted chemical reaction of the alkali in the cement with the siliceous aggregate, after the concrete has set, thereby inhibiting unwanted expansion in the concrete after it has set.

2,744,832

WRINKLE DRYING OIL SICCATIVE

Folsom E. Drummond, Washington, D. C., assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio

No Drawing. Application July 17, 1952, Serial No. 299,508

2 Claims. (Cl. 106—264)

1. A wrinkle drying fatty oil siccative consisting of a mixture of fatty drying oil and conjugated mixed glycerides of keto polyethenoid C_{18} fatty acids and isomeric eleostearic acids, the mixed glycerides constituting about 70% by weight of the siccative.

2,744,833

WRINKLE DRYING OIL SICCATIVE

Folsom E. Drummond, Washington, D. C., assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Delaware

No Drawing. Application August 27, 1952, Serial No. 306,720

2 Claims. (Cl. 106—264)

1. A wrinkle drying fatty oil siccative consisting of a mixture of fatty drying oil and conjugated fatty acid glycerides of hydroxy isomeric eleostearic acids, the latter fatty acid glycerides constituting about 60% to about 75% by weight of the siccative.

2,744,834

WAX COMPOSITION INHIBITED FROM OXIDATIVE DETERIORATION

Harry R. Robinson, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a corporation of Delaware

No Drawing. Application October 10, 1952, Serial No. 314,199

4 Claims. (Cl. 106—270)

1. A colorless wax normally subject to oxidative deterioration containing between 0.1 and 3 parts per million of an antioxidant obtained by extraction of chlorophyll-containing plant matter with a solvent mixture of hydrocarbon and polar oxygenated hydrocarbon.

2,744,835

METHOD OF TREATING FIBERS WITH A VINYL COPOLYMER AND A WERNER COMPLEX

Remus F. Caroselli, Manville, R. I., assignor to Owens-Corning Fiberglas Corporation, a corporation of Delaware

No Drawing. Application June 10, 1953, Serial No. 360,817

12 Claims. (Cl. 117—72)

1. In the method of treating fibrous structures to improve the characteristics thereof, the steps of coating the fibers with a composition containing a vinyl copolymer and a vinyl methyl ether-maleic anhydride copolymer, setting the coating materials on the fiber surfaces, and then treating the fibers with a Werner complex compound in which the acido group coordinated with the trivalent nuclear chromium atom contains at least 10 carbon atoms.

2,744,836

PROCESS FOR COATING LEATHER

Rudolf Schubert, Ludwigshafen (Rhine), and Gerhard Otto, Mannheim, Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application June 13, 1952, Serial No. 293,440

Claims priority, application Germany July 11, 1951

4 Claims. (Cl. 117—142)

1. A process for coating leather which comprises coating the leather with a solution of an ammonium salt of carboxyl groups containing polymer of an acrylic ester having the general formula

$$CH_2{=}C{-}COOR'$$
$$\quad\quad|$$
$$\quad\quad R$$

wherein R stands for a member selected from the class consisting of hydrogen and a methyl group and R' stands for a member selected from the class consisting of hydrogen and an alkyl radical having from 1 to 4 carbon atoms, these polymers having in

$$100{-}CH_2{-}C{-}COOR'$$
$$\quad\quad\quad\quad|$$
$$\quad\quad\quad\quad R$$

groups from 95 to 65 carboxyl ester groups and from 5 to 35 unesterified carboxyl groups and being dissolved in a mixture of water and an organic solvent miscible with water selected from the class consisting of monohydric alcohols having from 1 to 3 carbon atoms, water miscible ketones and ethers, using in this mixture from 60 to 150 parts of the organic water miscible solvent for each 100 parts of the polymer salt.

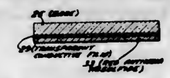
2,744,837

PHOTO-CONDUCTIVE TARGETS FOR CATHODE RAY DEVICES

Stanley V. Forgue, Cranbury, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application June 1, 1951, Serial No. 229,427

6 Claims. (Cl. 117—211)



1. A light-sensitive target for a cathode ray device comprising a layer of red antimony tri-sulfide having a mat surface.

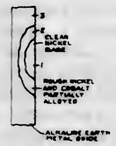
2,744,838

ELECTRON DISCHARGE DEVICE CATHODE AND METHOD OF MAKING SAME

Robert W. Newman, South Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

Application November 3, 1951, Serial No. 254,704

15 Claims. (Cl. 117—217)



4. The process of inhibiting flaking of an electron emissive oxide coating from a nickel cathode base member which comprises the steps of applying to the surface of said base member a powdered mixture of a cobalt compound and a nickel compound, said compounds being reducible to metallic cobalt and nickel respectively, and heating said cathode base member and applied powders in a reducing atmosphere to a temperature in the order of 1000° C. to reduce said compounds to metallic cobalt and nickel, and to at least partially alloy the metallic cobalt and nickel thus formed with each other and the surface of said base member.

2,744,839

COATED ELECTRICAL APPARATUS AND METHOD OF MAKING THE SAME

Guy R. Radley, Whitefish Bay, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware

Application August 24, 1953, Serial No. 376,039

4 Claims. (Cl. 117—218)

1. In producing a protective coating on electrical apparatus, the steps of applying a mixture comprising one

part of liquid silicone resin adhesive material and from one-fourth to two-thirds of a part of particles of heat resistant mineral filler material having a diameter of about one mil, to the surface to be protected, embedding particles of substantially smooth surfaced heat resistant mineral filler material having a diameter of approximately five to ten mils in the mixture of adhesive material and



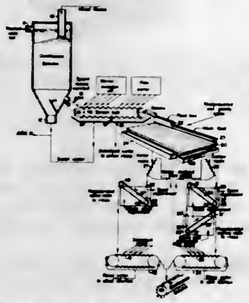
particles of filler material, air drying and baking said adhesive material to harden the same, applying a second layer comprising a mixture of liquid silicone resin adhesive material and dark coloring matter over the first layer of filler materials and hardened adhesive, and thereafter air drying and heating said second layer to harden the same.

2,744,840

SUGAR PURIFICATION ION EXCHANGE METHOD AND APPARATUS

Robert Martin Daniels, Joseph E. Maudru, and Guy O. Rorabaugh, Colorado Springs, Colo., assignors to Holly Sugar Corporation, Colorado Springs, Colo., a corporation of New York

Application June 16, 1950, Serial No. 168,584
5 Claims. (Cl. 127—46)



3. In apparatus for purifying sugar juices and the like, means for containing a mixed bed of anion and cation resins; means for passing said juice through said bed; means for substantially continuously introducing fresh resins to said bed at a predetermined point thereof; means for substantially continuously removing exhausted resins from said bed at a spaced point; and a wet gravity shaking table for hydraulically separating the anion resins from the cation resins, said table having a tilted bed provided with longitudinally extending riffles at least ¼ inch deep, at least half of said riffles extending to the end of said table, and means for producing a cross flow of wash water over said riffles.

2,744,841

REMOVING POLYETHYLENE FROM METAL SURFACES

Frank Cassis, Munster, Ind., and Charles R. Greene, El Cerrito, Calif., assignors to Standard Oil Company, Chicago, Ill., a corporation of Indiana

No Drawing. Application May 20, 1955, Serial No. 510,051
2 Claims. (Cl. 134—7)

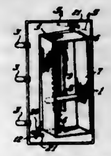
1. The method of removing polyethylene resin from metal surfaces comprising contacting said polyethylene resin on said surface with pentaerythritol at a temperature above the softening point of said polyethylene and below the melting point of said pentaerythritol and withdrawing said polyethylene and said pentaerythritol from said metal surface.

2,744,842

TEST TUBE CLEANING DEVICE AND METHOD

Catherine C. Golden, Cincinnati, Ohio

Application September 10, 1953, Serial No. 379,336
10 Claims. (Cl. 134—23)



1. In a device for the purposes described, a tank capable of being filled and drained, a generally rectangular holder in said tank, said holder being tiltably supported on a pivoting means positioned to normally incline said holder from the horizontal in the direction of one corner edge thereof, said holder being tiltable on said pivoting means in the direction of the opposite corner edge thereof, and means connected to said holder for moving it from one position to the other as said tank is filled and drained.

10. The method of cleaning test tubes in a tank which is adapted to be repeatedly filled and drained, which consists in placing said test tubes in horizontally disposed condition in a generally rectangular foraminous basket with their open ends extending either longitudinally or transversely of said basket, supporting said basket in said tank on a tiltable platform balanced to normally tilt toward one corner edge thereof and capable of being tilted in the opposite direction, said basket being placed on said platform with the open ends of the test tubes facing toward a side edge of said basket adjacent the first named corner edge of said platform, and providing buoyancy means connected to the first named side edge of said basket, whereby upon filling of said tank, said first named corner edge of said platform will be lifted so as to tilt said platform in the opposite direction, and upon draining of said tank, said basket will be returned to its initial position.

2,744,843

ENAMEL BONDING BY THE USE OF ARSENIC

Bruce G. Craig, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York

No Drawing. Application May 10, 1951, Serial No. 225,668
4 Claims. (Cl. 148—6.14)

1. An improvement in the bonding of vitreous enamel to steel comprising applying a composition consisting essentially of weak arsenic acid to the surface of the steel to be covered with enamel, said acid having a concentration of less than 25% by weight and reacting with said steel to form a tightly adherent insoluble coating thereon, covering the coated steel with a glass composition, and subjecting the glass covered steel to a high temperature in the range of 1300° to 1600° F. to fuse the composition with the intermediate coating reacting with the glass to form a bond between said glass and the steel.

2,744,844

HEMMED CLOTH WITH AN ADHESIVE TYPE BINDER

Richard D. Wood, Jr., Wawa, Pa., and George Thomson, Milton, Mass., assignors to Millville Manufacturing Company, Millville, N. J., a corporation of New Jersey

Application January 26, 1952, Serial No. 268,372
4 Claims. (Cl. 154—43)

1. As an article of manufacture, a textile material comprising a sheet of woven fibrous strands which present cut ends along one side of the material, portions of the

textile material including the cut ends being folded to provide a hem, said hem having a binder consisting of a vinyl copolymer organosol disposed between the interfaces of the folded portions, said binder occurring as a substantially continuous ribbon-like body which is present in limited amounts and distributed so that a relatively larger



proportion of the binder is concentrated at the interfaces and a relatively lesser proportion is impregnated in the respective sides of the hem, said hem further including a tubular margin which is substantially free from binder, and said tubular margin in conjunction with the binder in its limited state of distribution preserving in the hem the normal textile characteristics of the said textile material.

2,744,845

CHLORINATED MALEIC ADDUCT-ETHOXYLINE RESINOUS COMPOSITIONS

Hyman Rudoff, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

No Drawing. Application August 22, 1952, Serial No. 305,913
10 Claims. (Cl. 154—43)

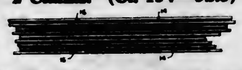
1. A composition of matter comprising (1) a complex epoxide resin comprising a polyether derivative of a polyhydric organic compound, said derivative containing 1,2 epoxy groups, said compound being selected from the class consisting of polyhydric alcohols and phenols containing at least two phenolic hydroxy groups, and (2) from 0.8 to 1.2 equivalents of hexachloroendomethylenetetrahydrophthalic anhydride for each equivalent of epoxide in said epoxide resin.

2,744,846

LAMINATED PROTECTIVE MATERIAL

Donald C. Stickles, Marlboro, Mass., assignor to Victory Plastics Co., Hudson, Mass., a corporation of Massachusetts

Application February 4, 1954, Serial No. 408,270
2 Claims. (Cl. 154—52.5)



1. A flexible protective structure comprising a multiplicity of layers of 2 x 2 basket weave nylon fabric; a synthetic resin bonding said layers together to improve the anti-ballistic properties of the said structure and to prevent said layers as a whole from shifting and bunching; said layers being bonded along lines in staggered relation, said lines being approximately one-half inch in width and spaced approximately two inches apart on the upper surface of an intermediate layer and the lines on the under surface of said intermediate layer being similarly dimensioned and spaced but being located approximately mid-way between the said lines on the said upper surface thus providing unbonded paths in each said layer at least three-quarters of an inch in width extending lengthwise and providing a flexible structure capable of being rolled on itself.

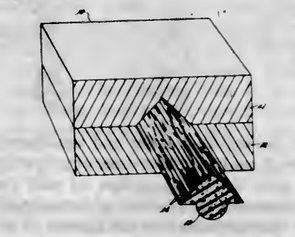
2,744,847

FABRIC-BACKED SPONGE GASKET AND METHOD OF MAKING SAME

Marcus O. Orr, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a corporation of New York

Application September 8, 1951, Serial No. 245,677
8 Claims. (Cl. 154—93)

1. A sealing gasket comprising an elastomeric sponge body portion having a face adapted for securement to a supporting member, and a thin fibrous web of unwoven fabric consisting essentially of unidirectional unwoven untwisted individual fibers bonded to said face of said body portion, said web of unwoven fabric being essentially inextensible in the direction in which the unidirectional fibers thereof extend.



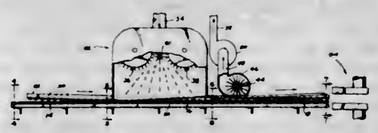
6. The method for making a sealing strip which comprises providing an elongated body of heat-softening composition containing a blowing agent, disposing a fibrous web of unwoven fabric consisting essentially of unidirectional unwoven untwisted individual fibers, the said web of unwoven fabric being essentially inextensible in the direction in which the unidirectional fibers thereof extend, adjacent a face of said elongated body of heat-softening composition with the unidirectional fibers of said web of unwoven fabric lying generally parallel to the longitudinal axis of said elongated body of heat-softening composition, and heating said body of heat-softening composition and web of unwoven fabric within a confining mold to expand said heat-softening composition into cellular form and press it against said fibers of said web of unwoven fabric to bond said fibers to said face of the expanded body of the sealing strip.

2,744,848

MAKING FIBERBOARD OF UNIFORM DENSITY AND THICKNESS

Arthur L. Mottet, Longview, Wash., assignor to The Long-Bell Lumber Company, Longview, Wash., a corporation of Missouri

Application March 29, 1954, Serial No. 419,449
4 Claims. (Cl. 154—101)



1. The method of making composite pressed products of uniform density and thickness which comprises providing an arcuate resilient plate, depositing particles of material on the plate to form a mat thereon, flexing the plate until it is substantially flat, removing particles from the surface of the mat until the mat has a predetermined thickness while holding the plate substantially flat, releasing the plate whereupon because of its resiliency it reassumes its arcuate configuration, and pressing the mat to a predetermined density.

2,744,849

METHOD OF BACKING CAMELBACK

Louis J. Andy and Joseph Andy, Washington, Pa., assignors of fifty per cent to Patsy Andy and Bessie Andy, both of Washington, Pa.

Application July 15, 1952, Serial No. 298,971
1 Claim. (Cl. 154—102)

The method of forming a camelback strip for recapping pneumatic tires, comprising extruding a heated rubber tread-forming compound into the form of an elongated sheet, calendering a mass of cushion gum into the form of a relatively thin sheet thereon as a layer in the presence

of heat in the range of between 125° and 240° F. whereby said sheets are heat-laminated and firmly adhered together, and finally, while still heated to a temperature within said range, passing said sheets through a stitching roller and a solid roller of diameter several times smaller



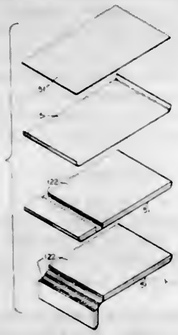
than that of the stitching roller and simultaneously introducing, through said rollers, a sheet of polyethylene which is adhered onto the outer surface of said cushion gum sheet while disposed at an angle of between 45° and 75° with respect thereto to prevent entrapment of air and while the latter is still at elevated temperature.

2,744,850

METHOD OF MAKING A FORMED ARTICLE COMPRISING A RESINOUS SHEET BACKED BY PLYWOOD

Christian A. Schofield, Philadelphia, Pa.

Application July 17, 1952, Serial No. 299,409
1 Claim. (Cl. 154—110)



The method of making a formed article comprising a resinous sheet backed by plywood which method comprises placing a resinous sheet in such position that its ends overlap oppositely disposed heating elements, allowing those portions of the sheet which overlie said heating elements to partially melt, pressing the overlapping portions of the sheet over said heating elements while the said overlying portions are in a partially melted stage, allowing said sheet to cool, applying an adhesive to said cooled sheet, bonding at least two spaced backing members to the adhesive coated resinous sheet while applying both a vertical and an angular pressure to said backing members and while simultaneously applying heat, allowing the resulting article to cool and then bending the said resulting article at the area underlying the space between the two backing members by applying this area over a heating element and allowing at least one portion of said article to fall by gravity after the said area is partially melted and then allowing the said article to cool.

2,744,851

CARDIAC GLYCOSIDES FOR INTRAMUSCULAR INJECTION

Alfred Halpern and Clifford H. Bradney, New York, N. Y., assignors to E. Fougera & Co., Inc., New York, N. Y., a corporation of New York

No Drawing. Application April 28, 1951, Serial No. 223,652
9 Claims. (Cl. 167—58)

1. A liquid preparation adapted to be used for intramuscular injection, containing a cardiac glycoside, water and polyoxyethylene glycol having average molecular weight in the range of 200 to 600.

2,744,852

MEDICINAL COMPOSITION CONTAINING DIPHENYL DIHYDRO OR TETRAHYDROGLYOXALINE-4-ONE AND METHOD OF PRODUCING ANTICONVULSANT ACTIVITY

Louis S. Goodman, Salt Lake City, Utah

No Drawing. Application October 21, 1953, Serial No. 387,519
4 Claims. (Cl. 167—65)

1. A pharmaceutical preparation having anticonvulsant activity, in dosage unit form, comprising a pharmaceutical carrier and as the added active medicament about 100–600 mgms. of a member selected from the group consisting of 5,5-diphenyltetrahydroglyoxyaline-4-one and 5,5-diphenyl-$\Delta^{-1,2}$-dihydroglyoxaline-4-one.

2,744,853

REMOVAL OF METAL CONTAMINANTS FROM PETROLEUM

Kevin E. Kavanagh, Douglaston, and Ralph P. Chesluk, Beacon, N. Y., assignors to The Texas Company, New York, N. Y., a corporation of Delaware

No Drawing. Application June 15, 1953, Serial No. 361,859
7 Claims. (Cl. 196—23)

1. A process for treating a heavy petroleum oil selected from the group consisting of crude petroleum, residual fractions thereof, heavy fuel oil fractions, lubricating oil fractions and gas oil fractions, said heavy petroleum oil containing a contaminating amount of oil-soluble metal compounds selected from the group consisting of compounds of vanadium, nickel, iron and mixtures thereof, which comprises contacting said heavy petroleum oil with a treating agent consisting essentially of elemental iodine in non-aqueous form under conditions to convert said oil-soluble metal compounds to oil-insoluble solid metal- and iodine-containing compounds, and separating said oil-insoluble solid compounds from the heavy oil to thereby obtain a treated heavy petroleum oil from which at least the major proportion of said contaminating metal content has been removed.

2,744,854

OXIDATION OF MERCAPTANS

Peter Urban, Jr., Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application June 30, 1952, Serial No. 296,477
18 Claims. (Cl. 196—29)

1. A method of oxidizing a mercaptan which comprises reacting the mercaptan with an oxidizing agent in the presence of a metal chelate and a phenylene diamine.

2,744,855

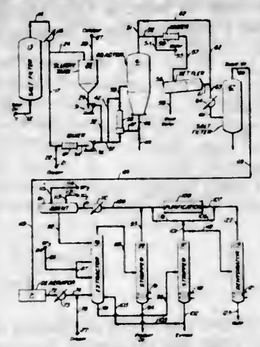
DESULFURIZATION PROCESS USING ALKALI FOLLOWED BY EXTRACTION WITH LIQUID SULFUR DIOXIDE AND A PROMOTER

Robert C. Arnold, Park Forest, Ill., assignor to Standard Oil Company, Chicago, Ill., a corporation of Indiana

Application July 9, 1953, Serial No. 366,957
15 Claims. (Cl. 196—32)

1. A process for refining a mercaptan-containing hydrocarbon oil, which process comprises (1) treating said oil to substantially eliminate the mercaptans therefrom, (2) contacting said substantially mercaptan-free oil with an agent consisting essentially of liquid SO_2 and a promotor, wherein the liquid SO_2 is present in an amount at least sufficient to form an extract phase and the promoter is selected from the class of Friedel-Crafts

metal halides consisting of $AlCl_3$, $FeCl_3$, $TiCl_4$, BF_3, $HgCl_2$, BCl_3 and $ZnCl_2$ at a temperature below about



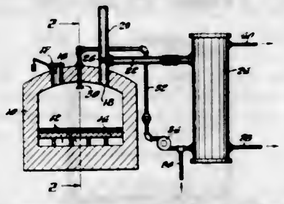
+10° C., and (3) separating a refined raffinate containing essentially no free-sulfur from an extract phase.

2,744,856

PRODUCTION OF DENSE COKE BY RETARDING FROTH FORMATION DURING COKING

Charles B. Wendell, Jr., Canton, Mass.

Application April 21, 1954, Serial No. 424,583
7 Claims. (Cl. 202—32)



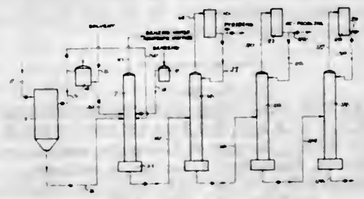
7. In the production of coke from a bed of carbonaceous coking material which when heated to coking temperature normally tends to become liquid and froth, a process for increasing the density of the coke produced which comprises the steps of distributing over the top surface of the bed of carbonaceous coking material, while the bed is in the frothing stage and being subjected to coking temperatures by heating from the bottom, in amount sufficient to retard said frothing and significantly increase the density of the resulting coke, a liquid hydrocarbon which is so volatile relative to its coking tendency that it is essentially noncoking and is mostly vaporized and removed from the coking chamber with other volatile by-products.

2,744,857

PROCESS OF DECOLORIZING TAR BASE DISTILLATES WITH ALDEHYDE

Woodrow E. Kemp, Pittsburgh, Pa., assignor to Koppers Company, Inc., a corporation of Delaware

Application March 19, 1954, Serial No. 417,400
12 Claims. (Cl. 202—57)



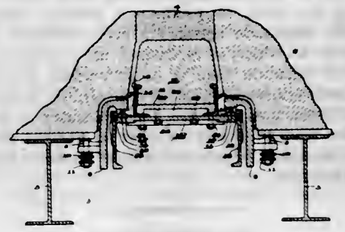
7. The process of decolorizing and purifying mononuclear low-boiling tar bases having a pyridine nucleus which boil at a temperature of at least about 115° C. and which contain color-forming impurities comprising: treating said low-boiling tar bases with an approximately stoichiometric amount of an aldehyde containing not more than 12 carbon atoms to form higher-boiling reaction products with the color-forming impurities, incorporating an amount of benzene in the mixture that is at least sufficient to form a constant boiling mixture of benzene with the water present therein, and thereafter fractionally distilling the mixture to distill the constant boiling mixture and the aforesaid low-boiling tar bases from the mixture and leave the higher boiling reaction products of aldehyde with the color-forming impurities in the residue.

2,744,858

FLOATING, RESILIENT SEALING FRAME FOR COKE OVEN DOORS

Paul J. Homan, Pittsburgh, Pa., assignor to Koppers Company, Inc., a corporation of Delaware

Application March 1, 1954, Serial No. 413,296
5 Claims. (Cl. 202—248)



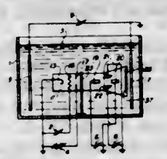
1. In combination with a coke oven door adapted to cooperate with a coking chamber door jamb frame having an outer plane sealing surface surrounding the opening therethrough, a resilient sealing frame in parallelism with said sealing surface and positioned on said door in floating relation thereon between that side of said door facing said coking chamber and said sealing surface of said door jamb frame, a tight seal being obtained between said door and said door jamb frame when said door is pushed to closed position regardless of any planar distortions that might exist in said door jamb frame and said door, and removable means for retaining the resilient sealing frame in position for sealing on the door while allowing for its floating action thereon as a freely bodily movable element with the portion of the sealing frame that contacts the sealing surface on the door jamb frame always exposed in both the on and off positions of the door.

2,744,859

ELECTROPLATING METHOD AND SYSTEM

Robert H. Rines, Boston, Mass.

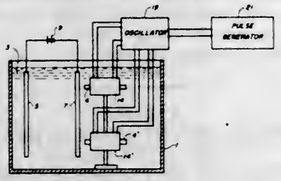
Application February 20, 1951, Serial No. 211,820
5 Claims. (Cl. 204—15)



1. A method of electroplating an article disposed with an electrode in an electroplating solution that comprises producing a potential of magnitude less than the electroplating potential between the electrode and the article, producing an electron stream in a cathode-ray envelope provided with a wall comprising a conducting layer, disposing the wall close to the article, impinging the electron

stream on selected regions of the wall, and adjusting the intensity of the impinged electron stream to control the plating of the article at the said regions.

2,744,860
ELECTROPLATING METHOD
Robert H. Rines, Belmont, Mass.
Application November 13, 1951, Serial No. 255,973
12 Claims. (Cl. 204—45)



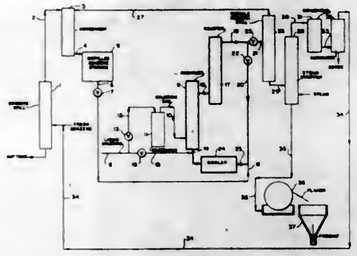
1. An electroplating method that comprises electroplating an article disposed in an electroplating solution, during the electroplating, producing sonic vibrations and applying the same to produce a relative vibration of molecular amplitude between a predetermined region of the article at which it is desired to produce a greater degree of vibration than at other regions of the article and a predetermined region of the solution at the surface between them, and confining the vibrations to periods of successive discreet pulses in order to prevent the formation of standing vibrational waves between the article and the solution.

2,744,861
REGENERATION OF CATALYSTS
Charles L. Thomas, Winnetka, Ill.
No Drawing. Application December 6, 1951, Serial No. 260,323
3 Claims. (Cl. 204—72)

1. Method of regenerating liquid, hydrocarbon-acid catalytic material which has become fouled by combination with organic material while in use in a hydrocarbon process, the acid being selected from the group consisting of concentrated sulfuric acid and concentrated phosphoric acid, which comprises passing a direct electric current through the fouled liquid catalyst for a time sufficient to effect separation of phases after discontinuing the passage of electric current as recited hereinafter, discontinuing the passage of electric current through the catalytic material, effecting separation of the so-treated catalytic material into a lower layer of liquid, hydrocarbon-acid catalytic material of enhanced catalytic activity and an upper layer of unsaturated hydrocarbons, and separating said lower layer from said upper layer.

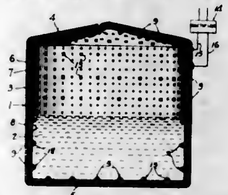
2,744,862
PRODUCTION OF BENZENE HEXACHLORIDE
Bernard H. Nicolaisen, Lewiston, N. Y., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application April 27, 1951, Serial No. 223,255
4 Claims. (Cl. 204—163)

1. A cyclic process for the production of benzene hexachloride from benzene and chlorine by reaction at a temperature of less than about 70° C. and in the presence of catalyzing light which comprises circulating a liquid stream consisting of benzene hexachloride-in-benzene solution between an absorption zone and a reaction zone, withdrawing to a product recovery zone a minor portion of the stream circulating from the reaction zone, adding make-up benzene to the stream circulating to the absorption zone, adding chlorine to the circulating stream in the absorption zone in an amount equal to about 1 to slightly more than 2% of the theoretical amount of chlorine required to convert the total amount of uncombined benzene present in the circulating stream leaving the absorption zone to benzene hexachloride and sufficient to maintain a concentration of benzene hexachloride



of about 17 to 22 per cent in the circulating stream leaving the reaction zone, and recovering benzene hexachloride from the benzene hexachloride-in-benzene solution in the product recovery zone.

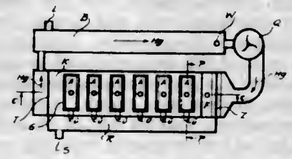
2,744,863
CATHODIC PROTECTION OF METAL IN VAPOR SPACE
Orrin E. Andrus, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application October 25, 1951, Serial No. 253,060
4 Claims. (Cl. 204—196)



1. A cathodically protected metal article, which comprises a first metallic member having a surface subject to corrosion when exposed to a liquid capable of conducting an electric current, a second metallic member extending substantially coextensively with said first member and in spaced relation thereto and having a plurality of openings therein, a plurality of spaced metal means extending from one member to the other said member to support the members in fixed spaced relation and provide a clearance between the members into which the openings in the second member communicate for passage of said liquid, electrically insulating absorbent material confined within the clearance between the members and adapted to absorb said liquid with the absorbed liquid functioning as an electrolyte to provide an electrical connection between the members through said electrolyte, and means electrically connecting said first and second members other than said electrolyte to provide a second electrical connection between the members and to complete the electric circuit between said members, the said first member being the cathode and the second member the anode in said circuit to thereby promote corrosion of the second member and inhibit corrosion of the first member.

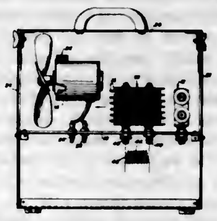
2,744,864
APPARATUS FOR THE ELECTROLYSIS OF AQUEOUS ALKALI SULPHATE SOLUTIONS
Wilhelm Müller, Darmstadt, Germany, assignor to E. Merck, Darmstadt, Germany, a company
Application February 14, 1951, Serial No. 210,879
1 Claim. (Cl. 204—220)

Apparatus for the electrolysis of aqueous alkali sulphate solutions comprising a fixed electrolytic vessel having an inlet end and an outlet end, an anolyte channel at one side thereof and having an outlet for anolyte near said outlet end, a decomposition channel connected to the outlet end of said vessel, means associated with said decomposition channel for withdrawing mercury therefrom and causing it to enter the inlet end of said vessel and to flow on the bottom thereof to said outlet end, the end walls of said vessel extending into the mercury layer on the bottom wall of the vessel and sealing against escape of electrolyte therebetween, said vessel having openings in the upper part of its inlet and outlet ends for entry of electrolyte and for withdrawal of gases, respectively, a plurality of anode chambers in said vessel, each chamber



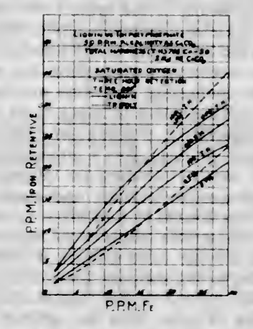
comprising vertical walls defining a space and a porous diaphragm at its lower end adjacent to mercury on the bottom wall of said vessel, said walls and diaphragm being composed of non-conducting material resistant to the electrolyte, and an anode in each chamber having its vertical edges disposed close to said vertical walls and defining therewith narrow passages for the flow of gases and liquids therebetween, the bottom surface of the anode lying close to the diaphragm and both said surface and diaphragm sloping upwardly in the direction of flow of mercury on the bottom of the vessel, each anode chamber having a passage leading into the anolyte channel at a level substantially below the level of the electrolyte in said vessel.

2,744,865
OZONE GENERATOR
Nicholas J. Penning, Milwaukee, Wis.
Application April 5, 1952, Serial No. 280,816
12 Claims. (Cl. 204—319)



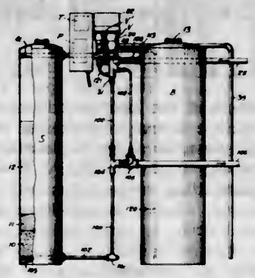
10. In an ozone machine, the combination with a plurality of spaced dielectric plates, each having a thin rectangular sheet conductor entirely and separately enclosed therein, each conductor being off center in its plate but having openings at opposite ends of the plate symmetrical with the offset sheet conductor therein, the opening at one end having an electric conductor therein engaging the end of the conductor sheet therein and the opening at the other end of the plate being free from engagement with the conductor sheet, each alternate plate being reversely connected to the conducting posts at the ends of the plate to offset both edges of the plates alternately of each other, a control device for heating air supplied edgewise to the plates, means for supplying electric current to the conductors at opposite ends of the plate, and means for causing a flow of air through the control device and through the generator for causing the flow of ozone therefrom.

2,744,866
IRON RETENTION IN AQUEOUS SOLUTION
Harry Lewis Kahler, Feasterville, Pa., assignor to W. H. & L. D. Betz, Philadelphia, Pa., a partnership composed of William H. Betz, L. Drew Betz, and John Drew Betz
Application March 25, 1952, Serial No. 278,359
4 Claims. (Cl. 210—23)



1. The process of treating a water supply from a well preparatory to use in a non-evaporative water-using device, which water supply contains a substantial amount of iron in solution, has an alkalinity as calcium carbonate between 0 and 300 p. p. m., and is nonaerated, which comprises adding a water soluble lignin to the water supply, said lignin being added to said water supply between its source and said water-using device, said water soluble lignin being added in a concentration of from 0.2 to 200 p. p. m.

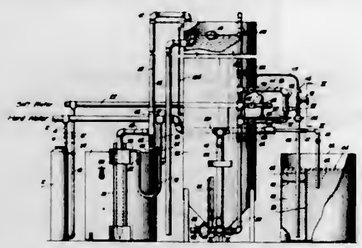
2,744,867
WATER SOFTENING APPARATUS
Francis H. Webb, Pasadena, Calif.
Application December 30, 1952, Serial No. 328,584
6 Claims. (Cl. 210—24)



1. Automatic water softening apparatus comprising: a softener tank having a hard water inlet and a soft water outlet; a brine tank; a master valve element movably mounted to occupy a service position and a regenerating position and having valved means; means connecting the hard water inlet to a supply of water under pressure through the medium of said valved means, for the flow of water through the softener tank to a service line when said element occupies its service position; said element having two other valved means; means connecting said soft water outlet of the softener tank to the source of water supply through the medium of one of said two other valved means when said master valve element is in regenerating position, to admit a restricted flow of rinsing water to the softener tank; means connecting said hard water inlet of the softener tank to a drain line through the medium of the other of said two other valved means when the master valve element occupies regenerating position, to drain rinsing water from the softener tank; a brine valve element movably mounted to occupy a

service position and a regenerating position and having two valved means; means connecting the hard water inlet to the brine tank through the medium of one of said two valved means of the brine valve element to pressurize the brine tank when the brine element occupies regenerating position; means connecting the brine tank to the softener tank through the medium of the other of said two valved means of the brine valve element when the master valve element occupies service position, to admit brine from the brine tank to the softener tank; means including time mechanism controlling the master valve element; means connecting said time mechanism means to the master valve element to move same from service position to regenerating position wherein said master valve element is retained for a predetermined regenerating period; means including an interval timer controlling said brine valve element; and means connecting said interval timer means to said brine valve element to move same from service position to regenerating position wherein said brine valve element is retained for the delivery of brine to the softener tank during only a predetermined initial portion of said regenerating period, followed by rinsing of brine from the softener tank during the remainder of the regenerating period.

2,744,868
REGENERATION SYSTEM FOR WATER SOFTENING PLANT
Wesley A. Harting, Kansas City, Mo.
Application January 2, 1952, Serial No. 264,537
2 Claims. (Cl. 210—24)



1. In apparatus of the kind described requiring connection only with a source of untreated water and the atmosphere for simultaneously regenerating the water-softening substance from a plurality of water-softener tanks, the combination as an integrated system of an open top container adapted to initially receive said substance from said tanks; an open top processing drum of greater height than the container; conduit structure communicating with the container adjacent the bottom of the latter and extending upwardly therefrom to a point of communication with the drum adjacent the top of the latter; a venturi tube connected into said conduit structure and provided with an outlet in communication with that portion of the structure leading to the drum, a suction inlet in communication with that portion of the structure leading to the container, and a pressure jet inlet; fluid carrying means, including a closure valve, communicating with said pressure jet inlet and adapted for connection with said source; fluid carrying means, including a closure valve, communicating with the container and adapted for connection with said source; drain means, including a filtering manifold and a closure valve, communicating with the drum adjacent the bottom of the latter; a fluid-carrying assembly, including a pair of spaced closure valves, communicating with the drum adjacent the bottom of the latter and with the drum adjacent the top of the latter; conduit means, including a closure valve, communicating with the fluid-carrying assembly between the valves, of the latter and adapted for connection with said source; fluid carrying structure, including a pair of spaced closure valves, communicating with the fluid-carrying assembly between the valves of the latter and adapted for connection with said source; a venturi tube connected into said fluid carrying structure and provided with an outlet in communication with the valve of the fluid-carrying structure nearest said fluid-carrying assembly, a pressure jet inlet in communication with the valve of the fluid carrying structure nearest said source, and a suction inlet; pipe means, including a closure valve, communicating with the suction inlet of the last-mentioned venturi tube and with the atmosphere; an open top receptacle adapted to hold a quantity of brine-forming salt; fluid-carrying means, including a closure valve, communicating with the receptacle and adapted for connection with said source; fluid-carrying means, including a closure valve, communicating with the suction inlet of the last-mentioned venturi tube and with the receptacle; a water-softener tank having an inlet and an outlet; fluid-carrying means, including a closure valve, communicating with the inlet of the last-mentioned tank and adapted for connection with said source; fluid-carrying means, including a closure valve, communicating with the outlet of the last-mentioned tank and with the fluid-carrying assembly between the valves of the latter; and delivery pipe structure, including a closure valve, communicating with the drum adjacent the bottom of the latter and with the atmosphere, the extremity of the delivery pipe structure in communication with the atmosphere being disposed for redelivery of regenerated water-softening substance into one of said first-mentioned tanks.

2,744,869
DRILLING FLUID FOR HIGH-TEMPERATURE WELLS
Henry C. H. Darley, Bellaire, Tex., assignor to Shell Development Company, New York, N. Y., a corporation of Delaware
No Drawing. Application November 23, 1953, Serial No. 393,919
10 Claims. (Cl. 252—8.5)

1. A process for drilling a high-temperature well comprising drilling the well with well drilling tools, circulating in the well a water-base lime-free drilling mud containing colloidal particles of clayey material suspended in sufficient water to render the same circulatable, and increasing the solids capacity of said drilling mud by admixing with said mud and interacting therewith barium hydroxide in an amount of from 1 to 15 pounds per barrel in excess of that which would react with any sulfate ions present in the mud, said barium hydroxide being sufficient to raise the solids capacity of the mud and prevent the solidification thereof when said muds are exposed to temperatures above 110° C., said amount of barium hydroxide being insufficient to increase the viscosity of said mud to such an extent as to render said drilling mud uncirculatable.

2,744,870
LUBRICATING COMPOSITIONS
Cornelis Stillebroer, Delft, and Johan Leonard van der Minne, Amsterdam, Netherlands, assignors to Shell Development Company, New York, N. Y., a corporation of Delaware
No Drawing. Application November 15, 1954, Serial No. 469,035
Claims priority, application Netherlands November 24, 1953
7 Claims. (Cl. 252—33.6)

1. A lubricating composition for lubrication of internal combustion engines operating with high sulfur hydrocarbon fuels, said lubricating composition consisting essentially of a water-in-oil emulsion consisting essentially of from 5% to 40% by weight of water and from 60% to 95% of a mineral lubricating oil, said water phase of the emulsion containing in solution at least 0.25 gram mols per liter of a water-soluble salt of a divalent metal.

2,744,871
LUBRICATING COMPOSITION
Paul H. Williams, Berkeley, and Lawrence B. Scott, Lafayette, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware
No Drawing. Application May 12, 1953, Serial No. 354,622
6 Claims. (Cl. 252—49)

1. A lubricating composition adapted for extreme pressure use comprising a major amount of a water miscible mixture of monohydroxy oxyethylene oxy 1,2-propylene aliphatic monoethers in which the ethylene oxide and 1,2-propylene oxide are combined therein as oxyethylene and oxy 1,2-propylene groups in a ratio which is at least one-third part of 1,2-propylene oxide for each part of ethylene oxide by weight, said mixture having an average molecular weight of at least 300 attributable to said groups, the aliphatic monoethers of said mixture containing in a single molecule both the oxyethylene and oxy 1,2-propylene groups, and a minor amount between about 0.1% and about 5% by weight, sufficient to improve the extreme pressure properties thereof of boric acid.

2,744,872
GEAR LUBRICANT COMPRISING A WIDE MINERAL OIL BLEND AND AN OXIDIZED PARAFFINIC RESIDUUM
Roy F. Nelson, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
No Drawing. Application June 23, 1953, Serial No. 363,675
6 Claims. (Cl. 252—49.6)

1. A gear lubricant consisting essentially of about 30-35 percent by weight of an unoxidized heavy mixed base residual oil having a viscosity of about 700–750 seconds Saybolt Universal at 210° F., about 30–35 per cent by weight of an unoxidized napthenic distillate oil having a viscosity of about 50–75 seconds Saybolt Universal at 100° F. and about 30–35 per cent by weight of a fluid cut back oxidized residuum having a Saybolt Furol viscosity of about 175–225 seconds at 210° F. and consisting of about 40–60 per cent by weight of a napthenic distillate oil having a viscosity of about 75–125 seconds Saybolt Universal at 100° F. and about 40–60 per cent by weight of an oxidized residuum having a penetration at 77° F. of about 55–75, obtained by oxidizing a paraffinic cylinder stock residuum having a viscosity of about 100–150 seconds Saybolt Universal at 210° F.

2,744,873
MIXED NICKEL, ZINC, VANADIUM FERRITE
Leon T. Piekarski, Skaneateles, N. Y., assignor to General Electric Company, a corporation of New York
No Drawing. Application November 8, 1952, Serial No. 319,601
7 Claims. (Cl. 252—62.5)

1. A soft ferromagnetic mixed crystal ferrite consisting essentially of 40 to 60 mol per cent iron oxide, 0.1 to 1.0 mol per cent vanadium oxide, 18 to 32 mol per cent zinc oxide, balance nickel oxide.

2,744,874
DETERGENT COMPOSITIONS
Elmer A. Fike and William H. Seaton, Nitro, W. Va., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
No Drawing. Application May 24, 1952, Serial No. 289,910
5 Claims. (Cl. 252—161)

5. A detergent composition comprising as an essential active ingredient an alkyl benzene sodium sulfonate wherein the alkyl group contains from 9 to 16 carbon atoms and an effective amount within the range of 0.5%–5% thereof of an oxy alkylene ether of the structure $RO(R_1O)_nH$ where RO is the residue after removal of hydrogen from a carbinol substituted by a five membered heterocyclic radical containing four carbon atoms and an oxygen atom, R_1 is an alkylene group containing at least 2 but not more than 4 carbon atoms and n is an integer at least 5 but not more than 20.

2,744,875
CELLULAR PHENOLIC RESIN MATERIALS
Frank W. Thomas, Burbank, and Eli Simon, Los Angeles, Calif., assignors to Lockheed Aircraft Corporation, Burbank, Calif.
No Drawing. Application June 14, 1951, Serial No. 231,673
4 Claims. (Cl. 260—2.5)

2. The method of making a cellular plastic material which comprises the incorporation in an acid catalyzable, water miscible phenol-aldehyde resol having a specific gravity of between 1.15 and 1.35 and a pH of about 7 of from about 0.01% to about 20% of the total weight of the other ingredients of a gassing agent selected from the class consisting of: aluminum leafing powder, magnesium leafing powder, iron leafing powder, zinc leafing powder, and then mixing with said resol-gassing agent mixture a catalyst in the amount of from about 0.5% to 20% of the weight of the resol, the catalyst being an aqueous acidic blend of benzene sulfonic acid and orthophosphoric acid which consume and gassifies the gassing agent to form the cellular material.

2,744,876
ORGANOTIN DERIVATIVES OF GLYCERYL MONO-ESTERS
Hugh E. Ramsden, Metuchen, N. J., assignor to Metal & Thermit Corporation, New York, N. Y., a corporation of New Jersey
No Drawing. Application July 11, 1952, Serial No. 298,462
17 Claims. (Cl. 260—23)

1. As a stabilizer for a resin, a novel organotin derivative of a glyceryl mono-ester, selected from the class consisting of alkyltin, aryltin and aralkyltin derivatives of monoesters of saturated, ethylenic unsaturated and hydroxyl substituted aliphatic hydrocarbon monobasic acids wherein alkyl, aryl and aralkyl groups are attached to monoester through tin and tin is connected to the mono-ester through oxygen.

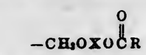
2,744,877
THERMOPLASTIC POLYMER COMPOSITIONS PLASTICIZED WITH CERTAIN ESTERS OF SUBSTITUTED 1,5-PENTANEDIOLS
Curtis W. Smith, Berkeley, Calif., assignor to Shell Development Company, New York, N. Y., a corporation of Delaware
No Drawing. Application April 30, 1954, Serial No. 426,926
11 Claims. (Cl. 260—31.4)

1. A composition comprising a thermoplastic polymer of a monomer containing a single ethylenic



group and a plasticizing amount of an ester of (1) a substituted 1,5-pentanediol wherein the chain carbon atom immediately adjacent to one of the terminal hydroxyl bearing carbon atoms is joined to an alkyl side chain containing up to 8 carbon atoms and the chain carbon atom adjacent to the other hydroxyl carbon atom is joined through one valence bond to an alkyl side chain containing up to 8 carbon atoms and through another valence bond to

a member of the group consisting of —CH_2OR, —CH_2OXOH, —CH_2OXOR and



radicals wherein R is a hydrocarbon radical containing from 1 to 18 carbon atoms and X is a divalent hydrocarbon radical containing from 1 to 7 carbon atoms and (2) an acid component of the group consisting of monocarboxylic acids containing up to 18 carbon atoms, dicarboxylic acids containing from 2 to 16 carbon atoms and acid esters of the aforementioned dicarboxylic acids and monohydric alcohols containing up to 8 carbon atoms.

2,744,878

ELASTIC ORGANOPOLYSILOXANES OF IMPROVED HEAT RESISTANCE AND ADHESION CONTAINING AN ORGANIC SILICATE AND CALCIUM CARBONATE

Robert Smith-Johannsen, Niskayuna, N. Y., assignor to General Electric Company, a corporation of New York

No Drawing. Application February 27, 1953, Serial No. 339,461
23 Claims. (Cl. 260—37)

1. A heat and peroxide-curable composition of matter comprising (1) an organosilicon compound selected from the class consisting of (*a*) monomeric organosilicates corresponding to the general formula



where R and R′ are members selected from the class consisting of alkyl groups and halogen-substituted alkyl groups, and R′, in addition, represents a member selected from the class consisting of aryl, aralkyl, alkaryl, alkoxy, aryloxy groups, and halogenated derivatives of the aforesaid aryl, aralkyl, alkaryl, alkoxy and aryloxy groups, and (*b*) liquid partial hydrolysis products of the aforementioned organosilicate monomeric compounds, (2) an alkaline-condensed organopolysiloxane convertible to the cured, solid, elastic state and consisting essentially of monovalent organic radicals and silicon and oxygen atoms in which the organic radicals are selected from the class consisting of methyl, ethyl, chlorophenyl, and phenyl radicals and are attached to silicon by carbon-silicon linkages in such ratio that there are present from about 1.95 to 2.05 organic radicals per silicon atom, and the organopolysiloxane consists essentially of recurring R″$_2$SiO units in which R″ is a member selected from the class consisting of methyl, ethyl, chlorophenyl, and phenyl radicals, (3) calcium carbonate as a filler, and (4) a peroxide curing agent for the aforesaid mixture of ingredients, the compositions (1), (3) and (4) being present, by weight, based on the weight of the alkaline-condensed organopolysiloxane, as follows: (*a*) organosilicon compound: from 0.01 to 8%, (*b*) calcium carbonate filler: at least 10%, and (*c*) peroxide curing agent: at least 0.1%.

2,744,879

COMPOUNDING BUTYL RUBBER

Elbert C. Ladd, Passaic, N. J., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application January 11, 1952, Serial No. 266,099
3 Claims. (Cl. 260—41.5)

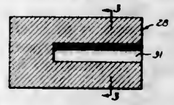
1. A vulcanizate of a mixture of a rubbery isobutylene-diolefin copolymer and a filler selected from the group consisting of precipitated hydrated silica, precipitated hydrated calcium silicate and kaolin, said filler having been reacted with 10-undecenyltrichlorosilane with liberation of hydrogen chloride.

2,744,880

CORROSION-INHIBITING SOLUBLE PLUG

John R. Brown, Inglewood, Calif., assignor, by mesne assignments, to Kobe, Inc., Huntington Park, Calif., a corporation of California

Application September 18, 1950, Serial No. 185,435
14 Claims. (Cl. 260—41.5)



1. A cleaning plug insertable into an oil pipe line and to be passed therethrough in engagement with the inner walls thereof to remove by mechanical action deposits on inner surfaces of the pipe line, such plug including: a normally solid binder body of oil-soluble material capable of slow dissolution over a long period of time in liquid petroleum products encountered in said pipe line; and a solid mineral constituent distributed in said body in proportion of about 35 to 40 parts by weight to each 100 parts by weight of said binder, said solid mineral constituent having the two properties of abrasiveness to clean mechanically interior surfaces of said pipe line upon passage therethrough and of inhibition of corrosion of such surfaces after passage thereover.

2,744,881

VINYL HALIDE RESIN STABILIZED WITH BASIC LEAD DICARBOXYLATES

John G. Hendricks, Chatham, N. J., and Leonard M. Kebrich, Brooklyn, N. Y., assignors to National Lead Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application February 27, 1953, Serial No. 339,442
7 Claims. (Cl. 260—45.75)

1. A composition comprising a vinyl chloride resin and from 0.25 to 10% based on the weight of said resin of a heat and light stabilizer comprising basic lead aliphatic dicarboxylates.

2,744,882

UNSYMMETRICAL DIPHENYLOL METHANES

Howard L. Bender and Alford G. Farnham, Bloomfield, and John W. Guyer, Verona, N. J., assignors, by mesne assignments, to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application January 26, 1949, Serial No. 72,992
7 Claims. (Cl. 260—47)

7. Method of preparing unsymmetrical diphenylol methanes, which comprise reacting at a temperature between 100° C. and 200° C. and a pH between 4 and 7 a mixture comprising saligenin and an excess molar quantity of a phenol having at least one reactive position and attached to the phenolic ring in addition to a phenolic hydroxyl group at least one more monovalent radical selected from the group consisting of alkyl, cycloalkyl, aryl, alkenyl, alkoxy and hydroxy and removing water formed during the condensation.

2,744,883

PREPARATION OF WATER SOLUBLE SALT OF N-DIALKYLAMINOALKOXYMETHYL POLYAMIDE

Irving P. Hammer, Belleville, and John B. Rust, East Hanover, N. J., assignors, by direct and mesne assignments, of one-half to Montclair Research Corporation, a corporation of New Jersey, and one-half to Ellis-Foster Company, a corporation of New Jersey

No Drawing. Application March 17, 1949, Serial No. 82,026
11 Claims. (Cl. 260—72)

1. The method of making a water soluble polyamide which comprises heating to reaction temperature as the

only essential reactants a formaldehyde yielding substance, a lower fatty acid, an N-dialkyl substituted aminoalcohol capable of neutralizing the fatty acid, and a synthetic linear polyamide of intrinsic viscosity above 0.4 and having hydrogen bearing carbonamide groups as an integral part of the main polymer chain, and adding an amount of an organic liquid capable of precipitating the modified polyamide to precipitate the modified polyamide from the solution in the form of a water-soluble salt.

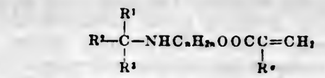
2,744,884

N-TERT-ALKYLAMINOALKYL ESTERS

Peter L. de Benneville, Philadelphia, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application July 20, 1954, Serial No. 444,645
16 Claims. (Cl. 260—78.5)

8. Copolymers of a compound of the structure



where R^1, R^2, and R^3 are alkyl groups having a total of not over 23 carbon atoms, R^x is a member of the class consisting of hydrogen and the methyl group, and *n* is an integer from two to three, there being two carbon atoms between nitrogen and oxygen atoms and another polymerizable vinylidene compound.

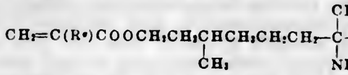
2,744,885

AMINOALKYL ESTERS

Peter L. de Benneville and Homer J. Sims, Philadelphia, Pa., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application July 20, 1954, Serial No. 444,646
6 Claims. (Cl. 260—78.5)

4. Polymers of the compounds



where R^x is a member of the class consisting of hydrogen and the methyl group.

2,744,886

ACCELERATION OF POLYMERIZATION OF ACRYLATE ESTERS WITH A THIOPHENOL, A DIACYL PEROXIDE, AND A TERTIARY AMINE

Thomas F. Protzman, Levittown, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application August 4, 1954, Serial No. 447,889
4 Claims. (Cl. 260—89.5)

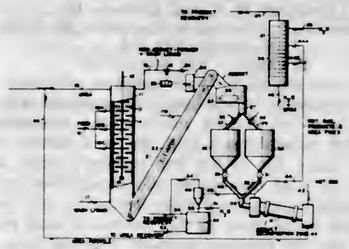
1. A process for polymerizing alkyl esters of acrylic and methacrylic acid which comprises mixing together an alkyl ester of an acid from the class consisting of acrylic acid and α-methacrylic acid, a catalytically effective amount of a diacyl peroxide between 0.002% and 2% of the weight of the resulting composition, an activating amount of a tertiary amine having N-substituents from the class consisting of alkyl groups of not over four carbon atoms, the benzyl group, and aryl groups of one to two cycles, there being at least one aromatic cycle in the amine, the amine being used at 0.001% to 2% of the weight of the resulting composition, and a promoting amount of a thiophenol between 0.002% and about 0.09% of the resulting composition, and permitting the resulting composition to polymerize between —20° and 100° C.

2,744,887

DECOMPOSING UREA ADDUCTS BY COUNTERCURRENTLY CONTACTING THE UREA ADDUCT WITH A HOT GAS, REMOVING THE UREA FINES AND RECYCLING THE LARGER UREA PARTICLES

Harris A. Dutcher and Howard R. Sailors, Bartlesville, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware

Application August 3, 1950, Serial No. 177,456
13 Claims. (Cl. 260—96.5)



1. A process for separating an organic compound capable of forming an adduct with an amide selected from the group consisting of urea and thiourea from admixture with an organic compound not capable of forming such an adduct which comprises continually moving particles of said amide downwardly as an aggregate mass by gravity flow through an adduct-forming zone, continually feeding said admixture of organic compounds into said adduct-forming zone at an intermediate point therein at such a rate that the mol ratio of said amide to the adduct-forming compound is within the range of 1:1 to 20:1, maintaining said adduct-forming zone at a temperature within the range of minus 70 to 120° F. and under sufficient pressure to maintain liquid phase conditions therein, withdrawing non-adduct-forming compound from the upper portion of said adduct-forming zone, adding a washing medium comprising a non-adduct-forming low boiling hydrocarbon to the lower portion of said adduct-forming zone at a rate within the the range of 1 to 50 gallons per cubic foot of adduct whereby any non-adduct-forming compound occluded on the adduct is removed therefrom, passing the washed adduct formed in said adduct-forming zone to a decomposition zone, passing an inert gaseous heat carrier at a temperature within the range of 125 to 200° F. through said decomposition zone countercurrently to said adduct passing therethrough and at a velocity within the range of 3 to 50 feet per second, continuously tumbling said adduct transversely through said heat carrier gas whereby said adduct is decomposed to liberate said adduct-forming compound and said amide and whereby undesirably fine particles of said liberated amide are removed from said decomposition zone in suspension in said carrier gas along with the liberated adduct-forming compound contained therein, returning the coarser particles of said amide to said adduct-forming zone, countercurrently contacting said carrier gas containing said fine particles of said amide and said liberated adduct-forming compound with water at a temperature within the range of 50 to 150° F. and at a rate within the range of 0.5 to 5 pounds of water per pound of said amide, crystallizing the resultingly dissolved amide from said water and returning the recovered crystals to said adduct-forming zone.

2,744,888
ETHENOXY N-MONOETHANOLAMIDES OF TALL OIL
Joseph J. Carnes, Stamford, Conn., and William T. Booth, Jr., Pittsburgh, Pa., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine
No Drawing. Original application August 4, 1950, Serial No. 177,776. Divided and this application September 13, 1952, Serial No. 309,558
5 Claims. (Cl. 260—97.5)

1. Ethenoxy N-monoethanolamides of tall oil acid mixtures containing about 80% to 20% by weight of fatty acids of 16–18 carbon atoms and about 20% to 75% by weight of abietic acid, said N-monoethanolamide derivatives containing about 4 to 50 ethenoxy groups per molecule.

2,744,889
ESTER-ACIDS FROM HIGHER FATTY ACIDS AND RESIN ACIDS
Frederick H. Gayer, Chicago, Ill.
No Drawing. Application December 29, 1952, Serial No. 328,525
15 Claims. (Cl. 260—97.5)

1. As a new composition of matter a substance from the group consisting of synthetic ester-acids of fatty acid having at least ten carbon atoms in the molecule and methylolated natural resin acid, the acid nature of the ester-acids being due to the free carboxyl group of the resin acid, the acid number of said composition remaining substantially unchanged when heated for one hour at 225° C. and being close to the theoretical acid number calculated for the expected product resulting from completion of the esterification reaction as to at least one of the reactants entering into the esterification reaction. esters of said ester-acids and salts of said ester acids.

2,744,890
PROTEINACEOUS COMPOSITION AND METHOD OF MAKING THE SAME
Jean I. Wagner, Huntington, Becker Habighurst, Patchogue, and Millard G. Terry, Jr., Holtsville, N. Y., assignors to National Dairy Research Laboratories, Inc., Oakdale, N. Y., a corporation of Delaware
No Drawing. Application December 19, 1952, Serial No. 327,034
5 Claims. (Cl. 260—119)

1. A proteinaceous composition for use as a dressing comprising an aqueous solution having a viscosity within the range from 20 to 60 Brookfield units at 20 R. P. M. of an alkali-soluble non-antigenic heavy-metal-salt-coagulable casein and an ammonia compound capable of inhibiting age-thickening of the composition and selected from the group consisting of urea, cysteine, methinone and hydrolyzed wool protein, said compound being in an amount within the range from about 0.25% to 1% by weight of the composition.

2,744,891
PROCESS FOR PRODUCING A WATER-SOLUBLE CASEIN
David F. Waugh, Watertown, Mass., assignor to National Dairy Research Laboratories, Inc., Oakdale, N. Y., a corporation of Delaware
No Drawing. Application September 24, 1952, Serial No. 311,311
8 Claims. (Cl. 260—120)

1. A process for isolating a water-soluble alkali metal caseinate from skim milk which comprises adjusting the calcium concentration of the milk to within the range from 0.05 to 0.1 molar at a temperature below about 60° C. in order to displace the ionic calcium-casein equilibrium to induce ionic calcium association of casein micelles to a water-nondispersible stage, separating calcium caseinate therefrom, and treating the calcium caseinate with a calcium sequestering agent to substitute an alkali metal for ionic calcium associated with the casein and reduce the casein calcium content to below 0.2%, based on the dry weight of the casein, and displace the ionic calcium-casein equilibrium to dissociate the ionic calcium-associated casein micelles to a water-soluble stage, the said substitution being carried out in an aqueous medium while maintaining the pH within the range from about 5.3 to about 6.5.

2,744,892
CRYSTALLIZATION OF DIHYDROSTREPTOMYCIN SULPHATE
Leon Katz, Springfield, N. J., assignor to Schenley Industries, Inc., New York, N. Y., a corporation of Delaware
No Drawing. Application June 2, 1952, Serial No. 291,290
6 Claims. (Cl. 260—210)

1. A process for the recovery and purification of dihydrostreptomycin sulphate from an aqueous solution of crude dihydrostreptomycin sulphate which comprises adding to the aqueous solution a substantial proportion of a solvent of the group consisting of ethylene glycol, glycerol, propylene glycol, diethylene glycol, formamide and dimethyl formamide, adding to the resulting solution such an amount of methanol that turbidity is developed, thereafter maintaining the solution at a temperature between approximately 45° C. and approximately 65° C. while crystallization of the salt proceeds, and subsequently recovering the crystalline salt.

2,744,893
SEPARATION OF FLAVONOID COMPOUNDS
Simon H. Wender, Norman, Okla., Thomas B. Gage, Richmond, Va., Clark H. Ice, Aiken, S. C., and Quentin L. Morris, Commerce, Tex., assignors to the United States of America as represented by the United States Atomic Energy Commission
No Drawing. Application April 29, 1952, Serial No. 285,046
11 Claims. (Cl. 260—210)

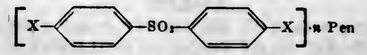
1. An improved method of separating a mixture of flavonoid aglycones from flavonoid glycosides, which comprises contacting an aqueous solution of said flavonoids with a comminuted cation-exchange resin, separating the resulting flavonoid-depleted solution from the resulting flavonoid-retaining resin, selectively eluting the adsorbed flavonoid glycosides from said resin with an aqueous-organic solvent containing at least approximately 50% water, by volume, and eluting the remaining flavonoid aglycones from the resulting resin with an organic solvent containing not more than approximately 10% water, by volume.

2,744,894
HYDROXYALKYLATION OF POLYSACCHARIDES
Donald B. Benedict and Aubrey E. Broderick, South Charleston, W. Va., assignors to Union Carbide and Carbon Corporation, a corporation of New York
No Drawing. Application September 8, 1952, Serial No. 308,522
9 Claims. (Cl. 260—231)

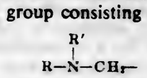
1. Process for producing an hydroxyalkyl ether of a polysaccharide, which comprises dispersing a polysaccharide selected from the class consisting of the celluloses and the starches in a liquid dispersant mixture comprising (1) a major portion of a liquid boiling above 85° C. and selected from the class consisting of the benzenoid hydrocarbons, the alkanes, and the monoether and the monoketone derivatives of the alkanes, and (2) a minor portion of an alkoxyalkanol having one to four carbon atoms in the alkoxy group and selected from the class consisting of the alkoxyethanols, the alkoxyisopropanols and the alkoxypropanols, in the present of water and a caustic alkali, and agitating the resultant dispersion with an alkylene oxide having two to four carbon atoms, at elevated temperatures no higher than around 50° C., while maintaining in the solid state the polysaccharide and the hydroxyalkyl ether derivative thereof thus produced.

2,744,895
BENZENESULFONYLBENZYLAMINE SALTS OF PENICILLIN
David Aaron Johnson, Syracuse, N. Y., assignor to Bristol Laboratories Inc., Syracuse, N. Y., a corporation of New York
No Drawing. Application July 16, 1954, Serial No. 443,965
5 Claims. (Cl. 260—239.1)

1. A salt of penicillin having the formula



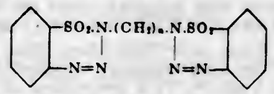
wherein Pen designates an acid penicillin, *n* is an integer from one to two inclusive equal to the number of nitrogen atoms in the cation of the salt, and X is a member selected from the group consisting of hydrogen and



no more than one X representing hydrogen, wherein R represents a member selected from the group consisting of benzyl and alkyl containing less than nine carbon atoms and R′ represents hydrogen.

2,744,896
N,N′-ALKYLENEBISBENZOSULFOTRIAZENES
Frank A. V. Sullivan, Glenbrook, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
No Drawing. Application December 14, 1954, Serial No. 475,269
4 Claims. (Cl. 260—243)

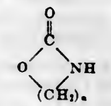
1. A compound of the formula



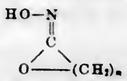
in which *n* is an integer 1 to 4.

2,744,897
CYCLIC CARBAMATES AND METHOD FOR THEIR PREPARATION
Erhart K. Drechsel, Springdale, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
No Drawing. Application August 9, 1952, Serial No. 303,609
3 Claims. (Cl. 260—244)

1. The method of preparing a cyclic carbamate represented by the general formula



where *n* represents a whole number selected from the class consisting of 3 and 4, said method comprising effecting a Beckmann rearrangement, using sulfuric acid as a catalyst for the reaction, of the corresponding hydroximic acid represented by the general formula



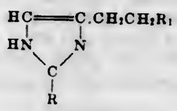
where *n* has the same meaning as given above with reference to the first-named formula, and isolating a cyclic carbamate represented by said first-named formula from the resulting reaction mass.

2,744,898
HALOGEN SUBSTITUTED ALKENYL DITHIOCARBAMATES
Marion W. Harman, Nitro, and John J. D'Amico, Charleston, W. Va., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
No Drawing. Application March 17, 1952, Serial No. 277,057
19 Claims. (Cl. 260—247.1)

1. A halogen substituted alkenyl ester of a dithiocarbamic acid in which the alkenyl group contains less than six carbon atoms and not more than one substituent of the group consisting of chlorine or bromine on any one carbon atom.

2,744,899
4-(β-SUBSTITUTED AMINOETHYL)-IMIDAZOLES AND THE PREPARATION THEREOF
Charles F. Huebner, Morristown, N. J., assignor to Ciba Pharmaceutical Products, Incorporated, Summit, N. J., a corporation of New Jersey
No Drawing. Application March 2, 1951, Serial No. 213,668
9 Claims. (Cl. 260—247.5)

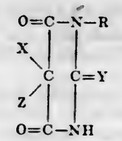
1. The process of preparing an imidazole having the structure:



wherein R is a member selected from the group consisting of hydrogen, lower alkyl and mononuclear carbocyclic aryl free from substituents which interfere with the reaction, and R_1 is a radical selected from the group consisting of lower dialkylamino, piperidino and morpholino, which comprises the steps of reacting hydroxymethyl-vinyl ketone with a secondary aliphatic amine corresponding to the formula R_1H, wherein R_1 has the precedingly-indicated significance, and heating the resulting substituted aminoethyl hydroxymethyl ketone in solution with ammonia and an aldehyde corresponding to the formula RCHO, R having the precedingly-indicated significance, in the presence of cupric ions, whereby the isolation of intermediates is unnecessary.

2,744,900
PRODUCTION OF NEW DERIVATIVES OF BARBITURIC ACID
Walter Reppe and Otto Schlichting, Ludwigshafen (Rhine), and Franz Westphal, Ludwigshafen (Rhine)-Oppau, Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany
No Drawing. Application March 1, 1954, Serial No. 413,456
Claims priority, application Germany March 5, 1953
6 Claims. (Cl. 260—257)

1. Derivatives of barbituric acid of the general formula



wherein R represents a member of the group consisting of hydrogen, methyl and ethyl, X represents a member of the group consisting of hydrogen and lower alkyl groups containing up to 4 carbon atoms, Y stands for a member of the group consisting of oxygen and sulfur and Z is a member of the group consisting of Δ1.2- and Δ2.3-cyclooctenyl.

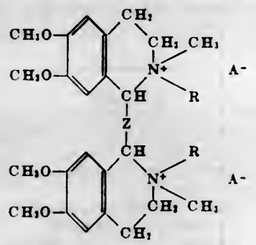
2,744,901

BIS-TETRAHYDRO-1-ISOQUINOLYL QUATERNARY AMMONIUM SALTS

Fred P. Nabenhauer, Philadelphia, Pa., assignor to Smith, Kline & French Laboratories, Philadelphia, Pa., a corporation of Pennsylvania

No Drawing. Application July 30, 1951, Serial No. 239,387
6 Claims. (Cl. 260—286)

1. A compound having the following formula:



in which Z is selected from the group consisting of an alkylene radical having from 7 to 12 carbon atoms and phenylene and p-xylene radicals, R is selected from the group consisting of methyl and ethyl, and A^- is an acid anion selected from the group consisting of chloride, bromide, iodide, methosulfate and ethosulfate radicals.

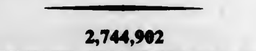
2,744,902

ALKYL NAPHTHYL QUATERNARY AMMONIUM COMPOUNDS

Benjamin R. Harris, Glencoe, Ill., assignor, by mesne assignments, to Emulsol Chemical Corporation, Chicago, Ill., a corporation of Illinois

No Drawing. Application February 23, 1954, Serial No. 412,108
9 Claims. (Cl. 260—290)

1. A germ-counteracting agent having the formula



where R is an alkyl group containing from 12 to 18 carbon atoms, Ar is an aromatic hydrocarbon radical selected from the group consisting of naphthalene and alkyl-substituted naphthalene radicals in which the number of said last-mentioned alkyl groups does not exceed 3 and in which the number of carbon atoms in each of said last-mentioned alkyl radicals is from 1 to 4, $N{\equiv}R_1$ is a tertiary amine having a total of not more than 10 carbon atoms and containing only carbon, hydrogen and nitrogen, said tertiary amine being selected from the group consisting of aliphatic saturated amines, heterocyclic amines, and lower alkyl aryl amines, and A is a salt-forming anionic radical.

2,744,903

DEHYDROGENATION PROCESS

Fred E. Boettner, Philadelphia, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application February 18, 1953, Serial No. 337,650
5 Claims. (Cl. 260—290)

1. A process for preparing methyl pyridines which comprises heating between 100° and 500° C. in the presence of a dehydrogenating catalyst the basic condensation products of isobutylene, formaldehyde, and a member of the class consisting of ammonia and methylamine, said products being formed in the presence of hydrogen chloride.

2,744,904

PROCESS OF PREPARING PYRIDINE AND 3-PICOLINE

Francis E. Cislak and William R. Wheeler, Indianapolis, Ind.

No Drawing. Application November 25, 1953, Serial No. 394,490
14 Claims. (Cl. 260—290)

1. The process of preparing pyridine and 3-picoline which comprises an interaction of acetylene, ammonia, and methanol in the presence of a catalyst useful in the preparation of picolines from acetylene and ammonia.

2,744,905

PROCESS FOR THE PRODUCTION OF THIOSEMICARBAZONES OF ISONICOTINALDEHYDE AND 4-PYRIDYL ALKYL KETONES

Werner Schäfer, Leverkusen-Schlebusch, Gerhard Domagk, Wuppertal-Elberfeld, Richard Wegler, Leverkusen-Schlebusch, and Engelbert Kühle, Bergisch Gladbach, Germany, assignors to Schenley Industries, Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application July 28, 1954, Serial No. 446,402
Claims priority, application Germany August 17, 1953
7 Claims. (Cl. 260—294.8)

1. A process for the production of a thiosemicarbazone of a 4-carbonyl-substituted pyridine which comprises heating together at a temperature between approximately 100° C. and approximately 200° C. a mixture of a 4-alkylpyridine, sulfur, and a substance of the group consisting of thiosemicarbazide and its salts with inorganic acids, and subsequently recovering the resulting thiosemicarbazone.

2,744,906

PROCESS FOR THE PRODUCTION OF THE THIOSEMICARBAZONE ISONICOTINALDEHYDE

Hans-Bodo König and Hans-Albert Offe, Wuppertal-Elberfeld, Germany, assignors to Schenley Industries, Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application September 2, 1954, Serial No. 453,939
Claims priority, application Germany October 30, 1953
10 Claims. (Cl. 260—294.8)

1. Process for the production of the thiosemicarbazone of isonicotinaldehyde which comprises reacting 4-(trichloromethyl)-pyridine with thiosemicarbazide in a suitable diluent in which both the 4-(trichloromethyl)-pyridine and thiosemicarbazide are soluble, and separating and recovering the reaction product.

2,744,907

PRODUCTION OF HETEROCYCLIC SULFONYL CHLORIDES

Richard William Young, Riverside, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application January 27, 1954, Serial No. 406,605
4 Claims. (Cl. 260—302)

1. The process of oxidative cleavage of compounds of the formula:

$$R.SCH_2C_6H_5$$

wherein R is a heterocyclic function selected from the group consisting of aryl thiadiazole, alkylamino thiadiazole, aryl thiazole, and aryl triazole radicals which comprises suspending a compound of the above formula in an aqueous acid solution, and passing chlorine therethrough to form the corresponding sulfonyl chloride.

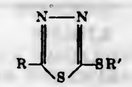
2,744,908

PROCESS FOR PREPARING SUBSTITUTED-MERCAPTO-1,3,4-THIADIAZOLES

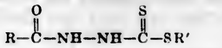
Richard William Young, Riverside, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application January 27, 1954, Serial No. 406,604
9 Claims. (Cl. 260—302)

1. A method for preparing compounds having the general formula:



wherein R is a member selected from the group consisting of hydrogen atoms, alkyl, phenyl, thiazolyl, pyridyl, furoyl, p-nitrophenyl, halogenated phenyl and p-ethoxyphenyl radicals and R′ is a member selected from the group consisting of alkyl and benzyl and 2,4-dinitrobenzyl radicals which comprises reacting a compound of the class:



with a strong acid.

2,744,909

2-(ORTHO-PHENYLBENZYL) IMIDAZOLINE AND ACID ADDITION SALTS

Merrill Eugene Speeter, Kalamazoo, Mich., assignor to Bristol Laboratories Inc., Syracuse, N. Y., a corporation of New York

No Drawing. Application June 27, 1955, Serial No. 518,351
3 Claims. (Cl. 260—309.6)

1. A compound selected from the group consisting of 2-(ortho-phenylbenzyl)-imidazoline and acid addition salts thereof.

2,744,910

2-(ORTHO-BENZYLBENZYL)-IMIDAZOLINE AND ACID ADDITION SALTS

Merrill Eugene Speeter, Kalamazoo, Mich., assignor to Bristol Laboratories Inc., Syracuse, N. Y., a corporation of New York

No Drawing. Application June 27, 1955, Serial No. 518,352
3 Claims. (Cl. 260—309.6)

1. A compound selected from the group consisting of 2-(ortho-benzylbenzyl)-imidazoline and acid addition salts thereof.

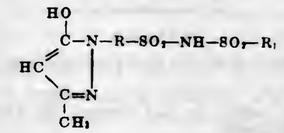
2,744,911

PYRAZOLONES AND PROCESS FOR THEIR MANUFACTURE

Hans Bolliger, Basel, Switzerland, assignor to Ciba Limited, Basel, Switzerland, a Swiss firm

No Drawing. Application January 25, 1954, Serial No. 406,088
Claims priority, application Switzerland January 28, 1953
9 Claims. (Cl. 260—310)

1. A 5-pyrazolone of the formula



wherein R represents a member selected from the group consisting of the benzene and chlorobenzene radicals and R_1 represents a member selected from the group consisting of the benzene and chlorobenzene radicals and the saturated lower aliphatic hydrocarbon radicals.

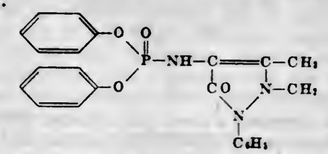
2,744,912

4-O.O-DIPHENYLPHOSPHONYLAMINO-ANTIPYRIN AND PROCESS FOR ITS PRODUCTION

Paul Gailliot, Paris, and Francois Dobarre, Esubonne, France, assignors to Societe des Usines Chimiques Rhone-Poulenc, Paris, France, a French body corporate

No Drawing. Application October 13, 1955, Serial No. 540,340
Claims priority, application France October 26, 1954
7 Claims. (Cl. 260—310)

1. 4-O.O-diphenylphosphonylamino-antipyrin of the formula:



2,744,913

PROCESS FOR THE MANUFACTURE OF TETRA-AZA-PORPHIN COLORING MATTERS

Harold France, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application January 29, 1953, Serial No. 334,092
Claims priority, application Great Britain February 6, 1952
6 Claims. (Cl. 260—314)

1. A process for the manufacture of magnesium tetra-aza-porphins which comprises heating (1) a member of the group consisting of alkyl-substituted fumaric dinitriles and mixtures thereof with a nitrile from the group consisting of a different alkyl-substituted fumaric dinitrile, maleic dinitrile, substituted maleic dinitriles, Δ′-tetrahydrophthalonitriles and phthalonitriles with (2) a member of the group consisting of magnesium alcoholate and the compound obtained by decomposing a Grignard reagent with an alcohol.

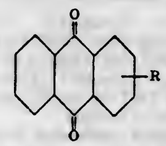
2,744,914

DYESTUFFS OF THE PHTHALOCYANINE SERIES AND THEIR PRODUCTION

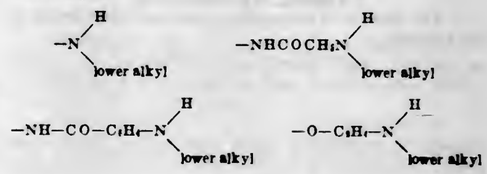
Georg Rösch, Leverkusen, Germany, assignor to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application May 29, 1951, Serial No. 228,987
Claims priority, application Germany May 31, 1950
12 Claims. (Cl. 260—314.5)

1. The process which comprises treating at temperatures of from about 0° to about 40° C. in the presence of a hydrogen chloride acceptor a phthalocyanine sulfochloride with the leuco sulfuric ester of an anthraquinone containing a basic secondary amino group and having the general formula



wherein R stands for a radical selected from the group consisting of

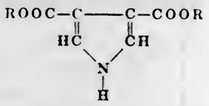


2,744,915
PROCESS FOR THE PREPARATION OF SUBSTITUTED PYRROLES

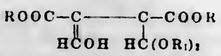
Reuben G. Jones and Edmund C. Kornfeld, Indianapolis, Ind., assignors to Eli Lilly and Company, Indianapolis, Ind., a corporation of Indiana

No Drawing. Application July 29, 1955, Serial No. 525,351
5 Claims. (Cl. 260—326.3)

1. The process of preparing a compound represented by the formula



wherein R represents a lower alkyl radical, which comprises formylating a dialkoxymethyl succinic acid ester to produce a 1-formyl-2-dialkoxymethyl succinic acid ester having the formula



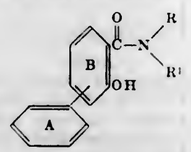
wherein R has the significance as before and R_1 is a lower alkyl radical, and cyclizing the said formylated compound by treating it with an acidic cyclizing reactant containing a nitrogen atom.

2,744,916
PHENYL-SUBSTITUTED SALICYLAMIDES

Melville Sahyun, John A. Faust, and Leonard H. Jules, Santa Barbara, Calif., assignors, by mesne assignments, to Cutter Laboratories, Inc., Berkeley, Calif., a corporation of California

No Drawing. Application February 12, 1953, Serial No. 336,643
6 Claims. (Cl. 260—326.3)

1. A compound having the formula:



wherein R and R^1 are selected from the group consisting of lower alkyl radicals and lower alkyl radicals which are joined together to form a heterocyclic ring selected from the group consisting of pyrrolidyl and piperidyl, and wherein the A-phenyl ring is located in a position selected from the group consisting of the 3-, 4- and 5- positions of the B-phenyl ring.

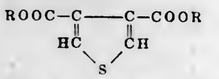
3. N-(3-phenylsalicyloyl)pyrrolidine.

2,744,917
PROCESS FOR THE PREPARATION OF THIOPHENE DICARBOXYLIC ACID

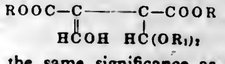
Reuben G. Jones and Edmund C. Kornfeld, Indianapolis, Ind., assignors to Eli Lilly and Company, Indianapolis, Ind., a corporation of Indiana

No Drawing. Original application June 30, 1950, Serial No. 171,555. Divided and this application July 29, 1955, Serial No. 525,352
5 Claims. (Cl. 260—332.2)

1. The process of preparing a compound represented by the formula



wherein R represents a lower alkyl radical, which comprises formylating a dialkoxymethyl succinic acid ester to produce a 1-formyl-2-dialkoxymethyl succinic acid ester having the formula



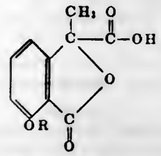
wherein R has the same significance as before and R_1 represents a lower alkyl radical, and cyclizing the said formula compound by treating it with an acidic cyclizing reactant containing a sulphur atom.

2,744,918
SUBSTITUTED PHTHALIDES AND METHODS OF PREPARING THE SAME

Samuel Kushner, Nanuet, N. Y., and John Morton II, Allendale, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

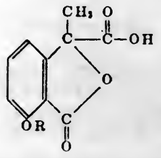
No Drawing. Application May 3, 1952, Serial No. 286,031
10 Claims. (Cl. 260—343.3)

9. Compounds selected from the group consisting of carboxylic acids represented by the formula

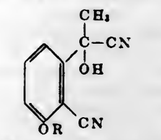


in which R represents a member selected from the group consisting of hydrogen and lower alkyl radicals, metallic salts of said acids, and the lower alkyl and lower aralkyl esters of said acids.

10. A method of preparing compounds selected from the group consisting of carboxylic acids represented by the formula



in which R represents a member selected from the group consisting of hydrogen and lower alkyl radicals, metallic salts of said acids, and the lower alkyl and lower aralkyl esters of said acids, which comprises heating at a temperature of from about 40° C. to 125° C. and in the presence of a mineral acid, a compound represented by the formula



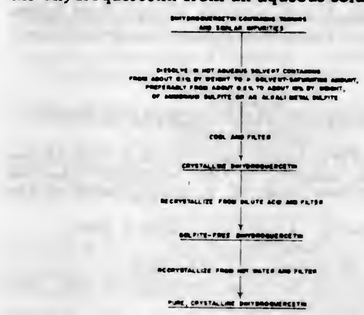
in which R is as defined above, with at least three molar equivalents of water.

2,744,919
PRODUCING PURE DIHYDROQUERCETIN

Ervin F. Kurth, Corvallis, Oreg., assignor to the State of Oregon, acting by and through the Oregon State Board of Forestry

Application September 9, 1952, Serial No. 308,676
10 Claims. (Cl. 260—345.2)

1. The process of separating dihydroquercetin from crude dihydroquercetin containing tannins and like impurities derived from bark, which comprises crystallizing the dhydroquercetin from an aqueous solution containing



from about 0.5% to about 10% by weight of sodium sulfite.

2,744,920
CONVERTING DIHYDROQUERCETIN TO QUERCETIN

Ervin F. Kurth, Corvallis, Oreg., assignor to the State of Oregon, acting by and through the Oregon State Board of Forestry

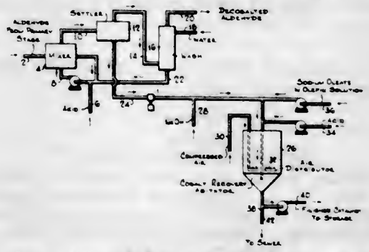
Application September 9, 1952, Serial No. 308,677
8 Claims. (Cl. 260—345.2)

1. The process of converting dihydroquercetin to quercetin which comprises reacting an aqueous solution of dihydroquercetin with at least one member of the group consisting of the alkali metal bisulfites and ammonium bisulfite, the said solution having a bisulfite concentration of from about 1% by weight to that required to saturate the solution, the reaction temperature being between about 40° C. and the boiling point of the solution, and the reaction time being sufficient to convert a substantial proportion of the dihydroquercetin to quercetin.

2,744,921
DECOBALTING IN OXO PROCESS USING OXIDIZING GAS AND ORGANIC ACID

Joseph K. Mertzweiller, Hugh E. Templeton, and Russell L. Daussat, Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application February 9, 1952, Serial No. 270,837
11 Claims. (Cl. 260—414)



1. In a carbonylation process wherein olefinic carbon compounds are contacted in a carbonylation zone with CO and H_2 in the presence of a cobalt catalyst under conditions to produce reaction products comprising aldehydes containing at least one more carbon atom than said olefinic compounds, and wherein a solution comprising said reaction products and dissolved cobalt catalyst is transferred to a catalyst removal zone and said cobalt is recovered, an improved method of removing and recovering said cobalt from said aldehyde product which comprises contacting said cobalt-contaminated aldehyde product with an aqueous solution of an organic acid whose cobalt salts are at least partially water soluble and oil insoluble, thereby converting cobalt carbonyls dissolved in said aldehyde into water-soluble forms of cobalt, passing aldehyde product and aqueous solution of cobalt to a settling zone, withdrawing a substantially cobalt-free aldehyde product from said zone, withdrawing from said zone an aqueous solution of cobalt compounds wherein cobalt is present both in an anionic and a cationic form, passing said solution to a mixing zone, increasing the pH of said solution to at least about 7, subjecting said solution to an oxidizing treatment with an oxygen-containing gas to precipitate substantially all of said dissolved cobalt, acidifying said precipitated material comprising cobalt to convert the same substantially into cobaltous ion, and converting cobaltous ion-containing solution thus prepared into cobalt soaps.

2,744,922
METHOD OF SOAP-MAKING

Fredrik Teodor Palmqvist, Stockholm, Sweden, assignor to Aktiebolaget Separator, Stockholm, Sweden, a corporation of Sweden

Application December 6, 1952, Serial No. 324,585
4 Claims. (Cl. 260—418)

1. In the art of soap-making wherein soap is grained out with an aqueous solution of an electrolyte made up at least partly of alkali hydroxide, and is then separated as neat soap from the spent lye, the improvement which comprises neutralizing the alkali hydroxide content of the neat soap with an agent selected from the group consisting of bi-valent and poly-valent acids and the acid alkali salts thereof, said neutralizing agent being added in a quantity such as to produce a soap mass in which the neat soap is in phase equilibrium with niger, said neutralizing being carried out with substantially no formation of free niger.

2,744,923
PREPARATION OF ORGANOPOLYSILOXANES

John J. Duane, Kenmore, N. Y., assignor to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application June 22, 1951, Serial No. 233,121
14 Claims. (Cl. 260—448.2)

1. In the making of organopolysiloxanes by hydrolysis of a hydrolyzable organosilane taken from the group consisting of hydrocarbon and hydrocarbonoxysilanes with subsequent condensation, the improvement which comprises condensing the intermediate hydrolysis product in contact with a substantially anhydrous potassium salt of a weak inorganic acid, while providing for removal of water of condensation from the reaction zone.

2,744,924
1-THIOCYANO-4,5,6,7,8,8-HEXAHALO-3a,4,7,7a-TETRAHYDRO-4,7-METHANOINDENE

Simon H. Herzfeld, Chicago, Ill., assignor to Velsicol Chemical Corporation, a corporation of Illinois

No Drawing. Application May 31, 1952, Serial No. 291,072
3 Claims. (Cl. 260—454)

1. As a new composition of matter, 1-thiocyano-4,5,6,7,8,8-hexahalo - 3a,4,7,7a-tetrahydro-4,7-methanoindene, wherein the halogens are of the group consisting of chlorine and bromine.

2,744,925
PRODUCTION OF AROMATIC NITRILES

William G. Toland, Jr., San Rafael, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware

Application March 22, 1952, Serial No. 278,104
5 Claims. (Cl. 260—465)

1. A process which comprises intimately contacting a mixture of a polyalkyl benzene hydrocarbon containing

1 to 3 carbon atoms in each alkyl group and an alkyl cyanobenzene containing 1 to 3 carbon atoms in the alkyl group in liquid phase with air at a temperature in the range 200° F. to 300° F. in an oxidation zone to produce a mixture of an alkyl benzoic acid and a cyanobenzoic acid.

2,744,926

PREPARATION OF ACRYLONITRILE

Russell E. Koons, El Dorado, Ark., assignor, by mesne assignments, to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

Application October 22, 1951, Serial No. 252,562
4 Claims. (Cl. 260—465.3)

1. In a method of preparing acrylonitrile wherein acetylene and hydrogen cyanide are reacted together in the presence of a liquid cuprous chloride complex as catalyst, the improvement which comprises continuously recirculating said liquid cuprous chloride catalyst through the reaction zone for said reactants countercurrent to the flow of acetylene through said zone, with said catalyst being reintroduced to said reaction zone in the form of a liquid spray during the course of recirculation.

2,744,927

SOLVENT EXTRACTION OF BLACK LIQUOR

James E. Copenhaver, William A. Biggs, Jr., and William H. Baxley, Hartsville, S. C., assignors to Sonoco Products Company, a corporation of South Carolina

No Drawing. Application November 28, 1952, Serial No. 323,144
2 Claims. (Cl. 260—527)

1. A process of treating black liquor to effect the removal therefrom of acetic acid, comprising concentrating said black liquor to a solids content of approximately 25% to 60%, acidfying the concentrated black liquor with sulfuric acid, and extracting the concentrated and acidified black liquor with a solution composed of 70% isopropyl acetate and 30% isopropanol and separating the acetic acid from the extracting solvent.

2,744,928

OXIDATION OF UNSATURATED ALDEHYDES TO ACIDS

Curtis W. Smith and Roy T. Holm, Berkeley, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application November 28, 1952, Serial No. 323,169
8 Claims. (Cl. 260—530)

1. A process for preparing an alpha,beta-unsaturated aliphatic carboxylic acid which comprises treating a solution of the corresponding alpha,beta-unsaturated aliphatic aldehyde in a mutual solvent for the aldehyde and the acid with from about 0.5 to about 1 equivalent per equivalent of aldehyde of hydrogen peroxide as the sole effective added oxidizing agent in the presence of a heteropolyacid of at least one acid-forming element of group VI of the periodic table, in a reaction environment the water content of which is regulated so that the amount of water in the reacted mixture does not exceed about 30% by weight and at a temperature within the range of from about 10° C. to about 100° C.

2,744,929

PRODUCTION OF UNSATURATED CARBOXYLIC ACIDS

Curtis W. Smith and Roy T. Holm, Berkeley, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application September 26, 1952, Serial No. 311,802
19 Claims. (Cl. 260—530)

1. A process of producing an unsaturated carboxylic acid which comprises reacting an unsaturated aldehyde in the presence of a member of the group consisting of selenium and tellurium dioxides with a per oxidizing agent of the group consisting of hydrogen peroxide, sodium peroxide, barium peroxide, tertiary butyl hydroperoxide, benzoyl peroxide, and peracetic, performic and perphathalic acids.

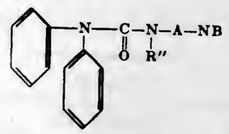
2,744,930

N,N-DIPHENYL-N'-AMINOALKYLENE-UREA DERIVATIVES

John Krapcho, Perth Amboy, and William A. Lott, Maplewood, N. J., assignors to Olin Mathieson Chemical Corporation, New York, N. Y., a corporation of Virginia

No Drawing. Application August 4, 1954, Serial No. 447,927
10 Claims. (Cl. 260—553)

1. Compounds of the class consisting of: free bases having the general formula:



wherein R'' is a radical selected from the class consisting of lower alkyl and lower alkenyl, A is a lower alkylene radical separating the nitrogen atoms by at least two carbon atoms, and NB is a radical selected from the class consisting of amino, mono-(lower alkyl) amino, di(lower alkyl) amino, piperidino, pyrollidino, and morpholino; and the pharmacologically-acceptable acid-addition salts thereof.

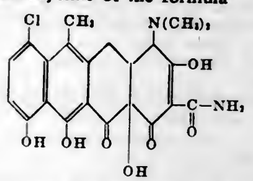
2,744,931

ANHYDROCHLORTETRACYCLINE

Robert Broschard, Pearl River, and George Krupka, Nanuet, N. Y., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application October 11, 1952, Serial No. 314,408
3 Claims. (Cl. 260—559)

1. Compounds selected from the group consisting of anhydrochlortetracycline of the formula



and the hydrochloric, hydrobromic, sulfuric, phosphoric, acetic and picric acid addition salts thereof.

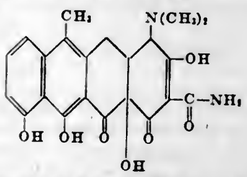
2,744,932

ANHYDROTETRACYCLINE

Coy W. Waller, Nannet, N. Y., and Angela A. Goldman, River Edge, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application October 11, 1952, Serial No. 314,405
3 Claims. (Cl. 260—559)

1. Compounds selected from the group consisting of anhydrotetracycline of the formula:



and the hydriodic acid addition salt thereof.

2,744,933

AMINE-SULFUR DIOXIDE-ADDITION PRODUCTS OF ACETOACETANILIDES

Wilhelm Ehm, Dormagen, Germany, assignor to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application September 29, 1953, Serial No. 383,124
Claims priority, application Germany September 30, 1952
7 Claims. (Cl. 260—562)

1. A process for the production of addition compounds, which comprises contacting about 1 mol of a substituted acetoacetic acid amide of the structural formula:

$$CH_3CO.CH_2CO.NHR$$

in which R is a member selected from the group consist- of phenyl, chlorophenyl, lower-alkylphenyl, naphthyl, and the acetoacetylbenzidine radical, with about 1 mol of an aromatic amine selected from the group consisting of aniline, chloroaniline, lower-alkylaniline, naphthylamine, and benzidine, and sulfur dioxide and at least 1 mol of water.

2,744,934

PROCESS FOR THE PRODUCTION OF CHOLINE HALIDES

Howard C. Klein, Brooklyn, N. Y., and Roland Kapp, Newark, N. J., assignors to Nopco Chemical Company, Harrison, N. J., a corporation of New Jersey

No Drawing. Application October 19, 1951, Serial No. 252,192
8 Claims. (Cl. 260—567.6)

1. A process for the production of a choline halide comprising reacting a methyl halide with dimethylethanolamine in the presence of a catalytic quantity of boron trifluoride etherate.

2,744,935

PROCESS FOR THE MANUFACTURE OF HYDRAZOBENZENES

Hans Johner, Basel, Switzerland, assignor to Ciba Limited, Basel, Switzerland, a Swiss firm

No Drawing. Application December 15, 1952, Serial No. 326,131
Claims priority, application Switzerland December 17, 1951
11 Claims. (Cl. 260—569)

1. In a process for the preparation of a hydrazobenzene by alkaline reduction of a compound selected from the group consisting of nitrobenzene, 2-methyl-1-nitrobenzene and 2-methoxy 1-nitrobenzene and the corresponding azoxy and azo compounds, the improvement which comprises carrying out the reduction by means of metallic iron containing an oxygen-free iron compound of at least one of the elements silicon and carbon, and adding to the reaction mixture at least about one mol of alkali hydroxide for each reduction equivalent required.

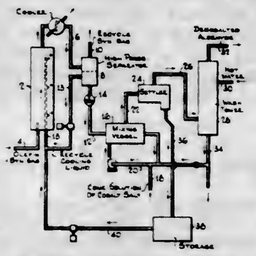
2,744,936

OXO SYNTHESIS USING COBALT SALT OF COBALT CARBONYL

Joseph K. Mertzweiller, Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application February 9, 1952, Serial No. 270,836
11 Claims. (Cl. 260—604)

1. In a carbonylation process wherein olefinic carbon compounds are contacted in a carbonylation zone with CO and H_2 in the presence of a cobalt catalyst under conditions to produce reaction products comprising aldehydes containing at least one more carbon atom than said olefinic compounds and wherein a solution comprising said reaction products and dissolved cobalt catalyst is decobalted to remove and recover cobalt from cobalt-contaminated aldehyde products, the improvement which



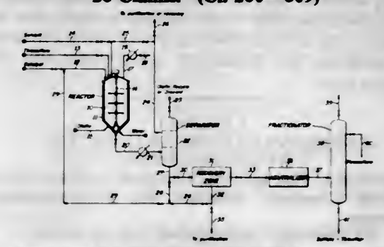
comprises decobalting said contaminated aldehyde product with an aqueous solution of cobaltous ions.

2,744,937

PREPARATION OF SULFONE THIOETHERS

William F. Wolff, Park Forest, and Gordon D. McLeod, Lansing, Ill., assignors to Standard Oil Company, Chicago, Ill., a corporation of Indiana

Application February 29, 1952, Serial No. 274,256
28 Claims. (Cl. 260—609)



1. A process for the preparation of a sulfone thioether which comprises reacting a hydrocarbon thiasulfone with a compound affording at least one olefinic linkage in the presence of a chemical compound which is an acidic condensation catalyst.

2,744,938

REMOVAL OF COLOR IMPURITIES FROM ORGANIC COMPOUNDS

Peter Urban, Jr., Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application July 24, 1952, Serial No. 300,761
12 Claims. (Cl. 260—613)

10. A process for decolorizing 2-tertiary butyl-4-methoxyphenol contaminated with a discoloring impurity which comprises dissolving said phenol in a solvent consisting essentially of ethyl alcohol, mixing the resulting solution with a catalyst-free activated vegetable charcoal at a temperature corresponding to the boiling point of the alcohol and in the presence of hydrogen maintained at a superatmospheric pressure of from about 5 to about 300 pounds per square inch to absorb the discoloring impurity in said charcoal, and separating the thus treated solution from the charcoal.

2,744,939

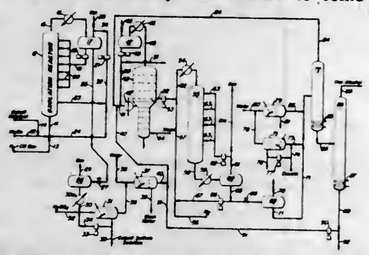
PRODUCTION OF ALCOHOLS OF HIGH PURITY BY IMPROVED OXO PROCESS

William E. Kennel, Munster, Ind., assignor to Standard Oil Company, Chicago, Ill., a corporation of Indiana

Application November 26, 1954, Serial No. 471,318
4 Claims. (Cl. 260—638)

1. In an oxo process wherein an olefin having in the range of 3 to 15 carbon atoms per molecule is reacted with carbon monoxide and hydrogen in the presence of an oil soluble cobalt catalyst under a pressure of about 2,500

to 4,000 p. s. i. at a temperature in the range of 250 to 400° F. to produce an oxolation product stream, the oxolation product stream is treated under conditions to separate cobalt therefrom, the treated stream is subjected to a flash distillation step to separate lower boiling materials and bottoms from an alcohol-aldehyde fraction, the alcohol-aldehyde fraction is hydrogenated and the hydrogenated product is finally fractionated to remove com-



ponents lower boiling than the alcohol product, the improved method of operation which comprises distilling not only products lower boiling than alcohol in the final fractionation step but also at least about 10 per cent of the produced alcohols and returning the overhead from the final fractionation step to the stream entering the flash distillation step so that products lower boiling than produced alcohols are discharged solely from the flash distillation step.

2,744,940

CHLORINATION OF SATURATED HYDROCARBONS

Herman Pines, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application July 10, 1952, Serial No. 298,195
14 Claims. (Cl. 260—648)

1. A process for producing a monochloride of an alkylcycloparaffin which comprises reacting an alkylcycloparaffin containing a tertiary carbon atom and having at least 6 carbon atoms per molecule and a tertiary chloroalkane to form a monochloride of said alkylcycloparaffin and an isoparaffin in the presence of hydrogen chloride and at least one mineral acid catalyst selected from the group consisting of sulfuric acid and phosphoric acid at a reaction temperature of from about −30° to about 200° C.

2,744,941

POLYIODINATED BENZOTRIFLUORIDES

Robert J. Hartle, Worthington, and Glenn W. Kinzer, Columbus, Ohio, assignors, by mesne assignments, to American Bosch Arma Corporation, a corporation of New York

No Drawing. Application March 4, 1953, Serial No. 340,382
4 Claims. (Cl. 260—651)

3. A high density liquid reaction product having a density of not less than 2.5 g./ml. at 85° C. and having a freezing point not greater than 75° C. produced by the process comprising heating to a temperature within the range of 60° C.–100° C. a mixture of iodine, an oxidizing iodine compound selected from the class consisting of iodic acid, iodic acid anhydride and an alkali metal iodate, and a benzotrihalide selected from the group consisting of benzotrifluoride and meta-bromobenzotrifluoride in a medium of concentrated sulfuric acid, the iodine and the oxidizing iodine compound being present in molecular porportions of at least about four to one and recovering the high density polyiodobenzotrifluoride liquid thus produced.

2,744,942

PRODUCTION OF NITRATION GRADE AROMATICS BY CATALYTIC HYDROFORMING, SOLVENT EXTRACTION AND CLAY TREATMENT

Charles Wankat, Brookfield, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application March 8, 1952, Serial No. 275,655
2 Claims. (Cl. 260—674)

1. A process for producing a nitration grade aromatic which comprises subjecting a gasoline fraction to reforming in the presence of a catalyst comprising platinum, separating an aromatic fraction from the products of said reforming, subjecting said aromatic fraction to treatment with a selective solvent to separate an aromatic concentrate, and subjecting said aromatic concentrate to treatment with an aluminum silicate at a temperature of from about 275° F. to below that at which cracking occurs.

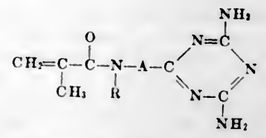
2,744,943

METHACRYLAMIDOACYLGUANAMINES

Leo S. Luskin and Peter L. de Benneville, Philadelphia, Pa., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application August 18, 1954, Serial No. 450,782
15 Claims. (Cl. 260—80.5)

1. A compound from the class consisting of chemical substances of the formula



and salts thereof formed with strong inorganic acids, where R is a member of the class consisting of hydrogen and alkyl, alkenyl, aralkyl and cycloalkyl groups and A is an alkylene group containing one to eight carbon atoms.

ELECTRICAL

2,744,944

ROTATING ELECTRIC PHOSPHORUS FURNACE

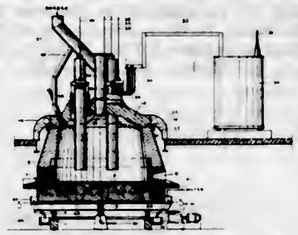
Marcus M. Striplin, Jr., and Stanford A. Hardin, Florence, and William H. Bundy, Sheffield, Ala., assignors to Tennessee Valley Authority, a corporation of the United States

Application December 17, 1954, Serial No. 476,096
7 Claims. (Cl. 13—10)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. An electric furnace for smelting phosphate rock which comprises in combination a vertical, round, rotatably mounted crucible having a carbon hearth; means for rotating the crucible at slow, controlled speed; a stationary cover superimposed on the crucible; a gas-tight seal between the crucible and the cover; three vertical graphite electrodes disposed at the apices of an equilateral triangle, each of the electrodes having a diameter which may be calculated

$$D=k\frac{P^{0.44}}{3}$$

wherein D is electrode diameter in inches, P is total furnace power input in watts, and k is any constant in the



range from 0.036 to 0.043; said electrodes being disposed to extend substantially vertically through the cover at a center-to-center distance which may be calculated

$$C=kP^{0.50}$$

wherein C is center-to-center electrode distance in feet, P is total furnace power input in watts, and k is any constant in the range from 0.002 to 0.0026; each electrode being at a distance from the interior wall of the crucible which may be calculated

$$S=kP^{0.50}$$

wherein S is the distance from the electrode center to the interior wall of the crucible in feet, P is the total furnace power input in watts, and k is any constant in the range from 0.0015 to 0.0019; means, comprising a suitable transformer tap and electrical connections, for energizing the electrodes with 3-phase alternating current with one electrode on each phase with a total furnace power input in the range from 30 to 50 kilowatts per square foot of hearth area; means for raising and lowering the electrodes vertically through a distance necessary to maintain the peripheral ohm factor r, calculated

$$r=\frac{E}{I}\pi D$$

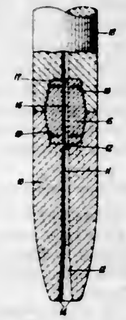
wherein E is the electrode voltage in volts, I is the electrode current in amperes, and D is the electrode diameter in inches, in the range from 0.75 to 1.25; and means for maintaining a selected uniform burden depth in the furnace.

2,744,945

GRAPHITE FURNACE ELECTRODE FOR A STABILIZED ARC

Harry V. Johnson, Niagara Falls, N. Y., assignor to Union Carbide and Carbon Corporation, a corporation of New York

Application March 11, 1955, Serial No. 493,637
4 Claims. (Cl. 13—18)



4. The combination of a pair of graphite arc furnace electrode sections and a threaded graphite nipple joining such sections, each of the electrode sections having therein a longitudinal hole large enough to stabilize an arc being formed between said electrode and material in the furnace, and substantially reduce the presence of an arc on a lower outer side surface, said hole having a diameter of but a minor portion of the electrode diameter, substantially circular in cross section and contiguous to the electrode longitudinal axis and said nipple providing a diaphragm to preclude any updraft through said hole.

2,744,946

ELECTRIC FURNACE AND HEATING UNIT THEREFOR

Stephen Lewicki, Rose Valley, Pa., assignor to L & L Manufacturing Company, Upland, Pa., a firm

Application November 25, 1953, Serial No. 394,470
9 Claims. (Cl. 13—22)



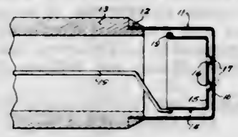
1. A heating unit for an electric furnace comprising a heat resisting brick of friable material, a longitudinally extending channel of refractory material having integral ribs extending longitudinally from the external walls thereof for interlocking engagement within a recess formed in said brick, and a heating element fitted within said channel and supported in its entirety therein adjacent to a longitudinal opening therealong.

2,744,947

RADIATION THERMOCOUPLE

William A. Ray, North Hollywood, Calif., assignor to General Controls Co., Glendale, Calif., a corporation of California

Application April 5, 1954, Serial No. 420,932
12 Claims. (Cl. 136—4)



11. A thermoelectric generating device consisting of a pair of cup-shaped members of thin metal having dissimilar thermoelectric properties; one of the members being somewhat smaller than the other and spacedly disposed therein with its end wall adjacent and generally parallel to the end wall of the other and larger of the members; the end wall of said one of the members having an elongated indention forming a hollow projection engaging the end wall of the other of the members and secured to form therewith a substantially linear hot-junction; the outer surface of the larger of the members being adapted to be faced toward a source of thermal radiation.

2,744,948

PRIMABLE ELECTRIC BATTERIES EMPLOYING CUPROUS CHLORIDE

Jean Salauze, Paris, France, assignor to Societe des Accumulateurs Fixes et de Traction (Societe Anonyme), Romainville, France, a French company

Application November 6, 1953, Serial No. 390,671
Claims priority, application France November 19, 1952
15 Claims. (Cl. 136—100)

14. A primary cell comprising a first shallow rectangular tray-shaped container of thermoplastic material comprising flat surfaces constituting the sides and the edges of said container, said container constituting one half of the external casing of said battery, a flat positive electrode placed in said container, and comprising es-

sentially a sintered porous copper body impregnated with cupric chloride which reacts with the copper of the body to yield cuprous chloride as active material, liquid absorbent means placed with said positive electrode in said first container, a second container identical to the first, a flat negative electrode located thereon, said negative electrode consisting substantially of magnesium, liquid absorbent means placed with said negative electrode in said second container, a finely porous separator



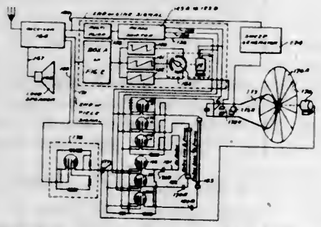
coextensive with said both containers and interposed between the said flat surfaces thereof which are sealed through said separator, copper wire connections welded one to each said positive and negative electrodes, said connections passing through and extending out of said casing between said sealed flat surfaces, and at least one opening formed in each shallow container, by means of which the said battery, assembled in the dry state may be activated for use by temporary immersion in an electrolyte.

2,744,949

TELEVISION SYSTEMS

Pierre Marie Gabriel Toulon, Paris, France, assignor, by direct and mesne assignments, of seventy-five per cent to Products and Licensing Corporation, New York, N. Y., a corporation of Delaware, and twenty-five per cent to Nelson Moore and William D. Hall, as joint tenants

Application June 18, 1951, Serial No. 232,075
12 Claims. (Cl. 178—5.2)



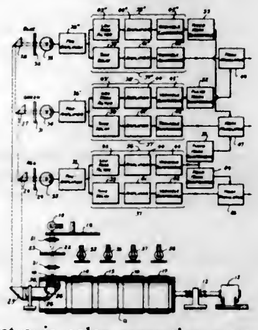
1. In a television system, a cathode ray tube having a grid and including deflection means which may be energized to displace the beam in a first direction, scanning means for moving the beam perpendicular to the first direction in a series of lines, first and second sweep generators synchronized to operate at the same frequency but displaced in phase from each other, switching means for alternately connecting the first and second sweep generators to said deflection means, a video receiver, circuit means for applying the output of the receiver to said grid including delay means for delaying excerpts of the signals, said circuit means including switching means operable to switch the delay means out of circuit with said grid, and means for controlling both the switching means and the circuit means to switch the second sweep generator in circuit with the deflection means simultaneously with the switching of a delayed signal to said grid.

2,744,950

ONE DIMENSIONAL UNSHARP MASKING

Vincent C. Hall, Stamford, Conn., and John A. C. Yule, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application October 5, 1951, Serial No. 249,934
7 Claims. (Cl. 178—5.4)



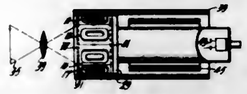
1. In an electronic color correction system, the combination of a subject in color to be scanned, means for scanning said subject with a single beam of light, means for generating a first signal in response to said beam representative of variations in one color of said subject, means for generating a second signal in response to said beam representative of variations in a different color of said subject, means for delaying the first signal, means for selectively amplifying the low frequency components of said second signal, and means for modulating the amplitude of the delayed first signal in accordance with the amplitude of the selectively amplified second signal.

2,744,951

REGISTRATION IN COLOR TELEVISION

Walter G. Gibson, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application August 1, 1952, Serial No. 302,052
The terminal 15 years of the term of the patent to be granted has been disclaimed
7 Claims. (Cl. 178—5.4)



1. Electron controlling apparatus for an image orthicon including an image section having at opposite ends a photocathode and a target, respectively, said apparatus comprising, a plurality of pairs of electrically independent coils positioned about the periphery of said image section, one pair for each corner of such target and means to energize said coils substantially statically in a manner to control the shape of the impingement pattern upon said target of electrons derived from said photocathode, said coils being located with respect to said target such that one coil of each pair is arranged to control vertical deflection of electrons in its location and the other coil of the pair is arranged to control horizontal deflection of such electrons.

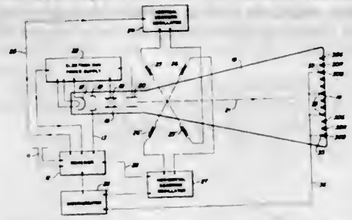
2,744,952

COLOR TELEVISION APPARATUS

Ernest O. Lawrence, Berkeley, Calif., assignor to Chromatic Television Laboratories, Inc., New York, N. Y., a corporation of California

Application June 29, 1951, Serial No. 234,189
19 Claims. (Cl. 178—5.4)

1. In a polychrome television image producer wherein a cathode-ray beam is arranged to be deflected along a series of substantially parallel and adjacent paths collectively forming repeating scanned fields and is adapted to impact a phosphor target formed from a multiplicity of adjacent strips each of a width less than that of an image point to be reproduced, with adjacent strips formed of different compositions such that the group when impinged by the deflected cathode-ray beam is adapted successively to develop light in several component colors additively producing white, the scanning linearizing circuits comprising means to develop a signal pulse series



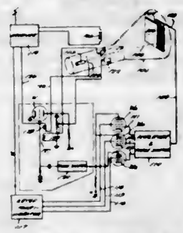
indicative of the rate of repetition of a single selected color component in the representation of an image area concurrently with the production of the said color image detail in the same selected color, means to generate a local signal indicative of an optimum rate of color repetition in the single color, means for comparing the two signals as to phase to develop a control signal representative of the departure from optimum, and means to accelerate and decelerate the scanning along each path under the control of the developed signals.

2,744,953

COLOR TELEVISION SYSTEMS

Haig Antranikian, Lakewood, N. J.

Application January 28, 1952, Serial No. 268,610
9 Claims. (Cl. 178—5.2)



1. In a color television system, and in combination, a screen having a cyclically repeated plurality of sets of parallel strips, each set comprising strips corresponding in number and in predetermined order to a number of component colors to be reproduced, means for scanning the said screen by moving an electron beam transversely of the strips for successively scanning the lines, means responsive to the electron beam for generating a signal in timed relation to the scanning thereby of the strips, and color selecting means controlled by the said signal and operating to decrease the scanning speed of the beam over predetermined strips of the said sets.

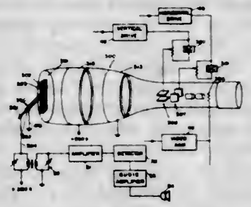
2,744,954

TELEVISION RECEIVER HAVING A SOUND-SIGNAL DETECTOR ELECTRODE IN ITS PICTURE TUBE

James E. Robinson, Eggertsville, N. Y., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts

Original application January 3, 1948, Serial No. 460. Divided and this application February 12, 1949, Serial No. 76,167
4 Claims. (Cl. 178—5.8)

1. The combination with a picture-reproducing cathode ray tube containing a fluorescent screen and a cathode ray source, of means for separating out sound pulses from a combined sound and video signal comprising means to modulate the intensity of said ray in accordance with said combined signal, a metal signal strip positioned near one vertical edge of said fluorescent screen means for deflecting said ray horizontally and vertically so that all of the horizontal deflections of said cathode ray cross said strip, a shield of conducting low emission material surrounding



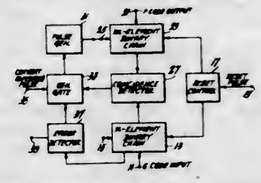
said strip and containing a slit through which the cathode ray may strike the strip when said pulses occur, a coaxial cable extending through the envelope of the tube with its outer conductor in contact with the glass of the tube and connected to the shield and its inner conductor connected to the strip, an output circuit connected to the inner conductor, and an independent circuit connected to the outer conductor and providing a path to ground.

2,744,955

REVERSIBLE ELECTRONIC CODE TRANSLATORS

Arthur Eugene Canfora, Brooklyn, N. Y., Anthony Liguori, Hackensack, and Eugene Richard Shenk, Bergenfield, N. J., and Hajime James Kishi, New York, N. Y., assignors to Radio Corporation of America, a corporation of Delaware

Application August 24, 1953, Serial No. 375,995
16 Claims. (Cl. 178—23)



1. A reversible code translating circuit arrangement, including a plurality of storage circuits in the form of input bistable reciproconductive circuits connected as a binary chain, there being one such reciproconductive circuit for each element of a character as expressed in the code to be translated, means responsive to code signals expressed in the code to be translated, to trigger said reciproconductive circuits in accordance with the nature of the signal elements of the character to be translated, a number of output bistable reciproconductive circuits, there being one such reciproconductive circuit for each element of a character as expressed in another code, an astable reciproconductive circuit, a gating lock-in reciproconductive circuit coupled to said astable reciproconductive circuit, normally holding the latter inoperative by an applied holding bias voltage, a source of operate or convert pulses synchronized with the utilization apparatus, means to apply said operate or convert pulses to said gating reciproconductive circuit to remove said bias voltage and permit said astable reciproconductive circuit to run freely, a plurality of coincidence points, a plurality of resistive elements connected to coincidence points, a plurality of plural electrode electron flow path devices connecting said coincidence points to said astable reciproconductive circuit, means to apply the output of said astable reciproconductive circuit to said output bistable reciproconductive circuits connected as a binary chain,

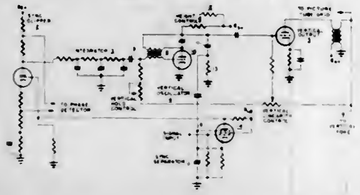
said output reciproconductive circuits producing voltages whereby a single one of said coincidence points will receive a potential above a predetermined value, means to apply said voltage transition to said gating lock-in reciproconductive circuit to block said astable reciproconductive circuit, thereby leaving the output reciproconductive circuits with the proper binary code combination for the character to be translated as expressed in said other code, a switching element interposed between said astable reciproconductive circuit and the counting chain comprising said plurality of bistable reciproconductive circuits and counting chain comprising said number of bistable reciproconductive circuits to apply the output pulses of the astable reciproconductive circuit selectively to said chains, means to reset said input reciproconductive circuits to the initial condition, said means including further means connected to said gating lock-in reciproconductive circuit to reset said output reciproconductive circuits to a predetermined condition, a validity checking circuit comprising input and output terminals, a connection from the input terminal of said validity checking circuit to each of said plurality of reciproconductive circuits, means biasing said validity circuit to produce current at said output terminal upon the state of conduction of said reciproconductive circuits, failure to represent a valid character combination, and means to apply said current to said lock-in reciproconductive circuit to control the operation of said astable reciproconductive circuit.

2,744,956

MEANS FOR IMPROVING TELEVISION INTERLACE CONTROL

Glenn L. Haugen and George D. Wofford, Baltimore, Md., assignors to Bendix Aviation Corporation, Towson, Md., a corporation of Delaware

Application May 27, 1954, Serial No. 432,706
2 Claims. (Cl. 178—69.5)



1. A television receiver circuit comprising a vertical oscillator circuit responsive to integrated synchronizing pulses in a television signal, means in the output circuit of the said oscillator circuit responsive to each cycle of operation of said oscillator to generate a voltage impulse of selected duration, said means comprising a resistor-capacitor network, means in said receiver circuit responsive to a voltage impulse of the character of said generated impulse to render said oscillator circuit insensitive to signals external thereto for the duration of said voltage impulse, and means applying said generated voltage impulse to the last named means.

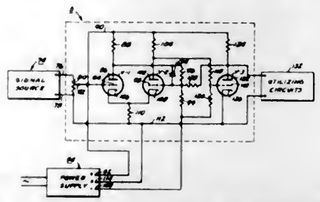
2,744,957

IMPROVED ELECTRONIC TRIGGER CIRCUIT

Lawrence M. Carver, Stamford, Conn., assignor to C. G. S. Laboratories, Inc., Stamford, Conn., a corporation of Connecticut

Application November 12, 1952, Serial No. 320,080
11 Claims. (Cl. 178—70)

9. For use with a trigger circuit which is arranged to be responsive to the leading and trailing edges of pulses traveling along a transmission line and wherein the circuit is triggered from a first stable condition into a second stable condition when the voltage in the leading edge of each of said pulses reaches a first predetermined magnitude and wherein the circuit is triggered back into its first condition when the voltage in the trailing edges of each of said pulses reaches a second predetermined magnitude, a bias-distortion correcting circuit for said trigger circuit arranged to establish a predeterminable minimum difference between said first and second predetermined magnitudes, a tube in said bias correcting circuit having at least a cathode, a control grid, and an anode, a load impedance connected in the anode circuit of said tube, first circuit means connecting a first portion of said trigger circuit to said control grid, whereby the conduction of current through said tube is changed by the triggering of said trigger circuit from said first condition into said second condition, thereby producing a voltage change across said load impedance, and second circuit means connecting said load impedance to a second portion of said trigger circuit to apply said voltage change to said second portion, thereby further locking said trigger circuit in said second condition, whereby the voltage in each of the trailing edges of said pulses must differ from said first predetermined magnitude by said predetermined minimum difference before said trigger circuit can be triggered from its second condition back into its first condition.

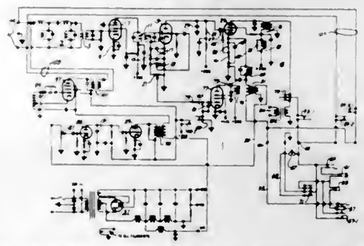


2,744,958

CARRIER TELEPHONE SYSTEM

Ellsworth A. Hosmer, Kenwood, Calif.

Application July 30, 1951, Serial No. 239,292
12 Claims. (Cl. 179—1)



1. A carrier current telephone system for operation on individual subscriber circuits including a microphone, a telephone receiver, a signalling device and an answering switch for transferring connections between the signalling device and the microphone and telephone receiver; comprising a filter for selecting a receiving carrier frequency, a detector connected to said filter, a local source of current for actuating said signalling device, means responsive to current from said detector for connecting said source to said signalling device comprising a vacuum tube having a control electrode and having an output circuit which may be changed from a conductive state to a substantially non-conductive state by changing the potential on said control electrode, means for normally biasing said control electrode to produce one of said states, means responsive to said detector current to change the potential of said electrode to produce the other of said states, a relay in said output circuit and responsive to changes of state therein, said relay including a pair of contacts which are open when said circuit is in the state produced when said control electrode is normally biased and closed when the potential of said electrode is changed in response to detector current, said signalling current source being connected in series with said contacts, and means actuated by said answering switch for disabling said detector-current responsive means.

2,744,959

PULSE-CODE MODULATION TRANSMITTER

Johannes Anton Greefkes, Frank de Jager, and Piet van Tilburg, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application April 14, 1951, Serial No. 221,023
Claims priority, application Netherlands May 17, 1950
7 Claims. (Cl. 179—15)



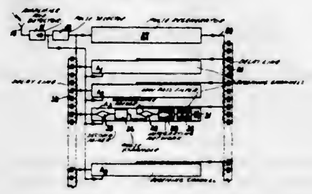
1. A transmitter for emitting in time-multiplex pulse-code modulation signals, comprising a synchronization pulse generator, a plurality of signal channels, means to supply an operating pulse and a channel signal to the input of each channel to produce a signal pulse which may be present or absent as a function of the channel signal to be emitted, and means to emit cyclically at a predetermined rate a synchronizing pulse from said generator and a signal pulse from each of said channels, each cycle being constituted by a sequence of intervals during one of which the synchronizing pulse is emitted and during the remainder of which the present or absent signal pulses from the respective channels are emitted, said emitted pulses being substantially equal and coinciding in time position with respective pulses of a series of equidistant pulses, and means to supply signalling pulses to the input of each channel, each of said channels further including means responsive to said signalling pulses for suppressing all the signal pulses in the signal pulse intervals associated therewith for the duration of said signalling pulses.

2,744,960

TIME-MULTIPLEX PULSE-CODE MODULATION SIGNAL TRANSMISSION SYSTEM

Johannes Anton Greefkes and Piet van Tilburg, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application May 9, 1951, Serial No. 225,314
Claims priority, application Netherlands June 23, 1950
7 Claims. (Cl. 179—15)



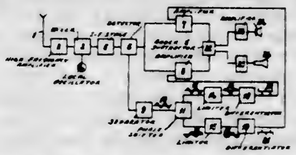
1. In a time-multiplex pulse-code modulation signal-transmission system wherein successive trains of signal pulses are transmitted, each train having a like number of pulse intervals and being preceded by a synchronization pulse; a receiver for regenerating said transmitted pulses both in form and time of occurrence and for distributing them in cyclical sequence; said receiver comprising a synchronization pulse selector responsive to the received pulses for separating the synchronization pulses from the trains of pulses, a synchronization pulse regenerator comprising an input filter tuned to the repetition frequency of said synchronization pulses, an amplitude limiter coupled to the output of said filter, and a differentiating network coupled to the output of said limiter, a delay network coupled to the output of the differentiating network in said regenerator and having a series of spaced taps each yielding substitution pulses, and a plurality of receiving channels corresponding in number to the number of intervals in a train, each channel including a coincidence mixer, means to supply the received pulses and the substitution pulses derived from a respective tap of said delay network to the input of said mixer, and means to derive the separated and regenerated signal pulses from the output of said mixer.

2,744,961

RECEIVER FOR TWO AMPLITUDE-MODULATED WAVES

Johannes Josephus Alphonsus Peek, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application June 21, 1951, Serial No. 232,716
Claims priority, application Netherlands July 1, 1950
4 Claims. (Cl. 179—15)



1. A receiver for the simultaneous reception of an incoming signal constituted by two distinct carriers having a predetermined frequency displacement, each carrier having an amplitude modulation component, said receiver comprising means to demodulate said signal and including an amplitude detector responsive to both amplitude-modulated carriers, first and second amplifying channels having the same amplification factor, the input of both channels being coupled to the output of said detector, control means coupled to said detector to render said first channel operative periodically only at the instants an oscillation whose frequency corresponds to said frequency displacement attains its maximum value and to render said second channel operative periodically only at the instants said oscillation attains its minimum value, and combining means coupled to the output of both channels to combine the outputs thereof positively to develop a first output voltage and to combine the outputs thereof differentially to produce a second output voltage.

2,744,962

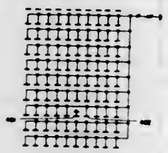
SWITCHING SELECTOR REPEATER

Pier Bakker, Chicago, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware

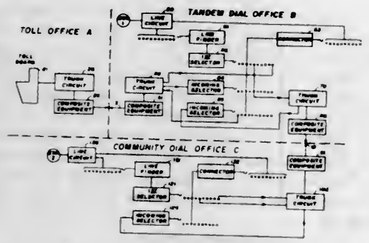
Application January 6, 1955, Serial No. 480,190
11 Claims. (Cl. 179—18)

1. For use in a telephone system having a main office and a suboffice together with means including a group of switching selector repeaters in said suboffice for completing connections between lines of calling subscribers in said suboffice and lines of called subscribers in said suboffice and in the main office, each selector repeater having a wiper set, including a special wiper, with a plurality

of primary and secondary positions, bank contacts in the selector repeaters accessible to the wipers, certain of the contacts accessible to the special wiper having various electric potentials connected thereto, those bank contacts accessible to the special wiper in each switch and in all switches, having the same potential connected thereto, being multipled to each other, means operated in response to the initiation of a call by one of said calling subscribers for extending his line to one of said selector repeaters and to the main office by way of said one selector repeater; means in said one selector repeater operated responsive to a first and a second series of impulses for repeating said impulses to the main office and for moving the wipers to a primary position thereof and then to a secondary position thereof, means in said one selector repeater operated responsive to its special wiper encountering a certain one of said potentials connected to the bank contact accessible thereto in said secondary position for restoring the wipers to normal, control means independent of said bank contacts and operated only in certain of the primary positions of the wipers, said third-mentioned means operated responsive to a certain third series of impulses for repeating said third series of impulses to the main exchange and for moving the wipers into one of said certain primary positions thereof, thereby to operate said control means, and means in said one selector repeater operated responsive to said operation of the control means for moving the wipers to a desired secondary position, for extending connections to the wiper set and for disconnecting the calling line from the main office.

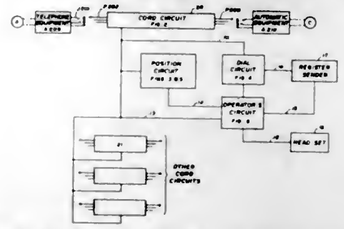


2,744,963
MULTI-OFFICE TELEPHONE SYSTEM
William W. Pharis, Rochester, N. Y., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application December 14, 1953, Serial No. 397,951
14 Claims. (Cl. 179—27)



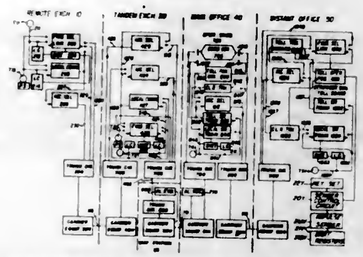
1. In a telephone system, a first trunk circuit and a second trunk circuit, a trunk line interconnecting said trunk circuits and comprising a communication channel and a derived signal path, first and second classes of calling lines, switching equipment, means for extending a connection from either said first or said second classes of calling lines to said first trunk circuit, means in said first trunk circuit for repeating switch directing impulses from either said first or said second classes of calling lines to said second trunk circuit over said derived signal path, means in said second trunk circuit for repeating the switch directing impulses received over the derived signal path to said switching equipment, means in said first trunk circuit operative only in the event that a connection is extended thereto from said first class of calling line for transmitting a preliminary impulse over said derived signal path to the second trunk circuit, and means in said second trunk circuit responsive to the receipt of the preliminary impulse for identifying the class of the calling line to the switching equipment.

2,744,964
TOLL SWITCHBOARD
Leon H. Reagan, Richland, Wash., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application January 16, 1953, Serial No. 331,627
17 Claims. (Cl. 179—27)



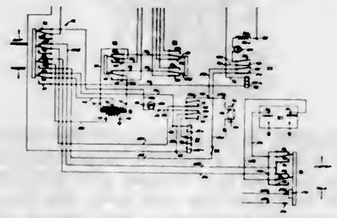
1. In a telephone system, an operator's position comprising a cord circuit including a front and a rear sleeve conductor, an operator's headset and an operator's circuit, a position circuit accessible to said cord circuit, said operator's circuit comprising a talking path including a two winding induction coil for connecting said headset with said position circuit, means for balancing said induction coil to avoid sidetone in said operator's headset, control means for switching said anti-sidetone balancing means into and out of said talking path and means for operating said control means depending upon the marking extended over at least one of said sleeve conductors to said position circuit.

2,744,965
CARRIER TYPE INTERTOLL DIALING TELEPHONE SYSTEM
Imre Molnar, Chicago, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Original application July 10, 1947, Serial No. 760,136, now Patent No. 2,603,717, dated July 15, 1952. Divided and this application August 13, 1951, Serial No. 241,505
20 Claims. (Cl. 179—27)



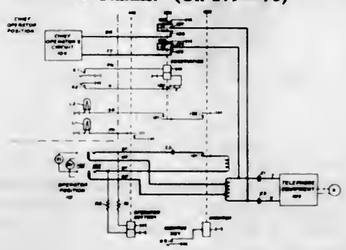
1. A telephone system comprising a switchboard, a carrier link, automatic switching apparatus of the multistage type including at least one switching stage arranged for a hunting operation requiring a time interval to find an idle succeeding switching stage, means controllable from said switchboard for transmitting a first carrier frequency signal disposed above the audio frequency range over said carrier link to effect seizure of said switching apparatus, means then controllable from said switchboard for selectively interrupting said first carrier frequency signal transmitted over said carrier link to effect transmission of successive digits to said switching apparatus in order selectively to control operation of the successive switching stages, means responsive to said hunting operation requiring a time interval by said one switching stage for returning during said time interval a second carrier frequency signal disposed above the audio frequency range over said carrier link, means responsive to said second carrier frequency signal returned over said carrier link for returning a corresponding delay signal to said switchboard, and a modulator for modulating with an audio frequency signal originating at said switchboard said first carrier frequency signal transmitted over said carrier link.

2,744,966
INTERCOMMUNICATION SYSTEM
Allan C. Bernstein, Great Neck, N. Y., assignor to Executone Inc., New York, N. Y., a corporation of New York
Application October 5, 1950, Serial No. 188,563
15 Claims. (Cl. 179—39)



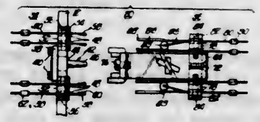
1. In an intercommunicating system comprising a plurality of stations, communications circuits interconnecting said stations, a transducer individual to each station and a signalling means comprising a series connected visual and single stroke audible chime signalling device at each of said stations, means at each of said stations for completing said communicating circuit from the transducer thereat to the transducer at a selected one other of said stations, and means including circuit connections controlled by completion of said communication circuit for automatically operating said signalling device at the selected station to which the communications circuits have been completed.

2,744,967
MEANS FOR REDUCING CONTACT CAPACITANCE
Leon H. Reagan, Richland, Wash., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application January 16, 1953, Serial No. 331,628
4 Claims. (Cl. 179—78)



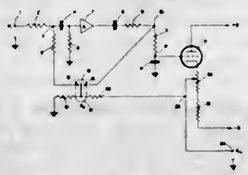
1. In a telephone system, a circuit means for carrying conversation currents, a relay having at least two pair of opened contact springs, means for connecting said open contacts in series in said circuit means whereby a section of said circuit means is isolated between said open contacts, break contacts operatively associated with the springs of one of said open contacts, means including said break contacts for grounding said isolated section, and means for operating said relay thereby closing said open contacts to complete said circuit means and opening said break contacts to remove said ground connection.

2,744,968
POSITION-THEN-LOCK JACK
James M. Blackhall, Galion, Ohio, assignor to North Electric Company, Galion, Ohio, a corporation of Ohio
Application May 15, 1951, Serial No. 226,372
12 Claims. (Cl. 179—91)



1. In electric apparatus, a jack comprising a pair of separable units, each unit including a plurality of banks of conductors, said banks of conductors being arranged in a similar manner on each unit whereby each bank on one unit is paired with a bank on the other unit and actuator means movable to force the conductors of each one of said banks of said one unit in succession into engagement with the contactors of the paired banks of the other unit.

2,744,969
D. C. AMPLIFIER
William D. Peterson, Long Beach, Calif., assignor to North American Aviation, Inc.
Application August 4, 1952, Serial No. 302,461
1 Claim. (Cl. 179—171)

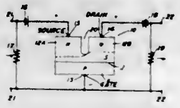


Means for producing a direct current output signal directly proportional to a direct current input signal comprising a single pole double-throw switch operable at predetermined frequency, an alternating current amplifier having an odd number of voltage amplification stages, a capacitor connecting said input signal to said amplifier. a resistor connecting said input signal to a fixed terminal of said switch, a second capacitor connected to the output of said amplifier, means connecting the other side of the second capacitor to the other fixed terminal of said switch, a cathode follower, a filter connecting said other fixed terminal to the input of said cathode follower, and voltage divider means connecting a portion of the output of said cathode follower to the movable terminal of said switch, said movable terminal and the input to said amplifier being impedance connected to ground, whereby the output of said cathode follower is directly proportional to said input signal.

2,744,970
SEMICONDUCTOR SIGNAL TRANSLATING DEVICES
William Shockley, Madison, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application August 24, 1951, Serial No. 243,541
8 Claims. (Cl. 179—171)

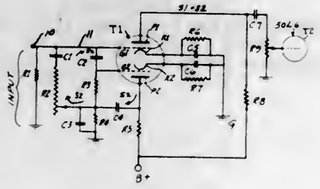
1. In combination, a semiconductive body including a first zone of one conductivity type and a second zone of

opposite conductivity type contiguous with said first zone and forming a rectifying junction therebetween, source and drain connections to said first zone spaced apart therealong near opposite ends of said rectifying junction, and a gate connection to said second zone; an input circuit connected between the source and gate connections including an input signal source and means for biasing said junction in reverse to a high impedance condition



and to discourage minority carrier injection into the first zone from said second zone; and an output circuit connected between the source and drain connections including a load and means for biasing the drain connection relative to the source connection so as to supply majority carriers to the first zone from said source connection and to collect majority carriers from said first zone to said drain connection.

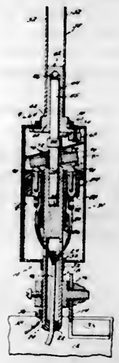
2,744,971
HIGH FIDELITY AUDIO FREQUENCY AMPLIFIER
John D. Llopes, Philadelphia, Pa.
Application July 12, 1951, Serial No. 236,383
1 Claim. (Cl. 179—171)



A high fidelity amplifier comprising a pair of triodes, each triode having a cathode, grid and plate, one triode being adapted to amplify lower audio frequency components of an applied input signal, the second triode being used to amplify the higher audio frequency components of said applied input signal, a feedback circuit to feed back amplified signals from said second triode to said first triode 180° out of phase with said applied input signal, said feedback circuit including a plurality of condensers and a resistor in series, one end of said feedback circuit being connected to the plate of said second triode and the other end of said feedback circuit being connected to the grid of said first triode, the grid of said second triode being connected to the grid of said first triode through one of said plurality of condensers, a voltage source being applied to the plate of each of said triodes through resistors, the plates of said triodes being joined together through a series of resistors, the cathodes of each triode being connected to ground through a resistor and condenser connected in parallel, the input signal being applied across a resistor connected directly at one end to the grid of said first triode, the other end of the last mentioned resistor being connected to ground, and an output signal being taken from the plate of said first triode and applied across a condenser and resistor in series to ground.

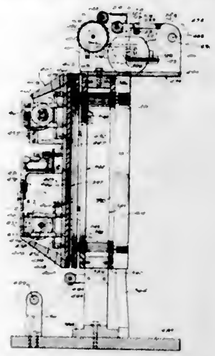
2,744,972
SWITCHING SYSTEM
Edward A. Davis, Harwichport, Mass.
Application August 10, 1953, Serial No. 373,191
10 Claims. (Cl. 200—23)

1. A switching system comprising in combination, a central support, a contact disc mounted to tilt in all directions on the support, a plurality of stationary electrical contacts mounted on said support in spaced relation to each other and in contactable proximity to the periphery of the contact disc, a lever disc of magnetic material mounted in engageable proximity to the opposite face of the contact disc from said contacts to tilt in all directions into tilting engagement with the contact disc to tilt the contact disc into electrical contact with said



contacts selectively in accordance with the direction of tilt of said lever disc, a rotatable magnet mounted on said support to move in a circular path proximate the periphery of said lever disc, said lever disc being in a state of continuous attraction to said magnet whereby said lever disc is tilted to tilt the contact disc into contact with said contacts selectively in accordance with the rotated position of the magnet relative to the support.

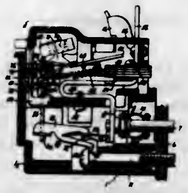
2,744,973
CONTROL UNIT FOR TYPE SETTING MACHINE
Blackwell K. Murchison, Brooklyn, N. Y.; Bessie F. Murchison, executrix of said Blackwell K. Murchison, deceased
Original application February 21, 1951, Serial No. 212,054. Divided and this application December 12, 1952, Serial No. 325,548
5 Claims. (Cl. 200—46)



1. In a type setting machine, a control unit comprising a frame, a group of primary contact pins slidably mounted on said frame, a group of secondary contact pins slidably mounted on said frame, means for selectively resiliently urging said contact pins outwards, a tape guide back plate slidably mounted on said frame and having openings through which the contact ends of said pins engage, a cover hingedly mounted on said frame, means for latching said cover closed across said tape guide plate, a tape guide front plate mounted on said cover opposed to said back plate and having openings through which

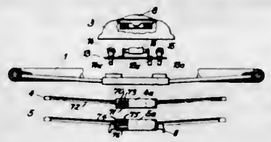
the contact ends of said pins may engage, group selector contact plates for selecting groups of type slidably mounted on said cover behind said front plate, a type selector contact plate for selecting a piece of type for a selected group of type slidably mounted on said cover behind said front plate, means for periodically drawing a tape between said back and front plates while in separated positions and including an electric motor drive, and means for forcing said contact plates towards said tape guide plates for engaging said contact plates against said pins.

2,744,974
CIRCUIT BREAKER
Leslie L. Baird, Secane, Pa., assignor to General Electric Company, a corporation of New York
Application August 3, 1953, Serial No. 372,079
4 Claims. (Cl. 200—50)



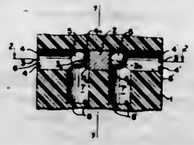
1. In combination, panel structure having an electrical conductor associated therewith, a circuit breaker including a base which is provided with a disconnect device for electrically connecting said circuit breaker to said conductor, releasable structure comprising an element extending outwardly from said panel structure, said element having mounted thereon a retaining portion which retains said base adjacent said panel structure and prevents disconnection of said disconnect device from said conductor until said retaining portion is withdrawn a predetermined minimum distance relative to said panel structure, said circuit breaker comprising relatively movable contacts and a trip device actuable to open said contacts, and interlock means engaging said retaining portion and operatively interconnecting said trip device with said releasable structure, said interlock means being effective to actuate said trip device in response to movement of said retaining portion a distance less than said predetermined minimum distance.

2,744,975
CONTROL DEVICE FOR MOTOR VEHICLES
Horst Naumann, Aschaffenburg (Main), Germany, assignor to Firma Lenkradwerk Gustav Petri, Aschaffenburg (Main), Germany
Application February 1, 1952, Serial No. 269,402
1 Claim. (Cl. 200—61.56)



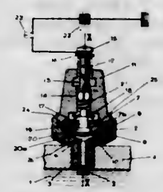
A control device in association with the steering wheel of a motor vehicle for the electrically operated devices of the vehicle, comprising two control rings arranged at so short a distance from the steering wheel as to be reached by the fingers of the driver's hand without the hand being removed from the steering wheel, each of said control rings having its own switch connections for operation of the devices to be electrically controlled, switch control means on one of said rings operable by pressure from below, switch control means on said other ring operable from above, at least one of said control rings having switch control means operable by rotation of said ring, said switch control means being independent of each other, said switch control means upon operation being capable of causing the electrically operated devices to become actuated, the steering wheel having a hub and a cap thereon, panes of different colors set into said cap, a lamp-ring below said cap, and a plurality of lamps on said ring, one lamp registering with each colored pane, each of said lamps indicating the actuation of one electrically controlled device.

2,744,976
MAGNETICALLY CONTROLLED INERTIA SWITCH
James G. Black, Richmond, Ky., assignor to the United States of America as represented by the Secretary of the Navy
Application December 24, 1952, Serial No. 327,945
6 Claims. (Cl. 200—80)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A centrifugal switch device comprising a body member, a plurality of switch terminal members, inertia actuated switch terminal closure members of magnetic material operable under centrifugal and linear accelerative force conditions in predetermined sequence to be moved from an initial magnetically retained inactive position to a switch closure position, a plurality of passages in said body permitting predetermined movement of said inertia members, and magnetic means at one end of each of said passages for initially restraining the magnetic inertia members against movement and for the repositioning thereof upon decrease of a predetermined one of said accelerated forces by a predetermined amount, said passages being arranged in communicating pairs with each pair having a closure member individual thereto, each of said pairs being oriented so that its respective closure member is motivated to successively move in the passages under the influence of the predetermined sequence of said accelerative forces.

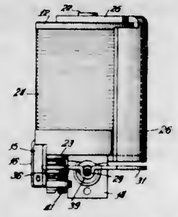
2,744,977
ELECTRIC SIGNALIZING PRESSURE SENSITIVE INDICATOR
Jean Lombard, Boulogne, and Jean Mazoyer, Levallois, France, assignors to Ateliers Seignol, Neuilly-sur-Seine, France, a corporation of France
Application January 9, 1951, Serial No. 205,080
Claims priority, application France January 11, 1950
3 Claims. (Cl. 200—83)



1. In a fluid pressure responsive switching means, comprising a base member adapted to be mounted on a pressure tank and providing an inner chamber in sealed communication with said pressure tank, a top body member secured to said base member and providing an axial bore inwardly extending into a passage adjacent to said inner chamber, an elastic membrane secured within said base member and constituting outwardly a sealed transversal

closure for said inner chamber, a conducting transversal wall member secured within said base member and having a central aperture terminating the inner end of said passage, an insulating motion transmitting member axially movable within said passage and aperture and operatively engaging said membrane, yielding means within said axial bore for constantly exerting an adjustable axially and inwardly directed effort on the outer end of said motion transmitting member, stationary contact means on said transversal wall member, and movable contact means mounted on and movable with said motion transmitting member for operatively cooperating with said stationary contact means, the provision of safety abutting means for positively and independently from the adjustment of said yielding means limiting the outward stroke of said motion transmitting member just sufficiently to bring the innermost exposed portion of same adjacent said wall member substantially flush with the inwardly exposed surface of said wall member.

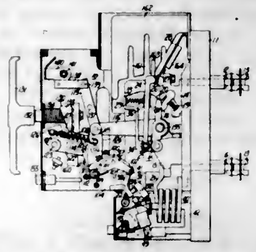
2,744,978
MINIATURE RELAY
Jan Adam Romer, Princeton, Ind., assignor to Potter & Brumfield, Princeton, Ind., a corporation of Indiana
Application April 17, 1952, Serial No. 282,826
4 Claims. (Cl. 200—87)



1. A miniature relay comprising a cylindrical magnetic core carried by and bonded to a plastic spool having an enlarged end, said enlarged end carrying partially embedded contact terminals and armature bearing support members, a magnetic pole piece surrounding one end of said core and having an arcuate edge, a magnetic segment of a cylinder supported from the other end of said core and extending along said spool to the proximity of the arcuate edge of said magnetic pole piece, and an armature carried by said bearing support members having a magnetic circuit portion extending between said pole piece and said cylindrical segment, said armature having a contact carrying portion cooperating with said contact terminals.

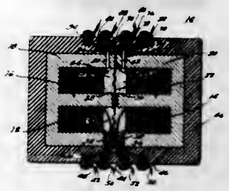
2,744,979
THERMAL TRIP DEVICE WITH PICKUP COIL ON AN ADJUSTABLE ARMATURE
Thor G. Bank, Milwaukee, and Willard S. Lorenz, Oconomowoc, Wis., assignors to Allis-Chalmers Manufacturing Company, West Allis, Wis.
Application September 22, 1954, Serial No. 457,744
6 Claims. (Cl. 200—88)

1. In an alternating current circuit breaker, the combination comprising a core, a primary coil electrically connected with said circuit breaker and inductively coupled with said core, a movable first armature in the magnetic circuit of said core, a stationary second armature in the magnetic circuit of said core, a secondary pickup coil inductively coupled with said second armature, a thermal trip device including a shaft, a pivoted latch, said latch engaging and holding said first armature against pickup in its nontrip position, a bimetallic element mounted adjacent said shaft and said latch having one of its extremities firmly affixed to said shaft and the other of its extremities firmly affixed to said latch, a heater adjacent said bimetallic element, said heater being electrically connected with said pickup coil, means for adjusting an air



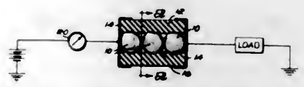
gap between said second armature and said core, and means actuated by said first armature for tripping said circuit breaker.

2,744,980
CIRCUIT CONTROL APPARATUS
John C. Bellamy, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a corporation of Illinois
Application January 5, 1953, Serial No. 329,571
22 Claims. (Cl. 200—112)



21. A control device for actuating an electric circuit in response to a variable condition comprising an enclosure, a nonconducting fluid medium substantially filling said enclosure, means for creating a differential pressure in the fluid in isolated parts of said enclosure in response to said variable condition, a passage associated with said isolated parts and through which a portion of the fluid moves, a freely movable conducting element disposed in said portion of fluid filling said passage, and contact means mounted in said passage whereby said contact means completes the electric circuit through said movable element in said fluid medium under predetermined conditions of differential pressure within said enclosure.

2,744,981
MEANS FOR CONTROLLING CURRENT FLOW IN ELECTRIC CIRCUITS
Morton F. Spears, Westwood, Mass.
Application June 16, 1953, Serial No. 361,921
14 Claims. (Cl. 200—113)



1. As a means for controlling the flow of current in an electric circuit a cluster of small masses most of which are normally in contact one with another and which are of relatively high conductivity to then pass a substantial flow of current, at least certain of said masses being at least in substantial frictional engagement with a mass of material of relatively high resistance which has a relatively great coefficient of expansion under heat and which is free and has sufficient rigidity so that the small masses due to said engagement receive motion therefrom when the mass expands on being heated by transmission there-

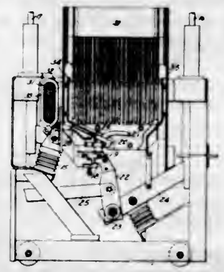
to of heat developed in the cluster by the application of an abnormal current thereto, whereby the number of contact points among the small masses is reduced to reduce to a negligible value the conductivity of the cluster as a whole.

2,744,982
CIRCUIT INTERRUPTING DEVICE
Sidney R. Smith, Jr., Stockbridge, and Robert E. Koch, Pittsfield, Mass., assignors to General Electric Company, a corporation of New York
Application August 24, 1953, Serial No. 375,902
23 Claims. (Cl. 200—114)



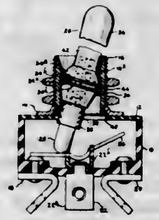
1. In a device having two metallic contacts engageable and disengageable with each other, one of said contacts being wedge-shaped, the other of said contacts comprising two spaced floating metallic contact shoes disposed opposite to each other in a wedge-shaped manner, each of said shoes engageable with an opposite side of said one wedge-shaped contact, each of said shoes being floatingly mounted by being connected adjacent the widely spaced ends thereof to ductile metallic strips and having tabs formed adjacent the closely spaced ends thereof loosely disposed in a pair of apertures whereby each of said shoes is free for pivotal movement about either of its opposite ends.

2,744,983
PERFORATED ARC CHUTE BARRIER PROVIDING PARALLEL ARC PATHS
Philip L. Taylor, Abington, Mass., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application October 3, 1951, Serial No. 249,566
17 Claims. (Cl. 200—144)



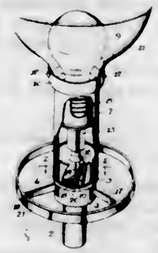
1. An electric circuit interrupter comprising arcing contacts for initiating an arc and an arc chute for receiving and extinguishing the arc, said chute comprising a plurality of slotted spaced insulating plates arranged to extend longitudinally of the axis of said chute with the slots adjacent said arcing contacts to form an arc passage, said slots gradually restricting the high current arc as it moves through said chute to a predetermined cross sectional area, some of said plates being provided with a cluster of apertures adjacent the closed end of said slots for subdividing the constricted relatively high current arc into a plurality of relatively low current small diameter arcs in parallel with each other to rapidly cool and extinguish the arc, said cluster comprising a plurality of apertures being equally spaced from the zone of arc initiation.

2,744,984
SEALING MEANS FOR LEVER OPERATED ELECTRIC SWITCHES
Harold W. Hultz, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application August 12, 1953, Serial No. 373,705
5 Claims. (Cl. 200—168)



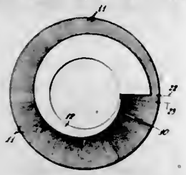
1. In combination, a switch casing including a hollow supporting bushing, an oscillatable operating lever comprising a handle portion extending outwardly from said bushing, another portion extending into said casing, and an enlarged portion between the portions aforementioned, said enlarged portion having formed therein a substantially V-shaped peripheral groove, and a normally flat punched thin elastic sealing member compressively engaging an inner peripheral portion of the bushing and elastically embracing said operating lever at the vertex of said groove whereby said lever may be oscillated with minimum flexing of said elastic sealing member.

2,744,985
SWITCH ACTUATING MECHANISM
William C. Buck, Denver, Colo., assignor to Creative Services, Inc., a corporation of Colorado
Application December 11, 1953, Serial No. 397,724
2 Claims. (Cl. 200—172)



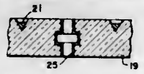
1. In a lamp, a standard, a tubular shell secured to said standard, said shell having a plurality of slots extending downwardly from its upper edge, a spider comprising a hub and a plurality of arms extending radially from said hub, said arms each extending through one of said slots, a second tubular shell telescoped over the upper portion of said first tubular shell, the lower edge of said second shell closing the upper portion of each of said slots and forming an upper end for each of said slots spaced from the lower end thereof a distance slightly greater than the height of said arms, each of said arms engaging a corresponding end of its slot and being movable to a limited extent in one vertical direction, a switch mounted in said second shell, a pull cord extending from said switch for actuating it, said pull cord being secured to said hub, whereby force applied against any of said arms in either vertical direction urges said pull cord towards switch actuating position.

2,744,986
POTENTIOMETER AND METHOD OF MAKING
Conrad C. Caldwell, Del Mar, Calif., assignor to Bill Jack Scientific Instrument Company, Solana Beach, Calif., a corporation of California
Application February 6, 1953, Serial No. 335,537
2 Claims. (Cl. 201—60)



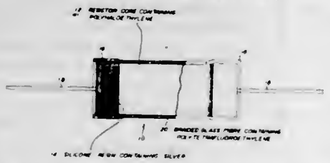
1. The method of making a potentiometer comprising the steps of applying a protective coating in a pattern to define a plurality of spaced segments on the surface of a conductive material, placing said coated material in an etching bath to thereby remove the uncoated conductive surface to form a plurality of electrically disconnected conductive segments, cleaning said protective coating from said segments to thereby expose a conductive surface of each of said segments and applying a continuous layer of high resistance coating in contact with the conductive surface of each of said segments and leaving a section of each of the segments free of said high resistance coating for making electrical contract without disturbing said high resistance coating.

2,744,987
ELECTRICAL RESISTANCE HEATING ELEMENTS
Philip R. Marvin, Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
Application March 18, 1954, Serial No. 417,041
5 Claims. (Cl. 201—63)



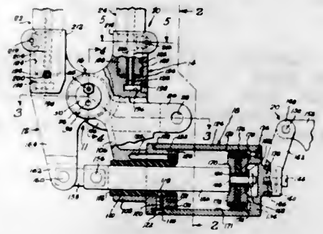
1. An electrical resistor comprising a base of electrical insulating material having a spiral groove therein, the base also having an opening therethrough transversely to the groove coinciding with one end of the groove, and a film of metal in the groove and also in the opening on the sides thereof.

2,744,988
MOLDED RESISTORS
Melvin Tierman, North Adams, Mass., assignor to Sprague Electric Company, North Adams, Mass., a corporation of Massachusetts
Application February 7, 1952, Serial No. 270,505
5 Claims. (Cl. 201—64)



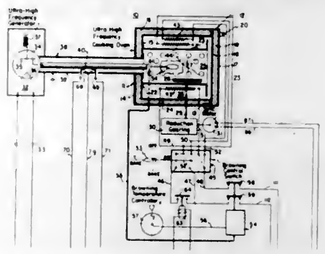
1. A high temperature resistor consisting essentially of a sintered uniformly dispersed mixture of a polyhaloethylene resin containing at least one fluorine atom per ethylene unit, with electrically conducting particles and electrically insulating particles, the weight ratio of electrically conducting and electrically non-conducting particles to the resin being from about 1:3 to about 2:1, and terminal connections electrically connected to spaced portions of the sintered mixture.

2,744,989
SCISSORS-TYPE SPOT WELDING GUN
Ralph D. Fagge, Detroit, Mich.
Application January 3, 1955, Serial No. 479,592
10 Claims. (Cl. 219—4)



1. A scissors-type spot welding gun comprising a pair of arm supports having fulcrum portions projecting toward one another intermediate their opposite ends, a welding-electrode-carrying arm secured to one end of each arm support, a reciprocatory electrode-clamping motor mounted on the opposite end of one of said arm supports and reciprocably engaging the corresponding opposite end of the other of said arm supports, a fulcrum structure pivotally disposed between said fulcrum portions, said fulcrum structure including a pivot element with outer and inner cylindrical raceways coaxial therewith and multiple bearing rollers disposed in an annular path between said raceways in rolling engagement therewith, a first welding cable connection terminal attached to one of said arm supports, a second welding cable connection terminal attached to said fulcrum structure, an electrical insulating structure disposed between said fulcrum structure and the terminal-attached arm support, and insulating means disposed between said motor and one of said arm supports.

2,744,990
ULTRAHIGH FREQUENCY HEATING APPARATUS
George W. Schroeder, Sandy Hook, Conn., assignor to General Electric Company, a corporation of New York
Application January 24, 1951, Serial No. 207,454
10 Claims. (Cl. 219—10.55)



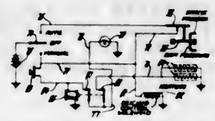
5. Heating apparatus including walls formed of electrically conducting material defining a cavity adapted to receive a load to be heated, and a generator for supplying ultra-high frequency electromagnetic power to said cavity so as to effect heating of the load therein, the total heating effect produced in the load in said cavity being related to the total amount of ultra-high frequency electromagnetic energy absorbed thereby; the combination comprising means for detecting the differences between incident and reflected ultra-high frequency electromagnetic power with respect to said cavity and for integrating said power differences as time proceeds to derive the total ultra-high frequency electromagnetic energy absorbed by the load in said cavity, and means governed by said last-mentioned means for controlling the supply of ultra-high frequency electromagnetic power from said generator to said cavity.

2,744,991
METHOD OF AND APPARATUS FOR ADJUSTING THE SPARK GAP LENGTH IN METALWORKING APPARATUS BY WHICH METAL MAY BE REMOVED OR ERODED BY SPARKING
Carl Ballhausen, Krefeld, Germany, assignor to Deutsche Edelstahlwerke Aktiengesellschaft, Krefeld, Germany
Application September 14, 1953, Serial No. 379,898
Claims priority, application Germany September 17, 1952
6 Claims. (Cl. 219—15)



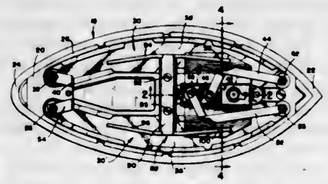
1. The method of adjusting the length of the spark gap in a metal-working apparatus where metal may be removed or eroded by sparking across a dielectric gap between an electrode and a metal workpiece, which consists in urging the electrode towards the workpiece by the force of an elastically energised resilient heat deformable element and deforming said element in opposition to its resilient force by heat generated by the sparking current, thereby to preserve and regulate the spark gap whilst the metal workpiece is being eroded.

2,744,992
DEICING CONTROL
Esten W. Spears, Indianapolis, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application March 30, 1951, Serial No. 218,478
8 Claims. (Cl. 219—20)



6. An apparatus for controlling icing in an air duct comprising, in combination, means responsive to the deposition of ice in the duct including a member normally resting in a first position and moving to a second position when ice is deposited, means actuated by the member in its second position to effect deicing of the duct, optionally energizable means for selectively heating the responsive means to remove ice therefrom including holding means, and means actuated by movement of the member to its first position to inactivate the holding means.

2,744,993
FLATIRON WITH ANTICIPATOR
Frederick H. La Bree, Anoka, Minn., assignor, by mesne assignments, to Illinois McGraw Electric Co., a corporation of Illinois
Application February 28, 1952, Serial No. 273,927
3 Claims. (Cl. 219—25)



1. An electric flatiron comprising a soleplate having a bottom ironing surface and a top surface including a substantially flat control area and an electric heating unit mounted on said upper surface at opposite sides of the control area and having a metallic cover exposed at the top of the soleplate, an anticipator plate of relatively high thermal conductivity extending across substantially all of said control area and having portions engaging the cover of said heating unit at each of said sides of the area, and a thermal electric switch in circuit with the heating unit, said switch having a control member extending along a substantial length of the control area and free to expand and contract and thereby open and close the switch in response to increase and decrease of temperature in said area, said control member, anticipator plate and soleplate control area being in superimposed, face-to-face engagement during temperature-responsive expansion and contraction of the control member and thereby providing a direct metallic heat-conducting path from both the heating-unit cover and the bottom of the soleplate to each portion along the length of the control member within said area, said control member comprising a plate extending across a substantial length and breadth of the control area, the anticipator plate being located between the control plate and soleplate, and the anticipator-plate portions which engage the heating-unit cover extending along the cover a distance substantially corresponding to the length of the control area, the anticipator plate having its control-area portion and heating-unit-cover-engaging portions at relative levels insuring engagement of said cover-engaging portions with the cover before the control-area portion engages the control area, and means clamping the control member against the control-area portion of the anticipator plate and thereby holding the latter in face-to-face engagement with the control area with said heating-unit-engaging portions in resilient contact with the heating-unit cover.

2,744,994
ELECTRIC BAKING, ROASTING, AND COOKING APPARATUS
Harry Brückner, Berlin-Wilmersdorf, and Albert Heitmann, Berlin, Germany, assignors to Arista William R. P. Schulz G. m. b. H., Osterholz-Scharmbeck, Germany
Application August 4, 1952, Serial No. 302,566
Claims priority, application Germany August 6, 1951
4 Claims. (Cl. 219—35)

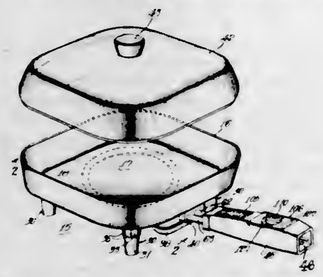


1. An electric roasting, baking and cooking apparatus comprising a base, spaced apart substantially vertically disposed side walls on said base, rear, front and top walls on said base formed together in substantially inverted U-shape to provide a hood for said base and side walls and defining with said base and side walls a cooking zone, an elongated heating element positioned inwardly of the side walls and adjacent the lowermost portions thereof, being substantially parallel thereto, the inner surfaces of said base, side walls, front, rear and top walls being of a heat reflective material.

2,744,995
ELECTRIC FRYING PAN
Ivar Jepson, Oak Park, Ill., assignor to Sunbeam Corporation, Chicago, Ill., a corporation of Illinois
Application December 2, 1953, Serial No. 395,824
28 Claims. (Cl. 219—44)

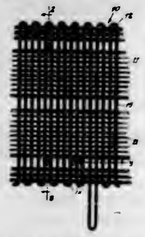
8. A cooking vessel immersible in liquid for cleaning purposes and including a cooking surface having an elec-

trical heating element in intimate heat exchange relationship with the underside thereof, said vessel including integrally formed wall portions at the bottom portion thereof defining a recess having an access opening thereto, at least a portion of said recess extending below the underside of said cooking surface, said recess forming a substantial part of a sealed chamber, a handle for said vessel comprising two portions, one portion being non-metallic with a longitudinally extending passageway therein and the other portion being a tubular spacer member interposed between said vessel and said non-metallic handle portion to space said non-metallic handle portion from said vessel, means for securing said handle to the means



defining said sealed chamber with the passageway in said one handle portion in communication with said recess through said tubular member and for sealing said recess against the entrance of moisture or other foreign matter thereby to provide said sealed chamber including said recess, an adjustable temperature responsive device having the temperature responsive portion thereof mounted in said recess with a control portion thereof extending through said spacer portion of said handle into said non-metallic portion, and adjusting means mounted on said non-metallic handle portion interconnected with said control portion to vary the settings of said adjustable temperature responsive device.

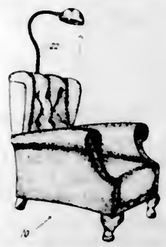
2,744,996
HEATING ELEMENT
Vernon S. Clark, Durham Center, Conn., assignor to Safeway Heat Elements, Inc., Middletown, Conn., a corporation of Delaware
Application January 22, 1953, Serial No. 332,609
2 Claims. (Cl. 219—46)



1. A flexible woven electrical heating unit comprising a warp of wire strand and a woof consisting of a resistance wire covered with an insulating material and a braided wire wrap outside of said insulating material to protect it physically and to aid in heat dissipation.

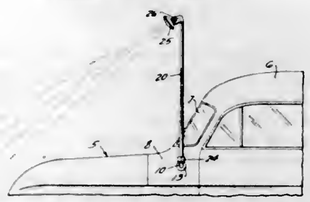
2,744,997
COMBINATION LAMP AND CHAIR
Stephen R. Sefsik, Westport, Conn., and Joseph Kiss, New York, N. Y.
Application August 19, 1953, Serial No. 375,113
1 Claim. (Cl. 240—4)

In combination, an easy chair including an upholstered high back, and an adjustable goose-neck lamp supported from and above the central portion of said back, said chair including top and bottom members extending across said back, said cross members having axially aligned openings therein, a plate attached to each of said cross members and having a threaded opening aligned with the respective opening in the cross member, an externally threaded pipe extending through said openings in said cross members and said plates and having threaded engagement with the latter, said upper cross member supporting stuffing material at the top of the back, a circular



collar threaded on the upper end of the pipe and compressing the stuffing material between same and said upper cross member, and said back having an outer covering turned in over said collar, a collar supported on the upper end of said pipe, a flexible cable having one end thereof secured to said pipe by said last collar, a lamp supported by the other end of said cable in forward overhanging relation to the said chair back, and an electric wire extending through said pipe and said flexible cable to said lamp.

2,744,998
REMOVABLE FOG LIGHT
Carl T. Halvorson, Ringsted, Iowa
Application April 17, 1952, Serial No. 282,797
1 Claim. (Cl. 240—7.1)



In an auxiliary lighting assembly for use with motor vehicles of the type having a roof and a panel body, said assembly comprising a bracket adapted to be rigidly mounted upon the panel body of the vehicle, said bracket including a tubular member bent angularly and being externally threaded at each of its end portions and having a flange extending outwardly adjacent one of the threaded end portions, a nut adapted to be threaded on the threaded end portion of said tubular member adjacent said flange to clamp the adjacent portions of the panel body therebetween when inserted through an opening in the panel body, a rigid shank having an outwardly extending flange adjacent its lower end portion, a coupling carried by said shank and being adapted to slide outwardly over its flange to a limited degree and to threadedly engage the other threaded end portion of said member to thereby rigidly affix said shank to said member in upright position, a unidirectional fog light projector mounted on the upper end portion of said shank and extending angularly thereto and being directed downwardly and forwardly relative to the forward direction of movement of the vehicle, the length of said shank being such that said fog light projector will normally be disposed several feet above the roof of the vehicle when said shank and said bracket are so connected whereby the driver of said

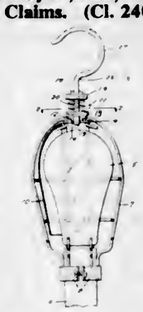
vehicle as a consequence of the elevated position of said fog light projector will be enabled to discern objects in fog and the like ahead of said automobile, electrical conductor means connected to said fog light projector and extending along said shank, and cooperating electrical conductor means mounted within said shank and being connectable to a source of electric power within said tubular member.

2,744,999
MOUNTING FOR VEHICLE HEADLIGHTS
Anthony Arnejo, Detroit, Mich.
Application July 21, 1954, Serial No. 444,728
4 Claims. (Cl. 240—8.1)



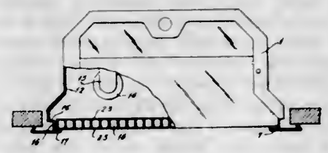
1. A device of the character described comprising, in combination with an automobile fender having a headlight receiving opening therein, the provision of a flat metal ring affixed to the inner face of the peripheral portion of said headlight-receiving opening, a headlight construction comprising an annular ring having a plurality of circumferentially spaced holes therethrough, an enlarged rear portion for said ring having a plurality of circumferentially spaced openings therethrough, said annular ring having a circumferentially extending groove in the outer periphery thereof adjacent said enlarged portion, a reflector having a flange at the forward end thereof abutting the forward side of said annular ring, a lens abutting the flange of said reflector, said lens and said flange having openings registering with the openings in said annular ring, a lamp housing rearwardly of said reflector, a flange at the forward end of said housing, bolts extending through the registering openings in said lens, annular ring and said flanges, a nut for each of said bolts, a plurality of bolts affixed to the metal ring and extending rearwardly therefrom and through the openings in said enlarged portion, and a nut for each of said last-mentioned bolts.

2,745,000
ROTATABLE SUSPENSION HOOK FOR TROUBLE LAMP
Joseph Kowalcyk, Houtzdale, Pa., assignor of one-half to George R. Kerr, Philipsburg, Pa.
Application May 6 ,1952, Serial No. 286,289
2 Claims. (Cl. 240—54)



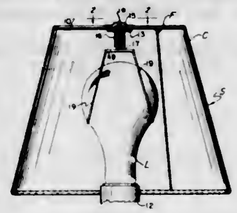
1. A support-engaging means for a cage-equipped trouble lamp comprising a plate with fingers adapted for engagement with the lamp cage, said plate having an elongated perforation with an intermediate circular portion, an elongated circular shank nail engaged through the circular portion of the perforation, the head of the nail being interposed between the bottom of the plate and the top of the cage, the shank of the nail, beyond said plate, being hooked-shaped for engagement with a support, an intermediate portion of the shank between the base of the hook and said perforate plate being swaged to provide laterally extending lugs of a length and width to conveniently pass through the perforation in said plate when aligned therewith, and spring means mounted on said nail between said lugs and perforate plate for tensioning the hook and cage and permitting relative movement of the hook and cage only when rotative pressure is exerted on either of these members.

2,745,001
LIGHT DIFFUSORS FOR ILLUMINATING DEVICES
Edwin F. Guth, St. Louis County, Mo.
Application December 15, 1951, Serial No. 261,780
4 Claims. (Cl. 240—78)



1. A light diffusor comprising a lattice of translucent strips arranged to define between them a multiplicity of substantially cubic apertures, said apertures having a dimension of one-quarter to one-half inch on a side.

2,745,002
LAMP SHADE HOLDER
Henry K. Hoffmann, Cheyenne, Wyo.
Application July 9, 1953, Serial No. 366,936
1 Claim. (Cl. 240—128)

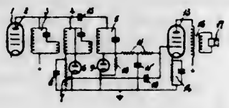


A lamp shade holder comprising a first member attached to the central part of a lamp shade frame, a rigid tubular portion forming a socket depending from the first member, a second member from which depend complementary looped elements for resiliently gripping the rounded end of an electrical light bulb, yieldable means in the form of a tightly wound helical spring having one end thereof integral with the second member and positioned within the socket, said spring being constructed to fit fairly snugly within the socket and of a length substantially coextensive with the length of the socket whereby the yieldable means connects the members and normally holds the shade in a "straight" condition when the looped elements grip the bulb but is capable of yielding to permit the shade to move relatively to the looped elements without shifting of said elements on the bulb in the event a moving force acts on the shade.

2,745,003
RADIO RECEIVER WITH INTERCHANNEL NOISE SUPPRESSION

Adelbert van Weel, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application March 1, 1952, Serial No. 274,426
Claims priority, application Netherlands March 20, 1951
6 Claims. (Cl. 250—20)

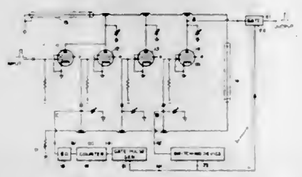


1. In a radio receiver, apparatus for deriving from a first resonant network responsive to an incoming signal a direct voltage which varies in accordance with the detuning of said first network with respect to said signal, said apparatus comprising second and third resonant networks, both of which are tuned to the resonant frequency of said first network, said second and third networks being respectively reactively coupled to said first and second networks in succession, said first and third networks being connected electrically in series and in phase opposition, whereby the output voltages across said first and third networks are substantially equal and in phase opposition when the signal frequency is equal to said resonant frequency and exhibit a phase displacement relative to each other which varies with said detuning when the signal frequency differs from said resonant frequency, a rectifier circuit provided with a rectifier element and a resistance element, and means serially coupling said first and third networks, excluding said second network, and said rectifier circuit to produce said direct voltage across said resistance element by rectification of the combined said output voltages, whereby said direct voltage is of substantially zero value when said signal and resonant frequencies are equal.

2,745,004
VARIABLE PULSE DELAY CIRCUIT

Yeo Pay Yu, Passaic, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware

Application October 6, 1952, Serial No. 313,292
6 Claims. (Cl. 250—27)

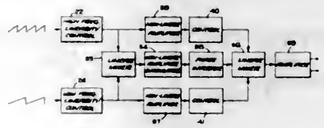


1. A variable pulse delay circuit comprising a first inductive line, a first delay line having a near end and a far end, said near end being connected to one end of said first inductive line, said far end being short circuited, a second delay line having a near end and a far end, said near end of said second delay line being connected to the other end of said first inductive line, a plurality of thermionic tubes having the anodes of each thereof connected to different points respectively of said first inductive line intermediate said delay lines, a second inductive line connected to the far end of said second delay line, each said thermionic tube having a control electrode connected to respective different points on said second inductive line, and a source of pulses, said source being connected to the anode of a first of said thermionic tubes.

2,745,005
CATHODE RAY TUBE SCANNING CIRCUIT

William M. Lynch, Palo Alto, and William E. Evans, Jr., Menlo Park, Calif., assignors to Technicolor Motion Picture Corporation, Hollywood, Calif., a corporation of Maine

Application October 31, 1952, Serial No. 317,858
2 Claims. (Cl. 250—27)

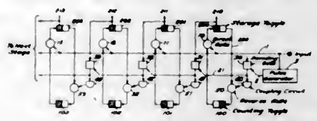


1. A circuit for deriving a keystone correction wave form adapted to correct for keystone distortion in a cathode ray tube scanned by an off-axis electron gun including a source of low frequency saw-tooth waves, a source of high frequency saw-tooth waves, a linear mixer for combining said waves, a non-linear amplifier for the combined waves, means for subtracting from the output of said non-linear amplifier a wave corresponding to said low frequency saw-tooth waves, and additional means for subtracting from the output of said non-linear amplifier a wave corresponding to said high frequency saw-tooth waves to obtain from said non-linear amplifier a wave corresponding to said keystone correction wave form.

2,745,006
BINARY COUNTER

Jeffrey C. Chu, Naperville, and David H. Jacobsohn, Chicago, Ill., assignors to the United States of America as represented by the United States Atomic Energy Commission

Application August 18, 1952, Serial No. 305,056
6 Claims. (Cl. 250—27)

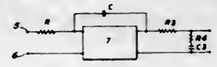


1. An electric impulse counter comprising an input for receiving pulses to be counted, means for deriving a control pulse corresponding to each input pulse but delayed in time, and at least two concatenated stages, each stage comprising: first and second binary responsive members, a first transfer means responsive to pulses at said input connecting said first and second members in response to electrical impulses impressed upon said input, whereby the binary state of the first member may be transferred to the second member, a second transfer means connecting said members whereby the binary state of said second member may be transferred to said first member upon receipt of said control pulse, and third transfer means coupled to said second transfer means; said third means in all stages except the first being coupled to and adapted to be energized by only one binary state of the second member of the next preceding stage and being further coupled to the third transfer means in said next preceding stage to receive control pulses propagated therethrough, and in said first stage being coupled to a source of reference potential and to said control pulse deriving means; whereby a control pulse is propagated through successive stages to transfer the states of said second binary members of said stages to said first binary members until said pulse is blocked by an unenergized third transfer means.

2,745,007
NETWORKS FOR COMPENSATING ERRORS DUE TO ABSORPTION EFFECTS IN CAPACITORS

Eric Lloyd Thomas, Wembley, England, assignor, by mesne assignments, to The Sperry Gyroscope Company, Limited, Brentford, England, a company of Great Britain

Application January 5, 1951, Serial No. 204,671
Claims priority, application Great Britain January 5, 1950
6 Claims. (Cl. 250—27)

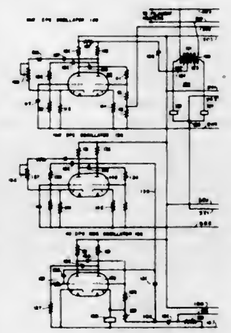


1. An integrator comprising a D. C. amplifier having input and output terminals, a resistor serially connected between said amplifier and its input terminal, a first capacitor connecting the output terminal of said amplifier with its input terminal, said capacitor having known absorption decay characteristics, a compensating network connected to the output of said amplifier, said compensating network being comprised of a resistive series arm and a resistive-capacitive shunt arm, and having electrical values which produce a network time-constant characteristic proportional in amplitude and opposite in sense to the absorption decay of electrical charge on said first capacitor.

2,745,008
ELECTRONIC TONE GENERATOR

Otho D. Grandstaff, Oak Park, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware

Application October 8, 1952, Serial No. 313,688
11 Claims. (Cl. 250—36)

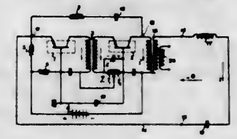


1. An electronic tone generator comprising an oscillator, an amplifier, an alternating current power supply providing an alternating current source for said generator, modulating means having a plurality of input circuits, said modulating means possessing inherent variable characteristics, circuit means for connecting said oscillator to one of said input circuits of said modulating means, circuit means for connecting said alternating current source to another of said input circuits of said modulating means to provide an alternating current therein, a tapped network, said modulating means connected to said amplifier through said tapped network, said modulating means effective to combine the alternating current output of said oscillator and a portion of the alternating current output of said power supply to produce a predetermined composite output signal and to apply said composite signal to said network, said amplifier effective in response to receipt of said composite signal from said tapped network to amplify said composite signal to the desired signalling magnitude.

2,745,009
HIGH STABILITY TRANSISTOR OSCILLATOR

Jean-Marie Moulon, Paris, France

Application February 26, 1954, Serial No. 412,673
Claims priority, application France March 28, 1953
2 Claims. (Cl. 250—36)

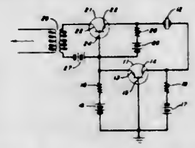


1. A high stability transistor oscillator comprising, in combination, a two-stage transistor amplifier including a phase-inverting interstage transformer, a phase inverting output transformer and an input stage and an output stage transistor each having an emitter, a collector and a base electrode; a series-connected resonant circuit consisting of an inductance and a condenser connected between emitter electrode of said input stage transistor and one winding of said output transformer, the other winding of which is inserted in the collector circuit of said output stage transistor, a negative feedback connection consisting of an impedance connected between the emitter of said input transistor and the collector of said output transistor, a resistor connected in series in the base-electrode emitter circuit of said output stage transistor, a high capacity condenser connected across said resistor; said oscillator being further characterized in that said inductance has a positive temperature coefficient and in that the ohmic resistance of said inductance is higher than the sum of the input resistance of said input stage transistor and of the resistance of said one winding of said output transformer.

2,745,010
TRANSISTOR OSCILLATORS

Frank R. Stansel, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application September 12, 1951, Serial No. 246,226
6 Claims. (Cl. 250—36)



1. In combination, an oscillator comprising a transistor having emitter, collector, and base electrodes, means to supply operating potentials to said emitter and collector electrodes, and a frequency-determining impedance connected between the said emitter and collector electrodes, and an amplifier having its input side connected in series with said impedance in the path between said emitter and collector electrodes.

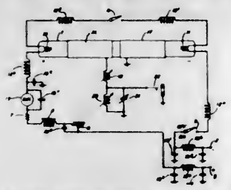
2,745,011
VERY HIGH FREQUENCY GAS DISCHARGE NOISE SOURCE

Brian C. Bellows, Jr., Brookside, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application May 20, 1952, Serial No. 288,869
4 Claims. (Cl. 250—36)

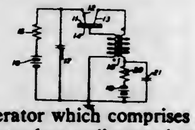
1. In a noise source, an elongated gas tube, electrode means for establishing a steady positive column discharge extending without interruption for a predetermined distance along the length of said gas tube, two spaced capacitive pick-up elements located close to said positive

column within said predetermined distance, a coupling circuit including lumped capacitive and inductive elements connected to said pick-up elements for coupling noise



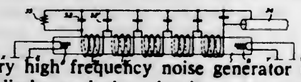
energy within a predetermined frequency band from said positive column to an output circuit, and means for isolating said positive column discharge from external circuits containing oscillations within said frequency band.

2,745,012
TRANSISTOR BLOCKING OSCILLATORS
Jean H. Felker, Livingston, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application August 18, 1951, Serial No. 242,442
5 Claims. (Cl. 250—36)



1. A pulse generator which comprises a transistor having an emitter electrode, a collector electrode, and a base electrode, a transformer intercoupling said collector electrode with one of the other of said electrodes to provide positive feedback, means to bias said collector electrode in the reverse direction, a timing capacitor, a charging path for said timing capacitor which includes the internal path of said transistor between said emitter and base electrodes, biasing means for said emitter electrode, and a discharge path for said timing capacitor which includes a resistor connected between said emitter and base electrodes, said timing capacitor being alternately charged and discharged through said respective paths in order to provide sharp pulses of output voltage at said collector electrode.

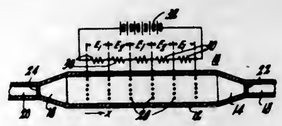
2,745,013
VERY HIGH FREQUENCY GAS DISCHARGE NOISE SOURCE
Marion E. Hines, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application May 20, 1952, Serial No. 288,836
10 Claims. (Cl. 250—36)



1. A very high frequency noise generator comprising a gaseous discharge device, circuit means to establish an electrical gas discharge having a positive column portion within said device, and an artificial transmission line repeatedly coupled to said positive column portion to receive high frequency electrical energy from said positive column portion of said discharge.

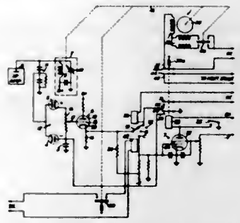
2,745,014
GAS RESONANCE SYSTEM
Lowell E. Norton, Princeton, N. J., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Army
Application August 3, 1953, Serial No. 372,112
10 Claims. (Cl. 250—36)

1. A system comprising a microwave generator for generating a carrier frequency and a pair of sideband frequencies, of which one is above and one is below and each is displaced by a modulation frequency from said carrier frequency in frequency modulation relation therewith, a microwave absorption gas cell containing a gas at low pressure and containing means for providing two



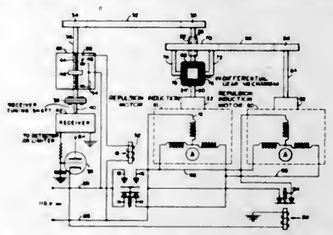
different gas resonance frequencies at spatially periodic intervals of half wavelength at the said carrier frequency, means for applying said carrier frequency to said cell, and means for amplitude modulation detecting said sideband frequencies signals against the said carrier frequency signal transmitted by said gas.

2,745,015
AUTOMATIC TUNER
Jerome Stillman, Brooklyn, N. Y., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application June 28, 1952, Serial No. 296,105
10 Claims. (Cl. 250—40)



6. An automatic tuner for a tank circuit comprising an adjustable impedance element for said tank circuit, means for actuating said adjustable impedance element through its entire range of adjustment, means to rectify negatively and positively a portion of the output of said tank circuit, means to store the maximum negative voltage reached during a first adjustment of said impedance device, and means to stop said actuating means when said positively rectified voltage equals the maximum stored negative voltage during a subsequent adjustment of said impedance device.

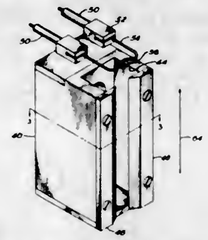
2,745,016
AUTOMATIC TUNING MECHANISM
Edwin F. Kulikowski, University Park, John M. Miles, Hillcrest Heights, and Robert T. Fitzgerald, Rockville, Md.
Application March 25, 1952, Serial No. 278,512
4 Claims. (Cl. 250—40)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In an automatic tuning system for a radio receiver, means for tuning said receiver back and forth through a

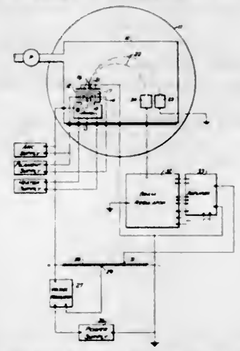
given frequency band comprising first and second reversible direction electric motors, said first motor being continuously operated, a differential gear mechanism having an output shaft connected to the tuning element of said receiver and a pair of input shafts connected respectively to the output shafts of said motors to change the rotation rate of the receiver tuning element when said second motor is energized, reversing switch means connected to said motors to effect a reversal in the direction of rotation thereof, and a second switch means connected to said second motor to control the energization thereof, and means responsive to the reception of a signal by said receiver to actuate said second switch means.

2,745,017
ION PRODUCING MECHANISM
Frank F. Oppenheimer, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application November 28, 1945, Serial No. 631,418
4 Claims. (Cl. 250—41.9)



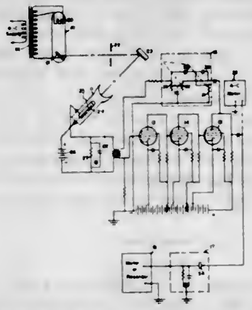
1. A calutron transmitter comprising walls defining a chamber having an exit, a pair of accelerating electrodes disposed outside said chamber adjacent said exit, and an electron-emissive cathode disposed adjacent one end of said chamber, said cathode having a portion concave with respect to said electrodes for forming an electron stream having a concave cross-section adjacent said exit.

2,745,018
BEAM CURRENT REGULATOR
William R. Baker and Robert De Liban, Berkeley, Calif., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application September 26, 1947, Serial No. 776,222
7 Claims. (Cl. 250—41.9)



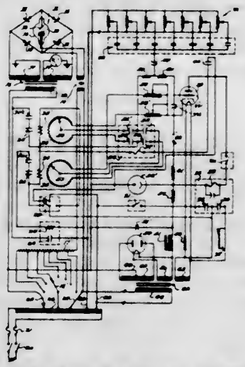
1. A beam regulator for a calutron comprising in combination a calutron having an ion generator, accelerating electrodes disposed adjacent said ion generator, a source of potential connected between said ion generator and said accelerating electrodes for producing a beam of ions, means establishing a magnetic field transverse to the direction of travel of said ion beam, current collecting elements disposed in the normal path of said beam, means responsive to the current flowing to one of said collector elements for providing a voltage proportional thereto, and means for impressing said voltage upon said accelerating electrodes for regulating the position of said beam of ions with respect to said collecting elements.

2,745,019
X-RAY INTENSITY MEASURING SYSTEM
Edward A. Hamacher, Irvington-on-Hudson, N. Y., assignor, by mesne assignments, to North American Philips Company, Inc., New York, N. Y., a corporation of Delaware
Application October 8, 1952, Serial No. 313,720
11 Claims. (Cl. 250—83.6)



5. Apparatus for analyzing by X-ray radiation comprising means to generate periodic surges of X-ray radiation, means to expose a specimen to said surges, the periodicity and amplitude of said surges being independent of the dimensions of said specimen, an ionization tube circuit to detect emission from said specimen to produce for each of said surges a discrete train of impulses whose number depends on the intensity of said emission, an integrating network coupled to said tube circuit to integrate each of said trains of impulses to produce periodic pulses amplitude modulated as a function of the counter rate of X-ray quanta emitted from said specimen, and means coupled to said network and responsive to the amplitude modulation component of said pulses to produce an indication of the intensity of said emission.

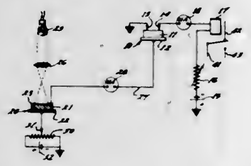
2,745,020
ELECTRICAL PROTECTIVE SYSTEM
Donald E. Graves and Dominic M. Cameli, Milwaukee, Wis., assignors to General Electric Company, a corporation of New York
Application January 6, 1950, Serial No. 137,194
15 Claims. (Cl. 250—95)



15. A system for delivering power to an electron flow device, such as an X-ray tube, wherein heat generation

is a function of several adjustably variable operating conditions, including anode-cathode potential, cathode excitation level, and duration of operating time interval, which conditions may be selectively determined and adjusted prior to the placement of the device in operation, comprising a normally closed relay switch for controlling the delivery of power to said device, a normally open switch closable to set the device in operation under selected operating conditions, an electron trigger valve having a control grid and adapted for operation at a predetermined grid bias level to open said normally closed switch, means for applying a control bias of predetermined value on the grid of said valve to hold the same normally inoperative, means operable to alter said bias in accordance with the adjustment of the operating time interval, and means for modifying said bias in accordance with the selected anode-cathode potential and also in accordance with the selected cathode excitation level, whereby said valve may be actuated to open said normally closed switch to thereby prevent the delivery of power to said device in response to the closure of said normally open switch when said selected values of operating potential, cathode excitation, and duration of operating time interval are such that the device would be electrically overloaded if operated under such preselected operating conditions.

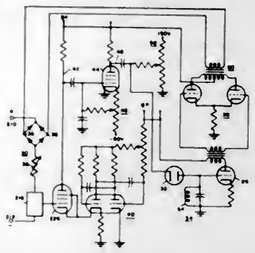
2,745,021
PHOTO DEVICE AMPLIFIER CIRCUIT
Jerome Kurshan, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application November 23, 1951, Serial No. 257,888
5 Claims. (Cl. 250—211)



1. An amplifier circuit for a photo-conductive device comprising a photo-conductive device having a non-linear resistance which decreases in response to an increase of the voltage existing across said device, a transistor including a semi-conducting body, a base electrode, an emitter electrode and a collector electrode in contact with said body, a first source of potential, said first source and said device being connected in series between a junction point and said base electrode, means connecting said emitter electrode to said junction point, a second source of potential, and an output circuit connected in series with said second source between said junction point and said collector electrode, said first source being adjusted to provide substantially maximum base current, whereby the collector current decreases in response to illumination of said photo-conductive device.

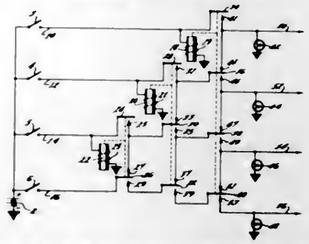
2,745,022
VOLTAGE REGULATOR
James Snyder, Asbury Park, N. J., assignor to the United States of America as represented by the Secretary of the Army
Application January 5, 1954, Serial No. 402,417
5 Claims. (Cl. 307—43)
(Granted under Title 35, U. S. Code (1952), sec. 266)

5. A low voltage supply, a load, a variable resistance, a rectifier bridge having a first two terminals connected in series with said variable resistance and said load across said voltage supply, a vacuum tube actuated by the voltage across said load, a multivibrator circuit connected to gate said vacuum tube, means for amplifying the output of said vacuum tube, means for increasing the proportion of modulation of the output of said vacuum tube, means for transforming the output of said vacuum tube to a lower impedance output, means for connecting the lower im-



pedance output across a second two terminals and said rectifier bridge to compensate for the variations in voltage across said load.

2,745,023
REMOTE INDICATING AND CONTROL SYSTEM
Simpson B. Adler, Haddonfield, N. J., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Army
Application February 18, 1953, Serial No. 337,548
7 Claims. (Cl. 307—112)



1. A remote indicating and control system comprising, a number of input circuits, a relay associated with each of said circuits, operating means for each of said relays, output circuits connected to said relays, means to selectively energize each of said relay operating means, and a series of means to energize a number of said output circuits consecutively depending upon the number of input circuits that are energized.

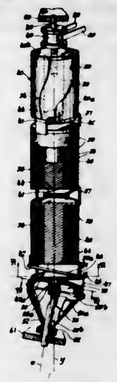
2,745,024
SENSITIVE TIME DELAY RELAY
Robert G. Quick, West Caldwell, N. J., assignor to the United States of America as represented by the Secretary of the Navy
Application October 1, 1953, Serial No. 383,713
5 Claims. (Cl. 307—132)
(Granted under Title 35, U. S. Code (1952), sec. 266)



4. An automatically recycling time delay system of a character incorporating a magnetically damped electrical time delay device comprising a permanent magnet movable coil type sensitive relay having a plurality of fixed contacts, a movable contact adapted to engage said plurality of fixed contacts, said movable contact being connected for movement with said coil, said coil being disposed in the field of said magnet, cyclically operative

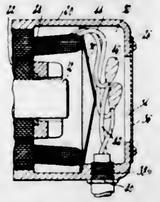
actuator system means for displacing the movable contact from said fixed contact for initiating an initial cycle of operation, means responsive to a predetermined movement of said movable contact away from said fixed contact to provide a short circuiting of the movable coil to provide a damping thereof only during return movement of the movable contact with said coil to the normal position thereof, and circuit means rendered responsive to completion of return movement of said movable contact into engagement with said fixed contact for automatically reinitiating a subsequent cycle of displacement of said movable contact from said fixed contact.

2,745,025
MINIATURE ELECTRIC MOTORS
Roy C. Vaughan, Teheran, Iran
Application November 27, 1953, Serial No. 394,829
5 Claims. (Cl. 310—22)



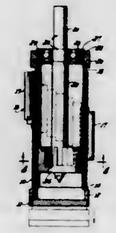
1. An electric motor comprising rotatable magnets, an oscillatory armature pivoted to one of said magnets, a crankshaft fixed with respect to said rotatable magnets and rotatably mounting one end of said magnets, and linkage means coupled to said armature at one end and loosely mounted around said crankshaft at the opposite end, whereby said armature is oscillated when said magnets are rotated.

2,745,026
HOUSING FOR SPINDLE MOTOR
Albert E. Kempton, Andover, Mass., assignor to Pope Machinery Corporation, Haverhill, Mass., a corporation of Massachusetts
Application April 6, 1955, Serial No. 499,556
1 Claim. (Cl. 310—89)



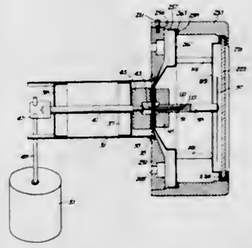
In combination with a cylindrical casing having an opening at one end almost as large as the cross-sectional area of the casing, a removable plate normally closing said opening, an electric motor mounted in said casing and spaced from said plate to provide space for multi-wire connections, a bushing extending through the wall of said casing near said end, and a conical partition member of stiff dielectric paper against the end of the motor nearest to said plate forming a substantially complete barrier between said motor and said space.

2,745,027
MAGNET CONVERSION OF AXIAL TO ROTARY MOTION
Jacob V. Williford, Jr., Downey, Calif., assignor, by mesne assignments, to Lido Land Co., Los Angeles, Calif., a copartnership
Application September 22, 1952, Serial No. 310,847
3 Claims. (Cl. 310—103)



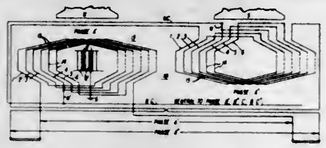
1. A device of the class described comprising two coaxially arranged members one of which is axially movable and the other of which is rotatable relatively thereto, a plurality of magnets on one of said members the axis of which are parallel to the axis of said member but the poles of which are distributed along the length of said member, the other member having a magnet the axis of which is arranged transverse to the axes of the first mentioned magnets whereby when relative axial movement occurs between said members rotary relative movement will be caused to take place between the members due to the change of repulsion and attraction between the magnets on said members.

2,745,028
POINTER BEARING FOR INDICATING INSTRUMENTS
George E. Ford, Brighton, N. Y., assignor to Qualitrol Corporation, East Rochester, N. Y., a corporation of New York
Original application January 16, 1948, Serial No. 2,576, now Patent No. 2,620,412, dated December 2, 1952. Divided and this application November 15, 1952, Serial No. 320,743
5 Claims. (Cl. 310—104)



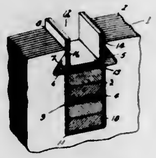
1. A gauge of the magnetic drive type including a wall, a driving magnet on one side of said wall, a pin on the other side of said wall in approximate alinement with said driving magnet, a shaft having an axial bore, said shaft being mounted axially on said pin with said pin extending into said bore, and a driven magnet fixed to said shaft in position to be under the magnetic influence of said driving magnet, characterized by a substantially flat end surface on the end of said pin which is within said bore, and a ball seated in said bore and contacting with said flat end surface of said pin to form a low-friction thrust bearing resisting axial thrust of said shaft in a direction along said pin.

2,745,029
POLYPHASE GENERATORS
John E. McElligott, Pasadena, Calif., assignor to General Electric Company, a corporation of New York
Application June 10, 1955, Serial No. 514,587
16 Claims. (Cl. 310—202)



1. A dynamoelectric machine comprising a multi-slot core and a polyphase winding carried in the slots of said core, each phase of said winding including an odd number of series connected phase belts and being arranged in two series connected sections with a junction therebetween, the junctions in the phases of said winding occurring at corresponding points therein, and a neutral connection between the junctions in the phases of said winding, whereby the induced phase voltage component between any point on any one of the phases of said winding and said core is substantially smaller than the induced phase voltage of the one phase of said winding.

2,745,030
DYNAMOELECTRIC MACHINE CORE MEMBER AND METHOD OF MAKING SAME
Morris J. Baldwin, Erie, Pa., assignor to General Electric Company, a corporation of New York
Application September 3, 1952, Serial No. 307,688
6 Claims. (Cl. 310—214)



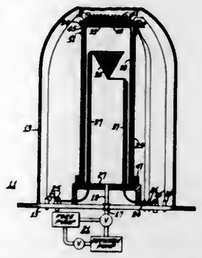
1. The method of wedging a conductor in a slot of a dynamoelectric machine core member, which method comprises placing a U-shaped wedge member in said slot with its base resting on said conductor and its legs projecting from said slot, and swedging said legs of said wedge member so that said legs are within said slot and tightly engaging the walls thereof thereby wedging said conductor therein.

2,745,031
DIRECT-CURRENT MACHINE WITH COMPENSATING POLE-FACE WINDINGS
Hans Rimkus, Berlin-Wilmersdorf, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a corporation of Germany
Application May 17, 1952, Serial No. 288,372
Claims priority, application Germany May 24, 1951
3 Claims. (Cl. 310—218)



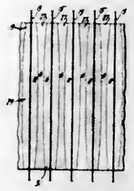
1. A dynamoelectric direct-current machine, comprising a machine housing structure and pole structures mounted on said housing structure, each pole structure having a pole core and a pole shoe in mutual coaxial alignment, said core having a pole excitation coil, said pole shoe of each pole comprising a rigid unitary iron structure having an even number of at least four peripherally sequential compensating winding grooves, said grooves being equally divided at each side of the pole axis, said core and said pole shoe comprising two separate parts and having respective junction faces outside said excitation coil, a radially extending screw bolt axially traversing said pole core and including means removably fastening said pole shoe and said core to said housing, said pole shoes each having a central longitudinal groove open to the radial magnetic air gap of the machine and extending from one side to the other of its respective shoe, and a clamp bar disposed in said longitudinal groove, said screw bolt being secured to said clamp bar.

2,745,032
PHOTO-CONDUCTIVE TARGETS FOR CATHODE RAY DEVICES
Stanley V. Forgue and Robert R. Goodrich, Cranbury, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application June 1, 1951, Serial No. 229,428
16 Claims. (Cl. 313—65)



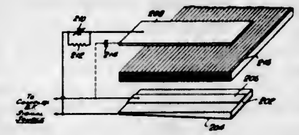
1. A photo-conductive target for a cathode ray device comprising a supporting member, a layer of electrically-conductive material, and a layer of evaporated red antimony tri-sulfide.

2,745,033
DISPLAY SURFACE FOR COLOR TELEVISION TUBE
Ernest O. Lawrence, Berkeley, Calif., assignor to Chromatic Television Laboratories, Inc., New York, N. Y., a corporation of California
Application December 22, 1953, Serial No. 399,753
12 Claims. (Cl. 313—78)



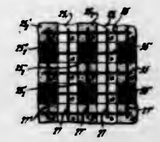
9. A display screen for cathode-ray tubes for producing television images in color and employing lens-grids comprising a multiplicity of generally parallel linear conductors for establishing a system of electron lenses adjacent to said display screen, comprising a supporting base, and a phosphor coating on said base consisting of generally parallel strips of three different phosphors respectively emissive on electron impact of light of three component colors additive to produce white light and arranged in a repeating pattern, alternate strips being wider at the end portions than at the central portions thereof and the intervening strips being wider at the central portions than at the ends thereof.

2,745,034
FREQUENCY ANALYZER
Rodney F. Simons, Huntington, N. Y., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application February 2, 1955, Serial No. 485,831
4 Claims. (Cl. 315—1)



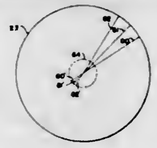
1. In combination with a cathode ray tube having an electron gun for forming an electron beam and a fluorescent face on which said electron beam impinges; first means for deflecting said electron beam along one dimension of the face of said cathode ray tube; a wedge-shaped piezoelectric crystal having a given length, a given width and a thickness which varies monotonically along the length thereof from a given minimum thickness, to a given maximum thickness, said maximum thickness being small relative to the width of said crystal, and said crystal being oriented within said cathode ray tube between said electron gun and said face with the length thereof substantially parallel to said one dimension and the width thereof substantially parallel to said electron beam; said electron beam passing in proximity to said crystal; a first electrode in contact with one length-width surface of said crystal and a second electrode in contact with the other length-width surface of said crystal; second means for applying a complex signal between said first and second electrodes, whereby said complex signal tends to deflect said electron beam in a direction perpendicular to said one dimension; and third means in spaced relationship with respect to said crystal for cancelling the tendency of said complex signal to deflect said electron beam at all points along the length of said crystal which are non-resonant to frequency components of said complex signal.

2,745,035
COLOR TELEVISION TUBE TARGET STRUCTURE
Ernest O. Lawrence, Berkeley, Calif., assignor to Chromatic Television Laboratories, Inc., New York, N. Y., a corporation of California
Application December 22, 1953, Serial No. 399,754
15 Claims. (Cl. 315—14)



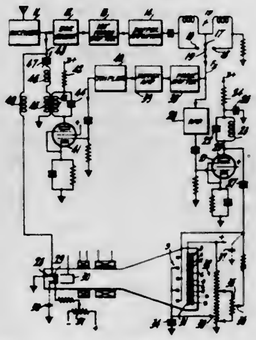
1. In a cathode-ray tube for displaying television images in color including means for directing a flow of electrons against a target area across which they are adapted to be deflected in two dimensions from a center of deflection to trace a raster defining a field of view; a target in said area comprising a display screen including a base, phosphors emissive on electron impact of light of different component colors additive to produce white light disposed over substantially the entire area of said base in a repeating pattern composed of groups of all of said phosphors, the area covered by each group being in at least one dimension of the order of magnitude of one elemental area of the television image to be reproduced and an electron permeable conducting layer covering said phosphors; an electrode structure mounted adjacent and substantially parallel to said screen, and terminals for applying different electrical potentials to said conducting layer and said electrode structure, respectively, said electrode structure having apertures defining the pupils of a multiplicity of electron lenses through which said electron flow can be focused on corresponding groups of phosphors, the centers of said groups of phosphors being substantially uniformly spaced and the spacing of said apertures being non-uniform and greater near the edges of said target than at the center thereof.

2,745,036
RADAR INDICATOR SWEEP DEFLECTION SYSTEM
Orten H. Symer, Jr., Wantagh, N. Y., assignor to Hazeltine Research, Inc., Chicago, Ill., a corporation of Illinois
Application October 21, 1954, Serial No. 463,650
6 Claims. (Cl. 315—22)



1. A radar indicator sweep deflection system comprising: a display device including a display screen and means for scanning the display screen with a beam which is periodically unblanked to develop on the display screen the display of target echoes of periodic radar signals; circuit means for generating periodic sweep signals inherently having undesirable characteristics during the initial portions thereof and individually starting a predetermined interval prior to the corresponding radar signal to control said scanning beam; means for supplying off-centering signals to said display device to enable said scanning beam to start from an off-center position for each scan and pass across the center of said display screen at the end of said predetermined interval; and circuit means for unblanking said display device as said scanning beam crosses over the center of said display screen to enable the device to display the subsequent portion of each scan which is controlled by the later portions of said sweep signals.

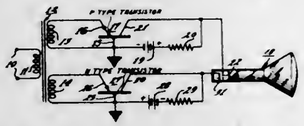
2,745,037
KEYING ARRANGEMENT FOR SINGLE BEAM COLOR TUBE
Nathan Rynn, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application December 18, 1951, Serial No. 262,272
8 Claims. (Cl. 315—30)



1. Apparatus for coupling a keying wave and a video signal to the grid of a kinescope in such manner that the keying wave and the video signal are added in a pre-

determined mutual phase relation in linear fashion comprising in combination a source of keying waves, a source of video signals, an inductance having one end coupled to the grid of the kinescope, said inductance forming with at least the inherent distributed capacity of said grid circuit, a circuit that is resonant to the frequency of said keying wave, means for coupling said keying waves from their source to said grid via said inductance and means for coupling said video signals from their source to said grid via said inductance.

2,745,038
SEMICONDUCTOR SIGNAL TRANSLATING CIRCUIT
George C. Sziklai, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application October 26, 1954, Serial No. 464,811
11 Claims. (Cl. 315—30)



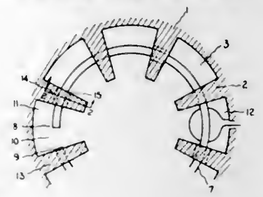
1. A signal translating circuit comprising in combination, a pair of semiconductor devices of opposite conductivity types, each including input and output electrodes, means for applying an alternating current signal to said input electrodes, an image reproducing device including a control electrode and a cathode, signal output means coupling the output electrode of one of said pair of semiconductor devices with said control electrode, and signal output means coupling the output electrode of the other of said pair of semiconductor devices with said cathode.

2,745,039
ULTRA-HIGH FREQUENCY ELECTRONIC DEVICE
Arnold E. Bowen, deceased, late of Fair Haven, N. J., by Virginia C. Bowen, executrix, Bloomfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Original application May 4, 1943, Serial No. 485,579, now Patent No. 2,530,373, dated November 21, 1950. Divided and this application September 20, 1950, Serial No. 185,850
2 Claims. (Cl. 315—39.51)



1. An electron coupled oscillator-amplifier combination comprising a ground plate, a cathode on one side only of said ground plate, a resonant system of conductors defining a first gap and a second gap, said system being located generally opposite the ground plate and on the same side thereof as the cathode, means to constrain electrons from said cathode to travel in curved paths which vary in curvature depending upon the velocity of the electrons and which pass through and beyond the neighborhood of said first gap, whereby any alternating electromagnetic field which may be developed in said gap by excitation of said resonant system serves to velocity vary the electron stream to divide the electrons as they pass said gap into first and second density varied streams which follow paths of unequal curvature, said second gap being positioned adjacent the path of said first density varied stream whereby this stream induces an alternating electromagnetic field in said second gap thereby generating self-oscillations in said resonant system, a collecting electrode adjacent to said ground plate and in the path of the said first density varied stream beyond the region of said second gap whereby said first stream strikes said collecting electrode, means including an edge of said ground plate defining an opening located in the path of said second density varied stream through which the said second density varied stream passes into a region on the other side of the ground plate from the cathode, and energy abstracting means positioned along the path of the said second stream in said last-mentioned region spaced from the ground plate in the direction of the thickness of the said plate, whereby self-oscillations of the said resonant system on the cathode side of the ground plate are maintained and transferred by electronic coupling to the system on the other side of the ground plate.

2,745,040
CAVITY TYPE MAGNETRONS
Robert Dunsmuir, Rugby, England, assignor to The British Thomson-Houston Company Limited, a British company
Application October 11, 1954, Serial No. 461,572
4 Claims. (Cl. 315—39.69)



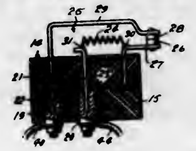
1. A multi-cavity-type magnetron having an anode of cylindrical form, said anode comprising a series of circumferentially displaced segments defining a series of cavity resonators, a first ring strap concentric with said anode, said strap passing through said segments, connections between said strap and alternate segments, a second ring strap parallel to said first ring strap, connections between said second ring strap and intervening segments, an end strap, means defining a gap in the said end strap in a particular cavity resonator, and connections from said end strap on opposite sides of said gap to respective segments defining said cavity resonator.

2,745,041
CONDUCTIVE FOOT COVERING
Russell W. Price, Newton, Mass.
Application March 26, 1952, Serial No. 278,556
5 Claims. (Cl. 317—2)



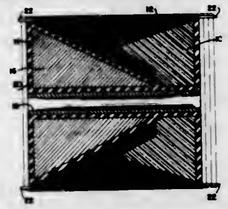
1. A conductive foot covering adapted to be worn over a shoe for minimizing the risk of explosion from static spark, said foot covering comprising a conductive half-sole portion, means for detachably connecting the conductive half-sole portion to the shoe, said means comprising a stretchable toe portion capable of accommodating the toes of a number of different sizes of shoes, and an endless stretchable strap formed integrally with the toe portion and adapted to extend around the rear of the heel portion of the wearer's shoe and of stretching to enable the foot covering to be worn on shoes of different lengths, and a conductive heel strip of a width and length capable of being folded over the top of the heel portion of a low shoe and of being tucked down inside the shoe and under the heel of the wearer to assist in anchoring the heel portion of the foot covering upon the wearer's shoe, and conductive means extending along said endless strap connecting said flexible conductive heel strip to the conductive sole portion of the shoe.

2,745,042
AUTOMATIC IGNITION MECHANISM FOR GAS BURNERS
John M. Hoff, Mansfield, Ohio, assignor to The Tappan Stove Company, Mansfield, Ohio, a corporation of Ohio
Application July 14, 1953, Serial No. 367,833
3 Claims. (Cl. 317—83)



1. A combined electric ignition means and a thermally responsive control switch therefor which is adapted to be removably mounted in a cooking range in position to ignite a gaseous fuel burner and comprises, a base of insulating material, a first connector prong carried by said base, a conductor arm carried by said base, a second connector prong carried by said base, said prongs extending above and below said base with the lower ends thereof being adapted to be received in a socket, a thermally responsive arm secured to the upper end of said first prong and extending outwardly therefrom substantially parallel to said base, a stationary contact carried by said conductor arm, a movable contact carried by said thermally responsive flexible arm in engagement with said stationary contact, and electric ignition means connected between said conductor arm and said second prong, said means thereby being in circuit with and controlled by such contacts, said thermally responsive flexible arm being operative when heated to move said movable contact out of engagement with said stationary contact.

2,745,043
MAGNETIC EJECTOR AND DE-MAGNETIZER
Anthony A. Ambrose, Chicago, Ill.
Application December 29, 1953, Serial No. 401,020
11 Claims. (Cl. 317—123)



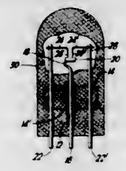
1. In an electromagnetic unit; a conical member of electrically conductive non-magnetic material, an electric coil wound around said conical member so that the outer surface of the coil is parallel with the axis of the conical member, said coil extending beyond the apex of said conical member and having an inwardly tapering recess in the end thereof opposite said conical member, a non-magnetic tapered non-conductive member in said recess, and a hollow tube of non-magnetic material extending through said coil and said conical member on the axis thereof.

2,745,044
ASYMMETRICALLY CONDUCTIVE APPARATUS
Fred J. Lingel, Syracuse, N. Y., assignor to General Electric Company, a corporation of New York
Application September 15, 1951, Serial No. 246,827
6 Claims. (Cl. 317—234)



1. An asymmetrically conductive unit comprising in combination a sheet of insulating material; a plurality of asymmetrically conductive elements each including a first and a second terminal plate member fastened in sealed and insulated relation and defining a sealed cavity therebetween, a semiconductor piece having a P–N junction therein between two surface portions thereof, said semiconductor piece being conductively secured from one of said surface portions to one of said plate members within said cavity, and means conductively connecting the other of said surface portions to the other of said plate members; and a plurality of formed connecting strip members; said elements being secured in coplanar spaced relation by said strip members on one face of said sheet and electrically connected from the said first plate member of one of said elements to the said second plate member of another of said elements by said strip members.

2,745,045
SEMICONDUCTOR DEVICES AND METHODS OF FABRICATION
Robert C. Ingraham, Danvers, Mass., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts
Application July 19, 1952, Serial No. 299,804
12 Claims. (Cl. 317—236)

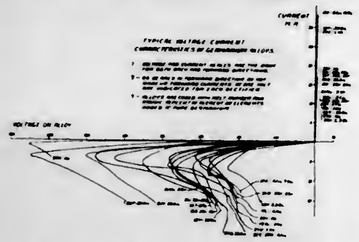


1. An electrical device comprising a base, a lead projecting from said base, a point contact element spaced from and supported on said base by said lead, a semiconductor element adapted to be engaged by said point contact element, a telescoping metallic mount having a fixed sleeve supported on said base and a lead slidable within said sleeve for adjustment relative thereto, and supporting said semiconductor element, and a rigidified insulating body surrounding the assembly of said elements and maintaining said elements in an adjusted position.

2,745,046
ALLOYS AND RECTIFIERS MADE THEREOF
Karl Lark-Horovitz and Randall M. Whaley, Lafayette, Ind., assignors to Purdue Research Foundation, Lafayette, Ind., a corporation of Indiana
Original application July 13, 1945, Serial No. 604,744, now Patent No. 2,514,879, dated July 11, 1950. Divided and this application December 29, 1949, Serial No. 135,749
12 Claims. (Cl. 317—239)

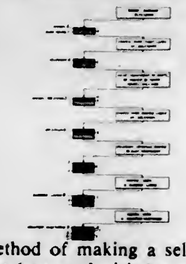
1. An electrical device comprising a semi-conductor, a counter electrode having substantially point contact with said semi-conductor and a second electrode having an area of contact with said semi-conductor which is large compared to that of the counter electrode, said semi-conductor consisting of germanium of the order of 99%

purity in combination with at least one of the elements from the group consisting of cobalt and nickel, said device having a peak back voltage in the range in excess of 10 volts and approaching the order of 200 volts.



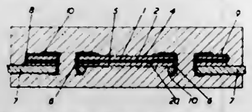
8. An electrical device comprising a body of semiconducting material consisting essentially of germanium of the order of 99% purity in combination with palladium, said palladium being present in an amount up to 0.50 atomic percent.

2,745,047
SELENIUM RECTIFIERS AND METHOD OF MANUFACTURE
Paul E. Lighty, Lafayette, N. J., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application December 14, 1951, Serial No. 261,726
12 Claims. (Cl. 317—241)



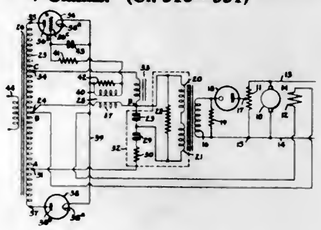
1. In the method of making a selenium rectifier containing adjacent layers of nickel and selenium, the step comprising producing a layer of a compound of nickel selenide at the interface portions of the layers of nickel and selenium by heating said two layers to an elevated temperature of at least 400° C.

2,745,048
ELECTRIC CAPACITORS
Walter Schick, Ilford, England
Application November 23, 1954, Serial No. 470,724
Claims priority, application Great Britain December 1, 1953
8 Claims. (Cl. 317—258)



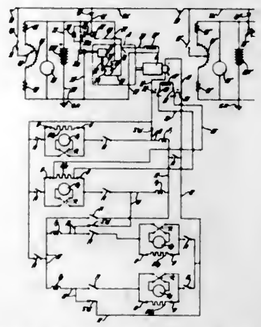
1. An electric capacitor comprising as an assembly at least two thin metallic electrodes with lead-in conductor members, a mica dielectric plate not exceeding two and a half mils in thickness separating said electrodes, and relatively thick insulating supporting plates between which said so-separated electrodes are secured for mechanical strengthening said assembly being enclosed save for projecting end portions of the said conductor members in an insulating coating of a composition comprising at least 70% by weight of an insulating mineral powder, and a resin for binding the powder, said coating bonding with said assembly including the peripheral surfaces of said lead-in wires, and said coated assembly being incorporated in a casing of insulating plastic material.

2,745,049
PHASE SHIFT SYSTEM UTILIZING SATURABLE REACTORS AND MOTOR CONTROL UTILIZING SUCH SYSTEM
Donald B. Holland, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application October 23, 1952, Serial No. 316,440
7 Claims. (Cl. 318—331)



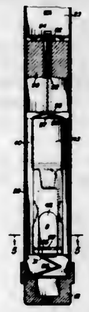
4. In combination, a D. C. motor, a source of adjustable voltage in circuit with the armature of said motor, means for supplying the field winding of said motor with rectified A. C. including a grid controlled electron tube for regulation, and a phase shift circuit including a saturable reactor having a saturating winding associated with the armature of said motor for varying the saturation of said reactor as the energization of the motor armature is varied, an A. C. winding effective to vary the phase of the voltage applied to the grid of said electron tube as the saturation of said reactor is varied and means responsive to energization of the motor armature for preventing saturation of said saturating winding unless said motor armature is energized more than a preselected amount.

2,745,050
LOCOMOTIVE DYNAMIC BRAKING SYSTEM
Lauren L. Johnson, Westchester, Richard M. Dilworth, Hinsdale, and Albert N. Addie, La Grange Park, Ill., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 2, 1952, Serial No. 264,624
16 Claims. (Cl. 318—367)



9. A dynamic braking system of the character described, comprising: a traction motor having an armature and a field winding; a resistance grid adapted to be connected across said armature; a generator having a main field and a shunt field; means for connecting said generator to said field winding to provide excitation thereof; switch means for connecting said shunt field directly across said grid, whereby the flux developed in the shunt field is in opposing relation to the flux developed in the main field; a source of voltage; a circuit connecting the main generator field across said source; a variable resistance connected in series with said main field across said source; means for varying said resistance; a solenoid connected across said source for operating said resistance varying means; variable means for developing a control voltage; a sensitive relay having normally open contacts in series with said solenoid and having an operating coil connected between said field and said control voltage developing means for controlling the operation of said resistance varying means as a function of the magnitude of said control voltage and the voltage drop across said resistance; and a rectifier connected in series with the operating coil of said relay for preventing reverse current operation thereof.

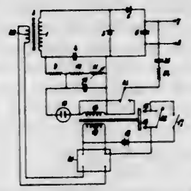
2,745,051
BATTERY-CAPACITOR CARTRIDGE FOR PHOTOGRAPHIC FLASH UNIT
Otto H. Sahmel, Rochester, N. Y., assignor to Graflex, Inc., Rochester, N. Y., a corporation of Delaware
Application January 21, 1955, Serial No. 483,383
5 Claims. (Cl. 320—1)



1. A removable cartridge for use as a powering means in the battery case of a photographic flash unit, comprising a tubular housing made of insulating material and open at both ends, a battery holder slidable axially in and out of said housing, and comprising a base and a pair of resilient arms projecting from said base and constructed and arranged to engage resiliently with opposite sides of a battery positioned in said holder, said battery holder having electrical connection with one side of said battery and being positioned in said housing so that its base is adjacent one open end of said housing, a capacitor holder slidable axially in and out of said housing and comprising a resilient electrically-conducting member having one end adjacent the other open end of said housing and having electrical connection with the other side of said battery and with one side of said capacitor, and means within said housing for electrically connecting the opposite side of said capacitor with said battery holder.

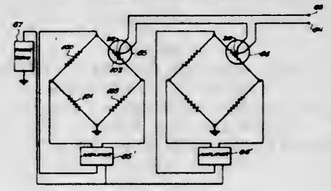
2,745,052
DEVICE FOR CHARGING A CAPACITOR
Theo Willem Willemse, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application August 4, 1953, Serial No. 372,249
Claims priority, application Netherlands September 26, 1952
2 Claims. (Cl. 320—1)

1. A circuit-arrangement comprising a main capacitor, a main rectifier connected in series with said capacitor, means to apply an alternating voltage across the series combination of said capacitor and rectifier to charge said capacitor, an auxiliary rectifier connected in parallel with said series combination, the direction of conduction of said auxiliary rectifier in the circuit formed by said auxiliary rectifier and said series combination beng the same as that of said main rectifier, an auxiliary capacitor connected in series with said series combination, and circuit



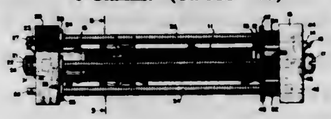
means including voltage sensitive means coupled to one of said rectifiers to render said voltage applying means inoperative when said main capacitor attains a predetermined value.

2,745,053
D. C. REFERENCE SOURCE
Franklin Meyer, Franklin Square, N. Y., assignor to Aviation Engineering Division, Avien-Knickerbocker, Inc., Woodside, N. Y.
Application November 12, 1953, Serial No. 391,519
15 Claims. (Cl. 323—69)



11. A D. C. reference source comprising, a thermocouple electrically heated to a first temperature by means of a resistance wire, a second thermocouple connected in series opposition to said first thermocouple, said second thermocouple being heated to a second temperature by a second resistance element, output terminals in series with said thermocouples, a first circuit containing said first resistance element comprising a bridge having input and output terminals, an amplifier having at least two stages of amplification having its input terminals connected to said output terminals of said bridge and its output terminals connected to said bridge input terminals, a second circuit containing said second resistance element comprising a bridge having input and output terminals, an amplifier having its input terminals connected to said bridge input terminals, and means to introduce an A. C. signal at the grid of one of said vacuum tubes in each of said amplifiers.

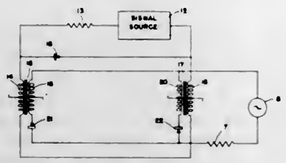
2,745,054
ELECTRICAL APPARATUS FOR MEASURING
John Leyenberger, Willow Grove, Pa., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application October 16, 1952, Serial No. 314,979
6 Claims. (Cl. 323—75)



6. In a potentiometric measuring apparatus, the combination comprising, a balanceable electrical network, a plurality of sources of signal potential arranged for selectable comparison with a potential on said network, and means including a plurality of calibration connec-

tions in said network selectable in accordance with said sources of signal potential, said means comprising, an elongated bobbin of insulating material having a resistance wire wound thereon, a first insulated block mounted on one end of said bobbin, a second insulated block mounted on the opposite end, a plurality of metallic contact surfaces peripherally spaced about said bobbin and mounted in said first block, a corresponding plurality of holes extending through said second block and spaced relative to said bobbin as said contact surfaces, a plurality of screw threaded members projecting into said holes and bearing against said contact surfaces, each of said threaded members having a shoulder adjacent said second block, resilient means bearing between said shoulder and said block on each of said threaded members to maintain said members in tight electrical contact with said contact surfaces, a plurality of resilient metallic screw following members, said following members engaging said resistance wire to establish electrical contact between said threaded members and said resistance wire, and each comprising a flattened U-shaped member having the open ends of the U formed to threadedly engage the associated threaded member with the closed end of the U engaging the resistance wire, and electrical connecting terminals for each of said contact surfaces and said resistance wire.

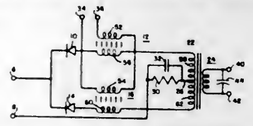
2,745,055
LOAD AND CONTROL CURRENT FEEDBACK MAGNETIC AMPLIFIER
Hugo H. Woerdemann, Whittier, Calif., assignor to North American Aviation, Inc.
Application December 19, 1951, Serial No. 262,425
5 Claims. (Cl. 323—89)



1. In a magnetic amplifier, a plurality of load and control windings, said load windings inductively coupled to said control windings and relatively disposed with respect to said control windings so as to induce series aiding currents in said control windings and thus induce even harmonic currents in said control windings and inductively buck out fundamental and odd harmonic power source currents induced in said control windings, a load, a power source connected to furnish power to said load windings and said load, a signal source connected to furnish input signals to said magnetic amplifier, and a rectifier connected in circuit with said control winding and poled in a direction to permit circulation of said induced series aiding currents in said control windings.

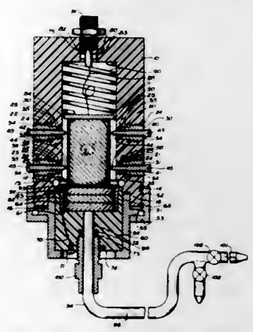
2,745,056
MAGNETIC AMPLIFIER CIRCUIT
Marcel B. Zucchino, Long Branch, N. J., assignor to the United States of America as represented by the Secretary of the Army
Application May 4, 1953, Serial No. 353,023
5 Claims. (Cl. 323—89)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A magnetic amplifier comprising; an alternating current supply, a source of control voltage, a first and a second rectifier, a first and a second saturable reactor each having a gate winding and a control winding, a transformer having a center tapped push-pull wound primary and a secondary, a resistor, a first condenser, said first rectifier connected to the gate winding of said first saturable rectifier which is connected to one-half of the primary winding of said transformer, the second rectifier connected to the gate winding of said second saturable reactor which is connected to the other half of the primary winding of said transformer, said resistor connected from the center tap of the primary of said transformer to one terminal of said alternating current supply, the other terminal of said alternating current supply connected to



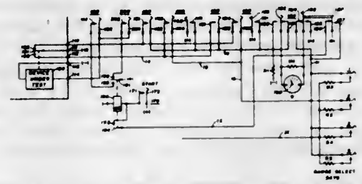
said first and second rectifiers, said first condenser connected across said resistor, the control winding of said first saturable reactor connected in series with the control winding of said second saturable reactor across said source of control voltage, a utilization circuit connected across the secondary of said push-pull output transformer and a second condenser connected across the secondary of said push-pull output transformer.

2,745,057
APPARATUS USED IN MEASURING INTERSTITIAL WATER CONTENT AND ELECTRICAL RESISTIVITY OF UNMOUNTED CORE SAMPLES
Billy J. Dotson, Dallas, Tex., assignor, by mesne assignments, to Socony Mobil Oil Company, Inc., a corporation of New York
Application August 2, 1952, Serial No. 302,374
12 Claims. (Cl. 324—13)



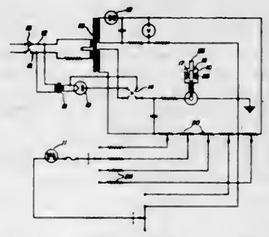
4. Apparatus of the character described comprising in combination a body member containing a chamber therein adapted to receive a core sample and having an opening thereto, means for introducing a fluid into said chamber, a first electrode in said chamber adapted to contact a core sample in said chamber, a ring member contacting said body member at said opening to said chamber, a block member fitting within said ring member, a semi-permeable membrane contacting said block member and positioned with respect thereto to contact a core sample in said chamber, resilient means within said chamber adapted to hold a core sample between said first electrode and said semi-permeable membrane, a second electrode contacting said semi-permeable membrane and adapted to contact a core sample in said chamber, means for retaining said ring member in its position contacting said body member at said opening to said chamber, fluid conducting means passing through said block member and leading to said semi-permeable membrane, electrical conductor means leading to said first electrode, electrical conductor means leading to said second electrode, and a plurality of electrode means leading through said body member and adapted to contact a core sample within said chamber.

2,745,058
DIRECT READING TIME MEASURING DEVICE
Theodor Frankel, Rochester, N. Y., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application August 14, 1952, Serial No. 304,315
11 Claims. (Cl. 324—28)



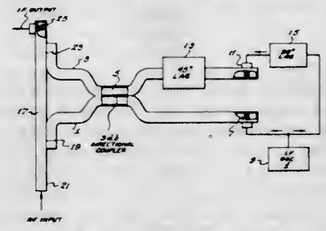
11. An instrument for measuring a brief interval of time comprising; non-self-restoring means for measuring the value of an electrical quantity of current, the response time required for said measuring means to reach its maximum measurement being greater than said brief interval, means for controlling said current within said brief interval of time comprising a relay having at least make and break contacts, means effective at a time when said relay is operated for completing a circuit including said make contacts and said measuring means, and means effective simultaneously with said last named means for releasing said relay thereby opening said make contacts to open said circuit, whereby the time required for said make contacts to open is measured.

2,745,059
DEVICE FOR MEASURING GAS PRESSURES
Roy C. Gauger, Rochester, N. Y., assignor, by mesne assignments, to Consolidated Electrodynamics Corporation, Pasadena, Calif., a corporation of California
Application May 3, 1952, Serial No. 285,959
19 Claims. (Cl. 324—33)



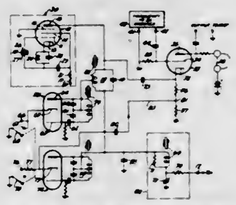
6. In a device for determining the pressure of a gas by measuring the current intensity produced by a cold cathode discharge taking place in the gas, a discharge tube comprising an inner generally cylindrical member and an outer generally cylindrical member secured together in generally concentric relation and forming a double-walled envelope, said inner member defining a discharge space and being provided with an opening for the introduction of a gas into said space, an electrode comprising two parallel portions facing each other across said discharge space, each said electrode portion projecting through said inner member into the space between said inner member and said outer member and into said discharge space, magnet means disposed in the space between said inner member and said outer member and encircling said inner member, said magnet means being in contact with said electrode portions, said electrode portions forming pole extensions for said magnet means to produce a beam of magnetic lines of force across said discharge space from one said portion to the other said portion, a loop electrode of substantially lesser surface area than said first-named electrode mounted in said discharge space and lying in a plane generally normal to said beam of magnetic lines of force and generally intermediate said electrode portions, said loop electrode encircling said beam of magnetic lines of force between said electrode portions, means for energizing said first-named electrode and said loop electrode at opposite polarities, and means for causing said loop electrode to have a positive polarity and said first-named electrode to have a negative polarity when operating at a pressure below about 10 microns Hg and for causing said loop electrode to have a negative polarity and said first-named electrode to have a positive polarity when operating at a pressure above about 10 microns Hg.

2,745,060
MICROWAVE RADIO FREQUENCY CONVERTER SYSTEMS
Peter J. Sferrazza, Wantagh, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware
Application September 2, 1954, Serial No. 453,866
6 Claims. (Cl. 324—58)



3. Apparatus for testing a radio device, comprising means for producing a first signal of relatively high frequency F and means for producing second and third signals of relatively low frequency f, said second and third signals being in phase quadrature, means for mixing said first signal with said second signal to produce a first pair of side band signals of frequencies $F+f$ and $F-f$ respectively, means for mixing said first signal with said third signal to produce a second pair of side band signals of frequencies $F+f$ and $F-f$ respectively, means for combining said first and second pairs of side band signals to produce cancellation of said side band signals at one of said side band frequencies and addition at the other of said side band frequencies to produce a resultant side band signal, means for applying said resultant side band signal as input to the device to be tested, and means for mixing the resultant output of said device with said first mentioned signal to produce a signal of said frequency f representing the characteristics of said device at said frequency of said resultant side band signal.

2,745,061
ELECTRIC FREQUENCY STANDARD OSCILLATING SYSTEM
Jerry B. Minter 2nd, Boonton, N. J., assignor to Measurements Corporation, Boonton, N. J., a corporation of New Jersey
Application June 25, 1952, Serial No. 295,427
21 Claims. (Cl. 324—79)



1. A frequency meter of the heterodyne kind comprising in combination, a master oscillator of highly stabilized

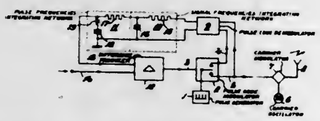
fundamental frequency accompanied by harmonics each of whose amplitudes is normally markedly lower than the fundamental frequency, a free-running oscillator, means to lock the frequency of said free-running oscillator to said fundamental frequency, and a mixer device upon which the signals from both the stabilized oscillator and the free-running oscillator are separately but simultaneously impressed for cross-modulation, said modulator device having an output circuit wherein there are produced harmonics of said fundamental frequency whose amplitudes are markedly increased over the corresponding harmonics from said master oscillator.

2,745,062
ELECTROSTATIC INSTRUMENTS WITH MAGNETIC SUSPENSIONS
Gustav K. Medicus, Dayton, Ohio
Application February 26, 1952, Serial No. 273,533
1 Claim. (Cl. 324—109)
(Granted under Title 35, U. S. Code (1952), sec. 266)



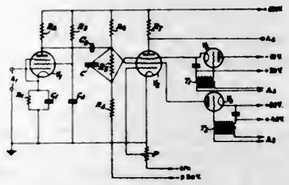
An electrostatic instrument comprising a stationary electrode structure having two cylindrical surfaces concentric with and symmetrical to a vertical axis, the axial dimensions of said surfaces increasing from a minimum value at one end to a maximum value at the other end; an electrode structure rotatable about said axis having two cylindrical surfaces concentric with and symmetrical to said axis and of small circumferential dimension relative to the circumferential dimension of said stationary electrode surfaces, said two cylindrical surfaces being formed by a pair of thin non-rigid metallic ribbons extending between the ends of upper and lower rigid metallic cross members; fixed annular magnetic pole means concentric with said axis; annular ferromagnetic pin means, shaped so as to be self-centering relative to said pole means, attached to said upper cross member at its center and positioned below said pole means; a torsion fiber attached at one end to the center of said lower cross member and at the other end to a fixed point on said axis below said lower cross member; the length of said fiber being such as to position said pin means in close but not touching relationship to said pole means, and the magnetic force of said pole means being such that said metallic ribbons and said fiber are placed in tension by the magnetic attraction between said pole means and said pin means.

2,745,063
PULSE-CODE MODULATOR
Frank de Jager, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application March 20, 1951, Serial No. 216,486
Claims priority, application Netherlands March 29, 1950
9 Claims. (Cl. 332—11)



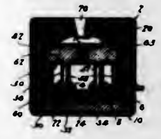
1. Apparatus for translating intelligence signals having a predetermined frequency range into code modulated pulses having a repetition rate substantially higher than the maximum frequency in said frequency range, said apparatus comprising a pulse code modulator yielding code modulated pulses, means to supply to said modulator pulses of said repetition rate, a return circuit for said modulator and including a pulse code demodulator, a first network integrating all voltages whose frequencies fall within said signal frequency range, a second network integrating all voltages whose frequencies fall between the maximum frequency of said signal frequency range and said repetition rate and a difference producer having first and second input circuits, said producer having amplifying characteristics at which the voltage produced in the output thereof is proportional to the difference in the voltages supplied to said input circuits, the output of said pulse code modulator being fed serially through said demodulator, said networks and through the first input circuit of said difference producer circuit to the input of the pulse code modulator, and means to supply the intelligence signal through the second input circuit of said difference producer to the input of said modulator.

2,745,064
PULSE CODE MODULATION SYSTEM
Christopher Edmund Gervase Bailey, Bromma, Sweden, and David Harker Paul, Loughborough, England, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application August 30, 1951, Serial No. 244,428
Claims priority, application Great Britain
September 1, 1950
8 Claims. (Cl. 332—11)



1. A pulse code communication system comprising a transmitter including encoding apparatus for a modulation signal and provided with means to produce in response to an input voltage representative of a value of said signal, an output voltage varying exponentially as a function of time and having an initial level depending on said input voltage; and a receiver for intercepting pulse code signals emitted by said transmitter and including decoding apparatus provided with means responsive to said pulse code signals to produce an output voltage varying exponentially as a function of time and having a final level depending on said pulse code signals.

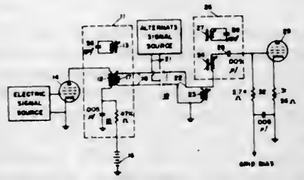
2,745,065
COUPLING FOR COAXIAL HIGH FREQUENCY TRANSMISSION LINES
Charles H. Maher, Washington, D. C.
Application March 15, 1955, Serial No. 494,418
4 Claims. (Cl. 333—6)



1. A device for connecting inner and outer conductors of a coaxial branch line respectively to inner and outer conductors of a coaxial cable, comprising; a body of insulating material including a pair of blocks each having a spaced pair of grooves in the opposite faces thereof; the grooves in said blocks cooperating to receive said line and cable therein when said blocks are clamped together; means for clamping said blocks together; a metallic jumper plate in one of said blocks; metal prongs on said jumper plate, said prongs extending into the grooves for tapping

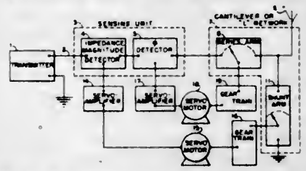
outer conductors of said cable and line when said blocks are clamped together, whereby metallically to connect said outer conductors; the other of said blocks having a well therein, with the bottom of said well opening into said grooves; a coupler unit removably engaging in said well and including a spaced pair of metallic slugs separated by a dielectric and forming opposite plates of a capacitor; and insulated probes respectively connected to said slugs and extending through said opening said probes having exposed free ends for engaging inner conductors of said cable and line.

2,745,066
COUPLING TRANSFORMER WITH ALTERNATE SIGNAL SOURCE
James R. Marshall, Englewood, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware
Application December 21, 1950, Serial No. 201,895
3 Claims. (Cl. 333—7)



1. An electric wave coupling circuit comprising a primary winding connected to an electric signal source, a low impedance coupling line connected to said primary winding, a switch connected to said coupling line, an alternate signal source connected to said switch, a secondary winding magnetically isolated from said primary winding and connected to said switch, and a magnetically isolated inductance connected in shunt with said secondary winding between said secondary winding and said switch, said switch selectively connecting said primary circuit or said alternate signal source to said secondary winding.

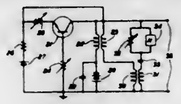
2,745,067
AUTOMATIC IMPEDANCE MATCHING APPARATUS
Virgil True and Bert Fisk, Washington, D. C.
Application June 28, 1951, Serial No. 234,135
8 Claims. (Cl. 333—17)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. Apparatus for automatically matching the impedance of a load to an energy source over a wide range of frequencies comprising: a network coupling the energy source to the load including, a first circuit coupled between said source and said load and responsive to a difference in phase between load voltage and current and a second circuit responsive to a load impedance different from a predetermined magnitude, a first amplifier coupled to said first circuit, a first driving means coupled to said first amplifier, a first operating means coupled to said first driving means and driven thereby, a cantilever network coupled between said source and said load and having a series arm and a shunt arm, said series arm comprising a variable inductance and a variable capacitance electrically connected in series and rigidly coupled so that the inductance reaches maximum inductance when the capacitance reaches maximum capacitance and the inductance reaches minimum inductance when the capacitance reaches minimum capacitance, said shunt arm comprising a variable inductance and a variable capacitance electrically connected in parallel and rigidly coupled so that the inductance reaches its maximum when the capacitance reaches its maximum and the inductance reaches its minimum when the capacitance reaches its minimum, the series arm being coupled to said first operating means and driven thereby to eliminate the phase difference in the load, a second amplifier coupled to said second circuit, a second driving means coupled to said second amplifier, a second operating means coupled to said second driving means and driven thereby, the shunt arm of said cantilever network being coupled to said second operating means and driven thereby to cause the load impedance to match the predetermined magnitude.

3. A circuit for measuring the impedance of a load comprising a capacitive voltage divider connected across a voltage source, a first rectifier coupled across a portion of said capacitive voltage divider, a second voltage divider in paralled with said capacitive voltage divider comprising a resistance of known impedance value in series with the load to be measured, a second rectifier coupled across said resistance which is oppositely polarized with respect to said first rectifier, the output voltages of said first and second rectifiers being equal in magnitude under given load conditions, a potentiometer connected between the rectifier connected mid-points of said voltage dividers, said potentiometer having an adjustable tap the potential at which is a function of the load impedance.

2,745,068
TRANSISTOR NEGATIVE IMPEDANCE CONVERTERS
Danforth K. Gannett, Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application December 23, 1954, Serial No. 477,298
14 Claims. (Cl. 333—80)



14. A negative impedance converter which comprises a transistor having an emitter electrode, a collector electrode, and a base electrode, a first transformer having a first winding, a second winding, and a turns ratio from said first winding to said second winding of substantially

$$1:\frac{z_{12}}{z_{22}}$$

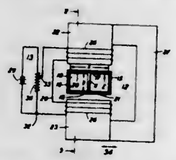
where z_{12} is the transfer impedance from said emitter and base electrodes to said collector and base electrodes and z_{22} is the self-impedance between said collector and base electrodes, a first impedance having a value of substantially $z_{22}(\alpha-1)$, where α is the current amplification factor of said transistor, said first winding being connected between said collector and base electrodes, said second winding being connected in series with said first impedance between said emitter and collector electrodes, and said first and second windings being poled with respect to each other to provide degenerative feedback from said collector electrode to said emitter electrode, a first pair of terminals coupled to said collector and base electrodes and a second pair of terminals coupled to opposite ends of said first impedance, whereby an impedance N connected across said first pair of terminals causes an impedance of substantially $-(\alpha-1)N$ to be presented at said second pair of terminals and an impedance N con-

nected across said second pair of terminals causes an impedance of substantially

$$\frac{N}{-(\alpha-1)}$$

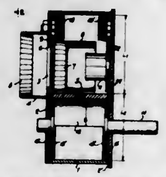
to be presented at said first pair of terminals.

2,745,069
MICROWAVE MAGNETIZED FERRITE ATTENUATOR
William H. Hewitt, Jr., Mendham, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application May 17, 1950, Serial No. 162,570
11 Claims. (Cl. 333—81)



6. In combination, a conductively bounded microwave transmission structure, means for introducing linearly polarized electromagnetic waves into said structure at one point, a load associated with said structure at another point for utilizing said waves after propagation from said one point to said other point, a solid body comprising ferrite located within said structure between said points, and means for applying a magnetic field to said body in a direction parallel to that of the polarization of said waves, said body being an elongated element of cross section less than the internal cross section of said structure and being substantially longitudinally arranged in said structure.

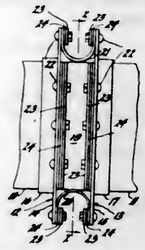
2,745,070
CYLINDER TUNING OF CAVITY
Loy E. Barton, Collingswood, N. J., assignor to the United States of America as represented by the Secretary of the Navy
Application January 8, 1945, Serial No. 571,921
9 Claims. (Cl. 333—82)



4. An electrical resonator comprising a substantially closed cavity structure having a dimension which determines the resonant frequency thereof, and means for varying said dimension comprising a hollow semi-cylindrical member having a length dimension substantially equal to the cavity dimension perpendicular to said dimension rotatably mounted within the cavity about an axis perpendicular to said dimension and asymmetrically positioned with respect to the cavity.

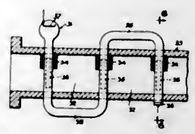
2,745,071
FLEXIBLE WAVE GUIDE COUPLING
Coleman J. Miller, Catonsville, and Frank M. Krantz, Baltimore, Md., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application May 14, 1952, Serial No. 287,664
2 Claims. (Cl. 333—98)

1. A flexible coupling for joining two sections of hollow rectangular cross-section waveguide having a predetermined characteristic impedance path, comprising, externally extending flanges adapted for mounting on the ends of the waveguide sections to be joined, two flexible conducting members of generally U-shaped cross section each having legs and being substantially equal in length perpendicular to said U-shaped cross section to the waveguide cross-section interior width dimension, two further flexible conducting members of generally U-shaped cross section each having legs and being substantially equal in



length perpendicular to said U-shaped cross section to the wave guide cross-section interior height dimension and means securing one leg of all the generally U-shaped members to each of said flanges with the curved portion of the U-shaped members extending toward the center of said flanges, said curved portions defining a passage substantially identical with the inside dimensions of the waveguides, whereby to provide an impedance path substantially equal to that of the waveguide sections to be joined.

2,745,072
WAVE GUIDE GAS SWITCHING DEVICE
Ladislas Goldstein, Urbana, Ill., Donald J. Levine, New York, N. Y., and William Sichak, Lyndhurst, N. J., assignors to International Telephone and Telegraph Corporation, a corporation of Maryland
Application February 18, 1952, Serial No. 272,236
12 Claims. (Cl. 333—98)

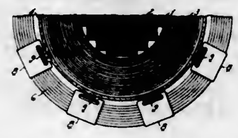


1. A switching device comprising a waveguide of a hollow type containing a plurality of spaced apart resonant structures disposed transversely to the direction of propagation of an electromagnetic wave within said waveguide, each said resonant structure including a conductive inductive iris, a conductive capacitive post and a gas discharge tube section, and means to control substantially simultaneously and independently of electromagnetic radio-frequency energy propagated through said waveguide the ionization of the gas contained in the tube sections of said structures.

2,745,073
MEANS FOR SPACING DISK COILS
Anthony J. Swidelsky, Bellevue, Pa., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application December 6, 1954, Serial No. 473,138
6 Claims. (Cl. 336—60)

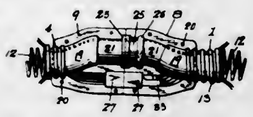
6. An electrical induction apparatus comprising a magnetic core including first and second sections spaced apart axially and surrounding said core, a generally T-shaped element affixed at its base to said apparatus with its cross arm having a first end portion and a second flexible end portion, and a spacer extending longitudinally radially between said first and second sections

and anchored to said element, said spacer having an end segment with a T-shaped slot to form first and second lips spaced apart a distance less than the cross arm of said element and defining a groove to contain the cross arm of said element, said first lip opposite said second lip and overhanging an end section of the groove, said first portion disposed within said end section, said second lip overhanging an opposite end section of the groove and having a surface diverging outward from said first of said lips and in a direction away



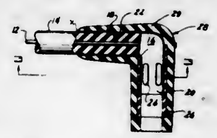
from the groove for engagement by said second flexible portion which is caused to flex, slide past said second lip and become disposed within the opposite end section by force being exerted through said diverging surface, first and second base surfaces of said first and second lips, said first and second portions in abutment with said first and second base surfaces, respectively, thereby causing said portions to be retained within the groove securing the cross arms of said element within said spacer.

2,745,074
ELECTRICALLY EQUIPPED OXYGEN HOSE
Ralph E. Darling, Bethesda, Md.
Application January 11, 1951, Serial No. 205,597
2 Claims. (Cl. 339—16)



1. In combination with an oxygen hose consisting of two sections each having electrical conductors integrated within its wall, an integral end sleeve on each section, and a pair of resiliently engaged separable coupling tubes fitted in said sleeves, a pair of mechanical coupling units having voids and embracing the end sleeves and tubes, an insulation block mounted in each unit laterally of its coupling tube, a plug-contact forming a terminal in one block and a socket-contact forming a terminal within the other block, and each conductor having an end exterior of a hose wall projecting through a void and attached to a terminal contact.

2,745,075
INSULATED TERMINAL
Robert L. Simpkins, Royal Oak, John S. Materka, Dearborn, and Howard A. Elliott, Detroit, Mich., assignors to Essex Wire Corporation, Detroit, Mich., a corporation of Michigan
Application January 31, 1951, Serial No. 208,768
2 Claims. (Cl. 339—26)



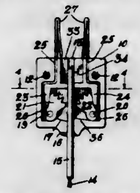
1. An insulated sleeve type terminal particularly adapted for use with a spark plug comprising an inner metal shell having a conductor-receiving portion and an electrode-receiving portion, a conductor having insulating material thereon extending into said conductor-receiving portion and in electrical contact with said conductor receiving portion, and a cap of protective dense material combining a neoprene compound molded over said terminal and the adjacent portion of said conductor and bonded to the insulating material on said conductor, said cap extending beyond the free end of the electrode-receiving portion to provide a protective cover.

2,745,076
ELECTRICAL CONNECTOR
Welding J. Kolstad, Milton, Mass., assignor to Albert & J. M. Anderson Manufacturing Company, Boston, Mass., a corporation of Massachusetts
Application November 16, 1954, Serial No. 469,196
5 Claims. (Cl. 339—47)



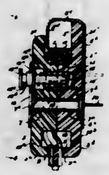
1. A cable connector comprising an elongated metal contact member provided with a pair of spaced elongated outer contact fingers and a pair of spaced elongated inner contact fingers adapted to engage with the spaces of a second and identical connector, at least one of said fingers of each of cooperating connectors having a laterally projecting hook portion adapted for locking engagement with a corresponding hook portion of said second connector upon relative rotation and outward pulling of engaged connectors to engage the hook portions, said hook portions having rectangular engaging surfaces extending parallel to the longitudinal axis of the connectors whereby to positively prevent inadvertent relative rotation and disengagement of the connectors.

2,745,077
MALE ELECTRIC PLUG
William H. Cook, Toledo, Ohio
Application August 30, 1954, Serial No. 452,774
1 Claim. (Cl. 339—99)



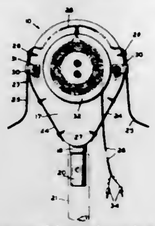
A male plug comprising positioning means, a pair of conductor prongs mounted in said positioning means, corresponding ends of said prongs extending outwardly of said positioning means and being adapted to be inserted into a female outlet, the inner ends of said prongs extending within said positioning means and being oppositely disposed therewithin, said positioning means having a central longitudinal bore extending therethrough intermediate said prongs and adapted to receive therewithin an electrical cord, oppositely disposed pawls of conductive material rotatably mounted within said positioning means on opposite sides of said bore, said pawls being displaced laterally with respect to each other whereby to engage opposite sides of the electrical cord, said positioning means being adapted to permit the lateral flexing of the inner ends of said prongs, each of said pawls having a cam surface in contact with the inner end of the adjacent prong, said pawls being adapted to permit the inward movement of the electrical cord and to pierce said cord upon the latter being pulled outwardly so as to establish contact with the conductor wires therewithin.

2,745,078
DETACHABLE ELECTRIC CIRCUIT CONNECTING DEVICE HAVING CONDUCTOR SHEATH PENETRATING MEANS
Thomas J. Wood, Jr., Mayfield Heights, Ohio
Application November 20, 1953, Serial No. 393,286
7 Claims. (Cl. 339—99)



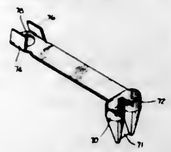
1. A device for electrically connecting a branch circuit to another circuit, said device comprising a body formed of non-conducting material and having an end shaped to provide a through channel adapted to receive a portion of a cable having current conductor wires therein, the bottom wall of said channel providing a seat for the cable, conductor members for a branch circuit mounted within said body and including leads having pointed terminating ends which are in offset relationship to each other and which extend outwardly beyond said seat into said channel, and a movable member supported on said body for movement in a direction transversely of said channel and provided with a pressure element disposed outwardly of said channel and adapted to engage a cable adjacent to the opening of the channel and move the cable into engagement with said seat upon movement of said movable member in a direction to move said pressure element inwardly of said channel, the pointed terminating ends of said leads being projected through the insulation of the cable and into electrical contact with the respective wires therein upon movement of the cable against said seat, said movable member being provided with an abutment disposed to engage the cable and move it away from said seat and disconnect said leads from said wires when said movable member is moved in a direction to move said pressure element outwardly of said channel.

2,745,079
LINE TAPPER
Rodney B. Cummings, Philomath, Oreg.
Application March 2, 1954, Serial No. 413,607
2 Claims. (Cl. 339—109)



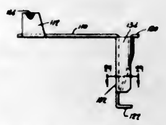
1. A line tapper for making electrical connections to a pair of spaced apart electrical conductors normally supported at a substantial elevation above the ground surface, said line tapper comprising a disk, pear-shaped in front elevation, of insulated material, having a width to bridge the normal spacing between the spaced apart electrical conductors, a pair of inverted V connecting hooks fixedly secured on the periphery of said disk at opposite sides thereof, the pear stem portion of said disk extending downwardly between said hooks and providing an extension rod receiving means for raising and supporting said line tapper in operating position, and a pair of line tapper electrical conductors, one of said line tapper electrical conductors being secured to one of said hooks, and the other of said line tapper electrical conductors being secured to the other of said hooks, a reel secured to one side of said disk providing a storage means for said line tapper electrical conductors, the combined thickness of said disk and said reel being substantially less than the normal bridging distance between the pair of spaced apart electrical conductors being tapped.

2,745,080
SOCKET FOR RADIO TUBES AND THE LIKE
Seymour Offerman, Great Neck, N. Y., assignor to Industrial Hardware Mfg. Co., Inc., New York, N. Y., a corporation of New York
Application November 19, 1951, Serial No. 257,015
6 Claims. (Cl. 339—194)



4. A metal contact for a tube socket or the like, said contact being formed out of a single integral generally T-shaped blank of sheet metal, the crossbar portion of said T-shaped blank being substantial in height and each branch thereof being incised with three triangular incisions, much of the stem portion of said blank acting as a base adapted to be received between the insulation laminations of a laminated socket, a pin grip portion at one end of said base portion extending in a direction approximately perpendicular to the base portion, said pin grip portion being formed out of the material at the free end of the stem portion, a collateral pair of resilient tapered wire grip portions at the other end of the stem portion extending in a direction approximately perpendicular to the base portion and opposite to the pin grip portion, said wire grip portions being formed out of the incised crossbar portion of the blank, each of said wire grip portions being dimensioned to receive and grip either one or two wires over a substantial range of wire-diameter.

2,745,081
SOCKET FOR RADIO TUBES AND THE LIKE
Seymour Offerman, Great Neck, N. Y., assignor to Industrial Hardware Mfg. Co., Inc., New York, N. Y., a corporation of New York
Application January 30, 1952, Serial No. 269,005
12 Claims. (Cl. 339—194)



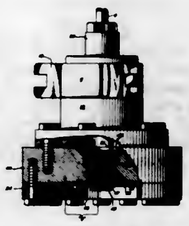
8. A metal contact for a tube socket or the like intended to be pot soldered, said contact being formed out of a single integral blank of sheet metal having a base portion, one end of said contact being shaped and bent to form a pin grip portion at one end of said base portion pointing in one direction approximately perpendicular to the base portion, the other end of said contact having a back wall and three or more collateral resilient wire grip portions pointing in a direction approximately perpendicular to the base portion and opposite to the pin grip portion, each wire grip portion and the back wall being relatively convergent in a direction from the base end toward the free end, each wire grip portion being movable toward and away from the back wall independently of the other wire grip portions, and each of said wire grip portions being dimensioned to receive and grip between it and the back wall a single wire over a substantial range of diameter.

2,745,082
ELECTRICAL CONNECTOR LUG
John S. Crawford, New Brunswick, N. J.
Application July 9, 1954, Serial No. 442,369
2 Claims. (Cl. 339—276)



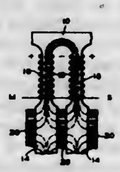
1. An electrical connector comprising a bendable strap metal lug having one end anchored in an upstanding position to a supporting device, a compressible loop formed at the free end of the lug and adapted to receive a circuit wire in a crosswise position with respect to the lug for clamping the wire transversely in the loop, said lug having an opening below the loop, and a bendable locking tongue at the free end of the lug and engageable in said opening.

2,745,083
TRANSDUCER, ELEMENTS THEREFOR, AND METHODS OF ASSEMBLY THEREOF
Benjamin L. Snavely, Takoma Park, Md.
Application July 7, 1949, Serial No. 103,501
4 Claims. (Cl. 340—8)
(Granted under Title 35, U. S. Code (1952), sec. 266)



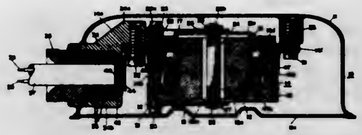
1. A transducer comprising a housing; a rigid ring shaped backing plate secured to said housing, said plate having a central recessed portion defining a space therein and a peripheral portion with a flat outer surface, said central recessed portion having an aperture centrally disposed at one end of said backing plate and an irregular enlarged section extending inwardly from said aperture; a core and coil assembly centrally positioned in said enlarged section and having leads extending inwardly therefrom, a cast mass of dielectric material of a character providing dimensional stability of and partially surrounding said assembly and leads and filling said enlarged section, the irregularities of said enlarged section rigidly interlocking said mass of dielectric material to fixedly support said assembly within the confines of said enlarged section, said assembly comprising a substantially cylindrical core formed of discrete particles of magnetic material bonded to and insulated from each other by a dielectric material, said core having an annular cavity extending inwardly from the outer end surface thereof, and an annular coil positioned in said cavity flush with said end surface to form a planar face, said planar face abutting said aperture and being the only portion of said assembly not enveloped by said mass of dielectric; a diaphragm mounted on said plate; and a disc shaped armature secured to the inner face of said diaphragm and partially housed within said aperture in axial alignment with said assembly, said armature having a flat face substantially parallel to and spaced from said planar face, said armature being formed of discrete particles of magnetic material bonded to and insulated from each other by a dielectric material.

2,745,084
UNDERWATER SOUND TRANSDUCER
Francis P. Bundy, Medford, Mass., assignor to the United States of America as represented by the Executive Secretary of the Office of Scientific Research and Development
Application August 29, 1945, Serial No. 613,352
9 Claims. (Cl. 340—11)



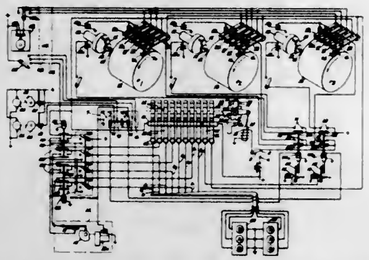
2. An underwater sound transducer comprising a laminated oscillator of magneto-strictive material having a sound propagating flange, spaced legs extending from said flange, portions of said legs remote from said flange having lobes providing stiff leg-portions which are connected to said flange by relatively elastic leg-portions whereby the point of maximum strain is established within said relatively elastic portion near the junction of said elastic and stiff leg portions, polarizing magnets disposed between the lobes of said legs, and energizing coils positioned about the relatively elastic portion of said legs.

2,745,085
SEISMIC DETECTOR
Malcolm D. McCarty, Dallas, and Kenneth W. McLoad, Houston, Tex., assignors, by direct and mesne assignments, to Socony Mobil Oil Company, Inc., a corporation of New York
Application July 9, 1953, Serial No. 366,888
5 Claims. (Cl. 340—17)



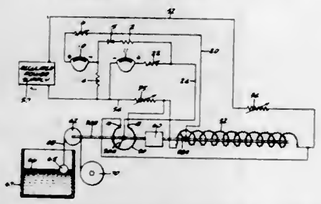
1. A detector having a magnet structure comprising a cylindrical permanent magnet, a radially extending pole piece counterbored to receive one end of said cylindrical magnet, a ring-shaped pole piece at the opposite end of said magnet forming therewith a narrow circumferential air gap and having legs extending lengthwise of said magnet into abutting engagement with said counterbored pole piece, mounting flanges forming an integral part of said structure and extending radially with respect to said cylindrical magnet beyond the periphery of said legs, and a housing to which said mounting flanges are secured.

2,745,086
TRAFFIC SIGNAL CONTROLLER
Ralph A. Reid, Beverly, and Vincent W. Leonard, Saugus, Mass., assignors to General Electric Company, a corporation of New York
Application March 17, 1951, Serial No. 216,124
6 Claims. (Cl. 340—40)



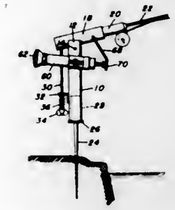
1. In a traffic signal controller, a rotatable signal controller including a plurality of switches, electro-responsive means connected to rotate said controller through a plurality of discrete signal display positions, said signal display positions determining a signal display sequence for a plurality of intersecting traffic lanes and including at least one pair of consecutive positions in which right of way is accorded to a predetermined one of said traffic lanes, a plurality of cyclic program timers each including a driving motor and a pair of contacts recurrently actuated, switching means for selectively connecting the contacts of a desired one of said timers to control said electro-responsive means, and means controlled by said signal controller for rendering said switching means operable only in the first of each said pair of consecutive signal display positions.

2,745,087
REMOTE INDICATING SYSTEM
Horace Dickinson, South Gate, Calif., assignor to Vapor Recovery Systems Co., Compton, Calif., a corporation of California
Application June 22, 1953, Serial No. 363,182
4 Claims. (Cl. 340—177)



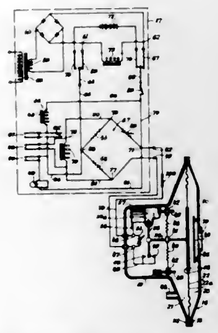
1. A pair of potentiometer resistances connected in parallel, each one of said potentiometer resistances having a tap, a source of voltage, a first line compensation resistance connected between one terminal of said source and one terminal of said potentiometer resistances, a second line compensation resistance connected between the other terminal of said source and the other terminal of said potentiometer resistances, the taps on said potentiometer resistances being arranged for joint movement, a first meter connected between the tap on a first one of said potentiometer resistances and said other terminal of said source, a voltage dividing network connected betwen the tap on said first potentiometer resistance and said other terminal of said source, a second meter having one of its terminals connected to the tap on a second one of said potentiometer resistances, the other terminal of said second meter being connected to a point in said voltage dividing network, said voltage dividing network including a blocking rectifier connected in series in said network between said other terminal of said second meter and said tap on said first resistance to prevent the flow of current from said second meter to said first meter.

2,745,088
FISHING ROD HOLDER WITH SIGNAL MEANS
Lawrence E. Bauer, Mitchell, S. Dak., assignor of one-half to George L. Kiner, Mitchell, S. Dak.
Application April 16, 1954, Serial No. 423,599
4 Claims. (Cl. 340—213)



1. A rod holder comprising a vertical standard rod supporting means pivotally secured to the top of said standard for movement about a horizontal axis, resilient means mounted on said standard and connected to said rod supporting means for maintaining the same in adjusted position, signal means carried by said standard in fixed position adjacent the top thereof, means mounted on said rod supporting means and engageable with said signal means for actuating the same, said vertical standard being provided with a bifurcated upper end, said rod supporting means comprising a tubular member pivotally secured adjacent one end to the bifurcated end of said standard, said resilient means including a rod fixedly secured to said one end of the tubular member and extending parallel to said standard, a bracket on said standard slidably receiving said rod, an abutment adjustably mounted on said rod adjacent the free end thereof, and a spring disposed on said rod between said abutment and said bracket for resiliently urging said rod in one direction.

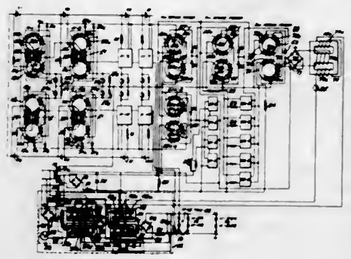
2,745,089
BURGLAR ALARM AND LIKE WARNING SYSTEMS
Joseph Peppo Levy, Acton, London, England, assignor, by direct and mesne assignments, of one-half to Isaac Ergas, New York, N. Y., and one-half to William Agnew McPhail, Bracknell, England
Application January 19, 1954, Serial No. 404,993
8 Claims. (Cl. 340—236)



1. An intruder warning system for protecting a substantially closed chamber, including means for modifying the atmospheric pressure in said chamber relative to that

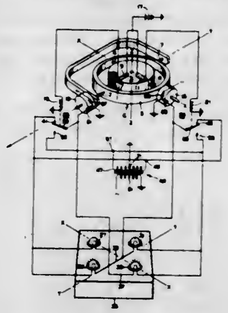
existing exteriorly thereof, a pressure sensitive element by which a warning is given or controlled, said pressure-sensitive element being sensitive to variations of pressure in said chamber caused by varying the extent of atmospheric communication between the inside and outside of said chamber and having a non-warning position corresponding to a predetermined pressure-differential between the inside and outside of the chamber and having at least two warning positions, one on each side of its non-warning position, and being arranged to be moved in opposite directions, from its non-warning position, to one or the other of its oppositely disposed warning positions by any significant decrease or increase of the pressure-differential, one side of said pressure-sensitive element being exposed to the atmosphere on the inside of said chamber and the other side of the pressure-sensitive element being exposed to the atmosphere on the outside of said chamber, a restricted passageway forming a communication between the two sides of said pressure-sensitive element, said restricted passageway being so small in relation to the aforementioned pressure-modifying means that so long as said pressure-modifying means remains operative at substantially the pressure-modifying level for which it was set, the leakage through said restricted opening will not be sufficient to move pressure-sensitive element to one of its warning positions but so that if the aforementioned pressure-modifying means either ceases to operate altogether or operates at a substantially reduced pressure-modifying level from that for which it was set, then the pressure-differential on opposite sides of said pressure-sensitive element will be sufficiently reduced through said restricted opening to cause the pressure-sensitive element to move into one of its warning positions.

2,745,090
BATTERY CELL VOLTAGE COMPARISON SYSTEM
Joseph Grillo, New York, N. Y., assignor to Ward Leonard Electric Company, a corporation of New York
Application July 24, 1952, Serial No. 300,686
5 Claims. (Cl. 340—253)



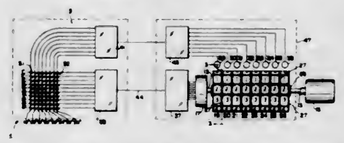
1. An electrical system for monitoring a plurality of electrical devices comprising a plurality of separate magnetic amplifiers each directly connected to a different electrical device to receive a monitoring current from a respective electrical device, a reference circuit directly connected to each of said magnetic amplifiers and providing a reference current on comparison with said monitoring current in said magnetic amplifiers producing a flux differential maintaining a non-activating output on an approved relationship producing an activating output on occurrence of a predetermined unapproved relation between said currents, a set of mixer amplifiers with each mixer amplifier connected to a separate group of said magnetic amplifiers, a second set of mixer amplifiers with each second mixer amplifier connected to a separate group of said first mixer amplifiers, said first and second mixers combining the outputs of said magnetic amplifiers for actuation of a general indicator on occurrence of the predetermined relationship in any magnetic amplifier.

2,745,091
TILT INDICATOR FOR GYROSCOPE
Robert Leffler, Brooklyn, N. Y., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application March 9, 1953, Serial No. 340,985
4 Claims. (Cl. 340—282)



1. In an indicator of the class described, a gyroscope having a rotor spinning about an axis in a predetermined attitude and mounted for angular movement about mutually perpendicular axes, vertical detecting means for detecting the departure of the gyroscope spin axis from the predetermined attitude about the mutually perpendicular axes, and axis attitude indicating means, including two relays selectively actuated by the detecting means, each relay having front and back contacts, four signal lamps arranged to indicate different axis departure directions, and circuit means connecting said lamps to said contacts and to a source of electrical energy for selectively lighting said lamps in conformity with the direction of said axis departure from the predetermined attitude.

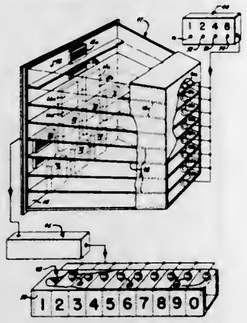
2,745,092
STROBOSCOPIC VISUAL INTELLIGENCE PRESENTER
Milton M. Moorhead, Jr., and James C. Parker, Dayton, Ohio, assignors to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
Application April 23, 1953, Serial No. 350,708
2 Claims. (Cl. 340—318)



1. An apparatus for visually indicating intelligence and comprising a plurality of coaxially aligned character wheels having contacting lateral surfaces, said wheels being solid and translucent with light being readily transmitted therethrough, there being means between said wheels to prevent the passage of light therebetween, there further being indicating characters on the peripheries of said wheels with corresponding characters on the several wheels being arranged permanently in lateral alignment and parallel to the common axis of said wheels, a housing enclosing said character wheels and having a window therein, said window extending across all of said character wheels and having a width sufficient to display only one character from each wheel, a separate flash light source positioned adjacent the periphery of each character wheel and coplanar therewith, means for rotating said character wheels at a rate greater than sixteen revolutions per second, a plurality of means corresponding to said character wheels for selectively illuminating said flash lights when predetermined characters are aligned with

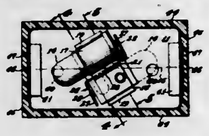
said window whereby the several selected characters appear as a single stationary line of characters when the wheels are revolving at a speed greater than sixteen revolutions per second.

2,745,093
RADIX CONVERTING EXHIBITOR
Wesley A. Holman, Santa Clara County, and Reynold B. Johnson, Palo Alto, Calif., assignors to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application June 21, 1954, Serial No. 438,273
9 Claims. (Cl. 340—332)



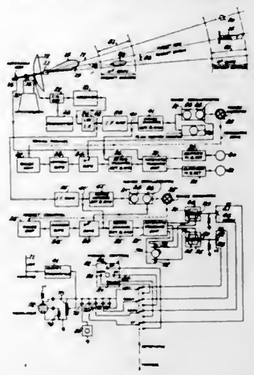
9. A register comprising a plurality of devices for indicating notations of value, each said device controlled by one of a plurality of output lines, a plurality of units having two electrically conductive light responsive paths extending from a common junction, a first electrical circuit connecting each path of a first group of said paths to a said junction of another said unit, a second electrical circuit connecting each path of a second group of said paths to one of said output lines, a means for selectively illuminating one or the other of said paths of each said unit according to a predetermined binary entry amount whereby a said output line is energized to control one of said devices to indicate a notation on said register of a value equivalent to said binary entry amount.

2,745,094
BLOCK TYPE PANEL INDICATOR LIGHT
Frank A. Harrington, Brea, and Thomas W. Jentges, Santa Ana, Calif., assignors to Marco Industries Company, Anaheim, Calif., a corporation of California
Application April 21, 1953, Serial No. 350,116
8 Claims. (Cl. 340—381)



8. A casing and socket assembly for a multiple lamp block indicator panel light, utilizing a plurality of lamps each having a ground contact base capsule, a live contact at one end thereof and a light transmitting bulb at the other end thereof, said casing and socket assembly comprising: a multiple socket assembly; a casing comprising a base section of open U-shape, consisting in an elongated back panel and arms projecting forwardly from the respective ends of said back panel and at right angles thereto, and a shallow cap of light transmitting material, including a front display panel to overlie said lamps and to be illuminated thereby, including end walls arranged to embrace said arms of the base section and to interengage therewith so as to secure said cap to said base section, and including side walls cooperating with said end walls to circumscribe an elongated, narrow, shallow space to receive said base section, said socket assembly and said lamps; said multiple socket assembly comprising a sheet metal ground terminal unit secured to said back panel, said terminal unit having ground contact legs to embrace, and to establish common ground contact with the base capsules of said plurality of lamps and to support the lamps in positions wherein their longitudinal axes lie in a common plane parallel to said back panel; a live terminal unit having live contact arms positioned to engage said live contacts of the respective lamps and to determine positions of said lamps wherein said bulbs project in opposite directions from the center of said panel and wherein each is substantially centered with reference to a respective half of the area thereof.

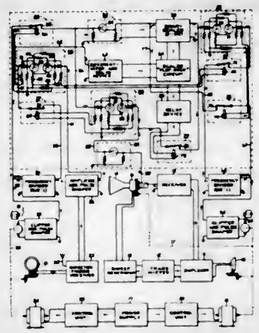
2,745,095
RADIANT ENERGY CONTROL SYSTEM FOR MISSILE GUIDANCE
James V. Stoddard, St. Josephs, N. Y., assignor to the United States of America as represented by the Secretary of War
Application September 4, 1947, Serial No. 772,040
10 Claims. (Cl. 343—6)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In combination with an object locating device of the pulse-echo type having a narrow radio beam with means for conical scanning and a normal receiving channel adapted to track a moving target automatically, means for simultaneously tracking a second object in range moving within the radio beam, said second tracking means comprising a second receiving channel included as part of the object locating device and connected to the normal receiving channel at an intermediate point in the intermediate frequency amplifier, said second receiving channel including means for detecting and amplifying echo pulses and for displaying said pulses on a range oscilloscope, and means for producing a very narrow gate at the range of the second object such that all echo signals coming from objects within the radio beam are rejected except those from the said second object within the narrow gate.

2,745,096
BEARING CORRELATING SYSTEM
Richard C. Jensen, Baldwinsville, N. Y., assignor to General Electric Company, a corporation of New York
Application June 2, 1952, Serial No. 291,087
13 Claims. (Cl. 343—11)

1. In combination with a pair of rotatable, directional energy-receiving devices, integrating means coupled to one of said devices for deriving a first sum of incremental angular movements thereof from a reference bearing to the bearing at which energy is received by said one device from an energy-transmitting object, means coupling said other of said devices to said integrating means for de-



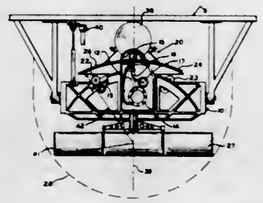
riving a second incremental sum of angular movements thereof from a reference bearing, and means included in said integrating means for producing an indication when said first and said second sums are substantially equal.

2,745,097
RADIO ECHO DETECTION SYSTEM
Everhard H. B. Bartelink, Cambridge, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application October 30, 1945, Serial No. 625,665
7 Claims. (Cl. 343—11)

1. An object detector of the type which transmits periodically recurring radio pulses and receives pulses which are reflections from said objects, comprising a directive antenna having overlapping receiving lobes, a transmitter, means for pulsing said transmitter to produce a series of long and short pulse emissions at different times, a receiver, means for alternately disconnecting said receiving paths of said antenna from said receiver during the reception of the reflection pulses produced by said long pulse, means for producing a voltage having a magnitude depending on the difference in the energy in said reflection pulses in each of said receiving paths, a cathode ray tube connected with said receiver for indicating said reflection pulses produced by said long and short pulses, and means for biasing said cathode ray tube beyond cutoff in response to said voltage.

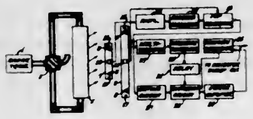
2,745,098
ANTENNA STABILIZING APPARATUS
Willoughby M. Cady, Cambridge, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Air Force
Application May 30, 1945, Serial No. 596,723
1 Claim. (Cl. 343—100)

In combination with an airborne radio object-locating system including an antenna having an axis adapted to lie normally in a vertical plane which extends longitudinally of an aircraft, roll stabilizing apparatus comprising a supporting structure attached to the aircraft, a single second structure movable relative to said supporting structure, said antenna being carried by said second structure, a plurality of curved tracks on said supporting structure, a plurality of rollers on said second structure cooperating with said tracks to support and guide said second structure, power-operated means carried by said supporting structure, a gear sector forming an arc lying on a circle whose center is the center of said antenna, said sector being fixedly mounted upon said second structure, gear means interconnecting said power-operated means and said gear sector, electrical means controlling



said power-operated means, means automatically responsive to roll of the aircraft for operating said electrical means in accordance with the amount of such roll, said power-operated means being arranged to operate under control of said electrical means for positioning said second structure through the medium of said gear means and gear sector thereby to maintain said antenna axis substantially in said vertical plane irrespective of the roll of the aircraft, and manual pitch stabilizing means mounted on said supporting structure for adjusting the position thereof to correct for the pitch angle of said aircraft.

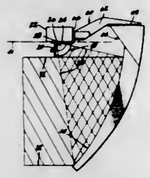
2,745,099
SWEEP MODULATOR DIRECTION FINDER
Waldon P. Bollinger and Richard W. Howery, Haddonfield, N. J., and John R. Ford, Narberth, Pa., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Air Force
Application May 10, 1951, Serial No. 225,568
15 Claims. (Cl. 343—113)



1. A system for modulating a substantially linear sweep generator in accordance with a predetermined rate function comprising a linear antenna array for scanning a selected region, said antenna array scanning said region at a non-linear angular rate, an energy sampling member responsive to said scanning, means coupled to said member for generating a plurality of signals proportional to said non-linear angular scanning rate to provide control signals, and means for utilizing said control signals to correlate said sweep with said non-linear angular rate.

13. A remote station direction finding system comprising a pivotal hollowpipe waveguide including in a given waveguide wall a pair of longitudinally oppositely disposed apertures, said waveguide enclosing a phase-sensitive null detector, said detector registering a null when signal energies transmitted or reflected from a remote station travel equidistant paths from said station to each of said apertures.

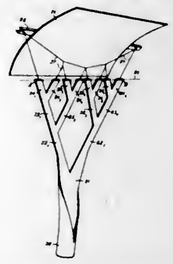
2,745,100
CIRCULARLY POLARIZING DIRECTIONAL ANTENNA SYSTEM
Joe Glaze McCann, Pacific Palisades, Frederick M. Weil, La Canada, and Romar E. Stein, Los Angeles, Calif., assignors to Gilfillan Bros., Inc., Los Angeles, Calif., a corporation of California
Application June 12, 1953, Serial No. 361,144
5 Claims. (Cl. 343—756)



1. Antenna means for producing a beam of substantially circularly polarized radiation of a predetermined radio frequency, comprising a linear antenna array acting to project a primary radiation field that is linearly polarized and that is collimated in its axial dimension and divergent in its transverse dimension, a concave cylindrical reflector spaced from the array in the primary radiation field, the array axis lying substantially in the focus of the reflector, whereby the secondary radiation field reflected by the reflector is collimated in both said dimensions, and a grid between the array and the reflector, the grid being spaced relatively close to the array and relatively far from the reflector and intercepting substantially all of the primary radiation field and lying substantially outside of the secondary radiation field, said grid acting to transform the linearly polarized radiation of the primary field from plane polarized into substantially circularly polarized radiation, and the cylindrical reflector acting to alter the condition of collimation of that radiation while maintaining its condition of circular polarization.

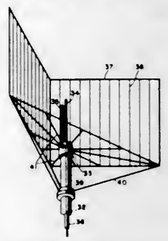
2,745,101
DIELECTRIC ANTENNA WITH DIELECTRIC WAVE-GUIDE FEED
Pierre G. Marié, Paris, France
Application December 13, 1954, Serial No. 474,764
Claims priority, application France December 14, 1953
6 Claims. (Cl. 343—785)

1. A dielectric antenna with dielectric feed means to be fed with microwave electromagnetic energy from a metallic wave-guide comprising a tubular dielectric wave-guide, first transition means between said tubular dielectric wave-guide and said metallic wave-guide, a main flatwise wave-guide dielectric strip, second transition means between said tubular dielectric wave-guide and said main flatwise dielectric strip formed by cutting the tubular dielectric wave-guide along a generatrix to develop it flatwise, said flatwise strip being bifurcated, secondary flatwise wave-guide dielectric strips issued from said bifur-



cation means, and an array arrangement of a plurality of radiators located at the ends of said secondary flatwise dielectric strips at equal distances from said bifurcation means.

2,745,102
ANTENNA
Oscar Norgorden, Washington, D. C.
Application December 14, 1945, Serial No. 635,117
7 Claims. (Cl. 343—834)
(Granted under Title 35, U. S. Code (1952), sec. 266)

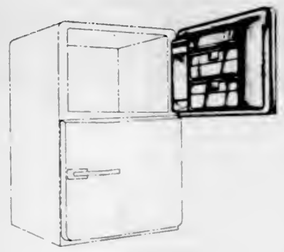


1. An antenna having a primary element, a ground plane positioned at one end of the primary element, a transmission line having a uniform impedance throughout connected between the ground plane and the primary element, a plurality of rods connected to said ground plane to provide a reflector screen for said primary element and a parasitic element of a length less than said primary element and positioned alongside the primary element and connected to the ground plane operative to effect a terminating impedance for the transmission line equal to its surge impedance, the spacing between said primary element and said parasitic element being sufficiently small to preserve the directivity pattern possessed by the primary element alone.

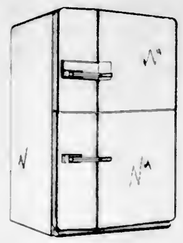
DESIGNS

MAY 8, 1956

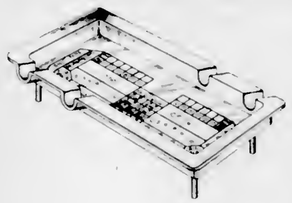
177,604
COMBINATION REFRIGERATOR AND FOOD FREEZER
William A. Allen, Syracuse, N. Y., assignor to Carrier Corporation, Syracuse, N. Y., a corporation of Delaware
Application January 3, 1955, Serial No. 33,819
Term of patent 3½ years
(Cl. D67—3)



177,605
CABINET FOR COMBINATION REFRIGERATOR AND FOOD FREEZER
William A. Arzberger North Syracuse, N. Y., assignor to Carrier Corporation, Syracuse, N. Y., a corporation of Delaware
Application January 3, 1955, Serial No. 33,812
Term of patent 3½ years
(Cl. D67—3)



177,606
ASH TRAY OR THE LIKE
James Babcock, Pomona, Calif., assignor to James Babcock Associates, Inc., Beverly Hills, Calif., a corporation of Nevada
Application November 23, 1954, Serial No. 33,192
Term of patent 3½ years
(Cl. D85—2)



177,607
BOTTLE
Edward Barq, Jr., Biloxi, Miss., assignor to Barq's Incorporated, Biloxi, Miss., a corporation of Mississippi
Application September 20, 1954, Serial No. 32,351
Term of patent 14 years
(Cl. D58—8)



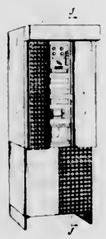
177,608
ELECTRIC LAMP BASE
David Borowitz, Chicago, Ill.
Application August 18, 1955, Serial No. 37,540
Term of patent 3½ years
(Cl. D48—20)



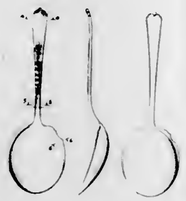
177,609
ELECTRIC LAMP BASE
David Borowitz, Chicago, Ill.
Application August 18, 1955, Serial No. 37,541
Term of patent 3½ years
(Cl. D48—20)



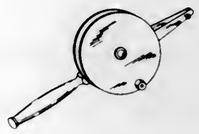
177,610
BEVERAGE DISPENSING MACHINE
Cornelia V. Brous, Peterborough, N. H., assignor to Food Engineering Corporation, Manchester, N. H., a corporation of New Hampshire
Application September 21, 1955, Serial No. 38,010
Term of patent 7 years
(Cl. D52—3)



177,611
SPOON OR SIMILAR ARTICLE
William T. Brown, Attleboro, and Joaquin Prado, Taunton, Mass., assignors to R. Wallace & Sons Manufacturing Company, Wallingford, Conn., a corporation of Connecticut
Application August 19, 1955, Serial No. 37,579
Term of patent 14 years
(Cl. D54—12)



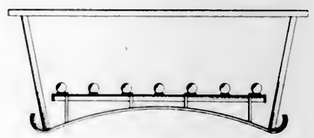
177,612
KITE REEL
Robert D. Browning, Sardis, Ala.
Application May 14, 1953, Serial No. 25,007
Term of patent 3½ years
(Cl. D34—15)



177,613
COMBINED HAIR CURLER AND COMB
Joseph Lloyd Chiariello, Los Angeles, and Sidney Cox, Inglewood, Calif.
Application August 31, 1955, Serial No. 37,734
Term of patent 7 years
(Cl. D86—8)



177,614
ELECTRICAL DISPLAY DEVICE
Clyde H. Clement, Phoenix, Ariz.
Application May 17, 1955, Serial No. 36,033
Term of patent 14 years
(Cl. D80—1)



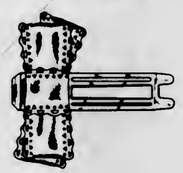
177,615
CARTON OPENING KNIFE
William F. Cralle, Charlotte, N. C., assignor to Independence Specialties Co., Inc., a corporation of North Carolina
Application November 21, 1955, Serial No. 38,965
Term of patent 14 years
(Cl. D22—3)



177,616
FRONT OF A BANK DEPOSITORY
Henry Dreyfuss, South Pasadena, Calif., assignor to The Mosler Safe Company, Hamilton, Ohio, a corporation of New York
Application November 21, 1955, Serial No. 38,971
Term of patent 14 years
(Cl. D69—1)



177,617
HAIR CLIP
Natalie A. Ecker and Claire Rands, Detroit, Mich.
Application October 5, 1955, Serial No. 38,238
Term of patent 3½ years
(Cl. D86—10)



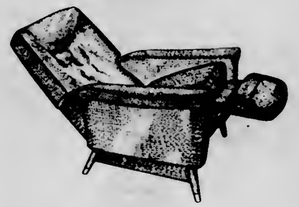
177,618
DEVICE FOR CONVERTING BOTTLES, JUGS, VASES OR THE LIKE INTO LAMPS
Heinz S. Edelmuth, New York, N. Y.
Application February 13, 1956, Serial No. 40,124
Term of patent 3½ years
(Cl. D48—20)



177,619
TOILET PAPER HOLDER OR SIMILAR ARTICLE
Mary Ellen Flaherty, Northport, N. Y.
Application April 29, 1955, Serial No. 35,747
Term of patent 14 years
(Cl. D4—3)



177,620
RECLINING CHAIR
Morris Futorian, Glencoe, Ill.
Application April 19, 1955, Serial No. 35,572
Term of patent 3½ years
(Cl. D15—11)



177,621
DISPLAY RACK
Frank E. Gallagher, Rockville Centre, N. Y., assignor to Whiting-Adams Company, Inc., Boston, Mass., a corporation of Massachusetts
Application August 3, 1954, Serial No. 31,723
Term of patent 14 years
(Cl. D80—10)



177,622
NEGLIGEE
Violet Giovagnoni, New York, N. Y.
Application March 29, 1955, Serial No. 35,255
Term of patent 3½ years
(Cl. D3—26)



177,623
HANDLE FOR KITCHEN UTENSILS
James L. Hvale, Chicago, Ill., assignor to Ekco Products Company, Chicago, Ill., a corporation of Illinois
Application November 16, 1955, Serial No. 38,932
Term of patent 14 years
(Cl. D44—29)



177,624
HANDLE FOR KITCHEN UTENSILS
James L. Hvale, Chicago, Ill., assignor to Ekco Products Company, Chicago, Ill., a corporation of Illinois
Application November 16, 1955, Serial No. 38,933
Term of patent 14 years
(Cl. D44—29)



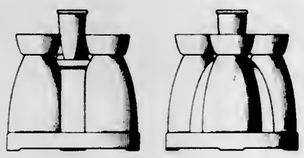
177,625
CHILD'S HANDBAG
Sidney Hyman, New York, N. Y.
Application December 16, 1955, Serial No. 39,358
Term of patent 3½ years
(Cl. D87—3)



177,626
CHILD'S HANDBAG
Sidney Hyman, New York, N. Y.
Application December 22, 1955, Serial No. 39,440
Term of patent 3½ years
(Cl. D87—3)



177,627
CONDIMENT SET
Milton Immermann, Piermont, and Robert H. Ensign, Bronxville, N. Y., assignors to International Minerals & Chemical Corporation, a corporation of New York
Application June 27, 1955, Serial No. 36,698
Term of patent 14 years
(Cl. D44—22)



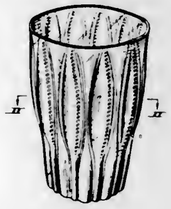
177,628
CONDIMENT SET
Milton Immermann, Piermont, and Robert H. Ensign, Bronxville, N. Y., assignors to International Minerals & Chemical Corporation, a corporation of New York
Application June 27, 1955, Serial No. 36,699
Term of patent 14 years
(Cl. D44—22)



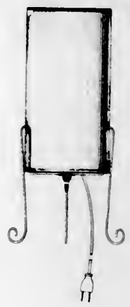
177,629
ADVERTISING SIGN
Harry L. Jones, Houston, Tex.
Application November 8, 1954, Serial No. 33,023
Term of patent 3½ years
(Cl. D1—12)



177,630
TUMBLER OR SIMILAR ARTICLE
Carl C. Kohl, Pittsburgh, Pa., assignor to Bryce Brothers Company, Mount Pleasant, Pa., a corporation of Pennsylvania
Application January 24, 1955, Serial No. 34,181
Term of patent 7 years
(Cl. D36—8)



177,631
ELECTRIC LAMP OR SIMILAR ARTICLE
Herbert Lagin, Great Neck, N. Y., assignor to Jane Stacey, Inc., New York, N. Y., a corporation of New York
Application May 19, 1955, Serial No. 36,117
Term of patent 14 years
(Cl. D48—20)



177,632
INJECTOR PUMP
Maurice O. Lawson, Dayton, and Hans von Ohain, Brookville, Ohio
Application May 26, 1955, Serial No. 36,244
Term of patent 14 years
(Cl. D65—1)



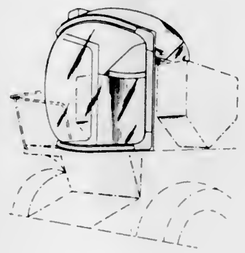
177,633
HOUSING FOR A SWIMMING POOL CLEANER
Oliver M. Lombardi, San Rafael, Calif.
Application August 29, 1955, Serial No. 37,691
Term of patent 14 years
(Cl. D9—2)



177,634
COMBINED TABLE AND SEAT FOR A CHILD
Leonard P. Matson, Huffman, Ala.
Application December 24, 1953, Serial No. 28,197
Term of patent 3½ years
(Cl. D33—14)



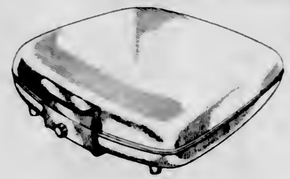
177,635
HARVESTER CAB
Lawrie G. McIntosh, Toronto, Ontario, Canada, assignor to Massey-Harris-Ferguson Inc., Racine, Wis., a corporation of Maryland
Application October 5, 1955, Serial No. 38,232
Term of patent 14 years
(Cl. D14—3)



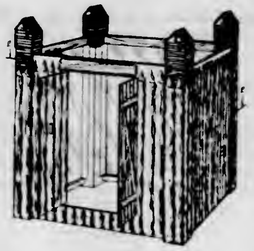
177,636
WRENCH
Walter R. Meier, Hamburg, and Hollis R. Ross, Buffalo, N. Y., assignors to Barcalo Manufacturing Company, Buffalo, N. Y.
Application November 23, 1955, Serial No. 39,019
Term of patent 14 years
(Cl. D54—13)



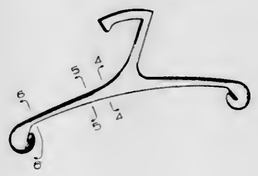
177,637
WAFFLE IRON
Walter E. Moore, St. Louis, Mo., assignor to Knapp-Monarch Company, St. Louis, Mo., a corporation of Delaware
Application September 20, 1954, Serial No. 32,359
Term of patent 14 years
(Cl. D81—10)



177,638
TOY FORT OR SIMILAR ARTICLE
Audrey A. Namowitz, New York, N. Y., assignor to Toymaster Products Company, Inc., Clifton, N. J., a corporation of New Jersey
Application August 25, 1955, Serial No. 37,662
Term of patent 14 years
(Cl. D34—15)



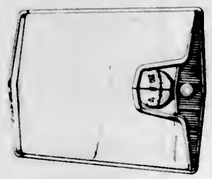
177,639
GARMENT HANGER
Elfriede Reiss Nikkel, Detroit, Mich.
Application February 8, 1955, Serial No. 34,419
Term of patent 3½ years
(Cl. D80—8.5)



177,640
UNDERWATER CAMERA
Einar E. Petersen, North Long Beach, Calif.
Application December 5, 1955, Serial No. 39,171
Term of patent 14 years
(Cl. D61—1)



177,641
BATHROOM SCALE
Harry Preble, Jr., Cross River, N. Y., assignor to Detecto Scales, Inc., Brooklyn, N. Y., a corporation of New York
Application February 9, 1955, Serial No. 34,430
Term of patent 14 years
(Cl. D52—10)



177,642
EXPANSIBLE LINK CHAIN FOR A BRACELET OR THE LIKE
Emil Rodriguez, New York, N. Y., assignor to Jacoby-Bender, Inc., Woodside, N. Y., a corporation of New York
Application November 2, 1954, Serial No. 32,926
Term of patent 7 years
(Cl. D45—4)

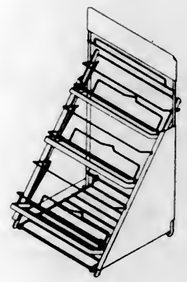




177,643
CARVING AID FORK
Joseph Schoenfeld, Santa Cruz, Calif.
Application October 20, 1955, Serial No. 38,491
Term of patent 14 years
(Cl. D44—29)



177,644
DISPLAY RACK
Walter H. Schray, Battle Creek, Mich., assignor to United Steel and Wire Co.
Application June 5, 1953, Serial No. 25,341
Term of patent 3½ years
(Cl. D80—10)



177,645
FAN HOUSING OR SIMILAR ARTICLE
Martin T. Schumb, Milton, Mass., assignor to The Murray Company of Texas, Inc., Dallas, Tex., a corporation of Delaware
Application October 11, 1955, Serial No. 38,328
Term of patent 14 years
(Cl. D26—7)



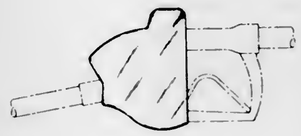
177,646
FRINGED LACE
Frank H. Shepherdson, Philadelphia, Pa.
Application June 23, 1955, Serial No. 36,654
Term of patent 3½ years
(Cl. D47—6)



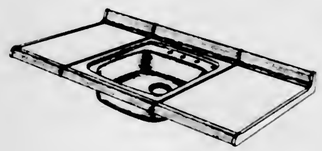
177,647
LACE
Frank H. Shepherdson, Philadelphia, Pa.
Application October 25, 1955, Serial No. 38,571
Term of patent 3½ years
(Cl. D47—6)



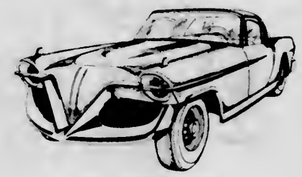
177,648
COMBINED BUMPER AND DUST COVER FOR GASOLINE DISPENSING NOZZLE
George H. Sinclair, Richmond Heights, and Wayne H. Rush, St. Louis, Mo.
Application August 12, 1955, Serial No. 37,435
Term of patent 14 years
(Cl. D52—2)



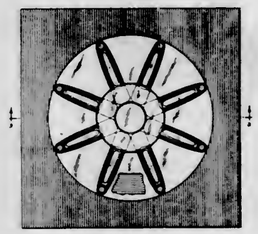
177,649
COMBINED SINK AND TABLE TOP
Jacques Stanitz, Warren, Ohio, assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation, New York, N. Y., a corporation of Delaware
Application February 17, 1953, Serial No. 23,652
Term of patent 14 years
(Cl. D4—2)



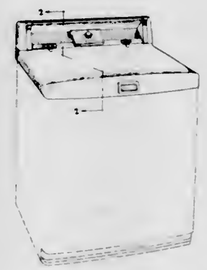
177,650
AUTOMOBILE
Clifford Brooks Stevens, Milwaukee, Wis.
Application October 10, 1955, Serial No. 38,317
Term of patent 3½ years
(Cl. D14—3)



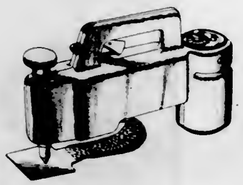
177,651
PACKAGE OF SAFETY PINS
Clifford E. Stubbs, Weston, Mass., assignor to The Reddy Company, Inc., Montpelier, Vt., a corporation of Vermont
Application June 3, 1955, Serial No. 36,358
Term of patent 14 years
(Cl. D58—2)



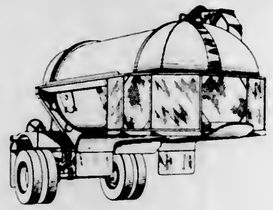
177,652
LAUNDRY MACHINE CABINET OR SIMILAR ARTICLE
Carl W. Sundberg, Birmingham, Mich., assignor, by mesne assignments, to Whirlpool-Seeger Corporation, St. Joseph, Mich., a corporation of Delaware
Application August 11, 1955, Serial No. 37,418
Term of patent 14 years
(Cl. D49—1)



177,653
BAND WELDER
Dorsey B. Thomas, Savannah, Ga.
Application July 26, 1955, Serial No. 37,136
Term of patent 14 years
(Cl. D26—1)



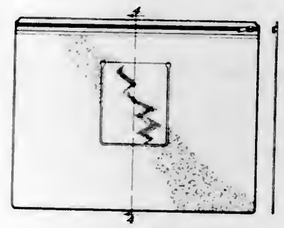
177,654
MIXER TRAILER
Bert Orland Underwood, Oklahoma City, Okla., assignor to The Boardman Co., Oklahoma City, Okla., a corporation of Oklahoma
Application May 11, 1955, Serial No. 35,941
Term of patent 14 years
(Cl. D14—3)



177,655
AUTOMOBILE TIRE
Otto J. Wolfer, Park Ridge, Ill.
Application May 4, 1954, Serial No. 30,327
Term of patent 14 years
(Cl. D90—20)



177,656
BRIEF CASE
Fern Ziebell, Chicago, Ill.
Application October 17, 1955, Serial No. 38,421
Term of patent 3½ years
(Cl. D87—5)



LIST OF REISSUE PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 8TH DAY OF MAY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Garbo, Paul W., to Hydrocarbon Research, Inc. Manufacture of synthesis gas. Re. 24,148, 5–8–56, Cl. 48—196.

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Garbo, Paul W. 24,148.

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Regan, Ronald. 1,478.

Regan, Ronald, to Monrovia Nursery Co. Lantana plant. 1,477, 5–8–56, Cl. 47—60.

Regan, Ronald, to Monrovia Nursery Co. Lantana plant. 1,478, 5–8–56, Cl. 47—60.

Sullivan, Charles E. Walnut tree. 1,475, 5–8–56, Cl. 47—62.

Sullivan, Charles E. Walnut tree. 1,476, 5–8–56, Cl. 47—62.

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Allen, William A., to Carrier Corp. Combination refrigerator and food freezer. 177,604, 5–8–56, Cl. D67—3.

American Radiator & Standard Sanitary Corp.: *See*—
Stanitz, Jacques. 177,649.

Arzberger, William A., to Carrier Corp. Cabinet for combination refrigerator and food freezer. 177,605, 5–8–56, Cl. D67—3.

Babcock, James, to James Babcock Associates, Inc. Ash tray or the like. 177,606, 5–8–56, Cl. D85—2.

Babcock, James, Associates, Inc.: *See*—
Babcock, James. 177,606.

Barcalo Mfg. Co.: *See*—
Meier, Walter R., and Ross. 177,636.

Barq, Edward, Jr., to Barq's Inc. Bottle. 177,607, 5–8–56, Cl. D58—8.

Barq's Inc.: *See*—
Barq, Edward, Jr. 177,607.

Boardman Co., The: *See*—
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Borowitz, David. Electric lamp base. 177,608, 5–8–56, Cl. D48—20.

Borowitz, David. Electric lamp base. 177,609, 5–8–56, Cl. D48—20.

Brous, Cornelia V., to Food Engineering Corp. Beverage dispensing machine. 177,610, 5–8–56, Cl. D52—3.

Brown, William T., and J. Prado, to R. Wallace & Sons Mfg. Co. Spoon or similar article. 177,611, 5–8–56, Cl. D54—12.

Browning, Robert D. Kite reel. 177,612, 5–8–56, Cl. D34—15.

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Clement, Clyde H. Electrical display device. 177,614, 5–8–56, Cl. D80—1.

Cox, Sidney: *See*—
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Cralle, William F., to Independence Specialties Co., Inc. Carton opening knife. 177,615, 5–8–56, Cl. D22—3.

Detecto Scales, Inc.: *See*—
Preble, Harry, Jr. 177,641.

Dreyfuss, Henry, to The Mosler Safe Co. Front of a bank depository. 177,616, 5–8–56, Cl. D69—1.

Ecker, Natalie A., and C. Rands. Hair clip. 177,617, 5–8–56, Cl. D86—10.

Edelmuth, Heinz S. Device for converting bottles, jugs, vases, or the like into lamps. 177,618, 5–8–56, Cl. D48—20.

Ekco Products Co.: *See*—
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Hvale, James L. 177,624.

Ensign, Robert H.: *See*—
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Futorian, Morris. Reclining chair. 177,620, 5–8–56, Cl. D15—11.

Gallagher, Frank E., to Whiting-Adams Co., Inc. Display rack. 177,621, 5–8–56, Cl. D80—10.

Giovagnoni, Violet. Negligee. 177,622, 5–8–56, Cl. D3—26.

Hvale, James L., to Ekco Products Co. Handle for kitchen utensils. 177,623, 5–8–56, Cl. D44—29.

Hvale, James L., to Ekco Products Co. Handle for kitchen utensils. 177,624, 5–8–56, Cl. D44—29.

Hyman, Sidney. Child's handbag. 177,625, 5–8–56, Cl. D87—3.

Hyman, Sidney. Child's handbag. 177,626, 5–8–56, Cl. D87—3.

Immermann, Milton, and R. H. Ensign, to International Minerals & Chemical Corp. Condiment set. 177,627, 5–8–56, Cl. D44—22.

Immermann, Milton, and R. H. Ensign, to International Minerals & Chemical Corp. Condiment set. 177,628, 5–8–56, Cl. D44—22.

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Immermann, Milton, and Ensign. 177,628.

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Kohl, Carl C., to Bryce Brothers Co. Tumbler or similar article. 177,630, 5–8–56, Cl. D36—8.

Lagin, Herbert, to Jane Stacey, Inc. Electric lamp or similar article. 177,631, 5–8–56, Cl. D48—20.

Lawson, Maurice O., and H. von Ohain. Injector pump. 177,632, 5–8–56, Cl. D65—1.

Lombardi, Oliver M. Housing for a swimming pool cleaner. 177,633, 5–8–56, Cl. D9—2.

Massey-Harris-Ferguson Inc.: *See*—
McIntosh, Lawrie G. 177,635.

Matson, Leonard P. Combined table and seat for a child. 177,634, 5–8–56, Cl. D33—14.

McIntosh, Lawrie G., to Massey-Harris-Ferguson Inc. Harvester cab. 177,635, 5–8–56, Cl. D14—3.

Meier, Walter R., and H. R. Ross, to Barcalo Mfg. Co. Wrench. 177,636, 5–8–56, Cl. D54—13.

Moore, Walter E., to Knapp-Monarch Co. Waffle iron. 177,637, 5–8–56, Cl. D81—10.

Mosler Safe Co., The: *See*—
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Murray Co. of Texas, Inc., The: *See*—
Schumb, Martin T. 177,645.

Namowitz, Audrey A., to Toymaster Products Co., Inc. Toy fort or similar article. 177,638, 5–8–56, Cl. D34—15.

Nikkel, Elfriede R. Garment hanger. 177,639, 5–8–56, Cl. D80—8.5.

Petersen, Einar E. Underwater camera. 177,640, 5–8–56, Cl. D61—1.

Prado, Joaquin: *See*—
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Ross, Hollis R.: *See*—
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Schoenfeld, Joseph. Carving aid fork. 177,643, 5–8–56, Cl. D44—29.

Schray, Walter H., to United Steel and Wire Co. Display rack. 177,644, 5–8–56, Cl. D80—10.

Schumb, Martin T., to The Murray Co. of Texas, Inc. Fan housing or similar article. 177,645, 5–8–56, Cl. D26—7.

Shepherdson, Frank H. Fringed lace. 177,646, 5–8–56, Cl. D47—6.

Shepherdson, Frank H. Lace. 177,647, 5–8–56, Cl. D47—6.
Sinclair, George H., and W. H. Rush. Combined bumper and dust cover for gasoline dispensing nozzle. 177,648, 5–8–56, Cl. D52—2.
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Stanitz, Jacques, to American Radiator & Standard Sanitary Corp. Combined sink and table top. 177,649, 5–8–56, Cl. D4—2.
Stevens, Clifford B. Automobile. 177,650, 5–8–56, Cl. D14—3.
Stubbs, Clifford E., to The Reddy Co., Inc. Package of safety pins. 177,651, 5–8–56, Cl. D58—2.
Sundberg, Carl W., to Whirlpool-Seeger Corp. Laundry machine cabinet or similar article. 177,652, 5–8–56, Cl. D49—1.
Thomas, Dorsey B. Band welder. 177,653, 5–8–56, Cl. D26—1.
Toymaster Products Co., Inc.: *See*—
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Ziebell, Fern. Brief case. 177,656, 5–8–56, Cl. D87—5.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 8TH DAY OF MAY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

A. C. E. Machinery Ltd.: *See*—
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Addie, Albert N.: *See*—
Johnson, Lauren L., Dilworth, and Addie. 2,745,050.
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Grip, Erik K. 2,744,686.
Aktiebolaget Separator: *See*—
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Albert, Anthony. Pipe bending device with an angularly adjustable handle. 2,744,427, 5–8–56, Cl. 81—15.
Albert, Daniel. Rotatable non-tangling fishing reel. 2,744,693, 5–8–56, Cl. 242—84.1.
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Symons, Percy L. 2,744,472.
Aldred, Leslie, to Imperial Chemical Industries, Ltd. Tablet counting and batching devices. 2,744,602, 5–8–56, Cl. 193—38.
Alexeev, Antonina. Transmission speed changer. 2,744,414, 5–8–56, Cl. 74—216.3.
Allen, Edward A. Automatic pistol. 2,744,448, 5–8–56, Cl. 89—196.
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Crane, Walton B. 2,744,675.
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Swidelsky, Anthony J. 2,745,073.
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Ambrose, Anthony A. Magnetic ejector and de-magnetizer. 2,745,043, 5–8–56, Cl. 317—123.
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Kolstad, Welding J. 2,745,076.
Anderson, Thomas M., and B. E. Good. Apparatus for mounting keys, pads and the like of musical instruments. 2,744,435, 5–8–56, Cl. 84—380.
Andrus, Orrin E., to A. O. Smith Corp. Cathodic protection of metal in vapor space. 2,744,863, 5–8–56, Cl. 204—196.
Andy, Bennie.: *See*—
Andy, Louis J. and J. 2,744,849.
Andy, Joseph.: *See*—
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Antranikian, Haig. Color television systems. 2,744,953, 5–8–56, Cl. 178—5.2.
Ardell, Edgar, and M. S. Wozniak, to Emhart Mfg. Co. Star wheel transfer mechanism for cans or the like. 2,744,608, 5–8–56, Cl. 198—22.
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Arnejo, Anthony. Mounting for vehicle headlights. 2,744,999, 5–8–56, Cl. 240—8.1.
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Arnold, Robert C., to Standard Oil Co. Desulfurization process using alkali followed by extraction with liquid sulfur dioxide and a promoter. 2,744,855, 5–8–56, Cl. 196—32.
Arp, Ewald A. Steady rest. 2,744,366, 5–8–56, Cl. 51—238.
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Bailey, Christopher E. G., and D. H. Paul, to Hartford National Bank and Trust Co., as trustee. Pulse code modulation system. 2,745,064, 5–8–56, Cl. 332—11.
Baird, Leslie L., to General Electric Co. Circuit breaker. 2,744,974, 5–8–56, Cl. 200—50.
Baker, Raymond G., and L. E. Willett, to Chamberlin Co. of America. Combination guide and weatherstrip for sliding window constructions. 2,744,297, 5–8–56, Cl. 20—52.2.
Baker, William R., and R. De Liban, to the United States of America as represented by the United States Atomic Energy Commission. Beam current regulator. 2,745,018, 5–8–56, Cl. 250—41.9.
Bakker, Pier, to Automatic Electric Laboratories, Inc. Switching selector repeater. 2,744,962, 5–8–56, Cl. 179—18.
Baldwin, John D., Jr., to The Weatherhead Co. Relief valve cap. 2,744,535, 5–8–56, Cl. 137—377.
Baldwin, Morris J., to General Electric Co. Dynamoelectric machine core member and method of making same. 2,745,030, 5–8–56, Cl. 310—214.
Ball, Charles F., to Joy Mfg. Co. Rotary cutter and shaft mounting for a pavement cutter. 2,744,740, 5–8–56, Cl. 262—20.
Ballhausen, Carl, to Deutsche Edelstahlwerke Aktiengesellschaft. Method of and apparatus for adjusting the spark gap length in metalworking apparatus by which metal may be removed or eroded by sparking. 2,744,991, 5–8–56, Cl. 219—15.

Bank, Thor G., and W. S. Lorenz, to Allis-Chalmers Mfg. Co. Thermal trip device with pickup coil on an adjustable armature. 2,744,979, 5–8–56, Cl. 200—88.

Banker, Oscar H., to New Products Corp. Hydraulic tappet. 2,744,509, 5–8–56, Cl. 123—90.

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Barrett, Eric, deceased (A. Barrett, administratrix), and A. Barrett. Syringes and syringe mixers. 2,744,527, 5–8–56, Cl. 128—216.

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Bartelink, Everhard H. B., to the United States of America, as represented by the Secretary of the Navy. Radio echo detection system. 2,745,097, 5–8–56, Cl. 343—11.

Barton, Loy E., to the United States of America as represented by the Secretary of the Navy. Cylinder tuning of cavity. 2,745,070, 5–8–56, Cl. 333—82.

Bass, Wilfred M. Roller fish net. 2,744,350, 5–8–56, Cl. 43—9.

Bassett, Calvin P.: *See*—
Ashe, Nell W., Huskey, McNaughton, and Bassett. 2,744,669.

Batz, George C. Machine for forming and heat treating metal articles. 2,744,746, 5–8–56, Cl. 266—6.

Bauer, Lawrence E., ½ to G. L. Kiner. Fishing rod holder with signal means. 2,745,088, 5–8–56, Cl. 340—213.

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Baynes, Leslie E., to Baynes Aircraft Interiors Ltd. High speed aircraft wing and tail surfaces having variable sweepback. 2,744,698, 5–8–56, Cl. 244—42.

Bearer, Louis C., to Phillips Petroleum Co. Pebble heat exchange chamber. 2,744,732, 5–8–56, Cl. 257—55.

Beart, Robert W., to Illinois Tool Works. Method of making lock washers. 2,744,268, 5–8–56, Cl. 10—72.

Beck, Walter, to Montgomery Elevator Co. Fluid buffer for elevators. 2,744,587, 5–8–56, Cl. 187—67.

Becker, Fred, to Underwood Corp. Form stop for carriages. 2,744,604, 5–8–56, Cl. 197—140.

Bedford, William A., Jr., to United-Carr Fastener Corp. Fastening device. 2,744,708, 5–8–56, Cl. 248—73.

Beethoven, Harry J. Rolling ball game. 2,744,753, 5–8–56, Cl. 273—125.

Beggs, Donald, and E. G. de Coriolis, to Erie Mining Co. Pellet indurating process and apparatus. 2,744,743. 5–8–56, Cl. 263—29.

Behrendt, Ignatius F.: *See*—
Behrendt, Julian F. and I. F. 2,744,364.

Behrendt, Julian F. and I. F. Grinding disk. 2,744,364, 5–8–56, Cl. 51—197.

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Bell Telephone Laboratories, Inc.: *See*—
Bellows, Brian C., Jr. 2,745,011.
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Stansel, Frank R. 2,745 010.

Bellamy, John C., to Cook Electric Co. Circuit control apparatus. 2,744,980, 5–8–56, Cl. 200—112.

Bellows, Brian C., Jr., to Bell Telephone Laboratories, Inc. Very high frequency gas discharge noise source. 2,745,011, 5–8–56, Cl. 250—36.

Beloit Iron Works: *See*—
Hornbostel, Lloyd. 2,744,453.

Bender, Howard L., A. G. Farnham, and J. W. Guyer, to Union Carbide and Carbon Corp. Unsymmetrical diphenylol methanes. 2,744,882, 5–8–56, Cl. 260—47.

Bendix Aviation Corp.: *See*—
Erle, Donald Z. 2,744,540.
Gerwig, Larry L. 2,744,386.
Haugen, Glenn L., and Wofford. 2,744,956.
Leffler, Robert. 2,745,091.

Bendot, Joseph M., to National Steel Corp. Apparatus for filling containers. 2,744,670, 5–8–56, Cl. 226—19.

Benedict, Donald B., and A. E. Broderick, to Union Carbide and Carbon Corp. Hydroxyalkylation of polysaccharides. 2,744,894, 5–8–56, Cl. 260—231.

Bently, George K., to McCray Refrigerator Co., Inc. Adjustable mezzanine shelf for refrigerated display cases. 2,744,807, 5–8–56, Cl. 312—351.

Berger, Johannes, and G. Lange, to Carl Zeiss. Photographic objective comprising four air spaced meniscus shaped components. 2,744,447, 5–8–56, Cl. 88—57.

Bernstein, Allan C., to Executone Inc. Intercommunication system. 2,744,966, 5–8–56, Cl. 179—39.

Betz, W. H. & L. D.: *See*—
Kahler, Harry L. 2,744,866.

Biggs, William A., Jr.: *See*—
Copenhaver, James E., Biggs, and Baxley. 2,744,927.

Bill, Jack, Scientific Instrument Co.: *See*—
Caldwell, Conrad C. 2,744,986.

Bird, Byron M., to The Jeffrey Mfg. Co. Jigging apparatus. 2,744,628, 5–8–56, Cl. 209—455.

Birnbaum, Samuel. Guard-hood for parallelly spaced apart dental teeth grinding discs. 2,744,327. 5–8–56, Cl. 32—59.

Birtman Electric Co.: *See*—
Ahlswede, Norman E. 2,744,678.
Howard, Frank S. 2,744,679.
Howard, Frank S. 2,744,691.
More, Philip J. 2,744,342.
More, Philip J., and McCord. 2,744,343.
Sparklin, Charles H. 2,744,412.

Blaauw, Andrew, and G. W. Findley, to Ford Motor Co. Tractor jack. 2,744,724, 5–8–56, Cl. 254—94.

Black, James G., to the United States of America as represented by the Secretary of the Navy. Magnetically controlled inertia switch. 2,744,976, 5–8–56, Cl. 200—80.

Black, James J., to Trailmobile, Inc. Expansible vehicle body. 2,744,781, 5–8–56, Cl. 296—21.

Black, John W., Jr., to Pemco Wheel Co. Wheel and bearing assembly. 2,744,800, 5–8–56, Cl. 308—187.1.

Blackhall, James M., to North Electric Co. Position-then-lock jack. 2,744,968, 5–8–56, Cl. 179—91.

Blackstone, Henry. Bottle construction. 2,744,646, 5–8–56, Cl. 215—11.

Blankenburg, Frederick R. Engine starter. 2,744,586, 5–8–56, Cl. 185—41.

Blaw-Knox Co.: *See*—
Mittelstadt, Clarence F. 2,744,456.

Blittschau, Edward H. Tape feeding device for sewing machines. 2,744,481, 5–8–56, Cl. 112—2.

Boegehold, Alfred L., to General Motors Corp. Salt bath furnace. 2,744,495, 5–8–56, Cl. 118—429.

Boeing Airplane Co.: *See*—
Chace, Richard A., and Newell. 2,744,501.

Boettner, Fred E., to Rohm & Haas Co. Debydrogenation process. 2,744,903, 5–8–56, Cl. 260—290.

Bolliger, Hans, to Ciba Ltd. Pyrazolones and process for their manufacture. 2,744,911, 5–8–56, Cl. 260—310.

Bollinger, Waldon P., R. W. Howery, and J. R. Ford, to the United States of America as represented by the Secretary of the Air Force. Sweep modulator direction finder. 2,745,099, 5–8–56, Cl. 343—113.

Booth, William T., Jr.: *See*—
Carnes, Joseph J., and Booth. 2,744,888.

Borden, Philip H., to Central Industrial Corp. Safety razor and blade changer therefor. 2,744,317, 5–8–56, Cl. 30—40.

Borden, Philip H., to Central Industrial Corp. Razor blade changing mechanism. 2,744,318, 5–8–56, Cl. 30—40.

Borg, Paul E.: *See*—
Woolslayer, Homer J., Jenkins, Borg, and Campbell. 2,744,725.

Borg-Warner Corp.: *See*—
Hatch, Albert M. 2,744,721.
Stephenson, Henry R., and Gommel. 2,744,548.
Troendly, Harry P. 2,744,598.

Bork, Charles: *See*—
Parker, Warren H. 2,744,365.

Bowen, Arnold E., deceased, by V. C. Bowen, executrix, to Bell Telephone Laboratories, Inc. Ultra-high frequency electronic device. 2,745,039, 5–8–56, Cl. 315—39.51.

Bowen, Virginia C.: *See*—
Bowen, Arnold E. 2,745,039.

Boyd, Albert B., deceased: M. B. Ritter, administratrix. Valve operating mechanism. 2,744,262, 5–8–56, Cl. 4—67.

Boyer, Morris H., to Danita Hosiery Mfg. Co., Inc. Mechanism for automatically adjusting knitting machines to knit stockings of different sizes. 2,744,400, 5–8–56, Cl. 66—155.

Bradney, Clifford H.: *See*—
Halpern, Alfred, and Bradney. 2,744,851.

Brady, Francis E., Jr. Air control unit. 2,744,543, 5–8–56, Cl. 137—791.

Brandt, Franz D. Easel. 2,744,712, 5–8–56, Cl. 248—166.

Brandt, Herbert. Regenerative heat exchanger. 2,744,731, 5–8–56, Cl. 257—6.

Braunschweigische Maschinenbaunstalt A. G.: *See*—
Rothe, Walter. 2,744,338.

Breathitt, Harvie W., Jr.: *See*—
Houston, Wesley M., and Breathitt. 2,744,625.

Bredtschneider, Kurt E. B., to Crane Co. Pressure vessel. 2,744,651, 5–8–56, Cl. 220—46.

Bredtschneider, Kurt E. B., to Crane Co. Valve construction. 2,744,775, 5–8–56, Cl. 286—31.

Breitman, Harold. Camera convertible into a slide projector and an attachment for effecting such conversion. 2,744,444, 5–8–56, Cl. 88—26.

Briggs, James L., Jr., and C. H. Hannon, ½ to Revere Copper and Brass Inc., and ½ to General Electric Co. Copper base alloys. 2,744,822, 5–8–56, Cl. 75—159.

Briggs, Quentin L., to Super Premiums, Inc. Kite. 2,744,702, 5–8–56, Cl. 244—154.

Bristol Aeroplane Co. Ltd., The: *See*—
Massey, Bernard S., and Bush. 2,744,395.

Bristol Laboratories Inc.: *See*—
Johnson, David A. 2,744,895.
Speeter, Merrill E. 2,744,909.
Speeter, Merrill E. 2,744,910.

British Thomson-Houston Co. Ltd., The: *See*—
Dunsmuir, Robert. 2,745,040.

Broderick, Aubrey E.: *See*—
Benedict, Donald B., and Broderick. 2,744,894.

Broschard, Robert, and G. Krupka, to American Cyanamid Co. Anhydrochlortetracycline. 2,744,931, 5–8–56, Cl. 260—559.

Brown, Albert A.: *See*—
Jenkins, Paul W., and Brown. 2,744,589.

Brown, John R., to Kobe, Inc. Corrosion-inhibiting soluble plug. 2,744,880, 5–8–56, Cl. 260—41.5.

Brown, Robert L. Bracket for assembly of parts. 2,744,776, 5–8–56, Cl. 287—20.

Browning, Rowland E. Induction type wind tunnel. 2,744,410, 5–8–56, Cl. 73—147.

Brückner, Harry, and A. Heitmann, to Arista William R. P. Schulz G. m. b. H. Electric baking, roasting and cooking apparatus. 2,744,994, 5–8–56, Cl. 219—35.

Bruderick, George W. Dressing apparatus. 2,744,515, 5–8–56, Cl. 125—11.

Brugler, Richard L., and D. Davis, Sr., to Chrysler Corp. Heat exchange coil assembly. 2,744,393, 5–8–56, Cl. 62—140.

Brunswick-Balke-Collender Co., The: *See*—
Reineman, Richard G. 2,744,283.
Reineman, Richard G. 2,744,804.

Bryer, Harry: *See*—
Drescher, Sol, and Bryer. 2,744,254.

Buchholz, Karl: *See*—
Stastny, Fritz, and Buchholz. 2,744,291.

Buck, Clarence G. Torpedo launching rack. 2,744,486, 5–8–56, Cl. 114—239.

Buck, William C., to Creative Services, Inc. Switch actuating mechanism. 2,744,985, 5–8–56, Cl. 200—172.

Buckeye Steel Castings Co., The: *See*—
Moeller, Harry A. 2,744,471.

Buckner, Wilbur G. Shut-off valve. 2,744,536, 5–8–56, Cl. 137—413.

Buddemeyer, Bruce D.: *See*—
Thompson, Jerome B., and Buddemeyer. 2,744,825.
Thompson, Jerome B., and Buddemeyer. 2,744,826.

Budwig, Gilbert G. Aspirator. 2,744,791, 5–8–56, Cl. 299—142.

Bundy, Francis P., to the United States of America as represented by the Executive Secretary of the Office of Scientific Research and Development. Underwater sound transducer. 2,745,084, 5–8–56, Cl. 340—11.

Bundy, William H.: *See*—
Striplin, Marcus M., Jr., Hardin, and Bundy. 2,744,944.

Bureau, Francis M., and H. H. Langdon; said Langdon to Curlator Corp. Feeder mechanism for textile machines. 2,744,294, 5–8–56, Cl. 19—67.

Burkholder, Claude A., to General Box Distributors. Veneer feeder and conveyor unit. 2,744,551, 5–8–56, Cl. 144—279.

Busch, Richard E., D. F. O'Connor, and M. V. Scozzafava, to Clary Corp. Accumulator engaging mechanism. 2,744,682, 5–8–56, Cl. 235—60.

Bush, Denis G.: *See*—
Massey, Bernard S., and Bush. 2,744,395.

Butler, Charles W.: *See*—
Parker, Warren H. 2,744,365.

Butts, Alfred M. Load-supporting structures. 2,744,590, 5–8–56, Cl. 189—36.

Bussi, Riccardo, to I. Rizzieri. Variable fulcrum differential actuating mechanism. 2,744,684, 5–8–56, Cl. 235—79.

C. G. S. Laboratories, Inc.: *See*—
Carver, Lawrence M. 2,744,857.

Cady, Willoughby M., to the United States of America as represented by the Secretary of the Air Force. Antenna stabilising apparatus. 2,745,098, 5–8–56, Cl. 343—6.

Calder, Alan R.: *See*—
Fienberg, Nathan, and Calder. 2,744,288.

Caldwell, Conrad C., to Bill Jack Scientific Instrument Co. Potentiometer and method of making. 2,744,986, 5–8–56, Cl. 201—60.

California Eastern Airways, Inc.: *See*—
Cooper, Ivan O. 2,744,581.

California Research Corp.: *See*—
Toland, William G., Jr. 2,744,925.

Callery Chemical Co.: *See*—
Jackson, Carey B. 2,744,810.

Cameli, Dominic M.: *See*—
Graves, Donald E., and Cameli. 2,745,020.

Campbell, Erwin A.: *See*—
Woolslayer, Homer J., Jenkins, Borg and Campbell. 2,744,725.

Canfora, Arthur E., A. Liguori, E. R. Shenk, and H. J. Kishi, to Radio Corp. of America. Reversible electronic code translators. 2,744,955, 5–8–56, Cl. 178—23.

Cansler, Mary A. Beautician's cape. 2,744,252, 5–8–56, Cl. 2—50.

Carkhuff, Le Roy F., to The Diamond Match Co. Control device for carton set-up machine. 2,744,599, 5–8–56, Cl. 192—125.

Carl, John H. Railway track cleaner. 2,744,273. 5–8–56, Cl. 15—55.

Carlson, George E., J. P. Bader, and N. B. Owen, to Viking Valve Co. Pressurized container valve structure. 2,744,665, 5–8–56, Cl. 222—394.

Carnes, Joseph J., and W. T. Booth, Jr., to American Cyanamid Co. Ethenoxy n-monoethanolamides of tall oil. 2,744,888, 5–8–56, Cl. 260—97.5.

Caroselli, Remus F., to Owens-Corning Fiberglas Corp. Method of treating fibers with a vinyl copolymer and a Werner complex. 2,744,835, 5–8–56, Cl. 117—72.

Carpenter, James S., J. C. Shutt, and J. H. Winchester, to The Eagle-Picher Co. Removal of molded articles. 2,744,286, 5–8–56, Cl. 18—2.

Carter, Cecil F. Wheel-barrow with pivoted supporting legs. 2,744,763, 5–8–56, Cl. 280—47.33.

Carver, Lawrence M., to C. G. S. Laboratories, Inc. Improved electronic trigger circuit. 2,744,857, 5–8–56, Cl. 178—70.

Cassia, Frank, and C. R. Greene, to Standard Oil Co. Removing polyethylene from metal surfaces. 2,744,841, 5–8–56, Cl. 134—7.

Central Industrial Corp.: *See*—
Borden, Philip H. 2,744,317.
Borden, Philip H. 2,744,318.

Chace, Richard A., and G. C. Newell, Jr., to Boeing Airplane Co. Toggle lock actuator assembly. 2,744,501, 5–8–56, Cl. 121—40.

Chaiken, Morris, and J. M. Weinstein. Replaceable enamel facing for crowns and method of making same. 2,744,326, 5–8–56, Cl. 32—12.

Chamberlain Corp.: *See*—
Etten, Nicholas L. 2,744,300.
Etten, Nicholas L. 2,744,403.

Chamberlin Co. of America: *See*—
Baker, Raymond G., and Willett. 2,744,297.

Chambless, Ersyl F. Receptacle having scrubbing brushes for cleaning golf club heads. 2,744,276, 5–8–56, Cl. 15—123.

Chappen, Stephen P. Surface treating apparatus for upright wall surfaces. 2,744,494, 5–8–56, Cl. 118—305.

Charat, Hanoh. Supports. 2,744,715, 5–8–56, Cl. 248—317.

Chassar, Anthony R., to The Oster Mfg. Co. Self-tightening chuck. 2,744,757. 5–8–56, Cl. 279—114.

Chayne, Charles A., to General Motors Corp. Steering column assembly. 2,744,419, 5–8–56, Cl. 74—493.

Chesluk, Ralph P.: *See*—
Kavanagh, Kevin E., and Chesluk. 2,744,853.

Chicago Eye Shield Co.: *See*—
Malcom, Robert, Jr., and Whipple. 2,744,523.
Whipple, Willis Z. 2,744,524.
Whipple, Willis Z. 2,744,525.

Chilton, William D., to General Motors Corp. Flexible chute. 2,744,601, 5–8–56, Cl. 193—25.

Christiansen, Andrew L., ½ to W. S. Simpson. Fish skinning machine. 2,744,285, 5–8–56, Cl. 17—2.

Chromatic Television Laboratories, Inc.: *See*—
Lawrence, Ernest O. 2,744,952.
Lawrence, Ernest O. 2,745,033.
Lawrence, Ernest O. 2,745,035.

Chrysler Corp.: *See*—
Brugler, Richard L., and Davis. 2,744,393.

Chu, Jeffrey C., and D. H. Jacobsohn, to the United States of America as represented by the United States Atomic Energy Commission. Binary counter. 2,745,006, 5–8–56, Cl. 250—27.

Chuba, George J. Barber shears. 2,744,324, 5–8–56, Cl. 30—271.

Ciavola, Eugene A. Anti-skid device. 2,744,558, 5–8–56, Cl. 152—228.

Ciba Ltd.: *See*—
Bolliger, Hans. 2,744,911.
Johner, Hans. 2,744 935.

Ciba Pharmaceutical Products, Inc.: *See*—
Huebner, Charles F. 2,744,899.

Cirillo, Lee, to Towmotor Corp. Carton hook assembly for lift trucks. 2,744,645 5–8–56, Cl. 214—651.

Cislak, Francis E., and W. R. Wheeler. Process of preparing pyridine and 3-picoline. 2,744,904, 5–8–56, Cl. 260—290.

Clark, Cyrus J. Automatic pressure reducing cut off valve for fluid pressure line. 2,744,537. 5–8–56, Cl. 137—462.

Clark, Vernon R., to Safeway Heat Elements, Inc. Heating element. 2,744,996. 5–8–56, Cl. 219—46.

Clarke, William J. P.: *See*—
Warburton, Geoffrey, and Clarke. 2,744,313.

Clarostat Mfg. Co., Inc.: *See*—
Mucher, George J. 2,744,777.

Clary Corp.: *See*—
Busch, Richard E., O'Connor, and Scozzafava. 2,744,682.
Gearheart, John D., and Scozzafava. 2,744,605.

Clasen, Claus J., to American Steel Foundries. Changeable gauge railway truck. 2,744,473, 5–8–56, Cl. 105—178.

Cleaveland, Burton L., R. A. Englert, and G. A. Larson, to Sylvania Electric Products, Inc. Article handling device. 2,744,372, 5–8–56, Cl. 53—246.

Cleveland-Cliffs Iron Co., The: *See*—
Erck, Louis J. 2,744,627.

Cliborn, Robert, to Thompson Products, Inc. Seal. 2,744,773, 5–8–56, Cl. 286—11.15.

Cockshutt Farm Equipment, Ltd.: *See*—
Collier, Everett P. 2,744,617.

Cole, Nathaniel S.: *See*—
Wilcox, Isaac L., Cole, and Peach. 2,744,367.

Coleman, Robert E., to Jet-Heet, Inc. Thermopump. 2,744,470, 5–8–56, Cl. 103—255.

Collier, Everett P., to Cockshutt Farm Equipment, Ltd. Forage harvesters. 2,744,617, 5–8–56, Cl. 198—166.

Collini, Walter. Method of making articles from fusible materials. 2,744,360, 5–8–56, Cl. 49—85.

Combustion Engineering, Inc.: *See*—
Millsaps, Paul R., Morton, and Reedy. 2,744,503.

Comeaux, Gilford J., Sr. Post hole digging machine. 2,744,726, 5–8–56, Cl. 255—19.

Commonwealth Engineering Co. of Ohio, The: *See*—
Drummond, Folsom E. 2,744,832.
Drummond, Folsom E. 2,744,833.
Marvin, Philip R. 2,744,987.
Moorhead, Milton M., Jr., and Parker. 2,745,092.
Way, Raymond C., and Downs. 2,744,329.

Conger, David L., to The Walton Co. Broken drill extractor. 2,744,312. 5–8–56. Cl. 29—256.

Conley, Albert B., Jr. Dispensing display rack. 2,744,634, 5–8–56. Cl. 211—49.

Conmar Products Corp.: *See*—
Johns, Max F. and L. E. 2,744,560.

Consolidated Electrodynamics Corp.: *See*—
Gauger, Roy C. 2,745,059.

Cook Electric Co.: *See*—
Bellamy, John C. 2,744,980.

Cook, Francis F., and J. E. Spriggs, to Pictorial Machinery Ltd. Brake and indexing means for printing machines. 2,744,458. 5–8–56, Cl. 95—73.

Cook, William H. Male electric plug. 2,745,077, 5–8–56, Cl. 339—99.

Cooke, Robert S. Fastening for boxes, cases, and the like. 2,744,778, 5–8–56, Cl. 292—250.

Cooper, Ivan O., to California Eastern Airways, Inc. Self-propelled wheeled hangar for airplane wings. 2,744,581, 5–8–56, Cl. 180—1.

Co-Operative Wholesale Society Ltd.: *See*—
Eales, John G. R., and Hale. 2,744,325.

Copenhaver, James E., W. A. Biggs, Jr., and W. H. Baxley, to Sonoco Products Co. Solvent extraction of black liquor. 2,744,927, 5–8–56, Cl. 260—527.

Corson, William G. Apparatus for applying tread rubber to tire carcasses. 2,744,290, 5–8–56, Cl. 18—30.

Coselman, C. B., Inc.: *See*—
Coselman, Clinton B. 2,744,689.

Coselman, Clinton B., to C. B. Coselman, Inc. Thermostatic damper control. 2,744,689, 5–8–56, Cl. 236—96.

Coulter, James H., Jr., and F. E. Hutton, to The Babcock & Wilcox Co. Combination of a furnace for the incineration of residual liquor with means for disintegrating solids entrained in said liquor. 2,744,812, 5–8–56, Cl. 23—262.

Cox, George E. Ophthalmic perimeters. 2,744,441, 5–8–56, Cl. 88—20.

Craig, Bruce G., to A. O. Smith Corp. Enamel bonding by the use of arsenic. 2,744,843, 5–8–56, Cl. 148—6.14.

Craig, Hanson C. Mop attachment. 2,744,280, 5–8–56, Cl. 15—229.

Craig, Hugh B. Oscillating weeder and cultivator for tractors. 2,744,459, 5–8–56, Cl. 97—35.

Crane Co.: *See*—
Bredtschneider, Kurt E. B. 2,744,651.
Bredtschneider, Kurt E. B. 2,744,775.
Hjulian, Julius A. 2,744,738.

Crane, Walton B., to Allied Plastics Co. Shipping container. 2,744,675, 5–8–56, Cl. 229—27.

Crawford, John S. Electrical connector lug. 2,745,082, 5–8–56, Cl. 339—276.

Creative Services, Inc.: *See*—
Buck, William C. 2,744,985.

Creely, Clarice A.: *See*—
Slotkin, George B., and Creely. 2,744,256.

Crist, Buckley, ⅔ to B. Crist and ⅓ to E. L. Haddon. Beverage dispensing machine. 2,744,672, 5–8–56, Cl. 226—46.5.

Crosswhite, Henry M., Jr.: *See*—
Steinhaus, David W., and Crosswhite. 2,744,438.

Cuckson, Eric E., and A. L. Jones, to W. E. Cuckson & Son Ltd. Machine for use in the manufacture of zip fasteners. 2,744,561, 5–8–56, Cl. 153—1.

Cuckson, W. E., & Son Ltd.: *See*—
Cuckson, Eric E., and Jones. 2,744,561.

Cummings, Robert A., Jr.: *See*—
Mosher, Ralph E., and Stiveson. 2,744,442.

Cummings, Rodney B. Line tapper. 2,745,079, 5–8–56, Cl. 339—109.

Curlator Corp.: *See*—
Buresh, Francis M., and Langdon. 2,744,294.

Cutler, Bertram S. Safety razor and blade assembly. 2,744,319, 5–8–56, Cl. 30—66.

Cutler-Hammer, Inc.: *See*—
Holland, Donald B. 2,745,049.
Hults, Harold W. 2,744,984.
Krieger, Alvin W. 2,744,302.
Radley, Guy R. 2,744,839.

Cutter Laboratories, Inc.: *See*—
Sahyun, Melville, Faust, and Jules. 2,744,916.

Cygnet Associates: *See*—
Saylors, Rodger D. 2,744,526.

Dague, George W. Flush-valve tank-ball. 2,744,259, 5–8–56, Cl. 4—52.

Daignas, Pierre M. J. M. R. Means for feeding pargeting machines with thick pargeting material. 2,744,787, 5–8–56, Cl. 299—63.

Dailey, William H., Jr., to Surface Combustion Corp. Furnace pressure control. 2,744,687, 5–8–56, Cl. 236—15.

D'Amico, John J.: *See*—
Harman, Marion W., and D'Amico. 2,744,898.

Daniels, Robert M., J. E. Maudru, and G. O. Rorabaugh, to Holly Sugar Corp. Sugar purification ion exchange method and apparatus. 2,744,840, 5–8–56, Cl. 127—46.

Danita Hosiery Mfg. Co., Inc.: *See*—
Boyer, Morris H. 2,744,400.

Darley, Henry C. H., to Shell Development Co. Drilling fluid for high-temperature wells. 2,744,869, 5–8–56, Cl. 252—8.5.

Darling, Joseph S.: *See*—
Jacobs, William, and Darling. 2,744,666.

Darling, L. A., Co.: *See*—
Parke, Alfred G. 2,744,714.

Darling, Ralph E. Electrically equipped oxygen hose. 2,745,074, 5–8–56, Cl. 339—16.

Daussat, Russell L.: *See*—
Mertzweiller, Joseph K., Templeton, and Daussat. 2,744,921.

Davidson, Elmer T., and L. E. Kilmarx, Jr., to Scovill Mfg. Co. Quickly attachable safety hose coupling. 2,744,770, 5–8–56, Cl. 285—169.

Davidson, Robert B. Bunk for logging vehicles. 2,744,766, 5–8–56, Cl. 280—145.

Davie, William R., to Pittsburgh Coke & Chemical Co. Low volatile herbicidal compositions. 2,744,818, 5–8–56, Cl. 71—2.6.

Davis, De Witt, Sr.: *See*—
Brugler, Richard L., and Davis. 2,744,393.

Davis, Edward A. Switching system. 2,744,972, 5–8–56, Cl. 200—23.

Davis, Harold E.: *See*—
Wiegers, Irvin E., and Davis. 2,744,748.

Davis, Lewis B., and J. B. Paulsen, to Read Standard Corp. Sanitary flour handling system. 2,744,620, 5–8–56, Cl. 198—213.

Davis, Lincoln K., to The Foxboro Co. Flexible liquid dispensing container having a removable spout assembly and filter. 2,744,661, 5–8–56, Cl. 222—189.

Day, George A.: *See*—
Rainbow, Horace S., Paul, and Day. 2,744,680.

Day, Robert E. Rafter tool. 2,744,332, 5–8–56, Cl. 33—93.

Deane, Gerald N. Apparatus for freezing, cooling beverages or comestibles. 2,744,391, 5–8–56, Cl. 62—99.

Debarre, Francois: *See*—
Gailliot, Paul, and Debarre. 2,744,912.

De Benneville, Peter L.: *See*—
Luskin, Leo S., and de Benneville. 2,744,943.

De Benneville, Peter L., to Rohm & Haas Co. N-tert-alkyl-aminoalkyl esters. 2,744,884, 5–8–56, Cl. 260—78.5.

De Benneville, Peter L., and H. J. Sims, to Rohm & Haas Co. Aminoalkyl esters. 2,744,885, 5–8–56, Cl. 260—78.5.

De Coriolis, Ernest G.: *See*—
Beggs, Donald, and de Coriolis. 2,744,743.

De Jager, Frank: *See*—
Greefkes, Johannes A., de Jager, and van Tilburg. 2,744,959.

De Jager, Frank, to Hartford National Bank and Trust Co., trustee. Pulse-code modulator. 2,745,063, 5–8–56, Cl. 332—11.

De Liban, Robert: *See*—
Baker, William R., and De Liban. 2,745,018.

Del Mar, Bruce E. Advertising and toy aircraft blank. 2,744,355, 5–8–56, Cl. 46—79.

Demis, Marie: *See*—
Killinger, John W., M. and M. C. Demis, and Payne. 2,744,356.

Demis, Michael C.: *See*—
Killinger, John W., M. and M. C. Demis, and Payne. 2,744,356.

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Deutsche Edelstahlwerke Aktiengesellschaft: *See*—
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Deutsche Perrot-Bremse G. m. b. H.: *See*—
Seiler, Georg, and Rützenhofer. 2,744,588.

De Villers, Louis S. Collapsible display shelf. 2,744,713, 5–8–56, Cl. 248—174.

Diamond, Horace W., to Morton Salt Co. Salt composition. 2,744,823, 5–8–56, Cl. 99—2.

Diamond Match Co., The: *See*—
Carkhuff, Le Roy F. 2,744,599.

Dibbins, Walter N., to Radio Corp. of America. Magnetic tape editing machine. 2,744,755, 5–8–56, Cl. 274—4.

Dickinson, Horace, to Vapor Recovery Systems Co. Remote indicating system. 2,745,087, 5–8–56, Cl. 340—177.

Difford, Le Roy A., to Thompson Products, Inc. Pump inlet guard. 2,744,466, 5–8–56, Cl. 103—103.

Di Florio, August: *See*—
Sokol, Benjamin, and Di Florio. 2,744,382.

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Dilworth, Richard M.: *See*—
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Dixon, Paul H. 2,744,780.

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Martin, William McK., and Ryan. 2,744,531.

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Dollar, Milford F. Incinerator. 2,744,478, 5–8–56, Cl. 110—18.

Domagh, Gerhard: *See*—
Schäfer, Werner, Domagh, Wegler, and Kühle. 2,744,905.

Dore, James E., to Kaiser Aluminum & Chemical Corp. Trough for transferring molten metal. 2,744,303, 5–8–56, Cl. 22—79.

Dotson, Billy J., to Socony Mobil Oil Co., Inc. Apparatus used in measuring interstitial water content and electrical resistivity of unmounted core samples. 2,745,057, 5–8–56, Cl. 324—13.

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Toornman, Burton V. 2,744,817.
Toornman, Burton V. 2,744,819.

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Way, Raymond C., and Downs. 2,744,329.

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Drechsel, Erhart K., to American Cyanamid Co. Cyclic carbamates and method for their preparation. 2,744,897, 5–8–56, Cl. 260—244.

Drescher, Sol, and H. Bryer. Garment pad to correct low shoulders. 2,744,254, 5–8–56, Cl. 2—93.

Drill, Ervin A. Bucket attachment for ingot strippers and the like. 2,744,305, 5–8–56, Cl. 22—95.

Drummond, Folsom E., to The Commonwealth Engineering Co. of Ohio. Wrinkle drying oil siccative. 2,744,832, 5–8–56, Cl. 106—264.

Drummond, Folsom E., to The Commonwealth Engineering Co. of Ohio. Wrinkle drying oil siccative. 2,744,833, 5–8–56, Cl. 106—264.

Duane, John J., to Union Carbide and Carbon Corp. Preparation of organopolysiloxanes. 2,744,923, 5–8–56, Cl. 260—448.2.

Du Mont, Allen B., Laboratories, Inc.: *See*—
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Durbon, William K., to Waugh Equipment Co. Cushion underframe. 2,744,638, 5–8–56, Cl. 213—8.

Dutcher, Harris A., and H. R. Sailors, to Phillips Petroleum Co. Decomposing urea adducts by countercurrently contacting the urea adducts with a hot gas, removing the urea fines and recycling the larger urea particles. 2,744,887, 5–8–56, Cl. 260—96.5.

Dyer, John W., J. H. Flatt, and B. H. Short, to General Motors Corp. Windshield wiper mechanism. 2,744,282, 5–8–56, Cl. 15—255.

Eagle Lock Co., The: *See*—
Vile, Norman J. 2,744,404.

Eagle-Picher Co., The: *See*—
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Edera, Eugene, and S. R. J. Stokvis. Automatic boring mill. 2,744,423, 5–8–56, Cl. 77—57.

Ehm, Wilhelm, to Farbenfabriken Bayer Aktiengesellschaft. Amine-sulfur dioxide-addition products of acetoacetanilides. 2,744,933, 5–8–56, Cl. 260—562.

Eisele, Andrew. Bore gauging instrument. 2,744,333, 5–8–56, Cl. 33—178.

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Simpkins, Robert L., Materka, and Elliott. 2,745,075.

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Elsbett, Ludwig, to W. H. R. Behrens. Internal combustion engines. 2,744,508, 5–8–56, Cl. 123—41.39.

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Engelhard, William E. Sealed annealing apparatus. 2,744,745, 5–8–56, Cl. 266—5.

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Ensmann, Ralph, and W. H. Barrett, to Minnesota and Ontario Paper Co. Roller speed indicating means for paper coating machines. 2,744,492, 5–8–56, Cl. 118—10.

Erck, Louis J., to The Cleveland-Cliffs Iron Co. Method of concentrating ores. 2,744,627, 5–8–56, Cl. 209—172.5.

Ergas, Isaac: *See*—
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Beggs, Donald, and de Coriolis. 2,744,743.

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Simpkins, Robert L., Materka, and Elliott. 2,745,075.

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Mertzweiller, Joseph K. 2,744,936.
Mertzweiller, Joseph K., Templeton, and Daussat. 2,744,921.

Etten, Nicholas L., to Chamberlain Corp. Awning structure and method of making same. 2,744,300, 5–8–56, Cl. 20—57.5.

Etten, Nicholas L., to Chamberlain Corp. Mounting arrangement for pivotal wringer roll. 2,744,403, 5–8–56, Cl. 68—244.

Evanoff, Harry, to Louis Marx & Co., Inc. Shopping indicator. 2,744,490, 5–8–56, Cl. 116—134.

Evans Enterprises, Inc.: *See*—
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Evans, Frederick H., to Evans Enterprises, Inc. Bloom turning apparatus. 2,744,639, 5–8–56, Cl. 214—1.

Evans, Joseph C.: *See*—
Evans, Joseph C., and Wedmore. 2,744,739.

Evans, Joseph C., and H. S. Wedmore, to Joseph C. Evans. Beach sand cleaning device. 2,744,739, 5–8–56, Cl. 262—2.

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Evans, William R., to Aircraft-Marine Products, Inc. Crimping tool with a plurality of movable dies operable singly or together. 2,744,428, 5–8–56, Cl. 81—15.

Everbrite Electric Signs Inc.: *See*—
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Everett, Arthur C., to Pneumatic Scale Corp. Closure applying apparatus. 2,744,368 5–8–56 Cl. 53—67.

Evinrude, Ralph S., to Outboard, Marine & Mfg. Co. Engine carburetor with a choking and priming control. 2,744,736, 5–8–56, Cl. 261—34.

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Fafnir Bearing Co., The: *See*—
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Fagge, Ralph D. Scissors-type spot welding gun. 2,744,989, 5–8–56, Cl. 219—4.

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Falligant, Louis A., to Prepo Corp. Fuel systems for light portable gas combustion burners. 2,744,809, 5–8–56, Cl. 62—1.

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Faust, Delbert G., and J. A. Wilson, Jr., to C. A. Norgren Co. Airline filter and automatic drain valve. 2,744,534, 5–8–56, Cl. 137—195.

Faust, John A.: *See*—
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Feigin, Leon, to Aviation Engineering Division, Avien-Knickerbocker, Inc. Differential stop mechanism. 2,744,416, 5–8–56, Cl. 74—414.

Felker, Jean H., to Bell Telephone Laboratories, Inc. Transistor blocking oscillators. 2,745,012, 5–8–56, Cl. 250—36.

Felsa, A. G.: *See*—
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Ferrier, Peter H. Wheel suspension having coil springs and dual axle. 2,744,765, 5–8–56, Cl. 280—124.

Fetherston, Robert T.: *See*—
Jenney, Ray S., and Fetherston. 2,744,611.
Jenney, Ray S., Fetherston, and Miller. 2,744,609.

Fiedler, Ludwik F. Vehicle suspension mechanism. 2,744,749, 5–8–56, Cl. 267—20.

Fienberg, Nathan, and A. R. Calder, to A. C. I. Plastics Proprietary Ltd. Moulding apparatus. 2,744,288, 5–8–56, Cl. 18—20.

Fike, Elmer A., and W. H. Seaton, to Monsanto Chemical Co. Detergent compositions. 2,744,874, 5–8–56, Cl. 252—161.

Finch, Milton T. Infinite ratio selector. 2,744,422, 5–8–56, Cl. 74—751.

Findley, George W.: *See*—
Blaauw, Andrew, and Findley. 2,744,724.

Findley, Howard J., to Eaton Mfg. Co. Magnetic drive. 2,744,596, 5–8–56, Cl. 192—21.5.

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Finkelstein, William. Luggage handle. 2,744,595, 5–8–56, Cl. 190—58.

Finn, John S., to W. H. Mead. Apparatus for conveying comminuted materials. 2,744,792, 5-8-56, Cl. 302—14.

Firma Lenkradwerk Gustave Petri: *See*—
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Fisher, Milton E. and P. C. Self-feeding pig feeder. 2,744,497, 5–8–56, Cl. 119—53.

Fisher, Paul C.: *See*—
Fisher, Milton E. and P. C. 2,744,497.

Fisher, W. Reuen. Drill guide bushing. 2,744,424, 5–8–56, Cl. 77—62.

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Fitzgerald, Reginald P., to Pneumatic Drop Hammer Co. Method and apparatus for die-forging articles from blanks of normally rigid material. 2,744,315, 5–8–56, Cl. 29—553.

Fitzgerald, Robert T.: *See*—
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Flamand, Maurice R., to Draper Corp. Loom stop motion. 2,744,544, 5–8–56, Cl. 139—354.

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Larson, Arnold W. G., and Flaten. 2,744,361.

Flatt, James H.: *See*—
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Fleischhauer, Henry G. Automatic controlling device for branch pipe lines. 2,744,541, 5–8–56, Cl. 137—627.

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Flex-O-Lators, Inc.: *See*—
Richardson, William F. 2,744,480.

Florence, Frank P. Power operated fountain brush. 2,744,271, 5–8–56, Cl. 15—29.

Folk, Joseph, to U. S. Slicing Machine Co., Inc. Slicing machine having means for regulating the number of slices in a group. 2,744,553, 5–8–56, Cl. 146—94.

Food Machinery and Chemical Corp.: *See*—
Halt, James M. 2,744,613.

Foote, Fred F. Lawn edging device. 2,744,357, 5–8–56, Cl. 47—33.

Ford, George E., to Qualitrol Corp. Pointer bearing for indicating instruments. 2,745,028, 5–8–56, Cl. 310—104.

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Ford Motor Co.: *See*—
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Sewell, Walter W., and Wilson. 2,744,642.

Forgue, Stanley V., to Radio Corp. of America. Photo-conductive targets for cathode ray devices. 2,744,837, 5–8–56, Cl. 117—211.

Forgue, Stanley V., and R. R. Goodrich, to Radio Corp. of America. Photo-conductive targets for cathode ray devices. 2,745,032, 5–8–56, Cl. 313—65.

Forming Machine Co. of America, The: *See*—
Simpson, Alvan D. 2,744,591.

Foster-Ellis Co.: *See*—
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Foster, Lawrence V. Mixing faucet for showers and the like. 2,744,542, 5–8–56, Cl. 137—630.18.

Foster Wheeler Corp.: *See*—
Howes, Allen H. 2,744,733.
Merritt, Gilbert S. 2,744,730.

Fougera, E., & Co., Inc.: *See*—
Halpern, Alfred, and Bradney. 2,744,851.

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Overton, Charles M., Iddings, and Fountain. 2,744,698.

Foxboro Co., The: *See*—
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France, Harold, to Imperial Chemical Industries Ltd. Process for the manufacture of tetra-aza-porphin coloring matters. 2,744,913, 5-8-56, Cl. 260—314.

Franceschini, Lorenzo, to Officine Galileo Societa per Azioni. Widening mechanism for straight knitting machines. 2,744,397, 5-8-56, Cl. 66—70.

Francis, Charles B. Apparatus for the production of fixed gas from fuel oil. 2,744,814, 5-8-56, Cl. 48—105.

Franck, George E., to The Imperial Brass Mfg. Co. Priming device. 2,744,512, 5-8-56, Cl. 123—187.5.

Frankel, Theodor, to General Dynamics Corp. Direct reading time measuring device. 2,745,058, 5-8-56, Cl. 324—28.

Frantz, William, to Simmonds Aerocessories, Inc. Pneumatic control apparatus. 2,744,502, 5-8-56, Cl. 121—41.

Freedman, Mollie S. Convertible garment. 2,744,253, 5-8-56, Cl. 2—80.

Freeland, Chester V. Emergency fire escape. 2,744,673, 5-8-56, Cl. 227—18.

Fried. Krupp, Lokomotivfabrik: *See*—
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Fulger, Russell K., to Sylvania Electric Products Inc. Universal wafer stem cutter. 2,744,574, 5-8-56, Cl. 164—40.

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Wender, Simon H., Gage, Ice, and Morris. 2,744,893.

Gailliot, Paul, and F. Debarre, to Societe des Usines Chimiques Rhone-Poulenc. 4-0.0-diphenyl-phosphonylamino-antipyrin and process for its production. 2,744,912, 5-8-56, Cl. 260—310.

Gallant, Albert L., to The Foxboro Co. Ribbon indicator instrument. 2,744,489, 5-8-56, Cl. 116—129.

Gannett, Danforth K., to Bell Telephone Laboratories, Inc. Transistor negative impedance converters. 2,745,068, 5-8-56, Cl. 333—80.

Gardes, Alfred W., to Indiana Commercial Filters Corp. Filtering screen assembly. 2,744,632, 5-8-56, Cl. 210—184.

Gare, Louis. Line indicating device for typewriters. 2,744,606, 5-8-56, Cl. 197—189.

Gaubatz, Arthur W., to General Motors Corp. Servomotor. 2,744,415, 5-8-56, Cl. 74—388.

Ganger, Roy C., to Consolidated Electrodynamics Corp. Device for measuring gas pressures. 2,745,059, 5-8-56, Cl. 324—33.

Gayer, Frederick H. Ester-acids from higher fatty acids and resin acids. 2,744,889, 5-8-56, Cl. 260—97.5.

Gearheart, John D., and M. V. Scozzafava, to Chary Corp. Ribbon feeding and reversing mechanism for printing machines. 2,744,605, 5-8-56, Cl. 197—165.

Geisel, Paul E., to A. N. Lucian. Jet power plant for aircraft. 2,744,381, 5-8-56, Cl. 60—35.6.

Gellman, Sidney. Method and apparatus for generating steam. 2,744,504, 5-8-56, Cl. 122—135.

Geltner, Bernard B. Maintenance kit for firearms. 2,744,275, 5-8-56, Cl. 15—118.

Genco, Frank C. Collapsible container for waste paper. 2,744,461, 5-8-56, Cl. 100—34.

General Box Distributors: *See*—
Burkholder, Claude A. 2,744,551.

General Cap and Container Corp.: *See*—
Hoover, Lawrence E. de S. 2,744,658.

General Controls Co.: *See*—
Ray, William A. 2,744,947.

General Dynamics Corp.: *See*—
Frankel, Theodor. 2,745,058.
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Reagan, Leon H. 2,744,967.

General Electric Co.: *See*—
Baird, Leslie L. 2,744,974.
Baldwin, Morris J. 2,745,030.
Briggs, James L., Jr., and Hannon. 2,744,822.
Graves, Donald E., and Camell. 2,745,020.
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Lingel, Fred J. 2,745,044.
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Newman, Robert W. 2,744,838.
Osman, Lee E. 2,744,821.
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Reid, Ralph A., and Leonard. 2,745,086.
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Schroeder, George W. 2,744,990.
Smith-Johannsen, Robert. 2,744,878.
Smith, Sidney R., Jr., and Koch. 2,744,982
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General Motors Corp.: *See*—
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Chayne, Charles A. 2,744,419.
Chilton, William D. 2,744,601.
Dyer, John W., Flatt, and Short. 2,744,282.
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Johnson, Lauren L., Dilworth, and Addie. 2,745,050.
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Orr, Nolan B. 2,744,722.
Spears, Esten W. 2,744,992.

General Precision Laboratory Inc.: *See*—
Gray, John W. 2,744,683.
Paine, George R. 2,744,339.

Georgia Kaolin Co.: *See*—
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Gerber, Albert J., to Gerber Plastic Co. Footwear and methods for making the same. 2,744,340, 5-8-56, 36—11.5.

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Gerdy, Emanuel J. Muffler and tailpipe hanger. 2,744,706, 5-8-56, Cl. 248—60.

Gerhardt, Carl W. Well point. 2,744,579, 5-8-56, Cl. 166—160.

Gerosa, Anthony. Movable support for containers. 2,744,710, 5-8-56, Cl. 248—129.

Gerwig, Larry L., to Bendix Aviation Corp. Dispensing valve for high pressure fluid storage flasks. 2,744,386, 5-8-56, Cl. 62—1.

Geyer, Paul.: *See*—
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Gibson, Walter G., to Radio Corp. of America. Registration in color television. 2,744,951, 5-8-56, Cl. 178—5.4.

Gilbert & Barker Mfg. Co.: *See*—
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Hope, Stanley C. 2,744,656.

Gilfillan Bros., Inc.: *See*—
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Gladstone, Martell M., and B. R. Harris, to B. R. Harris. Production of improved dried egg whites. 2,744,828, 5-8-56, Cl. 99—210.

Glew, David N.: *See*—
Robertson, Ross E., and Glew. 2,744,440.

Gluck, David, to Houdaille Industries, Inc. Device for controlling belt alignment. 2,744,363, 5-8-56, Cl. 51—139.

Golden, Catherine C. Test tube cleaning device and method. 2,744,842, 5-8-56, Cl. 134—23.

Goldman, Angela A.: *See*—
Waller, Coy W., and Goldman. 2,744,932.

Goldstein, Ladislas, D. J. Levine, and W. Sichak, to International Telephone and Telegraph Corp. Waveguide gas switching device. 2,745,072, 5-8-56, Cl. 333—98.

Gommel, Dewey E.: *See*—
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Good, Byron E.: *See*—
Anderson, Thomas M., and Good. 2,744,435.

Goodman, Abe E.: *See*—
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Goodman, Louis S. Medicinal composition containing diphenyl dihydro or tetrahydrogiyoxaline-4-one and method of producing anticonvulsant activity. 2,744,852, 5-8-56, Cl. 167—65.

Goodrich, B. F., Co., The: *See*—
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Goodrich, Robert R.: *See*—
Forgue, Stanley V., and Goodrich. 2,745,032.

Gordo, Fred L., and J. G. Stinde. Belt sander. 2,744,362, 5-8-56, Cl. 51—135.

Goslin-Birmingham Mfg. Co.: *See*—
Mair, James. 2,744,571.

Gould, Jay P. Apparatus for handling a fitting under pressure. 2,744,310, 5-8-56, Cl. 29—213.

Graflex, Inc.: *See*—
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Graham, Matthew P., to Thompson Products, Inc. Method of making ball studs. 2,744,309, 5-8-56, Cl. 29—148.4.

Gram, Eugene M. Toilet flush control. 2,744,281, 5-8-56, Cl. 4—67.

Granberry, Edgar H., and J. M. Wall, to West Point Mfg. Co. Slasher creel beam bearing. 2,744,801, 5-8-56, Cl. 308—236

Grandstaff, Otho D., to Automatic Electric Laboratories, Inc. Electronic tone generator. 2,745,008, 5-8-56, Cl. 250—36.

Graphic Arts Research Foundation, Inc.: *See*—
Higonnet, Rene A., and Moyroud. 2,744,443.
Higonnet, Rene A., and Moyroud. 2,744,457.

Graves, Donald E., and D. M. Camell, to General Electric Co. Electrical protective system. 2,745,020, 5-8-56, Cl. 250—95.

Gray, G. A., Co., The: *See*—
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Gray, John W., to General Precision Laboratory Inc. Navigational resolver-integrator. 2,744,683, 5-8-56, Cl. 235—61.

Greefkes, Johannes A., F. de Jager, and P. van Tilburg, to Hartford National Bank and Trust Co., as trustee. Pulse-code modulation transmitter. 2,744,959, 5-8-56, Cl. 179—15.

Greefkes, Johannes A., and P. van Tilburg, to Hartford National Bank and Trust Co., as trustee. Time-multiplex pulse-code modulation signal transmission system. 2,744,960, 5-8-56, Cl. 179—15.

Green, Leland W.: *See*—
Thels, William T., and Green. 2,744,272.

Green, Charles R.: *See*—
Cassis, Frank, and Greene. 2,744,841.

Grillo, Joseph, to Ward Leonard Electric Co. Battery cell voltage comparison system. 2,745,090, 5-8-56, Cl. 340—253.

Grip, Erik K., to Aktiebolaget Atvidaberg-Facit. Tens transfer device for calculating machines and the like. 2,744,686, 5-8-56, Cl. 235—140.

Grisé, Alfred L., to Gilbert & Barker Mfg. Co. Swinging arm hose retriever for fluid dispensing apparatus. 2,744,788, 5-8-56, Cl. 299—77.

Gronek, John. Live fish bag holder. 2,744,709, 5-8-56, Cl. 248—99.

Grossman, Ralph E. Method of painting in the reproduction of paintings. 2,744,349, 5-8-56, Cl. 41—26.

Güldner, Harry W.: *See*—
Köhler, Hellfried K., Güldner, and Tell. 2,744,600.

Gustafson, Gustaf. Pruning implement. 2,744,322, 5-8-56, Cl. 30—249.

Guth, Edwin F. Light diffusors for illuminating devices. 2,745,001, 5-8-56, Cl. 240—78.

Guyer, John W.: *See*—
Bender, Howard L., Farnham, and Guyer. 2,744,882.

Habighurst, Becker: *See*—
Wagner, Jean I., Habighurst, and Terry. 2,744,890.

Hackney, Robert F., and B. N. Lyle. Attachment for lifting truck, with end loading means. 2,744,644, 5-8-56, Cl. 214—512.

Haddon, Edward L.: *See*—
Crist, Buckley. 2,744,672.

Hagan Corp.: *See*—
White, John H. 2,744,663.

Hait, James M., to Food Machinery and Chemical Corp. Fruit transferring and rejecting means. 2,744,613, 5-8-56, Cl. 198—33.

Hale, Eric.: *See*—
Eales, John G. R., and Hale. 2,744,325.

Hall, George V., and W. S. Oliwa, to Monroe Calculating Machine Co. Overdraft detection for crawl carry. 2,744,681, 5-8-56, Cl. 235—1.

Hall, Vincent C., and J. A. C. Yule, to Eastman Kodak Co. One dimensional unsharp masking. 2,744,950, 5-8-56, Cl. 178—5.4.

Hall, William D.: *See*—
Toulon, Pierre M. G. 2,744,949.

Haller, John F., to Olin Mathieson Chemical Corp. Process. 2,744,811, 5-8-56, Cl. 23—154.

Haller, John W. E., to The Linen Thread Co., Ltd. Novel machine for treating netting. 2,744,306, 5-8-56, Cl. 26—1.

Halpern, Alfred, and C. H. Bradney, to E. Fougera & Co., Inc. Cardiac glycosides for intramuscular injection. 2,744,851, 5-8-56, Cl. 167—58.

Halvorson, Carl T. Removable fog light. 2,744,998, 5-8-56, Cl. 240—7.1.

Hamacher, Edward A., to North American Philips Co. X-Ray intensity measuring system. 2,745,019, 5-8-56, Cl. 250—83.6.

Hamilton-Thomas Corp.: *See*—
Wiegers, Irvin E., and Davis. 2,744,748.

Hammer, Irving P., and J. B. Rust. ½ to Montclair Research Corp., and ½ to Ellis-Foster Co. Preparation of water soluble salt of n-dialkylaminoalkoxymethyl polyamide. 2,744,883, 5-8-56, Cl. 260—72.

Hampden Brass and Aluminum Co.: *See*—
Sevetz, Edward B., Sr. 2,744,547.

Hanna Coal & Ore Corp.: *See*—
Vidmar, John P. 2,744,514.

Hannon, Cyril H.: *See*—
Briggs, James L., Jr., and Hannon. 2,744,822.

Hardin, Stanford A.: *See*—
Striplin, Marcus M., Jr., Hardin, and Bundy. 2,744,944.

Harkness, Andrew W. Flush valve and valve outlet. 2,744,258, 5-8-56, Cl. 4—52.

Harkness, Andrew W. Valve ball cage. 2,744,260, 5-8-56, Cl. 4—57.

Harless, Charles A., to R. Hoe & Co., Inc. Partitioned fountain rotary intaglio printing machines. 2,744,464, 5-8-56, Cl. 101—157.

Harman, Marion W., and J. J. D'Amico, to Monsanto Chemical Co. Halogen substituted alkenyl dithiocarbamates. 2,744,898, 5-8-56, Cl. 260—247.1.

Harrington, Frank A., and T. W. Jentges, to Marco Industries Co. Block type panel indicator light. 2,745,094, 5-8-56, Cl. 340—381.

Harris, Benjamin R.: *See*—
Gladstone, Martell M., and Harris. 2,744,828.
Shaffer, Bernard M. 2,744,829.

Harris, Benjamin R., to The Emulsol Chemical Corp. Alkyl naphthyl quaternary ammonium compounds. 2,744,902, 5-8-56, Cl. 260—290.

Hartford National Bank and Trust Co.: *See*—
Bailey, Christopher E. G., and Paul. 2,745,064.
De Jager, Frank. 2,745,063.
Greefkes, Johannes A., de Jager, and van Tilburg. 2,744,959.
Greefkes, Johannes A., and van Tilburg. 2,744,960.
Müller, Friedrich W. 2,744,583.
Peek, Johannes J. A. 2,744,961.
Van Weel, Adelbert. 2,745,003.
Willemse, Theo W. 2,745,052.

Harting, Wesley A. Regeneration system for water softening plant. 2,744,868, 5-8-56, Cl. 210—24.

Hartle, Louis J., to Amsler Morton Corp. Soaking pit curb. 2,744,479, 5-8-56, Cl. 110—181.

Hartle, Robert J., and G. W. Kinser, to American Bosch Arma Corp. Polyiodinated benzotrifluorides. 2,744,941, 5-8-56, Cl. 260—651.

Hartley, Henry J., and C. S. Rankin, to Pacific Foundry Co., Ltd. Incinerator. 2,744,477, 5-8-56, Cl. 110—8.

Hartney, James L., to United States Steel Corp. Method of introducing air to burners of reversing type furnaces. 2,744,744, 5-8-56, Cl. 263—52.

Hatch, Albert M., to Borg-Warner Corp. Turbine. 2,744,721, 5-8-56, Cl. 253—32.

Haugen, Glenn L., and G. D. Wofford, to Bendix Aviation Corp. Means for improving television interlace control. 2,744,956, 5-8-56, Cl. 178—69.5.

Haverstick, Merral P., to National Rejectors, Inc. Coin separators. 2,744,603, 5-8-56, Cl. 194—102.

Hazeltine Research, Inc.: *See*—
Symer, Orten H., Jr. 2,745,036.

Heber, William E. Fingergrip wiper for bowling balls. 2,744,279, 5-8-56, Cl. 15—210.

Heck, John F., Jr., to New Allegheny Mfg. Co. Underground trap for leaks in gas pipes. 2,744,815, 5-8-56, Cl. 48—193.

Heitmann, Albert: *See*—
Brückner, Harry, and Heitmann. 2,744,994.

Hellon, James B. Public address housing assembly. 2,744,584, 5-8-56, Cl. 181—31.

Hendricks, John G., and L. M. Kebrich, to National Lead Co. Vinyl halide resin stabilized with basic lead dicarboxylates. 2,744,881, 5-8-56, Cl. 260—45.75.

Henigman, Joseph. Adjustable carrying handles. 2,744,668, 5-8-56, Cl. 224—55.

Henry, Beulah L. Can opener. 2,744,653, 5-8-56, Cl. 220—52.

Hersfeld, Simon H., to Velsicol Chemical Corp. 1-thiocyano-4,5,6,7,8,8-hexahalo-3a,4,7,7a-tetrahydro-4,7-methanoindene. 2,744,924, 5-8-56, Cl. 260—454.

Hess, Otto. Sewing machine. 2,744,482, 5-8-56, Cl. 112—258.

Heusner, Wilhelm L. G., to Hermann Schwars K. G. Lock for metallic mine props. 2,744,717, 5-8-56, Cl. 248—354.

Hewitt, William H., Jr., to Bell Telephone Laboratories, Inc. Microwave magnetized ferrite attenuator. 2,745,069, 5-8-56, Cl. 333—81.

Higonnet, Rene A., and L. M. Moyroud, to Graphic Arts Research Foundation, Inc. Photographic copying device. 2,744,443, 5-8-56, Cl. 88—24.

Higonnet, Rene A., and L. M. Moyroud, to Graphic Arts Research Foundation, Inc. Photographic composing apparatus. 2,744,457, 5-8-56, Cl. 95—4.5.

Hill, George C., Jr., to Leeds and Northrup Co. Spectrometer systems to compensate for the wandering of light rays. 2,744,439, 5-8-56, Cl. 88—14.

Hill, Gilbert F.: *See*—
Wittkuhns, Bruno A., and Hill. 2,744,455.

Hines, Marion E., to Bell Telephone Laboratories, Inc. Very high frequency gas discharge noise source. 2,745,013, 5-8-56, Cl. 250—36.

Hipp, Ronald N. Tiltable body trailer. 2,744,643, 5-8-56, Cl. 214—506.

Hirsch, Andrei: *See*—
Mattick, Alexander T. R., and Hirsch. 2,744,827.

Hiss, Richard E. Paintbrush holder and container. 2,744,635, 5-8-56, Cl. 211—66.

Hjullan, Julius A., to Crane Co. Aerator device. 2,744,738, 5-8-56, Cl. 261—115.

Hoe, R., & Co., Inc.: *See*—
Harless, Charles A. 2,744,464.

Hoff, John M., to The Tappan Stove Co. Automatic ignition mechanism for gaseous fuel burners. 2,744,569, 5-8-56, Cl. 158—115.

Hoff, John M., to The Tappan Stove Co. Automatic ignition mechanism for gas burners. 2,745,042, 5-8-56, Cl. 317—83.

Hoffmann, Henry K. Lamp shade holder. 2,745,002, 5-8-56, Cl. 240—128.

Hohenner, Werner W. Hydraulic system. 2,744,385, 5-8-56, Cl. 60—53.

Holgerson, Arvid R. Water kite. 2,744,352, 5-8-56, Cl. 43—43.13.

Holland, Donald B., to Cutler-Hammer, Inc. Phase shift system utilizing saturable reactors and motor control utilizing such system. 2,745,049, 5-8-56, Cl. 318—331.

Holly Sugar Corp.: *See*—
Daniels, Robert M., Maudru, and Rorabaugh. 2,744,840.

Holm, Roy T.: *See*—
Smith, Curtis W., and Holm. 2,744,928.
Smith, Curtis W., and Holm. 2,744,929.

Holman, Wesley A., and R. B. Johnson, to International Business Machines Corp. Radix converting exhibitor. 2,745,093, 5-8-56, Cl. 340—332.

Homan, Paul J., to Koppers Co., Inc. Floating, resilient sealing frame for coke oven doors. 2,744,858, 5-8-56, Cl. 202—248.

Hoogstoel, Leon E., and C. A. Ross, to Norton Co. Packaging device. 2,744,624, 5-8-56, Cl. 206—65.

Hoover, Lawrence E. de S., to General Cap and Container Corp. Cartridge for grease gun. 2,744,658, 5-8-56, Cl. 222—95.

Hope, Stanley C., to Gilbert & Barker Mfg. Co. Oil dispensing receptacles. 2,744,656, 5-8-56, Cl. 222—82.

Hoppe, William, to Package Machinery Co. Wrapping machines. 2,744,371, 5-8-56, Cl. 53—230.

Hornbostel, Lloyd, to Beloit Iron Works. Reverse press assembly. 2,744,453, 5-8-56, Cl. 92—49.

Hornung, George G.: *See*—
Moore, Robert T., and Hornung. 2,744,487.

Hosmer, Ellsworth A. Carrier telephone system. 2,744,958, 5-8-56, Cl. 179—1.

Houdaille Industries, Inc.: *See*—
Gluck, David. 2,744,363.

Houston, Wesley M., and H. W. Breathitt, Jr., to Minerals & Chemicals Corp. of America. Concentration of phosphate ores. 2,744,625, 5-8-56, Cl. 209—12.

Howard, Frank S., to Birtman Electric Co. Vacuum cleaner. 2,744,679, 5-8-56, Cl. 230—127.

Howard, Frank S., to Birtman Electric Co. Bobbin winder. 2,744,691, 5-8-56, Cl. 242—22.

Howarth, Harry A. S., deceased; M. J. Howarth, administratrix. Bearing. 2,744,799, 5-8-56, Cl. 308—160.

Howarth, Mary J.: *See*—
Howarth, Harry A. S. 2,744,799.

Howery, Richard W.: *See*—
Bollinger, Waldon P., Howery, and Ford. 2,745,099.

Howes, Allen H., to Foster Wheeler Corp. Heat exchange apparatus. 2,744,733, 5-8-56, Cl. 257—224.

Hubbard, Arthur F., to American Air Filter Co., Inc. Portable fluid fuel burning air heater. 2,744,516, 5-8-56, Cl. 126—110.

Huber, Eugen, to Inconex Handelsges. m. b. H. für industrielle Produkte-Konstruktionen-Export. Means for treating liquid fuel before its injection into the working cylinder of internal combustion engines. 2,744,507, 5-8-56, Cl. 123—32.

Huebner, Charles F., to Ciba Pharmaceutical Products, Inc. 4-(β-substituted aminoethyl)-imidazoles and the preparation thereof. 2,744,899, 5-8-56, Cl. 260—247.5.

Hughes, Arthur D. Apparatus for separating immiscible liquids. 2,744,630, 5-8-56, Cl. 210—56.

Huguenin, Robert A. Machine gear wheels. 2,744,417, 5-8-56, Cl. 74—434.

Hull, Richard D., and S. C. Nelson, to American Viscose Corp. Carton sealing apparatus. 2,744,373, 5-8-56, Cl. 53—374.

Hults, Harold W., to Cutler-Hammer, Inc. Sealing means for lever operated electric switches. 2,744,984, 5-8-56, Cl. 200—168.

Huskey, Ralph D.: *See*—
Ashe, Nell W., Huskey, McNaughton, and Bassett. 2,744,669.

Hutchison, Alexander C., to Imperial Chemical Industries Ltd. Solid gas-generating charges. 2,744,816, 5–8–56, Cl. 52—0.5.

Hutton, Frank E.: *See*—
Coulter, James H., Jr., and Hutton. 2,744,812.

Ice, Clark H.: *See*—
Wender, Simon H., Gage, Ice, and Morris. 2,744,893.

Iddings, Charles D.: *See*—
Overton, Charles M., Iddings, and Fountain. 2,744,696.

Illinois McGraw Electric Co.: *See*—
La Bree, Frederick H. 2,744,993.
Schoen, Donald W. 2,744,734.

Illinois Tool Works: *See*—
Beart, Robert W. 2,744,268.

Imperial Brass Mfg. Co., The: *See*—
Franck, George E. 2,744,512.

Imperial Chemical Industries Ltd.: *See*—
Aldred, Leslie. 2,744,602.
France, Harold. 2,744,913.
Hutchison, Alexander C. 2,744,816.

Inconex Handelsges. m. b. H. für industrielle Produkte-Konstruktionen-Export: *See*—
Huber, Eugen. 2,744,507.

Indiana Commercial Filters Corp.: *See*—
Gardes, Alfred W. 2,744,632.

Industrial Hardware Mfg. Co., Inc.: *See*—
Offerman, Seymour. 2,745,080.
Offerman, Seymour. 2,745,081.

Ingraham, Robert C., to Sylvania Electric Products Inc. Semiconductor devices and methods of fabrication. 2,745,045, 5–8–56, Cl. 317—236.

International Business Machines Corp.: *See*—
Holman, Wesley A., and Johnson. 2,745,093.

International Telephone and Telegraph Corp.: *See*—
Goldstein, Ladislas, Levine, and Sichak. 2,745,072.
Lighty, Paul E. 2,745,047.
Stillman, Jerome. 2,745,015.

Interstate Engineering Corp.: *See*—
Theis, William T., and Green. 2,744,272.

Iron Fireman Mfg. Co.: *See*—
Judson, Albert L., and Lach. 2,744,573.

Italo Rizzieri: *See*—
Buzzi, Riccardo. 2,744,684.

Iverson, Arden L., to Para-Lux Products Co. Combined collar protector and shirtboard. 2,744,623, 5–8–56, Cl. 206—46.

Jackson, Carey B., to Callery Chemical Co. Production of compounds containing boron and hydrogen. 2,744,810, 5–8–56, Cl. 23—14.

Jacobs, William, and J. S. Darling. Dispenser with frictionally interfitting parts in which a closure member is rotatable about an axis. 2,744,666, 5–8–56, Cl. 222—545.

Jacobs, William H. Beverage dispenser. 2,744,660, 5–8–56, Cl. 222—146.

Jacobsohn, David H.: *See*—
Chu, Jeffrey C., and Jacobsohn. 2,745,006.

Janning, Robert J. Viewer. 2,744,343, 5–8–56, Cl. 40—152.2.

Janz, Fred, to National Container Corp. Partition strip feeding mechanism for a partition assembling machine. 2,744,751, 5–8–56, Cl. 271—2.5.

Jeffrey Mfg. Co., The: *See*—
Bird, Byron M. 2,744,628.

Jehn, Werner F. Actuating mechanism and parachute delivery apparatus. 2,744,700, 5–8–56, Cl. 244—150.

Jendrisak, Joseph E., to Libbey-Owens-Ford Glass Co. Method and apparatus for bending glass sheets or plates. 2,744,359, 5–8–56, Cl. 49—67.

Jenkins, Cecil: *See*—
Woolslayer, Homer J., Jenkins, Borg, and Campbell. 2,744,725.

Jenkins, Paul W., and A. A. Brown, to H. H. Robertson Co. Wall-panel structure. 2,744,589, 5–8–56, Cl. 189—34.

Jenney, Ray S., R. T. Fetherston, and G. R. Miller, to Kellogg Co. Apparatus for separating and feeding articles. 2,744,609, 5–8–56, Cl. 198—31.

Jenney, Ray S., and R. T. Fetherston, to Kellogg Co. Delivery mechanism. 2,744,611, 5–8–56, Cl. 198—32.

Jensen, Louis, to Uarco, Inc. Carbon change signaling device for an autographic register. 2,744,768, 5–8–56, Cl. 282—1.

Jensen, Richard C., to General Electric Co. Bearing correlating system. 2,745,096, 5–8–56, Cl. 343—11.

Jentges, Thomas W.: *See*—
Harrington, Frank A., and Jentges. 2,745,094.

Jepson, Ivar, to Sunbeam Corp. Pressing iron capable of being converted to a steam iron. 2,744,344, 5–8–56, Cl. 38—77.

Jepson, Ivar, to Sunbeam Corp. Electric frying pan. 2,744,995, 5–8–56, Cl. 219—44.

Jet-Heet, Inc.: *See*—
Coleman, Robert E. 2,744,470.
Miles, George N. 2,744,517.

Johner, Hans, to Ciba Ltd. Process for the manufacture of hydrazobenzenes. 2,744,935, 5–8–56, Cl. 260—569.

Johns, La Moine E.: *See*—
Johns, Max F. and L. E. 2,744,560.

Johns, Max F. and L. E., to Conmar Products Corp. Apparatus for manufacturing slide fastener stringers. 2,744,560, 5–8–56, Cl. 153—1.

Johnson, Arleigh Q. Gas-oil conversion burner tube. 2,744,568, 5–8–56, Cl. 158—11.

Johnson, David A., to Bristol Laboratories Inc. Benzenesulfonylbenzylamine salts of penicillin. 2,744,895, 5–8–56, Cl. 260—239.1.

Johnson, Donald N. Bubble fountain device. 2,744,784, 5–8–56, Cl. 299—9.

Johnson, Harry V., to Union Carbide and Carbon Corp. Graphite furnace electrode for a stabilized arc. 2,744,945, 5–8–56, Cl. 13—18.

Johnson, Lauren L., R. M. Dilworth, and A. N. Addie, to General Motors Corp. Locomotive dynamic braking system. 2,745,050, 5–8–56, Cl. 318—367.

Johnson, Reynold B.: *See*—
Holman, Wesley A., and Johnson. 2,745,093.

Johnson, Vivion A. Lint and fiber cleaner. 2,744,293, 5–8–56, Cl. 19—59.

Johnson, Wallace D., to Yates-American Machine Co. Precision guide fence for power tool work table. 2,744,549, 5–8–56, Cl. 143—174.

Johnson, Wallace H. Base mountings for antenna masts. 2,744,704, 5–8–56, Cl. 248—45.

Jondole, Stephen C. Stud spacer gauge. 2,744,334, 5–8–56, Cl. 33—180.

Jones, Arthur L.: *See*—
Cuckson, Eric E., and Jones. 2,744,561.

Jones, Charles T. A.: *See*—
Lambert, Donald R., and Jones. 2,744,685.

Jones, David W., to Kenyon Instrument Co., Inc. Check valve. 2,744,539, 5–8–56, Cl. 137—527.4.

Jones, Reuben G., and E. C. Kornfeld, to Eli Lilly and Co. Process for the preparation of substituted pyrroles. 2,744,915, 5–8–56, Cl. 260—326.3.

Jones, Reuben G., and E. C. Kornfeld, to Eli Lilly and Co. Process for the preparation of thiophene dicarboxylic acid. 2,744,917, 5–8–56, Cl. 260—332.2.

Joy Mfg. Co.: *See*—
Ball, Charles F. 2,744,740.
Russell, John D. 2,744,607.
Sibley, John R. 2,744,614.

Judson, Albert L., and R. E. Lach, to Iron Fireman Mfg. Co. Time delay program relay. 2,744,573, 5–8–56, Cl. 161—1.

Jules, Leonard H.: *See*—
Sahyun, Melville, Faust, and Jules. 2,744,916.

Kaehn, Frank E., ½ to L. H. Solonche. Convertible seat-bed. 2,744,266, 5–8–56, Cl. 5—18.

Kahler, Harry L., to W. H. & L. D. Betz. Iron retention in squeous solution. 2,744,866, 5–8–56, Cl. 210—23.

Kaiser Aluminum & Chemical Corp.: *See*—
Dore, James E. 2,744,303.

Kammer, Frank. Stop control for jaw crushers. 2,744,462, 5–8–56, Cl. 100—215.

Kapp, Roland: *See*—
Klein, Howard C., and Kapp. 2,744,934.

Karig, Horace E., to the United States of America as represented by the Secretary of the Navy. Torpedo depth control. 2,744,485, 5–8–56, Cl. 114—25.

Katz, Leon, to Schenley Industries, Inc. Crystallization of dihydrostreptomycin sulphate. 2,744,892, 5–8–56, Cl. 260—210.

Kauffmann, William M., and G. Steven, to Worthington Corp. Apparatus for controlling proportionate delivery of air and gas to a supercharged internal combustion engine. 2,744,511, 5–8–56, Cl. 123—120.

Kaul, Joseph L., to National Lead Co. Tandem toggle press. 2,744,304, 5–8–56, Cl. 22—92.

Kavanagh, Kevin E., and R. P. Chesluk, to The Texas Co. Removal of metal contaminants from petroleum. 2,744,853, 5–8–56, Cl. 196—23.

Kay, John G., and J. K. Rye, to F. Joseph Lamb Co. Orienter. 2,744,612, 5–8–56, Cl. 198—33.

Keahey, Ernest W.: *See*—
McLaughlin, Bernard A., and Keahey.

Kebrich, Leonard M.: *See*—
Hendricks, John G., and Kebrich.

Keefe, Lincoln M., to R. I. N. Weingart. Ticket vending machine. 2,744,463, 5–8–56, Cl. 101—97.

Kegevic, Paul A. Tool kit. 2,744,621, 5–8–56, Cl. 206—16.

Kelser, David H., Jr. Shearing action device. 2,744,321, 5–8–56, Cl. 30—237.

Kellogg Co.: *See*—
Jenney, Ray S., and Fetherston. 2,744,611.
Jenney, Ray S., Fetherston, and Miller. 2,744,609.

Kelly, George M., to Kingston Products Corp. Cannister-type vacuum cleaner. 2,744,583, 5–8–56, Cl. 183—37.

Kemp, Woodrow E., to Koppers Co., Inc. Process of decolorizing tar base distillates with aldehydes. 2,744,857, 5–8–56, Cl. 202—57.

Kempton, Albert E., to Pope Machinery Corp. Housing for spindle motor. 2,745,026, 5–8–56, Cl. 310—89.

Kennel, William E., to Standard Oil Co. Production of alcohols of high purity by improved oxo process. 2,744,939, 5–8–56, Cl. 260—638.

Kenyon Instrument Co., Inc.: *See*—
Jones, David W. 2,744,539.

Kerr, George R.: *See*—
Kowalcyk, Joseph. 2,745,000.

Kerr, Karl K., E. J. Kleber, Jr., and S. H. S. Raub, to Union Carbide and Carbon Corp. Pipe threading die head assembly. 2,744,269, 5–8–56, Cl. 10—123.

Kestenman Bros. Mfg. Co.: *See*—
Valcourt, Louis E. 2,744,379.

Kidder, Maude F.: *See*—
Kidder, Max. 2,744,375.

Kidder, Max, deceased; M. F. Kidder, administratrix. Corn harvesting picking rolls. 2,744,375, 5–8–56, Cl. 56—104.

Killinger, John W., M. and M. C. Demis, and C. W. Payne. Parachute carrying aerial disk. 2,744,356, 5–8–56, Cl. 46—86.

Kilmarx, Louis E., Jr.: *See*—
Davidson, Elmer T., and Kilmarx. 2,744,770.

Kiner, George L.: *See*—
Bauer, Lawrence E. 2,745,088.

King, Frederick G., to U. S. Slicing Machine Co., Inc. Slicing machine control. 2,744,554, 5–8–56, Cl. 146—102.

Kingston Products Corp.: *See*—
Kelly, George M. 2,744,585.

Kinney, Joseph, Jr. Method of making multiply metal. 2,744,314, 5–8–56, Cl. 29—471.5.

Kinzer, Glenn W.: *See*—
Hartle, Robert J., and Kinzer. 2,744,941.

Kirk, William W. Hand operated article lifting and moving device. 2,744,762, 5–8–56, Cl. 280—47.28.

Kishi, Hajime J.: *See*—
Canfora, Arthur E., Liguori, Shenk, and Kishi. 2,744,955.

Kiss, Joseph: *See*—
Sefsik, Stephen R., and Kiss. 2,744,997.

Kleber, Edward J., Jr.: *See*—
Kerr, Karl K., Kleber, and Raub. 2,744,269.

Kleiman, Floyd R. Ball and socket type hitch. 2,744,767, 5–8–56, Cl. 280—512.

Klein, Howard C., and R. Kapp, to Nopco Chemical Co. Process for the production of choline halides. 2,744,934, 5–8–56, Cl. 260—567.6.

Kleist, Herman W., to Dole Refrigerating Co. Refrigerating car structure. 2,744,388, 5–8–56, Cl. 62—4.

Klingler, Karl A. Journal lubricating device. 2,744,797, 5–8–56, Cl. 308—90.

Knapp, Walter, to Reamstown Products Co. Multiple position wood working machine. 2,744,550, 5–8–56, Cl. 144—134.

Kobe, Inc.: *See*—
Brown, John R. 2,744,880.

Koch, Robert E.: *See*—
Smith, Sidney R., Jr., and Koch. 2,744,982.

Kocks, Friedrich. Method for the production of iron and steel. 2,744,820, 5–8–56, Cl. 75—11.

Köhler, Hellfried K., H. W. Güldner, and W. W. Tell, to VEB Buchungsmaschinenwerk Karl-Marx-Stadt. Device for driving or stopping a driven shaft. 2,744,600, 5–8–56, Cl. 192—148.

Kolstad, Welding J., to Albert & J. M. Anderson Mfg. Co. Electrical connector. 2,745,076, 5–8–56, Cl. 339—47.

König, Hans-Bodo, and H.-A. Offe, to Schenley Industries, Inc. Process for the production of the thiosemicarbazone isonicotinaldehyde. 2,744,906, 5–8–56, Cl. 260—294.8.

Koons, Russell E., to Monsanto Chemical Co. Preparation of acrylonitrile. 2,744,926, 5–8–56, Cl. 260—465.3.

Koonz, Andrew M. Hair trimmer. 2,744,316, 5–8–56, Cl. 30—31.

Koppers Co., Inc.: *See*—
Homan, Paul J. 2,744,858.
Kemp, Woodrow E. 2,744,857.

Kornfeld, Edmund C.: *See*—
Jones, Reuben G., and Kornfeld. 2,744,915.
Jones, Reuben G., and Kornfeld. 2,744,917.

Kowalcyk, Joseph, ½ to G. R. Kerr. Rotatable suspension hook for trouble lamp. 2,745,000, 5–8–56, Cl. 240—54.

Kraft, Pauline B. Combined bath tub shelf and head rest. 2,744,263, 5–8–56, Cl. 4—185.

Krantz, Frank M.: *See*—
Miller, Coleman J., and Krantz. 2,745,071.

Krapcho, John, and W. A. Lott, to Olin Mathieson Chemical Corp. N,N-diphenyl-N-aminoalkylene-urea derivatives. 2,744,930, 5–8–56, Cl. 260—553.

Krieger, Alvin W., to Cutler-Hammer, Inc. Electrical snap switches. 2,744,302, 5–8–56, Cl. 200—67.

Kriegh, Charles B. Pipe and tubing cutter. 2,744,576, 5–8–56, Cl. 164—60.

Kruger, Frederick B., R. H. Rossomme, and J. A. Stein, to Bacharach Industrial Instrument Co. Injector testing device. 2,744,407, 5–8–56, Cl. 73—49.7.

Krupka, George: *See*—
Broschard, Robert, and Krupka. 2,744,931.

Kühle, Engelbert: *See*—
Schäfer, Werner, Domagk, Wegler, and Kühle. 2,744,905.

Kuhlman, Stanley. Shears. 2,744,323, 5–8–56, Cl. 30—251.

Kulikowski, Edwin F., J. M. Miles, and R. T. Fitzgerald. Automatic tuning mechanism. 2,745,016, 5–8–56, Cl. 250—40.

Kurshan, Jerome, to Radio Corp. of America. Photo device amplifier circuit. 2,745,021, 5–8–56, Cl. 250—211.

Kurth, Ervin F., to the State of Oregon, acting by and through the Oregon State Board of Forestry. Producing pure dihydroquercetin. 2,744,919, 5–8–56, Cl. 260—345.2.

Kurth, Ervin F., to the State of Oregon, acting by and through the Oregon State Board of Forestry. Converting dihydroquercetin to quercetin. 2,744,920, 5–8–56, Cl. 260—345.2.

Kushner, Samuel, and J. Morton II, to American Cyanamid Co. Substituted phthalides and methods of preparing the same. 2,744,918, 5–8–56, Cl. 260—343.3.

L & L Mfg. Co.: *See*—
Lewicki, Stephen. 2,744,946.

La Bree, Frederick H., to Illinois McGraw Electric Co. Flat-iron with anticipator. 2,744,993, 5–8–56, Cl. 219—25.

Labrie, Joseph C. Sliding door lock. 2,744,406, 5–8–56, Cl. 70—96.

Lach, Robert E.: *See*—
Judson, Albert L., and Lach. 2,744,573.

Ladd, Elbert C., to United States Rubber Co. Compounding butyl rubber. 2,744,879, 5–8–56, Cl. 260—41.5.

Lamb, F. Joseph, Co.: *See*—
Kay, John G., and Rye. 2,744,612.

Lambert, Donald R., and C. T. A. Jones, to Powers-Samas Accounting Machines Ltd. Counters. 2,744,685, 5–8–56, Cl. 235—92.

Lammers, Ernst, to Fried. Krupp Lokomotivfabrik. Power transmission for vehicles, particularly rail vehicles with individual axle drive. 2,744,421, 5–8–56, Cl. 74—665.

Langdon, Howard H.: *See*—
Buresh, Francis M., and Langdon. 2,744,294.

Lange, Günther: *See*—
Berger, Johannes, and Lange. 2,744,447.

Lark-Horovitz, Karl, and R. M. Whaley, to Purdue Research Foundation. Alloys and rectifiers made thereof. 2,745,046, 5–8–56, Cl. 317—239.

Larkin, Daniel C. Seat cover. 2,744,567, 5–8–56, Cl. 155—182.

La Rocca, James V.: *See*—
La Rocca, John B. and J. V. 2,744,562.

La Rocca, John B. and J. V., to Pioneer Mounting & Finishing Co. Apparatus for assembling advertising displays. 2,744,562, 5–8–56, Cl. 154—1.6.

Larson, Arnold W. G., and N. T. Flaten, to Tobin-Arp Mfg. Co. Scouring gun. 2,744,361, 5–8–56, Cl. 51—11.

Larson, Gilbert A.: *See*—
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Laurent, Milton P., to F. A. Rudman. Pipe coupling ring with locking means. 2,744,771, 5–8–56, Cl. 285—177.

Lawrence, Ernest O., to Chromatic Television Laboratories, Inc. Color television apparatus. 2,744,952, 5–8–56, Cl. 178—5.4.

Lawrence, Ernest O., to Chromatic Television Laboratories, Inc. Display surface for color television tube. 2,745,033, 5–8–56, Cl. 313—78.

Lawrence, Ernest O., to Chromatic Television Laboratories, Inc. Color television tube target structure. 2,745,035, 5–8–56, Cl. 315—14.

Lee, Luther E. Parting and slotting tool. 2,744,451, 5–8–56, Cl. 90—33.

Lee, Yih-Hung. Puzzle. 2,744,754, 5–8–56, Cl. 273—159.

Leeds and Northrup Co.: *See*—
Hill, George C., Jr. 2,744,439.
Steinhaus, David W., and Crosswhite. 2,744,438.

Leffler, Robert, to Bendix Aviation Corp. Tilt indicator for gyroscope. 2,745,091, 5–8–56, Cl. 340—282.

Lehigh Portland Cement Co.: *See*—
McCoy, Walter J. 2,744,831.

Lemmons, Harry: *See*—
Myers, William H. 2,744,711.

Lent, Albert, to Erly-Fat Livestock Feed Co. Ruminant feed from cotton gin waste. 2,744,824, 5–8–56, Cl. 99—6.

Leonard, Vincent W.: *See*—
Reid, Ralph A., and Leonard. 2,745,086.

Leonetti, Ronald W., to The Dill Mfg. Co. Tubeless tire valve stem. 2,744,559, 5–8–56, Cl. 152—427.

Levine, Donald J.: *See*—
Goldstein, Ladislas, Levine, and Sichak. 2,745,072.

Levy, Joseph P., ½ to I. Ergas and ½ to W. A. McPhail. Burglar alarm and like warning systems. 2,745,089, 5–8–56, Cl. 340—236.

Lewicki, Stephen, to L & L Mfg. Co. Electric furnace and heating unit therefor. 2,744,946, 5–8–56, Cl. 13—22.

Leyenberger, John, to Minneapolis-Honeywell Regulator Co. Electrical apparatus for measuring. 2,745,054, 5–8–56, Cl. 323—75.

Libbey-Owens-Ford Glass Co.: *See*—
Jendrisak, Joseph E. 2,744,359.

Lido Land Co.: *See*—
Williford, Jacob V., Jr. 2,745,027.

Lighty, Paul E., to International Telephone and Telegraph Corp. Selenium rectifiers and method of manufacture. 2,745,047, 5–8–56, Cl. 317—241.

Liguori, Anthony: *See*—
Canfora, Arthur E., Liguori, Shenk, and Kishi. 2,744,955.

Lilly, Eli, and Co.: *See*—
Jones, Reuben G., and Kornfeld. 2,744,915.
Jones, Reuben G., and Kornfeld. 2,744,917.

Linen Thread Co. Ltd., The: *See*—
Haller, John W. E. 2,744,306.

Lingel, Fred J., to General Electric Co. Asymmetrically conductive apparatus. 2,745,044, 5–8–56, Cl. 317—234.

Link, Murray H. Foldable file. 2,744,557, 5–8–56, Cl. 150—39.

Litman, Bernard, to American Bosch Arma Corp. Gravity pendulum device. 2,744,335, 5–8–56, Cl. 33—220.

Llopes, John D. High fidelity audio frequency amplifier. 2,744,971, 5–8–56, Cl. 179—171.

Lockheed Aircraft Corp.: *See*—
Thomas, Frank W., and Simon. 2,744,875.

Locomotive Finished Material Co., The: *See*—
Smith, Charles C. 2,744,750.

Loman, George T., to Bell Telephone Laboratories, Inc. Semiconductor translating device and method of manufacture. 2,744,308, 5–8–56, Cl. 29—25.3.

Lombard, Jean, and J. Mazoyer, to A. Seignol. Electric signalizing pressure sensitive indicator. 2,744,977, 5–8–56, Cl. 200—83.

Long-Bell Lumber Co., The: *See*—
Mottet, Arthur L. 2,744,848.

Lord, Albert M. Apparatus for burning wire metal. 2,744,742, 5–8–56, Cl. 263—1.

Lorentzen, Hans K., to Lorentzen Hardware Mf'g. Corp. Brace for Venetian blind cord locks and head channels. 2,744,572, 5–8–56, Cl. 160—173.

Lorentzen Hardware Mf'g. Corp.: *See*—
Lorentzen, Hans K. 2,744,572.

Lorenz, Willard S.: *See*—
Bank, Thor G., and Lorenz. 2,744,979.

Lott, William A.: *See*—
Krapcho, John, and Lott. 2,744,930.

Loughran, Robert H., to United Aircraft Corp. Burner construction for high velocity gases. 2,744,384, 5–8–56, Cl. 60—39.72.

Louthan, George R., to Sears, Roebuck and Co. Reciprocating cutting assembly with tractor mountable hitch structure. 2,744,374, 5–8–56, Cl. 56—25.

Lucian, Arsene N.: *See*—
Geisel, Paul E. 2,744,381.

Lucien, René, to Societe d'Inventions Aeronautiques et Mecaniques S. I. A. M. Control system for aircraft wheel brakes and the like. 2,744,699, 5–8–56, Cl. 244—111.

Lundegreen, Alma J. Mobile sprinkler. 2,744,785, 5–8–56, Cl. 299—52.

Lurgi Gesellschaft fuer Waermetechnik m. b. H.: *See*—
Paul, Herbert. 2,744,813.

Luskin, Leo S., and P. L. de Benneville, to Rohm & Haas Co. Methacrylamidoacylguanamines. 2,744,943, 5–8–56, Cl. 260—80.5.

Lyle, Bernard N.: *See*—
Hackney, Robert F., and Lyle. 2,744,644.

Lynch, William M., and W. E. Evans, Jr., to Technicolor Motion Picture Corp. Cathode ray tube scanning circuit. 2,745,005, 5–8–56, Cl. 250—27.

Lyon, George A. Apparatus for coining metal parts. 2,744,426, 5–8–56, Cl. 78—60.

MacClean, Edward S.: *See*—
Melchert, Frank G., and MacClean. 2,744,728.

Maher, Charles H. Coupling for coaxial high frequency transmission lines. 2,745,065, 5–8–56, Cl. 333—6.

Mair, James, to Goslin-Birmingham Mfg. Co. Evaporating process. 2,744,571, 5–8–56, Cl. 159—47.

Malcom, Robert, Jr., and W. Z. Whipple, to Chicago Eye Shield Co. Fume and mist respirator with ring means for removably mounting the filters. 2,744,523, 5–8–56, Cl. 128—146.

Mallina, Rudolph F., to Bell Telephone Laboratories, Inc. Code tape perforators. 2,744,578, 5–8–56, Cl. 164—115.

Maloney, Roy T. Portable cabinet structure for automobiles. 2,744,667, 5–8–56, Cl. 224—29.

Mann, Charles J. Actuators. 2,744,499, 5–8–56, Cl. 121—38.

Manske, Richard H. F., to United States Rubber Co. Shading composition for greenhouses. 2,744,830, 5–8–56, Cl. 106—84.

Marco Industries Co.: *See*—
Harrington, Frank A., and Jentges. 2,745,094.

Marié, Pierre G. Dielectric antenna with dielectric waveguide feed. 2,745,101, 5–8–56, Cl. 343—785.

Marien, Melvin W., to Ramsey Corp. Piston rings. 2,744,803, 5–8–56, Cl. 309—45.

Markowski, Edwin P., and W. W. Symonds, to Barry Controls Inc. Vibration isolator. 2,744,718, 5–8–56, Cl. 248—358.

Marsden, George: *See*—
Watkins, Alexander E., and Marsden. 2,744,354.

Marshall, James R., to Allen B. Du Mont Laboratories, Inc. Coupling transformer with alternate signal source. 2,745,066, 5–8–56, Cl. 333—7.

Martin, William M., and J. F. Ryan, Jr., to James Dole Engineering Co. Container washing apparatus. 2,744,531, 5–8–56, Cl. 134—125.

Marvin, Philip R., to The Commonwealth Engineering Co. of Ohio. Electrical resistance heating elements. 2,744,987, 5–8–56, Cl. 201—63.

Marx, Louis, & Co., Inc.: *See*—
Evanoff, Harry. 2,744,490.

Massey, Bernard S., and D. G. Bush, to The Bristol Aeroplane Co. Ltd. Shaft coupling. 2,744,395, 5–8–56, Cl. 64—9.

Materka, John S.: *See*—
Simpkins, Robert L., Materka, and Elliott. 2,745,075.

Mattick, Alexander T. R., and A. Hirsch, to National Research Development Corp. Manufacture and preservation of cheese. 2,744,827, 5–8–56, Cl. 99—162.

Maudru, Joseph E.: *See*—
Daniels, Robert M., Maudru, and Rorabaugh. 2,744,840.

Maximoff, Boris S., to the United States of America as represented by the Secretary of the Air Force. Electric deviation gage for Shoran straight line indicators. 2,744,328, 5–8–56, Cl. 33—1.

Maytag Co., The: *See*—
Smith, Thomas R. 2,744,402.

Mazoyer, Jean: *See*—
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McCall, Floyd and L. Side delivery rake. 2,744,377, 5–8–56, Cl. 56—376.

McCall, Lloyd: *See*—
McCall, Floyd and L. 2,744,377.

McCann, Joe G., F. M. Weil, and R. E. Stein, to Gilfillan Bros., Inc. Circularly polarizing directional antenna system. 2,745,100, 5–8–56, Cl. 343—756.

McCarty, Malcolm D., and K. W. McLoad, to Socony Mobil Oil Co., Inc. Seismic detector. 2,745,085, 5–8–56, Cl. 340—17.

McClain, Archie L. Self-towing attachment for track vehicles having grooved cleats. 2,744,690, 5–8–56, Cl. 238—14.

McClelland, Clarence P., to General Motors Corp. Door lock and mounting for instrument panel compartment. 2,744,405, 5–8–56, Cl. 70—81.

McCord, John B.: *See*—
More, Philip J., and McCord. 2,744,343.

McCoy, Veri E. Lubricating device. 2,744,798, 5–8–56, Cl. 308—91.

McCoy, Walter J., to Lehigh Portland Cement Co. Inhibiting alkali reactivity of Portland cement. 2,744,831, 5–8–56, Cl. 106—98.

McCray Refrigerator Co., Inc.: *See*—
Bentley, George K. 2,744,807.

McDermott, Wilfrid J. Key for opening cans. 2,744,652, 5–8–56, Cl. 220—52.

McDonough, F. Marvin: *See*—
McDonough, James S. 2,744,795.

McDonough, Herbert E.: *See*—
McDonough, James S. 2,744,795.

McDonough, James E.: *See*—
McDonough, James S. 2,744,795.

McDonough, James S., deceased; H. E., J. E., and F. M. McDonough, administrators, to The Finest Scaffold Co. Scaffolds. 2,744,795, 5–8–56, Cl. 304—2.

McElligott, John E., to General Electric Co. Polyphase generators. 2,745,029, 5–8–56, Cl. 310—202.

McKinney, John F., Jr., to Sun Oil Co. Apparatus for elevating contact material. 2,744,793, 5–8–56, Cl. 302—53.

McLaughlin, Bernard A., and E. W. Keahey. Machine-tool vise having an extendible and downwardly sloping support for a movable jaw. 2,744,430, 5–8–56, Cl. 81—22.

McLeod, Gordon D.: *See*—
Wolff, William F., and McLeod. 2,744,937.

McLoad, Kenneth W.: *See*—
McCarty, Malcolm D., and McLoad. 2,745,085.

McMahan, Walter C. Lift mechanism for extending a horizontal support. 2,744,805, 5–8–56, Cl. 312—27.

McMillan, Edward B., and D. F. Straubel. Method of generating jet power through sulfide reaction. 2,744,380, 5–8–56, Cl. 60—35.4.

McMillan, Judson P. Adjustable door hinge. 2,744,284, 5–8–56, Cl. 16—131.

McNaughton, Don A.: *See*—
Ashe, Neil W., Huskey, McNaughton, and Bassett. 2,744,669.

McPhail, William A.: *See*—
Levy, Joseph P. 2,745,089.

McRae, Fred W. Quick-opening and quick-closing valve. 2,744,719, 5–8–56, Cl. 251—62.

Mead, William H.: *See*—
Finn, John S. 2,744,792.

Means, Norman E. L. Anti-splash unit for cooking pans. 2,744,519, 5–8–56, Cl. 126—299.

Measurements Corp.: *See*—
Minter, Jerry B., 2nd. 2,745,061.

Medicus, Gustav K. Electrostatic instruments with magnetic suspensions. 2,745,062, 5–8–56, Cl. 324—109.

Melchert, Frank G., and E. S. MacClean. Folding cattle guard. 2,744,728, 5–8–56, Cl. 256—14.

Melchor, Gibbs U. Grease gun nozzle. 2,744,659, 5–8–56, Cl. 222—125.

Mennerich, Fred A., to Owens-Corning Fiberglas Corp. Coating device for strands. 2,744,563, 5–8–56, Cl. 154—1.7.

Merck, E.: *See*—
Müller, Wilhelm. 2,744,864.

Merritt, Gilbert S., to Foster Wheeler Corp. Apparatus for quenching high temperature gases. 2,744,730, 5–8–56, Cl. 257—1.

Merritt, Robert H. Clutch mechanism. 2,744,597, 5–8–56, Cl. 192—35.

Mertzweiller, Joseph K., H. E. Templeton, and R. L. Dausat, to Esso Research and Engineering Co. Decobalting in oxo process using oxidizing gas and organic acid. 2,744,921, 5–8–56 Cl. 260—414.

Mertzweiller, Joseph K., to Esso Research and Engineering Co. Oxo synthesis using cobalt salt of cobalt carbonyl. 2,744,936, 5–8–56, Cl. 260—604.

Metal & Thermit Corp.: *See*—
Ramsden, Hugh E. 2,744,876.

Metalwash Machinery Co.: *See*—
Zademach, Erich R. 2,744,532.

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Paxhia, Emanuel F., Metzger, and White. 2,744,577.

Meyer, Franklin, to Aviation Engineering Division, Avien-Knickerbocker, Inc. D. C. reference source. 2,745,053, 5–8–56 Cl. 323—69.

Meyer, Friedrich, to Felsa A. G. Pallet bridge for watch or clock movements. 2,744,378, 5–8–56, Cl. 58—104.

Miles, George N., to Jet-Heet, Inc. Gas fired heating system. 2,744,517 5–8–56, Cl. 126—110.

Miles, John M.: *See*—
Kulikowski, Edwin F., Miles, and Fitzgerald. 2,745,016.

Miller, Coleman J., and F. M. Krantz, to the United States of America as represented by the Secretary of the Navy. Flexible wave guide coupling. 2,745,071, 5–8–56, Cl. 333—98.

Miller, Frederick E.: *See*—
Welsh, Matilda D., and Miller. 2,744,760.

Miller, Glen R: *See*—
Jenney, Ray S., Fetherston, and Miller. 2,744,609.

Millsaps, Paul R., R. T. Morton, and H. W. Reedy, to Combustion Engineering, Inc. Gas fired table top water heater with built-in draft diverter. 2,744,503, 5–8–56, Cl. 122—17.

Millville Mfg. Co.: *See*—
Wood, Richard D., Jr., and Thomson. 2,744,844.

Milne, David T., to American Viscose Corp. Threading apparatus for a tubular drier. 2,744,336, 5–8–56, Cl. 34—21.

Miner, William M. Lawn mower. 2,744,376, 5–8–56, Cl. 56—244.

Minerals & Chemicals Corp. of America: *See*—
Houston, Wesley M., and Breathitt. 2,744,625.

Minneapolis-Honeywell Regulator Co.: *See*—
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Minnesota and Ontario Paper Co.: *See*—
Enzmann, Ralph, and Barrett. 2,744,492.

Minter, Jerry B., 2nd, to Measurements Corp. Electric frequency standard oscillating system. 2,745,061, 5–8–56, Cl. 324—79.

Mitchell, James M. Clothes drier attachment. 2,744,636, 5–8–56, Cl. 211—108.

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Mittelstadt, Clarence F., to Blaw-Knox Co. Conditioner for smoothing and vibrating concrete. 2,744,456, 5–8–56, Cl. 94—48.

Moeller, Harry A., to The Buckeye Steel Castings Co. Equalized railway truck. 2,744,471, 5–8–56, Cl. 105—194.

Molnar, Imre, to Automatic Electric Laboratories, Inc. Carrier type intertoll dialing telephone system. 2,744,965, 5–8–56 Cl 179—27.

Monroe Calculating Machine Co.: *See*—
Hall, George V., and Oliwa. 2,744,681.

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Harman, Marion W., and D'Amico. 2,744,898.
Koons, Russell E. 2,744,926.

Montague, Paul B., to The Standard Rivet Co. Jewel setting machine. 2,744,250, 5–8–56, Cl. 1—3.

Montclair Research Corp.: *See*—
Hammer, Irving P., and Rust. 2,744,883.

Montgomery Elevator Co.: *See*—
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Moore, Lee C., Corp.: *See*—
Overton, Charles M., Iddings, and Fountain. 2,744,696.
Woolslayer, Homer J., Jenkins, Borg, and Campbell. 2,744,725.

Moore, Nelson: *See*—
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Moore, Robert T., and G. G. Hornung. Liquid sight glass. 2,744,487, 5–8–56, Cl. 116—117.

Moorhead, Milton M., Jr., and J. C. Parker, to The Commonwealth Engineering Co. of Ohio. Stroboscopic visual intelligence presenter. 2,745,092, 5–8–56, Cl. 340—318.

More, Philip J., to Birtman Electric Co. Steam iron. 2,744,342, 5–8–56, Cl. 38—77.

More, Philip J., and J. B. McCord, to Birtman Electric Co. Steam iron. 2,744,343, 5–8–56, Cl. 38—77.

Morgan, Wylie C., 40% to R. H. Vaughn, Sr. Machine for coating and slitting strip roofing material. 2,744,493, 5–8–56, Cl. 118—38.

Morris, Quentin L.: *See*—
Wender, Simon H., Gage, Ice, and Morris. 2,744,893.

Morton, John, II: *See*—
Kushner, Samuel, and Morton. 2,744,918.

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Morton Salt Co.: *See*—
Diamond, Horace W. 2,744,823.

Moses, Charles. Flexible membrane shoe tree. 2,744,270, 5–8–56, Cl. 12—128.4.

Mosher, Ralph E., and R. A. Stiveson, to R. A. Cummings, Jr. Apparatus for stereoscopic projection in aerial mapping. 2,744,442, 5–8–56, Cl. 88—24.

Mossberg Pressed Steel Corp.: *See*—
Olson, Robert V. 2,744,695.

Mottet, Arthur L., to The Long-Bell Lumber Co. Making fiberboard of uniform density and thickness. 2,744,848, 5–8–56, Cl. 154—101.

Moulon, Jean-Marie. High stability transistor oscillator. 2,745,009, 5–8–56, Cl. 250—36.

Moyroud, Louis M.: *See*—
Higonnet, Rene A., and Moyroud. 2,744,443.
Higonnet, Rene A., and Moyroud. 2,744,457.

Mucher, George J., to Clarostat Mfg. Co., Inc. Control coupling. 2,744,777, 5–8–56, Cl. 287—53.

Müller, Friedrich W., to Hartford National Bank and Trust Co., trustee. Apparatus for simulating the sound of a swinging bell. 2,744,583, 5–8–56, Cl. 181—0.5.

Müller, Wilhelm, to E. Merck. Apparatus for the electrolysis of aqueous alkali sulphate solutions. 2,744,864, 5–8–56, Cl. 204—220.

Murchison, Bessie F.: *See*—
Murchison, Blackwell K. 2,744,973.

Murchison, Blackwell K., deceased; B. F. Murchison, executrix. Control unit for type setting machine. 2,744,973, 5–8–56, Cl. 200—46.

Murphy, Wayne E. Penetrating and expanding fastener. 2,744,437, 5–8–56, Cl. 85—40.

Murray, Aubrey S., to North American Rayon Corp. Take-up spool. 2,744,694, 5–8–56, Cl. 242—124.

Müschenborn, Walter: *See*—
Reerink, Wilhelm, Müschenborn, and Nötzold. 2,744,626.

Myers, William H., ½ to L. C. Schaeffer and ½ to H. Lemmons. Support stand with spider legs. 2,744,711, 5–8–56, Cl. 248—165.

Nabenhauer, Fred P., to Smith, Kline & French Laboratories. Bis-tetrahydro-1-isoquinolyl quaternary ammonium salts. 2,744,901, 5–8–56, Cl. 260—286.

Nagy, Michael J., and D. M. Threewit, to Northrop Aircraft, Inc. Wheel mounting. 2,744,396, 5–8–56, Cl. 64—28.

National Container Corp.: *See*—
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National Dairy Research Laboratories, Inc.: *See*—
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Waugh, David F. 2,744,891.

National Lead Co.: *See*—
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National Paper Bottle Co., Inc.: *See*—
Wittkuhns, Bruno A., and Hill. 2,744,455.

National Rejectors, Inc.: *See*—
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National Research Council: *See*—
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National Research Development Corp.: *See*—
Mattick, Alexander T. R., and Hirsch. 2,744,827.

National Steel Corp.: *See*—
Bendot, Joseph M. 2,744,670.

Naumann, Horst, to Firma Lenkradwerk Gustav Petri. Control device for motor vehicles. 2,744,975, 5–8–56, Cl. 200—61.56.

Navy, United States of America as represented by the Secretary of the: *See*—
Bartelink, Everhard H. B. 2,745,097.
Barton, Loy E. 2,745,070.
Black, James G. 2,744,976.
Karig, Horace E. 2,744,485.
Miller, Coleman J., and Krantz. 2,745,071.
Quick, Robert G. 2,745,024.
Simons, Rodney F. 2,745,034.
Stockard, John M. 2,744,484.
Van Allen, James A. 2,744,697.

Nelson, Roy F., to The Texas Co. Gear lubricant comprising a wide mineral oil blend and an oxidized paraffinic residuum. 2,744,872, 5–8–56, Cl. 252—49.6.

Nelson, Seddon C.: *See*—
Hull, Richard D., and Nelson. 2,744,373.

Neo-Ray Products, Inc.: *See*—
Zingone, Anthony E. 2,744,716.

New Allegheny Mfg. Co.: *See*—
Heck, John F., Jr. 2,744,815.

Newell, George C., Jr.: *See*—
Chace, Richard A., and Newell. 2,744,501.

Newman, Robert W., to General Electric Co. Electron discharge device cathode and method of making same. 2,744,838, 5–8–56, Cl. 117—217.

New Products Corp.: *See*—
Banker, Oscar H. 2,744,509.

Newton, Roger H., to Badger Mfg. Co. Separation of gaseous mixtures by fractionation. 2,744,394, 5–8–56, Cl. 62—175.5.

New York Air Brake Co., The: *See*—
Bahniuk, Eugene. 2,744,467.

Nicholson, Andrew, and C. F. Wilkinson, to Parker Rust Proof Co. Method of simultaneously phosphating and cleaning metal surfaces and composition therefor. 2,744,555, 5–8–56, Cl. 148—6.15.

Nicolaisen, Bernard H., to Olin Mathieson Chemical Corp. Production of benzene hexachloride. 2,744,862, 5–8–56, Cl. 204—163.

Niks, Nicholas J. Adjustable distributing roll in paper making machines. 2,744,452, 5–8–56, Cl. 92—44.

Nipken, Eleanor and W., to The Walton Co. Drill extractor. 2,744,311, 5–8–56, Cl. 29—240.

Nipken, Walter: *See*—
Nipken, Eleanor and W. 2,744,311.

Nopco Chemical Co.: *See*—
Klein, Howard G., and Kapp. 2,744,934.

Norgorden, Oscar. Antenna. 2,745,102, 5–8–56, Cl. 343—834.

Norgren, C. A., Co.: *See*—
Faust, Delbert G., and Wilson. 2,744,534.

North Electric Co.: *See*—
Blackhall, James M. 2,744,968.

North American Aviation, Inc.: *See*—
Peterson, William D. 2,744,969.
Woerdemann, Hugo H. 2,745,055.

North American Philips Co., Inc.: *See*—
Hamacher, Edward A. 2,745,019.

North American Rayon Corp.: *See*—
Murray, Aubrey S. 2,744,694.

Northrop Aircraft, Inc.: *See*—
Nagy, Michael J., and Threewit. 2,744,396.
Parker, Warde L. 2,744,533.
Pigford, John D. 2,744,420.
Strayer, Chalmers A. 2,744,802.

Northrop, Harley E.: *See*—
Belden, Charles W., and Northrop. 2,744,449.

Norton Co.: *See*—
Hoogstoel, Leon E., and Ross. 2,744,624.

Norton, Lowell E., to the United States of America as represented by the Secretary of the Army. Gas resonance system. 2,745,014, 5–8–56, Cl. 250—36.

Nötzold, Erich: *See*—
Reerink, Wilhelm, Müschenborn, and Nötzold. 2,744,626.

Novick, Abraham, to F. L. Smithe Machine Co., Inc. Adjustable toggle actuated paper clamp. 2,745,552, 5–8–56, Cl. 144—302.

O'Connor, Daniel F.: *See*—
Busch, Richard E., O'Connor, and Scozzafava. 2,744,682.

Offe, Hans-Albert: *See*—
König, Hans-Bodo, and Offe. 2,744,906.

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Offerman, Seymour, to Industrial Hardware Mfg. Co., Inc. Socket for radio tubes and the like. 2,745,081, 5–8–56, Cl. 339—194.

Office of Scientific Research and Development, United States of America as represented by the Executive Secretary of the: *See*—
Bundy, Francis P. 2,745,084.

Officine Galileo Societa per Azioni: *See*—
Franceschini, Lorenzo. 2,744,397.

Olin Mathieson Chemical Corp.: *See*—
Haller, John F. 2,744,811.
Krapcho, John, and Lott. 2,744,930.
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Oliwa, Walter S.: *See*—
Hall, George V., and Oliwa. 2,744,681.

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Verzera, James. 2,744,347.

Olson, Olaf J. Multipurpose pocket-size harmonica with selective key-change means. 2,744,434, 5–8–56, Cl. 84—377.

Olson, Oscar R. Bath furnace conveying device. 2,744,619, 5–8–56, Cl. 198—211.

Olson, Robert V., to Mossberg Pressed Steel Corp. Beam head. 2,744,695, 5–8–56, Cl. 242—124.

Oppenheimer, Frank F., to the United States of America as represented by the United States Atomic Energy Commission. Ion producing mechanism. 2,745,017, 5–8–56, Cl. 250—41.9.

Orr, Marcus O., to The B. F. Godrich Co. Fabric-backed sponge gasket and method of making same. 2,744,847, 5–8–56, Cl. 154—93.

Orr, Nolan B., to General Motors Corp. Turbine bearing support. 2,744,722, 5–8–56, Cl. 253—39.1.

Osborn Mfg. Co., The: *See*—
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Osburn, Henry G. Drill pipe float valve. 2,744,727, 5–8–56, Cl. 255—28.

Osman, Lee E., to General Electric Co. Iron base high temperature alloy. 2,744,821, 5–8–56, Cl. 75—124.

Oster Mfg. Co., The: *See*—
Chasar, Anthony R. 2,744,757.

Oswego Falls Corp.: *See*—
Wicox, Isaac L., Cole, and Pesch. 2,744,367.

Otto, Gerhard: *See*—
Schubert, Rudolf, and Otto. 2,744,836.
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Evinrude, Ralph S. 2,744,736.
Overton, Charles M., C. D. Iddings, and G. E. Fountain, to Lee C. Moore Corp. Fast line guide. 2,744,696, 5–8–56, Cl. 242—157.
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Carlson, George E., Bader, and Owen. 2,744,665.
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Caroselli, Remus F. 2,744,835.
Mennerich, Fred A. 2,744,563.
Owens-Illinois Glass Co.: *See*—
Wheaton, Jack M., and Pellett. 2,744,647.
Pacific Foundry Co., Ltd.: *See*—
Hartley, Henry J., and Rankin. 2,744,477.
Pacific Pumps, Inc.: *See*—
Walters, Michael E. 2,744,796.
Package Machinery Co.: *See*—
Hoppe, William. 2,744,371.
Paillard, S. A.: *See*—
Werfeli, Arnold. 2,744,445.
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Palermo, Vincent J. Knife. 2,744,320, 5–8–56, Cl. 30—138.
Palmqvist, Fredrik T., to Aktiebolaget Separator. Method of soap-making. 2,744,922, 5–8–56, Cl. 260—418.
Para-Lux Products Co.: *See*—
Iverson, Arden L. 2,744,623.
Parke, Alfred G., to L. A. Darling Co. Frame unit and bracket structure. 2,744,714, 5–8–56, Cl. 248—245.
Parker, James C.: *See*—
Moorhead, Milton M., Jr., and Parker. 2,745,092.
Parker Rust Proof Co.: *See*—
Nicholson, Andrew, and Wilkinson. 2,744,555.
Parker, Warde L., to Northrop Aircraft, Inc. Hydraulic fuse. 2,744,533, 5–8–56, Cl. 137—87.
Parker, Warren H., ⅓ to C. W. Butler and ⅓ to C. Bork. Machine tool and chuck therefor. 2,744,365, 5–8–56, Cl. 51—237.
Parshall, Clarence M., and P. Geyer, to United States Rubber Co. Mill. 2,744,287, 5–8–56, Cl. 18—12.
Partsch, Earnest W., to Servel, Inc. Ice maker. 2,744,390, 5–8–56, Cl. 62—7.
Patent Scaffolding Co., Inc., The: *See*—
Sheard, William B. 2,744,794.
Paterson, Dugald S., to American Flange & Mfg. Co., Inc. Dispensing gun. 2,744,664, 5–8–56, Cl. 222—326.
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Thompson, Jerome B., and Buddemeyer. 2,448,825.
Thompson, Jerome B., and Buddemeyer. 2,744,826.
Paul, David H.: *See*—
Bailey, Christopher E. G., and Paul. 2,745,064.
Paul, Donald: *See*—
Rainbow, Horace S., Paul, and Day. 2,744,680.
Paul, Herbert, to Ruhrchemie Aktiengesellschaft, and Lurgi Gesellschaft fuer Waermetechnik m. b. H. Cataytic furnace. 2,744,813, 5–8–56, C. 23—288.
Paulsen, John B.: *See*—
Davis, Lewis B., and Paulsen. 2,744,620.
Paxhia, Emanuel F., R. J. Metzger, and L. G. White, to Toolset, Inc. Notching unit. 2,744,575, 5–8–56, Cl. 164—50.
Paxhia, Emanuel F., R. J. Metzger, and L. G. White, to Toolset, Inc. Punch set apparatus having punch mounted in vertically spaced generaly horizontal plates. 2,744,577, 5–8–56, Cl. 164—94.
Payne, Charles W.: *See*—
Killinger, John W., M. and M. C. Demis, and Payne. 2,744,356.
Peavey, Anna A.: *See*—
Peavey, Joseph L.: 2,744,783.
Peavey, Joseph L., deceased: A. A. Peavey, executrix. Twin control glare shields. 2,744,783, 5–8–56, Cl. 296—97.
Peek, Johannes J. A., to Hartford National Bank and Trust Co., as trustee. Receiver for two amplitude-modulated waves. 2,744,961, 5–8–56, Cl. 179—15.
Pellett, Fred G.: *See*—
Wheaton, Jack M., and Pellett. 2,744,647.
Pemco Wheel Co.: *See*—
Black, John W., Jr. 2,744,800.
Penning, Nicholas J. Ozone generator. 2,744,865, 5–8–56, Cl. 204—319.
Pesch, Herman: *See*—
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Petersen, Lowell W., to Swift & Co. Vapor collecting and fluid preheating system for evaporators. 2,744,570, 5–8–56, Cl. 159—46.
Peterson, Ruben O., to The Osborn Mfg. Co. Rotary brush assembly. 2,744,277, 5–8–56, Cl. 15—181.
Peterson, Thomas F. Helically-preformed lashing for connecting cables to messenger strands. 2,744,707, 5–8–56, Cl. 248—61.
Peterson, William D., to North American Aviation, Inc. D-C amplifier. 2,744,969, 5–8–56, Cl. 179—171.
Pharis, William W., to General Dynamics Corp. Multi-office telephone system. 2,744,963, 5–8–56, Cl. 179—27.
Phillips Edward E., and J. V. Shatting, to United States Steel Corp. Automatic stop mechanism for wire drawing machine. 2,744,692, 5–8–56, Cl. 242—78.
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Bearer, Louis C. 2,744,732.
Dutcher, Harris A., and Sailors. 2,744,887.
Pictorial Machinery, Ltd.: *See*—
Cook, Francis F., and Spriggs. 2,744,458.
Piekarski, Leon T., to General Electric Co. Mixed nickel, zinc, vanadium ferrite. 2,744,873, 5–8–56, Cl. 252—62.5.
Pigford, John D., to Northrop Aircraft, Inc. Cable slack compensator. 2,744,420, 5–8–56, Cl. 74—501.5.
Pines, Herman, to Universal Oil Products. Chlorination of saturated hydrocarbons. 2,744,940, 5–8–56, Cl. 260—648.
Pioneer Mounting & Finishing Co., Inc.: *See*—
La Rocca, John B. and J. V. 2,744,562.
Pittsburgh Coke & Chemical Co.: *See*—
Davie, William R. 2,744,818.
Pneumatic Drop Hammer Co.: *See*—
Fitzgerald, Reginald P. 2,744,315.
Pneumatic Scale Corp., Ltd.: *See*—
Everett, Arthur C. 2,744,368.
Vergobbi, John G. 2,744,491.
Pope Machinery Corp.: *See*—
Kempton, Albert E. 2,745,026.
Porter, William H. Balanced well pump. 2,744,468, 5–8–56, C. 103—183.
Portias, Socrates G. Shirt collar stay. 2,744,255, 5–8–56, Cl. 2—132.
Potter & Brumfield: *See*—
Romer, Jan A. 2,744,978.
Potts, Charles R. Fence and fence post structure. 2,744,729, 5–8–56, Cl. 256—59.
Powers-Samas Accounting Machines Ltd.: *See*—
Lambert, Donald R., and Jones. 2,744,685.
Prepo Corp.: *See*—
Falligant, Louis A. 2,744,657.
Falligant, Louis A. 2,744,809.
Price, Russell W. Conductive foot covering. 2,745,041, 5–8–56, Cl. 317—2.
Procario, Justino, and P. F. Ball washing apparatus. 2,744,274, 5–8–56, Cl. 15—97.
Procario, Paul F.: *See*—
Procario, Justino and P. F. 2,744,274.
Products and Licensing Corp.: *See*—
Toulon, Pierre M. G. 2,744,949.
Protzman, Thomas F., to Rohm & Haas Co. Acceleration of polymerization of acrylate esters with a thiophenol, a diacyl peroxide, and a tertiary amine. 2,744,886, 5–8–56, Cl. 260—89.5.
Purdue Research Foundation: *See*—
Lark-Horovitz, Karl, and Whaley. 2,745,046.
Qualitrol Corp.: *See*—
Ford, George E. 2,745,028.
Quick, Robert G., to the United States of America as represented by the Secretary of the Navy. Sensitive time delay relay. 2,745,024, 5–8–56, Cl. 307—132.
Radio Corp. of America: *See*—
Canfora, Arthur E., Liguori, Shenk, and Kishi. 2,744,955.
Dibbins, Walter W. 2,744,755.
Forgue, Stanley V. 2,744,837.
Forgue, Stanley V., and Goodrich. 2,745,032.
Gibson, Walter G. 2,744,951.
Kurshan, Jerome. 2,745,021.
Ruedy, John E. 2,744,808.
Rynn, Nathan. 2,745,037.
Sziklai, George C. 2,745,038.
Vine, Benjamin H. 2,744,629.
Radley, Guy R., to Cutler-Hammer, Inc. Coated electrical apparatus and method of making the same. 2,744,839, 5–8–56, Cl. 117—218.
Rainbow, Horace S., D. Paul, and G. A. Day, to Armstrong Siddeley Motors Ltd. Electrical heating and mounting of axial flow compressor blades. 2,744,680, 5–8–56, Cl. 230—132.
Ramsden, Hugh E., to Metal & Thermit Corp. Organotin derivatives of glyceryl mono-esters. 2,744,876, 5–8–56, Cl. 260—23.
Ramsey Corp.: *See*—
Marien, Melvin W. 2,744,803.
Ranco Inc.: *See*—
Raney, Estel C. 2,744,337.
Raney, Estel C. 2,744,389.
Raney, Estel C., to Ranco Inc. Control apparatus. 2,744,337, 5–8–56, Cl. 34—45.
Raney, Estel C., to Ranco Inc. Defroster control for refrigerating systems. 2,744,389, 5–8–56, Cl. 62—4.
Rankin, Clarence S.: *See*—
Hartley Henry J., and Rankin. 2,744,477.
Raub, Samuel H. S.: *See*—
Kerr, Karl K., Kleber, and Raub. 2,744,269.
Ray, William A., to General Controls Co. Radiation thermocouple. 2,744,947, 5–8–56, Cl. 136—4.
Rayonier Inc.: *See*—
Schlosser, Paul H., and Mitchell. 2,744,292.
Read Standard Corp.: *See*—
Davis Lewis B., and Paulsen. 2,744,620.
Reagan, Leon H., to General Dynamics Corp. Toll switchboard. 2,744,964, 5–8–56, Cl. 179—27.
Reagan, Leon H., to General Dynamics Corp. Means for reducing contact capacitance. 2,744,967, 5–8–56, Cl. 179—78.
Reamstown Products Co.: *See*—
Knapp, Walter. 2,744,550.
Reed, Daniel J., and J. H. Tanner, to J. M. Stover. Liquid fuel vaporizer. 2,744,387, 5–8–56, Cl. 62—1.
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Millsaps, Paul R., Morton, and Reedy. 2,744,503.
Reerink, Wilhelm, W. Müschenborn, and E. Nötzold. Process for the removal of ash and water from raw material containing coal. 2,744,626, 5–8–56, Cl. 209—49.
Regec, John J., and H. W. Roeber, to Sylvania Electric Products, Inc. Port section for double turret sealex. 2,744,671, 5–8–56, Cl. 226—20.4.
Reid, Ralph A., and V. W. Leonard, to General Electric Co. Traffic signal controller. 2,745,086, 5–8–56, Cl. 340—40.
Reineman, Richard G., to The Brunswick-Balke-Collender Co. Shoe for a furniture leg. 2,744,283, 5–8–56, Cl. 16—42.
Reineman, Richard G., to The Brunswick-Balke-Collender Co. Furniture leg. 2,744,804, 5–8–56, Cl. 311—109.
Reiter, Daniel I. Top wall handle installation and handle end holder therefor. 2,744,556, 5–8–56, Cl. 150—33.

Reliance Electric and Engineering Co.: *See*—
Seal, Clyde W. 2,744,618.
Remond, Louis C., to Sylvania Electric Products Inc. Waveguide window. 2,744,592, 5–8–56, Cl. 189—36.5.
Reppe, Walter, O. Schlichting, and F. Westphal, to Badische Anilin- & Soda-Fabrik Aktiengesellshaft. Production of new derivatives of barbituric acid. 2,744,900, 5–8–56, Cl. 260—257.
Republic Aviation Corp.: *See*—
Sokol, Benjamin, and Di Fiorio. 2,744,382.
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Briggs, James L., Jr., and Hannon. 2,744,822.
Reynolds, Blake, to Texaco Development Corp. Two-stroke uniflow-scavenged internal combustion engine. 2,744,506, 5–8–56, Cl. 123—32.
Reynolds, Harry R., to The Fafnir Bearing Co. Railway bearing. 2,744,474, 5–8–56, Cl. 105—223.
Rhindress, Walter H. Floating boat house. 2,744,483, 5–8–56, Cl. 114—0.5.
Richardson, William F., to Flex-O-Lators, Inc. Continuous core wrapping machine. 2,744,480, 5–8–56, Cl. 112—2.
Richter, Kenneth W., to Everbrite Electric Signs Inc. Resilient supports for light tubes. 2,744,705, 5–8–56, Cl. 248—50.
Ridgley, Raymond. Jet operated refrigerator. 2,744,392, 5–8–56, Cl. 62—117.05.
Rimkus, Hans, to Siemens-Schuckertwerke Aktiengesellschaft. Direct-current machine with compensating pole-face windings. 2,745,031, 5–8–56, Cl. 310—218.
Rines, Robert H. Electroplating method and system. 2,744,859, 5–8–56, Cl. 204—15.
Rines, Robert H. Electroplating method. 2,744,860, 5–8–56, Cl. 204—45.
Ritter, Margaretta B.: *See*—
Boyd, Albert B. 2,744,262.
Rixson, Oscar C., Co., The: *See*—
Ellis, David H. 2,744,779.
Röben, Karl, to Westfalia Separator A. G. Adjustable milking machine cups. 2,744,496, 5–8–56, Cl. 119—14.47.
Robertson, H. H., Co.: *See*—
Jenkins, Paul W., and Brown. 2,744,589.
Robertson, Ross E., and D. N. Glew, to National Research Council. Cell holder for a spectrophotometer. 2,744,440, 5–8–56, Cl. 88—14.
Robey, Floyd M. Tetrahedronal kite and method of making. 2,744,701, 5–8–56, Cl. 244—153.
Robinson, Harry R., to The Texas Co. Wax compositions inhibited from oxidative deterioration. 2,744,834, 5–8–56, Cl. 106—270.
Robinson, James E., to American Optical Co. Television receiver having a sound-signal detector electrode in its picture tube. 2,744,954, 5–8–56, Cl. 178—5.8.
Roby, Horace H. Water scooter. 2,744,267, 5–8–56, Cl. 9—1.
Roeber, Henry W.: *See*—
Regec, John J., and Roeber. 2,744,671.
Roeder, Harold C.: *See*—
Roeder, Woodrow W. and H. C. 2,744,769.
Roeder, Woodrow W. and H. C. Bushing means for attaching cable in plate. 2,744,769, 5–8–56, Cl. 285—6.5.
Rohm & Haas Co.: *See*—
Boettner, Fred E. 2,744,903.
De Benneville, Peter L. 2,744,884.
De Benneville, Peter L., and Sims. 2,744,885.
Luskin, Leo S., and de Benneville. 2,744,943.
Protzman, Thomas F. 2,744,886.
Romer, Jan A., to Potter & Brumfield. Miniature relay. 2,744,978, 5–8–56, Cl. 200—87.
Ronk, George T., to Barnard & Leas Mfg. Co., Inc. Folding conveyors. 2,744,615, 5–8–56, Cl. 198—115.
Rooms, David N. Guitar keyboard. 2,744,433, 5–8–56, Cl. 84—315.
Rorabaugh, Guy O.: *See*—
Daniels, Robert M., Maudru, and Rorabaugh. 2,744,840.
Rösch, George, to Farbenfabriken Bayer Aktiengesellschaft. Dyestuffs of the phthalocyanine series and their production. 2,744,914, 5–8–56, Cl. 260—314.5.
Ross, Alfred A. Automatic heat control system with warm-up period. 2,744,688, 5–8–56, Cl. 236—46.
Ross, Colin A.: *See*—
Hoogstoel, Leon E., and Ross. 2,744,624.
Ross, Milburn, M. Fastener with pivoted rod engaging dogs. 2,744,436, 5–8–56, Cl. 85—36.
Rossomme, Raymond H.: *See*—
Kruger, Frederick B., Rossomme, and Stein. 2,744,407.
Roush, Milton S., to Thompson Products, Inc. Controlled temperature fluid flow directing member. 2,744,723, 5–8–56, Cl. 253—39.15.
Roth, Harry. Foldable toothbrush construction. 2,744,278, 5–8–56, Cl. 15—185.
Rothe, Walter, to Braunschweigische Maschinenbaunstalt A. G. Apparatus for drying friable material. 2,744,338, 5–8–56, Cl. 34—58.
Rowe, George E., to Emhart Mfg. Co. Apparatus for forming paste mold glassware. 2,744,358, 5–8–56, Cl. 49—18.
Rudman, Frank: *See*—
Laurent, Milton P. 2,744,771.
Rudoff, Hyman, to General Electric Co. Chlorinated maleic adduct-ethoxyline resinous compositions. 2,744,845, 5–8–56, Cl. 154—43.
Rueb, Theodore O., to Sherman-Klove Co. Reversible ratchet wrench. 2,744,432, 5–8–56, Cl. 81—62.
Ruedy, John E., to Radio Corp. of America. Apparatus for evaporating chemicals. 2,744,808, 5–8–56, Cl. 316—30.
Ruhrchemie Aktiengesellschaft: *See*—
Paul, Herbert. 2,744,813.
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Seiler, Georg, and Rützenhofer. 2,744,588.
Ryan, James F., Jr.: *See*—
Martin, William M., and Ryan. 2,744,531.
Rye, John K.: *See*—
Kay, John G., and Rye. 2,744,612.
Rynn, Nathan, to Radio Corp. of America. Keying arrangement for single beam color tube. 2,745,037, 5–8–56, Cl. 315—30.
Safeway Heat Elements, Inc.: *See*—
Clark, Vernon S. 2,744,996.
Sahmel, Otto H., to Grafiex, Inc. Battery-capacitor cartridge for photographic flash unit. 2,745,051, 5–8–56, Cl. 320—1.
Sahyun, Melville, J. A. Faust, and L. H. Jules, to Cutter Laboratories, Inc. Phenyl-substituted salicylamides. 2,744,916, 5–8–56, Cl. 260—326.3.
Sailors, Howard R.: *See*—
Dutcher, Harris A., and Sailors. 2,744,887.
Salause, Jean, to Societe des Accumulateurs Fixes et de Traction (Societe Anonyme). Primable electric batteries employing cuprous chloride. 2,744,948, 5–8–56, Cl. 136—100.
Salser, Alexander. Cigarette lighter and flint supply indicator therefor. 2,744,401, 5–8–56, Cl. 67—7.1.
Sampietro, Achille C. Overhead valve means for internal combustion engines. 2,744,513, 5–8–56, Cl. 123—191.
Saunders, Claude, to Georgia Kaolin Co. Filters. 2,744,633, 5–8–56, Cl. 210—199.
Saylors, Rodger D., to Cygnet Associates. Mobile extremity restraint. 2,744,526, 5–8–56, Cl. 128—214.
Schaefer, Edward J. Valve structure for preventing air lock in pumps. 2,744,469, 5–8–56, Cl. 103—203.
Schaeffer, Lewis C.: *See*—
Myers, William H. 2,744,711.
Schäfer, Werner, G. Domagk, R. Wegler, and E. Kühle, to Schenley Industries, Inc. Process for the production of thiosemicarbazones of isonicotinaldehyde and 4-pyridyl alkyl ketones. 2,744,905, 5–8–56, Cl. 260—294.8.
Scheibe, Walter. Warp knitting machine. 2,744,398, 5–8–56, Cl. 66—86.
Schenley Industries, Inc.: *See*—
Katz, Leon. 2,744,892.
König, Hans-Bodo, and Offe. 2,744,906.
Schäfer, Werner, Domagk, Wegler, and Kühle. 2,744,905.
Scherr, George H. Closure. 2,744,648, 5–8–56, Cl. 215—79.
Schick, Walter. Electric capacitors. 2,745,048, 5–8–56, Cl. 317—258.
Schild, Edwin F. Convertible table. 2,744,806, 5–8–56, Cl. 312—140.3.
Schlichting, Otto: *See*—
Reppe, Walter, Schlichting, and Westphal. 2,744,900.
Schlosser, Paul H., and R. L. Mitchell, to Rayonier Inc. Regenerated cellulose sheets and process of producing the sheets. 2,744,292, 5–8–56, Cl. 18—48.
Schmid, Wolfgang. Method and system for observing motion phenomena in living bodies. 2,744,521, 5–8–56, Cl. 128—2.
Schmidt, H., Mfg. Co.: *See*—
Schmidt, Henry. 2,744,566.
Schmidt, Henry, to H. Schmidt Mfg. Co. Bracket for back rest of article of furniture. 2,744,566, 5–8–56, Cl. 155—160.
Schneider, Emile, to Societe Horlogere de Porrentruy, Phenix Watch Co. S. A. Oscillatory cam ratchet drive. 2,744,413, 5–8–56, Cl. 74—126.
Schoen, Donald W., to Illinois McGraw Electric Co. Beater ejector. 2,744,734, 5–8–56, Cl. 259—1.
Schofield, Christian A. Method of making a formed article comprising a resinous sheet backed by plywood. 2,744,850, 5–8–56, Cl. 154—110.
Schroeder, George W., to General Electric Co. Ultra-high frequency heating apparatus. 2,744,990, 5–8–56, Cl. 219—10.55.
Schroeder, Henry H., Jr., to Specialties Development Corp. Handieless discharge head for portable fluid dispensing apparatus. 2,744,380, 5–8–56, Cl. 169—31.
Schubert, Rudolph, and G. Otto, to Badische Anilin-& Soda-Fabrik Aktiengesellschaft. Process for coating leather. 2,744,836, 5–8–56, Cl. 117—142.
Schwarz, Hermann, K. G.: *See*—
Heusner, Wilhelm L. G. 2,744,717.
Scime, Emilio. Gear operated wrench with rotary impact means. 2,744,431, 5–8–56, Cl. 81—52.3.
Scott, Lawrence B.: *See*—
Williams, Paul H., and Scott. 2,744,871.
Scovill Mfg. Co.: *See*—
Davidson, Elmer T., and Kilmarx. 2,744,770.
Seaver, Donald A. 2,744,498.
Scozzafava, Milton V.: *See*—
Busch, Richard E., O'Connor, and Scozzafava. 2,744,682.
Gearheart, John D., and Scozzafava. 2,744,605.
Seal, Clyde W., to Reliance Electric and Engineering Co. Multiple conveyor drive. 2,744,618, 5–8–56, Cl. 198—203.
Sealy, Marie P., to Federated Department Stores, Inc. Container for merchandise. 2,744,676, 5–8–56, Cl. 229—44.
Sears, Roebuck and Co.: *See*—
Louthan, George R. 2,744,374.
Seaton, William H.: *See*—
Fike, Elmer A., and Seaton. 2,744,874.
Seaver, Donald A., to Scovill Mfg. Co. Copy holder. 2,744,498, 5–8–56, Cl. 120—32.
Sédille, Marcel H. L., to Societe Rateau (Societe Anonyme). Gas turbine plant. 2,744,383, 5–8–56, Cl. 60—39.15.
Seely, John S. Tool for and method of forming a flow restriction in a conduit. 2,744,429, 5–8–56, Cl. 81—15.
Sefsik, Stephen R., and J. Kiss. Combination lamp and chair. 2,744,997, 5–8–56, Cl. 240—4.
Seiler, Georg, and H. Rutzenhöfer, to Deutsche Perrot-Bremse G. m. b. H. Brake actuator. 2,744,588, 5–8–56, Cl. 188—78.

Selvage, Blaine G. Combined wheelbarrow and mixer. 2,744,735, 5–8–56, Cl. 259—171.

Seney, John S., to E. I. du Pont de Nemours and Co. Apparatus for continuously determining mass per unit length. 2,744,408, 5–8–56, Cl. 73—67.

Seragnoli, Ariosto. Stacking mechanism for wrapped articles. 2,744,369, 5–8–56, Cl. 53—159.

Seragnoli, Ariosto. Mechanism for wrapping caramels, pastilles and articles of similar shape. 2,744,370, 5–8–56, Cl. 53—228.

Servel, Inc.: *See*—
Partsch, Earnest W. 2,744,390.

Sessions, Lee W., ½ to G. M. Eames. Train actuated railroad switch. 2,744,703, 5–8–56, Cl. 246—338.

Sevetz, Edward B., Sr., to Hampden Brass and Aluminum Co. Tilting band saw machine. 2,744,547, 5–8–56, Cl. 143—24.

Sewell, Walter W., and R. W. Wilson, to Ford Motor Co. Crate loading mechanism. 2,744,642, 5–8–56, Cl. 214—313.

Sferrazza, Peter J., to Sperry Rand Corp. Microwave radio frequency converter systems. 2,745,060, 5–8–56, Cl. 324—58.

Shaffer, Bernard M., to B. R. Harris. Treatment of liquid egg whites. 2,744,829, 5–8–56, Cl. 99—210.

Shatting, James V.: *See*—
Phillips, Edward E., and Shatting. 2,744,692.

Sheard, William B., to The Patent Scaffolding Co., Inc. Foldable end-frames for sectional scaffoldings. 2,744,794, 5–8–56, Cl. 304—2.

Shell Development Co.: *See*—
Darley, Henry C. H. 2,744,869.
Smith, Curtis W. 2,744,877.
Smith, Curtis W., and Holm. 2,744,928.
Smith, Curtis W., and Holm. 2,744,929.
Stillebroer, Cornelis, and van der Minne. 2,744,870.
Williams, Paul H., and Scott. 2,744,871.
Wist, Edward B. 2,744,774.

Shenk, Eugene R.: *See*—
Canfora, Arthur E., Liguori, Shenk, and Kishl. 2,744,955.

Sheppard, Joe A. Asparagus harvester. 2,744,582, 5–8–56, Cl. 180—19.

Sherman, Elmer W. Turbine-type engine. 2,744,505, 5–8–56, Cl. 123—15.

Sherman-Klove Co.: *See*—
Rueb, Theodore O. 2,744,432.

Shields, James J. Side outlets for bag elevators. 2,744,616, 5–8–56, Cl. 198—127.

Shockley, William, to Bell Telephone Laboratories, Inc. Semiconductor signal translating devices. 2,744,970, 5–8–56, Cl. 179—171.

Short, Brooks H.: *See*—
Dyer, John W., Flatt, and Short. 2,744,282.

Shutt, John C.: *See*—
Carpenter, James S., Shutt, and Winchester. 2,744,286.

Sidley, John R., to Joy Mfg. Co. Tension maintaining arrangement for a conveyor chain. 2,744,614, 5–8–56, Cl. 198—109.

Sichak, William: *See*—
Goldstein, Ladislas, Levine, and Sichak. 2,745,072.

Siemens-Schuckertwerke Aktiengesellschaft: *See*—
Rimkus, Hans. 2,745,031.

Siems, Frederick B. T. Marking instrument. 2,744,330, 5–8–56, Cl. 33—34.

Simmonds Aerocessories, Inc.: *See*—
Frantz, William. 2,744,502.

Simon, Eli: *See*—
Thomas, Frank W., and Simon. 2,744,875.

Simons, Rodney F., to the United States of America as represented by the Secretary of the Navy. Frequency analyzer. 2,745,034, 5–8–56, Cl. 315—1.

Simpkins, Robert L., J. S. Materka, and H. A. Elliott, to Essex Wire Corp. Insulated terminal. 2,745,075, 5–8–56, Cl. 339—26.

Simpson, Alvan D., to The Forming Machine Co. of America. Device for preventing leakage around fastener heads. 2,744,591, 5–8–56, Cl. 189—36.

Simpson, Wilbur S.: *See*—
Christiansen, Andrew L. 2,744,285.

Sims, Homer J.: *See*—
De Benneville, Peter L., and Sims. 2,744,885.

Siobins, Marcus. Ventilator deflector. 2,744,518, 5–8–56, Cl. 126—198.

Siotkin, George B., and C. A. Creely. Cap having a plurality of pockets. 2,744,256, 5–8–56, Cl. 2—195.

Smecko, Florian. Gun sights. 2,744,331, 5–8–56, Cl. 33—58.

Smiley, Gerald T. Cartridge case trimmer. 2,744,307, 5–8–56, Cl. 29—1.32.

Smith, A. O., Corp.: *See*—
Andrus, Orrin E. 2,744,863.
Craig, Bruce G. 2,744,843.

Smith, Anthony P., and G. Fletcher. Insecticide—and like spraying equipment. 2,744,662, 5–8–56, Cl. 222—189.

Smith, Charles C., to The Locomotive Finished Material Co. Stabilizers or cushioning devices for railway trucks. 2,744,750, 5–8–56, Cl. 267—67.

Smith, Curtis W., to Shell Development Co. Thermoplastic polymer compositions plasticized with certain esters of substituted 1,5-pentanediols. 2,744,877, 5–8–56, Cl. 260—31.4.

Smith, Curtis W., and R. T. Holm, to Shell Development Co. Oxidation of unsaturated aldehydes to acids. 2,744,928, 5–8–56, Cl. 260—530.

Smith, Curtis W., and R. T. Holm, to Shell Development Co. Production of unsaturated carboxylic acids. 2,744,929, 5–8–56, Cl. 260—530.

Smith, George F. Camouflage holder for hunting garments. 2,744,348, 5–8–56, Cl. 41—10.

Smith, James. Handling device. 2,744,641, 5–8–56, Cl. 214—300.

Smith-Johannsen, Robert, to General Electric Co. Elastic organopolysiloxanes of improved heat resistance and adhesion containing an organic silicate and calicum carbonate. 2,744,878, 5–8–56, Cl. 260—37.

Smith, John C. Bottle pilot tube attaching device. 2,744,649, 5–8–56, Cl. 215—100.

Smith, John E. Sectional ladder. 2,744,674, 5–8–56, Cl. 228—34.

Smith, Kline & French Laboratories: *See*—
Nabenhauer, Fred P. 2,744,901.

Smith, Sidney R., Jr., and R. E. Koch, to General Electric Co. Circuit interrupting device. 2,744,982, 5–8–56, Cl. 200—114.

Smith, Thomas H. Fishing pole holder. 2,744,351, 5–8–56, Cl. 43—16.

Smith, Thomas R., to The Maytag Co. Agitator for washing machines. 2,744,402, 5–8–56, Cl. 68—133.

Smithe, F. L., Machine Co., Inc.: *See*—
Novick, Abraham. 2,744,552.

Snavely, Benjamin L. Transducer, elements therefor, and methods of assembly thereof. 2,745,083, 5–8–56, Cl. 340.8.

Snyder, James, to the United States of America as represented by the Secretary of the Army. Voltage regulator. 2,745,022, 5–8–56, Cl. 307—43.

Societe des Accumulateurs Fixes et de Traction (Societe Anonyme): *See*—
Salause, Jean. 2,744,948.

Societe des Usines Chimiques Rhone-Poulenc: *See*—
Gailliot, Paul, and Debarre. 2,744,912.

Societe d'Inventions Aeronautiques et Mecaniques S. I. A. M.: *See*—
Lucien, René. 2,744,699.

Societe Horlogere de Porrentruy, Phenix Watch Co. S. A.: *See*—
Schneider, Emile. 2,744,413.

Societe Rateau (Societe Anonyme): *See*—
Sédille, Marcel H. L. 2,744,383.

Socony Mobil Oil Co., Inc.: *See*—
Dotson, Billy J. 2,745,057.
McCarty, Malcolm D., and McLoad. 2,745,085.

Sokol, Benjamin, and A. Di Florio, to Republic Aviation Corp. Removable inflatable protective closure for jet engine. 2,744,382, 5–8–56, Cl. 60—39.09.

Solonche, Louis H.: *See*—
Kaehn, Frank E. 2,744,266.

Somers, Francis M. Bucket linkage. 2,744,640, 5–8–56, Cl. 214—147.

Sonoco Products Co.: *See*—
Copenhaver, James E., Biggs, and Baxley. 2,744,927.

Sorensen, Egon. Compressor. 2,744,677, 5–8–56, Cl. 230—49.

Sparklin, Charles H., to Birtman Electric Co. Shuttle drive mechanism for a sewing machine. 2,744,412, 5–8–56, Cl. 74—66.

Sparks, George C. Combination box and cradle for decorated Easter eggs and the like. 2,744,622, 5–8–56, Cl. 206—45.14.

Spears, Esten W., to General Motors Corp. Deicing control. 2,744,992, 5–8–56, Cl. 219—20.

Spears, Morton F. Means for controlling current flow in electric circuits. 2,744,981, 5–8–56, Cl. 200—113.

Specialties Development Corp.: *See*—
Schroeder, Henry H., Jr. 2,744,580.

Speeter, Merrill E., to Bristol Laboratories Inc. 2-(orthophenylbensyl) imidazoline and acid addition salts. 2,744,909, 5–8–56, Cl. 260—309.6.

Speeter, Merrill E., to Bristol Laboratories Inc. 2-(orthobenzylbenzyl) - imidazoline and acid addition salts. 2,744,910, 5–8–56, Cl. 260—309.6.

Spencer, Lorn L., Sr. Liquid level gauge. 2,744,411, 5–8–56, Cl. 73—317.

Sperry Gyroscope Co., Ltd., The: *See*—
Thomas, Eric L. 2,745,007.

Sperry Rand Corp.: *See*—
Sferrazza, Peter J. 2,745,060.

Sperzel Co.: *See*—
Sperzel, Peter J. 2,744,264.

Sperzel, Peter J., to Sperzel Co. Toilet seat and cover therefor. 2,744,264, 5–8–56, Cl. 4—234.

Spigarelli, John C. Rotary cutter mining machine with belt drive. 2,744,741, 5–8–56, Cl. 262—26.

Spisak, Andrew A., to The Warner & Swasey Co. Suction duct system for variable drafting heads. 2,744,295, 5–8–56, Cl. 19—130.

Sprague Electric Co.: *See*—
Tierman, Melvin. 2,744,988.

Spriggs, John E.: *See*—
Cook, Francis F., and Spriggs. 2,744,458.

Springer, Frederick H. Screw type pump. 2,744,465, 5–8–56, Cl. 103—87.

Standard Oil Co.: *See*—
Arnold, Robert C. 2,744,855.
Cassis, Frank, and Greene. 2,744,841.
Kennel, William E. 2,744,939.
Wolff, William F., and McLeod. 2,744,937.

Standard Rivet Co., The: *See*—
Montague, Paul B. 2,744,250.

Stansel, Frank R., to Bell Telephone Laboratories, Inc. Transistor oscillators. 2,745,010, 5–8–56, Cl. 250—36.

Stastny, Fritz, and K. Buchholz, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Production of porous shaped articles from thermoplastic materials. 2,744,291, 5–8–56, Cl. 18—48.

State of Oregon acting by and through the Oregon State Board of Forestry: *See*—
Kurth, Ervin F. 2,744,919.
Kurth, Ervin F. 2,744,920.

Steele, Frank E. Wheelbarrow with spring mounted wheel. 2,744,761, 5–8–56, Cl. 280—47.22.

Stein, Joseph A.: *See*—
Kruger, Frederick B., Rossomme, and Stein. 2,744,407.

Stein, Romar E.: *See*—
McCann, Joe G., Weil, and Stein. 2,745,100.

Steinhaus, David W., and H. M. Crosswhite, Jr., to Leeds and Northrup Co. Methods of and systems for spectrochemical analysis. 2,744,438, 5–8–56, Cl. 88—14.

Stephenson, Henry R., and D. E. Gommel, to Borg-Warner Corp. Saw chain and tooth therefor. 2,744,548, 5–8–56, Cl. 143—135.

Sternbergh, David. Toe brake for roller skates. 2,744,759, 5–8–56, Cl. 280—11.2.

Steven, George: *See*—
Kauffmann, William M., and Steven. 2,744,511.

Stevenson, Robert, to Anco, Inc. Hydraulic pressure relief valve. 2,744,538, 5–8–56, Cl. 137—490.

Stewart, John, to A. C. E. Machinery Ltd. Winches. 2,744,637, 5–8–56, Cl. 212—61.

Stibbe, G., & Co., Ltd.: *See*—
West, Bertram H. 2,744,399.

Stickles, Donald C., to Victory Plastics Co. Laminated protective material. 2,744,846, 5–8–56, Cl. 154—52.5.

Stiles, John W. Conveying apparatus. 2,744,610, 5–8–56, Cl. 198—32.

Stillebroer, Cornelis, and J. L. van der Minne, to Shell Development Co. Lubricating compositions. 2,744,870, 5–8–56, Cl. 252—33.6.

Stillman, Jerome, to International Telephone and Telegraph Corp. Automatic tuner. 2,745,015, 5–8–56, Cl. 250—40.

Stinde, John G.: *See*—
Gordo, Fred L., and Stinde. 2,744,362.

Stiveson Robert A.: *See*—
Mosher, Ralph E., and Stiveson. 2,744,442.

Stockard, John M., to the United States of America as represented by the Secretary of the Navy. Connector. 2,744,484, 5–8–56, Cl. 114—20.

Stoddard, James V., to the United States of America as represented by the Secretary of War. Radiant energy control system for missile guidance. 2,745,095, 5–8–56, Cl. 343—6.

Stokvis Samuel R. J.: *See*—
Edera, Eugene, and Stokvis. 2,744,423.

Stokvis, Samuel R. J., and E. Edera. Roller device for moving loads. 2,744,758, 5–8–56, Cl. 280—1.

Stover, John M.: *See*—
Reed, Daniel J., and Tanner. 2,744,387.

Straubel Dudley F.: *See*—
McMillan, Edward B., and Straubel. 2,744,380.

Strayer, Chalmers A., to Northrop Aircraft, Inc. Piston sealing assembly. 2,744,802, 5–8–56, Cl. 309—4.

Strinlin, Marcus M., Jr., S. A. Hardin, and W. H. Bundy, to Tennessee Valley Authority. Rotating electric phosphorus furnace. 2,744,944, 5–8–56, Cl. 13—10.

Strom George E.: *See*—
Wintle, Harry D., Jr., and Strom. 2,744,409.

Sullivan Frank A. V., to American Cyanamid Co. N,N'-alkylenebisbenzosulfotriazenes. 2,744,896, 5–8–56, Cl. 260—243.

Sunbeam Corp.: *See*—
Jepson, Ivar. 2,744,344.
Jepson, Ivar. 2,744,995.

Sun Oil Co.: *See*—
McKinney, John F., Jr. 2,744,793.

Super Premiums, Inc.: *See*—
Briggs, Quentin L. 2,744,702.

Surface Combustion Corp.: *See*—
Dalley, William H., Jr. 2,744,687.

Sutton, Robert T. Measuring soap dispenser for fluid lines. 2,744,789, 5–8–56, Cl. 299—84.

Suzuki, George S. Pie edge crimping and trimming device. 2,744,476, 5–8–56, Cl. 107—49.

Swenson, Charles H., to Union Carbide and Carbon Corp. Separable ring fastener. 2,744,530, 5–8–56, Cl. 129—1.

Swerdlow Nathan, to General Electric Co. Closure fastener and hinge construction. 2,744,654, 5–8–56, Cl. 220—55.

Swidelsky, Anthony J., to Allis-Chalmers Mfg. Co. Means for spacing disk coils. 2,745,073, 5–8–56, Cl. 336—60.

Swift & Co.: *See*—
Petersen, Lowell W. 2,744,570.

Sylvania Electric Products, Inc.: *See*—
Cleaveland, Burton L., Englert, and Larson. 2,744,372.
Fulger, Russell K. 2,744,574.
Ingraham, Robert C. 2,745,045.
Regec, John J., and Roeber. 2,744,671.
Remond, Louis C. 2,744,592.

Symer, Orten H., Jr., to Hazeltine Research, Inc. Radar indicator sweep deflection system. 2,745,036, 5–8–56, Cl. 315—22.

Symonds, William W.: *See*—
Markowski, Edwin P., and Symonds. 2,744,718.

Symons, Percy L., to Albina Engine & Machine Works, Inc. I-beam roller. 2,744,472, 5–8–56, Cl. 105—154.

Szikiai, George C., to Radio Corp. of America. Semiconductor signal translating circuit. 2,745,038, 5–8–56, Cl. 315—30.

Tanner, James H.: *See*—
Reed, Daniel J., and Tanner. 2,744,387.

Tappan Stove Co., The: *See*—
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Hoff, John M. 2,745,042.

Taylor, Philip L., to Allis-Chalmers Mfg. Co. Perforated arc chute barrier providing parallel arc paths. 2,744,983, 5–8–56, Cl. 200—144.

Taylor, Ralph B., Sr., and R. Whewell, Jr., to The Warner & Swasey Co. Filling detection for weaving machine. 2,744,545, 5–8–56, Cl. 139—374.

Technicolor Motion Picture Corp.: *See*—
Lynch, William M., and Evans. 2,745,005.

Tell, Werner W.: *See*—
Köhler, Hellfried K., Güldner, and Tell. 2,744,600.

Templeton, Hugh E.: *See*—
Mertzweiller, Joseph K., Templeton, and Daussat. 2,744,921.

Tennessee Valley Authority: *See*—
Striplin, Marcus M., Jr., Hardin, and Bundy. 2,744,944.

Terry, Millard G., Jr.: *See*—
Wagner, Jean L., Habighurst, and Terry. 2,744,890.

Texaco Development Corp.: *See*—
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Texas Co., The: *See*—
Kavanagh, Kevin E., and Chesiuk. 2,744,853.
Nelson, Roy F. 2,744,872.
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Theis, William T., and L. W. Green, to Interstate Engineering Corp. Air-driven floor polisher. 2,744,272, 5–8–56, Cl. 15—49.

Thomas, Charles L. Regeneration of catalysts. 2,744,861, 5–8–56, Cl. 204—72.

Thomas, Eric L., to The Sperry Gyroscope Co., Ltd. Networks for compensating errors due to absorption effects in capacitors. 2,745,007, 5–8–56, Cl. 250—27.

Thomas, Frank W., and E. Simon, to Lockheed Aircraft Corp. Cellular phenolic resin materials. 2,744,875, 5–8–56, Cl. 260—2.5.

Thomas, Joseph R. Convertible furniture. 2,744,265, 5–8–56, Cl. 5—13.

Thompson, Jerome B., and B. D. Buddemeyer, to C. J. Patterson Co. Acyl lactylic acid products. 2,744,825, 5–8–56, Cl. 99—91.

Thompson, Jerome B., and B. D. Buddemeyer, to C. J. Patterson Co. Flour composition. 2,744,826, 5–8–56, Cl. 99—93.

Thompson Products, Inc.: *See*—
Cliborn, Robert. 2,744,773.
Difford, Le Roy A. 2,744,466.
Graham, Matthew P. 2,744,309.
Rouah, Milton S. 2,744,723.

Thomson, George: *See*—
Wood, Richard D., Jr., and Thomson. 2,744,844.

Threewit, Donald M.: *See*—
Nagy, Michael J., and Threewit. 2,744,396.

Tichy, Bernard W. Anti-colic nursing device. 2,744,529, 5–8–56, Cl. 128—252.

Tierman, Melvin, to Sprague Electric Co. Molded resistors. 2,744,988, 5–8–56, Cl. 201—64.

Tobin-Arp Mfg. Co.: *See*—
Larson, Arnold W. G., and Flaten. 2,744,361.

Toland, William G., Jr., to California Research Corp. Production of aromatic nitriles. 2,744,925, 5–8–56, Cl. 260—465.

Toolset, Inc.: *See*—
Paxhia, Emanuel F., Metzger, and White. 2,744,575.
Paxhia, Emanuel F., Metzger, and White. 2,744,577.

Toombs, Robert P. Strainer for drinking glasses. 2,744,631, 5–8–56, Cl. 210—163.

Toornman, Burton V., to The Dow Chemical Co. Method and composition for the control of the growth of undesirable vegetation. 2,744,817, 5–8–56, Cl. 71—2.3.

Toornman, Burton V., to The Dow Chemical Co. Method for the control of undesired grasses. 2,744,819, 5–8–56, Cl. 71—2.6.

Torricelli Creations, Inc.: *See*—
Torricelli, Ugo. 2,744,520.

Torricelli, Ugo, to Torricelli Creations, Inc. Machine for testing reflex action of humans. 2,744,520, 5–8–56, Cl. 128—2.

Toulon, Pierre M. G., 75% to Products and Licensing Corp., and 25% to N. Moore and W. D. Hall, joint tenants. Television systems. 2,744,949, 5–8–56, Cl. 178—5.2.

Towmotor Corp.: *See*—
Cirillo, Lee. 2,744,645.
Weaver, Elverton W. 2,744,764.

Trailmobile, Inc.: *See*—
Black, James J. 2,744,781.

Travis, John P. Gyrating and sliding pivot window with retractible weather bar. 2,744,296, 5–8–56, Cl. 20—42.

Travis, John P. Gyrating and shiftable pivot window with stationary weather bars. 2,744,298, 5–8–56, Cl. 20—53.

Travis, John P. Gyrating and shiftable pivot window with retractible weather bars. 2,744,299, 5–8–56, Cl. 20—53.

Travis, John P. Pivoted reversible window with laterally and transversely shiftable pivot. 2,744,593, 5–8–56, Cl. 189—66.

Travis, John P. Gyrating and shiftable pivot window with retractible weather bars. 2,744,594, 5–8–56, Cl. 189—69.

Troendly, Harry P., to Borg-Warner Corp. One-way engaging mechanism. 2,744,598, 5–8–56, Cl. 192—45.1.

True, Virgil, and B. Fisk. Automatic impedance matching apparatus. 2,745,067, 5–8–56, Cl. 333—17.

Tyler, Edward P., and A. E. Goodman. Compression braking system for internal combustion engines. 2,744,510, 5–8–56, Cl. 123—97.

Uarco, Inc.: *See*—
Jensen, Louis. 2,744,768.

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Classification of Designs

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OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
May 8, 1956 Volume 706 Number 2

TRADEMARKS

NOTICES

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 128,072 (Glen=Tex), Glensder Textile Co., Republished by Glensder Textile Corp., Veiling, netting, chiffons, georgettes, and laces; **TM 378,100** (Glentex), same, Ladies' scarfs and handkerchiefs; **TM 328,558**, same, Brows & Jacobson, Inc., Republished by Glensder Textile Corp., Women's and children's coats, **filed** Apr. 9, 1956, D. C., S. D. N. Y., Doc. 108/301, *Glensder Textile Corp.* v. *Glen-Tex Mills Inc.*

TM 176,408, TM 220,294, TM 377,505 (Esso), Standard Oil Co. of N. J., Refined, semirefined, and unrefined oils made from petroleum, etc.; **TM 347,535**, same, Asphalt; **TM 354,294**, same, Leather oil; **TM 370,870, TM 376,515**, same, Liquid gloss and floor dressing, etc.; **TM 376,887**, same, Anti-freeze compounds, leak stopping and rust preventing compounds; **TM 377,316**, same, Leather oils; canned or bottled liquid petroleum; spot removers and dry cleaners, etc.; **TM 258,648**, same, Esso Standard Oil Co., Liquid gloss and floor dressing; **TM 280,830**, same, Glass pump globes and lenses thereof; **TM 282,259**, same, Dispensing pumps and parts thereof; **TM 355,741**, same, Gilbert & Barker Mfg. Co., Oil burners, combination boiler burner units, etc.; **TM 306,182** (Essoheat), Esso Standard Oil Co., Fuel oils; **TM 438,578** ("E" within an oval design), Penola Inc., Refined, semirefined, and unrefined oils made from petroleum, etc.; **TM 505,830**, same, Insecticides, **filed** Mar. 30, 1956, D. C., S. D. N. Y., Doc. 108/199, *Esso Standard Oil Co.* v. *Eastern Petroleum Prod. Co. et al.*

TM 220,294. (See TM 176,408.)

TM 258,648. (See TM 176,408.)

TM 280,830. (See TM 176,408.)

TM 282,259. (See TM 176,408.)

TM 306,182. (See TM 176,408.)

TM 328,558. (See TM 128,072.)

TM 340,912 (Par-T-Pak), Nehi, Inc., Nonalcoholic, maltless beverages sold as soft drinks, etc., **filed** Mar. 27, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c576, *Par-T-Pak Royal Crown Corp.* v. *Northwestern Beverage Co.*

TM 341,330, TM 553,794 ("Ballantine's," etc. and design), **TM 508,704** (Ballantine's), George Ballantine & Son, Ltd., Whisky, **filed** Jan. 24, 1956, D. C., E. D. Mo. (St. Louis), Doc. 10591(2), *George Ballantine & Son, Ltd.* v. *Peoples Liquor, Inc., et al.* Consent decree; defendants enjoined and restrained from use of names "Ballantyne," "Walter Ballantyne & Son," etc. Mar. 22, 1956.

TM 347,535. (See TM 176,408.)

TM 354,294. (See TM 176,408.)

TM 355,741. (See TM 176,408.)

TM 370,870. (See TM 176,408.)

TM 372,767 ("Librascope" and design), L. W. Imm, Balance computers, etc.; **TM 587,287**, same, Librascope, Inc., same; **TM 584,648**, same, Boring machines, etc.; **TM 612,471** (S. N. 667,316), same, Magnetic amplifiers, etc., **filed** Dec. 7, 1955, D. C. N. J. (Newark), Doc. 1134/55, *Librascope, Inc.* v. *Labscope, Inc.* Stipulation and order of dismissal Mar. 28, 1956.

TM 376,515. (See TM 176,408.)

TM 376,887. (See TM 176,408.)

TM 377,316. (See TM 176,408.)

TM 377,505. (See TM 176,408.)

TM 378,100. (See TM 128,072.)

TM 426,168 (Sealy), Sealy, Inc., Mattresses and sofa beds, studio couches, and upholstered chairs; **TM 433,307** ("Sealy Rest," etc. and design), same, Mattresses and box springs,

CONDITION OF TRADEMARK APPLICATIONS AS OF APRIL 13, 1956

Total number of applications awaiting action [excluding renewals and Sec. 12 (c)] 8,648
Date of oldest new application ..... Sept. 15, 1955
Date of oldest amended application ..... Dec. 13, 1955

MERCHANT, JOHN, Director, Trademark Examining Operation

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application	
	New	Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	11-30-55	1-11-56
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	9-15-55	12-15-55
III. WENDT, C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	9-21-55	12-13-55
Renewals (All Classes)	2-10-56	3-13-56
Sec. 12 (c) Publications (All Classes)	2-13-56	3-13-56

Applications Filed During Week Ending April 13, 1956—445

Registrations Issued ..... 325—No. 626,403 to No. 626,727
Renewals Issued 58

filed Apr. 6, 1956, D. C., S. D. N. Y., Doc. 108/289, *Sealy, Inc. v. Sealy Shoulder Pad Corp.*

TM 423,207. (See TM 426,168.)

TM 438,578. (See TM 176,408.)

TM 505,830. (See TM 176,408.)

TM 508,704. (See TM 341,330.)

TM 535,416 (Woodcrest), J. R. Wood & Sons, Inc., Finger rings, included by corrected notice, filed Feb. 27, 1956, D. C., S. D. N. Y., Doc. 107/193, *J. R. Wood and Sons, Inc. v. Reese Jewelry Corp.*

TM 542,748 (Wafex), E. A. Ferguson, Appetite satient, a composition effective to curb one's appetite for fattening foods; **2,714,083**, E. A. Ferguson, Jr., Appetite satient, filed Feb. 29, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16314, *Edgar A. Ferguson, Jr., et al. v. Frank Anderson Inc. et al.* Consent judgment Apr. 6, 1956.

TM 544,106 (Honey debs), Holiday Casuals, Shoes made of straw and linen fabrics for women and children, filed July 14, 1952, D. C., S. D. N. Y., Doc. 77/155, *Holiday Casuals, Inc. v. M. Beckerman & Sons, Inc., et al.* Stipulation and order of discontinuance Apr. 5, 1956.

TM 553,794. (See TM 341,330.)

TM 561,593 ("Perma Knit-Pleat" and design), **TM 576,395** ("Flare Knit" and design), Lass O'Scotland, Ltd., Knitted skirts, suits, dresses, blouses, jackets and coats for women, misses, and children; **2,599,168**, S. Feldman, Pleated fabric and garment made of same; **Des. 176,612**, same, Skirt or similar article; **2,619,819**, **2,622,423**, **2,624,186**, same, Knitted garment, filed Apr. 2, 1956, D. C., S. D. N. Y., Doc. 108/209, *Lass O'Scotland, Ltd., et al. v. Kimberly Knit Wear, Inc., et al.*

TM 576,395. (See TM 561,593.)

TM 582,839 (Reclu), Reclu Sales Co., Pharmaceutical preparation used for relief of hyperacidity of the stomach, etc., filed Dec. 1, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 19111–WM, *Reclu Drug Co., Ltd. v. The Reclu Co. et al.* Consent judgment; trademark "Reclu" and registration held valid and infringed; defendants restrained from use of trademark "Reclu" and trade name "The Reclu Co." (notice Mar. 21, 1956).

TM 584,648. (See TM 372,767.)

TM 587,287. (See TM 372,767.)

TM 606,113 (Planned Parenthood), Planned Parenthood Federation of America, Inc., Encouraging research, etc., filed Apr. 6, 1956, D. C., S. D. N. Y., Doc. 108/279, *Planned Parenthood Federation of America v. Joseph M. Samostie et al.*

TM 612,471. (See TM 372,767.)

TM 613,699 (Emba), Mutation Mink Breeders Association, Mink fur pelts, filed Sept. 29, 1955, D. C., S. D. Iowa (Des Moines), Doc. 3/647, *Mutation Mink Breeders Asso. v. Younker Brothers, Inc.* Order of dismissal without prejudice (notice Mar. 16, 1956).

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.

As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 689,492. Imperial Chemical Industries Limited, London, England. Filed June 14, 1955.

ALKATHENE

Owner of British Reg. No. 612,938, dated Oct. 1, 1940; and of U. S. Reg. No. 409,013.

For Plastics in the Form of Rods, Tubes, Sheet, and Powders.

SN 689,675. Texas Sesame Seed Growers, Paris, Tex. Filed June 16, 1955.

"Shatterproof"

For Sesame Seed.

First use Apr. 4, 1955.

SN 690,313. Pacific Budgie Association, Sacramento, Calif. Filed June 27, 1955.



For Budgies.

First use Jan. 1, 1955.

SN 690,382. Hudson Foam Latex Company, Yonkers, N. Y. Filed June 28 1955.

PERMAFOAM

For Polyester Foam Padding in Sheets or Rolls.

First use August 1951.

SN 693,350. Aircraft-Marine Products, Inc., Harrisburg, Pa. Filed Aug. 19, 1955.

AMP

For Extruded Plastic Tubing for Further Fabrication and Cast Film for Further Fabrication.

First use May 14, 1943, on cast film for further fabrication.

SN 693,523. Callisons, Inc., Seattle, Wash. Filed Aug. 23, 1955.

Little John

Owner of Reg. No. 383,828.

For Cut Decorative Evergreen Foliage.

First use during August 1928.

SN 693,537. Durethene Corporation, Chicago, Ill. Filed Aug. 23, 1955.

DURETHENE

For Polyethylene Plastic Film in the Form of Tubing and Sheets, and Embossed Polyethylene Film, Both Clear and Colored.

First use Apr. 29, 1949.

CLASS 2

SN 684,612. Wolcospray, Inc., Hartford, Conn. Filed Mar. 30, 1955.

WOLCOSPRAY

For Dispensers of the Aerosol Type and Components Thereof Including Containers and Applicator Heads.

First use Mar. 2, 1955.

SN 686,689. Plax Corporation, West Hartford, Conn. Filed May 2, 1955.



Owner of Reg. Nos. 548,558, 568,820, and 571,279.

For Plastic Bottles.

First use Dec. 15, 1954.

SN 692,382. Chase Bottle & Supply Corp., New York, N. Y. Filed Aug. 3, 1955.

POLYSPRAY

For Plastic Squeeze Bottles.

First use Mar. 10, 1955.

SN 695,301. Gooderham & Worts Limited, Detroit, Mich. Filed Sept. 26, 1955.

HOSTRAY

For Decanter Serving Tray.

First use on or about Aug. 1, 1955.

SN 696,760. Anderson-Wills Sales Company, Sturbridge, Mass. Filed Oct. 20, 1955.



For Containers Particularly Adapted for Attachment to Vehicles for Receiving Waste.

First use Aug. 2, 1955.

SN 289. Amea Harris Neville Co., San Francisco, Calif. Filed Jan. 9, 1956.

SHO-ALL

Owner of Reg. No. 288,591.
For Polyethylene Bags.
First use Oct. 27, 1954.

SN 388. Marshall I. Williamson, New Haven, Conn. Filed Jan. 9, 1956.

BEVELEDGE

For Folding Cardboard and Paperboard Boxes and Cartons.
First use Dec. 15, 1955.

SN 943. Atlas Plywood Corporation, Boston, Mass. Filed Jan. 18, 1956.

SAF-T-CLEAT

For Packing Cases.
First use August 1953.

SN 1,021. The Sherwin-Williams Company, Cleveland, Ohio. Filed Jan. 18, 1956.

KEM

For Paint Trays To Be Used With Roller Applicators.
First use Mar. 30, 1952.

SN 1,069. General Textile Mills, Inc., New York, N. Y. Filed Jan. 19, 1956.

GENTEXITE

Owner of Reg. Nos. 409,173 and 418,501.
For Containers for Parachute Packs.
First use March 1943.

SN 1,096. The Lord Baltimore Press, Incorporated, Baltimore, Md. Filed Jan. 19, 1956.

PAR-A-GLO

For Boxes and Cartons, Both Made of Cardboard or Paper.
First use Oct. 1, 1954.

SN 1,097. The Lord Baltimore Press, Incorporated, Baltimore, Md. Filed Jan. 19, 1956.

PAR-A-VEL

For Boxes and Cartons, Both Made of Cardboard or Paper.
First use Sept. 17, 1954.

CLASS 3

SN 664,435. Fran-Stef Manufacturing Company, New York, N. Y. Filed Apr. 13, 1954.

Coin-ette

For Billfolds, Wallets, and Purses.
First use Mar. 1, 1954.

SN 680,115. John G. Treacy & Co., New York, N. Y. Filed Jan. 18, 1955. Sec. 2(f).

Fa-cile Frame

The word "Frame" is disclaimed apart from the mark.
Owner of Reg. No. 369,628.
For Handbag Frames and Parts Thereof.
First use September 1945.

SN 700,467. Magnex, Inc., Denver, Colo. Filed Dec. 22, 1955.

MONEY MINDER

For Clips for Paper Money and Other Papers.
First use July 13, 1955.

SN 700,905. Schoenfeld & Wolf, Inc., New York, N. Y. Filed Dec. 30, 1955.

Sparkalite

For Ladies' Handbags of Leather, Synthetic Plastics, Fabric, and Combinations Thereof.
First use Oct. 4, 1954.

CLASS 4

SN 669,894. Walter Leskowitz, d. b. a. Jet Products, Butler, Pa. Filed July 13, 1954.

Jet Glaze

For Combination Automobile Cleaner and Polishing Material.
First use June 1, 1954.

SN 680,506. American Copper Sponge Co., Inc., Providence, R. I. Filed Jan. 26, 1955.

TERRY TEX

For Terry Cloth Pads Impregnated With an Abrasive Compound for Cleaning and Scouring Pots and Pans.
First use Feb. 15, 1951.

SN 681,798. K. J. Quinn & Co. Inc., Malden, Mass. Filed Feb. 16, 1955.

SPIT-SHINE

For Lustre Imparting Liquid for Use by itself or in Conjunction With Shoe Polishes.
First use Dec. 13, 1954.

SN 692,368. American Optical Company, Southbridge, Mass. Filed Aug. 3, 1955.

Owner of Reg. Nos. 268,217, 444,749, and others.
For Abrasive and Polishing Materials Including Wax for Polishers and Pitch Blocking Materials Used for Blocking Lenses During Polishing.
First use on or about Sept. 11, 1944.

SN 692,584. Henry V. Dum, Houston, Tex. Filed Aug. 8, 1955.

NU SPRA

For Composition for Dressing, Cleaning, and Treating Rubber and Metal Surfaces.
First use April 1953.

SN 693,466. Leatherfoam, Inc., South Bend, Ind. Filed Aug. 22, 1955.

Lustrefoam

For Preparation for Cleaning and Polishing Leather and Artificial Leather.
First use June 20, 1955.

SN 697,691. Old Colony Furniture Company, Inc., Nashua, N. H. Filed Nov. 4, 1955.

"PATEEN"

For Furniture Polish.
First use Oct. 24, 1955.

CLASS 5

SN 652,567. United States Plywood Corporation, New York, N. Y. Filed Aug. 31, 1953. Sec. 2(f).

WIZARD with WOOD

For Resin Adhesives, Glues, and Adhesive Cements.
First use on or about May 1950.

SN 673,949. Starch Products Limited, Langley, Slough, England. Filed Sept. 28, 1954.

VISCOGEL

For Adhesives for Stationery Use, Adhesives for Industrial Use, Wall Paper Paste Powder, Wall Size, Binding Agents for Colors and for Paints and Mordants, Core and Molding Sand Binders, and Distemper Binders.
First use in 1946.

SN 677,061. Heco Envelope Company, Chicago, Ill. Filed Nov. 22, 1954.

Magic Seal

For Transparent Plastic Adhesive for Envelope Flaps and the Like.
First use on or about Nov. 15, 1953.

SN 683,556. Rexford Paper Company, Milwaukee, Wis. Filed Mar. 15, 1955.

Reddy Tape

No claim is made to the word "Tape" apart from the mark as shown.
For Pressure Sensitive Tape.
First use Feb. 18, 1955.

SN 683,594. Hudson Pulp & Paper Corp., New York, N. Y. Filed Mar. 16, 1955.

Fastweld

For Reinforced Gummed Sealing Tape.
First use Mar. 5, 1955.

SN 684,304. Haskelite Manufacturing Corporation, Grand Rapids, Mich. Filed Mar. 28 1955.

HASKO-BOND

For Adhesive in Flowable Form Consisting Primarily of Synthetic Resin Materials for Bonding Synthetic Resin Materials to Each Other or to Other Materials.
First use Feb. 18, 1955.

SN 693,397. Rogers Isinglass and Glue Company, Gloucester, Mass. Filed Aug. 19, 1955. Sec. 2(f).

ROGERS

Owner of Reg. Nos. 229,021, 511,835, and others.
For Dry and Liquid Adhesives, Viz: Glues, Cement, Mending Fluid, Library Pastes, Mucilage, and Isinglass for Use as an Adhesive.
First use Sept. 18, 1913.

SN 693,485. Permatex Company, Inc., Brooklyn, N. Y. Filed Aug. 22, 1955.

SPRAY-A-GASKET

Owner of Reg. No. 547,708.
For Fast Drying and Hard Setting, and Non-Hardening and Pliable Adhesive in Liquid Form Used in the Automotive Industry for Keeping Gaskets in Place.
First use July 26, 1955.

SN 694,731. Meehanite Metal Corporation, New Rochelle, N. Y. Filed Sept. 15, 1955.

SODASET

For Binders Used in Making Foundry Molds and Cores.
First use May 6, 1955.

SN 695,048. Thompson-Winchester Co., Inc., d. b. a. Thompson's, Boston, Mass. Filed Sept. 20, 1955.

RUG-TITE

For Adhesive Backing Affixed to Underside of Rugs To Prevent Skidding.
First use Jan. 17, 1955.

SN 697,915. Eugene K. Krakaur, Patchogue, N. Y. Filed Nov. 8, 1955.

Advertape

For Adhesive Gummed Paper Tape Used for Wrapping and Packaging.
First use July 1932.

CLASS 6

SN 670,284. Heyden Chemical Corporation, New York, N. Y. Filed July 20, 1954.

HC-1281

For Herbicides.
First use on or about June 18, 1954.

SN 671,460. Alex F. W. Olze, d. b. a. Anders Chemical Company, East Rutherford, N. J. Filed Aug. 10, 1954.

ANDO

Owner of Reg. No. 554,213.
For Textile Printing Colors.
First use January 1938.

SN 682,551. General Electric Company, Schenectady, N. Y. Filed Mar. 1, 1955.

Alkanex

For Polyester Materials Used for Coating, Impregnating, Insulating and Various Other Applications in the Industrial Arts.
First use Feb. 11, 1955.

SN 682,850. Aquatrols Corporation of America, Wilmington, Del. Filed Mar. 7, 1955.



For Non-Ionic Surface-Active Wetting Agent for Promoting the Penetration, Absorption, and Retention of Moisture in the Soil.
First use Jan. 10, 1955.

SN 683,136. Refined Products Corporation, Lyndhurst, N. J. Filed Mar. 9, 1955.

PERMA SILENE

For Water-Repellent Compositions for Use in Textile Treatment.
First use June 23, 1954.

SN 683,620. Quik Cal Company, Salem, Ill. Filed Mar. 16, 1955.



The figure representative of a gas flame is in the color of blue, and the shadow of the flame is in a darker shade of blue approaching black in color.
For Liquid Petroleum and Bottled Gas.
First use Mar. 11, 1955.

SN 684,947. Koppers Company, Inc., Pittsburgh, Pa. Filed Apr. 5, 1955.

DYLITE

For Polystyrene.
First use Mar. 18, 1955.

SN 686,262. American Cyanamid Company, New York, N. Y. Filed Apr. 26, 1955.

CYPAN

For Chemical Composition Adapted for Use as a Drilling Mud Conditioner.
First use Apr. 15, 1955.

SN 687,397. National Shoe Products Corporation, Boston, Mass. Filed May 12, 1955.

FOUR ★★★★ STAR

For Vegetable and Animal Waxes Used in Shoe Making.
First use Dec. 20, 1954.

SN 690,640. B. G. Pratt Company, Paterson, N. J. Filed July 1, 1955.

Shot-Gun

For Insecticidal and Fungicidal Garden Sprays and Dusts.
First use Apr. 19, 1955.

SN 690,682. Chipman Chemical Company, Inc., Bound Brook, N. J. Filed July 5, 1955.

CHLOREA

For Grass and Weed-Killing Chemical.
First use Dec. 16, 1954.

SN 691,500. Monolith Portland Midwest Company, Los Angeles, Calif. Filed July 18, 1955.

MONOLITH

For Sodium Aluminate Solids and Alumina.
First use Apr. 8, 1954.

SN 2,475. Jacques Wolf & Co., Clifton, N. J. Filed Jan. 17, 1956.

PADASOL

For Sodium Alkyl Aryl Sulphonate Used in the Dyebath for Dispersion of Dyestuffs.
First use Feb. 9, 1948.

CLASS 10

SN 678,333. Lawn-Tex, Inc., Chicago, Ill. Filed Dec. 14, 1954.

CHICAGRO

For Fertilizer.
First use on or about Nov. 15, 1954.

SN 694,675. Societe Anonyme des Manufactures des Glaces et Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Filed Sept. 14, 1955.



For Complex Granulated Fertilizers and Fertilizer Mixtures.
First use during March 1949; in commerce since April 1951.

SN 695,056. Garfield Williamson, Inc., Jersey City, N. J. Filed Sept. 20, 1955.

imp

For Specialty Fertilizers—Namely, "Rose Food," "Bulb Food," "Mum Food," and "Rhododendron and Azalea Food."
First use 1935.

CLASS 12

SN 676,576. "De Cirkel" N. V., Zwanenburg, Haarlemmermeer, Netherlands. Filed Sept. 9, 1954.

HEXAGON

Owner of Dutch Reg. No. 117,629, dated Feb. 5, 1954.
For Perforated Structural Angles of Metal and Metal Panels for Use in the Construction of Shelves.

SN 677,517. Mauser Kommandit-Gesellschaft, Koeln-Ehrenfeld, Germany. Filed Nov. 30, 1954. Sec. 2(f).

MAUSER

Owner of German Reg. No. 637,245, dated Apr. 22, 1953.
For Construction Materials—Namely, Window Frames of Steel, Door Frames of Steel, Steel Doors, Building Elements of Profiled Steel, Building Elements of Profiled Metal, Building Elements of Profiled Light Weight Materials, Building Slabs, Framing for Light Constructions, Constructional Steel Cloth of Wire, and Constructional Steel Cloth of Profiled Material.
First use January 1900; in commerce since March 1905.

SN 683,065. Solar Aircraft Company, San Diego, Calif. Filed Mar. 8, 1955.

SOLITE

For Metallic Sandwich Structures Having a Honeycomb Core.
First use Feb. 17, 1955.

SN 684,207. The Flintkote Company, New York, N. Y. Filed Mar. 25, 1955.



Owner of Reg. Nos. 250,529, 282,647, and others.
For Asbestos-Cement Siding and Roofing, Insulating Siding, Asphalt Shingles, Mineral Surface Roll Roofing, Smooth Sur-

face Roll Roofing, Cold Process Built Up Roofing Materials, Hot Built Up Roofing Materials, Decorative Insulation Board Products, Perforated Tile, Sheathing Board, Insulation Lathe, Building Board, Roofing Insulation, Shingle Backer, Insulating Wool, Hardboard, Perforated Hardboard Panels, Hardboard Siding, Sound-Deadening Felts, Spray-On Sound Deadeners, Mastic Flooring, Mastic Insulation, Deck Covering and Underlayment, Marine Insulation, Bilge, Bulkhead and Tank Insulation, Asphalt Saturated Membrane Caulking Compounds, Coal Tar Emulsions, Floor Tile Underlayments, Spandrel Cloth, Driveway and Parking Lot Surface Material, Jet-Fuel Resistant Joint Sealer for Airfield Pavement, Oil-Resistant Surface Sealer for Airfields, Rubber-Asphalt Joint Sealer for Concrete Pavement, Rubber-Asphalt and Rubber-Tar Compounded Binders for Pavement Surfacings, Plastic-Asbestos Wall Tile, Asphalt Floor Tile, Vinyl Plastic-Asbestos Floor Tile, Plastic-Asbestos Floor Tile, Greaseproof Floor Tile, Trim, Bases and Accessory Strips for Tile.
First use 1938.

SN 686,466. Anita B. Lentz, d. b. a. Bazer-Lentz Co., Wichita, Kans. Filed Apr. 28, 1955.

Light Touch

For Window Valances Constructed Principally of Wood.
First use Mar. 24, 1955.

SN 686,725. The Celotex Corporation, Chicago, Ill. Filed May 3, 1955.

TEXBORD

For Fiberboard Products—Namely, Siding, Panels, and the Like.
First use Apr. 19, 1955.

SN 686,726. Chapman Manufacturing Co., Inc., Corvallis, Oreg. Filed May 3, 1955.

PLANK-ette

For Textured Hardboard in Plank-Type Design for Construction Purposes.
First use Feb. 11, 1955.

SN 686,920. The Rapids-Standard Company, Inc., Grand Rapids, Mich. Filed May 5, 1955.

RAPISTEEL

For Structural Shapes of Various Cross Sections Sold in Unassembled or Partially Assembled Condition.
First use March 1955.

SN 687,402. Orangeburg Manufacturing Co., Inc., Orangeburg, N. Y. Filed May 12, 1955. Sec. 2(f) as to "Orangeburg."



The representation of the goods is disclaimed. The mark consists of a circumferential band of a metallic color having the feature "Orangeburg" displayed thereon. Owner of Reg. Nos. 360,511, 515,149, and others.
For Conduit, Ducts, and Pipes Made of Fibre Composition.
First use Feb. 1, 1955.

SN 687,452. Concrete Forms Corporation, Chattanooga, Tenn. Filed May 13, 1955.

TIME-SAVER

For Concrete Forms and Parts and Accessories Therefor.
First use on or about Apr. 1, 1954.

SN 687,509. Sunshade Corp., Buffalo, N. Y. Filed May 13, 1955.

Duo temp

For Aluminum Combination Storm and Screen Windows.
First use Dec. 1, 1953.

SN 688,291. Acme Highway Products Corporation, Buffalo, N. Y. Filed May 26, 1955.

ACME HIGHWAY PRODUCTS CORPORATION

No registration rights are claimed for the words "Highway Products Corporation" except when used in connection with the mark as shown.
For Parts for Use in Highway Construction—Namely, Joint Supports, Highway Guard Railings, and Parts Thereof.
First use Apr. 10, 1955.

SN 688,556. Metal Engineering Co., Chicago, Ill. Filed May 31, 1955.

KWIK FIT

For Windows, Storm Sash, Window Screens, Storm Doors, Screen Doors, and Packaged Kits Containing the Aforesaid Articles in Knockdown Condition.
First use on or about Nov. 16, 1954.

SN 688,675. Skyline Plastic Molding, Inc., Titusville, Pa. Filed June 1, 1955.

MONTEREY

For Plastic Wall Tile.
First use on or about November 1954.

SN 689,263. Atlas Plywood Corporation, Boston, Mass. Filed June 10, 1955.

ATLATOX

Owner of Reg. No. 405,496.
For Plywood.
First use July 14, 1943.

SN 689,278. Globe Roofing Products Co., Inc., Whiting, Ind. Filed June 10, 1955.

Super-Lok

Owner of Reg. No. 607,526.
For Mineral Surfaced Asphalt Composition Shingles.
First use May 23, 1955.

SN 691,462. Globe Roofing Products Co., Whiting, Ind. Filed July 18, 1955.

DeLuxe 300

For Asphalt Composition Shingles.
First use June 1, 1955.

SN 693,308. Commissary Corporation, Wooster, Ohio. Filed Aug. 18, 1955.

dairy Isle

Owner of Reg. No. 567,732.
For Buildings—Namely, Prefabricated Roadside Dairy Bars and Food Stands and Parts Thereof, and Fixtures for Such Buildings.
First use on or about Oct. 10, 1951.

SN 694,225. M. C. Gill Corporation, El Monte, Calif. Filed Sept. 6, 1955.



For Reinforced Product Plastics—Namely, Laminates, Consisting of Plastics of the Polyester Type Resins and Natural or Synthetic Fibers Prepared for Structural or Decorative Use.
First use Apr. 1, 1951.

SN 694,638. Big River Industries, Inc., Baton Rouge, La. Filed Sept. 14, 1955.

GRAVELite

For Light Weight Aggregate Adapted for Use in Concrete Constructions.
First use on or about July 1, 1955.

SN 695,505. Texas Industries, Inc., Dallas, Tex. Filed Sept. 28, 1955.

CAÑON BRICK

The word "Brick" is disclaimed apart from the mark as shown.
For Building Bricks.
First use Aug. 16, 1955.

SN 696,372. Neo Primer Products Co., Detroit, Mich. Filed Oct. 13, 1955.

NEO GLIDE

For Guide Moldings and Sliding Doors.
First use Dec. 21, 1954.

SN 696,749. The A. D. Treves Company, New York, N. Y. Filed Oct. 19, 1955.

A D T

For Lumber.
First use Aug. 25, 1947.

SN 700,259. Security Sash & Screen Company, Detroit, Mich. Filed Dec. 19, 1955.

RFT

For Aluminum Storm Windows and Doors.
First use Sept. 28, 1955.

CLASS 13

SN 680,397. McRae Corporation, Glendale, Calif., to Coppus Engineering Corporation, Worcester, Mass. Filed Jan. 24, 1955.

SENTRY

For Valves for the Control of Fluids and Gases.
First use 1946.

SN 681,010. Gourmet Aluminum Co. Ltd., New York, N. Y. Filed Feb. 3, 1955.

ALADDIN magic Cooker

For Cooking Vessels.
First use on or about July 1, 1953.

SN 683,166. Armbrust Chain Company, Providence, R. I. Filed Mar. 10, 1955.

LUSTERLYTE

For Aluminum Chains Primarily for Use With Handbags and the Like.
First use on or about Dec. 1, 1954.

SN 686,844. The Pollak Steel Company, Evendale, Ohio. Filed May 4, 1955. Sec. 2(f).

POLLAK STUDTEE

Owner of Reg. Nos. 519,797 and 520,932.
For Metal Fence Posts.
First use Oct. 23, 1946.

SN 686,845. The Pollak Steel Company, Evendale, Ohio. Filed May 4, 1955. Sec. 2(f).

STUDTEE

For Metal Fence Posts.
First use Sept. 24, 1946.

SN 689,794. Adams City Manufacturing Company, Adams City, Colo. Filed June 20, 1955.

OB-ROUND

For Pre-Cast Concrete Plumbing Supplies Including Grease Traps, Septic Tanks.
First use Jan. 10, 1955.

SN 693,827. Hayes Spray Gun Company, Pasadena, Calif. Filed Aug. 29, 1955.

Air-i-gator

For Faucet Aerators.
First use 1947.

SN 695,617. The Delron Company, Inc., South Gate, Calif. Filed Sept. 30, 1955.

Fasco

For Fastener Devices for Securement of Various Structures to Light-Weight Cellular Panels Formed With Spaced Walls.
First use on or about Mar. 7, 1952.

SN 695,795. Aluminum Plumbing Fixture Corp., San Francisco, Calif. Filed Oct. 4, 1955.

SUPER SECUR WARE

For Water Closet Bowls, Lavatories, Combination Lavatories and Water Closets, and Valves Therefor.
First use Mar. 24, 1955.

SN 700,804. Market Forge Company, Everett, Mass. Filed Dec. 29, 1955.

MARK-FORE

For Pressure Cookers.
First use Dec. 15, 1955.

SN 700,816. Rockwell Manufacturing Company, Pittsburgh, Pa. Filed Dec. 29, 1955.

HYPRESPHERE

Owner of Reg. Nos. 347,710, 538,183, and 540,013.
For Valves.
First use Apr. 16, 1955.

SN 700,818. Security Sash & Screen Company, Detroit, Mich. Filed Dec. 29, 1955.

Security

For Hardware for Combination Aluminum Storm Windows and Screens.
First use January 1949.

SN 77. Master Pneumatic, Inc., Detroit, Mich. Filed Jan. 3, 1956.

HYDRO-JECTOR

For Device for Collecting and Removing Water and Extraneous Material From Pneumatic Systems.
First use Nov. 21, 1955.

CLASS 14

SN 685,085. American Nickeloid Company, Peru, Ill. Filed Apr. 7, 1955.



The drawing is lined for red.
For Sheet Metal Having a Finish of Baked Enamel or Other Protective or Decorative Coating.
First use on or about Mar. 26, 1955.

CLASS 15

SN 698,811. The Texas Company, New York, N. Y. Filed Nov. 23, 1955.

AIRTAC

For Lubricating Oils.
First use Aug. 10, 1954.

SN 698,813. The Texas Company, New York, N. Y. Filed Nov. 23, 1955.

MARQUENCH

For Lubricating Oils.
First use Nov. 13, 1953.

SN 698,814. The Texas Company, New York, N. Y. Filed Nov. 23, 1955.

MOLYTEX

For Lubricating Greases.
First use Oct. 30, 1954.

SN 699,159. Monsanto Chemical Company, St. Louis, Mo. Filed Nov. 30, 1955.

MONSANTO

Owner of Reg. Nos. 315,300, 549,401, and others.
For Hydraulic Oils, Lubricants, Lubricant Additives, Burner Fuel Additives, and Engine Fuel Additives.
First use July 1945.

SN 699,334. Monsanto Chemical Company, St. Louis, Mo. Filed Dec. 2, 1955.

Lionite

Owner of Reg. Nos. 333,369, 350,000, and others.
For Motor Fuel Additive.
First use Oct. 10, 1955.

SN 699,518. Muench-Kreuzer Candle Co., Inc., Syracuse, N. Y. Filed Dec. 6, 1955.



For Candles.
First use prior to 1925.

CLASS 16

SN 651,657. Glasurit-Werke, M. Winkelmann, Aktiengesellschaft, Hamburg, Germany. Filed Aug. 11, 1953.



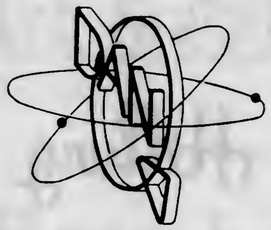
Owner of German Reg. No. 491,152, dated Feb. 2, 1937.
For Lacquers; Bronze Paints; Stains; Protective Coating Waxes; Preservative Coating Compositions for Linoleum and Other Similar Materials, Metals, Woods, and Stone; and Varnishes.

SN 657,529. Gunther Wagner, Hannover, Germany. Filed Dec. 7, 1953.



Owner of German Reg. No. 311,515, dated Feb. 20, 1924.
For Water Colors, Oil Paints, Technical Oils for Painting Purposes, Transparent Majolica Colors, and Enamel Colors, for Use by Artists.

SN 679,651. Dan Cu Chemical Co., Oklahoma City, Okla. Filed Jan. 10, 1955.



For Various Transparent Protective Coatings Capable of Forming an Integrate Part of Surfaces to Which They Are Applied for Use on Precious, Semi-Precious, and Artificial Stones in Jewelry, Optical Lenses, Display Cases and Mirrors, Photographic Lens and Windshields.
First use Dec. 15, 1954.

SN 689,124. Deutsche Amphibolin-Werke von Robert Murjahn, Ober-Ramstadt, Hessen, Germany. Filed June 8, 1955.

CAPAROL

Owner of German Reg. No. 385,614, dated May 1, 1928.
For Varnishes, Lacquers, and Woodstains.

CLASS 17

SN 698,935. R. R. Tobin Tobacco Co., Detroit, Mich. Filed Nov. 25, 1955.

Carriage Trade

For Pipe Tobacco.
First use Dec. 8, 1950.

CLASS 18

SN 679,631. John Beard Memorial Foundation, San Francisco, Calif. Filed Jan. 10, 1955.

ARMENICIN

For Enzymic Extract of Various Seeds for the Prevention of Intestinal Fermentation and Putrefaction.
First use Nov. 3, 1954.

SN 681,594. Hannah Laboratories, Inc., Carmel Valley, Calif. Filed Feb. 14, 1955.

COO

For Ointment for Relief of Chafing, Diaper Rash, and Minor Skin Irritations.
First use Nov. 10, 1952.

SN 683,114. Gray Pharmaceutical Co., Inc., Newton, Mass. Filed Mar. 9, 1955.

Cerebratonin

For Vitamin Preparation.
First use Mar. 1, 1955.

SN 684,045. Hellwig, Inc., Chicago, Ill. Filed Mar. 23, 1955. Sec. 2(f).

Hellwig

For Neutral Sodium Para-Amino Salicylate Dihydrate, Para-Amino Salicylic Acid, Sodium Para-Amino Salicylate Used Alone or in Conjunction With Other Materials in Treating Tuberculosis, Phenesin, Used for Treatment of Muscle Spasms and To Reduce Tremor of Hands, Aminophylline Tablets Used for Treatment of Heart and Bronchial Disorders.
First use Jan. 1, 1950.

SN 684,675. Physicians and Hospitals Supply Company, Inc., d. b. a. Ulmer Pharmacal Company, Minneapolis, Minn. Filed Mar. 31, 1955. Sec. 2(f).

BENZO-SAL

For Medical Preparation—Namely, a Fungicidal Ointment for Treatment of Fungus Infections of the Skin.
First use Aug. 1, 1934.

SN 684,909. George Zofchak, d. b. a. Tatra Company, Morrisville, Pa. Filed Apr. 4, 1955.

Ematea

For Herb Tea Having Laxative Properties.
First use April 1951.

SN 689,510. The Norwich Pharmacal Company, d. b. a. Eaton Laboratories, Norwich, N. Y. Filed June 14, 1955.

TRICOFURON

For Antibacterial Preparations for the Treatment of Vaginal Infections.
First use May 10, 1955.

SN 692,508. De Leon Laboratories, Inc., Atlanta, Ga. Filed Aug. 5, 1955.

DE TAL

For Anti-Spasmodic Preparation.
First use May 16, 1955.

SN 692,509. De Leon Laboratories, Inc., Atlanta, Ga. Filed Aug. 5, 1955.

NORMIN

For Anti-Depressant.
First use May 16, 1955.

SN 692,510. De Leon Laboratories, Inc., Atlanta, Ga. Filed Aug. 5, 1955.

SAL-C

For Anti-Rheumatic Preparation.
First use May 16, 1955.

SN 692,511. De Leon Laboratories, Inc., Atlanta, Ga. Filed Aug. 5, 1955.

STET CAPS

For Vitamin and Mineral Dietary Supplement.
First use May 16, 1955.

SN 692,588. Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. Filed Aug. 8, 1955.

REFAGAN

Owner of German Reg. No. 601,496, dated Oct. 3, 1950.
For Remedy Against Grippe.

SN 692,589. Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. Filed Aug. 8, 1955.

RESORMOL

Owner of German Reg. No. 609,954, dated Aug. 2, 1951.
For Antibiotic.

SN 694,779. Columbia Research Corp., New York, N. Y. Filed Sept. 16, 1955.

PROPEX

For Reducing Tablets.
First use Aug. 23, 1955.

SN 694,794. Max Geisler Bird Co., New York, N. Y. Filed Sept. 16, 1955.

petmycin

For Antibiotic Tablets for Ailing Parrakeets, Canaries, and All Cage Birds.
First use June 6, 1955.

SN 695,090. Clifford O. Hatfield, d. b. a. Vita-Metics Research, Los Angeles, Calif. Filed Sept. 21, 1955.

VITA-METICS

For Dietary Food Supplement Consisting of Vitamins and Minerals in Tablet Form.
First use Aug. 15, 1955.

SN 695,324. The S. E. Massengill Company, Bristol, Tenn. Filed Sept. 26, 1955.

CONAR

For Antihistamine, Antitussive Suspension.
First use Sept. 23, 1955.

SN 695,330. Jane Wharton Mitten, d. b. a. Derm Laboratories, Newark, N. J. Filed Sept. 26, 1955.

PIMPLEX

For Medicinal Compound or Lotion for External Treatment of Skin Irritations, Such as Pimples and Acne.
First use sometime in May 1945.

SN 695,365. Andrew G. Marin, d. b. a. A. G. Marin Pharmaceuticals, Miami, Fla. Filed Sept. 16, 1955.

NUTROP

For Anticholinergic-Antispasmodic With or Without Pentobarbital.
First use July 6, 1955.

SN 695,367. Andrew G. Marin, d. b. a. A. G. Marin Pharmaceuticals, Miami, Fla. Filed Sept. 16, 1955.

DRANOCHOL

For Hydrocholeretic-Antispasmodic.
First use July 11, 1955.

SN 695,911. The Gland-O-Lac Company, Omaha, Nebr. Filed Oct. 5, 1955.

PIG TEE

For Compound for Worming Pigs.
First use Sept. 19, 1955.

SN 696,056. Nepera Chemical Co., Inc., Nepera Park, N. Y. Filed Oct. 7, 1955.

CHOLEGYL

Owner of Reg. No. 572,767.
For Diuretic, Bronchodilator, and Coronary Dilator.
First use Aug. 25, 1955.

SN 696,115. The Central Pharmacal Company, Seymour, Ind. Filed Oct. 10, 1955.

NEOCYCLATE

For Salicylate Analgesic, Primarily for the Treatment of Rheumatic Fever and Rheumatoid Conditions.
First use Oct. 30, 1947.

SN 696,119. The Central Pharmacal Company, Seymour, Ind. Filed Oct. 10, 1955.

SYNOPHYLATE

For Cardiac Stimulant and Bronchial Dilator.
First use Jan. 2, 1948.

SN 696,276. Alberto J. Paparelli, d. b. a. San Pedro Laboratories, San Antonio, Tex. Filed Oct. 11, 1955.

SAL U

For Laxative Medicinal Preparation.
First use July 17, 1945.

CLASS 19

SN 660,597. Fred H. Koehler, San Mateo, Calif. Filed Feb. 4, 1954.

Kurb Kracker

For Curb Feelers.
First use October 1952.

SN 688,356. Royal Aircraft Corporation, West Allis, Wis. Filed May 26, 1955.

Royal Gull

For Airplanes and Structural Parts Thereof.
First use Feb. 15, 1955.

SN 695,598. Carl P. Ayers, d. b. a. Camad Specialty Company, Batavia, Ill. Filed Sept. 30, 1955.

LITTLE TRAVELER

For Self-Supported Rear Seat Extensions for Automobiles.
First use July 8, 1955.

SN 696,785. Favorit, Narodni Podnik, Rokycany, Czechoslovakia. Filed Oct. 20, 1955.

FAVORIT

Owner of Czechoslovakian Reg. No. 151,621, dated Sept. 22, 1954.
For Bicycles Including Racing Bicycles and Parts Thereof.

SN 696,786. Favorit, Narodni Podnik, Rokycany, Czechoslovakia. Filed Oct. 20, 1955.



The mark as shown in the drawing consists of a stylized letter "F" within a circle. Owner of Czechoslovakian Reg. No. 151,622, dated Sept. 22, 1954.
For Bicycles Including Racing Bicycles and Parts Thereof.

SN 187. Atlas Supply Company, Newark, N. J. Filed Jan. 5, 1956.

ATLAS

Owner of Reg. Nos. 291,757 and 511,917.
For Oil Filler Caps for Use on Internal Combustion Engines for Automobiles.
First use Nov. 30, 1955.

SN 768. Equipment Manufacturing, Inc., Detroit, Mich. Filed Jan. 16, 1956.

QUAD-O-MATIC

For Refuse Handling Bodies for Vehicles.
First use Jan. 5, 1951.

SN 921. Cedric C. Stack, d. b. a. Stack Mfg. Co., Elwood, Ind. Filed Jan. 17, 1956.

Stackson

For Baby Walker, Comprising a Wheeled Frame Adjustably Supporting a Fabric, Bucket-Seat With Leg Openings Therein.
First use Aug. 16, 1950.

SN 1,129. Cedric C. Stack, d. b. a. Stack Mfg. Co., Elwood, Ind. Filed Jan. 19, 1956.

"SPIDER"

For Baby Walker, Comprising a Wheeled Frame Adjustably Supporting a Fabric, Bucket-Seat With Leg Openings Therein.
First use Jan. 11, 1956.

CLASS 21

SN 685,893. Electro-Mech Corporation, Norwood, N. J. Filed Apr. 20, 1955.

Electro-Mech

For Electronic Controls Such as Flame Failure Protective Systems for Gas and/or Oil Burners; and Sequence, Interlock, Motor and Thermal Control Systems for Industrial Equipment and Processes.
First use June 7, 1954.

SN 687,012. Sprague Products Company, North Adams, Mass. Filed May 6, 1955.

CERAMIKITS

For Metal Cabinets Containing Varied Assortments of Electrical Capacitors.
First use Jan. 13, 1955.

SN 687,195. Freed Electronics and Controls Corporation, New York, N. Y. Filed May 10, 1955.

SCOTOTRON

For Dark-Trace Cathode-Ray Tubes.
First use Feb. 7, 1955.

SN 687,467. The Gray Manufacturing Company, Hartford, Conn. Filed May 13, 1955.

PDX

For Telephone Dictation Systems Inc.uding Central Station, Switchboard, and Sub-Station Components Thereof.
First use May 5, 1955.

SN 688,073. Peerless Fabrikkerne A/S, Copenhagen, Denmark. Filed May 23, 1955.

Perle

For Loudspeakers.
First use Mar. 7, 1955.

SN 688,281. Thermel, Inc., Chicago, Ill. Filed May 25, 1955.

THERMAPLATEN

Owner of Reg. No. 591,607.
For Electric Heating Elements and Cast-In Heating Units.
First use Feb. 22, 1950.

SN 688,283. Thermel, Inc., Chicago, Ill. Filed May 25, 1955.

THERMACARTRIDGE

Owner of Reg. No. 591,607.
For Electric Heating Elements and Heating Units.
First use Mar. 6, 1953.

SN 691,157. Sittler Corporation, Chicago, Ill. Filed July 12, 1955.

TATTELITE

For Electrical Testing Lamps.
First use on or about July 1, 1935.

SN 694,594. Rambusch Decorating Company, New York, N. Y. Filed Sept. 13, 1955.

ROTOSPOT

For Electrical Lighting Fixtures.
First use June 1950.

SN 696,242. William T. La Rose, Cohoes, N. Y. Filed Oct. 11, 1955.

THERMAIL

The drawing is lined for red.
For High Frequency Generators Used for Heating Materials.
First use Dec. 21, 1944.

SN 696,455. National Broadcasting Company, Inc., New York, N. Y. Filed Oct. 14, 1955.



For Sound Reproducing Apparatus, Component Parts Thereof, and Accessories for Such Goods.
First use June 30, 1955.

SN 697,678. EMC Recordings Corporation, St. Paul, Minn. Filed Nov. 4, 1955.

Imperial

For Recording and Recorded Magnetic and Sound Reproducing Tapes.
First use Aug. 19, 1955.

SN 698,152. Ferroxcube Corporation of America, Saugerties, N. Y. Filed Nov. 14, 1955.

FERROX

Owner of Reg. Nos. 519,694 and 545,060.
For Electro-Magnetic Cores for Use in Transformers and Inductances.
First use Oct. 22, 1955.

SN 698,414. Even Heat Products Co., Evanston, Ill. Filed Nov. 17, 1955.

Skill-Grill

For Electric Frying Pan and Broiler Combination.
First use Nov. 4, 1955.

SN 699,293. Clevite Corporation, Inc., Cleveland, Ohio. Filed Dec. 2, 1955.

PZT

For Dielectric Ceramic Elements for Use in Electrical, Electromechanical, and/or Electronic Applications.
First use Nov. 8, 1955.

SN 764. Du-Wal Inc., River Grove, Ill. Filed Jan. 16, 1956.

MAITRE D'

For Electric Skillets, Electric Fry Pans, and Electric Sauce Pans.
First use May 18, 1955.

SN 933. Whitehead & Kales Company, Detroit, Mich. Filed Jan. 17, 1956.

W&K

Owner of Reg. Nos. 509,895 and 515,896.
For Electric Hoist and Parts for Operating Ramp of Carry-Car Trailer.
First use Dec. 16, 1955.

CLASS 22

SN 664,067. The Docrayor Co., Sherman Oaks, Calif. Filed Apr. 7, 1954.

DOCRAYOR

For Game Consisting of a Transparent Cover Sheet and Filler Sheets Upon Which Markings by Crayon and the Like Are Drawn, and Figures on Adherent Sheet Material To Be Applied to the Cover Sheet.
First use Apr. 1, 1954.

SN 682,421. General Molds & Plastics Corp., Pittsburgh, Pa. Filed Feb. 28, 1955.

G.M.P. ORIGINAL Underground TOYS

No claim is made to the words "Original" and "Toys" apart from the mark as shown. The drawing is lined for blue, but color is not claimed. Consent of Andrew N. Giardina to the abbreviation "Andy Gard" is of record.
For Plastic Toys, Particularly Vehicular Toys.
First use Jan. 25, 1955; and Oct. 1, 1953, as to "G. M. P."

SN 694,845. Bal Dolls, Inc., New York, N. Y. Filed Sept. 19, 1955.

CANDY...

For Dolls.
First use on or about June 25, 1955.

CLASS 23

SN 665,129. The New Britain Machine Company, New Britain, Conn. Filed Apr. 23, 1954. Sec. 2(f) as to "New Britain."

NB
NEW BRITAIN

Owner of Reg. Nos. 195,032, 202,796, and others.
For Screw Machines, Chucking Machines, Boring Machines, Turning Machines, Copying Lathes, Center-Drive Lathes, and Drilling Machines.
First use September 1947.

SN 665,338. Anderson Bros. Manufacturing Co., Rockford, Ill. Filed Apr. 28, 1954. Sec. 2(f) as to "Anderson."

Anderson

The drawing is lined for red.

For Metal-Working Machines—Namely, Manually and Power Operated Scrapers and Manually and Power Operated Straightening Presses; Packaging Equipment—Namely, Manually and Power Operated Filling and Capping Machines for Filling Containers Such as Cups With Plastic Material Such as Ice Cream, Cottage Cheese, and the Like and for Capping the Same; Bagging Machines for Bagging Small Articles and Machines for Filling and Closing Cartons With Plastic Material Such as Ice Cream and the Like; Molds for Making Frozen Confections; Manually and Power Operated Mold Fillers for Filling Frozen Confection Molds and Attachments Therefor Including Nozzle Plates, Nozzles, Hoppers, Slides, Baskets and Gears; Stick Holders for Holding Sticks in Confection Molds; Machines for Loading Sticks in Stick Holders; Ice Cream Sandwich Making Machines; Ice Cream Bar Making Machines; and Ice Cream Brick Cutters.

First use on or about July 17, 1946.

SN 665,849. The New Britain Machine Company, New Britain, Conn. Filed May 6, 1954. Sec. 2(f).

NEW BRITAIN

Owner of Reg. Nos. 195,981, 200,815, and 202,796.

For Automatic or Semi-Automatic Screw Machines, Chucking Machines, Boring Machines, Turning Machines, Copying Lathes, Precision Boring Machines, Horizontal Boring Mills, Wrenches, Wrench Sets, Sockets and Socket-Wrench Sets, Ratchets, Automatic Transmission Tools, Ratchet Adapters, Drive Tools, Stud Extractors, Hammers, Dolly Blocks, Body and Fender Repair Tool Sets, Saws and Blades, Files and File Sets, Chisels and Chisel Sets, Punches and Punch Sets, Pliers, Pullers, Screw Drivers, Piston and Ring Service Tools, Tire Service Tools, Valve Service Tools, Lubrication Service Tools, Reamers, Reamer Pilots and Reamer Pilot Sets, Pulling Tools, Tube Cutters and Flaring Tools, Screw Extractors, Drills and Sets of Drills, Torque Wrenches.

First use 1895.

SN 669,652. Atlas Hardware Co., New York, N. Y. Filed July 9, 1954. Sec. 2(f).

PILOT

For Screw Taps.

First use May 16, 1949.

SN 680,283. Marilyn Arts Company, Denver, Colo. Filed Jan. 21, 1955.

Jewel-er

For Tools for Attaching and Setting Rhinestones, Half Pearls, and the Like in Stone Grippers.

First use on or about Jan. 9, 1954.

SN 680,421. SKF Kugellagerfabriken Gesellschaft mit beschraenkter Haftung, Schweinfurt, Germany. Filed Jan. 24, 1955.

VKF

Owner of German Reg. No. 663,517, dated Sept. 29, 1954; and U. S. Reg. No. 600,312.

For Antifriction Bearings—Namely, Ball Bearings and Roller Bearings; Balls—Namely, Balls of Steel and Balls of Other Materials; Rollers; Axle Boxes for Railroad and Trolley Cars; and Bearings for the Driving Member of Water Crafts.

SN 680,894. D. Napier & Son Limited, London, England. Filed Feb. 1, 1955.

DELTIC COMPAK

Owner of British Reg. Nos. 773,779 and 773,780, dated Sept. 6, 1954.

For Internal Combustion Engines and Parts Thereof.

First use July 8, 1954; in commerce July 1954.

SN 682,059. Precision Electrotype Company, San Francisco, Calif. Filed Feb. 21, 1955.

PECO

Owner of Reg. No. 525,923.

For Stamps and Brands for Stamping Paper or the Like.

First use January 1955.

SN 682,497. Skytop Rig Co., Victoria, Tex. Filed Feb. 28, 1955.

Skytop

For Well Drilling and Workover Rigs.

First use Dec. 20, 1954.

SN 683,147. Simplex Packaging Machinery, Inc., Oakland, Calif. Filed Mar. 9, 1955.

Simplex

Owner of Reg. No. 507,598.

For Bag Making, Filling and Sealing Machines.

First use 1947.

SN 685,688. The Federal Foundry Supply Co., Cleveland, Ohio. Filed Apr. 18, 1955.

ROL-O-DRAW

For Machines Used in Making Sand Molds.

First use Jan. 7, 1954.

SN 686,122. The Wolseley Sheep Shearing Machine Company Limited, Witton, Birmingham, England, by change of name Wolseley Engineering Limited, Witton, Birmingham, England. Filed Apr. 22, 1955.

PEDIGREE

Owner of British Reg. No. 730,046, dated May 11, 1954.

For Power Operated Hair Clipping Machines, Not for Personal Use.

SN 686,545. James Mfg. Co., Fort Atkinson, Wis. Filed Apr. 29, 1955.

"Shuttle-Stroke"

For Barn Cleaner.

First use June 1, 1952.

SN 687,420. Herman C. Sommer, d. b. a. Comwel Company, Lynwood, Calif. Filed May 12, 1955.

COMWEL

For Automobile Service Station Equipment—Namely, Air Compressors, Automobile Hoists, Fluid Pressure Storage Vessels Sold as a Unit With Air Compressors, Underground Steel Tanks Sold as a Unit With Air Compressors, Hose Reels, Hose Retriever Wells, and Automatic Car Washing Equipment.

First use June 7, 1930.

SN 689,869. Frank L. Robinson, d. b. a. Frank L. Robinson Company, Oakland, Calif. Filed June 20, 1955.

ACE

For Pallet Rollers for Supporting and Moving Pallets.

First use June 29, 1950.

SN 690,311. New Holland Machine Company, New Holland, Pa. Filed June 27, 1955. Sec. 2(f).

NH

NEW HOLLAND

Owner of Reg. Nos. 409,016, 596,117, and others.

For Farm Machinery—Namely, Automatic Hay Balers, Forage Harvesters, and Attachments Therefor, Blower Conveyers, Wagon Unloaders, Side Delivery Hay Rakes, Mowers, Corn Husker-Shellers, and Manure Spreaders.

First use 1940 on hay balers.

SN 690,406. Pneumafil Corporation, Charlotte, N. C. Filed June 28, 1955.

VIBRATROL

For Vibration Control Systems, Bases, Racks, and Cases Used To Isolate Equipment To Prevent Damage Resulting From Excessive Vibration.

First use Apr. 15, 1955.

SN 692,433. Societe Anonyme Compagnie Electro-Mecanique, Paris, France. Filed Aug. 3, 1955.

STATOCEM

Priority claimed under Sec. 44(d) on French Reg. No. 449,082, dated Feb. 4, 1955 (Paris); Natl. Inst. No. 51,504.

For Transfer Machines for Winding Stators of Electrical Machines Having Divided Coils.

SN 692,600. Harvestaire, Inc., Oakland, Calif. Filed Aug. 8, 1955.

HARVESTAIRE

For Harvesters and Parts Therefor, Including Material Separating Apparatus.

First use on or about 1949.

SN 692,855. Modern Industrial Engineering Company, Detroit, Mich. Filed Aug. 11, 1955.

MODERN Burr-Master

Owner of Reg. No. 615,330.

For Chamfering Machines for Gears and Similar Toothed Machine Elements.

First use Nov. 10, 1949.

SN 694,711. Gardex, Inc., Michigan City, Ind. Filed Sept. 15, 1955.

HOME-GARDENER

The word "Gardener" is disclaimed apart from the mark as shown.

For Garden Implements, Consisting of Forks, Spades, Shovels, Trowels, Cultivators, Weeders, Hoes, Rakes, Edgers, Hand Plows, Seeders, and Hooks.

First use Sept. 11, 1954.

SN 695,504. Tavaro Societe Anonyme, Geneva, Switzerland. Filed Sept. 28, 1955.

PLANA

Priority claimed under Sec. 44(d) on Swiss Reg. No. 156,016, dated June 9, 1955.

For Sewing Machines, Including the Electric Portable Type, and Attachments Therefor—Namely, Bobbins, Presser Feet, Hemmer Feet, Hemmer Felling Feet, Brading Feet, Ruffers, Zipper Feet With Guide, Darning Feet, Darning Plates, Buttonhole Feet, Button Plates, Buttonhole Knives, Twin Needle Clamps, Piping Feet, Piping Guides, Needles, Screw Drivers, Simple and Double Cams, Cam Levers, Twin Needle Throat Plates, Button Feet.

SN 695,737. Lockwood Grader Corporation, Gering, Nebr. Filed Oct. 3, 1955. Sec. 2(f).

Lockwood GRADERS

The word "Graders" is disclaimed apart from the mark shown. Owner of Reg. No. 509,480.

For Potato Processing Equipment—Namely, Graders, Washers, Sizers, Loaders, Brushers, Elevators, Dryers, Waxers, Diggers, and Bag Sewing Machines.

First use on or about Mar. 1, 1940.

SN 696,064. R-Columbia Products Co., Highwood, Ill. Filed Oct. 7, 1955.

TROLMASTER

For Tool for Use in Cleaning and Lubricating Parts of Radio and Television Receivers.

First use May 25, 1955.

SN 696,321. John Royle & Sons, Paterson, N. J. Filed Oct. 12, 1955.

SPIROYLE

Owner of Reg. No. 585,104.

For Extruder Cylinders, for Machines for Extruding Rubber, Rubber-Like Materials, and Plastic Materials.

First use on or about Jan. 2, 1953.

SN 696,477. Wald Industries, Inc., Huntingdon, Pa. Filed Oct. 14, 1955.



The drawing of the mark is lined to designate a reddish color.

For Paint Mixer.

First use Aug. 31, 1954.

SN 696,563. Mayflower Textiles Co., Franklin, Mass. Filed Oct. 17, 1955.

PURITAN

For Portable Rug Frames.

First use Sept. 27, 1955.

SN 697,067. Wonder Klip Corporation, Chicago, Ill. Filed Oct. 24, 1955. Sec. 2(f).

WONDER KLIP

For Electric Hair Clippers and Comb Attachments for Hair Clippers.

First use Jan. 15, 1949.

SN 697,075. American Breddo Corp., New York, N. Y. Filed Oct. 25, 1955.

BREDDOMATIC ICER

No claim is made to the word "Icer" apart from the mark as shown.

For Machines for Applying Icings to Baked Goods.

First use Sept. 27, 1955.

SN 698,491. Ariens Company, Brillion, Wis. Filed Nov. 18, 1955. Sec. 2(f) as to "Ariens."

Ariens trans-A-matic

Owner of Reg. No. 510,552.

For Wheeled, Motor Operated Tiller.

First use Jan. 1, 1955; in 1932 as to "Ariens."

SN 698,940. Utica Cutlery Company, Utica, N. Y. Filed Nov. 25, 1955.

EASI-GRIP

For Table Knives, Forks and Spoons, and Pie Knives, All of Base Metal.

First use Apr. 27, 1955.

SN 699,314. Globe Hoist Company, Des Moines, Iowa. Filed Dec. 2, 1955.

GLOBE *lacific*

Owner of Reg. No. 566,187.

For Vehicle Hoists.

First use Sept. 9, 1955.

SN 699,566. The International Silver Company, Meriden, Conn. Filed Dec. 7, 1955.

SPHERE

For Stainless Steel Flatware—Namely, Knives, Forks, and Spoons for Table Use.

First use Dec. 2, 1955.

SN 622. Oneida Ltd., Oneida, N. Y. Filed Jan. 12, 1956.

PROFILE

For Flat Tableware of Non-Precious Metal.

First use Dec. 2, 1955.

SN 666. H. C. Davis Sons' Mill Machinery Co., Bonner Springs, Kans. Filed Jan. 13, 1956.

KRIMPER-KRACKER

For Roller Mills for Grains and the Like.

First use September 1950.

SN 716. White Flower Farm, Litchfield, Conn. Filed Jan. 13, 1956.



For Weeding Tools.

First use Dec. 21, 1955.

SN 762. Dresser Industries, Inc., Connersville, Ind. Filed Jan. 16, 1956.

ROOTS-CONNERSVILLE

Owner of Reg. Nos. 153,840 and 617,425.

For Gas and Liquid Pumps, Vacuum Pumps, Air and Gas Compressors, and Inert Gas Generators.

First use 1947; and at least as early as 1935 in a different form.

SN 805. Kraft Bag Corporation, New York, N. Y. Filed Jan. 16, 1956.



For Filling Machine for Open Mouth Bags.

First use Jan. 15, 1955.

SN 850. Urana Corporation, Newark, N. J. Filed Jan. 16, 1956.

SCOTCH

For Safety Razor Blades.

First use Dec. 16, 1955.

SN 867. Bell & Gossett Company, Morton Grove, Ill. Filed Jan. 17, 1956.

UNI-BUILT

For Centrifugal Pumps.

First use Dec. 20, 1943.

SN 889. H. Leach Machinery Co., Providence, R. I. Filed Jan. 17, 1956.

GAGE MASTER

For Surface Grinders.

First use May 25, 1955.

SN 909. The Penfield Saw Works, Inc., Thomaston, Conn. Filed Jan. 17, 1956.

SABRE-PLY

Owner of Reg. No. 599,606.

For Guide Bars for Chain Saws.

First use Dec. 30, 1953.

SN 920. Southern Engineering Sales & Service Co., Nashville, Tenn. Filed Jan. 17, 1956.

SESSCO

For Specialty Machinery, Such as Fancy Perforating Dies and Cutting Dies, and Power Presses for the Folding of Leather.

First use Sept. 1, 1955.

SN 1,005. The Ore & Chemical Corporation, New York, N. Y. Filed Jan. 18, 1956.



For Separatory Apparatus for Heavy Media Separation, Ore Concentrating, Coal Washing, and Similar Purposes.

First use June 10, 1955.

SN 1,088. Heaps, Waterous Ltd., Vancouver, British Columbia, Canada, to Heaps, Waterous Co., Salem, Oreg., copartnership consisting of Elmer R. Worth, Sr., and Chandler P. Brown. Filed Jan. 19, 1956. Sec. 2(f).

HEAPS

For Production Machinery for Sawmills, Planing Mills, Box Mills, and Allied Wood-Working Crafts.

First use 1913.

SN 1,100. The Motch & Merryweather Machinery Company, Cleveland, Ohio. Filed Jan. 19, 1956.

MILL MATIC

For Milling Machines.

First use July 13, 1955.

SN 2,470. Club Razor & Blade Manufacturing Corporation, Newark, N. J. Filed Jan. 12, 1956.

fan

For Razor Blades.

First use Mar. 18, 1936.

CLASS 26

SN 676,094. Walter B. Armstrong, San Fernando, Calif. Filed Nov. 5, 1954.

MAGNASCOPE

For Stage and Motion Picture Theatre Equipment—Namely, Frames and Screens for Showing Motion Pictures.

First use Nov. 5, 1928.

SN 679,676. Peerless Camera Stores, Inc., New York, N. Y. Filed Jan. 10, 1955.

HEXACON

For Cameras, Camera Equipment, Photographic Lenses, Tripods, Photo-Copying Dryers and Machines, Binoculars.

First use October 1954.

SN 688,810. Epsco, Incorporated, Boston, Mass. Filed June 3, 1955.

DATRAC

For Electrical Data Conversion Control and Computing Systems and Components.
First use on or about Nov. 1, 1954.

SN 694,527. Surface Combustion Corporation, Toledo, Ohio. Filed Sept. 12, 1955.

AUTOCARB

For Control Equipment for Measuring and Controlling the Dew Point of Gases.
First use July 9, 1954.

SN 694,763. American Optical Company, Southbridge, Mass. Filed Sept. 16, 1955.

CINE Ipergon

Owner of Reg. No. 555,726.
For Motion Picture Objectives.
First use on or about Aug. 10, 1955.

SN 694,811. Measure-All Corporation, Chicago, Ill. Filed Sept. 16, 1955.



For Calibrated Dispensing Spoon.
First use Sept. 2, 1955.

SN 695,725. Hellige, Incorporated, Garden City, N. Y. Filed Oct. 3, 1955.

Blue Seal

For Microscope Cover Glasses.
First use April 1930.

SN 696,420. E. I. du Pont de Nemours and Company, Wilmington, Del. Filed Oct. 14, 1955.

VARILOUR

For Sensitized Photographic Paper.
First use Sept. 13, 1955.

SN 696,665. Photographic Importing & Distributing Corp., Valley Stream, N. Y. Filed Oct. 18, 1955.

PROXISCOPE

For Close-Up Focusing Device for 35 mm. Still Cameras.
First use Mar. 3, 1954.

CLASS 27

SN 686,143. Ernest Borel & Cie, S. A., Neuchatel, Switzerland. Filed Apr. 25, 1955.

ERNEST BOREL
SEA GEM

Owner of Swiss Reg. No. 150,842, dated Apr. 2, 1954, and U. S. Reg. Nos. 532,971 and 422,525.
For Clocks, Watches, and All Parts Thereof.

SN 697,910. Hamilton Watch Company, Lancaster, Pa. Filed Nov. 8, 1955.

NAUTILUS

For Wrist Watches.
First use August 1953.

SN 698,350. The Gruen Watch Company, Cincinnati, Ohio. Filed Nov. 16, 1955.

SUPER G

For Watches, Watch Cases, and Watch Movements.
First use Nov. 1, 1955.

SN 755. Columbia Eastern Corporation, New York, N. Y. Filed Jan. 16, 1956.

ESTRELLA

For Watches and Clocks.
First use May 1944.

SN 1,180. Concord Watch Co., Inc., New York, N. Y. Filed Jan. 20, 1956.

CORTLAND

For Watches.
First use on or about Jan. 16, 1928.

SN 1,182. Movado Watch Agency, Inc., New York, N. Y. Filed Jan. 20, 1956.

MINIMATIC

For Watches.
First use Mar. 30, 1955.

SN 1,252. Longines-Wittnauer Watch Co., Inc., New York, N. Y. Filed Jan. 23, 1956.

GUARDOMATIC

For Watches.
First use Dec. 1, 1955.

CLASS 28

SN 65. Gomez Manufacturing Company, Inc., San Francisco, Calif. Filed Jan. 3, 1956. Sec. 2(f).

GOMEZ

For Finger Rings.
First use Jan. 2, 1930.

SN 102. Speidel Corporation, Providence, R. I. Filed Jan. 3, 1956.

SLIM LIZARD

For Watch Bracelets (Not Including Watches).
First use Dec. 8, 1955.

SN 199. The Gemex Corporation, Union, N. J. Filed Jan. 5, 1956.

SHALIMAR

For Bracelets and Watch Bracelets and Watch Straps.
First use Oct. 27, 1955.

SN 586. The Gemex Corporation, Union, N. J. Filed Jan. 12, 1956.

GEMEX SILHOUETTE

For Bracelets and Watch Bracelets and Watch Straps.
First use Mar. 18, 1955.

SN 598. Kaspar & Esh, Inc., New York, N. Y. Filed Jan. 12, 1956.

ADD-A-LINK

The word "Link" is disclaimed apart from the mark as shown. Owner of Reg. No. 600,347.
For Diamond Necklaces.
First use May 26, 1955.

SN 998. Marvella Pearls, Inc., New York, N. Y. Filed Jan. 18, 1956.

Spin-it

For Charms, Charm Bracelets, Necklaces, Earrings, Brooches.
First use Dec. 21, 1955.

SN 1,134. Vargas Manufacturing Company, Providence, R. I. Filed Jan. 19, 1956.

Cradle Craft

For Children's Jewelry for Personal Wear (Not Including Watches)—Namely, Pendants, Necklaces, Pins, Bracelets, and Finger Rings, Made Wholly or Partly of Precious Metals.
First use on or about Sept. 5, 1946.

SN 1,492. R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Filed Jan. 25, 1956.

ORCHID ELEGANCE

For Sterling Silver Flatware, i. e., Knives, Forks, and Spoons.
First use October 1955.

SN 2,008. Jack J. Felsenfeld, New York, N. Y. Filed Jan. 9, 1956.



For Pearls, Cultured and Imitation.
First use 1923.

CLASS 30

SN 628,039. I. Freeman & Son, Inc., New York, N. Y. Filed Apr. 14, 1952. Sec. 2(f).

PORCELAINE
DE PARIS

For Chinaware and Crockery—Namely, Cups, Saucers, Plates, Bowls, and Platters as Decorative Ware and Collectors' Items.
First use Sept. 17, 1948.

CLASS 31

SN 680,316. Universal Major Elec. Appliances, Inc., d. b. a. Universal Major Elec. Appliance Co., Lima, Ohio, to Universal Major Corporation, New York, N. Y. Filed Jan. 21, 1955.

UNIVERSAL

Owner of Reg. No. 156,697.
For Refrigerators and Freezers.
First use 1912.

SN 681,388. Danfoss ved Mads Clausen, Nordborg, Als, Denmark. Filed Jan. 6, 1955.

Danfoss

Owner of Danish Reg. No. 1429/52, dated Oct. 11, 1952.
For Installations for Refrigerating, Refrigerating Plants, Refrigerating Machines, Apparatus and Parts Thereof, and Accessories to Refrigerating Plants and Refrigerating Machines (Except Motors).

SN 682,504. Tyler Refrigeration Corporation, Niles, Mich. Filed Feb. 28, 1955.

4 TYLER SCOTCH FOURSOME

Owner of Reg. Nos. 510,184 and 560,387.
For Refrigerating Machine Units Mounted on Racks.
First use Jan. 24, 1955.

SN 684,239. Air-Way Electric Appliance Corporation, Toledo, Ohio, now by change of name to Air-Way Industries, Inc. Filed Mar. 28, 1955.

Sani-Bag

For Disposable Filter Bags for Vacuum Cleaners.
First use Mar. 14, 1955.

SN 694,909. Paramount Service, San Francisco, Calif. Filed Sept. 19, 1955.

MILEAGE MINDER

The drawing is lined for red but no claim is made to color.
For Fuel Filter for Automobiles Which Acts as a Pressure Regulator, Pulsation Dampener, Carburetor Protector, and Filter.
First use October 1954.

CLASS 32

SN 663,917. International Manufacturing Co., Roxbury, Mass. Filed Apr. 5, 1954.



No claim is made to exclusive use of the word "Mattress" apart from the mark.
For Bed Mattresses for Automobiles.
First use on or about March 1951.

SN 679,458. Display Workshop, Incorporated, Hartford, Conn. Filed Jan. 5, 1955.

*Fold 'N-Pak**

For Display Cabinets.
First use Nov. 15, 1954.

SN 680,621. Metropolitan Wire Goods Corporation, Brooklyn, N. Y. Filed Jan. 27, 1955.

ERECTA SHELF

The word "Shelf" is disclaimed apart from the mark.
For Shelving Units for Use in the Home as an Article of Furniture.
First use Oct. 14, 1954.

SN 683,231. Purofied Down Products Corp., New York, N. Y. Filed Mar. 10, 1955.

Daron by *Purofied*

Owner of Reg. Nos. 428,290 and 574,870.
For Mattresses, Pillows, and Cushions.
First use Nov. 1, 1954.

SN 683,232. Purofied Down Products Corp., New York, N. Y. Filed Mar. 10, 1955.

Dacrilan by *Purofied*

Owner of Reg. Nos. 428,290 and 574,870.
For Mattresses, Pillows, and Cushions.
First use Nov. 1, 1954.

SN 683,233. Purofied Down Products Corp., New York, N. Y. Filed Mar. 10, 1955.

Puron by *Purofied*

Owner of Reg. Nos. 428,290 and 574,870.
For Mattresses, Pillows, and Cushions.
First use Nov. 1, 1954.

SN 686,792. Max W. Westgard, d. b. a. Key to Sleep Bedding Support Company, Walla Walla, Wash. Filed May 3, 1955.

KEY-TO-SLEEP
Your key to health and comfort

For Bedding Support, Being a Metal Frame Attachable to Bedding and for the Purpose of Holding the Bedding Off the Feet of a Sleeper.
First use on or about July 15, 1954.

SN 687,355. Cooper Decoration Co., Inc., Syracuse, N. Y. Filed May 12, 1955.

flexibooth

For Display Booths of the "Knock-Down" Type.
First use Jan. 3, 1955.

SN 690,904. Queen City Tulatex Corporation, Burlington, Vt. Filed July 7, 1955

TULAPAD

For Rubberized or Otherwise Suitably Bonded Vegetable Fiber Insulating Pads for Use in Upholstering Chairs, Automobile Seat Cushions, and Goods of a Related Nature.
First use November 1948.

SN 691,847. Fisher Products Company, Chester, Pa. Filed July 25, 1955.

Ortho-Zone

For Mattresses.
First use June 23, 1954.

SN 696,670. Ro-Mar Mattress Company, Inc., Dunn, N. C. Filed Oct. 18, 1955.



For Mattresses and Box Springs.
First use May 10, 1955.

SN 115. C. B. White Company, Inc., Boston, Mass. Filed Jan. 3, 1956.

UNICORD

For Venetian Blinds and Controls.
First use Dec. 5, 1955.

SN 116. C. B. White Company, Inc., Boston, Mass. Filed Jan. 3, 1956.

VERSATILT

For Venetian Blinds and Controls.
First use Dec. 5, 1955.

SN 246. L. T. Dulaney, Oklahoma City, Okla. Filed Jan. 6, 1956. Sec. 2(f).

Dulaney's

For Divans, Some of Which Are Convertible Into Beds, Sofas, Chairs, and Ottomans.
First use Feb. 1, 1946.

SN 393. Wrought Iron Range Company, St. Louis, Mo. Filed Jan. 9, 1956.

HOME COMFORT
SINCE 1864
ST. LOUIS, MO.

The words "Since 1864" and "St. Louis, Missouri" are disclaimed apart from the mark as shown. Owner of Reg. Nos. 61,357, 367,411, and others.
For Metal, Wood, and Combined Metal and Wood Cabinets.
First use Oct. 1, 1951.

SN 516. Relaxing Specialties Corporation, New York, N. Y. Filed Jan. 11, 1956.

SPINAFORM

For Bed Having a Contoured Support Frame for the Mattress.
First use Sept. 26, 1955.

SN 521. Sealy, Incorporated, Chicago, Ill. Filed Jan. 11, 1956.

AIR WOVEN

For Mattresses and Box Springs.
First use Jan. 1, 1920.

SN 522. Sealy, Incorporated, Chicago, Ill. Filed Jan. 11, 1956.

AIR VENT

For Mattresses and Box Springs.
First use Jan. 1, 1929.

SN 523. Sealy, Incorporated, Chicago, Ill. Filed Jan. 11, 1956.

LASTIK-KOIL

For Mattresses and Box Springs.
First use July 1, 1924.

SN 644. Benj. F. Wininger & Son, Inc., Los Angeles, Calif. Filed Jan. 12, 1956.

MERCURY

Owner of Reg. No. 617,229.
For Shelving, Gondolas, Produce Stands, Racks and End Displays, Counters and Cases.
First use Nov. 15, 1952.

CLASS 33

SN 695,846. Saks & Company, New York, N. Y. Filed Oct. 4, 1955. Sec. 2(f).

Saks-Fifth Avenue

For Glass Tableware and Vases, Bar Glasses, Glass Stem Ware, Glass Bowls, and Decorative Glass Ware—Namely, Bottles, Powder Jars, and Trays.
First use Sept. 15, 1924.

SN 698,219. Schultz Products Company, Inc., d. b. a. Plant Shine Co., St. Louis, Mo. Filed Nov. 14, 1955.

"WRINGER" NECK

For Glass Bottles.
First use July 1, 1952.

CLASS 34

SN 677,023. American Locomotive Company, New York, N. Y., now by change of name Alco Products, Incorporated. Filed Nov. 22, 1954.

ALCOPLATE

Owner of Reg. Nos. 308,766 and 572,930.
For Nickel Plated Pressure Vessels Such as Heat Exchanger Shells and the Like.
First use Nov. 15, 1954.

SN 683,998. Super Vacuum Manufacturing Co., Denver, Colo. Filed Mar. 22, 1955.



The lining represents red, silver, and blue.
For Portable Motor-Driven Exhaust Fans for Use by Fire Departments for Drawing Smoke From Burning Buildings.
First use on or about Jan. 1, 1946.

SN 684,039. The Gabriel Company, d. b. a. Hädees Heater Division of The Gabriel Company, Rockford, Ill. Filed Mar. 23, 1955.

Chief

Owner of Reg. Nos. 319,901 and 613,824.
For Fan Equipped, Fluid Heated Type, Air Heaters and Parts and Accessories Therefor.
First use Feb. 1, 1954.

SN 689,668. A. E. Staley Manufacturing Company, Decatur, Ill. Filed June 16, 1955. Sec. 2(f).

Staley's

For Continuous Cooking Apparatus for the Commercial Cooking of Starch Solution, Syrup and Other Liquids or Pastes.
First use Aug. 11, 1954.

SN 693,586. American Blower Corporation, Detroit, Mich. Filed Aug. 24, 1955.

DIAFLO

For Line Flow Fan Wheels and Air Conditioning Units and Air Conditioning Units Embodying Such Line Flow Fan Wheels and Heating Units.
First use May 9, 1955.

SN 760. Dresser Industries, Inc., Connersville, Ind. Filed Jan. 16, 1956.

ROOTS-CONNERSVILLE

Owner of Reg. Nos. 153,840 and 617,425.
For Centrifugal Air and Gas Blowers and Exhausters, and Rotary Positive Air and Gas Blowers and Exhausters.
First use in 1947.

CLASS 35

SN 671,612. Tru-Flex Rubber Products Company, Los Angeles, Calif. Filed Aug. 12, 1954.

NYLAFLEX

For Repair Patches for Tires and Tubes.
First use Oct. 31, 1953.

SN 687,792. The Mansfield Tire & Rubber Company, Mansfield, Ohio. Filed May 18, 1955. Sec. 2(f).

Bond

For Tires.
First use Jan. 1, 1939.

SN 687,793. The Mansfield Tire & Rubber Company, Mansfield, Ohio. Filed May 18, 1955. Sec. 2(f).

BOND

For Tires.
First use Jan. 1, 1939.

SN 689,803. Bendix Aviation Corporation, Green Island, N. Y. Filed June 20, 1955.

FK

For Brake Lining.
First use Apr. 21, 1955.

CLASS 37

SN 668,801. Washington Publishing Company, Birmingham, Mich. Filed June 23, 1954.

ETERNALOG

For Personal Record and Data Books.
First use June 16, 1954.

SN 668,846. George La Monte & Son, Nutley, N. J. Filed June 24, 1954. Sec. 2(f).

PHELPS PROTECTIVE PAPER

The words "Protective Paper" are disclaimed apart from the mark shown.
For Safety Paper.
First use at least 1910.

SN 679,625. Zellerbach Paper Company, San Francisco, Calif. Filed Jan. 7, 1955.

Pacific Bond

The word "Bond" is disclaimed apart from the mark.
For Writing Paper.
First use in or about October 1954.

SN 681,475. American Lead Pencil Company, Hoboken, N. J. Filed Feb. 11, 1955.

VELVET • ball *PEN* • cil

Applicant disclaims the term "Ball Pencil," except as fancifully displayed on the goods and as shown in the drawing. Owner of Reg. Nos. 22,273, 403,534, and others.
For Ball Pens.
First use Feb. 28, 1953.

SN 681,924. The Kendall Company, Walpole, Mass. Filed Feb. 18, 1955.

Curity

Owner of Reg. Nos. 591,265, 133,720, 358,738, and others.
For Diaper Liners Made of Paper.
First use July 7, 1954.

SN 682,115. Bonnar-Vawter, Incorporated, Cleveland, Ohio. Filed Feb. 23, 1955.

Colorfold

For Business Forms.
First use on or about Jan. 12, 1955.

SN 695,465. Buchan Loose Leaf Records Company, Clifton Heights, Pa. Filed Sept. 28, 1955.

SPRED-LOK

For Loose Leaf Binders.
First use Nov. 1, 1952.

SN 695,996. Rex Income Tax Record Company, Detroit, Mich. Filed Oct. 6, 1955.

Visible Week

For Appointment Books.
First use Aug. 1, 1950.

SN 696,025. Fort Howard Paper Company, Green Bay, Wis. Filed Oct. 7, 1955.

BEVNAP

For Paper Napkins.
First use Aug. 30, 1955.

SN 696,165. Mounties, Inc., Boston, Mass. Filed Oct. 10, 1955.

"Pic"

For Gummed Cloth Photo Hinges.
First use Aug. 1, 1941.

SN 696,234. Gulf States Paper Corporation, Tuscaloosa, Ala. Filed Oct. 11, 1955.

E-Z Load

Owner of Reg. Nos. 227,085, 575,332, and 593,737.
For Paper Bags.
First use Aug. 25, 1955.

SN 696,235. Gulf States Paper Corporation, Tuscaloosa, Ala. Filed Oct. 11, 1955.

WHITE CEDAR

For Butchers' Paper.
First use Aug. 31, 1955.

CLASS 38

SN 682,990. Skuttle Manufacturing Company, Milford, Mich. Filed Mar. 7, 1955.

"Humid Herbert's" Shuttlebutt



For Trade Publication Published From Time to Time.
First use in or about October 1952.

SN 694,912. The Protestant Radio and Television Center, Inc., DeKalb County, Ga. Filed Sept. 19, 1955.

HYMNSCRIPTIONS

For Production of Religious Music and Television Shorts on Film, Which Film Is Used on Television for Sustaining Programs or Shorts and Is Offered to Television Stations, Ministerial Associations, and Hospitals.
First use Apr. 1, 1954.

SN 695,001. The Jones Publishing Company, Chicago, Ill. Filed Sept. 20, 1955.

Figure

For Periodicals Issued From Time to Time.
First use April 1950.

SN 695,167. Little Bit of Ireland, Pittsburgh, Pa. Filed Sept. 22, 1955.



LITTLE BIT OF IRELAND

For Printed Souvenir Deeds of Conveyance.
First use Aug. 26, 1955.

SN 695,180. Quigley Publishing Company, Inc., New York, N. Y. Filed Sept. 22, 1955. Sec. 2(f).

Better Theatres

Owner of Reg. No. 319,517.
For Regularly Published Magazine.
First use May 26, 1923.

SN 695,181. Quigley Publishing Company, Inc., New York, N. Y. Filed Sept. 22, 1955. Sec. 2(f).

MOTION PICTURE DAILY

For Regularly Published Magazine.
First use Dec. 22, 1930.

SN 696,081. United Press Associations, New York, N. Y. Filed Oct. 7, 1955.

LET'S TAKE A TRIP

For Press Releases for Oral Presentation.
First use Oct. 4, 1952.

SN 696,264. The E. W. Scripps Company, Cleveland, Ohio. Filed Oct. 11, 1955.



Give Light and the People Will Find Their Own Way

Owner of Reg. Nos. 234,524 and 610,110.
For News Publications Published Daily.
First use May 9, 1927.

SN 696,899. The New Yorker Magazine, Inc., New York, N. Y. Filed Oct. 21, 1955.

THE LYRICAL PRESS

For Magazine Column.
First use Jan. 16, 1954.

SN 699,657. The Penton Publishing Company, Cleveland, Ohio. Filed Dec. 8, 1955.

AD-GAGE

For Publication Published Monthly or From Time to Time.
First use on or about July 22, 1955.

SN 700,053. The Oz Corporation, New York, N. Y. Filed Dec. 15, 1955.

OZ

For Greeting Cards.
First use June 9, 1950.

SN 700,101. The Gideons, International, Chicago, Ill. Filed Dec. 16, 1955.

GIDEON

For Bibles, Testaments, and Magazines.
First use Oct. 20, 1955, on bibles; on June 8, 1903, as to the word "Gideon" on magazines and other printed literature; and on Aug. 15, 1911, as to the emblem on magazines.

SN 700,131. Smith Decalcomania Company, Inglewood, Calif. Filed Dec. 16, 1955.

Dri-Ply

For Decalcomania.
First use Nov. 23, 1953.

SN 700,274. Walter Stearns, d. b. a. Polypix Company, Chicago, Ill. Filed Dec. 19, 1955.

POLYPIX

For Color Prints—Namely, Photographic Reproductions in Color Made From Plates.
First use July 13, 1955.

CLASS 39

SN 666,853. Lancaster Sportswear, Inc., New York, N. Y. Filed May 21, 1954.

BLUE MOUNTAIN

For Men's, Women's, and Children's Sports Jackets.
First use Nov. 20, 1953.

SN 666,937. Flip-It, Inc., New York, N. Y. Filed May 24, 1954.

The MacTAM

For Men's and Women's Wool Tartan Tams.
First use January 1954.

SN 670,586. Bernard Kowalsky, Utica, N. Y. Filed July 26, 1954.

White Orchid Fashions

For Garments—Namely, Doctors', Nurses', Dentists', Technicians', Industrial, and Laboratory Uniforms.
First use June 25, 1954.

SN 675,639. The H. D. Lee Company, Incorporated, Kansas City, Mo. Filed Oct. 28, 1954. Sec. 2(f).



The drawing is lined for black and gold. Owner of Reg. Nos. 120,403, 430,729, and others.
For Work and Utility Trousers and Waistband Overalls.
First use August 1948 on waistband overalls; and since Oct. 1, 1916, as to "Lee."

SN 678,577. Phelan Shirt Company, Fall River, Mass. Filed Dec. 8, 1954.

Cape od Shirts

The word "Shirts" is disclaimed except in combination with the mark as shown.
For Men's and Women's Shirts and Pajamas.
First use on or about May 17, 1926.

SN 679,018. Summit Sportwear Co., Boston, Mass. Filed Dec. 27, 1954.

ORIGINAL CONTINENTAL WALKER Summit of Boston

The words "Original" and "of Boston" are disclaimed apart from the mark as shown.
For Ladies' and Misses' Skirts.
First use July 10, 1953.

SN 679,184. Sew-Smart Products, Media, Pa. Filed Dec. 30, 1954.

Sew Smart's

For Ladies' Hat Frames With Patterns and Instructions for Covering the Frames Sold as a Unit.
First use Aug. 18, 1954.

SN 679,519. Dack Corporation Limited, Toronto, Ontario, Canada. Filed Jan. 6, 1955. Sec. 2(f).

Dack's FOR OVER A CENTURY

For Men's Shoes.
First use Mar. 30, 1922; in commerce since Mar. 30, 1922.

SN 681,171. Jameshire Sports, Ltd., New York, N. Y. Filed Feb. 7, 1955.

SHE LOVES TO LIVE IN A Jameshire

Owner of Reg. No. 604,510.
For Women's and Misses' Suits.
First use Apr. 20, 1954.

SN 681,591. S. Goldberg & Co. Inc., Hackensack, N. J. Filed Feb. 14, 1955.



Owner of Reg. No. 569,215.
For House Slippers for Men, Women, and Children.
First use June 1, 1952.

SN 681,687. Harry Goldman, d. b. a. Scotch Knitting Mills and Monarch Knitting Mills, Los Angeles, Calif. Filed Feb. 15, 1955.

Kidlamere

For Sweaters.
First use Oct. 1, 1953.

SN 683,170. The Birnie Company, Inc., Atlanta, Ga. Filed Mar. 10, 1955. Sec. 2(f).

Nattyboy Togs

Owner of Reg. No. 511,514.
For Boys' Dress, Sports Shirts, Pajamas, Pants, Suits, Dress Shorts, Sun Suits, Swim Trunks, Outer Coats, and Jackets.
First use Apr. 9, 1946.

SN 685,339. The Bearfoot Sole Company, Inc., Wadsworth, Ohio. Filed Apr. 12, 1955.

NITROLITE

For Soles and Heels of Rubber Composition or Its Equivalent for Boots and Shoes.
First use Mar. 14, 1955.

SN 686,994. National Shoes, Inc., New York, N. Y. Filed May 6, 1955.

Di Orsini ORIGINALS

For Shoes for Women and Misses.
First use Jan. 27, 1955.

SN 687,223. Sheffield Hosiery Mills, Inc., New York, N. Y. Filed May 10, 1955.

penn fashion

For Ladies' and Misses' Hosiery.
First use Apr. 22, 1955.

SN 687,504. Samuel Schulman Furs, Inc., New York, N. Y. Filed May 13, 1955.

Alixandre

For Coats, Jackets, Stoles, and Scarfs All Made of Fur.
First use Jan. 4, 1955, on jackets.

SN 688,686. Triangle Hosiery Company, Inc., High Point, N. C. Filed June 1, 1955.

FIT-'N-COMFORT

For Men's, Boys', and Girls' Hosiery.
First use April 1955.

SN 688,709. C. & J. Clark Limited, Street, England. Filed June 2, 1955.

TRIMOLD

Owner of British Reg. No. 736,245, dated Nov. 17, 1954.
For Boots, Shoes, Slippers, Sandals, Overboots, and Overshoes and Inner Socks for the Foregoing; Bottoming Materials for Footwear, Soles and Heels for Footwear, and Parts of Footwear.

SN 695,148. Eby Shoe Corporation, Ephrata, Pa. Filed Sept. 22, 1955.

FLEET-AIR

Owner of Reg. No. 332,334.
For Shoes.
First use 1946; and on or about June 1, 1935, as to "Fleet Air."

SN 695,172. Miller Brothers, Houston, Tex., to Williamson-Dickie Manufacturing Company, Fort Worth, Tex. Filed Sept. 22, 1955.

ACE ♥ HIGH

For Work Clothing—Namely, Overalls, Shirts, Coats, and Pants.
First use September 1907.

SN 697,412. Princess Fair Blouse, Inc., New York, N. Y. Filed Oct. 31, 1955.

MAGI-CUF

For Shirt Blouses Worn by Girls, Women, and Children.
First use Oct. 21, 1955.

SN 698,266. Bond Stores, Incorporated, New York, N. Y. Filed Nov. 15, 1955.

YOUNG EXECUTIVE

Owner of Reg. Nos. 537,760 and 542,745.
For Men's, Young Men's, and Boys' Suits, Topcoats, Overcoats, Dress Suits, Tuxedos, Trousers, Sports Jackets, Sports Coats, Raincoats, Robes, Sweaters, Hats, Caps, Shirts, Neckties, Hose, Scarfs, Belts, Garters, Gloves, Underwear, Handkerchiefs, Pajamas, and Bathing Suits.
First use Sept. 15, 1955.

SN 698,428. Goldstein Millinery Company, Chicago, Ill. Filed Nov. 17, 1955.

Poppy

Owner of Reg. No. 327,383.
For Women's and Misses' Hats.
First use Oct. 31, 1955; and on or about Feb. 20, 1931, as to "Poppy."

SN 698,431. Hampton Shirt Co., Inc., New York, N. Y. Filed Nov. 17, 1955.

Munsey Park

For Men's and Boys' Dress and Sport Shirts.
First use Sept. 22, 1955.

SN 698,559. So-Lo Works, Inc., Loveland, Ohio. Filed Nov. 18, 1955.

Rain-Debzies

For Lightweight Rubber Overshoes.
First use Sept. 13, 1955.

SN 698,690. Joseph H. Cohen & Sons, Inc., New York, N. Y. Filed Nov. 22, 1955.

CORREGIDOR

For Men's and Boys' Outer Garments—Namely, Coats, Suits, Jackets, Top Coats, Overcoats, Slacks, Trousers, and Vests.
First use Aug. 2, 1954.

SN 698,827. Atlas Underwear Corporation, Piqua, Ohio. Filed Nov. 25, 1955.

TITAN

For Men's Knitted T-Shirts, Athletic Shirts, Knitted Briefs and Boxer Shorts, and Boys' Knitted T-Shirts and Knitted Briefs.
First use Oct. 28, 1955.

SN 698,828. Atlas Underwear Corporation, Piqua, Ohio. Filed Nov. 25, 1955.

SOVEREIGN

For Men's Knitted T-Shirts, Athletic Shirts, Knitted Briefs and Boxer Shorts, and Boys' Knitted T-Shirts and Knitted Briefs.
First use Oct. 28, 1955.

SN 698,842. Joseph H. Cohen & Sons, Inc., New York, N. Y. Filed Nov. 25, 1955.

IVYAIRE

For Men's and Boys' Outer Garments—Namely, Coats, Suits, Jackets, Top Coats, Overcoats, Slacks, Trousers, and Vests.
First use Mar. 15, 1954.

SN 698,843. Joseph H. Cohen & Sons, Inc., New York, N. Y. Filed Nov. 25, 1955.

ROADMASTER

For Men's and Boys' Outer Garments—Namely, Coats, Suits, Jackets, Top Coats, Overcoats, Slacks, Trousers, and Vests.
First use Aug. 2, 1954.

SN 700,634. Lisanne, Inc., Brooklyn, N. Y. Filed Dec. 27, 1955.

LISANNE

For Ladies' and Misses' Housecoats and Robes.
First use Sept. 30, 1955.

SN 700,670. Sherman Classics, Inc., d. b. a. Chestnut Hill Sportswear, Boston, Mass. Filed Dec. 27, 1955.

VENETIAN CARNIVAL

For Coordinated Wearing Apparel for Ladies and Misses—Namely, Skirts, Blouses, Outer Shorts, and Slacks.
First use Dec. 15, 1955.

SN 700,700. Wundies, Inc., Williamsport, Pa. Filed Dec. 27, 1955.

LIFE-SET

For Lingerie—Namely, Slips, Panties, and Petticoats.
First use Dec. 1, 1955.

SN 700,907. Philip Shlansky & Sons, Inc., New York, N. Y. Filed Dec. 30, 1955.

BEAUVANA

For Ladies' and Misses' Coats, Suits, Jackets, and Outer Skirts.
First use Mar. 1, 1955.

SN 700,908. Southern Garment Company, Inc., d. b. a. Southern Garment Co., Dallas, Tex. Filed Dec. 30, 1955.

7-DAY WONDER

For Women's and Misses' Coats.
First use Jan. 15, 1955.

SN 48. Elaine of Hollywood Brassiere Co., Los Angeles, Calif. Filed Jan. 3, 1956.

Upstart

For Brassieres.
First use Nov. 16, 1955.

SN 89. J. C. Penney Company, New York, N. Y. Filed Jan. 3, 1956. Sec. 2(f).

Brentwood

Owner of Reg. No. 366,293.
For Ladies' and Children's Dresses.
First use Feb. 4, 1938.

SN 632. Streger Emerson Co., Port Chester, N. Y. Filed Jan. 12, 1956.

DOLL-SIZE

For Ladies', Misses', Girls', and Children's Dresses, Coats, Suits, Jackets, Outer Skirts, Jumpers, Blouses, Pinafores, and Slacks.
First use Dec. 6, 1954.

CLASS 40

SN 683,612. Milford Products Corp., Milford, Conn. Filed Mar. 16, 1955.

Hoop-la

For Foundation Forms for Petticoats and Skirts.
First use Mar. 4, 1955.

SN 698,508. Eagle Buckram Co., Inc., New York, N. Y. Filed Nov. 18, 1955.

SHAP-IT

For Wire Stiffening Elements or Stays Attachable to the Visor of a Cap or Hat.
First use Oct. 27, 1955.

SN 700,420. Ben-Hur Products, Inc., New York, N. Y. Filed Dec. 30, 1955. Sec. 2(f).

ROLLETTE

Owner of Reg. No. 380,902.
For Hair Rollers.
First use about Dec. 15, 1931.

CLASS 42

SN 654,534. Elchmann & Hecht, New York, N. Y. Filed Oct. 12, 1953.

CRYSTALETTE

For Textile Fabrics in the Piece, of Silk, Wool, Cotton, and All Man-Made Fibers and Combinations Thereof.
First use August 1953.
Subj. to Intf. with Reg. No. 610,766.

SN 666,414. Myron H. Ackerman Associates Inc., New York, N. Y. Filed May 17, 1954.

ACK-TION-IZED

For Lining Material for Men's Clothing.
First use October 1952.

SN 694,115. American Viscose Corporation, Philadelphia, Pa. Filed Sept. 2, 1955.

AVISCO

Owner of Reg. No. 373,479.
For Fabrics of Natural and Synthetic Fibers and Blends Thereof.
First use July 29, 1955, on fabrics of synthetic fibers.

SN 695,393. David Crystal, Inc., New York, N. Y. Filed Sept. 27, 1955.

ROS COMAIN

For Fabric for Making of Ladies' and Misses' Dresses.
First use Sept. 9, 1955.

SN 695,397. Dan River Mills, Incorporated, Danville, Va. Filed Sept. 27, 1955. Sec. 2(f) as to "Wrinkl-Shed."

WRINKL-SHED
WITH DRI-DON

Owner of Reg. Nos. 607,067, 560,250, and 514,317.
For Textile Fabrics in the Piece of Cotton and Mixtures of Cotton With Rayon, Acetate, and Synthetics To Be Used in Shirtings, Dress Goods, and Other Apparel.
First use Aug. 23, 1955.

SN 695,523. Arthur Beir & Co. Inc., New York, N. Y. Filed Sept. 29, 1955.

CLIPPER CREPE

The word "Crepe" is disclaimed apart from the mark as shown. Owner of Reg. No. 334,186.
For Rayon Piece Goods.
First use January 1931.

SN 696,203. Advance Fabrics Company, New York, N. Y. Filed Oct. 11, 1955.

T AND T by ADVANCE
THICK and THIN

Applicant disclaims the wording "Thick and Thin" apart from the mark as shown. Owner of Reg. No. 617,906.
For Textile Piece Goods Made of Rayon With Silk.
First use June 1, 1955.

SN 696,681. Thomas Wilson & Co. Inc., New York, N. Y. Filed Oct. 18, 1955. Sec. 2(f).

Wilson Laces

For Laces, Nettings, and Embroideries in the Piece.
First use Jan. 5, 1839.

SN 696,756. Wamsutta Mills, New Bedford, Mass. Filed Oct. 19, 1955.

Arpeggio

For Cotton and/or Rayon Piece Goods and/or Combinations Thereof.
First use June 1, 1955.

SN 699,292. Celanese Corporation of America, New York, N. Y. Filed Dec. 2, 1955.

TRICONEL

Owner of Reg. No. 333,031.
For Textile Fabrics Made of Synthetic Fibers Alone and in Admixture With Cotton, Wool, or Silk.
First use Oct. 21, 1955.

SN 699,431. Alexander Smith, Incorporated, New York, N. Y. Filed Dec. 5, 1955.

MODERN CRAFT WEAVE

For Pile Carpets.
First use Nov. 7, 1955.

SN 700,300. Thomas Burke, Inc., New York, N. Y. Filed Dec. 20, 1955.

Top House Fabrics

For Textile Fabrics of Cotton, Wool, Silk, Rayon, Linen, and Synthetic Fabrics.
First use Jan. 1, 1955.

SN 700,311. D. B. Fuller & Co., Inc., New York, N. Y. Filed Dec. 20, 1955.

BARAMA

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
First use Nov. 8, 1954.

SN 700,348. United Merchants and Manufacturers, Inc., New York, N. Y. Filed Dec. 20, 1955.

CASA/MIA

For Piece Goods of Cotton, Wool, Silk, Synthetic Fibers, and/or Combinations Thereof Adapted for Use as Upholstery and Drapery Fabrics.
First use on or about Nov. 21, 1955.

SN 700,471. Martel Mills Corporation, New York, N. Y. Filed Dec. 22, 1955.

BOWLING BROOK

For Cotton Piece Goods—Namely, Ticking.
First use 1930.

SN 700,483. Seco Mills, Inc., New York, N. Y. Filed Dec. 22, 1955.

EXOTECO

For Piece Goods Made of Cotton.
First use Sept. 6, 1955.

CLASS 43

SN 684,219. Harriet Cotton Mills, Henderson, N. C. Filed Mar. 25, 1955.

HARRIET Soft-Spun

Owner of Reg. No. 581,835.
For Carded Cotton Yarn.
First use Mar. 2, 1955.

SN 698,731. Max Pollack & Company, Inc., New York, N. Y. Filed Nov. 22, 1955.



For Sewing Threads.
First use May 1, 1921.

CLASS 44

SN 635,381. Turner Hall Corporation, New York, N. Y. Filed Sept. 17, 1952.

Conical

For Permanent Wave Kits Comprising Hair Waving Solution and Curlers.
First use May 19, 1952.

SN 672,058. Diana Manufacturing Co., Green Bay, Wis. Filed Aug. 23, 1954.



For Obstetrical Pad.
First use June 10, 1954.

SN 681,120. Zoller Chemical Corporation, Los Angeles, Calif. Filed Feb. 4, 1955.



For Disposable Syringes, Catheters and Tubes, Oxygen Catheters and Therapy Line, Tubular Therapy Line, and Intravenous Administration Sets.
First use Sept. 15, 1953.

SN 682,242. Dallons Laboratories, Inc., Los Angeles, Calif. Filed Feb. 24, 1955.

Medi-Sonar

For Ultrasonic Equipment for Therapeutic Purposes.
First use Apr. 12, 1953.

SN 682,243. Dallons Laboratories, Inc., Los Angeles, Calif. Filed Feb. 24, 1955.

MEDIQUARTZ

For Ultra-Violet Ray Equipment for Therapeutic Purposes.
First use Sept. 15, 1937.

SN 682,244. Dallons Laboratories, Inc., Los Angeles, Calif. Filed Feb. 24, 1955.

MEDI-SINE

For Low Volt Equipment for Therapeutic Purposes.
First use Aug. 1, 1945.

SN 692,757. American Optical Company, Southbridge, Mass. Filed Aug. 10, 1955.

Owner of Reg. Nos. 268,217, 444,749, and others.

For Refracting Chairs; Stools; Instrument Stands; Tables; Cabinets; Artificial Eyes and Orbital Implants; Sterile Fluid Pumps; Centrifuges; Instruments for Exercising and/or Treating the Eyes, Accessories and Parts Therefor; Diagnostic Instruments Including Laryngoscopes, Pharyngoscopes, Ophthalmoscopes, Otoscopes, Retinoscopes, Tongue Depressors, Specula, Illuminators, Transilluminators and the Like Used in the Practice of Ophthalmology, Optometry and Medicine and Surgery Generally, the Lamps, Accessories and Parts Therefor; Tonometers (Measurement of Intraocular Pressure); Malingering (Detection of Simulated Blindness) and Muscle Tests; Color Perception Tests; Test Charts; Television Trainers; Bar Separators; Tissue Freezers; Respirators and Parts Therefor.
First use on or about Sept. 11, 1944.

SN 693,739. Emda Fabrik Elektro-Medizinischer und Dentaler Apparate, Georg Hartmann, Frankfurt am Main, Germany. Filed Aug. 26, 1955.

Emda

Owner of German Reg. No. 637,784, dated May 4, 1953.

For Medical and Dental Apparatus and Equipment—Namely, Wash Stands; Electric, Pneumatic, and Hydraulic Apparatus; Instruments and Implements for Dental Requirements, Such as Dental Drilling, Grinding and Polishing Machines; Apparatus for Galvano and Caustic, High-Frequency Apparatus, Diathermic Apparatus, Hot Air Blowers, Compressors; Instrument Tables, Aseptic Instrument Cabinets, Operating Chairs, Foot Stools.

SN 693,749. Industrie A.-G. Allegro, Emmenbrucke, Switzerland. Filed Aug. 26, 1955.

ALLEGRO

For Devices for the Care of Teeth—Namely, Dental Floss, Dental Floss Holder, Parts of Dental Floss Holders.
First use 1946; in commerce 1952.

SN 693,824. Thomas W. Halliday, Los Angeles, Calif. Filed Aug. 29, 1955.

Steri-Spool

For Spools of Stainless Steel Surgical Wire.
First use Oct. 18, 1948.

SN 694,001. Nobilium Processing Company of Chicago, Chicago, Ill. Filed Aug. 31, 1955.

NOBIL-HINGE

For Hinge and Stress Relieving Structure for Dentures.
First use on or about July 29, 1955.

SN 694,917. Margaret E. Rogers, d. b. a. Marvel Products, Ames, Iowa. Filed Sept. 19, 1955.

SLEEP-RITE

For Device Designed To Correct the Mouth Breathing Habit, Said Device Including an Elastic Chin-Supporting Sling and Connecting Head Straps.
First use Nov. 1, 1954.

SN 696,998. Marco, Inc., Houston, Tex. Filed Oct. 24, 1955.

Skin Vac

For Vacuum-Actuated Skin Massaging and Cleansing Apparatus.
First use Oct. 1, 1954.

SN 697,028. The Seamless Rubber Company, New Haven, Conn. Filed Oct. 24, 1955.

CREST

For Water Bottles, Fountain Syringes, Combination Syringes, Face Bottles, Syringes, Ice Caps, Throat and Spinal Bags, Surgeons' Gloves, Made of Rubber.
First use June 15, 1928.

SN 697,209. C. R. Bard, Inc., Summit, N. J. Filed Oct. 27, 1955.

DISPOZ-A-BAG

For Plastic Urinal Bags.
First use on or about Aug. 9, 1955.

SN 697,508. Travenol Laboratories, Inc., Morton Grove, Ill. Filed Nov. 1, 1955.

TRAVAD

For Plastic Pharmaceutical Containers for Use in the Storing and Dispensing of Fluids.
First use since June 14, 1955.

SN 697,588. Carlo Joseph Telesco, New York, N. Y. Filed Nov. 2, 1955.

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PK

For Sanitary Napkins.
First use Sept. 29, 1955.

SN 697,798. The Kendall Company, Boston, Mass. Filed Nov. 7, 1955.

BATTLE RIBBON

For Surgical Dressings.
First use Sept. 29, 1955.

SN 697,839. Q-Tips, Inc., Long Island City, N. Y. Filed Nov. 7, 1955.

TWINETTES

For Swabs Consisting of Sanitary Absorbent Cotton Attached to Both Ends of a Wooden Stick.
First use Aug. 23, 1955.

CLASS 46

SN 635,591. Rose Mill, Incorporated, Milford, Conn., from H. Roland Frickenhaus, d. b. a. Rose Mill. Filed Sept. 22, 1952.

ROSE MILL

For Whole Wheat Flour, Cracked Wheat, Unbleached, Bleached, Enriched and Unenriched White Flour, Bran, Corn Meal, Corn Flour, Rye Flour, Pumpernickel, Buckwheat Flour, Complete and Semi-Complete Prepared Mixes for the Production of Baked Products Having One of the Foregoing as a Basic Ingredient Alone or in Blend With One or More of the Foregoing Bakery Products—Namely, Bread, Rolls, Cakes, Cookies, Buns, Tarts, and Pies.
First use in 1709.

SN 663,311. Rockwood & Co., Brooklyn, N. Y. Filed Mar. 25, 1954.

CHOCOLATE KRUSTIES

For Chocolate Candy Pieces.
First use Mar. 11, 1954.

SN 663,965. Edwin M. Taylor, Arroyo Grande, Calif., to Phelan & Taylor Produce Co., Inc., Oceano, Calif. Filed Apr. 5, 1954.

TAYLOR MADE

For Fresh Vegetables.
First use Mar. 22, 1954.

SN 673,528. Lisco Trading Corporation, New York, N. Y. Filed Sept. 21, 1954.

LEMARCHAND

For Canned Fish.
First use July 1953.

SN 680,977. F. E. Royston & Co., Aurora, Ill. Filed Feb. 2, 1955.

PRIDE of AURORA

For Canned Vegetables, Pork and Beans, Spaghetti, Evaporated Milk, Soups, Canned Fruits and Berries, Bottled Catsup, and Food Flavoring Extracts.
First use June 27, 1913, on canned vegetables.

SN 681,428. Eastman Kodak Company, Rochester, N. Y. Filed Feb. 10, 1955. Sec. 2(f).

EASTMAN

Owner of Reg. Nos. 67,012, 574,245, and others.
For Chemical Preparation for Use as an Inhibitor To Retard Deterioration of Food or Foodstuffs, and Antioxidants for Foods or Foodstuffs.
First use Apr. 16, 1948.

SN 683,192. Fable Brands, Inc., Wilmington, Del. Filed Mar. 10, 1955.

FABLE

For Edible Hydrogenated Vegetable Oil; Concentrate of Vegetable Fats, Sugar, Etc., for Making Frozen Desserts; a Whip Consisting of Vegetable Oils, Dextrose, Sugar, Corn Syrup, Etc.; and a Topping Consisting of Vegetable Fats, Sugar, Emulsifiers, Stabilizers, Etc.
First use Dec. 3, 1953, on vegetable fat.

SN 683,219. Aunt Nellie's Farm Kitchen, Inc., Clyman, Wis. Filed Mar. 10, 1955.

Aunt Nellie's

Owner of Reg. Nos. 270,935, 405,583, and others.
For Canned Vegetables and Canned Potato Salad.
First use Sept. 25, 1920, on canned peas.

SN 683,328. John Wagner & Sons Inc., Philadelphia, Pa. Filed Mar. 11, 1955.

SALT-EX

Owner of Reg. No. 536,507.
For All-Purpose, Low-Sodium Seasoning for Salt-Free Diets.
First use Feb. 23, 1955.

SN 682,243. Dallons Laboratories, Inc., Los Angeles, Calif. Filed Feb. 24, 1955.

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Owner of Reg. Nos. 67,012, 574,245, and others.
For Chemical Preparation for Use as an Inhibitor To Retard Deterioration of Food or Foodstuffs, and Antioxidants for Foods or Foodstuffs.
First use Apr. 16, 1948.

SN 683,192. Fable Brands, Inc., Wilmington, Del. Filed Mar. 10, 1955.

FABLE

For Edible Hydrogenated Vegetable Oil; Concentrate of Vegetable Fats, Sugar, Etc., for Making Frozen Desserts; a Whip Consisting of Vegetable Oils, Dextrose, Sugar, Corn Syrup, Etc.; and a Topping Consisting of Vegetable Fats, Sugar, Emulsifiers, Stabilizers, Etc.
First use Dec. 3, 1953, on vegetable fat.

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For Canned Vegetables and Canned Potato Salad.
First use Sept. 25, 1920, on canned peas.

SN 683,328. John Wagner & Sons Inc., Philadelphia, Pa. Filed Mar. 11, 1955.

SALT-EX

Owner of Reg. No. 536,507.
For All-Purpose, Low-Sodium Seasoning for Salt-Free Diets.
First use Feb. 23, 1955.

SN 683,702. Ben Myerson Candy Co., Los Angeles, Calif. Filed Mar. 17, 1955.

Christopher's

For Candy.
First use Jan. 1, 1908.

SN 683,988. Quality Bakers of America Cooperative, Inc., New York, N. Y. Filed Mar. 22, 1955. COLLECTIVE MARK.

Sunnyshells

For Baked Goods—To Wit, Unfilled Pastry Shells.
First use Mar. 18, 1955.

SN 684,973. Santiago Development Corporation, New York, N. Y. Filed Apr. 5, 1955.

Lilac

For Milk in Powdered Form.
First use Jan. 15, 1954.

SN 685,246. Samuel Brown, d. b. a. Brownies, New York, N. Y. Filed Apr. 11, 1955.

My Wife's

For Cakes, Pies, Danish and French Pastries.
First use Sept. 1, 1953.

SN 686,938. Woody's Cheese Company, Waupaca, Wis. Filed May 5, 1955.

Woody's CHEESE-Quick

Owner of Reg. Nos. 538,391, 544,276, and 545,765.
For Cheese Spread.
First use Mar. 24, 1954.

SN 687,460. The Frito Company, Dallas, Tex. Filed May 13, 1955.

CHILITOS

For Corn Chips Treated With a Chili Powder.
First use Dec. 28, 1954.

SN 687,865. E. F. Kemp Corp., Somerville, Mass. Filed May 19, 1955.

Kemp's Golden Glow Nuts

The words "Salted Nuts," "Nut Products," and "Nuts" are disclaimed apart from the mark as shown. Owner of Reg. Nos. 97,059, 577,734, and others.
For Salted and Unsalted Nuts and Shelled and Unshelled Nuts.
First use on or about Dec. 10, 1951.

SN 690,706. William J. Grijalva, d. b. a. The Normlee Co., San Francisco, Calif. Filed July 5, 1955.

TopDog

For Fresh Fruits.
First use Sept. 10, 1954.

SN 692,381. Certified Brands, Inc., Kansas City, Mo. Filed Aug. 3, 1955.

Golden Wedding

For Coffee and Tea.
First use Apr. 30, 1909.

SN 692,722. Lyndonville Canning Co., Inc., Lyndonville, N. Y. Filed Aug. 9, 1955.

APPLE SMOOTH

For Canned Apple Sauce.
First use July 19, 1955.

SN 692,768. Norman M. Coffin, Hollywood, Fla. Filed Aug. 10, 1955.

WIDE AWAKE

For Fresh Vegetables.
First use on or about Aug. 1, 1955.

SN 693,444. Curtice Creamery Company, Rochester, N. Y. Filed Aug. 22, 1955.

RACHELE

For Cheeses.
First use July 5, 1955.

SN 693,832. Irvine Valencia Growers, Irvine, Calif. Filed Aug. 29, 1955. Sec. 2(f).

Madras

Owner of Reg. No. 357,641.
For Fresh Citrus Fruits.
First use Apr. 24, 1937.

SN 693,843. Our Gang Pet Food Co., Los Angeles, Calif. Filed Aug. 29, 1955.

LITTLE RASCALS

For Dog and Cat Food.
First use Feb. 2, 1955.

SN 694,953. Bayou Foods Company, Mobile, Ala. Filed Sept. 20, 1955.

Cap'n Joe's

For Frozen Deviled Crabs and Frozen Crab Rolls.
First use 1951.

SN 694,974. Dannen Mills, Inc., St. Joseph, Mo. Filed Sept. 20, 1955.

HUNKETS

For Cattle Feed.
First use February 1938.

SN 695,116. Schulze and Burch Biscuit Co., Chicago, Ill. Filed Sept. 21, 1955. Sec. 2(f).

FLAVOR-KIST

For Crackers and Cookies.
First use Apr. 11, 1946.

SN 695,733. L. & N. Products, Inc., Tacoma, Wash. Filed Oct. 3, 1955.

Paddy's

For Beef Stew.
First use Aug. 4, 1955.

SN 696,078. Topco Associates, Inc. (Cooperative), d. b. a. Topco Associates, Inc., Chicago, Ill. Filed Oct. 7, 1955.

MINTAIRES

For Candy.
First use July 10, 1951.

CLASS 47

SN 684,497. Tempesta Import Corporation, Long Island City, N. Y. Filed Mar. 29, 1955.

Châtillion

For Wines.
First use May 1951.

SN 694,987. French-Italian Wine & Liquor Corp., Brooklyn, N. Y. Filed Sept. 20, 1955.

VILLA D'ESTE

For Vermouth.
First use Feb. 10, 1955.

SN 695,023. Richard's Wine Cellars, Inc., Petersburg, Va. Filed Sept. 20, 1955.

Mother Vineyard

For Wines.
First use in the year 1934.

CLASS 48

SN 681,805. Schultheiss-Brauerei Aktiengesellschaft, Berlin, Charlottenburg, Germany. Filed Feb. 16, 1955.



Owner of German Reg. No. 28,731, dated Jan. 26, 1898.
For Beer.

SN 682,022. Kotake Company, Limited, Honolulu, Territory of Hawaii. Filed Feb. 21, 1955.



The Japanese characters are translated as "White Eagle."
For Sake.
First use Dec. 21, 1951.

SN 695,561. National Beer Sales, Inc., Milwaukee, Wis. Filed Sept. 29, 1955.

Prost

The word "Prost" is related to the word "Prosit" which is a salutation meaning "May it do you good."
For Beer.
First use Sept. 20, 1955.

CLASS 49

SN 683,102. Campbell & Clark Limited, Glasgow, Scotland. Filed Mar. 9, 1955. Sec. 2(f).

CLARK'S *Reserve*

For Scotch Whisky.
First use 1936; in commerce 1936.

SN 694,709. Federal Liquors Ltd., d. b. a. C. H. Graves & Sons Co., Boston, Mass. Filed Sept. 15, 1955.

BORIS Gudanoff

For Vodka.
First use June 1952.

SN 695,249. Schenley Distillers, Inc., New York, N. Y. Filed Sept. 23, 1955.

OLD JACK POGUE

Owner of Reg. No. 329,730.
For Whiskey.
First use Aug. 14, 1934.

CLASS 50

SN 691,215. The Hettrick Manufacturing Company, Toledo, Ohio. Filed July 13, 1955.

NIGHT RIDER

For Tents.
First use May 17, 1955.

SN 694,118. American Viscose Corporation, Philadelphia, Pa. Filed Sept. 2, 1955.

AVISCO

For Tubular Bands and Caps of Regenerated Cellulose or Cellulosic Materials, Such as Cellulose Ethers or Cellulose Esters, and Plastic Materials for Use in Sealing and Closing Containers.
First use Aug. 1, 1955.

SN 695,964. Addressograph-Multigraph Corporation, Cleveland, Ohio. Filed Oct. 6, 1955.

Systemaster

For Blank and Preprinted Planographic Paper Printing Plates or Mats in Sheet Form, or in Continuous Form, or as a Part of a Unit Set of Forms, and Adapted for Use in Duplicating Machines.
First use Aug. 5, 1955.

SN 699,757. Albina Engine & Machine Works, Portland, Oreg. Filed Dec. 12, 1955.

CLIMBER

For Suspended Scaffolding.
First use Apr. 30, 1954.

SN 699,807. Leeds Sweete Products, Inc., Chicago, Ill. Filed Dec. 12, 1955.

AQUA MAGIC

For Silk Screen Construction and Printing Kits Comprising Screen Fabric, Stencil Compounds, Water Soluble Stencil Remover, Silk Screen Printing Units, Squeegees, Construction Manuals, Water Soluble Paints, Brushes, and Spatulas.
First use Oct. 12, 1955.

CLASS 51

SN 696,728. Pharma-Craft Corporation, New York, N. Y. Filed Oct. 19, 1955.

Ebb

Owner of Reg. No. 533,117.
For Personal Deodorant—Namely, Stick Deodorant.
First use Aug. 2, 1955.

CLASS 52

SN 680,677. Walter G. Legge Company, Inc., New York, N. Y. Filed Jan. 28, 1955.

ELIMDUST

For Liquid To Be Applied to a Dustcloth for Causing the Dust To Adhere Thereto.
First use Dec. 28, 1954.

SN 680,814. Solvem Company, Portland, Oreg. Filed Jan. 31, 1955.

SOLVEM



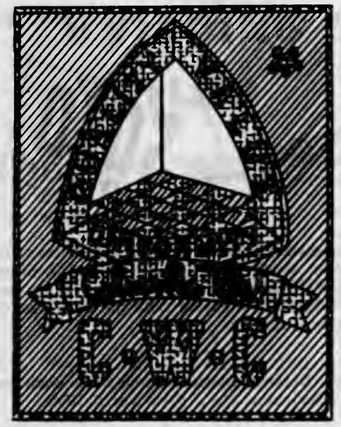
For Paste Hand Cleaner and Paste Household Cleaner.
First use Oct. 7, 1954.

SN 684,396. George D. Butcher, d. b. a. Fort Worth Sl-Clean Service, Fort Worth, Tex. Filed Mar. 29, 1955.

KLIFF

The drawing is lined for red but color is not claimed.
For Cleaning Solvents for Removing Stains From Fabrics.
First use July 1, 1952.

SN 690,226. Columbia Wax Company, Glendale, Calif. Filed June 27, 1955.



Applicant disclaims the words "Quality," "Value," "Uniformity," and "Wax" apart from the mark as shown. The drawing is lined for yellow and brown.
For Cleaners for Floors.
First use Apr. 17, 1950.

SN 690,750. Sanitary Soap Company, Inc., Paterson, N. J. Filed July 5, 1955.

DUSTGONE

For Composition in Powder Form for Application as Sweeping Compounds.
First use July 1936.

SN 691,086. Nettie Rosenstein, Inc., New York, N. Y. Filed July 11, 1955.

EVIL ANGEL

For Soap.
First use May 5, 1955.

SN 692,906. Continental Midway Corp., Baltimore, Md. Filed Aug. 12, 1955.

Mintt Wash!

For Powdered Product for Cleaning Motor Vehicle Bodies.
First use July 6, 1954.

SN 693,187. Producers Chemical Service, Borger, Tex. Filed Aug. 16, 1955.

SHUX

For Toilet, Laundry, and Industrial Cleaners in the Form of Liquids, Solids, Pastes, and Powders.
First use July 18, 1955.

SN 693,669. Economics Laboratory, Inc., St. Paul, Minn. Filed Aug. 25, 1955.

SOILITE

Owner of Reg. Nos. 401,571 and 536,498.
For Detergent Compound for Use in Dishwashing Machines.
First use May 1, 1955.

SN 694,113. Airkem, Inc., New York, N. Y. Filed Sept. 2, 1955.

a—3

For Detergent Composition Having a Combined Detergent, Deodorant, and Sanitizer Action.
First use Aug. 10, 1955.

SN 698,942. Walsh & Adam Company, Santa Barbara, Calif. Filed Nov. 25, 1955.

Shampuff

For Liquid Detergent for Fabrics.
First use Aug. 15, 1955.

SN 698,943. H. Weber & Sons, Wappingers Falls, N. Y. Filed Nov. 25, 1955.

"INSTANTO"

For Waterless Hand Soap.
First use July 20, 1954.

SERVICE MARKS

CLASS 100

SN 662,509. L. W. Bonsib, d. b. a. Bonsib Drive-Ins, Denver, Colo. Filed Mar. 12, 1954.



Owner of Reg. No. 380,927.
For Restaurant Services.
First use on or about Aug. 12, 1953.

SN 663,801. Lane-Wells Company, Los Angeles, Calif., to Lane-Wells Company, Huntington Park, Calif. Filed Apr. 2, 1954.

FLOWLOG

For Measuring the Flow of Fluid at Various Points in Oil Well and the Like Earth Boreholes.
First use Nov. 3, 1948.

SN 669,951. Visioneering Company, Inc., Cleveland, Ohio. Filed July 13, 1954.



Owner of Reg. No. 430,760.
For Engineering Services Rendered to Others in the Design, Development, and Production of Articles of Merchandise.
First use on or about Jan. 1, 1942.

SN 671,067. Super Valu Stores, Inc., Hopkins, Minn. Filed Aug. 3, 1954.



Owner of Reg. No. 340,502.
For Advice and Consultation Services in Connection With the Management, Merchandising, Organization, and Operation of Grocery Stores.
First use August 1942.

SN 678,122. Lane-Wells Company, Los Angeles, Calif., to Lane-Wells Company, Huntington Park, Calif. Filed Dec. 10, 1954.

MINI-ELECTROLOG

For Electrically Measuring the Characteristics of Sub-Surface Strata Surrounding Oil Well and Other Well Boreholes.
First use May 27, 1954.

SN 678,529. The Greyhound Corporation, Chicago, Ill. Filed Dec. 17, 1954.

GREYHOUND



Owner of Reg. Nos. 541,197, 541,199, and others.
For Restaurant Services.
First use June 26, 1937.

SN 695,669. Wimpy Grills, Inc., Chicago, Ill. Filed Sept. 30, 1955.



Owner of Reg. Nos. 334,286 and 344,153.
For Restaurant Services.
First use Nov. 10, 1934.

CLASS 101

SN 670,266. W. H. M. Sold, Inc., Detroit, Mich. Filed July 19, 1954.



For Promoting the Sale of Goods and Services of Others on a Commission Basis Using Manufacturers' Representatives as Applicant's Agents, the Orders Secured by the Agents Being Consolidated and Placed With the Individual Concerns.
First use June 22, 1946.

SN 685,039. National Stationery and Office Equipment Association, Washington, D. C. Filed Apr. 6, 1955.



For Preparing and Distributing Advertising Copy for Newspaper Publication by Members of the Applicant's Association.
First use Sept. 22, 1954.

SN 691,649. Welcome Wagon, Inc., Memphis, Tenn. Filed July 20, 1955.

WELCOME WAGON SERVICE

The word "Service" is disclaimed apart from the mark as shown.
For Advertising Service Employing Personal Visits to Selected Groups of Prospective Purchasers by a Representative of the Public Relations Organization and the Presentation of Gifts to Said Prospective Purchasers From Retail Firms Employing the Service.
First use July 1928.

CLASS 102

SN 690,435. Continental Assurance Company, Chicago, Ill. Filed June 29, 1955.

MED-X

For Underwriting Health Insurance.
First use June 1, 1955.

CLASS 103

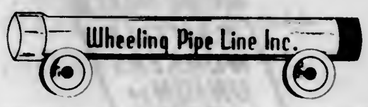
SN 661,491. Robert A. Parker, d. b. a. R. A. "Bob" Parker Lumber Company, Ponca City, Okla. Filed Feb. 23, 1954.

BUILDING TAILOR

For Consultation and Advisory Services Rendered in the Purchase, Construction, and Repair of Homes and Other Buildings by Others.
First use Dec. 29, 1953.

CLASS 105

SN 686,121. Wheeling Pipe Line, Inc., El Dorado, Ark. Filed Apr. 22, 1955.



The wording "Wheeling Pipe Line Inc." constitutes applicant's trade name and no registrable rights are claimed therein.
For Transportation by Tractor and Semi-Trailer of Crude Oil and Refined Petroleum Products.
First use June 20, 1949.

CLASS 106

SN 651,681. Velveray Corporation, New York, N. Y. Filed Aug. 11, 1953.

VINYLURE

For Processing Woven and Knitted Fabrics of Cotton, Silk, Rayon, Nylon, Wool, Acetate, and Linen Belonging to Others by Dyeing, Applying Flock and a Suede Finish Thereto and by Printing and Decorating Such Fabrics.
First use Nov. 15, 1950.

CLASS 107

SN 693,423. Miss America Pageant, Atlantic City, N. J. Filed Aug. 22, 1955.

MISS AMERICA

For Promotion of Education Through the Granting of Scholarships, the Recipients Being Selected in Local, State, and National Contests, Based on Such Factors as Beauty, Personality, and Talent.
First use Jan. 8, 1942.

SN 695,145. Carlton S. Dargusch, Jr., & Byron Taggert, Columbus, Ohio. Filed Sept. 22, 1955.

"How Bright You Are"

For Entertainment Service—Namely, the Presentation of a Panel-Type Quiz Show Through the Medium of Television.
First use Sept. 7, 1955.

CERTIFICATION MARKS

CLASS A

SN 688,154. The Institute of Boiler and Radiator Manufacturers, New York, N. Y. Filed May 24, 1955.

I=B=R

The mark certifies compliance with one or more codes that provide a method of testing and rating indirect water heaters.
For Indirect Water Heaters.
First use Apr. 19, 1955.

SN 691,298. State of Idaho, Boise, Idaho. Filed July 14, 1955.



The mark certifies regional origin. The drawing is lined for black but color is not claimed.
For Potatoes.
First use since Apr. 27, 1955.

SN 695,959. Textile Workers Union of America, New York, N. Y. Filed Oct. 5, 1955.

UNION MADE TEXTILE WORKERS UNION of AMERICA

Applicant disclaims any exclusive right or title in or to use of the words "Union Made" in its application. The mark certifies that the work or labor on the goods was performed by members of the Textile Workers Union of America.

For Textile Products and Related Materials.

First use June 1, 1939.

SN 696,272. Virginia Milk Producers Federation, Blacksburg, Va. Filed Oct. 11, 1955.

VIRGINIA PRODUCED MILK ★ THE STANDARD OF EXCELLENCE ★

The mark certifies regional origin.

For Dairy Products.

First use Sept. 15, 1955.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

626,403. MAPLE LEAF AND DESIGN. Industrial Processing Company. SN 681,599. Pub. 12–27–55. Filed 2–14–55.

CLASS 2

626,404. ATLAS PLY-8-CRATE. Atlas Plywood Corporation. SN 665,264. Pub. 2–21–56. Filed 4–27–54.

626,405. KNEAD-POT. Wirecraft Manufacturing Co. SN 669,068. Pub. 2–21–56. Filed 6–28–54.

626,406. GLASKET. Melvin L. Armstrong, d. b. a. Dura-Lite Plastics Company. SN 680,349. Pub. 2–21–56. Filed 1–24–55.

626,407. JONNY PLANTER. Carol Beatty Co. SN 684,102. Pub. 2–21–56. Filed 3–24–55.

626,408. GOODY BOY. F. Richard Coughlan, d. b. a. Frank Richard Agency. SN 686,531. Pub. 2–21–56. Filed 4–29–55.

626,409. VERSADYE. Fablok Mills, Inc. SN 690,615. Pub. 2–21–56. Filed 7–1–55.

626,410. SEALDRUM. United States Rubber Company. SN 691,181. Pub. 2–21–56. Filed 7–12–55.

626,411. SEALDBIN. United States Rubber Company. SN 691,182. Pub. 2–21–56. Filed 7–12–55.

626,412. DRILLMASTER. Sunbeam Corporation. SN 692,654. Pub. 2–21–56. Filed 8–8–55.

626,413. BIN-BOKS. Western Lithograph Company, also d. b. a. Westline Products Div. SN 692,980. Pub. 2–21–56. Filed 8–12–55.

626,414. KUBE KEEPER AND DESIGN. Kent Plastics Corporation. SN 693,059. Pub. 2–21–56. Filed 8–15–55.

626,415. NYLO-TAINER. E. Shipton & Company Limited. SN 695,356. Pub. 2–21–56. Filed 9–26–55.

626,416. PRESTO-LOC. Kaumagraph Company. SN 696,239. Pub. 2–21–56. Filed 10–11–55.

626,417. 2–20. Union Bag & Paper Corporation. SN 696,269. Pub. 2–21–56. Filed 10–11–55.

626,418. TWO-TWENTY. Union Bag & Paper Corporation. SN 696,270. Pub. 2–21–56. Filed 10–11–55.

CLASS 3

626,419. SPARTAN AND DESIGN. United States Trunk Company. SN 647,733. Pub. 2–23–54. Filed 5–26–53.

CLASS 5

626,420. LOCTITE. The American Sealants Company. SN 687,522. Pub. 2–21–56. Filed 5–16–55.

626,421. LIN-O-SET. Archer-Daniels-Midland Company. SN 695,129. Pub. 2–21–56. Filed 9–22–55.

CLASS 6

626,422. SOLVIC AND DESIGN. Solvic Société Anonyme. SN 666,693. Pub. 2–21–56. Filed 5–19–54.

626,423. SOLVIC AND DESIGN. Solvic Société Anonyme. SN 666,694. Pub. 2–21–56. Filed 5–19–54.

626,424. SOLVIC WITHIN OVAL DESIGN. Solvic Société Anonyme. SN 666,695. Pub. 2–21–56. Filed 5–19–54.

626,425. DETREX PAINTBOND ETC. AND DESIGN. Detrex Corporation. SN 670,417. Pub. 8–23–55. Filed 7–22–54.

626,426. LEBEC. Lebec Chemical Corporation. SN 688,944. Pub. 2–21–56. Filed 6–6–55.

626,427. SYNOWAX. Cary Chemicals, Inc. SN 689,021. Pub. 2–21–56. Filed 6–7–55.

626,428. ACCONOX. American Cyanamid Company. SN 689,115. Pub. 2–21–56. Filed 6–8–55.

CLASS 7

626,429. TI-ALL. Ti-All Fasteners Inc. SN 677,615. Pub. 2–21–56. Filed 12–1–54.

CLASS 10

626,430. GARD N GRO AND DESIGN. The Stadler Fertilizer Company. SN 639,722. Pub. 6–7–55. Filed 12–18–52.

CLASS 11

626,431. DASHAFLUID. Dashew Business Machines, Inc. SN 690,240. Pub. 1–3–56. Filed 6–27–55.

CLASS 12

626,432. SERVTO. Servto Corporation. SN 659,824. Pub. 2–21–56. Filed 1–20–54.

626,433. SAFETY-WALK. Minnesota Mining & Manufacturing Company. SN 682,163. Pub. 2–21–56. Filed 2–23–55.

626,434. LUSTERGLO. Lusterglo, Inc. SN 682,811. Pub. 2–21–56. Filed 3–4–55.

626,435. CORONASTONE. Minnesota Mining & Manufacturing Company. SN 682,961. Pub. 2–21–56. Filed 3–7–55.

626,436. AZTEC. Harry P. Anderson. SN 683,088. Pub. 2–21–56. Filed 3–9–55.

626,437. FINEWOOD D AND DESIGN. Dulaney Plywood Corporation. SN 684,720. Pub. 2–21–56. Filed 4–1–55.

626,438. WINDO-TENDA. Windo-Tenda, Inc. SN 688,777. Pub. 2–21–56. Filed 6–2–55.

626,439. QUALITY SEAL AND DESIGN. Aluminum Products, Inc. SN 689,012. Pub. 2–21–56. Filed 6–7–55.

626,440. STABILITE IT "STAYS PUT." Nickey Brothers, Inc. SN 689,734. Pub. 2–21–56. Filed 6–17–55.

626,441. LUSTERSTONE. Wilson Stone Company. SN 691,597. Pub. 2–21–56. Filed 7–19–55.

626,442. PHILLIPS CUSTOMATIC. Green Mfg. Corp. SN 691,623. Pub. 2–21–56. Filed 7–20–55.

626,443. THREDKOTE. Humble Oil & Refining Company. SN 692,468. Pub. 2–21–56. Filed 8–4–55.

626,444. BUBLTILE. Robbins Floor Products, Inc. SN 693,630. Pub. 2–21–56. Filed 8–24–55.

626,445. POLKATILE. Robbins Floor Products, Inc. SN 693,631. Pub. 2–21–56. Filed 8–24–55.

626,446. W M AND DESIGN. Wolverine Mouldings, Inc. SN 695,671. Pub. 2–21–56. Filed 9–30–55.

626,447. ANVIL-TOP AND DESIGN. The Master Builders Company, to American-Marietta Company. SN 697,305. Pub. 2–21–56. Filed 10–28–55.

626,448. BAR MESH. Pennington Manufacturing Company. SN 697,317. Pub. 2–21–56. Filed 10–28–55.

626,449. "PERFOWOOD." United States Plywood Corporation. SN 697,510. Pub. 2–21–56. Filed 11–1–55.

626,450. SOFSTEP AND DESIGN. The Mastic Tile Corporation of America. SN 698,048. Pub. 2–21–56. Filed 11–10–55.

626,451. BAXCO. J. H. Baxter & Co. SN 698,125. Pub. 2–21–56. Filed 11–14–55.

626,452. SHEF-TEN. Armco Steel Corporation. SN 698,394. Pub. 2–21–56. Filed 11–17–55.

CLASS 13

626,453. ARLINGTON UNIT CLOSET AND DESIGN. Kokomo Sanitary Pottery Corporation. SN 679,853. Pub. 2–21–56. Filed 1–13–55.

626,454. VAPO-GARD. Enardo Manufacturing Company. SN 685,440. Pub. 2–21–56. Filed 4–13–55.

626,455. ENARDO. Enardo Manufacturing Company. SN 685,441. Pub. 2–21–56. Filed 4–13–55.

626,456. TITEFLEX "500." Titeflex, Inc. SN 689,531. Pub. 2–21–56. Filed 6–14–55.

626,457. MASTER PEMBROKE. American Radiator & Standard Sanitary Corporation. SN 694,948. Pub. 2–21–56. Filed 9–20–55.

CLASS 14

626,458. NOVOSTON. J. Stone & Company (Charlton) Limited. SN 679,016. Pub. 2-21-56. Filed 12-27-54.

626,459. INCO AND DESIGN. The International Nickel Company, Inc. SN 691,768. Pub. 2-21-56. Filed 7-22-55.

626,460. MS SW AND DESIGN. Mid-States Steel & Wire Co. SN 695,328. Pub. 2-21-56. Filed 9-26-55.

CLASS 16

626,461. SHEFFIELD TINTS-ALL. Sheffield Bronze Paint Corporation. SN 697,328. Pub. 2-21-56. Filed 10-28-55.

626,462. PRIMAFIL. Pratt & Lambert-Inc. SN 697,832. Pub. 2-21-56. Filed 11-7-55.

CLASS 18

626,463. LIPOZAN. Chase Chemical Company. SN 649,210. Pub. 10-27-53. Filed 6-23-53.

626,464. DAD'S. A. Jay Loomis. SN 678,240. Pub. 2-21-56. Filed 12-13-54.

626,465. EQUILENE. Axpeco Chemical Company. SN 685,949. Pub. 12-6-55. Filed 4-21-55.

626,466. CITRANOID. Physiological Research Corporation. SN 686,081. Pub. 2-21-56. Filed 4-22-55.

626,467. FIL-A-LAC. Fil-A-Lac Mineral Co. SN 689,477. Pub. 2-21-56. Filed 6-14-55.

626,468. ANTIVERT. Chas. Pfizer & Co., Inc. SN 689,650. Pub. 2-21-56. Filed 6-16-55.

626,469. DECA-MULCIN. Mead Johnson & Company. SN 690,726. Pub. 2-21-56. Filed 7-5-55.

626,470. BIOFLAV. Physiological Research Corporation. SN 691,079. Pub. 2-21-56. Filed 7-11-55.

626,471. CITROID. Physiological Research Corporation, to Grove Laboratories, Inc. SN 691,080. Pub. 2-21-56. Filed 7-11-55.

626,472. YOGI OIL. John Calvin Core, Jr. SN 691,195. Pub. 2-21-56. Filed 7-13-55.

CLASS 19

626,473. STAFAST. Protexacar. SN 677,982. Pub. 2-21-56. Filed 12-8-54.

CLASS 21

626,474. DIAL-X AND DESIGN. General Dynamics Corporation, from Stromberg-Carlson Company. SN 667,267. Pub. 2-21-56. Filed 5-27-54.

626,475. RUSS AND DESIGN. Russ-Elektroofen K. G. SN 677,815. Pub. 2-21-56. Filed 12-6-54.

626,476. STROMBERG-CARLSON SOUND AND DESIGN. General Dynamics Corporation, from Stromberg-Carlson Company. SN 678,825. Pub. 2-21-56. Filed 12-22-54.

626,477. MAGNA WELDER. Auto Arc-Weld Manufacturing Company. SN 681,398. Pub. 2-21-56. Filed 2-10-55.

626,478. NADAR AND DESIGN. North American Aviation, Inc. SN 682,456. Pub. 2-21-56. Filed 2-28-55.

626,479. MUSICALL AND DESIGN. Calbeat Engineering & Electronics Co. SN 684,272. Pub. 2-21-56. Filed 3-28-55.

626,480. SINUSAIRE. Stuart Corporation. SN 684,701. Pub. 2-21-56. Filed 3-31-55.

626,481. PARTY POT. Marion-Kay Products Co. Inc. SN 691,378. Pub. 2-21-56. Filed 7-15-55.

626,482. HOST ELECTRIC BRUSH. Racine Industrial Plant, Inc. SN 694,386. Pub. 2-21-56. Filed 9-8-55.

626,483. OXY-SPEED AND DESIGN. Oxy-Dry Sprayer Corporation. SN 694,739. Pub. 2-21-56. Filed 9-15-55.

626,484. ARM AND DESIGN OF SHIELD. Florida Aircraft Radio and Marine, Inc. SN 694,865. Pub. 2-21-56. Filed 9-19-55.

626,485. UTRON. Otis T. Carr. SN 694,964. Pub. 2-21-56. Filed 9-20-55.

626,486. GLO-TISSERIE. Globe American Corporation. SN 695,299. Pub. 2-21-56. Filed 9-26-55.

CLASS 22

626,487. BRONSON MULTI-ROYAL. Higbie Manufacturing Company. SN 644,983. Pub. 2-21-56. Filed 4-9-53.

626,488. BRONSON ROYAL-MATIC. Higbie Manufacturing Company. SN 644,984. Pub. 2-21-56. Filed 4-9-53.

626,489. BRONSON ROYALIST. Higbie Manufacturing Company. SN 644,985. Pub. 2-21-56. Filed 4-9-53.

626,490. HAPPINESS. Hinton & Company, Inc. SN 658,993. Pub. 10-12-54. Filed 1-5-54.

626,491. STRAT-O-WHEEL. Virgil L. McCormack, d. b. a. V. L. McCormack Company. SN 689,294. Pub. 2-21-56. Filed 6-10-55.

626,492. OOPFLI. Cycraft Products Co. SN 689,469. Pub. 2-21-56. Filed 6-14-55.

626,493. FEATHERWEIGHT AND DESIGN. Western Grinders. SN 689,686. Pub. 2-21-56. Filed 6-16-55.

626,494. TOP-FIVE. Paul Jenisch, d. b. a. Paul Jenisch Creations. SN 689,725. Pub. 2-21-56. Filed 6-17-55.

626,495. COLT AND DESIGN. Colt Golf. SN 689,925. Pub. 2-21-56. Filed 6-21-55.

CLASS 23

626,496. BURR MASTER. Modern Industrial Engineering Company. SN 659,731. Pub. 2-21-56. Filed 1-19-54.

626,497. SADI. Societe Auxiliaire d'Industrie (Sadi). SN 662,025. Pub. 2-21-56. Filed 3-4-54.

626,498. TRAVELER. A. P. deSanno & Son, Inc. SN 669,316. Pub. 2-21-56. Filed 7-2-54.

626,499. EVERPRINT. The Everprint Corporation. SN 676,947. Pub. 2-21-56. Filed 11-19-54.

626,500. AEROCAST. Kiekhaefer Corporation. SN 678,638. Pub. 2-21-56. Filed 12-20-54.

626,501. GARD. General Filter Company. SN 678,861. Pub. 2-21-56. Filed 12-23-54.

626,502. USI AND DESIGN. U. S. Industries, Inc. SN 679,430. Pub. 2-21-56. Filed 1-4-55.

626,503. LITTLE GIANT AND DESIGN. Wilson Brothers. SN 683,072. Pub. 2-21-56. Filed 3-8-55.

626,504. HEIRLOOM AND DESIGN. Philip C. Lucido, d. b. a. Reliable Utilities Company. SN 683,408. Pub. 2-21-56. Filed 3-14-55.

626,505. MIMOT. George Schoenborn-Buchheim, d. b. a. Garvenswerke. SN 684,072. Pub. 2-21-56. Filed 3-23-55.

626,506. GARVENS. George Schoenborn-Buchheim, d. b. a. Garvenswerke. SN 684,073. Pub. 2-21-56. Filed 3-23-55.

626,507. TRAVELOADER. The Baker-Raulang Company. SN 687,524. Pub. 1-24-56. Filed 5-16-55.

626,508. KRINON. Cornelis van der Lely. SN 690,982. Pub. 2-21-56. Filed 7-8-55.

626,509. SPEED-D-BURR AND DESIGN. Speed-D-Burr Corporation. SN 691,330. Pub. 2-21-56. Filed 7-14-55.

626,510. ECONMOBILE. American Road Equipment Company. SN 692,694. Pub. 2-21-56. Filed 8-9-55.

626,511. UTIL-A-LIFT. American Road Equipment Company. SN 692,695. Pub. 2-21-56. Filed 8-9-55.

626,512. WAGNER. Wagner Electric Corporation. SN 692,975. Pub. 2-21-56. Filed 8-12-55.

626,513. PROGRESSUS. Rudi L. Baer, d. b. a. Progressus Company. SN 693,114. Pub. 2-21-56. Filed 8-16-55.

626,514. OUTBOARD MOTORS K AND DESIGN. Kiekhaefer Corporation. SN 693,464. Pub. 2-21-56. Filed 8-22-55.

626,515. CODEDGE. Sauven Perforating Machine Co. SN 693,494. Pub. 2-21-56. Filed 8-22-55.

626,516. API. American Pamcor, Inc. SN 693,652. Pub. 2-21-56. Filed 8-25-55.

626,517. REEVES. The Reliance Electric and Engineering Company, d. b. a. Reeves Pulley Company. SN 693,934. Pub. 2-21-56. Filed 8-30-55.

626,518. ACC-U-MAT. Armand M. Dreyfuss. SN 695,146. Pub. 2-21-56. Filed 9-22-55.

626,519. SPRING-EE. U. S. Auto Accessories Corporation. SN 695,191. Pub. 2-21-56. Filed 9-22-55.

626,520. A. Wales-Strippit Corporation. SN 695,196. Pub. 2-21-56. Filed 9-22-55.

626,521. PRESTO AND DESIGN. Lee Engineering Company. SN 695,314. Pub. 2-21-56. Filed 9-26-55.

626,522. TRACTO-GRIP. S. G. Taylor Chain Company. SN 695,359. Pub. 2-21-56. Filed 9-26-55.

626,523. WORK POSITIONING PAYS AND DESIGN. Worthington Corporation. SN 695,462. Pub. 2-21-56. Filed 9-27-55.

626,524. DRAGONFLY. Robertson-Hedges, Inc. SN 695,570. Pub. 2-21-56. Filed 9-29-55.

626,525. SEMSPAK. Illinois Tool Works. SN 695,629. Pub. 2-21-56. Filed 9-30-55.

626,526. ALISON. Duplicators, Inc. SN 695,707. Pub. 2-21-56. Filed 10-3-55.

626,527. VICON. Landbouwwerktuigen- en Machinefabriek H. Vissers N. V. SN 695,735. Pub. 2-21-56. Filed 10-3-55.

CLASS 26

626,528. PEERFLEKTA. Peerless Camera Stores, Inc. SN 679,677. Pub. 2-21-56. Filed 1-10-55.

626,529. KEYSTONE STEREO-MOTIVATOR. Keystone View Company. SN 694,579. Pub. 2-21-56. Filed 9-13-55.

626,530. NEOTAR. Durst S. A. Bolzano. SN 694,790. Pub. 2-21-56. Filed 9-16-55.

626,531. LO-TRAN. Houze Glass Corporation. SN 695,547. Pub. 2-21-56. Filed 9-29-55.

CLASS 27

626,532. LADYMATIC. Norman M. Morris Corporation. SN 694,442. Pub. 2-21-56. Filed 9-9-55.

626,533. ROTOSTOP. Fabrique d'Horlogerie de Fontainemelon S. A. SN 695,712. Pub. 2-21-56. Filed 10-3-55.

626,534. RW AND DESIGN. Rodi & Wienenberger Aktiengesellschaft. SN 696,464. Pub. 2-21-56. Filed 10-14-55.

626,535. I. D. AND DESIGN. I. D. Watch Case Co., Inc. SN 696,545. Pub. 2-21-56. Filed 10-17-55.

CLASS 28

626,536. RW AND DESIGN. Rodi & Wienenberger Aktiengesellschaft. SN 696,462. Pub. 2-21-56. Filed 10-14-55.

626,537. FIXOFLEX. Rodi & Wienenberger Aktiengesellschaft. SN 696,465. Pub. 2-21-56. Filed 10-14-55.

626,538. ELASTOFIXO. Rodi & Wienenberger Aktiengesellschaft. SN 696,466. Pub. 2-21-56. Filed 10-14-55.

CLASS 30

626,539. YALE. The Yale & Towne Manufacturing Company. SN 694,684. Pub. 2-21-56. Filed 9-14-55.

CLASS 31

626,540. UNIVERSAL. Universal Major Elec. Appliances, Inc., to Universal Major Corporation. SN 655,097. Pub. 2-21-56. Filed 10-20-53.

626,541. STEDY-FLO. Detrex Corporation. SN 687,923. Pub. 2-21-56. Filed 5-20-55.

626,542. METCO AND DESIGN. Metallizing Engineering Co. Inc. SN 687,968. Pub. 2-21-56. Filed 5-20-55.

626,543. COLORAMICS. The Warren Company, Incorporated. SN 688,199. Pub. 2-21-56. Filed 5-24-55.

626,544. FAR-AIR. Farr Company. SN 689,029. Pub. 2-21-56. Filed 6-7-55.

626,545. PERIFILTER. Dorr-Oliver Incorporated. SN 689,215. Pub. 2-21-56. Filed 6-9-55.

626,546. UNIFLOW. Uniflow Manufacturing Company. SN 689,441. Pub. 2-21-56. Filed 6-13-55.

626,547. NORBLO AND DESIGN. Northern Blower Company. SN 689,735. Pub. 2-21-56. Filed 6-17-55.

626,548. SOFTMAGIC. Softmagic Corporation. SN 690,203. Pub. 2-21-56. Filed 6-24-55.

626,549. SOFTMAGIC LAUNDRY MATE. Softmagic Corporation. SN 690,204. Pub. 2-21-56. Filed 6-24-55.

626,550. WHIRLPOOL. Whirlpool Corporation, to Whirlpool-Seeger Corporation. SN 690,782. Pub. 2-21-56. Filed 7-5-55.

626,551. HI-TEMP RAPID-FLO. Johnson & Johnson. SN 690,952. Pub. 2-21-56. Filed 7-8-55.

626,552. BELOIT ROLL FILTER LUBRICATION AND DESIGN. Beloit Iron Works. SN 691,421. Pub. 2-21-56. Filed 7-18-55.

626,553. CUL-CLEER. Culligan, Inc. SN 691,438. Pub. 2-21-56. Filed 7-18-55.

626,554. CHIPPER. Gits Molding Corporation. SN 691,619. Pub. 2-21-56. Filed 7-20-55.

626,555. HYDRO-FLO. Bell & Gossett Company. SN 692,112. Pub. 2-21-56. Filed 7-29-55.

626,556. WEATH-R-GARD AND DESIGN. Borg-Warner Corporation. SN 692,567. Pub. 2-21-56. Filed 8-8-55.

626,557. DESIGN OF MAN HOLDING THERMOMETER AND WEATHERVANE. Borg-Warner Corporation. SN 692,568. Pub. 2-21-56. Filed 8-8-55.

626,558. WEATH-R-GARD. Borg-Warner Corporation. SN 692,569. Pub. 2-21-56. Filed 8-8-55.

626,559. PRONTO. Frank Mittelberger, d. b. a. American Plant Equipment Company. SN 693,072. Pub. 2-21-56. Filed 8-15-55.

626,560. GLAS-KLEEN. Micro Metallic Corporation. SN 693,616. Pub. 2-21-56. Filed 8-24-55.

626,561. ECON-O-MITE. Bowser, Inc. SN 694,192. Pub. 2-21-56. Filed 9-6-55.

626,562. MULT-A-PLIANCE. General Motors Corporation. SN 696,231. Pub. 2-21-56. Filed 10-11-55.

626,563. LIFETIME. Kem Manufacturing Company, Inc. SN 696,304. Pub. 2-21-56. Filed 10-12-55.

626,564. SEPRIFUGE GM AND DESIGN. General Motors Corporation. SN 696,883. Pub. 2-21-56. Filed 10-21-55.

626,565. INTERNATIONAL. Inflico Incorporated. SN 696,988. Pub. 2-21-56. Filed 10-24-55.

626,566. JET ACTION. Sunbeam Corporation. SN 697,051. Pub. 2-21-56. Filed 10-24-55.

626,567. DRI-PURE. Houdaille-Hershey of Indiana, Inc., now Indiana Commercial Filters Corporation. SN 697,093. Pub. 2-21-56. Filed 10-25-55.

626,568. OUF DORRCO AND DESIGN. Dorr-Oliver Incorporated. SN 698,270. Pub. 2-21-56. Filed 11-15-55.

626,569. MARCLAD. The Marley Company. SN 698,444. Pub. 2-21-56. Filed 11-17-55.

CLASS 32

626,570. STRATORESTER. Strat-O-Lounger, Inc. SN 694,017. Pub. 2-21-56. Filed 8-31-55.

CLASS 34

626,571. CHILL-A-BREEZE AND DESIGN. Jerrold B. Meyer, d. b. a. Clayton Specialty Mfg. Co. SN 686,378. Pub. 2-21-56. Filed 4-27-55.

626,572. BELAIRE. Samuel Stamping & Enameling Company. SN 690,490. Pub. 2-21-56. Filed 6-29-55.

626,573. HI-EX. The Duriron Company, Inc. SN 690,812. Pub. 2-21-56. Filed 7-6-55.

CLASS 35

626,574. AUTOMATION. The B. F. Goodrich Company. SN 679,728. Pub. 2-21-56. Filed 1-11-55.

626,575. RTC RAMCO TOP CHROME. Ramsey Corporation. SN 685,299. Pub. 2-21-56. Filed 4-11-55.

626,576. TRACTION LUG. Seiberling Rubber Company. SN 692,354. Pub. 2-21-56. Filed 8-2-55.

CLASS 37

626,577. "21." The Parker Pen Company. SN 621,837. Pub. 6-24-52. Filed 11-29-51.

626,578. PHOTOTATE. Walter A. McCabe, d. b. a. Walter A. McCabe Company. SN 648,934. Pub. 3-2-54. Filed 6-17-53.

626,579. PERMA-KOR. The Cleveland Container Company. SN 679,033. Pub. 9-13-55. Filed 12-28-54.

CLASS 38

626,580. BLUEPRINTS IN ESTATE PLANNING. Kennedy Sinclaire, Inc. SN 673,456. Pub. 2-21-56. Filed 9-20-54.

626,581. COMMERCIAL REFRIGERATION AND AIR CONDITIONING. Telenews Productions, Inc. SN 688,278. Pub. 2-21-56. Filed 5-25-55.

626,582. POLICE AND FIREMEN NATIONAL PRESS AND DESIGN. Police and Firemen National Press, Inc. SN 692,735. Pub. 2–21–56. Filed 8–9–55.

626,583. AROLINES. The Aro Equipment Corporation. SN 692,759. Pub. 2–21–56. Filed 8–10–55.

626,584. LOGETRONIC. Logetronics, Inc. SN 692,849. Pub. 2–21–56. Filed 8–11–55.

626,585. A PERFECT SAINT. Norcross, Inc. SN 693,076. Pub. 2–21–56. Filed 8–15–55.

CLASS 39

626,586. GOLD RIVET. Tobias Kotzin, d. b. a. A-1 Manufacturing Company. SN 488,961. Pub. 5–27–52. Filed, act of 1905, 9–25–45; amended to act of 1946, 11–16–48.

626,587. GROW-A-YEAR TAILORED BY FIELDSTON. Fieldston Clothes, Inc. SN 582,035. Pub. 8–15–50. Filed 7–15–49.

626,588. DUBONNET. Caughey Footwear, Inc. SN 614,615. Pub. 1–20–53. Filed 6–1–51.

626,589. PLASTIMAYD. Plastimayd Products Corporation, from Plastic Sheeting Company. SN 635,316. Pub. 2–21–56. Filed 9–16–52.

626,590. ALLURES AND DESIGN. Allure Shoe Corporation. SN 635,338. Pub. 12–8–53. Filed 9–17–52.

626,591. JAN. Joyce Horton, to Jan Hats, Inc. SN 637,277. Pub. 3–30–54. Filed 10–28–52.

626,592. SEA FOAM. Germantown Hosiery Company, d. b. a. Germantown Hosiery Co. SN 650,797. Pub. 9–14–54. Filed 7–24–53.

626,593. SLUMBERAP. Wearite Specialty Co., Inc. SN 659,447. Pub. 6–29–54. Filed 1–13–54.

626,594. IRVANA. Irvana, Inc. SN 665,707. Pub. 3–1–55. Filed 5–4–54.

626,595. DONMOOR. L. Isaacson & Sons. SN 671,350. Pub. 5–17–55. Filed 8–9–54.

626,596. TRAVELMATE. Susquehanna Waist Company. SN 683,241. Pub. 10–11–55. Filed 3–10–55.

626,597. LA VACANZA. Cluett, Peabody & Co., Inc. SN 685,351. Pub. 2–21–56. Filed 4–12–55.

626,598. MONSIEUR "X." Wells International Corporation. SN 686,249. Pub. 2–21–56. Filed 4–25–55.

626,599. PENGRAS. The Neusteter Co. SN 686,838. Pub. 2–21–56. Filed 5–4–55.

626,600. DILLIES A NEW STAR BY KNIGHT AND DESIGN. Knight Slipper Manufacturing Corporation. SN 686,914. Pub. 2–21–56. Filed 5–5–55.

626,601. WYELOCH. Warner & Co. Incorporated, d. b. a. Warner & Co. SN 689,102. Pub. 2–21–56. Filed 6–7–55.

626,602. THE WOODSTOCK. Mavest, Inc. SN 689,148. Pub. 2–21–56. Filed 6–8–55.

626,603. FOAM FLUFFS. Langerman Shoe Co. SN 689,290. Pub. 2–21–56. Filed 6–10–55.

626,604. LITTLE SWEET TEE. Ephrata Sportswear Co. SN 690,254. Pub. 2–21–56. Filed 6–27–55.

626,605. BEAU GEM. I. C. Isaacs & Company, Incorporated. SN 690,471. Pub. 2–21–56. Filed 6–29–55.

626,606. GOLDEN KING AND DESIGN. Rockford Textile Mills, Inc. SN 694,598. Pub. 2–21–56. Filed 9–13–55.

626,607. SUPERETTE. David M. Blumberg, d. b. a. Superette Hosiery. SN 694,639. Pub. 2–21–56. Filed 9–14–55.

626,608. S-O-S. Vocational Footwear, Inc. SN 694,936. Pub. 2–21–56. Filed 9–19–55.

626,609. WHITTENTON. Whittenton Garment Corporation. SN 694,942. Pub. 2–21–56. Filed 9–19–55.

626,610. CASUALETTE. Carol Crawford, Inc. SN 694,971. Pub. 2–21–56. Filed 9–20–55.

626,611. CLEVER-TEENS. J. J. Newberry Co. SN 695,011. Pub. 2–21–56. Filed 9–20–55.

626,612. STREAMLINER. Feldan Brothers, Inc. SN 695,083. Pub. 2–21–56. Filed 9–21–55.

626,613. VICKSHIRE AND DESIGN. Victory Girl Coat Co. SN 695,255. Pub. 2–21–56. Filed 9–23–55.

626,614. "TEEN-HI." William Gluckin & Co., Inc. SN 695,300. Pub. 2–21–56. Filed 9–26–55.

626,615. JEANNE CARR. Jonathan Logan, Inc. SN 695,427. Pub. 2–21–56. Filed 9–27–55.

CLASS 40

626,616. "TRY-ON." Clairol Incorporated. SN 661,778. Pub. 11–23–54. Filed 3–1–54.

626,617. ACCURATE CCA AND DESIGN. Accurate Casting Co. Inc. SN 677,755. Pub. 2–21–56. Filed 12–6–54.

626,618. SPIN. The Gillette Company. SN 679,284. Pub. 2–21–56. Filed 1–3–55.

626,619. 'MEND-A-HEEL.' Weyland Echols. SN 686,537. Pub. 2–21–56. Filed 4–29–55.

CLASS 42

626,620. FORM FIT. Pepperell Manufacturing Company. SN 602,711. Pub. 9–30–52. Filed 8–24–50.

626,621. RAVEN KING. Allan Goldfarb Corporation. SN 620,036. Pub. 2–21–56. Filed 10–16–51.

626,622. A. V. M. SPOT-PRUF. American Velour Mills Inc. SN 649,557. Pub. 3–15–55. Filed 6–30–53.

626,623. WASHELLA. Edward P. Leveen Sales Corporation, from Woolmark Corporation, by change of name from Carleton Sales Corporation. SN 670,541. Pub. 2–21–56. Filed 7–26–54.

626,624. WEDGMOOR. Woolmark Corporation, by change of name from Carleton Sales Corporation. SN 675,538. Pub. 2–21–56. Filed 10–27–54.

626,625. WOOLMARK. Woolmark Corporation, by change of name from Carleton Sales Corporation. SN 675,539. Pub. 2–21–56. Filed 10–27–54.

626,626. LE BOUTON. Cortley Curtain Corp. SN 694,302. Pub. 2–21–56. Filed 9–7–55.

626,627. ROYAL VELVET. Fieldcrest Mills, Inc. SN 694,310. Pub. 2–21–56. Filed 9–7–55.

626,628. NEO-PRINT. Swift Manufacturing Company. SN 694,456. Pub. 2–21–56. Filed 9–9–55.

626,629. NEO-JET AND DESIGN. Swift Manufacturing Company. SN 694,457. Pub. 2–21–56. Filed 9–9–55.

626,630. PUKKAH. Shirley Fabrics Corp. SN 694,602. Pub. 2–21–56. Filed 9–13–55.

CLASS 45

626,631. SPLURGE. Pola-Rona, Inc. SN 603,497. Pub. 7–24–51. Filed 9–13–50.

626,632. RED ROVER. W. R. Beyer, d. b. a. Beyer Company. SN 689,019. Pub. 2–21–56. Filed 6–7–55.

CLASS 46

626,633. A#1. River Brand Rice Mills Inc. SN 644,348. Pub. 2–21–56. Filed 3–27–53.

626,634. ALL-IN-ONE. Superior Feed Mills, Inc. SN 649,396. Pub. 2–21–56. Filed 6–25–53.

626,635. LOVE AND KISSES. Antonia Nash. SN 658,748. Pub. 2–21–56. Filed 12–29–53.

626,636. OK'S HUSH PUPPIES. O. K. Feed Mills, Inc. SN 661,096. Pub. 2–21–56. Filed 2–15–54.

626,637. GREEN HILL AND DESIGN. L. & T. Provision Company, to Green Hill Incorporated. SN 663,292. Pub. 2–21–56. Filed 3–25–54.

626,638. FUNSTEN'S AND DESIGN. R. E. Funsten Company. SN 665,412. Pub. 2–21–56. Filed 4–29–54.

626,639. K AND THREE DIMENSIONAL FIGURE. Kraft Foods Company. SN 667,243. Pub. 2–21–56. Filed 5–27–54.

626,640. VITA VALLEY. Pharr Canning Co., Inc. SN 678,807. Pub. 2–21–56. Filed 12–22–54.

626,641. BEST PRIZE AND DESIGN. Best Markets, Inc. SN 679,972. Pub. 2–21–56. Filed 1–17–55.

626,642. REGENCY. Realemon-Puritan Co. SN 681,799. Pub. 2–21–56. Filed 2–16–55.

626,643. BAFFIN. Baffin, Inc. SN 684,264. Pub. 2–21–56. Filed 3–28–55.

626,644. CAT'S WHISKERS AND DESIGN. E. E. Saunders & Company. SN 684,476. Pub. 2–21–56. Filed 3–29–55.

626,645. HOLLY FARM BRAND AND REPRESENTATION OF HOLLY. The Holly Farms Poultry Company. SN 684,840. Pub. 2–21–56. Filed 4–4–55.

626,646. DENNIS AND DESIGN. Dennis Chicken Products Co. SN 685,100. Pub. 2–21–56. Filed 4–7–55.

626,647. THIN LADY. American Bakeries Company. SN 686,518. Pub. 2–21–56. Filed 4–29–55.

626,648. MENDOTA GOLD. Colt Ranch, Inc. SN 686,526. Pub. 2–21–56. Filed 4–29–55.

626,649. DON CERDO. Berns & Koppstein, Inc. SN 687,249. Pub. 2–21–56. Filed 5–11–55.

626,650. TOP O' THE HEAP. Roll Packing House. SN 687,417. Pub. 2–21–56. Filed 5–12–55.

626,651. KREME KIST. The Kolter-Buckeye Company. SN 688,159. Pub. 2–21–56. Filed 5–24–55.

626,652. DAINTY MAIDS. Ward Baking Company. SN 688,775. Pub. 2–21–56. Filed 6–2–55.

626,653. NILCAR. Pure Frozen Lemon Juice Corporation of America. SN 688,852. Pub. 2–21–56. Filed 6–3–55.

626,654. SEA GLADE. Seaside Fisheries Company. SN 688,861. Pub. 2–21–56. Filed 6–3–55.

626,655. HIAWATHA. Mille Lacs Maple Products Corporation. SN 689,147. Pub. 2–21–56. Filed 6–8–55.

626,656. RED JACKS. The Charles A. Peterson Company. SN 689,159. Pub. 2–21–56. Filed 6–8–55.

626,657. CHAMPAGNE. The Charles A. Peterson Company. SN 689,160. Pub. 2–21–56. Filed 6–8–55.

626,658. BLUE SAILS. Snively Groves, Inc. SN 689,524. Pub. 2–21–56. Filed 6–14–55.

626,659. LAKE ELOISE. Snively Groves, Inc. SN 689,527. Pub. 2–21–56. Filed 6–14–55.

626,660. SNIVELY. Snively Groves, Inc. SN 689,528. Pub. 2–21–56. Filed 6–14–55.

626,661. BANTAM. Big Stone Canning Co. SN 689,543. Pub. 2–21–56. Filed 6–15–55.

626,662. OPEN HEARTH. Wass Food Products Co. SN 689,774. Pub. 2–21–56. Filed 6–17–55.

626,663. OPEN SEASON. Wass Food Products Co. SN 689,775. Pub. 2–21–56. Filed 6–17–55.

626,664. GENII. Perkins Products Company. SN 690,029. Pub. 2–21–56. Filed 6–22–55.

626,665. THEME Perkins Products Company. SN 690,030. Pub. 2–21–56. Filed 6–22–55.

626,666. BRISQ. Perkins Products Company. SN 690,031. Pub. 2–21–56. Filed 6–22–55.

626,667. CHANT. Perkins Products Company. SN 690,033. Pub. 2–21–56. Filed 6–22–55.

626,668. SNO-KIST. Yakima Fruit Growers Association. SN 690,212. Pub. 2–21–56. Filed 6–24–55.

626,669. MISTY VALE. Chehalis Packing Co. SN 690,223. Pub. 2–21–56. Filed 6–27–55.

CLASS 47

626,670. ROSE PERLE. Fernand, Victor, Joseph Rossignol. SN 690,487. Pub. 2–21–56. Filed 6–29–55.

CLASS 48

626,671. PHILADELPHIA'S KEGLET AND DESIGN. Esslinger's, Inc. SN 686,896. Pub. 2–21–56. Filed 5–5–55.

626,672. VAS YOU EFER IN ZINZINNATI? AND DESIGN. The Burger Brewing Company. SN 694,691. Pub. 2–21–56. Filed 9–15–55.

CLASS 49

626,673. DESIGN OF SHIELD. The Drambuie Liqueur Co. Ltd. SN 687,058. Pub. 2–21–56. Filed 5–9–55.

626,674. EARLY TIMES AND DESIGN. Brown-Forman Distillers Corporation. d. b. a. Early Times Distillery Company. SN 690,128. Pub. 2–21–56. Filed 6–24–55.

CLASS 50

626,675. WINDOW-FABRIC. Flex-O-Glass, Inc., d. b. a. Warp Brothers. SN 623,797. Pub. 2–21–56. Filed 1–19–52.

626,676. MR. ESPEY. Spring Packing Corporation. SN 656,597. Pub. 2–21–56. Filed 11–18–53.

626,677. SARACOTE. Standard Packaging Corporation. SN 689,091. Pub. 2–21–56. Filed 6–7–55.

626,678. CHROMCOTE. Closures, Inc. SN 690,136. Pub. 2–21–56. Filed 6–24–55.

CLASS 51

626,679. CYRIAQUE. Valoré Inc., from Irving A. Grannick. SN 657,429. Pub. 2–21–56. Filed 12–4–53.

626,680. CHROMO. Societe Monsavon-L'Oreal. Societe Anonyme, d. b. a. L'Oreal-Paris. SN 674,707. Pub. 2–21–56. Filed 10–12–54.

626,681. ZIRPRESION. Pharma-Craft Corporation. SN 686,223. Pub. 2–21–56. Filed 4–25–55.

626,682. BLINKY. Enid Edson. SN 687,269. Pub. 2–21–56. Filed 5–11–55.

626,683. MIDAS TOUCH. Harriet Hubbard Ayer, Inc. SN 688,122. Pub. 2–21–56. Filed 5–24–55.

CLASS 52

626,684. ARMOSOL. Armour and Company. SN 656,925. Pub. 2–21–56. Filed 11–25–53.

626,685. REI. Willi Maurer K. G. SN 677,427. Pub. 2–21–56. Filed 11–29–54.

626,686. CHANITE. O-Cedar of Canada Limited. SN 677,672. Pub. 2–21–56. Filed 12–2–54.

626,687. SANFAX. The Sanfax Company. SN 679,492. Pub. 2–21–56. Filed 1–5–55.

626,688. TEEN SHEEN. Teen Sheen, Inc. SN 687,738. Pub. 2–21–56. Filed 5–17–55.

626,689. ROIL. Rayette, Inc. SN 692,802. Pub. 2–21–56. Filed 8–10–55.

Service Marks

CLASS 100

626,690. AUTOMATICALLY DEVEINED PEELED AND DESIGN. The Peelers Company. SN 681,289. Pub. 2–21–56. Filed 2–8–55.

626,691. VIDECLINIC. Smith Kline & French Laboratories. SN 686,578. Pub. 2–21–56. Filed 4–29–55.

CLASS 101

626,692. BETTER HOMES AND GARDENS ETC. AND DESIGN. Meredith Publishing Company. SN 645,171. Pub. 2–21–56. Filed 4–13–53.

626,693. GOLD STAMP ETC. AND DESIGN. Saunders Distributors, Inc., d. b. a. Gold Stamp Premium Company. SN 677,739. Pub. 2–21–56. Filed 12–3–54.

CLASS 106

626,694. BRADSKILL. Bradford Dyeing Association (U. S. A.). SN 692,118. Pub. 2–21–56. Filed 7–29–55.

CLASS 107

626,695. "YOU SHOULD KNOW" AND DESIGN. Sam H. Kaufman, Esther F. Swanson, and Oreland R. Johnson. SN 666,962. Pub. 2–21–56. Filed 5–24–54.

Certification Mark

CLASS A

626,696. ISSUED BY AUTHORITY OF THE TOBACCO WORKERS ETC. AND DESIGN. Tobacco Workers International Union. SN 694,609. Pub. 2–21–56. Filed 9–13–55.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 2

626,697. Atlas Plywood Corporation, Boston, Mass. SN 685,333. Filed P. R. 4–12–55. Am. S. R. 2–2–56.

REUZIT

For Plywood Container for Television Tube Packs.
First use Nov. 15, 1954.

CLASS 4

626,698. Norman Wiggs & Company, Los Angeles, Calif. SN 685,796. Filed P. R. 4–18–55. Am. S. R. 1–27–56.

Double-Gloss

For Automobile Polish.
First use Mar. 5, 1954.

CLASS 6

626,699. E-Z Start, Inc., Akron, Ohio. SN 677,646. Filed P. R. 12–2–54. Am. S. R. 12–1–55.

E-Z-START

For Chemical Spray Propellent for Use in Starting Combustion Engines.
First use on or about Sept. 15, 1954.

626,700. Vis-Ko, Inc., Sumner, Wash. SN 682,685. Filed P. R. 3–2–55. Am. S. R. 11–16–55.

STOP-MOLD
"B"

For Disinfectant To Reduce Mold Development on Fruits or Other Perishable Products.
First use Sept. 10, 1947.

626,701. Vis-Ko, Inc., Sumner, Wash. SN 682,686. Filed P. R. 3–2–55. Am. S. R. 11–16–55.

VIS-KO'S
STOP-MOLD
"B"

For Disinfectant To Reduce Mold Development on Fruits or Other Perishable Products.
First use Sept. 10, 1947.

CLASS 13

626,702. Mardigian Corporation, Detroit, Mich. SN 659,290. Filed P. R. 1–11–54. Am. S. R. 11–18–55.

THERMO-CORE

For Cooking Utensils—Namely, Skillets.
First use Dec. 2, 1953.

626,703. Race & Race, Inc., Winter Haven, Fla. SN 691,780. Filed P. R. 7–22–55. Am. S. R. 1–25–56.

INDUSTRIAL

For Aluminum Irrigation Pipe.
First use Dec. 31, 1954.

CLASS 21

626,704. Julian A. McDermott Corporation, Corona, N. Y. SN 663,812. Filed P. R. 4–2–54. Am. S. R. 4–5–55.

PULS-FLARE

For Battery-Operated Warning Lights.
First use Jan. 2, 1953.

626,705. Appleton Electric Company, Chicago, Ill. SN 665,173. Filed P. R. 4–26–54. Am. S. R. 11–17–55.

APPLETON
THE STANDARD FOR BETTER LIGHTING

For Electrical Lighting Equipment Including Lights, Fixtures, Reflectors, and Fitments for Use Therewith.
First use Jan. 15, 1954.

626,706. Knapp-Monarch Company, St. Louis, Mo. SN 674,259. Filed P. R. 10–4–54. Am. S. R. 1–30–56.

AUTOMATIC
REDI-HOT SERVER

The words "Automatic" and "Server" are disclaimed apart from the mark as shown.
For Electrical Water Heating Appliance.
First use Sept. 1, 1954.

626,707. Morse Sewing Machine and Supply Corp., New York, N. Y. SN 679,310. Filed P. R. 1–3–55. Am. S. R. 2–7–56.

MORSE

For Electric Vacuum Cleaners and Floor Polishers.
First use Dec. 22, 1954.

626,708. Hans Fein, d. b. a. Firma C. & E. Fein, Stuttgart-N, Germany. SN 685,107. Filed P. R. 4–7–55. Am. S. R. 2–6–56.

Fein

For Hand Held, Portable Electric Tools.

626,709. Electric Soldering Iron Co., Inc., Deep River, Conn. SN 687,458. Filed P. R. 5–13–55. Am. S. R. 2–7–56.

LUGER

For Soldering Appliances—Namely, Soldering Guns.
First use November 1954.

626,710. Van Brode Milling Co., Inc., Clinton, Mass. SN 699,347. Filed P. R. 12–2–55. Am. S. R. 2–10–56.

KANT-KER-RODE

For Electric Storage Battery Terminal Protectors, and Wing-Nuts and Washers Used in Connection With the Hold-Down Devices of Said Batteries.
First use Feb. 7, 1955.

CLASS 23

626,711. Merrill G. Bassler, d. b. a. Pokomo Plastic Products, El Monte, Calif. SN 670,531. Filed P. R. 7–26–54. Am. S. R. 7–15–55.

"Diper Dipper"

For Tongs for Rinsing Diapers.
First use June 21, 1954.

CLASS 26

626,712. L. J. House Convex Glass Company, Point Marion, Pa. SN 666,471. Filed P. R. 5–17–54. Am. S. R. 2–6–56.

NATURAL VIEW

For Colored Spectacle Lenses.
First use Apr. 22, 1953.

626,713. Roelof Ree, d. b. a. Ree Associates, Bogota, N. J. SN 678,261. Filed P. R. 12–13–54. Am. S. R. 11–7–55.

WRAP-AROUND

For Templates.
First use Sept. 22, 1954.

626,714. Burrell Corporation, Pittsburgh, Pa. SN 679,715. Filed P. R. 1–11–55. Am. S. R. 12–2–55.

KWIK-CHEK

For Gas Analysis Apparatus.
First Use March 1954.

626,715. Portable Slide Manufacturing Corp., Brooklyn, N. Y. SN 683,987. Filed P. R. 3–22–55. Am. S. R. 2–10–56.

Add-A-Tray

For Portable Cabinets for Photographic Slides.
First use Feb. 2, 1955.

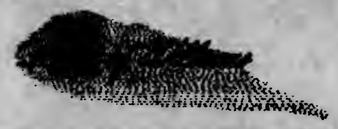
626,716. Walz Company Limited, Nihonbashi, Chuo-ku, Tokyo, Japan. SN 685,790. Filed P. R. 4–18–55. Am. S. R. 1–6–56.

Walz

For Cameras and Camera Cases; Optical Lenses for Still and Movie Cameras; Accessories for Still and Movie Cameras Including Filters for Black and White Type and Color Type Film, Neutral Density Filters, Polarising Filters, Lens Hoods, Rangs Finders, Self Timers, Flash Equipments (Electronic and Ordinary), Various Close-Up Attachments, Tripod Heads (Tilt Top and Pan Head) and Exposure Meters; Binoculars.

CLASS 28

626,717. Paul A. Williams, Chicago, Ill. SN 664,638. Filed P. R. 4–15–54. Am. S. R. 1–31–55.



For Precious Metal Jewelry, Trophies and Plaques Made at Least Partly of Precious Metal, Silver Tableware and Diamonds.
First use Jan. 26, 1953.

CLASS 31

626,718. Essick Manufacturing Company, Los Angeles, Calif. SN 665,486. Filed P. R. 4–30–54. Am. S. R. 4–12–55.

NO CLOG

For Filters.
First use 1949.

626,719. Klemm Automotive Products Co., Chicago, Ill. SN 674,979. Filed P. R. 10–18–54. Am. S. R. 2–15–56.

Klemm
VAPOR-LIMINATOR
WITH SNORKEL-TUBE

For Filtering Units for Filtering Gasoline.
First use May 25, 1954.

CLASS 34

626,720. Standard Factors, Seattle, Wash. SN 681,458. Filed P. R. 2–10–55. Am. S. R. 2–10–56.

TAHITIAN

For Torches, Torch Stands, Torch Mounting Poles, Torch Wicks, Lighters and Snuffers.
First use May 17, 1954, on torches.

CLASS 35

626,721. The Kelly-Springfield Tire Company, Cumberland, Md. SN 681,175. Filed P. R. 2–7–55. Am. S. R. 1–23–56.

SELECT

For Tires Composed Wholly or Principally of Rubber.
First use Jan. 13, 1955.

CLASS 44

626,722. Coty, Inc., New York, N. Y. SN 664,214. Filed P. R. 4-9-54. Am. S. R. 9-20-55.

LOCK ATOMIZER

For Cologne Atomizer.
First use Nov. 30, 1953.

CLASS 46

626,723. Josef Manner & Comp. A. G., Vienna, Austria. SN 651,606. Filed P. R. 8-10-53. Am. S. R. 6-23-55.



For Neopolitan Wafers.

626,724. Snake River Trout Company, Buhl, Idaho. SN 681,553. Filed P. R. 2-11-55. Am. S. R. 12-13-55.



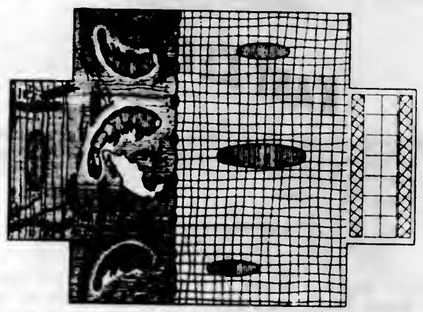
For Fresh Rainbow Trout.
First use Sept. 1, 1954.

626,725. The Quaker Oats Company, Chicago, Ill. SN 681,879. Filed P. R. 2-17-55. Am. S. R. 2-6-56.

FRESCAVENA

"Frescavena" is Spanish, the literal translation of which is "fresh oats."
For Mix Made From Oats for Making a Beverage.
First use July 1953.

626,726. Industrias Maritimas Del Golfo, S. A., Mexico City, Mexico. SN 686,369. Filed 4-27-55.



The right portion of the trademark shows a red grid design on white background and the left portion thereof a design of maritime motives in white color upon a blue background. The shrimps and the ovals appearing in the mark are shown in red color. No claim is made to the picture of the shrimps apart from the association shown in the drawing.
For Frozen Shrimps.
First use Oct. 7, 1953.

Service Mark

CLASS 100

626,727. United Press Associations, New York, N. Y. SN 668,799. Filed P. R. 6-23-54. Am. S. R. 2-3-56.

TODAY'S PICTURES
WITH TODAY'S NEWS TODAY.

For Supplying Pictures and News Items of Current Events of General Interest Gathered From All Over the World for Program Use by Television Stations.
First use May 10, 1954.

TRADEMARK REGISTRATIONS RENEWED

107,125. DELIGHT AND DESIGN. Cl. 46. 11-9-15.
108,120. ZEREGA'S. Cl. 46. 1-18-16.
108,251. DESIGN OF WOMAN ETC. Cl. 52. 1-25-16.
108,345. NEXT TO WINGS. Cl. 39. 2-1-16.
108,409. VIKING. Cl. 23. 2-8-16.
108,548. SIGNET. Cl. 13. 2-15-16.
108,787. FORD TIMES. Cl. 38. 2-29-16.
108,804. MILLER TIRES GEARED TO THE ROAD. Cl. 35. 2-29-16.
108,932. VELOX. Cl. 26. 3-7-16.
109,011. HAPPY-VALE. Cl. 46. 3-14-16.
109,615. AMERICAN GENTLEMAN. Cl. 46. 4-11-16.
109,616. AMERICAN LADY. Cl. 46. 4-11-16.
109,927. DESIGN OF ARM AND HAMMER. Cl. 28. 4-25-16.
110,720. DESIGN OF MOUNTAIN SCENERY. Cl. 37. 6-13-16.
110,721. NIBROC. Cl. 37. 6-13-16.
110,749. HALL MARK RB AND DESIGN. Cl. 46. 6-13-16.
111,067. STAR AND DESIGN. Cl. 46. 6-20-16.
111,113. WESTINGHOUSE ELECTRIC W AND DESIGN. Cl. 21. 6-27-16.
111,488. ANONA. Cl. 46. 7-18-16.
329,027. HEIRLOOM. Cl. 38. 10-15-35.
331,528. F-113. Cl. 6. 1-14-36.
331,529. F-21. Cl. 6. 1-14-36.
331,530. F-12. Cl. 6. 1-14-36.
331,643. F-11. Cl. 6. 1-14-36.
331,823. SOLVENIZED. Cl. 15. 1-21-36.
331,925. EYLAX AND DESIGN. Cl. 51. 1-28-36.
332,193. VANASIL. Cl. 14. 2-4-36.
332,197. EGCO AND DESIGN. Cl. 26. 2-4-36.
332,319. RAINY DAY ETC. AND DESIGN. Cl. 6. 2-11-36.
332,383. DOBRY'S BEST OF THE WEST AND DESIGN. Cl. 46. 2-11-36.
332,388. DOBRY'S BEST AND DESIGN. Cl. 46. 2-11-36.
332,804. LUBER-FINER. Cl. 31. 2-25-36.
333,293. HAMMER THE HAMMER AND DESIGN. Cl. 9. 3-17-36.
333,635. THQ. Cl. 6. 3-31-36.
333,917. THEBITAL. Cl. 18. 4-14-36.
333,957. LIQUID AND DESIGN. Cl. 46. 4-14-36.
334,027. CONYNGHAM AND DESIGN. Cl. 46. 4-14-36.
334,763. WOOD'S "SUPER-GREEN" ETC. Cl. 1. 5-12-36.
335,113. LUCKIES. Cl. 17. 5-26-36.
335,229. NICHOLSON ETC. AND DESIGN. Cl. 23. 5-26-36.

335,413. HUNT CLUB. Cl. 37. 6-2-36.
335,588. POLIDENT. Cl. 51. 6-9-36.
335,734. CA-BOLERO. Cl. 39. 6-16-36.
335,738. COLYZIM. Cl. 18. 6-16-36.
335,766. AMOCO. Cl. 15. 6-16-36.
335,786. PET. Cl. 46. 6-16-36.
335,848. TOMMIES. Cl. 39. 6-16-36.
335,849. STREAMLINE. Cl. 40. 6-16-36.
335,876. MAINBOCHER. Cl. 39. 6-16-36.
336,068. SANIDOWN. Cl. 32. 6-23-36.
336,181. AMOCO. Cl. 21. 6-30-36.
336,222. NATURAL BRIDGE. Cl. 39. 6-30-36.
336,387. BELL BRAND AND DESIGN. Cl. 46. 7-7-36.
336,414. BEECH-NUT. Cl. 18. 7-7-36.
336,415. REAL JOY. Cl. 46. 7-7-36.
336,490. CALSEA. Cl. 46. 7-7-36.
336,512. MASSETTES. Cl. 18. 7-7-36.
336,542. COUNTRY COMFORT. Cl. 39. 7-7-36.

TRADEMARK REGISTRATIONS CANCELED

Section 7

38,166. REPRESENTATION OF WOMAN'S HEAD WITH LONG HAIR AND DESIGN. Cl. 51. 4-22-02.
50,573. REPRESENTATION OF WOMAN'S HEAD WITH LONG HAIR. Cl. 6. 3-20-06.
114,852. WILSON'S "PREMIER". Cl. 46. 1-2-17.
155,696. GOLDMAN'S. Cl. 6. 6-6-22.
193,925. PETER PIPER. Cl. 46. 1-13-25.
205,611. COLORATONE. Cl. 6. 11-10-25.
214,967. DRI-WELL. Cl. 6. 7-6-26.
215,484. MARY T. GOLDMAN AND DESIGN. Cl. 6. 7-20-26.
267,221. REPRESENTATION OF A WOMAN'S HEAD. Cl. 51. 2-18-30.
350,623. CALEY'S. Cl. 46. 9-28-37.
601,958. SWIFT WEIGHT AND DESIGN. Cl. 26. 2-8-55.

Section 8

74,917. FIRE FLY. Cl. 19. 8-17-09.
75,908. MARVEL. Cl. 1. 11-23-09.
76,117. SEMHI. Cl. 23. 12-14-09.
76,191. ROYAL SOCIETY. Cl. 40. 12-28-09.
76,207. J. R. G. AND DESIGN. Cl. 13. 12-28-09.
114,944. CHASE. Cl. 2. 1-16-17.
157,384. DENTA-MINT. Cl. 51. 8-1-22.
222,653. NEW AGE. Cl. 46. 1-4-27.
231,003. OIL-CO. Cl. 52. 8-9-27.
233,303. REXOLEUM. Cl. 20. 9-27-27.
234,841. "AVONA". Cl. 23. 11-8-27.
234,934. THE P & H CROWD. Cl. 38. 11-8-27.
236,417. PYNTREE. Cl. 6. 12-13-27.
245,176. RIBBONFOLD. Cl. 37. 8-7-28.
259,645. DUX. Cl. 16. 8-6-29.
262,603. MAJESTIC. Cl. 37. 10-15-29.
263,884. DOMINO. Cl. 42. 11-12-29.
264,833. STYLTRED. Cl. 39. 12-10-29.
264,932. BE CANT CRUSH. Cl. 42. 12-10-29.
270,579. REPRESENTATION OF SPREAD EAGLE AND DESIGN. Cl. 24. 5-6-30.
274,180. NEWCO. Cl. 39. 8-19-30.
323,427. HINODE. Cl. 46. 4-16-35.
325,361. CHEE-KIST. Cl. 37. 6-18-35.
334,933. SLEEKIES. Cl. 42. 5-19-36.
341,725. EUGENIA AND REPRESENTATION OF HEAD OF WOMAN. Cl. 37. 12-22-36.
345,501. AEROGENE. Cl. 44. 4-27-37.
345,734. AEROGENE. Cl. 51. 5-4-37.
351,275. THERMO-TECTOR. Cl. 21. 10-26-37.
355,625. SNUGS. Cl. 32. 3-22-38.
362,526. TOUCH-O-MATIC. Cl. 23. 11-22-38.
363,330. KIM. Cl. 51. 12-20-38.
364,319. MOTORIDE. Cl. 19. 1-24-39.
368,119. CHIEFTAIN AND REPRESENTATION OF HEAD OF INDIAN. Cl. 6. 6-6-39.
375,133. MARLENE. Cl. 44. 2-6-40.
375,523. JOHN KOLLINS AND DESIGN. Cl. 39. 2-20-40.
383,123. SHULIFE. Cl. 4. 11-26-40.
383,142. MY LAMB. Cl. 39. 11-26-40.
383,658. VUE-GENE. Cl. 44. 12-17-40.
385,169. EVE. Cl. 37. 2-18-41.
387,324. IROQUOIS MIRACLE COAL WITHIN CIRCULAR DESIGN. Cl. 1. 5-13-41.
389,164. SHULIFE. Cl. 50. 7-29-41.
389,370. SHULIFE. Cl. 6. 8-5-41.
417,504. VITA LINK AND DESIGN. Cl. 18. 10-30-45.
426,083. SUN-MAID. Cl. 37. 12-17-46.
429,472. TROJAN BRAND AND DESIGN. Cl. 44. 4-29-47.
442,710. GRAND DUKE AND SHIELD DESIGN. Cl. 46. 5-17-49.
442,736. SHAMROCK. Cl. 46. 5-24-49.
519,151. T. H. B. TEXAS HOME BRAND. Cl. 46. 12-27-49.
519,153. TEMPOTOOL AND DESIGN. Cl. 27. 12-27-49.
519,155. MATMOR. Cl. 46. 12-27-49.
519,157. MANFRED. Cl. 46. 12-27-49.
519,159. ERA METER CO. Cl. 23. 12-27-49.
519,160. MARMICO WITHIN DIAMOND DESIGN. Cl. 46. 12-27-49.
519,168. FRANKLIN. Cl. 23. 12-27-49.
519,174. FIREFLY. Cl. 23. 12-27-49.
519,176. ONE-LAY. Cl. 24. 12-27-49.
519,180. REGENT. Cl. 32. 12-27-49.
519,183. LYON. Cl. 24. 12-27-49.
519,185. TEK-CEL. Cl. 46. 12-27-49.
519,186. TEKNIMIX. Cl. 46. 12-27-49.
519,188. TEK-SHURE. Cl. 46. 12-27-49.
519,196. LONDON BOBBY. Cl. 48. 12-27-49.
519,197. NICK THOMAS AND DESIGN. Cl. 48. 12-27-49.
519,198. EHO. Cl. 42. 12-27-49.
519,200. SLISERVETT. Cl. 23. 12-27-49.
519,201. RELAXON. Cl. 32. 12-27-49.
519,203. NORRIS AND SHIELD DESIGN. Cl. 46. 12-27-49.
519,217. ROYAL. Cl. 26. 12-27-49.
519,227. MEYER'S BEST AND DESIGN. Cl. 46. 12-27-49.
519,228. ORANGE "A" PEEL. Cl. 45. 12-27-49.
519,232. FISCHEL. Cl. 32. 12-27-49.
519,240. DITTO. Cl. 23. 12-27-49.
519,245. TROMMER'S. Cl. 48. 12-27-49.
519,246. STAMPOMATIC AND DESIGN. Cl. 23. 12-27-49.
519,247. CA. Cl. 42. 12-27-49.
519,249. TELE-JUICE. Cl. 23. 12-27-49.
519,254. CASTRUCCIO BROS. Cl. 46. 12-27-49.
519,261. CHARMBREEZE. Cl. 42. 12-27-49.
519,262. CHARMKOOL. Cl. 42. 12-27-49.
519,263. CHARMSTRYPE. Cl. 42. 12-27-49.
519,264. VICAR GEM. Cl. 52. 12-27-49.
519,268. TOBINETTE. Cl. 46. 12-27-49.
519,270. STATETEX. Cl. 42. 12-27-49.
519,274. DDT AND DESIGN. Cl. 23. 12-27-49.
519,277. VAL-SWEET AND REPRESENTATION OF GLASS AND BASKET OF GRAPES. Cl. 45. 12-27-49.
519,281. JESSICA'S. Cl. 46. 12-27-49.
519,282. HELANCA. Cl. 42. 12-27-49.
519,288. BW. Cl. 6. 12-27-49.
519,297. DURALOOM. Cl. 42. 12-27-49.
519,298. PANCROTOL WITHIN OVAL DESIGN. Cl. 18. 12-27-49.
519,300. DUNDERRY. Cl. 42. 12-27-49.
519,304. KLONDIKE AND LS WITHIN CIRCULAR DESIGN. Cl. 45. 12-27-49.
519,307. BLOSSER'S CIGARETTES. Cl. 18. 12-27-49.
519,310. CLARIDGE. Cl. 42. 12-27-49.
519,314. TAKE TO WATER LIKE A DUCK AND REPRESENTATION OF DUCK WITHIN DIAMOND DESIGN. Cl. 42. 12-27-49.
519,329. KITCHENAIRE. Cl. 42. 12-27-49.
519,330. KAN-SKIN. Cl. 42. 12-27-49.
519,333. VIDEO. Cl. 42. 12-27-49.
519,334. CALGLAZED. Cl. 42. 12-27-49.
519,338. NYLOBREEZE. Cl. 42. 12-27-49.
519,341. WUNDAFLEX. Cl. 42. 12-27-49.
519,342. AA ALL LEGAL VENDING AUTOMATIC VENDING AND ADVERTISING CO. AND DESIGN. Cl. 101. 12-27-49.

519,343. CHRISTIAN ASSOCIATED VOLUNTEERS AND DESIGN. Cl. 107. 12–27–49.
519,348. LADY FAIRFAX. Cl. 31. 12–27–49.
519,349. CHICAGOAN FORT DEARBORN AND REPRESENTATION OF BLOCK HOUSE. Cl. 46. 12–27–49.
519,350. KLAMATH AND DESIGN. Cl. 46. 12–27–49.
519,352. EV-R-SEAL. Cl. 21. 12–27–49.
519,353. MODERNE. Cl. 22. 12–27–49.
519,356. INGERSOLL UTILITY UNIT. Cl. 34. 12–27–49.
519,357. HYKREME. Cl. 46. 12–27–49.
519,361. TEL VISION AND DESIGN. Cl. 21. 12–27–49.
519,362. STRIKE-A-LIGHT. Cl. 22. 12–27–49.
519,364. SURE LOCK. Cl. 13. 12–27–49.
519,366. CAPSULETS. Cl. 18. 12–27–49.
519,370. VOGUE. Cl. 2. 12–27–49.
519,373. WOOD-TYPE. Cl. 35. 12–27–49.
519,376. SHIR-TRIMS AND DESIGN. Cl. 40. 12–27–49.
519,378. CHIC BUTTON-ON PADS. Cl. 40. 12–27–49.
519,379. NO CREASE. Cl. 3. 12–27–49.
519,383. BLOHM'S HI-GROWN. Cl. 46. 12–27–49.
519,385. R. O'N. Cl. 39. 1–3–50.
519,387. ST. JOHNS. Cl. 39. 1–3–50.
519,388. CONTINENTAL. Cl. 23. 1–3–50.
519,389. COOK. Cl. 23. 1–3–50.
519,390. LORRAINE FABRICS OF INTEGRITY. Cl. 39. 1–3–50.
519,397. RIVOLETTES. Cl. 39. 1–3–50.
519,398. RIVOLETTE AND REPRESENTATION OF PARROT. Cl. 39. 1–3–50.
519,399. CAPER CAP BAR. Cl. 39. 1–3–50.
519,401. TRU-FASHIONED. Cl. 39. 1–3–50.
519,408. MYSIE. Cl. 39. 1–3–50.
519,410. HOTCHKISS. Cl. 23. 1–3–50.
519,413. DEVONSHIRE. Cl. 39. 1–3–50.
519,416. BUCKEYE. Cl. 23. 1–3–50.
519,420. VAN-TEX. Cl. 39. 1–3–50.
519,424. THREE CROWN PRODUCTIONS AND REPRESENTATION OF CROWNS WITHIN CIRCULAR DESIGN. Cl. 26. 1–3–50.
519,425. GREMLINS AND REPRESENTATION OF GREMLINS. Cl. 39. 1–3–50.
519,426. HALO-ETTE. Cl. 39. 1–3–50.
519,427. LADY PENNDEL. Cl. 39. 1–3–50.
519,433. NY-SPLICE. Cl. 39. 1–3–50.
519,441. A MANFIN COAT. Cl. 39. 1–3–50.
519,445. ATOM. Cl. 23. 1–3–50.
519,453. WOLVERINE SHELL HORSE-HIDE WORK SHOES ETC. AND DESIGN. Cl. 39. 1–3–50.
519,454. GRACEMAKERS WITHIN RECTANGULAR DESIGN. Cl. 39. 1–3–50.
519,457. SIMPLEX. Cl. 23. 1–3–50.
519,458. BLUE DEVIL AND REPRESENTATION OF AIRPLANE. Cl. 39. 1–3–50.
519,460. JET-JAC. Cl. 39. 1–3–50.
519,461. JET-JAC AND REPRESENTATION OF AIRPLANE. Cl. 39. 1–3–50.
519,462. VIANNE. Cl. 39. 1–3–50.
519,464. BREEZE. Cl. 23. 1–3–50.
519,469. COBERT. Cl. 39. 1–3–50.
519,470. SUN 'N SHOWER FASCINATOR AND REPRESENTATION OF SUN AND RAIN. Cl. 39. 1–3–50.
519,471. FRIGIDELITE. Cl. 46. 1–3–50.
519,473. TAMBORINA. Cl. 39. 1–3–50.
519,476. GRO SPORT AND ARROW DESIGN. Cl. 39. 1–3–50.
519,478. CATHY CUPIDS. Cl. 39. 1–3–50.
519,480. IT'S STRONED WITHIN RECTANGULAR DESIGN. Cl. 23. 1–3–50.
519,482. FLORENTINE. Cl. 39. 1–3–50.
519,484. ABD. Cl. 23. 1–3–50.
519,485. HOLLANDIA KATTEX. Cl. 39. 1–3–50.
519,487. CHI-WA-WA AND REPRESENTATION OF DOG'S HEAD. Cl. 39. 1–3–50.
519,488. GIFTED MISS. Cl. 39. 1–3–50.
519,489. LADY LEXINGTON AND REPRESENTATION OF BIRD. Cl. 39. 1–3–50.
519,491. ZIPONEER. Cl. 39. 1–3–50.
519,492. BLUE MOON. Cl. 39. 1–3–50.
519,493. PIN-O-WAY. Cl. 39. 1–3–50.
519,495. FORCEMITTER. Cl. 26. 1–3–50.
519,496. DATE-MATE. Cl. 39. 1–3–50.
519,497. HENDEY AND DESIGN. Cl. 23. 1–3–50.
519,498. FLOPRINT. Cl. 26. 1–3–50.
519,499. ROCKWELL. Cl. 26. 1–3–50.
519,501. ADECO WITHIN DIAMOND DESIGN. Cl. 26. 1–3–50.
519,504. FORMALLY YOURS. Cl. 39. 1–3–50.
519,505. PARADISE. Cl. 26. 1–3–50.
519,506. ANEMOTHERM. Cl. 26. 1–3–50.
519,508. SIL-KEY. Cl. 1. 1–3–50.
519,510. SCRUSTART AND DESIGN. Cl. 23. 1–3–50.
519,513. GARD-N-EZE GARDEN TRACTOR AND DESIGN. Cl. 23. 1–3–50.
519,514. BEST MAID AND REPRESENTATION OF MAID. Cl. 24. 1–3–50.
519,518. FLASH ON GLO AND REPRESENTATION OF BOY. Cl. 39. 1–3–50.
519,521. STA-DOWN. Cl. 39. 1–3–50.
519,523. INFRA-RAY. Cl. 44. 1–3–50.
519,526. LOGIS DU MAY. Cl. 49. 1–3–50.
519,529. THE UPLIFT THAT STAYS UP! 5 LENGTHS FOR YOUR FIGURE AND REPRESENTATION OF WOMEN. Cl. 39. 1–3–50.
519,530. THE ONLY BELL THAT WILL NOT "RING". Cl. 52. 1–3–50.
519,532. PLAN-O-BLOCKS. Cl. 26. 1–3–50.
519,533. BOYNTON M M ACCESSORIES. Cl. 42. 1–3–50.
519,534. MINT POLE. Cl. 46. 1–3–50.
519,535. VALDEZ. Cl. 3. 1–3–50.
519,542. DE-LICIOUS! DE-LIGHT-FUL! DE-MAND-IT! Cl. 48. 1–3–50.
519,543. PARISIAN LADY. Cl. 39. 1–3–50.
519,545. ORLANDO. Cl. 46. 1–3–50.

Section 18

366,660. PERK. Cl. 45. 4–25–39. Canc. 6599.
372,627. CHICAGROW. Cl. 10. 11–7–39. Canc. 6586.
571,243. GREEN NUTRO. Cl. 10. 3–3–53. Intf. 5157.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

109,637. VICTOR. Cl. 35. 4–11–16. Bowers Rubber Works. H. K. Porter Company, Inc. of Pittsburgh, Philadelphia, Pa. Corrected: In line 2 of the renewal certificate, after "Inc.", *of Pittsburgh* should be inserted.

190,125. EBCO. Cl. 13. 10–7–24. The D. A. Ebinger Sanitary Mfg. Co. The Ebco Manufacturing Company, Columbus, Ohio. Amended: In the statement the description of goods with the exception of "drinking fountains" and "water coolers" is deleted.

204,094. DESIGN—A BLACK BEAR ETC. Cl. 1. 10–6–25. Wilckes Martin Wilckes Company. Monsanto Chemical Company, St. Louis, Mo. Amended: In the statement, column 2, lines 5, 6, and 7, 'The geographical terms "New York, N. Y. . . . USA" are disclaimed apart from the mark shown in the drawing.' is deleted, and the drawing is amended to appear:



524,353. WELFORD. Cl. 39. 4–25–50. The Hecht Company, Washington, D. C. Corrected: In the certificate, line 4, and in lines 2 and 3 of the statement, "District of Columbia" should be *State of Maryland*.

565,832. ALT HEIDELBERG. Cl. 48. 10–28–52. Columbia Breweries, Inc. Heidelberg Brewing Co., Tacoma, Wash. Amended to appear:

Heidelberg

624,214. BAUER. Cl. 26. 3–27–56. Eugen Bauer Gesellschaft mit beschrankter Haftung, Stuttgart-Unterturkheim, Germany. Corrected: In line 4 of the certificate "13th day of June, 1956" should be *8th day of August, 1955*.

TRADEMARK REGISTRATIONS—NEW CERTIFICATES

New Certificates issued under sections 7(c), 7(f), 7(g) of the Trademark Act of 1946 for the unexpired term of the original registrations.

395,851. LASTI-KID. Cl. 1. Alfred Vamos, assignor to Clarence E. Nelson. 6–16–42. New Cert. Sec. 7(c), to Barrett & Company, Inc., Newark, N. J., 5–8–56.

395,852. LASTI-KID AND DESIGN. Cl. 1. Alfred Vamos, assignor to Clarence E. Nelson. 6–16–42. New Cert. Sec. 7(c), to Barrett & Company, Inc., Newark, N. J., 5–8–56.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

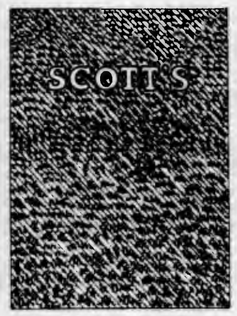
CLASS 1

340,485. Nov. 10, 1936. O. M. Scott & Sons Company, Marysville, Ohio. Pub. by registrant.



The drawing is lined for orange.
For Field, Garden, and Grass Seeds.

341,690. Dec. 22, 1936. O. M. Scott & Sons Company, Marysville, Ohio. Pub. by registrant.



The drawing is lined for green.
For Field, Garden, and Grass Seeds.

402,615. Aug. 3, 1943. Edgewood Farms, Inc., Marysville, Ohio. Pub. by registrant.



For Grass Seeds.

416,751. Sept. 25, 1945. Edgewood Farms, Inc., Marysville, Ohio. Pub. by registrant.

REGENT

For Grass Seeds.

CLASS 6

378,500. June 11, 1940. Richard W. Taylor, Boston, Mass. Pub. by registrant.

TAYLORIZED

For Compound for Imparting a Water Repellent and Wear Resisting Finish for Knitted and Woven Textiles, and Particularly Hosiery, Lingerie, and the Like.

CLASS 11

19,462. May 12, 1891. Wyckoff, Seamans & Benedict, New York, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

PARAGON

For Carbons and Linen Papers for Typewriters and Typewriter Ribbons.

CLASS 26

295,541. July 5, 1932. Atlas Supply Company, Newark, N. J. Pub. by registrant.

ATLAS

For Automobile Goggles.

CLASS 29

295,109. June 21, 1932. Atlas Supply Company, Newark, N. J. Pub. by registrant.

ATLAS

For Chemically Treated Automobile Polishing Cloths, Nickel Polish, Chromium Polish, and Automobile Polishing Kits Consisting of a Bottle or Can of the Above Mentioned Nickel or Chromium Polish and a Piece of Cheese Cloth, a Soft Knitted Cloth, a Chemically Treated Polishing Cloth, Chamois, or Sponge.

CLASS 46

232,893. Sept. 20, 1927. Yo-Ho Pure Food Products Co., Chicago, Ill. Pub. by Yo Ho Food Products Company, Inc., Chicago, Ill.



For Potato Chips.

418,032. Nov. 27, 1945. Polk Packing Association, Winter Haven, Fla. Pub. by registrant.

NU-ZEST

For Citrus Products—Namely, Fresh Citrus Fruits, Canned Citrus Fruits, and Canned Citrus Juices for Food Products.

LIST OF REGISTRANTS OF TRADEMARKS

A-1 Mfg. Co.: *See*—
Kotsin, Tobias.
Abrams & Mann, Inc., New York, N. Y. 519,454, canc. Cl. 39.
Accurate Casting Co. Inc., New York, N. Y. 626,617, pub. 2–21–56. Cl. 40.
Aircraft & Diesel Equipment Corp., to L. G. Simmons, Chicago, Ill. 519,501, canc. Cl. 26.
Allen, S. L., & Co., Philadelphia, Pa. 74,917, canc. Cl. 19.
Allure Shoe Corp., Miami, Fla. 626,590, pub. 12–6–55. Cl. 39.
Aluminum Products, Inc., Saginaw, Mich. 626,439, pub. 2–21–56. Cl. 12.
American Bakeries Co., Atlanta, Ga. 626,647, pub. 2–21–56. Cl. 46.
American Cyanamid Co., New York, N. Y. 626,428, pub. 2–21–56. Cl. 6.
American Hard Rubber Co., New York, N. Y. 335,849, ren. 6–16–56. Cl. 40.
American-Marietta Co.: *See*—
Master Builders Co., The.
American Oil Co., The, New York, N. Y. 335,766, ren. 6–16–56. Cl. 15.
American Oil Co., The, New York, N. Y. 336,181, ren. 6–30–56. Cl. 21.
American Pamcor, Inc., Havertown, Pa. 626,516, pub. 2–21–56. Cl. 23.
American Plant Equipment Co.: *See*—
Mittelberger, Frank.
American Radiator & Standard Sanitary Corp., New York, N. Y. 626,457, pub. 2–21–56. Cl. 13.
American Road Equipment Co., Omaha, Nebr. 626,510–11, pub. 2–21–56. Cl. 23.
American Sealants Co., The, Hartford, Conn. 626,420, pub. 2–21–56. Cl. 5.
American Stores Co., Philadelphia, Pa. 417,504, canc. Cl. 18.
American Tobacco Co., The, New York, N. Y. 335,113, ren. 5–26–56. Cl. 17.
American Velour Mills Inc., Bound Brook, N. J. 626,622, pub. 3–15–55. Cl. 42.
Anderson, Harry P., Harlingen, Tex. 626,436, pub. 2–21–56. Cl. 12.
Anemostat Corp. of America, New York, N. Y. 519,506, canc. Cl. 26.
Appleton Electric Co., Chicago, Ill. 626,705. Cl. 21.
Appliance Parts Co., Cedar Falls, Iowa. 519,514, canc. Cl. 24.
Arata, Frank B., Fruit Co., Fruitland, Idaho. 519,349, canc. Cl. 46.
Archer-Daniels-Midland Co., Cleveland, Ohio. 626,421, pub. 2–21–56. Cl. 5.
Armco Steel Corp., Middletown, Ohio. 626,452, pub. 2–21–56. Cl. 12.
Armour and Co., Chicago, Ill. 626,684, pub. 2–21–56. Cl. 52.
Armstrong, Melvin L., d. b. a. Dura-Lite Plastics Co., Kent, Wash. 626,406, pub. 2–21–56. Cl. 2.
Aro Equipment Corp., The, Bryan, Ohio. 626,583, pub. 2–21–56. Cl. 38.
Associated Christian Volunteers, The, Newark, N. J. 519,343, canc. Cl. 107.
Astra Bent Wood Furniture Co., New York, N. Y. 519,232, canc. Cl. 32.
Atlas Plywood Corp., Boston, Mass. 626,404, pub. 2–21–56. Cl. 2.
Atlas Plywood Corp., Boston, Mass. 626,697. Cl. 2.
Atlas Supply Co., Newark, N. J. 295,109, 12(c) pub. 5–8–56. Cl. 29.
Atlas Supply Co., Newark, N. J. 295,541, 12(c) pub. 5–8–56. Cl. 26.
Auto Arc-Weld Mfg. Co., Cleveland, Ohio. 626,477, pub. 2–21–56. Cl. 21.
Automatic Vending and Advertising Co.: *See*—
Herrmann, Lawrence H.
Ayer, Harriet Hubbard, Inc., New York, N. Y. 626,683, pub. 2–21–56. Cl. 51.
Aspeco Chemical Co., Havana, Cuba. 626,465, pub. 12–6–55. Cl. 18.
Baer, Rudi L., d. b. a. Progressus Co., New York, N. Y. 626,513, pub. 2–21–56. Cl. 23.
Baffin, Inc., Scarsdale, N. Y. 626,643, pub. 2–21–56. Cl. 46.
Baker-Raulang Co., The, Cleveland, Ohio. 626,507, pub. 1–24–56. Cl. 23.
Barbara Jean Hosiery Co., South Langhorne, Pa. 519,427, canc. Cl. 39.
Barrett & Co., Inc.: *See*—
Vamos, Alfred.
Basic Industries, Inc., Chicago, Ill. 519,357, canc. Cl. 46.
Bassler, Merrill G., d. b. a. Pokomo Plastic Products, El Monte, Calif. 626,711. Cl. 23.
Bauer, Eugen, Gesellschaft mit beschränkter Haftung, Stuttgart-Unterturkheim, Germany. 624,214, cor. Cl. 26.
Baxter, J. H., & Co., San Francisco, Calif. 626,451, pub. 2–21–56. Cl. 12.
Beagle Mfg. Co.: *See*—
Beagle, Ralph G.
Beagle, Ralph G., d. b. a. Beagle Mfg. Co., Pasadena, Calif. 519,370, canc. Cl. 2.
Bear Mill Mfg. Co., Inc., New York, N. Y. 519,333, canc. Cl. 42.
Beatty, Carol, Co., Los Angeles, Calif. 626,407, pub. 2–21–56. Cl. 2.
Beech-Nut Packing Co., Canajoharie, N. Y. 336,414, ren. 7–7–56. Cl. 18.
Belfield, H., Co., Philadelphia, Pa. 76,207, canc. Cl. 13.
Bell Chemical Co., Chicago, Ill. 519,530, canc. Cl. 52.
Bell & Gossett Co., Morton Grove, Ill. 626,555, pub. 2–21–56. Cl. 31.
Beloit Iron Works, Beloit, Wis. 626,552, pub. 2–21–56. Cl. 31.
Bentley, Charles E., Co., New York, N. Y. 76,191, canc. Cl. 40.
Berlin Mills Co., Portland, Maine, to Brown Co., Portland, Maine, and Berlin, N. H. 110,720–21, ren. 6–13–56. Cl. 37.
Berns & Koppstein, Inc., New York, N. Y. 626,649, pub. 2–21–56. Cl. 46.
Best Markets, Inc., Philadelphia, Pa. 626,641, pub. 2–21–56. Cl. 46.
Bethlehem Supply Co., Tulsa, Okla. 519,464, canc. Cl. 23.
Betz, W. H. & L. D., Philadelphia, Pa. 333,635, ren. 3–31–56. Cl. 6.
Beyer Co.: *See*—
Beyer, W. R.
Beyer, W. R., d. b. a. Beyer Co., Odessa, Tex. 626,632, pub. 2–21–56. Cl. 45.
Big Stone Canning Co., Ortonville, Minn. 626,661, pub. 2–21–56. Cl. 46.
Blohm, S. T., Malin, Oreg. 519,383, canc. Cl. 46.
Blosser Co., The, Atlanta, Ga. 519,307, canc. Cl. 18.
Blue-Bird Shoppe: *See*—
Gruner, Olly.
Blumberg, David M., d. b. a. Superette Hosiery, Reading, Pa. 626,607, pub. 2–21–56. Cl. 39.
Borden Co., The: *See*—
Borden's Condensed Milk Co.
Toner, John F.
Borden's Condensed Milk Co., to The Borden Co., New York, N. Y. 111,067, ren. 6–20–56. Cl. 46.
Borg-Warner Corp., Chicago, Ill. 519,356, canc. Cl. 34.
Borg-Warner Corp., Chicago, Ill. 626,556–8, pub. 2–21–56, Cl. 31.
Bowers Rubber Works, H. K. Porter Co., Inc. of Pittsburgh, Philadelphia, Pa. 109,637, cor. Cl. 35.
Bowser, Inc., Fort Wayne, Ind. 626,561, pub. 2–21–56. Cl. 31.
Boyle-Midway Inc.: *See*—
Hygienic Products Co., The.
Bradford Dyeing Association (U. S. A.), New York, N. Y. 626,694, pub. 2–21–56. Cl. 106.
Brown Co.: *See*—
Berlin Mills Co.
Brown-Forman Distillers Corp., d. b. a. Early Times Distillery Co., Louisville, Ky. 626,674, pub. 2–21–56. Cl. 49.
Bruning, Charles, Co., Inc., New York, N. Y. 519,288, canc. Cl. 6.
Brunswick-Balke-Collender Co., The, Wilmington, Del., and Chicago, Ill. 519,353, canc. Cl. 22.
Buckeye Iron & Brass Works, Dayton, Ohio. 519,416, canc. Cl. 23.
Burger Brewing Co., The, Cincinnati, Ohio. 626,672, pub. 2–21–56. Cl. 48.
Burrell Corp., Pittsburgh, Pa. 626,714. Cl. 26.
Burson Knitting Co., Rockford, Ill. 519,401, canc. Cl. 39.
Bush and Sons Apiaries, Tulelake, Calif. 519,350, canc. Cl. 46.
Calbest Engineering & Electronics Co., Los Angeles, Calif. 626,479, pub. 2–21–56. Cl. 21.
Caley, A. J., & Son, Ltd., Norwich, England. 350,623, canc. Cl. 46.
California Grape Colony, Fresno, Calif. 519,277, canc. Cl. 45.
California Importing Co., Los Angeles, Calif. 519,254, canc. Cl. 46.
Callaway Mills Co., La Grange, Ga. 519,334, canc. Cl. 42.
Calvital Co., Inc., Mount Vernon, N. Y. 519,298, canc. Cl. 18.
Carleton Sales Corp.: *See*—
Loveen, Edward P., Sales Corp.
Woolmark Corp.
Carr, Otis T., Baltimore, Md. 626,485, pub. 2–21–56. Cl. 21.
Cary Chemicals, Inc., Paterson, N. J. 626,427, pub. 2–21–56. Cl. 6.
Caughey Footwear, Inc., New York, N. Y. 626,588, pub. 1–20–53. Cl. 39.
Century Milling Co., The, Minneapolis, Minn. 222,653, canc. Cl. 46.
Charmette Fabrics Co., Inc., New York, N. Y. 519,261–3, canc. Cl. 42.
Chase Bag Co., St. Louis, Mo. 114,944, canc. Cl. 2.
Chase Chemical Co., Newark, N. J. 626,463, pub. 10–27–53. Cl. 18.
Chehalis Packing Co., Seattle, Wash. 626,669, pub. 2–21–56. Cl. 46.
Chic Pad Corp., New York, N. Y. 519,378, canc. Cl. 40.
Chicago, Portrait Co., Chicago, Ill. 329,027, ren. 10–15–55. Cl. 38.
Chicagrow Corp., The, Chicago, Ill. 372,627, canc. Cl. 10.
Clairol Inc., Stamford, Conn. 626,616, pub. 11–23–54. Cl. 40.
Clark, James E., Nashville, Tenn. 366,660, canc. Cl. 45.
Clayton Specialty Mfg. Co.: *See*—
Meyer, Jerrold B.
Cleveland Container Co., The, Cleveland, Ohio. 626,579, pub. 9–13–55. Cl. 37.
Closures, Inc., Waterbury, Conn. 626,678, pub. 2–21–56. Cl. 50.

Cluett, Peabody & Co., Inc., Troy, N. Y. 626,597, pub. 2–21–56. Cl. 39.
Cobb & Pullen: *See*—
Roter Pickle & Canning Co.
Cobb, Robert B.: *See*—
Roter Pickle & Canning Co.
Coffin & Neeley, Los Angeles, Calif. 519,510, canc. Cl. 23.
Cohen, S., & Co. Inc., New York, N. Y. 519,462, canc. Cl. 39.
Colt Ranch, Inc., Firebaugh, Calif. 626,648, pub. 2–21–56. Cl. 46.
Collins & Aikman Corp., New York, N. Y., and Philadelphia, Pa. 519,247, canc. Cl. 42.
Colorado Milling & Elevator Co., The, d. b. a. The Springfield Flour Mills, Denver, Colo., and Springfield, Mo. 519,227, canc. Cl. 46.
Coloratone Gray Hair Restorer Co.: *See*—
Gale, Benjamin T.
Colt Golf, New York, N. Y. 626,495, pub. 2–21–56. Cl. 22.
Columbia Breweries, Inc. Heidelberg Brewing Co., Tacoma, Wash. 565,832. Am. 7(d). Cl. 48.
Cook, A. D., Inc., Lawrenceburg, Ind. 519,389, canc. Cl. 23.
Core, John C., Jr., Huntington, W. Va. 626,472, pub. 2–21–56. Cl. 18.
Cornlbert, Inc., New York, N. Y. 519,469–70, canc. Cl. 39.
Cortley Curtain Corp., New York, N. Y. 626,626, pub. 2–21–56. Cl. 42.
Coty, Inc., New York, N. Y. 626,722. Cl. 44.
Coughlan, F. Richard, d. b. a. Frank Richard Agency, Chicago, Ill. 626,408, pub. 2–21–56. Cl. 2.
Crampton-Farley Brass Co., to Crampton-Farley Mfg. Co., Kansas City, Mo. 108,548, ren. 2–15–56. Cl. 13.
Crampton-Farley Mfg. Co.: *See*—
Crampton-Farley Brass Co.
Crawford, Carol, Inc., New York, N. Y. 626,610, pub. 2–21–56. Cl. 39.
Crown Luggage Co. Inc., Baltimore, Md. 519,379, canc. Cl. 3.
Culligan, Inc., Northbrook, Ill. 626,553, pub. 2–21–56. Cl. 31.
Cycraft Products Co., Youngstown, Ohio. 626,492, pub. 2–21–56. Cl. 22.
Dashew Business Machines, Inc., Culver City, Calif. 626,431, pub. 1–3–56. Cl. 11.
Daytimer Shoe Co., North Adams, Mass. 519,473, canc. Cl. 39.
Dennis Chicken Products Co., Augusta, Ill. 626,646, pub. 2–21–56. Cl. 46.
De Sanno, A. P., & Son, Inc., Phoenixville, Pa. 626,498, pub. 2–21–56. Cl. 23.
Detrex Corp., Detroit, Mich. 626,425, pub. 8–23–55. Cl. 6.
Detrex Corp., Detroit, Mich. 626,541, pub. 2–21–56. Cl. 31.
Diamond Match Co., The, Chicago, Ill. 270,579, canc. Cl. 24.
Dick, A. B., Co., Chicago, Ill. 519,484, canc. Cl. 23.
Dickey Mfg. Co., The, Toledo, Ohio. 519,180, canc. Cl. 32.
Diebold, Inc., Canton, Ohio. 519,498, canc. Cl. 26.
Ditto, Inc., Chicago, Ill. 519,240, canc. Cl. 23.
Dobry Flour Mills, Inc., Yukon, to Shawnee Milling Co., Shawnee, Okla. 332,383, ren. 2–11–56. Cl. 46.
Dobry Flour Mills, Inc., Yukon, to Shawnee Milling Co., Shawnee, Okla. 332,388, ren. 2–11–56. Cl. 46.
Dorr-Oliver Inc., Stamford, Conn. 626,545, pub. 2–21–56. Cl. 31.
Dorr-Oliver Inc., Stamford, Conn. 626,568, pub. 2–21–56. Cl. 31.
Drambuie Liqueur Co. Ltd., The, Edinburgh, Scotland. 626,673, pub. 2–21–56. Cl. 49.
Dreyfuss, Armand M., New York, N. Y. 626,518, pub. 2–21–56. Cl. 23.
Dri-Well Co., The: *See*—
Gale, Benjamin T.
Du-Bal Packing Co., Salinas, Calif. 442,710, canc. Cl. 46.
Dulaney Plywood Corp., Louisville, Ky. 626,437, pub. 2–21–56. Cl. 12.
Dunderry Woolen Mills: *See*—
Rockford Mitten & Hosiery Co.
Duplicators, Inc., New York, N. Y. 626,526, pub. 2–21–56. Cl. 23.
Du Pont, E. I., de Nemours and Co.: *See*—
Kinetic Chemicals, Inc.
Du Pont, E. I., de Nemours and Co., Wilmington, Del. 259,645, canc. Cl. 16.
Dura-Lite Plastics Co.: *See*—
Armstrong, Melvin L.
Duraloom Carpet Mills, Inc., New York, N. Y. 519,297, canc. Cl. 42.
Duriron Co., Inc., The, Dayton, Ohio. 626,573, pub. 2–21–56. Cl. 34.
Durst S. A. Bolzano, Bolzano, Bozen, Italy. 626,530, pub. 2–21–56. Cl. 26.
E-Z Start, Inc., Akron, Ohio. 626,699. Cl. 6.
Early Times Distillery Co.: *See*—
Brown-Forman Distillers Corp.
Eastern States Soilbuilders, Inc., Sharpsburg, Md. 571,243, canc. Cl. 10.
Eastman Kodak Co., Rochester, N. Y., to Eastman Kodak Co., Flemington, N. J. 108,932, ren. 3–7–56. Cl. 26.
Ebco Mfg. Co., The: *See*—
Ebinger, D. A., Sanitary Mfg. Co., The.
Ebinger, D. A., Sanitary Mfg. Co., The. The Ebco Mfg. Co., Columbus, Ohio. 190,125. Am. 7(d). Cl. 13.
Echols, Weyland, Los Gatos, Calif. 626,619, pub. 2–21–56. Cl. 40.
Edgewood Farms, Inc., Marysville, Ohio. 402,615, 12(c) pub. 5–8–56. Cl. 1.
Edgewood Farms, Inc., Marysville, Ohio. 416,751, 12(c) pub. 5–8–56. Cl. 1.
Edson, Enid, New York, N. Y. 626,682, pub. 2–21–56. Cl. 51.
Ehrenberg, B., Co.: *See*—
Ehrenberg, Bertram.
Ehrenberg, Bertram, d. b. a. B. Ehrenberg Co., New York, N. Y. 264,932, canc. Cl. 42.
Electric Soldering Iron Co., Inc., Deep River, Conn. 626,709. Cl. 21.
Emery Food Co.: *See*—
Libby, McNeill & Libby.
Enardo Mfg. Co., Tulsa, Okla. 626,454–5, pub. 2–21–56. Cl. 13.
Ephrata Sportswear Co., Ephrata, Pa. 626,604, pub. 2–21–56. Cl. 39.
Era Meter Co., Chicago, Ill., from Era Meter Co. 519,159, canc. Cl. 23.
Essick Mfg. Co., Los Angeles, Calif. 626,718. Cl. 31.
Esslinger's, Inc., Philadelphia, Pa. 626,671, pub. 2–21–56. Cl. 46.
Etem, Frank J., d. b. a. Gard-N-Eze Co., Escondido, Calif. 519,513, canc. Cl. 23.
Eugene, Ltd., New York, N. Y. 345,501, canc. Cl. 44.
Eugene, Ltd., New York, N. Y. 345,734, canc. Cl. 51.
Eugene, Ltd., New York, N. Y. 383,658, canc. Cl. 44.
Eve-N-Form Undergarment Co.: *See*—
Schuster, Charles.
Everprint Corp., The, Garden City, N. Y. 626,499, pub. 2–21–56. Cl. 23.
Eversharp, Inc., Chicago, Ill. 519,480, canc. Cl. 23.
Fablok Mills, Inc., Irvington, N. J. 626,409, pub. 2–21–56. Cl. 2.
Fabrique d'Horlogerie de Fontainemelon S. A., Fontainemelon, Neuchatel, Switzerland. 626,533, pub. 2–21–56. Cl. 27.
Fairfax Engineering Co., Inc., The, Kansas City, Mo. 519,348, canc. Cl. 31.
Farr Co., El Segundo, Calif. 626,544, pub. 2–21–56. Cl. 31.
Fead, John L., & Sons, Port Huron, Mich. 519,433, canc. Cl. 39.
Feder Industries, Inc., New York, N. Y. 519,426, canc. Cl. 39.
Fein, Hans, d. b. a. Firma C. & E. Fein, Stuttgart-N, Germany. 626,708. Cl. 21.
Feldan Brothers, Inc., New York, N. Y. 626,612, pub. 2–21–56. Cl. 39.
Fernand, Victor, Joseph Rossignol, Segre (Maine-et-Loire), France. 626,670, pub. 2–21–56. Cl. 47.
Fey, A. W., Hazelton, to G. Pappas, d. b. a. St. Johns Cannery, St. Johns, Pa. 334,027, ren. 4–14–56. Cl. 46.
Fieldcrest Mills, Inc., Spray, N. C. 626,627, pub. 2–21–56. Cl. 42.
Fieldston Clothes, Inc., West Orange, N. J. 626,587, pub. 8–15–50. Cl. 39.
Fil-A-Lac Mineral Co., Caldwell, Idaho. 626,467, pub. 2–21–56. Cl. 18.
Firma C. & E. Fein: *See*—
Fein, Hans.
Flex-O-Glass, Inc., d. b. a. Warp Brothers, Chicago, Ill. 626,675, pub. 2–21–56. Cl. 50.
Florentine Hosiery Mills, Philadelphia, Pa. 519,482, canc. Cl. 39.
Florida Aircraft Radio and Marine, Inc., Miami, Fla. 626,484, pub. 2–21–56. Cl. 21.
Ford Motor Co., Highland Park, to Ford Motor Co., Dearborn, Mich. 108,787, ren. 2–29–56. Cl. 38.
Foremost Dairies, Inc., Jacksonville, Fla. 519,471, canc. Cl. 46.
Fougera, E., & Co., Inc.: *See*—
Razalon Corp.
Frank Richard Agency: *See*—
Coughlan, F. Richard.
Franklin Railway Supply Co., Wilmington, Del., and New York, N. Y. 519,168, canc. Cl. 23.
Friedman Bros. & Sons Neckwear Co., Inc., New York, N. Y. 519,518, canc. Cl. 39.
Funsten, R. E., Co., St. Louis, Mo. 626,638, pub. 2–21–56. Cl. 46.
Gale, Benjamin T., d. b. a. Coloratone Gray Hair Restorer Co., St. Paul, Minn. 205,611, canc. Cl. 6.
Gale, Benjamin T., d. b. a. The Dri-Well Co., St. Paul, Minn. 214,967, canc. Cl. 6.
Gale, Benjamin T., d. b. a. Mary T. Goldman Co., St. Paul, Minn., to Monroe Chemical Co., Quincy, Ill. 267,221, canc. Cl. 51.
Ganson Mfg. Co., San Francisco, Calif. 519,535, canc. Cl. 3.
Gard-N-Eze Co.: *See*—
Etem, Frank J.
Garvenswerke: *See*—
Schoenborn-Buchheim, George.
General Dynamics Corp., New York, N. Y., from Stromberg-Carlson Co. 626,474, pub. 2–21–56. Cl. 21.
General Dynamics Corp., New York, N. Y., from Stromberg-Carlson Co. 626,476, pub. 2–21–56. Cl. 21.
General Electric Co., Schenectady, N. Y. 351,275, canc. Cl. 21.
General Filter Co., Ames, Iowa. 626,501, pub. 2–21–56. Cl. 23.
General Motors Corp., Detroit, Mich. 626,562, pub. 2–21–56. Cl. 31.
General Motors Corp., Detroit, Mich. 626,564, pub. 2–21–56. Cl. 31.
General Utilities Distributors, Inc., Chicago, Ill. 519,388, canc. Cl. 23.
Germantown Hosiery Co., d. b. a. Germantown Hosiery Co., Philadelphia, Pa. 626,592, pub. 9–14–54. Cl. 39.
Gillette Co., The, Boston, Mass. 626,618, pub. 2–21–56. Cl. 40.
Gits Molding Corp., Chicago, Ill. 626,554, pub. 2–21–56. Cl. 31.
Globe American Corp., Kokomo, Ind. 626,486, pub. 2–21–56. Cl. 21.
Gluckin, William, & Co., Inc., New York, N. Y. 626,614, pub. 2–21–56. Cl. 39.
Gold Stamp Premium Co.: *See*—
Saunders Distributors, Inc.

Golden State Co., Ltd., San Francisco, Calif. 519,185–6, canc. Cl. 46.
Golden State Co., Ltd., San Francisco, Calif. 519,188, canc. Cl. 46.
Goldenberg's, Washington, D. C. 233,303, canc. Cl. 20.
Goldfarb, Allan, Corp., New York, N. Y. 626,621, pub. 2–21–56. Cl. 42.
Goldman, Benjamin T., St. Paul, Minn. 50,573, canc. Cl. 6.
Goldman, Benjamin T., St. Paul, Minn. 155,696, canc. Cl. 6.
Goldman, Benjamin T., St. Paul, Minn. 215,484, canc. Cl. 6.
Goldman, Mary T., St. Paul, Minn. 38,166, canc. Cl. 51.
Goldman, Mary T. Co.: *See*—
Gale, Benjamin T.
Goodrich, B. F., Co., The: *See*—
Miller Rubber Co., The.
Goodrich, B. F., Co., The, Akron, Ohio. 626,574, pub. 2–21–56. Cl. 35.
Grannick, Irving A.: *See*—
Valoré Inc.
Green Hill, Inc.: *See*—
L. & T. Provision Co.
Green Mfg. Corp., Erie, Pa. 626,442, pub. 2–21–56. Cl. 12.
Greenberg, Jack, Inc., Philadelphia, Pa. 519,157, canc. Cl. 46.
Greiner, Emil, Co., The, New York, N. Y. 332,197, ren. 2–4–56. Cl. 26.
Gro-Cord Rubber Co., Lima, Ohio. 519,476, canc. Cl. 39.
Grove Laboratories, Inc.: *See*—
Physiological Research Corp.
Gruner, Olly, d. b. a. Blue-Bird Shoppe, New York, N. Y. 519,489, canc. Cl. 39.
Gulf Pickle Co.: *See*—
Roter Pickle & Canning Co.
Gulf & West Indies Co., Inc., New York, N. Y. 519,508, canc. Cl. 1.
Gutekunst, Carl, York, Pa. 519,457, canc. Cl. 23.
H & W Co., The, Newark, N. J. 519,521, canc. Cl. 39.
Haas Brothers, San Francisco, Calif. 426,083, canc. Cl. 37.
Hahlo & Solomon Inc., New York, N. Y., to Joseph Singer & Son, Inc., Michigan City, Ind. 335,734, ren. 6–16–56. Cl. 39.
Hallowell Shoe Co., Hallowell, Maine. 519,478, canc. Cl. 39.
Harnischfeger Corp., Milwaukee, Wis. 234,934, canc. Cl. 38.
Harris, Emanuel, d. b. a. The Majestic Pen Co., New York, N. Y. 262,603 canc. Cl. 37.
Hat Corp. of America, Norwalk, Conn. 336,542, ren. 7–7–56. Cl. 39.
Hays Corp., The, Michigan City, Ind. 519,495, canc. Cl. 26.
Heberlein & Co., A. G., Wattwil, Switzerland. 519,282, canc. Cl. 42.
Hecht Co., The, Washington, D. C. 524,353, cor. Cl. 39.
Heidelberg Brewing Co.: *See*—
Columbia Breweries, Inc.
Heineman, Leo, New York, N. Y. 231,003, canc. Cl. 52.
Hendey Machine Co., The, Torrington, Conn. 519,497, canc. Cl. 23.
Herrmann, Lawrence H., d. b. a. Automatic Vending and Advertising Co., Grand Island, Nebr. 519,342, canc. Cl. 101.
Higbie Mfg. Co., Bronson, Mich. 626,487–9, pub. 2–21–56. Cl. 22.
Hinton & Co., Inc., New York, N. Y. 626,490, pub. 10–12–54. Cl. 22.
Hjelm, Alfred, Seattle, Wash. 519,493, canc. Cl. 39.
Hoffman, C. Elbert, Philadelphia, Pa. 336,512, ren. 7–7–56. Cl. 18.
Hollandia Kattenburg, Inc., New York, N. Y. 519,485, canc. Cl. 39.
Hollingshead, R. M., Corp., Camden, N. J. 383,123, canc. Cl. 4.
Hollingshead, R. M., Corp., Camden, N. J., to Sears, Roebuck and Co. 389,164, canc. Cl. 50.
Hollingshead, R. M., Corp., Camden, N. J., to Sears, Roebuck and Co. 389,370, canc. Cl. 6.
Holly Farms Poultry Co., The, Wilkesboro, N. C. 626,645, pub. 2–21–56. Cl. 46.
Home Curtain Corp., Far Rockaway, N. Y. 519,376, canc. Cl. 40.
Horton, Joyce, San Francisco, Calif., to Jan Hats, Inc. 626,591, pub. 3–30–54. Cl. 39.
Hotchkiss, E. H., Co., The: *See*—
Hotchkiss Realty Corp.
Hotchkiss Realty Corp., to The E. H. Hotchkiss Co., Norwalk, Conn. 519,410, canc. Cl. 23.
Houdaille-Hershey of Indiana, Inc., Lebanon, Ind., now by change of name Indiana Commercial Filters Corp. 626,567, pub. 2–21–56. Cl. 31.
Houze Glass Corp., Point Marion, Pa. 626,531, pub. 2–21–56. Cl. 26.
Houze, L. J., Convex Glass Co., Point Marion, Pa. 626,712. Cl. 26.
Humble Oil & Refining Co., Houston, Tex. 626,443, pub. 2–21–56. Cl. 12.
Hunter Milling Co., The: *See*—
Monarch Milling Co., The.
Huther Bros. Saw Mfg. Co., Inc., Rochester, N. Y. 76,117, canc. Cl. 23.
Hygienic Products Co., The, Canton, Ohio, to Boyle-Midway Inc., New York, N. Y. 108,251, ren. 1–25–56. Cl. 52.
I. D. Watch Case Co., Inc., Jamaica, N. Y. 626,535, pub. 2–21–56. Cl. 27.
Illinois Tool Works, Chicago, Ill. 626,525, pub. 2–21–56. Cl. 23.
Imperial Knife Co., Inc.: *See*—
New York Knife Co.
Independent Paper Mills, Inc., Plattsburg and New York, N. Y. 245,176, canc. Cl. 37.
Indiana Commercial Filters Corp.: *See*—
Houdaille-Hershey of Indiana, Inc.
Industrial Processing Co., Portland, Oreg. 626,403, pub. 12–27–55. Cl. 1.
Industrial Scale and Supply Co., Portland, Oreg. 601,958, canc. Cl. 26.
Industrias Maritimas Del Golfo, S. A., Mexico City, Mexico. 626,726. Cl. 46.
Infilco Inc., Tucson, Ariz. 626,565, pub. 2–21–56. Cl. 31.
International Nickel Co., Inc., The, New York, N. Y. 626,459, pub. 2–21–56. Cl. 14.
Irma Hosiery Co., Philadelphia, Pa. 519,488, canc. Cl. 39.
Iroquois Coal Co., Chicago, Ill. 387,324, canc. Cl. 1.
Irvana, Inc., New York, N. Y. 626,594, pub. 3–1–55. Cl. 39.
Isaacs, I. C., & Co., Inc., Baltimore, Md. 626,605, pub. 2–21–56. Cl. 39.
Isaacson, L., & Sons, New York, N. Y. 626,595, pub. 5–17–55. Cl. 39.
Jan Hats, Inc.: *See*—
Horton, Joyce.
Jenisch, Paul, d. b. a. Paul Jenisch Creations, Mount Vernon, N. Y. 626,494, pub. 2–21–56. Cl. 22.
Jenisch, Paul, Creations: *See*—
Jenisch, Paul.
Johnson & Johnson, New Brunswick, N. J. 626,551, pub. 2–21–56. Cl. 31.
Johnson, Oreland R.: *See*—
Kaufman, Sam H., Esther F. Swanson, and Oreland R. Johnson.
Johnson's, Iver, Arms & Cycle Works, Fitchburg, Mass. 333,293, ren. 8–17–56. Cl. 9.
Jolibar Hosiery Co., Boston, Mass. 519,425, canc. Cl. 39.
Jordan Marsh Co., Boston, Mass. 234,841, canc. Cl. 23.
Kalfin-Fleischmann, Inc., Boston, Mass. 519,441, canc. Cl. 39.
Kanmak Textiles Inc., New York, N. Y. 519,330, canc. Cl. 42.
Kansas Milling Co., The, Wichita, Kans. 110,749, ren. 6–13–56. Cl. 46.
Kaufman, Sam H., Esther F. Swanson, and Oreland R. Johnson, Minneapolis, Minn. 626,695, pub. 2–21–56. Cl. 107.
Kaumagraph Co., Wilmington, Del. 626,416, pub. 2–21–56. Cl. 2.
Kaylon Inc., New York, N. Y. 335,848, ren. 6–16–56. Cl. 39.
Kelly-Springfield Tire Co., The, Cumberland, Md. 626,721. Cl. 35.
Kem Mfg. Co., Inc., Fair Lawn, N. J. 626,563, pub. 2–21–56. Cl. 31.
Kennedy Sinclaire, Inc., New York, N. Y. 626,580, pub. 2–21–56. Cl. 38.
Kent Plastics Corp., Evansville, Ind. 626,414, pub. 2–21–56. Cl. 2.
Keystone View Co., Meadville, Pa. 626,529, pub. 2–21–56. Cl. 26.
Klekhaefer Corp., Cedarburg, Wis. 626,500, pub. 2–21–56. Cl. 23.
Klekhaefer Corp., Cedarburg, Wis. 626,514, pub. 2–21–56. Cl. 23.
Kinetic Chemicals, Inc., to E. I. du Pont de Nemours and Co., Wilmington, Del. 331,528–30. ren. 1–14–56. Cl. 6.
Kinetic Chemicals, Inc., to E. I. du Pont de Nemours and Co., Wilmington, Del. 331,643, ren. 1–14–56. Cl. 6.
Klemm Automotive Products Co., Chicago, Ill. 626,719. Cl. 31.
Knapp-Monarch Co., St. Louis, Mo. 626,706. Cl. 21.
Knight Slipper Mfg. Corp., Brooklyn, N. Y. 626,600, pub. 2–21–56. Cl. 39.
Kokomo Sanitary Pottery Corp., Chicago, Ill. 626,453, pub. 2–21–56. Cl. 13.
Kolter-Buckeye Co., The, Lima, Ohio. 626,651, pub. 2–21–56. Cl. 46.
Kotsin, Tobias, d. b. a. A-1 Mfg. Co., Los Angeles, Calif. 626,586, pub. 5–27–52. Cl. 39.
Kraft Foods Co., Chicago, Ill. 626,639. pub. 2–21–56. Cl. 46.
L. & T. Provision Co., to Green Hill, Inc., Elliston, Va. 626,637. pub. 2–21–56. Cl. 46.
Landbouwwerktuigen- en Machinefabriek H. Vissers N. V., Nieuw Vennep, Netherlands. 626,527, pub. 2–21–56. Cl. 23.
Langerman Shoe Co., New York, N. Y. 626,603, pub. 2–21–56. Cl. 39.
Largman Gray Co., Philadelphia, Pa. 519,492, canc. Cl. 39.
Lebec Chemical Corp., Paramount, Calif. 626,426, pub. 2–21–56. Cl. 6
Lee Engineering Co., Pawtucket, R. I. 626,521, pub. 2–21–56. Cl. 23.
Leveen, Edward P., Sales Corp., New York, N. Y., from Woolmark Corp., by change of name from Carleton Sales Corp. 626,623. pub. 2–21–56. Cl. 42.
Libby, McNeill & Libby, to Emery Food Co., Chicago, Ill. 109 011. ren. 3–14–56. Cl. 46.
Lichtenstein, Jessie M., Chicago, Ill. 519 281, canc. Cl. 46.
Liquid Carbonic Corp., The, Chicago, Ill. 333,957, ren. 4–14–56. Cl. 46.
Logan, Jonathan, Inc., New York, N. Y. 626,615, pub. 2–21–56. Cl. 39.
Logetronics, Inc., Washington, D. C. 626,584, pub. 2–21–56. Cl. 38.
Loomis, A. Jay, Niles, Mich. 626,464, pub. 2–21–56. Cl. 18.
L'Oreal-Paris: *See*—
Societe Monsavon-L'Oreal, Societe Anonyme.
Lorraine Mfg. Co., Pawtucket, R. I., and New York, N. Y. 519,390, canc. Cl. 39.
Luber-Finer, Inc.: *See*—
Russell, John K.
Lubrizol Corp., The: *See*—
Lubri-Zol Corp., The.
Lubri-Zol Corp., The, to The Lubrizol Corp., Wickliffe, Ohio. 331,823, ren. 1–21–56. Cl. 15.
Lucido, Philip C., d. b. a. Reliable Utilities Co., St. Louis, Mo. 626,504, pub. 2–21–56. Cl. 23.
Lusterglo, Inc., Wickliffe, Ohio. 626,434, pub. 2–21–56. Cl. 12.
Lynchburg Hosiery Mills Inc., Lynchburg, Va. 336,222, ren. 6–30–56. Cl. 39.
Lyon Metal Products, Inc., Aurora, Ill. 519,183, canc. Cl. 24.

MacNeill Engineering Co., Waltham, Mass. 519,364, canc. Cl. 13.
Mahr, Julius A., Minneapolis, Minn. 364,319, canc. Cl. 19.
Main R. Bocher: *See*—
Societe a Responsabilite Limitee "Mainbocher."
Mainbocher: *See*—
Societe a Responsabilite Limitee "Mainbocher."
Majestic Pen Co., The: *See*—
Harris, Emanuel.
Mallard, A. E., Laboratories, Inc., Detroit, Mich. 519,366, canc. Cl. 18.
Manner, Josef, & Comp. A. G., Vienna, Austria. 626,723. Cl. 46.
Mardigian Corp., Detroit, Mich. 626,702. Cl. 13.
Marine Products Co., San Diego, Calif. 336,490, ren. 7–7–56. Cl. 46.
Marion-Kay Products Co. Inc., Brownstown, Ind. 626,481, pub. 2–21–56. Cl. 21.
Maritime Milling Co. Inc., Buffalo, N. Y. 519,160, canc. Cl. 46.
Marley Co., The, Kansas City, Mo. 626,569, pub. 2–21–56. Cl. 31.
Marshall Field & Co., Chicago, Ill. 519,399, canc. Cl. 39.
Master Builders Co., The, Cleveland, Ohio, to American-Marietta Co., Chicago, Ill. 626,447, pub. 2–21–56. Cl. 12.
Mastic Tile Corp. of America, The, Newburgh, N. Y. 626,450, pub. 2–21–56. Cl. 12.
Matmor Olive Co, Lindsay, Calif. 519,155, canc. Cl. 46.
Maurer, Willi, K. G., Boppard, Germany. 626,685, pub. 2–21–56. Cl. 52.
Mavest, Inc., New York, N. Y. 626,602, pub. 2–21–56. Cl. 39.
McCabe, Walter A., d. b. a. Walter A. McCabe Co., East Haddam, Conn. 626,578, pub. 3–2–54. Cl. 37.
McCabe, Walter A., Co.: *See*—
McCabe, Walter A.
McClure Raymond A., Waterloo, Iowa. 519,352, canc. Cl. 21.
McCormack, V. L., Co.: *See*—
McCormack, Virgil L.
McCormack, Virgil L., d. b. a. V. L. McCormack Co., St. Louis, Mo. 626,491, pub. 2–21–56. Cl. 22.
McDermott, Julian A., Corp., Corona, N. Y. 626,704. Cl. 21.
McKim Dental Service: *See*—
McKim, Orville E.
McKim, Orville E., d. b. a. McKim Dental Service, Port Chester, N. Y. 363,339, canc. Cl. 51.
McSweeny Bros., Temecula, Calif. 442,736, canc. Cl. 46.
Mead Johnson & Co., Evansville, Ind. 626,469, pub. 2–21–56. Cl. 18.
Mechanised Horticultural Implements Ltd., London, England. 519,445, canc. Cl. 23.
Mente & Co., Inc., New Orleans, La. 263,884, canc. Cl. 42.
Meredith Publishing Co., Des Moines, Iowa. 626,692, pub. 2–21–56. Cl. 101.
Merrell, Wm. S., Co., The, to The Wm. S. Merrell Co., Cincinnati, Ohio. 333,917, ren. 4–14–56. Cl. 18.
Metallizing Engineering Co. Inc., Westbury, N. Y. 626,542, pub. 2–21–56. Cl. 31.
Meyer, Jerroid B., d. b. a. Clayton Specialty Mfg. Co., Chicago, Ill. 626,571, pub. 2–21–56. Cl. 34.
Miami Valley Brewing Co., The, Dayton, Ohio. 519,196–7, canc. Cl. 48.
Micro Metallic Corp., Glen Cove, N. Y. 626,560, pub. 2–21–56. Cl. 31.
Mid-States Steel & Wire Co., Crawfordsville, Ind. 626,460, pub. 2–21–56. Cl. 14.
Milam Mfg. Co., Tupelo, Miss. 383,142, canc. Cl. 39.
Mille Lacs Maple Products Corp., St. Paul, Minn. 626,655, pub. 2–21–56. Cl. 46.
Miller Rubber Co., The, Akron, Ohio, to The B. F. Goodrich Co., Akron, Ohio, and New York, N. Y. 108,804, ren. 2–29–56. Cl. 35.
Millerton Mfg. Co., Inc., Millerton, N. Y. 519,533, canc. Cl. 42.
Minnesota Mining & Mfg. Co., St. Paul, Minn. 626,433, pub. 2–21–56. Cl. 12.
Minnesota Mining & Mfg. Co., St. Paul, Minn. 626,435, pub. 2–21–56. Cl. 12.
Mittelberger, Frank, d. b. a. American Plant Equipment Co., New York, N. Y. 626,559, pub. 2–21–56. Cl. 31.
Modern Industrial Engineering Co., Detroit, Mich. 626,496, pub. 2–21–56. Cl. 23.
Monarch Milling Co., The, Hutchinson, to The Hunter Milling Co., Wellington, Kans. 109,615–16, ren. 4–11–56. Cl. 46.
Monroe Chemical Co.: *See*—
Gale, Benjamin T.
Monsanto Chemical Co.: *See*—
Wilckes Martin Wilckes Co.
Morris, Norman M., Corp., New York, N. Y. 626,532, pub. 2–21–56. Cl. 27.
Morse Sewing Machine and Supply Corp., New York, N. Y. 626,707. Cl. 21.
Nash, Antonio, Los Angeles, Calif. 626,635, pub. 2–21–56. Cl. 46.
Nelson, Clarence E.: *See*—
Vamos, Alfred.
Neumann, Arthur E., Chicago, Ill. 519,174, canc. Cl. 23.
Neusteter Co., The, Denver, Colo. 626,599, pub. 2–21–56. Cl. 39.
Newberry, J. J., Co., New York, N. Y. 274,180, canc. Cl. 39.
Newberry, J. J., Co., New York, N. Y. 375,133, canc. Cl. 44.
Newberry, J. J., Co., New York, N. Y. 626,611, pub. 2–21–56. Cl. 39.
New York Knife Co., New York, N. Y., to Imperial Knife Co., Inc., Providence, R. I. 109,927, ren. 4–25–56. Cl. 28.
New York Mercantile Co., The, St. Louis, Mo. 375,523, canc. Cl. 39.
New York Merchandise Co. Inc., New York, N. Y. 519,543, canc. Cl. 39.
Nicholson File Co., Providence, R. I. 335,229, ren. 5–26–56. Cl. 23.
Nickey Brothers, Inc., Memphis, Tenn. 626,440, pub. 2–21–56. Cl. 12.
Norcross, Inc., New York, N. Y. 626,585, pub. 2–21–56. Cl. 38.
Norris Inc., Atlanta, Ga. 519,203, canc. Cl. 46.
North American Aviation, Inc., Los Angeles, Calif. 626,478, pub. 2–21–56. Cl. 21.
Northern Blower Co., Cleveland, Ohio. 626,547, pub. 2–21–56. Cl. 31.
Nusan Brassiere Co., Inc., to Surprise Brassiere Co., Inc., New York, N. Y. 519,529, canc. Cl. 39.
O-Cedar of Canada Ltd., Stratford, Ontario, Canada. 626,686, pub. 2–21–56. Cl. 52.
Ogden Brothers: *See*—
Valley Forge Envelope & Paper Co.
O. K. Feed Mills, Inc., Fort Smith, Ark. 626,636, pub. 2–21–56. Cl. 46.
Old Mission Packing Corp., Ltd., San Diego, to Pacific Olive Co., Visalia, Calif. 336,387, ren. 7–7–56. Cl. 46.
Orange "A" Peel Co., Hollywood Beach, Fla. 519,228, canc. Cl. 45.
O'Sullivan Rubber Co., Portland, Maine, and New York, N. Y., to O'Sullivan Rubber Corp., Winchester, Va. 108,345, ren. 2–1–56. Cl. 39.
O'Sullivan Rubber Corp.: *See*—
O'Sullivan Rubber Co.
Oxy-Dry Sprayer Corp., New York, N. Y. 626,483, pub. 2–21–56. Cl. 21.
Pacific Alloy Co., to B. B. Pelly, Seattle, Wash. 332,193, ren. 2–4–56. Cl. 14.
Pacific Olive Co.: *See*—
Old Mission Packing Corp., Ltd.
Pappas, George: *See*—
Fey, A. W.
Parker Pen Co., The, Janesville, Wis. 626,577, pub. 6–24–52. Cl. 37.
Peelers Co., The, New Orleans, La. 626,690, pub. 2–21–56. Cl. 100.
Peerless Camera Stores, Inc., New York, N. Y. 626,528, pub. 2–21–56. Cl. 26.
Peerless Mills Co. of New York, Inc., New York, N. Y. 519,338, canc. Cl. 42.
Peerless Shirt & Overall Mfg. Co., Wilkes-Barre, Pa. 519,458, canc. Cl. 39.
Pelly, Bernard B.: *See*—
Pacific Alloy Co.
Pennington Mfg. Co., Addison, Ill. 626,448, pub. 2–21–56. Cl. 12.
Pepperell Mfg. Co., Boston, Mass. 626,620, pub. 9–30–52. Cl. 42.
Perkins Products Co., Chicago, Ill. 626,664–7, pub. 2–21–56. Cl. 46.
Pet Milk Co., St. Louis, Mo. 335,786, ren. 6–16–56. Cl. 46.
Peterson, Charles A., Co., The, Cleveland, Ohio. 626,656–7, pub. 2–21–56. Cl. 46.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 626,468, pub. 2–21–56. Cl. 18.
Pharma-Craft Corp., New York, N. Y. 626,681, pub. 2–21–56. Cl. 51.
Pharr Canning Co., Inc., Van Buren, Ark. 626,640, pub. 2–21–56. Cl. 46.
Physiological Research Corp., St. Louis, Mo. 626,466, pub. 2–21–56. Cl. 18.
Physiological Research Corp., St. Louis, Mo. 626,470, pub. 2–21–56. Cl. 18.
Physiological Research Corp., to Grove Laboratories, Inc., St. Louis, Mo. 626,471, pub. 2–21–56. Cl. 18.
Picture Belt Co., The, Denver, Colo. 519,496, canc. Cl. 39.
Piel Bros., Brooklyn, N. Y. 519,542, canc. Cl. 48.
Plan-O-Blocks, Inc., Binghamton, N. Y. 519,532, canc. Cl. 26.
Plastic Sheeting Co.: *See*—
Plastimayd Products Corp.
Plastimayd Products Corp., Portland, Oreg., from Plastic Sheeting Co. 626,589, pub. 2–21–56. Cl. 39.
Pokomo Plastic Products: *See*—
Bassler, Merrill G.
Pola-Rona, Inc., Boston, Mass. 626,631, pub. 7–24–51. Cl. 45.
Police and Firemen National Press, Inc., Brooklyn, N. Y. 626,582, pub. 2–21–56. Cl. 38.
Polk Packing Association, Winter Haven, Fla. 418,032, 12(c) pub. 5–8–56. Cl. 46.
Portable Slide Mfg. Corp., Brooklyn, N. Y. 626,715. Cl. 26.
Porter, H. K., Co., Inc of Pittsburgh: *See*—
Bowers Rubber Works.
Portland Glove Co., Portland, Oreg. 519,387, canc. Cl. 39.
Pratt & Lambert-Inc., Buffalo, N. Y. 626,462, pub. 2–21–56. Cl. 16.
Printing Industries, Inc., New York, N. Y. 519,246, canc. Cl. 23.
Progressus Co.: *See*—
Baer, Rudi L.
Protection Products Mfg. Co., Kalamazoo, Mich. 332,319, ren. 2–11–56. Cl. 6.
Protexacar, Elizabeth, N. J. 626,473, pub. 2–21–56. Cl. 19.
Pulien, Alan G.: *See*—
Roter Pickle & Canning Co.
Pure Frozen Lemon Juice Corp. of America, Hubbard Woods, Ill. 626,653, pub. 2–21–56. Cl. 46.
Pyrexon Ray Co. Ltd., Toronto, Canada. 519,523, canc. Cl. 44.
Quaker Oats Co., The, Chicago, Ill. 626,725. Cl. 46.
Race & Race, Inc., Winter Haven, Fla. 626,703. Cl. 13.
Racine Industrial Plant, Inc., Racine, Wis. 626,482, pub. 2–21–56. Cl. 21.
Ramsey Corp., St. Louis, Mo. 626,575, pub. 2–21–56. Cl 35.

Ranger Seafood, Inc., Buena Park, Calif. 519,545, canc. Cl. 46.
Rask, Jens S., Wheeling, Ill. 519,200, canc. Cl. 23.
Rayette, Inc., St. Paul, Minn. 626,689, pub. 2–21–56. Cl. 52.
Rayflex Fabrics, Inc., New York, N. Y. 519,341, canc. Cl. 42.
Rasalon Corp., to E. Fougera & Co., Inc., New York, N. Y. 335,738, ren. 6–16–56. Cl. 18.
Realemon-Puritan Co., Chicago, Ill. 626,642, pub. 2–21–56. Cl. 46.
Ree Associates: *See*—
Ree, Roelof.
Ree, Roelof, d. b. a. Ree Associates, Bogota, N. J. 626,718. Cl. 26.
Reeves Pulley Co.: *See*—
Reliance Electric and Engineering Co., The.
Reliable Utilities Co.: *See*—
Lucido, Philip C.
Reliance Electric and Engineering Co., The, d. b. a. Reeves Pulley Co., Columbus, Ind. 626,517, pub. 2–21–56. Cl. 23.
Rice Growers Association of California, Sacramento, Calif. 323,427, canc. Cl. 46.
Rice-O'Neill Shoe Co., St. Louis, Mo. 519,385, canc. Cl. 39.
Rich Guild Shirt Co., New York, N. Y. 519,491, canc. Cl. 39.
River Brand Rice Mills Inc., New York, N. Y. 626,633, pub. 2–21–56. Cl. 46.
Rivoli Mills, Inc., The, Chattanooga, Tenn. 519,397–8, canc. Cl. 39.
Robbins Floor Products, Inc., Tuscumbia, Ala. 626,444–5, pub. 2–21–56. Cl. 12.
Robertson-Hedges, Inc., Kansas City, Mo. 626,524, pub. 2–21–56. Cl. 23.
Rockford Mitten & Hosiery Co., d. b. a. Dunderry Woolen Mills, Rockford, Ill. 519,300, canc. Cl. 42.
Rockford Textile Mills, Inc., McMinnville, Tenn. 626,606, pub. 2–21–56. Cl. 39.
Roden Coal Co., Birmingham, Ala. 75,908, canc. Cl. 1.
Rodi & Wienenberger Aktiengesellschaft, Pforsheim, Germany. 626,534, pub. 2–21–56. Cl. 27.
Rodi & Wienenberger Aktiengesellschaft, Pforsheim, Germany. 626,536–8, pub. 2–21–56. Cl. 28.
Roll Packing House, Chula Vista, Calif. 626,650, pub. 2–21–56. Cl. 46.
Roter Pickle & Canning Co., d. b. a. Gulf Pickle Co., to R. B. Cobb and A. G. Pullen, d. b. a. Cobb & Pullen, Dallas, Tex. 519,151, canc. Cl. 46.
Royal Drafting Instrument Co., Royal Oak, Mich. 519,217, canc. Cl. 26.
Russ-Elektroofen K. G., Koln-Bayenthal, Germany. 626,475, pub. 2–21–56. Cl. 21.
Russell, John K., to Luber-Finer, Inc., Los Angeles, Calif. 332,804, ren. 2–25–56. Cl. 31.
St. Johns Cannery: *See*—
Fey, A. W.
Samuel Stamping & Enameling Co., Chattanooga, Tenn. 626,572, pub. 2–21–56. Cl. 34.
Sanfax Co., The, Atlanta, Ga. 626,687, pub. 2–21–56. Cl. 52.
Saunders Distributors, Inc., d. b. a. Gold Stamp Premium Co., Charlotte, N. C. 626,693, pub. 2–21–56. Cl. 101.
Saunders, E. E., & Co., Pensacola, Fla. 626,644, pub. 2–21–56. Cl. 46.
Sauven Perforating Machine Co., London, England. 626,515, pub. 2–21–56. Cl. 23.
Scott, O. M., & Sons Co., Marysville, Ohio. 340,485, 12(c) pub. 5–8–56. Cl. 1.
Scott, O. M., & Sons Co., Marysville, Ohio. 341,690, 12(c) pub. 5–8–56. Cl. 1.
Sears, Roebuck and Co.: *See*—
Hollingshead, R. M., Corp.
Sears, Roebuck and Co., Chicago, Ill. 157,384, canc. Cl. 51.
Sears, Roebuck and Co., Chicago, Ill. 355,625, canc. Cl. 32.
Sears, Roebuck and Co., Chicago, Ill. 362,526, canc. Cl. 23.
Seaside Fisheries Co., Long Beach, Calif. 626,654, pub. 2–21–56. Cl. 46.
Selberling Rubber Co., Barberton, Ohio. 626,576, pub. 2–21–56. Cl. 35.
Servto Corp., Cleveland, Ohio. 626,432, pub. 2–21–56. Cl. 12.
Schneider, Amanda V.: *See*—
Schneider, Ben R.
Schneider, Ben R., deceased, Nicoma Park, Okla.: A. V. Schneider, administratrix. 519,362, canc. Cl. 22.
Schoenborn-Buchheim, George, d. b. a. Garvenswerke, Vienna, Austria. 626,505–6, pub. 2–21–56. Cl. 23.
Schuster, Charles, d. b. a. Eve-N-Form Undergarment Co., Philadelphia, Pa. 519,504. canc. Cl. 39.
Scranton Lace Co., The, Scranton, Pa. 519,329, canc. Cl. 42.
Service Textile Co., Inc., Newark, N. J. 519,314, canc. Cl. 42.
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Shedd-Bartush Foods, Inc.: *See*—
Wheatley Mayonnaise Co.
Sheffield Bronze Paint Corp., Cleveland, Ohio. 626,461, pub. 2–21–56. Cl. 16.
Sherman Products: *See*—
Sherman, Sol.
Sherman, Sol, d. b. a. Sherman Products, New York, N. Y. 519,487. canc. Cl. 39.
Shipton, E., & Co. Ltd., Ferndown, Northwood Hills, England. 626,415. pub. 2–21–56. Cl. 2.
Shirley Fabrics Corp., New York, N. Y. 626,630, pub. 2–21–56. Cl. 42.
Shu-Stiles, Inc., St. Louis, Mo. 264,833, canc. Cl. 39.
Signode Steel Strapping Co., Chicago, Ill. 519,201, canc. Cl. 32.
Simmons, Louis G.: *See*—
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Sinclair Mfg. Co., The, Toledo, Ohio. 368,119, canc. Cl. 6.
Singer, Joseph, & Son, Inc.: *See*—
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Sitroux Co., Inc., The, Brooklyn, N. Y. 334,933, canc. Cl. 42.
Smith, Alexander, & Sons Carpet Co., Yonkers, N. Y. 519,310, canc. Cl. 42.
Smith Kline & French Laboratories, Philadelphia, Pa. 626,691, pub. 2–21–56. Cl. 100.
Snake River Trout Co., Buhl, Idaho. 626,724. Cl. 46.
Snively Groves, Inc., Winter Haven, Fla. 626,658–60, pub. 2–21–56. Cl. 46.
Societe a Responsabilite Limitee "Mainbocher," Paris, France, to M. R. Bocher, d. b. a. Mainbocher, New York, N. Y. 335,876, ren. 6–16–56. Cl. 39.
Societe Auxiliaire d'Industrie (Sadi), Forest-Bruxelles, Belgium. 626,497. pub. 2–21–56. Cl. 23.
Societe Monsavon-L'Oreal, Societe Anonyme, d. b. a. L'Oreal-Paris, Paris (Seine), France. 626,680, pub. 2–21–56. Cl. 51.
Softmagic Corp., Whittier, Calif. 626,548–9, pub. 2–21–56. Cl. 31.
Solvic Société Anonyme, Brussels, Belgium. 626,422–4, pub. 2–21–56. Cl. 6.
Speed-D-Burr Corp., Glendale, Calif. 626,509, pub. 2–21–56. Cl. 23.
Sperry Rand Corp.: *See*—
Wyckoff, Seamans & Benedict.
Spring Packing Corp., Chicago, Ill. 626,676, pub. 2–21–56. Cl. 50.
Springfield Flour Mills, The: *See*—
Colorado Milling & Elevator Co., The.
Stadler Fertiliser Co., The, Cleveland, Ohio. 626,430, pub. 6–7–55. Cl. 10.
Stag Clothes, Inc., Philadelphia, Pa. 519,408, canc. Cl. 39.
Standard Factors, Seattle, Wash. 626,720. Cl. 34.
Standard Packaging Corp., Chicago, Ill. 626,677, pub. 2–21–56. Cl. 50.
State Sanitary Supply Co., Chicago, Ill. 519,270, canc. Cl. 42.
Steele, J. W., & Co., North Kansas City, Mo. 519,176, canc. Cl. 24.
Steinberger, L., & Sons, Inc., Jersey City, N. J. 519,304, canc. Cl. 45.
Sterilek Co., Inc., The, Brooklyn, N. Y. 325,361, canc. Cl. 37.
Sterilek Co. Inc., The, New York, N. Y. 385,169, canc. Cl. 37.
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Stone, J., & Co. (Charlton) Ltd., Charlton, London, England. 626,458, pub. 2–21–56. Cl. 14.
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Strauss and Co. Inc., Baltimore, Md. 519,198, canc. Cl. 42.
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Stuart Corp., Baltimore, Md. 626,480, pub. 2–21–56. Cl. 21.
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Sunbeam Corp., Chicago, Ill. 626,566, pub. 2–21–56. Cl. 31.
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Superior Feed Mills, Inc., Oklahoma City, Okla. 626,634, pub. 2–21–56. Cl. 46.
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Swift Mfg. Co., Columbus, Ga. 626,628–9, pub. 2–21–56. Cl. 42.
Swissels, Inc., New York, N. Y. 519,534, canc. Cl. 46.
Taylor Redding Mfg. Co., Taylor, Tex. 336,068, ren. 6–23–56. Cl. 32.
Taylor, Richard W., Boston, Mass. 378,500, 12(c) pub. 5–8–56. Cl. 6.
Taylor, S. G. Chain Co., Hammond, Ind. 626,522, pub. 2–21–56. Cl. 23.
Teen Sheen, Inc., Shaker Heights, Ohio. 626,688, pub. 2–21–56. Cl. 52.
Telecoin Corp., New York, N. Y. 519,249, canc. Cl. 23.
Telenews Productions, Inc., Cleveland, Ohio. 626,581, pub. 2–21–56. Cl. 38.
TELvision Laboratories, Inc., Chicago, Ill. 519,361, canc. Cl. 21.
Tempo Products Co., Cleveland, Ohio, from Tempo Products Co. 519,153, canc. Cl. 23.
Terrill, D. D., Saw Co.: *See*—
Terrill, Delmer D.
Terrill, Delmer D., d. b. a. D. D. Terrill Saw Co., Bangor, Maine. 519,274, canc. Cl. 23.
Three Crown Productions: *See*—
Williamson, Birger E.
Ti-All Fasteners Inc., White Plains, N. Y. 626,429, pub. 2–21–56. Cl. 7.
Titeflex, Inc., Newark, N. J. 626,456, pub. 2–21–56. Cl. 13.
Tobacco Workers International Union, Washington, D. C. 626,696, pub. 2–21–56. Cl. A.
Tobin Packing Co., Inc., Rochester and Albany, N. Y. 519,268, canc. Cl. 46.
Toner, John F., Denver, Colo., to The Borden Co., New York, N. Y. 111,488, ren. 7–18–56. Cl. 46.
Trommer, John F., Inc., Brooklyn, N. Y. 519,245, canc. Cl. 48.
Uniflow Mfg. Co., Erie, Pa. 626,546, pub. 2–21–56. Cl. 31.

Union Bag & Paper Corp., New York, N. Y. 626,417–18, pub. 2–21–56. Cl. 2.
United Press Associations, New York, N. Y. 626,727. Cl. 100.
U. S. Auto Accessories Corp., Boston, Mass. 626,519, pub. 2–21–56. Cl. 23.
U. S. Industries, Inc., Chicago, Ill. 626,502, pub. 2–21–56. Cl. 23.
United States Plywood Corp., New York, N. Y. 626,449, pub. 2–21–56. Cl. 12.
United States Rubber Co., New York, N. Y. 626,410–11, pub. 2–21–56. Cl. 2.
U. S. Sanitary Specialties Corp., Chicago, Ill. 236,417, canc. Cl. 6.
United States Trunk Co., Fall River, Mass. 626,419, pub. 2–23–54. Cl. 3.
Universal Major Corp.: *See*—
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Valley Forge Envelope & Paper Co., to Ogden Brothers, Philadelphia, Pa. 335,413, ren. 6–2–56. Cl. 37.
Valoré Inc., Greenwich, Conn., from I. A. Grannick. 626,679, pub. 2–21–56. Cl. 51.
Vamos, Alfred, to C. E. Nelson, to Barrett & Co., Inc., Newark, N. J. 395,851–2, new cert. Cl. 1.
Van Brode Milling Co., Inc., Clinton, Mass. 626,710. Cl. 21.
Van der Lely, Cornelis, Maasland, Netherlands. 626,508, pub. 2–21–56. Cl. 23.
Van Hall, Ralph R., Peoria, Ill. 331,925, ren. 1–28–56. Cl. 51.
Van Wert Mfg. Co., The, Van Wert, Ohio. 519,420, canc. Cl. 39.
Veldown Co., Inc., New York, N. Y. 341,725, canc. Cl. 37.
Victory Girl Coat Co., New York, N. Y. 626,613, pub. 2–21–56. Cl. 39.
Viking Pump Co., Cedar Falls, Iowa. 108,409, ren. 2–8–56. Cl. 23.
Vintage Wines, Inc., New York, N. Y. 519,526, canc. Cl. 49.
Virginia-Carolina Chemical Corp., Richmond, Va. 519,264, canc. Cl. 52.
Vis-Ko, Inc., Sumner, Wash. 626,700–1. Cl. 6.
Vocational Footwear, Inc., Lutesville, Mo. 626,608, pub. 2–21–56. Cl. 39.
Wagner Electric Corp., St. Louis, Mo. 626,512, pub. 2–21–56. Cl. 23.
Waldeck, Jacob C. C., St. Louis, Mo., to Swift & Co., Chicago, Ill. 107,125, ren. 11–9–55. Cl. 46.
Wales-Strippit Corp., North Tonawanda, N. Y. 626,520, pub. 2–21–56. Cl. 23.
Wals Co. Ltd., Chuo-Ku, Tokyo, Japan. 626,716. Cl. 26.
Ward Baking Co., New York, N. Y. 626,652, pub. 2–21–56. Cl. 46.
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Warren Co., Inc., The, Atlanta, Ga. 626,543, pub. 2–21–56. Cl. 31.
Wass Food Products Co., Chicago, Ill. 626,662–3, pub. 2–21–56. Cl. 46.
Wearite Specialty Co., Inc., New York, N. Y. 626,593, pub. 6–29–54. Cl. 39.
Weinrich, A. F., d. b. a. Weinrich Pickle Co., Los Angeles, Calif. 193,925, canc. Cl. 46.
Weinrich Pickle Co.: *See*—
Weinrich, A. F.
Wells International Corp., New York, N. Y. 626,598, pub. 2–21–56. Cl. 39.
Wernet Dental Mfg. Co., Brooklyn, N. Y., to Wernet Dental Mfg. Co. Inc., Jersey City, N. J. 335,588, ren. 6–9–56. Cl. 51.
Wernet Dental Mfg. Co. Inc.: *See*—
Wernet Dental Mfg. Co.
Western Grinders, Glendale, Calif. 626,493, pub. 2–21–56. Cl. 22.
Western Lithograph Co., also d. b. a. Westline Products Div., Los Angeles, Calif. 626,413, pub. 2–21–56. Cl. 2.
Westinghouse Electric Corp.: *See*—
Westinghouse Electric & Mfg. Co.
Westinghouse Electric & Mfg. Co., East Pittsburgh, to Westinghouse Electric Corp., Pittsburgh, Pa. 111,113, ren. 6–27–56. Cl. 21.
Westline Products Div.: *See*—
Western Lithograph Co.
Wheatley Mayonnaise Co., Louisville, Ky., to Shedd-Bartush Foods, Inc., Detroit, Mich. 336,415, ren. 7–7–56. Cl. 46.
Whirlpool Corp., to Whirlpool-Seeger Corp., St. Joseph, Mich. 626,550, pub. 2–21–56. Cl. 31.
Whirlpool-Seeger Corp.: *See*—
Whirlpool Corp.
Whittenton Garment Corp., Taunton, Mass. 626,609, pub. 2–21–56. Cl. 39.
Wiggs, Norman, & Co., Los Angeles, Calif. 626,698. Cl. 4.
Wilckes Martin Wilckes Co. Monsanto Chemical Co., St. Louis, Mo. 204,094. Am. 7(d), Cl. 1.
Williams, Paul A., Chicago, Ill. 626,717. Cl. 28.
Williamson, Birger E., d. b. a. Three Crown Productions, San Jose, Calif. 519,424, canc. Cl. 26.
Wilson Brothers, Springfield, Mo. 626,503, pub. 2–21–56. Cl. 23.
Wilson Mechanical Instrument Co., Inc., Bridgeport, Conn. 519,499, canc. Cl. 26.
Wilson Provision Co., Peoria, Ill. 114,852, canc. Cl. 46.
Wilson Stone Co., Old Hickory, Tenn. 626,441, pub. 2–21–56. Cl. 12.
Windo-Tenda, Inc., Greenville, S. C. 626,438, pub. 2–21–56. Cl. 12.
Wirecraft Mfg. Co., St. Louis, Mo. 626,405, pub. 2–21–56. Cl. 2.
Wolverine Mouldings, Inc., Lincoln Park, Mich. 626,446, pub. 2–21–56. Cl. 12.
Wolverine Shoe & Tanning Corp., Rockford, Mich. 519,453, canc. Cl. 39.
Wood, T. W., & Sons, Richmond, Va. 334,763, ren. 5–12–56. Cl. 1.
Wood, Wayne P., Shreveport, La. 519,373, canc. Cl. 35.
Woolmark Corp.: *See*—
Leveen Edward P., Sales Corp.
Woolmark Corp., New York, N. Y., by change of name from Carleton Sales Corp. 626,624–5, pub. 2–21–56. Cl. 42.
Worthington Corp., Harrison, N. J. 626,523, pub. 2–21–56. Cl. 23.
Wyckoff, Seamans & Benedict, by Sperry Rand Corp., New York, N. Y. 19,462, 12(c) pub. 5–8–56. Cl. 11.
Yakima Fruit Growers Association, Yakima, Wash. 626,668, pub. 2–21–56. Cl. 46.
Yale & Towne Mfg. Co., The, Stamford, Conn. 626,539, pub. 2–21–56. Cl. 30.
Yo Ho Food Products Co., Inc.: *See*—
Yo-Ho Pure Food Products Co.
Yo-Ho Pure Food Products Co., by Yo Ho Food Products Co., Inc., Chicago, Ill. 232,893, 12(c) pub. 5–8–56. Cl. 46.
Youngs Rubber Corp., New York, N. Y. 429,472, canc. Cl. 44.
Zerega's, A., Sons, Cons'l'd, Brooklyn, N. Y., to A. Zerega's Sons, Inc., Fair Lawn, N. J. 108,120, ren. 1–18–56. Cl. 46.
Zerega's, A., Sons, Inc.: *See*—
Zerega's, A., Sons, Cons'l'd.
Zylite Optical Co. Inc., New York, N. Y. 519,505, canc. Cl. 26.

U. S. GOVERNMENT PRINTING OFFICE: 0——1956

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
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NOTICES

Division Number Should Appear On Communications Relating to Pending Applications

It is again requested that the Division number be typed on amendments and other communications relating to pending applications in order to expedite the handling of mail and to conserve manpower. The number of the Division should be placed on the right-hand side, opposite the Serial Number or name of applicant. In view of the vast amount of mail, continued careful attention to these details will do much toward avoiding delay in handling of mail.

To avoid confusion between Classification Divisions I to V and Examining Divisions 1 to 5 respectively, papers intended for the classification divisions should bear the notation "Class. Div. ——" with the appropriate roman numeral.

C. A. KALK,
Acting Director of Administration.

Apr. 24, 1956.

Adjudicated Patent

(D. C. N. Y.) Hancock Patent No. 2,708,114 (272—8), for an ornamental adjunct to a clock. Claim 9 *Held* invalid, but, if valid, was infringed. *Mastercrafters Clock & Radio Co.* v. *United Metal Goods Mfg. Co.*, 138 F. Supp. 388; — USPQ —.

Adverse Decisions in Interferences

In the designated interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed.

Pat. 2,583,134, H. V. Atwell, Catalytic synthesis of hydrocarbons, decided Jan. 31, 1956, Interference No. 86,610, claims 1, 2, 3, 6, 7, 8, 9, 10, 11, and 12.

Pat. 2,609,428, H. B. Law, Base electrodes for semi-conductor devices, decided Jan. 17, 1956, Interference No. 86,912, claims 2, 4, 5, 6, and 7.

Pat. 2,656,153, T. A. White, Rotary drilling bits, decided Apr. 11, 1956, Interference No. 87,259, claims 1 and 2.

Pat. 2,670,599, K. R. Davies and K. Herbstritt, Fuel systems for gas-turbine engines, decided Mar. 29, 1956, Interference No. 87,004, claim 20.

Disclaimer

2,699,095.—*Russel D. Irwin*, Oreland, Pa. CONTROL APPARATUS FOR PULP REFINERS. Patent dated Jan. 11, 1955. Disclaimer filed Apr. 13, 1956, by the assignee, *Minneapolis-Honeywell Regulator Company*.

Hereby enters this disclaimer to claims 11 and 12 of said patent.

Patents Available for Licensing or Sale

2,637,969. Geographical Clock. M. L. Beyer, 50 Brown Ave., Hempstead, L. I., N. Y. Correspondence to A. John Michel, 15 Park Row, New York 38, N. Y.

2,740,268. High Speed Air Conditioner Circulating Chamber. Calvin M. Jones, 64 S. E. 6th St., Miami, Fla.

General Electric Company is prepared to grant non-exclusive licenses under the following 28 patents on reasonable terms to domestic manufacturers.

Applications for licenses under the following two patents should be directed to: General Electric Company, Patent Counsel, Chemical and Metallurgical Division, 1 River Road, Schenectady 5, N. Y.

2,714,585. Curing of Silicone Resins With Aluminum Crotonate.

2,732,092. Closure Device.

Applications for licenses under the following two patents should be directed to: General Electric Company, Aircraft Gas Turbine Division, Cincinnati 15, Ohio. Attention: Patent Counsel.

2,721,788. Decomposition of Hydrogen Peroxide.

2,733,570. Injection Head for Jet Propulsion System.

Applications for licenses under the following four patents should be directed to: Patent Counsel, Switchgear & Control Division, General Electric Company, 6901 Elmwood Ave., Philadelphia 42, Pa.

2,279,729. Electric Converting System.

2,482,553. Electronic Relay.

2,640,179. Electronic Motor and Stabilizing Means Therefor.

2,707,764. Electronic Motor Control System.

Applications for licenses under the following two patents should be directed to: General Electric Company, Component Products Division, 1635 Broadway, Fort Wayne, Ind.

2,734,158. Protective Arrangement for Dual-Voltage Motor.

2,735,989. Variable Inductance.

Applications for license under the following 18 patents may be directed to: Patent Counsel, General Engineering Laboratory, General Electric Company, 1 River Road, Schenectady 5, N. Y.

2,236,984. Electric Motor Control System.

2,260,036. Transmission Dynamometer.

2,262,491. Electric Control Circuit.

2,272,772. Electrical Measuring Apparatus.

2,326,550. Electric Valve Translating Circuits.

2,332,300. Interval Timer.

2,346,984. Rate Control for Tuning Fork Oscillator.

2,362,235. Apparatus for Indicating Variations in Densities of Transparent Media.

2,366,544. Electric Valve Protective System.

2,380,249. Liquid Level Indicating Device.

New Applications Received During March 1956

Patents	6,583
Designs	445
Plants	3
Reissues	19
Total	7,050

Issue

Patents	938—No.	2,745,103 to No.	2,746,040, incl.
Designs	47—No.	177,657 to No.	177,703, incl.
Reissues	5—No.	24,149 to No.	24,153, incl.
Total	990		

2,461,286. Radio Frequency Bridge.

2,473,235. Follow-Up Control Systems.

2,489,920. Metal Detector.

2,509,728. Regulating Apparatus.

2,541,831. Eliminating of Viscous Drag in a Magnetic Fluid Clutch.

2,652,529. Phase Balancing System.

2,718,779. Apparatus for Testing Wear Resistance.

2,721,977. Variable Amplitude Oscillator.

Patent Removed From Register

2,584,759, Cover Securing Means for Pressure Cooker, which was listed in the OFFICIAL GAZETTE of Feb. 5, 1952, as being available for licensing by the General Electric Company, is hereby removed from the Register of Patents Available for Licensing or Sale.

CONDITION OF PATENT APPLICATIONS AS OF MARCH 30, 1956

Total number of pending applications (excluding Designs)	219, 645
Total number of pending Design applications	6, 977
Total number of applications awaiting action (excluding Designs)	123, 900
Total number of Design applications awaiting action	2, 491
Date of oldest new application	Nov. 23, 1954
Date of oldest amended application	Nov. 6, 1953

ROSA, M. C., Director, Patent Examining Operation

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 80, 86, 59, 63, 64.
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IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
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VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE.	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	3-7-55	6-14-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	6-17-55	1-13-55
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	7-13-55	3-29-54
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	6-10-55	8-6-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	6-21-55	12-10-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic Amides, Amines, General Organic Processes	5-18-55	6-9-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	7-6-55	3-4-54
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	2-24-55	6-1-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	6-13-55	6-1-54
10. (VI) BOYD, S., Firearms; Ordnance; Ammunition; Explosive Charge Making	12-17-54	1-20-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	7-13-55	9-8-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	4-4-55	11-17-53
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	3-23-55	2-10-54
14. (III) MANIAN, J. C. (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	3-11-55	4-7-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	7-1-55	4-7-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	5-16-55	2-2-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	4-27-55	7-19-54
18. (VI) BLUM, A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	2-15-55	5-14-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	6-3-55	7-8-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	6-7-55	5-20-54
21. (III) MADER, R. C., Textiles	7-5-55	4-20-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	6-17-55	7-12-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	11-23-54	11-6-53
24. (III) DRACOPOULOS, P. T. (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	5-10-55	12-2-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	7-1-55	7-2-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	7-15-55	1-3-55
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	7-6-55	10-8-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	5-26-55	8-24-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	4-12-55	1-3-55
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	9-19-55	9-13-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application	
	New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	4-21-55	10-28-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	6-17-55	12-3-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	7-13-55	3-9-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	6-10-55	3-8-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	6-6-55	10-20-54
36. (V) McFADYEN, A. D., Measuring and Testing	4-7-55	1-31-55
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	6-9-55	10-6-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g., Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	7-1-55	11-1-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	7-25-55	5-11-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	7-1-55	1-3-55
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	4-1-55	4-14-54
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	1-10-55	7-19-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	5-18-55	7-15-54
44. (II) EVANS, N. H., Antennas; Automatic Pilots; Directive Radio Systems; Mass Spectrometers; Nuclear Batteries; Nuclear Resonant Devices; Neutron Detecting and Measuring; Radar; Sonar; Torpedoes	1-3-55	1-28-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	6-14-55	1-6-55
46. (II) WILES, W. G., Actinide Series (e. g., fissionable) Compounds; Sintered Metal Stock; Explosives; Power Plants (part); Metallurgy (part); Blasting; Surgery (part); Radioactive Medicines; Irradiation Chemistry; Carbon Chemistry (part)	3-10-55	8-20-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	7-13-55	12-6-54
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	3-10-55	4-12-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	5-2-55	10-1-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	6-20-55	4-15-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	6-24-55	4-2-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	5-11-55	7-15-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	7-15-55	12-2-54
54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	4-25-55	4-30-54
55. (VII) KLINE, J. R., Surgery; Dentistry; Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	3-11-55	3-24-54
56. (I) KEELY, J. E. (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	7-1-55	12-20-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	10-11-55	8-11-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	7-1-55	4-5-54
59. (I) HENKIN, B. (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	5-19-55	5-19-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	6-10-55	1-3-55
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	6-7-55	10-1-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	6-10-55	7-6-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	6-29-55	4-26-54
66. (V) LISANN, I. (BUCHLER, M., acting), Geometric Instruments; Automatic Weighing Scales; Acoustics	5-16-55	4-6-54
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	5-10-55	2-28-55
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	5-16-55	11-27-53
70. (II) BREWRINK, J. L., Security laws administration.	6-1-55	1-11-55
CLASS. DIVS. I (VII) LANHAM, B. E., Paper Making	7-1-55	2-2-55
CLASS. DIVS. II (II) LADY, J. E., Oscillators; Amplifiers	8-29-55	1-31-55
CLASS. DIVS. III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	6-24-55	12-27-54
CLASS. DIVS. IV (VI) SMITH (Mrs.), M. P., Harrows; Plows; Earth Rollers	7-1-55	6-2-55
CLASS. DIVS. V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	8-18-55	9-22-55
DESIGNS (III) A—BREHM, G. L., Industrial Arts	8-5-55	9-12-55
DESIGNS (III) B—GRAY, M. A., Household, Personal and Fine Arts		

The following divisions have been abolished: 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during May 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1953*.

Patents ..... Numbers 2,156,257 to 2,160,804, inclusive

DECISIONS IN PATENT AND TRADEMARK CASES

U. S. Court of Customs and Patent Appeals

IN RE BASCOM

No. 6156. Decided January 20, 1956. Petition for rehearing denied March 19, 1956

[— F.2d —; — USPQ —]

1. PATENTABILITY—COMBINATION OF REFERENCES.
Where it is argued that the hypothetical combination of reference patents is not permissible because it requires extensive modification of the individual features of each, *Held* that "the proper inquiry should not be limited to the specific structure shown by the references, but should be into the concepts fairly contained therein, and the overriding question to be determined is whether those concepts would suggest to one skilled in the art the modification called for by the claims."

2. SAME — PARTICULAR SUBJECT MATTER — COMBINATION SCREEN AND STORM DOOR.
Certain claims to a combination screen and storm door, *Held* properly rejected as unpatentable over the cited prior art.

APPEAL from the Patent Office. Serial No. 109,130.

AFFIRMED.

Henry Shur for Bascom.

Clarence W. Moore (*H. S. Miller* of counsel) for the Commissioner of Patents.

Before O'CONNELL, *Acting Chief Judge*, and JOHNSON, WORLEY, COLE, and JACKSON (retired), *Associate Judges*

COLE, *J.*, delivered the opinion of the court.

This case involves the patentability of certain claims of an application (Serial No. 109,130, filed August 8, 1949) directed to a "combination screen and storm door." Eight claims are involved in this appeal from the Board of Appeals of the United States Patent Office, which affirmed the Primary Examiner's rejection. Four claims have been allowed by the tribunals below, thereby recognizing, according to appellant, "the presence of inventive subject matter in the application." Appellant's brief states, "This appeal is taken because the allowed claims are believed unduly restricted in the light of the prior art: and appellant seeks allowance of broader claims commensurate with the scope of his invention and contribution to the art to which it relates, so that others may not evade his patent while adopting the heart of the present invention in its broader aspects."

As described in the specification, appellant's combination door is of the general type used as outer doors on dwelling places. In summer the door has a large screen portion, which permits ventilation, while keeping out insects. In winter the screen portion is replaced by a glassed portion, which aids in the insulation of the dwelling, by keeping a dead air blanket between the outer and inner door. In the exemplification of this type of door in general use, the screen section and the glass section are separate units, which may be interchangeably installed upon the door frame by the adjustment of a few screws or toggles. The unused section must be stored elsewhere. A modification of this design is described in appellant's brief as "a 'double-hung' type in which the opening of the door frame is divided into two half sections and a separate window or screen unit is independently hung in each half. * * * Thus, such doors may be all screen door, or all storm door, or half screen and half window. No other variation is possible. The two unused units must be stored in some place like a garage, shed or basement where they are frequently damaged or broken."

The door described in appellant's application (of which an impressive demonstration was made at oral argument) has two (or more) sections for both the window unit, and the screen unit. These sections are mounted on tracks which extend down out of sight into a lower portion of the door described as a "storage compartment." By the simple expedient of sliding the window units up from the storage compartment, and sliding the screen units down, the screen door is changed into a storm door. With equal facility, the storm door can be changed into a screen door, or, if desired, the door may be made half-window and half-screen.

Although the appealed claims differ considerably in scope, no distinction has been made between them either by appellant or by the Patent Office, and it seems to be agreed that they stand or fall together. Claim 10 was cited by the Board as illustrative, and appellant having accepted this claim as illustrative in his brief, it is reproduced herewith as follows:

10. In a door having an opening therein longer than one-half of its length, a track means secured in said door; said track means composed of at least two parallel adjacent spaced apart guiding portions, a storage compartment adjacent to said opening, a plurality of transparent windows adapted to selectively reside in said storage compartment and said door opening moving directly from one to the other by sliding movement on one of said track guide portions, and a plurality of screen windows adapted to selectively reside in said storage compartment and said door opening moving directly from one to the other by sliding movement on the other of said track guide portions.

The following references were relied on by the Patent Office:

Wendelken, 1,238,704, Aug. 28, 1917.
Lunken, 1,326,676, Dec. 30, 1919.
Carter, 2,540,864, Feb. 6, 1951.

The Carter patent was selected as the basic reference, and the claims were rejected as unpatentable over Carter in view of Lunken or Wendelken. Carter shows a convertible screen and storm door of the general type hereinbefore discussed, which has four removable half sections, two of which are screen sections and two of which are window sections. In addition thereto, Carter also shows a storage compartment in the bottom of the door, in which are placed the two unused sections. To change from screen door to storm door, it is necessary to unscrew a securing plate, remove the screen sections from the frame of the door, withdraw the storm sections from the storage compartment, place the screen sections within the storage compartment, insert the storm sections in the frame, and replace the securing plate. The storm windows will then rest upon the top of the screen windows now in the storage compartment (or vice versa when the door is screened). Since appellant's specification recognizes that combination screen and storm doors are

old, the principal value of the Carter reference clearly is to show the concept of a storage compartment in the door itself.

The Wendelken reference shows a window construction (as distinguished from a door construction) in which there are four permanently installed half-window sections or sashes—two louvered, and two glassed—and a fixed screen. The four sashes are permanently installed on separate tracks or guides and are equipped with the usual pulley stiles, sash weights, ropes, and pulleys which are typical of the usual window construction in common use in houses. The Wendelken construction differs from the ordinary window construction (in addition to having more than two sash units) in that the tracks or guides extend down into a "sash pocket" which is analogous to the "storage compartment" of appellant's construction. The following statement is made in the Wendelken patent:

> The sashes are so proportioned in relation to the window opening and the sash pocket, that each sash when up will cover substantially half the area of the window opening and when all the way down will fit entirely within the sash pocket and below the sill beams. Thus any one sash or combination of sashes may be raised into the desired place in the window opening and the remaining sashes lowered into the sash pocket. * * * [Diagram references have been omitted.]

Thus, the Wendelken patent shows the concept—in a window construction—of having window units slide on tracks which extend down into a compartment or pocket in which the unused window units are stored until needed.

The Lunken reference is less pertinent than the Wendelken reference, and shows a storage compartment in the top of the window opening into which the sash guides extend so as to receive the sashes when not in use. The Lunken reference is also for a window, as distinguished from a door, construction.

Referring now to the appealed claims, and particularly to claim 10 quoted supra, we find that the common thread running through all of them is the concept of having a door with a plurality of screen windows and a plurality of transparent windows, which are adapted to slide selectively from the door opening to a storage compartment below the opening. The Carter reference shows a door with an opening and an adjacent storage compartment, and the other references show a plurality of window units adapted to slide selectively between the window opening and an adjacent storage compartment. In this situation, the only question is whether it is proper to combine the references.

We have been impressed by the obvious advantages which appellant's construction has over the Carter door, but we find ourselves unable to believe that door construction and window construction are not sufficiently analogous so that it would not have been "obvious," as that term is used in patent law, to one skilled in the art to adapt the extended track and storage compartment of Wendelken's or Lunken's window to Carter's door.

Appellant argues that the hypothetical combination of Carter in view of Lunken or Wendelken requires extensive modification of the individual features of each of them, and states that this is not permissible, citing *In re Pappas et al.*, 38 CCPA (Patents) 746, 758, 185 F.2d 695, 88 USPQ 108. It is undeniably true that Carter does not suggest tracks extending between the door opening and the storage compartment so as to permit the window units to be selectively moved between the two, and it is also true that the cumbersome and bulky sash, pulley, and weight arrangement of the secondary window references would probably be unsuitable for a door such as described by Carter and appellant. [1] However, the proper inquiry should not be limited to the specific structure shown by the references, but should be into the concepts fairly contained therein, and the overriding question to be determined is whether those concepts would suggest to one skilled in the art the modification called for by the claims. *In re Ewald*, 26 CCPA (Patents) 1312, 104 F.2d 622, 42 USPQ 35. *In re Merkle*, 32 CCPA (Patents) 1151, 150 F.2d 445, 66 USPQ 165. Despite very able argument by counsel, we strongly believe that it would have been obvious to one skilled in the art, having before him Carter's door with its storage compartment, and Wendelken's and Lunken's windows and adjacent and connecting storage compartments, to make the modifications necessary to combine them.

[2] For the reasons hereinbefore stated, the decision of the Board of Appeals is affirmed.

AFFIRMED.

JACKSON, *J.*, retired, recalled to participate.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

1,628,179, L. D. Nelson, Bag filling machine; **1,851,017**, K. Middelboe, same; **2,613,053**, N. E. Dorrington et al., same; **1,994,797**, A. K. Thomas, Apparatus for feeding and weighing material; **2,111,921**, E. W. Bleam, Automatic weighing apparatus; **2,317,865**, G. W. Talbot, Automatic bag filling and weighing machine; **2,564,544**, P. B. Richardson, Weighing apparatus; **2,616,728**, S. R. Howard, Material feeding conveyer; **2,616,663**, L. M. Haugen, Bag opener for packaging machines; **2,634,062**, M. Knobel, Weighing machine, included by counterclaim filed Mar. 13, 1956, D. C., E. D. Va. (Norfolk), Doc. 2167, *Inglett & Corley, Inc.* v. *Baugh & Sons Co.*

1,851,017. (See 1,628,179.)

1,994,797. (See 1,628,179.)

2,061,060, P. Modigliani, Process for the mechanical production of glass felt, filed Dec. 2, 1947, D. C., E. D. N. Y. (Brooklyn), Doc. 8731, *Modigliani Glass Fibers Inc. et al.* v. *The Glassfloss Mfg. Co. Inc. et al.* Order of dismissal Apr. 18, 1956.

2,109,534, **2,199,289**, C. S. Johnson, Central mixing plant; **2,138,172**, same, Batching apparatus; **2,174,089**, same, Mixing apparatus; **2,352,202**, **2,408,397**, same, Mixing plant, filed June 13, 1950, D. C., E. D. Ill. (Danville), Doc. 2002, *Noble Co.* v. *The C. S. Johnson Co.* Patent Nos. 2,138,172, 2,174,089, 2,352,202, and 2,408,397 dismissed by plaintiff without prejudice Nov. 23, 1954; Patents 2,109,534 as to claim 31, and 2,199,289 as to claim 2 held invalid; counterclaim for infringement dismissed Apr. 9, 1956.

2,111,921. (See 1,628,179.)

2,126,172. (See 2,109,534.)

2,174,089. (See 2,109,534.)

2,199,289. (See 2,109,534.)

2,217,702, H. W. Kleist, Cooling method and apparatus, filed Apr. 9, 1956, D. C. N. J. (Newark), Doc. 302/56, *Dole Refrigerating Co.* v. *Amerio Refrigerating Equipment Co. Inc.*

2,275,150, H. G. Nye, Jr., Method of making sails, awnings, or tents, filed Jan. 4, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c12, *Murphy & Nye, Inc.* v. *Kenneth A. Nelson Co.* Consent decree; patent held valid and infringed; injunction granted Apr. 11, 1956.

2,286,197, H. S. Claybaugh, Pipe or culvert: **2,316,839**, same, Method of making arch-type culverts; **2,556,900**, A. F. Cleve, The manufacture of arch culvert, filed Apr. 10, 1956, D. C., S. D. Miss. (Jackson), Doc. 2469, *Armco Steel Corp.* v. *Caldwell Culvert Co.*

2,316,839. (See 2,286,197.)

2,317,865. (See 1,628,179.)

2,331,808, Shelton and Van Campen, Composition of matter; **2,367,302**, Moore and Kirchmeyer, Bisulphite derivatives of 2-methyl-1,4-naphthoquinone and the like, filed Apr. 12, 1956, D. C., S. D. N. Y., Doc. 108/350, *Heterochemical Corp.* v. *Abbott Laboratories Inc. et al.*

2,352,202. (See 2,109,534.)

2,358,969. (See 2,286,197.)

2,367,302. (See 2,331,808.)

2,402,464, H. Suter, Velocity measuring system, filed Apr. 16, 1956, D. C., W. D. N. Y. (Buffalo), Doc. 6989, *Eastern Industries, Inc.* v. *Traffic Controls, Inc.*

2,408,397. (See 2,109,534.)

2,457,347, Casler and Milner, Electrical outlet structure, filed Jan. 6, 1956, D. C., S. D. Ind. (Indianapolis), Doc. IP 56/C/1, *Leslie Casler et al.* v. *Fred C. Pridgen.*

2,464,361, L. F. Wilson, Drip candle, filed Mar. 6, 1953, D. C., S. D. Calif. (Los Angeles), Doc. 15273–WM, *Lester F. Wilson* v. *Muench Kruezer Candle Co., Inc., et al.* Patent and claims held valid and infringed by defendant Muench-Kruezer Candle Co. Inc.; injunction issued restraining said defendant from further infringement (notice Apr. 16, 1956).

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2,616,663. (See 1,628,179.)

2,616,663. (See 1,628,179.)

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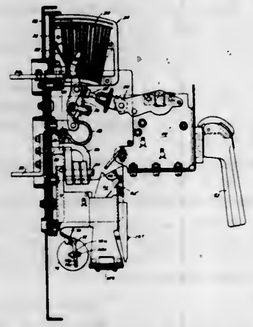
Des. 160,061. (See Des. 153,349.)

REISSUES

MAY 15, 1956

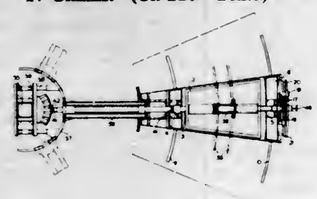
Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,149
TIME DELAY CIRCUIT BREAKER
Carl Thumin, Westbury, N. Y.
Original No. 2,704,311, dated March 15, 1955, Serial No. 148,696, March 9, 1950. Application for reissue January 18, 1956, Serial No. 560,055
15 Claims. (Cl. 200—108)



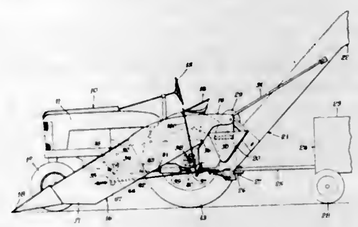
1. In a trip mechanism for a circuit breaker including current responsive means energizable in response to fault currents, an armature comprising a pair of plates for said current responsive means operable in response to the energization of said current responsive means, a trip device operable in response to the operation of said armature, an intermittently operable time delay mechanism connected to said armature for controlling the rate of operation of said armature, the intermittent motion of said time delay mechanism being reflectable in said armature, and means for damping out the natural resonant frequency of said time delay mechanism comprising a counter weight elastically suspended on a pair of rubber washers inserted between said plates of said armature.

24,150
CONTINUOUS HORIZONTAL ROTARY FILTER OF THE TILTING CELL TYPE
Andre Delruelle, deceased, late of Trooz, Belgium, by Martha Clementine Hubertine Van Leckwyck Delruelle, legal representative, Foret, Belgium, assignor, by mesne assignments, to Panmetals and Processes Inc., Panama, Panama, a corporation of Panama
Original No. 2,684,158, dated July 20, 1954, Serial No. 192,249, October 26, 1950. Application for reissue July 18, 1955, Serial No. 532,814
Claims priority, application France October 26, 1949
17 Claims. (Cl. 210—202.5)



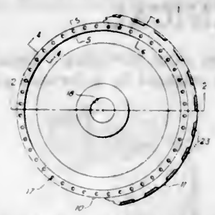
1. A filter cell for a continuous, horizontal, rotary filter of the tilting cell type comprising a substantially planar bottom having inwardly converging side edges and formed with an outlet opening in one of the outer corner portions thereof, a resilient false bottom overlying said bottom and being coextensive with the latter, upstanding walls extending along the marginal portions of said false bottom and formed with flanges on the lower edges to overlie said marginal portions, means extending through and securing together said flanges, said marginal portions and said bottom, means defining passages between said false bottom and said bottom in communication with said outlet opening, said false bottom having openings formed therethrough within the area of the false bottom defined by said upstanding walls, said openings communicating with said passages, a filter cloth extending over said false bottom, and means securing the edge portions of said filter cloth to said false bottom.

24,151
WAGON ELEVATOR THROWOUT CLUTCH FOR AGRICULTURAL IMPLEMENTS
Clinton D. Prosser, Rock Island, Ill., assignor to International Harvester Company, a corporation of New Jersey
Original No. 2,694,280, dated November 16, 1954, Serial No. 308,601, September 9, 1952. Application for reissue May 31, 1955, Serial No. 512,357
11 Claims. (Cl. 56—15)



1. For a field traversing harvesting implement having a trailing wagon hitched thereto, a driving means for said harvesting implement, a wagon elevator driven by said driving means, said wagon elevator attached to said harvesting implement and adapted to elevate harvested crops to said trailing wagon, a clutch on said harvesting implement interposed between said driving means and said driven wagon elevator, and clutch actuation means comprising a transversely disposed bar carried on said harvesting implement for transverse sliding movement, a clutch operating fork, said fork attached to said bar and arranged whereby transverse movement of said bar causes engagement or disengagement of said clutch, a horizontally disposed plate carried on said harvesting implement for swinging movement in a horizontal plane about a loosely positioned pivot, said transversely disposed bar attached to said horizontally disposed plate and receiving its sliding movement from swinging movement of said horizontally disposed plate, and linkage means on said harvesting implement causing swinging movement of said horizontally disposed plate.

24,152
CONTACT WHEEL
William J. Coonos, Highland Park, Ill., assignor to Chicago Rubber Company, Inc., a corporation of Illinois
Original No. 2,639,560, dated May 26, 1953, Serial No. 187,851, October 2, 1950. Application for reissue March 17, 1955, Serial No. 495,079
2 Claims. (Cl. 51—141)



1. A contact wheel comprising an elastic rim of the traction type to engage successive portions of the inside of an abrasive band and to drive it against the resistance of a workpiece pressed against the portion of the band in contact with the wheel; and a rigid body having the elastic rim molded thereon, the body consisting of a homogeneous casting and comprising a flange which has a generally cylindrical outer surface with a plurality of closely spaced port holes uniformly distributed over said entire surface in a plurality of laterally spaced circular rows intersecting with a plurality of pheripherally spaced transverse rows of such holes, the total area of such holes being a major part of the area of said outer surface, each port hole being recessed into and undercut below said outer surface and communicating with another surface of the flange, whereby the plastic rim molded thereon has closely spaced, integral and homogeneous extensions laterally and peripherally distributed over the flange and anchoring the rim to the flange against the forces resulting from said resistance of the workpiece and from a surface speed in the range of about 5000 to 10,000 feet per minute.

24,153
FISHING REEL DRIVE
Lawrence W. Lockwood, Spokane, Wash.
Original No. 2,713,274, dated July 19, 1955, Serial No. 336,963, February 16, 1953. Application for reissue September 22, 1955, Serial No. 536,058
5 Claims. (Cl. 74—750)



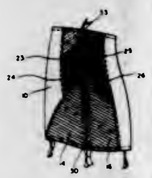
1. In a fishing reel having a spool, a drive comprising a central shaft for driving the spool of the reel; a manually operated crank carried by said reel; a pinion fixed on said shaft; a resiliently biased dog pivotally carried by said crank and engaging said pinion, whereby rotation of the crank in one direction drives said shaft; an even number train of idler gears carried by the crank and having an end one meshing with said pinion; a drive gear meshing with the end one of said train opposed to the pinion; a hand knob journaled on said crank; and manually operated means for selectively engaging and disengaging said knob and said drive gear.

PATENTS

GRANTED MAY 15, 1956

GENERAL AND MECHANICAL

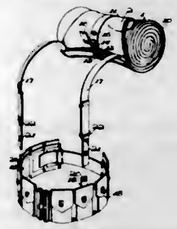
2,745,103
GIRDLE
Vera C. Van Horne, Norwalk, Conn.
Application December 21, 1954, Serial No. 476,679
13 Claims. (Cl. 2—37)



1. A girdle having an upper thigh covering portion, an abdominal covering portion and a waist covering portion, the front of the girdle including, at each side, a front side elastic section of a single piece of elastic material extending vertically of the girdle, each of said front side elastic sections being folded upon itself transversely of its vertical length and intermediate its ends to provide an intermediate folded portion extending to the respective sides of the girdle, at least a part of which is multi-layer, which is of substantial extent in a vertical direction at both its inner and outer sides and which has a greater resistance to stretch than the upper and lower portions of the front side elastic sections, each of said intermediate folded portions having its lower edge lying along a line extending upwardly and outwardly at an angle of approximately 45° with respect to a vertical line at the front center of the garment and along a line extending from a point below the crest of the pubis, when the garment is worn, along a line generally following the lower edge of the obliquus externus abdominus muscle and over the crest of the ilium of the wearer, the upper edge of said intermediate folded portion of greater resistance to stretch extending in the same general direction as the lower edge thereof and generally following the upper hip line of the wearer, the lower portions of said front side sections having their primary direction of stretch extending downwardly and outwardly with respect to a vertical line at the front center of the girdle, and the upper portions of said front side sections having their primary direction of stretch extending upwardly and outwardly with respect to such a vertical line.

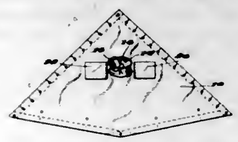
2,745,104
QUICK-APPLYING CAPE AND HOOD
Ralph W. Persico and Dominic Pompa, Philadelphia, Pa., assignors to the United States of America as represented by the Secretary of the Army
Application March 25, 1954, Serial No. 418,796
2 Claims. (Cl. 2—88)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. In combination, a combined cape and hood, said cape being folded inside-out into a plurality of longitudinal folds and rolled up inside-out and overlapped by the hood, a strap encircling the package thus formed, snap fastener means on the strap for releasably securing the strap in position about the package, means for supporting the package across the shoulders of the wearer, and a forwardly-extending tab on the free end of the package-encircling strap providing a finger grip, whereby the cape may be released by a forward pull on the strap



so as to unfold by gravity into operative position as a covering for the wearer's body.

2,745,105
MULTIPURPOSE TENT-CLOTH
Franz Schaefer, Meisungen, Germany
Application June 28, 1952, Serial No. 296,191
Claims priority, application Germany October 30, 1951
2 Claims. (Cl. 2—89)



1. A multiple-purpose tent cloth adapted to be used as a tent and as a protective outer garment, comprising a body of tenting fabric adapted to cover the body of a human being, said body having a central opening therein to receive the head of the wearer, means to close said opening, shoulder protecting flaps on either side of the opening having spaced edges, the edges nearest the opening being secured to the fabric body adjacent the head opening, the edges remote from the opening being free and being spaced inwardly from the outer edge of the fabric body, the fabric body being adapted to be folded between the flaps, the free edges of the flaps remote from the opening having cooperating fastening means thereon, said flaps being of such length that they are able to meet around said folded body and to be fastened to one another so as to hold the fabric body in a package.

2,745,106
HIP FRAME
Lena O. Salhus, Minneapolis, Minn.
Application January 28, 1953, Serial No. 333,690
2 Claims. (Cl. 2—215)

1. A frame for angulating the hip lines of a gown at opposed sides thereof comprising, a flexible waistband, a pair of shelving members of stiff material secured in spaced depending relation to the waistband, each of said shelving members being provided with an upper bowed portion extending downwardly at its forward and rear terminal portions and having a concavely arcuate inner edge secured along said waistband and adapted to engage the waist of a wearer and a convexly arcuate outer edge having common terminal points with said inner edge, said upper bowed portion presenting an upper curved surface lying substantially parallel to an axis extending outwardly and downwardly from the waistband and contained within a vertical plane transversely bisecting said upper bowed portion, a lower bowed portion in each of said shelving members having an upper edge joined to the outer convex edge of the upper bowed portion coextensively therewith, a stay member extending along the juncture of said upper and lower bowed portions, said lower bowed portion having a curved outer surface lying substantially parallel to an axis contained within said vertical plane and intersecting said first mentioned axis and extending downwardly and inwardly from said point of intersection, said lower bowed portion having a lower curved peripheral edge adapted to continuously contact the side of a wearer's hip when worn, and stays extending between the upper and lower edges of said lower bowed portion.

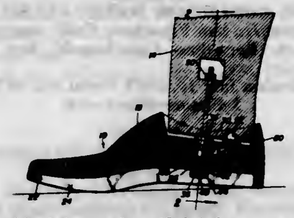


2,745,107
GARMENT AND WAISTBAND STRUCTURE
Hugo J. Gemignani, Rochester, N. Y., assignor to Hickey-Freeman Company, Rochester, N. Y., a corporation of New York
Application November 27, 1953, Serial No. 394,599
2 Claims. (Cl. 2—236)



1. In combination, a garment, a layer of material attached thereto and providing a waistband portion defining the upper zone of the same, a stiffening strip comprising relatively rigid transversely-extending fibers folded upon themselves in inverted U form and relatively flexible fibers extending longitudinally of said strip and interwoven with said stiff fibers to maintain the latter in substantially predetermined positions with respect to each other, said stiffening strip being disposed adjacent the inner face of said waistband portion with the crotches of said rigid fibers extending upwardly and the legs thereof lying parallel to that portion, the material of said waistband portion adjacent its upper edge extending inwardly over and downwardly around the crotches of said stiff fibers, a lining strip having an upper edge zone interposed between the said stiffening strip and downwardly extending material of the waistband portion and being secured to the latter, said lining strip overlying and bearing against the legs of said stiff fibers and together with the material of said waistbant portion furnishing a sheath for said strip, means for restricting movements of said stiffening strip within said sheath, the lower zone of said lining strip extending adjacent the lower ends of the U-shaped fibers and means for securing such zone of said lining strip to the lower edge zone of material of said waistband portion to completely enclose said stiffening strip within said sheath.

2,745,108
ANKLE JOINT AND ARTIFICIAL FOOT
Thomas E. Withers, Los Angeles, Calif.
Application August 10, 1954, Serial No. 448,830
2 Claims. (Cl. 3—7)



1. An ankle joint and artificial foot comprising a resilient artificial foot member having an enlarged recess on the upper surface thereof, a substantially vertical aperture in said foot member substantially in the center of the recess, a transverse member positioned in said recess, a bolt extending through said transverse member and said aperture for securing the transverse member to the foot member, and a threaded bolt rigidly secured to said transverse member and extending upwardly therefrom for attachment to an artificial leg, said bolt extending through said transverse member being pivotal in relation thereto for permitting a natural movement of the foot, said foot including a relatively hard rubber center portion and progressively softer rubber areas adjacent the outer edges, and a bottom recess formed by a depending peripheral flange for cushioning the steps and simulating a natural foot.

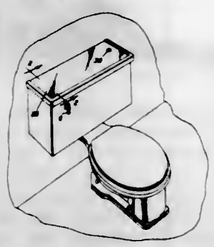
2,745,109
VALVE ASSEMBLY FOR FLUSH TANKS
James A. Stuart, Jr., Danbury, Conn.
Application May 7, 1954, Serial No. 428,295
6 Claims. (Cl. 4—56)



1. A unitary flush valve assembly comprising an elongate, upright body having a liquid outlet on the lower end thereof and a seat surrounding said outlet, a valve member which cooperates with said seat to control the outflow of liquid through said outlet, a rod extending through the body, means on said body which guides said rod for up and down movement, said valve member being rigidly joined to the lower end of the rod for movement with the rod, and a float comprising a vessel having a closed bottom, rigidly joined to the upper end of the rod and responsive only to the rise and fall of the liquid to cause

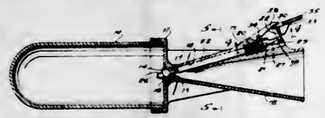
up and down movement of said rod and a corresponding movement of said valve member with respect to the seat to open and close said outlet, the weight of the rod, valve, and float and the buoyancy of the float being so related that when the assembly is immersed in a body of water the float will overcome the total weight of the valve, rod and float and also the downward pressure of water on the valve, thereby to raise the valve and open the said outlet.

2,745,110
LOCKING COVER FOR TOILET FLUSH TANKS
George Lyster, Jr., San Francisco, Calif., assignor of fifty per cent to Berardino Chiuchiarelli, San Francisco, Calif.
Application July 10, 1953, Serial No. 367,207
1 Claim. (Cl. 4—68)



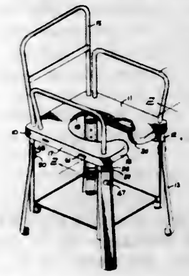
In a toilet flush tank having side and end walls, a cover seating on said walls, a rectangular first frame in the top of said tank fitting between said side walls, means securing said frame in said tank, a second rectangular frame secured to and depending from the bottom of said cover and fitting in the first frame, studs fixed in one end of one frame and loosely extending through apertures in a corresponding end of the other frame for upward tilting of said second frame upon said studs and sliding of said second frame off said studs upon upward tilting of said cover and sliding thereof on said tank, whereby to remove said cover, and a lock mounted in said cover and extending therethrough adjacent the other ends of the frames and having a bolt lockably engageable with said other ends to prevent upward tilting of said second frame and removal of said cover.

2,745,111
PERSONAL RELIEF DEVICE
Gustave Podmorski, Lyndhurst, N. J., assignor to Air Associates, Inc., Teterboro, N. J., a corporation of New Jersey
Application May 13, 1953, Serial No. 354,839
3 Claims. (Cl. 4—110)



1. In a portable device of the character described, a container having a cover removably secured thereto, a tubular member open at one end and affixed to the cover at the other end, said cover having an opening communicating with said tubular member and providing an inlet into the container, said tubular member having a passageway extending lengthwise along a side wall of said tubular member and terminating inwardly within said tubular member outwardly of said inlet, a tubular stem mounted for reciprocatory sliding movement in said passageway and having a valve element affixed to the inner end thereof, means urging said tubular stem outwardly for normally retaining the valve element in closed relation with reference to said inlet, said valve element having an opening therethrough communicating with the interior of the tubular stem for the admission of air to and the venting of air from said container, a central stem mounted for reciprocatory movement in said tubular stem and having a valve member affixed to the inner end thereof, means urging said central stem outwardly for normally maintaining said valve member in closed relation with the opening in said valve element to seal the container against the entrance and escape of air, and means manually operable to move said central stem inwardly, successively first to open only said valve member to equalize air in the container with outside air, and second to open said valve element and thereby open said inlet.

2,745,112
COMMODE
Marie Bindbeutel, South San Gabriel, Calif.
Application August 6, 1953, Serial No. 372,733
5 Claims. (Cl. 4—134)



1. In a commode, a seat, said seat including an aperture and having a downwardly directed flange about the aperture, said seat having a downwardly directed rear edge flange, a pair of downwardly directed side edge flanges and having a pair of spaced downwardly directed front edge flanges, a channel member secured to the lower surface of the seat at each side of the aperture, a front sleeve and a rear sleeve disposed at each side of the seat, each sleeve having a flange secured to the lower surface of the seat, said seat having holes therein, said holes being aligned with the sleeve bores, a pair of U-shaped arms each having parallel free ends passing through said seat holes and removably secured in the sleeves, a back supporting sleeve secured adjacent to the rear sleeve at each side of the seat, said seat having holes aligned with the bores of the back supporting sleeves, a U-shaped back having its free ends arranged in said back supporting sleeve bores, and a set of legs, each leg including a face portion having an edge flange at each side thereof, each leg having an attaching member thereon, each attaching member including a substantially semi-cylindrical portion and reversely bent flanges, said last mentioned flanges being secured to the flanges on the associated legs, each attaching member semi-cylindrical portion engaging about one of said sleeves, the leg flanges each resiliently engaging the seat edge flanges.

2,745,113
FOLDABLE SOFA BED AND LOCK THEREFOR
Rudolph Coopersmith, Clayton, Mo.
Application May 13, 1953, Serial No. 354,687
9 Claims. (Cl. 5—31)

1. A sofa bed comprising: a sofa frame; a bed frame pivotally secured at one end to said sofa frame and comprising a series of pivotally connected sections foldable within said sofa frame into a seat forming arrangement, said bed frame being also unfoldable into a bed forming arrangement in which the sections extend in substantial

alignment with each other, the seat forming arrangement providing a first section extending horizontally in position to serve as a support for seat cushions and having a free end and another substantially horizontally extending section parallel to and spaced below said first section; latch means pivotally mounted on said first section near the free end thereof and extending into engagement with said spaced second section for releasably retaining said first section and second section in spaced relation; a link con-

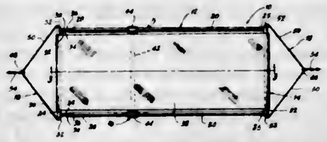


nected with said second section and movable relative to said second section to engage said latch means; and a lever member pivotally connected with said sofa frame and said second section and having a connection with said link, said lever member moving in a predetermined direction on unfolding movement of said bed frame and having relative movement with respect to said second section effective for operating said link to engage and release said latch means to permit unfolding of said bed frame into its bed forming arrangement.

2,745,114
FOLDING STRETCHER
Raoul A. Coté, Montreal, Quebec, Canada
Application June 26, 1952, Serial No. 295,739
3 Claims. (Cl. 5—82)

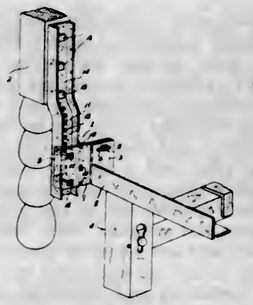
1. A device of the class described comprising a pair of multiple hollow telescoping side bars each side bar including a largest central member and telescoping members of decreasing diameter extending from each end thereof, folding end members pivoted thereto to hold the same in spaced relation, and a flexible body-supporting member connected to said side bars, said member having seam-formed longitudinal tubular pockets to receive and cover the side bars, said pockets having openings at the ends larger than the ends of the side bars, and end flaps on the body supporting member to close the seam-formed pockets at the ends of the side bars.

2,745,115
HAMMOCK
Joseph F. Reiss, St. Louis, Mo.
Application September 23, 1953, Serial No. 381,808
4 Claims. (Cl. 5—122)



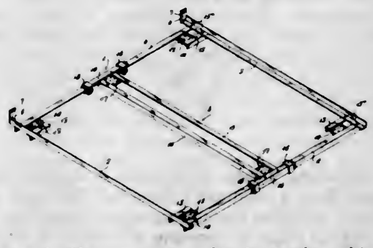
2. A hammock construction comprising in combination: a rectangular metallic frame including a pair of transversely spaced tubular side rails, a pair of longitudinally spaced tubular end cross bars, and a pair of guide rods each rigid at one end with one of said end cross bars and having its opposite end portion slidably extending into the adjacent end portion of one of said side rails; an endless piece of canvas suspended within the frame by and between the end cross bars; a pair of resilient hanger members each removably attached to one of said end cross bars to suspend the frame; means to increase and decrease the space between the end cross bars aforesaid whereby to control the slack obtaining in said canvas, said means consisting of a series of pairs of longitudinally spaced vertically aligned openings in each guide rod, and a pair of cotter pins or the like removably insertable in selected corresponding pairs of openings in the guide rods; and a transverse bar assembly disposed beneath the canvas and slidably supported on said side rails intermediate the end cross bars whereby to automatically elevate one portion of the canvas to a higher plane than the remaining portion thereof when the body of an individual is supported thereon.

2,745,116
HEADBOARD POSITIONING MEANS FOR BEDFRAMES
Leslie K. Jackson, Cleveland, Ohio, assignor to The Harvard Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application April 9, 1953, Serial No. 347,815
9 Claims. (Cl. 5—131)



6. In a bedframe assembly, a connector plate operatively engageable with a bedframe for securing a bed headboard thereto, said connector plate having an edge flange thereon and vertically spaced lugs extending therefrom opposed to said edge flange, and a member for engaging a bed headboard positioned between and engaged by said edge flange and lugs to be at least partly positioned thereby.

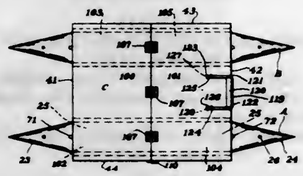
2,745,117
BEDFRAME WITH REINFORCING CASTER PLATE MEANS THEREIN
Hillard J. Sands, Cleveland, Ohio, assignor to The Harvard Manufacturing Co., Cleveland, Ohio, a corporation of Ohio
Application September 10, 1953, Serial No. 379,343
4 Claims. (Cl. 5—200)



4. In a bedframe, an angular in section side rail, a pair of cross rail members, means securing said cross rail members to spaced portions of said side rail to extend therefrom in spaced parallel relation, a caster,

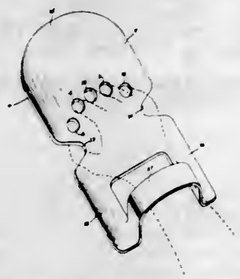
and a caster support plate positioning said caster, said caster support plate being secured to and extending between said cross rail members spaced from said side rail whereby load on said bedframe is transmitted to said casters by a quadrilateral structure comprising a section of said side rail, said cross rail members and said caster plate and turning and twisting moments are at least reduced in said side rails and rail members.

2,745,118
CATAMARAN
Thomas A. Potts and Helen V. Potts, Bridgton, Maine; Helen Victoria Potts, executrix of said Thomas A. Potts, deceased
Application October 24, 1952, Serial No. 316,577
4 Claims. (Cl. 9—2)



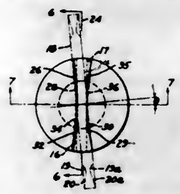
1. A catamaran comprising a pair of identical, spaced apart separate pontoons of inflated flexible material, each pontoon being straight and having upwardly tapered ends and a cylindrical intermediate portion between said ends; a horizontal platform of rigid material positioned above, and extending across, the intermediate portions of said pontoons, said platform having a leading edge and a trailing edge; and a pair of identical, spaced apart straight channels of rigid material mounted on the underside of each opposite side of said platform for receiving and gripping said pontoons, each channel having a horizontal base wall and a pair of spaced apart downwardly depending vertical sidewalls, and each said channel tangentially contacting and frictionally gripping the upper half of the cylindrical intermediate portion of an inflated pontoon throughout the length of its cylindrical portion by pneumatic pressure and being detachable from said pontoon by pontoon deflation alone.

2,745,119
HAND SWIMMING PADDLE
Richard R. Whipple, Haverhill, Mass.
Application June 7, 1954, Serial No. 434,876
2 Claims. (Cl. 9—21)



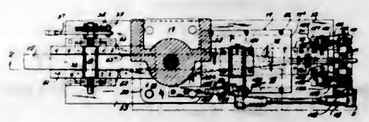
1. A swimming paddle comprising a molded plastic body larger than a swimmer's hand and having a solid outer surface including thumb receiving indentations with smooth rounded edges in opposing side edges of the body and five finger receiving holes with smooth rounded edges arcuately disposed and conveniently spaced relative to each other and the indentations whereby the body may be gripped firmly in the areas of either indentation and any group of four holes by either hand of the swimmer, the plastic body having a cellular interior to cause it to float.

2,745,120
METHOD OF MILLING AN UNDERCUT SLOT IN A SCREW HEAD
Rudolph M. Vaughn, Newport Beach, Calif.
Original application July 11, 1949, Serial No. 104,033, now Patent No. 2,677,985, dated May 11, 1954. Divided and this application November 16, 1953, Serial No. 395,199
3 Claims. (Cl. 10—10)



1. The method of making an undercut slot in the head of a screw having a longitudinal axis, which comprises forcing into the top of said screw head a cutter having a central axis which is rotating on an axis of rotation, said central axis and said axis of rotation being coincident, said central axis and axis of rotation being substantially perpendicular to said longitudinal axis, said cutter having at its periphery first cutting means on opposite sides of the cutter which diverge from each other toward the periphery of the cutter, and transverse cutting means between said first cutting means, and then turning the axis of rotation of the cutter through an angle about said longitudinal axis, keeping the central axis of the cutter coincident with its axis of rotation, and the axis of rotation perpendicular to the longitudinal axis, whereby said transverse cutting means cuts a slot having an arcuate bottom and parallel side walls when the cutter is forced into the screw head, and said first cutting means undercut said side walls when said axis of rotation of the cutter is turned, thereby generating undercut surfaces which are surfaces of revolution.

2,745,121
APPARATUS FOR FORMING RING-SHAPED FASTENERS FROM FLAT STOCK
Lee B. Green, Lakewood, Ohio
Original application January 11, 1951, Serial No. 205,573. Divided and this application January 21, 1953, Serial No. 332,382
22 Claims. (Cl. 10—28)



1. In apparatus for producing ring-shaped articles from a strip of sheet metal stock, a support, a shearing die mechanism mounted on said support and comprising cooperating shearing die members operable to sever fastener blanks in succession from the leading end of the stock strip, guide means on said support and located relative to said shearing die mechanism to receive said blanks directly therefrom and comprising spaced-apart guide surfaces defining guide passage means extending in the direction of the axis of said stock strip and effective for maintaining said blanks in a series relation with the adjacent edges of adjacent blanks in abutting engagement so as to constitute a strip of said blanks, feeding means mounted on said support and associated with said shearing die

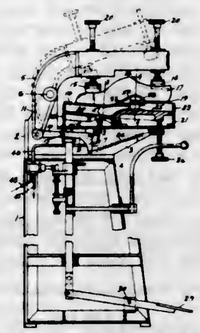
mechanism and operable to intermittently advance said stock strip into said shearing die mechanism and to also intermittently advance said strip of blanks in the same direction and ahead of said stock strip by feeding movement transmitted through the latter, and a curling die mechanism mounted on said support and having a forming means reciprocably movable along said strip of blanks and operable on the latter by impingement thereagainst during the intervals when said strip of blanks is relatively stationary to curl said strip of blanks transversely thereof for forming said blanks into ring fasteners at substantially the same rate that said blanks are being produced by said shearing die mechanism, said guide passage means being defined at least in part by said curling die mechanism.

2,745,122
METHOD OF PRODUCING RING-SHAPED ARTICLES
Lee B. Green, Lakewood, Ohio
Application January 11, 1951, Serial No. 205,573
21 Claims. (Cl. 10—34)



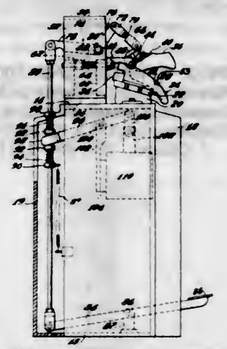
1. The method of making pronged annular fasteners which comprises, imparting a forward feeding movement to a strip of sheet metal stock, severing sections in succession from the leading end of said strip transversely thereof to form fastener blanks of a length corresponding substantially with the developed length of the annular fastener being produced, forming prongs on said blanks, maintaining said blanks in a series relation so as to constitute a strip of blanks, curling said strip of blanks transversely thereof to substantially tubular form by repeatedly imparting wedgingly inwardly and longitudinally acting impact bending forces to opposite edge portions of said strip of blanks, and separating completed pronged annular fasteners from the curled strip.

2,745,123
SHOE PRESS PAD
Maxwell C. Suerken, Erie, Pa., assignor to Lamac Process Company, Erie, Pa., a corporation of Delaware
Application August 19, 1953, Serial No. 375,087
5 Claims. (Cl. 12—38)



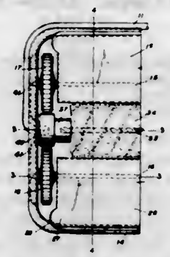
1. In a shoe press, a pad having an inflatable casing for pressing a sole against a shoe, the casing having a surface underlying the sole and being substantially wider than the sole at the shank of the sole, an auxiliary pad substantially wider than the shank of the sole forming part of said surface of the casing beneath the shank, said auxiliary pad being flexible in a direction lengthwise of the shank and rigid in a direction crosswise of the shank whereby the unit pressure exerted on the shank of the sole is higher than over the remainder of the sole.

2,745,124
APPARATUS FOR MOLDING BOOT AND SHOE PARTS
Agenor Eugene St. Germain, Haverhill, Mass.
Application December 28, 1953, Serial No. 400,449
14 Claims. (Cl. 12—97)



1. Apparatus for molding shoe parts comprising a supporting frame, a molding unit mounted on the support, said unit having cooperable mold parts arranged to receive between them the shoe parts to be molded, said mold parts being relatively movable to bring them into engagement, means for effecting relative movement of the mold parts to engage the shoe part, independently operable means for holding the mold parts together under pressure after they have been drawn together, means for operating said last named means, timing means associated with the holding means for releasing the holding means at the end of a predetermined time and hence to release the mold parts, and means for effecting separation of the mold parts following release.

2,745,125
CARPET SWEEPER
Emil Klumb, Middle Village, N. Y., assignor to Modern Carpet Sweeper Co., Inc., Brooklyn, N. Y.
Application September 3, 1952, Serial No. 307,611
3 Claims. (Cl. 15—41)



1. A carpet sweeper comprising a single shell casing having a pair of aligned horizontally extending louvres in each side wall thereof, a brush having a shaft disposed within said casing, a bale located outside of said casing having inturned ends extending into said casing, brush rollers upon said brush shaft rotatably mounted upon said inturned ends, a sub-assembly comprising axles, wheels, dust pans and spring means, said axles having the ends thereof loosely mounted in said louvres and said axles being arranged on opposite sides of said brush, said wheels being mounted upon said axles at each end thereof and being located within said casing, each of said louvres having a vertical dimension greater than the diameter of said axles and a horizontal dimension substantially greater than said vertical dimension, said dust pans being rotatably journaled on said axles and said spring means interconnecting and supported solely

by said dust pans and extending above said brush shaft, said spring means urging said dust pans, axles and wheels towards one another so that said wheels coact with said brush rollers to rotate said brush and when said brush and brush rollers are removed from said casing said subassembly may be removed as a unit.

2,745,126
COMBINED WASHER AND SQUEEGEE
Steve Mora, Detroit, Mich., assignor to Inter-City Manufacturing Company, Detroit, Mich., a copartnership
Application June 24, 1953, Serial No. 363,762
5 Claims. (Cl. 15—121)



1. In a device of the character described in combination, a handle, a wire shank supported by said handle, and a head supported by said shank, said head comprising a pair of rectangular members arranged face to face, each of which is provided with a central opening for receiving said shank, said shank terminating in oppositely directed feet portions, each of which is secured to the far side of the rectangular member remote from said handle, the other rectangular member being loosely mounted on said shank, said rectangular members having their corresponding longitudinal edges inturned at least along one side, a resilient element retained by said inturned edges, and means to retain said rectangular members against displacement.

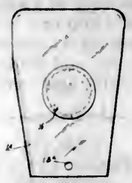
2,745,127
SOAP CONTAINING BRUSH
Margaret Wulf, Detroit, Mich.
Application April 15, 1953, Serial No. 349,007
3 Claims. (Cl. 15—122)



2. A brush of the class described comprising a handle forming portion; an elongated wire loop secured at one end to the forward end of said handle forming portion and projecting forwardly therefrom; an elongated receptacle embodying an outer casing; connecting bars secured at one end of said outer casing and projecting outwardly therefrom and connected to said loop for mounting said outer casing within said loop; said outer casing being formed with openings therethrough; an inner casing rotatably mounted in said outer casing and having openings formed therein for registration with the openings formed in said outer casing and movable out of registration therewith upon relative rotation of said casings; and bristles mounted on said loop and embracing said receptacle on opposite sides and the forward end thereof.

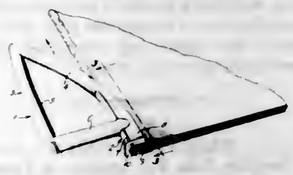
2,745,128
COMBINATION PLASTIC MITTEN AND SPONGE RUBBER WASHING DEVICE
Ann Zenner, Mount Vernon, N. Y.
Application May 29, 1952, Serial No. 290,667
1 Claim. (Cl. 15—227)

A reversible washing mitten comprising a mitten-shaped enveloping body of plastic comprising spaced web portions with inturned edges sealed together along the opposed sides and one end thereof so as to maintain a space beteen the web portions, the edges of the web portions at the opposite end of the body being unattached providing an entrance opening into the space between the web portions for the hand of the user, one of said web portions having a circular central opening therein opposed to the palm of the hand of the user when worn, a sponge rubber pad with slightly convexed surfaces



mounted in said opening, said pad having an annular groove in the peripheral edge thereof to one side of the center of said peripheral edge for receiving the edge wall of the circular opening so that a smaller mass of the pad with a smaller cleaning surface is disposed outside the web portion than the mass and cleaning surface inside the web portion, the space between the web portions being sufficient to permit the web portions to be turned inside out in order to reverse the positions of the cleaning surfaces of the pad.

2,745,129
EDGE SMOOTHING AND SIZING TOOL
Morton A. Johnson, Beckley, W. Va.
Application December 4, 1951, Serial No. 259,829
2 Claims. (Cl. 15—236)

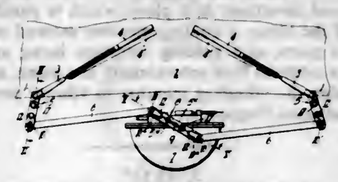


1. A tool for smoothing a coating upon an edge and two adjacent side surfaces of flexible strip material to form the coated strip to uniform thickness comprising, a head and a handle of tubular stock, said head being a continuation of one end of said handle and the other end of said handle secured to said head intermediate the ends of said head, said head being an elongated member which is U-shaped having a back wall and spaced side walls, the end of the head adjacent said one end of the handle being the leading end in use and the opposite end the trailing end, the side walls being parallel adjacent the trailing end and diverging toward the leading end and said back wall being flat adjacent the trailing end and flaring upwardly toward the leading end, the diverging side walls and upwardly flaring back wall forming between them a chamber for excess coating material.

2,745,130
WINDSHIELD CLEANER
John R. Oishei, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y.
Application May 19, 1951, Serial No. 227,190
13 Claims. (Cl. 15—253)

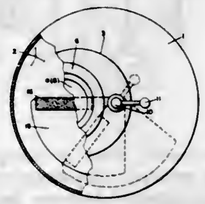
1. A windshield cleaner comprising a wiper, a rock shaft supporting the same for oscillation, a drive shaft, a power transmission operatively connecting the two shafts and including a rocker arm part fixed on each shaft and a reciprocatory link bar part joining the two rocker arms, one of said transmission parts having movably connected

sections permitting inertia-actuated over-travel of the wiper, and a resilient member yieldably resisting relative movement between the sections in absorbing the force of



inertia in the wiper, said sections of said one transmission part having a chamber means conformably confining the resilient member under compression.

2,745,131
DEVICE FOR THE CLEANING OF SIGHT GLASSES ALLOWING INSPECTION OF HIGH VACUUM ROOMS
Max Auwärter, Balzers, Liechtenstein, assignor to Alois Vogt, Vaduz, Liechtenstein
Application March 17, 1951, Serial No. 216,231
Claims priority, application Switzerland March 22, 1950
2 Claims. (Cl. 15—255)



2. The combination with a high vacuum chamber which in use is adapted to contain hot vapors of light-absorbing solid matter which condense and precipitate on the walls thereof, of means for allowing inspection of the interior of said chamber, comprising a transparent window in a wall of the chamber, a cleaning element arranged within said chamber to sweep over the window to remove condensed matter therefrom, means for actuating said cleaning element to move the same across the face of the window parallel to the plane of the window and in contact therewith, and a plate normally disposed in front of the window to shield the same and thereby minimize the quantity of vapor particles impinging on the window, said plate being movable by said actuating means from in front of the window to expose the latter, said cleaning element being disposed between the plate and the window.

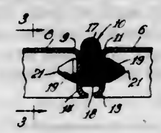
2,745,132
DOOR MOUNTING AND LATCHING MEANS
William J. Clark, Philadelphia, and James J. Devery, Ambler, Pa., assignors to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application September 25, 1953, Serial No. 382,264
7 Claims. (Cl. 16—147)

1. In combination: a cabinet having a front opening; a door; a plurality of combined latch-hinge mechanisms mounting said door over said front opening in a manner whereby said door may be opened from its right or its left hand side, selectively, said cabinet having side walls and said door being of a width spanning the distance between said side walls; a pair of latch-hinge mechanisms disposed toward the lower portion of the cabinet and serving to support the weight of the door; an additional pair of latch-hinge mechanisms disposed toward the upper portion of said cabinet and serving to hold said door against tilting movements about said pair first mentioned; each of said latch-hinge mechanisms including a strike pivotally mounted upon a side wall of said cabinet adjacent said front opening, and a latch member mounted upon said door in position for releasable engagement with said strike; means for releasing said members from said strikes, selectively, whereby said door may be swung open about the latch hinge mechanisms on either side of the cabinet; a handle rotatably mounted in fixed door structure; a link movably mounted upon each side of said door, said link including means at opposite end portions thereof to actuate said latch members; crank means



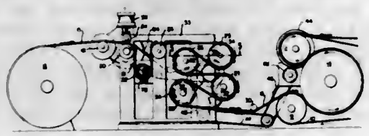
connecting said links to said handle; means actuated by said handle for rotating said crank means whereby movement of said handle in one direction actuates the link on one side of said door to release said latch members on said one side from the associated strikes to provide for opening of said door about the combined latch-hinge mechanisms on the other side of said door; and interlock means operable by said handle to prevent actuation of said crank means to open the door from the other side without first returning the door to its closed position.

2,745,133
HINGE
Irvin E. McWethy, Galesburg, Ill., assignor to Admiral Corporation, Chicago, Ill., a corporation of Delaware
Application January 15, 1953, Serial No. 331,434
7 Claims. (Cl. 16—150)



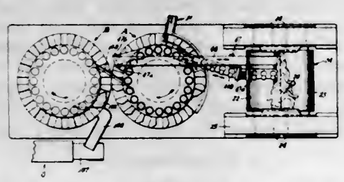
1. A hinge structure for attachment of a closure to an opening in a cabinet wall wherein the closure and opening are provided with flanges arranged to be juxtaposed in the closed position and wherein said juxtaposed flanges are provided with apertures therein, the apertures in the closure flange being offset relative to the apertures in the other flange, comprising a body of resilient material extending substantially the length of the said flanges, said body being provided with a plurality of spaced arms extending from the body in alignment with each other and opposite to said apertures, each alternate arm being provided with a head portion for engagement in apertures of one of said flanges extending normal to the arms, the other arm portions being provided with heads for engagement in the other apertures in the other of said flanges.

2,745,134
APPARATUS FOR TENSIONING STRIP MATERIAL
Don F. Collins, Pontiac, Mich., assignor to Boston Woven Hose and Rubber Company, Cambridge, Mass., a corporation of Massachusetts
Application May 24, 1952, Serial No. 289,866
7 Claims. (Cl. 18—1)



1. A machine for tensioning strip material, comprising a cylindrical rotary roll adapted to receive and support a strip of material in arcuate surface contact therewith, rotary cylindrical means beyond the roll for supporting the material and drawing it along from the roll, rotary means in frictional driving relation with the roll, means for driving said rotary means in a direction opposite to the movement of the material and roll, and means cooperating with said rotary means and the material between the roll and rotary cylindrical means for automatically varying the frictional driving torsion on the roll in inverse ratio to the tension on the material passing from the roll to the rotary cylindrical means.

2,745,135
MOLDING MACHINE
Henry Z. Gora, Stratford, Conn., assignor, by mesne assignments, to Anchor Hocking Glass Corporation, Lancaster, Ohio, a corporation of Delaware
Application September 29, 1950, Serial No. 187,394
23 Claims. (Cl. 18—5)



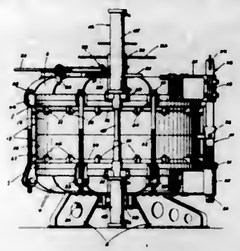
1. A machine for making gaskets comprising cooperating dies; means to guide and feed a strip of gasket material between said dies; means to operate said dies to cut out from said strip and retain in one of said dies an annular gasket blank and the material included thereby; means to separate said dies to free said strip therefrom; means to eject said included material from the retaining die and press the same adherently against said freed perforated strip; means to direct said freed strip and adherent material away from said dies; and means to eject said gasket blank from said die.

2,745,136
APPARATUS AND METHOD FOR MAKING WOOL-LIKE ARTIFICIAL FIBRES
Marcel Louis Delamare Debouteville, Neuilly-sur-Seine, France
Application March 10, 1952, Serial No. 275,804
Claims priority, application France March 14, 1951
6 Claims. (Cl. 18—8)



2. A device for imparting to a freshly spun, and at least partly coagulated, artificial fibre, superficial irregularities comparable with those existing in wool and other similar, natural fibres, comprising a vibrating member having a resonance frequency of at least 100 cycles per second, and two parts of which are adapted to vibrate synchronously in opposed directions in a plane which is parallel to the plane of the fibres, a guiding member secured on each of said two parts, said guiding members being adapted to guide the artificial fibre substantially in a plane, and means for causing the vibrating member to vibrate permanently at its resonance frequency.

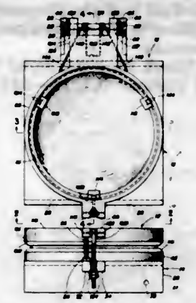
2,745,137
MOLD FOR RETREADING TIRES
Edwin A. Glynn, Lodi, Calif., assignor to Super Mold Corporation of California, Lodi, Calif., a corporation of California
Application May 9, 1952, Serial No. 286,905
8 Claims. (Cl. 18—18)



2. A tire retreading mold including separable upper and lower body sections, a tire receiving matrix assembly mounted on and disposed between the body sections, a hinge unit connecting the body sections for relative movement between open and closed position, releasable draw means connected between the body sections to clamp the matrix assembly between the body sections when the mold is closed, and power means connected between the body sections operative to open the same upon release of the draw means; said power means including upstanding, fluid pressure actuated, dual power cylinder units disposed on opposite sides of the mold, the hinge unit being at the rear of the same; each cylinder unit including a cylinder alongside the upper body section, a cylinder alongside the lower body section, swivel connections between the cylinders and corresponding body sections, and a common piston rod extending between said upper and lower cylinders of each unit.

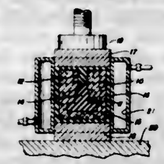
2,745,138
APPARATUS FOR THE MANUFACTURE OF PLASTIC LENSES FROM MONOMERIC MATERIALS
John O. Beattie, Stamford, Conn., assignor to Optical Plastics Corporation, Stamford, Conn., a corporation of New York
Application May 26, 1953, Serial No. 357,521
7 Claims. (Cl. 18—26)

1. Apparatus for making plastic lenses from monomeric materials, comprising a two-part frame having hinged together a lower frame and an upper frame; a lower mold having a concave molding face adapted to hold a pool of monomer to be polymerized; an upper molding face having a convex molding face adapted to press into said pool to form a concave lens-shaped pool; means for holding the lower mold in the lower frame; means for holding the upper mold in the upper frame; means for holding the molding faces and their peripheral edges uniformly and parallelly spaced apart including laterally extending lug means on each of the lower and upper frames, a pintle passing through the lug means, and securable means for centering the pintle in the lug



means of one of the frames for thus parallelizing the molding faces.

2,745,139
METHOD AND APPARATUS FOR PRODUCING MOLDABLE RUBBER OR RUBBER LIKE ARTICLES
Walter E. Burton, Akron, Ohio
Application September 16, 1950, Serial No. 185,210
9 Claims. (Cl. 18—34)

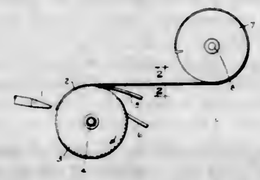


1. A method for making articles of rubber-like elastic material, comprising the steps of providing a mold having an article-forming cavity and inlet means thereto, placing a predetermined amount of rubber-like elastic material in said cavity, encasing a substantial proportion of the mold exterior with rubber-like elastic material to have portions thereof at said inlet means in close proximity to the material in said cavity, and embracing the entire mold to apply pressure to the encasing elastic material inwardly of the mold in all directions and thereby to compress enough of the encasing elastic material inwardly of said inlet opening means to compress said predetermined amount of material into article-forming conformity with the mold cavity.

2,745,140
METHOD OF MAKING A PATTERN FOR AN ARTICLE OF WEARING APPAREL
Philip Leslie, Leeds, and Frederick Joseph Rickard Batten, Morley, England, assignors to themselves and Ernest Walter Smith, Dewsbury, England
No Drawing. Application December 5, 1952, Serial No. 324,394
Claims priority, application Great Britain December 5, 1951
1 Claim. (Cl. 18—56)

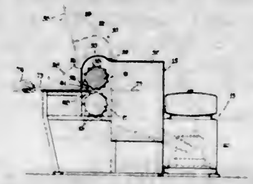
A method of making a pattern for an article of wearing apparel comprising the steps of forming a covering on a model by applying to the model a single layer of a stretchable fabric in at least partly stretched condition and essentially composed of cellulose acetate so that the fabric conforms to the shape of the model; applying to the fabric a liquid substance exerting a solvent action on the material of said fabric, said liquid substance being composed in proportions by weight of 35.5% of methanol, 35.43% of isopropyl alcohol, 28.55% of dimethyl ketone, 0.25% of formaldehyde, 0.15% of diacetone alcohol and 0.1% of benzaldehyde, the balance being colour and perfume, the steps of forming said covering on a model, and of applying to said fabric a liquid substance being performed in any desired sequence; evaporating said liquid substance from said fabric while the latter is at least partly stretched and in position on the model; and removing said fabric from said model, whereby the fabric is rendered substantially incapable of further stretching and retains the shape assumed while in position on the model.

2,745,141
CONTINUOUS METHOD OF MAKING POROUS STRIP MATERIAL
Joseph B. Brennan, Cleveland, Ohio
Application November 24, 1952, Serial No. 322,276
6 Claims. (Cl. 18—57)



1. In a method of making porous flexible dielectric sheet material the steps of, creating a spray field of interiorly solid and exteriorly molten dielectric particles, causing relative traversing movement between said spray field and a base, depositing a layer of said particles on the base with the exteriorly molten portions of adjacent deposited particles in fused engagement with each other at spaced points of their surfaces and with interstices remaining between said adjacent particles so that the deposited and fused particles constitute such dielectric sheet material which is rendered porous by the presence of said interstices, and stripping said sheet material from said base.

2,745,142
FIBRE DECORTICATING MACHINE
John E. Cary, Russell E. Shafer, and Valerie Cary, Opelousas, La.
Application March 27, 1952, Serial No. 278,916
1 Claim. (Cl. 19—24)



A fibre decorticating machine for cleaning both sides of fibre stalks comprising a frame structure, vertically spaced and aligned cooperative rolls journaled in said frame structure on horizontal axes, transversely disposed radial ribs on said rolls spaced at regular intervals around the circumference of each of said rolls, the ribs of one of said rolls arranged and timed for alternate disposition with the ribs of the other of said rolls, means rotatably driving said rolls in opposite directions, means guiding delivery of stalks to said cooperative rolls on the side thereof where the adjoining faces of the rolls are moving toward each other whereby the fibre stalks may be held at one end and inserted and drawn between the rolls and thereafter pulled out to complete decortication, said means guiding delivery of stalks to the rolls including a substantially horizontally disposed shelf carried by said frame structure in alignment with the juncture between the vertically spaced rolls, a shield forming a part of

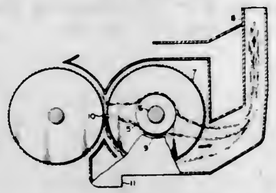
said shelf mounted on said frame structure and disposed over the top of said upper roll and extending down to a spaced position above said shelf, a plurality of laterally spaced apart ribs joining the shield and the shelf, said shield, ribs and shelf forming a unitary structure, and means hinging said unitary structure with respect to said frame structure.

2,745,143
TEXTILE DRAFTING METHOD AND MACHINE
Philip T. Bodell, Bristol, R. I., assignor to Collins & Aikman Corporation, Philadelphia, Pa., a corporation of Delaware
Application May 7, 1952, Serial No. 286,569
14 Claims. (Cl. 19—66)



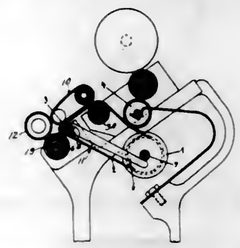
1. In a drafting mechanism for strands of textile fibers, means forming a front nip to draw off the fibers as they are being drafted, a rotatable fiber control pin roller positioned rearwardly of the front drawing off nip and above the strand path in position for combing and drafting said fibers, a strand guide for the fibers located below the strand path adjacent said pin roller, and heating means carried by said guide whereby said fibers are heated by contact with said guide as they pass over the surface of said guide while being combed and drafted.

2,745,144
FIBER DEFLECTOR
Ray C. Young and Ralph A. Rusca, New Orleans, La., assignors to the United States of America as represented by the Secretary of Agriculture
Application December 2, 1952, Serial No. 323,737
1 Claim. (Cl. 19—93)
(Granted under Title 35, U. S. Code (1952), sec. 266)



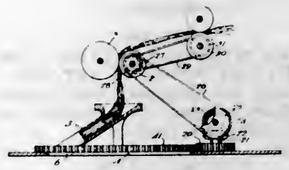
A cotton working machine comprising a suction flue provided with circular openings in its side walls; horizontally-disposed rotatable cylinders including a cotton working cylinder and a doffer within the flue, said doffer being provided with a shaft whose ends extend through each of said circular openings in the flue; and a disc-shaped radial extension on the portion of the shaft within each of said circular openings, the extension being provided with an unbroken annular surface extending radially from the shaft to the peripheral edge of said extension, said extension being further provided with a smooth peripheral surface extending axially the width of the disc, the diameter of said disc-shaped radial extension being large enough to cause fiber particles coming in contact with its peripheral surface during rotation to be thrown off by centrifugal force, the diameter of the circular opening in the flue being larger than that of the radial extension and sufficiently large to admit sufficient air around the extension to carry away the fibers thrown off by said disc.

2,745,145
TIGHTENING-PULLEY MOUNTING FOR THE LOWER TAPE OF TAPE DRAWING ROLLERS
Fritz Dölling and Carl Ludwig Kümpers, Rheine (Ems), Germany, assignors to F. A. Kumpers K. G., Rheine, Westphalia, Germany
Application March 13, 1951, Serial No. 215,208
2 Claims. (Cl. 19—131)



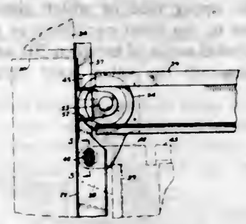
1. In a machine for drawing fibrous materials, upper and lower drawing rollers, an endless upper feed unit, an endless band below the upper unit defining a lower feed unit, a turner bar adjacent the periphery of the lower drawing roller, a feed roller, and a tightening roller over which the band is movable and means for mounting the tightening roller, said mounting means comprising a rigid base plate secured to the face of the turner bar remote from the lower drawing roller, a pair of spaced apart parallel arms attached to the base plate and depending from the base plate at an angle towards the rear of the machine, each of said arms being provided with a continuous unbroken upper surface extending from the base plate to the free ends of the arms and the said tightening roller resting upon and being guided by the unbroken upper surfaces of the parallel arms whereby the tightening roller may move up or down the said arms freely to adjust the tension of the endless band.

2,745,146
PROCESS FOR COILING SLIVER IN CANS
Robert C. Wilkie, Andover, Mass., assignor to Pacific Mills, Lawrence, Mass., a corporation of Massachusetts
Original application December 6, 1947, Serial No. 790,158, now Patent No. 2,598,738, dated June 3, 1952. Divided and this application May 23, 1952, Serial No. 289,450
9 Claims. (Cl. 19—159)



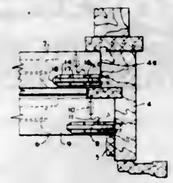
1. The method of filling a sliver can compactly from top to bottom with sliver through a rotating coiler head having an opening therein eccentric of its axis of rotation which comprises delivering the sliver from a point along the axis of rotation of the coiler head continuously to the opening in the head at a predetermined speed, continuously rotating the coiler head to move the portion of the sliver within the opening in a circular path at a linear speed 2% to 15% greater than said predetermined speed of delivery, and pressing the sliver issuing from the opening between the under surface of said coiler head and a relatively stationary surface within the can, whereby the sliver is pulled through the opening and into the can.

2,745,147
COMPOSITE OVERHEAD DOOR STRUCTURE
Glenn Berry, Pontiac, Mich.
Application November 4, 1954, Serial No. 466,837
16 Claims. (Cl. 20—19)



1. A door structure comprising, a frame adapted to be mounted on jambs defining a doorway, a door panel, pivotal means fixed on said frame, said pivotal means mounting the panel on the frame for swinging upwardly and downwardly for opening and closing and supporting said panel in closed position, track means supporting the upper portion of the door panel during opening and closing, said track means being adjustably secured on said frame, means fixing said panel to said frame to facilitate mounting said door structure as a unit in a doorway, the last said means being releasable to free the door panel for swinging movement after adjustment of said track means.

2,745,148
DOUBLE-HUNG WINDOW STRUCTURE
William George Banham, Edmonton, Alberta, Canada
Application February 29, 1952, Serial No. 274,205
4 Claims. (Cl. 20—48)



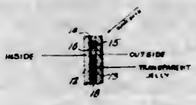
1. In a double-hung window structure, the combination with the window frame having the usual pair of sash channels and wherein the outer channels for the upper sash are stepped inwardly and a horizontally recessed seat in each channel approximately midway of the height thereof, of a pair of sashes slidable therein, each sash consisting of a spaced pair of side stiles and an intermediate glazed panel section hingedly connected near the bottom to said side stiles, the upper sash being narrower than the lower sash for accommodation in the inwardly stepped sash channels in the frame by having its intermediate glazed panel section only of reduced width, at least one side stile of each sash having a vertically disposed trough extending across the top thereof and opening toward both sides, said panel section also having a vertical trough in the top thereof and opening toward the stile; and a lock member permanently mounted in the trough in the top of said stile and normally engaged in concealed position in the trough in the top of said panel section with its upper side substantially flush with the tops of said stile and panel section respectively to hold the sash parts in co-planar relation and said lock member being movable out of said panel section on one side, freeing the same for hinging relation, and into engagement with the laterally positioned recessed seat in the window frame on its other side.

2,745,149
METHOD OF CONVERTING A DOUBLE HUNG WINDOW CONSTRUCTION TO A PIVOTAL AND SLIDING CONSTRUCTION
Harold A. Etling, Marshallville, Ohio, assignor to Weather-Seal Incorporation, Barberton, Ohio, a corporation of Ohio
Application September 23, 1953, Serial No. 381,917
5 Claims. (Cl. 20—49)



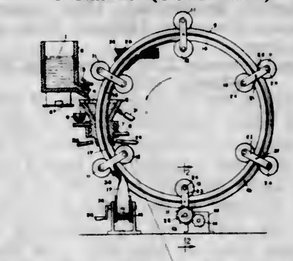
1. That method of converting a conventional vertically extending sliding double hung window construction having the sliding window sashes to a construction having pivotal and sliding sashes, comprising the steps of securing hinge and guide means to one vertically extending edge of a window casing and the edges of the window sashes thereadjacent for pivotal and sliding movement of the sashes, reducing the lateral dimensions of the window sashes to free the remaining vertically extending edges of same from the casing, forming a stepped edge portion on such remaining vertically extending edge of each of said sashes, and securing laterally retractable resiliently positioned sash edge engaging members in the casing for releasable engagement with the stepped edge of said sashes to position same in the casing for sliding movement.

2,745,150
GLASS PANEL SUNSHIELD
Willard F. Warns, Corpus Christi, Tex.
Application November 23, 1954, Serial No. 470,675
1 Claim. (Cl. 20—56.5)



A screen of the class described comprising a plurality of horizontally extending louvers arranged in vertically spaced relation, said louvers being outwardly and downwardly inclined, an inner transparent sheet and an outer transparent sheet, and said screen being embedded in a transparent jelly securing substance in encasing relation between the inner and outer sheets, said transparent jelly binding said inner and outer sheets and the screen into one transparent panel.

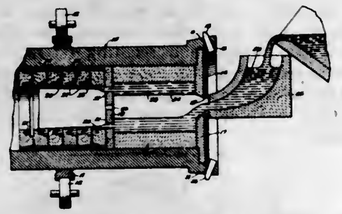
2,745,151
METHOD AND APPARATUS FOR CONTINUOUS CASTING
Joseph B. Brennan, Cleveland, Ohio
Application November 23, 1953, Serial No. 393,666
3 Claims. (Cl. 22—57.4)



2. Apparatus for continuous casting of relatively thin strip metal comprising a mold having a relatively nar-

row open side which corresponds to an edge of the strip metal to be cast and which leads to a strip-shaped cavity in said mold, a molten metal supply crucible, means for maintaining a substantially constant head of molten metal in said crucible, means supporting said mold for continuous movement downwardly through said crucible for flow of molten metal into said mold through the open side of the latter, cooling means downwardly adjacent to said crucible and through which said mold is moved so as to cool the mold and the cast metal in the corresponding cavity portion to solidify the cast metal, said cooling means serving to bridge the open side of said mold therealong, and means for continuously withdrawing the cast and solidified metal from said mold.

2,745,152
CENTRIFUGAL METAL CASTING PROCESS AND MOLD APPARATUS
Clarence K. Johnson, Portland, Oreg., assignor, by mesne assignments, to Electric Steel Foundry Company, Portland, Oreg., a corporation of Oregon
Application July 2, 1954, Serial No. 441,022
14 Claims. (Cl. 22—65)

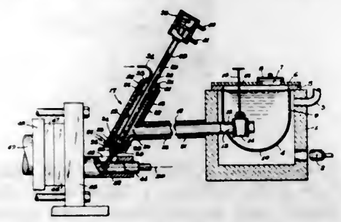


1. In a centrifugal casting process for forming a casting in a mold, in which process molten metal is poured into a mold mounted for rotation and the mold rotated about an axis to form a casting, the steps of mounting within said mold an annular core having radial recesses therein, pouring the molten metal into one end of the mold, restraining the longitudinal flow of the metal in said end of the mold until the metal has attained the peripheral speed of the mold, and then releasing the metal in a thin annular stream along the inside diameter of the core.

6. In combination with a centrifugal mold mounted for rotation and having a central inlet opening at one end and means for introducing molten metal into said opening while the mold is operating, a core mounted within said mold and having a radial recess therein, and a control core adjacent said molding core and spaced from the inlet of said mold to provide a reservoir, said control core having a plurality of openings aligned generally with the inside diameter of said core.

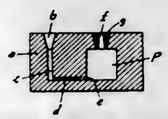
2,745,153
APPARATUS FOR DISPENSING SHOTS OF MOLTEN METAL
Francis L. Burkett, Breckenridge, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
Application February 2, 1955, Serial No. 485,642
3 Claims. (Cl. 22—79)

1. An apparatus for dispensing shots of molten readily oxidizable metal comprising in combination with a melting pot adapted to contain a quantity of the molten metal to be dispensed shotwise of a sloping pipe leading from the pot under the force of gravity to the discharge end, a valve assembly on the discharge end of the pipe remote from the melting pot for controlling the release of molten metal from the pipe, said valve comprising a body member having an axial bore from end to end and a port in the side intermediate the ends of the bore and communicating with the discharge end of the pipe, the upper end of the bore of said body member being above the working level of the molten metal in the pot, a valve seat in the lower end of the bore of the body, said seat comprising an annulus the inner periphery of which is cylindrical and the upper face of which slopes downwardly from the outer to the inner periphery as a conical recess having an included angle of between 20° and 120°, a valve stem extending into the valve body through the upper



end thereof, a valve of hemispherical form on the lower end of the valve stem adapted to be urged by the stem onto the upper surface of the valve seat to close the passageway through the said annulus, the length of said passageway through the opening in the annulus being not over one-quarter inch, and the distance between the top of the said axial bore and the working level of the molten metal being at least as much as the valve stem travel in opening the valve.

2,745,154
IMPROVEMENTS RELATING TO THE MOULDING OF FOUNDRY CASTING, PARTICULARLY FOR LIGHT ALLOYS
René Lucien, Paris, and Emile Tetart, Louvie-Juzon, France, assignors to Societe d'Inventions Aeronautiques et Mecaniques S. I. A. M., Geneva, Switzerland, a corporation of Switzerland
Application January 4, 1951, Serial No. 204,318
Claims priority, application France May 2, 1950
3 Claims. (Cl. 22—134)



1. In combination with a bottom casting mould having an outer sand box with an outwardly flared vent therein, a heat-insulating sheath positioned in the vent and comprising a pair of hollow frusto-conical members positioned one inside the other defining an inner space for the escape of gases from the inside of the mould and the formation of a riser and an intermediate space between the two members, the outer one of said members flaring upwardly and the inner one downwardly, and a mass of insulating material in said intermediate space having a greater heat resistance than the sand in the box surrounding the vent, the hollow frusto-conical members constituting an integral unit adapted to be readily removed from the vent.

2,745,155
SPRING METAL FASTENER FOR TELEVISION AERIALS
Coy W. Collins, Toledo, Ohio, assignor to Prestole Corporation, Toledo, Ohio, a corporation of Michigan
Application February 11, 1954, Serial No. 409,715
2 Claims. (Cl. 24—1)

1. A shim of the character described, comprising a one-piece body portion of spring sheet metal, a relatively flat intermediate portion centrally apertured and formed

with a pair of grooves intersecting each other at approximately right angles and extending from side to side of such intermediate portion, downwardly extending walls at opposite sides of said intermediate portion, the



depth of said walls being at least as great as the depth of said grooves, a pair of legs inclining downwardly and outwardly from the lower ends of said walls, and notched end portions on the free ends of said legs respectively.

2,745,156
FASTENER DEVICE
William A. Bedford, Jr., North Scituate, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Boston, Mass., a corporation of Delaware
Application February 12, 1948, Serial No. 7,951
7 Claims. (Cl. 24—73)



1. A molding fastener comprising a molding flange-engaging plate, support-engaging means on said plate, a U-shaped molding body-engaging member having its bight portion secured to said plate and its legs disposed in planes at right angles thereto, said legs extending from said plate in directions oblique to a plane normal to said plate.

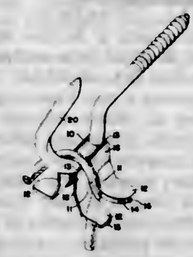
2,745,157
BELT BUCKLE
Frank J. Bomerscheim, Royal Oak, Mich.
Application December 27, 1952, Serial No. 328,224
7 Claims. (Cl. 24—77)



1. A buckle comprising a hollow metal body including a pair of longitudinally spaced, substantially flat outer panels, opposed longitudinally extending top and bottom walls extending at right angles from said outer panels and interconnecting the same, opposed spaced inturned lower flanges extending from said walls parallel to said outer panels and extending throughout the length of said outer panels, a clip attachable to one end of a belt projected between one of said outer panels and said lower flanges and having a reverse turned tongue retainingly engageable over the inner edge of said one outer panel, and a tongue centrally secured to the corresponding inner edge of the other outer panel having a depending and out-turned portion extending towards said lower flanges and adapted for retaining registry within one of a plurality of transverse slots formed at the other end of said belt projected between said other outer panel and said lower flanges.

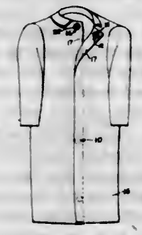
2,745,158
TIE-DOWN CLAMP
John G. Schweigert, Garfield Heights, Ohio
Application August 21, 1952, Serial No. 305,592
1 Claim. (Cl. 24—130)

In a tie-down clamp, a strap having its central portion bent in the shape of a thin U, the sides of which, when the U is inverted, are spaced apart a distance to allow the U to be placed over a clothesline hook with the sides of the U engaging the sides of the hook along arcuate lines of contact and the base of the U received within the crook of the hook, hook-receiving notches in each end of the base of the U to allow the base of the U to seat deep within the crook of the hook, the ends of said strap flaring outwardly from said central U-shaped portion and terminating in two endmost edges, a tie-down notch in each of said endmost edges, each of said tie-



down notches extending back into one of said outwardly flaring end portions of said strap, whereby, when said strap is engaged with a clothesline hook as above recited and a rope is passed through the crook of the hook to contact the base of the U and is then pulled downwardly into one of said tie-down notches to be anchored thereby, turning of the strap is prevented by said hook-strap engagement along arcuate lines of contact and lifting of said strap is counteracted by bearing-down of said rope on the base of the U.

2,745,159
HEAT SEALABLE PLASTIC FASTENER AND ASSEMBLY
Walter I. Jones, Belmont, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Boston, Mass., a corporation of Delaware
Application March 30, 1951, Serial No. 218,301
1 Claim. (Cl. 24—213)



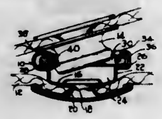
An assembly comprising a flexible base sheet at least the outer surface of which is a continuous pellicle of synthetic organic thermoplastic material and, associated therewith, a one-piece fastener element of similar thermoplastic material compatible with that of the pellicle, the fastener element comprising a post extending away from the surface and having an inner portion and outwardly thereof an enlarged head defining an inwardly facing overhanging shoulder, the post having a hollow centre defined by an encircling wall of the thermoplastic material and having at its inner end portion an extension of said wall projecting radially outwardly in the form of a thin annulus of substantially uniform thickness presented to the sheet, the outer periphery of the annulus defining the outer periphery of the inner end of the fastener element, the opposed surfaces of said annulus and of the pellicle throughout the area of the annulus and to the exterior boundary thereof being fusedly connected in an autogenous joint.

2,745,160
FASTENER FOR ATTACHMENT TO PLASTIC MATERIAL
Walter I. Jones, Belmont, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Boston, Mass., a corporation of Delaware
Application April 19, 1948, Serial No. 21,993
2 Claims. (Cl. 24—217)



1. An assembly comprising a flexible base sheet at least the outer surface of which is a continuous pellicle of thermoplastic material and, associated therewith, a fastener element comprising a post extending away from the surface and having at axially different points portions of different transverse dimensions defining an intermediate shoulder for cooperation by snapping engagement with complementary portions of a companion member, the post having an integral radially extending flange and a thickness of thermoplastic material of substantially identical peripheral form and size covering its bottom surface and having integral portions overlying its upper surface to unite it mechanically thereto, said thickness being fusedly connected to the surface of said pellicle by an autogenous joint throughout the peripherally extending area of the base to the outer boundary thereof.

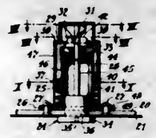
2,745,161
FASTENING DEVICE
Harold S. Van Buren, Jr., Cambridge, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Boston, Mass., a corporation of Delaware
Application August 2, 1952, Serial No. 302,315
1 Claim. (Cl. 24—218)



A three sided lock snap fastener socket comprising a base for attachment to a supporting sheet, an upstanding peripheral wall disposed on the base forming a stud receiving aperture, and a radially extending flange disposed on the upper edge of the wall, a split ring spring resting on the flange, said flange having an integral tab on one side thereof extending over the ends of the spring, a detent extending downwardly from said tab between the end portions of the spring to prevent lateral movement of the spring portions without restricting the flexing of the ends thereof, and an integral spring retaining flange secured to said radially extending flange and extending over and enveloping a portion of the spring along a point diametrically opposite said tab whereby said spring retaining flange extends into the aperture to engage the shoulder of an assembled stud to prevent separation of the stud and socket by a separating force applied on said opposite side, the portions of said radially extending flange on either side between said spring retaining flange and said tab being unobstructed.

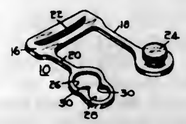
2,745,162
FASTENING DEVICES
Victor F. Zahodiakin, Summit, N. J.
Application July 18, 1952, Serial No. 299,556
4 Claims. (Cl. 24—221)

1. A fastening device for clamping members together, comprising a cylinder adapted to be secured axially perpendicular to one of said members, said cylinder being hollow and open at both ends and having external screw threads, a crown cylinder overlapping said stationary cylinder and having internal screw threads engaging the external screw thread of the stationary cylinder, said crown cylinder having an end wall at its end away from the stationary cylinder and said end wall having a stud-receiving aperture, a retainer slidable on said cylinder and



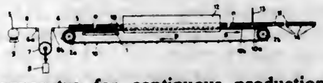
located next the overlapping end of the crown cylinder, said overlapping end of the crown cylinder and the adjacent face of the retainer having serrations, a spring pressing the serrated face of the retainer into releasable engagement with the serrations of the crown cylinder, and means for preventing the retainer from rotating.

2,745,163
FASTENING DEVICE
Harold S. Van Buren, Jr., Cambridge, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Boston, Mass., a corporation of Delaware
Application October 20, 1953, Serial No. 387,210
1 Claim. (Cl. 24—246)



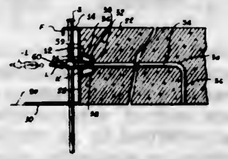
A garment supporting device formed of a single piece of molded flexible plastic, comprising an elongated strap receiving portion having longitudinally extending slot means therein to receive a supporting strap, and a pair of laterally flexible legs integrally formed with said strap receiving portion, each of which extends downwardly from one end of and in the same plane as the strap receiving portion in spaced parallel relation to one another, said legs being constructed to be overlapped by their lateral flexibility at the respective free ends on two opposite sides of a garment to be supported, one of said legs being provided with an integral stud means immediately adjacent its free end, and the other leg having a keyhole aperture with the smaller portion immediately adjacent its free end for receiving the stud for engaging a portion of the garment between the two end portions.

2,745,164
PRODUCTION OF PRESTRESSED BUILDING ELEMENTS
Mirko Robin Ros, Zurich, Switzerland
Application August 30, 1952, Serial No. 307,228
Claims priority, application Switzerland August 30, 1951
5 Claims. (Cl. 25—118)



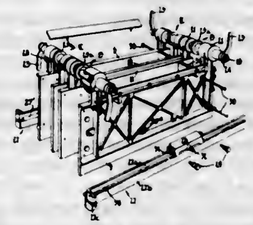
1. An apparatus for continuous production of prestressed reinforced concrete elements, including supporting means, a plurality of molding means for said elements, reinforcing means passing through said molding means consecutively, supply means for said reinforcing means, means for advancing said molding means along said supporting means, means for supplying concrete to said molding means, and means for severing said reinforcing means between adjacent elements on said supporting means, said supply means for said reinforcing means including spool feeding means, intermittently actuated locking means for said spool feeding means, and weighed means suspended on said reinforcing means for maintaining a predetermined stress on said reinforcing means, said weighted means being positioned between said locking means and said molding means.

2,745,165
PAVING FORM STRUCTURE
William H. Lewis, Pasadena, Calif., assignor to Joint Saw Company, Arcadia, Calif., a corporation of California
Application August 18, 1954, Serial No. 450,605
6 Claims. (Cl. 25—118)



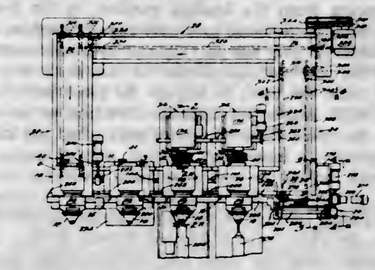
1. In a paving form structure that includes a side form, the combination of an elongated key strip having vertical rear wall means which abut one side of said side form, a pair of top and bottom walls tapering forwardly and toward one another from said rear wall means and merging into a front wall having its intermediate portion curved rearwardly so as to define a generally semi-circular paving dowel receiving-recess, the front portion of one of said forwardly tapering walls being formed with a plurality of longitudinally spaced apertures each of which are substantially vertically aligned with a second aperture formed in the front part of the adjacent rearwardly curved portion of said front wall, each of said pair of apertures receiving a paving dowel retaining-element insertible therein from the exterior of said key strip; a plurality of fastener means, each horizontally insertible through a bore formed in said side form; and a plurality of longitudinally spaced receiving means for said fastener means formed on the rear wall means of said key strip.

2,745,166
MOBILE MOULDS FOR THE CONSTRUCTION OF BUILDINGS AND SIMILAR STRUCTURES
Clifford Cyril Fogg and Harold Patrick Sinclair, Armadale, Victoria, Australia
Application August 6, 1951, Serial No. 240,574
Claims priority, application Australia August 18, 1950
9 Claims. (Cl. 25—131)



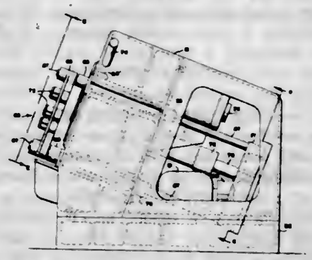
1. A mobile mold for the construction of buildings, section by section and course by course, comprising a pair of outer forms and a pair of inner forms for moulding a section of a course, a plurality of transverse supports for supporting and adjustably retaining the said forms in spaced relationship, the said transverse supports each including an inner sleeve and an outer sleeve, the individual sleeves on each transverse support having a plurality of sections and being operatively connected together by a plurality of left handed and right handed screw threads, means for actuating the sleeves on the said transverse supports to contract the said forms for molding a section of a course and to retract the said forms to permit the mold to be withdrawn from the said section after it has been molded, and means for disassembling an outer form and the adjacent inner form from the mold as a unit for molding a single wall, and for ganging the unit to the mold for molding a cavity wall.

2,745,167
AUTOMATIC CHUCKING MACHINE
Ralph E. Cross, Grosse Pointe Shores, Mich., assignor to The Cross Company, Detroit, Mich., a corporation of Michigan
Application December 24, 1949, Serial No. 134,933
15 Claims. (Cl. 29—33)



1. In a multiple-station machine tool, a series of in-line work stations having aligned track sections and each equipped with a rotatably driven drive shaft and locating and clamping mechanisms; a portable headstock including mechanism having a rotatably driven shaft for rotatably driving work on said headstock, and a supporting pallet; means for indexing said headstock progressively from one work station to another on said track sections, and said headstock being engageable by the locating and clamping mechanism in each station to position the driven shaft in alignment with the drive shaft of such station; means for coupling the drive shaft of the station occupied by the headstock with the driven shaft of said headstock after the latter has been acted upon and is held stationary by the locating and clamping mechanisms of such stations; and automatic transfer means arranged to receive the headstock as it is indexed from the last work station and operable to move such headstock to the first station in said series.

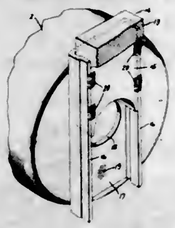
2,745,168
SECOND OPERATION PRODUCTION CHUCKING MACHINE
Frank Di Stefano, Rochester, N. Y.
Application January 5, 1952, Serial No. 265,151
14 Claims. (Cl. 29—38)



1. An apparatus for simultaneously machining a plurality of piece parts, which comprises a frame, a rotatable shaft, bearing means fixed on said frame for obliquely supporting said shaft, a rotatable table carried at the front upper end of said shaft having a plurality of rotatable work holders spacedly positioned thereon, hydraulic means for turning the table so as to advance the work holders carried thereby in a step by step man-

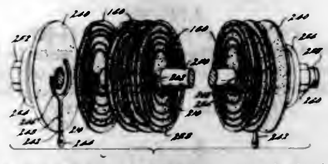
ner through a loading station, a series of machining stations and an unloading station of the apparatus, the last said means comprising indexing means for accurately locating each work holder at each of said stations, each of said work holders comprising part-engaging means designed to receive, grip and release a piece part to be machined, a sildable tool carriage for supporting a plurality of tools designed to perform various operations on the piece parts held in the spindles, one tool being provided on the carriage at each machining station of the apparatus, means for rotating only those spindles positioned at the machining stations of the apparatus to turn the piece parts positioned therein with respect to the tools, stationary cam means engaged by each work holder as it is advancing from the loading position to the first machining position to cause said part engaging means of the work holder to grip the part tightly, hydraulic means for moving the tool carriage parallel to said shaft in a direction to cause the tools to engage the piece parts carried by the table and in an opposite direction so as to disengage the tools from the piece part after the carriage has reached its innermost position, means engaged by each work holder as it is advancing from the last machining position to the unloading position to cause said part engaging means of the work holder to release its grip on the piece part positioned therein so that it may be removed from the table, and control means including a single hydraulic control valve for causing the table turning means, the indexing means and the tool carriage moving means to operate in timed relation with respect to each other so that each piece part carried by the table is successively engaged by the tools provided at each machining station of the apparatus.

2,745,169
METHOD FOR SUPPORTING A CYLINDER ASSEMBLY ON A COMPRESSOR FRAME
Owen H. Scheldorf, North East, Pa., assignor to General Electric Company, a corporation of New York
Application April 23, 1953, Serial No. 350,573
2 Claims. (Cl. 29—150)



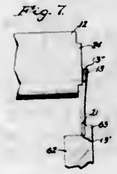
1. In the construction of a compressor of the fabricated type including a reciprocable piston, a frame, and an assembly including a bracket of greater thickness than said frame and carrying a cylinder for cooperating with said piston, the method of securing said bracket to said frame by welding with a minimum of distortion and obtaining a satisfactory head clearance between and alignment of said piston and cylinder comprising the steps of locally welding at spaced points to said frame a channel member of substantially the same thickness as said frame and including a pair of spaced apart rails extending parallel to the direction of reciprocation of said piston and outwardly from said frame, disposing said bracket between said rails and against the base of said channel member at a position affording satisfactory head clearance between said piston and cylinder, and locally welding the outer edges of said rails to said bracket at spaced points, said rails heating up and expanding edgewise during welding and being effective upon cooling for contracting edgewise and thereby drawing said bracket firmly into engagement with said base of said channel member.

2,745,170
PROCESS FOR MANUFACTURING ELECTRICAL COILS
Paul T. Nims, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application June 30, 1950, Serial No. 171,441
5 Claims. (Cl. 29—155.5)



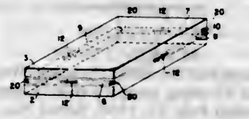
1. In a method for fabricating electrical circuit components comprising a plurality of laminations, the steps of printing a series of adjacent patterns on opposed sides of a continuous strip of a non-conductive sheet, said patterns being constituted by an electrically conductive material, depositing a continuous edge stripe of said conductive material along one edge portion of said non-conductive sheet on both sides thereof, said stripe blending with an extremity of each of said patterns, electrodepositing metal on said pattern and said stripe, covering portions of said patterns with an insulating material, severing said continuous strip between adjacent patterns to provide a plurality of individual sheets, and stacking said individual sheets in juxtaposed adjacent relationship to form a laminated structure, the uncovered portions of said patterns mutually contacting each other thereby forming an internal electrical path within said laminated structure.

2,745,171
METHOD OF PRODUCING A BLADED STRUCTURE
De Witt L. King, Kenmore, and Robert C. Stutz, Buffalo, N. Y., assignors to Niagara Blower Company, New York, N. Y., a corporation of New York
Application September 8, 1949, Serial No. 114,652
1 Claim. (Cl. 29—156.8)



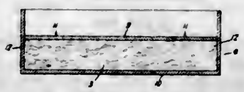
The method of producing a bladed structure from a pair of substantially identical and substantially flat end rings having inner and outer margins and said rings also having an annular series of registering, regularly spaced, transverse slots therethrough, the opposite ends of each of said slots terminating close to the inner and outer margin of the corresponding end ring, and a series of identical, longitudinally straight blades each continued at its opposite ends to form tongues of smaller size than said blades transversely of said blades, which comprises spacing said rings axially from each other a distance slightly less than the overall length of said blades including said tongues and with the slots of one ring in register with the slots of the other ring, holding said inner margins of said rings, completely around said rings, against further separation, springing successive adjacent segments of the outer margin of at least one of said rings progressively beyond said distance to permit the successive insertion of the tongues of said blades into the corresponding pairs of slots of said pair of rings, said insertion of said blades at the progressively sprung segments of said rings being lengthwise of said slots from the ends of said slots adjacent said outer margins of said rings, progressively releasing said sprung adjacent segments of said rings to trap said tongues of said blades in said slots, and thereafter welding said tongues to said rings.

2,745,172
COMPOSITE ASSEMBLY FOR BONDING PLATES OF DISSIMILAR METALS
Leyshon W. Townsend, Washington, Pa.
Application June 6, 1951, Serial No. 230,106
6 Claims. (Cl. 29—194)



1. A composite assembly for bonding plates of dissimilar metals, comprising: at least a pair of superimposed plates composed of forgeable, dissimilar metals; a reducing agent which volatilizes below the forging temperature of said plates, disposed therebetween; metal sealing means extending peripherally about and welded to said assembly and sealing the same in a substantially gas-tight welded joint; venting means extending through said sealing means from the exterior to the interior of said assembly, said venting means comprising at least one metal tube filled with a refractory packing, for limiting gaseous flow between the exterior and interior of said assembly.

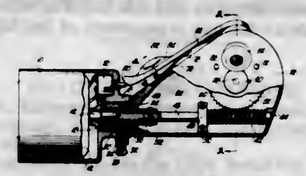
2,745,173
METHOD OF THERMAL INSULATION
Alfred G. Janos, Erie, Pa., assignor to General Electric Company, a corporation of New York
Application August 8, 1952. Serial No. 303,324
2 Claims. (Cl. 29—455)



1. A method of manufacturing an evacuated insulating structure which comprises providing a first wall and a second pan-shaped wall of predetermined depth including a central portion and a rim extending toward said first wall for spacing said first wall from said central portion of said second wall, providing a batt of filler material of a thickness greatly exceeding the depth of said second wall, said batt filler material consisting of a plurality of elongated glass filaments, applying a force at least of the order of one atmosphere to compress said batt to a thickness substantially equal to the depth of said second wall, and, while said force is applied, heating said batt to a temperature above the strain point of the glass filaments and below the temperature at which any softening and flow of the glass occurs to cause said batt to substantially retain its compressed form after said force is removed, cooling said batt to a temperature substantially below said strain point before removing said force, assembling said compressed batt in said pan-shaped second wall, bringing said first wall into engagement with said second wall to enclose said batt, welding said first wall to said second wall to seal said structure, and evacuating said sealed structure to a pressure of the order of 100 microns of mercury.

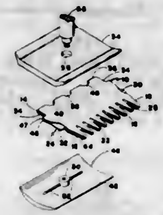
2,745,174
MOTOR-DRIVEN CAN OPENER
Everett Herrick, Springfield, Mo.
Application July 6, 1954, Serial No. 441,209
9 Claims. (Cl. 30—4)

1. In a can opener, a body having a can cutter thereon, a feed wheel rotatably mounted on said body in spaced relation to said cutter to receive a portion of a can therebetween, an arm on said body operatively connected to said can cutter and movable to shift said cutter toward said feed wheel to close the space between the two, a feed wheel drive shaft journaled in the body, speed reduction gearing between said shaft and said feed wheel, a motor



having a housing, means for detachably mounting said body on said housing, a motor shaft, a detachable coupling between the motor shaft and the feed wheel drive shaft, a motor switch carried by said housing, and an actuator on said switch in a position to be engaged and operated by said arm upon movement thereof.

2,745,175
EXTENSION BLADE GUARD ATTACHMENT FOR DOUBLE EDGE SAFETY RAZORS
Kenneth Cameron Purdy, Escondido, Calif.
Application November 19, 1952, Serial No. 321,370
4 Claims. (Cl. 30—31)



4. A safety razor holder having clamping plates and an abutment member between said plates, a clip comprising two parallel and integral layers of sheet material having a return folded end, said folded end being provided with comb teeth so that a razor blade-receiving slot is provided in said teeth and between said layers, said clip including parallel heel portions at the edge of the clip remote from said teeth, said heel portions having cut-out portions at the ends of the edges thereof remote from said teeth and said heel portions being clamped between said clamping plates and the edges of said heel portions remote from said teeth comprising stop means for limiting the entry of the heel portions into the razor holder by engaging said abutment member, and means for clamping said plates on said clip.

2,745,176
BARK PEELING DEVICE
Sverre Aleksander Lekagard, Oslo, Norway
Application October 1, 1953, Serial No. 383,622
Claims priority, application Sweden April 30, 1953
1 Claim. (Cl. 30—121)

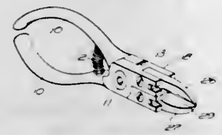
A spade-shaped bark peeling tool comprising a shaft portion adapted for connection to an actuating means, an arcuate crosshead integral with said shaft and extending arcuately outward from said shaft, the central portion of said crosshead having an integral depending flange of less thickness than the crosshead, a central lamella having a cut out portion adjacent its upper end, said cut out portion mating with the aforesaid depending flange to form a lap joint therewith, means detachably securing said central lamella rigidly to the aforesaid depending flange, a pair of notches formed integrally in said cross-

head along one of the lower edges thereof and extending from either side of the depending flange to the ends of the crosshead, a pair of side lamellas hingedly secured to said central lamella for pivotal movement along their adjacent sides, the upper ends of said side lamellas having projections mating with the notches in the crosshead whereby upward thrust on said side lamellas is transmitted to said crosshead through engagement of the tops of the



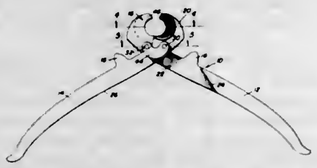
projections on said side lamella with one surface of the aforesaid notches and the other surface of the notches may engage the side surfaces of the aforesaid projections to limit pivotal movement of the side lamellas to the aforesaid arcuate contour of the crosshead, the lower edges of said central and side lamellas being sharpened and having an arcuate edge contour along an arc in a plane parallel to the axis of the tool.

2,745,177
CUTTING TOOL
Morris Kortick, Cranston, R. I.
Application June 27, 1955, Serial No. 517,988
10 Claims. (Cl. 30—186)



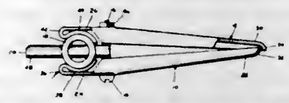
1. A cutting tool comprising a pair of complementary handle members pivoted to each other, each member having a short rectangular portion extending integrally beyond the pivot, a cutting blade for each of said members, and means for locking said blades in said members, said means including a slot in each rectangular portion, a pin extending through each blade and a U-shaped cut out at the end of each rectangular portion at each side of said slot, said pins entering said cut outs when said blades are placed in said slots.

2,745,178
CABLE CUTTER
Louis Rogoff, New Haven, Conn.
Application April 11, 1955, Serial No. 500,498
1 Claim. (Cl. 30—245)



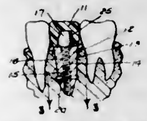
A self-centering hand tool for shearing cable consisting of a pair of handle members, each of said handle members having opposed cutting head portions, said handle members being crossed at intermediate portions, the intermediate portions of the handle members being juxtaposed planar surface portions, pivot pin elements extending laterally from the intermediate portions of said handle members, and a pivot link extending between the handle members and being pivotally connected at opposite ends to each of the pivot pin elements on each handle member as the only connection between the handle members, each handle member being independently pivoted about both pivot pin elements for providing pivotal movement between the link element and handle members and relative longitudinal movement between the handle members.

2,745,179
SCORING TOOL
Ole D. Jensen and Victor S. Fleming, Omaha, Nebr.; said Fleming assignor to said Jensen
Application July 13, 1953, Serial No. 367,654
5 Claims. (Cl. 30—304)



1. A scoring tool comprising a handle having a lower section and a complementary upper section, said sections having opposed coacting arcuate flanges extended inwardly from corresponding ends thereof at one end of the handle, a tube of resilient material having spaced diagonally positioned cutting blade holding slots extended therethrough, safety razor blades retained in said slots by resiliency inherent in the material of the tube, said tube being nested in the opposed flanges of the sections of the handle, and bolts having nuts thereon extended through the sections of the handle for clamping the said sections against the tube.

2,745,180
DENTURE CONSTRUCTION
Thomas F. Kiernan, Jr., Warwick, R. I.
Application July 1, 1953, Serial No. 365,491
6 Claims. (Cl. 32—10)



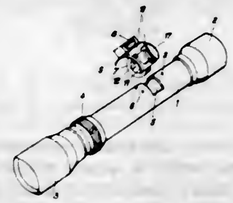
1. An artificial tooth comprising an anchoring base adapted to fit within a tooth socket, said anchoring base having an internally threaded vertical bore and horizontally spaced radial bores, a tooth crown having a socket recess, a screw element including a head and a threaded lower shank, said shank being threadedly positioned within said bore and said head being seated in said crown socket recess, and means including a threaded thimble within said vertical bore and slidably movable pins in said radial bores for securing said anchoring base within the tooth socket.

2,745,181
DRAFTING COMPASS
John F. Czerniewicz, Mineola, N. Y.
Application January 27, 1953, Serial No. 333,570
3 Claims. (Cl. 33—27)



1. Compass means comprising a first cylindrical member having a base and a circular wall, a first axial projecting member affixed to said base, said axial projecting member having a first constant diameter portion adjacent said base, a decreasing diameter portion adjacent said first constant diameter portion and a second constant diameter portion at the termination of said projecting member, a second cylindrical member having a base and a cylindrical wall, a second axial projecting member affixed to the base of said second cylindrical member, said second axial projecting member having an axial directed hole therethrough, said hole having a constant diameter portion adjacent the base and an increasing diameter portion adjacent said constant diameter portion and a circular button member having a circular recess in one face thereof, said recess having the same diameter as said second constant diameter portion of said first axial projecting member.

2,745,182
SIGHTING TELESCOPE
Paul Kohler, Berlin, Germany, assignor to Pecar Fabrikation von Zielfernrohren und Feldstechern Paul Kohler & Co., Berlin, Germany, a German firm
Application May 5, 1953, Serial No. 353,098
Claims priority, application Germany January 13, 1953
4 Claims. (Cl. 33—50)



1. A telescopic gun sight with selectively interchangeable sighting marks comprising a telescope having a side opening in the barrel thereof and a plurality of different adjustable sighting mark assemblies adapted for interchangeable mounting on the telescope, each of said sighting mark assemblies comprising a mounting plate shaped to conform to the contour of the barrel of the telescope to seat thereon and manually adjustable sighting marks mounted on said plate so as to project through the opening in the barrel of the telescope when the mounting plate is seated thereon, the telescope barrel and each of the respective mounting plates having holes therein for the reception of fastening means to secure a selected sighting mark assembly in correctly adjusted operative position on the barrel, the sighting marks of different types being so positioned upon their respective mounting plates that when a selected assembly is mounted on the telescope and fastened to the barrel thereof the sighting elements will lie in the focal plane of the telescope lens, whereby to attain quick interchangeability of the respective sighting mark assemblies with freedom of parallax of the variously formed sighting marks thereof.

2,745,183
TOOLMAKER'S SQUARE
John D. Pe Queen, Orchard Park, N. Y.
Application December 4, 1952, Serial No. 324,025
6 Claims. (Cl. 33—75)



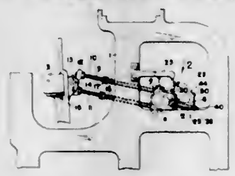
1. A try square comprising a head portion and a blade portion pivoted thereto, said head portion having a longitudinal chamber therein and a dial indicator, an elongated member fixed to said blade for pivotal movement therewith and extending lengthwise in said chamber, and motion multiplying means acting between the distal end of said elongated member and said dial indicator for indicating relative pivotal positions of the head portion and the blade portion on said dial indicator on an enlarged scale.

2,745,184
CALIPERING MECHANISMS
Lennart A. Kasparson, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts
Application December 20, 1954, Serial No. 476,161
11 Claims. (Cl. 33—178)



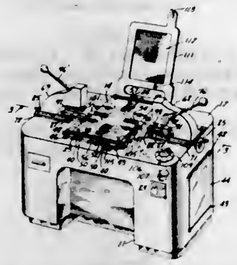
1. In a calipering mechanism, a worm, a worm wheel driven by said worm, three movable calipering elements two of which are settable but inactive in a calipering operation and the third of which is the active caliper, gearing connecting the worm wheel to each of the settable but inactive calipering elements, and backlash preventing members one connected to each settable but inactive caliper and connected to move said worm wheel in the retrograde mechanism opening direction but not powerful enough to turn said worm.

2,745,185
LOOM GAUGE
Clarence R. Kronoff, Worcester, and Albert H. Taylor, Jr., Shrewsbury, Mass., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a corporation of Massachusetts
Application February 20, 1953, Serial No. 337,958
7 Claims. (Cl. 33—181)



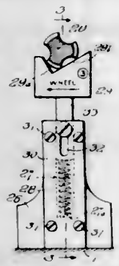
1. In a gauge for a loom having a part to be reciprocated provided with a pivot pin, a connector one end of which is supported by and movable angularly on said pivot pin, a crank shaft the axis of which is parallel to the axis of said pivot pin, a wrist pin on said shaft the axis of which is parallel to the axis of the shaft, a support member rigidly attached to the connector, a rockable member swingable on the support member about an axis which is parallel to the axes of the crank shaft and the wrist pin and in a plane including the axes of the wrist pin and the pivot pin, a centering element slidable on said rockable member having two shaft engaging wings defining an angle, said element being slidable on said rockable member in such a direction that the bisector of the angle passes through said axis of the rockable member for all sliding positions of the element relative to the rockable member, and indicia on said members which register with each other when said bisector is in a plane including said axis of the rockable member and the axis of the wrist pin.

2,745,186
UNIVERSAL PRINTING PLATE REGISTERING AND PUNCHING MACHINE
Harry W. Faeber, Larchmont, N. Y., assignor to Time, Incorporated, New York, N. Y., a corporation of New York
Application December 1, 1951, Serial No. 259,461
11 Claims. (Cl. 33—184.5)



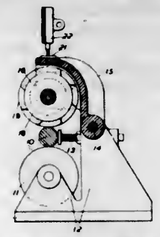
11. Mechanism for registering and punching printing plates comprising, a base, level-limiting means on said base for predetermining a reference plane for registering purposes, a turntable supported adjacent said base for adjustably holding a printing plate, a pair of concentric rings having complementary sloping faces in engagement, said turntable being supported by and rotatable relative to said rings, means for rotating said rings relative to each other for aligning the surface of the printing plate with said reference plane, a die carried by said turntable, and a punch mounted on said base arranged to overhang the turntable.

2,745,187
DEVICE FOR ORIENTING TAPS FOR GRINDING
Edgar L. Detrow, Boonsboro, Md., assignor to Vulcan Machine Company, Waynesboro, Pa., a corporation of Pennsylvania
Application January 30, 1953, Serial No. 334,247
6 Claims. (Cl. 33—185)



1. A tool for setting fluted taps in a tap-grinding fixture comprising a standard terminating in a flat top portion and a base portion and having a vertically extending groove therein, a substantially T-shaped member having a laterally disposed head adapted to move from a flat contacting position on the top of said standard to various positions substantially parallel therewith and having a tongue depending downwardly therefrom and extending into said groove, a coil spring housed within said groove beneath said tongue and forming a cushion for the end of the tongue of said substantially T-shaped member and biased to project the said tongue vertically from said standard, means associated with said standard for confining the vertical projection of said tongue with respect to said standard, and faces formed on said substantially T-shaped head for engaging the flutes of a tap disposed horizontally in the jaws of the tap-grinding fixture either in a position capable of free orientation within the jaws or in a position clamped within the jaws whereby the faces on said head are forced into linear contact with the edges of the flutes on the tap for exerting a turning torque thereon for orienting the tap while the tap is mounted for free orientation within the jaws of the tap-grinding fixture to a pre-set position in which the tap may be clamped by the jaws in a position for the precision grinding thereof, the base portion of said standard substantially conforming in transverse dimension with the top portion thereof.

2,745,188
GAUGING DEVICES FOR CHECKING DIMENSIONS AND INVESTIGATING THE CONTOUR OR PROFILE OF SURFACES
Sydney Arthur Wills, Southfields, London, and Evan Frederick James Gathercole, London, England, assignors to Tolimit Gauges Limited, London, England, a British company
Application March 12, 1952, Serial No. 276,196
Claims priority, application Great Britain March 16, 1951
9 Claims. (Cl. 33—199)



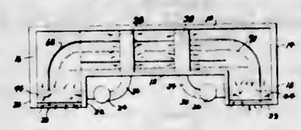
1. A measuring instrument comprising a reference member against which an article whose surface is to be investigated can be placed, a rotary gauging member freely movable towards and away from the surface under investigation, said rotary gauging member being provided with a rib formed and arranged to make substantially only a single contact at any instant with the surface of the article under investigation so that as the rotary gauging member is rotated, the area of contact between said rib and the surface of the article under investigation sweeps across said surface, and indicating means for determining changes in the relative positions of said reference member and said rotary gauging member.

2,745,189
HYDRAULIC CONTROL MECHANISM FOR DRIFT RECORDERS
Marion A. Garrison, South Pasadena, Calif., assignor, by mesne assignments, to Johnston Testers, Inc., Houston, Tex., a corporation of Texas
Application January 10, 1955, Serial No. 480,784
6 Claims. (Cl. 33—205.5)



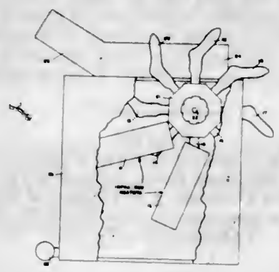
1. In a control unit for use with a drift recorder having a housing and an actuating spear point extending downwardly therefrom, a tubular member adapted to be received within a drill collar, means adjacent the upper end of said tubular member adapted to be contacted by and support the lower end of said housing with said spear point extending downwardly through said means, a sleeve slidably mounted in said tubular member below said annular seat, a restricted passageway extending through said sleeve, said passageway being smaller in diameter than the external diameter of said spear point, means yieldably urging said sleeve toward its uppermost position, whereby fluid moving downwardly through said drill collar will urge said sleeve downwardly out of contact with said spear point and whereby stopping the downward movement of said fluid will permit said yieldable means to urge said sleeve upwardly to raise said spear point and actuate said drift recorder.

2,745,190
DRYING OVEN
Rex E. Moule, Holden, Mass.
Application November 15, 1952, Serial No. 320,688
7 Claims. (Cl. 34—12)



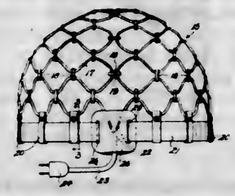
6. The process of treating fiber comprising the steps of passing the fiber in a generally continuous strand along a predetermined path through an enclosure, recirculating hot air in the enclosure, heating the air exteriorly of the enclosure and completely separated from any flame, cutting the fiber strand into butts, and repassing the butts through the enclosure along a separate path, the strand and butts being passed through the enclosure simultaneously.

2,745,191
APPARATUS FOR BOARDING AND PRESETTING TEXTILES
Francis M. Southerland, Mebane, N. C., assignor to Sarco, Incorporated, Mebane, N. C., a corporation of North Carolina
Application December 1, 1954, Serial No. 472,287
10 Claims. (Cl. 34—66)



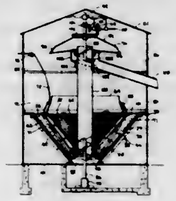
9. A textile boarding and presetting machine comprising a movable textile board supporting means, a plurality of textile boards, each of said boards being secured at one end to said supporting means and extending from said supporting means in spaced positions, a heating cabinet, at least two radiant heaters in said cabinet, each of said heaters being mounted to provide heating areas in the path of movement of said boards as said supporting means is moved and being spaced from each other by a distance substantially equal to the spacing between said boards and defining a cooling area between said heaters, means for controlling the temperature of each of said heaters, and drive means to intermittently move said supporting means by an amount substantially equal to the spacing between said boards.

2,745,192
ELECTRICAL HAIR DRIER AND METHOD OF PRODUCING THE SAME
George W. Crise, Danville, Ohio
Application April 22, 1950, Serial No. 157,512
6 Claims. (Cl. 34—96)



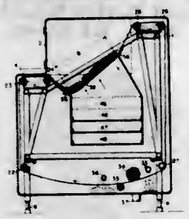
2. An electrical hair drier comprising a substantially circular and flexible headpiece consisting of a continuous length of electrically insulated and moisture proof resistance wire arranged in radially spaced, spiralled convolutions throughout substantially the full area of said headpiece, and a plurality of relatively spaced, radially disposed flexible links joining each convolution with another convolution and maintaining said convolutions in relatively spaced open mesh configuration, said headpiece being arranged to conform to and lie directly against the hair when placed upon the head of a wearer; electrical conductor means electrically connected with the ends of said wire and extending remotely from said headpiece for supplying operating current thereto; and means connected with said headpiece for securing the same to the head of a wearer.

2,745,193
DRIER
Allan L. Ladd and Melvin L. Speckman, Sleepy Eye, Minn.
Application November 17, 1954, Serial No. 469,476
6 Claims. (Cl. 34—102)



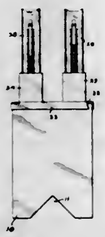
1. In a drier apparatus comprising a chamber, a sloping floor extending around the entire lower portion of the chamber provided with a plurality of spaced apart apertures, the floor sloping toward the center of the lower end of the chamber forming a relatively small pocket at the bottom of said chamber, a pipe positioned in the chamber extending from adjacent the pocket at the lower end of the chamber to adjacent the top of said chamber, a conveyor means including a shaft positioned in the pipe extending from the bottom of the chamber to the top of the pipe, a rotary housing having spaced apart outlet means mounted adjacent the upper end of the shaft, the lower end of housing positioned below the upper end of the pipe whereby the pipe extends into the housing, and means for actuating the housing at one speed and the conveyor at a second speed.

2,745,194
CONTINUOUS BELT TROUGH DRIER
Edison Lowe, El Cerrito, and William C. Rockwell, Richmond, Calif., assignors to the United States of America as represented by the Secretary of Agriculture
Application January 16, 1953, Serial No. 331,753
5 Claims. (Cl. 34—233)
(Granted under Title 35, U. S. Code (1952), sec. 266)



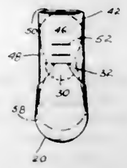
1. A dehydrator comprising an endless foraminous belt, means for continuously traversing said belt in its lengthwise direction, means for maintaining part of the belt in the form of a trough extending across the width of the belt, one end of said trough being higher than the other, means for depositing material to be dried in the upper end of the trough, means for removing dried material from the lower end of the trough, a chamber extending along the width of the belt under the trough portion thereof, a longitudinal opening in the top portion of said chamber, said opening being positioned to underlie the bed of material in said trough, the area of the opening being slightly less than the area of the bed of material, flanged supported surfaces about said opening to maintain the trough portion of the belt overlying the opening in an almost flat plane, and means for forcing a gaseous dehydrating medium into said chamber, out of said opening, and through the bed of material overlying said opening.

2,745,195
RELATIVE HEAT FLOW DEMONSTRATOR
Frederick S. Gombert, Indianapolis, Ind., assignor to Hall-Neal Furnace Company, Indianapolis, Ind.
Application August 4, 1953, Serial No. 372,295
1 Claim. (Cl. 35—50)



A heat flow comparator comprising a housing open at its top and having lateral openings in the lower end portions of its sides; a heating member centrally mounted within the housing above said lateral openings and spaced from the sides of the housing; a centrally, vertically disposed partition across said housing cut out to extend in close proximity to and in substantially a common plane across and down the sides of said heating member; said partition being in two parts, one part being fixed stationary around a lower portion of the heating member, and the other part being removably positioned across the upper portion of that member; a fin radiator compressibly held with fin ends against said heating member on one side of said partition and defining vertical air flows along said member; a cover engaging the upper end of the housing and bearing across said partition other part, retaining that other part in position; a pair of stub flues, each of rectangular and equal cross-section carried by and extending vertically from said cover, one flue opening through the cover on each side of said partition; each flue opening having a thermometer supporting ledge entering therein from common sides; and a thermometer having a back of a width approaching the width of said flues and resting by a lower end on said ledge and inclined therefrom to rest on the opposite upper side of said flue in each instance; said thermometer back in each instance carrying a bulb exposed through an opening in the back within the flue, and from which bulb a thermometer column extends up along the top side of the back.

2,745,196
SHOE CONSTRUCTION
Helmuth F. Schneider and Erna E. Schneider, Westville, N. J.
Application October 30, 1951, Serial No. 253,838
4 Claims. (Cl. 36—2.5)



1. An infant's bootee comprising a soft front section detachable from a soft heelless rear section each constituting about half the bootee, each of said sections having a sole portion, the sole portion of one section having an integral soft foldable extension projecting out into overlapping relation with the sole portion of the other section, fastener means formed from said extension, and a plurality of separate complementary fastener means formed from the other overlapping member, said first fastener means upon folding being engageable with said second fastener means to interlock with said second fastener means so that said first fastener means can be selectively fastened in a plurality of positions to provide adjustable bootee lengths for fitting the bootee to the growing feet of infants at least until they reach the size at which infants normally begin to walk and wear out their footgear.

2,745,197
MID-SOLE CONSTRUCTION
John E. Holt, Danielson, Conn., assignor to The Danielson Manufacturing Company, a corporation of Connecticut
Application September 9, 1954, Serial No. 454,968
5 Claims. (Cl. 36—2.5)



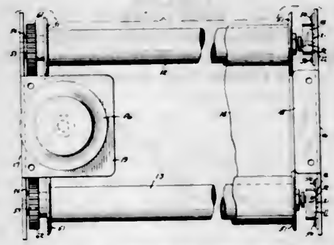
3. A sport shoe construction of the character described comprising an outsole, a thermoplastic mid-sole secured to the outer surface of said outsole, said mid-sole having a plurality of spike-receiving sockets integral therewith and extending therefrom, and a tap sole secured to said mid-sole and having a plurality of apertures therein for receiving said sockets.

2,745,198
MERCHANDISE DISPLAY CAP FOR MECHANICAL PENCILS
Melven V. Nelson, Chicago, Ill., assignor, by mesne assignments, to Cory Corporation, a corporation of Delaware
Application November 5, 1951, Serial No. 254,946
1 Claim. (Cl. 40—19)



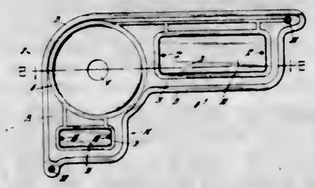
A display cap detachably and frictionally mounted on and encompassing the upper end of a pencil and enclosing an eraser and its bushing in the upper end of the barrel of the pencil with the eraser exposed upon removal of the cap, said cap visably displaying a product contained therein and comprising a transparent cylindrical capsule providing a removable cap slidably and frictionally mounted on the eraser end of the pencil and removable therefrom to expose the eraser, the interior of the capsule being hollow to provide an upper display cavity and a lower enclosure for the eraser, its bushing and the adjacent upper end of the barrel, the interior of said capsule having spaced annular shoulders providing stepped enlargements with the upper shoulder located at the lower end of the cavity, the upper cavity receiving and displaying a flowable mass partially filling the cavity and viewable through the transparent wall, a closure for the lower end of the display cavity and affixed to the upper shoulder in the interior of the cap to seal the cavity and its contents against leakage, the hollow interior of the cap below the closure conformably receiving and protecting the eraser on the upper end of the barrel with another of said shoulders being located below said closure and between it and the lower end of the cap to provide a stop for the upper end of the eraser bushing and locating the eraser within the hollow of the cap beneath the closure, the lower portion of the exterior of the cap from adjacent the closure to the lower end of the cap being reduced in diameter and provided with a band of non-transparent material tightly encompassing and reinforcing the end of the cap of reduced thickness and concealing the eraser, its bushing and the adjacent upper end of the barrel.

2,745,199
VEHICLE DESTINATION SIGN MECHANISMS
Russell Kreinberg, Narberth, Pa., assignor to Electric Service Manufacturing Co., Philadelphia, Pa., a corporation of Pennsylvania
Application May 21, 1952, Serial No. 289,127
7 Claims. (Cl. 40—86)



4. In a vehicle destination sign mechanism of the character described, a frame structure comprising a pair of horizontally spaced rigid side members, a pair of vertically spaced roller shafts revolubly mounted between said side members, and a pair of bearing units mounted upon one of the side members of said structure, there being one such unit for each of said roller shafts, said units each comprising a one-piece sheet material housing having a main wall and side walls extending laterally from said main wall for maintaining said main wall in spaced relation to the associated side member of said frame, a pair of bearing blocks each disposed in close adjacent relation to said main wall and shiftably fitted between said main wall and the associated side member of said frame on opposite sides of a terminal portion of said roller shaft projected through said main wall, the proximate surfaces of said bearing blocks being complementally notched for conjointly receiving said terminal roller shaft portion, and said main wall and one of the sidewalls of said housing being formed to permit shifting movement of said terminal roller shaft portion laterally of its axis into said bearing to its position aforesaid between said bearing blocks, and means in said housing for biasing one of said bearing blocks toward the other, said bearing units being positioned each with its biased bearing block on the side of its terminal roller shaft portion remote from the other roller shaft.

2,745,200
DOOR PLATE
Joseph Aimé Lavallee, Springfield, Mass.
Application November 2, 1953, Serial No. 389,785
1 Claim. (Cl. 40—125)



An identifying plate construction for associating with a door and a lock thereof comprising in combination, a plate from a sheet of metal having a main part and a secondary part extending therefrom, said main part having a circular portion depressed downwardly from the upper face of said plate to receive and underlie the escutcheon of a lock and provided centrally thereof with an opening for the passage of a lock part therethrough, said secondary part having a portion depressed downwardly from the face of said plate and an identification plate therein, and means securing said identification plate in said depression, said plate being provided with openings for means securing said plate to a door.

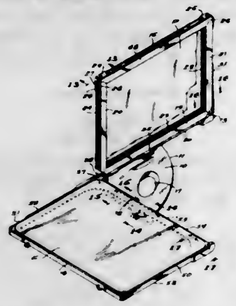
2,745,201
DISMOUNTABLE PLACARD
Savio Giuseppe, José V. Viviani, and Celso Madueño Silva, Sao Paulo, Brazil, assignors to Sociedade Industrial Silpa Ltda, Sao Paulo, Brazil, a firm of the United States of Brazil
Application July 16, 1952, Serial No. 299,124
1 Claim. (Cl. 40—140)



A demountable sign board comprising in combination, a flat base; a plurality of elongated sign supporting mem-

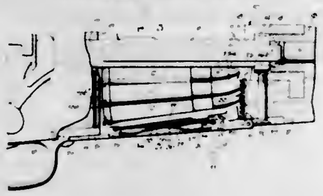
bers each having a longitudinal and a pair of parallel lateral projections, said longitudinal and lateral projections being respectively provided with longitudinal lugs having concavely bulged surfaces the edges of which are spaced from each other so as to form grooves, said elongated sign supporting members being arranged on said flat base parallel to and slightly spaced from each other so as to form elongated spaces between adjoining lateral projections; elongated holding members arranged in said spaces, each having oppositely arranged holding projections extending along the length of the holding members and adapted to overlap the lateral projections of adjacent elongated supporting members and to hold the same, and means securing at least said elongated holding members to said flat base.

2,745,202
ARTISTS' PALETTE AND PANEL SUPPORT
Charles R. Wood, New Rochelle, N. Y.
Application December 22, 1953, Serial No. 399,658
6 Claims. (Cl. 41—5)



3. In a palette and panel support, a plate in the form of a sector having a thumb receiving opening for supporting the plate by one hand of a user, a palette frame, a panel, means connecting said panel with said palette frame at one corner thereof for arcuate movement of the panel toward and away from one edge of said palette frame and for turning movement from a position in which the panel is in upright relation to a position in which the panel is disposed in substantially parallel relation to said palette frame, means pivotally connecting said plate to said palette frame on an axis extending centrally through the aforesaid means for movement of said plate from a position beneath said palette frame to a position projecting outwardly at one side thereof.

2,745,203
FIREARM CARTRIDGE PROTECTOR
Carl E. Ruple, Colorado Springs, Colo., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application May 20, 1952, Serial No. 288,815
5 Claims. (Cl. 42—50)



1. A recoil-absorbing box-magazine for use with a firearm, comprising a rigid frame having opposite sidewalls and opposite endwalls for the reception of a plurality of cartridges in orderly column arrangement; and a shock absorber pad of resiliently compressible material mounted in said frame and lining only that endwall thereof which is nearest the noses of the inserted cartridges, said shock absorber pad confronting those noses of the inserted cartridges in said frame which are within the confines of the latter, and being resiliently compressed on impact with the adjacent cartridge noses.

2,745,204
FISH SPEAR
Virgil O. Myers, Milwaukee, Wis., assignor of forty-nine per cent to Herman E. Myers, Minneapolis, Minn.
Application July 15, 1954, Serial No. 443,480
5 Claims. (Cl. 43—6)



1. A fish spear comprising a shank, a tip pivotally and slidably attached to the front end of the shank, and spring means releasably holding the tip in alignment with the shank during flight of the spear and releasing the tip upon retracting movement of the spear from an object penetrated thereby for swinging the tip at an angle to the shank.

2,745,205
ELECTRICAL FISHING EQUIPMENTS
Wilhelm Kafka, Tennenlohe, near Erlangen, Germany, assignor to Siemens-Schuckertwerke, Aktiengesellschaft, Berlin-Siemensstadt, Germany, a corporation of Germany
Application August 9, 1950, Serial No. 178,427
Claims priority, application Germany August 10, 1949
10 Claims. (Cl. 43—17.1)



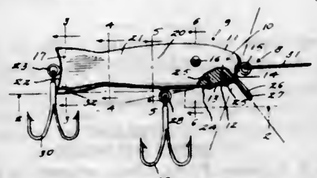
1. An electrical circuit adapted for use in discharging electric current through a pair of spaced electrodes immerged in sea water, comprising a direct current source, a condenser continuously connected to said source when in operation to be electrically charged thereby, periodic switching means connecting the electrodes to the condenser at the instant of highest charge therein for oscillatively discharging said condenser through the sea water, and a choke coil connected in series with said condenser and with said direct current source whereby said condenser is oscillatively charged, said choke coil being adapted to limit the charging current of said condenser during its discharge period and as long as the countervoltage of said condenser is low, said switch means being operative to effect disconnection of said electrodes from said condenser as the discharge current of said condenser through said salt water passes through zero.

2,745,206
FISH LURE
J. Wilson Gaw, Seattle, Wash.
Application February 5, 1954, Serial No. 408,402
3 Claims. (Cl. 43—42.06)



1. A fish lure of the character described comprising relatively movable opposite end members and an intermediate member, said opposite end members being of buoyant, cork-like material and said intermediate member being of resilient sponge rubber, or the like, adapted to be impregnated with a fish attracting oil for automatic dissipation therefrom by the manipulation of the material as effected by relative movement of said members that result from functional use of the lure.

2,745,207
FISHING LURE
John E. Akkanen, Sault Ste. Marie, Mich.
Application June 19, 1953, Serial No. 362,776
4 Claims. (Cl. 43—42.47)



1. In a lure of the character described, an elongated rigid lure body having a forward part defining a head portion and a rear part defining a tail portion, said head portion having a horizontal axis and a vertical axis and being of substantial thickness both horizontally and vertically thereof relative to the remainder of the lure body, said lure body being tapered in thickness both horizontally and vertically from adjacent said head portion to adjacent the tail portion thereof, said tail portion being wide and thin relative to the tapered lure body portion and being substantially flat and disposed in the plane at an angle to the horizontal and vertical axes of said head portion, said lure body being twisted from adjacent said head portion to the tail portion, a plate secured to said lure body and extending downwardly and forwardly from the underside of the forward end of the head portion thereof, said plate functioning with the tail portion to cause the lure body to oscillate about its longitudinal axis when drawn through the water or when held in a moving body of water with the head portion thereof facing into the current.

2,745,208
FISHHOOK
August E. Zech, Albany, N. Y.
Application August 7, 1953, Serial No. 373,001
2 Claims. (Cl. 43—44.8)



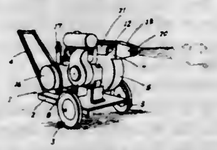
1. A fish hook adapted for use with live bait and comprising a shank, an eye, a sharp pointed hook portion having a barb adjacent the point thereof, and a bait holding element; said element comprising a pin of stiff but resilient wire secured at one end to said shank closely adjacent said eye and having a sharp pointed free end; said pin having a first portion extending outwardly from said shank and substantially at right angles thereto at a point adjacent said eye, and a second, straight portion of a length extending beyond said hook portion and depending from said first portion and in substantially coplanar but laterally spaced relation to said shank; said second portion, when unstressed, extending over the point of said hook portion and in laterally spaced relation thereto to facilitate affixing a minnow to said element but adapted to be sprung towards said hook portion until a portion thereof spaced from said free end will interlock with said barb when said pin is released.

2,745,209
LIVE CRICKET DISPENSER
Jerome W. Kimball, Savannah, Ga.
Application October 12, 1955, Serial No. 539,994
5 Claims. (Cl. 43—55)



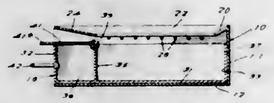
1. A live cricket dispenser comprising a first cylindrical casing closed at the top and open at the bottom, said casing being formed of material adapted to permit the circulation of air therethrough and having shape retaining characteristics, a second impervious container slidably mounted within the open end of said first container, the inner end of said second container being open and the outer end thereof being closed, said second container being of less length than said first container, stop means for limiting the inward displacement of said second container through said first container, second stop means limiting the outward displacement of said second container through said first container, said second container having an opening therein adapted to permit the loading of a quantity of live crickets therewithin when in the outer position relative to said first container, said first container having a chute extending outwardly therefrom adapted to be aligned with said second container opening, when said second container is in a closed position and spring closure means at the end of said chute.

2,745,210
INSECTICIDE DISTRIBUTOR
Raymond L. Hild, Biggs, Calif.
Application July 7, 1953, Serial No. 366,563
4 Claims. (Cl. 43—125)



1. A device, for distributing an insecticide solution, comprising a blower having a discharge duct from which a forceful air stream is projected by said blower, an internal combustion engine driving the blower, an exhaust pipe assembly leading from the engine, said assembly including a discharge tube disposed within the duct in position to discharge the exhaust gases into the air stream in the same direction of flow, a tank for a quantity of insecticide solution, and an insecticide solution supply pipe connected between the tank and said exhaust pipe assembly intermediate the ends of the latter: said exhaust pipe assembly including a pipe section outside of said blower and its duct, and the supply pipe for a portion of its length being in heat exchange contact with said exhaust pipe section.

2,745,211
COMBINED SOAP AND RAZOR BLADE RECEPTACLE
Ira J. Proffitt, Los Angeles, Calif.
Application August 25, 1953, Serial No. 376,427
1 Claim. (Cl. 45—28)



In a receptacle for soap and razor blades, a rectangular hollow body having bottom, side, back end and top walls, and an open front end, said top wall having an open depressed portion spaced inwardly from its side and front and back edges, the portions of the top wall bounding said depressed portion being outwardly and upwardly inclined and connecting the top edges of the side and back end walls, a plurality of uniformly spaced soap supporting bars extending transversely across the depressed portion, a drawer housed within said body, a partition extending transversely within the drawer adjacent the front end of the drawer to form a razor blade compartment, a lid for said compartment hingedly connected with the top edge of said partition, the inclined portion at the front end of said depressed portion having a width substantially equal to that of said compartment to provide a clearance to allow opening of the lid sufficiently for the insertion of used razor blades into the compartment without drawer movement, and a pull loop on the front end of said drawer.

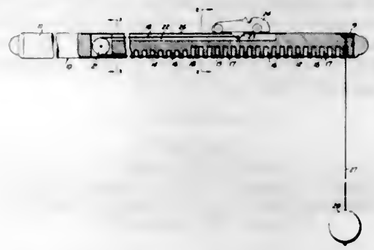
2,745,212
TUFTED UPHOLSTERY AND METHOD OF MAKING SAME
Leonard Guzzino, Livingston, N. J.
Application January 24, 1955, Serial No. 483,628
3 Claims. (Cl. 45—138)



1. In the making of an upholstered unit, the combination of a backing or supporting piece, a plain layer of uncompressed but compressible padding material on said backing piece, the latter having a plurality of regularly spaced, pre-formed holes depthwise therethru, a pre-moulded sheet of thin, easily flexible synthetic plastic material, having a tufted formation, lying on the uncompressed padding material, the deep or intertuft areas of the plastic material lying over the holes previously formed in the padding material, and fastening means passing thru sheet of plastic material at the deep or intertuft areas thereof and thru the holes preformed in the padding material, and also thru the backing piece.

2,745,213
GAME DEVICE
George R. Bellett, Fairfax, Calif., assignor to Peter H. Behr, San Francisco, Calif.
Application May 10, 1954, Serial No. 428,658
7 Claims. (Cl. 46—1)

1. In a device of the character described, an elongated stick, a mobile object adapted to track along one side of the stick from a starting to a finished position, a string attached to the object for moving the same and having the other end attached to said stick, a weight separate from the stick, a cord attached to one end of the stick and to the weight whereby upon waving the stick in a generally circular manner the weight is caused to swing about the stick and the cord wound upon the stick, and means upon the



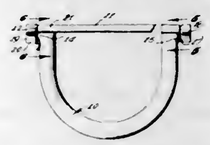
stick responsive to the wrapping of the cord thereon for pulling the string to move the object toward the finished position.

2,745,214
REED SOUNDER
George S. Lawson, Perry, Ohio, assignor to C. M. Penney Co., Cleveland, Ohio, a corporation of Ohio
Application July 18, 1952, Serial No. 299,595
2 Claims. (Cl. 46—117)



1. A device of the character described, comprising complementary parts of similar construction joined to each other across a diametral plane, said parts molded to conjointly provide reed compartments increasing in depth from the center of the device to the ends thereof, each part having an amplifying chamber extending longitudinally of the device and communicating with said reed compartments, each of said amplifying chambers decreasing in depth in both directions longitudinally from the center of the device, and a single reed extending across said amplifying chambers and into said reed compartments, said parts being provided respectively with dowel pins and dowel openings to receive said pins, said reed being provided with recesses in its sides through which said dowel pins pass to retain said reed against longitudinal displacement from said device.

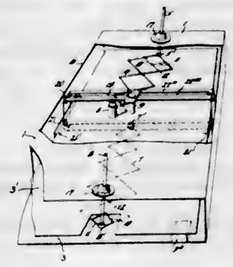
2,745,215
TURKEY CALLER
Walter W. Puckette, Gladys, Va.
Application April 16, 1954, Serial No. 423,645
1 Claim. (Cl. 46—180)



In a turkey caller, the combination which comprises a U-shaped bow having a continuation at each of its ends

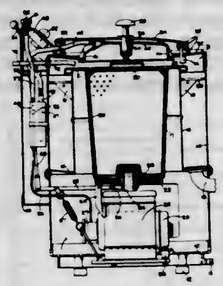
comprising an outwardly extended projection substantially at right angles thereto with at least one circumferential groove in each projection spaced from the outer end thereof, each bow end and projection constituting a continuous flat surface, a flat strip of elastic material stretched across the open side of the bow and in contact with the said flat surfaces, said elastic strip being further extended across the end surfaces of the projections and folded back against the sides of the projections opposite to the sides on which said flat surfaces are positioned, and elastic bands positioned around the projections urging portions of the elastic strip into the grooves of the projections so that said strip is free to vibrate against the ends of the bow to produce a sound.

2,745,216
MAGNETIC GAME APPARATUS
Lothar Stanetzki, Bonn (Rhine), Germany
Application February 9, 1955, Serial No. 487,050
Claims priority, application Germany April 10, 1952
20 Claims. (Cl. 46—240)



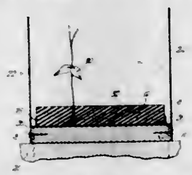
1. A toy playboard comprising a box of comparatively shallow depth having a bottom wall and a top wall on which magnetizable figures may freely move; a magnet movably mounted beneath said top wall, said magnet having sufficient strength to cause a magnetizable figure within the effective range of the magnetic field of said magnet to move therewith so as to follow the movements of the magnet as the latter is moved along the bottom surface of said top wall; a control lever universally pivoted on the top wall adjacent the field of movement of the figures thereon, said lever having an outer arm extending out exteriorly of said box and an inner arm extending into the interior of the box; and means connected to said inner arm and disposed in the interior of said box constructed and arranged to transmit to said magnet an amplified movement from the movement of said control lever to any desired position, so as to carry with it a figure to any desired position on the entire play surface of the playboard, said means comprising a lazytongs device comprising a pair of first arms pivotally connected together at one end and at their other ends pivoted to the extremities of the crossed links of the lazytongs device; said crossed links forming a series of pairs pivoted to one another at the mid-lengths thereof, the extremities of the first pair of crossed links being pivoted respectively to the ends of said first arms; a stationary pivot within the area of the first parallelogram of the lazytongs device, about which pivot the lazytongs is adapted to fulcrum; a pair of links articulated at one end to said stationary pivot and at the other ends thereof pivoted respectively to intermediate points on said first arms so as to form a smaller parallelogram therewith; and a pivotal connection between the extremity of said inner arm of the control lever and the pivotal junction of said first arms.

2,745,217
MACHINE FOR IMPROVING THE KEEPING QUALITIES OF PLANTS AND RESTORING WILTED PLANTS TO FULL FRESHNESS
Richard Lucius Gold, Erdington, Birmingham, England, and Paul Froeschel, Ghent, Belgium
Application May 5, 1953, Serial No. 353,102
8 Claims. (Cl. 47—1)



1. Apparatus for the treatment of plants, wherein water is caused to enter into the intercellular spaces of the plants, comprising a drum adapted to contain the plants submerged in water and mounted for rotation about a vertical axis for drying the plants; a closure lid for the open end of said drum having air-tight engagement with the drum; a vacuum pump operatively connected to the drum for creating a vacuum therein when the lid is in position; and a water trap including a closed tank having a pipe from the suction side of the pump entering its lower part and extending to near the top of the tank, a pipe connected to the lid of the drum entering the upper part of the tank and extending to near the bottom thereof, and a pipe connected to the upper part of the tank leading to an air release valve adapted to be operated to release vacuum created within the drum when the lid is in position on the drum.

2,745,218
FLOWER HOLDER
Woodrow W. Cruce, Miami, Okla.
Application May 28, 1954, Serial No. 432,975
1 Claim. (Cl. 47—41)

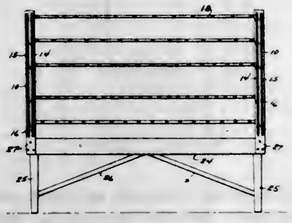


A holder of the kind described, comprising, in combination, a solid base plate having an uppermost flat surface; a porous, water absorptive, pierceable block atop the base and having a lowermost flat face and upright, marginal, side edges; and a continuous, waterproof, adhesive film on the block covering said lowermost face and at least a lower portion of all of said marginal edges of the block, said film extending between the block and the base and in engagement with both for mounting the block on the base.

2,745,219
PLANT SUPPORT
Ole Knud Olsen, Beloit, Wis.
Application February 27, 1953, Serial No. 339,366
1 Claim. (Cl. 47—47)

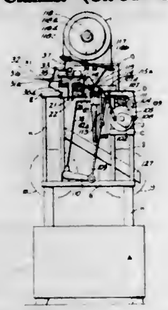
In a plant support, a bench including a horizontally disposed tray, a plurality of vertically disposed legs for supporting said tray, inclined braces extending between said legs and tray, a plurality of vertically disposed spaced

parallel posts extending upwardly from the corners of said tray and secured thereto, each of said posts being provided with a pair of spaced parallel longitudinally extending slots, clamping blocks arranged contiguous to the inner surfaces of said posts, said blocks adapted to be adjusted vertically along said posts, each of said blocks being provided with a pair of openings registering with the slots in said posts, there being countersunk recesses in said blocks communicating with said openings, securing elements extending through said registering openings and slots for detachably connecting said blocks to said posts and said securing elements having heads thereon seated



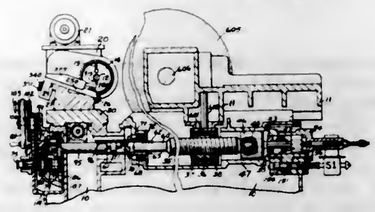
in said countersunk recesses, a plurality of rectangular frames each including spaced parallel side rails and spaced parallel end rails, said side and end rails being secured together, a first set of spaced, parallel horizontally disposed strands extending between said side rails and secured thereto, and a second set of spaced, parallel strands extending between said end rails and secured thereto, said second strands coacting with said first strands to define rectangular areas therebetween, said rails being hollow and said rails being each provided with a plurality of spaced apertures for the projection therethrough of portions of said strands, said frames being freely positioned on said blocks.

2,745,220
AUTOMATIC LATHE MACHINE
Helmuth C. Sonntag, Bloomfield, N. J., assignor to Glenwood Machinery Associates, Inc., a corporation of New Jersey
Application September 24, 1952, Serial No. 311,180
6 Claims. (Cl. 51—154)



1. In an automatic lathe machine, the combination of a base; said base having a lonigtudinal axis, a feed assembly for work elements mounted in vertically spaced relation above said base at one end thereof, said assembly having an outlet opening in substantially right angular relation to said longitudinal base axis; a lathe assembly, including at least one pair of coaxially opposed headstock and tailstock members, in which said headstock members are rotatably supported in vertically spaced relation to said base, and in a line substantially parallel to said base axis, and said tailstock members are rotatably mounted below said headstock members for limited vertically reciprocal movement toward and away from the headstock members to engage and hold a work element between them; a work element transport assembly mounted on said base, including at least two individual work element carrier members disposed in spaced relation longitudinally of said base and supported for limited, reciprocally arcuate movement toward and away from said headstock members and for limited reciprocal movement longitudinally of said base, said individual carrier elements adapted to receive individual work elements from said feed assembly outlet, to position each element between a pair of headstock and tailstock members, and to remove each element therefrom in sequence; an assembly for engaging said work elements in a lathe operation while held between a pair of headstock and tailstock members, including a tool carriage slidably mounted on said base for reciprocal movement laterally thereof toward and away from the common vertical axis of said paired headstock and tailstock members, and at least one operational tool supported on said carriage to engage a work element held in said lathe assembly between paired headstock and tailstock members therein; a first power train connected for continuous rotation of headstock members in said lathe assembly during operation of said machine; a drive assembly mounted on said base for actuation of said feed, lathe, transport and other operational assemblies, said drive assembly including means for synchronizing and regulating the function of said several operational assemblies; and a second power train mounted on said base for energizing said drive assembly.

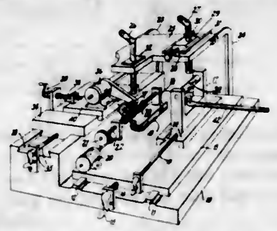
2,745,221
INFEED CONTROL
George E. Comstock 3d, Holden, Mass., assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts
Application November 16, 1954, Serial No. 469,200
13 Claims. (Cl. 51—165)



6. In a grinding machine, an infeed apparatus, a control for said infeed apparatus to cause it to slow down, a workpiece engaging feeler, mechanism associated with said feeler to register the high point of the workpiece, mechanism recording the progress of said infeed, and a connection between said mechanisms also connected to said control to actuate said control to slow down said infeed apparatus when said mechanisms give measurements of the high point of the workpiece and the position of the infeed having a predetermined relation to each other.

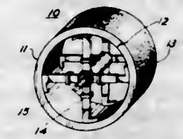
2,745,222
METHOD AND APPARATUS FOR MACHINING ARTICLES OF MANUFACTURE
James F. Charf and Henry S. Himes, Dayton, and Earl E. Todd, Jr., Covington, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 27, 1952, Serial No. 306,684
11 Claims. (Cl. 51—165)

1. Apparatus for precision machining an article which is designed to cooperate with a particular element including in combination, first sight means for locating reference indicia on said element, second sight means for locating corresponding reference indicia on said article, means to support the article and element so that the first reference indicia on the element and article can be located by said first and second sight means, means operatively connected with said article and element for simultaneously moving them relative to said first and second sight means to locate second reference indicia on



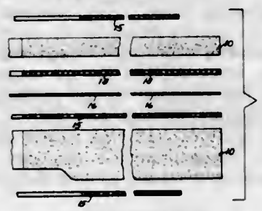
the element and article by said first and second sight means, and means associated with said article after it is so moved for machining portions of the same to obtain a predetermined dimensional relationship between the reference indicia of the article and the reference indicia of the element.

2,745,223
GRINDING DRUM
Harry A. Toulmin, Jr., Dayton, Ohio, assignor, by mesne assignments, to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
Application March 2, 1954, Serial No. 413,613
3 Claims. (Cl. 51—190)



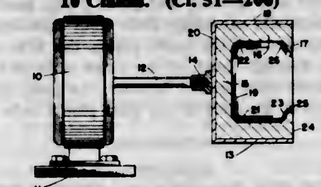
1. A grinding wheel comprising a resilient metallic supporting cylinder, an expansible supporting frame positioned within said cylinder, an abrasive band mounted upon the outer surface of said cylinder, and continuous grooved means on said cylinder for circulating a coolant between said cylinder and said band.

2,745,224
REINFORCED ABRASIVE WHEEL AND METHOD OF MAKING SAME
John R. Erickson, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts
Application May 12, 1955, Serial No. 507,895
2 Claims. (Cl. 51—195)



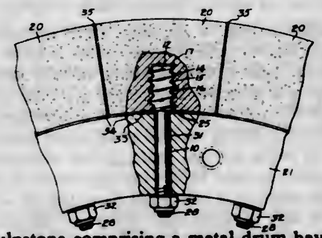
1. An abrasive wheel comprising a disc with a hole centrally located therein, said disc being made of abrasive grains bonded with a matured phenol formaldehyde resin, and said disc containing three discs of woven glass cloth, one on each side and one intermediate, and a disc of woven cloth between the intermediate glass cloth and one of the glass cloth discs on the side of the wheel, said woven cloth being made of yarn having a tensile strength of at least 50,000 pounds per square inch and an elongation of at least 15%, and paper between the intermediate glass cloth disc and the woven cloth disc, the latter being bonded to the abrasive grains bonded with phenol formaldehyde through the glass cloth disc at an inner zone defined as three inches less in diameter than the diameter of the wheel with a tensile strength of from 500 to 1090 pounds per square inch and bonded at an outer zone defined as the outer half inch of the wheel on the radius with a tensile strength of from 500 to 1140 pounds per square inch, there being paper between the intermediate glass cloth and the woven cloth in at least 90% of the area of the inner zone, the woven cloth being nearer to one side of the wheel than to the other.

2,745,225
LAPIDARY WHEEL
Phillip A. Vonada, State College, Pa.
Application June 27, 1955, Serial No. 518,247
10 Claims. (Cl. 51—206)



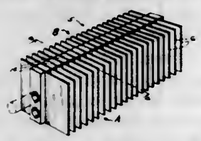
1. Means for grinding and polishing gemstones or the like comprising: a hollow cylindrical body open at one end and having a wall closing its other end; an inwardly protruding lip rigidly connected to the periphery of the open end and adapted to retain a fluid within said body; and means connected to said body whereby said body may be rotatably driven.

2,745,226
PULPSTONE
Walter F. Beth, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts
Application May 31, 1955, Serial No. 511,832
6 Claims. (Cl. 51—206.5)



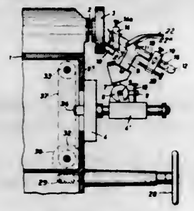
1. A pulpstone comprising a metal drum having radial holes therethrough at regularly spaced intervals, a set of abrasive pulpstone blocks with threaded holes of shape, size and number to cover the major portion of the outer surface of said drum leaving however narrow spaces between adjacent blocks, holding bolts with threaded heads with pitch of at least .080" screwed into said threaded holes and in threaded engagement with said blocks, there being at least one bolt for each block and each bolt extending through one of the holes in the drum, and nuts on the bolts inside of said drum said nuts being tightened to place said bolts under absolute stress of at least 3,000 pounds, said threaded heads being held by said drum to stop the tensile stress from extending into the heads and there being substantially no tension between the heads and the blocks with the pulpstone at rest, and room temperature setting cement between the outside surface of the drum and the adjacent surfaces of the blocks.

2,745,227
PROPULSION HEAD FOR GLASS GRINDING MACHINES
Paul J. Pilger, North Miami, Fla.
Application September 10, 1953, Serial No. 379,322
5 Claims. (Cl. 51—216)



1. A propulsion head assembly comprising a multiplicity of guide plates spaced apart a distance substantially equal to the thickness of glass plates, the edges of which are to be ground, and with the edges of the guide plates aligned with each other and a core which ties all of said plates together, said core comprising filler members lying between and spacing said guide plates apart and integral tie members extending from filler member to filler member and through the guide plates, the filler members terminating enough short of the outer ends of the guide plates to leave open spaces between the guide plates for the reception of the ends of the glass plates to be ground.

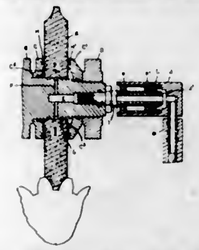
2,745,228
DEVICE FOR SHARPENING TWIST DRILLS
Eugen Nädelin, Ebingen, Wurttemberg, Germany, assignor to Gottlieb Gühring, Ebingen, Wurttemberg, Germany
Application May 25, 1953, Serial No. 357,334
Claims priority, application Germany May 28, 1952
11 Claims. (Cl. 51—219)



1. In combination, a grinding wheel presenting a flat grinding surface to which a drill point is to be presented for grinding, and a drill shaping device comprising a shaft lying in a plane normal to the grinding surface and at an angle to said surface so that a projection of its axis intersects said grinding surface at an acute angle, a holder mounted to swing on said shaft, a first adjustable carrier rigidly secured to said holder having means to grippingly support the point end of a drill mounted on said holder so that the axis of such drill intersects the axis of said shaft at a point spaced from the grinding surface, a second adjustable carrier, a centering spindle mounted on said second adjustable carrier, each of said carriers and the adjacent holder structure having indicia thereon whereby said carriers can be adjusted to accommodate drills of different diameters, said means to grippingly support the point end of a drill including a V-grooved block and a spring pressed pin extending into said V-groove to engage the flute of a drill lying in said V-groove.

2,745,229
LIQUID COOLED GRINDER WHEEL
Samuel G. Brady, Royal Oak, Mich., assignor to The Gear Grinding Machine Company, Detroit, Mich., a corporation of Delaware
Application January 24, 1955, Serial No. 483,697
2 Claims. (Cl. 51—267)

1. A liquid cooled grinding wheel comprising a grinder body sufficiently porous for passage of liquid therethrough, a hollow rotary spindle on which said body is mounted having a helical channel in the portion of its surface surrounded by said body with radial ports connecting the space within the spindle and said channel, clamping plates on opposite sides of said body dished to



form chambers in communication with said channel, sealing means between said body and plates at the periphery of said chambers and also between said plates and spindle and a connection at the outer end of said spindle for the introduction of cooling liquid under pressure.

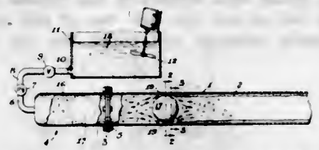
2,745,230
GUARD FOR GRINDING OR POLISHING WHEELS
Olav Marius Krogsgaard, Aarhus, Denmark
Application November 8, 1954, Serial No. 467,527
7 Claims. (Cl. 51—270)



1. A guard for a grinding wheel comprising a guard wall adapted to substantially enclose said wheel along its periphery to control the flow of grinding particles carried in the air current produced by rotation of said wheel, said guard wall having a front end wall positioned closely adjacent to the working place of said wheel and having a rearward section positioned remotely from said wheel with an aperture formed at the same level as and substantially opposite said working place, a guiding plate having one end thereof positioned substantially within said aperture and extending forwardly therefrom with the other end terminating adjacent to said front end wall, said front end wall having an inner concave portion extending above and below the front end of said guiding plate, said guiding plate being adapted to form a first channel between said guiding plate and said grinding wheel, a curving channel between said concave portion and the front edge of said guiding plate and a second channel between said guiding plate and said guard wall, said grinding wheel being mounted for rotation and adapted to direct part of the air current rearwardly below said grinding wheel and through said aperture and to direct the other part of the air current forwardly through said first channel, around through said curved channel, rearwardly through said second channel and through said aperture, and said second channel having approximately the same area as the upper part of said aperture formed between said guiding plate and said guard wall.

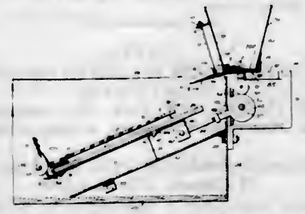
2,745,231
METHOD OF CLEANING THE INSIDE OF PIPE
Charles A. Prince, Shreveport, La., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
Application April 12, 1954, Serial No. 422,529
5 Claims. (Cl. 51—282)

1. The method of dislodging scale from inside a pipe line having a generally uniform diameter cylindrical bore which comprises inserting into the pipe line at one end a generally spherical rigid object having a diameter slightly less than that of the inside of the pipe line and introducing into the pipe line behind the said object an abrasive-laden



liquid under pressure so as to force the abrasive liquid between the said object and the inside of the pipe line to produce jetting and abrasion against the scale and move the said object along the bore of the pipe line as the scale is thereby dislodged.

2,745,232
APPARATUS FOR STACKING FLAT PARTS
Harry Alfandre, Jamaica, N. Y., and Anthony Dominic Ianucci, Waterbury, Conn.; said Ianucci assignor to said Alfandre
Application November 7, 1952, Serial No. 319,238
15 Claims. (Cl. 53—126)



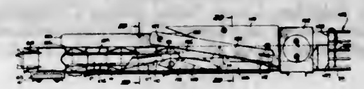
10. Apparatus for stacking identical flat parts in face-to-face vertical disposition, comprising a magazine longitudinally vibratory in an inclined plane in the direction of the inclination, said magazine having a longitudinally extending channel closed at its lower end and being throughout of slightly greater width than any of said flat parts, the bottom of said channel having raised longitudinally extending corner formations defining a depressed portion extending longitudinally and medially of said channel whereby portions of said flat parts will be spaced from the bottom of said channel when said flat parts are positioned face down therein, said channel being open at its upper end for the reception of said flat parts in face-down disposition, and means for longitudinally vibrating said magazine, whereby said face-down flat parts will slide down said channel towards the lower end thereof into overlapping dispositions and be progressively urged into stacked vertical disposition through a mutual wedging action.

2,745,233
SEMIAUTOMATIC BOOK-FORMING MACHINE AND METHOD
William R. Collings, Harold L. Browne, and Arthur A. Weirauch, Midland, Mich., assignors to Dow Corning Corporation, Midland, Mich., a corporation of Michigan
Application March 10, 1951, Serial No. 214,976
5 Claims. (Cl. 53—139)



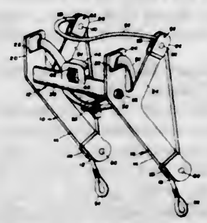
1. A unit for stapling and cutting off books from a sub-assembly which comprises: a holding-and-forming die having two hinged covers for receiving a multiple-book sub-assembly; means for resiliently pressing the covers against the sub-assembly; a plurality of staplers adapted to insert a staple in each book-wide unit of the assembly while the assembly is held in the die; and a plurality of slitting discs arranged to cut the sub-assembly into a plurality of books while the assembly is held in the die.

2,745,234
WRAPPING MACHINE
Joseph T. Schooler, Burbank, Calif.
Application December 29, 1952, Serial No. 328,485
25 Claims. (Cl. 53—379)



1. In a machine for completing the wrapping of packages having a circumferential wrapping of thermoplastic material initially applied thereto, the combination of a supporting frame, a pair of spaced oppositely disposed package end folding devices mounted on said frame and defining a passageway for the movement of a package therethrough, each of said devices comprising a base member secured to said frame carrying flap forming and folding devices including a lower leading edge intucking element, bottom flap primary and secondary folders, a guide rail extending parallel to said base member and mounted for vertical adjustment relative to said base member; said guide rail supporting an upper leading edge intucking element and a top flap primary folder, a top flap secondary folder having one end thereof pivotally connected to said guide rail and having the other end thereof pivotally and slidably connected to said base member; the mounting means for said guide rail comprising a pair of identical bellcrank members pivotally mounted on said base member and each having horizontal and vertical arm portions; said horizontal arm portions being connected to said guide rail and said vertical arms being interconnected by a link, and manually operable means engaging one each of said pairs of bellcrank members effective to rock said members uniformly and simultaneously in the same direction with resultant change in the vertical position of said guide rail and the folding devices carried thereby to accommodate the thickness of the package to be wrapped and sealed thereby, and sealing means for uniting the overlapping ends of an initially applied wrapping comprising a heating element disposed in said passageway.

2,745,235
HORSE TRAINING BRIDLE
Frank N. Evans, El Cajon, Calif.
Application October 22, 1954, Serial No. 464,037
5 Claims. (Cl. 54—7)

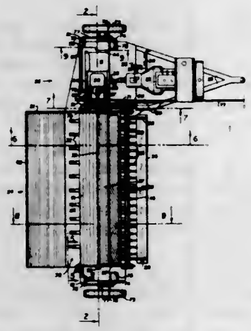


1. A horse training bridle comprising a bit, a pair of cheek pieces secured to the ends of said bit, said cheek pieces each comprising a plate having a lug and a depending lever arm and a guide arm angularly disposed be-

tween said lug and lever arm, said lug and lever arms having their inner terminals integral with each other and having their outer terminals spaced from each other, a nose engaging band having an intermediate, looped portion slidably engaging the guide arms, the portions extending from said intermediate portion slidably engaging and projecting from said lever arms, and means for attachment to reins at the nose engaging band portions projecting from said lever arms, and a jaw engaging strap secured to and between said lugs.

2,745,236
MACHINE FOR CLEARING LAND OF SAGEBRUSH AND THE LIKE

James T. Eskridge, Craig, Colo.; Wilma C. Eskridge, administratrix of said James T. Eskridge, deceased
Application March 13, 1952, Serial No. 276,247
2 Claims. (Cl. 56—23)

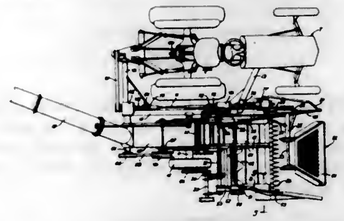


1. In a machine for cutting brush along a path and forming a windrow of cut brush alongside said path and having an endless chain of cutting elements and means to move said machine along said path and means to move said chain transversely of the path, along the front of the machine in one direction and along a rearward portion of the machine in the opposite direction, the combination therewith of a row of fingers along the front of the machine adapted to cooperate with said cutting elements to cut brush, a trough in the rearward portion of said machine aligned with, and along which, said rearward portion of said chain moves, said trough being open at its end toward which said rear portion of said chain moves and means for moving cut brush from the front of the machine into said trough, said cutting elements being adapted to engage brush deposited in said trough and move the same to and through said open end.

2,745,237
TRANSFER MECHANISM FOR USE IN HARVESTING MACHINES

Brantford G. Elliott, Royal Oak, Mich., assignor to Harry Ferguson, Inc., Detroit, Mich., a corporation of Delaware
Application January 26, 1953, Serial No. 333,191
8 Claims. (Cl. 56—60)

1. In a forage harvester, in combination, a rotatably driven cutter, a pair of horizontally disposed cooperating feed rolls disposed forwardly of said cutter for feeding material thereto, said feed rolls having a length substantially equal to the width of said cutter, material cutting and gathering means located forwardly of said feed rolls including a cutter bar having a length substantially greater than the length of the feed rolls, a first endless conveyor belt having a width approximately equal to the length of the feed rolls, guide rolls supporting said conveyor belt, one of said guide rolls being located closely adjacent said cutter bar for receiving material cut by the bar and the other closely adjacent said feed rolls for delivering material thereto, a second endless conveyor belt, guide rolls supporting said second conveyor belt at one side of said first belt, one of said rolls being located closely adjacent said cutter bar for receiving



material cut by the bar and the other disposed intermediate the rollers supporting said first conveyor belt, and a screw conveyor supported adjacent said other end of the second conveyor belt in a position to receive material therefrom and to move such material laterally of the second conveyor belt and deposit it on said first conveyor belt.

2,745,238
COUNTERBALANCED DRIVE MEANS FOR HARVESTERS

Luther H. Hopkins, Oak Park, Ill., assignor to International Harvester Company, a corporation of New Jersey
Application September 28, 1954, Serial No. 458,802
8 Claims. (Cl. 56—296)



1. For a harvester having a support and a cutter bar including an elongated sickle reciprocable thereon on a given line and a shoe connected to the cutter bar: sickle drive mechanism, comprising a carrier structure having means for the fixed mounting thereof on said shoe and having external means for pivotal mounting thereof on said support; driving means including a pair of laterally spaced counter-rotating shafts journalled on the carrier structure on axes disposed in a plane substantially at right angles to said line of reciprocation of the sickle, each of said shafts having a crank, a counterweight connected to each shaft diametrically opposite to the crank, and a driving connection operatively interconnecting each crank with said sickle and including a separate connecting rod extending between each crank and the sickle and pivotally connected thereto, said counterweights being phased to develop a counter-balancing inertia to the inertia of the sickle at each end of its stroke attendant to rotation of said shafts.

2,745,239
TWIST CONTROL BALLOON INCLOSURE

Chadwick B. Kingsbury, Elizabethton, Tenn., assignor to North American Rayon Corporation, New York, N. Y., a corporation of Delaware
Application April 6, 1953, Serial No. 346,893
7 Claims. (Cl. 57—100)

1. A yarn twisting machine for placing a substantial number of twists into the yarn per inch of yarn length comprising a yarn bobbin, means for rotating said bobbin to apply twist to the yarn as the yarn is being removed from said bobbin, and rigid means engaging the yarn for urging the twist existing therein away from the

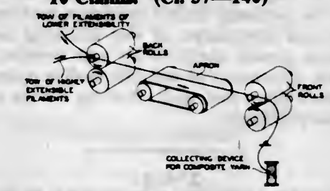
portion of the yarn immediately adjacent to said bobbin so that said portion of the yarn does not tend to wrap



thereinto the loose yarn filaments projected from said bobbin by the centrifugal action of the rotating bobbin.

2,745,240
COMPOSITE FILAMENT AND STAPLE YARN

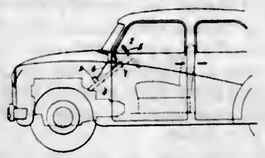
Joseph H. Brant, West Auburn, Maine, assignor to Bates Manufacturing Company, a corporation of Maine
Application May 18, 1950, Serial No. 162,709
10 Claims. (Cl. 57—140)



6. A method of producing a composite yarn having the appearance of a staple yarn, which comprises doubling a first tow of incompletely oriented, continuous and highly extensible filaments with a second tow of continuous filaments of substantially lower extensibility, drafting the doubled tows an amount sufficient to elongate permanently by at least about 100% and orient and impart maximum tensile strength to the filaments in the first tow without breaking them and to break the filaments in the second tow, and twisting the yarn so produced.

2,745,241
WATCH WITH AN AUTOMATIC WINDING MECHANISM FOR A MOTOR VEHICLE

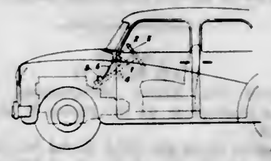
Ernest Morf, La Chaux-de-Fonds, Switzerland
Application March 30, 1953, Serial No. 345,426
Claims priority, application Switzerland March 11, 1953
8 Claims. (Cl. 58—46)



3. In a motor vehicle having a passenger compartment and a rotatable steering member, in combination, time indicating means mounted in the passenger compartment of the motor vehicle; belt means engaging said rotatable steering member for movement thereby during use of the motor vehicle and located remote from said time indicating means; spring means for operating said time indicating means mounted in said vehicle remote therefrom and adjacent said belt means; winding means including pulley means frictionally engaged and rotatable by said belt means during use of said vehicle, pawl and ratchet means driven by said pulley means, and a gear mechanism driven by said pawl and ratchet means and connected to said spring means for winding the latter means during movement of said belt means only while said spring means is not fully wound, said belt means slipping on at least one of said rotatable steering member and said pulley means when said spring means is fully wound; and elongated motion transmitting means connecting said spring means aranged adjacent said winding means and remote from said time indicating means to said time indicating means for operating the same.

2,745,242
TIMEPIECE

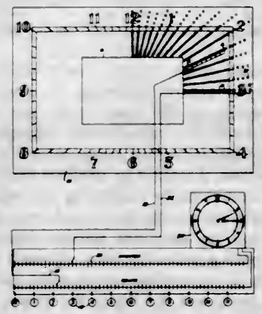
Ernest Morf, La Chaux-de-Fonds, Switzerland
Application April 14, 1954, Serial No. 423,105
Claims priority, application Switzerland March 10, 1954
12 Claims. (Cl. 58—46)



1. In a timepiece, in combination, support means; a gear train carried by said support means and including an input member turnably carried by said support means for receiving energy to be transmitted through said gear train to elements of the timepiece; winding means located distant from said support means and including a turnable output member; an elongated coil spring forming a spring motor for the timepiece; connecting means connecting one end of said coil spring to said input member and the other end of said coil spring to said output member for storing in said coil spring energy to be transmitted to said input member upon turning of said output member in one direction; a core located within said coil spring to sustain the same during tensioning thereof; and stop means operatively connected to said winding means for preventing the latter from tensioning said coil spring beyond a given upper limit and for preventing the coil spring from unwinding to a tension below a given lower limit.

2,745,243
ILLUMINATED CLOCK

Frank J. Schumacher, Chicago, Ill., assignor to General Outdoor Advertising Co., Inc., Chicago, Ill., a corporation of New Jersey
Application July 21, 1953, Serial No. 369,480
1 Claim. (Cl. 58—50)



In a clock, the combination comprising a face having hour and minute indicia, a plurality of minute-indicating lamps arranged in a plurality of radial rows alined with said minute indicia, said lamps being substantially equally spaced in said rows, each of said rows including a predetermined number of said lamps, means for sequentially

illuminating said rows of lamps to simulate a moving minute hand, a plurality of hour-indicating lamps arranged in a plurality of rows superimposed upon and in substantially exact alinement with the inner portions of said rows of minute-indicating lamps with the hour-indicating lamps in each row thereof alternating in interspersed fashion with the minute-indicating lamps in the inner portion of the alined row thereof, each of said rows of said hour-indicating lamps having substantially fewer lamps than the alined superimposed row of minute-indicating lamps, said rows of minute-indicating lamps extending outwardly substantially beyond said rows of hour-indicating lamps, and means for sequentially illuminating said rows of hour-indicating lamps to simulate a moving hour hand, the illuminated row of hour-indicating lamps being distinctly visible even when alined with the illuminated row of minute-indicating lamps.

2,745,244
CAR WATCH
Gérard Friedli, St. Blaise, Switzerland, assignor to Fabrique d'Horlogerie de St. Blaise S. A., St. Blaise, Switzerland
Application April 20, 1954, Serial No. 424,451
Claims priority, application Switzerland February 16, 1954
3 Claims. (Cl. 58—88)



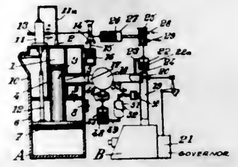
1. In combination a watch, a flat annular opened spring fixed on to the watchcase bottom, and having its two free ends extending in a direction transversely to the watchcase bottom, a socket on the watchcase, formed by a cavity in the watchcase bottom and by said free ends of the spring, and a piece integral with a spherical head held with strong friction within said socket, said piece being adapted to be screwed on to a motor car switch-key.

2,745,245
WATERPROOF WATCH CASE AND CRYSTAL
Hyman Dinstman, New York, N. Y.
Application August 23, 1954, Serial No. 451,594
1 Claim. (Cl. 58—90)



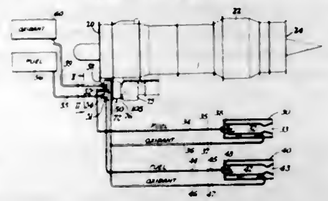
A waterproof watch crystal construction comprising a bezel having a central opening, an inwardly inclined crystal-gripping lip on the bezel at the top of the central opening, said bezel having a groove adjacent and under the lip, a crystal-supporting ledge on the bezel beneath the lip and groove, a crystal of resilient transparent material having a downwardly projecting rim portion adapted to fit against the lip on the bezel and over the groove in the bezel, a lug on said rim portion interlocking with said groove, and a reflector ring adapted to fit against the inner edge of the crystal rim to hold said rim against the lip on the bezel and the lug in the groove of the bezel, said rim of the crystal having an inner edge recess to seat the reflector ring, said crystal rim being of a thickness for the inner edge of the recess therein to extend beyond the crystal-supporting ledge on the bezel and interlock with the reflector ring, said reflector ring spanning the juncture between the rim of the crystal and the ledge of the bezel.

2,745,246
REGULATING DEVICE FOR A FREE PISTON GAS GENERATOR-TURBINE RECEIVER SYSTEM
Robert Huber, Bellevue, France, assignor to "Societe d'Etudes et de Participations, Eau, Gaz, Electricite, Energie," S. A., Geneva, Switzerland, a society of France
Application August 5, 1952, Serial No. 302,844
Claims priority, application France August 23, 1951
10 Claims. (Cl. 60—13)



1. A system including at least one machine for supplying gas under pressure and at least one receiver machine to be driven by said gas under pressure, conduit means for connecting the outlet of said gas supplying machine with the inlet of said receiver machine, an adjustable gas throttling device in said conduit means, adjustable means for feeding fuel to said gas supplying machine, a member movable in response to the variations of the difference between the pressures in said conduit means respectively upstream and downstream of said throttling device, and servo-motor means operative by said member for controlling the adjustment of said fuel feeding means to keep the pressure drop past said throttling device small and substantially constant.

2,745,247
ROCKET ASSISTED COMPOSITE ENGINE ARRANGEMENT
Dietrich E. Singelmann, New York, and James R. Hall, Buffalo, N. Y., assignors to Bell Aircraft Corporation, Wheatfield, N. Y.
Application January 23, 1952, Serial No. 267,710
6 Claims. (Cl. 60—35.6)

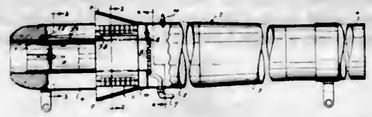


1. A composite engine arrangement for aircraft comprising, in combination with a turbojet engine of the type having as a part thereof an accessory gear box housing a gear system for driving accessory equipment and including a power take-off pad, a pump-fed rocket type auxiliary thrust engine, and a propellant pump for feeding said rocket engine, said pump being mounted upon said power take-off pad and mechanically coupled to and driven by said accessory gear system.

2,745,248
CONVERTIBLE PULSE JET AND RAM JET ENGINE
John S. Winter, Florissant, George W. Kallal, Overland, and James J. Mazzoni, Richmond Heights, Mo., assignors to McDonnell Aircraft Corporation, St. Louis, Mo., a corporation of Maryland
Application October 12, 1950, Serial No. 189,736
3 Claims. (Cl. 60—35.6)

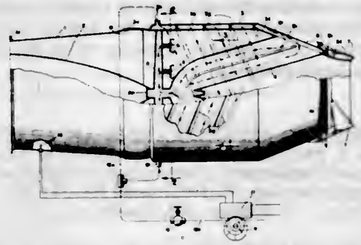
2. A jet engine comprising a casing, a tubular valve connected to one end of said casing, an air inlet cowling provided with an air inlet tube connected to said tubular valve, a valve member mounted in said air inlet tube to control the flow of air into the casing selectively for

ram jet operation and to cut off the flow of air for pulse jet operation, a sleeve slidably mounted in said air inlet tube to surround said valve member, said sleeve being movable to a position opposite said tubular valve to



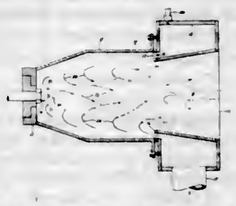
prevent flow of air through said tubular valve while the engine is operating as a ram jet; and means for directing air into said tubular valve while the engine is operating as a pulse jet.

2,745,249
REHEATER AND FUEL VAPORIZER FOR JET PROPULSION ENGINES
Daniel S. Sanborn, Palos Verdes Estates, Calif., assignor to The Ryan Aeronautical Co., San Diego, Calif., a corporation of California
Application October 22, 1946, Serial No. 704,894
4 Claims. (Cl. 60—35.6)



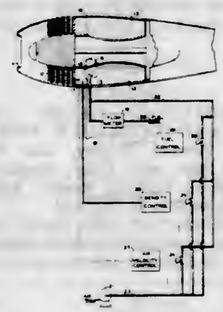
2. In a reheater for jet-propulsion engines of the class described, the combination of a diverging diffuser section adapted to be secured to the outlet side of the turbine wheel of a conventional turbo jet-engine, a fuel manifold near the diverging end of said diffuser, a fuel pump having a variable speed motor in connection therewith and arranged to supply fuel to said manifold, a temperature sampling bulb in said diffuser arranged to control the speed of said motor whereby said fuel pump increases the delivery of fuel to said manifold when the temperature in said diffuser drops and decreases the delivery of fuel to said manifold when the temperature in said diffuser rises as indicated by said temperature sampling bulb, and nozzles in connection with said manifold having disk shape portions and integral hollow stem portions provided with outlet openings at the upstream side of said disk shape portions.

2,745,250
REVERSE VORTEX COMBUSTION CHAMBER
Robert H. Johnson and Raymond H. Shackelford, Schenectady, N. Y., assignors to General Electric Company, a corporation of New York
Application September 26, 1952, Serial No. 311,754
5 Claims. (Cl. 60—39.65)



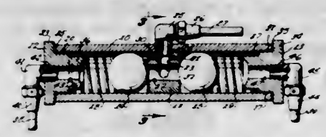
4. A combustion chamber comprising an imperforate casing with an open end and a closed end, fuel inlet means adjacent said closed end, and air inlet means located only adjacent said open end and facing said fuel inlet means, said air inlet means comprising a plurality of angularly directed nozzle openings for vortical admission of combustion and cooling air.

2,745,251
APPARATUS FOR ATOMIZATION OF A LIQUID FUEL
Robert M. Schirmer, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application December 26, 1951, Serial No. 263,171
5 Claims. (Cl. 60—39.74)



1. An apparatus for atomization of a liquid fuel which comprises in combination a gas assist fuel atomizer comprising a liquid fuel conduit and an air conduit; a fluid flow measuring device in communication with said fuel conduit, said device being adapted to vary the supply of air to said air conduit in response to changes in fuel flow; a linear air velocity measuring device associated with said atomizer, said device being so constructed and arranged that the supply of air to said air conduit is varied in response to changes in linear air velocity; and an air density measuring device associated with said atomizer, said device being so constructed and arranged that the supply of air to said air conduit is varied in response to changes in air density.

2,745,252
EMERGENCY VALVE CYLINDER FOR HYDRAULIC BRAKE SYSTEMS
Cole Lewis Reese and Louis Straus, Dallas, Tex.; said Reese assignor, by direct and mesne assignments, of twenty-one and one-half per cent to James Henry Stroman, Oklahoma City, Okla., and five per cent to J. Val Connell
Application July 30, 1954, Serial No. 446,810
5 Claims. (Cl. 60—54.5)



1. An emergency valve assembly for use in a hydraulic brake system of a vehicle, comprising a cylinder, a stationary spacer positioned in said cylinder intermediate the ends thereof and having a longitudinally extending central bore therein, a pair of bushings mounted in the ends of said cylinder and having passages therethrough for connection to wheel cylinders in a hydraulic system, there being a valve seat in the inner portion of each of said bushings, a pair of balls movably mounted in said cylinder for coaction with said valve seats, a pair of coil springs positioned in said cylinder for urging said balls away from said valve seats and into engagement with the

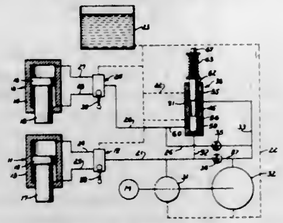
bore in said spacer, there being an opening in the wall of said cylinder intermediate the ends thereof, a fitting arranged in threaded engagement with said opening, there being a flaring aperture in said spacer connecting said bore to said fitting, there being aligned passageways in said spacer extending parallel to said central bore and communicating with said aperture, there being another opening in the cylinder wall intermediate the ends of said cylinder, another bore in said spacer in alignment with the said other opening in the cylinder wall and communicating with the central bore in said spacer, a filling plug detachably connected to said other opening in the cylinder wall, the inner ends of said bushings being provided with cylindrical sections of reduced diameter, said reduced diameter sections forming a shoulder and said shoulders having said coil springs arranged in engagement therewith.

2,745,253

COMBINED ADMISSION, RELIEF AND UNLOADING VALVE AND HYDRAULIC POWER SYSTEM

John Maurice Towler, Rodley, and Frank Hathorn Towler, Dob Park, near Otley, England, assignors to Electraulic Presses Limited, Rodley, England, a corporation of the Kingdom of England

Application March 28, 1951, Serial No. 217,914
Claims priority, application Great Britain April 1, 1950
8 Claims. (Cl. 60—97)



1. An unloading and relief valve comprising a body having first and second inlet passages adapted for connection to two separate sources of pressure fluid, first and second delivery passages in communication respectively with said first and second inlet passages adapted for connection to two separate pressure fluid operable motors, an exhaust passage, and a cross passage connecting said second inlet passage with said first delivery passage, a check valve interposed in said cross passage to prevent reverse flow from said first delivery passage to said second inlet passage, and valve means responsive to the pressure in said first delivery passage and operable progressively in the course of a predetermined rising pressure gradient first to connect said second delivery passage to said exhaust passage, and then also to relieve said first delivery passage to said exhaust passage while maintaining a predetermined maximum pressure in said first delivery passage, and in the course of a reverse of said gradient to interrupt said connections in reverse order.

ERRATUM

For Class 61—1 see:
Patent No. 2,745,768

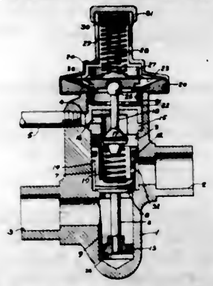
2,745,254

FLUID FLOW CONTROLLING DEVICE

Hyman Malkoff, Levittown, Pa., assignor to Kramer Trenton Company, Trenton, N. J., a corporation of New Jersey

Application June 10, 1954, Serial No. 435,716
7 Claims. (Cl. 62—3)

4. A refrigerating system including a compressor, condenser, evaporator and reevaporator all operatively interconnected, together with a hot gas conduit connecting compressor discharge with evaporator, and a valve device positioned between the evaporator and the reevaporator and compressor, said device comprising a casing, an inlet thereinto connected with the outlet of the evaporator, an outlet from the casing connected to the inlet of the compressor, a second outlet from the casing connected



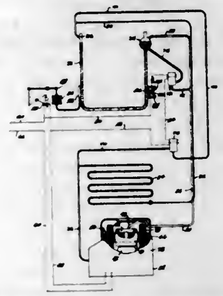
to the inlet of the reevaporator, and means within the casing for controlling refrigerant flow therethrough from the inlet to both outlets or only to the last named outlet according to whether the refrigerating system is operating on a refrigerating cycle in which the flow is mainly in gaseous phase or a defrosting cycle in which the flow is mainly in liquid phase.

2,745,255

DEFROSTING REFRIGERATING APPARATUS

Lawrence A. Philipp, Detroit, Mich., assignor to American Motors Corporation, a corporation of Maryland

Application July 30, 1952, Serial No. 301,641
2 Claims. (Cl. 62—3)



1. Refrigerating apparatus comprising a system having a motor-compressor unit, a refrigerant condenser connected to said unit, a refrigerant evaporator having a liquid refrigerant containing accumulator at its outlet, a vapor return conduit having one end connected to said accumulator above the level of liquid refrigerant therein and the other end thereof connected to said unit adjacent the motor thereof, a supply conduit connected on one end thereof to the condenser and on the other end to said evaporator, a valve controlled by-pass conduit having one end thereof connected to the outlet of said compressor and the other end thereof being connected to the inlet of said evaporator and a valve controlled dumping conduit having one end thereof connected to said accumulator below the level of liquid refrigerant therein and the other end thereof being connected to said vapor return conduit.

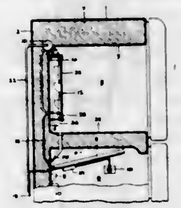
2,745,256

EVAPORATOR OF HIGH THERMAL MASS

Frank A. Schumacher, Louisville, Ky., assignor to General Electric Company, a corporation of New York

Application May 9, 1955, Serial No. 506,745
6 Claims. (Cl. 62—4)

3. A refrigerator including a storage compartment and a freezer compartment, refrigerant evaporator means in each of said compartments for maintaining the desired temperatures therein, electrically operated refrigerant condensing means for periodically supplying liquid refrigerant to both of said evaporator means, means responsive to the temperature of the evaporator in said storage compartment controlling the operation of said condensing means



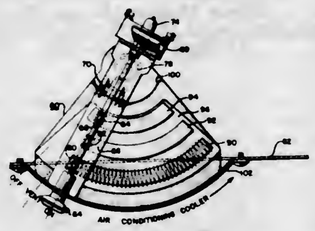
and adapted to energize said condensing means only after said storage compartment evaporator has warmed to defrosting temperature, said freezer compartment evaporator comprising a flat plate including a plurality of substantially horizontal passes of refrigerant tubing and water containing receptacles mounted on said plate between adjacent tubing passes for increasing the thermal mass of said evaporator.

2,745,257

REFRIGERATING APPARATUS

James W. Jacobs, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application August 26, 1953, Serial No. 376,594
8 Claims. (Cl. 62—4)



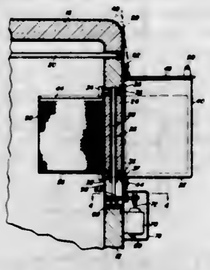
8. In a single operative refrigerating system, a compressor, a condenser, an evaporator, refrigerant flow connections between said compressor, condenser and evaporator, a prime mover, power transmitting means between said prime mover and said compressor including a clutch, blower means for circulating air to be conditioned in thermal exchange relationship with said evaporator, duct means for conveying fresh air into thermal exchange relationship with said evaporator, a fresh air damper in said duct means, a master control element, means responsive to rotation of said master control element for varying the speed of said blower means, means responsive to oscillation of said master control element in one plane for controlling said fresh air damper, means responsive to oscillation of said master control element in another plane for controlling the operation of said clutch, said clutch control means including a thermostat arranged to respond to the refrigeration requirements for automatically operating said clutch, and means responsive to movement of said control means for varying the temperature at which said temperature responsive means operate said clutch.

2,745,258

AUTOMATIC THAWING DEVICE

Milton H. Gotlib, Beverly Hills, Calif., assignor of thirty-three and one-third per cent to Eugene W. Smith, Arcadia, and thirty-three and one-third per cent to Robert Haves, Los Angeles, Calif.

Application February 7, 1955, Serial No. 486,449
8 Claims. (Cl. 62—89)



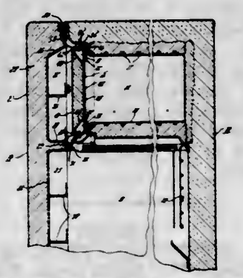
1. A thawing device comprising means for retaining material in a cold area, and means for raising the temperature of the material, said retaining means including a receptacle movably mounted on a wall separating a cold area from a warm area, said receptacle moving from a position within the cold area to a position in the warm area at a preset time.

2,745,259

REFRIGERATOR WITH MEANS TO COOL SHELVES ADJACENT AN INSULATED FREEZING COMPARTMENT

Orson V. Saunders, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application February 14, 1955, Serial No. 487,960
2 Claims. (Cl. 62—89)



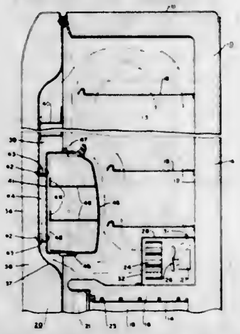
1. A refrigerator including a cabinet having an open front unfrozen food storage compartment and a front access opening frozen food storage compartment therein insulated from said unfrozen food compartment, a refrigerating system associated with said cabinet including a first evaporator for cooling air in said unfrozen food compartment and a second evaporator for cooling air in said frozen food compartment, a common door extending across the access opening of both of said compartments, an inner door between said common door and said frozen food compartment for closing the access opening thereof, said common door having food supporting shelf means on its inner face located opposite said inner door, means for transferring heat from food products placed on said shelf means to said second evaporator for refrigerating same, said last named means including valved air passageways extending through said inner door, and means for maintaining said valved passageways open when the common door is shut and for closing said passageways automatically in response to opening said common door.

2,745,260

HYDRATOR ON REFRIGERATOR CABINET DOOR

Orson V. Saunders, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application August 12, 1953, Serial No. 373,859
1 Claim. (Cl. 62—89)



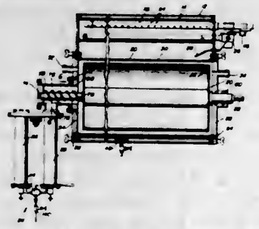
In a refrigerator, a cabinet having a food storage chamber therein provided with a front opening, a door normally closing said chamber opening, a refrigerating system associated with said cabinet including an evaporator for cooling air in said chamber, a hydrator receptacle carried by said door, said receptacle comprising a back wall stationarily mounted upon said door in spaced relation to the inner face thereof forming a flue therebetween and a cover member pivotally secured to the lower portion of said back wall for vertical swinging movement relative thereto, means for circulating air over said evaporator to cool and cause the cooled air to flow through said flue for carrying away warm air as it forms in the space between said receptacle back wall and the inner face of said door, said cover member of said hydrator receptacle having partitioning means thereon dividing the interior of the receptacle into compartments, one of said partitioning means forming a support within said receptacle above the bottom thereof for receiving and supporting food products therein, and said receptacle cover member together with food products therein being swingable downwardly relative to its stationary back wall into a horizontal plane, when said door is opened, to provide access to the food products at substantially a waist high level.

2,745,261

CONTINUOUS FREEZER

Casper W. Merrill, Logan, Utah

Application November 1, 1954, Serial No. 466,028
11 Claims. (Cl. 62—114)



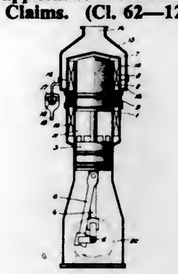
1. A continuous freezer comprising a housing, a refrigerant casing in said housing, a mix chamber in said refrigerant casing, a mixing drum in said mix chamber with said mix chamber having an inlet and an outlet, said refrigerant casing including an apertured baffle plate, a vapor chamber above said refrigerant casing, liquid refrigerant precooling coils in said vapor chamber, and a vapor suction line in said vapor chamber.

2,745,262

REFRIGERATOR GAS LIQUEFIER

Jacob Willem Laurens Köhler, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application May 1, 1952, Serial No. 285,440
Claims priority, application Netherlands May 31, 1951
5 Claims. (Cl. 62—123)



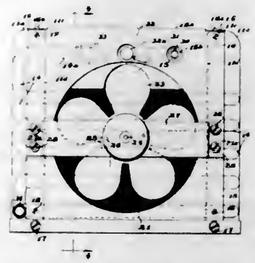
1. A refrigerator comprising a freezer; a regenerator; a cooler and two spaces containing a working medium of invariable chemical composition which traverses a closed thermodynamic cycle while being in the same physical state through said freezer, regenerator and cooler; one space having a relatively lower temperature than the other space; the working medium in each of said spaces varying continuously in volume with a substantially constant relative phase difference; a gaseous medium surrounding said freezer being adapted to condense at least at —150° C. on substantially all of the wall of said freezer; and a screen having heat insulation properties extending in a space confronting manner for substantially the whole length of said freezer thereby forming an interspace for said gaseous medium to be condensed therein.

2,745,263

PORTABLE COOLING UNIT

Alfredo Mendez, Chicago, Ill.

Application August 25, 1953, Serial No. 376,428
3 Claims. (Cl. 62—140)



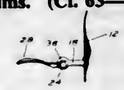
1. A portable cooling unit for trucks, truck trailers, house trailers, kitchens, dwelling and storage rooms, etc., comprising in combination a casing-like frame comprising a rectangular pan-like base having upstanding front, rear and end flanges, a pair of upstanding, laterally spaced and substantially channel form end wall units for said frame supported between said base flanges and providing longitudinally coextensive front and rear flanges, the front flanges of said end wall units being substantially wider than the said rear flanges, an upstanding rear wall for said cooling unit coextensive in height with said end wall units and providing a central fan receiving opening, said unit rear wall supported by said base member between the rear flange thereof and the lower ends of the rear flanges of said end wall units, fastening means securing said unit rear wall to said rear end wall unit and base member flanges, other fastening means securing said rear wall to said rear end unit flanges, a front panel element secured to and connecting the front flanges of the end wall units adjacent the top thereof whereby to cooperate with the latter and the front flange of said base unit to provide a rectangular cold air discharge opening at the front of said unit and occupying the major portion of said unit front in alignment with the fan-receiving opening of said unit rear wall, a cooling coil extending between said end wall units and having an inlet at one end and an outlet at the other end, said coil supported by said end wall units between said flanges to be protected thereby, there being an expansion valve in said coil adjacent the inlet thereof and having adjustment means operable through a hole in said unit rear wall, a removable top closure for said unit, said front panel having a substantially coextensive inturned flange at its upper edge cooperating with the upper ends of said end wall units to support said closure, a forwardly turned keeper flange at the top edge of said rear wall and overlying the rear edge of said closure, said end wall units having integral horizontal flange-connecting top portions, closure fasteners engaging the latter, a motor-carried fan secured to said rear end member flanges and disposed opposite said fan-receiving opening therein, and said coil outlet lying behind the widened front flange of one of said end wall units to be protected thereby.

2,745,264

JEWELRY CLIP WITH FRICTION PIVOT

Julian Jaron, Providence, R. I., assignor to Alice Jewelry Company, a corporation of Rhode Island

Application May 31, 1955, Serial No. 512,052
4 Claims. (Cl. 63—14)



1. A jewelry clip comprising a face plate, a bracket secured to the back thereof and having a pair of rearwardly extending legs terminating in circular ear members, a clamping arm hinged at one end between said ear members and twisted at right angles beyond but adjacent to said ear members to provide oppositely disposed, outwardly extending shoulders in overlying relation with respect to the edges of the ear members, the axis of the pivot of said clamping arm being located in spaced relation with respect to the axis of the circular ear members whereby said ear members are eccentrically disposed with respect to said axis of pivot, said outwardly extending shoulders being adapted to make engagement with the high edge portions of the eccentric ear members when the clamping arm is pivoted to clamping position whereby to maintain said arm in any desired position of clamping adjustment.

2,745,265

DETACHABLE RING GUARD FOR FINGER RINGS

Peter Grafstein, New York, N. Y., assignor to Axel Bros., Inc., Long Island City, N. Y., a corporation of New York

Application September 25, 1952, Serial No. 311,350
4 Claims. (Cl. 63—15.6)



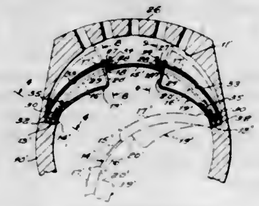
1. The combination with a finger ring body that defines a finger-receiving opening and that is provided with a recess which is open along the inner periphery of the ring, of a ring guard comprising a resilient frame registering with the recess and having snap engagement with the ends of the recess whereby the frame is frictionally held in the recess, said frame being substantially wholly contained in the recess, a pair of spaced stop members carried by the frame, a pair of mobile elements, hinge means pivotally connecting one end of each mobile element to a corresponding end portion of the frame, an extension at the other end of each mobile element, and spring means interposed between the frame and each mobile element for normally and yieldingly urging each mobile element about its pivot connection with the frame to project the mobile elements into the finger-receiving opening, each of said extensions engaging a corresponding one of said stop members to limit normal movement of the corresponding mobile element about its pivot connection with the frame.

2,745,266

RING GUARD WITH SPRING PRESSED PIVOTED MEMBER

Peter Grafstein, New York, N. Y., assignor to Axel Bros., Inc., Long Island City, N. Y., a corporation of New York

Application May 28, 1953, Serial No. 358,083
5 Claims. (Cl. 63—15.6)



1. The combination with a finger ring body that defines a finger-receiving opening and that is provided with a recess which is open along the inner periphery of the ring, of a ring guard comprising a resilient frame registering with the recess and having snap engagements with the ends of the recess whereby the frame is frictionally held in the recess, said frame being substantially wholly contained in the recess and comprising a body and a pair of spaced lugs carried by the body and projecting into the recess, said lugs being disposed intermediate the ends of the body, a pair of hollow mobile elements, hinge means pivotally connecting one end of each mobile element to a corresponding end portion of the frame, each mobile element including an end wall remote from its pivotal connection with the frame and having a slot formed therein, a pair of spring means, each spring means engaging a mobile element and the frame, a portion of each spring means extending through the slot of a corresponding mobile element and fixedly engaging one of the lugs, each spring means normally and yieldingly urging and moving the corresponding mobile elements about its pivotal connection with the frame to project such mobile element into the finger-receiving opening to the extent allowed by the corresponding slot.

2,745,267

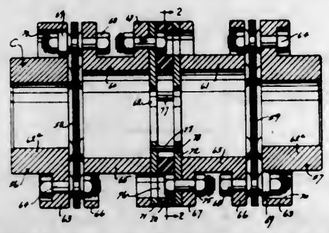
TORSIONALLY RESILIENT FLEXIBLE COUPLINGS

Ernest Hagenlocher, Warren, Pa.

Application February 11, 1952, Serial No. 271,008
2 Claims. (Cl. 64—13)

1. In a flexible coupling the combination of a pair of shaft attaching coupling parts each including a hub portion and an annular outwardly extending flange, two sets of laterally flexible steel laminations, bolts connecting one of each of said sets to one of each of said coupling parts

upon the flanges of the latter and at annularly spaced bolt locations, a pair of metal spools each including a cylindrical body portion and an outwardly extending fixed flange at each end thereof, bolt means connecting the remote flanges of said spools, one to one set of laminations and the other to the other set of laminations at bolt zones circumferentially spaced with respect to the bolt zones where said laminations are bolted to the respective couplings parts, a rubber sandwich connected to the proximate flanges of said spools, said rubber sandwich comprising a pair of flat rigid metal plates having bonded therewith and therebetween a resilient rubber member of



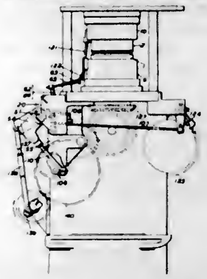
a construction to take care of torsional stresses on a torsion axis parallel with an axis at right angles to the plane of said plates and resilient member, means connecting said rubber sandwich to the proximate flanges of said spools comprising bolts which bolt the innermost flanges of the spools to the said flat plates of said rubber sandwich with the said flat plates in abutment with the said proximate flanges of the spools, the last mentioned bolts being removable to permit complete detachment of the rubber member and plates from between the said proximate flanges of the spools without disturbing the position of the spools with respect to their connection with the laminated disc sets.

2,745,268
CLUTCH DRIVEN PLATE
Harold V. Reed, Chicago, Ill., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application July 1, 1952, Serial No. 296,569
12 Claims. (Cl. 64—27)



1. Torsional vibration dampener means connecting a rotatable driving member to a driven member, comprising, a hub connected to said driven member and having a radial flange; a radial disc alongside said hub flange and adapted to be rotated by said driving member; a supplementary hub defined by a hub plate mounted on and connected to said driven member for rotating therewith, said hub plate also being movable independently of said hub and radial disc; means yieldably connecting said hub flange, radial disc and hub plate for conjoint rotation, and for limited independent rotative movement of said disc and hub plate with respect to said hub and flange; and braking means interposed between said hub flange, radial disc and hub plate, said braking means being effective during rotation of said driving and driven members to create friction which varies in response to changes of torque between said members.

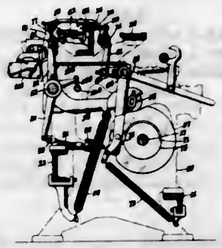
2,745,269
KNITTING MACHINE OF THE OPPOSED NEEDLE CYLINDER TYPE
Frederick Edward Deans, Leicester, England, assignor to The Bentley Engineering Company Limited, Leicester, England
Application March 19, 1951, Serial No. 216,292
Claims priority, application Great Britain March 24, 1950
9 Claims. (Cl. 66—14)



1. A circular knitting machine of the axially opposed double cylinder type organized to produce seamless stockings, socks, and like articles of footwear having a tubular knitted part including a leg, and a pouch, said machine having opposed needle cylinders, needles in the cylinders, a main knitting station, a cam box for each cylinder, main knitting cams in each cam box at the main knitting station, means for effecting relative rotation between the cylinders and the cams and consequently between the needles and the main knitting station for producing the tubular part, and means for changing from said relative rotation to relative reciprocation for producing the pouch, and further having a set of interchangeable yarn feeders at said main knitting station, patterning mechanism for effecting their selective interchange coincident with the presentation of a small group of the needles at the main knitting station, an auxiliary knitting station spaced circumferentially from the main station, auxiliary knitting cams in each cam box at said auxiliary station, an auxiliary yarn feeder at the auxiliary station, feeder control mechanism for introducing and withdrawing the auxiliary feeder during the production of required courses of the tubular part and at a stage in the production of each of these courses coincident with the presentation of said group of needles at the auxiliary station, and for withdrawing it at a stage in the production of the article coincident with the commencement of said relative reciprocation and commencement of production of the pouch, cam control mechanism for rendering the auxiliary knitting cams inoperative when the auxiliary feeder is withdrawn so that the needles continue to knit only at the main station, and a movable control member common to said feeder control and cam control mechanisms for controlling actuation of said mechanisms.

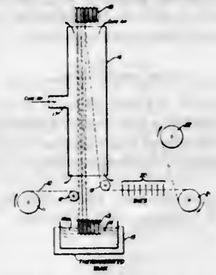
2,745,270
CATCHBAR SAFETY MEANS FOR KNITTING MACHINES
Charles R. Fegley, Laureldale, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a corporation of Pennsylvania
Application March 6, 1952, Serial No. 275,128
15 Claims. (Cl. 66—110)

1. In a full-fashioned knitting machine having a main camshaft, a sinker-head having sinkers, a slur cam reciprocated along said sinker-head to advance said sinkers in said sinker-head, a catchbar, means operated by said camshaft in timed relation with said slur cam for giving said catchbar down and up movements for engaging and disengaging said sinkers and forward and back move-



ments to advance and retract said sinkers, and means connected to said slur cam and catchbar operating means for arresting the down movement of said catchbar and for returning it to an up position prior to said forward and back movements when said slur cam and catchbar become mistimed in relation to each other.

2,745,271
CANDLE WICK AND METHOD OF PREPARING SAME
Donald C. Walker, Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill., a corporation of Indiana
Application July 24, 1953, Serial No. 370,197
3 Claims. (Cl. 67—22)



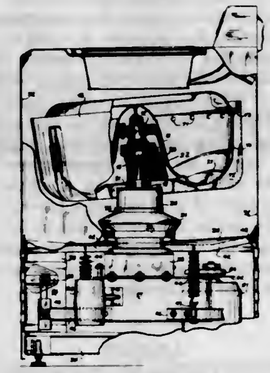
1. A waxed candle wick comprising a textile fiber candle wicking impregnated with a wax composition comprising from about 40% to about 60%, by weight, of a crystalline paraffin wax having a melting point of from about 120° F. to about 130° F. and from about 60% to about 40%, by weight, of a microcrystalline wax having a melting point of from about 155° F. to about 165° F.

2,745,272
MANTLE MOUNTING
Carl Bramming, Nashville, Tenn., assignor to Aladdin Industries, Incorporated, Nashville, Tenn., a corporation of Illinois
Application June 11, 1953, Serial No. 361,025
6 Claims. (Cl. 67—38)



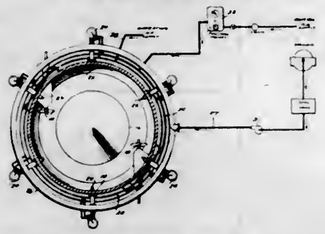
2. In a mantle mounting in which a mantle-supporting harp is mounted on a pair of sidewardly extending ears, the provision of mantle-positioning and air-directing means comprising an upstanding annular inner wall, a pair of upstanding arcuate outer walls, the arcuate walls and the inner wall being connected by a pair of bottom walls and together defining a pair of mantle-receiving channels, and a pair of downwardly extending flanges positioned between said pair of arcuate outer walls and supported from said inner wall, said pair of flanges being adapted to meet with downwardly extending complementary flanges in a burner cone to form an air passage.

2,745,273
SPRING MOUNTED WASHING MACHINE OF THE WATER BALANCE TYPE
Ralph L. Archbold, Euclid, Ohio, assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application April 1, 1953, Serial No. 346,145
3 Claims. (Cl. 68—23)



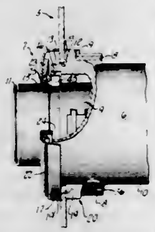
1. The combination with a washing machine of the type having a relatively rigid frame, a clothes container rotatable about a generally vertical axis to extract water from clothes, means integral with the container adapted to receive extracted water to counterbalance unequal loading of clothes in the container, and operating mechanism including a motor for effecting agitation of clothes disposed in said container during a washing period and rotating said container during an extraction period, of means for mounting said container and operating mechanism to minimize transmission of vibration to said frame during operation of the machine, said mounting means comprising a structural unit within the frame supporting the container and operating mechanism including a plurality of spaced arms each extending radially outwardly to a point adjacent the frame, the motor being secured directly to the structural unit eccentrically of the vertical axis of the machine, weights substantially corresponding in foot pounds to the foot pounds exerted by the motor and secured to the structural unit in substantially equally spaced relation to each other and the motor to provide a relatively stable platform, spring means supported at their upper ends from the frame and engaging said unit at their lower ends whereby said unit, operating mechanism and container are spring-supported both during washing and extracting periods, the spring means having a rating and being of a length to provide the spring-supported parts with a swinging frequency having a maximum value of one-sixth of the container operating frequency at extraction speed, snubbing means mounted on the frame and engaging the end portions of the arms to limit both vertical and lateral movement of said structural unit, and said spring means being located a substantial distance inboard from the snubbing means.

2,745,274
MEANS FOR DISCHARGING PULP FROM BLEACHING TOWERS
John P. Rich, Nashua, N. H., assignor to Improved Machinery Inc., Nashua, N. H., a corporation of Maine
Application October 22, 1952, Serial No. 316,117
2 Claims. (Cl. 68—181)



1. Means for bleaching wood pulp comprising a reaction tower having its axis vertical; means at the top of the tower for continuously delivering into the tower a high density mixture of pulp and a bleaching agent; said tower having an outlet adjacent its bottom; a plurality of inwardly directed, peripherally spaced nozzles adjacent the bottom of said tower but spaced vertically above said outlet; a substantially constant speed centrifugal pump for delivering dilution water to said nozzles; means connecting said pump to each of said nozzles; each of said nozzles having an outlet opening and a member movable within each of the nozzles to adjust the area of said openings; each of said members having a fluid pressure responsive device connected thereto for moving the same; a source of fluid pressure independent of said pump, and control means for applying said fluid pressure equally to all of said devices.

2,745,275
MEANS FOR SECURING AN INSTRUMENT TO AN INSTRUMENT PANEL
Edward N. Jacobi, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a corporation of Delaware
Application October 7, 1954, Serial No. 460,806
13 Claims. (Cl. 70—370)



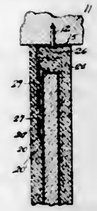
1. Means for securing the mounting member of an instrument to a panel in line with an access hole in the panel, comprising: abutment means on the exterior of said member engageable with one face of the panel at a plurality of locations spaced around said access hole; a bezel member having an annular front portion engageable with the other face of the panel; cooperating means on the panel and on one of said members interengageable to hold the latter in a predetermined position on the panel relative to said access hole and against rotation relative to the panel; and other cooperating means on said members substantially providing a bayonet joint therebetween rendered effective by rotation of the other of said members in one direction relative to said nonrotatable member to hold said members against separation, with portions of the panel clamped between the bezel member and said abutment means to maintain the mounting member in position on the panel and to maintain the annular front portion of the bezel member in engagement with said other face of the panel, with its aperture in line with the access hole in the panel.

2,745,276
PRE-CAST BUILDING UNITS
Arthur L. Kuhlman, Bay City, Mich.
Application May 7, 1949, Serial No. 91,996
4 Claims. (Cl. 72—41)



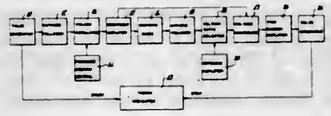
4. An interchangeable precast block of generally rectangular cross section, the four side walls of which are rectangular in outline and of identical perimetral dimensions to provide an interchangeable, multi-faced block, the length of each side wall surface and the width of each side wall surface being identical to the length and width of the other side wall surfaces respectively, one side wall being centrally channeled from one end to the opposite end, the opposite side wall having longitudinally spaced apart pockets provided therein of a substantial depth relative to the channel so that a relatively thin knockout wall remains between the bottom of each pocket and the channeled surface, said pockets in a block being spaced a predetermined distance apart and spaced with regard to the ends of the block so that the distance between adjoining pockets in the row of pockets formed when a pair of the blocks are laid in end to end relation with a thickness of mortar between the abutting blocks is substantially equal.

2,745,277
CEILING RUNNERS AND PARTITION STRUCTURE
Nels Nelsson, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a corporation of Illinois
Application November 16, 1949, Serial No. 127,566
3 Claims. (Cl. 72—46)



3. In a plastered wall, the combination of a stationary support, a lath panel having planar exposed surfaces, a plaster coat applied to the exposed surfaces of said lath panel, a runner mounted on said stationary support and having a depending section disposed adjacent one exposed surface of said panel, and means engaging the other exposed panel surface and said depending runner section and securing said panel and runner in assembled relation; said runner comprising an elongated first flange section attached to said stationary support, and a depending elongated apertured second flange section extending angularly from said first flange section and forming said depending section disposed adjacent said one exposed panel surface, said second flange section having the elongated free edge thereof offset and protruding from one side of said second flange section toward said one exposed surface of said panel whereby only said offset edge is in contact with said exposed panel surface and the remainder of said second flange section is spaced therefrom and substantially parallel therewith and cooperates therewith to form a cavity, said second flange section being provided with a plurality of apertures disposed opposite said exposed panel surface and communicating with said cavity, a portion of said plaster coat extending through said apertures into said cavity.

2,745,278
APPARATUS FOR MEASURING DENSITY OR PRESSURE
Edward A. Roberts and Paul Goldsmith, Chicago, Ill., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Army
Application March 24, 1952, Serial No. 278,152
4 Claims. (Cl. 73—24)



1. Apparatus for measuring the pressure of a gaseous medium, comprising a first pulse generator, an oscillator circuit including a piezoelectric crystal for cyclical actuation by said first pulse generator, means for generating a signal when said piezoelectric crystal amplitude of oscillation has decayed by a predetermined ratio from an initial amplitude produced by a pulse from said pulse generator, a second pulse generator actuated by said signal from said generating means, and a timing indicator for measuring elapsed time between a pulse from said first pulse generator and a pulse from said second pulse generator.

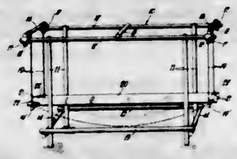
2,745,279
PRESSURE TESTING DEVICE AND METHOD
Paul E. Collins and Guy M. Inman, Richland, Wash., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application December 12, 1944, Serial No. 567,877
10 Claims. (Cl. 73—49.3)



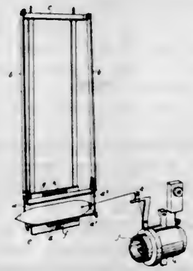
1. In a device for testing porosity of a sealed container, in combination: a transparent receptacle adapted to contain a liquid and having an opening therein; means for removably sealing and supporting at least a portion of said container within said receptacle; tiltable mounting means attached to the receptacle whereby the receptacle may be tilted to a position in which the liquid covers at least the portion of said container sealed within the receptacle; and means for changing the pressure within said receptacle.

2,745,280
APPARATUS FOR SUPPORTING SHEET-METAL SPECIMENS DURING SAG TEST
Harry L. Conaway, McKeesport, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Application August 13, 1953, Serial No. 374,030
1 Claim. (Cl. 73—100)

A structure adapted to be placed in a furnace for supporting elongated sheet-metal specimens while being heated to enameling temperatures for sag-resistance testing, said structure comprising spaced parallel horizontal bars, a pair of spaced transoms connecting said bars, a pair of spaced suspensions carried by said transoms, each suspension including a refractory trapeze bar and a pair of wires of heat-resistant alloy connected one adjacent each end thereof, and legs supporting said first-mentioned bars at a level such that said suspensions swing freely, said bars, transoms and legs being composed of heat-resistant steel, whereby they retain their rigidity when the structure is subjected to said temperatures.



2,745,281
DEVICE FOR MEASURING THE UNWINDING TENSION FROM A TEXTILE YARN PACKAGE
John Joseph Vincent, Wilmslow, Chester, and Philip Hunter Wolfenden, Manchester, England, assignors to The British Cotton Industry Research Association, Manchester, England, a British research association
Application June 17, 1953, Serial No. 362,344
Claims priority, application Great Britain June 19, 1952
11 Claims. (Cl. 73—143)

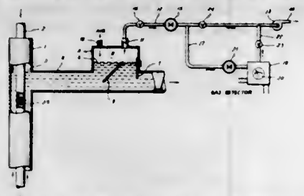


1. An unwinding tension measuring device for a yarn package comprising a body of substantial mass, resilient mounting means for said body providing a long natural period of vibration, said mounting means permitting, but resiliently opposing displacement of said body in a predetermined direction, means for indicating displacement of said body from a normal zero position, a holder on said body for a yarn package, means for drawing off the yarn therefrom at a predetermined uniform speed and in a direction such that the tension in the yarn has a component in the direction of displacement of the body, and non-return means in association with the body to check its return movement and thereby assist, in combination with the effect of the long natural period of vibration, in providing the desired readings.

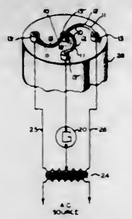
2,745,282
GAS LOGGING OF WELLS
Robert W. Rochon, San Antonio, Tex., assignor to Monarch Logging Company, Inc., San Antonio, Tex., a corporation of Texas
Application March 2, 1953, Serial No. 339,781
5 Claims. (Cl. 73—153)

1. The method of determining the gas-releasing properties of a hydraulic drilling fluid to be employed in the rotary drilling of wells, comprising, introducing into an increment of known quantity of said fluid a known volume of gas, circulating said increment containing said known quantity of gas through a substantially gas-free well to

subject said increment to the drilling and circulating conditions encountered in that well, causing gas to evolve from said increment as it returns to the surface, and measuring the amount of the evolved gas to thereby establish a quantitative relation for that fluid between the known volume of gas initially present in the fluid and the amount of gas released by said fluid.



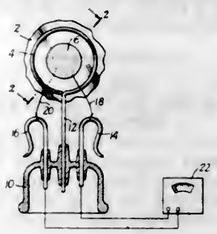
2,745,283
TEMPERATURE CHANGE COMPENSATED THERMAL MEASURING DEVICE
Charles E. Hastings, Hampton, Va., assignor to Hastings Instrument Company, Inc., Hampton, Va., a corporation of Virginia
Application January 23, 1950, Serial No. 140,140
5 Claims. (Cl. 73—204)



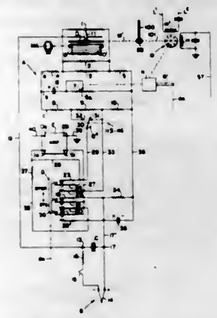
1. A heat transfer measuring device comprising, a main thermopile having at least one thermocouple section, a compensating thermopile having at least one thermocouple section, each thermocouple section of both thermopiles having junctions of a first class which have low and substantially identical thermal inertia, and the sections of both thermopiles having alternate junctions of a second class which have high and substantially identical thermal inertia so as to remain at ambient temperature, means mounting both thermopiles so that all the first class junctions of both thermopiles are similarly exposed solely to a surrounding fluid medium, the heat transfer between which and the first class junctions is to be measured, and so that all the second class junctions of both thermopiles are similarly exposed to their surroundings, a circuit including a voltage responsive means, means tending to maintain the temperature of the first class junctions of only the main thermopile at a level differing from the temperature of said surrounding fluid medium, the main and compensating thermopiles being connected into said circuit in voltage opposition with respect to each other so that said voltage responsive means responds to the difference between the voltages produced by said thermopiles, the arrangement being such that the transient voltages generated at the main thermopile during periods of change in ambient temperature will be compensated by transient voltages generated in the compensating thermopile during said periods of change in ambient temperature.

2,745,284
GLASS RADIOMETER
John V. Fitzgerald and Kenneth M. Laing, New Kensington, Pa., assignors to Pittsburgh Plate Glass Company
Application February 20, 1952, Serial No. 272,674
8 Claims. (Cl. 73—355)

1. A condition-sensitive element comprising a glass diaphragm, electrodes in electrical contact with opposite sides of said diaphragm near its center with the edge portions of said diaphragm extending at least 1 cm. beyond the limits of said electrodes, a supporting element having an opening therein, said supporting element engaging said extending edge portions of the glass diaphragm with the inner edge of said opening spaced from said electrodes, the thickness of the glass of said diaphragm between said electrodes being of the order of 10^{-4} cm., and resistance responsive means connected to said electrodes.



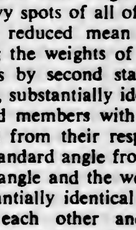
2,745,285
TEMPERATURE MEASURING APPARATUS
William H. Wannamaker, Jr., Philadelphia, Pa., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application October 21, 1952, Serial No. 315,975
5 Claims. (Cl. 73—360)



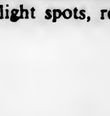
1. A molten metal temperature measuring apparatus comprising a self balancing potentiometric apparatus having a thermocouple adapted for immersion into a molten metal bath, said apparatus having an output on which a motor driving signal is present upon an unbalance of said apparatus, an electrical motor connected to be driven by said output and connected to rebalance said potentiometric apparatus, first switch means actuated by said motor as the motor adjusts said apparatus adjacent to a balance position indicative of equalization of the temperature of the thermocouple and the temperature of the molten metal, signal sensing means connected to respond to the driving signal to said electrical motor, a second switch means connected to be actuated by said signal sensing means upon balance of said potentiometric apparatus, and a signalling means connected to be controlled by said first and second switch means when both are actuated.

2,745,286
COMPRESSION MEASURING AND RECORDING INSTRUMENTS
Herman Schlaich, Elmhurst, N. Y.; Lottie Schlaich and President and Directors of The Manhattan Company, executors of said Herman Schlaich, deceased
Application November 23, 1951, Serial No. 257,767
1 Claim. (Cl. 73—391)

In a compression tester for testing and recording pressures in the cylinders of a multicylinder engine, a casing, a pressure pipe projecting from the casing, a fitting on said pressure pipe for temporary engagement with a hole in a cylinder, a piston mounted for longitudinal movement in said pressure pipe, a compression spring above said piston for opposing movement of the piston in one direction in the pipe, a longitudinally grooved adjusting screw mounted in said fitting below said piston for adjustment longitudinally toward and from said piston to form an adjustable stop for limiting the downward movement thereof, record making means in the casing, and a rod connecting said piston with said record making means.

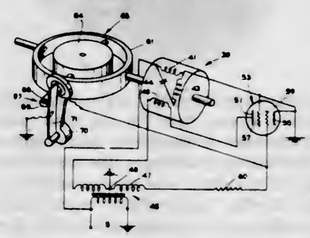


2,745,287
METHOD OF BALANCING ROTARY MEMBERS
Walter Kohlhagen, Elgin, Ill.
Application October 9, 1951, Serial No. 250,449
6 Claims. (Cl. 73—481)



1. The method of balancing by a standardized procedure a plurality of similar rotary members having respective inherent unbalances within a range between preset maximum and minimum unbalances of which the preset maximum unbalance is greater than the maximum permissible remaining unbalance for each member, said method comprising the steps of locating the respective inherent mean heavy spots, if any, of said members; changing the weights of local portions of the respective members on diametric lines thereof passing through the respective inherent mean heavy spots, if any, by a first standard weight×radius value substantially identical for each member to provide said members with reduced mean heavy spots, respectively, in which the then remaining resultant unbalances of the respective members are centered, and which have weight×radius values, respectively, smaller than the maximum weight×radius value of the inherent mean heavy spots of all of said members; locating the respective reduced mean heavy spots of said members; changing the weights of local portions of the respective members by second standard weight×radius values, respectively, substantially identical for each member, to provide said members with balancing light spots angularly displaced from their respective reduced mean heavy spots by a standard angle from about 20° to about 85°, said standard angle and the weight×radius value of each of said substantially identical balancing light spots being related to each other and to the maximum weight×radius value of the reduced mean heavy spots of all of said members to produce in each of said members a resultant mean unbalance spot corresponding in weight×radius value, within plus or minus the weight×radius value of said maximum permissible remaining unbalance, to the mean of the weight×radius values of the resultant mean unbalance spots of all of said members; subsequently locating the respective resultant mean unbalance spots of said members; and again changing the weights of local portions of the respective members by third standard weight×radius values, respectively, substantially identical for each member, to provide said members with correcting light spots, respectively, effective at locations substantially coincident with radial lines passing through the respective resultant mean unbalance spots, and therewith bringing each of said members within said maximum permissible remaining unbalance, the weight×radius value of the correcting light spot of any of said members corresponding, within the value of said maximum permissible remaining unbalance, to the weight×radius value of the resultant mean unbalance spot of the same member.

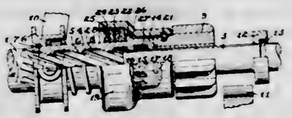
2,745,288
SERVO SYSTEM
Henry Konet, Hoboken, and Charles E. Hurlburt, Teaneck, N. J., assignors to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application April 9, 1951, Serial No. 220,034
9 Claims. (Cl. 74—5.47)



1. In a system of the kind described, an alternating power source, a two-phase reversible motor having a pair of windings both connected directly to and uniformly energized by said power source and having an auxiliary winding, said motor being driven in one normal direction by said power source, and a control circuit connected to said auxiliary winding and including means responsive to one condition for energizing the auxiliary winding to drive said motor in the opposite direction and responsive to another condition to de-energize the auxiliary winding and drive the motor in said normal direction

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2,745,289
STARTER GEARING FOR INTERNAL COMBUSTION ENGINES
Donald L. Miller, Horseheads, N. Y., assignor to Bendix Aviation Corporation, a corporation of Delaware
Application October 4, 1954, Serial No. 459,998
9 Claims. (Cl. 74—6)

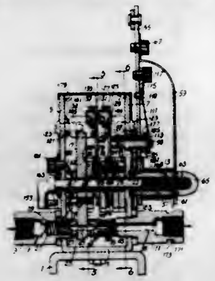


1. Engine starter gearing including a motor shaft, a sleeve splined thereon, a transmission member slidably journaled on the shaft and having an overload slip coupling with said sleeve, a pinion slidably journaled on the shaft having an overrunning clutch connection with said transmission member, and a barrel member rotatably connected to said sleeve and to the pinion, enclosing and confining the coupling and clutch connections.

2,745,290
TIMING MECHANISM
Victor G. Klein, Defiance, and Carl H. Mueller, St. Louis, Mo., assignors to Lincoln Engineering Company, St. Louis, Mo., a corporation of Missouri
Application May 2, 1952, Serial No. 285,722
8 Claims. (Cl. 74—142)

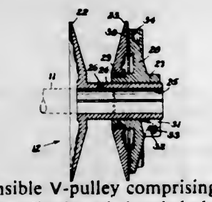
1. In combination, a pair of spaced supports, a shaft extending between said supports, a cluster comprising

a first and a second ratchet having a different number of teeth conjointly rotatable and axially slidable on the shaft, a third ratchet independently rotatable and axially slidable on the shaft, an arm oscillatable on the shaft axis, a driving pawl for the cluster carried by the arm and movable with respect to the arm and having a first and a second tooth selectively constantly engageable with either



the first or the second ratchet, a pivot extending between the supports, a driving pawl for the third ratchet pivoted and axially slidable on the pivot, means for driving said third ratchet driving pawl from the cluster, and a spring biasing said third ratchet and cluster axially on the shaft toward one of the supports and engendering sufficient frictional resistance to rotation of the third ratchet and cluster to prevent their reverse rotation.

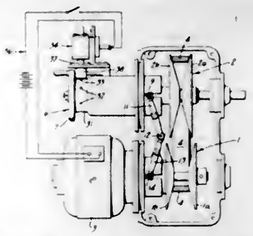
2,745,291
EXPANSIBLE V-PULLEY
John S. Michie, Columbus, Ind., assignor, by mesne assignments, to The Reliance Electric and Engineering Company, Cleveland, Ohio, a corporation of Ohio
Application September 4, 1953, Serial No. 378,552
7 Claims. (Cl. 74—230.17)



1. An expansible V-pulley comprising a first coned disc having a peripherally-threaded male hub portion projecting axially therefrom, an internally-threaded female hub member threadedly received on said male hub portion for movement toward and away from said first coned disc upon relative rotation between said hub member and the hub portion of said first coned disc, a second coned disc journalled on said hub member in mating relation with said first coned disc, and means for releasably locking said hub member against rotation relative to said hub portion.

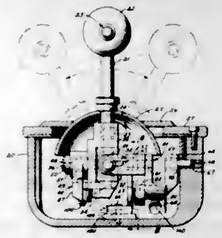
2,745,292
LOCKING MECHANISM FOR VARIABLE SPEED DRIVES
O. B. Woodward, Vallejo, Calif.
Application September 11, 1952, Serial No. 309,156
5 Claims. (Cl. 74—230.17)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. In a variable speed belt drive powered by an electrical power circuit and having a control mechanism for varying the drive speed, the combination with said control mechanism of a lock comprising a latch keeper fixed to the control mechanism so as to move therewith, an electrically actuated latch mounted adjacent said keeper which engages said keeper to lock the same and thereby the control mechanism against movement when said power circuit is deenergized, and electrically operated means in circuit with said power circuit for disengaging said latch



and thereby free it and said control mechanism for movement upon energization of said power circuit.

2,745,293
LEVER CONTROL MECHANISM
Robert H. Berg, Elmhurst, Ill., assignor to International Minerals & Chemical Corporation, a corporation of New York
Application December 17, 1954, Serial No. 475,996
12 Claims. (Cl. 74—471)

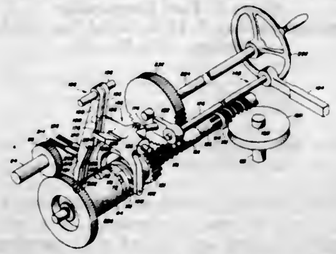


1. A control lever mechanism for actuating independently or simultaneously a pair of devices comprising a mounting for supporting a control lever, first and second support members pivotally mounted on said mounting with their pivotal axes intersecting, each of said support members having a crank arm for application thereto of forces tending to oscillate the support member about its pivotal axis, said crank arms being positioned adjacent one another but spaced laterally from the point of intersection of the pivotal axes of said support members, a control lever having a base portion positioned intermediate said crank arms and adjacent the point of intersection of the pivotal axes of said support members, an element pivotally mounted on said base portion and positioned at the point of intersection of the pivotal axes of the support members, means pivotally interconnecting said base member with the crank arm of said first support member, means pivotally interconnecting said element with the crank arm of said second support member, the pivot axes of said element and said pivotally interconnecting means intersecting at the point of intersection of the pivotal axes of said support members, and means connected to each of said support members for transmitting oscillations thereof to the devices to be actuated.

2,745,294
VALVE CONTROLS
Harold O. Kron, Philadelphia, Pa., assignor to Philadelphia Gear Works, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application August 26, 1952, Serial No. 306,347
16 Claims. (Cl. 74—625)

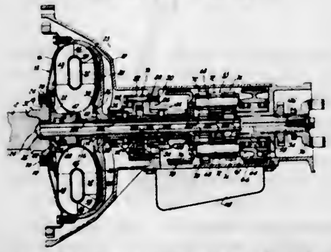
1. In a valve control including, a valve-stem, a motor-drive, a worm-gear whose rotation effects opening and closing movement of the valve stem, a shaft carrying a worm co-acting with the worm-gear, a train of power-

transmitting elements between the motor-drive and the gear having as one of its elements a clutch including a driving element and a reciprocable driven element respectively rotatably and non-rotatably carried by the worm-shaft, a hand motivatable mechanism including a shaft parallel to the worm-shaft carrying a hand-wheel and a gear, a gear slidably mounted on the worm-shaft for rotation therewith and for reciprocation with the



reciprocable clutch element, spring means normally urging the slidable gear and the reciprocable clutch element to a clutching position longitudinally displaced from the gear on the hand-wheel shaft, rockable yoke means manually operable to effect de-clutching to interrupt the motor-drive connection with the worm-shaft and to effect axial movement of the slidable gear on the worm-shaft into operative engagement with the gear on the hand-wheel shaft for hand-operation of the valve stem.

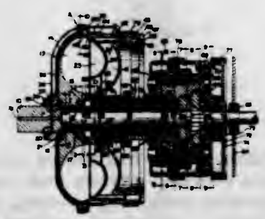
2,745,295
TRANSMISSION
Richard Thomas Burnett, South Bend, Ind., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Original application July 30, 1948, Serial No. 41,559. Divided and this application September 8, 1951, Serial No. 246,250
6 Claims. (Cl. 74—677)



1. A transmission comprising a hydro-kinetic torque converter having rotatable bladed turbine and reaction wheels, said reaction wheel tending to rotate in a direction opposite to that of said turbine wheel, a planetary gear train including a planet carrier mounting pinions, a first sun gear arranged in meshing relationship to one of said pinions and being securely fixed to said turbine wheel, a second sun gear arranged in meshing relationship to another of said pinions and being securely fixed to said reaction wheel, a third sun gear arranged in meshing relationship to still another of said pinions, an output shaft connected to said third sun gear, and means for holding said planet carrier or said first sun gear to thereby connect the output shaft for forward or reverse rotation respectively.

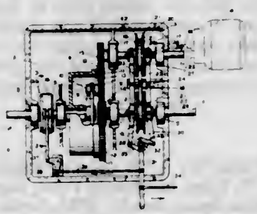
2,745,296
TRANSMISSION
Frederick W. Seybold, Westfield, N. J.
Application July 21, 1951, Serial No. 237,974
13 Claims. (Cl. 74—677)

1. In a transmission having driving and driven shafts: a pair of intermediate shafts arranged in telescoping relation with each other and with said driven shaft, sun gears of respectively different sizes on said intermediate and driven shafts, cluster planet gear means meshing with said sun gears, a frame rotatable on the axis of said shafts and rotatably supporting said cluster planet gear means, means for coupling said driving shaft first with the one of said intermediate shafts having the smaller sun gear thereon and then with the other of said intermediate shafts having the larger sun gear thereon, brake means



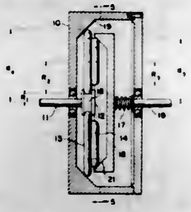
selectively engageable for holding said frame against rotation in one direction, an overrunning clutch between said frame and brake means for permitting rotation of said frame in a direction opposite to the said one direction, a direct drive sun gear of a size intermediate the sun gears on said intermediate shafts and a pinion integral with said cluster planet gear means and meshing with said direct drive sun gear, and means for preventing said direct drive sun gear from rotating at a speed above that of said driving shaft.

2,745,297
REVERSIBLE SPEED CHANGER
Budd W. Andrus, Eugene, Oreg.
Application January 28, 1953, Serial No. 333,650
4 Claims. (Cl. 74—689)



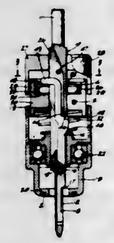
1. A reversible speed changer comprising a drive shaft, a driven shaft, a planetary gear system between said shafts and including two concentric gears with a planet gear therebetween and meshing therewith, said planet gear being journalled on a carrier fixed with said driven shaft, one of said concentric gears being a sun gear fixed with said drive shaft and the other concentric gear being an internal ring gear floatingly supported and including an external spur-type gear, a countershaft, a spur gear fixed with said countershaft and meshing with said external spur-type gear, a variable speed drive means connected between said shaft and said countershaft for selectively driving said shafts through a range of both increasing and decreasing speeds, said variable speed drive means including control means for selectively regulating the speed transmitted between said drive shaft and said countershaft, and mechanism connected with said control means and responsive to rotation of said driven shaft in either direction to urge said control means to establish unity of transmission with said counter and drive shafts rotating at the same speed.

2,745,298
ANTI-BACKLASH POWER TRANSMISSION
Magnus V. Braunagel and Robert L. Shelley, Indianapolis, Ind.
Application June 9, 1953, Serial No. 360,625
1 Claim. (Cl. 74—798)
(Granted under Title 35, U. S. Code (1952), sec. 266)



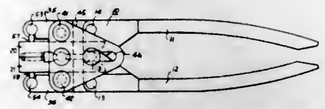
An anti-backlash power transmission consisting of a housing, a drive shaft and a driven shaft coaxially journaled in confronting walls of the housing, both extending into the housing, a peripherally grooved friction disk carried by the inner end of the drive shaft, a take-off friction disk carried by the inner end of the driven shaft, a fillet occupying a corner of the housing constituting a fixed annular track, being pitched at an angle away from that wall contiguous to the grooved friction disk to face the driven shaft and to situate said grooved disk within the confines of said track, a similar fillet and track embodied in the take-off friction disk, being pitched at an angle to face the drive shaft and the aforesaid contiguous wall, forming with the first-named contiguous wall and fillet a space occupied in part by the peripherally grooved friction disk, a planetary cluster of drive-transmission members also occupying said space, each of the members comprising at least a pair of two-diameter friction disks, unitarily constructed in concentric stepped formation and revoluble on axes parallel to the shaft axes, the large diameter disks thereof being bottomed in the grooved friction disk, and a spring loading on the driven shaft, putting side pressure by contact of the take-off disk fillet with the lateral rims of the small-diameter disks, in turn to cause lateral rim contact of the large-diameter disks against the housing fillet to keep the individual two-diameter disks of the planetary clusters upright and coplanar in the aforesaid space.

2,745,299
DEBURRING AND CHAMFERING TOOL
Joseph W. Fried and Armin Fried, Burbank, Calif.
Application September 21, 1953, Serial No. 381,246
7 Claims. (Cl. 77—73.5)



1. A chamfering and deburring tool comprising a spindle, a cutter pivotally mounted upon the spindle having a cutting edge adapted to be projected laterally from the spindle or assume a retracted position relatively thereto, means for causing the cutter to assume a position wherein its cutting edge is projected, means responsive to the pressure on the cutting edge exceeding a predetermined degree for causing the cutter to return to its retracted position and be retained in its retracted position, and means for varying the last-mentioned means whereby the pressure at which the cutter is returned may be varied.

2,745,300
COMPOUND ACTION GRIP AND WORK PERFORMING TOOL
William A. Barnes, Utica, N. Y., assignor to Utica Drop Forge & Tool Corporation
Application May 5, 1953, Serial No. 353,210
5 Claims. (Cl. 78—82)



1. A tool adapted to grip workpieces and separately perform work thereon, comprising, first and second handle members, first and second work-member holding jaws, first linkage means between the handle members and the work-member holding jaws providing closing movement of the work-member holding jaws upon closing movement of the handles, first and second work performing jaws movable relative to said work-member holding jaws for performing work on work pieces held thereby, and second linkage means between the handles and work performing jaws providing driving movement of said work performing jaws upon closing movement of the handles.

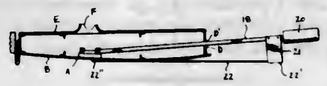
2,745,301
CAP REMOVER AND BOTTLE OPENER FOR BOTTLES AND CANS
Edward Grunwald, New York, N. Y.
Application November 10, 1953, Serial No. 391,213
2 Claims. (Cl. 81—3.1)



1. A combination container, cap remover and bottle opener comprising a fluid container having a neck with a neck opening adapted to be closed by a crown cap, a body portion and a bottom, said bottom having a recessed portion with a crown cap remover therein, said recessed portion of said bottom having a bar integrally formed therein extending thereacross, said crown cap remover being mounted on said bar and disposed completely inside the recessed portion, said bar having a lower portion of dovetail shape cross-section with oppositely inclined sides, said crown cap remover being a hook having a channel base portion with sides clamped to the sides of the bar and a cap top rest with a channel base portion with sides clamped to the sides of the bar, said cap top rest being spaced from the hook on the bar, said hook and cap top rest being slidably mounted on the bar.

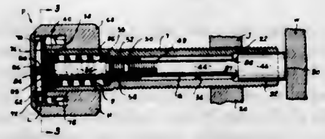
2,745,302
TOOLS FOR REPAIRING AUTO PANELS
Hiram D. Gilstrap, Butte, Mont.
Application July 1, 1953, Serial No. 365,432
1 Claim. (Cl. 81—15)

A tool for clearing dents from auto bodies, comprising, an anvil for disposition behind a panel to be repaired and beneath the usual upholstery or lining of the panel, the anvil having a socket depressed into the rear side thereof for receiving a lug, a square bodied rod for supporting the anvil against the inner side of the panel when said rod is inserted through a hole in the edge or flange of said panel and the anvil is inserted through a slit in the lining of said panel, said rod having an offset and forwardly sloping lug of like diameter as the rod on the outer



end thereof for releasable engagement with said socket, a clamp plate resiliently connected over the rear side of the anvil and having an upraised square cornered housing over the socket for yieldably binding the anvil upon the end of the rod, bevels on the edges of the anvil for guiding the lug into the socket, said lug serving the additional purpose of impinging directly against the dents for removing the same by leverage without an anvil, where the panel is thin.

2,745,303
THUMB SCREW WITH OVERLOAD RELEASE MEANS
Paul D. Cornelius, Burbank, Calif., assignor to Vlier Engineering, Inc., Los Angeles, Calif., a corporation of California
Application June 25, 1954, Serial No. 439,295
17 Claims. (Cl. 81—52.4)



1. A thumb screw with overload release for use with a first object formed with a threaded bore and a second object that is positioned adjacent said first object in line with said bore, comprising: an externally threaded tube threadable within the bore of said first object; a rod axially slidably carried within said tube for engaging said second object; a head; spring means interposed between said tube and said rod tending to effect their axial separation; and lock means normally interconnecting said head and said tube in order that they may undergo concurrent rotation, said lock means being rendered inoperative upon the occurrence of a predetermined amount of axial movement of said tube relative to said rod against the force exerted by said spring means.

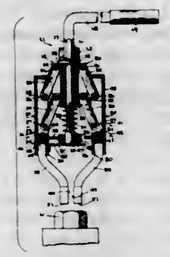
2,745,304
SPRING CLIP WRENCH ATTACHMENT FOR HOLDING A SCREW
Paul D. Cornelius, Burbank, Calif., assignor to Vlier Engineering, Inc., Los Angeles, Calif., a corporation of California
Application May 3, 1954, Serial No. 427,127
1 Claim. (Cl. 81—71)

An attachment clip for releasably retaining the socket of a horizontally disposed socket head screw upon the horizontal front end of a wrench having a polygonal cross-section similar to that of said socket, comprising: an integral strip of spring steel having its intermediate portion formed into an incomplete downwardly extending loop, a rear leg extending upwardly and rearwardly from the rear terminus of said loop, a front leg extending upwardly and forwardly from the front terminus of said loop with the forward portion of said front leg being curved over upon itself downwardly so as to define a hook, said clip having a pair of horizontally aligned apertures of slightly larger but similar cross-sectional shape as said wrench formed in said front and rear legs above said loop, and the free end of said hook having an upwardly curved screw-engaging recess substantially corresponding to the root diameter of said screw, said front and rear legs being constantly biased away from



one another so as to cause the edges of said apertures to frictionally engage said wrench and thereby simultaneously restrain movement of said legs along said wrench and bias the free end of said hook downwardly into engagement with said screw, said clip being rendered free to move along said wrench and said hook being raised from engagement with said screw by the exertion of a squeezing force upon the upper ends of said front and rear legs.

2,745,305
WRENCHES WITH ADJUSTABLE JAWS RESPONSIVE TO HANDLE ACTUATION
Martin G. Reiffin, Brooklyn, N. Y.
Application October 28, 1953, Serial No. 388,859
26 Claims. (Cl. 81—128)

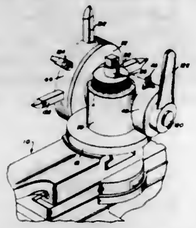


1. A wrench comprising a frame, a plurality of jaws extending downwardly from the frame and having gripping surfaces at their lower ends coacting to form a segmented socket therebetween, said jaws being movably mounted on the frame for movement toward and away from each other, means responsive to pressure of a workpiece on said jaws to move the latter to relatively spaced positions to receive and grippingly engage the workpiece, and means responsive to torque applied to the wrench to urge the jaws inwardly to grip the workpiece with a gripping pressure proportional to the extent of said applied torque.

2,745,306
ADJUSTABLE TOOL HOLDER
Walter V. Schmidt, Highland Falls, N. Y.
Application April 26, 1951, Serial No. 222,996
2 Claims. (Cl. 82—36)

1. A lathe tool holder comprising a base including an upstanding bushing, a clamping bolt disposed axially of said bushing for adjustably securing the same to the T slot of a lathe tool compound, a body slidably mounted upon said bushing, means for adjusting said body vertically of said bushing, said body having a transverse bore, a

bushing rotatably and axially adjustable in said bore, said bushing having a plurality of eccentrically disposed



parallel tool receiving sockets, said means including a sleeve disposed within said body.

2,745,307
HARMONICAS
Caspar W. Elsasser, Philadelphia, Pa.
Application August 30, 1952, Serial No. 307,284
5 Claims. (Cl. 84—377)



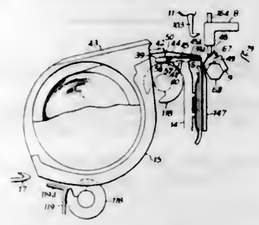
1. A musical instrument comprising a pair of body portions and a reed plate, each of said body portions having a longitudinal wall with transverse walls on one side face thereof integral therewith and alternately connected at their ends by longitudinal side walls integral therewith to provide alternately forwardly and rearwardly opening chambers, the forwardly opening chambers of one body portion being respectively in superposed relation to the rearwardly opening chambers of the other body portion, said transverse and side walls of each of said body portions having terminal faces in a common plane for each body portion, said reed plate being interposed between said terminal faces of said portions and said reed plate having a plurality of spaced reeds on one side thereof each interposed between a pair of said superposed forwardly and rearwardly extending chambers.

2,745,308
SHEET METAL NAIL HAVING CHANNEL SHAPED, BARBED SPREADING LEGS
Emanuel Gisondi, Scarsdale, N. Y.
Application March 29, 1955, Serial No. 497,695
3 Claims. (Cl. 85—13)



1. A sheet metal nail comprising, a head, a channel-shaped leg of substantially V-shape in cross-section extending therefrom, the leg being barbed along its edges, said leg having an integral, laterally-extending portion connected to a second similar channel-shaped, barbed-edge leg, the legs having their barbed edges and concave sides directed toward each other to form a shank substantially rectangular in cross-section with the edges adjacent the head in contact with each other, the barbed edges of the legs diverging adjacent to the ends of the legs whereby percussive contact with the nail head will cause the legs to spread apart when driven into work, both legs being provided with a plurality of lugs extending substantially at right angles with respect to the leg and underlying and contacting the head for reinforcing the head.

2,745,309
NET MAKING MACHINES
Thomas Edward Boynton, Leicester, and William Greenwell Turnbull, Kirby Muxloe, England, assignors to Porter, Spiers (Leicester) Limited, Leicester, England, a British company
Application April 30, 1954, Serial No. 426,791
Claims priority, application Great Britain April 30, 1953
12 Claims. (Cl. 87—53)



1. In a power-operated net making machine equipped with a row of stationary shuttles for containing spools from which spool twines are drawn, a structure for supporting supplies of top twines, and means operable to form loops of the top twines, a knotting mechanism comprising, in combination, means for engaging, forming into bights and drawing through the said loops adjoining portions of the top twines, said means being movable to cause substantial elongation of the bights and dispose the same beneath the spools and about the spool twines, means for taking the loops formed from the top twines and moving them into such positions as to facilitate their penetration by the first mentioned means for engaging and forming into bights the adjoining portions of the said twines, a primary draw-off mechanism for drawing the top twines off the supplies, a compensating member around which the top twines pass, and means for moving the said member to and fro in directions towards and away from the knotting mechanism whereby not only are lengths of the top twines paid out to the first mentioned means while these are moving about the spools, but the bights are drawn up and engaged with the relevant spool twines in such a way as to draw loops of the latter through the loops of the top twines and thereby produce a row of knots.

2,745,310
INTERFEROMETER
Willi Horn, Wetzlar, Germany, assignor to Ernst Leitz G. m. b. H., Wetzlar, Germany, a German corporation
Application January 29, 1953, Serial No. 334,020
Claims priority, application Germany February 22, 1952
9 Claims. (Cl. 88—14)

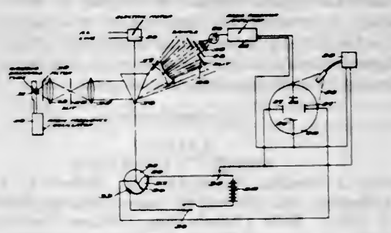
1. An interferometer with a diffraction grating for producing coherent light beams, each beam forming a grating spectrum, comprising optical reversing means for reversing the position of the colors in each spectrum, and optical means for combining the beams into an interference band pattern in a plane, the colored rims of the

interference bands being so widened that all except the two center bands which are almost achromatic comple-



ment each other to appear almost white by superimposition of the colored rims of the spectra.

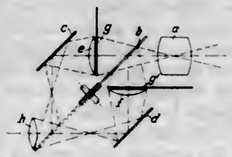
2,745,311
ELECTRONIC EMISSION SPECTROMETRY USING RADIO FREQUENCY EXCITED AND MODULATED LIGHT EMISSION SPECTRUM
Guy A. D. Touvet, Orleans, France
Application July 6, 1951, Serial No. 235,503
29 Claims. (Cl. 88—14)



12. A spectrometer for examining the emission characteristics of a substance comprising a tube, vapor in said tube consisting of the substance to be examined, means for exciting said vapor at radio-frequency to cause emission of light radiation amplitude modulated at radio-frequency, optical means for transforming the light from said tube into a point source, an optical dispersing system positioned to receive light from said source, a light sensitive system positioned to receive light from said dispersing system to convert said light into radio-frequency current having amplitude variations at a frequency corresponding to said radio-frequency amplitude modulated light and varying in amplitude intensities for the different light frequencies of the light radiation in accordance with the characteristic emission spectrum of the substance, and radio-frequency means for amplifying the current output of said light sensitive element.

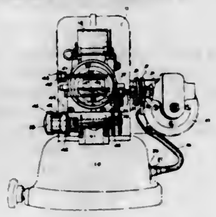
2,745,312
PROJECTOR FOR SERIES OF PICTURES
Georg Sittig, Berlin-Charlottenburg, Germany, assignor to Pintsch Bamag Aktiengesellschaft, a joint-stock company of Germany
Application January 16, 1952, Serial No. 266,659
Claims priority, application Germany January 25, 1951
4 Claims. (Cl. 88—16.6)

1. In a projector, in combination, a rotatably mounted sector-shaped shutter blade having opposite reflecting faces, said sector-shaped shutter blade sweeping a circular plane during rotation and said blade being located entirely on one side of its axis of rotation; means for directing a light beam along a first path intersecting said circular plane at a first point of intersection so that said light beam is reflected along a second path by that face of said shutter which faces said light beam during passage of said shutter through said first point of intersection, rotation of said shutter thus resulting in alternating projection of said light beam along said first and second paths; a pair of reflecting means respectively arranged in said paths to reflect light beams projected along said first and second paths respectively along third and fourth paths intersecting each other in said circular plane at a second point of intersection on the opposite side of said axis from said first point and spaced from the axis of rotation of



said shutter by the same distance as said first point of intersection, so that during rotation of said shutter through said second point of intersection the other reflecting face of said shutter reflects the light beam reflected along said third path into said fourth path; and optical projecting means arranged in said fourth path on the side of said second point of intersection opposite from the reflecting means located in said second path, so that a film portion located in said second or fourth path between said circular plane and the reflecting means in said second path will be projecting through said projecting means alternately with a film portion located in said first or third path between said circular plane and the reflector means located in said first path.

2,745,313
CONTROLLED READING PROJECTOR
Stanford E. Taylor, Levittown, N. Y.
Application May 20, 1952, Serial No. 288,856
3 Claims. (Cl. 88—28)



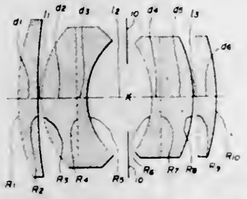
1. In a device of the character described, a projector including a light source and a projection lens system optically aligned therewith, means for supporting in projection position a film having a plurality of lines of material to be projected, a sprocket for advancing said film intermittently with each line being successively positioned in projection position and held stationary during projection, a motor operatively connected to said sprocket for advancing said film at a predetermined speed and a rotary cylindrical member in parallel alignment with the line of said material being projected, said rotary member having a helical slot diametrically therethrough whereby the projection portions of said line is in continuous progressive sequence upon rotation of said rotary cylindrical member and means operatively connecting said rotary cylindrical member to said motor for effecting rotation thereof.

2,745,314
TEMPLE HINGE CONSTRUCTION
Lionel Rabb, Pawtucket, R. I., assignor to Merit Mfg. Co., Inc., Central Falls, R. I., a corporation of Rhode Island
Application May 27, 1954, Serial No. 432,687
1 Claim. (Cl. 88—53)



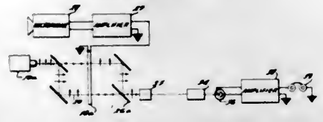
In an ophthalmic mounting, a hinge construction for pivotally joining a temple piece element to the end of a solid frame element comprising an elongated flat body portion stamped from inherently resilient sheet material, an integral flat lug extending laterally from each side edge of the body portion at right angles thereto, said lugs being disposed in spaced, confronting parallel relation and having aligned pivot openings, one of said elements having an oblong opening extending therethrough from the outer surface through the inner surface adjacent the end thereof and having countersunk depressions in the outer surface at the ends of the opening, said opening being of a width less than the distance between the outer planar opposed surfaces of the lugs so that when the lugs are pushed through said frame opening they are wedged into tight frictional contact with the bounding side walls of the opening, said body portion snugly fitting in and closing off the opening at the outer surface of the said element and said body portion having coplanar reduced and extensions snugly fitted in the depressions to position the body portion flush with the outer surface of the said element, a complementary hinge member on the other of said elements and a pivot pin extending through the pivot openings in the lugs and through said complementary hinge member to pivotally secure the lugs and hinge member together.

2,745,315
HIGH SPEED CORRECTED OBJECTIVE COMPRISING FOUR AIR SPACED MEMBERS
Theodor Brendel, Munich, Germany, assignor to Agfa Camera-Werk Aktiengesellschaft, Munich, Germany, a corporation of Germany
Application July 19, 1951, Serial No. 237,566
Claims priority, application Germany July 26, 1950
2 Claims. (Cl. 88—57)



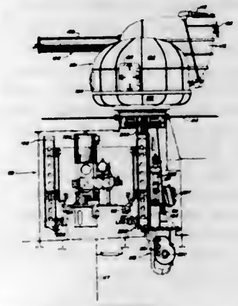
1. A high speed photographic objective having a minimum aperture of F:2.8 corrected for spherical and chromatic aberrations, astigmatism, coma, field curvature and distortion, comprising four members separated from each other by air spaces of which the two outer members are convergent single elements whereas the two inner members are convergent single elements whereas the two inner members represent cemented menisci of negative power having their concave surface facing towards the central stop, the overall length ranging between 0.55 times and 0.67 times the total focal length of the objective, the axial air space between the two cemented menisci being greater than 0.2 times and less than 0.25 times said focal length, wherein both cemented surfaces are plane and for both the part in front of as well as that behind the central stop the refractive indices for the *d*-line of the spectrum (587.6 mu) of the convergent single element and of the divergent part of the cemented meniscus ranges between 1.62 and 1.72, their difference however being between −0.01 and +0.01 and simultaneously the refractive index of the convergent part of the cemented meniscus is at least 0.04 but not more than 0.1 greater than that of the divergent part as well as of the convergent single element.

2,745,316
HIGH EFFICIENCY POLARIZING LIGHT VALVE
George C. Szikiai, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application December 23, 1952, Serial No. 327,503
The terminal 15 years of the term of the patent to be granted has been disclaimed
3 Claims. (Cl. 88—61)



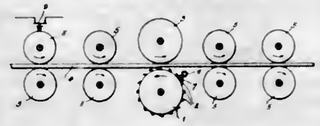
2. A light valve for modulating light projected from a light source comprising a polarizing beam splitter positioned to receive light from said source, a reflecting element positioned to receive and reflect light reflected by said beam splitter, a half wave plate positioned to receive light reflected by said reflecting element and light transmitted by said polarizing beam splitter, a second reflecting element positioned to receive light transmitted by said polarizing beam splitter and said half wave plate, means connected to said half wave plate for applying a source of electrical signals thereacross whereby to modulate light passing therethrough in response to said signals, and a second polarizing beam splitter positioned to receive light reflected from said second reflecting element and light reflected by said first reflecting element.

2,745,317
MISSILE LAUNCHER
Arthur J. Stanton, Bethesda, Md., Robert E. Carlberg, Arlington, Va., Robert K. Bole, Bethesda, Md., Frank W. Sieve, Falls Church, Va., William Danziger, New York, N. Y., and Rocco De Masi, Arlington, Va.
Application September 1, 1950, Serial No. 182,696
32 Claims. (Cl. 89—46)
(Granted under Title 35, U. S. Code (1952), sec. 266)



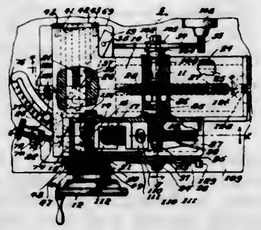
1. A device for launching a plurality of missiles in rapid succession comprising; a structure mounted for rotation relative to other components of the device, a guide carried by said structure for directing the initial flight of the missiles and supported for oscillating movement from an inclined firing position to a vertical loading position, a ready service magazine for carrying a plurality of missiles and sequentially presenting the carried missiles to a position below and in longitudinal alignment with said guide when the latter is in loading position, means for sequentially loading missiles from the ready service magazine through a straight, vertical path into the guide when the guide is in the vertical loading position, means for firing a missile from the guide when the guide is inclined to the firing position, both said means including electric cables connected between said rotatable structure and stationary components therebelow, means for preventing twisting, straining, and chafing of the cables during rotation of said rotatable structure, and means for protecting said guide from back blast of missiles being launched.

2,745,318
MILLING OF METAL
Henry M. Williams, Alton, Ill., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application November 29, 1950, Serial No. 198,149
2 Claims. (Cl. 90—11)



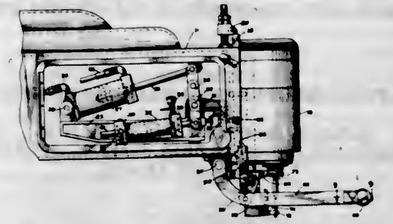
2. In combination with a milling cutter, apparatus for lubricating and cooling the cutting surfaces of the milling cutter during a milling operation on a flat sheet, comprising, an atomizer for converting cutting liquid into a mist, a distributing pipe connected with said atomizer and positioned adjacent the side of the milling cutter from which the blades thereof approach the surface of the sheet to be milled, said distributing pipe having an aligned series of closely spaced ports addressed toward said cutter, said series of ports extending for the full axial dimension of the cutter, and each of said ports being located in the region immediately outside the periphery of the cutter between the already milled surface of the sheet being milled and a plane perpendicular to said surface which is tangent with the periphery of the cutter.

2,745,319
CAM MILLING ATTACHMENT FOR MILLING MACHINES
William F. Sawyer, Brighton, Mich.
Application January 14, 1953, Serial No. 331,276
3 Claims. (Cl. 90—13.9)



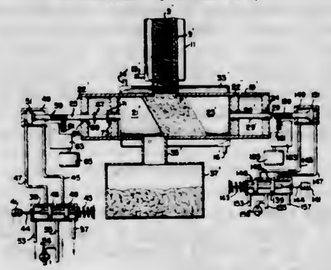
1. In a cam cutting attachment for a milling machine, the combination which comprises a base having a longitudinally disposed dove-tail groove in the under surface, said groove being adapted to receive a tongue of a conventional milling machine bed, a horizontally disposed cam carrying spindle rotatably mounted in said base, means for clamping a pattern on one end of the spindle, means for clamping a blank on the end of the spindle opposite to the end on which the pattern is positioned, said spindle positioning the blank in cutting relation to a milling cutter of a machine, a hand wheel shaft positioned parallel to and spaced from the spindle, said hand wheel shaft being rotatably mounted on said base, a hand wheel on the hand wheel shaft, a stub shaft extended from the hand wheel shaft to a point above the spindle, a worm gear on the spindle, a worm on the stub shaft positioned in meshing relation with the worm gear of the spindle, and means for advancing the base whereby the cam blank follows the outline of the pattern upon rotation of the spindle by the hand wheel.

2,745,320
ACTUATOR
Willem Groen, Chicago, Ill., assignor to Onsrud Machine Works, Inc., Chicago, Ill., a corporation of Illinois
Application January 14, 1953, Serial No. 331,233
7 Claims. (Cl. 90—14)



1. In a milling machine, a carrier frame mounted for movement in a horizontal plane, a milling head vertically slidable on said carrier frame, a fluid actuated jack on said frame having a reciprocating member, actuating means interposed between said member and said milling head for raising said milling head, said reciprocating member having a sliding connection with said actuating means and a shoulder for operatively engaging said actuating means upon movement in the lifting direction only, said reciprocating member slidably overrunning said actuating means upon movement in the opposite direction to release the same for gravitational descent of said milling head, a dashpot acting between said frame and head to retard the speed of descent of said head, a source of fluid under pressure, valve means operable for controlling admission of fluid from said source to said jack and the exhausting thereof to drive said reciprocating member selectively in opposite directions, a handle on said frame for guiding horizontal movement of said milling head, and manually controlled means on said handle operatively connected to said valve means for selecting the direction of movement of said reciprocating member.

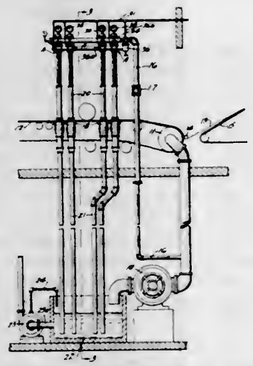
2,745,321
APPARATUS FOR KNEAD PULPING
Harold E. Bowers, Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
Application January 19, 1954, Serial No. 404,841
2 Claims. (Cl. 92—20)



1. Pulping apparatus comprising an elongated cylindrical shaped member defining a kneading chamber, said chamber having an inlet opening in the side wall thereof for introducing material into said chamber, and an outlet in the opposite wall for discharge of material from the chamber, screw means for feeding material to the inlet opening, a pair of cylindrical shaped rotatable ele-

ments slidably disposed in said chamber and spaced from each other and arranged at opposite sides of said inlet opening, said rotatable elements being substantially of the same diameter as the inner diameter of said chamber, said rotatable elements having their opposed side faces beveled forming frusto-cylindrical elements for kneading pulp, means for rotating each of said cylindrical shaped elements independently of the other to effect a continuous change in the shape of the cross-section of said kneading chamber, and means for independently shifting said rotatable elements axially towards and away from each other concurrently as said elements are rotated.

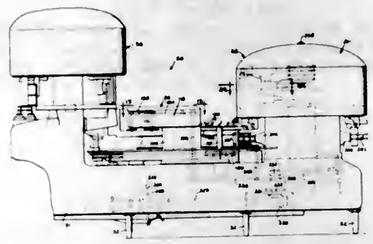
2,745,322
DIAPHRAGM OPERATED VACUUM CONTROL SYSTEM
Arthur E. Broughton, Glens Falls, N. Y.
Application January 14, 1954, Serial No. 404,079
7 Claims. (Cl. 92—51)



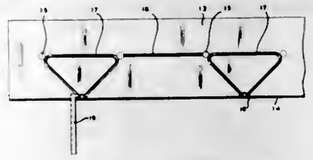
1. In a paper making machine, a system for controlling the vacuum in a suction head comprising a suction head positioned to remove water from an overlying layer of diluted paper pulp, a withdrawal conduit communicating with said suction head to permit the air and water drawn into said suction head to be removed therefrom, a hollow upstanding receiving member communicating with said withdrawal conduit and having a downwardly extended drainage leg with the lower end thereof vacuum sealed and through which water removed from said suction head is adapted to flow and having an upwardly extending air withdrawal leg, a vacuum control valve controlling the vacuum supplied to said air leg, a diaphragm controller operatively associated with said control valve including a chamber communicating with said suction head, a diaphragm working in said chamber, and a relief valve affording communication between said chamber and air under at least atmospheric pressure and operatively connected with said diaphragm for increasing the pressure in said chamber when the vacuum therein reaches a predetermined maximum limit.

2,745,323
FLAT TOP CONTAINER FABRICATING MACHINE
Charles Z. Monroe and James F. Earp, Detroit, Mich., assignors to Ex-Cell-O Corporation, Detroit, Mich., a corporation of Michigan
Application November 10, 1952, Serial No. 319,684
18 Claims. (Cl. 93—36.8)

1. In a machine for making flat-topped cartons of paperboard or the like from preformed bodies having top closure parts defined therein and selectively coated with thermoplastic adhesive, each said body having roof panels, top flange panels, an inner top flap having a filling and pouring opening therein, and an outer top flap having a filling flap therein, the combination of a base, a body forming unit mounted on said base, a conveyor adapted to receive preformed carton bodies in a procession from said body forming unit, a top preformer unit adapted to infold the roof panels and to outfold the top flange panels of carton bodies traversed therethrough by said conveyor, said preformer unit also being adapted to fold down said inner top flap of each carton, a top closing turret mounted on said base for rotation about a generally upright axis, means on said turret for receiving successively a plurality of carton bodies, means for transferring the cartons successively to said turret, means for downfolding the outer top flap of each carton as an incident to transfer to said turret but without closing the filling flap thereof, a plurality of top closure heads fixed to said turret and each adapted to apply heat and pressure to the top flange panels and downfolded top flaps of an associated carton body to activate the thermoplastic adhesive thereon, and means in each said closure head for precluding application of heat and pressure to the filling flap of the carton associated therewith.

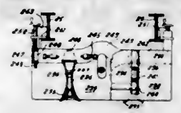


2,745,324
FABRICATED JOINT FOR CONCRETE ROADWAY
Leonard H. Webb, Girard, Ohio, assignor to Webcore Steel Framing Systems, Inc., Youngstown, Ohio, a corporation of Ohio
Application April 19, 1955, Serial No. 502,326
3 Claims. (Cl. 94—17)



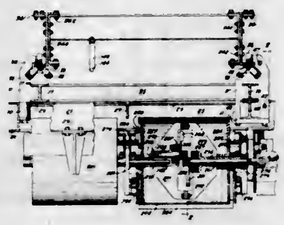
1. A fabricated steel joint assembly for a concrete roadway comprising an elongated plate-like web member mounted on edge, a plurality of parallel dowels projecting right-angularly through said web member intermediate the top and bottom edges thereof and longitudinally spaced therealong and rigidly secured to said web, a plurality of stiff legs extending outwardly from the bottom edge of said web member and being generally parallel with said dowels, said legs being rigidly secured to said web member intermediate pairs of said dowels, longitudinal braces on one side of said web member only between successive dowels and connected to said dowels adjacent the outer end portions thereof, and oppositely inclined braces on said one side of said web member only rigidly connected at their lower ends to said legs and at their upper ends to said dowels adjacent the outer end portions thereof thereby forming triangularly shaped supports for said outer end portions of said dowels and providing a rigid truss-like structure to restrain movement of the said outer end portions of said dowels in either longitudinal or vertical directions, the arrangement being such that said dowels are rigidly held in parallel relation during handling of the assembly and pouring of the concrete thereabout.

2,745,325
BLADE AND LEVELING APPARATUS FOR ROAD MACHINES
George P. Green, Lubbock, Tex.
Application March 24, 1952, Serial No. 278,250
4 Claims. (Cl. 94—44)



1. A machine of the type described comprising a wheel supported frame structure, a trackway supported by said frame structure transversely of the longitudinal axis thereof; a carriage supported on said trackway for back and forth movement; power means mounted on said frame structure to propel the machine; means operated by said power means to actuate the carriage back and forth on said trackway at a predetermined rate of travel relative to the rate of movement of the machine; and a blade member supported by said carriage for cutting and leveling material, said blade member comprising a pair of spaced blade assemblies individually pivotally mounted for independent limited movement about horizontal axes parallel to said trackway, each of said blade assemblies having a pair of oppositely facing mold boards, said blade member having stop members for limiting movement of each blade assembly.

2,745,326
ROLLER FOR ROAD MACHINES
George P. Green, Lubbock, Tex.
Application May 17, 1952, Serial No. 288,478
5 Claims. (Cl. 94—48)



1. In a machine of the type described, a hollow roller; a first and second shaft mounted on said machine and extending into said roller from opposite directions, said roller being rotatably mounted on said shafts for rotation about a horizontal axis; means within said hollow roller for supporting the inner ends of said first and second shafts in axial alignment; a weight mounted on and spaced from said first shaft for rotation therewith within said drum; a third shaft mounted on said second shaft and disposed parallel to and spaced from said second shaft; a second weight rigidly mounted on said third shaft and spaced therefrom for rotation within said drum about an axis parallel to and spaced from the longitudinal axis of said first shaft; means connecting said first and third shafts for causing said first and third shafts to rotate at equal speeds in opposite directions, said weights when extended horizontally from their axes of rotation being on opposite sides of their axes, said weights moving simultaneously downwardly and upwardly; and means for rotating said first shaft.

706 O G.—33

2,745,327
ELECTROPHOTOGRAPHIC PROCESS
Otavio J. Mengali, Columbus, Ohio, assignor, by mesne assignments, to The Haloid Company, Rochester, N. Y., a corporation of New York
No Drawing. Application May 12, 1952, Serial No. 287,415
3 Claims. (Cl. 95—1.3)

1. An electrophotographic process comprising placing an electrostatic charge on the surface of an electrophotographic member comprising a photoconductive insulating layer having a resistivity of at least about 10^{14} ohms-cm. in darkness and capable of accepting an electrostatic potential of at least 300 volts and substantially retaining said potential for at least 10 minutes in the absence of illumination and capable of rapidly dissipating this charge by increased conductivity upon exposure to light, said layer being a substantially vitreous uniform mixture of between about 0.1% to 10% tellurium and the remainder substantially vitreous selenium overlying and in electrically conductive contact with a conductive backing member, selectively dissipating electrostatic charge from the surface of the charged photoconductive insulating layer by exposing the charged layer to a light image thereby creating an electrostatic latent image on the surface of the photoconductive insulating layer, and developing said electrostatic latent image with electrically charged powder particles.

2,745,328
HITCH ATTACHMENT STRUCTURE FOR CARRY-TYPE SCRAPER
Kirk L. Brimhall, Torrance, Calif., assignor, by mesne assignments, to Western Equipment Mfg. Co., Glendale, Calif., a corporation of California
Application December 27, 1949, Serial No. 135,206
3 Claims. (Cl. 97—46.07)

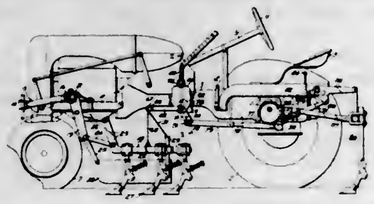


1. A hitch unit for coupling a ground working implement to a vertically movable, power-operated draft unit of a tractor, said draft unit including a pair of lifting arms having outer ends disposed rearwardly of the tractor, and a control member connected in the draft unit to raise and lower said lifting arms responsive to predetermined loads imposed thereon; said hitch unit comprising: a pair of elongated side members; a cross member fixed at its ends to said side members adjacent corresponding ends of said side members; means on said side members for detachably mounting said side members on said lifting arms with said cross member and said corresponding ends disposed above said arms and in inwardly spaced relation to said outer ends of said arms; a draft lever fulcrumed on said cross member with one end disposed below said cross member and in inwardly spaced relation to said outer ends of said arms; means on said one end of said lever operable for effecting a draft connection with a ground-working implement; a link connected at one end with the other end of said lever; and means on the other end of said link providing for connection of the link with said control member.

2,745,329
LIFT MECHANISM AFFORDING INDEPENDENT MANUAL ADJUSTMENT AND POWER ACTUATION OF SEPARATE TOOLS
August G. Buhr, La Crosse, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application June 29, 1951, Serial No. 234,296
4 Claims. (Cl. 97—46.45)

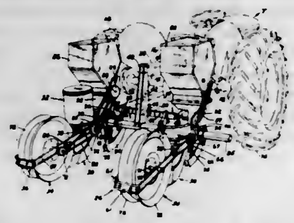
2. An agricultural machine comprising, in combination: a tractor having a rearward operator's station, a

pair of implement frames mounted at opposite sides of said tractor forwardly of said operator's station for adjustment independently of each other between implement raised and implement lowered positions, a bracket structure mounted on said tractor forwardly of said operator's station, a first lift shaft section rotatably supported in said bracket structure on an axis extending transversely of said tractor and having an implement lift portion operatively connected with one of said implement frames at one side of said tractor, and presenting an actuating arm at the other side of said tractor; a second lift shaft section rotatably supported in said bracket structure coaxially with said first lift shaft section and having an actuating arm at said other side of said tractor and presenting an implement lift portion operatively connected with the other of said implement frames at said



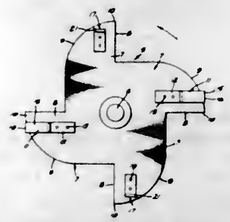
other side of said tractor; said actuating arms extending radially from said lift shaft sections in proximity to each other at said other side of said tractor; a pair of relatively rotatable control elements pivotally mounted, respectively, on said lift shaft sections, each of said lift shaft sections and its associated control element presenting adjacent portions coactable with each other to selectively determine limit positions to which said lift shaft sections can be rotated relative to their associated control elements in implement lowering direction, and a single actuating device connected with said actuating arms at said other side of said tractor and operative to rotate said lift shaft sections in implement raising direction and permitting limited rotation of each of said lift shaft sections relative to each other in implement lowering direction.

2,745,330
FLEXIBLE IMPLEMENT CONNECTION TO TRACTOR DRAWBAR
Noral A. Nelson, Detroit, Mich., assignor to Harry Ferguson, Inc., Detroit, Mich., a corporation of Delaware
Application June 1, 1950, Serial No. 165,489
4 Claims. (Cl. 97—47.62)



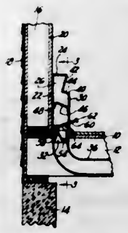
1. The combination with a tractor having a power operated hitch linkage including a pair of trailingly pivoted laterally spaced draft links and a trailing pivoted upper link with a drawbar connected between the draft links, of an implement comprising a rigid frame structure including an elongated transversely disposed tool bar, means rigid with said tool bar connecting said frame structure to the drawbar for free pivotal movement about a fore-and-aft axis and for limited pivotal movement about a vertical axis, said means having an upwardly projecting extension for connecting said frame structure with the upper link at a point spaced substantially above the drawbar, and means on said tool bar comprising a pair of stops each including a forwardly facing arm terminating at its lower end in an angularly bent strap positioned to coact with the drawbar to restrict both such pivotal movements within predetermined limits.

2,745,331
LAWN EDGERS
Lawrence Lancour, Santa Ana, Calif.
Application August 19, 1954, Serial No. 450,971
3 Claims. (Cl. 97—227)



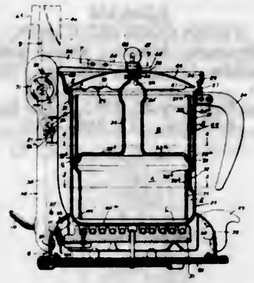
1. A lawn-edger comprising a plurality of principal blades each having a smooth slicing edge inclined rearwardly from the direction of normal rotation and a tip pointed rearwardly from said edge, said blades being joined centrally in circular saw-tooth formation, secondary blades secured to some of said principal blades and spaced laterally from them, and scoops secured to others of said principal blades interspersed with said secondary blades and extending at right angles thereto for removing vegetation cut by said principal blades and said secondary blades.

2,745,332
BASEBOARD HEAT DISTRIBUTOR
Louis C. Cotts, Michigan City, Ind.
Application April 28, 1951, Serial No. 223,580
7 Claims. (Cl. 98—40)



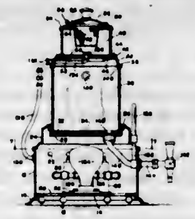
1. An air distributor adapted to be mounted at the lower part of a building wall for connection with a discharge duct of a forced air circulating device, comprising front, back, top, bottom and end walls defining a horizontally elongated chamber, one of said walls having an inlet opening, the upper portion of said front wall being inwardly offset to provide a longitudinal shoulder portion spaced from said top and bottom walls and defining a lower chamber portion and an upper chamber portion, and an air discharge outlet from said lower chamber formed in said shoulder to extend longitudinally thereof and face upwardly to discharge air upwardly along the outer surface of the upper portion of said front wall, said outlet constituting at least one opening, the walls at said upper chamber portion being substantially imperforate and said upper and lower chamber portions being in open communication throughout the length of the chamber, whereby the air discharged from said outlet will be directed upwardly and along the building wall to form a curtain parallel to said wall.

2,745,333
COFFEE MAKING APPARATUS
James R. Campbell, Laguna Beach, Calif.
Application July 10, 1950, Serial No. 172,884
6 Claims. (Cl. 99—281)



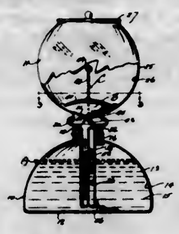
1. A coffee brewing receptacle comprising: an open top outer container for water to be heated; an inner vessel insertible within and removable from said outer container and comprising a lower member open at its lower end and closed at its upper end to provide a pressure chamber therein, and an upper member open at its lower end detachably seated on said lower member to provide a separate infusion chamber therein, said upper member having an opening at its upper end; said lower and upper members having side walls spaced inward from the outer container to provide an annular liquid passage extending from the open lower end of the lower member to the opening at the upper end of the upper member; the upper end of said lower member and the lower end of said upper member having portions interengaging to provide filter passage means for restricted movement of liquid from the bottom of said infusion chamber to said annular liquid passage; said lower member being provided at its upper end with a vent tube communicating with the top of said pressure chamber and extending upwardly through said infusion chamber and having a vent opening at its upper end; and a cover formed to overlie the inner vessel and having a sealing member movable with said cover into and out of sealing engagement with the upper end of said vent tube upon relative vertical movement of said cover and said inner vessel.

2,745,334
COFFEE MAKING MACHINE
Julius C. Schwall, Brooklyn, N. Y., assignor to Wallin Industrial Corporation, New York, N. Y., a corporation
Application March 11, 1952, Serial No. 275,899
1 Claim. (Cl. 99—283)



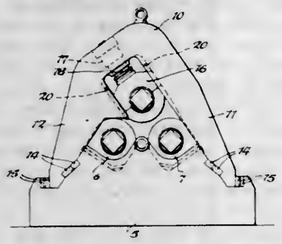
The combination in a coffee machine comprising a base, an intermediate and an upper compartment sections stacked one upon another, tie-rods connecting the said intermediate and upper sections, the said base section, having an open top and providing a housing for a series of electrical control units, a solenoid controlled hot water valve in said housing and having a pipe line supplying hot water to said solenoid controlled valve, a solenoid controlled steam valve having a pipe line supplying steam to the said solenoid controlled valve, a riser pipe line leading from the two said solenoid controlled valves to the said upper compartment section and adapted to direct hot water and steam to the said upper compartment, the said electrical control units in the said base compartment consisting of a triple disk timer unit, electrically connected to the electrical source, a motor to rotate the triple timer disks, and electrically connected with the third timer disk, the said third timer disk adapted to control the rotative action of the said motor, a manually operated push button switch electrically connected to the said motor and to said third timer disk and adapted to start and maintain the operation of the said motor, the said first and second timer disks of said triple disk timer unit having electrical connection with the said solenoid controlled steam and hot water valves, pilot lights in circuit with the said solenoid controlled valves to indicate the hot water and steam flow, an infra-red heating unit electrically connected to the current source, and a switch to control the current to the said heating unit, the said intermediate compartment adapted to rest over the open top of the said base compartment to provide a reservoir for the brewed coffee, a draw off tap connected to the bottom of the said intermediate compartment, the said upper compartment providing a coffee brewing chamber and resting upon the upper open end of the said intermediate compartment, a perforated basket in the said upper compartment adapted to contain ground coffee, a spreader outlet upon the upper end of the aforesaid riser pipe line adapted to spray the hot water and steam through the ground coffee in said basket and a pipe line connecting the said upper compartment with the said intermediate compartment.

2,745,335
COFFEE MAKERS
Earle F. Hiscock, Washington, D. C., assignor to Kip, Inc., Washington, D. C., a corporation of Delaware
Application July 18, 1950, Serial No. 174,476
3 Claims. (Cl. 99—295)



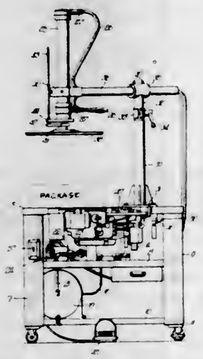
1. In a vacuum type coffee maker the combination of upper and lower receptacle portions, the upper receptacle portion having a tube connected therewith depending into the lower receptacle portion, said tube having a passageway therethru communicating with said receptacle portions, a coffee packet including a flexible porous coffee containing casing mounted in the upper receptacle portion across said passageway, an extensible tension spring releasably disposed within the passageway of the tube having means releasably connected with the lower part of the tube and means at the opposite end thereof releasably connected to the packet so that the tension thereof will pull the packet into position across said passageway, said packet connecting means including a covering over the top major area of the packet, said spring being of such tension that as an incident of ebullition of liquid thru said passageway it will resiliently flex so that the packet will be given an intermittent squeezing action by said covering in the upper receptacle portion.

2,745,336
ROLL MILLS
Nicolas A. Helmer, Plainfield, N. J., assignor to The Squier Corporation, Buffalo, N. Y.
Application June 26, 1952, Serial No. 295,733
3 Claims. (Cl. 100—165)



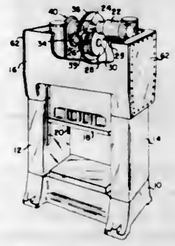
1. In a mill having an upper roll cooperating with two lower rolls one of which constitutes a feed roll, and in which the material to be pressed passes first between said upper roll and said feed roll and then between said upper roll and the other lower roll, that improvement which includes bearing housings in which said rolls are journalled, bearings in said housings, the bearings for said lower rolls being arranged in fixed relation to each other, guideways in said bearing housings in which the bearings for said upper roll are arranged for movement toward and from said lower rolls, said guideways being inclined downwardly in a direction more toward the bearings for the other of said lower rolls than toward the bearings of said feed roll, and yielding means urging said bearings for said upper roll downwardly along said guideways, whereby movement of said upper roll toward and from said feed roll resulting from material passing into said mill is greater than the movement of said upper roll relatively to the other of said lower rolls.

2,745,337
COMPRESSION DEVICE FOR PACKAGES AND BUNDLES
Ernest C. Barker, La Grange Highlands, and Shirley Bernard Brouse, Chicago, Ill., assignors to United States Steel Corporation, a corporation of New Jersey
Application November 5, 1951, Serial No. 254,874
1 Claim. (Cl. 100—269)



Apparatus for compressing a package resting on a platform comprising a post upstanding on said platform and having a T-head, means mounting said post for angular adustment about its own axis, a horizontal arm slidable through said head and extending over said platform, a ring clamp at one end of said arm, a double-acting fluid-pressure cylinder held erect in said clamp, said cylinder being vertically adjustable in said clamp and having a piston rod extending downwardly therefrom and a package-engaging plate carried by said rod, said arm being tubular, and a conduit extending from each end of said cylinder through said arm.

2,745,338
PRESS CONSTRUCTION
Reuben E. Wissman, Minster, Ohio, assignor to The Minster Machine Company, Minster, Ohio, a corporation of Ohio
Application February 20, 1953, Serial No. 337,977
4 Claims. (Cl. 100—282)



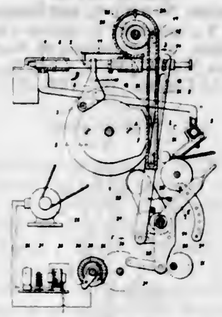
1. A press of the character described, having a frame and a platen mounted for reciprocation thereon, and a drive motor for operating mechanism to actuate the platen, in combination with a flywheel and flywheel shaft driven by the motor at a predetermined speed, an intermediate clutch and brake shaft with a friction plate clutch and brake mounted thereon having a gear driven from said flywheel shaft at a lesser speed than the flywheel shaft, a pinion on said intermediate shaft, a crankshaft, gear means thereon for engaging the pinion on the clutch and brake shaft whereby the crankshaft is operated at a speed lower than the intermediate clutch and brake shaft whereby the clutching and braking function is performed at relatively slow speed as contrasted to the speed of the flywheel shaft.

2,745,339
APPARATUS FOR DECORATING CONCAVE AND CONVEX SURFACES
José Valiela Fernández, Buenos Aires, Argentina
Application March 19, 1951, Serial No. 216,435
3 Claims. (Cl. 101—41)



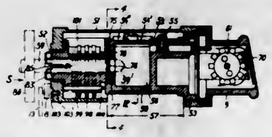
1. An apparatus for decorating ceramic articles comprising an elongated table, a design transfer member set in said table and hinged on one side thereto, said design transfer member including a hollow metallic block having an opening in one side, a perforated disc placed in the opening, a resilient, non-absorbent sheet having a small opening covering said disc, a tubular element connected to the opening in the resilient sheet and passing through and out of said hollow block, a conduit communicating with said hollow block, means for imprinting a design onto said resilient sheet, and an article supporting member set in said table adjacent to the hinged side of said hollow block, said article supporting member including an inclined annular seating portion, a vertically adjustable platform disposed within said annular seating portion, a ring resting on said annular seating portion, a plurality of biased slots in said ring, a plurality of arcuate segments disposed above said ring, a radially extending slot in each of said arcuate segments, a plurality of fingers, each of which is movably mounted in one of said radial slots, pins extending upwardly from each of said fingers, each of said pins being disposed within one of the biased slots in said ring and means for turning said ring whereby said fingers will be moved radially inwardly to center an article on said supporting member.

2,745,340
MOISTURE CONTROL DEVICE FOR ROTARY DUPLICATING MACHINES
Wilhelm Ritzerfeld and Gerhard Ritzerfeld, Berlin-Dahlem, Germany
Application January 16, 1952, Serial No. 266,692
Claims priority, application Germany January 22, 1951
12 Claims. (Cl. 101—132.5)



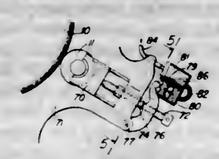
1. In a rotary duplicating machine, in combination, a rotary printing drum member; a pressure member for pressing sheets against said printing drum member; adjusting means connected to one of said last mentioned members for adjusting the printing pressure; a counting device connected to said printing drum member and counting turning movements of the same for counting the number of sheets printed; and motion transmitting means connecting said counting device with said adjusting means in such manner that the printing pressure is increased in accordance with the number of turning movements of said drum member counted by said counting device, and thereby in accordance with the number of printed sheets.

2,745,341
PRINT ROLL SECURING MEANS
Fritz Haseloff, Kassel, Germany, assignor to Licentia Patent-Verwaltungs, G. m. b. H., Hamburg, Germany
Application March 6, 1952, Serial No. 275,058
8 Claims. (Cl. 101—212)



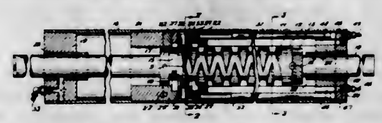
1. Printing apparatus, comprising in combination, a casing having an inner surface and having a side wall portion formed with an opening passing therethrough; a printing roller mounted in said casing opposite said opening for rotation with respect thereto, said printing roller carrying a printing stock which extends only part way about the axis of said roller; releasable locking means mounted on said roller and casing to prevent rotation of the former with respect to the latter and to lock said roller in said casing in a position where said printing stock is angularly displaced from said opening, said locking means comprising at least one pair of projections mounted on said inner surface of said casing, at least one locking member mounted on said roller for movement toward and away from said inner surface of said casing, and spring means operatively connected to said locking member for urging the same toward said inner surface of said casing so that an end of said locking member is located between said pair of projections to prevent rotation of said roller with respect to said casing; and release means located in the apparatus for engaging said locking member and moving the latter against the action of said spring means away from said inner surface of said casing and said projections to release said roller for rotation in said casing by said opening thereof, whereby an article in said opening may engage said roller to be printed thereby.

2,745,342
PRESSURE LOADING DEVICE FOR PRINTING ROLL
Eduard Küsters, Krefeld, Germany, assignor to Texplant Corporation, New York, N. Y., a corporation of New York
Application May 6, 1950, Serial No. 160,502
Claims priority, application Germany March 10, 1950
8 Claims. (Cl. 101—247)



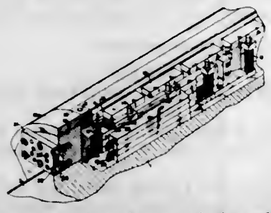
1. In a roll printing machine for printing a continuous textile web, a main cylinder, a printing roll having a movable bearing for each of its shaft ends, pneumatic pressure means acting upon each bearing for urging said printing roll against said main cylinder, and a mechanical adjustment for said pneumatic pressure means, said pneumatic pressure means including a cushioned body of fluid between the point of application of pressure to the movable bearing of said printing roll and said mechanical adjustment, whereby both the force of said pneumatic pressure means and that of said mechanical adjustment act upon the point where pressure is applied to said movable bearing.

2,745,343
AUTOMATIC VIBRATOR ROLL
Noel Davis, Gates Mills, Ohio, assignor to Harris-Seybold Company, Cleveland, Ohio, a corporation of Delaware
Application March 19, 1953, Serial No. 343,313
10 Claims. (Cl. 101—348)



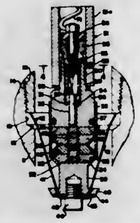
1. In an automatic vibrator roll, a fixed shaft, a two-way screw thereon, a hollow roll enclosing said screw, an internal housing adapted to be inserted into the roll from one end thereof, means for fixing said housing in said roll, a traveller carried by said housing and cooperating with said screw, said traveller surrounding the screw and comprising an oscillator surrounding the screw with an opening therethrough of greater diameter than the external diameter of said screw, a crescent carried by and fixed with respect to said oscillator and projecting into said opening, said crescent running in said screw and constituting a driving dog, bearing means for said oscillator carried by said traveller on opposite sides of said screw, said bearing means being in alignment upon an axis at right angles to said screw and cutting said crescent at its midpoint, and deflecting means at the ends of said screw for engagement with said crescent to turn said oscillator on its said bearing means and cause said crescent to enter the reverse thread.

2,745,344
FLEXIBLE SHEET SECURING DEVICE FOR PRINTING ROLLERS
George Rogers Brodie, Lower Merion Township, Montgomery County, Pa., assignor to Fred'k. H. Levey Company, Inc., New York, N. Y.
Application March 2, 1955, Serial No. 491,720
7 Claims. (Cl. 101—415.1)



1. A lock-up for clamping a printing plate to a plate cylinder of a rotary printing press, comprising a pair of cooperating clamping jaws co-extensive with the width of the printing plate, having upper edges tapering toward each other and terminating substantially flush with the peripheral surface of the cylinder, a lug positioned between the lower ends of the clamping jaws and adapted to cooperate therewith in clamping the respective ends of the plate, pusher bars positioned at intervals along each side of the pair of clamping jaws and adapted to bear thereon at a point intermediate the height of the jaws, means associated with each pusher bar adapted to force the pusher bar and the associated clamping jaw toward the cooperating jaw and means actuated from one end of the lock-up, and extending longitudinally through the cylinder for actuating the pusher bar forcing means.

2,745,345
APPARATUS FOR RELEASING THREADED PIPE COUPLINGS
William G. Sweetman, Houston, Tex.
Application September 18, 1948, Serial No. 49,990
4 Claims. (Cl. 102—21.8)



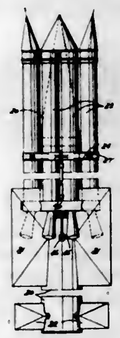
1. Apparatus for releasing the threaded joint between the members of a male-female threaded coupling connecting pipe sections in a well, comprising, a carrier insertible in the bore of said coupling and movable longitudinally therein on a lowering cable, a continuous annular high explosive charge mounted on said carrier concentric with said coupling, said charge being composed of a pair of superposed flat rings of detonatable explosive having registering axial bores and complementary inwardly sloping peripheral edges to define between them a continuous annular hollow in the outer periphery of said charge, said hollow being triangular in cross-section and having an included angle of from about 80° to 100°, a body of booster explosive disposed in said axial bores, a liner conforming in shape to and seated in said hollow, a circumferentially extending wall closing said hollow at its base, radially extending resilient spacer elements mounted on said carrier and engageable with the inner end of the male member of said coupling in response to upward movement by said cable to thereby selectively position said charge within the female member of said coupling and axially spaced from said inner end of said male member, a resilient connection means interposed between said carrier and said cable extendible by upward pull on said cable following engagement of said spacer means with said inner end of said male member, and detonating means on said carrier positioned on the longitudinal axis of said charge.

2,745,346
METHOD OF CHARGING HOLES WITH EXPLOSIVES
Robert B. Aitchison, New York, and Stanley B. Kirk, New Rochelle, N. Y., assignors to Union Carbide and Carbon Corporation, a corporation of New York
Application May 11, 1953, Serial No. 354,174
16 Claims. (Cl. 102—23)



4. A method of charging a blast hole with explosive comprising inserting into said hole to the bottom thereof an elongated collapsed inflatable expansible tube of substantially impervious material having its lower end closed off and weighted, inflating said tube into contact with the side walls of said hole, and then introducing a free flowing explosive into said inflated tube.

2,745,347
SELF-PROJECTED MISSILES
Alexander Lightbody and James Morrison Johnston, Baginton, near Coventry, England, assignors to Sir W. G. Armstrong Whitworth Aircraft Limited, Baginton, near Coventry, England
Application June 5, 1952, Serial No. 291,932
Claims priority, application Great Britain July 6, 1951
8 Claims. (Cl. 102—49)



2. A self-projected missile having discardable, wrapped round boost motors, the boost motors being secured to the missile at two axially-spaced places, the forward attachment of the motors to the missile including arcuate frame members which carry the motors, releasable catches connecting said frame members together so as to form round the missile an axially-slidable ring thereon, means holding said releasable catches in contracting posi-

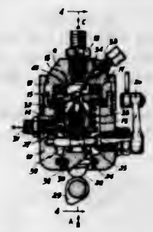
tion, while the thrust of the motors is sufficiently great, said means being rearwardly-extending pins which engage said catches and are restrained axially on the missile.

2,745,348
MOTOR OR PUMP
Harold A. Reuter, Cleveland, Ohio, assignor to Visioneering Company, Inc., Cleveland, Ohio, a corporation of Ohio
Application June 17, 1952, Serial No. 294,096
6 Claims. (Cl. 103—4)



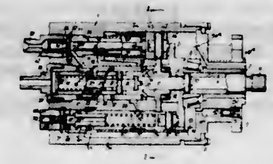
1. An hydraulic motor or pump including a plurality of cylindrical motor or pump sections, each section including a vaned rotor and pair of associated rotary valve members, a circular lip projecting beyond one face of each section and engaging a shoulder around the edge of the opposite face of an adjoining section, a circular cover having a shoulder around the edge engaging the projecting lip of one end section, a circular shaft-end cover having a circular lip engaging the shoulder around the edge of the other end section, bolt means securing the covers and sections together in fluid-tight relationship with an enclosed fluid-tight space provided between adjacent sections, a drive shaft passing through and coupled to the rotor in each section, said shaft extending through the shaft-end cover, a rotary seal secured to the shaft-end cover and adapted to seal the shaft opening against leakage of fluid, each of said sections having a pair of fluid inlet or outlet passages communicating with the rotor, a valve associated with each inlet or outlet passage, a fluid by-pass line directly interconnecting the inlet or outlet passages of each section intermediate the valve and the rotor, and a valve in each of said fluid by-pass lines, the by-pass valve and inlet or outlet valves of each section being mechanically coupled whereby the by-pass valve opens when the inlet or outlet valves are closed to permit recirculation of fluid through the section when it is cut off from the fluid source.

2,745,349
PUMPING DEVICES
Bruno Tavola, Cellini, Milan, Italy
Application January 16, 1952, Serial No. 266,707
Claims priority, application Italy February 5, 1951
15 Claims. (Cl. 103—37)



1. In a pumping device a first rigid member, having a first face, a second rigid member in variably spaced relationship with said first rigid member and having a second face opposite said first face, a substantially ring-shaped member, made of resilient material, in abutting relationship with both said faces and having a cylindrical inner surface defining with said faces a pressure chamber, driving means for reciprocating one of said rigid members in respect to other of said rigid members as to vary the spaced relationship thereof within the limits allowed by the expansion and compression of said resilient substantially ring-shaped member abutting thereon, a valve seat forming inlet opening being formed in said face of said one of said rigid members, a valve movably supported by said one of said rigid members so as to cooperate with said seat for closing said inlet opening, means for detaching said valve from said seat in timed relationship with the cycle of operation of the device, said means comprising a stop member connected to the other of said rigid members and arranged to actuate said valve to detach itself from said seat as said one said rigid member approaches to its most spaced position from the other said rigid member, and outlet check valve means mounted on the other of said rigid members and communicating with said pressure chamber.

2,745,350
INJECTION PUMPS
Roger Capeek, Paris, France, assignor to Bronzavia S. A., Courbevoie, France, a corporation of France
Application June 20, 1951, Serial No. 232,499
Claims priority, application France June 23, 1950
14 Claims. (Cl. 103—41)

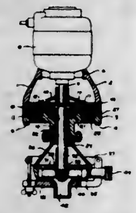


1. A fuel injection pump including a pump body, a plurality of parallel fuel pumps arranged on a circle in said pump body and comprising each a cylinder and a piston reciprocatable therein, a rotative member rotatively mounted in said pump body and operatively connected to each of said pistons for reciprocating the latter in succession in their conjugate cylinders, parallel lubricating oil pumps arranged on a circle in said pump body and each comprising a cylinder and a reciprocative plunger therein and oil inlet and outlet ports provided in said oil pump cylinder, each plunger being operatively connected to said rotative member for reciprocation in their conjugate cylinders by the latter, first conduits connecting said lubricating oil inlet ports to a source of lubricating oil, second conduits connecting the outlet ports of said lubricating oil pumps to an oil chamber, third conduits radially connected to the respective cylinders of said fuel pumps and to said oil chamber thereby putting the oil chamber in communication with said fuel pump cylinders, and pressure relief means provided in said pump body and in communication with said outlet ports for controlling the pressure of the oil pumped by the lubricating oil pumps through said outlet ports, whereby a supply of lubricating oil may be pumped between the piston and cylinder of said fuel pumps at a high pressure controlled by said pressure relief means and thoroughly lubricate the contacting surfaces of piston and cylinder and create an effective fuel-tight seal between the latter.

2,745,351
MOTOR DRIVEN PUMPS
Igor V. Zozulin, Vancouver, British Columbia, Canada, assignor to Hermag Pumps Ltd., Vancouver, British Columbia, Canada
Application September 2, 1952, Serial No. 307,437
3 Claims. (Cl. 103—103)

1. A power driven pump having a vertical shaft fitted with a clutch element at its upper end and an agitator

at its lower end, a pump casing enclosing the agitator, a bell surrounding the lower part of the shaft and a base member enclosing the upper part of the shaft and the clutch element, said base member having a top closure, said shaft having bearings carried by the base member, a plate covering the pump casing and a sleeve carried



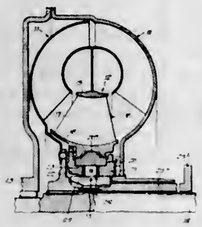
by said plate and freely surrounding the shaft, said sleeve having a weeping aperture adjacent the plate, said bell being of such volumetric capacity that when the pump is being operated at maximum pressure air normally entrapped in the bell and the base member and compressed to said pressure will prevent liquid pumped from reaching the shaft bearings.

2,745,352

HYDRODYNAMIC COUPLING DEVICE

Reinhold C. Zeidler, Detroit, Mich., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois

Application August 30, 1950, Serial No. 182,301
5 Claims. (Cl. 103—115)



1. In a vaned element of a hydrodynamic coupling device, the combination of a vaned portion comprising an annular supporting member and a plurality of generally radial vanes extending outwardly therefrom, said vaned portion being formed of metal having low wear resistance properties; and an annular hub portion within said annular supporting member and having an internal bearing surface, said hub portion being formed of metal having high wear resistance properties; and means mechanically interlocking said supporting member and said hub portion, said means comprising sets of circumferentially spaced projections extending radially outwardly of said hub portion on opposite sides thereof received within recesses in said supporting member, the projections of one set being in circumferentially staggered relation to the projections of the other set.

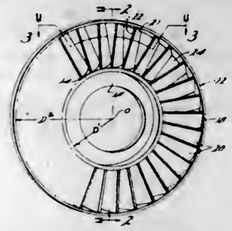
2,745,353

ROTOR WHEEL

Augustin J. Syrovy, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware

Application May 3, 1949, Serial No. 91,057
2 Claims. (Cl. 103—115)

1. An integrally cast rotor wheel comprising concentrically arranged annular hub and rim portions with radially extending, axially directed blade elements connected between the hub and rim portions, said blade elements being of substantially uniform thickness and each having helically curved, opposed, faces generated about the axis of rotation of the wheel, said blade elements having a twist wherein the angularity of twist varies uniformly with increase in the diameter of the wheel whereby said



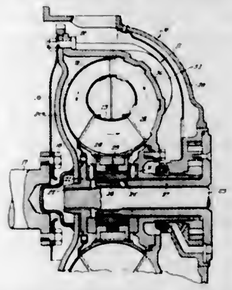
helically curved blade element faces have constant lead throughout their extent, and a circumferential spacing between adjacent blades that progressively increases with increase in the diameter of the wheel.

2,745,354

HYDRODYNAMIC COUPLING

Herdis G. English, La Grange, Vladimir J. Jandasek, North Riverside, and Daniel C. Gillespie, Oak Park, Ill., assignors to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois

Application April 22, 1950, Serial No. 157,602
10 Claims. (Cl. 103—115)



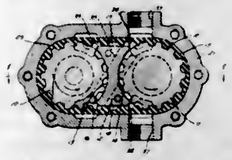
1. In a vaned element of a hydrodynamic coupling device, the combination of a hollow casing, a vane fitting within and engaging said casing, and means holding said vane in engagement with said casing and comprising a member disposed between and providing an interlocking connection between said vane and casing, said member extending transversely of said vane and through said vane, and means for preventing lateral movement of said vane at said interlocking connection.

2,745,355

PUMP OR FLUID MOTOR OF THE GEAR TYPE

Bruce H. Mosbacher, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a corporation of Illinois

Application June 1, 1953, Serial No. 358,625
14 Claims. (Cl. 103—117)



1. A pump or fluid motor comprising spaced first and second rotary toothed gears, an endless flexible belt extending around said gears and formed at its inner face with spaced teeth received in the spaces between teeth on said

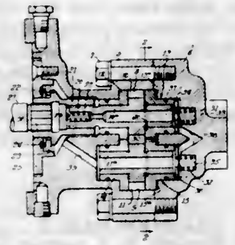
gears, a housing enclosing said gears and said belt and having portions disposed in close running fit with the ends of said gears and belt, a spacer disposed between the spaced gears and formed with spaced arcuate opposite end faces extending respectively closely adjacent the toothed peripheral portions of the gears which are closest to one another and providing close running fits thereat for said gears, said spacer being formed with spaced flat opposite end faces extending closely adjacent opposed portions of the toothed inner face of the belt between said gears, a first high pressure passage in the housing communicating with the space between said first gear, said spacer and one of said opposed portions of the toothed inner face of the belt, a first low pressure passage in said housing communicating with the space between the second gear, said spacer and said one opposed portion of the toothed inner face of the belt, a second high pressure passage in the housing communicating with the space between the second gear, said spacer and the other of said opposed portions of the toothed inner face of the belt, and a second low pressure passage in the housing communicating with the space between the first gear, said spacer and said other opposed portion of the toothed inner face of the belt.

2,745,356

PRESSURE LOADED PUMP

John A. Lauck, Shaker Heights, Ohio, assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois

Application June 16, 1950, Serial No. 168,587
19 Claims. (Cl. 103—126)



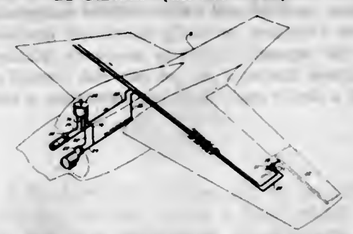
1. A liquid pump comprising a housing having a pump chamber and an inlet leading to and an outlet leading from said pump chamber, means including a rotatable member received in said pump chamber for forcing liquid from said inlet out of said housing through said outlet, an end plate in said pump chamber having a back face normally spaced from the adjacent end wall of said pump chamber and having portions cooperable with said housing to provide a pressure chamber, said end plate also having a front face subject to pressures in said pump chamber and cooperable with the adjacent side faces of said rotatable member to provide a pumping seal therewith, one of said last two mentioned faces having a relief recess formed therein inwardly of its outer periphery to limit the sealing area between said side face and said front face, the center of area of said recess being offset with respect to the axis of said rotatable member, means establishing communication between said relief recess and said inlet and means establishing communication between said pressure chamber at the back of said end plate and said outlet, the relation of the area of said back face to said sealing area being such that the force acting upon said back face of said end plate always slightly exceeds the force acting upon said front face of said end plate whereby to maintain said pumping seal without excessive friction, wear or loss of volumetric efficiency.

2,745,357

PRESSURIZED HYDRAULIC RESERVOIR

Chalmers A. Strayer, Wilmington, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California

Application October 22, 1951, Serial No. 252,537
11 Claims. (Cl. 103—223)



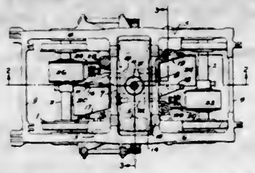
1. A hydraulic reservoir for a hydraulic system, comprising a first cylinder closed at one end thereof, a first piston extending across and movable longitudinally in said first cylinder to define a fluid reservoir of variable size, a second cylinder coaxially mounted on and movable with said first piston, a second piston inside of said second cylinder, a piston rod fixed to the closed end of said first cylinder and extending axially through said reservoir and attached to said second piston, said second cylinder being provided with an axial seal around said piston rod to define an operating space, an operating fluid inlet, an operating fluid duct connecting said operating fluid inlet with said operating space through said piston rod, a reservoir fluid inlet, and a reservoir fluid outlet for said reservoir.

2,745,358

ELECTRIC MOTOR RAILWAY TRUCK

James C. Travilla, University City, Mo., and James W. Cooke, Rosemont, Pa., assignors to General Steel Castings Corporation, Granite City, Ill., a corporation of Delaware

Application November 29, 1951, Serial No. 258,886
4 Claims. (Cl. 105—138)



4. In a railway truck, spaced wheel and axle assemblies, a truck frame supported therefrom and including side members and transverse transoms extending from one side member to the other between said assemblies and spaced apart longitudinally of the truck, a bracket carried solely by and projecting from each transom towards the adjacent assembly and extending a substantial distance into the space between the assembly wheels, a driving motor supported from each of said brackets at points on the latter spaced substantially from the corresponding transom, each motor being operatively connected to the assembly at the opposite end of the truck, and a tie between and bracing said transoms adjacent to the inner ends of said brackets.

2,745,359

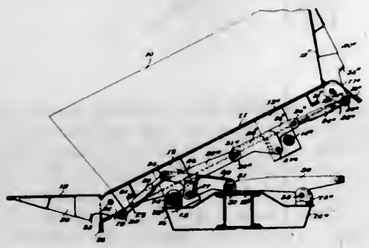
DUMP CAR DOOR CONTROL MEANS

Einar O. Lunde, Wyckoff, N. J., assignor to Magor Car Corporation, New York, N. Y., a corporation of Delaware

Application September 19, 1952, Serial No. 310,447
4 Claims. (Cl. 105—272)

1. In a dump car including a frame embodying a center sill, a body supported on the frame and having laterally

opposed fulcrum pins normally engaged within open bearings on the frame for movement of either fulcrum pin upwardly from its bearing upon tilting of the body about the other bearing, and a door at each side of the body and pivotally connected thereto at the lower edge of the door; the improvement comprising control means for each door, each of said control means comprising a control arm extension pivotally connected intermediate its ends to the opposed bearing in concentric relation thereto, a bell crank having a pin on one end thereof extending through a slot in one end of said extension, a roller rotat-



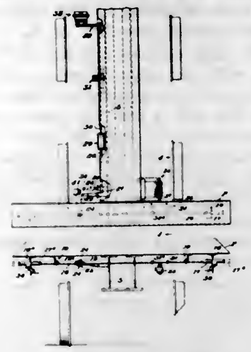
ably supported on said pin and constantly bearing on said sill during body dumping about said other bearing, a control arm, the opposite end of said bell crank and the adjacent end of said control arm being pivotally connected to the body at a point intermediate the pin on said bell crank and the adjacent fulcrum pin, said bell crank and control arm having adjacent bearing faces above their pivotal connection normally in contact, and an adjustable link assembly pivotally connecting the opposite end of said control arm and said door below its pivotal connection with the body.

2,745,360
HOPPER OUTLET VALVE STRUCTURE
Einar O. Lunde, Wyckoff, N. J., assignor to Magor Car Corporation, New York, N. Y., a corporation of Delaware
Application July 14, 1952, Serial No. 298,855
4 Claims. (Cl. 105—307)



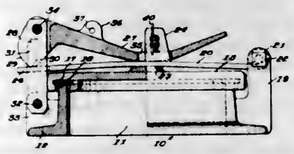
1. In a hopper outlet valve structure, a cylindrical housing, a hopper receiving member supported on the housing, a shaft extending diametrically through the housing, a butterfly valve supported by the shaft and cooperating with the inner wall of the cylindrical housing, an operating shaft supported by the housing externally thereof and being disposed above and at right angles to the first shaft, operative connections between the two shafts, said first shaft being provided with a diametrical slot of substantial extent axially thereof, said butterfly valve extending through said slot, means securing said valve to said first shaft, said butterfly valve including a pair of parallel spaced disk plates and a rubber ring secured between the margins of said plates and including an exposed head portion for cooperation with the inner wall of said housing.

2,745,361
VALVE CONTROL MEANS IN RAILWAY CAR DUMPING SYSTEMS
Einar O. Lunde, Wyckoff, N. J., assignor to Magor Car Corporation, New York, N. Y., a corporation of Delaware
Application April 14, 1952, Serial No. 282,148
5 Claims. (Cl. 105—311)



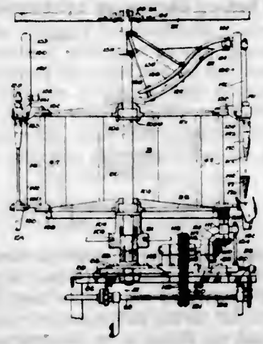
1. Means for controlling a directional valve and a dump valve in succession in a railway car dumping system, comprising an elongated control rod extending transversely beneath the car and supported thereon for axial and rotary movement, means operable upon axial movement of the control rod for operating the directional valve, means operative upon rotation of the control rod for operating the dump valve, said first means comprising an operating rod extending longitudinally of the car and supported thereby for axial movement, a pair of axially spaced stop lugs projecting laterally from said operating rod, and means supported by the car and cooperating with said lugs for locking the rod against valve actuating movement when the car is undergoing a dumping operation.

2,745,362
CAR ROOF HATCH
Einar O. Lunde, Wyckoff, N. J., assignor to Magor Car Corporation, New York, N. Y., a corporation of Delaware
Application May 19, 1952, Serial No. 288,719
4 Claims. (Cl. 105—377)



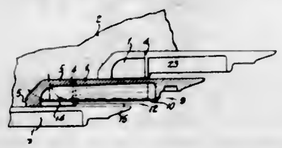
1. In a car roof hatch construction, a cylindrical frame, a cover having a pivotal connection with the frame, means for releasably holding the cover in closed position comprising an elongated resilient strap extending diametrically over the cover, the strap having one end thereof pivotally connected to the frame, an upward extension on the cover engageable by an intermediate portion of the strap, a link having one end thereof pivotally connected to the frame diametrically of the pivotal connection of the strap, and a lever having one end thereof pivotally connected to the other end of said link, said lever having cam means engageable with the strap adjacent its free end and the lever extending above and longitudinally of the strap in operative position and having a free operating end intermediate said strap pivotal connection and said upward extension.

2,745,363
MACHINE FOR AUTOMATICALLY MAKING ROLLED CONES
James Balton, Baltimore, Md., assignor to The Maryland Baking Company, Baltimore, Md., a corporation of Maryland
Application December 12, 1951, Serial No. 261,274
4 Claims. (Cl. 107—58)



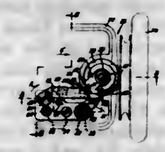
1. A cone rolling unit comprising a rotatable turret, a plurality of conical molds spaced about the periphery of said turret, a plurality of corresponding conical cores spaced about the periphery of said turret above said molds, a shaft axially secured to each of said cores, a roller slidably keyed to each of said shafts, means for reciprocating each core and shaft relative to its corresponding roller and mold, an endless belt adjacent one side of the turret having a portion thereof at a fixed position in the orbit of revolution of said rollers on the turret, means for driving said belt, and a stationary arm having a friction area at another fixed position in the orbit of revolution of said rollers.

2,745,364
COMBUSTION AIR SUPPLY THROUGH GRATES AND GRATE CONSTRUCTION
Johannes Josef Martin, Munich, Germany
Application September 28, 1949, Serial No. 118,418
Claims priority, application Germany October 1, 1948
4 Claims. (Cl. 110—74)



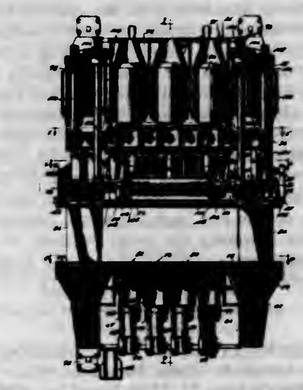
1. A fuel burning grate receiving combustion air from below the grate and comprising a plurality of juxtapositioned longitudinal hollow grate bars, each of said grate bars having a forward and a rearward portion, each of said grate bars having an air inlet opening and two parallel side walls, an air discharge opening in at least one of said side walls at the forward portion of the grate bar, and air flow blocking means projecting laterally from at least one of said side walls in the rear of said discharge opening, said air flow blocking means of one of two neighboring grate bars being adjacent to the other grate bar and being adapted to block flow of air between the neighboring bars all along the length of the neighboring bars in the rear of said discharge opening, said blocking means leaving an air flow passage between the side walls of the forward portions of two neighboring grate bars, said passage receiving air from the inside of the grate bar through said discharge opening.

2,745,365
SPOOL WINDER FOR SEWING MACHINES
Hermann Zink and Herbert Wenz, Kaiserslautern, Germany, assignors to G. M. Pfaff A.-G., Kaiserslautern, Germany, a corporation of Germany
Application May 6, 1953, Serial No. 353,370
Claims priority, application Germany May 9, 1952
2 Claims. (Cl. 112—218)



1. In a spool winding device, for use in connection with a sewing machine having a hand wheel and an apertured cover, in combination, an elongated cranked spool carrier member pivoted for arcuate movement in opposite directions between an inactive rest position, and an active position wherein it is in driven connection from said hand wheel, and including a spool support, a spring urging said carrier member towards said inactive position, a control member pivoted for arcuate movement in opposite directions between an active carrier engaging position and a rest position wherein it is disposed substantially perpendicularly to said spool carrier member, resilient means urging said control member towards said rest position, and means intermediate said members comprising a cam surface formed on said carrier member opposite the pivot of said control member and including a first flat surface, a second flat surface and an intermediate surface, a follower formed fixedly on said control member and being operable to engage said intermediate surface when said control member is moved from the rest position towards the engaging position thereby moving said carrier from the inactive to the active position, and a plunger movably disposed in said control member adjacent said cam follower thereof and being spring pressed towards ejection from said control member and having a flat face disposed at an angle to said cam follower and being operable to engage in abutment said first flat surface in the active position and operable to engage in abutment said second flat surface in the rest position.

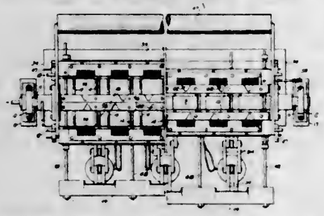
2,745,366
HYDRAULIC PRESS
Bertrand Japikse, Bexley, Ohio, assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa., a corporation of Delaware
Application June 10, 1952, Serial No. 292,645
17 Claims. (Cl. 113—45)



1. In a hydraulic press, a main ram, a main cylinder for the main ram, a draw slide comprising a main stress-carrying body relatively adjacent to and operatively con-

nected to the main ram, a relatively light bolster plate in spaced relation to the body and more remote from the main ram, having single openings distributed over its area, bolster-supporting posts connected to the body and to the bolster plate and distributed over the bolster plate, a blank holder slide substantially continuous over the pressing area, interposed between the body and the bolster plate and having small openings through which the bolster-supporting posts extend, a blank holder cylinder and ram operatively connected to the blank holder slide, a blank holder die located on the side of the bolster plate remote from the main ram and having an opening, pins extending from the blank holder slide to the blank holder die through the openings in the bolster and distributed over the blank holder die, and a punch mounted on the bolster and extending into the opening in the blank holder die, whereby the pressure pins extend through the bolster plate but not through the main body of the draw slide.

2,745,367
MEANS FOR MAKING BATTERY PLATE UNITS
Ernest George Tiegel, San Francisco, Calif., assignor to Tiegel Manufacturing Co., Belmont, Calif., a corporation of California
Application April 5, 1949, Serial No. 85,656
4 Claims. (Cl. 113—59)



1. In a machine of the character described, means for positioning a pre-stacked plate and separator assembly having two spaced series of leads projecting from one edge thereof, comprising a box invertibly mounted about a horizontal axis and having an open top for slidably receiving the assembly with the said edge in leading position and having a rest across the bottom adapted for engaging the body portions of the plates and the separators for stopping the same while allowing the leads to project downward beyond the rest, the box having end walls of normally fixed spacing to accommodate the thickness of the assembly, and side walls of fixed spacing in excess of the width of the assembly to allow a relatively loosely arranged assembly to readily drop between the same, and the rest being in the form of a centrally-located fixed plate essentially narrower than the spacing between the leads to provide ample space for loosely alined leads to pass on opposite sides thereof, clamping bars mounted on the box and above the same and having means for moving the same to project inside the box and upon the upper side edges of the assembly for centering the upper portions of the plates and the separators with respect to the box, cooperative combs and back-irons carried by the box and mounted below the bottom level of the box and of the rest and in spaced relation thereto, and means for moving the combs and back-irons into engagement with the leads for centering the lower portions of the plates and the separators and for isolating the lower ends of the leads for burning operations.

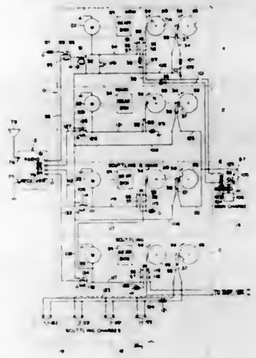
2,745,368
COMBINED HEATING AND SOLDERING DEVICE
Joseph R. Klein, Pewaukee, Wis.
Application June 23, 1954, Serial No. 438,773
3 Claims. (Cl. 113—110)

1. A combined heating and soldering device for use in sweating fittings to pipes comprising: a sleeve having a small diameter bore opening to one end thereof and a large diameter bore opening to the other end thereof; a shoulder inside the sleeve joining said large and small diameter bores; a ring of solder secured within the small diameter bore of the sleeve adjacent to said shoulder, the inside diameter of the ring of solder and of the small bore being slightly larger than the outside diameter of a pipe of the size for which the device is designed; and a cylindrical heating element of exothermic material se-



cured in the large diameter bore of the sleeve, the inside diameter of said heating element being larger than that of the ring of solder and the smaller bore by an amount substantially equal to the difference in outside diameters of the pipe and the fitting to be sweated to the pipe, so that in use, the heating element snugly fits around the portion of the fitting into which the pipe is telescoped when the ring of solder surrounding the pipe is brought to bear against the end of the fitting.

2,745,369
DEMOLITION SYSTEM
Ellis M. Brown, Charles B. Lee, and Saul R. Gilford, United States Navy, Washington, D. C.
Application March 26, 1945, Serial No. 584,996
14 Claims. (Cl. 114—21)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In a demolition unit adapted to be self-propelled to its objective and adapted to fire scuttling and main explosive charges carried thereby under remote control of an operator of the unit, the combination of means under control of the operator of the unit for firing the scuttling and main explosive charges in predetermined sequence when the unit reaches its objective, and means controlled by said firing means for disabling the propelling means of the unit and thereafter invariably firing the scuttling charges.

2,745,370
STABLE WATER JET HULL
James Vincent Manis, Oreland, Pa.
Application July 13, 1953, Serial No. 367,388
1 Claim. (Cl. 115—16)

A marine craft comprising a V-shaped hull having an upper-deck portion and a below-water portion, said hull

having diverging sides curving upwardly and outwardly at the upper deck portion and thence curving downwardly, the outer downward tip of the sides being in normally submerged position to form a tunnel approximately semi-circular in cross-section running the complete length on each side of the craft, said sides at the tunnel surrounding areas being of airfoil section so that during rapid motion added lift and cushioning will be effected on the craft as trapped air rushes through the tunnels, a tube disposed longitudinally through the craft below the waterline, said tube having an entrance aperture at the prow of the craft and an exit aperture at the stern, to permit water to rush through the tube in motion of the craft, thereby stabilizing the craft with respect to roll, yaw, and pitch, since the weight of the water displaced by the tube acts as ballast when the craft tends to



pitch, roll, or yaw, a ring having an approximate diameter equal to the inside diameter of the tube, a propulsion screw disposed within the ring, said ring having an outer rim comprising gear teeth, gear train means meshing with the gear teeth of said ring to thereby transmit power to said screw, thereby preventing side energy waste since the back wash from the screw is restricted by the tube walls to present a concentrated column of energy force directed at the tube exit during operation of said craft, a rudder disposed directly to the rear of and on a center line with the tube, said rudder thereby being subject to the concentrated jet of water from the tube in craft operating condition to give rapid rudder response action, the craft thereby possessing for its size characteristics of high stability, high efficiency of engine operation, rapid control response and relatively large pay load capability.

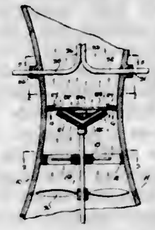
2,745,371
MEMORANDUM DEVICE
Benjamin Robbio, Providence, R. I., assignor to Giftcraft, Inc., a corporation of Rhode Island
Application March 1, 1954, Serial No. 413,217
3 Claims. (Cl. 116—134)



1. A memorandum device comprising a hollow body having a top wall, indicia on the obverse face of said wall at spaced locations therealong, a one-piece supporting plate within said body having a longitudinal opening therein, a spring member secured to said plate, said spring member bridging said opening and resting on said plate at the opposite edges thereof, individual movable keys projecting through said wall, each key located to serve one of said spaced indicia and movable into at least two positions with reference to said indicia to selectively designate said indicia, a surface of each of said keys extending into engagement with said spring member at a location thereon between the edges of said opening to be tensioned and held by said spring member in one of said two selected positions.

2,745,372
APPARATUS FOR GENERATING SOUND WAVES
Israel Chertoff, Brooklyn, N. Y.
Application April 24, 1952, Serial No. 284,091
3 Claims. (Cl. 116—137)

1. An apparatus for generating directed high frequency sound waves comprising a Venturi tube, means for passing a stream of air through the said Venturi tube, a hollow cone fixed transversely within the throat of the said Venturi tube with the apex directed toward the incoming air, a hollow rotary cone nesting with the said fixed



cone, the said cones having series of openings in register with each other, a shaft mounted concentrically within the said Venturi tube supporting the said rotary cone, and means for rotating the said shaft.

2,745,373
REVOLVING PUTTING-GREEN FLAG
Dominick Artese and Mary N. Artese, New Rochelle, N. Y.
Application May 26, 1955, Serial No. 511,234
2 Claims. (Cl. 116—173)

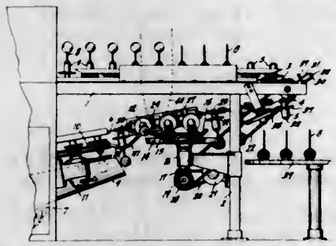


1. In combination a vertical flag staff having a tubular upper end, a bracket for supporting a flag comprising a ring rotatably surrounding said staff, a vertical member rising from said ring alongside said staff and having a lower end connected to said ring and an upper end terminating in a depending U-shaped portion rotatably and removably disposed in the upper end of the staff, and an inverted U-bend connecting said U-shaped portion to said vertical portion and straddling and resting on the upper edge of said upper end of the staff to support said bracket on said edge, said U-shaped portion terminating in an eye, a flag having an upper edge attached to said eye, a second ring rotatable on said staff and passing through the flag below its upper edge to secure the lower portion of the flag to the staff, said rings being vertically slidably fitted around said staff for removal upwardly off the staff so that said bracket and flag may be removed as a unit from the staff, and a transverse member in said staff above both rings preventing upward sliding of said rings and removable to permit said rings to be slid upwardly.

2,745,374
MACHINE FOR COATING APPLES ON STICKS
Harry Pikal, Bangor, Mich.
Application March 13, 1952, Serial No. 276,379
6 Claims. (Cl. 118—16)

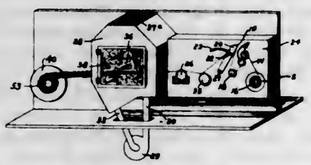
1. A machine for coating apples on sticks comprising a supporting framework having a continuous conveyor mounted thereon for movement in closed circuit between two upright planes, said conveyor comprising pivotally connected relatively movable elements, some adjacent pairs of said elements being relatively twistable angularly

about the line of motion of the conveyor, stick receiving chucks mounted on certain of said elements and having their chucking axes projecting outwardly of the circuit of the conveyor, said chucks being mounted for individual free rotation about their projecting axes and having exposed cylindrical surfaces, said conveyor having a lower reach advancing upwardly from a low point, tank means positioned adjacent the low point for immersing apples on the ends of sticks mounted in said chucks in a heated sticky confection, means positioned upwardly along the lower reach and over a portion of said tank means and adapted to engage said cylindrical surfaces and spin said chucks in depending vertical position to throw off excess confection from said apples into said tank means, a guide rail positioned upwardly along said lower reach



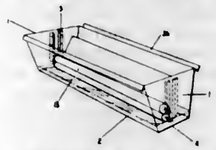
from said spinning means and in the path of said chucks, said rail being curved to swing said chucks laterally of said conveyor, a horizontal circular table having one side positioned in closely spaced relationship from the end of said spinning means and under an upper portion of said rail, said rail having a downwardly curved portion adapted to permit lowering of the laterally displaced apples onto said table and a rising portion adapted to lift apples off of the far edge of the table as the apples are advanced thereacross, means for delivering a comminuted comestible to said table to provide a layer of the comestible on the table, means connected to drive said conveyor, and means connected to rotate said table with the portion of the table in the path of the apples moving oppositely to the adjacent portion of the conveyor.

2,745,375
APPARATUS FOR COVERING CORE MATERIAL WITH FIBROUS MATERIAL
Edward R. Frederick, Pittsburgh, Pa., assignor to the United States of America as represented by the Secretary of the Army
Application August 18, 1952, Serial No. 304,875
8 Claims. (Cl. 118—33)



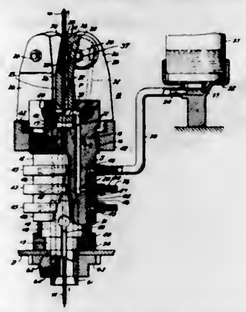
1. Apparatus for producing continuously a low density, high bulk filler suitable for sleeping bags comprising means for moving a continuous fine resilient core material in its own length; means for imposing tension on said core material as it travels; means over which the tensioned core material travels for changing the molecular structure of the core material by an unbalanced stretching so that the core material, when tension is released, will automatically assume a generally helical form, the diameter of the helix so formed being many times the diameter of the cross section of the core material; means to coat the treated core material with a tacky adhesive; means for applying a bulky soft fibrous product to said core material and in sufficient quantity to cover said core material with a high bulk bonded covering; and means to carry away the covered core.

2,745,376
METHOD AND MACHINE FOR PAPER HANGING
Joseph C. Nowak, Holyoke, Mass.
Application May 13, 1954, Serial No. 429,526
3 Claims. (Cl. 118—40)



1. A device for applying an adhesive solution uniformly to wallpaper comprising a tub, guides at each end of said tub, a first roller having two ends and a spring pin in each end, said roller mounted in said tub whereby said pins are within said guides, pitched means on said roller for biasing the amount of adhesive solution coating said roller, and a second roller of a heavy weight within a roll of wall paper directly above the first roller, said second roller having two ends and a pin on each end, said second roller mounted in said tub whereby said pins are within said guides.

2,745,377
STRAND STRIPING MACHINE
Sidney Elmer Borgeson, Cranston, R. I., assignor to James L. Entwistle Co., Providence, R. I.
Application April 2, 1953, Serial No. 346,333
7 Claims. (Cl. 118—221)

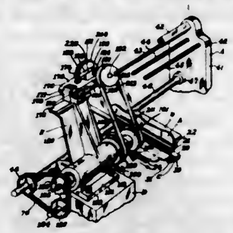


1. A rotatable striping head in which a marking fluid is supplied thereto from a stationary reservoir, comprising a pivotally mounted tubular body member provided with fluid passages therethrough, an applicator provided with fluid passages therethrough pivotally mounted on said body member on the skew for rotation therewith about a strand passing through said body member, a collar adjustably mounted on said body member in cooperative engagement with said applicator whereby said applicator is adjustable relative to said strand, an annular valve journaled on said body member in fluid transfer relation with said applicator, and a conduit connected to and between said reservoir and annular valve.

2,745,378
ADHESIVE APPLYING APPARATUS
Harold S. Labombarde, deceased, late of Nashua, N. H., by Beatrice M. Labombarde, executrix, Nashua, N. H., assignor to International Paper Box Machine Company, Nashua, N. H., a corporation of New Hampshire
Application December 9, 1952, Serial No. 324,864
9 Claims. (Cl. 118—257)

1. A device for applying a longitudinally extending strip of liquid adhesive to the upper horizontal surfaces

of paper box blanks advancing individually and successively along the paper line of a box forming machine, said device comprising the combination of adhesive transfer means positioned at the side of said machine and including a transfer roller revolving on an axis of rotation transverse to, and below the plane of said paper line for continuously supplying a film of liquid adhesive and adhesive applicator means including an endless belt in tangential



contact with said roller, said belt extending upwardly therefrom to a plane above the plane of said paper line and thence extending downwardly to the paper line with a loop thereof travelling around an axis of rotation transverse to, and above the plane of said paper line in tangential engagement with successive blanks for transferring said film of liquid adhesive from said roller to the upper surface of said blanks in the form of a longitudinally extending strip.

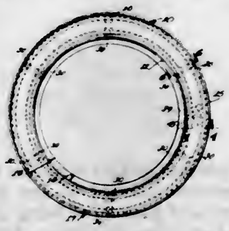
2,745,379
AUTOMATIC EGG COLLECTOR FOR POULTRY HOUSES
Walter G. H. Schmidt, Hubbard, Oreg.
Application February 5, 1952, Serial No. 269,951
2 Claims. (Cl. 119—48)



1. An egg collecting arrangement for a poultry house comprising an endless conveyor member having upper and lower, horizontal runs, a plurality of laying nests arranged adjacent each of said runs, each of said nests including a bottom inclined downwardly toward the run adjacent which the nest is positioned and terminating immediately adjacent the upper surface of such run whereby eggs may roll from the nest onto the conveyor run adjacent thereto, a table adjacent one end of said upper run for receiving eggs from said upper run, drive means operatively connected to said conveyor member for driving the same with said upper run moving toward the table, and transfer means operatively arranged at the end of said conveyor member opposite said table for transferring eggs from said lower to said upper run, said transfer means comprising an elevating conveyor having a lower end adjacent said lower run and an upper end slightly above the level of said upper run, a deflecting plate positioned diagonally across said lower run to deflect eggs carried on the run onto said lower end of said elevating conveyor, and chute means extending between said upper end of said elevating conveyor and said upper run and inclined downwardly from said elevating conveyor for transferring eggs from said elevating conveyor onto said upper run.

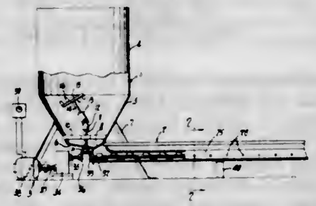
2,745,380
REVOLVING TROUGH CATTLE FEEDER
John A. Vanes, Brazil, Ind.
Application December 22, 1954, Serial No. 477,088
5 Claims. (Cl. 119—52)

1. In a cattle feeder, a circular housing for surrounding a silo and including a vertically disposed inner and outer wall arranged in concentric relation with respect to each other, a horizontally disposed bottom wall extending between said inner and outer walls and secured thereto, the top of said housing being open for receiving material from said silo and for permitting cattle to gain access to the material in said housing, a pair of concentrically arranged U-shaped tracks secured to the undersurface of said bottom wall, a plurality of hollow vertically disposed spaced parallel casings arranged below said housing and arranged in pairs, a tube adjustably mounted



in each of said casings, a securing element extending through each casing and into engagement with the tube therein, a U-shaped channel member secured to the upper ends of each pair of tubes, a plate mounted on each of said channel members and provided with a pair of slots therein, securing elements extending through said slots and into engagement with said channel member, brackets extending upwardly from said plate, and rollers journaled in said brackets and engaging said tracks, and means for rotating said housing.

2,745,381
POULTRY FEEDER
Maurice E. Wallace and Robert F. Wallace, Delphi, Ind., assignors to Feed-O-Matic Manufacturing Corporation, Delphi, Ind., a corporation
Application July 31, 1952, Serial No. 301,842
6 Claims. (Cl. 119—52)

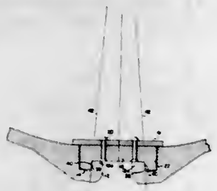


1. A feed supporting and conveying unit comprising an elongated feed supporting member, a feed conveying device mounted thereon and extending therealong, said device including a conduit having a series of spaced lateral openings in one side above the bottom of said conduit and a conveyor member operable in said conduit to simultaneously force portions of said body of feed laterally through said openings, and means for operating said device.

2,745,382
POWER PISTON CYLINDER ASSEMBLY
Harry R. Heintzen, Philadelphia, Pa.
Application July 14, 1954, Serial No. 443,446
2 Claims. (Cl. 121—1)
(Granted under Title 35, U. S. Code (1952), sec. 266)

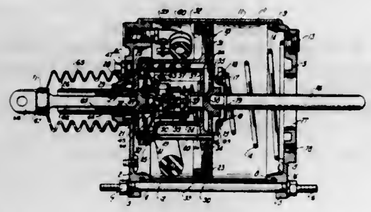
1. A piston-cylinder assembly comprising an elongated cylinder having a longitudinal slot in the bottom wall between its end portions, said slot having inwardly extending flanges providing a longitudinal guideway adjacent and on either side of said slot, a piston mounted for reciprocation within said cylinder, a continuous longitu-

dinal passageway extending through said piston between its end portions, said passageway extending from a zone within the body of the piston toward and communicating with the spaced openings in the bottom of the piston, an elongate flexible sealing strip within said passageway, said piston and sealing strip cooperating to cover the slot in the cylinder during movement of the piston



relative to the cylinder, locking members for the cylinder comprising projections secured to and depending from said sealing strip, said projections being aligned in longitudinal rows and each row providing a flexible articulated guide for reception within one of the longitudinal guideways of the cylinder upon relative movement of the piston and cylinder.

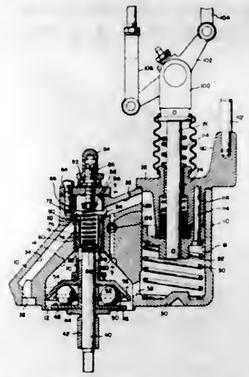
2,745,383
POWER BOOST CONTROL
Edward E. Hupp, South Bend, Ind., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application September 18, 1952, Serial No. 310,173
11 Claims. (Cl. 121—41)



1. A servo-motor adapted to be employed as the actuating means of a hydraulic brake master cylinder, said motor including a cylinder housing closed at its ends by two disc like members, a piston member comprising two valve controlling elements housed within the cylinder housing and serving to divide the motor into two compartments, power fluid conducting means housed within one of said compartments and encircling a portion of the piston member, and piston actuating spring means housed within the other of said compartments, said spring actuating means being so connected to the piston and so constructed as to be operative to compensate for the torque generated by the straightening of the power fluid conducting means when power fluid is transmitted through said means.

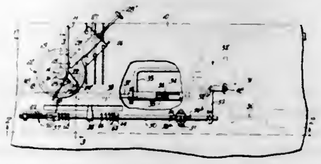
2,745,384
CENTRIFUGAL GOVERNOR WITH HYDRAULIC BOOSTER
Herman G. Adler, Detroit, Mich., assignor to Novi Equipment Company, Novi, Mich., a corporation of Michigan
Application April 23, 1951, Serial No. 222,336
10 Claims. (Cl. 121—43)

1. Structure of the character described comprising a casting having an enlarged chamber open at one side thereof, a bore extending from said chamber to the other side of said body, a cylinder in said body at the side of said chamber and bore, said cylinder being open at the side of said body opposite said chamber and its opposite end being closed, a removable head for the open end of said cylinder including an abutment thereon, a piston in said cylinder, a piston rod extending from said piston through said head, a lever pivoted to the outer end of said rod and movable into engagement with said abutment, an operator control link connected to said lever, a



governing link also connected to said lever for connection with a speed control element, centrifugal governing means in said chamber, a valve in said bore operably connected to said means, and a fluid passage in said body controlled by said valve for carrying fluid under pressure to said cylinder.

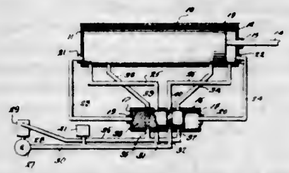
2,745,385
CONTROL UNIT FOR HYDRAULIC STEEL BENDING APPARATUS
Horace M. Shuff, Brookmont, Md.
Application April 23, 1952, Serial No. 283,793
1 Claim. (Cl. 121—45)



A control unit for a hydraulic cylinder motor and piston actuated rack reciprocated thereby, and a control valve therefor having a neutral seeking control lever, said control unit comprising a manually adjustable rod for actuating said control valve to start and stop said hydraulic cylinder motor and control the direction of movement of said rack, means supporting said rod for reciprocal axial movement parallel to said rack, a pivoted bell crank lever intercoupling one end of said rod with said neutral seeking control lever for positioning said control lever to terminate hydraulic supply to said motor and establish forward and reverse flow supply thereto in accordance with displacement of said rod, resiliently biased catch means cooperating with notches in said rod for holding said rod in positions disposing said control lever in said forward and reverse hydraulic supply positions, and means associated with said rod from a position supplying fluid to said motor to a hydraulic supply terminating position when said rack reaches predetermined outer and inner positions of travel, said last-named means including a pair of abutment means supported in spaced relation on said rod and an integral arm extending from said rack and having a collar thereon surrounding and slidable along said rod between said abutment means, said abutment means each comprising an annular ring surrounding said rod having a stop element projecting therefrom to be engaged by said collar to shift said rod and decouple the same from said catch means

and a coil spring projecting from said ring and beyond said stop element to be compressed by said collar and store up energy immediately prior to contact of said collar with said stop elements and to release the stored up energy upon decoupling of said catch means from said rod to shift said rod and control lever to hydraulic supply terminating position, one of said abutment means being fixed on said rod to be contacted by said collar when said rack is at a preselected inwardly drive-initiating position and the other of said abutment means being adjustably positioned on said rod outwardly of said first abutment means and adjacent the free end of said rod to be contacted by said collar at a selected point in its travel outwardly of said cylinder motor, said rod having transverse notches adjacent the free end thereof graduated in terms of degrees of movement of said rack, and said adjustably positioned abutment means includes a pawl pivotally supported on the annular ring thereof and resiliently biased to dispose the nose of said pawl into engagement with said transverse notches for resiliently holding said adjustable abutment means at selected positions of adjustment.

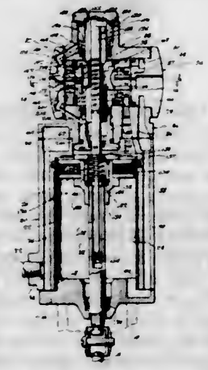
2,745,386
HYDRAULIC MOTOR AND AUTOMATIC VALVE THEREFOR
Julius M. Wildeman, Park, Kans.
Application March 27, 1953, Serial No. 345,061
1 Claim. (Cl. 121—150)



A device of the character described comprising a valve housing, a valve in said housing, a first pair of supply pipes connected to said valve housing, a first pair of return pipes connected to said valve housing, a motor cylinder, a piston reciprocally mounted in said motor cylinder, a shaft extending from said piston through one end of said cylinder, a control pipe interconnecting each end of said valve housing with an end of said cylinder, a second pair of supply pipes each connecting a central portion of said valve housing with said cylinder adjacent one end thereof, and a second pair of return pipes each connecting said valve housing outwardly of said central portion with an end portion of said cylinder inwardly of said second supply pipe connections therewith, said valve adapted to be moved alternately in opposite directions by fluid moving through said control pipes from said cylinder, and said valve adapted to control the direction of flow of fluid to and from said cylinder, said valve housing being cylindrical, said valve being a cylinder provided with a pair of spaced annular grooves, and said grooves being adapted to selectively interconnect said first and second pairs of supply and return pipes.

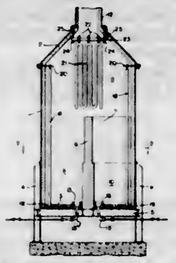
2,745,387
RECIPROCATING FLUID MOTOR AND VALVE MECHANISM THEREFOR
Henry T. Dinkelkamp, Niles, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a corporation of Virginia
Application September 25, 1953, Serial No. 382,241
9 Claims. (Cl. 121—154)

1. A fluid motor comprising, in combination, a cylinder, a main piston slidable within said cylinder, a main valve including a flow control member for directing fluid under pressure to opposite ends of said cylinder, an actuator having a lost motion connection with said flow control member, means forming a lost motion connection between said actuator and said main piston, means defining two actuator cylinders receiving opposite ends of said actuator, pilot valve means including a flow control member movable between two operating positions for directing fluid under pressure to either of said actuator cylinders while exhausting the other cylinder, motion limiting means positioned to prevent shifting movement



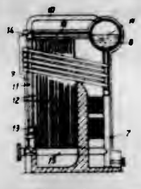
of said pilot valve flow control member beyond either of said operating positions therefor, and means forming a slip connection between said pilot valve flow control member and said actuator whereby initial movement of said actuator by said main piston transmitted through said slip connection to said pilot valve means serves to direct fluid under pressure into the appropriate one of said actuator cylinders to continue the movement of said actuator to shift said main valve flow control member to reverse said main piston.

2,745,388
MULTIPLE CELL CIRCULAR HEATER
Harold A. Becker, La Grange, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware
Application June 26, 1952, Serial No. 295,724
6 Claims. (Cl. 122—240)



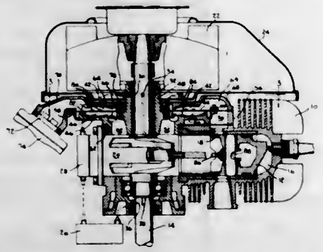
1. A heating apparatus comprising a vertical furnace chamber of circular cross-section having a refractory cylindrical wall, a vertical partitioning wall extending across an end portion of said chamber, a vertical partitioning wall extending angularly from the first-mentioned partitioning wall to said cylindrical wall, said partitioning walls dividing said end portion of the chamber into a plurality of segmental radiant heating sections, a bank of fluid heating conduits disposed within each of said sections adjacent said circular wall of the furnace chamber, and means for supplying heat to each of said sections adjacent the partitioning wall surfaces therein comprising burner means at the vertex of each of the angles formed by said partitioning walls.

2,745,389
WATER TUBE BOILER
Heinrich Vorkauf, Berlin-Schmargendorf, Germany
Application April 29, 1952, Serial No. 284,875
Claims priority, application Germany May 5, 1951
1 Claim. (Cl. 122—488)



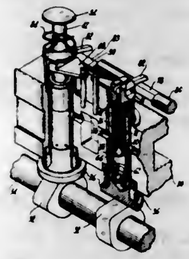
In a water tube boiler the combination of a steam separator drum including a steam space and a water space, a first group of evaporator tubes in a first vertical plane, a second group of evaporator tubes in a second vertical plane forming a corner with said first plane remote from said drum, a lower and an upper horizontal collector box for each of said groups of tubes having their ends connected to the associated collector boxes, a vertical non-heated tube at said corner and constituting a return pipe, said lower collector boxes being connected with one of their ends to the lower portion of said return pipe, the other end of the lower collector box of said first group being connected to the water space of said drum, said upper collector boxes of both said groups being located in one plane substantially at the height of the mean water level in said drum, and being connected with one of their ends to the upper end portion of said return pipe at right angles to the latter, the other end of the upper collector box of said first group being connected to said drum substantially at said height of said mean water level, and a steam conveying pipe connected to said return pipe with one of its end portions in a vertical continuation of said return pipe above the connection of said upper collector boxes and with its other end to the steam space of said drum, so as to cause in each of said upper collector boxes steam to flow in the same direction as water towards said return pipe.

2,745,390
TWO-CYCLE INTERNAL COMBUSTION ENGINE WITH IMPROVED FUEL INDUCTION MEANS
Richard C. Heidner and Kenneth R. Pike, Hartford, Wis., and Wilford B. Burkett, Los Angeles, Calif., assignors to West Bend Aluminum Co., West Bend, Wis., a corporation of Wisconsin
Application May 15, 1952, Serial No. 287,912
7 Claims. (Cl. 123—73)



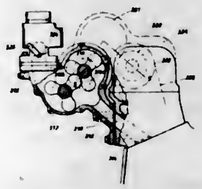
1. In a two-cycle internal combustion engine, a crankcase, a crankshaft operably mounted in said case, a piston operatively associated with said crankshaft, a combustion chamber, an inlet port in said combustion chamber, a bearing for said crankshaft, a pressurized chamber encircling said bearing and connected with said crankcase, an induction chamber encircling said bearing and connected with said inlet port, a flexible impervious diaphragm encircling said bearing and separating said pressurizing chamber and said induction chamber, and means for supplying combustible mixture to said induction chamber.

2,745,391
MULTIPLE CYLINDER INTERNAL COMBUSTION ENGINE
Albert H. Winkler, Jr., Elmira, N. Y., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Original application May 29, 1947, Serial No. 751,282, now Patent No. 2,652,038, dated September 15, 1953. Divided and this application June 15, 1953, Serial No. 361,604
4 Claims. (Cl. 123—90)



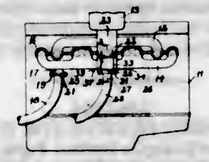
1. A valve actuating mechanism for an internal combustion engine comprising a stationary cylinder, a fluid inlet port in the side wall of said cylinder, a hollow reciprocable cylinder in said stationary cylinder, an annular recess in the periphery of said reciprocable cylinder adapted to register with said port, a hollow piston in said last mentioned cylinder forming an enclosed chamber therein, a fluid inlet passage connecting the recess with said chamber, a check valve in said passage, a fluid outlet passage for said chamber disposed in said piston, a control valve in said piston, a spring urging said control valve toward closed position, a lever pivoted on said piston and adapted to reciprocate therewith for opening said control valve, and a nonrotatable guide member adapted to be carried by said piston.

2,745,392
INTERNAL COMBUSTION ENGINE WITH A SUPERCHARGER
Friedrich K. H. Nallinger, Stuttgart, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Untertürkheim, Germany
Application November 24, 1951, Serial No. 258,013
Claims priority, application Germany November 25, 1950
19 Claims. (Cl. 123—119)



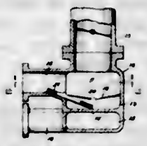
1. In an internal combustion engine a cylinder head with an inlet valve, an inlet port in the cylinder head leading to said inlet valve, a blower located above said inlet valve and adapted to supply the inlet port, and a blower casing directly united with the cylinder head to form one casing unit and to thereby provide a unitary structure with relatively short connections between said blower and said inlet valve so as to reduce the losses in such connections.

2,745,393
ONE PIECE DUAL EXHAUST MANIFOLD FOR INTERNAL COMBUSTION ENGINES
Joseph Paul Marx, Hartford, Wis.
Application July 20, 1954, Serial No. 444,581
11 Claims. (Cl. 123—122)



1. An exhaust manifold comprising, in combination, a hollow elongated member having ports spaced along its length adapted to register with exhaust ports of an internal combustion engine, a heat riser integral with said member, a partition dividing the interior of said member into two portions each containing some of said ports, means to secure said partition in place, and said member having an exhaust outlet adjacent one end of and communicating with one of said portions and a second exhaust outlet adjacent the partition and communicating with the other portion.

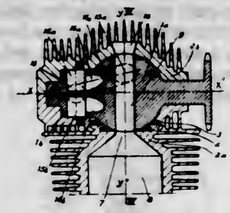
2,745,394
MANIFOLD ASSEMBLY FOR INTERNAL COMBUSTION ENGINES
George M. Holley, Sr., Grosse Pointe, Mich., assignor to Holley Carburetor Company, Detroit, Mich., a corporation of Michigan
Application June 28, 1954, Serial No. 439,766
6 Claims. (Cl. 123—122)



1. A manifold assembly for internal combustion engines, comprising an intake manifold having a bottom wall, an intake port through which fuel mixture is conducted into the manifold, outlet ports through which fuel mixture is discharged into an engine and spaced above the bottom wall, means for collecting unvaporized fuel dropping from the fuel mixture flowing from the intake port to the outlet ports, said means comprising a supplemental wall extending below the outlet ports in spaced relationship to the bottom wall of the intake manifold to provide a chamber and having an opening through which unvaporized fuel passes into the chamber, means for heating the unvaporized fuel accumulated within the chamber to a temperature sufficiently high to vaporize the fuel, passages connecting the chamber to the outlet ports for conveying the fuel vaporized in said chamber to the outlet ports, the supplemental wall extending for the full length of the bottom wall of the intake manifold, said passages comprising tubes having their inner ends communicating with the chamber and having their outer ends respectively communicating with the outlet ports.

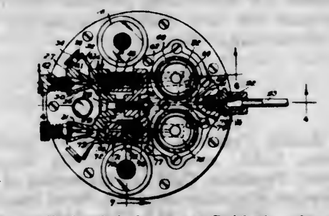
2,745,395
DEVICE FOR CONTROLLING THE OPENING AND CLOSING OF THE CYLINDERS OF COMBUSTION ENGINES
Joseph Jean Genet, Paris, France
Application April 22, 1953, Serial No. 350,429
Claims priority, application France August 10, 1948
4 Claims. (Cl. 123—190)

1. In a rotary distributor for an internal combustion engine, a housing, a rotary distributor body disposed within said housing, and a sealing device positioned between said distributor body and said housing for sealing said distributor body from said housing against gases escaping from an orifice, said orifice being located adjacent said distributor body and housing, said sealing device including a groove of substantially triangular section formed in said housing, said groove being formed with slots in stepped relation, slit resilient rings positioned in



said slots in constant contact with said distributor body, said rings each having a face of part spherical shape, the rings nearest said orifice having a trapezoidal cross section, the rings furtherest away from said orifice having a substantially triangular cross section, said rings being adapted to move in their respective slots so that gases escaping from the orifice which filter into a small space provided between the rings and end of the slots will force said rings against the distributor body.

2,745,396
TOP CYLINDER LUBRICATOR
Draper M. Harvey, Hingham, Mass., assignor to Automotive & Marine Products Corporation, a corporation of Massachusetts
Application January 27, 1951, Serial No. 208,195
4 Claims. (Cl. 123—196)

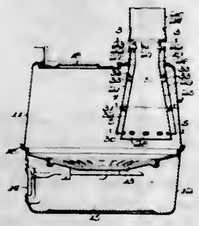


1. In a top cylinder lubricator, a fluid-air mixer, means for supplying the mixer with fluid and air, the fluid supply means for said mixer including a regulatable control valve, a mixture spray chamber, a conduit for conducting fluid-air mixture from the mixer to the spray chamber, means in said conduit for whirling the fluid air mixture in a helical flow path, a second fluid-air mixer, means for supplying the second mixer with fluid and air, the fluid supply means for the second mixer including a regulatable control valve, a second mixture spray chamber, a conduit for conducting fluid-air mixture from the second mixer to the second spray chamber, means in said second conduit for whirling the fluid air mixture in a helical flow path, an outflow line connection, and a conduit for conducting the mixtures from the two spray chambers to the outflow line connection.

2,745,397
AUXILIARY AIR FEEDING DEVICE FOR STOVES
Alexander Levin, Washington, D. C., assignor to the United States of America as represented by the Secretary of the Army
Application September 29, 1952, Serial No. 312,180
4 Claims. (Cl. 126—77)
(Granted under Title 35, U. S. Code (1952), sec. 266)

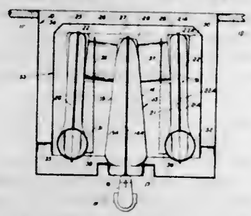
1. A stove comprising a body portion including a top having an opening, an upstanding collar secured to said

top adjacent said openings, a spider support mounted upon the top of the collar over said opening and including substantially horizontal radial elements having their inner ends extending radially inwardly of the margin of said opening, the spider support being adapted for attachment with a chimney extending above said opening, a depending flared nozzle arranged within the body portion and having its upper portion extending into said opening and provided near its upper end with slots receiving the inner ends of the pins for detachably securing the nozzle to the spider support, the lower end of the nozzle extending a substantial distance below the top of the body portion and into the high temperature zone of the stove, the nozzle having a plurality of side openings



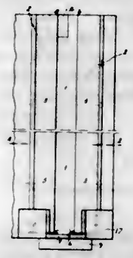
formed therein near its lower end, spaced radial elements secured to the side wall of the flared nozzle, at least one of the elements having a passage extending therethrough and leading into the flared nozzle near and below the top of the body portion, and an outer flared hood surrounding the flared nozzle in spaced substantially concentric relation and engaging the radial elements and supported thereby, the top end of the hood substantially contacting the top of the body portion and registering with said opening in the top of the body portion, the lower end of the hood terminating near the side openings of the flared nozzle, the hood being provided near its top end with at least one side opening registering with said passage of the radial element.

2,745,398
FLOOR FURNACE
Karl L. Bedell, Pasadena, and John H. Hollingsworth, Altadena, Calif., assignors to Holly Manufacturing Company, Pasadena, Calif., a corporation of California
Application September 26, 1952, Serial No. 311,626
2 Claims. (Cl. 126—116)



1. In a floor furnace, the combination which comprises a housing having vertical side walls and a bottom wall, said housing adapted to be disposed directly below the floor of a space to be heated, the top of the housing being open and adapted to be in direct communication with the space, a heater having an upright hollow wedge-shaped combustion chamber disposed in the housing with the thin portion of the wedge uppermost and directly below the open top of the housing, means for burning fuel in the combustion chamber, a hollow slab-shaped radiator disposed at a side of the combustion chamber and spaced therefrom, at least one conduit connecting the upper portion of the combustion chamber to the upper portion of the radiator, an inner casing having vertical side walls located between the radiator and the adjacent sides of the housing and spaced from the sides of the housing and the radiator, said radiator being of substantially uniform thickness from top to bottom thereof, the side walls of said radiator being inclined relative to the adjacent side walls of the inner casing and the adjacent side of said combustion chamber to form air passages of upwardly increasing cross-sectional area on opposite sides thereof, and a conduit connected to the lower portion of the radiator to exhaust products of combustion from the heat exchanger.

2,745,399
GAS-TIGHTENING DEVICES FOR OVEN DOORS
Felix Jean François Barbas, Paris, France
Application January 9, 1952, Serial No. 265,669
Claims priority, application France January 9, 1951
10 Claims. (Cl. 126—190)



1. A sealing device for oven openings provided with vertically moving doors, comprising an oven having continuous channels provided around the entrance opening thereof, a permanent chain of sealing material positioned in said channels, spaced apart fixed plates partly closing the open front part of said channels, a door slidably mounted on said oven for closing and opening said oven opening, vertical closing members extending below said door with respect to its opening direction and slidably positioned across the mouth of the vertical portions of said channels in close contact with said plates in all vertical positions of said door for hermetically closing said vertical channels and said door having closing members for hermetically closing the remaining portions of said channels in the closed position of said door only.

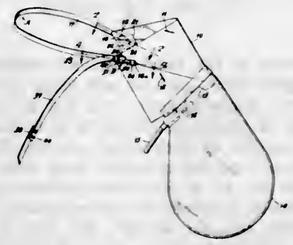
2,745,400
OZONE MASSAGE DEVICE
Carl F. Mueller and Walter A. Mueller, Los Angeles, Calif.
Application January 28, 1954, Serial No. 406,715
4 Claims. (Cl. 128—24.1)



1. A massage device comprising a plurality of glass tubes, each of said tubes containing gas, an electrode disposed within one end of each of said tubes, each of said tubes having its ends extending substantially parallel to each other with its body portion bent to form a pair of loops extending outwardly from said ends, said tubes being disposed in close parallel proximity to each other with a small gap between their adjacent surfaces, the ends of all of said tubes being disposed within a handle, means withing said handle for spacing said tubes evenly from each

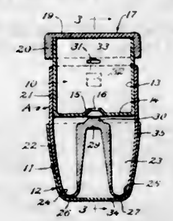
other, the upper surfaces of the loops of said tubes combining to form a massage portion which is adapted to fit the contours of the human body, said device adapted to be connected to a suitable source of electrical supply to cause electrical current to flow through said tubes and arc discharges to take place across substantially the entire massage portion of said device during the time such current flows to provide ozone massage to stimulate the skin, muscles and blood circulation of the body.

2,745,401
HEAD BAND FOR MASKS, ETC.
Charles D. Cupp, Lancaster, N. Y., assignor to Scott Aviation Corporation, Lancaster, N. Y.
Application May 7, 1951, Serial No. 224,872
4 Claims. (Cl. 128—141)



1. A head band associated with a mask having an aperture, and comprising: a fastener secured to the inner face of said mask and having a reduced neck passing outwardly through said aperture and terminating in a hook; a buckle adapted to engage with said hook; and a strap connected with said buckle.

2,745,402
INHALER
Oliver J. Dufresne, St. Paul, Minn.
Continuation of application Serial No. 125,434, November 4, 1949. This application June 15, 1953, Serial No. 361,551
7 Claims. (Cl. 128—200)



5. An inhaler including a hollow body of generally oval shape having a pair of projections extending in substantially parallel spaced relation therefrom spaced apart in the direction of the major axis of the oval, said projections having a slightly tapering inner opposed surfaces and outer surfaces tapering inwardly throughout their length to a greater degree, the projections terminating in end apertured rounded extremities.

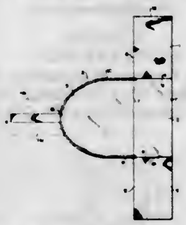
2,745,403
DISPOSABLE CARTRIDGE TYPE SYRINGE
Samuel D. Goldberg, West Hempstead, N. Y.
Application October 14, 1954, Serial No. 462,194
6 Claims. (Cl. 128—218)

4. A disposable hypodermic syringe cartridge that comprises an elongate tubular body of substantially uniform bore, open at one end, partially constricted and provided with an annular grooved formation on its outer surface near the other end thereof; a piston, positioned within the open end of the tubular body and capable of movement axially therein, engaging the inner walls thereof to provide an essentially liquid-tight closure therefor; and a partial closure at the opposite end of the tubular body, said partial closure comprising a disc-shaped member, formed of resilient material capable of being pierced readily by a needle, adapted to overlie the opening at the partially constricted end portion of the tubular body; an essentially cylindrical hub element having an opening extending axially therethrough, provided with a radially extending flanged portion at one end and, at the other end, with means for engaging with and supporting a double-



pointed hypodermic needle while one end of said needle is positioned in the axially extending opening and projects therethrough from the flanged end thereof, said hub element being adapted to being positioned with its flanged end portion against the resilient member and with its axis substantially coincident with the longitudinal axis of the tubular body; and a collar member, disposed around the flanged end portion of the hub element, the resilient disc-shaped member and the tubular body end portion in engagement with the annular grooved formation thereon, pressing these parts together axially whereby the resilient member is held against the end of the tubular body to provide a liquid-tight seal therefor.

2,745,404
BED-PROTECTOR APRON
Blanche V. Wood-Minor, Brooklyn, N. Y.
Application August 10, 1954, Serial No. 448,837
3 Claims. (Cl. 128—283)



1. A sanitary device for adult bed patients comprising a band portion constructed to encircle the body of the patient in the vicinity of the waist, with the opposite ends secured together to hold said band snugly and smoothly in position, said band being of sufficient width to cover the greater portion of the abdomen, an apron-like member of moisture-proof material having an upper portion with substantially parallel sides and a rounded lower portion, said apron-like member being disposed crosswise substantially centrally of said band and permanently secured thereto, and at least one tab member secured adjacent the bottom edge of said apron-like member, the said apron-like member being constructed and arranged to fold

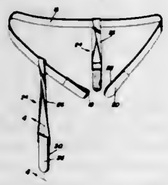
around the buttocks and thighs and through the crotch and to be held in place by removably securing said tab member to said band substantially opposite the mid-section of said band, one end of said band being bifurcated to provide two spaced fastening tabs leaving a slot between them the bottom of which is adjacent one side of said apron-like member so that when the device is placed about the waist of the patient an opening is left formed by the inner edges of the sides of these tabs, the bottom of said slot and the opposite end of said band, for the reception of a colostomy bag or ileostomy bag.

2,745,405
SANITARY RECEPTACLES
Anne M. Landy and Neola Seidler, Philadelphia, Pa.
Application March 24, 1953, Serial No. 344,306
1 Claim. (Cl. 128—286)



A sanitary receptacle for a pad comprising absorbent material having a top, a bottom, sides and end portions, and having retaining extremities extending from said end portions; said sanitary receptacle comprising a base portion having a substantially continuous wall secured to said base and in fluid impervious relation thereto along the sides and end portions of said base; said base being wider at the anterior end portion and narrower at the posterior end portion and comprising exterior and interior layers of absorbent and washable fabric and an intermediate layer of fluid impervious material; said wall comprising side portions and end portions corresponding generally to the side and the end portions respectively of said base; means for securing said retaining extremities to said receptacle; said side wall portions being patterned in accordance with a substantially angular contour; said continuous wall portion being substantially collapsible against said base; said wall portion and said base being adapted to conform longitudinally and transversely to the contour of the body of the wearer and to lie in substantially flat contact therewith.

2,745,406
SANITARY BELT
Beatrice Kenner, Washington, D. C.
Application July 20, 1954, Serial No. 444,469
3 Claims. (Cl. 128—291)



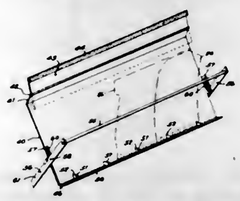
1. A sanitary belt comprising an elongated member adapted to encircle the body of a wearer, means for adjustably securing the ends of the belt to each other, a pair of supporting elements adjustably positioned on said elongated member, and adhesive means for detachably securing the supporting elements to the ends of a sanitary napkin.

2,745,407
OZONE THERAPEUTIC DEVICE
Carl F. Mueller and Walter A. Mueller, Los Angeles, Calif.
Application February 26, 1954, Serial No. 412,830
4 Claims. (Cl. 128—407)



1. A device of the class described comprising a plurality of glass tubes, each of said tubes containing gas, an electrode disposed within one end of each of said tubes, each of said tubes having its ends extending substantially parallel to each other with its body portion bent to form a narrow elongated loop, said tubes being disposed so that all of their body portions are disposed in close parallel proximity to each other with a small gap between their adjacent surfaces, the ends of all of said tubes being disposed within a manually grippable handle, means within said handle for spacing said tubes evenly from each other, said tubes combining to form a unitary ozone generating portion which is adapted to fit within the orifices of the human body, said device adapted to be connected to a suitable source of electrical supply to cause electrical current to flow through said tubes and arc discharges to take place across substantially the entire length of said tubes during the time such current flows to provide ozone for therapeutic treatment of the human body.

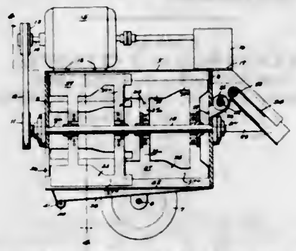
2,745,408
CARD BANK REMOVER
John H. Logan, Port Washington, N. Y., assignor to Vue Fax Corporation, New York, N. Y., a corporation of New York
Application July 5, 1952, Serial No. 297,311
5 Claims. (Cl. 129—16)



4. A card transfer device adapted to take out a predetermined number of file cards from a card index file apparatus and to maintain said cards in spaced relationship and return said cards to said apparatus in the same spaced relationship, comprising a portable thin tray for insertion between the cards, a releasable clamp for moving into engagement with said cards and for holding said cards against said tray while they are being removed from said card file apparatus and for releasing said cards when said transfer device is in substantially upright display position, arm means for supporting said tray in display position outside of said apparatus, said arms being folded against said tray during the removal of said cards and being extended during display position, said arms having their lower ends extending to the back of said tray and having the tops thereof extending forward of said tray,

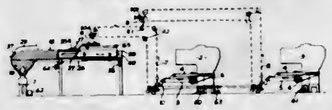
a bar between the forward ends of said arms for receiving said cards when they are tipped away from said tray, and separate means carried by said tray and separate from said releasable clamp for movement into engagement with the bottom edge of said tray and to extend forwardly therefrom to receive and hold said index cards, said separate means having extensions thereon for engaging notches in the bottom edges of said cards for holding said cards in predetermined spaced relationship during display.

2,745,409
GRAIN THRESHER
La Clede Tillotson, Madrid, Iowa, assignor of one-fourth to Leon H. Struck, one-eighth to Charles Cletus Andrews, and one-eighth to Frederick W. Andrews
Application August 10, 1953, Serial No. 373,415
1 Claim. (Cl. 130—27)



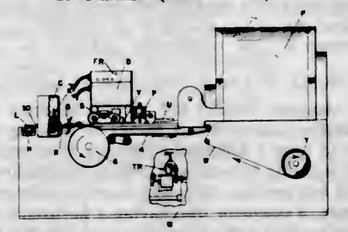
A grain thresher comprising a cylindrical housing, end walls secured to said housing, one of said end walls having an intake opening and the other of said end walls having a lower straw and chaff discharge opening, a shaft rotatably carried by said end walls, a plurality of blades fixed to said shaft, each blade being formed of an elongated body extending longitudinally of said housing having a relatively wide trailing portion and a narrow leading portion, a pair of radial arms extending inwardly from said body and fixed relative to said shaft, a downwardly and forwardly inclined grain delivery trough carried by the lower portion of said housing, said housing having a longitudinal grain delivery opening communicating with said trough, a screen covering said longitudinal opening, means rotating said shaft, and means delivering unthreshed grain to said housing through said intake opening.

2,745,410
DELIVERY OF CIGARETTES TO A CIGARETTE-PACKING MACHINE
Desmond Walter Molins, Deptford, London, England, assignor to Molins Machine Company, Limited, London, England, a British company
Application November 2, 1953, Serial No. 389,713
12 Claims. (Cl. 131—21)



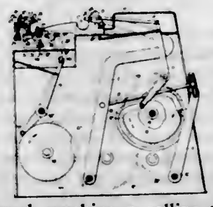
1. Apparatus for feeding cigarettes directly from cigarette-making machinery into the hopper of a cigarette-packing machine, comprising a conveyor-system to receive cigarettes from the cigarette-making machinery, and to convey them towards the packing machine, a magazine communicating with the hopper to receive cigarettes so conveyed and to accommodate them in the form of a stack, and having feeding means to feed cigarettes through the magazine into the hopper at a different speed from that at which they are conveyed by the said conveyor-system, said magazine having movable means to vary the size of the magazine, and detector means operable automatically in response to variations in the quantity of cigarettes in the magazine to cause said movable means to move so as to vary the size of the magazine and thereby maintain the stack of cigarettes in the magazine at a substantially constant height.

2,745,411
CONTROL FOR CIGARETTE MAKING MACHINE
Samuel Gilman, Maplewood, N. J., and Vincent J. Petrucelly, New York, N. Y., assignors to American Machine and Foundry Company, a corporation of New Jersey
Application October 2, 1950, Serial No. 188,034
13 Claims. (Cl. 131—22)



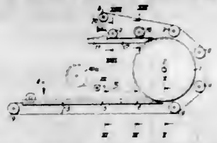
1. In a cigarette making machine having an automatic feed regulator to increase and decrease the rate of feed so as to feed a constant quantity of tobacco and a detector mounted adjacent to the path of travel of the tobacco stream fed by said machine for determining the quantity of tobacco in said stream, means interconnecting said detector with said feed regulator to control the operation thereof, an indicating device operative only when said detector indicates average weight cigarettes have been manufactured by said cigarette making machine for a predetermined length of time, and a control actuated by said detector for operating said indicating device.

2,745,412
CIGAR BUNCH MACHINES
Karl Erik Granstedt, Stockholm, Sweden, assignor to Arenco Aktiebolag, Stockholm, Sweden, a Swedish joint-stock company
Application April 6, 1954, Serial No. 421,272
Claims priority, application Sweden April 22, 1953
3 Claims. (Cl. 131—52)



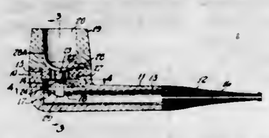
3. In a cigar bunch machine, a rolling table, a bunch rolling apron placed on said table, a bunch gripper at one end of said table having a vertical bunch receiving opening therethrough, means for operating said apron to wind filler tobacco into a binder placed on said apron, a bunch carrier reciprocally mounted in the opening in said gripper, means for reciprocating said carrier vertically between the top and the bottom of said opening in the gripper, and means operatively connecting said carrier reciprocating means and said apron operating means, whereby said carrier is elevated within the gripper just below the top thereof immediately adjacent the edge of said table to form a trough with said gripper, said apron is projected beyond the front end of said rolling table to deliver a bunch directly onto said carrier, the apron is tensioned to urge the bunch downwardly against said carrier and into said gripper, and said carrier is simultaneously started downwardly with the bunch clamped between said carrier and the projecting end of the tensioned apron.

2,745,413
MACHINES FOR PRODUCING CIGARETTES
Kurt Körber, Hamburg-Bergedorf, Horst Kochalski, Hamburg-Wandsbek, Alexander Flocke, Reinbek, near Hamburg, and Walter Heuer, Hamburg-Bergedorf, Germany, assignors to Kurt Korber & Co. Kommandit-Gesellschaft, Hamburg-Bergedorf, Germany, a German firm
Application August 24, 1951, Serial No. 243,396
Claims priority, application Germany February 12, 1951
9 Claims. (Cl. 131—84)



1. A cigarette tobacco rod forming machine comprising an endless conveyor belt, means for bending the moving belt to form a longitudinal groove in its middle portion for receiving tobacco and to form longitudinal lateral marginal belt portions extending laterally outwardly from the groove, a conveyor disc having a horizontal axis and a circumferential surface portion receiving the bent belt at the bottom of said disc with the groove opening toward the disc, said belt being adjacent to and following substantially one half of the circumferential portion of said disc, means for continuously introducing cigarette paper web between said belt and the bottom of said disc, the paper web being pressed toward said circumferential surface portion by said belt, and means receiving said belt and the paper web covering the tobacco filled longitudinal groove from the top of said disc.

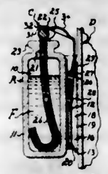
2,745,414
TOBACCO PIPE WITH BOWL ACTUATED SCRAPER
Philip S. Doumitt, Portland, Oreg.
Application September 29, 1952, Serial No. 311,983
4 Claims. (Cl. 131—184)



4. A tobacco pipe comprising a base, a generally cylindrical bowl detachably mounted on said base for rotation about the vertical axis of said bowl, a scraper mounted in said bowl for rotation about said axis and arranged against the inner wall of said bowl, means operatively connecting said scraper and bowl for securing said scraper against axial movement with respect to said bowl, and means operatively connecting said scraper and base for holding said scraper against rotation relative to said base when said bowl is rotated thus causing said scraper to sweep along the inner wall of said bowl to clean it, the last mentioned means axially slidably connecting said scraper to said base to provide for separation of said scraper from said base for removal with said bowl.

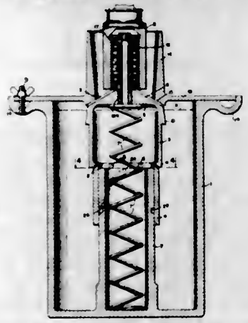
2,745,415
CIGARETTE EXTINGUISHER
Allen R. Andre, Minneapolis, Minn.
Application January 14, 1953, Serial No. 331,260
5 Claims. (Cl. 131—256)

4. A cigarette extinguisher for an automobile comprising an elongated upright receptacle for holding quenching fluid said receptacle having a restricted opening at the upper end thereof, a wick element positioned in said restricted opening and extending slightly above said top and downwardly within the receptacle and for contacting fluid contained therein, magnetic means for mounting the receptacle on a metallic surface of said automobile, and a closure pivotally mounted at the upper end of said receptacle and resiliently urged downwardly against the top thereof in overlying relation with said restricted opening and the top of said wick, said closure having an upwardly indented central portion and an abutment



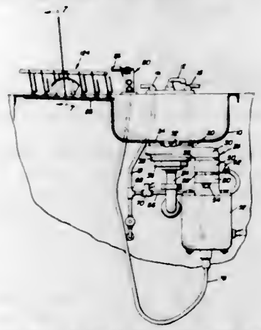
member adjacent thereto adapted to releasably hold a burning cigarette butt adjacent the burning end thereof and in communication with the top of said wick whereby quenching fluid will be fed from the inner portion of said receptacle to the burning end thereof until the glowing end has been quenched.

2,745,416
SUCKER ROD BOX CLEANERS
Holt McWorkman, Tulsa, Okla.
Application June 28, 1954, Serial No. 439,695
8 Claims. (Cl. 134—47)



1. A sucker rod box cleaner comprising a container, a hollow piston rigidly secured to and extending upwardly from the bottom of said container and having an open upper end, a cylinder surrounding and freely slidable over said piston, a removable cover for said container, and a spring within said piston and cylinder serving to hold the latter resiliently in engagement with said cover, the interior of said cylinder communicating with said container.

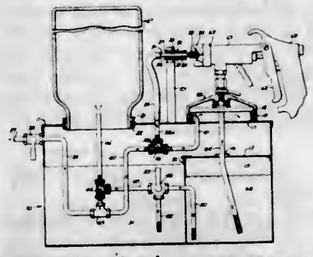
2,745,417
DISHWASHER
Sterling A. Fielding, Portsmouth, Va.
Application July 17, 1953, Serial No. 368,600
2 Claims. (Cl. 134—58)



1. In combination with a kitchen sink having a drain pipe, a valve normally closing said pipe and having a housing discharging drainage from said sink when the valve is closed, a fitting secured to and enclosing the

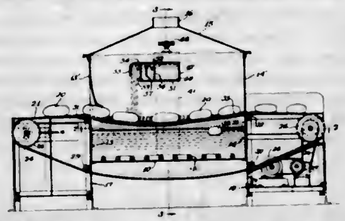
housing for receiving drainage therefrom, a pump communicating with said fitting for pumping drainage therefrom, a spray head, a flexible hose connecting said spray head to said pump for spraying drainage therefrom into said sink, a water pressure supply pipe connected to said fitting, a water control valve in said supply pipe, and means for selectively operating said pump and water control valve including selective controls on said spray head.

2,745,418
APPARATUS FOR CLEANING PAINT SPRAY GUNS AND CONTAINERS UTILIZED IN CONJUNCTION THEREWITH
John A. Balcom and George P. Nixon, Norwalk, Calif.
Application August 10, 1953, Serial No. 373,372
6 Claims. (Cl. 134—102)



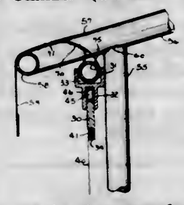
1. In a device for cleaning spray guns: a container; partitioning means dividing said container into a clean solvent compartment and a used solvent compartment; means for mounting a spray gun on said container with the supply tube of said spray gun extending into said clean solvent compartment; supply means for supplying compressed air to said container; means connected to said supply means and connectible to said spray gun for aspirating solvent from said clean solvent compartment through said supply tube and said spray gun; and means for returning said solvent to said used solvent compartment.

2,745,419
APPARATUS FOR SHRINKING PACKAGES AROUND FOOD PRODUCTS
Arthur J. Slingerland, Chicago, Ill., assignor to Edward S. Schneider, Chicago, Ill.
Application December 10, 1954, Serial No. 474,559
1 Claim. (Cl. 134—130)



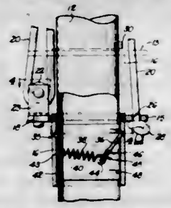
In a device of the class described, a foraminous substantially horizontally extending endless conveyor belt including transversely extending spaced slats defining the conveying surface thereof, an enclosure comprising side walls embracing an intermediate length of the upper run of said belt, means on said side walls guiding the upper run of said belt in a concave path in its passage therebetween, a hot liquid collector and reservoir disposed below the upper run of said belt, an overflow receptacle disposed between said side walls and above the upper belt run for continuously delivering thereto a substantially-solid vertically-descending wall of liquid, said receptacle comprising a top, bottom, side and end walls, one of said side walls terminating in spaced relation to said top wall and forming an overflow opening therewith, spaced lip means extending from said top and spaced side wall forming a downwardly opening and vertically projecting spout extending substantially the full width of said belt, a liquid inlet opening formed in one end of said receptacle adjacent the other side wall thereof, baffle means in said receptacle disposed between its side walls for reducing turbulence of and for distributing liquid introduced therein, and motor driven propeller pump means for continuously elevating heated liquid from said reservoir and introducing it to the inlet opening of said receptacle.

2,745,420
PORCH OR GARDEN HOUSE ENCLOSURE
Abe Zitomer, Milwaukee, Wis., assignor to Alumatic Corporation of America, Milwaukee, Wis., a corporation of Wisconsin
Application August 2, 1951, Serial No. 239,865
7 Claims. (Cl. 135—1)



1. In a structure of the character described including a wall, a skeletonized stanchioned and raftered shelter independent of said wall, said shelter having a flexible roof covering provided with a hemmed flap, and a weight member carried by the hem and resting by gravity against the top of the wall, whereby said wall, flap and covering cooperate to constitute a closure for said skeletonized shelter.

2,745,421
UMBRELLA LATCH AND RUNNER COMBINATION
Ray A. Russell, Santa Ana, Calif.
Application April 16, 1953, Serial No. 349,180
10 Claims. (Cl. 135—38)

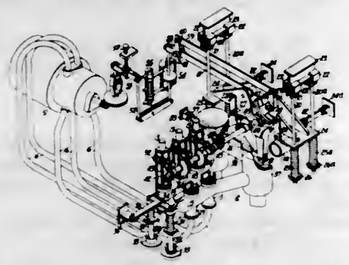


1. In an umbrella staff and runner combination: a vertical staff for carrying an umbrella canopy adapted to be expanded and having braces to expand the canopy: a runner mounted to slide vertically on said staff between the ends thereof and provided with means for receiving the inner ends of said braces, said runner having internal groove means on its inner wall providing stop means to receive latch means; and movable latch means internally carried by said staff to project through an opening in a side wall of said staff in an upward direction for one end of said latch to engage said stop means and hold said runner in an upper position for extending said braces and expanding said canopy.

2,745,422
INLET VALVE SUPPORTING AND ACTUATING MEANS FOR ELASTIC FLUID TURBINES
Charles D. Wilson, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application February 26, 1953, Serial No. 339,074
19 Claims. (Cl. 137—35)

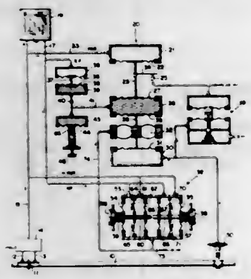
1. In combination, an elastic fluid operated turbine; motive fluid supply means connecting said turbine to a

source of motive fluid, said fluid supply means including valve means operable to control the flow of motive fluid to said turbine; first support means flexibly connected to foundation structure; a member supported by said first support means in spaced relation to said founda-



tion structure for movement relative to said foundation structure; and second support means flexibly connected to said member and said valve means for supporting said valve means in variable spaced relation to said member whereby said valve means are supported for movement relative to said foundation.

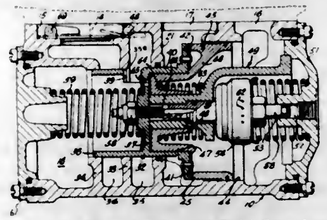
2,745,423
SELF-ADJUSTING CONTROL APPARATUS
Edward C. Grogan, Philadelphia, Pa., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application October 8, 1954, Serial No. 461,132
16 Claims. (Cl. 137—85)



1. A fluid controller comprising, a first chamber having a first pressure deflectable element therein, a flapper-nozzle actuator carried by said pressure deflectable element in said first chamber, a second chamber having second and third pressure deflectable elements therein, means connecting said second pressure deflectable element to said flapper-nozzle actuator, a third chamber having a fourth pressure deflectable element therein, mechanical means connecting said third and fourth pressure deflectable elements, a fluid spring connected to said last named connection; a source of pressure adjustable in accordance with the magnitude of a variable connected to said first chamber, a set point source of pressure connected to said second chamber, a feedback source of pressure connected to said third chamber, and a source of pressure indicative of a deviation of said set point pressure source from said variable pressure source connected to said fluid spring.

2,745,424
OIL TANK OR LIKE VALVE
Frank E. Carroll, Jr., Dayton, Ohio, assignor to United Aircraft Products, Inc., Dayton, Ohio, a corporation of Ohio
Application June 9, 1954, Serial No. 435,560
10 Claims. (Cl. 137—89)

10. A valve assembly for controlling fluid flow through dual paths, said valve assembly comprising a valve body having inlet and outlet chambers formed therein, said valve body also having a first port providing an inlet to said inlet chamber, a second and third port communicating with said inlet chamber and adapted to be connected to the inlet ends of said dual paths respectively, a fourth and fifth port communicating with said outlet chamber and adapted to be connected to the discharge ends of said dual paths respectively, and a sixth port providing an outlet from said outlet chamber, a bracket within said outlet chamber, a thermostat mounted in said bracket and having an arm extending into said inlet chamber, said arm being axially movable by said thermostat in response to temperature changes in said outlet chamber, first spring means interposed between said thermostat and a wall of said outlet chamber and biased to urge said thermostat toward said inlet chamber, said bracket being provided with a stop to limit movement of said thermostat by said spring means, valve means including a diverter valve and a segregator valve mounted for co-axial relative movement in said valve body, said diverter valve having a valve face positioned in said inlet chamber in cooperative relation with said second and third ports to vary by its

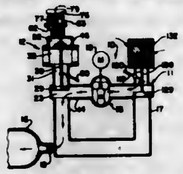


axial movement the distribution of fluid flow between said second and third ports, said diverter valve being connected to said thermostat arm, said diverter and segregator valves having cooperating valve faces positioned in said outlet chamber adjacent to said fourth port to regulate by relative axial movement of said diverter and segregator valves the fluid flow through said fourth port, second spring means interposed between said diverter valve and a wall of said inlet chamber and biased to urge said diverter valve toward said segregator valve, and third spring means interposed between said segregator valve and said bracket to urge said segregator valve being exposed on its opposite sides to the pressures in said inlet and outlet chambers respectively and said third spring means being relatively weaker than said second spring means, whereby a differential pressure between said inlet and outlet chambers tends to urge said segregator valve away from said diverter valve to open said fourth port, and check valves on said second and third ports spring loaded to maintain the pressure difference between said inlet and outlet chambers at or above the value necessary to overcome said spring means.

2,745,425
SYSTEM AND APPARATUS FOR INFLATING OR DEFLATING PNEUMATIC VESSELS
Raymond W. Jensen, Encino, Calif., assignor to The Garrett Corporation, Los Angeles, Calif., a corporation of California
Application June 1, 1953, Serial No. 358,791
8 Claims. (Cl. 137—108)

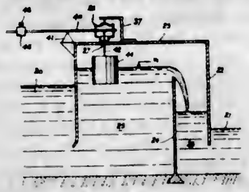
7. A selective inflation-deflation system comprising, in combination: a driven compressor; a first passage extending from the discharge side of said compressor to a space to be inflated, said passage having an outlet communicating with the atmosphere; a control valve positioned for movement in said first passage; a second passage interconnecting the entrance side of said compressor, said first passage, the atmosphere and said space; a vacuum relief inlet valve positioned for movement in said second passage; manually operable means to move said inlet valve

to close said second passage and to permit communication between said compressor entrance and atmosphere; filter means intermediate atmosphere and said compressor entrance; a pressure regulator associated with said control valve; means to transmit the pressure in said first passage to said regulator; a control valve actuator operably associated with said pressure regulator; valve means



operable by said valve actuator to permit fluid flow when a predetermined pressure is reached in said first passage to thereby cause movement of said control valve to close said first passage and to simultaneously vent said compressor discharge to atmosphere; and manually operable means operative independently of said control valve actuator to close said control valve and permit said compressor discharge to be vented to atmosphere.

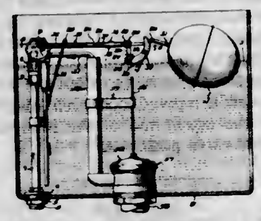
2,745,426
ARRANGEMENT FOR ADJUSTING A FLOW OF LIQUID
Yves Marie Ponsar, Bois-Colombes, France
Application February 9, 1953, Serial No. 335,749
Claims priority, application France February 20, 1952
11 Claims. (Cl. 137—143)



1. An arrangement for adjusting a liquid flow between an upper and a lower hydraulic section, comprising in combination two closed capacities connected respectively through their lower ends with the upstream and downstream sections and each filled in its lower part with liquid and in its upper part with a gaseous atmosphere, one of the capacities being provided with an opening in its upper part, means through which liquid is adapted to pass out of the lower part of the capacity connected with the upstream section into the lower part of the other capacity connected with the downstream section, means whereby through the upper parts of the two capacities are connected to allow a passage of gas therebetween, a member dipping into the upper portion of the liquid in the capacity connected with the upstream section, said member being sensitive to the modifications in the level of said liquid, a valve system associated with the opening in the upper part of one of the capacities for adjusting the throughput of gas through said opening and means for operatively connecting said valve system with the level-sensitive member wherethrough the variations in pressure produced by the operation of the valve system constrain the level to assume a predetermined value and the liquid flow to assume a desired value.

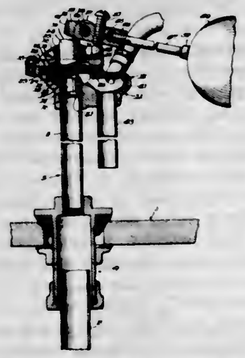
2,745,427
TRIPPER ROD MECHANISM
Julius A. Hjulian, Palos Heights, Ill., assignor to Crane Co., Chicago, Ill., a corporation of Illinois
Application December 8, 1951, Serial No. 260,631
9 Claims. (Cl. 137—420)

1. A closure member and tripper rod mechanism for a tank valve or the like, the combination of a valve including a casing therefor, a float member movable within a tank, a reciprocally movable closure member within the said valve casing actuated by the said float member, a tripper rod comprising telescoping elements for actuating said closure member, one of the said latter elements being axially movable, a releasable latch means cooperating with the telescoping elements, resilient means interposed between said telescoping elements to oppose the axial movement of one of the telescoping elements, the said telescoping elements being pivotally movable relative to the said closure member, the outer one of said tele-



scoping elements supporting the inner one of the said telescoping elements, a pivotally mounted member carried by one of said telescoping elements, the said latter pivotally mounted member having a transverse surface portion bearing against an end of the other of said telescoping elements, the said latch means predeterminately engaging one of the said telescoping elements whereby upon movement of said float member and predetermined axial movement of one of said telescoping elements relative to the other of said telescoping elements, the said latch means is released to permit pivotal movement of the said tripper rod to effect closing of the valve.

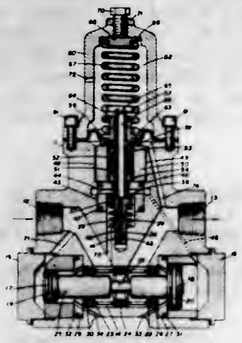
2,745,428
DIAPHRAGM BALLCOCK
Carl R. Stone, Lombard, and Edward G. Schmidt, La Grange, Ill., assignors to Crane Co., Chicago, Ill., a corporation of Illinois
Application August 12, 1953, Serial No. 373,736
2 Claims. (Cl. 137—446)



1. A ball cock comprising a body having an inlet and outlet and a ported seat in fluid communication therewith, a flexible diaphragm closure member within said body engageable with said ported seat for the closed valve condition, a plunger freely movable within said body for depression of said diaphragm member into the closed position, the movement of the plunger being normal to the plane of said ported seat, said plunger having flat upper and lower ends extending substantially to the periphery of the plunger and parallel to the plane of said ported seat, said plunger being of substantially uniform cross section between said upper and lower ends thereof, float actuated lever means pivotally mounted on said

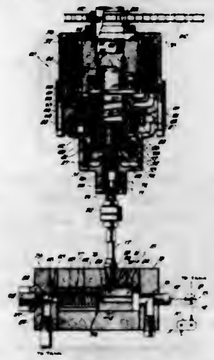
body and cooperating with said plunger to effect the closing of the diaphragm, said lever means having a single pivot and including a float element at one end for actuating the said means, said pivot being intermediate the plunger and float element, said lever means being curved on the underside at the end opposite the float element for rocking engagement with the flat upper end of the plunger along a contact which moves away from the pivot of the lever means during the closing movement of said diaphragm and across at least a major portion of the distance between the portion of the periphery of the plunger nearest said pivot and a point substantially halfway across the flat upper end, the contact between the lever means and plunger terminating substantially at the halfway point at the end of the closing movement, said pivot of the lever means being in close proximity to but not within the edge of plunger nearest the pivot, said pivot also being at least slightly above the upper end of the plunger in both the open and closed valve positions.

2,745,429
SNAP ACTION REGULATOR VALVE
Robert R. Crookston, Houston, Tex., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware
Application June 26, 1952, Serial No. 295,613
5 Claims. (Cl. 137—492.5)



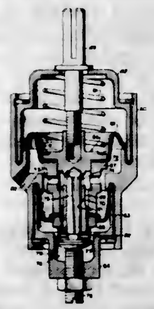
1. A valve for regulating a snap-acting main valve and adapted to be operable by outlet pressure from said main valve which consists of, a housing provided with a valve cavity, said housing defining an inlet and an outlet for said valve cavity, with the valve cavity inlet in fluid communication with the inlet of said main valve and the valve cavity outlet adapted to deliver fluid pressure through a first passageway in said housing to operate said main valve, a valve seating member arranged in said cavity, a valve member in said cavity adapted to seat against said seating member and provided with a passageway for equalizing pressure from above and below the valve member, a biasing means embracing said valve member and normally urging said valve member into seating engagement with the seating member, a valve stem in said cavity provided with a passageway communicating fluidly with the passageway in the valve member and the atmosphere normally bearing against the valve member to open said valve member by overcoming said biasing means, pressure responsive means operatively connected to said valve stem and adapted to move said valve stem from said valve member, said outlet pressure being exerted against said pressure responsive means through a second passageway in said housing leading from the main valve outlet, and biasing means operatively connected to said valve stem normally urging said valve stem against the valve member to move the valve member off said seating member.

2,745,430
AUTOMATIC PRESSURE THROTTLING VALVE FOR FLUID PRESSURE SYSTEMS
Joseph J. Slomer, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application October 15, 1951, Serial No. 251,438
3 Claims. (Cl. 137—505.13)



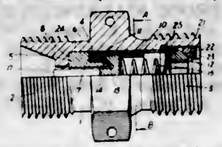
1. An automatic pressure throttling valve for preventing shock on a fluid pressure operated device connected thereto and caused by the admission of pressure fluid to said device in excess of a desired amount, said automatic pressure throttling valve comprising a valve body having a bore therein, an inlet port at one end of said bore and coaxial therewith, an outlet port intersecting said bore, a piston type valve member movable in said bore and including spring means for urging said valve member toward said inlet port, a passageway in said valve member affording communication between said inlet port and said outlet port, said passageway including a passage in alignment with said outlet port when said valve member is in returned position by said spring means, said valve member being movable by pressure fluid at said inlet port to provide for fluid at a throttled pressure, further movement of said valve member thereby moving said passage out of alignment with said outlet port, and an additional passage of reduced cross sectional area formed in the surface of said movable valve member and together with said bore forming a means of communication for pressure fluid between said first named passage and said outlet port after said further movement of said valve member.

2,745,431
SPRING RATE COMPENSATING DEVICE FOR RELIEF VALVES AND ACTUATORS
Raymond W. Jensen, Encino, Calif., assignor to The Garrett Corporation, Los Angeles, Calif., a corporation of California
Application June 9, 1953, Serial No. 360,563
11 Claims. (Cl. 137—514.7)



8. A fluid pressure operated actuator comprising: a member supported for reciprocatory movement; resilient means tending to urge said member in one direction, said member having a first surface area responsive to fluid pressure to move said member in opposition to said resilient means, such movement tending to increase the force of said resilient means, means on said member to compensate for the increase in force of said resilient means, said compensating means having surface areas exposed to fluid pressure in the initial position of said member the resultant force of which tends to urge said member in said one direction; and metering valve means disposed to control the application of fluid pressure to a predetermined portion of said surface areas of said compensating means, said valve means being located to be actuated by said member to a position to vary the pressure applied to the predetermined portion of said surface areas of said compensating means in proportion to the increase in force of said resilient means to decrease the tendency thereof to urge said member in said one direction whereby the response of the first surface area to fluid pressure to move said member in opposition to said resilient means will be increased.

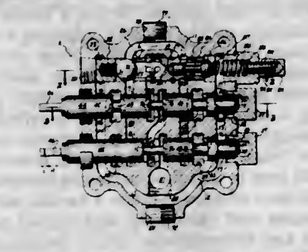
2,745,432
NON-RETURN VALVES
Derrick J. Williams, Kenton, England, assignor to High-Pressure Components Limited, London, England
Application December 10, 1952, Serial No. 325,059
3 Claims. (Cl. 137—540)



1. A non-return charging type valve adapted to be connected to a container to be charged with a fluid at high pressures, comprising a housing body having an axial boring extending therethrough to provide an outlet at a first end and an inlet at the opposite end thereof, the first end of said housing body being adapted to be connected to said container, said boring including a cylindrical portion ending adjacent an inward annular shoulder and extending from said shoulder toward said first end of said housing, a tubular seat carrier axially arranged in said cylindrical portion with a first end thereof abutting against said annular shoulder, the other end of said tubular seat carrier having a reduced outside diameter, an annular resilient elastomeric valve seating fitted between and substantially completely filling the space between the cylindrical portion of said boring and that portion of said seat carrier having the reduced outside diameter, a retaining sleeve in said cylindrical portion having one end which abuts an outer annular region of said valve seating leaving exposed a portion of the surface of the elastomeric valve seating between the boring and the seat carrier, a valve member having an inwardly tapering annular nose portion for engaging said valve seating axially slidable in said sleeve into engagement with the exposed surface of said valve seating, said valve member being shaped at its exterior surface to provide fluid passageways between said valve member and said sleeve, a coil spring engaging said valve member to normally hold said valve member in contact with said valve seating.

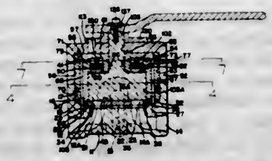
2,745,433
CONTROL VALVE FOR FLUID PRESSURE OPERATED MECHANISMS
Dana J. Schneider, Waukesha, and Francis H. Tennis, Milwaukee, Wis., assignors to Hydraulic Unit Specialties Co., Waukesha, Wis., a corporation of Wisconsin
Application February 25, 1952, Serial No. 273,202
6 Claims. (Cl. 137—621)

1. A control valve of the character described, comprising: a valve body having an inlet and an outlet therein and a single elongated substantially centrally located through passage extending through the body and connecting the inlet with the outlet, said through passage being at all times communicated with the inlet, said body having an outer passage therein leading to an exhaust port and having branches thereof in spaced parallel and coplanar relationship with the through passage but disposed at opposite sides thereof, said body having an inner passage communicating with the inlet end of the through passage to provide in effect a part of the latter, said inner passage having branches thereof in spaced substantially parallel and coplanar relationship with the through passage and said branches of the outer passage, with each branch of the inner passage disposed between the through passage and one branch of the outer passage, said body having a bore therein with its axis in the plane of said branches of the inner and outer passages and the through passage and the bore intersecting the same at locations a distance downstream from the inlet end of the through passage, and the body having a pair of high pressure outlet ports each leading into the bore at a location be-



tween one branch of the outer passage and the adjacent branch of the inner passage, said high pressure outlet ports being communicable with the branches of the inner and outer passage adjacent thereto through said bore; a valve element slidable endwise in said bore from a neutral position clearing the through passage for the travel of fluid therethrough and closing off communication between said high pressure outlets and the adjacent branches of the inner and outer passages, to an operative position in which said valve element blocks off the through passage and connects one of the high pressure outlets with the adjacent branch of the inner passage and the other high pressure outlet port with the adjacent branch of the outer passage; and a check valve in said inner passage upstream from said bore for closing off communication between the inner passage and the body inlet whenever the valve element is in a neutral position clearing the through passage for the travel of fluid therethrough, said check valve being arranged to open in response to the build up of pressure in the inlet end of the through passage resulting from closure of the through passage by the valve element.

2,745,434
FOUR WAY BALANCED PRESSURE VALVE
Robert Stevenson, Barrington, R. I., assignor to Anco, Inc., a corporation of Rhode Island
Application January 19, 1952, Serial No. 267,214
2 Claims. (Cl. 137—625.43)



1. A four way balanced pressure valve comprising a lower housing having a beaded edge with bolt holes

therein, provided with four ports having pipe threads in the outboard ends, a raised cylindrical wall, forming a first chamber having a base provided with a cavity, annular recesses in the ends of said ports at the juncture of said cavity, ducts connecting said ports with said base, a valve plate having four ports adapted to cooperate with said ports in said lower housing, a fluidtight packing material in said annular recesses beneath said valve plate, an upper housing comprising a beaded edge with bolt holes adapted to be alined with the bolt holes in said lower housing, bolts and nuts in said bolt holes securing said beaded edges together, a cylindrical wall forming a second chamber in alignment with said first chamber in said lower housing, a ceiling in said second chamber, a bore in said ceiling, a fluid balancing member in said first and second chambers, consisting of a closed end cylinder, the base of said cylinder bearing against said ceiling, the end of said cylinder bearing against said valve plate, the base of said cylinder having a bore and four chambers, the cylinder having four ducts in alignment with said ducts in said lower housing on one end and engaging each of said four chambers individually on the other end, tubing fixed in the cylinder wall ducts and lower housing ducts, the outside wall of said cylinder having a recess adapted to house a fluidtight sealing material engaging said chamber in said lower housing, balancing plugs provided with grooves adapted to house a fluid tight sealing material spring pressed in each of said four chambers, a valve plug comprising a cylindrical body and a cylindrical stem, arched passageways in said body, a groove in said stem adapted to house a fluidtight sealing material bearing against said bore in said fluid balancing member, a square end on said stem adapted to house a handle, said balancing plugs engaging said valve plug, said arched passageways engageable and disengageable with a combination of any two of said four ports.

2,745,435
HYDRAULICALLY ACTUATED RING DIAPHRAGM
Howard Frederick Hobbs, Leamington Spa, England, assignor to Hobbs Transmission Limited, Leamington Spa, England, a British company
Application October 10, 1952, Serial No. 314,101
Claims priority, application Great Britain October 11, 1951
2 Claims. (Cl. 137—788)



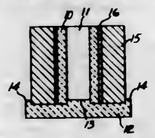
1. A pressure transmitting device comprising a flexible ring diaphragm, a housing member having a ring-like depression in which said diaphragm is disposed, an opening in the housing member communicating with a space between the diaphragm and the adjacent part of the housing member, a ring-like outer holding plate located on the side of the diaphragm opposite to the depression and attached directly to the housing member in contact therewith adjacent the outer periphery of the housing member for holding the outer peripheral margin of the diaphragm in the said depression, an inner peripheral holding plate located on the same side of the diaphragm as the outer holding plate and attached directly to the housing member in contact therewith adjacent the inner periphery of the housing member for holding the inner peripheral margin of the diaphragm in said depression, movable means disposed between said outer and inner holding plates and engaging the diaphragm and movable thereby, both of said holding plates having an extending part which projects from the unclamped part of the diaphragm nearest its adjacent periphery to a distance radially of at least three times the thickness of the diaphragm, said extending part engaging the diaphragm on the side of the diaphragm remote from said space, the surfaces of both said holding plates facing the diaphragm and between the unclamped part and the adjacent periphery of the holding plate being of frusto-conical shape with said periphery furthest from the plane of the margin of the diaphragm, the housing member and said extending parts of said holding plates being spaced from the plane of the margin of the diaphragm so that the diaphragm when fluid pressure is admitted to said depression passes through a position in which its margin is in the same plane as the remainder of the diaphragm.

2,745,436
SOLVENT PROOF MARKING FOR CONDUITS
Richard Battle and Ralph E. Donner, West Los Angeles, Calif., assignors to Douglas Aircraft Company, Inc., Santa Monica, Calif.
Application October 3, 1950, Serial No. 188,252
6 Claims. (Cl. 138—47)



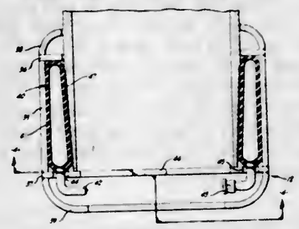
1. An indexed article in which the indicium is resistant to stress and is substantially corrosion, actinicism, erosion and solvents-proof, comprising: a substantially flexible core member having a flexible thermoplastic sheath, said sheath having a sunken portion therein in the form of a bas-relief indicium, the relief portion of said indicium being bare and exposed and consisting essentially of a visible coalescence of materials substantially inert to corrosion, actinicism, erosion and commercial solvents, the coalesced materials of the relief-portion being integral and in one piece with the thermoplastic walls of said sunken portion in said sheath so as to preclude stress-disintegration of said relief and release thereof from said sheath under flexure, torsional compression and shear stresses in said article.

2,745,437
REINFORCED CERAMIC BODY OF REVOLUTION
George E. Comstock 3d, Holden, Mass., assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts
Application September 12, 1951, Serial No. 246,305
6 Claims. (Cl. 138—64)



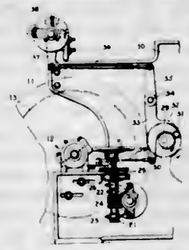
1. A composite article comprising an inner ceramic body of revolution having a compressive strength greater than 100,000 pounds per square inch and a hardness of at least 7 on Mohs's scale, the major portion of the material of said body being selected from the group consisting of silicates, other oxides and carbides, a metal envelope mating with and in compression against said inner ceramic body, said metal having a melting point between 140° C. and 1800° C., said compression being on a calculated interference fit basis from .3 mil to 10 mils per inch, and an outer metal envelope surrounding and mating with said envelope mating with the inner ceramic body, said outer metal envelope being of metal having a higher melting point than the metal of the envelope mating with the inner ceramic body and said outer metal envelope being in compression against said envelope mating with the inner ceramic body with a compression which on a calculated interference fit basis is from .3 mil to 10 mils per inch.

2,745,438
PIPE THREAD PROTECTOR
Dolores Floyd Bloom, Bakersfield, Calif.
Application February 12, 1954, Serial No. 410,011
3 Claims. (Cl. 138—96)



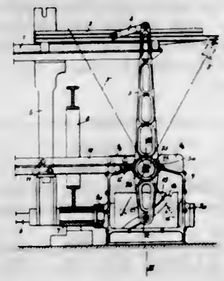
1. A pneumatically actuated pipe thread protector comprising a cylindrical member adapted to enclose the threaded end of an externally threaded pipe section and having a rigid wall substantially paralleling the external wall of said pipe section, means, including a soft, flexible member contiguous to the external threading of said pipe section, for defining an enclosed air space capable of retaining air under pressure between the rigid wall of said cylindrical member and the externally threaded wall of said pipe section, and valve means for controlling the admission, retention and release of air under pressure within said air space; whereby said soft, flexible member may be pressed into engagement with the threaded portion of said pipe section to exclude foreign material from the threads and retain the protector in position thereon, and subsequently released to permit removal of said protector from said pipe section.

2,745,439
LET-OFF FOR LOOMS
Maurice R. Flamand, Central Falls, R. I., assignor to Draper Corporation, Hopedale, Mass., a corporation of Maine
Application June 11, 1952, Serial No. 292,898
7 Claims. (Cl. 139—110)



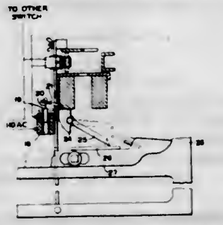
5. In a loom having a warp beam from which a warp sheet is drawn and a whip roll over which said warp sheet is passed, a warp let-off means comprising gearing for advancing said warp beam as governed by tension in said warp sheet and means for positively advancing the gearing which comprises a ratchet wheel and a pawl means for said wheel, said pawl means comprising an arm pivoted concentrically with said wheel, a pivot at the relatively free end of said arm for said pawl, the engaging surfaces of the wheel and pawl being roughened and that of the pawl being formed on an arc eccentric to the pawl pivot, a spring for urging the pawl into engagement with the wheel, and reciprocatory means for moving said arm and pawl through a small angular extent to ratchet said wheel, said means being connected to said pawl between its pivot and the point at which it engages the ratchet wheel for withdrawing the pawl from the wheel against the tension of said spring.

2,745,440
SHUTTLELESS LOOMS WITH CONTINUOUS WEFT FEEDING
Raymond Dewas, Amiens, France
Application February 18, 1952, Serial No. 272,049
Claims priority, application Great Britain February 23, 1951
4 Claims. (Cl. 139—123)



1. In a shuttleless loom comprising a batten, an oscillating picking arm, and a sword carrying said batten; a lower shaft, a main casing rotatably mounted upon said lower shaft, a cross-piece connecting said casing with said sword, operating means located within said casing and operatively connected to said lower shaft and to said picking arm for oscillating said picking arm, said picking arm having a hub, a torsion bar attached at one end thereof to said hub, and retaining means carried by said loom and connected to the other end of said torsion bar, said means being adapted to prevent any rotational movement of said other end of said torsion bar.

2,745,441
STOP MOTION FOR LOOMS
Clyde Roebuck, College Park, Ga.
Application April 27, 1950, Serial No. 158,432
6 Claims. (Cl. 139—341)



1. An electro-mechanical stop for a loom having a shuttle box, a shuttle, a main frame and a rocking lay frame, characterized by switch means provided with a pressure actuated contact arm projecting inwardly of a

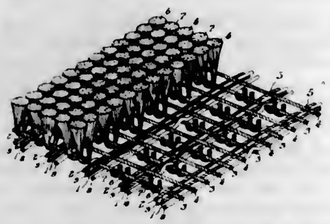
side wall of said shuttle box in a manner to be engaged by said shuttle upon its entrance into said shuttle box to actuate said switch means, a frog mounted on said loom, a pawl arranged for selective engagement with said frog to stop movement of said lay frame, and electro-mechanical mechanism operably connecting said pawl with said switch means to actuate said pawl to clear said frog upon proper entrance of said shuttle into said shuttle box.

2,745,442
THREE-SHOT AXMINSTER WEAVE
Gerald E. Herrnstadt, Cornwall, N. Y., assignor to The Firth Carpet Company, Inc., New York, N. Y., a corporation of New York
Application August 30, 1955, Serial No. 531,436
5 Claims. (Cl. 139—399)



1. A three-shot Axminster carpet weave comprising a plurality of spaced pairs of double weft shots and a single double weft shot intermediate said pairs and all lying in substantially the same plane, a pile yarn end looped under every third double weft shot, two warp ends extending together over each of said pairs of double weft shots and under each of said intermediate single double weft shots, and a single warp end extending under each of said pairs of double weft shots and over each single double weft shot.

2,745,443
PILE FABRICS
William Rollin Keen, Media, Pa., assignor to Collins & Aikman Corporation, Philadelphia, Pa., a corporation of Delaware
Application December 29, 1953, Serial No. 400,892
1 Claim. (Cl. 139—399)



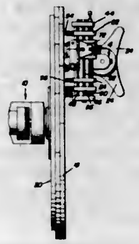
As a new product of manufacture, pile fabric having a foundation weave in which pairs of ground warps are interlaced at spaced intervals with picks of a weft thread, and in which auxiliary or back face warps respectively outward of the ground warps of each pair are interlaced at relatively long skip intervals with different picks of the weft; and multiple U pile tuft elements are looped about alternate weft picks in the intervals between adjacent groups of the ground and auxiliary warps.

2,745,444
WOVEN MATTING
George Lionel Rodolphe Longtin, St. Johns, Quebec, Canada, assignor to Kraft Paper Products Limited, St. Johns, Quebec, Canada
Application July 26, 1952, Serial No. 301,027
5 Claims. (Cl. 139—420)



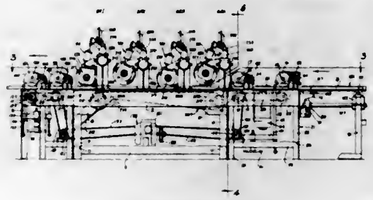
5. A matting consisting solely of interwoven warp and weft members, each consisting of a flattened tube of interlaced strands of fibrous material.

2,745,445
PORTABLE PATTERN MAKER'S FACER
Oscar E. Klawitter, Millville, N. J.
Application July 21, 1953, Serial No. 369,300
5 Claims. (Cl. 142—1)



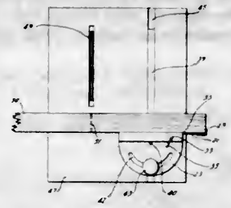
1. In a portable pattern maker's facer having a tool bed provided with a support including a base plate having spaced upwardly extending end pieces and guide rods extending between said end pieces, the combination of a threaded carriage bar journaled in said end pieces, a tool carriage clampingly secured about said guide rods and threadedly engaging said carriage bar and work piece engaging guide blocks slidably positioned on said guide rods, said guide blocks having bifurcated end portions, discs rotatably mounted on shafts extending between the bifurcated end portions of said guide blocks, said discs extending outwardly from said guide blocks and being adapted to engage the work piece.

2,745,446
QUICKLY ADJUSTABLE MACHINE FOR RIPPING LUMBER INTO SELECTED WIDTHS
Albert J. Deiry and Harry E. Cullen, Minneapolis, Minn., assignors to Wabash Screen Door Company, Minneapolis, Minn., a corporation of Minnesota
Application July 30, 1952, Serial No. 301,662
23 Claims. (Cl. 143—37)



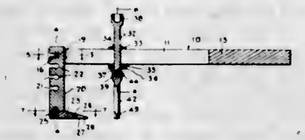
13. In a machine of the class described, a bed over which the lumber is longitudinally fed, a pair of feed rolls at each end of the machine bed for feeding lumber through the machine, a plurality of saw heads mounted for horizontal and vertical movements over the machine bed and normally in inoperative positions, means for moving said saw heads into and out of cutting positions over the machine bed, a control mechanism for selectively controlling the operations of the saw heads, said control mechanism including a holding circuit comprising a pair of normally open switches, one positioned adjacent the feed rolls at each end of the machine, each of said switches comprising a movable element positioned in the path of the boards fed through the machine whereby when one or both of said switches are closed by the movement of a board through the machine, the operation of the machine will continue uninterruptedly until the board has passed completely through the machine and out of engagement with said switches.

2,745,447
ANGULARLY AND LINEARLY ADJUSTABLE STOCK GUIDE
Clarence K. Studley, Jr., Berkeley, Calif.
Application September 1, 1953, Serial No. 377,763
2 Claims. (Cl. 143—169)



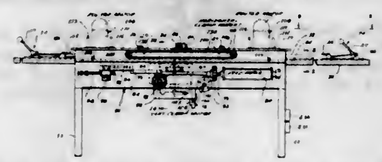
1. A stock guide for circular saws and like cutting mechanisms for predetermining the length of a piece cut from the stock, comprising a slide arranged for movement in a direction parallel to the plane of the saw blade a predetermined distance therefrom, a block rotatably mounted upon said slide, and having a rectilinear stock guiding face, means for securing said block upon said slide in selected angular positions of said face relative to the plane of the saw blade, a cavity provided in said block behind said stock guiding face, a calibrated tape coil disposed within said cavity and having a run extending directly behind and parallel to the rectilinear face of said block and emerging from said block adjacent the edge of said face remote from the plane of the saw blade, a stock engaging hook provided at the end of said tape exteriorly of said block, the value of the calibrations of said tape being arranged to ascend in a direction inwardly from said hook, a window provided in the stock guiding face of said block to expose the parallel run of said tape within said block, and witness marks provided along said face adjacent calibrations on said tape, indicative of the distance between the said hook and the plane of the saw for different angular positions of said block relative to said plane when said tape is in fully retracted position.

2,745,448
SCREW REMOVING TOOL
George L. Leake, Simpsonville, S. C.
Application January 31, 1955, Serial No. 484,921
3 Claims. (Cl. 144—32)



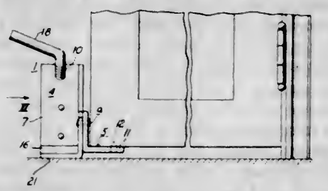
1. A tool for removing screws from flat or irregular surfaces comprising an upstanding leg to be arranged generally at right angles to the surface of the work, said leg provided in one vertical side thereof with a plurality of vertically spaced slots extending transversely through the leg and opening through said side, there being a corresponding number of enlarged cylindrical recesses at the inner ends of said slots and communicating therewith near the transverse center of the leg, a foot secured to the lower end of the leg for engaging the surface of the work and having spaced claws extending transversely beyond one side of the leg, said claws adapted to receive between them a partly removed screw, an elongated supporting arm to be arranged generally horizontally above the work and including spaced sides forming a longitudinal passage between them adapted to receive said leg, a transverse pin extending between and connecting said sides near their free ends, said pin provided upon opposite sides thereof with flat faces, whereby the pin may enter and pass through a selected one of the slots when the flat faces of the pin are arranged parallel to the opposite sides of the slot, the supporting arm and pin then being turned upon the axis of the pin so that the pin will be held within said enlarged cylindrical recess and form therewith a pivotal connection between the leg and said supporting arm, a spindle engaging through said longitudinal passage between the sides of the supporting arm and shiftable longitudinally of the arm, means for maintaining the spindle substantially at right angles to the supporting arm, and means adapting said spindle for connection with a screw driver element beneath the supporting arm, the upper end of said spindle being adapted for connection with rotary driving means above the supporting arm.

2,745,449
MACHINE FOR ROUTING STAIR STRINGERS
Olaf Pearson, West Orange, N. J.
Application May 3, 1954, Serial No. 427,187
12 Claims. (Cl. 144—136)



1. A machine for routing stair stringers including a fixed frame, a stringer carrier movable through the fixed frame, a router guideplate having two intersecting guide slots therein corresponding to the riser and tread of the stairs, the guideplate being located on the frame above the stringer carrier, bearing means by which the guideplate is attached to the frame at a relatively fixed location on said frame and about which the guideplate is rotatable about a center near the intersection of the guide slots in the plate to change the ratio of rise to run for the stringers routed by the machine, feed mechanism for advancing the stringer carrier with a step-by-step movement past the guideplate, and adjustable means for changing the length of the steps of the feed mechanism in accordance with the position of the guideplate to adjust the machine for stair stringers having different ratios of rise to run.

2,745,450
SCREW ACTUATED DOOR SECURING DEVICE
Robert H. Boggs, Carrollton, Ky.
Application May 13, 1953, Serial No. 354,750
2 Claims. (Cl. 144—296)



1. A device for holding a swinging door, while open, in a fixed position while work is being done thereon, said device comprising a member having a vertical back and a flange adapted to be positioned under the bottom of the door, bell crank members pivotally secured to the back of said flanged member at locations adjacent the opposite edges thereof, the arms of said bell crank members extending outwardly from said vertical back and disposed to rest on the floor on opposite sides of the door to form a relatively broad support base, and means

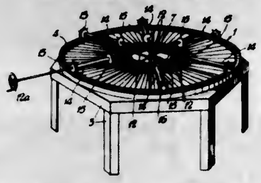
for turning said bell cranks in opposite directions, whereby the flanged member is lifted and urged firmly against the under side of the door to wedge the same and restrain it against turning on the door hinges.

2,745,451
AUTOMATIC RESETTING SCREW-HOLDING SCREW DRIVER
James M. Neil, Oakland, Calif.
Application March 21, 1952, Serial No. 277,826
15 Claims. (Cl. 145—50)



11. A screw driver having a handle, a bit rotatably mounted in said handle, an element rotatably mounted in said handle, means to rotate said element relative to said bit to grip a screw, and means to prevent rotation of said element relative to said handle when said handle is turned to tighten the screw.

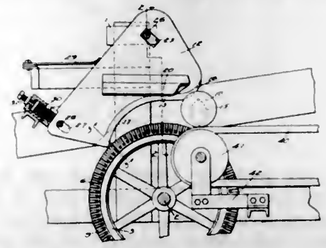
2,745,452
MACHINE FOR PUNCHING NUT KERNELS FROM THEIR SHELLS
Eric D. Hawkins, Limbe, Nyasaland Protectorate
Application June 25, 1951, Serial No. 233,578
Claims priority, application Great Britain August 8, 1950
5 Claims. (Cl. 146—8)



4. A machine for shelling tung and like nuts comprising a horizontally disposed wheel for carrying nuts to be shelled, nut-supporting means located around the periphery of the wheel, a rotatable drum mounted above the nut supporting means, a nut shell penetrating punch rigidly secured to and extending radially outwards from the drum, means for rotating the drum to move the punch toward the nut supporting means and for moving the carrier, and means for effecting relative synchronous motion between the said punch and the nut-supporting means on the carrier to cause the punch to penetrate the shell of a nut to eject the kernel therefrom.

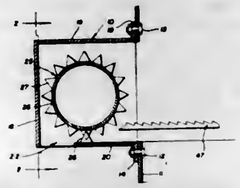
2,745,453
FREESTONE PITTER
Joseph Perrelli and John Perrelli, Richmond, Calif.
Application March 8, 1952, Serial No. 275,586
7 Claims. (Cl. 146—28)

6. In a pitting machine for drupes and the like having a cutting blade formed along one edge with a cutting edge, a carrier for drupes extending past said edge for supporting drupes thereon for movement past said blade in bisecting relation to said blade, said carrier comprising a pair of parallel, elongated, hollow waterproof supports of resilient rubber-like material positioned along opposite sides of the plane of said blade and extending past the latter adjacent the edge of said blade, said supports having divergently upwardly extending drupe supporting sur-



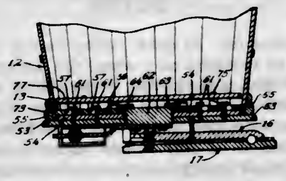
faces facing generally toward said blade for centering a drupe thereon relative to said plane, means supporting said supports for movement in one direction past said blade, and means for so moving said supports, the adjacent lower portions of said supports being open and the means supporting said supports for movement being a wheel with said supports carried on the outer periphery thereof.

2,745,454
CHOPPING DEVICE FOR HARVESTING MACHINE
Parnell W. Fuelling, Monroeville, Ind.
Application June 16, 1951, Serial No. 232,016
1 Claim. (Cl. 146—117)



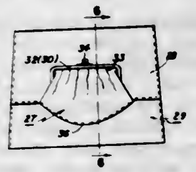
A weed chopping device comprising an oscillating straw discharge rack, a pair of spaced panels fixed adjacent the straw-delivering end of said rack, a rotary cylindrical cutter mounted between said panels with its longitudinal axis parallel to and slightly above the end of said rack whereby straw and weeds may be fed to said cutter by gravity and the thrusting action of said rack, said cutter including longitudinal parallel rows of knives on the outer surface thereof, individual knives of one row being displaced laterally with respect to individual knives of adjacent rows, said knives extending into close straw receiving relation with said rack at the outer limit of oscillation thereof, a flat bottom panel having an opening and mounted between and below said side panels for guiding straw and weeds to said cutter and preventing escape of air between said cutter and the side of said machine, a concave mounted at the outer extremity of said lower panel approximately beneath the center of said cylindrical cutter and comprising a row of perpendicular knives mounted on said bottom panel in overlapping relation with said cutter knives to permit passage of said cutter knives between adjacent concave knives, a vertically disposed end cover fixed adjacent said bottom opening and to the outer ends of said panels in close relation to said cylindrical cutter for minimizing the flow of air in an upward direction with respect to said cylindrical cutter, and a cover mounted on the upper side of said side panels closely adjacent to said cylindrical cutter for preventing the discharge of chopped material from the upper side of said cylindrical cutter and for reducing flow of air over the top of said cutter thereby to create suction on the rack side of said cutter.

2,745,455
APPARATUS FOR FORMING SLACK BARRELS
Alvis H. Snipes, St. Paul, Minn., assignor to Greif Bros. Cooperage Corporation, Delaware, Ohio, a corporation of Delaware
Application September 20, 1952, Serial No. 310,717
8 Claims. (Cl. 147—4)



1. A slack barrel setting up device for use in conjunction with staves having crozed grooves at at least one end thereof, the device comprising a frame, a stave support including a base having a ring shaped groove in the upper surface thereof designed to accommodate the grooved ends of the staves, a generally cylindrical wall forming the outer side of said groove and a plurality of outwardly movable clamping plates supported by said base and spaced inwardly of said wall, and means for moving said plates outwardly toward said wall and into the crozed grooves on said staves, clamping said staves against said wall.

2,745,456
HANDBAGS AND THE LIKE
Emily Rubin, New York, N. Y.
Application April 22, 1954, Serial No. 424,965
3 Claims. (Cl. 150—35)



1. In a purse of the type having an overlapping cover flap, a cut out portion in the lower edge of said flap, a smaller purse having hinged frame members forming a mouth portion attached to said flap, one of said frame members enclosing the edges of said cut out portion of said flap.

2,745,457
WIRE COIL BOLT LOCK
Eugene M. Lang, Danbury, Conn., assignor to Heli-Coil Corporation, Danbury, Conn., a corporation of Delaware
Application August 19, 1952, Serial No. 305,117
4 Claims. (Cl. 151—14)

1. A lock bolt comprising in combination a bolt and an inner and outer screw thread forming wire coil insert for a tapped hole, said bolt having a head formed for the application of a torque and a shank portion having a free end opposite said head, said shank portion being provided with an outer screw thread screwed into the inner screw thread formed by said insert, said free end being provided with an axial slot having flanking walls parallel to each other and to the axis of said bolt, said slot forming two end projections of said shank each of which having an end face inclined substantially from the bottom of the slot at the opposite ends thereof, respectively, and rising towards the ultimate end of said projections in the same sense as the thread of said bolt, said



wire coil including at its one end a diametrical tang located in said slot, said end faces being so inclined as to allow said tang to ride thereon but to be deformed thereby before leaving said slot when a torque tending to reverse said bolt in said insert exceeds a predetermined value.

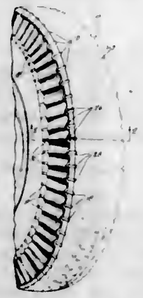
2,745,458
RESILIENTLY RETAINED FASTENER WITH FLANGE DETENT
William A. Bedford, Jr., North Scituate, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Boston, Mass., a corporation of Delaware
Application June 20, 1950, Serial No. 169,175
3 Claims. (Cl. 151—41.75)



1. A mounting device for assembly into an aperture in a supporting panel comprising an elongated flat base, flanges extending integrally from a portion of each side edge of said base at substantially right angles thereto, the front and rear vertical edges of each of said flanges being spaced adjacent to and inward from the front and rear edges of said base, integral resilient arms extending upwardly and outwardly from a top portion of each of said flanges adjacent to the rear vertical edges of said flanges thereby leaving each of said flanges with a longitudinal front top bearing edge, said arms extending laterally in opposite directions with relation to the base, and being inclined toward the plane of the base, thread receiving means centrally disposed on said base with respect to the width thereof and extending upwardly therefrom between and in the same direction as said flanges for engaging a threaded member, the top longitudinal bearing edge of each of said flanges providing bearing surfaces for engaging the edge of an aperture in a supporting panel on which the fastener is to be installed, the mounting device being so proportioned that the longitudinal length of said flanges is substantially equal to the distance from the forward end of said thread receiving means to the rear edge of said base, so that the forward end of said base may be inserted into such aperture in the support with the arms bearing against the front face of such support, and said bearing surfaces engaging the edges of the aperture behind the support, the fastener then being tilted so that said rear end of the base passes through such aperture and moved laterally to permit the said rear end of the base to become engaged with the back face of such support and the arms to become resiliently engaged with the front face while the vertical edges of the flanges are positioned adjacent opposite edges of the aperture to restrict substantially lateral movement of the device with respect to the aperture of such support.

2,745,459
AIR COOLED TIRE
Milton F. Pennock, Elk Grove, Calif.
Application February 12, 1954, Serial No. 409,834
2 Claims. (Cl. 152—153)

1. An air cooled pneumatic tire casing of resilient material comprising a tread and side walls, each of said side walls having radially extending and circumferentially spaced channels therein opening longitudinally on its outer side wall surface, an annular undulating cover integral with each of said side walls extending outwardly therefrom, said cover having circumferentially spaced openings



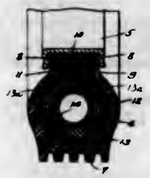
extending radially therethrough in registering overlying relation to said channels to define therewith radially extending air passages for cooling a tire by dissipating heat generated in the interior of the tire.

2,745,460
TIRE TRACK—PARTIAL ENGAGEMENT TYPE
Carl F. Koenig, Lyndhurst, Ohio, assignor, by mesne assignments, to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application February 9, 1953, Serial No. 335,781
3 Claims. (Cl. 152—182)



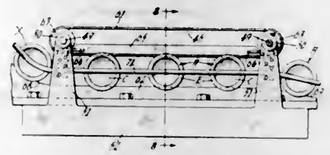
1. In combination, a pneumatic tire having side walls and a tread, said tire having evenly spaced grooves extending cross-wise of said tire at least in the zones where said side walls meet said tread, said tire being of a construction and having a normal working pressure such that the portion of said tire engaging the ground flattens under load so that said evenly spaced grooves temporarily lie at a reduced even spacing along said ground-flattened portion of said tire, an endless track completely surrounding and tightly engaging the circumference of said tire, said track comprising a plurality of rigid shoes and articulating connections between adjacent shoes, each of said shoes having a flat mid-portion engaging the tread of said wire, each of said shoes having end portions extending inwardly from the ends of said mid-portion and lying opposite said zones, said end portions having ridges extending inwardly therefrom and spaced at said reduced even spacing, and said ridges having such an inward extent that they have driving engagement with said grooves only at said ground-flattened portion of said tire.

2,745,461
CUSHION TIRE CONSTRUCTION
Paul Rossi, Warren, Ohio
Application December 10, 1953, Serial No. 397,437
1 Claim. (Cl. 152—312)



In a cushion tire, an outer casing having spaced beads adapted to be mounted on a wheel rim, an inner split casing in said outer casing having beveled inner edges, a solid annular cushioning member fitted on the wheel rim, and engaging between said spaced beads, an inner cushioning tube constructed of soft rubber material snugly fitting within said inner casing, said annular cushioning member having wedge-shaped projections fitting between said beveled inner edges of said inner casing and the surface of said inner cushioning tube, and a central cushioning tube fitted within said inner cushioning tube.

2,745,462
METHOD OF AND APPARATUS FOR TRUING OUT-OF-ROUND CAN BODIES
John Dryculski, Hillside, N. J., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application November 28, 1950, Serial No. 197,999
4 Claims. (Cl. 153—32)



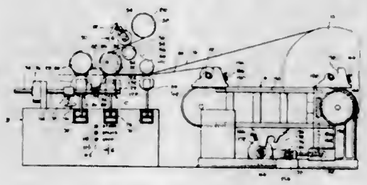
1. In an apparatus for truing an out-of-round body wall of an open end substantially cylindrical container having a radially projecting end seam at a closed end of the container and a radially projecting flange at its opposite open end, the combination of a pair of movable spaced parallel endless belt members having driving faces respectively engageable with the projecting container end seam and with an axially spaced outer peripheral body wall portion of the out-of-round container between said end seam and said flange, means for positively driving one of said belt members, a pair of pressure bars for respectively holding said belt members in engagement with the aforesaid axially spaced portions of said container, and a track member disposed adjacent said belt members in spaced relation thereto, a portion of said track member holding the projecting end seam of said container against said driving face of one belt member to effect rotation of said container about its longitudinal axis, another laterally spaced and substantially parallel portion of said track member being mounted to project towards said container body wall a distance greater than said first mentioned track member, said another track member portion being spaced from the driving face of the second belt member a distance substantially equal to the true diameter of the container body for cooperation with said end seam engaging belt member to tangentially engage the container body wall for exerting a diametrical pressure against the out-of-round wall of said rotated body to reform said wall into true cylindrical container formation, said reforming diametrical pressure being exerted against the container body wall solely at a locality spaced axially inwardly of the container open end.

2,745,463
PRESS FOR HEAT SEALING SHEET AND LIKE MULTIPLE PART OBJECTS
Dietrich G. Rempel, Akron, Ohio, assignor to Rempel Manufacturing, Inc., Akron, Ohio, a corporation of Ohio
Application May 28, 1953, Serial No. 358,043
11 Claims. (Cl. 154—1)



1. A press comprising a substantially rigid bed, a relatively thin substantially flat inflatable bag overlying said bed and substantially coextensive therewith, a work engaging member comprising a flexible sheet metal plate overlying said bag, a complementary work engaging member, means for mounting said bag and said complementary work engaging member for relative movement to admit a work piece between said complementary work engaging member and said plate, and means for releasably securing said complementary work engaging member to said bed adjacent said plate.

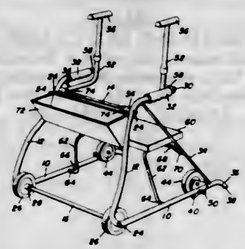
2,745,464
AUTOMATIC BUTT SPLICER
George N. Auerbacher, South Orange, and Lawrence H. Haskin, Jr., Bloomfield, N. J., assignors to Champlain Company, Inc., Bloomfield, N. J., a corporation of New York
Application December 18, 1952, Serial No. 326,648
42 Claims. (Cl. 154—42.3)



1. Apparatus for butt splicing webs end to end, said apparatus comprising a pair of normally separated cutting rolls disposed with their axes transverse of the web, means to abruptly move said rolls together for web severance through both webs which are to be spliced, a pair of normally separated splicer rolls adapted to carry an adhesive material, said rolls being disposed with their axes transverse of the web, and means to abruptly move said splicer rolls together to apply the adhesive material to the severed web ends.

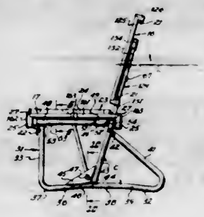
2,745,465
INVALID WALKER
Joseph L. Hogan, San Francisco, Calif., assignor to Walk-A-Lator Mfg. Co., Inc., Santa Rosa, Calif., a corporation of California
Application April 13, 1954, Serial No. 422,785
2 Claims. (Cl. 155—23)

1. An invalid walker comprising a frame, said frame being formed of a pair of side members, each of said side members having a horizontally disposed portion and a vertically extending portion secured to the forward end of said horizontal portion and extending upwardly and rearwardly therefrom, means extending between said side members for maintaining the same in vertical positions, said vertical portions being provided with horizontally disposed rearwardly extending handle portions, and a pair of wheels mounted for rotation on said frame adjacent the forward ends of said horizontal portions said means comprising a pair of parallel shafts extending between said side members one of said shafts being disposed adjacent the upper ends of said vertical portions the other of said shafts being disposed adjacent the lower ends of said vertical portions, said wheels being disposed at the opposite ends of said lower shaft, said side frame members being provided with a seat pivotally secured thereto for movement between an operative and an inoperative



position, said seat comprising a seat portion provided with a leg extending downwardly from each end thereof, said legs being pivoted at their lower ends to said horizontal portions intermediate the length thereof, brace means connecting the upper ends of the vertical portions with the rear ends of the horizontal portions, said seat portion being provided with means thereon engaging said brace means for retaining said seat in an operative position.

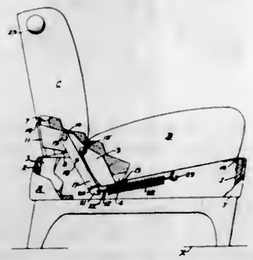
2,745,466
FOLDAWAY BENCH-TABLE SHIPPING-STORAGE UNIT
Frederick C. Thompson, Washington, D. C., assignor to Converti-Bench Corporation, Washington, D. C., a corporation of Delaware
Application July 22, 1952, Serial No. 300,310
6 Claims. (Cl. 155—43)



1. A combined bench-table unit comprising an elongated seat board; edge reinforcing portions depending from one face thereof and forming therewith a recess; supporting leg structures of generally planar form enabling said leg structure to be stored within said recess; means connecting said leg structures to said one face enabling said structures to extend in a plane transverse to said face and parallel to the width of the seat board; a combined back-table board; edge reinforcing portions depending from one face thereof and forming therewith a recess, one of said reinforcing portions being notched at one point at least along its free edge, said back-table board and reinforcing portions being of equal dimensions to those of the seat board; a support structure for said back-table board comprising tubular posts each having a main support portion and an angularly offset terminal portion, said leg structure having sockets removably, pivotally receiving the free ends of said main support portions of said posts, means spaced longitudinally of the recess face of said back-table board universally connecting the free ends of said offset terminal portions of said posts to said back-table board for swinging movement to a stored position

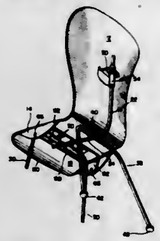
within said recess and to a table or seat back position whereby said seat board and back-table board, with their respective support structures in stored position and their edge reinforcing portions cooperating in abutting relation, cooperate to form a box-like storage and transfer unit with all support structure enclosed; and releasable means for connecting and holding the seat-board and back-table board edge reinforcing portions together in said abutting relation.

2,745,467
RECLINING BED CHAIRS
Baldwin Vale, deceased, late of San Francisco, Calif., by Helen E. Vale, executrix, San Francisco, Calif.
Application July 26, 1951, Serial No. 238,647
3 Claims. (Cl. 155—45)



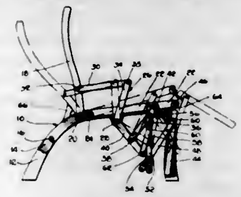
1. A reclining chair comprising a base open at the top, a seat and a back; a hinge joining said seat and said base along the front edges thereof to permit vertical movement of the rear portion of said seat within said base; a toggle hinge having a back plate and a seat plate pivoted together at one end and having lateral bracket portions at the other end attached to said seat and back respectively; a fulcrum arm pivoted at one end to said back plate to the rear of said toggle hinge pivot and intermediately of its length to a fixed pivot on said base substantially in vertical alignment with said hinge pivot; and a spring interposed between said seat and fulcrum arm for urging said seat downward within said base.

2,745,468
CHAIR WITH RESILIENT TILTING SEAT AND BACK
Gideon A. Kramer, Seattle, Wash.
Application March 10, 1952, Serial No. 275,723
6 Claims. (Cl. 155—53)



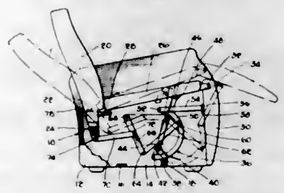
5. A chair, comprising: a single resilient sheet of material shaped to form a seat and a back in a unitary, integral structure; supporting means for said seat and back including substantially vertically oriented guide means engaging said back permitting movement of said back in a substantially vertical direction and preventing movement of the back laterally of the guide means in a substantially horizontal direction, the resiliency of said sheet permitting limited pivoting and return of said back about an upright axis formed by said guide means so that the back resiliently yields to turning of the user in the chair, said supporting means including pivotal bearing means pivotally supporting said seat on an axis running transversely of said seat approximately half way between the front and the rear of said seat, the resiliency of said sheet resisting deformation but permitting limited bending between said seat and back as said seat is tilted under the force of the weight of the user and as said back moves upward and downward in said guide means, the resiliency of the sheet returning said seat and back to their original position when such force is removed.

2,745,469
ARTICLE OF REPOSE FOR SUPPORTING THE BODY OF A PERSON
Anton Lorenz, Buffalo, N. Y.
Application October 22, 1952, Serial No. 316,199
3 Claims. (Cl. 155—106)



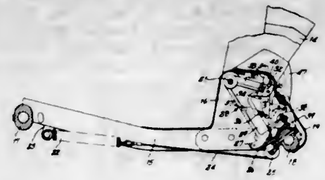
1. An article of repose for supporting the body of a person, comprising in combination: a support, a back-rest-member swingable on said support, a seat, the rear portion of said seat being swingable on said support, a double-armed controlling member swingably mounted on said support, a first connecting link pivoted at one of its ends to the structure of said back-rest-member and at its other end to one arm of said controlling member, a second connecting link pivoted at one of its ends to the other arm said controlling member and at its other end to said seat, a leg-rest swingably mounted on the front portion of said seat, a controlling arm pivoted to said second connecting link, a controlling bar pivoted at one of its end portions to said controlling arm and at its other end portion to said other arm of said controlling member, and means interposed between said controlling arm and said leg-rest for effecting movement of the later in coordination with said controlling arm.

2,745,470
ARTICLE OF REPOSE FOR SUPPORTING THE BODY OF A PERSON
Johannes Luckhardt, Berlin-Dahlem, Germany, assignor, by mesne assignments, to Norman P. Martin and Otto L. Walter, as trustees of Gamma Trust, Lake Worth, Fla.
Application July 8, 1953, Serial No. 366,747
Claims priority, application Germany December 8, 1952
6 Claims. (Cl. 155—106)



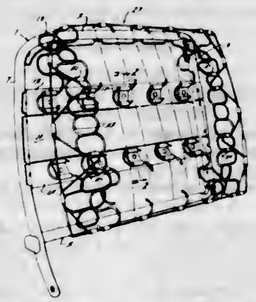
2. An article of repose for supporting the body of a person, comprising: a support, a back-rest structure pivotally mounted on said support, a seat, the rear portion of said seat being swingably mounted on said support, a controlling member pivotally connected with said support, a linkage including a primary link, a secondary link and a tertiary link, said secondary link being swingably mounted on said support and being pivoted to one end of said primary link and to one end of said tertiary link, the other end of said primary link being pivoted to said back-rest structure, the other end of said tertiary link being pivoted to said controlling member so as to effect movement of the latter in coordination with said back-rest structure, the pivotal connection of said controlling member with said support being in a plane below the plane of the pivotal connection of said controlling member with said tertiary link of said linkage, and a connecting link, one end of said connecting link being pivoted to said controlling member, and the other end of said connecting link being pivoted to said seat.

2,745,471
LOCKING AND RELEASING MECHANISM FOR TILTABLE BACKS FOR AIRCRAFT AND SIMILAR SEATS
George F. Chappuis, Cornwall Bridge, and Earl Katan, Kent, Conn., assignors to The Aerotherm Corporation, Bantam, Conn., a corporation of Connecticut
Application April 30, 1952, Serial No. 285,279
5 Claims. (Cl. 155—160)



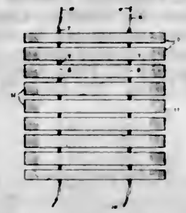
3. A seat having a back tiltable to swing upwardly and forwardly and having a pin projecting from said back to swing with said back in an arc transverse to the length of the pin, a swinging arm on said seat engaging the lower side of said pin to move said back upwardly and forwardly, spring means actuating said swinging arm, a latch pivoted on said seat, a spring pressing said latch to a position to engage said pin as said back is tilted to upright position and to oppose further forward tilting, the engaging surface of said latch being slightly inclined to the direction of movement of said pin to provide a slight component of force against said last named spring to release said latch under overriding pressure.

2,745,472
ZIGZAG SPRING CUSHION HAVING CENTRAL SUPPORT
Hyland C. Flint, Birmingham, Mich., assignor to American Metal Products Company, Detroit, Mich., a corporation of Michigan
Application October 10, 1951, Serial No. 250,658
5 Claims. (Cl. 155—179)



1. In a spring cushion construction, a base frame having end members joined by side members, a cross member joining said side members interjacent said end members, a series of sinuous springs each having an arched load supporting portion and reversely bent end portions, means for securing said reversely bent end portions in fixed relation to said cross member, a flexible border wire of substantially the shape of said frame member having end portions joined by side portions, a series of sinuous spring strips secured across the end portions of said resilient border wire, said spring strips being aligned with and resting on the spring strips secured to the base frame with the border wire spaced therefrom and substantially aligned therewith, and means for securing the aligned spring strips together in fixed relation to each other.

2,745,473
BACK REST FOR VEHICLE RIDING
John J. Boland, West Hempstead, N. Y.
Application November 13, 1953, Serial No. 391,833
4 Claims. (Cl. 155—182)



1. Means for relieving back strain in automobile riding, comprising in combination with a seat of an automobile having an upright back part, a pair of elongated rope elements secured in a substantially north, south direction over the face of the back part in substantial spaced parallel relation to each other, and a plurality of rigid slats, each detachably hooked transversely of the rope elements in close parallel relation to one another knots in each rope element spacing one slat from the next below, and, the slats each having a broad smooth outer surface that is tapered at the ends thereof and is adapted to contact and support the back of the rider occupying the seat.

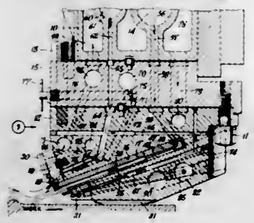
2,745,474
CLOTHES RACK
Herbert A. Blomquist, Washington, D. C.
Application June 7, 1950, Serial No. 166,678
4 Claims. (Cl. 155—190)



1. In a clothes rack, a back comprising a pair of spaced upright posts terminating at their lower ends in feet, a top bar connected between the upper ends of said posts, said top bar being shaped to support the shoulders and neck of a suit coat, a second trouser supporting bar connected between said posts and spaced below said top bar leaving a sufficient open space between said bars for the convenient draping of trousers over said second bar, opposed seat supporting members each integrally joined with one of said posts adjacent said feet, said members including upwardly extending portions spaced forwardly from said posts and substantially horizontal rail portions and having front feet portions positioned to contact the

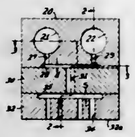
floor at a substantial distance forwardly of said posts, a chair seat carried between the rail portions of said members, said seat being entirely detached from said back posts and having a rearward edge spaced forwardly therefrom providing an uninterrupted open space between said back and said seat and its supporting members which extends entirely across the rack and downwardly from said bars substantially to the feet of said posts, whereby the front panels of a suit coat and the trousers may hang in unwrinkled condition in this space when suspended from said bars, and a back rest connected with said rail portions and extending upwardly from the rearward edge of said seat, said back rest likewise being spaced forwardly of and detached from said posts leaving the open uninterrupted space for suspending the coat and trousers.

2,745,475
THERMOCHEMICAL SCARFING DEVICES
Ivan P. Thompson, Elizabeth, William Allmang, Bloomfield, and William C. Weidner, Cranford, N. J., assignors, by mesne assignments, to Union Carbide and Carbon Corporation, a corporation of New York
Application August 17, 1950, Serial No. 179,904
16 Claims. (Cl. 158—27.4)



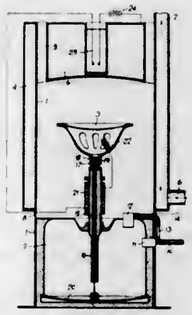
1. In apparatus for thermochemically scarfing metal bodies, a surface conditioning head comprising a nozzle block having a wide continuous slot therein adapted to discharge a sheet-like stream of oxidizing gas in a zone extending across a metal body, said slot being adapted to be disposed at an acute angle of impingement to the work surface of said metal body, the lower surface of the upper wall of said slot extending smoothly and continuously forwardly and terminating in a front edge beyond the front edge of the lower wall of said slot in overhanging relation thereto for a distance measured along said slot and greater than the spacing of said walls, to bring the front edge of said upper wall close to the horizontal projection of the front edge of said lower wall.

2,745,476
FLASHBACK-PROOF GAS BURNER AND MIXER
John Teti, Wilmington, Del., assignor to Air Reduction Company, Incorporated, New York, N. Y., a corporation of New York
Application December 4, 1952, Serial No. 324,017
3 Claims. (Cl. 158—27.4)



2. An anti-flashback gas burner comprising separate inlet passageways for a fuel gas and a combustion supporting gas, a discharge face, a plurality of discharge passageways leading to the discharge face, a shallow distributing slot upstream from said discharge face and in communication with said discharge passageways, mixing passageways upstream of said narrow discharge slot and leading to said slot, a mixing slot upstream of said mixing passageways and in communication therewith, and means to deliver said fuel gas and said combustion supporting gas separately from their respective inlet passageways to said mixing slot at locations such that each gas must flow through portions of said mixing slot in a direction parallel to the opposite walls thereof which define the narrow dimension thereof before reaching the entrance to the mixing passageways, the narrow dimension of the mixing slot being at any place such that a mixture of the gases introduced thereto will not burn therein, the plurality of discharge passageways being distributed in any desired pattern as long as none is in alignment with one of said mixing passageways whereby the mixture of gases must pass through a portion of said shallow distributing slot in passing from said mixing passageways to said discharge passageways, and the shallow slot having one dimension transverse the direction of flow of the mixture of gas therethrough which does not at any place exceed .090 inch.

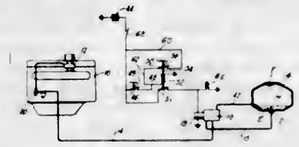
2,745,477
STOVES, PARTICULARLY FOR THE HEATING OF MOTOR VEHICLES
Guy John Olof Welin-Berger, Stockholm, Sweden
Application April 4, 1951, Serial No. 219,206
Claims priority, application Sweden May 24, 1950
6 Claims. (Cl. 158—36)



1. A stove for liquid fuel comprising a heating device including a vaporization chamber having an inlet for liquid fuel and an outlet for vaporized fuel, a discharge valve interposed between the interior of the chamber and the outlet and adapted to permit escape of the vaporized fuel through the outlet from the chamber only after the reaching of a predetermined pressure therein, means for producing pressure within the chamber consisting of a fuel passage having a portion disposed within the chamber and which is adapted to be heated to form gas within it, and a non-return valve interposed between the chamber and a fuel supply and adapted to open the inlet for supply of the liquid fuel to the chamber after reduction of the pressure therein below a predetermined level.

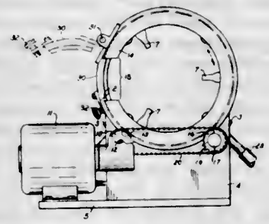
2,745,478
LIQUID FUEL SUPPLY SYSTEM WITH AUXILIARY RESERVE SUPPLY
Cecil F. Arens and Stanley I. MacDuff, South Bend, Ind., assignors to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application September 30, 1950, Serial No. 187,704
6 Claims. (Cl. 158—46.5)

1. In an engine fuel supply system, a fuel tank, first conduit means having an outlet adapted to be connected to an engine and an inlet connected to the fuel tank wherein the inlet is positioned at a first predetermined level above the bottom of the tank, second conduit means having an outlet adapted to be connected to an engine and an inlet connected to the fuel tank wherein the inlet is positioned at a second predetermined level which is below said first level, valve means in said conduit means operative to selectively permit flow through said second conduit means and electrical means for controlling said valve means and including an electrical power circuit for actuating said valve means to permit flow through said second conduit means when said circuit is energized, a normally



open magnetic switch in the circuit, a control circuit for said magnetic switch, a manually operated switch in the control circuit for energizing said magnetic switch to cause it to close, and a second manually-operated switch in the control circuit for de-energizing said magnetic switch to cause it to open.

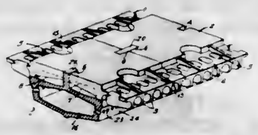
2,745,479
ROTARY GAS BURNER
Hewitt H. Young, West Lafayette, Ind., assignor to General Electric Company, a corporation of New York
Application February 18, 1953, Serial No. 337,494
4 Claims. (Cl. 158—99)



1. A rotary ring-type gas burner comprising an annular burner ring and a surrounding stationary annular race member rotatably supporting said burner ring, said burner ring having a gap in its circumference and said race member having also a gap in its circumference substantially co-extensive with the gap in said burner ring and bridged by a removable gate portion, said burner ring being provided with a groove around an external surface thereof terminating at each end short of the gap therein and covered by a surface of said race member including its said gate portion in all angular positions of said burner ring, said burner ring further having burner openings at its inner periphery communicating with said groove, a pair of gas ports in said race member arranged to be covered by and communicate with the groove in the burner ring during rotation thereof and spaced apart circumferentially of the race member a distance greater than the gap in said burner ring, self-closing valve means in said ports normally closed and arranged to be engaged and opened by said burner ring only when said gas ports are substantially covered by the burner ring to thereby permit flow of gas to said groove, and means to continuously rotate said burner ring in said race member.

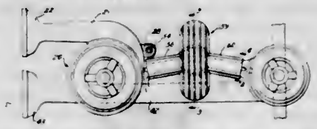
2,745,480
CERAMIC RADIANT BROILER BURNER
Albert H. Crone, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a corporation of Illinois
Application July 19, 1951, Serial No. 237,637
6 Claims. (Cl. 158—113)

5. A broiler for gas stove comprising a horizontal gas burner formed with a plurality of ports disposed in a row and separated from each other by a space, a ceramic body supported on said gas burner, a thin horizontal wall formed on said body extending outwardly from said gas burner above said flame ports, a plurality of evenly spaced ribs extending outwardly from said body and depending from said wall into alternate spaces midway between the flame ports on opposite sides of said alternate spaces whereby a pair of flame ports is disposed between adjacent ribs, the flame ports on opposite sides of each of



said alternate spaces being disposed on opposite sides of the rib depending therebetween and arranged so that the flame from each port impinges on one side of each rib whereby opposite sides of each rib are contacted by the flame from two separate flame ports, said horizontal wall having an aperture formed therein between each of said ribs and intermediate the ends thereof to liberate the gases of combustion and insure complete combustion at the burner flame ports.

2,745,481
TOP BURNER CONSTRUCTION FOR GAS STOVES
Albert H. Crone, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a corporation of Illinois
Application October 3, 1951, Serial No. 249,529
4 Claims. (Cl. 158—115)

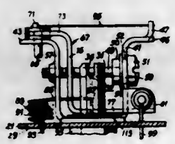


1. A top burner and flash tube construction comprising an elongated mixer tube, a lower portion of a rear burner cast integrally with one end of said mixer tube and formed with an ignition port, a front burner supported on said mixer tube intermediate the ends thereof in fixed relation thereto and formed with an ignition port, a lower flash tube member including a pair of channel-shaped horizontal lower flash tube arms each having one end thereof cast integral with said mixer tube, a first of said flash tube arms having said one end thereof positioned adjacent the rear burner ignition port to communicate therewith, the other of said flash tube arms having said one end thereof positioned adjacent said front burner ignition port to communicate therewith, said flash tube arms extending laterally of said mixer tube towards each other and having the adjacent ends thereof spaced horizontally from one side of said mixer tube, a pilot burner support ring cast integrally with the other ends of said flash tube arms and disposed closely adjacent said mixer tube at said one side thereof, an upper flash tube member including a pair of downwardly opening channel-shaped arms disposed on the arms of said lower member, and a downwardly opening imperforate channel-shaped heat shield cast integrally with the arms of said upper member and extending transversely thereof.

2,745,482
ELECTRIC PILOT-FLAME IGNITER
Bradley C. Douglas, Kirkwood, and Harry H. Pryor, St. Louis, Mo., assignors to Magic Chef, Inc., a corporation of New Jersey
Application September 12, 1951, Serial No. 246,284
19 Claims. (Cl. 158—123)

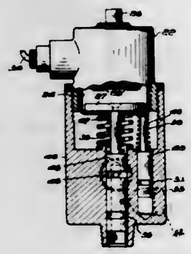
1. An electrical pilot igniter comprising a support, a gas nozzle on said support adapted to produce a flame,

a thermal switch on said support consisting of an upwardly open U-shaped member having upright legs, a stationary contact at the lower end of one leg and an anchor at its upper end, a bell crank lever pivoted at the upper end of the other leg and having a relatively short arm, a thermal wire connecting said anchor and said short arm and located in heat-exchange relationship with said flame,



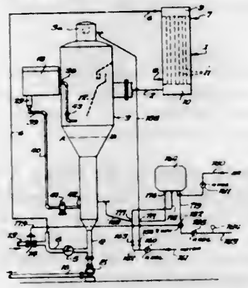
said bell crank lever also having a relatively long arm extending downward between the vertical legs of the U-shaped member, a movable contact on the end of said long arm engageable with said stationary contact, and an adjusting means between said vertical legs and adapted to move them apart or together, whereby the contacts may be predeterminately set for predetermined opening and closing actions.

2,745,483
AUTOMATIC GAS SAFETY CUT-OFFS OF THE THERMOCOUPLE TYPE
Robert E. Newell, Irwin, Pa.
Application March 14, 1952, Serial No. 276,623
2 Claims. (Cl. 158—129)



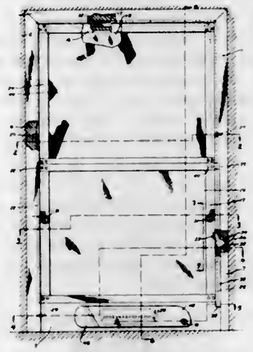
1. The combination with a gas line and a fluid pressure-operated valve, operable to shut off flow of gas through the line, of a control device therefor, comprising a valve casing having a port communicating with the gas line at a point in advance of the said valve and having a port leading to one side of the pressure-operated valve, for utilizing the line pressure to hold the valve closed, a valve in said casing movable to a position to establish communication between said ports, a spring for yieldably holding the valve in said position, an armature carried by the valve, an electro-magnetic device energized by the heat of a gas flame, for holding the control valve in closed position with respect to the first-named port and against the spring pressure, an exhaust port for the valve chamber which has communication with the second-named port when the control valve is held in its last-named position by the electro-magnet, the said spring serving to return the control valve to its first-named position upon failure of the gas flame, a second spring, the magnet being manually movable into engagement with the armature against the resistance of this second spring, a pilot gas line for supplying a pilot flame, a valve therefor, means yieldably holding the valve in position to cut off flow through said line, and a connection between this last-named valve and the electromagnet, for moving the valve to open position for flow through said pilot line, when the magnet is moved against the pressure of the second-named spring.

2,745,484
CONTINUOUS DENSITY CONTROL OF A LIQUID
Albert W. Eckstrom, Buffalo, and Graham Hill, Kenmore, N. Y., assignors, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa., a corporation of Delaware
Application March 27, 1950, Serial No. 152,212
14 Claims. (Cl. 159—44)



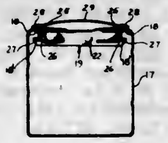
14. The method of continuously evaporating a liquid to a selected and uniform specific gravity, which comprises heating and recirculating a body of liquid to be concentrated in a confined space in a selected, circulating pattern through a series of zones in succession, removing vapors from said circulating body in one zone of said space and condensing them as a separate body outside of said space, removing parts of said circulating body, as the concentrated liquid one for sampling and one for permanent removal, from the portion of said circulating body in a successive zone after removal of vapors therefrom, adding fresh liquid to be concentrated to said circulating body after removal of said concentrated liquid in said successive zone before said body again reaches said one zone, continuously weighing a moving and fresh sample of the removed concentrated liquid, controlling a sensitive pilot medium by the deviations in the weight of said sample, and varying the flow of liquid out of said body by said pilot medium.

2,745,485
WINDOW CONSTRUCTION
Harold A. Etling, Marshallville, Ohio, assignor to Weather-Seal Incorporated, Barberton, Ohio, a corporation of Ohio
Application May 3, 1950, Serial No. 159,757
7 Claims. (Cl. 160—90)



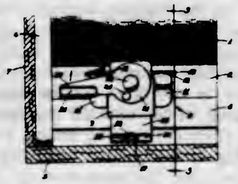
1. In an auxiliary or storm window, a pair of opposed frame members one of which has a pair of parallel grooves formed therein and extending the length thereof, the second of said frame members having a pair of grooves formed in one end portion thereof and terminating in a recessed portion of said frame member that extends the remainder of the length thereof, said grooves in said frame members being opposed to provide two pairs of opposed grooves for positioning a pair of window sashes therebetween with one window sash being received in each opposed pair of grooves, a removable lock strip positioned in said recess formed in said second frame member and providing therewith a window frame receiving groove in such portion of said second frame member, the upper end of said lock strip closing an end of one groove in said second frame member to retain a window frame therein, means for securing said lock strip to said second frame member, and a bottom rail extending between and engaged with said frame members, said lock strip having an end flange engaging said bottom rail and retaining it in engagement with said frame members.

2,745,486
VENETIAN BLIND CONSTRUCTION
Harry Nelson, New York, N. Y., assignor to Lorentzen Hardware Mf'g Corp., New York, N. Y., a corporation of New York
Application July 24, 1951, Serial No. 238,241
2 Claims. (Cl. 160—166)



1. For a Venetian blind head bar having a metal channel of U-shaped cross section with the free edges of the channel formed into inturned, downwardly opening beads, a one-piece sheet metal fitting constituting a brace, said fitting comprising: a body having a horizontal top and skirts depending from the opposite sides of the top, terminal formations projecting from the ends of the skirts, each such terminal formation including a vertical edge to engage the side of the bead of the channel and a hook to engage the open edge of the bead, and additional members projecting from the ends of said top to overlie the beads of the channel, the members overlying the beads of the channel being made of resilient metal whereby the hooks of the terminal formations are constantly pressed against the bead.

2,745,487
SCREEN TENSIONING DEVICE
Jack H. Jensen, San Leandro, Calif., assignor to Ry-Lock Company, Ltd., San Leandro, Calif., a corporation of California
Application April 19, 1954, Serial No. 423,964
6 Claims. (Cl. 160—328)



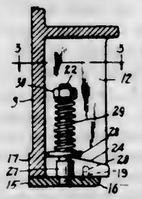
6. A screen tensioning device for connection between the bottom cross bar of a frameless window screen and the adjacent sill; said device comprising a mount having a vertical face plate disposed in adjacent but spaced, facing relation to the bottom cross bar, inturned flanges on the opposite sides of the face plate whereby to define a vertical guide channel, wings projecting laterally outward from the inner edges of the flanges, said wings bearing on the bottom cross bar, means to fixedly secure the wings to said bottom cross bar, a flat slide vertically slidable in said guide channel, said slide being releasably fixed and said plate having a relatively raised initial position and a relatively lowered screen tensioning position, means to attach said slide at its lower end to the sill, a lever arm, means pivoting the lever arm exteriorly to the face plate, and cam means between the lever arm and slide operative to move the latter between a relatively lowered initial position and a relatively raised position upon swinging of the lever arm; there being means causing said last named means to releasably lock when the face plate is in said relatively lowered, screen tensioning position.

2,745,488
DRAPERY FIXTURE
Harry S. Rosenbaum, Baltimore, Md., assignor to The Eastern Venetian Blind Company, Baltimore, Md., a corporation of Maryland
Application January 14, 1955, Serial No. 481,827
16 Claims. (Cl. 160—344)



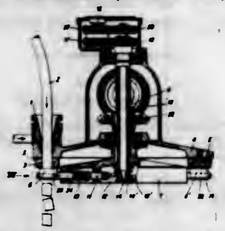
1. In a drapery fixture, a traverse rod, an operating cord associated with said traverse rod, a master carrier mounted on said traverse rod and having a drapery associated therewith, said master carrier including a primary slide and a secondary slide, said secondary slide secured to said cord and responsive to the movement thereof, said primary slide mounted freely on said traverse rod and responsive to the movement of said secondary slide for movement along said traverse rod, said secondary slide being movable relative to said primary slide within predetermined limits, the relative movement compensating for stresses in said operating cord when said drapery is drawn to a closed position, thereby preventing said drapery from retracting from the closed position.

2,745,489
BINDER CLAMP ATTACHMENT FOR PAPER CUTTING MACHINES
William C. Rupp, Parma, Ohio, assignor to The Chandler & Price Company, Cleveland, Ohio, a corporation of Ohio
Application December 1, 1953, Serial No. 395,413
7 Claims. (Cl. 164—52)



6. In a paper cutting machine having a table, and a binder clamp adapted to bear forcibly upon a stack of sheets on said table to hold the same firmly in position and compressed during the cutting operation, said clamp including a presser foot member having a series of rearwardly extending flange fingers adapted thus to bear on such stack; a quickly removable plate adapted to be secured to the underside of said foot to bridge said fingers and therefore bear more uniformly on such stack, and attaching means therefor comprising cooperating cam members on said foot and said plate adapted to interengage lower and upper surfaces thereof when said plate is moved forward closely beneath said foot, and vertically operative resilient means adapted to urge said cam members together to draw said plate upwardly against the underside of said foot.

2,745,490
FILAMENT-STAPILIZING MACHINE, INCLUDING GRINDING RING
Robert Steiger, Muri, near Bern, and Fritz Lüthi, Zollikofen, Switzerland, assignors to Ing. A. Maurer S. A., Bern, Switzerland
Application January 12, 1954, Serial No. 403,519
Claims priority, application Switzerland January 14, 1953
8 Claims. (Cl. 164—60)



1. In a filament-bunch cutting machine, the combination of at least one rotary knife, a grinding ring having a flat face being in contact with said knife so as to grind the same during operation of the machine, and means for reciprocating said knife radially with respect to said flat face of said grinding ring.

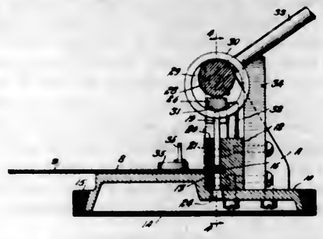
2,745,491
APPARATUS FOR THE PREPARATION OF GLASS FIBER REINFORCED MOLDING COMPOSITIONS
Ralph H. Sonneborn and Frank W. Dennen, Newark, Ohio, assignors to Owens-Corning Fiberglas Corporation, Toledo, Ohio, a corporation of Delaware
Application May 16, 1952, Serial No. 288,358
3 Claims. (Cl. 164—61)



1. Apparatus for cutting short lengths of fibers off the forward end of a group of strands of continuous fibers, said apparatus consisting of a rotary drum, a cutter roller mounted on an axis parallel to the axis of said drum, means for driving said drum and said roller in opposite directions, said cutter roller comprising a shaft, a disk-like hub mounted on said shaft, a plurality of knives mounted in said hub with the edges thereof turned radially outward and extending axially thereof, the edges of said knives lying along lines equal radial distances from the axis of said hub, the backs of said knives being diametrically spaced, and the spaces therebetween diametrically and circumferentially being in communication, with the space between the ends of said knives remote from said hub being unobstructed; the axes of said drum and said roller being so spaced that the edges of said knives and the surface of said drum contact each other during rotation and means in the space interiorly of said knives for inducing axial movement of the severed short lengths of fibers through such interior space toward the unobstructed remote end thereof.

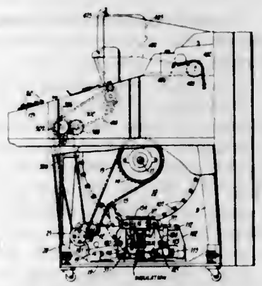
2,745,492
PUNCH FOR PERFORATING SHEETS TO RECEIVE THE RINGS OF MECHANICAL BINDINGS
Arthur F. Brook, Poughkeepsie, N. Y., assignor to Wire-O Corporation, Poughkeepsie, N. Y., a corporation of New York
Application September 16, 1953, Serial No. 380,436
5 Claims. (Cl. 164—91)

1. A punch of the character disclosed comprising a base, a die member on said base having spaced die openings, a punch bar, punches secured to said punch bar in cooperative relation to said die openings, a shaft journaled eccentrically over said punch bar, rings loosely en-



circling said shaft and punch bar and thereby confining said punch bar to said eccentrically mounted shaft and means for rocking said shaft to impart reciprocating motion to said punch bar and punches.

2,745,493
MACHINE FOR PUNCHING AND SORTING POSTAL MONEY ORDER CARDS
Frank J. Furman and Harold J. Kistner, Endicott, Harold L. Read, Vestal, and Walter W. Wagner, Endwell, N. Y., assignors to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application November 15, 1951, Serial No. 256,442
4 Claims. (Cl. 164—113)

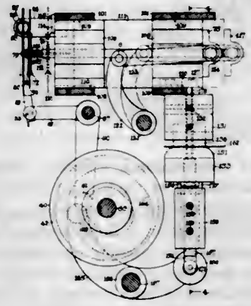


1. In a combined sorting and accounting machine having a keyboard which is operable by an operator to effect punching of items on records to be sorted according to their designations, a punching mechanism, a plurality of sorting compartments, means for feeding a record to a viewing station, and thereafter to a punching station, means for selecting under control of the keyboard punches corresponding to the item represented on the record as it is visible in the viewing station, means for sensing a compartment selecting designation as the record is fed to the viewing station, means under control of said sensing means to select a compartment appropriate to the designation sensed while said keyboard is being operated by the operator to select said punches, means initiated in operation by the operator for causing the operation of the selected punches to punch said card and the aforesaid feeding means to feed a record to the punching station and a following record to the viewing station, and the operation of further feeding means to feed the punched record in the punching station into the selected compartment.

2,745,494
JACQUARD CARD DUPLICATING MACHINE
Gustav A. Boettcher, New York, N. Y.
Application March 7, 1952, Serial No. 275,347
8 Claims. (Cl. 164—114)

1. A Jacquard card duplicating machine including a frame structure having a driven shaft and bearings for supporting the same, a plurality of individually movable

punches, a stationary guide bar fixed on the frame structure transversely of the copy card and having a series of holes for guiding the punches and normally retaining them in initial operative position, a movable punch die disposed adjacent to the ends of the punches on one side of the guide bar with die apertures registering with said punches, guide means upon the frame structure for said punch die, means driven from said shaft for moving said die during operation, horizontal guide means fixed upon the frame structure for supporting a group of slides, a plurality of punch control slides slidably mounted upon said horizontal guide means and at one end of each carrying a perforation feeler, each punch control slide having both effective and ineffective portions capable of registering with the punches, means for moving the master card against the feelers including a pair of closely associated guide plates, a pair of bearings fixed upon the machine upon both sides of the punch control slides, a pair



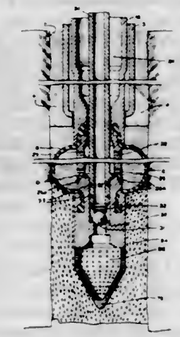
of substantially parallel shafts extending through the latter bearings and secured at one end of each to the outer of said guide plates, the other being loosely mounted and having a pair of springs urging the same toward the other plate in order to retain the master card therebetween, means operated from the driven shaft for feeding the master card downward step by step between said guide plates, a rear cross bar fixed to the other ends of said pair of shafts, a cam on the driven shaft, a further shaft supported upon the frame structure having a follower arm mounted thereon with a follower engaging with said cam, a pair of further arms fixed on the follower arm and rockable therewith upon said further shaft, a pair of links pivotally connected at one end of each to said cross bar and the other ends being pivotally connected to said further arms, and means also driven from said driven shaft for additionally and independently feeding said master card and maintaining a loop therein.

2,745,495
METHOD OF COMPLETING OIL WELLS
William B. Taylor, Houston, Tex., assignor, by mesne assignments, to Johnston Testers, Inc., Houston, Tex., a corporation of Texas
Application May 19, 1953, Serial No. 355,900
2 Claims. (Cl. 166—35)



1. The method of completing an oil well wherein a selected production formation has been penetrated by a cased well bore and in which the mud fluid is retained, comprising the following steps carried out one after another in close timed sequence so as to constitute one single overall operation, lowering a perforating gun into the mud fluid in the well attached to the lower end of a string of tubing to a position in registry with the selected production formation, the string of tubing having a fluid passage communicating between the interior of the string and the cased bore at a point above and adjacent the gun, introducing oil downwardly through the tubing, outwardly through the passage into contact with the mud fluid and upwardly through the space between the tubing and casing to replace the mud fluid with oil, closing the space between the tubing and the casing at the surface after the well bore has been cleansed of mud fluid, thereafter firing the perforating gun to perforate the casing and the surrounding production formation, while the tubing is open at the top of the well, and then regulating the flow of formation fluid from the production formation through the passage in the tubing and upwardly through the tubing to the surface by partially closing the tubing at the surface.

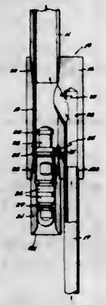
2,745,496
FORMATION TESTING APPARATUS
Robert H. Blood and Ben W. Sewell, Tulsa, Okla., assignors to Esso Research and Engineering Company, a corporation of Delaware
Continuation of application Serial No. 28,698, May 22, 1948. This application October 27, 1953, Serial No. 388,647
7 Claims. (Cl. 166—152)



1. A well testing apparatus adapted to pass down through a drill pipe, comprising an elongated packer support body, a first elastic packing means fixed to said support body in a mid portion thereof, means for expanding said packing means to fill a portion of the annulus between said support body and the drill pipe, a second inflatable elastic packer mounted on said support body below said first packing means, a sampling port in the exterior of said support body below said second packer, a first passageway for fluid within said support body communicating between said port and the interior of said drill pipe above said first packing means, said first passageway providing a path for the travel of sample fluid obtained below said second packer, a second passageway for fluid within said support body communicating between the interior of said inflatable packer and the interior of said drill pipe above said first packing means, said second passageway providing a path for the travel of fluid for the inflation of said inflatable packer, a first valve positioned in said first passageway operative to permit fluid flow from said sampling port to said drill pipe while obstructing flow in the reverse direction, a second valve positioned in said second passageway, said second valve having two operative positions, being oper-

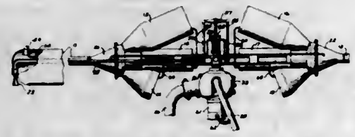
able in the first of said positions to permit fluid flow from the interior of said drill pipe above said first packing means into said inflatable packer and to oppose fluid flow in the opposite direction, and being operable in the second of said positions to permit fluid flow in the latter direction and to oppose fluid flow in the former direction, and means for moving said second valve from one of said operative positions to the other operative position.

2,745,497
WELL PRODUCING, PRESSURIZING AND TESTING APPARATUS
Clarence R. Dale and John F. Dale, Long Beach, Calif.; said John F. Dale assignor to said Clarence R. Dale
Application January 18, 1954, Serial No. 404,607
6 Claims. (Cl. 166—224)



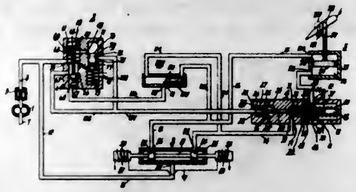
1. A device adapted to be connected to a tubing string located in a producing well comprising, a body having means at its upper end for connecting the same to the lowermost end of the tubing string, a first passage extending completely through the body in alignment with the axis of the tubing string and communicating with the bore of the tubing string, a second passage in said body parallel to said first passage, said second passage being laterally offset from said first passage and having a lower end open to the well and an upper closed end, tubular means in said first passage at the lower end thereof forming a seat adapted to receive a plug thereon to block off said first passage, means spaced above said seat communicating said second passage with said first passage, and a depending pipe element connected to the body in alignment with said second passage and communicating therewith, said pipe element extending downwardly from said second passage to a point below the bottom of said body whereby the tubing string is communicable with the well only through said second passage when said first passage is blocked off by a plug received on said seat and the tubing string is communicable with the well at different levels through both of said passages in the absence of a plug in said first passage.

2,745,498
ROCKET-DRIVEN HELICOPTER ROTOR
Bruno Nagler, Boston, Mass., assignor to Nagler Helicopter Company, Inc., a corporation of Delaware
Application October 23, 1951, Serial No. 252,647
4 Claims. (Cl. 170—135.4)



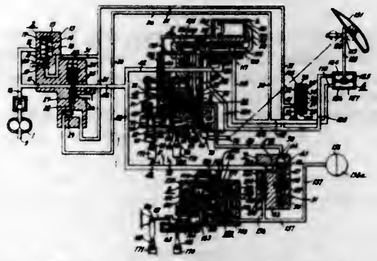
1. In an aircraft, a suspension rig, a set of horizontally disposed wings rotatable about said suspension rig, each of said wings having a hollow manifold at its inner end, and a fluid discharge jet at its outer end, a power plant integral with said wings and rotatable therewith, said power plant including a plurality of rocket motors carried on each of said manifolds, and means for causing said rocket motors to direct fluid under pressure into said manifolds, for passage along said wings, and discharge to the atmosphere by way of said fluid discharge jets.

2,745,499
PROPELLER CONTROL
Kenneth L. Berninger, Dayton, and Calvin C. Covert, Vandalia, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 26, 1951, Serial No. 263,416
9 Claims. (Cl. 170—160.21)



1. In a control system for a variable pitch propeller subject to an external force tending to reduce the pitch position thereof, the combination including a fluid motor for adjusting propeller pitch, a fluid pressure system for actuating said motor, said system comprising a source of fluid pressure, pressure regulating means operatively connected with the source and the motor and operable to maintain a predetermined pressure differential between said source and said motor, and a valve having connection with said source and a pair of conduits connected to said motor for controlling fluid flow to and from said motor, and servo actuated means in one of said conduits, said servo actuated means having connection with said pressure regulating means and maintaining a fixed propeller pitch upon failure of said fluid pressure system by trapping fluid in said motor.

2,745,500
PROPELLER CONTROL FOR CONTROLLING BLADE PITCH IN GOVERNED SPEED, FEATHERING, AND NEGATIVE PITCH REGIMES
Richard E. Moore, Dayton, and Dale W. Miller, Brookville, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application February 28, 1952, Serial No. 273,806
21 Claims. (Cl. 170—160.21)



11. In a fluid system for controlling blade pitch in governed speed and for moving the blades to feathering and negative pitch regimes, the combination including; a source of fluid pressure, passage means connected with said source of fluid pressure providing a high pressure line, pressure reducing means connected with the high pressure line and providing a low pressure line, a reversible blade shifting motor operable upon directed application of high pressure fluid thereto to adjust the propeller blades, a servo-actuated distributor valve having a pressure port connected to said high pressure line and having a pair of control ports connected to said motor for directing application of high pressure fluid to either side of said blade shifting motor, a speed sensitive valve having a pressure port connected to said low pressure line and having a control port connected to said distributor valve and adapted to supply low pressure to and drain from said servo-actuated distributor valve for controlling the operation of said distributor valve in applying high pressure fluid to either side of said blade adjusting motor, a selector valve assembly including a pressure port constantly open to the pressure port of said speed sensitive valve, a second and valve-controlled port connectible to the control port of said speed sensitive valve, and a control port, means operable to connect said selector valve control port to said speed sensitive valve control port for propeller operation in the governed positive regime, means operable to connect said selector valve control port to said selector valve pressure port for moving the blades to the feathering regime, means operable to connect said selector valve control port to drain for propeller operation in the negative pitch regime, and passage means connecting said selector valve control port with the servo-actuated distributor valve.

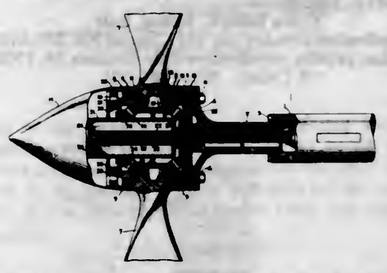
2,745,501
PROPELLER SPINNER ASSEMBLY
Wallace Blanchard, Jr., and David D. Bowe, Dayton, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application March 13, 1952, Serial No. 276,311
3 Claims. (Cl. 170—160.23)



1. In combination with a propeller having blades, each of which is rotatable about its own longitudinal axis, a spinner shell mounted on said propeller having cutouts through which the blades project, means attached to said shell and forming a well extending radially inward of the peripheral surface of said shell adjacent each of said cutouts, a seal assembly attached to each of said blades and comprising a truncated cylindrical member projecting into said well and rotatably supported therein, means attached to the inner circumferential edge of said well for sealingly engaging the inner edge of said truncated cylindrical member, means attached to each seal assembly and blade for substantially closing each cutout, and a cuff element attached to said last recited means for perfecting the airfoil contour of the shank portion of each blade, the connection between said cuff element and the said last recited means preventing outward movement of said cuff element under the urge of centrifugal force.

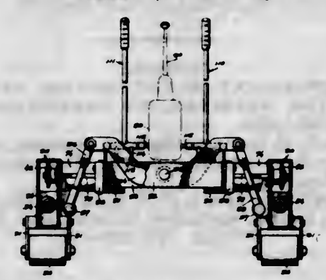
2,745,502
PROPELLER PITCH CONTROL MECHANISM
Hewitt A. Gehres, Mount Vernon, Ohio, assignor to Cooper-Bessemer Corporation, Mount Vernon, Ohio, a corporation of Ohio
Application February 18, 1954, Serial No. 411,176
4 Claims. (Cl. 170—160.32)

1. Propeller pitch control mechanism of the character described, including a housing rotatable with the propeller shaft structure, a propeller blade adjusting member provided with means for connecting a propeller blade thereto and mounted to move angularly with respect to said housing about an axis directed substantially radially with respect to the axis of rotation of the housing, to thereby alter the pitch of the propeller, said mechanism having a chamber and means for supplying fluid under pressure to said chamber and withdrawing same therefrom, said chamber having vane members extending longitudinally with respect to the propeller shaft structure and mounted to afford relative angular movement between said vane



members about an axis directed longitudinally with respect to the propeller shaft structure, in response to changes in fluid pressure in said chamber, one of said vane members being movable in a first direction and another of said vane members being movable in a second direction in response to fluid pressure in said chamber, and means coupling said one and said other of said vane members to said propeller adjusting member to move the latter angularly as aforesaid, in response to relative angular movement between said vane members as aforesaid.

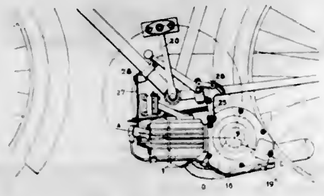
2,745,503
STABILIZING BEAM CONNECTION BETWEEN CRAWLERS AND TRACTOR FRAME
Peter Fisher, North Vancouver, British Columbia, Canada, assignor of one-third to William Blaylock Steele and one-third to Lloyd Thurman Graves, both of North Vancouver, British Columbia, Canada
Application May 1, 1950, Serial No. 159,311
4 Claims. (Cl. 180—9.1)



1. In a tractor, in combination with a main frame presenting rigid hollow pivot arms projecting laterally from opposite sides thereof on a common transverse horizontal axis located more or less central to the length of said frame, crawler frames having inwardly directed cylindrical neck elements made rigid with the crawler frames to lie midway of the ends thereof and finding a pivoting sleeve fit with the pivot arms, a respective jackshaft extending axially through said arm-and-neck pivot assemblies and receiving a rotary journal therein, a cross-member laterally connecting the sides of the main frame forwardly of the pivot arms, and a stabilizing means interconnecting the cross-member and the crawler frames and operating by relative oscillatory motion as between the two crawler frames to impart a mean of said relative movement to the main frame, said stabilizing means comprising a walking beam in the form of an inverted ox-bow and pivoted to the cross-member at the longitudinal

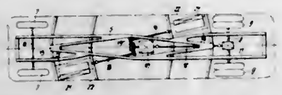
median line of the main frame, and a vertical link interconnecting each end of the walking beam with the adjacent crawler frame, said link being rotatably movable on the crawler frame and on the end of the walking beam.

2,745,504
AUXILIARY MOTOR AND DRIVE FOR BICYCLES ADAPTED TO BE CONFINED BETWEEN THE PEDALS THEREOF
Carlo Gilardi, Milan, Italy
Application October 16, 1951, Serial No. 251,613
Claims priority, application Italy October 30, 1950
1 Claim. (Cl. 180—33)



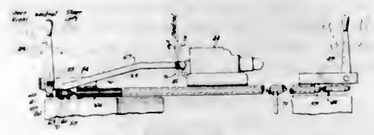
In a conventional bicycle, a power unit connected with the bicycle frame and disposed substantially below the axis of rotation of the pedal crankshaft and between the planes of rotation of the pedal cranks of the bicycle and comprising a casing including a cylinder having a piston reciprocable therein, a hub projecting from one side of said casing, a drive shaft rotatably mounted at only one end in said hub, a cup-shaped roller secured to said one end of said shaft and enveloping said hub for frictional driving contact with the rear wheel tire of the bicycle, an eccentric on said shaft and within said casing, a connecting rod extending from said piston and terminating in a ring portion about said eccentric, a flywheel at the other unsupported end of said shaft opposite said roller, and plate members at the opposite sides of said eccentric within the casing and retaining said ring portion therebetween, said plate members extending in parallel with said connecting rod to counterbalance said eccentric.

2,745,505
ARRANGEMENT OF THE DRIVING GEAR OF MOTOR VEHICLES, IN PARTICULAR OF OMNIBUSES
Friedrich K. H. Nallinger, Stuttgart, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Untertürkheim, Germany
Application June 6, 1950, Serial No. 166,360
Claims priority, application Germany June 25, 1949
1 Claim. (Cl. 180—54)



In a motor vehicle, a frame including two spaced longitudinal frame members for said vehicle, a pair of front wheels, a pair of rear wheels, a pair of driving engines including a drive shaft for each engine, one of said engines being disposed on one side of the vehicle outside said frame close to the contours of the outer body walls of the vehicle and immediately behind one of the front wheels, the other of said engines being disposed on the other side of the vehicle outside said frame close to the contours of the outer body walls of the vehicle and immediately in front of one of said rear wheels, both engines with their drive shafts extending toward the center of the vehicle in substantially parallel relationship, a common change-gear located in the longitudinal central plane of the vehicle intermediate said two spaced frame members, means for operatively connecting said drive shafts with said change-gear, and means for transmitting the drive from said change-gear to said rear wheels, said driving engines being inclined with the central longitudinal plane of each engine forming an acute angle with respect to the vertical and with their cylinder heads inclined toward the outside of the vehicle to provide for greater accessibility.

2,745,506
LEVER CONTROL MECHANISM FOR COMBINED OPERATION OF VEHICLE TRAMMING AND STEERING VALVES
Robert A. McCallum, Clarendon Hills, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application October 21, 1952, Serial No. 316,045
4 Claims. (Cl. 180—77)



4. In a control mechanism for a vehicle having at least two valves arranged at right angles with respect to each other for controlling steering and tramming thereof, means operable from either side of the vehicle for independently and simultaneously operating said valves comprising a sleeve extending transversely of the vehicle and mounted thereon for pivotal movement with respect thereto about an axis extending longitudinally of said sleeve, support yokes at each end of said sleeve and mounted thereon, a control lever pivotally connected to each of said support yokes for pivotal movement with respect thereto about an axis extending transversely of the pivotal axis of said sleeve, each of said control levers having a depending lever arm, a first link extending through said sleeve and pivotally connected to said lever arms at its ends, a second link having operative connection with a first valve and pivotally mounted on said first link to accommodate pivotal movement of said sleeve with respect to said first link and also being restrained for movement along the axis of said first link, for operating said first valve upon rectilinear movement of said first link effected by pivotal movement of either of said control levers, a rocking arm extending from said sleeve, and a third link connecting said rocking arm with a second valve for operating the same effected by operation of either of said control levers in the same direction in the direction of the pivotal axis thereof.

2,745,507
GEOPHYSICAL TRANSDUCER
Albert G. Bodine, Jr., Van Nuys, Calif.
Application March 19, 1951, Serial No. 216,442
25 Claims. (Cl. 181—.5)

5. Seismic wave generator apparatus comprising, in combination, a vibrator, earth coupling means, means for normally supporting said vibrator for vertical vibratory oscillation relative to said earth coupling means, and means for rigidly coupling said vibrator to said earth coupling means.

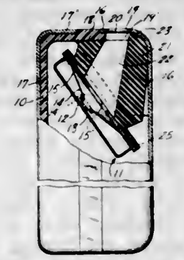
17. Apparatus for directional seismic wave generation and projection comprising the combination of: an area-defining array of independently earth-coupled sustained seismic wave generators having a common frequency spaced apart by at least a substantial fraction of a wave

length in the earth at the common generator frequency, so as to impart a directional property to the combined



waves from said plurality of generators, and means for driving said generators at the common frequency.

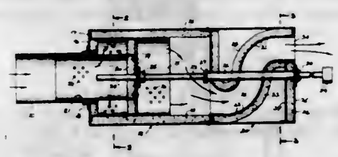
2,745,508
MICROPHONE SUPPORT
Charles W. Vadersen, Port Washington, N. Y., assignor to Dictograph Products Company, Inc., Jamaica, N. Y., a corporation of Delaware
Application September 11, 1952, Serial No. 309,077
2 Claims. (Cl. 181—31)



2. In an acoustic system for use with a microphone unit, in combination with a casing having a sound-receiving opening therein, said opening affording an acoustic mass, divergent first wall means of resilient material attached to the casing around said opening and defining an inwardly enlarging passage the smaller end of which is in communication with said opening and affording an acoustic compliance, second wall means defining a constricted opening adjacent the larger end of said passage and affording an acoustic mass, said second wall means being adapted to receive a microphone unit having a cavity adapted to be placed in communication with said constricted opening on the other side thereof from said passage, said first and second wall means and said microphone unit being suspended in cantilever fashion from the casing, whereby said acoustic compliances and masses comprise an acoustic network for modifying the frequency-pressure characteristics of sound entering the casing opening and screen means in the path of sound transmission from the said opening in the casing to the microphone unit for adding series resistance to said acoustic network.

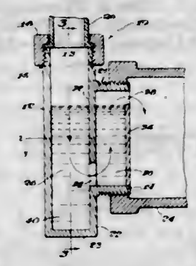
2,745,509
NOISE REDUCTION DEVICE
Peter A. Argentieri, Danbury, Conn., assignor to Connor Engineering Corporation, a corporation of New York
Original application September 22, 1950, Serial No. 186,154. Divided and this application August 12, 1952, Serial No. 303,923
2 Claims. (Cl. 181—42)

1. A noise-reduction means for connection to the outlet of an air duct comprising, a chamber having a passage of sinuous, serpentine form extending through it, one end of said passage constituting the inlet end and being flared, the opposite end of the passage being the outlet end and being located completely to one side of the inlet end while having its axis parallel to the axis of the inlet end, the



walls of the passage being perforated and covered by sound-absorbing material, the chamber being extended around and enclosing the passage, the chamber being secured to the passage only at the ends of the same, the walls of the passage being spaced from the wall of the chamber.

2,745,510
DRAIN TRAPS
Albert B. Hultgren, Canton, Mass.
Application May 11, 1954, Serial No. 429,007
3 Claims. (Cl. 182—23)

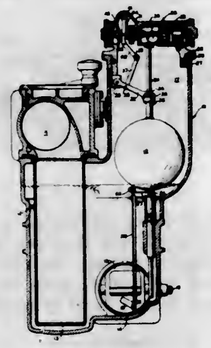


3. The combination with a drain pipe having an internally threaded access opening of a drain trap comprising a horizontal externally threaded cylindrical hollow portion adapted to be received in said access opening, said hollow portion comprising an outlet chamber having a front wall and a rear wall, said walls extending across the ends of said cylindrical portion, an elongated tubular portion formed integrally with and extended diametrically across the front wall of said hollow portion, the adjacent wall of the tubular portion being coextensive with the front wall of the hollow cylindrical portion, said tubular portion forming with said hollow portion a receptacle having a communicating passage in the lower part of said front wall and having a discharge passage in the upper part of said rear wall communicating with said drain pipe, the lower end of said tubular portion being closed and the upper end being open and adapted for connection to a screened inlet pipe.

2,745,511
AIR ELIMINATOR VALVE
William F. Berck, Hayward, Calif., assignor to Ralph N. Brodie Company, San Leandro, Calif., a corporation of California
Application May 3, 1954, Serial No. 427,051
7 Claims. (Cl. 183—2.5)

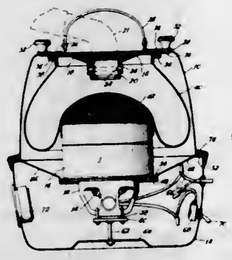
1. An air eliminating apparatus comprising a housing, an inlet to said housing, an outlet from said housing, an air trap chamber above both said inlet and said outlet, a passageway venting said air trap chamber, a poppet type valve normally closing said passageway, float means in said air trap chamber, means operatively connecting

said float to said valve, and means for applying the pressure in said housing to both ends of said valve to statically



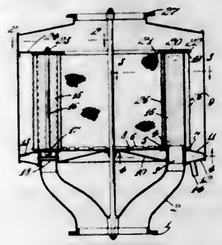
balance said valve at all times when said valve is in its closed position.

2,745,512
VACUUM CLEANER
Ralph C. Osborn, Bloomington, Ill.
Application August 11, 1953, Serial No. 373,542
4 Claims. (Cl. 183—37)



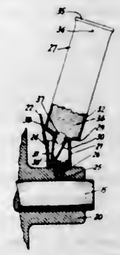
4. A device of the type described comprising a first chamber defined by an encompassing side wall, a diaphragm fixed to the lower portion of said side wall, and a cover carried by the upper portion of said side wall, a pair of brackets secured to the opposite sides of the upper surface of said cover, said brackets comprising oppositely extending generally horizontal portions, and generally vertical portions, a handle pivotally attached to said vertical portions, a pair of generally vertical studs carried by the upper portion of said side wall, said horizontal portions of said brackets being formed to receive said studs, caps carried by said studs, said diaphragm being formed with an opening, gasket means carried by said diaphragm adjacent said opening, suction means disposed in said opening and resting on said gasket means, said cover being formed with an inlet, gasket means separating the lower portion of said side wall and said diaphragm, a cleaner bag within said first chamber adjacent said suction means, said inlet leading to said cleaner bag, a receptacle including an encompassing side wall merging into a bottom wall, said first chamber being supported on the upper periphery of said receptacle side wall, said diaphragm and said receptacle defining a second chamber, said receptacle being formed with an outlet, and means securing said suction means to said receptacle, said means detachably securing said chambers in assembled relation.

2,745,513
DEVICES FOR SEPARATING LIQUIDS FROM GASEOUS DISPERSIONS
Bernard Sidney Massey, Bristol, England, assignor to The Bristol Aeroplane Company Limited, Bristol, England, a British company
Application November 19, 1951, Serial No. 257,071
Claims priority, application Great Britain November 28, 1950
2 Claims. (Cl. 183—70)



1. A water separator for an air conditioning plant for separating water from a gaseous dispersion of the same, said device comprising an entry chamber, a plurality of tubular diaphragm elements, which elements have walls composed of an agglomeration of adherent solid particles of a substance resistant to corrosion by the liquid, the agglomerated particles defining tortuous pore-passages through said walls of such dimensions as to cause coalescence into droplets of dispersed particles when forced therethrough while maintaining the least possible thickness of the walls constant with adequate mechanical strength of the tubular elements, said entry chamber commmunicating with the interior of all said tubular elements, and said tubular elements together presenting a flow path which is not materially restricted over the flow path through said entry chamber, and exit chamber, means supporting said tubular elements within said exit chamber, a plurality of concentric layers of gauze embracing said diaphragm elements and forming an annular space for separation of liquid droplets from the dispersion medium, means supporting said layers of gauze within said exit chamber in the path of the gaseous dispersion emerging from said walls, means in said exit chamber for collecting liquid draining from said layers of gauze, and means for removing drained liquid from said collecting means.

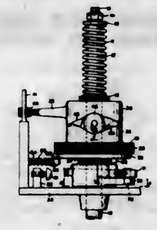
2,745,514
CONTINUOUS LUBRICANT SUPPLY FOR BEARINGS
Louis W. Milos, Clifton, N. J.
Application July 18, 1952, Serial No. 299,523
3 Claims. (Cl. 184—65)



1. A lubricating oil holding container adapted to be removably mounted in generally vertical position on the oil cup of a bearing, said container having a spout on its lower end, the spout having an upwardly flaring passage therein, the upper inner end of said passage constituting

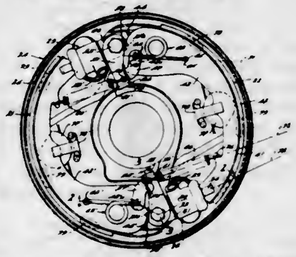
a seat, a gravity held eccentric ball disposed in said seat, the ball and seat presenting a minute opening therebetween when the ball is in the seat.

2,745,515
ACCUMULATOR FOR MECHANICAL ENERGY
Yves Pelenc, La Buisserate-St-Martin-le-Vinoux, France, assignor to Etablissements Merlin & Gerin, Societe Anonyme, Grenoble, France, a corporation of France
Application March 31, 1955, Serial No. 498,397
Claims priority, application France April 7, 1954
14 Claims. (Cl. 185—37)



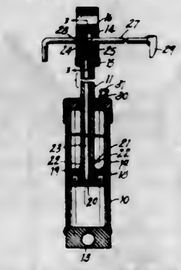
1. Accumulator for mechanical energy, particularly for the actuation of circuit breakers, starters and controllers for motors and other rotary apparatus and the like, including an energy storing and releasing elastic system disposed for compression and expansion by translational motion along a longitudinal axis thereof, mechanism being associated with said elastic system for supplying mechanical energy thereto to be stored therein and for receiving mechanical energy to be released therefrom, said mechanism including a rotor, a shaft carrying the same, said elastic system and said rotor being disposed relatively to each other so as for the geometric axis of rotation of said rotor to coincide with said longitudinal axis of the elastic system, said mechanism further including transmission and motion converting gear operatively connecting said rotor to said elastic system thereby to transmit said mechanical energy between both and converting translational motion of the elastic system into rotary motion of said rotor and conversely.

2,745,516
FLOATING SHOE BRAKE
Robert F. Smith, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application February 28, 1952, Serial No. 273,957
13 Claims. (Cl. 188—78)



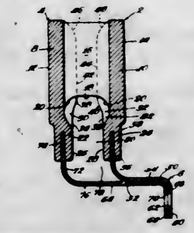
1. In a floating shoe brake assembly, an annular, relatively fixed, backing plate, a pair of hydraulically operated brake shoe actuators mounted on said backing plate at diametrically opposed positions, a bolt-like connector fastening each of said actuators to said backing plate, an anchor plate carried by each of said bolt-like connectors that is independent of the actuator mounted on the same connector, each anchor plate having portions thereof formed to provide a substantially radially extending ramp surface, a brake shoe extending between each actuator and the ramp surface on the anchor plate associated with the other actuator fastener bolt, said shoes each having the toe end thereof connected to an actuator and the heel end thereof engaged with an anchor plate ramp surface for movement therealong, and resilient means continuously urging said shoes into retracted positions against their associated actuator and anchor plate ramp surface.

2,745,517
DASHPOT CYLINDER
William M. Zook, Bangor, Mich., assignor to Kalamazoo Tank & Silo Company, Kalamazoo, Mich., a corporation of Michigan
Application April 20, 1953, Serial No. 349,582
1 Claim. (Cl. 188—88)



A dashpot cylinder and coacting piston rod having their opposite ends adapted to be pivotally connected to separate members to support and regulate the movement of said members relative to each other, said assembly comprising a piston connected to said piston rod and reciprocable in said cylinder and having a check valve positioned therein and opening inwardly of the cylinder from said rod, said piston rod being tubular with a valve chamber formed in the end thereof connected to said piston, a valve port opening from the opposite face of said piston to the chamber in said piston rod and therethrough to the other end of said cylinder, a fitting axially adjustably mounted on the outer end of said piston rod and adapted to form the connection between said piston rod and said one of said members, a valve rod reciprocable in said piston rod and having a valve closing surface on its inner end coacting with the port in said piston, a spring biasing said valve rod to valve opening position, a valve control rod journalled in said fitting and extending transversely through said fitting and across the outer end of said valve rod, and a hand operating piece on the end of said control rod positioned exteriorly of said fitting, and an eccentric surface on said control rod coacting with the outer end of said valve rod.

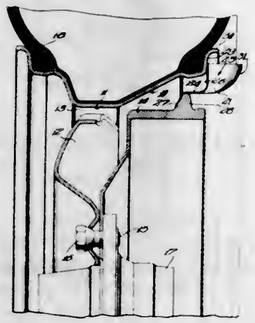
2,745,518
BRAKE ROTOR
Fred E. Bachman, St. Louis, Mo., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application August 15, 1950, Serial No. 179,621
9 Claims. (Cl. 188—218)



1. A brake rotor comprising spaced interconnected plates, a separate substantially cylindrical continuous hub

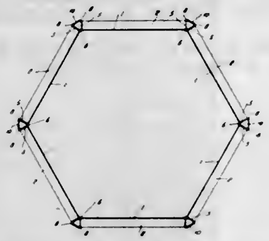
for each plate, said plates being cast on the peripheries of the respective hubs, said hubs being arranged in cupped relationship, said plates forming a brake ring and having portions at their inner ends offset toward each other, the offset portions flaring radially outwardly at their outer extremities and arranged with said hubs to provide a venturi at the inner periphery of said brake ring, and openings in at least one of the hubs communicating with the space between the hubs.

2,745,519
BRAKE DRUM AIR COOLING DEVICE
George Albert Lyon, Detroit, Mich.
Application August 9, 1951, Serial No. 240,997
11 Claims. (Cl. 188—264)



1. In a vehicle wheel assembly including a brake drum and a wheel structure detachably secured concentric with the brake drum and having a tire rim encircling the brake drum in spaced relation and defining an air chamber between the tire rim and the brake drum, an air circulation promoting member comprising a ring mounted across the inner side of said chamber between the tire rim and the brake drum and including radially spaced portions in engagement with respectively the tire rim and the brake drum, said member having peripheral radially outwardly opening air scooping means thereon disposed to scoop air out of the slip stream moving past the wheel in service and to drive air from the inner side of the wheel assembly axially through said chamber, said air scooping means including a curved surface directing air from the radial inward direction to the axial direction.

2,745,520
SILO FOR GRANULOUS MATERIAL
Jacques Boutard, Pringy par Ponthierry, France
Application April 2, 1951, Serial No. 218,761
Claims priority, application France June 20, 1950
13 Claims. (Cl. 189—3)



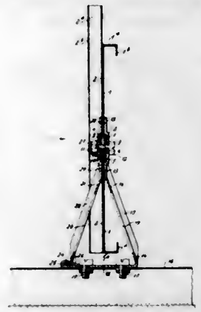
12. In a metallic construction, two horizontally corrugated panels with the corrugations extending to the edges thereof, each panel being disposed at an angle with respect to each other and with the side edges terminating in vertical planes, flat vertical billets contacting and secured to the corrugated edges of the panels with the flat faces of the billets closing the corrugations, said billets being secured to each other along adjacent vertical edges in angular relation, and a vertical billet having opposed vertical edges secured to the other vertical edges of the first-mentioned billets to form a beam at the intersection of the panels.

2,745,521
GASKET RETAINER FOR SEPARABLE MEMBERS
Frank B. White, Canoga Park, Calif., assignor of forty-five per cent to John J. Woodruff, Pacific Palisades, Calif.
Application October 7, 1952, Serial No. 313,435
3 Claims. (Cl. 189—36)



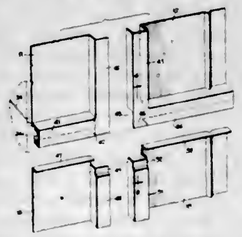
1. The combination with a pair of separable members and a gasket therebetween, of a plurality of retainers having tubular stems in holes in said gasket and in threaded holes in a first member and extensions from said stems underlying said gasket, and attaching bolts extended through a second member and said gasket into threaded connection with said threaded holes in said first member which contain said tubular stems, for attaching said members together and confining said gasket between said members, said stems being deformed between the threads of said holes and said bolts.

2,745,522
JUNCTION OF INTERSECTING SHEET METAL SUPPORTING MEMBERS
Alexandre Horowitz and Frans Termaat, Amersfoort, Netherlands, assignors to N. V. Ontwikkelingmaatschappij "Polynorm," Amsterdam, Netherlands, a limited company of the Netherlands
Application September 24, 1951, Serial No. 248,025
Claims priority, application Netherlands June 18, 1951
4 Claims. (Cl. 189—36)



1. A junction of intersecting thin sheet metal members having flat portions of the thin sheet metal facially abutting against each other, said junction comprising in combination: a cup shaped depression in the flat portion of the one member and a similar depression formed in the flat portion of the other member, said depressions facing each other and defining a cylindrical space between their bottoms; a central hole in the bottom of each of said cup shaped depressions; a flat disk fitting closely in said space defined by the depressions, said disk having a central hole; two caps of thicker metal, each arranged outside one of the cup shaped depressions and closely fitting around the related depression and against the adjoining flat portion of the sheet metal member, and each of said caps having a central opening; and a fastening member traversing the openings of said caps, the holes of said depressions and the central hole of said disk, and holding the caps, the depressions and the disk closely together, radial clearance being provided between said fastening member and said holes of the depressions and openings of the caps so that shearing loads are transmitted between said sheet metal members through said disk and said caps prevent deformation of said depressions under the shearing loads.

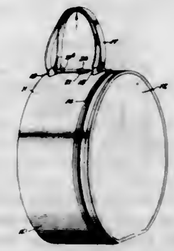
2,745,523
SHEET METAL WALL VENEER CONSTRUCTION
Richard A. Biggs, New York, N. Y., assignor to Crucible Steel Company of America, New York, N. Y., a corporation of New Jersey
Application August 22, 1950, Serial No. 180,740
5 Claims. (Cl. 189—86)



1. A rectangular, sheet metal, veneer panel, of substantially uniform gauge throughout and having side edges and upper and lower transverse edges, said panel being of slightly arcuate contour in the direction between one pair of its oppositely disposed edges for mounting said panel substantially flat and in flexed condition against a backing wall engaging the normally convex surface of said panel, said panel terminating along one side edge and said lower edge in struck-up, side and transverse ribs of substantially U-shape in cross section, the open sides of said ribs facing in the same direction as said convex surface and an extension of a portion of at least one of said ribs at the contiguous ends thereof forming a corner of said panel, and the oppositely disposed side and upper edges being up-turned for disposition within the ribs of an adjacent similar panel, said side rib and said upturned side edge having upper ends adjacent said upper edge and at least one of said upper ends having a spacing from the edge contiguous thereto which is less than the width of said transverse rib whereby said extension overlaps said one end when a plurality of said panels are mounted adjacent each other with said upturned edges disposed within the ribs of the next adjacent panel, and certain of said ribs being adapted for reception of and attachment to supporting members for mounting said panel on said backing wall.

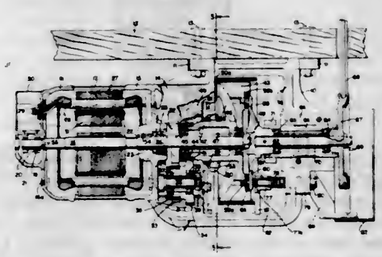
2,745,524
TWO-WAY HANDLE FOR HAT BOXES
Joseph H. Plotkin, Chicago, Ill., assignor to Oshkosh Trunks and Luggage Co., a corporation of Illinois
Application April 15, 1953, Serial No. 348,912
3 Claims. (Cl. 190—57)

1. In a hat box having an enclosure-defining body of side wall means, top and bottom, the provision of a carrying-handle structure comprising a pair of vertically spaced and alined anchor-loop fittings mounted on said side wall means between said top and bottom, a strap attached at its one end to one of said fittings and extending through the other of said fittings, a fastener mounted on the other end of said strap, a first fastener-mating element mounted on said side wall means between said fittings for selectively coacting with said fastener with said strap



looped back on itself from said other fitting and threaded through said one fitting, and a second fastener mating element on a part of said side wall means substantially diametrically opposite to said fittings for coacting with the fastener mounted on said strap with said strap looped across said top of said box.

2,745,525
ELECTRIC TRANSMITTER FOR SEWING MACHINES
Arthur N. Hale, Park Ridge, Ill., assignor to Union Special Machine Company, Chicago, Ill., a corporation of Illinois
Application July 23, 1954, Serial No. 445,276
12 Claims. (Cl. 192—3.5)

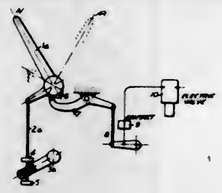


1. A power drive for a sewing machine which comprises a frame, an electric motor having a shaft journalled in said frame, a flywheel journalled in said frame, connections from said motor shaft for rotating said flywheel, said connections including speed increasing means for driving said flywheel at greater angular speed than said motor shaft, a driven shaft carried by said frame, means including a clutch connecting said flywheel with said driven shaft and a pulley carried by said driven shaft adapted for belt connection with a sewing machine.

2,745,526
TRANSMISSION AND ENGINE BRAKE INTERLOCK MECHANISM IN AUTOMOTIVE VEHICLES
Léon Saives, Billancourt, France, assignor to Regie Nationale des Usines Renault, Billancourt, France
Application April 25, 1951, Serial No. 222,842
Claims priority, application France May 24, 1950
4 Claims. (Cl. 192—4)

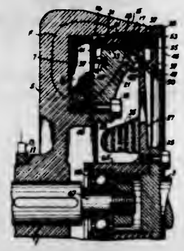
1. In an automotive vehicle having a gas turbine driving means, a transmission mechanism from said driving means to the driven portion of the vehicle, a gear changing mechanism in said transmission mechanism, means for actuating said gear changing mechanism and

braking means operable upon said gas turbine driving means while said driving means is in driving relationship with said transmission mechanism, said gear actuating means and said braking means being arranged for



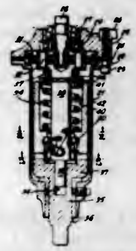
inter-dependent actuation whereby said braking means is actuated each time said gear changing means is to be actuated, but said braking means acts upon said driving means to brake said driving means before said gear changing mechanism is actuated.

2,745,527
MAGNETIC FLUID MIXTURE CLUTCH
Anthony Winther, Kenosha, Wis., assignor, by mesne assignments, to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application December 21, 1951, Serial No. 262,779
6 Claims. (Cl. 192—21.5)



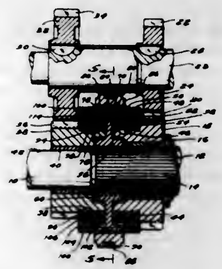
1. A magnetic clutch comprising magnetic driving and driven members one of which is constituted by first and second spaced inner and outer magnetic cylinders concentric about a center line, said cylinders being joined at one end and having radially disposed portions at their other ends providing between them a radially disposed space, the other member comprising a third and intermediate concentric magnetic cylinder located in spaced telescopic relation between the first and second spaced cylinders to provide radially spaced inner and outer cylindric magnetic gaps, said intermediate cylinder being open where the first and second cylinders are joined, a radially disposed support for said intermediate cylinder at its other end and in part located in said radially disposed space, annular running sealing means respectively on opposite sides of said radially disposed support for the intermediate cylinder and forming seals respectively between said support and said radially disposed portions of the first and second cylinders, the periphery of the innermost one of said annular sealing means being at a radial distance from the outermost part of the outer gap which is a minor fraction of the distance from said center line to said outermost part of the outer gap so as to confine a limited annular space adjacent the magnetic gaps and to separate said confined space from the remaining space occupied by the centrally located portions of the clutch, a fluent magnetic material movable in said gaps and in said confined space, and an annular field coil carried by said first and second cylinders near where they are joined and adapted to establish a magnetic flux field across said magnetic gaps.

2,745,528
REVERSIBLE IMPACT WRENCH
Lester A. Amtsberg, New Hartford, N. Y., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a corporation of New York
Application January 5, 1953, Serial No. 329,573
15 Claims. (Cl. 192—30.5)



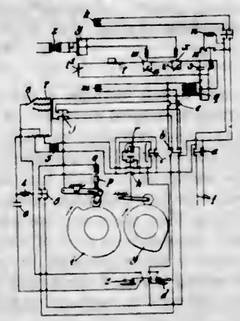
2. An impact tool comprising a rotatable anvil, a rotatable hammer for driving the anvil with a succession of impacts, said hammer being arranged rearwardly of the anvil, a rotatable driving spindle, yieldable means urging the hammer forwardly relative to the spindle and anvil, and a driving connection between the spindle and hammer, said driving connection including an intermediate sleeve, cooperating ball raceways carried by the intermediate sleeve, hammer and spindle respectively, each raceway having a helical arm communicating at one end with a circumferential arm, and a ball mounted in the cooperating raceways and movable in the circumferential and helical arms thereof, thereby connecting the hammer to the spindle for swivel movement in the extreme forward position of the hammer, but for relative helical movement when displaced from the forward position.

2,745,529
SYNCHRONIZING GEARS
Heinz Dorpmund, Wolfsburg, Germany, assignor to Volkswagenwerk G. m. b. H., Wolfsburg, Germany
Application September 23, 1954, Serial No. 457,959
Claims priority, application Germany September 26, 1953
6 Claims. (Cl. 192—53)



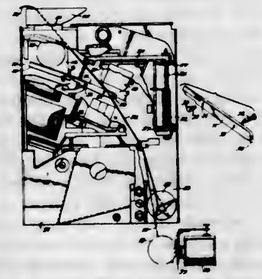
1. A synchronizing gear, particularly for motor vehicles, comprising, in combination, a shaft, a first body arranged loosely on said shaft, said first body having a toothed rim, a second body arranged on said first body near said toothed rim thereof, gear shifting means arranged for linear motion substantially parallel to said shaft, said gear shifting means being in toothed engagement with said second body, and an annular disc arranged at the end of said toothed rim of said first body adjacent to said second body, said annular disc forming a stop limiting the motion of said gear shifting means parallel to said shaft.

2,745,530
FORGING PRESS CONTROL
John Foster, Openshaw, Manchester, England, assignor to B. & S. Massey Limited, Openshaw, Manchester, England, a British company
Application March 14, 1952, Serial No. 276,718
Claims priority, application Great Britain March 27, 1951
4 Claims. (Cl. 192—144)



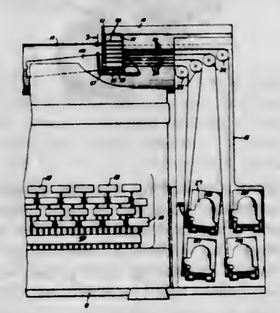
1. In a control system for presses, and forging machines having a ram actuated by an eccentric shaft, a brake for arresting the eccentric shaft and a clutch for coupling the eccentric shaft to a driving medium, of the type comprising a clutch-operating solenoid, a brake-operating solenoid, contacts for connecting the brake solenoid to a current supply source, a brake relay for actuating said contacts, switch means for connecting the clutch solenoid and the brake relay to a current supply source, and a delay circuit associated with the brake relay for retarding the opening of the relay when disconnected from the current supply source, the arrangement which comprises: a switch-closing relay for effecting the closing of said switch means, a switch for energising the switch-closing relay to close the switch means and thereby cause the clutch to be engaged and the brake to be released, and the ram to be actuated, means for cutting off the current supply to the switch-closing relay after one stroke of the ram has occurred, and an adjustable delay circuit associated with the switch-closing relay for keeping it energised after its current supply has been cut off, until the ram has performed a limited number of strokes.

2,745,531
ANTI-CHEATING DEVICE COIN OPERATED MACHINES
William A. Patzer, Chicago, Ill., assignor, by mesne assignments, to Seth B. Atwood, Rockford, Ill.
Application November 2, 1954, Serial No. 466,335
6 Claims. (Cl. 194—97)



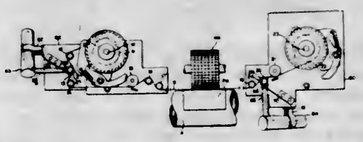
1. In a coin operated machine, means for preventing repeated use of inserted coins for unauthorized repeated operations of the machine comprising a face plate, a crosswise extending, downwardly inclined runway over which the coins travel to the machine for actuation thereof, means mounting the runway to permit displacement of the lower end portion a limited distance toward and away from the face plate, means resiliently urging the runway in the direction toward the face plate, and means associated with the lower end portion of the runway for diverting elements secured to the coins passing over the runway into the area between the runway and face plate as the coin falls from the lower end portion of the runway.

2,745,532
CODE TYPING MEANS
Perry Crawford, Jr., Great Neck, N. Y., assignor, by mesne assignments, to Underwood Corporation, New York, N. Y., a corporation of Delaware
Application September 18, 1952, Serial No. 310,340
13 Claims. (Cl. 197—1)



5. The combination with a typewriter or the like having keys operable one at a time to control printing of data character by character in uncoded form upon a work sheet supported by a platen; of a code typing unit to type combinational codal representations of the data, one representation after another, in successive areas of said work sheet, said unit including key contacts closed under control of said keys, a set of differentially positioned type elements for printing similar marks in differential positions of a said area, the differential position of a mark determining its codal significance, magnets for operating said type elements selectively, and circuits controlled by closure of said key contacts for energizing said magnets in various combinations determined by a combinational code of character data representation so as to operate said type elements in similar combinations for typing codal representations of data in said areas concurrently with the character by character printing of the data in uncoded form.

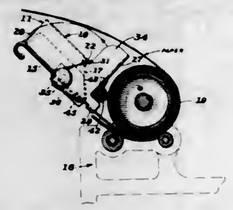
2,745,533
RIBBON REINKING DEVICE
Henry W. Keleher, Binghamton, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application December 29, 1952, Serial No. 328,484
2 Claims. (Cl. 197—171)



2. A ribbon reinking device having, in combination, two spools between which said ribbon is extended, ribbon feeding and reversing mechanism cooperating with said spools, a pair of guide rollers, one of which is adjacent each spool and about which said ribbon is guided, a pair of removable ink capsules with inking wicks extending therefrom and into contact with said rollers, a

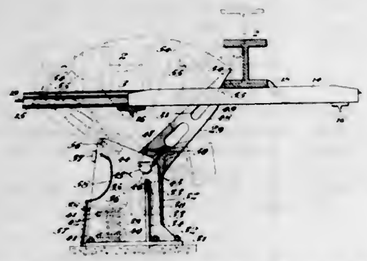
ratchet wheel on each roller, and a flexible flat spring detent for stopping said ratchet wheel and roller from being rotated by the ribbon except when it is passing from the roller towards the adjacent spool to be rewound, whereby reinking is done on a part of the ribbon about to be rewound, to allow time for the ink to spread evenly.

2,745,534
PAGE END INDICATOR
Alberto R. Brun, Caracas, Venezuela
Application April 22, 1953, Serial No. 350,284
8 Claims. (Cl. 197—189)



1. In a typewriter having a paper support, a rotatable paper feeding platen adjacent its lower edge and a paper guide on said support disposed at right angles to said platen, a page end indicator comprising: a stationary bracket; a paper contacting arm projecting transversely from said bracket; a bell crank pivotally secured to said bracket having a paper contacting arm projecting transversely therefrom, said contacting arms being vertically spaced apart so as to permit paper to pass therebetween when said bell crank is in a lower rotated position; interengaging fingers on said bracket and said bell crank for releasably holding said contacting arms in vertically spaced relation so as to permit paper to be fed therebetween; and means for rotating said bell crank upwardly when the paper has passed from between said paper contacting arms.

2,745,535
BEAM TURNING DEVICE
Carl W. Schlegel, Allentown, Pa., assignor to Bethlehem Steel Company, a corporation of Pennsylvania
Application October 21, 1949, Serial No. 122,636
5 Claims. (Cl. 198—33)



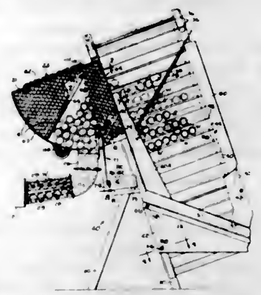
3. In combination with a support for receiving a workpiece and means for moving the workpiece across said support, an arm pivoted below said support with its outer end projecting above said support and extending toward the workpiece, said outer end having a recessed portion adapted on movement of the workpiece toward said arm to engage the leading edge of the workpiece and on further movement of the workpiece to elevate said leading edge and thereby rotate the workpiece rearwardly, said arm being adapted to be tilted on further movement of the workpiece until said arm is disposed entirely below the top of the support.

2,745,536
BEAM AND CHANNEL TURNING DEVICES
Victor A. Link, West Mifflin, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Application February 4, 1953, Serial No. 335,147
8 Claims. (Cl. 198—33)



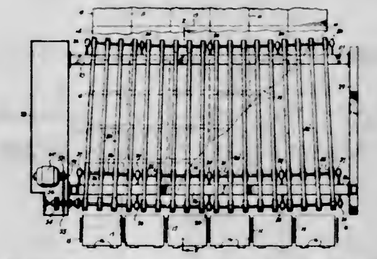
2. In a hot bed which includes a plurality of parallel rails for supporting structural members of the type having webs and flanges, and carriages movably supported between said rails for moving the members therealong, the combination therewith of a device for turning the members from a position in which their webs are vertical to a position in which their webs are horizontal comprising a lever pivotally mounted on one of said carriages and adapted to occupy a prone position or an upright position, a dog mounted on said lever and adapted in the upright position thereof to engage under the flange of a member resting on said rails with its web vertical, and in the prone position of said lever to pass underneath members resting on said rails, a trigger mounted on said lever, and an abutment fixed to said bed, said trigger being cooperable with said abutment for resetting said lever from its prone to its upright position after turning a member.

2,745,537
CONTINUOUS FEED MECHANISM
Harold O. Cadman, Rockton, Ill., assignor to Gardner Machine Company, South Beloit, Ill., a corporation of Illinois
Application February 7, 1951, Serial No. 209,867
10 Claims. (Cl. 198—33)



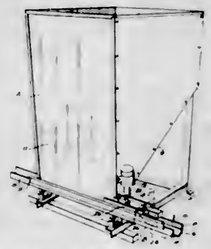
1. A mechanism for feeding substantially circular workpieces in a continuous procession from a source to a machine tool or other receiving means, said mechanism comprising the combination of a hopper, an endless lift conveyor operatively associated with said hopper and having a plurality of channels for receiving workpieces therefrom, structural supports for maintaining said lift conveyor in a rearwardly and laterally inclined attitude with respect to said hopper, a variable speed drive connected with said conveyor for elevating the loaded channels thereof, fixed abutment means on one of said structural supports for retaining workpieces in the channels of said lift conveyor during elevation thereof, a workpiece reservoir adapted to receive workpieces presented thereto by said conveyor, said reservoir being located at a level substantially above said hopper, a diagonal wiper bar overlying the face of said conveyor between said hopper and said reservoir, a control in said reservoir for regulating said variable speed drive in relation to the level of workpieces in said reservoir, a discharge duct located at the bottom of said reservoir for withdrawing workpieces therefrom in a continuous procession, and an agitator operatively associated with said reservoir for precluding obstruction of said discharge duct by bridging of workpieces thereacross.

2,745,538
SHEET SPREADING CONVEYOR
George E. Lamb, Hoquiam, Wash., assignor to Lamb-Grays Harbor Co., Inc., Hoquiam, Wash., a corporation of Washington
Application July 12, 1954, Serial No. 442,601
5 Claims. (Cl. 198—34)



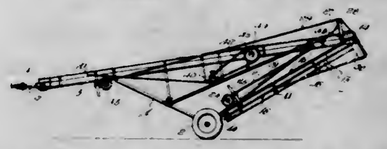
1. A conveyor for the conveying and spreading apart of sheets that are received at one end thereof in edge to edge relationship as cut from a single web, for delivery from the other end of the conveyor into laterally spaced receptacles; said conveyor comprising a plurality of substantially coextensive conveyor belts driven in unison with sheet carrying runs thereof extending in the same plane and in such diverging relationship as to effect the separation of the sheets as conveyed thereon to the extent of lateral separation of said receptacles, pulley wheels mounting said conveyor belts at the receiving and discharge ends of the conveyor, and cross-shafts at the receiving and discharge ends of the conveyor, each shaft mounting all of the pulley wheels at the corresponding end of the conveyor thereon; and means maintaining each of said cross-shafts in a predetermined curvature whereby each of the pulley wheels will be maintained in operative alignment with the individual belt which operates thereabout.

2,745,539
FEED HOPPER FOR A RECIPROCATING TROUGH CONVEYOR
Gretzolon L. Hazen, Fort Atkinson, Wis., assignor to James Mfg. Co., Fort Atkinson, Wis., a company
Application September 25, 1952, Serial No. 311,489
3 Claims. (Cl. 198—37)



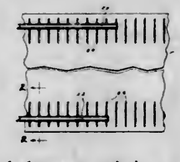
1. In a feed device of the character described, the combination with a hopper having a feed spout with an open bottom and an end wall provided with a dispensing opening, of a reciprocating conveyor trough beneath said spout, said trough being provided with a bottom along which feed is conveyed and a false bottom spaced thereabove, said false bottom providing a bottom closure for the hopper spout, and means for reciprocating said trough together with said false bottom whereby to concurrently convey feed along said trough and agitate the feed in said hopper spout for free discharge of said feed through said dispensing opening into said trough.

2,745,540
EXTENSION FOR LOADING AND UNLOADING APPARATUS
Isaac Z. Smoker, Intercourse, Pa.
Application August 11, 1952, Serial No. 303,676
4 Claims. (Cl. 198—115)



1. An extension conveyor comprising a main conveyor frame, an extension conveyor frame, a wheeled chassis supporting said main conveyor frame, a pair of posts mounted adjacent the upper extremity of said main conveyor frame and extending substantially normal thereto, roller members pivoted on said posts, a pair of angle members mounted on the end of said extension conveyor frame adjacent the upper extremity of said main conveyor frame, brackets carried by the end of said main conveyor frame aligned with the angle members on said extension conveyor frame, said angle members and brackets each having transversely extending flanges adapted to approach or recede from each other to a limit in which said flanges are disposed in spaced substantially parallel planes, pivot means transversely interconnecting said brackets and said angle members for pivoting said extension conveyor frame with respect to said main conveyor frame, cables secured to the extremities of said angle members remote from said extension conveyor frame and extending in engagement with said roller members to a position adjacent the base of said main conveyor frame, means on said main conveyor frame for reeling and unreeling said cables for orienting said extension conveyor frame with respect to said main conveyor frame about said pivot means as a center for aligning said extension conveyor frame in a plane substantially coplanar with the plane of said main conveyor frame from a position substantially parallel with the underside of said main conveyor frame and in which said brackets include side plates which overlap the inside flanges of said angle members and wherein aligning means are carried by the inside flanges of said angle members, said side plates being apertured for the passage of said aligning means and a transverse shaft extending through said aligning means.

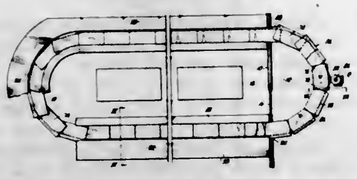
2,745,541
WEAR RESISTING STRUCTURE FOR CONVEYOR BELTS
Frank F. Hofstatter, Cleveland, Ohio, assignor, by mesne assignments, to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 25, 1952, Serial No. 268,160
10 Claims. (Cl. 198—184)



1. A conveyor belt wear resisting structure, comprising a continuous one piece conveyor belt having resilient

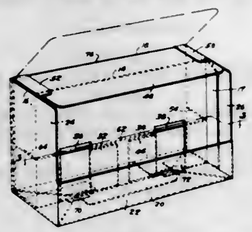
homogeneous surfaces adapted to have its load material carrying surface supported by a plurality of spaced conveyor rollers and adapted to pass under longitudinally extending side boards, longitudinally spaced irregularities carried by the upper surface of said belt for traveling under said side boards, said irregularities comprising transverse grooves in raised beads under said side boards on the top of said load carrying belt surface, whereby said spaced irregularities reduce the abrasive effect of the material jammed under said side boards by the movement of the belt.

2,745,542
FOOD HANDLING STRUCTURE FOR RESTAURANTS
Arthur A. Boots, Carthage, Mo., assignor to Cafa-Roll, Inc., Carthage, Mo., a corporation of Missouri
Application September 29, 1952, Serial No. 312,029
2 Claims. (Cl. 198—203)



1. In a food serving system, a continuous, flat, horizontal track having a pair of opposed, elongated, parallel side stretches and a pair of opposed, semicircular end stretches; a continuous series of carriages mounted on the track for movement around the latter in procession; a rotatable driver disposed outwardly of the path of travel of the carriages adjacent one end stretch of the track; a continuous cable circumscribing the path of travel of the carriages and passing around the said driver for actuation thereby; and releasable clip means on each carriage respectively extending outwardly therefrom and normally in frictional engagement with the cable for supporting the latter and for movement therewith, said clips each being disposed for movement out of engagement and supporting relationship with the cable when its carriage moves adjacent said driver, said clip means and said driver being the only structure in contact with and supporting the cable.

2,745,543
DISPLAY BOXES
Frank W. Broderick, Summit, N. J., assignor to Brown & Bailey Company, Philadelphia, Pa., a corporation of Pennsylvania
Application August 29, 1952, Serial No. 307,097
1 Claim. (Cl. 206—45)



A display box comprising an outer container formed from a one-piece blank, said outer container including a vertical rear wall, a shortened front wall integrally joined to said rear wall by a side wall, side walls connecting said front and rear walls, a partition positioned between and parallel with said front and rear walls and coextensive therewith, vertically hinged locking flaps cut out from said partition adjacent the bottom edge thereof and terminating short of the top edge thereof, said partition defining a front and a rear compartment in said outer container, an inner container formed from a one-piece blank disposed in said rear compartment and adapted to slide vertically therein, a tongue formed integral with the bottom section of said inner container extending outwardly in the plane thereof, a top section formed integral with the back wall of said inner container and adapted when pulled upwardly to raise said inner container in said rear compartment above said locking flaps, said outer container providing an edge portion engageable by the tongue to limit upward movement of the inner container when so raised.

2,745,544
MERCHANDIZING PACKAGES FOR STOCKINGS OR THE LIKE
Russell C. Folk, Reading, Pa., assignor to George W. Griffin, New Rochelle, N. Y., Ray F. Borda and Russell C. Folk, both of Reading, Pa., copartners
Application June 24, 1955, Serial No. 517,720
5 Claims. (Cl. 206—45.33)

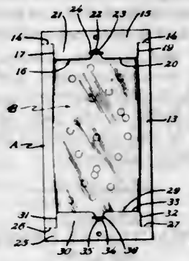


1. A merchandizing package for articles such as stockings, comprising a foundation component in the form of an oblong strip of cardboard or the like subdivided by transverse fold lines into at least three sections, one of the end sections having an opening therein extending beyond the crease line by which it is defined, the mid section being folded over the other end section, and the apertured section being turned inwardly over said adjacent section; a square insert of cardboard or the like, having a pair of stockings wrapped thereabout, placed into the fold behind the apertured end section of the foundation component, with the top portions of the stockings turned downwardly and outwardly over said mid section and passed through the opening in said apertured section; and an envelope of transparent sheet material encasing the foundation component with the stockings assembled as aforesaid.

2,745,545
BAG SUPPORT
Robert M. Dunning, St. Paul, Minn., assignor to Waldorf Paper Products Company, St. Paul, Minn., a corporation of Minnesota
Application January 6, 1951, Serial No. 204,800
1 Claim. (Cl. 206—78)

A bag support for supporting a filled tubular bag having flat sealed ends, the support including a card having transverse cuts therein adjacent the ends thereof defining a central body portion and two end portions hingedly connected to said central body portion along parallel lines of fold, said transverse cuts extending inwardly from said fold lines and forming flap means on said end portions and foldable with said end portions, said cuts also forming an ear extending outwardly from said central body portion at each end thereof dividing the inner ends

of each said flap means into two spaced flap portions, the flat ends of the bags overlying said central body portion and said ears and underlying said flap means, and

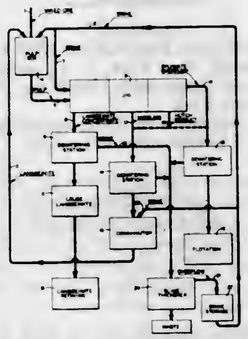


staple means straddling said ears and extending through said spaced flap portions and said flat bag ends, and clinched beneath said ears.

2,745,546
TREATING PACKING MATERIAL
Carl Fischer, Hamburg-Wandsbek, and Karl-Heinz Grodde, Hamburg, Germany
No Drawing. Application February 9, 1954, Serial No. 409,251
Claims priority, application Germany February 3, 1951
21 Claims. (Cl. 206—84)

18. Method of packing bituminous substances, comprising in combination the steps of applying to a smooth surface an aqueous solution containing at least one water soluble alginic acid derivative and including at least one finely comminuted filler; precipitating from said thus applied aqueous solution a water insoluble derivative of alginic acid thereby coating said smooth surface with said water insoluble derivative of alginic acid and filler; drying said coating on said smooth surface thereby forming a sheet of packing material which does not adhere to bituminous substances; and packing bituminous substances in said thus formed sheet of packing material.

2,745,547
JIGGING PROCESS FOR BENEFICIATION OF POTASSIUM CONTAINING ORES
Edgar E. Wrege, Lakeland, Fla., assignor to International Minerals & Chemical Corporation, a corporation of New York
Application August 5, 1952, Serial No. 302,780
11 Claims. (Cl. 209—2)



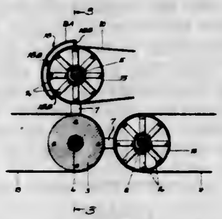
1. A process for the beneficiation of mixed ores containing langbeinite and sylvinite which comprises preparing a pulp of comminuted ore particles, suspending said comminuted ore particles in high density brine containing ore particles too finely divided to be separated during processing and in sufficient quantity to produce a medium having an apparent specific gravity above 1.3, but below 2.0, subjecting the resulting pulp to a jigging operation, and separately collecting a langbeinite enriched fraction and a sylvite enriched fraction therefrom.

2,745,548
APPARATUS FOR DETECTING AND REMOVING UNCAPPED BOTTLES FROM A CONVEYOR
Lawrence A. Schroeder, Menomonie, Wis., assignor to The Parker Pen Company, Janesville, Wis., a corporation of Wisconsin
Application May 17, 1954, Serial No. 430,106
13 Claims. (Cl. 209—75)



1. Apparatus for application to a conveyor having a belt carrying capped bottles of the character in which the cap has a portion of greater dimension than the portion of the bottle immediately adjacent the cap and to which the cap is applied, comprising in combination, means for removing loose caps from the bottles, means at an ejecting station posterior to the first means for engaging the caps remaining on the bottles and removing the bottles slightly from the conveyor belt while enabling them to move therealong, said last means including members positioned for engaging the caps and permitting uncapped bottles to pass uninterrupted therepast, and deflector means at the ejecting station positioned for engagement by the uncapped bottles remaining on the conveyor belt but permitting the capped bottles to pass uninterrupted therepast.

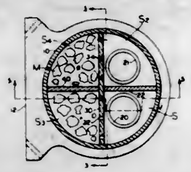
2,745,549
MAGNETIC SEPARATOR
Heinrich Spodig, Lunen, Germany
Application August 23, 1954, Serial No. 451,515
16 Claims. (Cl. 209—219)



1. In a magnetic separator, in combination, a magnetic structure having a supporting face; magnet means having a first pole and an opposite pole associated with said magnetic structure for imparting the magnetic polarity of said opposite pole to said magnetic structure, said magnet means being located so that a space is formed between said supporting face of said magnetic structure and said first pole of said magnet means so that lines of magnetic flux cross the space between said supporting face of said magnetic structure and said first pole of said magnet means; and mechanical transport means for passing a substance containing magnetic particles to be separated from the substance through the space formed between said supporting face of said magnetic structure and said first pole of said magnet means so that when the substance containing magnetic particles is passed through the space formed between said supporting face of said magnetic structure and said first pole of said magnet

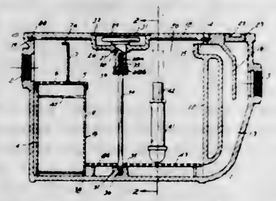
means, the magnetic particles will be attracted by said first pole of said magnet means and be separated from the substance.

2,745,550
LIQUID TREATMENT APPARATUS
Herbert J. Atkinson, Sudbury, Mass.
Application April 15, 1953, Serial No. 349,024
2 Claims. (Cl. 210—36)



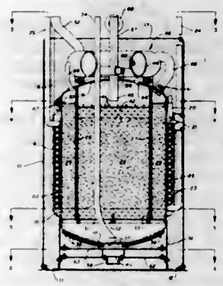
1. In liquid treatment apparatus having means to store a mass of crystalline treatment material, means to normally conduct a flow of feed water through said material, and a normally inactive but always freely open by-pass connection through which said feed water may flow directly and with negligible rise in pressure if said conducting means becomes clogged, that improvement which comprises an upright cylinder having a base and a cap and enclosing a vertical transverse and substantially diametral partition which defines a clear space and a storage space for said liquid-treatment material, said diametral partition being secured to said base and extending substantially to said cap and having a multiplicity of normally open and vertically-extended narrow slots, and a first vertical radial and imperforate upright partition having one upright edge fixed to said slotted diametral partition and substantially bisecting the clear space between said diametral partition and that adjacent side wall portion of said cylinder which is more remote from said storage space, and said first radial partition extending from said base to a point spaced downward from said cap and from the top of said slotted diametral partition, and a second vertical radial and imperforate upright partition substantially bisecting said storage space and having one upright edge fixed to said slotted diametral partition, and said second radial partition extending from the base to a point somewhat below the upper end of the first radial partition, and said apparatus having inlet and outlet passages in the lower portion thereof and at opposite sides of said first radial partition and on the same side of said slotted diametral partition, and said passages being connected respectively into the two parts of the vertically extended clear space which is bisected by the first radial partition and which is separated from said storage space by said diametral partition.

2,745,551
SEPARATOR
John H. Schmid, Erie, Pa., assignor to J. A. Zurn Mfg. Co., Erie, Pa., a corporation of Pennsylvania
Application March 12, 1951, Serial No. 215,049
9 Claims. (Cl. 210—43)



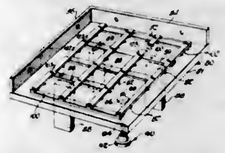
1. A separator for matter of varying densities comprising a container having an inlet and an outlet, and a transverse wall in said container spaced from said inlet defining a separating tank having a transversely extending, horizontal, elongated opening spaced upwardly a predetermined distance from the bottom of said container, said wall causing surging of liquid on the inlet side thereof whereby solid matter is deposited and retained on the inlet side of said wall and it does not pass to the outlet side of said wall and said opening distributing the flow of liquid transversely in said container, said separating tank having the top side thereof apertured and having an upwardly extending baffle in the path of liquid entering through said inlet in said container to disperse the liquid to be separated entering said inlet.

2,745,552
FILTER WITH FRACTIONAL CRYSTALLIZATION MEANS
Warren H. Bruggeman, Watervliet, and Bertram G. Voorhees, Schenectady, N. Y., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application September 2, 1953, Serial No. 378,184
5 Claims. (Cl. 210—122.5)



1. A cold trap for removing from a liquid stream an impurity whose solubility in the liquid changes with temperature; comprising a heat exchanger, inlet and outlet means in said heat exchanger for inlet and outlet streams of said liquid, means within the heat exchanger for bringing the inlet stream into heat exchange relationship with the outlet stream, a holdup tank, baffle means dividing the interior of the tank into an annular inlet zone and a central well, metal wool in the annular zone and central well, cooling means around the exterior of the tank adjacent the annular zone thereof, conduit means connecting the annular zone with the inlet stream in the heat exchanger, and conduit means connecting the central well with the outlet stream in the heat exchanger.

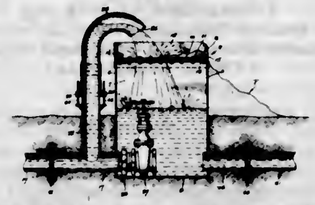
2,745,553
FILTER BOTTOM FOR FIXED BED FILTERS
Thomas M. Riddick, New York, N. Y., assignor to Filtration Equipment Corporation, Rochester, N. Y., a corporation of New York
Application November 16, 1951, Serial No. 256,644
9 Claims. (Cl. 210—124)



1. A filter bottom unit adapted to form part of a sectional foraminous filter bottom of a sand filter, said unit comprising a perforated plate, a first series of slats secured to one side of said plate at spaced intervals between the perforations of said plate, a second series of slats overlying said first series of slats and secured to said plate, the slats of said second series being angularly arranged with

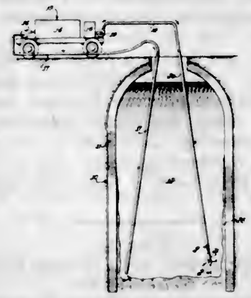
respect to those of said first series and being positioned in registry with the perforations of said plate, three supporting legs of equal height secured to the other side of said plate, and another leg adapted to be fitted to the distance between said plate and a plane support on which said unit rests to ensure uniform support of said unit in said filter.

2,745,554
FILTERING SYSTEM FOR SCREENING IRRIGATION WATER
John A. Bolton, Prosser, and Gordon C. McKinley, Byron, Wash., assignors of thirty-three and one-third per cent to John Anderson, Yakima, Wash.
Application August 11, 1953, Serial No. 373,526
4 Claims. (Cl. 210—152)



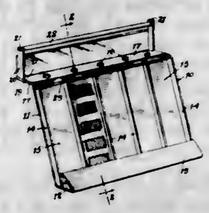
1. In a filtering system, an open-top receptacle, a screen covering said open top and having a mesh sufficiently fine to trap water-borne silt, a supply pipe and a discharge pipe disposed co-axial to one another and connecting with the interior of said open-top receptacle through opposite walls of the receptacle adjacent the floor of the latter, a valve normally closing the outlet end of said supply pipe, a main for carrying water in which silt is entrained under pressure into said supply pipe, and a side branch carrying said pressure supply of water from the supply pipe to a tail pipe discharging from a location elevated so above the screen as to splash an open stream of water onto the screen.

2,745,555
METHOD FOR CLEANING CESSPOOLS
George R. Hewey, Mentone, Calif.
Application March 3, 1952, Serial No. 274,550
4 Claims. (Cl. 210—207)



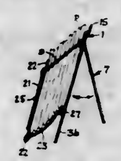
1. The method of treating a water-containing cesspool chamber and porous gravel formation below the chamber to remove dense organic deposits from the side walls of the chamber and similar deposits on the chamber bottom and within the gravel formation below, that includes applying to said side wall deposits an aqueous solution of an organic detergent to remove and disperse the deposits in the body of water in the chamber, and as a separate step penetrating below the surface of the deposit on the chamber bottom into said porous formation and projecting at the penetration depth a high velocity fluid stream containing ammonium hydroxide and acting to disperse the organic deposits and open the formation for fluid flow into the outlying formation.

2,745,556
DISPLAY DEVICE
Adele Lakin, Edgewater, N. J., assignor to Archer Mills, Inc., Columbus, Ga., a corporation of Georgia
Application September 24, 1951, Serial No. 247,933
2 Claims. (Cl. 211—45)



1. A display device for ladies' stockings comprising a base member, a body portion extending upwardly from said base member, a plurality of ribs spaced transversely of said body portion so as to form compartments, a rearward extension at the top of said body portion, a back member upstanding on said rearward extension, stocking supporting means mounted upon said back member, and openings corresponding to said compartments provided in said rearward extension through which the stockings are drawn before being passed around said supporting means.

2,745,557
ALL-WIRE COLLAPSIBLE NEWSPAPER RACK
Lewis C. Martin, Nashville, Tenn., George B. Moffett, Mobile, Ala., and Gilbert O. Erickson, Nashville, Tenn.
Application July 28, 1952, Serial No. 301,318
1 Claim. (Cl. 211—50)

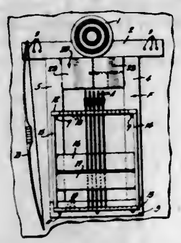


In a collapsing newspaper rack, a collapsing newspaper pocket comprising: an upright rear wall, a front wall swingable from a collapsed position against said rear wall to an expanded position to receive and hold a bundle of newspapers, a pair of spaced side links swivelly connecting the top of said front wall to said back wall, and bottom link means swivelly connecting the bottom of said front wall to said rear wall, said links and link means holding said walls approximately parallel during their expanding and collapsing relative movement, said bottom link means being bent away from said front wall at at least the lower part of the substantially collapsed pocket, whereby pinch and tearing of the last one or few papers is prevented.

2,745,558
SUPPORTS FOR ARCHERY EQUIPMENT
Stephen H. Greenspan, Baltimore, Md.
Application December 23, 1952, Serial No. 327,579
3 Claims. (Cl. 211—60)

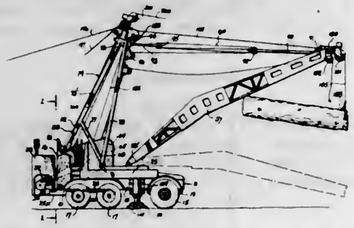
1. A combined rack and cabinet for archery equipment comprising a rectangular frame defined by spaced horizontal members with displaced vertical members extending therebetween disposed in a common vertical plane, a plurality of pegs extending forwardly from said frame on both said horizontal and vertical members, a rectangular rack for arrows comprising spaced horizontal bars integrated by opposite vertical bars, said horizontal bars having a displacement corresponding to the spacing of pegs on said frame to render the arrow rack detachably sup-

portable on the pegs of said frame at both horizontal bars of said rack, and a cabinet compartment mounted



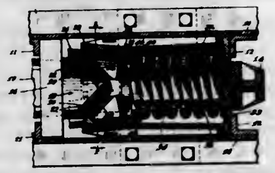
within the confines of said frame forwardly of the vertical plane thereof and displaced from said arrow rack.

2,745,559
COMBINATION LOG YARDER AND LOADER
Sidney S. McIntyre, Sedro Woolley, Wash., assignor to The Humboldt Company, Seattle, Wash., a corporation of Washington
Application July 2, 1951, Serial No. 234,735
1 Claim. (Cl. 212—7)



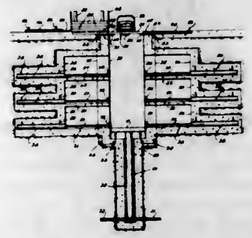
A combination mobile log yarding and log loading vehicle having a base frame supported by steering and propelling wheels, a hingedly mounted mast on said frame, a rotatable turntable mounted on the frame, a boom hingedly mounted on the turntable, a single engine on the frame, and driven means operated by said engine for yarding and loading logs and for propelling the vehicle, said means including a first cable winding drum for yarding, a second cable winding drum for loading logs and a third cable winding drum, and first, second and third cables wound upon the respective drums, a sheave mounted adjacent the top of said mast over which said first cable is trained for performing yarding operations, a second sheave on the mast and a sheave on the boom over which the second cable is trained for performing loading operations, a third sheave mounted on said mast and a sheave pivotally mounted on the end of said boom over which said third cable is trained for guying said boom, control means for independently operating said drums, and said driven means including mechanism for raising and lowering said boom.

2,745,560
DRAFT GEAR
William E. Gray, West Lafayette, Ind.
Application June 26, 1952, Serial No. 295,718
5 Claims. (Cl. 213—34)



1. A draft gear comprising a longitudinally extending housing, a pair of friction shoes disposed within said housing and engageable with the inner surface thereof at diametrically opposite points, means operable in response to draft and buffing forces on said gear for moving said shoes rearwardly of the housing and for urging the shoes apart to force them into firm frictional engagement with the housing, the shoe-engaging surface of the housing converging rearwardly, each shoe having a central portion engaging the housing and side portions spaced inwardly from the housing, the shoe-engaged portion of said housing being circumferentially continuous and elastically distortable under outward pressure exerted on the housing by the central portions of the shoes to bring it progressively into engagement with the side portions of the shoes.

2,745,561
UNDERGROUND GARAGE
Wincenty Natkanski, New York, N. Y.
Application December 20, 1954, Serial No. 476,364
4 Claims. (Cl. 214—16.1)



1. An underground parking and storage garage comprising a ground level surface apron, an elevator shaft frame extending from said apron vertically into the ground, an elevator adapted to hold one or more vehicles movably mounted in the frame, elevator moving means to move the elevator up and down the frame, a plurality of floors radiating from the elevator shaft frame, a plurality of vehicle holding pallets, pallet moving means on each of said floors to move a pallet and vehicle thereon to and from the elevator, said pallet moving means being operative from said apron above ground, pallet holding means adjacent said apron to hold one of said pallets over the elevator shaft structure for a vehicle to be moved thereon and therefrom, means connecting said pallet holding means with the elevator to retract the pallet holding means and deposit a pallet and vehicle thereon on the elevator, and pallet withdrawing means adjacent the apron slidably to withdraw an empty pallet from the pallet holding means, and means operatively connecting the pallet withdrawing means with the elevator to operate said pallet withdrawing means when the elevator approaches the apron with a pallet and vehicle on the elevator.

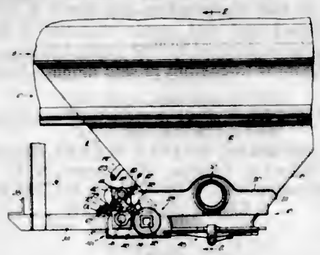
2,745,562
MATERIAL GRIPPING AND HANDLING TRAILER STRUCTURE
Fred J. Vandemark and Richard G. Buchignani, Memphis, Tenn.
Application April 20, 1953, Serial No. 349,832
24 Claims. (Cl. 214—77)



1. In a trailer structure, a load handling and supporting bed comprising a peripheral frame, a pair of transverse beam members adjacent one end of said frame, a second pair of transverse beam members adjacent the opposite end of said frame, said transverse beam members spanning from side to side of and rigidly fixed to said frame, the members of each said pair being longitudinally spaced

apart, transverse tilt members pivotally connected at one end to said beam members respectively and being shiftable from and to a loaded position in which said tilt members are substantially alined with said beam members to and from a tilted position in which said tilt members are substantially perpendicular to said beam members, hydraulic tilt actuating means connected to said tilt members adjacent their opposite ends adapted to alternately shift said tilt members to said tilted position and return to said loaded position, longitudinally disposed channel members rigidly fixed to and shiftable with said tilt members, said channel members being of a length to overlie and rest upon the ends of said frame and being supported on said transverse beams in said loaded position, a pair of longitudinally spaced clamp plates, clamp plate supports telescopically and slidably engaging said channels, said supports being fixed to said plates respectively and supporting said plates perpendicular to said channels, hydraulic clamp actuating means supported by said channels and connected to said clamp plates, said clamp actuating means being adapted to shift said clamp plates along said channels to vary the spacing between said plates, shift of said tilt members to said tilted position shifting said clamp plates to project laterally beyond a side of said frame to embrace a load adjacent said frame, actuation of said clamp means shifting said clamp plates into clamping engagement with an embraced load for shift thereof upon return movement of said tilt members to said loaded position, hydraulic means for delivering actuating flow to said tilt actuating means and to said clamp actuating means; and wheeled means supporting said bed.

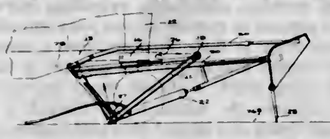
2,745,563
OUTLET FRAME FOR RAILWAY HOPPER CARS
George E. Dath, Mokena, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application June 23, 1953, Serial No. 363,485
3 Claims. (Cl. 214—83.18)



1. For combination with a load containing hopper for a railway car adapted to transport fine lading such as grain, flour and the like, a cast iron frame defining the opening of said hopper and having side and end walls, a gate slidable on said frame for closing said hopper opening, operating means carried by said frame for moving said gate to and from closed position, one of said walls of said frame having an opening, a conduit in the form of a tube extending from said opening in said wall and cast integrally therewith to provide an auxiliary discharge for said hopper, and a removable cover for said conduit.

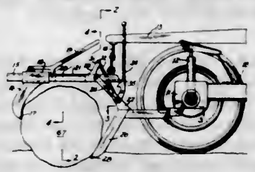
2,745,564
SHOVEL LOADER ATTACHMENT FOR TRACTORS
Paul F. Billenstein, La Rue, Ohio
Application April 1, 1955, Serial No. 498,540
4 Claims. (Cl. 214—140)

1. The combination with a tractor frame including spaced side bars and a cross bar connecting the front ends of said side bars together, a pair of steerable wheels supporting said cross bar and adjacent portions of said frame side bars above a ground surface, and a pair of side members arranged in longitudinal spaced relation positioned longitudinally along the frame side bars and having the ends inwardly of said frame cross bar detachably connected to said frame side bars, the portions adjacent the other ends of said side members projecting beyond said frame cross bar, of a shovel loader attachment including a pivot bar arranged parallel to and on substantially the same level as said frame cross bar, a pair of upstanding side frames arranged longitudinally of said tractor frame side bars and having the forward parts of their lower ends fixed to said pivot bar and having the rear parts of their lower ends resting upon the ground surface, a pair of booms arranged longitudinally of said side frames and having adjacent ends connected to said side frames adjacent the upper ends thereof for upward and downward movement about a horizontal axis, and a shovel having a bottom provided with pro-



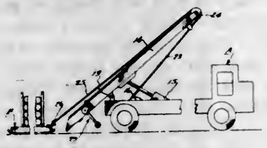
jecting teeth and spaced side walls rising from said bottom arranged adjacent the other ends of said booms so that the front edges of said side walls face downwardly with said shovel teeth engaging the ground surface, the side walls of said shovel being connected to the other ends of said booms for free movement in clockwise and counterclockwise directions about a horizontal axis, said pivot bar being receivable in and rotatably supported intermediate its ends in the other ends of said side members upon movement of said tractor frame an extent such as to bring the other ends of said side members into engagement with said pivot bar and said rear parts of the lower end of said side frames being movable to elevated positions alongside of said tractor side bars about the point of engagement of said shovel teeth with the ground surface as a pivot, and means detachably securing the rear parts of the lower ends of said side frames in the elevated position to said tractor side bars.

2,745,565
STONE LOADER ATTACHMENT FOR A TRACTOR
Elmer Johnson, Portage, Wis.
Application April 22, 1955, Serial No. 503,123
3 Claims. (Cl. 214—147)



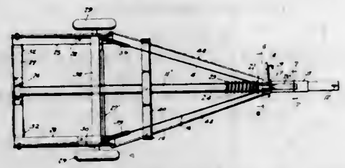
1. The combination with a tractor having a rear axle housing and a power lift having upward and downward movements, of a stone loader comprising an arm arranged in tandem spaced relation with respect to said rear axle housing and having one end connected to the power lift for movement therewith, a first jaw positioned so as to face toward said axle housing adjacent the other end of said arm and fixedly attached to said arm, and a pair of jaws arranged in parallel spaced relation positioned so as to face said first jaw below and adjacent said one end of said arm and operatively connected to said rear axle housing and to said arm for movement toward said first jaw upon execution of upward movement of said power lift, said first jaw being disposed intermediate said pair of jaws.

2,745,566
SELF-LOADING AND UNLOADING VEHICLE CARRIER
Paul Emile Bouffard, Matane, Quebec, Canada
Application June 9, 1954, Serial No. 435,501
1 Claim. (Cl. 214—505)



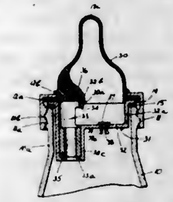
In a self-loading and unloading vehicle carrier, the combination of a load-carrying platform; a self-powered dump truck including a chassis and a frame pivotally supported by said chassis for displacement between a substantially horizontal position overlying said chassis and a fully-rearwardly tilted position, said frame extending rearwardly of its pivotal support to present its rearward end adjacent to the ground when in fully-tilted position; a drum carried by said chassis and operatively coupled to the engine of said dump truck; a sheave freely journalled on said frame adjacent the forward end thereof; a cable wound on said drum and looped over said sheave to present its free end for attachment to one end of said platform to lift said platform onto said frame when said frame is tilted; and adjustable means carried by said frame rearwardly of its pivotal support manually operable effectively to engage the ground selectively to determine the tilted position of said frame other than its fully-tilted position, when the weight of said platform tends to tilt said frame rearwardly, said frame and said platform having co-operating track means for guiding said platform on said frame as said platform is being lifted onto said frame, one of said means also serving as slides on which said platform may be slid over the ground.

2,745,567
BOAT TRAILER
Jim S. Groves, Lewisville, Tex.
Application October 30, 1953, Serial No. 389,251
1 Claim. (Cl. 214—506)



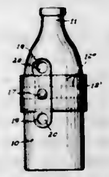
A boat trailer of the kind described comprising an elongated supporting tube, a horizontal base frame secured to said supporting tube adjacent the rear end thereof, an upwardly extending open boat support frame secured at the lower end thereof to the forward end of said base frame and extending upwardly of said supporting tube intermediate the length thereof, outwardly extending wheels carried by said frames at the juncture thereof, transversely extending resilient rollers carried by said base frame below the rear end thereof, a brace between the rear end of said base frame and the upper end of said boat support frame, a pair of radius rods pivotally connected at one end thereof to the forward end of the base frame and converging at the other end forwardly of said base frame, a sleeve slidable on the forward end of said supporting tube, a coiled spring between said sleeve and said forward end of said tube, a pair of upwardly extending bracket arms carried by said sleeve adjacent said other end of said tube, the other ends of said radius rods being secured to the lower end of said bracket arms below said supporting tube, a winch rotatably mounted on the upper ends of said bracket arms, a flexible tensile member engaged at one end about said winch and secured at the other end to the upper end of said boat supporting frame for rotatably supporting said boat frame on said wheels and a boat cradle secured on said supporting tube intermediate the length thereof.

2,745,568
NURSING BOTTLE
Harry A. Newton, New York, N. Y.
Application April 3, 1951, Serial No. 219,020
20 Claims. (Cl. 215—11)



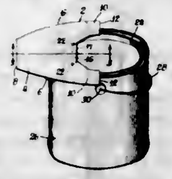
1. In combination with a nursing bottle having a nipple with a nipple opening, an attachment comprising a diaphragm member which is adapted to be mounted in said bottle to separate said bottle into a relatively large bottle chamber below said diaphragm member and a relatively small nipple chamber above said diaphragm member, first means mounted on said diaphragm member for permitting liquid flow from said nipple chamber to said bottle chamber only when said bottle is held upwardly inclined, second means mounted on said diaphragm member and normally active only when said bottle is held downwardly inclined for permitting liquid flow between said bottle chamber and said nipple chamber so as to permit the liquid to fill said nipple chamber, and control means for said second means responsive to and operative during excess of pressure within said nipple chamber resulting from squeezing of said nipple when said bottle is held downwardly inclined and said nipple chamber is filled with liquid so as to render said second means inactive, whereby excess of liquid is forced out of said nipple opening.

2,745,569
BABY NURSING BOTTLE SLEEVE HOLDER
Robert C. Seaman, Morristown, N. J.
Application May 4, 1953, Serial No. 352,939
1 Claim. (Cl. 215—11)



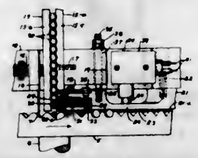
A protective wrapper for a baby nursing bottle or the like for facilitating removal of the same from a sterilizer or the like comprising an elongated straight-ended pliable body including outer layers of plastic material and an inner layer of heat insulating material, fastening means at the ends of the body whereby when the body is looped the said ends may be secured together to form a girdle which may be wrapped about the bottle, the body being of narrow width so that only a minor portion of the bottle is covered by the girdle, and finger engaging means whereby the bottle can be removed from the sterilizer without contacting the bottle, said finger engaging means comprising a pair of perforated integral tabs extending from opposed edges of the body at the center thereof in the same plane as the body and longitudinally of the bottle and another pair extending from opposed edges at one end of the body in the same direction, the pairs of tabs being diametrically opposed when the girdle is on the bottle.

2,745,570
PAINT BRUSH SUPPORT AND WIPER
Ralph L. Miller, Chicago, Ill.
Application November 6, 1952, Serial No. 319,108
1 Claim. (Cl. 220—90)



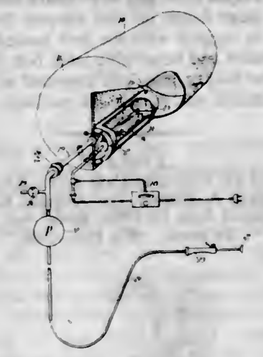
In a paint brush wiper and support for a can having an inturned rim and having a hinged handle; the combination of a flat support member of deformable resilient material, said member having spaced integral arms coplanar therewith, said arms and said member adapted to seat at the underside thereof on the top of said rim, said arms being of sufficient length to extend approximately to a vertical plane defining the hinge axis of the handle, said arms being adapted to engage the handle to limit excessive swinging of the can when carried by said handle, an integral downturned flange on said member between said arms, upwardly diverging ears on said flange at respective ends thereof, said ears extending upwardly from said flange and adapted to wedge against the underside of said rim, whereby the resiliency of said material accommodates resilient clamping of the rim against said member and arms by said ears, and an arcuate brush wiping surface at the juncture of said flange with said member.

2,745,571
CHUTE MEANS FOR URGING BLANKS INTO A CARRIER
Emil Roy, Windsor, Conn.
Application December 4, 1953, Serial No. 396,182
4 Claims. (Cl. 221—243)



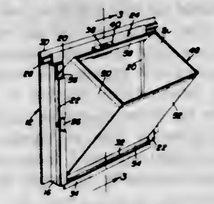
1. In a screw slotting machine, a movable carrier member having a plurality of notches in a face thereof adapted to receive the shanks of screw blanks, spaced track members extending perpendicularly to said face for feeding blanks to said carrier member; the end of one of said track members being spaced from said carrier member a greater distance than the other, a retaining plate having a retaining surface adjacent said face of the carrier member adapted to engage the shanks of the screw blanks and retain them in said notches; said retaining plate having a head portion disposed between said end of the track member and the carrier member forming an extension of said track member and a notch extending inwardly thereinto from said retaining surface, a plurality of spring members contained within said notch and having perpendicularly extending fingers thereon disposed in nested relation with their end portions terminating substantially flush with said retaining surface; the side portion of said finger adjacent the end of the head being disposed in alignment with the end of the retaining member to provide an extension of said track member; said spring members being adapted to yield upon engagement by the shanks of screw blanks which do not fully enter said notches and to urge said shanks thereinto.

2,745,572
DISPENSING SYSTEM FOR APPLYING MOLASSES TO STOCK FEED
Arnold M. Talbott, Rye, N. Y.
Application November 28, 1952, Serial No. 322,959
11 Claims. (Cl. 222—1)



8. A process for storing and dispensing molasses to stock feed on farms under winter as well as summer conditions which comprises, storing the molasses at commercial grade which does not ferment appreciably on standing and when molasses is to be dispensed heating only the portion of the same to be dispensed in a heating zone for the most part within the body of the stored molasses whereby the insulating quality of the stored viscous molasses is utilized in lessening dissipation of heat from the zone, pumping the warmed molasses from said zone when its viscosity has been reduced to a degree permitting flow from the heating zone, introducing water into the warmed molasses during its flow from said zone and then flowing the diluted molasses to one or more points of distribution to the stock feed.

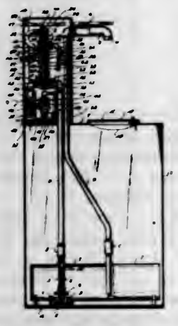
2,745,573
GRAIN BIN HOPPER ATTACHMENT
Lyle R. Fuller, Minot, N. Dak.
Application January 7, 1955, Serial No. 480,511
3 Claims. (Cl. 222—153)



3. A non-spilling grain discharge attachment for a grain bin wall having a grain discharge opening therein comprising an adapter frame provided with a grain discharge opening, said frame being designed to be secured to said wall in a manner to register its discharge opening with the grain discharge opening in said wall, cooperating tracks mounted on the exterior side of said frame and situated along the vertical marginal portions of the discharge opening in the frame, a trapdoor slidably mounted in said tracks and normally closing said discharge opening, stop means for said door fixed to the

bottom of said frame, additional tracks carried by the first named tracks, a funnel-like hopper open at its respective intake and discharge ends and embodying bottom and side walls, the side walls having outstanding flanges and said flanges being keyed slidably and removably in the additional tracks in a manner to removably support the hopper on the frame, the top portion of said hopper adjacent the intake end having a cut-away portion defining a hand grip as well as a hand hole, the upper portion of said trapdoor having handle means for raising and lowering the door and registrable with said hand hole and accessible by way of the latter, said handle being an L-shaped member, the horizontal flange of which is provided with a keeper hole, said stop means being an integral outstanding ledge flange on said adapter frame having a keeper hole in registry with the first named keeper hole, and an insertable and removable latch bolt fitting through said respective keeper holes and provided at its lower end with an attachable and detachable padlock.

2,745,574
LIQUID DISPENSING APPARATUS
George A. Hunter, Los Angeles, Calif.
Application June 23, 1950, Serial No. 169,921
9 Claims. (Cl. 222—189)



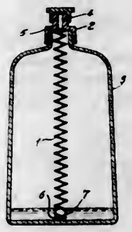
1. A liquid dispenser com prising: a frame, a receptacle submerged in a tank of liquid for holding a quantity of liquid and formed with a valve controlled inlet and an outlet for a liquid, a dispensing spout on said frame at a substantial elevation above and connected with the liquid outlet of said receptacle, said receptacle having an air inlet, a control mechanism on said frame including an air intake valve connected with a source of compressed air and with the air inlet of said receptacle, an exhaust valve connected with the air inlet of said receptacle, simultaneously operable air and liquid valves axially alined for regulating the flow of liquid and air respectively to said receptacle, a manually operable member borne by said frame and operatively engageable with and for bodily moving the air intake valve relative to the exhaust valve for opening the air valve of said receptacle to pressurize the liquid and prevent flow of liquid to the receptacle while liquid is being dispensed from said spout at each operation of said manually operable member.

2,745,575
PRINTING INK HOLDER AND DISPENSER, INCLUDING A CYLINDRICAL CONTAINER AND PISTON
Alvin C. Spencer, Corona del Mar, Calif.
Application October 15, 1951, Serial No. 251,395
3 Claims. (Cl. 222—327)

1. A holder and dispenser for printing ink comprising a container having a cylindrical body with a discharge opening at one end, a frusto-conical wall about said discharge opening, a piston for applying pressure upon the ink for discharging the same, said piston having a frusto-conical wall structure of substantially the angularity of the internal wall structure between the body of the cylinder and the dispensing opening to conform closely thereto and insure discharge of a maximum amount of ink from the container, the peripheral edge of said piston defining an angular undercut wiping edge, an externally threaded stem engaging said piston, a mounting for said container having an axial bore through which said stem is reciprocable, a nut slidably carried by said mounting and having an opening with threads extending around a portion thereof for engaging the external threads of the stem, said opening being of a size to permit disengagement of the respective threads, spring means for maintaining said threads normally in engagement, and an operating member on said stem by means of which it may be operated for expelling ink from said container, said container having a bead at its end and said mounting member having flange means for engaging said bead and retaining the parts assembled.

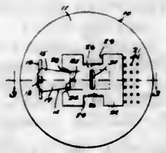


2,745,576
MEASURED DOSAGE DISPENSER
Story F. Chappell, Riverside, Conn.
Application December 20, 1952, Serial No. 327,127
5 Claims. (Cl. 222—477)



1. A pour measuring device adapted for dispensing a predetermined quantity of a viscous liquid comprising in combination a receptacle for holding said liquid and having a discharge opening at one end, a stopper member for said opening with a single aperture extending therethrough adapted for passage of liquid outwardly and air inwardly, and means adjacent said aperture forming an abutment for one end of a coil extending radially inward of the open end of said coil and having a valve seat arranged around the said aperture, an elongated tubular coil freely extending from said valve seat to the opposite end of the receptacle arranged with one end substantially surrounding and in open communication with the inner end of said aperture, and a ball in the coil, at least some of the turns of said coil being spaced apart, the open spaces between successive adjacent spaced turns being less than the diameter of the ball but in at least part of the coil being equal to the chord of a substantial arc of the circumference of said ball.

2,745,577
COMBINATION SHAKER AND SPOUT DEVICE FOR SALT SHAKERS
Clayton C. Davis, Denton, Tex.
Application October 16, 1953, Serial No. 386,479
5 Claims. (Cl. 222—480)



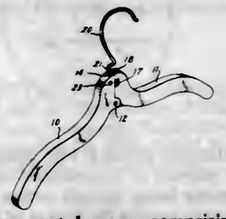
1. A combination shaker and spout device for a container of granular material having a top thereon, said top being formed with a pouring opening therethrough, a pouring spout hinged on said top movable from an outwardly extending pouring position in said opening to an overlying position on said opening in an opening closing position, said top having a plurality of shaker openings therethrough adjacent said pouring opening and spout, a shaker opening cover plate slidable on the upper surface of said top for opening and closing said shaker openings, said shaker opening cover plate engaging over an edge of said spout, remote from said shaker openings, for securing said spout in a closed position over said pouring opening in the shaker open position of said shaker opening cover plate.

2,745,578
COLLAPSIBLE GARMENT FORM
Benjamin Wexler and Marvin C. Wexler, Philadelphia, Pa.
Application January 7, 1955, Serial No. 480,449
8 Claims. (Cl. 223—68)



1. In a collapsible garment form, a frame structure comprising a longitudinally extending main section extending from the right side to the left side of the form, a plurality of auxiliary sections carried by said main section and operatively connected thereto for swinging movement between folded and expanded positions, said auxiliary sections being disposed compactly against said main section when in the former of said positions, and being operative conjointly with said main section to outline the trunk of the human body when in the latter of said positions, one of said auxiliary sections located at the upper end of the form and to the rear of said main section being provided with an outer surface conforming in shape to the upper back area of the human body, said one auxiliary section and a next adjacent underlying auxiliary section located at the waist line being conjointly operative to determine the shape of the entire back area of the form above the waist line, an elongated member carried by said main section and mounted for axial shifting movement relative thereto, said shiftable member being connected to said auxiliary sections and being operable to simultaneously swing the same between said folded and expanded positions, and spring means associated with said shiftable member and operative to urge the same into such position relative to said main section as to maintain said auxiliary sections in fully expanded condition.

2,745,579
FOLDING GARMENT HANGER
Morris Goodman, Miami Beach, Fla.
Application April 4, 1955, Serial No. 499,068
3 Claims. (Cl. 223—94)



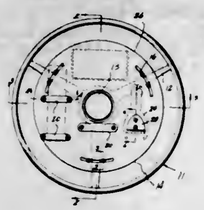
1. A folding garment hanger, comprising a pair of arms hinged together to fold downward and upward, a hook member having a shank formed with an upper hook portion that is bent downwardly and an upwardly bent lower hook portion, the upper hook portion having an upright free end, the inner end edge of one arm being provided with a recess having substantially parallel side walls, the upper end of said arm being provided with an opening that extends into the recess, said hook member being movable up and down in said recess and being constrained against rotary movement by the side walls of the recess, the free end of the lower hook portion extending outward from said recess, the second arm having a corresponding recess in its inner end edge and an opening leading upward from said recess, the free end of the lower hook portion being received in the recess of the second arm when the two arms are folded upward and in alignment with the opening into the recess of said second arm so that upon raising the hook member the end of the free end of the lower hook portion will engage in said opening to lock the two arms in upward operative position.

2,745,580
PROTECTIVE GUARD FOR WRIST WATCHES
John W. Ward, Geneva, Ala., assignor of ten per cent to Wells R. Draughon and ten per cent to G. A. Ward, both of Geneva, Ala.
Application October 15, 1951, Serial No. 251,360
2 Claims. (Cl. 224—4)



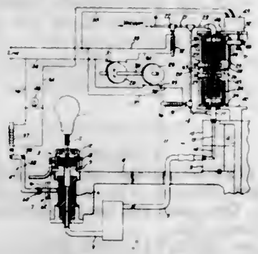
1. For use in conjunction with a wrist watch and an attached wrist encircling band, a protector of the type described comprising a resilient substantially C-shaped bracelet adapted to embrace a wearer's wrist and having spaced opposing ends, and a watch supporting rest superposed on said bracelet intermediate the ends of the latter, said rest having an intermediate portion spaced outwardly from the bracelet and a pair of end portions connected to the bracelet at circumferentially spaced points, the end portions of the bracelet being provided with transverse slots constituting passages for a watch band on the outer surface of the bracelet, said bracelet being provided at said circumferentially spaced points with transversely elongated openings, together with a pair of inturned tongues provided at the ends of said rest and removably seated in said openings.

2,745,581
BUS OPERATORS PUNCH AND TRANSFER HOLDER
Merle F. Smith, Hammond, Ind.
Application February 20, 1953, Serial No. 337,973
2 Claims. (Cl. 224—29)



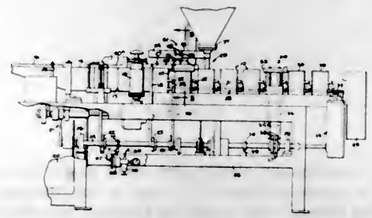
1. A transfer and punch holder comprising an annular disc member adapted to be positioned on a steering wheel, said disc member being formed with a plurality of arcuate slots spaced to overlie the spokes of the steering wheel, respective pairs of depending fingers depending from the disc member beneath said slots, respective fastening members extending through the slots and engaging the fingers to adjustably secure the fingers to the disc member in position to lockingly engage opposite sides of the spokes of the steering wheel, and a generally triangular block secured on said disc member and adapted to be engaged between the legs of a punch to hold the punch on the disc member.

2,745,582
LEAK DETECTING MEANS
George E. Ott, Willoughby, Ohio, assignor to General Electric Company, a New York corporation
Application August 26, 1953, Serial No. 376,703
2 Claims. (Cl. 226—20.4)



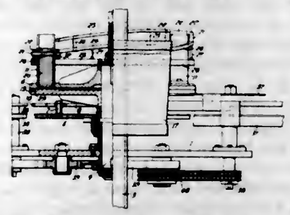
1. An exhaust machine comprising a turret carrying an exhaust port for receiving the exhaust tube of a device to be evacuated, a port valve in the exhaust connection to said port and having an operating member extending therefrom, electromagnetic actuating means for said operating member, leak detector means comprising a pair of chambers and including a pressure responsive movable structure, conduit means connecting one of said chambers with said exhaust port, another conduit connecting the other chamber with a vacuum source, and still another conduit interconnecting said chambers, a normally open first valve in the conduit leading to said vacuum source and located to isolate the vacuum source from both said chambers, a normally open second valve located in the conduit interconnecting said chambers to isolate said one chamber and the exhaust port from said other chamber, means operable to close said first and second valves substantially simultaneously, and electrical means controlled by movement of said movable structure for controlling actuation of said electromagnetic actuating means to close said port valve in the event of increased pressure in said one chamber due to a leak in the device carried by said port while both said first and second valves remain closed.

2,745,583
PACKAGING MACHINE
Charles B. Harker, Rockford, Ill., assignor to Bartelt Engineering Company, Rockford, Ill., a corporation of Illinois
Application June 16, 1952, Serial No. 293,778
8 Claims. (Cl. 226—59)



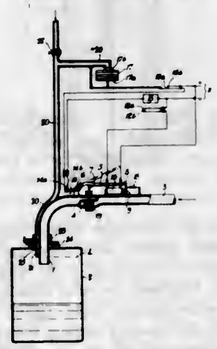
1. In a packaging machine having stations disposed successively along a predetermined path, the combination of, means for gripping and supporting a row of bags open end up in edge to edge but laterally spaced relation, each of said bags comprising front and back walls joined at their edges to points short of the top of the bag whereby to leave the upper ends of the walls free, mechanism for advancing said gripping means horizontally step by step to move said bags edgewise along said path and present said bags one by one to said stations, a dispensing device disposed at one of said stations and operable during a dwell of the bags to discharge a quantity of material into the bag at said one station, an elongated straight splitter bar longer than the width of a bag stationarily supported above said gripping means and disposed along said path in advance of said one station and between said wall ends of at least one of said bags over the full width and length of said ends whereby to hold the ends separated, said bar having an orifice opening downwardly at the lower edge of the bar and along a substantial part of the width of the bag dwelling under the orifice, and mechanism operated in timed relation to the advance of said gripping means and operable to initiate a flow of gas through said orifice and into the bag engaging said bar to spread the walls of the bag preparatory to filling at said one station.

2,745,584
FLUID FILLING MACHINE
Robert Lawson Trotter, Southall, England, assignor to Unilever Limited, Port Sunlight, England, a British company
Application October 7, 1952, Serial No. 313,384
Claims priority, application Great Britain October 9, 1951
12 Claims. (Cl. 226—96)



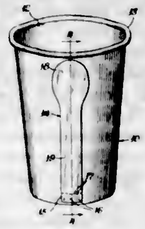
1. A method of filling or partly filling containers with fluid, which method comprises the steps of moving a cylinder round a circular path, connecting an aperture in said cylinder with a stationary supply of fluid, raising a piston in said cylinder through a predetermined stroke to cause the entry of a predetermined quantity of fluid, disconnecting said aperture from the stationary supply of fluid, bringing a container into line with said aperture, and lowering the piston while maintaining the pressure below the aperture and in the container at substantially atmospheric pressure to expel the fluid into the container through said aperture while the container and cylinder are moving together.

2,745,585
AUTOMATIC FILLING APPARATUS FOR LIQUID CONTAINERS
Herman Linders, Sheffield, England
Application January 21, 1952, Serial No. 267,390
Claims priority, application Great Britain February 20, 1951
3 Claims. (Cl. 226—127)



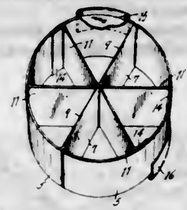
2. Apparatus for supplying liquid to a receptacle up to a predetermined level therein comprising a liquid discharge nozzle, a valve for controlling the liquid flow through the nozzle, a valve operating lever resiliently biased to the closed position, a detent engageable with the operating lever to hold it in the open position, an electromagnet for holding the detent in its engaged position, an air pressure pipe connected to said nozzle and terminating at a point corresponding to the said predetermined level, a single pneumatic relay communicating with the said pipe, a first pair of contacts adapted to be opened by the pneumatic relay on a rise in pressure in the pipe, a second pair of contacts in series with the said first pair and adapted to be closed by the valve operating lever when engaged by the detent, and an electromagnetic relay in the circuit of said contacts for controlling the energisation of the detent electromagnet when the valve operating lever is moved to the open position.

2,745,586
PAPER CUP WITH A STIRRING SPOON MADE UNITARY THEREWITH
Edwin L. Thoma, River Forest, Ill.
Application July 6, 1953, Serial No. 366,089
1 Claim. (Cl. 229—1.5)



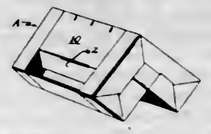
A combination paper cup and paper spoon stirrer, said paper cup having a bottom, a generally upwardly extending annular wall from said bottom, said annular wall open at its top and defined by an annular lip, said paper spoon stirrer comprising a spoon portion, a handle, and an end continuing portion from said handle, said end continuing portion and said handle having a perforate line therebetween, cement means fastening the end continuing portion of said spoon to the outer side wall of said paper cup at a position adjacent the bottom thereof, said paper spoon stirrer being vertically disposed and lying flat against the cup and having the spoon portion disposed adjacent the annular lip of the cup, and said perforate line disposed horizontally and parallel to the bottom of the cup, whereby the paper spoon stirrer may be easily torn loose from the cup by tearing on the perforate line.

2,745,587
PARTITIONED CONTAINER
Thomas Vander Lagt, Jr., Kalamazoo, Mich., assignor to Sutherland Paper Company, Kalamazoo, Mich.
Application December 29, 1952, Serial No. 328,441
3 Claims. (Cl. 229—15)



1. A partition unit comprising two complementary segmental sections formed of an integral blank and disposed side by side, each section when erected comprising a curved side wall of approximately 180° in extent, a pair of first partition members and a pair of second partition members, the outer edges of the first partition members being hingedly connected to the opposed side edges of the side wall and having their inner edges hingedly connected to the inner edges of the second partition members, said first partition members having folding scores disposed parallel to their said hinging connections to the side wall, said second partition members having sealing flaps on their outer edges secured in angularly spaced relation relative to each other to the inner side of the side wall, said second partition members being disposed in outwardly diverging relation to each other when the section is erected, the inner edges of the first partition members being in abutting relation when in erected position, end edges of the first partition members of one section having hinged connection to the corresponding end edges of first partition members of the other section, said sections being foldable on said hinge connections for said first partition members into side by side relation with the curved side walls complementing each other to provide a cylindrical outer wall and with the several partition members disposed radially relative to the outer wall of the unit.

2,745,588
DISPENSING CONTAINER
Robert M. Dunning, St. Paul, Minn., assignor to Waldorf Paper Products Corporation, St. Paul, Minn., a corporation of Minnesota
Application December 7, 1951, Serial No. 260,508
2 Claims. (Cl. 229—17)



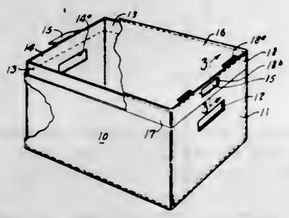
1. A container including six panels arranged in series with the end panels of the series connected together, two of

said adjoining panels being of substantially larger size than the intermediate panels therebetween, each of said larger panels being connected to a narrower panel which is parallel to the other of said larger panels, and each of said narrower panels being foldably connected to a narrower panel parallel to the larger panel to which each respective first named narrower panel is secured, the container thus formed including two right angularly extending legs, and end flaps on said wall panels foldable into overlapping relation to close the ends of the container each of said larger panels including a flap cut and formed from the body of the large panel and foldable out of the plane of the large panel.

2,745,589
CARTON

Grover J. Daly and Harold E. Lynch, Toledo, Ohio, assignors to The Ottawa River Paper Company, Toledo, Ohio, a corporation of Ohio

Application January 29, 1953, Serial No. 333,889
2 Claims. (Cl. 229—23)

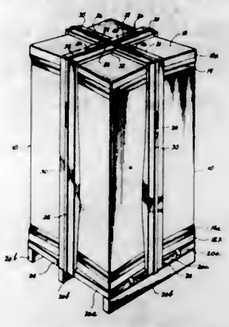


1. A substantially rectangular carton for apples and the like commodities comprising a liner and a cover tray adapted to be packed in inverted position, said tray having a top wall and side and end panels and said liner having similar but slightly smaller side and end panels and an open top and bottom, the panels of the liner telescoping snugly within corresponding panels of the tray when the tray is inverted and the top of the liner is nested downwardly therein, resilient flaps on opposite end panels of said liner adjacent the top end thereof, said flaps lying on the outer sides of said liner and having free end edges disposed towards the liner bottom, said tray being formed of a blank having a rectangular central portion constituting the top wall of the tray, side and end wings on said blank, said central portion having slits therein adjacent the end wings, said side wings having main portions contiguous and co-extensive with the central portion and tongues projecting beyond the ends thereof, said main portions being folded downwardly and constituting the side panels of the tray, said end wings each having a window therein adjacent the central portion of the blank and a cut-out in the free edge thereof outwardly of the window, said cut-outs having inner edges parallel with the ends of the central blank portion, and tabs on said free edges, said end wings each being folded downwardly from the central blank portion and thence upwardly along a foldline between the window and the inner edge of the cut-out, the inner edge of the cut-out constituting an abutment facing the top wall of the blank, said tabs projecting through said slits, said tongues being folded inwardly and engaged between the folds of the end panels, the abutments on the end panels of the tray being arranged to engage the free end edges of said flaps for locking the liner in the tray, whereby a display layer of commodities may be carefully arranged in said inverted tray and others of said commodities may then be poured into said liner, and an outer box member having a bottom wall and having side and end panels snugly fitting over the corresponding panels of said liner.

2,745,590
PORTABLE BIN

Harold A. Herzog, Mercer Island, and Clinton Eastwood, Seattle, Wash., assignors to Fisher Flouring Mills Co., Seattle, Wash., a corporation of Washington

Application January 2, 1952, Serial No. 264,600
8 Claims. (Cl. 229—23)

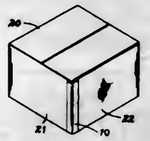


1. A portable bin structure comprising connected together paperboard panels inwardly bowed only intermediate their corners forming a rectangular body with spaced vertically disposed corners, closure means for the bin, individual substantially rigid panel bowing and reinforcing means, the bowing means being less in dimension than the dimension of the panels and having their respective inner surfaces conforming to the inward bowed portion of the respective panels and their outer surfaces being in substantially a vertical plane, and band means under tension surrounding the body in engagement with the said outer surfaces and removably securing the bowing and reinforcing means against the respective panels to maintain the inwardly bowed condition of said panels.

2,745,591
STAY TAPE

Frederick W. Holt, Jr., Troy, Ohio, assignor to The Brown-Bridge Mills Company, Inc., Troy, Ohio, a corporation of Ohio

Application December 22, 1951, Serial No. 262,964
7 Claims. (Cl. 229—49)

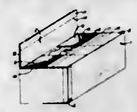


1. In a carton of the character described formed of a blank including a pair of panels adapted to be connected along adjacent edges to form a joint and to lie at substantially right angles to each other in the finished carton, means forming a reinforced connection between said panel edges comprising a pair of inner and outer layers of web material arranged in superimposed relation and extending lengthwise along said panel edges, adhesive securing said inner layer to said panels, means connecting both side edges of said layers together, said connecting means being confined to portions of said layers extending along the side edges thereof and spaced from each other laterally of said layers to leave a substantial portion of said layers along the centers thereof unconnected and defining a space therebetween, a separate layer of web material received within said space, said separate layer being not greater in width than said space and being unconnected with said pair of layers, and said outer layer being not substantially greater in width than said inner layer and being under sufficient lateral stress to effect frictional gripping of said separate layer between said inner and outer layers in the finished carton while maintaining substantially the full original strength of said outer layer.

2,745,592
EASY OPENING CORRUGATED PAPERBOARD CARTON

Clyde O. Steck, Allison Park, Pa., assignor to F. J. Kress Box Co., Pittsburgh, Pa., a corporation of Pennsylvania

Application August 13, 1953, Serial No. 373,960
2 Claims. (Cl. 229—51)



1. A corrugated paperboard carton having at its top inturned inner flaps covered by inturned outer flaps, the outer flaps having inner longitudinal edges in close proximity to each other, the lower surface of an outer flap having a slit extending across it lengthwise near its inner edge to define a marginal strip extending the full length of said flap and overlying the inner flaps, and adhesive securing the outer flaps to the inner flaps, the areas of the inner flaps beneath said strip being substantially free of adhesive, whereby in opening the carton said strip can be lifted away from the inner flaps easily and folded back onto the outer flap to provide a space between the outer flaps.

2,745,593
BAG

Charles V. Brady, St. Louis, Mo., assignor to Bemis Bro. Bag Company, St. Louis, Mo., a corporation of Missouri

Application October 2, 1952, Serial No. 312,693
6 Claims. (Cl. 229—54)



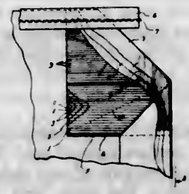
1. A bag comprising a length of tubing having gusset sides and formed at one end with a bag bottom closure, said bottom closure comprising means securing together portions of the tubing at said one end thereof, said bag being provided with a flexible handle member which is narrow relative to the width of the bag and which extends the full length of the tubing on the outside thereof in one of the gussets and which is caught at its lower end by said means in the bottom closure, the total length of the flexible member being equal to the length of the tubing and the flexible member throughout its length lying flat against the tubing, the flexible member being secured to the tubing in the region between the bottom closure and the top of the bag by securing means which fastens the flexible member in position extending heightwise of the bag but which allows for the member to be readily separated from the tubing except at the bottom closure.

2,745,594
VALVE BAG

William W. Hahn, New Hope, and Ray H. Brodt, Nazareth, Pa., assignors to Universal Paper Bag Co., New Hope, Pa., a corporation of Pennsylvania

Application March 22, 1955, Serial No. 496,036
2 Claims. (Cl. 229—62.5)

1. A valve bag comprising a multi-ply paper body having a longitudinal gusset and having a top corner folded in at the gusset to form a valve apron, said valve apron having a free edge forming the inner end of the valve opening and a parallel fold line along which it is joined to said gusset, said apron also having a center fold line extending from the mid point of said free edge to the mid point of said parallel fold line and forming at said free edge the apex of the valve, said apron also having a series of corrugations extending across said apron in



directions perpendicular to said free edge and to said parallel fold line, and said apron also having a plurality of lines of perforations extending diagonally across said apron and diagonally across said corruagtions in directions which intersect said free edge and said parallel fold line.

2,745,595
LOCK-TOP ENVELOPE

William H. Kelly, Cohoes, N. Y., assignor to Cohoes Carrybag Company, Inc., a corporation of New York

Application May 21, 1954, Serial No. 431,564
3 Claims. (Cl. 229—77)



1. An envelope comprising a front panel, a rear panel, an opening between adjacent edges on one side of the panels providing access to the interior of the envelope, a cover flap connected to the edge of the front panel adjacent the opening and folded down over the rear panel to close the opening, a stiffening member secured to the inner surface of the rear panel adjacent the opening, a second stiffening member secured to the inner surface of the cover flap and extending over the inner surface of the front panel adjacent the opening, coextensive slits cut in the front and rear panels and through the stiffening members and underlying the cover flap, said slits being concave as viewed from the opening, and a slit cut through the cover flap and the second stiffening member forming a tongue having a pair of ears which extend down and to the sides of the central portion of the tongue and overlie the sides of the concave slits in the front and rear panels while the central portion of the tongue terminates short of the central portion of the concave slits, the ears of the tongue being inserted through the sides of the slits in each of the panels to lock the cover flap in the closed position.

2,745,596
WRAPPINGS FOR CHOCOLATE, COOKIES, CANDY, AND OTHER SWEETS

Eugen H. Lorenzsonn, Meilrichstadt, Germany, assignor to Publishers Printing Co., Inc., Louisville, Ky., a corporation of Kentucky

Application November 23, 1951, Serial No. 257,730
7 Claims. (Cl. 229—87)

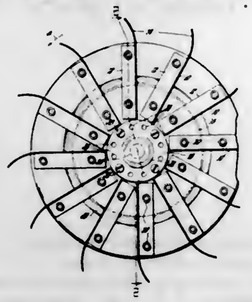
1. In a wrapping of the character described, a case open at at least one end and having a top, bottom and sides, the junctions between said top and sides being perforated, whereby said top is severable from said sides

by tearing therefrom, and having a flap extending from said open end thereof, said flap having spaced perforations, an inner member slidably contained in said case and comprising two sheets corresponding in length and width with said top and connected to each other by means of a folded part which projects from the open end of



said case, said part having perforations spaced to correspond with the perforations of said flap, and in registration with the perforations of said flap when said member is wholly within the case, and means extending through the perforations of said part and said flap for removably securing said member to said case.

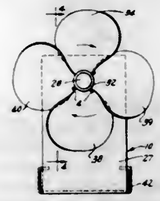
2,745,597
FAN
Donald C. Sinclair, South Hadley Falls, and Samuel Wallans, Springfield, Mass., assignors to Harvey-Whipple, Incorporated, Springfield, Mass., a corporation of Massachusetts
Application January 13, 1953, Serial No. 331,012
1 Claim. (Cl. 230—134)



A fan construction for rotation in a certain direction comprising, a hub having a shaft bore provided with a longitudinal axis, a sheet metal circular disc having a rear face secured to said hub and provided with a forward face, a plurality of elongated flat sheet metal blades having inner and outer longitudinal edges and provided with flanges secured to the inner edges in right angular relation to said blades and terminating inwardly of outer ends thereof providing outer free ends, the flanges secured to the forward face of said disc and arranged to space said blades circumferentially of the face in radial planes extending through the longitudinal axis with the free ends extending beyond the periphery of said disc and inner edges of said blades adjacent the face, the outer edges of said blades being unconnected and the outer free ends thereof outwardly of the periphery of said disc being curved forwardly in the certain direction of rotation of the fan.

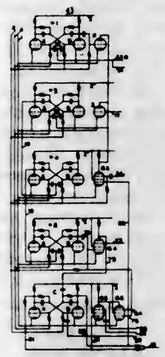
2,745,598
FAN
Antonio Conesa Martinez, Calzada de Managua, El Calvario, Havana, Cuba
Application June 15, 1953, Serial No. 361,758
2 Claims. (Cl. 230—259)

1. In a portable battery operated fan, a housing including spaced parallel vertically disposed side walls, a horizontally disposed top and bottom wall, an insulated partition arranged in said housing and defining an upper compartment and a lower compartment, a plurality of batteries supported in said lower compartment, a bar extending across the tops of said batteries, bolt and nut assemblies providing contact leads for the bar, a motor supported in the upper compartment and electrically connected to said bolt and nut assemblies, a switch positioned in said upper compartment for controlling actuation of said motor, a ground wire leading from said switch to said housing, a manually operative button connected to said switch and projecting through a wall of said housing, there being an opening in the front of said housing, a shaft extending from said motor through the opening in the front of said housing, a sleeve spaced from the end of said shaft and



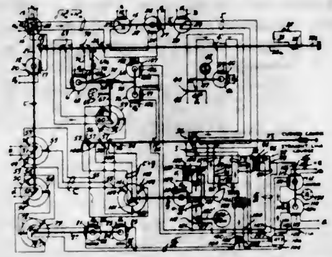
secured thereto, said sleeve being arranged exteriorly of said housing, a collar mounted on the end of said shaft and secured thereto, a first blade extending from said collar and secured to said collar, a plurality of rings rotatably and slidably mounted on said shaft and interposed between said collar and sleeve, a blade secured to each of said rings, and a lug secured to each of said last named blades for engagement with an edge of an adjacent blade for causing said blades to simultaneously rotate upon actuation of said motor, said sleeve and collar being spaced apart sufficiently to permit the blades to move to a compact position one behind the other.

2,745,599
ELECTRONIC MULTIPLIER
William Woods-Hill, Letchworth, and David T. Davis, Wandsworth Common, London, England, assignors to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application March 3, 1950, Serial No. 147,441
Claims priority, application Great Britain March 24, 1949
26 Claims. (Cl. 235—61)



18. An electronic registering device for electronically storing values in accordance with a chosen radix, means for operating said register to initially enter a value therein to a radix other than said chosen radix, means to represent the accumulated value of said initial entry and of an additional entry and means subsequently operative to invariably enter a corrective entry for modification of said accumulated value registration.

2,745,600
ELECTROMECHANICAL COMPUTING APPARATUS
Richard Y. Miner and Quentin J. Evans, New York, and Clifford F. Abt, Long Island City, N. Y., assignors to American Bosch Arma Corporation, a corporation of New York
Application June 28, 1950, Serial No. 170,846
20 Claims. (Cl. 235—61.5)



1. In electromechanical computing apparatus, the combination of a transformer having a pair of primary windings severally energized by voltages in accordance with corresponding signal inputs and a pair of secondary windings angularly movable in the field of said primary windings for inducing a corresponding voltage in said secondary windings in accordance with their angular positions in said field, motive means energized by the voltage induced in one of said secondary windings, operative connections between said motive means and said secondary windings for angularly moving said one secondary winding to non-inductive position in said field to thereby deenergize said motive means, second motive means having a control field winding, a potentiometer having a rotor winding and a stator winding energized by a signal input, series connections between the other of said secondary windings and said control field winding and said potentiometer rotor winding, a second potentiometer having an energized stator winding and a rotor winding, operative connections between said second motive means and said first and second potentiometer rotor windings for rotating the same, third motive means having a control field winding, a third potentiometer having a winding and a cooperating movable element driven by said third motive means, series connections between the outputs of said second and third potentiometers and the control winding of said third motive means to energize the same, and indicating means driven by said third motive means.

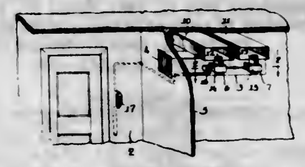
2,745,601
KEY-RESPONSIVE CALCULATING MACHINE
Roland G. Fowler, Newfield, and Nelson R. Frieberg and Oscar F. Larsen, Ithaca, N. Y., assignors to The National Cash Register Company, Dayton, Ohio, a corporation of Maryland
Application July 20, 1951, Serial No. 237,758
9 Claims. (Cl. 235—62)



1. In a calculating machine, the combination of a plurality of denominational orders of differentially-set-

table means; a power means for giving the differentially-settable means excursions of movements in cycles; a plurality of rows of keys, one row of keys for controlling the extent of movement of each differentially-settable means; a light spring for maintaining each key in normal position, said springs acting to provide a light resistance to the depression of the keys into first positions wherein the keys control the differential movements of the settable means associated therewith; a latch for each row of keys; a spring for urging each latch into engagement with its associated row of keys; cam means on each key for camming the associated latch against the tension of the last-named spring; a notch in each key with which the latch is engaged when a key is moved into said first position; a slide associated with each row of keys and movable by any key of a row of keys when the key is moved past said first position into a fully-depressed position; a spring biased to urge the slides against the keys of their adjacent rows, said last named spring being heavier than said light springs to provide for a sensibly-perceptible heavier resistance to depression of a key past said first position; a common member actuated by any one of said slides when any key of any row of keys is moved past the initial position into said fully-depressed position; a normally-open switch in a circuit for controlling the power means; and means movable by the common member to close said switch as any one of said keys is moved into fully-depressed position to render the power means active when the key reaches the fully-depressed position.

2,745,602
AUTOMATIC AIR REGULATING CONTROL DEVICE
William L. Hand, Hammond, Ind.
Application March 16, 1955, Serial No. 494,779
11 Claims. (Cl. 236—13)

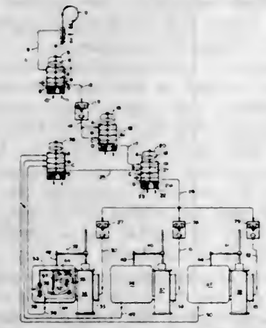


5. An automatic air control system comprising a warm air feeder duct, a cold air feeder duct, a branch duct communicating with each of said feeder ducts through separate interceptor units, each of said interceptor units including a tube and a set of rings movable into and retractible from one of said feeder ducts, said rings being curved inwardly to deflect and turn air from said feeder ducts through said tubes, and a thermostatically controlled motor for automatically moving the tube and rings of each interceptor unit simultaneously in opposite directions transversely relative to said feeder ducts upon variations between the thermostat setting and the temperature of room in which the thermostat is located to increase the diversion of air from one of said ducts and proportionally decrease the diversion of air from said other duct to maintain the total air diverted from said feeder ducts at a constant volume and to regulate the air temperature in the room in which the thermostat is located.

2,745,603
BOILER CONTROL SYSTEM
Jack E. Wilhelm, Pittsburgh, Pa., assignor to Bailey Meter Company, a corporation of Delaware
Application March 29, 1952, Serial No. 279,490
4 Claims. (Cl. 236—26)

1. A control system for the pulverized coal supply of a vapor generator having multiple pulverizers with plural

feeders for each pulverizer including, a control drive mechanism for each pulverizer positioned by fluid pressure, means for each control drive having a fluid pressure established therein representative of the position of the control drive mechanism, a plurality of multi-chambered relays for adding the control drive position fluid pressures, a valve in the fluid pressure conduit to each relay chamber under the control of a feeder, a relay adding the outputs



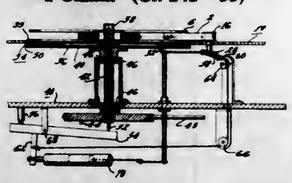
of the said multi-chamber relays and forming a single fluid pressure representative of the number of feeders in operation, and a balance relay for opposing the said single fluid pressure with a fluid pressure representative of demand upon the vapor generator and producing a control fluid pressure output which is equally applied to the control drive mechanisms to set the total pulverizer output until the demand of the vapor generator is satisfied.

2,745,604

TAPE TENSION WINDING CONTROL

Earl E. Masterson, Palmyra, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application May 11, 1951, Serial No. 225,818
The terminal 15 years of the term of the patent to be granted has been disclaimed
1 Claim. (Cl. 242—55)



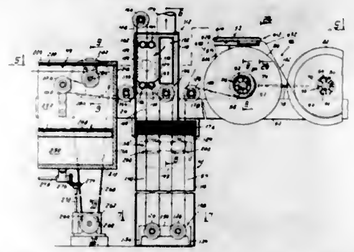
A reeling system for tape reeling apparatus of the type wherein a flexible tape is adapted to be moved from a storage reel to a take-up reel, said system comprising means including a variable-friction clutch for driving the storage reel, cconstant speed driving means for driving said tape, means responsive to variations in the tension of the tape between said constant speed means and said storage reel for varying the frictional engagement of said clutch whereby the tension in said tape between said constant speed driving means and said storage reel is maintained substantially constant, means including a second variable-friction clutch for driving the take-up reel, and means responsive to variations in the tension of said tape between said constant speed driving means and said take-up reel for varying the frictional engagement of said second clutch whereby the tension in said tape between said constant speed means and said take-up reel is maintained substantially constant, said means for varying the frictional engagement of each of said clutches including means operable as a function of the amplitude of the change in tension of said tape, and further means operable as a function of the rate of change in the tension of said tape, said last two means being mechanically connected in shunt with respect to each other.

2,745,605

PRODUCTION OF MAGNETIC SOUND TAPE

William C. Speed, Riverside, and James J. Dwyer, Stamford, Conn., assignors to Audio Devices, Inc., New York, N. Y., a corporation of New York

Continuation of applications Serial Nos. 264,181 and 264,182, December 29, 1951. This application December 29, 1951, Serial No. 264,189
1 Claim. (Cl. 242—55)



In the method of producing blank magnetic sound recording tape wherein an elongated piece of tape base is unwound from a roll of the same in an unwinding zone, passed while under tension through a coating zone and a drying zone and wound into a roll in a winding zone and the forward end of a subsequent roll of tape base to be processed is spliced to the tail end of the roll of tape base being processed before such tail end reaches the coating zone; the improvement which comprises passing the unwound tape base at a continuous normal rate of speed through the coating and drying zones, accumulating a predetermined length of unwound advancing slack tape base wholly by gravity in a slack-producing zone in advance of the coating zone, the slack being accumulated at least in part as a continuously forming and depending generally U-shaped loop of given maximum height, with the tops of the open legs of the loop in fixed locations but with the bottom closed leg portion of the loop free to rise and fall as required, continuing the unwinding of the roll of tape base until its tail end leaves the roll, securing an adhesive band to the forward end of the roll of tape base next to be processed, cutting off sharply the forward tip portion of the combined adhesive band and tape base secured thereto, whereby a tight joint between the two that will slide easily without damage thereto is obtained in the line of cutting, securing the tail end of the roll of tape base being processed to the opposite side of the adhesive band, taking up simultaneously sufficient accumulated tape base slack in the slack-producing zone from the first roll to permit the advancing tape base from that roll to continue through the coating and drying zones at its normal speed of travel, the height of the U-shaped loop being reduced as the slack is taken up and the bottom portion of the loop rises during the splicing operation, unwinding the second roll of tape base in the unwinding zone after the splicing operation in completed, and accelerating temporarily the rate of unwinding of the second roll until the bottom portion of the loop falls to its former position and the loop as a whole is restored to its normal height in the slack-producing zone in readiness for splicing the tail end of the second roll of tape base to the forward end of the next roll of tape base in the series similarly to be processed.

2,745,606

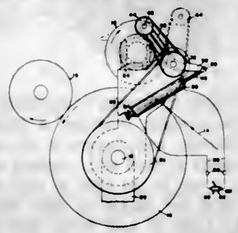
PAPER MACHINE REEL STARTER

Foster D. McCormack, International Falls, Minn., assignor to Minnesota and Ontario Paper Company, Minneapolis, Minn.

Application January 15, 1954, Serial No. 404,277
2 Claims. (Cl. 242—65)

1. A paper winding apparatus comprising a driving drum, a means for rotating the driving drum, a rubber

covered winding roll normally disposed in contact with the driving drum so as to be driven thereby, means including vertically extending members attached to the winding apparatus frame, a sloping face block carried by said vertically extending members, said block initially supporting the said rubber covered winding roll out of contact with the driving drum, means for bringing the rubber covered roll to about the speed of the driving drum, said means including a sheave mounted on the driving drum, a second sheave supported by the vertically extending member and mounted above the first mentioned sheave



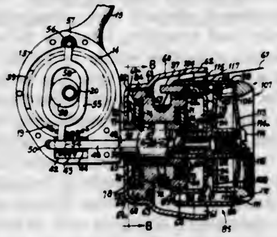
and spaced to one side of a line extending perpendicular of the first sheave, a shaft carrying the second mentioned sheave, an arm having one end shorter than the other and pivotally mounted on said shaft, an adjustable sheave operatively attached to said arm, a sheave mounted on said sheave support, a fluid operated piston hingedly connected to the short end of said arm and the other end of said arm pivotally mounted on one of the vertically extending members, belt means rotating the sheaves and the said rubber covered winding roll and means for operating the fluid piston.

2,745,607

SPINNING TYPE FISHING REEL

John K. Taggart and James C. Taggart, Indianapolis, Ind.

Application April 9, 1954, Serial No. 422,026
15 Claims. (Cl. 242—84.4)



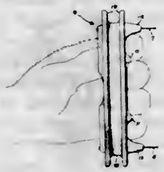
1. In a fishing reel of the class described; the combination of a gear case having a forwardly projecting support; a driven shaft extending longitudinally through said support; a line-receiving spool rotatably mounted on said support and slidably movable longitudinally therealong; crank operated means for simultaneously driving said shaft and reciprocating said spool; a cylindrical, flanged flyer having a reentrant peripheral channeled portion forming internally thereof a recess for receiving said spool; said flyer being fixed to said shaft forwardly of and adjacent said spool; a pickup member disposed longitudinally within said channeled portion adjacent said spool-receiving recess; spring means normally urging said pickup member from a retracted position within said channeled portion into a projected position overlying the line-receiving portion of said spool; latch means associated with said pickup member operable to latch said member in said retracted position; a fingertip operable annular control member mounted on said flyer forwardly thereof for independent, limited, coplanar rotation relative thereto; said control member being operatively connected to said pickup member to move said pickup member into said retracted position; and a portion of said latch means projecting into said spool recess and being engageable by said spool during its reciprocatory movement to release said latch means from said flyer and thereby permit said pickup member to move into said projected position.

2,745,608

CONTROL HANDLE WITH ENCOMPASSING STORAGE GROOVE

Neville E. Walker, Portland, Oreg., assignor to American Junior Aircraft Company, Portland, Oreg., a corporation of Oregon

Application May 2, 1952, Serial No. 285,661
4 Claims. (Cl. 242—97)



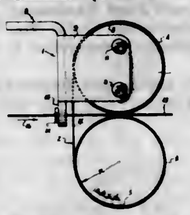
1. A control handle, comprising a hoop-like body member having a single integral spoke extending across a diameter thereof and defining a handle member, said handle member being contoured to define a hand grip and the margins thereof being spaced from the inner surface of the encompassing body member to accommodate the hand and fingers of an operator about the said hand grip, a mated pair of snouts protruding laterally to the plane of said body member one from each end of said handle member and together defining spaced control points, each of said snouts having an elongated tunnel which extends through said handle member and terminates in an enlarged recess, each of said tunnels carrying an elongated control wire having a terminal bight secured within the corresponding enlarged recess.

2,745,609

CONSTANT FORCE YARN TENSIONING MEANS

Basil Lermont, New York, N. Y.

Application October 14, 1953, Serial No. 385,905
15 Claims. (Cl. 242—149)



1. A yarn tensioning device, comprising: a spring having the ends thereof wound in opposite directions to form reversely wound coils having outermost convolutions inherently forcibly urged toward each other; a support; means mounting said coils on said support; and means positioned to guide a yarn into place between said outermost convolutions.

2,745,610

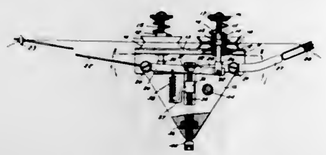
THREAD TENSION REGULATING MEANS FOR REELING MACHINES AND THE LIKE

Juan Vilá Reyes, Barcelona, Spain

Application May 3, 1954, Serial No. 427,122
Claims priority, application Spain May 8, 1953
4 Claims. (Cl. 242—150)

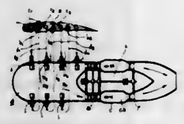
1. A thread tension regulating mechanism for use in reeling and like machines comprising a frame, two sets

of tensioning devices carried by the frame, each set including a sleeve mounted in the frame, a pair of discs loosely carried on each sleeve for receiving the thread therebetween, an axially movable spindle within each sleeve extending through both discs with a portion projecting above the upper disc, adjustable regulating means on the projecting portion of each disc, a spring surrounding each spindle between the regulating means and the upper disc to independently regulate each tension device, a pair of rocking levers pivotally mounted on the frame, one of the levers being located at the inlet side of the machine, a thread eye at the distal end of such lever, a pivotal connection between such lever and the lower end of the spindle at the outlet side of the machine, the other



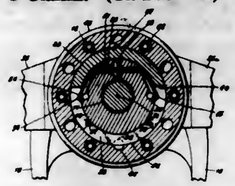
lever being located at the outlet side of the machine, a thread eye at the distal end of the other lever, a pivot connection between the other lever and the lower end of the spindle at the inlet side of the machine, the inner portions of the levers crossing each other, means defining a slot in the inner portion of one of the levers and a pin on the other lever extending through the slot to connect the levers together and spring means connected to one of the levers serving to oppose the action of the springs surrounding the spindles suchwise that the over tension of the thread in either the inlet or outlet thread eye causes the displacement of the corresponding lever and the partial release of the springs of both tensioning devices.

2,745,611
JET PROPULSION AND BOUNDARY LAYER CONTROL SYSTEM FOR AIRCRAFT
Marcel Henri Louis Sédille, Paris, France, assignor to Societe Rateau (Societe Anonyme), Paris, France, a company of France, and René Anxionnaz, Paris, France
Continuation of application Serial No. 745,575, May 2, 1947. This application November 3, 1952, Serial No. 318,478
Claims priority, application France May 29, 1946
4 Claims. (Cl. 244—15)



1. An aircraft comprising an air-consuming engine used for propelling said aircraft and having an air-intake side, wing surfaces in contact with atmospheric air and having thereon a plurality of spanwise suction slots for sucking up the boundary layer of atmospheric air said suction slots being staged at different levels between the leading edge and the trailing edge of said wing surfaces, an air-collecting chamber connected with said air-intake side and sealed from atmosphere, a plurality of channels connecting said slots with said chamber, and individual air compressors in said channels, one air compressor being disposed in each channel, said air compressors being adapted to discharge into said chamber.

2,745,612
STEERABLE, CASTERABLE AIRPLANE WHEEL MOUNTING
Charles D. Cupp, Lancaster, N. Y., assignor to Scott Aviation Corporation, Lancaster, N. Y.
Application July 19, 1954, Serial No. 444,000
5 Claims. (Cl. 244—50)



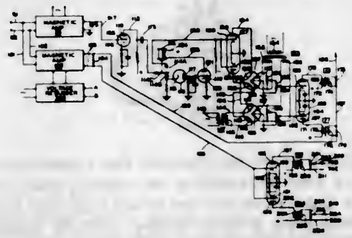
4. An airplane wheel mounting comprising: a bracket connected with the airplane fuselage; a fork having a wheel journaled thereon and having a slit and a hole formed perpendicularly of said slit; a spring member arranged in said slit; a pin in the hole of said fork having a length smaller than the length of said hole so as to permit peening the ends of said hole; and a rotatable steering collar journaled on said fork and having notches adapted to engage with the ends of said spring member.

2,745,613
GUST LOAD ALLEVIATING DEVICE
Edward Harpoothian and William Bailey Oswald, Los Angeles, Calif., assignors to Douglas Aircraft Company, Inc., Santa Monica, Calif.
Application December 10, 1951, Serial No. 260,821
19 Claims. (Cl. 244—76)



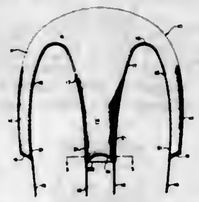
1. An aircraft airload reducing device, comprising: a substantially central aircraft body construction; a wing carried thereby and extending laterally therefrom; wing-bracing structure extending within said wing and secured thereto; said wing and bracing structure being sufficiently flexible to be gust-deflected about chordwise and spanwise axes in response to gusts thereon resulting in respective extensions and contractions of the upper and lower surfaces of said wing and bracing structure; elongate, mainly spanwise-extending, relatively inextensible, wing-deflection sensing means consisting entirely of a mechanical linkage operatively engaging said bracing structure, the one terminal-region of said sensing means being immobilized with respect to said structure and wing and the opposite end of said sensing means being free to move with respect to said structure in response to gust loads on the wing; movable lift-varying means movably carried by the wing; and force-transmitting means extending between said free opposite end of said sensing means and said lift-varying means and having opposite terminals respectively connected operatively to said free end and to said lift-varying means; said sensing means constituting the sole means of producing the motive force in the device to actuate said lift-varying means in response to wing-deformations, and transmitting the forces generated by the relative displacement of said sensing means and said bracing structure and by the fibre stresses generated in said sensing means by said extensions and contractions of said bracing means directly through said force-transmitting means to said lift-varying means for moving said lift-varying means, directly and substantially immediately in proportional response to said deflections, in senses and magnitudes adequate to effect aerodynamic corrections of said deflections.

2,745,614
AIRCRAFT CONTROL SYSTEM
Alfred Bennett, New York, N. Y., and Corles M. Perkins, Anoka, Minn., assignors to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application August 23, 1952, Serial No. 306,022
10 Claims. (Cl. 244—77)



1. In an automatic steering system for a vehicle having a movable control surface, a servomotor for operating said surface, reference means on said vehicle for generating a reference signal corresponding to the extent of angular displacement of the vehicle from a predetermined position, first means responsive to said reference signal for developing a first control signal for operating said servomotor, second means responsive to said reference signal for developing a second control signal for operating said servomotor, the magnitude of said second signal being determined by the time of persistence of said reference signal, and control means connected for operation by said reference signal for rendering said second means ineffective when said reference signal is of one value and rendering it effective when said reference signal is another value.

2,745,615
PARACHUTE
Gordon L. Fogal, Silver Spring, Md.
Application August 31, 1951, Serial No. 244,680
3 Claims. (Cl. 244—145)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A parachute for supporting a load and comprising, in combination, a canopy for said parachute having at the periphery thereof a plurality of curved quadrantal cut-out portions forming therebetween a plurality of extended leg members, said leg members being of substantial width and terminating in a hem which is substantially normal to the curve of said adjacent cut out portion at the outer extremity thereof, tunneled hems stitched around the periphery of said cut-out portions and extending from the outer extremity of each of said leg members to the outer extremity of the next adjacent leg member, shroud lines passing through each of said tunneled hems respectively and extending beyond said leg members to a parachute load, stitching for securing said shroud lines against movement within said hems, transversely disposed pocket bands secured at the ends thereof to the curved portion of said leg members at the outer extremities thereof, said pocket bands being of a length shorter than the width of the extremities of said leg members whereby the leg members are inflated during the descent of the parachute.

2,745,616
JAR HOLDER
Alviro Gomes, Jamaica, N. Y.
Application July 6, 1953, Serial No. 366,315
1 Claim. (Cl. 248—138)



A holder for a bottle or the like comprising an annular base, opposed standards on the base along the center thereof, and being formed with slotted portions at their outer ends providing central studs in said slotted portions, nose portions at the sides of the slotted portions, said nose portions having camming inner and outer faces and seats formed in the slotted portions at the inner ends of the inner camming faces of the nose portions, a frame tiltably mounted on said standards including upper and lower rings, U-shaped bars connecting said rings with their horizontal portions crossing to form a seat for a bottle inserted in the frame, pairs of closely spaced trunnion pins carried by the outer ring and seated in the seats in the slotted portions, and elongated spring fingers secured to said outer ring adjacent their outer ends, the remaining portions of said fingers being unattached and curving inwardly of the rings along the U-shaped bars for gripping a bottle inserted in the frame, said pins being adapted to coact with the camming faces on said nose portions upon swinging movement of the frame, for limiting such swinging movement.

2,745,617
DISPLAY STAND
Richard E. Paige, New York, N. Y.
Application June 7, 1952, Serial No. 292,268
7 Claims. (Cl. 248—174)

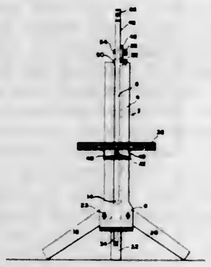


1. A display stand having a tray with sides and a base with sides below the tray, the sides of the tray being directly above the respective sides of the base, a pair of sections one above the other uniting each side of the base along its upper edge to the lower edge of the adjacent side of the tray, said sections having junctions with each other between the tray and the base, the lower sections extending upward and inward from the base and the upper sections inward and upward towards the lower sections, the lower sections being higher than the upper sections, and a bottom in the tray resting on the junctions of said upper and lower sections, said sections forming at said junction a dihedral angle, the apex of which forms a supporting rib for the tray along the highest portions of both said sections.

2,745,618
ARTIST'S EASEL
Oliver A. Verner, New Orleans, La.
Application August 21, 1953, Serial No. 375,682
6 Claims. (Cl. 248—197)

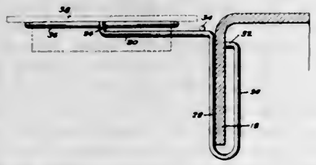
1. An easel comprising, in combination; an elongate front support adapted for normally upright disposition and

including a front strip having a longitudinal slot therein, and a rear strip rigidly affixed to the rear of the front strip; a pair of relatively short legs; means pivotally connecting said short legs on the lower end of the front strip so as to swing between a downwardly and outwardly extended position and a retracted position in which said legs lie generally parallel to the front strip; a rear prop leg having a longitudinal slot therein, said slot being adapted to accommodate the greater part of the rear strip; means pivotally connecting the upper end of said prop leg to the upper portion of said rear strip whereby said prop leg may be swung from a downwardly and rearwardly extended position to a retracted position nesting



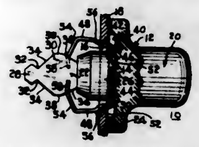
over said rear strip with said rear strip fitting in said slot; a lower article support comprising a shelf; means adjustably supporting said shelf on said front strip; an upper article support comprising a rod adapted to engage in the slot on the front strip; means supporting said rod on the upper end of said rear strip in alignment with the slot in the front strip, said last-named means supporting said rod for angular and lengthwise adjustment of the rod whereby said rod may be swung from a normal working position in which one end extends forwardly of said front support to a retracted position in which it nests in the slot in the front strip; and article engaging means on the forward end of said rod for cooperation with the lower article support.

2,745,619
TRAY HOLDER
Robert J. Osborne, Chicago, Ill.
Application December 9, 1952, Serial No. 324,904
2 Claims. (Cl. 248—226)



1. A tray support comprising a pair of similar spaced parallel arms, said arms each having a horizontal portion and a downwardly depending leg, the forward end of said horizontal portion terminating in a short upright extension, the leg being bent back upon itself and extended generally up to the vicinity of the horizontal portion of said arm and terminating in a short right angle bend directed toward the arm, and a horizontally disposed support ring connected to and above the forward ends of both of said arms, said arms being formed of spring wire so that a vertical wall may be frictionally grasped between the vertical leg and its bent back parallel portion.

2,745,620
FASTENING DEVICE
Howard J. Murphy, Lynnfield, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Boston, Mass., a corporation of Delaware
Application August 30, 1952, Serial No. 307,238
2 Claims. (Cl. 248—239)



1. A fastening device for assembly into a panel opening, comprising a stud for entering the opening and a locking member disposed on the end of the stud, said locking member comprising a base having laterally extending wings to bear against one side of the panel, an aperture in the base freely receiving the stud, and a pair of spring arms extending from the base to enter the opening, said arms having free end portions extending toward each other and gripping the stud on opposite sides, said arms having outwardly projecting shoulders disposed near the base, said stud having a flange spaced from the end, recessed portions near the end receiving the ends of the arms, an enlarged arm-spreading portion disposed between the recessed portions and the flange, shoulder portions disposed on the stud between the enlarged arm-spreading portion and the flange, and a shank disposed adjacent the flange which substantially conforms to the shape and size of the aperture in the base, whereby when said stud and attaching member are inserted into the opening until the wings of the base bear against the panel, further movement of the stud into the opening causes the stud to move axially through the locking member so that said shank portion enters the aperture and said arms are spread on the enlarged portion to seat behind the shoulders on the stud thereby forcing the shoulders on the arms into locking engagement behind the panel.

2,745,621
SWING SUSPENSION DEVICE
Earl D. Boisselier, Glen Ellyn, Ill., assignor to Sears, Roebuck and Co., Chicago, Ill., a corporation of New York
Application August 5, 1950, Serial No. 177,944
5 Claims. (Cl. 248—340)



1. Swing suspension devices of the character described, comprising in combination a tubular horizontal support having a pair of spaced apertures in the upper portion thereof, and a bearing member comprising a continuous loop-form tenuous element encircling said support, said bearing member having terminal portions extending vertically through said apertures and having portions adjoining said terminal portions bent at substantially right angles thereto and engaging the upper face of said support.

2,745,622
IRON PIT PROPS
Willi Zindel, Bochum, Germany
Application February 12, 1953, Serial No. 336,603
Claims priority, application Germany February 26, 1952
7 Claims. (Cl. 248—354)

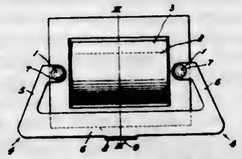
1. A collapsible pit prop comprising a tubular upper portion, a cruciform lower portion telescoping within

the upper portion, a clamping lock connecting said portions, said lock consisting of a plurality of wedges tapering inwardly in a direction toward the upper prop portion; said wedges together forming a segmental frusto-



conical body, and a frusto-conical annular sleeve slidably fitting said segmental body, the lower edge of the upper prop portion resting directly upon the upper edge of said sleeve, thereby to exert pressure through the sleeve and wedges to the lower prop portion.

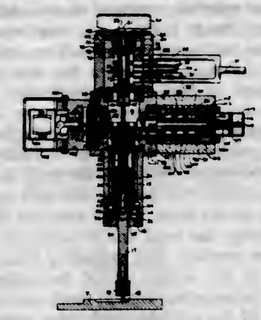
2,745,623
APPARATUS COMPRISING A FASTENING DEVICE
Jan Bergmans and Engelbert Wiegman van Heuven, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application April 18, 1951, Serial No. 221,696
Claims priority, application Netherlands May 31, 1950
2 Claims. (Cl. 248—358)



1. The combination of electrical apparatus having an elongated member subject to self-energized oppositely-directed longitudinal vibrations and a fastening device securing said apparatus to a supporting body and spaced therefrom, said device comprising a substantially U-shaped member having a longitudinally-extending base and two upwardly extending straight limbs of substantially equal length each forming an angle of less than 90° with the base, the planes of said limbs converging toward each other to define at the intersection of said planes an angle in excess of 20°, means securing the elongated member at portions thereof subject to oppositely-directed longitudinal vibrations to and between the extremities of said limbs, and means securing a central portion only of said base to said supporting body, the rigidity of the limbs and the base and the angle between the limbs being such that the central portion of said base is substantially motionless when said apparatus is energized.

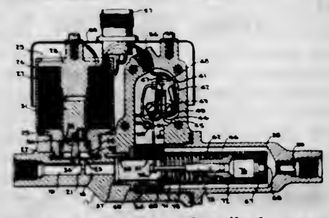
2,745,624
THREE DIMENSION TRACER
Manuel Turchan, Dearborn, Mich.
Application February 25, 1953, Serial No. 338,840
15 Claims. (Cl. 251—3)

1. A control means for a pair of horizontally disposed spring biased first valves movable in a tracer housing at right angles to each other and for a third spring biased valve movable in said housing at right angles to the axial plane of the first valves; comprising a pattern engaging spindle having an elongated bore at one end universally mounted intermediate its ends within the lower end of said housing and projecting therefrom, an annular valve operator on the upper end of said spindle responsive to tilting movements of the spindle, and an upright valve control rod loosely mounted at one end



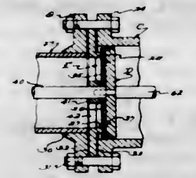
within the bore of said spindle and projecting thereabove the lower end of said spindle being manually traversable over the surface of a pattern.

2,745,625
REPEATED ACTION INJECTOR DEVICE
Harry T. Booth, Dayton, Ohio, assignor to United Aircraft Products, Inc., Dayton, Ohio, a corporation of Ohio
Application March 27, 1952, Serial No. 278,979
7 Claims. (Cl. 251—13)



1. An injector of the class described, comprising a housing to be interposed in a liquid flowing conduit and presenting an inlet and an outlet, means for alternatively opening and closing said housing to the flow of liquid therethrough, means defining a primary flow stream through said housing and a secondary flow stream in said housing, means for producing a pressure drop in the liquid flowing through said primary stream, means in said secondary stream movable in response to creation of said pressure drop from a retracted to an extended position, a spring for returning said movable means to retracted position, and means operable by said movable means only as it reaches its extended and retracted positions for controlling said alternatively opening and closing means.

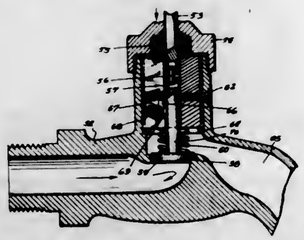
2,745,626
PILOT CONTROLLED VALVE FOR SUB-ATMOSPHERIC AND OTHER LOW PRESSURES
Keith E. Wilson, Burbank, Calif., assignor to Hieatt Engineering Co., Los Angeles, Calif., a corporation of California
Application September 7, 1950, Serial No. 183,614
6 Claims. (Cl. 251—25)



1. Apparatus of the character described including, a flanged T-fitting establishing a body with an elongate

main portion and a lateral extension open with the body intermediate the ends of the main portion of the body, an annular seat member arranged at one end of the main portion, a duct flange holding the seat member against said end of the body portion, a head on and closing the other end of the main portion, a flat disc shaped valve member adapted to operate longitudinally in the main portion of the body past the said extension and into and out of engagement with the seat, a cylinder carried by and projecting from the head, the cylinder having its inner end in communication with the body, a piston operating in the cylinder and having one side subject to the same pressure as the body, a rod attached to the piston, extending through the head and attached to the valve, a continuous low pressure line extending from the interior of the body to the outer end of the cylinder, a high pressure line independent of the body and extending to the outer end of the cylinder, and valve mean selectively controlling flow between the said lines and the cylinder outward of the piston.

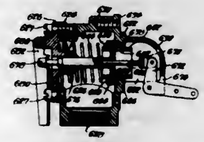
2,745,627
MANUAL AND AUTOMATIC VALVES
Robert N. Winfree, Lynchburg, Va., assignor to Kel-Win Manufacturing Company, Inc., Richmond, Va., a corporation of Virginia
Original application May 31, 1950, Serial No. 165,284, now Patent No. 2,658,716, dated November 16, 1953. Divided and this application July 1, 1953, Serial No. 365,487
3 Claims. (Cl. 251—75)



1. A valve for fluid systems comprising a casing, a closure disk and stem in said casing, said disk cooperating with a seat portion in the casing, manual means mounted on the casing including a stem cooperating with the stem of the closure disk for actuating the closure disk by means of its stem to open the valve and to partially close the valve down to where a slight opening still exists between the disk and the seat, a pin interconnecting the stems to permit play relative to said stems in the longitudinal direction, means in the casing and on the first-mentioned valve stem to automatically cause a final free closing of the valve after the manual partial closing operation has been completed, said last-mentioned means including a spring on the first-mentioned stem and a cam on the first-mentioned stem and a second cam resiliently mounted in the casing and both cams cooperating with each other to permit a free final closing of the closure disk aided by the spring and a plug member secured in the casing and having a perforation therethrough through which both stems project and also having a cut-away portion in which the second-mentioned cam is secured.

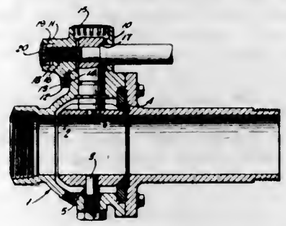
2,745,628
VALVE
Oscar F. Carlson, Evanston, Ill.
Application November 17, 1952, Serial No. 320,845
2 Claims. (Cl. 251—83)

1. A valve comprising body means having an inlet and an outlet and defining a valve port between said inlet and said outlet, said body means defining an inclined valve seat surrounding said valve port, a valve member slidably mounted within said body means and having a tubular portion slidably guided within said valve port, said valve means having a radial face opposing said inclined valve seat, said valve member having an annular groove in said face, a resilient O-ring seal positioned in said annular groove and including a portion extending axially outward of said groove toward said valve seat, whereby said O-ring is adapted to provide a resilient seal between said valve member and said valve seat, to close off said port, said valve seat with respect to the axially extending portion of said O-ring defining an inclined surface biasing said O-ring in a generally radial direction upon engagement of said O-ring with said valve seat, whereby said O-ring is flexed radially upon each opening and closing of the valve, said valve member having a stem extending



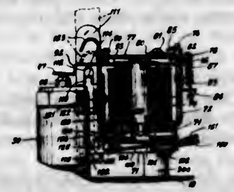
from the surface thereof opposite said face of said member, said body means having a portion providing a bore within which said valve stem is slidably guided, resilient means confined between said body means and said valve member normally urging said valve member into engagement with said valve seat, said stem extending through said body means to the exterior thereof and including a head to the exterior of said body means, and an actuating lever pivotally mounted on said body means to the exterior thereof and having an aperture therein through which said stem freely extends, said lever upon movement away from said body member being adapted to engage said head on said valve stem to move said valve member away from said valve seat, said valve member being adapted to be actuated by fluid force exerted on the said face thereof independently of said lever.

2,745,629
VALVE LOCKING MECHANISM
Edwin B. Watson, Ithaca, N. Y., assignor, by mesne assignments, to American La France Corporation, Elmira, N. Y., a corporation of Delaware
Application December 3, 1954, Serial No. 472,903
3 Claims. (Cl. 251—96)



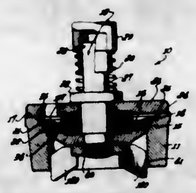
1. Valve locking mechanism comprising the combination with a housing, a rotary valve therein and a valve stem protruding from the housing, of an actuating handle extending transversely through and rotatably mounted in the protruding valve stem, means for limiting axial movement of the handle, the latter having a threaded end portion projecting beyond the stem and a locking shoe engaged with said threaded end portion for movement toward the valve stem in response to rotation of the handle in one direction about its own axis, the valve housing having an arcuate portion concentric with the stem axis and located for engagement by the locking shoe in different valve setting dispositions of the actuating handle.

2,745,630
CONTROL MEANS FOR SOLENOID ACTUATING DEVICE
Claude M. Garner, Clayton, Mo., assignor to Missouri Automatic Control Corporation, St. Louis, Mo., a corporation of Missouri
Original application June 19, 1946, Serial No. 677,830. Divided and this application March 15, 1952, Serial No. 276,782
8 Claims. (Cl. 251—130)



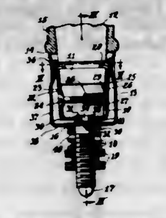
1. A valve operating means including a coil, an armature wholly situated exteriorly of the coil and movable upon energization of the coil, an operating member adapted to be removed by the armature, manual means to operate said operating member including a first member movable from a released position into position to be engaged by the armature and returned to released position upon energization of the coil, a second member engageable with the operating member to move the same, means connecting the two members so that when the first member is moved to its position to be engaged by the armature the second member will be moved to actuate the operating member, and means releasably holding the manual means in said position, the coil upon energization being adapted to actuate the armature to engage the first member, return the same to its released position, and to release the second member.

2,745,631
OIL WELL MUD PUMP VALVE
Roy K. Shelman, Compton, Calif., assignor to MacClatchie Manufacturing Co., Compton, Calif., a corporation of California
Application October 23, 1952, Serial No. 316,347
1 Claim. (Cl. 251—175)



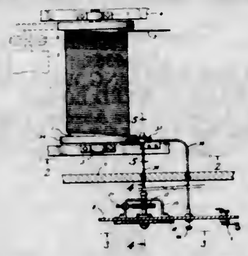
A reciprocating valve comprising: a rigid valve seat having an annular concavo-conoidal sealing surface and an annular substantially flat stop surface offset both radially and axially outwardly of said sealing surface; and a reciprocable valve unit seatable on said seat, said unit comprising a stem member, means defining a rigid circumferential flange fixed on said stem member against outward movement relative thereto and having an annular stop surface opposed and complementary to said seat stop surface for abutment thereagainst in the closed position of the valve, and a yielding pressure-deformable sealing ring coaxially mounted on said stem member inwardly of said flange and having an inner peripheral portion fixed against axial movement relative to said stem member and an outer peripheral sealing surface opposed and substantially complementary to said seat sealing surface for sealing engagement thereagainst in the closed position of the valve, the outer peripheral portion of said ring being spaced from said flange with the axially and radially outer edge of said ring sealing surface being axially spaced from said flange stop surface, to thereby define an annular space between said ring and flange, the latter having at least one aperture therethrough to communicate fluid to said space in the closed position of the valve.

2,745,632
ADAPTER FOR GLASS STOPCOCK
Ernest F. Kaiser, Hasbrouck Heights, N. J.
Application November 9, 1950, Serial No. 194,780
5 Claims. (Cl. 251—181)



1. A universal adapter for converting a glass stopcock to a pressure-tight stopcock, comprising an internal adjustable clamp having an approximate U-shaped vertical cross section thereby providing a pair of arms and said arms being bent inwardly 90° at their outer ends as contact fingers, said contact fingers being adjustable over a wide range, a screw and internally threaded bushing connecting the opposing arms, an outer screw projecting at the bottom of the U-shaped clamp in a direction opposite from said arms, a barrel for said clamp, said barrel having a hole in the bottom thereof for passing said outer screw therethrough, said barrel having inwardly directed tabs, auxiliary to the open-ended periphery of said barrel for supporting a stopcock, a nut on said outer screw, and a coil spring fitting around said outer screw and having one end against the bottom of said barrel and the other end supported in a desired compression by said nut on said outer screw.

2,745,633
CABLE SPEED INDICATOR
Claire L. Cornwell, Texas City, Tex.
Application June 22, 1953, Serial No. 363,234
6 Claims. (Cl. 254—150)



1. An accessory equipment for application to a cable winding drum apparatus, including a drum engageable driving wheel, a mounting adjustably supporting the wheel for movement into or out of driving engagement with the drum, a wheel drive transmitting flexible shaft leading to a distant operator station, an operator station control panel, a driven rotor mounted on the control panel and drive connected to said shaft, finger feel knobs on said rotor for operator finger contact and feel of the rate of rotation, a visual marker fixed relative to the rotor for co-operation with said knobs, a rotor carried series of peripherally spaced projections, a sounding reed having its free end entering between said projections to be struck thereby, a support for the opposite end of the reed having a fixed bearing for one reed face and an

adjustable bearing for the other reed face for varying the reed vibration rate in one direction of wheel rotation relative to reed vibration rate in the opposite direction of wheel rotation, a panel control knob connected with the adjustable wheel mounting to set the wheel in or out of drum drive engagement and spring means acting on the mounting to urge the wheel toward drive engagement.

2,745,634
APPARATUS FOR DRILLING WELLS WITH ORIENTED CURVED BORES OF LARGE RADII
John A. Zublin, Los Angeles, Calif.
Application December 30, 1952, Serial No. 328,680
5 Claims. (Cl. 255—1.6)



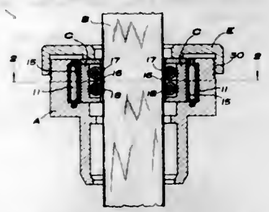
1. Apparatus for controlling the direction and extent of deviation of a well bore by the rotary drilling method comprising an elongated relatively inflexible tubular section, an elongated drill collar rotatably mounted in said tubular section, a drill bit carried at the lower end of and rotatable with said drill collar, means at the upper end of said drill collar for connecting same to the lower end of a rotary drill string for rotation therewith, said tubular section having a well bore engageable fulcrum means thereon, and well bore engaging deflecting means carried by said tubular section at a point spaced from said well bore engageable fulcrum means acting to urge said inflexible tubular section and said drill bit to pivot about said fulcrum means in a predetermined radial direction.

2,745,635
APPARATUS FOR DRILLING WELLS OF LARGE RADII CURVED BORES
John A. Zublin, Los Angeles, Calif.
Application July 20, 1953, Serial No. 368,857
5 Claims. (Cl. 255—1.6)



4. Apparatus for controlling the direction and extent of deviation of a well bore by the rotary drilling method comprising an elongated relatively inflexible tubular section, an elongated drill collar rotatably mounted in said tubular section and capable of limited longitudinal movement relative to said tubular section, interengaging clutch elements carried by said tubular section and said drill collar respectively, means normally holding said clutch elements in disengaged position while permitting engagement of said clutch elements upon limited longitudinal movement of said drill collar within said tubular section, a drill bit carried at the lower end of and rotatable with said drill collar, means at the upper end of said drill collar for connecting same to the lower end of a rotary drill string for rotation therewith and whereby said drill collar may be moved longitudinally relative to said tubular section by lifting of the drill string for engagement of said clutch elements, a first well bore engageable fulcrum forming means mounted adjacent the upper end of said tubular section and extending outwardly from one side thereof, a first well bore engaging deflecting means carried by said tubular section adjacent the point of mounting of said first fulcrum forming means to extend outwardly from the side generally opposite said first fulcrum forming means, a second well bore engageable fulcrum forming means mounted on said tubular section at a point spaced below said first fulcrum forming means and extending outwardly from one side thereof, a second well bore engaging deflecting means carried by said tubular section adjacent the point of mounting of said second fulcrum forming means to extend outwardly from the side generally opposite said second fulcrum forming means, said well bore engaging deflecting means acting to urge the respective fulcrum forming means toward engagement with the wall of the well bore.

2,745,636
KELLY DRIVE BUSHING
Douglas Ragland, New Orleans, La., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware
Application March 9, 1953, Serial No. 340,943
3 Claims. (Cl. 255—23)



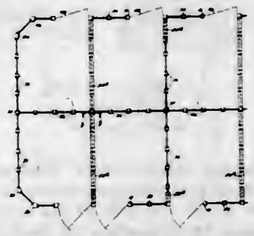
3. A Kelly drive bushing adapted to drive a Kelly bar having its section in the shape of a regular polygon comprising, in combination, a generally annular body adapted to be arranged with its axis vertical and to be rotated in use at least a major portion of the time in a given direction, the interior surface of said annular body having equally spaced driving recesses corresponding in number to the sides of the Kelly bar, vertically extending roller bearings corresponding in number and spacing to the sides of the Kelly bar mounted on said body between said driving recesses, a plurality of like vertically extending driving assemblies equal in number and spacing to the sides of the Kelly bar uniformally arranged within said body with each assembly having a leading edge and a trailing edge with the leading edge of one assembly adjacent the trailing edge of an adjacent assembly, each vertically extending driving assembly being tapered horizontally and of decreasing thickness from its leading edge to its trailing edge and having its outer vertical surface in contact with one of said vertically extending roller bearings and having its inner vertical opposite side provided with a recess, horizontally extending roller bearings arranged in each of said recesses in the driving assemblies to make contact with one of the sides of the Kelly bar, and blocks equal in number to the sides of the Kelly bar uniformally mounted in the annular body between and in contact with the driving assemblies with a block slidably arranged in each of said driving recesses and having surfaces parallel to and in contact with the leading and trailing edges of two adjacent vertically extending driving assemblies, said blocks transmitting power to the driving assemblies when rotating the annular body in an opposite direction.

2,745,637
MOBILE DRILLING MACHINE
Charles F. Ball, Franklin, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Original application November 20, 1948, Serial No. 61,177. Divided and this application June 30, 1951, Serial No. 234,627
12 Claims. (Cl. 255—51)



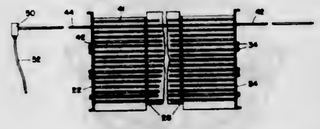
2. In combination, a boom mounted to swing in vertical and horizontal planes about horizontal and vertical pivotal axes, a swivel mounting carried at the outer portion of said boom, said mounting having a swivel axis disposed at right angles to a line parallel with said horizontal pivotal axis of said boom, an extensible supporting structure carried by said swivel mounting and adjustable about said swivel axis into different angular positions relative to said boom, said extensible supporting structure including an extendable support adjustable endwise in any angular position of said supporting structure relative to said boom and a clamp for securing said extendable support in adjusted position, said swivel axis of said swivel mounting disposed at right angles to the longitudinal axial line of said extensible supporting structure, an elongated guide frame carried by said extendable support at the outer portion thereof, and a hole drilling tool guided for rectilinear movement back and forth along said guide frame.

2,745,638
PENS FOR LIVESTOCK AND FENCE FOR USE IN SAME
William J. O'Connor, Chicago, Ill., assignor to Union Stock Yards & Transit Company, Chicago, Ill., a corporation of Illinois
Application October 22, 1953, Serial No. 387,675
5 Claims. (Cl. 256—19)



1. In a fence for defining a group of separate livestock pens, a plurality of spaced concrete posts including end posts, corner posts and center posts having their lower end portions embedded within the ground, a plurality of vertically spaced apart concrete cross members interconnecting one post with another, each post being formed with a groove extending from the top downwardly through an intermediate portion of the side walls interconnected by the cross members to a level croresponding to the distance of the lower cross member from the ground, in position of use, and in which the grooves in one wall remain independent of the grooves extending inwardly from other walls of the posts, the connecting cross members being dimensioned to have a length greater than the distance between the interconnected side walls of the posts but slightly less than said distance plus the depth of the grooves, an arm depending integrally from the ends of the upper cross members and dimensioned to correspond in length to the vertically spaced relation between the cross members and dimensioned to have a width corresponding to the depth of the grooves, said arms being disposed substantially completely within the grooves, when in the assembled relation, and resting upon the upper surface of the underlying cross member, and flanges extending laterally from the upper edge portion of the uppermost cross members which extend crosswise of the livestock pens to form crosswise walkways between the pen sections.

2,745,639
HEAT EXCHANGER
Patrick F. Dougherty, Chester Heights, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
Application July 15, 1953, Serial No. 368,064
2 Claims. (Cl. 257—1)

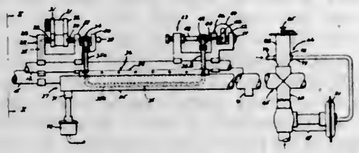


1. The combination with a heat exchanger of the type comprising a bundle of spaced apart tubes extending in parallel relationship and end plates between which the tubes are supported, the heat exchange being effected between fluid flowing through the tubes and fluid flowing through the space surrounding the tubes: of a number of rods extending between the plates in parallel relationship with and spaced from each other and from the heat-exchanger tubes and having no heat exchange function, the rods being loosely held between the end plates permitting movement in response to the internal conditions of the heat exchanger and longitudinally slidable, for a predetermined distance, within the tube bundle, the rods having each an end element to which is attachable the end of a cleaning tube having a multiplicity of perforstions in its wall and adapted to receive cleaning fluid and discharge it through the perforations, each of said rods, when so attached to a cleaning tube, and moved for said distance longitudinally as aforesaid, placing the cleaning tube in the position theretofore occupied by the rod before such movement, to discharge cleaning fluid through the perforations toward the heat exchanger tubes of the bundle to effect removal therefrom of fouling material deposited thereon, the rods and attached cleaning tube, when the longitudinal movement of the rods is reversed, withdrawing the cleaning tube and restoring the rods to the first specified position to adapt the heat exchanger for normal heat exchange operation.

2,745,640
HEAT EXCHANGING APPARATUS
John A. Cushman, Reedsville, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application September 24, 1953, Serial No. 382,104
1 Claim. (Cl. 257—2)

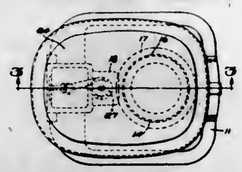
A heat exchange system including an elongated fluid conveying member having outlet means at its opposite

ends, at least two longitudinally spaced elongated openings extending through a wall of said member, a cover for each of said openings detachably secured to said member, a conduit carried by each of said covers, each of said conduits including a central portion positioned within and extending longitudinally and substantially axially of



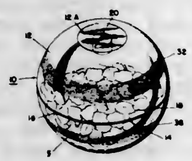
said member and end portions serving as inlet and outlet means extending through its respective cover, and a heat responsive valve means connected to said member intermediate said openings for admitting fluid therein whereby heat transfer between fluids passing through said member and conduits occurs in the areas of said central portions.

2,745,641
BEVERAGE DISPENSER
William H. Jacobs, Newton, Mass.
Application March 16, 1953, Serial No. 342,677
11 Claims. (Cl. 259—36)



1. A liquid dispenser comprising: a storage tank for the liquid; a cylindrical refrigerating element mounted in said tank and spaced from the walls thereof; a pump having an intake port communicating with said tank and a discharge port; a discharge conduit leading from said discharge port; means for driving said pump; and a standpipe leading upward into said tank, having its lower end connected to said conduit, said standpipe having an orifice above the level of liquid in the tank, and an orifice below said level, said latter orifice being adapted to discharge substantially tangentially to the walls of said refrigerating element.

2,745,642
MIXING CONSTRUCTION
Dick Hermann, La Canada, Calif.
Application October 28, 1953, Serial No. 388,824
4 Claims. (Cl. 259—72)



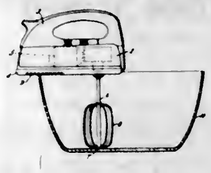
1. A mixing device comprising two complemental substantially hemispherical receptacle portions, the free edges of said receptacle portions being provided with interengaging portions for removably locking said receptacle portions into a single unitary substantially spherical container, the bottom portion of at least one of said receptacle portions being provided with an integral open measuring cup facing and extending toward the other complemental hemispherical receptacle portion.

2,745,643
KNEADING PUMP
Fritz Kleinlein, Furth, Germany, assignor to Martin Scheerle, Stockborn, Switzerland
Application September 2, 1952, Serial No. 307,503
Claims priority, application Germany May 2, 1952
8 Claims. (Cl. 259—104)



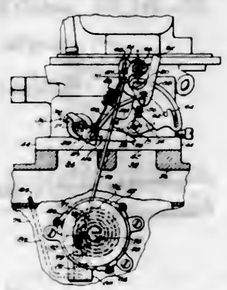
1. A kneading pump comprising a housing which provides a recess bounded by two cylindrical surfaces having parallel axes and intersecting each other, two worms each having a core and a system of helical flights on said core, said system comprising, on a first portion of the length of the worm, a first helical flight stepped to provide a first helically contoured cylindrical surface of substantially equal diameter as the one of the said cylindrical surfaces bounding the recess in the housing for rotatably supporting the worm in said recess, and to provide a second helically contoured cylindrical surface of smaller diameter than the first such surface, and a second helical flight having a helically contoured cylindrical surface of equal diameter as the said first surface of the first helical flight, the pitch of the said second helical flight and of the contour of its helically contoured cylindrical surface being greater than that of the first helical flight and of its first helically contoured cylindrical surface, respectively, said system further comprising, on a second portion of the length of the worm, a single helical flight stepped to provide a helically contoured cylindrical surface tapering in width away from said first portion and continuing both the said first cylindrical surface of said first flight and the said cylindrical surface of the second flight of said first portion, and a second helically contoured cylindrical surface continuing the said second helically contoured cylindrical surface of the first flight of said first portion, the first portion of each worm being arranged adjacent the second portion of the other worm in said recess of the housing, whereby the first cylindrical surface of the first flight of the first portion and the first cylindrical surface of the flight of the second portion of each worm cooperate with the second cylindrical surface of the second portion and of the first portion, respectively, of the other worm.

2,745,644
BOWL SUPPORT FOR PORTABLE FOOD MIXER
William P. Von Behren, Fairfield, Conn., assignor to General Electric Company, a corporation of New York
Application July 2, 1953, Serial No. 365,697
2 Claims. (Cl. 259—135)



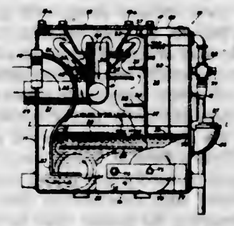
1. In an electric motor driven food mixer of the portable type having an elongated casing, a motor therein, and beaters at the one end of the casing driven by the motor, means for supporting the food mixer on the edge of a mixing bowl with the lower ends of the beaters resting on the bottom of a bowl comprising a wall on the underside of the casing at the end remote from the beaters, said wall having a plurality of transversely extending longitudinally spaced grooves in which a bowl rim may be positioned.

2,745,645
DUAL CARBURETOR
Milton J. Kittler, Detroit, Melvin F. Sterner, Bloomfield Hills, and Marion L. Smithey, Huntington Woods, Mich., assignors to Holley Carburetor Company, Detroit, Mich., a corporation of Michigan
Application September 22, 1953, Serial No. 381,552
1 Claim. (Cl. 261—23)



An automatic choke mechanism for a two stage carburetor having individual air entrances, mixing chambers and outlets, primary and secondary throttles in said mixture outlets and a choke valve in the air entrance to the primary carburetor, a choke lever therefor, an inlet manifold and an exhaust heated wall associated therewith, a thermostat mounted on the outside of said exhaust heated wall, an element moved thereby, a movable link connecting said thermostatically operated element to said choke valve lever, a slotted lever having two slots of unequal length mounted on said primary throttle, a second throttle lever, said lever controlling said secondary throttle, a link pivotally connected to said second throttle lever at one end, the other end riding in said slots, a second slotted lever linkage comprising a slot in said choke lever, a pin in said slot, a floating lever pivotally mounted on the end of said second throttle link, the pivot of which rides in and engages with the ends of the slots in the first slotted lever, said pin being mounted on said floating lever so that when the primary throttle is opened the end of the shorter slot engages the end of the link in the event that the choke valve is open so as to open the secondary throttle wide when the primary throttle is opened wide, and in the event that the choke valve is closed the end of the link operating the second throttle will then engage the end of the longer slot so that when the primary throttle is wide open then the secondary throttle will be hardly opened at all and the choke valve is free to move because of the slot in the choke valve lever.

2,745,646
EXHAUST GAS CONDITIONER
Charles E. Stoltz, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application March 30, 1954, Serial No. 419,876
10 Claims. (Cl. 261—123)



1. A conditioner for exhaust gases from a diesel engine or the like comprising a walled housing, a vertical partition spaced from one of the walls of said housing so as to divide said housing into two side-by-side walled chambers, one of said chambers being connected to an exhaust manifold so as to enable exhaust gases to be expanded therein, a body of liquid contained in said other chamber, an opening between said two chambers so as to enable the exhaust gases to move from said first chamber to the second to bubble up through the liquid contained in said second chamber, an auxiliary chamber communicating with said second chamber and arranged to receive water from said second chamber when the pressure from said exhaust gases is in excess of a predetermined amount, and to discharge liquid back into said second chamber when the pressure from said exhaust gases decreases below a predetermined amount, means for regulating the amount of liquid moving from said second chamber to the auxiliary chamber by controlling the pressure within said auxiliary chamber including a metering passageway connecting said second chamber and said auxiliary chamber, and means for regulating the flow through said metering passageway.

2,745,647
PRODUCTION OF UNDERGROUND CAVITIES
Forrest E. Gilmore, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application July 21, 1952, Serial No. 300,000
11 Claims. (Cl. 262—3)

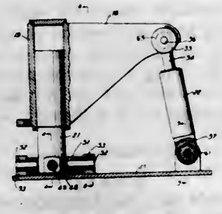


1. An apparatus for the formation of an underground cavern comprising, in combination, a well casing projecting downwardly in a well bore, sealing means for said casing at its upper end, conduit means for introducing a gas and liquid into said casing, a tubing within and spaced from said casing, said tubing extending through said sealing means and at least to the bottom of said casing, a cylindrical sleeve within said casing and disposed about said tubing, said sleeve being not longer than the desired height of said cavern and being in substantially air-tight connection with said casing but moveable within said casing, an annular plate having a central perforation through which said tubing is disposed and having a plurality of other perforations, said plate being rigidly attached to said tubing and to the bottom circumference of said sleeve, flexible nozzles attached to said plate at said plurality of other perforations, and means for raising, lowering and rotating said tubing.

2,745,648
TILTABLE SUPPORTS FOR CUTTER HEADS OF BORING TYPE MINING MACHINES
James S. Robbins, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application November 6, 1953, Serial No. 390,519
3 Claims. (Cl. 262—7)

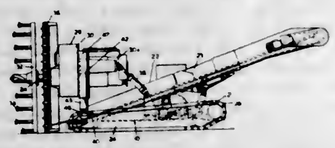
1. In a mining machine of the type having a cutter head with cutter arms arranged to cut contiguous bores,

a main frame including means for propelling same along a mine floor or the like, an auxiliary frame mounted on said main frame and having said cutter head extending therefrom, lifting means for raising and lowering said auxiliary frame with respect to said main frame, comprising fluid operated cylinders and pistons therefor mounted in spaced relationship laterally of said main frame, said cylinders being fixed rigidly at their upper ends to said auxiliary frame, said fluid operated cylinders and their pistons being selectively extensible in order to provide a position of limited tilt of said auxiliary frame



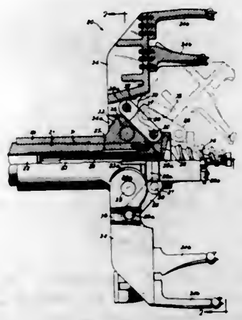
to correct any tendency of said cutter arms to deviate from the cutting of a straight bore, and means for mounting each of said cylinders and their pistons so as to accommodate a greater projected distance on said main frame between said cylinders in accordance with such tilting of the auxiliary frame comprising a member having a swiveling connection with said main frame, a swivelling connection from the piston of said cylinder to said member including a pin passing through said piston and said member, said piston being arranged to move laterally of such swivelable member upon said pin in accordance with such tilting movement.

2,745,649
MINING MACHINE WITH ADJUSTABLY MOUNTED ROTARY CUTTING HEAD
James S. Robbins, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application March 27, 1953, Serial No. 345,157
3 Claims. (Cl. 262—7)



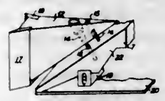
1. In a mining machine of the multi-boring type, a main frame arranged for progressive movement along the ground, a subframe supported at the front end of said main frame having a plurality of horizontally disposed shafts projecting in spaced relation therefrom with radially extending arms on said shafts for cutting a plurality of contiguous bores as the machine is advanced, means for adjustably mounting said subframe relative to said main frame, including a pair of generally upright jacks disposed along opposite sides of said subframe and pivotally connected for universal tilting movement at their similar ends to one of said frames, and a second pair of laterally spaced jacks pivotally connected at their upper ends to said subframe and disposed at downwardly and rearwardly inclined angles to said subframe, and with their lower ends pivotally connected to the main frame at points substantially to the rear of the first-named pair of jacks.

2,745,650
CONTRACTIBLE BORING HEAD FOR MINING MACHINES
Herman E. Smith, Park Forest, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application December 16, 1954, Serial No. 475,649
3 Claims. (Cl. 262—7)



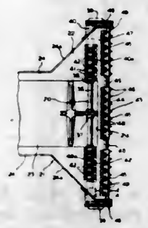
1. In a boring head for mining machines, a rotatable hollow hub having a plurality of cutter arms hinged at its forward end for limited swinging movement in radially extending planes including the axis of said hub, a slide reciprocably mounted in the front end of said hollow hub having an enlarged head projecting beyond the front end of said hub, a link connecting the said enlarged head with each of said cutter arms for swinging the latter simultaneously in response to reciprocable movement of said slide in said hub, said head being movable rearwardly to engage the front end of said hub and enclose the longitudinal bearing surfaces of said slide in said hub when the cutter arms are in fully extending boring position.

2,745,651
MINING PLANER
Julius Herrmann, Wethmar, near Lunen, Westphalia, Germany, assignor to Gewerkschaft Eisenhuette Westfalia, Lunen, Germany, a German corporation
Application June 15, 1953, Serial No. 361,753
Claims priority, application France July 8, 1947
5 Claims. (Cl. 262—8)



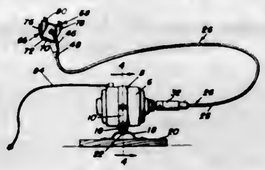
1. In a mining planer having a planer cutter movable back and forth along the forward portion of a longitudinally extending conveyor, the improvement which comprises guide means positioned along the forward portion of said conveyor, a base member movably positioned for back and forth motion along said guide means in guided relation thereto, a planer head, having two planing cutting edges thereon arranged to cut in substantially opposite directions, pivotally mounted on said base member about an axis of pivot lying in a substantially vertical plane and inclined forwardly in the direction transverse of the path of the planer head to permit pivoting of the planer head within a limited arc of pivot to tilt one of said cutting edges upwardly and into a non-cutting position, and the other edge downwardly and into a cutting position when moving the planer head in cutting contact in the direction of said last-mentioned edge, and means for moving said base member back and forth along said conveyor.

2,745,652
MINING MACHINE HAVING COMBINED ELEVATING CONVEYOR AND HORIZONTAL ROTARY CUTTER BAR
Robert H. Kraft, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application October 22, 1954, Serial No. 464,068
2 Claims. (Cl. 262—24)



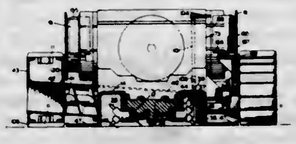
1. In a mining machine having an elongated conveyor structure with a widened apron at its front end and adapted to gather material from the mine floor in advance of the machine for removal toward the rear of the machine, said conveyor structure including a chain flight conveyor, a sprocket shaft journalled on a transverse axis adjacent the front gathering end of the conveyor structure, a cutting mechanism including a rotary cutter bar with projecting cutter bits disposed along the widened front apron of the conveyor structure in advance of said sprocket shaft, driving connections between the sprocket shaft and the rotary cutter bar for driving the latter, the sprocket shaft also having coaxial rotary cutter bar portions at opposite ends thereof with cutter bits projecting therefrom and the widened apron having a plurality of slots in its upper surface permitting the cutter bits on the sprocket shaft to project upwardly through said apron as they are rotated with the sprocket shaft.

2,745,653
PLASTER SCARIFYING AND REMOVING DEVICE
Orville J. Deason, Kansas City, Mo.
Application March 5, 1954, Serial No. 414,285
3 Claims. (Cl. 262—26)



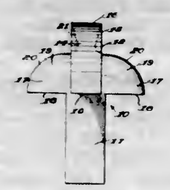
1. For use in handily scarifying the surface of a plaster wall or, alternatively, disintegrating and completely breaking up and wholly removing said wall, in combination, a flexible motion transmitting shaft, an arbor operatively mounted on one end of said shaft, a cutter head embodying a pair of complemental parts each of elongate form and L-shaped in cross-section and embodying an attaching flange and a companion serrated flange providing a sawtooth blade, the respective flanges overlapping each other and the respective blades being cooperatively interrelated in spaced parallelism, said arbor being positively connected at one end to predetermined portions of the overlapped flanges, and a hand-grip operatively associated with said arbor, said hand-grip having an axial bore providing a passage for said arbor, and also having a bearing for said arbor.

2,745,654
SELF-PROPELLED ROOM AND PILLAR KERF CUTTING MACHINE
Frank A. Lindgren, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application July 24, 1952, Serial No. 300,621
9 Claims. (Cl. 262—30)



1. In a room and pillar kerf cutting machine, a motor, a main frame extending forwardly therefrom, a cutter bar projecting forwardly from said main frame and having a cutter chain guided for orbital movement thereabout, a sprocket journaled on said main frame for rotation about a vertical axis and driving said cutter chain, a spiral conveyor disposed rearwardly of said sprocket and extending transversely of said main frame for discharging the cuttings to one side thereof, an opening in said conveyor facing said sprocket and having cuttings communication with said cutter chain, means supporting the rear end of the machine for slidable movement along the ground and for transporting the same comprising two laterally spaced continuous traction tread devices, one extending along each side of said motor and main frame, tread frames for said continuous tread devices for guiding the same in closed orbital paths, drive sprockets for said continuous tread devices journaled in said tread frames, supporting connections between said tread frames and said motor coaxial with the axis of said drive sprockets, a cuttings discharge passageway extending through the tread frame on the retreating side of the machine, and cylinder and piston means on said main frame and engaging said tread frames and elevating said cutter bar for transportation and also lowering said main frame into engagement with the ground and positioning said spiral conveyor to register with said discharge passageway when said main frame is in engagement with the ground.

2,745,655
TWO-WAY COAL CUTTING BIT
Andrew J. Vojtush, Clarksville, Pa.
Application November 19, 1954, Serial No. 469,898
6 Claims. (Cl. 262—33)



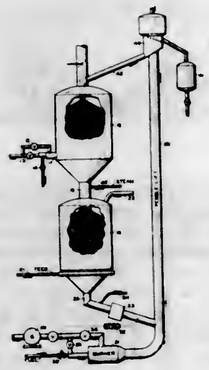
1. A coal cutting bit comprising a unitary steel block including an elongated chain lug engageable shank and a cutting head, said head including opposed wing portions projecting from opposite edges of said shank at one end thereof, and a central body portion of greater dimensions lengthwise of said shank than said wing portions, and said first and second portions having cutting edges disposed in a longitudinal median plane of said shank with the cutting edge of the body portion displaced outwardly of said wing portions lengthwise of said shank.

2,745,656

APPARATUS AND METHOD FOR CONTROLLING TEMPERATURES OF HOT GAS LIFT FOR PEBBLES

Leonard P. Meade, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application June 11, 1951, Serial No. 230,865
7 Claims. (Cl. 263—19)



6. An improved pebble heat exchange system comprising, in combination, a first closed, upright, pebble chamber having pebble inlet means and gaseous outlet means in its upper end portion and fluid inlet means in its lower end portion; a second closed, upright pebble chamber disposed below said first chamber and having gaseous outlet means in its upper end portion and fluid inlet means and pebble outlet means in its lower end; pebble conduit means connecting the lower end of said first chamber and the upper end of said second chamber; a gas-pebble separator chamber connected to said pebble inlet means; an upright gas lift conduit connected at its upper end to said gas-pebble separator chamber and connected at its lower end to said pebble outlet means; lift gas inlet means connected to the lower end of said gas lift conduit; means for detecting the temperature differential between that of the pebbles flowing through said pebble outlet means and that of the lift gas in said lift gas inlet means; and means for controlling the temperature of the lift gas in response to said detected temperature differential.

2,745,657

PROCESS OF BURNING SOLID FUEL TO PRODUCE SLAG SUITABLE FOR PORTLAND CEMENT

Thomas H. Oster, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a corporation of Delaware

No Drawing. Application November 19, 1952, Serial No. 321,501
5 Claims. (Cl. 263—53)

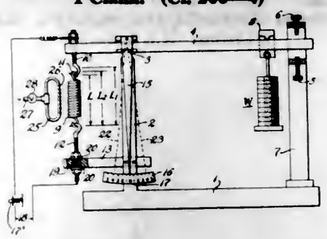
1. The process of burning solid fuel and producing a slag suitable for grinding into Portland cement comprising injecting a mixture of air, crushed solid fuel, calcic material, siliceous material and argillaceous material into a water cooled metallic cylinder, burning said solid fuel in the water cooled cylinder and with a second stream of air introduced tangentially into said metallic cylinder, said tangentially introduced second stream of air producing a helical movement of the liquid and solid materials along the inner periphery of the shell, maintaining the temperature within the cylinder sufficiently high to melt and gasify respectively all the reactants except carbon, permitting the coal ash and cement making materials to interact, and tapping off a molten slag.

2,745,658

APPARATUS FOR BRINGING COIL SPRINGS TO TEST AND RELIEVING STRAINS THEREIN WHILE UNDER LOAD

Frank W. Gaskins, Cincinnati, Ohio

Application June 23, 1950, Serial No. 169,966
1 Claim. (Cl. 266—4)



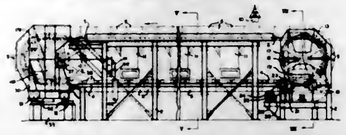
In combination, a scale beam having a frictionless fulcrum, a constant predetermined load on said beam disposed to tilt the beam in one direction, a stationary support member spaced from said beam, said beam and support being provided with means to which the ends of a coiled steel spring may be connected, the distance between the points of attachment of said spring to said beam and to said support being such that the spring is elongated to a length that is proportioned to the minimum distance between said beam and support, the force of said spring on said beam tending to turn the beam in a direction opposite to the direction of turning by said load, means for limiting deflection of said beam in either direction from its balanced position, means for connecting said spring to a source of supply of current when the beam is tilted off balance by the spring force, means responsive to dropping of the beam resulting when the spring has been heated to a temperature at which it yields at the load applied to said beam for interrupting said heating current, means for directing a coolant against said spring, and means responsive to the dropping of said beam for connecting said coolant directiong means to a source of supply of coolant, and timing means for automatically interrupting the flow of coolant when the spring has cooled.

2,745,659

SINTERING MACHINE

Boris M. Osojnak, Pittsburgh, Pa., assignor to Heyl & Patterson, Inc., Pittsburgh, Pa., a corporation of Pennsylvania

Application March 28, 1955, Serial No. 497,045
14 Claims. (Cl. 266—21)



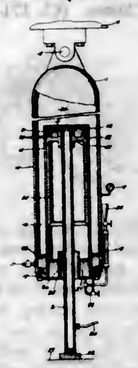
1. A sintering machine comprising a pallet guideway arranged to guide pallets in a closed path in which the pallets move in an upper reach generally in one direction with one side up and in a lower reach generally in the opposite direction with said side down, the guideway except for one end portion thereof being normally stationarily mounted during operation of the machine, said end portion of the guideway comprising means guiding pallets between the upper and lower reaches and inverting the pallets and being mounted separately from the remainder of the guideway for movement generally toward and away from the remainder of the guideway, means exerting force against said end portion of the guideway urging it toward the remainder of the guideway and means adapted to engage pallets to advance the pallets in the guideway.

2,745,660

SEAL DEVICE FOR RECIPROCATING PISTON

Raymond D. Delahay, Long Beach, Calif., assignor to Lacy Oil Tool Company, Los Angeles, Calif., a copartnership

Application May 18, 1953, Serial No. 355,490
11 Claims. (Cl. 267—1)



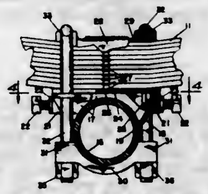
1. A pneumatic counterbalance for oil well pumps, comprising: a cylinder open to atmospheric pressure at its lower end and having at its lower end a lubricant reservoir; a piston slidable relative to said cylinder and forming therewith a high pressure chamber at the upper end of said piston, said piston having a skirt adapted to dip into said reservoir and coat the walls of said cylinder with a lubricant film during upstroke of said piston; the confronting walls of said piston and cylinder defining an annulus adapted to receive said lubricant film; a seal ring groove in one of said confronting walls and a lubricant passage leading therefrom to said high pressure chamber; a metal ring capable of limited axial displacement within said groove and defining therewith a lubricant flow channel from said annulus to said lubricant passage, and intimately engageable with the other of said confronting walls to deflect lubricant into said flow channel; and a check valve ring of distortable material disposed behind said metal ring and operable to close said flow channel against back flow of lubricant from said lubricant passage to said annulus.

2,745,661

ADJUSTABLE SADDLE ASSEMBLY FOR VEHICLE SPRINGS

Frederick F. Van Raden, Portland, Oreg., assignor to NePeer Company, Portland, Oreg., a copartnership

Application February 13, 1953, Serial No. 336,819
1 Claim. (Cl. 267—52)



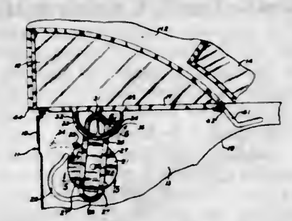
Means to secure an elongated, cylindrical, wheel-supporting member in transverse relation to a vehicle comprising a leaf spring extending in the longtudinal direction of the vehicle, means securing the ends of the leaf spring to the vehicle, a base structure welded to the upper half of the surface of said member, said base structure comprising wall portions terminating in a generally horizontal plane close to the top of said member and defining an upwardly open cavity, a spring seating plate resting on said base structure and supporting the central portion of said spring on its upper surface, cooperating means on said plate and said spring to prevent relative movement thereof in the longtudinal direction of said spring, a pair of abutment means projecting into said cavity from said plate in spaced relation to said rim portions in the longitudinal direction of said spring, said abutment means extending below the top of said member in spaced relation to the surface thereof, a pair of adjustment screws mounted on said base structure and engaging said abutment means, said screws extending in opposite directions in the longitudinal direction of said spring whereby rotation thereof effects adjustment of said member relative to said spring in the longitudinal direction of the vehicle, and means to clamp said member, said plate and said spring together in the vertical sense, comprising an upper saddle overlying and partially embracing a central portion of said leaf spring, a lower saddle overlying and partially embracing a portion of said member, and vertical tie bolt means adjustably securing said saddles to each other comprising a pair of U-bolts each straddling said leaf spring.

2,745,662

WINDOW REGULATOR

John A. McDougall, Garden City, Mich., assignor to Ford Motor Company, Dearborn, Mich., a corporation of Delaware

Application June 2, 1953, Serial No. 359,022
5 Claims. (Cl. 268—104)



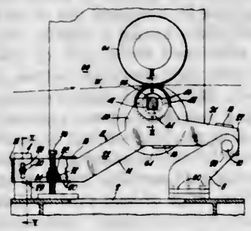
1. In a window control mechanism for bodily moving a window in a vehicle body, an actuated member pivotally mounted on said body, an arm carried by said actuated member and operatively connected to the lower portion of said window, said arm being bodily slidably mounted on said member to vary the effective length of said arm, and cam means on said body cooperating with said arm to vary the position of said arm relative to said member as the latter is rotated.

2,745,663

STRIP SUPPORTING DEVICE

Merrill V. Hamilton and Morris E. Hoop, Gary, Ind., assignors to United States Steel Corporation, a corporation of New Jersey

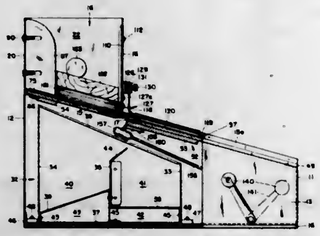
Application August 14, 1953, Serial No. 374,262
6 Claims. (Cl. 271—2.1)



2. A device for supporting elongated strip at the cutting point as it passes through a pair of rotary edge-

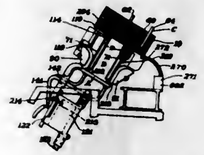
trimming shears disposed coaxially, said device comprising a base disposed beneath the path of strip travel and between said shears, a pair of spaced brackets projecting upwardly from said base adjacent one end thereof, a shaft supported by and extending rigidly between said pair of brackets transverse to the direction of strip travel, a roll saddle frame having spaced side members each pivotally supported adjacent one end on said shaft, a transverse plate extending between said side members adjacent the end of said saddle remote from its pivotally supported end, said transverse plate having a threaded vertical hole therethrough intermediate its ends, an adjusting bolt threaded through said last mentioned hole with one end projecting downwardly from said transverse plate to engage said base and thereby adjustably support said saddle, a bracket projecting upwardly from said base adjacent the end of said saddle remote from its pivotally supported end, means adjustably connecting said bracket and said remote end of said saddle for locking the latter in adjusted position, and an idler roll carried by said saddle intermediate the ends thereof between said shears and transverse to the direction of strip travel.

2,745,664
CARD MARKING DEVICE
Thomas D. Davies, United States Navy, and Clayton J. Perry, Jacksonville, Fla.
Application March 17, 1953, Serial No. 343,000
8 Claims. (Cl. 271—3)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A card marking device which comprises a housing having a card supply space in its upper portion adapted to contain a stack of cards and a card receiving space thereunder, a card marking surface in the upper portion of said housing adjacent the bottom of said card supply space, a member slidably movable in a plane parallel to and immediately below the plane of said card marking surface and the bottom of said card supply space, means for operating said movable member, a first set of card contacting members connected to one end of said movable member and adapted to contact the upper edge of the bottom card only of said stack of cards, said card contacting members being adapted on movement of said movable member in one direction to transfer said bottom card to said card marking surface, guide slides for properly conducting said bottom card out of said card supply space, said guide slides having a slightly concave surface, a guide finger positioned above each of said outer guide slides adjacent said card marking surface, the space between said guide fingers and their corresponding outer guide slides being such as to permit passage therebetween and onto said card marking surface of said bottom card only, a second set of card contacting members connected to the other end of said movable member and adapted to contact the bottom edge of said card on said card marking surface, said last mentioned card contacting members being adapted on movement of said movable member in another direction to transfer a card from said marking surface to said card receiving space.

2,745,665
SUCTION FEEDING MECHANISM
Harold S. Labombarde, deceased, late of Nashua, N. H., by Beatrice M. Labombarde, executrix, Nashua, N. H., assignor to International Paper Box Machine Company, Nashua, N. H., a corporation of New Hampshire
Application September 16, 1952, Serial No. 309,892
11 Claims. (Cl. 271—26)



1. In a suction device, for use in sheet feeding, the combination of a rigid suction open tube; an open rigid tube mouth at the end of said tube; an imperforate flexible, resilient bellows shaped suction sleeve surrounding said tube mouth and having its base fixed to and air sealed around the tube in rear of the tube mouth; air passages through the tube wall between said tube mouth and said sleeve base, and an imperforate, integral, flexible, sleeve mouth on said sleeve in advance of said tube mouth; a rigid member fixed to said suction tube in rear of said sleeve base and movable with said tube, said member having a rigid surface adjacent but outside the perimeter of said sleeve mouth, at least some portion of which surface is in advance of the tube mouth but none of which surface is in advance of the sleeve mouth, said sleeve mouth being retractable in the direction of said tube mouth when a sheet seals said sleeve mouth and suction is applied through said suction tube.

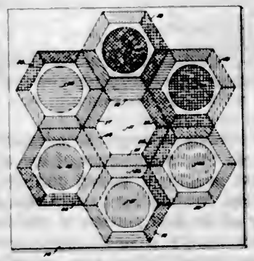
2,745,666
AERIAL PROJECTILE AND TARGET
Otto M. Swartz, Chicago, Ill., assignor to Innovation Industries, Inc., Chicago, Ill.
Application November 9, 1954, Serial No. 467,749
4 Claims. (Cl. 273—95)



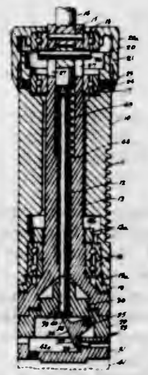
4. In a game, a rigid plate-like movable dart catching target member presenting a smooth front surface, a dart adapted to be thrown towards a player holding said target member, said dart comprising a body including a suction cup, means secured to the rear surface of the movable target for securing said target to the hand of a player for effecting manipulation of said target to a position intercepting the line of flight of said dart thrown, the suction cup striking said smooth front surface of the target temporarily holding said target on said smooth front surface.

2,745,667
APPLIANCE FOR PLAYING GAMES
Patrick Richard H. Graham, Alvin J. Graham, and George Haldon Graham, Vancouver, British Columbia, Canada
Application November 4, 1952, Serial No. 318,662
1 Claim. (Cl. 273—134)

In a game, the combination which comprises a rectangular shaped game board having a hexagonally shaped center area, a plurality of hexagonally shaped areas surrounding said center area, said center area having adjacent its outer periphery a plurality of portions each having a different color, each of the hexagonally shaped outer areas having adjacent its outer periphery a continuous track with sections of equal size therein, the sections of the track having the same color as the adjacent portions of the center area, each section of the track having a different color from the other sections of the track, each of the surrounding hexagonally shaped areas having a circular area in the center thereof, each of the circular areas of each hexagonally shaped area having a different color from the other circular areas, a barricade having spaced transversely disposed strips thereon adapted to be positioned at the meeting edges of the centrally positioned area and one of the surrounding hexagonally shaped areas, a cube having colored areas on the sides thereof adapted to be used to determine the color of the station of a following player, and a playing piece representing an animal adapted to be positioned on the colored sections of the track of the hexagonally shaped areas.

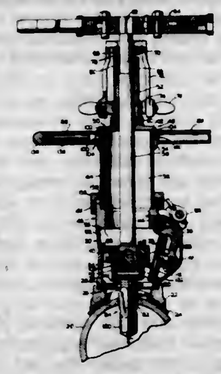


2,745,668
SPINDLE AND SLIDE CONTROL ASSEMBLY
Charles P. Haas, Bridgeport, Conn., assignor to Jigbore-Grind Machine Company, Inc., Westboro, Mass., a corporation of Massachusetts
Application October 17, 1951, Serial No. 251,724
8 Claims. (Cl. 279—6)



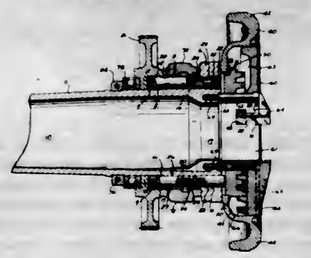
1. A spindle and slide control assembly comprising a quill to be mounted for longitudinal movement in a machine tool provided with a drive shaft, a rotatable shaft mounted in the quill, means at one end for connecting the latter shaft to the drive shaft, an adapter unit secured to the other end of the shaft including a slide movable radially of the shaft for carrying a tool, a plunger mounted for longitudinal sliding movement in the shaft, a pivoted cam in the unit connected with the slide to shift this slide, means connecting the plunger with the cam for operating this cam to shift the slide, an adjuster comprising a rotatable sleeve embracing and threaded to the quill at the opposite end thereof from the adapter unit for adjustment longitudinally of the quill, and an operative connection from the adjuster to the plunger for operating the plunger to shift the slide.

2,745,669
MACHINE FOR DRILLING AND TAPPING MAINS
Frank H. Mueller and John J. Smith, Decatur, Ill., assignors to Mueller Co., Decatur, Ill., a corporation of Illinois
Application February 19, 1952, Serial No. 272,354
6 Claims. (Cl. 279—91)



1. In a drilling machine the combination comprising: a boring bar having a circular socket at one end thereof to receive the shank of a tool and notch means in the rim of said socket; a tool having a circular shank receivable in said socket; a lateral locking projection on said shank receivable in said notch means and having a side surface portion disposed outwardly of said one end of said bar; a retaining nut threadable on said one end of said bar and having an uninterrupted inwardly-extending circumferential flange engageable with said side surface portion, the inner diameter of said flange being greater than the maximum transverse dimension of said tool outwardly of said projection; and means defining a recess in said tool adjacent and outwardly of said lateral projection for reception of a removable abutment implement engageable by said nut flange, on unthreading said nut, to dislodge said tool from said socket.

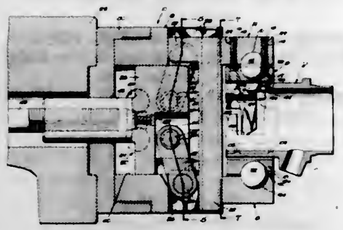
2,745,670
QUICK ACTING CHUCKING TOOL
Anton J. Janik, Elyria, Ohio, assignor to The Ridge Tool Company, Elyria, Ohio
Application October 19, 1953, Serial No. 386,814
24 Claims. (Cl. 279—114)



13. In a chucking tool for holding a workpiece having a centrally located barrel type spindle, a flange on one end of said spindle, a drive member mounted on said spindle member and adapted to provide means for rotatable motion for said spindle, a bracket member mounted on the outer periphery of said spindle member and adapted to provide means for securing said tool to a machine such as a lathe, a face plate member having a plurality of radially spaced movable jaw members disposed therein for securing said workpiece to said chucking tool, means adapted to move said jaw members toward and into

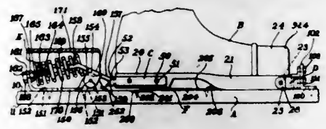
resilient engagement with said workpiece comprising; a disk shaped scroll plate, a spiral shaped groove on one surface of said scroll plate member defining a spiral land, a plurality of teeth formed on said movable jaws adapted to be engaged by said spiral shaped groove and land, a plurality of depressions and tongues formed about the edge of the surface of said scroll plate opposite the surface containing said spiral groove, a hand wheel member having a centrally located hole, a plurality of lugs formed on the periphery of said hole and adapted to extend into said depressions on said scroll plate member, whereupon rotation of said wheel said lugs strike against said tongues forcing said scroll plate to rotate producing a resultant force acting upon the contacting surfaces of said spiral groove, land and teeth of said jaws, said force having a component to move said jaws into engagement with said workpiece, a second component to move said scroll plate longitudinally away from said jaws, a plurality of cam surfaces spaced radially on said drive member, one or more of a second type of cam surface interspaced between said first mentioned cam surface, holes located in said flange portion of said shaft extending therethrough and opening adjacent said cam surfaces, pin means disposed within alternate holes and engaging said first mentioned cam surfaces, pin means disposed within the remainder of said holes and engaging said second mentioned cam surfaces, said pin means in said second mentioned cam surfaces comprising of a head part and a tail part, a spring interposed between said head and tail part of said pin means adapted to be operated upon by said longitudinal movement of said scroll plate whereby said tail part is forced through said hole toward said head part compressing said spring and thereby providing a greater degree of coupling between said drive member and shaft member to rotatably drive said chucking tool.

2,745,671
WORK-HOLDING CHUCK
Harry E. Sloan, Hartford, and Linwood B. Swanson, New Britain, Conn., assignors to The Cushman Chuck Company, Hartford, Conn., a corporation of Connecticut
Application June 8, 1953, Serial No. 360,137
8 Claims. (Cl. 279—119)



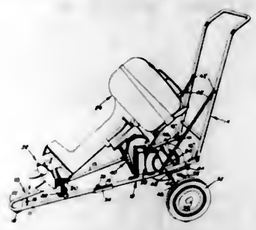
1. A chuck, comprising a body with a longitudinal axis; opposite work-gripping jaws, said body having in its front two substantially parallel transverse guideways on opposite sides of and spaced from said body axis and extending throughout the transverse dimensions of said body thereat; slides carrying said jaws, respectively, diametrically opposite each other, said slides being received in said guideways, respectively, extending therein substantially throughout the lengths of the latter for radial guidance of said jaws into and from gripping engagement with work and having rearward extensions thereon; and jaw-operating mechanism in said body comprising a member non-rotatably mounted in the body for reciprocation axially thereof rearwardly of the guideways therein, and further comprising toggle links connecting said member with said rearward extensions on said slides, respectively, for simultaneously moving the slides to bring said jaws into and from gripping engagement with work.

2,745,672
AUTOMATICALLY RELEASABLE SKI BINDING
Robert C. Meier, Jr., Salem, N. H.
Application October 22, 1951, Serial No. 252,457
11 Claims. (Cl. 280—11.35)



1. In a ski binding arranged to releasably connect a ski boot to a ski the combination of toe engaging jaws, fixed to said ski, adapted to permit only rearward movement of the boot toe relative to said ski; a metal spur, fixed centrally of the heel portion of said boot; a downwardly and rearwardly inclined upper surface on said spur; a concave channel of uniform curved cross section, extending longitudinally along the central portion of the inclined upper surface of said spur; a spring-pressed latch horizontally pivoted to said ski, slightly rearward of said spur, said latch extending rearwardly and upwardly from its free end to a point above said pivot and thence extending downwardly to said pivot and a convex tip, at the free end of said latch, curved to conform to and engaged in the curved concave channel of said spur.

2,745,673
OUTBOARD MOTOR CARRIER
Lloyd E. Koepke and Eli D. Storm, Mattoon, Ill.
Application December 14, 1953, Serial No. 398,064
2 Claims. (Cl. 280—40)



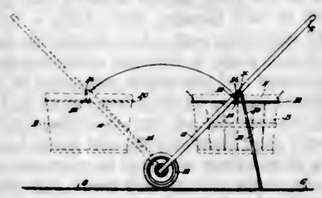
1. An outboard motor carrier comprising a V-shaped horizontal frame having a front apex portion and legs diverging rearwardly from said apex portion and terminating in spaced apart ends, a pair of plates at opposite sides of said frame adjacent said ends, means including horizontal pivots connecting said plates to said legs for vertical swinging, a pair of wheels on said plates parallel therewith for swinging into vertical and horizontal positions, respectively, by said plates to unfold and fold the wheels, a skid secured to said apex portion and together with said wheels when unfolded depending from said frame for supporting said frame in elevated position, a U-shaped handle having ends, horizontal pivots securing the ends of the handle to the rear ends of said legs for swinging of said handle into upwardly and rearwardly inclined position relative to said frame, braces connecting said handle to said legs to retain said handle in upwardly and rearwardly inclined position, a rod, means detachably attaching said rod to said plates for holding said wheels unfolded when the rod is attached and to permit folding of said wheels when the rod is detached, and a plate inclined upwardly and rearwardly of said frame and cross-connecting said legs forwardly of said wheels and adapted for engagement by clamping means of an outboard motor.

2,745,674
VERTICALLY ADJUSTABLE WHEEL SUSPENSION MEANS
Joseph H. Struble, Caldwell, Kans.
Application March 29, 1955, Serial No. 497,704
1 Claim. (Cl. 280—44)



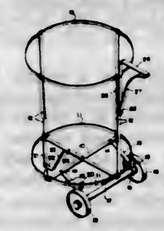
A vertically adjustable wheel suspension means, comprising an elongated frame formed of parallel side members, forward and intermediate connecting bars between said side bars, a jack at the forward end of said frame, a rear axle, wheels carried by said axle, an elongated plate fixed relative to said axle between said wheels, a pair of links fixed at one end thereof relative to said axle, means pivotally connecting the other ends of said links to said side bars forwardly of the rear ends of the latter, a winding shaft rotatably carried by said plate, a crank on one end of said shaft, a ratchet fixed on said shaft, a spring pressed pawl engaging said ratchet, a sheave carried by each side bar rearwardly of the connection of the links therewith, a pair of cables wound about said shaft and extended through said sheaves, and means securing the outer ends of said cables to said links, winding of said cables on said shaft raising the rear ends of said bars.

2,745,675
BASKET CARRYING CART
William J. Haynes, Bonner Springs, Kans., assignor to Leavenworth Steel, Inc., Kansas City, Kans., a corporation of Kansas
Application July 21, 1953, Serial No. 369,280
1 Claim. (Cl. 280—47.24)



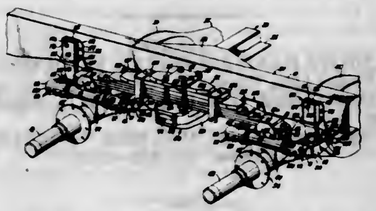
A basket-carrying cart comprising a generally planar frame having parallel side arms, ground-engaging wheels mounted at the lower end of said frame, and a handle member at the upper end of said frame, a generally planar stand having spaced apart parallel side portions pivoted respectively at their upper ends to the side arms of said frame on a horizontal axis lying in the plane of said frame, said stand being movable from an inner or folded position lying against said frame to an outer or extended position at an angle to said frame, and stop means limiting the outward movement of said stand, the lengths of said frame and stand being so proportioned that when said cart is at rest with said wheels and said stand in its extended position engaging the ground, the planes of said stand and the lower portion of said frame will be disposed respectively at opposite sides of a vertical plane passing through said pivotal axis, the angle of said frame to the vertical, hereinafter denoted the frame angle, being greater than the angle of said stand to the vertical, the latter being hereinafter denoted the stand angle; a leg fixed to each side portion of said stand and extending downwardly from the pivotal axis thereof at an angle to the plane of the stand, a pair of pivot pins carried respectively by said legs at the lower ends thereof on a common horizontal axis parallel to the pivotal axis of said stand; and a basket-carrying hoop normally disposed horizontally and mounted at diametrically opposite points on said pivot pins, a plane including the axis of said pivot pins and the pivotal axis of said stand being disposed at an angle to the plane of said stand greater than said stand angle, but less than said frame angle.

2,745,676
CARRIERS FOR TRASH BURNERS
Ross R. Scott, Oreland, Pa.
Application July 8, 1953, Serial No. 366,668
3 Claims. (Cl. 280—47.26)



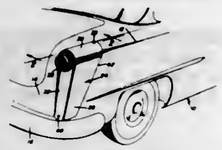
1. A carrier for trash burners comprising a single pair of U-shaped members disposed in planes at right angles to each other, each of said members having a flat base portion and vertical uprights, said flat base portions being secured to each other at the center, a ring member secured to and connecting said uprights at their lower ends, another ring member secured to and connecting said uprights at their upper ends, said ring members serving to maintain said U-shaped members in their respective planes, a pair of bracket members each having a portion secured to the flat base portion of one of the U-shaped members and another portion secured to the ring member at the lower ends thereof, an axle carried by said bracket members, and wheels carried by said axle.

2,745,677
TANDEM AXLE SUSPENSION FOR VEHICLES
Robert J. Walter, Kenmore, N. Y., assignor to Truck Equipment Co. Inc., Buffalo, N. Y., a corporation of New York
Application July 8, 1953, Serial No. 366,786
18 Claims. (Cl. 280—104.5)



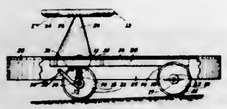
1. A tandem axle vehicle suspension adapted to be interposed between a vehicle frame and a pair of tandem axles each having wheels journalled thereon, comprising a frame bracket secured to each side of said frame intermediate said tandem axles and having a downwardly facing bearing face, an elongated generally horizontal supporting member arranged adjacent each bracket and having at its center an upwardly facing bearing face forming a perch engaging and supporting the corresponding downwardly facing bearing face, the curvature of one of said bearing faces, in a direction lengthwise of the vehicle frame, being different from the curvature of the other bearing face whereby said bearing faces have rocking engagement with each other to permit rocking of each of said elongated supporting members about an axis generally parallel with said axles, and means connecting the opposite ends of each of said elongated supporting members with the corresponding tandem axles.

2,745,678
VEHICLE ORNAMENT PROTECTOR
John D. Morgan, Smithfield, N. C.
Application November 23, 1953, Serial No. 393,747
2 Claims. (Cl. 280—152)



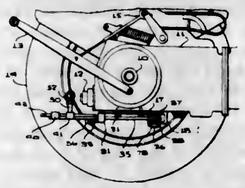
1. The combination of a vehicle body comprising a rear fender having a rearwardly extending raised curved end surface terminating in a curved top surface portion, both of the aforementioned surfaces being joined to an outer side surface, and an inner side surface, the inner side surface being in abutting relation to a transversely extending curved trunk deck surface, the curved end surface abutting a substantially horizontal splash pan secured to the vehicle body, tail light means on the curved end surface of said fender, an attachable rear fender trim-protector having a curved end surface terminating in a curved top surface, the curved end surface including a portion providing an opening to conform with the exact configuration of said tail light means and being of the same length as the rear end surface of said fender for terminating in juxtaposition to said splash pan, the curved end and top surfaces terminating in outer and inner side surfaces, the outer side surface terminating in a downwardly and rearwardly extending annular edge portion joined to the portion of the end surface in juxtaposition to said splash pan, the inner side surface terminating in a rearwardly curved edge portion connected to the portion of the end surface in juxtaposition to said splash pan, said curved edge portion conforming to the configuration between the inner side surface of said fender and the trunk deck of said vehicle body, each of the surfaces of the trim-protector forming to a comparable surface on said rear fender to provide an ornamental and protective end cap therefor, and means on said trim-protector and rear fender for detachably securing said trim-protector in flush engagement on said rear fender.

2,745,679
CHILD'S HAND-PROPELLED VELOCIPEDE
Knut Möller Lien, Tromoy on Arendal, Norway, assignor to Enna Limited, Greenford, England, a British company
Application July 21, 1953, Serial No. 369,410
6 Claims. (Cl. 280—218)



1. A hand-car comprising a frame, a pair of wheels on a transverse axle mounted on the front of said frame, said wheels being adjacent the edges of said frame, ground engaging means at the rear of said frame, a vertical stem mounted for oscillation centrally of and above said axle, a steering element on the upper end of said stem, a hook depending from the lower end of said stem and surrounding said axle while permitting limited relative movement thereof, a horizontal lever fixed to said hook and extending adjacent to and in front of said pair of wheels, whereby the angular movement of said element in one direction toward a side of the car locks the wheel on the same side against rotation causing the opposite wheel to pivot about said locked wheel and vice versa, whereby sinuous propulsion of said car results.

2,745,680
IMPLEMENT HITCH WITH VERTICAL PIVOT AND SPACED HORIZONTAL GUIDE FOR AGRICULTURAL TRACTOR
John F. Achenbach, Taylorville, and Virgil C. Jones, Assumption, Ill.
Application September 5, 1952, Serial No. 307,962
2 Claims. (Cl. 280—499)



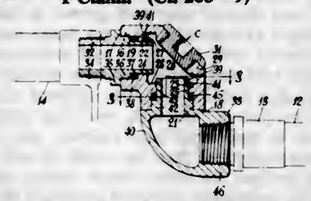
2. In an agricultural tractor having a rear axle and a drive mechanism housing disposed at right angles to said rear axle midway between the ends of the latter, an implement hitch assembly comprising a flat mounting plate having at one end a transversely extending channel formation including an intermediate portion extending perpendicularly from said one end and a flange extending perpendicularly from the end of the intermediate portion remote from the plate and disposed in spaced and substantially parallel relationship to the plate positioned so that the plate bears against the under side of said housing with the intermediate portion and flange of the channel formation depending from the under side of the housing and having the open side facing rearwardly toward the other end of the plate, means securing said plate to the under side of said housing, there being a hole in said flange and registering with a hole formed in the adjacent portion of said plate, a king pin extending through the registering holes and removably supported in said holes, a guide frame carried by the other end of said plate and extending transversely of and to respectively opposite sides of said plate therebeneath, said guide frame including a pair of guidebars arranged in superimposed spaced relation, the lower one of said guide bars being longitudinally curved on its edge remote from said channel formation, said curved edge of said lower guide bar having a series of spaced apart notches, a drawbar positioned longitudinally of and below said plate and projecting between said guide bars and having one end extending between said flange and the adjacent portion of said plate, said one end of said drawbar having an aperture elongated longitudinally of said drawbar through which said king pin extends, a hitch bar slidably carried on said drawbar for movement longitudinally of said drawbar, means carried by said drawbar for operative engagement with said hitch bar to maintain said hitch bar in a selected position longitudinally of said drawbar, and a lug projecting from the under side of said drawbar and engageable with a notch of said series of notches to lock the drawbar and hitch bar against swinging movement about said king pin.

2,745,681
VEHICLE COUPLER DRAW BAR FOR TOWING TRAILERS
Carl C. Kitterman, Albia, Iowa
Application April 30, 1953, Serial No. 352,256
6 Claims. (Cl. 280—501)

1. A draw bar of the character stated comprising two bar sections in end overlapping relation, means adjustably securing the same together for varying the length of the draw bar, an upstanding clamp frame integral with an end of one bar section and having a flat top for engaging the underside of a vehicle chassis frame, an upstanding jaw tongue formed across said flat top, a movable jaw member positioned on said one bar section and comprising a base portion, an upstanding wall carried by the base portion and a jaw tongue extending from said wall toward the first jaw tongue at an elevation above said flat top, means for coupling said clamp frame and said jaw member together, said last means being adapted to draw the movable jaw member toward the clamp frame, means carried by the other bar section at the end thereof remote from the clamp frame for the attachment of a draft element to the draw bar, and means for clamping said other bar section at the said end thereof to a vehicle bumper.

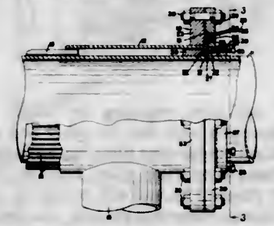


2,745,682
SWIVEL COUPLING FOR GASOLINE DISPENSERS
George E. Chevallier, Salisbury, Md., assignor to The Wayne Pump Company, Salisbury, Md.
Application October 27, 1952, Serial No. 317,057
1 Claim. (Cl. 285—9)



A swivel coupling for connecting the nozzle of a gasoline dispensing unit to the hose of said unit whereby the nozzle may be rotated without placing undue strain on the hose, said coupling comprising a hollow body having end faces angularly disposed with respect to each other, relatively large and small bores extending into the interior of the body from said end faces, internal annular shoulders formed at the junctions of said large and small bores, said shoulders having internal faces parallel to the end faces and angularly disposed with respect to each other, said internal faces and other parts of said body defining an internal chamber in communication with said bores, said internal chamber, adjacent each internal annular shoulder having a greater dimension and area than said relatively small bores, said body having a wall formed with an opening communicating with said chamber to provide access to said internal shoulder faces, said wall extending at an angle perpendicular to a bisector of said angularly disposed end faces, hollow members rotatably positioned in said bores, each of said hollow members having an enlarged portion abutting one of said end faces and also having relatively large and small annular portions externally thereof in bearing engagement respectively with the large and small bores of the body, said relatively large annular portion being spaced from the outer face of the body shoulder, said relatively small annular portion extending through the relatively small bore and into said chamber, a groove formed in said relatively small portion in alignment with the internal face of said body shoulder, a split retaining ring positioned in said groove and having thrust bearing engagement with said internal face, whereby said hollow member is restrained from axial displacement and may be rotated on its own axis, said ring having means which permit it to be snapped into said groove with simple tools, said wall opening being sufficiently large to permit insertion of said ring into said chamber and placement thereof in said groove, packing material in the space between the outer surface of the shoulder and the relatively large annular portion, each of said hollow members being formed with means for making a pipe connection thereto, and a closure for the opening in said wall.

2,745,683
CONNECTING MEANS FOR CONCENTRIC PIPES
Arvid C. K. Nihlen, Oberlin, Ohio, assignor to Brown Fintube Company, Elyria, Ohio, a corporation of Ohio
Application April 3, 1953, Serial No. 346,597
4 Claims. (Cl. 285—22)

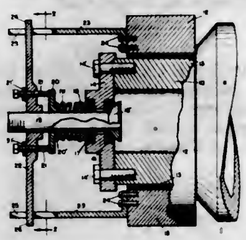


1. A tubular connection for joining an inner tube to an outer tube comprising a collar welded to the exterior of the inner tube and disposed within the outer tube adjacent one end thereof, an external flange welded to the outer tube adjacent said end thereof, said external flange having an axially projecting annular flange having an outwardly facing annular sealing surface thereon, said collar having an axially projecting annular flange having an outwardly facing annular sealing surface thereon, said flange on said collar being disposed within said axially projecting flange on said external flange, the sealing surfaces on said axially projecting flanges being disposed in substantially the same plane, an annular sealing ring welded to said sealing surfaces and spaced from the end surfaces of said external flange and said collar between said sealing surfaces, an annular supporting washer disposed within and substantially filling the space between the inner surface of said sealing ring and said end surfaces of said external flange and collar and engaging substantially the entire inner surface of said sealing ring, a clamping ring secured to said external flange and having a recessed portion receiving said sealing ring and providing an inwardly facing surface engaging and supporting substantially the entire external surface of said sealing ring and clamping said sealing ring against said sealing surfaces, a stop ring secured to the exterior of said inner tube adjacent the outer surface of said clamping ring and clamping screws mounted in said stop ring and engaging the outer surface of said clamping ring to prevent relative movement between said inner tube and said outer tube.

2,745,684
ROTARY STEAM JOINT AND LOOSE MOUNTING THEREFOR
Henry A. Courand, West Linn, Oreg., assignor to Crown Zellerbach Corporation, San Francisco, Calif., a corporation of Nevada
Application March 29, 1952, Serial No. 279,429
2 Claims. (Cl. 285—96.1)

1. A rotary joint of the character described including a non-rotating fluid-delivery pipe and a hollow rotating roll, a mounting for said roll, an end plate secured on said roll, a central aperture in said plate, said pipe extending through said aperture with circumferential clearance, identical annular recesses around said aperture in the inside and outside faces of said plate, a pair of identical bearing and sealing rings mounted in said recesses respectively, a collar on the inside end of said pipe having a spherical surface in bearing engagement with said inside sealing ring, a thrust collar slidably mounted on said

pipe on the outside of said plate adapted for bearing engagement with said outside sealing ring and having a spherical bearing surface identical to that of said inside collar, a spring extending around the outside of said pipe and having one end engaging said thrust collar, a slidable



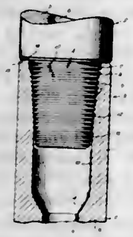
member on said pipe engaging the other end of said spring, a supporting plate for the other end of said pipe, set screws in said supporting plate for adjustably securing said pipe in said supporting plate, brackets for said supporting plate attached to said roll mounting, said supporting plate loosely mounted in said brackets for slight movement, and spring-tensioning means carried by said supporting plate and engaging said slidable member.

2,745,685

RESILIENT DRILL COLLAR JOINT

Stanley C. Moore, Midland, Tex., assignor to The Drill Collar Service Company, Inc., Midland, Tex., a corporation of Texas

Application February 15, 1952, Serial No. 271,773
2 Claims. (Cl. 285—146)



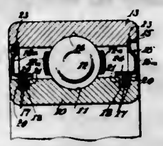
1. A threaded connection assembly for joining a pair of relatively thick-walled drill collars, said assembly including mating box and pin elements on the adjacent ends of said drill collars, said box element comprising an inwardly tapering socket in an end of one of the drill collars communicating with the bore thereof, a series of threads on the inner wall of said socket, the portion of said bore adjacent the last of said threads being cylindrically enlarged to a diameter corresponding to the root diameter of said last thread whereby to cause said last thread to vanish into the wall of enlarged portion of said bore and to reduce the normal wall thickness of said one of said drill collars at the point of vanishment of said last thread, said cylindrically enlarged portion extending longitudinally along said one of said drill collars for a substantial distance beyond the point of vanishment of said last thread and thereafter merging on a smooth curvature into the thicker walled portion of the drill collar whereby said cylindrically enlarged portion forms a longitudinally extending relatively resilient connection between the threaded socket and said thicker walled portion, said pin element having external threads matching those in said box element and having a corresponding taper, the length of said pin element being such that when fully inserted in said box element the threads on said pin element will engage and fully cover said last thread at least to its said point of vanishment.

2,745,686

BEARING SEALS

Warren D. Anderson, Glenbrook, Conn., assignor to Norma-Hoffman Bearings Corporation, Stamford, Conn., a corporation of New York

Application September 23, 1952, Serial No. 310,987
1 Claim. (Cl. 286—5)



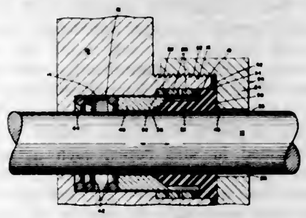
In a seal for an antifriction bearing having an inner race member and an outer race member, said inner race member having an annular groove in its outer peripheral surface in the proximity of one axial end thereof, said groove being defined by an outer shoulder and a cylindrical peripheral surface extending axially inwardly from said shoulder, and said outer race member having a bore facing said outer peripheral surface of said inner race member and an annular recess in said bore; the combination of an annular retaining member having a substantially radial portion with its outer periphery anchored in said recess in said outer race member and a substantially cylindrical flange extending in parallelism with said outer peripheral cylindrical surface of said inner race member and from said axial end thereof over said groove in said surface, and forming a cylindrical bore, said flange having an inherent resiliency with respect to said radial portion, and an expanded split ring within said bore of said cylindrical flange engaging said flange by its inherent resiliency for rotational movement therewith, said ring extending into said groove in said inner race member and being of a width substantially less than the width of said peripheral cylindrical surface, the outer lateral surface of said split ring being in immediate dustproof proximity of said outer shoulder in said groove and the inner lateral and the inner peripheral surfaces of said split ring being spaced axially from the inner end of said groove and from said cylindrical peripheral surface in said groove, respectively.

2,745,687

SHAFT SEAL

Theodore T. Stack, Chicago, Ill., assignor to Crane Packing Company, Chicago, Ill., a corporation of Illinois

Application August 31, 1953, Serial No. 377,298
5 Claims. (Cl. 286—30)



1. A seal for sealing the space existing between a relatively movable cylindrical shaft and a surrounding casing, said seal comprising in combination means on said housing providing an end wall, a cylindrical bore projecting forwardly from said end wall, an open ended counterbore forwardly of said bore and defining a forwardly facing shoulder, an end closure member for the forward open end of the cylindrical bore, a tubular sealing member surrounding said shaft and comprised of a deformable material having a low coefficient of friction with respect to the material of the shaft, said sealing member being provided with a radial flange closely fitting within said counterbore and having a forward face

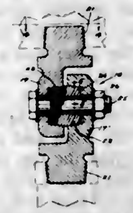
bearing against the end closure member, a sleeve portion extending rearwardly from said radial flange and fitting closely around said shaft, the rear end of said sleeve portion being inclined rearwardly and inwardly to provide a conical sealing face, a rigid sealing ring closely surrounding said shaft rearwardly of said sealing member, said sealing ring having a forwardly and outwardly inclined conical sealing surface bearing against and substantially coextensive with the conical sealing surface provided on said sleeve portion, a compression spring interposed between the shoulder on said casing and the radial flange on said sealing member and serving to normally urge said flange against said end closure member, and a compression spring interposed between the end wall of said casing and the rear face of said sealing ring and serving to normally urge said sealing ring forwardly within said bore against said deformable sealing member.

2,745,688

SOLID ADJUSTABLE ANGLE FITTING

Robert K. Farrington, Shaker Heights, and Thayer B. Farrington, Cleveland Heights, Ohio, assignors to The Thompson Electric Company, Cleveland, Ohio, a corporation of Ohio

Application February 27, 1951, Serial No. 212,906
1 Claim. (Cl. 287—14)



Suspension joint means for an angularly adjustable support, comprising a pair of fittings each having an attachment end and an adjustable angle connecting end off-center from the axis of the attachment end, each adjustable angle connecting end having a transversely extending frusto-conical recess in a wall thereof, said recesses in said pair of fittings opening toward each other, a plug disposed between the fittings and having two opposed projecting frusto-conical portions extending respectively into said recesses, the inner surface of each recess having a taper converging toward the bottom of the recess and each said projecting portion being correspondingly tapered to fit its respective recess whereby to permit angular adjustment of each of said fittings on said plug, the inner surfaces of said recesses and the outer surfaces of said projecting portions being portions of cones having the same acute vertex angle, there being aligned holes through said fittings substantially coaxial with said plug, and adjustable connecting means extending axially through said plug and outwardly through said aligned holes in said fitting whereby said fittings may be drawn tightly towards each other on the opposed tapered portions of said plug, the off-center position of said adjustable angle connecting ends permitting said fittings to be assembled on said plug with said attachment ends axially aligned.

2,745,689

KNOB CONNECTION OR THE LIKE

John Balint and Donald F. Garman, Cleveland, Ohio, assignors to Tinnerman Products, Inc., Cleveland, Ohio, a corporation of Ohio

Application February 23, 1955, Serial No. 489,888
4 Claims. (Cl. 287—53)

3. A fastener for securing a shaft in a recess in a cooperating member, said shaft having a generally D-shaped cross section and said recess in said member having a corresponding substantially D-shaped cross-sectional contour together with lateral enlargements at the ends of the flat wall of said recess defining longitudinal slots adjacent to and in communication with said recess, said fastener comprising a piece of sheet metal bent to provide a generally tubular clip comprising a substantially flat said intermediate return bent free end sections opposite said flat side and spaced outwardly therefrom, said free end sections of the clip being rounded to define a substantially half-round side of the clip and together with



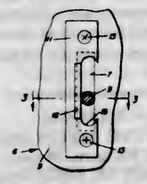
said flat side thereof providing the clip in a generally D-shaped cross-sectional contour corresponding substantially to that of said recess in said member, said free end sections having spaced inward longitudinal corrugations adjacent their junctions with said flat side of the clip to define spaced longitudinal ribs receivable in said longitudinal slots adjacent said recess in the assembled position of the clip in said recess, said clip having outwardly projecting elements for anchoring the same in said assembled position in said recess and inwardly projecting means for bearing on and securing the shaft inserted in the clip.

2,745,690

VEHICLE DOOR LOCK REPAIR DEVICE

Ralph A. Thornell, Washington, Ind., assignor of one-fifth to Robert O. Chambers, Washington, Ind.

Application June 16, 1955, Serial No. 515,854
1 Claim. (Cl. 292—1)



In combination, a vehicle door comprising a free end having a vertical slot therein, a lock mounted in the door and including a casing mounted interiorly on said free end thereof, said lock further including a vertically swingable bolt operable in the slot, a vertically elongated plate mounted exteriorly on said free end of the door over the slot and having a vertically elongated recess therein communicating with said slot and accommodating the bolt, screws securing the casing and the plate in position on the door with said free end thereof in between, and a longitudinal wear strip integral with the plate, said wear strip and plate being cooperable with one of the longitudinal walls of the slot for retaining the bolt against lateral movement.

2,745,691

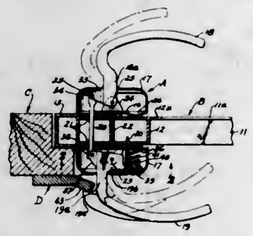
DOOR LATCH

Paul S. Moloney and John L. Verga, Cleveland, Ohio, assignors to The Seneca Manufacturing Company, Cleveland, Ohio, a corporation of Ohio

Application June 15, 1954, Serial No. 436,813
2 Claims. (Cl. 292—123)

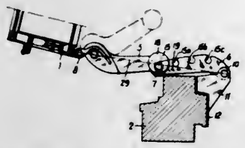
1. A door latch for latching engagement with a strike plate on the door frame comprising: a first sub-assembly mounted on the side of the door sash toward which the

door opens and a second sub-assembly on the other side of the door in opposed relation to the first sub-assembly, each sub-assembly including a stamped sheet metal base plate with central portions sheared and bent perpendicular to form a pair of parallel perforated ears at the mid-portion of the plate and a handle having a shank portion pivotaly mounted at its inner end by a pin between said ears to pivot about an axis parallel to the adjacent door edge and having a grip portion extending laterally from the outer end of the shank in a direction away from the adjacent door edge, the shank portion of each handle having a laterally projecting integral lug at the inner end thereof, the handle of the second sub-assembly having a shoulder formation projecting beyond the shank and facing toward the direction of door opening for latching en-



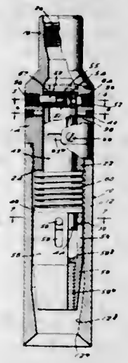
gagement with a strike plate on the door frame and a lateral arm spaced from the inner end of the shank extending laterally in a direction opposite to said shoulder, a link rod extending through an aperture in the door sash with ends pivotally pinned to said lugs, said base plates being individually symmetrical and identically formed including perforations at the opposite ends thereof for mutual alignment with corresponding holes in the door sash, a pair of mounting bolts passed through said perforations and holes in the sash with cooperating nuts whereby the sub-assemblies may be commonly secured to the door sash, said base plates also having identically cut openings to accommodate said rod, and compression spring means interposed between said arm and the base plate in the second sub-assembly to bias the latch toward engaged position.

2,745,692
LOCKING MECHANISM
Eric Sigfrid Persson, Malmo, Sweden
Application January 15, 1952, Serial No. 266,476
Claims priority, application Sweden January 19, 1951
1 Claim. (Cl. 292—263)



A locking mechanism for windows to be mounted between a window sash suspended in a stationary window frame to be swung about a horizontal axis substantially at the middle of the window, comprising a link having one end adapted to be pivoted to the sash, a link having one end adapted to be pivoted to the frame, a releasable coupling forming a pivot means for interconnection of the other ends of said links, said pivot means comprising a pivot pin forming a latch-bolt in the releasable coupling and being displaceable in its longitudinal direction in a transverse bore in one of the links, the other link being formed with a plurality of transverse recesses spaced apart along the length of said link and adapted to selectively receive a portion of said bolt according to the desired opening position of the window.

2,745,693
FISHING TOOLS
Robert E. McGill, Bakersfield, Calif.
Application April 17, 1952, Serial No. 282,775
2 Claims. (Cl. 294—102)



1. In a fishing tool for wells, an elongate tubular body formed to provide a lower part and an upper part, said upper part having its lower end portion of a reduced diameter and threaded into the upper end portion of the lower part, a mandrel within the body, a plurality of co-acting slips within the lower end of said lower part and having a vertical slot in the upper end portion of each, a collar on the lower end of said mandrel and having a diameter to position within the upper ends of said slips, pins projecting radially from said collar engaged in said slots, a washer overlying the top side of said collar and the upper ends of said slips, a coil spring encircling said mandrel between the reduced end of the said upper part and said washer, said mandrel having an L-shaped slot adjacent its upper end, a latch stud carried by the body and normally engaged in the vertical leg of said slot, a shear pin carried by the body in the path of upward movement of said mandrel, a spring actuated locking element carried by the mandrel and engageable in a recess in the body following the shearing of said pin in an upward movement of the mandrel relatively to the body, and means carried by said slips engageable with the fish to free the same from gripping relation therewith upon a forcible downward movement of the body, said slips and the mandrel being forced upwardly relatively to the body of the fish, said pin being sheared during such movement to allow passage of the mandrel until it is sustained in elevated position by the automatic engagement of said locking element in the said recess.

2,745,694
BALE LIFT
John B. Wagemann, Bethany, Ill.
Application May 2, 1952, Serial No. 285,769
3 Claims. (Cl. 294—109)

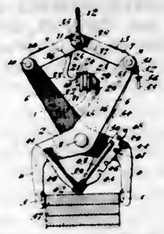
1. In a bale hoist, a frame carrier including a body adapted to be suspended above bales and like objects to be lifted and having a generally vertical slot; a pair of bale-engaging frames disposed in side-by-side relation below said body and having their inner sides arranged adjacent one another; bale-engaging teeth depending from the outer sides of the frames and normally extending vertically from the frames; first and second flexible elements connected to the inner and outer sides, respectively, of each frame and extended upwardly from the frames toward said body; a pin extending through and slidable longitudinally of the slot between the upper and lower ends thereof; connecting links carried by said pin and extended therefrom in downwardly diverging relation, said links being respectively connected, at their divergent ends,

to the first elements of the respective frames; means connecting the second elements to said body at a location spaced from said slot, said pin being adjustable vertically of the body relative to said means and being adapted, when adjusted to the upper end of the slot, to tense the first elements for swinging the inner sides of the frames upwardly, whereby to incline the teeth of the respective frames in downwardly converging relation for gripping said bales to be lifted, said pin when adjusted to the lower end of the slot being adapted to create slack in the first flexible elements effective to produce a responsive upward pull by the second flexible elements on the outer sides of the frames tending to return the teeth to their normal positions, for disengagement of the teeth from said bales; and means for releasably locking said pin in the upwardly adjusted position thereof, including a latch member pivotally mounted upon the pin to swing laterally of the line of vertical adjustment of the pin,



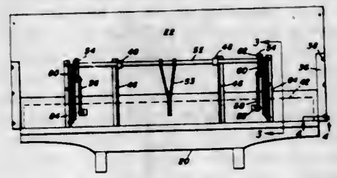
said latch member extending substantially vertically and upwardly from the pin in the plane of the slot walls and being held against lateral swinging movement by the slot walls in all positions of the pin except the upwardly adjusted position thereof, the latch member having at its free end a laterally extended finger, a shoulder on said body disposed laterally of said line of vertical adjustment and with which said finger is engageable on swinging of the latch member in one direction in the upwardly adjusted pin position, said finger being proportioned to slide off said shoulder on freeing of the latch member for swinging in an opposite direction responsive to downward pull exerted on the pin by a supported object, and a locking arm pivotally mounted on said body to swing between substantially vertical and horizontal extreme positions, said locking arm in its vertical position biasing the latch in the first-named direction of movement thereof into engagement with said shoulder.

2,745,695
LIFTING TONGS LOCKING UNIT
Frank Peyer, Bethlehem, Pa., assignor to Bethlehem Steel Company, a corporation of Pennsylvania
Application March 9, 1951, Serial No. 214,749
13 Claims. (Cl. 294—118)



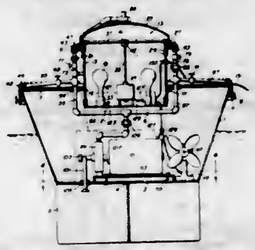
1. In an article handling tong, comprising a pair of tong levers pivoted together at an intermediate point, each having a downwardly extending arm with gripping jaws mounted thereon and an upwardly extending lever arm, a link pivoted to the upper end of each lever arm, a pin for pivotally connecting the inner ends of the links having an upper hook mounted thereon for swinging movement, means connected to the pin for suspending and movably supporting the tong, a lower fixed hook positioned upright on one tong member, a shield pivotally mounted in the lower hook member having a movable swinging nose portion adapted to normally close the entrance to the recess of the lower fixed hook member and provided with a shoulder adapted to be engaged by the upper swinging hook member upon the operation of the tong to rotate the nose of the shield to uncover and open the entrance to the recess in the lower hook member, and a locking latch for holding the shield in the open position.

2,745,696
TAIL GATE FOR TRUCKS
William G. Weatherly, Clarkston, Wash.
Application October 8, 1954, Serial No. 461,255
3 Claims. (Cl. 296—51)



1. A tail gate assembly comprising a fixed end wall member having an opening, means fixedly securing the ends of said end wall member to the side walls of a truck, a gate valve member slidable on the end wall member, said means fixedly securing the ends of said end wall member including channels guidingly holding the gate valve member, links pivotally attached to the gate valve member, a rod rotatably carried by the end wall member, arms fixed thereon and pivotally carrying the links whereby rotation of the rod will swing the arms to move the gate valve member through the links and springs attached to the fixed end wall member and to the arms, said springs being attached to the arms so that the springs hold the gate valve member in open and closed positions by movement past the center of the rod.

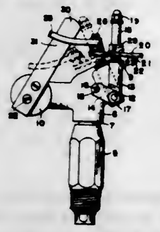
2,745,697
FLOATING FOUNTAIN
Rubee J. Pearse, Raleigh, N. C.
Application March 11, 1955, Serial No. 493,763
1 Claim. (Cl. 299—4)



In a display fountain, a hollow body having an open top and a closed bottom, a cover removably mounted on said body, a cylinder rising concentrically out of said cover above the same with a transparent removable dome top and an open bottom between the cover and the bottom of the body, illuminating means in said cylinder for passing light rays upwardly through said top, an annular spray pipe surmounting said cover and surrounding said

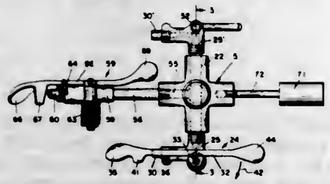
cylinder concentrically and below said top, a relatively smaller annular spray pipe surrounding said cylinder above said first named spray pipe, a pump on the bottom of said body for supplying water to said spray pipes and having an intake extending through said bottom, a U-shaped water supply manifold straddling said cylinder with legs extending upwardly through said cover and supporting said smaller spray pipe at the top of said cylinder elevated above the first named spray pipe, said manifold having a bight portion between said pump and the bottom of said cylinder provided with a detachable coupling to said pump accessible through said cylinder when said top is removed, said first named spray pipe and said cylinder and manifold being attached to said cover for removal together with the smaller spray pipe as a unit with said cover when said coupling is detached.

2,745,698
ROTATING SPRINKLER
Daniel O. Norland, Cypress, Calif.
Application May 4, 1953, Serial No. 352,738
4 Claims. (Cl. 299—68)



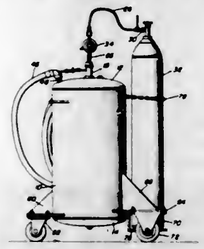
1. A sprinkler comprising: a jet nozzle mounted to revolve on an upright axis and having its discharge end extended to one side of said axis and having an arm extending oppositely on the other side of said axis; a disc rotatably mounted on said nozzle so as to receive discharged water from said nozzle, and having serrations against which the discharged water may impinge to cause rotation of said disc; a hammer pivotally mounted on said disc adjacent the edge thereof so as to be thrown centrifugally outwardly by rotation of said disc, the orbit of said hammer then encompassing said axis, said hammer swinging only in the plane of said disc; and anvil means carried by said arm extending into the orbit of said hammer on the side of said axis opposite to the discharge end of said nozzle so as to be struck by the hammer when the hammer is centrifugally extended said hammer then retracting from its extended position to a position substantially chordal to said disc in which said anvil means is outside the diminished orbit of said hammer.

2,745,699
SPRAY DEVICE
Fingal C. Orr, Glendale, Calif.
Application August 11, 1952, Serial No. 303,716
1 Claim. (Cl. 299—70)



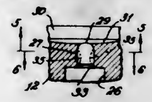
A liquid distributing device, comprising a body adapted to be attached to a liquid supply conduit, a member rotatably mounted on said body, a first nozzle mounted on said body for rotation about an axis normal to the axis of rotation of said member, said nozzle being disposed to discharge liquid radially of its axis of rotation, a deflector vane pivotally mounted for limited movement on said first nozzle having a vane section disposed normally in the path of liquid issuing from said nozzle at an angle such that the reaction force generated by liquid striking said vane section tends to rotate said nozzle about its axis, a spring urging said vane to said normal position, a second nozzle mounted on said member disposed to discharge liquid generally radially of the axis of rotation of said member, a deflector vane pivotally mounted for limited movement on said second nozzle having a vane section disposed normally in the path of liquid issuing from said second nozzle at an angle such that the reaction force generated by liquid striking said vane section tends to rotate said nozzle and said member about the axis of rotation of said member, and a spring urging said last-mentioned vane to said normal position.

2,745,700
FIRE EXTINGUISHER
Joseph L. Phalen, Omaha, Nebr., assignor of one-half to Eugene D. O'Sullivan, Omaha, Nebr.
Application July 27, 1953, Serial No. 370,355
3 Claims. (Cl. 299—95)



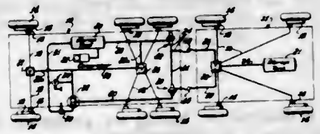
1. A fire extinguisher comprising a fluid container, said container having an opening adjacent the top thereof, a pressure conduit connected in communication with said opening, a fitting on said pressure conduit adapted to be connected to a compressed gas container, a gas pressure regulator in said pressure conduit, a valve in said pressure conduit, a discharge conduit communicating with said fluid container adjacent the bottom thereof, a fog producing nozzle on said discharge conduit, a tube communicating said pressure conduit with said discharge conduit, a bracket mounted on and secured to one side of fluid container, a caster wheel mounted on and secured to said bracket, a platform mounted on the opposite side of said fluid container, a pair of wheel supporting brackets depending from said platform, spaced apart wheels journaled on said brackets, a recess in said platform adapted to receive the end of a compressed gas bottle, and a flexible loop secured to said tank and adapted to support a gas bottle seated in said recess.

2,745,701
SPRAY NOZZLE ORIFICE APPROACH
Fred W. Wahlin, Oak Park, Ill., assignor to Spraying Systems Co., Bellwood, Ill., a corporation of Illinois
Application August 5, 1952, Serial No. 302,681
4 Claims. (Cl. 299—153)



1. A spray nozzle of the class described comprising a one-piece body having therein a cylindrical passage which has an entrance end and an exit end and extends part way through the one-piece nozzle body to a passage end closing portion of the one-piece nozzle body, the said passage having at the exit end thereof a spray discharge orifice communicating through said passage end closing portion to the exterior of the nozzle, and the said passage having at its entrance end a deformed portion of the one-piece body providing an internal annular bead surrounding and restricting the entrance of the passage.

2,745,702
SAFETY VALVE FOR FLUID CONTROL SYSTEM
Sherman R. Burdick, Gardena, Calif., assignor to Burdick Bros., Inc., Gardena, Calif., a corporation of California
Application April 8, 1950, Serial No. 154,865
7 Claims. (Cl. 303—84)



1. In a compressed air system for operating the brakes on a truck and attached trailer towed by the truck, the combination comprising: separate sources of air under pressure on the truck and on the trailer; a main supply conduit extending between the truck source of air and the trailer source of air for transfer of air under pressure to the trailer source; a control fluid system receiving air from said sources for controlling operation of the truck and trailer brakes; and valve means mounted on the truck in the main supply conduit including a movable valve member biased toward a closed position to stop fluid flow to the trailer, and pressure responsive means always exposed to fluid pressure existing in the section of the supply conduit between said truck source and said valve member even when said valve member is closed and operable by said last mentioned fluid pressure to move the valve member automatically to an open position in response to the existence of a predetermined fluid pressure in the supply conduit between said truck source and said valve member.

2,745,703
POLISH ROD STEPS
Robert E. Rose, Odessa, Tex., assignor to Skinner Brothers Company, Tulsa, Okla., a partnership
Application August 20, 1954, Serial No. 451,137
3 Claims. (Cl. 304—28)



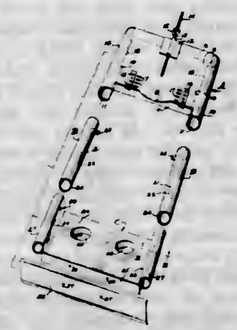
1. A polish rod step including, a support, an upright hanger on the support having a vertically-extending concave face for receiving a polish rod, a step arm pivotally mounted on the support at a point spaced laterally from the hanger and in horizontal alinement with the hanger, an extension carried by the arm and projecting from the pivot point of the arm toward the concave face of the hanger for engaging and clamping a polish rod in engagement with the hanger face, the end of said extension being formed with a rod-engaging face, and a transverse bead on the upper portion of the latter face spaced further from the pivot point of the arm than the imaginary line between the apex of the bead and the lower margin of the rod-engaging face of the extension, whereby as the extension is swung upwardly into engagement with a polish rod a toggle action is obtained in forcing the extension upwardly past initial engagement of the bead with the polish rod to bring the apex of the bead and the lower margin of the rod-engaging face of the extension into clamping engagement with the rod.

2,745,704
SEALING MEANS FOR PISTONS
Martin P. D'Errico, Altadena, Calif.
Application May 18, 1953, Serial No. 355,790
5 Claims. (Cl. 309—31)



1. A combined lubricant pumping and sealing means for a piston adapted to be reciprocated in a lubricant coated cylinder and having a piston ring groove formed in its circumferential surface; a metallic piston ring occupying the radially outer portion of said groove; a bypass including at least the radially inner portion of said groove, and having an inlet end communicating with the annular region between said piston and cylinder at the low pressure side of said piston ring and an outlet communicating with the high pressure side of said piston; and a unitary continuous ring of resilient material interposed in said bypass between said piston ring and the bottom of said groove, the cross-section of said resilient ring being three sides of a hollow rectangle open at one end and with the open end directed toward the high pressure end of said piston, whereby fluid pressure may enter said ring to expand the same into non-leaking contact with the inner face of said piston ring and with the bottom and one end wall of said groove, to seal against the escape of pressure from the high pressure end of said piston to the low pressure end thereof, said resilient ring being radially collapsible to permit the pumping past said metallic piston ring of at least a portion of the lubricant coating entrapped between said piston and cylinder, when the pressure of said lubricant coating exceeds the pressure at the high pressure end of said piston.

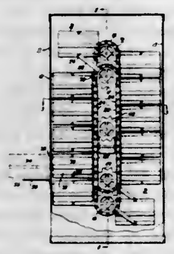
2,745,705
REFRESHMENT TRAY FOR AUTOMOBILE INSTRUMENT PANEL
Clyde W. Morgan, Dallas, Tex.
Application May 29, 1953, Serial No. 358,429
6 Claims. (Cl. 311—21)



1. A refreshment tray assembly for automobiles adapted to support beverage glasses and bottles carried

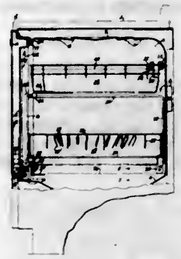
thereby in upright position, comprising a supporting structure including a substantially planar body portion, semi-cylindrical sleeve members depending from opposite sides of the supporting structure having oppositely disposed open portions defining shoulder elements therein, intermediate tubular members telescopically receivable in the semi-cylindrical sleeves and having an outer end and an inner end and provided with opposite longitudinally extending slots terminating in inwardly-directed opposite lugs adjacent to the inner ends of the intermediate tubular members, the said lugs being engageable with the shoulder elements in the semi-cylindrical sleeve members of the supporting structure, and a tray section including a tray portion having opposite upstanding side walls having upper edges carrying outwardly directed tubular slide members telescopically engageable with the intermediate tubular members, cooperating stop means in the said intermediate tubular members and carried by the side walls of the tray section for inhibiting complete removal of the tray section from the intermediate tubular members, and means on the supporting structure for securing said supporting structure in operative position to the structure of an automobile.

2,745,706
CONVEYOR MECHANISM
Jerome W. Mendelsohn, Euclid, Ohio
Application December 4, 1951, Serial No. 259,788
6 Claims. (Cl. 312—268)



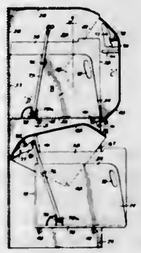
1. A conveyor mechanism comprising a frame having first and second sides, a plurality of receptacles in said frame, only first and second guide and support means for said receptacles, said first guide and support means including a first and a second wheel journaled in said frame in a first plane near said first side, said second guide and support means including a third and a fourth wheel journaled in said frame near said second side and in a second plane substantially parallel to said first plane and spaced therefrom, only first and second flexible carriers with said first carrier linking said first and second wheels and said second carrier linking said third and fourth wheels, said carriers having longitudinal dimensions substantially parallel, said first and third wheels being near one end of said frame and said second and fourth wheels being near the other end of said frame, the axes of said first and third wheels being substantially parallel and spaced a given distance and the axes of said second and fourth wheels being substantially parallel and spaced substantially said given distance, said carriers being of substantially equal length, a plurality of arms carried by said carriers and extending outwardly therefrom, and said plurality of receptacles each extending between an arm on one carrier and an arm on the other carrier and each receptacle being pivotally connected to said last mentioned arms, said two pivotal connections on each receptacle being the only connections between each receptacle and said guide and support means, the axes of said pivots being substantially normal to said two planes and the pivot axes on any one receptacle being spaced substantially said given distance.

2,745,707
DISHWASHER RACK AND SUPPORTING FRAME
Carl R. Sebena, Bridgeport, Conn., assignor to General Electric Company, a corporation of New York
Application October 30, 1952, Serial No. 317,798
3 Claims. (Cl. 312—311)



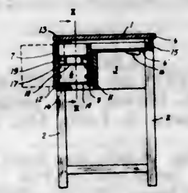
1. In a dishwasher having an enclosing tub of substantially rectangular configuration with a front opening door therefor hinged with respect to said tub along the lower edge thereof, a rack assembly for supporting dishes within said tub comprising a pair of inverted U-shaped supporting frame members each including a substantially horizontal top rail, rollers on the lower terminals of said frame members, means in said tub and on said door when in its open position defining tracks parallel with the side walls of said tub for said rollers, a lower dish rack rigidly secured to said frame members, an upper dish rack, supporting blocks secured to said upper rack at the front thereof and positioned for slidable movement on said frame top rails, upper support rollers secured to said upper rack at the rear thereof, an upper track formed on the side walls of said tub for receiving said upper supporting rollers thereby providing support for the rear portion of said upper rack, the rear end of said track terminating in a downwardly sloped portion on which said upper supporting rollers rest when said upper rack is within said tub, and stop means preventing outward movement of said supporting blocks beyond the forward end of said top rails.

2,745,708
FILING CABINET
Irving R. Cornish, Elmhurst, Ill.
Application December 26, 1951, Serial No. 263,299
7 Claims. (Cl. 312—311)



4. A filing cabinet comprising, an open front casing, a container mounted for opposite horizontal movement in the casing between receded and advanced positions with respect to the casing open front, a panel swingably mounted on the casing on an axis above the base of the container and intermediate its front and back for movement between a position for closing the casing open front and a retracted position within the casing, a first means on the casing connected to the container to effect the opposite horizontal movements thereof between its receded and advanced positions, a part of the first means disposed in the path of the panel when the panel is swinging adjacent its fully-retracted position within the cabinet, and pocket means on the panel adapted to embracively engage the part on the first means only during the swinging movement of the panel adjacent its fully-retracted position, whereby the opposite horizontal movements of the container are effected by the panel only as the panel moves into and out of its fully-retracted position.

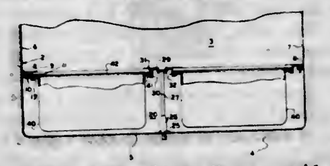
2,745,709
WORKING TABLE
Jorgen Alfred Vaashaug, Oslo, Norway
Application November 20, 1951, Serial No. 257,370
Claims priority, application Norway November 22, 1950
1 Claim. (Cl. 312—330)



A work table comprising a table top having substantially straight front and rear edges, a drawer having front and rear walls, said drawer being slidably supported beneath the table top, cooperating supporting and slide means secured at the lower surface of the said table top and on the said drawer, respectively, and extending transversely inwardly from the said front edge of the table top enabling the said drawer to be at least partly withdrawn outside the said front edge, the said drawer extending inwardly from the said front edge and extending downwardly from the said table top to a level below the knees of an adult person seated at the table, a shallow extension rigid with said drawer and extending toward and nearly to the rear edge of said table top, immediately underneath the table top, said rear wall of said drawer and said shallow extension defining a space to accommodate the legs of an adult person seated at said table, stop means to prevent said drawer from entering said space, and handle means on said extension near said rear edge of said table top.

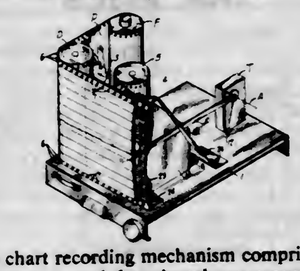
2,745,710
CENTER GUIDE SUPPORT FOR REFRIGERATOR VEGETABLE PAN
Richard J. Carbary, Findley Lake, N. Y., assignor to General Electric Company, a corporation of New York
Application October 21, 1953, Serial No. 387,440
9 Claims. (Cl. 312—332)

1. In a refrigerated cabinet including an inner liner, said inner liner including side walls and a bottom, means



disposed on each of the side walls to provide guides, a resiliently mounted member extending upwardly from the bottom of said inner liner, means connected to said member to provide guides, and containers adapted to be disposed in said guides.

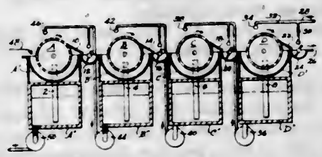
2,745,711
STRIP CHART RECORDER
Earl O. Schweitzer, Wickliffe, Ohio, assignor to The Swartwout Company, Cleveland, Ohio, a corporation of Ohio
Application August 8, 1952, Serial No. 303,370
19 Claims. (Cl. 346—116)



1. Strip chart recording mechanism comprising an axis, a stylus arm mounted for pivotal movement about said axis, means for moving said arm about said axis in response to conditions to be recorded, a stylus carried by said arm transversely thereof and remote from said axis, and a plate disposed generally parallel to said axis and having an arcuately curved edge lying in a plane normal to said axis adjacent said stylus and struck from the same radius from said axis as the radius of the stylus from said axis.

CHEMICAL

2,745,712
PROCESS FOR COUNTERCURRENT WASHING OF COOKING LIQUOR OUT OF PULP
Elmer R. Burling and John P. Rich, Nashua, N. H., assignors to Improved Machinery, Inc., Nashua, N. H., a corporation of Maine
Application October 22, 1953, Serial No. 387,694
4 Claims. (Cl. 8—156)

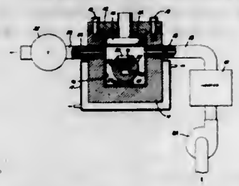


1. A process of washing residual, highly forming, cooking liquor out of pulp comprising: operating on countercurrent principles a series of horizontal, foraminous cylindrical filters of the type wherein liquor is sucked inwardly through the foraminous surface of the cylinder wall under vacuum generated primarily as a result of rotation of the cylinder: separately collecting the liquor extracted by each filter; returning from each succeeding filter a portion of the liquor collected thereby as a shower on the face of the preceding filter; and using a portion of the remainder to dilute pulp concentrated on the preceding filter, the collection of liquor extracted by each cylinder occurring at a level only a little below the center line of such cylinder.

2,745,713
HIGH TEMPERATURE HIGH PRESSURE REACTOR
Chauncey G. Suits, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application October 29, 1952, Serial No. 317,395
11 Claims. (Cl. 23—1)

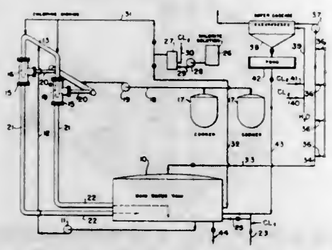
8. The method of subjecting a substance to high temperature and pressure which comprises confining said

substance in the cylindrical cavity of a first pressure vessel, confining said first pressure vessel within a second pressure vessel, and circulating through said second pressure vessel a hydraulic fluid under pressure at the temperature to which the substance is to be subjected selected



from the group consisting of lead, indium, bismuth, sodium, potassium, gallium, lithium, and tin, said hydraulic fluid acting upon said first pressure vessel to subject the substance therein to a pressure higher than that of the hydraulic fluid.

2,745,714
TREATMENT OF ODOR CONTAINING GASES WITH CHLORINE DIOXIDE
Eric R. Woodward, New York, N. Y., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application June 5, 1950, Serial No. 166,116
1 Claim. (Cl. 23—2)



The method of controlling the odors of vapors evolved in the processing of organic materials which comprises forming a stream of water at a temperature of at least about 90° F. and an alkaline pH of about 8–10, adding sufficient chlorine dioxide to provide a chlorine residual of at least 10 p. p. m., and intimately contacting the process vapors with said warm, alkaline, chlorine dioxide containing water.

2,745,715
PROCESS OF PRECIPITATING SUBSTANTIALLY ANHYDROUS CALCIUM CHROMATE
Holbert E. Dunn, Crafton, and Ellis J. O'Brien, Pittsburgh, Pa., assignors to Vanadium Corporation of America, New York, N. Y., a corporation of Delaware
No Drawing. Application March 4, 1953, Serial No. 340,401
3 Claims. (Cl. 23—56)

1. The process of precipitating substantially anhydrous calcium chromate, which comprises preheating sodium chromate solution to 120–190° F., preheating calcium chloride solution to 120–190° F., adding alkali to the sodium chromate solution in such amount that after the sodium chromate solution and the calcium chloride solution are mixed and heated to complete the reaction, the final slurry will have a pH of 9–12, mixing the calcium chloride solution and the sodium chromate solution in an amount of at least 120% of the stoichiometric requirements of calcium chloride for precipitating calcium chromate, and heating the resulting slurry at atmospheric pressure and at a temperature of 200–215° F. to precipitate anhydrous calcium chromate.

2,745,716
PRODUCTION OF POTASSIUM FLUOZIRCONATE
Alfred L. Hock, Clifton Junction, near Manchester, England, assignor to Magnesium Elektron Limited, Clifton Junction, near Manchester, England
No Drawing. Application May 21, 1952, Serial No. 289,200
Claims priority, application Great Britain June 14, 1951
1 Claim. (Cl. 23—88)

A process for producing potassium fluozirconate corresponding to molecular ratios of $KF:ZrF_4$ of from 1.0 to 1.2 comprising providing an aqueous medium containing potassium fluozirconate both in solution and in suspension, said potassium fluozirconate corresponding to molecular ratios of $KF:ZrF_4$ greater than 1.2, adding to said aqueous medium at least one mineral acid selected from the group consisting of hydrochloric acid, sulphuric acid, and nitric acid, the amount of said mineral acid being at least 1 mole of acid per atom of zirconium and being sufficient to cause the production of potassium fluozirconate having said ratios of 1.0 to 1.2, and recovering the resulting potassium fluozirconate from the mixture.

2,745,717
PREPARATION OF POLYPHOSPHATES
James W. Edwards, Dayton, Ohio, assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
No Drawing. Application April 23, 1953, Serial No. 350,770
3 Claims. (Cl. 23—106)

1. The method of preparing $Na_5P_3O_{10}$ (I) which comprises heating a mixture of trisodium hydrogen pyrophosphate and disodium hydrogen orthophosphate at a temperature between about 200° C. and about 500° C.

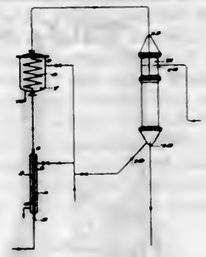
2,745,718
METHOD OF SEPARATING PHOSPHATE IONS FROM IRON IONS
Johan Halberstadt, Amsterdam, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
No Drawing. Application May 23, 1952, Serial No. 289,681
Claims priority, application Netherlands June 5, 1951
5 Claims. (Cl. 23—165)

1. A method of separating radioactive phosphorus from deuteron-bombarded iron comprising the steps of forming an aqueous alkaline solution containing ions of the radioactive phosphorus and iron to precipitate iron hydroxide, separating the iron hydroxide from the solution containing radioactive phosphate ions, adding to the solution a water-soluble bismuth salt to precipitate insoluble bismuth phosphate, dissolving the bismuth phosphate in an aqueous solution of a hydrohalogenic acid, precipitating from the latter solution an insoluble bismuth salt while retaining in solution radioactive phosphate ions, and recovering radioactive phosphoric acid from said solution.

2,745,719
HYDROGEN PEROXIDE PRODUCTION
Josef Müller, Paternion, Austria, assignor to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfurt am Main, Germany
Application April 25, 1952, Serial No. 284,217
Claims priority, application Germany April 28, 1951
11 Claims. (Cl. 23—207)

1. In a process for the production of hydrogen peroxide by the hydrolysis of a solution of a persulfuric compound selected from the group consisting of persulfuric acid and its salts and the distillation of the hydrogen peroxide formed the steps which comprise passing the persulfuric compound solution through an externally heated graphite tube at a velocity of at least 50 ccm. per

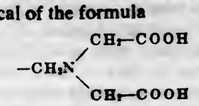
minute per $cm.^3$ of interior cross-section, and during passage of the solution through the graphite tube indirectly supplying a sufficient amount of heat to evaporate at least 30% of the original volume of the persulfuric compound solution and effect substantially complete hydrolysis of the persulfuric compound while only evaporating



a minor portion of the hydrogen peroxide produced and conducting the reaction solution and vapor mixture leaving the graphite tube without previous separation of the vapor from the solution to a stripping column wherein the mixture is treated directly with steam to remove hydrogen peroxide therefrom.

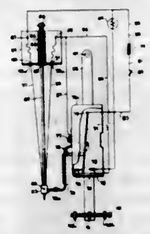
2,745,720
ACID-BASE INDICATOR DYESTUFFS
Gerold Schwarzenbach, Zurich, and Richard Sallmann, Basel, Switzerland, assignors to Ciba Limited, Basel, Switzerland, a Swiss firm
No Drawing. Application August 25, 1952, Serial No. 306,284
Claims priority, application Switzerland August 29, 1951
12 Claims. (Cl. 23—230)

1. A derivative of an acid-base indicator dyestuff, which contains the radical of the formula



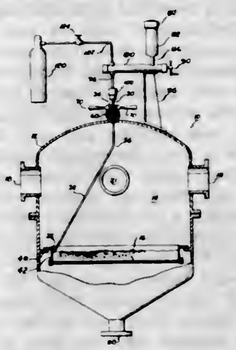
in at least one position vicinal to an auxochromic group selected from the class consisting of unsubstituted amino groups and hydroxyl groups of phenolic character, the amino and hydroxyl groups being bound to a monocyclic carbocyclic aromatic nucleus.

2,745,721
COMBUSTIBLE VAPOR DETECTOR
Carter Tiffany, Englewood, N. J.
Application June 13, 1952, Serial No. 293,254
5 Claims. (Cl. 23—255)



1. In a device for detecting the occurrence of a combustible vapor; a base member; a signal arm; a pair of wire elements; one extremity of each of said wire elements being secured to said signal arm near one extremity of the latter, the opposite extremities of said wire elements being spaced apart and secured to said base member; such wire elements, the axis of said signal arm, and a pair of lines each extending perpendicularly from said axis to respective of said opposite wire extremities forming two adjacent right angle triangles having a common side portion along said axis and also having adjacent acute angle apices; pivot means for the opposite extremity of said signal arm; signal arm resilient means for urging said signal arm resiliently and axially thereof in a direction normally to place said wire elements under tension thereby forming a V-tension mounting, said signal arm resilient means exerting a force upon said signal arm which is a function of the extent of deformation thereof, said wire elements having equal expansion characteristics responsive to a common temperature change; one of said wire elements including a catalyst for heating same relative to the other wire element in response to oxidation of combustible vapor under the influence of such catalyst; said signal arm under the influence of said resilient means being angularly shiftable in response to an axial expansion differential between said wire elements whereby such resilient means can expand and the thrust thereof diminished as a function of such expansion; a contact for engaging said signal arm; limit-stop resilient means for such signal arm, such limit-stop resilient means having preselected structural strength characteristics for exerting a progressively increasing force against such signal arm, which force is a function of the extent of such signal arm angular movement from a norm position and thus of the extent of deformation of said limit-stop resilient means, such limit-stop resilient means by virtue of such preselected structural strength characteristics creating a force adequate to arrest such angular movement of said signal arm in response to departure thereof in a critical amount from such norm position, such critical amount being less than an amount causing a permanent set in such wire element including the catalyst but being at least equal to an amount causing substantial expansion of said signal arm resilient means thereby to reduce the force exerted upon said signal arm by said signal arm resilient means in turn to diminish the tension upon such other of said wire elements below the elastic limit of the latter element.

2,745,722
APPARATUS FOR CALKING CATALYST BED
Victor A. Lacoste, Three Rivers, Mass., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
Application June 17, 1953, Serial No. 362,211
10 Claims. (Cl. 23—288)



1. In a reactor comprising a wall defining a reaction chamber containing a horizontally disposed bed of finely-divided catalyst, calking apparatus for depositing a supply of fresh catalyst about the peripheral edge of said catalyst bed in order to compensate for radial contraction thereof,

said calking apparatus comprising a gas-tight seal in said wall above said catalyst bed, a rotatable conduit of comparatively small cross-sectional area entering said chamber through said seal and terminating in a discharge end at a point above and in proximity to the peripheral edge of said catalyst bed, and means connected to said conduit for maintaining said discharge end of said conduit above and in close proximity to said peripheral edge as said conduit is rotated.

2,745,723

APPARATUS FOR THE CONVERSION OF LIQUID HYDROCARBONS

David M. Lantz, Philadelphia, Pa., assignor to Houdry Process Corporation, Wilmington, Del., a corporation of Delaware

Application April 12, 1950, Serial No. 155,536
5 Claims. (Cl. 23—288)



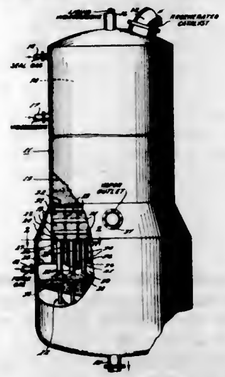
1. In a hydrocarbon conversion reactor provided with means for introducing granular contact material into said reactor at the top thereof and means for discharging contact material at the bottom thereof, a horizontal partition within said housing adapted to support a bed of contact material thereon, said partition being provided with a plurality of tubular discharge devices arranged in a pattern to distribute contact material below said partition uniformly over the cross section of said reactor, a narrow horizontal hollow beam spaced below said partition, gas distributing members intersecting said beam, said beam being provided with openings therein at the points of intersection of each of said gas distributing members to permit gas flow from said beam into said distributing members and said distributing members being provided with openings therein permitting flow of such gas into the reactor, said distributing members being spaced below said partition and said discharge devices terminating at a level above said distributing members to provide a conversion zone between said level of termination of said discharge members and said gas distributing members, a longitudinally extending vapor conducting tube passing through said partition, said tube communicating with the interior of said beam and rising vertically upward therefrom, means for introducing vapors into said reactor above said partition, means for withdrawing vapors from said reactor at a level intermediate said partition and the level of termination of said discharge devices, a liquid discharge nozzle within said reactor at a point above said partition, and contact material distributing means above said nozzle arranged to divert contact material passing through said reactor from contact with said discharge nozzle, said contact material distributing means being arranged to discharge contact material toward the upper surface of said partition.

2,745,724

DISENGAGEMENT OF GASES FROM A MOVING BED OF FLUENT SOLID PARTICLES

Reyner Kollgaard, San Mateo, Calif., assignor to Houdry Process Corporation, Wilmington, Del., a corporation of Delaware

Application August 23, 1952, Serial No. 305,971
4 Claims. (Cl. 23—288)



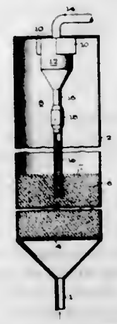
1. Apparatus for disengaging gas flowing concurrently through a compact moving bed of solids gravitating through a contact chamber comprising: a tube-sheet forming the lowermost boundary of said contact chamber and supporting said bed, a purge chamber beneath said tube-sheet, vertical elongated purge nipples spaced over the cross-sectional area of said contact chamber with their upper portions set in said tube-sheet and their lower portions extending to an intermediate level within said purge chamber, gas-collecting ducts horizontally coextensive with said tube-sheet and located within the spaces between said purge nipples, vertical tubes within the bottom region of said contact chamber with their lower ends in open communication with said ducts, gas-disengaging members supported by and in open communication with said vertical tubes, a manifold chamber in open communication with each of said ducts, means for introducing purge gas into said purge chamber, means at the bottom of said purge chamber for discharging said solids, and means for discharging gas from said manifold chamber.

2,745,725

FLUIDIZED SOLIDS CHEMICAL APPARATUS

John V. Ward, Oakmont, and Benjamin M. Wedner, Pittsburgh, Pa., assignors to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware

Application November 13, 1951, Serial No. 255,954
6 Claims. (Cl. 23—288)



1. Apparatus for carrying out a chemical reaction in the presence of a bed of fluidized solids, comprising a vessel adapted to contain a dense phase of fluidized solid particles in its lower portion and a dilute phase in the upper portion, inlet means for introducing fluidizing gas into the lower portion of said vessel, outlet means for removing product vapors from the upper portions of said vessel, a centrifugal gas-solids separator in association with said outlet means and adapted to remove solid particles from said product vapors, conduit means in association with said separator and extending beneath the dense-phase level for returning separated solid particles into the lower portion of the vessel beneath the dense phase level, unidirectional, direct-acting, normally open valve means positioned within said conduit, said valve means being responsive to sudden increases in pressure drop across the separator, and being adapted to close when the pressure drop exceeds that sufficient to cause appreciable reverse flow of particles through said conduit.

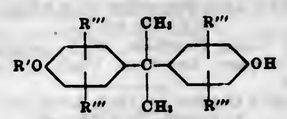
2,745,726

STABILIZED ORGANIC COMPOSITIONS CONTAINING ALKYLATED BISPHENYL COMPOUNDS

David W. Young and George E. Serniuk, Roselle, and Delmer L. Cottle, Highland Park, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application February 17, 1951, Serial No. 211,582
9 Claims. (Cl. 44—78)

1. As new chemicals, hydrocarbon oil-soluble alkylated bisphenyl type compounds corresponding to the general formula



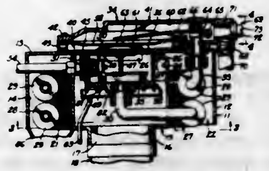
wherein R′ is a radical selected from the group consisting of hydrogen and alkyl radicals having from 1 to 5 carbon atoms, and R‴ is an alkyl radical having 4 to 22 carbon atoms.

2,745,727

HEAT EXCHANGE APPARATUS FOR LIQUEFIED FUEL CARBURETORS

George L. Holzapfel, Los Angeles, Calif.

Application March 31, 1951, Serial No. 218,675
10 Claims. (Cl. 48—184)



10. In an apparatus for vaporizing liquefied fuel and mixing it with air, the combination of: a source of liquefied fuel; a vertically walled housing incorporating a chamber having a cylindrical baffle secured therein and spaced from the wall of said housing to define a combustion air inlet passage and a combustion air outlet passage, said combustion air inlet passage communicating with the ambient air surrounding said housing and said combustion air outlet passage communicating with the air intake of a carburetor; a first pressure reducing valve disposed within said cylindrical baffle and connected to a fuel inlet mounted on said housing connected to said source; a second pressure reducing valve mounted externally on said housing and communicating with a fuel outlet on said housing connected to said carburetor below sad intake; a heat exchanger disposed in said combustion air inlet passage, said heat exchanger being connected intermediate said first pressure reducing valve and said second pressure reducing valve for reducing the temperature of said combustion air as it flows through said combustion air inlet passage and for supplying the latent heat of vaporization to said liquefied fuel as it flows through said heat exchanger; and a regulator mounted adjacent the fuel outlet for regulating the pressure of the fuel as it leaves said outlet.

2,745,728

GRINDING WHEELS AND METHOD OF MAKING THEM

Ernest P. Irany, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts

No Drawing. Application July 30, 1952, Serial No. 301,798
3 Claims. (Cl. 51—298)

1. A process of making a phenol-formaldehyde bonded grinding wheel which comprises forming on sulphur particles a substantially continuous coating of a film forming substance in a state in which said substance is non-reactive to phenol-formaldehyde resins during the curing thereof, mixing the coated sulphur with abrasive grains and a reactive phenol-formaldehyde resin, molding a grinding wheel from the resultant mix, and curing the mix with heat to form a grinding wheel having good bond strength containing sulphur due to prevention of the deterioration, during said curing, of the resin bond by means of the non-reactive coating on the sulphur particles.

2,745,729

HERBICIDAL COMPOSITION

David T. Mowry, Kirkwood, Mo., and Arthur H. Schlesinger, Dayton, Ohio, assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application January 16, 1953, Serial No. 331,724
2 Claims. (Cl. 71—2.6)

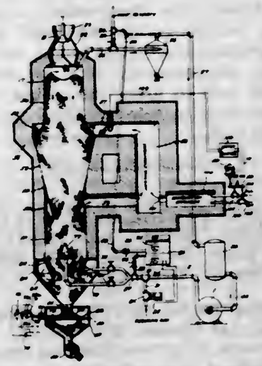
1. The method of preventing plant growth which comprises applying allyl phthalate to media normally supporting said growth, said phthalate being applied to said media in a quantity which prevents plant growth.

2,745,730

PROCESS OF REDUCING MANGANESE ORES

Fred D. De Vaney, Hibbing, Minn., assignor to Pickands Mather & Co., Cleveland, Ohio, a copartnership

Application January 29, 1952, Serial No. 268,729
1 Claim. (Cl. 75—1)



In the process of reductively roasting a manganiferous iron ore material containing at least 7.56% MnO_2, to convert the manganese content thereof to manganous oxide and the iron content thereof to magnetite, involv-

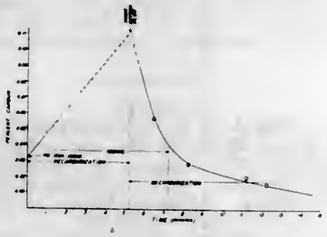
ing the steps of establishing and maintaining a gravitationally descending column of the initially substantially unheated ore in particulate form and countercurrently passing through at least the upper part of the column an initially heated reactive gas mixture containing carbon dioxide and a gaseous reducing agent of the group consisting of carbon monoxide and hydrogen, there being present more carbon dioxide than gaseous reducing agent, the mode of preventing "dead burning" of the manganese oxide content of the ore and of preventing formation of poorly leachable manganous oxide which consists in so controlling the volume and the initial temperature of the reactive gas mixture, within the range 800°–1000° F., as to prevent the occurrence in the top 24 inches of the ore column of a peak temperature materially above 1510° F.

2,745,731

METHOD FOR MAKING LOW CARBON 18–8 TYPE HEATS

Garland W. Reese, Jr., Loudonville, and George E. Schmidt, Albany, N. Y., assignors to Allegheny Ludlum Steel Corporation, Brackenridge, Pa., a corporation of Pennsylvania

Application November 22, 1954, Serial No. 470,303
5 Claims. (Cl. 75—12)



1. In the method of producing steel having a carbon content below 0.03% maximum by means of an electric arc furnace using a virgin metal melting procedure in which a predetermined mass of scrap metal, devoid of substantial amounts of chromium and manganese, together with predetermined amounts of metal of the non-oxidizable metals nickel and molybdenum is initially arc melted to form a molten metal bath and the carbon content is then adjusted to a predetermined level after which predetermined amounts of chromium, manganese and silicon are added and the molten metal is refined to a predetermined chemical analysis prior to tapping the molten metal into a ladle, the improvement comprising, recarburizing the initially arc melted metal bath by adding pig iron to produce a reboiling action, and injecting gaseous oxygen simultaneously with the reboiling of the molten metal bath to lower the carbon content of the molten metal bath to below 0.020% by weight of the molten metal bath.

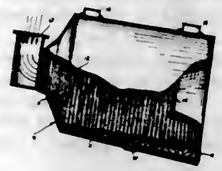
2,745,732

METHOD OF REDUCING ORES BY A PARTICULAR FUEL COMBUSTION MIXTURE

Thomas H. Oster, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a corporation of Delaware

Application October 28, 1952, Serial No. 317,282
11 Claims. (Cl. 75—26)

1. The process of burning fluid fuel comprising injecting tangentially at high velocity a stream of preheated oxidizing gas into a refractory lined cylindrical container, causing fluid fuel and subdivided metal bearing material to become entrained in the stream of oxidizing gas, producing a slag by the fusion of at least a portion of the metal bearing material, maintaining the temperature of the interior of the container sufficiently high to maintain all of the products of the reaction except carbon in a fluid state, water cooling the refractory to protect it from attack by molten oxides, adjusting the velocity of the tangential stream of oxidizing gas so that at least a portion of the slag will describe a helical path along the periphery of the container, main-



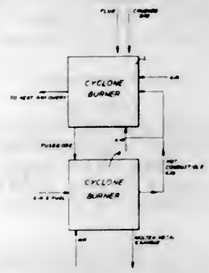
taining conditions within the container sufficiently reducing to lower the state of oxidation of the metallic compounds to the desired degree, tapping off the slag and reduced metallic compounds from the periphery of the container, ejecting the highly heated gaseous products of the reaction into a combustion chamber and then burning these gaseous products of combustion with a further addition of oxidizing gas before said gaseous products of combustion have substantially cooled.

2,745,733

APPARATUS AND PROCESS FOR REDUCTION OF ORES TO METAL

Thomas H. Oster, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a corporation of Delaware

Application October 24, 1952, Serial No. 316,708
11 Claims. (Cl. 75—40)



1. In an apparatus for the reduction of metals from lean ores, two cyclone burners arranged with the first cyclone burner at a higher elevation than the second cyclone burner, means for conducting the hot gaseous effluent from the second cyclone burner to the first cyclone burner, means for transferring by gravity molten ore from the first cyclone burner to the second cyclone burner, means for feeding crushed ore to the first cyclone burner, means for feeding fuel to the second cyclone burner and means for tapping from the second cyclone burner metal and slag.

2,745,734

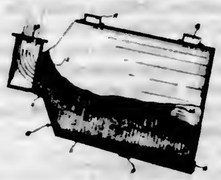
METAL REDUCTION AND COMBUSTION PROCESS

Thomas H. Oster, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a corporation of Delaware

Application October 30, 1951, Serial No. 253,890
12 Claims. (Cl. 75—40)

1. The process of burning solid fuel comprising circulating a coolant in a confined stream within a refractory lined cylindrical container, said coolant being confined

in a metallic conduit adjacent the periphery of the container injecting tangentially and at high velocity a highly preheated stream of oxidizing gas into said cylindrical container, adding to said stream of oxidizing gas a crushed solid fuel and a subdivided metalliferous material, the total heat generated by the combustion of the fuel and brought in in the preheated oxidizing gas being sufficient to liquefy as a slag or metal the metallic reactants and to gasify all of the other products of reaction except the carbon of the fuel, the velocity of the injected stream of oxidizing gas being sufficient to carry with it



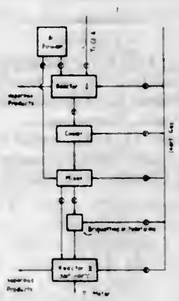
at least a portion of the liquid products of reaction in a helical path along the interior periphery of the refractory lined cylindrical container, the ratio of solid fuel to oxidizing gas being made sufficiently high to reduce at least a portion of the metallic content of the slag to elemental metal, tapping off the molten slag and metal from the periphery of the container, ejecting the highly heated and combustible gaseous products of reaction into a combustion chamber and there burning these gaseous products of combustion with a further addition of oxidizing gas before said gaseous products of combustion have substantially cooled.

2,745,735

METHOD OF PRODUCING TITANIUM

Alva C. Byrns, Lafayette, Calif., assignor to Kaiser Aluminum & Chemical Corporation, Oakland, Calif., a corporation of Delaware

Application April 28, 1953, Serial No. 351,664
12 Claims. (Cl. 75—84)



5. Process for making a ductile titanium metal which comprises heating titanium tetrachloride and excess aluminum metal of particle size substantially entirely passing a No. 200 screen, at from 400° C. to 600° C., in the absence of a reactive gas, to form a lower chloride of titanium and vaporous aluminum chloride and less than stoichiometric amount of finely divided aluminum metal, removing said vaporous aluminum chloride, mixing said titanium lower chloride and finely divided aluminum, agglomerating said mixture under pressure, heating said agglomerates at a temperature gradually increasing from 500° C. to at least 1000° C., under a stream of inert gas, to form vaporous aluminum chloride and compact titanium metal, separately withdrawing said vaporous aluminum chloride, and recovering said titanium metal.

2,745,736

PROCESS FOR THE PRODUCTION AND RECOVERY OF ZINC IN METALLIC FORM BY REDUCTION OF MATERIALS CONTAINING ZINC IN OXIDE FORM

Hirsch Loevenstein, New York, N. Y., and Paul Louis Adrien Belon, L'Argentiere, France, assignors to Pechiney Compagnie de Produits Chimiques et Electrometallurgiques, Paris, France, a corporation of France

No Drawing. Application November 20, 1951, Serial No. 257,428

Claims priority, application France November 27, 1950

15 Claims. (Cl. 75—86)

1. A process of reducing and recovering zinc in metallic form by the thermal reduction of zinc oxide which comprises forming a mixture of a material containing zinc oxide and a sufficient amount of a reducing agent consisting of an alloy of silicon and aluminum to reduce the zinc oxide present in the charge, said reducing agent containing aluminum in proportion not exceeding 65% with the balance principally silicon, heating the mixture to a temperature sufficient to initiate the reduction reaction between the zinc oxide and the aluminum and silicon constituents of the charge, and thereafter employing the heat evolved to volatilize substantially all of the zinc so produced and to maintain a sufficient temperature in the reaction zone to promote and maintain the reduction reaction without the application of extraneous heat.

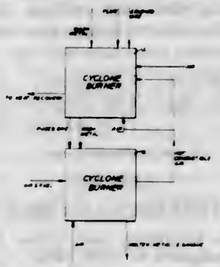
2,745,737

PROCESS OF REDUCING METALLIC ORES WITH GASES

Thomas H. Oster, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a corporation of Delaware

Application November 21, 1952, Serial No. 321,769

12 Claims. (Cl. 75—91)



1. In a process for the combustion of fuel and the production of molten metal and a combustible gas, the steps of melting metal ore, transferring this molten ore to a cyclone burner operated under conditions reducing to said metal, adding to said cyclone burner a source of wash metal, said wash metal being a solvent for the metal being reduced, tapping said metals and slag from the cyclone burner, said cyclone being operated at a temperature sufficient to liquefy or gasify all of the products of reaction except carbon, the sensible heat added to the cyclone in the combustion air and fuel, plus the heat added in the molten ore plus the heat of the combustion within the burner being at least equal to the energy of reduction of the metal plus the sensible and latent heat of the gaseous products of combustion plus the heat of the molten metals and slag plus the heat abstracted by radiation and cooling water.

2,745,738

STEEL ALLOY BLANKS FOR GLASS-TO-METAL SEAL

Freeman J. Phillips and Raymond Smith, Pittsburgh, Pa., assignors to United States Steel Corporation, a corporation of New Jersey

No Drawing. Application September 12, 1951, Serial No. 246,334

2 Claims. (Cl. 75—126)

2. A metal blank for forming a glass-to-metal seal, said blank being formed of steel containing .005 to .12% carbon, 15 to 20% chromium, nil to 1.00% manganese, nil to 1.00% silicon, nil to 1.00% aluminum, nil to 1.00% titanium, nil to 1.00% nickel, and balance substantially iron, said carbon, chromium, silicon, aluminum, titanium, manganese and nickel being restricted to amounts consistent with the formula

Percent Cr+percent Si/2+30×percent Ti+10×percent Al−4.27(percent Ni+percent Mn/2+30×percent C)−19.56=a numerical value greater than unity

said steel being characterized by being completely ferritic after quenching from 2190° F.

2,745,739

STEEL GLASS SEALS AND STEEL THEREFOR

Freeman J. Phillips, Pittsburgh, and Charles O. Tarr, McKeesport, Pa., assignors to United States Steel Corporation, a corporation of New Jersey

No Drawing. Application October 22, 1952, Serial No. 316,326

6 Claims. (Cl. 75—128)

1. A stainless steel characterized by being ferritic completely after heating to 1200° C. and quenching, and having a coefficient of expansion of less than 12.5×10^{-6} in./in./° C. throughout the temperature range of 530° to 30° C. containing 9.5 to 13.5% chromium, less than .10% carbon, at least .50% titanium, .25 to 1.00% molybdenum, .02 to .30% aluminum, .10 to 1.00% silicon, .10 to .75% manganese and less than .50% nickel, said chromium, carbon, titanium, molybdenum, aluminum, silicon, manganese and nickel being restricted to amounts consistent with the formula

%Cr+%Si/2+30×%Ti+10×%Al+2.4×%Mo−4.27(%Ni+%Mn/2×%C)−19.56=a sum greater than unity

2,745,740

PROCESS OF PREPARING AN IRON BASE MELT

Paul L. Jackson, Dearborn, and Victor F. Zackay, Detroit, Mich., assignors to Ford Motor Company, Dearborn, Mich., a corporation of Delaware

No Drawing. Application September 2, 1954, Serial No. 453,954

3 Claims. (Cl. 75—130.5)

1. The process of preparing an effectively gas free iron base casting comprising preparing an iron base melt containing as essential alloying ingredients chromium in an amount from 10 to 30 per cent, and manganese from 10 to 20 percent, subjecting said melt to a superatmospheric pressure amounting to at least one atmosphere above the ambient, alloying the melt under said pressure of at least two atmospheres with nitrogen in an amount from 0.3 to 1 per cent, and until the ratio of chromium to nitrogen is between 70 to 1 and 25 to 1, casting the nitrogenous melt into a mold without interrupting the application of pressure, and abstracting heat from the melt rapidly enough to cause solidification without substantial ebullition of gas.

2,745,741

METHOD OF PRODUCING MAGNESIUM BASE ALLOYS

Edward Frederick Emley and William Unsworth, Manchester, England, assignors to Magnesium Elektron Limited, Manchester, England

No Drawing. Application February 13, 1953, Serial No. 336,868

Claims priority, application Great Britain October 7, 1952

8 Claims. (Cl. 75—168)

1. A method of reducing the content of rare earth metals in magnesium base alloys containing both thorium and rare earth metals which comprises effecting intimate contact of magnesium chloride with the alloy throughout the body of the alloy, while said alloy is in the molten state, and maintaining over the alloy a substance capable of minimising the tendency of the alloy to oxidation, such substance being selected from the group consisting of metal chloride fluxes, inert atmospheres, and combinations thereof.

2,745,742

METHOD OF MAKING A SINTERED BRAZING PELLET

Alfred T. Gaskill, Cleveland Heights, Ohio, assignor to General Electric Company, a corporation of New York; patent dedicated to the Public insofar as it relates to lamps and lamp parts to the extent stated in document recorded in the United States Patent Office, January 4, 1954, liber U–238, page 394

No Drawing. Application March 8, 1952, Serial No. 275,670

4 Claims. (Cl. 75—211)

1. The method of making a hard sintered brazing pellet of uniform size and high resistance to crumbling which comprises thoroughly drying a quantity of powdered flux material having a fineness of at least 70 mesh and consisting of a relatively low melting point borate glass, admixing said powdered flux material with a powdered brass solder having a fineness of at least 70 mesh and the particles of which predominantly have a highly irregular rough surface characterized by acicular projections, pressing a measured quantity of the admixture into a pellet of predetermined size and shape, and sintering the pressed pellet into a firmly coherent mass.

2,745,743

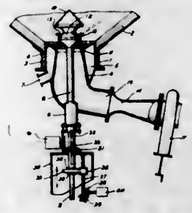
CELLULOSE COOKERS

Erich H. Knopf, Raubling, Upper Bavaria, Germany, assignor to Aschaffenburger Zellstoffwerke A. G., Redenfelden, Upper Bavaria, Germany

Application July 12, 1954, Serial No. 442,846

Claims priority, application Germany July 13, 1953

12 Claims. (Cl. 92—7)



1. A cellulose cooker comprising, in combination, a container in which raw cellulose is treated, said container being formed with upper and lower openings respectively in top and bottom portions thereof; supply means communicating with said upper opening for supplying raw cellulose and additional chemicals to the interior of said container; conduit means communicating with said lower opening for leading treated material away from said container; control means forming part of said conduit means for controlling the flow of material from said container; and means located adjacent said lower opening of said container and communicating permanently with the interior thereof for directing streams of treating liquid into and out of the interior of said container.

2,745,744

TREATING AGENTS INCORPORATION

Charles Leslie Weidner and Isaac Richard Dunlap, Cranbury, N. J., assignors to Permacel Tape Corporation, a corporation of New Jersey

No Drawing. Application February 9, 1951, Serial No. 210,281

Claims priority, application Canada February 17, 1950

19 Claims. (Cl. 92—21)

1. A process for making felted fibrous webs composed of fibrous and non-fibrous material comprising the steps of: *a*. Mixing an aqueous anionic colloidal dispersion of non-fibrous material, with a water dispersion of fiber comprising from about one-fifth of one per cent to about one hundred percent hydrophobic material based on the weight of said fiber; and in the presence of said material *b*. Adding as the essential precipitating agent from about one part to about two thousand parts per million parts of dispersion and added non-fibrous material of a precipitating agent comprising an aqueous solution of a water-soluble poly-N-basic polymer salt of a strong base and not surface active each molecular unit having at least three basic nitrogen groups recurring along the polymeric chain, said solution of poly-N-basic salt having a pH above about 4.3, thereby precipitating said dispersion; and *c*. Forming a web from said precipitated dispersion, in which said non-fibrous material is incorporated along with said fibers.

2,745,745

POULTRY FEED

Edward S. Blake, Lynnfield, and Robert J. Wineman, Concord, Mass., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application October 30, 1952, Serial No. 317,828

11 Claims. (Cl. 99—4)

1. A poultry feed composition comprising a poultry feed and a compound selected from the group consisting of alpha-hydroxy-gamma - methylmercaptobutyric acid, the ammonium salt of said acid, an alkali earth metal salt of said acid, mixtures of said salts, and alpha-hydroxy-gamma-methylmercaptobutyramide, said compound being present in an amount sufficient to improve the efficiency of feed utilization of said feed by poultry.

2,745,746

METHOD OF TREATING COCOA BEANS AND PRODUCT THEREOF

Harold E. Jones, Cambridge, Mass.

No Drawing. Application January 19, 1953, Serial No. 332,097

4 Claims. (Cl. 99—23)

1. The method of treating cocoa beans, which comprises effecting a preliminary partial roasting of the beans, removing the shells from the beans to leave the nibs, adding to the nibs an alkalizing solution formed by dissolving 8 pounds of sodium carbonate monohydrate in 36 quarts of water for each 400 pounds of cocoa nibs, allowing the nibs to absorb the solution for approximately a half hour, and then roasting the nibs to the desired extent to drive off approximately 95% of the water.

2,745,747

WINE FINING

Kurt Hennig, Geisenheim (Rhine), Germany

No Drawing. Application February 4, 1953, Serial No. 335,157

5 Claims. (Cl. 99—48)

1. The process of fining vinous and fruit beverages including the group consisting of grape wine, fruit wine, grape juice, fruit juice and must, containing at least one contaminating heavy metal, comprising adding to one of said beverages an inositol compound selected from the group consisting of calcium salt of inositol tetraphosphate, calcium salt of inositol pentaphosphate, calcium salt of inositol hexaphosphate, magnesium salt of inositol tetraphosphate, magnesium salt of inositol pentaphosphate, magnesium salt of inositol hexaphosphate, potassium salt of inositol tetraphosphate, potassium salt of inositol pentaphosphate, potassium salt of inositol hexaphosphate, sodium salt of inositol tetraphosphate, sodium salt of inositol pentaphosphate, sodium salt of inositol hexaphosphate, mixed salts thereof, and mixtures thereof for reacting with the heavy metal to form a substantially insoluble complex compound of the heavy metal and of said inositol compound, allowing the reaction to continue for a predetermined time while agitating, and thereafter separating the complex compound and said added inositol compound from the beverage to form the finished product.

2,745,748

WHOLE GRAIN FLOURS AND PROCESS OF MAKING

James F. McCashen, Rocky River, Ohio

Application November 4, 1948, Serial No. 58,319

14 Claims. (Cl. 99—93)



1. A composition of matter comprising a cereal grain in the form of finely divided particles containing substantially all parts and ingredients of, and approximately the same moisture content as, the original kernels of grain, certain of said particles having rounded edges and non-abrasive surfaces and comprising hulls attached to starch.

10. A baking flour composition comprising a mixture of finely divided particles of at least one cereal grain and at least one solid, finely divided baking flour ingredient, the flour particles containing a major part of the oily material in cells having substantially unbroken walls, and the hull of the cereal grain connected to starch thereof, and approximately all the moisture present in the cereal grain subjected to comminution.

2,745,749

GLYCERIDIC MIXTURES EXHIBITING UNIQUE PROPERTIES AND PROCESS FOR THEIR PRODUCTION

Reuben O. Feuge, New Orleans, Earl J. Vicknair, Marrero, and Klare S. Markley, New Orleans, La., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application July 19, 1951, Serial No. 237,658

12 Claims. (Cl. 99—118)

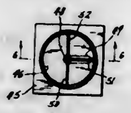
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A process which comprises acylating a mixture containing at least 50% monoglycerides of the group consisting of glyceryl monostearate, glyceryl monopalmitate and mixtures thereof with an acylating agent of an unsubstituted saturated alkanoic acid containing from 2 to 4 carbon atoms, and continuing the acylation until a product is obtained having a hydroxyl value of from 15 to 200 and a residual monoglyceride content of from 0.1 to 30%.

2,745,750
MARGARINE AND METHOD OF MAKING IT
Stanley I. Shafer, Melrose, and Arne R. Gudheim, Peterham, Mass., and Werner H. Schmidt, Englewood, N. J., assignors to Lever Brothers Company, New York, N. Y., a corporation of Maine
Application October 10, 1951, Serial No. 250,606
6 Claims. (Cl. 99—122)

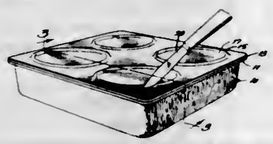
1. A method of making margarine which comprises mildly cooling and agitating the initial fat stock to precrystallize the higher melting glycerides therein, rapidly chilling and agitating the stock to supercool it, and blending at least part of the aqueous ingredient with the supercooled material.

2,745,751
FOOD PACKAGE KIT
Julio A. Pichardo, New York, N. Y.
Application October 20, 1952, Serial No. 315,731
1 Claim. (Cl. 99—171)



A package unit for providing individual portions of powdered sugar comprising an annular compartment having spaced top and bottom walls containing powdered sugar, a shaft extending axially through said top and bottom walls, means associated with the shaft for partitioning the compartment, a pointer rigidly mounted on said shaft above the annular compartment and radially thereto, and a sharp point on the free end of said pointer engaging the top wall whereby rotation thereof will tear the annular compartment along its peripheral edge, said partitioning means consisting of radial ribs on the shaft extending into said compartment to subdivide the compartment, said ribs being rotatable with the pointer as it is rotated to expose the subcompartments successively into view.

2,745,752
SOFT PLASTIC FOOD PACKAGE
Leo Peters, Evanston, Ill.
Application May 10, 1950, Serial No. 161,083
5 Claims. (Cl. 99—171)



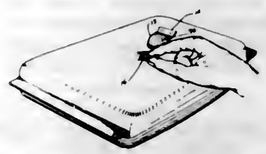
1. In a soft plastic food package having an open-topped compartment and a soft plastic food body within said compartment, a flange about the top of said compartment providing an attachment surface around said compartment and lying at a spaced distance from the top edges thereof, a plastic film cover over the top of said compartment extending to said attachment surface and secured thereto around said compartment, said flange being provided with a variation in surface contour inwardly of said attachment surface and extending around said compartment, said contour variation being arranged for spacing a portion of said film cover from said flange between said attachment surface and said compartment so that the spaced portion of said film can be readily severed, said cover film inwardly from the spaced portion thereof being freely separable from said flange and said compartment.

2,745,753
PIE CRUST PACKAGE AND METHOD OF MAKING SAME
Sarah Ann Ayres, Hermosa Beach, Calif.
Application August 4, 1951, Serial No. 240,431
6 Claims. (Cl. 99—172)



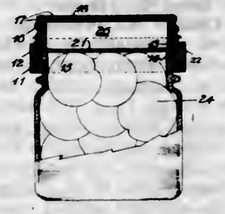
1. The method of packaging pie crust dough, comprising the steps of: placing an uncooked pie crust dough of a preselected size and shape on a sheet of a water and grease impervious material of a size greater than the size of said dough; helically wrapping the sheet with said dough to form a substantially cylindrical mass; reversely bending the outer extremity of said sheet back upon itself to form a tab extending longitudinally of said mass; passing the reversely bent extremity of said sheet around said mass and facewisely engaging the terminus thereof with said tab; bonding the engaged faces to form a hermetic seal extending longitudinally of said mass; inserting said mass into a cylindrical casing sufficiently rigid to protect the rolled dough and of a length greater than the width of said dough and less than the width of said sheet; flattening the oppositely extending portions of said sheet; and bonding the flattened convolutions of said sheet closely adjacent the opposite ends of said casing to hermetically seal the opposite ends of said mass.

2,745,754
OLEOMARGARINE MIXING PACKAGE
Robert S. Steinbock, Sarnia, Ontario, Canada, assignor, by mesne assignments, to Hammock Package Ltd., a corporation of Canada
Application August 4, 1951, Serial No. 240,424
1 Claim. (Cl. 99—179)



A mixing package for the coloring of oleomargarine comprising a wrapper of a flexible and translucent material adapted to be sealed about a body of oleomargarine, a body of oleomargarine sealed within said flexible wrapper, said wrapper having a wall provided with a single straight slit normally having contiguous edges, said slit adapted to admit solid coloring material therethrough for the mixing of said coloring material with the oleomargarine, and a flexible tape covering said slit and being provided with a pressure-sensitive adhesive securing said tape upon the surface of said wall about said slit, said tape being removable so that a desired amount of coloring material may be inserted through said slit for mixture with said oleomargarine, and also being reattachable to reseal said slit and to retain said oleomargarine and coloring material within said wrapper during mixture thereof, and whereby additional amounts of coloring material may be inserted through said slit following a kneading operation until a desired color intensity of the oleomargarine is obtained.

2,745,755
APPARATUS AND METHOD FOR STERILIZING CONTAINERS AND THE FOOD PRODUCTS THEREIN
Earl R. Anderson, Campbell, Calif.
Application June 4, 1953, Serial No. 359,507
8 Claims. (Cl. 99—182)



1. A method of sterilizing food products in the container therefor which comprises filling a container with a desired amount of the product, filling the container substantially to the brim with liquid, providing an expansion chamber above the food-filled container in liquid-tight relation therewith, restraining movement of the product above the top of the container, supporting the closure for the container on the chamber to provide a complete package unit for sterilizing, subjecting the package unit to a sterilizing temperature for sufficient time to effect sterilization of the food product, the container, and the closure for the container, then allowing any expanded liquid to draw back into the container, removing the expansion chamber from the container and applying the closure to the container.

6. An expansion chamber member for use in the sterilizing of food products in a container, said member comprising an annular ring, one end of said ring having an internally threaded lower portion adapted to engage over the threaded end of the container, the upper portion of said expansion member being of lesser diameter than said lower portion, a shoulder provided between said portions to overlap the end of the container threadedly engaged with said lower portion, a partition member at said shoulder for extending across the open end of the container, said partition member having perforations for establishing communication from a container to the upper portion of said expansion member while restraining said products, and said upper portion having means to support a closure for the container.

2,745,756
PREPARATION FOR STORAGE OF SOLID ANIMAL PROTEINACEOUS MATERIALS
Frederic S. Ruff, Cambridge, Mass., assignor to F. William Andres, Boston, Mass., trustee
No Drawing. Application May 23, 1951, Serial No. 227,933
1 Claim. (Cl. 99—187)

The method of packing animal proteinaceous solids for storage in the frozen state, said solids have a solid content of more than 15% and a moisture content of no more than 85%, comprising placing said unfrozen animal proteinaceous solids having substantially their natural cell structure in a rigid sealable container, drawing a vacuum in the container substantially instantaneously to at least 27.5 inches of Hg to remove from all surfaces of said solids substantially all pressure due to atmosphere and to remove gases from said solids to permit expansion of moisture therein, hermetically sealing the soids in such condition in the container at the attenuated pressure, and then removing heat from the sealed container and enclosed solids to bring the same to a temperature for storage not exceeding 15° F. whereby the storage life of the solids after defrosting is greatly increased.

2,745,757
OPTICAL GLASS
Walter Geffcken, Landshut, Germany, assignor to Jenaer Glaswerk Schott & Gen., Mainz, Germany
No Drawing. Application August 3, 1953, Serial No. 372,155
Claims priority, application Germany August 8, 1952
2 Claims. (Cl. 106—54)

1. A thorium oxide, beryllium oxide free optical glass with a high refractive index consisting of: (*a*) at least 36 weight per cent boron oxide; (*b*) 26–44 weight per cent lanthanum oxide; (*c*) 5–19 weight per cent calcium oxide; (*d*) 0–11 weight per cent zirconium oxide; (*e*) 0–6 weight per cent of a bivalent basic component other than calcium oxide; (*f*) 0–9 weight per cent of a member selected from the group consisting of niobium oxide, tantalum oxide and mixtures thereof; (*g*) 0–2 weight per cent lithium oxide; (*h*) 0–4 weight per cent of compatible glass components; (*i*) Above 4 to 10 weight per cent silica; the total amounts of (*a*) and (*i*) not exceeding 50 weight per cent, the amounts of (*c*), (*e*) and (*g*) not exceeding a total of 19 weight per cent, the sum of (*c*), (*e*) and 2(*g*) not exceeding the value of 33 weight per cent minus one-half (*b*).

2,745,758
COATING COMPOSITION
Allan B. Ruddle, deceased, late of San Francisco, Calif., by Beatrice M. Ruddle, executrix, San Francisco, Calif.
No Drawing. Application August 6, 1952, Serial No. 302,998
2 Claims. (Cl. 106—83)

2. A coating composition comprising the emulsified product resulting from the admixture of a first mixture of gilsonite in a mineral oil, the approximate relative proportions of said constituents being 15 grams of gilsonite and 40 cc. of a mineral oil, with approximately 50 cc. of a second mixture comprising the following constituents in the indicated relative proportions:

Water	gallons	1
Aluminum sulphate	ounces	1–10
Sodium fluosilicate	do	1–10
Sodium silicate	gallons	2–20

said amount of said second mixture having incorporated therein after formulation approximately 2 grams of sodium fluosilicate, said emulsified product having the property of being able to form a satisfactory coating film for wood and metal surfaces upon being diluted with a compatible thinner.

2,745,759
CEMENTITIOUS COMPOSITION
Arnold E. Pavlish, Cleveland Heights, Ohio, assignor, by mesne assignments, to Basic, Incorporated, a corporation of Ohio
No Drawing. Application November 17, 1950, Serial No. 196,355
4 Claims. (Cl. 106—106)

1. A slow-setting cementitious composition consisting essentially of an admixture of magnesium oxide and calcium carbonate in the approximate weight ratio that the same are found in partially calcined dolomite substantially free of calcium oxide, an aqueous solution of a reagent selected from the group consisting of magnesium chloride and magnesium sulphate in an amount sufficient to form a workable mass with said admixture, the concentration of said reagent being from about 22° Baumé to complete saturation, and from about 0.05% to about 1.5% by weight, based on the weight of said admixture, of a water-soluble, alkali metal phosphate.

2,745,760
LAUNDRY STARCH
Bud J. Peter, Santa Rosa, Calif., assignor, by mesne assignments, to American Tansul Company, San Francisco, Calif., a corporation of California
No Drawing. Application October 15, 1952, Serial No. 314,940
4 Claims. (Cl. 106—214)

1. A laundry product comprising laundry starch, flaked hectorite and water.

2,745,761
COOKED LAUNDRY STARCH
Bud J. Peter, Santa Rosa, Calif., assignor, by mesne assignments, to American Tansul Company, San Francisco, Calif., a corporation of California
No Drawing. Application July 13, 1953, Serial No. 367,777
3 Claims. (Cl. 106—214)

1. A laundry product comprising a mixture of hectorite and corn starch in the proportion of approximately 3½% to 96½%.

2,745,762
ASPHALTIC WATERPROOF ADHESIVE
Adolph Soderberg, Salt Lake City, Utah
No Drawing. Application January 3, 1952, Serial No. 264,850
8 Claims. (Cl. 106—273)

1. An asphaltic adhesive as described, comprising an intimate mixture of an asphalt and a polyisobutylene, the latter having molecular weight below approximately 450.

2,745,763
REFRACTORY COMPOSITION FOR JOURNALS, BEARINGS AND THE LIKE
Herbert F. G. Ueltz, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts
No Drawing. Application December 14, 1953, Serial No. 398,232
2 Claims. (Cl. 106—65)

1. An article of manufacture having a composition which is from 93 to 98 parts of alumina to from 7 to 2 parts of boron nitride, the matter other than alumina and boron nitride limited to 1%, the article having a specific gravity between 3.3 and 3.96.

2,745,764
PROCESS OF PRECIPITATING SUBSTANTIALLY ANHYDROUS CALCIUM CHROMATE AND PRODUCT RESULTING THEREFROM
Holbert E. Dunn, Crafton, and Ellis J. O'Brien, Pittsburgh, Pa., assignors to Vanadium Corporation of America, New York, N. Y., a corporation of Delaware
No Drawing. Application March 4, 1953, Serial No. 340,403
11 Claims. (Cl. 106—302)

5. The process of precipitating a substantially anhydrous calcium chromate product, which comprises adding sodium silicate solution to a sodium chromate solution, adding sodium aluminate solution to the sodium chromate solution, maintaining the slurry at a temperature of 70–190° F. during a conditioning period of at least 2 minutes to form nuclei of sodium aluminosilicate and at a pH of 7.2–12.0, adding calcium chloride in an amount of at least 120% of the stoichiometric requirements of calcium chloride for precipitating calcium chromate, and heating the resulting slurry to a temperature of 200–215° F. to precipitate a mixture of substantially anhydrous calcium chromate and sodium aluminosilicate gel.

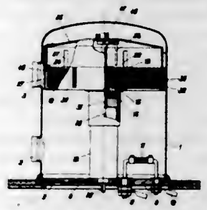
2,745,765
PROCESS OF PRECIPITATING SUBSTANTIALLY ANHYDROUS CALCIUM CHROMATE AND PRODUCT RESULTING THEREFROM
Holbert E. Dunn, Crafton, and Ellis J. O'Brien, Pittsburgh, Pa., assignors to Vanadium Corporation of America, New York, N. Y., a corporation of Delaware
No Drawing. Application March 4, 1953, Serial No. 340,404
11 Claims. (Cl. 106—302)

1. The process of precipitating a substantially anhydrous calcium chromate product, which comprises dissolving in a sodium chromate solution an amount of sodium chloride to provide 35 to 70% saturation of the aqueous solvent, adding sodium silicate solution to the sodium chromate solution, adding sodium aluminate solution to the sodium chromate solution, maintaining the slurry at a temperature of 70–190° F. during a conditioning period for a time sufficient to form nuclei of sodium aluminosilicate and at a pH of 7.2–12, adding calcium chloride in an amount of at least 120% of the stoichiometric requirements of calcium chloride for precipitating calcium chromate, and heating the resulting slurry to a temperature of 200–225° F. to precipitate a substantially anhydrous coprecipitate containing calcium chromate and sodium aluminosilicate.

2,745,766
PROCESS FOR MAKING ULTRAMARINE
Charles A. Kumins, Tuckahoe, N. Y., assignor to Interchemical Corporation, New York, N. Y., a corporation of Ohio
No Drawing. Application March 9, 1951, Serial No. 214,843
4 Claims. (Cl. 106—305)

3. The method of making an ultramarine blue which comprises preparing an intimate mixture in proportions sufficient to produce an ultramarine blue, of sodium benzoate, sulfur, sodium aluminate and finely divided acid washed silica in the proportions of 2.0 to 3.0 parts of silica to one part of alumina on a molecular basis, heating the mixture under reducing conditions to between 750° C. and 900° C. for about one hour, cooling to between 500° C. and 800° C., continuing the heating under oxidizing conditions and in the presence of oxides of sulfur for about three hours, and cooling and washing the resultant product.

2,745,767
PROCESS AND APPARATUS FOR TREATING BY VAPOUR DEPOSITION A PLURALITY OF ARTICLES INTRODUCED AT SEVERAL LEVELS, WHILE MAINTAINING THE SAME VACUUM
Max Auwärter, Balzers, Liechtenstein, assignor to Dr. Alois Vogt, Vaduz, Liechtenstein
Application July 11, 1952, Serial No. 298,422
Claims priority, application Austria July 23, 1951
14 Claims. (Cl. 117—38)



1. The process of treating by vapour deposition a plurality of articles introduced at several levels into a vacuum chamber while maintaining the same vacuum, comprising creating a vacuum in said chamber, producing within this vacuum a stream of vapour, and conducting groups of superposed rings through the vapour stream at the same level in succession by passing articles situated at the same level through the stream of vapour, after all articles situated at the same level have been passed through the stream of vapour, moving the articles situated at at least one level to the level where the articles treated by vapour deposition already has been situated, at the same time shielding the articles already treated by vapour deposition against the stream of vapour, and passing the articles through the stream of vapour at that level at which the articles already treated by vapour deposition had been situated while being thus treated.

2,745,768
EROSION AND FLOOD CONTROL AND LAND RECLAMATION
Krekel Karch, Decatur, Ill.
Application April 15, 1952, Serial No. 282,317
1 Claim. (Cl. 61—1)



The method of stopping erosion by slit-containing water flowing in a gully, and causing deposition of silt therefrom, comprising: erecting a water barrier across said gully to provide a temporary retaining basin for at least some of said water, said barrier comprising a conduit positioned substantially horizontally beneath and transversely of said barrier, the inlet of said conduit being at the lowest point in the basin; providing a spillway near one end of said barrier of lower elevation than the top of said barrier; receiving silt-containing water in said basin; causing water to collect in said basin by discharging water from the floor of said basin solely through said conduit at a flow volume substantially less than that at which water enters said basin, and thereby causing deposition of silt from said water on the floor of said basin, in substantially successive increments at the ever-changing water periphery; and continuously discharging desilted water from said conduit until said basin is empty; whereby erosion in said gully is eliminated and said basin is thereafter operable as a safely cultivatable dry basin, wherein the basin floor slopes upwardly from the conduit level to the ultimate silt level.

2,745,769
WELDING FLUX AND METHOD
George Edwin Linnert and Walter R. Satterfield, Baltimore, Md., assignors to Armco Steel Corporation, a corporation of Ohio
No Drawing. Application November 5, 1952, Serial No. 318,964
13 Claims. (Cl. 117—132)

10. The method of preparing for subsequent fusion-welding a fabricated article formed of stainless steel high in chromium and manganese contents comprising preparing in viscous solution lithium carbonate along with silicon dioxide, both finely powdered and carried in a silicone resin admixture, along with a volatile organic solvent; providing a thin coating thereof on a metal surface prepared for welding; and then curing the same to a hard adherent coating on the surface of the metal, preparatory to welding.

2,745,770
ORGANIC SHAPED STRUCTURES COATED WITH WERNER-TYPE CHROMIUM COMPOUNDS AND METHOD OF MAKING THE SAME
Richard W. Kingerley, Jr., Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application April 9, 1952, Serial No. 281,481
4 Claims. (Cl. 117—139.5)

1. A method which comprises applying to an organic shaped structure having a moisture regain of no greater than 5% and a surface resistivity of at least 400,000 × 10^6 ohms a solution containing a complex chromium compound of the Werner type selected from the group consisting of p-nitrophenylacetato chromic chloride, p-nitrobenzoato chromic chloride, phenylacetato chromic chloride, trichloroacetato chromic chloride, thioglycollato chromic chloride, cyanoacetato chromic chloride and gluconato chromic chloride, and subsequently drying said structure.

2,745,771
METAL ARC WELDING OF 90–10 TYPE COPPER-NICKEL MATERIAL
George Raymond Pease, Westfield, and Theodore Ephraim Kihlgren, Berkeley Heights, N. J., assignors to The International Nickel Company, Inc., New York, N. Y., a corporation of Delaware
No Drawing. Application November 6, 1953, Serial No. 390,732
8 Claims. (Cl. 117—205)

1. An arc welding electrode adapted for forming weld deposits substantially devoid of gas porosity in metal-arc-welding of iron-bearing copper-nickel members, said electrode having a core wire comprising a 90–10 type cupronickel alloy having as essential ingredients about 87.5% copper, about 10% nickel, about 1.5% iron, about 0.4% manganese, about 0.4% silicon; and a flux coating on said core wire, said flux coating containing about 16 parts calcium carbonate, about 25 parts calcium fluoride, about 24 parts cryolite, about 24 parts titania, about 2.6 parts manganese, about 5 parts calcium silicate, and about 3 parts bentonite and a water-dispersible binder.

2,745,772
MANUFACTURE OF MOSAIC SCREENS SUCH AS ARE UTILIZED IN TELEVISION TRANSMISSION TUBES
Harry Cassman, Harlington, England, assignor to Electric & Musical Industries Limited, Hayes, England, a company of Great Britain
Application February 15, 1951, Serial No. 211,013
Claims priority, application Great Britain February 23, 1950
4 Claims. (Cl. 117—210)

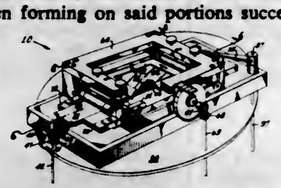


2. A method of manufacturing a mosaic electrode such as utilized in television pick-up tubes, comprising the steps of coating one surface of a dielectric support with a caesium resistant metal oxide film, mounting a stencil mesh in front of the coated surface of said support, depositing metal through said stencil to provide a multiplicity of conductive elements on said coating, moving the stencil mesh away from said surface, and thereafter exposing the conductive elements and the parts of said coating between said elements to caesium and oxygen to sensitize said elements.

2,745,773
APPARATUS AND METHOD FOR FORMING JUXTAPOSED AS WELL AS SUPERIMPOSED COATINGS
Paul K. Weimer, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application March 25, 1953, Serial No. 344,498
18 Claims. (Cl. 117—212)

14. The method of forming juxtaposed interference color filters on a light permeable workpiece with a set of filters of one color interlaced with a set of another color

and each capable of transmitting a different predetermined spectral bandwidth, said method including the steps of masking all but those spaced apart portions of the workpiece on which the set of filters of one color are to be formed, then forming on said portions successive super-



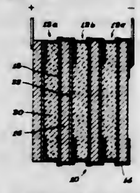
imposed layers of high and low index of refraction material each of a thickness determined by exposing said portions only to light and measuring the amount of light of a given wavelength transmitted through said portions to form said interference color filter set.

2,745,774

METHOD OF MAKING CONDUCTIVELY COATED ELECTRODES

Raymond W. Reid, Sanford, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

Application May 23, 1955, Serial No. 510,448
4 Claims. (Cl. 117—216)



1. The method of applying an electrically conductive, liquid impervious coating to a clean metal surface, comprising applying a coating of molten petroleum derived tar having a melting point between 150° F. and 235° F., to the surface to be coated, cooling said coated surface to solidify the tar, applying finely divided carbon particles to said coated surface, heating said coating at least to the melting point of said tar to disperse said particles through said tar, cooling the coated surface to below the melting point of said tar, spreading a wax having a lower melting point than that of tar over said coated surface, heating said surface to melt said wax, and rubbing off the excess wax from said coated surface.

2,745,775

TOBACCO PRODUCT AND METHOD OF CONDITIONING SAME

Ernest H. Freund, Sayville, and Kelvin Domovs, Oakdale, N. Y., assignors to National Dairy Research Laboratories, Inc., Islip, N. Y., a corporation of Delaware

No Drawing. Application March 31, 1955, Serial No. 498,437
12 Claims. (Cl. 131—17)

1. A tobacco product containing tobacco and a lactositol conditioning agent in an amount sufficient to give the tobacco a moist texture.

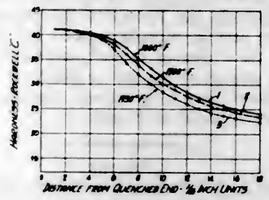
2,745,776

METHOD OF RESTORING HARDENABILITY OF BORON-CONTAINING STEEL

Raymond A. Grange, Livingston, N. J., and Ernest C. Turner, Library, Pa., assignors to United States Steel Corporation, a corporation of New Jersey

Application October 13, 1954, Serial No. 461,962
2 Claims. (Cl. 148—21.55)

1. A method of restoring the hardenability effect of boron in boron-containing steel which has been diminished by austenitizing the steel at a temperature above 1650° F. comprising holding the austenitized steel prior to quenching at the Ar_3 temperature for sufficient time



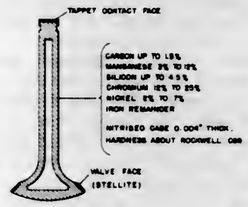
to equalize the temperature of the steel at said temperature and precipitate boron dissolved in the austenite by said austenitizing.

2,745,777

INTERNAL COMBUSTION ENGINE VALVES AND THE LIKE

William C. Clarke, Jr., Baltimore, Md., assignor to Armco Steel Corporation, a corporation of Ohio

Application December 20, 1951, Serial No. 262,510
4 Claims. (Cl. 148—31)



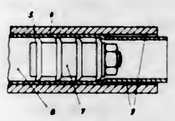
1. Internal combustion engine valve free of tungsten and titanium in composition and essentially consisting of carbon from about 0.30% to about 0.65%, manganese about 8% to about 10%, sulfur up to about .2%, silicon up to about 0.45%, chromium about 20% to 22%, nickel from about 2.5% to about 4.5%, nitrogen up to about 0.4%, and the balance iron having a surface case of at least 0.003 inches thick essentially including nitrogen and with hardness at least about Rockwell C–69.

2,745,778

METHOD OF LINING A METAL PIPE

Wilhelm Garten, Hagen, Westphalia, Germany

Application June 19, 1952, Serial No. 294,447
Claims priority, application Germany August 18, 1951
3 Claims. (Cl. 154—82)



2. The method of lining pipe which comprises coating the inner surface of the pipe with an adhesive material, positioning a flexible tubular lining within the pipe, placing a stopper in the form of a movable air tight valve member within one end of the lining and pipe, and applying fluid under pressure to said one end of the pipe forcing the stopper through the lining and pipe and forcing the lining against the adhesive coated inner surface of the pipe.

2,745,779

METHOD OF MAKING LAMINATED PANELS AND PRODUCT THEREOF

Eugen Johann Ritter and Heinz Middendorff, Mainleus, Germany

Application September 18, 1953, Serial No. 381,024
Claims priority, application Germany October 11, 1952
16 Claims. (Cl. 154—118)



1. A method of making a laminated panel, comprising the steps of forming an assembly of layers including an outer layer having incorporated therein a latently adhesive binder material, a core layer formed of finely divided particles of solid material and having incorporated therein a latently adhesive binder material in an amount less than the amount which said core layer is capable of absorbing, and a separating layer between said outer layer and said core layer, said separating layer being adapted to permit diffusion from the outer layer toward the core layer of a sufficient amount of binder material from said outer layer when said binder material is plasticized to join the layers to each other while preventing substantially more than said sufficient amount of binder material from diffusing from said outer layer to said core layer, whereby a saving in binder material is effected while obtaining secure joining of said layers to each other; and pressing said layers together under heat thereby plasticizing said binder material for securely joining said layers together.

9. A laminated panel, comprising in combination, an outer layer having adhesive binder material incorporated therein; a core layer formed of loosely arranged finely divided particles of solid material and having an adhesive binder material incorporated therein in an amount less than the amount which said core layer is capable of absorbing; and a separating layer between said outer layer and said core layer, said separating layer being adapted to permit diffusion of an amount of binder material from the outer layer to the core layer which is sufficient for joining the layers to each other and to prevent diffusion of a substantially greater amount of binder material than that required for joining said layers to each other, said layers being joined together by the adhesive binder material incorporated therein.

2,745,780

ACARICIDE COMPOSITION CONTAINING 4,4'-DICHLOROBENZILIC ACID ESTERS

Franz Häffiger, Basel, Switzerland, assignor to J. R. Geigy A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application November 29, 1951, Serial No. 258,997
Claims priority, application Switzerland May 8, 1951
10 Claims. (Cl. 167—30)

1. A composition for the control of acaridae comprising, as active toxic ingredient, 4,4-dichlorobenzilic acid-lower alkyl ester and, as inert diluent, an acaricide adjuvant selected from the group consisting of a pulverulent inorganic carrier, a surface-active dispersing agent which lowers the surface tension of water, and a spray oil solvent.

2,745,781

PARASITICIDE COMPOSITION AND METHOD

Doane Stewart, Garden Grove, Calif., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application July 6, 1951, Serial No. 235,560
6 Claims. (Cl. 167—31)

1. An aqueous spray composition having dispersed therein an ethanolamine salt of 2,4-dinitro-6-secondary-butyl-phenol and methylcellulose, the latter being in such proportion as to exert an energising action upon the amine salt compound as regards parasiticidal and residual activity.

2,745,782

PARASITICIDE COMPOSITION OF REDUCED PHYTOTOXICITY AND METHOD

Doane Stewart, Garden Grove, Calif., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application July 5, 1951, Serial No. 235,395
7 Claims. (Cl. 167—31)

2. An aqueous parasiticide composition comprising dispersed therein (1) a lower alkanolamine salt of 2,4-dinitro-6-cyclohexyl-phenol as an active toxicant, and (2) sufficient methylcellulose to accomplish a reduction in the phytotoxic properties of the amine salt.

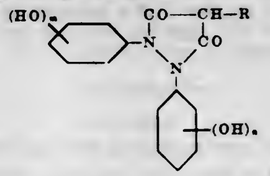
2,745,783

SUBSTITUTED 1.2-DIPHENYL-3.5-DIOXO-PYRAZOLIDINES

Franz Häffiger, Basel, Switzerland, assignor to J. R. Geigy A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application April 1, 1954, Serial No. 420,471
Claims priority, application Switzerland November 6, 1950
5 Claims. (Cl. 167—65)

2. A substituted 1.2-diphenyl - 3.5 - dioxo-pyrazolidine corresponding to the general formula:



wherein:

R represents a hydrocarbon radical containing 2 to 18 carbon atoms and linked to the pyrazolidine nucleus by a non-quaternary carbon atom,
m represents an integer from 1 to 3, and
n represents an integer from 0 to 3.

2,745,784

11β,14α,17α,21-TETRAHYDROXYPROGESTERONE AND ESTERS THEREOF

Gilbert M. Shull, Huntington Station, Donald A. Kita, Jackson Heights, and Jacob W. Davisson, Levittown, N. Y., assignors to Chas. Pfizer & Co., Inc., Brooklyn, N. Y., a corporation of Delaware

No Drawing. Application December 20, 1954, Serial No. 476,556
9 Claims. (Cl. 167—65)

1. A compound selected from the group consisting of 11β,14α,17α,21 - tetrahydroxyprogesterone, a 21 ester thereof with a hydrocarbon monocarboxylic acid containing only the elements hydrogen, oxygen and carbon and having a carbon content of from 1 to 10 carbon atoms inclusive, a 21 acid ester of said steroid carbinol with a hydrocarbon polycarboxylic acid containing only the elements hydrogen, oxygen and carbon and having a carbon content of from 2 to 10 carbon atoms inclusive, and a salt selected from the group consisting of the alkali metal, and ammonium salts of said acid esters.

2,745,785

THERAPEUTIC COMPOSITION COMPRISING TABULAR N,N'-DIBENZYLETHYLENEDIAMINE DI-PENICILLIN, AND PROCESS FOR PREPARING SAME

William F. Bruce, Havertown, Charles D. Edwards, Westtown, and Joseph K. Apat, West Chester, Pa., assignors, by mesne assignments, to American Home Products Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application October 29, 1952, Serial No. 317,586

11 Claims. (Cl. 167—65)

1. A process for preparing a therapeutic composition comprising crystallizing N,N'-dibenzylethylenediamine dipenicillin from a formamide medium, isolating from said formamide medium tabular crystals of the penicillin salt, comminuting said crystals to obtain crystal particle sizes of less than about 150 microns and combining said comminuted crystal particles with an agent of the group consisting of suspending agent and carrier for said crystals.

2,745,786

METHOD OF PRODUCING STABLE THEOPHYLLINIC AEROSOLS

Jacques Baisse, Paris, France, assignor to Societe Promidel, Courbevoie, France, a corporation of France

No Drawing. Application April 2, 1952, Serial No. 280,170

6 Claims. (Cl. 167—67)

1. In a method for producing stable theophyllinic aerosols, the steps consisting in dissolving in water a solution having a pH less than 7 of a derivative of theophylline ethanoic acid and producing therewith an aerosol inert against the action of carbon dioxide.

2,745,787

RECOVERY AND PURIFICATION OF VITAMIN B_{12}

Jerry Robert D. McCormick, New City, N. Y., and Siegfried A. Muller, Westwood, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application July 17, 1952, Serial No. 299,492

8 Claims. (Cl. 167—81)

1. The process which comprises adding to an aqueous solution of impure vitamin B_{12} material, said aqueous solution containing from about 0.1 to 100 gammas of vitamin B_{12} per ml. and said aqueous solution having a pH of from about 1 to about 10 inclusive and having a temperature of from about 0° C. to about 80° C., a quantity of a water-soluble salt of a water-insoluble carboxylic acid, said quantity of water-soluble salt being from about 0.005 to about 0.5 gram per ml. of said aqueous solution, said carboxylic acid being a benzene carboxylic acid having not more than two carboxyl groups, not more than twelve carbon atoms and containing a benzene ring, and said carboxylic acid being a solid in the presence of water at temperatures below about 80° C., treating the resulting solution with sufficient mineral acid to result in the precipitation of free insoluble carboxylic acid, separating the resulting solid precipitate, contacting said precipitate with a combination of an aqueous solvent and a water-immiscible organic liquid, said organic liquid being a solvent for said carboxylic acid but a non-solvent for vitamin B_{12} materials, and separating the two phases whereby an aqueous solution of purified vitamin B_{12} material is obtained.

2,745,788

DYEING WITH QUINONES OR HYDROQUINONES AND BOROHYDRIDES AND COMPOSITIONS THEREFOR

Raymond Stanley Max Frohnsdorff, Twickenham, and John Upton Lewis, Isleworth, England, assignors to The Gillette Company, Boston, Mass., a corporation of Delaware

No Drawing. Application October 6, 1954, Serial No. 460,776

Claims priority, application Great Britain April 30, 1954

8 Claims. (Cl. 167—88)

1. A reduced solubilized aqueous quinone dye composition stabilized with a member of the class consisting of sodium and potassium borohydride.

2,745,789

ULTRASONIC IRRADIATION IN PREPARATION OF MALT

Walter Specht, Ludwigstadt, and Hermann Schultheis, Weissenthurm (Rhine), Germany

No Drawing. Application November 1, 1951, Serial No. 254,449

Claims priority, application Germany June 26, 1951

2 Claims. (Cl. 195—71)

1. In the preparation of malt, the method of improving the germinating properties and increasing the yield by weight of the barley grain, comprising steeping the grain for a shortened period of only about 20 to 40 hours instead of about 60 to 100 hours required for ripeness, subjecting then the steeped grain in the steep to ultrasonic irradiation of high frequency for about 30 to 150 min. and discontinuing subsequently the steeping treatment.

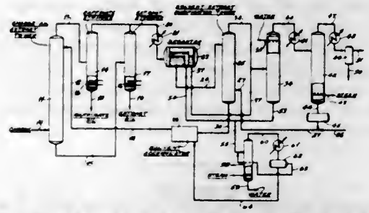
2,745,790

SOLVENT EXTRACTION OF OIL

Robert E. Manley, Yonkers, N. Y., assignor to The Texas Company, New York, N. Y., a corporation of Delaware

Application October 11, 1951, Serial No. 250,844

5 Claims. (Cl. 196—14.26)



1. In the solvent refining of a feed oil containing co-boiling aromatic constituents soluble in a liquid selective solvent and having true boiling points in the range of the solvent boiling temperature and below, wherein the feed oil is subjected to contact in a charge oil extraction zone with the solvent to form extract and raffinate phases which are separately removed from the extraction zone and distilled to yield a distillate of solvent vapor containing said co-boiling oil constituents, leaving liquid product residues of oil substantially free of solvent, the improvement which comprises condensing such distillate, settling said condensate to form a solvent-rich liquid phase, contacting said solvent-rich liquid phase in a liquid-liquid extraction step with a relatively high molecular weight, high boiling paraffinic oil having an A. S. T. M. initial boiling point not lower than 580° F. effective to selectively dissolve from the said solvent-rich phase co-boiling aromatic constituents having a boiling point in the vicinity of the boiling point of said solvent and below, thereby producing a solvent-rich liquid having a reduced amount of said co-boiling constituents dissolved therein, withdrawing the resulting solvent-rich liquid and recycling said withdrawn solvent liquid to said charge oil extraction zone.

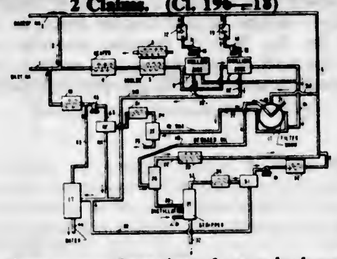
2,745,791

PROPANE DEWAXING OF LUBRICATING OILS

William T. Knox, Jr., Cranford, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application June 19, 1953, Serial No. 362,735

2 Claims. (Cl. 196—18)



1. In the propane dewaxing of waxy hydrocarbon distillate in the presence of water, the improvement of inhibiting ice formation by said water comprising the steps of adding to a mixture of said waxy hydrocarbon distillate and propane a freezing point depressant consisting essentially of ammonia in the amount of less than about 2% by weight based on the amount of propane present, chilling the mixture so formed to a temperature in the range of from about +30° F. to −40° F., whereby a separate immiscible ammoniacal water phase is formed, separating said immiscible phase from the chilled wax-distillate-propane mixture, and subsequently filtering said chilled mixture to recover precipitated wax.

2,745,792

HYDROCARBON TREATING PROCESS

Chyn Duog Shiah, New York, N. Y.

No Drawing. Application December 6, 1951, Serial No. 260,313

7 Claims. (Cl. 196—23)

1. A process of treating a heavy hydrocarbon oil stock characterized by a significant content of asphalts and colloidal carbon to remove said asphalts and carbon from said stock which comprises, intimately mixing said heavy hydrocarbon oil stock at substantially atmospheric pressure with a coalescing agent comprising a coordination compound of boron fluoride in the substantial absence of free boron fluoride and free coordination component, said coalescing agent being employed in a quantity of at least about 0.1% by volume but substantially less than the quantity required for solvent separation of said asphalts and colloidal carbon from said heavy hdrocarbon oil stock, causing the intimately mixed stock to separate into a coalesced phase and a purified phase, and separating said purified phase from said coalesced phase.

2,745,793

DELEADING GASOLINE

James L. Jezl, Swarthmore, and Ivor W. Mills, Glenolden, Pa., assignors to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

No Drawing. Application February 2, 1953, Serial No. 334,754

5 Claims. (Cl. 196—23)

1. Method of deleading gasoline which comprises contacting a gasoline containing tetraethyl lead with silica gel at a temperature above 200° F. and separating the gasoline from the silica gel, whereby lead is retained in the silica gel.

2,745,794

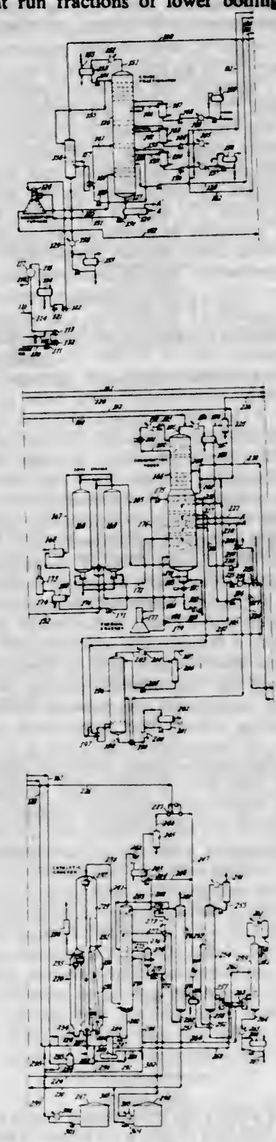
COMBINATION CRACKING PROCESS

Nicholas J. G. Alozery, New York, and William P. Given, Levittown, N. Y., assignors to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware

Application January 21, 1953, Serial No. 332,392

11 Claims. (Cl. 196—49)

1. A continuous process for refining crude petroleum to produce a maximum of light straight run products and cracked gasoline, which includes the steps of: continuously introducing said crude petroleum into a crude petroleum distillation zone and fractionating said crude petroleum therein into a reduced crude fraction having a boiling range starting between 400° F. and 900° F., a heavy gas oil fraction having a boiling range of between 300° F. to 700° F. initial and 600° F. to 1100° F. final, and straight run fractions of lower boiling range; con-



tinuously withdrawing said h vy gas oil from said crude petroleum distillation zone a pressure between zero and 50 p. s. i. g. and a temp ature between 500° F. and 800° F. and contacting said heavy gas oil with finely divided solid catalyst at cracking temperatures and pressures without reducing the temperature of said heavy gas oil below 450° F. and catalytically cracking said oil: withdrawing an effluent from said catalytic cracking step at a temperature of between 850° F. and 1000° F. and a pressure of between 5 and 50 p. s. i. g., and introducing

said effluent into a vertically extended catalytic cracking effluent fractionation zone operating at a temperature of between 90 to 200° F. at the top and 600 to 900° F. at the bottom, and a pressure of between zero and 50 p. s. i. g., without reduction in temperature of said effluent below 600° F. before introduction; withdrawing a light gaseous fraction having a boiling range ending at from 250 to 450° F. from the upper end of said catalytic cracking effluent fractionation zone, cooling it to a temperature not higher than 120° F. to partially condense at least 40 per cent weight of said effluent, compressing the uncondensed portion to an intermediate pressure of at least 25 p. s. i. g., pumping the condensed portion to a pressure of at least 125 p. s. i. g.; withdrawing said reduced crude from said crude petroleum fractionation step, heating it to coking temperatures of between 770° F. and 1000° F., and coking it to produce coke and coker hydrocarbon vapors having a final boiling point between 600° F. and 1100° F.; flowing said coker hydrocarbon vapors to a vertically extended combination fractionation zone without lowering their temperature below 780° F. before introduction therein; fractionating said hydrocarbon vapors within said combination fractionating zone under a pressure of 15 to 350 p. s. i. g. to obtain several fractions, including a light gas oil fraction having a boiling range between 200° F. to 500° F. initial and 550° F. to 750° F. final; withdrawing said light gas oil fraction from said combination fractionating zone at a temperature of 500° F. to 800° F. and a pressure of 15 to 350 p. s. i. g., thermally cracking said thermal cracking feed fraction at final temperatures of between 900° F. and 1100° F.; introducing effluent from said thermal cracking into said combination fractionating zone; withdrawing from said combination fractionating zone a heavy gas oil having a boiling range between 450° F. and 650° F. initial and 700° F. and 1000° F. final, and recycling said heavy gas oil for further coking in said coking step; withdrawing a fraction composed primarily of gasoline from the upper end of said combination fractionating zone, cooling to a temperature less than 200° F. to partially condense said fraction into an unstabilized gasoline; combining the uncondensed portion of said fraction with said compressed uncondensed portion of said catalytic cracking effluent and compressing the mixture to a pressure of between 125 and 350 p. s. i. g.; combining said compressed mixture with said condensed catalytic cracking effluent at a pressure of between 125 and 350 p. s. i. g. and a temperature of between 80° F. and 200° F., to produce a high pressure rich gas and a distillate liquid composed primarily of unstabilized gasoline having a final boiling point of 350° F. to 450° F.; forming a stream of lean light gas oil at least partly by withdrawing a stream having a boiling range of between 300° F. to 500° F. initial and 600° F. to 750° F. final boiling point from at least one of said effluent fractionation zones, counter-currently contacting said high pressure rich gas with said stream of lean light gas oil to absorb heavier hydrocarbons from said rich gas and thereby produce a lean gas and a rich oil; and returning said rich oil to at least one of said effluent fractionation zones.

2,745,795

APPARATUS FOR THE INTRODUCTION OF GRANULAR SOLIDS INTO A CLOSED VESSEL

Joe E. Penick and John W. Payne, Woodbury, N. J., assignors to Socony Mobil Oil Company, Inc., a corporation of New York

Application July 17, 1951, Serial No. 237,264
10 Claims. (Cl. 196—147)

1. An apparatus for introducing granular material into a vessel which comprises in combination: a conduit for the passage of granular material, a second conduit of larger horizontal cross-sectional area than said first-named conduit placed concentrically about the lower section of said first-named conduit so that an annular space is defined between the outer wall of said first-named conduit and the inner wall of said second-named conduit, a horizontal partition closing off the lower ends of both of said conduits, a plurality of spaced apart vertical partitions extending radially acros sthe lower section of said annular space so as to form a plurality of compartments in the lower section of said annular space, at least one opening for the flow of granular material extending through the wall of said first-named conduit into each of said compartments whereby granular material will flow



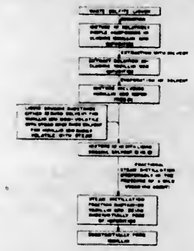
from said first-named conduit into said compartments, a sleeve fitted loosely and slidably about said first-named conduit, openings in said sleeve through which said vertical positions will pass when said sleeve is lowered, means for raising and lowering said sleeve along the lower section of said pipe and at least one conduit for granular material extending downwardly from each of said compartments into said vessel, the conduits from said compartments terminating at about the same vertical level within the vessel and at horizontally spaced apart points on said vertical level.

2,745,796

METHOD OF RECOVERING VANILLIN

Otmar Töppel, Aschaffenburg, Germany, assignor to Aschaffenburger Zellstoffwerke Aktiengesellschaft, Aschaffenburg, Germany

Application October 20, 1954, Serial No. 463,599
Claims priority, application Germany October 21, 1953
15 Claims. (Cl. 202—46)



1. A process of obtaining vanillin from a mass containing the same and also containing impurities, comprising the steps of steam distilling a mixture comprising said mass containing vanillin and impurities and a liquid organic substance having a predetermined volatility value and a predetermined dissolving ability value for vanillin, one of said predetermined values being very low and the other of said predetermined values being very high, whereby a steam distillation fraction containing vanillin and being substantially free of impurities is formed; and recovering said vanillin-containing fraction.

2,745,797

ELECTROPLATING PIPE JOINT

George R. Long, Oakwood, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application January 19, 1953, Serial No. 331,924
1 Claim. (Cl. 204—16)



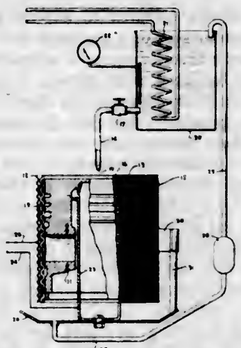
The method of coating a joint between sections of copper and aluminum which comprises immersion depositing cadmium on the aluminum adjacent said joint and then electroplating said immersion deposit and the copper adjacent said joint.

2,745,798

METHOD OF COATING METAL SURFACES

Batist R. Haueisen, Indianapolis, Ind., and Fred A. Wales, Detroit, Mich.

Application November 6, 1951, Serial No. 255,046
5 Claims. (Cl. 204—25)



1. In the method of selectively forming a corrosion resistant coating on the exterior surfaces of the aluminum alloy portions of a composite aluminum steel strut internal combustion engine piston, the steps of placing said piston upright in a tubular porous shell supported in a vertical position and having an absorbent liner therein in contact with the sides of said piston, flooding the top of said piston with an acid electrolyte in regulated amounts and allowing the electrolyte to flow downwardly through said absorbent liner, connecting said porous shell as the cathode and said piston as the anode and passing an electric current therebetween so as to form said coating on the surfaces of said piston which are wet with said electrolyte, and providing circulating means for said electrolyte including means to maintain said electrolyte at a predetermined acid concentration and temperature.

2,745,799

PROCESSES FOR COATING ALUMINUM AND ALLOYS THEREOF

Jos Patrie, Tournus, France, assignor to Pechiney Compagnie de Produits Chimiques et Electrométallurgiques, Paris, France, a corporation of France

No Drawing. Application March 11, 1952,
Serial No. 276,047
Claims priority, application France March 16, 1951
10 Claims. (Cl. 204—38)

1. Process of electrolytically coating aluminum and alloys thereof with other metals comprising the steps of: zinc plating the article in an aqueous alkaline solution consisting essentially of zincate, alkali cyanide and a cyanide of a heavy metal of the group consisting of copper, silver and cadmium, wherein the ratio of weight of the alkali cyanide to the heavy metal cyanide is greater than 4, and thereafter electrically depositing a metal other than zinc.

2,745,800

ELECTROPLATING WITH IRON

John Poor, Portville, N. Y., assignor to Van Der Horst Corporation of America, Olean, N. Y., a corporation of Delaware

No Drawing. Application January 16, 1953,
Serial No. 331,725
16 Claims. (Cl. 204—48)

1. A process for electrodepositing iron which comprises electrolyzing an aqueous acid solution consisting essentially of ferrous iron, not more than 3 grams per liter of ferric iron, and at least 26 grams per liter of acid radical selected from the group consisting of chloride radical and a combination of chloride and sulphate radicals, in such combination the chloride radical being present in the amount of from 6½ to 100 grams per liter, and from 10 to 100 grams per liter of fluoborate radical.

2,745,801

CHROMIUM PLATING

Thomas Blaine, Parma Heights, Ohio, assignor to The Harshaw Chemical Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application March 14, 1955,
Serial No. 494,263
5 Claims. (Cl. 204—51)

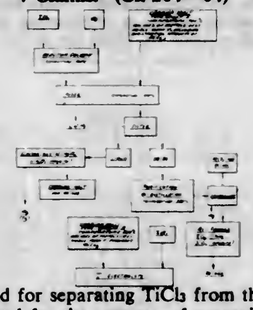
1. A process capable of producing adherent chromium deposits of improved lustre on bright surfaces of the class consisting of antimony, tin, silver and lead comprising electrolyzing between an anode surface and a bright cathode surface of the class consisting of bright antimony, bright tin, bright silver and bright lead surfaces, an aqueous solution essentially consisting of water, chromic acid, acetate ion and sulfate ion, acetate ion being present in concentration from about 15 to about 35% of the chromic acid by weight, sulfate ion being present to the extent of from about 0.3 to about 1.0 per cent of the chromic acid by weight and chromic acid being present in concentration from about 100 to about 700 grams per liter.

2,745,802

INORGANIC MOLTEN ELECTROLYTE FOR THE ELECTROLYSIS OF TITANIUM

Walther Schmidt, Richmond, Va., assignor to Reynolds Metals Company, Richmond, Va., a corporation of Delaware

Application September 18, 1952, Serial No. 310,365
7 Claims. (Cl. 204—64)



4. A method for separating $TiCl_3$ from the chloride of a reducing metal for the purpose of preparing said $TiCl_3$ suitable to be fed into a molten inorganic electrolyte, said reducing metal being selected from the group comprising Al and Hg, said $TiCl_3$ and chloride being simultaneously formed by reducing $TiCl_4$, which comprises dissolving the chloride of the reducing metal in a melt consisting essentially of a mixture of $AlCl_3$ and at least one alkali-chloride selected from the group consisting of NaCl, KCl and LiCl, thereby forming a melt in which

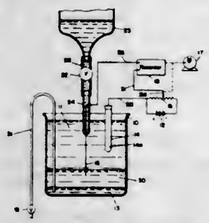
the quantity by weight of $AlCl_3$ is larger than the quantity of said alkali-chloride, employing a quantity of said melt sufficiently large and at a temperature sufficiently low, so as to dissolve all of said chloride of reducing metals, yet not to dissolve substantial amounts of $TiCl_3$, and separating the undissolved $TiCl_3$ from the melt.

2,745,803

POLAROGRAPHIC ELECTRODE

Pierre Lévêque, Fontenay aux Roses, France, assignor to Leeds and Northrup Company, Philadelphia, Pa., a corporation of Pennsylvania

Application April 24, 1952, Serial No. 284,027
Claims priority, application France May 10, 1951
6 Claims. (Cl. 204—195)



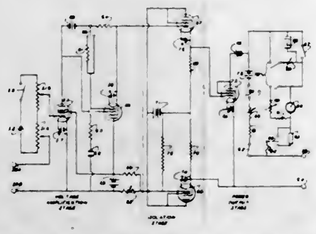
1. Polarographic apparatus comprising a container for a solution under test, and elongated metallic element having a surface wettable by mercury for flow of mercury along that surface, supporting means for positioning said element within said container with the lower end of said element disposed near and spaced from the bottom of said container, said supporting means including walls closely surrounding said element and forming a flow passage about the upper end of said elongated element, means for supplying mercury to said passage, the size of the area of said passage between said element and said walls restricting flow of mercury along said wettable surface to such a low rate that only discrete drops of mercury form at, and detach themselves from, the lower end of said element, the length of said element through the solution under test providing a mercurial surface several times greater than that of the area of the succesive drops of mercury which detach themselves from the lower end of said element.

2,745,804

ELECTROLYTIC TITRATION APPARATUS

Philip A. Shaffer, Jr., Pasadena, Calif., assignor, by mesne assignments, to Consolidated Electrodynamics Corporation, Pasadena, Calif., a corporation of California

Application April 16, 1946, Serial No. 662,453
5 Claims. (Cl. 204—195)



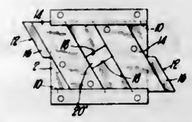
1. In an automatic titrating mechanism for the quantitative determination of a first reactant in a fluid, the combination which comprises a cell into which the fluid is introduced, electrolytic means for generating a second reactant for reaction to an end point in the cell with the first reactant, end point sensing means in operative association with the cell for producing a potential difference which changes as the excess of one of the reactants in the cell changes from the end point, an electronic power amplifier of high transconductance having its input connected to the end point sensing means and its output connected to the electrolytic means to supply power thereto for generating the second reactant and so arranged that its output current varies in response to the change in the potential difference, and means including a reactive circuit connected between the end point sensing means and the electrolytic means for more strongly attenuating high frequency components of the amplifier input than low frequency components of the amplifier input.

2,745,805

ADJUSTABLE MASKING SHIELD FOR ELECTRO-POLISHER

Hiram Jones, Jr., Ellwood City, Pa.

Application January 16, 1952, Serial No. 266,719
1 Claim. (Cl. 204—279)



A masking device adapted to expose a substantially constant rectangular area of a specimen to a liquid etchant which comprises a sheet of material substantially resistant to said etchant having a port therein, a pair of parallel slideways on said sheet adjacent two opposite edges thereof, a pair of oppositely disposed first and second flat shielding members having angularly disposed legs, each member being slidable rectilinearily on said sheet with the first leg of one shielding member in contact with one slideway and the first leg of the other shielding member in contact wtih the other slideway, the second leg of each shielding member being arranged in overlapping relationship with the first leg of the other shielding member whereby the overlapping legs are adapted to engage opposite sides of a specimen therebetween, the first leg of the first of said shielding members having an edge portion disposed at an oblique angle to the first of said slideways and the second leg of said first shielding member having an edge portion disposed at 90 degrees to said first mentioned edge portion, and the first leg of the second of said shielding members having an edge portion disposed parallel to the said edge portion of the first leg of the first shielding member, the second leg of the second of said shielding members having an edge portion disposed parallel to the said edge portion of the second leg of the first shielding member, said edge portions defining a rectangular opening in communication with said port, the relative dimensions of which opening may be varied by sliding movement of one member relative to the other whereby the area of the specimen exposed through said opening when said overlapping legs are closed thereon is substantially constant.

2,745,806

LIQUID FIRE EXTINGUISHING COMPOSITION

Charles Anthony, Jr., East Orange, and Robert Thomann, Jr., Clifton, N. J., assignors to Specialties Development Corporation, Belleville, N. J., a corporation of New Jersey

No Drawing. Application July 29, 1954, Serial No. 446,656
6 Claims. (Cl. 252—2)

1. An aqueous fire extinguishing and fire preventing composition consisting of water and from 50% to 60% by weight of the composition of a salt mixture dissolved in the water, said mixture consisting of from 40% to 55% by weight of the composition of zinc chloride and from 20% to 5% by weight of the compositions of hydrated magnesium chloride.

2,745,807

LIQUID FIRE EXTINGUISHING COMPOSITION

Charles Anthony, Jr., East Orange, and Robert Thomann, Jr., Clifton, N. J., assignors to Specialties Development Corporation, Belleville, N. J., a corporation of New Jersey

No Drawing. Application December 5, 1952, Serial No. 324,402
4 Claims. (Cl. 252—2)

1. A fire extinguishing composition serviceable as a free flowing liquid at about —65° F. consisting essentially of a water solution of between 40% and 45% by weight zinc chloride and between 5% and 15% by weight of at least one halide selected from the group consisting of calcium bromide, lithium iodide, and zinc bromide, said solution containing between 50% and 55% by weight of said materials.

2,745,808

FIRE EXTINGUISHING LIQUID

Lawrence A. Roe, Madison, Wis., assignor to Bjorksten Research Laboratories, Inc., a corporation of Illinois

No Drawing. Application August 23, 1952, Serial No. 306,070
1 Claim. (Cl. 252—8)

A fire extinguishing liquid composed of 60% to 70% of carbon tetrachloride and 30% to 40% of dibromodifluoromethane.

2,745,809

METHOD AND COMPOSITION FOR COMBATING CORROSION

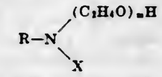
Paul H. Cardwell and Edwin N. Alderman, Jr., Tulsa, Okla., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application April 14, 1953, Serial No. 348,833
8 Claims. (Cl. 252—8.55)

1. A composition effective in combating corrosion of ferruginous materials consisting essentially of a mixture of (A) from 25 to 65 per cent by weight of at least one quaternary ammonium halide wherein all of the organic substituents are hydrocarbon radicals containing up to 18 carbon atoms, at least one of such radicals being an aliphatic hydrocarbon radical containing from 8 to 18 carbon atoms and each of two of such radicals being lower alkyl radicals having from 1 to 3 carbon atoms; (B) from 2 to 30 per cent by weight of at least one amine having the general formula:

$$R\text{–}NH_2$$

wherein R represents a member of the class consisting of tertiary alkyl radicals having 18 to 24 carbon atoms and the hydrocarbon radical of a rosin amine; and (C) from 20 to 60 per cent by weight of at least one compound having the general formula:



wherein R is as aforesaid, X represents a member of the group consisting of hydrogen and the radical

$$-(C_2H_4O)_nH,$$

and *m* and *n* represent integers whose sum is 8 to 21.

2,745,810

PROCESS FOR PREPARING LUBRICATING COMPOSITIONS

Arnold J. Morway, Clark Township, Union County, N. J., and Lewis C. Dawson, Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application May 2, 1952, Serial No. 285,712
5 Claims. (Cl. 252—41)

1. A process for the preparation of channeling type high temperature anti-friction bearing lubricating grease compositions which comprises the steps of admixing with a mineral base lubricating oil from 20% to 50% by weight of a grease forming complex soap, heating to a temperature sufficient to completely dissolve said complex soap, rapidly cooling said heated mixture to a temperature below the transition temperature of the soap, then adding a quantity of a mineral lubricating oil having a viscosity index substantially higher than that of said base oil, said quantity being sufficient to result in a formulation containing from 6% to 18% by weight of soap and subjecting the mixture to the action of rates of shear in the order of 10,000 to 500,000 reciprocal seconds under streamlined conditions to obtain a grease composition having an ASTM penetration within the range of from 200 to 350 mm./10.

2,745,811

BLUE ELECTROLUMINESCENT ZINC SULFIDE PHOSPHOR

Keith H. Butler, Marblehead, and Horace H. Homer, Arlington, Mass., assignors to Sylvania Electric Products, Inc., Salem, Mass., a corporation of Massachusetts

No Drawing. Application June 8, 1951, Serial No. 230,712
3 Claims. (Cl. 252—301.6)

1. A blue-electroluminescing phosphor of low conductivity, consisting essentially of chloride-free zinc sulphide activated by between about 0.0002 and about 0.0015 mole of copper per mole of zinc sulphide and containing between about 0.01% and 0.0001% lead by weight.

2,745,812

PREPARATION OF A CATALYST USING A METAL SOAP OF A CARBOXYLIC ACID AS AN ADSORBATE

Herman E. Ries, Jr., Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y., a corporation of Maine

No Drawing. Application April 11, 1950, Serial No. 155,367
6 Claims. (Cl. 252—455)

1. In the production of metal-type solid adsorptive catalysts, the steps which include depositing a monomolecular layer of a metal-type catalyst on an adsorptive carrier surface in the form of a metallic salt of an organic, soap forming, high molecular weight aliphatic carboxylic acid selected from the group consisting of acyclic carboxylic acids and carbocyclic carboxylic acids by deposition from a solution of the sale in an inert vaporizable organic solvent, separating the solid material from the liquid solvent, drying the solid and treating the solid to decompose the organic portion of the adsorbed salt.

2,745,813

METHOD OF AND MATERIAL FOR TAKING IMPRESSIONS, ESPECIALLY FOR DENTAL PURPOSES

Heino Logemann, Leverkusen, and Wilhelm Graulich and Wilhelm Becker, Leverkusen-Bayerwerk, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application November 9, 1950, Serial No. 194,926
Claims priority, application Switzerland November 16, 1949
8 Claims. (Cl. 260—29.6)

5. A material for taking impressions for dental purposes comprising a mixture of a compound (*a*) selected from the group consisting of acrylamide and acrylic acid, and a compound (*b*) selected from the group consisting of alkylene diacrylamide, alkylene dimethacrylamide and hexahydro-1,3,5-triacrylyl-s-triazine, a solvent for the compounds (*a*) and (*b*) forming a gel with said com-

pounds during the polymerization and a polymerization catalyst capable of effecting polymerization at temperatures not exceeding about 45° C.

2,745,814

SOLUTIONS OF VINYLIDENE CYANIDE INTERPOLYMERS IN NITROALKANES

Harry Gilbert, Cuyahoga Falls, and Floyd F. Miller, Wadsworth, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a corporation of New York

No Drawing. Application May 20, 1952, Serial No. 289,014
19 Claims. (Cl. 260—32.4)

1. A composition comprising a solution of an interpolymer of vinylidene cyanide with at least one other monoolefinic monomer, said interpolymer containing from about 45 to 55 mole per cent of vinylidene cyanide units, and, as a solvent therefor, a nitroalkane.

2,745,815

METHOD AND COMPOSITION FOR THE IMPROVEMENT OF SOIL STRUCTURE

Dorsey R. Mussell, Clare, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application January 2, 1953, Serial No. 329,446
5 Claims. (Cl. 260—37)

1. A method for the improvement of soil structure which comprises distributing in the soil and in intimate admixture therewith a water-soluble polyethyleneimine, said polyethyleneimine having a viscosity for an aqueous 25 percent solution of at least 20 centistokes at a temperature of 25° C.

2,745,816

NOVOLAK FROM PHENOL AND FURFURAL REACTED IN ALKALINE MEDIUM

Rinse Dijkstra, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

No Drawing. Application November 23, 1951, Serial No. 257,941
Claims priority, application Netherlands December 22, 1950
5 Claims. (Cl. 260—45)

4. A method of preparing a resin-like product of the permanently fusible type which comprises the steps, mixing furfural, a monohydric phenol, and a member selected from the group consisting of ammonia and unsubstituted primary monoamines in a molecular ratio of 1.1:1:0.12 to 0.2; adding to said mixture as a catalyst an alkaline earth hydroxide: and heating said mixture until at least 0.7 mol. of water has been distilled off for each molecule of phenol which has reacted.

2,745,817

DENTAL MATERIAL

Heino Loeemann, Leverkusen, and Wilhelm Becker and Otto Bayer, Leverkusen-Bayerwerk, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application March 7, 1951, Serial No. 214,428
Claims priority, application Switzerland March 7, 1950
3 Claims. (Cl. 260—45.5)

1. A composition for use in making dental fillings comprising a mixture of (I) a polymethacrylic acid ester (II) a monomeric methacrylic acid ester and (III) an amide of the group consisting of acrylamide and methacrylamide, said amide being present in an amount up to about 10%, by weight of the composition.

2,745,818

SELF-REINFORCING RUBBER AND METHOD OF MAKING SAME

Theodore A. TeGrotenhuis, Olmsted Falls, Ohio, assignor of twenty per cent to The General Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application October 27, 1951, Serial No. 253,560
12 Claims. (Cl. 260—45.5)

1. A method of producing a synthetic rubber composition which comprises mixing a polymerizable conjugated diolefinic component with a copolymerizable mono-olefinic component so that one of said components constitutes a major proportion and the other a minor proportion of the weight of the mixture, dispersing the mixture in a continuous phase of water containing a surface-active agent and maintaining the mixture dispersed in the presence of a polymerization catalyst until a substantial amount of said mixture of said polymerizable components have copolymerized, thereafter mixing into the emulsion thus formed sufficient of the polymerizable component that was initially present in minor proportion to cause it to become a major proportion of the free copolymerizable components present in said mixture and agitating the mixture until a substantial amount of copolymer is formed after the second addition, the conjugated diolefinic component being 60% to 95% of the total copolymerizable components during one stage of the polymerization after one of the additions of a polymerizable component and being 2% to about 15% of the total of said polymerizable components during another stage of the polymerization after another addition of a polymerizable component the said mono-olefinic component being present in amounts of at least 5 percent of the total polymerizable ingredients during at least part of the stage when the diolefinic component is in excess and after one of the said additions of said diolefinic component, said mono-olefinic component having conjugated double bonds and said diolefinic component having less than 8 aliphatic carbon atoms.

2,745,819

HALOGEN-CONTAINING RESINS STABILIZED WITH ORGANO-TIN COMPOUNDS

Gerry P. Mack, Jackson Heights, and Emery Parker, New York, N. Y., assignors, by mesne assignments, to Carlisle Chemical Works, Inc., Reading, Ohio, a corporation of Ohio

No Drawing. Application April 1, 1952, Serial No. 279,952
10 Claims. (Cl. 260—45.75)

1. A heat and light resistant plastic composition including as a major constituent a halogen-containing resin and as a stabilizer an organo-tin compound wherein a tetravalent tin atom is linked with each of its four valences to a carbon atom, at least two and not more than three of said carbon atoms being part of a radical selected from the group consisting of alkyl and aryl, the rest of said carbon atoms being each linked to at least two negative groups, at least one of which contains a member selected from the group consisting of CO, COO, CN, SO_2, C:C, C≡C, C:C—C:C, NO_2, NO, and conjugated hydrocarbon rings.

2,745,820

TRI-BUTYL-TIN-MONO-METHOXIDE AND POLYVINYL CHLORIDE RESIN STABILIZED THEREWITH

Gerry P. Mack, Jackson Heights, N. Y., assignor, by mesne assignments, to Carlisle Chemical Works, Inc., Reading, Ohio, a corporation of Ohio

No Drawing. Application June 30, 1949, Serial No. 102,432
2 Claims. (Cl. 260—45.75)

1. As a new composition of matter a mixture containing a polymerized vinyl chloride plastic composition and .5 to 5 per cent of a tributyl tin monoalkoxide.

2,745,821

ACRYLONITRILE POLYMERS STABILIZED WITH CERTAIN ALKYL ESTERS OF THIOGLYCOLIC ACID

George W. Stanton and Forrest A. Ehlers, Walnut Creek, Calif., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application September 4, 1952, Serial No. 307,920
5 Claims. (Cl. 260—45.85)

1. A composition of matter the essential constituents of which are a polymeric body containing at least 60 per cent by weight of acrylonitrile polymerized in the polymer molecule, any balance being another monoethylenically unsaturated compound copolymerized with acrylonitrile, and, as a stabilizing agent therefor, from 1 to 20 per cent by weight of an alkyl ester of thioglycolic acid in which the alkyl group is from the class consisting of the ethyl, butyl and amyl radicals.

2,745,822

ACRYLONITRILE FIBERS OF IMPROVED DYE SUSCEPTIBILITY

Gerry P. Mack, Jackson Heights, N. Y., assignor, by mesne assignments, to Carlisle Chemical Works, Inc., Reading, Ohio, a corporation of Ohio

No Drawing. Application February 10, 1953, Serial No. 336,203
2 Claims. (Cl. 260—83.3)

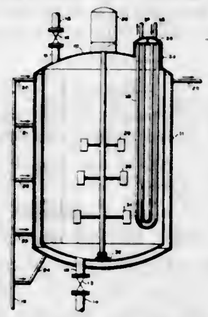
1. A process of preparing a copolymer of acrylonitrile suitable for spinning fibers having improved dye susceptibility comprising reacting 80 to 99 parts of acrylonitrile with 20 to 1 parts of a conjugated diene and subsequently epoxdizing at least part of the double bond of the copolymerization product.

2,745,823

CONTROL OF TEMPERATURE IN EMULSION POLYMERIZATION

William C. Hewitt, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application December 4, 1951, Serial No. 259,751
3 Claims. (Cl. 260—83.7)



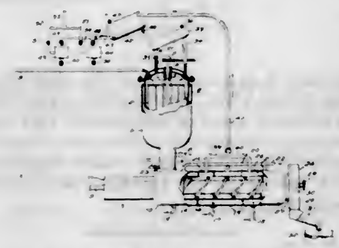
1. The method of controlling the temperature of polymerization of a monomeric material comprising a conjugated diene which comprises charging a stream of said monomeric material to a smooth-walled reaction zone, charging water, an emulsifier, an oxidant and an activator to said zone to provide an aqueous emulsion therein, circulating a cooling medium in a plurality of separately spaced elongated confined paths bounded by walls of heat transfer material located within said reaction zone adjacent the inner wall thereof to remove an additional portion of said heat of reaction, such paths extending principally in a vertical direction, stirring said emulsion to produce a whirling movement thereof about a vertical axis of said zone with increasing velocity of movement proceeding from said axis toward the walls of the reaction zone, said velocity being sufficient to sweep away particles of polymeric material deposited on the walls defining said confined paths and thus to prevent fouling of said walls, and withdrawing a polymerized product from said reaction zone.

2,745,824

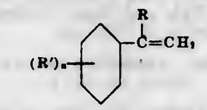
PROCESS FOR THE POLYMERIZATION OF STYRENE AND ACRYLONITRILE

James A. Melchore, Darien, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

Application June 10, 1953, Serial No. 360,720
8 Claims. (Cl. 260—85.5)



1. A process for producing a thermoplastic resinous material which comprises the polymerization of a mixture comprising from about 90% to about 60% by weight of a compound represented by the general formula



wherein R is selected from the group consisting of hydrogen, chlorine and methyl radicals, R′ is a substituent selected from the group consisting of chlorine and lower alkyl radicals and *n* is an integer between 0 and 2, and from about 10% to about 40% by weight of acrylonitrile in bulk at a temperature of from about 85° C. to about 120° C. until a conversion to approximately 40% to 60% polymeric material is obtained, passing said partially polymerized material and unreacted monomeric material through a zone maintained at a temperature between about 110° C. and about 190° C. and at an absolute pressure of less than 100 mm. mercury in a period of from 1 to 3 minutes while simultaneously extruding the polymeric material and devolatilizing the unreacted monomeric material therefrom, separately withdrawing the volatilized unreacted monomeric material and the extruded polymeric material from the zone, recycling the unreacted monomeric material recovered from the zone to the bulk polymerization mixture, and cooling the substantially completely polymerized material containing greater than 98% polymeric material.

2,745,825

PROCESS FOR THE PRODUCTION OF POLYACRYLONITRILE

Heinrich Wenning, Marl, Westphalia, Germany, assignor to Chemische Werke Hülz Aktiengesellschaft, a corporation of Germany

No Drawing. Application May 15, 1953, Serial No. 355,418
Claims priority, application Germany May 27, 1952
2 Claims. (Cl. 260—88.7)

1. Process for the production of polyacrylonitrile which comprises polymerizing acrylonitrile in aqueous dispersion at a temperature within the range from about 25° C. to about 75° C. under a sulfur dioxide pressure of from about 1 to about 5 atmospheres.

2,745,826

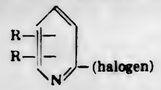
PROCESS OF PREPARING THIOUREA COMPLEXES

Serge Semenoff, New Brunswick, and Morris A. Dolliver, Skelton, N. J., assignors to Olin Mathieson Chemical Corporation, New York, N. Y., a corporation of Virginia

No Drawing. Application December 16, 1953, Serial No. 398,637

6 Claims. (Cl. 260—96.5)

1. The method which comprises interacting a 2-(halo)-pyridine compound of the general formula:



wherein each R is a member of the class consisting of hydrogen, lower alkyl, (lower alkyl)-oxy and halogen, with an oxidizing agent of the peroxide type to form the correspondingly-substituted 1-oxide base; treating the reaction mixture containing said 1-oxide base with a thiourea, in a solvent for the reactants; and recovering the thiourea complex formed.

2,745,827

STABILIZED TALL OIL AND METHOD OF MAKING SAME

Manton G. Bestul, North Charleston, S. C., assignor to West Virginia Pulp and Paper Company, New York, N. Y., a corporation of Delaware

No Drawing. Application January 29, 1954, Serial No. 407,175

7 Claims. (Cl. 260—97.5)

1. The method of stabilizing tall oil against crystallization which comprises forming tall oil soap in situ in the approximate amount of 10–30% by weight as required by treating said tall oil with a soap-forming alkali and thereafter heating the tall oil so treated to render the moisture content less than about 1% but without reducing the acid number to below 100.

2,745,828

COPPER-CONTAINING AZO DYESTUFFS

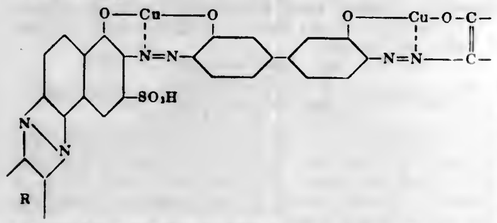
Ernst Iselin, Dornach, and Walter Wehrli, Riehen, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application July 2, 1953, Serial No. 365,773

Claims priority, application Switzerland July 9, 1952

8 Claims. (Cl. 260—146)

1. Copper-containing azo dyestuffs which correspond to the formula



wherein R stands for a radical selected from the group consisting of the benzene and naphthalene series, and wherein the grouping



forms a part of the radical of an azo compound selected from the group consisting of the 1-aryl-5-pyrazolone and acetoacetylaminoaryl series.

2,745,829

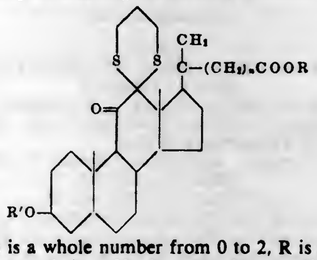
PREPARATION OF 3-HYDROXY-11-KETOCHOLANIC ACID, DERIVATIVES AND ANALOGS THEREOF, AND INTERMEDIATES IN SAID PREPARATION

Sydney Archer, Albany, N. Y., assignor to Sterling Drug Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application March 25, 1954, Serial No. 418,779

18 Claims. (Cl. 260—239.5)

1. A compound having the formula



wherein *n* is a whole number from 0 to 2, R is a member of the class consisting of hydrogen and lower-alkyl groups, and R′ is a member of the class consisting of hydrogen and carboxylic acid acyl groups.

2,745,830

DERIVATIVES OF 4:4′-DIAMINOSTILBENE DISULFONIC ACID-(2:2′)

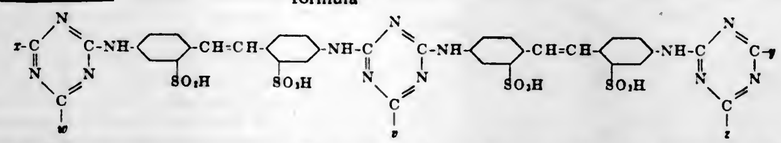
Adolf-Emil Siegrist, Basel, Switzerland, assignor to Ciba Limited, Basel, Switzerland, a Swiss firm

No Drawing. Application September 11, 1952, Serial No. 309,135

Claims priority, application Switzerland September 13, 1951

8 Claims. (Cl. 260—249.6)

1. An alkali metal salt of a derivative of 4:4′-diaminostilbene-disulfonic acid-(2:2) which corresponds to the formula



wherein each of *v*, *w* and *z* represents an amino radical attached by the amino nitrogen atom to the adjacent triazine ring and having at least one hydrogen atom attached to said amino nitrogen atom, said amino radical being selected from the group consisting of lower alkylamino, lower (hydroxy-alkyl)-amino, morpholino, and mononuclear carbocyclic aromatic amino; wherein, further, each of *x* and *y* is a member selected from the group consisting of —Cl, —NH_2, lower alkylamino, lower (hydroxyalkyl)-amino, morpholino, mononuclear carbocyclic aromatic amino, mononuclear carbocyclic aryloxy attached to the ariazine ring by the aryloxy oxygen atom, and mononuclear carbocyclic arylmercapto attached to the triazine ring by the mercapto sulfur atom, the respective amino groups being attached to the triazine ring by the amino nitrogen atom; and wherein each of *v*, *w*, *x*, *y* and *z* is free from groups which impart dyestuff characteristics to the molecule.

2,745,831

CHEMICAL COMPOUNDS

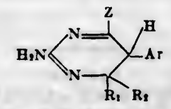
George H. Hitchings, Tuckahoe, and Peter Byrom Russell, Crestwood, N. Y., and Norman Whittaker, London, England, assignors to Burroughs Wellcome & Co. (U. S. A.) Inc., Tuckahoe, N. Y., a corporation of New York

No Drawing. Application March 24, 1953, Serial No. 344,452

Claims priority, application Great Britain March 25, 1952

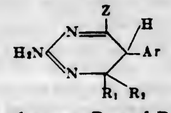
6 Claims. (Cl. 260—256.4)

1. Compounds selected from the class consisting of those of the formula

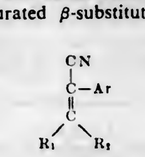


wherein Ar is an aryl group, R_1 and R_2 are selected from the class consisting of hydrogen, lower alkyl radicals, and when joined, form a spiro ring containing from five to seven carbon atoms, and Z is selected from the class consisting of hydroxyl and amino radicals, the tautomeric forms of such compounds and their non-toxic salts.

6. The method of preparing compounds of the formula



wherein Ar is an aryl group, R_1 and R_2 are selected from the class consisting of hydrogen, lower alkyl radicals, and when joined, form a spiro ring containing from five to seven carbon atoms, and Z is selected from the class consisting of hydroxyl and amino radicals, which comprises reacting an unsaturated β-substituted-α-arylacrylonitrile of the formula



with guanidine.

2,745,832

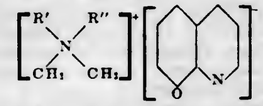
METAL QUINOLINOLATES AND METHODS OF MAKING THE SAME

Joseph Fath, Morristown, and George J. Leitner, Roselle, N. J., assignors to Nuodex Products Co., Inc., Elizabeth, N. J., a corporation of New York

No Drawing. Application March 8, 1954, Serial No. 414,898

23 Claims. (Cl. 260—270)

1. Method of preparing an oil-soluble compound containing a polyvalent metal salt of 8-hydroxy quinoline which comprises: reacting a quaternary ammonium 8-quinolinolate of the structure



wherein R′ is selected from the group consisting of an alkyl, alkaryl and alkenyl containing not more than 18 carbon atoms, and wherein R″ is selected from the group consisting of an alkyl, alkaryl, alkaryloxyalkoxyalkyl, hydroxy alkyl, carboxy alkyl, and substituted alkaryl, with a substantially stoichiometric amount of a polyvalent metal salt of a water insoluble carboxylic acid.

2,745,833

PRODUCTION OF SUBSTITUTED PYRIDINES

Charles E. Stoops and Charles E. Becker, Bartlesville, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application May 29, 1950, Serial No. 165,098

13 Claims. (Cl. 260—290)

1. The process for producing pyridine derivatives which comprises reacting with ammonia a low-boiling aldehyde reactive with ammonia to produce pyridine derivatives in the presence of a salt of a fluorine-containing acid as a catalyst for the reaction and in the presence of an alkali metal phosphate glass.

2,745,834

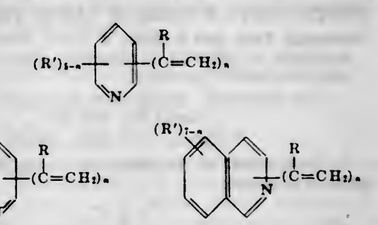
STABILIZATION OF CERTAIN VINYL-PYRIDINES, VINYL QUINOLINES AND VINYL-ISOQUINOLINES

Clyde W. Mertz, Borger, Tex., assignor to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application February 9, 1953, Serial No. 336,010

12 Claims. (Cl. 260—290)

1. A method of stabilizing heterocyclic nitrogen bases selected from the group consisting of compounds having the formua



wherein *n* is an integer selected from the group consisting of 1 and 2, R is selected from the group consisting of H, CH_3 and C_2H_5, and each R′ is individually selected from the group consisting of H and an alkyl group, not more than 12 carbon atoms being present in the total of said R′ groups, with a stabilizing amount of an alkali-metal polysulfide having from 2 to 5 sulfur atoms.

2,745,835

CONTINUOUS PROCESS FOR PRODUCTION OF ALKYL PYRIDINES

Charles E. Becker, Pasadena, Tex., assignor to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application November 17, 1952, Serial No. 321,043

8 Claims. (Cl. 260—290)

1. A process for the production of an alkyl pyridine which comprises polymerizing acetaldehyde to paraldehyde in the presence of a hydrogen halide selected from the group consisting of hydrogen fluoride, hydrogen chloride and hydrogen bromide, said hydrogen halide being present in sufficient quantity to catalyze the polymerization, reacting ammonia with the resulting reaction mixture in an amount sufficient to convert said hydrogen halide catalyst to an ammonium halide, in the presence of the thus formed ammonium halide as a catalyst reacting sufficient ammonia with said paraldehyde to form methylethylpyridine, and recovering said methylethylpyridine.

2,745,836

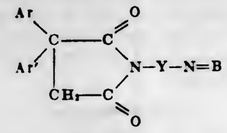
TERTIARY-AMINOALKYL-α,α-DIARYL-SUCCINIMIDES AND PROCESS FOR THE PREPARATION THEREOF

Chester M. Suter, Albany, N. Y., assignor to Sterling Drug Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application September 20, 1952, Serial No. 310,740

14 Claims. (Cl. 260—294.7)

1. A tertiary-aminoalkyl-α,α-diarylsuccinimide having the formula



wherein Y is a lower-alkylene radical in which the free valences are on different carbon atoms, N=B is a member of the group consisting of di-lower-alkylamino, piperidino, pyrrolidino, morpholino, and lower-alkylated derivatives thereof, and Ar and Ar' are monocyclic aryl radicals of the benzene series, selected from the group consisting of the phenyl group and phenyl groups substituted by from 1 to 3 substituents selected from lower-alkyl, lower-alkoxy, nitro and halogen, which together with the α-carbon atom of the succinimide ring can form a 9-fluorenyl group.

2,745,837

BENZHYDRYL ETHERS OF ALKYL PIPERIDINOLS

Domenick Papa and Stephen B. Coan, Bloomfield, N. J., assignors to Schering Corporation, Bloomfield, N. J., a corporation of New Jersey

No Drawing. Application January 21, 1954, Serial No. 405,495

5 Claims. (Cl. 260—294.7)

1. Compounds of the group consisting of bases of the general formula:



wherein R is a member of the group consisting of phenyl, mono-chlorophenyl, mono-bromophenyl, mono-methylphenyl and mono-methoxyphenyl radicals; and R_2 is a member of the group consisting 1,2,6-trimethyl-3-piperidyl, 1,2,6-trimethyl-4-piperidyl, and 1,2,2,6-tetramethyl-4-piperidyl radicals, and the non-toxic acid addition and quaternary salts thereof.

2,745,838

PREPARATION OF ISONICOTINIC ACID ESTERS

Abraham Bavley, Brooklyn, Merton G. Gollaher, New Hyde Park, and William M. McLamore, Flushing, N. Y., assignors to Chas. Pfizer & Co., Inc., Brooklyn, N. Y., a corporation of Delaware

No Drawing. Application March 9, 1953, Serial No. 341,345

6 Claims. (Cl. 260—295)

1. A process for preparing a lower alkyl ester of isonicotinic acid which comprises hydrogenating a solution of a lower alkyl ester of 2,6-dihalopyridine-4-carboxylic acid under non-hydrolytic conditions and under superatmospheric pressure and at an elevated temperature, in the presence of a palladium catalyst and a non-hydrolytic base, and terminating the reaction when approximately two mols of hydrogen have been reacted per mol of said 2,6-dihalopyridine-4-carboxylic acid ester.

2,745,839

N-ISONICOTINOYL-HYDRAZONES AND A PROCESS OF PREPARING THEM

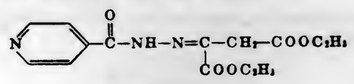
Gustav Ehrhart, Bad Soden am Taunus, and Walter Aumüller, Frankfurt am Main, Germany, assignors to Farbwerke Hoechst A. G., vormals Meister Lucius & Brüning, Frankfurt am Main, Hochst, Germany, a German company

No Drawing. Application August 5, 1953, Serial No. 372,605

Claims priority, application Germany August 9, 1952

1 Claim. (Cl. 260—295)

The compound of the formula



2,745,840

RECOVERY AND PURIFICATION OF SACCHARIN

Frederick Comte, Kirkwood, Mo., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application April 8, 1953, Serial No. 347,625

8 Claims. (Cl. 260—301)

1. The process for recovering individually saccharin, o-toluenesulfonamide and p-sulfamylbenzoic acid from a mixture thereof which comprises dissolving the mixture in a low boiling water-soluble solvent selected from the class consisting of glycol, acetone and lower alkanols, recrystallizing a major proportion of the saccharin from the solution, alkalizing the solvent mother liquor, fractionating the resulting alkaline solvent solution to recover the solvent, dissolving the residue in water, successively stepwise acidifying said aqueous solution with a mineral acid to precipitate o-toluenesulfonamide at a pH of 6, p-sulfamylbenzoic acid at a pH of 3.5 and saccharin at a pH of 1.5 and recovering each of said compounds before further acidifying the aqueous mixture to precipitate the next compound whereby the saccharin so recovered is characterized by the property of being free from bitter aftertaste.

2,745,841

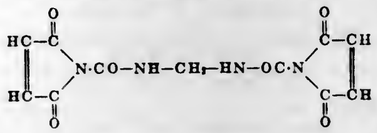
THE METHYLENEBIS DERIVATIVE OF N-CARBAMYLMALEIMIDE

Pliny O. Tawney, Passaic, and Robert J. Kelly, Clifton, N. J., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application October 27, 1954, Serial No. 465,138

1 Claim. (Cl. 260—326.3)

A compound represented by the formula



2,745,842

PREPARATION OF N,N'-DIACYLHEXAMETHYLENEDIAMINES AND AN INTERMEDIATE

George E. Munn, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 15, 1952, Serial No. 271,857

7 Claims. (Cl. 260—332.2)

1. In a process for preparing N,N'-diacylhexamethylenediamines the step which comprises converting alpha, alpha'-diacylamidomethylthiophenes to N,N'-diacylhexamethylenediamines by subjecting alpha, alpha'-diacylamidomethylthiophene, wherein the diacylamido groups

are selected from the class consisting of diacetylamido and dibenzoylamido groups, to the action of metallic nickel containing adsorbed hydrogen, and thereafter separating the resulting N,N'-diacylhexamethylenediamine from the resulting mixture.

6. alpha, alpha'-Diacetylamidomethylthiophene.

2,745,843

PROCESS FOR THE PURIFICATION OF THIOPHENE

Leonard S. Levitt, Drexel Hill, Pa.

No Drawing. Application May 7, 1952, Serial No. 286,617

3 Claims. (Cl. 260—332.8)

2. The process of purifying commercial thiophene containing foul smelling organic sulfur compounds as impurities which comprises treating said thiophene in the presence of water with an oxidizing nitrogen oxide-containing compound selected from the group consisting of N_2O_5, N_2O_4, N_2O_3, NO_2, NO, HNO_2 and HNO_3 at a temperature of about 25° to 84° C. for a sufficient time to produce a yellow-orange color, cooling the mixture, separating the thiophene phase from the water phase and distilling said thiophene to yield a purified thiophene free of the objectionable odor.

2,745,844

ADDUCTS

Joachim Dazzi, Dayton, Ohio, assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

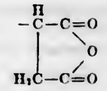
No Drawing. Application June 23, 1950, Serial No. 170,050

3 Claims. (Cl. 260—346.8)

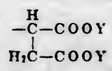
1. Substantially water-insoluble addition products of higher olefinic nitriles, said addition products having the following formula



in which Z is a mono-olefinic aliphatic hydrocarbon radical of from 10 to 17 carbon atoms, *n* is an integer of from 1 to 3 and M is a dicarboxylic acid residue selected from the class consisting of



and



in which Y is selected from the class consisting of alkyl and alkoxy alkyl radicals of from 1 to 8 carbon atoms.

2,745,845

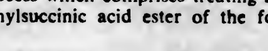
1-FORMYL-2-DIALKOXYMETHYL-SUCCINIC ACID ESTERS AND THEIR CYCLIZATION TO HETEROCYCLIC COMPOUNDS

Reuben G. Jones and Edmund C. Kornfeld, Indianapolis, Ind., assignors to Eli Lilly and Company, Indianapolis, Ind., a corporation of Indiana

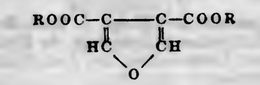
No Drawing. Application June 30, 1950, Serial No. 171,555

9 Claims. (Cl. 260—347.3)

1. The process which comprises treating a 1-formyl-2-dialkoxymethylsuccinic acid ester of the following formula



in which R and R_1 represent lower alkyl radicals, with an acidic dehydrating agent to cyclize the said ester and to produce a compound having the formula



wherein R has the same significance as before.

2,745,846

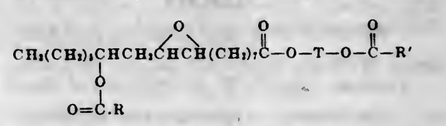
EPOXIDIZED ACYL RICINOLEATES

Joachim Dazzi, Dayton, Ohio, assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application January 28, 1952, Serial No. 268,686

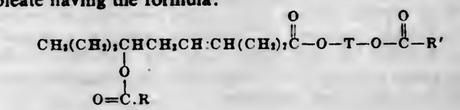
12 Claims. (Cl. 260—348)

1. Epoxidized acylricinoleates having the formula:



in which R and R' are alkyl radicals of from 1 to 5 carbon atoms and T is selected from the class consisting of alkylene radicals of from 2 to 6 carbon atoms, alkyleneoxyalkylene radicals of from 4 to 8 carbon atoms.

8. The method of preparing epoxidized ricinoleic acid derivatives which comprises contacting an acylated ricinoleate having the formula:



in which R and R' are alkyl radicals of from 1 to 5 carbon atoms and T is selected from the class consisting of alkylene radicals of from 2 to 6 carbon atoms, alkyleneoxyalkylene radicals of from 4 to 8 carbon atoms, with an agent selected from the class consisting of solutions of hydrogen peroxide in a fatty acid of from 1 to 4 carbon atoms, and per compounds selected from the class consisting of fatty per acids of from 1 to 4 carbon atoms and perbenzoic acid, and allowing the resulting mixture to stand until epoxidation of said ricinoleate has occurred.

2,745,847

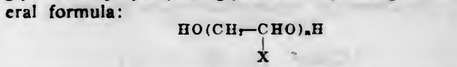
DIEPOXIDES

Benjamin Phillips and Paul S. Starcher, Charleston, W. Va., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application October 8, 1953, Serial No. 385,026

6 Claims. (Cl. 260—348)

1. The dihydric alcohol diesters of acids selected from the group consisting of 3,4-epoxycyclohexanecarboxylic acid and lower alkyl substituted 3,4-epoxycyclohexanecarboxylic acids in which the hydroxyl groups of said dihydric alcohols are esterified by said acids and wherein said dihydric alcohol represents members selected from the group consisting of lower aliphatic hydrocarbon glycols and polyalkylene glycols corresponding to the general formula:



wherein X represents members selected from the group consisting of hydrogen and methyl groups and *n* represents a positive integer in the range of from 2 through 3.

2,745,848

PREPARATION OF CYCLOHEXENE OXIDE

Frank P. Greenspan and Ralph J. Gall, Buffalo, N. Y., assignors, by mesne assignments, to Food Machinery and Chemical Corporation, San Jose, Calif., a corporation of Delaware

No Drawing. Application February 25, 1953, Serial No. 338,878

2 Claims. (Cl. 260—348.5)

1. The method of making cyclohexene oxide which comprises stirring cyclohexene with a minor excess of perpropionic acid at a temperature of 5° to 20° C. for a period of about 2 to 4 hours, adjusting the reaction mixture to a pH of substantially 7 and separating the cyclohexene oxide from the reaction mixture.

2,745,849

METHOD OF PURIFYING BILE ACIDS

Merlyn W. Fogle, Joliet, Ill., assignor to Armour and Company, Chicago, Ill., a corporation of Illinois

No Drawing. Application June 14, 1954, Serial No. 436,689

9 Claims. (Cl. 260—397.1)

1. In a method of separating hyodesoxycholic acid from a bile acid mixture, which mixture includes hyodesoxycholic acid esters, said esters being alkyl groups having less than 4 carbon atoms, the steps of combining said mixture with an organic solvent of the group consisting of carbon tetrachloride, toluene, and benzene, whereby a crystalline complex of said solvent and the hyodesoxycholic acid esters is formed, and separating the crystalline complex from the liquid residuum.

2,745,850

DEBROMINATION OF 16-BROMO-C_{21}-STEROIDS

Martin W. Farrar, Webster Groves, Mo., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application November 27, 1953, Serial No. 394,868

10 Claims. (Cl. 260—397.45)

1. In a process for debrominating 16-bromo-steroids the steps which comprise mixing together in the presence of an inert solvent a 16-bromo-C_{21}-steroid with a low molecular weight carboxylic acid and a Raney nickel catalyst that has been modified by treatment with a hydrogen acceptor and heating said mixture at a temperature in the range of 20° C. to about 100° C.

2,745,851

OXIDATION OF PROGESTERONE AND PRODUCTS PRODUCED THEREBY

Aram Mooradian, Nassau, N. Y., assignor to Sterling Drug Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application October 25, 1951, Serial No. 253,195

6 Claims. (Cl. 260—397.47)

1. A compound selected from the group consisting of $\Delta^{1,4}$-pregnadiene-3,20-dion-21-ol and lower-alkanoic acid esters thereof.

2,745,852

$\Delta^{4,16}$-PREGNADIENE-21-OL-3,20-DIONES AND PROCESS

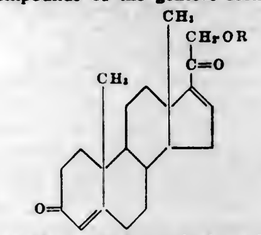
Gustav Ehrhart, Heinrich Ruschig, and Werner Haede, Frankfurt am Main, Germany, assignors to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius und Brüning, Frankfurt am Main-Hochst, Germany, a German company

Application July 21, 1952, Serial No. 300,042

Claims priority, application Germany July 27, 1951

6 Claims. (Cl. 260—397.47)

1. The compounds of the general formula



wherein R stands for a lower hydrocarbon carboxylic acid radical having at most 8 carbon atoms.

2,745,853

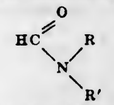
PREPARATION OF AMIDES

Lyle A. Hamilton and Robert H. Williams, Pitman, N. J., assignors to Socony Mobil Oil Company, Inc., a corporation of New York

No Drawing. Application February 2, 1953, Serial No. 334,744

9 Claims. (Cl. 260—404)

1. A process for producing amides which comprises reacting an ethylenically unsaturated hydrocarbon having no conjugated double bonds with a formamide



wherein R and R′ are radicals selected from the group consisting of hydrogen atoms and lower alkyl radicals, in the presence of a peroxide catalyst, for a period of time varying between about 5 hours and about 70 hours, and at the activation temperature of said peroxide catalyst.

2,745,854

DEHYDRATED CASTOR OIL FATTY ACIDS

Wesley A. Jordan, Minneapolis, Minn., assignor to General Mills, Inc., a corporation of Delaware

No Drawing. Application May 5, 1952, Serial No. 286,200

4 Claims. (Cl. 260—405.5)

1. Process of dehydrating castor fatty acids which comprises heating a mixture of castor fatty acids and an added higher fatty acid to an elevated temperature within the approximate range of 150–250° C. to form the estolide of the castor fatty acids, and then subjecting the estolide to an elevated temperature within the approximate range of 250–300° C. to yield a mixture of dehydrated castor fatty acids and the added higher fatty acid, vaporizing the mixture and condensing the dehydrated castor fatty acid and the additional fatty acid.

2,745,855

ALKYLENE OXIDE CONDENSATE OF DISCARD PALM OIL

Everett N. Case, Homewood, Ill., assignor, by mesne assignments, to Sinclair Oil and Gas Company, Tulsa, Okla., a corporation of Maine

No Drawing. Application April 14, 1951, Serial No. 221,127

3 Claims. (Cl. 260—410.6)

1. The condensation product prepared by condensing discard palm oil with an alkylene oxide having two to three carbon atoms in which the weight ratio of alkylene oxide to discard palm oil is in the range of about 0.2 to 2.5.

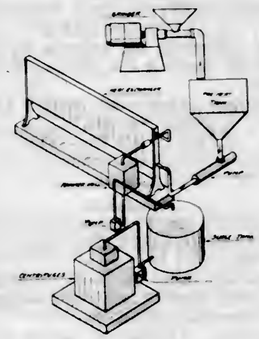
2,745,856

METHOD OF RENDERING ANIMAL FATS

William R. Dayen and Kenneth M. Christensen, Indianapolis, Ind., assignors, by mesne assignments, to Hygrade Food Products Corporation, Detroit, Mich., a corporation of New York

Application April 30, 1952, Serial No. 285,176

7 Claims. (Cl. 260—412.6)



1. The method of continuously rendering fats which comprises coarsely grinding fat containing tissue, continuously feeding said ground tissue to a point of application of heat, heating the ground tissue thus fed to a relatively low temperature not high enough to coagulate said tissue but sufficient to melt the said fat, thereby to render the tissue effectively fluid, continuously pumping said fluidized tissue to a second point of application of heat, and continuously heating the fluidized tissue thus being fed under pressure to a temperature sufficient to coagulate the animal protein contained therein, continuously pumping said coagulated tissue to a rendering point, and thereafter rendering the tissue by continuously grinding the same to a sub-cellular non-fibrous state.

2,745,857

GLYCOLIC ACID ETHERS OF POLYOXYPROPYLENE COMPOUNDS AND METHOD OF PREPARATION

Edgar C. Britton and Peter S. Petrie, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application February 23, 1952, Serial No. 273,156

7 Claims. (Cl. 260—429)

1. A composition selected from the group consisting of a mixture of glycolic acid ethers of monoalkyl ethers of polypropylene glycols and salts thereof having the probable formula:

$$R—(OC_3H_6)_n—O—CH_2COO—X$$

wherein R represents an alkyl radical containing from 1 to 16 carbon atoms, X represents a member of the group consisting of hydrogen and metals and n is a whole number greater than 3, the said glycolic acid ethers of the monoalkyl ethers of the polypropylene glycols having an average molecular weight of from 500 to 1500.

2,745,858

PROCESS FOR RECOVERING PURE ZINC ETHIONATE

Frederick H. Norton, Concord, Calif., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application July 7, 1954, Serial No. 441,945

2 Claims. (Cl. 260—429)

1. A method for the recovery of pure zinc ethionate from a lower grade of the same material containing zinc hydroxide as an impurity which comprises dissolving said lower grade material in a strong acid, adding an alkali metal hydroxide to the solution only until the pH of the medium is in the range from 6.0 to 6.2, and recovering the so-precipitated and purified zinc ethionate.

2,745,859

METHOD FOR THE PREPARATION OF ZINC ETHIONATE

Frederick H. Norton and Donna Stevens, Concord, Calif., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application July 7, 1954, Serial No. 441,944

3 Claims. (Cl. 260—429)

1. The method which comprises deaminating at pH above 7 an aqueous solution of crude ethionine originally containing ions which interfere with precipitation of zinc ethionate, decarbonating the resulting solution after acidification to pH below 7, and precipitating zinc ethionate by reaction of the so-treated solution with a water-soluble zinc salt at a pH from 6 to 7.

2,745,860

DISPROPORTIONATION OF ALKOXYDISILYL HYDROCARBONS

Donald Leroy Bailey, Buffalo, N. Y., assignor to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application October 16, 1952, Serial No. 315,211

11 Claims. (Cl. 260—448.2)

1. A process of disproportionating an alkoxydisilyl hydrocarbon containing at least one hydrogen atom attached to a silicon atom and at least one alkoxy radical attached to a silicon atom, which comprises treating said alkoxydisilyl hydrocarbon with an alkali metal alkoxide and recovering a disilyl hydrocarbon.

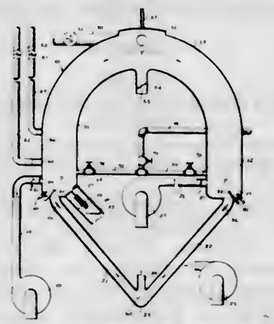
2,745,861

PROCESS AND APPARATUS USING RESONANT SOUND WAVE AND SONIC FLAME FOR PRODUCTION OF CARBON MONOXIDE, SYNTHESIS GASES, AND SYNTHETIC HYDROCARBONS

Albert G. Bodine, Jr., Van Nuys, Calif.

Application August 11, 1952, Serial No. 303,795

26 Claims. (Cl. 260—449)



18. The process of producing synthetic hydrocarbon products from a powdered solid carbonaceous raw mate-

rial such as coal and the like, that comprises: periodically burning successive rich mixture charges of the powdered raw material and air within, and at instants of peak positive pressure at, a pressure antinode region of a confined resonant gas column undergoing the pressure and velocity cycles of a standing sound wave maintained in said column by such burning, thereby producing carbon monoxide, establishing a flow of said carbon monoxide longitudinally along said gas column in a direction away from said pressure antinode region, reacting steam with heated carbon in the gas column to produce hydrogen flowing along said gas column in a mixture with said carbon monoxide, effecting hydrogenation of the mixture of hydrogen and carbon monoxide by contacting said mixture with a catalyst at a region of said gas column which is subject to said standing sound wave, and withdrawing the products of hydrogenation from the gas column.

2,745,862

PRODUCTION OF DIALKYL HYDROGEN PHOSPHITES

Everett E. Gilbert, Flushing, and Julian A. Otto, Long Island City, N. Y., assignors to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

No Drawing. Application June 20, 1952, Serial No. 294,732

7 Claims. (Cl. 260—461)

1. The process for making a dialkyl phosphite which comprises reacting dialkyl sulfate with an alkali metal monohydrogen phosphite in the presence of pyridine.

2,745,863

PREPARATION OF ALKARYL PHOSPHORIC ACIDS

Ferdinand P. Otto, Woodbury, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York

No Drawing. Application December 17, 1952, Serial No. 326,590

7 Claims. (Cl. 260—461)

1. A method for preparing an alkaryl phosphoric acid which comprises reacting together (*a*) 1 mol of P_2O_5, (*b*) from about 1 to about 3 mols of a hydroxyaromatic compound selected from the group consisting of phenol, alpha-naphthol, beta-naphthol, ortho-cresol and catechol and (*c*) from about 1 mol to about 3 mols per mol of hydroxyaromatic compound used of an olefin, said olefin having from 3 to about 24 carbon atoms in the aliphatic portion thereof and being selected from the group consisting of olefins of the formulae RRC=CH_2, RRC=CHR and RRC=CRR, wherein R is a radical selected from the group consisting of alkyl, aryl and alkaryl radicals, the mols of olefin supplied to the reaction being at least equal to the mols of hydroxyaromatic compound used, at a temperature of from about 50° C. to about 125° C. and for a period of time sufficient for reaction to take place.

2,745,864

METHOD OF PREPARING UNSATURATED NITRILES

James K. Dixon, Riverside, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application February 18, 1953, Serial No. 337,689

8 Claims. (Cl. 260—464)

1. The method of preparing an unsaturated nitrile which comprises heating an olefin in the presence of cyanogen chloride at a temperature of at least about 450° C., and recovering the thus-formed unsaturated nitrile.

2,745,865

PREPARATION OF CYANOHYDRINS

Glen E. Jourueay, Texas City, Tex., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application February 27, 1953, Serial No. 339,450

11 Claims. (Cl. 260—465)

1. A process for preparing a cyanohydrin which comprises reacting hydrocyanic acid with a compound from the group consisting of aldehydes and ketones, in the liquid phase, in a solvent medium, and in the presence of a catalyst comprising a mixture of pyridine and an aliphatic monocarboxylic acid having from 1 to 6 carbon atoms.

2,745,866

α,β-DIARYL SUBSTITUTION PRODUCTS OF α-ALKENONITRILES

Kurt J. Rorig, Evanston, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application January 22, 1953, Serial No. 332,757

1 Claim. (Cl. 260—465)

An α,β-bis(p-anisyl)-α-pentenonitrile.

2,745,867

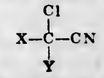
FLUORINATION OF PERHALOACETONITRILES OVER AN IMPROVED CHROMIUM FLUORIDE CATALYST

Robert P. Ruh and Ralph A. Davis, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application January 31, 1955, Serial No. 485,307

8 Claims. (Cl. 260—465.7)

1. The process of fluorinating a perhaloacetonitrile corresponding to the general formula



wherein X and Y each represent a member of the group consisting of chlorine and fluorine, which process comprises passing the perhaloacetonitrile and greater than one molecular proportion of hydrogen fluoride at a reaction temperature in the range of from 300° to 600° C. through a bed of a catalyst prepared by heating a hydrated chromium fluoride to a temperature in the range of from about 350° to 750° C. in the preesence of oxygen.

2,745,868

PROCESS FOR THE PRODUCTION OF TRICHLORO-ACETONITRILE

Gerhard Käbisch, Hanau (Main), Germany, assignor to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfurt am Main, Germany

Application February 8, 1954, Serial No. 408,952

Claims priority, application Germany February 7, 1953

6 Claims. (Cl. 260—465.7)

1. A process for the production of trichloro-acetonitrile which comprises contacting an acetonitrile compound selected from the group consisting of acetonitrile and monochloro-acetonitrile in admixture with hydrogen chloride with chlorine at temperatures between 50 and 80° C.

2,745,869

STABILIZED COMPOSITIONS COMPRISING MONOMERIC 1.1-DICYANO ETHYLENE

Eugene F. Sachara, Parma Heights, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a corporation of New York

No Drawing. Application November 17, 1953, Serial No. 392,741

9 Claims. (Cl. 260—465.8)

1. A composition comprising crude unstable monomeric 1,1-dicyano ethylene and a stabilizer, said stabilizer being selected from the class consisting of halosulfonic acids and sulfuryl halides, said stabilizer being present in a concentration of about 0.01% to about 10.0% by weight.

2,745,870

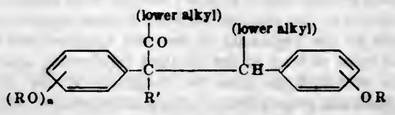
POLYALKOXY AND POLYALKANOYLOXY DERIVATIVES OF α,β-DIPHENYLALKANONES AND THEIR PREPARATION

Kurt J. Rorig, Chicago, Ill., assignor to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application November 14, 1952, Serial No. 320,615

11 Claims. (Cl. 260—479)

1. The compounds of the structural formula



wherein R is a member of the class consisting of lower alkyl and (lower alkyl)—CO— radicals, R′ is a member of the class consisting of hydrogen and lower alkyl radicals, and *n* is a positive integer smaller than 3.

2,745,871

ALKYLAMINE SALTS OF ALPHA-2,4,5-TRICHLOROPHENOXYPROPIONIC ACID

Bill M. Williams, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application May 16, 1951, Serial No. 226,750

1 Claim. (Cl. 260—521)

Isopropylammonium alpha-2,4,5-trichlorophenoxypropionate.

2,745,872

ISOPHTHALIC ACID AND TEREPHTHALIC ACID SEPARATION

Earl F. Carlston and Funston G. Lum, Richmond, Calif., assignors to California Research Corporation, San Francisco, Calif., a corporation of Delaware

Application December 24, 1952, Serial No. 327,762

11 Claims. (Cl. 260—525)

1. A process for separating mixtures of an alkali metal salt of isophthalic acid and the same alkali metal salt of terephthalic acid which comprises forming an intimate mixture of the salts with a concentrated aqueous solution of an inorganic salt of the same alkali metal, said inorganic salt being selected from the group consisting of alkali metal chlorides, sulfates and carbonates, and said aqueous solution being insufficient to dissolve all of the mixed alkali metal phthalates and separating a solid phase and a liquid phase from the intimate mixture.

2,745,873

PROCESS OF PRODUCING N-ACETYL METHIONINE

John P. Callanan, Pasadena, and Abner P. Patton, Glen Burnie, Md., assignors to National Distillers Products Corporation, New York, N. Y., a corporation of Virginia

No Drawing. Application February 2, 1953, Serial No. 334,716

8 Claims. (Cl. 260—534)

1. Method of producing N-acetyl methionine which comprises reacting acetic anhydride with methionine at an elevated temperature not exceeding about 100° C. in an organic liquid reaction medium inert with respect to acetic anhydride and boiling within the range of about 55° C.–100° C., said medium being a solvent for the N-acetyl methionine at the reaction temperature, and thereafter cooling the reaction mixture and thereby crystallizing the N-acetyl methionine from the solution.

2,745,874

INSECTICIDAL DERIVATIVES OF DIPHENYL UREA

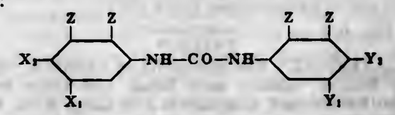
Guido Schetty and Walter Stammbach, Basel, and Robert Zinkernagel, Rieben, near Basel, Switzerland, assignors to J. R. Geigy A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application June 16, 1954, Serial No. 437,302

Claims priority, application Switzerland June 18, 1953

6 Claims. (Cl. 260—553)

1. A diphenyl urea compound having the general formula:



wherein one X represents the trifluoromethyl group and the other X represents a member selected from the group consisting of hydrogen, chlorine and bromine, one Y represents a member selected from the group consisting of chlorine, bromine and the trifluoromethyl group, the other Y represents a member selected from the group consisting of hydrogen, chlorine and bromine and Z represents a member selected from the group consisting of hydrogen, chlorine and bromine.

2,745,875

PREPARATION OF N-ACYLAMINO-PHENYL-PROPANE DIOLS

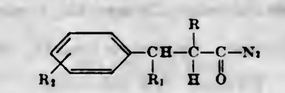
Gustav Ehrhart, Helmut Nahm, and Walter Siedel, Frankfurt am Main, Germany, assignors to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius & Brüning, Frankfurt am Main, Germany, a corporation of Germany

No Drawing. Application June 25, 1954, Serial No. 439,472

Claims priority, application Germany June 30, 1953

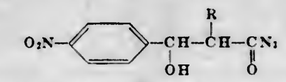
9 Claims. (Cl. 260—558)

1. The process of preparing acylamino-alcohols, which comprises reacting an amino-acid azide having the formula



wherein R is a member selected from the group consisting of N-lower alkanoyl, N-(halo-lower alkanoyl) and N-benzoyl radicals, wherein R is a member selected from the group consisting of hydroxy, lower-alkoxy and acetoxy radicals, and wherein R_2 is a member selected from the group consisting of hydrogen, chloro, nitro, methylmercapto, and phenyl radicals, with a member selected from the group of complex metal hydrides consisting of alkali metal boron hydrides, alkali metal aluminum hydrides, alkaline earth metal boron hydrides and alkaline earth metal aluminum hydrides, in the presence of an aliphatic oxygen-containing solvent to thereby form an intermediate complex and in the presence of a member selected from the group consisting of water and a lower aliphatic alcohol as hydrogen donators for breaking up the intermediate complex, and adding water to the reaction mixture thus obtained to thereby obtain the corresponding acylamino alcohol in a pure state.

4. The process of claim 1, wherein said azide has the formula



R representing an N-benzoyl radical.

2,745,876
PREPARATION OF ALPHA-HALO-NITRO-ACETOPHENONES

Ezra Monroe and Samuel Wendell Long, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application June 2, 1952, Serial No. 291,316
13 Claims. (Cl. 260—592)

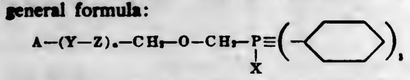
1. The method of preparing an alpha-(halomethyl) nitrobenzyl alcohol which comprises hydrolyzing an alpha-(halomethyl)nitrobenzyl nitrate in which the halomethyl radical is from the group consisting of bromomethyl and chloromethyl in the presence of greater than one molecular proportion of an aqueous hydrohalic acid from the group consisting of hydrobromic acid and hydrochloric acid at a temperature above 30° C.

2,745,877
QUATERNARY PHOSPHONIUM COMPOUNDS

Jakob Bindler, Rieben, near Basel, and Ernst Model, Basel, Switzerland, assignors to J. R. Geigy A. G., Basel, Switzerland

No Drawing. Application July 2, 1952, Serial No. 296,947
Claims priority, application Switzerland July 6, 1951
7 Claims. (Cl. 260—606.5)

1. An organic quaternary phosphonium compound of the general formula:



wherein A represents a member selected from the group consisting of halogen-substituted phenyl, diphenylyl and phenoxyphenyl radicals, which halogen has an atomic weight of at least 35 and at most 80,
Y represents a member selected from the group consisting of oxygen and sulphur,
Z represents a divalent aliphatic hydrocarbon radical of 1 to 5 carbon atoms,
n represents a whole number of the value of 0 to 1,
X represents a halogen atom selected from the group consisting of chlorine and bromine.

2,745,878
PREPARATION OF AROMATIC THIO ETHERS

Julius M. Mavity, Hinsdale, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application June 30, 1952, Serial No. 296,489
8 Claims. (Cl. 260—609)

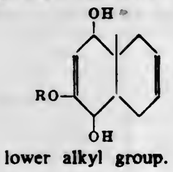
1. A process for the preparation of an aromatic thioether which comprises condensing an unsubstituted polyhydric phenol in the presence of a thioetherification catalyst with a compound consisting of carbon, hydrogen and sulfur and selected from the group consisting of alkyl and aryl mercaptans and dialkyl and diaryl sulfides.

2,745,879
HEXAHYDRONAPHTHALENES AND PRODUCTION THEREOF

Robert B. Woodward, Belmont, Mass., assignor to Research Corporation, New York, N. Y., a corporation of New York

No Drawing. Application May 19, 1953, Serial No. 356,084
5 Claims. (Cl. 260—611)

4. 1,4 - dihydroxy - 2 - alkoxy - 10 - methyl - $\Delta^{2,6}$ - hexahydronaphthalenes of the formula



wherein R is a lower alkyl group.

2,745,880
PRODUCTION OF POLYPENTAERYTHRITOLS

Edward J. Russell and Franklin B. Wells, Allentown, Pa., assignors to Trojan Powder Company, a corporation of New York

No Drawing. Application November 14, 1952, Serial No. 320,619
2 Claims. (Cl. 260—615)

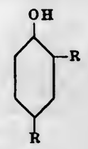
1. In the manufacture of mixed pentaerythritols of high proportion of tripentaerythritol, by reaction involving formaldehyde and acetaldehyde in contact with an alkaline condensing agent, the improvement comprising admixing a material selected from the group consisting of dipentaerythritol and a mixture thereof with another pentaerythritol to the reaction mixture at least approximately as early as the beginning of the said reaction and introducing most at least of the alkaline condensing agent and of the acetaldehyde after the addition of the dipentaerythritol, the proportion of dipentaerythritol so admixed being at least equal on the molar basis to the total of any other pentaerythritols in the said material.

2,745,881
PREPARATION OF ASYMMETRICAL BISPHENOLS

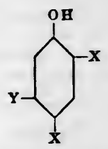
Raymond H. Rigterink, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application March 24, 1952, Serial No. 278,297
6 Claims. (Cl. 260—619)

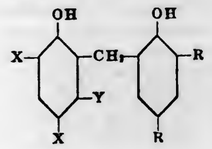
1. Process for preparing alkyl, halo-asymmetrical bisphenols comprising the steps of chloromethylating a compound of the general formula:



wherein one R is an alkyl group of one to four carbon atoms and the other R is one of the halogens chlorine and bromine, condensing the chloromethylated alkyl halophenolic product with an equimolar quantity of a compound of the general formula:



wherein the substituents X are one of the halogens chlorine and bromine and Y is selected from the group consisting of the same halogen and hydrogen, in the presence of a catalytic amount of an aluminum halide, and subsequently separating the bisphenolic product having the general formula:

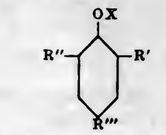


2,745,882
DEHYDRATIVE DISTILLATION FOR PREPARATION OF ALKALI METAL SALTS OF 2,4,6-TRIALKYLPHENOLS

Chauncey C. Hale, Cranford, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application February 5, 1953, Serial No. 335,385
10 Claims. (Cl. 260—624)

1. A process for preparing alkali metal phenolates corresponding to the formula



wherein R' and R'' are tertiary alkyl groups having from 4 to 16 carbon atoms, R''' is an alkyl group having from 1 to 6 carbon atoms, and X is an alkali metal radical, which comprises reacting an alkali metal hydroxide with the corresponding phenol in the presence of an inert, organic liquid, azeotroping agent which has a boiling point in the range of 50°–150° C., forms an azeotrope with water, and is relatively insoluble therein and removing water from the reaction mixture by heating the reaction mixture to a temperature at which an azeotrope of water and the azeotroping agent is distilled out.

2,745,883
PRODUCTION OF TRICHLOROBENZENES

Theodore M. Jenney, Kenmore, N. Y., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia

No Drawing. Application May 19, 1951, Serial No. 227,270
6 Claims. (Cl. 260—650)

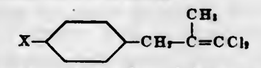
1. In the production of trichlorobenzenes by the dehydrochlorination of benzene hexachloride in suspension in a solution selected from the class consisting of aqueous alkali metal hydroxide solutions and aqueous alkaline earth metal hydroxide solutions, the improvement which comprises incorporating in the reaction mixture a minor amount of at least about 0.01 weight percent based on the benzene hexachloride of a surface active agent which is stable in the presence of the aqueous hydroxide solution.

2,745,884
HALOPHENYLDICHLOROMETHYLPROPENES

Donald G. Kundiger, Manhattan, Kans., and Huey Piedcer, Jr., Pittsburgh, Pa., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application June 18, 1952, Serial No. 294,265
3 Claims. (Cl. 260—651)

1. A compound of the formula



wherein X represents a member of the group consisting of chlorine and bromine.

2,745,885
1-CHLORO-1,2,3,4,4-PENTAFLUORO-1,3-BUTADIENE

Robert P. Ruh and Ralph A. Davis, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application June 24, 1953, Serial No. 363,949
1 Claim. (Cl. 260—653)

1 - chloro - 1,2,3,4,4 - pentafluoro - 1,3 - butadiene.

2,745,886
PROCESS FOR FLUORINATING ALIPHATIC HALOHYDROCARBONS WITH A CHROMIUM FLUORIDE CATALYST AND PROCESS FOR PREPARING THE CATALYST

Robert P. Ruh and Ralph A. Davis, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application January 31, 1955, Serial No. 485,306
18 Claims. (Cl. 260—653)

1. A method of preparing a catalyst useful in promoting the fluorination of haloalkanes by vapor-phase reaction with hydrogen fluoride, said method comprising heating a mixture of a major proportion of hydrated chromium fluoride and a minor proportion of chromium trioxide at a temperature above about 400° C. for a time sufficiently long to convert at least part of the hydrated chromium fluoride to a basic chromium fluoride.

18. A method of fluorinating haloalkanes which comprises passing a vapor mixture of a haloalkane having from one to four carbon atoms including at least one carbon atom which is attached to a minimum of two halogens of atomic number not greater than 35, at least one of said halogens being of atomic number from 17 through 35 inclusive, and at least an equimolecular proportion of hydrogen fluoride at a reaction temperature in the range of from about 125° C. to about 600° C. through a bed of a catalyst consisting essentially of a basic chromium fluoride.

2,745,887
DEHYDROGENATION OF NON-AROMATIC CYCLIC COMPOUNDS

Herman Pines, Chicago, and Jerome A. Vesely, Evanston, Ill., assignors to Universal Oil Products Company, Des Plaines, Ill., a corporation of Delaware

No Drawing. Application June 15, 1953, Serial No. 361,875
12 Claims. (Cl. 260—668)

1. A process for the dehydrogenation of a non-aromatic cyclic hydrocarbon containing a six carbon atom ring and at least two double bonds per molecule, at least one of said double bonds being in said ring, to form an aromatic compound which comprises the step of heating said non-aromatic cyclic hydrocarbon at a dehydrogenating temperature of from about 100° C. to about 400° C. in contact with a catalyst selected from the group consisting of the alkali and alkaline earth metals and hydrides thereof.

6. A process for the dehydrogenation of a non-aromatic cyclic hydrocarbon containing a six carbon atom ring and at least two double bonds per molecule, at least one of said double bonds being in said ring, and at least one hydrogen atom on the carbon atoms of the ring which do not contain a double bond which comprises heating said non-aromatic cyclic hydrocarbon with an alkali metal catalyst at a temperature of from about 160° C. to 300° C.

7. A process for the dehydrogenation of d-limonene to form p-cymene which comprises the step of heating said limonene with a catalyst selected from the group consisting of alkali metals and hydrides thereof, under dehydrogenating conditions.

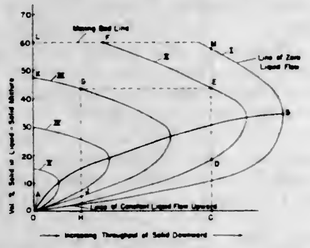
2,745,888
TREATING OF LIQUIDS WITH GRANULAR SOLIDS

Thomas S. Mertes, Wilmington, Del., and Harrison B. Rhodes, Norwood, Pa., assignors to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

Application January 21, 1952, Serial No. 267,466
8 Claims. (Cl. 260—674)

1. Process for countercurrently contacting a liquid with a granular solid which comprises: feeding a stream of the liquid into a vertical elongated open column having

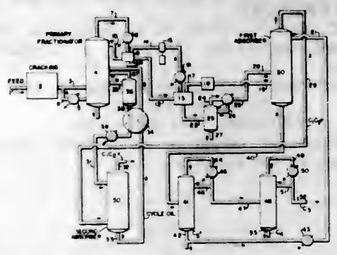
an upper expanded section constituting a reservoir for granular solid and a lower section of smaller diameter constituting a countercurrent contacting zone, the liquid being fed into a lower part of said section of smaller diameter, flowing liquid upwardly through said section of smaller diameter, maintaining within said reservoir a supply of granular solid in dense form immersed in liquid, permitting said solid to fall directly from said reservoir into said section of smaller diameter and downwardly



countercurrent to said liquid, and withdrawing solid from the bottom at a rate such that a mass of solid in dense form is maintained at the lower end of said section of smaller diameter immediately adjacent the level at which liquid enters therein, and the solid falling countercurrent to the liquid is restrained to the extent that an N-phase system, in which the falling solid, while being in less dense form than that within said reservoir, is in more dense form than freely falling solid, is maintained essentially throughout said contacting zone.

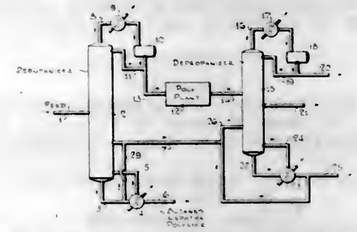
2,745,889
SEPARATION OF C_2, C_3 AND C_4 ALKENES FROM HIGHLY CRACKED DISTILLATES
Robert H. Johnston, Chatham, N. J., and George E. Mitchell, Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application June 22, 1953, Serial No. 363,050
7 Claims. (Cl. 260—677)

1. The process of separating a narrow ethene-rich fraction from high-temperature cracked light hydrocarbon gaseous products stripped from higher-boiling products in a primary fractionator and separated from overhead distillate thereof, which comprises passing a stream of said gaseous products first through an absorption zone where said stream is contacted with a C_5+ hydrocarbon fraction to remove most of the C_3 and higher components, said C_5+ hydrocarbon fraction being passed into said absorption zone after being stripped free of C_3 and C_4 components, then passing the remaining ethene-rich stream into contact with a light gas oil from the primary fractionator to remove substantially all remaining C_5 diene and higher components by absorption in said oil,



and returning said gas oil containing absorbed C_5+ components to the primary fractionator.

2,745,890
PROCESS FOR PRODUCTION OF POLYMER HYDROCARBONS
Robert P. Cahn, Elizabeth, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application March 29, 1952, Serial No. 279,415
7 Claims. (Cl. 260—683.15)

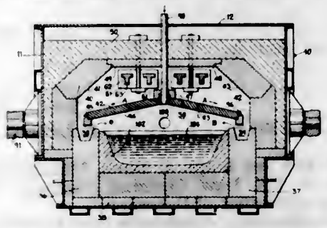


7. In a process for the polymerization of a feed stream comprising unsaturated hydrocarbons containing four or less carbon atoms wherein said feed is diluted with butane prior to polymerization by recycling butane to a debutanization tower into which said feed stream is introduced and from which a bottoms stream free of unsaturated hydrocarbons but containing at least some butane is removed, the improvement comprising introducing recycled butane vapors into said tower at a point below that at which said feed stream is introduced, whereby said butane vapors rise upwardly through said tower past the point of introduction of said unsaturated hydrocarbons, carrying said unsaturated hydrocarbons to the top of said tower, and effectively blocking said unsaturated hydrocarbons from access to the bottom of said tower.

ELECTRICAL

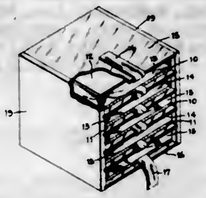
2,745,891
APPARATUS FOR MELTING HIGHLY REACTIVE METALS
Paul F. Darby, Walter L. Finlay, and Orien W. Simmons, Beaver, Pa., assignors to Rem-Cru Titanium, Inc., Midland, Pa., a corporation of Pennsylvania
Application March 15, 1954, Serial No. 416,068
16 Claims. (Cl. 13—31)

2. A radiation type skull furnace comprising a furnace chamber having a hearth adapted to hold a mass of highly refractory reactive metal in the molten state, a plurality of electrical resistance heating elements disposed in said chamber and positioned so as to radiate heat toward said hearth in combination with means provided in said furnace chamber and positioned relative to said heating elements and said hearth in such manner as to prevent



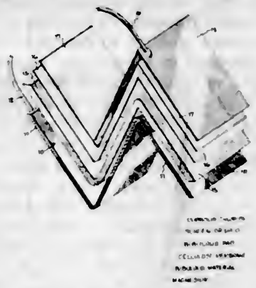
contamination of the molten mass due to vapor rising therefrom, becoming contaminated and returning thereto.

2,745,892
METHOD OF DISCHARGING ELECTROLYTIC CELLS
Melvin F. Chubb and James M. Dines, Joplin, Mo., assignors of The Eagle-Picher Company, Cincinnati, Ohio, a corporation of Ohio
Application January 26, 1952, Serial No. 268,422
4 Claims. (Cl. 136—90)



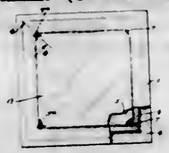
2. An improved method of activating an electrolytic cell having a pasted cuprous chloride positive electrode, a sheet magnesium negative electrode and a bibulous pad between the electrodes in order to reduce the rate of decomposition of the cuprous chloride of the positive electrode and to prevent overheating of the cell, said method comprising saturating the bibulous pad of the cell with an aqueous electrolyte which contains substantially 5 to 50% water miscible polar solvent of the class consisting of glycerin, ethylene glycol, diethylene glycol, propylene glycol, and dipropylene glycol, whereby the solubility of the cuprous chloride in the electrolyte is reduced and the exothermic hydration of the magnesium chloride which is formed by decomposition of the negative electrode is retarded.

2,745,893
CUPROUS CHLORIDE MAGNESIUM CELL WITH CELLOPHANE MEMBRANE
Melvin F. Chubb and James M. Dines, Joplin, Mo., assignors to The Eagle-Picher Company, Cincinnati, Ohio, a corporation of Ohio
Application April 23, 1952, Serial No. 283,938
2 Claims. (Cl. 136—100)



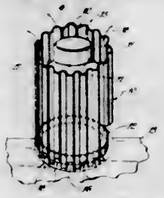
1. An electrolytic cell comprising a pasted cuprous chloride positive electrode, a magnesium negative electrode, at least two bibulous pads adapted to retain aqueous electrolyte, said pads disposed between said electrodes with one of said pads being in engagement with the positive electrode and with the other pad being in engagement with the negative electrode, and a membrane which is substantially thin in relation to said pads and of a porosity substantially equal to the porosity of regenerated cellulose, said membrane being sandwiched between said pads, whereby the membrane inhibits migration of copper deposits from the negative electrode to the positive electrode.

2,745,894
PRIMARY DRY CELL
Glenn J. Nowotny, Madison, Wis., assignor to Ray-O-Vac Company, Madison, Wis., a corporation of Wisconsin
Application June 19, 1952, Serial No. 294,366
25 Claims. (Cl. 136—111)



22. A primary dry cell comprising a flexible non-conductive plastic envelope formed by sealing the marginal edges of at least one sheet of such plastic, positive and negative electrodes and an electrolyte within said envelope, said negative electrode comprising a substantially flat piece of sheet metal disposed on one portion of the envelope, said positive electrode comprising a sheet of conductive plastic the marginal edges of which are sealed to a portion of the inner surface of said plastic envelope opposite the portion on which the negative electrode is disposed, thereby forming an interior pocket, and a metal collector element disposed within said pocket, said metal collector element being a plate of sheet metal having an elevated sharp surface portion adapted to puncture the overlying non-conductive plastic envelope.

2,745,895
VACUUM TUBE SHIELD AND HEAT RADIATOR
Ernest J. Lideen, Cicero, Ill.
Application June 9, 1951, Serial No. 230,770
7 Claims. (Cl. 174—35)

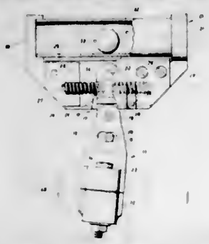


1. In combination a vacuum tube mounted in a tube socket, a grounding ring surrounding said socket, and a tube shield supported upon said grounding ring in slidable, telescoping relationship therewith and enclosing the sides of said tube, said shield comprising a corrugated piece of sheet metal affording vertical air flow channels and bent to a cylindrical form having an internal diameter substantially the same as said tube, the bottom of said shield having an irregular edge to provide air inlet openings sidewardly into the air flow channels formed by the corrugations adjacent to said grounding ring.

2,745,896
VIBRATION DAMPING DEVICE
Louis Rostoker, Toronto, Ontario, Canada
Application December 6, 1954, Serial No. 473,371
10 Claims. (Cl. 174—42)

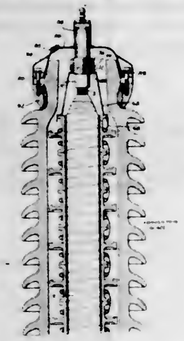
1. A device for damping vibrations in tensioned cable and the like, comprising: a clamping bracket adapted to be fastened rigidly to said cable; a post having upper and lower ends; means adjustably mounting the lower end of said post on said bracket to dispose said post in a fixed vertical position above said cable; a damping element; means pivotally mounting said damping element on the upper end of said post for rocking motion thereon responsive to vibrations in said bracket; means on said damping element limiting the angle of rocking motion thereof with respect to said post and providing a counter-impulse in

said post and bracket responsive to said vibrations to effect damping of the latter in said cable; and means biasing said



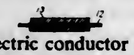
damping element to a position intermediate the limits of rocking motion thereof.

2,745,897
HIGH VOLTAGE ELECTRIC TERMINATOR
James H. Nicholas, Chicago, Ill., assignor to G & W Electric Specialty Company, Chicago, Ill., a corporation of Illinois
Application February 1, 1952, Serial No. 269,365
8 Claims. (Cl. 174—73)



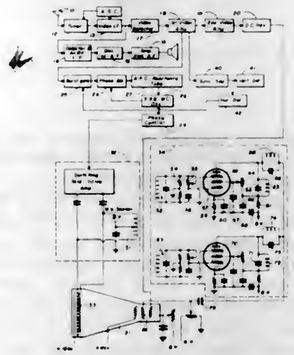
1. A terminator for a high voltage conductor comprising an outer hollow insulator into which the conductor extends and in which the cable conductor terminates, covering insulation around the conductor within the insulator, grounded means at the end of the hollow insulator into which said conductor extends, and means for controlling the potential gradient of the covering insulation and the outer insulator in an axial direction comprising a sleeve of solid insulation surrounding the covering insulation and within the hollow insulator, axially spaced discs of solid insulation integral with the sleeve and projecting radially therefrom, conductor means forming condenser electrodes covering the radially extending surfaces of the discs and constituting each disc as the dielectric of a separate condenser, means connecting said condensers in series, and means for connecting the series connected condensers within the insulator in circuit between ground and the end of the conductor.

2,745,898
INSULATED ELECTRIC CONDUCTORS
Dallas T. Hurd, Burnt Hills, N. Y., assignor to General Electric Company, a corporation of New York
Application September 20, 1952, Serial No. 310,577
7 Claims. (Cl. 174—120)



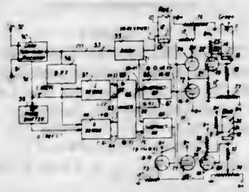
1. An insulated electric conductor comprising the combination of a base conductor having a cupreous surface, an adherent film thereon of anodic black copper oxide formed by anodization of said cupreous surface in an aqueous alkaline solution, and an adherent sheath of insulation thereon consisting of resinous material which is capable of adhering to said oxide film.

2,745,899
TELEVISION RECEIVER CIRCUIT
Richard A. Maher, Cincinnati, and Christian C. Pfitzer, Deer Park, Ohio, assignors to Avco Manufacturing Corporation, Cincinnati, Ohio, a corporation of Delaware
Application May 24, 1954, Serial No. 431,814
6 Claims. (Cl. 178—5.4)



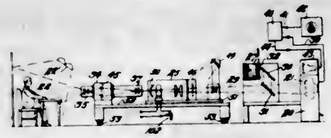
1. In a color television receiver for receiving standard modulated composite color television waves including video signals consisting of luminance components and color subcarrier components representative of hues and saturations, and also including horizontal and vertical synchronizing signal components and color burst signal components, the combination of: First, a cathode ray picture tube having at least one beam-intensity modulating electrode adapted to have video signals applied thereto, horizontal and vertical beam-deflecting electrodes adapted to have deflecting signals applied thereto, a display screen against which electrons from said gun are directed and comprising a base having disposed thereon horizontal strips of phosphors respectively emissive of light of different primary colors additive to produce white light, said strips being disposed in a cyclically repeating pattern of groups emissive of light of all of said colors, and color grid elements adapted to have color switching signals applied thereto; Second, a source of such composite color television waves; Third, means coupling said source of composite color television waves to a beam-intensity modulating electrode of said tube; Fourth, means for recovering and converting the horizontal and vertical signal components into deflecting signals and applying the same to their respective sets of beam-deflecting electrodes; Fifth, a color subcarrier oscillator; Sixth, means controlled by the horizontal synchronizing components for recovering the color burst signals to supply reference signals; Seventh, means including a phase detector for comparing the relative phases of the color subcarrier oscillator output and the recovered color burst reference signals to produce a corrective effect compelling the oscillator to operate in a desired phase relationship relative to such reference signals; Eighth, means for applying an output of the color subcarrier oscillator to said color grid elements to switch the same; and Ninth, modulating means intercoupling said oscillator and a beam-intensity modulating electrode of such picture tube in such a manner as to provide at such electrode modulations including at least a low-order harmonic of the output frequency of said color subcarrier oscillator.

2,745,900
COLOR TELEVISION RECEIVER
Norman W. Parker, Park Forest, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Application March 17, 1953, Serial No. 342,817
6 Claims. (Cl. 178—5.4)



1. In a television receiver, the combination of image reproducing means including at least a first cathode-ray beam section and a second cathode-ray beam section; first and second electrodes in each of said sections for controlling the intensity of the cathode-ray beam therein; means for impressing a signal on said first electrode of said first section; first and second impedance elements respectively connecting said second electrodes of said first and second sections to a point of reference potential; and a discharge device having one element connected to said first electrode of said second section, having another element connected to one of said second electrodes, and having yet another element connected to the other of said second electrodes, so that current variations of said first cathode-ray beam produce corresponding current variations in said second cathode-ray beam in a proportion determined by the values of said impedance elements.

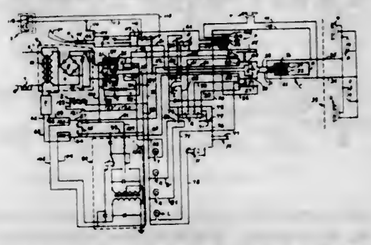
2,745,901
TELEVISION APPARATUS AND OPTICAL SYSTEM
Freeman H. Owens, New York, N. Y.
Application July 11, 1951, Serial No. 236,114
1 Claim. (Cl. 178—6)



Apparatus for televising subjects of widely different character, comprising in combination a single television camera, a projecting camera having a short focal length lens directed toward the televised subject for producing a sharp aerial image of live action and an enlarging lens directed toward the mosaic of said television camera for impressing live action on the mosaic, and still projectors at opposite sides of said projecting camera and adjustable on convergently inclined lines toward and away from the mosiac of said same television camera, said live action projecting camera and still projectors being independently controlled and adjusted for transmitting live action or different stills to said television camera in any desired succession or order and a common support for said live action projecting camera and still projectors bodily shiftable in respect to said television camera and the live action to be televised for enabling quick changes in procedure.

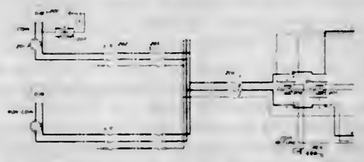
2,745,902
COMPOSITE ELECTRICAL SIGNALING AND INTER-COMMUNICATING SYSTEM
Reagan G. Brown, Oklahoma City, Okla.
Application June 6, 1955, Serial No. 513,540
17 Claims. (Cl. 179—5)

4. A composite electric signaling and inter-communicating system, including: a source of alternating current; a source of direct current; a first relay connected with and maintained operated by said direct current; a plurality of alarm bells and telephones connected in multiple series; a circuit for said bells and telephones closed by the operation of said first relay; a sub-cycle ringer connected with said alternating current; a second relay; an alarm key; a circuit for operating said second relay by the closing of



said alarm key; a circuit connecting said ringer with said bells closed by said second relay in operated position; an alarm lamp; a circuit for said lamp closed by said second relay in operated position; and a switch-hook in said alarm key circuit, whereby said second relay is restored by opening said switch, thereby silencing said bells, extinguishing said lamp and permitting telephonic intercommunication.

2,745,903
SIGNALING SYSTEM
Frank Kessler, Los Angeles, Calif., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application May 10, 1952, Serial No. 287,094
9 Claims. (Cl. 179—6.3)

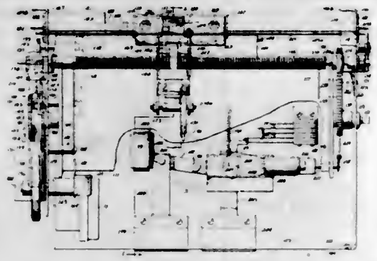


6. In a telecommunication system, a one way trunk line having a circuit network and outgoing terminals in one office, a circuit network and incoming terminals in another office and a two wire link between said networks, a duplex circuit composited on each wire of said link, an operator's cord circuit for making connection to said trunk line by way of said incoming terminals, coin collect and coin refund batteries associated with said cord circuit and means in said cord circuit for selectively transmitting currents from said batteries into the said network at the said incoming end of said trunk, coin collect and coin refund batteries associated with said circuit network at said outgoing terminal end of said trunk, and means included in said network at said incoming end responsive to the application of said coin collect and coin refund batteries from said cord circuit to said incoming terminal circuit and controlled over said duplex circuits for applying said coin collect and coin refund batteries at said outgoing end to said outgoing terminals.

2,745,904
MAGNETIC RECORDING MACHINE
Lloyd J. Bobb, Glenside, Pa., assignor to The International Electronics Company, Philadelphia, Pa., a corporation of Pennsylvania
Application February 28, 1948, Serial No. 11,993
43 Claims. (Cl. 179—100.2)

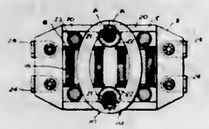
1. Office dictation equipment comprising a mandrel for supporting a magnetic record, a carriage mounted for normal scanning movement and for back spacing move-

ment relative to a record on the mandrel, a scanning electromagnet carried by the carriage, a circuit for said electromagnet, a switch for controlling said circuit and



means interconnecting said carriage and said switch and driven by the carriage upon back space movement thereof to operate the switch.

2,745,905
MAGNETIC HEAD ASSEMBLY
Lloyd J. Bobb, Glenside, Pa., assignor to The International Electronics Company, Philadelphia, Pa., a corporation of Pennsylvania
Application January 14, 1949, Serial No. 70,837
7 Claims. (Cl. 179—100.2)



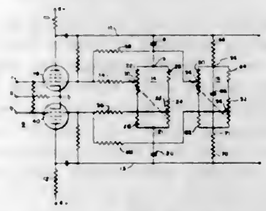
1. A generally arcuate core half-member for a magnetic head characterized in plan by a pair of end edges lying in a common plane, a concave edge intersecting said end edges, and a convex edge intersecting each of said end edges at a point outwardly from the intersection of said end edges with said concave edge, the concave edge being defined by an arc of a circle, the central portion of the convex edge being defined by an arc of a circle having the same center as said first circle, and the portions of said convex edge adjoining said end edges being defined by arcs of circles having shorter radii than the radius of said first-mentioned circle.

2,745,906
TELEPHONE SUPPORTS
Cleon Bolton, San Francisco, Calif.
Application July 13, 1953, Serial No. 367,546
1 Claim. (Cl. 179—157)



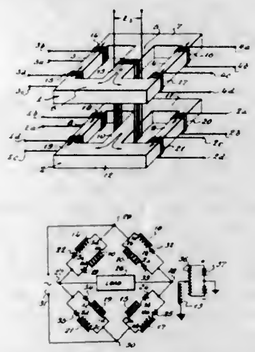
A combination receiver-transmitter telephone unit comprising a telephone receiver, a telephone transmitter, a shank connecting said receiver and said transmitter and a shoulder-rest adapted to encompass said shank and extending radially with respect to the axis of said shank, said rest comprising a heat-shaped molded rubber body terminating in a flat bottom portion bifurcated to provide a pair of pliable jaws, spaced one from the other, to provide a passageway therebetween and in communication with an opening in said body and in which the shank is received, the entire periphery of the body, with the exception of the flat bottom, being serrated, and additional means for securing said body to the shank, said means including a metal strap straddling the passage-way and fastened at its extremities of the bottom surfaces of said jaws.

2,745,907
TONE CONTROL CIRCUIT
Gunter K. Guttwein, Long Branch, and Carlton E. Bessey, Little Silver, N. J., assignors to the United States of America as represented by the Secretary of the Army
Application May 3, 1951, Serial No. 224,436
9 Claims. (Cl. 179—171)
(Granted under Title 35, U. S. Code (1952), sec. 266)



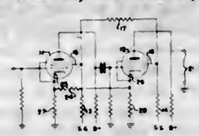
1. A tone control circuit for a stage of amplification having an input and a push-pull output comprising; a resistance-capacitance network having an input connected across said push-pull output, said network mainly responsive to a particular range of frequencies, said network having an output connected back to the input of said stage, whereby the gain of said stage is varied with respect to frequency as determined by said network.

2,745,908
MAGNETIC AMPLIFIER
Sidney B. Cohen and Jerome Beatkowsky, Brooklyn, N. Y., assignors to Sperry Rand Corporation, a corporation of Delaware
Application January 10, 1951, Serial No. 205,368
4 Claims. (Cl. 179—171)



2. A magnetic amplifier comprising four circuit branches connected to form a bridge, a power source of A. C. potential connected across one diagonal of the bridge, a load connected across the other diagonal of the bridge, each of said circuit branches including a serially connected load winding and rectifier connected in parallel with another serially connected load winding and rectifier, said rectifiers being oppositely poled in each branch to permit current flow in both directions therethrough but in opposite directions only through the individual windings of each branch, a pair of three-legged cores, a signal winding on the center legs of said cores, and a source of D. C. potential connected to energize said signal winding, the load windings of one pair of opposite branches being wound in pairs on the outer legs of one core while the load windings of the other pair of opposite branches are wound in pairs on the outer legs of the other core, the adjacent pairs of windings on each outer leg of one core being arranged thereon alternately on successive half cycles of said power source to produce fluxes in the center leg of such core in a direction aiding the flux produced therein by said signal winding, while the other adjacent pairs of windings on each outer leg of the other cores are arranged thereon alternately on successive half cycles of said power source to produce fluxes in the center leg of such other core in a direction bucking the flux produced therein by said signal winding.

2,745,909
SCREEN-GRID NEUTRALIZED AMPLIFIER
William B. Anspacher, Silver Spring, Md.
Application March 8, 1951, Serial No. 214,620
4 Claims. (Cl. 179—171)
(Granted under Title 35, U. S. Code (1952), sec. 266)



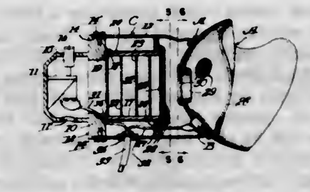
1. In an amplifier, the combination comprising first and second electron discharge devices each having a cathode, an anode, a control grid, and a screen grid; first circuit means including a source of potential for applying anode-cathode operating potential to said devices; means for impressing a signal on the control grid of said first device; means coupling said devices in cascade; a source of screen-grid biasing potential; first and second unby-passed dropping resistances respectively connecting the screen grids of said first and second devices to said source of biasing potential; and second circuit means including circuit connections and substantially purely resistive means for connecting solely said resistive means between said screen grids and in tandem therewith to provide a feedback path for applying from the screen grid of said second device a regenerative voltage to the screen grid of said first device to substantially neutralize the degenerative voltages produced by said dropping resistances.

2,745,910
HIGH FREQUENCY ELECTRIC DISCHARGE DEVICE COUPLING APPARATUS
Rudolph A. Dehn, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application December 22, 1950, Serial No. 202,258
14 Claims. (Cl. 179—171)



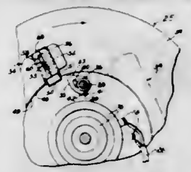
1. Apparatus for electromagnetic energy intercoupling of at least two high frequency electric discharge devices comprising a resonator defined by an elongated wave guide section having aligned longitudinally spaced means at opposing walls for making connection with respective electrodes of respective ones of electric discharge devices inserted within said guide section whereby energy may be transferred between said guide section and each device, said guide section having a transverse dimension less than one-half wave length at a predetermined frequency across said opposing walls to support an electromagnetic wave pattern of said predetermined frequency along said transverse dimension of said guide section in the vicinity of each connection making means when said discharge devices are inserted therein while attenuating electromagnetic energy of said frequency along the length of said guide section, said connection making means being spaced apart a distance small enough to provide synchronization of the transverse wave patterns by the longitudinally attenuated energy and being spaced from the ends of said guide section a distance large enough to provide at least a ten decibel attenuation of the supported electromagnetic wave energy at the ends of the guide section.

2,745,911
AMBIENT SOUND EXCLUDING DICTATION MASK
Horace L. Webb, Washington, D. C.
Application December 5, 1952, Serial No. 324,306
9 Claims. (Cl. 179—188)



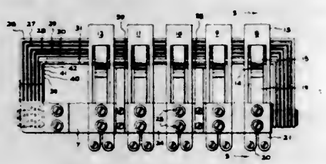
1. A dictation mask structure comprising a ring, spaced apart inner and outer tubular walls one within the other extending from one side thereof, a mask element mounted at the end of said outer wall opposite to the ring, a microphone on the mask, said mask element being open to the interior of the inner wall for passage of sound through the latter, sound baffling means disposed across the bore space of the inner tubular wall in the path of said sound, a switch to control a recording machine, and a grasping means for the structure extending from said ring carrying said switch.

2,745,912
TAKE-UP REEL WITH RELEASABLE LOCKING DEVICE
Irwin Meyer, Chicago, Ill., assignor to Appleton Electric Company, Chicago, Ill., a corporation of Illinois
Application June 3, 1950, Serial No. 165,953
8 Claims. (Cl. 191—12.2)



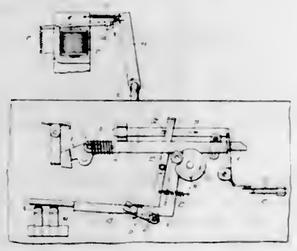
1. A take-up reel assembly comprising, in combination, a housing, a spring loaded sheave journaled in said housing, said sheave and said housing respectively defining a first support and a second support rotatable relative thereto, means defining a generally arcuate cam surface on one of said supports, a dog pivotally mounted upon the other of said supports, a dog stop and means for yieldably biasing said dog against the stop, said dog having a longer extreme radial dimension than the distance between the cam surface and the pivotal axis of said dog when said sheave is in a particular operative position relative to said housing, and a yieldable abutment mounted on said one of said supports, said abutment being normally disposed for interception of said dog upon relative rotation between said sheave and said housing to thereby momentarily deflect the dog against its biasing means so that the dog snaps into wedging engagement with said cam surface and abutment.

2,745,913
PUSH BUTTON SWITCH
Stanley B. Welch, Louisville, Ky., assignor to General Electric Company, a corporation of New York
Application December 23, 1954, Serial No. 477,205
4 Claims. (Cl. 200—5)



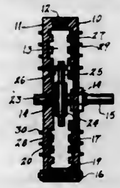
1. A push button switch comprising a base, a plurality of toggle switches mounted on said base, each of said toggle switches including first and second flexible arms lying in substantially the same plane, spring means between said arms for biasing said first arm into one of two positions on opposite sides of said second arm, a fixed contact carried by said base, and a movable contact carried by said first arm; a plurality of separately movable actuator bars each engageable with the said second arm of at least one of said toggle switches, a movable transfer bar engageable with the said first arm of each of said toggle switches, means biasing said actuator and transfer bars out of engagement with said arms, means for moving said transfer bar into engagement with said first arms so as to shift them overcenter with respect to said second arms and open said contacts upon movement of any one of said actuator bars into engagement with said second arms, and a plurality of push buttons each secured to one of said actuator bars, whereby predetermined combinations of said toggle switches may be opened and closed upon manual actuation of said push buttons.

2,745,914
CONTINUOUS ISSUE INTERLOCK
John R. Montgomery, Chicago, Ill., assignor to American Totalisator Company, Inc., Baltimore, Md., a corporation of Maryland
Application July 30, 1953, Serial No. 371,367
5 Claims. (Cl. 200—5)



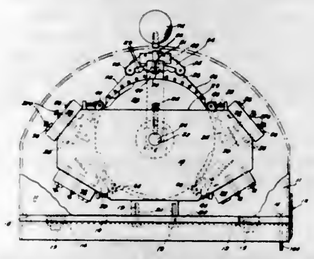
1. In a machine for selectively printing and issuing tickets; a start switch; a bar moved longitudinally to operate said start switch to initiate an operation of the machine; a shaft; a bell crank fixed on said shaft; a motor switch; means for rotating said shaft thereby to move said bell crank to close said motor switch; a pivoted latch; a shoulder on said latch normally blocking movement of said bell crank; and a bar controlled by said start switch for moving said latch thereby to move said shoulder out of the path of said bell crank when the start switch is in operated position thereby to permit movement of the bell crank to close said motor switch.

2,745,915
MULTIPLE REMOTE CONTROL SWITCH
Steven Pantages, New York, N. Y.
Application January 28, 1953, Serial No. 333,693
10 Claims. (Cl. 200—11)



1. In a multiple control switch comprising, in combination, a pair of spaced insulating disk members in superposed relation, a rotatable shaft extending centrally through said disk members, the opposed surfaces of said disk members being formed with spiral grooves, spaced stationary contacts in said grooves in spiral formation, a contacting arm slidably and rotatably supported by said shaft in the space between the disk members, a contact finger slidably mounted at the end of said arm for engaging said stationary contacts, means associated with the shaft for moving said contact finger into engagement with the contacts of either disk member upon rotation of the shaft in either a clockwise direction or in a counterclockwise direction.

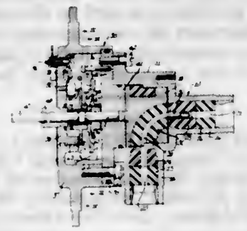
2,745,916
MASTER SWITCH ASSEMBLY
Paul V. Yingst, Cincinnati, Ohio, assignor to The Post Glover Electric Company, Cincinnati, Ohio, a corporation of Ohio
Application June 30, 1953, Serial No. 365,045
6 Claims. (Cl. 200—17)



1. A master switch construction comprising a base, a pair of centrally footed stands secured in spaced parallelism thereon, a stationary shaft supported parallel to the top of the base by said stands, terminal strips each secured on the edges of the stands with a longitudinal corner edge thereof parallel to and equally spaced from the center axis of the shaft, a plurality of spring closed contact assemblies mounted on each strip in spaced apart relation between said stands, each of the contact assemblies including an arm pivoted on an axis parallel to the shaft and having the free end thereof biased toward the shaft, a movable cam assembly including an elongated hub journaled on the shaft between the stands and provided adjacent its opposite ends with a fixed plate and a removable plate respectively, spaced parallel cam discs freely surrounding said hub, bolts passing through said plates and cams, spacers on the bolts between the cams and cooperating with the bolts to secure the cams in parallelism for unitary rotary movement with the hub, each cam presenting its periphery to the free end of a contact arm on each of the terminial strips at predetermined circumferentially spaced apart positions on the cam, a radial arm fixed to the hub and to the fixed plate thereon and operable in closely spaced

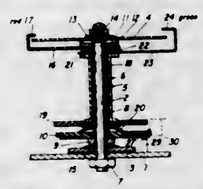
parallelism to the adjacent mounting stand, a star wheel segment secured edgewise to the top edge of the said adjacent mounting stand, a saddle piece including a pair of spring pressed arms having rollers on their free ends for engaging the notches in the star wheel segment for yieldably holding the radial arm selectively in a verticial upright position and in a predetermined number of angularly related positions on either side of said vertical upright position, the cams being selectively notched for receiving the free ends of the contact arms whereby the several contacts are permitted to assume circuit closing positions in selected sequence with relation to other contacts associated with the same cam and with other cams in the switch.

2,745,917
ELECTRIC SWITCH
Richard L. Gates, Eastlake, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application January 9, 1952, Serial No. 265,600
11 Claims. (Cl. 200—18)



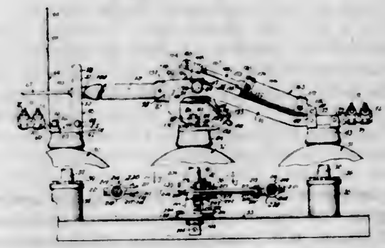
1. A coaxial switch including a rotor, a first shaft connecting with said rotor, a housing enclosing the free end of said first shaft, a second shaft extending into said housing axially shiftable therein, a first member carried by said first shaft, a second member carried by said second shaft, means carried by said first and second members for interlocking said first and second members upon axial shifting of said second member toward said first member, and means carried by said second shaft engaging said second member to shift said second member toward said first member and to rotate said second member to rotate said first member and said first shaft to position the rotor.

2,745,918
TIMERS
Leonard C. Stewart, Twain Harte, Calif., assignor to David W. Henry, Oakland, Calif.
Application March 16, 1953, Serial No. 342,591
5 Claims. (Cl. 200—36)



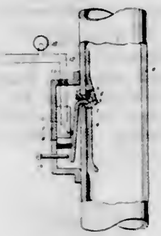
4. In a timer of the character described, a revolvable shaft having a pair of disc cams revolvable thereon with the cams arranged in adjacent relation, yielding means for urging the cams into driving relation with the shaft for common rotation, the said means being made to allow of manual rotary adjustment of each cam on the shaft, a conducting disc secured upon the face of one of the cams and having a conducting flange extending partly around the rim of the said cam, and an electric circuit having two terminals, with one terminal in continuous contact with the disc and the second terminal made to bridge the two cams and biased toward the same, the two cams being shaped to cause the second terminal to contact the flange for selected periods depending upon the setting of the cams with respect to the shaft.

2,745,919
HIGH VOLTAGE AIR BREAK SWITCH ASSEMBLIES
William L. Hollander, Centralia, Mo., assignor to A. B. Chance Company, Centralia, Mo., a corporation of Missouri
Application May 8, 1952, Serial No. 286,794
26 Claims. (Cl. 200—48)



1. An electrical switch mechanism, comprising a rotating insulator, a fixed insulator, fixed contact shoes carried by the fixed insulator, a switch blade pivotally mounted upon a fixed support above said rotating insulator, and a pair of diagonal cranks operatively connected together adjacent their ends, one extending from the rotating insulator, and the other extending from the end of the switch blade, the rotation of the insulator causing a rotation of the blade and causing the switch blade to be moved upward out of engagement with the fixed contact shoes due to the action of said cranks.

2,745,920
EMPTY INDICATOR FOR RAW COAL PIPES AND THE LIKE
Lester M. Keephart, Chester, Pa.
Application June 18, 1951, Serial No. 232,083
3 Claims. (Cl. 200—61.21)

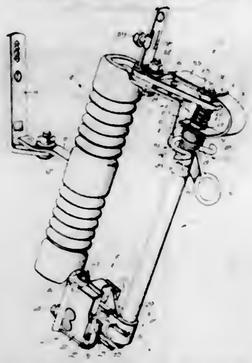


1. In apparatus affording a signal when the height of a column of loose material falls below a predetermined level, a pipe enclosing the material and having an aperture in its wall defined in part by a substantially horizontal knife edge, an inverted generally V-shaped lever supported on said edge for oscillation relatively to the pipe, the inner arm of the lever extending into and the outer arm extending exteriorly of the pipe, a resilient seal interposed between the lever and the upper edge of the aperture, an electric switch adapted for actuation by the outer arm of the lever, and a spring biasing said outer arm toward the pipe whereby when the level of the material in the pipe is above said inner arm and its pressure thereagainst exceeds the bias of the spring said outer arm is held in switch actuating position.

2,745,921
DROP OUT FUSE CONSTRUCTION

Sigurd I. Lindell, Chicago, Ill., assignor to S & C Electric Company, Chicago, Ill., a corporation of Delaware

Application June 10, 1954, Serial No. 435,747
8 Claims. (Cl. 200—114)



1. A drop out fuse cutout comprising, in combination, upper and lower terminal members in insulated spaced relation, said lower terminal member including a pair of vertically extending spaced apart walls each having an upwardly opening slot with a rearwardly opening notch at the lower end of each forward branch, a fuse tube having terminals at its ends for interconnection by a fuse link and adapted to recoil upwardly on blowing thereof, the upper fuse tube terminal being latched to said upper terminal member and the lower fuse tube terminal having a pair of trunnions the radius of which is greater than the depth of said notches interfitting with said upwardly opening slots, and spring means carried by said lower terminal member and reacting against said lower fuse tube terminal to bias said trunnions outwardly into said notches whereby the upper shoulders thereof act in cooperation with said trunnions and said spring means to restrain upward sliding movement of said trunnions when said fuse tube is swung to the latched position and application of predetermined upward force to said fuse tube is capable of overcoming said spring means and moving said trunnions out of said notches and said fuse tube and said trunnions upwardly in said slots.

2,745,922
THERMOSTATIC SWITCH

Ray J. D. Roberts and Alfred H. Faulkner, Chicago, Ill., assignors to Charles D. Hummel, Sr., New York, N. Y.

Application August 16, 1954, Serial No. 450,096
10 Claims. (Cl. 200—116)

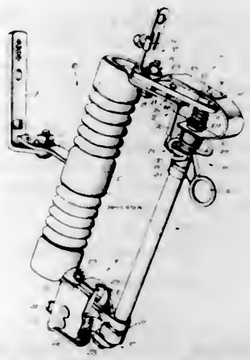


1. A trip-free thermostatic switch comprising a protective switch box, a reset button extending through said switch box and being manually movable relative to the switch box, a base panel secured to said switch box, a thermostatic element having one end secured to said panel and having a free end with a latch portion thereon, a resilient primary contact arm mounted with one end in fixed relationship to said panel and having its opposite end free to move, a resilient secondary contact arm mounted on said panel at one end, said primary and secondary contact arms being adjacent to each other and carrying contacts in aligned relationship for engagement for the conduction of current therethrough, a pivot pin secured on said panel and having a spindle portion thereon, a non-conducting latch cam rotatably mounted on said spindle portion and being actuatable by said reset button, said latch cam having thereon a latch-receiving portion normally engageable with the latch portion of said thermostatic element to hold the latch cam in a contact closing position and a lobe portion for engagement with said primary contact arm, a heater element adjacent the thermostatic element and connected to one of the contact arms so as to be heated by an overload current flow, thereby to cause said thermostatic element to disengage its latch portion from said latch cam, and a contact operator member rotatably mounted on the spindle portion of said pivot pin and having a portion engageable by and actuatable by said reset button, said contact operator member also having a portion engageable with said secondary contact arm when operating pressure is applied to the actuating button, to effect separation of said secondary contact arm from the primary contact arm, thereby to hold the contacts apart and break the circuit through the switch.

2,745,923
FUSE CONSTRUCTION

Sigurd I. Lindell, Chicago, Ill., assignor to S & C Electric Company, Chicago, Ill., a corporation of Delaware

Application July 14, 1953, Serial No. 367,801
29 Claims. (Cl. 200—116)



1. A circuit interrupter comprising, in combination, upper and lower terminal members adapted to be held in fixed insulated spaced relation, a fuse tube adapted to receive a fuse link, said fuse tube being closed at its upper end and open at its lower end, means pivotally and slidably mounting the lower end of said fuse tube on said lower terminal member, means latching the upper end of said fuse tube to said upper terminal member, means responsive to the blowing of said fuse link for releasing said upper end of said fuse tube from said upper terminal to swing downwardly to open circuit position, spring means reacting between said upper terminal member and said fuse tube to bias the latter downwardly against its pivot mounting on said lower terminal member, said spring means being further stressed on upward movement of said fuse tube caused by recoil resulting from blowing of said fuse link, the extent of further stressing of said spring means depending upon the force exerted by the recoil, and stop means on said lower terminal member cooperating with said fuse tube to limit the upward movement thereof after said spring means has been stressed a predetermined extent and said fuse tube has been moved upwardly a predetermined distance.

2,745,924
BI-METAL STRIP MOUNTING

James Norman Coates, Grand Rapids, Mich.

Application May 11, 1953, Serial No. 354,024
16 Claims. (Cl. 200—138)

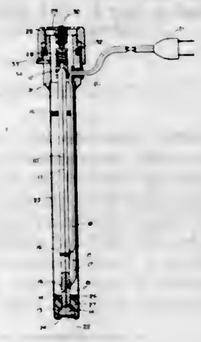


1. A thermostatic switch comprising, an elongated tubular body, a gasket of insulating material in one end of said body, a pair of elongated contact elements positioned in said body and seated against said gasket, lead wires secured to said elements and projecting through said gasket and located thereby, and a base comprising a mass of chemically setting resin molded and solidified in place within said body and against said gasket and around the ends of said elements, one of said elements being a bi-metal element, said resin having the property of solidifying at the temperature at which the switch operates.

2,745,925
ADJUSTABLE THERMOMETER CONTROLLER

Laurence C. Liberatore, Rochester, N. Y., Charles B. Tibbits, Gahanna, Ohio, Clarence F. Aldridge, Pittsford, N. Y., and Harry C. Fischer, Canal Winchester, Ohio, assignors, by direct and mesne assignments, to Taylor Instrument Companies, Rochester, N. Y., a corporation of New York

Application June 9, 1954, Serial No. 435,536
6 Claims. (Cl. 200—141)



1. An adjustable electric contact thermometer comprising a rigid stem of insulating material with a bore therein and a bulb having a flexible wall in communication with said bore, a liquid of conducting material in said bulb, said liquid being movable by expansion and contraction within said bore in response to temperature variations, a conductor extending through the wall of said stem into the bore thereof, and means including said flexible wall for changing the volume of said bulb comprising an enclosing casing with said stem and bulb disposed therein, said casing having a closed end and a removable cover at the opposite end thereof, resilient means adapted to apply an external biasing force to said flexible wall and an adjustment screw threaded through said removable cover and adapted to vary said biasing force to change the volume of said bulb whereby said temperature responsive conducting liquid may be adjustably moved within said bore relative to said conductor.

2,745,926
FIRE ALARM APPARATUS

Vernon P. Mullally, Dorchester, Mass.

Application July 28, 1951, Serial No. 239,037
2 Claims. (Cl. 200—142)

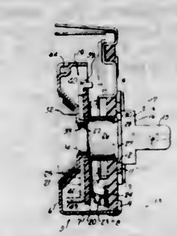


1. In a fire alarm apparatus having an electric circuit with a signalling means therein and with a pair of electrical contacts at each of a plurality of distributed locations in said circuit at each of which locations the contacts are relatively movable to open and close said circuit thereby to control the operation of said signalling means, the combination with each said pair of electrical contacts, of a body of material holding the pair of contacts in their condition wherein said signalling means is inoperative, said body of material at each said pair of electrical contacts being a relatively high melting point material which continues stable in the presence of relatively high temperatures but which is highly inflammable and becomes consumed in a flash when contacted by flame, thereby to release said pair of contacts for relative movement to condition said electrical circuit for operation of said signalling means, a said flash consumption of a said body of material leaving the conducting portions of said circuit intact for restoration of its original condition by replacing the consumed body of material by another similar body of material in said holding relation to said pair of contacts, and a flame runner of highly inflammable material connected to said body of material at at least one of said pairs of contacts for conducting flame rapidly from a remote location to said body of contact-holding material to effect a said flash consumption of said body of material.

2,745,927
ELECTRICAL CONTROL INSTRUMENTALITY

Arthur M. Daily and Joseph G. Veatch, Jr., Elkhart, Ind., assignors to Chicago Telephone Supply Corporation, Elkhart, Ind., a corporation of Indiana

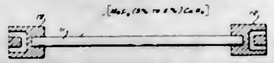
Application January 9, 1953, Serial No. 330,528
11 Claims. (Cl. 201—55)



1. In an electrical control instrumentality of the character described: a housing having opposing front and rear walls in fixed space apart relationship, the front wall having a central aperture therein providing a bearing; flange means on the rear wall of the housing providing another bearing coaxial with said aperture; a contact assembly rotatably carried by said bearings and including a driver having a hollow hub, one end portion of said hub being rotatably supported by said flange means on the rear wall of the housing and the opposite end portion of the hub being rotatably journalled in the bearing provided by said aperture in the front wall of the housing; and means on the hub of the driver defining a drive slot

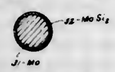
accessible from the exterior of the housing at its front to enable rotation to be transmitted to the contact assembly by a tool engaged in said drive slot.

2,745,928
HEATER BODIES AND THEIR PRODUCTION
Frank W. Glaser, New York, N. Y., assignor to American Electro Metal Corporation, Yonkers, N. Y., a corporation of Maryland
Application June 3, 1953, Serial No. 359,343
Claims priority, application Austria October 6, 1952
3 Claims. (Cl. 201—63)



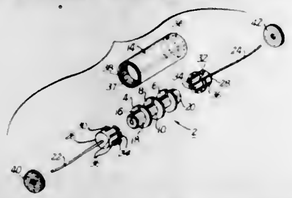
1. In an electric heater device, a heater resistor body having spaced metallic electrodes for passing heating current therethrough, said body consisting essentially of molybdenum disilicide $MoSi_2$ containing 5% to 50% CrB_2 in solid solution.

2,745,929
ELECTRIC RESISTOR HEATERS AND THEIR PRODUCTION
Frank W. Glaser, New York, N. Y., assignor to American Electro Metal Corporation, Yonkers, N. Y., a corporation of Maryland
Application October 1, 1953, Serial No. 383,656
6 Claims. (Cl. 201—64)



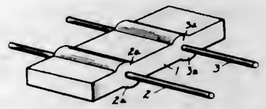
1. In an electric heater device, an elongated self-supporting mounting member of electrically insulating hard refractory material, a helically coiled electrically conductive heating structure surrounding with its coil turns said mounting member and supported thereby, said coiled heating structure having a length that is much greater than its maximum cross-sectional dimension, the entire exposed exterior of said structure consisting essentially of a body layer of molybdenum disilicide $MoSi_2$ having a thickness of at least 0.003 inch, and the interior of said structure consisting essentially of molybdenum.

2,745,930
ELECTRIC RESISTOR
Emil Reisman, Harrisburg, Pa., assignor to Resistance Products Company, Harrisburg, Pa.
Application June 6, 1952, Serial No. 292,041
6 Claims. (Cl. 201—67)



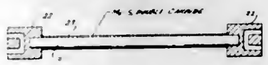
1. An electrical unit that is hermetically sealed and capable of continued operation at elevated temperatures comprising an impervious tubular casing having metallized surface portions adjacent each end, an element-supporting member positioned within said tube, first and second metal end-members secured mechanically to opposite ends of said element supporting member, two internal element leads each secured to one of said end-members, two externally-extending connecting leads secured to said end-members and extending axially of said casing, and a metal seal over each end of said casing, each of said seals being in intimate soldered contact with said metallized surface and with the junctions of one of said internal leads and one of the external leads with the adjacent end-member, said end-members being entirely within said casing and fully enclosed by said metal seals and said casing.

2,745,931
RESISTORS AND METHOD OF MAKING THE SAME
Jerome D. Heibel, Erie, Pa., assignor to Erie Resistor Corporation, Erie, Pa., a corporation of Pennsylvania
Application March 25, 1953, Serial No. 344,580
9 Claims. (Cl. 201—73)



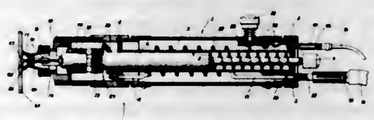
1. A resistor comprising a tape, a resistance coating on the tape, conductive cement coatings overlying the resistance coating at the ends of the tape, leads on the conductive cement and extending away from the resistance coating, and top and bottom plastic sheets longer and wider than the tape, the tape with the leads thereon being sandwiched between the sheets and the sheets being consolidated around the sides and ends of the tape to form an insulating case, the plastic sheets initially having a projected area substantially equal to the projected area of the finished case and holding the leads in contact with the conductive cement.

2,745,932
ELECTRIC RESISTOR
Frank W. Glaser, New York, N. Y., assignor to American Electro Metal Corporation, Yonkers, N. Y., a corporation of Maryland
Application June 3, 1953, Serial No. 359,345
5 Claims. (Cl. 201—75)



1. In an electric heater device, a solid elongated heater body of substantial thickness arranged to be traversed by electric heating current and consisting of carbonaceous material, said body having metal electrodes at opposite end regions, the entire exposed surface of said heater body between said end regions having as an integral part thereof a dense continuous enclosure layer of a double carbide of molybdenum and silicon having a melting temperature of at least 1800° C.

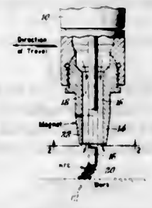
2,745,933
STUD WELDER
Robert L. Puckett, Stockton, Calif., assignor of one-half to Guntert & Zimmerman Const. Div., Inc., Stockton, Calif., a corporation of California
Application September 9, 1953, Serial No. 379,273
1 Claim. (Cl. 219—4)



A stud welder, for use with a welding machine having a main lead, comprising a tubular body, a plunger supported in the body for reciprocation axially thereof, a spring in the body urging the plunger forward, a chuck on the forward end of the plunger adapted to releasably support a stud projecting axially from the corresponding

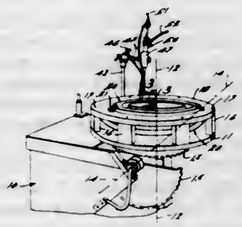
end of the body, manually controlled means in the body operative to retract the plunger and then release it for forceful advance by the spring, and means connecting the chuck in circuit with said main lead without restricting reciprocation of the plunger, a rear-end closure disc in the body, a guide rod extending axially rearwardly from the plunger and slidably extending through the disc, and an adjustable stop head on the rod exteriorly of said disc; the spring being of helical compression type and surrounding the rod between the plunger and disc.

2,745,934
INERT GAS SHIELDED MAGNETIC FIELD CONTROLLED ELECTRIC ARC METAL WORKING APPARATUS
John L. Curtin, Kenmore, and Donald M. Yeani, Williamsville, N. Y., assignors, by mesne assignments, to Union Carbide and Carbon Corporation, a corporation of New York
Original application October 27, 1950, Serial No. 192,482, now Patent No. 2,666,122, dated January 12, 1954. Divided and this application April 30, 1953, Serial No. 352,152
8 Claims. (Cl. 219—8)



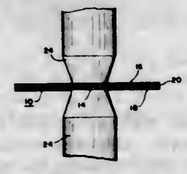
1. A gas cup for inert gas shielded electric arc-metal working torches, consisting of a gas nozzle having incorporated therewith a horseshoe magnet the curvature of which substantially coincides with that of the nozzle.

2,745,935
METHOD FOR ARC WELDING
Richard A. Powley, Birmingham, Mich., assignor, by mesne assignments, to Air Reduction Company, Incorporated, New York, N. Y., a corporation of New York
Application May 27, 1952, Serial No. 290,295
2 Claims. (Cl. 219—10)



2. A method of surfacing a ferrous article with aluminum bronze having a Brinnell hardness rating of at least 300 which comprises circulating a cooling liquid in direct heat exchange relation with said ferrous article and depositing said aluminum bronze on said article by an inert gas shielded metal arc welding process using a bare consumable aluminum bronze welding electrode while said article is maintained in direct heat exchange relation with said circulating cooling liquid.

2,745,936
REFRIGERATING APPARATUS
Leland H. Grenell, Oakwood, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 19, 1953, Serial No. 332,057
1 Claim. (Cl. 219—12)



The method of manufacturing plate type receptacles which comprises placing two complementary plates together with a fuseable bonding material between the two plates, heating the assembly to fuse the bonding material, allowing the plates to cool, and thereafter resistance brazing the area adjacent the edge portion of said plates to seal the edges so as to prevent the formation of frost blisters.

2,745,937
ELECTRIC OVEN HEATING SYSTEM
Stanley B. Welch, Louisville, Ky., assignor to General Electric Company, a corporation of New York
Application August 24, 1953, Serial No. 376,122
6 Claims. (Cl. 219—20)

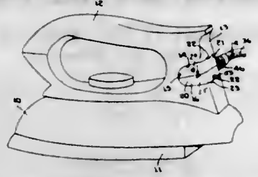


1. In an electric range, an oven compartment, heating means for said compartment comprising a first heating unit in the upper part of said compartment arranged to provide radiant heat for broiling operations and a second heating unit associated with said compartment so as to provide heat for baking operations, said first unit including a resistance heating element having a high positive temperature coefficient of resistance exceeding that of said second unit by a ratio of at least 30 to 1, a pair of electrical conductors arranged to supply electrical power to said range, and switching means for connecting said units to said conductors; said switching means including means for connecting said units in parallel circuit relation to provide maximum heat output from both units for preheating said oven, means for connecting said units in series circuit relation to provide a substantially reduced heat output from said first unit and a relatively high heat output from said second unit for baking operations, and means for connecting only said first unit to said conductors to provide radiant heat for broiling operations.

2,745,938
REVERSIBLE CONNECTION FOR ELECTRIC IRONS
Morris D. Brandler, Forest Hills, N. Y.
Application April 5, 1954, Serial No. 420,924
1 Claim. (Cl. 219—25)

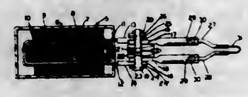
The combination of an electric iron provided with a handle formed with an enlarged rear section having a transverse recess extending forwardly from the rear face thereof, and a detachable female plug provided with upper and lower horizontal faces and provided with an electrical cable leading from one side thereof and which is positioned within the recess in one of two positions with its cable leading transversely from one or the other side of the iron, male electrical contacts leading rearwardly from the front wall of the recess and stopping short of the rear terminal thereof, and female contacts in the plug to

receive the male contacts, a depressible spring latch carried by the plug for securing the same in the handle recess, the side and rear walls of the plug being substantially



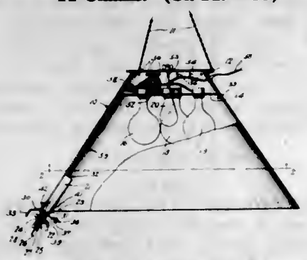
flush with the same walls of the rear handle section and presenting a smooth, unbroken surface therewith, the lower faces of the plug becoming the upper face when the plug is reversed to permit the cable to extend from the opposite side of the iron.

2,745,939
SOLDERING IRON
Edgar Lenk, Waltham, Mass., assignor to Lenk Manufacturing Company, Boston, Mass., a corporation of Kentucky
Application May 14, 1954, Serial No. 429,917
5 Claims. (Cl. 219—26)



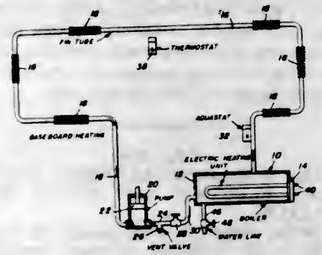
1. A quick heating soldering iron comprising a step-down transformer formed with a closed core having a primary coil of a large number of fine turns wound about the central core element and a secondary coil of only a few turns of coarse wire wound over the primary coil a pair of terminal plates parallel to and spaced from one another and electrically connected to the end of the secondary coil, a soldering tip of small cross section area having arms extending from the tip in the same direction terminating in plate elements in electrical contact with and pivoted in face to face relation one each with the terminal plates at the ends of said secondary coil, whereby the position of said soldering tip may be angularly adjusted about the point of pivot.

2,745,940
TEMPERATURE CONTROL FOR BROODER
William R. Stroh, Mount Airy, Md.
Application May 25, 1953, Serial No. 356,994
11 Claims. (Cl. 219—35)



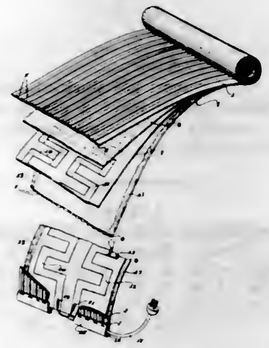
1. In combination, a reflector, a plurality of sources of infra-red light mounted proximate the reflector, a switch for controlling current serially to said sources an expansion bellows mounted in the path of radiation of said infra-red lights, means controlled by the bellows for operating the switch, means for adjusting the expansion of the bellows, and a shield for restricting the passage of a major portion of the radiation from the light sources to the bellows, said shield being independent of the bellows and the expansion control means of the bellows.

2,745,941
STEAM VACUUM BOILER
Edward D. McElhaney, Dunkirk, N. Y.
Application April 3, 1952, Serial No. 280,415
2 Claims. (Cl. 219—38)



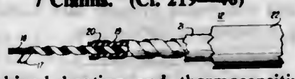
1. A heating unit comprising a boiler, piping connected to said boiler, heat transfer fins carried by said piping, said unit being in the form of a closed circulatory system, a vent valve for bleeding air from said piping whereby a vacuum is produced in the piping when steam is not being produced by said boiler, means for controlling heat produced by said boiler including a temperature responsive device for controlling the temperature of fluid in said piping.

2,745,942
ELECTRICALLY HEATED MAT AND THE LIKE
Irving M. Cohen, Winthrop, Mass.
Application June 18, 1953, Serial No. 362,524
7 Claims. (Cl. 219—46)



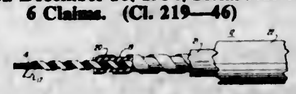
1. A mat or the like comprising flexible resilient longitudinally extending insulating covers one of which is provided with an outer tread face, a pair of juxtaposed flexible longitudinally extending insulating sheets of less width than the width of the covers loosely interposed between the covers, the covers being secured together along their longitudinal margins exterior to the longitudinal edges of the sheets, one of the flexible sheets being provided substantially coplanar with its surface adjacent to the other flexible sheet with a thin planar zigzag strip conductor providing a continuous flat conductive path, the said other flexible sheet preventing contact between the strip conductor and the cover adjacent thereto, the sheets being of less resiliency than the resiliency of the covers in order to provide for less bending thereof than the bending of the covers during the flexing of the mat and thereby to exert less bending strain upon the strip conductor, a pair of terminals disposed at the ends of the strip conductor, and connectors connected to the respective terminals for connecting a source of electric current to the terminals to heat the strip conductor.

2,745,943
COMBINED HEATING AND THERMOSENSITIVE HEATING CONTROL UNITS
Moyer M. Safford, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application December 22, 1954, Serial No. 476,911
7 Claims. (Cl. 219—46)



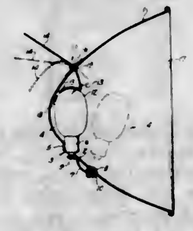
1. A combined heating and thermosensitive heating control unit for use in combination with an electrically heated fabric, or the like, that is normally subjected in use to frequent flexure and folding; said unit being of elongated cable-like structure and comprising a flexible heating conductor, a flexible signal conductor, and a flexible solid moisture-resistant synthetic organic polyester elastomer in intimate surface contact with said conductors and retaining the same in closely spaced-apart relation, said elastomer having a temperature-impedance coefficient so as variably electrically to insulate said conductors from each other over an operating temperature range up to about 250° F. when a signal potential is impressed therebetween and so that said conductors are well insulated from each other at relatively low temperatures below about 105° F. and so that a signal current of controlling magnitude is conducted between said conductors at relatively high temperatures well above 105° F. but below about 250° F., the electrical characteristics of said elastomer varying only slightly with changes in moisture content of said elastomer, the magnitude of the signal current being increased both with an increase in the relatively high temperature of a given section of said elastomer and with an increase in the length of said elastomer subjected to a given relatively high temperature, said elastomer also being age-resistant and stable and of high tensile strength in said operating tempearture range, whereby said unit is of exceedingly long life in use.

2,745,944
COMBINED HEATING AND THERMOSENSITIVE HEATING CONTROL UNITS
Fraser P. Price, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application December 16, 1954, Serial No. 475,758
6 Claims. (Cl. 219—46)



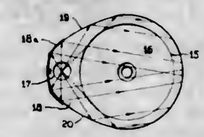
1. A combined heating and thermosensitive heating control unit for use in combination with an electrically heated fabric, or the like, that is normally subjected in use to frequent flexure and folding; said unit being of elongated cable-like structure and comprising a flexible heating conductor, a flexible signal conductor, and a flexible solid moisture-resistant butadiene-acrylonitrile elastomer composition in intimate surface contact with said conductors and retaining the same in closely spaced-apart relation, said elastomer having a temperature-impedance coefficient so as variably electrically to insulate said conductors from each other over an operating temperature range up to about 250° F. when a signal potential is impressed therebetween and so that said conductors are well insulated from each other at relatively low temperatures below about 105° F. and so that a signal current of controlling magnitude is conducted between said conductors at relatively high temperatures well above 105° F. but below about 250° F., said temperature-impedance coefficient of said elastomer varying only slightly with changes in moisture content of said elastomer, the magnitude of the signal current being increased both with an increase in the relatively high temperature of a given section of said elastomer and with an increase in the length of said elastomer subjected to a given relatively high temperature, said elastomer also being age-resistant and stable and of high tensile strength in said operating temperature range, whereby said unit is of exceedingly long life in use.

2,745,945
FLASH LAMP ENERGIZING AND REFLECTING HOLDER
Richard Blount, South Euclid, Ohio, assignor to General Electric Company, a corporation of New York
Application January 4, 1954, Serial No. 401,850
5 Claims. (Cl. 240—1.3)



5. A holder for a photoflash lamp comprising a bulb having at one end thereof a base including a metallic shell and an end contact insulated from said shell, said holder comprising a concave light-concentrating reflector having an opening adjacent its apex for receiving and engaging the base of said lamp, a contact spring member insulatively supported from said reflector at the outside thereof and over said opening to engage the said end contact of the lamp base and exert a thrust thereagainst laterally of the axis of the reflector and longitudinally of the lamp, and an ejection lever member pivotally mounted on said reflector at the opposite side thereof from said opening and having one arm extending outwardly and the other inwardly of said reflector, the pivotal axis of said lever being offset slightly forwardly of the said lateral direction of thrust of said contact spring member in the direction of the mouth of said reflector, the inwardly extending arm of said lever being retroverted rearwardly toward the apex of the reflector to receive the top of the lamp bulb, the spacing and proportioning of said contact spring member and ejection lever member being such that the lamp is securely clamped therebetween and against the apex of the reflector and turning of the lever about its axis effects ejection of the lamp.

2,745,946
DIAL ILLUMINATOR
Donald E. Protzmann, Framingham, Mass., assignor to General Electric Company, a corporation of New York
Application January 27, 1954, Serial No. 406,471
4 Claims. (Cl. 240—2.1)



1. An illuminated device comprising a casing having an opening therein defining an area to be illuminated, a plate of light-conducting material extending across said opening and having a portion thereon extending beyond said opening, a light source in said extending portion in a position to introduce light into said plate, a first substantially parabolically shaped edge portion disposed so as to reflect internally within said plate and across said opening light emitted from said source, and a second substantially parabolically shaped edge portion on said extending portion disposed so as to internally reflect

light emitted from said source across said opening at an angle with respect to the light reflected from said first edge portion.

2,745,947
ELECTRICALLY ILLUMINATED DRINKING GLASS HOLDER
Joseph Leon Samson, Paris, France
Application November 6, 1953, Serial No. 390,447
1 Claim. (Cl. 240—6.4)



In an electrically illuminated drinking glass holder, a flat circular base, an annular flange rising from said base inwardly of and concentrically with respect to the edge thereof, said base and flange being formed as a unit from an insulating material, a pair of spaced elongate plates resting on said base within the confine of said flange, upstanding portions at the ends of each of said plates for the positioning of a dry cell therebetween, an inverted U-shaped part connecting said plates at their centers, a socket for an electric lamp bulb mounted in the center of the medial portion of said U-shaped part, an electric switch supported on said base between adjacent ends of said plates and having its operating button projecting outwardly through said flange, the dry cells, switch and socket being electrically connected, a dome shaped transparent wall overlying said dry cells and the lamp bulb socket and resting on said flange, a vertical tubular member having its lower end seated over said flange and its upper end outwardly flared, and means on the inside of said tubular member for holding engagement with the edge of said transparent wall when the tubular member is disposed in seated position with respect to the base and said flange.

2,745,948
ILLUMINATED SHRINE
Stanley F. Prest, Youngstown, Ohio, assignor of one-half to Anthony T. Kryzan, Youngstown, Ohio
Application July 1, 1954, Serial No. 440,782
1 Claim. (Cl. 240—10)



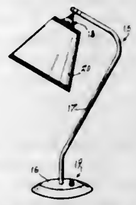
A decorative illuminated shrine assembly comprising in combination an enlarged hollow base having a flat top surface portion, a hollow pedestal-like member mounted on said top surface, an electric bulb socket mounted on said base and opening into the hollow interior of said pedestal-like member, an electric bulb received in said socket and extending upwardly into the interior of said pedestal-like member toward the upper portion thereof, said pedestal-like member having an aperture in its upper portion located over said bulb, a statuette mounted on the upper portion of said pedestal-like member, said statuette being formed of translucent plastic material and being of hollow construction with an opening at its lower end positioned over said aperture, said statuette being coated over selected surface area portions whereby light transmitted into the interior of said statuette from said bulb causes the statuette to luminesce with varying degrees of brightness over different surface area portions, and a generally semi-cylindrical backdrop positioned about said statuette, said backdrop being formed integrally with said pedestal-like member and being of translucent plastic, the arrangement being such that light from said bulb is transmitted to and distributed through said backdrop to give the same a luminescent appearance.

2,745,949
HOSPITAL FLOOR LAMP
Harlan F. Boria, Chicago, Ill., assignor to American Hospital Supply Corporation, Evanston, Ill., a corporation of Illinois
Application April 13, 1953, Serial No. 348,289
13 Claims. (Cl. 240—81)



1. A floor lamp comprising a base adapted to be positioned beneath an article of furniture, an elongated standard of substantial height extending upwardly from said base adjacent one side thereof and fixed relative thereto, socket means for receiving a light bulb, a lamp shade, means for adjustably mounting said lamp shade about said socket means adjacent the top of said standard, said mounting means including means securing said shade for pivotal adjustment about a substantially horizontal axis extending outwardly from said standard and above said base, said lamp shade thereby being in substantially vertical alignment with said base for overlying an article of furniture, and conducting means within said standard and leading to said socket means for furnishing electrical energy to a bulb in said socket means.

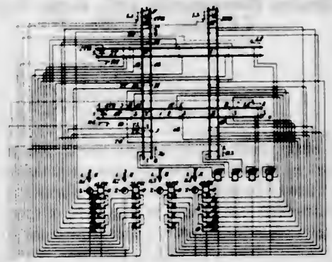
2,745,950
KEYLESS THREE WAY LIGHT SOCKET
Hung-tu Tseng, New York, N. Y.
Application May 5, 1953, Serial No. 353,205
1 Claim. (Cl. 240—81)



A lamp socket comprising a solid cylindrical insulating base member, an outer sleeve supported thereby, said base member having a pair of opposed recesses therealong from end to end thereof, and a third recess intermediate said pair of recesses terminating short of one end, a conducting sleeve secured to said base member and depending therefrom inside said outer sleeve, said conducting sleeve being open at both ends, a terminal member mounted in each opposed recess of the base, binding screws connected to said terminal members, a central lamp contact connected to one of the opposed terminal members, said central contact being disposed in the opening in the inner end of the conducting sleeve

in spaced relation, conductors leading from the binding screws of said opposed terminals to a remote three-pole switch connected to a source of electro motive force and a conductor leading from the binding screw of the terminal in the intermediate recess to a source of electro motive force.

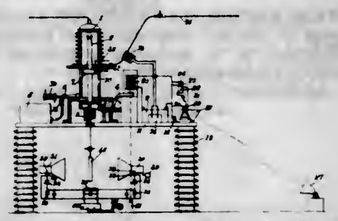
2,745,951
TRACK CIRCUIT SYSTEM FOR MULTIPLE TRACK RAILWAY GRADE CROSSINGS
William T. Derr, Cleveland, and Richard R. McGuire, East Cleveland, Ohio, assignors to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application December 16, 1952, Serial No. 326,307
7 Claims. (Cl. 246—114)



1. In combination, a plurality of track stretches including frogs forming a multiple track crossing, the frogs being insulated from each other and from adjoining portions of the stretches, an insulated portion in each stretch at each side of the crossing, a source of energy associated with each stretch and connected to the rails of the insulated portions on one side of the crossing, a track relay associated with each stretch and connected to the rails of the insulated portion on the other side of the crossing, circuit controlling means associated with each stretch and having first and second conditions, a first circuit means associated with each stretch of track controlled by said associated circuit controlling means and effective only when said circuit controlling means is in said first condition for connecting the rails of the two insulated portions at opposite sides of the crossing together to form a track circuit to energize the associated track relay whereby said frogs will be by-passed and deenergized, a second circuit means associated with each stretch controlled by said associated circuit controlling means and effective only when said circuit controlling means is in said second condition and including the insulated frogs and so connected that adjacent frogs have opposite polarities for connecting the insulated portions on opposite sides of the crossing together to energize the associated track relay, said frogs being so arranged in said second circuit means that engagement of adjacent frogs simultaneously by the wheels of a vehicle having a metallic undercarriage will shunt energy away from the associated track relay and thereby deenergize it.

2,745,952
DEVICES FOR OPERATING AND CONTROLLING HIGH TENSION ELECTRICAL APPARATUS
Leon Cabanes, Louis Alran, Andre Chevallier, and Charles Dietsch, Paris, and Maurice Painboeuf, Sceaux, France, assignors to Electricite de France Service National, Paris (Seine), France, a society of France
Continuation of abandoned application Serial No. 66,818, December 22, 1948. This application July 16, 1954, Serial No. 443,932
Claims priority, application France October 23, 1948
4 Claims. (Cl. 250—2)

1. In combination with a high tension electrical apparatus insulated from the ground and having at least one movable switch means adapted to occupy either of two different positions, the improvement which comprises, servo-motor means for actuating said movable switch means mechanically interconnected therewith irrespective of electrical insulation therefrom, wireless wave energy means for operating said servo-motor means from a distance, means producing a wireless wave transmission between points at least one of which is at a distance from



said apparatus for indicating the position of said switch means, means operative by said movable switch means for blocking said transmission for one of said two positions of said switch means, emergency means for operating said servo-motor means, and means operative by said wireless wave transmission for operating said emergency control means in case of failure of said first mentioned wave energy means to operate said servo-motor means.

2,745,953
RADIANT ENERGY SIGNALING SYSTEMS
William R. Young, Jr., Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application December 27, 1951, Serial No. 263,561
3 Claims. (Cl. 250—6)



1. A multichannel frequency modulation radio communication system comprising in combination, a first fixedly located radio transmitter operating on a carrier frequency F1, a second radio transmitter fixedly positioned at a location different from that of said first transmitter and operating on a carrier frequency F^2 closely spaced in the frequency spectrum to F1, a mobile radio station including a radio receiver having frequency selective circuits tuned to provide a maximum response when energy of said first carrier frequency F1 is received by said receiver and an attenuated response when energy of said second carrier frequency F3 is received by said receiver, said attenuated response having a value which when expressed in decibels is N decibels lower than said maximum response when said receiver is subject to equal field strengths at said carrier frequencies F1 and F3, said mobile radio receiver also having a limiter circuit designed to discriminate in favor of the current of higher level between two simultaneously applied currents of different frequencies, warning means for warning an operator at said mobile station that the operation of his station should be discontinued when his station has moved away from said first transmitter and into an interference area constituted by the immediate vicinity of said second transmitter, said warning means including a third radio transmitter fixedly positioned at the same location as said second transmitter and operating continuously on said carrier frequency F1, the power of said third transmitter being equal to $P+(S-N)$ wherein P is the value of the power of the carrier waves radiated by said second transmitter and S is the power equivalent of the value ex-

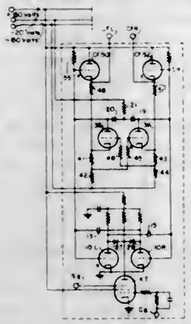
pressed in decibels of an arbitrary safety factor which is smaller than the value of N so that the expression $(S-N)$ represents a negative quantity whereby energy from said warning transmitter dominates the limiter circuit of said mobile receiver only when said mobile station is in said interference area.

2,745,954
INTERCARRIER WAVE TRANSLATION CIRCUITS
George F. Devine, Marcellus, and Raymond F. Foster, Syracuse, N. Y., assignors to General Electric Company, a corporation of New York
Application October 29, 1952, Serial No. 317,482
4 Claims. (Cl. 250—20)



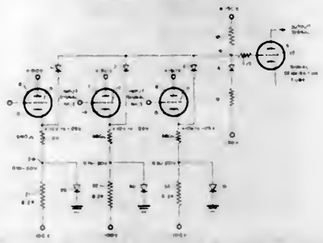
1. In a high frequency circuit adapted to translate simultaneously an amplitude-modulated wave and a first frequency-modulated wave spaced apart in frequency from one another by a predetermined frequency difference, means for combining said amplitude-modulated wave and said first frequency-modulated wave to produce a second frequency-modulated wave, said second frequency-modulated wave having a mean carrier frequency equal to the difference between said amplitude-modulated wave and said first frequency-modulated wave, said means comprising an electron discharge device including an anode, a cathode, and first and second control electrodes, means for impressing said amplitude-modulated wave on said first electrode, means for impressing said first frequency-modulated wave on said second electrode, an anode-to-cathode path for said device comprising filtering means for selecting said second frequency-modulated wave, and means for demodulating said amplitude-modulated wave comprising a detector circuit including said first electrode and said cathode.

2,745,955
MULTIVIBRATOR TRIGGER CIRCUIT
Byron L. Havens, Closter, N. J., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application December 21, 1951, Serial No. 262,733
7 Claims. (Cl. 250—27)



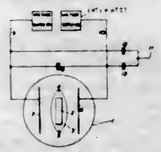
1. An electronic switching circuit having two stable conditions represented by an alternate conduction and non-conduction of each of two grid controlled tubes; a source of pulses for switching said circuit from each stable condition to the other; means consisting only of a pair of rectifiers and a resistor connected between the control grid of each of said tubes and a first constant potential for limiting the negative voltage excursion thereon to a predetermined value thereby decreasing the recovery time of said circuit; means directly connecting the cathodes of each of said tubes in common to a second constant potential such that said cathodes are at all times maintained at said second constant potential; and a rectifier connected to the control grid of each of said tubes and said source so that each pulse from said source will be applied only to the control grid having the most positive voltage thereon.

2,745,956
DIODE PROTECTION CIRCUIT
Charles T. Baker, Jr., Poughkeepsie, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application December 31, 1951, Serial No. 264,309
2 Claims. (Cl. 250—27)



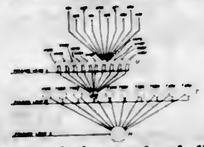
1. In an electronic system having a source of voltages that are respectively positive and negative relative to ground, the combination of a cathode follower adapted to be supplied with plate current from a positive voltage terminal of said source and having a cathode connected by a resistor to a negative voltage terminal of said source, said cathode follower including a control grid responsive to input signals for varying the voltage of said cathode relative to ground, a voltage divider connected between the positive and negative voltage terminals of said source and having a point of variable voltage therein, a first crystal diode connected between said variable voltage point and said cathode and arranged to conduct current normally when said cathode is at a lower voltage than said variable voltage point, and a second crystal diode arranged to bypass at least a portion of said resistor whenever the voltage of said cathode tends to rise above a predetermined level relative to ground, thereby limiting the rise of cathode voltage and preventing the conductor characteristics of said first diode from being significantly altered due to excessive reverse voltage.

2,745,957
ELECTRON DISCHARGE APPARATUS
Charles Cecil Eaglesfield, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application December 2, 1952, Serial No. 323,562
2 Claims. (Cl. 250—27)



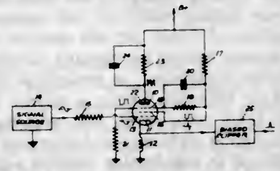
1. An electric circuit arrangement comprising an electron discharge device having a plurality of electrodes including a cathode, at least one grid positioned on opposite sides of the said cathode, and an anode extending on said opposite sides, the said electrodes being only approximately symmetrical in position with respect to the said cathode, one of said electrodes other than the cathode having separate portions on each of said sides, and bias means, controlling electron flow, applying different voltages to each side of said one electrode to compensate for departure from symmetry of the electrode positions, whereby microphonicity due to vibratory flexion of electrodes is reduced.

2,745,958
TRANSLATING ARRANGEMENT
Wallace A. Depp, Mountainside, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application March 9, 1953, Serial No. 341,079
4 Claims. (Cl. 250—27)



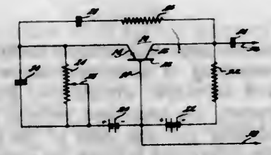
1. A device for translating a plural digit code into an indication exclusive to the plurality of digits in said code comprising, a plurality of switching stages equal in number to the number of digits in said code with each stage comprising at least one step-by-step device having a plurality of discrete stepping positions, each device being responsive to digital impulses to enable it to step from position to position with the final stepping position dependent upon the pulse content of said digital input, the first stage comprising one of said devices, each succeeding stage comprising one of said devices exclusive to each stepping position of each device of the immediate preceding stage, a source of impulses representative of plural digit codes, means exclusive to said first stage and associable with said source whereby the step-by-step device in said first stage is controlled by the pulses representative of the first digit of the code and is caused by said pulses to step to a final stepping position determined by the pulse content of said first digit, means including the final stepping position of a step-by-step device in all stages except the last for conditioning for response to impulses only the step-by-step device exclusive thereto in the next succeeding stage, means individually associated with each successive switching stage and common to all devices in its associated stage and associable with said source of impulses for applying impulses to all devices in its associated stage simultaneously whereby each successive stage is controlled by the impulses representative of successive digits of the code to step to a final stepping position only the device in each stage that is exclusive to the final stepping position of a device in the immediate preceding stage, the final stepping position of one responsive device in the last stage being an indication exclusive to said code.

2,745,959
TRIGGER CIRCUITS
Alfred R. Kilbey, Albuquerque, N. Mex., and George E. Tucker, Waltham, Mass., assignors to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application October 24, 1952, Serial No. 316,622
5 Claims. (Cl. 250—27)



1. An electron discharge system comprising a cathode, a reactive impedance in circuit with said cathode, an anode spaced from said cathode, a reactive impedance in circuit with said anode which will resonate with the reactive impedance in circuit with said cathode during conduction between said anode and said cathode, and means for controlling the conduction between said anode and said cathode.

2,745,960
SEMI-CONDUCTOR SIGNAL GENERATOR
Brooks D. Griffith, Maple Shade, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application June 23, 1953, Serial No. 363,633
9 Claims. (Cl. 250—36)



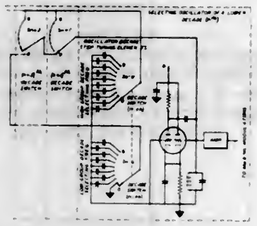
1. A feedback sine wave oscillation generator of the resistance-capacitance type comprising in combination, a semi-conductor device of the point-contact type having an emitter electrode, a collector electrode and a base electrode, means connected with said electrodes for applying biasing voltages thereto, a first resistor and a first capacitor connected in series between said collector and emitter electrodes, a second capacitor connected in series between said first capacitor and said base electrode, and a variable resistor connected in parallel with said second capacitor and between said emitter and base electrodes for varying the current in said emitter electrode thereby to vary the frequency of oscillation of said generator.

2,745,961
MULTIBAND U. H. F. OSCILLATORS
Wen Yuan Pan, Collingswood, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application November 3, 1951, Serial No. 254,686
The terminal 15 years of the term of the patent to be granted has been disclaimed
11 Claims. (Cl. 250—36)



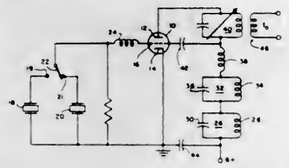
1. A frequency determining circuit adjustable within each of a plurality of separate frequency bands within the very high and ultra high frequency spectrum comprising a first inductor and a variable capacitor connected in series, a plurality of series circuits, each being connected in shunt with said first inductor, each of said series circuits including a further inductor and a capacitance means connected in series, the inductance of said inductors being different, each of said capacitance means having a first capacitance value of substantially zero and a second small predetermined capacitance value, and means for selectively adjusting each of said capacitance means to one of its values to provide a selected shunt path of small impedance to a wave within one of said frequency bands.

2,745,962
ADJUSTABLE FREQUENCY OSCILLATOR SYSTEM
Bogumil M. Wojciechowski, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application March 28, 1951, Serial No. 217,977
12 Claims. (Cl. 250—36)



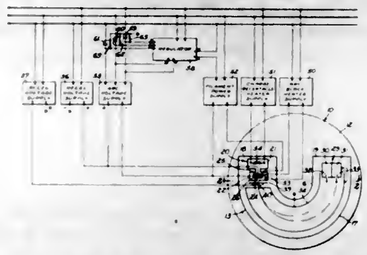
1. A frequency generating system comprising at least one chain consisting of three modulators each having two input and an output circuits, two fixed frequency selective elements, one interposed between the output of the first modulator and one input of the second modulator, the other interposed between the output of the second modulator and one input of the third modulator, an alternating current source of harmonically related frequencies connected to one input of the first modulator, a second alternating current source of multiple frequencies differing from each other by a substantially constant frequency interval connected to the other input circuits of the first and the third modulators for applying thereto any one of the multiple frequencies, a third alternating current source of frequencies adjustable over said frequency interval connected to the other input of the second modulator and a third fixed frequency selective element connected to the output of the third modulator for selecting a desired modulation product and for eliminating from the output of the third frequency selective element the frequency drift component of the second alternating current source.

2,745,963
FREQUENCY MULTIPLIER
Alwin Hahnel, Little Silver, N. J., assignor to the United States of America as represented by the Secretary of the Army
Application May 4, 1955, Serial No. 506,098
6 Claims. (Cl. 250—36)
(Granted under Title 35, U. S. Code (1952), sec. 266)



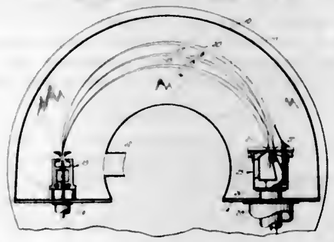
1. A frequency multiplier comprising a vacuum tube having at least a plate, a cathode and a grid, discrete means adapted to generate radio-frequency energy at a first and second fundamental frequency having a relatively high frequency ratio, three discrete resonant means in series circuit with said plate, two of said discrete resonant means being tuned respectively to said first and second fundamental frequency, the third of said discrete resonant means being tuned to a prescribed frequency which is substantially an harmonic of one of said fundamental frequencies, and means for selectively connecting either of said discrete fundamental frequency generating means in circuit with said grid whereby said prescribed frequency is keyed only at the selected fundamental frequency to produce a frequency spectrum wherein only the frequency harmonically related to said selected fundamental frequency and substantially equal to said prescribed frequency is at maximum amplitude.

2,745,964
ARC REGULATOR FOR CALUTRON ION SOURCE
Robert De Liban, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application May 3, 1946, Serial No. 666,909
11 Claims. (Cl. 250—41.9)



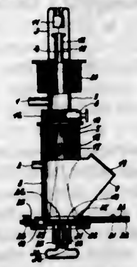
1. A calutron ion source regulator comprising in combination an ion source having a cathode and an anode, a cathode power supply for heating said cathode to electron emissive temperature, an arc power supply for maintaining an arc between said anode and said cathode, a source of alternating current for energizing said power supplies, a saturable reactor having an A. C. and a D. C. winding, said A. C. winding being connected between said source of alternating current and said cathode power supply, means responsive to the current supplied said arc current supply from said source of alternating current for obtaining an A. C. signal substantially proportional to the arc discharge current, and means responsive to said A. C. signal for supplying D. C. current to said D. C. winding of said saturable reactor, whereby said arc discharge current is maintained substantially constant through the control of the heating current to said cathode.

2,745,965
CALUTRON RECEIVERS
Edward J. Lofgren, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application May 28, 1945, Serial No. 596,222
12 Claims. (Cl. 250—41.9)



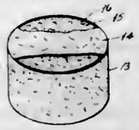
1. In a calutron having means for establishing an ion beam and for causing divergence of beam components of different mass during travel of said components to respective regions of focus, an ion receiver comprising a collecting pocket having an opening therein for admitting one beam component, a removable liner for said pocket, and an electrode having a surface for intercepting another beam component, said opening and the entire ion intercepting surface of said electrode being respectively positioned in side-by-side relation adjacent the regions of sharpest focus of the beam components to be received thereby.

2,745,966
ELECTRON-DIFFRACTION APPARATUS
Adrianus Verhoeff, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application November 19, 1952, Serial No. 321,295
Claims priority, application Netherlands
December 20, 1951
3 Claims. (Cl. 250—49.5)



1. In an electron diffraction apparatus for producing an image of an object disposed in the path of an electron beam on a luminescent screen and on a photographic plate, respectively, including an evacuated chamber, means within said chamber to generate an electron beam, means to support the object in the path of the beam, means to project an electron image of the object onto the luminescent screen and photographic plate, respectively, and means to alternately position said luminescent screen and said photographic plate in the path of said electron beam to reproduce the projected image of said object, said last means including a support for said luminescent screen comprising a flat circular plate having a central axis coincident with the electron beam, a centrally-disposed pin member having a given axis, and connected to said plate and extending rearwardly from said plate through an aperture in a wall of the vessel, means outside said vessel to rotate said pin member about said given axis and to move said pin member along said given axis, a displaceable holder for said photographic plate disposed adjacent said support for said screen, means interconnecting said flat circular plate and said photographic plate holder and adapted upon rotation and displacement of said pin to move said holder transverse to said given axis of said pin into the position previously occupied by said round plate for the taking of a photograph.

2,745,967
DETECTION AND MEASUREMENT OF PENETRATIVE RADIATION
Clifford G. Ludeman, Scarsdale, N. Y., assignor to Texaco Development Corporation, New York, N. Y., a corporation of Delaware
Original application March 12, 1949, Serial No. 81,098, now Patent No. 2,559,219, dated July 3, 1951. Divided and this application May 1, 1951, Serial No. 223,982
9 Claims. (Cl. 250—71)



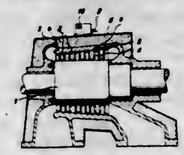
1. A phosphor element for use in the detection and measurement of penetrative radiation such as gamma rays comprising a polynuclear aromatic in relatively small amount having of itself relatively small effective dimensions for the interception and conversion of penetrative radiation to more easily detectable and measurable radiation in other ranges of the spectrum, and a matrix of relatively large volume capable of conducting said last-named radiation, said polynuclear aromatic being substantially homogeneously distributed throughout said matrix whereby the original relatively small effective dimensions of said polynuclear aromatic for the interception and conversion of penetrative radiation are enlarged to the volume of said matrix, the element formed by said polynuclear aromatic and said matrix being formed with at least one section for exposure to and interception of penetrative radiation and at least one second section for exposure to a detecting and measuring device capable of detecting and measuring the converted radiation, said first and second sections being spaced from one another to insure exposure of the penetrative radiation to a substantial portion of the volume of said element.

2,745,968
DETECTION AND MEASUREMENT OF PENETRATIVE RADIATION
Clifford G. Ludeman, Scarsdale, N. Y., assignor to Texaco Development Corporation, New York, N. Y., a corporation of Delaware
Original application March 12, 1949, Serial No. 81,098, now Patent No. 2,559,219, dated July 3, 1951. Divided and this application May 1, 1951, Serial No. 223,981
6 Claims. (Cl. 250—71)



1. A phosphor element for use in the detection and measurement of penetrative radiation such as gamma rays comprising calcium tungstate in relatively small amount having of itself relatively small effective dimensions for the interception and conversion of penetrative radiation to more easily detectable and measurable radiation in other ranges of the spectrum, and a matrix of relatively large volume capable of conducting said last-named radiation, said calcium tungstate being substantially homogeneously distributed throughout said matrix whereby the originally relatively small effective dimensions of said calcium tungstate for the interception and conversion of penetrative radiation are enlarged to the volume of said matrix, the element formed by said calcium tungstate and said matrix being formed with at least one section for exposure to and interception of penetrative radiation and at least one second section for exposure to a detecting and measuring device capable of detecting and measuring the converted radiation, said first and second sections being spaced from one another to insure exposure of the penetrative radiation to a substantial portion of the volume of said element.

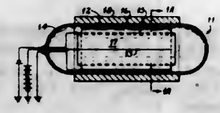
2,745,969
TURBO-MACHINES
Curt Keller, Kusnacht, Switzerland, assignor to Aktiengesellschaft Fuer Technische Studien, Zurich, Switzerland, a corporation of Switzerland
Application October 22, 1952, Serial No. 316,166
Claims priority, application Switzerland October 25, 1951
6 Claims. (Cl. 250—83.6)



1. The combination of an axial-flow turbine consisting of a rotor and a housing surrounding said rotor; a radio-

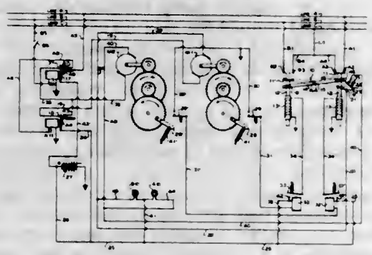
active substance applied to a runner blade of said rotor; a counter of radio-active rays arranged outside the housing in the vicinity of said runner blade; said housing presenting a discontinuity in wall thickness in the region of axial displacements of that blade, so that the intensity of the rays passing from the radio-active substance to the counter is modified according to axial displacements of the rotor blade relatively to the housing.

2,745,970
RADIOACTIVITY DETECTOR
John T. Dewan, Houston, Tex., assignor to Schlumberger Well Surveying Corporation, Houston, Tex., a corporation of Delaware
Application January 4, 1952, Serial No. 264,934
6 Claims. (Cl. 250—83.6)



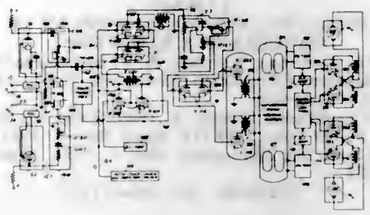
3. A radioactivity detector comprising an anode wire, a cylindrical annular cathode concentrically surrounding said anode wire, an electron-permeable electrode interposed between said anode wire and said cathode, an envelope enclosing said anode wire, cathode and permeable electrode in an ionizable gas, means for maintaining a positive potential difference between said anode wire and said cathode and a negative potential difference between said electron-permeable electrode and said cathode, and means for establishing a magnetic field substantially coaxial with said anode wire.

2,745,971
AUTOMATIC TRANSFER SWITCH CONTROL CIRCUIT
Loyd James Robertson, Albuquerque, N. Mex.
Application December 6, 1951, Serial No. 260,239
9 Claims. (Cl. 307—64)



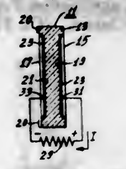
1. A control system for the selective connection of a load to a main or an auxiliary power line comprising a main switch including a contact connected to the main line, a second contact connected to the auxiliary line, third and fourth contacts connected to the load, a first solenoid, a first armature movable thereby, a bridging contact on said armature movable to close the circuit between said first and third contacts, a second solenoid, a second armature movable thereby, a second bridging contact on said second armature movable to close the circuit between said second contact and said fourth contact, interconnecting lever means between said first and second bridging contacts for causing said bridging contacts to be in operative position one at a time, said lever having an extension at one end thereof, a single throw double pole spring biased limit switch located in the path of the extension of said lever means, said limit switch being closed in the spring biased direction when said first bridging contact is in circuit closing relation and said limit switch being closed in the opposite direction upon contact by the extension of said lever means when said second bridging contact is in circuit closing relation between said auxiliary line and said load, a first relay in said system normally connected to said main line, a second relay connectable to said auxiliary line through a manually operated switch, the armature of said second relay having a spring biased insulated contact connected to said main line to complete a circuit to said first relay, an independent source of electrical energy, first and second motor timers, said energy source, a first contact of said first relay, said first motor timer and the contact of the normally closed contact of the spring biased single pole double throw limit switch being in a circuit whereby the first motor timer is actuated when all of these contacts are closed; a normally open switch actuatable by said first motor timer after a predetermined delay, a third relay actuatable by said normally open switch, a contact of said third relay being closed when the latter is actuated for operating said second solenoid, a second contact of said first relay being closed when said first relay is deenergized and being connected to a contact of said second relay which is closed when said second relay is energized and said contacts being connected together and to said second motor timer, said second motor timer being connected to the contact of said limit switch which is normally spring biased closed, whereby said second motor timer may be actuated, a second normally open switch actuatable by said second motor timer after a predetermined delay, a fourth relay connected to said second normally open switch, a contact of said fourth relay being connected to said second solenoid for actuating the second solenoid and establishing a connection between said auxiliary line and said load when the power of said main line fails or said manual switch is operated, and electrically operated indicating means connected to said independent source of electrical energy and to said single pole double throw limit switch for indicating the position of said main switch.

2,745,972
ELECTRONIC POSITION AND MOTION CONTROL SYSTEMS
Jules Sandock, Hyattsville, Md., assignor to Raytheon Manufacturing Company, Waltham, Mass., a corporation of Delaware
Application December 9, 1953, Serial No. 397,227
5 Claims. (Cl. 307—149)



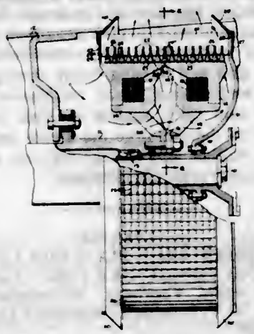
4. In a control system, means for utilizing a pair of complementary A. C. vector voltages copulatively representative of a stressing force, said utilizing means including means for effecting a summation of said vector voltages for transmission to a succeeding stage of the system, and means for applying to said succeeding stage a D. C. voltage whose magnitude varies in proportion to variations in said stressing force, said last-named means comprising phase displacing means controlled by the voltage output of said vector summation means, and rectifying and anti-hunt means receiving the phase-displaced output of said phase displacing means.

2,745,973
RADIOACTIVE BATTERY EMPLOYING INTRINSIC SEMICONDUCTOR
Paul Rappaport, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application November 2, 1953, Serial No. 389,601
19 Claims. (Cl. 310—3)



1. A primary source of electrical energy comprising, a body of semiconducting material having a resistivity substantially in or near the intrinsic region, a P-type conductivity region formed at one surface of said body, an N-type conductivity region formed at an opposing surface of said body, a source of nuclear emission for irradiating said body to establish a difference in electric potential between said regions, and connection means coupled to said regions for supplying the energy of said potential to a load circuit.

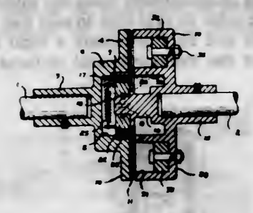
2,745,974
EDDY CURRENT TORQUE PRODUCING DEVICE
John George Oetzel, Beloit, Wis., assignor to Warner Electric Brake & Clutch Company, South Beloit, Ill., a corporation of Illinois
Application March 26, 1952, Serial No. 278,662
15 Claims. (Cl. 310—93)



1. A rotary inductor for an eddy current device comprising a series of circular rings of magnetic metal and equal size concentric with a common axis and disposed side by side in closed spaced relation whereby to define narrow annular slots between the rings, a series of cross bars circumferentially spaced around and spanning the outer edges of said rings so as to constitute fan blades operable during rotation of the inductor to induce air to flow radially and outwardly through said passage, each of said bars having teeth spaced along its inner edge and each projecting in between two adjacent rings and connected to the sides of the latter in heat conducting relation, and means rigidly joining said rings and bars and supporting the same for rotation about said axis.

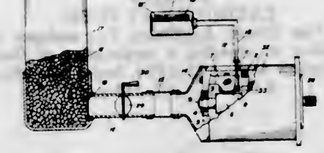
2,745,975
CENTRIFUGALLY CONTROLLED MAGNETIC COUPLINGS
Igor V. Zozulin, George J. Okulitch, and Alec S. J. Ellett, Vancouver, British Columbia, Canada, assignors to Magnetorque Couplings Limited, Vancouver, British Columbia, Canada
Application July 27, 1953, Serial No. 370,586
1 Claim. (Cl. 310—100)

A centrifugally controlled magnetic coupling comprising two separate rotors, said rotors being adapted for mounting upon a pair of substantially aligned shafts, one rotor having a cylindrical recess having a frictional lining and a flange of magnetic permeability surrounding the cylindrical recess, the second of said rotors having permanent magnets concentrically arranged to oppose the flange of the first rotor and a centrifugal clutching



element adapted to be inserted into the cylindrical recess whereby on a given rotational speed being imparted to the first rotor by the magnets the clutching elements will engage the frictional lining of the first-mentioned rotor, there being no mechanical connection between the two rotors prior to the engagement of the frictional lining by the clutching element.

2,745,976
MEANS AND METHOD OF SEATING BRUSHES ON ROTATING ELECTRICAL MACHINES
Cecil G. Martin, Parkview, and James H. Johnston, Bedford, Ohio, assignors to Jack & Heintz, Inc., Cleveland, Ohio, a corporation of Delaware
Application September 17, 1952, Serial No. 309,998
5 Claims. (Cl. 310—228)

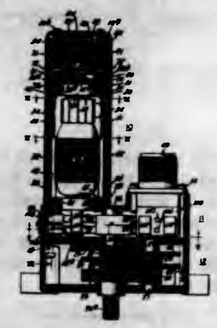


1. In combination with a rotating electrical machine, a relatively rotatable current collector and a relatively stationary member, seating means for seating said stationary member in predetermined desired seating engagement with the outer contour of said collector during running operation of said machine, said seating means comprising an air inlet for said machine to said stationary member, means for delivering moisture-free pressure air through said inlet to said stationary member and means for controlling this flow of dry air to said stationary member during its self-seating operation while said machine is running.

2,745,977
MOTOR FRAME STRUCTURE AND BRUSH RIGGING
Kimble Frank Teah, Santa Monica, Calif., assignor to Bendix Aviation Corporation, North Hollywood, Calif., a corporation of Delaware
Original application October 19, 1951, Serial No. 252,155. Divided and this application November 21, 1952, Serial No. 321,793
4 Claims. (Cl. 310—239)

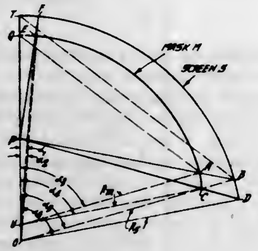
1. In an electric motor: an integral elongated frame comprising a hollow field core of rectangular exterior shape in cross section and having a pair of inwardly ex-

tending poles in one pair of opposite sides, the sides of said poles being spaced from the other pair of opposite sides, and field windings encircling said poles; said integral frame member including end walls at opposite ends of and spaced from said field core and of the same exterior size and shape in cross section; longitudinal connecting members extending longitudinally from the mid-section of said other opposite sides of said core to said end walls whereby said end walls and core constitute a rigid integral frame all portions of the exterior lateral surfaces of which are



flush with respect to each other; a motor shaft extending axially through said frame, and an armature on said shaft within said field core in close running clearance therewith; said end walls having cylindrical bearing apertures of the same radius, and coaxial with each other, and said field poles having faces lying in the same cylindrical plane as said apertures; and bearing means for rotatably supporting said shaft, said bearing means having concentric inner and outer surfaces tightly fitting said shaft and said bearing apertures respectively.

2,745,978
CATHODE RAY TUBE
David D. Van Ormer, Lancaster, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Application August 23, 1954, Serial No. 451,343
4 Claims. (Cl. 313—69)



1. A cathode ray tube having a central axis, a curved fluorescent screen, electron gun means for projecting at least one beam of electrons toward the concave side of said screen, a center-of-scan intermediate said gun means and said screen whereat said beam is deflected relative to said axis to scan said screen, and a curved electrode having a multiplicity of systematically-arranged uniformly-spaced apertures mounted adjacent to said curved screen between said screen and said gun means, the spacing between said apertured electrode and said screen, as measured along the beam path from the center-of-scan, being greater at the outer margin of the electrode than at the central axis of the tube.

2,745,979
ELECTRON GUN, PARTICULARLY FOR CATHODE RAY TUBES
Marcel Anpoix, Paris, and Elie Droche, La Garenne, France, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application October 1, 1952, Serial No. 312,536
Claims priority, application France October 9, 1951
4 Claims. (Cl. 313—82)



1. An electron gun structure for a cathode-ray tube comprising a control grid and an acceleration anode, said control grid comprising a flat plate having a central aperture, a first flat plate of ceramic insulating material having a central aperture and recesses therein and disposed between said grid and anode and defining the spacing therebetween, a second flat plate of insulating material having a central aperture and recesses therein and disposed on the side of the grid remote from the anode, a plurality of studs connected to said anode and free of said control grid and passing freely through the recesses in said first and second plates, and means for clamping the ends of said studs against the free surface of said second plate to thereby urge the anode and second plate against one another and against the grid and first plate, whereby a unitary system is obtained.

2,745,980
SURFACE DISCHARGE PLUG FOR LOW TENSION AND CONDENSER DISCHARGE
Wytze Beye Smits, Voorburg, Netherlands, assignor to Smitsvonk N. V. Research Laboratory Comp., Rijswijk, Netherlands
Application March 3, 1952, Serial No. 274,607
1 Claim. (Cl. 313—131)



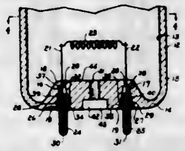
Surface discharge spark plug arrangement for low tension and condenser discharge, comprising: means forming a chamber having its opening at the sparking end of said plug, said chamber consisting of a vaulted bottom and, extending from said bottom to said opening, unobstructed parallel sidewalls; sparking electrodes disposed in said sidewalls forming a part thereof, said electrodes lying at a distance less than one-third the depth of the chamber from the chamber opening, and insulating material forming a sparking surface disposed between said electrodes.

2,745,981
MOUNTING MEANS FOR A VACUUM TUBE ELECTRODE ASSEMBLY
John M. Sanabria, Evanston, and Edward J. Skwarlo, Chicago, Ill., assignors, by mesne assignments, to American Television Manufacturing Corp., Inc., a corporation of Illinois
Application February 21, 1952, Serial No. 272,732
6 Claims. (Cl. 313—254)



1. An electron tube comprising an envelope, an electrode assembly, and means supporting said assembly within said envelope including a peripheral convexity on the interior face of the envelope and a plurality of hairpin springs secured to and spaced apart about said assembly, each said spring having a concavity engaging over said convexity and positioning said assembly longitudinally and transversely of said envelope.

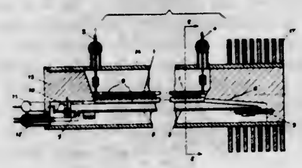
2,745,982
TERMINAL STRUCTURE FOR ELECTRIC LAMP OR SIMILAR DEVICE
Robert Leonard Brendner, Kenton, and Charles Henry Simms, Twickenham, England, assignors to General Electric Company, a corporation of New York
Application March 25, 1953, Serial No. 344,522
Claims priority, application Great Britain March 25, 1952
5 Claims. (Cl. 313—271)



1. An electrical device comprising a sealed envelope provided with a vitreous end closure member having a plurality of tubular recesses in its outer side, lead-in conductors sealed through the wall of said end closure member and extending into the said recesses therein, an electrical energy translation element disposed within said envelope and electrically connected to said lead-in conductors, and tubular terminal contact pins snugly fitting within and seated against the walls of respective ones of said recesses and projecting outwardly thereof, said recesses being proportioned to accommodate said pins to a depth substantially in excess of their diameter, the external portions of said lead-in wires being securely fastened to said terminal pins and extending taut between their respective points of attachment to the end closure member and the terminal pins so as to hold the latter in place in said recesses against endwise withdrawal movement therefrom.

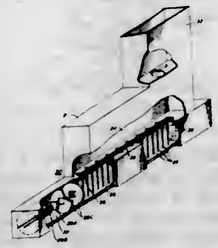
2,745,983
TRAVELING WAVE TUBE
Oscar Döhler and Harry Huber, Paris, France, and Werner Kleen, Madrid, Spain, assignors to Compagnie Generale De Telegraphie Sans Fil, a corporation of France
Application May 25, 1950, Serial No. 164,128
3 Claims. (Cl. 315—3.5)

3. Travelling wave tube comprising a transmission line comprising two substantially parallel spaced conductors, at least one of which comprises wave delay elements and input and output terminals for the circulation of ultra-high frequency energy therethrough, means for applying different potentials to the conductors of the line thereby to establish therebetween an electrostatic field having mean lines of force oriented substantially perpendicular to the axes of the conductors, means for establishing a substantially time-constant magnetic field in the space between the conductors having lines of force substantially perpendicular both to the mean lines of force of the electrostatic field and to the axes of the conductors, means



comprising an electron gun positioned adjacent to the input terminal of the line for emitting an electron beam along a mean direction substantially parallel to the axes of the conductors and in the space therebetween, and an electron collector positioned in the vicinity of the output terminal and having an electron-receiving surface facing one of the conductors, the product of said magnetic field intensity and the distance between said electron receiving surface and the said facing conductor decreasing progressively in the direction of travel of the electrons.

2,745,984
MICROWAVE OSCILLATOR
David W. Hagelbarger, Morristown, N. J., and Laurence R. Walker, New York, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application March 25, 1952, Serial No. 278,323
16 Claims. (Cl. 315—4)

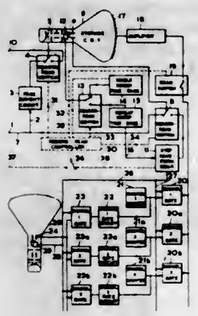


1. In a microwave oscillator, a wave resonant member having a wall surface apertured to form a slot therealong, a conductive base member positioned opposite said wall surface, a plurality of spaced conductive elements in a linear array, successive elements extending from opposite sides of the slot in the wall surface to the base member, means for forming and projecting an electron stream past the linear array in field coupling relation with the conductive elements, and means for abstracting energy from the wave resonant member for utilization.

2,745,985
PULSE AMPLITUDE ANALYSERS
Ian Alexander Darroch Lewis, Wantage, Berkshire, England
Application October 12, 1951, Serial No. 251,105
5 Claims. (Cl. 315—9)

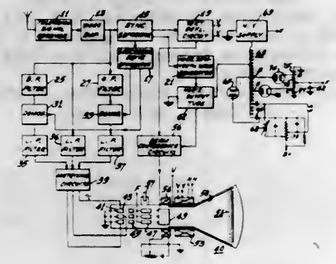
1. A pulse amplitude analyzer comprising, a storage cathode-ray tube, circuit means connected to said tube for

plotting the peaks of an input pulse train on time/amplitude co-ordinates as localized charged areas on the screen of said tiube, means for scanning said areas in a series



of channels, each of constant amplitude range, and an analyzing circuit connected to said scanning means for analyzing the pulses scanned in each constant amplitude range.

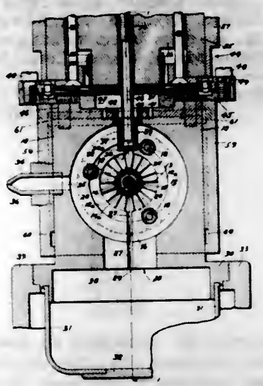
2,745,986
ADJUSTABLE VOLTAGE SUPPLY
Joseph O. Preisig, Trenton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application March 5, 1954, Serial No. 414,417
7 Claims. (Cl. 315—22)



1. In a cathode ray tube system, a variable voltage supply comprising the combination of a deflection wave transformer, a pair of rectifying means respectively connected with similar polarity to spaced intermediate points on a winding of said transformer for developing respectively different unidirectional potentials at respective rectifying means output terminals, a voltage divider coupled between said rectifying means output terminals, a voltage supply output terminal, and means for adjustably coupling said voltage supply output terminal to said voltage divider.

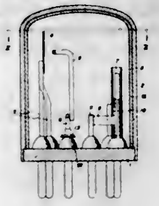
2,745,987
TUNABLE MAGNETRONS
Edward C. Dench, Needham, Mass., and George E. Dombrowski, Great Neck, N. Y., assignors to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application January 17, 1952, Serial No. 266,912
13 Claims. (Cl. 315—39.61)

1. An electron discharge device comprising an electron source, an anode structure spaced from said source, said anode structure comprising a plurality of tightly coupled cavities adapted to interact with electrons from said source, means tightly coupled to one of said cavities in the inductive regions thereof for varying the frequency-response characteristic of said one cavity, and a wall substantially transparent to radiant energy positioned between



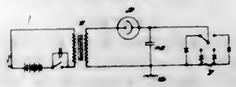
said characteristic-varying means and portions of said cavity.

2,745,988
GLOW DISCHARGE TUBE AND CIRCUIT THEREFOR
Christopher Haly Tosswill, Carshalton, England, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application April 11, 1951, Serial No. 220,424
Claims priority, application Great Britain April 13, 1950
3 Claims. (Cl. 315—168)



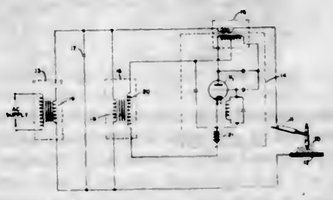
1. A glow-discharge tube comprising an envelope containing an ionizable gaseous medium, a coating of metal having a melting point exceeding 1400° C. substantially entirely covering the inner wall of the envelope, a cathode, an ignition electrode positioned in close proximity to the cathode, an anode, and a screen electrode surrounding the anode, said screen being spaced from said anode a distance equal to about 10 to 100 times the mean-free-path of electrons in the gaseous medium whereby an auxiliary discharge of the order of several microamperes may be produced between the anode and the screen.

2,745,989
IGNITION SYSTEM FOR LOW-VOLTAGE IGNITION IN CONDENSER DISCHARGE SPARKING PLUGS
Wijtze Beije Smits, Voorburg, Netherlands, assignor to Smitsvonk N. V., Rijswijk, Netherlands
Application May 15, 1951, Serial No. 226,390
1 Claim. (Cl. 315—183)



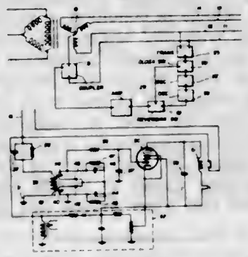
An ignition system for low voltage spark plugs capable of being fired on a condenser discharge, a condenser, means for supplying current impulses of predetermined voltage to fully charge said condenser, a rectifier having a breakdown voltage of less than said predetermined voltage series connected between said condenser and said charging means, a spark gap series connected with said rectifier whereby dischrge of the condenser through the charging circuit is prevented and at least one low voltage spark plug connected in the discharge path of said condenser.

2,745,990
ALTERNATING CURRENT ELECTRIC ARC WELDING
Nelson E. Anderson, Berkeley Heights, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a corporation of New York
Application December 28, 1951, Serial No. 263,874
1 Claim. (Cl. 315—183)



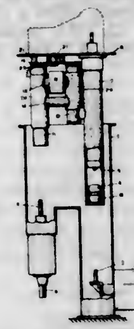
An alternating current arc welding system comprising in a welding circuit a source of welding current, a workpiece and an electrode spaced from said workpiece to form an arc gap between said electrode and said workpiece; an auxiliary high frequency oscillator circuit including a grid controlled electron tube; a tansformer having a primary winding in parallel circuit relation to said arc gap in said welding circuit and a secondary winding in the circuit of said oscillator to apply a voltage across the plate and cathode of said electron tube to cause said tube to conduct and thereby produce oscillation in said oscillator circuit when the voltage applied between the plate and cathode of said electron tube exceeds the peak value of that applied thereto when the arc gap is conductive, and bias means in circuit with said electron tube to cause said tube to be non-conductive when the voltage applied thereto from said transformer secondary does not exceed the peak value applied thereto when said arc gap is conductive; and a coupling transformer having a secondary winding in said welding circuit and a primary winding in said oscillator circuit to couple the output of said oscillator into said welding circuit.

2,745,991
CENTRALIZED LOAD CONTROL SYSTEMS
Charles E. Seymour, Baraboo, Wis.
Application January 3, 1951, Serial No. 204,221
5 Claims. (Cl. 317—142)



3. In a power distribution system, a central power station including an alternating voltage wave of power frequency, frequency conversion means connected thereto for deriving from the power line voltage wave a signal consisting of an even harmonic of said wave, coupling means connected to said frequency conversion means and said station for adding said harmonic wave to the power voltage wave in such phase relationship as to form a composite wave having positive and negative peaks of equal amplitude, a load control receiver connected to said system comprising a phase shifting network coupled to said system for shifting the phase of said harmonic wave with respect to the phase of the power voltage wave to a degree sufficient to form a second composite wave having positive and negative peaks of unequal amplitude, a differential voltage generating means coupled to said network for generating a differential voltage in response to said second composite wave, a load control relay, an electron tube coupled to said differential voltage generating means and said relay, and means for biasing said tube to provide a normal output voltage of sufficient magnitude to hold said relay but of insufficient magnitude to actuate said relay and to provide an output signal voltage in response to said differential voltage of sufficient magnitude to actuate said relay.

2,745,992
ELECTRIC SWITCHING APPARATUS FOR HIGH TENSION
Hendrik A. Hidde Nijland, Laren, Netherlands, assignor to N. V. "COQ," Utrecht, Netherlands, a company of the Netherlands
Application August 23, 1954, Serial No. 451,586
Claims priority, application Netherlands August 24, 1953
6 Claims. (Cl. 317—157.6)



1. An electric circuit breaker for high tension, comprising a stationary metal casing adapted to be filled with an insulating fluid, a cover detachably mounted on said casing, leading-in conductors insulatedly passing through the walls of the casing, a switching element composed of two individual sections suspended from and independently attached to said cover and located in said casing, a first one of said sections including a current transformer, readily separable members, one of which is mounted on one of the sections, electrically interconnecting the two sections of the switching element, means for attaching the first section to the cover for ready removal therefrom after it has been removed from the casing, and a pair of cooperating plug and bushing contacts between the leading-in conductors and the respective sections of the switching element, said plug and bushing contacts permitting the cover together with the two sections of the switching element to be bodily removed from the casing and disconnected from the conductors while the leading-in conductors are energized.

2,745,993
CAPACITOR UNIT
James H. Foster, Erie, Pa., assignor to Erie Resistor Corporation, Erie, Pa., a corporation of Pennsylvania
Application March 20, 1953, Serial No. 343,658
1 Claim. (Cl. 317—249)

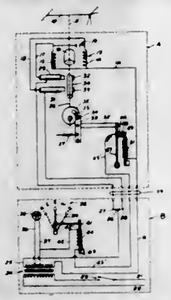
A capacitor having a pair of members with opposed plane surfaces on the respective members in face to face

engagement and with opposed electrodes on the respective members having adjacent opposed surfaces of the electrodes separated by an air gap determined from said plane surfaces as a datum plane, one of the members being of molded plastic insulating material and its electrode being metal foil molded in place and occupying part of the surface of said one member and having an adhesive between its inner face and said one member and having its entire outer or exposed face depressed a



controlled distance into said one member and having its inner face united by the adhesive to the underlying part of said one member, said underlying part of said one member and the adhesive being molded to conform to the inner surface of the foil, whereby the position of the outer face of the electrode with respect to the plane surface of said one member is located from said plane surface independent of variations in the thickness or distribution of the metal, adhesive or insulating material.

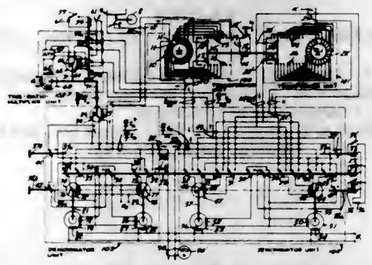
2,745,994
ANTENNA POSITION CONTROL MEANS AND INDICATOR
Paul A. Dicke, New Bremen, Ohio, and Allen A. Dicke, Montclair, N. J., assignors to Crown Controls Company, Inc., New Bremen, Ohio, a corporation of Ohio
Application May 12, 1951, Serial No. 226,032
9 Claims. (Cl. 318—18)



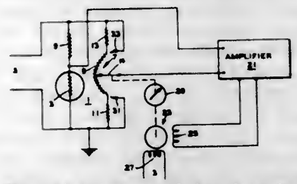
1. In a reversible antenna rotator of the type wherein motor means is operatively connected with an antenna mast for rotating said mast, an electrical control circuit for said motor means including alternative leads to the windings of said motor means and a common lead therefrom, a main switch in said circuit, a supplemental switch for closing the circuit selectively through said alternative leads, an antenna position indicator, a thermal element connected to said indicator and flexed to define a normal or starting position therefor, a resistance coil in said circuit for heating said thermal element to move said indicator away from normal position in response to closing of said main switch, and control means in said circuit responsive to operation of said motor means for interrupting current flow through said resistance coil.

2,745,995
MATHEMATICAL ANALYZER
Richard Y. Miner and Quentin J. Evans, New York, and Clifford F. Abt, Long Island City, N. Y., assignors to American Bosch Arma Corporation
Application July 13, 1950, Serial No. 173,528
26 Claims. (Cl. 318—19)

1. In mathematical analyzing apparatus, the combination of an energized winding having a plurality of taps, a brush adapted to successively engage said taps, actuating means for said brush, a potentiometer having a stator winding connected to said brush and to said energized winding and having a rotor winding, motive means having a control winding connected in series with said rotor winding, operative connections between said motive means and said rotor winding, a second energized winding having taps, a brush driven by said actuating means into successive engagement with said second winding taps, terminals connected to said second energized winding and said second brush, and series connections between said rotor winding and said terminals whereby said motive means is energized to drive said rotor winding to a position where its output voltage matches the voltage at said terminals.



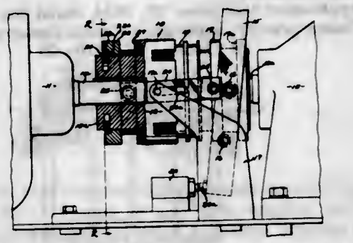
2,745,996
NULL SEEKING SYSTEM
Frederick B. Sylvander, Ridgewood, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application August 23, 1952, Serial No. 305,938
6 Claims. (Cl. 318—29)



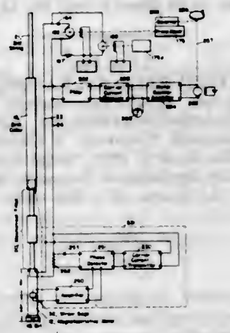
5. A null seeking system of the class described, comprising a bridge circuit for providing signals corresponding to a condition, including an element sensitive to the condition in one of its legs and a potentiometer including a resistor in another two of its legs, said two last-mentioned legs including a pair of resistors connected to the ends of said potentiometer resistor, a power source connected across said pair of resistors and said potentiometer resistor, said potentiometer including a wiper movable along the associated resistor for balancing said bridge upon a change in condition, a servomotor operatively associated with said bridge and responsive to the signals therefrom and drivably connected to said wiper for driving said wiper to balanced position, and means operative upon over-travel of said wiper to open circuit position to restore the wiper to engagement with said resistor, comprising contact means connected to the power source and engaged by said wiper at the ends of its travel for providing signals to reverse rotation of said motor and drive said wiper toward said resistor.

2,745,997
CLUTCH CONTROL FOR PLURAL MOTOR UNIT
Leo B. Wessel, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a corporation of Ohio
Application July 23, 1953, Serial No. 369,779
5 Claims. (Cl. 318—102)

1. In the organization of a high-speed motor and a low-speed motor, each of said motors having a driven shaft and clutch means operatively associated with said shafts for coupling and uncoupling them, and control means operatively connected with said clutch means and movable from clutch-uncoupling to clutch-coupling position; the combination therewith of speed responsive means operatively connected with said high-speed motor and having a lower speed position and a higher speed position, and said last named means in said higher speed position having an operative association with said clutch control means preventing movement of the latter to clutch-coupling position.



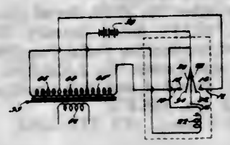
2,745,998
FREQUENCY CONTROL SYSTEMS FOR VIBRATORY TRANSDUCER
George McPherson, Jr., Columbus, Ohio, assignor, by mesne assignments, to Drilling Research, Inc., Houston, Tex., a corporation of Delaware
Application April 23, 1953, Serial No. 350,732
16 Claims. (Cl. 318—118)



1. In a well-drilling system comprising a drill string having means for applying a static load to a drill bit secured to the lower end of a vibratory column at the lower end of said drill string, said column including an elongated magnetostrictive transducer: means for supplying an alternating current to said transducer to produce a changing flux of high peak density therein, and means responsive to measurable characteristics in said vibratory column that may vary according to deviation from the resonant frequency, including means responsive to the alternating current supplied to said transducer, for controlling the frequency of excitation of said transducer to maintain the vibration of said column at substantially the resonant frequency of said column while in engagement with strata to be penetrated.

16. In a well-drilling system in which the resonant frequency of a vibratory transducer changes during penetration of subsurface strata, resulting in a deviation between the frequency of the driving current and the resonant frequency with a resultant decrease of the vibratory forces, the method of compensating for changes in said resonant frequency by varying the speed of the supply generator in manner comprising cyclically varying the speed of said generator first in one direction and then in the other direction to vary its frequency, detecting any increase or decrease in power with said changes in frequency, and in response to the relative changes in power with said changes of frequency, modifying said cyclical variation of speed of said generator to produce a greater change in the direction that increases its power output than in the direction that decreases its power output until maximum power output from the generator is attained.

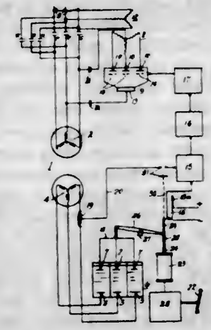
2,745,999
VIBRATOR
Joseph A. Mas, Elmont, N. Y., assignor to Vibration Research Laboratories, Inc., Brooklyn, N. Y., a corporation of New York
Application August 10, 1951, Serial No. 241,363
17 Claims. (Cl. 318—124)



1. In a vibrator comprising a fixed contact, a first vibratile member having a natural frequency of vibration, means for causing said first vibratile member to vibrate, and a movable contact periodically engageable with and disengageable from said fixed contact and mounted on said first vibratile member via a second vibratile member having a different natural frequency of vibration; the improvement which comprises the natural frequencies of vibration of said first and second vibratile members being in the ratio of 1:X.5, where X is any odd integer.

6. In a vibrator having a vibratile member and a driving coil active upon said member so as to make it vibrate at a predetermined frequency, said driving coil being energized by a D. C. source upon which is superimposed an A. C. voltage the frequency of which is controlled by the vibration of said member; the improvement which comprises having the A. C. voltage greater than the D. C. voltage.

2,746,000
CONTROL OF ALTERNATING CURRENT ELECTRIC MOTOR EQUIPMENT
Ronald Parr, Davyhulme, and Owen Thomas Evans, Sale, England, assignors to Metropolitan-Vickers Electrical Company Limited, London, England, a British company
Application June 28, 1954, Serial No. 439,846
7 Claims. (Cl. 318—212)



1. An alternating current induction motor equipment having control means for obtaining dynamic braking by supplying excitation current to one winding of the motor and controlling load resistance in circuit with a second

winding of the motor, in which said control means comprise means for controlling the value of excitation of the motor, means representative of the value of said load resistance, and means responsive to the current in said second winding, in combination with means rendering the excitation dependent on the value of load resistance or on said current responsive means, dependent upon whether said resistance is within a higher or lower range of values.

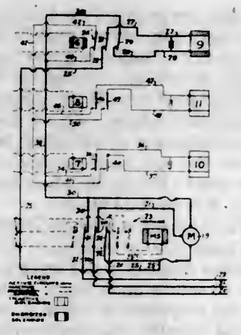
2,746,001

ELECTRIC MOTOR OPERATION WITH INTERLOCKING RELAYS AND CONTROL CIRCUITS

Burton F. Holmes and Herbert H. Heindel, Toledo, Ohio, assignors to Schultz Die Casting Company, Toledo, Ohio, a corporation of Ohio

Application November 21, 1950, Serial No. 196,914, now Patent No. 2,700,737, dated January 25, 1955, which is a division of application Serial No. 790,838, December 10, 1947, now Patent No. 2,532,256, dated November 28, 1950. Divided and this application February 9, 1953, Serial No. 335,876

9 Claims. (Cl. 318—484)



1. An interconnected electrical actuating and controlling system, including power input leads; an electric motor adapted to be supplied with electrical current from said leads; a series of sequentially operating separate solenoids; circuits from said power leads to said motor and to each of said solenoid; a common manually operable switching means in said circuits for simultaneously controlling the circuit from said power line to said motor and to each of said solenoids; said solenoid circuits including a circuit from said common switch to the first of said solenoids; a circuit to the next sequential solenoid connected with said common switch to said power leads; a circuit for a subsequent sequentially operating solenoid adapted to be connected to said power line; a separate controlling relay coil independent of said motor circuits, one for each of said solenoids; a timing network independent of said motor power line circuit for actuating said relay coils; separate switch means controlled by each coil and located in the corresponding solenoid power line circuit, whereby energization and deenergization of said motor, the first-mentioned solenoid and each of said subsequent sequential solenoids are controlled both by the controlling coil of the first-mentioned solenoid circuit and said common switch; connections from a supply for said timing network; a two position switch interposed in the electrical supply connections for said network; and means intercalated between said motor and said two position switch and actuated from said motor for effecting movement of said switch to one position to establish energization of said timing network for controlling the relay for the first of said solenoids and to the other position for energizing said network with the relays for effecting the subsequent operation of the other solenoids.

2,746,002

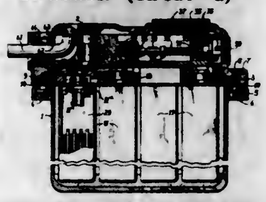
BATTERY OF ACCUMULATORS AND BENCH FOR CHARGING THIS BATTERY

André Albert Robillard, Douai, France, assignor to Compagnie Auxiliaire des Mines, Douai, France, a French body corporate

Application December 28, 1954, Serial No. 478,012

Claims priority, application France January 4, 1954

20 Claims. (Cl. 320—2)



1. In a battery of accumulators more particularly for supplying power to mining lamps, in combination: a fully gas-tight housing, disposed in the latter, a switching device for establishing the charging and discharging circuits and provided with a control means comprising a metal element wholly housed in said housing and movable between a position corresponding to discharging and a position corresponding to charging the battery and an elastic device capable of acting on said control means so as to maintain it in the discharging position and a magnetic body disposed in the wall of said housing and facing said control means whereby said control means may be operated from outside said housing by means of an electromagnetic attraction in opposition to the action of said elastic device so as to bring it into the charging position.

2,746,003

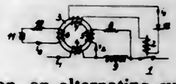
CIRCUIT-INTERRUPTER RELEASING APPARATUS

Johannes Wegener, Berlin-Siemensstadt, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a German corporation

Application April 9, 1952, Serial No. 281,421

Claims priority, application Germany May 24, 1951

6 Claims. (Cl. 321—48)



1. In combination, an alternating current main circuit to be controlled, a contact device having contact means connected in said main circuit and having a pulse-responsive release circuit operative to control said contact means to open said main circuit upon receiving a current pulse of a given magnitude, a saturable-core transformer having a first primary winding series connected with said contact means in said main circuit, a second primary winding on said transformer, an inductance connected in series in said main circuit, circuit means including said inductance for energizing said second primary winding with a leading current, said transformer having additional constant excitation means and having a secondary winding connected with said release circuit for issuing pulses thereto, said constant excitation means producing in said transformer an ampere turn magnitude substantially equal to that required to produce in said secondary winding a current equal to said current pulse of given magnitude.

2,746,004

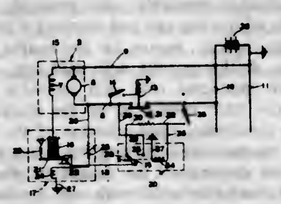
GENERATOR POLARIZING SYSTEM

Lawrence E. Gartner, Lodi, N. J., assignor to Bendix Aviation Corporation, Eatontown, N. J., a corporation of Delaware

Application June 3, 1952, Serial No. 291,420

6 Claims. (Cl. 322—6)

1. Apparatus for use in a generator system having a field winding, comprising switch means for energizing said field winding, electromagnetic means for actuating said switch means, a source of direct current for energizing said electromagnetic means, and means energized by the energization of said electromagnetic means connecting and source of direct current to said field winding said last means being disconnected from said field winding upon actuation of said switch means.



2,746,005

CURRENT REGULATOR

Frederick M. Potter, Westwood, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware

Application April 30, 1953, Serial No. 352,143

5 Claims. (Cl. 322—27)



1. Current regulating means for a generator having a shunt winding, interpole and compensating windings, comprising a carbon pile resistance element for varying the energization of said shunt winding, a control winding for said carbon pile element, and circuit means including a compensating resistor connecting said control winding across said interpole and compensating windings, said compensating resistor being formed of a length of copper wire wound non-inductively and positioned in intimate contact with said compensating winding.

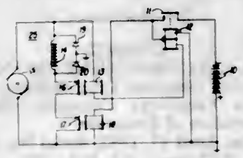
2,746,006

VOLTAGE REGULATOR

Fred P. Hill, Elgin, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois

Application October 15, 1952, Serial No. 314,839

5 Claims. (Cl. 322—70)



1. A voltage regulator for the electrical system of an automobile and the like, said electrical system comprising a battery and a generator having an armature connected in shunt with said battery and further having a field winding, said regulator including in combination, at least one regulator relay having a pair of normally closed contacts, the aforesaid field winding and said contacts being series-connected in shunt with the aforesaid armature, a first selenium rectifier connected between one side of the aforesaid field winding and a point of reference potential, and a second selenium rectifier connected between the other side of the aforesaid field winding and said point of reference potential, said selenium rectifiers being connected with a selected polarity to be nonconductive to the unidirectional current flow from the aforesaid battery in the field winding but to short circuit the induction voltage developed thereacross by breaking of said contacts.

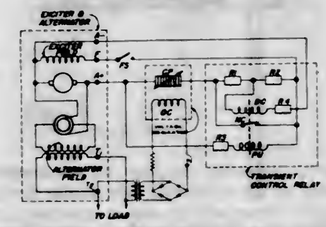
2,746,007

TRANSIENT CONTROL RELAY

Arnold Bergson, Cleveland, Ohio, assignor to Jack & Heintz, Inc., Cleveland, Ohio, a corporation of Delaware

Application September 17, 1952, Serial No. 310,081

3 Claims. (Cl. 322—76)



3. In a generator, a generator field winding, an exciter for energizing said field winding including an exciter field winding, a regulator having an operating coil responsive to the output of said generator and a variable resistance connected in series with said exciter field winding for controlling the output of the generator, a second resistance connected in series with said variable resistance and said exciter field winding, and means for short-circuiting said second resistance in said exciter field winding circuit comprising a relay having a first relay operating coil responsive to the voltage drop across said variable resistance and a second relay operating coil responsive to the voltage drop across said generator field winding, said relay normally effectively actuating a circuit for shorting said second resistance out of said exciter field winding circuit and operating upon application of voltages to said relay operating coils having a predetermined difference in magnitude to open the short circuit for said second resistance.

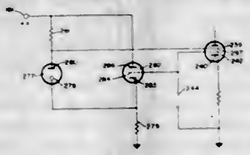
2,746,008

VARIABLY DISPLACED REGULATED-VOLTAGE POWER SUPPLY

Robert C. Paulsen, West Caldwell, N. J., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York

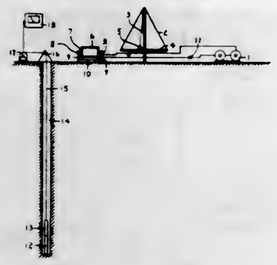
Original application May 26, 1951, Serial No. 228,432, now Patent No. 2,717,994, dated September 13, 1955. Divided and this application February 7, 1952, Serial No. 270,413

5 Claims. (Cl. 323—22)



1. In combination: a source of fixed potential having output terminals; plural impedance elements; a voltage-regulating device connected in series with said impedance elements across said fixed source; a source of variable potential having first and second terminals, said first terminal being connected to a first output terminal of said fixed source; means associated with said second terminal for varying the potential drop across a first of said impedance elements as a function of said variable potential; and means for utilizing the potential drop between said second terminal and the junction of a second of said impedance elements and said voltage-regulating device.

2,746,009
ELECTROMAGNETIC DRILL HOLE EXPLORATION METHOD AND APPARATUS
George H. McLaughlin and William A. Robinson, Toronto, Ontario, Canada, assignors to The McPhar Engineering Company of Canada Limited, Toronto, Ontario, Canada
Application December 24, 1951, Serial No. 263,098
6 Claims. (Cl. 324—6)



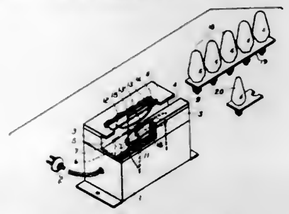
1. A drill hole exploration method, comprising creating at the surface from which a drill hole leads a main primary alternating electromagnetic field to link with a subterranean conductor body to create a secondary electromagnetic field, creating at the surface from which the drill hole leads an auxiliary primary electromagnetic field of the same frequency as said main primary field and having its magnetic component rotatable relative to the direction of the magnetic component of said main primary field, detecting any magnetic component of said secondary electromagnetic field down the drill hole spacially out of phase with the main primary magnetic field without detecting, amplifying and measuring the detected out-of-phase secondary magnetic field component, varying the direction of the magnetic component of the auxiliary primary field for minmum detected signal, and measuring the direction of the magnetic component of the auxiliary primary field for minimum signal as an indication of the direction of the conductor body.

2,746,010
IGNITION SYSTEM TESTER
Guy R. Feaster, Manhattan Beach, Calif.
Application November 26, 1951, Serial No. 258,206
5 Claims. (Cl. 324—17)



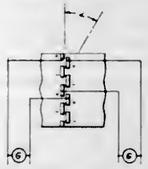
4. A spark plug and ignition system tester, comprising a gas filled discharge tube with an outer and an inner electrode, and a pair of spaced air separated electrodes in series with the said discharge tube, the latter and one of the air spaced electrodes forming a unit, an insulating partly transparent pencil-shaped casing concentric with said discharge tube and surrounding the said unit, provided on one end with an outwardly projecting test pin having an inwardly turned portion forming the second electrode of the pair, a cap at the other end of the said pencil-shaped casing, carrying a combined ground connection and indicator assembly, said assembly including a stem rotatable within the cap and carrying a pointer and a dial carried by the cap, means for connecting the outer electrode of the discharge tube with said cap, a displacing cam surface connected with said rotatable stem displacing the entire unit, consisting of the discharge tube and one of the electrodes, upon rotation of the stem, the pointer carried by the stem indicating the extent of the displacement which determines the length of the air gap between the electrodes in series with said discharge tube, said stem being in contact with the body of the operator during operation and being thus grounded, the voltage condition of the spark plug and ignition system tested being indicated by the appearance and disappearance of a discharge in the gas filled discharge tube and the pointer position.

2,746,011
LAMP TESTING DEVICE
Paul A. Carson, Pittsburgh, Pa., assignor to General Electric Company, a corporation of New York
Application May 21, 1952, Serial No. 289,040
6 Claims. (Cl. 324—22)



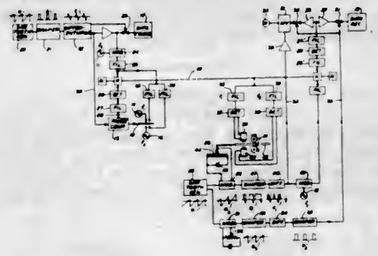
4. A tester for platformed lamps comprising an insulating block having a bottom surface and lateral walls defining a straight channel, a first contact means comprising an extended strip disposed along said bottom surface lengthwise of said channel, a second contact means comprising a resilient member mounted on one of said lateral walls and disposed to obstruct partially said channel and to be forced aside when engaged by the base shell of a lamp guided through said channel, and means connected across said contact means for applying a regulated voltage thereto and comprising a saturable inductor having an output volt-ampere characteristic coinciding substantially with the voltage-current operating points of selected groups of lamps of different voltage ratings to be tested thereby.

2,746,012
INDUCTIVE ELECTROMAGNETIC INSPECTION
Berry Glenn Price, Houston, Tex., assignor, by mesne assignments, to Tuboscope Company, Harris County, Tex., a corporation of Delaware
Application April 17, 1952, Serial No. 282,743
3 Claims. (Cl. 324—37)



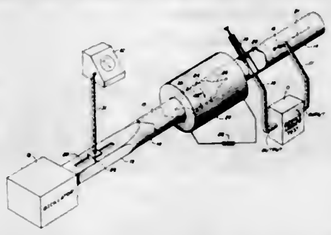
1. In apparatus adapted for electromagnetic detection of flaws in pipe having a natural magnetic pattern of helical form, a group of four coils, the second and fourth of said four coils respectively being adapted to be disposed circumferentially around said pipe from the first and third of said coils, and the third and fourth of said four coils being adapted respectively to be disposed on helical lines from said first and second of said coils, the helix angle of said helical lines being substantially equal to the helix angle of the natural magnetic pattern of said pipe, said first and four coils being connected in opposing senses to said second and third coils.

2,746,013
MEASUREMENT OF TRANSMISSION TIME DELAY
Pierre Mertz, Bellerose, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application October 18, 1952, Serial No. 315,495
6 Claims. (Cl. 324—57)



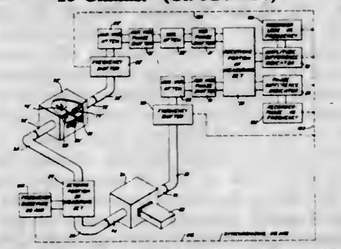
1. The method of measuring the transmission time of a line or circuit comprising transmitting thereover short pulses of current from first and second stations to each other, starting the pulses from said first station at such times as to cause them to arrive at said second station in time coincidence with the pulses sent from said second station, toward said first station, and measuring at said first station the difference in time between the pulse sent therefrom and the pulse received thereat from the said second station.

2,746,014
TRANSMISSION METER
Arthur G. Fox, Eatontown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application December 27, 1951, Serial No. 263,630
6 Claims. (Cl. 324—58)



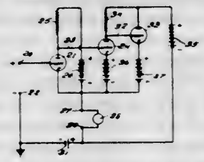
1. In combination, a source of microwave energy, a rectangular wave guide having an end connected to said source, a circular wave guide having an end coupled for wave energy polarized in a given plane to the other end of said rectangular guide, an antireciprocal Faraday-effect rotator producing a forty-five degree rotation of plane polarized microwave energy, said rotator being disposed in said circular guide, a pair of conjugate microwave connections each coupled to the other end of said circular guide for wave energy in planes displaced forty-five degrees from said given plane, a microwave circuit connected between said connections, and a standing wave detector interposed along said rectangular guide.

2,746,015
METHOD OF AND MEANS FOR MEASURING IMPEDANCE AND RELATED QUANTITIES
Dietrich A. Alsberg, Berkeley Heights, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application December 20, 1950, Serial No. 201,781
13 Claims. (Cl. 324—58)



12. Apparatus for making electrical measurements upon a given device with correction for an inherent stray impedance between a pair of electrodes within said device, comprising a standard reference transmission line, a comparison transmission line, sending means common to said lines, comparison means for comparing transmission characteristics of said lines, amplitude and phase compensating means in at least one of said lines, means for connecting the given unit to one of said lines, means in the last-mentioned line to make said line substantially transparent at a frequency at which the given device has impedance caused substantially wholly by said stray impedance, and means associated with said receiving means for indicating amplitude and phase differences in the respective outputs of said lines.

2,746,016
HIGHLY STABLE ELECTRONIC AMPLIFIER
Vernon Dale Schurr, Linfield, Pa., assignor of one-half to Paul Glenn, Pottstown, Pa.
Application December 21, 1951, Serial No. 262,694
4 Claims. (Cl. 324—123)



1. In an amplifier drawing minimal input current for a large range of input voltage, input vacuum tube means having an anode, cathode and control grid, amplifier vacuum tube means, having an anode, cathode and control grid, cathode follower vacuum tube means having an anode, cathode and control grid, an input vacuum tube load resistor, an amplifier vacuum tube load resistor, input vacuum tube biasing means, amplifier vacuum tube biasing means, cathode follower vacuum tube biasing means, a source of B voltage, means for supplying voltage to the anode of the input vacuum tube means, an output load device, means connecting the control grid of the input vacuum tube means to one side of the input, means connecting the anode of the input vacuum tube means to one side of the input vacuum tube load resistor, means connecting the other side of the input vacuum tube load resistor through the means for supplying voltage to the anode of the input vacuum tube to a point responsive to the variable potential of the cathode of the input vacuum tube means which follows the potential of the input signal, such point being free from ground connection, means connecting the anode of the input vacuum tube means to the control grid of the amplifier vacuum tube means, means connecting the cathode of the amplifier vacuum tube means through the amplifier vacuum tube biasing means

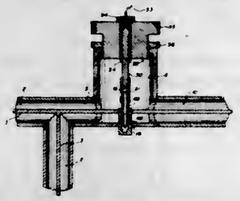
to the point responsive to the variable potential of the cathode of the input vacuum tube means, means connecting the anode of the amplifier vacuum tube means to the control grid of the cathode follower vacuum tube means, means connecting the anode of the amplifier vacuum tube means through the amplifier vacuum tube load resistor to the positive side of the B source, means connecting the negative side of the B source through the output load device to the point responsive to the variable potential of the cathode of the input vacuum tube means, means connecting the cathode of the cathode follower vacuum tube through the cathode follower tube biasing means to the point responsive to the variable potential of the cathode of the input vacuum tube, means connecting the anode of the cathode follower vacuum tube means to the positive side of the B source and means connecting the side of the output load device which is remote from the cathode through the source of bias for the input vacuum tube means to the other side of the input.

2,746,017

PROTECTION OF RECEIVER AGAINST OVERLOAD

James L. Lawson, Cambridge, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy

Application March 18, 1943, Serial No. 479,662
4 Claims. (Cl. 333—13)



1. A low power TR box comprising, in combination, a hollow cylindrical cavity resonator having end closure walls, a conductive tuning plug threaded into one of said walls and capable of being extended by variable amounts into said cavity resonator along its longitudinal axis, a first electrode supported by said tuning plug and having one extremity projecting into said cavity resonator, said first electrode being electrically insulated from said conductive tuning plug, a sleeve, a second electrode, said sleeve being secured to said first and second electrodes so as to retain these electrodes in alignment a fixed distance apart, and means for maintaining a partial vacuum within said sleeve to promote an electrical discharge between said electrodes whenever said cavity resonator is excited at a predetermined level by the coupling thereto of electromagnetic energy.

2,746,018

MICROWAVE PHASE SHIFTER

William Sichak, Lyndhurst, N. J., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy

Application October 2, 1951, Serial No. 249,363
3 Claims. (Cl. 333—29)



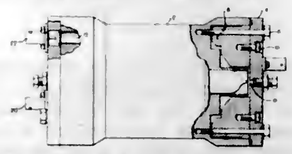
1. A phase shifter comprising a circular waveguide section, a helical input antenna element for radiating a circularly polarized wave at one end of said section for propagation therethrough, a helical output antenna element to receive said wave at the other end of said section, the circular waveguide section defining a path for the energy radiated from said input antenna to said output antenna, means to rotate one of said helical elements relative to the other helical element whereby the phase of the output voltage with respect to the input voltage is proportional to the relative angle of rotation of said elements, means for coupling a source of radio frequency energy to said input antenna, said helical input antenna being adapted to launch a wave circularly polarized with one sense of rotation, said waveguide section including means for suppressing propagation of waves circularly polarized in a sense of rotation opposite to said one sense of rotation including at least a slot in the wall of said section disposed substantially parallel to electric currents produced in response to the propagation of a wave circularly polarized with said given sense of rotation and having lossy conductive material disposed relative to said slot such as to absorb energy radiated by said slot, whereby relatively large amounts of power may be transmitted to a load with a minimum of loss.

2,746,019

DELAY LINE

Lawrence B. Woolaver, Boston, and Franklyn P. Maclay, Natick, Mass., assignors to Laboratory for Electronics, Inc., Boston, Mass., a corporation of Delaware

Application September 19, 1951, Serial No. 247,332
11 Claims. (Cl. 333—30)



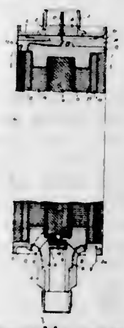
1. A sonic delay line comprising a body having a number of parallel, concentrically arranged, fluid filled holes, two corner reflectors, one at each end of the body, each reflector having a number of pairs of mutually perpendicular plane reflecting surfaces, electro-acoustical input transducers mounted in the reflecting surfaces to generate sonic rays and direct each of them against one of the reflectors to cause the rays to follow multiple paths through the liquid, and output transducers mounted in the reflecting surfaces to receive the reflected sonic energy and convert it into electrical energy, the reflectors being relatively adjustable to change the number of said holes through which the sonic rays must travel from input to output transducers, whereby the length of each sonic ray is adjustable in discrete steps.

2,746,020

ELECTRIC COIL ASSEMBLY

Elmer W. Lautenberger, Scotia, N. Y., assignor to General Electric Company, a corporation of New York

Application June 9, 1951, Serial No. 230,771
6 Claims. (Cl. 336—55)



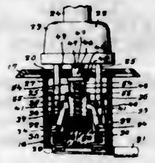
1. An electric coil assembly comprising a sealed container, a winding of insulated electric conducting wire impregnated with a polysiloxane liquid and mounted within said container, said liquid being carried wholly within said winding, and a quantity of an insulating gas sealed under greater than atmospheric pressure in said container.

2,746,021

SELF-LOCKING AND SELF-EJECTING ELECTRIC OUTLET AND PLUG

John M. Butkovich, Detroit, Mich.

Application May 12, 1955, Serial No. 507,897
2 Claims. (Cl. 339—45)



1. In combination, a housing having inner and outer walls, there being a pair of spaced parallel apertures in the outer wall of said housing, there being a circular opening in the outer wall of said housing positioned between said apertures, a plug including a base and a pair of spaced parallel prongs extending from said base for insertion through said apertures, a stud extending from said base and positioned between said pair of prongs, said stud being shorter than said prongs, there being a notch in the inner surface of each of said prongs, a pair of contacts extending from the inner wall of said housing and adapted to be connected to a source of electrical energy, L-shaped ribs mounted in said inner wall and connected to said contacts, a pair of spaced parallel ears extending from each of said ribs, a spring contact member extending from each pair of ears, an insulated bar pivotally connected to each pair of ears, each of said bars being provided with a cutout defining a shoulder for engagement with the notch in said prong, a body portion extending inwardly from each of said bars, there being a recess in the inner wall of said housing, coil springs seated in said recess and abutting said body portion, a finger of reduced size extending outwardly from each of said bars, there being a central recess in the inner wall of said housing, a pin having one end projecting into said last named recess, a plunger arranged on the outer end of said pin and including a cylindrical portion mounted for reciprocatory movement through the circular opening in the outer wall of said housing, a collar of increased diameter arranged at the inner end of said plunger, a coil spring circumposed on said pin and having one end abutting said collar, a pair of spaced parallel securing elements extending from said collar and secured thereto, a bracket including a sleeve surrounding said pin and engaging said securing elements, there being holders on said bracket for at times receiving said fingers.

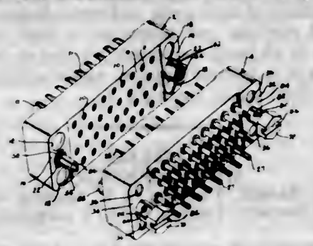
2,746,022

SEPARABLE CONNECTOR ASSEMBLY WITH ALIGNING AND SECURING MEANS

Leon Gilbert, Stamford, Conn., assignor to Continental Connector Corporation, Long Island City, N. Y., a corporation of New York

Application February 10, 1953, Serial No. 336,049
13 Claims. (Cl. 339—92)

1. A separable connector assembly comprising supports having a plurality of cooperable connector elements adapted to operatively engage when said supports are moved toward one another, one of said supports having a sleeve opening toward said other support and a pin projecting toward said other support, said sleeve and pin being spaced from one another an appreciable distance, said other support having a sleeve opening toward said one support and positioned so as to receive said first named pin therein when said connector elements are aligned, and also having a pin projecting toward said one support and positioned so as to enter said first named sleeve when said connnector elements are aligned, one



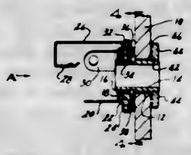
of each cooperating sleeve-pin pair being fixed to its support and the other being rotatable on its support but substantially immovable axially thereof and including means for manually rotating it, said sleeve having internally threaded portions and said pins having externally threaded portions cooperable therewith.

2,746,023

CONNECTOR JACK

Harold Tyzack, Schiller Park, Ill., assignor to Carter Parts Company, Chicago, Ill., a corporation of Illinois

Application August 26, 1954, Serial No. 452,241
5 Claims. (Cl. 339—176)



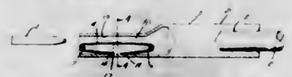
1. An electrical jack adapted for installation within an opening in a panel, said jack comprising a sleeve having a projection at one of its ends, a series of insulating members and terminal-carrying members arranged on said sleeve in alignment with said projection, a washer having a series of teeth in biting engagement with said sleeve, said washer having other teeth extending from its opposite faces for biting engagement with one of the members and aforementioned panel, and means on the opposite end of said sleeve for squeezing said washer between said one member and the aforementioned panel, thereby preventing rotation of said sleeve and terminal-carrying members.

2,746,024

SOCKETS FOR FLAT BLADE PINS

Joseph Ostrak, St. Louis, Mo., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application April 28, 1951, Serial No. 223,546
9 Claims. (Cl. 339—256)



1. In a connector, a socket element having formed in one end thereof a hole for the reception of a flat blade pin, and providing a flat surface extending along one side of said hole and forming a portion of the peripheral boundary of said hole, said socket element having extending generally longitudinally of and loosely constrained within said hole an elongated spring in spaced relation to but arched toward said flat surface and having at each end thereof a connection with said socket element

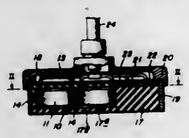
providing for relative movement upon flattening of said spring, said surface and spring closer together at their nearest points, in the absence of such a pin from said hole, than the thickness of a flat blade pin receivable in said hole and adapted to engage concurrently the flat opposite surfaces of such a pin, said spring having oppositely bent end portions and supported at both ends within said hole in all positions thereof whether or not said flat blade pin is in inserted position within said hole or said spring is flattened as aforesaid.

2,746,025
WIRE CONNECTOR
Harry E. Radack, Trenton, N. J., assignor to Circle F Mfg. Company, Trenton, N. J., a corporation of New Jersey
Application March 25, 1954, Serial No. 418,618
2 Claims. (Cl. 339—272)



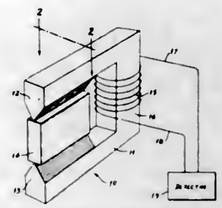
1. A solderless wire connector with a wire receiving channel open at each end and a pressure terminal, said channel having a bottom wall with an inner surface bounded on each side by upstanding walls vertically positioned above the bottom wall surface, means formed in the upper end of one of said walls pivotally mounting said pressure terminal of the connector, said pressure terminal comprising a plate mounted at one end on said vertically positioned means and being formed with a threaded opening, a screw threaded member carried by the plate in said opening having its lower end projecting into the said wire channel when said plate is swung in a horizontal plane around said vertically positioned means into a horizontal position between the said channel walls, and the upper end of the other upstanding wall opposite to said means being formed with a locking member adapted to hold the plate of the pressure terminal in horizontal position between the said channel walls and above the bottom wall surface, while the said screw threaded member is being manually adjusted in the plate, said locking means comprising a vertically positioned hook and a dog, said plate engaging behind said dog under the hook when horizontally positioned across and between said channel walls.

2,746,026
HALF WAVE ANNULAR TRANSDUCER
Leon Walton Camp, Glendale, Calif., assignor to Bendix Aviation Corporation, North Hollywood, Calif., a corporation of Delaware
Application August 14, 1953, Serial No. 374,211
6 Claims. (Cl. 340—8)



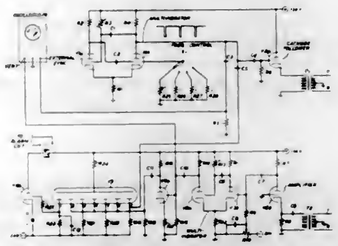
1. In a transducer for translating sound waves in a liquid body into electrical waves in an electric circuit and vice versa: a hollow, generally cylindrical, open-ended radially vibratile member of electromechanically responsive material and means electrically responsive to radial vibration of said member for electrically coupling it to said electric circuit; means, including a sound-transmitting effectively liquid medium within said member in contact with the inner surface thereof, defining a sound transmission path from said inner surface to said liquid body through one end of said member; and means of substantially less acoustic impedance than said liquid medium closing the other end of said member, said member being of axial length substantially equal to one-half wave length of sound in said liquid medium at the natural frequency of radial vibration of said member.

2,746,027
FLUX-GAP VARIATION TRANSDUCER FOR HYDROPHONES, MICROPHONES, AND ACCELEROMETERS
James J. Murray, Easthampton, Mass.
Application November 16, 1951, Serial No. 256,808
6 Claims. (Cl. 340—11)
(Granted under Title 35, U. S. Code (1952), sec. 266)



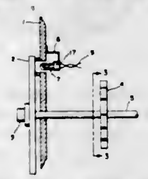
4. In an electro-mechanical transducer, the combination comprising a magnetic circuit including a magnet, a gap in said magnetic circuit defining a pair of opposed magnetic poles, a pressure responsive flux-varying element in said gap and comprising a suspension of finely divided magnetic particles dispersed in a suspending medium, and electric means coupled to said magnet of said magnetic circuit remote from said gap and responsive to flux changes therein to detect pressure changes in said flux-varying element.

2,746,028
AIR RAID WARNING SYSTEM
Albert E. Bachelet, New York, and James S. Bomba, Manhasset, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application August 5, 1952, Serial No. 302,645
7 Claims. (Cl. 340—147)



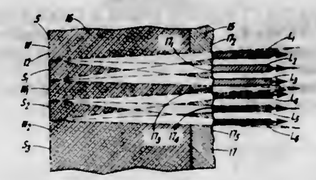
7. In a signaling system having a normal condition and a plurality of selective alarm conditions, a control center, a plurality of receiving stations all of which are connected with said control center by a plurality of transmission paths, each of said receiving stations being a different distance from said control center, means including a pulse generator at said control center for transmitting pulse signals at a predetermined repetition rate representing a normal condition of said system over a first transmission path to all of said receiving stations during the normal condition of said system, means at each receiving station for retransmitting said received normal condition pulse signals to said control center over a second transmission path whereby the retransmitted signals from the receiving stations are received by the control center at different instances of time depending upon the distance between the control center and each receiving station, means including said pulse generator at said control center for selectively transmitting different alarm condition pulse signals over said first transmission path to all of said receiving stations during an alarm condition at said control center, each of said different alarm signals comprising a series of pulses of a repetition rate individual to itself, a plurality of alarm devices including a plurality of band pass filters and a plurality of rectifier networks at each of said receiving stations with each one of said alarm devices having operatively associated therewith an individual one of said band pass filters and an individual one of said rectifier networks, each of said filters being designed to pass an individual one of said alarm signals that may be transmitted by said control center, means at each of said receiving stations to energize each one of said alarm devices upon receipt of its related alarm signal thereat as transmitted from said control center through the band pass filter and rectifier network associated with said alarm device, a plurality of switching means at each receiving station with each of said switching means being operatively associated with an individual one of said alarm devices, circuit means at each receiving station whereby the operation of a switching means deenergizes its related alarm device and causes said currently received alarm signal to be retransmitted to said control center over said second transmission path whereby the retransmitted alarm signals from the receiving stations are received by the control center at different instances of time depending upon the distance between the control center and each receiving station, and means at said control center responsive both to said retransmitted normal condition pulse signals and to said retransmitted alarm signal applied to said second transmission path to confirm the reception of said received signals at all of said receiving stations, a pulse counting circuit at said control center operable by the receipt at said control center of the retransmitted received pulse from each receiving station so that said pulse counting circuit normally advances to a count equal to the number of receiving stations for every pulse transmitted from said control center, alarm means at said control center operable when said pulse counting circuit fails to advance to its normal count for a predetermined length of time, said alarm being indicative of the fact that all of said receiving stations are not retransmitting said received signals over said second transmission path to said control center.

2,746,029
SELF-EXTINGUISHING DIAL LIGHT FOR TV TUNER
Charles E. Pfund, Timonium, Md., assignor to Bendix Aviation Corporation, Towson, Md., a corporation of Delaware
Application July 24, 1953, Serial No. 370,136
3 Claims. (Cl. 340—282)



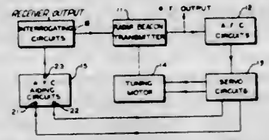
1. A system for the temporary illumination of the channel selecting dial of a television receiver; said system comprising, a lamp positioned to illuminate the indication of said dial which identifies the channel selected thereby, said lamp being normally extinguished, and means for energizing said lamp when said dial is rotated for the selection of a new channel, said means comprising, an energizing circuit for said lamp, an energy source in said circuit, a switch in said circuit, a cam actuated by the rotation of said dial, a cam follower actuated by said cam, said cam follower being positioned to operate said switch, and being so positioned that said switch is normally in its open position, thus interrupting said circuit, means actuated by the rotation of said dial to close said switch only during the rotation of said dial between positions corresponding to the selection of television channels, and an energy storage means in said circuit, said storage means being charged on the closing of said switch and discharging through said lamp upon the opening of said switch.

2,746,030
IMAGE REPRODUCING DEVICE LENS STRUCTURE
Ray Schrecongost, Kenmore, N. Y., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts
Application October 30, 1952, Serial No. 317,694
7 Claims. (Cl. 340—369)



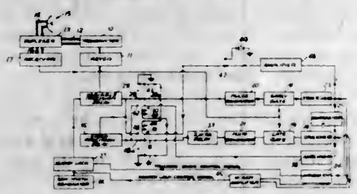
1. A lens structure for a television image reproducing device, which has a surface providing a raster of substantially parallel line traces of which alternate lines are illuminated and intervening lines are dark, comprising a member having a lenticular surface which in use is adapted to be positioned in spaced relation to said first-mentioned surface and is formed of substantially contiguous elongated lens elements each positioned for use substantially parallel to one of said line traces and having the same type of lens cross-sectional configuration along its length.

2,746,031
AUTOMATIC FREQUENCY CONTROL AID
Frank P. Zaffarano, Lakewood, Ohio, assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application February 11, 1946, Serial No. 646,918
9 Claims. (Cl. 343—6.8)



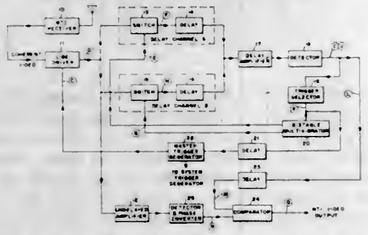
1. In combination with an automatic frequency control system for an intermittently pulsed transmitter, said system controlling the frequency of said transmitter only when said transmitter is pulsed, a frequency control aiding system comprising a trigger generating circuit having a variable frequency, said trigger generating circuit cooperating with said automatic frequency control system and applying energizing pulses to said transmitter when said transmitter is not at correct frequency and when transmitter operation is required.

2,746,032
TRACKING CONTROL SYSTEM
John Fitzallen Moore, Arlington, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application November 3, 1950, Serial No. 193,837
9 Claims. (Cl. 343—7.3)



1. A control system comprising a source of time-position signals, means for producing a signal-time reference, means for sampling signals from said source comprising a plurality of gates spaced a substantial time position apart, and means for moving said gates variable with respect to said signal-time reference and to substantially the same time position upon passage of a signal by said gates.

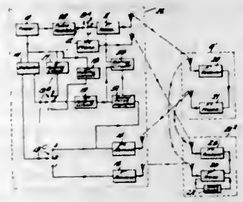
2,746,033
MOVING TARGET INDICATION SYSTEM
John F. Bachmann, Baltimore, Md., assignor to Bendix Aviation Corporation, Towson, Md., a corporation of Delaware
Application December 13, 1950, Serial No. 200,635
8 Claims. (Cl. 343—7.7)



8. In a radio pulse echo system in which pulses of radiant energy reflected from targets are beat with a reference signal synchronized with the transmitted signal to provide a video output in which responses from moving targets vary in amplitude from pulse to pulse while responses from fixed targets remain constant in amplitude from pulse to pulse, each of said responses of said video output being then delayed by a pulse interval and compared with the corresponding undelayed response next following, means to prevent the occurrence of a relationship between the radial component of the speed of a target with respect to said system and the pulse repetition frequency of said system such that said target moves radially between illuminations by successive pulses a distance which is an integral multiple of a half wave length of the frequency of the energy of the transmitted signal, said means comprising means alternating the pulse repetition frequency of the transmitted pulses of said system between two values and means correspondingly varying the delay applied to said video output in synchronism with said alternation of the values of said pulse repetition frequency.

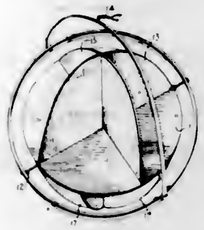
2,746,034
POSITIONING DETERMINING SYSTEM
Arthur F. Hasbrook, Bexar County, Tex., assignor to Olive S. Petty, San Antonio, Tex.
Application June 1, 1951, Serial No. 229,362
6 Claims. (Cl. 343—15)

1. A system for measuring at a base point the distance between two remote points comprising, in combination, a master station located at said base point and a repeater station located at each of said remote points; each station including a transmitter and a receiver, means at each of said repeater stations connecting the transmitter and receiver to effect reradiation by the transmitter of signals arriving at the receiver; the transmitter at said master station, the receiver at the first of said repeater stations, and the transmitter at the second of said repeater stations being tuned to a first frequency; the receiver at said master station, the transmitter at the first of said repeater stations and the receiver at the second of said repeater stations being tuned to a second frequency; whereby signals transmitted from said master station are initially received only at the first of said repeater stations, signals reradiated from the second of said repeater



stations are initially received only at the first of said repeater stations, and signals reradiated from the first of said repeater stations are received at both said master station and the second of said repeater stations; so that signals transmitted from said master station are returned directly to said master station from the first of said repeater stations, and are concurrently reradiated to the second of said repeater stations, returned to the first of said repeater stations and thence to said master station; and means at said master station for measuring the lapsed time between the arrival at said master station of signals returned directly from the first of said repeater stations and of signals returned from the second of said repeater stations through the first of said repeater stations to said master station.

2,746,035
RADAR REFLECTOR
Virginia T. Norwood, Red Bank, N. J., assignor to the United States of America as represented by the Secretary of the Army
Application June 4, 1951, Serial No. 229,858
6 Claims. (Cl. 343—18)
(Granted under Title 35, U. S. Code (1952), sec. 266)



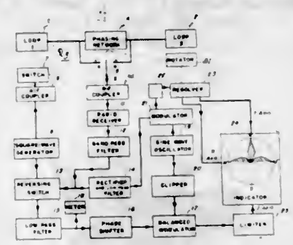
1. A corner reflector for radiant energy comprising two sets of trihedral angles back-to-back, each set comprising four right trihedral angles about a common axis of intersection, one set being angularly askew about the common axis relative to the other of said sets and means operably associated with said reflector to permit said reflector to rotate freely.

2,746,036
DEVICE FOR COUPLING BETWEEN FREE SPACE AND AN ELECTRON STREAM
Laurence R. Walker, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application March 25, 1952, Serial No. 278,322
18 Claims. (Cl. 343—100)



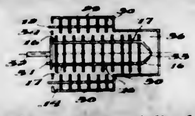
16. In a microwave device, a conductive base member, a slotted waveguiding member positioned opposite said base member, means forming and projecting an electron stream intermediate said base and waveguiding member, the slot in said waveguiding member being parallel to the direction of flow of the electron stream and transverse to the direction of current flow induced in the waveguiding member by waves propagating therealong, a linear array of wire elements each approximately an integral number of half wavelengths long extending between said base and waveguiding members in coupling relation with the electron stream, successive wire elements being connected to said waveguiding member on opposite sides of the slot therein, and an apertured conductive plate positioned opposite said waveguiding member on the side remote from said base member.

2,746,037
SPACED LOOP DIRECTION FINDER
Robert E. McCoy, Los Angeles, Calif., assignor to the United States of America as represented by the Secretary of the Army
Application May 28, 1952, Serial No. 290,615
14 Claims. (Cl. 343—118)
(Granted under Title 35, U. S. Code (1952), sec. 266)



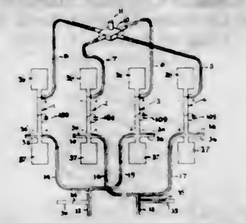
1. A radio signal direction finder comprising a rotatably mounted spaced loop antenna array, means for rotating said array, said array including a pair of loop antennas in spaced apart parallel relation, said loops differentially coupled so that the voltage generated in each of said antennas are in opposition, a phase shifting network, a switching device operating at a predetermined frequency for connecting said network alternately in the output circuits of said loop antennas for shifting the relative phase angle of the antenna voltage affected by said network, means for combining said voltages into two resultant voltages, whereby said resultant voltages are of equal amplitude at two positions of said antenna array, means for demodulating said voltages, means for rectifying said demodulated voltages in accordance with the frequency and phase of said switching frequency, an indicator, said indicator responsive to said last mentioned voltage.

2,746,038
RADIO GONIOMETER
Carl-Erik Granqvist, Lidingo, Sweden, assignor to Svenska Aktiebolaget Gasaccumulator, Lidingo, Sweden, a corporation of Sweden
Application November 19, 1951, Serial No. 257,137
11 Claims. (Cl. 343—124)



1. A radio goniometer, especially for short-wave purposes, comprising, a plurality of electrical oscillation lines in the form of straight conductors, mutually parallel and in mutual inductive coupling, one portion of these electrical oscillation lines being stationary to form part of a stator, the remaining portion of the oscillation lines being rotatably mounted to form part of a rotor, the high voltage terminals of said stationary lines being located at one end of said stationary lines, and the high voltage terminals of said rotatably mounted lines being located at the opposite end of said rotatably mounted lines.

2,746,039
ANTENNA
Robert M. Sprague, Waban, Mass., assignor to Andrew Alford, Boston, Mass.
Application April 28, 1952, Serial No. 284,680
14 Claims. (Cl. 343—767)



1. An electromagnetic wave radiator comprising a conductive shell having a longitudinal axis with a plurality of slots parallel to said axis in the surface of the shell, means for feeding said slots with high frequency electric waves comprising a feeder to supply potentials in the same phase to each slot and feeders to supply opposing phases to pairs of slots, and means connected near the ends of the slots for effectively shortening the lengths of the slots for the feeders to the pairs in phase opposition without affecting the effective length of the slot for the feeder supplying the slots in the same phase.

2,746,040
ANNULAR ELEMENT ANTENNA SYSTEMS
Charles Andrew Martin, Setauket, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application May 20, 1950, Serial No. 163,313
22 Claims. (Cl. 343—830)



1. An antenna system for use with a given ground plane element including a conductive surface element of substantially annular configuration having inner and outer boundaries, the surface of said element being arranged substantially parallel to said ground plane element, and means to couple radio frequency apparatus between said ground plane element and said annular conductive surface element at the inner boundary only.

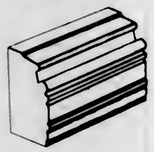
DESIGNS

MAY 15, 1956

177,657
TABLE
Harry A. Bedol, Cleveland Heights, Ohio
Application August 26, 1955, Serial No. 37,680
Term of patent 14 years
(Cl. D33—14)



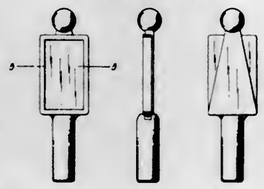
177,658
BASEBOARD REGISTER
Gordon Bennett, West Hartford, Conn., assignor to The Vulcan Radiator Company, Hartford, Conn.
Application December 17, 1954, Serial No. 33,594
Term of patent 14 years
(Cl. D81—21)



177,659
COMBINED PENCIL HOLDER AND ADVERTISING DEVICE OR THE LIKE
Matthew B. Blish, Oak Park, Ill.
Application April 29, 1953, Serial No. 24,766
Term of patent 3½ years
(Cl. D74—1)



177,660
COMBINED PENCIL HOLDER AND ADVERTISING DEVICE OR THE LIKE
Matthew B. Blish, Oak Park, Ill.
Application June 1, 1953, Serial No. 25,257
Term of patent 3½ years
(Cl. D74—1)



177,661
BUCKLE
Milton Brock, Great Neck, N. Y.
Application May 5, 1955, Serial No. 35,816
Term of patent 7 years
(Cl. D17—1)



177,662
BUCKLE
Milton Brock, Great Neck, N. Y.
Application May 5, 1955, Serial No. 35,817
Term of patent 7 years
(Cl. D17—1)



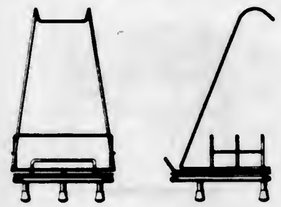
177,663
VEHICLE SEAT OF THE ADJUSTABLE TYPE
Orville S. Caesar, Barrington, Ill.
Application August 31, 1954, Serial No. 32,095
Term of patent 14 years
(Cl. D15—8)



177,664
RING-APPLYING TOOL FOR TREE LIMB SUPPORTS
Louis P. Caldwell, Independence, and Preston C. Caldwell, Kansas City, Mo.
Application November 15, 1954, Serial No. 33,103
Term of patent 3½ years
(Cl. D54—13)



177,665
LAZY SUSAN RACK STAND FOR SUPPORTING PACKS OF PLAYING CARDS AND A SCORE PAD
Jerome G. Caplan, Fairfield, Conn.
Application January 13, 1956, Serial No. 39,741
Term of patent 3½ years
(Cl. D34—13)



177,666
CLOCK
Ellworth R. Danz, La Salle, Ill., assignor to General Time Corporation, New York, N. Y., a corporation of Delaware
Application September 7, 1955, Serial No. 37,834
Term of patent 14 years
(Cl. D42—7)



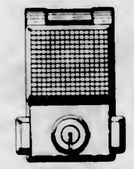
177,667
LADY'S SHOE
Nici D'Or, New York, N. Y.
Application September 9, 1955, Serial No. 37,864
Term of patent 14 years
(Cl. D7—7)



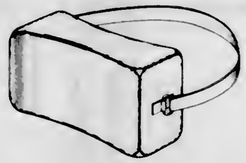
177,668
DESK AND SEAT COMBINATION
Robert M. Fossos, Seattle, Wash.
Application April 7, 1955, Serial No. 35,397
Term of patent 7 years
(Cl. D33—7)



177,669
LOCKABLE CATCH FOR LUGGAGE CASES OR THE LIKE
Charles S. Gehrie, Montclair, N. J., assignor to Baltimore Luggage Company, Baltimore, Md., a corporation of Maryland
Application December 7, 1955, Serial No. 39,200
Term of patent 14 years
(Cl. D50—7)



177,670
FLOAT
Andrew Glavas, Milwaukee, Wis.
Application April 1, 1950, Serial No. 8,927
Term of patent 14 years
(Cl. D71—1)



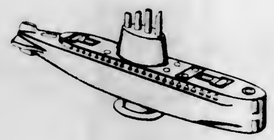
177,671
HANDBAG
James G. Hammond, New York, N. Y.
Application June 10, 1955, Serial No. 36,447
Term of patent 7 years
(Cl. D87—3)



177,672
STEAK KNIFE
Irving Harper, New York, N. Y., assignor to Chas. D. Briddell, Inc., Crisfield, Md., a corporation of Maryland
Application August 1, 1955, Serial No. 37,244
Term of patent 14 years
(Cl. D22—3)



177,673
TOY SUBMARINE
Henry Hirsch and Benjamin L. Hirsch, Toledo, Ohio, assignors to Kellogg Company, Battle Creek, Mich., a corporation of Delaware
Application February 17, 1955, Serial No. 34,550
Term of patent 14 years
(Cl. D34—15)



177,674
CLAMP AMMETER
Paul P. Huber, Hillside, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a corporation of New Jersey
Application November 18, 1954, Serial No. 33,157
Term of patent 14 years
(Cl. D26—1)



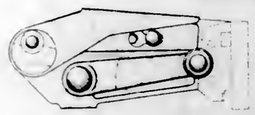
177,675
SHOWER HEAD
Julius Hurwitz, Bayside, N. Y.
Application January 9, 1956, Serial No. 39,661
Term of patent 14 years
(Cl. D91—3)



177,676
FAUCET NOZZLE
Julius Hurwitz, Bayside, N. Y.
Application January 9, 1956, Serial No. 39,666
Term of patent 14 years
(Cl. D91—3)



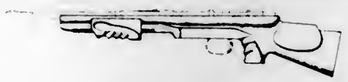
177,677
CAN OPENER
James L. Hvale, Chicago, Ill., assignor to Ekco Products Company, Chicago, Ill., a corporation of Illinois
Application June 13, 1955, Serial No. 36,478
Term of patent 14 years
(Cl. D22—2)



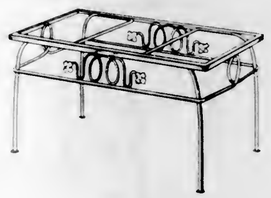
177,678
TABLE
Peter Hvidt and Orla Mölgaard Nielsen, Copenhagen, Denmark, assignors to John Stuart Inc., New York, N. Y., a corporation of New York
Application June 17, 1953, Serial No. 25,546
Term of patent 14 years
(Cl. D33—14)



177,679
GUN
Jessie T. Ivy, Seattle, Wash.
Application October 24, 1955, Serial No. 38,534
Term of patent 14 years
(Cl. D30—1)



177,680
TABLE FRAME
James E. Jones, Toledo, Ohio, assignor to The Hettrick Manufacturing Company, Toledo, Ohio, a corporation of Ohio
Application May 18, 1955, Serial No. 36,065
Term of patent 14 years
(Cl. D33—14)



177,681
TABLE FRAME
James E. Jones, Toledo, Ohio, assignor to The Hettrick Manufacturing Company, Toledo, Ohio, a corporation of Ohio
Application May 18, 1955, Serial No. 36,066
Term of patent 14 years
(Cl. D33—14)



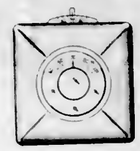
177,682
COMBINED COMB AND BRUSH OR SIMILAR ARTICLE
Lester R. Kahn, Jersey City, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application November 23, 1954, Serial No. 33,200
Term of patent 7 years
(Cl. D86—8)



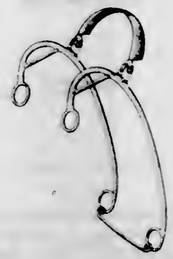
177,683
AUTOMOBILE WHEEL COVER
Henry T. King and Edwin S. Getner, Detroit, Mich., assignors to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application July 22, 1954, Serial No. 31,536
Term of patent 7 years
(Cl. D14—30)



177,684
THERMOSTAT HOUSING
Homer E. Malone, Milwaukee, Wis., assignor, by mesne assignments, to General Controls Co., a corporation of California
Application March 10, 1954, Serial No. 29,448
Term of patent 14 years
(Cl. D52—7)



177,685
BRIDLE BIT
Walter C. Martin, Phoenix, Ariz., assignor of fifty per cent to Johnny Shumaker, Phoenix, Ariz.
Application December 9, 1954, Serial No. 33,467
Term of patent 14 years
(Cl. D38—2)



177,686
BICYCLE
Bernard Mennesson, Neuilly-sur-Seine, France, assignor to Societe d'Appareils de Controle et d'Equipement des Moteurs, S. A. C. E. M., Neuilly-sur-Seine, France, a French society
Application July 15, 1955, Serial No. 36,988
Claims priority, application France February 18, 1955
Term of patent 14 years
(Cl. D90—8)



177,687
AUTOMATIC FIRE DETECTOR
Willard C. Messick, Summit, N. J.
Application September 26, 1955, Serial No. 38,086
Term of patent 14 years
(Cl. D16—2)



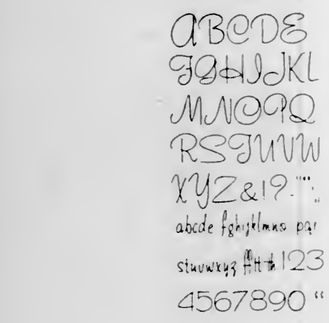
177,688
TABLE ORNAMENT OR SIMILAR ARTICLE
Andrew A. Mina, Point Pleasant, N. J.
Application November 30, 1954, Serial No. 33,333
Term of patent 7 years
(Cl. D29—28)



177,689
SPOON OR SIMILAR ARTICLE
Felix A. Mirando, Jr., Providence, R. I., assignor to Imperial Knife Company, Inc., New York, N. Y., a corporation of Rhode Island
Application November 15, 1955, Serial No. 38,901
Term of patent 14 years
(Cl. D54—12)



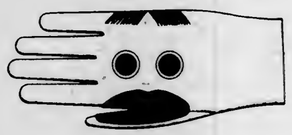
177,690
FONT OF PRINTING TYPE
Ray F. Morgan, Northfield, Ill.
Application November 17, 1955, Serial No. 38,935
Term of patent 14 years
(Cl. D64—12)



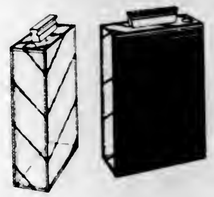
177,691
TOY WATER PISTOL OR SIMILAR ARTICLE
Clair Omar Musser, Studio City, Calif., assignor to Knickerbocker Plastic Company, Inc., North Hollywood, Calif., a corporation of California
Application November 7, 1955, Serial No. 38,780
Term of patent 14 years
(Cl. D34—15)



177,692
NOVELTY GLOVE
Joan O'Brien, Los Angeles, Calif.
Application September 19, 1955, Serial No. 37,994
Term of patent 14 years
(Cl. D3—11)



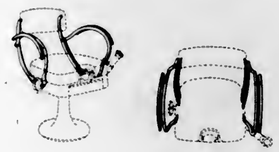
177,693
BOX
Joy Pampinella, Los Angeles, Calif.
Application August 5, 1954, Serial No. 31,745
Term of patent 14 years
(Cl. D58—12.6)



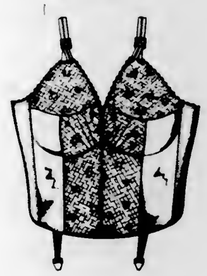
177,694
HAMMER HANDLE
Fayette R. Plumb II and Harry G. Hetzel, Philadelphia, Pa., assignors to Fayette R. Plumb Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application December 13, 1954, Serial No. 33,510
Term of patent 14 years
(Cl. D93—4)



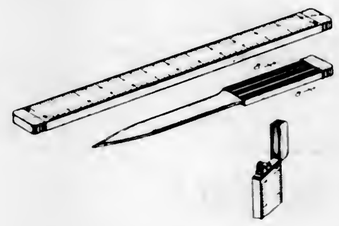
177,695
FISHING CHAIR
Frank H. Richterkessing, Louisville, Ky.
Application January 11, 1954, Serial No. 28,480
Term of patent 14 years
(Cl. D15—1)



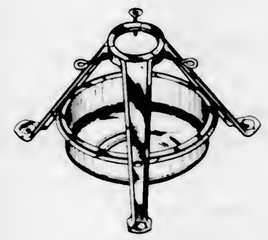
177,696
BRASSIERE
William Rosenthal, Bayville, N. Y.
Application July 22, 1955, Serial No. 37,099
Term of patent 14 years
(Cl. D20—4)



177,697
COMBINATION DESK SET AND PAPER WEIGHT, COMPRISING A RULER, LETTER OPENER, AND CIGARETTE LIGHTER
Arthur Salm, Chicago, Ill., and Willi Spitzer, Solingen, West Germany, assignors to Arthur Salm Inc., Chicago, Ill., a corporation of Illinois
Application March 17, 1955, Serial No. 35,086
Term of patent 14 years
(Cl. D52—1)



177,698
CHRISTMAS TREE HOLDER
Joseph E. Scanland, Des Moines, Iowa, assignor to New Monarch Machine and Stamping Co., Des Moines, Iowa, a corporation of Iowa
Application January 4, 1954, Serial No. 28,356
Term of patent 14 years
(Cl. D35—3)



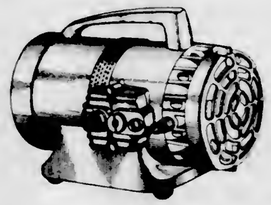
177,699
HOUSING FOR SCIENTIFIC INSTRUMENTS
Harold R. Schultz, Anaheim, Calif., assignor to Beckman Instruments, Inc., Fullerton, Calif., a corporation
Application October 4, 1954, Serial No. 32,524
Term of patent 14 years
(Cl. D26—5)



177,700
DOOR HANDLE ESCUTCHEON PLATE
Jacques Stanitz, Warren, Ohio, assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation, New York, N. Y., a corporation of Delaware
Application June 11, 1953, Serial No. 25,456
Term of patent 14 years
(Cl. D50—6)



177,701
ELECTRIC AIR COMPRESSOR
Robert E. Sykes, Evanston, Ill., assignor to Bell & Gossett Company, Morton Grove, Ill., a corporation of Illinois
Application December 8, 1954, Serial No. 33,451
Term of patent 14 years
(Cl. D65—1)



177,702
WASTE RECEPTACLE
Wesley A. Weber and Moises B. Lorenzana, Chicago, Ill., assignors, by mesne assignments, to John Wood Company, New York, N. Y., a corporation of Delaware
Application August 2, 1954, Serial No. 31,684
Term of patent 14 years
(Cl. D58—17)



177,703
RECIPE HOLDER STAND
George White and Minnie White, Los Angeles, Calif.
Application August 30, 1955, Serial No. 37,717
Term of patent 14 years
(Cl. D44—29)



LIST OF REISSUE PATENTEES

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Chicago Rubber Co., Inc. : *See*—
Cosmos, William J. Re. 24,152.

Cosmos, William J., to Chicago Rubber Co., Inc. Contact wheel. Re. 24,152, 5–15–56, Cl. 51—141.

Delruelle, Andre, deceased, by M. C. H. V. Delruelle, legal representative, to Panmetals and Processes Inc. Continuous horizontal rotary filter of the tilting cell type. Re. 24,150, 5–15–56, Cl. 210—202.5.

Delruelle, Martha C. H. V. : *See*—
Delruelle, Andre. Re. 24,150.

International Harvester Co. : *See*—
Prosser, Clinton D. Re. 24,151.

Lockwood, Lawrence W. Fishing reel drive. Re. 24,153, 5–15–56, Cl. 74—750.

Panmetals and Processes Inc. : *See*—
Delruelle, Andre. Re. 24,150.

Prosser, Clinton D., to International Harvester Co. Wagon elevator throwout clutch for agricultural implements. Re. 24,151, 5–15–56, Cl. 56—15.

Thumin, Carl. Time delay circuit breaker. Re. 24,149, 5–15–56, Cl. 200—108.

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Baltimore Luggage Co. : *See*—
Gehrie, Charles S. 177,669.

Beckman Instruments, Inc. : *See*—
Schultz, Harold R. 177,699.

Bedol, Harry A. Table. 177,657, 5–15–56, Cl. D33—14.

Bell & Gossett Co. : *See*—
Sykes, Robert E. 177,701.

Bennett, Gordon, to The Vulcan Radiator Co. Baseboard register. 177,658, 5–15–56, Cl. D61—21.

Blish, Matthew B. Combined pencil holder and advertising device or the like. 177,659, 5–15–56, Cl. D74—1.

Blish, Matthew B. Combined pencil holder and advertising device or the like. 177,660, 5–15–56, Cl. D74—1.

Briddell, Chas. D., Inc. : *See*—
Harper, Irving. 177,672.

Brock, Milton. Buckle. 177,661, 5–15–56, Cl. D17—1.

Brock, Milton. Buckle. 177,662, 5–15–56, Cl. D17—1.

Caesar, Orville S. Vehicle seat of the adjustable type. 177,663, 5–15–56, Cl. D15—8.

Caldwell, Louis P. and P. C. Ring-applying tool for tree limb supports. 177,664, 5–15–56, Cl. D54—13.

Caldwell, Preston C. : *See*—
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Caplan, Jerome G. Lazy Susan rack stand for supporting packs of playing cards and a score pad. 177,665, 5–15–56, Cl. D34—13.

Chrysler Corp. : *See*—
King, Henry T., and Getner. 177,683.

Dans, Ellworth R., to General Time Corp. Clock. 177,666, 5–15–56, Cl. D42—7.

D'Or, Nici. Lady's shoe. 177,667, 5–15–56, Cl. D7—7.

Du Pont, E. I., de Nemours and Co. : *See*—
Kahn, Lester R. 177,682.

Ekco Products Co. : *See*—
Hvale, James L. 177,677.

Fossos, Robert M. Desk and seat combination. 177,668, 5–15–56, Cl. D33—7.

Gehrie, Charles S., to Baltimore Luggage Co. Lockable catch for luggage cases or the like. 177,669, 5–15–56, Cl. D50—7.

General Controls Co. : *See*—
Malone, Homer E. 177,684.

General Time Corp. : *See*—
Dans, Ellworth R. 177,666.

Getner, Edwin S. : *See*—
King, Henry T., and Getner. 177,683.

Glavas, Andrew. Float. 177,670, 5–15–56, Cl. D71—1.

Hammond, James G. Handbag. 177,671, 5–15–56, Cl. D87—3.

Harper, Irving, to Chas. D. Briddell, Inc. Steak knife. 177,672, 5–15–56, Cl. D22—3.

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Jones, James E. 177,681.

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Hirsch, Henry and B. L., to Kellogg Co. Toy submarine. 177,673, 5–15–56, Cl. D34—15.

Huber, Paul P., to Weston Electrical Instrument Corp. Clamp ammeter. 177,674, 5–15–56, Cl. D26—1.

Hurwitz, Julius. Shower head. 177,675, 5–15–56, Cl. D91—3.

Hurwitz, Julius. Faucet nozzle. 177,676, 5–15–56, Cl. D91—3.

Hvale, James L., to Ekco Products Co. Can opener. 177,677, 5–15–56, Cl. D22—2.

Hvidt, Peter, and O. M. Nielsen, to John Stuart Inc. Table. 177,678, 5–15–56, Cl. D33—14.

Imperial Knife Co., Inc. : *See*—
Mirando, Felix A., Jr. 177,689.

Ivy, Jessie T. Gun. 177,679, 5–15–56, Cl. D30—1.

Jones, James E., to The Hettrick Mfg. Co. Table frame. 177,680, 5–15–56, Cl. D33—14.

Jones, James E., to The Hettrick Mfg. Co. Table frame. 177,681, 5–15–56, Cl. D33—14.

Kahn, Lester R., to E. I. du Pont de Nemours and Co. Combined comb and brush or similar article. 177,682, 5–15–56, Cl. D86—8.

Kellogg Co. : *See*—
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King, Henry T., and E. S. Getner, to Chrysler Corp. Automobile wheel cover. 177,683, 5–15–56, Cl. D14—30.

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Lorenzana, Moises B. : *See*—
Weber, Wesley A., and Lorenzana. 177,702.

Malone, Homer E., to General Controls Co. Thermostat housing. 177,684, 5–15–56, Cl. D52—7.

Martin, Walter C., 50% to J. Shumaker. Bridle bit. 177,685, 5–15–56, Cl. D38—2.

Mennesson, Bernard, to Societe d'Apparells de Controle et d'Equipement des Moteurs, S. A. C. E. M. Bicycle. 177,686, 5–15–56, Cl. D90—8.

Messick, Willard C. Automatic fire detector. 177,687, 5–15–56, Cl. D16—2.

Mina, Andrew A. Table ornament or similar article. 177,688, 5–15–56, Cl. D29—28.

Mirando, Felix A., Jr., to Imperial Knife Co., Inc. Spoon or similar article. 177,689, 5–15–56, Cl. D54—12.

Morgan, Ray F. Font of printing type. 177,690, 5–15–56, Cl. D64—12.

Musser, Clair O., to Knickerbocker Plastics Co., Inc. Toy water pistol or similar article. 177,691, 5–15–56, Cl. D34—15.

Nielsen, Orla M. : *See*—
Hvidt, Peter, and Nielsen. 177,678.

New Monarch Machine and Stamping Co. : *See*—
Scanland, Joseph E. 177,698.

O'Brien, Joan. Novelty glove. 177,692, 5–15–56, Cl. D3—11.

Pampinella, Joy. Box. 177,693, 5–15–56, Cl. D58—12.6.

Plumb, Fayette R., II, and H. G. Hetzel, to Fayette R. Plumb Inc. Hammer handle. 177,694, 5–15–56, Cl. D93—4.

Plumb, Fayette R., Inc. : *See*—
Plumb, Fayette R., II, and Hetzel. 177,694.

Richterkessing, Frank H. Fishing chair. 177,695, 5–15–56, Cl. D15—1.

Rosenthal, William. Brassiere. 177,696, 5–15–56, Cl. D20—4.

Salm, Arthur, and W. Spitzer, to Arthur Salm Inc. Combination desk set and paper weight, comprising a ruler, letter opener, and cigarette lighter. 177,697, 5–15–56, Cl. D52—1.

Salm, Arthur, Inc. : *See*—
Salm, Arthur, and Spitzer. 177,697.

Scanland, Joseph E., to New Monarch Machine and Stamping Co. Christmas tree holder. 177,698, 5–15–56, Cl. D35—3.

Schultz, Harold R., to Beckman Instruments, Inc. Housing for scientific instruments. 177,699, 5–15–56, Cl. D26—5.

Shumaker, Johnny : *See*—
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Spitzer, Willi : *See*—
Salm, Arthur, and Spitzer. 177,697.

Stanitz, Jacques, to American Radiator & Standard Sanitary Corp. Door handle escutcheon plate. 177,700, 5–15–56, Cl. D50—6.

Stuart, John, Inc. : *See*—
Hvidt, Peter, and Nielsen. 177,678.

Sykes, Robert E., to Bell & Gossett Co. Electric air compressor. 177,701, 5–15–56, Cl. D65—1.

Vulcan Radiator Co., The : *See*—
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Weber, Wesley A., and M. B. Lorenzana, to John Wood Co. Waste receptacle. 177,702, 5–15–56, Cl. D58—17.

Weston Electrical Instrument Corp. : *See*—
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White, George and M. Recipe holder stand. 177,703, 5–15–56, Cl. D44—29.

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Wood, John, Co. : *See*—
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PATENTS WERE ISSUED ON THE 15TH DAY OF MAY, 1956

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Abt, Clifford F.: *See*—
Miner, Richard Y., Evans, and Abt. 2,745,600.
Miner, Richard Y., Evans, and Abt. 2,745,995.

Achenbach, John F., and V. C. Jones. Implement hitch with vertical pivot and spaced horizontal guide for agricultural tractor. 2,745,680, 5–15–56, Cl. 280—499.

Adler, Herman G., to Novi Equipment Co. Centrifugal governor with hydraulic booster. 2,745,384, 5–15–56, Cl. 121—43.

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Aitchison, Robert B., and S. B. Kirk, to Union Carbide and Carbon Corp. Method of charging holes with explosives. 2,745,346, 5–15–56, Cl. 102—23.

Akkanen, John E. Fishing lure. 2,745,207, 5–15–56, Cl. 43—42.47.

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Aldridge, Clarence F.: *See*—
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Alfandre, Harry, and A. D. Ianucci, said Ianucci to said Alfandre. Apparatus for stacking flat parts. 2,745,232, 5–15–56, Cl. 53—126.

Alford, Andrew: *See*—
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Alice Jewelry Co.: *See*—
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Gilbert, Everett E., and Otto. 2,745,862.

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Buhr, August G. 2,745,329.
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Thompson, Ivan P., Allmang, and Weidner. 2,745,475.

Alozery, Nicholas J. G., and W. P. Given, to The M. W. Kellogg Co. Combination cracking process. 2,745,794, 5–15–56, Cl. 196—49.

Alran, Louis: *See*—
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Alsberg, Dietrich A., to Bell Telephone Laboratories, Inc. Method of and means for measuring impedance and related quantities. 2,746,015, 5–15–56, Cl. 324—58.

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Miner, Richard Y., Evans, and Abt. 2,745,995.

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American Motors Corp.: *See*—
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Peter, Bud J. 2,745,761.

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Andre, Allen R. Cigarette extinguisher: 2,745,415, 5–15–56 Cl. 131—256.

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Anthony, Charles, Jr., and R. Thomann, Jr., to Specialties Development Corp. Liquid fire extinguishing composition. 2,745,806 5–15–56, Cl. 252—2.

Anthony, Charles, Jr., and R. Thomann, Jr., to Specialties Development Corp. Liquid fire extinguishing composition. 2,745,807, 5–15–56, Cl. 252—2.

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Arenco Aktiebolag: *See*—
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Arens, Cecil F., and S. I. MacDuff, to Bendix Aviation Corp. Liquid fuel supply system with auxiliary reserve supply. 2,745,478, 5–15–56, Cl. 158—46.5.

Argentieri, Peter A., to Connor Engineering Corp. Noise reduction service. 2,745,509, 5–15–56, Cl. 181—42.

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Atkinson, Herbert J. Liquid treatment apparatus. 2,745,550, 5–15–56, Cl. 210—36.

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Auerbacher, George N., and L. H. Haskin, Jr., to Champlain Co., Inc. Automatic butt splicer. 2,745,464, 5–15–56, Cl. 154—42.3.

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Aupoix, Marcel, and E. Droche, to Hartford National Bank and Trust Co., as trustee. Electron gun, particularly for cathode ray tubes. 2,745,979, 5–15–56, Cl. 313—82.

Automotive & Marine Products Corp.: *See*—
Harvey, Draper M. 2,745,396.

Auwärter, Max, to A. Vogt. Device for the cleaning of sight glasses allowing inspection of high vacuum rooms. 2,745,131, 5–15–56, Cl. 15—255.

Auwärter, Max, to Dr. A. Vogt. Process and apparatus for treating by vapour deposition a plurality of articles introduced at several levels, while maintaining the same vacuum. 2,745,767, 5–15–56, Cl. 117—38.

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Axel Bros., Inc.: *See*—
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Grafstein, Peter. 2,745,266.

Ayres, Sarah A. Pie crust package and method of making same. 2,745,753, 5–15–56, Cl. 99—172.

Bachelet, Albert E., and J. S. Bomba, to Bell Telephone Laboratories, Inc. Air raid warning system. 2,746,028, 5–15–56, Cl. 340—147.

Bachman, Fred E., to American Steel Foundries. Brake rotor. 2,745,518, 5–15–56, Cl. 188—218.

Bachmann, John F., to Bendix Aviation Corp. Moving target indication system. 2,746,033, 5–15–56, Cl. 343—7.7.

Bailey, Donald L., to Union Carbide and Carbon Corp. Disproportionation of alkoxydisilyl hydrocarbons. 2,745,860, 5–15–56, Cl. 260—448.2.

Bailey Meter Co.: *See*—
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Baisse, Jacques, to Societe Promidel. Method of producing stable theophyllinic aerosols. 2,745,786, 5–15–56, Cl. 167—67.

Baker, Charles T., Jr., to International Business Machines Corp. Diode protection circuit. 2,745,956, 5–15–56, Cl. 250—27.

Balcom, John A., and G. P. Nixon. Apparatus for cleaning paint spray guns and containers utilised in conjunction therewith. 2,745,418, 5–15–56, Cl. 134—102.

Balint, John, and D. F. Garman, to Tinnerman Products, Inc. Knob connection or the like. 2,745,689, 5–15–56, Cl. 287—53.

Ball, Charles F., to Joy Mfg. Co. Mobile drilling machine. 2,745,637, 5–15–56, Cl. 255—51.

Balton, James, to The Maryland Baking Co. Machine for automatically making rolled cones. 2,745,363, 5–15–56, Cl. 107—58.

Banham, William G. Double-hung window structure. 2,745,148. 5–15–56, Cl. 20—48.

Barbas, Felix J. F. Gas-tightening devices for oven doors. 2,745,399, 5–15–56, Cl. 126—190.

Barker, Ernest C., and S. B. Brouse, to United States Steel Corp. Compression device for packages and bundles. 2,745,337, 5–15–56, Cl. 100—269.

Barnes, William A., to Utica Drop Forge & Tool Corp. Compound action grip and work performing tool. 2,745,300, 5–15–56, Cl. 78—82.

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Battle, Richard, and R. E. Donner, to Douglas Aircraft Co., Inc. Solvent proof marking for conduits. 2,745,436, 5–15–56, Cl. 138—47.

Bayley, Abraham, M. G. Gollaher, and W. M. McLamore, to Chas. Pfizer & Co., Inc. Preparation of isonicotinic acid esters. 2,745,838, 5–15–56, Cl. 260—295.

Bayer, Otto: *See*—
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Beattie, John O., to Optical Plastics Corp. Apparatus for the manufacture of plastic lenses from monomeric materials. 2,745,138, 5–15–56, Cl. 18—26.

Becker, Charles E.: *See*—
Stoops, Charles E., and Becker. 2,745,833.

Becker, Charles E., to Phillips Petroleum Co. Continuous process for production of alkyl pyridines. 2,745,835, 5–15–56, Cl. 260—290.

Becker, Harold A., to Universal Oil Products Co. Multiple cell circular heater. 2,745,388, 5–15–56, Cl. 122—240.

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Logemann, Heino, Graulich, and Becker. 2,745,813.

Bedell, Karl L., and J. H. Hollingsworth, to Holly Mfg. Co. Floor furnace. 2,745,398, 5–15–56, Cl. 126—116.

Bedford, William A., Jr., to United-Carr Fastener Corp. Fastener device. 2,745,156, 5–15–56, Cl. 24—73.

Bedford, William A., Jr., to United-Carr Fastener Corp. Resiliently retained fastener with flange detent. 2,745,458, 5–15–56, Cl. 151—41.75.

Behr, Peter H.: *See*—
Bellett, George R. 2,745,213.

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Singelmann, Dietrich E., and Hall. 2,745,247.

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Merts, Pierre. 2,746,013.
Walker, Laurence R. 2,746,036.
Young, William R., Jr. 2,745,953.

Bellett, George R., to P. H. Behr. Game device. 2,745,213, 5–15–56, Cl. 46—1.

Belon, Paul L. A.: *See*—
Loevenstein, Hirsch, and Belon. 2,745,736.

Bemis Bro. Bag Co.: *See*—
Brady, Charles V. 2,745,593.

Bendix Aviation Corp.: *See*—
Arens, Cecil F., and MacDuff. 2,745,478.
Bachmann, John F. 2,746,033.
Bennett, Alfred, and Perkins. 2,745,614.
Burnett, Richard T. 2,745,295.
Camp, Leon W. 2,746,026.
Gartner, Lawrence E. 2,746,004.
Hupp, Edward E. 2,745,383.
Konet, Henry, and Hurlburt. 2,745,288.
Miller, Donald L. 2,745,289.
Pfund, Charles E. 2,746,029.
Potter, Frederick M. 2,746,005.
Sylvander, Frederick B. 2,745,996.
Tesh, Kimble F. 2,745,977.
Winkler, Albert H., Jr. 2,745,391.

Bennett, Alfred, and C. M. Perkins, to Bendix Aviation Corp. Aircraft control system. 2,745,614, 5–15–56, Cl. 244—77.

Bentkowsky, Jerome: *See*—
Cohen, Sidney B., and Bentkowsky. 2,745,908.

Bentley Engineering Co. Ltd., The: *See*—
Deans, Frederick E. 2,745,269.

Berck, William F., to Ralph N. Brodie Co. Air eliminator valve. 2,745,511, 5–15–56, Cl. 183—2.5.

Berg, Robert H., to International Minerals & Chemical Corp. Lever control mechanism. 2,745,293, 5–15–56, Cl. 74—471.

Bergmans, Jan, and E. W. van Heuven, to Hartford National Bank and Trust Co. Apparatus comprising a fastening device. 2,745,623, 5–15–56, Cl. 248—358.

Bergson, Arnold, to Jack & Heintz, Inc. Transient control relay. 2,746,007, 5–15–56, Cl. 322—76.

Berninger, Kenneth L., and C. C. Covert, to General Motors Corp. Propeller control. 2,745,499, 5–15–56, Cl. 170—160.21.

Berry, Glenn. Composite overhead door structure. 2,745,147, 5–15–56, Cl. 20—19.

Bessey, Carlton E.: *See*—
Guttwein, Gunter K., and Bessey. 2,745,907.

Bestul, Manton G., to West Virginia Pulp and Paper Co. Stabilized tall oil and method of making same. 2,745,827, 5–15–56, Cl. 260—97.5.

Beth, Walter F., to Norton Co. Pulpstone. 2,745,226, 5–15–56, Cl. 51—206.5.

Bethlehem Steel Co.: *See*—
Peyer, Frank. 2,745,695.
Schlegel, Carl W. 2,745,535.

Biggs, Richard A., to Crucible Steel Co. of America. Sheet metal wall veneer construction. 2,745,523, 5–15–56, Cl. 189—86.

Billenstein, Paul F. Shovel loader attachment for tractors. 2,745,564, 5–15–56, Cl. 214—140.

Bindbeutel, Marie. Commode. 2,745,112, 5–15–56, Cl. 4—134.

Bindler, Jakob, and E. Model, to J. R. Geigy A. G. Quaternary phosphonium compounds. 2,745,877, 5–15–56, Cl. 260—606.5.

Birdsboro Steel Foundry and Machine Co.: *See*—
Japikse, Bertrand. 2,745,366.

Bjorksten Research Laboratories, Inc.: *See*—
Roe, Lawrence A. 2,745,808.

Blaine, Thomas, to The Harshaw Chemical Co. Chromium plating. 2,745,801, 5–15–56, Cl. 204—51.

Blake, Edward S., and R. J. Wineman, to Monsanto Chemical Co. Poultry feed. 2,745,745, 5–15–56, Cl. 99—4.

Blanchard, Wallace, Jr., and D. D. Bowie, to General Motors Corp. Propeller spinner assembly. 2,745,501, 5–15–56, Cl. 170—160.23.

Blaw-Knox Co.: *See*—
Eckstrom, Albert W., and Hill. 2,745,484.

Blomquist, Herbert A. Clothes rack. 2,745,474, 5–15–56, Cl. 135—190.

Blood, Robert H., and B. W. Sewell, to Esso Research and Engineering Co. Formation testing apparatus. 2,745,496, 5–15–56, Cl. 166—152.

Bloom, Dolores F. Pipe thread protector. 2,745,438, 5–15–56, Cl. 138—96.

Blount, Richard, to General Electric Co. Flash lamp energising and reflecting holder. 2,745,945, 5–15–56, Cl. 240—1.3.

Bobb, Lloyd J., to The International Electronics Co. Magnetic recording machine. 2,745,904, 5–15–56, Cl. 179—100.2.

Bobb, Lloyd J., to The International Electronics Co. Magnetic head assembly. 2,745,905, 5–15–56, Cl. 179—100.2.

Bodell, Philip T., to Collins & Aikman Corp. Textile drafting method and machine. 2,745,143, 5–15–56, Cl. 19—66.

Bodine, Albert G., Jr. Geophysical transducer. 2,745,507, 5–15–56, Cl. 181—0.5.

Bodine, Albert G., Jr. Process and apparatus using resonant sound wave and sonic flame for production of carbon monoxide, synthesis gases, and synthetic hydrocarbons. 2,745,861, 5–15–56, Cl. 260—449.

Boettcher, Gustav A. Jacquard card duplicating machine. 2,745,494, 5–15–56, Cl. 164—114.

Boggs, Robert H. Screw actuated door securing device. 2,745,450, 5–15–56, Cl. 144—296.

Boisselier, Earl D., to Sears, Roebuck and Co. Swing suspension device. 2,745,621, 5–15–56, Cl. 248—340.

Boland, John J. Back rest for vehicle riding. 2,745,473, 5–15–56, Cl. 155—182.

Bole, Robert K.: *See*—
Stanton, Arthur J., Carlberg, Bole, Sieve, Danziger, and De Masi. 2,745,317.

Bolton, Cleon. Telephone supports. 2,745,906, 5–15–56, Cl. 179—157.

Bolton, John A., and G. C. McKinley, 33⅓% to J. Anderson. Filtering system for screening irrigation water. 2,745,554, 5–15–56, Cl. 210—152.

Bomba, James S.: *See*—
Bachelet, Albert E., and Bomba. 2,746,028.

Bomerschein, Frank J. Belt buckle. 2,745,157, 5–15–56, Cl. 24—77.

Booth, Harry T., to United Aircraft Products, Inc. Repeated action injector device. 2,745,625, 5–15–56, Cl. 251—13.

Boots, Arthur A., to Cafa-Roll, Inc. Food handling structure for restaurants. 2,745,542, 5–15–56, Cl. 198—203.

Borda, Ray F.: *See*—
Folk, Russell C. 2,745,544.

Borgeson, Sidney E., to James L. Entwistle Co. Strand stripping machine. 2,745,377, 5–15–56, Cl. 118—221.

Borg-Warner Corp.: *See*—
English, Herdis G., Jandasek, and Gillespie. 2,745,354.
Lauck, John A. 2,745,356.
Reed, Harold V. 2,745,268.
Zeidler, Reinhold C. 2,745,352.

Borin, Harlan F., to American Hospital Supply Corp. Hospital floor lamp. 2,745,949, 5–15–56, Cl. 240—81.

Boston Woven Hose and Rubber Co.: *See*—
Collins, Don F. 2,745,134.

Bouffard, Paul E. Self-loading and unloading vehicle carrier. 2,745,566, 5–15–56, Cl. 214—505.

Boutard, Jacques. Silo for granulous material. 2,745,520, 5–15–56, Cl. 189—3.

Bowers, Harold E., to The Commonwealth Engineering Co. of Ohio. Apparatus for knead pulping. 2,745,321, 5–15–56, Cl. 92—20.

Bowie, David D.: *See*—
Blanchard, Wallace, Jr., and Bowie. 2,745,501.

Boynton, Thomas E., and W. G. Turnbull, to Porter, Spiers (Leicester) Ltd. Net making machines. 2,745,309, 5–15–56, Cl. 87—53.

Brady, Charles V., to Bemis Bro. Bag Co. Bag. 2,745,593, 5–15–56, Cl. 229—54.

Brady, Samuel G., to The Gear Grinding Machine Co. Liquid cooled grinder wheel. 2,745,229, 5–15–56, Cl. 51—267.

Bramming, Carl, to Aladdin Industries, Inc. Mantle mounting. 2,745,272, 5–15–56, Cl. 67—38.

Brandler, Morris D. Reversible connection for electric irons. 2,745,938, 5–15–56, Cl. 219—25.

Brant, Joseph H., to Bates Mfg. Co. Composite filament and staple yarn. 2,745,240, 5–15–56, Cl. 57—140.

Braunagel, Magnus V., and R. L. Shelley. Anti-backlash power transmission. 2,745,298, 5–15–56, Cl. 74—798.

Breadner, Robert L., and C. H. Simms, to General Electric Co. Terminal structure for electric lamp or similar device. 2,745,982, 5–15–56, Cl. 313—271.

Brendel, Theodor, to Agfa Camera-Werk Aktiengesellschaft. High speed corrected objective comprising four air spaced members. 2,745,315, 5–15–56, Cl. 88—57.

Brennan, Joseph B. Continuous method of making porous strip material. 2,745,141, 5–15–56, Cl. 18—57.

Brennan, Joseph B. Method and apparatus for continuous casting. 2,745,151, 5–15–56, Cl. 22—57.4.

Briggs & Stratton Corp.: *See*—
Jacobi, Edward N. 2,745,275.

Brimhall, Kirk L., to Western Equipment Mfg. Co. Hitch attachment structure for carry-type scraper. 2,745,328, 5–15–56, Cl. 97—46.07.

Bristol Aeroplane Co. Ltd., The: *See*—
Massey, Bernard S. 2,745,513.

British Cotton Industry Research Association, The: *See*—
Vincent, John J., and Hunter. 2,745,281.

Britton, Edgar C., and P. S. Petrie, to The Dow Chemical Co. Glycolic acid ethers of polyoxypropylene compounds and method of preparation. 2,745,857, 5–15–56, Cl. 260—429.

Broderick, Frank W., to Brown & Bailey Co. Display boxes. 2,745,543, 5–15–56, Cl. 206—45.

Brodie, George R., to Fred'k. H. Levey Co., Inc. Flexible sheet securing device for printing rollers. 2,745,344, 5–15–56, Cl. 101—415.1.

Brodie, Ralph N., Co.: *See*—
Berck, William F. 2,745,511.

Brodt, Ray H.: *See*—
Hahn, William W., and Brodt. 2,745,594.

Bronzavia S. A.: *See*—
Capsek, Roger. 2,745,350.

Brook, Arthur F., to Wire-O Corp. Punch for perforating sheets to receive the rings of mechanical bindings. 2,745,492, 5–15–56, Cl. 164—91.

Broughton, Arthur E. Diaphragm operated vacuum control system. 2,745,322, 5–15–56, Cl. 92—51.

Brouse, Shirley B.: *See*—
Barker, Ernest C., and Brouse. 2,745,337.

Brown & Bailey Co.: *See*—
Broderick, Frank W. 2,745,543.

Brown-Bridge Mills Co., Inc., The: *See*—
Holt, Frederick W., Jr. 2,745,591.

Brown, Ellis M., C. B. Lee, and S. R. Gilford. Demolition system. 2,745,369, 5–15–56, Cl. 114—21.

Brown Fintube Co.: *See*—
Nihlen, Arvid C. K. 2,745,683.

Brown, Reagan G. Composite electrical signaling and intercommunicating system. 2,745,902, 5–15–56, Cl. 179—5.

Browne, Harold L.: *See*—
Collings, William R., Browne, and Weirauch. 2,745,233.

Bruce, William F., C. D. Edwards, and J. K. Apat, to American Home Products Corp. Therapeutic composition comprising tabular N,N'-dibensylethylenediamine di penicillin, and process for preparing same. 2,745,785, 5–15–56, Cl. 167—65.

Bruggeman, Warren H., and B. G. Voorhees, to the United States of America as represented by the United States Atomic Energy Commission. Filter with fractional crystallization means. 2,745,552, 5–15–56, Cl. 210—122.5.

Brun, Alberto R. Page end indicator. 2,745,534, 5–15–56, Cl. 197—189.

Buchignani, Richard G.: *See*—
Vandemark, Fred J., and Buchignani. 2,745,562.

Buhr, August G., to Allis-Chalmers Mfg. Co. Lift mechanism affording independent manual adjustment and power actuation of separate tools. 2,745,329, 5–15–56, Cl. 97—46.45.

Burdick Bros., Inc.: *See*—
Burdick, Sherman R. 2,745,702.

Burdick, Sherman R., to Burdick Bros., Inc. Safety valve for fluid control system. 2,745,702, 5–15–56, Cl. 303—84.

Burkett, Francis L., to The Dow Chemical Co. Apparatus for dispensing shots of molten metal. 2,745,153, 5–15–56, Cl. 22—79.

Burkett, Wilford B.: *See*—
Heidner, Richard C., Pike, and Burkett. 2,745,390.

Burling, Elmer R., and J. P. Rich, to Improved Machinery, Inc. Process for countercurrent washing of cooking liquor out of pulp. 2,745,712 5–15–56, Cl. 8—156.

Burnett, Richard T., to Bendix Aviation Corp. Transmission. 2,745,295, 5–15–56, Cl. 74—677.

Burroughs Wellcome & Co. (U. S. A.) Inc.: *See*—
Hitchings, George H., Russell, and Whittaker. 2,745,831.

Burton, Walter E. Method and apparatus for producing moldable rubber or rubber like articles. 2,745,139, 5–15–56, Cl. 18—34.

Burkovich, John M. Self-locking and self-ejecting electric outlet and plug. 2,746,021, 5–15–56, Cl. 339—45.

Butler, Keith H., and H. H. Homer, to Sylvania Electric Products, Inc. Blue electroluminescent zinc sulfide phosphor. 2,745,811, 5–15–56, Cl. 252—301.6.

Byrns, Alva C., to Kaiser Aluminum & Chemical Corp. Method of producing titanium. 2,745,735, 5–15–56, Cl. 75—84.

Cabanes, Leon, L. Airan, A. Chevallier, C. Dietsch, and M. Painboeuf, to Electricite de France Service National. Devices for operating and controlling high tension electrical apparatus. 2,745,952, 5–15–56, Cl. 250—2.

Cadman, Harold O., to Gardner Machine Co. Continuous feed mechanism. 2,745,537, 5–15–56, Cl. 198—33.

Cafa-Roll, Inc.: *See*—
Boots, Arthur A. 2,745,542.

Cahn, Robert P., to Esso Research and Engineering Co. Process for production of polymer hydrocarbons. 2,745,890, 5–15–56, Cl. 260—683.15.

California Research Corp.: *See*—
Carlston, Earl F., and Lum. 2,745,872.

Callanan, John P., and A. P. Patton, to National Distillers Products Corp. Process of producing n-acetyl methionine. 2,745,873, 5–15–56, Cl. 260—534.

Camp, Leon W., to Bendix Aviation Corp. Half wave annular transducer. 2,746,026, 5–15–56, Cl. 340—8.

Campbell, James R. Coffee making apparatus. 2,745,333, 5–15–56, Cl. 99—281.

Capsek, Roger, to Bronzavia S. A. Injection pumps. 2,745,350, 5–15–56, Cl. 103—41.

Carbary, Richard J., to General Electric Co. Center guide support for refrigerator vegetable pan. 2,745,710, 5–15–56, Cl. 312—332.

Cardwell, Paul H., and E. N. Alderman, Jr., to The Dow Chemical Co. Method and composition for combating corrosion. 2,745,809, 5–15–56, Cl. 252—8.55.

Carlberg, Robert E.: *See*—
Stanton, Arthur J., Carlberg, Bole, Sieve, Danziger, and De Masi. 2,745,317.

Carlisle Chemical Works, Inc.: *See*—
Mack, Gerry P. 2,745,820.
Mack, Gerry P. 2,745,822.
Mack, Gerry P., and Parker. 2,745,819.

Carlson, Oscar F. Valve. 2,745,628, 5–15–56, Cl. 251—83.

Carlston, Earl F., and F. G. Lum, to California Research Corp. Isophthalic acid and terephthalic acid separation. 2,745,872, 5–15–56, Cl. 260—525.

Carroll, Frank E., Jr., to United Aircraft Products, Inc. Oil tank or like valve. 2,745,424, 5–15–56, Cl. 137—89.

Carson, Paul A., to General Electric Co. Lamp testing device. 2,746,011, 5–15–56, Cl. 324—22.

Carter Parts Co.: *See*—
Tyzack, Harold. 2,746,023.

Cary, John E., R. E. Shafer, and V. Cary. Fibre decorticating machine. 2,745,142, 5–15–56, Cl. 19—24.

Cary, Valerie: *See*—
Cary, John E., Shafer, and Cary. 2,745,142.

Case, Everett N., to Sinclair Oil and Gas Co. Alkylene oxide condensate of discard palm oil. 2,745,855, 5–15–56, Cl. 260—410.6.

Cassman, Harry, to Electric & Musical Industries Ltd. Manufacture of mosaic screens such as are utilized in television transmission tubes. 2,745,772, 5–15–56, Cl. 117—210.

Chambers, Robert O.: *See*—
Thornell, Ralph A. 2,745,690.

Champlain Co., Inc.: *See*—
Auerbacher, George N., and Haskin. 2,745,464.

Chance, A. B., Co.: *See*—
Hollander, William L. 2,745,919.

Chandler & Price Co., The: *See*—
Rupp, William C. 2,745,489.

Chappell, Story F. Measured dosage dispenser. 2,745,576, 5–15–56, Cl. 222—477.

Chappuis, George F., and E. Katan, to The Aerotherm Corp. Locking and releasing mechanism for tiltable backs for aircraft and similar seats. 2,745,471, 5–15–56, Cl. 155—160.

Charf, James F., H. S. Himes, and E. E. Todd, Jr., to General Motors Corp. Method and apparatus for machining articles and manufacture. 2,745,222, 5–15–56, Cl. 51—165.

Chemische Werke Hüls Aktiengesellschaft: *See*—
Wenning, Heinrich. 2,745,825.

Chertoff, Israel. Apparatus for generating sound waves. 2,745,372, 5–15–56, Cl. 116—137.

Chevallier, Andre: *See*—
Cabanes, Leon, Airan, Chevallier, Dietsch, and Painboeuf. 2,745,952.

Chevallier, George E., to The Wayne Pump Co. Swivel coupling for gasoline dispensers. 2,745,682, 5–15–56, Cl. 285—9.

Chicago Pneumatic Tool Co.: *See*—
Amtsberg, Lester A. 2,745,528.

Chicago Telephone Supply Corp.: *See*—
Daily, Arthur M., and Veatch. 2,745,927.

Chiuchiarelli Berardino: *See*—
Lyster, George, Jr. 2,745,110.

Christensen, Kenneth M.: *See*—
Dayen, William R., and Christensen. 2,745,856.

Chrysler Corp.: *See*—
Nims, Paul T. 2,745,170.
Smith, Robert F. 2,745,516.
Syrovy, Augustin J. 2,745,353.

Chubb, Melvin F., and J. M. Dines, to The Eagle-Picher Co. Method of discharging electrolytic cells. 2,745,892, 5–15–56, Cl. 136—90.

Chubb, Melvin F., and J. M. Dines, to The Eagle-Picher Co. Cuprous chloride magnesium cell with cellophane membrane. 2,745,893, 5–15–56, Cl. 136—100.

Ciba Ltd.: *See*—
Schwarzenbach, Gerold, and Sallmann. 2,745,720.
Siegrist, Adolf-Emil. 2,745,830.

Circle F Mfg. Co.: *See*—
Radack, Harry E. 2,746,025.

Clark, William J., and J. J. Devery, to Philco Corp. Door mounting and latching means. 2,745,132, 5–15–56, Cl. 16—147.

Clarke, William C., Jr., to Armco Steel Corp. Internal combustion engine valves and the like. 2,745,777, 5–15–56, Cl. 148—31.

Coan, Stephen B.: *See*—
Papa, Domenick, and Coan. 2,745,837.

Coates, James N. Bi-metal strip mounting. 2,745,924, 5–15–56, Cl. 200—138.

Cohen, Irving M. Electrically heated mat and the like. 2,745,942, 5–15–56, Cl. 219—46.

Cohen, Sidney B., and J. Bentkowsky, to Sperry Rand Corp. Magnetic amplifier. 2,745,908, 5–15–56, Cl. 179—171.

Cohoes Carrybag Co., Inc.: *See*—
Kelly, William H. 2,745,595.

Collings, William R., H. L. Browne, and A. A. Weirauch, to Dow Corning Corp. Semiautomatic book-forming machine and method. 2,745,233, 5–15–56, Cl. 53—139.

Collins & Aikman Corp.: *See*—
Bodell, Philip T. 2,745,143.
Keen, William R. 2,745,443.

Collins, Coy W., to Prestole Corp. Spring metal fastener for television aerials. 2,745,155, 5–15–56, Cl. 24—1.

Collins, Don F., to Boston Woven Hose and Rubber Co. Apparatus for tensioning strip material. 2,745,134, 5–15–56, Cl. 18—1.

Collins, Paul E., and G. M. Inman, to the United States of America as represented by the United States Atomic Energy Commission. Pressure testing device and method. 2,745,279, 5–15–56, Cl. 73—49.3.

Commonwealth Engineering Co. of Ohio, The: *See*—
Bowers, Harold E. 2,745,321.
Toulmin, Harry A., Jr. 2,745,223.

Compagnie Auxiliaire des Mines: *See*—
Robillard, André A. 2,746,002.

Compagnie Generale de Telegraphie Sans Fil: *See*—
Döhler, Oscar, Huber, and Kleen. 2,745,983.

Comstock, George E., 3d, to Norton Co. Infeed control. 2,745,221, 5–15–56, Cl. 51—165.

Comstock, George E., 3d, to Norton Co. Reinforced ceramic body of revolution. 2,745,437, 5–15–56, Cl. 138—64.

Comte, Frederick, to Monsanto Chemical Co. Recovery and purification of saccharin. 2,745,840, 5–15–56, Cl. 260—301.

Conaway, Harry L., to United States Steel Corp. Apparatus for supporting sheet-metal specimens during sag test. 2,745,280, 5–15–56, Cl. 73—100.

Connell, J. Val: *See*—
Reese, Cole L., and Straus. 2,745,252.

Connor Engineering Corp.: *See*—
Argentieri, Peter A. 2,745,509.

Consolidated Electrodynamics Corp.: *See*—
Shaffer, Phillip A., Jr. 2,745,804.

Continental Connector Corp.: *See*—
Gilbert, Leon. 2,746,022.

Converti-Bench Corp.: *See*—
Thompson, Frederick C. 2,745,466.

Cooke, James W.: *See*—
Travilla, James C., and Cooke. 2,745,358.

Cooper-Bessemer Corp.: *See*—
Gehres, Hewitt A. 2,745,502.

Coopersmith, Rudolph. Foldable sofa bed and lock therefor. 2,745,113, 5–15–56, Cl. 5—31.

Cornelius, Paul D., to Vlier Engineering, Inc. Thumb screw with overload release means. 2,745,303, 5–15–56, Cl. 81—52.4.

Cornelius, Paul D., to Vlier Engineering, Inc. Spring clip wrench attachment for holding a screw. 2,745,304, 5–15–56, Cl. 81—71.

Cornish, Irving R. Filing cabinet. 2,745,708, 5–15–56, Cl. 312—311.

Cornwell, Claire L. Cable speed indicator. 2,745,633, 5–15–56, Cl. 254—150.

Cory Corp.: *See*—
Nelson, Melven V. 2,745,198.

Coté, Raoul A. Folding stretcher. 2,745,114, 5–15–56, Cl. 5—82.

Cottle, Delmer L.: *See*—
Young, David W., Serniuk, and Cottle. 2,745,726.

Cotts, Louis C. Baseboard heat distributor. 2,745,332, 5–15–56, Cl. 98—40.

Courand, Henry A., to Crown Zellerbach Corp. Rotary steam joint and loose mounting therefor. 2,745,684, 5–15–56, Cl. 285—96.1.

Covert, Calvin C.: *See*—
Berninger, Kenneth L., and Covert. 2,745,499.

Crane Co.: *See*—
Hjulian, Julius A. 2,745,427.
Stone, Carl R., and Schmidt. 2,745,428.

Crane Packing Co.: *See*—
Stack, Theodore T. 2,745,687.

Crawford, Perry, Jr., to Underwood Corp. Code typing means. 2,745,532, 5–15–56, Cl. 197—1.

Crise, George W. Electrical hair drier and method of producing the same. 2,745,192, 5–15–56, Cl. 34—96.

Crompton & Knowles Loom Works: *See*—
Kronoff, Clarence R., and Taylor. 2,745,185.

Crone, Albert H., to Geo. D. Roper Corp. Ceramic radiant broiler burner. 2,745,480, 5–15–56, Cl. 158—113.

Crone, Albert H., to Geo. D. Roper Corp. Top burner construction for gas stoves. 2,745,481, 5–15–56, Cl. 158—115.

Crookston, Robert R., to Esso Research and Engineering Co. Snap action regulator valve. 2,745,429, 5–15–56, Cl. 137—492.5.

Cross Co., The: *See*—
Cross, Ralph E. 2,745,167.

Cross, Ralph E., to The Cross Co. Automatic chucking machine. 2,745,167, 5–15–56, Cl. 29—33.

Crown Controls Co., Inc.: *See*—
Dicke, Paul A. and A. A. 2,745,994.

Crown Zellerbach Corp.: *See*—
Courand, Henry A. 2,745,684.

Cruce, Woodrow W. Flower holder. 2,745,218, 5–15–56, Cl. 47—41.

Crucible Steel Co. of America: *See*—
Biggs, Richard A. 2,745,523.

Cullen, Harry E.: *See*—
Deirv, Albert J., and Cullen. 2,745,446.

Cupp, Charles D., to Scott Aviation Corp. Head band for masks, etc. 2,745,401, 5–15–56, Cl. 128—141.

Cupp, Charles D., to Scott Aviation Corp. Steerable, castorable airplane wheel mounting. 2,745,612, 5–15–56, Cl. 244—50.

Curtin, John L., and D. M. Yenni, to Union Carbide and Carbon Corp. Inert gas shielded magnetic field controlled electric arc metal working apparatus. 2,745,934, 5–15–56, Cl. 219—8.

Cushman Chuck Co., The: *See*—
Sloan, Harry E., and Swanson. 2,745,671.

Cushman, John A., to American Viscose Corp. Heat exchanging apparatus. 2,745,640, 5–15–56, Cl. 257—2.

Czerniewicz, John F. Drafting compass. 2,745,181, 5–15–56, Cl. 33—27.

Daily, Arthur M., and J. G. Veatch, Jr., to Chicago Telephone Supply Corp. Electrical control instrumentality. 2,745,927, 5–15–56, Cl. 201—55.

Daimler-Benz Aktiengesellschaft: *See*—
Nallinger, Friedrich K. H. 2,745,392.
Nallinger, Friedrich K. H. 2,745,505.

Dale, Clarence R. and J. F.: said J. F. Dale assor. to said C. R. Dale. Well producing, pressurizing and testing apparatus. 2,745,497, 5–15–56, Cl. 166—224.

Dale, John F.: *See*—
Dale, Clarence R. and J. F. 2,745,497.

Daly, Grover J., and H. E. Lynch, to The Ottawa River Paper Co. Carton. 2,745,589, 5–15–56, Cl. 229—23.

Danielson Mfg. Co., The: *See*—
Holt, John E. 2,745,197.

Danziger, William: *See*—
Stanton, Arthur J., Carlberg, Bole, Sieve, Danziger, and De Masi. 2,745,317.

Darby, Paul F., W. L. Finlay, and O. W. Simmons, to Rem-Cru Titanium, Inc. Apparatus for melting highly reactive metals. 2,745,891, 5–15–56, Cl. 13—31.

Dath, George E., to Enterprise Railway Equipment Co. Outlet frame for railway hopper cars. 2,745,563, 5–15–56, Cl. 214—83.18.

Davies, Thomas D., and C. J. Perry. Card marking device. 2,745,665, 5–15–56, Cl. 271—3.

Davis, Clayton C. Combination shaker and spout device for salt shakers. 2,745,577, 5–15–56, Cl. 222—480.

Davis, David T.: *See*—
Woods-Hill, William, and Davis. 2,745,599.

Davis, Noel, to Harris-Seybold Co. Automatic vibrator roll. 2,745,343, 5–15–56, Cl. 101—348.

Davis, Ralph A.: *See*—
Ruh, Robert P., and Davis. 2,745,867.
Ruh, Robert P., and Davis. 2,745,885.
Ruh, Robert P., and Davis. 2,745,886.

Davisson, Jacob W.: *See*—
Shull, Gilbert M., Kita, and Davisson. 2,745,784.

Dawson, Lewis C.: *See*—
Morway, Arnold J., and Dawson. 2,745,810.

Dayen, William R., and K. M. Christensen, to Hygrade Food Products Corp. Method of rendering animal fats. 2,745,856, 5–15–56, Cl. 260—412.6.

Dazzi, Joachim, to Monsanto Chemical Co. Adducts. 2,745,844, 5–15–56, Cl. 260—346.8.

Dazzi, Joachim, to Monsanto Chemical Co. Epoxidized acyl ricinoleates. 2,745,846, 5–15–56, Cl. 260—348.

Deans, Frederick E., to The Bentley Engineering Co. Ltd. Knitting machine of the opposed needle cylinder type. 2,745,269, 5–15–56, Cl. 66—14.

Deason, Orville J. Plaster scarifying and removing device. 2,745,653, 5–15–56, Cl. 262—26.

Dehn, Rudolph A., to General Electric Co. High frequency electric discharge device coupling apparatus. 2,745,910, 5–15–56, Cl. 179—171.

Deiry, Albert J., and H. E. Cullen, to Wabash Screen Door Co. Quickly adjustable machine for ripping lumber into selected widths. 2,745,446, 5–15–56, Cl. 143—37.

Delahay, Raymond D., to Lacy Oil Tool Co. Seal device for reciprocating piston. 2,745,660, 5–15–56, Cl. 267—1.

Delamaredebouttéville, Marcel L. Apparatus and method for making wool-like artificial fibres. 2,745,136, 5–15–56, Cl. 18—8.

De Liban, Robert, to the United States of America as represented by the United States Atomic Energy Commission. Arc regulator for calutron ion source. 2,745,964, 5–15–56, Cl. 250—41.9.

De Masi, Rocco: *See*—
Stanton, Arthur J., Carlberg, Bole, Sieve, Danziger, and De Masi. 2,745,317.

Dench, Edward C., and G. E. Dombrowski, to Raytheon Mfg. Co. Tunable magnetrons. 2,745,987, 5–15–56, Cl. 315—39.61.

Dennen, Frank W.: *See*—
Sonneborn, Ralph H., and Dennen. 2,745,491.

Deop, Wallace A., to Bell Telephone Laboratories, Inc. Translating arrangement. 2,745,958, 5–15–56, Cl. 250—27.

Derr, William T., and R. R. McGuire, to Westinghouse Air Brake Co. Track circuit system for multiple track railway grade crossings. 2,745,951, 5–15–56, Cl. 246—114.

D'Errico, Martin P. Sealing means for pistons. 2,745,704, 5–15–56, Cl. 309—31.

Detrow, Edgar L., to Vulcan Machine Co. Device for orienting taps for grinding. 2,745,187, 5–15–56, Cl. 33—185.

Deutsche Gold- und Silber-Scheideanstalt vormals Roessler: *See*—
Kübisch, Gerharr. 2,745,868.
Müller, Josef. 2,745,719.

De Vaney, Fred D., to Pickands Mather & Co. Process of reducing manganese ores. 2,745,730, 5–15–56, Cl. 75—1.

Devery, James J.: *See*—
Clark, William J., and Devery. 2,745,132.

Devine, George F., and R. F. Foster, to General Electric Co. Intercarrier wave translation circuits. 2,745,954, 5–15–56, Cl 250—20.

Dewan, John T., to Schlumberger Well Surveying Corp. Radioactivity detector. 2,745,970, 5–15–56, Cl. 250—83.6.

Dewas, Raymond. Shuttleless looms with continuous weft feeding. 2,745,440, 5–15–56, Cl. 139—123.

Dicke, Allen A.: *See*—
Dicke, Paul A., and A. A. 2,745,994.

Dicke, Paul A. and A. A., to Crown Controls Co., Inc. Antenna position control means and indicator. 2,745,994, 5–15–56, Cl. 318—18.

Dictograph Products Co., Inc.: *See*—
Vadersen, Charles W. 2,745,508.

Dietsch, Charles: *See*—
Cabanes, Leon, Alran, Chevallier, Dietsch, and Painboeuf. 2,745,952.

Dijkstra, Rinse, to Hartford National Bank and Trust Co. Novolak from phenol and furfural reacted in alkaline medium. 2,745,816, 5–15–56, Cl. 260—45.

Dines, James M.: *See*—
Chubb, Melvin F., and Dines. 2,745,892.
Chubb, Melvin F., and Dines. 2,745,893.

Dinkelkamp, Henry T., to Stewart-Warner Corp. Reciprocating fluid motor and valve mechanism therefor. 2,745,387, 5–15–56, Cl. 121—154.

Dinstman, Hyman. Waterproof watch case and crystal. 2,745,245, 5–15–56, Cl. 58—90.

Di Stefano, Frank. Second operation production chucking machine. 2,745,168, 5–15–56, Cl. 29—38.

Dixon, James K., to American Cyanamid Co. Method of preparing unsaturated nitriles. 2,745,864, 5–15–56, Cl. 260—464.

Döhler, Oscar, H. Huber, and W. Kleen, to Compagnie Generale De Telegraphie Sans Fil. Traveling wave tube. 2,745,983, 5–15–56, Cl. 315—3.5.

Dölling, Fritz, and C. L. Kümpers, to F. A. Kumpers K. G. Tightening-pulley mounting for the lower tape of tape drawing rollers. 2,745,145, 5–15–56, Cl. 19—131.

Dolliver, Morris A.: *See*—
Semenoff, Serge, and Dolliver. 2,745,826.

Dombrowski, George E.: *See*—
Dench, Edward C., and Dombrowski. 2,745,987.

Domovs, Kelvin: *See*—
Freund, Ernest H., and Domovs. 2,745,775.

Donner, Ralph E.: *See*—
Battle, Richard, and Donner. 2,745,436.

Dorpmund, Heins, to Volkswagenwerk G. m. b. H. Synchronizing gears. 2,745,529, 5–15–56, Cl. 192—53.

Dougherty, Patrick F., to Sun Oil Co. Heat exchanger. 2,745,639, 5–15–56, Cl. 257—1.

Douglas Aircraft Co., Inc.: *See*—
Battle, Richard, and Donner. 2,745,436.
Harpoothian, Edward, and Oswald. 2,745,613.

Douglas, Bradley C., and H. H. Pryor, to Magic Chef, Inc. Electric pilot-flame igniter. 2,745,482, 5–15–56, Cl. 158—123.

Doumitt, Philip S. Tobacco pipe with bowl actuated scraper. 2,745,414, 5–15–56, Cl. 131—184.

Dow Chemical Co., The: *See*—
Britton, Edgar C., and Petrie. 2,745,857.
Burkett, Francis L. 2,745,153.
Cardwell, Paul H., and Alderman. 2,745,809.
Kundiger, Donald G., and Pledger. 2,745,884.
Monroe, Ezra, and Long. 2,745,876.
Mussell, Dorsey R. 2,745,815.
Norton, Frederick H. 2,745,858.
Norton, Frederick H., and Stevens. 2,745,859.
Prince, Charles A. 2,745,231.
Reid, Raymond W. 2,745,774.
Rigterink, Raymond H. 2,745,881.
Ruh, Robert P., and Davis. 2,745,885.
Ruh, Robert P., and Davis. 2,745,867.
Ruh, Robert P., and Davis. 2,745,886.
Stanton, George W., and Ehlers. 2,745,821.
Stewart, Doane. 2,745,781.
Stewart, Doane. 2,745,782.
Williams, Bill M. 2,745,871.

Dow Corning Corp.: *See*—
Collings, William R., Browne, and Weirauch. 2,745,233.

Draper Corp.: *See*—
Flamand, Maurice R. 2,745,439.

Draughon, Wells R.: *See*—
Ward, John W. 2,745,380.

Drill Collar Service Co., Inc, The: *See*—
Moore, Stanley C. 2,745,685.

Drilling Research, Inc.: *See*—
McPherson, George, Jr. 2,745,998.

Droche, Elie: *See*—
Aupoix, Marcel, and Droche. 2,745,979.

Dryguiski, John, to American Can Co. Method of and apparatus for truing out-of-round can bodies. 2,745,462, 5–15–56, Cl. 153—32.

Dufresne, Oliver J. Inhaler. 2,745,402, 5–15–56, Cl. 128—200.

Dunlap, Isaac R.: *See*—
Weidner, Charles L., and Dunlap. 2,745,744.

Dunn, Holbert E., and E. J. O'Brien, to Vanadium Corp. of America. Process of precipitating substantially anhydrous calcium chromate. 2,745,715, 5–15–56, Cl. 23—56.

Dunn, Holbert E., and E. J. O'Brien, to Vanadium Corp. of America. Process of precipitating substantially anhydrous calcium chromate and product resulting therefrom. 2,745,764, 5–15–56, Cl. 106—302.

Dunn, Holbert E., and E. J. O'Brien, to Vanadium Corp. of America. Process of precipitating substantially anhydrous calcium chromate and product resulting therefrom. 2,745,765, 5–15–56, Cl. 106—302.

Dunning, Robert M., to Waldorf Paper Products Co. Bag support. 2,745,545, 5–15–56, Cl. 206—78.

Dunning, Robert M., to Waldorf Paper Products Corp. Dispensing container. 2,745,588, 5–15–56, Cl. 229—17.

Du Pont, E. I., de Nemours and Co.: *See*—
Kingerley, Richard W., Jr. 2,745,770.
Munn, George E. 2,745,842.

Dwyer, James J.: *See*—
Speed, William C., and Dwyer. 2,745,605.

Eagle-Picher Co., The: *See*—
Chubb, Melvin F., and Dines. 2,745,892.
Chubb, Melvin F., and Dines. 2,745,893.

Eaglesfield, Charles C., to International Standard Electric Corp. Electron discharge apparatus. 2,745,957, 5–15–56, Cl. 250—27.

Earp, James F.: *See*—
Monroe, Charles Z., and Earp. 2,745,323.

Eastern Venetian Blind Co., The: *See*—
Rosenbaum, Harry S. 2,745,488.

Eastwood, Clinton: *See*—
Herzog, Harold A., and Eastwood. 2,745,590.

Eaton Mfg. Co.: *See*—
Winther, Anthony. 2,745,527.

Eckstrom, Albert W., and G. Hill, to Blaw-Knox Co. Continuous density control of a liquod. 2,745,484, 5–15–56, Cl. 159—44.

Edwards, Charles D.: *See*—
Bruce, William F., Edwards, and Apat. 2,745,785.

Edwards, James W., to Monsanto Chemical Co. Preparation of polyphosphates. 2,745,717, 5–15–56, Cl. 23—106.

Ehlers, Forrest A.: *See*—
Stanton, George W., and Ehlers. 2,745,821.

Ehrhart, Gustav, and W. Aumuller, to Farbwerke Hoechst A. G., vormals Meister Lucius & Bruning. N-isonicotinoylhydrazones and a process of preparing them. 2,745,839, 5–15–56, Cl. 260—295.

Ehrhart, Gustav, H. Ruschig, and W. Haede, to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius und Brüning. Δ4,16-pregnadiene-21-cl-3,20-diones and process. 2,745,852, 5–15–56, Cl. 260—397.47.

Ehrhart, Gustav, H. Nahm, and W. Siedel, to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius & Brüning. Preparation of N-acylamino-phenylpropanediols. 2,745,875, 5–15–56, Cl. 260—558.

Electraulic Presses Ltd.: *See*—
Towler, John M. and F. H. 2,745,253.

Electric & Musical Industries Ltd.: *See*—
Cassman, Harry. 2,745,772.

Electric Service Mfg. Co.: *See*—
Kreinberg, Russell. 2,745,199.

Electric Steel Foundry Co.: *See*—
Johnson, Clarence K. 2,745,152.

Electricite de France Service National: *See*—
Cabanes, Leon, Alran, Chevallier, Dietsch, and Painboeuf. 2,745,952.

Ellett, Alec S. J.: *See*—
Zozulin, Igor V., Okulitch, and Ellett. 2,745,975.

Elliott, Brantford G., to Harry Ferguson, Inc. Transfer mechanism for use in harvesting machines. 2,745,237, 5–15–56, Cl. 56—60.

Elsasser, Caspar W. Harmonicas. 2,745,307, 5–15–56, Cl. 84—377.

Emley, Edward F., and W. Unsworth, to Magnesium Elektron Ltd. Method of producing magnesium base alloys. 2,745,741, 5–15–56, Cl. 75—168.

English, Herdis G., V. J. Jandasek, and D. C. Gillespie, to Borg-Warner Corp. Hydrodynamic coupling. 2,745,354, 5–15–56, Cl. 103—115.

Enna Ltd.: *See*—
Lien, Knût M. 2,745,679.

Enterprise Railway Equipment Co.: *See*—
Dath, George E. 2,745,563.

Entwistle, James L., Co.: *See*—
Borgeson, Sidney E. 2,745,377.

Erickson, Gilbert O.: *See*—
Martin, Lewis C., Moffett, and Erickson. 2,745,557.

Erickson, John R., to Norton Co. Reinforced abrasive wheel and method of making same. 2,745,224, 5–15–56, Cl. 51—195.

Erie Realator Corp.: *See*—
Foster, James H. 2,745,993.
Heibel, Jerome D. 2,745,931.

Eskridge, James T., deceased, by W. C. Eskridge, administratrix. Machine for clearing land of sagebrush and the like. 2,745,236, 5–15–56, Cl. 56—23.

Eskridge, Wilma C.: *See*—
Eskridge, James T. 2,745,236.

Esso Research and Engineering Co.: *See*—
Blood, Robert H., and Sewell. 2,745,496.
Cahn, Robert P. 2,745,890.
Crookston, Robert R. 2,745,429.
Hale, Chauncey C. 2,745,882.
Johnston, Robert H., and Mitchell. 2,745,889.
Knox, William T., Jr. 2,745,791.
Morway, Arnold J., and Dawson. 2,745,810.
Ragland, Douglas. 2,745,636.
Young, David W., Sernluk, and Cottle. 2,745,726.

Etablissements Merlin & Gerin, Societe Anonyme: *See*—
Pelenc, Yves. 2,745,515.

Etling, Harold A., to Weather-Seal Inc. Method of converting a double hung window construction to a pivotal and sliding construction. 2,745 149. 5–15–56, Cl. 20—49.

Etling, Harold A., to Weather-Seal Inc. Window construction. 2,745,485, 5–15–56, Cl. 160—90.

Evans, Frank N. Horse training bridle. 2,745,235, 5–15–56, Cl. 54—7.

Evans, Owen T.: *See*—
Parr, Ronald, and Evans. 2,746,000.

Evans, Quentin J.: *See*—
Miner, Richard Y., Evans, and Abt. 2,745,600.
Miner, Richard Y., Evans, and Abt. 2,745,995.

Ex-Cell-O Corp.: *See*—
Monroe, Charles Z., and Earp. 2,745,323.

Fabrique d'Horlogerie de St. Blaise S. A.: *See*—
Friedli, Gérard. 2,745,244.

Faeber, Harry W., to Time, Inc. Universal printing plate registering and punching machine. 2,745,186, 5–15–56, Cl. 33—184.5.

Farbenfabriken Bayer Aktiengesellschaft: *See*—
Logemann, Heino, Becker, and Bayer. 2,745,817.
Logemann, Heino, Graulich, and Becker. 2,745,813.

Farbwerke Hoechst A. G., vormals Meister Lucius & Bruning: *See*—
Ehrhart, Gustav, and Aumüller. 2,745,839.

Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius & Brüning: *See*—
Ehrhart, Gustav, Nahm, and Siedel. 2,745,875.
Ehrhart, Gustav, Ruschig, and Haede. 2,745,852.

Farrar, Martin W., to Monsanto Chemical Co. Dehromination of 16-bromo-C₂₀-sterolds. 2,745,850, 5–15–56, Cl. 260—397.45.

Farrington, Robert K. and T. B., to The Thompson Electric Co. Solid adjustable angle fitting. 2,745,688, 5–15–56, Cl. 287—14.

Farrington, Thayer B.: *See*—
Farrington, Robert K. and T. B. 2,745,688.

Fath, Joseph, and G. J. Leitner, to Nuodex Products Co., Inc. Metal quinolinolates and methods of making the same. 2,745,832, 5–15–56, Cl. 260—270.

Faulkner, Alfred H.: *See*—
Roberts, Ray J. D., and Faulkner. 2,745,922.

Feaster, Guy R. Ignition system tester. 2,746,010, 5–15–56, Cl. 324—17.

Feed-O-Matic Mfg. Corp.: *See*—
Wallace, Maurice E. and R. F. 2,745,381.

Fegley, Charles R., to Textile Machine Works. Catchbar safety means for knitting machines. 2,745,270, 5–15–56, Cl. 66—110.

Ferguson, Harry, Inc.: *See*—
Elliott, Brantford G. 2,745,237.
Nelson, Noral A. 2,745,330.

Fernandez, José V. Apparatus for decorating concave and convex surfaces. 2,745,339, 5–15–56, Cl. 101—41.

Feuge, Reuben O., E. J. Vicknair, and K. S. Markley, to the United States of America as represented by the Secretary of Agriculture. Glyceridic mixtures exhibiting unique properties and process for their production. 2,745,749, 5–15–56, Cl. 99—118.

Fielding, Sterling A. Dishwasher. 2,745,417, 5–15–56, Cl. 134—58.

Filtration Equipment Corp.: *See*—
Riddick, Thomas M. 2,745,553.

Finlay, Walter L.: *See*—
Darby, Paul F., Finlay, and Simmons. 2,745,891.

Firth Carpet Co., Inc., The: *See*—
Herrnstadt, Gerald E. 2,745,442.

Fischer, Carl, and K. Grodde. Treating packing material. 2,745,546, 5–15–56, Cl. 206—84.

Fischer, Harry C.: *See*—
Liberatore, Laurence C., Tibbits, Aldridge, and Fischer. 2,745,925.

Fisher Flouring Mills Co.: *See*—
Herzog, Harold A., and Eastwood. 2,745,590.

Fisher, Peter, ⅛ to W. B. Steele, and ⅛ to L. T. Graves. Stabilizing beam connection between crawlers and tractor frame. 2,745,503, 5–15–56, Cl. 180—9.1.

Fitzgerald, John V., and K. M. Laing, to Pittsburgh Plate Glass Co. Glass radiometer. 2,745,284, 5–15–56, Cl. 73—355.

Flamand, Maurice R., to Draper Corporation. Let-off for looms. 2,745,439, 5–15–56, Cl. 139—110.

Fleming, Victor S.: *See*—
Jensen, Ole D., and Fleming. 2,745,179.

Flint, Hyland C., to American Metal Products Co. Zigzag spring cushion having central support. 2,745,472, 5–15–56, Cl. 155—179.

Flocke, Alexander: *See*—
Körber, Kurt, Kochalski, Flocke, and Heuer. 2,745,413.

Fogal, Gordon L. Parachute. 2,745,615, 5–15–56, Cl. 244—145.

Fogg, Clifford C., and H. P. Sinclair. Mobile moulds for the construction of buildings and similar structures. 2,745,166, 5–15–56, Cl. 25—131.

Fogle, Merlyn W., to Armour and Co. Method of purifying bile acids. 2,745,849, 5–15–56, Cl. 260—397.1.

Folk, Russell C., to G. W. Griffin, R. F. Borda and R. C. Folk. Merchandising packages for stockings or the like. 2,745,544, 5–15–56, Cl. 206—45.33.

Food Machinery and Chemical Corp.: *See*—
Greenspan, Frank P., and Gall. 2,745,848.

Ford Motor Co.: *See*—
Jackson, Paul L., and Zackay. 2,745,740.
McDougall, John A. 2,745,662.
Oster, Thomas H. 2,745,657.
Oster, Thomas H. 2,745,732.
Oster, Thomas H. 2,745,733.
Oster, Thomas H. 2,745 734.
Oster, Thomas H. 2,745,737.

Foster, James H., to Erie Resistor Corp. Capacitor unit. 2,745,993, 5–15–56, Cl. 317—249.

Foster, John, to B. & S. Massey Ltd. Forging press control. 2,745,530, 5–15–56, Cl. 192—144.

Foster, Raymond F.: *See*—
Devine, George F., and Foster. 2,745,954.

Fowler, Roland G., N. R. Frieberg and O. F. Larsen, to The National Cash Register Co. Key-responsive calculating machine. 2,745,601, 5–15–56, Cl. 235—62.

Fox, Arthur G., to Bell Telephone Laboratories, Inc. Transmission meter. 2,746,014, 5–15–56 Cl. 324—58.

Frederick, Edward R., to the United States of America as represented by the Secretary of the Army. Apparatus for covering core material with fibrous material. 2,745,375, 5–15–56, Cl. 118—33.

Freund, Ernest H., and K. Domovs, to National Dairy Research Laboratories, Inc. Tobacco product and method of conditioning same. 2,745,775, 5–15–56, Cl. 131—17.

Frieberg Nelson R.: *See*—
Fowler, Roland G., Frieberg, and Larsen. 2,745,601.

Fried, Armin: *See*—
Fried, Joseph W., and A. Fried. 2,745,299.

Fried, Joseph W., and A. Fried. Deburring and chamfering tool. 2,745,299, 5–15–56, Cl. 77—73.5.

Friedli, Gérard, to Fabrique d'Horlogerie de St. Blaise S. A. Car watch. 2,745,244, 5–15–56, Cl. 58—88.

Froeschel, Paul: *See*—
Gold, Richard L., and Froeschel. 2,745,217.

Frohnsdorff, Raymond S. M., and J. U. Lewin, to The Gillette Co. Dyeing with quinones or hydroquinones and borohydrides and compositions therefor. 2,745,788, 5–15–56, Cl. 167—88.

Fuelling, Parnell W. Chopping device for harvesting machine. 2,745,454, 5–15–56, Cl. 146—117.

Fuller, Lyle R. Grain bin hopper attachment. 2,745,573, 5–15–56, Cl. 222—153.

Furman, Frank J., and H. J. Kistner, H. L. Read, and W. W. Wagner, to International Business Machines Corp. Machine for punching and sorting postal money order cards. 2,745,493, 5–15–56, Cl. 164—113.

G & W Electric Specialty Co.: *See*—
Nicholas James H. 2,745,897.

Gall, Ralph J.: *See*—
Greenspan, Frank P., and Gall. 2,745,848.

Gamma Trust: *See*—
Luckhardt, Johannes. 2,745,470.

Gardner Machine Co.: *See*—
Cadman, Harold O. 2,745,537.

Garman, Donald F.: *See*—
Balint, John, and Garman. 2,745,689.

Garner, Claude M., to Missouri Automatic Control Corp. Control means for solenoid actuating device. 2,745,630, 5–15–56, Cl. 251—130.

Garrett Corp., The: *See*—
Jensen, Raymond W. 2,745,425.
Jensen, Raymond W. 2,745,431.

Garrison, Marion A., to Johnston Testers, Inc. Hydraulic control mechanism for drift recorders. 2,745,189, 5–15–56. Cl. 33—205.5.

Garten, Wilhelm. Method of lining a metal pipe. 2,745,778. 5–15–56, Cl. 154—82.

Gartner, Lawrence E., to Bendix Aviation Corp. Generator polarizing system. 2,746,004, 5–15–56, Cl. 322—6.

Gaskill, Alfred T., to General Electric Co. Method of making a sintered brazing pellet. 2,745,742. 5–15–56, Cl. 75—211.

Gaskins, Frank W. Apparatus for bringing coil springs to test and relieving strains therein while under load. 2,745,658, 5–15–56, Cl. 266—4.

Gates, Richard L., to Thompson Products, Inc. Electric switch. 2,745,917, 5–15–56, Cl. 200—18.

Gathercole, Evan F. J.: *See*—
Wills, Sydney A., and Gathercole. 2,745,188.

Gaw, J. Wilson. Fish lure. 2,745,206, 5–15–56, Cl. 43—42.06.

Gear Grinding Machine Co., The: *See*—
Brady, Samuel G. 2,745,229.

Geffcken, Walter, to Jenaer Glaswerk Schott & Gen. Optical glass. 2,745,757, 5–15–56, Cl. 106—54.

Gehres, Hewitt A., to Cooper-Bessemer Corp. Propeller pitch control mechanism. 2,745,502, 5–15–56, Cl. 170—160.32.

Geigy, J. R., A. G.: *See*—
Bindler, Jakob, and Model. 2,745,877.
Häflinger, Franz. 2,745,780.
Häflinger, Franz. 2,745,783.
Schetty, Guido, Stammbach, and Zinkernagel. 2,745,874.

Gemignani, Hugo J., to Hickey-Freeman Co. Garment and waistband structure. 2,745,107, 5–15–56, Cl. 2—236.

General Dynamics Corp.: *See*—
Kessler, Frank. 2,745,903.

General Electric Co.: *See*—
Blount Richard. 2,745,945.
Breadner, Robert L., and Simms. 2,745,982.
Carbary, Richard J. 2,745,710.
Carson, Paul A. 2,746,011.
Dehn, Rudolph A. 2,745,910.
Devine, George F., and Foster. 2,745,954.
Gaskill, Alfred T. 2,745,742.
Hurd, Dallas T. 2,745,898.
Janos, Alfred G. 2,745,173.
Johnson, Robert H., and Shackelford. 2,745,250.
Lautenberger, Elmer W. 2,746,020.
Ott, George E. 2,745,582.
Price, Fraser P. 2,745,944.
Protzmann, Donald E. 2,745,946.
Safford, Moyer M. 2,745,943.
Scheldorf, Owen H. 2,745,169.
Schumacher, Frank A. 2,745,256.
Sebens, Carl R. 2,745,707.
Suits, Chauncey G. 2,745,713.
Von Behren, William P. 2,745,644.
Welch, Stanley B. 2,745,913.
Welch, Stanley B. 2,745,937.
Young, Hewitt H. 2,745,479.

General Mills, Inc.: *See*—
Jordan, Wesley A. 2,745,854.

General Motors Corp.: *See*—
Berninger, Kenneth L., and Covert. 2,745,499.
Blanchard, Wallace, Jr., and Bowie. 2,745,501.
Charf, James F., Himes, and Todd. 2,745,222.
Grenell, Leland H. 2,745,936.
Hofstatter, Frank F. 2,745,541.
Jacobs, James W. 2,745,257.
Koenig, Carl F. 2,745,460.
Long, George R. 2,745,797.
Moore, Richard E., and Miller. 2,745,500.
Saunders, Orson V. 2,745,259.
Saunders, Orson V. 2,745,260.

General Outdoor Advertising Co., Inc.: *See*—
Schumacher, Frank J. 2,745,243.

General Steel Castings Corp.: *See*—
Travilla, James C., and Cooke. 2,745,358.

General Tire & Rubber Co., The: *See*—
Te Grotenhuis, Theodore A. 2,745,818.

Genet, Joseph J. Device for controlling the opening and closing of the cylinders of combustion engines. 2,745,395, 5–15–56, Cl. 123—190.

George P. Nixon: *See*—
Balcom, John A., and Nixon. 2,745,418.

Gewerkschaft Eisenhuette Westfalia: *See*—
Herrmann, Julius. 2,745,651.

Giftcraft, Inc.: *See*—
Robbio, Benjamin. 2,745,371.

Gilardi, Carlo. Auxiliary motor and drive for bicycles adapted to be confined between the pedals thereof. 2,745,504, 5–15–56, Cl. 180—33.

Gilbert, Everett E., and J. A. Otto, to Allied Chemical & Dye Corp. Production of dialkyl hydrogen phosphites. 2,745,862, 5–15–56, Cl. 260—461.

Gilbert, Harry, and F. F. Miller, to The B. F. Goodrich Co. Solutions of vinylidene cyanide interpolymers in nitroalkanes. 2,745,814, 5–15–56 Cl. 260—32.4.

Gilbert, Leon, to Continental Connector Corp. Separable connector assembly with aligning and securing means. 2,746,022, 5–15–56, Cl. 339—92.

Gilford, Saul R.: *See*—
Brown, Ellis M., Lee, and Gilford. 2,745,369.

Gillespie Daniel C.: *See*—
English, Herdis G., Jandasek, and Gillespie. 2,745,354.

Gillette Co., The: *See*—
Frohnsdorff, Raymond S. M., and Lewin. 2,745,788.

Gilman, Samuel, and V. J. Petrucelly, to American Machine and Foundry Co. Control for cigarette making machine. 2,745,411, 5–15–56, Cl. 131—22.

Gilmore, Forrest E., to Phillips Petroleum Co. Production of underground cavities. 2,745,647, 5–15–56, Cl. 262—3.

Gilstrap, Hiram D. Tools for repairing auto panels. 2,745,302, 5–15–56, Cl. 81—15.

Gisondi, Emanuel. Sheet metal nail having channel shaped, barbed spreading legs. 2,745,308, 5–15–56, Cl. 85—13.

Giuseppe, Savio, J. V. Viviani, and C. M. Silva, to Sociedade Industrial Silpa Ltda. Dismountable placard. 2,745,201, 5–15–56, Cl. 40—140.

Given, William P.: *See*—
Alozery, Nicholas J. G., and Given. 2,745,794.

Glaser, Frank W., to American Electro Metal Corp. Heater bodies and their production. 2,745,928, 5–15–56, Cl. 201—63.

Glaser, Frank W., to American Electro Metal Corp. Electric resistor heaters and their production. 2,745,929, 5–15–56, Cl. 201—64.

Glaser, Frank W., to American Electro Metal Corp. Electric resistor. 2,745,932, 5–15–56, Cl. 201—75.

Gleen, Paul: *See*—
Schurr, Vernon D. 2,746,016.

Glenwood Machinery Associates, Inc.: *See*—
Sonntag, Helmuth C. 2,745,220.

Glynn, Edwin A., to Super Mold Corp. of California. Mold for retreading tires. 2,745,137, 5–15–56, Cl. 18—18.

Gold, Richard L., and P. Froeschel. Machine for improving the keeping qualities of plants and restoring wilted plants to full freshness. 2,745,217, 5–15–56, Cl. 47—1.

Goldberg, Samuel D. Disposable cartridge type syringe. 2,745,403, 5–15–56, Cl. 128—218.

Goldsmith, Paul: *See*—
Roberts, Edward A., and Goldsmith. 2,745,278.

Gollaher, Merton G.: *See*—
Bayley, Abraham, Gollaher, and McLamore. 2,745,838.

Gombert, Frederick S., to Hall-Neal Furnace Co. Relative heat flow demonstrator. 2,745,195, 5–15–56, Cl. 35—50.

Gomes, Alviro. Jar holder. 2,745,616, 5–15–56, Cl. 248—138.

Goodman Mfg. Co.: *See*—
Kraft, Robert H. 2,745,652.
Lindgren, Frank A. 2,745,654.
McCallum, Robert A. 2,745,506.
Robbins, James S. 2,745,648.
Robbins, James S. 2,745,649.
Slomar, Joseph J. 2,745,430.
Smith, Herman E. 2,745,650.
Stoltz, Charles E. 2,745,646.

Goodman, Morris. Folding garment hanger. 2,745,579, 5–15–56, Cl. 223—94.

Goodrich, B. F., Co., The: *See*—
Gilbert, Harry, and Miller. 2,745,814.
Sachara, Eugene F. 2,745,869.

Gora, Henry Z., to Anchor Hocking Glass Corp. Molding machine. 2,745,135, 5–15–56, Cl. 18—5.

Gotlib, Milton H., 33⅓% to E. W. Smith, and 33⅓% to R. Haves. Automatic thawing device. 2,745,258, 5–15–56, Cl. 62—89.

Grafstein, Peter, to Axel Bros., Inc. Detachable ring guard for finger rings. 2,745,265, 5–15–56, Cl. 63—15.6.

Grafstein, Peter, to Axel Bros., Inc. Ring guard with spring pressed pivoted member. 2,745,266, 5–15–56, Cl. 63—15.6.

Graham, Alvin J.: *See*—
Graham, Patrick R. H., A. J., and G. H. 2,745,667.

Graham, George D.: *See*—
Graham, Patrick R. H., A. J., and G. H. 2,745,667.

Graham, Patrick R. H., A. J., and G. H. Appliance for playing games. 2,745,667, 5–15–56, Cl. 273—134.

Grange, Raymond A., and E. C. Turner, to United States Steel Corp. Method of restoring hardenability of boron-containing steel. 2,745,776, 5–15–56, Cl. 148—21.55.

Granqvist, Carl-Erik, to Svenska Aktiebolaget Gasaccumulator. Radio goniometer. 2,746,038, 5–15–56, Cl. 343—124.

Grandstedt, Karl Erik, to Arenco Aktiebolag. Cigar bunch machines. 2,745,412, 5–15–56, Cl. 131—52.

Graulich, Wilhelm: *See*—
Logemann, Heino, Graulich, and Becker. 2,745,813.

Graves, Lloyd T.: *See*—
Fisher, Peter. 2,745,503.

Gray, William E. Draft gear. 2,745,560, 5–15–56, Cl. 213—34.

Green, George P. Blade and leveling apparatus for road machines. 2,745,325, 5–15–56, Cl. 94—44.

Green, George P. Roller for road machines. 2,745,326, 5–15–56, Cl. 94—48.

Green, Lee B. Apparatus for forming ring-shaped fasteners from flat stock. 2,745,121, 5–15–56, Cl. 10—28.

Green, Lee B. Method of producing ring-shaped articles. 2,745,122, 5–15–56, Cl. 10—34.

Greenspan, Frank P., and R. J. Gall, to Food Machinery and Chemical Corp. Preparation of cyclohexene oxide. 2,745,842, 5–15–56, Cl. 260—348.5.

Greenspan, Stephen H. Supports for archery equipment. 2,745,558, 5–15–56, Cl. 211—60.

Greif Bros. Cooperage Corp.: *See*—
Snipes, Alvis H. 2,745,455.

Grenell, Leland H., to General Motors Corp. Refrigerating apparatus. 2,745,936, 5–15–56, Cl. 219—12.

Grimm, George D.: *See*—
Folk, Russell C. 2,745,544.

Griffith, Brooks D., to Radio Corp. of America. Semi-conductor signal generator. 2,745,960, 5–15–56, Cl. 250—36.

Grodde, Karl-Heinz: *See*—
Fischer, Carl, and Grodde. 2,745,546.

Groen, Willem, to Onsrud Machine Works, Inc. Actuator. 2,745,320, 5–15–56, Cl. 90—14.

Grogan, Edward C., to Minneapolis-Honeywell Regulator Co. Self-adjusting control apparatus. 2,745,423, 5–15–56, Cl. 137—85.

Groves, Jim S. Boat trailer. 2,745,567, 5–15–56, Cl. 214—506.

Grunwald, Edward. Cap remover and bottle opener for bottles and cans. 2,745,301, 5–15–56, Cl. 81—3.1.

Gudheim, Arne R.: *See*—
Shafer, Stanley L., Gudheim, and Schmidt. 2,745,750.

Gühring, Gottlieb: *See*—
Nädelin, Eugen. 2,745,228.

Gulf Research & Development Co.: *See*—
Ward, John V., and Wedner. 2,745,725.

Guntert & Zimmerman Const. Div., Inc.: *See*—
Puckett, Robert L. 2,745,933.

Guttwein, Gunter K., and C. E. Beasey, to the United States of America as represented by the Secretary of the Army. Tone control circuit. 2,745,907, 5–15–56, Cl. 179—171.

Guzzino, Leonard. Tufted upholstery and method of making same. 2,745,212, 5–15–56, Cl. 45—138.

Haas, Charles P., to Jigbore-Grind Machine Co., Inc. Spindle and slide control assembly. 2,745,668, 5–15–56, Cl. 279—6.

Haede, Werner: *See*—
Ehrhart, Gustav, Ruschig, and Haede. 2,745,852.

Häflger, Franz, to J. R. Geigy A. G. Acaricide composition containing 4,4′-dichlorobenzilic acid esters. 2,745,780, 5–15–56, Cl. 167—30.

Häflger, Franz, to J. R. Geigy A. G. Substituted 1,2-diphenyl-3,5-dioxo-pyrazolidines. 2,745,783, 5–15–56, Cl. 167—65.

Hagelbarger, David W., and L. R. Walker, to Bell Telephone Laboratories, Inc. Microwave oscillator. 2,745,984, 5–15–56, Cl. 315—4.

Hagenlocher, Ernest. Torsionally resilient flexible couplings. 2,745,267, 5–15–56, Cl. 64—13.

Hahn, William W., and R. H. Brodt, to Universal Paper Bag Co. Valve bag. 2,745,594, 5–15–56, Cl. 229—62.5.

Hahnel, Alwin, to the United States of America as represented by the Secretary of the Army. Frequency multiplier. 2,745,963, 5–15–56, Cl. 250—36.

Halberstadt, Johan, to Hartford National Bank and Trust Co., as trustee. Method of separating phosphate ions from iron ions. 2,745,718, 5–15–56, Cl. 23—165.

Hale, Arthur N., to Union Special Machine Co. Electric transmitter for sewing machines. 2,745,525, 5–15–56, Cl. 192—3.5.

Hale, Chauncey C., to Esso Research and Engineering Co. Dehydrative distillation for preparation of alkali metal salts of 2,4,6-trialkylphenols. 2,745,882, 5–15–56, Cl. 260—624.

Hall, James R.: *See*—
Singelmann, Dietrich E., and Hall. 2,745,247.

Hall-Neal Furnace Co.: *See*—
Gombert, Frederick S. 2,745,195.

Haloid Co., The: *See*—
Mengali, Otavio J. 2,745,327.

Hamilton, Lyle A., and R. H. Williams, to Socony Mobil Oil Co., Inc. Preparation of amides. 2,745,853, 5–15–56, Cl. 260—404.

Hamilton, Merrill V., and M. E. Hoop, to United States Steel Corp. Strip supporting device. 2,745,663, 5–15–56, Cl. 271—2.1.

Hammock Package Ltd.: *See*—
Steinbock, Robert S. 2,745,754.

Hand, William L. Automatic air regulating control device. 2,745,602, 5–15–56, Cl. 236—13.

Harker, Charles B., to Bartelt Engineering Co. Packaging machine. 2,745,583, 5–15–56, Cl. 226—59.

Harpoothian, Edward, and W. H. Oswald, to Douglas Aircraft Co., Inc. Gust load alleviating device. 2,745,613, 5–15–56, Cl. 244—76.

Harris-Seybold Co.: *See*—
Davis, Noel. 2,745,343.

Harshaw Chemical Co., The: *See*—
Blaine, Thomas. 2,745,801.

Hartford National Bank and Trust Co.: *See*—
Aupoix, Marcel, and Droche. 2,745,979.
Bergmans, Jan, and van Heuven. 2,745,623.
Dijkstra, Rinse. 2,745,816.
Halberstadt, Johan. 2,745,718.
Köhler, Jacob W. L. 2,745,262.
Toeswill, Christopher H. 2,745,988.
Verhoeff, Adrianus. 2,745,966.

Harvard Mfg. Co., The: *See*—
Sands, Hilliard J. 2,745,117.
Jackson, Leslie K. 2,745,116.

Harvey, Draper M., to Automotive & Marine Products Corp. Top cylinder lubricator. 2,745,396, 5–15–56, Cl. 123—196.

Harvey-Whipple, Inc.: *See*—
Sinclair, Donald C., and Wallans. 2,745,597.

Hasbrook, Arthur F., to O. S. Petty. Positioning determining system. 2,746,034, 5–15–56, Cl. 343—15.

Haselolf, Fritz, to Licentia Patent-Verwaltungs, G. m. b. H. Print roll securing means. 2,745,341, 5–15–56, Cl. 101—212.

Haskin, Lawrence H., Jr.: *See*—
Auerbacher, George N., and Haskin. 2,745,464.

Hastings, Charles E., to Hastings Instrument Co., Inc. Temperature change compensated thermal measuring device. 2,745,283, 5–15–56, Cl. 73—204.

Hastings Instrument Co., Inc.: *See*—
Hastings, Charles E. 2,745,283.

Hauelsen, Batist R., and F. A. Wales. Method of coating metal surfaces. 2,745,798, 5–15–56, Cl. 204—25.

Havens, Byron L., to International Business Machines Corp. Multivibrator trigger circuit. 2,745,955, 5–15–56, Cl. 250—27.

Haves, Robert: *See*—
Gotlib, Milton H. 2,745,258.

Hawkins, Eric D. Machine for punching nut kernels from their shells. 2,745,452, 5–15–56, Cl. 146—8.

Haynes, William J., to Leavenworth Steel, Inc. Basket carrying cart. 2,745,675, 5–15–56, Cl. 280—47.24.

Hazen, Gretzolon L., to James Mfg. Co. Feed hopper for a reciprocating trough conveyor. 2,745,539, 5–15–56, Cl. 198—37.

Heibel, Jerome D., to Erie Resistor Corp. Resistors and method of making the same. 2,745,931, 5–15–56, Cl. 201—73.

Heidner, Richard C., K. R. Pike, and W. B. Burkett, to West Bend Aluminum Co. Two-cycle internal combustion engine with improved fuel induction means. 2,745,390, 5–15–56, Cl. 123—73.

Heil-Coil Corp.: *See*—
Lang, Eugene M. 2,745,457.

Heindel, Herbert H.: *See*—
Holmes, Burton F., and Heindel. 2,746,001.

Heintzen, Harry R. Power piston cylinder assembly. 2,745,382, 5–15–56, Cl. 121—1.

Helmer, Nicolas A., to The Squier Corp. Roll mills. 2,745,336, 5–15–56, Cl. 100—165.

Hennig, Kurt. Wine fining. 2,745,747, 5–15–56, Cl. 99—48.

Henry, David W.: *See*—
Stewart, Leonard C. 2,745,918.

Hermag Pumps Ltd.: *See*—
Zoguin, Igor V. 2,745,351.

Hermann, Dick. Mixing construction. 2,745,642, 5–15–56, Cl. 259—72.

Herrick, Everett. Motor-driven can opener. 2,745,174, 5–15–56, Cl. 30—4.

Herrmann, Julius, to Gewerkschaft Eisenhuette Westfalia. Mining planer. 2,745,651, 5–15–56, Cl. 262—8.

Herrnstadt, Gerald E., to The Firth Carpet Co., Inc. Three-shot Axminster weave. 2,745,442, 5–15–56, Cl. 139—399.

Herzog, Harold A., and C. Eastwood, to Fisher Flouring Mills Co. Portable bin. 2,745,590, 5–15–56, Cl. 229—23.

Heuer, Walter: *See*—
Körber, Kurt, Kochalski, Flocke, and Heuer. 2,745,413.

Hewey, George R. Method for cleaning cesspools. 2,745,553, 5–15–56, Cl. 210—207.

Hewitt, William C., to Phillips Petroleum Co. Control of temperature in emulsion polymerization. 2,745,823, 5–15–56, Cl. 260—83.7.

Heyl & Patterson, Inc.: *See*—
Osojnak, Boris M. 2,745,659.

Hickey-Freeman Co.: *See*—
Gemignani, Hugo J. 2,745,107.

Hiddle Nijland, Hendrik A., to N. V. "COQ." Electric switching apparatus for high tension. 2,745,992, 5–15–56, Cl. 317—157.6.

Hleatt Engineering Co.: *See*—
Wilson, Keith E. 2,745,626.

High-Pressure Components Ltd.: *See*—
Williams, Derrick J. 2,745,432.

Hild, Raymond L. Insecticide distributor. 2,745,210, 5–15–56, Cl. 43—125.

Hill, Fred P., to Motorola, Inc. Voltage regulator. 2,746,006, 5–15–56, Cl. 322—70.

Hill, Graham: *See*—
Eckstrom, Albert W., and Hill. 2,745,484.

Himes, Henry S.: *See*—
Charf, James F., Himes, and Todd. 2,745,222.

Hiscock, Earle F., to Kip, Inc. Coffee makers. 2,745,335, 5–15–56, Cl. 99—295.

Hitchings, George H., P. B. Russell, and N. Whittaker, to Burroughs Wellcome & Co. (U. S. A.) Inc. Chemical compounds. 2,745,831, 5–15–56, Cl. 260—256.4.

Hjulian, Julius A., to Crane Co. Tripper rod mechanism. 2,745,427, 5–15–56, Cl. 137—420.

Hobbs, Howard F., to Hobbs Transmission Ltd. Hydraulically actuated ring diaphragm. 2,745,435, 5–15–56, Cl. 137—788.

Hobbs Transmission Ltd.: *See*—
Hobbs, Howard F. 2,745,435.

Hock, Alfred L., to Magnesium Elektron Ltd. Production of potassium fluozirconate. 2,745,716, 5–15–56, Cl. 23—88.

Hofstatter, Frank F., to General Motors Corp. Wear resisting structure for conveyor belts. 2,745,541, 5–15–56, Cl. 198—184.

Hogan, Joseph L., to Walk-A-Lator Mfg. Co., Inc. Invalid walker. 2,745,465, 5–15–56, Cl. 155—23.

Hollander, William L., to A. B. Chance Co. High voltage air break switch assemblies. 2,745,919, 5–15–56, Cl. 200—48.

Holley Carburetor Co.: *See*—
Holley, George M., Sr. 2,745,394.
Kittler, Milton J., Sterner, and Smitley. 2,745,645.

Holley, George M., Sr., to Holley Carburetor Co. Manifold assembly for internal combustion engines. 2,745,394, 5–15–56, Cl. 123—122.

Hollingsworth, John H.: *See*—
Bedell, Karl L., and Hollingsworth. 2,745,398.

Holly Mfg. Co.: *See*—
Bedell, Karl L., and Hollingsworth. 2,745,398.

Holmes, Burton F., and H. H. Heindel, to Schultz Die Casting Co. Electric motor operation with interlocking relays and control circuits. 2,746,001, 5–15–56, Cl. 318—484.

Holt, Frederick W., Jr., to The Brown-Bridge Mills Co., Inc. Stay tape. 2,745,591, 5–15–56, Cl. 229—49.

Holt, John E., to The Danielson Mfg. Co. Mid-sole construction. 2,745,197, 5–15–56, Cl. 36—2.5.

Holsapfel, George L. Heat exchange apparatus for liquefied fuel carburetors. 2,745,727, 5–15–56, Cl. 48—184.

Homer, Horace H.: *See*—
Butler, Keith H., and Homer. 2,745,811.

Hoop, Morris E.: *See*—
Hamilton, Merrill V., and Hoop. 2,745,663.

Hopkins, Luther H., to International Harvester Co. Counterbalanced drive means for harvesters. 2,745,238, 5–15–56, Cl. 56—296.

Horn, Willi, to Ernst Leitz G. m. b. H. Interferometer. 2,745,310, 5–15–56, Cl. 88—14.

Horowitz, Alexandre, and F. Termaat, to N. V. Ontwikkelingmaatschappij "Polynorm." Junction of intersecting sheet metal supporting members. 2,745,522, 5–15–56, Cl. 189—36.

Houdry Process Corp.: *See*—
Kollgaard, Revner. 2,745,724.
Lunts, David M. 2,745,723.

Huber, Harry: *See*—
Döhler, Oscar, Huber, and Kleen. 2,745,983.

Huber, Robert, to "Societe d'Etudes et de Participations, Eau, Gas, Electricite, Energie," S. A. Regulating device for a free piston gas generator-turbine receiver system. 2,745,246, 5–15–56, Cl. 60—13.

Hulburt, Charles E.: *See*—
Konet, Henry, and Hurlburt. 2,745,288.

Hultgren, Albert B. Drain traps. 2,745,510, 5–15–56, Cl. 182—23.

Humboldt Co., The: *See*—
McIntyre, Sidney S. 2,745,559.

Hummel, Charles D., Sr.: *See*—
Roberts, Ray J. D., and Faulkner. 2,745,922.

Hunter, George A. Liquid dispensing apparatus. 2,745,574, 5–15–56, Cl. 222—189.

Hunter, Philip: *See*—
Vincent, John J., and Hunter. 2,745,281.

Hupp, Edward E., to Bendix Aviation Corp. Power boost control. 2,745,383, 5–15–56, Cl. 121—41.

Hurd, Dallas T., to General Electric Co. Insulated electric conductors. 2,745,898, 5–15–56, Cl. 174—120.

Hydraulic Unit Specialties Co.: *See*—
Schneider, Dana J., and Tennis. 2,745,433.

Hygrade Food Products Corp.: *See*—
Dayen, William R., and Christensen. 2,745,856.

Ianucci, Anthony D.: *See*—
Alfandre, Harry, and Ianucci. 2,745,232.

Improved Machinery, Inc.: *See*—
Burling, Elmer R., and Rich. 2,745,712.
Rich, John P. 2,745,274.

Ing. A. Maurer S. A.: *See*—
Steiger, Robert, and Lüthi. 2,745,490.

Inman, Guy M.: *See*—
Collins, Paul E., and Inman. 2,745,279.

Innovation Industries, Inc.: *See*—
Swarts, Otto M. 2,745,666.

Interchemical Corp.: *See*—
Kumins, Charles A. 2,745,766.

Inter-City Mfg. Co.: *See*—
Mora, Steve. 2,745,126.

International Business Machines Corp.: *See*—
Baker, Charles T., Jr. 2,745,956.
Furman, Frank J., Kistner, Read, and Wagner. 2,745,493.
Havens, Byron L. 2,745,955.
Keleher, Henry W. 2,745,533.
Paulsen, Robert C. 2,746,006.
Woods-Hill, William, and Davis. 2,745,599.

International Electronics Co., The: *See*—
Bobb, Lloyd J. 2,745,904.
Bobb, Lloyd J. 2,745,905.

International Harvester Co.: *See*—
Hopkins, Luther H. 2,745,238.

International Minerals & Chemical Corp.: *See*—
Berg, Robert H. 2,745,293.
Wrege, Edgar E. 2,745,547.

International Nickel Co., Inc., The: *See*—
Pease, George R., and Kihlgren. 2,745,771.

International Paper Box Machine Co.: *See*—
Labombarde, Harold S. 2,745,378.
Labombarde, Harold S. 2,745,665.

International Standard Electric Corp.: *See*—
Eavlesfield, Charles C. 2,745,957.

Irany, Ernest P., to Norton Co. Grinding wheels and method of making them. 2,745,728, 5–15–56, Cl. 51—298.

Iselin, Ernst, and W. Wehrli, to Sandoz A. G. Copper-containing azo dyestuffs. 2,745,828, 5–15–56, Cl. 260—146.

Jack & Heintz, Inc.: *See*—
Bergson, Arnold. 2,746,007.
Martin, Cecil G., and Johnston. 2,745,976.

Jackson, Leslie K., to The Harvard Mfg. Co. Headboard positioning means for bedframes. 2,745,116, 5–15–56, Cl. 5—131.

Jackson, Paul L., and V. F. Zackay, to Ford Motor Co. Process of preparing an iron base melt. 2,745,740, 5–15–56, Cl. 75—130.5.

Jacobi, Edward N., to Briggs & Stratton Corp. Means for securing an instrument to an instrument panel. 2,745,275, 5–15–56, Cl. 70—370.

Jacobs, James W., to General Motors Corp. Refrigerating apparatus. 2,745,257, 5–15–56, Cl. 62—4.

Jacobs, William H. Beverage dispenser. 2,745,641, 5–15–56, Cl. 259—36.

James Mfg. Co.: *See*—
Hazen, Gretzolon L. 2,745,539.

Jandasek, Vladimir J.: *See*—
English, Herdis G., Jandasek, and Gillespie. 2,745,354.

Janik, Anton J., to The Ridge Tool Co. Quick acting chucking tool. 2,745,670, 5–15–56, Cl. 279—114.

Janos, Alfred G., to General Electric Co. Method of thermal insulation. 2,745,173, 5–15–56, Cl. 29—455.

Japikse, Bertrand, to Birdsboro Steel Foundry and Machine Co. Hydraulic press. 2,745,366, 5–15–56, Cl. 113—45.

Jaron, Julian, to Alice Jewelry Co. Jewelry clip with friction pivot. 2,745,264, 5–15–56, Cl. 63—14.

Jenaer Glaswerk Schott & Gen.: *See*—
Geffcken, Walter. 2,745,757.

Jenney, Theodore M., to Olin Mathieson Chemical Corp. Production of trichlorobensenes. 2,745,883, 5–15–56, Cl. 260—650.

Jensen, Jack H., to Ry-Lock Co., Ltd. Screen tensioning device. 2,745,487, 5–15–56, Cl. 160—328.

Jensen, Ole D., and V. S. Fleming; said Fleming assor. to said Jensen. Scoring tool. 2,745,179, 5–15–56, Cl. 30—304.

Jensen, Raymond W., to The Garrett Corp. System and apparatus for inflating or deflating pneumatic vessels. 2,745,425, 5–15–56, Cl. 137—108.

Jensen, Raymond W., to The Garrett Corp. Spring rate compensating device for relief valves and actuators. 2,745,431, 5–15–56, Cl. 137—514.7.

Jesl, James L., and I. W. Mills, to Sun Oil Co. Deleading gasoline. 2,745,793, 5–15–56, Cl. 196—23.

Jigbore-Grind Machine Co., Inc.: *See*—
Haas, Charles P. 2,745,668.

Johnson, Clarence K., to Electric Steel Foundry Co. Centrifugal metal casting process and mold apparatus. 2,745,152, 5–15–56, Cl. 22—65.

Johnson, Elmer. Stone loader attachment for a tractor. 2,745,565, 5–15–56, Cl. 214—147.

Johnson, Morton A. Edge smoothing and sizing tool. 2,745,129, 5–15–56, Cl. 15—236.

Johnson, Robert H., and R. H. Shackelford, to General Electric Co. Reverse vortex combustion chamber. 2,745,250, 5–15–56, Cl. 60—39.65.

Johnston, James H.: *See*—
Martin, Cecil G., and Johnson. 2,745,976.

Johnston, James M.: *See*—
Lightbody, Alexander, and Johnson. 2,745,347.

Johnston, Robert H., and G. E. Mitchell, to Esso Research and Engineering Co. Separation of C_3, C_4 and C_5 alkenes from highly cracked distillates. 2,745,889, 5–15–56, Cl. 260—677.

Johnston Testers, Inc.: *See*—
Garrison, Marion A. 2,745,189.
Taylor, William B. 2,745,495.

Joint Saw Co.: *See*—
Lewis, William H. 2,745,165.

Jones, Harold E. Method of treating cocoa beans and product thereof. 2,745,746, 5–15–56, Cl. 99—23.

Jones, Hiram, Jr. Adjustable masking shield for electropolisher. 2,745,805, 5–15–56, Cl. 204—279.

Jones, Reuben G., and E. C. Kornfeld, to Eli Lilly and Co. 1-formyl-2-dialkoxymethyl-succinic acid esters and their cyclization to heterocyclic compounds. 2,745,845, 5–15–56, Cl. 260—347.3.

Jones, Virgil C.: *See*—
Achenbach, John F., and Jones. 2,745,680.

Jones, Walter I., to United-Carr Fastener Corp. Heat sealable plastic fastener and assembly. 2,745,159, 5–15–56, Cl. 24—213.

Jones, Walter I., to United-Carr Fastener Corp. Fastener for attachment to plastic material. 2,745,160, 5–15–56, Cl. 24—217.

Jordan, Wesley A., to General Mills, Inc. Dehydrated castor oil fatty acids. 2,745,854, 5–15–56, Cl. 260—405.5.

Journeay, Glen E., to Monsanto Chemical Co. Preparation of cyanohydrins. 2,745,865, 5–15–56, Cl. 260—465.

Joy Mfg. Co.: *See*—
Ball, Charles F. 2,745,637.
Ostrak, Joseph. 2,746,024.

Käbisch, Gerhard, to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler. Process for the production of trichloroacetonitrile. 2,745,868, 5–15–56, Cl. 260—465.7.

Kafka, Wilhelm, to Siemens-Schuckertwerke, Aktiengesellschaft. Electrical fishing equipments. 2,745,205, 5–15–56, Cl. 43—17.1.

Kaiser Aluminum & Chemical Corp.: *See*—
Byrns, Alva C. 2,745,735.

Kaiser, Ernest F. Adapter for glass stopcock. 2,745,632, 5–15–56, Cl. 251—181.

Kalamazoo Tank & Silo Co.: *See*—
Zook, William M. 2,745,517.

Kallal, George W.: *See*—
Winter, John S., Kallal, and Mazzoni. 2,745,248.

Karch, Krekel. Erosion and flood control and land reclamation. 2,745,768, 5–15–56, Cl. 61—1.

Kasparson, Lennart A., to Norton Co. Calipering mechanisms. 2,745,184, 5–15–56, Cl. 33—178.

Katan, Earl: *See*—
Chappuis, George F., and Katan. 2,745,471.

Keen, William R., to Collins & Aikman Corp. Pile fabrics. 2,745,443, 5–15–56, Cl. 139—399.

Keephart, Lester M. Empty indicator for raw coal pipes and the like. 2,745,920, 5–15–56, Cl. 200—61.21.

Keleher, Henry W., to International Business Machines Corp. Ribbon reinking device. 2,745,533, 5–15–56, Cl. 197—171.

Keller, Curt, to Aktiengesellschaft Fuer Technische Studien. Turbo-machines. 2,745,969, 5–15–56, Cl. 250—83.6.

Kellogg, M. W., Co., The: *See*—
Alozery, Nicholas J. G., and Given. 2,745,794.

Kelly, Robert J.: *See*—
Tawney, Pliny O., and Kelly. 2,745,841.

Kelly, William H., to Cohoes Carrybag Co., Inc. Lock-top envelope. 2,745,595, 5–15–56, Cl. 229—77.

Kel-Win Mfg. Co., Inc.: *See*—
Winfree, Robert N. 2,745,627.

Kenner, Beatrice. Sanitary belt. 2,745,406, 5–15–56, Cl. 128—291.

Kessler, Frank, to General Dynamics Corp. Signaling system. 2,745,903, 5–15–56, Cl. 179—6.3.

Kiernan, Thomas F., Jr. Denture construction. 2,745,180, 5–15–56, Cl. 32—10.

Kihlgren, Theodore E.: *See*—
Pease, George R., and Kihlgren. 2,745,771.

Kilbey, Alfred R., and G. E. Tucker, to Raytheon Mfg. Co. Trigger circuits. 2,745,959, 5–15–56, Cl. 250—27.

Kimball, Jerome W. Live cricket dispenser. 2,745,209, 5–15–56, Cl. 43—55.

King, De Witt L., and R. C. Stuts, to Niagara Blower Co. Method of producing a bladed structure. 2,745,171, 5–15–56, Cl. 29—156.8.

Kingerley, Richard W., Jr., to E. I. du Pont de Nemours and Co. Organic shaped structures coated with Werner-type chromium compounds and method of making the same. 2,745,770, 5–15–56, Cl. 117—139.5.

Kingsbury, Chadwick B., to North American Rayon Corp. Twist control balloon inclosure. 2,745,239, 5–15–56, Cl. 57—108.

Kip, Inc.: *See*—
Hiscock, Earle F. 2,745,335.

Kirk, Stanley B.: *See*—
Aitchison, Robert B., and Kirk. 2,745,346.

Kistner, Harold J.: *See*—
Furman, Frank J., Kistner, Read, and Wagner. 2,745,493.

Kita, Donald A.: *See*—
Shull, Gilbert M., Kita, and Davisson. 2,745,784.

Kitterman, Carl C. Vehicle coupler draw bar for towing trailers. 2,745,681, 5–15–56, Cl. 280—501.

Kittler, Milton J., M. F. Sterner, and M. L. Smitley, to Holley Carburetor Co. Dual carburetor. 2,745,645, 5–15–56, Cl. 261—23.

Klawitter, Oscar E. Portable pattern maker's facer. 2,745,445, 5–15–56, Cl. 142—1.

Kleen, Werner: *See*—
Döhler, Oscar, Huber, and Kleen. 2,745,983.

Klein, Joseph R. Combined heating and soldering device. 2,745,368, 5–15–56, Cl. 113—110.

Klein, Victor G., and C. H. Mueller, to Lincoln Engineering Co. Timing mechanism. 2,745,290, 5–15–56, Cl. 74—142.

Kleinlein, Fritz, to M. Scheerle. Kneading pump. 2,745,643, 5–15–56, Cl. 259—104.

Klumb, Emil, to Modern Carpet Sweeper Co., Inc. Carpet sweeper. 2,745,125, 5–15–56, Cl. 15—41.

Knopf, Erich H., to Aschaffenburger Zellstoffwerke A. G. Cellulose cookers. 2,745,743, 5–15–56, Cl. 92—7.

Knox, William T., Jr., to Esso Research and Engineering Co. Propane dewaxing of lubricating oils. 2,745,791, 5–15–56, Cl. 196—18.

Kochalski, Horst: *See*—
Körber, Kurt, Kochalski, Flocke, and Heuer. 2,745,413.

Koenig, Carl F., to General Motors Corp. Tire trackpartial engagement type. 2,745,460, 5–15–56, Cl. 152—182.

Koepke, Lloyd E., and E. D. Storm. Outboard motor carrier. 2,745,673, 5–15–56, Cl. 280—40.

Köhler, Jacob W. L., to Hartford National Bank and Trust Co., trustee. Refrigerator gas liquifier. 2,745,262, 5–15–56, Cl. 62—123.

Kohler, Paul, to Pecar Fabrikation von Zielfernrohren und Feldstechern Paul Kohler & Co. Sighting telescope. 2,745,182, 5–15–56, Cl. 33—50.

Kohlhagen, Walter. Method of balancing rotary members. 2,745,287, 5–15–56, Cl. 73—481.

Kollgaard, Reyner, to Houdry Process Corp. Disengagement of gases from a moving bed of fluent solid particles. 2,745,724, 5–15–56, Cl. 23—288.

Konet, Henry, and C. E. Hurlburt, to Bendix Aviation Corporation. Servo system. 2,745,288, 5–15–56, Cl. 74—5.47.

Körber, Kurt, H. Kochalski, A. Flocke, and W. Heuer, to Kurt Korber & Co. Kommandit-Gesellschaft. Machines for producing cigarettes. 2,745,413, 5–15–56, Cl. 131—84.

Korber, Kurt, & Co. Kommandit-Gesellschaft: *See*—
Körber, Kurt, Kochalski, Flocke, and Heuer. 2,745,413.

Kornfeld, Edmund C.: *See*—
Jones Reuben G., and Kornfeld. 2,745,845.

Kortick, Morris. Cutting tool. 2,745,177, 5–15–56, Cl. 30—186.

Kraft Paper Products Ltd.: *See*—
Longtin, George L. R. 2,745,444.

Kraft, Robert H., to Goodman Mfg. Co. Mining machine having combined elevating conveyor and horizontal rotary cutter bar. 2,745,652, 5–15–56, Cl. 262—24.

Kramer, Gideon A. Chair with resilient tilting seat and back. 2,745,468, 5–15–56, Cl. 155—53.

Kramer Trenton Co.: *See*—
Malkoff, Hyman. 2,745,254.

Kreinberg, Russell, to Electric Service Mfg. Co. Vehicle destination sign mechanisms. 2,745,199, 5–15–56, Cl. 40—86.

Kress, F. J., Box Co.: *See*—
Steck, Clyde O. 2,745,592.

Krogsgaard, Olav M. Guard for grinding or polishing wheels. 2,745,230, 5–15–56, Cl. 51—270.

Kron, Harold O., to Philadelphia Gear Works, Inc. Valve controls. 2,745,294, 5–15–56, Cl. 74—625.

Kronoff, Clarence R., and A. H. Taylor, Jr., to Crompton & Knowles Loom Works. Loom gauge. 2,745,185, 5–15–56, Cl. 33—181.

Kryzan, Anthony T.: *See*—
Prest, Stanley F. 2,745,948.

Kuhlman, Arthur L. Pre-cast building units. 2,745,276, 5–15–56, Cl. 72—41.

Kumins, Charles A., to Interchemical Corp. Process for making ultramarine. 2,745,766, 5–15–56, Cl. 106—305.

Kümpers, Carl L.: *See*—
Dölling, Fritz, and Kümpers. 2,745,145.

Kumpers, F. A., K. G.: *See*—
Dölling, Fritz, and Kümpers. 2,745,145.

Kundiger, Donald G., and H. Pledger, Jr., to The Dow Chemical Co. Halophenyldichloromethylpropenes. 2,745,884, 5–15–56, Cl. 260—651.

Küsters, Eduard, to Texplant Corp. Pressure loading device for printing roll. 2,745,342, 5–15–56, Cl. 101—247.

Labombarde, Beatrice M.: *See*—
Labombarde, Harold S. 2,745,378.
Labombarde, Harold S. 2,745,665.

Labombarde, Harold S., deceased, by B. M. Labombarde, executrix, to International Paper Box Machine Co. Adhesive applying apparatus. 2,745,378, 5–15–56, Cl. 118—237.

Labombarde, Harold S., deceased, by B. M. Labombarde, executrix, to International Paper Box Machine Co. Suction feeding mechanism. 2,745,665, 5–15–56, Cl. 271—26.

Laboratory for Electronics, Inc.: *See*—
Woolaver, Lawrence B., and Maclay. 2,746,019.

Lacoste, Victor A., to Monsanto Chemical Co. Apparatus for calking catalyst bed. 2,745,722, 5–15–56, Cl. 23—288.

Lacy Oil Tool Co.: *See*—
Delahay, Raymond D. 2,745,660.

Ladd, Allan L., and M. L. Speckman. Drier. 2,745,193, 5–15–56, Cl. 34—102.

Laing, Kenneth M.: *See*—
Fitzgerald, John V., and Laing. 2,745,284.

Lakin, Adele, to Archer Mills, Inc. Display device. 2,745,556, 5–15–56, Cl. 211—45.

Lamac Process Co.: *See*—
Suerken, Maxwell C. 2,745,123.

Lamb, George E., to Lamb-Grays Harbor Co., Inc. Sheet spreading conveyor. 2,745,538, 5–15–56, Cl. 198—34.

Lamb-Grays Harbor Co., Inc.: *See*—
Lamb, George E. 2,745,538.

Lancour, Lawrence. Lawn edgers. 2,745,331, 5–15–56, Cl. 97—227.

Landy, Anne M., and N. Seidler. Sanitary receptacles. 2,745,405, 5–15–56, Cl. 128—286.

Lang, Eugene M., to Heli-Coil Corp. Wire coil bolt lock. 2,745,457, 5–15–56, Cl. 151—14.

Larsen, Oscar F.: *See*—
Fowler, Roland G., Frieberg, and Larsen. 2,745,601.

Lauck, John A., to Borg-Warner Corp. Pressure loaded pump. 2,745,356, 5–15–56, Cl. 103—126.

Lautenberger, Elmer W., to General Electric Co. Electric coil assembly. 2,746,020, 5–15–56, Cl. 336—55.

Lavallee, Joseph A. Door plate. 2,745,200, 5–15–56, Cl. 40—125.

Lawson, George S., to C. M. Penney Co. Reed sounder. 2,745,214, 5–15–56, Cl. 46—117.

Lawson, James L., to the United States of America as represented by the Secretary of the Navy. Protection of receiver against overload. 2,746,017, 5–15–56, Cl. 333—13.

Leake, George L. Screw removing tool. 2,745,448, 5–15–56, Cl. 144—32.

Leavenworth Steel, Inc.: *See*—
Haynes, William J. 2,745,675.

Lee, Charles B.: *See*—
Brown, Ellis M., Lee, and Gilford. 2,745,369.

Leeds and Northrup Co.: *See*—
Lévêque, Pierre. 2,745,803.

Leitner, George J.: *See*—
Fath, Joseph, and Leitner. 2,745,832.

Leits, Ernst, G. m. b. H.: *See*—
Horn, Willi. 2,745,310.

Leksgard, Sverre A. Bark peeling device. 2,745,176, 5–15–56, Cl. 30—121.

Lenk, Edgar, to Lenk Mfg. Co. Soldering iron. 2,745,939, 5–15–56, Cl. 219—26.

Lenk Mfg. Co.: *See*—
Lenk, Edgar. 2,745,939.

Lermont, Basil. Constant force yarn tensioning means. 2,745,609, 5–15–56, Cl. 242—149.

Leslie, Philip, and F. J. R. Batten, to themselves and E. W. Smith. Method of making a pattern for an article of wearing apparel. 2,745,140, 5–15–56, Cl. 18—56.

Lévêque, Pierre, to Leeds and Northrup Co. Polarographic electrode. 2,745,803, 5–15–56, Cl. 204—195.

Lever Brothers Co.: *See*—
Shafer, Stanley I., Gudheim, and Schmidt. 2,745,750.

Levin, Alexander, to the United States of America, as represented by the Secretary of the Army. Auxiliary air feeding device for stoves. 2,745,397, 5–15–56, Cl. 126—77.

Levitt, Leonard S. Process for purification of thiophene. 2,745,843, 5–15–56, Cl. 260—332.8.

Levy, Fred'k. H., Co., Inc.: *See*—
Brodie, George R. 2,745,344.

Lewin, John U.: *See*—
Frohnsdorff, Raymond S. M., and Lewin. 2,745,788.

Lewis, Ian A. D. Pulse amplitude analysers. 2,745,985, 5–15–56, Cl. 315—9.

Lewis, William H., to Joint Saw Co. Paving form structure. 2,745,165, 5–15–56, Cl. 25—118.

Liberatore, Laurence C., C. B. Tibbits, C. F. Aldridge, and H. C. Fischer, to Taylor Instrument Companies. Adjustable thermometer controller. 2,745,925, 5–15–56, Cl. 200—141.

Licentia Patent-Verwaltungs, G. m. b. H.: *See*—
Haseloff, Fritz. 2,745,341.

Lideen, Ernest J. Vacuum tube shield and heat radiator. 2,745,895, 5–15–56, Cl. 174—35.

Lien, Knut M., to Enna Ltd. Child's hand-propelled velocipede. 2,745,879, 5–15–56, Cl. 280—218.

Lightbody, Alexander, and J. M. Johnston, to Sir W. G. Armstrong Whitworth Aircraft Ltd. Self-projected missiles. 2,745,347, 5–15–56, Cl. 102—49.

Lilly, Eli and Co.: *See*—
Jones, Reuben G., and Kornfeld. 2,745,845.

Lincoln Engineering Co.: *See*—
Klein, Victor G., and Mueller. 2,745,290.

Lindars, Herman. Automatic filling apparatus for liquid containers. 2,745,585, 5–15–56, Cl. 226—127.

Lindell, Sigurd I., to S & C Electric Co. Drop out fuse construction. 2,745,921, 5–15–56, Cl. 200—114.

Lindell, Sigurd I., to S & C Electric Co. Fuse construction. 2,745,923, 5–15–56, Cl. 200—116.

Lindgren, Frank A., to Goodman Mfg. Co. Self-propelled room and pillar kerf cutting machine. 2,745,654, 5–15–56, Cl. 262—30.

Link, Victor A., to United States Steel Corp. Beam and channel turning devices. 2,745,536, 5–15–56, Cl. 198—33.

Linnert, George E., and W. R. Satterfield, to Armco Steel Corp. Welding flux and method. 2,745,769, 5–15–56, Cl. 117—132.

Loevenstein, Hirsch, and P. L. A. Belon, to Pechiney Compagnie de Produits Chimiques et Electrometallurgiques. Process for the production and recovery of zinc in metallic form by reduction of materials containing zinc in oxide form. 2,745,736, 5–15–56, Cl. 75—86.

Lofgren, Edward J., to the United States of America as represented by the United States Atomic Energy Commission. Calutron receivers. 2,745,965, 5–15–56, Cl. 250—41.9.

Logan, John H., to Vue Fax Corp. Card bank remover. 2,745,408, 5–15–56, Cl. 129—16.

Logemann, Heino, W. Graulich, and W. Becker, to Farbenfabriken Bayer Aktiengesellschaft. Method of and material for taking impressions, especially for dental purposes. 2,745,813, 5–15–56, Cl. 260—29.6.

Logemann, Heino, W. Becker, and O. Bayer, to Farbenfabriken Bayer Aktiengesellschaft. Dental material. 2,745,817, 5–15–56, Cl. 260—45.5.

Long, George R., to General Motors Corp. Electroplating pipe joint. 2,745,797, 5–15–56, Cl. 204—16.

Long, Samuel W.: *See*—
Monroe, Ezra, and Long.

Longtin, George L. R., to Kraft Paper Products Ltd. Woven matting. 2,745,444, 5–15–56, Cl. 139—420.

Lorentzen Hardware Mfg. Corp.: *See*—
Nelson, Harry.

Lorenz, Anton. Article of response for supporting the body of a person. 2,745,469, 5–15–56, Cl. 155—106.

Lorenzsonn, Eugen H., to Publisher Printing Co., Inc. Wrappings for chocolate, cookies, candy, and other sweets. 2,745,596, 5–15–56, Cl. 229—87.

Lowe, Edison, and W. C. Rockwell, to the United States of America as represented by the Secretary of Agriculture. Continuous belt trough drier. 2,745,194, 5–15–56, Cl. 34—233.

Lucien, René, and E. Tetart, to Societe d'Inventions Aeronautiques et Mecaniques S. I. A. M. Improvements relating to the moulding of foundry casting, particularly for light alloys. 2,745,154, 5–15–56, Cl. 22—134.

Luckhardt, Johannes, to N. P. Martin, and O. L. Walter, as trustees of Gamma Trust. Article of repose for supporting the body of a person. 2,745,470, 5–15–56, Cl. 155—106.

Ludeman, Clifford G., to Texaco Development Corp. Detection and measurement of penetrative radiation. 2,745,967, 5–15–56, Cl. 250—71.

Ludeman, Clifford G., to Texaco Development Corp. Detection and measurement of penetrative radiation. 2,745,968, 5–15–56, Cl. 250—71.

Lum, Funston G.: *See*—
Carlston, Earl F., and Lum.

Lunde, Einar O., to Magor Car Corp. Dump car door control means. 2,745,359, 5–15–56, Cl. 105—272.

Lunde, Einar O., to Magor Car Corp. Hopper outlet valve structure. 2,745,360, 5–15–56, Cl. 105—307.

Lunde, Einar O., to Magor Car Corp. Valve control means in railway car dumping systems. 2,745,361, 5–15–56, Cl. 105—311.

Lunde, Einar O., to Magor Car Corp. Car roof hatch. 2,745,362, 5–15–56, Cl. 105—377.

Luntz, David M., to Houdry Process Corp. Apparatus for the conversion of liquid hydrocarbons. 2,745,723, 5–15–56, Cl. 23—288.

Lüthi, Fritz: *See*—
Steiger, Robert, and Lüthi.

Lynch, Harold E.: *See*—
Daly, Grover J., and Lynch.

Lyon, George A. Brake drum air cooling device. 2,745,519, 5–15–56, Cl. 188—264.

Lyster, George, Jr., 50% to B. Chiuchiarelli. Locking cover for toilet flush tanks. 2,745,110, 5–15–56, Cl. 4—68.

Macclatchie Mfg. Co.: *See*—
Shellman, Roy K.

MacDuff, Stanley L.: *See*—
Arens, Cecil F., and MacDuff.

Mack, Gerry P., and E. Parker, to Carlisle Chemical Works, Inc. Halogen-containing resins stabilized with organo-tin compounds. 2,745,819, 5–15–56, Cl. 260—45.75.

Mack, Gerry P., to Carlisle Chemical Works, Inc. Tri-butyltin-mono-methoxide and polyvinyl chloride resin stabilized therewith. 2,745,820, 5–15–56, Cl. 260—45.75.

Mack, Gerry P., to Carlisle Chemical Works, Inc. Acrylonitrile fibers of improved dye susceptibility. 2,745,822, 5–15–56, Cl. 260—83.3.

Maclay, Franklyn P.: *See*—
Woolaver, Lawrence B., and Maclay.

Magic Chef, Inc.: *See*—
Douglas, Bradley C., and Pryor.

Magnesium Elektron Ltd.: *See*—
Emley, Edward F., and Unsworth.
Hock, Alfred L.

Magnetorque Couplings Ltd.: *See*—
Zozulin, Igor V., Okulitch, and Ellett.

Magor Car Corp.: *See*—
Lunde, Einar O.
Lunde, Einar O.
Lunde, Einar O.
Lunde, Einar O.

Maher, Richard A., and C. C. Pfitzer, to Avco Mfg. Corp. Television receiver circuit.

Malkoff, Hyman, to Kramer Trenton Co. Fluid flow controlling device.

Manis, James V. Stable water jet hull.

Manley, Robert E., to The Texas Co. Solvent extraction of oil.

Markley, Klare S.: *See*—
Feuge, Reuben O., Vicknair, and Markley.

Martin, Cecil G., and J. H. Johnston, to Jack & Heintz, Inc. Means and method of seating brushes on rotating electrical machines.

Martin, Charles A., to Radio Corp. of America. Annular element antenna systems.

Martin, Johannes J. Combustion air supply through grates and grate construction.

Martin, Lewis C., G. B. Moffett, and G. O. Erickson. All-wire collapsible newspaper rack.

Martin, Norman P.: *See*—
Luckhardt, Johannes.

Martinez, Antonio C. Fan.

Marx, Joseph P. One piece dual exhaust manifold for internal combustion engines.

Maryland Baking Co., The: *See*—
Balton, James.

Mas, Joseph A., to Vibration Research Laboratories, Inc. Vibrator.

Massey, B. & S., Ltd.: *See*—
Foster, John.

Massey, Bernard S., to The Bristol Aeroplane Co. Ltd. Devices for separating liquids from gaseous dispersions.

Masterson, Earl E., to Radio Corp. of America. Tape tension winding control.

Mavity, Julian M., to Universal Oil Products Co. Preparation of aromatic thio ethers.

Mazzoni, James J.: *See*—
Winter, John S., Kallal, and Mazzoni.

McCallum, Robert A., to Goodman Mfg. Co. Lever control mechanism for combined operation of vehicle tramming and steering valves.

McCashen, James F. Whole grain flours and process of making.

McCormack, Foster D., to Minnesota and Ontario Paper Co. Paper machine reel starter.

McCormick, Jerry R. D., and S. A. Muller, to American Cyanamid Co. Recovery and purification of vitamin B12.

McCoy, Robert E., to the United States of America as represented by the Secretary of the Army. Spaced loop direction finder.

McDonnell Aircraft Corp.: *See*—
Winter, John S., Kallal, and Mazzoni.

McDougall, John A., to Ford Motor Co. Window regulator.

McElhaney, Edward D. Steam vacuum boiler.

McGill, Robert E. Fishing tools.

McGuire, Richard R.: *See*—
Derr, William T., and McGuire.

McIntyre, Sidney S., to The Humboldt Co. Combination log yarder and loader.

McKinley, Gordon C.: *See*—
Bolton, John A., and McKinley.

McLamore, William M.: *See*—
Bayley, Abraham, Gollaher, and McLamore.

McLaughlin, George H., and W. A. Robinson, to The McPhar Engineering Co. of Canada Ltd. Electromagnetic drill hole exploration method and apparatus.

McPhar Engineering Co. of Canada Ltd., The: *See*—
McLaughlin, George H., and Robinson.

McPherson, George, Jr., to Drilling Research, Inc. Frequency control systems for vibratory transducer.

McWethy, Irvin E., to Admiral Corp. Hinge.

McWorkman, Holt. Sucker rod box cleaners.

Meade, Leonard P., to Phillips Petroleum Co. Apparatus and method for controlling temperatures of hot gas lift for pebbles.

Meier, Robert C., Jr. Automatically releasable ski binding.

Melchore, James A., to American Cyanamid Co. Process for the polymerization of styrene and acrylonitrile.

Mendelsohn, Jerome W. Conveyor mechanism.

Mendez, Alfredo. Portable cooling unit.

Mengall, Otavio J., to The Haloid Co. Electrophotographic process.

Merit Mfg. Co., Inc.: *See*—
Rabb, Lionel.

Merrill, Casper W. Continuous freezer.

Mertes, Thomas S., and H. B. Rhodes, to Sun Oil Co. Treating of liquids with granular solids.

Mertz, Clyde W., to Phillips Petroleum Co. Stabilization of certain vinyl-pyridines, vinyl quinolines and vinyl-isoquinolines.

Mertz, Pierre, to Bell Telephone Laboratories, Inc. Measurement of transmission time delay.

Metropolitan-Vickers Electrical Co. Ltd.: *See*—
Parr, Ronald, and Evans.

Meyer, Irwin, to Appleton Electric Co. Take-up reel with releasable locking device.

Michle, John S., to The Reliance Electric and Engineering Co. Expansible V-pulley.

Middendorff, Heinz: *See*—
Ritter, Eugen J., and Middendorff.

Miller, Dale W.: *See*—
Moore, Richard E., and Miller.

Miller, Donald L., to Bendix Aviation Corp. Starter gearing for internal combustion engines.

Miller, Floyd F.: *See*—
Gilbert, Harry, and Miller.

Miller, Ralph L. Paint brush support and wiper.

Mills, Ivor W.: *See*—
Jezl, James L., and Mills.

Milos, Louis W. Continuous lubricant supply for bearings.

Miner, Richard Y., Q. J. Evans, and C. F. Abt., to American Bosch Arma Corp. Electromechanical computing apparatus.

Miner, Richard Y. Q. J. Evans, and C. F. Abt., to American Bosch Arma Corp. Mathematical analyzer.

Minneapolis-Honeywell Regulator Co.: *See*—
Grogan, Edward C.
Wannamaker, William H. Jr.

Minnesota and Ontario Paper Co.: *See*—
McCormack, Foster D.

Minister Machine Co., The: *See*—
Wissman, Reuben F.

Missouri Automatic Control Corp.: *See*—
Garner, Claude M.

Mitchell, George E.: *See*—
Johnston, Robert H., and Mitchell.

Model, Ernst: *See*—
Bindler, Jakob, and Model.

Modern Carpet Sweeper Co., Inc.: *See*—
Klumb, Emil.

Moffett, George B.: *See*—
Martin, Lewis C., Moffet, and Erickson.

Molins, Desmond W., to Molins Machine Co., Ltd. Delivery of cigarettes to a cigarette-packing machine.

Molins Machine Co., Ltd.: *See*—
Molins, Desmond W.

Moloney, Paul S., and J. L. Verga, to The Seneca Mfg. Co. Door latch.

Monarch Logging Co., Inc.: *See*—
Ronchon, Robert W.

Monroe, Charles Z., and J. F. Earp, to Ex-Cell-O Corp. Flat top container fabricating machine.

Monroe, Ezra, and S. W. Long, to The Dow Chemical Co. Preparation of alpha-halo-nitroacetophenones.

Monsanto Chemical Co.: *See*—
Blake, Edward S., and Wineman.
Comte, Frederick.
Dazzi, Joachim.
Dazzi, Joachim.
Edwards, James W.
Farrar, Martin W.
Journeay, Glen E.
Lacoste, Victor A.
Mowry, David T., and Schlesinger.

Montgomery, John R., to American Totalisator Co., Inc. Continuous issue interlock.

Mooradian, Aram, to Sterling Drug Inc. Oxidation of progesterone and products produced thereby.

Moore, John F., to Raytheon Mfg. Co. Tracking control system.

Moore, Richard E., and D. W. Miller, to General Motors Corp. Propeller control for controlling blade pitch in governed speed, feathering, and negative pitch regimes.

Moore, Stanley C., to The Drill Collar Service Co., Inc. Resilient drill collar joint.

Mora, Steve, to Inter-City Mfg. Co. Combined washer and squeegee.

Morf, Ernest. Watch with an automatic winding mechanism for a motor vehicle.

Morf, Ernest. Timepiece.

Morgan, Clyde W. Refreshment tray for automobile instrument panel.

Morgan John D. Vehicle ornament protector.

Morway, Arnold J., and L. C. Dawson, to Esso Research and Engineering Co. Process for preparing lubricating compositions.

Mosbacher, Bruce H., to Geo. D. Roper Corp. Pump or fluid motor of the gear type.

Motorola, Inc.: *See*—
Hill, Fred P.
Parker, Norman W.

Moule, Rex E. Drying oven.

Mowry, David T., and A. H. Schlesinger, to Monsanto Chemical Co. Herbicidal composition.

Mueller, Carl F., and W. A. Mueller. Ozone massage device.

Mueller Carl F. and W. A. Ozone therapeutic device.

Mueller, Carl H.: *See*—
Klein Victor G., and Mueller.

Mueller Co.: *See*—
Mueller, Frank H., and Smith.

Mueller, Frank H., and J. J. Smith, to Mueller Co. Machine for drilling and tapping mains.

Mueller, Walter A.: *See*—
Mueller, Carl F., and W. A.
Mueller, Carl F., and W. A.

Mullally, Vernon P. Fire alarm apparatus.

Müller, Josef, to Deutsche Gold-und Silber-Scheideanstalt vormals Roessler. Hydrogen peroxide production.

Muller, Siegfried A.: *See*—
McCormick, Jerry R. D., and Muller.

Munn, George E. to E. I. du Pont de Nemours and Co. Preparation of n,n'-diacylhexamethylenediamines and an intermediate.

Murphy, Howard J., to United-Carr Fastener Corp. Fastening device.

Murray, James J. Flux-gap variation transducer for hydrophones, microphones, and accelerometers.

Mussell, Dorsey R., to The Dow Chemical Co. Method and composition for the improvement of soil structure.

Myers, Herman E.: *See*—
Myers, Virgil O.

Myers, Virgil O., 49% to H. E. Myers. Fish spear.

N. V. "COQ": *See*—
Hidde Nijland, Hendrik A.

N. V. Ontwikkelingmaatschappij "Polynorm": *See*—
Horowitz, Alexandre, and Termaat.

Nädelin, Eugen, to Gottlieb Gühring. Device for sharpening twist drills.

Nagler, Bruno, to Nagler Helicopter Co., Inc. Rocket-driven helicopter rotor.

Nagler Helicopter Co., Inc.: *See*—
Nagler, Bruno.

Nahm, Helmut: *See*—
Ehrhart, Gustav, Nahm, and Siedel.

Naillinger, Friedrich K. H., to Daimler-Benz Aktiengesellschaft. Internal combustion engine with a supercharger.

Naillinger, Friedrich K. H., to Daimler-Benz Aktiengesellschaft. Arrangement of the driving gear of motor vehicles, in particular of omnibuses.

National Cash Register Co., The: *See*—
Fowler, Roland G., Frieberg, and Larsen.

National Dairy Research Laboratories, Inc.: *See*—
Freund, Ernest H., and Domovs.

National Distillers Products Corp.: *See*—
Callanan, John P., and Patton.

Natkanski, Wincenty. Underground garage.

Navy, United States of America as represented by the Secretary of the: *See*—
Lawson, James L.
Sichak, William.
Zaffarano, Frank P.

Neil, James M. Automatic resetting screw-holding screw driver.

Nelson, Harry, to Lorentzen Hardware Mfg. Corp. Venetian blind construction.

Nelson, Malvin V., to Cory Corp. Merchandise display cap for mechanical pencils.

Nelson, Noral A., to Harry Ferguson, Inc. Flexible implement connection to tractor drawbar.

Nelsson, Nels, to United States Gypsum Co. Ceiling runners and partition structure.

NePeer Co.: *See*—
Van Raden, Frederick F.

Newell, Robert E. Automatic gas safety cut-offs of the thermocouple type.

Newton, Harry A. Nursing bottle.

Niagara Blower Co.: *See*—
King, De Witt L., and Stutz.

Nicholas, James H., to G & W Electric Specialty Co. High voltage electric terminator.

Nihlen, Arvid C. K., to Brown Fintube Co. Connecting means for concentric pipes.

Nims, Paul T., to Chrysler Corp. Process for manufacturing electrical coils.

Norland, Daniel O. Rotating sprinkler.

Norma-Hoffman Bearings Corp.: *See*—
Anderson, Warren D.

North American Rayon Corp.: *See*—
Kingsbury, Chadwick B.

Northrop Aircraft, Inc.: *See*—
Strayer, Chalmers A.

Norton Co.: *See*—
Beth, Walter F.
Comstock, George E., 3rd.
Comstock, George E., 3rd.
Erickson, John R.
Irany, Ernest P.
Kasparson, Lennart A.
Ueltz, Herbert F. G.

Norton, Frederick H., to The Dow Chemical Co. Process for recovering pure zinc ethionate.

Norton, Frederick H., and D. Stevens, to The Dow Chemical Co. Method for the preparation of zinc ethionate.

Norwood, Virginia T., to the United States of America as represented by the Secretary of the Army. Radar reflector.

Novi Equipment Co.: *See*—
Adler, Herman G.

Nowak, Joseph C. Method and machine for paper hanging.

Nowotny, Glenn J., to Ray-O-Vac Co. Primary dry cell.

Nuodex Products Co., Inc.: *See*—
Fath, Joseph, and Leitner.

O'Brien, Ellis J.: *See*—
Dunn, Holbert E., and O'Brien. 2,745,715.
Dunn, Holbert E., and O'Brien. 2,745,764.
Dunn, Holbert E., and O'Brien. 2,745,765.

O'Connor, William J., to Union Stock Yards & Transit Co. Pens for livestock and fence for use in same. 2,745,638, 5–15–56, Cl. 256—19.

Oetzel, John G., to Warner Electric Brake & Clutch Co. Eddy current torque producing device. 2,745,974, 5–15–56, Cl. 310—93.

Oishei, John R., to Trico Products Corp. Windshield cleaner. 2,745,130, 5–15–56, Cl. 15—253.

Okulitch, George J.: *See*—
Zosulin, Igor V., Okulitch, and Ellett. 2,745,975.

Olin Mathieson Chemical Corp.: *See*—
Jenney, Theodore M. 2,745,883.
Woodward, Eric R. 2,745,714.
Ruple, Carl E. 2,745,203.
Semenoff, Serge, and Dolliver. 2,745,826.
Williams, Henry M. 2,745,318.

Olsen, Ole K. Plant support. 2,745,219, 5–15–56, Cl. 47—47.

Onsrud Machine Works, Inc.: *See*—
Groen, Willem. 2,745,320.

Optical Plastics Corp.: *See*—
Beattie, John O. 2,745,138.

Orr, Fingal C. Spray device. 2,745,699, 5–15–56, Cl. 299—70.

Osborn, Ralph C. Vacuum cleaner. 2,745,512, 5–15–56, Cl. 183—37.

Osborne, Robert J. Tray holder. 2,745,619, 5–15–56, Cl. 248—226.

Oshkosh Trunks and Luggage Co.: *See*—
Plotkin, Joseph H. 2,745,524.

Osojnak, Boris M., to Heyl & Patterson, Inc. Sintering machine. 2,745,659, 5–15–56, Cl. 266—21.

Oster, Thomas H., to Ford Motor Co. Process of burning solid fuel to produce slag suitable for Portland cement. 2,745,657, 5–15–56, Cl. 263—53.

Oster, Thomas H., to Ford Motor Co. Method of reducing ores by a particular fuel combustion mixture. 2,745,732, 5–15–56, Cl. 75—26.

Oster, Thomas H., to Ford Motor Co. Appartus and process for reduction of ores to metal. 2,745,733, 5–15–56, Cl. 75—40.

Oster, Thomas H., to Ford Motor Co. Metal reduction and combustion process. 2,745,734, 5–15–56, Cl. 75—40.

Oster, Thomas H., to Ford Motor Co. Process of reducing metallic ores with gases. 2,745,737, 5–15–56, Cl. 75—91.

Ostrak, Joseph, to Joy Mfg. Co. Sockets for flat blade pins. 2,746,024, 5–15–56, Cl. 339—256.

O'Sullivan, Eugene D.: *See*—
Phalen, Joseph L. 2,745,700.

Oswald, William B.: *See*—
Harpoothian, Edward, and Oswald. 2,745,613.

Ott, George E., to General Electric Co. Leak detecting means. 2,745,582, 5–15–56, Cl. 226—20.4.

Ottawa River Paper Co., The: *See*—
Daly, Grover J., and Lynch. 2,745,589.

Otto, Ferdinand P., to Socony Mobil Oil Co., Inc. Preparation of alkaryl phosphoric acids. 2,745,863, 5–15–56, Cl. 260—461.

Otto, Julian A.: *See*—
Gilbert, Everett E., and Otto. 2,745,862.

Owens-Corning Fiberglas Corp.: *See*—
Sonneborn, Ralph H., and Dennen. 2,745,491.

Owens, Freeman H. Television apparatus and optical system. 2,745,901, 5–15–56, Cl. 178—6.

Pacific Mills: *See*—
Wilkie, Robert C. 2,745,146.

Paige, Richard E. Display stand. 2,745,617, 5–15–56, Cl. 248—174.

Painboeuf, Maurice: *See*—
Cahanes, Leon, Alran, Chevallier, Dietsch, and Painboeuf. 2,745,952.

Pan, Wen Y., to Radio Corp. of America. Multiband UHF oscillators. 2,745,961, 5–15–56, Cl. 250—36.

Pantages, Steven. Multiple remote control switch. 2,745,915, 5–15–56, Cl. 200—11.

Papa, Domenick, and S. B. Coan, to Schering Corp. Benshydryl ethers of alkyl piperidinols. 2,745,837, 5–15–56, Cl. 260—294.7.

Parker, Emery: *See*—
Mack, Gerry P., and Parker. 2,745,819.

Parker, Norman W., to Motorola, Inc. Color television receiver. 2,745,900, 5–15–56, Cl. 178—5.4.

Parker Pen Co., The: *See*—
Schroeder, Lawrence A. 2,745,548.

Parr, Ronald, and O. T. Evans, to Metropolitan-Vickers Electrical Co. Ltd. Control of alternating current electric motor equipment. 2,746,000, 5–15–56, Cl. 318—212.

Patrie, Jos, to Pechiney Compagnie de Produits Chimiques et Electrométallurgiques. Processes for coating aluminum and alloys thereof. 2,745,799, 5–15–56, Cl. 204—38.

Patton, Abner P.: *See*—
Callahan, John P., and Patton. 2,745,873.

Patzer, William A., to S. B. Atwood. Anti-cheating device coin operated machines. 2,745,531, 5–15–56, Cl. 194—97.

Paulsen, Robert C., to International Business Machines Corp. Variably displaced regulated-voltage power supply. 2,746,008, 5–15–56, Cl. 323—22.

Pavliah, Arnold E., to Basic Inc. Cementitious composition. 2,745,759, 5–15–56, Cl. 106—106.

Payne, John W.: *See*—
Penick, Joe E., and Payne. 2,745,795.

Pearse, Rubee J. Floating fountain. 2,745,697, 5–15–56, Cl. 299—4.

Pearson, Olaf. Machine for routing stair stringers. 2,745,449, 5–15–56, Cl. 144—136.

Pease, George R., and T. E. Kihlgren, to The International Nickel Co., Inc. Metal arc welding of 90-10 type copper-nickel material. 2,745,771, 5–15–56, Cl. 117—205.

Pecar Fabrikation von Zielfernrohren und Feldstechern Paul Kohler & Co.: *See*—
Kohler, Paul. 2,745,182.

Pechiney Compagnie de Produits Chimiques et Electrometallugiques: *See*—
Loevenstein, Hirsch, and Belon. 2,745,736.
Patrie, Jos. 2,745,799.

Pelenc, Yves, to Etablissements Merlin & Gerin, Societe Anonyme. Accumulator for mechanical energy. 2,745,515, 5–15–56, Cl. 185—37.

Penick, Joe E., and J. W. Payne, to Socony Mobil Oil Co., Inc. Apparatus for the introduction of granular solids into a closed vessel. 2,745,795, 5–15–56, Cl. 196—147.

Penney, C. M., Co.: *See*—
Lawson, George S. 2,745,214.

Pennock, Milton F. Air cooled tire. 2,745,459, 5–15–56, Cl. 152—153.

PeQueen, John D. Toolmaker's square. 2,745,183, 5–15–56, Cl. 33—75.

Perkins, Corles M.: *See*—
Bennett, Alfred, and Perkins. 2,745,614.

Permacel Tape Corp.: *See*—
Weidner, Charles L., and Dunlap. 2,745,744.

Perrelli, John: *See*—
Perrelli, Joseph and J. 2,745,453.

Perrelli, Joseph and J. Freestone pitter. 2,745,453, 5–15–56, Cl. 146—28.

Perry, Clayton J.: *See*—
Davies, Thomas D., and Perry. 2,745,664.

Persico, Ralph W., and D. Pompa, to the United States of America as represented by the Secretary of the Army. Quick-applying cape and hood. 2,745,104, 5–15–56, Cl. 2—88.

Persson, Eric S. Locking mechanism. 2,745,692, 5–15–56, Cl. 292—263.

Peter, Bud J., to American Tansul Co. Laundry starch. 2,745,760, 5–15–56, Cl. 106—214.

Peter, Bud J., to American Tansul Co. Cooked laundry starch. 2,745,761, 5–15–56, Cl. 106—214.

Peters, Leo. Soft plastic food package. 2,745,752, 5–15–56, Cl. 99—171.

Petrie, Peter S.: *See*—
Britton, Edgar C., and Petrie. 2,745,857.

Petrucelly, Vincent J.: *See*—
Gilman, Samuel, and Petrucelly. 2,745,411.

Petty, Olive S.: *See*—
Hasbrook, Arthur F. 2,746,034.

Peyer, Frank, to Bethlehem Steel Co. Lifting tongs locking unit. 2,745,695, 5–15–56, Cl. 294—118.

Pfaff, G. M., A.-G.: *See*—
Zink, Hermann, and Wenz. 2,745,365.

Pfitzer, Christian C.: *See*—
Maher, Richard A., and Pfitzer. 2,745,899.

Pfizer, Chas., & Co., Inc.: *See*—
Bayley, Abraham, Gollaher, and McLamore. 2,745,838.
Shull, Gilbert M., Kita, and Davisson. 2,745,784.

Pfund, Charles E., to Bendix Aviation Corp. Self-extinguishing dial light for TV tuner. 2,746,029, 5–15–56, Cl. 340—282.

Phalen, Joseph L., ½ to Eugene D. O'Sullivan. Fire extinguisher. 2,745,700, 5–15–56, Cl. 299—95.

Philadelphia Gear Works, Inc.: *See*—
Kron, Harold O. 2,745,294.

Philco Corp.: *See*—
Clark, William J., and Devery. 2,745,132.

Phillipp, Lawrence A., to American Motors Corp. Defrosting refrigerating apparatus. 2,745,255, 5–15–56, Cl. 62—3.

Phillips, Benjamin, and P. S. Starcher, to Union Carbide and Carbon Corp. Diepoxides. 2,745,847, 5–15–56, Cl. 260—348.

Phillips, Freeman J., and R. Smith, to United States Steel Corp. Steel alloy blanks for glass-to-metal seal. 2,745,738, 5–15–56, Cl. 75—126.

Phillips, Freeman J., and C. O. Tarr, to United States Steel Corp. Steel glass seals and steel therefor. 2,745,739, 5–15–56, Cl. 75—128.

Phillips Petroleum Co.: *See*—
Becker, Charles E. 2,745,835.
Gilmore, Forrest E. 2,745,647.
Hewitt, William C. 2,745,823.
Meade, Leonard P. 2,745,656.
Mertz, Clyde W. 2,745,834.
Schirmer, Robert M. 2,745,251.
Stoops, Charles E., and Becker. 2,745,833.

Pichardo, Julio A. Food package kit. 2,745,751, 5–15–56, Cl. 99—171.

Pickands Mather & Co.: *See*—
De Vaney, Fred D. 2,745,730.

Pikal, Harry. Machine for coating apples on sticks. 2,745,374, 5–15–56, Cl. 118—16.

Pike, Kenneth R.: *See*—
Heidner, Richard C., Pike, and Burkett. 2,745,390.

Pilger, Paul J. Propulsion head for glass grinding machines. 2,745,227, 5–15–56, Cl. 51—216.

Pines, Herman, and J. A. Vesely, to Universal Oil Products Co. Dehydrogenation of non-aromatic cyclic compounds. 2,745,887, 5–15–56, Cl. 260—668.

Pintsch Bamag Aktiengesellschaft: *See*—
Sittig, Georg. 2,745,312.

Pittsburgh Plate Glass Co.: *See*—
Fitzgerald, John V., and Laing. 2,745,284.

Pledger, Huey, Jr.: *See*—
Kundiger, Donald G., and Pledger. 2,745,884.

Plotkin, Joseph H., to Oshkosh Trunks and Luggage Co. Two-way handle for hat boxes. 2,745,524, 5–15–56, Cl. 190—57.

Podmorski, Gustave, to Air Associates, Inc. Personal relief device. 2,745,111, 5–15–56, Cl. 4—110.

Pompa, Dominic: *See*—
Persico, Ralph W., and Pompa. 2,745,104.

Ponsar, Yves M. Arrangement for adjusting a flow of liquid. 2,745,426, 5–15–56, Cl. 137—143.

Poor, John, to Van Der Horst Corp. of America. Electroplating with iron. 2,745,800, 5–15–56, Cl. 204—48.

Porter, Spiers (Leicester) Ltd.: *See*—
Boynton, Thomas E., and Turnbull. 2,745,309.

Post Glover Electric Co., The: *See*—
Yingst, Paul V. 2,745,916.

Potter, Frederick M., to Bendix Aviation Corp. Current regulator. 2,746,005, 5–15–56, Cl. 322—27.

Potts, Helen V.: *See*—
Potts, Thomas A. and H. V. 2,745,118.

Potts, Thomas A., and H. V. Potts; H. V. Potts, executrix of T. A. Potts, deceased. Catamaran. 2,745,118, 5–15–56, Cl. 9—2.

Powley, Richard A., to Air Reduction Co., Inc. Method for arc welding. 2,745,935, 5–15–56, Cl. 219—10.

Preisig, Joseph O., to Radio Corp. of America. Adjustable voltage supply. 2,745,986, 5–15–56, Cl. 315—22.

President and Directors of the Manhattan Co.: *See*—
Schlaich, Herman. 2,745,286.

Prest, Stanley F., ½ to A. T. Kryzan. Illuminated shrine. 2,745,948, 5–15–56, Cl. 240—10.

Prestole Corp.: *See*—
Collins, Coy W. 2,745,155.

Price, Berry G., to Tuboscope Co. Inductive electromagnetic inspection. 2,746,012, 5–15–56, Cl. 324—37.

Price, Fraser P., to General Electric Co. Combined heating and thermosensitive heating control units. 2,745,944, 5–15–56, Cl. 219—46.

Prince, Charles A., to The Dow Chemical Co. Method of cleaning the inside of pipe. 2,745,231, 5–15–56, Cl. 51—282.

Proffitt, Ira J. Combined soap and razor blade receptacle. 2,745,211, 5–15–56, Cl. 45—28.

Protzmann, Donald E., to General Electric Co. Dial illuminator. 2,745,946, 5–15–56, Cl. 240—2.1.

Pryor, Harry H.: *See*—
Douglas, Bradley C., and Pryor. 2,745,482.

Publishers Printing Co., Inc.: *See*—
Lorenzsonn, Eugen H. 2,745,596.

Puckett, Robert L., ½ to Guntert & Zimmerman Const. Div., Inc. Stud welder. 2,745,933, 5–15–56, Cl. 219—4.

Puckette, Walter W. Turkey caller. 2,745,215, 5–15–56, Cl. 46—180.

Purdy, Kenneth C. Extension blade guard attachment for double edge safety razors. 2,745,175, 5–15–56, Cl. 30—31.

Rabb, Lionel, to Merit Mfg. Co., Inc. Temple hinge construction. 2,745,314, 5–15–56, Cl. 88—53.

Radack, Harry E., to Circle F Mfg. Co. Wire connector. 2,746,025, 5–15–56, Cl. 339—272.

Radio Corp. of America: *See*—
Griffith, Brooks D. 2,745,960.
Martin, Charles A. 2,746,040.
Masterson, Earl E. 2,745,604.
Pan, Wen Yuan. 2,745,961.
Preisig, Joseph O. 2,745,986.
Rappaport, Paul. 2,745,973.
Ssiklai, George C. 2,745,316.
Van Ormer, David D. 2,745,978.
Weimer, Paul K. 2,745,773.

Ragland, Douglas, to Esso Research and Engineering Co. Kelly drive bushing. 2,745,636, 5–15–56, Cl. 255—23.

Rappaport, Paul, to Radio Corp. of America. Radioactive battery employing intrinsic semiconductor. 2,745,973, 5–15–56, Cl. 310—3.

Ratheon Mfg. Co.: *See*—
Sandock, Jules. 2,745,972.

Ray-O-Vac Co.: *See*—
Nowotny, Glenn J. 2,745,894.

Raytheon Mfg. Co.: *See*—
Dench, Edward C., and Dombrowski. 2,745,987.
Kilbey, Alfred R., and Tucker. 2,745,959.
Moore, John F. 2,746,032.

Read, Harold L.: *See*—
Furman, Frank J., Kistner, Read, and Wagner. 2,745,493.

Reed, Harold V., to Borg-Warner Corp. Clutch driven plate. 2,745,268, 5–15–56, Cl. 64—27.

Reese, Cole L., and L. Straus; said Reese assor. of 21¼ % to J. H. Stroman, and 5% to J. V. Connell. Emergency valve cylinder for hydraulic brake systems. 2,745,252, 5–15–56, Cl. 60—54.5.

Reese, Garland W., Jr., and G. E. Schmidt, to Allegheny Ludlum Steel Corp. Method for making low carbon 18—8 type heats. 2,745,731, 5–15–56, Cl. 75—12.

Regie Nationale des Usines Renault: *See*—
Saives, Léon. 2,745,526.

Reid, Raymond W., to The Dow Chemical Co. Method of making conductively coated electrodes. 2,745,774, 5–15–56, Cl. 117—216.

Reiffin, Martin G. Wrenches with adjustable jaws responsive to handle actuation. 2,745,305, 5–15–56, Cl. 81—128.

Reisman, Emil, to Resistance Products Co. Electric resistor. 2,745,930, 5–15–56, Cl. 201—67.

Reiss, Joseph F. Hammock. 2,745,115, 5–15–56, Cl. 5—122.

Reliance Electric and Engineering Co., The: *See*—
Michie, John S. 2,745,291.

Rem-Cru Titaniu, Inc.: *See*—
Darby, Paul F., Finlay, and Simmons. 2,745,891.

Rempel, Dietrich G., to Rempel Mfg., Inc. Press for heat sealing sheet and like multiple part objects. 2,745,463, 5–15–56, Cl. 154—1.

Rempel Mfg., Inc.: *See*—
Rempel, Dietrich G. 2,745,463.

Research Corp.: *See*—
Woodward, Robert B. 2,745,879.

Resistance Products Co.: *See*—
Reisman, Emil. 2,745,930.

Reuter, Harold A., to Visioneering Co., Inc. Motor or pump 2,745,348, 5–15–56, Cl. 103—4.

Reynolds Metals Co.: *See*—
Schmidt, Walther. 2,745,802.

Rhodes, Harrison B.: *See*—
Mertes, Thomas S., and Rhodes. 2,745,888.

Rich, John P.: *See*—
Burling, Elmer R., and Rich. 2,745,712.

Rich, John P., to Improved Machinery Inc. Means for discharging pulp from bleaching towers. 2,745,274, 5–15–56, Cl. 68—181.

Riddick, Thomas M., to Filtration Equipment Corp. Filter bottom for fixed bed filters. 2,745,553, 5–15–56, Cl. 210—124.

Ridge Tool Co., The: *See*—
Janik, Anton J. 2,745,670.

Ries, Herman E., Jr., to Sinclair Refining Co. Preparation of a catalyst using a metal soap of a carboxylic acid as an adsorbate. 2,745,812, 5–15–56, Cl. 252—455.

Rigterink, Raymond H., to The Dow Chemical Co. Preparation of asymmetrical bisphenols. 2,745,881, 5–15–56, Cl. 260—619.

Ritter, Eugen J., and H. Middendorff. Method of making laminated panels and product thereof. 2,745,779, 5–15–56, Cl. 154—118.

Ritzerfeld, Gerhard: *See*—
Ritzerfeld, Wilhelm and G. 2,745,340.

Ritzerfeld, Wilhelm and G. Moisture control device for rotary duplicating machines. 2,745,340, 5–15–56, Cl. 101—132.5.

Robbins, James S., to Goodman Mfg. Co. Tiltable supports for cutter heads of boring type mining machines. 2,745,648, 5–15–56, Cl. 262—7.

Robbins, James S., to Goodman Mfg. Co. Mining machine with adjustably mounted rotary cutting head. 2,745,649, 5–15–56, Cl. 262—7.

Robbio, Benjamin, to Giftcraft, Inc. Memorandum device. 2,745,371, 5–15–56, Cl. 116—134.

Roberts, Edward A., and P. Goldsmith, to the United States of America as represented by the Secretary of the Army. Apparatus for measuring density or pressure. 2,745,278, 5–15–56, Cl. 73—24.

Roberts, Ray J. D., and A. H. Faulkner, to C. D. Hummel, Sr. Thermostatic switch. 2,745,922, 5–15–56 Cl. 200—116.

Robertson, Loyd J. Automatic transfer switch control circuit. 2,745,971, 5–15–56, Cl. 307—64.

Robillard, André A., to Compagnie Auxiliaire des Mines. Battery of accumulators and bench for charging this battery. 2,746,002, 5–15–56, Cl. 320—2.

Robinson, William A.: *See*—
McLaughlin, George H., and Robinson. 2,746,009.

Rochon, Robert W., to Monarch Logging Co., Inc. Gas logging of wells. 2,745,282, 5–15–56, Cl. 73—153.

Rockwell, William C.: *See*—
Lowe, Edison, and Rockwell. 2,745,194.

Roe, Lawrence A., to Bjorksten Research Laboratories, Inc. Fire extinguishing liquid. 2,745,808, 5–15–56, Cl. 252—8.

Roebuck, Clyde. Stop motion for looms. 2,745,441, 5–15–56, Cl. 139—341.

Rogoff, Louis. Cable cutter. 2,745,178, 5–15–56, Cl. 30—245.

Roper, Geo. D., Corp.: *See*—
Crone, Albert H. 2,745,480.
Crone, Albert H. 2,745,481.
Mosbacher, Bruce H. 2,745,355.

Rorig, Kurt J., to G. D. Searle & Co. α,β-diaryl substitution products of α-alkenonitriles. 2,745,866, 5–15–56, Cl. 260—465.

Rorig, Kurt J., to G. D. Searle & Co. Polyalkoxy and polyalkanoyloxy derivatives of α,β-diphenylalkanones and their preparation. 2,745,870, 5–15–56, Cl. 260—479.

Roš, Mirko R. Production of prestressed building elements. 2,745,164, 5–15–56, Cl. 25—118.

Rose, Robert E., to Skinner Brothers Co. Polish rod steps. 2,745,703, 5–15–56, Cl. 304—28.

Rosenbaum, Harry S., to The Eastern Venetian Blind Co. Drapery fixture. 2,745,488, 5–15–56, Cl. 160—344.

Rossi, Paul. Cushion tire construction. 2,745,461, 5–15–56, Cl. 152—312.

Rostoker, Louis. Vibration damping device. 2,745,896, 5–15–56, Cl. 174—42.

Roy, Emil. Chute means for urging blanks into a carrier. 2,745,571, 5–15–56, Cl. 221—243.

Rubin, Emily. Handbags and the like. 2,745,456, 5–15–56, Cl. 150—35.

Ruddle, Allan B., deceased, by B. M. Ruddle, executrix. Coating composition. 2,745,758, 5–15–56, Cl. 106—83.

Ruddle, Beatrice M.: *See*—
Ruddle, Allan B. 2,745,758.

Ruff, Frederic S., to F. W. Andres, trustee. Preparation for storage of solid animal proteinaceous materials. 2,745,756, 5–15–56, Cl. 99—187.

Ruh, Robert P., and R. A. Davis, to The Dow Chemical Co. Fluorination of perhaloacetonitriles over an improved chromium fluoride catalyst. 2,745,867, 5–15–56, Cl. 260—465.7.

Ruh, Robert P., and R. A. Davis, to The Dow Chemical Co. 1-chloro-1,2,3,4,4-pentafluoro-1,3-butadiene. 2,745,885, 5–15–56, Cl. 260—653.

Ruh, Robert P., and R. A. Davis, to The Dow Chemical Co. Process for fluorinating aliphatic halohydrocarbons with a chromium fluoride catalyst and process for preparing the catalyst. 2,745,886, 5–15–56, Cl. 260—653.

Ruple, Carl E., to Olin Mathieson Chemical Corp. Firearm cartridge protector. 2,745,203, 5–15–56, Cl. 42—50.

Rupp, William C., to The Chandler & Price Co. Binder clamp attachment for paper cutting machines. 2,745,489, 5–15–56, Cl. 164—52.

Rusca, Ralph A.: *See*—
Young, Ray C., and Rusca. 2,745,144.

Ruschig, Heinrich: *See*—
Ehrhart, Gustav, Ruschig, and Haede. 2,745,852.

Russell, Edward J., and F. B. Wells, to Trojan Powder Co. Production of polypentaerythritols. 2,745,880, 5–15–56, Cl. 260—615.

Russell, Peter B.: *See*—
Hitchings, George H., Russell, and Whittaker. 2,745,831.

Russell, Ray A. Umbrella latch and runner combination. 2,745,421, 5–15–56, Cl. 135—38.

Ryan Aeronautical Co., The: *See*—
Sanborn, Daniel S. 2,745,249.

Ry-Lock Co., Ltd.: *See*—
Jensen, Jack H. 2,745,487.

S & C Electric Co.: *See*—
Lindell, Sigurd I. 2,745,921.
Lindell, Sigurd I. 2,745,923.

Sachara, Eugene F., to The B. F. Goodrich Co. Stabilized compositions comprising monomeric 1,1-dicyano ethylene. 2,745,869, 5–15–56, Cl. 260—465.8.

Safford, Moyer M., to General Electric Co. Combined heating and thermosensitive heating control units. 2,745,943, 5–15–56, Cl. 219—46.

St. Germain, Agenor E. Apparatus for molding boot and shoe parts. 2,745,124, 5–15–56, Cl. 12—97.

Salves, Leon, to Regie Nationale des Usines Renault. Transmission and engine brake interlock mechanism in automotive vehicles. 2,745,526, 5–15–56, Cl. 192—4.

Salhus, Lena O. Hip frame. 2,745,106, 5–15–56, Cl. 2—215.

Sallmann, Richard: *See*—
Schwarzenbach, Gerold, and Sallmann. 2,745,720.

Sanabria, John M., and E. J. Skwarlo, to American Television Mfg. Corp., Inc. Mounting means for a vacuum tube electrode assembly. 2,745,981, 5–15–56, Cl. 313—254.

Sanborn, Daniel S., to The Ryan Aeronautical Co. Reheater and fuel vaporizer for jet propulsion engines. 2,745,249, 5–15–56, Cl. 60—35.6.

Sandock, Jules, to Raytheon Mfg. Co. Electronic position and motion control systems. 2,745,972, 5–15–56, Cl. 307—149.

Sandos, A. G.: *See*—
Iselin, Ernst, and Wehrli. 2,745,828.

Sands, Hillard J., to The Harvard Mfg. Co. Bedframe with reinforcing caster plate means therein. 2,745,117, 5–15–56, Cl. 5—200.

Sansous, Joseph L. Electrically illuminated drinking glass holder. 2,745,947, 5–15–56, Cl. 240—6.4.

Sarco, Inc.: *See*—
Southerland, Francis M. 2,745,191.

Satterfield, Walter R.: *See*—
Linnert, George E., and Satterfield. 2,745,769.

Saunders, Orson V., to General Motors Corp. Refrigerator with means to cool shelves adjacent an insulated freezing compartment. 2,745,259, 5–15–56, Cl. 62—89.

Saunders, Orson V., to General Motors Corp. Hydrator on refrigerator cabinet door. 2,745,260, 5–15–56, Cl. 62—89.

Sawyer, William F. Cam milling attachment for milling machines. 2,745,319, 5–15–56, Cl. 90—13.9.

Schaefer, Franz. Multipurpose tent-cloth. 2,745,105, 5–15–56, Cl. 2—89.

Scheerle, Martin: *See*—
Kleinlein, Fritz. 2,745,643.

Scheidorf, Owen H., to General Electric Co. Method for supporting a cylinder assembly on a compressor frame. 2,745,169, 5–15–56, Cl. 29—150.

Schering Corp.: *See*—
Papa, Domenick, and Coan. 2,745,837.

Schetty, Guido, W. Stammbach, and R. Zinkernagel, to J. R. Geigy A. G. Insecticidal derivatives of diphenyl urea. 2,745,874, 5–15–56, Cl. 260—553.

Schirmer, Robert M., to Phillips Petroleum Co. Apparatus for atomization of a liquid fuel. 2,745,251, 5–15–56, Cl. 60—39.74.

Schlaich, Herman, deceased, by L. Schlaich, and President and Directors of the Manhattan Co., executors. Compression measuring and recording instruments. 2,745,286, 5–15–56, Cl. 73—391.

Schlaich, Lottie: *See*—
Schlaich, Herman. 2,745,286.

Schlegel, Carl W., to Bethlehem Steel Co. Beam turning device. 2,745,535, 5–15–56, Cl. 198—33.

Schlesinger, Arthur H.: *See*—
Mowry, David T., and Schlesinger. 2,745,729.

Schlumberger Well Surveying Corp.: *See*—
Dewan, John T. 2,745,970.

Schmid, John H., to J. A. Zurn Mfg. Co. Separator. 2,745,551, 5–15–56, Cl. 210—43.

Schmidt, Edward G.: *See*—
Stone, Carl R., and Schmidt. 2,745,428.

Schmidt, George E.: *See*—
Reese, Garland W., Jr., and Schmidt. 2,745,731.

Schmidt, Walter G. H. Automatic egg collector for poultry houses. 2,745,379, 5–15–56, Cl. 119—48.

Schmidt, Walter V. Adjustable tool holder. 2,745,306, 5–15–56, Cl. 82—36.

Schmidt, Walther, to Reynolds Metals Co. Inorganic molten electrolyte for the electrolysis of titanium. 2,745,802, 5–15–56, Cl. 204—64.

Schmidt, Werner H.: *See*—
Shafer, Stanley I., Gudheim, and Schmidt. 2,745,750.

Schneider, Dana J., and F. H. Tennis, to Hydraulic Unit Specialties Co. Control valve for fluid pressure operated mechanisms. 2,745,433, 5–15–56, Cl. 137—621.

Schneider, Edward S.: *See*—
Slingerland, Arthur J. 2,745,419.

Schneider, Erna E.: *See*—
Schneider, Helmuth F. and E. E. 2,745,196.

Schneider, Helmuth F. and E. E. Shoe construction. 2,745,196, 5–15–56, Cl. 36—2.5.

Schooler, Joseph T. Wrapping machine. 2,745,234, 5–15–56, Cl. 53—379.

Schrecongost, Ray, to Sylvania Electric Products, Inc. Image reproducing device lens structure. 2,746,030, 5–15–56, Cl. 340—369.

Schroeder, Lawrence A., to The Parker Pen. Co. Apparatus for detecting and removing uncapped bottles from a conveyor. 2,745,548, 5–15–56, Cl. 209—75.

Schultheis, Hermann: *See*—
Specht, Walter, and Schultheis. 2,745,789.

Schurr, Vernon D., ½ to P. Glenn. Highly stable electronic amplifier. 2,746,016, 5–15–56, Cl. 324—123.

Schultz Die Casting Co.: *See*—
Holmes, Burton F., and Heindel. 2,746,001.

Schumacher, Frank A., to General Electric Co. Evaporator of high thermal mass. 2,745,256, 5–15–56, Cl. 62—4.

Schumacher, Frank J., to General Outdoor Advertising Co., Inc. Illuminated clock. 2,745,243, 5–15–56, Cl. 58—50.

Schwall, Julius C., to Wallin Industrial Corp. Coffee making machine. 2,745,334, 5–15–56, Cl. 99—283.

Schwarzenbach, Gerold, and R. Sallmann, to Ciba Ltd. Acid-base indicator dyestuffs. 2,745,720, 5–15–56, Cl. 23—230.

Schweigert, John G. Tie-down clamp. 2,745,158, 5–15–56, Cl. 24—130.

Schweitzer, Earl O., to The Swartwout Co. Strip chart recorder. 2,745,711, 5–15–56, Cl. 346—116.

Scott Aviation Corp.: *See*—
Cupp, Charles D. 2,745,401.
Cupp, Charles D. 2,745,612.

Scott, Ross R. Carriers for trash burners. 2,745,676, 5–15–56, Cl. 280—47.26.

Seaman, Robert C. Baby nursing bottle sleeve holder. 2,745,569, 5–15–56, Cl. 215—11.

Searle, G. D., & Co.: *See*—
Rorig, Kurt J. 2,745,866.
Rorig, Kurt. 2,745,870.

Sears, Roebuck and Co.: *See*—
Boisselier, Earl D. 2,745,621.

Sebens, Carl R., to General Electric Co. Dishwasher rack and supporting frame. 2,745,707, 5–15–56, Cl. 312—311.

Sédille, Marcel H. L., to Societe Rateau (Societe Anonyme), and R. Anxionnaz. Jet propulsion and boundary layer control system for aircraft. 2,745,611, 5–15–56, Cl. 244—15.

Seidler, Neola: *See*—
Landy, Anne M., and Seidler. 2,745,405.

Semenoff, Serge, and M. A. Dolliver, to Olin Mathieson Chemical Corp. Process of preparing thiourea complexes. 2,745,826, 5–15–56, Cl. 260—96.5.

Seneca Mfg. Co., The: *See*—
Moloney, Paul S., and Verga. 2,745,691.

Serniuk, George E.: *See*—
Young, David W., Serniuk, and Cottle. 2,745,726.

Sewell, Ben W.: *See*—
Blood, Robert H., and Sewell. 2,745,496.

Seybold, Frederick W. Transmission. 2,745,296, 5–15–56, Cl. 74—677.

Seymour, Charles E. Centralized load control systems. 2,745,991, 5–15–56, Cl. 317—142.

Shackelford, Raymond H.: *See*—
Johnson, Robert H., and Shackelford. 2,745,250.

Shafer, Russell E.: *See*—
Cary, John E., Shafer, and Cary. 2,745,142.

Shafer, Stanley I., A. R. Gudheim, and W. H. Schmidt, to Lever Brothers Co. Margarine and method of making it. 2,745,750, 5–15–56, Cl. 99—122.

Shaffer, Phillip A., Jr., to Consolidated Electrodynamics Corp. Electrolytic titration apparatus. 2,745,804, 5–15–56, Cl. 204—195.

Shelley, Robert L.: *See*—
Brauhagel, Magnus V., and Shelley. 2,745,298.

Shellman, Roy K., to Macclatchie Mfg. Co. Oil well mud pump valve. 2,745,631, 5–15–56, Cl. 251—175.

Shiah, Chyn D. Hydrocarbon treating process. 2,745,792, 5–15–56, Cl. 196—23.

Shuff, Horace M. Control unit for hydraulic steel bending apparatus. 2,745,385, 5–15–56, Cl. 121—45.

Shull, Gilbert M., D. A. Kita, and J. W. Davisson, to Chas. Pfizer & Co., Inc. 11β, 14α, 17α, 21-tetrahydroxyprogesterone and esters thereof. 2,745,784, 5–15–56, Cl. 167—65.

Sichak, William, to the United States of America as represented by the Secretary of the Navy. Microwave phase shifter. 2,746,018, 5–15–56, Cl. 333—29.

Siedel, Walter: *See*—
Ehrhart, Gustav, Nahm, and Siedel. 2,745,875.

Siegrist, Adolf-Emil, to Ciba Ltd. Derivatives of 4:4′-diaminostilbene disulfonic acid-(2:2′). 2,745,830, 5–15–56, Cl. 260—249.6.

Siemens-Schuckertwerke, Aktiengesellschaft: *See*—
Kafka, Wilhelm. 2,745,205.
Wegener, Johannes. 2,746,003.

Sieve, Frank W.: *See*—
Stanton, Arthur J., Carlberg, Bole, Sieve, Danziger, and De Masi. 2,745,317.

Silva, Celso M.: *See*—
Giuseppe, Savio, Viviani, and Silva. 2,745,201.

Simmons, Orien W.: *See*—
Darby, Paul F., Finlay, and Simmons. 2,745,891.

Simms, Charles H.: *See*—
Breadner, Robert L., and Simms. 2,745,982.

Sinclair, Donald C., and S. Wallans, to Harvey-Whipple Inc. Fan. 2,745,597, 5–15–56, Cl. 230—134.

Sinclair, Harold P.: *See*—
Fogg, Clifford C., and Sinclair. 2,745,166.

Sinclair Oil and Gas Co.: *See*—
Case, Everett N. 2,745,855.

Sinclair Refining Co.: *See*—
Ries, Herman E., Jr. 2,745,812.

Singelmann, Dietrich E., and J. R. Hall, to Bell Aircraft Corp. Rocket assisted composite engine arrangement. 2,745,247, 5–15–56, Cl. 60—35.6.

Sittig, Georg, to Pintsch Bamag Aktiengesellschaft. Projector for series of pictures. 2,745,312, 5–15–56, Cl. 88—16.6.

Skinner Brothers Co.: *See*—
Rose, Robert E. 2,745,703.

Skwarlo, Edward J.: *See*—
Sanabria, John M., and Skwarlo. 2,745,981.

Slingerland, Arthur J., to E. S. Schneider. Apparatus for shrinking packages around food products. 2,745,419, 5–15–56, Cl. 134—130.

Sloan, Harry E., and L. B. Swanson, to The Cushman Chuck Co. Work-holding chuck. 2,745,671, 5–15–56, Cl. 279—119.

Slomer, Joseph J., to Goodman Mfg. Co. Automatic pressure throttling valve for fluid pressure systems. 2,745,430, 5–15–56, Cl. 137—505.13.

Smith, Ernest W.: *See*—
Leslie, Philip, and Batten. 2,745,140.

Smith, Eugene W.: *See*—
Gotlib, Milton H. 2,745,258.

Smith, Herman E., to Goodman Mfg. Co. Contractible boring head for mining machines. 2,745,650, 5–15–56, Cl. 262—7.

Smith, John J.: *See*—
Mueller, Frank H., and Smith. 2,745,669.

Smith, Merle F. Bus operators punch and transfer holder. 2,745,581, 5–15–56, Cl. 224—29.

Smith, Raymond: *See*—
Phillips, Freeman J., and Smith. 2,745,738.

Smith, Robert F., to Chrysler Corp. Floating shoe brake. 2,745,516, 5–15–56, Cl. 188—78.

Smitley, Marion L.: *See*—
Kittler, Milton J., Sterner, and Smitley. 2,745,645.

Smits, Wijtze B., to Smitsvonk N. V. Ignition system for low-voltage ignition in condenser discharge sparking plugs. 2,745,999, 5–15–56, Cl. 315—183.

Smits, Wytze B., to Smitsvonk N. V. Research Laboratory Comp. Surface discharge plug for low tension and condenser discharge. 2,745,980, 5–15–56, Cl. 313—131.

Smitsvonk N. V.: *See*—
Smits, Wijtze B. 2,745,989.

Smitsvonk N. V. Research Laboratory Comp.: *See*—
Smits, Wytze B. 2,745,980.

Smoker, Isaac Z. Extension for loading and unloading apparatus. 2,745,540, 5–15–56, Cl. 198—115.

Snipes, Alvis H., to Greif Bros. Cooperage Corp. Apparatus for forming slack barrels. 2,745,455, 5–15–56, Cl. 147–4.

Sociedade Industrial Silpa Ltda.: *See*—
Giuseppe, Savio, Viviani, and Silva. 2,745,201.

"Societe d'Etudes et de Participations, Eau, Gaz, Electricite, Energie," S. A.: *See*—
Huber, Robert. 2,745,246.

Societe d'Inventions Aeronautiques et Mecaniques S. I. A. M.: *See*—
Lucien, René, and Tetart. 2,745,154.

Societe Promidel: *See*—
Balsse, Jacques. 2,745,786.

Societe Rateau (Societe Anonyme): *See*—
Sédille, Marcel H. L. 2,745,611.

Socony Mobil Oil Co., Inc.: *See*—
Hamilton, Lyle A., and Williams. 2,745,853.
Otto, Ferdinand P. 2,745,863.
Penick, Joe E., and Payne. 2,745,795.

Soderberg, Adolph. Asphaltic waterproof adhesive. 2,745,762, 5–15–56, Cl. 106—273.

Sonneborn, Ralph H., and F. W. Dennen, to Owens-Corning Fiberglas Corp. Apparatus for the preparation of glass fiber reinforced molding compositions. 2,745,491, 5–15–56, Cl. 164—61.

Sonntag, Helmuth C., to Glenwood Machinery Associates, Inc. Automatic lathe machine. 2,745,220, 5–15–56, Cl. 51—154.

Southerland, Francis M., to Sarco, Inc. Apparatus for boarding and presetting textiles. 2,745,191, 5–15–56, Cl. 34—66.

Specht, Walter, and H. Schultheis. Ultrasonic irradiation in preparation of malt. 2,745,789, 5–15–56, Cl. 195—71.

Specialties Development Corp.: *See*—
Anthony, Charles, Jr., and Thomann. 2,745,806.
Anthony, Charles, Jr., and Thomann. 2,745,807.

Speckman, Melvin L.: *See*—
Ladd, Allan L., and Speckman. 2,745,193.

Speed, William C., and J. J. Dwyer, to Audio Devices, Inc. Production of magnetic sound tape. 2,745,605, 5–15–56, Cl. 242—55.

Spencer, Alvin C. Printing ink holder and dispenser, including a cylindrical container and piston. 2,745,575, 5–15–56, Cl. 222—327.

Sperry Rand Corp.: *See*—
Cohen, Sidney B., and Bentkowsky. 2,745,908.

Spodig, Heinrich. Magnetic separator. 2,745,549, 5–15–56, Cl. 209—219.

Sprague, Robert M., to A. Alford. Antenna. 2,746,039, 5–15–56, Cl. 343—767.

Spraying Systems Co.: *See*—
Wahlin, Fred W. 2,745,701.

Squier Corp., The: *See*—
Helmer, Nicolas A. 2,745,336.

Stack, Theodore T., to Crane Packing Co. Shaft seal. 2,745,687, 5–15–56, Cl. 286—30.

Stammbach, Walter: *See*—
Schetty, Guido, Stammbach, and Zinkernagel. 2,745,874.

Standard Oil Co.: *See*—
Walker, Donald. 2,745,271.

Stanetski, Lothar. Magnetic game apparatus. 2,745,216, 5–15–56, Cl. 46—240.

Stanton, Arthur J., R. E. Carlberg, R. K. Bole, F. W. Sieve, W. Dansiger, and R. De Masi. Missile launcher. 2,745,317, 5–15–56, Cl. 89—46.

Stanton, George W., and F. A. Ehlers, to The Dow Chemical Co. Acrylonitrile polymers stabilized with certain alkyl esters of thioglycolic acid. 2,745,821, 5–15–56, Cl. 260—45.85.

Starcher, Paul S.: *See*—
Phillips, Benjamin, and Starcher. 2,745,847.

Steck, Clyde O., to F. J. Kress Box Co. Easy opening corrugated paperboard carton. 2,745,592, 5–15–56, Cl. 229—51.

Steele, William B.: *See*—
Fisher, Peter. 2,745,503.

Steiger, Robert, and F. Lüthi, to Ing. A. Maurer S. A. Filament-stapilising machine, including grinding ring. 2,745,490, 5–15–56, Cl. 164—60.

Steinbock, Robert S., to Hammock Package Ltd. Oleomargarine mixing package. 2,745,754, 5–15–56, Cl. 99—179.

Sterling Drug Inc.: *See*—
Archer, Sydney. 2,745,829.
Mooradian, Aram. 2,745,851.
Suter, Chester M. 2,745,836.

Sterner, Melvin F.: *See*—
Kittler, Milton J., Sterner, and Smitley. 2,745,645.

Stevens, Donna: *See*—
Norton, Frederick H., and Stevens. 2,745,859.

Stevenson, Robert, to Anco, Inc. Four way balanced pressure valve. 2,745,434, 5–15–56, Cl. 137—625.43.

Stewart, Doane, to The Dow Chemical Co. Parasiticide composition and method. 2,745,781, 5–15–56, Cl. 167—31.

Stewart, Doane, to The Dow Chemical Co. Parasiticide composition of reduced phytotoxicity and method. 2,745,782, 5–15–56, Cl. 167—31.

Stewart, Leonard C., to D. W. Henry. Timers. 2,745,918, 5–15–56, Cl. 200—36.

Stewart-Warner Corp.: *See*—
Dinkelkamp, Henry T. 2,745,387.

Stoltz, Charles E., to Goodman Mfg. Co. Exhaust gas conditioner. 2,745,646, 5–15–56, Cl. 261—123.

Stone, Carl R., and E. G. Schmidt, to Crane Co. Diaphragm ballcock. 2,745,428, 5–15–56, Cl. 137—446.

Stoops, Charles E., and C. E. Becker, to Phillips Petroleum Co. Production of substituted pyridines. 2,745,833, 5–15–56, Cl. 260—290.

Storm, Eli D.: *See*—
Koepke, Lloyd E., and Storm. 2,745,673.

Straus, Louis: *See*—
Reese, Cole L., and Straus. 2,745,252.

Strayer, Chalmers A., to Northrop Aircraft, Inc. Pressurized hydraulic reservoir. 2,745,357, 5–15–56, Cl. 103—223.

Stroh, William R. Temperature control for brooder. 2,745,940, 5–15–56, Cl. 219—35.

Stroman, James H.: *See*—
Reese, Cole L., and Straus. 2,745,252.

Struble, Joseph H. Vertically adjustable wheel suspension means. 2,745,674, 5–15–56, Cl. 280—44.

Struck, Leon H.: *See*—
Tillotson, La Clede. 2,745,409.

Stuart, James A., Jr. Valve assembly for flush tanks. 2,745,109, 5–15–56, Cl. 4—56.

Studley, Clarence K., Jr. Angularly and linearly adjustable stock guide. 2,745,447, 5–15–56, Cl. 143—169.

Stutz, Robert C.: *See*—
King, De Witt L., and Stutz. 2,745,171.

Suerken, Maxwell C., to Lamac Process Co. Shoe press pad. 2,745,123, 5–15–56, Cl. 12—38.

Suits, Chauncey G., to General Electric Co. High temperature high pressure reactor. 2,745,713, 5–15–56, Cl. 23—1.

Sun Oil Co.: *See*—
Dougherty, Patrick F. 2,745,639.
Jezl, James L., and Mills. 2,745,793.
Mertes, Thomas S., and Rhodes. 2,745,888.

Super Mold Corp. of California: *See*—
Glynn, Edwin A. 2,745,137.

Suter, Chester A., to Sterling Drug Inc. Tertiary-aminoalkyl-a,a-diaryl succinimides and process for the preparation thereof. 2,745,836, 5–15–56, Cl. 260—294.7.

Sutherland Paper Co.: *See*—
Vander Lugt, Thomas, Jr. 2,745,587.

Svenska Aktiebolaget Gasaccumulator: *See*—
Granqvist, Carl-Erik. 2,746,038.

Swanson, Linwood B.: *See*—
Sloan, Harry E., and Swanson. 2,745,671.

Swartwout Co., The: *See*—
Schweitzer, Earl O. 2,745,711.

Swartz, Otto M., to Innovation Industries, Inc. Aerial projectile and target. 2,745,666, 5–15–56, Cl. 273—95.

Sweetman, William G. Apparatus for releasing threaded pipe couplings. 2,745,345, 5–15–56, Cl. 102—21.8.

Sylvander, Frederick B., to Bendix Aviation Corp. Null seeking system. 2,745,996, 5–15–56, Cl. 318—29.

Sylvania Electric Products, Inc.: *See*—
Butler, Keith H., and Homer. 2,745,811.
Schrecongost, Ray. 2,746,030.

Syrovy, Augustin J., to Chrysler Corp. Rotor wheel. 2,745,353, 5–15–56, Cl. 103—115.

Sziklai, George C., to Radio Corp. of America. High efficiency polarizing light valve. 2,745,316, 5–15–56, Cl. 88—61.

Taggart, James C.: *See*—
Taggart, John K. and J. C. 2,745,607.

Taggart, John K. and J. C. Spinning type fishing reel. 2,745,607, 5–15–56, Cl. 242—84.4.

Talbott, Arnold M. Dispensing system for applying molasses to stock feed. 2,745,572, 5–15–56, Cl. 222—1.

Tarr, Charles O.: *See*—
Phillips, Freeman J., and Tarr. 2,745,739.

Tavola, Bruno. Pumping devices. 2,745,349, 5–15–56, Cl. 103—37.

Tawney, Pliny O., and R. J. Kelly, to United States Rubber Co. The methylenebis derivative of N-carbamylmaleimide. 2,745,841, 5–15–56, Cl. 260—326.3.

Taylor, Albert H., Jr.: *See*—
Kronoff, Clarence R., and Taylor. 2,745,185.

Taylor Instrument Companies: *See*—
Liberatore, Laurence C., Tibbits, Aldridge, and Fischer. 2,745,925.

Taylor, Stanford E. Controlled reading projector. 2,745,313, 5–15–56, Cl. 88—28.

Taylor, William B., to Johnston Testers, Inc. Method of completing oil wells. 2,745,495, 5–15–56, Cl. 166—35.

Te Grotenhuis, Theodore A., 20% to The General Tire & Rubber Co. Self-reinforcing rubber and method of making same. 2,745,818, 5–15–56, Cl. 260—45.5.

Tennis, Francis H.: *See*—
Schneider, Dana J., and Tennis. 2,745,433.

Termaat, Frans: *See*—
Horowitz, Alexandre, and Termaat. 2,745,522.

Teah, Kimble F., to Bendix Aviation Corp. Motor frame structure and brush rigging. 2,745,977, 5–15–56, Cl. 310—239.

Tetart, Emile: *See*—
Lucien, René, and Tetart. 2,745,154.

Teti, John, to Air Reduction Co., Inc. Flashback-proof gas burner and mixer. 2,745,476, 5–15–56, Cl. 158—27.4.

Texaco Development Corp.: *See*—
Ludeman, Clifford G. 2,745,967.
Ludeman, Clifford G. 2,745,968.

Texas Co., The: *See*—
Manley, Robert E. 2,745,790.

Texplant Corp.: *See*—
Klistera, Eduard. 2,745,342.

Textile Machine Works: *See*—
Fegley, Charles R. 2,745,270.

Thoma, Edwin L. Paper cup with a stirring spoon made unitary therewith. 2,745,586, 5–15–56, Cl. 229—1.5.

Thomann, Robert, Jr.: *See*—
Anthony, Charles, Jr., and Thomann. 2,745,806.
Anthony, Charles, Jr., and Thomann. 2,745,807.

Thompson Electric Co., The: *See*—
Farrington, Robert K. and T. B. 2,745,688.

Thompson, Frederick C., to Converti-Bench Corp. Foldaway bench-table shipping-storage unit. 2,745,466, 5–15–56, Cl. 155—43.

Thompson, Ivan P., W. Allmang, and W. C. Weidner, to Union Carbide and Carbon Corp. Thermochemical scarfing devices. 2,745,475, 5–15–56, Cl. 158—27.4.

Thompson Products, Inc.: *See*—
Gates, Richard L. 2,745,917.

Thornell, Ralph A., ¼ to R. O. Chambers. Vehicle door lock repair device. 2,745,690, 5–15–56, Cl. 292—1.

Tibbits, Charles B.: *See*—
Liberatore, Laurence C., Tibbits, Aldridge, and Fischer. 2,745,925.

Tiegel, Ernest G., to Tiegel Mfg. Co. Means for making battery plate units. 2,745,367, 5–15–56, Cl. 113—59.

Tiegel Mfg. Co.: *See*—
Tiegel, Ernest G. 2,745,367.

Tiffany, Carter. Combustible vapor detector. 2,745,721, 5–15–56, Cl. 23—255.

Tillotson, La Clede, ¼ to L. H. Struck, ¼ to C. C. Andrews, and ½ to F. W. Andrews. Grain thresher. 2,745,409, 5–15–56, Cl. 130—27.

Time, Inc.: *See*—
Faeber, Harry W. 2,745,186.

Tinnerman Products, Inc.: *See*—
Balint, John, and Garman. 2,745,689.

Todd, Earl E., Jr.: *See*—
Charf, James F., Himes, and Todd. 2,745,222.

Tolimit Gauges Ltd.: *See*—
Wills, Sydney A., and Gathercole. 2,745,188.

Töppel, Otmar, to Aschaffenburger Zellstoffwerke Aktiengesellschaft. Method of recovering vanillin. 2,745,796, 5–15–56, Cl. 202—46.

Tosswill, Christopher H., to Hartford National Bank and Trust Co., as trustee. Glow discharge tube and circuit therefor. 2,745,988, 5–15–56, Cl. 315—168.

Toulmin, Harry A., Jr., to The Commonwealth Engineering Co. of Ohio. Grinding drum. 2,745,223, 5–15–56, Cl. 51—190.

Touvet, Guy A. D. Electronic emission spectrometry using radio frequency excited and modulated light emission spectrum. 2,745,311, 5–15–56, Cl. 88—14.

Towler, Frank H.: *See*—
Towler, John M. and F. H. 2,745,253.

Towler, John M. and F. H., to Electraulic Presses Ltd. Combined admission, relief and unloading valve and hydraulic power system. 2,745,253, 5–15–56, Cl. 60—97.

Townsend, Leyshon W. Composite assembly for bonding plates of dissimilar metals. 2,745,172, 5–15–56, Cl. 29—194.

Travilla, James C., and J. W. Cooke, to General Steel Castings Corp. Electric motor railway truck. 2,745,358, 5–15–56, Cl. 105—138.

Trico Products Corp.: *See*—
Oishei, John R. 2,745,130.

Trojan Powder Co.: *See*—
Russell, Edward J., and Wells. 2,745,880.

Trotter, Robert L., to Unilever Ltd. Fluid filling machine. 2,745,584, 5–15–56, Cl. 226—96.

Truck Equipment Co. Inc.: *See*—
Walter, Robert J. 2,745,677.

Tseng, Hung-Tu. Keyless three way light socket. 2,745,950, 5–15–56, Cl. 240—81.

Tuboscope Co.: *See*—
Price, Berry G. 2,746,012.

Tucker, George E.: *See*—
Kilbey, Alfred R., and Tucker. 2,745,959.

Turchan, Manuel. Three dimension tracer. 2,745,624, 5–15–56, Cl. 251—3.

Turnbull, William G.: *See*—
Boynton, Thomas E., and Turnbull. 2,745,309.

Turner, Ernest C.: *See*—
Grange, Raymond A., and Turner. 2,745,776.

Tyzack, Harold, to Carter Parts Co. Connector jack. 2,746,023, 5–15–56, Cl. 339—176.

Ueltz, Herbert F. G., to Norton Co. Refractory composition for journals, bearings and the like. 2,745,763, 5–15–56, Cl. 106—65.

Underwood Corp.: *See*—
Crawford, Perry, Jr. 2,745,532.

Unilever Ltd.: *See*—
Trotter, Robert L. 2,745,584.

Union Carbide and Carbon Corp.: *See*—
Aitchison, Robert B., and Kirk. 2,745,346.
Bailey, Donald L. 2,745,860.
Curtin, John L., and Yenni. 2,745,934.
Phillips, Benjamin, and Starcher. 2,745,847.
Thompson, Ivan P., Allmang, and Weidner. 2,745,475.

Union Special Machine Co.: *See*—
Hale, Arthur N. 2,745,525.

Union Stock Yards & Transit Co.: *See*—
O'Connor, William J. 2,745,638.

United Aircraft Products, Inc.: *See*—
Booth, Harry T. 2,745,625.
Carroll, Frank E., Jr. 2,745,424.

United-Carr Fastener Corp.: *See*—
Bedford, William A., Jr. 2,745,156.
Bedford, William A., Jr. 2,745,458.
Jones, Walter I. 2,745,159.
Jones, Walter I. 2,745,160.
Murphy, Howard J. 2,745,620.
Van Buren, Harold S., Jr. 2,745,161.
Van Buren, Harold S., Jr. 2,745,163.

United States Atomic Energy Commission, United States of America as represented by the: *See*—
Bruggeman, Warren H., and Voorhees. 2,745,552.
Collins, Paul E., and Inman. 2,745,279.
De Liban, Robert. 2,745,964.
Lofgren, Edward J. 2,745,965.

United States Gypsum Co.: *See*—
Nelsson, Nels. 2,745,277.

United States Rubber Co.: *See*—
Tawney, Pliny O., and Kelly. 2,745,841.

United States Steel Corp.: *See*—
Barker, Ernest C., and Brouse. 2,745,337.
Conaway, Harry L. 2,745,280.
Grange, Raymond A., and Turner. 2,745,776.
Hamilton, Merrill V., and Hoop. 2,745,663.
Link, Victor A. 2,745,536.
Phillips, Freeman J., and Smith. 2,745,738.
Phillips, Freeman J., and Tarr. 2,745,739.

Universal Oil Products Co.: *See*—
Becker, Harold A. 2,745,388.
Mavity, Julian M. 2,745,878.
Pines, Herman, and Vesely. 2,745,887.

Universal Paper Bag Co.: *See*—
Hahn, William W., and Brodt. 2,745,594.

Unsworth, William: *See*—
Emley, Edward F., and Unsworth. 2,745,741.

Utica Drop Forge & Tool Corp.: *See*—
Barnes, William A. 2,745,300.

Vandersen, Charles W., to Dictograph Products Co., Inc. Microphone support. 2,745,508, 5–15–56, Cl. 181—31.

Vale, Baldwin, deceased, by H. E. Vale, executrix. Reclining bed chairs. 2,745,467, 5–15–56, Cl. 155—45.

Vale, Helen E.: *See*—
Vale, Baldwin. 2,745,467.

Vanadium Corp. of America: *See*—
Dunn, Holbert E., and O'Brien. 2,745,715.
Dunn, Holbert E., and O'Brien. 2,745,764.
Dunn, Holbert E., and O'Brien. 2,745,765.

Van Buren, Harold S., Jr., to United-Carr Fastener Corp. Fastening device. 2,745,161, 5–15–56, Cl. 24—218.

Van Buren, Harold S., Jr., to United-Carr Fastener Corp. Fastening device. 2,745,163, 5–15–56, Cl. 24—246.

Vandemark, Fred J., and R. G. Buchignani. Material gripping and handling trailer structure. 2,745,562, 5–15–56, Cl. 214—77.

Van Der Horst Corp. of America: *See*—
Poor, John. 2,745,800.

Vander Lugt, Thomas, Jr., to Sutherland Paper Co. Partitioned container. 2,745,587, 5–15–56, Cl. 229—15.

Vanes, John A. Revolving trough cattle feeder. 2,745,380, 5–15–56, Cl. 119—52.

Van Heuven, Engelbert W.: *See*—
Bergmans, Jan, and van Heuven. 2,745,623.

Van Horne, Vera C. Girdle. 2,745,103, 5–15–56, Cl. 2—37.

Van Ormer, David D., to Radio Corp. of America. Cathode ray tube. 2,745,978, 5–15–56, Cl. 313—69.

Van Raden, Frederick F., to NePeer Co. Adjustable saddle assembly for vehicle springs. 2,745,661, 5–15–56, Cl. 267—52.

Vasshaug, Jorgen A. Working table. 2,745,709, 5–15–56, Cl. 312—330.

Vaughn, Rudolph M. Method of milling an undercut slot in a screw head. 2,745,120, 5–15–56, Cl. 10—10.

Veatch, Joseph G., Jr.: *See*—
Daily, Arthur M., and Veatch 2,745,927.

Verga, John L.: *See*—
Moloney, Paul S., and Verga. 2,745,691.

Verhoeff, Adrianus, to Hartford National Bank and Trust Co., as trustee. Electron-diffraction apparatus. 2,745,966, 5–15–56, Cl. 250—49.5.

Verner, Oliver A. Artist's easel. 2,745,618, 5–15–56, Cl. 248—197.

Vesely, Jerome A.: *See*—
Pines, Herman, and Vesely. 2,745,887.

Vibration Research Laboratories, Inc.: *See*—
Mas, Joseph A. 2,745,899.

Vicknair, Earl J.: *See*—
Feuge, Reuben O., Vicknair, and Markley. 2,745,749.

Vilá Reyes, Juan. Thread tension regulating means for reeling machines and the like. 2,745,610, 5–15–56, Cl. 242—150.

Vincent, John J., and P. Hunter, to The British Cotton Industry Research Association. Device for measuring the unwinding tension from a textile yarn pakage. 2,745,281, 5–15–56, Cl. 73—143.

Visioneering Co., Inc.: *See*—
Reuter, Harold A. 2,745,348.

Viviani, José V.: *See*—
Giuseppe, Savio, Viviani, and Silva. 2,745,291.

Vlier Engineering, Inc.: *See*—
Cornelius, Paul D. 2,745,303.
Cornelius, Paul D. 2,745,304.

Vogt, Alois: *See*—
Auwärter, Max. 2,745,131.

Vogt, Dr. Alois: *See*—
Auwärter, Max. 2,745,767.

Vojtush, Andrew J. Two-way coal cutting bit. 2,745,655, 5–15–56, Cl. 262—33.

Volkswagenwerk G. m. b. H.: *See*—
Dorpmund, Heinz. 2,745,529.

Vonada, Phillip A. Lapidary wheel. 2,745,225, 5–15–56, Cl. 51—206.

Von Behren, William P., to General Electric Co. Bowl support for portable food mixer. 2,745,644, 5–15–56, Cl. 259—135.

Voorhees, Bertram G.: *See*—
Bruggeman, Warren H., and Voorhees. 2,745,552.

Vorkauf, Heinrich. Water tube boiler. 2,745,389, 5–15–56, Cl. 122—488.

Vue Fax Corp.: *See*—
Logan, John H. 2,745,408.

Vulcan Machine Co.: *See*—
Detrow, Edgar L. 2,745,187.

Wabash Screen Door Co.: *See*—
Deiry, Albert J., and Cullen. 2,745,446.

Wagemann, John B. Bale lift. 2,745,694, 5–15–56, Cl. 294—109.

Wagner, Walter W.: *See*—
Furman, Frank J., Klatner, Read, and Wagner. 2,745,493.

Wahlin, Fred W., to Spraying Systems Co. Spray nozzle orifice approach. 2,745,701, 5–15–56, Cl. 299—153.

Waldorf Paper Products Co.: *See*—
Dunning, Robert M. 2,745,545.
Dunning, Robert M. 2,745,588.

Wales, Fred A.: *See*—
Haueisen, Batist R., and Wales. 2,745,798.

Walk-A-Lator Mfg. Co., Inc.: *See*—
Hogan, Joseph L. 2,745,465.

Walker, Donald C., to Standard Oil Co. Candle wick and method of preparing same. 2,745,271, 5–15–56, Cl. 67—22.

Walker, Laurence R.: *See*—
Hagelbarger, David W., and Walker. 2,745,984.

Walker, Laurence R., to Bell Telephone Laboratories, Inc. Device for coupling between free space and an electron stream. 2,746,036, 5–15–56, Cl. 343—100.

Walker, Neville E., to American Junior Aircraft Co. Control handle with encompassing storage groove. 2,745,608, 5–15–56, Cl. 242—97.

Wallace, Maurice E. and R. F., to Feed-O-Matic Mfg. Corp. Poultry feeder. 2,745,381, 5–15–56, Cl. 119—52.

Wallace, Robert F.: *See*—
Wallace, Maurice E. and R. F. 2,745,381.

Wallans, Samuel: *See*—
Sinclair, Donald C., and Wallans. 2,745,597.

Wallin Industrial Corp.: *See*—
Schwall, Julius C. 2,745,334.

Walter, Otto L.: *See*—
Luckhardt, Johannes. 2,745,470.

Walter, Robert J., to Truck Equipment Co. Inc. Tandem axle suspension for vehicles. 2,745,677, 5–15–56, Cl. 280—104.5.

Wannamaker, William H., Jr., to Minneapolis-Honeywell Regulator Co. Temperature measuring apparatus. 2,745,285, 5–15–56, Cl. 73—360.

Ward, G. A.: *See*—
Ward, John W. 2,745,580.

Ward, John V., and B. M. Wedner, to Gulf Research & Development Co. Fluidized solids chemical apparatus. 2,745,725, 5–15–56, Cl. 23—288.

Ward, John W., 10% to W. R. Draughon, and 10% to G. A. Ward. Protective guard for wrist watches. 2,745,580, 5–15–56, Cl. 224—4.

Warner Electric Brake & Clutch Co.: *See*—
Oetzel, John G. 2,745,974

Warns, Willard F. Glass panel sunshield. 2,745,150, 5–15–56, Cl. 20—56.5.

Watson, Edwin B., to American La France Corp. Valve locking mechanism. 2,745,629, 5–15–56, Cl. 251—96.

Wayne Pump Co., The: *See*—
Chevallier, George E. 2,745,682.

Weatherly, William G. Tail gate for trucks. 2,745,696, 5–15–56, Cl. 296—51.

Weather-Seal Inc.: *See*—
Etling, Harold A. 2,745,149.
Etling, Harold A. 2,745,485.

Webb, Horace L. Ambient sound excluding dictation mask. 2,745,911, 5–15–56, Cl. 179—188.

Webb, Leonard H., to Webcore Steel Framing Systems, Inc. Fabricated joint for concrete roadway. 2,745,324, 5–15–56, Cl. 94—17.

Webcore Steel Framing Systems, Inc.: *See*—
Webb, Leonard H. 2,745,324.

Wedner, Benjamin N.: *See*—
Ward, John V., and Wedner. 2,745,725.

Wegener, Johannes, to Siemens-Schuckertwerke Aktiengesellschaft. Circuit-interrupter releasing apparatus. 2,746,003, 5–15–56, Cl. 321—48.

Wehrli, Walter: *See*—
Iselin, Ernst, and Wehrli. 2,745,828.

Weidner, Charles L., and I. R. Dunlap, to Permacel Tape Corp. Treating agents incorporation. 2,745,744, 5–15–56, Cl. 92—21.

Weidner, William C.: *See*—
Thompson, Ivan P., Allmang, and Weidner. 2,745,475.

Weidner, Paul K., to Radio Corp. of America. Apparatus and method for forming juxtaposed as well as superimposed coatings. 2,745,773, 5–15–56, Cl. 117—212.

Weirauch, Arthur A.: *See*—
Collings, William R., Browne, and Weirauch. 2,745,233.

Welch, Stanley B., to General Electric Co. Push button switch. 2,745,913, 5–15–56, Cl. 200—5.

Welch, Stanley B., to General Electric Co. Electric oven heating system. 2,745,937, 5–15–56, Cl. 219—20.

Welln-Berger, Guy J. O. Stoves, particularly for the heating of motor vehicles. 2,745,477, 5–15–56, Cl. 158—36.

Wells, Franklin B.: *See*—
Russell, Edward J., and Wells. 2,745,880.

Wenning, Heinrich, to Chemische Werke Hüls Aktiengesellschaft. Process for the production of polyacrylonitrile. 2,745,825, 5–15–56, Cl. 260—88.7.

Wenz, Herbert: *See*—
Zink, Hermann, and Wenz. 2,745,365.

Wessel, Leo B., to The American Laundry Machinery Co. Clutch control for plural motor unit. 2,745,997, 5–15–56 Cl. 318—102.

West Bend Aluminum Co.: *See*—
Heidner, Richard C., Pike, and Burkett. 2,745,390.

West Virginia Pulp and Paper Co.: *See*—
Bestul, Manton G. 2,745,827.

Western Electric Co., Inc.: *See*—
Wojciechowski, Bogumil M. 2,745,962.

Western Equipment Mfg. Co.: *See*—
Brimhall, Kirk L. 2,745,328.

Westinghouse Air Brake Co.: *See*—
Derr, William T., and McGuire. 2,745,951.

Wexler, Benjamin and M. C. Collapsible garment form. 2,745,578, 5–15–56, Cl. 223—68.

Wexler, Marvin C.: *See*—
Wexler, Benjamin and M. C. 2,745,578.

Whipple, Richard R. Hand swimming paddle. 2,745,119, 5–15–56, Cl. 9—21.

White, Frank B., 45% to J. J. Woodruff. Gasket retainer for separable members. 2,745,521, 5–15–56, Cl. 189—36.

Whittaker, Norman: *See*—
Hitchings, George H., Russell, and Whittaker. 2,745,831

Wildeman, Julius M. Hydraulic motor and automatic valve therefor. 2,745,386, 5–15–56, Cl. 121—150.

Wilhelm, Jack E., to Bailey Meter Co. Boiler control system. 2,745,603, 5–15–56, Cl. 236—26.

Wilkie, Robert C., to Pacific Mills. Process for coiling slivers in cans. 2,745,146, 5–15–56, Cl. 19—159.

Williams, Bill M., to The Dow Chemical Co. Alkylamine salts of alpha-2,4,5-trichlorophenoxypropionic acid. 2,745,871 5–15–56, Cl. 260—521.

Williams, Derrick J., to High-Pressure Components Ltd. Non return valves. 2,745,432, 5–15–56, Cl. 137—540.

Williams, Henry M., to Olin Mathieson Chemical Corp. Milling of metal. 2,745,318, 5–15–56, Cl. 90—11.

Williams, Robert H.: *See*—
Hamilton, Lyle A., and Williams. 2,745,853.

Wills, Sydney A., and E. F. J. Gathercole, to Tolimit Gauges Ltd. Gauging devices for checking dimensions and investigating the contour or profile of surfaces. 2,745,188, 5–15–56, Cl. 33—199.

Wilson, Charles D., to Allis-Chalmers Mfg. Co. Inlet valve supporting and actuating means for elastic fluid turbines. 2,745,422, 5–15–56, Cl. 137—35.

Wilson, Keith E., to Hleatt Engineering Co. Pilot controlled valve for sub-atmospheric and other low preasures. 2,745,626, 5–15–56, Cl. 251—25.

Wineman, Robert J.: *See*—
Blake, Edward S., and Wineman. 2,745,745.

Winfree, Robert N., to Kel-Win Mfg. Co., Inc. Manual and automatic valves. 2,745,627, 5–15–56, Cl. 251—75.

Winkler, Albert H., Jr., to Bendix Aviation Corp. Multiple cylinder internal combustion engine. 2,745,391, 5–15–56, Cl. 123—90.

Winter, John S., G. W. Kallal, and J. J. Mazzoni, to McDonnell Aircraft Corp. Convertible pulse jet and ram jet engine. 2,745,248, 5–15–56, Cl. 60—35.6.

Winther, Anthony, to Eaton Mfg. Co. Magnetic fluid mixture clutch. 2,745,527, 5–15–56, Cl. 192—21.5.

Wire-O-Corp.: *See*—
Brook, Arthur F. 2,745,492.

Wissman, Reuben E., to The Minster Machine Co. Press construction. 2,745,338, 5–15–56, Cl. 100—282.

Withers, Thomas E. Ankle joint and artificial foot. 2,745,108, 5–15–56, Cl. 3—7.

Wojciechowski, Bogumil M., to Western Electric Co., Inc. Adjustable frequency oscillator system. 2,745,962, 5–15–56, Cl. 250—36.

Wood, Charles R. Artists' palette and panel support. 2,745,202, 5–15–56, Cl. 41—5.

Wood-Minor, Blanche V. Bed-protector apron. 2,745,404. 5–15–56, Cl. 128—283.

Woodruff, John J.: *See*—
White, Frank B. 2,745,521.

Woods-Hill, William, and D. T. Davis, to International Business Machines Corp. Electronic multiplier. 2,745,599, 5–15–56, Cl. 235—61.

Woodward, Eric R., to Olin Mathieson Chemical Corp. Treatment of odor containing gases with chlorine dioxide. 2,745,714, 5–15–56, Cl. 23—2.

Woodward, O. B. Locking mechanism for variable speed drives. 2,745,292, 5–15–56, Cl. 74—230.17.

Woodward, Robert B., to Research Corp. Hexahydronaphthalenes and production thereof. 2,745,879, 5–15–56, Cl. 260—611.

Woolaver, Lawrence B., and F. P. Maclay, to Laboratory for Electronics, Inc. Delay line. 2,746,019, 5–15–56, Cl. 333—30.

Wrege, Edgar E., to International Minerals & Chemical Corp. Jigging process for beneficiation of potassium containing ores. 2,745,547, 5–15–56, Cl. 209—2.

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ISSUED MAY 15, 1956

NOTE.—First number—class, second number—subclass, third number—patent number

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45.85: 2,745,821
83.3: 2,745,822
83.7: 2,745,823
85.5: 2,745,824
88.7: 2,745,825
96.5: 2,745,826

260— 97.5: 2,745,827
148: 2,745,828
239.5: 2,745,829
249.6: 2,745,830
256.4: 2,745,831
270: 2,745,832
290: 2,745,833
2,745,834
2,745,835
294.7: 2,745,836
2,745,837
295: 2,745,838
2,745,839
301: 2,745,840
326.3: 2,745,841
332.2: 2,745,842
332.8: 2,745,843
346.8: 2,745,844
347.3: 2,745,845
348: 2,745,846
2,745,847
348.5: 2,745,848
397.1: 2,745,849
397.45: 2,745,850
397.47: 2,745,851
2,745,852
404: 2,745,853
406.5: 2,745,854
410.6: 2,745,855
412.6: 2,745,856
429: 2,745,857
2,745,858
2,745,859
448.2: 2,745,860
449: 2,745,861
461: 2,745,862
2,745,863
464: 2,745,864
465: 2,745,865
2,745,866
465.7: 2,745,867
2,745,868
465.8: 2,745,869
479: 2,745,870
521: 2,745,871
525: 2,745,872
534: 2,745,873
553: 2,745,874
558: 2,745,875
592: 2,745,876
606.5: 2,745,877
609: 2,745,878
611: 2,745,879
615: 2,745,880
619: 2,745,881
624: 2,745,882
650: 2,745,883
651: 2,745,884
653: 2,745,885
2,745,886
666: 2,745,887
674: 2,745,888
677: 2,745,889
683.15: 2,745,890
261— 23: 2,745,645
123: 2,745,646
262— 3: 2,745,647

263— 7: 2,745,648
2,745,649
2,745,650
8: 2,745,651
24: 2,745,652
26: 2,745,653
30: 2,745,654
33: 2,745,655
263— 19: 2,745,656
53: 2,745,657
266— 4: 2,745,658
21: 2,745,659
267— 1: 2,745,660
52: 2,745,661
268— 104: 2,745,662
271— 2.1: 2,745,663
3: 2,745,664
26: 2,745,665
273— 95: 2,745,666
134: 2,745,667
279— 6: 2,745,668
91: 2,745,669
114: 2,745,670
119: 2,745,671
280—11.35: 2,745,672
40: 2,745,673
44: 2,745,674
47.24: 2,745,675
47.26: 2,745,676
104.5: 2,745,677
152: 2,745,678
218: 2,745,679
499: 2,745,680
501: 2,745,681
285— 9: 2,745,682
22: 2,745,683
96.1: 2,745,684
146: 2,745,685
286— 5: 2,745,686
30: 2,745,687
287— 14: 2,745,688
53: 2,745,689
292— 1: 2,745,690
123: 2,745,691
263: 2,745,692
294— 102: 2,745,693
109: 2,745,694
118: 2,745,695
295— 51: 2,745,696
299— 4: 2,745,697
68: 2,745,698
70: 2,745,699
95: 2,745,700
153: 2,745,701
303— 84: 2,745,702
304— 28: 2,745,703
307— 64: 2,745,971
149: 2,745,972
309— 31: 2,745,704
310— 3: 2,745,973
93: 2,745,974
100: 2,745,975
228: 2,745,976
289: 2,745,977
311— 21: 2,745,705
312— 268: 2,745,706
311: 2,745,707

312— 311: 2,745,708
320: 2,745,709
332: 2,745,710
313— 60: 2,745,978
82: 2,745,979
131: 2,745,980
264: 2,745,981
271: 2,745,982
315— 3.5: 2,745,983
4: 2,745,984
9: 2,745,985
22: 2,745,986
39.61: 2,745,987
168: 2,745,988
183: 2,745,989
2,745,990
317— 142: 2,745,991
157.6: 2,745,992
249: 2,745,993
318— 18: 2,745,994
19: 2,745,995
20: 2,745,996
102: 2,745,997
118: 2,745,998
124: 2,745,999
212: 2,746,000
484: 2,746,001
320— 2: 2,746,002
321— 48: 2,746,003
322— 6: 2,746,004
27: 2,746,005
70: 2,746,006
76: 2,746,007
323— 22: 2,746,008
324— 6: 2,746,009
17: 2,746,010
22: 2,746,011
37: 2,746,012
57: 2,746,013
58: 2,746,014
2,746,015
123: 2,746,016
333— 13: 2,746,017
29: 2,746,018
30: 2,746,019
336— 55: 2,746,020
339— 45: 2,746,021
92: 2,746,022
176: 2,746,023
256: 2,746,024
272: 2,746,025
340— 8: 2,746,026
11: 2,746,027
147: 2,746,028
282: 2,746,029
339: 2,746,030
343— 6.8: 2,746,031
7.3: 2,746,032
7.7: 2,746,033
15: 2,746,034
18: 2,746,035
100: 2,746,036
118: 2,746,037
124: 2,746,038
767: 2,746,039
820: 2,746,040
346— 116: 2,745,711

Classification of Designs

D 3—11: Des.177,692
D 7— 7: Des.177,687
D14—30: Des.177,683
D15— 1: Des.177,695
8: Des.177,693
D16— 2: Des.177,687
D17— 1: Des.177,661
Des.177,662

D20— 4: Des.177,696
D22— 2: Des.177,677
3: Des.177,672
D26— 1: Des.177,674
5: Des.177,699
D29—28: Des.177,688
D30— 1: Des.177,679
D33— 7: Des.177,668

D33—14: Des.177,657
Des.177,678
Des.177,680
Des.177,681
D34—13: Des.177,665
15: Des.177,673
Des.177,691
D35— 3: Des.177,698

D38— 2: Des.177,685
D42— 7: Des.177,666
D44—29: Des.177,703
D50— 6: Des.177,700
7: Des.177,669
D52— 1: Des.177,697
7: Des.177,684
D54—12: Des.177,689

D54—13: Des.177,664
D58-12.6: Des.177,693
17: Des.177,702
D64—12: Des.177,690
D65— 1: Des.177,701
D71— 1: Des.177,670
D74— 1: Des.177,659
Des.177,660

D81—21: Des.177,658
D86— 8: Des.177,682
D87— 3: Des.177,671
D90— 8: Des.177,686
D91— 3: Des.177,675
Des.177,676
D93— 4: Des.177,694

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
May 15, 1956 Volume 706 Number 3

TRADEMARKS

NOTICES

Division Number Should Appear On Communications Relating to Pending Applications

It is again requested that the Division number be typed on amendments and other communications relating to pending applications in order to expedite the handling of mail and to conserve manpower. The number of the Division should be placed on the right-hand side, opposite the Serial Number or name of applicant. In view of the vast amount of mail, continued careful attention to these details will do much toward avoiding delay in handling of mail.

To avoid confusion between Classification Divisions I to V and Examining Divisions 1 to 5 respectively, papers intended for the classification divisions should bear the notation "Class. Div. ——" with the appropriate roman numeral.

C. A. KALK,

Apr. 24, 1956. *Acting Director of Administration.*

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 176,408, TM 220,294, TM 377,505 (Esso), Standard Oil Co. of N. J., Refined, semirefined, and unrefined oils made from petroleum, etc.; **TM 347,535**, same, Asphalt; **TM 354,294**, same, Leather oil; **TM 370,870, TM 376,515**, same, Liquid gloss and floor dressing, etc.; **TM 376,887**, same, Anti-freeze compounds, leak stopping and rust preventing compounds; **TM 377,316**, same, Leather oils; canned or bottled liquid petroleum; spot removers and dry cleaners, etc.; **TM 258,648**, same, Esso Standard Oil Co., Liquid gloss and floor dressing; **TM 280,830**, same, Glass pump globes and lenses thereof; **TM 282,259**, same, Dispensing pumps and parts thereof; **TM 355,741**, same, Gilbert & Barker Mfg. Co., Oil burners, combination boiler burner units, etc.; **TM 306,182** (Essoheat), Esso Standard Oil Co., Fuel oils; **TM 438,578** ("E" within an oval design), Penola Inc., Refined, semirefined, and unrefined oils made from petroleum, etc.; **TM 505,830**, same, Insecticides, **filed** Mar. 30, 1956, D. C., S. D. N. Y., Doc. 108/199, *Esso Standard Oil Co. v. Eastern Petroleum Prod. Co. et al.* Consent judgment for injunction Apr. 16, 1956.

TM 220,294. (See TM 176,408.)

TM 258,648. (See TM 176,408.)

TM 280,830. (See TM 176,408.)

TM 282,259. (See TM 176,408.)

TM 306,182. (See TM 176,408.)

TM 334,168 (Salyna), St. George Textile Corp., Rayon and cotton piece goods, **filed** Jan. 10, 1952, D. C., S. D. N. Y., Doc. 72/241. *St. George Textile Corp. v. Saks & Co.* Stipulation and order of discontinuance Nov. 10, 1955.

TM 347,535. (See TM 176,408.)

TM 354,294. (See TM 176,408.)

TM 355,741. (See TM 176,408.)

TM 370,870. (See TM 176,408.)

TM 376,515. (See TM 176,408.)

TM 376,887. (See TM 176,408.)

TM 377,316. (See TM 176,408.)

TM 377,505. (See TM 176,408.)

TM 387,893 (Worrybird), F. Powell, doing business as Chick Powell Co., Novelties and souvenirs, particularly in the form of birds, **filed** July 8, 1952, D. C., S. D. N. Y., Doc. 77/99, *Chick Powell Co. v. RKO Pictures, Inc., et al.* Order of discontinuance Jan. 8 and Apr. 13, 1956.

TM 438,578. (See TM 176,408.)

TM 505,830. (See TM 176,408.)

CONDITION OF TRADEMARK APPLICATIONS AS OF APRIL 20, 1956

Total number of applications awaiting action [excluding renewals and Sec. 12 (c)]	8,646
Date of oldest new application	Sept. 21, 1955
Date of oldest amended application	Dec. 13, 1955

MERCHANT, JOHN, Director, Trademark Examining Operation

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application	
	New	Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	12-5-55	1-11-56
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	9-21-55	12-19-55
III. WENDT, C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	9-21-55	12-13-55
Renewals (All Classes)	2-15-56	3-19-56
Sec. 12 (c) Publications (All Classes)	2-20-56	3-19-56

Applications Filed During Week Ending April 20, 1956—497

Registrations Issued ..... 439—No. 626,728 to No. 627,166
Renewals Issued 70

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.

As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 655,102. Addison-Wade Company, Boston, Mass. Filed Oct. 21, 1953.

LUSTERTONE

For Leather Used Only as a Component of Leather-Upholstered Furniture—Namely, Occasional Chairs, Lounge Chairs, Love Seats, and Sofas.
First use June 1, 1948.

SN 674,238. Ferro Corporation, Cleveland, Ohio. Filed Oct. 4, 1954.

GLASFACE

For Glaze Frit and Porcelain Enamel Frit.
First use July 22, 1954.

SN 675,091. Olin Mathieson Chemical Corporation, East Alton, Ill. Filed Oct. 19, 1954. Sec. 2(f).

Olin

Owner of Reg. Nos. 563,886, 563,888, and 563,887.
For Regenerated Cellulose Film and Polyethylene Film.
First use on or about June 28, 1951.

SN 675,340. Max F. Wilhelmi, d. b. a. Max F. Wilhelmi, Seedsman, Lawrence, Kans. Filed Oct. 22, 1954.

BUCKAROO



For Beans and Peas in the Raw State Used for Seeding.
First use Jan. 1, 1934.

SN 677,424. Jack C. Linn, d. b. a. Linn's Hatchery, Puyallup, Wash. Filed Nov. 29, 1954.

Silver Broad

For Live Cockerels.
First use on or about Apr. 1, 1954.

SN 680,983. United-Hagie Hybrids, Inc., Des Moines, Iowa. Filed Feb. 2, 1955.

UNITED·HAGIE

Owner of Reg. No. 515,020.
For Hybrid Seed Corn.
First use November 1953.

SN 684,306. Haskelite Manufacturing Corporation, Grand Rapids, Mich. Filed Mar. 28, 1955.

HASKO·STRUCT

Owner of Reg. Nos. 523,777, 546,704, and 548,722.
For Sheet Material Consisting of Synthetic Resin and a Reinforcing Fiber of Organic or Inorganic Origin.
First use Dec. 23, 1954.

SN 685,007. The Alan Douglas Company, South Boston, Mass. Filed Apr. 6, 1955.

Ray-fo

For Foam Rubber Filling for Upholstered Furniture, Mattresses, and Pillows.
First use May 14, 1954.

SN 685,870. Uniparr, Inc., Palo Alto, Calif. Filed Apr. 19, 1955.

UNIPARR

For Sheets of Plastic Molding Material Reinforced With Glass Fibers.
First use Feb. 22, 1955.

SN 688,386. Canadian Forest Products Ltd., Vancouver, British Columbia, Canada. Filed May 27, 1955.

HSP

Owner of Reg. No. 272,672.
For Wood Pulp.
First use May 6, 1952.

SN 689,103. Washable Leather Research Corporation, New York, N. Y. Filed June 7, 1955.



Exclusive use of the word "Leather" apart from the mark as shown on the drawing is hereby disclaimed.
For Leather.
First use Apr. 4, 1955.

SN 689,107. Zoysia Farm Nurseries, Baltimore, Md. Filed June 7, 1955.

GREEN BEAUTY

For Grass Sod and Plugs.
First use May 2, 1955.
Subj. to Intf. with SN 689,951.

SN 689,951. The J. Chas. McCullough Seed Company, d. b. a. Cincinnati Horticultural Products Co., Cincinnati, Ohio. Filed June 21, 1955.

Green Beauty

For Grass Seed.
First use May 16, 1955.
Subj. to Intf. with SN 689,107.

SN 689,995. B. D. Eisendrath Tanning Company, Chicago, Ill. Filed June 22, 1955.

CHINCHILLAN CALF

Exclusive use of the word "Calf" apart from the mark as shown is disclaimed.
For Leather.
First use May 10, 1955.

SN 690,977. Tomahawk Hybrid Corn Co., Belmond, Iowa. Filed July 8, 1955.

TOMCO

For Farm Seeds—Namely, Corn, Oats, Soy Beans, Wheat, Sorghum Grains, and Grass.
First use June 7, 1955.

SN 692,145. Knickerbocker Toy Co. Inc., Brooklyn, N. Y. Filed July 29, 1955.

Featherfoam

For Filler Material for Stuffed Toys.
First use May 15, 1955.

SN 694,117. American Viscose Corporation, Philadelphia, Pa. Filed Sept. 2, 1955.

AVISCO

For Sheet Material of Regenerated Cellulose or Cellulosic Materials, Such as Cellulose Ethers or Cellulose Esters.
First use Aug. 5, 1955.

SN 694,419. Courtaulds Limited, London, England. Filed Sept. 9, 1955.

DURACOL

Owner of British Reg. No. 736,405, dated Nov. 22, 1954.
For Raw Fibrous Textile Materials.

CLASS 2

SN 673,870. Pierre Seitz, Les Brenets, Switzerland. Filed Sept. 27, 1954. Sec. 2(f).

Seitz

Owner of Reg. No. 398,466.
For Storage Box Containers for Watch Jewels, Storage Box Containers for Watchmakers' Parts, and Storage Box Containers for Watchmakers' Tools.
First use 1936; in commerce 1937.

SN 696,874. Alexandra de Markoff Sales Corporation, New York, N. Y. Filed Oct. 21, 1955.



Owner of Reg. Nos. 280,660, 508,525, and others.
For Compacts Sold Empty.
First use October 1929.

CLASS 3

SN 693,915. Henry L. Kotkins, d. b. a. Skyway Luggage Company, Seattle, Wash. Filed Aug. 30, 1955.

JUNKET

For Cosmetic Carrying Cases.
First use Dec. 27, 1954.

SN 694,544. The Baltimore Luggage Co., Baltimore, Md. Filed Sept. 13, 1955.

Starline

For Luggage—Namely, Week-End Cases, Overnight Cases, Pullman Cases, Train Cases, and Wardrobe Cases.
First use June 22, 1955.

SN 695,307. Identification Products Corporation, Philadelphia, Pa. Filed Sept. 26, 1955.

LIFEGUARD

For Holder for Retaining Identification and Personal Life Data Which Is Attachable to a Pocketbook, Belt, Wristband, or the Like.
First use Jan. 7, 1952.

SN 697,623. Fiss Bros., Inc., New York, N. Y. Filed Nov. 3, 1955.

Daisy-Lee

For Handbags and Pocketbooks.
First use Oct. 4, 1954.

CLASS 4

SN 698,840. Clover Farm Stores Corporation, Cleveland, Ohio. Filed Nov. 25, 1955.

CLOVER FARM

For Self-Polishing Floor Wax.
First use February 1932.

SN 698,919. Sanitek Products, Inc., Los Angeles, Calif. Filed Nov. 25, 1955.

HOLD—18

For Floor Wax.
First use Apr. 1, 1954.

SN 699,175. Taber Instrument Corporation, North Tonawanda, N. Y. Filed Nov. 30, 1955.

CALIBRASE

For Abrasive Wheels.
First use 1938.

SN 699,176. Taber Instrument Corporation, North Tonawanda, N. Y. Filed Nov. 30, 1955.

CALIBRADE

For Abrasive Wheels.
First use 1938.

SN 699,286. Bev-Rich Products, Inc., Philadelphia, Pa. Filed Dec. 2, 1955. Sec. 2(f).

Westley's

For Automobile Polish.
First use Mar. 1, 1950.

SN 699,287. Bev-Rich Products, Inc., Philadelphia, Pa. Filed Dec. 2, 1955.

X-10

For Automobile Polish.
First use October 1947.

CLASS 5

SN 688,480. Union Bay State Chemical Co., Inc., Cambridge, Mass. Filed May 27, 1955. Sec. 2(f).

BONDRITE

For Solvent Cements.
First use June 10, 1938.

SN 698,492. Armour and Company, Chicago, Ill. Filed Nov. 18, 1955.

ARMOPAD

For Resin Padding Adhesives.
First use Sept. 8, 1955.

CLASS 6

SN 673,171. Sel-Rex Precious Metals, Inc., Belleville, N. J. Filed Sept. 14, 1954.

Sel-Rex

For Salts and Other Reagents, Including Copper Purifiers, Used in the Forming of Electrolytes in the Electrodeposition of Bright Gold, Silver, and Rhodium.
First use Jan. 2, 1951.

SN 677,275. Stanley Home Products, Inc., Westfield, Mass. Filed Nov. 19, 1954. Sec. 2(f).

STANLEY
SURE-KYL

Owner of Reg. No. 405,953.
For Liquid Insecticides.
First use June 1934.

SN 677,650. Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. Filed Dec. 2, 1954.

Tugon

Owner of German Reg. No. 489,994, dated Dec. 17, 1936.
For Insecticide.

SN 679,952. UHU-Werk H. u. M. Fischer, Buhl, Baden, Germany. Filed Jan. 14, 1955.

UHU-blend

Owner of German Reg. No. 643,349, dated Aug. 29, 1953.
For Laundry Bleach, Laundry Starch, Textile Finishing Agents, Laundry Blue, Dyes, and Rust Preventives.

SN 682,488. Ruson Laboratories, Incorporated, Portland, Oreg. Filed Feb. 28, 1955.

RUSIDE

For Germicidal Solutions for Sterilizing and Storing Surgical Instruments.
First use Jan. 18, 1955.

SN 682,556. Heyden Chemical Corporation, New York, N. Y. Filed Mar. 1, 1955.

HEXOIL

For Alkyd Intermediate for Use in Drying Oils, Resins, and the Like.
First use on or about Feb. 10, 1955.

SN 684,435. Koppers Company, Inc., Pittsburgh, Pa. Filed Mar. 29, 1955.

DYLENE

For Polystyrene.
First use Mar. 1, 1955.

SN 684,437. Koppers Company, Inc., Pittsburgh, Pa. Filed Mar. 29, 1955.

DYLAN

For Polyethylene.
First use Feb. 22, 1955.

SN 684,553. Geigy Chemical Corporation, New York, N. Y. Filed Mar. 30, 1955.

"not a spray...there to stay"
MITIN

Owner of Reg. Nos. 385,170 and 385,171.
For Chemicals Adapted for Moth-Proofing of Fibers and Fabrics.
First use Jan. 20, 1940.

SN 685,313. Spencer Chemical Company, Kansas City, Mo. Filed Apr. 11, 1955.



The drawing is lined for red and blue but no claim is made to color.
For Polyethylene Resin.
First use Mar. 19, 1955.

SN 686,854. Sandoz Chemical Works, Inc., New York, N. Y. Filed May 4, 1955.

FADEX

For Chemical Preparation Used as a Dyeing Assistant in the Textile Industry To Counteract the Fading Caused by Atmospheric Gases.
First use Feb. 9, 1955.

SN 687,752. American Cyanamid Company, New York, N. Y. Filed May 18, 1955.

ACCOSTRENGTH

For Synthetic Resin for Use in the Manufacture of Paper.
First use Apr. 19, 1955.

SN 688,304. Chatham Laboratories, Inc., Whippany, N. J. Filed May 26, 1955.

DUO

For Powdered Bleach Compound.
First use June 15, 1949.

SN 689,186. Universal Oil Products Company, Des Plaines, Ill. Filed June 8, 1955.

88

For Additives to Rubber and Other Elastomers.
First use Mar. 1, 1955.

SN 689,225. Philip A. Houghton, Inc., Boston, Mass. Filed June 9, 1955.

PAH-NOL

For Anti-Freeze.
First use July 15, 1954.

SN 689,311. Southeastern Syrup Company, Jackson, Tenn. Filed June 10, 1955.

AJAX

For Starch for Laundry and Industrial Use.
First use Apr. 5, 1950.

SN 691,337. Thiokol Chemical Corporation, Trenton, N. J. Filed July 14, 1955.

VA-7

For Vulcanizing Agents.
First use on or about Mar. 17, 1955.

SN 691,357. Columbia-Southern Chemical Corporation, Pittsburgh, Pa. Filed July 15, 1955.

SILENE EF

Owner of Reg. No. 396,079.
For Finely Divided, Precipitated, Hydrated Alkaline Earth Metal Silicate.
First use Aug. 25, 1942.

SN 691,533. Wilbur-Ellis Company, Seattle, Wash. Filed July 18, 1955.

wil-kil

For Insecticide.
First use Mar. 21, 1955.

SN 692,713. The General Tire & Rubber Company, Akron, Ohio. Filed Aug. 9, 1955.

DISOPRENE by GENERAL

For Polyurethanes and Polymers Made With Diisocyanate Resins.
First use May 31, 1955.

SN 698,567. Tanexco, Inc., Chicago, Ill. Filed Dec. 1, 1955.

PYROVIS

For Mud Control Additive in Deep Well Drilling.
First use Jan. 24, 1955.

CLASS 7

SN 696,448. The Linen Thread Co., Inc., New York, N. Y. Filed Oct. 14, 1955.

COBRA

For Polished Cotton Wrapping Twine.
First use Sept. 8, 1955.

CLASS 8

SN 697,302. Kitchen-Quip, Inc., Waterloo, Ind. Filed Oct. 28, 1955.

SMOGMASTER

For Ash Tray.
First use Aug. 26, 1955.

CLASS 10

SN 657,461. Smith-Douglass Co., Inc., Norfolk, Va. Filed Dec. 4, 1953.

NUTRO

For Fertilizers.
First use Aug. 10, 1934.

SN 681,104. Ruhr-Stickstoff Aktiengesellschaft, Bochum, Germany. Filed Feb. 4, 1955.

MONTANSALPETER

Owner of German Reg. No. 648,617, dated Nov. 21, 1953.
For Fertilizers.
First use 1945; in commerce September 1952.

SN 696,721. National Mines & Minerals, Inc., Denver, Colo. Filed Oct. 19, 1955.



The lining on the drawing designates the color red.
For Mineral Fertilizers.
First use on or about June 6, 1955.

CLASS 11

SN 700,757. Scripto, Inc., Atlanta, Ga. Filed Dec. 28, 1955.
For Ink.

PLASTI-LEAD

First use Sept. 21, 1955.

CLASS 12

SN 680,959. Kelley Island Company, Cleveland, Ohio, to Basic Refractories, Incorporated, Cleveland, Ohio. Filed Feb. 2, 1955.

FAST SOAK

For Lime for Building and General Construction Purposes.
First use Jan. 3, 1955.

SN 681,600. Insul-Mastic Corporation of America, Pittsburgh, Pa. Filed Feb. 14, 1955.

POLY-CELL

For Liquids To Be Sprayed Onto a Surface To Form Solidified Foam Insulation for Building Construction.
First use January 1955.

SN 682,381. American Materials Corporation, Greenville, Ohio. Filed Feb. 28, 1955.

amlite

For Expanded Slag for Use in Making Concrete Products Such as Building Blocks and the Like.
First use Sept. 1, 1949.

SN 685,730. Fred Medart Manufacturing Co., St. Louis, Mo. Filed Apr. 18, 1955.

SAFE-WAL

For Wainscotting.
First use Mar. 31, 1955.

SN 686,210. James M. Newberry, West Memphis, Ark. Filed Apr. 25, 1955.

SPIFFY

For Steel Gasoline Pump Island Forms and Curbing Forms.
First use June 14, 1954.

SN 690,253. Empire Emery Corporation, New York, N. Y. Filed June 27, 1955.

EMERUNDUM

For Aggregate and Grits for Concrete.
First use on or about Oct. 1, 1948.

SN 693,011. The Cambridge Tile Manufacturing Co., Inc., Cincinnati, Ohio. Filed Aug. 15, 1955.

Suntile Setfast

Owner of Reg. Nos. 345,608 and 395,439.
For Ceramic Tile for Floors and Walls Sold in Sheets With Mesh Backing.
First use Nov. 5, 1954.

SN 695,334. Multipane, Inc., Philadelphia, Pa. Filed Sept. 26, 1955.

MULTIPANE

For Insulating Glass Blocks.
First use Aug. 5, 1952.

SN 700,361. Alsynite Company of America, San Diego, Calif. Filed Dec. 21, 1955.

STEPLAP

For Rigid and Semi-Rigid Plastic and Reinforced Plastic Structural Panels.
First use January 1955.

SN 700,364. The Babcock & Wilcox Company, New York, N. Y. Filed Dec. 21, 1955.

MUL-TEMP

For Refractory Mortar.
First use Sept. 6, 1955.

SN 700,365. The Babcock & Wilcox Company, New York, N. Y. Filed Dec. 21, 1955.

MUL-SET

For Refractory Mortar.
First use Aug. 27, 1955.

SN 700,366. The Babcock & Wilcox Company, New York, N. Y. Filed Dec. 21, 1955.

MUL-KOTE

For Refractory Mortar.
First use Nov. 30, 1955.

SN 700,458. Irving Subway Grating Co. Inc., Long Island City, N. Y. Filed Dec. 22, 1955.

SIL-DECK

For Bridge Flooring.
First use Dec. 13, 1955.

CLASS 13

SN 691,107. The Welsbach Corporation, Philadelphia, Pa. Filed July 11, 1955. Sec. 2(f).

WELSBACH

For Water Works Brass Goods, Including Curb Stops, Corporation Stops, Couplings, Fittings and Unions, Brass Plugs, Meter Couplings, Ground Key Stops, Bent Hydrants, Ground Blbbs, and Parts Associated Therewith; Stops and Valves for Gas Service, Including Brass and Iron Body Stops, Meter Connections, High Pressure Gas Valves, and Parts Associated Therewith; Relief Valves and Shut-Offs of the Chemical Fuse Type, Including Gas Shut-Offs for Water Heaters, Relief Valves, Vacuum Breakers, Combination Drain and Relief Valves, Diaphragm Valves, Fuses To Be Used in Such Valves, and Parts Associated Therewith; Drainage Fittings, Including Bath and Shower Traps, Inlet Bends, Tubes, Caps, Elbows, Extensions, Drainage Nipples, Waste and Vent Fittings, Swet Bushings, Sifodrains, and Parts Associated Therewith; Balancing Valves and Fittings for Hot Water Heating Systems; Steam Cocks; Water Backs; and Miscellaneous Valves, Including Steel and Stainless Steel Needle Valves and Globe Valves and Various Ground Key Types.
First use 1947.

SN 183. Zallea Brothers, Wilmington, Del. Filed Jan. 4, 1956.

HYPTOR

For Expansion Joints Used in Air, Gas, and Liquid Pipe Lines.
First use Dec. 29, 1955.

CLASS 14

SN 660,335. Knapsack-Griesheim Aktiengesellschaft, Knapsack, near Koln, Germany. Filed Jan. 29, 1954.

ELEKTRON

Owner of German Reg. No. 528,477, dated Jan. 27, 1941.
For Non-Ferrous Light Metals, Their Alloys, and Semi-Fabricated Forms Thereof, Particularly Castings, Forgings, Rolled Sheets, Extruded Shapes, Granules, and Powders.

SN 660,372. American Alloys Corporation, Kansas City, Mo. Filed Feb. 1, 1954.

AMALLOY

For Ingots of Aluminum and Magnesium Casting of Alloys.
First use Sept. 14, 1952.

SN 660,809. Knapsack-Griesheim Aktiengesellschaft, Knapsack near Koln, Germany. Filed Feb. 9, 1954.

„Elektron"

Owner of German Reg. No. 290,883, dated Aug. 18, 1922, and Reg No. 413,512, dated Jan. 22, 1930.
For Non-Ferrous Light Metals, Their Alloys, and Semi-Fabricated Forms Thereof, Particularly Castings, Forgings, Rolled Sheets, Extruded Shapes, Granules, and Powders.

SN 683,999. Titan Industrial Corporation, New York, N. Y. Filed Mar. 22, 1955.

COKELITE

For Tinplate.
First use Dec. 16, 1954.

SN 685,086. American Nickeloid Company, Peru, Ill. Filed Apr. 7, 1955.

Bakekote

The drawing is lined for red.
For Sheet Metal Having a Finish of Baked Enamel or Other Protective or Decorative Coating.
First use on or about Mar. 26, 1955.

SN 697,881. Worcester Pressed Aluminum Corp., Worcester, Mass. Filed Nov. 7, 1955.

Palco

For Metal Stampings Made to Specification.
First use as early as 1919.

SN 700,454. Hunter Douglas Aluminum Corporation, New York, N. Y. Filed Dec. 22, 1955.

LUXAFLEX

For Metal Stock in Both Coil and Flat Form From Which Venetian Blind Slats Are Made.
First use Nov. 18, 1955.

SN 700,569. The Carpenter Steel Company, Reading, Pa. Filed Dec. 27, 1955.

HY-RA "49"

For Steel, Particularly Tool and Die Steels in the Form of Wire, Strips, Bars, Billets, and Other Shapes.
First use Apr. 15, 1955, on tool steel.

CLASS 15

SN 688,236. Gallo Candle Manufacturing Co., Inc., Brooklyn, N. Y. Filed May 25, 1955.

MADONNA

For Candles.
First use Aug. 5, 1949.

SN 694,928. Sterns, Inc., New York, N. Y. Filed Sept. 19, 1955.



For Lubricating Oils.
First use Oct. 1, 1938.

SN 699,699. Chatham Candle Corporation, Chatham, N. J. Filed Dec. 9, 1955.

HOMESTEAD



For Candles.
First use May 2, 1949.

SN 699,890. Dura Commodities Corporation, New York, N. Y. Filed Dec. 13, 1955.

F-T

For Mineral Wax.
First use July 2, 1953.

SN 699,891. Dura Commodities Corporation, New York, N. Y. Filed Dec. 13, 1955.

DURMONT

For Mineral Montan Wax.
First use Mar. 13, 1951.

SN 699,892. Dura Commodities Corporation, New York, N. Y. Filed Dec. 13, 1955.

DUROXON

For Mineral Wax.
First use Sept. 13, 1948.

SN 700,001. American Resin Corporation, Chicago, Ill. Filed Dec. 15, 1955.

SPRAY GRAPH

For Quick-Drying Graphite Lubricant.
First use on or about June 15, 1955.

SN 700,137. The Texas Company, New York, N. Y. Filed Dec. 16, 1955.

SYNJET

For Lubricating Oils.
First use on or about May 17, 1955.

SN 700,289. Will & Baumer Candle Co., Inc., Syracuse, N. Y. Filed Dec. 19, 1955.

CASCADE

For Wax Candles.
First use during the latter part of the year 1940.

CLASS 16

SN 684,629. Lawrence R. Bradley, d. b. a. The Periseal Company, New York, N. Y. Filed Mar. 31, 1955. Sec. 2(f).

SPAR VEHICLE

Owner of Reg. No. 326,247.
For Chemical Mixing, Formulating, and Blending Medium Used for the Production of Enamels, Paints, and Varnishes and Other Protective Coatings.
First use Oct. 1, 1931.

SN 685,033. Louisville Varnish Company, Louisville, Ky. Filed Apr. 6, 1955.

VARNITE

For Varnish.
First use Sept. 4, 1934.

SN 685,154. American Bitumuls & Asphalt Company, San Francisco, Calif. Filed Apr. 8, 1955. Sec. 2(f).

Laykold

Owner of Reg. Nos. 513,010 and 215,916.
For Asphaltic Base Protective and/or Decorative Coatings, Compositions or Preparations for Application to Metal, Masonry, Asphalt, Concrete, and Cement Structures and Other Surfaces.
First use June 1946.

SN 685,876. Weber Costello Company, Chicago Heights, Ill. Filed Apr. 19, 1955.

Brilliants

For Semi-Solid Color Cakes of Concentrated Tempera Pigment.
First use Apr. 1, 1955.

SN 686,348. American-Marietta Company, d. b. a. The Marietta Paint & Color Co., Chicago, Ill. Filed Apr. 27, 1955. Sec. 2(f).

Shieldcote

Applicant claims the exclusive right to the use of "Cote" as a part of its mark, but not otherwise.
For Enamels.
First use on or about Oct. 1, 1928.

SN 686,777. Samuel Clifford Robison, d. b. a. S. C. Robison & Company, Westfield, N. J. Filed May 3, 1955.

MARVAL

For Varnishes, Paints, and Enamels.
First use Apr. 15, 1955.

SN 687,413. The Reardon Company, St. Louis, Mo. Filed May 12, 1955.

Roco

For Wall Sizing Compound.
First use Jan. 15, 1929.

SN 687,790. Lawter Chemicals, Inc., Chicago, Ill. Filed May 18, 1955.

BOLD

For Paints Used for Coatings and for Printing.
First use Oct. 1, 1953.

SN 690,092. The Pantasote Co., Passaic, N. J. Filed June 23, 1955.

PANTASOTE RENOVATOR

No claim is made to the word "Renovator" when used apart from the mark as shown. Owner of Reg. No. 140,924.
For Dressing for Automobile Tops.
First use Apr. 27, 1911.

SN 692,375. Body Bros., Inc., Bedford, Ohio. Filed Aug. 3, 1955.



For Paints, Varnishes, and Lacquers.
First use on or about Apr. 5, 1955.

SN 699,401. Kaiser Gypsum Company, Inc., Oakland, Calif. Filed Dec. 5, 1955.

COVER-TEX

For Texture Paint for Interior Surfaces—Namely, a Pigmented Casein-Bound or Cereal-Bound Paint Containing a Gypsum Limestone Filler Sold in Powder Form to Which Water Is Added.
First use Apr. 3, 1952.

CLASS 17

SN 682,359. Fernando Fonticiella Rivera, Sancti-Spiritus, Las Villas, Cuba. Filed Feb. 25, 1955.

IMPERIO CUBANO

Owner of Cuban Reg. No. 90,137, dated Apr. 29, 1954.
For Cigars.
First use May 1, 1954.

SN 688,319. Fabriques de Tabac Reunies S. A. Neuchatel-Serrieres, d. b. a. Vereinigte Tabakfabriken A. G. Neuenburg-Serrieres, and Fabbriche Tabacchi Riunite S. A. Neuchatel-Serrieres, Serrieres, Switzerland. Filed May 26, 1955.

CONGRESS

Priority claimed under Sec. 44(d) on Swiss Reg. No. 153,795, dated Nov. 30, 1954.
For Cigarettes.

CLASS 18

SN 639,636. Heliogen Products, Inc., Long Island City, N. Y. Filed Dec. 17, 1952.

HELIOGEN

Owner of Reg. No. 334,740.
For Medicinal and Hygienic Preparations for Maintaining or Restoring Tissue Tone—Namely, Antiseptics and Germicides.
First use Apr. 1, 1952.

SN 653,440. Chemiewerk Homburg Aktiengesellschaft, Frankfurt am Main, Germany. Filed Sept. 21, 1953.

HOMBURG

Owner of German Reg. No. 632,879, dated Jan. 17, 1953.
For Pharmaceutical Products and Chemical Products for Pharmaceutical Preparations and Medicines—Namely, Medicines for the Treatment of Allergic Diseases, Blood Diseases, Endocrine Diseases, Female Diseases, Eye Diseases, Dystrophies, Diseases of the Urinary Organs, Diseases of the Vascular System, Diseases of the Throat, Nose and Ear, Heart and Circulatory Diseases, Diseases of Nervous Exhaustion and Arrested Development, Skin Diseases, Bone and Joint Diseases, Conditions of Physical Weakness, Diseases of the Liver and Gall Bladder (Not Including Laxatives), Diseases of the Stomach and Intestines, Blood Pressure Diseases, Infectious Diseases, Diseases of the Lung, Nerve and Brain Diseases, Dental Diseases, Muscle Diseases, Psychiatric Diseases, Vegetative Diseases, Poisoning and Other Diseases.

SN 674,183. Nepera Chemical Co., Inc., Yonkers, N. Y. Filed Oct. 1, 1954.

PRODIAMYL

For Analgesic Composition Comprising Antihistamine, Aspirin, Phenacetin, and Caffeine.
First use Sept. 16, 1954.

SN 676,752. Pearson Pharmacal Company, Inc., New York, N. Y., to Lady Pearson, Limited, division of Pearson Pharmacal Company, Inc., Long Island City, N. Y. Filed Nov. 16, 1954.

DEW DROPS

For Eye Drops Containing Phenylephrine, Hydrochloride, Boric Acid, Sodium Borate, and Thimerosal.
First use July 19, 1954.

SN 680,835. Kenneth H. Wood, d. b. a. D. K. Laboratories, Oakland, Calif. Filed Jan. 31, 1955.

Dentu-Komfort

For Green Liquid Dental Medicinal Preparation To Be Applied to Artificial Dentures To Relieve Irritation and To Give Comfort From Ill-Fitting Dentures.
First use May 26, 1950.

SN 682,796. Grove Laboratories, Inc., St. Louis, Mo. Filed Mar. 4, 1955.



Owner of Reg. Nos. 46,395 and 313,322.
For Preparation for the Relief of Colds.
First use Oct. 15, 1954.

SN 683,112. Gray Pharmaceutical Co., Inc., Newton, Mass. Filed Mar. 9, 1955.

Cerebratone

For Vitamin Preparation.
First use Mar. 1, 1955.

SN 683,127. Mission Pharmacal Company, San Antonio, Tex. Filed Mar. 9, 1955.

HOMAPIN

For Preparation for Antispasmodic Treatment.
First use Nov. 5, 1946.

SN 684,212. Geigy Chemical Corporation, New York, N. Y. Filed Mar. 25, 1955.

MEDOSERPIN

For Sedative and Tranquilizer.
First use Mar. 16, 1955.

SN 684,531. Carlen Corporation, Coral Gables, Fla. Filed Mar. 30, 1955.

CARLENDACIDE

For Germicidal Preparation for Personal Use.
First use Dec. 10, 1953.

SN 684,615. Rhein-Chemie G. m. b. H., Mannheim, Germany. Filed Dec. 20, 1954.

Asgoviscum
FORTE

Priority claimed under Sec. 44(d) on German application filed June 19, 1954; Reg. No. 683,387, dated Oct. 27, 1955.
For Medicines Against Hypertension and Attendant Phenomena—Namely, Mistletoe Preparations.

SN 685,245. Broemmel Pharmaceuticals, San Francisco, Calif. Filed Apr. 11, 1955.

BIOPHRIN

For Medicated Nasal Spray.
First use Mar. 22, 1955.

SN 685,483. Endo Products Inc., Richmond Hill, N. Y. Filed Apr. 14, 1955.

SYRUP OF PERIN

For Medicinal Preparation Used as an Antihelminthicide.
First use Apr. 1, 1955.

SN 686,681. Nion Corporation, Los Angeles, Calif. Filed May 2, 1955.

CALCINATAL

For Combination of Vitamins and Minerals for Prenatal Use.
First use Mar. 3, 1955.

SN 688,338. Merck & Co., Inc., Rahway, N. J. Filed May 26, 1955.

NICARB

For Coccidiostat for Domesticated Birds.
First use May 6, 1955.

SN 689,426. Sunkist Growers, Inc., Los Angeles, Calif. Filed June 13, 1955.

Exchange

Owner of Reg. No. 259,660.
For Derivatives of Citrus Fruits for Use as or in the Preparation of Pharmaceuticals, Some of Said Derivatives for Use Also as Nutritional Supplements.
First use June 26, 1928.

SN 690,742. Nion Corporation, Los Angeles, Calif. Filed July 5, 1955.

B-NUTRON

Owner of Reg. Nos. 389,084 and 400,358.
For Vitamin Concentrate in Syrup and Tablet Form To Be Used in Treatment of Vitamin B Deficiency.
First use Apr. 4, 1939.

SN 691,508. Corega Chemical Company, Jersey City, N. J. Filed July 18, 1955.

TARCORTIN

For Pharmaceutical Preparation To Be Used in the Treatment of Itching and Irritation.
First use June 19, 1955.

SN 691,767. Imperial Chemical (Pharmaceuticals) Limited, London, England. Filed July 22, 1955.

MYLEPSIN

Owner of British Reg. No. 706,499, dated Apr. 17, 1952.
For Anticonvulsants for Human Use and Veterinary Use.

SN 691,922. Abbott Laboratories, North Chicago, Ill. Filed July 26, 1955.

ERYTHROMID

Owner of Reg. No. 590,748.
For Pharmaceutical Preparation Consisting of an Antibiotic and Sulfonamides for the Treatment of Bacterial Infections.
First use July 15, 1955.

SN 692,022. R. J. Strasenburgh Company, Rochester, N. Y. Filed July 27, 1955.

BIPHETAMINE

Owner of Reg. No. 566,976.
For Pharmaceutical Preparation Useful as an Appetite Depressant and Nervous Stimulant.
First use Mar. 15, 1951.

SN 695,369. Abbott Laboratories, North Chicago, Ill. Filed Sept. 27, 1955.

GALLIMYCIN

For Antibiotic Preparation for Prevention and Treatment of Infectious Diseases in Poultry.
First use Aug. 1, 1955.

SN 695,452. Sixteen Laboratories, Darling, Pa. Filed Sept. 27, 1955.

SIXTEEN Lotion

The term "Lotion" is disclaimed apart from the mark as shown.
For Medicated Skin Lotion.
First use May 1947.

SN 695,586. The Upjohn Company, Kalamazoo, Mich. Filed Sept. 29, 1955. Sec. 2(f).

GELTABS

For Vitamin Preparation.
First use July 29, 1943.

SN 695,587. The Upjohn Company, Kalamazoo, Mich. Filed Sept. 29, 1955.

CER-O-STREPS

For Medicinal Preparation for the Treatment of Bacterial Infections.
First use June 29, 1955.

SN 695,758. Elwood Pugh, Jr., d. b. a. M-F Laboratories, Edmond, Okla. Filed Oct. 3, 1955.

M-F MAGIC-FORMULA

For Liniment for the Relief of Pain.
First use July 18, 1955.

SN 696,028. A. D. Frederick Co., Inc., Rochester, N. Y. Filed Oct. 7, 1955.

PRUNITIN

For Laxative Preparation.
First use March 1954.

SN 696,116. The Central Pharmacal Company, Seymour, Ind. Filed Oct. 10, 1955.

NEOCYTEN

For Salicylate Analgesic and Skeletal Muscle Relaxant.
First use Oct. 15, 1952.

SN 696,118. The Central Pharmacal Company, Seymour, Ind. Filed Oct. 10, 1955.

CODITRATE

For Cough Syrup.
First use Sept. 15, 1948.

SN 696,296. Galactina & Biomalz AG., Belp, Switzerland. Filed Oct. 12, 1955.

PESOMIN

Owner of Swiss Reg. No. 151,111, dated May 10, 1954.
For Medicinal Preparations for the Treatment of Exogenous Obesity, Endogenous Obesity, and Symptomatic Obesity.

SN 696,342. Abbott Laboratories, North Chicago, Ill. Filed Oct. 13, 1955.

RACOBAL

For Radioactive Cobalt To Serve as a Radioactive Source in Radiation Therapy.
First use Aug. 18, 1955.

SN 696,398. American Cyanamid Company, New York, N. Y. Filed Oct. 14, 1955.

STILOMICINA

Owner of Reg. No. 585,813.
For Antibiotic.
First use Sept. 13, 1955.

SN 696,566. Mead Johnson & Company, Evansville, Ind. Filed Oct. 17, 1955.

Natalins-PF

Owner of Reg. Nos. 571,421 and 605,389.
For Vitamin and Mineral Capsules.
First use Aug. 19, 1955.

SN 696,825. Purepac Corporation, New York, N. Y. Filed Oct. 20, 1955.

TRI-PEPTUM

For Preparation for Relieving Indigestion, Nausea, and Diarrhea.
First use Sept. 8, 1955.

SN 696,927. American Scientific Laboratories, Inc., Madison, Wis. Filed Oct. 24, 1955.

GALLIVERMA

For Drinking Water Wormer for Removal of Worms in Poultry.
First use Oct. 17, 1955.

SN 696,999. Merck & Co., Inc., Rahway, N. J. Filed Oct. 24, 1955.

REDIDAY

Owner of Reg. Nos. 568,605, 568,608, and others.
For Medicinal Preparation for Use in the Prevention and Treatment of Metabolic Deficiencies.
First use Aug. 15, 1955.

SN 2,484. The Kalo Company, Quincy, Ill. Filed Feb. 6, 1956.

KALO

For Minerals and Mineral Mixtures for Use as a Food Supplement for Livestock and Poultry, Livestock and Poultry Tonics and Remedies—Namely, Drenches, Worm Oils, and Antibiotic Vitamin Concentrates; and Trace Mineral and Vitamin-Trace Mineral Premixes for Use in Feed Manufacturing.
First use during the year of 1914.

CLASS 19

SN 642,284. Cletus A. Klein, d. b. a. Caro Manufacturing Co., Caro, Mich. Filed Feb. 16, 1953.

BRAKE-MOBILE TOW PILOT

The word "Tow" is disclaimed apart from the mark as shown.
For Tow Bars.
First use Jan. 19, 1953.

SN 674,270. Maybach-Motorenbau G. m. b. H., Friedrichshafen, Germany. Filed Oct. 4, 1954.

MAYBACH

No claim is made to the word "Maybach" apart from the mark as shown. Owner of German Reg. No. 408,531, dated Oct. 10, 1929.
For Rail Vehicles, Road Vehicles, Motor Driven Rail-, Road-, and Cross-Country Vehicles, Motorcycles, Bicycles, Wheel- and Caterpillar Type Cross-Country Vehicles, Watercraft, Aircraft, and Structural Parts Thereof.
First use on or about Oct. 1, 1924.

SN 684,346. The Ryan Aeronautical Company, San Diego, Calif. Filed Mar. 28, 1955.

VERTIJET

For Vertical Take-Off Aircraft.
First use Jan. 15, 1955.

SN 684,347. The Ryan Aeronautical Company, San Diego, Calif. Filed Mar. 28, 1955.

Ventiplane

For Vertical Take-Off Aircraft.
First use Jan. 15, 1955.

SN 690,078. Flexello Castors and Wheels Limited, Slough, Buckinghamshire, England. Filed June 23, 1955.

Flexello

Owner of British Reg. No. 646,442, dated Mar. 29, 1946.
For Wheels and Axles for Trucks and Motor Land Vehicles.

SN 696,426. Roy H. Fogelsonger, d. b. a. Lo-Rol Enterprises, Glendale, Calif. Filed Oct. 14, 1955.

The "Topper"

For Closure Canopies for Automotive Vehicles and Aluminum Tops for Pickup Trucks.
First use Sept. 15, 1952.

SN 699,616. Robert Bosch Gesellschaft mit beschrankter Haftung, Stuttgart, Germany. Filed Dec. 8, 1955.

Owner of German Reg. No. 544,602, dated Apr. 23, 1942.
For Equipment for Land, Air, and Water Craft—Namely, Reflectors, Windshield Wipers, Windshield Defrosters, Devices To Prevent Icing, Car Heaters; Brake Devices, Steering Devices, Devices for Opening and Shutting Doors and Windows of Motor Vehicles.

SN 1,254. Magna Products Corporation, Brooklyn, N. Y. Filed Jan. 23, 1956.



The mark comprises a white band or stripe on a contrasting background.
For Bicycle Pedal Treads.
First use Nov. 11, 1955.

SN 1,255. Magna Products Corporation, Brooklyn, N. Y. Filed Jan. 23, 1956.



The mark comprises a red band or stripe on a contrasting background. The drawing is lined for red.
For Bicycle Pedal Treads.
First use Nov. 11, 1955.

SN 1,269. Piasecki Helicopter Corporation, Morton, Pa., now by change of name Vertol Aircraft Corporation. Filed Jan. 23, 1956.

VERTOL

For Helicopters.
First use Jan. 5, 1956.

SN 1,270. Piasecki Helicopter Corporation, Morton, Pa., now by change of name Vertol Aircraft Corporation. Filed Jan. 23, 1956.

VERTAIR

For Helicopters.
First use Jan. 5, 1956.

CLASS 20

SN 696,792. Flex-O-Glass, Inc., d. b. a. Warp Brothers, Chicago, Ill. Filed Oct. 20, 1955.

PLAST-O-RUNNER

For Plastic Floor Covering.
First use September 1955.

CLASS 21

SN 675,648. Organizacion Llica, Laboratorios Industriales Internacionales S. A., Caracas, Venezuela. Filed Oct. 28, 1954.

infra-air

For Electrical Drying Apparatus Employing Radiant Energy Used as a Drying Unit in Process Machinery Such as Roto Gravure Presses, Wall-Paper Machines, Plastic Machinery and the Like.
First use Aug. 1, 1954.

SN 675,649. Organizacion Llica, Laboratorios Industriales Internacionales S. A., Caracas, Venezuela. Filed Oct. 28, 1954.



No claim is made to the words "Drying Unit."
For Electrical Drying Apparatus Employing Radiant Energy Used as a Drying Unit in Process Machinery Such as Roto Gravure Presses, Wall-Paper Machines, Plastic Machinery and the Like.
First use Aug. 1, 1954.

SN 696,138. General Dynamics Corporation, Rochester, N. Y. Filed Oct. 10, 1955.



For Radio and Television Receiving Sets, and Parts Thereof.
First use July 1955.

SN 696,963. Eastern Precision Resistor Corp., Brooklyn, N. Y. Filed Oct. 24, 1955.

COMP-U-TRIM

For Potentiometers of the Resistor Type.
First use Jan. 5, 1953.

SN 699,647. The Magnavox Company, Fort Wayne, Ind. Filed Dec. 8, 1955.

VIDEO THEATER

For Television Receivers.
First use January 1955.

SN 699,775. Channel Master Corporation, Ellenville, N. Y. Filed Dec. 12, 1955.

TWIN TWENTY

For Transmission Lines.
First use Oct. 4, 1955.

SN 699,856. The Soundscriber Corporation, New Haven, Conn. Filed Dec. 12, 1955. Sec. 2(f).

SoundScriber

Owner of Reg. No. 557,861.
For Electric Sound Recording and Reproducing Machines, Records, and Parts Thereof.
First use on or about Feb. 15, 1936.

SN 700,382. The Magnavox Company, Fort Wayne, Ind. Filed Dec. 21, 1955.

MODERN THEATER

For Television Receivers.
First use in October 1954.

CLASS 22

SN 669,368. Sifo Company, St. Paul, Minn. Filed July 2, 1954.

HONEY-BEE HIVE

For Wooden Ring and Peg Toy.
First use on Apr. 2, 1954.

SN 669,439. Industrial Fabricators, Inc., Norristown, Pa. Filed July 6, 1954.

ROCKET

For Gymnasium Sets, Slides and Toys and Swings for Children.
First use September 1949.

SN 669,565. Montauk Striper Manufacturing Company, Inc., Garfield, N. J. Filed July 7, 1954.



The applicant disclaims the words "Montauk Striper" apart from the trademark as shown.
For Lures Used for Fishing.
First use May 15, 1954.

SN 674,997. The Nye Rubber Company, Barberton, Ohio. Filed Oct. 18, 1954.

RUBBERIDE

For Toy Vehicle Wheels and Tires.
First use Sept. 8, 1954.

SN 678,496. Thomas De La Rue & Company Limited, London, England. Filed Dec. 16, 1954.

CALYPSO

Owner of British Reg. No. 729,710, dated Apr. 29, 1954.
For Card Games.

SN 682,214. W-B-G Corp., Los Angeles, Calif. Filed Feb. 23, 1955.

WHEEL 'N DEAL

For Combination Card and Dice Game Adapted for Amusement Only.
First use Nov. 9, 1954.

SN 686,292. Dimco-Gray Company, Dayton, Ohio. Filed Apr. 26, 1955.

DIMCO

For Shuffleboard Equipment.
First use 1940.

SN 690,488. Philip L. Rothenberg, Jamaica, N. Y. Filed June 29, 1955.

PLUGG

For Board Games.
First use Jan. 11, 1954.

SN 691,826. Edward G. Chamberlain, d. b. a. Chamberlain Manufacturing Company, North Miami, Fla. Filed July 25, 1955.

SAV A LIFE SWIM BUOY

For Floating Device for Supporting a Swimmer.
First use Jan. 20, 1955.

SN 694,233. Peter J. Kite, Syracuse, N. Y. Filed Sept. 6, 1955.

WORMFISH

For Fish Lures.
First use Aug. 24, 1955.

SN 694,428. Isofoam Corporation, New York, N. Y. Filed Sept. 9, 1955.

FOAMAGIC

For Toys—Namely, Toy Animals, Fishes, Alphabet Blocks, Boats, Telephones, Quoit Sets, Trucks, Trains, and Building Sets.
First use June 13, 1955.

SN 694,431. Langley Corporation, San Diego, Calif. Filed Sept. 9, 1955.

SPIN DRIFT

For Fishing Reels.
First use Aug. 4, 1955.

SN 696,287. Robert A. Corns, Gonzales, Tex. Filed Oct. 12, 1955.

Dolly Days

For Doll Dresses.
First use Aug. 1, 1955.

SN 699,327. Morris C. Levich, d. b. a. Hol-Le Toy Co., New York, N. Y. Filed Dec. 2, 1955.

Miss Lolly By Golly

For Dolls.
First use Oct. 6, 1955.

SN 436. Natural Doll Co., Inc., New York, N. Y. Filed Jan. 10, 1956.

"MISS ANNIVERSARY"

For Dolls.
First use Mar. 5, 1955.

SN 801. Joseph L. Kallus, d. b. a. Cameo Doll Products Co., Port Allegany, Pa. Filed Jan. 16, 1956.

Dyp-a-Babe

For Toy Dolls.
First use Dec. 1, 1955.

SN 927. Totsy Manufacturing Company, Inc., Springfield, Mass. Filed Jan. 17, 1956.

SIS-AN-ME

For Dolls and Doll Clothes.
First use December 1955.

SN 1,250. Kubby Industries, Inc., Knoxville, Tenn. Filed Jan. 23, 1956.

KUBBY

For Dolls.
First use May 14, 1955.

SN 1,785. Martin Henfield, New York, N. Y. Filed Jan. 31, 1956.

MISS CAKETTE

For Dolls.
First use in June 1953.

CLASS 23

SN 660,475. Detroit Stamping Company, Detroit, Mich. Filed Feb. 2, 1954.

DE-STA-CO

For Toggle Clamps, Toggle Pliers, Mechanical Arbor Spacers, Fixtures, Jigs, Housings for Machine Tools, Machine Housings, Bolt Retainers, and Compressor Valves.
First use February 1950.

SN 669,653. Atlas Hardware Co., New York, N. Y. Filed July 9, 1954. Sec. 2(f).

Superior

For High Speed Twist Drills for Drilling Metal.
First use Oct. 30, 1949.

SN 681,581. Dri-Power Company, Chicago, Ill. Filed Feb. 14, 1955.

Dri-Power

For Fire Extinguishers.
First use June 1953.

SN 682,404. Crown Crest Cutlery Corporation, Brooklyn, N. Y. Filed Feb. 28, 1955.

CROWN CREST

For Items of Cutlery Consisting of Carving Sets.
First use June 25, 1954.

SN 682,976. Pittsburgh Forgings Company, Coraopolis, Pa. Filed Mar. 7, 1955.

Roderick Lean

For Harrows, Rotary Hoes, and Spreaders.
First use Jan. 1, 1894, on harrows.

SN 683,479. Fred Burger, New Brunswick, N. J. Filed Mar. 15, 1955.

BLITZ

For Devices for Removing the Contents of Collapsible Tubes by Compression Exerted by a Roller on the Exterior of the Tube.
First use on or about Aug. 1, 1954.

SN 683,747. Berkeley Pump Company, Berkeley, Calif. Filed Mar. 18, 1955. Sec. 2(f).

BERKELEY

Owner of Reg. No. 569,355.
For Water Pumping Systems for Deep Wells and Shallow Wells, Pumps, and Pressure Tanks, Sold as a Unit, and Parts Thereof, for Home, Farm, and Industrial Use.
First use in the year 1938.

SN 684,015. Bell & Gossett Company, Morton Grove, Ill. Filed Mar. 23, 1955.

B G

Owner of Reg. No. 527,064.
For Booster Pumps, Centrifugal Pumps, Wash Tanks and Degreasers for Washing and Removing Grease and Oil From Metal Articles, Air Compressors and Spray Guns.
First use Oct. 26, 1948, for booster pumps.

SN 685,056. Superior Separator Company, Hopkins, Minn. Filed Apr. 6, 1955.

FEED HAND

Owner of Reg. Nos. 541,767, 525,704, and 518,202.
For Tractor-Mounted Material Loaders of the Farm Type and Farm Truck Mounted Devices for Mixing and Discharging Grain Feeds and the Like.
First use Feb. 28, 1955.

SN 685,057. Superior Separator Company, Hopkins, Minn. Filed Apr. 6, 1955.

POWER-BOX

For Tractor-Mounted Material Loaders of the Farm Type and Farm Truck Mounted Devices for Mixing and Discharging Grain Feeds and the Like.
First use Mar. 1, 1949.

SN 685,921. Oneida Ltd., Oneida, N. Y. Filed Apr. 20, 1955.

ONEIDA

Owner of Reg. Nos. 185,759, 316,341, and others.
For Flat Tableware of Nonprecious Metal.
First use Nov. 25, 1932.

SN 688,789. American Hard Rubber Company, New York, N. Y. Filed June 3, 1955.

ACE TEMPRON

Owner of Reg. No. 575,550.
For Molded Parts for Machinery Used in Treating and Plating Metal Parts.
First use Jan. 20, 1955.

SN 689,333. Tully J. Bagarozy, Bronx, N. Y. Filed June 13, 1955.



The drawing is lined for red.
For Fire Extinguishers.
First use Mar. 1, 1955.

SN 691,814. American Optical Company, Southbridge, Mass. Filed July 25, 1955.

AO

Owner of Reg. Nos. 268,217, 444,749, and others.
For Optical Lens Machinery—Namely, Lens Drills, Broaching Machines, Lens Chillers, Lens Markers, Lens Blockers, Lens Edgers, Lens Surfacers, Lens Polishers, Lens Cutters, Lap Truing Machines, Soldering Machines, Accessories and Parts for the Aforesaid Machines and Devices; Small Hand Tools Generally Used in the Optical and Ophthalmic Trades, Such as Pliers, Screw Drivers, Mandrels, Frame Stretchers, Auxiliary Heaters for Frame Stretchers, Protractors, and the Like; Benches Generally Used With or for Such Machines.
First use on or about Sept. 11, 1944.

SN 692,357. Societe Anonyme Francaise du Ferodo, Paris, France. Filed Aug. 2, 1955.

FERLEC

Owner of French Reg. No. 442,103, dated May 7, 1954 (Seine); Natl. Inst. No. 35,008.
For Clutches, Electromagnetic Clutches, Coupling, Transmissions, and Parts Thereof.

SN 693,151. The Joyce-Cridland Company, Dayton, Ohio. Filed Aug. 16, 1955. Sec. 2(f).

Materialift

For Hydraulic Lifts for Merchandise.
First use Aug. 7, 1939.

SN 693,310. Commissary Corporation, Wooster, Ohio. Filed Aug. 18, 1955.

dairy Isle

Owner of Reg. No. 567,732.
For Food Processing Machinery—Namely, Machinery for Preparing and Dispensing Beverages and Other Food Products and Ingredients Therefor, and Cutlery and Tools—Namely, Can Openers, Ice Cream Spades, Knives, Spoons, Dippers, and Tongs.
First use on or about Aug. 23, 1951.

SN 695,840. Merle J. Petersen, d. b. a. The Tractor Stilts Co., Omaha, Nebr. Filed Oct. 4, 1955.



For Tractor Raising Devices.
First use Nov. 15, 1949.

SN 696,004. The Union Tool Corporation, Warsaw, Ind. Filed Oct. 6, 1955.

Roto-gluer

For High Frequency Machine Used for Gluing Hardwood Panels, Lumber Cores, Table Tops, Sash and Door Stock, Lumber Core Banding, and Veneer Core Banding.
First use Jan. 18, 1951.

SN 696,005. The Union Tool Corporation, Warsaw, Ind. Filed Oct. 6, 1955.

PIVOTABLE

For High Frequency Machine With Rotating Table Used for Gluing Hardwood Panels, Lumber Cores, Table Tops, Sash and Door Stock, Lumber Core Banding, and Veneer Core Banding.
First use Jan. 18, 1951.

SN 697,020. H. K. Porter, Inc., Somerville, Mass. Filed Oct. 24, 1955. Sec. 2(f).

POINTCUT

Owner of Reg. No. 335,977.
For Wood-Cutting Tool for Brush Cutting, Pruning, Trimming, and Any General Improvement Cutting.
First use May 4, 1935.

SN 697,351. American Tractor Corporation, Churubusco, Ind. Filed Oct. 31, 1955.

TERRAMATIC

Owner of Reg. No. 539,691.
For Tractor Power Transmission Mechanisms and Controls, and Parts Thereof.
First use Sept. 22, 1955.

SN 697,355. Per Gunnar Brundell, Gavle, Sweden. Filed Oct. 31, 1955.

CAMBIO

Priority claimed under Sec. 44(d) on Swedish Reg. No. 79,571, dated Dec. 30, 1955.
For Stationary and Portable Log Debarking Machines and Accessories for Such Machines Which Feed Logs Into and Out of the Same, Pick Up Logs From the Ground and Deposit

Logs on the Ground, Internal Combustion Engines, Pneumatic and Hydraulic Motors, Conveying and Elevating Devices for Handling Boards, Logs and Timber, Apparatus for Disintegrating Bark, Apparatus for Removing Water From Bark, Apparatus for Mechanically Measuring Timber and Logs and Wood Working Machines.

SN 697,571. Moss-Gordin Lint Cleaner Company, Lubbock, Tex. Filed Nov. 2, 1955.



For Cotton Lint Cleaning Apparatus.
First use March 1953.

SN 697,653. Westinghouse Air Brake Company, Wilmerding, Pa. Filed Nov. 3, 1955.



Owner of Reg. Nos. 106,386, 396,576, and others.
For Power Force and Positioning Devices—Namely, Cylinders and Actuators; for Pneumatic Controlling Devices—Namely, Directional and Pressure Reducing Valves and Governors; for Signal Devices—Namely, Horns, Whistles, Signal Valves, Pneumatic Switches, and Gauges; for Hydraulic Devices—Namely, Power Boosters, Directional Valves; and for Compressors.
First use Sept. 30, 1954, on actuator positioners.

SN 698,446. Metzgar Conveyor Co., Grand Rapids, Mich. Filed Nov. 17, 1955.

METZGAR NYLO-

For Rollers for Gravity Conveyors and the Conveyors.
First use on or about June 24, 1955.

SN 698,776. Louis De Markus Corporation, Buffalo, N. Y. Filed Nov. 23, 1955.

Whirlpool

For Continuous Hop Separator.
First use Jan. 1, 1950.

SN 699,063. Dry Screen Process, Inc., Pittsburgh, Pa. Filed Nov. 29, 1955.



The words "Dry Screen Process, Inc., Pittsburgh, Pa." are disclaimed apart from the mark. The shading indicates red but this color is not a material portion.
For Printing Apparatus.
First use Sept. 7, 1955.

SN 699,609. The Bahnson Company, Winston-Salem, N. C. Filed Dec. 8, 1955.

Collecto-Vac

For Pneumatic Systems for Collecting Loose and Broken Fibers on Textile Working Machines.
First use June 19, 1955.

SN 699,709. Eska Company, Dubuque, Iowa. Filed Dec. 9, 1955.

ESKA

For Unrolling Tools for Rolls of Barbed Wire, and Power Lawn Mowers and Component Parts Thereof.
First use Sept. 26, 1946, on unrolling tool for rolls of barbed wire.

SN 699,743. Rebuilders, Inc., Garland, Tex. Filed Dec. 9, 1955.



For Automotive Equipment—Namely, Rebuilt Internal Combustion Engines for Passenger Cars and Trucks and Truck Tractors up to and Including Two-Ton Rating.
First use Oct. 1, 1952.

SN 700,624. Kinetic Dispersion Corporation, Buffalo, N. Y. Filed Dec. 27, 1955.

Kinetic
Reaktor

For Dispersion Mills for Dispersing Finely Divided Solid Materials in Liquid Suspension.
First use Oct. 21, 1955.

SN 72. Ladish Co., Cudahy, Wis. Filed Jan. 3, 1956.

Nofome

For Sanitary Centrifugal Liquid Pumps for Use Principally in the Dairy, Food, and Chemical Industries.
First use Dec. 23, 1955.

SN 687. National Air Vibrator Co., Cleveland, Ohio. Filed Jan. 13, 1956.

NAVCO

For Air Vibrators and Parts Thereof.
First use Oct. 11, 1955.

SN 1,171. Rex Cutlery Corporation, New York, N. Y. Filed Jan. 20, 1956.

JOY-FUTURAMA

Owner of Reg. Nos. 511,457 and 518,443.
For Scissors for Household Use, Sewing Scissors, Pocket Scissors, Embroidery Scissors.
First use Dec. 12, 1955.

SN 1,271. Plant Products Corporation, Blue Point, N. Y. Filed Jan. 23, 1956.

PLANTAREX

For Machines for Planting Horticultural and Agricultural Products.
First use Aug. 17, 1955.

SN 1,423. Harry B. Calvert, d. b. a. Calvert Machine Service, Boring, Oreg. Filed Jan. 25, 1956.



For Lumber Production Machinery and Equipment, Including Hydraulic Sawmill Carriages, Hydraulic Set Works, Hydraulic Log Turners, Hydraulic Sawmill Carriage Drives, and Parts Thereof.
First use Sept. 8, 1949.

SN 1,424. Harry B. Calvert, d. b. a. Calvert Machine Service, Boring, Oreg. Filed Jan. 25, 1956.

"SUPER SWEDE"

For Lumber Production Machinery and Equipment, Including Hydraulic Sawmill Carriages, Hydraulic Set Works, Hydraulic Log Turners, Hydraulic Sawmill Carriage Drives, and Parts Thereof.
First use Sept. 8, 1949.

SN 1,491. R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Filed Jan. 25, 1956.

HALLMARK

Owner of Reg. No. 594,191.
For Stainless Steel Flatware, i. e., Knives, Forks, and Spoons.
First use July 1953.

CLASS 24

SN 683,636. Trio Novelty Mfg. Corp., New York, N. Y. Filed Mar. 16, 1955.

SUPA-FOAM

For Ironing Board Pad.
First use Feb. 9, 1955.

SN 696,355. Forse Equipment Corporation, Anderson, Ind. Filed Oct. 13, 1955.



For Shirt Finishing Equipment, Such as Shirt Presses.
First use Feb. 25, 1955.

SN 696,356. Forse Equipment Corporation, Anderson, Ind. Filed Oct. 13, 1955.



For Shirt Finishing Equipment, Such as Shirt Presses.
First use June 2, 1955.

SN 697,309. Dennis Mitchell Industries, Philadelphia, Pa. Filed Oct. 28, 1955.

COLORAMA

For Laundry Carts and Clothes Racks.
First use July 1, 1955.

CLASS 25

SN 695,589. Aug. Winkhaus, Telgte, Westphalia, Germany. Filed Sept. 29, 1955.



Owner of German Reg. No. 656,260, dated Apr. 13, 1954.
For Locks, Padlocks, Furniture Locks, Bicycle Locks, and Chain Locks.
First use Feb. 1, 1928; in commerce Jan. 15, 1948.

CLASS 26

SN 664,002. The Dow Mechanical Corporation, Thompsonville, Conn. Filed Apr. 6, 1954.



For Internal and External Dimension Gauges and Comparators and Parts Thereof and Tools Sold as a Unit.
First use March 1949.

SN 675,961. Bell & Howell Company, Chicago, Ill. Filed Nov. 3, 1954.

Streamliner 500

For Stereopticon Projectors.
First use July 1951.

SN 683,919. Rolo Manufacturing Company, Houston, Tex. Filed Mar. 21, 1955.

ROLOCHECK

Owner of Reg. No. 529,199.
For Crude Oil Meters and Metering Separators.
First use Sept. 13, 1954.

SN 689,208. Bradfield and Bidwell, Inc., Ann Arbor, Mich. Filed June 9, 1955.

VUAID

For Electronic Test Equipment—Namely, Electron Tube Testing Apparatus.
First use Mar. 14, 1955.

SN 689,611. Cutting Room Appliances Corp., New York, N. Y. Filed June 16, 1955.

MEASURE-MATIC

For Measuring and Examining Machines for Sheet Material.
First use Mar. 10, 1955.

SN 690,062. Chiyoda Kogaku Seiko Kabushiki Kaisha, Higashi-ku, Osaka, Japan. Filed June 23, 1955.

OPTIPER

Priority claimed under Sec. 44(d) on Japanese application filed May 9, 1955; Reg. No. 474,638, dated Nov. 28, 1955.
For Camera Shutter.

SN 691,872. Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Filed July 25, 1955.

MODUSNAP

For Thermostatically Operated Valves.
First use Jan. 15, 1952.

SN 693,731. Allen Electric and Equipment Company, Kalamazoo, Mich. Filed Aug. 26, 1955.

ALLENYZER

Applicant disclaims the term "Motor Analyzer" apart from the mark as shown. Owner of Reg. Nos. 548,924 and 558,995.
For Device for Investigating Operating Characteristics of an Internal Combustion Engine, Commonly Known as a Motor Analyzer.
First use Aug. 11, 1955.

SN 697,260. Advance Pattern Co., Inc., New York, N. Y. Filed Oct. 28, 1955.

a Gold Thimble Award design

Applicant disclaims the word "Design" apart from the mark itself.
For Paper Dress Patterns.
First use Sept. 30, 1955.

SN 697,446. Iron Fireman Manufacturing Company, Portland, Oreg. Filed Nov. 7, 1955.

IRON FIREMAN

Owner of Reg. Nos. 195,811, 601,046, and others.
For Electric Gyroscopes, Electric Accessory Equipment for Gyroscopes, Thermostatically Operated or Thermally Responsive Electric Controls, Electric Relays, Time Responsive Electric Controls, Thermostatically Controlled Electric Switches Especially Adapted for Controlling Heat Generating and Heat Utilizing Apparatus, Pressure Controlled Electric Switches Especially Adapted for Controlling Heat Generating and Heat Utilizing Apparatus, and Including Electric Alarm and Limit Switches.
First use on or before July 27, 1926, on electric controls for automatic coal burners; and on automatic coal burners in or before July 1923.

SN 698,135. Cardinal Camera Corporation, Long Island City, N. Y. Filed Nov. 14, 1955.

CARDINAL CAMERA

The word "Camera" is disclaimed apart from the trademark as shown.
For Camera Assembling Kit.
First use on or about Oct. 10, 1949.

SN 59. Flash Box Opener Co., New York, N. Y. Filed Jan. 3, 1956.

FLASH LIFETIME

For Rulers.
First use Oct. 15, 1955.

SN 264. Panellit, Inc., Skokie, Ill. Filed Jan. 6, 1956.

PANALOG

For Automatic Process Measuring and Recording Equipment.
First use Nov. 14, 1955.

SN 341. Limelite Corporation, Los Angeles, Calif. Filed Jan. 9, 1956.

LIMELITE

For Photographic Flash Guns.
First use Jan. 20, 1955.

SN 428. Kay Electric Company, Pine Brook, N. J. Filed Jan. 10, 1956.

AUTO-VOX

For Variable Time Delay Instrument Designed To Introduce Controlled Amounts of Delay Into an Audio System.
First use Oct. 6, 1955.

SN 489. De Jur-Amsco Corporation, Long Island City, N. Y. Filed Jan. 11, 1956. Sec. 2(f).

DUAL PROFESSIONAL

Owner of Reg. No. 426,287.
For Photographic Exposure Meters.
First use Feb. 10, 1947.

SN 675. Haemoscope Corporation, New York, N. Y. Filed Jan. 13, 1956.

HAEMOPETTE

For Pipettes for Medical and Scientific Purposes.
First use Oct. 24, 1955.

SN 968. Marcelle D'Orsay, d. b. a. Dorsay Products, New York, N. Y. Filed Jan. 18, 1956.

SPECS-CHEK

For Attachment to Temple Pieces of Eyeglass Frames To Prevent Eyeglasses From Sliding Down Upon the Bridge of the Nose.
First use Dec. 16, 1955.

SN 1,242. Imperial Type Metal Company, Philadelphia, Pa. Filed Jan. 23, 1956.

VITAPLATE

For Photoengraving Zinc Sheets and Plates.
First use Jan. 2, 1956.

SN 1,368. Hood Draft Beer Equipment, Cincinnati, Ohio. Filed Jan. 24, 1956.

BEERGARD

For Precision Proportioned Gas Mixing Apparatus.
First use July 11, 1955.

SN 1,369. Industrial Nucleonics Corporation, Columbus, Ohio. Filed Jan. 24, 1956.



For Radiation Gauges Used in Measuring the Physical Properties of Materials, and Control Equipment Which Includes Such Gauges for Regulating Industrial Processes.
First use Dec. 14, 1954.

SN 1,429. Darmar International, Inc., New York, N. Y. Filed Jan. 25, 1956.

fashion mate

For Sunglasses.
First use Nov. 25, 1955.

SN 1,663. Burleigh Brooks Inc., New York, N. Y. Filed Jan. 30, 1956.

ZIP GRIP

For Attaching Device for Mounting a Photographic Camera on a Tripod.
First use Jan. 13, 1956.

CLASS 27

SN 142. Ditisheim et Cie Fabriques Vulcain et Volta, La Chaux-de-Fonds, Neuchatel, Switzerland. Filed Jan. 4, 1956.

sensilarm

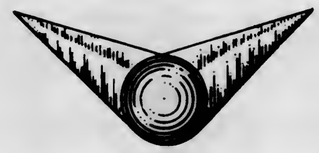
Owner of Swiss Reg. No. 157,224, dated July 22, 1955.
For Watches and Parts Thereof; Any Other Objects Giving the Time, and Parts Thereof.

SN 908. Peacock Jewelers, Inc., Tulsa, Okla. Filed Jan. 17, 1956.

Dubell

For Watches.
First use Oct. 28, 1955.

SN 2,674. Bulova Watch Company, Inc., Flushing, N. Y. Filed Mar. 12, 1956.



The mark consists of a V-shaped, three-dimensional device with tapered legs set at an angle in the apex of which a gem, usually a diamond, ruby, or sapphire has been set. Owner of Reg. Nos. 621,271 and 621,272.
For Watches.
First use Feb. 24, 1956.

CLASS 28

SN 672,741. Samuel Kirk & Son, Inc., Baltimore, Md. Filed Sept. 3, 1954.

Skylark

For Sterling Silver Flatware.
First use July 16, 1954.

SN 686,670. Robert N. Mandle Corp., New Rochelle, N. Y. Filed May 2, 1955.

PIK-KWIK

For Costume (Imitation) Jewelry, Including Earrings, Pins, Cuff Links, Bracelets, Necklaces, and Clips.
First use Sept. 1, 1954.

SN 299. Briggs, Bates & Bacon Co., Attleboro, Mass. Filed Jan. 9, 1956.

THE LAWS I LIVE BY

For Charms for Jewelry Items, Such as Necklaces and Bracelets.
First use on or about Dec. 23, 1955.

SN 1,178. Ventura-Assael & Co., New York, N. Y. Filed Jan. 20, 1956.

Dorette

For Cultured Pearls.
First use Jan. 3, 1956.

CLASS 29

SN 697,166. Immie Manufacturing Company, Rochester, N. Y. Filed Oct. 26, 1955.

IMMIE

For Applicator for Applying Paint, Shellac, Varnish, and Similar Substances, the Portion of the Applicator Used for Applying the Substances Being Made of a Fabric.
First use July 15, 1955.

SN 697,423. Star Brush Manufacturing Co., Inc., New York, N. Y. Filed Oct. 31, 1955.



The words "Sealed for Your Protection" are disclaimed.
For Paint Brushes.
First use Mar. 2, 1955.

CLASS 30

SN 663,460. Firma Wiener Porzellanfabrik Augarten Aktiengesellschaft zur Erneuerung und Fortsetzung der Vormaligen Staatlichen (Aerarial-) Porzellanmanufaktur Wien, Vienna, Austria. Filed Mar. 29, 1954.

ROYAL VIENNA AUGARTEN

Applicant disclaims the word "Vienna." Owner of Austrian Reg. No. 29,578, dated Nov. 19, 1953.

For Porcelain, Earthenware, Fayence—Namely, Tableware, and Artistic Ware—Namely, Coffee Service, Tea Service, Dinner Service, Jugs, Pitchers, Jars, Dishes, Platters, Tureens, Bowls, Bottles, Flasks.

SN 91. Platecraft of America, Inc., Buffalo, N. Y. Filed Jan. 3, 1956.

PLATECRAFT

For Metal Plated Ceramic Coffee Pots, Tea Pots, and Pitchers.
First use Dec. 7, 1955.

CLASS 31

SN 666,802. Victory Metal Manufacturing Co., d. b. a. Victory Metal Manufacturing Corp., Plymouth Meeting, Pa. Filed May 20, 1954.

STA-KOLD

For Refrigerators, Refrigerated Cases, Refrigerating Units, Frozen Food Cabinets, Freezing Cabinets, and Accessories and Parts Therefor.
First use on or about May 1, 1949.

SN 667,359. Herman W. Wilson, Jr., Venice, Calif. Filed May 28, 1954.

PERMA-ICE

For Chemical Refrigerant Which Is Sold in Flexible Containers so That Each Constitutes a Non-Melting, Re-Usable, Ice or Heat Absorber and Dissipator.
First use September 1952.

SN 676,946. Eastern States Farmers' Exchange, Incorporated, West Springfield, Mass. Filed Nov. 19, 1954.

DUBL-BONDED

For Milk Strainer Discs Formed of Double-Faced Gauze for Insertion in the Orifices of Milk Straining Devices.
First use Oct. 23, 1950.

SN 688,116. The Eimco Corporation, Salt Lake City, Utah. Filed Apr. 18, 1955.

EIMCO

Owner of Reg. No. 532,872.
For Pressure Filters, Rotary Vacuum Filters of the Drum, Disc, and Pan Types, Plate and Frame Filters, Precoat Filters, Filter Valves, Laboratory and Pilot Plant Filters, Dryers, Dewaterers, Filter Media.
First use about November 1938.

SN 691,732. Zero Cold Inc., Santa Ana, Calif. Filed July 21, 1955.

PENTHOUSE
Wetemp

For Refrigerating Units Comprising a Blower Fan, Evaporator Coil, and Drip Pan.
First use May 9, 1955.

SN 696,781. Drico Industrial Corporation, Passaic, N. J. Filed Oct. 20, 1955.

FILTREX

For Air Filters.
First use June 5, 1954.

SN 697,656. Westinghouse Air Brake Company, Wilmerding, Pa. Filed Nov. 3, 1955.

Owner of Reg. Nos. 106,386, 396,576, and others.
For Air Filters, Air Strainers, and Devices for Collecting Dirt, Rust, Pipe Scale, Metal Chips, Moisture, Precipitates, Excess Oil, and Other Foreign Matter, as by Filtering or Otherwise Separating Same From an Air Stream.
First use Sept. 24, 1954, on air strainers.

CLASS 32

SN 693,407. Tyler Refrigeration Corporation, Niles, Mich. Filed Aug. 19, 1955. Sec. 2(f).



FOOD STORE EQUIPMENT by TYLER

Owner of Reg. Nos. 510,184 and 560,387.
For Commercial Shelving.
First use July 1950; and 1938 as to "Tyler."

SN 693,942. The Spring-Air Company, Chicago, Ill. Filed Aug. 30, 1955.

HEALTH CENTER

For Mattresses and Innerspring Boxsprings.
First use on or about Feb. 16, 1954, on mattresses.

SN 693,944. The Spring-Air Company, Chicago, Ill. Filed Aug. 30, 1955.

Springdale

For Mattresses and Innerspring Boxsprings.
First use January 1954 on mattresses.

SN 693,945. The Spring-Air Company, Chicago, Ill. Filed Aug. 30, 1955.

Meadowlane

For Mattresses and Innerspring Boxsprings.
First use January 1954.

SN 693,946. The Spring-Air Company, Chicago, Ill. Filed Aug. 30, 1955.

Havenlee

For Mattresses and Innerspring Boxsprings.
First use on or about Feb. 8, 1954, on mattresses.

SN 693,947. The Spring-Air Company, Chicago, Ill. Filed Aug. 30, 1955.

Morningdale

For Mattresses and Innerspring Boxsprings.
First use January 1954 on mattresses.

SN 695,886. The L. Buchman Co., Inc., Brooklyn, N. Y. Filed Oct. 5, 1955.

FORTY WINKS FOAM RUBBER PRODUCTS

The words "Foam Rubber Products" are disclaimed apart from the mark as shown.
For Foam Rubber Mattresses and Pillows.
First use Aug. 1, 1955.

SN 710. Vogel-Peterson Co., Chicago, Ill. Filed Jan. 13, 1956.

CHALKROBE

For Wardrobe Equipment—Namely, Hat and Coat Racks and Shelves Combined With Display Board, Comprising Both Portable Equipment and Permanent Installation.
First use Feb. 24, 1955.

SN 711. Vogel-Peterson Co., Chicago, Ill. Filed Jan. 13, 1956.

Checkerette

Owner of Reg. No. 559,910.
For Checkroom or Wardrobe Equipment—Namely, Hat and Coat Racks.
First use January 1949.

SN 712. Vogel-Peterson Co., Chicago, Ill. Filed Jan. 13, 1956.

The OFFICE VALET

Owner of Reg. No. 382,315.
For Wardrobe Equipment, More Particularly Racks Adapted To Accommodate Coats, Hats, and Other Articles.
First use Apr. 22, 1940.

SN 713. Vogel-Peterson Co., Chicago, Ill. Filed Jan. 13, 1956.

Checker

Owner of Reg. No. 381,123.
For Checkroom or Wardrobe Equipment, More Particularly Coat and Hat Racks.
First use April 1940.

SN 714. Vogel-Peterson Co., Chicago, Ill. Filed Jan. 13, 1956.

CORKROBE

For Wardrobe Equipment—Namely, Hat and Coat Racks and Shelves Combined With Display Board, Comprising Both Portable Equipment and Permanent Installation.
First use Feb. 24, 1955.

CLASS 33

SN 683,973. Glenshaw Glass Company, Inc., Glenshaw, Pa. Filed Mar. 22, 1955.

GLENSHAW G

For Glass Bottles.
First use 1904.

CLASS 34

SN 695,401. C. A. Dunham Company, Chicago, Ill. Filed Sept. 27, 1955.

THERMO VECTOR

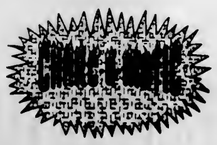
For Convector Radiation Cases.
First use Dec. 21, 1954.

SN 695,833. Herman A. Mugler, Huntington, N. Y. Filed Oct. 4, 1955.



For Air Circulators and Blowers.
First use Jan. 3, 1955.

SN 696,193. Tri-State Engineering Company, Los Angeles, Calif. Filed Oct. 10, 1955.



For Appliance for Igniting Charcoal in a Barbecue, Consisting of a Fuel Container, a Burner, and Means for Attaching Burner to Fuel Container and for Furnishing Fuel for Said Burner.
First use Oct. 3, 1955.

SN 699,457. Lumber Dryalators, Inc., Boston, Mass., to E. Russell Greenhood, Boston, Mass. Filed Dec. 8, 1955.

DRYALATOR

For Lumber Curing Machine.
First use September 1950.

CLASS 35

SN 690,514. Western Auto Supply Company, Kansas City, Mo. Filed June 29, 1955.

WIZARD

Owner of Reg. Nos. 341,752, 607,013, and others.
For Fan Belts for Automobiles, Belts for Fractional Horsepower Motors, Radiator Hose for Automobiles, Rubber and Plastic Garden Hose, Perforated-Hose Type Lawn Sprinklers and Soakers, Automobile Tires, Inner Tube Patches and Vulcanizing Kits, Gaskets for Automotive Use—Namely, Cylinder Head Gaskets, Manifold Gaskets, Oil Pan Gaskets and Gaskets for Hydraulic Brake Cylinders, Brake Lining and Piston Rings.
First use May 3, 1937, on fan belts for automobiles.

SN 1,060. Dunlop Tire and Rubber Corporation, Buffalo, N. Y. Filed Jan. 19, 1956.

TENSION FREE

Owner of Reg. No. 612,199.
For Tires.
First use May 5, 1955; and as shown in Reg. No. 612,199, Dec. 9, 1954.

SN 1,628. Richmond Tire & Rubber Company, Inc., Richmond, Va. Filed Jan. 27, 1956.

CUSHION COMFORT

For Vehicle Tires.
First use January 1949.

CLASS 36

SN 679,175. Radio Corporation of America, New York, N. Y. Filed Dec. 30, 1954.

"SELL EFFECTS"

For Grooved Phonograph Records.
First use Jan. 21, 1954.

SN 686,184. Wilhelm Heckel, Biebrich (Rhine), Hessen, Germany. Filed Apr. 25, 1955. Sec. 2(f).

HECKEL

Owner of German Reg. No. 63,197, dated Oct. 2, 1903.
For Musical Instruments.
First use 1831; in commerce in or about 1831.

SN 693,490. Real Record Co., Pasadena, Calif. Filed Aug. 22, 1955.

REAL

For Grooved Phonograph Records and Recordings.
First use Apr. 15, 1954.

SN 695,640. National Musical String Co., New Brunswick, N. J. Filed Sept. 30, 1955.

BELL BRAND

No claim is made to the word "Brand" apart from the mark as shown.
For Strings for Musical Instruments.
First use Apr. 21, 1899.

CLASS 37

SN 687,429. Wilson Jones Company, Chicago, Ill. Filed May 12, 1955.

Plymouth

For Loose Leaf Binders.
First use May 27, 1935.

SN 689,976. West Virginia Pulp and Paper Company, New York, N. Y. Filed June 21, 1955.

POLYCEL

Owner of Reg. No. 423,028.
For Kraft Paper—Namely, Bag Kraft, Standard Converting Kraft, Asphalting Kraft, Waxing Kraft, Multiwall Sack Kraft, Gumming Kraft.
First use July 14, 1954.

SN 695,847. Saks & Company, New York, N. Y. Filed Oct. 4, 1955. Sec. 2(f).

Saks Fifth Avenue

For Stationery for Personal Correspondence—Namely, Writing Paper, Correspondence Cards and Envelopes, Writing Pens, Pencils and Crayons, Paper Napkins and Handkerchiefs, Facial Tissue, Toilet Tissue, Desk Calendars, Calendar Pads, Blotters, Desk Blotters and Pads, Desk Sets Consisting of the Same, Envelope Openers, Paper Knives for Desk Use, Pen and Pencil Desk Sets, Address Books, Telephone Book Covers, Memorandum Pads and Telephone Number Finders for Desk Use of the Automatic Touch Control Type, Telephone Shields, Photographic Albums, Place Cards, Luggage Labels, and Diaries.
First use Sept. 15, 1924.

SN 696,026. Fort Howard Paper Company, Green Bay, Wis. Filed Oct. 7, 1955.

Facialin

Owner of Reg. No. 213,028.
For Paper Napkins.
First use Sept. 9, 1955.

SN 696,170. Pacific Coast Paper Mills of Washington Inc., Bellingham, Wash. Filed Oct. 10, 1955.



The drawing is lined to indicate the color green. Owner of Reg. Nos. 291,323 and 361,632.
For Toilet Paper and Paper Napkins.
First use July 15, 1931, on toilet paper.

SN 696,192. Robert A. Stough, d. b. a. Robert A. Stough & Company, Chicago, Ill. Filed Oct. 10, 1955.

TABLE ART

For Paper Napkins, Sanitary Tissues, Paper Place Mats, Paper Table Covers, Shelf Paper, Paper Plates and Cups.
First use Aug. 4, 1955, on paper napkins.

SN 696,308. N. L. & E. W. Kruysman, Inc., New York, N. Y. Filed Oct. 12, 1955.

Redweld

For Envelopes, Expanding Envelopes, File Pockets, Press Board Folders and Papers.
First use Mar. 10, 1950.

SN 696,400. American Lead Pencil Company, New York, N. Y. Filed Oct. 14, 1955.

BLUE POINT

Owner of Reg. Nos. 60,469, 357,467, and others.
For Ball Point Pens.
First use Sept. 23, 1955.

SN 696,509. Crown Zellerbach Corporation, San Francisco, Calif. Filed Oct. 17, 1955.

W

Owner of Reg. No. 261,379.
For Wrapping Paper and Waxed Paper.
First use Aug. 10, 1955.

SN 696,512. Documentation Incorporated, Washington, D. C. Filed Oct. 17, 1955.

RADEX

For Filing Cards for Indexing.
First use Feb. 1, 1955.

SN 696,587. Rapinwax Paper Company, Minneapolis, Minn. Filed Oct. 17, 1955.

"BANDMASTER"

For Rolls of Paper Reinforcing and Identifying Bands for Use in Wrapping Bread and Other Bakery Products.
First use Aug. 12, 1955.

CLASS 38

SN 687,753. American Tag Company of New Jersey, Belleville, N. J. Filed May 18, 1955.

E-Z ON

For Pressure Sensitive Printed Labels.
First use Dec. 1, 1954.

CLASS 39

SN 682,541. Adolf Dassler, d. b. a. Adidas Sportschuhfabrik Adi Dassler, Herzogenaurach, Bavaria, Germany. Filed Mar. 1, 1955.

adidas the mark with the 3 stripes

Priority claimed under Sec. 44(d) on German application filed Sept. 16, 1954; Reg. No. 666,461, dated Nov. 12, 1954. The words "The Mark With the 3 Stripes" are disclaimed apart from the mark as shown.
For Shoes for Men and Women.

SN 684,801. M. Berman & Sons, Inc., New York, N. Y. Filed Apr. 4, 1955.

SENATOR

Owner of Reg. No. 248,700.
For Men's, Young Men's, Boys', Ladies', Misses', and Infants' Slacks, Jackets, Shorts, Pedal Pushers, Bermuda Shorts, Shirts, Skirts.
First use January 1942.

SN 685,517. Princess Peggy, Inc., Peoria, Ill. Filed Apr. 14, 1955. Sec. 2(f).

Stretchee

Owner of Reg. No. 376,255.
For Dresses, Blouses, Smocks, and Aprons.
First use about Jan. 1, 1939, on dresses, blouses, and smocks.

SN 685,552. Barco Garment Company, Los Angeles, Calif. Filed Apr. 15, 1955.

SWITCH-ABOUTS

For Women Nurses' Uniforms—Namely, Blouses and Skirts.
First use Dec. 22, 1954.

SN 689,464. Herbert W. Cantor, d. b. a. S and R Manufacturing Co., Codorus, Pa. Filed June 14, 1955.



For Men's and Boys' Suits, Slacks, Sport Coats, and Sport Shirts.
First use since Apr. 15, 1955.

SN 691,275. Brooks Brothers, Inc., New York, N. Y. Filed July 14, 1955.

De Pinna

Owner of Reg. No. 151,736.
For Men's, Women's, and Children's Wearing Apparel—Namely, Men's, Women's, and Children's Suits, Outer Coats, Hosiery, Pajamas, Hats, Sweaters, and Neckwear; Women's and Girls' Dresses.
First use at least as of 1890.

SN 691,291. Garland Knitting Mills, Jamaica Plain, Mass. Filed July 14, 1955.

DREAMSPUN

For Knitted Sweaters and Jerseys.
First use May 2, 1955.

SN 692,105. Wembley, Inc., New Orleans, La. Filed July 28, 1955.

CONTÉ COSSI

For Men's Neckties.
First use July 1, 1955.

SN 692,130. Gaensien Bros. Leather Co., Milwaukee, Wis. Filed July 29, 1955.



For Men's Shoes Formed Principally of Leather.
First use July 6, 1955; first used in a different style of display on Mar. 2, 1945.

SN 692,295. American Optical Company, Southbridge, Mass. Filed Aug. 2, 1955.



Owner of Reg. Nos. 268,217, 441,000, and others.
For Protective Clothing Such as Men's and Women's One-Piece Suits, Coats, Pants, Leggings, Spats, Sweatbands, Hats, Hoods, Overalls, Aprons, Sleeves, Gloves, Mittens, Hand Pads, and Finger Guards.
First use on or about Sept. 11, 1944.

SN 692,323. The Florsheim Shoe Company, Chicago, Ill. Filed Aug. 2, 1955.

TRÉS-LO

The word "Trés" is the French equivalent of the word "very."
For Men's Shoes.
First use July 21, 1955.

SN 692,332. Hack Ripple Sole Corporation, Detroit, Mich., by change of name Ripple Sole Corporation. Filed Aug. 2, 1955.

Ripple Sole

The word "Sole" is disclaimed apart from the mark.
For Shoes, Athletic Shoes and Boots.
First use Aug. 1, 1953.

SN 693,111. Associated Lerner Shops of America, Inc., New York, N. Y. Filed Aug. 16, 1955.

Hoopette

For Female Undergarments—Namely, Petticoats.
First use Aug. 8, 1955.

SN 693,450. Irving H. Elfenbein Co. Inc., New York, N. Y. Filed Aug. 22, 1955.

"SCAPS"

For Ladies' and Misses' Cotton Jersey Pajamas.
First use July 21, 1955.

SN 693,579. Well-Built Shoe Company, Inc., Milford, Mass. Filed Aug. 23, 1955.



No claim is made to the words "Hand Lasted" apart from the mark as presented.
For Shoes.
First use Apr. 29, 1955.

SN 694,944. Winer Sportswear, Inc., Paterson, N. J. Filed Sept. 19, 1955.

Switch-eez

For Outerwear Garment That Expands From a Bunting to a Bootie Suit to a Snowsuit.
First use Dec. 27, 1954.

SN 694,945. Winer Sportswear, Inc., Paterson, N. J. Filed Sept. 19, 1955.



For Outerwear Garment That Expands From a Bunting to a Bootie Suit to a Snowsuit.
First use Dec. 27, 1954.

SN 695,112. Chester H. Roth Co., Inc., New York, N. Y. Filed Sept. 21, 1955.

Frou-Frou

For Women's Hosiery.
First use Aug. 11, 1955.

SN 695,230. Leonard Belt Co. Inc., New York, N. Y. Filed Sept. 23, 1955.

CUSTOM FASHIONED BY LEONARD

For Apparel Belts.
First use June 10, 1955.

SN 695,686. Blue Bell, Inc., Greensboro, N. C. Filed Oct. 3, 1955.

OKLAHOMA KID

For Men's, Boys', and Kiddies' Dungarees, Men's and Boys' Jackets, and Shirts.
First use Aug. 17, 1955.

SN 695,773. Stardust, Incorporated, Poughkeepsie, N. Y. Filed Oct. 3, 1955. Sec. 2(f).

Armstrong

Owner of Reg. No. 337,196.
For Ladies' Girdles, Brassieres, Chemises, Panties, Slips, Bloomers, and Stepins.
First use May 20, 1935.

SN 695,954. Smoler Bros., Inc., Chicago, Ill. Filed Oct. 5, 1955.

réloms

For Women's and Misses' Sportswear—Namely, Dresses, Suits, Skirts, Jackets, Coats, Shirts, Blouses, Sweaters, and Slacks.
First use Apr. 11, 1950.

SN 696,027. Fortuna Foundations, Inc., New York, N. Y. Filed Oct. 7, 1955.

FORE 'N' AFT

For Girdles.
First use Oct. 1, 1951.

SN 696,555. Lynchburg Hosiery Mills, Inc., Lynchburg, Va. Filed Oct. 17, 1955.

MONTVALE

Owner of Reg. No. 419,554.
For Ladies' Hosiery.
First use Nov. 23, 1944.

SN 697,208. Joseph Antell, Inc., Boston, Mass. Filed Oct. 27, 1955.

Prodigies



For Shoes for Ladies, Growing Girls, and Children.
First use July 1953; and "Prodigies" was first used in March 1953.

SN 697,540. David D. Doniger & Co. Inc., New York, N. Y. Filed Nov. 2, 1955.

SEA GULL

For Sport Jackets, Sport Shirts, and Sport Coats.
First use Aug. 11, 1954.

SN 697,681. Hart Schaffner & Marx, Chicago, Ill. Filed Nov. 4, 1955.

LEGERO

For Sport Coats and Suits.
First use Oct. 13, 1955.

SN 697,705. Shelburne Shirt Co., Inc., New York, N. Y. Filed Nov. 4, 1955.

Casamoda

For Dress and Sport Shirts.
First use June 20, 1955.

SN 697,707. Stahl-Urban Company, Terre Haute, Ind. Filed Nov. 4, 1955.

FORTY BELOW

For Trousers, Jackets, Blouses, and Coats, for Men and Boys.
First use June 12, 1939.

SN 698,927. Sport Specialty Shoemakers, Inc., St. Louis, Mo. Filed Nov. 25, 1955.

CLARA BARTON

Owner of Reg. No. 399,671.
For Women's Shoes.
First use Oct. 22, 1955.

SN 700,856. French, Shriner & Urner Manufacturing Co., Boston, Mass. Filed Dec. 30, 1955.

TWIN-GRIP

For Boots and Shoes of Leather, Fabric, or Combinations Thereof.
First use May 1925.

SN 683. Lofties Knitting Mills, Inc., Brooklyn, N. Y. Filed Jan. 13, 1956.

FUREVER SPUN

For Ladies', Misses', and Girls' Sweaters and Cardigans Made of a Combination of Lambs'-Wool, Fur, and Synthetic Fibres.
First use Feb. 1, 1955.

SN 719. Youthcraft Manufacturing Company, Kansas City, Mo. Filed Jan. 13, 1956.

Fontainbleu

For Ladies' Suits and Coats.
First use June 1, 1955.

CLASS 40

SN 693,269. Charles W. Pollard, d. b. a. C. W. Pollard Company, Chicago, Ill. Filed Aug. 17, 1955. Sec. 2(f).

TWIN-STRIPE

Owner of Reg. No. 520,538.
For Venetian Blind Supporting Tape, and Awning Braid.
First use Sept. 10, 1948.

SN 697,572. Needle Industries Limited, Birmingham, England. Filed Nov. 2, 1955.

DISC

Owner of British Reg. No. 746,746, dated Oct. 7, 1955.
For Knitting Pins and Knitting Needles.

SN 699,069. The Governor Fastener Company, Meriden, Conn. Filed Nov. 29, 1955.

GOVERNLINK

Owner of Reg. No. 504,381.
For Fasteners, Supporters, and/or Coupling Devices for Undergarments.
First use Nov. 14, 1922.

SN 699,070. The Governor Fastener Company, Meriden, Conn. Filed Nov. 29, 1955.

THE GOVERNOR BUCKLE

No rights are asserted to the exclusive use of the words "The" and "Buckle." Owner of Reg. No. 504,381.
For Fasteners, Supporters, and/or Coupling Devices for Undergarments.
First use Jan. 1, 1913.

CLASS 42

SN 694,313. Indian Head Mills, Inc., New York, N. Y. Filed Sept. 7, 1955.

POP-A-LIN

For Cotton Piece Goods.
First use Aug. 23, 1955.

SN 700,213. Erwin Mills, Inc., Durham, N. C. Filed Dec. 19, 1955.

EASE-ON

For Fitted Bed Sheets.
First use Aug. 3, 1955.

SN 700,214. Erwin Mills, Inc., Durham, N. C. Filed Dec. 19, 1955.

MASTHEAD

For Denim Piece Goods.
First use April 1950.

SN 700,254. Princeton Knitting Mills, Inc., New York, N. Y. Filed Dec. 19, 1955.

Kittenfluff

For Knitted Fabrics Made of Synthetic and Wool Fibers.
First use June 9, 1954.

SN 700,388. Pepperell Manufacturing Company, Boston, Mass. Filed Dec. 21, 1955.

LORD PEPPERELL

Owner of Reg. Nos. 328,741, 576,637, and others.
For Blankets, and Piece Goods of Cotton and Synthetic Fibers.
First use Oct. 15, 1930; and in 1852 as to "Pepperell."

SN 700,389. Pepperell Manufacturing Company, Boston, Mass. Filed Dec. 21, 1955.

PEPPERELL FABRICS

Exclusive registration rights in the word "Fabrics" are not claimed apart from the rest of the mark, all common law rights being retained. Owner of Reg. Nos. 68,576, 576,637, and others.
For Sheets, Pillowcases, and Blankets, and Piece Goods of Cotton and Synthetic Fibers.
First use July 1, 1931; in 1852 as to "Pepperell"; and in 1852 as to the representation of a dragon.

SN 700,390. Pepperell Manufacturing Company, Boston, Mass. Filed Dec. 21, 1955.

Regency

Owner of Reg. No. 330,093.
For Sheets, Pillowcases, and Blankets.
First use June 26, 1935, on sheets and pillowcases.

SN 700,808. Pepperell Manufacturing Company, Boston, Mass. Filed Dec. 29, 1955.

SUNSHINE

For Blankets.
First use Dec. 15, 1955.

SN 700,857. D. B. Fuller & Co., Inc., New York, N. Y. Filed Dec. 30, 1955.

VENICIA

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
First use Nov. 8, 1954.

SN 700,859. D. B. Fuller & Co., Inc., New York, N. Y. Filed Dec. 30, 1955.

SAIL-CORD

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
First use Feb. 1, 1955.

SN 700,860. D. B. Fuller & Co., Inc., New York, N. Y. Filed Dec. 30, 1955.

SANMARINO

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
First use Oct. 4, 1954.

SN 700,862. D. B. Fuller & Co., Inc., New York, N. Y. Filed Dec. 30, 1955.

BETTERSET

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
First use May 2, 1954.

SN 700,864. D. B. Fuller & Co., Inc., New York, N. Y. Filed Dec. 30, 1955.

CYMETREE

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
First use Aug. 2, 1954.

SN 162. Pepperell Manufacturing Company, Boston, Mass. Filed Jan. 4, 1956.

WEE IRON

For Piece Goods of Cotton and Synthetic Fibers.
First use November 1955.

SN 184. Alabama Mills, Inc., Birmingham, Ala. Filed Jan. 5, 1956.

OTISIZED

Owner of Reg. No. 567,042.
For Latex Treated Denim.
First use Dec. 19, 1955.

SN 232. Bemis Bro. Bag Company, St. Louis, Mo. Filed Jan. 6, 1956. Sec. 2(f).

LENONET

Owner of Reg. No. 593,462.
For Fabric Made of Woven Paper.
First use Sept. 12, 1946.

CLASS 43

SN 1,207. Celanese Corporation of America, New York, N. Y. Filed Jan. 23, 1956.

AMCEL

For Yarns.
First use Jan. 9, 1956.

CLASS 44

SN 697,612. Morris Beresin, Philadelphia, Pa. Filed Nov. 3, 1955.

BIO-MECHANICAL

For Artificial Posterior Teeth.
First use July 7, 1955.

SN 699,289. Binky Baby Products Company, New York, N. Y. Filed Dec. 2, 1955.

AQUA-COOL

For Water Cooled Baby Teether and Soother Made of Plastic, Filled With Distilled Water and Permanently Sealed, Used To Soothe Babies' Gums, and Teething Rings.
First use October 1953.

CLASS 45

SN 684,808. Coca-Cola Bottling Company of New Haven, Incorporated, New Haven, Conn. Filed Apr. 4, 1955.



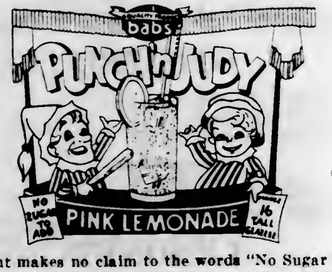
For Carbonated Soft Drinks.
First use Mar. 14, 1955.

SN 689,681. Ventura Coastal Lemon Company, Ventura, Calif. Filed June 16, 1955.

Sea Mist

Owner of Reg. No. 389,728.
For Lemonade, Orangeade, and Concentrates for Making the Same.
First use May 5, 1955.

SN 696,490. Babs Distributing Co., Inc., d. b. a. Babs Distributing Co., Los Angeles, Calif. Filed Oct. 17, 1955.



Applicant makes no claim to the words "No Sugar To Add," "Pink Lemonade," "Makes 16 Tall Glasses," and "A Quality Product."
For Imitation Lemonade Base.
First use May 11, 1955.

CLASS 46

SN 614,430. Excelsior Baking Company, d. b. a. Butter-Krust Toast Co., Minneapolis, Minn. Filed May 28, 1951. Sec. 2(f).

Butter-Krust

For Zwieback Toast.
First use 1912.

SN 661,990. Edmundson-Duhe Rice Mill, Rayne, La. Filed Mar. 4, 1954.

LOUISIANA BELLE

Owner of Reg. Nos. 436,010 and 581,650.
For Milled Rice.
First use Nov. 13, 1953.

SN 663,843. Tea Council of the U. S. A. Inc., New York, N. Y. Filed Apr. 2, 1954. Sec. 2(f). COLLECTIVE MARK.

TAKE TEA AND SEE

For Tea.
First use Oct. 1, 1951.

SN 663,844. Tea Council of the U. S. A. Inc., New York, N. Y. Filed Apr. 2, 1954. Sec. 2(f). COLLECTIVE MARK.



For Tea.
First use Oct. 1, 1951.

SN 683,266. Armour and Company, Chicago, Ill. Filed Mar. 11, 1955.

COMPETIDOR

"Competidor" is a Spanish word, translation of which is "competitor" or "rival."
For Sausage.
First use 1917.

SN 684,413. First National Pickle Products Inc., d. b. a. Pixie Film-Pak, Brooklyn, N. Y. Filed Mar. 29, 1955.



Owner of Reg. No. 586,459.
For Pickles.
First use Oct. 26, 1949.

SN 685,574. General Mills, Inc., Wilmington, Del. Filed Apr. 15, 1955.

GOLD MEDAL SUPERLATIVE

Owner of Reg. Nos. 134,294, 593,675, and others.
For Wheat Flour.
First use August 1944; and September 1876 as to "Superlative."

SN 686,155. Consolidated Products Company, Danville, Ill. Filed Apr. 25, 1955.

D L W

For Dried Whey Product Used as an Ingredient in Livestock and Poultry Feeds.
First use May 10, 1954.

SN 688,045. Herbert Kane, d. b. a. Brokay Products, Philadelphia, Pa. Filed May 23, 1955.

IF IT'S BROKAY IT'S OKAY BROKAY DIP

The slogan "If It's Brokay It's Okay" is disclaimed and no claim is made to the word "Dip" except in the association shown.
For Egg Dip Used as a Wash for Preparing and Coating Meat, Poultry, Fowl or the Like.
First use Apr. 1, 1954.

SN 689,336. Black Diamond Cheese Limited, Belleville, Ontario, Canada. Filed June 13, 1955.



For Cheese.
First use Oct. 24, 1933.

SN 689,559. Evans Industries, Inc., Marion, Ind. Filed June 15, 1955.

BOSTONIAN

For Canned Dog Food.
First use June 27, 1952.

SN 689,703. Crest Foods Co., Ashton, Ill. Filed June 17, 1955.

CREST

Owner of Reg. Nos. 571,613, 593,985, and others.
For Food Stabilizers; Food Emulsifiers; Dried Milk Protein Products Suitable for Use as a Food Ingredient; and Blends Including One of the Foregoing.
First use on or about Jan. 1, 1949.

SN 689,706. Crest Foods Co., Ashton, Ill. Filed June 17, 1955.

CREST-LAC

Owner of Reg. Nos. 571,613, 593,985, and others.
For Powder Comprising Mainly Solids of Skim Milk, Suitable for Use as a Food Ingredient.
First use June 16, 1954.

SN 690,161. Green Giant Company, Le Sueur, Minn. Filed June 24, 1955.

MEICHAL

For Canned Vegetables.
First use June 1, 1955.

SN 691,437. Cross Pacific Company, Compton, Calif. Filed July 18, 1955.

Sea Horse

For Canned Pet Food for Cats and Dogs.
First use June 29, 1955.

SN 691,815. Morris April Bros., Bridgeton, N. J. Filed July 25, 1955. Sec. 2(f).

APRIL Orchards

Owner of Reg. No. 547,357.
For Canned Fancy Strained Cranberry Sauce and Fancy Whole Cranberries.
First use June 18, 1948.

SN 691,997. Groeneveld Packing Co. Inc., Ravenna, Ohio. Filed July 27, 1955.

Sky King

For Smoked Ham.
First use June 21, 1955.

SN 692,093. So Good Potato Chip Co., St. Louis, Mo. Filed July 28, 1955. Sec. 2(f).

So Good

Owner of Reg. No. 524,547.
For Potato Chips and Shoe String Potatoes.
First use Mar. 25, 1938.

SN 692,263. E. F. Pinkham & Son, Exeter, Calif. Filed Aug. 1, 1955.

Emperador

Translation of "Emperador" is "emperor."
For Fresh Deciduous Fruits.
First use Apr. 15, 1955.

SN 692,322. Florida Citrus Exchange, Tampa, Fla. Filed Aug. 2, 1955.

PRESTIGE

For Fresh Citrus Fruits and Canned Citrus Fruit Juices.
First use May 22, 1954, on canned citrus fruit juices.
Subj. to Intf. with SN 692,767.

SN 694,261. Sioux Honey Association, Sioux City, Iowa. Filed Sept. 6, 1955.



Owner of Reg. Nos. 531,223, 585,154, and others.
For Honey.
First use July 1953.

SN 695,248. Riverside Arlington Heights Fruit Exchange, Riverside, Calif. Filed Sept. 23, 1955.

SILVERADO

For Fresh Citrus Fruits.
First use June 9, 1955.

SN 695,290. Marvin O. Farley, d. b. a. Farley Farms, El Centro, Calif. Filed Sept. 26, 1955.



For Fresh Vegetables; Fresh Deciduous Fruits; Fresh Citrus Fruits; Fresh Melons.
First use July 9, 1955, on fresh melons.

SN 695,511. Walker's Austex Chili Company, Austin, Tex. Filed Sept. 28, 1955.

AUSTEX

Owner of Reg. Nos. 275,915 and 532,764.
For Chili Beans, Enchiladas, Spaghetti With Tomato Sauce and Cheese, and Corned Beef Hash.
First use January 1935 on chili beans.

SN 696,483. J. A. Wood, d. b. a. J. A. Wood Co., Phoenix, Ariz. Filed Oct. 14, 1955.

WHOA - NELLIE

For Fresh Carrots and Melons.
First use May 27,1955.

SN 696,626. Chase Groves, Inc., Sanford, Fla. Filed Oct. 21, 1955.

ISLEWORTH

For Fresh Citrus Fruits.
First use June 1909.

SN 696,922. Valley Growers Packing Company, Turner, Kans. Filed Oct. 21, 1955.



The drawing is lined for red but no claim is made to color.
For Fresh Vegetables.
First use Sept. 19, 1955.

SN 697,163. Henry Heide, Incorporated, New York, N. Y. Filed Oct. 26, 1955.

GREAT WESTERN

For Candy.
First use as early as 1905.

SN 697,164. Henry Heide, Incorporated, New York, N. Y. Filed Oct. 26, 1955.

SPOOKY

For Candy.
First use August 1954.

CLASS 47

SN 684,118. De La Salle Institute, d. b. a. Mont La Salle Vineyards and as The Christian Brothers of California, Napa, Calif. Filed Mar. 24, 1955.



Owner of Reg. Nos. 364,376, 597,702, and others.
For Vermouth.
First use Mar. 11, 1955.

SN 696,711. Heublein, Inc., Hartford, Conn. Filed Oct. 19, 1955. Sec. 2(f).

HEUBLEIN'S

Owner of Reg. Nos. 328,424, 351,607, and 381,732.
For Wines and Vermouth.
First use June 4, 1942, on vermouth.

CLASS 48

SN 680,865. Carlsberg Bryggerierne Indehaver Carlsbergfondet, also d. b. a. The Carlsberg Breweries, Copenhagen, Denmark. Filed Feb. 1, 1955.



"Beer" and "Grand Prix Paris" are disclaimed apart from the mark as shown.
For Beer.
First use April 1946; in commerce April 1946.

SN 697,109. Pabst Brewing Company, Chicago, Ill. Filed Oct. 25, 1955.

Old Tap Lager
Eastside
BEER

The words "Lager" and "Beer" are disclaimed apart from the mark as shown. Owner of Reg. Nos. 77,932, 583,848, and others.
For Beer.
First use Sept. 16, 1955.

CLASS 49

SN 695,898. The Distillers Company, Limited, Linden, N. J. Filed Oct. 5, 1955.

DCL

For Gin.
First use December 1952.

CLASS 50

SN 684,446. Robert E. Martens, Charleston, W. Va. Filed Mar. 29, 1955.

REM

For Sculptured Works of Art.
First use Dec. 21, 1954.

SN 687,558. Glitter Products Company, Denver, Colo. Filed May 16, 1955.

Pixie Dust

The lining represents red, yellow, and orange.
For Comminuted Colored, Light Reflective, Materials for Forming Reflective Signs and Pictures and Kits Containing Picture Sheets, Adhesive and Packages of Comminuted Material of Various Colors for Forming Glittering Pictures.
First use on or about June 1, 1954.

SN 690,671. The Rudolph Wurlitzer Company, Chicago, Ill. Filed July 1, 1955.

WUR-LON

For Plastic Fabric Used as a Veneer in Finishing Piano Cases and Other Cabinet and Furniture Products.
First use June 6, 1955.

SN 697,530. Boston Woven Hose and Rubber Company, Cambridge, Mass. Filed Nov. 2, 1955.

BOSTON TWEED

Owner of Reg. No. 597,405.
For Rubber Flooring and Matting, and Rubber Stair Treads.
First use Oct. 4, 1955.

SN 700,489. The John S. Tilley Ladders Co., Inc., Watervliet, N. Y. Filed Dec. 22, 1955. Sec. 2(f).

HUDSON

For Step Ladders.
First use 1920.

CLASS 51

SN 667,060. State Pharmacal Company, Chicago, Ill. Filed May 25, 1954.

all-in-one

Owner of Reg. No. 398,742.
For Cream Used as a Skin Firmer.
First use July 31, 1952.

SN 670,346. Florasynth Laboratories, Incorporated, New York, N. Y. Filed July 21, 1954.

COMFORT ME

For Perfumes, Colognes, and Aromatic Oils Used in Making Perfumes.
First use Apr. 20, 1954.

SN 670,348. Florasynth Laboratories, Incorporated, New York, N. Y. Filed July 21, 1954.

SHELTER ME

For Perfumes, Colognes, and Aromatic Oils Used in Making Perfumes.
First use Apr. 20, 1954.

SN 670,759. Rey Lux Manufacturing Corp., New York, N. Y. Filed July 28, 1954.

VIOLUX (V)

For Dental Creams and Shaving Creams.
First use Mar. 10, 1954.

SN 671,096. Florasynth Laboratories, Incorporated, New York, N. Y. Filed Aug. 4, 1954.

MODESTY

For Perfumes, Colognes, and Aromatic Oils Used in Making Perfumes.
First use July 26, 1954.

SN 677,936. Carter Products, Inc., New York, N. Y. Filed Dec. 8, 1954.

SNOWITE

Owner of Reg. No. 383,275.
For Dentifrice.
First use Nov. 5, 1954.

SN 679,280. Fabergé, Inc., New York, N. Y. Filed Jan. 3, 1955.

SPRING '54 FABERGÉ

Owner of Reg. Nos. 402,130, 519,646, and 585,085.
For Lipsticks, Nail Polish, Face Powder, and Bath Powder.
First use Sept. 24, 1954.

SN 679,281. Fabergé, Inc., New York, N. Y. Filed Jan. 3, 1955.

FALL '54 FABERGÉ

Owner of Reg. Nos. 402,130, 519,646, and 585,085.
For Lipsticks, Nail Polish, Face Powder, and Bath Powder.
First use Sept. 24, 1954.

SN 681,807. Robert Miles Sherman, d. b. a. The Special Preparations Company, New York, N. Y. Filed Feb. 16, 1955.

ENTRANCEMENT

For Perfume.
First use Feb. 23, 1953.

SN 682,235. Carey Enterprises, Inc., St. Paul, Minn. Filed Feb. 24, 1955.

lorette

For Hair Waving Lotion.
First use Jan. 17, 1955.

SN 685,641. Beauty Counselors, Inc., Grosse Pointe, Mich. Filed Apr. 18, 1955. Sec. 2(f).

Beeman's

For Liquid Hair Dresser, Cosmetic Skin Lotion, After Shave Lotion, Toilet Water, Deodorant Cologne and Sun Tan Lotion, Brushless Shaving Cream, and Lather Shaving Cream.
First use Dec. 15, 1934, on toilet water.

SN 688,085. Shulton, Inc., Clifton, N. J. Filed May 23, 1955.

FRIENDSHIP'S GARDEN

Owner of Reg. Nos. 376,953 and 390,392.
For Toilet Water, Stick Cologne, Liquid Petals (Cream Perfume), Sachet, Bath Salts, and Talcum Powder.
First use May 28, 1953, on toilet water.

SN 690,091. Olin Mathieson Chemical Corporation, New York, N. Y. Filed June 23, 1955. Sec. 2(f).

WINCHESTER

Owner of Reg. No. 428,238.
For Lather Shave, After Shave Lotion, Men's Cologne, and Deodorant.
First use 1867.

SN 691,312. Middlebrooke Lancaster, Inc., Brooklyn, N. Y. Filed July 14, 1955.

LC 22

For Hair and Scalp Conditioner for Use Also for Dressing the Hair.
First use Mar. 1, 1950.

SN 692,122. Colgate-Palmolive Company, Jersey City, N. J. Filed July 29, 1955.

GARDOL

Owner of Reg. Nos. 146,987 and 285,260.
For Sodium N-Lauroyl Sarcosinate for Use as an Ingredient in Dentifrice.
First use Sept. 1, 1953.

SN 695,875. Jacqueline Cochran, Incorporated, Newark, N. J. Filed Oct. 20, 1955.

CHROMABLEND

For Foundation Cream.
First use Aug. 21, 1940.

SN 697,039. Sunbeam Corporation, Chicago, Ill. Filed Oct. 24, 1955.

SHAVEMASTER

Owner of Reg. No. 339,993.
For Shaving Lotion.
First use July 24, 1954.

SN 697,179. The Mundo Corporation, Memphis, Tenn. Filed Oct. 26, 1955. Sec. 2(f).

WILFORD'S

For Hair Dye.
First use June 1, 1945.

CLASS 52

SN 645,953. H. A. Cole Products Company, Jackson, Miss. Filed Apr. 27, 1953.

PINE-PLUS

The word "Pine" is disclaimed apart from the mark as shown.
For Liquid Cleaning Preparation Having Deodorizing and Disinfecting Properties for Use in Cleaning Tiles, Walls, Floors and the Like.
First use Oct. 10, 1951.

SN 650,361. E. F. Drew & Co., Inc., New York, N. Y. Filed July 16, 1953.

DRISYN SPOTTER 5

Exclusive use of the word "Spotter" is not claimed except in association with other features of the mark; this disclaimer is for the purpose of registration without waiver of applicant's common law rights. Owner of Reg. No. 558,927.
For Liquid Composition for Removal of Stains on Fabrics Caused by Paint, Oil, Grease, Lacquer, and the Like.
First use Apr. 17, 1953.

SN 660,958. Frank Philabert, d. b. a. Chemical Solvent Company, Birmingham, Ala. Filed Feb. 11, 1954.

CSCO

For Chemical Dissociative Cleaning Composition for Boilers and Water Circulation Systems, and Chemical Cleaning Compositions for Dissociating Vegetable and Mineral Matter From Water.
First use March 1932.

SN 660,959. Frank Philabert, d. b. a. Chemical Solvent Company, Birmingham, Ala. Filed Feb. 11, 1954.

CSCO

SOLVEX

For Dissociative Chemical Cleaning Composition for Boilers and Water Circulation Systems.
First use March 1932.

SN 681,538. The Pennsylvania Salt Manufacturing Company, Philadelphia, Pa. Filed Feb. 11, 1955.

DARI-KLEEN

For Sanitizing Cleaner Used Primarily for Milkstone Removal.
First use Aug. 17, 1953.

SN 685,212. Rust-Oleum Corporation, Evanston, Ill. Filed Apr. 8, 1955.

Surfa-Etch

For Composition for Removing Greases, Soaps, Waxes, and the Like, From Concrete and Similar Surfaces, but not Including Metallic Surfaces Preliminary to Painting Such Surfaces.
First use on or about Nov. 18, 1954.

SN 687,564. Gulf Oil Corporation, Pittsburgh, Pa. Filed May 16, 1955.



The drawing is lined for orange and blue. Owner of Reg. Nos. 345,744 and 616,973.
For Car Washing Compound.
First use Nov. 10, 1953.

SN 687,579. Gulf Oil Corporation, Pittsburgh, Pa. Filed May 16, 1955.

GULF

Owner of Reg. Nos. 345,744 and 616,972.
For Car Washing Compound.
First use Nov. 10, 1953.

SN 687,891. Racine Industrial Plant, Inc., Racine, Wis. Filed May 19, 1955.

HOST

For Dry Cleaning Powder for Rugs, Carpets, and the Like.
First use Mar. 21, 1955.

SN 692,064. The Hewitt Soap Company, Inc., Dayton, Ohio. Filed July 28, 1955.

WERX

Owner of Reg. No. 318,096.
For Sudsing Cleaner, Cleanser, and Detergent.
First use May 15, 1929.

SN 693,696. Permatex Company, Inc., Brooklyn, N. Y. Filed Aug. 25, 1955.

ACOTEX

For Anti-Static Cleaner Used in the Automotive and Aircraft Industries for Cleaning Glass and Plastic Materials.
First use July 26, 1955.

SN 694,296. Atlas Supply Company, Newark, N. J. Filed Sept. 7, 1955.

ATLAS

Owner of Reg. Nos. 295,109, 328,307, and 382,088.
For Leather Cleaner for Automobile Upholstery.
First use Aug. 18, 1955.

SN 695,057. A. L. Wilson Chemical Company, Kearny, N. J. Filed Sept. 20, 1955.

ExGo

Owner of Reg. Nos. 314,337, 585,489, and 589,017.
For Silver Nitrate Stain Remover.
First use Nov. 15, 1954.

SN 695,209. Ezequiel B. Cintron, New York, N. Y. Filed Sept. 23, 1955.

"CHAM'--SUELA"
★ SHAMPOO ★

Applicant disclaims the word "Shampoo" apart from the mark as shown. A free translation of "Cham'-Suela" means "shampoo with leather."
For Shampoo for Hair.
First use Apr. 23, 1953.

SN 695,360. Ultra Chemical Works, Inc., Paterson, N. J. Filed Sept. 26, 1955.

LIPA

For Detergent Additives.
First use September 1952.

SN 695,595. Alexandra de Markoff Sales Corporation, New York, N. Y. Filed Sept. 30, 1955.

Alexandra de Markoff

Owner of Reg. Nos. 280,660 and 508,525.
For Soaps.
First use June 22, 1949.

SN 699,052. Arkansas Company, Inc., Newark, N. J. Filed Nov. 29, 1955.

CELOPON

Owner of Reg. No. 402,729.
For Synthetic Detergents in Liquid or Paste Form for Use in Water in Processing of Textiles.
First use July 1939.

SN 699,516. Monarch Chemicals, Inc., Minneapolis, Minn. Filed Dec. 6, 1955.

peri

For Washing Compound.
First use July 1, 1950.

SERVICE MARKS

CLASS 100

SN 678,120. Dr. Grady V. Lake, d. b. a. The Harvey Lillard Chiropractic Clinic, Atlanta, Ga. Filed Dec. 10, 1954.

HARVEY LILLARD

For Chiropractic Services.
First use on about June 2, 1954.

SN 680,661. Children's Cancer Fund of America, Inc., New York, N. Y., formerly Children's Memorial Cancer Fund, Inc. Filed Jan. 28, 1955.



For Distributing Funds to Medical and Research Organizations for Use in Treating and Determining the Causes of Cancer in Children and for Use in Caring for and Providing Entertainment and Comfort for Children Stricken With Cancer.
First use on or about Nov. 12, 1954.

SN 681,996. Doane Agricultural Service, Inc., St. Louis, Mo. Filed Feb. 21, 1955.



Owner of Reg. Nos. 507,103, 539,511, and 565,035.
For Conducting Market and Applied Research Studies in Agriculture for Business and Industry.
First use Oct. 1, 1949.

SN 682,760. Eugene A. Sennett, d. b. a. Sennett's Security Bureau, New York, N. Y. Filed Mar. 3, 1955.



WE'LL KEEP WATCH

For Providing Uniformed Security Guards as Protection for Business Firms and Organizations.
First use May 1, 1951.

SN 691,068. National Institute of Governmental Purchasing, Washington, D. C. Filed July 11, 1955.

NIGP

For Consultation and Advice to State, County, and Municipal Purchasing Agencies in the Field of Public Purchasing.
First use Oct. 1, 1944.

CLASS 101

SN 626,997. Charles R. Leader, d. b. a. Charles R. Leader & Sons, Littleton, N. H. Filed Mar. 25, 1952.



For Promoting the Savings Deposit Services of Banks Through a Package Plan.
First use Mar. 15, 1952.

SN 660,539. Gibraltar Corrugated Paper Company, Inc., North Bergen, N. J. Filed Feb. 3, 1954.

Varni color

For Printing Applied to Floor Stands, Displays, Cartons, Containers, and Packaging Material According to the Individual Specifications of Customers.
First use on or about Dec. 11, 1953.

CLASS 102

SN 678,549. Mobro System, Kansas City, Mo. Filed Dec. 17, 1954.

MOBRO

For Brokerage Services in Connection With House Trailers and Arranging for the Financing and Insurance of House Trailers.
First use Nov. 1, 1954.

SN 683,398. International Yacht Sales, Detroit, Mich. Filed Mar. 14, 1955.



For Ocean and Inland Marine Insurance Agency, Yacht and Ship Brokerage Service.
First use on or about Dec. 15, 1953.

SN 687,237. Western Fidelity Life Insurance Company, Fort Worth, Tex. Filed May 10, 1955.



For Underwriting Life Insurance.
First use 1951.

CLASS 105

SN 648,738. Coronet Oil Company, San Francisco, Calif. Filed June 15, 1953.



The drawing is lined for orange.
For Truck Transportation and Storage of Petroleum of Others.
First use on or about January 1953.

SN 673,422. Benton Van & Storage, Inc., Albuquerque, N. Mex., to George H. Buergi, Albuquerque, N. Mex. Filed Sept. 20, 1954.



The word "Storage" is disclaimed apart from the mark shown. The drawing is lined for red and brown.
For Storage Services.
First use May 1, 1954.

SN 675,363. Robert W. Cannon, Nome, Territory of Alaska. Filed Oct. 25, 1954.

Curly Q

For Services Associated With Conducting Sight-Seeing Tours on a Narrow Gauge Railroad Which Also Serves as a Tourist Attraction.
First use May 1, 1952.

CLASS 106

SN 663,699. Velveray Corporation, New York, N. Y. Filed Mar. 31, 1954.

MULTICLIP

For Decorating and Printing Woven and Knitted Fabrics of Cotton, Silk, Rayon, Nylon, Wool, Acetate, and Linen Belonging to Others.
First use Jan. 1, 1950.

SN 685,233. American Dyeing Corporation, Rockville, Conn. Filed Apr. 11, 1955.

AMERBELLE

Owner of Reg. No. 438,859.
For Fabric Dyeing Service.
First use May 1, 1947.

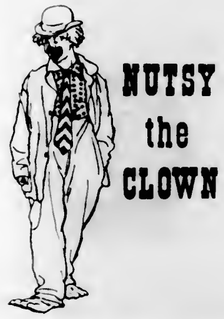
CLASS 107

SN 662,576. Casey Strong, Texarkana, Ark. Filed Mar. 12, 1954.

Hill-William

For Entertainment Services Consisting of Radio Broadcasts and Other Performances, Including Picnics and Jamborees, Featuring Country Music and Dances.
First use Aug. 31, 1951.

SN 675,607. Vance Colvig, Hollywood, Calif. Filed Sept. 1, 1954.



The drawing represents this affiant made up as "Nutsy the Clown."
For Entertainment Services as a Clown Through Live Personal Appearances on Theatrical Stages, on Live Television Broadcast Programs, and on Films.
First use November 1950.

SN 688,011. Booth Radio & Television Stations, Inc., Detroit, Mich. Filed May 23, 1955.

JAM FOR BREAKFAST

For the Title of a Radio Program, the Program Consisting of the Playing of Records Interspersed With Talking.
First use Oct. 14, 1947.

SN 690,070. Crosley Broadcasting Corporation, Cincinnati, Ohio. Filed June 23, 1955.

MOON RIVER

Owner of Reg. Nos. 428,894 and 438,574.
For the Title of a Radio Program Comprising Musical Entertainment.
First use Oct. 27, 1930.

SN 690,858. Bavarian Brewing Company, Inc., Covington, Ky. Filed July 7, 1955.

SHOWCASE OF HITS

For the Title of Radio and Television Programs Consisting of an Entertainment Service—Namely, Music and Talk.
First use Feb. 1, 1955.

SN 690,859. Bavarian Brewing Company, Inc., Covington, Ky. Filed July 7, 1955.

PROMISE PLAYHOUSE

For the Title of Radio and Television Programs Consisting of an Entertainment Service—Namely, Sports, Drama, and Music.
First use Apr. 25, 1955.

CERTIFICATION MARKS

CLASS A

SN 683,552. Ralston Purina Company, St. Louis, Mo. Filed Mar. 15, 1955.

CHECK-R-MIX

The mark certifies that the feeds are made with concentrates supplied by applicant, mixed with other ingredients obtained locally by the licensee, said mixture being made in accordance with specifications furnished by applicant, the nature and quality of said mixture being controlled by applicant. Owner of Reg. Nos. 269,158 and 527,483.
For Poultry Feed and Livestock Feed.
First use Mar. 4, 1955.

SN 685,036. Miller-Hofft, Inc., Richmond, Va. Filed Apr. 6, 1955.

CHIPCORE

The mark certifies that the goods have been manufactured on machines supplied by the applicant and through the use of processes developed by the applicant.
For Composition Boards Formed of Wood Particles Mixed With Plastic and Bonded Into Rigid Form Under Heat and Pressure.
First use on or before July 1, 1950.

TRADEMARK REGISTRATIONS ISSUED
PRINCIPAL REGISTER

CLASS 1

626,728. BAR-B-KETS AND DESIGN. Western Chef Products, Inc. SN 644,149. Pub. 4–13–54. Filed 3–24–53.

CLASS 2

626,729. UPAK. Continental Can Company, Inc. SN 660,921. Pub. 2–21–56. Filed 2–11–54.

626,730. IDEAL. George E. Belderwell, d. b. a. Ideal Reel Company. SN 684,626. Pub. 7–26–55. Filed 3–31–55.

CLASS 3

626,731. BAGSKET. Lewis W. Martin. SN 652,026. Pub. 2–28–56. Filed 8–19–53.

CLASS 4

626,732. KNOX-TARNISH AND DESIGN. Dolphin Chemical Company. SN 682,787. Pub. 2–28–56. Filed 3–4–55.

CLASS 5

626,733. CATALIN. Catalin Corporation of America. SN 691,823. Pub. 2–21–56. Filed 7–25–55.

CLASS 6

626,734. BLACK LEAF AND DESIGN. Virginia-Carolina Chemical Corp., to Diamond Black Leaf Company. SN 669,712. Pub. 1–17–56. Filed 7–9–54.

626,735. BLACK LEAF AND DESIGN. Virginia-Carolina Chemical Corp., to Diamond Black Leaf Company. SN 669,713. Pub. 1–17–56. Filed 7–9–54.

626,736. TERGOLIX. Sandoz Chemical Works, Inc. SN 670,617. Pub. 4–5–55. Filed 7–26–54.

626,737. PARKER PRE-NAMEL. Parker Rust Proof Company. SN 685,296. Pub. 2–28–56. Filed 4–11–55.

626,738. NP AND DESIGN. National Polychemicals, Inc. SN 688,953. Pub. 2–21–56. Filed 6–6–55.

626,739. KPR AND DESIGN. Eastman Kodak Company. SN 689,369. Pub. 2–28–56. Filed 6–13–55.

626,740. VOIDOX. Guardian Chemical Corporation. SN 689,624. Pub. 2–28–56. Filed 6–16–55.

CLASS 7

626,741. HAY KING AND DESIGN. Inlander-Steindler Paper Company. SN 675,990. Pub. 2–28–56. Filed 11–3–54.

626,742. NORMAN. Norman Librett, Inc. SN 690,720. Pub. 2–28–56. Filed 7–5–55.

CLASS 8

626,743. AIR-TITE. Rogers Imports Inc. SN 687,895. Pub. 2–21–56. Filed 5–19–55.

626,744. ROSANA. Fritz Siegfried Rothschild. SN 694,919. Pub. 2–28–56. Filed 9–19–55.

CLASS 9

626,745. PEACEMAKER. American Weapons Corporation. SN 694,622. Pub. 2–28–56. Filed 9–14–55.

CLASS 10

626,746. BEAVER BRAND PEAT HUMUS AND DESIGN. Finger Lakes Peat Moss Company. SN 633,613. Pub. 8–25–53. Filed 8–8–52.

626,747. DAP. The Colorado Fuel and Iron Corporation. SN 681,677. Pub. 9–20–55. Filed 2–15–55.

626,748. FERTILRITE AND DESIGN. Charles Wesley Frame. SN 691,027. Pub. 2–28–56. Filed 7–11–55.

626,749. FERTILENE. Fertilene Corporation of America. SN 691,286. Pub. 2–28–56. Filed 7–14–55.

626,750. FARMGRO. The Farm Bureau Cooperative Association, Inc. SN 694,219. Pub. 2–28–56. Filed 9–6–55.

626,751. STERILITE. Minerals Processing Corporation. SN 694,898. Pub. 2–28–56. Filed 9–19–55.

CLASS 11

626,752. SUPERTONE. James Weiss, d. b. a. Master Products Company. SN 661,386. Pub. 8–16–55. Filed 2–19–54.

626,753. PLYON. The Buckeye Ribbon & Carbon Co. SN 694,850. Pub. 2–28–56. Filed 9–19–55.

CLASS 12

626,754. VC AND DESIGN. Vibradamp Corporation. SN 644,476. Pub. 5–18–54. Filed 3–30–53.

626,755. LINSTONE AND DESIGN. Linville's, Inc. SN 680,204. Pub. 2–21–56. Filed 1–20–55.

626,756. ELEPHANT HIDE. Kerr Industries. SN 681,176. Pub. 2–28–56. Filed 2–7–55.

626,757. FLEXDOOR. Paul Collet & Co. Ltd. SN 689,610. Pub. 2–28–56. Filed 6–16–55.

626,758. CRYSTEX. National Tile & Manufacturing Co. SN 693,694. Pub. 2–28–56. Filed 8–25–55.

626,759. HENDRICK MITCO. Hendrick Manufacturing Company. SN 695,221. Pub. 2–28–56. Filed 9–23–55.

626,760. VISTA-LITE. Duralite Window Corporation. SN 695,807. Pub. 2–28–56. Filed 10–4–55.

626,761. TEROX. Terox Manufacturing Corporation. SN 695,958. Pub. 2–28–56. Filed 10–5–55.

626,762. CERAFELT. Johns-Manville Corporation. SN 696,043. Pub. 2–28–56. Filed 10–7–55.

626,763. JERZITE. A. P. Green Fire Brick Company. SN 698,515. Pub. 2–28–56. Filed 11–18–55.

626,764. REGAL. John L. Rogers, d. b. a. John L. Rogers Planing Mill. SN 698,644. Pub. 2–28–56. Filed 11–21–55.

CLASS 13

626,765. BEAD CHAIN AND DESIGN. The Bead Chain Manufacturing Company. SN 657,594. Pub. 2–28–56. Filed 12–8–53.

626,766. FLEXOFUSER. Chicago Pump Company. SN 660,188. Pub. 2–28–56. Filed 1–27–54.

626,767. "WIPE-AWAY." Winston Screw Products Corporation. SN 674,718. Pub. 2–28–56. Filed 10–12–54.

626,768. ORNA-BRAC. Brennan Illinois Iron Works, Inc. SN 678,434. Pub. 2–28–56. Filed 12–16–54.

626,769. SNUBIT. Vulcan Steel Products Company, Inc. SN 678,831. Pub. 2–28–56. Filed 12–22–54.

626,770. TACK BAND. Tack Band, Inc. SN 680,113. Pub. 2–28–56. Filed 1–18–55.

626,771. TYDEE. Samuel J. Dauer. SN 684,117. Pub. 2–28–56. Filed 3–24–55.

626,772. TOOTHPASTER. Stuart H. Reed and J. Herbert Gigandet. SN 685,929. Pub. 2–28–56. Filed 4–20–55.

626,773. HANDI-RING. Belford Company, Inc. SN 686,416. Pub. 2–28–56. Filed 4–28–55.

626,774. DOLE. The Dole Valve Company. SN 688,223. Pub. 2–21–56. Filed 5–25–55.

626,775. KELTON. H-K Equipment Co. SN 694,801. Pub. 2–28–56. Filed 9–16–55.

626,776. ROTO-MITE. The Weatherhead Company. SN 694,937. Pub. 2–28–56. Filed 9–19–55.

CLASS 14

626,777. WEARPACT. American Steel Foundries. SN 679,969. Pub. 2–28–56. Filed 1–17–55.

626,778. REPUBLIC ELECTRO FLASHCOTE. Republic Steel Corporation. SN 685,612. Pub. 2–21–56. Filed 4–15–55.

626,779. ZAJON "SAVE DOLLARS BY THE HUNDREDTHS." Roy Zajon, d. b. a. Roy Zajon Machine Parts. SN 688,779. Pub. 2–28–56. Filed 6–2–55.

626,780. MARKE AMPERE AND DESIGN. Hermann C. Starck Aktiengesellschaft. SN 692,815. Pub. 2–28–56. Filed 8–10–55.

626,781. RP AND DESIGN. Research Products Corporation. SN 698,460. Pub. 2–28–56. Filed 11–17–55.

CLASS 15

626,782. COMPINEX-PENN. Compinex Oil Company. SN 665,805. Pub. 2–28–56. Filed 5–6–54.

626,783. OPB "17." Oklahoma Oil Products Corporation. SN 670,372. Pub. 2–28–56. Filed 7–21–54.

626,784. LINK ETC. AND DESIGN. Link Petroleum Co., Inc. SN 683,897. Pub. 2–28–56. Filed 3–21–55.

626,785. MG AND DESIGN. Fleet-Wing Corporation. SN 691,203. Pub. 2–21–56. Filed 7–13–55.

CLASS 16

626,786. ZONE-LAC. J. E. Bauer Company. SN 641,666. Pub. 2–28–56. Filed 2–3–53.

626,787. TREDCOTE. West Disinfecting Company. SN 652,144. Pub. 4–27–54. Filed 8–21–53.

626,788. TROJAN CHEMICALS AND DESIGN. Trojan Powder Company. SN 659,017. Pub. 2–28–56. Filed 1–5–54.

626,789. CASUALITE. Wolverine Finishes Corporation. SN 666,413. Pub. 2–28–56. Filed 5–14–54.

626,790. LOUVARCO. Louisville Varnish Company. SN 680,207. Pub. 7–26–55. Filed 1–20–55.

626,791. PERMANITE. Maurice A. Knight. SN 683,894. Pub. 2–21–56. Filed 3–21–55.

626,792. INSTANT TEMPO SPRAY. Tempo Products Co. SN 690,049. Pub. 2–28–56. Filed 6–22–55.

626,793. COLOR CAROUSEL AND DESIGN. Standard-Toch Chemicals, Inc. SN 691,241. Pub. 2–28–56. Filed 7–13–55.

626,794. QUICKWALL PRIMER. Pittsburgh Plate Glass Company, to Barreled Sunlight Paint Company. SN 691,324. Pub. 2–28–56. Filed 7–14–55.

626,795. WYNEX. Gerald J. Wyatt, d. b. a. Wyco Paint & Chemical Co. SN 691,535. Pub. 2–28–56. Filed 7–18–55.

626,796. WYCOTE. Gerald J. Wyatt, d. b. a. Wyco Paint & Chemical Co. SN 691,536. Pub. 2–28–56. Filed 7–18–55.

626,797. LUSTRA-LUX GLASS-GLOSS. Republic Paint and Varnish Co. SN 692,164. Pub. 2–28–56. Filed 7–29–55.

626,798. CIROLOR. Societe Anonyme Conte. SN 695,852. Pub. 2–28–56. Filed 10–4–55.

626,799. ALKA HIDE. Gypsy Paint & Varnish Co., Inc. SN 696,886. Pub. 2–28–56. Filed 10–21–55.

626,800. SPEEDFLEX. Brooklyn Paint & Varnish Co., Inc. SN 698,014. Pub. 2–28–56. Filed 11–10–55.

626,801. CHEX-WEAR. Benjamin Moore & Co. SN 698,195. Pub. 2–28–56. Filed 11–14–55.

626,802. KATA-PONTEX. Inertol Co., Inc. SN 698,285. Pub. 2–28–56. Filed 11–15–55.

CLASS 17

626,803. REMBRANDT. Rembrandt Tobacco Corporation (Oversens) Limited. SN 691,961. Pub. 2–28–56. Filed 7–26–55.

CLASS 18

626,804. VAYLO. Ralph E. Brierley, d. b. a. The Brierley Company. SN 615,875. Pub. 3–17–53. Filed 6–29–51.

626,805. VAGITAB. B. F. Ascher & Company, Inc. SN 658,567. Pub. 9–13–55. Filed 12–28–53.

626,806. A S F. Chas. Pfizer & Co., Inc. SN 664,697. Pub. 6–28–55. Filed 4–16–54.

626,807. COLUMBIA. The F. C. Sturtevant Company. SN 677,824. Pub. 2–28–56. Filed 12–6–54.

626,808. MARAVILLA CURATIVA. Humphreys Medicine Company, Incorporated. SN 678,033. Pub. 2–28–56. Filed 12–9–54.

626,809. AL-LO-GENE. Joseph Wyman Walker. SN 679,249. Pub. 2–28–56. Filed 12–31–54.

626,810. TETRACYN-SF. Chas. Pfizer & Co., Inc. SN 682,187. Pub. 2–21–56. Filed 2–23–55.

626,811. TRACIQUENT. Chas. Pfizer & Co., Inc. SN 682,752. Pub. 2–28–56. Filed 3–3–55.

626,812. KYNEX. American Cyanamid Company. SN 683,472. Pub. 2–28–56. Filed 3–15–55.

626,813. ATHROSYL. American Cyanamid Company. SN 685,878. Pub. 2–28–56. Filed 4–20–55.

626,814. SITOSTIN. American Cyanamid Company. SN 685,879. Pub. 2–28–56. Filed 4–20–55.

626,815. DELTACORTONE. Merck & Co., Inc. SN 688,340. Pub. 2–28–56. Filed 5–26–55.

626,816. NEMBU-GESIC. Abbott Laboratories. SN 689,199. Pub. 2–28–56. Filed 6–9–55.

626,817. EPIVAX. The Wellcome Foundation Ltd. SN 689,975. Pub. 2–28–56. Filed 6–21–55.

626,818. KID-I-MINS. Kenneth Products. SN 690,715. Pub. 2–28–56. Filed 7–5–55.

626,819. AMOEBICON. Consolidated Midland Corporation. SN 691,670. Pub. 2–28–56. Filed 7–21–55.

626,820. STREPTOCONIN SULFATE. Consolidated Midland Corporation. SN 691,677. Pub. 2–28–56. Filed 7–21–55.

626,821. FORTICON. Consolidated Midland Corporation. SN 691,678. Pub. 2–28–56. Filed 7–21–55.

CLASS 19

626,822. SURGE-METER. The Anderson Company. SN 668,811. Pub. 2–28–56. Filed 6–24–54.

626,823. USI AND DESIGN. U. S. Industries, Inc. SN 679,432. Pub. 2–21–56. Filed 1–4–55.

626,824. COVOLET. B. T. Crump Company, Inc. SN 683,583. Pub. 2–28–56. Filed 3–16–55.

626,825. SAFTI CRAFT AND DESIGN. E. W. & A. P. Dupont, Inc. SN 692,680. Pub. 2–28–56. Filed 6–10–55.

626,826. WHEELMASTER. Crucible Corporation. SN 695,140. Pub. 2–28–56. Filed 9–22–55.

626,827. SAFARI. Airstream Trailers, Inc. SN 695,516. Pub. 2–28–56. Filed 9–29–55.

626,828. PACESETTER. Pacesetter Boats, Inc. SN 696,256. Pub. 2–28–56. Filed 10–11–55.

626,829. MORTAR-HOP AND DESIGN. American Road Equipment Company. SN 696,279. Pub. 2–28–56. Filed 10–12–55.

CLASS 21

626,830. SWITCH KING. Cable Electric Products, Inc. SN 650,870. Pub. 2–28–56. Filed 7–27–53.

626,831. COLORAMA LAMPS. Arch Lamp Manufacturing Corp. SN 663,155. Pub. 7–5–55. Filed 3–24–54.

626,832. MIMOT. George Schoenborn-Buchheim, d. b. a. Garvenswerke. SN 663,686. Pub. 2–28–56. Filed 3–31–54.

626,833. UTA. George Schoenborn-Buchheim, d. b. a. Garvenswerke. SN 663,687. Pub. 2–28–56. Filed 3–31–54.

626,834. APPLETON. Appleton Electric Company. SN 664,579. Pub. 2–28–56. Filed 4–15–54.

626,835. APPLETON THE STANDARD FOR BETTER WIRING. Appleton Electric Company. SN 664,580. Pub. 2–28–56. Filed 4–15–54.

626,836. REDI-FLO. A. O. Smith Corporation. SN 670,128. Pub. 11–22–55. Filed 7–16–54.

626,837. SHOTMASTER. Atlas Powder Company. SN 676,859. Pub. 2–28–56. Filed 11–18–54.

626,838. ROME. Rome Cable Corporation. SN 678,421. Pub. 2–28–56. Filed 12–15–54.

626,839. STROMBERG-CARLSON SOUND EQUIPMENT AND DESIGN. General Dynamics Corporation, from Stromberg-Carlson Company. SN 678,826. Pub. 2–21–56. Filed 12–22–54.

626,840. ZAVODY V. I. LENINA PLZEN AND DESIGN. Zavody V. I. Lenina Plzen, Narodni Podnik. SN 679,439. Pub. 2–28–56. Filed 1–4–55.

626,841. UDYLITE. The Udylite Corporation. SN 679,874. Pub. 2–28–56. Filed 1–13–55.

626,842. DIAL. Dial Products Company. SN 680,131. Pub. 2–28–56. Filed 1–19–55.

626,843. ARC-KING. Speer Carbon Company. SN 681,456. Pub. 2–28–56. Filed 2–10–55.

626,844. PLASTISEL. Electronic Devices, Inc. SN 686,435. Pub. 2-28-56. Filed 4-28-55.

626,845. PALMAIRE. Palmer Manufacturing Corporation. SN 689,238. Pub. 2-28-56. Filed 6-9-55.

626,846. THE FRANK-BANK AND DESIGN. Manley, Inc. SN 690,892. Pub. 2-28-56. Filed 7-7-55.

626,847. CHROMOS COSMO-CHROME. Cosmos Electronic Machine Corp. SN 691,122. Pub. 2-28-56. Filed 7-12-55.

626,848. Withdrawn.

626,849. FLEET-LINE. The Brown-Brockmeyer Company. SN 693,659. Pub. 2-28-56. Filed 8-25-55.

626,850. WARN FLASH AND DESIGN. Safety Warning Signal Co. SN 693,859. Pub. 2-28-56. Filed 8-29-55.

626,851. CLEVITE. Clevite Corporation. SN 694,049. Pub. 2-28-56. Filed 9-1-55.

626,852. MARCONI. Marconi's Wireless Telegraph Company Limited. SN 694,325. Pub. 2-28-56. Filed 9-7-55.

626,853. MAGIC FRAME. Electro Manufacturing Corporation. SN 694,481. Pub. 2-28-56. Filed 9-12-55.

626,854. PURITRON. The Ozo Sales Corporation. SN 694,503. Pub. 2-28-56. Filed 9-12-55.

626,855. GARRARD. The Garrard Engineering & Manufacturing Co., Ltd. SN 694,988. Pub. 2-28-56. Filed 9-20-55.

626,856. CONDOR. Jason Products, Inc. SN 694,998. Pub. 2-28-56. Filed 9-20-55.

626,857. DUKANE. Dukane Corporation. SN 695,147. Pub. 2-28-56. Filed 9-22-55.

626,858. ELGIN. Elgin-Neomatic, Inc. SN 695,149. Pub. 2-28-56. Filed 9-22-55.

626,859. ARTHUR MURRAY AND DESIGN. Arthur Murray Enterprises, Inc. SN 695,237. Pub. 2-28-56. Filed 9-23-55.

626,860. MOLCOTE. Frenchtown Porcelain Company. SN 695,408. Pub. 2-28-56. Filed 9-27-55.

626,861. NICOTE. Frenchtown Porcelain Company. SN 695,410. Pub. 2-28-56. Filed 9-27-55.

626,862. FANTOM. Carl W. Scheel, d. b. a. Scheel Development Company. SN 695,447. Pub. 2-28-56. Filed 9-27-55.

626,863. SILASTIC. Dow Corning Corporation. SN 695,467. Pub. 2-28-56. Filed 9-28-55.

626,864. UNISPUN. The Lamb Electric Company (Ohio corporation), to The Lamb Electric Company (Delaware corporation). SN 695,634. Pub. 2-28-56. Filed 9-30-55.

626,865. ALSPUN. The Lamb Electric Company (Ohio corporation), to The Lamb Electric Company (Delaware corporation). SN 695,635. Pub. 2-28-56. Filed 9-30-55.

626,866. AIR DUX. Illumitronic Engineering Co. SN 695,729. Pub. 2-28-56. Filed 10-3-55.

626,867. QUI-KLIP. Radio Receptor Company, Inc. SN 695,759. Pub. 2-28-56. Filed 10-3-55.

626,868. SANO. Sano Corporation. SN 695,949. Pub. 2-28-56. Filed 10-5-55.

626,869. SONOBLEND. Aeroprojects, Inc. SN 695,965. Pub. 2-28-56. Filed 10-6-55.

626,870. HP AND DESIGN. Hewlett-Packard Company. SN 695,980. Pub. 2-28-56. Filed 10-6-55.

626,871. GLOBE. Globe American Corporation. SN 696,030. Pub. 2-28-56. Filed 10-7-55.

626,872. MULT-A-PLIANCE. General Motors Corporation. SN 696,232. Pub. 2-28-56. Filed 10-11-55.

626,873. MUSI-MATIC AND DESIGN. John Edward Collins, d. b. a. C & H Supply Company. SN 696,285. Pub. 2-28-56. Filed 10-12-55.

626,874. RADIOCALL AND DESIGN. John Edward Collins, d. b. a. C & H Supply Company. SN 696,286. Pub. 2-28-56. Filed 10-12-55.

626,875. TEMPOWER. Hubert Leger Weiss. SN 696,340. Pub. 2-28-56. Filed 10-12-55.

626,876. EMERSON ELECTRIC OF SAINT LOUIS AND DESIGN. The Emerson Electric Mfg. Co. SN 696,353. Pub. 2-28-56. Filed 10-13-55.

626,877. TRAFFIC SENTINEL. Westinghouse Electric Corporation. SN 696,392. Pub. 2-28-56. Filed 10-13-55.

626,878. CALMAG. California Magnetic Control Corporation. SN 696,410. Pub. 2-28-56. Filed 10-14-55.

626,879. TURNER UNI-GAP AND DESIGN. Turner Uni-Drive Company. SN 696,474. Pub. 2-28-56. Filed 10-14-55.

626,880. S-C STROMBERG-CARLSON AND DESIGN. General Dynamics Corporation. SN 696,528. Pub. 2-28-56. Filed 10-17-55.

626,881. MINIPLATE. Glenco Corporation. SN 696,706. Pub. 2-28-56. Filed 10-19-55.

CLASS 22

626,882. JET-CHUTE AND DESIGN. Ben B. Fowler, d. b. a. The Jet-Chute Company. SN 656,506. Pub. 2-28-56. Filed 11-17-53.

626,883. BARAKUDA. Barakuda Gesellschaft fur Wassersport Ristau & Co. SN 657,753. Pub. 2-28-56. Filed 12-10-53.

626,884. OCEANSIDE. Ernest Chandler, Inc. SN 664,132. Pub. 2-28-56. Filed 4-8-54.

626,885. CALYPSO. Thomas De La Rue & Company Limited. SN 676,479. Pub. 2-28-56. Filed 11-12-54.

626,886. RACE-RAMA. Warren K. Reynolds. SN 677,607. Pub. 2-28-56. Filed 12-1-54.

626,887. 66. Phillips Petroleum Company. SN 689,742. Pub. 2-28-56. Filed 6-17-55.

626,888. DESIGN OF SHIELD. Phillips Petroleum Company. SN 689,751. Pub. 2-28-56. Filed 6-17-55.

626,889. DAVY JONES. Cortland Line Company, Inc. SN 689,993. Pub. 2-28-56. Filed 6-22-55.

626,890. KINK-KEE LEADER. Wesley C. Darby, d. b. a. Kink-Kee Leader Company. SN 690,139. Pub. 2-28-56. Filed 6-24-55.

CLASS 23

626,891. ROTOMIST. Food Machinery and Chemical Corporation. SN 588,684. Pub. 10-16-51. Filed 12-2-49.

626,892. KLOPP IN OVAL DESIGN. Klopp-Werke G. m. b. H. SN 656,957. Pub. 2-28-56. Filed 11-25-53.

626,893. NATIONAL POWER HORSE AND DESIGN. National Implement Company, Inc. SN 657,590. Pub. 1-31-56. Filed 12-1-53.

626,894. DONUT MASTER. D. R. M. Corporation. SN 661,936. Pub. 6-14-55. Filed 3-3-54.

626,895. DIAMOND ROLLER CHAIN AND DESIGN. Diamond Chain Company, Inc. SN 671,141. Pub. 2-28-56. Filed 8-5-54.

626,896. EL GALLO CUTLERY AND DESIGN. Forest Cruse. SN 672,055. Pub. 2-28-56. Filed 8-23-54.

626,897. JIM BOWIE CUTLERY. Forest Cruse. SN 672,056. Pub. 2-28-56. Filed 8-23-54.

626,898. X L CUTLERY AND DESIGN. Forest Cruse. SN 672,057. Pub. 2-28-56. Filed 8-23-54.

626,899. PROFILAP. Societe Anonyme Cri-Dan. SN 676,548. Pub. 2-28-56. Filed 11-12-54.

626,900. JACKSON & CHURCH J-C AND DESIGN. Jackson & Church Company. SN 677,064. Pub. 2-28-56. Filed 11-22-54.

626,901. PT. Cummins Engine Company, Inc. SN 679,084. Pub. 7-12-55. Filed 12-29-54.

626,902. ZAVODY V. I. LENINA PLZEN AND DESIGN. Zavody V. I. Lenina Plzen, Narodni Podnik. SN 679,440. Pub. 2-28-56. Filed 1-4-55.

626,903. SERVICE CHIEF. Blackhawk Mfg. Co. SN 680,248. Pub. 2-21-56. Filed 1-21-55.

626,904. C D P CEMENTED DIAMOND PARTICLES. Koebel Diamond Tool Co. SN 683,519. Pub. 2-28-56. Filed 3-15-55.

626,905. KRESCO. S. S. Kresge Company. SN 685,193. Pub. 2-28-56. Filed 4-8-55.

626,906. FERROTIC. Sintercast Corporation of America. SN 687,011. Pub. 2-28-56. Filed 5-6-55.

626,907. MULTI-ROLL AND DESIGN. U. S. Tool Company, Inc. SN 687,143. Pub. 2-28-56. Filed 5-9-55.

626,908. ECLIPSE GAT. Eclipse Air Brush Co. SN 691,753. Pub. 2-28-56. Filed 7-22-55.

626,909. ECLIPSE-G-6. Eclipse Air Brush Co. SN 691,754. Pub. 2-28-56. Filed 7-22-55.

626,910. QUARTET. Cincinnati Manufacturing Corporation, d. b. a. The United States Machine Tool Co. SN 691,827. Pub. 2-28-56. Filed 7-25-55.

626,911. LOMBARD. Lombard Corporation. SN 692,070. Pub. 2-28-56. Filed 7-28-55.

626,912. AXI-FLO WHITIN CLEANER AND DESIGN. Whitin Machine Works. SN 693,220. Pub. 2-28-56. Filed 8-16-55.

626,913. ROTO-DRAFTER WHITIN AMERICAN SYSTEM AND DESIGN. Whitin Machine Works. SN 693,221. Pub. 2-28-56. Filed 8-16-55.

626,914. EVEN-DRAFT WHITIN DRAWING AND DESIGN. Whitin Machine Works. SN 693,222. Pub. 2-28-56. Filed 8-16-55.

626,915. SCRATCHALIZER. B and W Incorporated. SN 693,303. Pub. 2-28-56. Filed 8-18-55.

626,916. POWER CHORING AND DESIGN. James Mfg. Co. SN 694,068. Pub. 2-28-56. Filed 9-1-55.

626,917. MITY MASTER. Winston M. Ward, d. b. a. Win Ward Co. SN 694,107. Pub. 2-28-56. Filed 9-1-55.

626,918. ARROWHEAD. Ekco Products Company. SN 694,209. Pub. 2-28-56. Filed 9-6-55.

626,919. AEROCEM. Aerocem Limited. SN 694,293. Pub. 2-28-56. Filed 9-7-55.

626,920. SONICUT. The Sheffield Corporation. SN 694,337. Pub. 2-28-56. Filed 9-7-55.

626,921. PHLOMAX. Phlomax (Overseas) Limited. SN 694,382. Pub. 2-28-56. Filed 9-8-55.

626,922. PHILLIPS AND DESIGN. Phillips Drill Company. SN 694,447. Pub. 2-28-56. Filed 9-9-55.

626,923. DOUBLE-MATIC. Porter-McLeod Machine Tool Co., Inc. SN 694,593. Pub. 2-28-56. Filed 9-13-55.

626,924. MT AND DESIGN. Mack Manufacturing Corporation. SN 694,810. Pub. 2-28-56. Filed 9-16-55.

626,925. HI-D HEAT EXCHANGERS AND DESIGN. United Aircraft Products, Inc. SN 694,827. Pub. 2-28-56. Filed 9-16-55.

626,926. UAP AND DESIGN. United Aircraft Products, Inc. SN 694,828. Pub. 2-28-56. Filed 9-16-55.

CLASS 25

626,927. STRONGHOLD. Crest Lock Co., Inc. SN 650,978. Pub. 8-17-54. Filed 7-28-53.

CLASS 26

626,928. MAGICASE. Jack J. Kuscher, d. b. a. Magicase Company. SN 649,162. Pub. 2-28-56. Filed 6-22-53.

626,929. PRES-FLO. Paul E. Chu. SN 681,747. Pub. 2-28-56. Filed 2-16-55.

626,930. HYDROGUARD. The Powers Regulator Company. SN 694,331. Pub. 2-28-56. Filed 9-7-55.

626,931. CALGON ZEO-KIT. Calgon, Incorporated. SN 694,472. Pub. 2-28-56. Filed 9-12-55.

626,932. WAYMATIC. Way-Matic Regulator Company. SN 694,682. Pub. 2-28-56. Filed 9-14-55.

626,933. CAPT. R. GOLZE E-Z-LOG AND DESIGN. Richard Golze. SN 694,712. Pub. 2-28-56. Filed 9-15-55.

626,934. UNOMAT. Durst S.-A. SN 694,786. Pub. 2-21-56. Filed 9-16-55.

626,935. ENDURON. Pioneer Scientific Corporation. SN 695,109. Pub. 2-28-56. Filed 9-21-55.

626,936. ROBOTEL. Infilco Incorporated. SN 695,308. Pub. 2-28-56. Filed 9-26-55.

CLASS 27

626,937. APOLLO. Aristo Import Co. Inc. SN 660,847. Pub. 8-30-55. Filed 2-10-54.

626,938. ATOMICRONIC. The Gruen Watch Company. SN 697,161. Pub. 2-21-56. Filed 10-26-55.

CLASS 28

626,939. REPRESENTATION OF GREEK LETTERS PHI AND PSI. Phi Psi Fraternity. SN 697,953. Pub. 2-21-56. Filed 11-16-55.

CLASS 29

626,940. ANGUS IN A BLACK OVAL DESIGN. Angus Mills, Inc. SN 678,081. Pub. 7-19-55. Filed 12-10-54.

626,941. VACU. Edward Weil. SN 684,083. Pub. 2-21-56. Filed 3-23-55.

626,942. MINUTE AND DESIGN. Ekco Products Company. SN 692,319. Pub. 2-28-56. Filed 8-2-55.

CLASS 31

626,943. DUO COOLER. The Marley Company. SN 684,853. Pub. 2-21-56. Filed 4-4-55.

626,944. HYDRO-CHILL. Emil Steinhorst & Sons, Inc. SN 687,013. Pub. 2-28-56. Filed 5-6-55.

626,945. FREEZE EAZY AND DESIGN. Joseph C. Bloom, d. b. a. Freeze Eazy Industries. SN 687,340. Pub. 2-28-56. Filed 5-12-55.

626,946. LONERGAN. McGraw Electric Company. SN 687,611. Pub. 2-28-56. Filed 5-16-55.

626,947. ROTO COOL ETC. AND DESIGN. Package Machinery Company. SN 687,883. Pub. 2-28-56. Filed 5-19-55.

626,948. KLEER-PAC. Houdaille-Hershey of Indiana, Inc., now Indiana Commercial Filters Corporation. SN 688,417. Pub. 2-28-56. Filed 5-27-55.

626,949. FLO-PAC. Houdaille-Hershey of Indiana, Inc., now Indiana Commercial Filters Corporation. SN 688,418. Pub. 2-21-56. Filed 5-27-55.

626,950. MONTCLAIR. Tri-State Electric Mfg. Co. SN 688,868. Pub. 2-28-56. Filed 6-3-55.

626,951. FLOATOMETIC. Ed Friedrich, Inc. SN 695,718. Pub. 2-28-56. Filed 10-3-55.

CLASS 32

626,952. LETTERBUG. Bernad Creations, Ltd. SN 669,394. Pub. 2-28-56. Filed 7-6-54.

626,953. ING-RICH. Ingram-Richardson Manufacturing Company. SN 677,224. Pub. 2-28-56. Filed 11-24-54.

626,954. PATIO KING. A A A Sales Company. SN 681,124. Pub. 2-28-56. Filed 2-7-55.

626,955. HITCHCOCK,ALFORD,&CO HITCHCOCKS-VILLE. CONN. The Hitchcock Chair Company. SN 690,466. Pub. 2-28-56. Filed 6-29-55.

626,956. BACK PROTEK-TOR. Slumberland Products Co. SN 693,940. Pub. 2-28-56. Filed 8-30-55.

626,957. SLEEPSTAKES. The Englander Company, Inc. SN 693,980. Pub. 2-21-56. Filed 8-31-55.

626,958. STACKMASTER. Union Steel Chest Corporation. SN 694,278. Pub. 2-28-56. Filed 9-6-55.

626,959. PLA-TRANER. William B. Wallace, d. b. a. William Wallace Company. SN 694,533. Pub. 2-28-56. Filed 9-12-55.

626,960. CENTSIBLE AND DESIGN. Central States Industries, Inc. SN 694,548. Pub. 2-28-56. Filed 9-13-55.

626,961. SPINE-A-LINER. Bethco Bedding Corporation. SN 694,637. Pub. 2-28-56. Filed 9-14-55.

626,962. TY-MASTER. Ty-Master Corporation. SN 694,835. Pub. 12-27-55. Filed 10-5-55.

626,963. LIFE FOAM AND DESIGN. National Foam Rubber Corp. SN 694,902. Pub. 2-28-56. Filed 9-19-55.

626,964. SET-T-COT. George D. Stanley. SN 695,042. Pub. 2-28-56. Filed 9-20-55.

626,965. TA-K-NAP. George D. Stanley. SN 695,043. Pub. 2-28-56. Filed 9-20-55.

626,966. "PEACE VALLEY." New Waterford Furniture Co. SN 695,103. Pub. 2-28-56. Filed 9-21-55.

626,967. HARLEIGH COURT. The Hecht Company. SN 695,305. Pub. 2-28-56. Filed 9-26-55.

626,968. THE MURRAY HILL GROUP. Nepengo, Inc. SN 695,485. Pub. 2-28-56. Filed 9-28-55.

626,969. YOUNG AMERICA. J. L. Chase Company. SN 695,611. Pub. 2-28-56. Filed 9-30-55.

CLASS 34

626,970. NATIONAL. National Steel Construction Co. SN 656,898. Pub. 6-8-54. Filed 11-24-53.

626,971. PDQ. Winro, Inc. SN 683,947. Pub. 2-28-56. Filed 3-21-55.

626,972. FEUER HAND AND DESIGN. Hermann Nier K. G. SN 686,211. Pub. 2-28-56. Filed 4-25-55.

626,973. FIRE HAND. Hermann Nier K. G. SN 686,212. Pub. 2-28-56. Filed 4-25-55.

626,974. ELCO (FANCIFUL). Elco Lamp & Shade Studio, Inc. SN 689,823. Pub. 2-28-56. Filed 6-20-55.

626,975. GRILLRYTE. New York Shipbuilding Corporation, d. b. a. Nesco, division of New York Shipbuilding Corporation. SN 689,862. Pub. 2-28-56. Filed 6-20-55.

626,976. HANG IT ALL. Lakewood Manufacturing Co. SN 690,956. Pub. 2-21-56. Filed 7-8-55.

CLASS 36

626,977. PUCHITO. Toreador Record Corporation. SN 689,678. Pub. 2-28-56. Filed 6-16-55.

CLASS 37

626,978. VOGUE. Interlake Tissue Mills Co. Limited. SN 644,754. Pub. 2-28-56. Filed 4-6-53.

626,979. DUOPRINT. American Printers & Lithographers, Inc. SN 661,392. Pub. 2-28-56. Filed 2-23-54.

626,980. LL. The Parker Pen Company. SN 681,939. Pub. 2-28-56. Filed 2-18-55.

626,981. SARACOTE. Standard Packaging Corporation. SN 689,092. Pub. 2-28-56. Filed 6-7-55.

626,982. TOPAZ. The Sterilek Company, Inc. SN 689,093. Pub. 2-28-56. Filed 6-7-55.

626,983. SOPHISTI-CAT. Norcross, Inc. SN 689,151. Pub. 2-28-56. Filed 6-8-55.

626,984. MACADAM BOND. Saxon Paper Corporation. SN 689,165. Pub. 2-28-56. Filed 6-8-55.

626,985. DIPLOMACY PARCHMENT. Saxon Paper Corporation. SN 689,166. Pub. 2-28-56. Filed 6-8-55.

626,986. ROLLWON. A. P. W. Products Company, Inc. SN 689,203. Pub. 2-28-56. Filed 6-9-55.

626,987. CHAPEL. Crocker, Burbank Papers Inc. SN 689,351. Pub. 2-28-56. Filed 6-13-55.

626,988. TRAFALGAR. Crocker, Burbank Papers Inc. SN 689,354. Pub. 2-28-56. Filed 6-13-55.

626,989. DOVER. Crocker, Burbank Papers Inc. SN 689,355. Pub. 2-28-56. Filed 6-13-55.

626,990. CHANCEL. Crocker, Burbank Papers Inc. SN 689,358. Pub. 2-28-56. Filed 6-13-55.

626,991. POCKET PRIDE. Daniel Cooper, d. b. a. Supercraft Mfg. Co. SN 689,468. Pub. 2-28-56. Filed 6-14-55.

626,992. BILTWELL. S. P. Richards Paper Company. SN 690,196. Pub. 2-28-56. Filed 6-24-55.

626,993. PREVIEW. Crown Zellerbach Corporation. SN 690,233. Pub. 2-28-56. Filed 6-27-55.

626,994. SOPPS AND DESIGN. Jaclin Company, to Sopps, Inc. SN 690,886. Pub. 2-28-56. Filed 7-7-55.

CLASS 38

626,995. RETMA RADIO-ELECTRONICS TELEVISION ETC. AND DESIGN. Radio-Electronics-Television Manufacturers Association. SN 659,737. Pub. 2-28-56. Filed 1-19-54.

626,996. "JUMPIN" JOE AND DESIGN. Joseph Ambrose, Jr. SN 685,231. Pub. 2-28-56. Filed 4-11-55.

626,997. P D R. Medical Economics, Inc. SN 690,177. Pub. 2-28-56. Filed 6-24-55.

626,998. PHYSICIANS' DESK REFERENCE. Medical Economics, Inc. SN 690,178. Pub. 2-28-56. Filed 6-24-55.

626,999. FORECAST. Hugo Gernsback. SN 693,043. Pub. 2-28-56. Filed 8-15-55.

627,000. DESIGN OF MUSICAL NOTES. Harold Floyd Garland, Jr. SN 693,819. Pub. 2-28-56. Filed 8-29-55.

627,001. PHOTORAMA. Photorama, Inc. SN 694,091. Pub. 2-28-56. Filed 9-1-55.

627,002. AVISCO. American Viscose Corporation. SN 694,120. Pub. 2-28-56. Filed 9-2-55.

627,003. IMAGINE MY SURPRISE. Barbara M. Benedict. SN 694,122. Pub. 2-28-56. Filed 9-2-55.

627,004. DAHNKEN. Adco, Inc. SN 694,178. Pub. 2-28-56. Filed 9-6-55.

627,005. TOY-O-RAMA. I. Lodge. SN 694,240. Pub. 2-28-56. Filed 9-6-55.

627,006. STEAK N SHAKE NEWS. Steak n Shake, Inc. SN 694,519. Pub. 2-28-56. Filed 9-12-55.

627,007. BROILER GROWING. Watt Publishing Co. SN 694,535. Pub. 2-28-56. Filed 9-12-55.

627,008. MR. TWEEDY. General Features Corporation. SN 694,568. Pub. 2-28-56. Filed 9-13-55.

CLASS 39

627,009. CHRISTIAN DIOR. Société à Responsabilité Limitée Comptoir de l'Industrie Cotonniere, now by change of name Societe Comptoir de l'Industrie Cotonniere. SN 598,932. Pub. 2-28-56. Filed 6-10-50.

627,010. DRI-BABE. Dri-Babe of California, Inc. SN 636,411. Pub. 3-23-54. Filed 10-9-52.

627,011. SOFT SHOULDERS. Vivien Kellems. SN 636,713. Pub. 2-2-54. Filed 10-16-52.

627,012. STAR LITERS AND STAR DESIGN. Midwest Footwear, Inc. SN 641,317. Pub. 3-15-55. Filed 1-26-53.

627,013. FEATHERWARM. The William Carter Company. SN 646,363. Pub. 3-23-54. Filed 5-4-53.

627,014. REPRESENTATION OF HAND MIRRORS. Mr. Arnold, Inc. SN 654,671. Pub. 2-28-56. Filed 10-13-53.

627,015. HELEN OF TROY. Stardust, Incorporated. SN 663,529. Pub. 8-10-54. Filed 3-29-54.

627,016. MARDI GRAS DEBS. Hermann's Shoes, Inc. SN 664,443. Pub. 4-19-55. Filed 4-13-54.

627,017. MIAMI MISS AND DESIGN. Miami Miss, Inc. SN 667,418. Pub. 2-1-55. Filed 6-1-54.

627,018. MAGIC ELASTIC. Even-Pul Foundations, Inc. SN 677,649. Pub. 6-7-55. Filed 12-2-54.

627,019. MADE OF GENUINE NINO FLEX ETC. AND DESIGN. Niehues & Dutting. SN 679,856. Pub. 2-28-56. Filed 1-13-55.

627,020. SPLASH MATES. March & Mendl, Inc. SN 684,954. Pub. 2-28-56. Filed 4-5-55.

627,021. HICKORY. S. Makransky & Sons, Inc. SN 685,507. Pub. 2-28-56. Filed 4-14-55.

627,022. MONTE VERDE. Ernest Greenberg. SN 685,704. Pub. 11-1-55. Filed 4-18-55.

627,023. ESCORT. Jordan Marsh Company. SN 686,017. Pub. 2-28-56. Filed 4-21-55.

627,024. SULGRAVE. Harry Camp Millinery Company. SN 689,696. Pub. 2-28-56. Filed 6-17-55.

627,025. 66. Phillips Petroleum Company. SN 689,744. Pub. 2-28-56. Filed 6-17-55.

627,026. BUMPY BOUNCEY. William Ernest Wandt. SN 690,350. Pub. 2-28-56. Filed 6-27-55.

627,027. RH. The Williamson-Dickie Manufacturing Company. SN 690,422. Pub. 2-28-56. Filed 6-28-55.

627,028. THREE-TIMER. The Joseph & Feiss Company. SN 690,713. Pub. 2-28-56. Filed 7-5-55.

627,029. FARAH OF TEXAS AND DESIGN. Farah Manufacturing Company, Inc. SN 690,813. Pub. 2-28-56. Filed 7-6-55.

627,030. CLICKER. Lakeland Manufacturing Company. SN 690,829. Pub. 2-28-56. Filed 7-6-55.

627,031. GRANITONE. Joseph H. Cohen & Sons, Inc. SN 690,935. Pub. 2-28-56. Filed 7-8-55.

627,032. JUNIOR-AIRE. Linker & Herbert, Inc. SN 690,958. Pub. 2-28-56. Filed 7-8-55.

627,033. NATURAL BRIDGE. Craddock-Terry Shoe Corporation. SN 694,356. Pub. 2-28-56. Filed 9-8-55.

627,034. DEENA. Albert, Inc. SN 694,539. Pub. 2-28-56. Filed 9-21-55.

627,035. PLI-FLEX. Nunn-Bush Shoe Company. SN 694,590. Pub. 2-28-56. Filed 9-13-55.

627,036. BLUE CASTLE AND DESIGN. Rockford Textile Mills, Inc. SN 694,597. Pub. 2-28-56. Filed 9-13-55.

627,037. ROBIN HOOD SPORTSWEAR AND DESIGN. Glick Sportswear Co. SN 694,795. Pub. 2-28-56. Filed 9-16-55.

627,038. ROBIN HOOD SPORTSWEAR AND DESIGN. Glick Sportswear Co. SN 694,796. Pub. 2-28-56. Filed 9-16-55.

627,039. ROBIN HOOD. Glick Sportswear Co. SN 694,797. Pub. 2-28-56. Filed 9-16-55.

627,040. TOBETTE JUNIOR. Toby Tyler & Co., Inc., to Frank Becker, Eleanor Becker and Ada Becker. SN 694,826. Pub. 2-28-56. Filed 9-16-55.

627,041. PAMPER. Alba Hosiery Mills, Inc. SN 694,839. Pub. 2-28-56. Filed 9-19-55.

627,042. "MAIDEN MAINE." Lumbard-Watson Co. SN 694,892. Pub. 2-28-56. Filed 9-19-55.

627,043. MISS CAROL. Carol Crawford, Inc. SN 694,970. Pub. 2-28-56. Filed 9-20-55.

627,044. "G.G.G." Wm. P. Goldman & Bros. Inc. SN 698,326. Pub. 2-28-56. Filed 11-9-55.

627,045. CELESTE. Celeste Frocks, Inc. SN 698,674. Pub. 2-28-56. Filed 12-5-55.

CLASS 40

627,046. REPRESENTATION OF A STAR. Star Watch Case Co. SN 653,180. Pub. 2-28-56. Filed 9-14-53.

627,047. TRU-FLEX. Springs, Inc. SN 676,415. Pub. 5-10-55. Filed 11-10-54.

CLASS 42

627,048. BEAUTIFLUTE. Beautiflute, Incorporated. SN 679,200. Pub. 2-28-56. Filed 12-31-54.

627,049. A KARA-LOC WEAVE. Fieldcrest Mills, Inc. SN 688,403. Pub. 2-28-56. Filed 5-27-55.

627,050. NYROCALE AND DESIGN. Glen Raven Knitting Mills, Inc. SN 688,409. Pub. 2-28-56. Filed 5-27-55.

627,051. SEKERS. West Cumberland Silk Mills Limited. SN 690,353. Pub. 2-28-56. Filed 6-27-55.

627,052. BUCARONI. Glen Raven Cotton Mills, Inc. SN 690,619. Pub. 2-28-56. Filed 7-1-55.

627,053. TWISTKNOT. Milton C. Blum, Inc. SN 690,795. Pub. 2-28-56. Filed 7-6-55.

627,054. SUPERLITE II. Amerotron Corporation. SN 691,259. Pub. 2-28-56. Filed 7-14-55.

627,055. SUPERLITE V. Amerotron Corporation. SN 691,263. Pub. 2-28-56. Filed 7-14-55.

627,056. SUPER 8. Amerotron Corporation. SN 691,264. Pub. 2-28-56. Filed 7-14-55.

627,057. STORMTIME. J. P. Stevens & Co., Inc. SN 691,718. Pub. 2-28-56. Filed 7-21-55.

627,058. HANGOUT. J. P. Stevens & Co., Inc. SN 692,358. Pub. 2-28-56. Filed 8-2-55.

627,059. NEWSMAKER. J. P. Stevens & Co., Inc. SN 692,359. Pub. 2-28-56. Filed 8-2-55.

627,060. MARKFAST. The Stearns & Foster Company. SN 692,650. Pub. 2-28-56. Filed 8-8-55.

627,061. SMOOTH-MAGIC. Marcus Brothers Textile Corp. SN 692,793. Pub. 2-28-56. Filed 8-10-55.

627,062. BETTY BATES. Bates Manufacturing Company. SN 693,116. Pub. 2-28-56. Filed 8-16-55.

627,063. MOUNTAIN. Reeves Brothers, Inc. SN 694,150. Pub. 2-28-56. Filed 9-2-55.

627,064. JUDY AND DESIGN. Simpson & Godlee Limited. SN 694,604. Pub. 2-28-56. Filed 9-13-55.

627,065. REEVES. Reeves Brothers, Inc. SN 694,669. Pub. 2-28-56. Filed 9-14-55.

627,066. MARTISTE. Emile Marghab, Incorporated. SN 694,726. Pub. 2-28-56. Filed 9-15-55.

627,067. DESIGN OF CIRCLE, STAR AND FANCIFUL FIGURE. Spartan Mills. SN 694,746. Pub. 2-28-56. Filed 9-15-55.

627,068. NORTHCOOL. A. Sagner's Son. SN 694,759. Pub. 2-28-56. Filed 9-30-55.

627,069. "GEORGETOWN." Bell Textile Co., Inc. SN 694,766. Pub. 2-28-56. Filed 9-16-55.

627,070. "SAVANNAH." Bell Textile Co., Inc. SN 694,767. Pub. 2-28-56. Filed 9-16-55.

627,071. CHESTERFIELD. E. T. Barwick Mills. SN 694,847. Pub. 2-28-56. Filed 9-19-55.

627,072. FONTAINEBLEAU. E. T. Barwick Mills. SN 694,848. Pub. 2-28-56. Filed 9-19-55.

627,073. MONTEVIDEO. Monarch Rug Mills. SN 694,900. Pub. 2-28-56. Filed 9-19-55.

627,074. FAIRLANE. Morrill Manufacturing Company. SN 694,901. Pub. 2-28-56. Filed 9-19-55.

627,075. HOUR "24" DUTY. Whittenton Garment Corporation. SN 694,941. Pub. 2-28-56. Filed 9-19-55.

627,076. ANGELEEN. Forstmann Woolen Co. SN 698,471. Pub. 2-28-56. Filed 12-2-55.

627,077. BURMANA. Forstmann Woolen Co. SN 698,472. Pub. 2-28-56. Filed 12-2-55.

627,078. CHONGA. Forstmann Woolen Co. SN 698,473. Pub. 2-28-56. Filed 12-2-55.

627,079. CHULANA. Forstmann Woolen Co. SN 698,474. Pub. 2-28-56. Filed 12-2-55.

627,080. KASHMIRLUXA. Forstmann Woolen Co. SN 698,478. Pub. 2-28-56. Filed 12-2-55.

627,081. MARVA. Forstmann Woolen Co. SN 698,479. Pub. 2-28-56. Filed 12-2-55.

627,082. MELVA. Forstmann Woolen Co. SN 698,480. Pub. 2-28-56. Filed 12-2-55.

627,083. ORIELLA. Forstmann Woolen Co. SN 698,481. Pub. 2-28-56. Filed 12-2-55.

627,084. PALLINA. Forstmann Woolen Co. SN 698,482. Pub. 2-28-56. Filed 12-2-55.

627,085. SUDANA. Forstmann Woolen Co. SN 698,483. Pub. 2-28-56. Filed 12-2-55.

627,086. VALDEEMA. Forstmann Woolen Co. SN 698,484. Pub. 2-28-56. Filed 12-2-55.

627,087. VALORA. Forstmann Woolen Co. SN 698,485. Pub. 2-28-56. Filed 12-2-55.

627,088. VELZARA. Forstmann Woolen Co. SN 698,486. Pub. 2-28-56. Filed 12-2-55.

627,089. VIO CREPE. Forstmann Woolen Co. SN 698,487. Pub. 2-28-56. Filed 12-2-55.

CLASS 43

627,090. MINKGORA. Brant Yarns, Inc. SN 658,966. Pub. 6-22-54. Filed 1-5-54.

627,091. CUPRADOR. Farbenfabriken Bayer Aktiengesellschaft. SN 694,562. Pub. 2-28-56. Filed 9-13-55.

627,092. EMPECO. Max Pollack & Company, Inc. SN 698,723. Pub. 2-28-56. Filed 11-22-55.

627,093. KNIGHT BRAND. Max Pollack & Company, Inc. SN 698,725. Pub. 2-28-56. Filed 11-22-55.

627,094. MECCA. Max Pollack & Company, Inc. SN 698,727. Pub. 2-28-56. Filed 11-22-55.

627,095. METEOR. Max Pollack & Company, Inc. SN 698,728. Pub. 2-28-56. Filed 11-22-55.

627,096. PARCIVAL. Max Pollack & Company, Inc. SN 698,729. Pub. 2-28-56. Filed 11-22-55.

627,097. STRONGHOLD. Max Pollack & Company, Inc. SN 698,730. Pub. 2-28-56. Filed 11-22-55.

CLASS 44

627,098. SAFE-T-TILT. Harry E. Rice and Trenton L. Rice. SN 675,946. Pub. 2-28-56. Filed 10-28-54.

627,099. AURITONE. Pharmaceuticals, Inc. SN 678,256. Pub. 2-28-56. Filed 12-13-54.

627,100. FLASHBALL. Baxter Laboratories, Inc. SN 682,106. Pub. 2-28-56. Filed 2-23-55.

627,101. SNAPON. Young Dental Manufacturing Co. SN 683,951. Pub. 2-28-56. Filed 3-21-55.

627,102. FLEXOPLAST. Edward Taylor Ltd. SN 694,932. Pub. 2-28-56. Filed 9-19-55.

CLASS 45

627,103. POP DROPS. MacDonald Laboratories, Inc. SN 660,768. Pub. 2-28-56. Filed 2-8-54.

CLASS 46

627,104. GLOBE "A1" AND DESIGN. Pillsbury Mills, Inc. SN 561,681. Pub. 2-28-56. Filed 7-19-48.

627,105. CANE BRAKE SYRUP. Colonial Molasses Co. of La., Inc. SN 633,833. Pub. 7-19-55. Filed 8-13-52.

627,106. ALLEN AND DESIGN. J. W. Allen & Co. SN 645,365. Pub. 3-22-55. Filed 4-16-53.

627,107. DR. TOPPER'S DOG CONES AND DESIGN. Northeast Feeds, Inc., to Norris Grain Company. SN 657,548. Pub. 2-28-56. Filed 12-7-53.

627,108. FLAVOR CHEST. Hilliard Joseph, d. b. a. Joseph Northwest. SN 659,864. Pub. 2-28-56. Filed 1-21-54.

627,109. DANNY'S TASTY-TENDER. Daniele Calanca, d. b. a. Danny's Products. SN 670,092. Pub. 2-28-56. Filed 7-16-54.

627,110. APISERUM. Josephine Grasser. SN 672,949. Pub. 2-28-56. Filed 9-9-54.

627,111. WINKY AND DESIGN. Armour and Company. SN 675,123. Pub. 2-28-56. Filed 10-20-54.

627,112. MARTIN'S RABBIT BRAND. The Kraft Foods Company. SN 678,918. Pub. 2-28-56. Filed 12-24-54.

627,113. DOUBLE H AND DESIGN. Wedgworth Produce, Inc. SN 679,692. Pub. 2-28-56. Filed 1-10-55.

627,114. DONT COOK HEAT ETC. AND DESIGN. F. O. Mitchell & Bro., Inc. SN 681,868. Pub. 2-28-56. Filed 2-17-55.

627,115. ROSE'S. L. Rose & Co., Limited. SN 682,674. Pub. 2-28-56. Filed 3-2-55.

627,116. GOLDEN GLOW ETC. AND DESIGN. E. F. Kemp Corp. SN 689,140. Pub. 2-28-56. Filed 6-8-55.

627,117. LASCO. Allen Foods, Inc. SN 690,589. Pub. 2-28-56. Filed 7-1-55.

627,118. MOLICO. The Nestlé Company, Inc. SN 690,633. Pub. 2-28-56. Filed 7-1-55.

627,119. STEDA-SUGAR. Loeb Dietetic Food Co., Inc. SN 690,830. Pub. 2-28-56. Filed 7-6-55.

627,120. THREE SISTERS. D. Thompson Swing, to D. Thompson Swing, Inc. SN 690,847. Pub. 2-28-56. Filed 7-6-55.

627,121. GOLDEN FLUFFO. The Procter & Gamble Company. SN 690,903. Pub. 2-28-56. Filed 7-7-55.

627,122. BRICK OVEN. Arnold Bakers, Inc. SN 690,931. Pub. 2-28-56. Filed 7-8-55.

627,123. SPUD VALLEY. Mendelson-Zeller Co. SN 691,061. Pub. 2-28-56. Filed 7-11-55.

627,124. CYLAN. E. I. du Pont de Nemours and Company. SN 691,199. Pub. 2-28-56. Filed 7-13-55.

627,125. RY-DO. Bay State Milling Co. SN 692,701. Pub. 2-28-56. Filed 8-9-55.

627,126. BLUEBIRD. Southern Fruit Distributors, Inc. SN 692,958. Pub. 2-28-56. Filed 8-12-55.

627,127. VERO. Locatelli, Inc. SN 694,027. Pub. 2-28-56. Filed 8-24-55.

627,128. STRATO OUT OF THIS WORLD AND DESIGN. Key Brands Company. SN 694,578. Pub. 2-28-56. Filed 9-13-55.

CLASS 47

627,129. REAL COMPANHIA VINICOLA DO NORTE, ETC. AND DESIGN. Real Companhia Vinicola do Norte de Portugal, S. A. R. L. SN 678,149. Pub. 2-28-56. Filed 12-10-54.

627,130. AKADAMA RED LIGHT WINE. Kotobukiya Limited. SN 690,559. Pub. 2-28-56. Filed 6-30-55.

CLASS 49

627,131. KING. Brown-Forman Distillers Corporation. SN 685,342. Pub. 2-28-56. Filed 4-12-55.

CLASS 50

627,132. REPRESENTATION OF A TOMAHAWK. Northern Engraving & Manufacturing Co. SN 667,043. Pub. 2-28-56. Filed 5-25-54.

627,133. WEATHER BRAKE. Hinson Manufacturing Company. SN 678,218. Pub. 2-28-56. Filed 12-13-54.

627,134. SQUEEZE-ME AND DESIGN. Berkeley Industries. SN 690,525. Pub. 2-28-56. Filed 6-30-55.

627,135. VULCAFILM. The B. F. Goodrich Company. SN 693,044. Pub. 2-28-56. Filed 8-15-55.

627,136. POP-TENT. Stross Manufacturing Company. SN 693,783. Pub. 2-28-56. Filed 8-26-55.

CLASS 51

627,137. PAT. Joseph Tursi, d. b. a. Michael's. SN 612,379. Pub. 6-17-52. Filed 4-7-51.

627,138. LIVING. International Latex Corporation. SN 678,223. Pub. 10-4-55. Filed 12-13-54.

627,139. SLICK-STRATE. Valmor Products Co. SN 687,653. Pub. 2-28-56. Filed 5-16-55.

CLASS 52

627,140. BAP. Drew Kloman, d. b. a. Beaver Alkali Products. SN 653,226. Pub. 2-28-56. Filed 9-15-53.

627,141. REPRESENTATION OF SILHOUETTE. Hans Schwarzkopf. SN 663,953. Pub. 2-28-56. Filed 4-5-54.

627,142. HI-RATIO SILICATE. Diamond Alkali Company. SN 667,387. Pub. 2-28-56. Filed 6-1-54.

627,143. COLGATE SPARKLE AND DESIGN. Colgate-Palmolive Company. SN 667,781. Pub. 2-28-56. Filed 6-7-54.

627,144. HYDROPURGE. Fidelity Chemical Products Corp. SN 678,854. Pub. 2-28-56. Filed 12-23-54.

627,145. SHAMROCK BRAND AND DESIGN. Jack Fisher, d. b. a. Industrial Sanitary Supply Co. SN 681,504. Pub. 10-11-55. Filed 2-11-55.

627,146. VEGO. Chemicals & Materials Distributors Corporation, d. b. a. Chemicals & Materials Corporation. SN 685,169. Pub. 2-28-56. Filed 4-8-55.

627,147. FEWA AND DESIGN. Bohme Fettchemie G. m. b. H. SN 686,023. Pub. 2-28-56. Filed 4-22-55.

627,148. SEA-SPRAY. David A. Cohen, d. b. a. Daycon Products Co. SN 689,267. Pub. 2-28-56. Filed 6-10-55.

627,149. RINGLET. The Gillette Company, d. b. a. The Toni Company. SN 689,939. Pub. 2-28-56. Filed 6-21-55.

627,150. AQUANEX. Montgomery Chemical Company. SN 692,343. Pub. 2-28-56. Filed 8-2-55.

627,151. SUPER DISIT. Abco, Inc. SN 692,756. Pub. 2-28-56. Filed 8-10-55.

627,152. PRO-MO-LITE. Masury-Young Company. SN 693,836. Pub. 2-28-56. Filed 8-29-55.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 1

627,153. International Clay Corporation, Graniteville, S. C. SN 689,944. Filed P. R. 6-21-55. Am. S. R. 2-24-56.

AIKEN CLAY

For Clay, Used for Various Purposes, Including a Clay Carrier for Insecticides and Fungicides, and as a Filler for Rubber in the Bulk and Articles Made of Rubber.
First use Feb. 28, 1952.

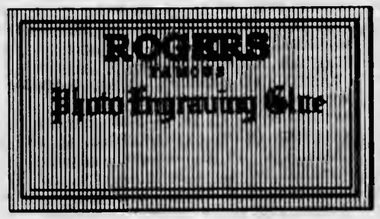
CLASS 5

627,154. Rogers Isinglass and Glue Company, Gloucester, Mass. SN 693,395. Filed 8-19-55.



The drawing is lined for red and yellow.
For Liquid Fish Glue.
First use Nov. 1, 1933.

627,155. Rogers Isinglass and Glue Company, Gloucester, Mass. SN 693,396. Filed 8-19-55.



The drawing is lined for red.
For Photo Engraving Glue.
First use Dec. 1, 1928.

CLASS 12

627,156. Remington Aluminum Window Corp., Hempstead, N. Y. SN 687,003. Filed P. R. 5-6-55. Am. S. R. 2-2-56.

REMINGTON

For Storm Windows, Doors and Awnings.
First use Jan. 10, 1953.

627,157. Wheatland Construction Co., Inc., Lancaster, Pa. SN 689,910. Filed P. R. 6-20-55. Am. S. R. 1-30-56.



For Prefabricated Knock-Down Dog Houses and Components Thereof.
First use March 1954.

CLASS 23

627,158. Robbins Plastic Machinery Corporation, Elkhart, Ind. SN 685,211. Filed P. R. 4-8-55. Am. S. R. 3-1-56.

Robbins

For Plastic Extrusion Dies and Parts, Refrigerated Water Tanks Used With Plastic Extruders, Sheeting Dies, Sheeting Haul-Off Devices, Offset Pipe Dies, Extrusion Conveyors, Automatic Cutoff Saws, Two Roll Sheeting Hanl-Off Units, and Pipe Pull-Off Units.
First use Jan. 2, 1952.

627,159. The Cattle Capital Mfg. Company, Alliance, Nebr., to Worden Company, Grand Island, Nebr. SN 690,802. Filed P. R. 7-6-55. Am. S. R. 2-21-56.

The "BEST" Scratcher!

For Cattle Oiler.
First use Feb. 3, 1955.

627,160. The Cattle Capital Mfg. Company, Alliance, Nebr., to Worden Company, Grand Island, Nebr. SN 690,803. Filed P. R. 7-6-55. Am. S. R. 2-21-56.

Buy a "BEST" ... Let the Cattle do the Rest.

For Cattle Oiler.
First use Feb. 3, 1955.

CLASS 25

627,161. Stoffel Seals Corporation, Tuckahoe, N. Y. SN 685,866. Filed P. R. 4-19-55. Am. S. R. 1-27-56.

SELF-LOCK

For Base Metal Seals To Be Applied to Strings and Wires of Shipping Containers—Namely, Barrels, Drums, Milk Cans, Bags, Carrying Cases, Crates for Identifying the Latter.
First use Apr. 1, 1949.

CLASS 46

627,162. Devonsheer Melba Corporation, West New York, N. J. SN 667,678. Filed P. R. 6–4–54. Am. S. R. 8–10–55.

Devonsheer
PROTEIN
WHOLE GRAIN
WAFERS

For Whole Wheat Wafers.
First use Mar. 15, 1954.

CLASS 51

627,163. Durlin Co., Newark, N. J. SN 674,668. Filed P. R. 10–12–54. Am. S. R. 3–15–56.

glamorous hands *around the world...*

For Nail Enamel.
First use Dec. 1, 1949.

627,164. Kiddie Kabinette, Inc., d. b. a. Prescription Toilet Preparations, New York, N. Y. SN 685,378. Filed P. R. 4–12–55. Am. S. R. 1–25–56.

Baby's Breath

For Cosmetic Skin Lotions, Baby Oils, Talcum Powder, Cologne, and Hair Oils and Hair Tonics.
First use Jan. 5, 1955.

627,165. The Nestle-LeMur Company, New York, N. Y. SN 687,212. Filed P. R. 5–10–55. Am. S. R. 1–27–56.

Soft-Stay

For Hair Spray for Keeping the Hair in Place.
First use Dec. 28, 1954.

Service Mark

CLASS 106

627,166. Cranston Print Works Company, New York, N. Y. SN 688,629. Filed P. R. 6–1–55. Am. S. R. 2–3–56.

DRI-SMOOTH

For Applying a Crease and Wrinkle Resistant Resin Finish to Textile Fabrics.
First use Apr. 26, 1954.

TRADEMARK REGISTRATIONS RENEWED

108,274. SOUTHERN KING AND DESIGN. Cl. 46. 1–25–16.
108,332. B-K. Cl. 6. 2–1–16.
108,576. CALSO. Cl. 12. 2–15–16.
109,126. P AND G ETC. Cl. 52. 3–21–16.
109,190. SYMPHONY LAWN. Cl. 37. 3–28–16.
109,484. SANTA CRUZ ETC. AND DESIGN. Cl. 12. 4–11–16.
109,811. PREFERRED STOCK. Cl. 46. 4–18–16.
110,267. RUBY. Cl. 1. 5–9–16.
110,410. KORECTAL. Cl. 26. 5–23–16.
329,367. VARSITY. Cl. 23. 10–29–35.
330,014. CHECK AND DESIGN. Cl. 21. 11–19–35.
330,554. CHECK AND DESIGN. Cl. 31. 12–3–35.
330,587. PANCRO. Cl. 26. 12–3–35.
331,053. MAGNA-TONE. Cl. 36. 12–24–35.
331,080. JUNIOR-BAND. Cl. 36. 12–24–35.
331,358. HIAWATHA PLATE. Cl. 28. 1–7–36.
331,728. AJK AND DESIGN. Cl. 2. 1–21–36.
331,931. ONE FORTY. Cl. 46. 1–28–36.
331,968. FARNAM DRIVE. Cl. 17. 1–28–36.
332,022. 41. Cl. 44. 1–28–36.
332,023. 42. Cl. 44. 1–28–36.
332,024. 51. Cl. 44. 1–28–36.
332,025. 52. Cl. 44. 1–28–36.
332,051. 31. Cl. 44. 1–28–36.
332,094. WINCHARGER. Cl. 23. 2–4–36.
332,118. VISTANEX. Cl. 5. 2–4–36.
332,147. HUMBLE TREDKOTE. Cl. 12. 2–4–36.
332,353. UTILITY AND DESIGN. Cl. 39. 2–11–36.
332,400. UTILITY AND DESIGN. Cl. 40. 2–11–36.
332,539. RONCO. Cl. 46. 2–18–36.
332,586. PARAROMA. Cl. 6. 2–18–36.
332,603. SALLY SAGE AND DESIGN. Cl. 39. 2–18–36.
332,664. DUXSEAL. Cl. 12. 2–18–36.
332,734. PERM-A-GLO. Cl. 4. 2–25–36.
332,798. OJO MAGICO. Cl. 21. 2–25–36.
332,828. VISTANEX. Cl. 6. 2–25–36.
332,920. DEKENT AND DESIGN. Cl. 15. 3–3–36.
333,246. AJAX PLUS. Cl. 6. 3–10–36.
333,643. APONDON. Cl. 18. 3–31–36.
333,987. VISTANEX. Cl. 52. 4–14–36.
334,640. SOIREE. Cl. 43. 5–12–36.
334,657. DESIGN CHECK MARK AND RECTANGLE. Cl. 6. 5–12–36.
334,765. BD AND DESIGN. Cl. 3. 5–12–36.
335,031. TASTY-PAK AND DESIGN. Cl. 46. 5–19–36.
335,050. IVORYLITE. Cl. 21. 5–19–36.
335,097. VAL JEAN AND DESIGN. Cl. 27. 5–26–36.
335,117. MORRELL. Cl. 46. 5–26–36.
335,149. FLOTEX. Cl. 6. 5–26–36.
335,182. CRASTO AND DESIGN. Cl. 47. 5–26–36.
335,235. MEZURALL. Cl. 26. 5–26–36.
335,349. PYROXCOTE. Cl. 16. 6–2–36.
335,538. KITCHEN CLUB AND DESIGN. Cl. 46. 6–9–36.
335,559. LAVOLAIN. Cl. 21. 6–9–36.
335,677. FORM-N. Cl. 44. 6–9–36.
335,830. "IMPERVITE." Cl. 42. 6–16–36.
335,877. XALOY. Cl. 14. 6–16–36.
335,906. BENCONE. Cl. 39. 6–16–36.
336,100. DESIGN OF YELLOW CIRCLE AND ORANGE TRIANGLE. Cl. 52. 6–23–36.
336,144. C & E PERMALUX. Cl. 32. 6–30–36.
336,230. SEASONETTES AND DESIGN. Cl. 46. 6–30–36.
336,386. SILVANA. Cl. 46. 7–7–36.
336,398. TITANIA. Cl. 43. 7–7–36.
336,417. CAL-PHOSPHOR. Cl. 18. 7–7–36.
336,451. TRICOFERO DE BARRY AND DESIGN. Cl. 18. 7–7–36.
336,522. SILK FLOSS. Cl. 46. 7–7–36.
336,594. ULTRAWET. Cl. 6. 7–7–36.
336,632. CLARO. Cl. 37. 7–14–36.
336,710. RU-BER-OID WATSON AND DESIGN. Cl. 12. 7–14–36.
336,871. INTERNATIONAL. Cl. 23. 7–21–36.
336,918. PHILLIPS DELICIOUS. Cl. 46. 7–21–36.

TRADEMARK REGISTRATIONS CANCELED

Section 8

235,585. ALTMAN MAGAZINE. Cl. 38. 11–22–27.
252,754. BRU-CELL-IZE. Cl. 6. 2–12–29.
261,775. SENIOR CLASS. Cl. 39. 9–24–29.
263,744. PURITAN BANK PINS AND REPRESENTATION OF PIN AND WOMAN WITHIN RECTANGULAR DESIGN. Cl. 40. 11–12–29.
263,821. REPRESENTATION OF ARMORED KNIGHT ON HORSE AND DESIGN. Cl. 44. 11–12–29.
264,197. VIM AND DESIGN. Cl. 2. 11–19–29.
265,060. ROVER. Cl. 46. 12–17–29.
265,093. RIVER ROVER. Cl. 46. 12–17–29.
265,889. RADIUM AND DESIGN. Cl. 37. 1–7–30.
265,890. LA FONTAINE AND REPRESENTATION OF WOMAN AND FOUNTAIN. Cl. 37. 1–7–30.
309,502. MONTECRISTO. Cl. 47. 1–16–34.
349,054. TRADEWINDER AND REPRESENTATION OF SAILING VESSEL. Cl. 39. 8–17–37.
380,477. MA VIOLETTE. Cl. 50. 8–20–40.
386,569. HYPRO. Cl. 23. 4–15–41.
386,802. HYPRO. Cl. 37. 4–22–41.
387,036. BFD WITHIN CIRCULAR DESIGN. Cl. 2. 4–29–41.
424,622. STRUT. Cl. 28. 10–15–46.
430,080. ROTA-BRAKE. Cl. 23. 6–10–47.
519,553. DAREX. Cl. 22. 1–10–50.
519,557. LIFE GUARD CUSHION RUG HOLDER AND REPRESENTATION OF CROSS WITHIN CIRCULAR DESIGN. Cl. 50. 1–10–50.
519,558. PEKAY POWER PLOWS AND DESIGN. Cl. 26. 1–10–50.
519,560. PIN KING. Cl. 23. 1–10–50.
519,561. O. Cl. 23. 1–10–50.
519,564. WALES. Cl. 50. 1–10–50.
519,565. MUSETTE. Cl. 39. 1–10–50.
519,573. K-C-LITE. Cl. 1. 1–10–50.
519,574. AMBER. Cl. 22. 1–10–50.
519,576. BRUSSELS. Cl. 22. 1–10–50.
519,583. ROTO-FLO. Cl. 23. 1–10–50.
519,584. THE CHEN CULATOR AND REPRESENTATION OF ABACUS. Cl. 26. 1–10–50.
519,588. HAMPTON. Cl. 1. 1–10–50.
519,591. REXITE. Cl. 14. 1–10–50.
519,592. SPORTSMAN OFFICIAL AID. Cl. 22. 1–10–50.
519,593. B & G BELL & GOSSETT COMPANY AND DESIGN. Cl. 26. 1–10–50.
519,595. CHEERIO AND DESIGN. Cl. 22. 1–10–50.
519,596. VARNEY. Cl. 22. 1–10–50.
519,597. BLASCO HABANA DE LUXE AND PORTRAIT DESIGN. Cl. 17. 1–10–50.
519,614. SIMULA-BROADTAIL (MOIRE PERSIAN PAW). Cl. 39. 1–10–50.
519,615. PERMA NETTING. Cl. 13. 1–10–50.
519,617. BOCONIZE. Cl. 6. 1–10–50.
519,623. JANE DOE. Cl. 39. 1–10–50.
519,624. INSIDIA. Cl. 51. 1–10–50.
519,625. A DILLAR-A DOLLAR. Cl. 22. 1–10–50.
519,626. NUMBERETTE. Cl. 23. 1–10–50.
519,628. WOODROW SUPREME QUALITY FINIS OPUS CORONAT W AND DESIGN. Cl. 39. 1–10–50.
519,633. VIS-O-TOG. Cl. 50. 1–10–50.
519,637. YOURCHILD WITHIN CIRCULAR DESIGN. Cl. 22. 1–10–50.
519,639. 'RALPO'. Cl. 23. 1–10–50.
519,640. GEOMETRIC DESIGN. Cl. 52. 1–10–50.
519,641. PEG O' MY HEART. Cl. 22. 1–10–50.
519,645. DS. Cl. 28. 1–10–50.
519,655. PASK. Cl. 50. 1–10–50.
519,657. OMAR-SCRYPT. Cl. 28. 1–10–50.
519,661. RAMA SPIN AND REPRESENTATION OF RAM'S HEAD. Cl. 8. 1–10–50.
519,662. CIPRA AND PORTRAIT. Cl. 28. 1–10–50.
519,664. GEP-ROD ACTIONIZED SPINNING AND DESIGN. Cl. 22. 1–10–50.
519,671. WOLF BAIT AND REPRESENTATION OF DOLL. Cl. 22. 1–10–50.
519,673. LACE CURTAIN. Cl. 17. 1–10–50.
519,675. FOUR ACES WITHIN CIRCULAR DESIGN. Cl. 51. 1–10–50.
519,676. LITEXIN. Cl. 18. 1–10–50.
519,687. D J'S BEST AND REPRESENTATION OF WOMEN WITHIN SQUARE DESIGN. Cl. 45. 1–10–50.
519,688. WALES SWEETHEART WALES AND SHIELD DESIGN. Cl. 3. 1–10–50.
519,689. LOWILL. Cl. 27. 1–10–50.
519,690. "WHIM-WHAM". Cl. 22. 1–10–50.
519,693. AMAZIN' MAISIE. Cl. 22. 1–10–50.
519,696. PRESTO. Cl. 23. 1–10–50.
519,700. TRIG. Cl. 6. 1–10–50.
519,702. FEDERAL "LIFETIME" DE LUXE SEAT. Cl. 13. 1–10–50.
519,704. FB FAESY & BESTHOFF, INC. AND DESIGN. Cl. 6. 1–10–50.
519,705. MOODICATOR. Cl. 50. 1–10–50.
519,707. BACIDROPS. Cl. 18. 1–10–50.
519,709. IVX AND REPRESENTATION OF LEAVES. Cl. 18. 1–10–50.
519,710. FOTOFLAT. Cl. 5. 1–10–50.
519,711. FAIR 'N GAY. Cl. 39. 1–10–50.
519,712. DILEINE. Cl. 6. 1–10–50.
519,720. EXCENTRIC. Cl. 51. 1–10–50.
519,721. LA FLEUR FOLLE. Cl. 51. 1–10–50.
519,723. KONIX. Cl. 50. 1–10–50.
519,724. Q-NEEK AND DESIGN. Cl. 6. 1–10–50.
519,727. ELOMIAN. Cl. 51. 1–10–50.
519,729. RIB-N-RITE. Cl. 11. 1–10–50.
519,730. TEPS AND DESIGN. Cl. 18. 1–10–50.
519,731. SHORT STOP. Cl. 22. 1–10–50.
519,737. PARMAZOIC. Cl. 18. 1–10–50.
519,739. COMPAL. Cl. 18. 1–10–50.
519,748. LAUNDEX. Cl. 6. 1–10–50.
519,749. KIP. Cl. 18. 1–10–50.
519,751. "BETMUR". Cl. 14. 1–10–50.
519,754. MARCH OF DIMES. Cl. 51. 1–10–50.
519,765. N-M-P-. Cl. 11. 1–10–50.
519,768. BEAUTE-GARD. Cl. 39. 1–10–50.
519,771. MON AMOUR. Cl. 51. 1–10–50.
519,773. GOLD CHAIN. Cl. 6. 1–10–50.
519,776. POLENE. Cl. 11. 1–10–50.
519,777. HEARTCRAFT. Cl. 28. 1–10–50.
519,787. THE WILSON SYSTEM AND DESIGN. Cl. 101. 1–10–50.
519,788. AIRCONOMY PLAN. Cl. 105. 1–10–50.
519,792. "MOTEUR MULTIPLEX". Cl. 23. 1–10–50.
519,794. ROLL ON WITH E Z ROLL WHEELS AND DESIGN. Cl. 22. 1–10–50.
519,795. PUREWRAP. Cl. 2. 1–10–50.
519,799. GILBERT LEWIS, PERRY. Cl. 18. 1–10–50.
519,803. MME. LILLIAN ANDERSON AND REPRESENTATION OF FLOWERS. Cl. 51. 1–10–50.
519,804. SUPERSEAL. Cl. 15. 1–10–50.
519,805. ARM & HAMMER BAKING SODA CHURCH & CO'S ETC. AND DESIGN. Cl. 46. 1–10–50.
519,806. RUBENS MILD CIGARS AND PORTRAIT WITHIN OVAL DESIGN. Cl. 17. 1–10–50.
519,810. THE LURE WITH THE KEEL WITHIN CIRCULAR DESIGN. Cl. 22. 1–10–50.
519,813. FARM-EASY. Cl. 23. 1–10–50.
519,815. LOVELIES BY LOVE. Cl. 39. 1–10–50.
519,816. COCKTAIL FOAM ALWAYS A HEAD AND REPRESENTATION OF COCKTAIL. Cl. 45. 1–10–50.
519,817. MANE DRESS. Cl. 51. 1–10–50.
519,818. HOOK-GRIP. Cl. 22. 1–10–50.
519,822. VIM-OIL A VITAMIN CONTAINING OIL GOOD IN THE TREATMENT OF ARTHRITIS BY MASSAGE AND DESIGN. Cl. 18. 1–10–50.
519,825. EHLERS TOPS ALL COFFEE "IT'S THE TOPS" AND DESIGN. Cl. 46. 1–10–50.
519,826. LO-CALORY. Cl. 18. 1–10–50.
519,827. AMBER LITE. Cl. 51. 1–10–50.
519,828. RICHTER'S. Cl. 18. 1–10–50.
519,830. PLYMOLD. Cl. 3. 1–10–50.

519,831. DR. DAY AND DESIGN. Cl. 45. 1–10–50.
519,833. CHAPMAN'S AND ARROW DESIGN. Cl. 18. 1–10–50.
519,834. BELKNAP GRIP SMOOTH. Cl. 39. 1–10–50.
519,840. SAVE AND SHARE PLAN FOR WAGE DIVIDENDS P-M-E-A AND DESIGN. Cl. 101. 1–10–50.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

534,736. KECO. Cl. 21. 12–12–50. Keco Industries, Inc., Cincinnati, Ohio. Corrected: In the printed copy of the registration, "Supplemental" should be *Principal.*

558,986. HOWDY DOODY. Cl. 39. 5–20–52. Robert E. Smith, assignor to Kagran Corporation, New York, N. Y. Corrected: In the certificate, lines 3 and 14, and in the heading to the statement, "Kagram" should be *Kagran.*

570,813. HOWDY DOODY. Cl. 107. 2–17–53. Robert E. Smith, assignor to Kagran Corporation, New York, N. Y. Corrected: In the certificate, lines 3 and 14, and in the heading to the statement, "Kagram" should be *Kagran.*

618,047. HYDRIN. Cl. 6. 12–27–55. Nox-Rust Chemical Corporation, by change of name Daubert Chemical Company, Chicago, Ill. Corrected: In the certificate, line 3, after "Corporation," (first occurrence), *by change of name Daubert Chemical Company,* should be inserted; line 13, after "to" *Daubert Chemical Company, by change of name from* should be inserted; and in line 1 of the printed copy of the registration, after "(Illinois corporation)" , *by change of name Daubert Chemical Company* should be inserted.

621,973. PHYTOMYCIN. Cl. 6. 2–28–56. Olin Mathieson Chemical Corporation, New York, N. Y. Corrected: In column 2, line 3 of the printed copy of the registration, "fire-bright" should be *fireblight.*

623,588. NYTON. Cl. 42. 3–20–56. Diener Knitting Mills, Inc., Leesport, Pa. Corrected: In the certificate, linea 2 and 13, and in line 1 of the printed copy of the registration, "Dienner" should be *Diener.*

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 37

434,194. Nov. 11, 1947. Max M. Neuhoff, New York, N. Y. Pub. by registrant.

ROBIN HOOD

For Fountain Pens.

CLASS 39

196,993. Apr. 7, 1925. Bullock's, Los Angeles, Calif. Pub. by Bullock's Inc., Los Angeles, Calif.

Collegienne

For Shoes of Leather, Rubber, Fabric and Combinations; Girls' and Junior Girls' Hats; and Girls' and Junior Girls' Coats, Suits, Dresses, Sweaters, Skirts, and Blouses.

343,589. Feb. 23, 1937. Hart Schaffner & Marx, Chicago, Ill. Pub. by registrant.

Towertown

For Men's and Boys' Suits, Coats, Overcoats, Topcoats, Vests, Trousers, Knickerbockers, and Breeches.

CLASS 42

334,514. May 5, 1936. Pepperell Manufacturing Company, Boston, Mass. Pub. by registrant.

SALISBURY

For Sheets and Pillow Cases.

CLASS 49

327,085. Aug. 13, 1935. James Keith Ltd., Hamilton, England. Pub. by registrant.

KEITH'S CADZOW BLEND.
Old Liqueur Whisky
James Keith Limited.
Hamilton
SCOTLAND.



All notations except "Sola Nobilitat Virtus," "Keith's," "James Keith Limited" and "Wild Cattle in Forest" are disclaimed apart from the mark as shown.

For Scotch Whisky.

CLASS 51

409,088. Sept. 12, 1944. The Wella Corporation, Englewood, N. J. Pub. by registrant.

BEAUTILOX

For Permanent Wave Solution.

409,337. Oct. 3, 1944. The Wella Corporation, Englewood, N. J. Pub. by registrant.

BLON DOR

For Hair Bleach.

409,704. Oct. 17, 1944. The Wella Corporation, Englewood, N. J. Pub. by registrant.

WELLOX

For Permanent Wave Solution.

409,826. Oct. 24, 1944. The Wella Corporation, Englewood, N. J. Pub. by registrant.

WELLIN

For Permanent Wave Solutions.

CLASS 52

435,211. Dec. 16, 1947. Sanitek Products Company, Los Angeles, Calif. Pub. by Sanitek Products, Inc., Los Angeles, Calif.

SAN-OVER

For Concentrated Cleaner Liquid for Cleaning Floors, Walls, and Woodwork.

443,735. Feb. 7, 1950. Harco Chemical Company, E. Cranford, N. J. Pub. by registrant.

SPRA-KLEEN

For Liquid Alkaline Concentrate of Compounded Chemicals for Use as an All-Purpose Detergent and Control in Water Curtains for Paint Spray Booths.

LIST OF REGISTRANTS OF TRADEMARKS

A A A Sales Co., Philadelphia, Pa. 626,954, pub. 2–28–56. Cl. 32.

A. J. & K. Co.: *See*—
A. J. & K. Co., Inc.

A. J. & K. Co., Inc., New York, N. Y., to E. Ferne Hoffstot, d. b. a. A. J. & K. Co., Colchester, Conn. 331,728, ren. 1–21–56. Cl. 2.

A. P. W. Products Co., Inc., New York, N. Y. 626,986, pub. 2–28–56. Cl. 37.

Abbott Laboratories, North Chicago, Ill. 626,816, pub. 2–28–56. Cl. 18.

Abco, Inc., McKeesport, Pa. 627,151, pub. 2–28–56. Cl. 52.

Adco, Inc., Salt Lake City, Utah. 627,004, pub. 2–28–56. Cl. 38.

Aerocem Ltd., London, England. 626,919, pub. 2–28–56. Cl. 23.

Aeroprojects, Inc., West Chester, Pa. 626,869, pub. 2–28–56. Cl. 21.

Airstream Trailers, Inc., Jackson Center, Ohio. 626,827, pub. 2–28–56. Cl. 19.

Alba Hosiery Mills, Inc., Valdese, N. C. 627,041, pub. 2–28–56. Cl. 39.

Albert, Inc., Chicago, Ill. 627,034, pub. 2–28–56. Cl. 39.

Allen Foods, Inc., St. Louis, Mo. 627,117, pub. 2–28–56. Cl. 46.

Allen, J. W., & Co., Chicago, Ill. 627,106, pub. 3–22–55. Cl. 46.

Allen & Lewis, to General Grocery Co., Inc., Portland, Oreg. 109,811, ren. 4–18–56. Cl. 46.

Almac Laboratories, Inc., Scranton, Pa. 519,730, canc. Cl. 18.

Altman, B., & Co., New York, N. Y. 235,585, canc. Cl. 38.

Ambrose, Joseph, Jr., Vineland, N. J. 626,996, pub. 2–28–56. Cl. 38.

American Airlines, Inc., New York, N. Y. 519,788, canc. Cl. 105.

American Cyanamid Co., New York, N. Y. 626,812–14, pub. 2–28–56. Cl. 18.

American Numbering Machine Co., Brooklyn, N. Y. 519,626, canc. Cl. 23.

American Printers & Lithographers, Inc., Chicago, Ill. 626,979, pub. 2–28–56. Cl. 37.

American Record Corp., New York, N. Y., to Columbia Broadcasting System, Inc., Bridgeport, Conn. 331,053, ren. 12–24–55. Cl. 36.

American Road Equipment Co., Omaha, Nebr. 626,829, pub. 2–28–56. Cl. 19.

American Steel Foundries, Chicago, Ill. 626,777, pub. 2–28–56. Cl. 14.

American Viscose Corp., Philadelphia, Pa. 627,002, pub. 2–28–56. Cl. 38.

American Weapons Corp., Burbank, Calif. 626,745, pub. 2–28–56. Cl. 9.

Amerotron Corp., New York, N. Y. 627,054–6, pub. 2–28–56. Cl. 42.

Anderson Co., The, Gary, Ind. 626,822, pub. 2–28–56. Cl. 19.

Anderson, Lillian, Manhasset, N. Y. 519,803, canc. Cl. 51.

Angus Mills, Inc., Vass, N. C. 626,940, pub. 7–19–55. Cl. 29.

Appleton Electric Co., Chicago, Ill. 626,834–5, pub. 2–28–56. Cl. 21.

Arch Lamp Mfg. Corp., New York, N. Y. 626,831, pub. 7–5–55. Cl. 21.

Arden, Elizabeth, Sales Corp., New York, N. Y. 519,771, canc. Cl. 51.

Aristo Import Co. Inc., New York, N. Y. 626,937, pub. 8–30–55. Cl. 27.

Armour and Co., Chicago, Ill. 627,111, pub. 2–28–56. Cl. 46.

Armstrong Cork Co., Manheim Township, Lancaster County, Pa. 519,561, canc. Cl. 23.

Arnold Bakers, Inc., Port Chester, N. Y. 627,122, pub. 2–28–56. Cl. 46.

Arnold, Mr., Inc., New York, N. Y. 627,014, pub. 2–28–56. Cl. 39.

Arrow-Hart & Hegeman Electric Co., The, Hartford, Conn. 335,050, ren. 5–19–56. Cl. 21.

Ascher, B. F., & Co., Inc., Kansas City, Mo. 626,805, pub. 9–13–55. Cl. 18.

Atlantic Refining Co., The, Philadelphia, Pa. 336,594, ren. 7–7–56. Cl. 6.

Atlas Powder Co., Wilmington, Del. 626,837, pub. 2–28–56. Cl. 21.

Augat, Ernest H., Attleboro, Mass. 424,622, canc. Cl. 2, 8, and 28.

B and W Inc., Los Angeles, Calif. 626,915, pub. 2–28–56. Cl. 23.

Bellard & Ballard Co., Louisville, Ky., to Pillsbury Mills, Inc., Minneapolis, Minn. 331,931, ren. 1–28–56. Cl. 46.

Barakuda Gesellschaft fur Wassersport Ristau & Co., Hamburg, Germany. 626,883, pub. 2–28–56. Cl. 22.

Barreled Sunlight Paint Co.: *See*—
Pittsburgh Plate Glass Co.

Barton Salt Co., The, Hutchinson, Kans. 336,417, ren. 7–7–56. Cl. 18.

Barwick, E. T., Mills, Chamblee, Ga. 627,071–2, pub. 2–28–56. Cl. 42.

Bates Mfg. Co., Lewiston, Maine. 627,062, pub. 2–28–56. Cl. 42.

Bauer, J. E., Co., Los Angeles, Calif. 626,786, pub. 2–28–56. Cl. 16.

Baxter, Don, Inc., Glendale, to Pancro Mirrors, Inc., Los Angeles, Calif. 330,567, ren. 12–3–55. Cl. 26.

Baxter Laboratories, Inc., Morton Grove, Ill. 627,100, pub. 2–28–56. Cl. 44.

Bay State Milling Co., Winona, Minn. 627,125, pub. 2–28–56. Cl. 46.

Bead Chain Mfg. Co., The, Bridgeport, Conn. 626,765, pub. 2–28–56. Cl. 13.

Beautifiute, Inc., Keyport, N. J. 627,048, pub. 2–28–56. Cl. 42.

Beaver Alkali Products: *See*—
Kloman, Drew.

Becker, Frank, Eleanor Becker, and Ada Becker: *See*—
Tyler, Toby, & Co., Inc.

Beiderwell, George E., d. b. a. Ideal Reel Co., Paducah, Ky. 626,730, pub. 7–26–55. Cl. 2.

Belford Co., Inc., New York, N. Y. 626,773, pub. 2–28–56. Cl. 13.

Bell & Gossett Co., Morton Grove, Ill. 519,593, canc. Cl. 26.

Bell Textile Co., Inc., New York, N. Y. 627,069–70, pub. 2–28–56. Cl. 42.

Belnap Mills Corp., Laconia, N. H. 519,834, canc. Cl. 39.

Bencoine Uniforms Inc.: *See*—
Cohen, Benjamin.

Benedict, Barbara M., Lynden, Wash. 627,003, pub. 2–28–56. Cl. 38.

Berkeley Industries, Jersey City, N. J. 627,134, pub. 2–28–56. Cl. 50.

Bernad Creations, Ltd., Yonkers, N. Y. 626,952, pub. 2–28–56. Cl. 32.

Berst-Forster-Dixfield Co., New York, N. Y. 380,477, canc. Cl. 50.

Berst-Forster-Dixfield Co., New York, N. Y. 386,569, canc. Cl. 23.

Berst-Forster-Dixfield Co., New York, N. Y. 386,802, canc. Cl. 37.

Berst-Forster-Dixfield Co., New York, N. Y. 387,036, canc. Cl. 2.

Bethco Bedding Corp., Allentown, Pa. 626,961, pub. 2–28–56. Cl. 32.

Betmur Steel Corp., Detroit, Mich. 519,751, canc. Cl. 14.

Bienen-Davis, Inc., New York, N. Y. 334,765, ren. 5–12–56. Cl. 3.

Blackhawk Mfg. Co., West Allis, Wis. 626,903, pub. 2–21–56. Cl. 23.

Bloom, Joseph C., d. b. a. Freeze Eazy Industries, Santa Rosa, Calif. 626,945, pub. 2–28–56. Cl. 31.

Blum, Milton C., Inc., New York, N. Y. 627,053, pub. 2–28–56. Cl. 42.

Bocon Chemical Corp., New York, N. Y. 519,617, canc. Cl. 6.

Bohme Fettchemie G. m. b. H., Dusseldorf, Germany. 627,147, pub. 2–28–56. Cl. 52.

Bordman Co., The, Philadelphia, Pa. 332,586, ren. 2–18–56. Cl. 6.

Boynton, Beryl W., Lafayette, Calif. 519,671, canc. Cl. 22.

Brant Yarns, Inc., New York, N. Y. 627,090, pub. 6–22–54. Cl. 43.

Brennan Illinois Iron Works, Inc., Chicago, Ill. 626,768, pub. 2–28–56. Cl. 13.

Brentwood Distributors: *See*—
Smith, Howard.

Brierley Co., The: *See*—
Brierley, Ralph E.

Brierley, Ralph E., d. b. a. The Brierley Co., New York, N. Y. 626,804, pub. 3–17–53. Cl. 18.

Brooklyn Paint & Varnish Co., Inc., Brooklyn, N. Y. 626,800, pub. 2–28–56. Cl. 16.

Brown-Brockmeyer Co., The, Dayton, Ohio. 626,849, pub. 2–28–56. Cl. 21.

Brown-Forman Distillers Corp., Louisville, Ky. 627,131, pub. 2–28–56. Cl. 49.

Bruce, E. L., Co., Memphis, Tenn. 252,754, canc. Cl. 6.

Brunswick-Balke-Collender Co., The, Chicago, Ill. 519,560, canc. Cl. 23.

Buckeye Ribbon & Carbon Co., The, Cleveland, Ohio. 626,753, pub. 2–28–56. Cl. 11.

Bullock's, by Bullock's Inc., Los Angeles, Calif. 196,993, 12(c) pub. 5–15–56. Cl. 39.

Bullock's Inc.: *See*—
Bullock's.

C & H Supply Co.: *See*—
Collins, John E.

Cable Electric Products, Inc., Providence, R. I. 626,830, pub. 2–28–56. Cl. 21.

Calanca, Daniele, d. b. a. Danny's Products, Washington, D. C. 627,109, pub. 2–28–56. Cl. 46.

Calgon, Inc., Pittsburgh, Pa. 626,931, pub. 2–28–56. Cl. 26.

California Magnetic Control Corp., North Hollywood, Calif. 626,878, pub. 2–28–56. Cl. 21.

Camp, Harry, Millinery Co., San Francisco, Calif. 627,024, pub. 2–28–56. Cl. 39.

Carter, William, Co., The, Needham Heights, Mass. 627,013, pub. 3–23–54. Cl. 39.

Catalin Corp. of America, New York, N. Y. 626,733, pub. 2–21–56. Cl. 5.

Cattle Capital Mfg. Co., The, Alliance, to Worden Co., Grand Island, Nebr. 627,159–60. Cl. 23.

Celeste Frocks, Inc., New York, N. Y. 627,045, pub. 2–28–56. Cl. 39.

Central States Industries, Inc., Royal Oak, Mich. 626,960, pub. 2–28–56. Cl. 32.

Chapman, Roland D., Laguna Beach, Calif. 519,833, canc. Cl. 18.
Chandler, Ernest, Inc., New York, N. Y. 626,884, pub. 2–28–56. Cl. 22.
Chase, J. L., Co., Chicago, Ill. 626,969, pub. 2–28–56. Cl. 32.
Cheerio Toys & Games Inc., Lockport, N. Y. 519,595, canc. Cl. 22.
Chemicals & Materials Corp.: *See*—
Chemicals & Materials Distributors Corp.
Chemicals & Materials Distributors Corp., d. b. a. Chemicals & Materials Corp., Terre Haute, Ind. 627,146, pub. 2–28–56. Cl. 52.
Chemische Fabriken Dr. Joachim Wiernik & Co. Aktiengesellschaft, Berlin-Waidmannslust, Germany, to Veritas Drug Co. Ltd., Shrewsbury, England. 333,643, ren. 3–31–56. Cl. 18.
Chemola Mfg. Co., Houston, Tex. 519,804, canc. Cl. 15.
Chernack, Molly, d. b. a. Gold Chain Exterminators, Brooklyn, N. Y. 519,773, canc. Cl. 6.
Chicago Pump Co., Chicago, Ill. 626,766, pub. 2–28–56. Cl. 13.
Chin, George M., Irvington, N. J. 519,584, canc. Cl. 26.
Chittenden & Eastman Co., Burlington, Iowa. 336,144, ren. 6–30–56. Cl. 32.
Christy Cosmetics Inc., New York, N. Y. 519,754, canc. Cl. 51.
Chu, Paul E., New York, N. Y. 626,929, pub. 2–28–56. Cl. 26.
Church & Dwight Co., Inc., New York, N. Y. 519,805, canc. Cl. 46.
Cincinnati Mfg. Corp., d. b. a. The United States Machine Tool Co., Cincinnati, Ohio. 626,910, pub. 2–28–56. Cl. 23.
Clark, C. A., Mfg. Co., Inc., Springfield, Mo. 519,810, canc. Cl. 22.
Clevite Corp., Cleveland, Ohio. 626,851, pub. 2–28–56. Cl. 21.
Cohen, Benjamin, New York, to Bencone Uniforms Inc., White Plains, N. Y. 335,906, ren. 6–16–56. Cl. 39.
Cohen, David A., d. b. a. Daycon Products Co., Washington, D. C. 627,148, pub. 2–28–56. Cl. 52.
Cohen, Joseph H., & Sons, Inc., New York, N. Y. 627,031, pub. 2–28–56. Cl. 39.
Colgate-Palmolive Co., Jersey City, N. J. 627,143, pub. 2–28–56. Cl. 52.
Collet, Paul, & Co. Ltd., Montreal, Quebec, Canada. 626,757, pub. 2–28–56. Cl. 12.
Collins, John E., d. b. a. C & H Supply Co., Dallas, Tex. 626,873–4, pub. 2–28–56. Cl. 21.
Colonial Molasses Co. of La., Inc., New Orleans, La. 627,105, pub. 7–19–55. Cl. 46.
Colorado Fuel and Iron Corp., The, Denver, Colo. 626,747, pub. 9–20–55. Cl. 10.
Columbia Broadcasting System, Inc.: *See*—
American Record Corp.
Columbia Walescraft, Ltd., New York, N. Y. 519,688, canc. Cl. 3.
Columbian Rope Co., Auburn, N. Y. 519,557, canc. Cl. 50.
Commercial Solvents Corp., Terre Haute, Ind. 333,246, ren. 3–10–56. Cl. 6.
Complnex Oil Co., New York, N. Y. 626,782, pub. 2–28–56. Cl. 15.
Consolidated Midland Corp., Katonah, N. Y. 626,819–21, pub. 2–28–56. Cl. 18.
Continental Can Co., Inc., New York, N. Y. 626,729, pub. 2–21–56. Cl. 2.
Cooper, Daniel, d. b. a. Supercraft Mfg. Co., New York, N. Y. 626,991, pub. 2–28–56. Cl. 37.
Cortland Line Co., Inc., Cortland, N. Y. 626,889, pub. 2–28–56. Cl. 22.
Cosmos Electronic Machine Corp., New York, N. Y. 626,847, pub. 2–28–56. Cl. 21.
Coty, Inc., New York, N. Y. 519,827, canc. Cl. 51.
Craddock-Terry Shoe Corp., Lynchburg, Va. 627,033, pub. 2–28–56. Cl. 39.
Cranston Print Works Co., New York, N. Y. 627,166. Cl. 106.
Crawford, Carol, Inc., New York, N. Y. 627,043, pub. 2–28–56. Cl. 39.
Creco Co., Inc., Long Island City, N. Y. 336,100, ren. 6–23–56. Cl. 52.
Crest Lock Co., Inc., New York, N. Y. 626,927, pub. 8–17–54. Cl. 25.
Crocker, Burbank Papers Inc., Fitchburg, Mass. 626,987–90, pub. 2–28–56. Cl. 37.
Crown Zellerbach Corp., San Francisco, Calif. 626,993, pub. 2–28–56. Cl. 37.
Crucible Corp., Chicago, Ill. 626,826, pub. 2–28–56. Cl. 19.
Crucible Steel Co. of America, New York, N. Y. 519,591, canc. Cl. 14.
Crump, B. T., Co., Inc., Richmond, Va. 626,824, pub. 2–28–56. Cl. 19.
Cruse, Forest, Austin, Tex. 626,896–8, pub. 2–28–56. Cl. 23.
Cummins Engine Co., Inc., Columbus, Ind. 626,901, pub. 7–12–55. Cl. 23.
D. R. M. Corp., Manitowoc, Wis. 626,894, pub. 6–14–55. Cl. 23.
Dauer, Samuel J., Newark, N. J. 626,771, pub. 2–28–56. Cl. 13.
Danny's Products: *See*—
Calanca, Daniele.
Darby, Wesley C., d. b. a. Kink-Kee Leader Co., Des Moines, Iowa. 626,890, pub. 2–28–56. Cl. 22.
Daubert Chemical Co.: *See*—
Nox-Rust Chemical Corp.
Daycon Products Co.: *See*—
Cohen, David A.
De La Rue, Thomas, & Co. Ltd., London, England. 626,885, pub. 2–28–56. Cl. 22.
Delaware Punch Bottling Co., The: *See*—
Ireland, D. J.
Delecto Products Co., San Mateo, Calif. 519,748, canc. Cl. 6.
Devonsheer Melba Corp., West New York, N. J. 627,162. Cl. 46.
Dewey and Almy Chemical Co., Cambridge, Mass. 519,553, canc. Cl. 22.
Dial Products Co., Newark, N. J. 626,842, pub. 2–28–56. Cl. 21.
Diamond Alkali Co., Cleveland, Ohio. 627,142, pub. 2–28–56. Cl. 52.
Diamond Black Leaf Co.: *See*—
Virginia-Carolina Chemical Corp.
Diamond Chain Co., Inc., Indianapolis, Ind. 626,895, pub. 2–28–56. Cl. 23.
Dickson Mfg. Co., Providence, R. I. 519,662, canc. Cl. 28.
Diener Knitting Mills, Inc., Leesport, Pa. 623,588, cor. Cl. 42.
Dixon, Joseph, Crucible Co., Jersey City, N. J. 336,632, ren. 7–14–56. Cl. 37.
Dole Valve Co., The, Chicago, Ill. 626,774, pub. 2–21–56. Cl. 13.
Dolphin Chemical Co., St. Louis, Mo. 626,732, pub. 2–28–56. Cl. 4.
Dow Corning Corp., Midland, Mich. 626,863, pub. 2–28–56. Cl. 21.
Dri-Babe of California, Inc., Santa Monica, Calif. 627,010, pub. 3–23–54. Cl. 39.
DuKane Corp., St. Charles, Ill. 626,857, pub. 2–28–56. Cl. 21.
Du Pont, E. I., de Nemours and Co., Wilmington, Del. 627,124, pub. 2–28–56. Cl. 46.
Dupont, E. W. & A. P., Inc., Morgan City, La. 626,825, pub. 2–28–56. Cl. 19.
Duralite Window Corp., Knoxville, Tenn. 626,760, pub. 2–28–56. Cl. 12.
Durlin Co., Newark, N. J. 626,163. Cl. 51.
Durst S.-A., Bolzano, Italy. 626,934, pub. 2–21–56. Cl. 26.
E-Z Roll Co., West Mellenry, Ill. 519,794, canc. Cl. 22.
Eastman Kodak Co., Rochester, N. Y. 626,739, pub. 2–28–56. Cl. 6.
Eclipse Air Brush Co., Newark, N. J. 626,908–9, pub. 2–28–56. Cl. 23.
Ehlers, Albert, Inc., Brooklyn, N. Y. 519,825, canc. Cl. 46.
Ekco Products Co., Chicago, Ill. 626,918, pub. 2–28–56. Cl. 23.
Ekco Products Co., Chicago, Ill. 626,942, pub. 2–28–56. Cl. 29.
Elco Lamp & Shade Studio, Inc., Mount Vernon, N. Y. 626,974, pub. 2–28–56. Cl. 34.
Electro Mfg. Corp., Chicago, Ill. 626,853, pub. 2–28–56. Cl. 21.
Electronic Devices, Inc., Brooklyn, N. Y. 626,844, pub. 2–28–56. Cl. 21.
Elgin-Neomatic, Inc., Los Angeles, Calif. 626,858, pub. 2–28–56. Cl. 21.
Emerson Electric Mfg. Co., The, St. Louis, Mo. 626,876, pub. 2–28–56. Cl. 21.
Englander Co., Inc., The, Chicago, Ill. 626,957, pub. 2–21–56. Cl. 32.
Escalante, Jose, & Co., Chicago, Ill. 519,597, canc. Cl. 17.
Escalante, Jose, & Co., Chicago, Ill. 519,806, canc. Cl. 17.
Esserman Bros., New York, N. Y. 519,614, canc. Cl. 39.
Esso Research and Engineering Co.: *See*—
Standard Oil Development Co.
Evans, John R., & Co.: *See*—
Ruby Kid Co.
Even-Pul Foundations, Inc., New York, N. Y. 627,018, pub. 6–7–55. Cl. 39.
Exhibit Supply Co., Chicago, Ill. 519,731, canc. Cl. 22.
Faesy & Besthoff, Inc., New York, N. Y. 519,704, canc. Cl. 6.
Fairsex Sportswear, Corp., New York, N. Y. 519,711, canc. Cl. 39.
Farah Mfg. Co., Inc., El Paso, Tex. 627,029, pub. 2–28–56. Cl. 39.
Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. 627,091, pub. 2–28–56. Cl. 43.
Farm Bureau Cooperative Association, Inc., The, Columbus, Ohio. 626,750, pub. 2–28–56. Cl. 10.
Federal Seat Corp., Long Island City, N. Y. 519,702, canc. Cl. 13.
Fertilene Corp. of America, Worthington, Ohio. 626,749, pub. 2–28–56. Cl. 10.
Fidelity Chemical Products Corp., Newark, N. J. 627,144, pub. 2–28–56. Cl. 52.
Fielderest Mills, Inc., Spray, N. C. 627,049, pub. 2–28–56. Cl. 42.
Finger Lakes Peat Moss Co., Waterloo, N. Y. 626,746, pub. 8–25–53. Cl. 10.
Fisher, Jack, d. b. a. Industrial Sanitary Supply Co., Los Angeles, Calif. 627,145, pub. 10–11–55. Cl. 52.
Fleet-Wing Corp., Cleveland, Ohio. 626,785, pub. 2–21–56. Cl. 15.
Food Machinery and Chemical Corp., San Jose, Calif. 626,891, pub. 10–16–51. Cl. 23.
Forstmann Woolen Co., Passaic, N. J. 627,076–89, pub. 2–28–56. Cl. 42.
Fowler, Ben B., d. b. a. The Jet-Chute Co., Fort Worth, Tex. 626,882, pub. 2–28–56. Cl. 22.
Frame, Charles W., Salt Lake City, Utah. 626,748, pub. 2–28–56. Cl. 10.
Freeze Eazy Industries: *See*—
Bloom, Joseph C.
Frenchtown Porcelain Co., Trenton, N. J. 626,860–1, pub. 2–28–56. Cl. 21.
Friedrich, Ed, Inc., San Antonio, Tex. 626,951, pub. 2–28–56. Cl. 31.
Fuld Bros., Inc., Baltimore, Md. 332,734, ren. 2–25–56. Cl. 4.
Gandolfi, L., & Co., Inc., New York, N. Y. 309,502, canc. Cl. 47.
Garland, Harold F., Jr., Santa Ana, Calif. 627,000, pub. 2–28–56. Cl. 38.

Garrard Engineering & Mfg. Co., Ltd., The, Swindon, England. 626,855, pub. 2–28–56. Cl. 21.
Garvenswerke: *See*—
Schoenborn-Buchheim, George.
General Dynamics Corp., New York, N. Y., from Stromberg-Carlson Co. 626,839, pub. 2–21–56. Cl. 21.
General Dynamics Corp., New York, N. Y. 626,880, pub. 2–28–56. Cl. 21.
General Features Corp., New York, N. Y. 627,008, pub. 2–28–56. Cl. 38.
General Felt Products, Inc., New York and Brooklyn, N. Y., to Standard Packaging Corp., Chicago, Ill. 335,830, ren. 6–16–56. Cl. 42.
General Grocery Co., Inc.: *See*—
Allen & Lewis.
General Motors Corp., Detroit, Mich. 626,872, pub. 2–28–56. Cl. 21.
General Purification Co., Phoenix, Aris., and Madison, Wis., to The Pennsylvania Salt Mfg. Co., Philadelphia, Pa. 108,332, ren. 2–1–56. Cl. 6.
Gephart Mfg. Co., Chicago, Ill. 519,664, canc. Cl. 22.
Gernsback, Hugo, New York, N. Y. 626,999, pub. 2–28–56. Cl. 38.
Gielow, J. J., & Sons, Inc., d. b. a. M. & R. Trading Co., Detroit, to J. J. Gielow & Sons, Inc., Dearborn, Mich. 335,538, ren. 6–9–56. Cl. 46.
Gigandet, J. Herbert: *See*—
Reed, Stuart H., and J. Herbert Gigandet.
Gilbert & Bennett Mfg. Co., The, Georgetown, Conn. 159,615, canc. Cl. 13.
Gillette Co., The, d. b. a. The Toni Co., Boston, Mass. 627,149, pub. 2–28–56. Cl. 52.
Gilman Paper Co., New York, N. Y. 264,197, canc. Cl. 2.
Givlemme, S. A., Milan, Italy. 519,624, canc. Cl. 51.
Gladding, B. F., & Co. Inc., South Otselic, N. Y. 519,574, canc. Cl. 22.
Gladding, B. F., & Co. Inc., South Otselic, N. Y. 519,576, canc. Cl. 22.
Glenco Corp., Metuchen, N. J. 626,881, pub. 2–28–56. Cl. 21.
Glen Raven Knitting Mills, Inc., Glen Raven, N. C. 627,050, pub. 2–28–56. Cl. 42.
Glen Raven Cotton Mills, Inc., Glen Raven, N. C. 627,052, pub. 2–28–56. Cl. 42.
Glick Sportswear Co., Cleveland, Ohio. 627,037–8, pub. 2–28–56. Cl. 39.
Globe American Corp., Kokomo, Ind. 626,871, pub. 2–28–56. Cl. 21.
Gold Chain Exterminators: *See*—
Chernack, Molly.
Goldman, Wm. P., & Bros. Inc., New York, N. Y. 627,044, pub. 2–28–56. Cl. 39.
Golze, Richard, Staten Island, N. Y. 626,933, pub. 2–28–56. Cl. 26.
Goodrich, B. F., Co., The, New York, N. Y. 627,135, pub. 2–28–56. Cl. 50.
Gordon Bait Co.: *See*—
Gordon, Lewis.
Gordon, Lewis, d. b. a. Gordon Bait Co., Texarkana, Tex. 519,690, canc. Cl. 22.
Gotham Tissue Corp., New York, N. Y. 265,889–90, canc. Cl. 37.
Grasser, Josephine, Paris, France. 627,110, pub. 2–28–56. Cl. 40.
Green, A. P., Fire Brick Co., Mexico, Mo. 626,763, pub. 2–28–56. Cl. 12.
Greenbaum, J., Tanning Co., Chicago, Ill. 519,588, canc. Cl. 1.
Greenberg, Ernest, New York, N. Y. 627,022, pub. 11–1–55. Cl. 39.
Gruen Watch Co., The, Cincinnati, Ohio. 626,938, pub. 2–21–56. Cl. 27.
Guardian Chemical Corp., Long Island City, N. Y. 626,740, pub. 2–28–56. Cl. 6.
Grunfeld, Kalman: *See*—
Wachtel, Nathan J.
Gypsy Paint & Varnish Co., Inc., Brooklyn, N. Y. 626,799, pub. 2–28–56. Cl. 16.
H-K Equipment Co., Portland, Oreg. 626,775, pub. 2–28–56. Cl. 13.
Hamel, Georges R., Paris, France. 519,792, canc. Cl. 23.
Happy Day Co., Inc., Lafayette, La. 519,831, canc. Cl. 45.
Harco Chemical Co., E. Cranford, N. J. 443,735, 12(c) pub. 5–15–56. Cl. 52.
Hart Schaffner & Marx, Chicago, Ill. 343,589, 12(c) pub. 5–15–56. Cl. 39.
Hartmann Co., Racine, Wis. 519,830, canc. Cl. 3.
Hatch Full Fashioned Hosiery Co., Belmont, N. C. 261,775, canc. Cl. 39.
Hecht Co., The, Washington, D. C. 626,907, pub. 2–28–56. Cl. 32.
Hendrick Mfg. Co., Carbondale, Pa. 626,759, pub. 2–28–56. Cl. 12.
Hermann's Shoes, Inc., Harrisburg, Pa. 627,016, pub. 4–19–55. Cl. 39.
Hewlett-Packard Co., Palo Alto, Calif. 626,870, pub. 2–28–56. Cl. 21.
Hinson Mfg. Co., Waterloo, Iowa. 627,133, pub. 2–28–56. Cl. 50.
Hitchcock Chair Co., The, Riverton, Conn. 626,955, pub. 2–28–56. Cl. 32.
Hoffstot, E. Ferne: *See*—
A. J. & K. Co., Inc.
Honolulu Oil Corp.: *See*—
Industrial Research Laboratories, Ltd.
Houdaille-Hershey of Indiana, Inc., Lebanon, Ind., now Indiana Commercial Filters Corp. 626,948, pub. 2–28–56. Cl. 31.
Houdaille-Hershey of Indiana, Inc., Lebanon, Ind., now Indiana Commercial Filters Corp. 626,949, pub. 2–21–56. Cl. 31.
Huber, J. M., Corp., Red Bank, N. J., and New York, N. Y. 519,765, canc. Cl. 11.
Humble Oil & Refining Co., Houston, Tex. 332,147, ren. 2–4–56. Cl. 12.
Humphreys Medicine Co., Inc., New York, N. Y. 626,808, pub. 2–28–56. Cl. 18.
IVX Laboratories: *See*—
Kross, Charles M.
Ideal Reel Co.: *See*—
Helderwell, George E.
Illumitronic Engineering Co., Sunnyvale, Calif. 626,866, pub. 2–28–56. Cl. 21.
Indiana Commercial Filters Corp.: *See*—
Houdaille-Hershey of Indiana, Inc.
Industrial Research Laboratories, Ltd., to Honolulu Oil Corp., San Francisco, Calif. 335,877, ren. 6–16–56. Cl. 14.
Industrial Sanitary Supply Co.: *See*—
Fisher, Jack.
Inertol Co., Inc., Newark, N. J. 626,802, pub. 2–28–56. Cl. 16.
Inflico Inc., Tucson, Ariz. 626,936, pub. 2–28–56. Cl. 26.
Ingram-Richardson Mfg. Co., Beaver Falls, Pa. 626,953, pub. 2–28–56. Cl. 32.
Inlander-Steindler Paper Co., Chicago, Ill. 626,741, pub. 2–28–56. Cl. 7.
Interlake Tissue Mills Co. Ltd., Toronto, Ontario, Canada. 626,978, pub. 2–28–56. Cl. 37.
International Business Machines Corp., New York, N. Y. 336,871, ren. 7–21–56. Cl. 23.
International Clay Corp., Graniteville, S. C. 627,153. Cl. 1.
International Latex Corp., Dover, Del. 627,138, pub. 10–4–55. Cl. 51.
International Silver Co., to The International Silver Co., Meriden, Conn. 331,358, ren. 1–7–56. Cl. 28.
International Silver Co., The: *See*—
International Silver Co.
Ireland, D. J., d. b. a. The Delaware Punch Bottling Co., Waco, Tex. 519,687, canc. Cl. 45.
Jackson & Church Co., Saginaw, Mich. 626,900, pub. 2–28–56. Cl. 23.
Jaclin Co., to Sopps, Inc., New York, N. Y. 626,994, pub. 2–28–56. Cl. 37.
James Mfg. Co., Fort Atkinson, Wis. 626,916, pub. 2–28–56. Cl. 23.
Jason Products, Inc., New York, N. Y. 626,856, pub. 2–28–56. Cl. 21.
Jet-Chute Co., The: *See*—
Fowler, Ben B.
Johns-Manville Corp., New York, N. Y. 332,664, ren. 2–18–56. Cl. 12.
Johns-Manville Corp., New York, N. Y. 626,762, pub. 2–28–56. Cl. 12.
Jordan Marsh Co., Boston, Mass. 627,023, pub. 2–28–56 Cl. 39.
Joseph & Feiss Co., The, Cleveland, Ohio. 627,028, pub. 2–28–56. Cl. 39.
Joseph, Hilliard, d. b. a. Joseph Northwest, Yakima, Wash. 627,108, pub. 2–28–56. Cl. 46.
Joseph Northwest: *See*—
Joseph, Hilliard.
Kafka, A., & Co., Inc., New Haven, Conn. 331,968, ren. 1–28–56. Cl. 17.
Kagran Corp.: *See*—
Smith, Robert E.
Kansas Milling Co., The, Wichita, Kans. 336,522, ren. 7–7–56. Cl. 46.
Keco Industries, Inc., Cincinnati, Ohio. 534,736, cor. Cl. 21.
Keith, James, Ltd., Hamilton, England. 327,085, 12(c) pub. 5–15–56. Cl. 49.
Kellems, Vivien, Stonington, Conn. 627,011, pub. 2–2–54. Cl. 39.
Kemp, E. F., Corp., Somerville, Mass. 627,116, pub. 2–28–56. Cl. 46.
Kenneth Products, Los Angeles, Calif. 626,818, pub. 2–28–56. Cl. 18.
Kerr and Hinz Doll Co., Santa Clara, Calif. 519,641, canc. Cl. 22.
Kerr Industries, Burbank, Calif. 626,756, pub. 2–28–56. Cl. 12.
Key Brands Co., Los Angeles, Calif. 627,128, pub. 2–28–56. Cl. 46.
Kiddie Kabinette, Inc., d. b. a. Prescription Toilet Preparations, New York, N. Y. 627,164. Cl. 51.
Kimberly-Clark Corp., Neenah, Wis. 519,573, canc. Cl. 1.
Kink-Kee Leader Co.: *See*—
Darby, Wesley C.
Kip Inc., Los Angeles, Calif. 519,749, canc. Cl. 18.
Kitchens of El Paseo: *See*—
Shipley, Frank A.
Klonan, Drew, d. b. a. Beaver Alkali Products, Rochester, Pa. 627,140, pub. 2–28–56. Cl. 52.
Klopp-Werke G. m. b. H., Solingen-Wald, Germany. 626,892, pub. 2–28–56. Cl. 23.
Knight, Maurice A., Akron, Ohio. 626,791, pub. 2–21–56. Cl. 16.
Koebel Diamond Tool Co., Detroit, Mich. 626,904, pub. 2–28–56. Cl. 23.
Koni, Nicholaus, New York, N. Y. 519,723, canc. Cl. 50.
Kotobukiya Ltd., Kigashi-ku, Osaka, Japan. 627,130, pub. 2–28–56. Cl. 47.
Kraft Foods Co., The, Chicago, Ill. 627,112, pub. 2–28–56. Cl. 46.
Kresge, S. S., Co., Detroit, Mich. 626,905, pub. 2–28–56. Cl. 23.
Kress, S. H., and Co., New York, N. Y. 331,080, ren. 12–24–55. Cl. 36.
Kross, Charles M., d. b. a. IVX Laboratories, Brooklyn, N. Y. 519,709, canc. Cl. 18.

Kuscher, Jack J., d. b. a. Magicase Co., Westport, Conn. 626,928, pub. 2–28–56. Cl. 26.
Lakeland Mfg. Co., Sheboygan, Wis. 627,030, pub. 2–28–56. Cl. 39.
Lakewood Mfg. Co., Westlake, Ohio. 626,976, pub. 2–21–56. Cl. 34.
Lamb Electric Co., The, to The Lam Electric Co., Kent, Ohio. 626,864–5, pub. 2–28–56. Cl. 21.
Lancaster Processes, Inc.: *See*—
Robinson, Thomas, Co., Inc.
Lanman & Kemp-Barclay & Co., Inc., New York, N. Y. 336,451, ren. 7–7–56. Cl. 18.
Lear Avia, Inc., Piqua, Ohio, now by change of name to Lear, Inc. 430,080, canc. Cl. 23.
Lear, Inc.: *See*—
Lear Avia, Inc.
Levine, Theodore, d. b. a. The Myalora Co., Brooklyn, N. Y. 519,675, canc. Cl. 51.
Lewis, Gilbert, d. b. a. Lewis-Perry Preparations, Henryetta, Okla. 519,799, canc. Cl. 18.
Lewis-Perry Preparations: *See*—
Lewis, Gilbert.
Librett, Norman, Inc., New Rochelle, N. Y. 626,742, pub. 2–28–56. Cl. 7.
Lilly, Eli, and Co., Indianapolis, Ind. 519,676, canc. Cl. 18.
Link Petroleum Co., Inc., Laredo, Tex. 626,784, pub. 2–28–56. Cl. 15.
Linker & Herbert, Inc., New York, N. Y. 627,032, pub. 2–28–56. Cl. 39.
Linville's, Inc., Wilson, N. C. 626,755, pub. 2–21–56. Cl. 12.
Lo-Calory Food Corp., New York, N. Y. 519,826, canc. Cl. 18.
Locatelli, Inc., New York, N. Y. 627,127, pub. 2–28–56. Cl. 46.
Lodge, I., Philadelphia, Pa. 627,005, pub. 2–28–56. Cl. 38.
Loeb Dietetic Food Co., Inc., New York, N. Y. 627,119, pub. 2–28–56. Cl. 46.
Lombard Corp., Youngstown, Ohio. 626,911, pub. 2–28–56. Cl. 23.
Louisville Varnish Co., Louisville, Ky. 626,790, pub. 7–26–55. Cl. 16.
Love, Joseph, Inc., New York, N. Y. 519,815, canc. Cl. 39.
Lowill Watch Co., The: *See*—
Perloff, Louis.
Lufkin Rule Co., The, Saginaw, Mich. 335,235, ren. 5–26–56. Cl. 26.
Lumbard-Watson Co., Auburn, Maine. 627,042, pub. 2–28–56. Cl. 39.
M. & R. Trading Co.: *See*—
Gielow, J. J., & Sons, Inc.
MacDonald Laboratories, Inc., St. Paul, Minn. 627,103, pub. 2–28–56. Cl. 45.
Mack Mfg. Corp., New York, N. Y. 626,924, pub. 2–28–56. Cl. 23.
Magicase Co.: *See*—
Kuscher, Jack J.
Makransky, S., & Sons, Inc., Philadelphia, Pa. 627,021, pub. 2–28–56. Cl. 39.
Manley, Inc., Kansas City, Mo. 626,846, pub. 2–28–56. Cl. 21.
March & Mendl, Inc., New York, N. Y. 627,020, pub. 2–28–56. Cl. 39.
Marconi's Wireless Telegraph Co. Ltd., London, England. 626,852, pub. 2–28–56. Cl. 21.
Marcus Brothers Textile Corp., New York, N. Y. 627,061, pub. 2–28–56. Cl. 42.
Marghab, Emile, Inc., New York, N. Y. 627,066, pub. 2–28–56. Cl. 42.
Marley Co., The, Kansas City, Mo. 626,943, pub. 2–21–56. Cl. 31.
Martin, Lewis W., Manheim, Lancaster, Pa. 626,731, pub. 2–28–56. Cl. 3.
Master Products Co.: *See*—
Weiss, James.
Masury-Young Co., Boston, Mass. 627,152, pub. 2–28–56. Cl. 52.
McGraw Electric Co., Chicago, Ill. 626,946, pub. 2–28–56. Cl. 31.
Medical Economics, Inc., Oradell, N. J. 626,997–8, pub. 2–28–56. Cl. 38.
Mendelson-Zeller Co., San Francisco, Calif. 627,123, pub. 2–28–56. Cl. 46.
Merck & Co., Inc., Rahway, N. J. 626,815, pub. 2–28–56. Cl. 18.
Miami Mfgs. Inc., Miami, Fla. 627,017, pub. 2–1–55. Cl. 39.
Michael's: *See*—
Tursi, Joseph.
Mid-States Sales, Muncie, Ind. 519,813, canc. Cl. 23.
Midwest Footwear, Inc., Sullivan, Mo. 627,012, pub. 3–15–55. Cl. 39.
Minerals Processing Corp., Syracuse, N. Y. 626,751, pub. 2–28–56. Cl. 10.
Minerva, S. A., Malaga, Spain. 336,386, ren. 7–7–56. Cl. 46.
Mitchell, F. O., & Bro., Inc., Perryman, Md. 627,114, pub. 2–28–56. Cl. 46.
Mock, Judson, Voehringer Co. of New York, Inc., to Mojud Co., Inc., Long Island City, N. Y. 332,603, ren. 2–18–56. Cl. 39.
Mojud Co., Inc.: *See*—
Mock, Judson, Voehringer Co. of New York, Inc.
Monarch Rug Mills, Dalton, Ga. 627,073, pub. 2–28–56. Cl. 42.
Montgomery Chemical Co., Rydal, Pa. 627,150, pub. 2–28–56. Cl. 52.
Moore, Benjamin, & Co., New York, N. Y. 626,801, pub. 2–28–56. Cl. 16.
Moore Fabric Co., to Moore Fabrics, Inc., Pawtucket, R. I. 335,677, ren. 6–9–56. Cl. 44.
Moore Fabrics, Inc.: *See*—
Moore Fabric Co.
Morrell, John, & Co., Ottumwa, Iowa. 335,117, ren. 5–26–56. Cl. 46.
Morrill Mfg. Co., Brookhaven, Ga. 627,074, pub. 2–28–56. Cl. 42.
Murray, Arthur, Enterprises, Inc., New York, N. Y. 626,859, pub. 2–28–56. Cl. 21.
Myalora Co., The: *See*—
Levine, Theodore.
Naimoli, Adele E., New York, N. Y. 519,727, canc. Cl. 51.
Nancy Ann Storybook Dolls, Inc., San Francisco, Calif. 519,625, canc. Cl. 22.
National Foam Rubber Corp., Montebello, Calif. 626,963, pub. 2–28–56. Cl. 32.
National Implement Co., Inc., Princeton, N. J. 626,893, pub. 1–31–56. Cl. 23.
National Polychemicals, Inc., Wilmington, Mass. 626,738, pub. 2–21–56. Cl. 6.
National Pressure Cooker Co., Eau Claire, Wis. 519,696, canc. Cl. 23.
National Steel Construction Co., Seattle, Wash. 626,970, pub. 6–8–54. Cl. 34.
National Tile & Mfg. Co., Anderson, Ind. 626,758, pub. 2–28–56. Cl. 12.
Nepenge, Inc., New York, N. Y. 626,968, pub. 2–28–56. Cl. 32.
Nesco, Division of New York Shipbuilding Corp.: *See*—
New York Shipbuilding Corp.
Nestlé Co., Inc., The, White Plains, N. Y. 627,118, pub. 2–28–56. Cl. 46.
Nestle-Le Mur Co., The, New York, N. Y. 627,165. Cl. 51.
Neuhoff, Max M., New York, N. Y. 434,194, 12(c) pub. 5–15–56. Cl. 37.
New Waterford Furniture Co., New Waterford, Ohio. 626,966, pub. 2–28–56. Cl. 32.
New York Bar Supply Co., d. b. a. White Cap Distributors, New York, N. Y. 519,816, canc. Cl. 45.
New York Merchandise Co., Inc., New York, N. Y. 519,564, canc. Cl. 50.
New York Shipbuilding Corp., d. b. a. Nesco, Division of New York Shipbuilding Corp., Milwaukee, Wis. 626,975, pub. 2–28–56. Cl. 34.
Niehues & Dutting, Nordhorn, Germany. 627,019, pub. 2–28–56. Cl. 39.
Nier, Hermann, K. G., Lockstedter Lager, Holstein, Germany. 626,972–3, pub. 2–28–56. Cl. 34.
Norcross, Inc., New York, N. Y. 626,983, pub. 2–28–56. Cl. 37.
Norris Grain Co.: *See*—
Northeast Feeds, Inc.
Northeast Feeds, Inc., Oswego, N. Y., to Norris Grain Co., Kansas City, Mo. 627,107, pub. 2–28–56. Cl. 46.
Northern Engraving & Mfg. Co., La Crosse, Wis. 627,132, pub. 2–28–56. Cl. 50.
Nox-Rust Chemical Corp., by change of name Daubert Chemical Co., Chicago, Ill. 618,047, cor. Cl. 6.
Nunn-Bush Shoe Co., Milwaukee, Wis. 627,035, pub. 2–28–56. Cl. 39.
Oklahoma Oil Products Corp., Chicago, Ill. 626,783, pub. 2–28–56. Cl. 15.
Olin Mathieson Chemical Corp., New York, N. Y. 621,973, cor. Cl. 6.
Omar, Inc., New York, N. Y. 519,657, canc. Cl. 28.
Omnium Arts et Industrie, Societe Anonyme, Paris, France. 519,720–1, canc. Cl. 51.
Ostbye and Anderson, Minneapolis, Minn. 519,777, canc. Cl. 28.
Ozo Sales Corp., The, New Haven, Conn. 626,854, pub. 2–28–56. Cl. 21.
P & K Inc., Chicago, Ill. 519,693, canc. Cl. 22.
Pacesetter Boats, Inc., Waxahachie, Tex. 626,828, pub. 2–28–56. Cl. 19.
Package Machinery Co., East Longmeadow, Mass. 626,947, pub. 2–28–56. Cl. 31.
Palmer Mfg. Corp., Phoenix, Ariz. 626,845, pub. 2–28–56. Cl. 21.
Pancro Mirrors, Inc.: *See*—
Baxter, Don, Inc.
Parisi, Jules T., d. b. a. Pekay Machine Co., Chicago, Ill. 519,558, canc. Cl. 26.
Parker Pen Co., The, Janesville, Wis. 626,980, pub. 2–28–56. Cl. 37.
Parker Rust Proof Co., Detroit, Mich. 626,737, pub. 2–28–56. Cl. 6.
Patterson, Roy I., d. b. a. Roto-Flo Mfg. Co., Camden Station, Minn. 519,583, canc. Cl. 23.
Pekay Machine Co.: *See*—
Parisi, Jules T.
Pennsylvania Salt Mfg. Co., The: *See*—
General Purification Co.
Pep Boys—Manny, Moe & Jack, The, Philadelphia, Pa. 329,367, ren. 10–29–55. Cl. 23.
Pepperell Mfg. Co., Boston, Mass. 334,514, 12(c) pub. 5–15–56. Cl. 42.
Perfect Circle Corp., Hagerstown, Ind. 519,705, canc. Cl. 50.
Perloff, Louis, d. b. a. The Lowill Watch Co., Philadelphia, Pa. 519,689, canc. Cl. 27.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 626,806, pub. 6–28–55. Cl. 18.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 626,810, pub. 2–21–56. Cl. 18.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 626,811, pub. 2–28–56. Cl. 18.
Pharmaceuticals, Inc., Newark, N. J. 627,099, pub. 2–28–56. Cl. 44.
Phi Psi Fraternity, Clemson, S. C. 626,939, pub. 2–21–56. Cl. 28.
Phillips Drill Co., Michigan City, Ind. 626,922, pub. 2–28–56. Cl. 23.
Phillips Packing Co. Inc., Cambridge, Md. 336,918, ren. 7–21–56. Cl. 46.

Phillips Petroleum Co., Bartlesville, Okla. 626,887–8, pub. 2–28–56. Cl. 22.
Phillips Petroleum Co., Bartlesville, Okla. 627,025, pub. 2–28–56. Cl. 39.
Phlomax (Overseas) Ltd., Redhill, England. 626,921, pub. 2–28–56. Cl. 23.
Photorama, Inc., Chicago, Ill. 627,001, pub. 2–28–56. Cl. 38.
Pillsbury Mills, Inc.: *See*—
Ballard & Ballard Co.
Pillsbury Mills, Inc., Minneapolis, Minn. 627,104, pub. 2–28–56. Cl. 46.
Pioneer Scientific Corp., Great Neck, N. Y. 626,935, pub. 2–28–56. Cl. 26.
Pittsburgh Plate Glass Co., Pittsburgh, Pa., to Barreled Sunlight Paint Co., Providence, R. I. 626,794, pub. 2–28–56. Cl. 16.
Poe, Ralph W., Canton, Ill. 519,639, canc. Cl. 23.
Pollack, Max, & Co., Inc., New York, N. Y. 627,092–7, pub. 2–28–56. Cl. 43.
Porter-McLeod Machine Tool Co., Inc., Hatfield, Mass. 626,923, pub. 2–28–56. Cl. 23.
Powers Regulator Co., The, Skokie, Ill. 626,930, pub. 2–28–56. Cl. 26.
Prescription Toilet Preparations: *See*—
Kiddie Kabinette, Inc.
Procter & Gamble Co., The, Cincinnati, Ohio. 109,126, ren. 3–21–56. Cl. 52.
Procter & Gamble Co., The, Cincinnati, Ohio. 519,640, canc. Cl. 52.
Procter & Gamble Co., The, Cincinnati, Ohio. 627,121, pub. 2–28–56. Cl. 46.
Production Management Engineering Associates, Inc., San Francisco, Calif. 519,840, canc. Cl. 101.
Pyroxylin Products, Inc., Chicago, Ill. 335,349, ren. 6–2–56. Cl. 16.
RCA Mfg. Co., Inc., Camden, N. J., to Radio Corp. of America, New York, N. Y. 332,798, ren. 2–25–56. Cl. 21.
Radio Corp. of America: *See*—
RCA Mfg. Co., Inc.
Radio-Electronics-Television Manufacturers Association, Washington, D. C. 626,995, pub. 2–28–56. Cl. 38.
Radio Receptor Co., Inc., Brooklyn, N. Y. 626,867, pub. 2–28–56. Cl. 21.
Ram Lighters, Inc., Newark, N. J. 519,661, canc. Cl. 8.
Rand Rubber Co., Inc., Brooklyn, N. Y. 332,353, ren. 2–11–56. Cl. 39.
Rand Rubber Co., Inc., Brooklyn, N. Y. 332,400, ren. 2–11–56. Cl. 40.
Real Companhia Vinicola do Norte de Portugal, S. A. R. L., Oporto, Portugal. 627,129, pub. 2–28–56. Cl. 47.
Reed, Stuart H., and J. Herbert Gigandet, Pittsburgh, Pa. 626,772, pub. 2–28–56. Cl. 15.
Reeves Brothers, Inc., New York, N. Y. 627,063, pub. 2–28–56. Cl. 42.
Reeves Brothers, Inc., New York, N. Y. 627,065, pub. 2–28–56. Cl. 42.
Rembrandt Tobacco Corp. (Overseas) Ltd., Steelenbosch, Cape Province, Union of South Africa. 626,803, pub. 2–28–56. Cl. 17.
Remington Aluminum Window Corp., Hempstead, N. Y. 627,156. Cl. 12.
Republic Paint and Varnish Co., Chicago, Ill. 626,797, pub. 2–28–56. Cl. 16.
Republic Steel Corp., Cleveland, Ohio. 626,778, pub. 2–21–56. Cl. 14.
Research Laboratories, Inc., Portland, Oreg. 519,822, canc. Cl. 18.
Research Products Corp., Madison, Wis. 626,781, pub. 2–28–56. Cl. 14.
Rexall Drug Co.: *See*—
United Drug Co.
Reynolds, Warren K., Upper Darby, Pa. 626,886, pub. 2–28–56. Cl. 22.
Ribbonwriter Corp. of America, Fort Lauderdale, Fla. 519,729, canc. Cl. 11.
Rice, Harry E., and Trenton L. Rice, Columbus, Ind. 627,098, pub. 2–28–56. Cl. 44.
Rice, Trenton L.: *See*—
Rice, Harry E., and Trenton L. Rice.
Richards, S. P., Paper Co., Atlanta, Ga. 626,992, pub. 2–28–56. Cl. 37.
Richter, W. H., & Co.: *See*—
Richter, William H.
Richter, William H., d. b. a. W. H. Richter & Co., Peoria, Ill. 519,828, canc. Cl. 18.
Ritter Dental Mfg. Co., Inc., Rochester, N. Y. 263,821, canc. Cl. 44.
Robbins Plastic Machinery Corp., Elkhart, Ind. 627,158. Cl. 23.
Robillo & Cuneo, to Robillo & Cuneo, Memphis, Tenn. 332,539, ren. 2–18–56. Cl. 46.
Robinson, Thomas, Co., Inc., New York, N. Y., to Lancaster Processes, Inc., New York, N. Y. 519,700, canc. Cl. 6.
Rockford Textile Mills, Inc., McMinnville, Tenn. 627,036, pub. 2–28–56. Cl. 39.
Rogahn, Albert T., d. b. a. Ollie Rogahn Bowlers Shop, Milwaukee, Wis. 519,818, canc. Cl. 22.
Rogahn, Ollie, Bowlers Shop: *See*—
Rogahn, Albert T.
Rogers Imports Inc., New York, N. Y. 626,743, pub. 2–21–56. Cl. 8.
Rogers Isinglass and Glue Co., Gloucester, Mass. 627,154–5. Cl. 5.
Rogers, John L., d. b. a. John L. Rogers Planing Mill, Tunnel Hill, Ga. 626,764, pub. 2–28–56. Cl. 12.
Rogers, John L., Planing Mill: *See*—
Rogers, John L.
Rogers Peet Co., New York, N. Y. 349,054, canc. Cl. 39.
Rome Cable Corp., Rome, N. Y. 626,838, pub. 2–28–56. Cl. 21.
Rose, L., & Co., Ltd., St. Albans, Hertfordshire, England. 627,115, pub. 2–28–56. Cl. 46.
Rothschild, Fritz S., Montreal, Quebec, Canada. 626,744, pub. 2–28–56. Cl. 8.
Roto-Flo Mfg. Co.: *See*—
Patterson, Roy I.
Ruberoid Co., The, New York, N. Y. 336,710, ren. 7–14–56. Cl. 12.
Ruby Kid Co., to John R. Evans & Co., Camden, N. J. 110,267, ren. 5–9–56. Cl. 1.
Safety Warning Signal Co., Brooklyn, N. Y. 626,850, pub. 2–28–56. Cl. 21.
Sagner's, A., Son, Baltimore, Md. 627,068, pub. 2–28–56. Cl. 42.
Sandoz Chemical Works, Inc., New York, N. Y. 626,736, pub. 4–5–55. Cl. 6.
Sanitek Products Co., by Sanitek Products, Inc., Los Angeles, Calif. 435,211, 12(c) pub. 5–15–56. Cl. 52.
Sanitek Products, Inc.: *See*—
Sanitek Products Co.
Sano Corp., Irvington, N. J. 626,868, pub. 2–28–56. Cl. 21.
Santa Cruz Portland Cement Co., San Francisco, Calif. 109,484, ren. 4–11–56. Cl. 12.
Sarkin, David, Inc., New York, N. Y. 519,645, canc. Cl. 28.
Saxon Paper Corp., New York, N. Y. 626,984–5, pub. 2–28–56. Cl. 37.
Scala Mfg. Co., Inc., Brooklyn, N. Y. 519,637, canc. Cl. 22.
Scheel, Carl W., d. b. a. Scheel Development Co., Cleveland, Ohio. 626,862, pub. 2–28–56. Cl. 21.
Scheel Development Co.: *See*—
Scheel, Carl W.
Schoenborn-Buchheim, George, d. b. a. Garvenswerke, Vienna, Austria. 626,832–3, pub. 2–28–56. Cl. 21.
Schwarzkopf, Hans, Hamburg-Altona, Germany. 627,141, pub. 2–28–56. Cl. 52.
Scovill Mfg. Co., Waterbury, Conn. 263,744, canc. Cl. 40.
Seal, Inc., Shelton, Conn. 519,710, canc. Cl. 5.
Seasonettes, Inc.: *See*—
Shipley, Frank A.
Sheffield Corp., The, Dayton, Ohio. 626,920, pub. 2–28–56. Cl. 23.
Shelby Mfg. Co., New York, N. Y. 519,623, canc. Cl. 39.
Shipley, Frank A., d. b. a. Kitchens of El Paseo, Santa Paula, to Seasonettes, Inc., Pasadena, Calif. 336,230, ren. 6–30–56. Cl. 46.
Siegel, A. L., Co., Inc., New York, N. Y. 519,633, canc. Cl. 50.
Simmon, Margaret S., New York, N. Y. 519,768, canc. Cl. 39.
Simpson & Godlee Ltd., Manchester, England. 627,064, pub. 2–28–56. Cl. 42.
Sintercast Corp. of America, Yonkers, N. Y. 626,906, pub. 2–28–56. Cl. 23.
Slumberland Products Co., Waltham, Mass. 626,956, pub. 2–28–56. Cl. 32.
Smith, A. O., Corp., Milwaukee, Wis. 626,836, pub. 11–22–55. Cl. 21.
Smith, Howard, d. b. a. Brentwood Distributors, New York, N. Y. 519,724, canc. Cl. 6.
Smith Products: *See*—
Smith, Vern C.
Smith, Robert E., to Kagran Corp., New York, N. Y. 558,986, cor. Cl. 39.
Smith, Robert E., to Kagran Corp., New York, N. Y. 570,813, cor. Cl. 107.
Smith, Vern C., d. b. a. Smith Products, Washougal, Wash. 519,817, canc. Cl. 51.
Sociedade dos Vinhos do Porto Constantino Limitada: *See*—
Tillier-Thompson, Inc.
Societdade dos Vinhos do Porto Constantino Ltda.: *See*—
Tillier-Thompson, Inc.
Société à Responsabilité Limitée Comptoir de l'Industrie Cotonniere, Paris, France, now by change of name Societe Comptoir de l'Industrie Cotonniere; Etablissements Boussac. 627,009, pub. 2–28–56. Cl. 39.
Societe Anonyme Conte, Paris, France. 626,798, pub. 2–28–56. Cl. 16.
Societe Anonyme Cri-Dan, Paris, France. 626,899, pub. 2–28–56. Cl. 23.
Societe Comptoir de l'Industrie Cotonniere; Etablissements Boussac: *See*—
Société à Responsabilité Limitée Comptoir de l'Industrie Cotonniere.
Sopps, Inc.: *See*—
Jaclin Co.
Southern Advance Bag & Paper Co. Inc., Bangor, Maine, and Boston, Mass. 519,795, canc. Cl. 2.
Southern Fruit Distributors, Inc., Orlando, Fla. 627,126, pub. 2–28–56. Cl. 46.
Southern Rice Sales Co., Inc., New York, N. Y. 265,060, canc. Cl. 46.
Southern Rice Sales Co., Inc., New York, N. Y. 265,093, canc. Cl. 46.
Spartan Mills, Spartanburg, S. C. 627,067, pub. 2–28–56. Cl. 42.
Speer Carbon Co., St. Marys, Pa. 626,843, pub. 2–28–56. Cl. 21.
Sportsman Aid Corp., Riverside, Ill. 519,592, canc. Cl. 22.
Springs, Inc., Hoboken, N. J. 627,047, pub. 5–10–55. Cl. 40.
Standard Oil Co., Richmond, Calif., to Standard Oil Co. of California, Wilmington, Del. 108,576, ren. 2–15–56. Cl. 12.
Standard Oil Co. of California: *See*—
Standard Oil Co.
Standard Oil Development Co., Linden, N. J., to Esso Research and Engineering Co., New York, N. Y. 332,118, ren. 2–4–56. Cl. 5.
Standard Oil Development Co., Linden, N. J., to Esso Research and Engineering Co., New York, N. Y. 332,828, ren. 2–25–56. Cl. 6.

Standard Oil Development Co., Linden, N. J., to Esso Research and Engineering Co., New York, N. Y. 333,987, ren. 4–14–56. Cl. 52.
Standard Packaging Corp. : *See*—
General Felt Products, Inc.
Standard Packaging Corp., Chicago, Ill. 626,981, pub. 2–28–56. Cl. 37.
Standard-Toch Chemicals, Inc., Staten Island, N. Y. 626,793, pub. 2–28–56. Cl. 16.
Stanley, George D., Salisbury, Md. 626,964–5, pub. 2–28–56. Cl. 32.
Star Porcelain Co., The, Trenton, N. J. 335,559, ren. 6–9–56. Cl. 21.
Star Watch Case Co., Ludington, Mich. 627,046, pub. 2–28–56. Cl. 40.
Starck, Hermann C. Aktiengesellschaft, Berlin-Lichterfelde, Germany. 626,780, pub. 2–28–56. Cl. 14.
Stardust, Inc., Poughkeepsie, N. Y. 627,015, pub. 8–10–54. Cl. 39.
Steak n Shake, Inc., Bloomington, Ill. 627,006, pub. 2–28–56. Cl. 38.
Stearns & Foster Co., The, Lockland, Cincinnati, Ohio. 627,060, pub. 2–28–56. Cl. 42.
Steinberger Bros., Inc., New York, N. Y. 334,640, ren. 5–12–56. Cl. 43.
Steinberger Bros., Inc., New York, N. Y. 336,398, ren. 7–7–56. Cl. 43.
Steinhorst, Emil, & Sons, Inc., Utica, N. Y. 626,944, pub. 2–28–56. Cl. 31.
Sterilek Co., Inc., The, New York, N. Y. 626,982, pub. 2–28–56. Cl. 37.
Stevens, J. P., & Co., Inc., New York, N. Y. 627,057–9, pub. 2–28–56. Cl. 42.
Stoffel Seals Corp., Tuckahoe, N. Y. 627,161. Cl. 25.
Stokely Brothers & Co., Newport, Tenn., to Stokely-Van Camp, Inc., Indianapolis, Ind. 108,274, ren. 1–25–56. Cl. 46.
Stokely-Van Camp, Inc. : *See*—
Stokely Brothers & Co.
Stromberg-Carlson Co. : *See*—
General Dynamics Corp.
Stross Mfg. Co., Ann Arbor, Mich. 627,136, pub. 2–28–56. Cl. 50.
Sturtevant, F. C., Co., The, Hartford, Conn. 626,807, pub. 2–28–56. Cl. 18.
Supercraft Mfg. Co. : *See*—
Cooper, Daniel.
Swing, D. Thompson, to D. Thompson Swing, Inc., Price, Md. 627,120, pub. 2–28–56. Cl. 46.
Swing, D. Thompson, Inc. : *See*—
Swing, D. Thompson.
Tack Band, Inc., Leominster, Mass. 626,770, pub. 2–28–56. Cl. 13.
Tasty Baking Co., Philadelphia, Pa. 335,031, ren. 5–19–56. Cl. 46.
Taylor, Edward, Ltd., Monton, Eccles, England. 627,102, pub. 2–28–56. Cl. 44.
Tempo Products Co., Cleveland, Ohio. 626,792, pub. 2–28–56. Cl. 16.
Terox Mfg. Corp., Franklin Park, Ill. 626,761, pub. 2–28–56. Cl. 12.
Tiller-Thompson, Inc., New York, N. Y., to Sociedade dos Vinhos do Porto Constantino Ltda., Villa Nova de Gaya, Portugal, to Sociedade dos Vinhos do Porto Constantino Limitada, Oporto, Portugal. 335,182, ren. 5–26–56. Cl. 47.
Tobin, Jack, Inc., Philadelphia, Pa. 519,565, canc. Cl. 39.
Tobin, R. R., Tobacco Co., Detroit, Mich. 519,673, canc. Cl. 17.
Toni Co., The : *See*—
Gillette Co., The.
Toreador Record Corp., New York, N. Y. 626,977, pub. 2–28–56. Cl. 36.
Tri-State Electric Mfg. Co., Delphos, Ohio. 626,950, pub. 2–28–56. Cl. 31.
Trojan Powder Co., Allentown, Pa. 626,788, pub. 2–28–56. Cl. 16.
Turner Uni-Drive Co., Kansas City, Mo. 626,879, pub. 2–28–56. Cl. 21.
Tursi, Joseph, d. b. a. Michael's, Atlantic City, N. J. 627,137, pub. 6–17–52. Cl. 51.
Tyler, Toby, & Co., Inc., to Frank Becker, Eleanor Becker and Ada Becker, New York, N. Y. 627,040, pub. 2–28–56. Cl. 39.
Ty-Master Corp., New York, N. Y. 626,962, pub. 12–27–55. Cl. 32.
Udylite Corp., The, Detroit, Mich. 626,841, pub. 2–28–56. Cl. 21.
Union Steel Chest Corp., Le Roy, N. Y. 626,958, pub. 2–28–56. Cl. 32.
United Aircraft Products, Inc., Dayton, Ohio. 626,925–6, pub. 2–28–56. Cl. 23.
United Drug Co., Boston, Mass., to Rexall Drug Co., Los Angeles, Calif. 109,190, ren. 3–28–56. Cl. 37.
U. S. Industries, Inc., Chicago, Ill. 626,823, pub. 2–21–56. Cl. 19.
United States Machine Tool Co., The : *See*—
Cincinnati Mfg. Corp.
U. S. Tool Co., Inc., Ampere, N. J. 626,907, pub. 2–28–56. Cl. 23.
Upjohn Co., The, Kalamazoo, Mich. 519,707, canc. Cl. 18.
Upjohn Co., The, Kalamazoo, Mich. 519,737, canc. Cl. 18.
Valjean Watch Co. : *See*—
Wachtel, Nathan J.
Valmor Products Co., Chicago, Ill. 627,139, pub. 2–28–56. Cl. 51.
Varney Scale Models, Chicago, Ill. 519,596, canc. Cl. 22.
Veritas Drug Co. Ltd. : *See*—
Chemische Fabriken Dr. Joachim Wiernik & Co. Aktiengesellschaft.
Vetter, George W., Wilmette, Ill. 519,655, canc. Cl. 50.
Vibradamp Corp., Jackson, Mich. 626,754, pub. 5–18–54. Cl. 12.
Virginia-Carolina Chemical Corp., Richmond, Va., to Diamond Black Leaf Co., Cleveland, Ohio. 626,734–5, pub. 1–17–56. Cl. 6.
Vulcan Steel Products Co., Inc., Brooklyn, N. Y. 626,769, pub. 2–28–56. Cl. 13.
Wachtel, Nathan J., to N. J. Wachtel and K. Grunfeld, d. b. a. Valjean Watch Co., New York, N. Y. 335,097, ren. 5–26–56. Cl. 27.
Walker, Joseph W., Atlanta, Ga. 626,809, pub. 2–28–56. Cl. 18.
Wallace, William B., d. b. a. William Wallace Co., Kilgore, Tex. 626,959, pub. 2–28–56. Cl. 32.
Wallace, William, Co. : *See*—
Wallace, William B.
Wandt, William E., Long Island City, N. Y. 627,026, pub. 2–28–56. Cl. 39.
Ward, Win, Co. : *See*—
Ward, Winston M.
Ward, Winston M., d. b. a. Win Ward Co., Pomona, Calif 626,917, pub. 2–28–56. Cl. 23.
Watt Publishing Co., Mount Morris, Ill. 627,007, pub. 2–28–56. Cl. 38.
Way-Matic Regulator Co., Fulton, Ky. 626,932, pub. 2–28–56. Cl. 26.
Weatherhead Co., The, Cleveland, Ohio. 626,776, pub. 2–28–56. Cl. 13.
Wedgworth Produce, Inc., Belle Glade, Fla. 627,113, pub. 2–28–56. Cl. 46.
Weil, Edward, Leonia, N. J. 626,941, pub. 2–21–56. Cl. 29.
Weiss, Hubert L., Los Angeles, Calif. 626,875, pub. 2–28–56. Cl. 21.
Weiss, James, d. b. a. Master Products Co., Chicago, Ill. 626,752, pub. 8–16–55. Cl. 11.
Wella Corp., The, Englewood, N. J. 409,088, 12(c) pub. 5–15–56. Cl. 51.
Wella Corp., The, Englewood, N. J. 409,337, 12(c) pub. 5–15–56. Cl. 51.
Wella Corp., The, Englewood, N. J. 409,704, 12(c) pub. 5–15–56. Cl. 51.
Wella Corp., The, Englewood, N. J. 409,826, 12(c) pub. 5–15–56. Cl. 51.
Wellcome Foundation Ltd., The, London, England. 626,817, pub. 2–28–56. Cl. 18.
West Cumberland Silk Mills Ltd., Hensingham, Whitehaven, Cumberland, England. 627,051, pub. 2–28–56. Cl. 42.
West Disinfecting Co., Long Island City, N. Y. 626,787, pub. 4–27–54. Cl. 16.
Western Chef Products, Inc., Spokane, Wash. 626,728, pub. 4–13–54. Cl. 1.
Western Laboratories, Inc., Burbank, Calif. 519,776, canc. Cl. 11.
Westinghouse Electric Corp., Pittsburgh, Pa. 626,877, pub. 2–28–56. Cl. 21.
Wheatland Construction Co., Inc., Lancaster, Pa. 627,157. Cl. 12.
White Cap Distributors : *See*—
New York Bar Supply Co.
White-Haines Optical Co., The, Columbus, Ohio. 110,410, ren. 5–23–56. Cl. 26.
White, S. S., Dental Mfg. Co., The, Philadelphia, Pa. 332,022–5, ren. 1–28–56. Cl. 44.
White, S. S., Dental Mfg. Co., The, Philadelphia, Pa. 332,051, ren. 1–28–56. Cl. 44.
Whitin Machine Works, Whitinsville, Mass. 626,912–14, pub. 2–28–56. Cl. 23.
Whittenton Garment Corp., Taunton, Mass. 627,075, pub. 2–28–56. Cl. 42.
Williamson-Dickie Mfg. Co., The, Fort Worth, Tex. 627,027, pub. 2–28–56. Cl. 39.
Wilson, Alton, Houston, Tex. 519,787, canc. Cl. 101.
Wincharger Corp., Sioux City, Iowa. 332,094, ren. 2–4–56. Cl. 23.
Windsor-Lloyd Products, Inc., Philadelphia, Pa. 330,014, ren. 11–19–55. Cl. 21.
Windsor-Lloyd Products, Inc., Philadelphia, Pa. 330,554, ren. 12–3–55. Cl. 31.
Windsor-Lloyd Products, Inc., Philadelphia, Pa. 332,920, ren. 3–3–56. Cl. 15.
Windsor-Lloyd Products, Inc., Philadelphia, Pa. 334,657, ren. 5–12–56. Cl. 6.
Windsor-Lloyd Products, Inc., Philadelphia, Pa. 335,149, ren. 5–26–56. Cl. 6.
Winro, Inc., Detroit, Mich. 626,971, pub. 2–28–56. Cl. 34.
Winston Screw Products Corp., Teterboro, N. J. 626,767, pub. 2–28–56. Cl. 13.
Winthrop-Stearns Inc., New York, N. Y. 519,739, canc. Cl. 18.
Wolf, Jaques, & Co., Clifton, N. J. 519,712, canc. Cl. 6.
Wolverine Finishes Corp., Grand Rapids, Mich. 626,789, pub. 2–28–56. Cl. 16.
Woodrow Stores, Inc., New York, N. Y. 519,628, canc. Cl. 39.
Worden Co. : *See*—
Cattle Capital Mfg. Co., The.
Wyatt, Gerald J., d. b. a. Wyco Paint & Chemical Co., Oak Park, Mich. 626,795–6, pub. 2–28–56. Cl. 16.
Wyco Paint & Chemical Co. : *See*—
Wyatt, Gerald J.
Young Dental Mfg. Co., St. Louis, Mo. 627,101, pub. 2–28–56. Cl. 44.
Zajon, Roy, d. b. a. Roy Zajon Machine Parts, Chicago, Ill. 626,779, pub. 2–28–56. Cl. 14.
Zajon, Roy, Machine Parts : *See*—
Zajon, Roy.
Zavody V. I. Lenina Plzen, Narodni Podnik, Plzen, Czechoslovakia. 626,840, pub. 2–28–56. Cl. 21.
Zavody V. I., Lenina Plzen, Narodni Podnik, Plzen, Czechoslovakia. 626,902, pub. 2–28–56. Cl. 23.

U. S. GOVERNMENT PRINTING OFFICE: 0—1956

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
May 22, 1956 Volume 706 Number 4

PATENTS

NOTICES

Erratum

All references to Patent No. 2,744,657 to Louis A. Falligant for Assembly and Locking Means for Liquid Handling Devices, appearing in the OFFICIAL GAZETTE of May 8, 1956, should be deleted as the application was withdrawn from issue and the patent was not issued.

Classification Bulletins Nos. 151, Rev. 1; 200, Rev. 1 and 402, Rev. 1

The following Classification Bulletins pertaining to the classification of subjects of invention revised by the Classification Group of the U. S. Patent Office, including all changes through Classification Order No. 192, are now available and copies may be obtained from the Commissioner of Patents at the prices indicated.

Class	Title	Bulletin No.	Price
16	Miscellaneous Hardware	151, Rev. 1	$.15
260	Chemistry, Carbon Compounds	200, Rev. 1	.80
53	Package Making	402, Rev. 1	.60

Disclaimer

2,564,310.—*Otto J. Nussbaum*, Trenton, and *Frank C. Obert*, Nutley, N. J. MEANS FOR CONTROLLING THE HEAD PRESSURE IN REFRIGERATING SYSTEMS. Patent dated Aug. 14, 1951. Disclaimer filed Apr. 17, 1956, by the assignee, *Kramer Trenton Company*.

Hereby enters this disclaimer to claims 2, 3, 4, 5, 6, 7, 8, 9, and 10 of said patent.

Adjudicated Patents

(C. A. N. Y.) Gentzel Patent No. 2,278,437 (137—468), for a valve mechanism. Claims 1, 2, 4, 5, 10, 11, 13, 14, 15, 16, and 17 *Held* invalid. *Gentzel et al.* v. *Manning, Maxwell & Moore, Inc.*, 230 F.2d 341 ; 108 USPQ 353.

(C. A. Ill.) Bushnell Patent No. 2,361,377 (94—24), for paving. *Held* valid. *Blaw-Knox Company* v. *I. D. Lain Company (Inc.)*, 230 F.2d 373 ; 108 USPQ 356.

(C. A. Ill.) Webber and Erickson Patent No. 2,637,241 (85—10), for a stud for explosive installations. Claims 1 and 2 *Held* invalid and not infringed. *Powder Power Tool Corporation* v. *Powder Actuated Tool Company, Inc., et al.*, 230 F.2d 409 ; 108 USPQ 155.

(D. C. Md.) Senior, Hensman and Wood Patent No. 2,675,644 (46—135), for a weeping doll. Claims 1, 2, 4, 7, and 8 *Held* valid, and claims 1, 4, and 8 *Held* infringed. *Brock et al., doing business as American Character Doll Co.* v. *Brown et al., doing business as Baltimore Products Co.*, 138 F. Supp. 628 ; 108 USPQ 241.

(C. A. N. Y.) Gentzel-Reissue Patent No. 22,164 (137—543), for a valve mechanism, *Held* invalid. *Gentzel et al.* v. *Manning, Maxwell & Moore, Inc.*, 230 F.2d 341 ; 108 USPQ 353.

Patents Available for Licensing or Sale

2,263,813. Unit Window Screen (Sponge rubber rim seals and permits easy insertion). Richard Mason, 57 Christopher St., New York 14, N. Y.

2,650,436. Micrometer Height Gauge. Ben Gessler, 82—39 268th St., Floral Park, N. Y.

2,709,726. Circuit Making and Breaking Device. Ethradge F. Rawl, 4801 21st Ave., North, St. Petersburg 2, Fla.

2,724,979. Sheet Metal Screw. Reginald J. Cross, Homestead Meopham, Kent, England, and Essex Aero Ltd., London East Airport, Gravesend, Kent, England. Correspondence to Cushman, Darby & Cushman, 730 15th St., N. W., Washington 5, D. C.

The following two patents on a thermostatic valve, bimetallic element with slow initial opening action, are offered for licensing by Roger C. Johnson, 2334 11th St., Moline, Ill.

2,352,203. Thermostatic Valve.

2,462,198. Thermostatic Valve.

The following ten patents are offered for licensing or sale by Alfred W. Vibber, 120 South Irving St., Ridgewood, N. J.

2,725,711. Twisting Spindle Balloon Control.

2,726,506. Twisting Spindle Balloon Control.

2,727,353. Twisting and Plying Spindle Balloon Control.

2,728,185. Twisting Spindle Balloon Control.

2,729,052. Twisting Spindle Balloon Control.

2,729,932. Twisting Spindle Balloon Control.

2,731,785. Method of and Apparatus for Plying Strands.

2,732,680. Method of and Apparatus for Plying Strands.

2,733,566. Twisting Spindle Balloon Control.

2,736,160. Twisting and Plying Spindle Balloon Control.

General Electric Company is prepared to grant non-exclusive licenses under the following 8 patents on reasonable terms to domestic manufacturers :

Applications for license under the following patent may be addressed to : General Electric Company, Motor and Generator Division, 1 River Road, Schenectady 5, N. Y.

2,454,579. Carbon Brush Element.

Applications for licenses under the following two patents may be addressed to : General Electric Company, Research Services, P. O. Box 1088, Schenectady, N. Y.

2,717,319. Method and Apparatus for Cooling Transducers.

New Applications Received During March 1956

Patents	6,583
Designs	445
Plants	3
Reissues	19
Total	7,050

Issue

Patents	1,144—No. 2,746,041 to No.	2,747,184, incl.
Designs	84—No. 177,704 to No.	177,787, incl.
Plants	1—No. 1,479	
Reissues	2—No. 24,154 to No.	24,155, incl.
Total	1,231	

2,721,495. Method and Apparatus for Detecting Minute Crystal Forming Particles Suspended in a Gaseous Atmosphere.

Applications for licenses under the following five patents may be addressed to: General Electric Company, Transformer Division, 100 Woodlawn Ave., Pittsfield, Mass., Attention Patent Counsel.

2,297,646. Pug Mill.

2,632,936. Method and Apparatus for Forming Ceramic Bodies.

2,728,820. Electric Switch.

2,732,477. Control System.

2,735,075. Support Members for End Turns of Electrical Coils.

CONDITION OF PATENT APPLICATIONS AS OF MARCH 30, 1956

Total number of pending applications (excluding Designs)	219, 645
Total number of pending Design applications	6, 977
Total number of applications awaiting action (excluding Designs)	123, 900
Total number of Design applications awaiting action	2, 491
Date of oldest new application	Nov. 23, 1954
Date of oldest amended application	Nov. 6, 1953

ROSA, M. C., Director, Patent Examining Operation

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 44, 46, 48, 51, 54, 69, 70
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 10, 18, 22, 28, 45, 47.
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE.	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application	
	New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	3-7-55	6-14-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	6-17-55	1-13-55
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	7-13-55	3-29-54
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	6-10-55	8-6-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	6-21-55	12-10-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic Amides, Amines, General Organic Processes	5-18-55	6-9-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	7-6-55	3-4-54
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	2-24-55	6-1-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	6-13-55	6-1-54
10. (VI) BOYD, S., Firearms; Ordnance; Ammunition; Explosive Charge Making	12-17-54	1-20-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	7-13-55	9-8-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	4-4-55	11-17-53
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	3-23-55	2-10-54
14. (III) MANIAN, J. C. (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	3-11-55	4-7-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	7-1-55	4-7-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	5-16-55	2-2-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	4-27-55	7-19-54
18. (VI) BLUM, A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	2-15-55	5-14-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	6-3-55	7-8-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	6-7-55	5-20-54
21. (III) MADER, R. C., Textiles	7-5-55	4-20-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	6-17-55	7-12-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	11-23-54	11-6-53
24. (III) DRACOPOULOS, P. T. (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	5-10-55	12-2-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	7-1-55	7-2-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	7-15-55	1-3-55
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	7-6-55	10-8-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	5-26-55	8-24-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	4-12-55	1-3-55
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	9-19-55	9-13-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application	
	New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	4-21-55	10-28-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	6-17-55	12-3-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	7-13-55	3-9-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	6-10-55	3-8-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	6-6-55	10-20-54
36. (V) McFADYEN, A. D., Measuring and Testing	4-7-55	1-31-55
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	6-9-55	10-6-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g., Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	7-1-55	11-1-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	7-25-55	5-11-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	7-1-55	1-3-55
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	4-1-55	4-14-54
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	1-10-55	7-19-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	5-18-55	7-15-54
44. (II) EVANS, N. H., Antennas; Automatic Pilots; Directive Radio Systems; Mass Spectrometers; Nuclear Batteries; Nuclear Resonant Devices; Neutron Detecting and Measuring; Radar; Sonar; Torpedoes	1-3-55	1-28-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	6-14-55	1-6-55
46. (II) WILES, W. G., Actinide Series (e. g., fissionable) Compounds; Sintered Metal Stock; Explosives; Power Plants (part); Metallurgy (part); Blasting; Surgery (part); Radioactive Medicines; Irradiation Chemistry; Carbon Chemistry (part)	3-10-55	8-20-54
	7-13-55	12-6-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles		
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	3-10-55	4-12-54
	5-2-55	10-1-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	6-20-55	4-15-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	6-24-55	4-2-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music		
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	5-11-55	7-15-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	7-15-55	12-2-54
54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	4-25-55	4-30-54
55. (VII) KLINE, J. R., Surgery; Dentistry; Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	3-11-55	3-24-54
56. (I) KEELY, J. E. (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	7-1-55	12-20-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	10-11-55	8-11-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	7-1-55	4-5-54
	5-19-55	5-19-54
59. (I) HENKIN, B. (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating		
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	6-10-55	1-3-55
	6-7-55	10-1-54
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination		
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	6-10-55	7-6-54
	6-29-55	4-26-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	5-16-55	4-6-54
66. (V) LISANN, I. (BUCHLER, M., acting), Geometric Instruments; Automatic Weighing Scales; Acoustics	5-10-55	2-28-55
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	5-16-55	11-27-53
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators		
70. (II) BREWRINK, J. L., Security laws administration.	6-1-55	1-11-55
CLASS. DIVS. I (VII) LANHAM, B. E., Paper Making	7-1-55	2-2-55
CLASS. DIVS. II (II) LADY, J. E., Oscillators; Amplifiers	8-29-55	1-31-55
CLASS. DIVS. III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	6-24-55	12-27-54
CLASS. DIVS. IV (VI) SMITH (Mrs.), M. P., Harrows; Plows; Earth Rollers	7-1-55	6-2-55
CLASS. DIVS. V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	8-18-55	9-22-55
DESIGNS (III) A—BREHM, G. L., Industrial Arts	8-5-55	9-12-55
DESIGNS (III) B—GRAY, M. A., Household, Personal and Fine Arts		

The following divisions have been abolished: 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during May 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1953*.

Patents ..... Numbers 2,156,257 to 2,160,804, inclusive

DECISIONS IN PATENT AND TRADEMARK CASES

U. S. Court of Customs and Patent Appeals

In re McIntosh

No. 6175. Decided February 21, 1956. Petition for rehearing denied March 28, 1956

[230 F.2d 612; 109 USPQ 101]

1. Appeal to U. S. Court of Customs and Patent Appeals—Matter Before Court—Unentered Specification and Drawing.

Where the Examiner refused to enter a proposed new specification and drawing for the reasons that they had not been required and that they contained new matter not supported by the original disclosure, and the applicant did not seek review of the Examiner's holding by petition or appeal, *Held* that "it accordingly became final and is not subject to review here."

2. Applications — Effective Date — No Filing Date Accorded Substitute Specification and Drawings.

Where the subject matter of appealed claims was first disclosed in proposed, but unentered, substitute specification and drawing, *Held* that while the proposed substitute specification and drawing were physically a part of the record of the application, they never formed a part of the official disclosure, and that from the prohibition of the introduction of new matter in 35 U. S. C. 132 it follows that, as to the subject matter of these claims, the applicant cannot be accorded a filing date either as of the date the application was filed or as of the date when the proposed, but unentered, substitute specification and drawing were filed in the application.

3. References—Patent Claims Allowable to Applicant Only After Prevailing in Interference.

Where the claims of a reference patent differ somewhat in phraseology from claims of an application but are drawn to the same inventive concept, *Held* that the application claims could not properly be allowed to the applicant unless he has successfully contested an interference with the patentee.

4. Application—Effective Date—Boykin Act Limitations.

Held that the Boykin Act (P. L. 690, 79th Congress, 2d. Sess., Ch. 910, August 8, 1946, 60 Stat. 940) "relates to situations in which foreign applications were filed or in which a disclosure was made to the Government of the United States pursuant to an agreement between the United States Government and the government of a foreign country."

5. References—Invalid Patent Is a Reference.

Where it is urged that a reference patent is invalid because of an alleged offer by an applicant to sell his invention to the National Inventors' Council at a date more than a year prior to the filing of the application upon which the patent issued, *Held* that the validity or invalidity of the patent has nothing to do with its effectiveness as a reference if the patent discloses and claims the invention claimed by applicant.

6. Applications—Effective Date—Disclosure to National Inventors' Council.

Held that "under the patent laws, a disclosure of an invention to the National Inventors' Council is not equivalent to the filing of an application for a patent nor to a reduction to practice of the invention."

7. Applications—Basis for Patent Grant Is Purely Statutory.

"The conditions under which patents may be granted are definitely set forth in the statutes and we are without authority to depart from those conditions on the basis of alleged equitable considerations."

8. Patentability—Particular Subject Matter—Supersonic Airplane.

Claims to a supersonic airplane *Held* properly rejected as unpatentable over the cited prior art.

Appeal from the Patent Office. Serial No. 241,736.

AFFIRMED.

Kenneth F. McIntosh pro se.

Clarence W. Moore (*H. S. Miller* of counsel) for the Commisisoner of Patents.

Before O'Connell, *Acting Chief Judge*, and Johnson, Worley, Cole, and Jackson (retired), *Associate Judges*

Cole, *J.*, delivered the opinion of the court.

This is an appeal from the decision of the Board of Appeals of the United States Patent Office, affirming the final rejection by the Primary Examiner of claims 1 to 6 inclusive of appellant's application, Serial No. 241,736, filed August 14, 1951, for a patent on a supersonic airplane. Claims 1 and 3, which are representative of the appealed claims, are as follows:[1]

1. A supersonic airplane of isosceles triangular plan form comprising two right triangular wings of the same dimension having their span sections progressively increasing in dimension from their acute angled nose of the airplane aft substantially to the trailing edge and each having their maximum span section equal to approximately 32% of the maximum chord.

3. A supersonic airplane including a main substantial wing of symmetrical air-foil section and general triangular plan and having a sweep-back angle of approximately 45 degrees, and having an aspect ratio not greater than 2, fixed streamlined fuselage projecting above said wing and extending forward of trailing edge along the midsection of said wing and faired into said upper wing surface; fixed stabilising fin means projecting above rear upper surface of said fuselage and extending forward of the trailing edge of said fuselage and faired into said upper surface of said fuselage; trailing rudder means pivotally mounted on said fin, means above the trailing edge of said fuselage, and horisontal control surfaces pivoted to the trailing edge of said wing adjacent to the tips thereof on opposite sides of and laterally spaced from said fin means for controlling both vertical and rolling movements of the airplane, each of said surfaces being within the outboard half of semi-span of said wing.

The references relied upon are:

Gluhareff, 2,511,502, June 13, 1950.

"Aviation Week," July 4, 1949, pages 21 to 24.

Appellant's application discloses a jet-propelled airplane which is of generally isosceles triangular shape and which may be formed of two symmetrical hollow wing sections joined together along the longitudinal axis of the plane. The apex of the triangle points in the direction of movement of the plane and a vertical stabilizer fin extends from the top mid-section of the trailing edge. A rudder is provided at the trailing edge of the fin, extending aft of the trailing edge of the wings. Longitudinal and lateral control is provided by wing tip surfaces disposed on opposite sides of the rudder and projecting outboard and forward along the trailing edge of the wings.

In modified forms, the plane may include a tapering fuselage which extends along the longitudinal axis of the plane and is faired into the wing sections.

The Gluhareff patent discloses a supersonic airplane of generally isosceles triangular form having two symmetrical wings, and provided with a stabilizing fin

[1] The following definitions will aid in the understanding of the claims:

air-foil section—the part of the plane exposed to the flow of air when the plane is in motion.

faired—fitted smoothly without projections.

span—greatest width at right angles to direction of flight.

aspect ratio—the ratio of the square of the span to the area of the wing surface. In the case of the triangular wing here involved that area is one half the product of the span by the length from nose to tail.

sweepback—the acute angue between the leading edge of a wing and a line perpendicular to the direction of flight.

maximum chord—the longest side of a member, in this case the inclined sides of the wings.

and rudder similar to those employed by the appellant. Gluhareff also provides wing tip surfaces similar to those used by the appellant, for effecting longitudinal and lateral control, and a fuselage located along the longitudinal axis of the plane and faired into the wings.

The publication "Aviation Week" discloses a supersonic airplane having a wing structure of essentially isosceles triangular form with a streamlined fuselage located along the longitudinal axis and faired into the wing structure and extending somewhat forwardly of the apex of the wing structure. The plane shown by the publication is also provided with a stabilizer fin, rudder and wing tip controlling surfaces similar to those shown by appellant and by the Gluhareff patent.

Before considering whether the subject matter of the appealed claims is disclosed by the references, it is necessary to pass upon several contentions which have been made by the appellant to the effect that the dates of the references are such that they were improperly cited against his application.

Appellant's application No. 241,736, on which the present appeal is based, was filed on August 14, 1951, more than a year after both the date of publication of the "Aviation Week" reference (July 4, 1949), and the date of issue of the Gluhareff patent (June 13, 1950). Accordingly, unless the appellant is entitled to rely on some filing date earlier than that of his instant application, each of the references is a statutory bar to the extent that it discloses the invention claimed by the appellant. 35 U. S. C. 1952 ed. § 102 (b).

The record shows that on September 7, 1949, appellant filed application, Serial No. 114,424, for patent on a "Supersonic Airplane Wing," which application was co-pending with the one on which the presenet appeal is based. To the extent that the subject matter claimed in this appeal was disclosed in application No. 114,424, as filed, therefore, appellant is entitled to a filing date of September 7, 1949. It was held by the Patent Office tribunals that the subject matter of appealed claims 1 and 2 was disclosed in appellant's application No. 114,424, as filed, but that the subject matter of appealed claims 3, 4, 5 and 6 was not so disclosed, and we are in agreement with those holdings. As was pointed out by the Examiner, application No. 114,424, as filed, did not sufficiently disclose a fuselage or streamlined cabin, as recited in appealed claims 3 and 4, nor the proportions of the wing recited in claims 5 and 6.

On February 16, 1951, the appellant filed in application No. 114,424, a proposed amendment including a new specification and drawing corresponding to those later filed as parts of his instant application, No. 241,736. The Examiner refused to enter the proposed new specification and drawing in application No. 114,424, for the reasons that they had not been required and that they contained new matter not supported by the original disclosure. [1] The appellant did not seek review of that holding of the Examiner by petition or appeal and it accordingly became final and is not subject to review here. It may be noted, however, that a comparison of the original and proposed substitute specifications and drawings shows that the Examiner's holding was clearly correct.

[2] While the proposed substitute specification and drawing were physically a part of the record of application No. 114,424, they never formed a part of the official disclosure of that application. Title 35, section 132, of the United States Code, 1952 ed., provides that "No amendment shall introduce new matter into the disclosure of the invention." It follows that as to the subject matter of appealed claims 3, 4, 5 and 6, the appellant cannot be accorded a filing date either as of September 7, 1949, when application No. 114,424 was filed, or February 16, 1951, when the proposed, but unentered, substitute specification and drawing were filed in that application; but must be restricted to August 14, 1951, the filing date of the appealed application, No. 241,736. The references are therefore statutory bars to the allowance of those claims so far as they disclose the claimed subject matter.

As to claims 1 and 2, the references are not statutory bars. However, the Gluhareff patent was issued on an application filed June 5, 1946, which is long prior to any filing date of appellant, and the patent is therefore a valid reference unless appellant can establish a date of invention of the subject matter of those claims prior to June 5, 1946.

With respect to claims 1 and 2, the Board made the following holding:

> As to claims 1 and 2 of the instant appeal, it is not apparent that the subject matter of these claims, even if supported by the original disclosure of the earlier application, is sufficiently distinct from that covered by the claims of the Gluhareff patent that the patent could be avoided by the filing of affidavits without a contest of priority. Appellant has made no attempt to copy any of the claims of the Gluhareff patent for interference purposes. For the reasons stated, we consider that the Gluhareff patent is a reference against appellant.

That holding is based on the fact that a prior patent can be overcome by ex parte affidavits as provided for by Patent Office Rule 131 only when the patent "substantially shows or describes but does not claim the rejected invention." *In re Fischer*, 19 CCPA (Patents) 1231, 58 F.2d 1058, 13 USPQ 386. If the patent claims the rejected invention, it can be overcome only by an interference proceeding and, as indicated by the Board, the appellant has not sought an interference with Gluhareff.

[3] We are in agreement with the quoted holding of the Board of Appeals, since the claims of the Gluhareff patent, although differing somewhat in phraseology from appealed claims 1 and 2, are drawn to the same inventive concept and accordingly appealed claims 1 and 2 could not properly be allowed to the appellant unless he has successfully contested an interference with the patentee.

Under these circumstances, the ex parte affidavits and other statements of record cannot be accepted as establishing that the appellant made the claimed invention prior to Gluhareff's filing date. It may be noted, moreover, that there is nothing of record to suggest that appellant ever made or tested a full-sized airplane constructed in accordance with any of the appealed claims. The evidence relied on relates only to drawings and models which, at best, could establish only conception of the claimed invention and not actual reduction to practice. Appellant could be accorded no date of reduction to practice prior to his first filing date of September 7, 1949, and could therefore overcome the Gluhareff patent only by showing the continuous exercise of reasonable diligence from Gluhareff's filing date of June 5, 1946, until September 7, 1949. See *Ex parte Hunter*, 1889 C. D. 218, 49 O. G. 733; *Ex parte Gasser*, 1880 C. D., 17 O. G. 507; *Ex parte Hodson et al.*, 95 USPQ 44. There is clearly no showing here of the required diligence by appellant.

For the reasons given, we are of the opinion that, so far as dates are concerned, the Gluhareff patent and "Aviation Week" are proper references against the appealed claims and it is therefore necessary to consider whether they disclose the subject matter of those claims.

Claims 1 and 2 were rejected on Gluhareff. The Examiner held that claim 1 "is obviously fully met by the reference," and that statement is correct since Gluhareff clearly discloses a supersonic airplane of isosceles triangular plan comprising two wings progressively increasing in dimension from the nose aft, as required by claim 1 and states that the maximum span of the combined wings is 64% of the maximum chord, from which it follows that the maximum span of each wing section is 32% of the maximum chord, as recited in appealed claim 1.

Appellant, in his brief, relies heavily on the fact that his airplane is composed of two symmetrical sections bolted together. However, neither claim 1 nor any of the other appealed claims is limited to an airplane formed in that manner, and it is well settled that the patentability of claims must be determined on the basis of the limitations which are recited in them. *In re Cresswell*, 38 CCPA (Patents) 917, 187 F.2d 632, 89 USPQ 147, and authorities there cited.

Claim 2 calls for a plane having a dart-shaped surface with the forwardly converging leading edges swept back at least 60 degrees and having an aspect ratio of not more than one. Sweepback is defined as the acute angle between the leading edge of the wing and a line perpendicular to the fuselage center line, while aspect ratio is the ratio of the square of the span to the total area of the wing and protruding fuselage, if any.

Gluhareff states that his sweepback angle may be as great as 72.5 degrees, which satisfies the requirement of claim 2 as to that angle. The lowest aspect ratio which he specifically suggests is 1.2 whereas claim 2 states that such ratio shall not be greater than 1. This is a comparatively small difference, however, and there is nothing to show that the particular aspect ratio claimed by the appellant is critical or will produce any new or unobvious result. We accordingly agree with the Board that appellant's claims 1 and 2 fail to define invention over what is disclosed and claimed by Gluhareff.

Claim 3 was rejected as unpatentable over "Aviation Week." That publication discloses a supersonic plane of generally triangular plan with a sweepback of 45 degrees or more, which satisfies the requirement of claim 3 for a sweepback of "approximately 45 degrees," and an "aspect ratio less than 3," which meets the requirement of the claim as to that ratio. The remaining structural features recited by claim 3 are also fairly disclosed in the publication, as pointed out by the Examiner and the Board, and the rejection of the claim was therefore proper.

Claim 4 was rejected on Gluhareff in view of "Aviation Week." Gluhareff clearly discloses everything called for by this claim except the streamlined cabin faired into the fuselage. Such a cabin is shown by "Aviation Week" and it would involve no invention, in view of that showing, to add a streamlined cabin to the fuselage of Gluhareff and to locate the controlling means for the plane in such cabin.

Claims 5 and 6 are clearly readable on the Gluhareff patent, on which they were rejected, except that the former calls for a plane having its maximum span section equal to 45% of its maximum chord and the latter calls for an aspect ratio between 1 and 1.2. Gluhareff suggests that the maximum span be equal to 64% of the maximum chord and that the aspect ratio be between 1.2 and 1.35. We agree with the Patent Office tribunals that these claimed differences between appellant's device and that of the references have not been shown to involve anything more than choice or design within the skill of the ordinary worker in the art, and that claims 5 and 6 therefore define nothing patentable over Gluhareff.

[4] The appellant contends that he is entitled to the benefits of the Boykin Act (P. L. 690, 79th Congress, 2d sess., ch. 910, Aug. 8, 1946, 60 Stat. 940). As was pointed out by the Board of Appeals, that act relates to situations in which foreign applications were filed or in which a disclosure was made to the Government of the United States pursuant to an agreement between the United States Government and the government of a foreign country. There is no evidence of any such foreign application or agreement in the present case, and the Boykin Act is therefore inapplicable.

[5] Appellant further argues that Gluhareff's patent is invalid because of an alleged offer by the appellant to sell his invention to the National Inventor's Council in 1941, more than a year prior to the filing of Gluhareff's application. However, the validity or invalidity of Gluhareff's patent has nothing to do with its effectiveness as a reference if, as we have herein held, the patent discloses and claims the invention claimed by appellant.

It appears that appellant feels that he has been unfairly treated in that he is now being refused a patent despite the fact that he disclosed what he alleges to be the invention claimed here to the National Inventor's Council long prior to the effective dates of the references on which his claims have been rejected. [6] However, under the patent laws, a disclosure of an invention to the National Inventor's Council is not equivalent to the filing of an application for a patent nor to a reduction to practice of the invention. [7] The conditions under which patents may be granted are definitely set forth in the statutes and we are without authority to depart from those conditions on the basis of alleged equitable considerations.

We have given this entire case very careful consideration in the light of all the arguments presented by the appellant and by the Patent Office, and we are of the opinion, for the reasons set forth above, that the rejection of the appealed claims was proper.

[8] The decision of the Board of Appeals is affirmed.

AFFIRMED.

JACKSON, J., retired, recalled to participate.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

1,941,066, E. H. Armstrong, Radio signaling system; **1,941,069**, same, Radio signaling; **Re. 21,069** (of **2,215,284**), same, Frequency modulation signaling system, **filed** Jan. 12, 1954, D. C., S. D. Ind. (Indianapolis), Doc. 3635, ***Edwin H. Armstrong*** v. ***Arvin Industries, Inc.*** Stipulation dismissing amended complaint with prejudice Apr. 23, 1956.

1,941,069. (See 1,941,066.)

2,148,308, H. E. Spear, Forward-tilting cab; **2,210,519**, A. C. Wollensak, Vehicle cab; **2,376,491**, L. W. Kinney, Jr., Tilting cab; **2,502,622**, B. C. Harris, same; **Des. 163,279**, same, Truck cab, **filed** Apr. 30, 1953, D. C., N. D. Ill. (Chicago), Doc. 53c1095, ***The White Motor Co.*** v. ***Diamond T. Motor Car Co.*** Consent judgment; Patent No. 2,148,308 and claims 2 and 4 held valid and infringed prior to expiration thereof on Feb. 21, 1956; Patent No. 2,210,519 and claims 1, 2, 5, 6, and 9 held valid and infringed; Patent No. 2,376,491 and claim 1 held valid and infringed; Patent No. 2,502,622 and claims 1, 2, 3, and 4 held valid and infringed; Des. Patent No. 163,279 held valid and infringed; no injunction Apr. 13, 1956. Same, **filed** Sept. 7, 1954, D. C., N. D. Ill. (Chicago), Doc. 54c1310, ***The White Motor Co. et al.*** v. ***International Harvester Co.*** Decree as above.

2,179,779, **2,199,526**, G. R. Dempster, Transporting and dumping vehicle; **2,500,618**, same, Bottom dumping container; **2,187,657**, W. E. Lambert, Conveying equipment; **2,210,323**, same, Conveying rig, **filed** Apr. 19, 1956, D. C., N. D. Ohio (Cleveland), Doc. 32732, ***Dempster Brothers, Inc., et al.*** v. ***Perfection Steel Body Co., Inc., et al.***

2,187,657. (See 2,179,779.)

2,199,526. (See 2,179,779.)

2,206,289. (See 2,444,830.)

2,210,323. (See 2,179,779.)

2,210,519. (See 2,148,308.)

2,215,284. (See 1,941,066.)

2,322,041, E. L. Mayo, Automotive vehicle heating apparatus, C. C. A., 6th Cir., Doc. 12586, ***Sears, Roebuck and Co.*** v. ***The Bishop and Babcock Mfg. Co.*** Judgment of District Court in all things affirmed Apr. 19, 1956. **Same**, Doc. 12587, ***The Bishop and Babcock Mfg. Co.*** v. ***Sears, Roebuck and Co.*** Decree as above.

2,367,302, Moore and Kirchmeyer, Bisulphite derivatives of 2-methyl-1,4-naphthoquinone and the like, **filed** Dec. 16, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 16120, ***Abbott Laboratories*** v. ***Ortho Chemical Corp.*** Consent judgment Apr. 25, 1956.

2,376,491. (See 2,148,308.)

2,381,589, S. A. Hayes, System and apparatus for distributing liquid solutions; **2,571,870**, same, Eductor nozzle; **2,571,871**, same, Proportioner; **2,592,806**, same, Eductor device; **2,388,445**, J. W. R. Stewart, Spraying proportioner, **filed** Apr. 20, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19827–TC, ***Hayes Spray Gun Co.*** v. ***The E. C. Brown Co. et al.***

2,388,445. (See 2,381,589.)

2,424,482. (See 2,523,720.)

2,444,830, W. Kellgren et al., Adhesive sheet and method of making; **2,206,289**, W. Kellgren, Method of making pressure-sensitive adhesive sheets, **suit** for Declaratory Judgment filed Apr. 20, 1956, D. C. N. J. (Newark), Doc. 359/56, ***Technical Tape Corp.*** v. ***Minnesota Mining & Mfg. Co.***

2,445,322, M. C. Fridolph, Body garment, **filed** Apr. 20, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16477, ***Sarong, Inc., et al.*** v. ***Magic Mold, Inc.*** **Same**, D. C., S. D. N. Y., Doc. 109/47, ***Sarong Inc. et al.*** v. ***Primrose Foundations, Inc.***

2,454,463, E. M. Kromer et al., Baby's safety sheet, **filed** Dec. 31, 1952, D. C., N. D. Ill. (Chicago). Doc. 52c2843, ***Stayon Products Inc. et al.*** v. ***Riegel Textile Corp.*** Mandate of U. S. C. A.; judgment of District Court affirmed on issue of validity and reversed on issue of infringement Apr. 17, 1956.

2,457,697, T. A. Te Grotenhuis, Polymeric composition and method of making same, **filed** Apr. 21, 1956, D. C., N. D. Ind. (South Bend), Doc. 2061, ***Heterochemical Corp.*** v. ***United States Rubber Co.***

2,461,881. (See 2,523,720.)

2,477,448, S. Friedman, Fur conditioning machine, **filed** Apr. 19, 1956, D. C. N. J. (Camden), Doc. 353/56, ***Reliable Machine Works, Inc.*** v. ***Glenview Metal Products Co.***

2,502,622. (See 2,148,308.)

2,523,720, Riedler and Mechur, Shoulder pad; **2,461,881**, A. Diamond, same; **2,424,482**, Mechur and Riedler, Shoulder pad and method of making the same; **Des. 155,069**, same, Machine for shaping shoulder pads or the like, **filed** Feb. 21, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16290, ***Perma-Fit Shoulder Pad Co. Inc.*** v. ***Scott Novelty Co. Inc.*** Consent judgment Apr. 20, 1956.

2,571,870. (See 2,381,589.)

2,571,871. (See 2,381,589.)

2,592,806. (See 2,381,589.)

2,595,038, E. E. Woller, Sofa bed, **filed** Aug. 25, 1954, D. C., N. D. Ill. (Chicago), Doc. 54c1251, ***Simmons Co.*** v. ***A. Brandwein & Co. et al.*** Complaint dismissed Apr. 18, 1956.

2,599,618. (See 2,179,779.)

2,618,307, B. Keller, Abrasion type hulling machine, **filed** Apr. 19, 1956, D. C., S. D. N. Y., Doc. 109/23, ***Bernhard Keller et al.*** v. ***Sprout Waldron & Co. Inc.***

2,633,328, B. E. Wallace, Winch, **filed** Apr. 17, 1956, D. C., E. D. Pa. (Philadelphia), Doc. 20542, ***The Lug-All Co.*** v. ***Fred Hill & Son Co.***

2,665,870, F. A. de Wiess, Adjustable bracket structure, **filed** May 6, 1955, D. C. N. J. (Newark), Doc. 428/55, ***Milton Fletcher*** v. ***Swing-O-Lite, Inc.*** Action dismissed (notice Apr. 19, 1956).

2,680,804, B. E. Goldman et al., Adjustable automobile headlight rim, **filed** Aug. 24, 1954, D. C., N. D. Ill. (Chicago), Doc. 54c1240, ***Ben E. Goldman et al.*** v. ***Star-Lite Accessories Co. et al.*** Patent held invalid; complaint dismissed Apr. 20, 1956.

2,703,406, M. M. Langa, Knitted tubular braid to be used as fabric edging, **filed** Apr. 17, 1956, D. C., E. D. Pa. (Philadelphia), Doc. 20543, ***Morris Langa*** v. ***Goldstein & Levin et al.***

2,704,544, G. R. Ryan, Venoclysis equipment, **filed** Apr. 17, 1956, D. C. Mass. (Boston), Doc. 56/321, ***Abbott Laboratories*** v. ***Fenral Laboratories.***

2,735,716, L. S. Shimabukuro, Baby stroller protector; **TM 616,123** ("Rain-ette Baby Shields" and design), same, Wind and rain guards for baby strollers, **filed** Apr. 19, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c721, ***Leona S. Shimabukuro*** v. ***Barney Mfg. Corp. et al.***

2,736,455, M. Rosen, Holders, **filed** Apr. 23, 1956, D. C., S. D. N. Y., Doc. 109/55, ***English Silver Mfg. Corp.*** v. ***Keystone Silver, Inc., et al.***

Re. 21,060. (See 1,941,066.)

Re. 22,191, H. H. Wade, Gravity separation of ores, **filed** Apr. 19, 1956, D. C., E. D. Pa. (Philadelphia), Doc. 20562, ***Minerals Beneficiation Inc. et al.*** v. ***Indian Head Coal Co.***

Des. 155,069. (See 2,523,720.)

Des. 163,279. (See 2,148,308.)

Des. 175,463, J. Elesh, Golf practice mat or similar article, **filed** Apr. 19, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19822–WM, ***Flexi-Mat Corp.*** v. ***Pacific Golf Supply, Inc., et al.***

REISSUES

MAY 22, 1956

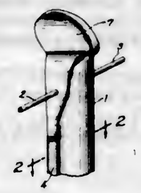
Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,154
HIGH-FREQUENCY TRANSMISSION CABLE

Ringland M. Krueger, Chicago, Ill., assignor to American Phenolic Corporation, Chicago, Ill., a corporation of Illinois

Original No. 2,543,696, dated February 27, 1951, Serial No. 49,927, September 18, 1948. Application for reissue April 19, 1955, Serial No. 502,538

2 Claims. (Cl. 174—113)



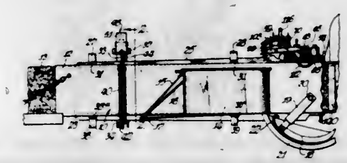
13. An electric transmission cable adapted to be used in applications where it is exposed to weathering at at least one end portion thereof, comprising a thin-walled single-layer air-filled integral tube of flexible thermoplastic dielectric material having a pair of flexible electric conductors embedded in opposite walls thereof and extending therein parallel to the axis of said tube, the outer walls of said tube between said conductors being of convex contour and the interior of said tube being substantially free from foreign matter throughout its length, the walls of said tube at said exposed end portion being merged together into an integral plastic mass forming an air-tight end seal for said tube.

24,155
HYDRAULIC CONTROL FOR BALE CHAMBER DISCHARGE OPENING

James H. Boruzin, La Grange, Ill., assignor to International Harvester Company, a corporation of New Jersey

Original No. 2,718,189, dated September 20, 1955, Serial No. 329,555, January 5, 1953. Application for reissue November 7, 1955, Serial No. 545,586

13 Claims. (Cl. 100—43)



12. An operating mechanism for controlling the cross sectional size of a bale chamber comprising: a bale forming chamber through which material to be baled is passed, a means for directly varying the size of the bale forming chamber, said means including a power converting element, a bale engaging member, means mounting said bale engaging member for movement into and out of said bale, means biasing said bale engaging member toward engagement with said bale, means compressing material to be baled within said bale forming chamber, and means to drive said power converting element by said bale engaging member, said last named means driven by movement of material through said bale forming chamber.

PLANT PATENTS

GRANTED MAY 22, 1956

Owing to the fact that almost all of the illustrations of the plant patents are in colors, it is not practicable to print a cut of the drawing.

1,479
DIOSMA PLANT

Yoshimatsu Nishizawa, West Los Angeles, Calif.

Application November 20, 1950, Serial No. 196,547

1 Claim. (Cl. 47—60)

A new and distinctive variety of Diosma plant characterized as to novelty by the compactness of the bush and the habit of producing profuse blossoms in greater quantity than can be found on its parents, said blossoms developing into a variegated coloring shaded between white and carmine-rose, substantially as described and illustrated.

PATENTS

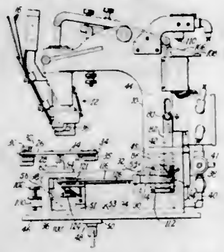
GRANTED MAY 22, 1956

GENERAL AND MECHANICAL

2,746,041
INSERTING MACHINES HAVING ROTARY ANVILS

Roland Heeley, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey

Application March 24, 1955, Serial No. 496,544
6 Claims. (Cl. 1—2)

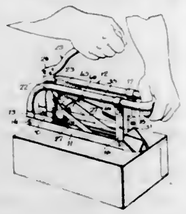


1. A machine for securing to a chassis an article having a lead to be inserted therethrough comprising means for installing the article in predetermined relation to the chassis and with said lead protruding from a surface thereof, a rotatable anvil disposed on the opposite side of the chassis from the installing means, said anvil being mounted for movement toward and from said chassis surface and having a lead-wiping surface inclined thereto, and means for moving said anvil relatively to said chassis surface first to place said wiping surface adjacent to the protruding lead and at a predetermined distance from the chassis surface and then to rotate the anvil whereby its wiping surface bends and wipes said lead into flat clinching relation with the chassis.

2,746,042
PORTABLE STAPLING MACHINE

Alonzo Robert Turner, Cottage Grove, Wis.

Application October 20, 1951, Serial No. 252,290
15 Claims. (Cl. 1—44.4)

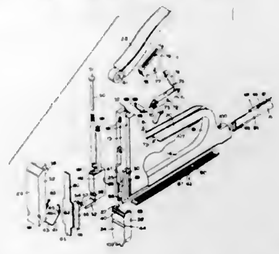


1. In a portable stapling machine for driving and clinching a staple, a housing, a vertically movable staple driver in said housing having spaced depending projections adapted to engage the upper surface of the staple at widely spaced points, means for restraining said driver in elevated position above the staple, power mechanism for impelling the driver against the staple with a heavy impact upon release of the latter from its restraining means, a pivotally mounted anvil in said housing, and manually actuated means for releasing the driver from its restraining means to permit the latter to be impelled against the staple with a heavy impact and for moving the anvil beneath the staple prior to such impact, said anvil being of substantially less width than the spacing between the projections on the staple driver to accommodate the thickness of the staple, and said projections when in lowered position extending beyond the anvil whereby the impact of the driver causes the staple to deform about the outer edges of the anvil and clinch its ends in the material to which the staple is applied.

2,746,043
MAGAZINE FOR STAPLING MACHINES

Harold S. Heller, Cleveland Heights, Ohio; Morton S. Zaller, executor of said Harold S. Heller, deceased, assignor to The Heller Corporation, a corporation of Delaware

Original application August 10, 1949, Serial No. 109,483. Divided and this application September 13, 1950, Serial No. 184,597
6 Claims. (Cl. 1—49)



1. In a staple tacker, a frame having an interconnected chambered head portion and chambered base portion, a staple supporting bar mounted in the chamber of said base portion, and means for normally urging staples on said bar toward the chambered head portion, the chamber of said frame base portion being narrower at its front end where it communicates with said chambered head portion than at its rear end, and said staple supporting bar being narrower at its front end than at its rear end, whereby said staple supporting bar can be completely inserted into said base portion chamber only if the front end of said bar is first inserted into the rear end of said chamber.

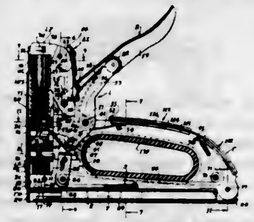
2,746,044
TACKERS

Gioacchino Cusumano, Glendale, and Irwin L. Delin, Brooklyn, N. Y., assignors to Swingline, Inc., Long Island City, N. Y., a corporation of New York

Application January 8, 1954, Serial No. 402,970
26 Claims. (Cl. 1—49)

1. In a tacker, a magazine for receiving a strip of staples and having a raceway, reciprocable staple driving means comprising a blade having a lower portion removably shiftable into said raceway for driving the foremost staple of said strip out of said magazine and comprising a block for anchoring the upper part of said blade, means for slidably guiding said driving means including a casing having spaced sides provided with transversely aligned openings disposed appreciably below said block, shock absorbing means for receiving the impact of said driving means on the downward stroke thereof and embodying a laminated

stack within said openings and bridging said sides and comprising a series of relatively thin, flexible and resilient, closely superimposed sheet metal diaphragms; helicoidal spring means within said casing for normally holding said block against said stack, means for initially raising said block away from said stack against the resistance of

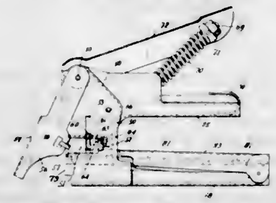


said spring means and for subsequently releasing said driving means to permit downward displacement of said block due to expansion of said spring means whereby said block impacts said laminated stack to flex and deflect said diaphragms for gradually slowing down said driving means pursuant to ejection by said blade of the foremost staple of said strip out of said raceway.

2,746,045
MAGAZINE AND STAPLE FEED MEANS FOR STAPLING MACHINES

Herman J. Spencer, Pittsburgh, Pa., assignor to International Staple and Machine Company, Herrin, Ill., a corporation of Pennsylvania

Application July 16, 1952, Serial No. 299,150
12 Claims. (Cl. 1—49)



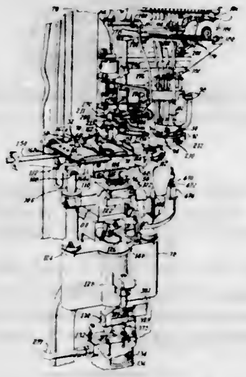
1. In a stapling device having a frame and an ejector means carrying a fastener from the device into a work piece, guide means on said frame terminating at one end thereof, delivery means cooperating with said guide means to carry fasteners thereon and deliver them to the ejector means at a point adjacent the termination of said guide means on the frame, said delivery means including pusher means running on the guide means, spring means adjacent the guide means, a clip fixed to one end of said spring means and releasably connected to the pusher means, said spring and clip tending to carry said pusher means toward the delivery end of the guide means, and release means on the guide means disengaging the pusher means from the clip upon removal of the pusher means from the guide means and engaging the pusher means and clip upon insertion of the pusher means on the guide means.

2,746,046
HEEL ATTACHING MACHINES

Ferman N. Lee, Danvers, William F. MacKenzie, Hamilton, Alfred C. D'Arcey, Danvers, and Alfred G. Cicchetti, Beverly, Mass., assignors to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey

Application June 6, 1955, Serial No. 513,436
49 Claims. (Cl. 1—141)

9. In a fastening inserting machine for securing parts of an article together, a fixed abutment, means for applying a predetermined force in one direction against one of the parts of the article to clamp together said parts held against movement by said abutment with sustained hold-down pressure, means for driving fastenings in a direction opposite to said one direction with a pressure which is slightly greater than that necessary to drive the fastenings into said parts and which may vary in accordance with resistance offered by said parts to said fastenings, means

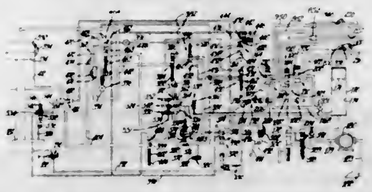


for applying in said one direction against said one of the parts a force which is additional to the sustained hold-down pressure and is substantially equal to the force applied against the fastenings in driving them into the shoe parts, and means responsive to movement of the fastening driving means to a predetermined position in said opposite direction for causing pressure to be released against said shoe parts and for causing movement of said fastening inserting means to be reversed.

2,746,047
HEEL ATTACHING MACHINES

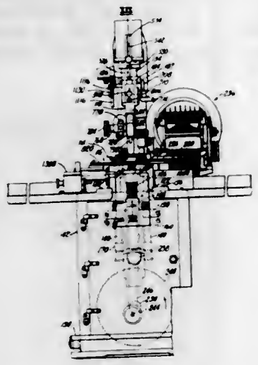
Wallace M. Cutler, Gloucester, and Edwin S. Kant, Melrose, Mass., and Henry B. Greenough, deceased, late of Beverly, Mass., by Mary R. Greenough, administratrix, Beverly, Mass., assignors to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey

Application April 9, 1952, Serial No. 281,392
83 Claims. (Cl. 1—141)



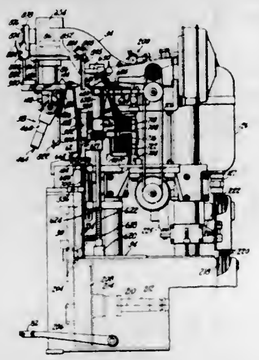
1. In a heel attaching machine, a pair of supports, an actuator which is operatively connected to one of said supports, fluid pressure means including a valve, manually actuated means for moving the valve toward one setting to cause fluid which is included in said means and is under pressure to be forced in one direction against said actuator to move the actuator and accordingly said one support toward the other support thereby forcing together a heel and a heel seat of a shoe mounted upon said supports, fastening inserting mechanism, mechanism comprising a unit responsive to the fluid of said means as a result of movement of said valve toward said one

setting for rendering said fastening inserting mechanism active to insert fastenings into the heel and the heel seat of the shoe, and means for moving said valve away from



said one setting to cause said fluid to be forced in an opposite direction against the actuator to move the actuator and accordingly said one support away from the other support.

2,746,048
HEEL ATTACHING MACHINES
Wallace M. Cutler, Gloucester, and Edwin S. Kant, Melrose, Mass., assignors to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application April 9, 1952, Serial No. 281,391
60 Claims. (Cl. 1—141)



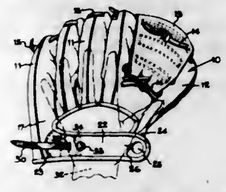
1. In a heel attaching machine, fluid pressure means, a pair of supports, an actuator which is operatively connected to one of the supports, a treadle valve having an element, means for moving said element from an initial to a displaced position to cause movement of the actuator by said fluid pressure means and accordingly movement of said one support in one direction to force together a heel mounted upon one of the supports and a heel seat of a shoe mounted upon the other of the supports, fastening inserting means, said fluid pressure means comprising a pilot valve responsive entirely to pressure exerted against the actuator for rendering said fastening inserting means active to insert fastenings into the heel and the heel seat of the shoe, and means for moving said element of the treadle valve back to its initial position to cause movement of the actuator by said fluid pressure means and accordingly movement of said one support in an opposite direction to effect relative retraction of said supports.

2,746,049
HELMET
Raymond A. Hudson, Birmingham, Mich., assignor, by mesne assignments, to Willson Products, Inc., Reading, Pa., a corporation of Pennsylvania
Application November 23, 1951, Serial No. 257,828
3 Claims. (Cl. 2—3)



1. A helmet molded under heat and pressure from at least two plastic-treated mats of fibrous material, said mats being formed to approximate shape of the helmet, and a brim piece of woven material covering the entire brim portion of the helmet and overlapping with the crown portion thereof, and suspension-connecting means moldably embedded between the fibrous material and the woven material, said suspension-connecting means protruding inwardly of the helmet through said woven brim piece.

2,746,050
BASEBALL GLOVE
Hugo Goldsmith, Cincinnati, Ohio, assignor to Sport Products, Inc., Cincinnati, Ohio, a corporation of Ohio
Application July 28, 1952, Serial No. 301,331
5 Claims. (Cl. 2—19)

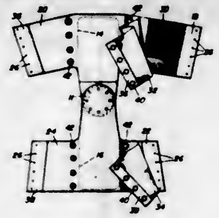


1. A baseball glove comprising a front face, a rear piece secured to the front face, an inner lining disposed intermediate the front face and the rear piece and secured to the front face, said glove including a thumb end, a little finger end, and heel portion, said rear piece being configurated to form a large opening for the insertion of a player's hand, a cross strap extending across said opening, said cross strap being permanently secured to said rear piece adjacent to the little finger end of the glove, means for releasably securing the cross strap to the rear piece at the thumb end of he glove, a wrist strap, said wrist strap being secured to said inner lining at a point on the heel portion thereof, substantially removed from the little finger end of the glove toward the thumb end, means for adjustably securing said wrist strap to said cross strap at a point substantially removed from the little finger end of the glove toward the thumb end, said wrist strap extending across said opening and forming a sling, said sling being substantially removed from the little finger end of the glove but less than one half the distance from the little finger end of the glove to the thumb end of the glove, whereby said wrist strap and said cross strap form a restricted wrist opening at the thumb end of the glove.

2,746,051
ELASTIC TONGUE INSERT FOR KNEE GUARD OR BRACE
Preston G. Stahly, South Bend, Ind., assignor to Ross O. S. Shook, Hutchinson, Kans.
Application December 8, 1952, Serial No. 324,619
2 Claims. (Cl. 2—22)

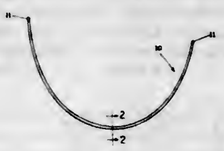
1. A device for laterally bracing a knee joint at one side only of the same comprising a single pair of upper and lower plates having their adjacent ends pivoted together in overlapping engagement, a fastener secured to the end of each plate remote from the pivot and adapted

to encircle a limb adjacent the knee joint for attaching the plates to the limb and positioning the plates at one side only of the limb, each fastener comprising a flexible web attached to the end of a plate and terminating short of the pivoted end thereof and extending laterally from both sides of said plate, an adapter liner insert secured to that surface of one of said fastener webs which is



adapted to embrace a limb, whereby said insert will be interposed between the fastener web and a limb, means for releasably securing together the opposite ends of each fastener web, said flexible web extending laterally from opposite sides of said plates, an elastic portion in said webs, said adapter insert being disposed across said elastic portion.

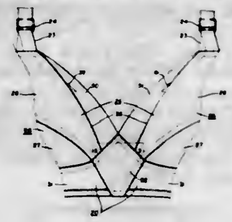
2,746,052
BRASSIERE FRAME
Marcus Schwartz, Flushing, N. Y., assignor to S. & S. Industries, Inc., New York, N. Y., a corporation
App ication April 4, 1955, Serial No. 498,936
1 Claim. (Cl. 2—42)



A substantially rigid arcuate steel wire brassiere frame of substantially rectangular cross-section having its longer dimension extending radially of the curve, and having a greater degree of lateral flexibility than longitudinal extensibility, said lateral flexibility being a minimum of four times the longitudinal flexibility and a maximum of twenty times the longitudinal flexibility of a round wire under the same load and having the same longitudinal extensibility as a round wire of the same cross-sectional area, permitting lateral deflection of the wire from the unstressed plane of the wire to fit the contours of the body of the wearer without causing a tortional twisting of the wire along the curve of the arc.

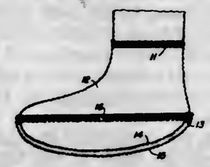
2,746,053
BRASSIERE
Larry L. Krieger, Dover, Del., assignor to International Latex Corporation, Dover, Del., a corporation of Delaware
Application September 29, 1953, Serial No. 383,012
1 Claim. (Cl. 2—42)

In a brassiere comprising spaced breast cups, each cup having a base and inelastic side margins, and means for holding the brassiere in position on the wearer, the combination therewith of a generally diamond shaped, horizontally inelastic center panel; elongated, horizontally elastic front panels attached to the bases of said breast cups and to said center panel; and breast-hugging elastic members substantially coextensive with and peripherally attached to the inelastic margins of the inner sides of said breast cups, said members being attached at their bases to the respective upper sides of said center panel and being



made of elastic fabric having maximum elasticity in a direction parallel to the free edge of said members.

2,746,054
GARMENT CONSTRUCTION
Harry S. Heilbronner, Perry, N. Y., assignor to The Perry Knitting Company, Perry, N. Y., a corporation of New York
Application June 5, 1952, Serial No. 291,897
1 Claim. (Cl. 2—83)



A garment comprising a body portion and a foot portion of fabric attached thereto and having an insole portion of ordinary knitted fabric with the loops extending longitudinally of said foot portion and with a napped upper surface for contact with the foot, and an outsole of coarse knitted fabric made with synthetic plastic yarn and arranged with the loops of knitting extending longitudinally of said foot portion so as to be alternately elongated by frictional contacts between the foot and floor and released between said contacts for return to normal shape, to intermittently vary the shape of said loops, and so that the loops of the knitted insole fabric coordinate under pressure with the loops of the outsole fabric to restrain slipping between said insole and outsole, said outsole having its edges extended substantially around the perimeter of the foot portion and turned upwardly in overlapping relation therewith, and a line of stitching connecting the upturned edges of said outsole to the perimeter of said foot portion.

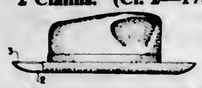
2,746,055
HOLD DOWN NECKTIE
James D. Gleason, Warren, Ohio
Application May 27, 1954, Serial No. 432,840
1 Claim. (Cl. 2—145)



A necktie having a wide end section and a narrow end section, a lining strip secured along the rear surface of said wide section, said lining strip having spaced parallel slits disposed longitudinally of said tie and having transverse slits at the upper and lower ends of the parallel slits

and spaced from the end of said parallel slits, the lining strip having a line of buttonholes disposed between said longitudinal slits and elongated longitudinally of said tie adapted to be buttoned over a button of a shirt with which the tie is used, holding said tie to the shirt, said narrow end section of the tie adapted to be extended through said transverse slits of the lining strip securing the narrow end section of the tie to the wide end section thereof, and said spaced parallel slits providing openings through which the fiingers may be passed in buttoning a button of the shirt to the tie.

2,746,056
WELT EDGE HAT
George T. Rafferty, Danbury, Conn., assignor to John B. Stetson Company, Philadelphia, Pa., a corporation of Pennsylvania
Application September 14, 1953, Serial No. 379,979
2 Claims. (Cl. 2—178)



2. A soft hat brim having a curled edge portion, the said curled edge being folded upon itself to form a double thickness at the edge, an absorbent fibrous woven latticed tape of single thickness impregnated with water-proof thermo-setting rigid adhesive lying in the folded brim edge and extending co-extensively with the fold and being heat set therein, the tape and set adhesive imparting longitudinal rigidity to the curled edge through the adhesive adherence between the fibers of the tape from each side of the tape with each other and with the fibers of the adjacent brim on one side of the tape and with the fibers of the folded brim edge to the extremity of the edge on the other side of the tape.

2,746,057
HEM CONSTRUCTION FOR GARMENTS
Marcus I. Breier, Amsterdam, N. Y., assignor to Marcus Breier Sons, Inc., Amsterdam, N. Y., a corporation of New York
Application July 22, 1953, Serial No. 369,596
2 Claims. (Cl. 2—243)



1. In a garment of the character described, the combination of a shell having a lower edge folded inwardly and upwardly and a lining having a lower edge terminating just above the lower edge of the shell, a binding member having one edge portion enclosing the said lower edge of the lining and secured thereto, the body portion of the binding member being loosely folded downwardly from the point of securement and the other edge of the binding member being positioned within the upwardly folded edge portion of the shell, the downwardly extending fold of the binding member forming a hinge allowing the parts to move relatively to one another.

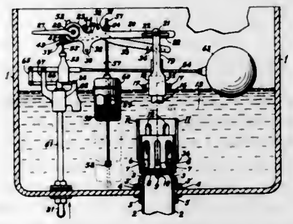
2,746,058
POCKET PROTECTOR
Elva O. Greer, Port Arthur, Tex.
Application July 26, 1954, Serial No. 445,682
1 Claim. (Cl. 2—249)

A combination pocket protector and holder comprising a relatively large panel of substantially rigid material and of substantially the same size and shape as a pocket which said panel is adapted to be inserted into, a comparatively small panel, filament tape having a relatively smooth outer surface securing said small panel to said large panel with said small panel cooperating with said large panel to form a trough adapted to straddle the upper edge of a pocket with said small panel forming a flap with said tape overlying said flap, said small panel having its top edge positioned immediately adjacent but spaced from



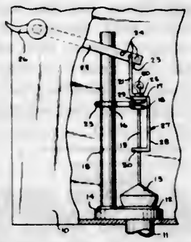
the top edge of said large panel with only said tape being arranged to overlie and straddle the upper edge of a pocket, and a relatively rough surfaced tape secured to the opposite surface of said large panel from said filament tape, said rough surfaced tape being adapted to frictionally engage the inner surface of a pocket, the filament strands of said filament tape extending perpendicular with respect to the top edges of said large panel and said small panel.

2,746,059
VALVES FOR WATERCLOSET TANKS AND MECHANISM FOR OPERATING SAME
Robustiano Gascon Ayensa, Havana, Cuba
Application December 9, 1954, Serial No. 474,241
3 Claims. (Cl. 4—53)



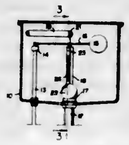
3. A watercloset tank valve which is metallic and of hollow cylindrical shape and open on top and closed at its bottom and provided with large openings at its peripheral wall, in combination with a vertical sleeve provided also with large openings and having the valve slidably mounted therein, a stand integral with the valve seat formed at the top end of the discharge tube secured across the tank bottom, a horizontal supporting bar connected with the top end of the stand and having formed at its opposed end a journal bearing, a horizontal shaft supported on the uppermost portion of the fore wall of the tank in said journal bearing and to the outer end of which is secured the operating handle for the mechanism, a lever pivotally mounted on a pivot pin fixed to said supporting bar and having a horizontally flattened arm arranged beneath said shaft and having the end of its opposed arm connected by a chain to the valve bottom, stop means pivotally mounted on said shaft so that as the handle is operated said means will press down the flattened arm of said lever and will raise the arm connected to the valve chain to pull the valve up from its seat to thereby allow the discharge of water from the tank through the openings of the sleeve and the valve, and a counter balanced float and releasing mechanism cooperable with said shaft to operate said stop means and release the flattened arm of said lever whereby its opposed arm falls and permits the valve to obturate the discharge of water from the tank.

2,746,060
VALVE CONTROL MEANS
Benedict V. Troyano, Perth Amboy, N. J.
Application May 11, 1954, Serial No. 429,061
5 Claims. (Cl. 4—67)



1. In a flush tank having a discharge outlet, valve means for controlling the discharge of water through said outlet, said means including a valve stem having its upper end provided with a stop, the improvement comprising manual means for moving the valve and its stem between the valve open and closed positions at will, said manual means including a pivoted lever and a depending link carried at one end thereby, said link having an offset lower end slidably mounted on the valve stem below said stop, said manual means being adapted to raise said stem towards its valve-open position by cooperation of said offset portion with said stop for normal flushing operation, and a follower slidably mounted on said stem having a side member and an upper and a lower end connected thereto, said upper end being adapted to abut said offset portion and the lower end being adapted to abut the valve and normally rest thereon, said follower being adapted to prematurely close the open valve by pressure engagement between said offset portion, said follower and the valve to thereby forcibly move the valve and its stem to the valve-closed position.

2,746,061
WATER TANK FLUSH VALVE
Orvan J. Bennett, Lupton, Colo.
Application May 16, 1955, Serial No. 508,671
7 Claims. (Cl. 4—67)



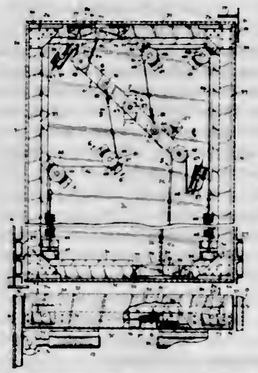
1. A flush valve for a toilet water tank having a discharge pipe from its bottom with the upper rim of the pipe terminating as an annular seat within the tank and near the bottom thereof and having a lifting lever over the seat within the tank a substantial distance above the seat, comprising in combination therewith, a body adapted to be positioned upon the seat for closure of the discharge pipe, a pliable but nonstretchable cord interconnecting the body and lever whereto lift the body from the seat responsive to upward movement of the lever, and an elastic member interconnecting a lower reach of the cord, said member being stretched within the reach, with the cord extended with a tension of said member being less than the weight of the body and adapted to permit the cord to be extended by the weight of the body, but being sufficient to double up the cord between the reach, with the body submerged under substantially balanced pressure.

2,746,062
APPARATUS FOR MOUNTING CLAMP-DOWN SINK FRAMES
Victor W. Waltz, Lexington, Ky., assignor of one-fourth to William E. Sherwood, Lexington, Ky.
Application May 31, 1955, Serial No. 511,966
4 Claims. (Cl. 4—187)



1. In combination, a mountable sink assembly comprising, a sink having a drain aperture in the bottom thereof, a sink rim, a clamp-down frame resting upon said rim, a mounting member extending across the sink and resting inboard of each end upon the top of said frame, connecting means extending through said drain aperture for anchoring against the sink bottom, means for detachably anchoring said connecting means to said mounting member intermediate the ends of said member and means for exerting pressure upon said connecting means and drawing said mounting member against said frame with sufficient force to form the sink and frame into a rigid mountable assembly.

2,746,063
COUNTERBALANCED BERTH ARRANGEMENT
Clarence W. Osner, Chicago, Ill., assignor to Pullman-Standard Car Manufacturing Company, Chicago, Ill., a corporation of Delaware
Application September 10, 1954, Serial No. 455,253
18 Claims. (Cl. 5—9)

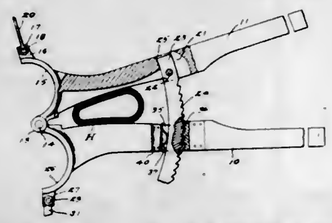


1. In a berth a structure, counterbalance mechanism mounted in said structure for vertically lowering and raising said structure and comprising a plurality of suspension cables each having one end external of said structure for attachment to an overhead object and the other end internal of said structure and secured thereto, pivotal means secured to said structure and engaging said cables, and biasing means secured at one end to the structure and at the other end to said pivotal means and tending to rotate said pivotal means so as to take up the suspension cables.

2,746,064
FIRE HOSE HOLDER AND CLAMP
Bernell L. Ausmus, Fullerton, Calif.
Application September 8, 1952, Serial No. 308,328
1 Claim. (Cl. 7—4)

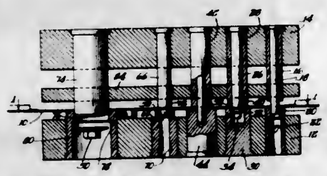
A fire hose clamp comprising a semi-cylindrical section having a concave inner surface and a convex outer

surface, an elongated member integrally joined to the central portion of the convex outer surface of said section, a lug integrally secured to and extending beyond one edge of said section with the axis of said lug parallel to the axis of said semi-cylindrical section, said elongated member having a recess extending therethrough with the axis of said recess extending right angularly to the axis of said section, said recess being spaced from the opposite ends of said member, said member having a recess formed in one side face thereof extending from the convex surface of said section to said first named recess, an arcuate arm pivotally secured at one end in said first recess and adapted to pivot from a position perpendicular to said member to a position generally parallel to said member and within said second recess, ratchet teeth formed on the convex side of said arm, a concave clamping surface formed on said elongated member adjacent said second recess, a second semi-cylindrical section having a concave inner surface and a convex outer surface, an elongated member integrally joined to the central portion of the convex outer surface of said



second section, a convex clamping surface formed on said second elongated member, a pair of spaced-apart aligned lugs integrally secured to and extending beyond one edge of said second section with the axis of said lugs parallel to the axis of said second section, a hinge pin pivotally securing said first lug between said pair of lugs. said elongated member having a groove extending therethrough with the axis of said groove generally perpendicular to the axis of said section, a cover for said groove closing the side face thereof, a flat spring secured to the inner wall of said groove, rack teeth formed in the outer wall of said groove, said groove being adapted to receive said arm with said ratchet teeth held in engagement with said rack teeth by said spring for locking said clamping surfaces closed in clamping relation with a fire hose, and a separable fastener secured to the side edges of said sections opposite said lugs with said separable fastener being adapted to lock said clamping surfaces completely open, said sections being adapted to be engaged about a hose and held thereon by said separable fastener so that said elongated members may then serve as hose manipulating members.

2,746,065
METHOD OF MAKING PREASSEMBLED WASHERS AND ROTARY FASTENERS
Ougljesa Jules Poupitch, Itasca, Ill., assignor to Illinois Tool Works, Chicago, Ill., a corporation of Illinois
Application March 24, 1953, Serial No. 344,310
1 Claim. (Cl. 10—86)



The method of forming washers and coupling the same in preassembled relation with rotary fasteners having clamping faces with projections extending axially therefrom, which method comprises feeding a strip of material intermittently past a series of work stations and at the said work stations successively performing the steps of punching the strip to provide apertures therein, forming a frusto-conical flange around each aperture, radially serrating each frusto-conical flange, telescopically associating a rotary fastener with each frusto-conical flange and with the axial projection on the fastener projecting through the aperture in a direction opposite to the direction in which the flange extends from the strip, swaging each projection on the rotary fastener to cooperate with the flange to trap each rotary fastener on the strip, centering each trapped rotary fastener with respect to a cupping and punching die, and finally cupping the strip away from the rotary fastener and blanking the cupped portion from the strip to provide the preassembled washer and rotary fastener.

2,746,066
COLLAPSIBLE THREADING DIE FOR SELECTIVELY CUTTING STRAIGHT OR TAPER THREADS
Robert R. Finn and Philip A. White, Springfield, Vt., assignors to Jones & Lamson Machine Company, Springfield, Vt., a corporation of Vermont
Application May 12, 1953, Serial No. 354,492
7 Claims. (Cl. 10—95)

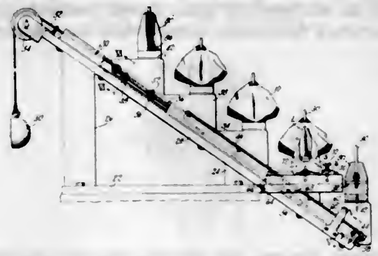


1. A die comprising a body having an axis, chaser holders movably carried by said body for motion toward and from said axis, a chaser carried by each holder, a member movably carried by said body for motion in the direction of said axis and operatively connected to said holders to move said holders away from said axis on movement of said member in one direction and to move said holders toward said axis on movement of said member in the opposite direction, a stop movable with and relative to said body and stopped by impingement on a workpiece to be threaded as said body is moved axially relative to said workpiece during threading of the workpiece, and means operatively connecting said stop and member causing the continued motion of said body onto the workpiece after the stopping of said stop by contact with the workpiece for selectively controlling relative in or out motions between said chasers and workpiece, said means comprising an element connected for rocking motion by a relative motion between said stop and member and an abutment operatively connected to said member and bearing on said element selectively on one or the other side of its rocking axis.

2,746,067
SHOE COVER TRANSFER UNITS
Hans C. Paulsen, Medford, Mass., assignor to B. B. Chemical Co., Boston, Mass., a corporation of Massachusetts
Application June 13, 1952, Serial No. 293,466
11 Claims. (Cl. 12—1)

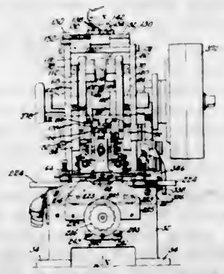
5. In combination, a shoe supoprt having a platform provided with shiftable, alternative, heel end supporting members, a holder adjacent thereto for a stack of closed shoe covers comprising a pair of abutments one of which is adapted to engage the inside of the heel ends of the

covers, the other abutment being movable and adapted to project through the ankle opening of the covers to engage



the forward ends of said openings, and means for urging said abutments apart to pull out the nested covers.

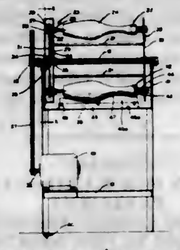
2,746,068
INSOLE LIP CUTTING AND SCORING MACHINES
Alfred S. Clark, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application October 10, 1951, Serial No. 250,762
30 Claims. (Cl. 12—40)



1. In a machine for operating upon shoe soles, a work table for supporting a sole, a head movable toward and from the work table, a tool upon the head for operating upon the sole, a pair of toggle links having adjacent ends, a toggle pin pivotally connecting said adjacent ends, a pivotal connection between the remote end of one toggle link and the head, a supporting arm, a pivotal connection between the remote end of the other toggle link and the supporting arm, a connecting rod pivotally attached at one of its ends to the toggle pin, means for driving the other end of the connecting rod to advance and retract the toggle pin and thereby to move the head toward and from the work table, a pivotal support for said supporting arm substantially coaxial with the toggle pin when the toggle pin occupies a position of greatest retraction, and means for holding the supporting arm in a desired position of angular adjustment about its pivotal support to determine the distance to which the head can approach the work table.

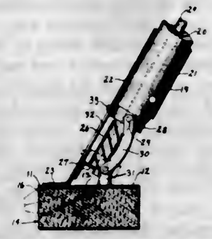
2,746,069
APPARATUS FOR REMOVAL OF PAINT FROM BOWLING PINS
Stephen P. Domenico, Canton, Ohio
Application April 29, 1953, Serial No. 351,817
2 Claims. (Cl. 15—4)

1. Apparatus for the removal of paint from bowling pins including, a paint solvent bath tank, spaced carriage elements mounted above said tank to revolve in and out of said bath, one of said elements consisting of an enclosed sealed housing, means for rotatably supporting bowling pins between said elements in spaced apart relationship whereby they will move successively into and out of said bath tank with revolution of said carriage elements, abrading means in said tank positioned to contact the surfaces of bowling pins moving therethrough, drive means within the enclosed carriage elements arranged to



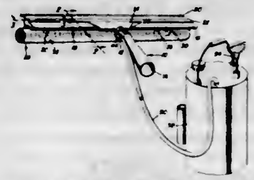
rotate the pin support means thereon, and power means for driving said enclosed drive means.

2,746,070
SELF-WRINGING MOP
William E. Parker, Warren, Ohio, assignor to Parker Manufacturing Company, Warren, Ohio, a corporation of Nevada
Application May 3, 1951, Serial No. 224,391
4 Claims. (Cl. 15—119)



1. A self-wringing mop, comprising a pair of normally substantially co-planar plates and a hinge joining said plates whereby they may be moved from generally co-planar relationship to a V relationship, mopping material secured to said plates and compressed therebetween when said plates are moved to V relationship, a handle rigidly secured to one of said plates for manipulation of the mop, a screw rotatably carried by said handle, a nut threaded on said screw, means holding said nut against rotation yet permitting longitudinal travel thereof along said screw when the latter is rotated, and link means having opposite ends pivotally connected respectively to said nut and the other of said plates, whereby rotation of said screw causes pivoting action of said other plate relative to said one plate.

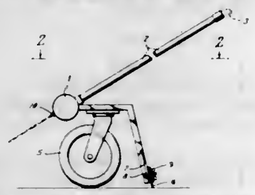
2,746,071
FOUNTAIN BRUSH AND SQUEEGEE
Peter Charun, Montreal, Quebec, Canada
Application November 28, 1952, Serial No. 322,891
3 Claims. (Cl. 15—123)



1. A fountain brush and squeegee for cleaning windows comprising a handle, an elongated U-shaped channel transversely secured to said handle, a squeegee extending from end to end of said channel and held in said channel and projecting outwardly therefrom, a pair of spaced arms secured to one side wall of said U-shaped channel and extending at right angles thereto, a cylindrical brush

rotatably supported by said arms and extending in spaced parallel relationship to said U-shaped channel, an elongated perforated tube secured to said one side wall of said U-shaped channel and directly overlying said cylindrical brush when said brush is lowermost, a finger operated valve member supported by said handle adjacent the U-shaped channel, and flexible tubes connecting said valve member to said perforated tube and to a liquid supply source.

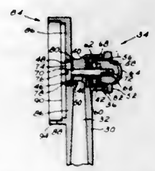
2,746,072
WATER SPRAY FOR WASHING CONCRETE PAVEMENT
James LeRoy Lumpkin, Beaumont, Tex.
Application April 15, 1954, Serial No. 423,339
1 Claim. (Cl. 15—127)



In a water spray for washing paved surfaces, a T-shaped frame including a cylindrical member and a tubular handle member, the handle member being in fluid communication with the cylindrical member and being disposed at right angles thereto, one end of the handle member being rigidly connected to the cylindrical member intermediate its ends, the cylindrical member being of substantially larger diameter than the handle member and being closed at its ends, the cylindrical member being normally disposed horizontally and being mounted on a plurality of wheeled supports spaced longitudinally with respect to the cylindrical member, the wheeled supports each consisting of a bracket supported upon wheel means, each of the brackets including an intermediate portion positioned directly above the wheel means, a forwardly extending end portion rigidly connected to the cylindrical member, and a rearwardly and downwardly extending end portion, a plurality of nozzles connected to the leading edge of the cylindrical member and spaced longitudinally with respect thereto, the nozzles being in fluid communication with the interior of the cylindrical member and being arranged to discharge fluid forwardly and downwardly with respect thereto, the nozzles being relatively small and having flattened tips whereby they are capable of discharging fluid at high velocity and in fan shaped patterns, the flattened tips of the nozzles being aligned with each other and the nozzles being so spaced that the effluent streams from the several nozzles overlap and commingle with each other to form a continuous blast of water arranged in a substantially straight line, and a squeegee blade disposed horizontally parallel to the cylindrical member and adjustably mounted on the lower ends of the rearwardly and downwardly extending end portions of the brackets whereby it may be raised and lowered with respect thereto, the cylindrical member being disposed forwardly with respect to the wheels and the weight of the cylindrical member being counter-balanced by the weight of the handle member so that the squeegee blade normally rests upon the supporting surface.

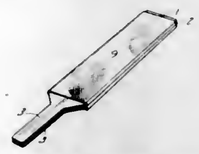
2,746,073
SPRING BIASED VALVE WITH LOCK
Carl C. Harris, Orange, Mass., assignor to The Rivet-O-Manufacturing Company, Orange, Mass., a corporation of Massachusetts
Application September 26, 1952, Serial No. 311,740
20 Claims. (Cl. 15—138)

1. A unitary valve mechanism comprising a body having two open ended portions, a partition separating said portions, a passage formed in said partition, a closure member on one side of said partition movable to seat against said partition and thereby cover said passage, an actuator on the opposite side of said partition, means interconnecting the closure member and the actuator, re-



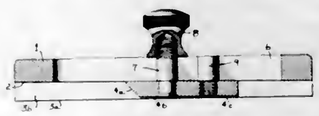
silient means between the partition and the actuator to bias said actuator and closure member to a passage closing position, and locking means on said actuator operatively engaging said body and said actuator to positively force said closure member to its closed position.

2,746,074
DUSTER
Lawrence A. Carlson, Sr., Minneapolis, Minn.
Application May 28, 1953, Serial No. 358,070
3 Claims. (Cl. 15—210)



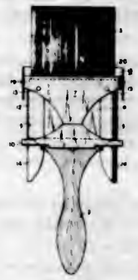
1. A duster comprising a pair of elongated generally rectangular relatively thin flat matching body members hinged together along adjacent longitudinai edges for swinging movements from an edge to edge parallel relationship to a face to face relationship in opposite directions and having reduced axially extended handle portions at one end thereof, and an elongated tubular fabric dusting skirt telescopically receivable over said body members when swung to said edge to edge relationship and foldable therewith.

2,746,075
FILM APPLICATOR FOR LIQUID OR SEMI-LIQUID MATERIAL
Paul N. Gardner, Washington, D. C.
Application August 31, 1954, Serial No. 453,209
8 Claims. (Cl. 15—236)



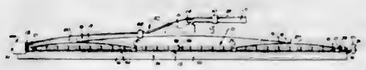
1. A device for applying a film of material to a flat surface comprising a block having depending substantially parallel side rails adapted to rest upon the surface, said side rails defining therebetween a channel extending in the direction in which the block is moved to apply the film, the lower coplanar faces of said side rails being at a slight slope with respect to the ceiling of said channel, a doctor member seated in and movable along said channel, said doctor member including a working edge parallel with the plane containing the lower faces of said side rails, and means for securing said doctor member in different positions of adjustment along said channel thereby to effect corresponding changes in the distance between the working edge of said doctor member and the lower faces of said side rails.

2,746,076
ANGLE BRUSH HOLDER
Harley E. Rutter, Ingram, Pa.
Application February 23, 1951, Serial No. 212,265
5 Claims. (Cl. 15—246)



1. A brush holder for holding the bristles of a brush at an angle, said holder comprising a frame adapted to be secured to the base of a brush with the bristles extending outwardly beyond said frame, a cross arm pivoted to said frame, said cross arm including a web and a flange at each end of the web, said flanges being pivoted to said frame, said web extending across the width of the brush and adapted when in operative position to bend and hold the bristles at an angle to the longitudinal axis of the brush, a bracket secured to said frame and extending transversely of the brush and lying between said flanges, a locking pin slidably mounted in said bracket, and a spring urging said pin outwardly beyond a flange of said cross arm for cooperating with said flange to lock said cross arm in operative position.

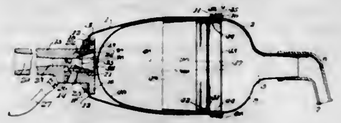
2,746,077
ELECTRICALLY-HEATED WINDSHIELD WIPER
Richard L. Higgins, Melvindale, Mich.
Application May 31, 1952, Serial No. 290,939
7 Claims. (Cl. 15—250.5)



1. In combination with the elongated longitudinally-grooved flexible rubber-like blade of a windshield wiper, an owner-installable wiper blade heating element comprising an elongated strip of electrically-conducting electrically-resistant flexible sheet material of approximately U-shaped form having elongated side members configured to lie alongside said blade externally thereof but substantially in contacting engagement therewith and having a portion extending into the blade groove, said heating element having a pair of terminals thereon at spaced locations therealong for connection of an electrical energization circuit.

2,746,078
VACUUM CLEANER
William V. Spurlin, Indiana, Pa., assignor to Syntron Company, Homer City, Pa., a corporation of Delaware
Application November 2, 1950, Serial No. 193,550
3 Claims. (Cl. 15—344)

1. A compressed air vacuum sweeper comprising a two part casing forming a chamber and having matched cooperative ends, one casing part having a suction nozzle opening into said chamber, the other casing part having a handle with a compressed air suction inducing means and an air discharge passage from said chamber, a shoulder on the matched ends of each casing part, an intermediate housing section in the form of a sleeve fitting into the matched ends of each casing part and carrying in said chamber a dirt bag extended toward the air discharge passage, an annular elastomer sealing member on said



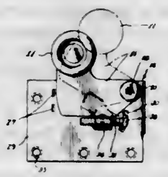
sleeve to seal between the shoulders of the casing parts when fitted on said sleeve, and releasable clamping means on said casing to hold said shoulders against said sealing members.

2,746,079
DECORATIVE AND PRESSURE-RECEIVING BUTTON AND MANUFACTURE THEREOF
Parker R. Zell, Los Angeles, Calif.
Application May 29, 1952, Serial No. 290,651
6 Claims. (Cl. 16—42)



1. A resilient yieldable button comprising: a body of plasticized thermoplastic resin deformed to place a surface layer thereof in tension, said layer being fused and reset to gloss the same; and a rigid base member secured to said body to hold the same in said deformed condition and with said surface layer exposed.

2,746,080
SLIDING DOOR HANGER FOR MOUNTING ON THIN DOORS
Olaf Pearson, West Orange, N. J.
Application April 28, 1953, Serial No. 351,590
6 Claims. (Cl. 16—105)



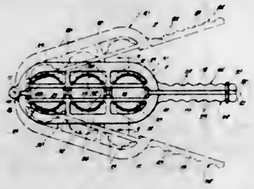
5. A door hanger comprising a frame that has side walls and that fits into a recess at the top of a door with which the hanger is intended to be used, means for connecting the frame to a door, a bracket pivotally connected to a side wall of the frame and extending above the upper end of the frame, an axle carried by the upper end of the bracket, above the frame, a wheel on the axle for supporting the door to which the hanger is adapted to be attached, the pivotal connection for the bracket being horizontally spaced from a vertical line through the mid portion of the wheel, a screw sleeve at the bottom of the bracket, and an adjusting screw threading through the sleeve, the adjusting screw having a head located between the side walls of the frame and of greater width than the distance between the side walls, a portion of said head extending into an opening in at least one of the side walls, the opening being shaped so that the screw head can move angularly in accordance with changes in the angular position of the screw as the bracket and screw sleeve rock about said pivotal connection.

2,746,081
CONTAINER HINGE ASSEMBLY
Irvin J. Gershen, Hillside, N. J., assignor to Pyro Plastics Corporation, Union, N. J., a corporation of New Jersey
Application October 7, 1954, Serial No. 460,807
7 Claims. (Cl. 16—150)



1. In a container of the type having a plurality of sections hingedly connected together, the improved hinge assembly which comprises: a member formed on one of the container sections having a hinge aperture therein and an enlarged head portion connected to the other container section by a reduced neck portion, said head portion being larger than said aperture and said neck portion being disposed in the aperture with the head portion disposed on the opposite side of the aperture from the point of connection between the neck portion and said other container section and said head portion and said slotted opening being relatively distortable so that the head portion may be inserted through the slotted opening for assembling and disassembling the container sections.

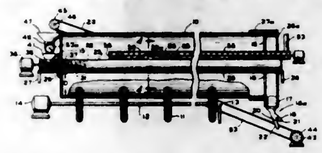
2,746,082
DEVICE FOR REMOVING SCALES FROM FISH
Philip F. Renner, Chicago, Ill.
Application June 14, 1951, Serial No. 231,492
6 Claims. (Cl. 17—7)



1. In combination a manually operated scaling device for fish comprising a pair of elongated body members of integral construction; cooperating leaf hinge portions on each body member at one end thereof; pivot means for hingedly connecting said cooperating leaf hinge portions; a half-frame portion on each of said body members comprising a side wall; an inwardly projecting ledge on said side wall; a plurality of closure bars joined to said ledge, a plurality of inverted cups held between said body members and below said closure bars, said cups having serated edges arranged in outwardly protruding position; a shelf arranged in spaced and parallel relation with said closure bars; a plurality of arcuately arranged projecting walls adjacent said shelf, each in alignment to contact a portion of a cup adjacent its bottom; an outwardly projecting handle on each half-body portion arranged and adapted to be adjusted in spaced and parallel relation to each other; curved outer edges on each of said handles; and a split ring adapted to be retained in said curved outer edges.

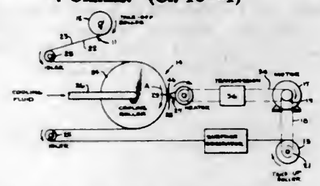
2,746,083
FEEDING MECHANISM
William R. King, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application January 29, 1953, Serial No. 334,021
13 Claims. (Cl. 18—1)

1. Feeding mechanism comprising, in combination, an elongated horizontally-disposed trough or tube, a shaft extending through said tube, a screw conveyor carried by said shaft, the spirals of said screw conveyor advancing in the same direction throughout its length, means for feeding granular material to said screw conveyor, a discharge opening in said tube, and plate means secured to said conveyor adjacent said opening, said plate means being constructed and arranged to define a scoop, whereby granular material fed through said conveyor is picked up by said scoop and discharged through said opening.



5. In apparatus for pelleting carbon black, in combination, a cylindrical mill, means for rotating said mill, means for feeding pellets of carbon black into said mill adjacent one end thereof, a horizontal trough extending from a point outside said mill through the other end thereof and a substantial distance thereinto, a screw conveyor mounted in said trough, means for feeding flocculent carbon black to said screw conveyor, and a discharge opening formed in said trough adjacent the end of the mill at which the pellets are introduced, said discharge opening being disposed above the level of the center of said screw conveyor, and means cooperating with said screw conveyor to form a scoop for lifting flocculent carbon black from the bottom of said trough and discharging it through said opening.

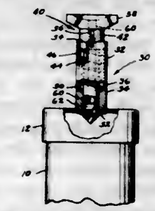
2,746,084
APPARATUS FOR TREATING POLYETHYLENE BODIES
Werner H. Kreidl, New York, N. Y., assignor to Traver Investments, Inc., Chicago, Ill., a corporation of Illinois
Application March 5, 1953, Serial No. 340,562
4 Claims. (Cl. 18—1)



1. In an apparatus, for use in treating a body of polyethylene to render a surface thereof receptive for the transfer of decorative material, in combination, a support for suspending said body, a heater operatively positioned for transmitting heat to said surface, means actuable for movement of said surface relative to said heater to expose succeeding surface areas to the heat transmission, said heater being pivoted for movement about an axis substantially parallel to said surface when the latter is opposite said heater, and a mechanism for turning said heater about its axis, at a cycle frequency substantially proportional to the speed of said movement, whereby continuous areas of said surface will intermittently be heated during spaced time intervals of said movement and, respectively, said surface will be free from heat application during the intervening time intervals and each succeeding heated area will overlap for a portion a preceding heated area.

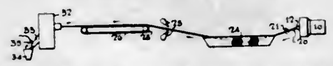
2,746,085
APPLICATOR FOR PLASTIC MATERIAL
William E. Sailors, Longview, Wash.
Application September 17, 1954, Serial No. 456,650
1 Claim. (Cl. 18—3.5)

An applicator for plastic materials comprising a reservoir for containing the plastic material, means for pressing the plastic material against an end of the reservoir, a sleeve attached to said end of the reservoir and communicating therewith, the sleeve having a longitudinal bore therethrough including a forward section of enlarged cross section and a rearward section of reduced cross section, a one piece plunger member including a forward enlarged section having the same cross section as the forward enlarged section of the bore and a rearward section having the same cross section as the rearward reduced section of the bore, the forward section of the plunger having a dispensing nozzle at its outer end, the rearward section of the plunger member extending into the reservoir, the rearward end of the plunger member having an annular groove therein removably receiving a ring-shaped abut-



ment member positioned for abutment against the rearward end of the sleeve for restricting the forward movement of the plunger member, the plunger member having a longitudinal opening communicating at its forward end with the nozzle and at its rearward end with a transverse opening in the rearward section of the plunger member, said transverse opening being positioned forwardly of the annular groove and adapted upon rearward movement of the plunger member to communicate with the reservoir and upon forward movement of the plunger member to be sealed by the rearward reduced section of the said longitudinal bore, and resilient means between the plunger member and sleeve for normally urging the plunger member to its forwardmost position.

2,746,086
METHOD OF MANUFACTURING THERMOPLASTIC PELLETS
Herbert H. Vickers, Union, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application September 29, 1952, Serial No. 311,970
6 Claims. (Cl. 18—47.5)



1. The method of manufacturing moldable thermoplastic pellets which comprises forming from a thermoplastic material a plurality of heated separate rods lying close together in substantially the same plane, compressing portions of said rods so that they are adhered at a plurality of spaced points of adhesion throughout their length, cooling the rods thus adhered, moving said rods in the direction of their length and severing successive transverse end portions thereof.

2,746,087
METHOD OF MANUFACTURE OF SPECTACLES
Karel Doležal, Prague, Czechoslovakia
Application September 18, 1951, Serial No. 247,087
Claims priority, application Czechoslovakia May 7, 1948
13 Claims. (Cl. 18—48)



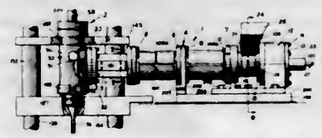
1. A method of manufacturing a frame for spectacles comprising moulding the rims, bridge and temples as an integral unit from a synthetic linear high molecular material permitting molecular orientation by cold working and cold working a portion of each temple at the rim, whereby molecular orientation in said portions is effected and their strength and resiliency is increased, so that said portions provide sufficient strength and resiliency to cause the temples to grip the head of the wearer, and to permit the temples to be folded inwards to a substantially flat position when out-of-use.

2,746,088
CELLULAR THERMOPLASTIC BODIES
Herbert Lindemann, Sins, Aargau, and Ernst Stirnemann, Basel, Switzerland
Application November 4, 1952, Serial No. 318,576
Claims priority, application Switzerland November 10, 1951
12 Claims. (Cl. 18—48)



1. A process of producing a closed-cell cellular thermoplastic resin article having wrinkled cell walls, comprising the steps of forming a gas-expanded cellular thermoplastic resin body having closed gas-permeable cells containing gas at a pressure at least equal to atmospheric pressure; subjecting said cellular thermoplastic resin body to partial vacuum at a temperature below the temperature at which said thermoplastic resin body starts to flow so as to reduce the gas pressure in said closed cells to below atmospheric pressure due to the diffusion of gas through the gas-permeable walls of said closed cells without expansion of said cells; and exposing the thus formed cellular thermoplastic resin body containing gas at below atmospheric pressure to atmospheric pressure so as to cause said closed cells to partially collapse, thereby causing the cell walls to be wrinkled.

2,746,089
METHOD FOR WORKING SYNTHETIC ORGANIC PLASTIC MATERIALS
James W. Hendry, Bay City, Mich., assignor, by mesne assignments, to Tube Turns Plastics, Inc., Louisville, Ky., a corporation of Delaware
Original application May 18, 1949, Serial No. 93,935. Divided and this application December 14, 1950, Serial No. 207,495
9 Claims. (Cl. 18—55)



1. The method of working, in a machine having a restricted chamber and a ram passing therethrough for compressing and ejecting the material therein, a synthetic, organic thermoplastic material at a working temperature slightly below the temperature at which said material will decompose, the steps therein including: placing a fluent charge of said material in said restricted chamber at said working temperature; placing a predetermined quantity of cold, dry, pulverulent material, chemically similar to the material constituting said fluent charge, above the material constituting said fluent charge and forming same in a thin layer on the surface of said fluent charge and permitting same to absorb heat therefrom; maintaining said ram

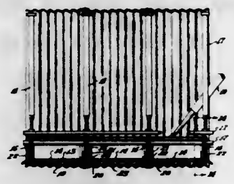
at a temperature less than that of said fluent charge and permitting it to bear on said dry layer for compressing and ejecting said fluent charge of material and allowing a portion of said dry material to be forced between said ram and the walls of said restricted chamber to form a sealing ring of said dry material between said ram and the walls of said restricted chamber.

2,746,090

METHOD OF PAVING PIPE

George R. Hoover, Middletown, Ohio, assignor to Armco Steel Corporation, Middletown, Ohio, a corporation of Ohio

Application September 17, 1952, Serial No. 310,017
7 Claims. (Cl. 18—59)



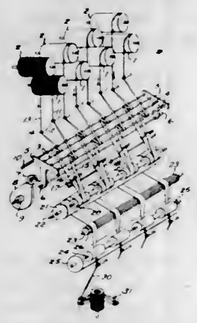
1. The method of paving a corrugated sheet metal pipe section with asphaltic material, which includes the steps of providing a dam at each end of said pipe section, said dams having a height approximately the height of rivet heads, placing a layer of parting material over the portion of the interior of said section to be paved, placing a form, having a contour substantially corresponding to the cross section of that portion of the pipe to be paved, over said parting material and resting on said dams and rivet heads, applying pressure to said form to hold it rigidly in place, and pouring said asphaltic material into the space between said pipe and said form between said dams.

2,746,091

METHOD AND APPARATUS FOR THE MANUFACTURE OF BLENDED YARNS

Germain Tissot and Pierre-Georges-Robert Ott, Paris, France, assignors to Societe de Constructions Mecaniques de Stains, Paris, France, a corporation of France

Application January 17, 1955, Serial No. 482,298
Claims priority, application France October 28, 1954
3 Claims. (Cl. 19—.41)



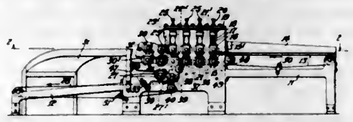
3. The method of making blended yarn from at least two tows of continuous filaments having different characteristics, which comprises spreading each tow into a flat ribbon of parallel filaments, superimposing said ribbons to make a composite ribbon of blended filaments, drawing said composite ribbon to rupture to form a staple fiber top and spinning said top into a yarn composed of blended fibers.

2,746,092

MEANS FOR THE TREATMENT OF VEGETABLE FIBRES

Herbert Donald Thompson and Humphrey Dudley Wightwick, Umtali, Southern Rhodesia, assignors of one-third to Rhodesian Jute Industries Limited

Application June 26, 1951, Serial No. 233,646
Claims priority, application Great Britain June 29, 1950
9 Claims. (Cl. 19—10)



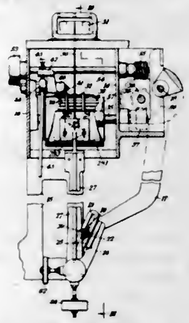
1. A machine for the decortication of fibrous vegetable stalks having a fibre-containing bark enclosing a core, comprising a series of pairs of co-operating splitting rollers, the rollers of each pair being arranged with their axes in a common vertical plane and the lower roller of each pair being covered with yielding material, means for urging the upper roller of each pair resiliently towards the lower roller, means for driving the lower rollers of all the pairs in the same direction and at the same peripheral speed, means for feeding the stalks successively through said pairs of splitting rollers which split the stalks and loosen the fibre-containing bark from the core, and a separating roller mounted substantially in horizontal alignment with the lower roller of the last pair of splitting rollers and driven in the opposite direction thereto for separating the bark of the stalks from the core and taking it off in a downward direction.

2,746,093

APPARATUS FOR DETECTING AND CORRECTING IRREGULARITIES OF THICKNESS OF A TEXTILE SLIVER

George Frederick Raper, Eastbourne, Darlington, England, assignor to T. M. M. (Research) Limited, Helmshore, Rossendale, Lancashire, England

Application August 8, 1952, Serial No. 303,385
Claims priority, application Great Britain August 14, 1951
2 Claims. (Cl. 19—70)



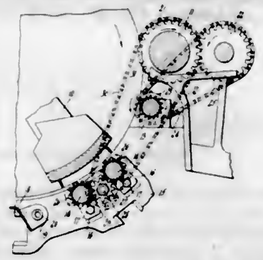
2. An apparatus for detecting and correcting irregularities of thickness of a textile sliver, comprising, in combination, a wheel, means for driving the wheel, a series of relay rods mounted on the wheel with capacity for sliding movement axially thereof, means responsive to sliver thickness for successively adjusting the rods axially of the wheel, and a transmitter comprising a member disposed to bear laterally against a side extremity of each successive rod, and having a rod engaging face which extends at an angle of less than 45° to the rod axis, and means supporting said member with capacity for movement toward and from the axis of the engaged rod, the wheel including an internal sleeve over which the rods are adapted to slide, which sleeve supports the rods laterally against deflection by the transmitter.

2,746,094

GRID SECTION

Robert S. Curley, Biddeford, Maine, assignor to Saco-Lowell Shops, Boston, Mass., a corporation of Maine

Application November 12, 1952, Serial No. 319,973
6 Claims. (Cl. 19—95)



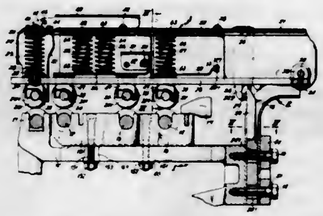
1. In a picker apparatus and the like for opening and cleaning textile fiber of trash and dirt having a rotatable beater, a grid bar rotatable about its axis and positioned adjacent the periphery of said beater, said grid bar having a passage immediately adjacent thereto of a length greater than individual fibers for removal of trash and dirt from the textile fiber, and means for continuously rotating said grid bar in a direction counter to said beater at a peripheral speed much slower than the peripheral speed of said beater.

2,746,095

TEXTILE DRAWING MECHANISM

Erwin Dausch, Esslingen (Neckar), Germany, assignor to SKF Kugellagerfabriken Gesellschaft mit beschraenkter Haftung, Schweinfurt, Germany, a limited liability company

Application February 24, 1953, Serial No. 338,311
Claims priority, application Germany February 28, 1952
15 Claims. (Cl. 19—135)



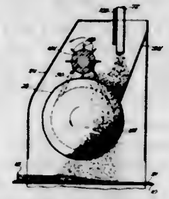
1. In a textile drawing mechanism, in combination, base means; elongated support means turnably mounted on said base means for movement to and from an operating position; a first elongated arm turnably connected to said base means and extending along the length of said support means; a first pair of top rolls turnably carried by said first arm and having their axis located beneath the same; a second elongated arm shorter than said first arm and being located thereover and turnably connected to said support means; a second pair of top rolls carried by said second arm and having their axis located beneath said first arm; spring means located between said arms and support means to urge said arms and rolls carried thereby downwardly with respect to said support means; stop means carried by said support means for movement toward and away from the drawing plane and being located adjacent to said first arm to limit the movement thereof with respect to said support means; and control means connected to said stop means for moving the same to control the position thereof with respect to the drawing plane and for holding said stop means in an end position most distant from the drawing plane.

2,746,096

FELTING APPARATUS

Lee G. Baxter, Frank R. Smith, and Arthur L. Mottet, Longview, Wash; said smith and said Mottet assignors to The Long-Bell Lumber Company, Longview, Wash., a corporation of Missouri

Application March 13, 1951, Serial No. 215,312
10 Claims. (Cl. 19—155)



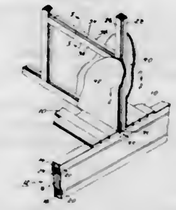
1. Felting apparatus comprising conveyor means; a foraminous drum rotatably mounted above the conveyor means; a brushing roll rotatably mounted above the drum parallel thereto and in peripheral contact therewith; a baffle plate stationed ahead of the brushing roll parallel to the drum and in peripheral contact therewith, thereby forming a chamber three sides of which are defined by the brushing roll, the baffle plate and the upper surface of the drum; and fiber feeding means for feeding fibrous material into the chamber, the rotation of the brushing roll and the drum acting to sift the material through the drum and to deposit it in a uniform layer upon the conveyor means.

2,746,097

SOUNDPROOF BUILDING CONSTRUCTION

Arthur M. Tofani, Jr., Philadelphia, Pa.

Application July 19, 1954, Serial No. 444,027
2 Claims. (Cl. 20—2)



1. In a building construction a girder formed of a lower body portion and an upper body portion, a layer of sound insulation therebetween, there being a notch formed in top of said upper body portion for receiving sound insulating material, a first vertical stud formed of a first vertical strip supported by said upper portion to one side of said notch and a second vertical strip supported by said upper body portion to the other side of said notch, and a vertical strip of sound insulating material located between said strips and registering with the sound insulating in said notch.

2,746,098

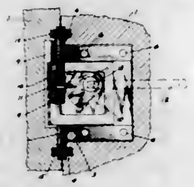
LOCKING MEANS FOR COUPLING BUILDING WALL PANELS

John Dewitt Cooper, Jasper, and Roy D. Stackhouse, Birmingham, Ala.

Application June 14, 1954, Serial No. 436,431
1 Claim. (Cl. 20—4)

In a wall panel connecting device of the character described comprising two similar metal square bars as main supports for other parts, each bar having a threaded hole in one end thereof adapted to receive a stud screw and having two plain holes through it adapted for stud

screws to be inserted therethrough, two similar approximately square plates having a plurality of holes in each as walls for enclosing other parts, a metal oblong shaped plate attached by stud screws to one end of each bar piece, said oblong plate having an oblong slot therethrough, a U-shaped main plunger positioned between the said similar bar pieces and the wall plates and adapted to extend partly through the slot in the oblong plate, a secondary plunger mounted in said main plunger, a tumbler having two integral bosses and journaled in holes in the centers of the wall plates and positioned within the U-shaped plunger, said tumbler having a hole in its center portion of a size and shape for the end of a wrench



to fit therein, an integral stud extension on its outer curved face, said secondary plunger having a notch therein for said tumbler extension to fit therein for moving the plunger, said secondary plunger having a hole across its minor axis, a coil spring mounted in compressed tension in said hole and adapted to prevent easy movement of said secondary plunger, said assembled parts held together by said wall plates by stud screws through the outer holes in the plates and the plain holes in the main supporting bars; a second oblong plate similar in shape to said first oblong plate and serving as a companion plate adapted for attachment to the other plate by said secondary plunger.

2,746,099

MOTOR VEHICLE EQUIPPED WITH A DEFROSTING SYSTEM

Béla Barényi, Stuttgart-Rohr, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany

Application February 20, 1952, Serial No. 272,679
Claims priority, application Germany February 22, 1951
8 Claims. (Cl. 20—40.5)



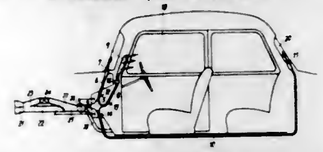
1. In a passenger car having a closable central passenger compartment with adjoining front and rear hoods, one of said hoods covering the driving engine and the other of said hoods covering a trunk compartment, a defrosting system including nozzles for defrosting at least a front window and a rear window by means of warm air emerging from the nozzles of the defrosting system, the defrosting system of each of said windows comprising a box-like hollow compartment with an upper delimiting wall simultaneously constituting the outer body wall thereat, said box-like hollow compartment containing said nozzle and extending directly from below the window to be defrosted a short distance in the longitudinal direction of the vehicle toward the adjacent end thereof and extending in the transverse direction of the vehicle over the entire width of the adjoining hood, whereby said box-like compartment forms a brace for said adjoining hood and whereby the snow and ice accumulated on said upper wall is also defrosted.

2,746,100

WINDOW DEFROSTING INSTALLATION

Friedrich K. H. Nallinger, Stuttgart-N, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany

Application May 18, 1950, Serial No. 162,664
Claims priority, application Germany May 20, 1949
2 Claims. (Cl. 20—40.5)



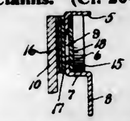
1. In a motor vehicle with a rigid chassis portion and a side door movable relative to said rigid chassis portion, a windshield extending transversely of the vehicle, a door window in said side door adjacent said windshield, a conduit with heat exchanger means for conducting heated air to said windshield, an uninterrupted branch conduit branching off from said first-mentioned conduit and extending toward said door window from below thereof to conduct heated air to said door window from below thereof, a discharge nozzle connected to the free end of said uninterrupted branch conduit, means for supporting said discharge nozzle on said rigid chassis portion of the vehicle, said branch conduit and said discharge nozzle being located exclusively within said rigid chassis portion of the vehicle to remain unaffected by movement of said side door, said nozzle extending along the front side edge of said door window, and said discharge nozzle including a plurality of subdividing guide plates arranged in super-posed relationship in the direction of air flow for changing the flow of warm air from its upward direction in said branch conduit into a plurality of substantially parallel layers flowing in an approximately horizontal direction along said side window, whereby warm air is discharged against and along the window surface.

2,746,101

FRICTION HINGE

Albert F. Lickteig, Grand Rapids, Mich., assignor, by mesne assignments, to Durable Products Company, Grand Rapids, Mich., a corporation of Michigan

Application September 13, 1954, Serial No. 455,591
5 Claims. (Cl. 20—42)



2. A mounting for an awning window comprising, an elongated channel having spaced flanges and a web connecting said flanges, said web having an elongated slot lengthwise of one end portion thereof, a plate at the outer side of said web over said slot, headed pins having heads within said channel between its flanges spaced in the direction of the length of said slot and having shanks passing through said slot connected to said plate, a friction strip member against the outer side of the web between said web and plate, and yielding spring means between said plate and friction member.

2,746,102

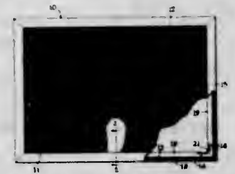
MULTIPLE GLAZED FLEXIBLE SPACER UNITS

Oscar D. Englehart, Brackenridge, and William S. Bobel, New Kensington, Pa., assignors to Pittsburgh Plate Glass Company

Application March 14, 1952, Serial No. 276,668
4 Claims. (Cl. 20—56.5)

1. A substantially rectangular multiple glazed unit comprising a plurality of glass panels of similar size, arranged

in parallel relation, a thin metal spacer channel of substantially U-shape cross section positioned between marginal portions of said panels, a clamping channel of thin metal of substantially U-shape cross section extending around the peripheral portions of said glass panels and having flanges engaging the outer surface of the outer panels of said unit, a mastic composition between said



spacer channel and said panels and between said spacer channel and said clamping channel, a tubular desiccant container for each marginal side portion of said unit and positioned in the channel of said spacer, and a spring clip in each corner of said unit and extending from the end of one desiccant container to the end of the adjacent desiccant container to resiliently position said containers in said chanel.

2,746,103

DRAUGHT EXCLUDING STRIPS, BEADINGS, MOULDINGS, AND THE LIKE

Thomas John Robert Bright, Blackdown, near Leamington Spa, England

Application April 3, 1952, Serial No. 280,351
2 Claims. (Cl. 20—69)



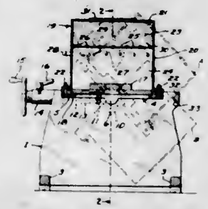
1. A draught excluding arrangement that comprises a plurality of U-section clips each having tangs extending toward one another from opposite shanks of the clip, each tang being located between the free end of the respective shank and the U-shaped portion of the clip, an elongated strip of resilient rubbery material, said strip having an internal contour complementary to the external contour of said clips, said clips being located in individually spaced relation within said strip with their outer surfaces enveloped thereby, and integral flange portions extending lengthwise of the strip and inwardly and upwardly from its opposite edges in embracing relation to the free edges of said clip and engaging the inner surface of the clip shanks between their free ends and the tangs to embace therebetween a supporting flange.

2,746,104

APPARATUS FOR PRODUCING SHELL MOLDS

Emery I. Valyi, New York, N. Y.

Application October 24, 1952, Serial No. 316,626
2 Claims. (Cl. 22—9)



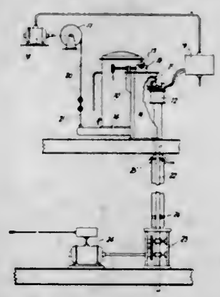
1. Apparatus for making a shell mold, comprising a pattern, a hopper for a molding mixture closed at one end and having a discharge opening at the other end, closure means in said hopper forming with said closed end a closed hopper compartment, means mounting said hopper and said pattern for relative movement, to bring the hopper and pattern into sealing engagement with the discharge opening surrounding said pattern, a supporting frame, means rotatably mounting said hopper and pattern on said frame for rotation in unison about a horizontal axis from vertical upright position to vertical inverted position and return, said closure means being adapted to be opened when said unit is in vertical upright position to drop the molding mixture onto said pattern and to be closed when said unit is in vertical inverted position to confine the loose molding mixture in said compartment, and a stop member mounted on said frame in position to engage said unit to limit the rotational movement of said unit in at least one direction when it reaches a predetermined inclined position after passing through the vertical position, said predetermined inclined position being selected to cause the molding mixture in said compartment to level itself by gravity.

2,746,105

CONTROL SYSTEM FOR CONTINUOUS CASTING

Temple W. Ratcliffe, Beaver, Pa., assignor, by mesne assignments, to The Babcock & Wilcox Company, Jersey City, N. J., a corporation of New Jersey

Application November 10, 1951, Serial No. 255,862
5 Claims. (Cl. 22—57.2)



1. Continuous casting apparatus including a fluid cooled mold, power means for regulating the rate of delivery of molten metal to said mold, means adapted to withdraw the casting from said mold, a thermo-sensitive element associated with said mold and adapted to respond to changes in the position of the molten metal level within the mold by a change in electric flow from said thermo-sensitive element, and speed control means responsive to said changes in electric energy flow to regulate the rate of molten metal delivery to said mold comprising a slidewire motor adapted to compare the electric flow from said thermo-sensitive element with an electric flow standard and to cause mechanical movement proportional to the difference between said energy flows, and an operative connection between said slidewire motor and said power means to regulate the speed of the latter in response to the movement of the former.

2,746,106

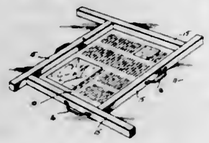
METHOD FOR PRODUCING FLAT PRINTING PLATES

Robert R. Myers, Jr., Des Moines, Iowa

Application March 15, 1951, Serial No. 215,741
1 Claim. (Cl. 22—203)

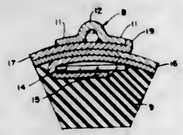
A method of producing flat printing plates comprising, taking a sheet member having relief indicia thereon, a flat supporting surface and a plurality of elongated bars that conduct heat rapidly and have great mass; then arranging the sheet member on the flat supporting sur-

face, then placing the elongated bars on the sheet as to surround the relief indicia on said sheet member and resting on the top of said sheet member, then pouring a molten chillable solidifiable material into the area surrounded by said elongated bars, then removing said elon-



gated bars as soon as the molten chillable solidifiable material adjacent them has solidified, and then applying pressure to said molten chillable solidifiable material and said sheet member until they are compressed to a predetermined thickness.

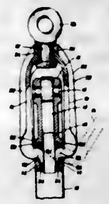
2,746,107
PRESSURE CLAMPS
Holbrook Mahn, Englewood, Colo., assignor to Band-It Company, Denver, Colo., a corporation of Colorado
Application November 17, 1952, Serial No. 321,006
4 Claims. (Cl. 24—23)



1. A pressure clamp which comprises the combination of a generally hollow buckle having a top wall, side walls, and bottom wall flanges turned inwardly from said side walls, said top wall having a front edge and a rear edge and an upper surface, said inturned flanges having front edges and rear edges corresponding to the front and rear edges of said top wall, and a strap having an inner and an outer end, the inner end of said strap being bent over the rear edges of said inturned bottom wall flanges and forming a hook securing said inner end of said strap to said buckle, the strap passing through said hollow buckle at least once between said top wall and said bottom wall flanges and forming a looped portion intermediate the inner and outer ends of said strap, the outer end of said strap being bent up against said front edge of said buckle top wall and cut off flush with said upper surface of said buckle top wall, said hook portion at the inner end of said strap secured to said buckle and said bent-up portion at the outer end of said strap abutting said front edge of said buckle maintaining the looped portion of said strap under substantial tension without requiring indentations in said buckle crimping said strap.

2,746,108
LOAD BINDER
Ralph N. Cole and William T. Cole, Canton, Ohio, assignors to The Canton Cast Products Company, Canton, Ohio, a corporation of Ohio
Application July 11, 1952, Serial No. 298,314
8 Claims. (Cl. 24—68)

6. In combination with a lever arm having a spaced pair of ears each having an aperture therein, a clevis formed of two similar sections each having an angular trunnion at its inner end pivotally located in one of said apertures and an angular projection on the end of said trunnion engaging the inner side of the corresponding ear adjacent to said apertures to prevent removal of the clevis from the lever, there being mating semi-cylindrical grooves in the outer ends of the clevis sections, a headed shank swiveled



in said grooves, and means rigidly connecting the outer ends of the clevis sections together around said shank.

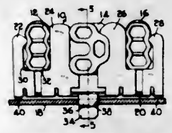
2,746,109
STRUCTURAL FASTENER ELEMENTS
Steve G. Budal, Cincinnati, Ohio, assignor, by mesne assignments, to The Globe-Wernicke Co., a corporation of Ohio
Application August 23, 1951, Serial No. 243,261
2 Claims. (Cl. 24—73)



1. A fastening element for securing together two slotted sheet metal members consisting of a planar sheet metal member presenting oppositely directed pairs of tines, one pair of said tines having parallel inner sides and the other pair having divergent inner sides defining a notch, the apex of said notch lying substantially on a line with the inner side of one of said first mentioned pair of tines, whereby said element may be engaged in a slotted member with said notch seated against one end of the slot and the inner sides of the first pair of tines extending parallel to the faces of the slotted member.

2. A fastening element comprising a sheet metal member of channel shape having a connecting web and parallel arms, and hook elements extending from the ends of said arms and in the planes of said arms to one side of said connecting web and directed toward the plane of said connecting web, and other hook elements extending from said arms and in the planes of said arms to the other side of said connecting web adjacent said web and directed oppositely to said first mentioned hook elements.

2,746,110
PANEL ENGAGING FASTENING DEVICE
William A. Bedford, Jr., North Scituate, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Boston, Mass., a corporation of Delaware
Application September 29, 1954, Serial No. 459,031
4 Claims. (Cl. 24—73)



1. A fastening device for securing articles to a support panel, said device being formed of a single piece of sheet metal and comprising an elongated base, said base being longitudinally bowed with the ends of said base being below the medial portion thereof for engaging the surface of the support panel, a series of longitudinally spaced pairs of article gripping arms extending upwardly from

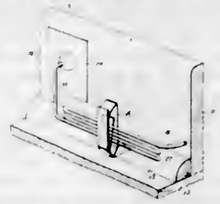
the base, the arms of each pair being joined to the base in lateral spaced relation, adjacent pairs of arms having adjacent portions shaped to receive an article therebetween, and means extending downwardly from the medial portion of said base for engagement with said support panel whereby the securing of the fastening devce to the support panel by the engagement means causes downward flexing of the medial portion of said base to cause said pairs of arms to be urged laterally inwardly toward one another to grip the articles disposed therebetween more tightly.

2,746,111
MOLDING CLIPS AND THE LIKE
Jerry F. Chvosta, Cleveland, Ohio, assignor to Tinnerman Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application March 26, 1953, Serial No. 344,830
11 Claims. (Cl. 24—73)



1. A fastener comprising a piece of sheet metal having opposite end portions bent to define a pair of spaced arms provided with outwardly extending hooks on the free ends of said spaced arms for attaching the fastener in a work opening, and elements on said arms having free ends extending inwardly toward each other and adapted for abutting relation to prevent movement of said arms inwardly toward each other in the attached position of said hooks in said work opening, thereby retaining said hooks on said arms against removal or displacement from attached position in said work opening.

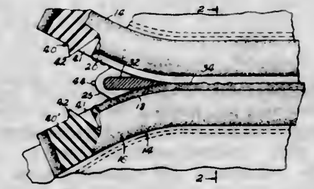
2,746,112
BASEBOARD CORD CLIP
Paul J. Simon, Philadelphia, Pa.
Application April 20, 1950, Serial No. 157,139
2 Claims. (Cl. 24—129)



1. A retaining clip for cords, having planar front, rear, and intermediate members of similar length, bridge means at the base of said members connecting front and rear members together and yieldingly maintaining them in substantially parallel spaced planes, a resilient connection supporting the intermediate member from the free end of the rear member and yieldingly maintaining the intermediate member in a plane which transects the parallel planes of the front and rear members, with the free end of the intermediate member terminating short of but closely adjacent to the line of connection between the front member and the bridge piece, said resilient connection supporting the intermediate member being constructed and arranged to yield more readily than said bridge means connecting the front and rear members.

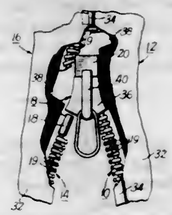
2,746,113
WATER TIGHT FASTENER
Harvey L. Williams, Hadlyme, Conn.
Application April 10, 1946, Serial No. 661,025
13 Claims. (Cl. 24—205.1)

1. A sealing device for slide fasteners of the type having chains of interengageable fingers secured in spaced relation on a flexible tape and a slider for guiding said fingers into and out of interdigitating engagement, which comprises a resiliently flexible and deformable sealing strip secured to said tape adjacent said fingers but otherwise free from the outer faces and adjacent edge portions of said fingers, extending across the outer faces of the fingers substantially to their pitch line and a thickened bead in the portion of said strip over the heels of the fingers, and a more flexible lip portion of



said strip extending along its edge and when relaxed sloping outward beyond the pitch line, whereby a slider for opening and closing the slide, fastener may pass under said sealing strip and, when two such chains are interlocked, the innermost edges of the strips substantially contact with little or no pressure and said lip portions are pressed together by their own resiliency due to greater deformation from their normal sloped position, and a portion of said strip between the bead and the lip being of less thickness than either.

2,746,114
SLIDE FASTENER TYPE TUBE COUPLING
Harvey L. Williams, Pittsburgh, Pa.
Application January 16, 1952, Serial No. 266,670
3 Claims. (Cl. 24—205.1)

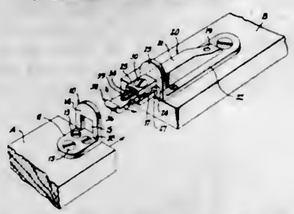


1. A tube coupling comprising continuous flexible bands of slide fastener chain secured to the adjacent edges of the tubes to be joined; continuous resilient sealing strips mounted on one side of said interengaged fastener chains and arranged to be forced into tight interengagement when the fastener chains are interengaged but yieldable to permit passage of a draft fin of a slider therebetween; counterabutment strips mounted on the opposite sides of said bands to insure the tight engagement of said continuous resilient sealing strips and to seal the other surface of said coupling; an anchor receiving box secured on one of said chains and disposed between said sealing and counterabutment strips; a slider on said chain on which said box is mounted, said slider having a draft fin extending between said sealing strips with pulling means attached outside of said sealing strips; an anchor on the other chain adapted to pass through the slider into the box for engagement therewith; and a recess in each of said resilient and counterabutment strips just behind said box to receive the ends of said slider and permit said sealing and counterabutment strips to overlap thereover, to form a fluid tight seal about the abutting head and tail of said coupling.

2,746,115
COUPLING DEVICE

Oswald Mazzei, New York, N. Y.

Application August 27, 1952, Serial No. 306,663
3 Claims. (Cl. 24—230)

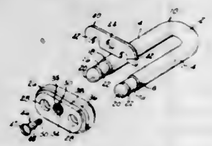


1. A disengageable coupling device for securely and rigidly connecting and holding the ends of adjacent parts in firm abutting engagement, the device comprising, a first mounting plate designed to be fastened to one of two parts to be connected, said mounting plate having an upright flange at one end thereof, the flange having a square hole therethrough; a bolt of substantially square cross-section, said bolt having a slotted end, and being mounted on said plate with its slotted end protruding through and from said hole, the slot being substantially parallel to the mounting plate; a locking plate designed to be fastened to the other of two parts to be connected, said locking plate having an upstanding flange and a square aperture in its flange for receiving said bolt; a cotter having an elongated internal slot in the cotter body; a pivot in said slotted end of the bolt element, said pivot extending through said internal slot, thereby retaining said cotter on said bolt element with freedom to turn about, and slide relatively to, said pivot, said cotter being of small enough cross section to fit through the aperture in the locking plate when the cotter is substantially aligned with said bolt element, said cotter having a side surface abutting the back surface of the flange on the locking plate when said cotter is pivoted 90 degrees with respect to said bolt element, said pivot being so located as to cause snug engagement between the back surface of the flange and said side surface of the cotter in the position in which both flanges abut.

2,746,116
SEPARABLE LINK

Wilbur J. Craven, East Hartford, Conn., assignor to The Capewell Manufacturing Company, Hartford, Conn., a corporation of Connecticut

Application January 6, 1953, Serial No. 329,868
4 Claims. (Cl. 24—265)

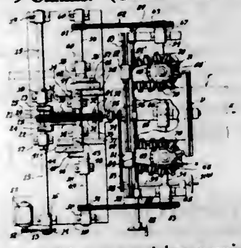


1. A separable link comprising a U-shaped member including a pair of leg portions each provided with a groove extending at least partially therearound, a yoke member having a pair of spaced apertures into which said leg portions are adapted to extend, a third aperture disposed intermediate said pair of apertures and a transverse slot communicating with the three apertures, a locking plate receivable in said slot provided on one side with a pair of notches forming bordering edge portions slidably engageable in said grooves and having an aperture registrable with said third aperture, and removable fastening means engageable in said third aperture and adapted to extend through said locking plate aperture to prevent disengagement of said notches from said grooves.

2,746,117
TENTERING MACHINES

Harold Ainsworth, East Orange, N. J.

Application December 2, 1952, Serial No. 323,612
9 Claims. (Cl. 26—57)

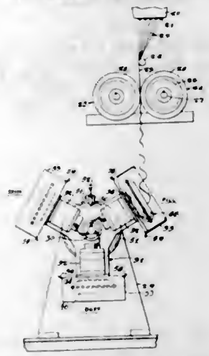


1. A tentering machine comprising a pair of clip chains movable through adjacent paths, a main drive gear, a secondary drive gear, a movable support for said secondary drive gear, an idler gear in mesh with said main and secondary gears, intermediate driving shafts for moving said chains through their respective paths, and adjustable motion transmission members for changing the rate of movement of said driving shafts upon change in the relative position of said secondary drive gear.

2,746,118
APPARATUS FOR THE PACKAGING OF CONTINUOUSLY PRODUCED STRANDS

Warren Wendell Drummond, William R. Steitz, and William F. Holtschulte, Newark, Ohio, assignors to Owens-Corning Fiberglas Corporation, a corporation of Delaware

Application April 25, 1952, Serial No. 284,388
8 Claims. (Cl. 28—21)



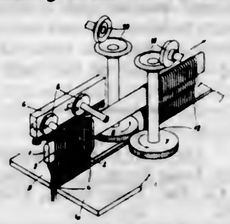
1. Apparatus for packaging a continuous strand comprising, in combination, rotary means for projecting said strand longitudinally across an open air space, a package having a generally cylindrical surface, and mechanism for so rotating said package on its axis and with its surface moving at a linear speed less than that of said strand in position to be impinged upon by said projected strand as to apply a continuous force to said strand after impingement upon said surface for compacting said strand thereon.

2,746,119
DEVICE FOR ARRANGING WIRE HEDDLES ON RODS IN WARP DRAWING MACHINES

Hugo Meierhofer, Uster, Switzerland, assignor to Zellweger A. G. Apparate- und Maschinenfabriken Uster, Uster, Switzerland, a corporation of Switzerland

Application March 21, 1955, Serial No. 495,600
Claims priority, application Switzerland March 22, 1954
2 Claims. (Cl. 28—46)

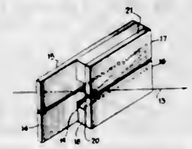
1. A device for arranging wire heddles filed in a row on rods in warp drawing machines, including pushing means for pushing the heddles along the rods, and regulating means disposed on either side of the row formed by the heddles and adapted to laterally engage the heddles, one of said regulating means on one side of said row moving continuously in a direction opposite to the direction in which the heddles are pushed by said pushing means and the other of said regulating means on the other side of said row moving continuously in the same direction in which the heddles are pushed by said pushing means.



2,746,120
APPARATUS FOR CLEANING THREADS

Albert Moos, Gachwader, Uster, Switzerland, assignor to Zellweger A. G. Apparate- und Maschinenfabriken Uster, Uster, Switzerland, a corporation of Switzerland

Application October 29, 1953, Serial No. 389,109
Claims priority, application Switzerland November 21, 1952
3 Claims. (Cl. 28—64)

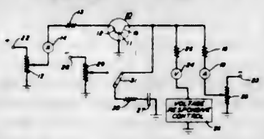


1. An apparatus for cleaning a longitudinally moving thread comprising a first pair of plates disposed in a plane and having parallel spaced edges forming a slot and being inclined with respect to the direction of the movement of the thread to be cleaned for laterally moving the thread whenever a slub in the thread reaches the slot, a second pair of plates disposed in a plane parallel to the plane in which said first pair of plates is disposed, the plates of said second pair having parallel spaced edges forming a slot which is parallel to the slot formed by the first pair of plates, and a plate disposed between said two pairs of plates and having a marginal portion inclined with respect to and gradually covering the slots formed by said plates in the direction of the lateral movement of the thread.

2,746,121
CONDITIONING OF SEMICONDUCTOR TRANSLATORS

Alva Eugene Anderson, Mountainside, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application October 6, 1951, Serial No. 250,160
15 Claims. (Cl. 29—25.3)



1. The method of electrically forming a transistor to improve its electrical characteristics, said transistor having a semiconductor body, an ohmic base connection to said body, and a non-linear collector connection to said body, which comprises applying forming energy to the semiconductor body in the vicinity of the collector connection, monitoring the collector-to-base voltage while anomalous charge carriers are injected into the region being formed, and terminating the forming operation when the collector-to-base voltage has fallen to a predetermined value which is dependent on the density of anomalous charge carriers injected into the region being formed.

2,746,122
METHOD OF STABILIZING THE RESISTANCE CHARACTERISTICS OF SELENIUM RECTIFIER CELLS

Henry J. Zygmunt, Braddock, and Linnie K. Hedding, Wilkinsburg, Pa., assignors to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania

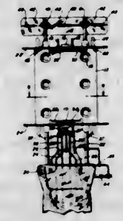
No Drawing. Application May 17, 1952,
Serial No. 288,565
10 Claims. (Cl. 29—25.3)

1. A method of stabilizing the reverse resistance of a selenium rectifier cell comprising the steps of repeatedly exposing the cell to a temperature below 0° F. for at least several minutes during each exposure period, and reforming the cell after each exposure except the last.

2,746,123
FABRICATION OF ELECTRODES FOR ELECTRON DISCHARGE DEVICES

Sture O. Ekstrand, Bethlehem, and Victor L. Ronci, Zionsville, Pa., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Original application August 3, 1949, Serial No. 108,356, now Patent No. 2,592,549, dated April 15, 1952. Divided and this application May 19, 1951, Serial No. 227,214
3 Claims. (Cl. 29—25.18)



1. The method of preparing an electrode assembly for electron discharge devices, said assembly comprising two similar flat plate sections each having inwardly extending embossments, comprising welding said embossments, heat treating said assmebly to relieve stress, and subsequent to said heat treatment compressing said assembly down to a predetermined spacing between said sections by crushing the welded embossments.

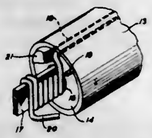
2,746,124
WIRE WRAPPING TOOL FOR COATED WIRE

Emil Belek, Flushing, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application December 28, 1951, Serial No. 263,783
10 Claims. (Cl. 29—33)

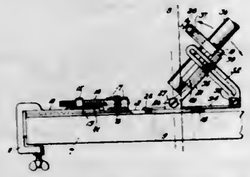
1. A wiring tool for coated wires comprising a sleeve and a spindle mounted for rotation within said sleeve, said spindle having a substantially axial terminal receiving opening therein and having a longitudinal groove in the surface of the spindle for cooperating with the adjacent interior wall of the sleeve to define an orifice for receiving and guiding a wire to be wrapped on a terminal, a projection on the end of the spindle adjacent said

groove and including an end portion of said groove, one face of said projection intersecting the bottom wall of the groove to define therewith an angular edge over which the portion of the wire which is to come in contact with the terminal is drawn during wrapping, whereby the



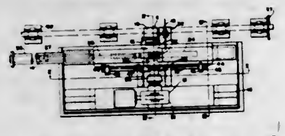
coating is removed from that portion of the wire, said projection having another face substantially tangent to a circle centered on the axis of rotation of the spindle for smoothing down the final end of the wire on the terminal, and means for rotating the spindle in the sleeve.

2,746,125
APPARATUS FOR CUTTING PIPE AT A PREDETERMINED RADIUS AND ANGLE
Ernest A. Cuny, Miami Beach, Fla.
Application May 18, 1953, Serial No. 355,820
4 Claims. (Cl. 29—67)



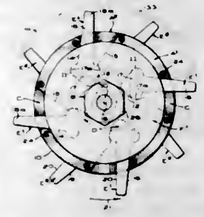
1. Machine for cutting pipe at an angle and at a radius to match the curvature of other pipe to which it is to be joined at that angle and comprising the combination of a pipe cutting tool operating on a vertical axis, a horizontally disposed open center bearing ring surrounding but clear of said cutting tool, a concentrically arranged open center clamp carrying ring swivelled on said bearing ring clear of the cutting tool and adjustable rotatably about the center of said bearing ring, a clamp for holding pipe axially aligned with the center of said bearing ring and pivotally supported on said clamp carrying ring on a horizontal axis intersecting the axis of the bearing ring to thereby present pipe to the cutting tool at an angle determined by adjustment of the same about said horizontal axis and means mounting the bearing ring for horizontal adjustment of the center of the same toward and away from the vertical axis of the cutting tool whereby to determine radius of cut made by said tool on rotation of said clamp carrying ring about the center of the bearing ring.

2,746,126
FLYING SAW
Howard H. Talbot, Pittsburgh, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application August 14, 1947, Serial No. 768,530
8 Claims. (Cl. 29—69)



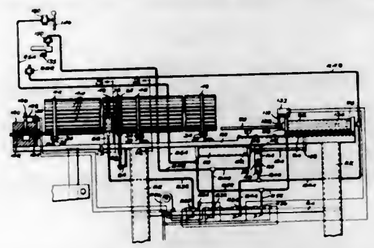
1. In combination with a flying saw, a frame, a saw supporting carriage, having a rack secured thereto, supported by and adapted to be reciprocated along said frame, a driving means with the shaft thereof rotating at a predetermined speed, a second shaft having a pinion at one end thereof in engagement with said rack, a clutch interposed between said shafts, and yieldable driving means so disposed with respect to and for imposing a rapidly accelerated motion upon said carriage to cause said second shaft to be rotated and said clutch to become engaged whereby the ultimate speed of said carriage is determined by the speed of the shaft of said driving means.

2,746,127
DESCALING WHEEL
Elmo B. Jaques, Long Beach, Calif., assignor to Descaling Equipment Co. Inc., Long Beach, Calif., a corporation of California
Application March 6, 1953, Serial No. 340,809
4 Claims. (Cl. 29—81)



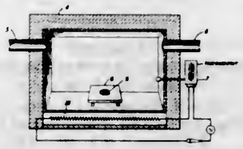
4. In a descaling wheel: a series of rotatable plates abutted one against the other to provide a laminated body; each plate defining a marginal rim, and having at least one recess extending thereinto from the rim; the recesses in alternate plates being staggered relative to those in the intervening plates, with alternate plates forming walled barriers over lateral sides of the recesses in the intervening plates and vice versa; and a hammer swingably disposed in each recess for movement in the general plane of the plate in which the recess is fashioned; and means swingably anchoring the inner ends of the hammers with the plates; the hammers having outer abrading ends movable into positions beyond the rims of the plates.

2,746,128
LOADING DEVICE FOR AUTOMATIC SCREW AND SIMILAR MACHINES
James T. Barron, Joseph J. Dill, and Joseph H. Hotelling, Erie, Pa., assignors to Brown & Sharpe Manufacturing Company, a corporation of Rhode Island
Application March 15, 1950, Serial No. 149,786
7 Claims. (Cl. 29—93)



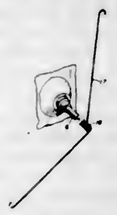
1. A loading device for automatic screw and similar machines, having a work spindle through which bar stock is fed, having in combination, a feed tube for the bar stock within the spindle arranged for a limited axial movement relative to the spindle, spring means normally maintaining the feed tube in a relatively retracted position, a bar stock supporting barrel aligned with the work spindle, and a pusher device for advancing a bar of stock from the barrel and for feeding the bar through the work spindle comprising a pusher member constructed and arranged to advance a bar from an aligned barrel into the work spindle and to feed successive increments of the bar to the machine, said pusher and feed tube being further constructed and arranged so that movement of the pusher into the feed tube causes the pusher to engage and move the feed tube axially against its spring, and actuating means for advancing and for withdrawing the pusher member including a device rendered operative by the movement of the feed tube to reverse the direction of movement of the pusher member.

2,746,129
METHOD OF PRODUCING A TAUT THIN MEMBER
Howard Christensen, Springfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application November 16, 1949, Serial No. 127,715
4 Claims. (Cl. 29—155.5)



1. The method of producing a taut, thin, metallic member comprising securing a member having a thickness of the order of a micron to a frame, oxidizing the surface portions only of said member, rapidly heating the oxidized member in a reducing atmosphere to reduce the oxidized surface portions of the member and draw the member taut, and then slowly cooling the frame-held member.

2,746,130
METHOD OF SECURING CONDUCTOR TO STYLUS
Charles C. Davis, Los Angeles, Calif., assignor, by mesne assignments, to Westrex Corporation, a corporation of Delaware
Application August 15, 1952, Serial No. 304,511
2 Claims. (Cl. 29—155.5)



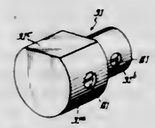
1. In a phonograph recorder having a recorder head, a record-cutting stylus resiliently mounted from said head to be movable relative thereto in response to signal currents and a stylus heating element in the form of an electrically energized conductor coiled around said stylus, the method of securing said conductor to said movable cutting stylus to prevent separation therebetween during a recording operation which comprises applying a thin coating of enamel to said conductor, permitting said coating to harden on said conductor, coiling said conductor around and in frictional contact with said stylus, applying an electrical current to said conductor sufficient to soften the enamel coating thereon, discontinuing the application of said current, and permitting said enamel to harden to form a bonding between said conductor and said stylus.

2,746,131
METHOD OF MAKING A CIRCUIT BREAKER LEVER
Harold V. Elliott, Anderson, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Original application April 2, 1949, Serial No. 85,172, now Patent No. 2,616,011, dated October 28, 1952. Divided and this application August 27, 1952, Serial No. 306,701
7 Claims. (Cl. 29—155.55)



1. The method of making a circuit breaker lever which comprises shaping a sheet metal blank in a symmetrical shape desired, punching, adjacent one end of the blank, two holes on a center line at right angles to the axis of symmetry of the blank and equidistant therefrom, then punching intermediate the ends of the blank two additional holes on a center line at right angles to the axis of symmetry and equidistant therefrom, folding the blank on its axis of symmetry to provide two integral leaves having the sets of holes in alignment, the first set of holes being at the hub portion of the lever, bending the leaves to provide at the end remote from the first mentioned holes two meeting ears in the same plane and at right angles to the planes of the leaves, bending the leaves on longitudinal center lines across the second mentioned holes to provide two meeting, cam rubbing block receiving pad portions in the same plane and at right angles to the planes of the leaves, said second pad portions providing a hole comprising portions of the second mentioned holes in the blank, assembling with the lever thus formed a rivet which has a notch at one end which receives the leaves and which extends through said holes in the second pad portions, attaching the rivet to the leaves, attaching a rubbing block to the second pad portions by means of the rivet, attaching a contact disc to the ears, and passing a bushing into the first-mentioned holes and securing it to the leaves.

2,746,132
FIXTURE AND METHOD OF ASSEMBLING GEAR PUMPS
Delbert S. Oliver, Euclid, Ohio, assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application September 11, 1952, Serial No. 309,001
5 Claims. (Cl. 29—156.4)



1. A fixture for facilitating assembly of a pump comprising a block having a forward cylindrical portion and a reduced diameter rear cylindrical portion joined thereto, said forward portion having a flattened face, a first spring-pressed detent carried by said forward portion of said block and protruding slightly from one side of said block, and a second spring-pressed detent carried by the rear portion of said block and protruding slightly from said one side of said block for operation in the same direction as said first detent, said first and second detents lying in a plane parallel to the flattened face.

2,746,133

PROCESS OF MAKING BORON CARBIDE CONTAINING ALUMINUM, AND PRODUCTS THEREOF

Edwin C. Lowe, Niagara Falls, Ontario, Canada, assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts

No Drawing. Application October 16, 1951, Serial No. 251,631
3 Claims. (Cl. 29—182.8)

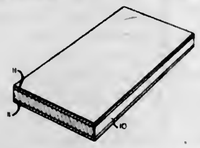
1. A composition of matter essentially consisting of boron carbide having from 2% to 5% of aluminum additional to the aluminum in alumina, said composition having not over 2% of alumina and not over 1% of matter apart from boron carbide, alumina and the said 2% to 5% of aluminum additional to the aluminum in alumina, said boron carbide having been reacted with said aluminum and said aluminum being completely dispersed throughout said boron carbide.

2,746,134

DUPLEX METAL SHEET OR ARTICLE

Folsom E. Drummond, Washington, D. C., assignor to Commonwealth Engineering Company of Ohio, Dayton, Ohio

Application May 22, 1953, Serial No. 356,697
4 Claims. (Cl. 29—191.2)



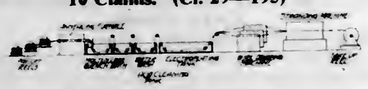
1. A corrosion resistant duplex metal article comprising a core of magnesium metal and a bonding layer thereover of a metal selected from the group consisting of zinc, cadmium and alloys thereof, and a layer of metal over said bonding layer of metal selected from the group consisting of titanium and zirconium.

2,746,135

WIRE-REINFORCED RUBBER ARTICLE AND METHOD OF MAKING THE SAME

Arch W. Harris, Euclid, Ohio, assignor to United States Steel Corporation, a corporation of New Jersey

Application September 30, 1947, Serial No. 777,118
10 Claims. (Cl. 29—195)



1. A rubber article reenforced with a stranded wire structure comprising a plurality of wires, the wires of said structure being composed of a base of high carbon steel containing between .50 and 1.00% carbon and having a tensile strength between 250,000 and 425,000 pounds per square inch and a uniform cold-drawn coating of electrodeposited as such copper base alloy directly bonded thereto, said alloy containing between 50 and 95% copper and between 5 and 50% of a metal of the class of zinc and tin, said coating containing between 50 and 90% copper when the metal of the class of zinc and tin is zinc and between 80 and 95% copper when the metal of the class of zinc and tin is tin, said coating having a smooth continuous surface, a dense, cold-worked structure and a weight between 1 and 50 grams per kilogram of base metal.

5. In a method of bonding rubber to steel wire the steps including electrodepositing as such a coating of copper-base alloy on the wire, the coating containing between 50 and 95% copper and between 5 and 50% of a metal of the class of zinc and tin, said coating containing between 50 and 90% copper when the metal of the class of zinc and tin is zinc and between 80 and 95% copper when the metal of the class of zinc and tin is tin, reducing the size of the copper alloy plated wire in a drawing operation, embedding the coated wire in a vulcanizable rubber composition, and vulcanizing the rubber composition in direct contact with the surface of the drawn copper alloy plated wire.

2,746,136

TREATMENT OF ALUMINUM AND ITS ALLOYS PRIOR TO ELECTRO-PLATING WITH LEAD

Henri Richaud, Chambery, France, assignor to Pechiney, Compagnie de Produits Chimiques et Electrometallurgiques, Paris, France, a corporation of France

No Drawing. Application July 24, 1952, Serial No. 300,755
Claims priority, application France August 1, 1951
7 Claims. (Cl. 29—197)

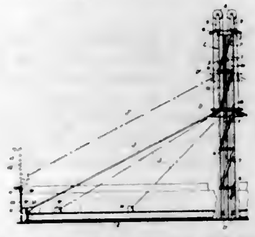
5. An article of aluminum and alloys thereof coated with a granular layer of nickel formed by chemical deposition and, superposed thereon, an adherent deposit of electrolytic lead, said lead deposit being free of blisters.

2,746,137

METHOD AND MECHANISM FOR BUILDING TANK SIDE WALLS

John H. Wiggins, Chicago, Ill.

Application August 13, 1953, Serial No. 374,089
5 Claims. (Cl. 29—429)



1. A method of building a tank side wall composed of a plurality of circular shaped sections arranged in superimposed relation, characterized by constructing the first or topmost section of the wall at ground level from metal plates joined together so as to form a cylindrical shell, detachably connecting to the lower end portion of said shell a stiff, ring shaped compression girder that extends continuously around the circumference of said shell and maintains it in a truly circular shape or form, hoisting said shell into a certain approximate position by exerting an upward pull on said girder at a plurality of points around the circumference of same, constructing the second section of the wall underneath said first section and permanently attaching the top edge of said second section to the bottom edge of said first section, and thereafter disengaging said compression girder from said first section and subsequently using said girder to progressively raise the wall structure, step by step, as successive sections of the wall are constructed and assembled one under the other and permanently joined together by attaching the top edge of the section last constructed to the bottom edge of the section located immediately above same.

2,746,138

HAND WARMER CONSTRUCTION METHOD

John W. Smith, Minneapolis, Minn.

Application September 28, 1950, Serial No. 187,194
2 Claims. (Cl. 29—451)

1. The method of forming burners for hand warmers which consists in utilizing a tubular cage, in employing tubular flexible combustion member stock of a normal diameter greater than that of the inner surface of the cage, in inserting said combustion member stock into the cage by stretching the same lengthwise and drawing it through the cage, in compressing the portion received within the



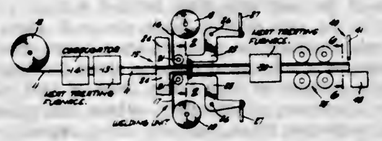
cage and in shearing off the portion of the stock retained within the cage.

2,746,139

METHOD OF FABRICATING STRUCTURAL SANDWICHES

Carl A. van Pappelendam, Rivera, Calif.

Application October 6, 1952, Serial No. 313,222
4 Claims. (Cl. 29—455)



1. A method of forming structural sandwich elements, which comprises feeding a core strip of metal through a corrugator to form corrugations extending longitudinally of the core strip, subjecting the corrugated core strip to heat treatment to relieve internal stresses, feeding flat face strips of metal transversely from opposite sides of said core strip and bending said face strips at points adjacent said core strip and into contact therewith, said face strips contacting said core strip at lines of initial contact which are generally opposite each other, and operating directly upon the ridges of said core strip in a manner effecting joining of said core strip to said face strips by heat bonding, said last-named step being performed adjacent said lines of initial contact between said core strip and face strips, and subjecting the formed sandwich to heat treatment to relieve internal stress.

2,746,140

METHOD OF SOLDERING TO THIN METALLIC FILMS AND TO NON-METALLIC SUBSTANCES

Richard B. Belser, Tucker, Ga., assignor to The Georgia Tech Research Institute, Atlanta, Ga., a corporation of Georgia

No Drawing. Application July 9, 1951, Serial No. 235,890
13 Claims. (Cl. 29—471.1)

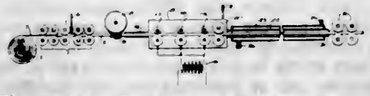
1. The method of soldering a metal object to a thin metallic film bonded to a substrate, comprising flowing indium rich solder directly into contact with the film by the application of heat, so as to penetrate the film and contact the substrate and then solidifying the solder in contact with said metal object, said film and said substrate.

2,746,141

METHOD OF WELDING A TUBE

Raymond H. Hobrock, Birmingham, Mich., assignor to Bundy Tubing Company, Detroit, Mich., a corporation of Michigan

Application November 27, 1950, Serial No. 197,797
5 Claims. (Cl. 29—473.5)



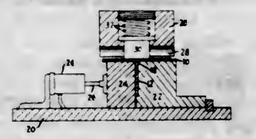
1. The method of making tube from strip steel stock which comprises, moving the strip lengthwise, fashioning the strip into tubular form with opposite edges of the strip disposed in abutting relationship, tack welding the abutting edges together by electrical resistance at spots which are spaced lengthwise of the tube thereby leaving portions with unwelded interfaces between the welded spots, passing the tube through a heating zone and therein heating the entire tube to a temperature in the vicinity of 2400° F., and while the tube is so heated, subjecting the tube to pressure to effect plastic deformation of the metal and to force the interfaces together, to thereby cause recrystallization with the welded spots serving as centers from which recrystallization initiates and grows, and spacing the welded spots from each other so that there are about three or four spots to the inch so that the recrystallization growth extends completely from one spot to another and across the interfaces to thereby weld unite the interfaces and provide a substantially uniformly welded seam.

2,746,142

METHOD OF MAKING A BRAKE SHOE

John A. Maxwell, Grosse Pointe, Mich.

Application October 28, 1950, Serial No. 192,759
3 Claims. (Cl. 29—522)



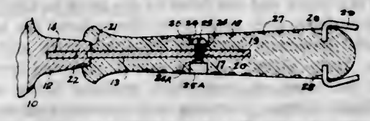
1. A method of manufacturing a brake shoe having T cross section, said method comprising stamping out a flat arcuate piece to provide the web member with a plurality of projections on its outer periphery, providing a flat strip of metal for the band member, said strip being provided with a corresponding plurality of openings adapted to receive said projections when the strip is bent, holding the web member, placing the band member on said web member perpendicularly thereto, bending the band member to arcuate form between two die members, and cold riveting the projections in said openings while the band member is so held between said die sections in its arcuate shape into which it is finally brought by said sections for bending.

2,746,143

METHOD OF MAKING A COOKING VESSEL AND HANDLE THEREON

James F. Maine, Euclid, Ohio, assignor to The Consolidated Iron-Steel Mfg. Co., Cleveland, Ohio, a corporation of Ohio

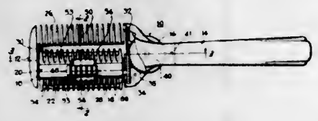
Application October 7, 1953, Serial No. 384,550
1 Claim. (Cl. 29—529)



The method of making a utensil and a handle thereon which includes: making an elongated metal handle core and making a transverse threaded hole therein at a first predetermined distance from one end thereof; making a sand mold cavity comprising a utensil wall cavity portion and a lateral lug cavity portion communicating with the wall cavity portion and having a terminal end wall, and a core cavity portion communicating with the lug cavity portion through its said end wall; forming the core cavity portion to receive the core placed therein, and to dispose the other end of the core to project within the lug cavity portion and to dispose the said one end of the core at a second predetermined distance from the lug cavity portion end wall; pouring metal into the said cavity portions to form the utensil wall, and to form a

lug integral therewith terminating in a lug end, and to embed the said other end of the core in the lug, with the core projecting out of the lug end, and with the one end of the core at said second predetermined distance from the lug end; making a handle grip having a longitudinal recess in one for telescoping over the projecting core; making a transverse hole through the grip at a third predetermined distance from said one end of the grip, equal to the second predetermined distance minus the first predetermined distance; telescoping the grip over the core to engage its one end with the lug end, and, by virtue of said predetermined distances, thereby aligning the grip hole and threaded hole; and projecting a threaded element through the grip hole and screwing it into the threaded hole.

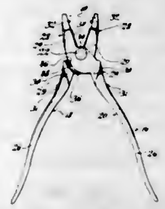
2,746,144
HAIR CUTTER
Abraham Nathaniel Spanel, Princeton, N. J., assignor to Cutter Corporation, a corporation of Delaware
Application March 23, 1953, Serial No. 344,157
8 Claims. (Cl. 30—31)



1. A hair cutter comprising a blade position fixing means adapted to position a cutting blade with an edge in a selected cutting position, and a comb body, said position fixing means and comb body being operatively interconnected, said comb body comprising a frame from which a plurality of spaced apart teeth project, the outer surfaces of which form a plane for supporting the cutter on the hair in proper position for cutting in substantially all cutting positions of the blade, the outermost portions of the teeth forming the front of the comb body, said comb body and blade position fixing means being relatively adjustable to effect relative transverse movement between a positioned blade and the comb body, means for retaining the comb body and positioned blade in any one of a plurality of selected transverse cutting positions, one position wherein the cutting edge is in close proximity to the outermost portions of the teeth, and another position wherein the cutting edge is spaced apart a substantial distance from both the outer surfaces of the teeth and transversely from the outermost portions of the teeth, said blade position fixing means and comb body being constructed and arranged so as to maintain the cutting edge of the blade and the front of the teeth in continuous parallel position with each other throughout the relative transverse movement between the comb body and blade position fixing means, and a guard mounted over the side of the blade on said blade position fixing means, and affixed thereto, forming an obstacle against accidental contact with the edge of the blade in any of its transverse positions.

2,746,145
HIGH LEVERAGE SIDE CUTTING PLIERS
Mathias A. Klein, Jr., Wilmette, and Walter F. Wendt, Chicago, Ill., assignors to Mathias Klein & Sons, Chicago, Ill., a corporation of Illinois
Application January 11, 1955, Serial No. 481,194
2 Claims. (Cl. 30—186)

1. High leverage side-cutting electrican pliers having a slim symmetrical appearance and comprising, in combination, a pair of elongated generally straight levers disposed in scissoring relation to each other, two opposing end portions of said respective levers forming plier jaws shaped as mirror images of each other, the inner end of each jaw constituting a base therefor, both levers being otherwise substantially identical, the major portion of the length of each lever extending from the end thereof opposite from the jaw portion thereof forming a bowed handle including a base at the inner end thereof, the portion of each lever between the jaw and handle bases thereon forming a hinge segment sharply relieved from one side to a central longitudinal plane and shaped to cross in hinged relation a similar hinge segment of the other lever, said respective lever hinge segments defining a single pair of aligned hinge pin apertures therein having axes in a central longitudinal plane of the pliers, a hinge pin extending through both apertures, the levers being shaped and dimensioned to define on opposite sides of the pliers two plane parallel surfaces perpendicular to the axis of said hinge pin, each plane surface entirely covering the adjacent lever hinge segment and continuing a substantial distance along the bases of the handle portions of both levers, both of said plane surfaces continuing substantially without interruption from said respective hinge segments along opposite sides of both jaws to the outer ends thereof, each lever hinge segment having a depth along the axis of said hinge pin equal to substantially half the spacing between said planes, each lever hinge segment having an arcuate tension band portion bounding a sector of the jaw side of the hinge pin aperture therein and extending away from the jaw on the lever through a substantial radial angle with respect to the axis of the aperture, the thickness of said tension band portion of each hinge segment measured



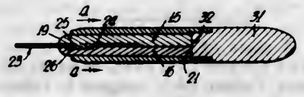
radially with respect to the axis of the hinge pin being substantially one-fifth of the overall thickness of the hinge segment measured through the axis of the hinge pin perpendicularly to both the hinge pin axis and the axis of elongation of the hinge segment, each of said jaws forming on one side thereof a straight elongated shearing edge opposing a similar edge on the other jaw and extending perpendicularly to the axis of said hinge pin into radial alinement relative to said axis with the radially outer edge of said thin tension band portion of the adjoined hinge segment, the portion of each lever hinge segment on the side of the aperture therein opposite the tension band portion thereof forming a beam extending between the adjoining jaw and handle bases, the end of each beam adjacent the adjoining jaw base extending substantially to the outer end of the jaw opposite the shearing edge thereon, the thickness of each hinge segment beam measured radially from the axis of the hinge pin progressively increasing toward the handle end of the beam, each handle base being shaped to conform to the outer extreme edge of the beam portion of the other lever when the pliers are in closed position, each handle including the base thereof being disposed entirely to one side of the central longitudinal plane of the pliers including the axis of said hinge pin, both handles including the bases thereof being symmetrical about a common longitudinal plane perpendicular to the axis of said hinge pin, and the ends of said handles adjacent the bases thereof being shaped to form upon closing a narrowed neck section of the pliers.

2,746,146
CUTTING TOOL
Stephen C. Schiro, Tampa, Fla.
Application January 13, 1954, Serial No. 403,893
8 Claims. (Cl. 30—272)



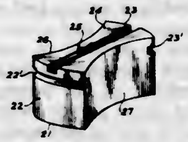
1. In a cutting tool, an elongated housing member formed into a crook at one end and having a guide slot along at least the crook position thereof, a knife movable in said guide slot and projecting beyond said housing at an angle to the plane of the crook, a flexible operator in said housing connected to said knife, and means connected to said operator to move it to cause said knife to traverse said guide slot.

2,746,147
UTILITY KNIFE
Herbert G. Booth, Harrison, N. Y., assignor to David Traum Company, Incorporated, a corporation of New York
Application September 8, 1953, Serial No. 378,751
4 Claims. (Cl. 30—339)



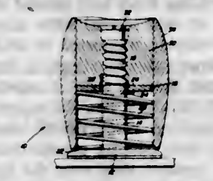
1. An article of the character described comprising a cylindrical hollow casing open at both ends, the bore diameter of said casing being smaller at one end than the other, a pair of elongated clamp members in said casing protruding from one end thereof, each semi-circular in cross section forming a substantially cylindrical rod when juxtaposed, the diameter of said rod increasing from one end to the other and being equal between its ends to the diameter of the smaller end of said casing bore, whereby said juxtaposed members will wedge in said casing with the smaller diameter end protruding from the smaller end of the casing and a substantially rectangular cutting blade clamped at one end between said clamp members and extending longitudinally of said casing beyond the protruding end of said clamp members.

2,746,148
MASTICATORS FOR ARTIFICIAL TEETH
Arthur C. Jernaya, Rochester, N. Y.
Application October 11, 1954, Serial No. 461,451
8 Claims. (Cl. 32—2)



1. A set of artificial teeth including a lower plate and an upper plate, comprising a pair of dental masticators of material which is hard relative to the artificial teeth and each having plane occlusal faces and mounted respectively in the teeth of said upper and lower plates in substantial alignment so that said plane occlusal faces contact each other when said teeth are in closed position, the occlusal face of the masticator in one plate being provided with a groove extending mesio-distally of said teeth and the occlusal face of the masticator in the other plate being provided with a groove extending bucco-lingually of said teeth whereby said grooves are substantially perpendicular to each other when said teeth are in closed position.

2,746,149
ARTIFICIAL TEETH
Torello A. Del Papa, Galveston, Tex.
Application February 28, 1955, Serial No. 491,077
8 Claims. (Cl. 32—10)



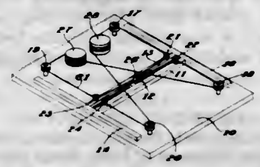
1. An artificial tooth structure comprising a saddle configurated to fit and conform to the edentulous ridge, a post secured at one end to said saddle and having a threaded free end portion, a plate having an aperture therethrough, said post extending through the aperture, a spring having one end secured to said post and said plate and having the other end engaging said saddle, a spindle threadedly received over said threaded end of said post, and an outer casing secured to said spindle.

2,746,150
BITE RECORDER
John W. Needles, Glendale, Calif.
Application July 30, 1953, Serial No. 371,301
7 Claims. (Cl. 32—19)



1. A bite recorder comprising upper and lower mounting members to fit the upper and lower jaws of the human mouth, complemental bite rims mounted on such mounting members to be in occlusal relation with each other when the mounting members are fitted to the human mouth, the occlusal surfaces of said rims being spherical, and means associated with one of said bite rims for making a tracing on the other of said rims as the jaws undergo masticatory movements, such tracing constituting a record of the mandibular motion associated with such masticatory movement.

2,746,151
TRACKING MECHANISM
Charles J. Kennedy, Oaklyn, N. J., assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application November 17, 1951, Serial No. 256,904
1 Claim. (Cl. 33—1)

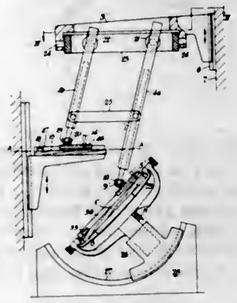


A tracking mechanism for continuously presenting a fix on a plotting board comprising, a pair of longitudinal guides mounted parallel to each other and adjacent oppo-

site edges of said plotting board, a first slide member receivable transversely between said guides and movable relative thereto, said first slide member formed with a longitudinal slot transversely of said guides, a second slide member receivable within said slot formed in said first slide member and movable transversely of said guides, first, second, third and fourth pulleys rotatably supported adjacent the four corners of said plotting board, fifth, sixth, seventh and eighth pulleys rotatably supported on said first slide member adjacent its four corners, an indicator attached to the second slide member and visible through said plotting board to indicate a fixed position, a projection extending from said second slide member on the reverse side of said second slide member, a pair of capstan shafts rotatably supported in said plotting board between the first and third pulleys, a first capstan fixed on the first capstan shaft, a second capstan fixed on said second capstan shaft, a first flexible means attached to the projection and passing, respectively, over the fifth and first pulleys and then passing counterclockwise so as to encircle the first capstan, then over the fourth and eighth pulleys and attached to the projection, a second flexible means attached to the projection and passing over the sixth and second pulleys and then encircling the second capstan in a counterclockwise direction and then over the third and seventh pulleys to the projection where it is attached, a housing mounted on said plotting board and rotatably supporting said first and second capstan shafts, a first transverse shaft extending from said first capstan shaft intermediate the plotting board and said housing, a second transverse shaft extending from said second capstan shaft intermediate the plotting board in said housing, first and second beveled gears rotatably mounted, respectively, on opposite ends of said first transverse shaft, third and fourth beveled gears rotatably mounted, respectively, on opposite ends of said second transverse shaft, a first sleeve rotatably supported between the first transverse shaft and said plotting board on the first capstan shaft, a second sleeve rotatably supported on the second capstan shaft between the second transverse shaft and the plotting board, a fifth beveled gear in engagement with the first and second beveled gears and fixed on said first sleeve, a sixth beveled gear in engagement with the third and fourth beveled gears and fixed on the second sleeve, a third sleeve rotatably supported on said first capstan shaft between the first transverse shaft and the housing, a fourth sleeve rotatably supported on the second capstan shaft between the second transverse shaft and the housing, a seventh beveled gear fixed on the third sleeve in engagement with the first and second beveled gears, an eighth beveled gear fixed on the fourth sleeve in engagement with the third and fourth beveled gears, a first cyclic gear mounted on the first sleeve, a second cyclic gear mounted on the second sleeve, a third cyclic gear mounted on the third sleeve, and a fourth cyclic gear mounted on the fourth sleeve, an idler shaft rotatably supported by the plotting board, an idler gear mounted on the idler shaft and in engagement with the first and second cyclic gears, a first and second crank shaft rotatably supported between the housing and the plotting board, a first drive gear mounted on the first crank shaft and in engagement with the fourth cyclic gear, a second drive gear mounted on the second drive shaft and in engagement with the first cyclic gear, and the third and fourth cyclic gears engaged.

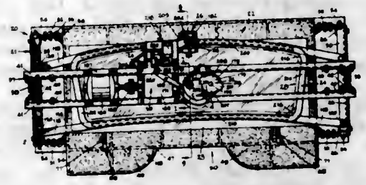
2,746,152
DRAWING APPARATUS
Thomas Meyrick Deakin, London, England
Application February 1, 1952, Serial No. 269,481
Claims priority, application Great Britain February 2, 1951
8 Claims. (Cl. 33—18)

8. Drawing apparatus comprising a plane drawing surface, a transversely rigid telescopic tracing member, a universal pivot mounting for one end of said tracing member, a table for supporting the object to be traced and adjustable both angularly about mutually perpendicular axes parallel to the surface thereof and bodily toward and away from said surface, said table being displaceable in a direction normal to its surface during a drawing operation, a tracing point universally pivotally coupled to said telescopic tracing member and movable over said drawing



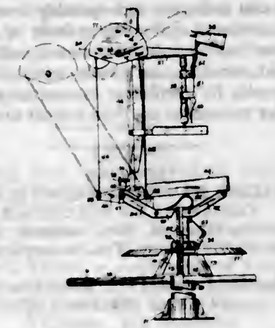
surface, a second transversely rigid telescopic member universally pivoted at one end at a point spaced from the pivot of the tracing member in a direction parallel to the drawing plane, a universal pivotal connection between the other end of said second telescopic member and a drawing point, and a linkage interconnecting said telescopic members to maintain their axes parallel and coplanar.

2,746,153
SHEET GLASS CUTTING MACHINE
Harry A. Kuntz, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio
Application July 9, 1951, Serial No. 235,824
12 Claims. (Cl. 33—27)



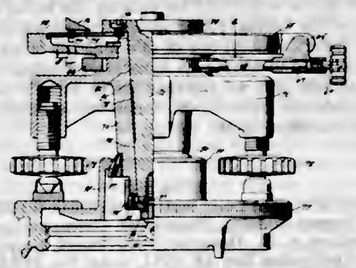
10. In a machine for cutting predetermined patterned shapes from sheet material such as glass, a support for supporting a sheet to be cut, a template mounted in spaced relation to said support and of substantially the same configuration as the sheet to be cut, means for positioning said sheet in proper cutting alignment with said template, means for moving said positioning means relative to said support, a cutting unit adapted to travel along said template and including a cutting tool engageable with a sheet on said support when said sheet is in cutting position, mounting means mounted in spaced relation with respect to both said sheet support means and said template and independently of said template, a hinged arm pivotally connected at one portion thereof to said mounting means within the area of said template, said arm being rotatable 360° about said mounting means as said cutting unit traverses said template, means for pivotally connecting another portion of said hinged arm to said cutting unit, said arm being so formed and connected to said mounting means and said cutter that it projects beyond said template only during a portion of its 360° rotation about said mounting means, and means operatively connected to said cutting unit for moving the same along said template.

2,746,154
SKY LOOKOUT CHAIR
Donald A. Lewis, Jr., Parma, Ohio
Application August 18, 1953, Serial No. 374,960
4 Claims. (Cl. 33—69)



4. In a sky lookout chair, a seat frame, a horizontal hinge pin carried by said frame, a chair back mounted to turn on said hinge pin, a shaft carried by said chair back parallel to said hinge pin, a lower yoke mounted on said hinge pin and fixed relative to said frame, an upper yoke loosely mounted on said shaft, dial markings on said upper yoke, mechanical connections between said yokes for maintaining the upper one parallel to the lower one in all positions of said chair back, a binocular supporting arm fixed to said shaft and a pointer fixed to said shaft in position to move over said dial markings as said arm is moved through a vertical angle in any position of the chair back.

2,746,155
PRECISION SURVEYING INSTRUMENT
Leopold Chargin, New York, N. Y., and Donald N. Grundberg, Stoneham, Mass., assignors to C. L. Berger & Sons, Inc., Boston, Mass., a corporation of Massachusetts
Application January 24, 1952, Serial No. 268,061
1 Claim. (Cl. 33—69)



Surveying instrument structure comprising: a leveling head; a horizontal measuring circle mounted upon said leveling head; said leveling head having a conically shaped bore extending therethrough, said bore having a substantially vertically disposed axis; a telescope support element having a tapered vertical spindle engageable with said bore, said spindle having an upper fitted area in the form of a frustum of a cone; and a lower fitted area in the shape of a second frustum of a cone; a vernier plate upon said spindle aligned with said horizontal measuring circle; means for adjusting the fit between said bore and said upper and lower fitted areas, and means for adjusting the alignment of said verner plate with respect to said horizontal measuring circle; said means for adjusting the fit of said fitted areas of said spindle with respect to said bore including a thrust bearing in the form of an annular washer disposed beneath said spindle, a housing surrounding said washer and threadedly engageable with a lower portion of said leveling head whereby said washer may be adjusted axially with respect to the axis of said spindle; means in the form of a locking screw to fix a given adjustment of said housing with respect to said leveling head; said spindle having a threaded bore axially disposed in the lower portion thereof, and a spindle locking nut having a threaded shaft portion adapted to project through said annular washer to engage said bore, and a headed portion engageable with said housing; whereby said spindle is maintained in positive contact with the annular upper area of said washer.

2,746,156
STEM CALIPER FOR SHALLOW BORES
Edwin D. Reed, Detroit, Mich.
Application April 23, 1953, Serial No. 350,686
3 Claims. (Cl. 33—143)



1. A counterbore gauge comprising an elongate handle having a head member at the lower end thereof, said head member being provided with a through opening therein the axis of which is perpendicular to the axis of said handle, inner and outer telescoping members mounted in said opening in said head with a portion of said head extending circumferentially around one of said telescoping members, said telescoping members each having a foot portion at the outer end thereof, said foot portions being fixed on and projecting downwardly from said telescoping members and extending at all times beyond the axial projection of said head, said foot members each having an outer end face which is convex in horizontal section and which slopes continuously inwardly in an upward direction, each of said foot members also having a lower end face which intersects said outer end face to form a sharp corner edge which defines the outermost edge on the bottom face of each foot portion.

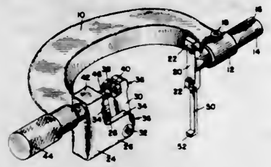
2,746,157
DOTTED LINE ATTACHMENT FOR DRAFTING MACHINES
Forrest L. Langford, Los Angeles, Calif.
Application December 21, 1953, Serial No. 399,448
11 Claims. (Cl. 33—174)



1. In combination with a draftsman's rule having a front ruling edge formed therein: a relatively thin template having a row of apertures adjacent and substantially parallel to a forward edge thereof adapted when said template is in a first position to be completely withdrawn under said rule and when said template is in a second position to underlie said ruling edge to modify a line drawn therealong, said template being substantially wider than said rule whereby the rearward edge of said template lies behind said rule in either of said positions; resilient

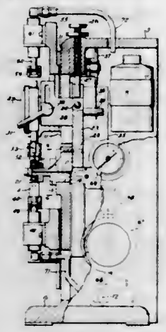
means secured to said rearward edge of said template and projecting forwardly across the top of said rule, said last means being spring biased downwardly to hold said template slidably against the under side of said rule; and guide means secured to the upper surface of said rule to slidably engage said resilient means whereby to constrain movement of said template between said first and second positions to translatory motion in a direction substantially transverse to said ruling edge.

2,746,158
TAPER MICROMETER
George L. Gershman, Worcester, Mass.
Application June 24, 1954, Serial No. 438,926
1 Claim. (Cl. 33—174)



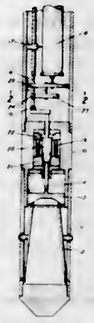
A precision taper micrometer comprising a frame, a trigometrical sine bar pivoted thereon having contact points for engagement with one side of the tapered device to be measured and having a cylindrical sine bar roll whose central axis is parallel to the pivot axis of the sine bar, a direct reading adjustable increment measuring device having a flat face engaging the sine bar roll on the cylindrical surface thereof, and a base member carried by the frame and spaced from the sine bar for contacting the article to be measured on the opposite side from the sine bar, said increment measuring device being rectilinearly movable to position the sine bar for the purpose of providing the desired measurement, said contact points on the sine bar being in a line parallel to a plane passing through the central axis of the sine bar roll and the pivot axis of the sine bar.

2,746,159
GAUGING DEVICE FOR BEARINGS
Willis Fay Aller, Dayton, Ohio, assignor to The Sheffield Corporation, Dayton, Ohio, a corporation of Ohio
Application January 3, 1951, Serial No. 204,203
11 Claims. (Cl. 33—174)



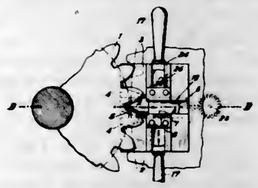
1. Apparatus for gauging the clearance relationship of a pair of inner and outer mating parts comprising a supporting member for loosely receiving one of the parts for limited radial play and free rotation thereon, a frame supporting said member in fixed position, means for applying a force in one direction radially on the other of said parts towards the said one part and including means for reversing the direction of force application, a first movable contact element within said supporting member for physically engaging the inner side of one of said parts and positioned thereby, a second movable contact element for physically engaging the outer side of the other of said parts, an indicator, a holder carrying the first of said elements and said indicator and operably mounted on said frame for rectilinear movement radially of said member, said indicator having indicating means controlled by the other of said elements, and means supporting the second of said elements for rectilinear movement parallel to the line of holder movement and with respect to said indicator.

2,746,160
CALIPER HAVING MAGNETICALLY CONTROLLED RECORDER
Berry G. Price, Houston, Tex., assignor to Tuboscope Company, Harris County, Tex., a corporation of Delaware
Application June 6, 1955, Serial No. 513,536
2 Claims. (Cl. 33—178)



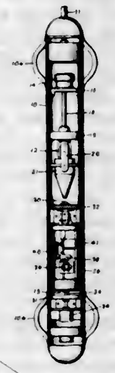
1. In a caliper of the class described, a housing adapted to be moved through tubing, feelers for engaging the inside of the tubing, feeler springs for urging the feelers outwardly, a cone mounted in the housing to respond to movement of the feelers, recording mechanism including a stylus moved by the cone, and magnets for preventing bounce of the stylus and for causing the stylus to record inside of the tubing, feeler springs for urging the feelers by the feelers, at least one of said magnets being of cylindrical shape and having an armature mounted for movement therein and so arranged as to exert a decreasing force upon the stylus as the feelers move outwardly into pits or corrosion in the tubing.

2,746,161
SETTING GAUGE FOR TOOTHED WHEELS
Arno August Budnick, Duesseldorf, Germany, assignor to Schiess A. G., Duesseldorf-Oberkassel, Germany
Application July 18, 1952, Serial No. 299,694
10 Claims. (Cl. 33—185)



1. A gauge for setting a toothed workpiece relative to a gear-cutting tool having a plurality of teeth, which comprises: a carrier plate, first gauge tooth means mounted on one of the two major surfaces of said plate and adapted to be brought into meshing engagement with said workpiece, second gauge tooth means mounted on the other one of said two major surfaces of said plate, the crests of said first and second gauge tooth means being directed toward each other, said second gauge tooth means being arranged to enter a tooth space of said cutting tool and also being movable to bring its plane of symmetry into alignment with the plane of symmetry of said first gauge tooth means, and means indicating the deviation of the plane of symmetry of said second gauge tooth means relative to the plane of symmetry of said first gauge tooth means.

2,746,162
APPARATUS FOR DETERMINING THE DEVIATION OF A BOREHOLE FROM THE VERTICAL AXIS
Maxime Felix Benoit Picard, Paris, France, assignor to Societe de Prospection Electrique Procedes Schlumberger, Paris, France, a corporation of France
Application August 12, 1954, Serial No. 449,465
Claims priority, application France August 29, 1953
2 Claims. (Cl. 33—205)



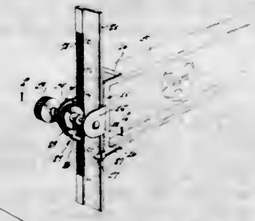
1. In apparatus for determining the angular deviation of the longitudinal axis of a well from the vertical and the azimuthal direction of said deviation, the combination of a housing adapted to be lowered into a well, means carried by the housing for maintaining the longitudinal axis thereof in fixed relation to the longitudinal axis of the well, compass means having a continuously north pointing movable element, universal joint means supporting said compass means in said housing, first electrical circuit means including electrical indicating means at the surface of the earth and an adjustable element coupled to said compass movable element for varying a parameter in said first electrical circuit means according to the position of said compass movable element relatively to a reference position, means for imparting relatively weak vibrations to said compass means to render said compass movable element continuously freely movable, a member mounted for pivoting movement in said housing about an axis having the same direction as the longitudinal axis of the well, an off-center weight carried by said member, second electrical circuit means including electrical indicating means at the surface of the earth and an adjustable element coupled to said member for varying a parameter in said second circuit means according to the angular position of said off-center weight relatively to a reference position, pendulum means mounted for swinging movement in a plane including said weight and the pivotal axis of said member, and third electrical circuit means including electrical indicatng means at the surface of the earth and an adjustable element coupled to said pendulum means for varying a parameter in said third electrical circuit means according to the angular position of said pendulum means relatively to a reference position.

2,746,163
FLANGE LEVEL
Roy W. Moritz, East Toledo, Ohio, assignor to The Pure Oil Company, Chicago, Ill., a corporation of Ohio
Application December 5, 1951, Serial No. 259,991
1 Claim. (Cl. 33—207)



In a flange level for simultaneously determining the rotational position of a pair of flange bolt holes and the alignment of the flange relative a horizontal reference plane, the combination comprising an elongated guide body member having a longitudinal axis and a transverse axis normal to said longitudinal axis, said body member having longitudinal straight-edged slots intermediate the middle and ends thereof, bosses slidably mounted in said slots, said bosses having end body portions extending on one side of said guide body member adapted to frictionally engage said flange bolt holes, adjustable nuts at the other ends of said bosses, a pair of flat sided opposing depressions intermediate the ends of said bosses, the inner surfaces of said nuts and the flat sides of said depressions engaging opposite edges on each side of said slots to guidably force and hold said bosses perpendicular within the flange bolt holes, a single hermetically sealed bubble-containing liquid reservoir within said body member, said reservoir having a transparent cover, a pair of parallel longitudinal reference markings and a pair of parallel transverse reference markings intersecting normal thereto in said cover, said reference markings forming a square visually registering with said bubble to thereby indicate any digression of said longitudinal and transverse axes from said reference plane.

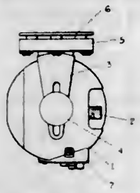
2,746,164
GRADE MEASURING ATTACHMENT FOR CARPENTERS' OR BUILDERS' LEVELS
William C. H. Eltzen, West Englewood, N. J.
Application April 1, 1954, Serial No. 420,375
1 Claim. (Cl. 33—214)



A grade measuring attachment for an elongated member having horizontal top and bottom walls and a vertical end wall, comprising a frame, said frame including a back adapted to set against said end wall, said back having vertically spaced resilient horizontal jaws extending rearward from said back adapted to frictionally engage said top and bottom walls and thus clamp the frame to the end of the member, said back having horizontally spaced ears extending forward therefrom substantially at right angles thereto, said ears having aligned openings therethrough, a shaft rotatably mounted in said openings and having one end thereof extending a distance beyond the adjacent ear, said end of said shaft having a turn knob thereon, said shaft having a pinion thereon between said ears, a graduated rigid strip slidably mounted against said back and having a rack thereon engaging said pinion whereby rotation of said knob moves said strip vertically, a pawl rotatably mounted on said shaft between said adjacent ear and said knob, and an elongated spring having the intermediate portion thereof coiled about said shaft, one end of said spring being anchored in said adjacent ear,

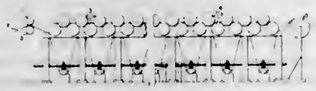
the other end of said spring engaging said pawl and urging the same into engagement with said rack thereby releasably locking said strip against retraction in the downwardly extended position of the strip.

2,746,165
SPHERICAL HOUSING TYPE COMPASS, ESPECIALLY SUITABLE FOR USE ON AIRCRAFT
Raffaello Nistri, Rome, Italy
Application January 29, 1953, Serial No. 333,945
Claims priority, application Italy February 23, 1952
1 Claim. (Cl. 33—222)



For a magnetic orientation compass, a mounting to support said compass on variously positioned surfaces in a manner such as to dispose the compass with its axis of rotation vertical, said mounting comprising a spherical housing for the compass, an attachment plate adapted to be secured to a surface, a stirrup having curved arms the inner surfaces of which match the external surface of the spherical housing, said arms conjointly extending over an arc substantially greater than 180°, said housing being embraced by said arms, said arms having coplanar slots the centers of which are substantially diametrically opposed, pins extending from said housing through said slots, said pins being in alignment and diametrically opposed, said pins being perpendicular to the axis of rotation of the compass, means for disengageably fixing said pins in any position in the slots, said pins when disengaged being slidable in the slots to permit rotation of the housing about the axis of the pins and about an axis perpendicular to the plane of the slots, and an anti-vibration suspension securing the stirrup to the attachment plate for selective rotation about an axis perpendicular to both the aforesaid axes of rotation.

2,746,166
PROCESS OF WEB DRYING
William Henry Stevens, Nashville, Tenn., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application November 30, 1954, Serial No. 471,954
4 Claims. (Cl. 34—41)



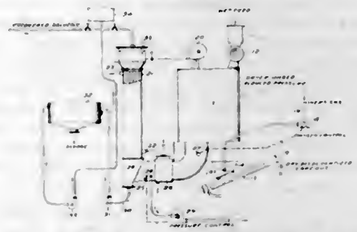
1. The process which comprises passing a continuous web of non-fibrous gel cellulosic sheet material, comprising edge lanes and a center section, through a drying zone, subjecting the web in said zone to drying temperatures maintained substantially uniform across the width of the web whereby the web transverse moisture distribution profile is maintained substantially symmetrical, maintaining the web under longitudinal tension just sufficient to prevent wrinkling or distortion of the web until the moisture content of the edge lanes of the web has been reduced to approximately 0.1 to 0.5 times the weight of the dry cellulosic material and the moisture content of the center section of the web has been simultaneously reduced to approximately 0.3 to 1.5 times the the weight of the dry cellulosic material, said center section being more moist than said edge lanes, and thereafter increasing the longitudinal tension on the web to an amount sufficient to elongate the center section to approximately the same length as the edge lanes, and completing drying of the web.

2,746,167
PROCESS OF WEB DRYING
Carlyle P. Britton, Richmond, Va., John T. Elker 3d, Passaic, N. J., and Earl T. Ellis, Petersburg, and Robert M. Lester, Jr., Richmond, Va., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
Application November 30, 1954, Serial No. 471,984
4 Claims. (Cl. 34—41)



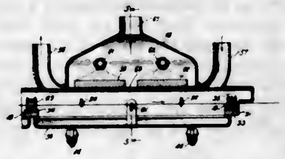
1. The process which comprises passing a continuous web of non-fibrous gel cellulosic sheet material, comprising edge lanes and a center section, through a drying zone; subjecting the web in said zone to drying temperatures maintained substantially uniform across the width of the web whereby the web transverse moisture distribution profile is maintained substantially symmetrical; maintaining the web under longitudinal tension just sufficient to prevent wrinkling or distortion of the web until the moisture content of the edge lanes of the web has been reduced to approximately 1.5 to 2.5 times the weight of the dry cellulosic material, said center section being more moist than said edge lanes; thereafter decreasing the longitudinal tension of said web and maintaining said web under decreased tension until the moisture content of the edge lanes of the web has been reduced to approximately 0.1 to 0.5 times the weight of the dry cellulosic material and the moisture content of the center section of the web has been simultaneously reduced to approximately 0.3 to 1.5 times the weight of the dry cellulosic material, said center section being more moist than said edge lanes; and thereafter increasing the longitudinal tension on the web to an amount sufficient to elongate the center section to approximately the same length as the edge lanes; and completing drying of the web.

2,746,168
CONTINUOUS DRYING APPARATUS
Charles Albert Rickabaugh, Park Ridge, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
Application February 4, 1953, Serial No. 335,018
3 Claims. (Cl. 34—51)



1. An apparatus for continuously drying inflammable solvent-wet solids under reduced pressure and for continuously recovering both said inflammable solvent and said dried solids comprising a drying chamber, means connected thereto which continuously feeds inflammable solvent-wet solids into said drying chamber, sealing means associated with said means for feeding and with said drying chamber which prevents all but a minimum amount of air from entering said drying chamber through said feeding means, a dried solids discharge hopper in a lower portion of said drying chamber, an inert gas admission port entering said drying chamber, inert gas feed means connected to said inert gas admission port, oxygen measuring means connected to said drying chamber, a purge gas discharge means connected to said drying chamber, pressure-sensitive means connected to said purge gas discharge means which increases or decreases the speed of said purge gas discharge means, thus maintaining the desired reduced pressure in the drying chamber, a discharge conveyor immediately below said hopper, sealing means in said conveyor which prevents all but a minimum amount of air from entering said drying chamber through said conveyor and said hopper, a condenser, a sludge separation system connected to said condenser, an inert gas circulating blower connecting said condenser and said drying chamber, a return conduit connecting said condenser and said drying chamber, said circulating blower cycling said inert gas and said solvent to said condenser and re-cycling said inert gas back to said drying chamber through said return conduit, and heating means in said return conduit which heats said recycled inert gas.

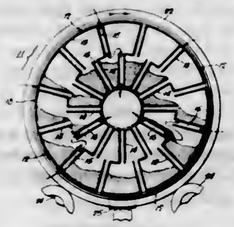
2,746,169
THREAD DRYING APPARATUS
Willem Bakker, Arnhem, Netherlands, assignor to American Enka Corporation, Enka, N. C., a corporation of Delaware
Original application September 27, 1950, Serial No. 187,022. Divided and this application July 8, 1953, Serial No. 366,804
Claims priority, application Netherlands October 25, 1949
5 Claims. (Cl. 34—68)



2. Apparatus for drying yarns running in parallel relationship in sheet form that comprises a chamber having a long internal space of a width not substantially in excess of the width of the sheet to be accommodated and having small vertical height, means to guide the yarns of the sheet within said chamber, means to admit a heating gas at a higher temperature to the wettest yarns and means to admit a heating gas at a lower temperature to the partially dried yarns, means to withdraw the heating gases after they have been passed in countercurrent relation to the direction of movement of the yarns, a plurality of radiation plates extending lengthwise of the top of said chamber between said admission means and said withdrawal means, a hood covering said radiation plates and burners located within said hood to apply heat to said plates, the top of the chamber separating the radiation plates from the interior of the chamber so that the gases within the hood do not contact the yarns moving in the chamber.

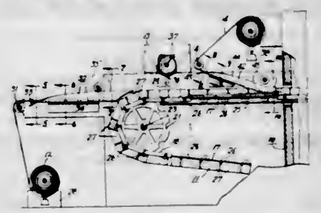
2,746,170
ROTARY DRYER
Jack P. Wilson, Penn Wynne, Pa., and William R. Marshall, Jr., Madison, Wis., assignors to Proctor and Schwartz, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application December 22, 1953, Serial No. 399,667
11 Claims. (Cl. 34—109)

1. A drying drum for powdered material and the like comprising a series of flights spaced circumferentially of the drum, first wall portions on each of said flights defining an outer section opening inwardly of the drum, second wall portions on each of said flights defining an inner section offset from said outer section and opening outwardly of the drum, the opening of the outer section of each of said flights partially registering with the opening of the inner section of the adjacent flight, means defining a first passage of less width than the entrance of the inner section between adjacent flights extending from



the exterior of the drum and terminating at substantially the mid-point of the entrance to the inner section of one of said adjacent flights, and means defining a second passage of less width than the entrance of the outer section between said adjacent flights extending from the interior of the drum and terminating at substantially the midpoint of the entrance to the outer section of the other of said adjacent flights.

2,746,171
DRYER FOR POWDERED MATERIAL
Myron T. Fleming, Wyncote, Pa., assignor to Proctor and Schwartz, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application January 8, 1953, Serial No. 330,289
7 Claims. (Cl. 34—233)



1. In a dryer for powdered material comprising a dryer housing in which a drying medium is circulated, an endless foraminous conveyor having an upper run thereof mounted for passage through the dryer housing, a web of gas pervious material positioned on top of said conveyor upper run, said web having upwardly extending side edge portions at opposite sides of said conveyor to carry a bed of powdered material, a second web of gas pervious material positioned on top of said bed of powdered material and having upwardly extending side edge portions inwardly adjacent the side edge portions of said first web to form an envelope of gas pervious material completely enclosing the bed of powdered material prior to passage of the same through the dryer housing, blower means in said dryer housing operable to force the drying medium through the powdered material, webs and conveyor to dry the powdered material, and means at the discharge end of the dryer housing to remove the powdered material from said webs.

2,746,172
MAGNET HOLDING BLOCK
Leonard R. Crow, Vincennes, Ind.
Application January 22, 1954, Serial No. 405,632
4 Claims. (Cl. 35—19)

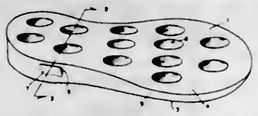
1. An educational device consisting of a magnet holding block having at least two magnet holding channels in

parallel spaced relation along one face thereof, said block adapted to support a non-magnetic sheet against the ends of magnets placed in said channels, and the other face of the block adjoining the face having the channels being



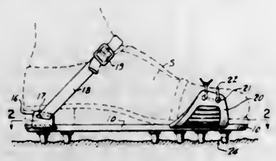
undercut for interfitting engagement of a magnetic metal strip or non-magnetic strip which illustrates the interaction of the magnetic lines of force through the orientation of iron filings on said sheet.

2,746,173
VACUUM HELD FOOTWEAR
Sigurd Tranmal, Rochester, N. Y.
Application January 23, 1953, Serial No. 332,861
6 Claims. (Cl. 36—2.5)



1. A footwear comprising a sole member provided with an upper and a lower surface, said upper surface being provided with at least one vacuum cup, said cup being oriented with its orifice facing upward so that a vacuum is created between said cup and said foot responsive to downward pressure of said foot.

2,746,174
SHOE ATTACHMENT
Edward James Patterson, Jr., and Joseph L. Patterson, Toledo, Ohio
Application January 5, 1954, Serial No. 402,212
1 Claim. (Cl. 36—7.7)



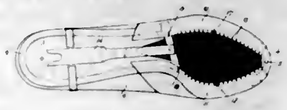
An overshoe sandal for sports use, comprising a unitary pad member of resilient rubber shaped to fit the sole and heel of the wearer's shoe, sheet metal plates embedded in the sole and heel portions of the pad member, said plates and adjacent portion of the pad member being apertured to receive anti-slip means, the portion of the pad member intermediate said plates being longitudinally stretchable, integral flaps on opposite edge portions of the sole portion of the pad member extending upwardly and inwardly to fit over a portion of the wearer's shoe, tie means connecting the free edge portions of said flaps for tightly securing the same to the wearer's shoe, the heel plate having integral projections on each side thereof extending outwardly beyond the unitary pad on each side of the latter, and means including flexible tie means tightly embracing the wearer's ankle and extending from the outward projections of the heel plate, whereby the front and rear portions of the pad are anchored in place and the stretchable intermediate portion of the pad enables the pad to yield with the wearer's shoe facilitating shoe movements normal to sports use.

2,746,175
TAPS FOR DANCING SHOES
Robert J. Root, Los Angeles, Calif.
Application April 19, 1954, Serial No. 423,884
2 Claims. (Cl. 36—8.3)



1. In combination with a dancing shoe; a plurality of taps mounted in spaced relation one to the other in a group on the toe portion of the shoe; and another tap mounted on the heel of the shoe; and individual fastening means for said taps countersunk therein and adjustable axially to provide for varied movement of the tap relative to the shoe to produce different sound effects.

2,746,176
SLIP LASTED SHOE WITH A THREE SECTION INSOLE
Fred Maccarone, Brooklyn, N. Y.
Application October 22, 1953, Serial No. 387,641
3 Claims. (Cl. 36—12)



1. A shoe having a bottom unit having a toe piece, a rear part member provided with a generally transverse slit adjacent to its forward extremity, a center piece substantially narrower than the toe piece and the rear part member, the forward extremtiy of the center piece underlying the toe piece and the rearward extremity of the center piece overlying that portion of the rear part member forward of the slit, extending through the slit, and underlying that portion of the rear part member rearward of the slit.

2,746,177
FOOTWEAR AND PROCESS OF MAKING SAME
Fred Maccarone, Brooklyn, N. Y.
Application April 29, 1953, Serial No. 351,933
10 Claims. (Cl. 36—46.5)



4. In a shoe, a bottom assembly including a toe piece, a rear part member and a center piece bridging the space between the toe piece and the rear part member and having its side edges offset inwardly from the edges of the toe piece and the rear part member, and a fitted shoe upper having a bottom margin arranged in edge-to-edge abutting relation to the center piece and in underlying relation to the toe piece and the rear part member respectively, said center piece being attached at one end to the toe piece and at its other end to the rear part member, said center piece being of less width than the interior of the shoe forepart.

2,746,178
HEEL LIFT FOR SHOES
William B. Miller and Virginia Elaine Miller, Dallas, Tex.
Application December 15, 1954, Serial No. 475,412
8 Claims. (Cl. 36—58.5)

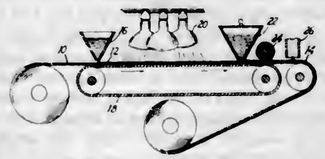
1. In a shoe, a sole structure including heel, ball, shank and toe portions, an elongate resilient frame structure adapted to be attached to said sole longitudinally from

points spaced inwardly from said heel and toe portions and whose fore and aft portions are disposed in relatively right angular planes, said frame structure including a pair of conversely disposed spring steel wires, one of said wires being attached from one end to midsection to the shank portion of said sole along one side thereof and from midsection to its opposite end along the edge of the ball



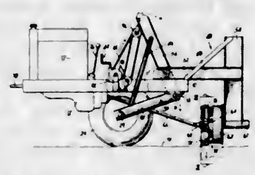
portion of said sole, the companion wire of said pair being attached from one end to midsection to the opposite side of said shank portion and from midsection to its opposite end along the opposite edge of said ball portion, the midsections of said wires intercrossing at said shank portion to define a fulcrum at the flexing point between the ball and shank portions of said sole.

2,746,179
IMPROVED COVERS AND COVER MATERIALS FOR TEMPORARY PROTECTION OF SHOES
John L. Perkins, Hingham, Mass., assignor to B. B. Chemical Co., Boston, Mass., a corporation of Massachusetts
Application October 24, 1952, Serial No. 316,733
5 Claims. (Cl. 36—72)



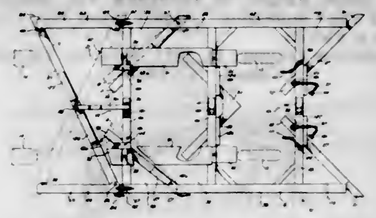
1. A temporary protective cover material comprising a flexible sheet, a layer of heat-activatable adhesive bonded to one face of said sheet for forming a readily rupturable bond to a surface to be protected, and a thin screen of finely divided silica aerogel particles distributed upon the exposed surface of said adhesive layer, said screen of silica aerogel particles serving to facilitate slip between said layer of adhesive and other surfaces prior to activation of said adhesive and also serving to improve the strength of bond between the adhesive layer and a surface to be protected by the cover material.

2,746,180
THROWER TYPE WHEEL EXCAVATOR
Wilbert A. Ficken, Gayville, S. Dak.
Application April 23, 1952, Serial No. 283,845
2 Claims. (Cl. 37—92)



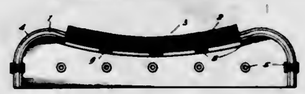
1. A ditch digging machine comprising in combination, a frame, vertically adjustable frame-carried ground-supported means for supporting the frame as the latter is propelled over the ground to be ditched, a forwardly extending axle carried by said frame, an excavating drum having a hub portion rotatably mounted on said axle, the forward end of said drum comprising a forwardly and inwardly extending concentrically tapered area, the forward end of said area terminating in a concentrically positioned flat face area around said hub portion, frame-carried drive means for said drum and operatively connected thereto, a blade member secured adjacent one end portion to the flat face area of said drum, said blade extending substantially radially from said flat face area beyond the outer margin of the latter and in spaced opposition to said concentrically tapered area, and frame-carried control means operatively connected to said ground-supported means whereby, through raising and lowering of said ground-supported means, the frame and the excavating drum carried thereby are raised and lowered to vary the depth of the ditch to be excavated.

2,746,181
ROAD GRADING ATTACHMENT
Jude M. Molene and Dennix B. Martin, Des Moines, Iowa
Application April 20, 1953, Serial No. 349,714
2 Claims. (Cl. 37—153)



1. A road grader attachment adapted to be moved along a road surface for leveling the same comprising a longitudinally extended main frame, scraper blades mounted on said frame, with said blades being arranged in longitudinally spaced pairs, with the forward and rear pairs being arranged in a forwardly diverged relation and an intermediate pair being forwardly converged, a rearwardly projected frame extension, a leveler blade adjustably mounted on said frame extension for movement in a horizontal plane between a pair of reversely inclined positions, with said main frame and said frame extension being movably connected together for up and down movement of said extension relative to said main frame and with said rear pair of scraper blades being horizontally adjustably mounted on said frame for directing earth scraped by said scraper blades toward the forward end of said leveler blade.

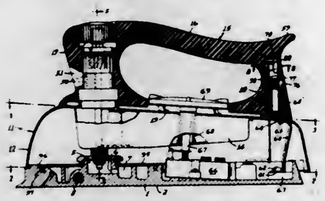
2,746,182
NEEDLED COVER FOR PRESSING PLATEN
Werner Schmitz, Wulfrath, Germany, assignor, by mesne assignments, to Peter Wolters, Offene Handelsgesellschaft, Mettmann, Germany, a corporation of Germany
Application May 27, 1952, Serial No. 290,281
Claims priority, application Germany October 19, 1951
3 Claims. (Cl. 38—66)



1. A rigid needle sheet cover for use with the curved pressing surface of an upper pressing platen in pressing machines and the like, said cover comprising a rigid homogeneously resin-impregnated fabric body having an upper and a lower surface: needles stitched through a predetermined area of said fabric body so as to protrude with their ends from said lower surface and having their feet plane with said upper surface, said needles being held rigidly within said rigid fabric body against ironing pressure;

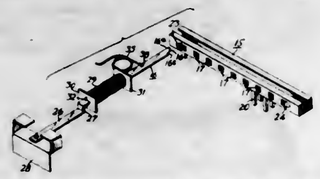
said fabric body having apertures in the needle area for passing steam therethrough; sealing means provided peripherally around the needle area on the upper surface of said fabric body for sealing said surface tightly against the curved surface of said upper pressing platen so as to prevent the escape of steam by other ways than through said apertures in said fabric body; an upwardly bent peripheral margin free from needles around said fabric body to receive the edge of said upper pressing platen therebetween; holes provided in the upwardly bent peripheral margin for receiving therein known means for fastening said needle sheet cover to said upper pressing platen; and spacing means for spacing said fabric body from the curved surface of said upper pressing platen, said spacing means being arranged on the upper surface of said fabric body inside said sealing means; said fabric body being shaped so as to fit with its upper surface onto said curved surface of said upper pressing platen.

2,746,183
VALVE FOR STEAM IRON
Merrill Miller Kistner, St. Petersburg, Fla., assignor to Steam Iron Corporation, Treasure Island, Fla., a corporation of Florida
Application February 21, 1951, Serial No. 211,998
3 Claims. (Cl. 38—77)



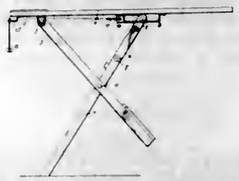
1. In a steam iron comprising a sole plate, a reservoir, and a handle, the front leg of the handle being provided with a bore, a tubular member in the bore communicating with the top of the reservoir, the tubular member being provided with openings, the front leg of the handle being provided with an opening communicating with said openings for filling the reservoir, and a sleeve surrounding the tubular member, the sleeve, when the iron is in ironing position, being positioned at the bottom of the tubular member covering the openings therein.

2,746,184
IRONING TABLE
Charles Davis, Philadelphia, Pa., assignor to Proctor Electric Company, Philadelphia, Pa., a corporation of Pennsylvania
Application January 21, 1952, Serial No. 267,333
1 Claim. (Cl. 38—121)



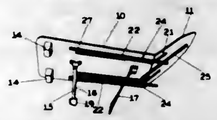
In an adjustable and collapsible ironing table, a table top, a pair of pivotally interconnected crossed legs providing an adjustable and collapsible support structure for said top, a fixed pivot connection between said top and the upper end of one of said legs, a sliding pivot connection between said top and the upper end of the other leg, latch means for retaining the sliding pivot in different positions to provide different height adjustments of the table, said latch means including a manually operable latch member, a slidable rack member associated with said sliding pivot having a height adjustment surface and a stop surface, a spring for biasing said latch member into engagement with said rack, a second spring carried on said latch member and compressed to a predetermined pressure whereby predetermined manual movement of said latch member against the action of said first spring will effect disengagement of said latch member and said height adjustment surface, and a stop on said table engageable by said second spring whereby further movement of said latch member under a substantially higher resisting force is necessary to permit disengagement of said latch member and said stop surface on said rack to thereby enable complete collapse of said table.

2,746,185
IRONING BOARDS
Frank Thomas Darton Moore, Pinner, England
Application May 19, 1954, Serial No. 430,917
2 Claims. (Cl. 38—123)



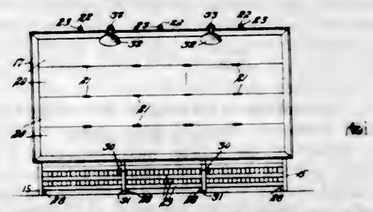
1. An ironing board structure comprising a board having an ironing surface, a first leg pivoted at the underside of said board, a second leg having upper and lower parts pivoted end-to-end, the lower of said parts being disposed across and pivoted to the first leg and the upper of said parts being arranged to abut against the underside of the board, a flexible draw member secured to the upper end of the upper part of the second leg, and catch means carried at a fixed point of the board remote from the second leg, said catch means serving to engage with the draw member at a selected position along the length of the latter to determine the maximum separation of the upper part of the two legs, and the height of the board.

2,746,186
SECTIONAL IRONING BOARD
Enoch Norris Brown, Whitman, Mass.
Application March 2, 1954, Serial No. 413,496
4 Claims. (Cl. 38—138)



4. A collapsible ironing board comprising a body member, an extension member, the forward end of said body member being in abutting end to end relationship with the rear end of said extension member and the upper surfaces of said members being coplanar when said board is in erected position, said body and extension members being free from pivotal attachment to each other, a first projection element attached to the lower side of the body member and extending forwardly beneath the lower side of said extension member when said board is in erected position, a second projection element attached to the lower side of the extension member and extending rearwardly beneath the lower side of the body member when the board is in erected position, and means for holding said body and extension members together consisting of a flexible longitudinally elastic strap member parallel to the lower side of said body and extension member when the board is in erected position and parallel to the longitudinal center line of said lower sides of said body and extension members in said erected position, said strap member having an intermediate portion the upper surface of which is substantially flat at least at the portion thereof which underlies said abutting end of said body and extension members when the board is in erected position, said substantially flat surface extending for a longitudinal distance which is at least equal to the sum of the thicknesses of said abutting ends of said body and extension members, said strap member having one end attached to the lower side of said body member and the other attached to the lower side of said extension member, the operative length of said strap member being such that it is under tension at all times, whereby, when the ironing board is in erected position, said strap member cooperates with said projection elements to hold the abutting ends of said body and extension members together and to retain the upper surfaces of said body and extension members in coplanar relationship, and, when said extension member is swung upwardly from said erected position about the forward end of said body member to collapse the ironing board to a position in which said upper surfaces of said body and extension members are in face to face relationship, said strap member continues to exert tension to hold the rear end of said extension member against the forward end of said body member for pivotal movement relative thereto and said flat surface of said strap member extends transversely of, slides across and flexes about the forward end of said body member and the rear end of said extension member.

2,746,187
OUTDOOR DISPLAY
Harry H. Ennever, North Miami, Fla.
Application December 26, 1951, Serial No. 263,459
1 Claim. (Cl. 40—125)



Outdoor display capable of withstanding hurricane weather, comprising a permanent stationary upright frame of openwork structure, horizontally extended display panels hingedly connected together at their horizontal edges and foldable in zigzag fashion, one over the other, into a compact, flat, horizontal mass, said panels in extended, unfolded relation resting flat in coplanar engagement against the face of the upright frame, pulleys on top of said frame, ropes extending up over said pulleys and connected with the topmost panel for hoisting the connected panels into position lying against the face of the frame and for lowering the panels in folding, zigzag formation into a single pile at the foot of and in front of the frame, clamps engageable with the panels and frame for holding the panels in the extended position flat against the face of the frame and releasable to permit the zigzag lowering and folding movement of the panels, a support shiftable on the frame into engagement beneath the lowermost panel for supporting the panels in the raised position independently of the hoisting ropes and shiftable from beneath the lowermost panel to permit the lowering and folding movement of the panels, a rack below and in front of the frame located to receive the downwardly folding panels and a clamp on said rack engageable over the pile of folded panels for securing the pile of panels against wind force.

2,746,188
EXTENDABLE SIGN EXHIBITOR
George E. Swestnam, Chicago, Ill.
Application October 23, 1951, Serial No. 252,785
4 Claims. (Cl. 40—139)



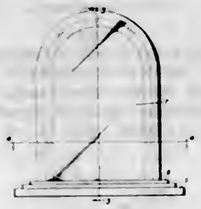
1. An extendable sign exhibitor comprising a housing having a front opening, a fixed panel mounted in parallel spaced relation behind the front opening, a vertically movable panel in front of the fixed panel, a horizontal laterally extending track carried by the fixed panel, a slide in the track, a pair of parallel links pivotally connecting the movable panel and the slide, a rotary motor mounted on the housing, a crank on the motor and a connecting rod from the crank to the slide.

2,746,189
BULLETIN BOARD WORD ELEMENTS
George H. Bass, New York, N. Y.
Application June 26, 1952, Serial No. 295,655
1 Claim. (Cl. 40—143)



A display element for use on slot type display or bulletin boards comprising a transparent backing portion having opaque letter or other formations thereon, an attaching portion extending at an angle from one edge thereof and adapted to enter the slots of the bulletin board to be retained in place thereon, and said backing portion being formed of two sections above and below the attaching portion and these two sections being respectively extended at an angle less than ninety degrees from the attaching portion, and enlarged and rounded formations being provided respectively on the free edges of the backing portion sections and of the attaching portion.

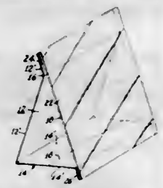
2,746,190
PICTURE FRAME
Murray Schenkman, Bronx, N. Y.
Application October 13, 1952, Serial No. 314,548
1 Claim. (Cl. 40—152.1)



A picture frame comprising a base, a front panel rising integrally from the base, said base including front and rear portions projecting forwardly and rearwardly respectively beyond the front panel to support the latter in

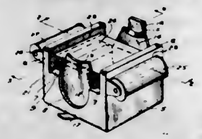
a perpendicular position relatively to the base, said panel being of vision penetrating material and having a large recess, at its rear surface, bordered by a marginal flange, said recess extending to the upper surface of the base, a back panel detachable with the front panel and supported on the base, said back panel engaging all of the inner surfaces of said marginal flange and the top of the base in filling said recess, the rear surface of the back panel being flush with the rear surface of said marginal flange, said back panel having inwardly directed shoulder means engaging the front panel in defining, between said panels, a picture receiving recess within the recess of the front panel, the front panel having, at its upper end, means extending from the flange forming a pocket opening through the rear surface of said panel, and the back panel having an extended flange insertable into the pocket to hold the back panel in assemblage with the front panel.

2,746,191
DISPLAY MOUNT
Sanford L. Goldman, New York, N. Y.
Application December 23, 1952, Serial No. 327,554
2 Claims. (Cl. 40—152.1)



1. A collapsible display mount comprising front, rear and base sections made from a continuous piece of fabric, said front and rear sections having stiffening elements enveloped by said fabric, said base section being foldable and having a fold line across its length to form an inverted V base section when said mount is collapsed, said rear section having a hinge line near the top portion thereof, a transparent plastic cover sheet having hooked or folded ends at the top and bottom thereof, the hooks on said ends extending toward each other, the top hooked end of the cover sheet folding over the top edge of the front section and being positioned between and cemented to the top portions of the front and rear sections, said top hooked end having spaced openings therein to enable cement to penetrate therethrough, the fabric of said base section being cemented to the rear of said front section for a predetermined distance upward from the bottom edge of said front section, which distance is greater than the dimension of the fold of the bottom hooked end of the transparent cover, whereby said bottom hooked end of the transparent cover may be disengaged from the lower edge of said front section to form a flap, and the entire front of said transparent cover is free to be drawn away from said front section.

2,746,192
FLEXIBLE AND CONFORMING FINGER PRINTING DEVICE
Thomas L. Norton, Fort Lauderdale, Fla.
Application October 30, 1953, Serial No. 389,220
3 Claims. (Cl. 41—4)



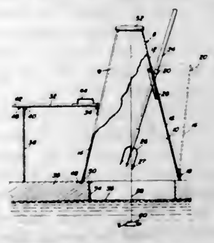
1. A finger printing device comprising a body portion of generally rectangular form having upstanding side walls, the side walls being slotted for their major length adjacent their upper ends to form guide means for a strip of paper, the body portion being arcuately grooved downwardly throughout its length and with the groove opening upwardly, shoulders formed upon the upper surface of the body portion for its full length and with the shoulders being disposed at opposite sides of the groove, the body portion being slotted vertically and transversely adjacent each end and with the slots extending throughout the height of the body, finger supporting and positioning plates vertically shiftable in the slots of the body and with their upper ends being concave for resting engagement of the finger, one end plate having its upper end offset and extended upwardly to form an abutment to limit the longitudinal positioning of the finger, spring means carried by the body portion and engaging each of the end plates to urge them upwardly, the end plates being simultaneously shifted downwardly when pressure is exerted upon a finger supported thereon, a flexible and conforming pad having its longitudinal edges supported on the shoulders and overlying the groove for its major length, the pad partially extending into the groove, the plates serving to support the finger longitudinally of and substantially parallel to the groove and with the finger and a strip of paper being in spaced relation to the upper surface of the pad.

2,746,193
DECORATING GLASSWARE BY HIGH ENERGY RADIATION
Carroll J. Billian, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a corporation of Ohio
Application August 18, 1954, Serial No. 450,748
8 Claims. (Cl. 41—17)



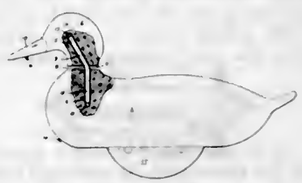
1. The method of printing or decorating a glass article which comprises directing high energy radiation toward the surface of the article, interpositioning between said surface and the source of radiation a mask having cut or stenciled therein a design, and causing the design to be applied to the glass by coloration or change in color of a surface portion of the glass exposed through the design in the mask.

2,746,194
VIEWING AND FISHING DEVICE
Horace F. Lonnman, Dixie Lake, Mich.
Application March 28, 1955, Serial No. 497,214
10 Claims. (Cl. 43—1)



1. A viewing and fishing device comprising a non-transparent truncated pyramidal shield open at its larger basal end and constantly open at its upper restricted end, said basal end being adapted to encompass said hole and rest firmly atop the ice surrounding and in alignment with said hole, said upper end being restricted so that a fishing line may be passed therethrough and suspended in the water via said hole and so that the fisherman may conveniently peer down through the shield with requisite vigilance and be thus alerted to make a desired catch.

2,746,195
DECOY
Charles S. Renwick, Jr., Richmond, Calif.
Application October 15, 1951, Serial No. 251,320
4 Claims. (Cl. 43—3)



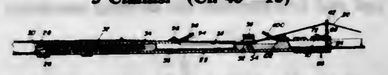
1. A buoyant decoy constituting a simulated game bird and comprising a separate body and head, said body being adapted to float upright in its normal floating position on the surface of water, said head being disposed above said body in said normal floating position, a bearing rod having a section journaled in said head and a section journaled in said body, the journaled sections of said rod being integrally connected and lying at an angle to each other, said section of said bearing rod journaled in said body being approximately vertically disposed in said body in said normal floating position, said section of said bearing rod journaled in said head being inclined to the vertical in said normal floating position, and means for spacing said head above said body with the juncture of said rod sections lying between said head and body, whereby any movement of the water on which said decoy is floating will cause said body to rock and pitch and said head to swing about the axis of said rod section journaled in said body and about the axis of said rod section journaled in said head.

2,746,196
WATER FOWL DECOYS
Leonard R. Karr, Yakima, Wash.
Application September 3, 1954, Serial No. 453,996
1 Claim. (Cl. 43—3)



A decoy for fowl comprising a relatively thin sheet of material cut to simulate the configuration of the fowl to be lured, said sheet having a pair of oppositely disposed upper and lower ends, said sheet of material having the central body portion thereof provided with a pair of vertically spaced substantially equilateral rectangular openings extending transversely therethrough and disposed adjacent each of said ends, respectively, support means for said decoy comprising an elongated substantially rectangular in cross section and relatively thin post, said post having one end thereof threaded through said substantially equilateral rectangular openings with said one end of said post extending across the sides of said central body portion and terminating short of said upper end of said sheet, the other end of said post being pointed to facilitate the insertion of said other end of said post into the ground, and said post being constructed of a flexible material whereby wind gusts impinging upon said decoy causes the same to sway.

2,746,197
FISHING DEVICE
Harlan N. Rogers, Jamestown, Ky., assignor of fifty per cent to Hobert J. Carnes, Jamestown, Ky.
Application May 8, 1953, Serial No. 353,720
3 Claims. (Cl. 43—15)



3. A fishing device comprising an elongated tubular member having a cut-away portion intermediate its ends, said tubular member being open at one end and provided with a closing cap at the opposite end, a trigger-latch pivotally supported from the open-ended portion of said tubular member, a plunger slidably confined in said tubular member and movable between forward and rearward positions, spring means also confined for operation in said tubular member and connected at one end with said cap and at its opposite end with the corresponding end of said plunger for urging said plunger to the rearward position, a fish line clamp carried by the intermediate portion of the plunger and operable in the cut-away portion of said tubular member, the end of said plunger adjacent the open end of said tubular member having an annular keeper groove therein and a portion of said trigger latch being releasably engageable with said trigger groove and also being provided with a fishing line eye, said clamp comprising a plate secured to said plunger, a lever member hingedly mounted on said plate and having a jaw portion engageable with said plate, resilient means secured to said plate and an intermediate portion of said lever for urging said jaw portion into engagement with said plate, and an angularly disposed trip plate fixed on said tubular member at one end of said cut-away portion and situated in the path of movement of an end of said lever member in a manner to trip the lever member and to open the clamp in a manner to release that portion of the fishing line which is cooperable with said clamp.

2,746,198
ELECTRIC FISH GIGGER
John Smith, Jackson, S. C.
Application September 30, 1953, Serial No. 383,294
7 Claims. (Cl. 43—19.2)



1. A fish gigger comprising a fishing rod, an electromagnetic vibrator carried thereby and having a vibrating armature and a circuit interrupter controlled thereby, means for supplying electrical current through the interrupter to the vibrator for intermittent operation thereof, an artificial lure, and vibratory means directly connected to the armature of the vibrator and to the lure for vibrating the lure on the surface of the water.

2,746,199
MULTIPLE HOOK FISHING DEVICE
Chester W. Dyczkowski, St. Paul, Minn.
Application June 23, 1954, Serial No. 438,715
1 Claim. (Cl. 43—36)

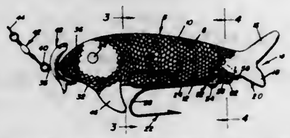
A pull actuated hook-equipped fishing device characterized by two complemental units, namely: a first unit

comprising a length of resilient wire bent between its ends and providing an eye and a pair of normally coplanar expansible and contractible flexibly resilient limbs joined at the same ends to said eye, the portions of said limbs adjacent to said eye being opposed, close together, and approximately parallel, the intermediate portions of said limbs normally diverging from said opposed portions and providing camming members, the remaining portions of said limbs being free and normally widely spaced apart, to flex toward each other and slightly toed-in toward each other and having outwardly and laterally bent terminal fingers, bends between said diverging portions and said free portions and defining junctional shoul-



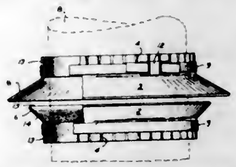
ders, and a readily applicable and removable fish hook carried by each limb, each fish hook embodying a rigid shank with an eye at one end and a barbed hook portion at the other end, the shank of each fish hook lying alongside of its companion free limb portion and having its eye encircling the companion cooperating intermediate portion adjacent to the complemental bend and the adjacent terminal finger partially embracing said shank, and a second unit comprising a shank slidable through the eye in said first unit, and a triangular loop embracing and slidable along said limbs and coacting with said camming members in a manner to compress and flex said limbs together to set the device for use.

2,746,200
ARTIFICIAL LURE
Charles F. Dale, Mayhill, N. Mex., assignor of fifty per cent to William R. Musick, Mayhill, N. Mex.
Application August 28, 1953, Serial No. 377,060
2 Claims. (Cl. 43—42.04)



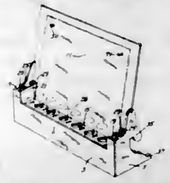
1. An artificial lure comprising, in combination, a main body having the general appearance of a minnow and including a head having a nose at its leading end, a stub shaft fixed to and protruding axially beyond said nose, a companion but secondary body having the general appearance of a minnow and appreciably smaller than the main body mounted for free rotation on said stub shaft, said secondary body being in close proximity to said nose to give the appearance of having been caught for consumption by the main body, said main body having a prong-like extension integral with and depending laterally from its ventral side and situated rearwardly of but adjacent to said nose, said main body having a tail portion V-shaped in side elevation and including an upwardly and rearwardly directed component and a complemental lower downwardly and rearwardly directed component, the latter being oblique angled relative to said ventral side, a spring clip fixed to said ventral side and located forwardly of said oblique-angled tail component and rearwardly of the aforementioned prong-like extension, a fishhook assembly embodying a shank pivotally connected to said ventral portion between said clip and said oblique angled tail component, said shank underlying said ventral portion and being releasably connected with said clip and having a free end portion provided with a plurality of circumferentially spaced barbed hooks at least two of which are in positions straddling opposite vertical sides of the intermediate portion of said main minnow.

2,746,201
INSECT GUARD FOR TREES
Albert B. Warrell, Palo Alto, Calif.
Application January 23, 1953, Serial No. 332,926
2 Claims. (Cl. 43—108)



2. An insect guard for trees, comprising a flat continuously straight strip of thin flexible material, a fold line extending longitudinally of the strip parallel to a long edge and dividing the strip into a waist portion and a skirt portion, said waist portion having a plurality of sets of triplicate fold lines extending thereacross, said skirt portion having convergent fold lines continuous with the waist fold lines and extending across the skirt, and tie means for binding the folded waist portion about a tree trunk.

2,746,202
EASEL ASSEMBLY
A. Lincoln Barker, Oakland, Calif.
Application June 29, 1950, Serial No. 171,220
3 Claims. (Cl. 45—129)



1. A blackboard easel comprising a tray having front, side and bottom walls, and a rear wall formed by a backboard intersecting said side walls and extending upwardly to a higher elevation than said front wall to provide a work surface, and means located toward the rear edges of said side walls for removably mounting such assembly on the chalk trough of a blackboard assembly, said means involving a hook on each side wall engageable in such chalk trough and a projection at the lower rear corner of each side wall in a downward spaced relationship to said hook, said projection being engageable against a wall beneath such blackboard assembly and said backboard being of a height to engage such blackboard with said hook engaging the outer wall of such chalk trough.

2,746,203
CHAIR SHOE
Joseph A. Gibas, Denver, Colo.
Application November 23, 1953, Serial No. 393,615
2 Claims. (Cl. 45—137)

1. A wall-engaging stop for attachment to a leg of an article of furniture, comprising an elongated body formed of a firm rubber or the like, said body being narrower at one end and wider at the opposite end, said body being

recessed on the underside and higher at the wider end and said higher end having a vertical aperture therein having a side wall for engaging said leg and forming a seal therewith, the outside of said body sloping relatively sharply downwardly and outwardly from the upper end of said aperture to the bottom at each side thereof and to said



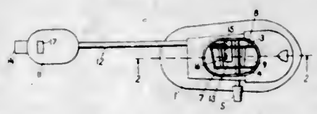
wider end, said wall sloping more gradually downwardly from said aperture toward said narrow end to a toe portion whose sides taper to said narrow end and said excess extending substantially the full length of said body and into said aperture, so that a suction effect may be produced by downward pressure upon said toe portion.

2,746,204
TOY SPECTACLES
Jerome C. Karpf, Forest Hills, N. Y.
Application December 18, 1953, Serial No. 399,009
1 Claim. (Cl. 46—1)



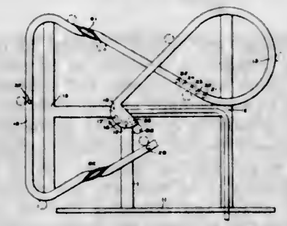
Toy spectacles comprising a frame, a pair of eyepieces mounted in the frame, each of said eyepieces having a back wall which is completely covered by a light reflecting medium having the ability to hide the wearer's natural eyes from view while permitting the wearer to see through said back wall to observe objects beyond, each of said eyepieces also having a front transparent wall which is spaced from said back wall, and a relatively small flat light weight disc representing the pupil of an eye enclosed in the space between the walls of each eyepiece, said disc contrasting with the back wall, the two discs giving the appearance of lively moving eyes when the wearer shakes his head to impart motions to the discs, said discs being freely movable in all directions between the walls of the eyepieces.

2,746,205
BUBBLE PRODUCING TOYS
Charles S. Raizen, New Rochelle, N. Y.
Application January 22, 1954, Serial No. 405,578
2 Claims. (Cl. 46—7)



2. A bubble-producing toy comprising a housing having walls surrounding an inner space having a lower part forming a reservoir adapted for being filled with a soapy liquid, a horizontal shaft passing rotatably through said housing and having an end projecting out of said housing whereby said shaft can be rotated; a drum-like film-lifting element positioned in said housing and having two rings concentric with said shaft, reaching into said reservoir and being spaced from each other in the direction parallel to said shaft, said element having bars connecting said rings across the peripheral side of said element and being spaced from each other whereby apertures are formed which are distributed about said shaft and are moving, when said element rotates, in a circular path, said element further having spokes connecting one of said rings with said shaft, the other ring surrounding an annular space forming an open side of said element; and a blowing pipe passing through a wall of said housing, being affixed to said housing, extending through said open side into said element aside of said shaft and having an outlet positioned within said element and being directed upward toward said path.

2,746,206
MOVING BALL ON MAGNETIC TRACK
John Hays Hammond, Jr., Gloucester, Mass.
Application July 31, 1953, Serial No. 371,491
1 Claim. (Cl. 46—43)



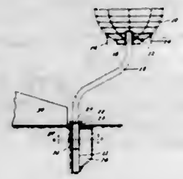
A toy comprising a member forming a track and having two ends spaced to form a gap to be jumped, a series of electromagnets disposed along said track and at the ends forming said gap, a ball of magnetic material movable along said track within the range of magnetic influence of said electromagnets and held to said track thereby, at least a portion of said track being inverted whereby the ball hangs therefrom supported solely by the influence of said magnets, and means energizing said electromagnets momentarily and in sequence for causing said ball to advance along said track and to jump across said gap.

2,746,207
TOY HELICOPTER
John E. Starkey, Hillside, N. J.
Application July 31, 1953, Serial No. 371,556
4 Claims. (Cl. 46—75)



1. A toy helicopter comprising at least two horizontally disposed blades arranged in confronting end to end spaced relation, a vertically disposed stem extending between the confronting ends of said blades and having one end above and spaced from said blades and having the other below and spaced from said blades, the confronting ends of said blades being connected to said stem adjacent said one end thereof for movement from the horizontal positions to positions extending longitudinally of said stem, a weight on the other end of said stem, and at least two spaced levers inwardly of said weight and engageable exteriorly with the portions adjacent the non-confronting ends of said blades when the latter are in the longitudinal position with respect to said stem and connected intermediate the ends to said stem for swinging movement about an axis transverse of said stem, one of said levers being on one side of said stem and the other of said levers being on the other side of said stem, each lever embodying a pair of arms extending in a diverging relation from its point of connection to said axis with one of said arms being shorter than the other of the arms.

2,746,208
FLORAL-CONTAINER SUPPORT
Harold L. Lewis, Indianapolis, Ind.
Application May 28, 1951, Serial No. 228,603
1 Claim. (Cl. 47—41)



A floral container and support adapted for use on a cemetery lawn, comprising a socket to be permanently sunk in the ground with its upper end substantially at ground level to be substantially un-noticeable and present no obstruction to mowing of the lawn in the absence of a container support therein, a container-supporting leg comprising a single rod-like member having a lower straight end adapted to be rotatably and removably received in said socket and extending upward therefrom to a point adapted to lie above the normal level of grass or foliage on the lawn and above the top edge of a headstone adjacent to which the socket is positioned, then smoothly curved and merged to an upward diagonal portion, then smoothly curved in an opposite direction and merged to an upper straight end parallel with the lower end and offset therefrom and terminating at its top in one element of a vertical pin and socket mounting, and a flower receptacle having at the bottom thereof the companion element of such pin and socket mounting adapted to be rotatably and removably received by the leg-carried mounting element, the offset of said leg being sufficient to dispose the flower receptacle wholly to one side of the axis of the ground-received socket when the receptacle is mounted on the upper end of the leg and the leg is received in the socket, whereby in a container and support mounted adjacent a headstone, the leg can be swung to a position in which the receptacle lies over the headstone to clear the adjacent lawn area for mowing and swung to an opposite position in which it and the receptacle is clear of the headstone.

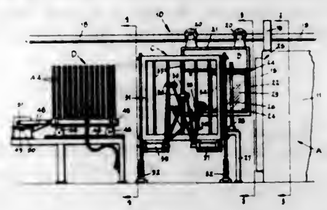
2,746,209
EQUIPMENT FOR BENDING GLASS SHEETS
Emmett L. Walters, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio
Application August 20, 1949, Serial No. 111,358
7 Claims. (Cl. 49—67)



5. A mold for use in the shaping of glass sheets comprising an open skeleton framework including an upstanding cast metal plate having a continuous upper edge which comprises at least a part of the shaping surface of the mold, and openings in the body of said plate adjacent said shaping surface but completely surrounded by said metal plate.

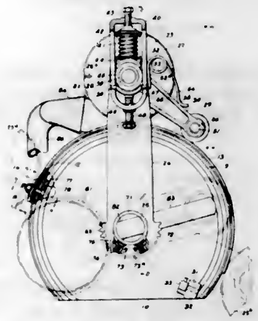
7. A mold for use in the shaping of glass sheets comprising an open skeleton framework including an upstanding continuous cast metal plate the upper edge of which comprises the shaping surface of the mold, said plate being tapered in cross section from said shaping surface to a portion of relatively thicker cross section spaced from said shaping surface.

2,746,210
METHOD OF PRODUCING FILMED AND TEMPERED GLASS SHEETS
Romey A. Gaiser, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio
Application December 6, 1952, Serial No. 324,573
8 Claims. (Cl. 49—79)



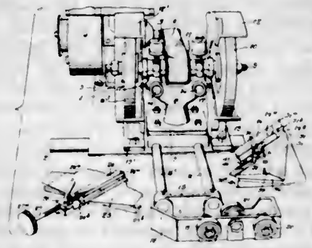
5. In a method of producing filmed glass sheets in which the film is produced by the reaction of the filming material with a glass surface that has been heated to substantially the softening point of the glass, the steps of preliminarily chilling only one surface of said sheet after said heating step, and then spraying the opposite surface with the filming material while said surface is still in its heated condition.

2,746,211
MACHINE TO ABRADE STEREOTYPING PACKLESS MATRICES
Edgar A. Mills, Long Island City, N. Y.
Application April 6, 1954, Serial No. 421,265
10 Claims. (Cl. 51—33)



1. An apparatus for reducing stereotyping printing matrices, each of said matrices having a pair of holsters at opposite sides thereof for longitudinally locating the matrix relative to the apparatus, comprising a fixed platen of substantially circular segmental outer contour, means for supporting a matrix against the circumferential outer surface of said platen, means formed in said platen operative to longitudinally align the matrix with the circumferential outer platen surface, a substantially cylindrical abrading drum rotatably mounted substantially parallel to the platen longitudinal axis, the outer surface of said abrading drum being located a short distance radially from the outer surface of the platen, abrasive means surrounding the abrading drum circumference operative to reduce the outer surface of the matrix, a pair of arms rotatably supported by the platen end walls, means fitted to the arms operative to radially adjustably support the abrading drum shaft relative to the circumferential outer surface of the platen, a pair of levers pivotally attached to the abrading drum, an auxiliary roller rotatably supported by the levers, spring means mounted adjacent the levers operative to press the auxiliary roller toward the outer surface of the platen in advance of the abrading drum, means for rotating the arms to progressively angularly advance the abrading drum relative to the platen outer surface, spring means fitted to the abrading roller support means for retaining the abrading roller surface in engagement with the circumferential outer surface of the platen, means for radially adjusting the position of the axis of rotation of the reducing roller relative to the outer platen surface, means for rotating the abrading drum, and means for progresively angularly advancing the abrading drum relative to the outer surface of the matrix mounted on the circumferential outer platen surface.

2,746,212
GRINDING ASSEMBLY FOR DRILL BITS
Clyde K. Jensch, Elm Grove, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a corporation of Wisconsin
Application July 26, 1951, Serial No. 238,727
1 Claim. (Cl. 51—92)



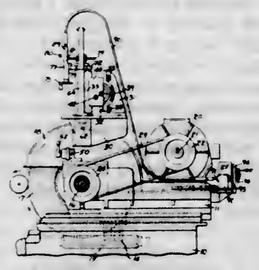
In a grinding assembly for drill bits and the like, a base and a grinding wheel mounted on said base for rotation about a predetermined axis, motor means on said base for rotating said grinding wheel, said base including spaced sleeves extending generally perpendicularly to the axis of said grinding wheel, a pair of rods inserted in said sleeves and means for holding said rods within said sleeves, a guiding support joined to said rods and extending in front of said grinding wheel, said guiding support including spaced roller elements journaled for rotation about axes generally parallel to the axes of said sleeves, a bit carriage having downwardly extending guide track means engageable with said rollers for movement of the carriage along a line generally parallel to the axis of said wheel, said carriage being removable from said rollers upon upward movement therefrom, said carriage including an upstanding portion with a substantially plane guiding surface, the plane of said surface extending generally parallel to the axes of said rods, said guiding surface having a channel formed therein for receiving the ridge of a bit positioned against said surface, an adjustable clamping lever on the carriage and cooperable with said surface for clamping a bit therebetween, and a stop on said carriage between said wheel and said carriage, said stop being in the path of a bit positioned against said surface but spaced from the axis of said channel, movement of said carriage along said rollers being effective to force said bit against the side of said wheel.

2,746,213
MEANS FOR MAINTAINING THE CONSTANCY OF THE WORKING PLANE OF GRINDING AND/OR POLISHING TOOLS
Edmond Laverdisse, Chateau St. Roch, Auvelais, Belgium, assignor to Les Glaceries de la Sambre, Societe Anonyme, Auvelais, Belgium, a Belgian company
Application November 12, 1953, Serial No. 391,697
Claims priority, application Belgium November 20, 1952
7 Claims. (Cl. 51—112)



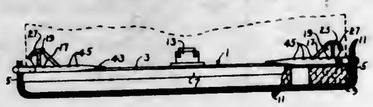
1. Apparatus for simultaneously working both faces of a sheet of glass, comprising rotary tools arranged with their axes normal to the plane of the sheet at opposite sides of the latter and adjustable towards and away from the opposite faces of the glass sheet, the tools at the opposite sides of said glass sheet having portions overlapping in the direction along the glass sheet, the tools engaging one face of the sheet having parts thereof extending beyond the tools engaging the other face of the sheet in the direction along the latter, and work support and traversing means engaging said other face of the sheet at locations opposite said parts of the tools engaging said one face which extend beyond the tools engaging said other face, said work support and traversing means being rigidly mounted to oppose the forces exerted by said tools engaging said one face and, thereby, to maintain the sheet of glass in a constant plane.

2,746,214
GRINDING MACHINE
Charles C. Alvord, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts
Application December 28, 1954, Serial No. 478,110
3 Claims. (Cl. 51—134.5)



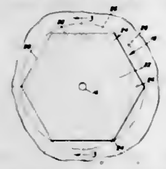
1. In a grinding machine having a transversely movable wheel slide, a rotatable wheel spindle thereon, a grinding wheel on said spindle, means including an electric motor on said slide to rotate said spindle, a rheostat on said slide operatively connected to control the speed of said motor, a truing apparatus on said slide including a longitudinally movable slide movable parallel with the axis of the wheel spindle, a transversely movable truing tool carrier on said slide, feeding mechanism interposed between the truing apparatus slide and the carrier to feed the truing tool toward and from the grinding wheel, means including a cam and a rotatable follower operatively connected to actuate said rheostat, and operative connections between the truing tool feeding mechanism and said cam whereby actuation of the truing tool feeding mechanism automatically actuates the rheostat to adjust the speed of said motor, said cam being shaped to control rate of actuation of the rheostat so as to maintain a constant peripheral speed of the grinding wheel as it wears away.

2,746,215
CLAMP FOR HOLDING STRIP MATERIAL ON PAD
Owen Burkart, Andrews, Ind.
Application October 6, 1954, Serial No. 460,545
7 Claims. (Cl. 51—189)



1. In a sanding pad which comprises a base plate terminating in an end against which strip material may be clamped, an actuator mounted on the base plate for rotation about an axis which is substantially parallel with said end and said base plate and disposed in closely spaced relation with said plate, said actuator comprising end portions having non-circular cross-sectional conformation, the improvement which comprises a clamp including a bar disposed substantially parallel to the end of the base plate, arms extending from the bar between the base and said end portions of the actuator and coacting therewith to be moved thereby so as to move said bar toward and from said end as said actuator is rotated in one direction or the other.

2,746,216
SANDING ATTACHMENT
Jean P. Hollingsworth, Savannah, Ga.
Application May 12, 1953, Serial No. 354,453
1 Claim. (Cl. 51—195)



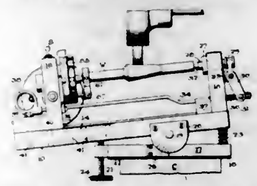
A sanding tool comprising a rotary shaft and a disk of abrasive material having a center portion attached to said shaft for rotation of the disk about its axis by said shaft, said disk having a polygonal edge forming a plurality of straight peripheral edge portions and tips alternating with said edge portions, said edge portions and tips being of the same thickness, said disk from its center portion to said edge portions and tips being free and self-supporting, said disk being flexible radially and axially for conforming to a concave surface to facilitate sanding by said edge portions and tips.

2,746,217
GRINDING WHEEL
John H. Breisch, Lakewood, Ohio
Application August 6, 1953, Serial No. 372,745
5 Claims. (Cl. 51—206.5)



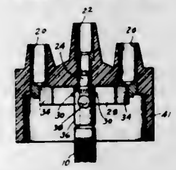
1. An adjustable mechanism comprising a backing plate oppositely spaced from a scroll plate, supporting means rigidly connected to one of said plates and extending freely through an opening in the center of the other of said plates so that said plates may be rotated with relation to each other, at least one adjustable segment having at least a portion thereof closely received between said plates, cooperable means on said scroll plate and said portion of said adjustable segment for causing said adjustable segment to be displaced substantially radially from the center of said scroll plate upon relative rotation of said scroll plate about its center, clamping means secured to said supporting means so as to engage the outer surface of said other plate and clamp said adjustable segment between said plates, and said clamping means being manually releasable so that said scroll plate may be rotated to change its relative position with respect to said adjustable element.

2,746,218
CYLINDRICAL GRINDING ATTACHMENT FOR SURFACE GRINDERS
Frank W. Bowie and Edward N. Sturdevant, Binghamton, N. Y., assignors to Frank W. Bowie, Binghamton, N. Y.
Application March 24, 1953, Serial No. 344,432
1 Claim. (Cl. 51—237)



An attachment for surface grinders having a rotary tool and a work supporting bed relatively traversible in a predetermined plane comprising a base plate adapted to be fixed to the bed, a base pivotally mounted on said plate, a tail stock rigidly fixed to said base and including a dead center, a head stock slidably mounted on said base and including a dead center cooperating with said tail stock dead center to support work pieces therebetween, means for rotating the work pieces, one of said dead centers being retractable with respect to its stock to permit the insertion and removal of work pieces, and control means mounted adjacent said head stock and operable to retract said dead center, said head and tail stocks including apertures, and a rod slidably mounted in said apertures and operably connected with said retractable dead center and said control means.

2,746,219
DISTRIBUTOR CAP CLEANING TOOL
Thomas W. Talbot, Santa Monica, Calif., assignor to Reed Tollefsen, Pacific Palisades, Calif.
Application June 29, 1954, Serial No. 440,008
1 Claim. (Cl. 51—241)



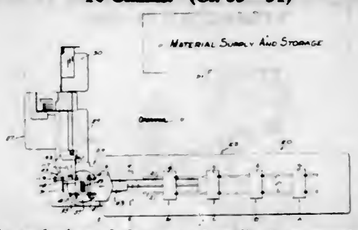
A distributor cap cleaning tool comprising a handle, extensions at the ends of the handle, means on one extension for cleaning the rotor contacts of the cap, said cleaning means being removable, the rotor contact cleaner comprising an S-shaped resilient blade, an abrasive on the ends of the S-shaped blade, the extension holder for the blade being slotted for the reception of same and means for retaining the blade in desired position in the slotted holder, said retaining means comprising a collet and a set-screw, the end of the set-screw contacting the blade, positioning protuberances fixed in the blade, the blade being notched for center positioning in the work.

2,746,220
GRINDING WHEEL COOLING DEVICE
Emil Leonard Thomas, Lorain, Ohio
Application August 28, 1953, Serial No. 377,188
3 Claims. (Cl. 51—266)



1. In a grinding wheel, a wheel body, a grinding ring on and surrounding said body, said grinding ring having circumferentially spaced cooling openings extending therethrough, a plurality of cooling blades mounted on said body, said blades having inner ends remote from said grinding ring and outer ends located alongside of said openings and engaging said grinding ring, wherein said wheel body has a conical sidewall having a smaller inner end and a larger outer end and a peripheral surface, said grinding ring being around the larger outer end of the side wall and projects radially from the side wall, said grinding ring has inner and outer sides through which said cooling openings extend, the blades being engaged with and extending along the peripheral surface of the side wall and angled relative to the axis of the wheel body.

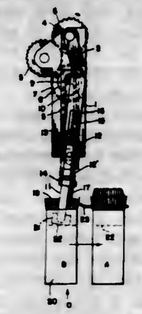
2,746,221
ENVELOPE TRANSFER MECHANISM
Francis J. Rouan, Darien, and John A. Strother, Stamford, Conn., assignors to Pitney-Bowes, Inc., Stamford, Conn., a corporation of Delaware
Application December 26, 1951, Serial No. 263,384
16 Claims. (Cl. 53—31)



2. In a device of the type described an envelope closing mechanism having a lengthwise envelope feed; means for inserting material into an envelope including a reciprocating ram which enters the envelope and thrusts it forward to a projected position; means for gripping said envelope when in said projected position and for holding the envelope while said ram is withdrawn; means to shift the position of said gripping means to direct the envelope opening away from the ram; and means for causing said gripping means to release said envelope and for causing the feeding of said envelope lengthwise into said envelope closing mechanism.

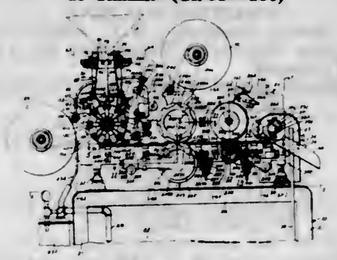
2,746,222
DETECTOR MECHANISM FOR A PACKAGING MACHINE
Harry E. Eagleson, Chicago, and Ellsworth A. Hartbauer, Des Plaines, Ill., assignors to F. B. Redington Co., Chicago, Ill., a corporation of Delaware
Application April 21, 1955, Serial No. 502,822
8 Claims. (Cl. 53—75)

7. In a packaging machine, apparatus for detecting a deficiency in the level of filling of a cardboard carton having flaps open at one end, said apparatus comprising a movable guide member, a crank, means coupled to said guide member and said crank to cause said guide member to mechanically oscillate and said crank to rotate in synchronism with the oscillating guide member, a probe arm having one end pivotally attached to the crank and



having a point slidably coupled to the guide member, and a probe arm extension mounted to slide along the probe arm for probing into the carton through the open flaps.

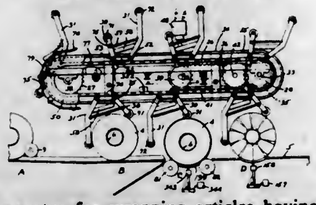
2,746,223
APPARATUS FOR PACKAGING OF POWDER IN SMALL QUANTITIES
Paul E. Fischer, Minneapolis, Minn., assignor, by mesne assignments, to E. G. Staude Manufacturing Company, Inc., Concord, N. H., a corporation of New Hampshire
Application May 9, 1952, Serial No. 287,009
15 Claims. (Cl. 53—180)



1. In an apparatus for the production of sealed packages of accurately measured small quantities of finely divided solid materials comprising a table supported in a substantially horizontal position, a plurality of stations along said table including a filling station, a sealing station, a pulling station, and a severing and discharge station, said receiving station including a material holder for said finely divided solid material, said material holder including a columnar space therethrough for holding said material as a solid column therein and a bottom having a partial cylindrical under surface, said surface having an opening therein aligned with said columnar space for the discharge of the solid material therethrough, a wheel having a cylindrical rim surface of a diameter such that it has a sealed running fit against the partial cylindrical bottom surface of said material holder, means mounting the wheel for rotation of said rim in contact with said partial cylindrical surface, said partial cylindrical bottom surface having an entering edge where the rim of the wheel engages said surface as it rotates thereagainst and a trailing edge away from which the rim of the wheel rotates as it leaves said surface, a port in the surface of said entering edge having gaseous fluid control means connected thereto for controlling a gaseous fluid to produce a condition of evacuation in said port as the pocket reaches said port and continues its motion towards said material discharge opening in said partial cylindrical bottom surface, a guide closely adjacent said trailing edge for guiding a continuous strip of package forming sealing

material against the rim of said wheel for movement downwardly in contact with the rim of said wheel to a lowermost position closely adjacent said table, said strip being thereafter moved along said table past said sealing station through said pulling station at which a pair of rolls engage the edges of the strip for pulling it along said table, said wheel at the receiving station having a plurality of radial pockets in said rim, a plunger positioned in each of said pockets and means on said wheel for normally retracting said plungers, cam means mounted in proximity with said wheel and having a cam lobe thereon positioned so as to contact said plungers and move them radially outwardly when each of the pockets and the plunger therein reaches a lowermost position directed downwardly toward said table, means between the receiving and sealing stations for feeding a superimposed continuous strip of package forming sealable material upon the first strip as it moves to said sealing station, said sealing station including cooperating pressure rollers engageable with the bottom and top of said composite composed of the two strips, said rollers being formed so as to provide continuous pressure along the edges of said composite formed of two strips and for applying pressure upon areas extending transversely across said strip at spaced intervals therealong, and means along said table at said severing station for severing the composite sealed strip after it has been pulled therealong, said severing means being timed for severing the strips only in said sealed transverse areas.

2,746,224
WRAPPING MACHINE
Ernest S. Wollett, Washington, D. C., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application August 26, 1952, Serial No. 306,443
20 Claims. (Cl. 53—204)



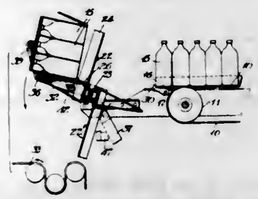
1. Apparatus for wrapping articles having cylindrical peripheries comprising a stationary runway therefor having at least two stations spaced therealong, a conveyor spaced laterally from the runway but extending generally lengthwise therewith, the conveyor comprising spaced portions extending transversely with respect to the length of the runway for successively engaging and propelling the articles therealong, means for intermittently driving the conveyor whereby an article is moved lengthwise of the runway into, and another article is moved out of, each station with each advance movement of the conveyor, means for passing a continuous sheet material toward the station nearer the receiving end of the runway, means for cutting successive sections of the sheet into wrappers, means for applying an adhesive to the leading end-portion and the tail end-portion of the inner surface of each wrapper, means for engaging and winding successive wrappers about successive articles in said station, means responsive to the wrapper-winding means for actuating the cutting means and adhesive-applying means and operating these means in timed relationship, means disposed at opposite sides of another of said stations for folding and pressing portions of the wrapper overhanging the end surfaces of each article against said surfaces, and means connected with said wrapper-winding means for actuating the driving means for the conveyor for the duration of one movement thereof.

2,746,225
CONSTRICTORS
Charles E. Cloud, Wilmette, Ill., assignor to William S. Cloud, Wilmette, Ill.
Original application February 9, 1949, Serial No. 75,322. Divided and this application February 18, 1952, Serial No. 272,233
5 Claims. (Cl. 53—370)



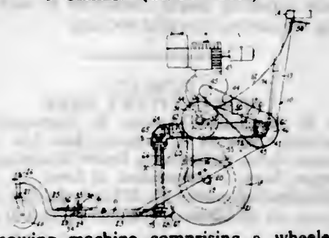
1. Constricting apparatus comprising a plurality of elastic strip portions, means circumferentially surrounding an axis controlling at spaced intervals one end of each of the said strip portions, means circumferentially surrounding the said axis controlling the other end of each of the said strip portions at intervals and so positioned that each of said strip portions is separated from the others and is inititally relatively widely spaced from said axis, and means for rotating one of said controlling means with respect to the other to force portions of said strip portions approximately to said axis and into engagement with one another.

2,746,226
CASING MACHINE
Alexander Donald, Woodside, and Leonard McGlhon, San Leandro, Calif., assignors to Anthony R. Silva, San Jose, Calif.
Application April 25, 1950, Serial No. 157,924
8 Claims. (Cl. 53—391)



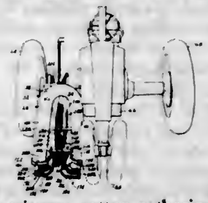
5. In a casing machine having means for supplying parallel rows of upright containers, a rotary table having a plurality of trays for successive alignment in horizontal position with said container supplying means, each tray when disposed in said horizontal position being adapted to receive a rectangular array of containers in upright position from said supplying means, the axis of rotation of said rotary table being disposed substantially in the plane of a tray in said horizontal position, a case supporting surface on said table for each of said trays and extending substantially at right angles thereto, said case supporting surface being disposed substantially vertically when the associated tray is in said horizontal position, means for operating said rotary table to lift a tray with the rectangular array of bottles and the case thereon away from said horizontal position, thereby separating said rectangular array of containers from said parallel rows of containers, and other case supporting means pivoted coaxially with said trays and mounted for oscillatory movement for successive cooperation therewith and positioned to engage the bottom of the case inserted over said rectangular array of bottles to control depositing of the case of bottles in inverted position after movement of said rotary table to invert the case of bottles.

2,746,227
ROTARY LAWN MOWER
George C. Tower, Hamden, Conn., assignor to Consolidated Industries, Incorporated, West Cheshire, Conn., a corporation of Connecticut
Application August 30, 1954, Serial No. 452,824
9 Claims. (Cl. 56—25.4)



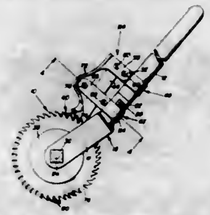
1. A mowing machine comprising a wheeled main frame, a triangular cutter frame projecting forwardly from the main frame and having a transversely extending hollow member at its forward end, a plurality of vertically disposed cutter shafts rotatably mounted in said member, a bladed cutter carried by each of said shafts above said member, a driving chain passing through said member and drivingly engaged with said shafts, and means on the main frame for driving said chain, said hollow member being of channel form in cross section and a finger bar closing the upper side of said member and having forwardly projecting fingers cooperating with said bladed cutters.

2,746,228
COMB ATTACHMENT FOR COTTON STRIPPERS
Jack F. Foster, Moline, Ill., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Application February 1, 1954, Serial No. 407,445
16 Claims. (Cl. 56—35)



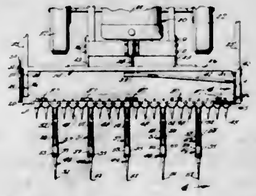
1. In a cotton stripper: cotton-gathering structure movable forwardly over a cotton field and including laterally spaced, generally upright and fore-and-aft extending side members defining between them a relatively wide fore-and-aft extending plant throat, said side members having lower portions at a level spaced slightly above the ground and transversely alined front portions defining the front end of the plant throat, and fore-and-aft stripper means carried between the side sheets and having a front entry end spaced rearwardly of the front portions of the side members and at substantially the level of the lower portions of the side members; comb means between the side members at the front and lower portions thereof and including a pair of fore-and-aft outer tines lying respectively inwardly of and proximate to the side members and other fore-and-aft tines intermediate said outer tines, all of said tines having rear ends fixed to the gathering structure in proximity to and at substantially the level of the front end of the stripper means, said tines extending forwardly and downwardly and having free front ends at about ground level and generally transversely alined with the front portions of the side members; a pair of guide elements, one for each side member and extending rearwardly and inwardly toward the comb from the front portion of the associated side member and occupying the space between the ground and the lower portion of said side member; a pair of first means respectively mounting the guide elements on the front ends of the outer tines, each first means including a pivot on a fore-and-aft axis; and a pair of second means respectively mounting the guide elements on the front portions of the side members, each second means including cooperative parts selectively vertically adjustable to enable vertical adjustment of the associated guide element about its aforesaid pivot.

2,746,229
LAWN EDGER
Francis L. Orr, Sacramento, Calif.
Application February 12, 1953, Serial No. 336,510
4 Claims. (Cl. 56—256)



1. A lawn edger comprising a portable support, a pair of ground-engaging cutting wheels rotatably mounted on one end of said support, said wheels being spaced apart a predetermined distance, a mounting bracket on said support, a guide bracket on said support, a pair of spaced limit stops on said guide bracket, and a floating blade pivotally mounted on said mounting bracket and extending through said guide bracket between said limit stops to a location between said cutting wheels, the thickness of said floating blade being substantially equal to said predetermined distance between said cutting wheels whereby rotational movement of said cutting wheels in one direction urges said floating blade toward one of said limit stops and in the other direction toward the other of said limit stops.

2,746,230
ADJUSTABLE CUTTER MEANS HAVING CROP LIFTING MEANS
William A. Reimer, Lisbon, Iowa; Lulu H. Reimer, administratrix of William A. Reimer, deceased, assignor to Lulu H. Reimer
Application February 19, 1954, Serial No. 411,360
3 Claims. (Cl. 56—312)

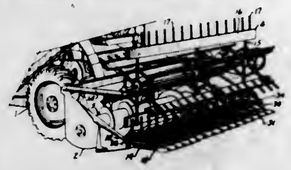


1. In a universal pickup guard assembly, a frame, a cutter bar on said frame, a horizontally disposed tube rotatably supported by said frame, a plurality of body members arranged forwardly of said frame, spring members connecting said body members to said tube, said body members being mounted for rotation about a horizontal axis, and manually operable means for rotating said tube.

2,746,231
HARVESTER MACHINE AND SICKLE GUARD EXTENSION THEREFOR
Roy E. Ayers, Woodward, Okla.
Application December 5, 1952, Serial No. 324,165
1 Claim. (Cl. 56—318)

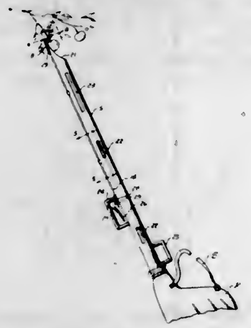
In a harvester having a grain pan, a sickle structure including spaced guards on the forward edge of the grain

pan and a reel rotated above and forward of the sickle to sweep grain crops into the sickle and grain pan, a plurality of guard extensions each consisting of an elongate tine member having a hollow open rear end portion engaged over the forward end of a sickle guard, a bracket fixed to the tine member adjacent the rear end thereof and extending rearwardly therefrom, means securing the bracket to the sickle structure whereby the tine member extends forwardly substantially in line with the respective sickle guard, said tine having a forward pointed end, a resilient rod fixed to the tine member adjacent the forward end thereof and sloping upwardly and rearwardly thereof and terminating in a rearwardly di-



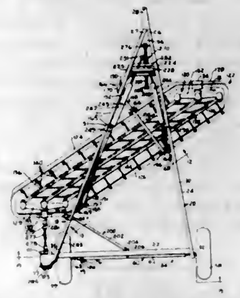
rected V-shaped portion substantially above and midway the length of the tine member, spaced parallel resilient fingers on the V-shaped portion of the rod and extending therefrom over and rearwardly of the sickle in substantially parallel vertically spaced relation to the tine member for supporting grain to be swept by the reel into the grain pan, said spaced parallel resilient fingers having a spacing equal to substantially one-half the spacing of the spaced guards of the sickle structure, and a plurality of longitudinally spaced radially extending teeth on the reel for movement between the guard extensions to aid in sweeping grain supported on the fingers thereof into the grain pan.

2,746,232
POLE SUPPORTED FRUIT PICKER WITH PIVOTED CUTTER
Salvatore Ossino, Totowa, N. J.
Application December 23, 1954, Serial No. 477,310
2 Claims. (Cl. 56—336)



1. In a device of the character described, a rigid conveyor tube having an open upper end terminating in a plane inclined relative to the axis of said tube to permit said upper end to be moved laterally about fruit stemmed from a branch to position the fruit substantially within the confines of said upper end, fruit stem clipping mechanism fixed to and supported by said upper end for clipping the stem of fruit for deposit within said tube when said upper end is disposed under said fruit, said mechanism including a plate extending over said upper end in spaced relation thereto and formed with inwardly converging spaced edges defining a stem guiding slot, said edges merging at their base in a semicircular stem receiving opening communicating with said slot, one of said edges having a sharpened portion disposed about said opening to thus provide a cutting edge, a cutting blade pivoted to said plate and operable across said opening and coacting with said cutting edge to effect clipping of a stem within said opening and deposit of fruit therefrom within said tube through said upper end, and blade actuating means connected to said blade for operating the latter across said opening.

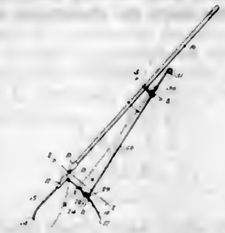
2,746,233
SIDE DELIVERY RAKE
Marcus E. McClellan, Arnold B. Skromme, Gail R. Sutherland, Howard E. Adams, and Leo L. Griffin, Ottumwa, Iowa, assignors to Deere Manufacturing Co., Dubuque, Iowa, a corporation of Iowa
Application September 17, 1952, Serial No. 309,991
18 Claims. (Cl. 56—377)



1. A side-delivery rake, comprising: a longitudinal main frame adapted for travel forwardly over a field at a normally fixed height above the ground; a support secured to the main frame and having means providing a vertical guideway; a carrier member having a mounting on the support providing for substantially universal rocking movement thereof relative to the support and also guided for vertical movement in the guide-way; first adjusting means cooperative between the support and the carrier member for adjusting the carrier member vertically relative to the support; a pair of subframe members having proximate end portions secured to the carrier member and diverging generally longitudinally and in a horizontal plane to remote end portions; second and third adjusting means separate from each other and from the first adjusting means and coacting between the main frame and the remote end portions of the subframe members for adjusting said remote end portions vertically independently of each other about the aforesaid universal mounting of the carrier member; each of said second and third adjusting means including a flexible lost-motion device enabling upward movement of the respective remote end portion relative to the main frame independently of adjustment; and a rake reel positioned generally transversely of and below the main frame and carried by the subframe members.

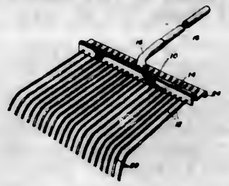
2,746,234
LEAF RAKE
Arthur B. Utley, Springfield, Mo.
Application February 17, 1954, Serial No. 410,764
2 Claims. (Cl. 56—400.12)

1. In a handled rake, a rigid supporting plate extending transversely of the rake and having rake fingers projecting forwardly therefrom in combination with a gripper hinged to said plate, said gripper having an elongated rectangular frame pivoted to the plate, and having a plurality of spaced grip teeth extending from said plate, a bracing plate mounted on and extending transversely of said grip teeth substantially centrally of said frame, an operating handle pivoted to the bracing plate centrally thereof and extending along the rake handle, said bracing plate having U-bolts extending therethrough and securing said spaced grip



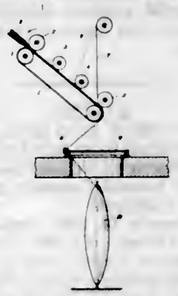
teeth to the bracing plate, one of the grip teeth having a convolution intermediate its ends forming the means for attachment of the operating rod.

2,746,235
FLEXIBLE LAWN RAKES
William E. Kautenberg, Freeport, Ill., assignor to W. E. Kautenberg Co., Freeport, Ill., a corporation of Illinois
Application January 2, 1953, Serial No. 329,181
7 Claims. (Cl. 56—400.17)



1. A lawn rake with flexible tines, comprising a one-piece stamped sheet metal cross head having a front bead extending above and below and integral intermediate portion of the cross head with a rear downwardly extending flange, the front of the head having perforations in the bead to receive the tines loosely therein and the intermediate portion of the cross-head between the front bead and the rear flange having projections extending therefrom engaging the tines inserted in the head, the projections and the tines therein being offset together in a limited arc for holding the tines tightly in place.

2,746,236
PROCESS FOR THE MANUFACTURE OF THREADS
Georg Kufner, Munich, Germany
Application May 16, 1951, Serial No. 226,737
Claims priority, application Germany May 24, 1950
2 Claims. (Cl. 57—160)



2. In the process for spinning a thread of spinnable fibers, including the steps of drawing in a plurality of stages and twisting said spinnable fibers, the improvement which comprises introducing into said spinnable fibers in the last drawing stage immediately prior to the twisting step predetermined limited lengths of at least one filament of a non-spinnable fiber, said non-spinnable fiber being introduced in the form of a thread consisting of consecutively disposed lengths of non-spinnable fibers connected by a serving of yarn.

2,746,237
CLOCK AND CASING THEREFOR
John Anderson, New York, N. Y., assignor to Galt Anderson Company, White Plains, N. Y., a copartnership
Application August 20, 1952, Serial No. 305,449
4 Claims. (Cl. 58—56)



1. A clock mounting comprising, in combination, a transparent front wall, a rear wall joined to the periphery of said front wall, at least one of said walls being shaped to provide a space between said walls extending close to said periphery, a clock having a dial mounted centrally of said rear wall and substantially smaller than said rear wall, said dial being visible through said front wall, said clock having a central rotating shaft extending into said space, a transparent circular disc mounted on said shaft for rotation therewith, and a replica of a living creature pivotally supported on said disc above its center of gravity at a point on the disc beyond the periphery of said dial, said front wall having masking means peripherally positioned to conceal the edge of said disc from the view of an observer of said clock dial, whereby as said dial rotates said replica appears to move through said space independently of any support.

2,746,238
ROCKABLE WEIGHT FOR SELF-WINDING WATCHES
Heinrich Stamm, Grenchen, Switzerland, assignor to Eterna Limited, Precision Factory, Grenchen, Switzerland, a Swiss joint-stock company
Application May 6, 1952, Serial No. 286,243
Claims priority, application Switzerland May 10, 1951
7 Claims. (Cl. 58—82)

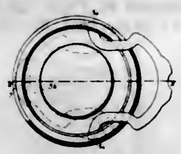


1. A rockable weight for self-winding watches consisting of a weighted annular segment extending through about half a circle, a hub in the center of said circle and a pair of elastic carrying members forming the only connection between said hub and said weighted segment.

2,746,239
TIMEPIECE BEARING
Marcel Vuilleumier, Pully, Switzerland, assignor of one-half to Parechoc S. A., Le Sentier, Switzerland, a corporation of Switzerland
Application September 29, 1953, Serial No. 383,043
Claims priority, application Switzerland October 2, 1952
9 Claims. (Cl. 58—140)

1. A bearing for a time-piece comprising an annular support with a stepped section and with three arcuate recesses formed in the inner wall of the support to the front of the stepped section and of which two are arranged symmetrically with reference to the diameter passing through the third recess, a throughstone held in

the support to the rear of the recessed section, an endstone held inside the stepped section of the support over said throughstone, a generally U-shaped blade spring engaging the outer front surface of the endstone and including a medial section, an outwardly directed projection on the latter adapted to be held inside the third recess in the support and to slide inside said recess in the direction of the above-mentioned diameter, said U-shaped blade spring having two lateral sections rigid with



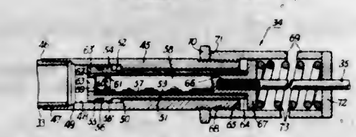
the medial section and an outwardly directed terminal section at the outer end of each lateral section adapted to be held in the corresponding recess to one side of the diameter passing through the third recess and to slide inside said recess to a slight extent longitudinally of said diameter to allow a shifting of said blade spring along said diameter to release the said projection from its cooperating recess, and thereafter permitting a pivoting movement of the blade spring round the axis defined by the terminal sections.

2,746,240

PUMP AND MOTOR HYDRAULIC TRANSMISSION AND PRESSURE RESPONSIVE SERVO-MOTOR CONTROL MEANS FOR THE PRIME MOVER THEREOF

Robert Brown, Hartsdale, and Thomas Edwards, Sunnyside, N. Y., assignors to City Tank Corporation, Corona, N. Y., a corporation of New York

Application October 19, 1950, Serial No. 190,964
5 Claims. (Cl. 60—19)



1. In an engine driven truck and loader assembly therefor; a pump and motor hydraulic transmission wherein the pump is driven by an engine controlled by a throttle and the motor is actuated by pressure in a pressure line leading from the pump, the combination therewith of a servomotor in fluid communication with said pressure line and operably connected with said throttle by a mechanical connection, said servomotor having cylinder and piston means operably connected with said mechanical connection to provide initially a low pressure responsive range of actuation thereto and additional cylinder and piston means operably connected with said mechanical connection to provide an auxiliary high pressure range of actuation thereto, said ranges of actuation having an abrupt gradient factor therebetween.

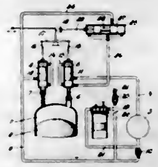
2,746,241

HOT-GAS RECIPROCATING ENGINE

Albert August Dros, Jacobus Albertus Louisa Yzer, and Evert Hellingman, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application April 17, 1952, Serial No. 282,918
Claims priority, application Netherlands May 12, 1951
8 Claims. (Cl. 60—24)

7. A device for regulating the amount of working medium in the working chambers of a multi-cylinder hot-gas engine comprising a supply vessel containing said working medium, supply pipe means for connecting said supply vessel to each of said working chambers, discharge pipe means in each of said working chambers and connected to said supply vessel for discharging working me-



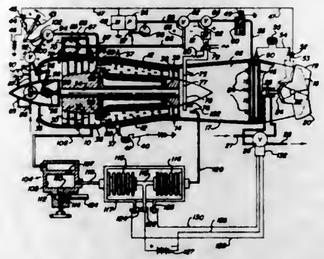
dium to said supply vessel, each of said supply pipes and said discharge pipes having a back-pressure valve and common pipe means for coupling each working chamber to each other working chamber.

2,746,242

PRESSURE RESPONSIVE INDICATING, SENSING, AND CONTROLLING DEVICES

Wendell E. Reed, Chula Vista, Calif., assignor to Solar Aircraft Company, San Diego, Calif., a corporation of California

Application January 27, 1950, Serial No. 140,856
14 Claims. (Cl. 60—35.6)



1. In a turbojet engine having an air compressor, a turbine, and means for varying the turbine discharge pressure, a device for simulating normal turbine discharge pressures comprising a closed chamber having an inlet orifice connected to be subject to the air compressor discharge pressure; an outlet orifice connecting said chamber and a pressure below said turbine discharge pressure, the area and configuration of said inlet and outlet orifices being so related as to maintain in said chamber a pressure substantially equal to said normal turbine discharge pressure; a differential pressure responsive device connected to be subject to the pressure in said chamber between said orifices and to the turbine discharge pressure; said differential pressure responsive device being operative to control said means for varying the turbine discharge pressure.

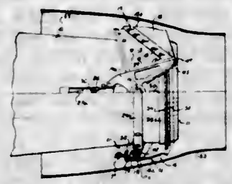
2,746,243

VARIABLE NOZZLE AND SEALING MEANS THEREFOR FOR JET ENGINE

Paul A. Pitt and Morris E. Nelson, San Diego, Calif., assignors to Solar Aircraft Company, San Diego, Calif., a corporation of California

Application January 14, 1954, Serial No. 404,022
11 Claims. (Cl. 60—35.6)

1. A variable nozzle construction for a jet engine exhaust discharge comprising a tailpipe for conducting the exhaust stream and having a fixed discharge orifice; a pair of movable gate members disposed externally on opposite sides of said tailpipe adjacent its discharge orifice and shaped so as to form a sealed annular tailpipe extension with a reduced discharge orifice when positioned in a closed position with oppositely disposed mating portions in engagement; an annular exterior shoulder on said tailpipe; internal shoulders on said gate members for forming with said exterior shoulder a substantially annular gas tight seal when the gate members are in closed position; and mechanism for simultaneously shifting both gate members to a retracted position clear of the exhaust gases issuing from said fixed discharge orifice and with the respective shoulders on said gate members and said tailpipe in clearance relation to form a cooling air passage therebetween.



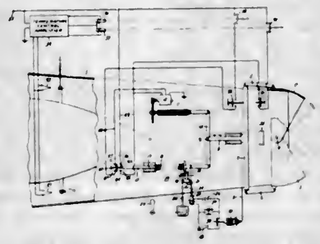
3. A variable orifice nozzle construction for jet engine exhaust discharges comprising a tailpipe having a fixed discharge orifice for conducting the exhaust stream; a pair of movable gate members disposed externally on opposite sides of said tailpipe adjacent its discharge orifice and shaped so as to form a sealed annular tailpipe extension with a reduced orifice when positioned in a closed position with oppositely mating portions in engagement; outwardly extending flanges on said gate members adjacent said mating portions and adapted to closely approach each other in an axial plane of said tailpipe when the gates are in closed position; mating resilient sealing means on said flanges for sealing them with respect to each other when said gates are in closed position; additional sealing means mounted on said gate members and said tailpipe effective to maintain a seal therebetween only in the closed position of said gate members; and mechanism for shifting both gate members to a retracted position clear of the exhaust gases issuing from said fixed discharge orifice and to break said last mentioned seal to permit the passage of cooling air therethrough.

2,746,244

REACTION POWER PLANT VARIABLE DISCHARGE AREA NOZZLE CONTROL SYSTEM

John H. Baker, Washington, D. C., assignor to General Electric Company, a corporation of New York

Application March 5, 1953, Serial No. 340,497
11 Claims. (Cl. 60—35.6)



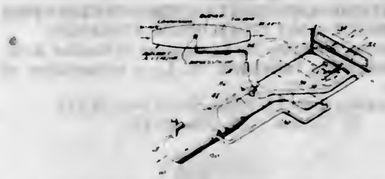
1. A control system for a reaction power plant having a variable area discharge nozzle comprising a reciprocable actuating member for opening and closing the nozzle, a differential device connected to drive said actuating member, said differential device having two input connections, a nozzle adjusting actuator means connected to one of said input connections, and a quick release nozzle closing device connected to the other of said input connections.

2,746,245

FREEZE PREVENTION IN JET AIRCRAFT PURGE GAS GENERATORS

Henry A. Geisler and Roger J. Quoiser, Indianapolis, Ind., assignors to Stewart-Warner Corporation, Chicago, Ill., a corporation of Virginia

Application February 20, 1953, Serial No. 337,933
3 Claims. (Cl. 60—39.07)



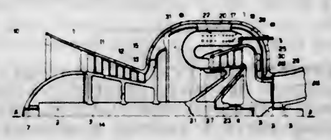
1. In a purge gas generating system for use in an aircraft which has a combustion turbine engine provided with an air compressor section therein which serves as a source of air at high temperature and pressure, the combination comprising: means forming a conduit having an inlet adapted for connection to said compressor section to receive said high pressure, high temperature air, said conduit having an outlet connection, combustion chamber forming means having an air inlet, a fuel inlet and an outlet for products of combustion, said combustion chamber air inlet being connected to said conduit outlet, means for supplying fuel to said fuel inlet, heat exchanger means having a gas passage and an air passage, said passages being in heat exchange relationship to each other, said gas outlet being connected to one end of said gas passage, a conduit leading to spaces to be purged, the last said conduit having an inlet connected to the other end of said gas passage, cold air duct means connected to one end of said air passage to supply cold air thereto, bypass forming means having an inlet and an outlet, said bypass inlet being connected into said first conduit, said bypass outlet being connected into said cold air duct means, valve means for regulating the rate of flow through said bypass means, and means sensitive to the temperature of said heat exchanger means to operate said valve to increase the flow through said bypass means when the temperature of said heat exchanger means drops below a predetermined minimum.

2,746,246

AXIAL FLOW GAS TURBINE

Alessandro Valota, Milan, Italy

Application September 5, 1952, Serial No. 308,078
5 Claims. (Cl. 60—39.16)



1. An axial flow turbine gas engine comprising a casing, two concentric rotors in said casing each including an annular rim having an inlet edge and an outlet edge, the rim of one of said rotors surrounding the rim of the other rotor, circumferential rows of respectively-alternating reversely directed blades on said rims, a power shaft connected with one of said rotors, an air compressor connected to be driven by the other of said rotors, a passageway between said compressor and said casing for blowing air into said casing, a stationary annular member of substantially U-shaped cross section enclosing both inlet edges of said rims with a gap between said annular member and said rims for passage of compressed air therethrough around said inlet edges, a combustion chamber located in said casing and communicating therewith.

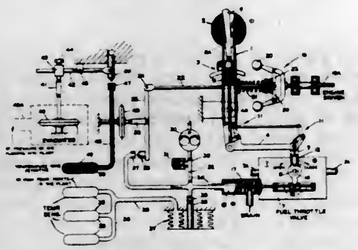
means for feeding fuel to said combustion chamber, apertures in said combustion chamber for admitting the compressed air therein, and nozzles for delivering the combustion gases from said combustion chamber to said annular member toward said blades.

2,746,247

FUEL CONTROL AND REGULATING SYSTEM FOR TURBOJET AND TURBOPROP ENGINES

James E. Bevins, Ramsey, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware

Application July 12, 1948, Serial No. 38,314
27 Claims. (Cl. 60—39.28)



7. For use with an aircraft engine having a combustion chamber and a valve for controlling flow of combustible fuel to said combustion chamber; the combination comprising manually operable lever means for positioning said valve, automatic means responsive to engine speed for also positioning said valve, manually operable mechanical means for selectively disconnecting said lever means from the valve, and means operatively connected to said lever means for setting the automatic means for the desired engine speed.

20. Apparatus for controlling a jet engine having burners and comprising a valve controlling fuel flow to the burners, a reversible motor for operating the valve, a motor control device for controlling direction and extent of movement of the motor, said device including an element movable in one direction to cause the motor to open the valve and in the opposite direction to close the valve, a power controlling member, means responsive to movement of the control member from a set position to cause said element to cause operation of the motor to effect a change in engine operating condition, means sensitive to the engine operating condition, and means operated by the sensing means for causing cessation of motor operation when the change in engine operating condition determined by the control member has been effected.

2,746,248

"T" SHAPED ROTOR TYPE OF, MULTIPLE GROUP EXPANSION, OPPOSITE DUAL FLOW PRESSURE VELOCITY COMPOUNDED, COMBUSTION GAS TURBINE MOTIVE POWER ASSEMBLY

Frank David Butler, Venice, Calif.

Application November 25, 1953, Serial No. 394,356
7 Claims. (Cl. 60—39.34)



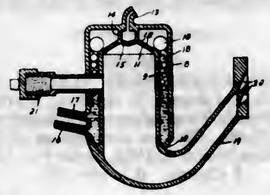
1. In a combustion gas turbine unit power plant assembly equipped with: a stator having an elongated bore, an elongated shaft mounted turbine rotor rotatable in one direction within said bore, a row of series of cylindrical combustion chambers extending parallel with said bore in a rim portion of said rotor and each provided with a baffle partition, a row of series of pairs of diffuser access nozzles with each pair extending tangentially convergingly through said rim of said rotor and terminating with one nozzle on either side of the baffle in its respective combustion chamber, a row of series of curved rotor expansion chamber buckets wherein each bucket extends tangentially into said rim of said rotor, a row of series of at least three different lengths of curved stator expansion chamber buckets wherein each extends tangentially from said bore into said stator and the longer of which buckets are open to one end of said stator, a row of series of fuel mixture diffuser nozzles each extending through said stator and terminating tangentially divergingly within said bore in series with a group of certain of said different lengths of stator buckets and cooperative with each of said diffuser access nozzles, a row of series of ignition plugs in alternate series with said row of fuel mixture diffuser nozzles and wherein each plug extends through said stator and terminates in a recess open to said bore and is in series with one group of said stator buckets, a combined fuel mixture and ignition electricity distributor provided with an oscillatable valve and rotor and through which to respectively supply compressed fuel mixture individually to each of said fuel mixture diffuser nozzles and ignition electricity to each of said ignition plugs by pairs and in a predetermined sequence, a multiple geared planetary type of oil drenched elastic fuel mixture compressor for said turbine and having an elongated drive sun-gear rotatable by said elongated shaft, a combined compressed fuel mixture accumulator and liquid settling compartment in communication with a discharge side of said compressor and a supply side of said distributor and having a float-valve through which to automatically return surplus fluid to an oil reservoir, a carburetor in communication with a suction side of said compressor and having a butterfly type of throttle-valve, a pressure regulator in communication with said accumulator and connected to said butterfly valve of said carburetor and for automatically controlling such butterfly valve, and, means for air cooling said stator and said turbine rotor, the provision therewith of: a T-shaped enlarged flanged portion integral with and projecting radially from said rotor and rotatable therewith closely adjacent to the open ends of the longest stator buckets in one end of said stator; a row of series of semi-conically shaped exhaust diffuser nozzles each initiating adjacent to the open ends of said longest stator buckets and terminating tangentially divergingly in the periphery of said flanged portion of said rotor in opposite to the direction of rotation of the latter; an induced draft cooling air circulating means provided with a row of series of air diffuser nozzles each extending, closely adjacent to said exhaust diffuser nozzles, tangentially divergingly through said flanged portion and terminating in the periphery thereof in opposite to the direction of rotor rotation and wherein the induced draft means is provided to induce air from external to internally to said rotor; a series of rows of series of conically shaped air diffuser holes wherein each row of such holes originate in said row of air diffuser nozzles and extend obliquely, in opposite to rotor rotation, divergingly to external to such flanged portion and terminate between two adjacent annular shaped cooling fins integral with the latter; a hub means forming a part of said flanged portion and for securing such turbine rotor to said elongated shaft; a turbine rotor starting means a part of which is rotatable coaxially with said flanged portion and said elongated shaft; a row of series of elongated cooling fins formed integral internally to said rim portion of said rotor and terminating adjacent to the induction side of said induced draft means; a gasoline float-valve chamber and fuel mixture spray nozzle, and a crude-oil float-valve chamber and fuel spray nozzle provided in dual parallel extending form within said carburetor and in series with said throttle-valve thereof such carburetor; means for supplying gasoline from a reservoir to such gasoline float-valve chamber through an electrical solenoid operated cut-out valve; a thermocouple switch for automatically controlling said solenoid; means for supplying crude-oil from said oil reservoir to said crude-oil float-valve chamber through a similar solenoid cut-out value; means for electrically heating such crude-oil for reducing its viscosity and at a location in the vicinity of such crude-oil spray nozzle; a butterfly type of quick-closing trip-valve forming a part of said distributor and in series with the compressed fuel mixture supply thereto from said accumulator; a combined governor and overspeed tripping member rotatable from said elongated shaft and provided respectively for automatically regulating said oscillatable valve and rotor of said combined distributor, and for tripping said quick-closing trip-valve of the latter whenever said shaft overspeeds; a series of riser tubes located within a gearing casing of said compressor and provided for limiting the oil level height in such compressor and forming access communication between the latter and said accumulator; means for enclosing said compressor within said stator and said rim portion of said rotor for compactness; and, means of applying such turbine assembly for power delivery purposes.

2,746,249

SPACED WALL COMBUSTION APPARATUS

Francis R. Bichowsky, Toledo, Ohio, and Robert H. Canfield, Washington, D. C.

Application September 14, 1936, Serial No. 100,686
1 Claim. (Cl. 60—39.46)
(Granted under Title 35, U. S. Code (1952), sec. 266)



A combustion device, comprising a vessel having two spaced walls joined together at one end of the vessel and with their opposite ends closed, means to introduce a spray of fuel inside the inner one of said walls at the said opposite end thereof, the said inner wall perforated at the said closed end to permit the passage of fluid from between said walls into the space within said inner wall in the form of a spray to mingle with the spray of said fuel, means to introduce into the space between said walls adjacent the junction of said walls a fluid that carries a supporter of combustion, means adjacent the said means to introduce into said space between the walls a fluid to interact with the first mentioned fluid to render said supporter of combustion more readily available to burn said fuel, and means to ignite the combustible mixture within said inner wall.

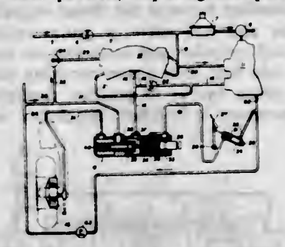
2,746,250

VENTURI CONTROL DEVICE FOR AIRCRAFT BRAKE SYSTEM

Scott F. Hawkins, Los Angeles, Calif., assignor to North American Aviation, Inc.

Application June 17, 1952, Serial No. 294,104
5 Claims. (Cl. 60—51)

5. In a fluid system for operating a single acting motor, including a pressurized reservoir, a return line from said motor connected to said reservoir, and a pressure line connected to said reservoir for the purpose of operating the motor, a device adapted for connection to the pressure line and to the reservoir in parallel with the motor and having in addition a connection to the return line to establish a reduced pressure therein for the purpose of facilitating the return stroke of the single acting motor, the said device comprising a housing having an inlet, an outlet, and a bore portion disposed between said inlet and said outlet, a Venturi member slidably mounted within said bore portion, a passage adapted to by-pass



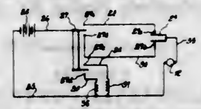
said Venturi, resilient means arranged to move said Venturi toward the inlet into a by-pass closing position wherein the Venturi overlies the by-pass entrance, a reduced pressure chamber formed between said Venturi member and said bore portion, a duct interconnecting the throat of the Venturi and said reduced pressure chamber, and a fluid connector provided for the reduced pressure chamber adapted to permit connection to the return line of the fluid system.

2,746,251

SELF-CONTAINED POWER ACTUATOR

Benjamin N. Ashton, Kingston, N. Y., assignor to Electrol Incorporated, Kingston, N. Y., a corporation of Delaware

Application August 1, 1951, Serial No. 239,800
2 Claims. (Cl. 60—52)



1. In an hydraulic system, a housing, a uni-directional electric motor carried by the housing, a chamber in said housing forming a fluid reservoir, a pump mounted in said chamber and connected to be driven by the motor, a cylinder formed in the housing, a piston mounted in said cylinder for reciprocatory movement therein, a double-throw control switch having a movable contact adapted to be connected to a source of electrical energy and a pair of stationary contacts connected to the motor, a pair of limit switches connected respectively to the stationary contacts of the control switch and in series with the motor, said limit switches being normally closed and adapted to be opened by movement of the piston to its respective extreme positions, a selector valve mounted in the housing and for controlling the flow of fluid to the cylinder, electromagnetic means for operating the selector valve and circuit means including switch means actuated with the said control switch connecting the electromagnetic means to the said source of electrical energy.

2,746,252

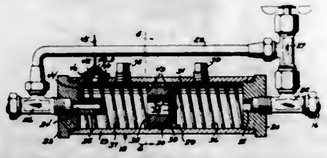
SAFETY CYLINDER FOR HYDRAULIC BRAKES

Cole Lewis Reese, Dallas, Tex., assignor, by direct and mesne assignments, of twenty-one and one-half per cent to James Henry Stroman, Oklahoma City, Okla., and five per cent to J. Val Connell

Application April 13, 1954, Serial No. 422,727
5 Claims. (Cl. 60—54.5)

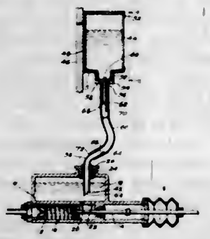
4. A safety cylinder for a fluid pressure brake, comprising a hollow housing, a first plug member detachably

connected to an end of said housing and having an inwardly projecting extension thereon, said first plug member being provided with a port therein, a passage in said extension connecting said port with the interior of said hollow housing, a second plug member detachably connected to the other end of said housing and provided with a longitudinally extending port, a fitting connected to each of the ports in said plug members, a valve connected to the fitting engaging said second plug member, a bypass line extending between the fitting engaging said first plug member and said valve, a piston reciprocably arranged in said cylinder and including an end wall and an annular side wall, said piston receiving said extension when said piston moves to position contiguous to said first plug member, a member detachably engaging the



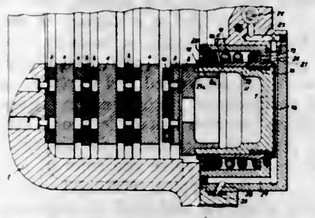
inner surface of said side wall, a resilient disc interposed between said member and end wall, there being openings in said disc and end wall registering with each other and with said passage, means for venting and filling the cylinder on opposite sides of the piston, a pair of springs positioned in said housing on opposite sides of said piston, a bushing detachably connected to said housing adjacent said first plug member, an insulated flexible flange seated in said bushing, a base member arranged in engagement with said bushing and provided with a socket, a wire leading from said base member, an indicator light connected to said wire and adapted to be mounted on the dashboard of a vehicle, and a contact ball carried by said flange and mounted for movement into and out of said socket by said piston for selectively closing the circuit to said indicator light.

2,746,253
BRAKE FLUID LEVEL CONTROL DEVICES
Oscar W. Anderson and Jack M. Anderson, Denver, Colo.
Application April 19, 1954, Serial No. 423,989
12 Claims. (Cl. 60—54.6)



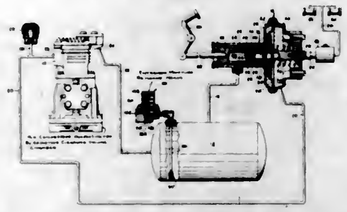
1. In a device for use in automatically maintaining the level of the brake fluid in a hydraulic brake master cylinder reservoir which has a top provided with a threaded fill opening, an auxiliary reservoir positioned above the master cylinder for holding a reserve supply of brake fluid, a screw plug having an air hole and adapted to be threadedy engaged in the fill opening to close the same, and an air tight tubular connection passing through the top of the screw plug and connecting the interior of said container with the interior of said reservoir for transferring the brake fluid from the auxiliary reservoir to the master cylinder reservoir; the improvement which comprises: pointed projections formed on the intake and discharge ends of the tubular connection for reducing the surface tension.

2,746,254
HYDRAULIC BRAKE WEAR TAKE-UP DEVICE
René Lucien, Paris, France, assignor to Societe d'Inventions Aeronautiques et Mecaniques S. I. A. M., Geneva, Switzerland, a corporation of Switzerland
Original application January 3, 1951, Serial No. 204,198. Divided and this application August 14, 1952, Serial No. 304,343
Claims priority, application France June 7, 1950
7 Claims. (Cl. 60—54.6)



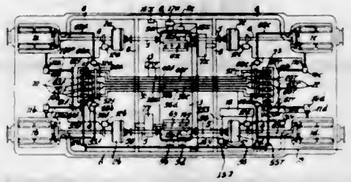
1. In combination with a hydraulic brake actuating device including a brake cylinder, a piston movable in the cylinder, and means for supplying pressure fluid to the cylinder to cause actuating movement of the piston therein, a wear take-up device comprising: a movable sleeve surrounding the piston, means positively limiting the movement of the sleeve to a predetermined small stroke in the cylinder, a compression spring abutting at one end against the sleeve and at the other end against the cylinder, and means positioned between the piston and the sleeve to exert therebetween a frictional grip causing joint movement thereof throughout said small stroke when no pressure fluid is supplied and permitting separate movement of the piston beyond the stroke of the sleeve when pressure fluid is supplied and the sleeve is actuated thereby into engagement with the stroke limiting means.

2,746,255
FLUID PRESSURE SYSTEM
Ellery R. Fitch and James V. Ralston, Elyria, Ohio, assignors to Bendix-Westinghouse Automotive Air Brake Company, Elyria, Ohio, a corporation of Delaware
Application March 4, 1953, Serial No. 340,342
8 Claims. (Cl. 60—57)



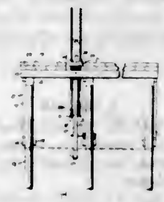
1. A closed system for compressed air comprising a compressor having an inlet, an outlet and a clearance volume chamber to limit the pressure output of the compressor to a predetermined value above atmospheric pressure, a reservoir connected with said outlet for the storage of compressed air at said predetermined value, means in said reservoir for receiving moisture entrained in the compressed air, an actuator, means for conducting compressed air from the reservoir to the actuator to energize the latter, means to conduct compressed air from the actuator to the compressor inlet to temporarily supercharge the compressor and increase the pressure output thereof above said predetermined value, means responsive to a predetermined increase in pressure in said reservoir above said predetermined value to connect said moisture receiving means with the atmosphere to discharge entrained moisture, and means for supplying make-up air to the compressor inlet at atmospheric pressure.

2,746,256
CONTROLS FOR MULTIPLE ENGINE POWER PLANTS
Louis Frederick Rudston Fell, Littleover, England, assignor to Fell Developments Limited, London, England, a British company
Application August 31, 1949, Serial No. 113,369
Claims priority, application Great Britain September 14, 1948
6 Claims. (Cl. 60—97)



1. In a power plant comprising at least two compression ignition main engines each having fuel injection means variable between idling and full power positions, common driven means, fluid coupling means connecting each main engine to said common driven means, a conduit system for filling and emptying each fluid coupling means and each such system including a valve movable between filling and emptying positions, means connected with each valve for individually controlling the same, a manually operable regulator connected to all of said fuel injecting means for causing simultaneous operation thereof between the idling and full power positions, cut-off mechanism connected to each fuel injection means and to an associated valve for the fluid coupling means for overriding the regulator and positioning the fuel injection means to its idling position in response to movement of said associated valve to its emptying position, regardless of the setting of said regulator.

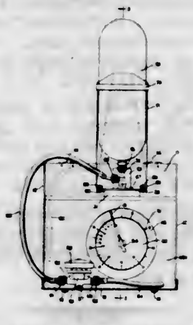
2,746,257
HANGING FIRE WALL AND METHOD OF CONSTRUCTING SAME
John J. O'Brien, New York, N. Y.
Application July 8, 1949, Serial No. 103,565
29 Claims. (Cl. 61—48)



1. In combination, with a pier deck, pending flexible connectors connected at intervals to the pier deck and hanging under the pier deck; a wall of hardened plastic material secured to said connectors close to said pier deck, and having its lower part disposed a short distance below the water line.

2,746,258
REFRIGERANT CHARGING AND WEIGHING DEVICE
Kenneth W. Hagans, Alliance, Ohio
Application November 23, 1953, Serial No. 393,548
10 Claims. (Cl. 62—1)

1. A fluid charging and weighing device comprising a case, a scale located in the case and including a vertically movable platform, a dial, a pointer cooperating with the dial and operatively connected to the platform, spring means urging the platform into an elevated position, means upon the platform for supporting a refrigerant fluid bottle and the like having an outlet neck in inverted position, a charging valve rigidly mounted within the case, a flexible hose connected to the inlet



side of the valve and having means for connection to the outlet neck of the bottle, means for supporting said hose between the valve and the bottle for preventing fluctation of the pointer, and a second flexible hose having means for connection to the outlet side of the valve and to a unit to be serviced.

2,746,259
AIR-CONDITIONING AND WATER-COOLING APPARATUS
Bernhard Katzenberger, Heidelberg, and Hans Ludwig von Cube, Schriesheim, Germany, assignors to Brown, Boveri & Cie, Aktiengesellschaft, Mannheim, Germany
Application March 2, 1954, Serial No. 413,518
Claims priority, application Germany March 3, 1953
2 Claims. (Cl. 62—3)

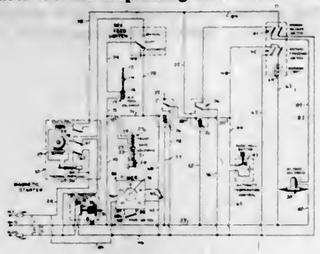


1. An air-conditioning and water-cooling apparatus, comprising a refrigerant compressor having a drive motor, a condenser, an air-conditioning device having an evaporator, refrigerant conduit means serially interconnecting said compressor and said condenser and said evaporator and forming together therewith a refrigerant circulation system, a water cooler having a cooling conduit and having controllable water supply means in heat-exchanging connection with said cooling conduit, said cooling conduit being serially interposed between said evaporator and said compressor in said system, a by-pass connected across said cooling conduit, and condition-responsive control means in said by-pass for controlling the flow of refrigerant through said cooling conduit to limit the cooling of the water.

2,746,260
PORTION CONTROL FOR DISPENSING FREEZER
Harvey F. Swenson, Seattle, Wash.
Application July 14, 1952, Serial No. 298,788
5 Claims. (Cl. 62—4)

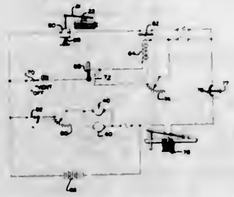
1. In a portion controlled dispensing freezer, a freezing cylinder adapted to freeze mix supplied thereto, means including a motor-driven dasher for dispensing frozen mix from the freezing cylinder, an automatically resetting electric timer activated by the closing of a self-opening manually closed switch, and control means including an electric control circuit opened and closed by the timer for

activating the dispensing means, said timer being arranged and adapted to automatically close the control circuit when activated and to thereafter open the control circuit and thereby inactivate the dispensing means after the passage



of a predetermined length of dispensing time, means being provided permitting said dispensing operation including an energizing of the motor which drives the dasher to be performed manually at will.

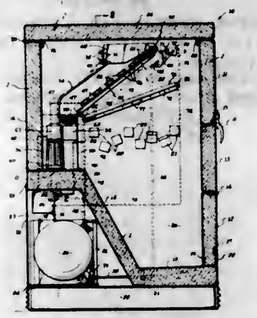
2,746,261
REFRIGERATING APPARATUS
J. Lowell Gibson, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 26, 1953, Serial No. 388,341
6 Claims. (Cl. 62—4)



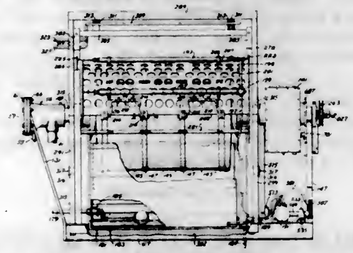
1. In combination with a car having a passenger compartment and an engine compartment, an engine within said engine compartment, a compressor, torque transmitting means including a clutch between said engine and said compressor, a condenser, a refrigerant evaporator, means for circulating air to be conditioned for said passenger compartment in thermal exchange with said evaporator, refrigerant flow connections between said compressor, condenser and evaporator, and means responsive to a predetermined increase in the temperature of said compressor for disengaging said clutch, said last named means comprising a manually resettable thermostat mounted on said compressor.

2,746,262
ICE MAKING MACHINE
Albert M. Gallo, Pacific Palisades, Calif.
Application January 11, 1954, Serial No. 403,139
17 Claims. (Cl. 62—7)

1. In an ice-making machine, the combination of: a cabinet; an insulated housing forming a part of said cabinet including a floor, a rear wall section sloping upwardly and rearwardly from said floor, a removable front wall section, and side wall sections defining with said sloping rear wall section and said removable front wall section an ice receiving bin in the lower region of said housing; refrigerating apparatus in the lower rear portion of said cabinet under and behind said sloping wall section, said cabinet including a removable rear panel enclosing the back side of the refrigerating apparatus; an ice forming plate member supported in the upper region of said insulated housing between said side walls; evaporator means for the refrigerating apparatus positioned adjacent one side of said plate member and in heat exchange relation thereto: and means for passing water over the other side of said plate to build up a slab of ice, said plate being inclined with respect to the vertical and said evaporator means being positioned adjacent the upper side of said plate, said water running down the underside of said plate.



2,746,263
CONGEALED PRODUCT AND APPARATUS AND MEANS FOR MAKING SAME
Crosby Field, Brooklyn, N. Y.
Application December 13, 1951, Serial No. 261,526
22 Claims. (Cl. 62—7)



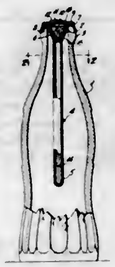
1. In the art of congealing a liquor, that improvement which includes the steps of applying a coating of liquor to a freezing surface, congealing the coating, stopping the application of liquor, wiping the exposed surface of the congealed coating compound, subcooling the congealed coating a predetermined amount, repeating the above steps, and removing the congealed subcooled coating.

2,746,264
MINIATURE COOLING UNIT
Frederick G. Keyes, Cambridge, Mass., assignor to Alfred Bicknell Associates, Inc., Cambridge, Mass., a corporation of Massachusetts
Application July 17, 1953, Serial No. 368,760
7 Claims. (Cl. 62—92)



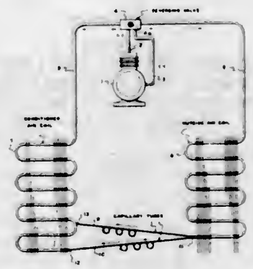
1. A refrigeration unit comprising a case, a detachable capsule of compressed refrigerant, means for tapping said capsule, valving means for periodically releasing a metered amount of the refrigerant, and a counterflow heat exchanger for the refrigerant comprising a spiral chamber formed by a spiral vane attached to a flat cooling end surface wherein the refrigerant supply is carried through said spiral chamber in a duct attached to the vane and the expanding gas escaping through the spiral cools the incoming refrigerant.

2,746,265
CONTAINER COOLING DEVICE
Evan D. Mills, Los Angeles, Calif.
Application January 7, 1955, Serial No. 480,442
2 Claims. (Cl. 62—94)



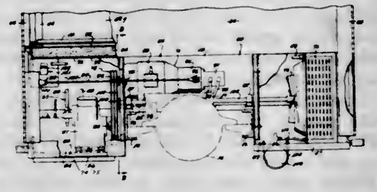
1. A cooler for bottled beverages comprising, a closed bottom conductor tube having an outwardly flaring upper portion and a peripheral flange about its top to seat upon the rim of said bottle, said tube having a chemical therein, a cartridge of similar size and shape to the flared top portion of said tube to seat within said upper portion of said tube and seal the tube, said cartridge having a chemical therein which when mixed with said first-mentioned chemical will react to absorb heat from said beverage, a gasket between said bottle rim and tube flange, a gasket on said tube flange, and a bottle cap over said tube, cartridge and bottle rim.

2,746,266
AIR CONDITIONING APPARATUS
Milton M. Kosfeld, Louisville, Ky., assignor to General Electric Company, a corporation of New York
Application June 14, 1954, Serial No. 436,674
4 Claims. (Cl. 62—115)



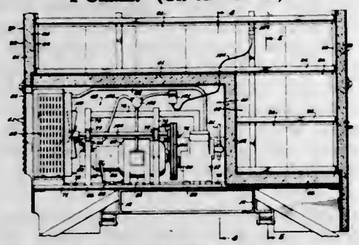
4. A reverse cycle refrigerating system for heating and cooling air for an enclosure comprising a compressor, an indoor coil and an outdoor coil, means including a reversing valve for selectively connecting the discharge and the suction of said compressor to said indoor and outdoor coils respectively during the heating cycle and to said outdoor and indoor coils respectively during the cooling cycle, and a pair of capillary tubes for expanding the refrigerant of said system from condensing pressure to evaporating pressure, one of said capillary tubes being connected between the ends of said coils remote from said reversing valve and the other of said capillary tubes being connected between said remote end of said outdoor coil and a point on indoor coil intermediate the ends thereof, said remote end of said outdoor coil being below the level of refrigerant liquefication in said outdoor coil when said outdoor coil is acting as a condenser during said cooling cycle thereby causing both of said tubes to be fed with liquid refrigerant during said cooling cycle, and said point being above the level of refrigerant liquefication in said indoor coil when said indoor coil is acting as a condenser during said heating cycle thereby causing said one tube ot be fed with liquid refrigerant and said other tube to be fed with gaseous refrigerant during said heating cycle, whereby said other capillary tube is less effective to pass refrigerant during said heating cycle than during said cooling cycle and a lower refrigerant flow rate is effected throughout said system.

2,746,267
SELF-REFRIGERATED HIGHWAY TRUCK
Lawrence T. Sellstrom, Los Angeles, Calif., assignor to Knudsen Creamery Co. of California, Los Angeles, Calif., a corporation of California
Application January 14, 1955, Serial No. 481,843
3 Claims. (Cl. 62—117.1)



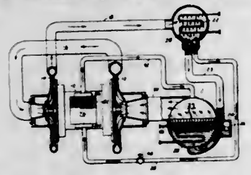
1. In a self-refrigerated highway truck, the combination of: a running chassis having a main frame; a truck engine mounted on the front end of said frame for propelling said chassis; a driver's cabin mounted on said frame to overlie said truck engine and shiftable upwardly to render said engine accessible; a refrigerated body mounted on said frame to the rear of and close to said cabin when the latter is in its normal operating position, said body being substantially rectangular in form and having an externally open transverse recess formed within the front lower corner portion of the body, said recess being separated by walls of insulation from the cargo space within said body; a series of cold plates mounted in said cargo space for cooling cargo carried in said space; a refrigerant compressing unit housed within said recess, said unit including a refrigerant compressor which is located in one end portion of said recess, which portion extends a substantial distance below the main frame of said chassis, and a refrigerant condenser equipped with a rotary fan which are similarly located in the opposite end portion of said recess, and a compound motor including an electric motor, a clutch, and a fluid motor, said compound motor being mounted in a portion of said recess located above said main chassis frame, and transmission means connecting said compound motor with said compressor and said condenser fan whereby said compressor and condenser fan may be optionally operated by said electric motor or by said fluid motor; a fluid pump mounted to be driven by said engine; and means connecting said pump with said fluid motor whereby said unit will be driven by said engine when said truck is travelling on the highway, said recess opening forwardly from said body whereby said recess is covered by said cabin, when the latter is lowered, and rendered open for access to said compressing unit when said cabin is lifted to render said engine accessible.

2,746,268
SELF-REFRIGERATED HIGHWAY TRUCK
Lawrence T. Sellstrom, Los Angeles, Calif., assignor to Knudsen Creamery Co. of California, Los Angeles, Calif., a corporation of California
Application January 14, 1955, Serial No. 481,842
1 Claim. (Cl. 62—117.1)



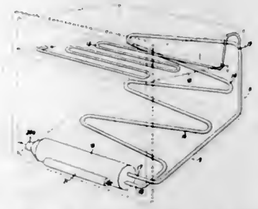
In a self-refrigerated highway truck, the combination of: a running chassis; a truck engine mounted on said chassis for propelling the same; a refrigerated body mounted on said chassis, said body being substantially rectangular in form and having an insulated recess formed in the lower rear corner of said body and opening laterally from said body, said recess being separated by walls of insulation from the cargo space within said body, said recess extending from one side of said truck only part way across said body, the balance of the rear lower corner space within said body, constituting a substantial portion thereof, being included in the insulating cargo-carrying space within said body; refrigerant expansion means mounted in said body for cooling cargo carried in said cargo space; a refrigerant compressing unit housed within said recess and connected to said expansion means, said unit including a compressor, an electric motor, clutch means mounted on said electric motor, and a fluid motor mounted on said clutch means, said clutch means consfituting an optional drive connection between said electric motor and said fluid motor, said compressing unit also including a refrigerating fluid condenser, said condenser being located at the laterally open end of said housing recess, and means for connecting said motors to said compressor comprising pulley-and-belt means and including a jack shaft driven by said pulley-and-belt means and extending transversely of said body on a line adjacent the center of said condenser; a fan mounted on said jack shaft adjacent said condenser so as to be rotated therewith when the compressing unit is operating to move air through said condenser; a fluid pump mounted to be driven by said truck engine; and means connecting said pump with said fluid motor whereby said refrigerant compressing unit will be driven by said truck engine when said truck is driving on the highway and when said clutch is engaged, but whereby said compressing unit may be driven by said electric motor when said clutch is disengaged and while said truck engine is not running.

2,746,269
PLURAL STAGE REFRIGERATING APPARATUS
Arthur M. G. Moody, La Crosse, Wis., assignor to The Trane Company, La Crosse, Wis.
Application March 17, 1955, Serial No. 494,884
3 Claims. (Cl. 62—117.6)



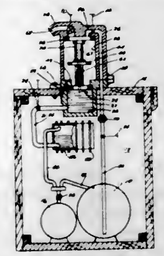
1. In refrigerating apparatus, the combination of an evaporator for vaporizing refrigerant, a condenser for liquefying refrigerant, a compressor for circulating refrigerant through said evaporator and said condenser, a motor for driving said compressor, a fluid tight casing enclosing said motor and compressor, a shaft and rotor assembly rotatably mounted in said motor, a heat exchanger in said fluid tight casing, a fan secured to said shaft and rotor assembly for circulating refrigerant gas from said motor through said heat exchanger and back to said motor, said heat exchanger having fluid passageways, a first conduit between said condenser and said fluid passageways for conducting liquid refrigerant from said condenser to said fluid passageways and a second conduit between said fluid passageways and said evaporator for conducting refrigerant gas from said fluid passageways to said evaporator.

2,746,270
DEFROSTING ARRANGEMENTS FOR REFRIGERATING SYSTEMS
Leonard W. Atchison, Erie, Pa., assignor to General Electric Company, a corporation of New York
Application July 8, 1952, Serial No. 297,635
10 Claims. (Cl. 62—126)



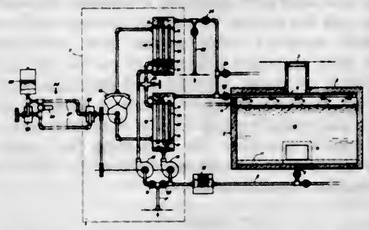
1. In a refrigerating system, a dry evaporator comprising a header and a continuous conduit connected at both ends to said header, at least the portion of said conduit including said ends being arranged in a plane sloping downwardly and forwardly, said header being disposed at the forward portion of said evaporator and at the lower end of said portion of said conduit, said evaporator header being disposed below the level of substantially all of said conduit whereby liquid refrigerant drains from said conduit into said header, means for supplying liquid refrigerant to said conduit adjacent the highest point thereof and means for withdrawing vaporized refrigerant from said header, and means for heating the lower portion of said evaporator to vaporize liquid refrigerant, the vaporized refrigerant condensing with said conduit to effect removal of frost therefrom.

2,746,271
COOLING SYSTEM FOR LIQUIDS
Charles A. Clements, Victoria, British Columbia, Canada
Application January 19, 1952, Serial No. 267,260
5 Claims. (Cl. 62—141)



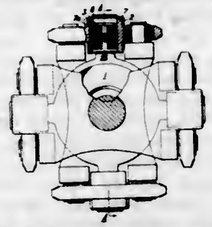
1. In a beverage dispensing apparatus having a cooled compartment; a metallic hollow body including a lower portion extending into said compartment and formed with a bore and an upper portion removably secured to said lower portion extending outwardly of said compartment and formed with a bore; pistons slidable in said bores, respectively; a stem from one of said pistons and supporting the other piston; a metallic container within said compartment in operative communication with the bore in said lower portion; a liquid in said container and said lower bore; and means for forcing said pistons downwardly and upwardly, cyclically.

2,746,272
METHOD FOR HOLDING SHRIMP
Walter H. Carpenter, Savannah, Ga.
Application July 24, 1952, Serial No. 300,742
1 Claim. (Cl. 62—170)



A method of refrigerating the catch of a shrimp boat comprising initially chilling the shrimp by dumping it into an insulated tank substantially filled with brine chilled by circulation through a chiller exterior of said tank, and maintaining said brine at refrigerating temperature for storing said shrimp in said tank until unloaded from said boat by both driving said chiller and recirculating said brine hydraulically by hydraulic means driven off a power unit of said boat.

2,746,273
FLEXIBLE DRIVES
John Oliver Philip Hughes, Whetstone, near Leicester, England, assignor to The English Electric Company Limited, London, England, a British company
Application August 31, 1953, Serial No. 377,664
Claims priority, application Great Britain September 8, 1952
4 Claims. (Cl. 64—17)



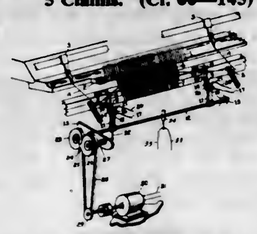
1. A flexible drive comprising in combination: a driving member, a driven member and a gimbal member all arranged coaxially with one another, the said gimbal member having a gimbal ring and radial gimbal pins fixedly connected to said gimbal ring sleeves removably fitted over the said gimbal pins, links resiliently connected to the said driving member and driven member respectively and having bores sliding on the said sleeves, a bearing journalling the said driving member and supplied with lubricating oil under pressure from an external source, resilient plunger couplings arranged in the said driving member and each contacting a link adjacent the said driving member on the sides of the said links which lie in the direction of the axis of the said bearing journalling the said driving member, an oil duct being provided in each of the said links leading from said resilient plunger couplings to the sliding face of the said sleeves in the said links, and an oil duct being provided in the said driving member establishing communication between the said bearing and the said resilient plunger coupling, whereby the said sliding faces are provided with lubricating oil from the said source.

2,746,274
CARRIER ROD DRIVE MECHANISM FOR STRAIGHT KNITTING MACHINES
Eugene M. Zesch, Shillington, Pa., assignor to Karl Lieberknecht, Inc., Reading, Pa., a corporation of Pennsylvania
Application August 28, 1953, Serial No. 377,055
12 Claims. (Cl. 66—130)



1. In yarn carrier rod drive mechanism for straight knitting machines, an endwise reciprocated bar; a friction box for the yarn carrier mounted on the bar; friction shoes respectively in opposite ends of the box for engaging the bar; spring urged cam elements carried by the friction box at opposite ends and pressing upon the respective shoes; end stops respectively for limiting the traverse of the friction box in opposite directions; and means operative to actuate the cam elements alternately as the friction box nears the limits of its travel in opposite directions, for easement of the pressure upon the friction shoes to prevent rebound of the box as it strikes the end stops.

2,746,275
YARN SEVERING DEVICE FOR STRAIGHT-BAR KNITTING MACHINES
Arthur J. Cobert, Signal Mountain, Tenn., assignor of fifty per cent to Beautiful Bryans, Incorporated, Chattanooga, Tenn., a corporation of Tennessee
Application March 16, 1953, Serial No. 342,690
5 Claims. (Cl. 66—145)

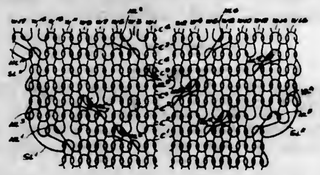


1. In a full-fashioned knitting machine, the combination of a needle row, means to lay yarn to said row, means cooperating with said row to knit fabric from said yarn and means to draw off the fabric, a portion of said yarn extending from the fabric to the yarn laying means, means for holding said portion of the yarn at a point offset from the needle row, and yarn severing means including a bracket, a heating element wire mounted on the bracket, and a spring connected between the wire and bracket for holding the wire taut in the bracket.

2,746,276
WIDENED KNITTED FABRIC AND METHOD OF MAKING THE SAME
Otto F. Smetana, Concord, N. C., assignor, by mesne assignments, to Phil Cord Corporation, a corporation of North Carolina
Application December 4, 1950, Serial No. 199,049
12 Claims. (Cl. 66—189)

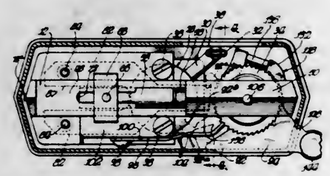
1. A weft knit selvaged fabric composed of loops forming courses and wales, and having a widened section,

certain courses of said section each having at one end only a needle loop transferred outwardly and initiating a wale positioned outwardly from and parallel to the wale



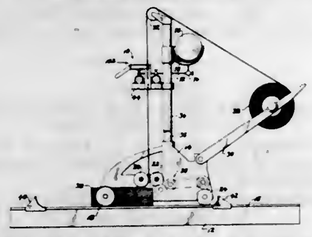
containing the selvage loop of the next preceding course, and a sinker loop extending along at least the full length of a leg of such transferred loop.

2,746,277
LIGHTERS
Fred Perlin, Oconomowoc, Wis., assignor to The Parker Pen Company, Janesville, Wis., a corporation of Wisconsin
Application September 8, 1953, Serial No. 378,764
5 Claims. (Cl. 67—7.1)



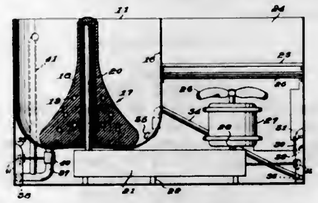
3. A lighter comprising a fuel tank, means forming a fuel passage from the tank terminating in a burner tip, a rotatable sparking wheel, a flint cooperating with the sparking wheel, a drive member rotatable between a retracted position and an advanced position, means connecting the drive member and sparking wheel in advancing direction, said drive member having a radial projection, and a leaf spring having a first end portion extending into the path of said projection, said leaf spring being fastened at a second end portion to a frame element and fulcrumed by a portion of said element at a point between said first and second end portions such that said first end portion acts as a relatively short lever arm about the fulcruming frame portion against advancing movement and the leaf spring as a whole acts as a relatively long lever arm about the second end portion against retracting movement.

2,746,278
STEAMING ATTACHMENT FOR CLOTH SPREADING MACHINES
William W. Artzt, New York, N. Y., assignor, by mesne assignments, to Trimless, Inc., New York, N. Y., a corporation of New York
Application June 14, 1952, Serial No. 293,692
6 Claims. (Cl. 68—5)



1. A steaming attachment for mounting upon a tubular knit goods laying-up machine; said attachment comprising a frame, means for mounting said frame on a laying-up machine, a pair of parallel and spaced apart elongated casings on said frame and positioned to have the tubular knit goods pass between said casings prior to the spreading of the goods, means for supplying water to said casings, means in said casings for intensely heating the water supplied to the latter to produce steam therein, said casings having openings formed in the confronting sides thereof to emit steam in directions toward the tubular knit goods passing between said casings, shield members for preventing impingement of the emitted steam against the tubular knit goods disposed between said casings, means supporting said shield members for movement between inoperative positions remote from said openings and operative positions interposed between said openings and the tubular knit goods between said casings, said shield members being spaced from said openings when in their operative positions to permit the continuous emission of steam through said openings, actuating means for moving said shield members between said inoperative and operative positions of the latter, and means on said shield members for collecting the condensate forming on said shield members when the latter are in said operative positions thereof.

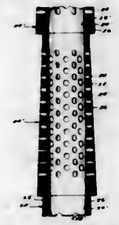
2,746,279
PORTABLE WASHING, STERILIZING, AND DRYING MACHINE
Ralph Rodriquez Torrent, Washington, D. C., and Chester N. Husman, Orlando, and Eugene K. Dyson, Gainesville, Fla.
Application May 22, 1953, Serial No. 356,724
2 Claims. (Cl. 68—20)



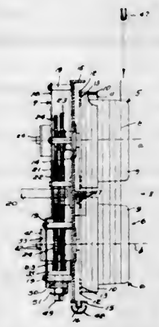
1. A portable, clothing washing, sterilizing and drying machine, comprising a casing, a tub disposed within the casing adjacent one end thereof, a drying compartment within the casing adjacent the opposite end thereof having a perforate bottom wall, an elongated transmission gear box disposed within the casing beneath said tub and said drying compartment and supported on the bottom wall of the casing, a rotatable shaft extending vertically from one end of said transmission gear box and axially within said tub, an agitator disposed within said tub and secured to said shaft, a motor supported within said casing beneath said drying compartment and having a vertical armature shaft extending into the other end of said transmission gear box, whereby said agitator is rotated by the motor, and a fan supported by the motor in a position beneath said perforate bottom wall of the drying compartment.

2,746,280
CONE FOR DYEING YARN
Robert A. Russell, Alexander City, Ala., assignor to The Russell Manufacturing Company, Incorporated, a corporation of Alabama
Application September 27, 1952, Serial No. 311,839
1 Claim. (Cl. 68—198)

A yarn carrier for package dyeing of yarn comprising a cone formed of a plastic material having corrosion resistant properties for withstanding attack by dye liquors, said cone having a plurality of perforations extending through the wall thereof for passage of dye liquors therethrough and having a central bore adapted to fit on a package dyeing machine spindle and a winder spindle adapter, said bore being tapered slightly and the wall of said cone being of substantial thickness, with the ends thereof formed entirely square for face to face abutment with the end of an adjacent cone on a dye machine spindle, and with said wall formed solid from said bore to the external cone surface, except for said perforations, and of increasing thickness from the small upper end to the large base end of said cone, the thickness of said base end being substantially twice the thickness of said upper end, whereby the increasing thickness of said wall toward the large end of said cone provides increasing strength for withstanding the increasing shrinkage stresses imposed toward said large end by a dyed yarn package supported on said cone and the substantial thickness of said wall provides for substantially sealed abutment at the ends of said cone with other adjacent cones when stacked on a dye machine spindle and for aligned positioning of said cones despite the taper of said bore.

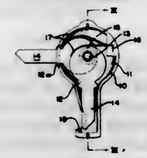


2,746,281
APPARATUS FOR THE FLUID TREATMENT OF FILAMENTS
Nicolas Drisch and Roland Brepson, Paris, France, assignors, by mesne assignments, to Societe Chimiotex, Tangiers, Morocco, a corporation of Morocco
Application April 22, 1953, Serial No. 350,332
Claims priority, application France April 30, 1952
3 Claims. (Cl. 68—205)



1. Apparatus for controlling the tension of artificial filaments which comprises a pair of roller assemblies arranged side by side with their axes slightly inclined to one another, each assembly comprising a conical roller and a coaxial hollow cylindrical roller, the larger end of the conical roller being disposed within the hollow cylindrical roller and spaced therefrom to leave an annular passageway therebetween with the smaller end of the conical roller projecting beyond the cylindrical roller to receive the filaments for stretching, a hollow shaft carrying each cylindrical roller, a spindle extending through said shaft and carrying the conical roller, independent driving gears carried by each shaft and spindle for separately driving the various rollers and a common drive shaft having gears driving all of said first gears, the rollers being so arranged that, upon rotation of the assemblies, the filament travels around the two roller assemblies in a series of loops passing from the narrow ends of the conical rollers to the cylindrical rollers and axially along the latter, means for directing a washing liquid onto the travelling filament on the conical rollers to feed along the surface thereof and into said annular passageway within the cylindrical rollers, said roller assemblies being mounted in a dished casing adapted to receive the washing liquid after its passage over the conical rollers, the end of each cylindrical roller remote from the conical roller being closed by a plate having holes for the discharge of the liquid, and a drain communicating with said casing to carry the liquid away.

2,746,282
KEY CASE
Evan L. Moberg, Latrobe, Pa.
Application January 28, 1955, Serial No. 484,810
2 Claims. (Cl. 70—456)



2. A key case comprising an elongated housing having a hollow interior portion, a shaft in said housing adjacent one end of the hollow portion, said housing having a lengthwise slot with an enlarged end portion adjacent the shaft, a shoulder on the housing at the enlarged portion of the slot adapted to receive the blade of a key pivoted on the shaft, resilient means on the shaft for urging the blade onto the shoulder and spring means in the housing adapted to bear against the key head urging it into the hollow interior portion.

2,746,283
REINFORCED CONCRETE BIN STRUCTURE
Ned H. Abrams, Sunnyvale, Calif.
Application March 22, 1951, Serial No. 216,960
3 Claims. (Cl. 72—6)

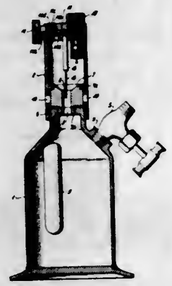


1. A composite reinforced concrete bin structure wherein a bin having a regular polygonal cross section is formed comprising substantially identical precast reinforced concrete members each having a substantially uniform Y-shaped cross section defined by a hub portion and three legs angularly disposed substantially 120° apart and of substantially equal length radiating therefrom, each of said legs having outwardly convergent surfaces, reinforcing elements embedded in said legs and projecting radially therefrom, adjacent members having adjacent legs secured together in substantial alignment, said members being arranged to jointly define a closed perimetrical bin wall, reinforcing elements of said adjacent legs having an interlocked relationship.

2,746,284
PYCNOMETER FOR VOLATILE LIQUIDS

Robert L. Posey and Herbert E. Reese, Bartlesville, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware

Application May 11, 1953, Serial No. 354,202
9 Claims. (Cl. 73—32)

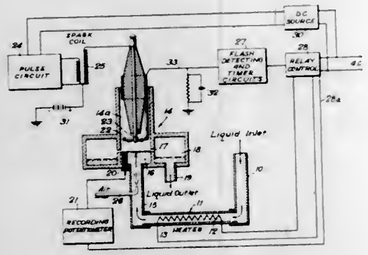


1. In a pycnometer for measuring a predetermined volume of a volatile liquid, a head chamber, a body chamber, a flexible and transparent bushing disposed between said head chamber and said body chamber, means for attaching said head chamber to said body chamber, said means for attaching the head chamber and the body chamber being provided with openings for viewing the interior of said chambers through said transparent bushing, means for compressing said bushing thereby forming compression seals on the top and bottom surfaces of said bushing, said head chamber communicating through said bushing with said body chamber, means for withdrawing liquid material from said head chamber, means for purging vapor from said head chamber, and automatic means for releasing pressure from said head chamber when said pressure exceeds a predetermined value.

2,746,285
FLASH POINT MEASUREMENT APPARATUS

Evon C. Greanias, Chicago, Ill., assignor to Standard Oil Company, Chicago, Ill., a corporation of Indiana

Application March 9, 1951, Serial No. 214,801
13 Claims. (Cl. 73—36)

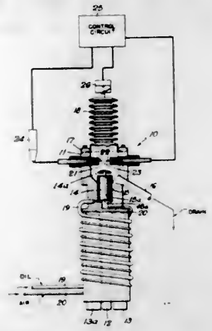


1. In a flash testing apparatus, a flash chamber, a cup within said chamber, conduit means exterior of said chamber supplying test liquid to said cup, a heater means for said conduit means, an overflow drain from said cup, a wall means defining a vapor space above said cup, a spark ignition means within said vapor space, means responsive to the temperature within the said cup, and electrical detector means responsive to an ignition flash in said chamber.

2,746,286
APPARATUS FOR AUTOMATIC FLASH POINT TESTING

Evon C. Greanias, Chicago, and Robert B. Jacobs, Homewood, Ill., assignors to Standard Oil Company, Chicago, Ill., a corporation of Indiana

Application March 9, 1951, Serial No. 214,802
13 Claims. (Cl. 73—36)

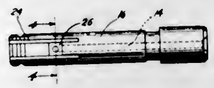


1. In a flash testing apparatus, a heated flash chamber, heating means for said chamber, a cup within a lower part of said chamber, conduit means for supplying test liquid to said chamber, an overflow from said cup, an extensible wall partially confining a vapor space above said cup, a spark ignition means within said vapor space, and electrical switch means actuated by said extensible wall to indicate the occurrence of a flash.

2,746,287
AIR GAGE HEAD

Wayne E. Tinker, Granby, Conn., assignor, by mesne assignments, to Pratt & Whitney Company, Incorporated, Hartford, Conn., a corporation of Delaware

Application July 7, 1951, Serial No. 235,650
2 Claims. (Cl. 73—37.9)



1. A gaging head for pneumatic dimension gages comprising a cylinder having an external diameter of slightly less than the dimension to be gaged, means at one end thereof for attachment to a gage body, said head having opposed nozzle openings therein connected to a longitudinal air supplying conduit within said head and having longitudinally extending channels formed in the outside surface of said head on opposite sides of said nozzle openings extending from the free end of said head to a position beyond said nozzle openings, a small arcuate area of said head surrounding each of said nozzle openings and intercepting said channels, said areas being coaxial with the cylindrical surface of said head and of slightly less diameter than said head.

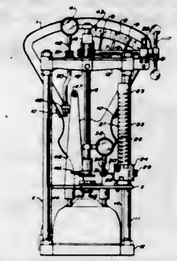
2,746,288
SPRING TESTING SCALE

Robert E. Scott, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a corporation of New Jersey

Application July 24, 1953, Serial No. 370,048
11 Claims. (Cl. 73—94)

1. In a force measuring device for testing an elastic material at a specified length, in combination, a base, a frame mounted on the base, a lever fulcrumed on the base, a force receiver supported by one arm of the lever, a counterweight receiver supported by the other arm of the lever, indicating means operatively connected to the

receivers, a ram mounted on said frame for movement toward and away from the force receiving side of said force receiver, means for reciprocating the ram to stress the material between the ram and the force receiver, and means for presetting the length at which the material is to be tested comprising a graduated bar mounted per-

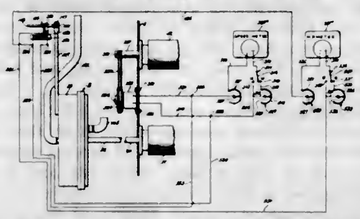


pendicularly from the force receiving side of the force receiver and parallel to the ram and an adjustable slider cooperating with the graduations to determine the major portion of the test length, and gauge means mounted on the ram and cooperating with the slider to determine the minor portion of the test length of the material.

2,746,289
ENGINE PERFORMANCE INDICATING MEANS FOR USE WITH CHASSIS DYNAMOMETERS

Edwin L. Cline, Pasadena, Calif., assignor to Clayton Manufacturing Company, El Monte, Calif., a corporation of California

Application September 24, 1947, Serial No. 775,765
20 Claims. (Cl. 73—117)



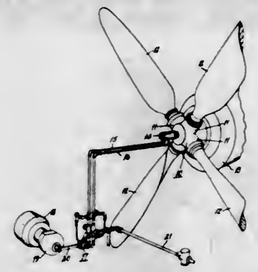
1. In a dynamometer, a brake for absorbing the power delivered by an engine undergoing test, said brake including a rotor and a stator; a torque arm connected at one end to said stator; and torque absorption means operatively associated with the opposite end of said torque arm, said torque absorption means including a housing, a reciprocable rod in said housing connected at one end with said torque arm, dash pot means in said housing effective upon the opposite end of said rod, a resistance coil in said housing, a contact finger carried by said reciprocable rod having one end thereof slidably engaging said resistance coil; a current source; and an electrical meter operatively connected in circuit with said current source, resistance coil, and contact finger and arranged in the circuit so that movement of said rod will vary the amount of current that can pass through said resistance coil to said meter in accordance with the extent to which said rod is moved by said torque arm.

2,746,290
PROPELLER BLADE TESTING APPARATUS

Robert C. Treseder, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application August 2, 1952, Serial No. 302,321
7 Claims. (Cl. 73—147)

1. Apparatus for inducing flatwise vibratory stresses in a propeller blade including, a hub having means for supporting a propeller blade for movement about its longitudinal axis, means disposed within said hub and operatively connected with said blade for moving the same about its longitudinal axis to alter the pitch setting

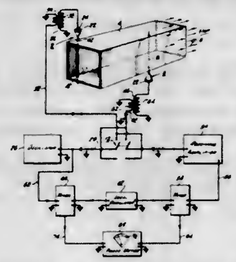


thereof, means for rotating said hub, and means for cyclically altering the pitch setting of said propeller blade throughout a predetermined angle and in a predetermined relation to the rotational speed of said hub whereby flatwise bends are produced therein.

2,746,291
FLUID VELOCITY MEASURING SYSTEM

Robert C. Swengel, York, Pa.

Application September 8, 1950, Serial No. 183,753
16 Claims. (Cl. 73—194)



1. In a system for measuring the flow of a fluid, apparatus comprising a first transducer communicating with said fluid, a second transducer communicating with said fluid and displaced along the path of said fluid from first transducer, energizing means for causing said first transducer to transmit compressional waves through said fluid, reception means responsive to signals from said second transducer produced by said waves impinging upon said second transducer, control means for interchanging the functions of said transducers whereby waves are transmitted by said second transducer and received by said first transducer, and means for measuring the difference in transit times of said waves when traveling through said fluid from said first to said second transducer and from said second to said first transducer.

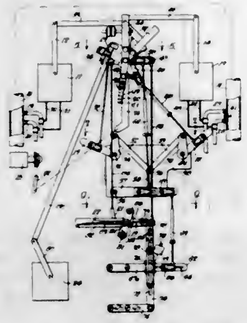
2,746,292
APPARATUS FOR MEASURING THE NET AMOUNT OF FOREIGN MATTER IN A FLOWING LIQUID

Otto B. Vetter, McKeesport, Pa., assignor to Hagan Corporation, Pittsburgh, Pa., a corporation of Pennsylvania

Application April 5, 1952, Serial No. 280,776
5 Claims. (Cl. 73—205)

1. Apparatus for measuring the net amount of undissolved matter in a flowing liquid, comprising a specific gravity meter; a first pair of fluid pressure lines conecting said specific gravity meter to vertically spaced inlets in a vertical header in which said liquid is flowing; a flowmeter; a second pair of fluid pressure lines connecting said flowmeter to opposite sides of a flow orifice in said

vertical header; a first lever positioned by said specific gravity meter; a second lever positioned by said flowmeter; a third lever; means actuated by said second lever positioning said third lever in accordance with the square root of the deflection of said second lever; a fourth lever; a summation linkage actuated by said first and third



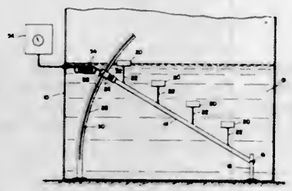
levers to position said fourth lever in accordance with the sum of the deflections of said first and third levers; a multiplication linkage positioned by said second and fourth levers in accordance with the product of the deflections of said second and fourth levers; and an output member positioned by said multiplication linkage to exhibit the true mass rate of flow of said undissolved matter.

2,746,293

APPARATUS FOR DETERMINATION OF AVERAGE TEMPERATURE OF FLUIDS IN STORAGE

Harold A. Quist, Swarthmore, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

Application June 5, 1952, Serial No. 291,836
3 Claims. (Cl. 73—353)



1. A device for continuously measuring the average temperature of a body of liquid subject to variations in quantity in combination with a storage vessel comprising an elongate member uniformly responsive throughout its longitudinal extent to surrounding temperature conditions, a pivotal connection maintaining one end of said member proximate the bottom of the liquid body, float means attached to said member to rotatably position the member about the pivotal support in maximum contact with the liquid at all levels thereof, and means to indicate the temperature response of said member including a housing adapted to contain a volume of fluid, an arcuate bracket extending upwardly from the bottom of the storage vessel in spaced relation from and in the path of travel of the free end of the pivoted temperature responsive member, a support member slidably contacting said arcuate bracket and supporting said housing, a diaphragm mounted on said housing and constructed to operably engage the free end of said temperature responsive member, an indicator calibrated in degrees of temperature exterior said storage vessel and connecting means to transmit diaphragm response to the pressure conditions from said housing to the indicator.

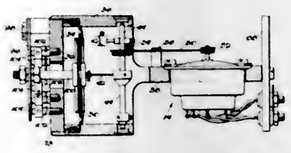
2,746,294

FLUID PRESSURE RESPONSIVE MEASURING APPARATUS

James E. Bevins, Ramsey, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware

Original application April 7, 1945, Serial No. 587,033, now Patent No. 2,623,383, dated December 30, 1952. Divided and this application April 30, 1952, Serial No. 285,178

1 Claim. (Cl. 73—397)



Measuring apparatus comprising a housing having a generally cylindrical portion, fluid pressure responsive flexible means including an element in the housing which is movable along the axis of said cylindrical portion in response to variations in fluid pressure, means for measuring movements of said element along said axis in response to variations in fluid pressure including a support structure supported in the housing by the housing and extending transversely therefrom substantially normal to said axis, electrical transmitter means disposed in the housing and having a part movable with said movable element for developing an electrical signal which is a function of the displacement of said movable element along said axis, a flat ribbon-like spiral spring disposed in the housing for restraining movement of said element along said axis, said spring having its ribbon widths normally lying substantially in a common plane which is normal to said axis and which is spaced from a portion of said support structure, said spring having its outer end fixedly mounted with respect to the housing and having its inner end disposed substantially at said axis, a member extending along said axis and connecting the inner end of said spring with said movable element so that said element deflects said spring toward said support structure upon movement of said element along said axis in response to variations in fluid pressure, and a series of abutment members mounted on said portion of the support structure along a spiral path in register with the spiral configuration of said spring in position to engage the lateral surfaces of said spring between its lateral margins at selected points along its spiral length upon deflection thereof in response to variations in fluid pressure, said abutment members being axially adjustable along said axis toward and away from the lateral surfaces of said spring to vary the spring deflection required for such engagement.

2,746,295

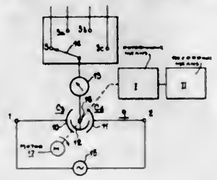
APPARATUS FOR MEASURING AND RECORDING PRESSURES INDICATED BY MANOMETER TUBES

Samuel Lubkin, Brooklyn, N. Y., assignor, by mesne assignments, to Underwood Corporation, New York, N. Y., a corporation of Delaware

Application December 12, 1951, Serial No. 261,227
5 Claims. (Cl. 73—398)

1. Apparatus for rapidly measuring and recording differential pressures by means of a non-conductive manometer tube having first and second branches and containing a conductive fluid comprising: a first conductive coating on the outer circumference of said first branch, said first conductive coating and said conductive fluid comprising a first capacitor; a second conductive coating on the outer circumference of said second branch, said second conductive coating and said conductive fluid comprising a second capacitor; coupling means connected to said conductive

fluid; a variable capacitor having first and second stators and a common rotor, said first stator and said common rotor comprising a third capacitor, said second stator and said common rotor comprising a fourth capacitor, said capacitors being connected together to form a bridge circuit; a null detector to indicate bridge circuit balance connecting said coupling means to said rotor; a rotatable shaft mechanically coupled to said rotor, means to rotate said shaft, the rotation of said shaft varying the capacitances of said third and fourth capacitors in opposite



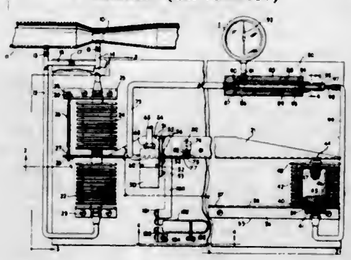
senses, the amount of rotation of said shaft from a predetermined reference position to balance said bridge circuit being indicative of the differential pressure measurement; determining means connected to said shaft and responsive to said null detector to ascertain the amount of rotational movement of said shaft required to balance said bridge circuit; and recording means connected to said determining means to record the ascertained amount, the recorded data being indicative of the differential pressure ascertained.

2,746,296

GAGE FOR FLOWMETERS

Emory Frank Stover, Wynnewood, Pa.

Application July 14, 1950, Serial No. 173,704
7 Claims. (Cl. 73—407)



4. The combination comprising a control lever having a fulcrum, resilient fluid pressure responsive members connected to said control lever at predetermined locations for applying a differential force on said control lever, fluid pressure transmitting means controlled by the movement of said control lever, fluid pressure responsive means connected to said pressure transmitting means and to said control lever at a predetermined location for resiliently applying a force on said control lever in opposition to the force applied by said differential force applying resilient members, an additional fluid pressure responsive member controlled by pressure from said transmitting means, said resilient members and resilient applying means providing moments on said control lever tending to stabilize said control lever and restore said control lever to a position of equilibrium, an abutment spaced from said fulcrum, an arm extending from said control lever and having a portion in a line from said abutment to said fulcrum, and a resilient member interposed between said portion and said abutment and applying a force in said line towards said fulcrum, said resilient member applying a moment on said control lever about said fulcrum which increases upon deflection of said arm from said line.

2,746,297

APPARATUS FOR PULP SAMPLING

William T. Martin, International Falls, Minn., assignor to Minnesota and Ontario Paper Company, Minneapolis, Minn.

Application August 12, 1953, Serial No. 373,844
4 Claims. (Cl. 73—421)



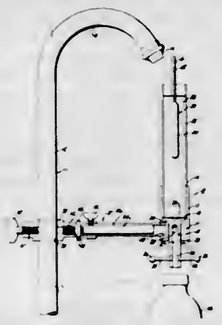
1. A device of the class described comprising a cylindrical vessel having a closed top and an opening on one side spaced from the top for receiving a foraminous bottom tray, a smaller diameter cylindrical member secured to the top and extending inside the vessel for less than half the length of the said vessel, a shower plate secured to the walls of the vessel and spaced apart from the top to provide a water space, means for supplying water to the water space, a funnel-like member secured inside the cylindrical vessel and spaced apart from the ends of the smaller diameter cylindrical member, said funnel-like member aligned substantially axially with the axis of the vessel and below the bottom of the smaller diameter cylindrical member and a foraminous collecting member positioned below the funnel-like member and a water discharge at one end of the cylindrical vessel and below the foraminous collecting member.

2,746,298

SPECIFIC GRAVITY MEASURING APPARATUS

John J. Grubb, Palo Alto, Calif.

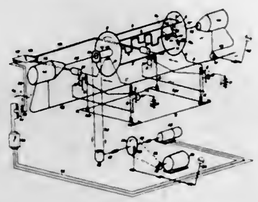
Application November 13, 1952, Serial No. 320,180
2 Claims. (Cl. 73—444)



1. Apparatus of the character described comprising a tube holder in the form of a cylindrical socket having an open upper end and a smooth inner wall, a cylindrical glass tube open at both ends and of a diameter to fit slidably within said socket and to seal against the inner wall thereof, a bottom closure for said socket having a valve seat at its upper end and having a longitudinal passage extending therethrough, a valve cooperable with said valve seat to normally close said passage, and a valve operating member in the form of a tubular rod fixed to the undersurface of said valve, extending through said longitudinal passage, and having a lateral opening communicating the interior of said socket with the interior of said tubular rod for draining liquid from said glass tube; said apparatus also comprising mounting means compris-

ing a vertically adjustable clamp attachable to a frame member and extensible cantilever means fixed at one end to said clamp and at the other end to said socket.

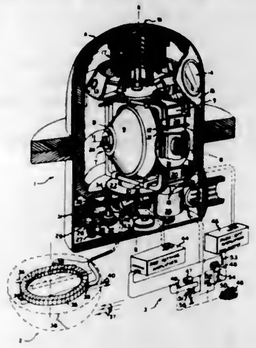
2,746,299
APPARATUS FOR THE BALANCE CENTERING OF REVOLVABLE BODIES
Klaus Federn, Darmstadt, Heinrich Hack, Gross Zimmern, near Darmstadt, and Walter Kurz, Darmstadt, Germany, assignors to Carl Schenck Maschinenfabrik G. m. b. H., a corporation of Germany
Application June 11, 1951, Serial No. 230,928
11 Claims. (Cl. 73—461)



1. Apparatus for the balance-centering of revolvable bodies, comprising a revolvable and oscillatorily journalled carrier for accommodating a body to be centered; phase-dependent balance measuring means responsive to two prelocated unbalance components in each of two transverse planes of said carrier, said balance measuring means having pickups disposed substantially in said two planes to provide two voltages responsive to unbalance oscillations, two sources of reference voltages of different phase synchronous with the carrier revolution, a wattmetric instrument, and first selector switch means connecting said instrument with said pickups and said sources to selectively apply said voltages to said instrument whereby said instrument responds to only one of said respective four unbalance components at a time; four individually controllable positioning devices mounted on said carrier and engageable with the body for displacing it relative to the axis of revolution, two of said positioning devices being disposed substantially in each of said two planes and having respective directions of body displacement corresponding to the directions of said two respective unbalance components in said plane; and second selector switch means connected with said four positioning devices for operating a selected one of them at a time; said first and second selector switch means being connected with each other so that the plane and displacement direction of each selected positioning device during the operation of said device corresponds to the plane and direction of the one unbalance component then being indicated by said instrument.

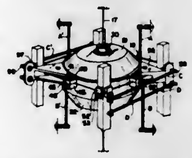
2,746,300
GYROSCOPE SETTING SYSTEM
Lewis T. Seaman, Saugus, Mass., assignor to General Electric Company, a corporation of New York
Application December 21, 1954, Serial No. 476,649
12 Claims. (Cl. 74—5.4)

1. A slaved gyroscope system comprising a gyro gimbal supported for movement about a major axis, a gyro rotor structure suspended by said gimbal for angular displacement in relation to said gimbal about a minor axis normal to said major axis, stop means limiting relative angular movement between said gyro rotor structure and said gimbal about said minor axis, torque means for applying torque about said major axis in two angular directions, an attitude reference device, means responsive to deviations between the attitude of said gimbal about said major axis and the attitude sensed by said reference device for actuating said torque means to apply torque about said major axis until said attitudes correspond, and means for reversing the direction of torque applied



about said major axis by said torque means after the attitudes of said gimbal and reference device correspond.

2,746,301
GYROSCOPIC DEVICES
Hayward W. Henderson, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application January 2, 1953, Serial No. 329,335
15 Claims. (Cl. 74—5.6)

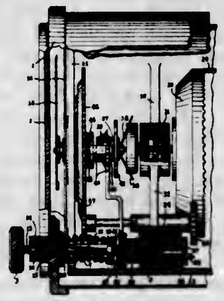


1. A gyroscope device comprising in combination, a rotatable mass and spinning means therefor, means mounting said mass for rotation about a spin axis, a frame member, elastic restraint means connected between said frame and said mounting means and suspending said mounting means for restrained pivotal movement about a pair of axes normal to one another and to said spin axis and for movement in a direction parallel to said spin axis, and means responsive to the movement of said mounting means about said pivotal mountings for producing a signal in proportion to said movement.

2,746,302
SEALED OPERATING MECHANISM
Hans A. Bakke, Swampscott, and Samuel Gabrielson, South Lynnfield, Mass., assignors to General Electric Company, a corporation of New York
Application January 29, 1954, Serial No. 407,094
10 Claims. (Cl. 74—18.1)

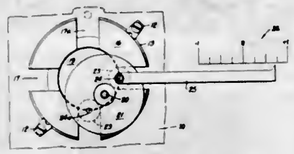
1. A sealed motion translating arrangement comprising a fluid-tight instrument enclosure having an aperture therethrough, a flexible open-ended bellows having one end sealed with said enclosure about said aperture, a wobble plate sealed with said bellows at the other open end thereof and having a substantially spherical convex surface thereon disposed toward the outside of said enclosure, a radially-slotted rotatable shaft mounted outside the sealed portion of said enclosure and having one end recessed with a substantially spherical concave surface disposed in a mating relationship with said surface of said plate, said substantially spherical surfaces having the same center of curvature, a substantially straight actuating arm extending through said wobble plate and said center of curvature, and means positioning one end of

said actuating arm in the slot in said slotted shaft with its longitudinal axis oblique in relation to the longitu-



dinal axis of said shaft, said actuating arm and said shaft being relatively rotatable.

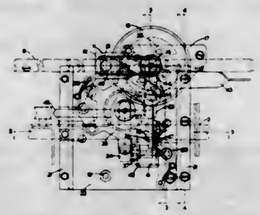
2,746,303
SINE-COSINE MECHANISM
William E. Pollock, Sun Valley Calif., assignor to Librascope, Incorporated, Glendale, Calif., a corporation of California
Application February 25, 1952, Serial No. 273,332
5 Claims. (Cl. 74—62)



1. In a sine-cosine mechanism, a base member comprising a circular cup-like housing formed with a central bearing and having a circumferential flange extending radially from the upper edge of the housing, said flange being formed with two diametrically extending guide slots intersecting at right angles at the axis of the central bearing, an input shaft journaled at one end in said bearing, an input disk fixed to said end and rotatable within said housing, an eccentric pivot pin on the upper side of said disk, an output disk journaled on said pin and carrying rollers journaled on its under side thereof at either side of the axis of said output disk and each positioned to travel in one of said intersecting slots, an output pin on said output disk positioned on the axis of one of said rollers, an output arm connected to said output pin for linear movement, the axes of said rollers being spaced from the axis of the output disk at distances respectively equal to that between the axis of the input shaft and the output disk, and means associated with said circumferential flange for permitting the rotational adjustment of said guide slots independently of movement of said input shaft.

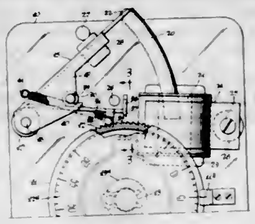
2,746,304
RECORD MATERIAL CARRIAGE SHIFTING MEANS FOR CALCULATING MACHINES
Emil P. Kuhlmann, Schwaben, Bavaria, Germany, assignor to National Registrier Kassen Augsburg G. m. b. H., Augsburg, Germany, a joint-stock company of Germany
Application June 28, 1951, Serial No. 234,065
2 Claims. (Cl. 74—99)

1. In a calculating machine having a main operating means for giving the machine cycles of operation, including a shaft which rocks one way during the first half and then the other way during the second half of a machine cycle, a record material carriage slidably mounted so that record material may be positioned with reference to a printing station, the combination of rotating means, including a disc and a four-toothed Geneva gear coupled thereto; a rotatable spider geared to the Geneva gear; a plate having mounted thereon a pair of by-pass pawls, said plate being coupled to and reciprocated back and forth by the rocking of the shaft, one pawl acting to drive the spider, which in turn drives the Geneva gear 90 degrees on the first half of the rocking of the shaft during a machine cycle and the other pawl acting to drive the spider further, which in turn drives the Geneva gear in the same direction another 90 degrees in the second half



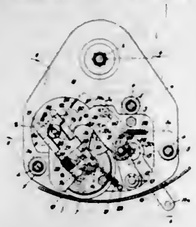
of the rocking of the shaft in said cycle; and a connecting link pivoted to the carriage and to a point on the disc, that point when the machine is at rest being on the radius of the disc that is at right angles to the line of carriage travel, whereby the carriage on one machine operation is moved from its normal rest position in one direction and back, and on the succeeding operation is moved from its normal rest position in the other direction and back, the carriage being at rest at mid-cycle, moving away from rest position to mid-cycle position with decreasing velocity, and moving from mid-cycle position to rest position with increasing velocity.

2,746,305
RATCHET MECHANISM
Robert J. Wagner, Philadelphia, Pa., assignor to Proctor Electric Company, Philadelphia, Pa., a corporation of Pennsylvania
Application June 12, 1951, Serial No. 231,223
6 Claims. (Cl. 74—153)



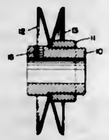
1. A ratchet mechanism, comprising a rotary member having ratchet teeth on the periphery thereof, a pivoted actuating member, a pair of fixed stops in the path of movement of said actuating member and defining limits of arcuate movement of said actuating member, a pawl element pivotally carried by said actuating member and movable between one of said stops and said rotary member for repeated engagement with said teeth, and toggle means connected to said pawl element and acting resiliently to retain the pawl element to one side or the other side of a critical center position, said pawl element during its engagement with said teeth being moved beyond said critical position whereupon said toggle means effects removal of the pawl element from said teeth, and said one stop being engageable by the pawl element to effect return movement of the pawl element beyond said critical position.

2,746,306
PLURAL-SPEED DRIVE MECHANISMS FOR PHONOGRAPH TURNTABLES
Herbert L. Hartman, Elyria, Ohio, assignor to The General Industries Company, Elyria, Ohio, a corporation of Ohio
Application September 22, 1949, Serial No. 117,132
12 Claims. (Cl. 74—199)



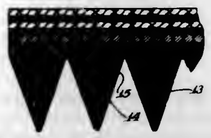
1. A three-speed drive mechanism for phonograph turntables comprising a motor driven shaft, a stepped idler pulley affording a set of relatively superposed pulley portions of successively different diameters and having another pulley portion peripherally frictionally engageable with said shaft, a final drive wheel having a friction rim selectively disposable at the different levels of the pulley portions of said set, spring means adapted to cause said rim to engage with that one of said set of pulley portions at whose level said rim is disposed, an adjustment member having a handle portion adapted for station-to-station movement from any, to any other of three stations disposed in interspaced relation in a path of uniform directional nature throughout, and wheel moving means operable by said member, adapted to respond successively to an initial portion, an intermediate portion and a concluding portion of said station-to-station movement of said handle, to successively laterally separate said wheel rim from a pre-engaged one of said pulley portions, shift said rim to the different level of a desired selected different one of said pulley portions, and then to release said wheel at said different level, whereby said spring means is adapted, in response to release of said wheel by said moving means, to laterally return said wheel rim in an opposite direction of movement, to peripheral spring-pressed engagement with the selected pulley portion.

2,746,307
ADJUSTABLE SHEAVE PULLEY
Lester T. Zatko, Cleveland, Ohio
Application February 26, 1953, Serial No. 338,938
1 Claim. (Cl. 74—230.17)



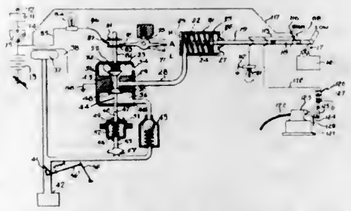
An adjustable sheave pulley comprising a male hub nut having a bore, a great outer periphery and a small outer periphery, a step between said great and small peripheries on said male hub nut defining a first shoulder, said small periphery on said male hub nut being threaded and having at least one flat formed thereon, a tapped hole extending radially through said male hub nut for the reception of a set-screw, a female hub nut having a bore threaded for engagement with the threaded small periphery of said male hub nut, said female hub nut further having a great outer periphery and a small outer periphery, a step between said great and small peripheries on said female hub nut defining a second shoulder, a tapped hole extending radially through said female hub nut for the reception of a set-screw, a first pulley sheave mounted around said small periphery of said male hub nut and against said first shoulder, a second pulley sheave mounted around said small periphery of said female hub nut and against said second shoulder, said sheaves each comprising a wall of susbtantially uniform given thickness extending radially outwardly from said male and female hub nuts, said walls in cross-section being bent away from each other with an angle therebetween of less than 90 degrees, said first shoulder facing said second shoulder, the threads on said small periphery of said male hub nut and on said bore of said female hub nut being so related that said female hub nut may be threaded up on said male hub nut to a longitudinal distance from said first shoulder not greater than said given wall thickness, said given wall thickness being not less than the width of said small periphery on said female hub nut, whereby the inner rims of said sheaves are clamped between said male ad female hub nuts when said female hub nut is fully threaded up on said male hub nut.

2,746,308
POWER TRANSMISSION BELT
James Adams, Jr., Passaic, N. J., assignor to Raybestos-Manhattan, Inc., Passaic, N. J., a corporation of New Jersey
Original application September 8, 1951, Serial No. 245,706, now Patent No. 2,620,016, dated December 2, 1952. Divided and this application May 23, 1952, Serial No. 289,607
2 Claims. (Cl. 74—233)



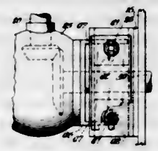
1. A relatively flexible power transmission belt comprising a relatively resilient carcass, a plurality of substantially triangular sectioned ribs upon a working face of the belt carcass disposed substantially parallel to the length of the belt carcass, and a fabric liner covering said ribs and enveloping and laterally embracing the portions of least sectional dimensions of said ribs, said fabric liner comprising a plurality of fabric strips disposed lengthwise of said ribs in lateral overlapping relationship to one another, said strips being narrower than the width of the belt and a plurality of said strips covering each rib.

2,746,309
CONTROL SYSTEM FOR POWER TRANSMISSIONS
Douglas Fowler Linsley, Westport, Conn., assignor to Myrick A. Walden, East Haddam, Conn.
Application April 3, 1951, Serial No. 218,933
11 Claims. (Cl. 74—335)



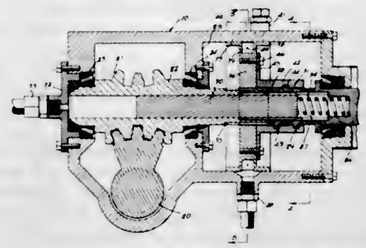
1. A control system for use in a motor vehicle having an internal combustion engine provided with an inlet manifold, a multi-speed transmission including high and low gear ratios and gear shifting mechanism for said transmission, comprising a power mechanism for shifting said transmission from one gear ratio to another including a pressure differential operated member connected to said shift mechanism, a control valve for regulating the application of pressure differential to said member, said valve being movable between one position in which said member is caused to shift said transmission into high gear and a second position in which said member is caused to shift said transmission into low gear, a vacuum actuated operating means for moving said valve from one position to the other in accordance with the degree of vacuum in said manifold, and means for selectively locking said valve in either of said positions irrespective of the vacuum condition in said manifold to thereby selectively lock said transmission in high or low gear.

2,746,310
TRANSMISSION GEAR UNIT MOUNTING
Raymond M. Ulrich, Roanoke, Va., assignor to Ulrich Foundation, Inc., a corporation of Delaware
Application May 17, 1951, Serial No. 226,839
3 Claims. (Cl. 74—385)



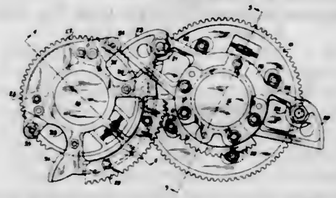
1. A transmission gear unit interconnecting two rotating power transmitting shafts maintained at right angles to each other at all times and having a unitary housing movable about the axis of one of said shafts, a fixed support bracket, a bearing for one of said shafts mounted on said bracket, said bracket and said bearing being interconnected by means for adjustment of the position of said housing relative to said bracket in a direction perpendicular to the axis of said shaft, and stop means carried by said housing for engaging said bracket to limit the rotation of said housing about the axis of said shaft to a predetermined amount.

2,746,311
POWER-STEERING DEVICE
Hillery C. Lavender, St. Louis, Mo.
Application May 20, 1955, Serial No. 509,910
3 Claims. (Cl. 74—388)



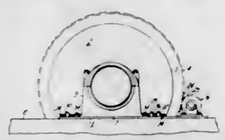
1. In a hydraulic vehicle power-steering apparatus, a housing, a hollow driven shaft positioned within said housing, means drivingly connecting said driven shaft to a steerable wheel assembly, a drive shaft rotatably supported in said housing and having one end abutting the other end of said driven shaft, said drive shaft having a bore extending inwardly from said one end and terminating at a point spaced from said one end, a piston positioned within said driven shaft and slidable in said driven shaft and the bore of said drive shaft, means on said piston interengageable with means on said driven shaft and said drive shaft for drivingly connecting said piston to said drive and driven shafts, spring means positioned in the bore of said drive shaft and operatively connected to the latter for biasing the means on said piston into interengagement with the means on said driven shaft, and hydraulic means for effecting the slidable movement of said piston into the bore of said drive shaft to thereby cause interengagement of the means on said piston solely with the means on said drive shaft.

2,746,312
NONUNIFORM SPEED DRIVE MECHANISM
James R. Wood, Cleveland, Ohio, assignor to Harris-Seybold Company, Cleveland, Ohio, a corporation of Delaware
Application October 8, 1952, Serial No. 313,722
11 Claims. (Cl. 74—393)



1. In combination, a drive shaft, a driven shaft, and means for continuously driving said driven shaft from said drive shaft at speeds above zero speed exclusively, comprising intermeshing gear members for turning said driven shaft at a constant speed during part of a revolution, one of said intermeshing members being a gear sector, cam and roller means on said driving and driven shafts for driving said driven shaft from said drive shaft functioning directly after a period of gear member engagement for decelerating said driven shaft to a lower rate of speed above zero speed, and other cam and roller means on said driving and driven shafts functioning directly in advance of said period of gear member engagement for accelerating said driven shaft from said lower speed to said constant speed.

2,746,313
GRINDING MILL SUPPORT BASE
Alexander J. Roubal, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application March 30, 1953, Serial No. 345,485
4 Claims. (Cl. 74—397)



1. In combination including a foundation having a driving gear operably fixed thereon and including a rotary machine having a driven gear and having a pedestal mounting one end of said machine on said foundation for movement into a position meshing said driven gear with said driving gear, the improvement comprising: a base portion of said pedestal having fixed guide means thereon extending at a right angle to the axis of rotation of said driven gear; a support on said foundation for said pedestal, said support having a tapped hole therein and having means thereon complementary to and cooperatively engaged with said fixed guide means to afford limited sliding movement of said pedestal in a direction at a right angle to said axis; a positioning block mounted on said support, said block having an elongated opening of which different portions are adapted to register with said tapped hole in said support and having a cap screw disposed in adjustable portions of said opening operably insertable in

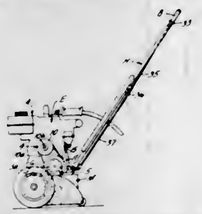
said tapped hole to secure said block to said support in adjustable positions including a position in a predetermined relation to said driving gear; power transmitting means carried by said support and operatively associated with said pedestal for selectively effecting a limited movement thereof along said guide means toward and away from said block sufficiently to effect engagement and disengagement of said driven and said driving gears; and means for releasably fixing said pedestal on said support.

2,746,314
ADJUSTABLE STROKE ACTUATOR
Howard W. Donovan, Fort Worth, Tex., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application September 3, 1953, Serial No. 378,301
8 Claims. (Cl. 74—424.8)



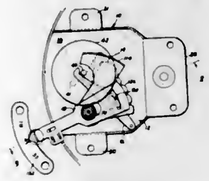
1. In a screw type linear actuator including a rotatable lead screw element, a non-rotatable actuator element engaged by said lead screw element for relative axial movement with respect thereto, the improvement comprising an external cover element provided with an internally threaded portion, an abutment portion carried by said lead screw element, and an adjustable stop element provided with external threads for engagement with the internal thread of said cover element arranged to be rotated into a predetermined position axially thereof to limit the linear movement of said actuator element by engagement of said abutment portion with said stop element.

2,746,315
COMBINED DRIVE AND THROTTLE CONTROL
Byron L. Ertsgaard and Herbert F. Horner, Jr., Minneapolis, Minn., assignors to Toro Manufacturing Corporation of Minnesota, Minneapolis, Minn., a corporation of Minnesota
Application September 23, 1954, Serial No. 457,965
6 Claims. (Cl. 74—472)



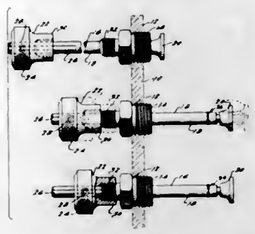
1. The combination of a lawn mower having collapsible handle structure, an engine mounted on said mower in driving relation and having a drive and a throttle, a movable shaft supported by said lawn mower and mounted for shifting longitudinal movement and for rotation about its longitudinal axis, an operative connection between said shaft and said drive to cause the latter to be shifted between driving and non-driving position as a result of one of said movements of said shaft, an operative connection between said shaft and said throttle to cause the latter to be adjusted as a result of the other of said movements of said shaft, and manually operated means mounted on said handle structure and connected to said shaft for causing the latter to move longitudinally and to rotate about its longitudinal axis as desired, the connection between said means and said shaft being flexible to permit said handle structure to collapse.

2,746,316
THREE SPEED MOTOR DRIVE CONTROL
Jules Nisenson, Croton-on-Hudson, N. Y., assignor to Loral Electronics Corporation, New York, N. Y., a corporation of New York
Application October 20, 1954, Serial No. 463,533
3 Claims. (Cl. 74—472)



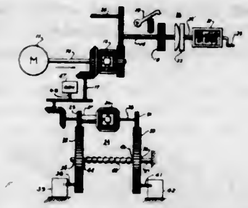
1. Phonograph motor control construction for use in conjunction with an electrically operated prime mover, a rotatably mounted turntable, and a resilient driving wheel driven by said prime mover and intermittently engageable with said turntable, said construction comprising: first circuit breaking means controlling the flow of current to said prime mover and second driving wheel engagement means serving to shift the axis of said driving wheel so that the same is disengaged with respect to said turntable; and third means for substantially simultaneously operating said first and second means whereby the flow of current to said prime mover and the moving of said driving wheel out of contact with said turntable are accomplished as a single operation, the means for shifting the axis of said driving wheel including a lever pivotally mounted at a first end thereof, and having a claw engageable with a shaft upon which the driving wheel is mounted.

2,746,317
PRESSURE UNITS
Henry H. Merriman, Jackson, Mich.
Application June 9, 1952, Serial No. 292,460
1 Claim. (Cl. 74—503)



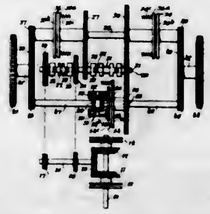
A pressure applying rod unit having a rapid traverse range with longitudinal sliding movement and a screw advance range with rotational movement comprising a bushing having a smooth bore and a pair of externally threaded longitudinally spaced portions concentric with said bore, a thrust rod supported in said bushing for rotational as well as longitudinal sliding movement, the pressure applying end of said rod being at one side of said bushing, a combination handle and nut longitudinally and relatively adjustable along said rod on the other side of said bushing, an internally threaded nut on said combination handle and nut concentrically embracing said rod and adapted to threadedly engage one of said externally threaded portions upon rotation of said combination handle and nut following sliding movement of said rod to bring the mating threaded portions into engagement with each other, said other threaded portion of said bushing being adapted to be received in the aperture of a fixed structure.

2,746,318
ROTATIONAL STORAGE DEVICE
Judson E. Benjamin, White Plains, N. Y., assignor to General Precision Laboratory Incorporated, a corporation of New York
Application October 7, 1952, Serial No. 313,565
9 Claims. (Cl. 74—665)



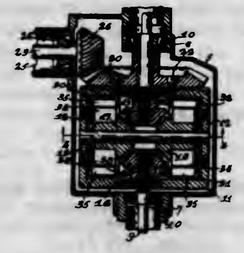
1. A motion storage device comprising, an algebraic adding device having an input terminal and a pair of energy transmitting terminals, means for imposing a torque on said input terminal, a utilization device connected to one of said pair of energy transmitting terminals for receiving torque therefrom, a storage device connected to the other of said pair of terminals for the interchange of torque therewith, said utilization device normally having less resistance to motion than said storage device.

2,746,319
CLUTCH-OPERATED STEERING GEAR FOR VEHICLES
Geoffrey Robert Greenbergh Gates, Leamington Spa, England
Application June 27, 1952, Serial No. 295,922
Claims priority, application Great Britain July 4, 1951
7 Claims. (Cl. 74—710.5)



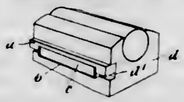
1. A clutch-operated vehicle driving and steering gear system, arranged to drive a pair of road wheels differentially to cause turning of the vehicle, said system comprising a transverse drive shaft, a transverse main shaft, main speed-changing mechanism arranged to provide a plurality of drive ratios connecting the drive shaft to the main shaft, driving means for rotating the drive shaft, a pair of main clutches connecting the road wheels respectively to the main shaft, a transverse steering shaft formed in two sections, a differential gear unit which has first and second elements connected with the respective road wheels by the steering shaft sections, a normally disengaged steering clutch arranged to be engaged to connect the third element of the differential to the drive shaft whenever one or other of the main clutches is disengaged, the said third element being then driven by the steering clutch at a speed different from the speed of that element which is still being driven from the drive shaft through that main clutch which is still engaged, and auxiliary speed changing mechanism interposed between the steering clutch and the drive shaft, said auxiliary speed changing mechanism acting to vary the minimum radius of turning produced by complete engagement of the steering clutch and complete disengagement of one of the main clutches.

2,746,320
DIFFERENTIAL MECHANISMS
Harry D. Algie, Montreal West, Quebec, Canada
Application June 18, 1954, Serial No. 437,613
7 Claims. (Cl. 74—711)



1. A differential mechanism comprising a differential gear housing partially filled with lubricant, axially aligned shafts having opposing end portions disposed within said housing bevel gears carried by the said end portions of the shafts, a bevel pinion gear interposed between and meshing with said shaft gears, a pinion gear carrier mounted in said housing to revolve relative to the housing and about an axle coinciding with the common axes of said shafts, said pinion gear being mounted on said gear carrier and rotatable relative thereto about an axis at right-angles to the axis of rotation of said carrier, a circular series of spaced, radially extending vanes rigidly carried by said pinion gear, a drum in which said vanes are positioned, said drum being rigidly secured to said carrier and provided with a circular series of inwardly projecting, radially extending vanes for cooperation with the vanes of said pinion gear, said drum being submersible in said lubricant in the gear housing during the cycle of rotation of said pinion gear carrier and being provided with an opening through which the lubricant enters and fills the drum when the latter is submerged in the lubricant, which serves to resist rotation of the vanes of said pinion gear relative to the drum, and a drive shaft geared to said gear carrier.

2,746,321
ROTARY SWAGING MACHINES
Samuel Smith, Elmdon, England
Application July 1, 1952, Serial No. 296,694
1 Claim. (Cl. 78—22)



A combined retaining and retracting device for swaging machine hammer blocks which have parallel sides and are slidably fitted between parallel walls in a swaging machine head, said combined retaining and retracting device comprising a rectangular key member having a rectangular cavity extending across one side thereof, the ends of said cavity being perpendicular to the sides of said key member, a rectangular strip having its ends bent at right angles to the sides of said strip, the ends of said strip so bent being fitted slidably between the ends of said cavity, and a rectangular resilient cushion fitted between the ends of said strip, the thickness of said cushion being greater than the distance to which the ends of said strip extend perpendicularly from the sides of said strip, whereby said strip is resiliently held outwardly of the side of said key member, there being keyways in the sides of said hammer blocks and in the walls of said swaging machine head between which said hammer blocks are slidably fitted, the keyways in the sides of said hammer blocks and the keyways in said walls of said swaging machine head being in

registration when said hammer blocks are retracted, the composite thickness of said key member, said strip and said cushion being substantially equal to the width of said keyways when said hammer blocks are retracted and said keyways are in registration, said resilient cushion being confined between the back walls of registering keyways as well as between one of said key members and one of said strips, but said resilient cushion being capable of yielding to permit said hammer blocks to move outwardly when forced to do so incident to the insertion of work to be acted upon by said hammer blocks.

2,746,322
ROOF FOILER FOR REPAIRING SHINGLES
John Joseph French, Bellingham, Wash.
Application October 8, 1953, Serial No. 384,963
1 Claim. (Cl. 81—3)



A metal foil applicator comprising a substantially cylindrical casing having end walls, a base integral with said end walls, an arcuate rear wall integral with the base and a cover hinged to the edge of the rear wall, and extended over the edges of the end walls, means on the base engaging the cover for retaining the same in fixed relation to said base an elongated blade upon one end of which the base of the casing is mounted, the edge of said cover being spaced from said base, and said rear wall having a finger receiving opening therein said blade positioned to receive metal foil of a roll in the casing and adapted to insert the foil between shingles of a roof.

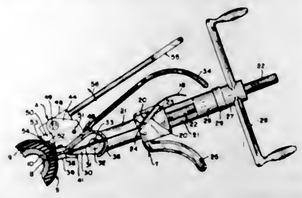
2,746,323
PIVOTED LEVER BOTTLE CAP REMOVING DEVICE
Gustav R. Johnson, East Providence, R. I.
Application September 23, 1954, Serial No. 457,886
3 Claims. (Cl. 81—3.1)



1. A bottle cap removing tool comprising an open frame, a relatively fixed finger thereon depending therefrom adjacent a side edge thereof, a movable finger diametrically opposite the fixed finger, terminal portions of the fingers extending diametrically toward each other, a fixed handle extending generally radially and mounted on said frame, a movable handle mounted on said frame, said movable handle being movable in the same general plane of the first handle, means on the second handle extending downwardly through the frame to engage a bottle cap centrally between the two fingers, the latter being adapted to engage under the lip of the bottle cap at the terminal portions thereof, and yielding means tending to move the movable finger toward the fixed finger, said last-named means yielding to allow the movable finger to move in the opposite direction upon engagement thereof with the top of the bottle cap to slip over and then under the lip of the cap.

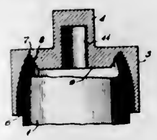
2,746,324
TOOL FOR APPLYING PRESSURE CLAMPS
Harold H. Beardsley, Lakewood, Colo., assignor to Band-It Company, Denver, Colo., a corporation of Colorado
Application November 3, 1952, Serial No. 318,420
13 Claims. (Cl. 81—9.3)

1. A tool for applying a pressure clamp or the like, said tool having a nose end, such pressure clamp including a buckle or the like having opposite ends and a strap adapted to pass through said buckle and to be attached thereto, said tool comprising means for applying tension to one end of said strap so as to tighten said strap around an article to be clamped, a bar mounted on and extending across the nose end of said tool for engaging one end of said buckle while said strap is tensioned and while said strap is bent up against said end of said buckle; a shear blade mounted on and extending across the nose end of said tool in spaced relation to said bar and thereby



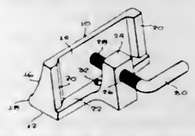
forming a passage through which said strap passes, said shear blade being adapted to shear said strap; a lever pivoted on the nose end of said tool for engaging the opposite end of said buckle; and a cam for actuating said lever when it is in engagement with said buckle, said lever applying a force through said buckle against said strap and said shear blade applying a cutting force against and on the other side of said strap opposite said buckle and shearing said strap close to said buckle when said lever is actuated by said cam.

2,746,325
TUBE END FORMING HAND TOOL
George E. Kjellberg, Lake Worth, Fla.
Application December 12, 1952, Serial No. 325,647
2 Claims. (Cl. 81—15)



1. A hand forming-tool comprising a body, an open-end cavity in said body, said cavity having a circular cross-section of diminishing diameter from said open end to the closed end thereof, a tapered concentric projection extending into said cavity, said projection being of lesser depth than the circular wall of the cavity and said projection defining an annular channel with the wall of said cavity and a horizontal annular flat section joining the wall of the cavity to the base of the projection.

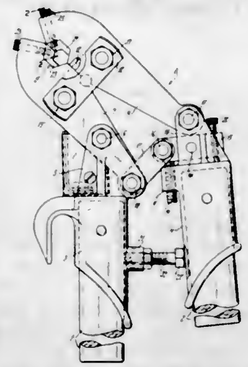
2,746,326
COMBINATION SHEAR SET AND SHARPENING DEVICE
Kerwin K. Crabs and John Albert Gaede, Manhattan, Kans.
Application November 9, 1954, Serial No. 467,692
2 Claims. (Cl. 81—15)



1. A device for setting shears and for supporting the same during sharpening thereof, comprising an elongated, cast base having an approximately triangular cross section, said base having a flat bottom surface and having

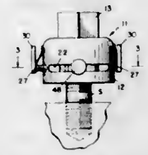
an inner surface inclined slightly from the vertical; lugs formed upon opposite ends of the base and one on each side of said inner surface, said lugs extending transversely of said inner surface and being of bar-like formation so as to be in engagement with a shears supported thereagainst over the full width of said shears; a pressure screw support block integrally cast with the base intermediate the opposite ends thereof, said block being spaced laterally of the base from said inner surface and being formed with a threaded opening extending normally to the plane of said inner surface, said block being offset longitudinally of the base from the midlength point of the base so as to be nearer one of said lugs than the other; a pressure screw threaded in said opening of the block and shiftable in the direction of said inner surface so as to apply pressure against one side of a shears the other side of which is engaged against said lugs; and a handle formed upon said screw.

2,746,327
CRIMPING TOOLS WITH REPLACEABLE DIES
Kenneth R. Runde, Lemay, Mo., assignor to James R. Kearney Corporation, St. Louis, Mo., a corporation of Missouri
Application May 17, 1952, Serial No. 288,395
2 Claims. (Cl. 81—15)



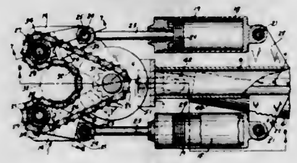
1. A tool having a pair of jaws movable one with respect to the other and provided with multiface recesses, cooperating multiface dies supported within said recesses, and means comprising screws for securing said dies to said jaws in a manner to provide for quick and convenient application of the dies to said jaws or quick and convenient removal of said dies from said jaws, there being a single inclined screw for securing each of said dies in place in its recess, and each of said single inclined screws being inclined with respect to an imaginary line drawn longitudinally of and between said jaws.

2,746,328
STUD PULLER AND DRIVER WRENCH
Ralph A. Valvano, Los Angeles, Calif.
Application September 14, 1953, Serial No. 379,788
9 Claims. (Cl. 81—53)



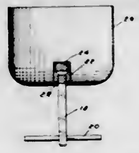
1. A wrench for driving and pulling studs, comprising a body having a cavity, a wedge-like jaw member in said cavity, a movable jaw backing member projecting into said cavity, said jaw member being adapted to be wedged between said jaw backing member and a stud received in said cavity, and adjustable means holding said jaw backing member, said last-mentioned means being operable to permit of said jaw backing member backing off from said jaw member whereby to loosen said jaw member from being tightly wedged between said jaw backing member and the stud.

2,746,329
SPINNING DEVICE FOR DRILL PIPE
Wm W. Paget, Mountain Brook, Ala., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application February 6, 1953, Serial No. 335,477
23 Claims. (Cl. 81—53)



1. A spinning device for drill pipe comprising a casing, a pair of levers pivotally mounted on said casing and projecting therefrom in positions to straddle a drill pipe, means for swinging said levers about their pivots, an endless drive chain engageable with the drill pipe for rotating the latter, idler sprockets about which said chain passes, driving means carried by said casing for circulating said chain about said idler sprockets, lever arms pivotally mounted on said levers respectively to swing relative thereto and by which said sprockets are respectively carried, and yieldable means acting on said lever arms for urging the latter inwardly toward their innermost positions with respect to said levers.

2,746,330
UNITARY WRENCH AND CONTAINER OIL FILTER REMOVER
Henry V. Pfetzing, Jackson, Mich., assignor to Kent-Moore Organization, Inc., Detroit, Mich., a corporation of Michigan
Application May 27, 1955, Serial No. 511,689
4 Claims. (Cl. 81—53)



1. An oil filter remover tool of the wrench type comprising a handle provided with a wrench head, a cup-shaped receptacle mounted upon the tool surrounding the head, said head being disposed adjacent to the bottom of the cup and projecting outwardly therefrom in the same direction as the open end of the cup.

2,746,331
REVERSIBLE RATCHET WRENCH WITH SUPPLEMENTARY DRIVE MEANS
Harold Andersen, Atlantic, Iowa
Application August 11, 1954, Serial No. 449,124
2 Claims. (Cl. 81—58.1)

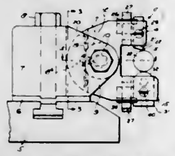
1. A wrench of the character described, including a head having flat side faces and provided with a recess opening inwardly from one side face and terminating short of the other side face to form a wall having a bearing opening therein, a ratchet wheel in said recess

and having a hub on one side rotatably mounted in said bearing opening and having a hub projecting from the opposite side of said ratchet wheel, a plate closing the open side of the recess and having a bearing opening in which the last-named hub is journalled, said ratchet wheel being of a width relative to the recess for restricting axial movement of the ratchet wheel in said hub, a driven sprocket having a hub for engaging the end of the hub projecting through the bearing opening in said wall, fastening devices spaced outwardly from the axis of rotation of the ratchet wheel and extending through the driven sprocket and into the hub of the ratchet wheel for clamping the driven sprocket to the hub of the ratchet wheel



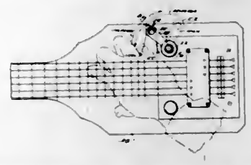
while maintaining a free rotating fit of the ratchet wheel in said recess of the head, a shank on the other of said hubs, a wrench socket removably mounted on said shank, a pawl in said head engagable with teeth of the ratchet wheel, an arm extending from the head and adapted to be oscillated on the axis of the ratchet wheel to effect step by step rotation of the ratchet wheel for turning the wrench socket, a driving sprocket, means for rotatably mounting the driving sprocket on the end portion of the arm opposite said head, a chain operating over the driving and driven sprockets, and a crank connected to the driving sprocket to effect continuous rotation of the ratchet wheel in over-running relation to the pawl to effect a continuous rotation of the wrench socket.

2,746,332
SHAVING TOOL FOR AUTOMATIC SCREW MACHINES
John R. Smith, Miami, Fla.
Application February 14, 1955, Serial No. 487,829
4 Claims. (Cl. 82—35)



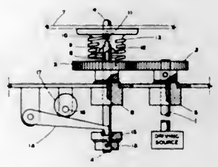
1. A blade shaving tool holder for use upon the tool posts of either the front or back slides of an automatic screw machine, the tool holder embodying a head portion semi-cylindrical in shape and having parallel flat side walls, the head being provided with a concentric transverse cylindrical opening therethrough, a cylindrical bushing engageable within the opening and with the bushing having its opposite ends projecting slightly beyond the flat sides, the bushing provided with an axial threaded opening entirely therethrough for the threaded reception of a clamping bolt passing through the tool post and whereby the bushing is rigidly clamped against the tool post, the tool holder being rockable in a vertical plane upon the bushing, a leaf spring connected with the bushing at one side and upon the center line of the bushing, the leaf spring having oppositely extending arms that bear against the head portion at points equidistantly spaced above and below the center line of the bushing and the head portion whereby to yieldably support the tool holder in a work engaging position, the head adapted to have alternate inverted mounting upon the tool post, the head provided with a pair of forwardly extending parallel and spaced apart jaws, one of the jaws provided with a vertical opening therethrough for the sliding reception of a tool blade, the blade being bevelled at one end to provide a cutting edge, the blade being slotted on one side for engagement by a screw adjustment, the other jaw provided with a vertically arranged square opening therethrough, a roller block vertically shiftable through the last named opening for movement toward and from the blade, a roller carried by the block at a right angle to the blade, the axial center line of the roller being on a vertical alignment with the cutting edge of the blade, the block provided with a slot upon one side for the reception of a screw adjustment device and means whereby the head portion is held against sliding movement with respect to the bushing and whereby the head portion is held in spaced relation to the tool post.

2,746,333
HAWAIIAN GUITAR VOLUME CONTROL ARM
John Penewell, Madison, Wis.
Application December 21, 1950, Serial No. 201,957
4 Claims. (Cl. 84—1.16)



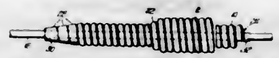
1. A volume control device for use on volume control shafts extended from musical instruments comprising a hub having a shaft receiving bore therein and an arm with a finger receiving recess in the upper surface extended from one side thereof, a set screw threaded in said hub and positioned to retain the hub in adjusted positions on the volume control shaft extended into the bore thereof, said hub having a counter bore in the outer surface and positioned around the bore therein, and a plastic cover positioned in the said counter bore for covering the end of said volume control shaft.

2,746,334
TONE WHEEL VIBRATO MEANS
Richard E. Williams, Manchester, N. H., assignor to Wilbespan Research Labs, Inc., Manchester, N. H.
Application June 3, 1950, Serial No. 165,889
2 Claims. (Cl. 84—1.25)



1. In a musical instrument having a moving tone wheel, means for controllably introducing a frequency vibrato in the pitch produced by said tone wheel, comprising drive means operatively connected to said tone wheel for imparting a basic constant speed to said tone wheel, said drive means including drive element means adapted for impressing an oscillatory speed variation upon said basic constant speed upon oscillatory movement of said drive element means, and operable control means moving at a vibrato rate and mounted for imparting such oscillatory displacement to said drive element means.

2,746,335
PIANO STRING
Robert E. Johnson, Chicago, Ill.
Application March 18, 1953, Serial No. 343,196
3 Claims. (Cl. 84—199)



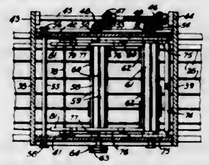
1. A piano string comprising a core wire and a covering wire wound thereon in a plurality of contiguous turns, the turns adjacent at least one end of said covering wire being flattened to form a tapered end on said covering wire in tight engagement with said core wire.

2,746,336
INSTRUMENT SUPPORT
Maurice H. Bisharat, Torrington, Conn.
Application November 19, 1952, Serial No. 321,335
3 Claims. (Cl. 84—280)



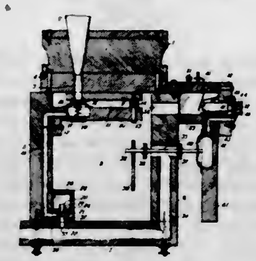
1. An article of the character described comprising the combination with a stringed instrument of a base plate, an adjustable tongue affixed thereto, a plurality of adjustable arcuate members mounted on said tongue and superposed at their mounted ends, said members being adjustable with respect to said tongue and to each other, the parts being so constructed and arranged that the parts and instrument supported thereby are out of contact with the collar bone.

2,746,337
CHORD-CHANGING DEVICE
Johannes H. Smit, Amsterdam, Netherlands
Application January 28, 1955, Serial No. 484,718
6 Claims. (Cl. 84—317)



1. A chord-changing attachment for a stringed instrument of the type having a neck provided with a fingerboard, said fingerboard comprising spaced frets whose spacing varies along said neck, said attachment comprising a support member, means for securing said support member to said neck in substantially parallel relation thereto, a frame slidably mounted on said support member, said frame being arranged to extend over the strings of the instrument, a transverse string-engaging bar carried by said frame at its rear portion, a first transverse rotor rotatably carried by the intermediate portion of said frame, a second transverse rotor rotatably carried by the forward end portion of the frame, said rotors being arranged to engage the strings, contact projections on said rotors engageable with selected strings in accordance with the rotated positions of said rotors, manual means arranged to simultaneously rotate said rotors to bring selected contact projections into engagement with selected strings, and cooperating means on the frame and on said support member arranged to vary the spacing of the transverse string-engaging bar and the second rotor with respect to the first rotor as the frame is moved along said support member in accordance with the variation in spacing of said frets.

2,746,338
PIPE ORGAN IMPROVED PITMAN WINDCHESTS
Roy R. Perry, Fountain City, Tenn.
Application August 15, 1952, Serial No. 304,565
9 Claims. (Cl. 84—338)



1. In an organ having a windchest, a pipe, a pipe valve to control the passage of wind from said windchest to said pipe, pneumatic means for actuating said pipe valve upon a reduction of the air pressure in said pneumatic means, an air passage leading to said pneumatic means, a stop channel, stop controlled means for selectively supplying air under pressure to said stop channel and venting said stop channel to the atmosphere, a key air passage, and key controlled means for selectively supplying air under pressure to said key air passage and venting said key air passage to atmosphere; the improvement which comprises a valve unit including a housing having a chamber therein, a first opening in said housing connecting said chamber with said stop channel, a second opening in said housing connecting said chamber with said key air passage, a free floating valve disposed in said chamber to close said first opening when said key air passage contains air under pressure and said stop channel is vented to the atmosphere, and to close said second opening when said stop channel contains air under pressure and said key air passage is vented to the atmosphere, and a third opening in said housing connecting said chamber to the first-mentioned air passage in all positions of said valve.

2,746,339
MEANS FOR TEACHING PIANO PLAYING
Alfred T. Schmidt, North Hollywood, Calif.
Application August 30, 1951, Serial No. 244,401
6 Claims. (Cl. 84—478)



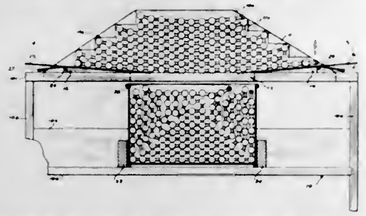
1. A device for teaching piano playing, including a casing adapted to overlie the keys of a piano, said casing having a series of spaced slots each to register with an individual piano key, an individual hinged shutter for each piano key to close and open its respective slot, a light source within the casing adapted to project light rays through one of said slots as its shutter is opened and thereby to illuminate the key, and means individual to each shutter to move the shutter to close the slot when the key is in normal elevated position and to move the shutter to open position when the key is depressed.

2,746,340
SHEET METAL PUSH ON FASTENER WITH STUD BITING TEETH
Ivan Sislik, Bound Brook, N. J., assignor to The Palnut Company, Irvington, N. J., a corporation of New Jersey
Application June 10, 1952, Serial No. 292,610
2 Claims. (Cl. 85—36)



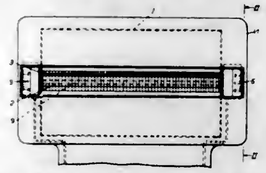
1. A threadless, push-on fastener for resiliently retaining a smooth-surfaced stud against withdrawal through a stud-receiving hole in a member, said fastener comprising a single piece of springy sheet metal comprising an elongated body arched upwardly between its ends and having generally parallel sides, one end with a broad axially extending projection with a convex tip thereon, and the other end with a centrally located recess complementary to said projection, the body having a stud-receiving aperture, said aperture extending longitudinally of the body and defining a long finger and an oppositely positioned short finger projecting from the convex side of the body, the fingers terminating at their free ends at opposite sides of the aperture and lying along the longitudinal center line of the body, each finger being bent upwardly from the body at an acute angle and having a sharp corner at its free end for engaging the stud, the angle which the short finger makes with the body markedly exceeding the angle which the long finger makes with the body, the free end of the long finger terminating substantially above the level of the free end of the short finger, the distance between the free ends of the fingers exceeding the diameter of the stud but the geometrical projection of such distance upon a plane tangent to the tips of the body being less than the diameter of the stud, so that, upon application of the fastener to the stud, the tip of the body nearer the long finger will first contact the member and the pressing of the midportion of the body to force the opposite tip of the body into contact with the member will flatten the arch of the body and urge both fingers into tight locking engagement with the stud.

2,746,341
APPARATUS FOR HANDLING A CARTRIDGE BELT
Dedrick A. Maanum, Minneapolis, Minn.
Application June 6, 1952, Serial No. 292,082
1 Claim. (Cl. 86—47)



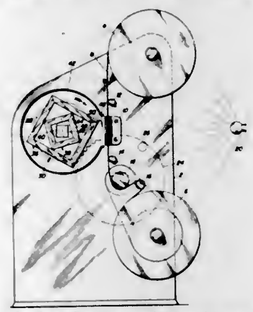
An apparatus for handling a cartridge belt and disposing the same in a container having in combination, a stand comprising a substantially horizontal support for said belt, said support having an opening intermediate its ends beneath which a container having an open top may be placed to receive said belt, upwardly inclined members extending oppositely at each end of said opening and being secured to said support, plate members respectively overlying said last mentioned members and extending outwardly at each end therefrom, said plate members respectively having a pair of elongated openings therein, members adapted to be disposed in said openings, hinges securing said last mentioned members respectively to said plate members, said hinges abutting against the outer ends of said upwardly inclined members, and hooks carried by said last mentioned members adapted to releasably hold portions of said belt until said cartridge belt is disposed in said container.

2,746,342
WEIGHING SCALE
Adrianus van Duyn, Hillegersberg, Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, Inc., La Porte, Ind., a corporation of Indiana
Application September 21, 1950, Serial No. 185,972
Claims priority, application Great Britain October 8, 1949
2 Claims. (Cl. 88—1)



1. In a weighing scale, apparatus for providing a visual indication of weight and of a plurality of prices corresponding to the weight, said apparatus comprising a horizontally rotatable drum having a cylindrical peripheral surface and at least one flat end surface, a first chart positioned about the peripheral surface of the drum and having indicating characters thereon, a stationary casing enclosing the drum and having an elongated horizontal opening in spaced relation with the drum to permit viewing of the chart thereon, said casing being of substantially greater length than the length of the drum to provide space for and to enclose mechanism for rotating the drum in accordance with weight placed on the scale, a second chart positioned about the peripheral portion of the end surface of the drum and having further indicating characters thereon, an optical deflecting means mounted in spaced relation with the elongated viewing opening of the casing and with the second chart on the end surface of the drum, said optical deflecting means being operative to deflect an image of the indicating characters from the second chart to be viewable through the opening and thereby to increase the number of indicating characters viewable along the length of the opening and to effectively extend the viewable chart area beyond the limits of the peripheral surface of the drum.

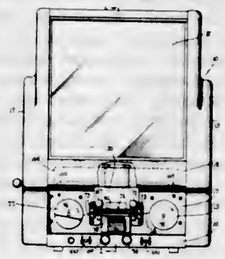
2,746,343
MOTION PICTURE APPARATUS
Barney L. Taylor, United States Navy
Application April 16, 1953, Serial No. 349,326
5 Claims. (Cl. 88—16.8)
(Granted under Title 35, U. S. Code (1952), sec. 266)



4. A refracting device for use with uniform film feed motion picture apparatus comprising a refracting body

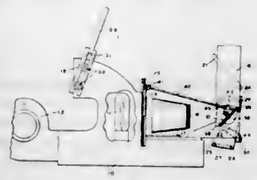
consisting of a first regular, hollow polygon, a second regular, hollow polygon lying within the first hollow polygon, similar thereto, concentric therewith, and so oriented relative thereto that the corners of said second polygon lie on the apothems of said first polygon; and means for mounting said body for rotation about an axis perpendicular to the plane of the polygons and passing through their common center; the sides of said polygons having plano-parallel opposite faces which are parallel to said axis.

2,746,344
MICROFILM READER
Verneur E. Pratt and George F. Gray, Norwalk, Conn., assignors to Diebold, Incorporated, Canton, Ohio, a corporation of Ohio
Application September 21, 1951, Serial No. 247,682
8 Claims. (Cl. 88—24)



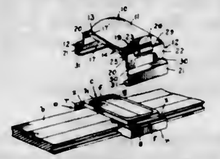
1. A microfilm reader comprising a housing having an opening at its front; a screen removably mounted in said opening; a projection system in said housing, for projecting an image from a film onto the screen, said system including a mirror assembly comprising a pair of angularly disposed mirrors having a large included angle, said assembly being removably mounted in the housing and being larger in overall size than the screen opening; and means connecting the mirrors to each other, enabling one mirror to be swung toward the other to reduce the size of the assembly sufficiently so that it can be readily removed from the housing through the screen opening.

2,746,345
PICTURE PREVIEWER AND PROJECTOR DEVICE
Harold J. Graves, Portland, Oreg., assignor to Sawyer's Inc., Progress, Oreg., a corporation of Oregon
Application August 5, 1952, Serial No. 302,651
6 Claims. (Cl. 88—27)



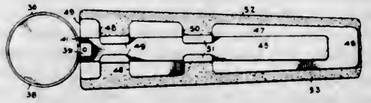
1. Projection apparatus comprising means to hold a pair of transparencies in horizontally disposed relation in an upright plane, a source of light behind the plane of said transparencies, a pair of lens means positioned ahead of the plane of said transparencies in position to magnify the images thereof, reflecting means including an opaque mirror, means movably mounting said mirror for movement into and out of the beams of light emerging from said lens means, said reflecting means, when said mirror is positioned in the beams of light, reflecting all of the beams of light rearwardly above said lens means, and a frosted translucent screen mounted on said projection apparatus in the paths of the reflected beams of light, said screen having grid lines thereon whereby the operator may check the vertical and horizontal alignment of the images.

2,746,346
MAGNIFIER FOR SLIDE RULES
Paul E. Gaire, Midland Park, N. J.
Application April 16, 1953, Serial No. 349,227
6 Claims. (Cl. 88—39)



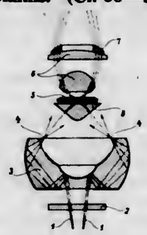
1. A magnifier for use with a slide rule cursor, comprising a magnifying lens of rectangular configuration, an encircling frame for said lens, a supporting bracket pivotally mounted at each end of said frame movable to be substantially perpendicular to said lens, and a channel portion on each bracket for removably fitting respectively around the cursor runners, and abutment means extending beyond the supporting brackets engageable with said lens for limiting the pivotal movement of said brackets from said lens to positions substantially perpendicular to said lens.

2,746,347
SLIDE RULE MAGNIFIERS
Paul E. Gaire, Midland Park, N. J.
Application November 24, 1953, Serial No. 394,085
2 Claims. (Cl. 88—39)



1. An auxiliary device for mounting in a slide rule case, comprising a magnifier, an elongate member secured at one end to said magnifier, a support plate having means on one side thereof forming a slide-way for said member, an adhesive sheet backing said plate on the side opposite said slide-way means and extending beyond the edges of the plate for adherence to the wall of the slide rule case, and a layer of protective material overlying the exposed edges of said adhesive sheet.

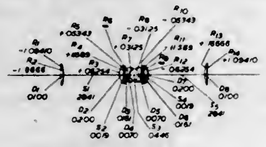
2,746,348
OPTICAL VIEWING DEVICE WITH CONTRASTING COLOR PHASES
Ludwig Leitz, Wetzlar, Germany, assignor to Ernst Leitz, G. m. b. H., a corporation of Germany
Application September 12, 1951, Serial No. 246,236
Claims priority, application Germany September 15, 1950
2 Claims. (Cl. 88—39)



1. A color phase contrast microscope for observing an object in color phase contrast comprising a micro-

scope objective, a radially tapered phase plate therein above the same, a ring formed condenser below the objective, said condenser having a plurality of light reflecting surfaces forming an annular focus facing the objective and providing an illuminating base emitting different spectral rays toward the objective, a glass cone member positioned between said objective and said condenser with its apex facing the condenser, said glass cone member forming a light dispersing element for imaging the different spectral rays emitted by said condenser upon the said phase plate in the form of concentric colored rings and a light filter positioned below the condenser for the passage of at least two spectral ranges of color of the incoming light.

2,746,349
PROJECTION OPTICAL OBJECTIVES
Kenneth Roy Coleman, Leicester, England, assignor to Taylor, Taylor & Hobson Limited, Leicester, England, a British company
Application May 26, 1952, Serial No. 289,965
Claims priority, application Great Britain May 31, 1951
20 Claims. (Cl. 88—57)



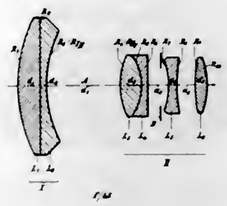
1. An optical objective, corrected for spherical and chromatic aberrations, coma, astigmatism, field curvature and distortion, and comprising a central group of four components consisting of two simple convergent outer components and two compound meniscus divergent inner components, such divergent components having their air-exposed surfaces concave towards a diaphragm position between them and being separated from one another by an axial distance between .03 L and .06 L where L is the track length of the objective (that is, the distance between the axial object point and the axial image point of the objective), and two convergent field lenses embracing the central group between them and arranged to render the objective telecentric, such field lenses contributing to the correction of the aberrations of the objective and each having equivalent focal length between .20 L and .80 L.

2,746,350
VARIABLE MAGNIFICATION OPTICAL SYSTEMS
Harold Horace Hopkins, London, England, assignor to W. Watson & Sons Limited, London, England, a British company
Application October 27, 1953, Serial No. 388,499
Claims priority, application Great Britain October 5, 1951
7 Claims. (Cl. 88—57)



1. A variable magnification optical system, for producing an image of continuously variable size of an object at a fixed distance from the system, comprising two normally stationary lenses, having powers of like sign, and two axially movable lenses, having powers of like sign which is opposite to the sign of the powers of the normally stationary lenses, all of which lenses are arranged on a common optical axis with the movable lenses between and spaced from the two normally stationary lenses, and in combination with the lens magnification varying means for continuously and simultaneously differentially moving the movable lenses in the axial direction of the system according to a law such that the distance from the normally stationary lenses at which the image of an object at a fixed distance from the normally stationary lenses is accurately focussed remains constant, while the size of the said image is continuously varied during the operation of the magnification varying means, in which system the movable lenses and their range of movement are such that, for one final image position of the system, at a mean position of their movement they have a joint magnification of minus one, the movable lenses being movable as aforesaid from their mean position to at least one far position, and in which system the lenses are such that the respective differences between the values of spherical aberration, coma, astigmatism and distortion produced by the movable lenses when they are at their mean position and the corresponding values of those four aberrations produced by the movable lenses when they are in their said far position, are substantially equal and opposite to the respective differences between the values of spherical aberration, coma, astigmatism and distortion produced by the said two normally stationary lenses when the movable lenses are at their mean position and the corresponding values of those four aberrations produced by the said two normally stationary lenses when the movable lenses are at the said far position, whereby each of the said four aberrations has substantially the same magnitude and sign when the movable lenses are in their said far position as when they are in their mean position.

2,746,351
PHOTOGRAPHIC OBJECTIVE OF THE MODIFIED TRIPLET TYPE AND A MENISCUS SHAPED NEGATIVE MEMBER AXIALLY SEPARATED THEREFROM
Albrecht Wilhelm Tronnier, Gottingen, Germany, assignor to Volgtländer, A. G., Braunschweig, Germany, a corporation of Germany
Application March 3, 1953, Serial No. 339,953
Claims priority, application Germany March 5, 1952
9 Claims. (Cl. 88—57)



1. A photographic objective of the modified triplet type comprising a converging triplet system containing a plurality of lenses formed as three air-spaced components and including a diaphragm, and a meniscus shaped member of negative refractive power axially separated by an air space from said triplet system on the side of the major conjugate, the outer surfaces of said meniscus shaped member and said triplet system being concave relative to the said diaphragm, the said objective satisfying the conditions and

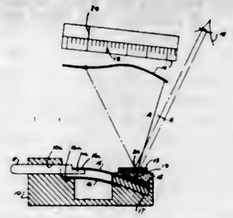
$$.45\ f<G<1.50\ f$$

and

$$.20\ f<A<0.75\ f$$

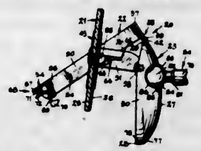
wherein G stands for the over-all length of the objective, f stands for the equivalent focal length of the objective and A is the thickness of the air space measured along the optical axis.

2,746,352
OPTICAL INDICATING DEVICE
Roger S. Estey, China Lake, Calif.
Application January 16, 1952, Serial No. 266,672
5 Claims. (Cl. 88—74)



1. An optical indicating device including a first opaque mirror and a fiducial mark optically aligned therewith, a second opaque mirror and a scale optically aligned therewith, said mirrors being in substantially the same plane and adapted to reflect images in the same general direction, said first mirror and fiducial mark and said second mirror and scale being in adjacent relation whereby from a common eye point the fiducial mark image is visible in said first mirror and the scale image is visible in said second mirror and the images of said scale and fiducial mark are contiguous, one of said mirrors being adjustable relative to the other of said mirrors to produce relative displacement of the images of said scale and fiducial mark, a support having a bore, a plunger in said bore, a pair of springs supporting said movable mirror, said springs being supported by said plunger and support respectively.

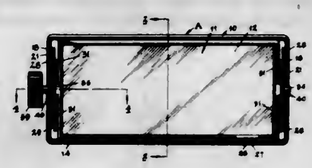
2,746,353
REVERSIBLE REARVIEW MIRROR
Ferdinand J. Mazur, Natrona Heights, Pa., and Lucien G. Ponce, Weirton, W. Va., assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio
Application June 29, 1950, Serial No. 171,052
13 Claims. (Cl. 88—77)



1. A reversible rear view mirror, comprising a supporting case including a rear wall provided with mounting means therefor and open at the front thereof, a frame hingedly connected to said case, a mirror element normally closing the front of the case and having two oppositely disposed reflective surfaces of different reflecting values, means carried by the mirror element for rotatably supporting the same within said frame, and actuating arms pivotally carried at one end by the case, at least one of said actuating arms having a slot at the other end provided with a gear sector and said supporting means being provided with a gear operating in said slot to effect rotation of the mirror element upon swinging movement of the frame relative to the case to cause said supporting means to reciprocate in said slot and said gear to mesh with said gear sector.

2,746,354
REARVIEW MIRROR
Dwight W. Barkley, Cheswick, Pa., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio
Application May 27, 1949, Serial No. 95,743
10 Claims. (Cl. 88—77)

1. In a rear view mirror for automobiles and the like, a case having a transversely arcuate rear wall and forwardly directed end walls and being open at the front, mounting means for the case carried by the rear wall thereof, a mirror unit substantially closing the front of the case and releasably engaged by the top and bottom walls thereof when in normal operating position and having oppositely disposed reflecting surfaces of different reflecting values, one adapted for day driving and the other for night driving, and link members pivotally and slidably carried at their inner ends by the end walls of the case and having their outer ends arranged in overlapping relation, the mirror unit being arranged between the overlapping outer ends of the link members and rotatably carried thereby so that the mirror unit can be reversed in a vertical plane to present the desired reflecting surface to the driver.



2,746,355
INSIDE ADJUSTABLE REARVIEW MIRROR FOR AUTOMOBILES
John R. Wells, Detroit, Mich.
Application November 10, 1952, Serial No. 319,671
9 Claims. (Cl. 88—93)

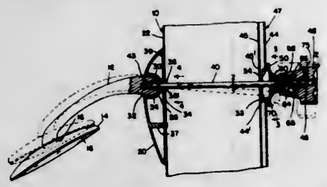


1. The combination with a vehicle body wall having spaced inner and outer panels, of a mounting including an arm for supporting a mirror or the like, means on said outer panel having a supporting portion for said arm, said arm and supporting portion having a socket on the one and a part on the other received in said socket to provide a swivel connection permitting rotation and rocking movement of said arm relative to said supporting portion, said arm having an extension projecting through a passage in said supporting portion and through said inner and outer panels, said inner and outer panels having openings for accommodating said extension, a guide block secured to said inner panel having an elongated slot receiving said extension to closely confine the path of rocking movement of said extension and arm, means providing an abutment adjacent and fixed relative to said supporting portion, means for urging said part against said socket to frictionally resist movement of said arm relative to said supporting portion including spring means on said extension between said supporting portion and guide block and supported on said extension against movement lengthwise thereof in an inward direction, said spring means having a portion acting upon and applying a yielding pressure against said abutment in an outward direction.

2,746,356
ADJUSTABLE REARVIEW MIRROR
John R. Wells, Detroit, Mich.
Application June 15, 1953, Serial No. 361,450
5 Claims. (Cl. 88—93)

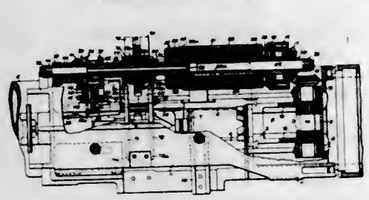
1. The combination with a vehicle body wall having spaced inner and outer panels, of a mounting including an arm for supporting a mirror or the like, means on said other panel having a supporting portion for said arm, said arm and supporting portion having a socket on the

one and a part on the other received in said socket to provide a swivel connection permitting rotation and rocking movement of said arm relative to said supporting portion, said arm having an extension projecting through a passage in said supporting portion and through said inner and outer panels, said inner and outer panels having openings for accommodating said extension, a guide block secured to said inner panel and having an elongated slot receiving and engaging said extension to close-



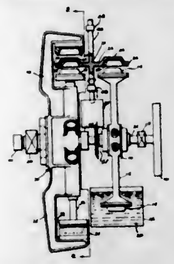
ly confine the path of rocking movement of said extension and arm in a single plane, and mechanism entirely at the inner side of said inner panel constituting the sole means for drawing said part into said socket to frictionally resist rotation and rocking movement of said extension and arm, said mechanism comprising an abutment on said extension at the inner side of said inner panel and spring means compressed between said abutment and guide block frictionally engaging the latter.

2,746,357
FEED MECHANISM
Paul H. Dixon, Rockford, Ill., assignor to the United States of America as represented by the Secretary of the Army
Application April 14, 1950, Serial No. 155,893
9 Claims. (Cl. 89—33)



9. In combination with a gun having a receiver, a breech ring mounted in said receiver for reciprocation in recoil and counterrecoil and an ammunition belt comprising pivotally interconnected links each resiliently gripping a round of ammunition, a frame fixed on said receiver, a drive shaft journalled in said frame, a sleeve and a spring drum coaxially journalled on said shaft, a drive spring within said drum and having its ends fixed to said sleeve and drum respectively, first means rotating said sleeve and winding said spring by and in response to reciprocation of said breech ring, second means preventing retrograde rotation of said drum under tension of said spring, a slip friction connection between said drum and shaft, a sprocket on said shaft for rotation as a unit therewith and positioned to engage and draw said belt over and across said receiver under the influence of stored energy in said spring, stop means normally active to prevent rotation of said shaft, means operated by and in response to reciprocation of said breech ring to momentarily release and then re-engage said stop means whereby said belt is indexed a distance between successive rounds, and means carried by said frame to successively strip rounds from said belt in response to feeding movement of the same and to guide the freed rounds into the receiver.

2,746,358
PULP MOLDING APPARATUS
Richard L. Emery, Fairfield, Maine, assignor to Keyes Fibre Company, Portland, Maine, a corporation of Maine
Application January 21, 1952, Serial No. 267,423
6 Claims. (Cl. 92—56)

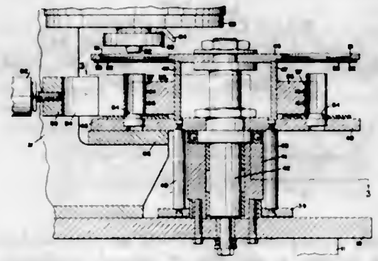


1. In a pulp molding apparatus, an open container for holding a body of pulp slurry from which articles are to be molded, a forming turret unit positioned adjacent said container, said turrent unit comprising a hub mounted for rotation, and a plurality of forming dies radially extending from said hub, said turret unit being so positioned relative to said container that, as said turret unit rotates each of the dies thereon are successively carried into, through and out of the slurry in said container, a drying turret unit coaxial with said forming turret unit, said drying turret unit also being mounted for rotation, said drying turret unit comprising a hub, a plurality of inner drying dies connected to said hub and positioned radially in respect to said hub, and a plurality of outer drying dies also connected to said hub and positioned radially thereto, there being an outer die corresponding to each of said inner dies, each of said outer dies being positioned radially outwardly of its corresponding inner die, said drying turret unit being so constructed and arranged that each inner die and its corresponding outer die are relatively movable into and out of compressive relationship, driving mechanism for rotating both of said turret units in timed relationship, means for causing each inner die and its corresponding outer die to be relatively moved into compressive relationship during at least one portion of the rotational movement of said drying turret unit and out of such compressive relationship at other portions of said rotational movement, and transfer mechanism operatively connected to both of said turret units and adapted to transfer formed masses of molded pulp from each of the dies on said forming turret unit to a position between a pair of corresponding inner and outer dies on said drying turret unit when said last mentioned inner and outer dies are out of compressive relationship, said transfer mechanism being also adapted to unload molded articles from the drying dies after the completion of a drying treatment.

2,746,359
PAPER SPOOL FABRICATING MACHINE
Walter E. Woehlert, South Euclid, and Ross C. Betts, Rocky River, Ohio, assignors to The Dobeckmun Company, Cleveland, Ohio, a corporation of Ohio
Application June 8, 1953, Serial No. 360,156
18 Claims. (Cl. 93—1)

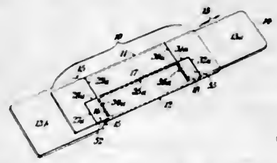
1. A machine for fabricating paper spools comprising a turntable mounted for advancement past a given station and having an upper flange and a lower flange, a plurality of bores through said upper flange, a plurality of positioning abutments on said lower flange, each of said abutments being associated with one of said bores, a side of each of said positioning abutments lying on the axial projection of the periphery of the bore with which

it is associated, press means at said given station reciprocable along a path from a first press position above said upper flange to a second press position below said upper flange, said press means comprising a press-head having passages therein opening out on the work engaging surface of said head, a plurality of arcuate saddles between said upper and lower flanges and fixed relative thereto, each of said saddles having an axial center of radius in alignment with the axis of one of said bores, annular resilient members extending radially partially inwardly from the periphery of each of said bores below the top thereof, drive means to intermittently advance said turntable to successively position said bores in alignment with said path of reciprocation of said press means,



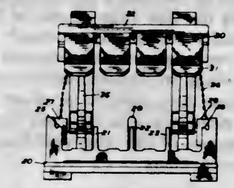
spacer means at said given station reciprocable between a first retracted spacer position and a second spacer position in surrounding relationship with the one of said arcuate saddles which is appositely position thereto, means to move said press means from said first press position to said second press position and back to said first press position between intermittent advances of said turntable means to move said spacer means from said first spacer position to said second spacer position and back to said first spacer position between intermittent advances of said turntable, means to apply vacuum to said passages during movement of said press means from said first press position to said second press position and to relieve said vacuum before initiation of return movement of said press means to said first press position.

2,746,360
APPARATUS AND METHOD FOR MAKING FOLDING PLASTIC CONTAINERS
Stanley Bright, Jr., Haverford, Pa., assignor to Troth Bright Page, Inc., Paoli, Pa., a corporation of Pennsylvania
Application May 9, 1952, Serial No. 287,064
10 Claims. (Cl. 93—36)



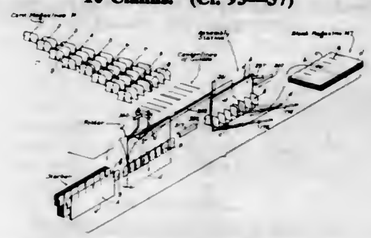
1. A method of making a seamless plastic folding container blank from an extruded plastic tube comprising flattening said tube to form folded side edges, cutting a blank from said flattened tube, inserting a flat rigid mandrel having scoring ridges mounted thereon between the walls of said blank, contacting cutting knives to each wall of said blank under sufficient pressure to cut completely through said walls along predetermined cutting lines, contacting resilient pads forcibly against said walls to press the walls against the scoring ridges of said mandrel sufficient to score said walls, and severing a portion of each folded side edge sufficient to form closing flaps at each end of the blank.

2,746,361
APPLIANCE FOR USE IN FORMING SEPARATE COMPARTMENTS IN CARDBOARD UNITS
Leslie Rex Whitby, London, England, assignor to R. H. Flimer Limited, London, England, a British company
Application September 16, 1950, Serial No. 185,294
4 Claims. (Cl. 93—37)



1. An appliance for use in forming compartments in a cardboard unit of tubular outline wherein such unit is provided with pairs of spaced score lines extending transversely thereof at spaced intervals to form compartments intermediate such score lines in the top wall of the unit, a score line and a slit in the bottom wall opposite each pair of score lines in the top wall, a slit at each end of each of said last named score lines arranged at right angles thereto and extending to the slit to form a flap at both sides of the compartments intermediate the pairs of score lines and a score line at each of the outermost compartments along the bottom and a slit at each end of said last named score lines arranged at right angles thereto and merging therewith to form a flap at the outer side of each of the outermost compartments comprising a base, a plurality of spaced upstanding projections on said base, the projections being of such a thickness to permit the projections to enter the flap openings and being of sufficient height and width to engage and support the top wall of the tubular unit substantially completely thereacross a support hingedly connected to said base for movement toward and away from said projections, a plurality of spaced plungers secured to said support and depending therefrom adapted to co-operate with the space between adjacent pairs of said upstanding projections, each of said plungers having a reduced elongated end, and a spring located between said base and said support normally holding said support away from said projections.

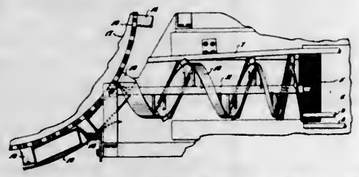
2,746,362
METHOD AND APPARATUS FOR ASSEMBLING CARTONS
Raymond Vahle, Tappan, N. Y., assignor to Robert Gair Company, Inc., New York, N. Y., a corporation of Delaware
Application August 10, 1950, Serial No. 178,566
10 Claims. (Cl. 93—37)



1. Given medially folded carton blanks having registering slots extending through the opposed walls thereof and arranged normal to the medial fold, and notches along the medial base fold in alignment with said slots, and given cross wall blanks having upwardly extending slots with locking tongues in their base edges, that method of assembling the carton and cross wall blanks which comprises feeding the medially folded carton blanks singly and holding each in turn in its assembling

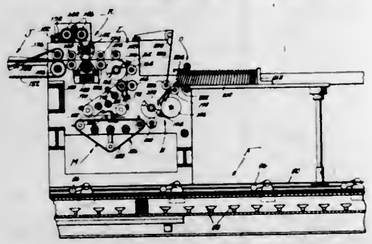
position, arranging several stacks of cross wall blanks in positions separated from the positioned carton blank but such that the planes of the stacked cross wall blanks are substantially parallel to the slots of the carton blank, feeding and guiding a set of cross wall blanks toward the positioned carton blank and projecting them through the registering slots in the walls of said positioned carton blank, buckling the free edge of one of the opposed walls of the medially folded carton blank to separate portions of the free edges of the opposed walls, and lifting said carton blank with respect to the inserted cross wall blanks to bring the separated portions of the free edges on opposite sides of a separator and simultaneously to interlock the tongues of the cross wall blanks with the notches of the carton blank.

2,746,363
CARTON FEEDING AND SQUARING-UP DEVICE
Donald C. Anderson, North College Hill, Ohio, assignor to The Procter & Gamble Company, Cincinnati, Ohio, a corporation of Ohio
Application January 25, 1955, Serial No. 484,032
15 Claims. (Cl. 93—53)



1. In a device for squaring-up collapsed cartons, a shaft, a helical element mounted on said shaft to be rotated thereby, one end of said helical element being adapted to enter the collapsed body of a carton between opposed walls thereof and by engagement with said carton to move it along a path, and means along said path to maintain contact between said carton and said helical element while it is being so moved, the convolutions of said helical element extending away from said mentioned end having a progressive increase in width in a direction substantially axially of said helical element, whereby the said convolutions act to exert internal expanding pressure on opposed walls of the carton to square it up while moving it in said path.

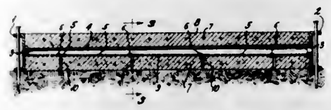
2,746,364
ENVELOPE MAKING MACHINE
Ormonde P. Welsh, Minneapolis, Minn., assignor to Parten Machinery Company, Minneapolis, Minn., a partnership
Application December 28, 1950, Serial No. 203,101
14 Claims. (Cl. 93—62)



7. An envelope making machine comprising a supply hopper for envelope blanks, side flap folding means, bottom flap folding means, means for transmitting the envelope blanks to the side flap folding means and the bottom flap folding means from the supply hopper with the bottom flap forming the leading edge, coacting blank feeding means relatively arranged to reverse the position of the leading and trailing edges of the blanks to arrange the seal flap as the leading edge prior to folding the seal flap, and seal flap folding means for receiving the blanks from said reversing means.

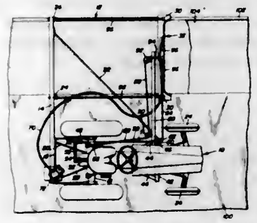
14. An envelope making machine comprising a supply hopper for envelope blanks, bottom flap folding means, means for transmitting the envelope blanks from the supply hopper to the bottom flap folding means with the bottom flap forming the leading edge, endless motion means for reversing the position of the leading and trailing edges of the blanks to arrange the seal flap in the leading position, and seal flap folding means for receiving the blanks from said reversing means.

2,746,365
ROAD CONSTRUCTION
Joseph A. Darneille, Silver Spring, Md.
Application November 16, 1951, Serial No. 256,654
2 Claims. (Cl. 94—33)



1. Road construction comprising, an elongated slab of concrete having a plurality of spaced horizontal passages extending completely through said slab transversely thereof, and having a plurality of vertical openings extending from the bottoms of said passages to the bottom face of said slab.

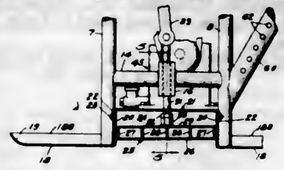
2,746,366
VIBRATING STRIKE-OFF
Everell E. Reed, Denison, Tex.
Application September 9, 1952, Serial No. 308,568
8 Claims. (Cl. 94—45)



3. An attachment for a vehicle comprising a push bar, a connecting frame at one end of said push bar adapted to be connected to the rear of the vehicle so that the push bar will project to one side of the vehicle, a screed parallel to said push bar, a pair of parallel connecting rods pivotally connecting said screed to said push bar for relative movement, vibrating means mounted on said screed, and means connected to said screed for reciprocating said screed.

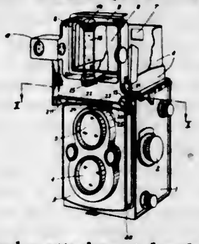
2,746,367
TAMPING MACHINE
William T. Ferguson, Bell, Calif., assignor, by mesne assignments, to Edna G. Ferguson, Bell Gardens, Calif.
Application September 27, 1951, Serial No. 248,590
8 Claims. (Cl. 94—49)

1. A tamping machine comprising an upstanding skeletal framework, a pair of horizontally spaced apart shoes which are rigidly fixed upon opposite side portions of said framework, said shoes having spacious flat bottom surfaces adapted to ride upon a horizontal cementitious plastic surface, a tamper substantially filling the space between said shoes, said tamper having a reticulated cement engaging portion of a sufficient fineness to obstruct objectionably large solid bodies in the cement, and motor driven means carried by said framework and said shoes



and operatively connected to said tamper to impart a vertical reciprocatory movement to the latter, thus to embed the aforesaid solid bodies in the plastic cement.

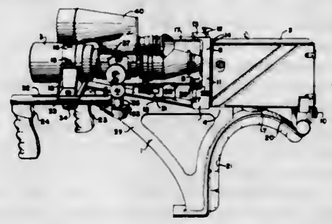
2,746,368
RANGE FINDER FOR PHOTOGRAPHIC CAMERAS
Richard Weiss, Braunschweig, Germany, assignor to Franke & Heidecke, Fabrik Photographischer Prazisions-Apparate, Braunschweig, Germany, a firm of Germany
Application June 2, 1953, Serial No. 362,034
7 Claims. (Cl. 95—44)



7. A range finder attachment for detachable use on a camera of the type having a body, a focusing hood at the top of the body provided with two sight openings together forming a direct view finder, and a lens carrier mounted at the front of said body below said hood for forward and backward movement for focusing purposes, said range finder attachment comprising a range finder frame, means for detachably securing said frame to said camera body above said lens carrier and in front of said hood, said frame being apertured for passage of light through said direct view finder in substantially non-obstructing relation thereto, a relatively narrow elongated beam splitter mounted on said frame and extending across the aperture thereof in one direction and widely spaced from the edges of the aperture in a second direction at right angles to the length of said beam splitter, a reflecting element mounted on said frame in a position substantially spaced from said beam splitter in said second direction and located beyond the outline of said aperture in non-obstructing relation to the field of view of said direct view finder, said reflecting element being positioned to reflect light approaching from an object in front of said camera toward said beam splitter, a light deflecting member adjustably mounted on said frame adjacent said reflecting element, and a movable arm mounted on said frame and operatively connected to said deflecting member to move the same and having a portion engaging said lens carrier when said frame is secured in normal position on said camera body, to move said deflecting member in accordance with focusing movement of said lens carrier.

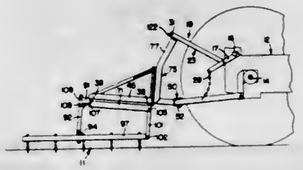
2,746,369
SHOULDER CAMERA MOUNT
Donald M. Beard, Spencerville, Md., Peter P. Bruce, Tyrone, Pa., and Kurt Kriegsmann, Washington, D. C.
Application September 21, 1953, Serial No. 381,524
9 Claims. (Cl. 95—86)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. The combination with a camera and lens of a camera and lens support comprising means for securing the camera and lens to the support, means configured to rest on the shoulders and contact the chest of a camera operator for operational support of the camera with the gravitational axis from the center of gravity of the camera falling within the curvature of the shoulder configured portion of the mount, means including a pair of hand grips for directing the camera, monocular view finder



means carried by said support and disposed remote from the camera at a position substantially before one eye of a camera operator, means disposed between said view finder and said support for providing positional adjustments for the sighting of the camera with said view finder, and means on the support and associated with one of said hand grips for remote operation of the camera.

2,746,370
HITCH DEVICE
Herman E. Altgelt, Moline, Ill., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Application March 28, 1952, Serial No. 279,199
6 Claims. (Cl. 97—47.14)

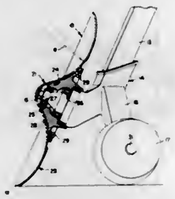


1. In an agricultural implement, a propelling frame, draft-transmitting links spaced apart fore-and-aft, means for pivotally connecting the forward link with the frame and implement whereby when the frame is propelled along the ground a propelling force is transmitted to the implement, means for pivotally connecting the lower end of the rear link with said implement, the upper end of said rear link having a slot extending generally longitudinally thereof, a pivot member carried by said frame and extending through said slot for pivotally connecting said rear link with said frame, an upwardly facing socket carried by said rear link adjacent said slot, and an abutment carried by said frame and adapted to be received by said socket for locking the rear link against pivoting relative to said frame when the rear link is in a generally upright position and said frame is lowered relative to the rear link to cause said pivot member to move to the lower end of said slot.

2,746,371
PLOW DISK
Curtiss L. Cook, Syracuse, N. Y., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Application January 8, 1953, Serial No. 330,239
1 Claim. (Cl. 97—217)

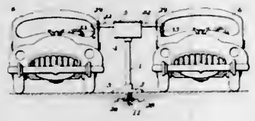
In a ground-working implement, a generally concavo-convex disk having the central portion thereof formed with a hollow protuberance extending outwardly from the concave side a distance beyond the plane of the peripheral portion of the disk, a bearing support shaped

to substantially fit within the hollow of said protuberance at the back side of the disk and lying substantially entirely inwardly of the plane that passes tangentially at the back side of the concave portion of the disk radially outwardly of said central portion of the disk, said bearing support having a through opening to form bearing-



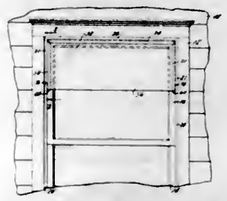
receiving means and a radially outwardly disposed portion detachably connected with the disk adjacent the invert section of said concave disk portion, and a bearing for said disk including a pair of axially spaced apart bearing portions disposed within the bearing receiving opening of said bearing support, both of said bearing portions lying inwardly of said last mentioned plane.

2,746,372
AIR CONDITIONER FOR AUTOMOBILES
Willis E. Smith and James R. Shipman, Tulsa, Okla.
Application October 31, 1951, Serial No. 254,132
4 Claims. (Cl. 98—2)



1. An air conditioning device for conditioning air inside of a pair of parked side by side automobiles comprising a casing adapted to be fixedly mounted on the ground and alongside of which the automobiles are parked, said casing having separate compartments, a partition dividing each compartment into separate air outlet and air return chambers, said partition having an opening communicating the chambers for the passage of return air from the return chamber to the outlet chamber, filter means mounted in said opening for filtering the air as it passes from the return chamber to the outlet chamber, a fan unit mounted in the outlet chamber of each compartment for drawing the air from the return chambers to the outlet chambers and exhausting it from the outlet chambers, heat exchange means interposed in the air stream between the return chambers and the outlet chambers for heating or cooling the air, axially adjustable air outlet pipes extending from opposite sides of the casing and communicating with the air outlet chambers, axially adjustable air return pipes extending from opposite sides of the casing and communicating with the air return chambers in each compartment, a plate to which the air outlet and return pipes from each side of the casing are attached, each of said plates having means for mounting it in a window opening in the automobile, temperature control means operatively associated with each of the heat exchange means for controlling the temperature of the air being recirculated, operating means carried by each of the plates for operating said control means from within each automobile, and adjustable vent means in each plate operable from inside each automobile for venting the interior thereof to the atmosphere.

2,746,373
WINDOW GUARD AND VENTILATOR
Ralph A. Bergsten, Winnetka, Ill., assignor of one-third to Mary E. Bergsten and one-third to Peter A. Bergsten, Barrington, Ill.
Application October 2, 1953, Serial No. 383,896
7 Claims. (Cl. 98—98)



1. A window guard and ventilator for the upper part of a window frame having a stop, a parting stop, and a blind stop, and upper and lower sashes movable in channels between said stops to open and close said window, said guard and ventilator comprising a pane of glass located in parallel spaced relation to the upper part of said upper sash, said pane having less vertical height than said upper sash, a strip attached to said blind stop immediately above said pane and having a short depending flange overlying the upper outer edge of said pane to prevent rain, snow and dust from passing therebetween, a holder for said pane attached to each side of said blind stop, each holder comprising main and auxiliary supports formed of sheet metal, each main support having a base provided with three screw holes, a glass retaining flange projecting at a right-angle to said base, said flange having an inturned lower end extending beneath said pane, each auxiliary support comprising a base having two screw holes aligned with the lowermost two screw holes of said main support, each auxiliary support having a pane retaining flange extending at right-angles to the base of the auxiliary support, the upper end of said last-named flange being resilient and pressing said pane against the flange of said main support, the lower end of the flange of the auxiliary support being inturned beneath said pane and supporting said pane, the lower end of said flange of the auxiliary support serving to press said pane against the complementary flange of the main support, and securing means for attaching said supports to said frame and for holding said auxiliary and main supports in assembled relationship.

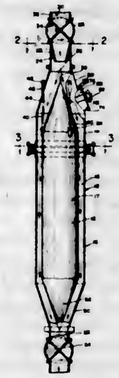
2,746,374
FLUTTERLESS DAMPER FOR A HEAT REGISTER STRUCTURE
ElRoy J. Kraft, Des Plaines, Ill., and Lee S. Wasserman, Dayton, Ohio, assignors to The Dole Valve Company, Chicago, Ill., a corporation of Illinois
Application October 31, 1951, Serial No. 254,082
5 Claims. (Cl. 98—108)



1. In a register apparatus for controlling the flow of fluid from a ventilating duct, a frame, said frame having an opening providing an outlet for the duct, and a butterfly damper pivotally supported in said opening and having

opposite edges thereof seated on opposite sides of said frame on opposite margins of said opening when in closed position, said frame having a flexible member connected thereto extending inwardly of one of said margins of said opening to engage said damper, said flexible member being deflectable out of the plane of said opening in response to the pressure flow of fluid through said outlet to engage said damper before it is fully closed, thereby to damp said damper and to reduce rapid changes in closure suction.

2,746,375
FLOUR BLEACHING APPARATUS
Fredric M. Abbott, Monterey Park, Denver C. Balsley, Los Angeles, and Henry F. Bamesberger, Anaheim, Calif., assignors to General Mills, Inc., a corporation of Delaware
Application October 9, 1952, Serial No. 313,886
12 Claims. (Cl. 99—263)



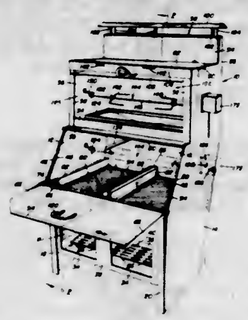
1. An apparatus for bleaching flour comprising in combination an enclosure shell in which flour is subjected to an atmosphere of a bleaching gas, means for injecting bleaching gas into the shell, a rigid body within the enclosure shell, means connected to the body freely suspending the rigid body within the shell capable of free lateral movement, means for introducing flour through an opening in the top of the shell to permit it to drop down and strike the rigid body to give motion thereto and be dispersed between the shell and body to pass through the bleaching gas and means at the bottom of the shell removing the flour as rapidly as it enters the shell at said top opening so that it will not pile up against said body.

2,746,376
COFFEE MAKERS
Earle F. Hiscock, Chatham, Mass., assignor to Kip, Inc., Chatham, Mass., a corporation of Delaware
Original application February 6, 1950, Serial No. 142,670. Divided and this application March 13, 1953, Serial No. 342,190
6 Claims. (Cl. 99—295)



1. In a vacuum type coffee maker the combination of upper and lower receptacle portions having a tube connection between them provided with a passageway and which tube projects into the lower receptacle portion below the normal level of liquid therein, said passageway being opened to the upper and lower compartments of the receptacles, a packet comprising a permeable flexible casing with comminuted coffee entirely confined therein and of a size to lie entirely over the passageway connecting the receptacle portions of the coffee maker and disposed in such location that vapor and liquid from the lower receptacle will necessarily pass through the tube passageway and through the permeable casing, and a member mounted in engagement with the major area of said packet immediately above the passageway of said tube provided with openings therein for passage of vapor and liquid therethrough and of a weight sufficient to hold the packet downwardly over the tube passageway to entirely cover the same and lift to a predetermined degree, under the upward surge of liquor passing through the tube from the lower receptacle compartment into the upper receptacle compartment, whereby during the brewing action to produce an intermittent squeezing of the packet and the coffee contents thereof.

2,746,377
OUTDOOR COOKING RANGE
Ernest H. Parks, Texarkana, Tex.
Application December 11, 1952, Serial No. 325,397
3 Claims. (Cl. 99—421)

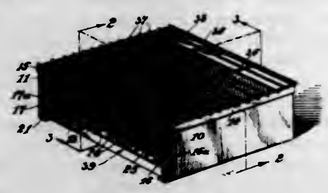


1. An outdoor cooking range comprising an upstanding housing including a lower firebox compartment, an intermediate grill compartment, and an upper oven compartment, grate means in said firebox compartment, draft control means providing access into said firebox compartment, horizontal foraminous grill means extending above said grate means and separating said firebox and grill compartments, vertically adjustable access door means permitting access into said grill compartment, an upwardly extending adjustable flue means communicating with said oven compartment, the bottom of said oven compartment being defined by horizontally disposed first and second drainage pans, the first pan including an edge portion overlying said second pan, said pans being vertically spaced permitting the passage of smoke from the grill compartment into said oven compartment, spit support means in said oven and grill compartments, and removable spit means for selective mounting in said grill and oven compartments.

2,746,378
BROILERS
Maxwell Eichhorn Lang, New York, N. Y.
Application September 26, 1952, Serial No. 311,680
1 Claim. (Cl. 99—447)

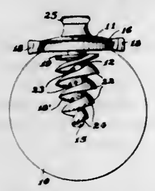
In a broiler, in combination: a metallic housing including three vertical walls with two of said walls parallel and spaced from each other by said third wall, a grid substantially horizontally supported by the upper edges of said walls, a pair of first guide rails extending along and

attached to the lower edges of said parallel walls, a removable metallic fuel pan having a perforated top plate supported by said first guide rails within said walls substantially at the bottom of said housing, a pair of second guide rails attached to said parallel walls in substantial parallelism with and above said first guide rails, and a flame prevention unit removably supported by said second guide rails in said housing between said grid and said fuel pan, said flame prevention unit including a skeleton consisting of a plurality of first metallic bars in two



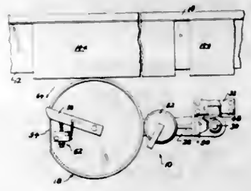
parallel layers and spaced by a plurality of second metallic bars forming spaced convolutions around said first metallic bars and securely attached to said first bars at the intersections therewith, and a layer of fine mesh screen enveloping said skeleton to form a self-contained unit with a space between the two parallel layers of said screen, whereby when the fuel in said fuel pan is ignited, the flames extending through said perforated top plate of said fuel pan are confined between said parallel layers of said screen surrounding said skeleton.

2,746,379
FRUIT JUICE EXTRACTOR
Mabel V. Covington, Nashville, Tenn.
Application November 10, 1952, Serial No. 319,738
1 Claim. (Cl. 100—108)



A juice extractor for citrus fruit including an elongated body having a closed lower end and an axial passage extending to the upper end thereof, said upper end being shaped to provide a discharge spout, said body having an annular flange extending outwardly and laterally therefrom adjacent its upper end, said body below said flange converging downwardly toward the lower end thereof and having a spiral tapered screw thread spaced from said flange to provide a space for receiving the rind of a citrus fruit when the extractor is inserted into the citrus fruit, the upper end of said thread terminating in a flat circular portion of smaller diameter than said flange, said flange having a concave inner surface coacting with said flat circular portion to provide a tight sealing engagement with the rind of the fruit in said space, said screw thread extending to the lower end of the body and having a convexedly curved upper surface to reduce the pressure on the pulp which would normally be built up over the thread and cause the fruit to split at the point of insertion of the extractor with the fruit, the lower end portion of the thread having a serrated edge, and said body having transverse holes communicating with said passages for withdrawing the juice from the fruit when the extractor is inserted therein.

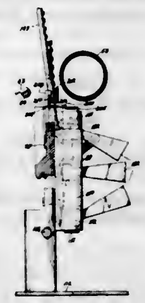
2,746,380
MARKING DEVICES
Ira S. Gottscho, Milburn, N. J., assignor to Adolph Gottscho, Inc., Hillside, N. J., a corporation of New York
Application October 16, 1952, Serial No. 315,038
8 Claims. (Cl. 101—35)



1. In a marking device of the class described for applying markings to successive articles conveyed past a marking station; the combination of a substantially cylindrical marking drum for carrying marking means on the periphery thereof, said drum having a flat peripheral portion which acts to arrest rotation of the drum when slidably engaged by an article, means rotatably supporting said drum at the marking station for contact at its periphery with the successive articles, said supporting means being movable toward and away from the path of the articles, yieldable means urging said supporting means in the direction toward the path of the article so that peripheral contact of said drum with the successive articles is maintained as the flat peripheral portion and the remaining arcuate peripheral portion of said drum are disposed for contact with the article, an arm rockably mounted on said drum and extending radially from the axis of rotation of said drum a distance substantially equal to the radius of the curved peripheral portion of said drum so that said arm projects radially beyond said flat peripheral portion when it is disposed within the angular limits of said flat peripheral portion, stop means on said drum for limiting the rocking of said arm relative to said drum in the direction of rotation of the latter during marking of the articles, said stop means being disposed so that said arm, when engaged thereby, is positioned within said angular limits of the flat peripheral portion and adjacent the trailing end of the latter, and yieldable means acting on said arm to continuously urge the latter against said stop means so that, as an article approaches the drum along a path parallel to the flattened peripheral portion of the latter, the article engages said arm disposed against said stop means and moves the arm before the article to effect initial rotation of said drum.

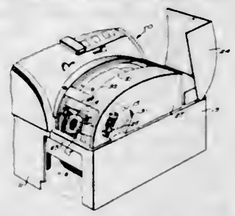
2,746,381
TYPE BAR CONTROL MECHANISM
Charles A. Parker, Chicago, Ill., and Clifton K. Rainey, Knoxville, Tenn., assignors, by mesne assignments, to Burroughs Corporation, a corporation of Michigan
Original application June 14, 1949, Serial No. 99,081. Divided and this application February 23, 1952, Serial No. 272,975
6 Claims. (Cl. 101—94)

1. In an accounting machine, a platen, calculating mechanism including adding type printing elements movable into and out of printing position relative to the platen, said printing elements being disposed in different angular relations when raised into different printing positions, a unitary support for said type printing elements when moved to printing position, said type printing elements loosely engaging the support at different angles of inclination, a cycling operating member for the calculating mechanism, said support being movable relative to the platen to bring its engaged type printing elements which have been raised into printing position into coplanar alignment parallel to the platen, and means operative from said operating member at a predetermined point



in its cycle to move said support for coplanar alignment of the type printing elements.

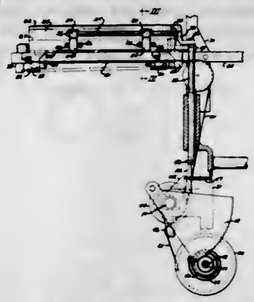
2,746,382
VALUE PRINTING DIE COVER MEANS
Walter J. Hanson, Port Chester, N. Y., assignor to Pitney-Bowes, Inc., Stamford, Conn., a corporation of Delaware
Application December 20, 1951, Serial No. 262,512
14 Claims. (Cl. 101—91)



1. In a machine of the character described, a rotatable printing drum; means surrounding the printing drum including a cover having a position preventing access to the printing drum and removable therefrom to permit access to portions of the printing drum; a latch for engaging said cover and holding the same in closed position; a control ring rotatable with said drum and having a track which is essentially circular but has a non-circular portion of limited extent; a latch control element having a feeler portion disposed adjacent said track, and operatively associated with said latch to prevent release thereof when the feeler is opposed by the circular portion of the track, but effective to permit release of the latch when the feeler is opposed by said non-circular portion, whereby removal of the cover is permitted only when the printing drum is in a predetermined position.

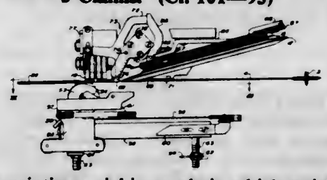
2,746,383
TICKET SHUTTLE
Lawrence S. Williams, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a corporation of New Jersey
Application April 15, 1953, Serial No. 348,969
7 Claims. (Cl. 101—93)

1. In a device for carrying a ticket from a receiving station on the outside of a housing of a printing weighing scale to a printing station inside the housing, in combination, a shuttle for holding the ticket, a track on which the shuttle is mounted for reciprocation, a rotatably mounted shaft, means for reciprocating the shuttle from the receiving station at one end of the track to the printing station at the other end, normally closed resilient means for clamping the ticket in the shuttle, cam means for opening the resilient means, means fixed to the shaft for both driving the means for reciprocating the shuttle and the cam means, the cam means holding the resilient means open when the ticket is in the receiving station, means for allowing the means fixed to the shaft to disengage from the cam means during the beginning of the movement of



the shuttle towards the printing station, whereby the normally closed resilient means close, and means for returning the shuttle to the receiving station after an imprint has been made on the ticket.

2,746,384
PRINTING WEIGHING SCALE
Robert O. Bradley and Frederick C. Carroll, Toledo, Ohio, assignors to Toledo Scale Company, Toledo, Ohio, a corporation of New Jersey
Application July 26, 1954, Serial No. 445,764
3 Claims. (Cl. 101—93)

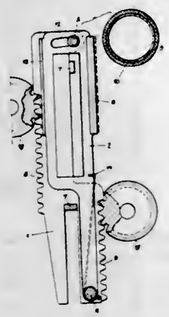


1. In a printing weighing scale in which weight responsive means positions a computed value drum and weight printing type and amount printing wheels are operatively connected to a keyboard to set up type according to computed amounts entered on the keyboard, in combination, a plurality of latchable keys for each decade of the computed amount to be printed, a stop member attached to each key, an offset rotatable bar for each decade extending along and adapted to engage the stop member of a selected one of the plurality of keys, a cord drive from each rotatable bar to the corresponding printing wheel for positioning the wheel according to the rotation of the bar, a cross bar extending transversely of and engageable with the rotatable bars of the various decades for rotating all of the bars to one limit of travel of the bars, a motor operated cam and follower and a cord drive from the follower to the cross bar adapted to hold the rotatable bars at said one limit of travel, spring means for urging the printing wheels and bars away from said limit of travel, said cam being shaped to maintain tension in the cord drive to the cross bar from the end of one printing cycle until the start of a next printing cycle, whereby the rotatable bars are held free of the key stops prior to a printing cycle and are released to cooperate with the keys stops during the printing cycle.

2,746,385
TYPE BARS FOR CALCULATING AND BOOKKEEPING MACHINES
Ernst Müller, Zurich, Switzerland, assignor to Precisa A. G. Rechenmaschinenfabrik, Zurich, Switzerland
Application May 20, 1952, Serial No. 288,822
3 Claims. (Cl. 101—109)

1. A type rack for calculating and bookkeeping machines comprising in combination: a toothed rack slid-

ably mounted in said machine and arranged to be guided vertically during operation when controlled by the actuating mechanism of said machine, a toothed rack series of teeth on opposite edges thereof adapted to be engaged by the actuating mechanism of said machine, a type lever rockably mounted on said tooth rack with its lower end pivoted to the lower end of said rack, a spring arm en-



circling said pivot with one end affixed to said rack and the opposite end engaging said type lever to yieldingly urge said lever in an inoperative position, a pin and slot connection between the upper ends of said tooth rack and type lever to guide said type lever in its to and fro movement with respect to the machine platen, and a set of type formed integral with said type lever and extending along one of the vertical edges thereof.

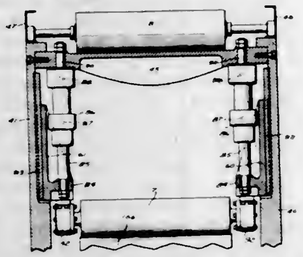
2,746,386

PRINTING CYLINDER ELEVATING MEANS

Arthur P. Bamford, East Orange, N. J., assignor, by mesne assignments, to E. G. Staude Manufacturing Company, Inc., Concord, N. H., a corporation of New Hampshire

Original application June 23, 1949, Serial No. 100,890, now Patent No. 2,637,270, dated May 5, 1953. Divided and this application July 5, 1951, Serial No. 235,302

6 Claims. (Cl. 101—153)



1. In a printing press comprising a printing cylinder, a pressure roll holding a web in printing contact therewith and a pair of frames disposed in spaced apart parallel relation at opposite ends of said rolls the improvement which consists in providing a mechanism for adjustably mounting the pressure roll comprising brackets slidable vertically in said frames, means in said brackets for journalling the shaft carrying said pressure roll extending between said brackets, fluid pressure means mounted on each frame and connected to raise or lower the respective brackets in response to fluid pressure, a rack on each bracket, pinions mounted on said frames to engage each rack, and a shaft carrying both pinions for operation in unison so as to equalize the movement of said brackets, a ratchet keyed to the shaft carrying the pinions, an arm pivoted to one of said frames carrying a pawl adapted to engage said ratchet to latch said brackets in elevated position, a cylinder, a piston slidably mounted in said cylinder, pin means connecting said piston and the end of said pivoted arm, and connections to supply fluid pressure to said cylinder in unison with the supply of fluid pressure in a direction to lower said brackets.

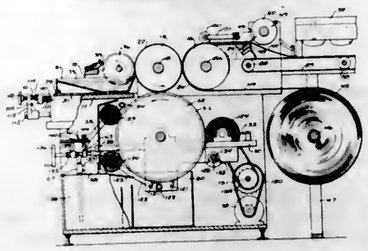
2,746,387

ROTARY INTAGLIO PRINTING AND EMBOSSING PRESS

John W. Neumann, Detroit, Mich., assignor to Rotographic, Inc., Ferndale, Mich., a corporation of Michigan

Application November 7, 1950, Serial No. 194,478

11 Claims. (Cl. 101—155)



1. A rotary engraving press comprising a support, a cylindrical roller on said support, a die plate on said roller having a legend which includes solid lines engraved in the surface thereof, a second cylindrical roller on said support juxtaposed to said first roller and mounted on an axis parallel to the axis of the first roller, a counter on said second roller having said legend in relief on the surface thereof, the legend on said counter being arranged to register with the legend on said die plate when the rollers are rotated in opposite directions, means for feeding a web of paper between said rollers, said second roller being arranged to support said paper web in contact with the surfaces of said die plate and counter as the web passes through the plane of the axes of said rollers, means for rotating said rollers in opposite directions and at the same surface speed of said plate and counter, means for applying a heavy film of ink to said legend and the surface of said first roller of such thickness to substantially fill the engraved cuts in said legend, a cylindrical wiping roller mounted on said support in juxtaposition to said first roller on an axis parallel to the axis of said first roller, said wiping roller being positioned to contact the surface of said die plate on said first roller as said last mentioned surface travels from said inking means toward said second roller, and means for rotating said wiping roller at a surface speed greater than that of the surface of the die plate and in a direction such that the contacting surfaces of said wiping roller and die plate move in opposite directions.

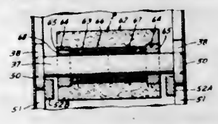
2,746,388

INKING ROLLER FOR AN IMPRINTING MEANS

John H. Gruver, Cleveland Heights, and Lester F. Mitchell, Shaker Heights, Ohio, assignors to Addressograph-Multigraph Corporation, Wilmington, Del., a corporation of Delaware

Application July 28, 1952, Serial No. 301,346

3 Claims. (Cl. 101—367)



1. An inking roller for printing indicia on a sales slip or the like, comprising a relatively rigid cylindrical body portion composed of porous ink-impregnable material,

said body portion being formed with an axial bore, a shaft of appreciably smaller diameter than said bore and extended through said bore, means at opposite ends of said shaft sealing off said bore, and resilient ink-impregnable material packed under compression in the portion of said bore not occupied by said shaft to serve as a reservoir for ink to be relayed by capillarity to said body portion.

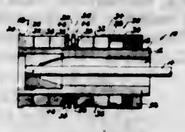
2,746,389

PRINTING ROLLERS AND TYPE THEREFOR

Andrew J. Alessi, Jr., Colonia, and Ira S. Gottscho, Milburn, N. J., and Malcolm Hirschey, Woodside, N. Y., assignors to Adolph Gottscho, Inc., Hillside, N. J., a corporation of New York

Application March 2, 1953, Serial No. 339,582

15 Claims. (Cl. 101—377)



1. A printing roller comprising the combination of a cylindrical body, at least two spacing and support ring members extending around said body, a resilient backing plate adapted to be flexed to conform to, and be carried by the curved peripheries of said spacing and support ring members, a plurality of hold-down ring members on said cylindrical body between said spacing and support ring members, said hold-down ring members being rotatable on said body and each having a radially enlarged portion extending outwardly beyond the peripheries of said spacing and support ring members and formed with a tangential gripping finger, said hold-down ring members being arranged with the gripping fingers thereof extending in opposite directions and angularly spaced to overlie and grip the opposite axial edges of said backing plate, means for urging said spacing and support ring members axially together thereby to grip said hold-down ring members and prevent relative angular displacement of the latter, and securing means on said body gripping the opposite circumferentially extending edges of said backing plate.

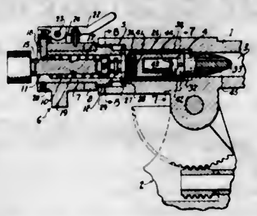
2,746,390

TOY GUN CARTRIDGE

Raymond L. Mosser, Fremont, Ohio

Application May 25, 1953, Serial No. 356,970

2 Claims. (Cl. 102—38)



1. A cartridge for guns comprising a shell having a projectile receiving bore in its forward end, a firing pin carried by and movable through the closed end of the shell to fire a charge therein, a projectile slidingly mounted in said bore, spring means carried by the shell and frictionally engaging the sides of the projectile, said projectile having one or more longitudinally extending spiral grooves in its outer side wall, pins projecting from the shell into said grooves to give the projectile a spiral movement in flight, and an explosive cap within the shell bore on one end of the projectile and capable of explosion by an inward striking movement of the firing pin thereagainst to impart flight to the projectile.

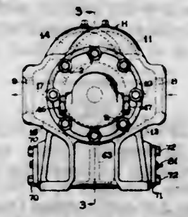
2,746,391

ROTARY PUMP

Joseph F. Jaworowski, Cleveland, and Norbert Jaworowski, Lakewood, Ohio, assignors to Shockey Corporation, Cleveland, Ohio, a corporation of Ohio

Original application June 28, 1948, Serial No. 35,618, now Patent No. 2,696,787, dated December 14, 1954. Divided and this application January 19, 1953, Serial No. 332,056

2 Claims. (Cl. 103—42)



1. A vane type rotary pump including a housing structure having a pump chamber, said pump chamber having an inlet port and a discharge port, a rotor supported substantially in line contact with the wall of said pump chamber for rotation therein, said housing having an inlet opening and a discharge opening and inlet and discharge passages leading respectively from said inlet opening to said inlet port and from said discharge port to said discharge opening, a wall between said passages having a by-pass port extending therethrough, oppositely facing valve seats at said by-pass port, said housing having a pair of identical cylindrical bores axially aligned with said by-pass port and disposed on opposite sides thereof, an open ended cylinder removably secured in one of said bores, an end cover plate removably secured at the outer end of the other of said bores, a piston disposed in said cylinder, a tubular valve stem member projecting from said piston, a valve carried by said valve stem and adapted to seat on one of said valve seats to close said by-pass port, an adjustable spring abutment member carried by said end cover plate within said other of said bores, and spring means between said abutment and said valve, said spring means tending to hold said valve seated, one end of said piston and the adjacent side of said valve being exposed to fluid in said pump discharge passage, the exposed area of said side of said valve being greater than the exposed area of said one end of said piston, and said tubular valve stem connecting said pump inlet passage to said cylinder whereby the other end of said piston is exposed to the pump inlet pressure.

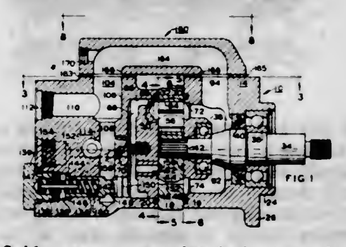
2,746,392

POWER TRANSMISSION

Ernst F. Klessig, Berkley, and Glenn M. Jones, Farmington, Mich., assignors to Vickers Incorporated, Detroit, Mich., a corporation of Michigan

Application November 23, 1951, Serial No. 257,908

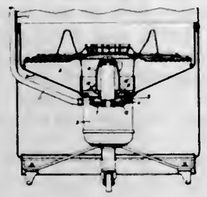
5 Claims. (Cl. 103—42)



1. In a fluid pressure generating device; pumping mechanism having suction and delivery zones; a housing for said pumping mechanism having therein external delivery and return connection ports; means in said housing form-

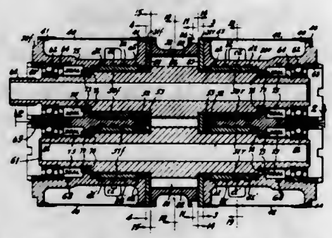
ing a delivery passage connecting said delivery port to said delivery zones; a reentrant return passage comprising means forming a first-fluid passage in said housing connected to said return connection port and having an outlet from said housing, means forming a second fluid passage in said housing having an inlet to said housing and leading to said suction zones, and a manifold block secured to said housing and having therein means forming a third fluid passage interconnecting the outlet of said first fluid passage and the inlet of said second fluid passage; and an external tank connection port in said manifold block leading to said third fluid passage.

2,746,393
CENTRIFUGAL DRAINAGE PUMP
Henry C. Sway, Bridgeport, Conn., assignor to General Electric Company, a corporation of New York
Original application February 9, 1949, Serial No. 75,466, now Patent No. 2,654,377, dated October 6, 1953. Divided and this application May 10, 1952, Serial No. 287,149
2 Claims. (Cl. 103—103)



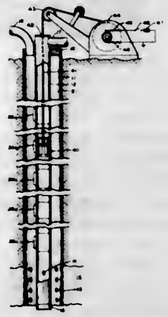
1. A centrifugal drainage pump comprising a pump casing having a discharge port, a rotary impeller mounted therein, a cover for the pump casing shaped to form a sump to receive drainage fluid, said cover being provided with a plurality of vanes located in said sump substantially tangential to the pump shaft so as to divide said cover into a plurality of sectors including one sector overlying the discharge port in the pump casing, each of said sectors except said one sector having a port through which fluid may flow into the pump casing.

2,746,394
GEAR PUMP
John Dolza, Davisburg, Earl W. Rohrbacher, Detroit, and John Zimmerman, Grosse Pointe Woods, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 11, 1951, Serial No. 241,432
6 Claims. (Cl. 103—126)



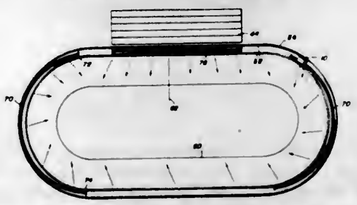
1. A gear pump for pressurizing a liquid comprising a gear housing having an inlet and an outlet, shaft bearings, parallel shafts supported by said shaft bearings and extending through the housing and providing meshing gears in the housing and each shaft having two cylindrical portions located at opposite sides of the meshing gears and adjacent thereto, four sleeves, respectively, receiving the cylindrical portions and each sleeve having a plurality, more than two, of liquid receiving pockets which are defined by longitudinally extending grooves closed at their ends and further closed by portions of the cylindrical portions of the shafts and spaced circumferentially by sealing segments on said sleeves having close clearance with said cylindrical portions, and means providing bearing supports and sleeve supports and ducts which connect the pockets of each sleeve respectively with regions of the pump at which the liquid is at different pressures, the location of the pockets, the areas of the pockets and the unit liquid pressure at the pockets being such as substantially to balance out the forces to which the shaft bearings are subjected by the gear tooth loading and the hydraulic loading of the pump.

2,746,395
GAS LIFT SYSTEM
Paul G. Carpenter, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application December 10, 1951, Serial No. 260,825
12 Claims. (Cl. 103—233)



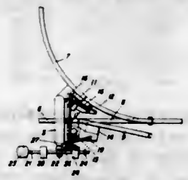
1. In combination, tubing suspended in a well, a series of vertically spaced valve units mounted along said tubing, each valve unit including a valve having an actuating member formed from magnetic material, a valve actuating assembly, means for lowering said assembly into said well, said assembly having an actuating member of magnetic material, one of (*a*) said actuating members on said assembly and (*b*) said actuating members on said valves taken collectively being magnetized whereby a magnetic attraction is set up between said members to actuate one of said valves each time said assembly passes adjacent a valve unit.

2,746,396
MOBILE CAMERA MOUNTING PLATFORM
Maurice C. Davis and Leland K. McIntyre, San Francisco, Calif.
Application May 5, 1952, Serial No. 286,168
8 Claims. (Cl. 104—75)



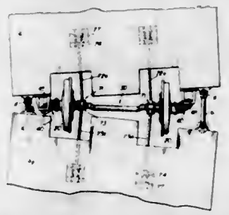
1. The combination of a track and a carriage movable therealong, said carriage having a rotatable platform adapted to have a camera mounted thereon, means for rotating said platform as said carriage moves along said track, said means including a guideway mounted between rails of said track, a depending rotatable arm carried by said platform engageable by said guideway and rotatable thereby in response to movement of the carriage, said guideway being mounted for vertical movement in opposite directions into and from engagement with said arm.

2,746,397
AUTOMATIC SWITCH FOR OVERHEAD TRACK
Sidney Le Fiell, San Francisco, Calif.
Application August 30, 1954, Serial No. 452,845
3 Claims. (Cl. 104—101)



1. A switch unit for overhead tracks comprising a straight portion of track, a curved portion of track, the end of the curved portion being spaced from the straight portion and in the same horizontal plane therewith, a yoke connecting each of said track sections, the straight section of track having a portion of its upper section cut away to form a recess, said curved track section having its adjacent end cut away to form a ledge, a walking beam pivoted to said yoke, a link secured to each end of said walking beam, and a switching element pivotally connected to each of said links and to its respective track sections, whereby movement of said walking beam will move alternately one of said switching elements into said recess in said straight track section or from said recess to said curved section.

2,746,398
AXLE STEERING MECHANISM FOR RAILWAY VEHICLES
Angel Torán Tomás, Madrid, Spain, assignor to Patentes Talgo, S. A., Madrid, Spain, a corporation of Spain
Application February 4, 1954, Serial No. 408,100
6 Claims. (Cl. 105—4)



5. In a railway vehicle having an articulated body including two pivoted rigid sections and a dead axle and a pair of wheels supporting the adjacent ends of the two sections, an axle steering mechanism comprising two levers of the first class fulcrumed on the axle for relative rotation about the axis of the wheels, one of said levers being fixed on the axle and the other being turnably mounted on the axle, four bars connecting the levers to the sections as follows: a first bar connecting one arm of one lever to one section, a second bar connecting the other arm of said lever to the other section, a third bar connecting one arm of the other lever to one of the sections and a fourth bar connecting the other arm of this lever to the other section, so that said bars steer the axle and two of them restrain rotation of the axle about the axis of the wheels.

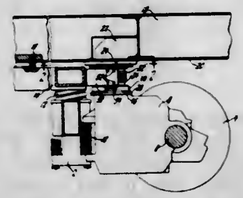
2,746,399
ARTICULATED RAILWAY TRAINS
Angel Torán Tomás, Madrid, Spain, assignor to Patentes Talgo, S. A., Madrid, Spain, a corporation of Spain
Application June 26, 1951, Serial No. 233,515
10 Claims. (Cl. 105—4)

1. In a railway vehicle, the combination with an articulated body consisting of rigid sections connected by vertical pivots, of a wheel axle, means for supporting the adjacent ends of two sections on the axle, and means independent of the supporting means for steering the



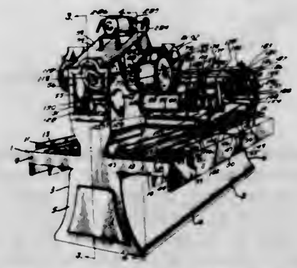
axle comprising a lever of the first class fulcrumed on the axle at one side of its middle point, and bars connecting the two arms of the lever to eccentric points of the two sections.

2,746,400
RAILWAY VEHICLE TRACTION MOTOR COOLING SYSTEM
William F. Holin, Riverside, Ill., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 5, 1952, Serial No. 318,880
11 Claims. (Cl. 105—59)



1. In a locomotive, a locomotive truck frame having supporting wheels rotatably attached thereto, a traction motor housing supported on said frame, a bolster supported on said frame, a locomotive body supported on said bolster, a surface defining the terminus of a cooling passage in said locomotive body, a surface defining an opening in said traction motor housing, and duct means supported on said bolster and connecting said terminus with said opening to conduct cooling media supplied to the passage in said locomotive body to said traction motor housing, the ends of said duct means engaging said surfaces and being slidable thereon.

2,746,401
DOUGH ROLLING MECHANISM OF A DOUGH MOLDING MACHINE
Irving M. Archer, Dallas, Tex.
Application July 28, 1950, Serial No. 176,447
6 Claims. (Cl. 107—9)



3. In a molding machine, a frame, a dough carrying conveyor extending along the frame, a pressure board, a pair of pressure board supports carried by the frame at each end of the pressure board, transverse shafts carried by the pressure board, means vertically movable on the supports and carrying the ends of the transverse shafts for independently raising and lowering the ends of the pressure board relatively to the dough carrying conveyor to support the pressure board at an angle to the dough carrying conveyor for controlling the pressure and time

that the dough is acted upon by the pressure board while the dough is carried on the carrying conveyor, one pair of said supports being rigidly carried on the frame and the pressure board being pivoted on the transverse shaft associated with the rigid supports, and means pivotally mounting the other pair of supports on the frame to accommodate said supports to the angular adjustment of the pressure board.

2,746,402
ICE CREAM MOLD
Floy Baxter, Fort Lauderdale, Fla.
Application October 6, 1954, Serial No. 460,684
4 Claims. (Cl. 107—19)



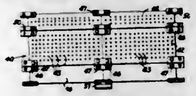
1. In a mold for forming a composite confectionary product, the combination of a plurality of tubular mold members of different diameters disposed concentrically one within the other, each of said members being open ended and providing a substantially uninterrupted tubular mold surface extending continuously throughout its length, a pair of end closures each provided with an outer annular flange disengageably embracing one end of the outermost one of said mold members and an inner annular flange separably engaged with the end of another one of said mold members, said outer annular flanges extending longitudinally of the mold for a material portion of its length and one of said inner annular flanges being substantially shorter than the other, and a handle pivoted to said other one of said mold members at the end thereof opposite said shorter inner annular flange.

2,746,403
BREAD MOULDING
Francis Frederick Hansen, Pittsburgh, Pa.
Application May 14, 1952, Serial No. 287,757
3 Claims. (Cl. 107—54)



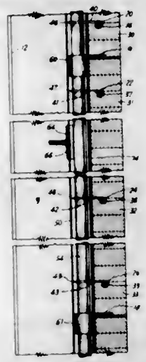
1. A continuous method of moulding loaves of bread dough comprising advancing a lump of dough in a substantially unidirectional straight line path while presheeting the dough by compressing, kneading, and extruding it to arrange the protein strands of the dough parallel to the line of movement of the presheeted dough to form a flat elongated strip, bodily carrying the strip from the presheeting operation through a sheeting operation in said unidirectional path and turning the strip while supported in a flat position while in transit through an angle of approximately 90° to the line of advancement of the strip to form the protein strands into a lattice like cross weave structure then curling the sheeted strip while in its turned relation to the line of advancement to form a dough roll and pressure rolling the dough roll while it advances in said unidirectional line of movement.

2,746,404
SECTIONAL FLAME SUPPRESSOR TUBE
Maurice H. Rottersmann, Webster Groves, Mo.
Application August 20, 1951, Serial No. 242,638
2 Claims. (Cl. 110—1)



1. A flame suppressor tube comprised of tubular sections arranged in end-to-end relation, each tubular section including a plurality of substantially rectangular plates angularly arranged in edge-to-edge relation to form a tube of polygonal cross-section, a plurality of said plates being provided with numerous openings, a plurality of bracket members each having portions overlapping a pair of adjacent corner portions of the plates of one section and the axially adjoining pair of adjacent corner portions of the next section, fastening elements connecting each corner portion to its overlapping bracket member portion to provide for end-to-end assembly of the plates of axially adjacent sections, and a plurality of axially spaced supports attached along one side of the tube.

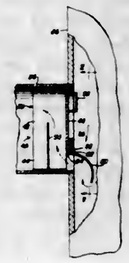
2,746,405
AIR COOLED REFRACTORY WALL CONSTRUCTION FOR FURNACES
James D. McCullough, New York, N. Y., assignor to The Babcock & Wilcox Company, Rockleigh, N. J., a corporation of New Jersey
Application April 15, 1950, Serial No. 156,109
6 Claims. (Cl. 110—1)



2. In an air cooled furnace wall construction, an inner wall consisting of panels of firebrick, an outer wall including metallic sections associated in a gas tight manner, supports for the outer wall, horizontally disposed frame members secured to said supports, vertically extending tubular members disposed between the outer and inner walls, sleeves secured to the horizontally disposed members and having the tubular members slidably fitting therein and extending therethrough, the tubular members having a height of the order of the height of the wall, and anchor means extending outwardly from the panels and engaging the tubular members at positions between successive horizontally disposed members.

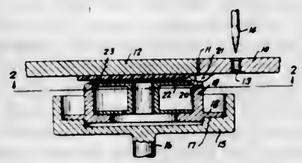
2,746,406
FURNACE FLUE AREA REDUCING DAMPER OR BAFFLE STRUCTURE
Urho Nicholai Karjala, Cloquet, Minn.
Application June 26, 1952, Serial No. 295,732
4 Claims. (Cl. 110—97)

1. A damper adapted for use with a furnace converted to utilize a blower and having a smoke pipe, said damper comprising a sleeve adapted to be received in an intake end of the smoke pipe, said sleeve being provided with a baffle system for reducing the effective size of the smoke pipe, means for securing said damper within a smoke pipe, said baffle system including a flat baffle at one end



of said sleeve and closing the upper portion thereof, a transversely curved baffle secured adjacent to the lower end of said flat baffle and extending downwardly and outwardly beyond the sleeve in spaced relation thereto for directing the flow of gases into a smoke pipe provided with the damper below said baffle.

2,746,407
SEWING MACHINE
Waldemar A. Ayres, Lakewood, Ohio, assignor to White Sewing Machine Corporation, Lakewood, Ohio, a corporation of Delaware
Application January 25, 1954, Serial No. 405,723
2 Claims. (Cl. 112—228)



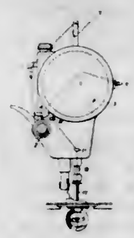
1. In a sewing machine of the type having a horizontal rotary hook beneath the bed plate and at one side of and adjacent to the path of movement of the vertically reciprocating needle and rotatable on a vertical axis, in combination, a cup-shaped rotary hook provided internally and adjacent its bottom with a horizontal annular supporting surface, a substantially cup-shaped bobbin holder or case nested in said rotary hook and provided adjacent its inner end with an external annular flange engaging said horizontal supporting surface of said rotary hook and acting to support said bobbin holder or case in said rotary hook so said hook can have rotation relative to said holder or case while the latter can have vertical movement relative to said hook, said bobbin holder or case being provided in its upper edge with a notch, a bed plate above said rotary hook and bobbin case or holder and provided on its underside with a lug extending into said notch and restraining said bobbin case or holder against rotation, and a pad of cushioning material on the underside of said bed plate and overlying the upper end of said bobbin case or holder with a clearance therebetween sufficient to enable a thread extending from a bobbin mounted in said case or holder to pass between the upper end of the case or holder and said pad, said pad acting to limit vertical movement of said bobbin case or holder relative to said rotary hook and thus to maintain said case or holder in assembled operative nested relationship within the cup-shaped rotary hook.

2,746,408
SEWING MACHINE
Waldemar A. Ayres, Lakewood, Ohio, assignor to White Sewing Machine Corporation, Lakewood, Ohio, a corporation of Delaware
Application January 25, 1954, Serial No. 405,721
4 Claims. (Cl. 112—229)



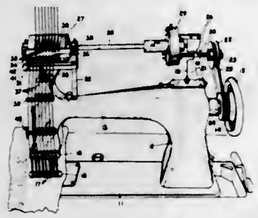
1. A bobbin case adapted for use with the rotary hook or shuttle of a sewing machine and comprising a substantially cup-shaped member adapted to mount therein a thread bobbin and provided with a central sleeve adapted to extend over the post of the rotary hook or shuttle, an arcuate thread tensioning spring plate on the exterior of a portion of the wall of said member and of a radius slightly less than the radius of curvature of said wall and between which plate and said wall the thread from the bobbin is adapted to pass, and adjustable means swingably mounted coaxially of said sleeve and on said member outwardly of the bottom thereof and having a portion extending over the outer side of said plate and slidably pressing thereon and movable lengthwise of the plate to cause the plate to impart variable tensioning effects on the thread in accordance with the adjusted position of said adjustable means.

2,746,409
THREAD TENSIONING DEVICE FOR SEWING MACHINES
Toru Matsubara and Denzaburo Terayama, Kitatama-gun, Tokyo, Japan, assignors to Tokyo Juki Kogyo Kabushiki Kaisha, Tokyo, Japan
Application January 22, 1952, Serial No. 267,588
Claims priority, application Japan March 20, 1951
2 Claims. (Cl. 112—248)



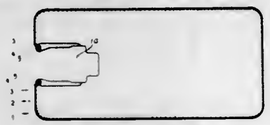
1. A sewing thread tensioning device in a sewing machine of the type in which a rotary hook makes two revolutions during a sewing cycle, comprising two discs concentrically attached to the main shaft of the machine, two pin-shaped sewing thread contact members fixed on said two discs, two thread guides, one on each side, set outside said discs, the angle formed by the center of rotation of said discs and the thread guides and the angle formed by said center of rotation and the two sewing thread contact members being substantially 120° and the ratio of the distance from said center of rotation to one of the contact members to the distance from said center to the other contact member is between 0.3 and 0.8.

2,746,410
UNIFORM TENSION FEEDING MECHANISM
Erby L. Passons, Chattanooga, Tenn., assignor to Broad Street Machine Company, a partnership composed of E. L. Passons and W. R. Reese, Chattanooga, Tenn.
Application November 12, 1953, Serial No. 391,597
4 Claims. (Cl. 112—254)



1. In a multiple thread sewing machine having a frame and a plurality of sewing needles and drive means for reciprocating said needles, a thread feeding and tensioning mechanism comprising a feed roller rotatably mounted on said frame in spaced relation to said needles, means for driving said roller, guide means mounted adjacent said roller for guiding multiple threads substantially parallel to each other and in contact with the surface of the roller for a distance greater than one-half the circumference of the roller, said guide means having a first row of apertures formed therein parallel to the axis of the roller for guiding separate threads approaching the roller, and a second row of apertures formed in said guide means parallel to the axis of the roller for guiding separate threads leaving the roller, the apertures in the first row lying substantially in planes with apertures in the second row, said planes being normal to the axis of the roller, and the first row of apertures being spaced apart from the second row a distance less than the diameter of the roller.

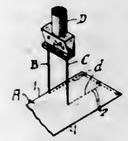
2,746,411
BASE PLATE FOR SEWING MACHINES
Alessandro Pagni, Milan, Italy, assignor to Vittorio Necchi Societa per Azioni, Pavia, Italy
Application April 14, 1953, Serial No. 348,636
Claims priority, application Italy April 28, 1952
1 Claim. (Cl. 112—260)



A sewing machine supporting structure comprising a base plate having a recess at one side thereof for a needle plate, said base plate having a groove extending throughout the periphery thereof, a strip of yielding material having a tongue positioned in said groove, said strip covering the outside periphery of said base plate, a wire located within said strip having a length exceeding the length of said strip to provide a free end of said wire at each end of said strip and means located at the sides of said recess for fastening said free ends of said wire to said base plate and thereby secure said strip to said base plate.

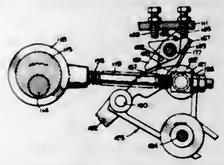
2,746,412
METHOD OF STITCHING FASTENER TAPE FOR FORMING FASTENER SECTIONS
Leo Roseman, Newark, N. J.
Application May 5, 1953, Serial No. 353,200
3 Claims. (Cl. 112—262)

1. In a method of making fastener sections from a long tape having fastener elements spaced longitudinally thereof and extending toward one longitudinal edge of the tape, and elongate straps projecting perpendicularly from the other longitudinal edge of the tape with the juxtaposed longitudinal edges of two adjacent straps disposed in spaced relation to each other and between two adjacent fastener elements, the steps consisting in arranging at least two needles in parallel relation spaced apart equidistantly transversely of the tape and in cooperative relation to other elements of a stitch-forming mechanism with one needle disposed above one longitudinal edge of the tape between two adjacent fastener elements and with the other needle disposed intermediate the width of the tape, relatively moving the needles and the tape in the direction of spacing of said needles and transversely of the tape with the tape beneath said needles until the second-mentioned needle is disposed above the opposite longitudinal edge of the tape and simultaneously reciprocating said needles into and out of said tape during said



relative movement of the tape and the needles and causing each needle to form one line of stitches in continuation of the line of stitches formed by the other needles, thus providing at the same time a plurality of aligned lines of stitches extending transversely of the tape from edge to edge thereof between said adjacent fastener elements and along the edge of one of said straps, then relatively moving the tape and the needles longitudinally of the tape a distance less than the distance between said two fastener elements while reciprocating the needles, and thereafter relatively moving the tape and the needles transversely in the direction opposite to that of the first-mentioned transverse movement while reciprocating said needles until the first-mentioned needle is again disposed above the first-mentioned longitudinal edge of the tape between said two fastener elements to form a plurality of other aligned lines of stitches each produced by one needle between said two fastener elements and along the adjacent edge of the other of said two straps.

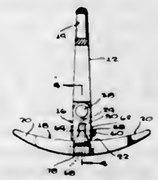
2,746,413
CAN END FEEDER
William B. Peterson, Jr., Long Beach, Calif., assignor to Angelus Sanitary Can Machine Co., Los Angeles, Calif., a corporation of California
Application December 24, 1951, Serial No. 263,052
9 Claims. (Cl. 113—114)



1. In a feeder for can bodies and ends therefor, the combination of: a conveyor for feeding can bodies consecutively in a given timed relation to a point at which a can end is to be assembled with each of said bodies; a conveyor for delivering can ends to said point in the same aforesaid timed relation for the assembly of said ends with said bodies; a can end magazine; means for feeding ends from said magazine successively to said can end conveyor; a rocker connected to said can end feed means for actuating the latter when said rocker is oscillated; reciprocating means operating in timed relation

with said conveyors and connected to said rocker to oscillate the latter to effect the actuation of said can end feed means; a spring between said reciprocating means and said rocker whereby movement of said rocker in one direction of each oscillation is transmitted thereto from said reciprocating means through said spring, said rocker having a stop shoulder; a latch positioned to drop in front of said shoulder a short distance from the beginning of a reciprocating movement imparted to said rocker through said spring to cause said spring to be compressed and thus prevent the response of said rocker to said spring thereby preventing the actuation of said can end feed means by said rocker; a can body responsive latch actuating arm disposed to be engaged successively by can bodies travelling on said can body conveyor; and means for yieldably connecting said arm to said latch whereby movement of said arm in response to engagement therewith by a can body on said conveyor yieldably urges said latch away from engagement with said shoulder whereupon said latch is yieldably shifted out of the path of said shoulder at the instant said shoulder is shifted out of pressural engagement with said latch thereby freeing said rocker from said latch to cause subsequent reciprocating movements of said reciprocating member to be transmitted through said spring to said rocker, and the actuation by the latter of said can end feed means to cause said can end feed means to feed a can end to the end conveyor whereby said end is delivered to said point in assembled relation with the particular can body, by the engagement of said arm with which, said end was caused to be fed to said end conveyor.

2,746,414
RETRIEVABLE ANCHOR
Robert Roberts, East Cleveland, Ohio
Application March 26, 1954, Serial No. 418,989
3 Claims. (Cl. 114—208)



1. A retrievable boat anchor comprising a stem, a two-way clevis carried by said stem for movement in an arcuate path about an axis perpendicular to the stem, an anchor base rotatably carried by said clevis at the end thereof remote from said stem for movement in an arcuate path about an axis perpendicular to said clevis and at right angles to the path of movement of said clevis, and a shear pin interposed between said stem, clevis and anchor base to normally prevent movement of said clevis and said base in their arcuate paths, said pin adapted to shear under abnormal stress to permit movement of said clevis and said anchor base in their arcuate paths.

2,746,415
LIQUID LEVEL SIGNALLING DEVICE
Joseph B. Campbell, Jr., Glen Cove, N. Y.
Application December 31, 1954, Serial No. 479,050
3 Claims. (Cl. 116—109)

1. For use with a closed container having a filler pipe extending upwardly from an upper end of the container, a liquid level signalling device for insertion in the filler pipe, said device comprising a tube having open upper and lower ends adapted to be loosely inserted in said filler pipe with its lower end portion projecting into the container and with its upper end projecting out of said filler pipe and adapted to be connected to a source of fluid, means closing said filler pipe around said tube, said tube being adjustably movable upwardly and downwardly in said filler pipe, stop means carried on said lower end portion of said tube engageable with the lower end of said filler pipe for indicating when said tube has been moved upwardly to a predetermined height within said container, a by-pass disposed in said tube and having its lower end communicating exteriorly thereof inter-



mediate the lower end of said tube and said stop means, said by-pass providing a passage for air entrapped over the liquid in said container while said container is being filled through said tube, and a whistle means carried on the upper end of said by-pass exteriorly of said tube operable by the air escaping through said by-pass while said container is being filled to the level of the lower end of said by-pass.

2,746,416
FILTER CLOGGING INDICATOR
Richard H. Aufderheide, Indianapolis, Ind., assignor to Rex Metal-Craft, Inc., Indianapolis, Ind., a corporation of Indiana
Application June 23, 1954, Serial No. 438,818
4 Claims. (Cl. 116—117)

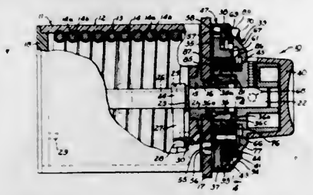


1. An indicator for indicating degree of air flow through a filter in the air intake conduit of a blower in a forced air flow type heating furnace, indicating only during operation of the blower, comprising a housing; a vane rockably supported on an axis transversely extending across the upper side of the housing to have the vane hang downwardly and swing freely therein; a needle extending generally upwardly from and fixed in relation to said vane to swing therewith; an indicia card traversed by said needle within the limits of swinging of said vane; a tube entering said housing to one side of said vane and open from its outer end, and further having an opening within the housing; means adjustably varying the area of said opening within the housing for individual furnace conditions; said tube by its outer end connecting to said furnace on the discharge side of said blower; said housing having an opening on the other side of said vane removed from said tube and discharging into the atmosphere; said vane and needle being in effect an integral unit and of distributed weight from said axis to induce by gravity a return of the needle always to an end position on said card when said blower is inoperative.

2,746,417
INDICATING DIAL

Howard B. McCord, La Canada, and Herbert E. McAlister, Pasadena, Calif., assignors, by mesne assignments, to Beckman Instruments, Inc., Fullerton, Calif., a corporation of California

Application March 9, 1953, Serial No. 341,094
15 Claims. (Cl. 116—124)

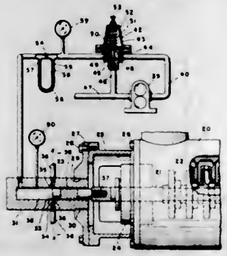


1. In a device for controlling and indicating the angular position of a rotor, the combination of: a first rotatable indicator having a gear segment thereon; a control knob; means for connecting said control knob and said first indicator to the rotor; a base; a second rotatable indicator coaxial with said first indicator and having a gear thereon, said second indicator being rotatably mounted on said base; a jump gear rotatably mounted on said base, said jump gear being meshed with said gear on said second indicator and meshing with said gear segment on said first indicator once per revolution of said first indicator so as to rotate said second indicator incrementally at the frequency of rotation of said first indicator; and means for preventing rotation of said second indicator when said jump gear is out of mesh with said gear segment on said first indicator.

2,746,418
POSITION INDICATOR FOR SHAFTS

Isidor R. Loss, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, New York, N. Y., a corporation of New Jersey

Application April 16, 1954, Serial No. 423,706
1 Claim. (Cl. 116—124)



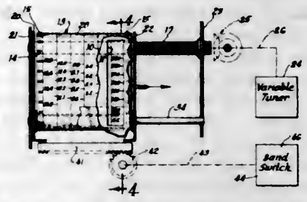
The combination with a casing and a shaft in the casing, of a body adjacent an end of the shaft having a chamber and an escape opening for the chamber, a member in the chamber carried by the shaft for movement axially therewith and controlling the effective size of the escape opening by axial movement of the shaft, means for feeding a restricted supply of pressure fluid to the chamber, and means for indicating variations in the pressure of the fluid in the chamber occurring whenever the member moves axially of the chamber.

2,746,419
DIAL MECHANISM

Igor B. Serge, Beverly Hills, Calif., assignor to Lear, Incorporated, Grand Rapids, Mich.

Application December 11, 1952, Serial No. 325,432
8 Claims. (Cl. 116—124.1)

1. Dial mechanism comprising an elongated, self-coilable strip having a plurality of longitudinally-extending columns of indicia thereon, a carriage for supporting said strip for longitudinal movement, a panel confronting said strip having a window therein for exposing a selected one of said columns, means on said carriage re-

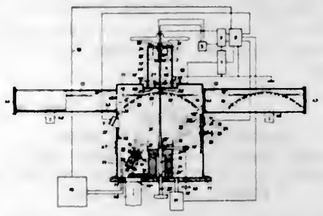


ceiving the coiled ends of the strip, means for longitudinally traversing the strip past the window, and means for imparting transverse movement to said carriage to present a selected column before the window.

2,746,420
APPARATUS FOR EVAPORATING AND DEPOSITING A MATERIAL

Karl Heinz Steigerwald, Mosbach (Baden), Germany

Application November 4, 1952, Serial No. 318,580
Claims priority, application Germany November 5, 1951
32 Claims. (Cl. 118—8)

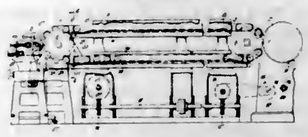


1. An apparatus for evaporating a material and depositing the evaporated material as a layer on a member it is desired to coat comprising, in combination, means for emitting a beam of electrically charged particles; means for directing said beam of electrically charged particles to a spot on the surface of the material so as to heat said spot and evaporate the material so as to form a cloud; means for adjusting said directed beam; means responsive to the temperature of said spot for controlling said adjusting means; and means for positioning said member outside of said beam of electrically charged particles and within said cloud of evaporated material so that said evaporated material is deposited from said cloud on said member as a layer.

2,746,421
MACHINE FOR COATING, PRINTING, AND DRYING TUBULAR CONTAINERS

Maurice Biddulph, Pendleton, Salford, England, assignor to Universal Metal Products Limited, Pendleton, Salford, Lancashire, England, a British company

Application August 7, 1952, Serial No. 303,054
3 Claims. (Cl. 118—46)

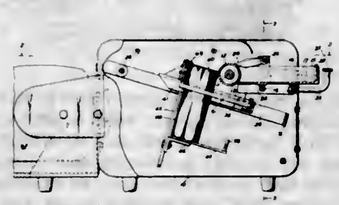


1. A machine for performing printing and coating operations on collapsible tubes, comprising tube coating means, tube printing means, a drying oven casing, a series of horizontal mandrels, a series of horizontal arbors arranged to hold the mandrels and said arbors being joined together in the form of a continuous chain, and indexing means for the chain to bring tubes mounted on the mandrels into contact with the coating and printing means and to carry the tubes through the drying oven casing.

2,746,422
LABEL FEEDING AND GUMMING APPARATUS

Robert J. Newman and David S. Friend, London, England, assignors to D. Trapow & Company Limited, London, England

Application October 27, 1953, Serial No. 388,516
Claims priority, application Great Britain October 31, 1952
4 Claims. (Cl. 118—236)

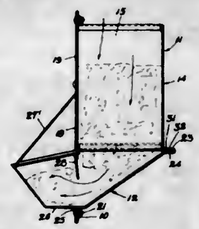


1. A label feeding apparatus comprising a gumming roller, means for rotating the gumming roller continuously, means for carrying a stack of labels, means for locating said label carrying means normally in the position in which the edge of the label to be removed is engaging directly on the gumming roller rotating in the direction to move off the edge away from the label at the successive lines of contact, a manually operable element, and operating means connected between said element and said label carrying means which upon operation of said element effects relative movement between the carrying means and the roller in a direction such that the label will move relatively to the roller transversely of the radius of the roller at the line of contact, said operating means moving the label only over a small fraction of the length of the label in the direction of its movement sufficient to enable the label to be caught up by the roller.

2,746,423
FEEDING STATION FOR SMALL STOCK

Boyce W. Runion, Portland, Oreg.

Application August 28, 1953, Serial No. 377,111
3 Claims. (Cl. 119—52)

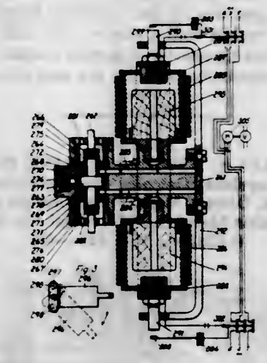


1. In a feeding device, a feed-holding hopper adapted to be attached to a fence of an enclosure, said hopper being arranged exteriorly of the enclosure and including a vertically disposed back wall and vertically disposed spaced parallel side walls, said side walls terminating in a transverse flange, the bottom edges of said side walls defining guide lips, an elongated horizontally disposed strip projecting rearwardly from the bottom of said back wall and provided with an aperture, a rectangular frame connected to the flanges of said hopper and contiguous to the inner surface of said fence and detachably connected to said frame and flanges, there being a rectangular opening in the lower portion of said plate, and a tray having its upper end open for receiving feed from said hopper, said tray including spaced parallel vertically disposed side members provided with downturned fingers for slidably engaging the lips on said hopper, a portion of said tray projecting through the opening in said plate whereby animals can gain access to the feed therein, and a finger projecting from the rear of said tray and provided with an aperture for registering with the aperture in said strip whereby a securing element can be projected through these registering apertures.

2,746,424
BALANCED VALVE FLUID-ACTUATED CONTROL DEVICE

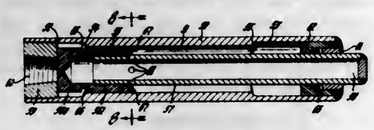
Carl Gustaf Hård af Segerstad and Alvar Torsten Westberg, Sandviken, Sweden, assignors to Sandvikens Jernverks Aktiebolag, Sandviken, Sweden

Application May 7, 1952, Serial No. 286,637
2 Claims. (Cl. 121—38)



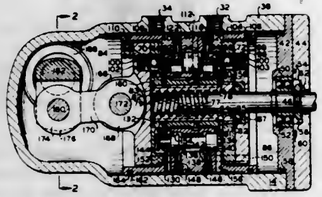
1. A device of the class described responsive to small mechanical displacements comprising, in combination with two pressure chambers, each provided with throttled inlet passages connected to a common source of fluid under pressure and provided with throttled outlet passages, means movable in response to said mechanical displacements for simultaneously controlling the degree of throttling of all of said inlet and outlet passages, whereby any displacement of said movable means will produce an increase in the effective cross-sectional area of the inlet passage of one chamber and the outlet passage of said other chamber, while simultaneously reducing the effective cross-sectional area of the outlet passage of said first-named chamber and the inlet passage of said second-named chamber, a pair of closed fluid actuable housings of variable volume, said volumes being variable in accordance with any difference between the fluid pressures in the two housings of said pair, and individual duct means connecting each of said housings with one of said throttled outlet passages; the provision of a pair of bleeder outlets communicating individually with each of said duct means; and movable closure means for simultaneously closing both of said bleeder outlets, said fluid being air and means being provided whereby said bleeder outlets communicate with the circumambient atmosphere, said bleeder outlets comprising a flat surfaced member having orifices formed in said surface, and said closure means comprising a pivotally mounted lever and closure plates carried by said lever and engaging said flat surface, said plates being arranged to close said orifices simultaneously and to substantially equal extents in response to movement of said lever.

2,746,425
AUTOMATIC RETURN AIR PISTON AND CYLINDER DEVICE
Eugene P. Schafer, East Cleveland, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 21, 1951, Serial No. 257,622
9 Claims. (Cl. 121—38)



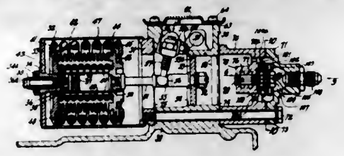
1. An automatic return air cylinder comprising a closed end cylinder having a bore therethrough and counterbores adjacent the ends thereof, a piston having the head portion thereof smaller in diameter than the remainder thereof, the said piston having an O-ring groove thereabout located where the diameter thereof is changed, an O-ring in said groove, a hollow piston rod serving as a compressed air reservoir connected to the large end of said piston and extending in reciprocating sealed relation through one end of said cylinder forming a return air chamber within said cylinder, the said compressed air reservoir having apertures therein located adjacent the said piston communicating with the said return air chamber.

2,746,426
HYDRAULIC POWER STEERING DEVICE
Duncan B. Gardiner, Detroit, Mich., assignor to Vickers Incorporated, Detroit, Mich., a corporation of Michigan
Application March 1, 1954, Serial No. 413,357
6 Claims. (Cl. 121—40)



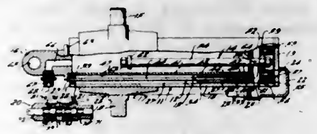
1. An integral hydraulic servomotor and valve mechanism device comprising in combination a cylinder having a fluid operated piston reciprocally mounted therein to form expansible chambers on opposite sides thereof and having a shaft member associated therewith for actuation thereby extending from the cylinder for actuation of a load device, said cylinder having external connection pressure supply and return ports leading to the piston, a servo valve shiftably mounted in the piston having a range of movement from either side of a neutral motor stop position to control the directional operation of the piston, operating means for the servo valve mounted in the piston and including means extending from the piston and the cylinder for selective operation of the servo valve, resilient means biasing the servo valve to the neutral position, means forming pressure supply and return passages and motor operating passages in the piston connecting the cylinder pressure supply and return ports and the expansible chambers to the servo valve, a lock valve in each motor operating passage permitting flow to said chambers and adapted to trap fluid in the motor chambers for locking the piston in the position operated to, a fluid operated member shiftably mounted in the piston and controlled by the servo valve, said member being operated to one position to open one of the lock valves in one position of operation of the servo valve and being operable to another position to open the other lock valve in another operating position of the servo valve, and means returning the member to a neutral valve locking position in the neutral position of the servo control valve.

2,746,427
PRESSURE SENSING APPARATUS
John Dolza, Fenton, and Robert D. Harvey, Huntington Woods, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 31, 1951, Serial No. 208,798
10 Claims. (Cl. 121—41)



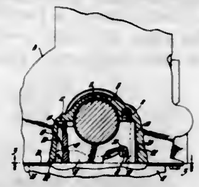
1. Pressure responsive apparatus having in combination, a movable control element which is positioned in accordance with variations in pressure in a fluid medium and means for variably positioning such element upon variations in fluid pressure including an evacuated metal bellows having fixed and movable heads and resilient means opposing collapse of the bellows, a pressure sensing element movable in response to variations in fluid pressure, means controlled by said pressure sensing element for effecting movements of the movable bellows head as said element is moved, means for effecting movement of the control element including a cam and a cam engaging member, one of which is operatively connected with the movable bellows head and the other with the control element, said cam having a contour such that the relation of the displacement of the control element to the displacement of the movable bellows head is in accordance with a predetermined schedule.

2,746,428
PRESSURE FLUID TELESCOPIC CYLINDER MOTOR
Norbert T. Starr, Detroit, Mich., assignor to Gar Wood Industries, Inc., Wayne, Mich., a corporation of Michigan
Application June 13, 1951, Serial No. 231,315
12 Claims. (Cl. 121—46)



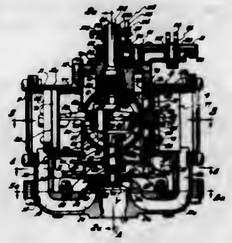
1. A telescopic motor comprising an outer cylinder adapted to be connected to a movable body, a shoulder on said outer cylinder, an intermediate cylinder within said outer cylinder and slidable between a retracted position within said outer cylinder and an extended position against said shoulder, a shoulder on said intermediate cylinder, an inner cylinder slidably mounted within said intermediate cylinder and movable between a retracted position within said intermediate cylinder and an extended position against said intermediate cylinder shoulder, a piston slidable within said outer cylinder, a piston rod extending from said piston through the forward end of said inner cylinder, said piston rod having a lost motion connection to said inner cylinder approximately equal in length to the maximum movement of said inner cylinder relative to said intermediate cylinder, a fluid connection to said inner cylinder, and means for conducting fluid from said connection to said piston, whereby application of fluid pressure through said connection will cause retracting movement of said cylinders.

2,746,429
CRANKSHAFT REAR BEARING CAP OIL SEAL
William H. Vaas, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 9, 1951, Serial No. 230,763
9 Claims. (Cl. 121—194)



1. In a crankshaft supporting device of the type embodying a split bearing assembly having an upper bearing formed in an engine block and a lower bearing formed in a supporting member, in which said engine block also includes a tapered recess formed therein and disposed immediately below the upper bearing, said recess being constructed to receive said lower bearing supporting member therewithin and tapered sealing means being adapted to coact with the tapered recess and the lower bearing supporting member to prevent the leakage of lubricant therebetween.

2,746,430
FLUID FLOW MECHANISM
William E. Steen, South Pasadena, Calif., assignor to A. O. Smith Corporation, Los Angeles, Calif., a corporation of New York
Application December 6, 1952, Serial No. 324,567
4 Claims. (Cl. 121—121)



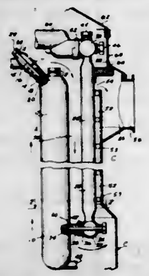
1. A fluid flow mechanism embodying a housing, a pair of horizontally arranged, diametrically opposed cylinders within the housing and axially spaced apart, the inner ends of the cylinders opening to a central chamber defined within the housing, and the outer ends of the cylinders opening to passageways defined within the housing walls, there being a fluid inlet to said chamber and there being a fluid outlet through the bottom wall of the housing, said passageways extending, one each, vertically downwardly from the outer ends of the cylinders, thence horizontally through said bottom wall and finally upwardly through said bottom wall to form a port opening into said chamber, a pair of pistons, one in each of said cylinders, said pistons being rigidly connected for simultaneous movement through their associated cylinders, a valve member mounted on said bottom wall for movement thereover in a manner to selectively put said ports into communication with the central chamber and said outlet, an operative connection between said pistons and said valve whereby piston reciprocation so moves said valve member, said operative connection including a bridge member within the chamber and secured to the bottom wall of the housing, and bridge member spanning the valve, a vertical crank shaft journaled in said bridge member, a crank arm on said shaft below the bridge, a crank pin on the arm and entered for rotation in a socket provided in said valve, all in a manner whereby crank shaft rotation sets up horizontal gyration of said valve member, and means holding said valve member against rotation, said last named means embodying a horizontal shuttle plate resting on top the valve, means on the bridge member limiting upward movement of the shuttle plate, means on the bridge member engaging opposite sides of the shuttle member to restrict it to horizontal reciprocation in one direction, there being an elongated slot in said shuttle plate extending in a direction at a right angle with respect to said one direction, and a non-circular lug on and rigid with respect to the valve member and entered in said slot and engaged with the side-defining walls thereof, said lug being movable lengthwise of the slot.

2,746,431
RODLESS FLUID PRESSURE-OPERATED PUMP
William F. Tebbetts, Huntington Park, Calif.
Application July 31, 1953, Serial No. 371,457
6 Claims. (Cl. 121—157)



1. In a pressure fluid-operated well pump comprising outer tubing and inner fluid-conducting tubing, a fluid-operated motor carried by the lower end of the inner tubing and comprising a body having passages to conduct fluid supplied by the inner tubing, an outer tube depending from the body, an inner tube depending from said body and constituting a motor cylinder, said tubes defining an annular chamber, one of said passages being in direct communication with said annular chamber, the inner tube being open at the bottom and in communication with said annular chamber, another of said passages communicating the inner fluid-conducting tubing and the upper end of said cylinder, a reciprocative master valve in the upper end of said body to control the latter passage, a pilot valve in the lower end of the body and provided with a downwardly directed extension provided with spaced abutments, a motor piston in said cylinder and having longitudinally spaced abutments alternately engaged with the abutments of said pilot valve to reciprocate the same, said piston having a downwardly-facing annular shoulder against which the fluid supplied through the first-mentioned passage constantly impinges to constitute a constant force urging said piston upwardly, the second-mentioned passage, when open, conducting pressure fluid to impinge the top of said piston to create a force larger than the force on the annular shoulder to urge said piston downwardly, passage means connected with the first-mentioned passage and controlled by the pilot valve to control flow of pressure fluid to the master valve to move the latter to a position opening the second-mentioned passage, and means to vent the pressure in the latter passage when the pilot valve is moved by the piston to close said passage means.

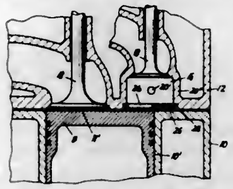
2,746,432
TUBULAR CONDUIT SYSTEM FOR BOILERS AND THE LIKE
Giovanni Rossi, Valle Lomellina, Italy
Application May 10, 1949, Serial No. 92,486
Claims priority, application Italy May 11, 1948
1 Claim. (Cl. 122—360)



A conduit coupling arrangement comprising, in combination, tubular conduit means adapted to contain a fluid having a lower temperature than the temperature outside of said conduit means, said tubular conduit means including a first set of tubular conduit elements and a second set of tubular conduit elements extending parallel to each other, a first transverse conduit element connecting the conduit elements of said first set of conduit elements and communicating with the same, a second transverse conduit element connecting the conduit elements of said second set of conduit elements and communicating with the same, a pair of tubular conduit members having inner ends abutting each other and outer ends secured to and communicating with said first and second transverse conduit elements, respectively, said first and second transverse conduit elements being each formed with an opening located opposite the respective tubular conduit member associated therewith; a threaded bolt having a head abutting against said second transverse conduit element in the region of said opening thereof, said bolt passing through said openings in said first and second transverse conduit elements and through said conduit members; and a nut member fixedly secured to said first transverse conduit element in the region of said opening in the same and being threadedly engaged by said bolt whereby said tubular conduit members are pressed against each other to establish fluid communication between said first and second sets of conduit elements through said first and second transverse conduit elements and said pair of tubular conduit members, said bolt being cooled by the fluid passing through said conduit means whereby by heat conduction also said head of said bolt located outside of said tubular conduit means is cooled.

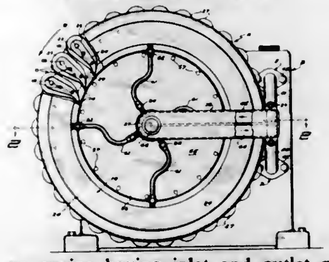
2,746,433
INTERNAL COMBUSTION ENGINE OF INJECTION TYPE WITH A COMBUSTION CHAMBER LATERALLY OFFSET FROM THE CYLINDER SPACE
Friedrich K. H. Nallinger, Stuttgart, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Untertürkheim, Germany
Application December 28, 1951, Serial No. 263,815
Claims priority, application Germany June 14, 1951
6 Claims. (Cl. 123—32)

1. In an internal combustion engine comprising a cylinder block with a cylinder space, a cylinder head fastened to said block and closing said cylinder space, a piston reciprocating in said cylinder space, said piston closely approaching said cylinder head in the upper dead center position thereof, a combustion chamber in said cylinder head, said combustion chamber partially overlapping said cylinder space and partially lying outside thereof as seen in the plan view thereof, said combustion chamber being open in the direction of said cylinder block and providing a communicating opening between said cylinder space and the part of the combustion chamber overlapping the same, a valve in said combustion chamber coaxial therewith, another valve in said cylinder head outside said combustion chamber and above said cylinder space, one of said valves being an inlet valve and the other an outlet valve, said cylinder head being provided with a cut-out portion adjacent said cylinder block, a partition consisting of a substantially flat plate of larger cross section than the cross section of said combustion chamber inserted into



said cut-out portion between said cylinder space and said combustion chamber and separating said combustion chamber from said cylinder block, said plate lying directly adjacent said cylinder head and being held in position solely by the fastening of the cylinder head to the cylinder block so as to be readily removable upon dismounting of the cylinder head from the cylinder block, and openings in said partition for imparting rotary motion to the air passing over from said cylinder space into said combustion chamber with said piston in the upper dead center position.

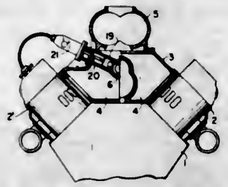
2,746,434
ENGINE COOLING AND FLYWHEEL MECHANISM
William E. Swenson, St. Paul, Minn., assignor to Minneapolis-Moline Company, Hopkins, Minn., a corporation of Minnesota
Application April 28, 1952, Serial No. 284,682
5 Claims. (Cl. 123—41.43)



1. For an engine having inlet and outlet means for circulation of a fluid coolant, cooling mechanism of the character described, comprising in combination a rotary fan having an annular series of generally radially arranged blades, each blade having a chamber with an inlet and an outlet, a central hub forming a rotary part of the fan and having at least one radially extending hollow member connecting the said outlet means to the chamber inlets for centrifugally pumping the coolant into and through the chambers in heat exchanging relation with air blown past the blades, and means for returning the coolant from the chamber outlets to the said inlet means, the said chamber inlets being closer to the axis of rotation than the outlets to cause centrifugal force also to urge the coolant through the chambers.

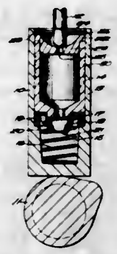
2,746,435
INTERNAL-COMBUSTION ENGINE
Johann Kremser, Hannover, Germany
Application July 31, 1953, Serial No. 371,522
Claims priority, application Germany December 22, 1952
4 Claims. (Cl. 123—55)

1. A V-type two-cycle internal combustion engine comprising an engine block and a crankshaft supported in said engine block, ported engine cylinders mounted in V-formation upon said engine block and projecting therefrom, said cylinders defining a substantially V-shaped space therebetween, a housing disposed within the said space between the said cylinders and secured to the said engine block, and a scavenging receiver formed in said housing and communicating with said ported cylinder,



chambers disposed in said housing coordinated to said cylinders, a fuel pump mounted in each of said chambers, a cam shaft supported within said housing for actuating each of said fuel pumps, a blower disposed on top of said housing and geared to said cam shaft and means for operatively connecting said cam shaft to said crankshaft of the engine.

2,746,436
HYDRAULIC VALVE LIFTER MECHANISM
Draper M. Harvey, Hingham, Mass.
Application July 20, 1951, Serial No. 237,780
5 Claims. (Cl. 123—90)



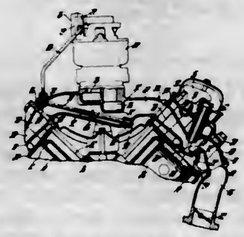
1. In a hydraulic valve lifter mechanism, a cylinder, a piston movably mounted therein, means for supplying lubricating oil to the contiguous surfaces thereof, and means comprising spaced parallel annular V grooves and a drain back channel on one surface for maintaining a lubricating oil film therebetween.

2,746,437
HYDRAULIC VALVE LIFTER
Louis J. Van Slooten, Holland, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application March 30, 1953, Serial No. 345,594
6 Claims. (Cl. 123—90)



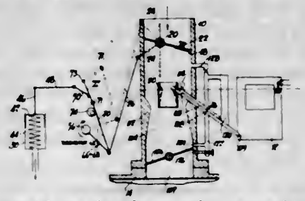
1. In a longitudinally extensible thrust transmitting device comprising slidably interfitted driving and driven members having the side walls of the outer member extending longitudinally beyond the corresponding end of the inner member, means forming a fluid sealing closure for the said end of the inner member, said means being substantially wholly contained within the outer member above the inner member and including a seating member in direct thrust transmitting coaction with said end of the inner member, a bellows having one end seated on said seating member and a ring sealingly securing the other end of the bellows to the outer member, said ring having a portion facing said seating member and in endwise abutting engagement with the bellows.

2,746,438
AUTOMATIC CHOKE
Robert R. Hutchison, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 12, 1953, Serial No. 391,555
6 Claims. (Cl. 123—119)



1. In an engine having two aligned banks of cylinders, an induction system for delivering a combustible charge to said cylinders, a separate exhaust system for each bank of cylinders, a crossover passage interconnecting said exhaust systems, choke means disposed in said induction system for controlling the mixture of said combustible charge, a thermal responsive element on said choke means to actuate said choke in response to temperature changes, over passage in heat exchanging relation with the gases and a tube having a portion thereof disposed in said cross- therein, and baffle means disposed in said portion, one end of said tube being connected to said thermal responsive element.

2,746,439
CARBURETOR
Scott F. Hunt, South Bend, Ind., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Continuation of application Serial No. 575,025, November 14, 1931. This application May 26, 1934, Serial No. 727,648
4 Claims. (Cl. 123—119)

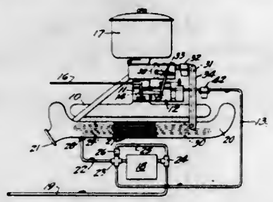


1. In an internal combustion engine, a carburetor in which there is incorporated a choke valve, an element actuated by variations in temperature of the engine operatively connected to the choke valve, means adapted to lock the choke valve in closed position, and means independent of the mentioned element to unlock the choke valve.

2,746,440
CARBURETION APPARATUS
Morten Eriksen, Minneapolis, Minn.
Application December 16, 1953, Serial No. 398,510
7 Claims. (Cl. 123—133)

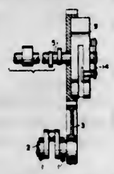
1. A vaporizer system for an internal combustion engine having as conventional elements a source of liquid

fuel, a fuel pump capable of maintaining a constant fuel line pressure irrespective of engine speed, a carburetor, a liquid fuel communication between said conventional elements, an intake manifold, an exhaust manifold and a throttle for said carburetor, said vaporizer system comprising, a branch line leading from said fuel pump outlet, a tubular portion in heat transferring relation with the exhaust manifold and in communication with said branch line, a mixing valve connecting in tandem with said carbu-



retor and having a throttle linkage connected therewith, a gas conduit leading from said tubular portion to said mixing valve, a vapor cut-off valve interposed in said conduit for interrupting the flow of gas therethrough, and a liquid cut-off in said liquid fuel communication between said fuel pump and said carburetor whereby said vapor system will be operatively started when the exhaust manifold has reached a predetermined temperature, said supply of liquid fuel to the carburetor then being interrupted.

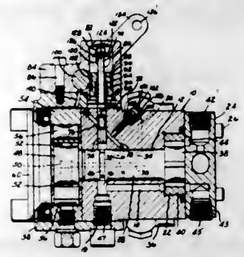
2,746,441
TWO-STROKE CYCLE INTERNAL-COMBUSTION ENGINE
Johann Kremser, Hannover, Germany
Application July 31, 1953, Serial No. 371,518
Claims priority, application Germany November 8, 1952
4 Claims. (Cl. 123—139)



1. A two-stroke cycle internal combustion engine with fuel injection comprising a fuel injection pump having plungers, a cam shaft, compensating weights carried by said cam shaft, said cam shaft being adapted for operation of the plungers of said fuel injection pump and simultaneously to operate as a compensating shaft, a drive gear for said cam shaft operated by said engine, an automatic variable governor responsive to the speed of said engine for the timing of the start of the injection period, and said governor being disposed between said cam shaft and said drive gear.

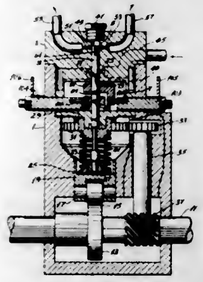
2,746,442
METERING VALVE FOR FUEL PUMP
Vernon D. Roosa, West Hartford, Conn.
Application April 4, 1952, Serial No. 280,575
16 Claims. (Cl. 123—139)

1. In a fuel injection system for internal combustion engines of the type comprising a charge pump driven by the engine and supplying fuel to the engine and a feed pump driven by the engine for supplying fuel to the charge pump, a fuel metering valve disposed between the charge and feed pumps for varying the amount of fuel delivered to the charge pump and thereby controlling the speed of the engine comprising a body having a passageway communicating with the feed pump and a metering outlet port in one side of the passageway communicating with the charge pump, a valve member movable endwise in said passageway for progressively increasing and decreasing the effective opening of said port depending upon the position of the valve member, said valve member having a surface subjected to the pressure of



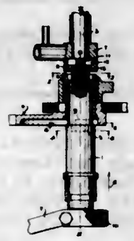
fuel in the passageway, a spring opposing movement of the valve in response to said pressure, means for variously positioning the valve member in said passageway comprising means for adjusting the force of the spring, and independent means for moving the valve member to port closing position against the bias of the spring.

2,746,443
FUEL INJECTION PUMP
Wolfgang E. Meyer, State College, Pa., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Application February 20, 1953, Serial No. 338,043
3 Claims. (Cl. 123—139)



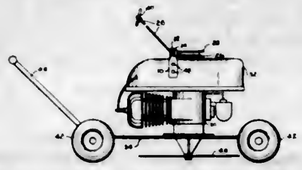
1. In an internal combustion engine fuel injection pump of the type wherein a single plunger is employed for pumping and metering fuel and distributing it to a plurality of engine cylinders, a body having a bore therein closed at one end and enlarged at the other end to form a fuel sump, a plunger adapted to reciprocate and rotate in said bore and forming at the closed end of said bore a pumping chamber, means for reciprocating and simultaneously continuously rotating said plunger in said bore, said fuel sump enclosing a portion of said plunger during the whole of said reciprocation thereof, a fuel passage in said plunger communicating with said pumping chamber, a plurality of control port means in said portion of said plunger enclosed within said fuel sump connected to said fuel passage and adapted to by-pass fuel from said pumping chamber to said sump during a plunger compression stroke, a first and a second movable means in said sump for isolating said control port means from said sump during a selected portion of said plunger compression stroke respectively to produce injection fuel pressure in said pumping chamber and to release said injection fuel pressure, a plurality of fuel distributing ports communicating with said bore at points equally spaced around a circumference of said plunger and located between said pump and said pumping chamber, a fuel distributing slot in said plunger adapted to connect one of said fuel distributing ports to said pumping chamber during a plunger compression stroke and to isolate said distributing ports from said pumping chamber during a plunger suction stroke, fuel supply ports communicating with said bore and located between said fuel distributing ports and said fuel sump, and supply ports in said plunger connected to said plunger passage and adapted to overlap said fuel supply ports to admit fuel to said pumping chamber during the portion of said plunger suction stroke when said plurality of control port means are otherwise isolated from said fuel sump.

2,746,444
COMBINED STARTING AND GEAR CONTROL DEVICE FOR MOTOR-CYCLES
Josef Jozif, Prague, Czechoslovakia
Application July 16, 1952, Serial No. 299,135
Claims priority, application Czechoslovakia April 26, 1952
5 Claims. (Cl. 123—179)



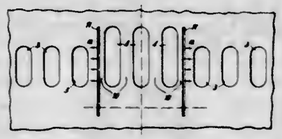
1. In a combined starting and gear control device for motorcycles having gearing and a starter, in combination, a shaft reciprocably shiftable axially between inner and outer extreme positions and turnable about its axis in either extreme position, a turnable gear shift actuator member, a turnable starter operator member, said members being arranged co-axially with said shaft for turning about the shaft axis and being restrained from shifting axially with said shaft, a projection disposed on said shaft near said actuator, said actuator having a hollow portion including a bore for said shaft and a passage for engaging said projection when disposed therein and for passing said projection and a circular recess communicating with said bore and passage, whereby said shaft will turn said actuator when said projection is disposed in said passage in the outer extreme shaft position and be disengaged therefrom when said shaft is shifted to the inner extreme position wherein said projection is disposed in said circular recess for turning idly, a claw connected to said shaft near said operator, said operator comprising a claw engaging element, said claw being operable to engage said element in the inner extreme shaft position and to be disengaged therefrom in the outer extreme shaft position.

2,746,445
STARTING DEVICE FOR INTERNAL-COMBUSTION ENGINE
Clinton T. Cocklin, Griswold, Iowa
Application May 21, 1953, Serial No. 356,455
1 Claim. (Cl. 123—185)



In an attachment for a power lawn mower, the combination which comprises an engine housing having a fuel tank thereon, a platform mounted on wheels and on which the engine housing is carried, an elongated bar having spaced openings in the lower portion and having a twisted upper end, bolts extended through the spaced openings and into the wall of the fuel tank of the engine housing for securing the bar to the housing, a stud, secured at one end to one side of the upper end of the bar, and having a head on the extended end, the axis of the stud being in a horizontal plane and also positioned in a vertical plane at an angle of 45° to a plane in which the lower portion of the bar is positioned, a pulley rotatably mounted on said stud, and a starting pulley with a notch therein positioned above the fuel tank and mounted on the crankshaft of the engine, the lower side of the pulley on the stud being positioned in a horizontal plane extended through the intermediate part of said starting pulley.

2,746,446
MEANS FOR PREVENTING THE FLOW OF LUBRICATING OIL INTO THE EXHAUST PORTS OF DIESEL ENGINES
Ludwig Laubender, Traustein, Germany, assignor to Fa. Krauss-Maffei A. G., Munchen-Allach, Germany
Application July 24, 1953, Serial No. 370,081
Claims priority, application Germany July 28, 1952
2 Claims. (Cl. 123—193)

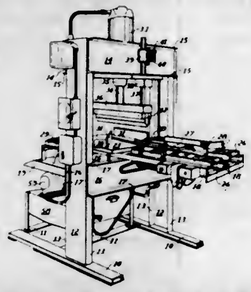


1. Oil flow preventing means of the class described, for use in a two-cycle diesel engine, said engine comprising: a hollow cylinder having lubricating oil supplied to the internal wall thereof; and a piston reciprocably mounted in said cylinder, said piston having a circumferential air flow path therearound, said cylinder having at least one exhaust port aperture and at least one scavenging port aperture formed side by side in the wall thereof, air under pressure being supplied to said scavenging port aperture, said apertures being positioned to be closed by said piston during a portion of its stroke, said cylinder wall further having a longitudinally extending oil flow blocking groove formed vertically therein intermediate said exhaust and scavenging port apertures and lying substantially in a single plane, said groove constituting said oil flow preventing means for preventing air, flowing from said scavenging port aperture to said exhaust port aperture in said circumferential path, from carrying said lubricating oil into said exhaust port by capturing said oil in said groove and draining said oil in a downward direction.

2,746,447
BLOCK SPLITTING MACHINE
Charles L. Petch, Alpena, Mich., assignor to Petch Manufacturing Company, Alpena, Mich., a corporation of Michigan
Application December 28, 1953, Serial No. 400,445
3 Claims. (Cl. 125—23)

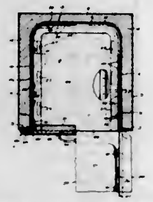
1. In a block splitting machine, a frame including an upper portion, a vertically movable blade suspended from said upper frame portion, means for vertically reciprocating said movable blade, a second blade fixedly secured to said frame below the movable blade and in vertical register therewith, a table disposed between the fixed and movable blades, means on the frame supporting the table for vertical movement, means normally urging the table to its upper position, said table having an opening therein to receive the fixed blade when the table is depressed, means supported by the frame at one side of said table

for delivering blocks to be split onto said table, the last means comprising a pair of spaced, parallel roller supports and mechanism disposed between the roller supports for moving blocks along the roller supports onto the table, said mechanism including a hydraulic cylinder fixed



to the frame, a piston rod extending from the cylinder between the roller supports, and fingers pivotally carried by the free end of said piston rod adapted to engage a block supported by the rollers and move the same onto said table.

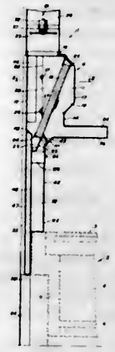
2,746,448
OVEN
Neil O. Holmsten, New Rochelle, N. Y.
Application January 9, 1952, Serial No. 265,652
13 Claims. (Cl. 126—19)



1. A cooking range having an oven compartment therein, opposed tracks within said compartment to receive sliding walls, a pair of metal wall sections slidably supported in said tracks, at least a portion of one of said wall sections being flexible, said sections constituting opposite walls and the back wall of an oven chamber within said compartment, and a pair of other wall sections removably supported between said first walls to form an open front oven chamber.

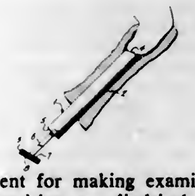
2,746,449
KITCHEN STOVE VENTILATOR
William A. Pledger, San Francisco, Calif., assignor to S. E. Pledger, doing business as The Pledger Ventilator Co., San Francisco, Calif.
Application January 21, 1952, Serial No. 267,434
6 Claims. (Cl. 126—301)

1. A ventilator for installation above a kitchen stove and its discharge vent comprising a box-like structure, the upper part of said structure forming a filter chamber, an air filter in said chamber for condensing grease, oil and evaporations from the air passing therethrough, said filter dividing said chamber into front and rear compartments; a concealed flue in the ventilator forming a continuous passage from the lower part thereof to the front compartment for passing products of combustion directly from said vent to the front compartment; a down draft duct extending from the top of said ventilator and terminating in the rear compartment; and means mounted on the ventilator and including a forced draft unit and a stack communicating with said rear compartment for creating forced draft in said device for drawing products of combustion through said concealed flue and hot air rising from said stove into said front compartment through said filter and into said rear compartment, and for drawing hot air from above said ventilator through said down



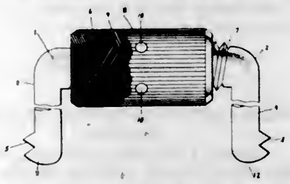
draft duct into said rear compartment and for expelling the air and products of combustion from said rear compartment.

2,746,450
BODY CAVITY EXAMINING INSTRUMENT
William T. Lady and Thomas M. Leonard, Washington, D. C.
Application October 27, 1954, Serial No. 464,919
2 Claims. (Cl. 128—6)



1. An instrument for making examinations within a body cavity comprising a cylindrical rod of material capable of picking up light rays on its surface and transmitting the rays axially of the rod, and a pivotally mounted mirror carried by the rod spaced from one end thereof.

2,746,451
ORTHOPEDIC DEVICE FOR STRAIGHTENING AND RELIEVING PAIN OF INGROWN NAILS
Norman H. Parker, Winchendon, Mass.
Application December 8, 1954, Serial No. 473,857
5 Claims. (Cl. 128—81)



1. A means for relieving ingrown nails comprising a pair of L-shaped arms, one end of one of the arms being threaded in one direction and an end of the other arm being threaded in the opposite direction, and a turnbuckle screwed on to the threaded ends of the arms.

2,746,452
CAST-CUTTING DEVICE
Rodger D. Saylors, Cincinnati, Ohio
Application March 16, 1953, Serial No. 342,403
3 Claims. (Cl. 128—91)

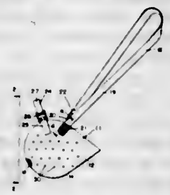
1. A device for cutting a cast having a wire therein which comprises a framework, a pair of coaxial spaced

rollers rotatably mounted on said framework for rolling on the cast, a shaft rotatably mounted on said framework spaced from the axis of the rollers, means on said



shaft for attaching the wire to said shaft, and shaft turning means on the device connected to said shaft for turning said shaft to draw the wire through the cast and between the rollers to sever the cast.

2,746,453
SUSPENSORY
Albert Johnson, Los Angeles, Calif.
Application March 8, 1954, Serial No. 414,773
2 Claims. (Cl. 128—162)



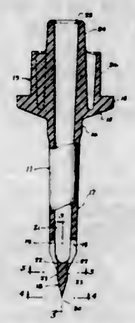
1. A suspensory comprising a pair of companion flexible sides each having a pointed rear end portion and a forwardly curved front end portion, said sides being juxtaposed and together defining a substantially pear-shaped receptacle, a retaining seam securing together the lower marginal edge portions of said sides from the said rear ends thereof only to a point between the ends of said curved portions, a longitudinally adjustable body encircling strap secured at its respective ends to said respective sides, and a transversely disposed longitudinally adjustable strap secured at its ends to said respective sides and extending over the top edge portions of said sides.

2,746,454
INTRAVENOUS NEEDLE
Hans W. Sorensen, Walnut Creek, Calif.
Application May 4, 1953, Serial No. 352,843
1 Claim. (Cl. 128—221)



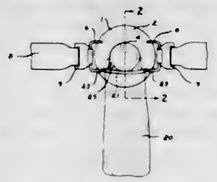
A hypodermic needle comprising a cannula and an integral pointed end, said cannula having right cylindrical outer and inner surfaces, said pointed end having an open side, a closed side and a penetrating point located between the longitudinal axis of the cannula and the outer surface adjacent said open side, the median line of said closed side being curved outwardly with respect to a straight line extending from the penetrating point to the end of said outer cylindrical surface, said open side comprising a surface surrounding an opening communicating with the lumen of the cannula, the last named surface curving inwardly with respect to a straight line extending from the penetrating point to the end of said outer cylindrical surface of the cannula, the surface of said open side of said pointed end comprising a substantially cylindrical portion.

2,746,455
VENOCLYSIS EQUIPMENT
David W. Abel, Waukegan, Ill., assignor to Abbott Laboratories, North Chicago, Ill., a corporation of Illinois
Application May 12, 1954, Serial No. 429,187
4 Claims. (Cl. 128—221)



1. A fluid conveying needle comprising a cannula with a generally tubular lateral wall having a generally conically tapered piercing point at one end, an axial passage extending from a point spaced axially inwardly from the said point and rearwardly through the cannula, at least one lateral opening in said cannula wall at a point spaced axially inward from the said piercing point communicating with the said axial passage, a ledge surface associated with said opening extending rearwardly from a point intermediate the said piercing point and said lateral opening terminating at the said opening, upstanding wall surfaces extending outwardly from the edges of the said ledge surface defining together with the said ledge surface an open slotted portion merging into the said lateral opening, and connecting means at the other end of said cannula for communicating with a fluid retaining means.

2,746,456
COLOSTOMY DEVICES
Amilcare De Camillis, Vancouver, British Columbia, Canada
Application January 31, 1955, Serial No. 485,140
6 Claims. (Cl. 128—283)



1. A colostomy device comprising an annular member adapted to be supported over the opening in the abdominal wall, said member having a resilient annular pad secured to its rear face, a washer coacting with said pad to form a seal, a bag, the open end of said bag being inserted through the opening of the resilient pad, said bag being gripped in open position between said pad and the washer when the device is pressed against the wearer's body.

2,746,457
UNIVERSAL FOLLOW UP COMPRESSOR
Frank J. Musacchia, Queens, N. Y.
Application September 16, 1954, Serial No. 456,405
4 Claims. (Cl. 129—30)

1. An article of the class described comprising a flat mounting member adapted to fit downwardly between the opposite sides of a file cabinet drawer in a substantially vertical plane with one face thereof in abutment

with the files or the like contained therewithin, a pair of longitudinally aligned bearing members mounted on the other face of said mounting member near the ends thereof, a substantially L-shaped clamp slidable longitudinally within each of said bearing members and having a depending outer portion adapted to frictionally engage the outer faces of the sides of the file drawer or the like upon inward movement of said clamps through said bearing members, each of said clamps having a flat substantially straight portion passing through said bearing members and having its plane disposed at substantially right angles to said mounting member, the inner end of each of said



straight portions being integrally formed with a unitary arcuate flat member twisted through substantially ninety degrees and having its plane substantially parallel to said mounting member and being curved away from said mounting member, and spring means intermediate the central portion of said arcuate member and said mounting member, said spring means being adapted to maintain said arcuate member at the center thereof in a maximum displacement from said mounting member whereby to draw said straight portions inwardly through said bearing members and to retain said depending flanges in frictional engagement with the sides of the filing cabinet drawer or the like.

2,746,458
BEAN AND PEA POD SPLITTER
Fred S. Hughes, Augusta, Ga.
Application June 10, 1955, Serial No. 514,537
3 Claims. (Cl. 130—30)



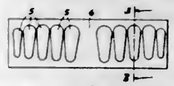
1. A bean and pea pod splitter comprising an upstanding support member formed with a head portion, a block member detachably secured to said head portion, said block member and head portion having upwardly and rearwardly inclined adjacent top surfaces, upstanding lug members at the upper outer portions of the top surfaces, a guide arm pivoted between said lug members for rotation therebetween, said guide arm being formed with a downwardly convergent channel facing said inclined top surfaces and being formed to define a convergent feed passage therewith, spring means biasing said guide arm downwardly toward said top surfaces, and a blade having a straight edge secured between said head portion and block member beneath said arm, said head portion and block member being arcuately contoured along the edge of the blade and rising above the intermediate portion of said edge, the end portions of said edge being exposed.

2,746,459
SMOKER'S PIPE
Abram G. Coble, Webster City, Iowa; L. G. Hix, guardian of the property of said Abram G. Coble
Application March 6, 1953, Serial No. 340,695
2 Claims. (Cl. 131—214)



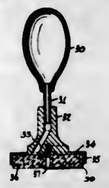
1. In a smoking pipe, a substantially cylindrical bowl having a tobacco chamber therein and a lower end, said chamber having a downwardly tapering bottom having the lowermost portion provided with a vertical opening, a plug comprising a wedge shaped portion fitting said tapering bottom, said wedge-shaped portion having a lower end depending through said opening, a cover piece on said lower end portion conformably engaging the lower end of the bowl, said wedge shaped portion and said cover piece having a vertical axial opening therethrough, said cover piece being threaded on the lower end portion of the plug, said cover piece having a depending peripheral flange, a trap cup having a sidewall threaded on said depending flange and a bottom spaced downwardly from said cover piece, said cover piece constituting a trap cup cover, a central boss on and rising from said trap cup bottom through the passage through the plug, a radial stub on the cup sidewall and a smoke tube having an open inner end extending through said stub and communicating with the interior of the trap cup, said boss being smaller in diameter than said plug opening and defining a smoke passage communicating with the interior of the bowl and the interior of the trap cup.

2,746,460
NAIL COVER
Guido Jellinek, Milan, Italy
Application August 7, 1951, Serial No. 240,666
Claims priority, application Italy September 1, 1950
5 Claims. (Cl. 132—73)



1. In a nail cover, a thin elastic patch preformed in a shape similar to, but longer than, a human nail, comprising an opaque reflecting layer, having an adhesive surface, a transparent colored layer superposed on the opposite surface of said opaque layer, whereby light may pass through said second layer and be reflected from said first layer to project the color of said second layer, and a third transparent layer on said second layer for protecting the same.

2,746,461
DEVICE FOR TREATING CORNS AND CALLOUSES
Ernest Bocchino, Clifton, N. J.
Application August 21, 1953, Serial No. 375,677
5 Claims. (Cl. 132—74.5)



1. A device for treating corns and callouses comprising a hollow housing having a roof and a side wall, a

hub formed integrally with said roof and projecting upwardly therefrom, an opening diagonally through said hub, a hollow cylindrical connecting tube, one of its ends in said hub, a flexible hollow bulb, the other end of said tube entered in said bulb, an absorbent pad in said housing adapted to receive liquid from said bulb through said connecting tube and diagonal opening and an abrasive area in said device for manipulation over the area to be treated.

2,746,462
LADY'S FACE POWDER COMPACT
Nathan Kasdan, Plainfield, Conn., assignor to Majestic Metal Specialties, Inc., Moosup, Conn., a corporation of Connecticut
Application November 27, 1951, Serial No. 258,457
8 Claims. (Cl. 132—83)



1. A lady's loose powder compact comprising a casing having a hinged cover with a peripheral wall, a powder compartment in the casing, powder delivery mechanism including a spring and a pressure plate bearing upwardly against the powder in the compartment, an oscillatable agitator, an apertured powder delivery platform above the agitator, and a handle exposed at the side of the casing to oscillate the agitator, the edge wall of the cover projecting downwardly into the path of travel of the handle, but being cut away at one or more points to receive the handle, and thereby locking the handle against accidental or unintended movement when the cover is closed, the arrangement being such that opening of the cover automatically releases the handle for movement of the agitator.

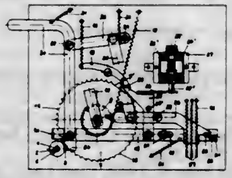
2,746,463
GUIDE FOR THE APPLICATION OF LIPSTICK TO THE LIPS
Mary Stuart, New York, N. Y.
Application April 18, 1955, Serial No. 501,847
2 Claims. (Cl. 132—88.5)



1. A lipstick application guide in the form of a unitary member adapted to overlie the mouth and chin and connecting and adjacent portions of the face, said member being horizontally convex and downwardly tapered to conform to the shape of the face, being forwardly inclined in the chin zone to accommodate forward protrusion of the chin, having a handle depending from the chin zone, and being forwardly flared at its upper corners to accommodate the cheekbones, said member having a mouth opening shaped and positioned to expose the lips in repose, the contour of said opening serving to guide a lipstick brush applicator in the application of lipstick to the lips in a selected pattern.

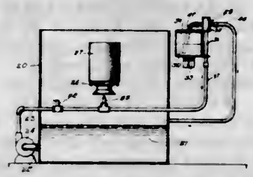
2,746,464
COUNTING MACHINES FOR COINS AND SIMILAR FLAT BODIES
Eugen Reis, Bruchsal, Germany
Application September 28, 1951, Serial No. 248,750
Claims priority, application Germany January 10, 1951
5 Claims. (Cl. 133—8)

1. In a counting machine for coins and similar flat bodies, in combination a counting mechanism, a guideway, means for conveying coins along the guideway, an electric motor adapted to drive said means, a star-shaped counting wheel adapted to be driven by the coins conveyed along the guideway and to drive the counting mechanism, a shaft rigid with the counting wheel, a cylindrical body coaxial and rigid with said shaft and provided with an eccentrically arranged pin extending parallel to the axis of rotation of the shaft, a slidably mounted bolt having at one end a stop plate adapted to arrest the pin on the cylindrical body and a lug adapted to arrest the movement of the coins in the guideway, and at the other end a pin, a tension spring adapted to act on the bolt, a pawl lever pivoted at its centre and having an end adapted to arrest the pin on the bolt, a rocking lever pivoted at its centre and having one end operatively connected to the bolt, a switch adapted to break the circuit of the electric motor, a compression spring adapted to act on the switch to turn the motor off, a plate rigid with the end of the rocking lever remote from the bolt, said plate being adapted to hold the switch in the closed position against the action of the compression spring,



a manually operable starting lever operatively connected to the bolt and adapted to move the bolt against the action of its tension spring, a toothed wheel provided with a pin adapted to depress the end of the pawl lever remote from the pin on the bolt to lift the other end thereof clear of the pin on the bolt, said toothed wheel having concave spur teeth on a part of its periphery and ratchet teeth on another part thereof, a cog projecting from the cylindrical surface of the cylindrical body and adapted to engage the spur teeth and rotate the toothed wheel, a tension spring adapted to rotate the toothed wheel in the opposite direction, a spring-actuated pawl adapted to engage the ratchet teeth to prevent the toothed wheel from being rotated by its tension spring while allowing it to be rotated by the cog, a pin on the pawl, an extension on the rocking lever adapted to engage the pin on the pawl and lift the pawl clear of the ratchet teeth, a manually operable stop lever pivoted about the axis of rotation of the toothed wheel and adapted to be secured in any required position and to arrest the pin on the toothed wheel, and a spring adapted to raise the end of the pawl lever remote from the pin on the bolt.

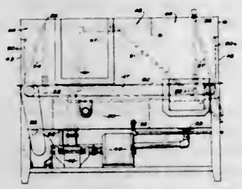
2,746,465
CAN WASHING SYSTEM
Robert E. Farison, Chicago, Ill., assignor to The Diversey Corporation, a corporation of Illinois
Application June 25, 1952, Serial No. 295,446
14 Claims. (Cl. 134—56)



1. In a washing system a source of washing liquid; means for discharging the washing liquid; a supply pipe line leading from the washing liquid source to the discharging means; means for supplying the washing liquid through the supply pipe line under pressure from the

source to the discharge means; means for intermittently and repeatedly applying and then releasing the pressure exerted by the washing liquid supply means on the washing liquid in the supply pipe line; a source of stock solution positioned above the level of the discharge means; a liquid dispenser unit having a substantally upright tube element with a liquid actuated piston slidably mounted in its bore; an actuating pipe line connecting the bottom of the tube element with the discharge means; an inlet pipe line connecting the stock solution source with the tube element; a stock solution discharge pipe line leading from the tube element above the highest possible level of the stock solution, said discharge pipe line emptying into the washing liquid; flow regulating means in said discharge pipe line and said inlet pipe line adapted to permit the flow of stock solution through the inlet pipe line into the bore of the tube element above the piston during downstroke of the piston and to permit the flow of stock solution in the bore of the tube element into the stock solution discharge pipe line during upstroke of the piston under the influence of washing liquid pressure in the actuating pipe line exerted by the washing liquid supply means.

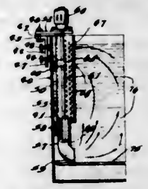
2,746,466
FRESH WATER PRE-WASH CONVEYOR DISHWASHER
James D. Clague and Arthur W. Haas, Rochester, N. Y., assignors to Toledo Scale Company, Toledo, Ohio, a corporation of New Jersey
Application June 8, 1954, Serial No. 435,332
1 Claim. (Cl. 134—72)



In a dishwashing machine, in combination, a cabinet having a front entrance opening and a rear exit opening, successive pre-wash, wash, and rinse spaces within the cabinet, means within the cabinet for transporting articles to be washed through the spaces from the entrance opening to the exit opening, slotted pre-wash devices within the pre-wash space, a pipe connected to the pre-wash devices for supplying fresh water from a source outside of the machine to the pre-wash devices, a flow control valve in the pipe for limiting the flow of the fresh water supplied to the pre-wash devices to less than 15 gallons per minute, rinse devices within the rinse space, means communicating with the rinse devices for supplying fresh heated water only thereto, a liquid supply tank below the wash space, and means for conducting liquid under pressure from the tank into the wash space.

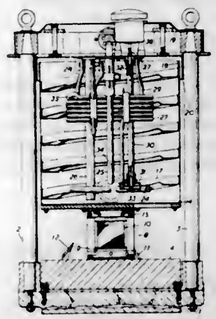
2,746,467
CLEANING APPARATUS
Charles D. Dempsey and Kenneth E. Dempsey, Oak Park, Ill., assignors to Dempsey and Stanley, Inc., Chicago, Ill., a corporation of Illinois
Application June 11, 1953, Serial No. 361,046
3 Claims. (Cl. 134—111)

1. Cleaning apparatus for attachment to one side of a container comprising clamp structure including an elongated leg adapted to extend vertically along the inner surface of said container side, said leg having a vertical row of uniformly spaced holes therein, a tube having a pair of securing means extending into an adjacent pair of said leg holes to adjustably mount said tube on said leg with the lower tube end near the container bottom, said lower tube end being shaped to discharge fluid in a direction generally normal to the tube axis and toward the opposite side of the container, a drive shaft extending



into the upper end of said tube, an impeller within said tube and adjustably mounted on said shaft, and a motor carried by said clamp structure in driving relation with said shaft.

2,746,468
CLEANING DEVICES
Eric Desmond, Pinner, and Charles Joseph Thorp, South Ruislip, England, assignors to Smiths America Corporation, Ruxton, Maryland
Application December 10, 1954, Serial No. 474,541
3 Claims. (Cl. 134—117)



1. Cleaning apparatus comprising a cylindrical drum adapted to be disposed with its axis vertical and to be partially filled with cleaning fluid, a trough in the form of a helix attached to the interior of said drum, one end thereof being immersed below the surface of the fluid and the trough extending above the surface of the fluid, a first base plate, said drum being resiliently supported on said base plate, means disposed between said base plate and said drum to apply a vibration to the drum both about its axis and along its axis whereby articles deposited at the end of the trough below the liquid surface are fed along the carrier and eventually out of the liquid, a second base plate whereon the first base plate is resiliently mounted, a member rigidly located with respect to said second base plate and adjacent the upper end of the drum, said member not being in direct mechanical contact with said drum, means supported by said member and disposed adjacent the bottom of the drum to heat fluid contained therein, and means supported by said member and disposed within the drum to condense vapor arising from the fluid.

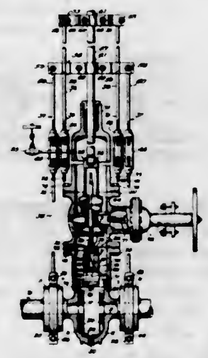
2,746,469
DETACHABLE UMBRELLA COVER
Neil J. D'Andrea, Upper Darby, Pa.
Application April 28, 1953, Serial No. 351,677
3 Claims. (Cl. 135—34)

2. A detachable cover for an umbrella having a central tip and radially extending ribs to which a fixed cover is attached, comprising a crowned piece of sheet material shaped to conform to the shape of the umbrella and fixed cover, said sheet material having a central opening adapted to fit over said tip, a piece of elastic material affixed to said sheet material around the central opening, said elastic material extending across said central opening and having an expandable opening normally smaller than said central opening, said sheet material having an outer edge,



and a plurality of elastic loops affixed at spaced points to the outer edge of said sheet material to attach the cover to the ends of the umbrella ribs, whereby the detachable cover is maintained in tension against said fixed cover when said loops are stretched in tension over the ends of said ribs.

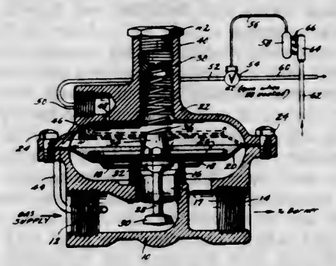
2,746,470
CONSTRUCTION AND METHOD FOR REPAIR OF VALVES UNDER PRESSURE
Hubert C. Laird, Oak Park, Ill., assignor to Crane Co., Chicago, Ill., a corporation of Illinois
Application December 2, 1954, Serial No. 472,591
6 Claims. (Cl. 137—15)



6. The method of removing valve parts under pressure of a valve having a body provided with external threading adjacent the upper end, a removable bonnet resting on top of the body, a valve stem passing through the bonnet, a valve disc attached to the stem below its passage through the bonnet and a bonnet ring threadedly engaging the threads of the body and extending over a portion of the bonnet whereby to retain the bonnet in tight engagement with the body, said method comprising the steps of securing the valve bonnet against upward movement by the application of downward force thereon, unscrewing the bonnet ring from the valve body and removal of it from engagement with the bonnet and from the valve while maintaining the tight engagement of the bonnet with the body by continued downward force on the bonnet, mounting substantially fluid tight means on the body over the bonnet and valve stem by threadedly engaging the means on the threads of the valve body while maintaining the downward force on the bonnet, ceasing the downward force on the bonnet and applying upward force on the bonnet moving the latter and at least a portion of the valve stem and any parts attached to the valve stem such as the valve disc upwardly and away from the valve body and beyond a close off place in the substantially fluid tight means, causing the latter fluid tight means to be closed against fluid pressure across its entire extent at the place of close off,

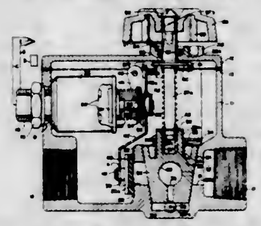
opening the substantially fluid tight means above the place of close off and removal of the valve parts therein contained.

2,746,471
PRESSURE REGULATOR AND SHUT-OFF VALVE
Clifton A. Cobb, Goshen, Ind., assignor to Penn Controls, Inc., Goshen, Ind., a corporation of Indiana
Application March 29, 1952, Serial No. 279,295
2 Claims. (Cl. 137—65)



1. A combined pressure regulator and shut-off valve comprising a valve body having an inlet, an outlet and a regulating passageway, a regulating seat at one end of said regulating passageway, a regulating valve plug adapted to coact therewith to effect a regulating action, a shut-off seat at the other end of said regulating passageway and of greater area than said regulating seat, said shut-off seat being displaced from the axis of said regulating passageway and regulating seat, a diaphragm for actuating said regulating valve plug and for seating on said shut-off seat, means aligned with said axis and biasing said diaphragm toward seated position, a first portion of one side of said diaphragm spanning said shut-off seat being subject to the pressure in said inlet and the remaining area of said side of said diaphragm being subject to the pressure in said outlet, means to normally subject the opposite side of said diaphragm to pressure from said inlet, means to relieve such pressure to unseat said diaphragm from said shut-off seat, said displacement of said shut-off seat from the axis of said regulating passageway and said regulating seat effecting a tilting action of said diaphragm off said shut-off seat due to the pressure of said inlet against said first portion of said diaphragm when greater than the pressure above the diaphragm plus the load of said biasing means.

2,746,472
SAFETY VALVE
Melvin G. Sogge, Los Angeles, Calif., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application December 13, 1952, Serial No. 325,855
11 Claims. (Cl. 137—66)



1. A control device comprising a valve body having axially aligned inlet and outlet openings, a partition between said openings, a first bore through said partition substantially coaxial with said openings, a second bore closed at one end and intersecting said first bore, a small outlet opening extending from said second bore through a wall of said body near the closed end of said second

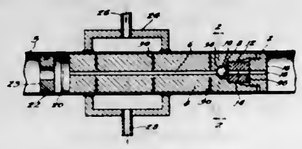
bore, a rotary valve positioned in said second bore, said rotary valve having a diametrically extending third bore therethrough alignable with said first bore and an arcuate groove in the outer surface of said rotary valve extending from one end of said third bore to the other end thereof and an axial fourth bore in said rotary valve extending from said third bore to the space between one end of said rotary valve and the closed end of said second bore, the other end of said rotary valve having a splined socket therein, a valve stem having a splined end extending into said splined socket and the other end thereof extending through an opening in said valve body to the exterior thereof, a manually operable dial secured to said other end of said stem and spaced from said valve body, an annular abutment member secured to said stem adjacent the inner surface of said valve body and having a radially extending arm thereon, resilient means biasing said abutment member against said inner body surface, spaced stops on said inner surface and cooperable with said radially extending arm to limit the rotating movement of said dial and valve, one of said stops being located to engage said radially extending arm when said third bore is coaxial with said first bore and being less high than the other stops and having a bevelled side which permits said arm to slide over said stop upon rotation in one direction but requiring axial movement of said dial before said arm can be rotated past said stop in the opposite direction, said other stops being located so as to engage said arm when said third bore and arcuate groove is out of register with the inlet end of said first bore and when the arcuate groove only is in register with said inlet end of said first bore, respectively.

2,746,473

VALVE MEANS FOR CHARGING CONTAINERS WITH FLUID

Leo A. Ohlinger, Los Angeles, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission

Application January 9, 1947, Serial No. 721,063
2 Claims. (Cl. 137—74)



1. A valve comprising a body having an aperture and a seat at one end of the aperture, a fusible member mounted in the body and having an aperture and a seat in spaced opposed relation to the seat of the body, a closure element positioned in the space between said seats so as to engage the seat of the body and close its aperture or to engage the seat of the fusible member without closing its aperture, spacing between the opposed seats formed on the body and the fusible member being sufficiently small to allow little movement to the closure element, whereby upon melting the fusible member bonds the closure element to the body and to itself and thereby causes the closure element to close the apertures in the body and the fusible member.

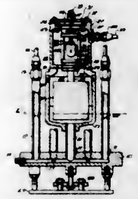
2,746,474

DEVICE FOR OBTAINING A CONTROLLED AIR PRESSURE DIRECTLY PROPORTIONAL TO THE SUM OF A PLURALITY OF PRESSURES

Samuel L. Adelson, Tucson, Ariz., assignor to Infilco Incorporated, Tucson, Ariz., a corporation of Delaware

Application November 8, 1954, Serial No. 467,554
9 Claims. (Cl. 137—85)

1. A summation device of the type described, comprising a housing, a plurality of tubes, said tubes communicating with said housing, a manometric fluid in said tubes and said housing, means for applying a plurality of pressures to said manometric fluid in said tubes, inlet means for air under pressure into said housing, a valve



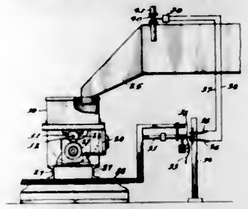
regulating flow of air through said inlet means, an escapement port leading from said housing, means for transmitting the movement of said manometric fluid to said valve, and a controlled air pressure port leading from said housing adapted to be connected to an instrument.

2,746,475

CONSISTENCY REGULATOR

Carl G. Muench, Chicago, Ill., assignor to The Celotex Corporation, Chicago, Ill., a corporation of Delaware

Application September 25, 1952, Serial No. 311,462
2 Claims. (Cl. 137—91)



1. A consistency regulating apparatus comprising in combination a fluid receiving tank, an agitator mounted in the tank and connected means operating the agitator, a stock supply conduit terminating at its end out of contact with but discharging over the tank, a separate secondary tank adjacent the receiving tank, the receiving tank provided with a discharge weir, the discharge weir having its outer end positioned over but out of contact with the secondary tank, a water pipe discharging over the receiving tank, a flow control device mounted in the water line and having associated operating means, a base on which are mounted the fluid receiving tank and agitator operating means, a scale on which such base is mounted, the scale provided with a weight-indicating arm and means associated with the weight-indicating arm and activated by the such arm and controlling operation of the water line flow control device operating means.

2,746,476

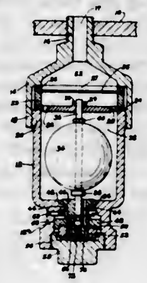
MECHANISM TO ABSTRACT LIQUID FROM GAS

Isaiah Dopkeen, Boston, Mass.

Application September 2, 1950, Serial No. 182,941
1 Claim. (Cl. 137—204)

Mechanism to abstract liquid from gas comprising a main body having a float chamber therein and a valve space below said chamber and having a discharge port extending to the outside of said body in communication with said valve space, a head connected to said body and having a chamber therein, said chamber having means adapted to establish communication with an outside supply of gas comprising a port in communication with said head chamber, spacer apparatus in said head chamber supported between said main body and head and having an opening therein in communication with

said float chamber, a float within said float chamber, a valve movably mounted in said main body and extending into said valve space and adapted to close an opening between said valve space and said float chamber when in closed position, a shaft attached to said float and slidably extending into said spacer apparatus and into said valve, said valve being so positioned that liquid may be received



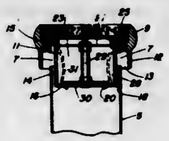
in said valve space when said valve is open and be discharged through said discharge port outside said main body, said valve having a screw-threaded opening in its lower portion, and a screw adapted to enter said opening and screw-threadedly connect with said valve and contact the lower end of said shaft whereby the position of said shaft may be adjusted.

2,746,477

VACUUM BREAKERS

Carl H. Krause and Jacques J. Filliung, Chicago, Ill., assignors to Sloan Valve Company, Chicago, Ill., a corporation of Illinois

Application June 23, 1950, Serial No. 169,944
2 Claims. (Cl. 137—218)



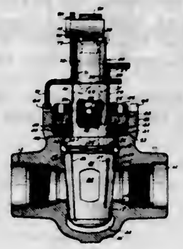
1. In a vacuum breaker for a water supply system, a tubular casing having air ports in the sides thereof, a flexible sleeve inside said tubular casing and centrally spaced from the side walls thereof, a flow director inside said flexible sleeve comprising a rigid disc transversely disposed across the lower end of said flexible sleeve and closing the opening therethrough, a supporting plate across the upper end of said flexible sleeve having openings therein for the passage of water, a connecting stem axially disposed for supporting said rigid disc from said supporting plate, and coupling means for clamping said tubular casing, said flexible sleeve and said supporting plate together, a lip portion on the lower end of said flexible sleeve thinner than said sleeve and extending inwardly thereof into slidable engagement with the bottom of said rigid disc, said rigid disc being effective to direct the water flow outward against the sides of said flexible sleeve to force the same tightly against said air ports to prevent leakage therethrough, said thin lip portion being forced outward by the water flow and away from the edge of said rigid disc to force the lower portion of said flexible sleeve tightly against the wall of said tubular casing to further assist in preventing leakage from said air ports, said thin lip portion also being bent by the water flow parallel to the water flow and to the tubular casing to thereby reduce restriction to the free flow of water.

2,746,478

PLUG VALVES

Charles B. Johnson, Pittsburgh, Pa., assignor to Rockwell Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania

Original application March 11, 1949, Serial No. 80,969. Divided and this application March 15, 1951, Serial No. 215,710
5 Claims. (Cl. 137—246.16)



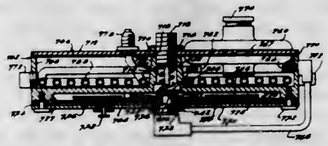
1. In a plug valve assembly, a casing having a fluid passage therethrough intersected by a plug bore, a rotatable plug in said bore, a valve stem for the plug projecting through said casing, a lubricant receiving bore in said stem; a screw rotatable in said bore and having a head projecting from said stem, spaced fixed stops on said casing, a stop member fixed on said stem and adapted to contact one or the other of said stops in different operative positions of rotation of the plug, means for locking the plug in fully open or closed positions comprising a member non-rotatably but removably mounted on said stem and having a part interposed between the stop member and that one of said stops not contacted by said stop member, and means interlocking said head and said locking member.

2,746,479

FUEL FEEDING DEVICE

Cecil J. Krow, Ralston, Okla.

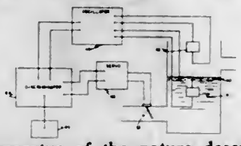
Application June 26, 1951, Serial No. 233,582
8 Claims. (Cl. 137—340)



1. In a fluid controlling device, a cup-shaped member having an end wall and an outwardly extending peripheral wall, a cover for said member having a boss positioned within said member and facing one surface of said end wall, said end wall and said boss being provided with aligned apertures, said boss aperture being internally screw threaded, a fluid inlet connection to said boss aperture, a cap member overlying the surface of said end wall opposite to said one surface, a flexible member having a peripheral portion clamped by said cap member against said opposite surface and having an aperture aligned with said aligned apertures, a vent connection to the chamber formed between said flexible member and said end wall, a fluid outlet connection to the chamber formed between said flexible member and said cap member, whereby pressure differentials between said chambers will cause flexing of said flexible member, an externally threaded fluid conveying member extending through said apertures and threaded within said threaded aperture and having a shoulder seating against and clamping said flexible member to said end wall and clamping said cover member to said peripheral wall, said fluid member having a valve seat opening into a space between said flexible member and said cap member, and

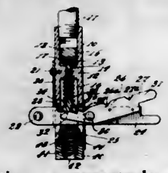
a valve member cooperable with said seat to control flow of fluid through said fluid conveying member, said valve member being operatively connected with said flexible member for movement relative to said seat as a consequence of flexing of said flexible member.

2,746,480
APPARATUS FOR THE MEASUREMENT AND CONTROL OF FLUIDS
Joseph M. Hildyard, Arlington, Va.
Original application May 10, 1946, Serial No. 668,996. Divided and this application May 15, 1953, Serial No. 356,018
2 Claims. (Cl. 137—386)
(Granted under Title 35, U. S. Code (1952), sec. 266)



2. In an apparatus of the nature described, a vessel for fluid, adjustable valve means for varying the fluid in said vessel, an electromechanical transducer located in said vessel below the normal fluid level therein, another electromechanical transducer located above the normal fluid level in said vessel, an oscillator, means connecting said oscillator to one of said transducers for driving the same at a predetermined high frequency, means connecting the other transducer to said oscillator for varying the frequency of the output thereof, and means responsive to variations in the frequency of the output of said oscillator for adjusting said valve means.

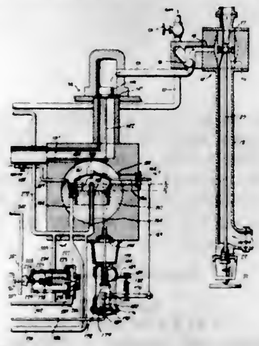
2,746,481
WATER SUPPLY VALVE FOR POULTRY WATERING TROUGHS
Abraham Coan, Solebury Township, Bucks County, Pa.
Application January 20, 1954, Serial No. 405,223
12 Claims. (Cl. 137—408)



1. In combination, a receptacle, a body portion, a connection to a source of water under pressure connected to said body portion, valve means in said body portion having a port with a valve seat at one end thereof for controlling the flow of water from said source to said receptacle, a valve member in said body portion for engagement with said seat, a plurality of valve control members to which said receptacle is connected and responsive to the weight of said receptacle in unfilled condition for moving one of said members towards a position to open said port and responsive to the weight of said receptacle in filled condition for moving both said members to a position for closing said port, and members in said body portion for urging each of said control members in opposition to the forces applied thereon from said receptacle.

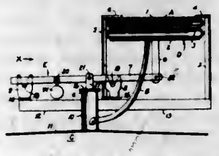
2,746,482
GAS CONTROLLING APPARATUS
William C. Conkling, Lockport, N. Y., assignor to Wallace & Tiernan Incorporated, a corporation of Delaware
Original application February 1, 1949, Serial No. 74,036. Divided and this application October 14, 1954, Serial No. 462,351
1 Claim. (Cl. 137—489)

In apparatus for advancing gas along a conduit under the negative pressure of suction applied at an end of the conduit, in combination, an adjustable valve in the conduit for varying the negative pressure therein at a locality upstream of the valve, a liquid-containing chamber having a space above the liquid open to the conduit at said locality, a movable but normally balanced chamber disposed in said first chamber and enclosing a space sealed by said liquid, means including a gas-pressure-communicating passage opening into the said space of the movable chamber, for adjusting the gaseous pressure therein, said chambers being arranged so that the difference of liquid levels between the chambers corresponds, when the movable chamber is at rest, to the difference of gaseous pressures in the chambers, means controlled by the movable chamber and responsive to unbalance thereof, for adjusting the valve to modify the pressure at the aforesaid locality until balance of the chambers is restored, said movable chamber and its said valve-adjusting means com-



prising means for producing balance of the movable chamber whenever the negative pressure in the outer chamber is more negative than that within the movable chamber by a predetermined amount, said apparatus also including a plurality of liquid-containing manometers respectively connected to indicate the pressure in the conduit at said locality and the pressure in the movable chamber, said manometers being disposed in parallel relation and adapted to indicate the respectively detected pressures on vertical scales ranging from fixed points of zero negative pressure, and liquid level regulating means for the manometer connected to the interior of the movable chamber, to adjust the liquid level of said last-mentioned manometer so that its said point of zero negative pressure stands at a level above that of the first manometer by an amount equal to the normally maintained difference in water levels between the chambers.

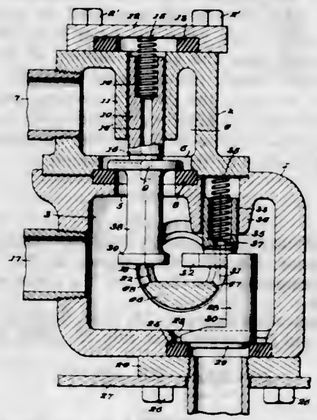
2,746,483
VENT VALVE FOR GAS AND/OR LIQUID STORAGE CONTAINER
John H. Wiggins, Chicago, Ill.
Application December 27, 1952, Serial No. 328,164
2 Claims. (Cl. 137—493)



1. The combination of a container adapted to hold gases and/or volatile liquids, a combined pressure relief and vacuum relief valve mounted on said container, said valve having a seat and a palate, and an operating mechanism for said palate comprising a gas chamber in direct communication with the vapor space of the container, said gas chamber having an actuating part that moves in

one direction in response to a positive pressure in said gas chamber and moves in the opposite direction in response to a minus pressure in said gas chamber, a lever pivotally attached to said actuating part and mounted intermediate its ends on said palate, said operating mechanism also comprising a first fulcrum for said lever located between said palate and the pivotal attachment of the lever to said actuating part and a second fulcrum for said lever located on the side of said palate opposite to said pivotal attachment, pressure in the container causing the lever to rock about said first fulcrum and open the valve palate to provide pressure relief for the container and a partial vacuum in said container causing the lever to rock about said second fulcrum and open the palate to provide vacuum relief for the container.

2,746,484
THREE-WAY ROCKER VALVE
Henry Fort Flowers, Findlay, Ohio
Application November 21, 1950, Serial No. 196,827
4 Claims. (Cl. 137—620)



1. A valve mechanism comprising a casing having upper and lower chambers, said casing being formed in two sections, said upper section having upper, lower and side walls forming the upper chamber, said side wall having an inlet opening, said lower section having an upper wall, a lower wall and side walls forming said lower chamber, the side wall of said lower chamber having an outlet opening and the lower wall of said lower chamber having an exhaust opening, the lower wall of the upper section contacting the upper wall of the lower section, a port extending through the contacting walls and connecting said chambers, a valve seat of flexible composition surrounding said port, said seat being extended so as to form a seal between the upper and lower sections of the casing, means for firmly clamping the upper section into sealed engagement with the lower section, a spring closed poppet valve mounted in said upper chamber and contacting said valve seat for closing the port, said valve having a depending portion axially thereof projecting through said port into said lower chamber, a spring closed poppet valve located in said lower chamber for closing the exhaust opening, and means located in said lower chamber for opening the valves in sequence.

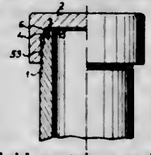
2,746,485
ACCUMULATOR
Benjamin N. Ashton, Kingston, N. Y., assignor to Electrol Incorporated, Kingston, N. Y., a corporation of Delaware
Application May 1, 1953, Serial No. 352,550
3 Claims. (Cl. 138—31)

1. An accumulator for hydraulic systems comprising a pair of hollow cylindrical members each having an open end and an integral cylinder head at its outer end, means connecting said members with their open ends in opposition to form a cylinder having the connecting means substantially at its midportion, an elongated piston slidable axially in said cylinder and at all times extending into both of said cylindrical members, resilient seal-



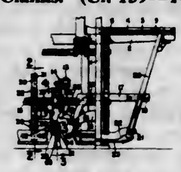
ing members interposed between each cylindrical member and the piston, said sealing member being located on opposite sides of said connecting means and engaging said cylinder and said piston in all positions of the latter in said cylinder, and a passage from the interior of said cylinder between said sealing members to the outside of said cylinder.

2,746,486
FLUID-TIGHT ASSEMBLY
Jean Louis Gratzmuller, Paris, France
Application January 13, 1953, Serial No. 331,017
Claims priority, application France January 23, 1952
6 Claims. (Cl. 138—89)



1. A pressure fluid container end assembly comprising a threaded tubular container end, a closing head having a frusto-conical bottom and adapted to be screwed on said threaded tubular end, an annular groove formed in the edge of said tubular end defining inner and outer longitudinally extending flanges, the outer flange having substantially equal thickness throughout substantially its length, said outer flange being shorter than the inner flange and having a radial thickness less than its axial length, said frusto-conical bottom and said outer flange being so designed and related to each other that screwing of said closing head tightly on said tubular end determines a limited coaxial relative displacement between said frusto-conical bottom and said outer flange, and, thus, a predetermined radially inwards elastic deformation of the said outer flange, whereby a fluid-tight seal is established directly between said container tubular end and closing head and whereby any fluid pressure in said container tends to press said outer flange against the frusto-conical surface of said bottom.

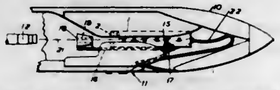
2,746,487
CHECKING MEANS FOR LOOM PICKING MECHANISM
Benjamin W. Brouwer, Auburn, and Raymond F. Dion, Worcester, Mass., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a corporation of Massachusetts
Application June 22, 1953, Serial No. 363,054
12 Claims. (Cl. 139—147)



1. In checking means for the shuttle picking assembly of a loom including a picking shaft which rocks during a

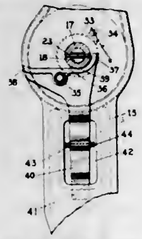
picking operation to effect shuttle picking, a wedge element forming part of said picking assembly and moving therewith when the shaft rocks during a picking operation, a pair of normally stationary check members, one for engagement with each side of the wedge element, and a resilient body on each check member positioned to be deformed by the wedge element to arrest motion of said picking assembly near the end of the shuttle picking operation.

2,746,488
DEVICE FOR USE IN TENSIONING THREAD
Karl W. Webb, Belfast, Northern Ireland
Application June 6, 1952, Serial No. 292,030
Claims priority, application Great Britain June 8, 1951
8 Claims. (Cl. 139—214)



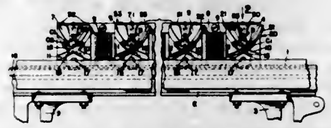
8. A device for use in tensioning thread comprising a series of columns anchored at one end, their lower ends, one behind the other in interspaced relationship in a horizontal plane so that thread drawn therebetween is constrained to a sinuous path, the columns extending from their lower ends one above the other in substantially arched formation through substantially 90° and lying substantially in a common vertical plane, and at their other ends being anchored and interspaced alternatively on each side of said vertical plane and presenting a substantially vertical inlet opening through which the thread may enter between the columns, whereby, when thread is drawn between the lower ends of the columns from the direction of the inlet opening, any tendency for the thread to rise above its required level is counteracted by virtue of the columns being of substantially arched formation.

2,746,489
CLOTH ROLL SUPPORT MEANS FOR LOOMS
Leonard M. Rogers, Mendon, Mass., assignor to Draper Corporation, Hopedale, Mass., a corporation of Maine
Application August 14, 1953, Serial No. 374,267
4 Claims. (Cl. 139—304)



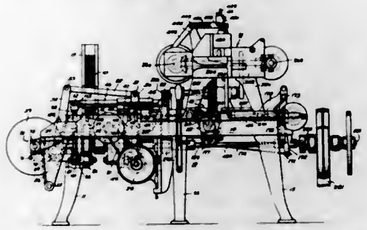
4. In a loom having a cloth roll upon which fabric is wound and means for supporting and rotating said cloth roll which comprises cloth roll stands one at each end of the roll and gudgeons borne in said stands and axially slidable to and from engagement with the ends of the roll, means for rotating one gudgeon including drive gears and a chain and sprockets, means for facilitating the release and handling of the roll which comprises at each end thereof, a pivot on said cloth roll stand, a member movable for limited angular extent on said pivot and comprising a roll engaging track, a depending arm formed as an integral part of said member and a pedal adjacent the end thereof and stop means carried by the arm and engageable with the cloth roll stand for limiting the movement of said arm and track so that upon pressing said pedal the cloth roll shall be raised to relieve the gudgeon of the weight of roll and cloth thereon.

2,746,490
ELECTRIC WEFT STOP MOTION FOR NARROW WARE LOOM
Kenneth J. Hall, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a corporation of Massachusetts
Application June 25, 1953, Serial No. 364,021
21 Claims. (Cl. 139—371)



1. In a narrow ware loom having a shuttle block into which a shuttle moves, a resilient electric conducting detector mounted on the shuttle and projecting forwardly from the latter to occupy a normal position relative to the shuttle when the weft of the shuttle is slack or broken but is deflected from said normal position by the weft if the latter is intact near the end of motion of the shuttle into the block, two electric contacts insulated from each other electrically connected by engagement with the detector only when the latter is in the normal position thereof near the end of motion of the shuttle into the block, electric circuit means normally open including said contacts, the detector forming part of the circuit and closing the latter when electrically connecting the contacts, and means to change the operation of the loom upon closure of the electric circuit.

2,746,491
MACHINE FOR PRODUCING CLOTHESPIN
Charles Forney, Norfolk, Va., assignor to The Diamond Match Company, New York, N. Y., a corporation of Delaware
Original application February 25, 1948, Serial No. 10,855. Divided and this application July 25, 1952, Serial No. 300,863
19 Claims. (Cl. 140—1)



1. In a machine for the assembly of three-part clothespins of the character comprising a pair of clamping members connected by a spring structure which structure includes a pair of laterally spaced convolutions arranged in substantially parallel planes, said machine comprising a frame, means mounted on said frame for retaining said clamping members in fixed position, means positioned adjacent said retaining means for slidably feeding and assembling said spring structure with the clamping members, and means associated with said feeding and assembling means for receiving a portion of said convolutions and guiding same in slidable relation during feeding movement and for aligning said convolutions with the fixed position of said clamping members.

2,746,492
CHAIN SAW ATTACHMENT FOR A TRACTOR
William M. De Hardit, Gloucester, Va.
Application August 25, 1953, Serial No. 376,391
3 Claims. (Cl. 143—32)

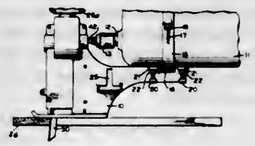
1. In a saw rig mountable upon a self-powered mobile unit having a power take-off, guide tracks mountable

vertically in spaced relation upon one side of the mobile unit, a carriage mounted for vertical sliding movement on said guide tracks, means to move the carriage vertically, spaced outwardly extending brackets on said carriage, a horizontal housing rotatably mounted intermediate its ends in said brackets, manual means to rotate said housing, a plurality of spaced bearings in said housing, a power shaft mounted in said bearings and extending beyond the ends of said housing, means coupling one projecting end of said power shaft to the power take-off of the mobile unit, the opposite projecting end of said power shaft being articulated, a second housing journalling the articulated end of said power shaft, a saw shaft



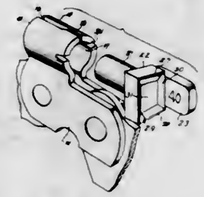
coupled to the articulated end of said power shaft and having one end journalled in said second housing and the saw shaft projecting from said second housing at right angles to said power shaft, a housing around said saw shaft, a chain saw guide connected to said saw shaft housing, a chain saw about said saw shaft and driven by said saw shaft, means carried by said horizontal housing and connected to said second housing to tilt said second housing, saw housing and chain saw in a plane including the axes of the power and saw shafts, and means carried by said second housing and connected to said saw shaft housing to tilt said saw shaft housing and chain saw about the axis of the saw shaft.

2,746,493
TELESCOPED DRIVING CONNECTION FOR POWER TOOLS
William J. Babcock, Lafayette, Calif.
Application December 7, 1954, Serial No. 473,665
2 Claims. (Cl. 143—68)



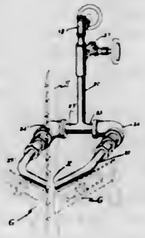
1. A power tool comprising a frame, means on said frame for removably mounting in operating position thereon a driving motor having a shaft carrying a chuck; tool driving means carried by said frame including a rotatable element having a tubular recess extending coaxially of the axis of rotation thereof; said element being mounted in spaced bearings in said frame and including tool operating means situated between the spaced bearings, and a flexible, torque-transmitting shaft of materially smaller diameter than said recess having at least its major portion disposed within said recess; the end of said flexible shaft within said element being secured to said element adjacent one end of said recess and the opposite end of said flexible shaft being provided with a chuck-engageable portion extending from the end of said recess adjacent said motor-mounting means, whereby said chuck may be engaged with said chuck-engageable portion of said flexible shaft closely adjacent the end of said rotatable element remote from the end secured to said shaft.

2,746,494
SAW CHAIN WITH INSERT TEETH
Joseph B. Cox, Portland, Oreg., assignor, by mesne assignments, to Oregon Saw Chain Corp., a corporation of Oregon
Application May 15, 1951, Serial No. 226,463
18 Claims. (Cl. 143—135)



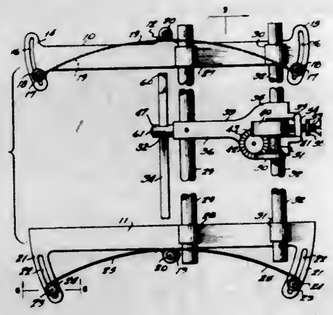
2. In a saw chain, a link having a portion defining a cylindrical socket, the axis of said socket extending in the longitudinal direction of the chain, a removable cutter unit including an elongated cylindrical shank portion arranged in a snugly fitting relation in said socket, a cutter head on said shank defining a pair of spaced apart substantially parallel cutting edges and a third cutting edge joining the ends of said pair of edges at substantially right angles with respect thereto, said cutting edges all extending in a common plane normal to the axis of said shank portion, said pair of cutting edges being spaced equally from said axis, a depth gauge portion on said cutter unit extending parallel with said shank portion and ahead of said cutter head and disposed on the side of said cutter head opposite said third cutting edge, said depth gauge being centrally disposed with relation to said pair of cutting edges.

2,746,495
DEVICE AND METHOD FOR PREVENTING HEATING OF A SAW BAND
Charles A. Greenlaw, San Pedro, Calif.
Application February 24, 1953, Serial No. 338,241
1 Claim. (Cl. 143—158)



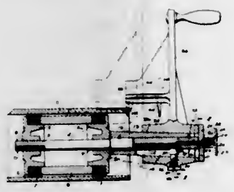
A method of maintaining a band saw used in cutting pitch-bearing wood in a true sawing condition, by causing said saw prior to engaging said wood to pass between two downwardly and inwardly directed air currents that may be adjusted to the desired velocity, discharging a pitch-dissolving liquid material into said air currents at such a rate to atomize said liquid into sufficiently fine particles that they adhere to said band surface until the pitch deposited thereon is dissolved to a non-solid state and is displaced from said band due to the motion thereof, and so controlling the quantities of said discharged air and atomized liquid as to provide a stationary cooling zone wherein the heat generated by the frictional engagement of said teeth with said wood is partially removed and the toothed edge of said saw and the rear edge of said saw are at substantially the same temperature and under proper tension relative to each other.

2,746,496
SHAPING TOOL FOR PATTERNS HAVING ARCUATE RECESSES
James R. Huff, Shreveport, La.
Application January 14, 1953, Serial No. 331,271
4 Claims. (Cl. 144—136)



4. In a tool for cutting arcuate recesses in patterns for casting pipe bends, in combination with a supporting frame therefor comprising paired adjustably spaced bars having a pair of shafts connecting the same, a pair of flexible guide members adjustably connected at each end to the ends of said bars whereby to form parallel arcs, a cutting element operatively supported in said frame mounted for adjustment transversely of said recesses and operative longitudinally thereof by moving said frame therealong, and a lever for operating said assembly and turning said cutting element.

2,746,497
TAPER TOOL FOR TAPERING FIBER CONDUIT OR PIPE IN THE FIELD
Raymond A. Thompson, Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application September 29, 1953, Serial No. 382,973
7 Claims. (Cl. 144—205)



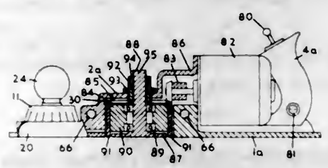
2. A tool for tapering the end of a cylindrical pipe comprising a shaft having one end for extending into a pipe, expansible means carried on said one end for compressively engaging a pipe interior in response to rotation of said shaft, a sleeve journalled on the other end of said shaft and secured against sliding toward said one end, said sleeve having the axis of its outer periphery inclined to the axis of said shaft and having a longitudinally disposed keyslot therein, a driving member slidably carried on said sleeve, means carried by said driving member and extending into said keyslot for interconnecting said driving member and sleeve whereby said driving member may slide longitudinally of the sleeve in fixed angular relation therewith, and a cutting bit supported by said driving member, said cutting bit tracing a cone of revolution when said rotatable member is rotated with and axially advanced on said sleeve.

2,746,498
LOG-RECEIVING TROUGH HAVING A ROTATING LOG-END STOP AND A BARK-REMOVING AUGER
Reginald R. Holycross, Goldendale, Wash.
Application May 24, 1955, Serial No. 510,689
5 Claims. (Cl. 144—208)



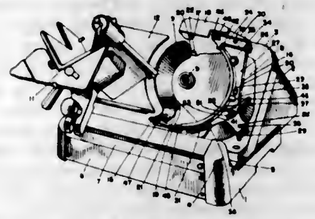
1. Log-barking apparatus comprising a channeled support frame; an auger journaled therein to support a log to be barked, said auger including a blade having a discontinuous log-engaging edge for simultaneously barking and rotating, in a direction opposite to the direction of the auger, a log extending within said frame; stop means mounted on the frame for rotation in a direction opposite to that of the auger and having a roughened face frictionally engaging one end of a log to hold such log against movement longitudinally of the auger, such an end of such a log being frictionally engaged at a location effective to supplement the turning force exerted on such a log by the auger; and means on the frame for driving said auger and stop means.

2,746,499
POWERED HAND PLANE
Leo O. Greeley, Cadillac, Mich.
Application May 3, 1952, Serial No. 285,889
5 Claims. (Cl. 145—4.2)



1. In a power operated plane having a base the improvement in said plane comprising: a post; means mounting said post to said base for axial adjustment, means to hold said post against rotation; a hollow circular cutter blade rotatably mounted on one end of said post; a stationary circular guide plate on said one end of said post and nested within said cutter blade, the surface of said guide plate being in the same plane as the ends of the teeth of said cutter blade.

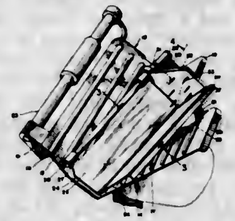
2,746,500
JUICE TROUGH ASSEMBLY FOR A SLICING MACHINE HAVING A ROTATABLE KNIFE
Cornelis Klingens, La Porte, Ind., assignor to U. S. Slicing Machine Company, Inc., La Porte, Ind., a corporation of Indiana
Application December 22, 1952, Serial No. 327,377
2 Claims. (Cl. 146—102)



1. In a slicing machine having a base supporting a rotatable knife with an integral peripheral flange and a

cutting edge thereon, apparatus for guarding the cutting edge of the knife and for catching juice and scraps therefrom, said apparatus comprising a casting mounted on the base and having an arcuate edge portion positioned adjacent to the cutting edge of the knife and circumscribing a substantial non-cutting arc thereof, a center plate positioned to cover the front face and edge of the knife in the non-cutting arc and having an arcuate edge in a recessed position adjacent to the flange on the knife in a portion of the remaining arc, and an arcuate juice catcher extending circumferentially about a portion of the knife beneath said center plate and being supported by the arcuate edge of the casting, said juice catcher having a U-shaped cross section with opposed spaced legs extending radially inwardly on each side of the cutting edge of the knife, said juice catcher having a guide spring extending therefrom for positioning the juice catcher on the casting, said guide spring extending upwardly and radially outwardly thereby further serving as a handle to provide a convenient and safe means for detaching the juice catcher from the slicing machine.

2,746,501
SLICING MACHINE ATTACHMENT FOR OBLIQUE SLICING
Kenneth Bruce Murrant, London, England, assignor to U. S. Slicing Machine Company, Inc., La Porte, Ind., a corporation of Indiana
Application December 6, 1952, Serial No. 324,466
Claims priority, application Great Britain February 6, 1952
1 Claim. (Cl. 146—102)



A slicing machine comprising a reciprocal carriage, a main L-shaped substance support, V-shaped in cross section and inclining vertically downward on said carriage, a food pusher receivable in and slidable along said support, and a second V-shaped substance support relatively V-shaped in cross section and adapted to be removably secured to the first substance support and at an angle thereto, whereby a substance on the main support may be cut perpendicularly or a substance on the second support may be cut obliquely, said second support being detachably connected to the first support, attachment means including a fitting mounted on the lower part of the second support to position the second support at an oblique angle with respect to the first support, there being means including recesses in opposite faces of the second support for engagement with the main substance support, said recesses engaging one of the legs of the L-shaped main support, a spring clip adapted to clamp against the bottom of said main substance support near the intersection of the legs of the L-shaped main support, and a depending flange portion which can be gripped manually to push said attachment into place on the main substance support and to remove it therefrom by pulling.

2,746,502
BAG WITH INTEGRAL CLOSING MEANS
Alberto Camprubi Graell, Sabadell, Spain
Application February 15, 1954, Serial No. 410,255
3 Claims. (Cl. 150—3)

1. A bag with integral closing means, comprising at least a lamellar element of a flexible material, the edges of said element being joined to one another so that they form a bag having two walls facing each other, said walls having means on the edges of their facing surfaces arranged lengthwise of said edges, part of said means being elastically engageable to constitute a closure impervious to dust and moisture, said means having opposed cut



away portions at one end of said edges, said portions being cut away to leave an opening in said closure at said one end of said edges, and string means attached within said bag adjacent the end of said edges opposite the end having the opening in said closure means, said string means extending out of said opening to permit opening of said closure means.

2,746,503
WALLET WITH IMPROVED FOLDABLE PASS CASE
Simon Knee, Newark, N. J.
Application July 6, 1954, Serial No. 441,498
5 Claims. (Cl. 150—35)

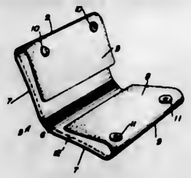


1. A wallet insert for use with a wallet or separately therefrom, said insert comprising a back wall foldable along a transverse line to form two substantially congruent cover portions, said one back wall portion being adapted to be inserted into a pocket of a wallet, a foldable apertured wall secured at one end to said back wall adjacent said transverse line, a plurality of apertured wall members secured to said apertured wall with the apertures of said plurality of wall members being in substantial registry with the apertures of said apertured wall to form a plurality of apertured pockets foldable from a superposed side-by-side condition in which they overlie one or the other of said portions of said back wall to a condition in which they are in an end-to-end relation and overlie one or the other of said back wall portions, another apertured wall member secured to the other back wall portion to form another pocket which when said back wall is unfolded will be either in end-to-end relation or side-by-side relation with said relatively foldable pockets depending upon the condition of said relatively foldable pockets.

2,746,504
BILLFOLD
Harry Powell, Petersburg, Va.
Application July 16, 1954, Serial No. 443,795
1 Claim. (Cl. 150—38)

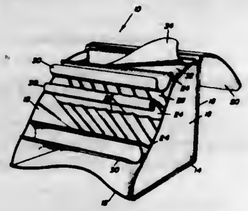
A billfold comprising: an elongated flexible sheet foldable transversely on itself on folded lines at three longitudinally spaced intermediate points, the innermost fold line providing a pair of hingedly connected sides, the outermost fold lines providing hinged end flaps freely swingable on said sides and adapted to receive thereon,

in the unfolded position of the billfold, the end portions of currency placed longitudinally on the sheet, said end flaps being foldable inwardly with the currency on said sides and being in outer face-abutting engagement with each other when said sides are closed, and



pairs of coacting snap fastener elements on the opposed faces of said flaps adjacent to said outermost fold lines and the longitudinal edges of the sheet for releasably securing the billfold in closed position, said fastener elements passing through said flaps to the inner faces thereof.

2,746,505
RECEPTACLE
Ralph M. Howard, North Attleboro, Mass.
Application September 16, 1953, Serial No. 380,454
1 Claim. (Cl. 150—52)



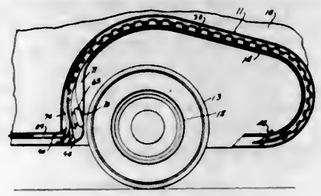
A flexible receptacle comprising a front, a back, a bottom and sides, a plurality of partitions hingedly mounted on the bottom and freely swingable between the sides, pockets mounted on both sides of the partitions and closure flaps for the pockets comprising single sheets of flexible material folded over the upper edges of and straddling the partitions and stitched to the upper marginal portions thereof.

2,746,506
SCREW AND WASHER ASSEMBLY
Ouglesa Jules Poupitch, Itasca, Ill., assignor to Illinois Tool Works, Chicago, Ill., a corporation of Illinois
Application August 12, 1952, Serial No. 303,889
3 Claims. (Cl. 151—37)



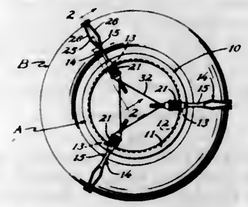
1. A preassembled fastener unit comprising a screw member having a threaded shank and a head with a conical clamping surface at one extremity of the shank and an annular recess around the peripheral edge of the head, and a lockwasher including an annular body portion in the form of a split ring encircling the periphery of the head along its area of maximum diameter, integral locking prongs extending from said body portion toward the threaded shank and having tooth sections positioned in adjacent operative position with respect to said conical clamping surface, said body portion including a flange extending inwardly in overlying relation with respect to the outer margin of the head and positioned in said annular recess substantially flush with the adjacent surface of the head, said flange being substantially continuous from one extremity of the split ring to the opposite extremity thereof, and the tooth sections adjacent the conical clamping surface providing a diameter less than the maximum diameter of said head.

2,746,507
TRACTION DEVICE AND APPLYING MEANS THEREFOR
Eugene F. Morgan, Paonia, Colo.; Marjorie Morgan Decker, administratrix of said Eugene F. Morgan, deceased
Application October 16, 1953, Serial No. 386,522
4 Claims. (Cl. 152—214)



1. In combination with an automotive vehicle having a drive wheel equipped with a pneumatic tire, an elongated receptacle disposed adjacent the tread surface of said tire and having an opening at one end thereof and in a side thereof nearest said tire, an elongated traction device normally received in said receptacle and including a band of flexible material extending around the tread surface of the associated tire, traction elements carried by said band and a separable connecting assembly including complementary parts secured to the ends of said band, a spring clip secured to said traction device near one end of the latter and movable through said side opening in the receptacle, a first lever disposed in said receptacle at said one end of the receptacle and secured at one end to the receptacle, manually operated means connected to the other end of said lever for moving said spring clip into engagement with the tire to enable said tire to pull said traction device out of said receptacle and wrap the device about the tire, said connecting assembly including a second lever effective to release the complementary parts of the assembly from each other when the second lever is pulled outwardly from the assembly, and the first lever disposed in said receptacle having resilient means thereon which engages the second lever included in said connector assembly to pull the last-mentioned lever outwardly from the associated connector assembly while said traction device is mounted on the associated tire, said first lever disposed in the receptacle being moved to its limiting extent toward the tire, and the tire being rotated in reverse direction.

2,746,508
TIRE LUG ASSEMBLY
Hartwell T. Doughty, St. Paul, Minn.
Application May 7, 1952, Serial No. 286,542
3 Claims. (Cl. 152—218)



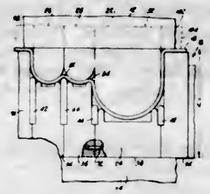
1. A tire lug assembly for mounting on a vehicle tired wheel without moving the same, raising the tire or taking the wheel and the tire from the ground comprising in combination a plurality of J-shaped lugs, each having a relatively short leg for engaging and gripping one side of the tire, a relatively long leg having a tire engaging portion for gripping the other side of the tire and a connecting portion having an inner curvature conforming substantially to the curvature across a tire tread, said relatively long leg having a threaded end extremity portion in off-set relation to said tire engaging portion, a mounting ring having angularly spaced bearing means through which each of said long legs radially and slidably extend to support said ring bodily outwardly and free of the vehicle wheel, nut means on the said threaded end extremity of each of the long legs, and spring means mounted on each said offset long leg portion between said mounting ring and said nut means.

2,746,509
EMERGENCY TRACTION CLEAT
Otto Lang, Chicago, Ill.
Application March 19, 1954, Serial No. 417,345
4 Claims. (Cl. 152—237)



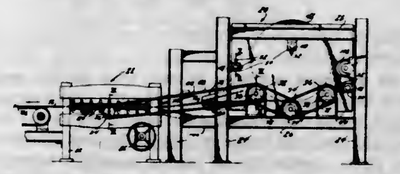
1. In a traction cleat for a wheel having a rim and a tire thereon, an outer plate for engagement with the outer side of the tire, said outer plate having an outward edge and an inward edge, an ear on and projecting from said inward edge and laterally with respect to said outer plate, an inner plate for engagement with the inner side of the tire, said inner plate having an outward edge and an inward edge, flexible traction elements connected to and extending between the outward edges of the outer and inner plates for engagement with the tread of the tire, a nut swivelly mounted on said ear, a hook having a threaded shank threaded in said nut, and a curved tongue fixed at one end on the inward edge of the inner plate for engagement with the rim of the wheel at the side of the rim remote from the tire, said tongue being flat and having a free end portion provided with a slot extending longitudinally of the tongue through which said hook can be passed, said tongue being otherwise imperforate.

2,746,510
FORMING DIES
Charles W. Pedersen, New York, N. Y.
Application June 2, 1953, Serial No. 359,237
2 Claims. (Cl. 153—48)
(Granted under Title 35, U. S. Code (1952), sec. 266)



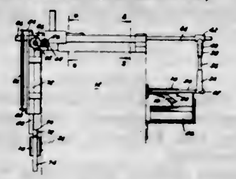
1. A forming die comprising a male die portion and a mating female die portion, said male portion including a plurality of forming sections each terminating in an arcuate forming surface, whereby any combination of sizes of adjacent sections may be arranged in said male die portion, said female die portion including a corresponding plurality of sections, each female die portion including a pair of rims at the opposed margins thereof, said rims being rounded and serving as forming surfaces, each adjacent pair of sections in said female die portion being jointly recessed to define a channel, an indent spacer terminating at one end in a rounded working surface for each channel.

2,746,511
APPARATUS FOR UNWINDING COILS
Harold Branthoover, Toledo, Ohio, assignor to Donovan Steel Pickling Company, Toledo, Ohio, a corporation of Ohio
Application April 7, 1952, Serial No. 280,958
1 Claim. (Cl. 153—54)



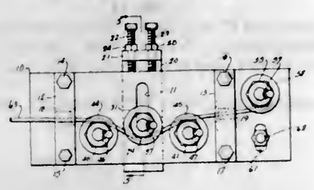
Apparatus for unwinding coils of sheet metal strips embodying a frame, a plurality of rollers mounted in said frame providing a supporting cradle for the coil, means for driving said rollers in unison, a pair of vertical plates in said frame above said rollers, means for adjusting said plates toward and from each other laterally above said rollers, and strip edge retaining guides for the strip mounted by said plates and said retaining guides extending a substantial distance along the inner faces of said plates and continuing a substantial distance beyond the perimeter of said plates.

2,746,512
ATTACHMENT FOR WIRE COILING MACHINE
John C. Hampson, Detroit, Mich., assignor, by mesne assignments, to Rockwell Spring and Axle Company, Coraopolis, Pa., a corporation of Pennsylvania
Application June 18, 1951, Serial No. 232,169
3 Claims. (Cl. 153—65)



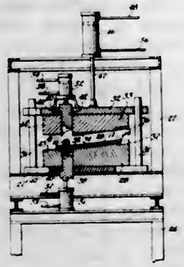
1. In a wire coiling machine wherein a length of wire stock is fed against an aligned coiler block which coils the wire and forms a helically coiled spring which has a longitudinal axis extending laterally of the direction at which the wire stock engages the coiler block and which forms the spring by advancing successive rotating coils laterally outwardly thereof, the improvement which comprises a spring supporting rod-like core, support means for rigidly supporting said core as a cantilever in parallelism with said longitudinal axis of said spring with the free end of said core directed toward said coiler block, means for reciprocating said support means in parallelism with said longitudinal axis to move said core between an inward position and an outward position, the free end of said core when at said inward position being disposed in close proximity to but longitudinally spaced from said coiler block to facilitate free sliding delivery of the advancing successive rotating coils of the spring on the core to prevent deformation of the spring, the free end of said core when at said outward position being spaced from the outer end of the resultant coiled spring to permit free falling of the spring when the inner end of the spring is severed from the wire stock.

2,746,513
WIRE STRAIGHTENING AND TENSIONING ATTACHMENT FOR BALING MACHINE
Arthur L. Kiesow and Paul E. Rehr, Downers Grove, Ill.
Application October 24, 1952, Serial No. 316,646
2 Claims. (Cl. 153—104)



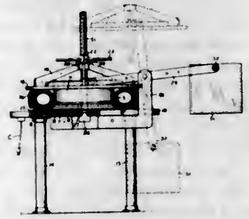
1. In a baling machine having wire guides mounted thereon in spaced apart relationship; the improvement residing in a wire straightening and tensioning device mounted on said machine between said guides and comprising a frame plate, a plurality of rollers rotatably mounted on one side of said frame plate in spaced apart relation to each other, said frame plate having a transversely extending slot adjacent its midpoint location, a slide block carried by and extending transversely of said frame plate on the other side thereof remote from said one side for transverse sliding movement thereon in overlying relation to said slot, a journal pin carried by said block and extending through said slot, a roller rotatably mounted on said journal pin adjacent one end thereof remote from said block and disposed to said one side of said frame plate, a flange carried by said block at one end thereof and projecting laterally therefrom spaced from an adjacent edge of said plate, said flange having spaced threaded walled apertures, set screws received in each of said apertures bearing against said adjacent edge of the frame plate to hold said block in a selected position of adjustment transversely of said frame plate and to hold said roller carried by said block at a selected position relative to said plurality of rollers, and securing means carried by said journal pin to clamp said block plate against said frame plate for maintaining said block in the selected position of adjustment.

2,746,514
MACHINE FOR MAKING COMPRESSOR BLADES
Elmer P. Warnken, Cincinnati, Ohio, assignor to Cincinnati Testing and Research Laboratories, Cincinnati, Ohio, a partnership
Application April 6, 1950, Serial No. 154,333
1 Claim. (Cl. 154—1)



A machine for molding a compressor blade having an elongated main portion of airfoil configuration and an enlarged root at one end thereof which comprises a pair of main dies, one of said main dies being movable relative to the other, means for moving said movable die, each of said main dies including a main portion and a root end portion, the main dies having elongated opposed die faces of airfoil configuration adapted to engage opposite sides of a pile of substantialy flat resin-impregnated laminations to form said laminations into the main portion of the blade and gripping faces adjacent the root ends of said main dies, there being opposed slots between said gripping faces and the main die faces, whereby the die faces and gripping faces hold the laminations on opposite sides of the slots when the main portion of the blade is molded, a root-forming auxiliary die reciprocably mounted in each of said slots, said root-forming dies having opposed die faces of blade root shape adapted to engage opposite sides of root-forming laminations disposed in the slots and on both sides of the pile of laminations, means for moving said root-forming dies into engagement with opposite sides of the root-forming laminations to mold the enlarged root end of the blade while the elongated laminations are held by the main die, and stops on the root-forming dies, the back faces of the main dies having portions for engaging said stops, the length of each root-forming die from its stop to the root die face being less than the thickness of the main die associated therewith, whereby, when the dies are closed, cavities are formed in the slots, the bottoms of the cavities being defined by the root-forming die faces.

2,746,515
METHOD OF APPLYING WHITE AND COLORED SIDE WALLS TO BLACK TIRES
Stephen J. Usack, Richmond Hill, N. Y.
Application December 17, 1953, Serial No. 398,817
6 Claims. (Cl. 154—14)



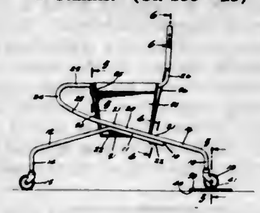
1. A method of applying a white rubber side wall to a black rubber tire containing materials capable of discoloring white rubber in contact therewith, said method comprising the steps of removing said discoloring materials from the side of said black rubber tire to a depth of approximately one-eighth of an inch, covering said side with a black rubber covering which is free from materials capable of discoloring white rubber in contact therewith, and finally applying a white rubber wall to said black rubber covering.

2,746,516
PIPE LINE INSTALLATION EQUIPMENT
James D. Cummings, Houston, Tex., assignor of one-half to Aubrey S. Crutcher, Houston, Tex.
Application May 2, 1955, Serial No. 505,462
17 Claims. (Cl. 154—41)



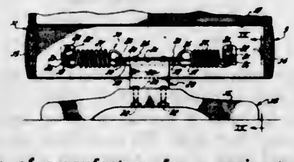
1. Pipe cradling mechanism, including a power driven, ground engaging vehicle, a pipe cradling structure carried by said power driven vehicle for travel along the length of pipe, said cradling structure including an endless carrier movably mounted for travel in a longitudinally extending loop circuit, pipe engaging slings pivotally connected to said carrier on transverse swing axes for cradling engagement with the pipe, a motor drive connected with the carrier and effecting circuit travel thereof, and means controlling said motor and regulating the speed of driven carrier travel to match the speed of travel of said power driven vehicle.

2,746,517
BABY WALKER AND ANCHOR
Carl B. Dahlberg, Alhambra, Calif., assignor to Hemet Aircraft Corporation, Alhambra, Calif., a corporation of California
Application January 4, 1954, Serial No. 401,969
2 Claims. (Cl. 155—23)



1. A device of the class described comprising a means providing a legged chair, caster wheels on the legs of the chair, and an anchor detachably connected to one of the caster wheels, said anchor comprising a disc having a vertical pin receivable in a recess in one of the caster wheels.

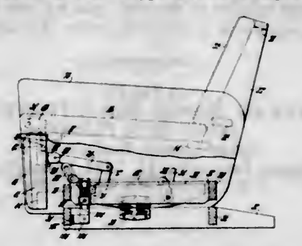
2,746,518
SPRING-TYPE ROCKING CHAIR
Charles Schneider, Los Angeles, Calif.
Application December 1, 1950, Serial No. 198,592
1 Claim. (Cl. 155—54)



An article of manufacture for a spring-type rocking chair having a chair frame with opposed side rails and a base for interconnecting one side rail to the base, comprising: a pair of elongated rigid members in closely adjacent parallel relation and in substantially the same plane, one of said members being longer that the other; a laterally extending stub arm carried by each end of the longer member, said shorter member lying between said stub arms; a pair of springs with their axes in alignment with the axis of the shorter member, each spring connecting one end of said shorter member with an adjacent stub arm; means carried by the longer member for connecting the same to one side rail intermediate the ends of the side rail; and means carried by said shorter member for connecting said shorter member to the base at a central portion thereof, each of said stub arms comprising a flat strap having a V-shaped crimped portion to form a recess to receive and hold an end of one of said springs.

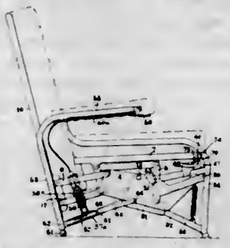
2,746,519
ROCKING CHAIR CONVERTIBLE TO NON-ROCKING
Albert P. Krikorian, Agawam, Mass.
Application August 13, 1953, Serial No. 373,987
6 Claims. (Cl. 155—72)

1. A reclining article of furniture comprising in combination, a support, an integral seat and back rest structure being rockable on said support, a foot rest mounted on said structure and swingable between horizontal operating and vertical non-operating positions, operating means engageable with said support and structure and foot rest and manually operable to more in a certain direction successively to an intermediate position for locking said structure to said support and to a position for-



ward of said intermediate position for elevating said foot rest from vertical non-operating to horizontal operating position.

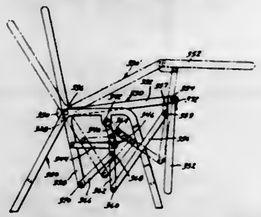
2,746,520
RECLINING CHAIR
Albert Ducrot, Paris, France
Application March 31, 1953, Serial No. 345,836
Claims priority, application France April 25, 1952
6 Claims. (Cl. 155—105)



1. A chair having a seat and back and capable of being adjusted from a normal position to a second position with the back raised and the seat moved forwardly and to a rocking-chair position with the seat inclined downwardly rearwardly and the back inclined upwardly rearwardly, comprising an underframe, horizontal coaxial pivot pins rigid with said underframe and located at opposite sides of said underframe substantially in vertical alignment with the center of gravity of the loaded seat, a pair of rigid frames respectively for the seat and back of the chair, a pair of vertical side plates pivoted respectively by said pivot pins on said underframe, a first bell crank lever pivoted at its apex to the lower rear portion of each side plate and having a rearwardly extending arm pivotally connected to the lower end of the back frame and an upwardly extending arm pivotally connected to the rear portion of the seat frame, a link pivoted to the upper rear portion of each side plate and to the back frame respectively, the connection of said link to the back frame being at a point above that of said first bell crank, a second bell crank lever pivoted at its apex to the forward portion of each side plate and having an upwardly extending arm and a forwardly extending arm, cross-ties connecting the corresponding arms of said second bell cranks, the cross tie connecting said upwardly extending arms of the second bell cranks providing a support for the forward portion of the seat frame, linkage connecting the upwardly extending arms of said second bell cranks with the upwardly extending arms of said first bell cranks, a stop on each side plate to engage the underframe in normal position of the seat, a stud rigid with each of said second bell cranks, abutment portions of the underframe engaging said studs in the normal position of the chair and cooperating with said stops to hold said side plates in fixed position, said studs being moved away from said abutments to free said side plates when the back is raised to said second

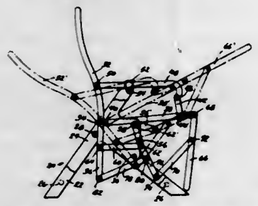
position, a leg rest hinged to the front end of the seat frame and means permitting adjustment of the slope of said leg rest relative to the seat, said leg rest being swingable backwardly to a position under the seat.

2,746,521
ARTICLE OF REPOSE FOR SUPPORTING THE BODY OF A PERSON
Anton Lorenz, Buffalo, N. Y.
Application September 12, 1952, Serial No. 309,272
6 Claims. (Cl. 155—106)



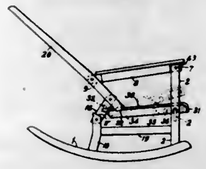
1. An article of repose for supporting the body of a person, comprising in combination: a support, a unit including a seat and a back-rest rigid with each other, said unit being swingably mounted on said support, a downward extension included in the structure of said unit, a leg-rest swingably mounted on the front portion of said seat, a guiding element swingably mounted on said support, means interposed between said guiding element and the structure of said unit for effecting movement of said guiding element about its pivot in dependence on movements of said unit, a controlling arm pivoted to said guiding element at a point spaced from the pivotal connection of the latter with the support and above the lower end of said extension, a control bar pivoted to the lower end of said extension of the unit at one of its end portions and pivoted above the middle of said controlling arm at its other end portion, a first controlling link pivoted at one of its end portions to said controlling arm, and a second controlling link pivoted at one of its end portions to the other end portion of said first controlling link, the other end portion of said second controlling link being pivoted to the front portion of said seat, and cooperating abutting surfaces arranged on the structure of one of said controlling links and on the structure of said leg-rest for effecting the movements of the latter in coordination with said controlling arm, said cooperating abutting surfaces loosely abutting against each other whereby said abutting surfaces may be disengaged from each other for the performance of independent movements of the leg-rest relative to the seat.

2,746,522
RECLINING ARTICLE OF FURNITURE
Anton Lorenz, Buffalo, N. Y.
Application September 12, 1952, Serial No. 309,271
7 Claims. (Cl. 155—106)



5. An article of repose for supporting the body of a person, comprising: a base, body supporting means movably mounted on said base, said body supporting means including a seat member and a back-rest member and a downward extension rigid with one of said members, a leg-rest swingably mounted on the front portion of said body supporting means, a guiding element swingably mounted on said base, means connecting said guiding element with said body supporting means for swinging said guiding element about its pivot in dependence on movements of said body supporting means, a controlling arm pivoted to said guiding element at a point spaced from the pivotal connection of the latter with the base whereby the pivotal connection between the controlling arm and the guiding element is movable along a circular path having the pivotal connection between the guiding element and the base as its center, a controlling bar, pivoted at different regions thereof to the lower end of said downward extension of said body supporting means and to said controlling arm above the middle thereof, and means interposed between the lower end of said controlling arm and the upper end of said leg-rest for effecting movements of the latter in coordination with said controlling arm.

2,746,523
ROCKING CHAIRS WITH ADJUSTABLE BACKS
Eduardo Martinez de la Cuesta, Havana, Cuba
Application January 16, 1952, Serial No. 266,631
Claims priority, application Cuba July 9, 1951
1 Claim. (Cl. 155—116)

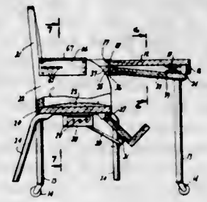


In a chair with an adjustable back the combination of two front legs provided at their upper ends with slots from front to back, a horizontal cross member joining said legs, two chair arms the front ends of which are received in said slots in said front legs, two pins pivotally connecting said chair arms to said front legs at said slots, two relatively short rear legs having slots in the upper ends thereof, a rear cross member connecting said rear legs, two side rails connecting said front and rear legs, two links having upper and lower extensions and having recesses in the inner faces of said links, pins pivotally retaining said lower extensions in said slots on said rear legs, two upright back members having slots in the lower ends thereof and having openings on the front faces of said members, pins pivotally retaining said upper link extensions in said slots on said upright back members, pins pivotally retaining the rear ends of said chair arms in said openings on said upright back members, a pair of back uniting members connecting said upright back members, a chair seat, a horizontal axle attached to the rear of said chair seat with its ends rotatably inserted into the recesses in said links, said chair seat having side members with a plurality of notches in the front portion thereof having a depth and width so that they are engageable over the top edge of the horizontal cross member connecting the two front legs to prevent lateral movement of said chair seat.

2,746,524
CHILD'S FEEDING TABLE AND CHAIR ASSEMBLY
David Brand and Morris Broedy, Bronx, N. Y.; said Broedy assignor to said Brand
Application November 2, 1954, Serial No. 466,290
7 Claims. (Cl. 155—123)

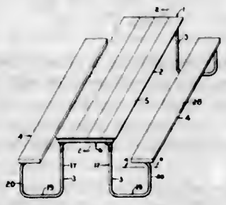
1. A child's feeding table and chair assembly comprising a table having a recess in its top, an insert sized to fill said recess and hingedly mounted on said table for

swinging movement between an extended position in which it fills said recess and a retracted position in which it is located beneath the table top clear of said recess, first latch means for locking said insert in its extended position, second latch means for locking said insert in



its retracted position, a chair sized to fit within said recess when said insert is in its retracted position, and means carried by said chair and cooperating with said first latch means for locking said chair in mounted position within said recess.

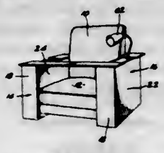
2,746,525
DISMOUNTABLE PICNIC TABLE
Calvin A. Cooper, Battle Creek, Mich., assignor, by mesne assignments, to Frederick J. Meiges, Battle Creek, Mich.
Application May 15, 1953, Serial No. 355,376
4 Claims. (Cl. 155—124)



1. A dismountable table assembly, comprising a table top, socket type leg receiving and holding means mounted on the underface of said table top and fastened to same at the corner portions thereof, a separate leg mountable at each corner portion of said table top, each leg having an upright portion fitting into and engaging said leg receiving and holding means at one end and an upright, bench seat supporting, portion at the other end with a ground contacting portion between them, each leg and each leg receiving and holding means having cooperating interengaging means locking same together when the leg is rotated into assembled position, and a bench seat mounted on the bench seat supporting portions of said legs, said legs having said bench seat mounted on them and anchored by the latter against rotation or removal from said leg receiving and holding means, said socket type leg receiving and holding means having a bayonet slot, and each leg having a projecting member cooperating and interengaging with said bayonet slot for locking the leg and the leg receiving and holding means together when in assembled position.

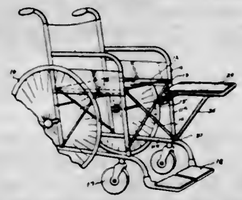
2,746,526
UNIVERSAL CHAIR
Ladislaus S. Loeschnigg and Hans J. Folk, Los Angeles, Calif.
Application June 1, 1954, Serial No. 433,556
3 Claims. (Cl. 155—127)

1. A chair including a pair of hollow arm members open at their tops, a pair of pivoted top members for said arm members, a pair of sliding top members for said arm members mounted to the rear of the respective said pivoted top members and operative engaging means on the swinging end of each of said pivoted top members for



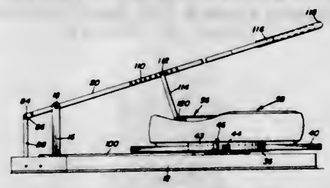
alternatively engaging the other pivoted top member and the respective said sliding top member.

2,746,527
LEG SUPPORTING ATTACHMENT FOR INVALID CHAIRS
John C. Liebich, Toledo, Ohio, assignor to Gendron Wheel Company, Perrysburg, Ohio, a corporation of Ohio
Application June 23, 1953, Serial No. 363,533
2 Claims. (Cl. 155—171)



1. A leg rest attachment for an invalid chair, having a front vertical rail, a seat, a horizontal brace link connected to said rail below the seat, and a horizontal rail rigid with the lower end of the vertical rail and having a forward extension, said attachment comprising a horizontal panel for supporting the leg, a bracket on the rear of said panel extending downwardly and rearwardly and terminating in a downwardly opening elongate yoke-like part to fit over the horizontal brace link of the chair, a leg inclining downwardly and rearwardly from the under side of the forward end portion of said panel, a clevis, a pivot mounting said clevis for pivotal movement about a vertical axis on the under side of the panel, said leg having a series of spaced holes in the upper end portion thereof, a bolt extending through the arms of the clevis and through one of said holes thereby enabling pivotal movement of the leg and providing link adjustment thereof, and a notched end portion for the lower end of the leg to fit the juncture of the vertical rail and forward extension of the horizontal rail of the chair.

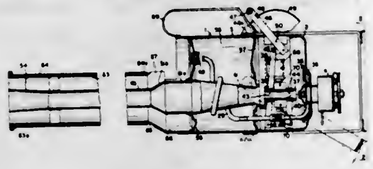
2,746,528
TIRE REMOVER WITH A ROTATABLE WHEEL SUPPORT
Lee J. Damman, Middleton, Wis.
Application January 26, 1953, Serial No. 333,113
7 Claims. (Cl. 157—1.26)



4. In a tire removing tool, a base, a turntable rotatably mounted on said base, an annular rim ring disposed on said turntable for receiving thereon a tire assembly, a force transmitting lever intermediately pivoted to said base and including a handle portion overlying said rim

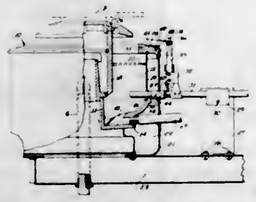
ring, a bead engaging element on said force transmitting lever for engaging the tire bead of a tire assembly, and force transmitting means for changing pivotal movement to rotary movement operatively connected to said turntable and to an end of said force transmitting lever for rotating said turntable in response to a return movement of said force transmitting lever.

2,746,529
RESONANT COMBUSTION DEVICE FOR HEATING ENGINES AND SIMILAR STRUCTURES
Wunibald I. E. Kamm, Willy Krautter, and Kurt Staiger, Dayton, Ohio, assignors, by direct and mesne assignments, to Stewart-Warner Corporation, Chicago, Ill., a corporation of Virginia
Application November 17, 1950, Serial No. 196,274
14 Claims. (Cl. 158—4)



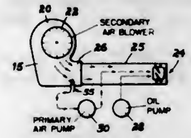
1. A heater for heating engines, and the like, which comprises in combination, a casing forming a combustion chamber with an inlet opening and an outlet opening located at two opposite extremities thereof, pipe means connected to the outlet opening of said combustion chamber and communicating therewith, said pipe means and said combustion chamber being arranged in substantially axial alignment with each other, an open-ended tubular means having one end disposed in opposed aligned relation to said combustion chamber inlet opening, fuel gas inlet means aligned with the opposite end of the tubular means to project fuel therein, manually operable means associated with said tubular means for varying the distance of said one end thereof relative to said inlet opening, closed fuel containing means adjacent said combustion chamber in heat receiving relation thereto, conduit means effecting communication between said fuel containing means and said fuel inlet means, said fuel inlet means having associated therewith a fuel flow control element, manually operable means associated with said control element for varying the supply of fuel through said fuel inlet means, and means operable automatically in response to the fuel gas pressure for varying the position of said fuel control element to increase the fuel supply through said inlet means in consequence of predetermined increases in the fuel gas pressure.

2,746,530
GAS PILOT ARRANGEMENT FOR BURNER APPARATUS
Cyril Charles Young, Kansas City, Mo.
Application August 4, 1952, Serial No. 302,538
7 Claims. (Cl. 158—11)



5. In a burner unit, a vaporizer tray, means providing a supply of fuel to said tray, means providing a combustion chamber adjacent said tray, gas burning means including a main gas burner adapted to burn combustible gas, and a pilot arrangement consisting of a first pilot extending adjacent to and outside of said combustion chamber arranged to ignite the gas fuel emanating from said gas burning means, and a second pilot extending into said combustion chamber and arranged to heat and ignite the fuel in said tray, both of said pilots having means directing a pilot flame toward a common point in said combustion chamber and operating to ignite and reignite one another, and means providing a source of gas fuel for said main gas burner controlled by fuel cutoff means and including a thermal control element outside of said combustion chamber arranged to be heated by said first pilot and adapted to operate said fuel cutoff means to cut off the supply of gas fuel to said main gas burner whenever said pilot is extinguished.

2,746,531
OIL BURNER
Charles G. Brelsford, Springfield, Ohio, assignor, by mesne assignments, to Kelsey-Hayes Wheel Company, Detroit, Mich., a corporation of Delaware
Application April 6, 1951, Serial No. 219,716
1 Claim. (Cl. 158—76)

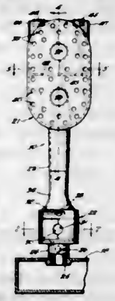


In an oil burner comprising a blower housing including a blast tube extending therefrom with said blast tube having a combustion head at the forward end thereof, the combination of a primary air tube within said blast tube, an oil tube within said air tube, a nozzle at the forward ends of said air and oil tubes for discharging an atomized spray of oil and primary air therefrom, a blower within said housing for supplying secondary air through said blast tube to said combustion head, an adapter connected to the rearward ends of said air and oil tubes, means securing said adapter within said housing on the discharge side of said blower to support said air and oil tubes within said blast tube, a primary air passage in said adapter connected with said air tube, an oil passage in said adapter connected with said oil tube, a primary air pump, an oil pump, means connecting the discharge sides of said air pump and said oil pump with said air passage and said oil passage respectively, said adapter having a third passage therein provided with a port in the rearward side of said adapter at a position located within the path of the secondary air discharged by said blower, and a conduit connecting said third passage in said adapter with the suction side of said air pump to supply air to the suction side of said air pump at the total discharge pressure of said blower.

2,746,532
GAS BURNER
Richard T. Keating, Chicago, Ill.
Application November 22, 1950, Serial No. 197,034
2 Claims. (Cl. 158—114)

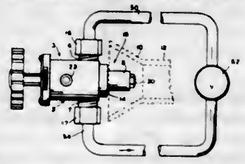
1. In an upright gas burner, the combination of a vertically disposed, oblong head portion comprising a vertical front wall, a generally vertical rear wall parallel with said front wall, and a marginal wall extending between said front and rear walls around their peripheral edges, with at least one open air duct extending between said front and rear walls; said head portion having a multiplicity of relatively small gas outlet ports disposed in generally horizontal position and located in spaced apart relationship in the aforementioned front wall; said

head portion having a generally horizontal transverse center partition extending between and interconnecting said front and rear walls and dividing the space within the head of the burner into an upper chamber and a lower chamber of substantially equal size and shape, oppositely disposed with respect to each other and located one above the other; said burner including a fuel mixture inlet comprising a mixing chamber and an elongated draft tube disposed in vertical position wholly below and communicate with the head portion of the



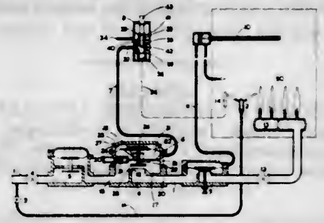
burner; with the upper end of the draft tube discharging entirely into the lower gas chamber of the burner at the bottom thereof; said partition having at least one enlarged metering aperture therein between the lower and upper gas chambers whereby the upper gas chamber is wholly in series with the lower chamber and is supplied with a portion of the fuel mixture flowing upwardly from the tube through the lower chamber to the upper gas chamber; said flow being restricted by the metering apertures in the aforementioned partition.

2,746,533
GAS STOVE FUEL SUPPLY SYSTEM, INCLUDING A VALVE
Leo V. Seaman, Phoenix, Ariz.
Application November 21, 1952, Serial No. 321,808
2 Claims. (Cl. 158—120)



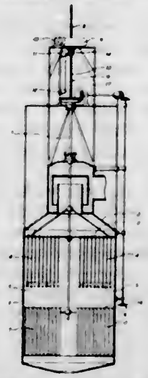
1. A gas stove fuel supply system including a valve composed of a body having a cylindrical forepart and a coaxial cylindrical rear part, an axially extending conical valve seat bore extending rearward from the fore end of said forepart and having a chamber at its inner end, an axial burner mixer nozzle boss extending rearward from the rear part of the body and having an axially extending nozzle receiving bore therein, a laterally disposed radially extending tube connecting boss having a bore connecting to said chamber at the bottom of said valve seat bore, an opposite laterally disposed radially extending tube connecting boss having a bore opening into said nozzle bore, and an inlet attaching boss extending radially from the fore portion of said valve body having a central bore extending radially into the forepart of said valve seat bore; a conical valve plug fitting into said valve seat bore having an axially extending operating stem at its outer end and an axial bore extending from its inner end to its forward portion and a radial bore extending outwardly from said axial bore to the surface of the plug and disposed to register with the bore of said inlet boss, and a tube loop including an automatic gas flow regulating valve connecting said laterally disposed connecting bosses.

2,746,534
SAFETY CONTROL MEANS FOR GAS APPLIANCES
Ernest George Brooks, Sanderstead, and James Edward Cooper, Carshalton Beeches, England, assignors to Thomas De La Rue & Company Limited, London, England, a company of Great Britain
Application January 5, 1953, Serial No. 329,712
Claims priority, application Great Britain February 4, 1952
9 Claims. (Cl. 158—129)



1. Safety control means for gas fired appliances and adapted for installation in a gas line connecting the main burner of an appliance with the gas supply, said control means comprising a pressure responsive cut-off valve in said gas line for preventing the flow of gas from said gas supply to said main burner when said cut-off valve is in its closed position; a cock in said gas line between said cut-off valve and said main burner for controlling the flow of gas to said main burner; a gas bleed passage connecting said cut-off valve and said gas line between said cut-off valve and said cock when said cut-off valve is in its closed position; a pilot jet; means by-passing said cut-off valve and said cock and connecting said pilot jet to said gas supply; a pressure controlling valve in communication with said cut-off valve for controlling the action of said cut-off valve; an electro-magnetic device for controlling said pressure controlling valve; a thermocouple adapted to be heated by said pilot jet for energizing of said electro-magnetic device; first manually operable control means in said cut-off valve; and second manually operable control means in said electro-magnetic device, said first and second manually operable control means being cooperable to open said cut-off valve and permit gas to flow to said main burner only after said cock and said manually operable control means are operated in predetermined sequence.

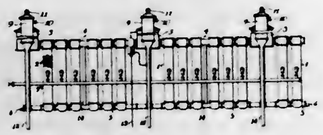
2,746,535
APPARATUS FOR CLEANING THE EVAPORATORS USED IN THE SUGAR INDUSTRY
Alberto Morin Barroso, Havana, Cuba
Application August 12, 1954, Serial No. 449,423
Claims priority, application Cuba January 13, 1954
4 Claims. (Cl. 159—1)



1. In an evaporator of the type described, cleaning apparatus comprising a first shaft and a second shaft, means

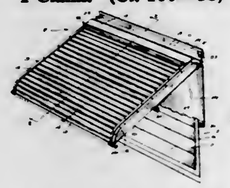
mounting said shafts upon said evaporator with said shafts in axial alignment, said mounting means including means coupling the proximate ends of said shafts so as to permit said shafts to turn freely relative to each other and so as substantially to prevent axial movement of said shafts relative to each other, a plurality of cleaning elements, means mounting said cleaning elements upon said first shaft, means for moving said second shaft axially in either direction, and means for turning said first shaft so as to vary the turned position of said cleaning elements.

2,746,536
LIQUID EVAPORATING APPARATUS
Shinzo Sumiya, Takaishicho, Senbokugun, Japan
Application April 14, 1952, Serial No. 282,115
Claims priority, application Japan April 18, 1951
4 Claims. (Cl. 159—17)



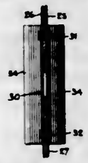
1. An evaporator comprising a plurality of groups of at least three heaters, a plurality of separators positioned one between each pair of adjacent groups of heaters, an upper circulation pipe and a lower circulation pipe connecting said separators in parallel, said groups of heaters being connected in parallel between said upper and lower circulation pipes, means in said lower circulation pipe to admit a liquid to be evaporated into said lower circulation pipe and the heaters, means to introduce steam to said heaters, means to withdraw concentrated liquid material from said separators, and means to withdraw vapor from said separators.

2,746,537
AWNING SHUTTER
Harry B. Joslin, Hollywood, Fla.
Application April 23, 1953, Serial No. 350,678
1 Claim. (Cl. 160—58)



A structure of the character described providing a combined awning and a protective shutter to be mounted adjacent a window opening in a wall with the device being so proportioned as to completely overlie the window opening when in the position of a protective shutter, the device embodying a rigid awning device and a pair of protective and supporting side panels, the awning consisting of a rigid frame having flat side walls and a corrugated top connecting the side walls, the side walls being straight along their lower edges and with the edges bent inwardly to form flanges, angle irons connecting the side walls and the top, the top and angle irons being curved downwardly at the upper and lower ends of the awning to terminate at the flanges, whereby to form an inverted trough; the top at the upper end of the awning being non-corrugated and having its free edge rolled to form a hinge element for the full width of the awning, the non-corrugated portion of the top bent upwardly to form a water stop inwardly from the upper end of the awning, a rolled mating hinge element that has convolutions that engage within the rolled edge of the top portion, the hinge elements being co-extensive, closure plates for the opposite ends of the hinge elements, the second named rolled hinge element being rigidly connected to the wall area above the window opening, the hinge elements supporting the awning to swing toward and from the window opening, the side panels being flat and having hinged mounting upon the wall outwardly of and upon opposite sides of the window opening to swing toward and from the window opening, the side panels when shifted outwardly underlying the side flanges of the awning and with the panels and the awning sides being flush, the side panels being segmental in side elevation and having a top flange that is parallel with the awning side flanges when in an extended position and a rear vertically disposed flange that is connected with the hinges, spring devices connected with the wall above the window opening and with each of the side panels whereby the panels are biased toward the window opening, bolt means for rigidly connecting the side panels and the awning when in the extended position, the said bolt means when released permitting the side panels to swing inwardly under the influence of the spring devices to move the panels out of the path of downward movement of the awning whereby the awning when swung downwardly upon its hinge elements will be disposed in wholly overlying relation to the window opening and in wholly overlying relation to the side panels and with its flanges engaging the wall, the second named rolled hinge element embodying a protective housing for the hinge.

2,746,538
FOLDING DOOR
Samuel J. Johnson, West Chester, and Charles J. Schroeder, Cincinnati, Ohio, assignors to Clopay Corporation, Cincinnati, Ohio, a corporation of Maryland
Application October 12, 1955, Serial No. 540,039
4 Claims. (Cl. 160—84)

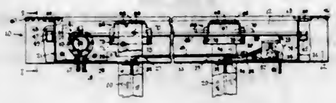


1. In a folding door including a flexible curtain for spanning a framed opening, a track adapted to be mounted on the upper edge of the frame, travellers mounted on the upper edge of the curtain and adapted to engage in the track, means on one side edge of the curtain for securing said edge permanently to a side of the frame, a vertical pocket formed in the opposed side edge of the curtain, a pair of stiffening slats disposed in said pocket with their inner ends spaced apart, a rigid handle secured to each of said slats and spanning the opening between them, whereby said slats and handle form a continuous stiffening member extending along the entire side edge of the curtain.

2,746,539
VENETIAN BLIND HEADBAR AND HARDWARE THEREFOR
Adolphe W. Loucony, Bridgeport, Conn., assignor to Conso Metal Products, Incorporated, Bridgeport, Conn., a corporation of Connecticut
Application October 25, 1952, Serial No. 316,930
3 Claims. (Cl. 160—177)

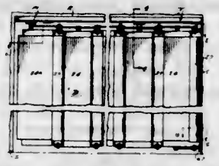
1. A bracket for a sheet-metal, open-top, channel-shaped headbar for Venetian blinds, comprising a sheet-metal stamping having a transverse right-angle bend to form a horizontal plate and a vertical plate, the latter having a uniform width to closely, slidingly fit between the side walls of the headbar and having a slot in its upper portion provided with a rolled-over, semi-circular

lower edge to form a half-bearing open at the top to receive and support a tilt rod, said upper portion having a transverse bend to offset the upper extremity thereof laterally of the remainder of the plate so as to provide an unobstructed passage to the said half-bearing from



above; and an arm struck out of the vertical plate and extending upward in a direction away from the said right-angle bend and in spaced relation to said semi-circular edge to form an end stop to limit the movement of the rod in one direction.

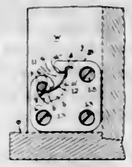
2,746,540
ACCORDION FOLDING DOOR
Guy E. Dixon, Jr., Hialeah, Fla.
Application May 4, 1955, Serial No. 506,019
2 Claims. (Cl. 160—206)



1. A folding door comprising a plurality of inflexible vertical panels formed with vertical slots having their inner ends enlarged in and substantially co-extensive with vertical edges of said panels and having horizontal slots in and adjacent the horizontal edges of said panels and coextensive therewith, strips of flexible material substantially coextensive with said vertical slots and having enlarged vertical edge portions received in the enlarged inner ends of said vertical slots, said strips connecting the panels in series, a horizontal track above said panels, rollers supported on said track and having axle members connected to and supporting said panels, a lazy-tong system between said track and the upper ends of said panels, another lazy-tong system at the bottom of the door, each system including similar generally U-shaped plates each having inturned flanges received in said horizontal slots and end flanges to lock said plates to panel bars substantially equal in length to said plates and pivoted at their centre points to said plates, said plates and said bars having pivotally connected terminals, the terminals of said plates being offset from the longitudinal axes thereof so that said panels can collapse into parallel relation when the door is fully opened, and an attaching plate for each of said systems, said plates having slots, one of said plates and one of said bars in each of said systems having terminal elements pivotally and slidably mounted in said slots.

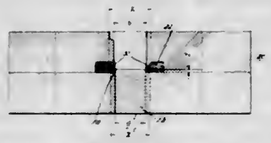
2,746,541
HOLD-DOWN BRACKET FOR WINDOW SHADES
Thomas Tash, St. Petersburg, Fla.
Application December 16, 1954, Serial No. 475,745
7 Claims. (Cl. 160—349)

1. A hold-down bracket for window shades, blinds and the like of the draw-type equipped with gudgeon pins on the lower end of said blinds to engage a bracket, said bracket comprising a body member having means by which it may be secured to a fixed member at a window opening, an arcuate slot therein and positioned to extend transversely of the draw-movement of said blind when secured in position, one end of said slot extending through an edge of the body member to provide an entrance opening thereto directed toward the line of draw-movement of said blind to receive a gudgeon on said blind transversely of said slot, the other end of said slot terminating in a closed extremity within the body member and forming a deep anchoring pocket with its closed end extending in the same general direction as its said open



end, the defining walls of said slot being spaced and dimensioned to slidably receive and guide the gudgeon pin therein, a resilient finger secured at one end portion to said body member and positioned and biased to lie across the path of movement of said gudgeon pin at said entrance opening and to close said pocket end of said slot with sufficient tension to obstruct and hold the gudgeon pin in said pocket except against deliberate manual pressure to traverse said slot toward its open end.

2,746,542
PUNCH AND DIE MACHINE FOR PERFORMING BOTH BLANKING AND TRIMMING OPERATIONS
George Biegert, Elmhurst, N. Y., assignor to Mergenthaler Linotype Company, a corporation of New York
Application July 3, 1951, Serial No. 235,029
7 Claims. (Cl. 164—21)

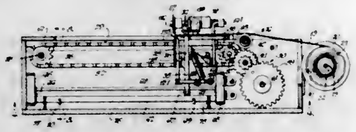


1. In a punch and die machine for performing both blanking and trimming operations, the combination of a die unit comprising an upper blank forming cavity and a lower blank trimming cavity, said cavities being in axial alignment and of the same cross-sectional shape but the dimensions of the lower blank trimming cavity being slightly less than the dimensions of the upper blank forming cavity, means for intermittently feeding the material to the die unit, and a power driven punch common to both cavities, said punch peripherally conforming in shape to the upper blank forming cavity and being peripherally dimensioned to extend into the upper blank forming cavity with a snug slide fit but being too large to fit into the lower blank trimming cavity, said punch being movable downwardly into the upper blank forming cavity just short of the lower blank trimming cavity to cut a blank from the material and force it into the lower cavity for trimming.

2,746,543
DISPENSER FOR DRAWING OUT AND SEVERING A DESIRABLE LENGTH OF TAPE
Stephen T. Gezich, Chicago, Ill.
Application December 2, 1953, Serial No. 395,721
10 Claims. (Cl. 164—42)

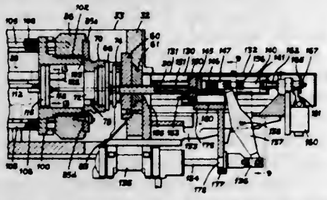
1. In an adhesive tape dispensing apparatus having a source of tape thereon, piercing means for gripping the tape, means for reciprocating the piercing means away from and toward the source of tape, said means including

a manually operable control, means intermediate the manual control and the piercing means to transmit movement from the control to the piercing means, means operable upon a change in the direction of movement of the control means to push the piercing means toward or pull the piercing means away from the tape, and means for stripping the tape from the piercing means, said stripping means comprising a hinged plate disposed beneath the tape and on the same side of the tape as the means for pushing the piercing means toward the tape, and common operating means for the piercing means and the stripping means, said operating means including means for reversing the relative direction of motion of the piercing means and stripping means such that the stripping means raises the tape while the piercing means is being lowered relative to said tape.



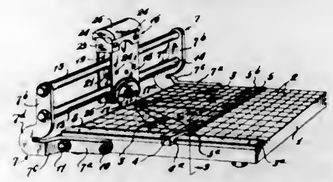
6. In an adhesive tape dispensing apparatus having a source of tape thereon, means for gripping the tape, means for severing the tape, means for reciprocating the gripping means away from and toward the source of tape, said reciprocating means having a normal starting position at the end of its reciprocation nearest the source of tape, said reciprocating means including a manually operable control reciprocable in timed relation with the gripping means, means intermediate the manual control and the gripping means to transmit movement from the control to the gripping means, means operable upon a change in the direction of movement of the control means at any position of the reciprocating means and independently of the severing means to engage and disengage the gripping means from the tape, and means operable upon return movement of the gripping means to a position just prior to its reaching the same normal starting position for operating the tape severing means.

2,746,544
DIE ASSEMBLY IN APPARATUS FOR TRIMMING TUBULAR PIECES
Charles M. Brehm, Springfield, Ohio, assignor, by mesne assignments, to Kelsey-Hayes Wheel Company, Detroit, Mich., a corporation of Delaware
Application January 27, 1953, Serial No. 333,499
16 Claims. (Cl. 164—48)



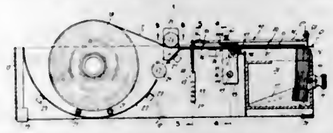
1. Apparatus of the character described for trimming tubular pieces comprising a die having a through bore for receiving successive said pieces therein for trimming, a feeding member mounted for reciprocating movement at the back of said die to feed said successive pieces into said bore, means for periodically holding said feeding member stationary in the advanced limit position thereof, a punch located at the front end of said die for insertion in the end of each said piece to be trimmed, drive means for effecting relative transverse movement of said punch and said die to trim said piece, a pusher member for engaging the opposite side of each said piece from said feeding member, and means for applying yielding pressure to said pusher member during operation of said drive means to urge each said piece against said stationary feeding member in such manner as to maintain the position of said piece in said die with respect to said feeding member during trimming thereof.

2,746,545
DEVICE FOR TRIMMING SHEET MATERIAL
George H. Chamberlain, San Jose, Calif.
Application February 19, 1951, Serial No. 211,763
3 Claims. (Cl. 164—77)



1. A trimmer comprising a board of fibrous material, a metal rod inserted within the edge of said board, brackets at the two ends of said inserted rod, said brackets having means for anchoring the same to said board and for securing the same to said inserted rod, a shear blade of metal fixedly mounted upon said inserted rod, rail means mounted upon said brackets and extending parallel to the edge of said shear blade, a carriage slidably mounted upon said rail means, a rotatable cutter mounted upon said carriage and being adapted for operative engagement with the cutting edge of said shear blade.

2,746,546
DISPENSER HAVING A TAPE SEVERING KNIFE AND AUTOMATICALLY ACTING TAPE-BRAKE
Charles P. Taylor, Belleville, Ill., assignor to Ideal Stencil Machine Company, Belleville, Ill., a corporation of Illinois
Application August 25, 1952, Serial No. 306,208
9 Claims. (Cl. 164—84.5)

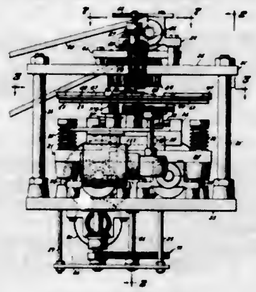


1. In a dispenser, a frame, a fixed horizontal platen on said frame, a knife and brake support disposed over said platen, means for pivotally connecting said brake and knife support to said frame, a knife carried by the support at its forward end, a brake carried by the support at its rearward end, a tape guide mounted beneath the knife and brake support, and located forwardly of said platen, pivot means pivotally connecting said tape guide to said knife and brake support, spring means connected to the knife and brake support, said spring means tending to urge the brake downwardly against the platen, and an abutment between the rear end of the tape guide and the knife and brake support, said abutment being located rearwardly of the pivotal connection between the knife and brake support and the frame.

2,746,547
CORE PERFORATOR FOR INK PAD
Charles C. Jenkins, La Canada, and John W. Lapointe, Van Nuys, Calif.
Application July 31, 1953, Serial No. 371,614
11 Claims. (Cl. 164—93)

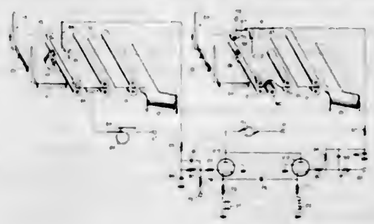
1. An apparatus for cutting a plurality of closely spaced cores in an ink pad body of resilient foamed rubber-like material comprising frame means, a number of hollow-

point drill means mounted on vertical axes rotatably on the frame, support means adapted to receive and support an ink pad body confronting the hollow-point ends of the drill means, vertically reciprocal cam means supported on the frame adapted to intermittently move said support means axially relative to said drill means to drive said



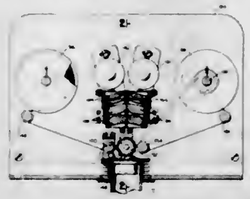
ends of the drill means into said pad body, horizontally rotatable cam means associated with the support means for intermittently displacing the ink pad body horizontally after each drill engagement for cutting additional cores closely adjacent cores cut therein; and powered means for rotating said drill means and for operating said cam means.

2,746,548
DEVICE FOR MAKING PERFORATED RECORDS IN TRANSIT
Robert E. Paris, Poughkeepsie, and John A. Wieland, Fishkill, N. Y., assignors to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application November 12, 1952, Serial No. 319,998
2 Claims. (Cl. 164—115)



1. A mechanism for perforating a record comprising, in combination, an element adapted to be actuated for perforating said record, a magnet operative when energized for actuating said element, means for controlling the energizing of said magnet comprising, in combination, first and second gaseous tubes, each having grid, anode and cathode electrodes, and each said tube capable of a conductive and non-conductive state, circuit connections for rendering one gaseous tube non-conductive whenever the other said gaseous tube is rendered conductive, means coupling said anodes, means connected to supply direct current anode potential to said tubes, means for applying a potential to the grid of said first gaseous tube for maintaining said first gaseous tube normally non-conductive, means for applying a potential to said grid of said second gaseous tube for maintaining said second tube normally conductive, conductors connecting the cathode of said first gaseous tube through said magnet to ground, said magnet being energized when said first tube conducts, an impedance, conductors connecting the cathode of said second gaseous tube through said impedance to ground, a pulsing means for initiating conduction in said first tube, normally open contacts adapted to be closed by said electromagnet when energized, and circuit means including said contacts and operative to initiate conduction of said second tube when said contacts are closed.

2,746,549
SELECTIVE FILM CONTROL FOR CARD PUNCH
Robert I. Roth, Mount Pleasant, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application July 20, 1951, Serial No. 237,732
5 Claims. (Cl. 164—115)

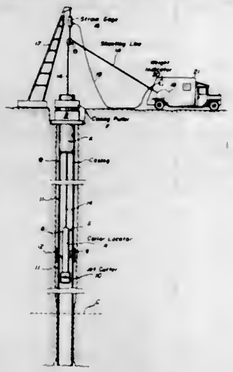


1. In a record card reproducing system, means for automatically sensing control indicia from each of a plurality of record means, means for electrically storing such indicia. a card punching station, means for feeding a blank record card to said card punching station, an optical system including a light source for projecting a film strip of indefinite length having photographically recorded thereon a succession of perforated records separate from the first named record means and including control indicia and record data, the number of said records being limited only by the length of said film strip, means in said optical system including means sensitive to a beam of light from said light source projected through control indicia on the film, means under control of said light sensitive means for comparing film control indicia with the electrically stored indicia, means for projecting record data from the same photographic film, light sensitive means responsive to projected record data, punch control means responsive to said last named light sensitive means, and means operative upon a comparison of stored control indicia and film control indicia and only when the indicia thus compared are identical, to render active said punch control means in response to said light sensitive means actuated by projected film data, whereby the data of selected film frames is reproduced in punched cards under the selective control of such stored control indicia.

2,746,550
RECOVERY OF CASING FROM WELLS
Milton E. Mitchell, Jr., Winters, Tex., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware
Application June 2, 1953, Serial No. 359,149
1 Claim. (Cl. 166—4)

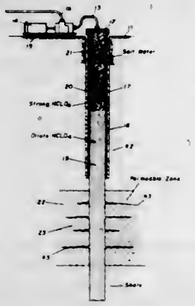
A method for recovering the maximum free portion of a string of pipe made up of sections fastened together at their respective ends by collars which comprises the steps of suspending an assembly including a collar locator and a jet casing cutter on a flexible wireline in a borehole, moving said assembly in said borehole by means of said wireline to sequentially position said collar locator at a series of said collars and sequentially engaging said collar locator with each of said collars, exerting a selected tension on said wireline while said collar locator is engaged with each of said collars, registering said tension on said wireline, exerting tension on the upper end of said string of pipe while maintaining said selected tension on said wireline, registering the resulting tension change on said wireline, locating the collar next above the collar at which there is no change registered in the tension exerted on the

wireline, cutting said pipe by means of said jet casing cutter approximately at said located collar to free the



portion of said string of pipe above said located collar and recovering said free portion of said string of pipe.

2,746,551
METHOD OF INCREASING PERMEABILITY OF A PRODUCING FORMATION
Whitman D. Mounce, Houston, Tex., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware
Application April 30, 1952, Serial No. 285,221
3 Claims. (Cl. 166—36)



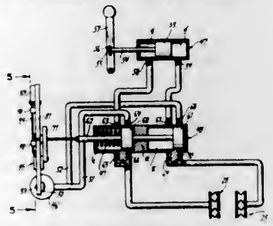
1. A method of increasing the permeability of a producing formation containing petroliferous substances which comprises forcing a dilute solution of perchloric acid of insufficient strength to explode at the prevailing temperature of the producing formation into said producing formation and then forcing a stronger solution of perchloric acid of a sufficient strength into said formation to initiate an explosion in said formation at prevailing temperature of the producing formation to clean and fracture said formation, and then producing petroliferous substances from said formation.

2,746,552
CYLINDRICAL STRAINER OR FILTER UNITS
Pierre Joseph Grospas, Casablanca, Morocco, assignor to Societe anonyme dite: Etablissements Grospas, Casablanca, French Morocco
Application April 2, 1951, Serial No. 218,757
Claims priority, application Morocco April 4, 1950
5 Claims. (Cl. 166—235)

1. In a well screen comprising an apertured guide tube having apertures spaced throughout the length thereof, a stack of separate rings mounted co-axially with said tube to define an annular space therebetween and calibrated longitudinal spacer elements between adjacent rings defining a predetermined axial space therebetween, the provision of radial spacer elements between said rings and said tube comprising a thin circular flange extending from each ring into continuous contact with said tube and partitioning the space between said rings and tube into a series of separate, circular, horizontal chambers.

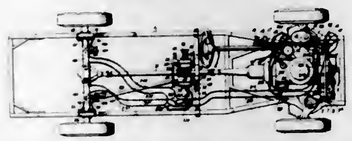


2,746,553
AIRCRAFT LATERAL CONTROL SYSTEMS
James L. Robertson, Clayton, Mo., assignor to Robertson Development Corporation, St. Charles, Mo., a corporation of Missouri
Application April 13, 1953, Serial No. 348,263
3 Claims. (Cl. 170—135.24)



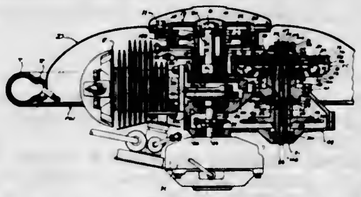
1. A lateral control system for aircraft comprising two variable-pitch propellers, means for independently rotating each propeller, pitch control means operatively associated with each propeller, a first hydraulic pump having two outlets and being adapted for simultaneously creating pressure at one outlet and suction at the other, a second hydraulic pump having two outlets and being adapted for simultaneously creating the same pressure or suction at both outlets, and a changeover valve interposed between the hydraulic pumps and the pitch control means for alternatively connecting the outlets of one or the other of said pumps to the respective pitch control means.

2,746,554
PARKING DEVICE FOR VEHICLES
Harry L. Matthews, Seattle, Wash., assignor of one-half to John C. Hurley, Seattle, Wash.
Application October 15, 1952, Serial No. 314,937
4 Claims. (Cl. 180—1)



1. In combination with a vehicle having a motor, a frame and a main drive shaft, means for turning said vehicle in a confined space, said means including a hydraulic system and comprising a fluid pump driven by said motor, a selector valve, said selector valve being in hydraulic interconnection with said pump and having means to control the direction of fluid from said pump through said system, a friction drive adapted to contact said shaft, said friction drive including opposed friction wheels on each side of said shaft, hinge bars pivotally suspended from said frame on each side of said shaft, said friction wheels being mounted for rotation in said hinge bars, hydraulic ram means including relatively moving telescopic members, each of said telescopic members being pivotally interconnected with one of said hinge bars whereby said friction wheels may be selectively driven toward each other in driving contact with said shaft and away from each other out of contact with said shaft, said hydraulic ram means being in fluid interconnection with said selector valve, two supporting brackets pivoted to said frame, auxiliary wheels mounted for rotation on each of said brackets upon axes longitudinally disposed with respect to said frame, hydraulic cylinder means in interconnection with each of said brackets to lower said wheels to ground engaging contact and to raise said wheels to raised inoperative position, said cylinder means being pivotally interconnected with said frame at one end thereof and to said brackets at the other end thereof, said cylinder means being in interconnection with said selector valve, means in interconnection with said friction wheels and at least one of said auxiliary wheels to drive said auxiliary wheels, whereby in one position of said valve said wheels are lowered and said friction wheels simultaneously engage said drive shaft, and in another position said wheels are retracted and said friction wheels are simultaneously placed out of contact with said shaft.

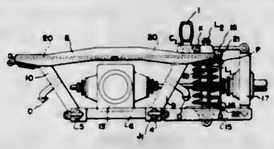
2,746,555
WHEEL DRIVE TRANSMISSION AND CLUTCH ARRANGEMENT
William P. Dalrymple, Rochester, Burr W. Mantle, Pittsford, and Henry A. Sherwood, Tarrytown, N. Y., assignors, by direct and mesne assignments, to Adrienne M. Sherwood, Tarrytown, N. Y.
Application September 5, 1950, Serial No. 183,178
10 Claims. (Cl. 180—10)



1. In a vehicle having a rotatable wheel carrying an engine for driving the same, power transmitting means for connecting the engine to the wheel to drive the same and embodying a clutch shaft adapted to be connected to said engine to be rotated thereby upon operation of the engine, a normally disengaged clutch structure mounted on said clutch shaft and including a clutch face adapted for rotation with said shaft, said clutch also including a hub rotatably mounted on said clutch shaft, a clutch plate connected to said hub inwardly of said clutch face, automatic means responsive to centrifugal force and effective to cause the clutch plate to engage said clutch face to thereby connect said hub to said clutch shaft for rotation therewith, means for connecting said hub to said wheel to effect rotation of said wheel when said hub is connected to said clutch shaft for rotation therewith, and means for manually engaging the clutch, the last-named means including a pin extended through the clutch shaft and adapted upon axial movement relative thereto to move said hub along said clutch shaft until said clutch plate engages said clutch face.

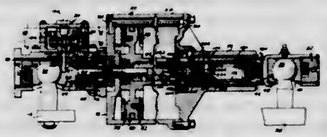
2,746,556
VEHICLE FRAME RESILIENTLY MOUNTED ON INDEPENDENTLY - SPRUNG - WHEEL - SUPPORTED, MOTOR-CARRYING SUBFRAME
Friedrich K. H. Nallinger and Josef Müller, Stuttgart, Germany, assignors to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application April 7, 1950, Serial No. 154,551
Claims priority, application Germany April 20, 1949
3 Claims. (Cl. 180—12)

2. In a suspension system for a motor vehicle with road wheels the combination of a sub-frame for said vehicle, a bridgelike structure including upwardly directed truss members and an upper cross-member forming part of said sub-frame and located transverse thereof, suspension means for said road wheels, means substantially in the vertical plane of said bridgelike structure attaching said suspension means to said sub-frame, a vehicle body, a plurality of pairs of resilient mounting means supporting one end of the vehicle body on said sub-frame, said pairs of mounting means being longitudinally spaced with respect to said vehicle body, one pair of said mounting



means being attached to said bridgelike structure and another pair of said mounting means being located towards a transverse central vertical plane of the vehicle body, a power plant, unit means resiliently supporting said power plant unit on said sub-frame including a plurality of longitudinally spaced mounting means, and torsion rod stabilizer means connected to said suspension means and extending along said bridgelike structure, both said bridgelike structure and said torsion stabilizer means extending transversely of the vehicle above a portion of said power plant unit.

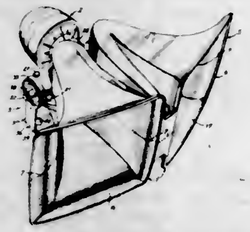
2,746,557
POWER STEERING APPARATUS
Darold A. Augustin, Elyria, Ohio, assignor to Bendix-Westinghouse Automotive Air Brake Company, Elyria, Ohio, a corporation of Delaware
Application January 12, 1953, Serial No. 330,798
8 Claims. (Cl. 180—79.2)



6. In a power steering mechanism for vehicles of the type having a manually operable steering member and a steering linkage operatively connected with the steerable wheels of the vehicle, a fluid pressure operated actuator having a cylinder and a piston therein, a hollow piston rod connected with the piston and adapted to be connected with a fixed member of the vehicle, means connecting the cylinder with said linkage whereby when said actuator is energized by fluid pressure said steerable wheels are steered by power, means connecting said linkage and said steering member and including a valve mechanism for controlling the application of fluid pressure to said cylinder whereby the steerable wheels may be moved manually or by the combination of manual and power effort, means including a precompressed spring interposed between said steering member and linkage and compressible when the resistance to steering of said wheels exceeds the degree of precompression of said spring to allow actuation of said valve mechanism by movement of said steering member, and a hydraulic dampening device for preventing operation of said valve mechanism due to road shock imparted to said connecting means, said device including a dampening piston positioned within said hollow piston rod and dividing the space within said rod into a pair of chambers adapted to be filled with a damping liquid, a rod connecting said dampening piston and cylinder and passing through one of said chambers, means carried by the dampening piston and estab-

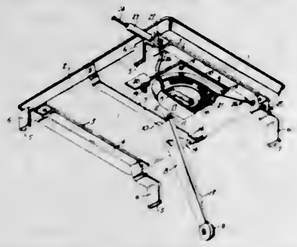
lishing a restricted communication between said chambers and allowing relatively free flow of liquid therebetween during normal movement of said cylinder during normal steering operations and building up a relatively high pressure to oppose movements of the dampening piston and the cylinder due to road shocks imparted to said connecting means which tend to increase the velocity of movements of said dampening piston and cylinder, a compensating cylinder secured within the hollow piston rod and positioned within the other of said chambers and being filled with said damping liquid, means for establishing communication between said compensating cylinder and said other of the chambers, and means to maintain the liquid in said compensating cylinder under a relatively light pressure at all times.

2,746,558
REFLEX TYPE LOUDSPEAKERS
Sidney E. Levy, White Plains, N. Y., assignor to University Loudspeakers, Inc., White Plains, N. Y., a corporation of New York
Application June 24, 1952, Serial No. 295,230
10 Claims. (Cl. 181—27)



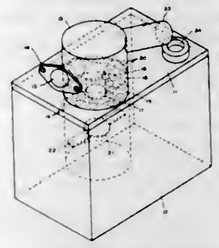
6. A loudspeaker of the class described, comprising two identical and symmetrical unitary horn half-sections defining a continuous sound channel therethrough when assembled together in opposed relation to each other, means for separately securing said horn sections together in assembled relation, a driver operatively connected to and communicating with the sound channel aforesaid, and mounting means for supporting said horn sections and driver, said mounting means including a member recessed in each horn half-section and rigidly clamped therebetween when said half-sections are secured together.

2,746,559
SERVING TRAY MOUNTED LOUD-SPEAKERS
Ivan W. Mastin, Bellingham, Wash.
Application June 1, 1954, Serial No. 433,485
3 Claims. (Cl. 181—31)



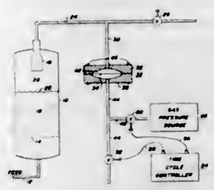
3. In combination, a serving tray, a loud-speaker including a cone, means carrying said loud-speaker beneath said tray, the upper surface of said tray being unbroken and unobstructed, having unimpaired utility for use as a serving tray, and legs carried by said tray and extending downward therefrom beyond said loud-speaker for supporting said tray independently of said loud-speaker.

2,746,560
WATER MUFFLER
William H. Arnold and Samuel H. Cottrell, Battle Creek, Mich., assignors to Clark Equipment Company, Buchanan, Mich., a corporation of Michigan
Application December 27, 1952, Serial No. 328,222
6 Claims. (Cl. 181—52)



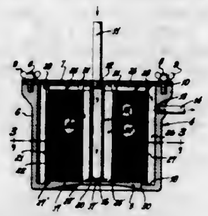
1. In a muffler comprising a housing having cooling liquid therein, an inlet tube extending downwardly through the top wall of said housing, an outlet tube, a deflector disc underlying said inlet tube in spaced parallelism with the liquid, and said inlet tube being adapted to direct gases in the process of expansion toward said deflector disc which causes the gases to be swirled across the surface of the liquid at a velocity less than the inlet velocity of said gases and without impeding the expansion thereof preliminary to the gases being exhausted upwardly through the top wall of said housing via said outlet tube.

2,746,561
METHOD AND APPARATUS FOR CLEANING FILTERS IN VAPOR SYSTEMS OF CATALYTIC REACTIONS
Oral L. Beber, Lakewood, and Byron B. Woertz, Crystal Lake, Ill., assignors to The Pure Oil Company, Chicago, Ill., a corporation of Ohio
Application December 28, 1953, Serial No. 400,742
2 Claims. (Cl. 183—61)



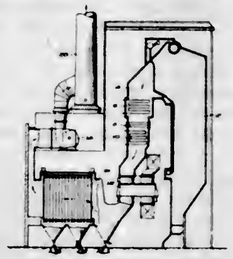
1. An apparatus for removing catalyst fines from a catalyst filter located between the outlet of a catalytic reaction zone and the conduit for conducting gaseous reaction products from said zone comprising in combination, a source of gas pressure, a pressure responsive means connected between said source of gas pressure and said outlet conduit, said gas pressure source being maintained at a pressure higher than the pressure within said reaction zone, said pressure responsive means adapted to translate pressure increases from the gas pressure side thereof to the outlet conduit side thereof, means for controlling the passage of gas pressure to said pressure responsive means, means for releasing the gas pressure from said pressure responsive means, and a time control means connected to said control and release means to alternately and intermittently open and close said control means and close and open said release means, thereby to cause said pressure responsive means to oscillate and impart a vibratory action to said reaction products and free said filter of occluded catalyst particles.

2,746,562
DEVICE FOR REMOVING LIQUID AND LIQUEFIABLE VAPORS FROM GAS
Edward W. Ryall, Los Angeles, Calif.
Application February 24, 1953, Serial No. 338,318
4 Claims. (Cl. 183—67)



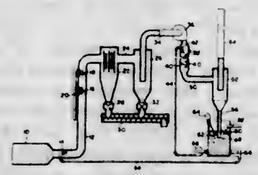
3. In a device for separating liquid from a gas: a closed chamber having an inlet and an outlet; means in said chamber providing a surface on which liquid is deposited from the gas; a nozzle connected with said inlet; said nozzle having a discharge opening disposed in close proximity to said surface to define therewith a restricted orifice through which gas is discharged from said nozzle; and a hollow cylindrical member of absorptive material capable of filtering gas therethrough; said member having an imperforate hollow core open at both ends and surrounding said nozzle in spaced relation thereto to form an annular flow passage communicating at one end with said orifice; one end of said member contacting said surface; the side of said member and the other end thereof being spaced from walls of said chamber to define a second passage communicating the other end of said annular flow passage with said outlet, said member providing therethrough a filtering passage leading from said surface to said second passage for filtering that portion of the gas flowing past said core between the said member and said surface; discharge of gas from said orifice resulting in the flow of gas through said passages to said outlet and the deposit of liquid on said surface; said absorptive member absorbing the liquid deposited on said surface.

2,746,563
PURIFICATION OF GASES
Earl V. Harlow, Towson, Md., assignor to Koppers Company, Inc., a corporation of Delaware
Application June 9, 1953, Serial No. 360,531
6 Claims. (Cl. 183—114)



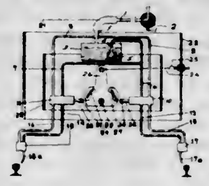
1. A process to reduce back discharge in the electrical precipitation of fly ash from combustion chamber stack gases containing SO_2 comprising the steps of passing said stack gases emanating from a combustion chamber, prior to the precipitation of the fly ash in said gases, through a zone having disposed therein a catalytic surface of sufficient area to convert a portion of said SO_2 to SO_3, and subsequently passing said gases to an electrical precipitation zone to remove the fly ash from said gases.

2,746,564
SEPARATING CARBON FROM GASES
Ira Williams, Borger, Tex., assignor to J. M. Huber Corporation, Locust, N. J., a corporation of New Jersey
Application May 31, 1955, Serial No. 511,944
12 Claims. (Cl. 183—121)



1. The process for recovering furnace carbon black from a gaseous suspension thereof which comprises continuously passing the gaseous suspension through a washing zone and therein washing the carbon black therefrom with an attenuated stream of a scrubbing liquid which consists essentially of a fluid aqueous slurry of such carbon black, continuously passing the resulting mixture of scrubbing liquid and carbon black from the washing zone and into a body of said scrubbing liquid in a reservoir, said body of scrubbing liquid having a volume of from about 160 gallons to about 1200 gallons for each pound of carbon black that is normally washed from the gaseous suspension in one minute and normally containing said carbon black in a concentration between about 1.25% and 10% by weight but less than that concentration which will increase the viscosity of the scrubbing liquid to above 15 centipoises at 30° C., dispersing the mixture of scrubbing liquid and carbon black from the washing zone approximately uniformly throughout said body of scrubbing liquid and maintaining the carbon black in suspension in said body of scrubbing liquid by agitating said body of scrubbing liquid, maintaining said body of scrubbing liquid at a substantially constant volume by the automatic addition of water thereto, continuously recirculating scrubbing liquid from said body thereof to the washing zone as the scrubbing liquid in said zone, continuously withdrawing scrubbing liquid from the body thereof at a substantially constant rate equivalent to the average rate at which the carbon black is washed from the gaseous suspension, and passing said withdrawn scrubbing liquid to a carbon black recovery system and there separating the carbon black from the scrubbing liquid.

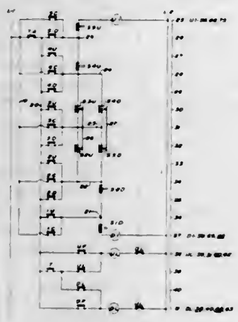
2,746,565
RAIL LUBRICATING DEVICE MOUNTED ON A VEHICLE RUNNING ON RAILS
René Ernest Lucien Vorburger and Adrien Jacques Michel Pierre Lafaye, Paris, France, assignors to "Societe de Robinetterie S. A. J.," Paris, France, a company
Application June 8, 1950, Serial No. 166,857
Claims priority, application France June 13, 1949
13 Claims. (Cl. 184—3)



1. In a rail-lubricating system for a vehicle comprising a lubricant reservoir, a source of motive fluid, an atomizer-ejector, means for feeding lubricant and motive fluid from said reservoir and said source, respectively, to said

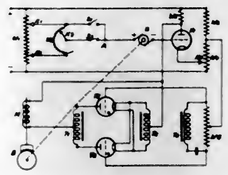
atomizer-ejector for discharging said lubricant against a rail, a distributor controlling the discharge of said lubricant, control means for said distributor preventing the discharge of said lubricant except during movement of the vehicle along a curve, said control means being connected to a vehicle part mounted for displacement relative to the vehicle body upon such movement: the combination of said distributor with a relay valve operatively interposed between said control means and said distributor, said valve having a movable element displaceable by said control means; said combination further including first conduit means linking said valve with said source and second conduit means linking said valve with said distributor, said first and second conduit means communicating with each other only in an off-normal position of said movable element; said distributor having a pressure-responsive control member displaceable by said motive fluid from said second conduit means in said off-normal position of said movable element; said distributor being provided with an inlet port connected to said source and with an outlet port connected to said atomizer-ejector, said ports communicating with each other only in an off-normal position of said control member, thereby admitting motive fluid to said atomizer-ejector and enabling the discharge of lubricant therefrom only in an off-normal position of said movable valve element.

2,746,566
DELAY FOR DIRECTIONAL PREFERENCE CONTROL FOR PARKED ELEVATOR CARS
Ernest B. Thurston, Toledo, Ohio, assignor to Haughton Elevator Company, Toledo, Ohio, a corporation of Ohio
Application August 31, 1953, Serial No. 377,311
7 Claims. (Cl. 187—29)



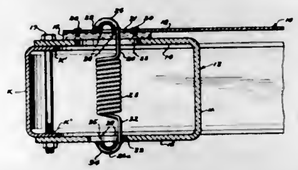
7. In a control for an automatic elevator system, in combination, a plurality of floor relays responsive to hall buttons for registering floor calls, a plurality of car relays individual to each car and responsive to car buttons for registering destination calls, circuit means for each car including contacts operated according to elevator car travel and contacts on said relays for signaling the location of calls relative to the location of the car, means for determining the direction of travel according to said signal circuit means, said direction determining means being de-energized when no calls for service remain unanswered, means for closing the doors of a car after the last call has been answered, a time delay relay that is energized as the doors are opened in response to a call and said direction determining means are de-energized, and contacts on said time delay relay that open when the relay is energized that are connected in circuit with contacts on said floor relays for relaying temporarily the response of the direction determining relays, whereby an intending passenger is afforded time to enter and select his direction of travel in preference to calls from other floors.

2,746,567
BRAKING DEVICES FOR ELEVATORS
Walter Güttinger, Sankt Gallen, and Gustav Spiess, Lucerne, Switzerland, assignors to Inventio Aktiengesellschaft, Hergiswil, Switzerland, a Swiss firm
Application October 30, 1952, Serial No. 317,752
10 Claims. (Cl. 187—29)



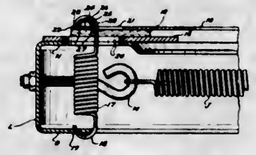
9. In an elevator decelerating device, the combination of a driving motor for the elevator cab, an electromagnetic brake, an electric amplifier, a tachometer-generator and a source of voltage, the tachometer-generator being electrically connected between the source of voltage and the input to said amplifier and being driven at a speed proportional to the elevator speed, said driving motor having a large rotor resistance inserted in the circuit during the deceleration period, whereby the difference in voltage between said source of voltage and the output of the tachometer-generator controls the application and release of the electromagnetic brake.

2,746,568
STABILIZING AND SNUBBING MECHANISM FOR GYRATORY EXTRACTORS
James R. Foster, Webster City, Iowa, assignor, by mesne assignments, to Gamble-Skogmo, Inc., Minneapolis, Minn., a corporation of Delaware
Application March 29, 1952, Serial No. 279,304
3 Claims. (Cl. 188—1)



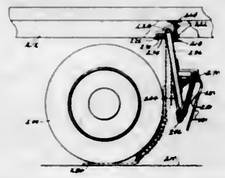
1. In a snubbing mechanism for a centrifugal extractor having an outer frame and an inner frame and the latter supporting a clothes receptacle for spinning rotation about an upright axis, and means supporting said inner frame and receptacle for gyration about the spin axis when the receptacle is rotated in an unbalanced condition, and having a plurality of vertically flexible snubber arms annularly spaced between the inner and outer frames and rigidly secured to the inner frame and extending outwardly toward the outer frame for snubbing contact with a horizontal friction surface on a part fixed to the outer frame, and a normally vertically extending spring between the frame and the outer end of each arm for increasing the snubbing friction as the inner frame with the snubber arms is displaced in any direction; the improved assembly of the friction elements for each arm comprising a box-shaped bracket having upper and lower flanges secured to the outer frame, one of said flanges providing on its outer side the friction surface, the overlapping snubber arm having friction shoes slidable on said surface, the snubber arm and said upper and lower flanges having openings, said vertical spring being arranged between said flanges and having its ends extending loosely through said openings, and a separate but identically formed cross arm engaged by each end of said spring and bearing on the snubber arm and the outer surface of the other flange respectively, each of said cross arms being bowed between its ends and grooved at its center for engagement by the corresponding spring end.

2,746,569
SNUBBING MECHANISM FOR GYRATING EXTRACTORS
George P. Castner, Webster City, Iowa, assignor, by mesne assignments, to Gamble-Skogmo, Inc., Minneapolis, Minn., a corporation of Delaware
Application November 28, 1951, Serial No. 258,710
3 Claims. (Cl. 188—1)



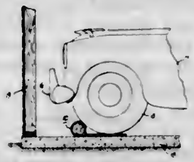
1. In a clothes washing machine, an outer stationary frame, an inner gyratory frame and means mounting the same in said outer frame for gyration about a normal upright axis; snubbing mechanism for resisting such gyration of the inner frame, comprising a base ring secured to the outer frame and surrounding the inner frame and having an inwardly turned flange, a plurality of vertically flexible snubber arms annularly spaced within said ring and rigidly secured to the inner frame and extending outwardly over the said flange and each having snubber shoes on its underside, a snubbing plate secured to the flange under said snubber shoes and these plates and the flange having registering openings, retractile coil springs extending vertically loosely through said openings and means attaching the upper and lower ends of the springs respectively to the snubber arms and the stationary frame whereby the tension of the springs will pull the snubber shoes downward with increasing pressure into frictional contact with said plates upon horizontal displacement of said inner frame in any direction.

2,746,570
TRAILER SAFETY DEVICE
Bernhardt Stahmer, Omaha, Nebr.
Application August 17, 1951, Serial No. 242,312
2 Claims. (Cl. 188—4)



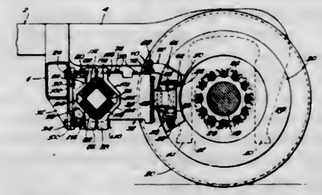
1. A safety device for use with a vehicle having rear wheels and a driving compartment, comprising at least one swingable arm having an upper end pivotally attached to the underside of said vehicle in front of said rear wheels; a yoke member secured to said swingable arm and having spaced apart portions having aligned apertures; a solenoid having a core removably disposable through said apertures, said solenoid being mounted on said swingable arm; means for control of said solenoid; a road engaging member disposable between said rear wheels and the surface of the road; and means including a flexible member for attaching the lower end of said swingable arm to said road engaging member and adapted to be releasably upheld in said yoke by said core.

2,746,571
PORTABLE WHEEL POSITION INDICATOR
Bert L. Taylor, Cleveland, Ohio
Application September 27, 1952, Serial No. 311,899
1 Claim. (Cl. 188—32)



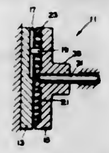
A portable chock for a vehicle wheel, comprising in combination, a flexible rubber sheet, of substantially rectangular shape, folded upon itself to form a flexible hollow cylindrical bumper portion, the two ends of the folded sheet being super-posed upon one another and cemented together to form a non-extensible apron lying substantially tangent to the bumper portion, and, a rigid cylinder fitted snugly within said flexible bumper portion and holding the same against collapse, the said bumper portion being free to flex relative to said rigid cylinder and apron when a tangential force is brought to bear against the circumferential face of the bumper portion by a rotating vehicle wheel resting on the apron.

2,746,572
ROTOR BRAKE
Carl E. Tack, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Original application July 13, 1949, Serial No. 104,453, now Patent No. 2,661,818, dated December 8, 1953. Divided and this application December 28, 1951, Serial No. 263,891
12 Claims. (Cl. 188—59)



10. In a brake arrangement for a railway car truck, a wheel and axle assembly including a friction element rotatable therewith, a support structure, movable brake means carried thereby including a pivotally movable shoe for engagement with said element, and interengaging means connected to and movable with said shoe and rigidly fixed to said structure for controlling pivotal movement of said shoe.

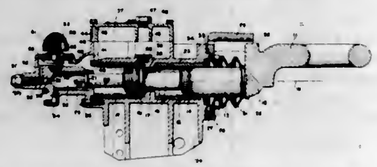
2,746,573
AUTOMATIC STOP MECHANISM
Donald F. Hastings, Suffern, N. Y., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application December 30, 1952, Serial No. 328,678
7 Claims. (Cl. 188—69)



1. In a device of the class described, a pair of members arranged for relative rotation, a replaceable resilient spiral

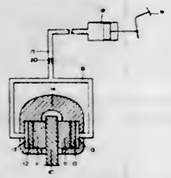
member removably carried by one of said first named members and including a predetermined number of turns, a movable element carried by the other of said first named members and extending between adjacent turns of said spiral member and movable thereby upon relative rotation between said first named members, and stop means engageable with said element to thereby arrest relative rotation between said first named members, the amount of such relative rotation being a function of the number of turns of said spiral member.

2,746,574
HYDRAULIC TRAILER HITCH
Marvin M. Smith and Clesent O. Fields, Muncie, Ind., assignors to Muncie Gear Works, Inc., Muncie, Ind., a corporation of Indiana
Application March 11, 1953, Serial No. 341,664
8 Claims. (Cl. 188—112)



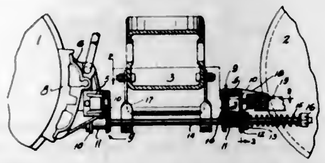
1. A combined coupling and brake-operating mechanism for a vehicle train comprising a housing having a pair of axially aligned bores separated by a rigid transverse wall forming a part of said housing, a brake-operating cylinder rigidly mounted on said housing at the end of one of said bores opposite said transverse wall and opening thereinto in axial alignment therewith, a piston in each of said bores and in said brake cylinder respectively, a common piston rod extending axially through said bores and transverse wall into the brake cylinder and connecting said pistons axially for reciprocable operation thereof in unison, said connection rod extending outwardly from said housing and the other bore thereof, means for yieldably resisting movement of the pistons in the bores of said housing in either axial direction, the last named pistons being directly engageable with said transverse wall for limiting the stroke of said connecting rod in either axial direction, and vehicle coupling means on the outer end of said connecting rod.

2,746,575
DISC BRAKES FOR ROAD AND OTHER VEHICLES
Joseph Warwick Kinchin, Lowsonford, near Lapworth, England, assignor to Girling Limited, Birmingham, England, a British company
Application August 19, 1952, Serial No. 305,154
Claims priority, application Great Britain August 21, 1951
11 Claims. (Cl. 188—152)



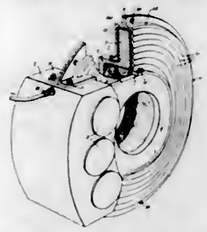
1. A disc brake for vehicles comprising a disc coupled to and rotating with a wheel of the vehicle, a stationary housing straddling the edge of the disc, opposed hydraulic brake cylinders in said housing, said cylinders being open at their inner ends adjacent to the disc, a friction pad slidably mounted in the inner end of each cylinder for engagement with opposite faces of said disc, a piston slidable in each cylinder for engaging the pad in the cylinder and urging it into engagement with the disc, a conduit connecting the other ends of said brake cylinders to each other so as to allow free passage of liquid between them, a master cylinder for supply liquid under pressure to said brake cylinders, a pipe line between said master cylinder and said conduit and restrictive means in said pipe line for controlling the passage of liquid between said master cylinder and said conduit.

2,746,576
BRAKE BEAM CONNECTOR
Frank W. Lewis and Irvin J. Spaeth, Chicago, Ill., assignors to Chicago Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application December 11, 1950, Serial No. 200,166
11 Claims. (Cl. 188—210)



1. In combination with a brake beam main member, an inverted U-shaped bracket straddling the member and projecting below it, a sleeve extending through both legs of said bracket beneath said member, key means securing the sleeve to the bracket, a safety connector extending through said sleeve, and a spring compressed between the end of said rod and said sleeve.

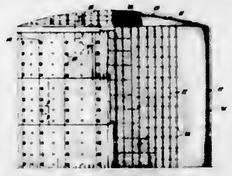
2,746,577
BRAKE WITH DUST SHIELD
Henry James Butler, Sutton Coldfield, England, assignor to Dunlop Rubber Company Limited, London, England, a British company
Application June 5, 1951, Serial No. 229,967
Claims priority, application Great Britain June 7, 1950
4 Claims. (Cl. 188—264)



1. A vehicle brake comprising an annular, rotatable disc, non-rotatable brake applying means covering a sector portion only of the braking service of said disc, and a non-rotating, heat dissipating, shroud element completely covering the remaining portion of said disc and having walls closely spaced from the side faces of said remaining portion of said disc to form an unobstructed space for the radiation of heat between said walls and said disc and exposed to the atmosphere and sealed to said brake applying means to completely enclose said disc.

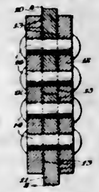
2,746,578
INSULATING STRUCTURE
Ralph Blomeley, Staten Island, N. Y.
Application April 13, 1953, Serial No. 348,541
3 Claims. (Cl. 189—34)

1. An insulating structure including in combination a side wall, posts movably disposed adjacent the outer face of said wall to slidably bear against the same throughout substantially its entire height, a number of separate wires extending transversely of and individual to each post with their ends anchored to the wall face at points short of adjacent posts to limit movement of the thus secured post across the face of said side wall, insulating material disposed in contact with the outer wall face and being locally supported by portions of the wire ends extending beyond said post, said posts being hollow and substantially square



in section, the sides of said posts being formed with aligned pairs of openings whereby the wires slidably pass therethrough, the inner post surface—throughout its entire height—movably bearing against the outer face of said wall, panels overlying said posts and securing means extending through said panels and posts into the interior of the latter.

2,746,579
STRUCTURAL JOINTS
John T. Gondek, Minneapolis, Minn.
Application November 9, 1951, Serial No. 255,682
1 Claim. (Cl. 189—36)



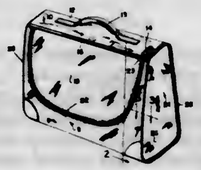
A joint connecting two parts including fastening means about which the parts tend to pivot holding the parts in substantial surface contact, pivotal motion of said parts being resisted by the interposition between said parts of a fragile, readily fracturable sheet supporting on a surface thereof, spaced, substantially spherical elements which are partially embedded in the facing surfaces of said parts and are of a material which is hard relative to the hardness of the parts, said sheet having been fractured by said elements upon tightening of said fastening means whereby said elements extend through said sheet and partially on either side of said sheet and said partial embedding in each of said parts is obtained.

2,746,580
STRUCTURAL UNIT
Leonhardt W. Benz, New Orleans, La.
Application September 5, 1946, Serial No. 694,931
2 Claims. (Cl. 189—37)



1. A structural unit comprising a like pair of aligned parallel flanges each formed by parallel spaced bars, and a continuous web strip of uniform width and thickness and having substantially the same width as the flanges alternately contacting and being integrally secured to the opposite inner sides of said flange bars by lengthwise extended areas uniformly spaced longitudinally of the unit, the said web strip being formed to provide lengthwise extending, oppositely facing, shallow corrugations complementally engaging only a minor inner portion of the flange bars at the areas of contact and having straight lengths extending between extended areas and flanges, and the said unit being of rectangular outline in cross section with a symmetrical distribution of bar and web strip material about both the longitudinal and transverse axes of the cross-section.

2,746,581
SOFT-SIDED LUGGAGE CASES
Julius P. Ritter, Jr., Racine, Wis., assignor to Hartmann Company, Racine, Wis., a corporation of Wisconsin
Application November 8, 1954, Serial No. 467,606
3 Claims. (Cl. 190—41)



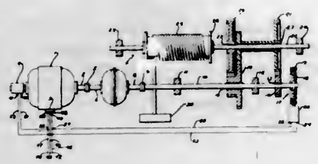
1. In a six sided hand luggage case wherein the covering for all of the walls is flexible sheet material and the sheet material for the end walls is interiorly reinforced by rigid panels, the end walls being set inwardly from the end edges of the flexible sheet material of the other walls, the end edges of the last mentioned walls being in the planes of their body portions, the edge portions of the sheet material of the end walls being turned right angularly against the co-planar with the projecting end edges of the sheet material of the other walls, resilient outwardly projecting welts, at right angles to the major extents of the end walls, applied to the peripheral portions of the end walls and having the projecting edges of the wall sheet material secured thereto.

2,746,582
LUGGAGE BAGS
Theodore S. Cart, Harbourton, N. J., assignor to Atlantic Products Corporation, Trenton, N. J., a corporation of New Jersey
Application July 27, 1953, Serial No. 370,336
1 Claim. (Cl. 190—58)



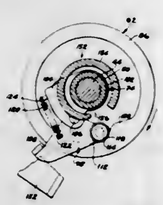
A luggage bag comprising a flat, rigid bottom panel, flexible side panels extending upwardly therefrom, said side panels having spaced upper edges providing an access aperture therebetween, a pair of matching handles for carrying said bag, said handles consisting of flexible strips extending loosely through openings in said side panels and continuing loosely downwardly through the interior of the bag, and means for attaching the ends of said handle strips to said bottom panel adjacent said side panels, said attaching means being the sole means securing said handles to said bag and the sole means through which the weight of the bag is transmitted to said handles.

2,746,583
CRANE HOIST MECHANISM
Eugene A. Blevins, Royal Oak, Mich., assignor to American Blower Corporation, Dearborn, Mich., a corporation of Delaware
Application December 15, 1952, Serial No. 326,014
8 Claims. (Cl. 192—2)



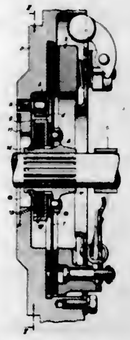
1. A hoist comprising, in combination, a driving means, a hoisting means operatively connected in driven relation to said driving means, a fluid coupling operatively interposed between the driving means and the hoisting means, a releasable brake to prevent movement of said hoisting means, and means responsive to and operable upon the occurrence of a predetermined condition of said driving means for releasing said brake.

2,746,584
SAFETY CONTROL FOR SELF-INTERRUPTING CLUTCH
Arnold B. Skromme, Ottumwa, Iowa, assignor to Deere Manufacturing Co., Dubuque, Iowa, a corporation of Iowa
Application April 2, 1953, Serial No. 346,403
2 Claims. (Cl. 192—28)



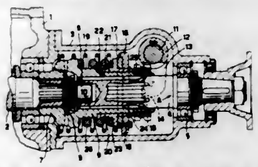
1. A rotary clutch of the character described, comprising: a rotatable driving member adapted to be journaled on a support and including a driving ring portion having a circular inner periphery interrupted by a driving lug means thereon; a driven member journaled coaxially with and for rotation at times relative to the driving member and having a driven hub loosely encircled by the driving ring portion; a clutch dog pivotally connected to the hub on an axis parallel to the axis of rotation of the members and having a lug-engaging roller thereon, said dog being swingable radially outwardly from a retracted position in which the roller is clear of the driving lug means to a driving position in which the roller is engaged by said driving lug means; means biasing the clutch dog to its driving position for rotation of the two members and the dog in unison; a second roller carried by the clutch dog coaxial with the lug-engaging roller; and means adapted to be fixed to the support in concentric relation to the driving and driven members and including a substantially circular track over which the second roller passes when the clutch dog is in its driving position, said track including radially inwardly directed pocket means for accommodating the second roller when the clutch dog is swung to its retracted position.

2,746,585
CENTRIFUGAL CLUTCHES
Richard Binder, Schweinfurt (Main), Germany, assignor to Fichtel & Sachs A. G., Schweinfurt (Main), Germany
Application November 22, 1954, Serial No. 470,426
Claims priority, application Germany November 20, 1953
10 Claims. (Cl. 192—48)



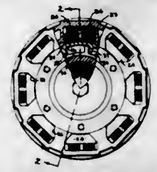
1. In a centrifugal clutch, in combination, a driving member adapted to rotate about a predetermined axis; a driven member located adjacent and coaxial with said driving member; means for transmitting a drive to said driven member from the driving member when the latter rotates at a speed above a given speed; a ratchet wheel located about and rotatable relative to said driven member adjacent said driving member; a plurality of pawls turnably carried by said driving member about said ratchet wheel for movement into and out of engagement therewith; spring means engaging said driving member and said pawls for urging the latter into engagement with said ratchet wheel only at relatively low turning speeds of said driving member substantially below said given speed; and slip clutch means located about said driven member between the latter and said ratchet wheel and interconnecting said ratchet wheel and driven member for limiting the turning moment transmitted from said ratchet wheel to said driven member.

2,746,586
TRACTOR FOR TOWING ORDNANCE OR OTHER HEAVY VEHICLES
Hubertus Josephus van Doorne, Deurne, Netherlands
Application January 21, 1953, Serial No. 332,207
Claims priority, application France January 28, 1952
3 Claims. (Cl. 192—99)



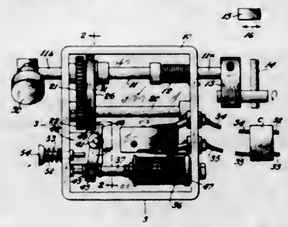
1. In a tractor having a motor, a winch operated by said motor, a cable on said winch having a towing hook with a shank, a seating member mounted on said tractor for seating said shank, a locking pawl in said seat cooperable with said shank and a spring loaded lever pivoted to said tractor urging said locking pawl to the locking position, that improvement comprising the combination of a clutch normally spring urged to the disengaged position, and linkage means between said clutch and said lever for locking said clutch in the engaged position and for starting movement of the clutch to the disengaged position, whereby when said shank seats in said seat said locking pawl is moved to the locking position and said linkage starts movement of said clutch to the disengaged position.

2,746,587
DRIVE STRUCTURE FOR AUTOMOBILE ENGINE ACCESSORIES
Charles B. Spase, Nedrow, N. Y., assignor to Lipe-Rollway Corporation, Syracuse, N. Y., a corporation of New York
Application December 9, 1952, Serial No. 324,866
3 Claims. (Cl. 192—104)



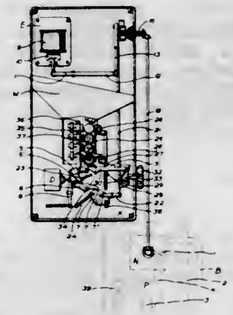
1. A drive structure for automobile engine accessories comprising a driving member fixedly mounted on the engine crank shaft and having a radial flange provided at its periphery with an annular friction drum portion, a driven member journalled for rotation relative to the driving member and having a flange extending radially at one end of said annular friction drum and having an annular portion encircling said drum and being concentrically spaced outwardly therefrom, a series of friction shoes interposed between said friction drum and said annular portion of the driven member, said shoes being carried by said annular portion for radial movement toward and from the drum, spring means interposed between said annular portion and each of said friction shoes to move the same into frictional engagement with the periphery of the drum, the radial flange of said driven member being formed with a series of circumferentially spaced apart apertures, said apertures and said friction shoes being located an equal radial distance from the axis of rotation, and a centrifugal type fan carried by said driving member and extending radially at the opposite end of the friction drum, and having its blade portions arranged to create an air flow through said apertures and over said shoes and springs.

2,746,588
CLUTCH CONTROL DEVICE FOR SEWING MACHINES
James L. Bryson, Clifton, N. J., assignor to Bryson Manufacturing Co., Inc., Clifton, N. J., a corporation of New Jersey
Application November 2, 1954, Serial No. 466,280
8 Claims. (Cl. 192—129)



1. A clutch control for actuating a sewing machine part comprising a casing, a first shaft rotatably journalled therein, means urging said shaft to rotate in a given direction, said shaft extending exteriorly of the casing for connection with the sewing machine part, the latter being actuated by virtue of said connection to a given position only on rotation of the shaft responsive to said urging means, a second shaft rotatably journalled in said casing, interengaging means on said shafts for rotating one shaft on rotation of the other, an arm mounted in said casing, a shouldered member on the second shaft, said arm having a free end, and also having a shouldered portion for registration with the shouldered portion of the member on the second shaft, means urging said arm to a position of interengagement of said shouldered portions, so that said shafts may be so latched against rotation responsive to said urging means, whereby the sewing machine part will not be disposed in said given position, a lever, means disposing said lever in said casing for movement in a plane at right angles to the plane of pivotal movement of the arm, with one end of the lever adjacent the free end of the arm, said end of the lever having a bevelled portion intersected by the plane of the free end of the arm when the latter is in latched position, and means actuated responsive to a condition in the sewing machine to move the lever to a position wherein its bevelled end will engage the free end of the arm and lift it so as to disengage said shouldered portions and enable the first shaft to rotate responsive to the means urging the same, to thus move the sewing machine part to its said given position.

2,746,589
COIN OPERATED LIQUID CONTROLLER
Karl Emil Rickard Rosenbloom, Stockholm, Sweden
Application November 12, 1952, Serial No. 319,946
4 Claims. (Cl. 194—13)

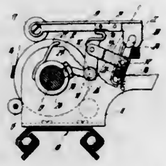


1. In a coin operated liquid dispensing apparatus, the combination of a pump having an electric motor, a liquid discharge conduit connected to the outlet of said pump, a liquid flow meter in said discharge conduit and of the type having a shaft rotating in dependence on the volume of liquid passing through said meter, a contactor controlling the supply of electrical energy to said pump motor, a coin operated switch controlling the energizing circuit of said contactor, means for breaking said energizing circuit of said contactor, said means including a rotatable member, a clutch coupling temporarily coupling said rotatable member to said rotating shaft of said liquid flow meter, and means including an electromagnet for controlling said clutch, said electromagnet having a winding connected in the energizing circuit of said contactor.

2,746,590
UPPER FEED ROLL CONTROL MEANS FOR TYPEWRITING AND LIKE MACHINES
Manuel G. Lemos, New York, N. Y., assignor to Underwood Corporation, New York, N. Y., a corporation of Delaware
Application December 11, 1952, Serial No. 325,466
2 Claims. (Cl. 197—138)

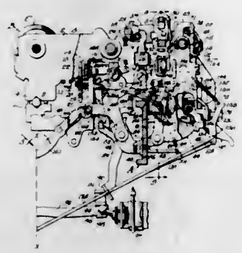
1. In a typewriting or like machine, a rotatably mounted cylindrical platen, a manually rotatable knob for rotating said platen, a set of lower feed rolls engaging the lower portion of said platen and serving to feed paper therearound when said platen is rotated, a set of upper feed rolls movable from paper-feeding engagement with said platen to a position off said platen wherein the leading edge of paper fed around the lower portion of said platen

will pass freely between said upper feed rolls and said platen, a finger piece mounted closely adjacent said knob so that said finger piece and knob may be moved simultaneously by a single digital member of an operator, and means operatively connecting said finger piece to said upper feed rolls so that movement of said finger piece



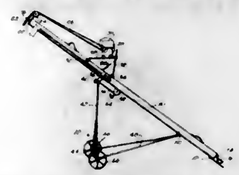
moves said upper feed rolls to their position off said platen, said lower feed rolls remaining in engagement with said platen when said upper feed rolls are moved to their position off said platen whereby in one operation paper may be fed beneath the platen and between the platen and said upper feed rolls.

2,746,591
TABULATING MECHANISM FOR TYPEWRITER OR LIKE MACHINES
Meigs W. Newberry, South Windsor, Conn., assignor to Royal McBee Corporation, a corporation of New York
Application April 30, 1952, Serial No. 285,219
20 Claims. (Cl. 197—178)



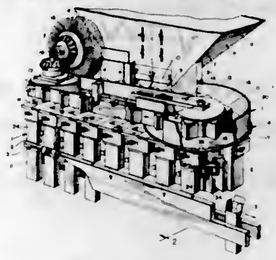
12. In a typewriting or like machine, the combination of a frame element; a carriage element mounted on said frame element for letter spacing and return travel; mechanism for driving the carriage element in the letter spacing direction; feed controlling mechanism normally conditioned for effecting incremental letter spacing movements of said carriage element and being conditionable for enabling tabulating runs of said carriage element uninterruptedly through a plurality of letter spacing increments; tabular stop means on one of said elements; a tabular stop device; means mounting said tabular stop device on the other of said elements for movement from an inactive position in which it is not engageable with said tabular stop means to an active position in which it is engageable with said tabular stop means; a device engageable with said tabular stop device and actuatable for moving said tabular stop device to initiate its movement from inactive to active position; means including a key for actuating said actuatable device; means for conditioning said feed controlling mechanism for enabling a tabulating run of said carriage element; and means other than said key for effecting a relative displacement between said actuatable device and said tabular stop device to so position them relatively as to prevent effective engagement of said two devices when said key is operated.

2,746,592
POWER OPERATED LOADER
Leon C. Wilcoxen, Dodge City, Kans., assignor to Mayrath Machinery Co., Inc., Dodge City, Kans., a corporation of Kansas
Application March 1, 1951, Serial No. 213,317
5 Claims. (Cl. 198—120.5)



1. In a power operated conveyor, an auger tube, an auger in said tube, an engine support pivotally mounted on said tube and comprising engine supporting rails adapted to receive an engine for sliding motion in a direction generally lengthwise of said auger tube, means for adjusting the inclination of said engine support relative to said augér tube, means including a flexible tension-transmitting element connected to said auger tube at a point spaced from the pivotal connection of said engine support and adapted for connection with an engine mounted on said rails to urge said engine toward one extremity of said rails, with a force substantially independent of the inclination of said engine support, a driven pulley connected to said auger at that end of said tube nearest the other extremity of said rails, and a drive belt for connecting said driven pulley with said engine.

2,746,593
CONVEYER
Harry E. Engleson, Chicago, and Elmer D. Sramek, Cicero, Ill., assignors to F. B. Redington Co., Chicago, Ill., a corporation of Delaware
Application August 25, 1954, Serial No. 452,128
10 Claims. (Cl. 198—140)

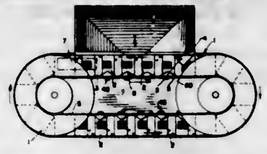


1. A conveyer comprising a plurality of buckets each hingedly connected on one side thereof, each bucket having spaced legs, overhanging top flanges on said legs, said legs being spaced apart forming a space therebetween, an adjustable movable end wall closing one end of said space between the legs, an integral extension on one of said legs closing the other end of said space, an extension on the movable end wall and engaging one of said legs, and means passing through the latter extension and engaging one of said legs to lock the movable end wall in adjusted position.

2,746,594
ENDLESS CONVEYER
Harry E. Engleson, Chicago, and Elmer D. Sramek, Cicero, Ill., assignors to F. B. Redington Co., Chicago, Ill., a corporation of Delaware
Application August 30, 1954, Serial No. 452,756
16 Claims. (Cl. 198—151)

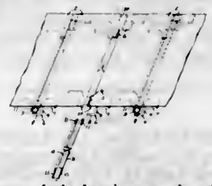
1. A conveyor for packaging machines comprising a continuous chain, a plurality of adjacently positioned buckets removably mounted on said chain, each bucket

having spaced legs, overhanging top flanges on said legs, said legs being spaced apart forming a space therebetween, an adjustable movable end wall closing one end of said space, an integral extension on one of said legs closing the other end of said space, said legs and end



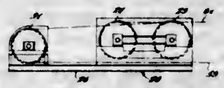
walls defining a measuring pocket, an extension on the movable end wall, a second chain connected to each movable end wall, and means to adjustably shift said latter chain to adjust each of said movable end walls simultaneously.

2,746,595
CONVEYOR BELT
Andrew Thomas Kornylak, Jersey City, N. J., assignor to Kornylak Engineering Corporation, Jersey City, N. J., a corporation of New Jersey
Application June 3, 1952, Serial No. 291,528
3 Claims. (Cl. 198—195)



1. In a conveyor belt having a plurality of inflexible flat rectangular links, a flexible coupling for adjacent links comprising plane flanges depending from the abutting edges of said adjacent links each flange defining an included angle with its respective link of not less than 30 degrees nor more than 60 degrees, a hollow generally cylindrical coupling member having a longitudinally extending slot in the wall thereof to receive the flanges of adjacent links, and a plurality of generally Z-shaped retaining brackets to maintain engagement of flanges and coupling member, one limb of each of said retaining brackets being fixed to the underside of a link and the other limb of each retaining bracket underlapping said coupling member, whereby rotation of adjacent links about their abutting edges, which rotation effects a parallel relation of said plane flanges, simultaneously rotates the brackets into retaining contact with the coupling member.

2,746,596
CONVEYORS
Charles Thomson, Montreal West, Quebec, Canada, assignor to Cable Belt Limited, Inverness, Scotland, a British company
Application February 17, 1953, Serial No. 337,415
Claims priority, application Great Britain March 3, 1952
10 Claims. (Cl. 198—203)



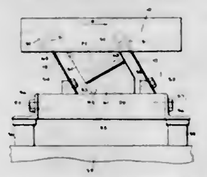
3. In a conveyor including head and tail units, a pair of endless cables, means guiding each of said cables in a circuit including upper and lower runs between said head and tail units, endless belt means driven by said cables, means intermediate the head and tail units to guide the cables in a local circuit away from and back to said upper run, means in said local circuit to displace the cable laterally so that it leaves the said circuit in a path offset laterally from its path of entry thereto, means in said local circuit to apply power to said cables, and cable engaging means connected to said belt, each of said cable engaging means having two cable engaging portions to engage the cables on the two sides of the local circuits respectively.

2,746,597
UNDERGROUND LOADING MACHINE AND FRAME THEREOF
Sterling C. Moon, Worthington, Ohio, assignor to The Jeffrey Manufacturing Company, a corporation of Ohio
Application May 29, 1952, Serial No. 290,693
6 Claims. (Cl. 198—204)



1. A relatively long narrow main frame for an extensible loader apparatus including a pair of longitudinally extending spaced bottom channel members having their channel sides facing each other and forming tracks in which support elements of a second frame travel, an elongated member extending along the top of each of said bottom channel members adapted to form spaced side walls of a trough extending longitudinally of said frame, longitudinally extending support means on said frame adapted to support a run of an endless conveyer travelling between said spaced wall means, and inverted channel means forming a removable trough bottom between said spaced wall means and above said longitudinally extending support means over which another run of said conveyer may travel to convey material through said trough.

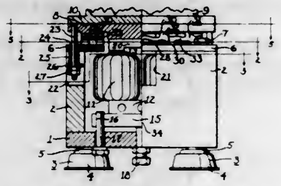
2,746,598
VIBRATORY CONVEYORS AND THE LIKE
Joseph William Sherwen, Erith, England, assignor to The General Electric Company Limited, London, England, a British company
Application March 9, 1953, Serial No. 341,251
6 Claims. (Cl. 198—220)



1. A vibratory conveyor comprising a support for material to be conveyed, a resilient mounting for said support including leaf springs disposed at an angle as herein defined, of the order of 70° to said support and so disposed as to cause said support to move upwardly when it is moved in the desired direction of movement of material therealong, electro-magnetic means adapted to impart oscillatory motion to said support by flexure of said leaf springs, said electro-magnetic means being adapted to act in a direction, as herein defined, generally parallel to the length of said leaf springs, a bedplate, said mounting being secured to said bedplate, said electro-magnetic means including two parts movable relative to one another, one of said parts being connected to the support and the other to the bedplate, and a housing for said electro-magnetic means, said housing including an upper part and a lower part, the upper part of said housing being movable with one of the parts of the electro-magnetic means and the lower part of the housing being movable with the other part of the electro-magnetic means, the upper and lower parts facing one another across a small air gap located in a plane generally trans-

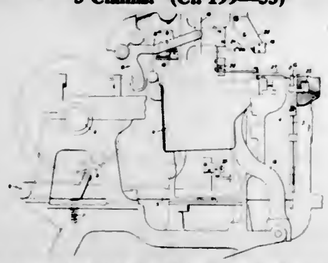
verse to the planes of the leaf springs and extending in a direction generally parallel to the planes of the leaf springs.

2,746,599
ELASTOMER SUPPORTED BOWL FEEDERS
Carl S. Weyandt, Indiana, Pa.
Application January 6, 1953, Serial No. 329,889
4 Claims. (Cl. 198—220)



1. A vibratory material handling device comprising a base having an annular top surface, an element to be vibrated having an annular bottom surface opposed to the top surface of said base, an annular series of spaced flexible elastomer levers connected to each other intermediate their ends and sloping in the same direction and secured to said top and bottom annular surfaces to support said element for reciprocation in a confined inclined arcuate path of movement about a vertical central axis and at a predetermined natural period of reciprocation, and driving means mounted in said base for imparting energy impulses to reciprocate said element in synchronism with the frequency of said energy impulses, said inclined flexible elastomer levers supporting and guiding said element to reciprocate as a free body in an inclined arcuate path of movement.

2,746,600
TYPOGRAPHICAL CASTING MACHINES
Louis Rossetto, Flushing, N. Y., assignor to Mergenthaler Linotype Company, a corporation of New York
Application September 2, 1950, Serial No. 183,032
3 Claims. (Cl. 199—53)



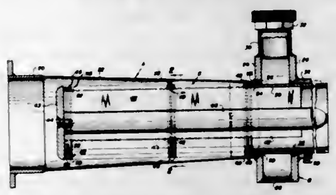
1. In a typographical casting machine equipped with a pair of vise jaws for holding a composed line of matrices and expansible spacebands, a justification bar movable upwardly into engagement with the spacebands to expand them in justifying the line between the vise jaws, a mold movable forwardly into contact with the line, a melting pot movable forwardly into contact with the mold, a pump plunger for forcing molten metal from the pot into the mold, and a normally active stop for preventing the operation of the pump plunger, the combination therewith of an electrical element for releasing the pump plunger stop, a normally closed switch for energizing said electrical element and which is opened only by an abnormal upward movement of the justification bar, a normally open switch for also energizing said electrical element and which is closed only by a full normal forward movement of the melting pot, and a common electric circuit which includes said electrical element and the two said switches and which is activated only when both switches are closed simultaneously.

2,746,601
CLASPS FOR UNITING THE ENDS OF STRIP IRONS ENCIRCLING PARCELS
André Rebichon, Paris, France, assignor to Juliette Rebichon (born Meyrouneinc), Paris, France
Application July 23, 1952, Serial No. 300,369
Claims priority, application France September 26, 1951
8 Claims. (Cl. 206—65)



3. A channel-shaped clasp for uniting the ends of strip irons encircling parcels, comprising a horizontal back portion, a wing depending from each lateral edge of said back portion, an inturned flange at the lower end of each of said wings and a pair of rows of projections on the outer surface of each of said wings, said pairs of rows of projections being parallel to said flanges of the respective wings and adapted to receive and support between them the inner edges of the flanges of a similar clasp in stacked relation to form a pack, and the distance between the inner edges of said flanges being substantially equal to the distance between the outer surfaces of said wings measured between said pairs of rows of projections to provide a snug fit of the flange edges of a stacked clasp between said rows of projections without materially deforming the flanges of the stacked clasp.

2,746,602
SEPARATING APPARATUS
Hadley R. Bramel, Los Angeles, Calif.
Application April 20, 1950, Serial No. 157,168
24 Claims. (Cl. 209—132)

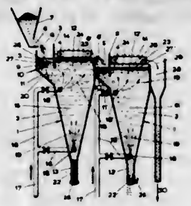


1. In a fluid suspension separator or classifier, a duct forming a passageway and having a fluid inlet at one end; a first outlet at the other end; a second outlet at said other end; a fluid separating core within said duct and dividing said duct into an exterior portion connected to said inlet and said first outlet, and a central portion connected to said second outlet; perforations through the wall of said core; and transversely concave faced deflectors on the outside of said core, on the upstream side of said perforations, to deflect heavier particles away from said perforations while permitting lighter fractions to pass therethrough.

2,746,603
SEPARATION OF SOLID SUBSTANCES OF DIFFERENT DENSITIES
Raymond Blondelle, Henin-Lietard, France, assignor to Compagnie de Fives-Lille pour Constructions Mecaniques et Entreprises, Paris, France, a French company
Application May 20, 1952, Serial No. 288,868
Claims priority, application France May 29, 1951
5 Claims. (Cl. 209—172.5)

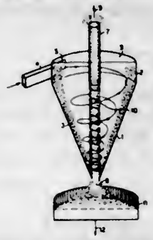
4. Apparatus for the separation of solid substances of different densities by flotation of the lighter of said substances on and by gravitational movement of the heavier of said substances to the bottom of a liquid medium, the density of which is intermediate between the densities

of said lighter and said heavier substances, comprising in combination a vessel having a downwardly tapering bottom, a partition dividing the upper part of said vessel into two compartments, a passage between the two compartments below said partition, means for supplying said fluid medium to said vessel in the median zone thereof, means for supplying mixed lighter and heavier substances to one of the two compartments serving as the feed compartment, means for discharging the lighter of the substances when separated by flotation in said medium from the other



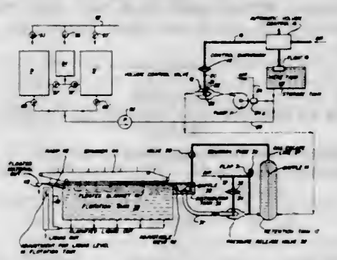
of said compartments serving as a discharge compartment, means for intermittently discharging from the bottom of said vessel to the atmosphere the heavier one of said substances after their separation by their gravitational movement to the bottom of the liquid medium, said means for intermittently discharging the heavy substance to free atmosphere including in combination a pivoted gauge valve disposed at the bottom of said vessel, lever means turnable with said valve, a cam, a cam follower, and linkage means connecting said follower to said lever.

2,746,604
PROCESS OF CLASSIFYING GRANULAR MIXTURES
Freerk J. Fontein, Heerlen, Netherlands, assignor to Stamicarbon N. V., Heerlen, Netherlands
Application March 8, 1951, Serial No. 214,503
Claims priority, application Belgium March 10, 1950
4 Claims. (Cl. 209—211)



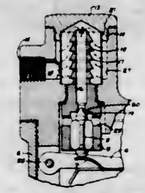
1. The continuous process of classifying mixtures of cement making solids, which comprises mixing such mixtures with sufficient water only to make a pumpable slurry suitable for introduction directly into a kiln, establishing and maintaining a body of such slurry in a hollow generally conical space of decreasing diameter that is confined by a closed and smooth surface of revolution near its wide end with an axial outlet at its apex and another axial outlet at its wide end, force-feeding such pumpable slurry into the confined body tangentially at its widest part for establishing and maintaining two concentric vortices in the body rotating in the same direction about the axis of the body but with opposed flow components with the inner vortex rotating more rapidly than the outer vortex, discharging faster settling solids from the outer vortex through the apex outlet while discharging slower settling solids through the other outlet, and feeding the slurry to the body with a controlled pressure not less than about four kilograms per square centimeter to develop centrifugal force and concomitant centripetal flow each significantly sufficiently in excess of the force of gravity for assuring settling of the suspended solids in accordance with their relative settling rates in spite of their crowded condition due to their high concentration at kiln-using consistency.

2,746,605
TREATMENT OF LIQUIDS BY MEANS OF DISSOLVED GASES
Robert A. Baum, Yonkers, N. Y.
Application March 13, 1952, Serial No. 276,284
3 Claims. (Cl. 210—53)



1. In a flotation apparatus including means for introducing a gas into a suspension of material in a liquid so as to increase the solubility of the gas in the liquid, and a tank adapted to contain a pool of the liquid into which the pressurized suspension containing the gas is discharged so that the gas comes out of solution and floats the material, the combination which comprises a closed vessel, means for introducing said liquid and gas into said vessel under pressure, means for bleeding undissolved gas from said vessel, a conduit for withdrawing the pressurized suspension and its dissolved gas from said vessel and introducing the material thus withdrawn into said pool, and pressure control means in said conduit arranged to maintain a predetermined pressure in said vessel.

2,746,606
LIQUID FILTER FOR CARBURETOR
Otto Henning, Clayton, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a corporation of Delaware
Application January 24, 1952, Serial No. 267,993
3 Claims. (Cl. 210—166)



2. In a fuel supply device, the combination of a well having an inlet and outlet, a valve cage member in said outlet having an axial fluid passage, an open topped standpipe having abrupt peripheral downwardly-facing surfaces and extending into said well and forming an extension of said valve cage and said fluid passage, and a tubular filter surrounding said standpipe.

2,746,607
POROUS MEMBRANE
Frederic O. Hess, Philadelphia, Pa., assignor to Selas Corporation of America, Philadelphia, Pa., a corporation of Pennsylvania
Application May 16, 1952, Serial No. 288,220
2 Claims. (Cl. 210—169)

1. A unit for a fluid separator consisting of spaced concentric porous tubes of woven material impregnated

with a thermo-setting resin, a body of glass fibers so dispersed as to be porous, and also impregnated with said



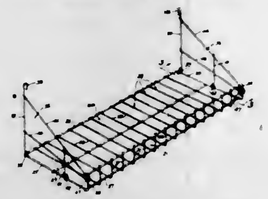
resin, disposed between said tubes, said resin when heat cured forming the tubes and glass fibers into a single rigid unit.

2,746,608
FILTER ELEMENT AND METHOD OF MAKING SAME
Southwick W. Briggs, Washington, D. C.
Application March 16, 1951, Serial No. 215,961
15 Claims. (Cl. 210—205)



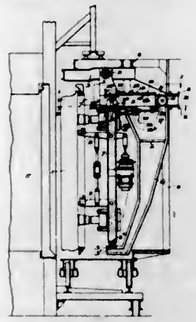
15. An article of manufacture comprising a filter cartridge having a compressed mass of fibers, said fibers having a thin coating of polymerized resin and a coating of filter aid material, said filter aid material being in finely divided particles in which it is not coated or impregnated with resin, said particles being bound in substantial point to point contact to said fibers by said resin, said filter aid being uniformly distributed throughout the cartridge and remaining substantially uncoated with resin.

2,746,609
WIRE SHELF FOR CLOSETS AND THE LIKE
Margaret E. Welsh, San Francisco, Calif.
Application June 10, 1955, Serial No. 514,556
2 Claims. (Cl. 211—93)



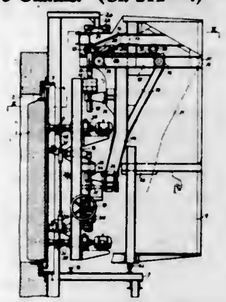
1. A foldable wire shelf comprising an outer marginal wire boundary comprising a horizontal rear stretch, a horizontal forwardly extending side stretch on each side of the shelf, a vertical stretch at the forward end of each side stretch and a horizontal front stretch connecting said vertical stretches, a plurality of L-shaped pieces attached to and extending forwardly from said horizontal rear stretch into attached engagement with said horizontal front stretch, and a pair of support arms, one at each side, each said support arm having a front and a rear vertical member pivotally connected at its lower end to said side stretch, said rear vertical member having a loop at its upper end to fasten said shelf to a primary supporting surface, and a forwardly extending wire connecting said vertical members and formed with a hook at its forward end to hook around said vertical stretch of said boundary wire.

2,746,610
DOOR-HANDLING MECHANISM FOR THE DOORS OF HORIZONTAL COKE OVENS
Georg Henseleit, Essen, Germany, assignor, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware
Application December 13, 1952, Serial No. 325,754
3 Claims. (Cl. 212—4)



1. In door handling mechanism for withdrawing doors from horizontal coke ovens and swinging the withdrawn door to one side, the combination with a door handling mechanism framework, door carrier means thereon adapted to be engaged with a coke oven door to support the latter during handling thereof in insertion and withdrawal from its oven doorway; means mounted for movement on said framework for horizontal traversal movement of the door carrier means horizontally axially of a coke oven; and pivotal means for supporting the door carrier means for swinging of the same to one side of the axial line of movement of said door carrier means; of fluid pressure operated means comprising a fluid pressure chamber and a link arrangement connected therewith for effecting the movement of the means for horizontal traversal movement of the door carrier means horizontally axially of a coke oven door, said link arrangement comprising parallel links interconnected by a connecting link, one of the parallel links being mounted on said framework, and the other being mounted on the means for horizontal traversal movement of the door carrier.

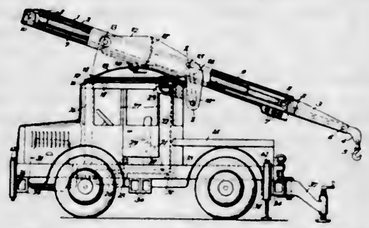
2,746,611
COKE OVEN DOOR HANDLING MACHINE
Georg Henseleit, Essen, Germany, assignor, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware
Application November 20, 1951, Serial No. 257,233
3 Claims. (Cl. 212—4)



1. A coke oven door operating machine, comprising: a carriage movable along a coke oven battery from

chamber to chamber in position to remove and replace coke oven doors from door frames of said chambers; cam track means immovably mounted on the carriage for carrying the weight of the doors while guiding and elevating the doors in their movement to and from their door frames in seating and unseating the doors with respect to the individual door frames; cam-follower means operatively associated with said cam track means; a door carrier having means for supporting said doors individually thereon in vertical position and means for supporting the door carrier at only a single point from said cam-follower means; retractive carriage means, separate and distinct from said cam track means, for moving the door towards and away from the furnace with rectilinear movement of said door carrier and the cam-follower means along the cam track means to and from the individual door frames for the doors; means for moving the retractive carriage means towards and away from the furnace; and vertically spaced sliding connections between the retractive carriage means and the door carrier for holding the door carrier vertical while accommodating vertical movement of the door carrier as it is being moved to and from the furnace so as to maintain the door in a vertical plane in all positions of the movement of the door to and from the furnace, whereby the door is sustained by the cam track means for vertical movement and is laterally restrained by the retractive carriage means, as the cam-follower means rises and falls during movement toward and away from the furnace.

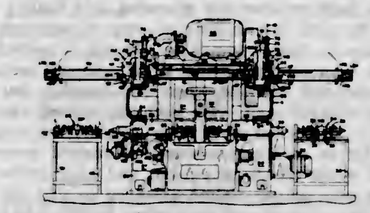
2,746,612
CRANE TRUCK
Ernst Wirz, Uetikon am See, Switzerland
Application July 12, 1952, Serial No. 298,546
7 Claims. (Cl. 212—59)



1. A crane truck comprising, a rotatable full-circle crane support, an annular thrust bearing mounting the crane support on a truck, an arch within said annular thrust-bearing providing a free space for the crane operator and at the same time reducing the height of the truck, a crane arm pivotally connected to said support for pivoting movement in a vertical plane, hydraulic means for pivoting said crane arm with respect to said support, said crane arm comprising a first hollow member, a second member telescopically mounted in said first member, a hydraulic jack for extending and retracting said second member, and hook means fixed directly to the free end of said second member.

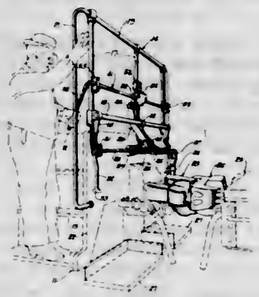
2,746,613
WORK HANDLING APPARATUS FOR MACHINE TOOLS
Walter R. Meyer and Harold J. Siekmann, Cincinnati, Ohio, assignors to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio, a corporation of Delaware
Application April 22, 1953 Serial No. 350,486
7 Claims. (Cl. 212—135)

5. In a work handling device of the nature described, a loading crane slidably mounted on a rail, a slide vertically slidable on said crane, a work supporting elongated hook member pivotally dependent from the lower end of the slide and swingable thereon, a shaft rotatable on the slide, means on the shaft engaging the hook which upon rotation of said shaft causes swinging movement of the hook,



power means on said crane for simultaneously reciprocating the slide thereon while swinging the hook on the slide whereby the lower work engaging end of the hook follows a predetermined fixed path.

2,746,614
SAFETY UNCOUPLING RIGGING FOR LOCOMOTIVE DRAFT GEAR
Francis B. Lewis, Kansas City, Kans., assignor to Paxton-Mitchell Company, Omaha, Nebr., a corporation of Nebraska
Application July 18, 1952, Serial No. 299,625
4 Claims. (Cl. 213—166)

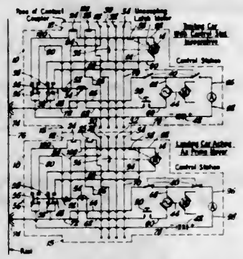


1. For use on a locomotive having an end platform with steps at each side leading thereto, an end railing guarding said steps and platform, and coupling mechanism disposed forwardly of said railing and including a pin movable vertically to effect uncoupling thereof; safety uncoupling rigging operable from said steps or said platform adjacent said steps and rearwardly of said railing, comprising a crank lever pivotally mounted at the end of the locomotive and operable to lift said pin, link means having a slotted connection at the lower end thereof with said crank lever, operating shaft means pivotally connected to the upper end of said link means, and bearing means for said shaft means mounted on said railing to enable operation of said shaft means to lift said coupling pin from any point on said steps or said platform adjacent said steps and rearwardly of said railing at which said shaft means is accessible, whereby said railing prevents anyone so operating said uncoupling rigging from being thrown forwardly accidentally from said platform or steps.

2,746,615
REMOTELY CONTROLLED CAR UNCOUPLING SYSTEMS
John W. Heimaster, Charleston, and Robert R. Cosner, South Charleston, W. Va., assignors to Union Carbide and Carbon Corporation, a corporation of New York
Application September 2, 1954, Serial No. 453,876
6 Claims. (Cl. 213—212)

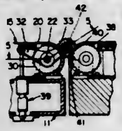
1. A remotely controlled car uncoupling system for uncoupling the last car only of a train of cars from a remote control station, which comprises, in combination,

leading and trailing couplers on each car which are adapted to couple automatically when the cars are brought together in series on the same track, means including limit switches for operating said trailing coupler on the next to the last car only to uncouple the latter from the train, comprising a motor, a control circuit and a motor energizing circuit, means including contacts adapted to mate when said couplers between cars are coupled, and, two normally closed switches adapted to be opened when such couplers are coupled, a contactor on each car, a source of control current, a source of motor energizing current, and a car uncoupling switch at said control station arranged so that the momentary operation of such uncoupling switch at said control station results in the energization of all of the contactors and the establishment of a contactor holding cir-



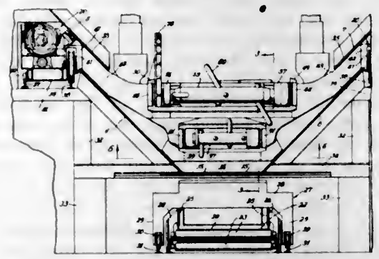
cuit therefor, causing a motor energization circuit to be established through one of said normally closed switches in the trailing coupler on the last car of the train, a limit switch on the next to the last car, and the motor on such next to the last car only, which sets the trailing coupler of such car so that it freely uncouples from the leading coupler of the last car when such couplers are moved apart, which results in the closure of the two coupler switches in the trailing coupler of the resulting last car in the train, one of which establishes a motor energizing circuit which automatically reverses the operation of said motor, causing the latter to set the trailing coupler for automatic coupling with the leading coupler of a car when such couplers are brought together, and restore the circuits for subsequent uncoupling of the last car only of the train in a similar manner.

2,746,616
VEHICLE PARKING DEVICE
Richard L. Sinclair, Compton, Calif.
Application November 28, 1952, Serial No. 323,043
1 Claim. (Cl. 214—16.1)



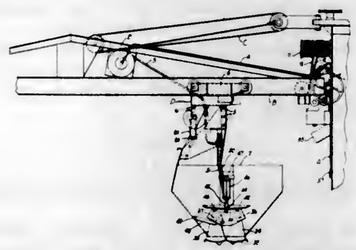
In vehicle-handling apparatus, a movable platform, a vehicle storage space with which the platform can be aligned, an endless conveyor means extending across said platform for supporting a vehicle, an endless conveyor means in said storage space for supporting a vehicle, the conveyor means of said platform and that of said storage space being spaced in longitudinal alignment when said platform is aligned with said storage space, motorized drive means on said platform for operating the conveyor means thereon, and means for operatively connecting said drive means to the conveyor means in the storage space and for bridging the space between the conveyor means on said platform and the means in the storage space, comprising a drive wheel connected to said drive means, a bell crank pivotally mounted on the axis of said drive wheel, a driven idler wheel mounted on said bell crank in continual engagement with said drive wheel, a wheel operatively connected to the conveyor means in the storage space engageable by said driven idler wheel in a predetermined position of said bell crank, a roller carried in part by and movable with said bell crank having its axis of rotation coincident with said driven idler wheel, and means for pivoting the bell crank.

2,746,617
DEVICE FOR FACILITATING THE UNLOADING OF MATERIAL FROM A HOPPER
Orville J. Borrowdale, Chicago, Ill.
Application July 23, 1953, Serial No. 369,898
18 Claims. (Cl. 214—17)



1. A device for facilitating the unloading of material from an elongated hopper having a substantially dihedral angular bottom portion through an elongated discharge provided in the bottom portion of the hopper adjacent the line of juncture of the planes of the dihedral walls comprising, a carrier positioned beneath a lateral wall of the hopper and movable lengthwise of said hopper, means for moving said carrier lengthwise of said hopper, supporting means mounted upon said carrier and projecting through an elongated opening in said last-mentioned dihedral wall into the lower portion of said hopper, said supporting means being movable with the carrier lengthwise through said hopper, and means carried by said supporting means within the hopper for agitating the material in the hopper to condition it for movement through the hopper discharge.

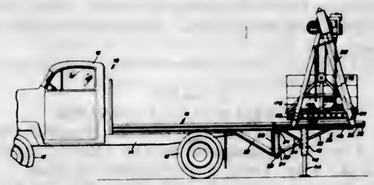
2,746,618
AIR OPERATED BUCKET
Edwin O. Martinson, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a corporation
Application September 25, 1952, Serial No. 311,507
5 Claims. (Cl. 214—59)



1. The combination with a paver having an operator's station thereon and including a boom and a bucket unit supported thereby for movement therealong, said bucket unit having a discharge opening and closure means therefor, of a cable operated fluid pressure control unit carried by the bucket unit, a power device connected to said

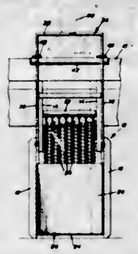
closure means for moving the same into a plurality of positions under the control of said control unit, a single fluid pressure supply line for said unit, and a cable, said cable engaging instrumentalities on said unit and operable from the operator's station for manipulating said unit, said control unit including a valve having a movable member therein adapted to transfer fluid pressure from the supply line to a plurality of ports, and the cable being reeved about a pulley connected to said member for moving the same.

2,746,619
TRUCK LOADING OR UNLOADING MECHANISM
Harold L. Kuhlenschmidt, Floyd E. Kuhlenschmidt, Arthur Geiselman, and Arnold Geiselman, Elberfeld, Ind., assignors to Elberfeld Manufacturing Co., Inc., Elberfeld, Ind., a corporation of Indiana
Application May 20, 1954, Serial No. 431,196
3 Claims. (Cl. 214—75)



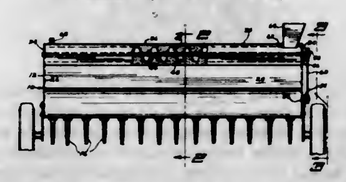
1. In combination with an automotive truck having a driver's cab and a loading platform to the rear of the cab, a carriage supported for movement longitudinally of the loading platform, comprising: a pair of spaced, vertical side frame assemblies interconnected at their upper ends by a horizontal cross member, a pair of spaced winch members mounted on said cross member, means on said cross member for selectively driving said winch members, an elevator platform connected with said winch members for vertical movement thereby, said side frame assemblies including tubular leg members, said leg members having plate-like extensions secured on opposite sides of the lower ends thereof, a wheel journaled between the extension of each leg member, a pair of spaced track members secured to said loading platform, said wheels being engaged upon said track members for guided movement therealong, means including an endless flexible element running through one of said leg members for driving the corresponding wheel, and a laterally projecting finger or at least one extension at each side of the carriage projecting under a portion of the loading platform to prevent tilting of the carriage and disengagement of the wheels from the tracks.

2,746,620
LOADING DEVICE FOR ELEVATED PLATFORMS
John C. Lindle, Alexandria, La.
Application December 29, 1953, Serial No. 400,931
3 Claims. (Cl. 214—77)



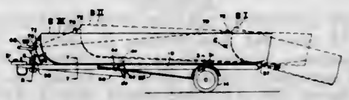
1. A loading attachment for an elevated platform comprising a support depending from said platform at an edge thereof, a vertically disposed carriage secured to said support for vertical swinging and pivotal movement relative to said support, spring means carried by said support and connected to said carriage for elevating said carriage, guide means carried by said platform engaging said carriage for guiding said carriage from its vertical position to a horizontal position overlying said platform upon elevation of said carriage, rollers on said platform engaging said carriage to control pivoting thereof, said guide means continuously retaining said carriage in engagement with said rollers.

2,746,621
SEED BOX LOADER FOR GRAIN DRILLS
William J. McIntyre, Swift Current, Saskatchewan, Canada
Application December 27, 1954, Serial No. 477,675
4 Claims. (Cl. 214—83.32)



1. In a planting implement having an elongated seeder box, a cover for the box, said cover having an opening adjacent one end for depositing seed in the box, a conveyor mechanism under the cover for moving grain deposited through the opening longitudinally through the box in a direction away from said opening, power means for driving the conveyor, and said cover having an overflow opening at its other end, said opening being surrounded with a transparent tube extending upwardly from the cover.

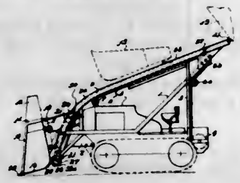
2,746,622
TRAILER FOR TRANSPORTING A BOAT
Dwight B. Roy, Rocky Hill, Conn., assignor to Mastercraft Trailers, Inc., Middletown, Conn., a corporation of Connecticut
Application March 30, 1953, Serial No. 345,300
6 Claims. (Cl. 214—84)



1. In a trailer for transporting a boat, the combination of a main frame and a cradle thereon near the rear end thereof for supporting a boat in a fully loaded forward position, ground engaging supporting wheels for the main frame behind the forward end thereof, a boat supporting device on the main frame at the rear end thereof and behind the cradle and including at least one boat supporting roller rotatable about a normally fixed transverse axis, two transversely spaced forward boat supporting rollers on the main frame ahead of the cradle and so spaced from the rear supporting device as to be engageable with the boat near the front thereof when the boat is positioned with its center of gravity slightly ahead of the rear supporting device, and means for causing movement of the two said forward rollers in unison relatively to the main frame and independently of the rear supporting device to upper positions or to lower positions, the said forward rollers when in their upper positions being at such an elevation that they and the said rear supporting device constitute the sole means for supporting the boat above the cradle for longitudinal movement to its fully forward position during loading and the said forward rollers upon subsequent movement from their upper positions to their lower positions serving to release the boat for downward pivotal movement about

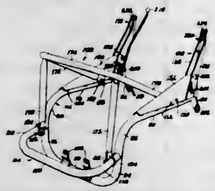
the said rear supporting device so that the boat after such pivotal movement is freed from engagement with the rear supporting device and with the forward rollers and is entirely supported by the said main frame and the said cradle.

2,746,623
VEHICLE MOUNTED SHOVEL LOADER
William Hay Smith, Buenos Aires, Argentina
Application March 31, 1952, Serial No. 279,593
6 Claims. (Cl. 214—103)



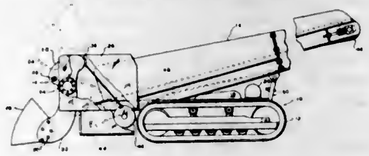
1. A load lifting apparatus for a vehicle comprising a frame including a pair of channel members defining a track, said channel members each having an upper flange and a lower flange, means for detachably mounting said frame on a vehicle, a collapsible carriage including a trailing section comprising a cross member and a pair of side members, wheels mounted adjacent said cross member on each side member, a wheel located between the flanges of a respective channel member, side arms pivotally connected to said side members, a receptacle pivotally connected at its rear bottom portion to said side arms, pulley means operatively connected to said carriage, a cable winding means mounted on said frame, and secured to the base of the receptacle, means operatively connected to said carriage for preventing collapse thereof while said carriage travels over said channel members, ramp means connected to said channel members, and a stop member in said frame for limiting movement of said carriage, said ramp means being so constructed as to engage said wheels on said carriage to initiate tilting thereof before said carriage engages said stop member.

2,746,624
ATTACHMENT FRAME FOR TRACTORS
Harold M. Stueland, East Moline, Ill., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Original application March 29, 1951, Serial No. 218,105, now Patent No. 2,679,943, dated June 1, 1954. Divided and this application June 29, 1953, Serial No. 364,715
5 Claims. (Cl. 214—131)



1. For a tractor of the type having a longitudinal body carried at its rear end on a wheeled, transverse rear axle having laterally spaced depending housings and at its forward end on a wheeled, transverse front axle, wherein the front end of the body includes a rigid body portion carrying an intermediate portion of the front axle structure on a longitudinal pivot: a loading machine frame comprising, when mounted on such tractor, an elongated frame of U-shape as viewed from above, having its open end at the rear and its bight at the front; each leg of the U comprising an elongated member having a rear end portion provided with means for rigid but detachable affixation to a low portion of the proximate depending housing of the rear axle, said member extending upwardly and forwardly from said rear end portion alongside the tractor to a point just above the front axle structure and curving thence downwardly ahead of the front axle to a level below said front axle, and thence extending transversely at said level as a rigid crossbar to join the other leg of said frame; means rigid on the crossbar and having provision for rigid but detachable affixation to the rigid body portion at the front of the tractor and independently of the tractor front axle pivot; a pair of upstanding supports, one adjacent and rigidly fixed to a rear end portion of each leg; and a pair of generally triangular brace means, one on each leg and having a lower edge running along and rigidly secured to the respective leg and terminating substantially at the aforesaid point at which said leg curves downwardly ahead of the front axle, each brace having a rear portion rigidly joined to the proximate support, and each brace having an upper edge inclining forwardly and downwardly from said support to join said lower edge substantially at the aforesaid point.

2,746,625
PIVOTED BUCKET LOADER
Daniel M. Schwartz and Donald E. Hendrickson, Salt Lake City, Utah, assignors to The Eimco Corporation, Salt Lake City, Utah, a corporation of Utah
Application August 9, 1951, Serial No. 241,057
4 Claims. (Cl. 214—131)

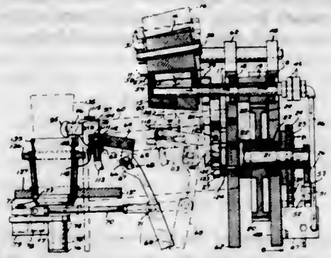


1. A material handling machine comprising a main frame and a power source, an arm pivotally mounted adjacent the forward end of said main frame, a shovel bucket carried at one end of said arm, a cam surface provided at the other end of said arm, said cam surface shaped to provide a continuous torque-speed ratio from a high torque low speed zone in the shovel digging position to a low torque high speed zone in the shovel dumping position, means connecting said cam surface to the power source for actuating the shovel arm through the digging-discharge cycle, said means including flexible draft means contacting the cam surface of said pivotally mounted arm and pulling means connected to said flexible draft means, and a torque responsive pump means for transmitting power from the power source to said pulling means.

2,746,626
CUP-MAKING MACHINE
Edward Vantlander, Long Island City, and Foster Jacobs, Levittown, N. Y., assignors to Constellation Cup Corporation, Long Island City, N. Y., a corporation of Delaware
Application March 1, 1954, Serial No. 413,204
4 Claims. (Cl. 214—146.5)

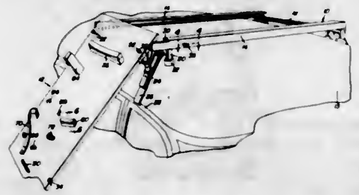
1. A transfer mechanism for a machine for making rolled paper cups and the like having a mandrel about which said cups are rolled, comprising a sliding carriage, a bracket pivoted to said carriage and carrying a suction cup to engage the rolled cup on said mandrel, means including a pinion on said bracket and a rack slidable on said carriage to rotate said bracket, means to cause said carriage to reciprocate with a definite stroke, means effective over a portion of said stroke to slide said rack so as to rotate said bracket to delivery position, and means

supplying suction to said suction cup including a valve actuated by said rotation of said bracket to cut off said



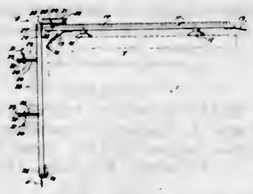
suction and to vent said suction cup when said bracket is in delivery position.

2,746,627
OUTBOARD MOTOR CARRIER FOR VEHICLES
Woodrow W. White, De Queen, Ark.
Application August 2, 1955, Serial No. 525,953
6 Claims. (Cl. 214—450)



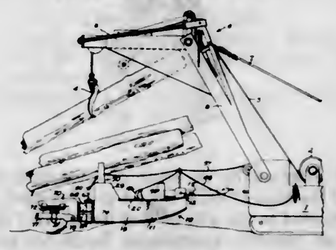
1. An outboard motor carrier for vehicles comprising a bed including a pair of tracks, means for securing said bed to the top of a vehicle with said tracks disposed transversely thereof, a carriage operatively associated with said track for sliding movement longitudinally thereof, means for securing an outboard motor upon said carriage, a pair of hooks secured to said tracks and having their open ends disposed outwardly and below said tracks, said carriage having openings therein adapted to receive said hooks therein when the carriage is withdrawn from the bed and with only its extremity supported by said track.

2,746,628
LADDER SUPPORT
Charles S. Neyra, Dallas, Tex.
Application October 23, 1953, Serial No. 387,961
7 Claims. (Cl. 214—450)



1. A ladder carrier for a truck comprising a pair of ladder supports, each consisting of a batten secured transversely of the top of said truck, an inverted channel member affixed longitudinally to said batten and having a longitudinal slot in its web terminating short of its ends, said channel member defining a stationary lower section, an upper section slidable longitudinally on said lower section, a short tail section hinged to one end of said upper section, an inverted T-shaped lug carried by said tail section and extending into the slot of said lower section to hold said upper section for displacement to a position at right angles to said lower section to dispose said upper section in a plane parallel with a side of said truck and means on each of said supports for retaining a ladder transversely across said supports.

2,746,629
LOG SKIDDING SLED DEVICE
Milton E. Sandland, Seeley Lake, Mont.
Application February 1, 1952, Serial No. 269,387
8 Claims. (Cl. 214—523)



1. A log skidding device comprising a skid pan, upstanding bunk supports at the sides of said pan, a log supporting bunk comprising end stakes, a log holding member extending between and connecting said stakes, said member including a sharp edged bar for dragging the logs and a roller below the sharp edged bar, pivot members mounting the bunk on said supports, a holding device cooperating with said pivot members to hold the sharp edged bar above the roller while dragging logs on said bar and means to release said holding device so the dragged logs will turn the bunk and bring the roller against the logs.

2,746,630
CLAMP FOR INDUSTRIAL TRUCKS
Stuart W. Sinclair, Houston, Tex., assignor to Anderson, Clayton & Co., Houston, Tex., a corporation of Delaware
Application October 16, 1952, Serial No. 315,057
4 Claims. (Cl. 214—653)

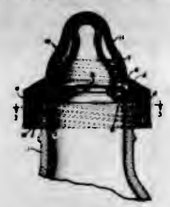


1. A load engaging clamp for an industrial truck comprising, a lift carriage, a pair of parallel guides disposed on said lift carriage, a piston cylinder slidably and nonrotatably disposed in each guide, the outer surface of said piston cylinder defining a slide surface complementary with the surfaces of the guides, such cylinders being oppositely directed, a piston element in each cylinder, a piston rod secured to each piston element and secured at its opposite end to said lift carriage, and a load engaging arm secured to the free extremity of such piston cylinder whereby the slide surfaces and the guides support the weight of a load on the load engaging arms.

2,746,631
CAP AND SHIELD FOR NURSING BOTTLE
Henry W. Witz, Chicago, Ill., assignor to Nursmatic Corporation, Chicago, Ill., a corporation of Delaware
Application February 24, 1953, Serial No. 338,225
8 Claims. (Cl. 215—11)

5. A cap and shield for a nursing bottle, said cap comprising a nipple-clamping member having a substantially annular flange for engagement with the open-end portion of a nursing bottle, the outer surface of said flange being

provided with an even number of similar groups of grooves, each group containing a plurality of adjacent grooves, the bases of the grooves of alternate groups being at progressively greater distances from the axis of the flange and the bases of the grooves of intermediate groups being at progressively lesser distances from the axis of said flange, in a predetermined plane at right-angles to the flange axis, the bases of diametrically opposite grooves



being at substantially the same distance from said flange axis and the base of each of said grooves along its length being inclined to the axis of said flange, said shield comprising an annular cap-engaging flange for substantially coaxial positioning on the outside of said cap flange, and diametrically opposite ribs carried on the inner surface of said shield flange for engagement with opposite grooves of certain of said groups of grooves in said cap flange.

2,746,632
FLEXIBLE BOTTLE CLOSURE
Carl Bramming, Nashville, Tenn., assignor to Aladdin Industries, Incorporated, Chicago, Ill., a corporation of Illinois
Application November 27, 1953, Serial No. 394,611
4 Claims. (Cl. 215—52)



1. A flexible closure for vacuum bottles, said closure comprising a soft resilient hollow open-topped generally cup-shaped member having an annular side wall, a bottom wall of double concave shape connected to said side wall adjacent its lower edge so that pressure or vacuum in the vacuum bottle will result in upward and downward flexing of the bottom wall and thereby will effect outward expansion of said side wall, an outwardly projecting annular flange connected to said side wall adjacent its upper edge for engaging the top of a vacuum bottle, and an inwardly projecting generally semi-circular lip connected to said side wall adjacent its upper edge and adapted to be grasped in removing said closure from the vacuum bottle, said lip extending generally half way across the top of said member, said member having an open top to afford access to the underside of said lip.

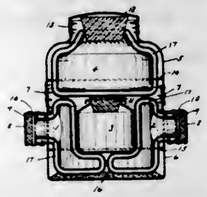
2,746,633
EYELET FORMING METHOD AND APPARATUS
William Earl Simmons, Cedar Rapids, Iowa, assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application August 25, 1952, Serial No. 306,119
3 Claims. (Cl. 218—14)

1. An eyelet-forming apparatus comprising an upper movable work tool adapted to receive an eyelet, a lower rigidly supported base tool, said upper work tool being movable relative to said lower base tool, the resilient work-supporting means having a work-supporting upper face closely surrounding said base tool with said upper face extending in a multiplicity of oppositely and angularly related directions to a considerable distance from said base tool, said resilient means being adapted to support a workpiece on said upper face, said resilient work-supporting means having an opening closely surrounding said lower base tool, said lower base tool being provided



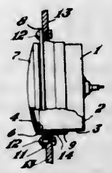
with a dished upsetting surface positioned within said opening and below said work supporting face, and means for moving said upper work tool toward said upsetting surface to cause said lower base tool to form a head on said eyelet.

2,746,634
SECTIONAL THERMOS FOOD CONTAINERS
Joe Ceifh Smith, West Blocton, Ala.
Application June 17, 1953, Serial No. 362,281
1 Claim. (Cl. 220—16)



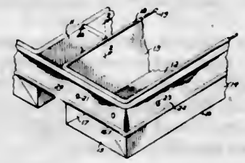
A sectional Thermos food container of the character described comprising a main case in two parts with a screw-type connecting joint for removably holding the parts together, two liquid containing compartments mounted removably in the lower part of the said case, each liquid container having a neck providing an opening, and a removable cap thereon, said neck projecting through the side of the case, said caps being leak-proof when closed, a third container mounted in the lower part of the case and between the upper portions of said liquid containers, a cork closure in the top of said third container, a fourth container mounted in the upper portion with its bottom in contact with the cork closure of the third container, a cork closure in the top of the said fourth container, a screw-type cap on the top opening of the case with the inner face of the cap adjacent the cork closure thereunder, a cushion element on the inner face of the bottom of the case, the walls of the said liquid containers and the container in the upper portion of the case with space between the walls for vacuum.

2,746,635
SEALED INSTRUMENT CASE
Roscoe A. Ammon, Manchester, N. H.
Application August 11, 1953, Serial No. 373,525
3 Claims. (Cl. 220—18)



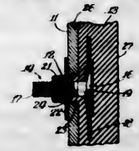
3. A sealed instrument case comprising a thin metal housing having an end wall and an integral tubular side wall forming an opening opposite said end wall, a transparent window, said opening including an abutment engaging the window edgewise, a metallic seal between said window and said abutment, and a relatively thick and stiff annular metal mounting bracket having a portion secured to the outside of said housing at a location spaced from said opening to isolate said abutment, window and seal from edgewise compression forces, said bracket also having a flange for attaching the bracket to a panel and an intermediate portion between the first said portion and said flange, said intermediate portion being spaced from said housing, and said housing wall between said location and opening being flexible to isolate said window and seal from twisting forces.

2,746,636
MULTIPLE BAKING PAN ASSEMBLY
Jerome H. Debs, Chicago, Ill., assignor to Chicago Metallic Manufacturing Company, Ashland, Ill., a corporation of Illinois
Application February 23, 1955, Serial No. 490,075
3 Claims. (Cl. 220—23.2)



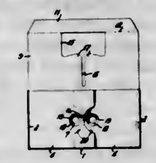
1. A multiple baking pan assembly comprising a plurality of substantially elongate rectangular baking pans joined together in spaced-apart relation, a reinforcing wire extending continuously all around the upper edge portion of each individual pan unit, the upper edge portion of the pan walls being turned about the wires to form a reinforcing bead, and bridging members separate and apart from the reinforcing wires and beads extending cross-wise between the adjacent side walls of laterally spaced pan units in the portions intermediate the ends thereof, said bridging members being in the form of elongate rod-like members having a body portion of curvilinear cross-section and dimensioned to correspond to the distance between the reinforcing wires in the adjacent side walls of adjacent pan units, and end portions extending outwardly from the ends of the body portion into engagement with the under side of the reinforcing wires and joined, as by welding, thereto, said end portions being flattened for more substantial engagement with the reinforcing wire.

2,746,637
ABRASION RESISTANT LINER
Hobart H. Todd, Oak Park, and Paul C. Whitney, Chicago, Ill., assignors to Robert P. Whitney, Chicago, Ill.
Application September 17, 1952, Serial No. 310,102
12 Claims. (Cl. 220—63)



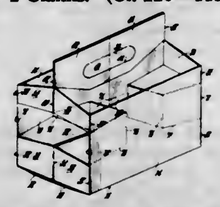
3. A liner of the character described comprising a rubber sheet of predetermined thickness and peripheral shape, a plurality of fastening elements having enlarged head portions embedded in said sheet and elongated shank portions projecting outwardly from the sheet in spaced relation for mounting the sheet on a surface to be lined, and apertured flexible reinforcing means embedded in said sheet and disposed adjacent the head portions of said fastening elements with said shank portions extending therethrough, said reinforcing means being of greater lateral dimensions than said head portions whereby to assist in retaining the latter in embedded position in said sheet, and the rubber of said sheet completely surrounding and being vulcanized to said head portions and also to said reinforcing means whereby said fastening elements and said reinforcing means are firmly and permanently mounted in said sheet.

2,746,638
CARRIER CARTONS
Charles L. Champlin and Gerald H. Steele, Rittman, Ohio, assignors to The Ohio Boxboard Company, Rittman, Ohio, a corporation of Ohio
Application April 10, 1953, Serial No. 347,984
8 Claims. (Cl. 220—105)



5. A carrier carton of paperboard material, including a body and a handle member, said body having a bottom member and side and end wall members upstanding from said bottom member, said end wall members having normally juxtaposed inner and outer plies and said side wall members having end flaps interposed between and embraced in assembled relation by the inner and outer plies of said end wall members, the inner ply of each of said end wall members being provided with an opening extending laterally and vertically thereof and upwardly from said bottom member to a height less than the height of its respective wall member, said openings respectively merging into vertical slots and at their zones of such merging being provided with ears extending inwardly of the openings toward said bottom member, said handle member being provided at its ends with wing means of a height greater than the height from said bottom member to the inner margins of said ears, the outer plies of said end wall members and said end flaps being apertured in substantially horizontal alignment with said ears for the reception of probe means wherewith while the respective wall plies are juxtaposed said ears may be distorted out of the plane of said respective inner plies sufficiently to permit entrance of said wing means through said openings and between said inner and outer plies in position for guidance by said ears through said slots when the handle member is raised relatively to said end wall members.

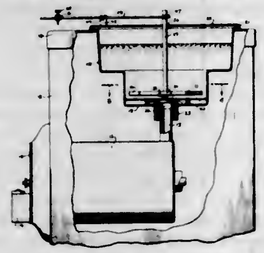
2,746,639
CARRIER FOR BOTTLES AND THE LIKE
Walter E. Turner, Waterford, and Earl B. Whitehead, Norwich, Conn., assignors to Atlantic Carton Corporation, Norwich, Conn., a corporation of New York
Application December 11, 1953, Serial No. 397,522
2 Claims. (Cl. 220—113)



1. A collapsible bottle carrier formed from a preformed blank of sheet material comprising in combination, opposite vertically disposed elongated outer side walls, hori-

zontal bottom wall sections connected at outer longitudinal edges to longitudinal lower edges of said side walls and connected at inner longitudinal edges thereof to one another, pairs of vertically spaced lower and upper vertical end wall sections at opposite ends of said side walls having outer ends of the end wall sections of the pairs thereof connected to corresponding ends of said side walls and extending inwardly towards one another, providing spaces between lower and upper sections vertical secured together central partition members between said side walls having opposite ends connected to inner ends of the lower and upper end wall sections of the pairs thereof whereby said partition members are spaced inwardly from said side walls, outer partition sections between the lower and upper pairs of end wall sections connected at outer ends to the ends of the side walls and being disposed on and secured to inner sides of said side walls, inner vertical partition sections connected to inner ends of said outer partition sections and extending parallel to said end wall sections and between said side walls and partition members and being spaced inwardly of said end wall sections and connected at inner ends to said partition members, said partition members extending above the plane of the upper edges of said side walls and provided with hand hole means, and cushion means between the lower longitudinal portion of said central partition members and said bottom wall sections.

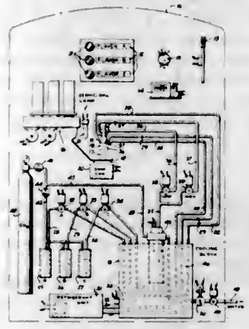
2,746,640
BATCH FEEDERS
Harvey F. Swenson, Seattle, Wash.
Application March 31, 1951, Serial No. 218,673
9 Claims. (Cl. 222—440)



5. In a batch feeder, a cylindrical container arranged to receive a fluid moderately resistant to flow and having a discharge opening at the bottom thereof, a circular plate somewhat smaller in diameter than the container and presenting radially extending wings for guiding the plate in endwise movement in the container, a valve stem depending from the said plate, a valve at the lower end of the valve stem for closing the discharge opening, and a circular disc corresponding in diameter to that of the container and guided on the valve stem for movement between the plate and the valve, said disc being provided with an opening contained within a circle less in diameter than that of the plate, and the plate, valve stem, and valve being less buoyant than the disc to cause the plate when released from a raised position to lower by the force of gravity substantially faster than the disc lowers so as to bring the plate and disc together to isolate a batch of fluid therebelow during the lowering operation.

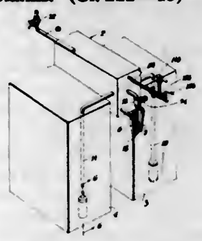
2,746,641
BEVERAGE DISPENSING MACHINES
William V. King, Brooklyn, N. Y., assignor, by mesne assignments, to Rowe Spacarb, Inc., New York, N. Y., a corporation of New York
Application May 27, 1950, Serial No. 164,805
11 Claims. (Cl. 222—2)

1. In a beverage vending machine of the type described, control means to be actuated by a customer in dispensing a drink, means actuated by said control means for dispensing selected ones of a plurality of syrups, means also actuated by said control means for dispensing carbonated water of different degrees of carbonation, said means including a dispensing nozzle having concentric, telescopically arranged, annular elements defining individual



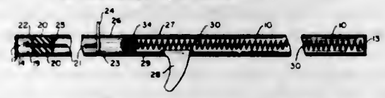
fluid conduits of different water-carrying capacity for carbonated water, and means interconnecting said control means with said syrup dispensing means and said water dispensing means for dispensing carbonated water of a predetermined one of said different degrees of carbonation with each of said plurality of syrups.

2,746,642
DRINK DISPENSING DEVICE
Regis E. Parks, Fredonia, N. Y.
Application May 27, 1952, Serial No. 290,149
16 Claims. (Cl. 222—15)



1. In a drink dispensing device, the combination of a plurality of cylinders each adapted to contain a liquid, a piston in each cylinder, means for selectively interconnecting a plurality of said pistons so that movement of one moves another, an inlet conduit connected with one of said cylinders adapted to supply liquid under pressure to one side of its piston, an outlet conduit connected with said cylinder at an opposite side of said piston, means for opening the outlet conduit to thereby effect movement of the piston toward the outlet conduit under the influence of liquid pressure in said inlet conduit, and conduits connected with the other of said cylinders for conducting liquid thereto and therefrom.

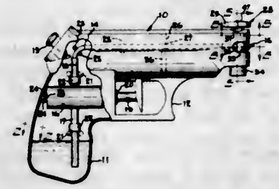
2,746,643
LIQUID EJECTION DEVICES
Robert S. Spalding, Denver, Colo.
Application November 17, 1952, Serial No. 321,004
27 Claims. (Cl. 222—79)



1. In a liquid ejection device, a relatively fixed container for liquid having an outlet; plunger means within

said container for relative movement thereto and adapted to force liquid through said outlet upon forward movement thereof, said container having a sufficient capacity that a succession of forward movements of said plunger will each force liquid through said outlet; an impact member movable between a rear position spaced from said plunger and a forward position in engagement with said plunger, successive forward movements of said impact member producing an impact against said plunger causing said plunger to move forwardly upon each impact; resilient means opposing movement of said impact member to said rear position and adapted to move said impact member forwardly into engagement with said plunger; and means for moving said impact member from a forward position engaging said plunger to said rear position.

2,746,644
TOY WATER PISTOL
Robert L. Steiner, Cincinnati, Ohio, assignor to Bromo-Mint Company, Inc., Cincinnati, Ohio, a corporation of Ohio
Application January 24, 1956, Serial No. 561,032
6 Claims. (Cl. 222—79)



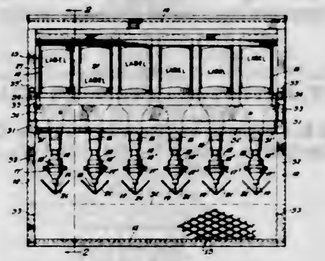
5. A toy water pistol having a hollow interior to constitute a reservoir and having a trigger operated pump therein, an element mounted within the barrel of the pistol at the discharge end thereof for turning movement about a vertical axis, a flexible hose having one end thereof connected to said trigger operated pump and extending forwardly therefrom through the barrel of said piston, and the forward portion of said flexible hose being free of the barrel and fastened to said element for turning movement therewith, whereby water forced through said hose by the trigger operated pump is discharged from the pistol in a direction dependent upon the position of said element.

2,746,645
DISPENSER FOR CANNED LIQUID GOODS
Hanns Knäbel, Esslingen (Neckar), Germany
Application May 11, 1951, Serial No. 225,693
3 Claims. (Cl. 222—86)



1. In an opening and pouring device, the combination of a container comprising as a bottom part a hollow body having a cylindrical side wall open at its upper end and a top part telescoping over said bottom part, said parts being adapted to be disposed over a can, the contents of which are to be poured, said bottom part being provided with means giving resiliency to said part, thereby holding tightly together by friction said bottom part and said top part, and the can encompassed by the same; and means for opening said can, consisting of two punches of half-open hollow semicone shape and provided with ground cutting edges, said punches depending from said top part and penetrating the top of said can when the parts of the container forming the pouring device are disposed over said can, one of said punches being connected to a pouring spout, and the other serving as an air vent, the punch with the pouring spout being arranged at the top of the upper part from which it extends at an angle deviating slightly from an angle of 90° between the longitudinal axis of said punch and the vertical axis of said top part.

2,746,646
BEVERAGE DISPENSING STAND
Owen F. Hall, Waukegan, Ill.
Application June 9, 1955, Serial No. 514,355
4 Claims. (Cl. 222—113)



1. In a beverage dispensing stand, a casing open at one side, a rack mounted in said casing adjacent the upper portion thereof for supporting a plurality of bottles in inverted position, with dispensing valve units inserted in the necks of said bottles, said rack including a plurality of horizontally aligned generally upright supporting members for individual bottles, with the dispensing valve units of said bottles in uniformly spaced relation above the bottom of said casing, each of said bottle supporting members including a spring holding member at the upper end thereof for yieldably engaging the inverted bottom face of its respective bottle, and a forwardly-projecting bifurcated supporting member on the lower end of each bottle supporting member adapted to receive a dispensing valve unit in detachable fitting relation therebetween.

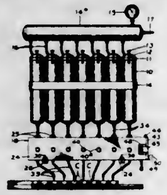
2,746,647
CONTAINER WITH CLOSURE AND DISPENSING VALVE
John T. Efford and Charles P. Mottram, Stratford, Conn., assignors to Bridgeport Brass Company, Bridgeport, Conn., a corporation of Connecticut
Application July 27, 1950, Serial No. 176,108
4 Claims. (Cl. 222—130)



1. A package including, in combination, a container having a recessed wall with a hole therethrough, an elastically deformable tubular plug pressed partly through said hole and having mutually opposed flange surfaces respectively pressing against the inside and outside of said wall and having a tapered inner shank and a cylindrical outer shank which respectively extend from said flange surfaces in mutually opposite directions and with a bore closed by a transverse web, a removable cover spanning said depressed wall and defining therewith an enclosure, and a nozzle valve positioned inside of said enclosure and removable therefrom when said cover is removed and having an abutment surface and a valve stem projecting therefrom with an enlarged pointed head

having an outwardly facing annular surface, said stem being proportioned respecting said plug so that when said nozzle valve is removed from said enclosure it can be pressed through the inside of said plug to pierce said web with said pointed head and so that said head projects beyond the inner end of said plug's inner shank with the latter engaged by said annular surface and with said abutment surface engaging the outer end of said plug's outer shank and elastically compressing it longitudinally with consequent elastic lateral bulging of said outer shank, said nozzle valve having a duct opening from adjacent to said annular surface of said stem's head and going longitudinally through said nozzle valve and opening therefrom outwardly beyond said abutment surface.

2,746,648
APPARATUS FOR DISPENSING MEASURED VOLUMES OF PAINT
Ralph E. Grossman and Herman W. Dorn, Decatur, Ill.
Application January 8, 1954, Serial No. 402,988
9 Claims. (Cl. 222—136)



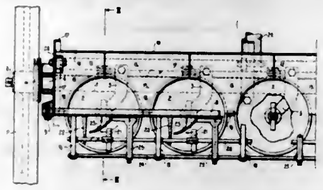
1. Apparatus for dispensing measured volumes of paint, comprising a plurality of vertically disposed elongated paint reservoirs, an elongated horizontal housing disposed below said reservoirs, means for introducing air pressure into the upper ends of said reservoirs, an elongated valve plate in said housing provided with a series of frusto-conical valve seats equal in number to that of the reservoirs, upper and lower vertically aligned ports in said plate opening through the wall of each valve seat in diametrical relation thereto, a conduit connecting each upper port with one of said reservoirs, a paint discharge nozzle communicating with each lower port and depending from said housing, a paint measuring and dispensing valve rotatably supported in each of said seats, and manual means for simultaneously rotating all of the valves.

2,746,649
QUADRUPLE SEASONING SHAKER
Joseph P. G. Ratte, San Diego, Calif.
Application July 15, 1952, Serial No. 298,938
1 Claim. (Cl. 222—142.9)



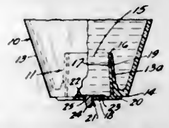
In a condiment shaker, a container interiorly divided into a plurality of vertical sections, a dome threadedly connected to the upper end of the container and having a central opening, an arcuate plate positioned in the dome and extending three-quarters of the circumference of the container, a pair of interconnected walls extending upwardly into the dome from the free edges of the plate, a threaded pin projecting upwardly from the junction of said walls and through said opening, said dome having a plurality of openings of different sizes for the passage of different condiments and an arcuate slot, a handle attached to one of said walls and projecting through said slot, and a cap threaded on said pin and engaging the dome.

2,746,650
MACHINES FOR SPREADING ARTIFICIAL FERTILIZERS AND THE LIKE
Herbert Vissers, Nieuw Vennep, Netherlands, assignor to C. V. Machinefabriek H. Vissers, Nieuw Vennep, Netherlands, a Dutch company
Application September 1, 1953, Serial No. 377,906
Claims priority, application Netherlands September 11, 1952
1 Claim. (Cl. 222—177)



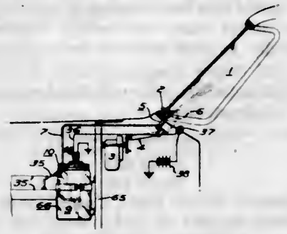
A machine for spreading artificial fertilizers and the like having a plurality of pans, and a hopper having a plurality of discharge orifices and comprising two oppositely disposed end walls, a bottom and longitudinal walls, each of the said pans being located beneath the corresponding discharge orifice of the said hopper and having a toothed rim, a drive shaft extending across the machine below the said hopper and carrying a plurality of worms, each of the said worms meshing with the toothed rim of its corresponding pan, at least two road wheels and each of the latter having a journal, each of the end walls of the said hopper being united with the journal of the corresponding road wheel, and the said hopper having its bottom on a lower level than that of the journals of the said road wheels, a bar extending across the machine below the said hopper, each of the end walls of the said hopper being constituted by a support member clamped on the ends of the said bar and being provided with flanged edges, supporting bars extending at the bottom of said hopper between said end walls, the said longitudinal walls and the bottom of said hopper being free from the said end walls thereof and supported by said supporting bars, and the said longitudinal walls being further supported by said flanged edges of said end walls, a bracket for each pan, and draft means for the said machine being clamped on said bar.

2,746,651
CLOSURE FOR RESILIENT DISPENSERS
Norman J. Lewis, Minneapolis, Minn.
Application July 8, 1953, Serial No. 366,746
6 Claims. (Cl. 222—213)



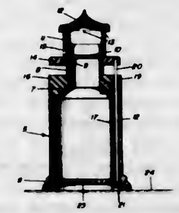
5. A dispensing container of the flexible type which can be compressed to extrude product and on release of compression will tend to regain its original shape, said container having a continuous wall surface for encasing the product, said wall surface having a local thin and more flexible area than the major portion of the container, said local area normally extending inwardly into the internal space of the container in a reverse fold with at least a portion of the outer surface of the local area lying against itself in contacting relation, said local area further having an orifice therethrough normally in sealed relation at the contacting area and a vent through that portion of the local area normally in unsealed relation with the contacting area, whereby upon compression of the container said local area will be extended to break said surface contact and expose the orifice for extrusion of product, and upon release of the compression force will retract the local area to re-establish the surface contacting and orifice sealing relation and permit air to enter said vent and replace that portion of the product extruded.

2,746,652
WINDSHIELD WASHER
John R. Oishei, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y.
Application December 3, 1952, Serial No. 323,902
11 Claims. (Cl. 222—385)



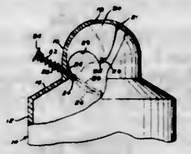
1. A windshield washer comprising a motor-pump unit having a motor chamber and a pump chamber with a differential piston-plunger member operating therein, a control therefor having a normally closed suction valve operable to set the motor in operation for actuating the pump on one stroke, means operable by the plunger member at the end of the stroke to render the valve inoperative, and means acting to impart a return stroke to the plunger member when the valve is inoperative, said control including an electromagnet having an armature with a play connection to the valve to enable striking the latter a jarring impact to break the suction for opening the valve.

2,746,653
SALT DISPENSER
George S. Cassimus, Birmingham, Ala.
Application January 6, 1954, Serial No. 402,515
1 Claim. (Cl. 222—500)



A salt dispenser comprising: a substantially cylindrical container for the reception of salt, a removable closure plug slidably inserted in the upper portion of said container, said plug including a peripheral flange overlying the container and engaged thereon, said flange and said container having aligned vertical bores therein, a neck rising from the closure plug and communicating with the container for receiving salt therefrom, said neck having a radial discharge port therein at an intermediate point, a closure disc in the neck above the discharge port, a cap mounted for vertical sliding movement on the neck and having a radial opening therein for registry with the discharge port, an external flange on the lower end of the cap adapted to rest on the closure plug, a rod slidable in the aligned bores and having one end anchored in the second-named flange, said rod extending below the bottom of the container for engagement with a support on which the container may be placed for actuation thereby for elevating the cap to closed position, a nut threadedly mounted on the lower end portion of the rod, and a coil spring encircling the rod and engaged with the nut for actuating the rod in a direction to move the cap downwardly to open position when the container is removed from the support.

2,746,654
CLOSURE DEVICE FOR COLLAPSIBLE CONTAINERS AND THE LIKE
Raymond J. Dengler, Vallejo, Calif.
Application August 14, 1953, Serial No. 374,339
1 Claim. (Cl. 222—508)

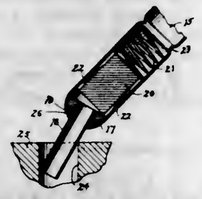


In a closure device for containers the combination of a container neck including an end wall formed with a single, centrally located dispensing aperture of substantial size in relation to the diameter of the neck, said end wall being formed with a substantially hemispherical inner surface; a closure plate within the neck, said plate being formed from a single piece of material shaped over its entire area as a segment of a single sphere, said plate including a closure plate body adapted to cover said aperture, ears formed upon opposite sides of the body, and a tongue extending from one end of the body, said ears being pivotally connected to diametrically opposite portions of the neck, the pivot axis of the closure plate passing through the center of said sphere, said plate bearing slidably against said inner surface of the end wall and being shiftable thereupon about said pivot axis between a first position in which said body covers the aperture, and a second position in which the body is shifted to one side of the aperture to open the same, all portions of the closure plate, in the aperture-covering position of the body thereof, being disposed in contact with said inner surface; a rod slidably mounted in the neck for movement along a line extending approximately tangentially of said sphere, said rod having one end projecting into the neck and loosely pivotally connected to said tongue, the other end of the rod projecting exteriorly of the neck and being formed with a button depressible by a user to shift the rod inwardly of the neck; and spring means coiled about the rod between the neck and button to normally urge the rod outwardly of the neck.

2,746,655
VALVED FLUID DISPENSING SPOUT
Harold Wolcott, Burlingame, Calif.
Application June 1, 1954, Serial No. 433,605
4 Claims. (Cl. 222—509)

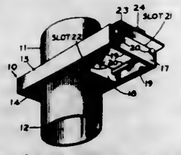
1. In a valved fluid dispensing container spout of the character described, the combination of a tubular fluid conducting member having its end turned inwardly to form a concaved socket with a coaxially disposed opening therein, a spout forming member having a collar with a convex surface seated in said socket and forming a transversely disposed valve seat at the inner end of said spout forming member, a substantially cylindrical valve member slidably mounted in said tubular fluid conducting member and engaging said transversely disposed

valve seat, said cylindrical valve member having at least one longitudinally extending flute in the side thereof, and spring means operating to bias said cylindrical valve



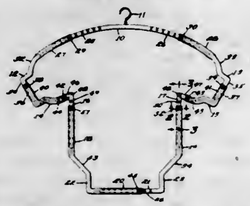
member and the collar carried by said spout in sealing relation within each other and with the socket at the end of said tubular fluid conducting member.

2,746,656
SELF-CLEANING GRAIN GATE CONSTRUCTION
Thomas L. Bradshaw, Decatur, Ill.
Application February 12, 1953, Serial No. 336,489
4 Claims. (Cl. 222—561)



1. A gate construction for controlling the flow of grain through a conduit including a hollow rectangular housing member disposed between adjacent inner ends of tubes, said housing member being of greater width and length than the diameter of the tube ends connected therewith, said housing member including a top wall connected with the inner end of one tube, said top wall covering the remainder of the rectangular housing member, side walls and end walls for the housing member of length and width respectively of the top wall of the rectangular housing member, a bottom wall for the housing member connected to the inner end of the other tube, said bottom wall extending from one end wall of the housing member around the last mentioned tube but short of the other end wall of the housing member, a partition wall extending from adjacent the top wall to the end of the bottom wall, the last mentioned end wall of the housing member having a slot therein substantially the width of the inner width of the housing member and a slidable rectangular gate supported in said slot of the end wall and supported on the top of the partition wall to close communication between the pipe ends.

2,746,657
SWEATER STRETCHER
Bessie C. Feathers, Kingsport, Tenn.
Application July 15, 1954, Serial No. 443,537
4 Claims. (Cl. 223—69)



1. A sweater-drying frame comprising an arcuate support bar having spaced openings in the ends and a hook extended upwardly from the intermediate portion, the ends of said support bar being arcuate in cross-section, upper sleeve bars having split tubular elements provided with a flat face, side sections extending at right angles to said face at the opposite longitudinal edges thereof, flanges extending at right angles to said side sections, and inwardly extending beads on the longitudinal edges of said flanges, said tubular elements being extended around the ends of said arcuate support bar and means passing through the ends of the support bar and outwardly of said split tubular elements for securing the tubular elements to the ends of said arcuate bar, said upper sleeve bars having depending ends that are arcuate in cross-section, and lower sleeve bars having split tubular elements provided with a flat face, side sections extending at right angles to said face at the opposite longitudinal edges thereof, flanges extending at right angles to said side sections, and inwardly extending beads on the longitudinal edges of said flanges, said tubular elements being extended to receive the depending ends of the upper sleeve bars, vertically disposed side bars depending from and connected to the lower sleeve bars, horizontally disposed bars extended inwardly on said ends of the vertically disposed body bars, and means passing through the ends of said horizontally disposed bars for adjustably connecting said horizontally disposed bars.

2,746,658
QUIVER
Robert Alfred Freid, Cornell, Wis.
Application January 30, 1953, Serial No. 334,115
2 Claims. (Cl. 224—28)

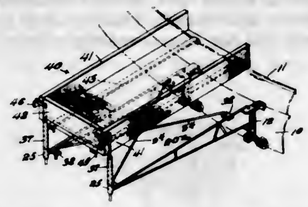


1. A quiver comprising an elongated transversely curved rigid plate adapted to fit about a portion of an arm of a person, strap means secured to said plate near respectively opposite ends thereof for attaching the plate to an arm of a person when applied to said arm, an open top receptacle carried by the convex side of said plate adjacent one end of the latter and having the open top facing toward the other end of the plate, a flange of resilient material extending transversely about the convex side of said plate adjacent the other end thereof and fixedly carried by the plate,, and another flange of resilient material extending transversely about the convex side of said plate at a location between said first named flange and said receptacle, the flanges being of progressively greater height in a direction away from said receptacle, each of said flanges having a plurality of spaced notches each extending inwardly from the outer side thereof, the notches of said first named flange being in alignment with the notches of said another flange for releasably receiving arrow shafts.

2,746,659
BUMPER CARRIER
Rocco Caruolo, Providence, R. I.
Application November 12, 1953, Serial No. 391,609
8 Claims. (Cl. 224—42.07)

1. In combination with an automobile having a rear bumper and a lip adjacent to said bumper, a carrier

frame secured to said bumper and extending therefrom in a generally horizontal direction, said frame having a cross member at the outer end portion thereof, a platform resting at one end portion thereof on said lip and at the



other end portion thereof on said cross member, and means secured to said platform interengaging with said lip and said cross member securing said platform to said lip and to said cross member.

2,746,660
AUTOMOBILE CLOTHES SUPPORT
Jonathan Golden, Atlanta, Ga.
Application September 23, 1953, Serial No. 381,949
3 Claims. (Cl. 224—42.1)



1. An automobile clothing support comprising a rigid bar shaped holding member adapted to support a clothing hanger device and designed to be disposed within the automobile alongside one of the doors thereof, a pair of tying members of flexible material and of small cross-section secured to said holding member at the end portions thereof and adapted to be secured within the space found between the top of the door and the jamb thereof, an additional bar shaped rigid holding member, said tying members being also secured to the end portions of said additional holding member, said additional holding member being designed to be disposed upon the outside of the automobile in adjacent relationship with the door and alongside one of the rain gutters thereof, and a pair of rigid hook members secured to said additional holding member at the ends thereof and adapted to secure said additional holding member to the rain gutter.

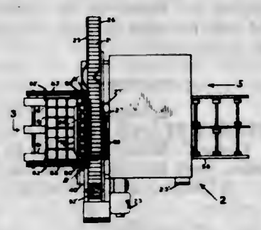
2,746,661
PORTABLE CLOTHES HANGER HOLDER AND CARRIER
Samuel Kaplan, New York, N. Y., assignor to Kastar Incorporated, Bronx, N. Y., a corporation of New York
Application April 8, 1954, Serial No. 421,813
1 Claim. (Cl. 224—42.45)

A portable clothes hanger comprising a garment carrying member having an inclined flange and a resilient portion integral therewith, and a protuberance formed within said resilient portion, and a post having inclined surfaces and a resilient flange therein, said resilient flange having a protuberance-engaging hole therein, said post being mountable between two substantially parallel edges of a frame, said inclined flange being engageable by said inclined surfaces, and said protuberance being releasably lockable within said protuberance engaging hole, said post having two mutually slidable components whereby the length of said post is rendered variable, and releasable stop means on one of said components for limiting the extent of mutual slidability between said components,



said means having a final lengthening adjustment for firmly seating said post between the edges of said frame.

2,746,662
AUTOMATIC CARTON-CASE LOADING MACHINE
Wallace M. Thompson, Albert G. Swint, Jr., and Alvin T. Roberts, Jr., Cordele, Ga., assignors, by mesne assignments, to Dacam Corporation, Charlotte, N. C., a corporation of North Carolina
Application October 27, 1951, Serial No. 253,504
18 Claims. (Cl. 226—14)



1. An automatic case loading machine having article feeding means for the single file feeding thereinto of articles to be loaded, conveyor means for feeding empty cases beneath said article feeding means and transversely to the movement thereof, a pusher plate slidably mounted for reciprocating motion to remove said articles from said article feeding means, motive power drive means operatively connected to said pusher plate, and trigger mechanism for periodically setting said drive means in motion to move said pusher plate forwardly across said article feeding means to remove said articles from said article feeding means, characterized by an article carrier mounted for up and down reciprocating movement, said article carrier having an open side adjacent said article feeding means to receive articles removed from said article feeding means by said pusher plate, resilient means urging said article carrier upwardly with a force which is overcome by a load of articles in said article carrier to cause said carrier to move downwardly, stop means for limiting the downward movement of said article carrier, and support means on said carrier for releasably holding articles in said carrier.

2,746,663
FILLING NOZZLE FOR APPARATUS FOR FILLING CONTAINERS WITH LIQUID
Carl L. Day and Leo F. Pahl, Baltimore, Md., assignors to Crown Cork & Seal Company, Inc., Baltimore, Md., a corporation of New York
Application September 24, 1951, Serial No. 248,074
17 Claims. (Cl. 226—116)

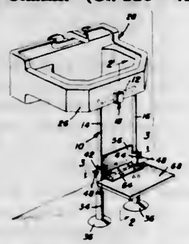
1. The combination with filling apparatus having a filling platform and a superposed liquid reservoir provided with a vacuumized air space, at least one of which

is vertically movable, of a filler nozzle comprising: a vertically movable valve assembly having separate passages extending therethrough from the lower to the upper end thereof, each of said passages being adapted to provide communication between the interior of a container to be filled and said air space of said liquid reservoir; a downwardly facing valve surface on said assembly co-



operating with a valve seat in an outlet to said reservoir; means defining a lateral port in said body below said surface and communicating with one of said passages between the ends thereof; and means on said assembly for sealingly engaging the mouth of the container with the lower ends of said passages in communication with the interior of the container.

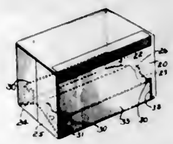
2,746,664
ADJUSTABLE STAND FOR LAVATORIES
Victor C. Strmic, Chicago, Ill.
Application April 11, 1952, Serial No. 281,788
2 Claims. (Cl. 228—45)



2. A children's stand for lavatories of the type including a depending front apron, said stand comprising: a substantially U-shaped vertical support, a substantially channel shaped bracket on the bight portion of the support engageable upwardly with the apron from therebeneath for anchoring the support thereto, floor engaging means on the legs of the support for adjusting same vertically for engaging the bracket with the apron, and a platform mounted on the support, said means including nuts fixed on the free ends of the legs, tubes slidably and rotatably mounted on the legs and depending therefrom, plugs fixed in said tubes, rods fixed on said plugs and threaded through the nuts, and feet on the lower ends of the tubes.

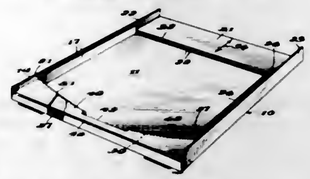
2,746,665
FEED BOX
Clyde E. Wiggins, Winter Garden, Fla., assignor, by mesne assignments, to Stone Mountain Grit Company, Inc., a corporation of Georgia
Application April 6, 1950, Serial No. 154,346
8 Claims. (Cl. 229—7)

1. In a feed box of the class described, a pair of opposed side walls the lower portions of which are adapted for cutting along a longitudinal line and then downwardly vertically from the ends of said line inwardly of the opposed ends of said side walls to a folding line for creating a box flap pivoting outwardly from each wall along said folding line, a filler for said box having a containing flap resting against each of said box flaps for pivotal movement with said box flaps outwardly relatively to said



box walls on a line substantially coincidental with said folding lines, means limiting said pivotal movement of said containing flaps whereby to contain feed in said box, and portions of said filler integral with said containing flaps forming a false bottom for said box for the full length thereof and slanting downwardly in said feed box toward said folding lines at each side of said containing flaps to create a trough.

2,746,666
FIBERBOARD PROTECTIVE STRUCTURE FOR TELEVISION SETS
Melvin A. Riley, Baltimore, Md., assignor to The Baltimore Paper Box Company, Baltimore, Md.
Application August 18, 1953, Serial No. 374,983
4 Claims. (Cl. 229—14)

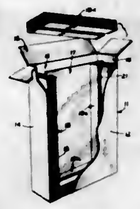


1. In a fiberboard protective pad structure for the top portion of a television set within a shipping box, a generally rectangular shaped fiberboard panel, an extension carried by the front edge of said panel extending throughout the width of the panel, a fold line defining the boundary between the panel and the extension, a plurality of superposed fiberboard strips adhesively joined in face to face relationship and adhering to an upper face of said panel and extending across the width thereof, said fiberboard strips having vertically aligned outer edges in vertical alignment with said fold line and having vertically aligned raw concave inner edges, said extension lying along the aligned outer edges of said strips and along an under face of the lower strip, and spaced tabs carried by a free edge of said extension lying at right angles to the plane of said panel and along the aligned concave edges of said fiberboard strips.

2,746,667
SHIPPING CONTAINER WITH CUSHIONING LINER
James J. Murphy, Chicago, Ill., assignor to Custom Made Container Corp., Chicago, Ill., a corporation of Illinois
Application August 17, 1953, Serial No. 374,665
3 Claims. (Cl. 229—14)

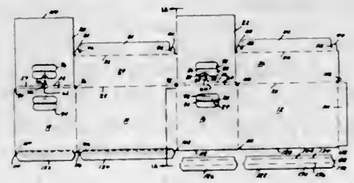
1. A container for fragile sheet material and comprising a paperboard box having four side walls, a top wall and a bottom wall, a liner in said box, said liner comprising a plurality of superimposed longitudinal planar paperboard strips adhesively secured together in face-to-face relation to form a longitudinal laminated structure having in one surface thereof a recess extending longitudinally thereof and also a longitudinally spaced series of grooves extending transversely thereacross, said laminated

structure being bent substantially perpendicularly at each of at least two of said transverse grooves to form a liner having at least three sides with said longitudinal recess extending around the interior of the liner, said liner being mounted in said box with one of the sides of the liner lying adjacent said bottom wall of the box and the other two sides of the liner lying adjacent respective side walls of the box, the respective portions of said



longitudinal recess in each of the sides of the liner being in a common plane, said liner having the adjacent ends of its sides adhesively secured together, and a slit extending longitudinally in the recessed surface of said laminated liner structure, said slit extending parallel and adjacent to and being spaced from the longitudinal recess to form a longitudinal portion removable from the liner to widen said longitudinal recess.

2,746,668
MERCHANDISE CASE HAVING A DETACHABLE MOISTURE PROOF BOTTOM TRAY
Harold A. Ringel and Frank E. Meyer, New Orleans, La., assignors of one-fourth to Caesar H. D'Antonio and one-fourth to Elmer D. Flanders, New Orleans, La.
Application June 6, 1952, Serial No. 292,921
3 Claims. (Cl. 229—23)



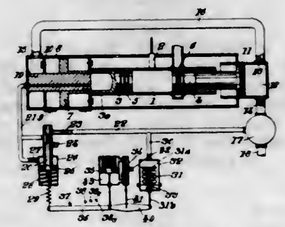
1. A merchandise case comprising a bottom tray having an upstanding marginal flange with an inturned downwardly extending hook forming a bill and defining a confined locking recess outwardly of the bill, a carton body possessing some resiliency, a locking projection carried exteriorly by the lower portion of the walls of the body, a leg carried by the lower portion of the walls of the body below the locking projection and possessing some resiliency, a laterally extending foot hingedly connected to the leg and extending inwardly therefrom for contacting the bottom of the tray, the external dimension of the locking projection on the carton body being greater than the area defined by the bill of the hook so that when the carton body is seated within the flange and the body and tray are forcibly moved together, the leg and locking projection will ride inwardly on the bill of the hook flexing the walls of the carton body inwardly and placing the same under resilient horizontal stress, said hinge connection between the leg and foot being adapted to bear against the bottom tray and fold inwardly thereon to enable the locking projection to pass about the bill and to place the walls of the carton body under resilient vertical stress, whereupon the stresses in the walls will cause the locking projection of the leg to be moved outwardly and the locking projection to be moved upwardly into the recess.

2,746,669
SANITARY HERMETIC SEALING CLOSURES FOR CONTAINERS
George Arlington Moore, New York, N. Y.
Application October 10, 1952, Serial No. 314,177
1 Claim. (Cl. 229—43)



A portable resilient closure formed of an assembly of two dissimilar materials, which materials are shaped to form said closure to be coincident with the open mouth wall surface structure of a paper container to be closed and resiliently sealed by engagement with said closure, said resilient closure comprising a pre-formed flexible plastic ring having an inwardly extending lateral marginal wall portion and an upwardly and outwardly sloping wall portion which terminates in an inverted U-shape contour, the lower portion of said sloping wall portion adjacent said inwardly extending portion being formed into an outwardly extended bead and a corresponding inwardly facing groove, said plastic ring being provided with an assembled substantially rigid disc of paper board material, said disc being treated to render same moisture or grease resistant, said disc being disposed in said groove and forming the bottom portion of the closure, said closure being adapted to be inserted into the open mouth of said container with the flexible plastic ring in sealing but non-adhering engagement with the walls thereof.

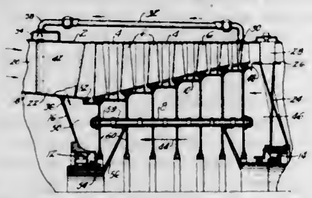
2,746,670
FREE PISTON MOTOR-COMPRESSORS
Robert Huber, Bellevue, France, assignor to Societe d'Etudes et de Participations Eau, Gaz, Electricite, Energie, S. A., Geneva, Switzerland, a society of Switzerland
Application May 11, 1951, Serial No. 225,691
Claims priority, application France May 13, 1950
4 Claims. (Cl. 230—56)



1. In combination, a free piston motor compressor including at least one power cylinder and one compressor cylinder fixed with respect to each other, a movable system constituted by a power piston and a compressor piston rigid with each other and freely movable in said two cylinders, respectively, an energy accumulator having a portion thereof operatively connected with said movable system for accumulating energy from said movable system during the power stroke of said power piston and giving back said energy thereto during the return stroke thereof, a regulating device operatively connected to said accumulator operative in response to variations in the delivery pressure of said compressor for varying the energy stored up by said accumulator on every cycle of said movable system so as to reduce said energy when said delivery pressure increases, said device being adjustable to have two different laws of variation of said energy in response to variation of said delivery pressure,

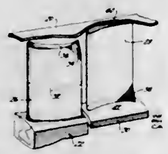
one for which the ratio of energy variation to delivery pressure variation is smaller than for the other, and means responsive to variations in the delivery pressure of the compressor for adjusting said regulating device to work according to the first of said two laws as long as said delivery pressure is below the lower limit of the motor compressor nominal delivery pressure and according to the second of said two laws when said delivery pressure is between the lower and upper limits of said nominal delivery pressure.

2,746,671
COMPRESSOR DEICING AND THRUST BALANCING ARRANGEMENT
Philip P. Newcomb, Manchester, Conn., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application April 14, 1950, Serial No. 155,835
2 Claims. (Cl. 230—120)



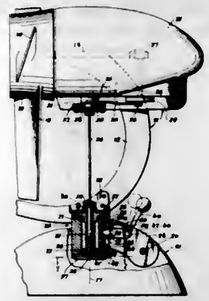
1. An axial flow compressor including a casing having means thereon forming an annular passage therewith, hollow inlet guide vanes extending from said casing and at least one stage of compression downstream of said vanes, in combination with means receiving air from said compressor and connected to said casing, said last means communicating with said passage for discharging into said passage a portion of the compressed air from the compressor, a tube positioned within and surrounded by each hollow vane and communicating with the passage to receive air therefrom, said tube having openings therein for directing fluid from said tube against a selected portion of the inner surface of the surrounding hollow vane, and means venting each of said vanes.

2,746,672
COMPRESSOR BLADING
Walter Doll, Jr., Manchester, and Philip Martsolf, Jr., South Windsor, Conn., and Carl R. Soderberg, Jr., Lincoln, Mass., assignors to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application July 27, 1950, Serial No. 176,234
16 Claims. (Cl. 230—122)



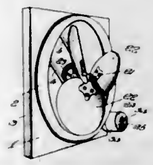
1. A blade for use in flow machinery designed to convert kinetic energy into pressure rise, said blade having an operative span for the flow of gases thereover, said span having a leading edge and a trailing edge and being cambered in accordance with its intended use so that gases passing thereover are turned through a predetermined pattern of turning, at least one end of said span being overcambered to a degree beyond that normally required by its intended use to turn the gases flowing thereover substantially more than they normally would be turned, said trailing edge being a warped line as a result of overcambering said end.

2,746,673
OSCILLATING AND LIKE MECHANISM FOR ELECTRIC FANS
Aubrey Lawrence Collins, Harrow, England
Application October 25, 1954, Serial No. 464,450
8 Claims. (Cl. 230—256)



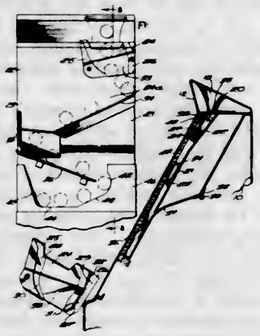
1. An electric fan comprising a base, a head which includes an electric motor and a fan rotor, and which is mounted to turn relative to the base, turning mechanism driven by the motor and including an anchorage member, a releasable brake device arranged to hold said anchorage member stationary to render the turning mechanism operative to turn the head, and a control member which is disposed upon the base and controls the brake device, which brake device comprises a plunger member on the base, a brake rotor movable with the anchorage member and having a recess engageable with the plunger member, and a spring operatively interposed between the control member and the plunger member, so that said spring, when stressed by the control member, presses the plunger member into operative engagement with said recess and at the same time enables the engagement of the plunger member and brake rotor to give way if the head in turning encounters an obstruction.

2,746,674
VENTILATING FANS
Lawrence L. Alldritt and Della May Alldritt, Miami, Fla.
Application December 23, 1953, Serial No. 399,929
7 Claims. (Cl. 230—259)



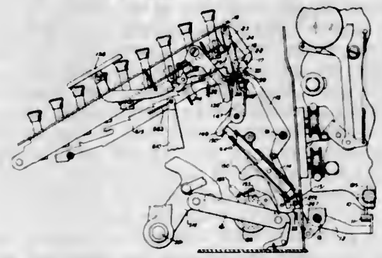
1. A ventilating fan for installation in buildings, comprising a substantially rectangular plate having a circular central opening with a venturi ring extending outwardly on one side and having a marginal flange on the opposite side of said plate, a pair of straight, parallel, elongated supports mounted flat on said plate on the side opposite said venturi ring, said supports extending diagonally across said central opening and being attached to said rectangular plate adjacent diagonally opposite corners thereof, said supports being parallel to and lying on opposite sides of a line joining said diagonally opposite corners, a rotatable fan supported on said elongated supports substantially coaxially of said opening, an electric motor mounted on said plate adjacent a corner thereof between said elongated supports and on the same side of said plate as said venturi ring, said motor having a motor shaft extending through a hole in said plate, and means on the same side of said plate as said elongated supports drivingly connecting said fan with said motor shaft.

2,746,675
FARE BOX
Max L. Grant, Providence, R. I.
Application July 24, 1951, Serial No. 238,284
2 Claims. (Cl. 232—7)



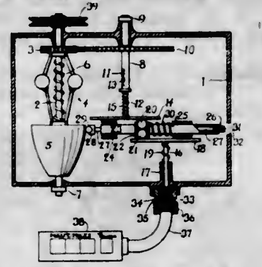
1. In a fare box, a coin receiver having a coin inlet with a narrow exit slot, whereby coins exit therefrom in edge upright position, a coin inspection and transfer chamber having an inclined face plate slanting downwardly and forwardly, and a longitudinally inclined coin inspection track mounted on said face plate, said track being transversely inclined upwardly away from said face plate whereby further to cause coins to incline rearward ly against said face plate, said face plate further having thereon guide means adjacent said exit slot, said guide means serving to deflect the upright coins to said track after passage of the coins from said exit slot whereby the path of movement of said coins makes an acute angle with said track just before impact therewith.

2,746,676
PREDETERMINED VALUE ENTERING MEANS FOR ACCOUNTING MACHINES
Samuel Kerr, Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a corporation of Delaware
Application December 16, 1953, Serial No. 398,566
9 Claims. (Cl. 235—60.47)



9. In a listing calculating machine the combination of a register means, printing means including a plurality of type members, a plurality of actuators for said register and for bringing the type members to printing line position, cyclic operating means including a clutch for imparting a registering movement to said actuators, a traveling paper carriage movable to a plurality of columnar positions, denominational banks of manipulative amount setting keys, a stop bar movable with each of said actuators having lugs thereon differentially spaced relative to said amount keys to limit an operation of said actuators in accordance with the value of a depressed key, a zero projection on said stop bars, column latches for said stop bars normally cooperable with said projection to restrain a value registration of the related actuator at zero, a secondary stop member mounted for longitudinal adjustment in accordance with a predetermined value upon the units and the tens orders of said stop bars, said stop member extending through and beyond the path of movement of said zero projection, means operable by said amount keys for adjusting the column latches out of said zero restraining position and beyond the path of movement inscribed by said secondary stop member in a movement of its related actuator when limited by a depressed amount key, adjusting means for the units and the tens order column latches including a member operable to adjust the said units and tens order column latches out of said cooperative position with said related zero projections and into a position intermediate of the adjustment of said column latches by a depressed value key, and wherein said latches in said intermediately adjusted position will cooperate with the said secondary stop member to control a registering movement of said actuators in accordance with a predetermined value setting of said secondary stop member, a control train for said intermediate position adjusting means, and a cam member mounted upon said traveling paper carriage adapted to effect operation of said control train upon a movement of said carriage to a predetermined columnar position, a cyclic clutch release train, a member in said train common to said intermediate position adjusting means for the units and tens order column latches and the said clutch release means, and wherein said common member in an operation of said control train for adjusting the said column latches to said intermediate position also releases the said cyclic clutch and thereby effects an operation of said cyclic operating means to automatically register and print said predetermined value.

2,746,677
LOGS FOR MARINE VESSELS
Donald C. Stone, Essex Fells, N. J.
Application April 28, 1955, Serial No. 504,482
1 Claim. (Cl. 235—61)

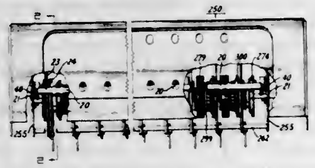


In a recording log for marine vessels the combination of a rotational take-off, a flyball governor type means, a variable ratio transmission, both said flyball governor type means and said variable ratio transmission driven from said rotational take-off, a cam of modified cylindrical form, said cam linked to and axially displaceable by said flyball governor type means, a spring-loaded cam follower, said cam follower bearing upon and actuated by said cam and said cam-follower being connected to the control of said variable ratio transmission, and a proportionally reading turns registering means, said turns registering means being driven from the output of said variable ratio transmission.

2,746,678
FUGITIVE ONE MECHANISM
Eugene E. Reynolds, Richmond, Calif., assignor to Marchant Calculators, Inc., a corporation of California
Application April 13, 1951, Serial No. 220,760
6 Claims. (Cl. 235—61)

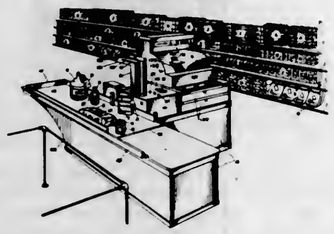
1. In a calculating machine having a register comprising a plurality of ordinally arranged numeral wheels and

digital actuators therefor, crawl carry differential gearing between adjacent numeral wheels each differential gearing comprising a digital entry gear for receiving increments of drive from a respective digital actuator, a tens carry entry gear for receiving partial increments of drive from an adjacent lower order numeral wheel, and an output gear driven by an amount corresponding to the sum of said digital and partial increments of drive, means for engaging and disengaging the digital input gears from their respective actuators, ordinally arranged aligning devices, means for moving the aligning devices from an enabled to a disabled position and vice versa,



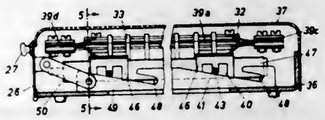
said aligning devices when enabled being operable under the control of the value representative positions of the numeral wheels to back out the partial increments of drive from their respective adjacent higher order numeral wheels, a drive connection between the output gear of the highest order numeral wheel and a differential input gear of the lowest order numeral wheel, and means controlled jointly by the crawl differential gearing and by the aligning devices and operable in response to an overdraft movement of the highest order numeral wheel for causing said drive connection to move the lowest order numeral wheel one digital increment in a subtractive direction.

2,746,679
APPARATUS AND SYSTEMS FOR AUTOMATICALLY RECORDING, CLASSIFYING, TOTALIZING AND AUDITING BUSINESS TRANSACTIONS
Robert Russell Stratton and William P. Munger, Binghamton, N. Y., assignors, by direct and mesne assignments, of one-half to Clarence E. Beach, Binghamton, N. Y.
Application May 3, 1950, Serial No. 159,692
9 Claims. (Cl. 235—61.6)



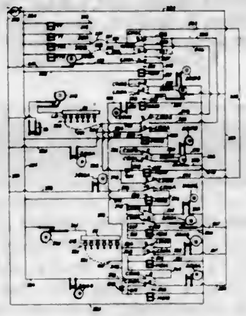
3. In a device of the class described, the combination of mechanism suited for cyclically acting to individually scan indicia of tokens of an intended type thereby to ascertain both price and accounting classification characterizing one or another of a variety of merchandise units, a magazine having walls between which such tokens may be stacked in preparation for such scanning, parts operable for initiating cycles of the action of said mechanism, said parts involving a feeler movable upwardly to position a portion thereof in that part of said magazine which may be occupied by the bottom token of such a stack, means yieldingly urging such upward feeler movement, a weight suited for applying to the upper surface of a token so positioned pressure sufficient to cause downward movement of said feeler notwithstanding such urge whereby to permit aforesaid cycle initiations, the lower surface of said weight having a recess therein for receiving said feeler during upward positioning thereof, said weight further having a projection extending from a surface thereof which projection extends into a slot formed in a wall of said magazine for movably securing the weight against removal from the magazine, the upper portion of which slot of form and positioning suiting a wall of said slot for serving, at times, to effect retention of said weight in elevated positioning, cyclically acting register mechanism comprising a plurality of totalizer mechanisms suited for independent alternative operation, means responsive to said scanning mechanism for selectively rendering one or another of said totalizers responsive to said first named mechanism in accordance with accounting classification indicia of scanned tokens, cyclic-action initiating means for said register mechanism, means for effecting actuations of said last named cycle initiating means only after completions of scanning cycles of said scanning mechanism and only during upward positionings of said feeler, and means rendered effective incident to completions of operation cycles of said register mechanism for operating the aforesaid parts for effecting initiations of individual cycles of the action of said scanning mechanism and for preventing initiation of scanning mechanism cycles during register operation cycles.

2,746,680
RECORD CONTROLLED MACHINE WITH CROSS CONNECTING BOARD
Michael Maul, Schwabach, near Nurnberg, Germany
Application June 19, 1953, Serial No. 362,710
Claims priority, application Germany July 1, 1952
5 Claims. (Cl. 235—61.6)



5. In an electrical record controlled machine having analyzing means for searching index marks provided in said records, index mark controlled receiving means under the supervision of said analyzing means, a removable matrix having parallel conductors in two layers, the conductors in the two layers being arranged at a right angle to each other, means for selectively connecting the intersection points of the conductors in the two layers, a hollow rectangular base plate in said record controlled machine having internally along at least one side terminal leads to said analyzing means, and along at least one further side, at a right angle to said first side, terminal leads to said index mark controlled receiving means, said base plate also having an opening at one side thereof for inserting the matrix within the base plate, guide bars for said matrix, said guide bars being arranged on opposite sides within said base plate, an actuating bar associated with and parallel to each guide bar and mounted for longitudinal movement, an inclined sliding connection between said actuating bars and said guide bars said connection serving to lift the guide bars during movement of the actuating bars in one direction and to lower the guide bars during movement of the actuating bars in the opposite direction, a door to said opening and a linkage between said door and the actuating bars, said linkage serving to move the actuating bars in the direction to effect lifting of the guide bars during closure of said door and to move the actuating bars in the direction to effect lowering of the guide bars during opening of said door, whereby when the door is closed the conductors of a matrix carried by said guide bars are pressed against said terminal leads and when the door is open said conductors are disengaged from said terminal leads.

2,746,681
TRANSLATING APPARATUS
Philip H. Du Bois, Clayton, Mo.
Application November 17, 1954, Serial No. 469,521
14 Claims. (Cl. 235—61.6)



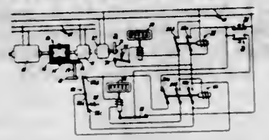
11. Apparatus for translating two decimal digits, represented as to numerical value by one or two differentially timed impulses occurring among ten possible sequential digit-indicating instants of time during a single operational cycle of at least eleven possible sequential instants of time and identified as to denominational order by the presence or absence of an additional electrical impulse at a nondigit-indicating instant of time during said single operational cycle, into two separate differentially timed impulses, one in each of first and second separate electrical output circuits of assigned denominational order; said apparatus comprising a first electrical input connected to a conditioning circuit and adapted to receive impulses during a first machine cycle, and a second electrical input connected to a third electrical circuit and adapted to receive impulses during a following machine cycle, said third circuit including first and second switches adapted in their first positions to interconnect said second input commonly to both said first and second output circuits to transmit a single digit-indicating impulse simultaneously thereto, said second switch adapted in its second position to disconnect said second input from said second output circuit and thus transmit the first of two differentially timed digit-indicating impulses only to said first output circuit, said first switch adapted in its second position to connect said second input to said second output circuit and thus transmit the second of two differentially timed digit-indicating impulses only to said second output circuit, said second switch responsive to reception of a second digit-indicating impulse by said first input to change from its first to its second position, said first switch responsive to reception of a first impulse by said second input to change from its first to its second position.

2,746,682
RECTILINEAR SLIDE RULES
Joseph T. Zak, Milwaukee, Wis.
Application October 4, 1952, Serial No. 313,128
12 Claims. (Cl. 235—70)



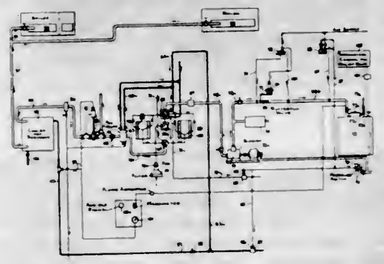
1. A rectilinear slide rule comprising a frame having a front and a back and openings in said front and back, a transparent partition relatively fixed with respect to said frame and intermediate the front and back, said frame being provided with slideways along said openings, a scale and a transparent cursor slidably mounted in said slideways at opposite sides of said partition and accessible for finger manipulation through said front and back openings for movement along said slideways, said partition and cursor being provided with indicator lines for correlation with the scale.

2,746,683
APPARATUS FOR MEASURING ROTATION OF A SHAFT
James D. McLaren, Amsterdam, N. Y., assignor to General Electric Company, a corporation of New York
Application February 24, 1955, Serial No. 490,254
12 Claims. (Cl. 235—103.5)



8. Apparatus for measuring the difference in speed between two rotating shafts comprising means for producing rotation of a third shaft at a speed proportional to the difference in speed between said first two shafts, means for energizing said apparatus, counting means, switch means for connecting said counting means to said energizing means, means carried by said third shaft for actuating said switch means momentarily to energize said counting means at at least one predetermined rotational position of said third shaft, timing means, relay means connected in circuit relationship with said switch means and said energizing means for energizing said timing means the first time said switch means is actuated after energization of said apparatus and for maintaining said timing means energized until de-energization of said apparatus, and means connected in circuit relationship with said switch means for preventing the momentary energization of said counting means said first time said switch means is actuated and permitting momentary energization of said counting means each successive time said switch means is actuated, means for de-energizing said apparatus, and means connected in circuit relationship with said de-energizing means and operatively associated with said counting means to prevent de-energization of said apparatus until said counting means is momentarily energized.

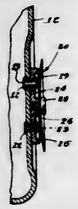
2,746,684
APPARATUS FOR PREVENTING CORROSION IN STORAGE COMPARTMENTS
Oliver D. Colvin, Jr., Seattle, Wash., Eugene Norman Fabares, New York, N. Y., and Farris J. Swaney, Essex Fells, N. J., assignors, by mesne assignments, to Oliver D. Colvin, Seattle, Wash.
Application May 6, 1948, Serial No. 25,346
4 Claims. (Cl. 236—44)



1. In apparatus for preventing corrosion within a storage compartment, the combination comprising, a dehumidifier, mechanism for moving gas through said dehumidifier and to the compartment, means for con-

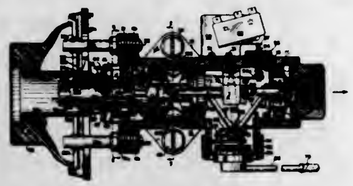
trolling said mechanism in response to the gas pressure in the compartment, a valve for venting gases from the compartment, temperature sensitive means, and a valve control mechanism operatively connected to said temperature sensitive means for actuation by the latter in response to a preselected temperature drop, said valve control mechanism including a timer and being operatively connected to said valve for opening same in response to said preselected temperature drop and for closing same after the expiration of a preselected time.

2,746,685
THERMOSTATIC VALVE FOR STEAM TRAP
Errol L. Myers, Detroit, Mich., assignor to Howard O. Trerice, Detroit, Mich.
Application February 2, 1953, Serial No. 334,461
3 Claims. (Cl. 236—53)



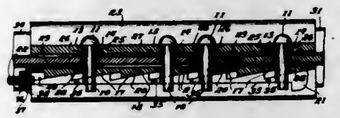
1. A thermostatic snap valve structure assembled with a steam trap bucket for controlling water flow through an orifice, said valve structure comprising an adapter provided with a perforated plate portion and an annular flange encircling said plate portion to form an outwardly opening recess, a plurality of hollow rivets in said plate perforations for securing said adapter to the wall of said steam trap bucket and acting to conduct water flow, and a snap acting thermostatic disc carried by said adapter and located to overlay the annular flange to close off communication between the outside and inside of said bucket, said snap disc distortable in response to temperature changes to snap open and provide a free unrestricted opening about the entire periphery of said adapter.

2,746,686
OVEN CONTROL
Roger S. Loveland, Temple City, and Albert J. Maher, Los Angeles, Calif., assignors to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application September 2, 1953, Serial No. 378,049
8 Claims. (Cl. 236—94)



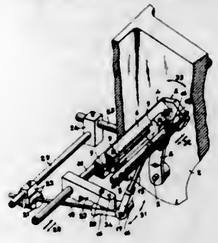
4. A combination control and signal device comprising a first manually operable control, a second control, a condition responsive means for actuating said second control, first motion transmitting means between said condition responsive means and said second control and operably contacting said first control for adjustment thereby, a third signal control, and second motion transmitting means between said condition responsive means and said third control and adjustably contacting said first control, the connections between said motion transmitting means and said first control being separate and simultaneously actuated by movement of said first control.

2,746,687
THREADLESS BOLT RAIL JOINT
William R. Hedrick, Knoxville, Tenn.
Application December 29, 1952, Serial No. 328,367
1 Claim. (Cl. 238—252)



In a rail joint, the combination which comprises a conventional splice bar having a vertically disposed web extended from a flange and having spaced pin holes through said web, a clamping splice bar having a web with pin holes therethrough positioned to register with the pin holes of the web of the conventional splice bar having a ledge on the upper edge engaging the undersurface of the head of the rail and inclined surfaces thereon through which said pin holes extend, a plurality of pins each having a notch in its side adjacent one of its ends, a head on the opposite end of each of said pins, and a wedge bar having inclined surfaces thereon positioned to coact with the inclined surfaces of the clamping splice bar and positioned with one edge thereof extending through the notches of the pins whereby movement of the wedge bar in relation to the splice bar having the inclined surfaces thereon draws the pins into clamping relation with the splice bars and the webs of rails against which the splice bars are positioned, the ledge extended from the upper edge of said clamping splice bar being positioned to cover extended ends of pins positioned in the pin holes of the splice bars and also covering said wedge bar, and said wedge bar having a head on one end and a threaded stud with a nut and lock washers thereon extended from the opposite end, and semi-circular recesses in alternate inclined surfaces to engage the pins, said recesses engaging the pins during the assembly of the rail joint and said surfaces engaging the pins after assembly to prevent the rotation of said pins.

2,746,688
THREAD GUIDE FOR WINDING MACHINES
Albert Brügger, Villeurbanne, France
Application March 30, 1954, Serial No. 419,821
Claims priority, application France March 31, 1953
13 Claims. (Cl. 242—43)



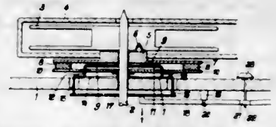
1. A thread guiding mechanism for winding machines, said thread guiding mechanism having a variable stroke and comprising, in combination, a movable member effecting a transverse movement in a straight line, a pivoting lever, means connecting said movable member to said pivoting lever to transform the reciprocating movements of said member into oscillatory movements of said lever, a thread guide, a control lever pivotally connected to said pivoting lever and positioned to effect a reciprocating transverse movement of the thread guide, said control lever being pivotable relatively to said thread guide, and articulation means slidably engaging the other end of said pivoting lever, whereby said control arm is automatically pivoted with respect to said pivoting lever upon movement of said movable member, whereby gradually to decrease the stroke of the thread guide in proportion in the increase in diameter of the bobbin being wound.

2,746,689
CONE HOLDING APPARATUS
Lukas Berkepeis, Arnhem, Netherlands, assignor to American Enka Corporation, Enka, N. C., a corporation of Delaware
Application March 31, 1954, Serial No. 420,100
Claims priority, application Netherlands April 29, 1953
6 Claims. (Cl. 242—46.3)



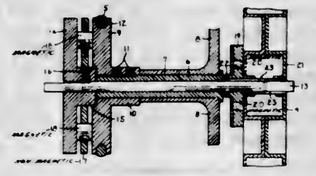
1. Apparatus for supporting a hollow winding cone that comprises spindle means, a plurality of clamps circumferentially spaced about the spindle and movable to and from a position engageable with the lower inner surface of a cone, plunger means mounted in coaxial telescoping relation on said spindle means and means for moving said clamps into engaging position and resilient means acting through said moving means to bias said plunger means to an extended position with its upper end above the position of the upper end of a cone, said resilient means being responsive to depression of the plunger means to relieve the bias on said clamps whereby the cone may be removed.

2,746,690
MECHANISM FOR DRIVING TAPE-SHAPED SOUND RECORD CARRIERS
Willi Röpke, Berlin-Steglitz, Germany
Application December 5, 1951, Serial No. 272,011
4 Claims. (Cl. 242—54)



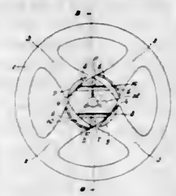
1. A mechanism for driving sound record tapes wound on reels including means for high-speed operation, said mechanism comprising a tape reel carrier provided with a coupling disc carried by a plate, friction layers being arranged between said coupling disc and said plate, a second disc arranged between said coupling disc and said plate, friction layers being arranged between said coupling disc and said second disc, holes being provided in said plate, lugs being provided on said second disc, said lugs being bent downwards perpendicularly to the face of said plate, projecting through said holes of said plate and mounted on an intermediate disc adapted to be moved upwards, thereby disengaging the friction coupling between the plate and the coupling disc, said tape reel, said tape reel carrier, said coupling disc, said plate, said second disc and said intermediate disc being arranged co-axially around a shaft, said plate being fixed on said shaft.

2,746,691
FILM TAKE-UP
Thomas C. Hoad, Toronto, Ontario, Canada
Application December 13, 1951, Serial No. 261,551
6 Claims. (Cl. 242—55)



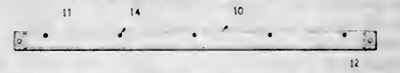
1. In a film take-up, a shaft on which a take-up reel is adapted to be mounted, a magnetically susceptible disc mounted on said shaft, a magnetically susceptible positively driven member coaxial with said disc, and at least one magnetic friction element mounted to rotate about the axis of said shaft independently of shaft rotation in contact with and forming a magnetic link between said disc and said positively driven member to provide through a combination of frictional and magnetic forces a torque transfer therebetween limited to provide a permissible tension on a film being taken up by a reel mounted on said shaft.

2,746,692
REEL FOR TAPES, FILMS AND THE LIKE
Jan Wijchman, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application February 9, 1954, Serial No. 409,184
Claims priority, application Netherlands February 16, 1953
2 Claims. (Cl. 242—70)



1. A film reel comprising a central core having at least two axial slits therein, said reel being constituted by two identical parts arranged symmetrically in the axial direction of said reel, each being provided with four radial spokes, a pair of said radial spokes being in line and integral with said central core and the other pair of radial spokes being in line but unattached to said central core whereby a narrow slit is provided between each of said other pair of radial spokes and said central core, said pairs of radial spokes being provided with flange rims whereby when one of said two identical parts is rotated 90° relative to the other part, the outer bounding surface of the flange rims on one of said pairs of radial spokes fits in the inner bounding surface of the flange rims on the other pair of said radial spokes.

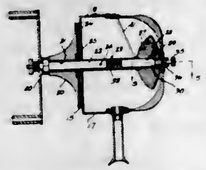
2,746,693
CLOTH ROLL
Leonard M. Rogers, Mendon, Mass., assignor to Draper Corporation, Hopedale, Mass., a corporation of Maine
Application October 1, 1953, Serial No. 383,611
2 Claims. (Cl. 242—74)



1. A cloth roll adapted to be rotated and to have fabric wound thereon comprising an elongated cylindrical

member and means forming a part thereof to which an end of fabric may be anchored, but permitting removal of the roll from cloth wound thereon which comprises pins of circular cross section disposed so that they do not project beyond the cylindrical surface of the roll and within counterbored recesses in the roll, said pins being integral with said roll and inclined at an angle intermediate a line tangent to the roll surface and a radial line both of which intersect at the end of a pin, whereby as the roll is rotated in one direction the pins engage the cloth more securely and when rotated oppositely, they withdraw from and release the cloth.

2,746,694
FISHING REEL
Hilmer F. Kauppi, Calumet, Mich.
Application June 3, 1955, Serial No. 512,943
3 Claims. (Cl. 242—84.4)



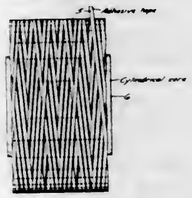
1. In a fishing reel, an upright post, a U-shaped bracket arranged with its legs in vertical spaced relation and having the lower one of its legs fixedly secured to said post at the upper end of the latter, means on the lower end of said post for attaching said post to a fishing rod, a vertically-disposed reel plate arranged in face to face spaced relation with respect to the bight of said bracket, a pair of flanges projecting perpendicularly from said plate, one of said flanges being pivotally connected to the upper leg of said bracket and the other of said flanges being connected to said post to thereby permit said plate to be moved from the face to face position with respect to said bight to a position transversely of said bight, a line-carrying reel spool mounted on said plate between said flanges for rotational movement about an axis perpendicular to said plate, means operatively connected to said spool for rotating the latter, and releasable interengaging means on said bight and on said spool for supporting the adjacent end of said spool when said plate is in the face to face position.

2,746,695
FISHING REEL
Stanley B. Clay, Northfield, Minn., assignor to Great Lakes Products, Inc., Detroit, Mich., a corporation of Michigan
Application March 11, 1952, Serial No. 275,959
2 Claims. (Cl. 242—84.5)



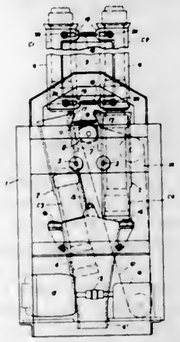
1. Apparatus for reeling up a fish line that has been cast, said apparatus comprising a rotatably mounted spool, a rotatable shaft operatively associated with said spool for rotating said spool, a cam member pivotally mounted on an axis offset from the axis of said shaft, a wheel concentrically mounted on said shaft and having an internal gear formed therein, a gear operatively associated with said spool and in driving engagement with said internal gear, a groove in the outer edge of said wheel, a portion of the edge of said cam member being positioned in said groove and adapted to engage the sides and bottom of said groove, and a jamming enlargement of said cam member being offset from the geometrical line between the axis of the cam and the axis of the shaft, the sides and edges of said cam and wheel groove being in frictional engagement, said jamming enlargement being pivotal toward said geometrical line when it is attempted to rotate the shaft in one direction, whereby jamming is caused between the cam and wheel, said cam member being displaced from said jamming position when the shaft is rotated in the opposite direction, whereby rotation of the spool is permitted in only winding direction, ratchet means on said wheel spaced axially of said groove, and ratchet means on said cam member spaced axially of said jamming portion and adapted to engage the means on said wheel, whereby when it is attempted to rotate the wheel in unwinding direction there is positive interengagement between the ratchet means on the wheel and on the cam to cause the jamming portion of the cam to positively bind against the wheel.

2,746,696
ADHESIVE TAPE SUPPLY ROLL
Hubert J. Tierney, St. Paul, Minn., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a corporation of Delaware
Application December 11, 1953, Serial No. 397,711
3 Claims. (Cl. 242—159)



1. A tape supply roll comprising a core and a pressure-sensitive adhesive tape cross-wound thereon in a manner to produce adhesive contact between an outer convolution and the next adjacent inner convolutions only at the cross-points, the tape being coated on its outer surface with a low-adhesion backsize.

2,746,697
PNEUMATIC TUBE CONVEYOR SYSTEMS
John Robert Kirk, London, England, assignor to The Lamson Corporation, Syracuse, N. Y.
Application June 16, 1953, Serial No. 362,021
2 Claims. (Cl. 243—29)



1. A pneumatic tube conveyor system comprising a plurality of delivery tubes through which carriers can pass, movable transfer sections each associated respectively

with one of said delivery tubes at the end of the tube from which a carrier passing through the tube emerges, a discharge conduit common to said transfer sections and adapted to receive carriers therefrom, each transfer section being movable between a receiving position relative to its associated delivery tube such that a carrier contained in the said delivery tube may pass into the transfer section and a discharging position relative to the discharge conduit such that a carrier contained in the transfer section may pass into the discharge conduit, means operative while each transfer section is in its receiving position for preventing the discharge from the transfer section of any carrier contained therein, means operative while each transfer section is in its discharging position for preventing the passage of any carrier contained in its associated delivery tube into the transfer section, and means for successively moving said transfer sections between said receiving and discharging positions in a predetermined sequence, said delivery tubes having expandible cross-sections adjacent the transfer sections, whereby should a transfer section be moved to its discharging position while a carrier is in transit between its associated delivery tube and the transfer section, the carrier will expand the delivery tube to avoid jamming of the carrier between the delivery tube and the transfer section.

2,746,698
HAND CONTROL FOR STEERING AIRCRAFT ON LAND OR IN AIR
Jewel G. Ross, Iron Mountain, Mo.
Application October 8, 1952, Serial No. 313,764
24 Claims. (Cl. 244—50)



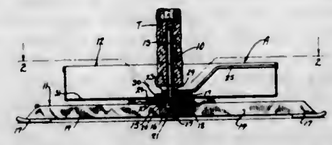
6. In an aircraft having a rudder, ailerons and a predetermined cruising speed, an operator's control device comprising first and second concentric shafts rotatably coupled respectively to the rudder and ailerons to actuate them, a primary wheel fixed to one of said shafts, a second control element rotatably carried by said primary wheel in axially offset relationship, said second control element having a readily accessible handle, a connection between said other shaft and said second control element so constructed and arranged as to cause the two to rotate together in the same direction, the coordination between the rudder, ailerons and the respective shafts being constructed and arranged to provide a normal bank when the rudder is turned with the secondary control element fixed relative to the primary wheel during cruising conditions, but permit abnormal banks by movement of secondary control element relative to the primary wheel when desired.

2,746,699
PARACHUTE
Richard H. Hart, Jacksonville, Fla.
Application January 20, 1954, Serial No. 405,169
1 Claim. (Cl. 244—145)



A parachute canopy of flexible material, such canopy being provided with venting means, such venting means being provided with screening means, such screening means allowing passage of air therethrough but being impenetrable by other parts of the parachute, a portion of such venting means being located near the periphery of the canopy and proportioned to allow escape therethrough of a considerable volume of air necessary to effect prompt steering of the parachute, and the remaining portions of such venting means being also located near the periphery of the canopy more or less adjacently and symmetrically to, but of lesser altitude than, the steering vent just described, such remaining portions of said venting means being of such number and dimensions that the great bulk of the air escaping from the canopy shall be vented through them and through the steering vent, and little or no air shall escape beneath the peripheral margin or lower lateral band of the canopy.

2,746,700
CHRISTMAS TREE STAND
Richard J. Barbera, Green Bay, Wis.
Application April 30, 1952, Serial No. 285,240
2 Claims. (Cl. 248—44)



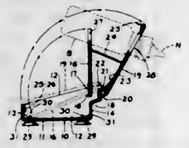
2. A tree holder comprising a base, a cup shaped socket member secured to said base having a semi-spherical inner bottom wall, a water receptacle about said socket member, an upright peg having a ball end received in said socket member and semi-spherical inner bottom wall, said socket member carrying internal threads, a correspondingly threaded elongated nut received in said socket member above the ball end of said peg having a portion adapted to engage the upper surface of the ball, said locking nut having an axial bore therethrough through which said peg extends upwardly, and a laterally extending operating handle secured to said lock nut, whereby, turning of the handle in one direction will allow free rotative movement of the ball end in the socket and the turning of the handle in the opposite direction will firmly hold the ball end against movement.

2,746,701
SPRING OR CUSHION CLAMP
Arley D. Carpenter, Los Angeles, and John A. Carpenter, North Hollywood, Calif.
Application July 31, 1953, Serial No. 371,576
3 Claims. (Cl. 248—73)



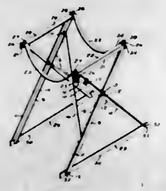
1. In combination, a cable support, a cable clamp comprising a pair of clamp members, legs depending from said clamp members, respectively, elements on the lower ends of said legs, respectively, engaging the under side of said support and holding said clamp members against the sides, respectively, of said cable on said support, and a resilient third clamp member extended over said cable and said side clamp members and clamping said side members against the sides, respectively, of said cable and also clamping said cable on said support.

2,746,702
NURSING BOTTLE HOLDER
Joseph E. Gourley and Laura M. Gourley, Decatur, Ill.
Application December 10, 1952, Serial No. 325,174
3 Claims. (Cl. 248—105)



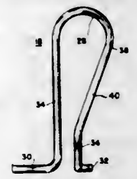
1. A nursing bottle holder comprising a box-like base including a bottom wall, side walls and first and second end walls, a generally rectangular first plate having dimensions smaller than the box-like base having one end thereof disposed between said side walls and pivotally connected thereto adjacent to but in spaced relation to the first end wall, a second generally rectangular plate having dimensions larger than the first mentioned plate and having one end thereof pivotally connected to the upper edge of the first mentioned end wall, each of said plates in operative position projecting upwardly from said base and being provided with bottle receiving means in its free end, means co-operating with the base and said second plate for yieldably retaining same in operative position, means for retaining said first plate in operative position comprising stops projecting from said side walls and engaging the plate below its pivotal connection and a flexible connection between the plates, and said plates being pivotal to inoperative position with the first named one disposed within the box-like base and the second named one engaging the upper edges of the side and end walls and forming a cover for the box-like base.

2,746,703
PORTABLE AND COLLAPSIBLE BARREL RACK
Victor W. Emery, New Castle, Pa.
Application August 25, 1953, Serial No. 376,325
2 Claims. (Cl. 248—150)



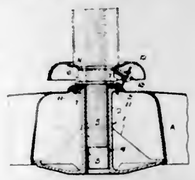
1. In a collapsible and portable rack, two pairs of crossed and pivoted legs, a spreader bar extending between the pairs of legs having ends pivotally traversing the legs at the points of intersection of the legs, said legs having upper ends, side rails extending between the legs of each pair at the upper ends of the legs, said side rails being angular in cross section and having horizontal longitudinal flanges extending laterally inwardly of the pairs of legs and toward each other and depending vertical flanges, said horizontal flanges overlying the upper ends of the legs, said pairs of legs having laterally outward sides along which the vertical flanges of the side rails depend, said vertical flanges having laterally inward sides, means pivotally securing the upper ends of the legs to the laterally inward sides of said vertical flanges, and cradle bands extending between said side rails and secured at their ends to the horizontal flanges of the side rails, the securing means of at least one leg of each pair comprising means providing for separation thereof from the related side rails.

2,746,704
MOUNT FOR METALLOGRAPHIC SPECIMENS
Alphonse Puglielli and Rostislaw S. Komarnitsky, Coraopolis, Pa., assignors, by mesne assignments, to Rockwell Spring and Axle Company, Coraopolis, Pa., a corporation of Pennsylvania
Application September 20, 1950, Serial No. 185,702
1 Claim. (Cl. 248—175)



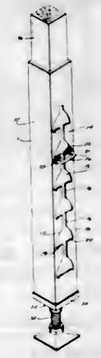
A spring wire clip adapted to hold a thin flat metallographic specimen of a desired thickness on edge on a flat support surface while embedding the specimen and clip in a molding composition, said clip comprising a loop, two straight side portions integral with the loop, extending to the bottom of said clip and lying in the plane of the loop, said straight side portions being of a height sufficient and positioned such that a specimen is received and rigidly held against tipping therebetween, that part of each of said straight side portions adjacent the bottom of said clip being positioned relative to the other a distance less than the thickness of said specimen and forming a gap for yieldingly clamping said specimen perpendicular to the support surface, whereby a specimen inserted between said side portions is gripped thereby, said side portions and said loop being arranged to hold a specimen in a plane disposed at substantially right angles to the plane of said loop, and a relatively short straight leg integral with each of said straight side portions at the ends of said straight side portions opposite said loop, each of said legs extending outwardly from the gap between said straight side portions, one of said legs extending transversely to the plane of the loop, the junction of said legs with said straight side portions being in the same plane, the angle between said legs being an obtuse angle.

2,746,705
CHAIR BASE
William Howard McKinley, Youngstown, Ohio, assignor to The General Fireproofing Company, Youngstown, Ohio, a corporation of Ohio
Application August 27, 1953, Serial No. 376,946
3 Claims. (Cl. 248—194)



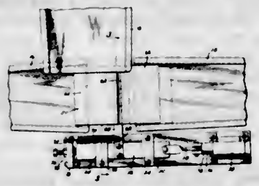
1. A chair base including a vertically disposed tubular column having a laterally outwardly projecting flange adjacent the upper end thereof, said flange having a circumferential series of fastener receiving openings therein, a washer type clip disposed above said flange and having a circumferential series of fastener receiving openings therein in alignment with said first openings, fastenings extending through the aligned openings of the two series thereof, a non-metallic bushing including a tubular shank disposed within said tubular column and whose inner cylindrical wall provides a bearing for the lower end of a seat spindle, the upper end of said tubular shank being provided with a laterally outwardly projecting flange having a smooth upper face and providing a thrust bearing for an adjusting nut on said spindle, and interfitting means between the lower face of said last flange and said washer for holding said tubular shank against rotation in said tubular column.

2,746,706
SHORING DEVICES
Henry F. Schneider, Pewaukee, Wis.
Application October 27, 1952, Serial No. 316,967
1 Claim. (Cl. 248—354)



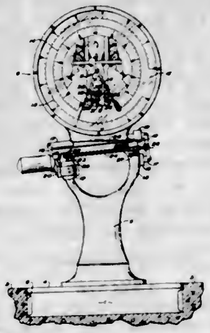
In a shoring device, an elongated square metal tube having a pair of longitudinally extending slots in opposed sides of said tube, a plurality of longitudinally-spaced pairs of aligned horizontal ledges extending outwardly from said slots, a semi-circular recess at the outer edge of each of said ledges, a plurality of pairs of opposed lateral enlargements each defined by a wall extending upwardly and inwardly from the outer edge of each of said recesses to said vertical slot, a plate member for supporting a shoring timber within said tube, transverse rod portions affixed under said plate member and adapted to seat in said recesses, and arcuate rod handle portions joining the ends of said rod portions on each side, said lateral enlargements being of such a size as to allow rotation of said plate to a vertical position without removal from said tube.

2,746,707
FEED CONTROL MEANS FOR WEIGHING MACHINES
James C. Petrea, Durham, N. C., assignor to Wright Machinery Company, Durham, N. C., a corporation of North Carolina
Application January 8, 1953, Serial No. 330,188
9 Claims. (Cl. 249—59)



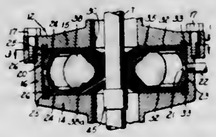
1. Feed control means comprising: means for directing a uniform continuous stream of material to be weighed along a predetermined path, a bulk feed conveyor arranged to receive material from said stream, a dribble feed conveyor, material proportioning means having a stream dividing portion arranged within said predetermined path for movement to a first position with said stream dividing portion to divide said stream and divert a predetermined fraction of said stream from said path to said dribble feed conveyor, means normally holding said proportioning means stationary in said first position, and means for moving said proportioning means to a second position wherein said dividing portion is outside said path to direct none of said stream to said dribble feed conveyor.

2,746,708
AUTOMATIC TARE DEVICE
Fred W. Gilchrist, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a corporation of New Jersey
Application October 29, 1952, Serial No. 317,408
9 Claims. (Cl. 249—60)



1. In a weighing scale having a load receiver, an automatic load counterbalancing mechanism operatively connected to the load receiver, and a tare beam and cooperating poise operatively connected to the load receiver to supplement the automatic load counterbalancing mechanism, in combination, an indicator shaft operatively connected to the automatic load counterbalancing mechanism, a pair of indicators, one of the indicators being fixed to the indicator shaft and the other being clutched on the indicator shaft so as to be adjustable thereon, a chart, a first row of indicia on the chart cooperating with the fixed indicator, the first row of indicia having graduations extending in opposite directions from a zero indicium, said graduations extending in one direction from zero being for net weight indication of a load placed upon the load receiver and said graduations extending in the opposite direction from zero being for tare weight indication of a load placed upon the load receiver, and a second row of indicia on the chart concentric with the first row which second row is adapted to cooperate with the clutched indicator, said second row of indicia extending from a zero indicium in the direction in which the graduations for the tare weight indication extend and being adapted to provide gross weight indication when the load receiver is unloaded.

2,746,709
BLOWOUT PREVENTER AND PACKER AND HOLE CLOSER THEREFOR
Burt S. Minor, Whittier, Calif., assignor to Regan Forge & Engineering Co., San Pedro, Calif., a corporation of California
Application January 23, 1951, Serial No. 207,291
2 Claims. (Cl. 251—1)



1. A blowout preventer comprising a casing consisting of an upper wall member, a lower wall member, such upper and lower wall members having aligned openings

therethrough for the passage of a well tube, and an annular side wall member spacing said upper and lower wall members, an annular packing member of yieldable material disposed between said upper and lower wall members, and consisting of a torus portion and integral flanges extending outwardly from the upper and lower faces of the torus portion and terminally connected to said upper and lower wall members, the central opening of the torus portion, the aligned openings in said wall members and the axial cross-section of the torus portion being of approximately the same size, said torus portion being provided with radially extending vertical slits on the outer side thereof located between said flanges, and also with radially extending vertical slits on the inner side thereof facing its central opening, the slits on the outer side of the torus portion being in staggered relation to the slits on the inner side thereof, said slits extending less than a semi-circle whereby they do not intersect said flanges or the upper or lower surfaces of the torus portion, and means for introducing pressure into the space between said flanges to force the torus portion inwardly to close its central opening or to close around a pipe occupying said opening.

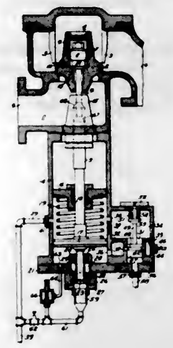
2,746,710
BLOWOUT PREVENTER AND RAM THEREFOR
Marvin R. Jones, Houston, Tex., assignor to Petroleum Mechanical Development Corporation, Houston, Tex., a corporation of Texas
Application October 29, 1952, Serial No. 317,490
13 Claims. (Cl. 251—2)



1. A blowout preventer ram, comprising, a body composed of deformable resilient material having an object-engaging face on its forward end, and a plurality of free-floating flat metal plate members embedded in said body, said plate members being disposed in closely spaced-apart parallel relation substantially throughout the transverse section of said body and extending vertically substantially from the upper to the lower surfaces of said body and longitudinally thereof from points adjacent said face to points intermediate the ends of said body, the arrangement of the plate members being such that when said face is engaged with an object the plate members will remain in substantially parallel relation.

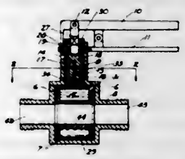
2,746,711
VALVE ACTUATING MEANS
Clarence E. Kenney, Hartland, and Charles L. Ringle, Milwaukee, Wis., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application April 10, 1952, Serial No. 281,566
3 Claims. (Cl. 251—26)

1. In combination with a valve having means operable to open and close said valve, said means including a cylinder, a piston reciprocally disposed within said cylinder and connected to said valve for movement therewith, a cover plate enclosing one end of said cylinder defining with said cylinder and said piston a fluid pressure confining chamber, and means selectively communicating said chamber with a source of fluid pressure for moving said piston to open said valve, and with a drain for moving said piston to close said valve, apparatus for effecting a closing movement of said valve to a predetermined partially closed position comprising a drain passage communicating with said chamber through said cover plate and including a manually operable drain valve for controlling the outflow of fluid through said drain passage, a stem connected to said piston and insertable into and movable within said drain passage, said stem moving to a position closing said drain passage as said valve moves in a closing direction to said predetermined closed posi-



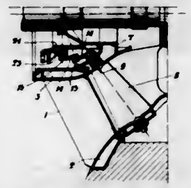
tion, and a pressure relief bypass passage for said drain passage connecting said drain passage upstream of said drain valve to said chamber.

2,746,712
PLUG VALVE
Lester Frederick Wickman, Oakland, Calif.
Application January 16, 1953, Serial No. 331,534
1 Claim. (Cl. 251—109)



In a valve, a valve body having inlet and outlet ports, a valve plug rotatable in said body and having a passage therethrough adapted to align with said ports, a tubular stem projecting from said plug, a tubular bushing about said stem and projecting from said body, said plug having upper and lower annular grooves and also longitudinal grooves on each side of said passage, upper and lower sealing rings in said annular grooves, sealing strips in said longitudinal grooves, a chamber in said plug about said passage, said plug having openings communicating said chamber with said annular grooves, a plunger slidable in said stem, said plunger having a central passage and a pair of lateral passages extending therefrom, said plug having an axial opening communicating said central passage with said chamber, said stem having an intake opening adapted to communicate with one of said lateral passages when said plunger is in an outer position, said bushing having an annular groove adjacent the outer end thereof, a valve plug operator extending right-angularly from said bushing and having a ring at the inner end thereof loosely engaging in said bushing groove, a plunger operating lever rockably mounted between the ends thereof on said plug operator, a stud extending outwardly from said plunger having a polygonal intermediate portion, means pivotally securing said stud to said lever, a cap fixed to the outer end of said stem having a polygonal opening through which said stud slidably engages, said bushing having a keeper notch in the outer end thereof, and a locking member carried by said lever engageable in said keeper to lock said stem with said plug in open position, inward movement of said plunger placing air in said chamber under pressure and simultaneously placing said sealing rings under pressure.

2,746,713
DISTRIBUTOR VANE OPERATING APPARATUS FOR HYDRAULIC TURBINES
Henri Peyrin and Severin Xavier Casacci, Grenoble, France, assignors to Etablissements Neyrpic, Grenoble, France, a corporation of France
Application July 19, 1951, Serial No. 237,633
Claims priority, application France August 4, 1950
3 Claims. (Cl. 253—155)



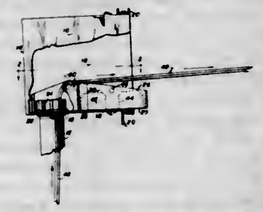
1. Flow distributing apparatus comprising an outer casing, an inner casing, said casings being of circular cross section and concentric and defining between them an annular passage for flow of fluid therethrough, a flow controlling vane within said passage pivotally supported by said casings on an axis extending across said passage between said casings, a shifting ring disposed within said inner casing coaxial with and supported to be rotatively movable upon the common axis of said casing, said ring being disposed in inwardly spaced parallel relation to and adjacent said inner casing and having a radius upon said axis to provide a substantial space within said ring about said axis, means operatively connecting said vane to said shifting ring for effecting pivotal movement of said vane concurrently with said rotative movement of said shifting ring upon said common axis to adjust the position of said vane in said flow passage, a toric cylinder disposed within said inner casing and outwardly of said ring with respect to said common axis and supported with the axis of the tore thereof concentric with said common axis, a toric piston movable to and fro within said toric cylinder in the arc of the tore about said common axis, and an operative connection between said toric piston and said ring for rotatively moving said ring forwardly and reversely upon said common axis upon to and fro movement of said toric piston to adjust the position of said vane in said passage.

2,746,714
JACK
Eugène Freyssinet, Neuilly-sur-Seine, France, assignor of one-third to Ingenieurs Bureau Voor Industrie Service N. V., La Haye, Netherlands, and one-third to Tans Metaalconstructies en Zwaar Transport N. V., Rotterdam, Netherlands, both companies of Netherlands
Application March 12, 1954, Serial No. 415,935
Claims priority, application France April 15, 1953
15 Claims. (Cl. 254—29)



1. A hydraulic jack designed for tensioning reinforcement wires extending within a concrete structure and protruding therefrom through an opening of an outwardly diverging passage and for anchoring said wires in said passage by means of a tapering wedge shaped to fit said passage, said jack comprising a generally annular member designed to be positioned about said opening and abutted against said structure, said member having a divergent inner surface, the divergence of said surface being substantially greater than that of said passage whereby said wires may be displayed along the peripheral surface of said passage and the inner surface of said member with an increasing divergence, a tubular casing having a closed end and an open end, a tubular piston assembly slidably and liquid-tightly fitted in said tubular casing and having a closed end opposite the closed end of said casing and an open end protruding from the open end of said casing, said open end of said assembly being adapted to accommodate a portion of said protruding wires and to fit against said annular member, a ram slidably and liquid-tightly fitted in said tubular piston assembly and having an operative end adapted to protrude from the open end of said assembly and engage said annular member, said ram being designed for driving said wedge into said passage, wire gripping means on said casing, controllable means for supplying and exhausting pressure liquid to and from the inside space of said tubular casing bounded by said closed ends, and further controllable means for supplying and exhausting pressure liquid to and from the inside space of said tubular piston assembly bounded by the closed end thereof and said ram.

2,746,715
WIRE GUIDING DEVICE
Virgil James Sherrod, Knoxville, Tenn.
Application July 27, 1953, Serial No. 370,549
4 Claims. (Cl. 254—134.3)



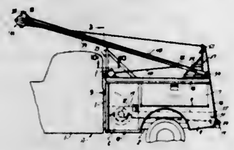
1. A wire guiding device for installing conductors in building electrical systems having conduits, outlet-boxes and wall housings comprising a frame including means defining a wire receiving opening within the frame, conductor guiding means carried by said frame and magnetic means for readily and detachably securing and holding the device in operative position.

2,746,716
WIRE GUIDE
George G. Zachary, Los Angeles, Calif.
Application May 22, 1953, Serial No. 356,727
4 Claims. (Cl. 254—134.3)



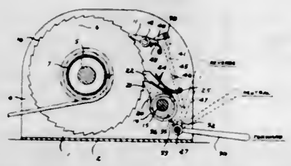
1. In combination with a wall box having externally threaded fittings therein, a wire guide comprising a rigid sleeve having one extremity internally threaded for engagement with the externally threaded extremity of a fitting within said wall box, and a flexible tubular guide body threadedly engaged with the opposite extremity of said sleeve, said flexible tubular guide body being formed from a length of coiled wire and said opposite extremity of the guide sleeve being provided with a threaded portion complementary to the configuration of said guide body, the length of said guide body being greater than the width of said wall box so that the free extremity of the guide body will be disposed externally of said wall box when said wire guide is connected with one of the fittings therein.

2,746,717
UTILITY TRUCK-BODY
John J. Powers, St. Louis, Mo.
Application September 10, 1952, Serial No. 308,787
1 Claim. (Cl. 254—139.1)



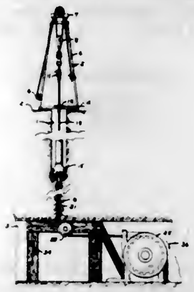
In a utility truck-body, a floor, a transverse forward end wall and spaced parallel side panels arranged to form a truck-body having a substantially open top and rear end, a hinge-fitting rigidly mounted on each side panel adjacent the rear end and in upwardly spaced relation to the floor, a derrick leg hingedly mounted at one end in each hinge-fitting, said derrick legs converging toward each other and being connected at their other ends in the provision of a two-legged V-shaped derrick frame adapted to swing from inoperative transport position to operative upright position, rack means at the forward end of the truck-body for supporting the derrick in transport position, a relatively long guy-member attached to each derrick leg, pivoted links on the truck-body securely attached to each of said long guy-members for adjusting the effective length thereof when the derrick legs are in upright position, a short guy-member secured to each derrick leg, means for releasably and adjustably engaging the short guy-members in the provision of a two-legged derrick stabilized by four downwardly and outwardly diverging guy-members, a winch mounted on the floor of the truck-body, a pair of vertically spaced pulleys mounted at the rear end of the truck-body, one of said pulleys being located substantially above the level of the hinge-fitting, a cable operatively reeled around the winch and pulleys and attached at one end to the upper end of the derrick, and an outwardly presented member secured to each derrick leg and positioned intermediate the ends thereof so that the guy-members when inoperative may be looped therearound to take up slack.

2,746,718
POWER DRIVEN WINCH
Charles A. French, Vancouver, British Columbia, Canada
Application January 10, 1955, Serial No. 480,960
8 Claims. (Cl. 254—186)



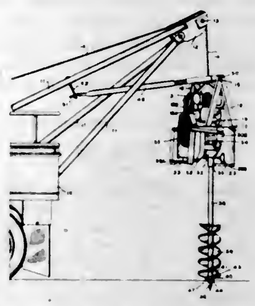
1. A winch comprising a freely rotatable drum having a ratchet wheel with teeth connected therewith, a pawl normally engaging the ratchet wheel to hold it against reversal, a driven shaft mounted for constant rotation in one direction, a pair of eccentrics mounted upon said shaft, a driving pawl swingingly mounted upon each eccentric and normally engaging said ratchet wheel to rotate said wheel one tooth in one direction as the eccentric shaft is rotated one revolution, and manually operable means to alternately free the pawls from the teeth of the ratchet wheel whereby said ratchet wheel may turn in a reverse direction while the shaft continues to rotate in the one direction.

2,746,719
DRILLING DEVICE FOR LARGE BORES
Alain R. Seligman, Houston, Tex.
Application May 22, 1952, Serial No. 289,253
2 Claims. (Cl. 255—19)



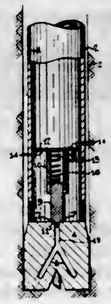
2. A rotary shaft drilling machine for enlarging to shaft proportions a pilot hole drilled between points to be connected by the shaft comprising in combination, a drill stem, means for rotating said drill stem, a drill bit attached to said drill stem, said drill bit including a pilot extension adapted to enter and to guide the bit along said pilot hole, a swivel connection on said bit, and means attached thereto and extending downwardly into the pilot hole for exerting a pull-down force upon the bit so that advancement of the bit forms a shaft along the line traversed by the pilot hole.

2,746,720
POSTHOLE DIGGER
Fred F. Cannon, Frazeyburg, Ohio
Application December 23, 1952, Serial No. 327,577
1 Claim. (Cl. 255—19)



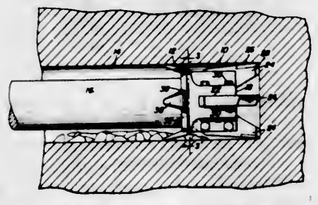
A post hole digger comprising a boom arranged at an inclination to the ground, a pulley adjacent the end of the boom, cable means extending around the pulley, a frame having upstanding V-shaped side members connected at their upper ends to the cable, a platform supported adjacent the lower ends of said frame, opposite downwardly depending frame members extending from said frame, power means on said platform including a vertically extending driven shaft located between said downwardly depending frame members and terminating above the bottom of said downwardly depending frame members, means for connecting said shaft to an auger, an elongated telescopic member having bifurcated arms connected to the apices of the V-shaped side members at one end thereof, a swivel connection joining the other end of the telescopic member to an intermediate portion of said boom, said telescopic member serving to prevent rotational movement of said frame, said depending frame members constituting manual guiding means for accurate control of the auger in forming post holes in the ground, and also serving as a support on the ground or other surface when the auger is disconnected from the shaft.

2,746,721
APPARATUS FOR DRILLING
Thomas V. Moore, Manhasset, N. Y., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application October 1, 1951, Serial No. 249,113
1 Claim. (Cl. 255—24)



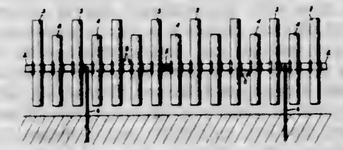
In an apparatus for drilling bore holes into subterranean surfaces an improved drill bit assembly which comprises a drill bit attached to the lower end of a pipe string, ports in said bit communicating by means of a common conduit to within said pipe string, a valve assembly positioned above said bit and concentrically disposed within said pipe string comprising a piston element which seats on a seat formed at the juncture of said conduit and a surface of the bit, and a cylinder element in which said piston element slides, said cylindrical element being rigidly positioned with respect to said pipe string by suitable brace elements, a vent communicating from within said cylindrical element above said piston to without said pipe string, a spring means positioned within said cylindrical element so as to exert a downward thrust on the piston element so as to seat the piston element in said seat, thereby controlling the flow of fluid through said conduit, said piston element being characterized by being upwardly flared and extending above said seat, whereby a predetermined lateral force exerted by the fluid head within said pipe string will exert an upward thrust component on said piston valve element which will exceed the downward thrust exerted by said spring means, whereby said piston element will move upwardly and allow free communication through said common conduit.

2,746,722
REVERSIBLE DRILL BIT
Jacob Schneider, Philipsburg, Mont.
Application July 17, 1950, Serial No. 174,290
3 Claims. (Cl. 255—61)



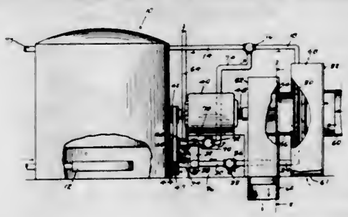
1. A reversible drill bit comprising a washer having a flat circular central portion for positioning between a conventional drill bit and the drill stem, said drill bit being screwed onto said stem and adapted to abut said central portion for retention thereby, multiple means on the periphery of said central portion projecting radially outward a distance at least as great as the largest diameter of the drill bit for engagement with the inside surface of the drill hole, said means including a plurality of prongs radially extending from said central portion, said prongs having angulated cutting portions thereon extending rearwardly of the drill bit and engageable with the inside surface of the drill hole whereby retracting movement of the drill bit from the drill hole is facilitated.

2,746,723
BORDER FENCING
Wallace E. Freeman, Minneapolis, Minn.
Application April 6, 1953, Serial No. 347,111
3 Claims. (Cl. 256—22)



1. A section of border fencing comprising a longitudinal flexible strap-like supporting rail, a plurality of plate-like gripping elements secured to said rail in uniformly spaced relation lengthwise thereof, each of said gripping elements comprising an enlarged body having its opposed upright marginal edges bent inwardly over its adjacent body portions and cooperating therewith to provide a pair of upright inwardly facing horizontally spaced parallel channels of substantial length, and a plurality of elongated flexible pickets of relatively thin resilient sheet metal, each picket being transversely bent about its longitudinal axis, whereby each picket is arcuately formed, cross sectionally, and the free width of said pickets being slightly greater than the horizontal width of each of said gripping elements, whereby when each picket is contracted transversely by the application of pressure to oppositely disposed portions of its opposite side edges, and said side edge portions are inserted into the opposed inwardly facing channels of one of said gripping elements, the opposed marginal edge portions of said picket will expand into frictional engagement with the walls of said channels, whereby the picket is firmly retained in position on the supporting rail.

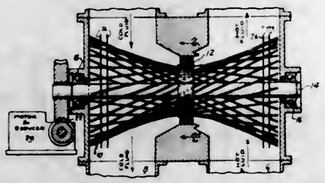
2,746,724
HEAT TRANSFER SYSTEM AND ELECTRIC CONTROLS THEREFOR
Ray B. Leach, Fremont, Nebr.
Application December 13, 1954, Serial No. 474,780
2 Claims. (Cl. 257—3)



1. A convertible heat transfer system comprising a water tank, means connecting said tank with a source of water under pressure, means for heating water in said tank, a plenum chamber having a pair of opposed air intake and discharge open ends, a metallic coil radiator disposed in said chamber and having a pair of opposed ends, a first conduit connecting said hot water tank with one end of said radiator, a first manually operated two-

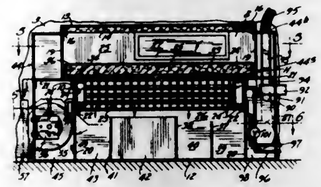
way valve connected in said first conduit, a pump, a second conduit connecting the other end of said radiator with the suction side of said pump, a second manually operated two-way valve connected in said second conduit, a water discharge conduit connected with said second manually operated valve, said second manually operated valve being normally open with respect to said second conduit and closed with respect to said discharge conduit, a third conduit connecting the pressure side of said pump with said water tank, a fourth conduit connecting said source with said first manually operated valve, said first manually operated valve being normally open with respect to said first conduit and closed with respect to said fourth conduit, a normally closed solenoid valve connected in said fourth conduit, a second plenum chamber, said second plenum chamber having air intake and discharge open ends, a centrifugal blower mounted in said second plenum chamber, a sleeve connecting said air discharge end of said first chamber with the air intake end of said second chamber and with the suction side of said blower, said blower discharging air from its pressure side through said discharge side of said second plenum chamber, an electric motor, means connecting said motor with said pump and said blower in driving relation, an electric circuit for said motor including a source of E. M. F., thermal responsve circuit control means operable to energize said circuit in response to a predetermined low temperature whereby hot water is circulated by said pump through said first, second and third conduits, said first and second manually operated valves, said tank and said radiator, to heat air drawn into said first plenum chamber and to discharge said heated air from said second plenum chamber, said manually operated valves being operable to a second position to cut off water from said tank to said radiator through said first conduit and to connect said first conduit with said fourth conduit, a second electric circuit for said motor, said second circuit including said motor, said solenoid valve, said source of E. M. F. a normally open thermal responsive control switch, said last named switch closing in response to a predetermining high temperature, whereby water flows from said source through said fourth conduit and solenoid valve, said first valve and conduit, said radiator, and second conduit and second manually operated valve and said discharge conduit, and said means connecting said motor with said pump in driving relation being disconnected therefrom.

2,746,725
HEAT EXCHANGER
Nelson G. Reed, Mount Vernon, Ohio, assignor to The Cooper-Bessemer Corporation, Mount Vernon, Ohio, a corporation of Ohio
Application September 20, 1954, Serial No. 457,253
5 Claims. (Cl. 257—6)



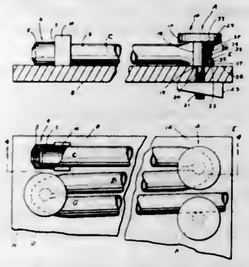
1. A heat exchanger for use with a chamber containing fluid at high temperature and a chamber containing fluid at low temperature, comprising supporting means disposed between said two chambers, closed hollow means carried by said supporting means and having a hollow portion extending into each of said chambers and tending to assume the temperature thereof, a volume of high heat conductivity material, liquid at its normal working temperature, disposed within and partially filling said hollow means, and means to move said supporting means in a manner such that said liquid enters the portions of said hollow means alternately in said high and low temperature chambers.

2,746,726
SPACE HEATER FOR BUSSES AND THE LIKE
Clarence A. Hoff, Milan, Minn.
Application December 18, 1953, Serial No. 399,038
4 Claims. (Cl. 257—137)



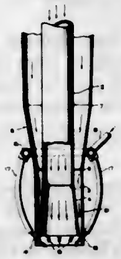
1. In a space heater for busses and the like, a housing comprising opposed side walls, end walls, and a bottom wall, said housing being adapted to rest upon the floor within the body of a vehicle adjacent one side wall thereof, a removable cover normally closing the open top of said housing, a normally horizontally disposed radiator mounted in said housing intermediate the bottom wall and cover and dividing the interior of the housing into an equalizing chamber above the radiator and a plenum chamber therebelow, means defining an air inlet to said equalizing chamber, said means comprising an air conduit extending in a direction to project through the adjacent side wall of the vehicle for the delivery of air to the interior of the vehicle to said equalizing chamber, a plurality of partition elements dividing the plenum chamber into a plurality of compartments, said radiator and bottom wall defining opposed wall elements each common to all of said compartments, said housing further defining a plurality of air outlets one for each of said compartments, and independent closure elements for each of said outlets, said partition elements each having one edge engaging said bottom wall, the opposite edge of each of said partition elements being downwardly spaced from the radiator, whereby, when only one of the closure elements is open, air moving outwardly therethrough will be drawn from all of the compartments and through the entire area of the radiator.

2,746,727
RETURN BEND HEAT EXCHANGER AND PROCESS FOR MANUFACTURE
Ralph W. Earl, Jr., Scottsdale, Ariz.
Application June 11, 1953, Serial No. 360,914
7 Claims. (Cl. 257—255)



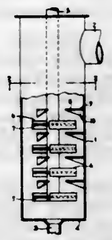
4. A heat exchanger composed of a single piece of round tubing bent at intervals forming a zig zag return bend structure, each of said return bends having a compass of 180° and having flattened sides at right angles to the axis of the bend, more than 110% of the diameter of the tube apart, and not greater than 125% of the diameter of the tube apart, the sides of the bend concentric with the axis of the bend being concave, and forming, together with said flattened sides, arcuate passage ways having substantially triangular sections.

2,746,728
MIXER FOR SOLIDS AND LIQUIDS
Edward Pomerleau, Williamstown, Mass.
Application July 20, 1953, Serial No. 368,996
4 Claims. (Cl. 259—4)



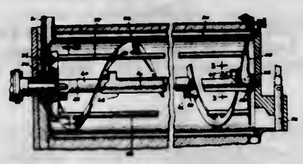
1. Apparatus for mixing solids and liquids comprising a substantially vertical solids feed pipe provided with a frusto-conical lower end, an air pipe surrounding said solids feed pipe, said air pipe being provided with an intermediate inverted frusto-conical portion which terminates above the frusto-conical portion of said solids feed pipe, the lower end of said air pipe being provided with a cylindrical section which extends downwardly from the lower end of its intermediate inverted frusto-conical portion and projects downwardly below the lower end of the frusto-conical portion of said solids feed pipe, and a series of nozzles for supplying jets of liquid directed inwardly through the lower portion of the cylindrical section of said air pipe and adjacent the lower extremity of said solids feed pipe.

2,746,729
METHOD FOR HOMOGENIZING GLASS
Merle M. Eakins, Ford City, Pa., assignor to Pittsburgh Plate Glass Company, Pittsburgh, Pa., a corporation
Application August 5, 1952, Serial No. 302,688
2 Claims. (Cl. 259—8)



1. A method of stirring glass comprising the steps of, continuously flowing molten glass by gravity through a stationary substantially cylindrical container at a rate to maintain the glass within the container at a substantially constant level, imparting a circular motion to the glass during its flow through the container, intermittently interrupting the free circular motion of the glass at the inner periphery of the cylinder during passage of the glass therethrough, and repeatedly shearing the glass within the area adjacent the periphery of the cylinder.

2,746,730
DISPENSING FREEZER
Harvey F. Swenson, Andre A. Bandat, and Herman Ryder, Seattle, Wash., assignors to Sweden Freezer Manufacturing Company, Seattle, Wash., a corporation of Washington
Application June 29, 1953, Serial No. 364,824
15 Claims. (Cl. 259—9)



1. A rotary dasher for use in the freezing cylinder of a dispensing ice cream freezer and comprised of headers occupying positions one at the front end and the other at the rear end of the dasher and reinforced by stay rods made integral with the headers and located parallel to the rotary axis at diametrically opposite sides thereof, said front header consisting of a disc-like member generally circular in shape with an access opening allowing the product processed in the freezing cylinder to pass from the back to the front side thereof, said access opening comprising only a minor part of the header's areal compass, a dasher blade extending between and integrated by its ends with the headers and tracing the locus of a spiral developed about the rotary axis of the dasher, and a scraper blade detachably associated with the headers and receiving a journal mounting therefrom supporting the scraper blade for wrist movement about an axis paralleling said rotary axis of the dasher, said developed spiral of the dasher blade having a comparatively steep pitch.

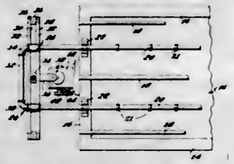
2,746,731
SOIL DISPERSION APPARATUS
Ting Ye Chu and Donald T. Davidson, Ames, Iowa, assignors to Iowa State College Research Foundation, Inc., Ames, Iowa, a corporation of Iowa
Application August 25, 1952, Serial No. 306,134
6 Claims. (Cl. 259—99)



1. A soil dispersion apparatus, comprising an open-topped vertically-extending hydrometer jar, said jar having transparent walls so that the contents thereof can be observed, a removable stopper in the top of said jar, an air supply conduit extending through said stopper into said jar to a point adjacent the bottom thereof, the lower portion of said air supply conduit being equipped with at least one passage communicating with the exterior of said conduit and arranged to direct a jet of air outwardly therefrom, said stopper having at least one passage therethrough for the escape of gas, and a deflec-

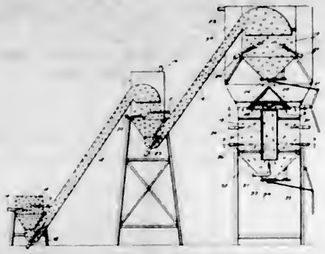
tor associated with said stopper and arranged to retard the movement of liquid and solid material through said stopper passage while at the same time permitting the free escape of gas, said stopper, conduit and deflector being removable as a unit from said jar.

2,746,732
OSCILLATOR ATTACHMENT FOR PLATING TANK
Louis J. Guillette, Attleboro, Mass.
Application November 1, 1952, Serial No. 318,295
8 Claims. (Cl. 259—112)



1. For use with a plating tank provided with bearings, horizontal agitator bars movable therein and suspension members hanging from the bars downwardly into the tank for supporting articles to be plated; an attachment comprising a rigid drive bar located externally of the tank, means on the bar to which the ends of the agitator bars are made fast, said means being adjustable lengthwise of the drive bar to change their relative spacing and their position on the drive bar, means for fixing the spacing of the last-named means both with respect to each other and the drive bar, and means operably connected to the rigid bar for effecting oscillation thereof.

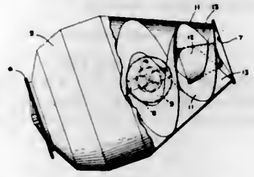
2,746,733
ASPHALT PAVEMENT CONSTRUCTION
Ira L. Edgerton, Edgewood, R. I.
Application December 9, 1953, Serial No. 397,100
7 Claims. (Cl. 259—147)



1. The method of manufacturing an asphalt mix comprising the steps of heating a mixture of sand and gravel, elevating the heating mixture to a storage chamber, periodically releasing heated mixture from the storage chamber, dispersing the released heating mixture and conducting the dispersed mixture into a mixing chamber, and whirling the dispersed mixture in the mixing chamber while simultaneously injecting liquid asphalt into the whirling dispersed mixture, whereby a thoroughly dispersed sand, gravel and asphalt mixture for pavements is formed.

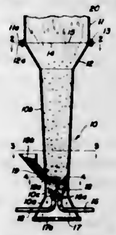
2,746,734
AGITATOR
Louis G. Hilkemeier, Plainfield, N. J., assignor to Worthington Corporation, Harrison, N. J., a corporation of Delaware
Application September 21, 1953, Serial No. 381,405
2 Claims. (Cl. 259—161)

1. An agitator for transferring concrete comprising, a truck frame, and inclined rotatable mixing drum mounted in said frame having a side hatch for charging and an end opening for discharging said drum, means for rotating said mixing drum, a plurality of spiral blades disposed on the inner wall of said mixing drum for discharging mixed concrete from said mixing drum when said drum is rotated for discharging, a cylindrical element in said



drum adjacent said end opening and held in spaced relation from said walls to form closed veins with said blades, said cylindrical element closed at its outer end to prevent mixed concrete from escaping through said end opening.

2,746,735
MATERIAL MIXING BURNER FOR PROCESSING FURNACES
James H. Bradford, Tooele, Utah, assignor of one-half to Combined Metals Reduction Company, a corporation of Utah
Application October 4, 1951, Serial No. 249,660
11 Claims. (Cl. 263—21)

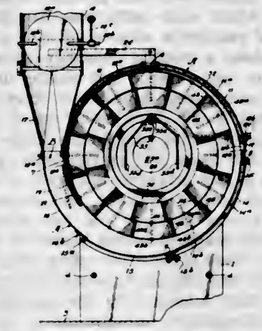


1. A material mixing combustion burner for industrial processing furnaces, comprising a Venturi tube having convergent inlet member, divergent outlet member, and a throat member therebetween; jet means for the supply of fuel to said inlet member; and a feeder for material to be processed, said feeder having a discharge portion directed into said throat member at a location beyond the said convergent inlet member, and said divergent outlet member having its outlet end entirely open as a single discharge orifice.

2,746,736
ROASTING DEVICES
Andrew H. Selzer, Evergreen Park, Eugene G. Berry, Chicago, and Ralph E. Williams, River Forest, Ill., assignors to B. F. Gump Co., Cicero, Ill., a corporation of Illinois
Original application October 25, 1951, Serial No. 253,094. Divided and this application November 14, 1952, Serial No. 320,436
19 Claims. (Cl. 263—33)

5. In a roaster, a housing having an end inlet and a scroll-shaped circumferential wall terminating in an upwardly open discharge gap extending for generally the full length of the housing, a drum mounted in said housing and means for rotating it about a generally horizontal axis, said drum having an air-pervious circumferential wall and material-conveying flights within said wall, said discharge gap lying generally in the horizontal plane of said axis, the circumferential wall having also an air inlet extending generally from end to end of the housing and lying generally in the horizontal plane of the axis but generally diametrically spaced from the discharge gap, and outlet means formed and adapted to receive the discharge from said discharge gap, whereby air may flow

through the air inlet, the progressive increase of the scroll from the air inlet to the discharge gap forming a scaveng-

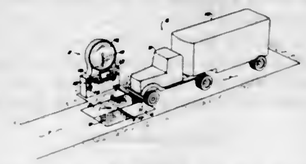


ing air passage inwardly defined by the circumferential wall of the drum.

2,746,737
PROCESS FOR HEATING UP APPARATUS FOR CARRYING OUT EXOTHERMIC GAS REACTIONS
Walter Pohl, Frankfurt am Main, Germany, assignor to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfurt am Main, Germany
No Drawing. Application July 7, 1953, Serial No. 366,617
Claims priority, application Germany July 9, 1952
7 Claims. (Cl. 263—52)

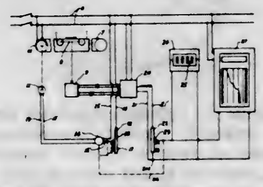
1. A method of directly preheating apparatus employed for carrying out continuous catalytic exothermic gas reactions with reactant gas mixtures containing one of the reactant gaseous components in excess, without requiring the use of gases other than the components of the reactant gas mixture, said apparatus having a reaction zone containing a catalyst preceded by a space free from catalyst which comprises passing a gas stream containing at least the reactant gas component which is in excess in the reactant gas mixture to be employed for the catalytic gas reaction through the apparatus and introducing into such stream of gas as it passes through the catalyst free space preceding the reaction zone a separate stream of a reactant gas component which is to be employed in smaller quantities with simultaneous ignition thereof and adjusting the velocity of the gas streams so that the ensuing reaction proceeds with flame formation.

2,746,738
WHEEL LOAD TRUCK SCALE
George C. Reiser, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a corporation of New Jersey
Application October 28, 1952, Serial No. 317,293
4 Claims. (Cl. 265—5)



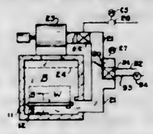
1. In a weighing scale adapted to weigh the load on one wheel at a time of a truck moving along a surface, in combination, a flat deck type load receiver mounted substantially in the plane of said surface and having diagonally opposite live decks staggered with respect to each other in the direction of travel of the truck to be weighed and separately supported dead decks covering the remainder of said load receiver, weighing mechanism operatively connected to the live decks, automatic means for printing impressions of the weight of each wheel load, timing mechanism, said timing mechanism being adapted to prevent printing until a prescribed time interval has elapsed after a load has been placed on the load receiver, automatic means for resetting the timing mechanism should the load receiver be disturbed during weighing, and means for signalling the driver when the priniting of the weight record has been completed.

2,746,739
DEVICE FOR CONTINUOUS WEIGHING
Joachim Wolfgang Philippovič, Indiana, Pa., assignor to Syntron Company, Homer City, Pa., a corporation of Delaware
Application June 26, 1953, Serial No. 364,410
2 Claims. (Cl. 265—28)



2. An apparatus for weighing material traveling along a conveyor which comprises a movable frame mounted to support at least a portion of the conveyor and the material traveling therealong, an electrically energized magnetostriction cell means mounted to receive the weight of said frame, an amplifier connected to receive the output of said magnetostriction cell means, a plurality of potentiometers each having a variable contactor, the output of said amplifier connected to one potentiometer, a motor having two operating circuits and mechanically connected to drive each of the variable contactors of the potentiometers, a generator connected to be driven in proportion to the speed of the movement of the material along the conveyor to provide an output commensurate thereto and connected to supply one of said operating circuits of said motor, a line circuit connected through the other of said potentiometers and to the other circuit of said motor to energize the same to control the position of the movable contacts of said potentiometers, and a calibrated weight totalizer connected to said one potentiometer to integrate and register the total weight of the material traveling along the conveyor.

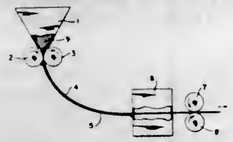
2,746,740
CYCLE ANNEALING FURNACE
Ernest W. Weaver, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a corporation of Ohio
Application January 28, 1953, Serial No. 333,759
5 Claims. (Cl. 266—2)



1. In a furnace for cycle annealing work, in combination, means forming a heating chamber, means forming a slow cooling chamber, means forming a fast cool chamber therebetween, closure means for sealing the fast cool chamber from the heating and slow cooling chambers, means for recirculating atmosphere through the fast cool chamber, and means for cooling the recirculating

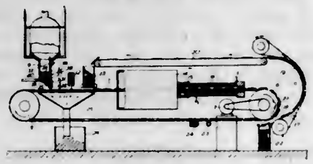
atmosphere when the temperature in the fast cool chamber rises above a predetermined value and for heating the recirculating atmosphere when the temperature in the fast cool chamber falls below a predetermined value, to obtain rapid cooling and yet avoid under cooling of the work in the fast cool chamber.

2,746,741
APPARATUS FOR THE PRODUCTION OF WROUGHT METAL SHAPES FROM METAL POWDER
Gerhard Naeser, Duisburg-Huckingen, Germany, assignor to Mannesmann Aktiengesellschaft, Dusseldorf, Germany, a German company
Application January 27, 1954, Serial No. 406,501
2 Claims. (Cl. 266—5)



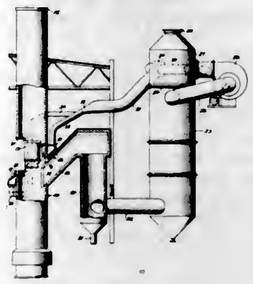
1. An apparatus for rolling and further consolidating metal articles originally partially consolidated from a metal powder and subsequently sintered, comprising oppositely disposed, laterally spaced pressure rolls forming a roll gap having a diameter of at least 50 and not more than 1,000 times the thickness of the metal product being rolled, for effecting a further consolidation of the originally consolidated metal article.

2,746,742
APPARATUS FOR PRODUCING POROUS METAL PLATES
Mervyn Arthur Comley, Solihull, England, assignor to The International Nickel Company, Inc., New York, N. Y., a corporation of Delaware
Original application March 24, 1949, Serial No. 83,164. Divided and this application August 27, 1952, Serial No. 306,588
Claims priority, application Great Britain March 25, 1948
6 Claims. (Cl. 266—5)



1. An apparatus for making porous magnetic metal plates by sintering magnetic metal powder between formers having opposed rough surfaces effective to prevent substantial contraction of said plates parallel to the major surfaces thereof, comprising in combination an endless flexible conveyor having a series of open-top molds, having a gravity-discharge end and having substantially horizontal upper and lower runs, each of said molds having a former comprising a rough-surface bottom portion of said mold interiorly thereof, said molds being connected to said conveyor for travel therewith in an endless path, charging means comprising a hopper positioned above the upper run of said conveyor and adapted to dispense magnetic metal powder into each of said molds, levelling means positioned above said upper run and downstream from said charging means with respect to the direction of travel of said upper run and adapted to remove excess powder from atop said molds, a magazine positioned above said upper run and downstream from said levelling means with respect to the direction of travel of said upper run and adapted to deliver a former comprising a cover plate having a rough surface onto the powder in each mold with the rough surface of the cover plate in contact with said powder, a sintering furnace through which said molds pass for sintering the magnetic metal powder in each mold to a porous magnetic metal plate, a cooling chamber through which said molds pass, said furnace and cooling chamber being positioned successively downstream from said magazine with respect to the direction of travel of said upper run, conveying means adapted tto receive the cover plates as they fall from said gravity-discharge end and to return them to said magazine exteriorly of said sintering furnace and cooling chamber, and magnetic means adjacent said gravity-discharge end and adapted to retain said porous magnetic metal plates in said molds until after said cover plates have fallen from said gravity-discharge end and adapted to release said porous magnetic metal plates subsequently for gravity discharge thereof from said molds.

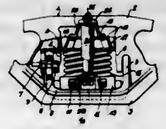
2,746,743
CUPOLA FURNACE PROVIDED WITH MEANS TO PRODUCE A GASEOUS CURTAIN IN ITS OPENING
Claude B. Schneible, Detroit, and Raymond H. Moore, Birmingham, Mich., assignors to Claude B. Schneible Company, Inc., Detroit, Mich., a corporation of Michigan
Application February 6, 1953, Serial No. 335,526
8 Claims. (Cl. 266—17)



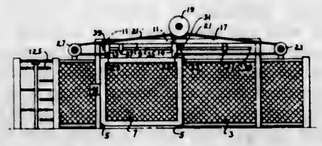
1. In apparatus of the character described, a generally upright open-ended cupola having a charging opening on one side intermediate the ends thereof, a wet scrubbing device for cleansing gases withdrawn from said cupola, a withdrawal duct communicating with the interior of said cupola below said charging opening and with the inlet of said wet scrubbing device, manifolds about said cupola communicating with the interior thereof and positioned thereon to direct a curtain of fluid thereacross intermediate said withdrawal duct and said charging opening, a return duct leading from the outlet of said scrubbing device to said manifolds and communicating therewith, and blower means for forcing fluid through said return duct and manifolds for forming a curtain of fluid across said cupola.

2,746,744
SNUBBER
Emil H. Blattner, Williamsville, N. Y., assignor to The Symington-Gould Corporation, Depew, N. Y., a corporation of Delaware
Application December 11, 1951, Serial No. 261,116
2 Claims. (Cl. 267—9)

1. The combination with a side frame, of a snubber unit comprising a hollow cylinder open at one end, a threaded bolt extending outwardly of said closed end, a rocker member carried by said bolt and bearing against the closed end of said cylinder, a set of friction shoes extending within the open end of said cylinder, yieldable means acting on said shoes for urging said shoes into frictional engagement with said cylinder, a headed bolt mounted within said shoes, a cap member collaring said headed bolt and engaging the outer ends of said shoes, and a second rocker member carried by said headed bolt and engaging said cap member, said bolts serving to connect the snubber unit to the adjacent bolster and spring plank members of said side frame.

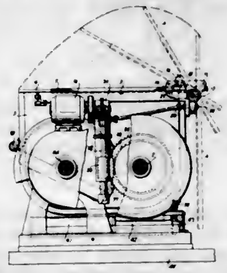


2,746,745
PARKING LOT CONTROL SYSTEM
Robert H. Damon, Chicago, Ill., assignor to Bowser, Inc., Fort Wayne, Ind., a corporation of Indiana
Application June 3, 1952, Serial No. 291,549
19 Claims. (Cl. 268—49)



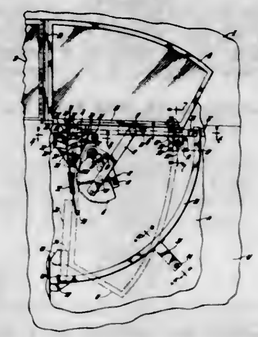
1. In a control apparatus for a parking lot provided with an enclosure having a passageway for vehicles, the combination of a barrier, means for supporting said barrier for movement to and from a position obstructing the passageway, power means for moving said barrier to and from said position, check controlled means, means responsive to the insertion of a check in said check controlled means for actuating said power means, means for retaining said check in said check controlled means and means for rendering the retaining means ineffective when said barrier is moved to obstructing position.

2,746,746
DEVICE FOR OPENING AND CLOSING A COVER PLATE FOR A PULVERIZING APPARATUS
Tomizo Saito, Shinagawa-ku, Tokyo, Japan
Application November 8, 1952, Serial No. 319,461
8 Claims. (Cl. 268—74)



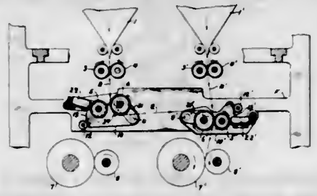
1. In a pulverizing apparatus having a pulp pulverizing drum and a cover for said drum adapted to be positioned substantially horizontally at the top of said drum to close it, a device for opening and closing said cover comprising means mounting the cover on said drum and including a gear mechanism operative to impart thereto a horizontal movement, and means including a second gear mechanism operative simultaneously with said first named gear mechanism to impart to said cover a rotary movement, such that an edge of the cover describes substantially a parabola as the locus of the resultant of both said movements and said cover is positioned alongside an external wall of the drum when fully opened.

2,746,747
WINDOW REGULATOR
Charles S. Lautenbach, Berkley, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 2, 1952, Serial No. 264,528
14 Claims. (Cl. 268—104)



1. A multi-directional window regulator for vehicle bodies having a window opening and a window panel closing said opening, a vertically swingable link pivoted to a body member with the free end thereof disposed under one corner of said window panel, means pivoting said window panel to the free end of said link, a stop limiting the vertical movement of said link, means spaced from said swingable link engaging and supporting said window panel including mechanism for moving and pivoting said window panel to open and close the same, and guide means having a portion on the body and a portion on the window panel for limiting the initial opening and final closing movements of said window panel to downwardly and upwardly movements respectively.

2,746,748
MOVABLE NIPPING ROLLER DELIVERY FOR A PRINTING MACHINE
Charles A. Harless, Riverside, Conn., assignor to R. Hoe & Co., Inc., New York, N. Y., a corporation of New York
Application December 3, 1952, Serial No. 323,844
4 Claims. (Cl. 270—41)



1. In a printing machine folder, means for delivering two sets of traveling ribbons separately to each of a pair of cutting and folding mechanisms and for associating the said sets if ribbons together and delivering the associated ribbons selectively to either of the said mechanisms, the said means comprising for each set of ribbons an upper pair of nipping rollers and a lower pair

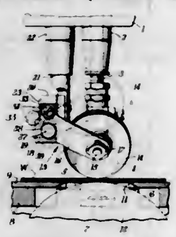
of nipping rollers, and mounting means for each lower pair of nipping rollers, including means for setting the two rollers in a cooperating engaging position and alternatively in a separated position, whereby either set of ribbons may be led through its lower pair of nipping rollers when in cooperating engagement, or around one of said rollers, when separated, and thence to the other pair of lower nipping rollers to associate it with the other set of ribbons, and means for adjusting the position of the middle two of the four lower nipping rollers to register the associated sets of ribbons, the last said means comprising pivotally mounted rigid supporting members and means for fixing the same in a selected adjusted position.

2,746,749
MEANS FOR SCANNING TRAVELING WEBS IN PRINTING MACHINES AND THE LIKE
William F. Huck, Forest Hills, N. Y., assignor to Huck Company, New York, N. Y., a partnership of New York
Application October 16, 1950, Serial No. 190,298
4 Claims. (Cl. 271—2.1)



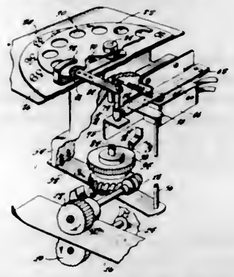
1. In a machine for operating on a traveling web, web-guiding means arranged on the machine and having a foraminated concave surface against which a traveling web is held, a suction chamber connected to and communicating with said web-guiding means, said chamber having a fluid-admittance opening, a valve member connected to the suction chamber, movable with respect thereto in response to variations in tension in said traveling web and constructed and adapted to form a variable closure for said opening, and an element extending from said valve member and engaging the traveling web, whereby the suction in said chamber is increased in response to an increase in tension of said traveling web.

2,746,750
ROLLER PRESSERS FOR SEAMING MACHINES
Hans Hacklander, South Sterling, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application May 23, 1952, Serial No. 289,687
10 Claims. (Cl. 271—2.3)



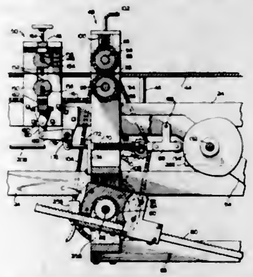
1. A roller-presser mechanism for a seaming machine having a presser-bar, said mechanism comprising a body portion, means for securing said body portion to said presser-bar, an arm rotatably carried by said body portion on a horizontal axis and having limited lateral translation with respect to said body portion, a roller-presser journaled in said arm on an axis parallel to the axis of rotation of said arm, means for adjusting said arm laterally of its axis of rotation, and latch means for locking the arm in operative position against rotation relative to said body portion, said latch means being engaged and disengaged by said lateral translation.

2,746,751
MEANS FOR DISPENSING MEASURED LENGTHS OF TAPE
Theodore Le Baron, Oak Park, Ill., and Earl B. Dodds, Chatham Township, Morris County, N. J.
Application December 19, 1952, Serial No. 326,872
8 Claims. (Cl. 271—2.4)



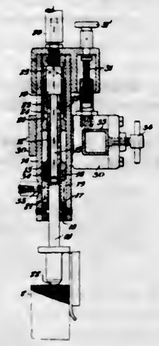
1. In a machine for dispensing measured lengths of strip material, power driven strip feeding means, a presettable length indicator, a follow-up element driven concurrently with the feed means for stopping the feed when the follow-up element has reached the position determined by the setting of the presettable indicator, operative connections from said power driven strip feeding means for driving said follow-up element, starting means for the power driven strip feeding means and follow-up element, two control devices for said starting means actuation of both of which is necessary to start the feed, one of said control devices being actuated by the initial movement of setting the presettable indicator and the second of which is actuated only upon completion of the setting movement of said presettable indicator.

2,746,752
ELECTRICALLY CONTROLLED WEB FEEDING MEANS FOR A BAG MAKING MACHINE
Theodore W. Keller, Council Bluffs, Iowa, and Charles W. Garvin, Omaha, Nebr.; said Garvin assignor to said Keller
Application April 9, 1952, Serial No. 281,338
13 Claims. (Cl. 271—2.6)



1. Apparatus for intermittently advancing a web uniform distances, comprising: a pair of feed rolls; a reciprocating rack; a rack gear driven thereby; a drive from said gear to said rolls; a one-way engaging clutch in said drive; a controllable clutch in said drive on the driven side of said one-way engaging clutch; a normally inoperative brake for said drive on the driven side of said controllable clutch; means coordinated with the movement of said rack for simultaneously disengaging said controllable clutch and applying said brake; and additional means coordinated with the movement of said rack for applying said brake with reduced braking force in advance of the application thereof by said first mentioned coordinated means.

2,746,753
APPARATUS TO MAINTAIN THE TOP OF A PILE OF SHEETS AT A SENSIBLY CONSTANT HEIGHT
Alfred Piersonne Battey, Barwick-in-Elmet, England, assignor to R. Hoe & Co. Inc., New York, N. Y., a corporation of New York
Application September 22, 1951, Serial No. 247,792
3 Claims. (Cl. 271—31)



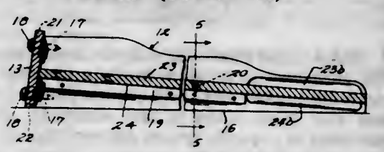
1. In a device for feeding sheets from a pile carried on a support that is raised by means actuated by suction from a vacuum system, and having a pair of sheet lifting members positioned over the rear corners of the pile and energized intermittently from the vacuum system to lift the adjacent corners of the sheets, and in combination, a combined suction operated pile height detector and sheet-bending member positioned centrally between the said sheet lifting members and actuated by the said vacuum system simultaneously with the said sheet lifting members, to press each sheet down while its corners are being lifted by the sheet lifting members, and thereby to bend each sheet transversely to its path of travel, the said pile height detector and sheet-bending member comprising a cylinder, a ram fitted to slide in the cylinder, a rod secured to the ram and having axial and radial passages and a sheet engaging tip, a sleeve having a radial passage and secured within the cylinder and slidably supporting the rod, said radial passages in the rod and the sleeve coacting as a valve to open the vacuum supply and activate the said means for raising the support as required to maintain the top of the pile at a desired elevation, and means to support the said cylinder in such position that the tip of the rod will be moved into engagement with the uppermost sheet of the pile when suction is applied to the cylinder by the vacuum system.

2,746,754
SPRING MOUNTED ROCKING HORSE
Fred W. Martel, Pasco, Wash.
Application March 29, 1954, Serial No. 419,171
1 Claim. (Cl. 272—52)



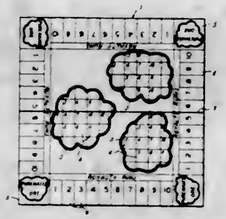
A rocking horse comprising a base having a pair of laterally spaced parallel horizontal rails secured at their ends by cross bars mortised therein, lateral anchor bars secured to the rails at their upper edges spaced from the longitudinal center thereof, upwardly disposed hooks carried by the anchor bars at the transverse center line of said base, angle members bolted to the inner faces of said rails midway their lengths, each with one flange disposed inwardly on a like horizontal plane; a relatively strong convolved compression spring welded to the inturned flanges of the angle members and extending upwardly therefrom, a horizontal fastening plate welded on the upper end of said spring; a wooden simulated horse secured to said plate by lag screws passing through apertures in the plate and threading into the body of the horse disposing said spring substantially vertically below the weight center of said horse, a saddle on the horse and disposed with its seat at the vertical weight center of the horse; and tension springs carried at one end by said hooks and having hooks on their opposed ends for hooking over selected convolutions of said compression spring, whereby the resiliency of said compression spring is variable.

2,746,755
GAME BOARD STRUCTURE
Willie K. Smith, Salinas, Calif.
Application May 13, 1953, Serial No. 354,732
5 Claims. (Cl. 273—118)



4. A game board structure of the character described comprising spaced complementary side walls, an end wall, a floor panel detachably disposed between said side walls for retaining the side walls in spread relation to one another, means attached to the side walls for supporting the floor panel therebetween, and means slidably connecting the end wall to complementary ends of the side walls and providing a limited lost motion of the side walls relative to the end wall upon removal of the floor panel to permit detachment of the end wall from the side walls by displacement of the side walls toward one another, said side walls being loosely connected to the end wall by said connecting means, and said floor panel, when positioned between the side walls, cooperating with the connecting means to secure the side walls immovably relative to the end wall.

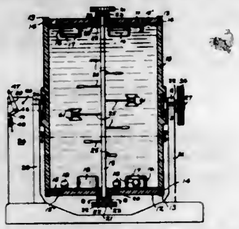
2,746,756
GAME APPARATUS
John R. Sitton, Jr., Houston, Tex.
Application September 22, 1954, Serial No. 457,683
4 Claims. (Cl. 273—134)



1. In a uranium mining game apparatus, a board having depicted thereon a plurality of irregular mining areas divided into eleven claim sections numbered with all the possible sums of indicia of a pair of conventional cubical

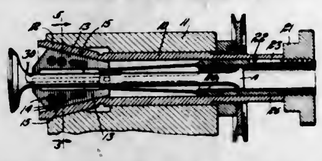
dice employed in playing the game and a plurality of rows of working spaces representing royalty payment periods, the spaces of each of said rows being progressively numbered, a plurality of movable game pieces representing ore, all of said game pieces being identical in appearance but only certain ones thereof being eligible for placement upon said working spaces, said certain ones being capable of passing an electric current therethrough, and current responsive means representing a Geiger counter for identifying said certain ones of said game pieces.

2,746,757
FLUID FILLED GAME PIECE RECEPTACLE
John G. Frost, Seattle, Wash.
Application March 19, 1951, Serial No. 216,417
5 Claims. (Cl. 273—138)



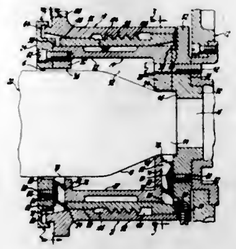
1. Game apparatus comprising a sealed transparent liquid filled receptacle; pivot means supporting said receptacle for angular movement about a substantially horizontal axis; game pieces in said receptacle, said game pieces being of a specific gravity different than the specific gravity of the liquid in the receptacle, whereby they will tend to move vertically through the liquid when the receptacle is inverted substantially at right angles to the axis of the pivot means; cup members carried by two oppositely positioned walls of said receptacle; a rotatable shaft supported by and extending through said receptacle; game piece deflecting arms on said shaft within said receptacle movable by rotation of said shaft into contacting relation with game pieces which are moving through the liquid in the receptacle; and finger piece means on each end of said shaft external to said receptacle, whereby the shaft may be angularly moved manually in skilfully moving the arms and guiding the playing pieces therewith as the playing pieces move toward the cup members.

2,746,758
CHUCKS
Arthur M. Stoner, Madison, and Girard S. Haviland, Wethersfield, Conn., assignors, by mesne assignments, to The Jacobs Manufacturing Company, West Hartford, Conn., a corporation of New Jersey
Application May 7, 1953, Serial No. 353,477
4 Claims. (Cl. 279—53)



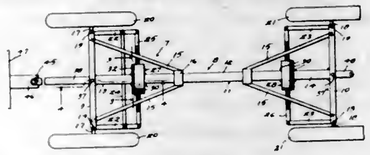
1. A chuck comprising the combination with a hollow shaft having a hollow cone at one end, of a plurality of thin circumferentially spaced tapered jaws within the cone, a body of non-metallic flexible rubber-like material extending between and through the jaws to integrate them, and an operator for drawing the jaws toward the smaller end of the cone consisting of a sleeve member remote from the jaws slidable in the hollow shaft and long, thin widely spaced radially flexible fingers extending from one end of the sliding member and having their outer ends only in engagement with the jaws, all other parts of the operator being free from engagement with the jaws when the operator draws the jaws toward the small end of the cone so that the force for drawing the jaws is transmitted longitudinally through the fingers which yield radially to avoid all sliding friction between the operator and the jaws during this operation, said fingers being manually detachable from the jaws upon radially inward movement of the fingers independently of the jaws, said rubber-like material holding the jaws in spaced axially alined relation when detached from the fingers.

2,746,759
CHUCK
Claude J. Kinsey, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 8, 1953, Serial No. 330,229
12 Claims. (Cl. 279—74)



1. A chuck comprising a member adapted to be rotated about an axis and having a passage extending axially inwardly from one end thereof, axially displaced sets of clamps disposed upon said member, each of said sets including three clamp members projecting radially into said passage, and sleeve means encompassing said member and having bearing surfaces thereon for maintaining them coaxial and including means adapted to vary the amount said clamping members extend into said passage.

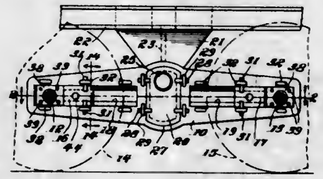
2,746,760
VEHICLE STEERING STRUCTURE
William B. Wolf, Grafton, Wis.
Application March 15, 1954, Serial No. 416,252
2 Claims. (Cl. 280—99)



1. A steering mechanism for a four wheeled type trailer vehicle comprising a trailer vehicle chassis including a front axle, a rear axle and a tubular reach interposed between and secured at its ends to intermediate portions of said axles, wheel spindles swingably connected to the ends of said axles for swinging movement in horizontal planes, ground engaging front and rear wheels journaled on the wheel spindles of the front and rear axles, respectively, arms fixed to and projecting from the pivoted ends of said wheel spindles and at substantially right angles to the axes of the wheel spindles, the arms of said front axle spindles extending rearwardly and the arms of said rear axle spindles extending forwardly relatively to the front and rear axles, respectively, rack bars having ends pivotally connected to the free ends

of said arms, one of said rack bars connecting the front axle arms and the other rack bar connecting the rear axle arms, said rack bars forming tie rods, a shaft journaled in said reach, front and rear pinions connected to said shaft for rotation therewith and supported by the shaft in meshing engagement with the rack bars of the front and rear axle arms, respectively, a draft tongue swingably connected at a point spaced from its ends to the intermediate portion of the front axle for swinging movement in a horizontal plane and having a rear end pivotally connected to the intermediate portion of the front rack bar and a forward end adapted to be connected to a draft vehicle whereby the front and rear wheels of the vehicle chassis will be steered simultaneously by a swinging movement of said tongue and with the rear wheels steerably turned in the opposite direction to the front wheels, said shaft having splined end portions extending through and to beyond remote sides of said pinions whereby reaches of different lengths may be employed for trailer chassis having wheel bases of different lengths, said reach comprising an intermediate section and end sections, pinion housings interposed in said reach between the end sections and intermediate section thereof and forming a part of the reach, said pinions being rotatably disposed in said housing and maintained thereby against movement longitudinally of the reach, one of said housings having a forwardly opening slot for swingably accommodating the rear portion of said tongue and both of said housings having transversely aligned slots for slidably accommodating the rack bars.

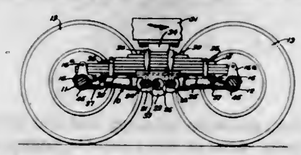
2,746,761
HIGH LOW TRAILER AXLE MOUNTING
John W. Richardson, Houston, Tex.
Application November 18, 1952, Serial No. 321,204
6 Claims. (Cl. 280—104.5)



1. A floating wheel mounting comprising a mounting plate having a vertically disposed opening therein positioned midway of the length thereof and having elongated longitudinally positioned slots in the ends, bars having wheel carrying spindles extended therefrom positioned in the slots of the mounting plate, means securing said bars in the mounting plate, a plate having an opening spaced from one end reversibly mounted in the vertically disposed opening of said mounting plate, and means pivotally mounting said plate with the opening therethrough on a stationary shaft of a vehicle.

2,746,762
AXLE ALIGNMENT GUIDE IN DUAL AXLE UNDERCARRIAGES
Herman J. Scholtze, Berkeley, Calif., assignor to F. A. B. Manufacturing Company, Inc., Emeryville, Calif., a corporation of Nevada
Application April 23, 1954, Serial No. 425,088
7 Claims. (Cl. 280—104.5)

1. A dual axle undercarriage truck for vehicles comprising a frame of running gear including a pair of longitudinally spaced and parallel axles for supporting suitable traction wheels at opposite ends thereof, truss means extending diagonally between said axles for maintaining the relative parallel spacing thereof, a leaf spring assembly at each opposite side of the frame extending between and seated on the axles, a load shaft extending laterally transversely across the frame centrally intermediately between and parallel with the axles and having its opposite end portions connected to the longitudinally central portions of the springs, said truss means being pivotally connected to said shaft, and an axle alignment means including a rigid downwardly disposed buttress flange depending below and adjacent to each end of the spring assemblies and adjacently spaced from the axles, stud bolts having one end adjustably mounted through said flanges, lock nuts on said bolts for locking the bolt relative to the flanges, a bumper plate connected to the opposite end of each of said bolts, and a resilient snubber block between each of said bumper plates and the adjacent ends of the axles, said snubber blocks being connected to the axle housings.



2,746,763
VEHICLE FRAME
Friedrich K. H. Nallinger, Stuttgart, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Untertürkheim, Germany
Application June 6, 1950, Serial No. 166,358
Claims priority, application Germany January 5, 1949
8 Claims. (Cl. 280—106)

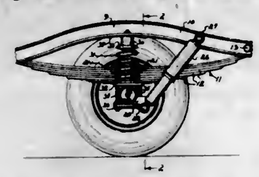


1. A frame for motor vehicles having a seat therein and a foot space in front thereof, comprising a floor, a cross-member extending below the seat and having a hollow cross-section of such height that it extends essentially from the lower surface lying next to the floor of the vehicle close to the surface supporting the seat, a pair of opposed laterally spaced side-members each on one side of the vehicle connected with said cross-member and each having a longitudinal portion whose cross-section is substantially less than that of the cross-member and the lower edge of which is approximately at the level of the lower edge of the cross-member, while the upper edge of the cross-member extends substantially above the upper edge of the longitudinal portion of the side-members, said side-members having enlarged portions directed upwardly to the seat at the places of the connection with the cross-member, the latter coming up against said enlarged portions and being rigidly connected therewith, said side-members extending with a low section through the region of the foot space in front of said seat.

2,746,764
OVERLOAD COIL SPRING
Raymond C. Davis, Halma, Minn., assignor of one-half to Lee H. Folland, Halma, Minn.
Application July 2, 1953, Serial No. 365,727
3 Claims. (Cl. 280—124)

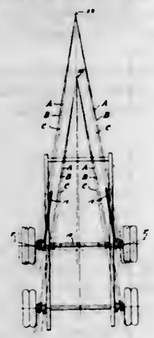
1. In a vehicle the combination with a tubular rear wheel housing, a vehicle frame, a pair of spaced conventional springs and a conventional shock absorber spaced adjacent and inwardly from each of said conventional springs, of an overload coil spring overlying said axle at a position intermediate each conventional spring and each adjacent shock absorber, said overload coil spring being positioned vertically and having its upper

end normally terminating in spaced relation with an undersurface of said frame, an upper plate rigidly attached to the lower end of the coil spring and a lower plate underlying said coil spring and said upper plate



and means for removably securing said coil spring, upper plate and lower plate in non-rotatable engagement with the tubular axle housing and a portion of the shock absorber.

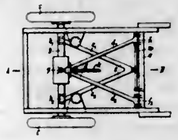
2,746,765
SUSPENSION SYSTEMS FOR MOTOR ROAD VEHICLES
Charles W. McCutchen, Cambridge, England
Application December 8, 1954, Serial No. 473,923
Claims priority, application Great Britain January 14, 1954
2 Claims. (Cl. 280—124)



1. In a tandem axle vehicle spring suspension, which comprises a frame, two axles each having wheels journaled thereon, a suspension bracket adjacent the end of each axle having its axis of vehicle support angularly disposed to the axis of the vehicle, a frame bracket, a shackle pivoted to the axle suspension bracket, a crank pivoted to said shackle having its arm pivoted to the frame bracket and a torque rod rigidly affixed to the crank, that improvement which consists in projecting the pivot axes of each bracket, crank, and torque rod of each separate axle toward a common point of convergence located forwardly on the axis of said vehicle and remote from the axle, the distance between the point of convergence of the pivot axes of the first axle and the point of convergence of the pivot axes of the second axle being spaced on said vehicular axis at a distance which corresponds to the spacing between the tandem axles of said vehicle.

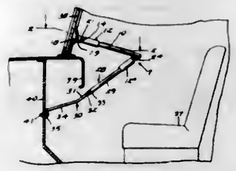
2,746,766
SUSPENSION OF A RIGID AXLE, PARTICULARLY FOR MOTOR VEHICLES
Friedrich K. H. Nallinger, Stuttgart, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Untertürkheim, Germany
Application June 28, 1951, Serial No. 234,053
8 Claims. (Cl. 280—124)

1. In a vehicle, the combination comprising an axle, a pair of wheels mounted thereon, a vehicle body supported by said axle, a single pair of links mounted one above the other for guiding said axle up and down relatively to said body, a hinge securing one of said links to said axle for rocking motion about the hinge axis only, the latter extending parallel to said axle, means connecting the same link to said vehicle body for swinging motion about both a transverse axis and a longitudinal axis of said vehicle, a joint for connecting the other one of said links to said axle for a relative rocking motion about a longitudinal



axis and about a transverse axis of said vehicle, and means for hinging said last mentioned link to said vehicle body for rocking motion about a transverse axis of said vehicle, said joint and said hinge axis being spaced from one another and located in a plane extending at an angle to either one of said links, said means and said joint being disposed in the vertical central plane of the vehicle.

2,746,767
FRONT SEAT CRASH BAR
Trevenor Leon Evans, Marietta, Okla.
Application April 9, 1954, Serial No. 422,103
7 Claims. (Cl. 280—150)

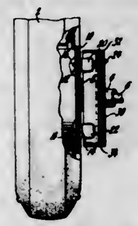


1. A vehicle passenger protector of the character described comprising a substantially rigid U-shaped member including an intermediate guard portion and arms extending in substantially the same direction from the ends of said guard portion, a pair of suction cups adapted to be detachably secured to horizontally spaced portions of the inner side of a windshield, means forming a limited universal connection between said suction cups and the free ends of said arms, said U-shaped member extending rearwardly with respect to the windshield from said suction cups, said arms being of a length to position said guard portion substantially above the forward part of the front vehicle seat, a brace having one end connected to said guard portion substantially midway between said arms and extending from the guard portion at an angle to the arms, and means adapted to secure the opposite end of said brace to the vehicle fire wall, said brace being adapted to extend below the bottom edge of the instrument panel and cooperating with the suction cups in supporting said U-shaped member.

2,746,768
WHEEL HOP DAMPER ATTACHMENT FOR VEHICLE ROAD WHEELS
Phillip C. Bowser, St. Clair Shores, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 4, 1954, Serial No. 466,763
6 Claims. (Cl. 280—150)

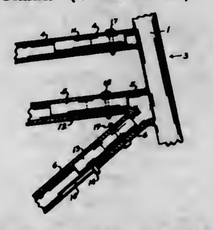
1. In a motor vehicle having a road wheel mounted on a non-rotatable wheel spindle, a vibration damper comprising a drum-like hollow container, a bracket secured on one side of said container in alignment with the axis thereof, means for attaching said bracket to

said spindle to secure said container in nesting relation with a side face of said wheel, and high density,



granular means confined in said container and coacting with the walls thereof to resist wheel hop.

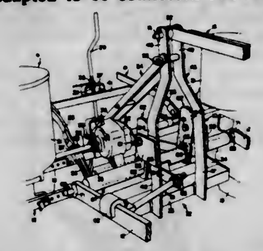
2,746,769
KNOCKDOWN BICYCLE FRAME
Harold W. Hoogendoorn, Ponca City, Okla.
Substituted for abandoned application Serial No. 273,174, February 25, 1952. This application July 20, 1953, Serial No. 369,076
1 Claim. (Cl. 280—287)



A knockdown bicycle frame comprising a tubular steering post head, a pair of substantially horizontal elongated tubular bars rigidly secured to said steering post head and extending rearwardly therefrom, an elongated tubular truss member rigidly secured to said head and extending rearwardly and downwardly therefrom, said tubular bars and said tubular truss members each being formed in two parts forming front and rear sections, said front sections being substantially shorter than said rear sections and terminating relatively close to said steering post head, dowel pins rigidly disposed axially in the rear sections of said tubular bars and being slidably received in said front sections of said tubular bars, said dowel pins and said front sections of said tubular bars having aligned apertures therethrough, anchor pins disposed in said aligned apertures in said dowel pins and said front sections, the rear section of said tubular truss member having a slot therein, a bolt slidably disposed in said truss member and having a projection attached thereto extending through said slot for manually sliding said bolt, the front section of said tubular truss member having an aperture therethrough, said bolt having an aperture therethrough, and a pin extending through the apertures in said tubular truss member and said bolt.

2,746,770
LATERALLY FLEXIBLE DRAFT MECHANISM
Knud B. Sorensen, Rock Island, and John O. Bruet, Moline, Ill., assignors to Deere & Company, Moline, Ill., a corporation of Illinois
Application November 3, 1952, Serial No. 318,464
12 Claims. (Cl. 280—446)

10. A hitch device for connecting an implement having a frame to a tractor of the type including a pair of laterally spaced apart draft elements, said hitch device comprising a generally vertically disposed member having laterally spaced apart sections, a pair of parts, means connecting said parts, respectively, with said sections for generally fore-and-aft directed movement relative to said sections, and a crossbar connected with said laterally spaced apart parts and adapted to be connected at its ends with said



draft elements, said parts including vertically slotted portions receiving said crossbar, whereby the latter may move in a generally vertical direction relative to either or both of said parts.

2,746,771
AUTOMOBILE TOW BAR
Arthur R. Gross, St. Paul, Minn., assignor, by mesne assignments, to Automatic Tow Bar Company, Inc., Minneapolis, Minn., a corporation of Minnesota
Original application January 11, 1951, Serial No. 205,574, now Patent No. 2,672,353, dated March 16, 1954. Divided and this application May 27, 1953, Serial No. 357,791
2 Claims. (Cl. 280—494)

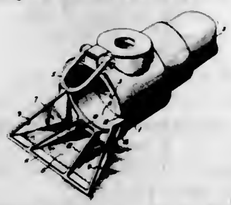


1. A coupling for a tow-bar or the like, said coupling comprising a yoke having a substantially flat web provided with a centrally disposed circular opening therein, and wings extending outwardly from the ends of the web, a bar section having a reduced cylindrical end portion extending through the opening in the web and into the space between the wings to provide a pivot for the web with respect to the bar section, means secured to the extending end of the bar section to retain said end in the opening in the web and to transmit an axial pull from the yoke to the bar section, a second bar section fitting between the wings of the yoke, a pin extending through the wings of the yoke and the second bar section and providing a transverse pivot connection between the yoke and second bar section, a second yoke having a substantially flat web provided with wings extending outwardly from the ends of the web and embracing the second bar section, and a pin extending through the wings of the yoke and the second bar section and providing a transverse pivot connection between the second yoke and second bar section disposed substantially 90° from the first pin in a plane parallel thereto.

2,746,772
PIPE GUIDING RIBBED APRON FOR IRRIGATION PIPE
Austin T. Race, Jr., and Norman C. Heck, Winter Haven, Fla., assignors to Race & Race, Inc., Winter Haven, Fla., a corporation of Florida
Application October 2, 1953, Serial No. 383,722
2 Claims. (Cl. 285—1)

1. A pipe-guiding and pipe-clearing apron for irrigation pipe couplers having an open mouth to receive an end of a pipe section to be coupled thereto comprising, a transversely flat bottom having a coupler end adapted

to be mounted adjacent the coupler spaced below the coupler mouth and an outer end spaced from the coupler mouth, said bottom being formed at an obtuse angle to the coupler mouth, the side edges of said bottom flaring from the coupler end outwardly, side walls rising from the side edges of said bottom, having their top edges flush with said bottom at the outer end thereof and increasing in height from said bottom to the coupler end, the inner side of said side walls having a portion substantially flush with said open mouth, and ribs extending the full



length of said bottom, rising vertically from said bottom and having their top edges flush with said bottom at the outer end thereof and progressively increasing in height from said bottom to the coupler end to be substantially flush with said coupler mouth, said ribs being spaced from one another and from said side walls and diverging toward the outer end of said coupler with respect to each other and with respect to said side walls, said ribs and said inner sides of said side walls serving to guide a pipe end into said open mouth.

2,746,773

SAFETY FITTING FOR FLUID HANDLING STRUCTURE

Peter J. Bily, Brea, Calif., assignor to Chiksan Company, Brea, Calif., a corporation of California

Application October 6, 1951, Serial No. 250,085
1 Claim. (Cl. 285—1)



A safety fitting for connecting a length of pipe to a swivel joint and for retaining adjacent the swivel joint a safety cable extending past the juncture of said pipe and joint, comprising a tubular nipple, externally threaded means at one end of the nipple for securing the same to one end of the swivel joint, a shoulder integral with said nipple and projecting radially outward therefrom in axially spaced relation to the threaded end of the nipple, the other end of the nipple being disposed in axial abutting relation to an end of the length of pipe, welding material integrally uniting said nipple and length of pipe and projecting radially outward from the exterior surface of the nipple and forming a permanent circumferential abutment on said other end of the nipple, a safety cable retaining collar loosely encircling said nipple between said shoulder and abutment, the internal circumference of said collar being substantially less than the external circumference of said shoulder and abutment whereby on separation of said nipple from said swivel joint, said collar will be retained upon said nipple between said shoulder and said abutment.

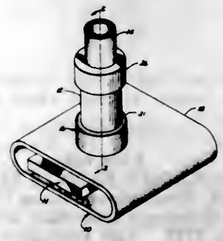
2,746,774

PLASTIC IRRIGATION TUBING OUTLET

Hans L. Nielsen, Bakersfield, Calif.

Application December 30, 1953, Serial No. 401,203
3 Claims. (Cl. 285—38)

1. Irrigation apparatus comprising an elongated tubular conduit formed of a flexible thermoplastic material and having at least one opening extending transversely through the side wall thereof, said opening having a diameter substantially less than the internal diameter of said conduit, and an elongated tubular outlet member formed of a flexible thermoplastic material, said tubular outlet member having an inside diameter greater than the diameter of said opening, said outlet member having a reversed end to form a flange disposed in spaced concentric relation with respect to the adjacent confronting portion of said outlet member, said outlet member and said



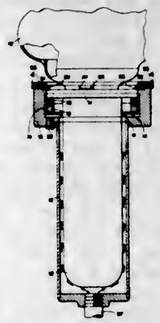
flange each having finite axial lengths with the finite length of said outlet member being greater than that of said flange, said reversed end of said outlet member being disposed in concentric relation with respect to said opening and fused to said conduit to integrally unite said outlet member and said flange with said conduit, and the wall thickness of the fused outlet member and conduit at their point of juncture being no greater than the sum of the individual thicknesses of the outlet member and said conduit.

2,746,775

MOUNTING FOR ARTICLES

George H. Leonard, Noroton Heights, Conn., assignor to Machlett Laboratories, Incorporated, Springdale, Conn., a corporation of Connecticut

Application October 2, 1951, Serial No. 249,376
2 Claims. (Cl. 285—165)



1. A mounting for an article having an outwardly projecting circumferential collar spaced inwardly from one end of the article, which comprises an annular body having an inner diameter larger than the outer diameter of the collar, flange means extending inwardly from the wall of the body in the opening through the body, a rigid ring within the body having a face remote from the flange which provides a positioning seat and having an inner diameter greater than the outer diameter of said end of the article and less than that of the collar, spring means separating the rigid ring and the flange, a circumferential seat formed by a portion of the wall of the opening between the positioning seat and the outer end of the body, a resilient packing ring of toroidal form lying against the positioning seat between of the collar and the seat, the ring having an internal diameter greater than the outer diameter of said end of the article and less than that of

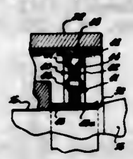
the collar, means defining a passage between the two seats, and means at the outer end of the body movable to overlie the collar for preventing removal of the article from the body.

2,746,776

SEALING DEVICE FOR RELATIVELY ROTATABLE PARTS

Joseph F. Brunner, Jr., San Marino, Calif., assignor to Kay-Brunner Steel Products, Inc., a corporation of Delaware

Application May 31, 1952, Serial No. 290,945
2 Claims. (Cl. 286—5)



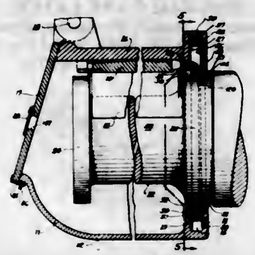
2. A lubricant sealing device for use on an axle having a cylindrical portion and an annular cam at one end of the cylindrical portion, including: a body constructed of sheet metal and comprising two identical annuli, each having a flat annular portion, an outer peripheral portion offset laterally with relation to said flat portion and then extended in a plane paralleling said flat portion, and an annular collar on the inner periphery of said flat portion; means securing said annuli to each other so that said flat portions are in abutting relationship; said outer peripheral portions being opposed to form an annular groove therebetween, said collars extending outwardly in opposite directions and coaxially positioned so that when the device is pressed axially onto the cylindrical axle portion in the direction of the annular cam, the leading collar will be jammed by the cam into locking and fluid-tight engagement with the axle; and a split ring in the groove.

2,746,777

GUARD AND OIL-RETAINING MEANS FOR RAILROAD JOURNAL BOX

Waldemar H. Korn, Davenport, Iowa, assignor to Kornlube Products, Davenport, Iowa, a copartnership

Application May 2, 1951, Serial No. 224,181
8 Claims. (Cl. 286—6)



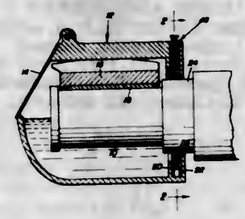
2. In a box for a journal bearing having a dust guard well of a width defined by end walls spaced from each other axially of the journal with journal-receiving apertures therethrough; guard and oil-retaining means for preventing entrance of foreign material into, and leakage of oil from, the box through said apertures, comprising a resilient ring narrower in width than said dust guard well and mounted on the journal for rotation therewith in said dust guard well, said resilient ring having an inner diameter somewhat smaller than that of said journal and the central portion of said ring being substantially reduced in cross section on one side only, whereby said ring assumes a concave shape directed toward one of said end walls to maintain a peripheral portion of said side thereof in sealing engagement with that end wall outwardly of its said aperture, and axial movement of the journal toward that end wall of sufficient magnitude will effect reversal of concavity of said ring to cause it to similarly engage the other one of said end walls.

2,746,778

JOURNAL BOX GREASE SEAL

Fred F. Huribert and Charles H. Gillispie, Cedar City, Utah, assignors of twenty per cent to Harold F. Huribert, Couperville, Wash., twenty per cent to Edward M. Huribert, Rock River, Wyo., and twenty per cent to Grace Huribert Lezer, Ogden, Utah

Application April 17, 1953, Serial No. 349,372
2 Claims. (Cl. 286—6)



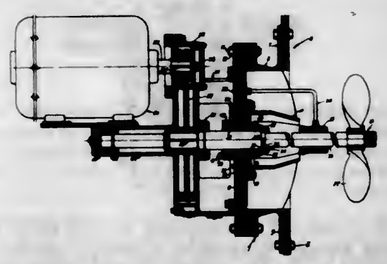
1. A grease seal assembly for journal boxes containing a lubricant including an annular seal ring of pliable sealing material concentrically disposed on the outer periphery of the journal shaft disposed in the journal box, said seal ring including means for urging said seal ring into engagement with said journal shaft, said journal box including a pair of parallel inwardly directed annular flanges concentric relative to said journal shaft, the outer periphery of said seal ring being retained between said flanges, means engaging the outer periphery of said seal ring within said flanges for urging said seal ring into engagement with oppositely disposed faces of said flanges and the journal shaft, and adjusting means operatively connected to said last-mentioned means and extending out of said journal box for applying pressure on said seal ring, said seal ring including a pair of annular radial flanges engageable with the oppositely disposed faces of the flanges on said journal box, said means engaging the outer periphery of said ring comprising an elongated strap having overlapped ends, said strap being concentrically disposed on said seal ring within the radial flanges thereon, said adjusting means being engaged with said overlapped ends for applying tension thereto and pressure to said seal ring.

2,746,779

SEAL STRUCTURE

Val S. Lobanoff, Berkeley, Calif., assignor to United Centrifugal Pumps, a corporation of California

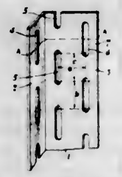
Application March 12, 1953, Serial No. 341,874
2 Claims. (Cl. 286—11.13)



1. A structure for sealing a shaft extending through a wall, the structure comprising a tubular housing having an annular passage therein, a shaft extending through said housing and supported for rotation in said passage, a

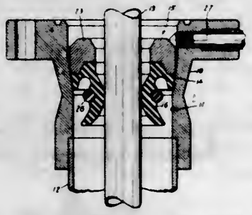
first ring fixed in position on the shaft and rotatable in the passage, a second ring mounted in the housing at one end of the passage cooperatively adjacent the first ring, said rings each having a face thereon adapted to engage a cooperating face on the other ring to provide a positive seal about the shaft, a threaded member extending through the tubular housing and bearing against said wall whereby turning said threaded member moves the housing to move the second ring into and out of engagement with the first ring, and sealing means between the shaft and the housing and insertable and withdrawable from between the shaft and the housing at the other end of the housing.

2,746,780
RIGID ANGLE JOINT
Demetrius Comino, London, England, assignor to Dexion Limited, London, England
Application November 27, 1951, Serial No. 258,361
Claims priority, application Great Britain June 28, 1946
22 Claims. (Cl. 287—54)



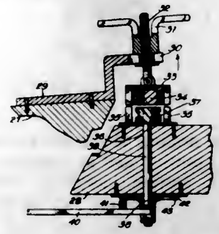
1. A constructional-element joint comprising two constructional elements, each of which includes, in cross section, two legs at right angles to each other and each of which is provided, in one of the said legs, with two laterally spaced, longitudinally extending, series of identical longitudinally elongated holes, the distance from the outer edges of the holes of the outer of said two series of holes to the inner edges of the holes of the inner of said two series being substantially equal to the overall length of the holes while the distance between the adjacent ends of consecutive holes of each series is substantially equal to the overall length of the holes less twice their width, a plurality of connecting members having shafts extending through holes of the two series in legs of respective elements for connecting said construction elements together, the aforesaid relative positions and dimensions of said holes enabling the connection of said members to be made with their axes arranged at any desired angle.

2,746,781
WIPING AND SEALING DEVICES FOR WELL PIPES
Marvin R. Jones, Houston, Tex., assignor to Petroleum Mechanical Development Corporation, Houston, Tex., a corporation of Texas
Application January 26, 1952, Serial No. 268,376
12 Claims. (Cl. 288—2)



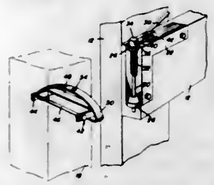
1. In wiping and sealing devices for well pipes, a pipe-engaging element, comprising, a generally annular body constructed of flexible resilient material having an axial bore therethrough, said bore having an initial pre-formed diameter somewhat greater than that of a pipe to be extended therethrough, and an annular flexible resilient member circumferentially mounted about the exterior of said body and adapted to resiliently constrict said body circumferentially into compressive engagement with said pipe.

2,746,782
RELEASABLE DOOR FASTENING
Jacobus J. Schamotta, Parktown North, Johannesburg, Union of South Africa, assignor to Imperial Cold Storage and Supply Company Limited, Cape Town, Union of South Africa, a corporation of the Union of South Africa
Application March 2, 1953, Serial No. 339,719
Claims priority, application Union of South Africa March 1, 1952
4 Claims. (Cl. 292—92)



1. A releasable door fastening of the emergency exit type comprising a latch formation adapted to be installed on a door, a keeper formation adapted to be installed on a door post, the latch formation and the keeper formation being arranged to interengage to secure the door on the outside of the door when the keeper formation is held down on the door post, a threaded bush on the keeper formation, a complementarily threaded head, a shaft carrying the threaded head and adapted to pass through the door post and means to turn the shaft on the inside of the door post, the threading being arranged that on turning of the shaft the keeper formation is forced from the door post and out of engagement with the head, and the latch and keeper being adapted so to interengage that during displacement of the keeper the latch is displaced to move the door outwardly from the door post.

2,746,783
NON-SAG GATE LATCH
James C. Rader, Piedmont, Kans.
Application April 26, 1954, Serial No. 425,619
1 Claim. (Cl. 292—173)



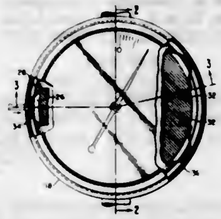
A gate latch comprising an angle bracket of right angled cross section to fit over a corner of a gate and against one side of a gate and to provide vertical and horizontal portions, a pair of vertically spaced rings on the vertical portion, a latch bolt slidable upwardly and downwardly in said rings into and out of latching relation to a keeper, a coil spring on said bolt fixed at one end thereto and bearing against the upper ring to urge said bolt downwardly, a transversely apertured lug upstanding from said horizontal portion, a transversely apertured head on said bolt above and seating on said upper ring to limit downward sliding of said bolt, and a handle for sliding said bolt upwardly comprising an intermediate bent portion extending through the aperture in the lug to pivot the handle on the lug and a right angled terminal portion extending through the aperture in said head to pivotally connect the handle to said bolt.

2,746,784
LATCH
Edward W. Holritz, Mount Vernon, N. Y.
Application October 30, 1953, Serial No. 389,200
3 Claims. (Cl. 292—175)



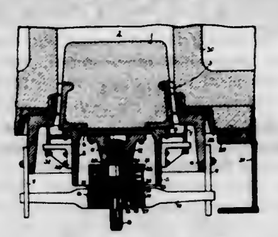
1. A latch assembly comprising, in combination, an integral dish shaped mounting member having a base, formed with a relatively short slot, a peripheral wall perpendicular to said base and a peripheral mounting flange extending from the outer edge of said wall substantially parallel to said base; an elongated latch bar slidably engaging the outer surface of said base and aligned with the slot therein; guiding means for said bar secured to the outer surface of said base; spring means mounted on the outer surface of said base and biasing said bar to the extended, latching position; a bracket secured to said bar and extending along such slot in guiding relation therewith, and having a portion extending perpendicularly to said base; and a handle secured to the outer end of said bracket portion and lying within said mounting member, said handle comprising an angular member extending across said mounting member with one leg substantially parallel to said base secured to said bracket and forming a grip portion spaced from said base and the other leg extending substantially perpendicular to and engageable with said base to guide the handle relative thereto; said bracket, in cooperation with the slot, limiting projection of said bar.

2,746,785
BEZEL HOLDING RING
Alfred H. Emery, Athol, Mass., assignor to The L. S. Starrett Company, Athol, Mass., a corporation of Massachusetts
Application October 29, 1953, Serial No. 389,135
3 Claims. (Cl. 292—256.6)



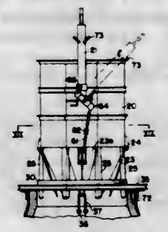
1. An instrument including an annular housing having a substantially annular and radially outwardly facing groove therein, an annular bezel ring on and coaxial with the housing and having an inwardly facing annular groove therein opposed to the first named groove, a substantially annular and resilient wire locking ring disposed within the first named groove, means for securing the locking ring against annular movement on the housing, and substantially diametrically opposed and outwardly directed locking portions carried by the locking ring and extending into the second named groove, the bezel ring having a hole therethrough to the second named groove through which an instrument can be engaged with and force one of said locking portions of the ring inwardly to a position freeing the bezel ring therefrom.

2,746,786
COKE OVEN DOOR LATCH
Paul Van Ackeren and Franz Doll, Essen, Germany, assignors, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware
Application November 29, 1951, Serial No. 258,792
7 Claims. (Cl. 292—259)



1. A door locking device for doors of coking chambers of horizontal coke ovens comprising an axially movable latch bolt member, a latch bar hub mounted on said bolt member, and a lock spring cooperating with said hub whereby the door is kept close to the door frame of the oven chamber by pressure of said spring between the door and said hub in locking position of the door and hub, characterized by a reversible latch bar hub that is reversibly mountable on said axially movable latch bolt member, an abutment member on the axially movable latch bolt member and a cooperating abutment on the latch bar hub which coact, in one position of the latch bar hub, to transmit force to the spring to compress the same to release the latch bar hub to unlocking position relative to the door, upon axial movement of the axially movable latch bolt member in one direction, and which coact in the reversed position of the latch bar hub on the axially movable latch bolt member to transmit force of the latter to the latch bar hub to lock the same with omission of the lock action of the lock spring, upon axial movement of the axially movable latch bolt member in the opposite direction to the direction it moves to compress said lock spring.

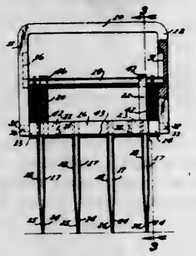
2,746,787
SCRAP CHARGING BUCKET
George I. Bottcher, Tarentum, Pa., assignor to Allegheny Ludlum Steel Corporation, Brackenridge, Pa., a corporation of Pennsylvania
Application November 9, 1951, Serial No. 255,663
12 Claims. (Cl. 294—71)



8. A mechanism for locking and releasing multiple leaves which form the bottom of a bucket for discharging scrap downwardly through a furnace opening and which bucket has a locking chain for surrounding the lower ends of the leaves when they are in a closed position, and wherein a lifting bail is pivotally connected to trunnions projecting from opposite sides of the bucket for movement between down and upright positions, which mechanism comprises a pivoted lever carried by one bottom leaf of the bucket, said pivoted lever having at one end thereof at least one pin-like element adapted to releasably hold the chain in position around the leaves when the leaves are in their closed position, said pivoted lever having a

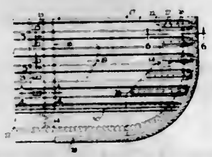
handle portion at its opposite end for manual movement to a chain locking position, a stop means mounted on said bottom leaf and cooperating with said pivoted lever for locking said lever in its chain-locking position, and means operated by the lifting bail when the bail is moved from its down position to its upright position for moving said stop means from a lever locking position to a lever releasing position.

2,746,788
NAIL CLAM
Roy R. Bixler, Westminster, Md.
Application September 1, 1953, Serial No. 377,848
3 Claims. (Cl. 294—117)



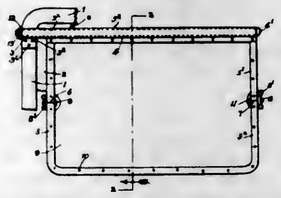
1. A nail gripping tool comprising as inverted U-shaped frame forming a handle having vertically disposed arms at the ends with cross bars at the lower ends of the arms, bars pivotally mounted in the ends of the cross bars and positioned between the arms of the handle, spaced prongs carried by the bars and extended downwardly therefrom, a rod slidably mounted in the arms of the handle, means for actuating the bars carrying the prongs by the rod slidably mounted in the handle, resilient means for actuating the rod slidably mounted in the handle for turning the bars pivotally mounted in the cross bars to actuate the prongs to release objects held thereby, and a plate secured to the undersurface of the crossbars intermediate of said prongs.

2,746,789
CORRUGATED SHEATHING SPOT-WELDED TO FRAME MEMBERS, ESPECIALLY FOR VEHICLE BODIES
Edmund T. Ridgway, Oaklyn, N. J., assignor to The Budd Company, Philadelphia, Pa., a corporation of Pennsylvania
Continuation of abandoned application Serial No. 83,214, March 24, 1949. This application March 23, 1953, Serial No. 344,097
2 Claims. (Cl. 296—29)



1. In a wall structure, especially of a vehicle body: a sheathing of thin gauge corrugated sheet metal, the corrugations having flat imperforate bottom walls adjoined along their margins by side walls; sheet metal frame members of a gauge substantially heavier than said sheathing; said members extending transversely to the corrugations and having a web overlapped by the bottom walls of the sheathing; plane sheet metal pads of a substantially constant gauge, such gauge being greater than the gauge of said sheathing, said pads having parallel opposite margins and a width between said margins slightly less than but close to the width of said bottom walls between the side walls of the corrugations; said pads being arranged on said imperforate bottom walls at their intersections with said frame members and having their said parallel margins arranged along and close to the margins of said bottom walls; said pads, bottom walls and webs being interconnected by single spot welds arranged in the mid-region between said side margins of the pads and having a diameter extending across a minor part only of the width of said pads.

2,746,790
COLLAPSIBLE ANTI-GLARE DEVICE FOR MOUNTING ON A WINDSHIELD
Charles F. Fleming, Regina, Saskatchewan, Canada
Application April 22, 1953, Serial No. 350,396
2 Claims. (Cl. 296—97)



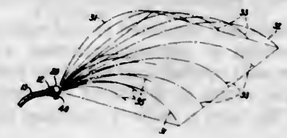
1. The combination with the frame of a vehicle windshield, of a bearing bracket secured to one of the upper corners of the frame, a horizontally disposed rod passing across the upper part of the windshield and carried by the bracket, a tube rotatably mounted on the rod, an upper frame section including an upper cross bar underlying and secured to the tube and pendant opposing end bars secured to the upper bar, a lower frame section including a lower cross bar and upstanding end bars, all of said bars being formed to provide similar channels at the inner sides of the sections, means hingedly and adjustably connecting the end bars of the sections together and a single sheet of flexible visor forming material having its several edges received and secured within the channels, said sheet being cut away at the hinges to give clearance.

2,746,791
SHIELD DEVICE FOR AN AUTOMOBILE CONVERTIBLE TOP
Norman R. Gosselin, Claremont, N. H.
Application June 2, 1953, Serial No. 359,068
15 Claims. (Cl. 296—107)



12. A shield device for an automobile top comprising a shield embodying a front member having upper and lower flanges, and a rear member, means connecting said front and rear members, a plurality of angle supporting members spaced apart mounted on said front member one angular portion of each being attached to a shield lower flange and another angular portion being spaced inwardly from an outer edge of said front member and extending to a point intermediate said upper and lower flanges, a clamping device to hold said shield to an automobile top frame embodying a clamp element fixedly attached to said supporting member other angular portion and a complementary clamp element movably attached to the first-mentioned clamp element, said clamp elements having portions spaced apart to receive an automobile top frame in the space, said other clamp element having a screw-threaded hole therein, a screw-threaded, tightening member in screw-threaded connection in said hole and adapted to hold said frame between said clamp elements and a retaining device, to hold an auto top in the space between said supporting members, embodying a spring clip embodying anchoring means attached to said supporting member and embodying ears each having a hole therein, and embodying a bearing portion normally spaced from said shield front member, said retaining device embodying an actuator member having two journal portions movably extending into said ear holes and a bearing portion normally adjacent and adapted to bear against said spring clip bearing portion upon actuation to move the latter nearer said shield front member to hold an auto top between the latter and said spring clip bearing portion.

2,746,792
PATTERN SPRAYING LAWN SPRINKLER
Homer H. Hough, Royal Oak, Mich.
Application November 3, 1951, Serial No. 254,773
3 Claims. (Cl. 299—18)



1. A portable lawn sprinkler comprising a closed hollow body adapted to be connected to the end of a hose and to be retained in position on the ground, a plurality of spraying orifices provided on said body to produce a corresponding plurality of spary streams at different angles to the horizontal place and consequently of different respective lengths, the arrangement of the extreme side openings being such that they produce streams forming approximately 90 degree angles to each other and determining the two sides of a rectangular area, with at least one middle opening directing its stream to form a diagonal of the area determined by said two side streams, with the rest of the openings being arranged to produce streams to cover the rest of the area determined by said side and said diagonal streams, with said body having a hollow hemispherical front disposed vertically in the operative position of the sprinkler, with the spray orifices being provided solely in the curved surface of said front.

2,746,793
LAWN SPRINKLER
Ernest V. Wyatt, Jr., Hartford, Conn.
Application November 23, 1954, Serial No. 470,643
5 Claims. (Cl. 299—18)



1. A lawn sprinkler adapted for spraying a horizontal area generally in the form of a parallelogram comprising in combination, a supporting base having the lower end of an elongated standard fixed thereto and extending vertically therefrom, an elongated body and first pivotal connections between the lower end thereof and the upper end of the standard, a nozzle and second pivotal connection between the lower end thereof and the upper end of the body, said standard and body and nozzle and pivotal connections being hollow to provide an elongated continuous passageway from the lower end of the standard to and through the nozzle, the axis of said pivotal connections being horizontally disposed and right angularly related for relative oscillation of said body and nozzle in vertical planes at right angles to one another, lower body and upper nozzle water wheel members for oscillating said body and nozzle pivoted for rotation on said standard and body respectively, said standard and body being provided with jet orifices from said passageway for directing water jets to said water wheels, and separate adjustable connections between said body water wheel member and body and between said nozzle water wheel member and nozzle thereby through rotation of said water wheels to oscillate said body and nozzle through predetermined angles.

2,746,794
AGRICULTURAL SPRAYING MACHINE
Richard H. Fish, Morgan Hill, Calif., assignor of one-half to Evalyn Preston, Morgan Hill, Calif.
Application May 3, 1954, Serial No. 426,991
12 Claims. (Cl. 299—45)

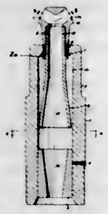


1. As a structural element of an agricultural spraying mechanism including a vehicle, a liquid supply tank mounted on the vehicle, a fan housing mounted on the vehicle in spaced relation to the tank, a fan impeller mounted in the fan housing, a spray manifold mounted to direct spray particles into an air blast from the fan housing, and a power driven drive element; a combined liquid pressure chamber and mounting unit comprising a pressure chamber of generally equilateral triangular shape, the sides of said triangular chamber being concave, said chamber being constructed for mounting with a predetermined apex thereof directed upwardly, valve controlled pipe means connecting each of the upper and lower portions of said chamber to the tank, valve controlled pipe means connected to a lower apex of said chamber for communication with a spray manifold, a support element mounted on the upper end of said chamber and extending oppositely to the pipe connecting the upper end of the chamber to the tank for supporting connection to the fan housing, and a drive shaft journaled substantially centrally of said chamber and in driven relation with said drive element, the fan impeller being mounted on a projecting portion of said shaft for rotation therewith.

2,746,795
DIFFUSING APPARATUS
Orville Kofoid, Corvallis, Oreg., assignor, by mesne assignments, of fifty per cent to R. B. Manufacturing Corp., Portland, Oreg., a corporation of Oregon
Application April 16, 1953, Serial No. 349,249
2 Claims. (Cl. 299—69)

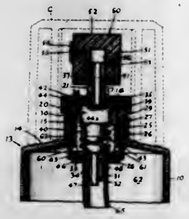
1. A diffusing apparatus adapted to be operated by the turbulence of liquids passing therethrough, comprising a stationary housing, a tube having an inwardly tapering frusto-conical aperture defined therein inserted in said housing, a rotor consisting of a cylindrical portion

and a coniform portion having a taper in coordinate exactitude with the taper of said frustoconical tube, said rotor being suspended by said housing, an annular collar integral with the rotor, a head defining slightly



staggered jets attached to the rotor without said housing for the purpose of expelling liquids and causing direction of rotation as turbulence created by the flow of liquids from the tube through the rotor causes rotation of the rotor.

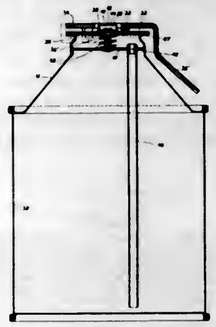
2,746,796
METERING VALVE AEROSOL BOTTLE
Wilfrid Harry St. Germain, Aurora, Ill., assignor to The Pharma-Craft Corporation, New York, N. Y., a corporation of Delaware
Application August 5, 1953, Serial No. 372,575
5 Claims. (Cl. 299—95)



1. An aerosol bottle which comprises a main body portion for holding a liquid aerosol propellant, means defining an expansion chamber having a discharge orifice; a housing including a wall defining a measuring chamber having an inlet port and an outlet port interposed between the interior of said main body portion of the bottle and said expansion chamber; an outlet valve, having a manually reciprocatable stem, for opening and closing said outlet port, an inlet valve for opening and closing said inlet port, said inlet port being closed and said outlet port being opened in response to inward movement of said stem and said inlet port being opened and said outlet port being closed in response to outward movement of said stem, a tube extending from said measuring chamber into said body portion of the bottle and terminating near the bottom of said body portion, and an openable and closable third port in said housing providing communication between said measuring chamber and the interior of said body portion of the bottle, said third port providing means through which liquid propellant may be charged from an outside source into the body portion of said bottle.

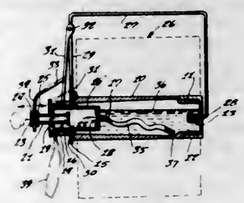
2,746,797
ATOMIZING APPARATUS
Roger Remané, Courtoa-le-Bas, France, assignor to René Maurice Achille Joseph Pollet
Application November 1, 1952, Serial No. 318,163
Claims priority, application France November 7, 1951
8 Claims. (Cl. 299—95)

1. An atomizing apparatus for storing and dispensing products dissolved in or mixed with a liquefied gas retained under pressure, comprising a container having a flexible resilient lid provided with a central opening, a valve seat arranged around said opening, an intermediate rigid partition arranged in the upper portion of the container above the level of the liquefied gas, a valve adapted to engage said seat, a valve stem carrying said valve extending through said opening inside the container and



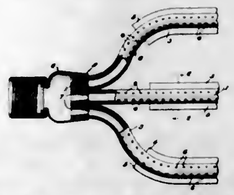
having its lower end connected to said rigid partition, an opening provided in said rigid partition, a conduit extending from said opening into the lower partition of the container, and means to deflect the said flexible resilient lid whereby the valve is made to disengage the valve seat.

2,746,798
DEODORANT SPRAY TOILET PAPER HANGER
MacArthur Wardell, Jr., Jamaica, N. Y.
Application May 18, 1955, Serial No. 509,283
10 Claims. (Cl. 299—96)



1. A deodorant spray toilet paper hanger comprising a hollow cylindrical container for liquid deodorant, said container fitting into the core of the toilet paper roll in frictional engagement therewith, whereby to rotate as the toilet paper is consumed, means for rotatably supporting said cylindrical member and the toilet paper roll, valve means for spraying the liquid deodorant into the surrounding air, and means actuable upon the toilet paper being consumed and said cylinder being rotated for operating said valve means.

2,746,799
SPRINKLERS
Lewen R. Nelson, Peoria, Ill.
Application March 30, 1954, Serial No. 419,687
6 Claims. (Cl. 299—104)



3. In a sprinkler, the combination of a plurality of fluid conducting conduits each provided with a series of longitudinally spaced radially directed discharge open-

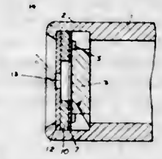
ings, and a single unitary coupling engaged with all of said conduits for connecting the same jointly to a single fluid supply, said conduits being flexible and separate and independent of each other except for mutual engagement by said coupling, so as to be disposable either side-by-side or along divergent lines, and said conduits each being substantially smaller in diameter than said coupling whereby said conduits may be crossed one over the other at a point immediately adjacent said coupling, each of said conduits being provided with laterally extending stabilizing means distributed uniformly therealong, except for a length thereof immediately adjacent said coupling and including said point to prevent twisting thereof.

2,746,800
FUEL INJECTION NOZZLES FOR INTERNAL COMBUSTION ENGINES
Willy Volt, Stuttgart, Germany, assignor to Robert Bosch G. m. b. H., Stuttgart, Germany
Application May 26, 1953, Serial No. 357,407
Claims priority, application Germany June 17, 1952
2 Claims. (Cl. 299—107.6)



1. A fuel injection nozzle for internal combustion engines, including in combination a needle body, a nozzle needle, a pin on the end of said needle on the injection side which penetrates into a cylindrical aperture of the needle body of less than 0.9 millimetre diameter, with free spacing therein, to act during the initial part of its stroke as a pin nozzle, and during the latter part of its stroke as a hole nozzle, and a closing spring acting on said nozzle needle, said pin including a cylindrical section contiguous with the nozzle needle and a conical inwardly tapering free end section on the cylindrical section, the depth of penetration of the said cylindrical section into said aperture being substantially one half of the needle stroke when the nozzle needle is closed.

2,746,801
ATOMIZERS
Vincent James Curran, Leamington Spa, England, assignor to Kigass Limited, Leamington Spa, England
Application February 2, 1953, Serial No. 334,595
Claims priority, application Great Britain May 27, 1952
7 Claims. (Cl. 299—120)



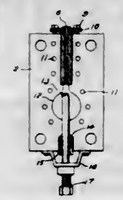
1. An atomiser for liquid fuel comprising a bored fuel supply housing having at least four superimposed and co-axial discs, each consisting of a sheet metal stamping, clamped therein in face-to-face contact, the said discs including a feed disc having slots opening to its periphery and communicating with the bore of the housing, and an annular groove, which is overlapped by the said slots, in its face adjacent a metering disc having a central eye, which forms a minor portion of a swirl chamber, and at least one conduit opening tangentially to said eye and terminating short of the periphery of said metering disc in overlapping relationship to the said groove, a third chamber disc located on the opposite side of the metering disc to the feed disc and having a central eye forming the major part of said swirl chamber, and an orifice disc on the opposite side of the chamber disc to the metering disc and having a central fuel discharge orifice therein.

2,746,802
ATOMIZER FOR LIQUIDS
Nikolaas Feis, Wageningen, Netherlands, assignor to Instituut Voor Tuinbouwtechniek, Wageningen, Netherlands, a corporation of the Netherlands
Application March 21, 1952, Serial No. 277,811
Claims priority, application Netherlands March 22, 1951
13 Claims. (Cl. 299—140)



1. An atomizer for liquids comprising a duct for guiding therethrough a stream of a gaseous fluid in unidirectional flow, a hollow liquid dispersing member disposed within said fluid duct in axial alignment therewith and open at both ends for causing a fluid flow along the inner and outer wall of said hollow member, the said member having inner and outer wall surfaces both outwardly tapered in the direction of the fluid flow, and liquid conduit means for feeding liquid to be dispersed to the outer wall of said hollow member.

2,746,803
GRANULATOR
Masao Murakami and Takeo Imamoto, Otsu, Kaneko, Nihama-shi, Japan, assignors to Chemical Construction Corporation, New York, N. Y., a corporation of Delaware
Application October 21, 1953, Serial No. 387,478
3 Claims. (Cl. 299—144)



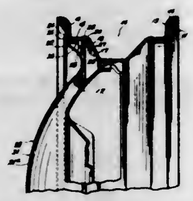
1. In an apparatus for preparing discrete granules in which hot concentrated solution is forced through a plurality of openings into a large, cooled drying chamber, an improved discharge-nozzle assembly which comprises: a horizontally-elongated block having a central solution passage along the horizontal axis of said block and an end port means for admission of hot solution thereinto; said block also having: a plurality of parallel discharge ports extending generally upwardly and at substantially right angles thereto from said central passage to an outer face on said block; in each of said discharge ports an elongated nozzle element demountably fastened therein and substantially filling said port, said nozzle element being of sufficient length relative to a small central lengthwise passage therethrough to impart definite direction to solution discharged from the exit end; a plurality of borings lengthwise through the block parallel to said central passage and located about said central passage and said discharge ports but connected with neither; and header means at either end of said block for circulating heating fluid through said borings.

2,746,804
DETACHABLE WHEELS FOR VEHICLES
Pierre Marcel Bourdon, Paris, France, assignor to Compagnie Generale des Etablissements Michelin, Clermont-Ferrand, France
Application January 21, 1953, Serial No. 332,226
Claims priority, application France March 11, 1952
9 Claims. (Cl. 301—9)



1. A mechanism for mounting a wheel on a hub, comprising a vehicle wheel having a centrally located hollow boss therein, said boss having a closed outer end and a smaller open inner end, a vehicle hub having a projection thereon substantially complemental to but smaller than the interior of said boss, said projection engaging in said boss through its open end to align said wheel with said hub, and means to change the relative size of said boss and said projection to bring said projection and said boss into tightly interfitting relation to secure said wheel to said hub.

2,746,805
WHEEL COVERS
Reynold F. Gamundi, Mayfield Heights, Ohio, assignor to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application March 19, 1952, Serial No. 277,467
16 Claims. (Cl. 301—37)



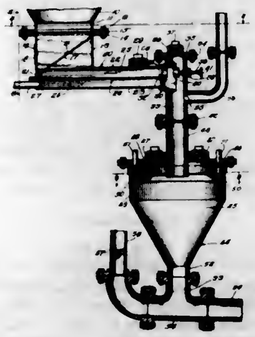
1. A wheel trim device comprising, a substantially circular member having a generally axially rearwardly extending annular flange of a diameter for telescoping engagement with an internal annular surface of the tire rim of a vehicle wheel, means carried by said flange and defining retaining elements engageable with said annular surface for retaining the trim device in its applied position on the wheel, and other retaining means carried by said flange comprising radially-and-circumferentially inclined wire prong elements having exposed ends and said prong elements being resiliently expansive substantially radially of said flange to form an interlock with said tire rim for preventing relative rotation between the trim device and wheel.

2,746,806
WHEEL TRIM STRUCTURE
Howard M. Jenkins, Jr., Detroit, Mich., assignor to Van Auken, Inc., Detroit, Mich., a corporation of Michigan
Application January 29, 1953, Serial No. 333,863
4 Claims. (Cl. 301—37)

1. As an article of manufacture, an automobile wheel trim member for disposition between the rim and hub cap of a wheel assembly comprising an outer ring adapted to seat on a portion of the wheel rim, and a pair of radially spaced inner wire rings adapted to seat on the outer surface of the wheel hub cap, a plurality of spoke-like elements connecting the outer ring with each of the inner wire rings, said spoke-like elements being V-shaped with the base of the V being attached to the outer ring and the end portions being attached respectively to each of the inner rings, said end portions being bent substantially radially inwardly adjacent their points of attachment with the inner rings and a plurality of spring clips hingedly mounted on the outwardly spaced inner ring having end portions adapted to be snapped onto portions of the wheel for holding the trim member in place.

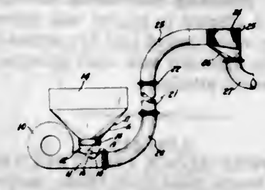


2,746,807
APPARATUS FOR DISCHARGING PULVERULENT MATERIAL
Edgar B. Tolman, Chicago, and Ray W. Williams, Blue Island, Ill., assignors to United Conveyor Corporation, a corporation of Illinois
Application May 18, 1953, Serial No. 355,558
3 Claims. (Cl. 302—29)



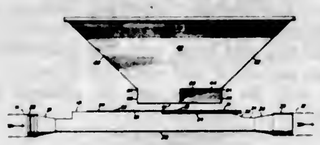
1. Apparatus for feeding pulverulent material in controlled volume from a storage hopper discharge to a water sluice type conveyor for carrying off said material, comprising: a conduit which has one end beneath the storage hopper discharge, said conduit being pitched at an angle less than the angle of repose of the pulverulent material in the hopper; a transversely disposed, continuous porous partition which divides said conduit into an upper material conveying portion and a lower air delivery tube; means for supplying air under pressure to said air delivery tube to fluidize pulverulent material in said material conveying portion; a discharge pipe to receive fluidized material from said material conveying portion; a mixing chamber to receive pulverulent material from said pipe and mix said material with a water sluice stream in which it may be carried off; hot gas delivery means adapted to provide a continuous stream of hot gas through said discharge pipe and said mixing chamber to prevent flow of moist air or material from said mixing chamber into said pipe; and metering means between said material conveying portion and said discharge pipe to limit to a predetermined maximum the volume of fluidized material which may enter the discharge pipe per unit time.

2,746,808
NON-CLOGGING PNEUMATIC CONVEYING APPARATUS
Gustave E. Stricker, Saginaw, Mich., assignor to A. T. Ferrell & Co., Saginaw, Mich.
Application August 24, 1953, Serial No. 375,939
3 Claims. (Cl. 302—36)



1. In a pneumatic conveyor, a conveying duct, a fan delivering a high velocity stream of air thereinto, material discharge and air escape openings in one end of the duct, a gravity discharging material hopper emptying into said duct interjacent the ends thereof, a plate projecting obliquely into said duct to guide the flow of material therein, a second plate thereabove and extending obliquely in an opposite direction to the first-mentioned plate, and a valve hingedly mounted on the terminal edge of said second plate and normally closed operable by the pressure of the material and air stream to permit the flow of material through the discharge space between said plates and operable to close off said space when said discharge and escape openings are blocked and sufficient back pressures are created.

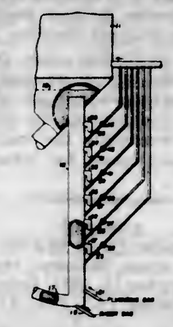
2,746,809
ASH REMOVAL UNIT
Neil H. Gebhardt, Erie, Pa.
Application June 24, 1953, Serial No. 363,871
16 Claims. (Cl. 302—39)



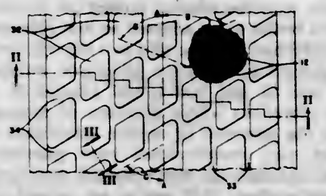
1. An intake pipe for a fluid current conveyor system for ashes comprising a pipe having a vertical central partition, an intake opening at the top of the pipe on each side of said partition, a horizontal partition extending from the pressure side of the pipe to points adjacent the proximate intake opening on each side providing a pressure air conduit below the horizontal partition and a secondary air conduit above the horizontal partition, said secondary air conduit being open to the atmosphere at the pressure end, and discharging into the pressure air conduit within the pipe and means for separately controlling the flow of air and ashes on each side of the central partition.

2,746,810
STANDPIPE FOR COARSE SOLIDS AND METHOD OF OPERATING
Walter G. May, Union, N. J., and George L. Matheson, deceased, late of Summit, N. J., by The Summit Trust Company, executor, Summit, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application May 7, 1953, Serial No. 353,618
6 Claims. (Cl. 302—52)

1. The process of controlling the flow of a mass of coarse solid particles down a standpipe and into an aerated solids riser, which comprises introducing a gasiform fluid near the bottom of a standpipe at a rate such as to aerate but not quite fluidize the solids in the lower part of said standpipe where pressure of solids in said standpipe is substantial, and bleeding off successive portions of said aerating fluid at a series of spaced points up said standpipe, to hold more nearly constant the velocity of the fluid up said standpipe as the pressure thereon is successively reduced.

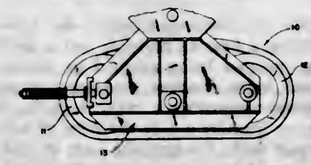


2,746,811
PNEUMATIC TRACK
Arthur E. Benson, Grosse Pointe Farms, Mich., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application March 11, 1953, Serial No. 341,793
3 Claims. (Cl. 305—10)



1. A pneumatic track comprising, a plurality of inflatable, longitudinally extending, flexible tubes positioned in side by side parallel relationship, reinforcing cords extending around the individual tubes and said tubes as a group at an angle of between 60° and 90° to the longitudinal axis of the track, a rubber cover surrounding said tubes and reinforcing cords and providing tread, sidewall and base portions, longitudinally spaced, transversely extending grooves in the exterior surface of said tread portion, said grooves extending transversely across the tread at substantially the same angle to the longitudinal axis of the track as said reinforcing cords.

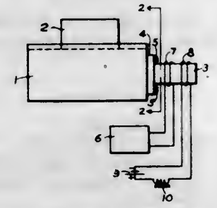
2,746,812
PNEUMATIC TRACK
Ernst Eger, Los Angeles, Calif., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application March 9, 1953, Serial No. 341,884
6 Claims. (Cl. 305—10)



1. An inflatable endless track comprising, an endless rubber tube, a rubber cover surrounding said tube providing tread, side wall and base portions, substantially inextensible flexible, reinforcing cords embedded in the

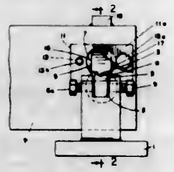
base portion of said cover, said reinforcing cords in said base portion extending in a substantially longitudinal direction to thereby render the base portion substantially inextensible in a longitudinal direction, substantially inextensible, flexible, reinforcing cords extending circumferentially around said tube at an angle of between 60 and 90 degrees to the longitudinal axis of the tube whereby said reinforcing cords restrain the tube against radial expansion without restraining the track against longitudinal stretching and means for inflating said rubber tube.

2,746,813
MEANS FOR REDUCING STATIC FRICTION
Frank Massa, Braintree, Mass.
Application November 16, 1951, Serial No. 256,735
9 Claims. (Cl. 308—1)



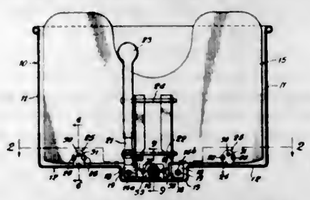
1. In combination, a first solid body having a smooth surface, a second solid body having a smooth surface which mates with the smooth surface on the first body, the said two bodies being adapted so that relative motion may be established between said two smooth mating surfaces, a compressional wave generator intimately attached to one of said bodies and adapted to transmit oscillatory vibrations whose direction of propagation is parallel to the direction of motion established between said bodies, said compressional wave generator being capable of transmitting compressional waves of a frequency greater than 1000 cycles per second into said body whereby the static friction between said two smooth surfaces is reduced.

2,746,814
KNIFE AND BEARING STRUCTURE FOR WEIGHING SCALES
Adrianus van Duyn, Hillegersberg, Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, Inc., La Porte, Ind., a corporation of Indiana
Application June 26, 1951, Serial No. 233,506
Claims priority, application Netherlands July 8, 1950
4 Claims. (Cl. 308—2)



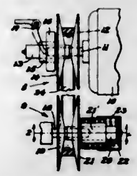
1. A knife and bearing structure for scales and the like embodying a bearing member and a knife member, the bearing member being adapted to receive the knife edge of said knife member, mounting means for the knife member comprising a conical shaft, means in a weighing lever forming a hole the sides of which provide a seat for said shaft, the opposite ends of said shaft protruding from said hole, means comprising end plates and screws cooperating with said weighing lever and capable of adjustment to move said shaft axially to tighten and loosen said shaft, flat sides on an end of said shaft to permit gripping for rotatable adjustment of said knife about the axis of said shaft after it has been loosened axially, an extension on said weighing lever, means comprising a key provided with recesses, the sides of one of said key recesses being adapted to engage said flat sides of said shaft and the sides of said other key recess being adapted to fit partially around said extension, and opposing key screws extending transversely through said last named sides and adapted to engage said extension transversely whereby when one of said key screws is loosened and the other is tightened said shaft is turned provided it has been loosened axially.

2,746,815
FOLLOWER BLOCK CONSTRUCTION
Jack C. King, North Muskegon, Mich., assignor to The Shaw-Walker Company, Muskegon, Mich., a corporation of Michigan
Application December 16, 1953, Serial No. 398,493
5 Claims. (Cl. 308—4)



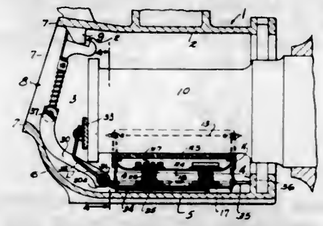
1. In combination with a generally upright partition adapted for sliding movement on an elongated support, a bearing piece comprising a generally flat semi-rigid block of molded plastic material having an offset rib along the bottom edge thereof, said partition having a pair of opposed flange members offset from one face and adjacent one edge thereof, for retaining opposed side edges of said bearing piece, and mutually interfitting abutment means on said block and the upright face of said partition, respectively, for holding said block against displacement when the side edges and rib of said block are in seated relation respectively with the flanges and the adjacent edge of said partition.

2,746,816
LUBRICATED EXPANSIBLE V-PULLEY STRUCTURE
John S. Michie and Adam L. Everroad, Columbus, Ind., assignors, by mesne assignments, to The Reliance Electric and Engineering Company, Cleveland, Ohio, a corporation of Ohio
Application April 2, 1953, Serial No. 346,360
9 Claims. (Cl. 308—5)



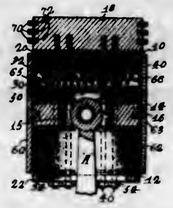
1. A first rotary element, a second rotary element, one of said elements having an axial bore and the other of said elements having a cylindrical portion disposed within said bore in intimate contact with the walls thereof to mount said one element for axial movement relative to said other element, and means for introducing lubricant between the intimate surfaces of said elements, the said intimate surface of one of said elements being peripherally grooved substantially throughout the axial extent of said surface for receiving and retaining said lubricant, and the lands between axially-adjacent groove sections having an axial dimension not substantially exceeding one-sixteenth inch.

2,746,817
RAILWAY AXLE JOURNAL LUBRICATOR
James J. Hennessy, Chambersburg, Pa., assignor to Hennessy Lubricator Company, Inc., Chambersburg, Pa., a corporation of Delaware
Application June 2, 1953, Serial No. 359,030
4 Claims. (Cl. 308—84)



1. In a railway axle journal lubricator, a support frame, a lever having a fulcrum thereon and having an actuated arm extending upwardly from the fulcrum and an operating arm extending horizontally from the fulcrum, a lubricant pump and distributor unit comprising a pad of fibrous material of shallow thickness and having a substantially greater width and length and having a concave upper face for application to a journal to be lubricated, a bag-like structure suspended from the sides and ends of said pad and provided with inlet valves at substantially different levels, said valves accommodating inlet of oil to the interior of the structure and automatically checking discharge therefrom, and spring means supporting the sides and ends of said pad and bag-like structure above said lever horizontal arm.

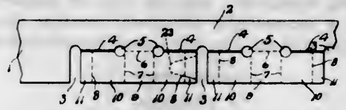
2,746,818
NON-EXPANDABLE PISTON
William Woltuk, Montreal, Quebec, Canada
Application May 18, 1955, Serial No. 509,309
10 Claims. (Cl. 309—15)



1. A composite piston for internal combustion engines comprising a main cylindrical body of two-piece construction of non-metallic material, a metallic centre portion extending trans-axially between said non-metallic body portions, a metallic piston head and a metallic piston base, said head, body portions, centre portion and base being interconnected and retained together in concentric axial alignment by a plurality of spaced apart elongated studs extending from said head to said base plate, and a metallic outer sleeve surrounding said non-metallic body and centre portion and extending from adjacent said base to adjacent said head.

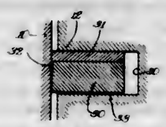
2,746,819
PISTON GUIDE AND PISTON RING WEAR SHIELD
Holly M. Olson, Muskegon, Mich., assignor to Sealed Power Corporation, Muskegon, Mich., a corporation of Michigan
Application December 28, 1953, Serial No. 400,524
4 Claims. (Cl. 309—44)

2. A piston ring comprising, a continuous generally circular flange of thin spring metal, parted at one side, adapted to be placed in a piston ring groove against a side of said groove, having a plurality of spaced generally rectangular sections of metal integrally connected to and at the inner edges of said flange, located generally at right angles thereto and adapted to bear at inner sides against the bottom of said piston ring groove, a yieldable section of metal integrally connected at one end to each of said rectangular sections, extending therefrom outwardly at an angle to the rectangular section to which



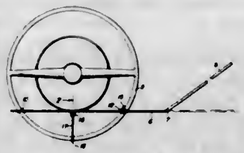
attached, each having a free end lip portion located inwardly from the outer edge of said flange and generally parallel to the adjacent edge thereof, and a piston ring pressingly engaging said free end portions and forcing them resistingly inward, one side of said piston ring being located against the inner side of said flange, and at its outer curved side extending beyond the outer edges of the flange.

2,746,820
PISTON RING
Arthur M. Brenneke, New Castle, Ind., assignor to Perfect Circle Corporation, Hagerstown, Ind., a corporation of Indiana
Application July 11, 1951, Serial No. 236,205
1 Claim. (Cl. 309—45)



A piston ring assembly for an internal combustion engine, comprising a pair of ring members in side-by-side relation, the ring member at the lower side of the ring groove having a tapered outer face providing an oil-scraping cylinder-engaging edge at its lower side, and the other ring member having a straight cylinder engaging face to prevent compression pressures from reaching the tapered face of the lower member and having a gap with portions in overlapping engagement to provide a circumferentially complete barrier to radial flow of oil from the inner portion of the groove between the first ring member and the upper side of the groove.

2,746,821
AUTOMOBILE STEERING WHEEL TABLE
Florence Margaret Schroeder, Dubuque, Iowa
Application March 14, 1955, Serial No. 494,053
1 Claim. (Cl. 311—21)



An automobile service table including a transversely elongated horizontal panel, and means for removably mounting said panel on automobile steering wheels of various diameters, said means comprising a substantially C-shaped, resilient clamp fixedly mounted on the front edge of the panel adjacent one end thereof and engageable with the rim of the wheel, a substantially U-shaped clip mounted for sliding adjustment on the front marginal portion of the panel adjacent the other end thereof and

having transverse slots in its leg portions, a substantially C-shaped, resilient clamp fixed on the bight portion of said clip and engageable with the wheel rim, a vertical bolt extending through the panel and engaged in the slots, a wing nut threaded on said bolt for frictionally securing the clip in adjusted position on the panel, a leg pivotally suspended beneath the rear portion of the panel, and a substantially C-shaped, resilient clamp on the free end of said leg engageable with the rim for supporting the panel in a substantially horizontal position thereon in conjunction with the first and second named clamps.

2,746,822
ADJUSTABLE TABLE LEGS
Roy T. Copenhaver, Kansas City, Kans.
Application February 21, 1955, Serial No. 489,432
1 Claim. (Cl. 311—39)



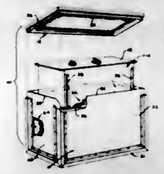
In a table construction having a plurality of extensible legs, each of said legs comprising an elongated tubular section having a threaded opening therein; an elongated tubular sleeve slidably mounted on the section and having a longitudinally extending slot therein, said slot being laterally offset at spaced intervals therealong; a screw shiftably threaded in said opening and extending through the slot for sliding movement therein; and a spring interconnecting the section and the sleeve for biasing the sleeve toward the uppermost end of its path of travel.

2,746,823
COLLAPSIBLE TABLE
Carl A. Sand, Cincinnati, Ohio, assignor to The Brunhoff Manufacturing Company, Cincinnati, Ohio, a corporation of Ohio
Application February 24, 1955, Serial No. 490,172
6 Claims. (Cl. 311—110)



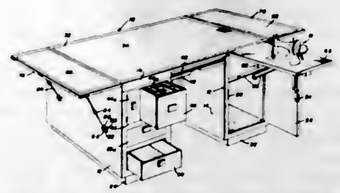
1. A collapsible stand or the like comprising a frame forming a supporting surface, a pair of elongated sleeve-like brackets extending along opposite sides of said frame, hook-like brackets extending along the remaining sides of said frame, leg members adapted to be engaged in said brackets, each of said leg members being formed from rod stock reversely bent to define inner and outer leg portions, said outer leg portions terminating in outwardly directed projections for engagement in said sleeve-like brackets, and the inner leg portions terminating in outwardly directed projections extending in substantially right angles to said first named projections, said inner leg portions and said last named projections being adapted to be sprung inwardly for engagement with said hook-like brackets.

2,746,824
SHOCK-RESISTANT CASE AND SEAL THEREFOR
Scott R. Bond, North Plainfield, N. J., assignor to H. K. Lorentzen, Inc., New York, N. Y., a corporation of New York
Application April 22, 1954, Serial No. 424,983
7 Claims. (Cl. 312—7)



5. Equipment adapted for delivery by parachute comprising: an open-topped, watertight transit case body, adapted telescopically to receive a boxlike unit having a top panel overhanging the body of the unit on all sides within it, weight-bearing, downwardly yieldable, shock-absorbing mountings on the bottom of the case body, upper and lower, laterally inwardly directed, shock-absorbing and unit-guiding mountings attached to the sides of the case body, and sealing means at the upper end of the case body for sealing the upper end of the unit to the case body without appreciably affecting the action of the resilient unit-mounting means, said sealing means comprising a gasket having a central body with a unit-receiving opening therethrough, the portion of the gasket body bounding the opening having a surface adapted to make sealing engagement with the overhanging top panel on the unit, means including the upper, laterally yieldable mountings to support the gasket body, an expansible flexible skirt attached to an outer edge of the gasket body and extending toward the wall of the transit case body, and means on the outer terminus of the skirt making a sealing connection with the wall of the case.

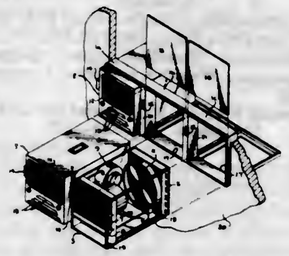
2,746,825
COMBINATION SEWING CABINET, WORK TABLE AND STORAGE SPACE DEVICE
Julia S. Lee, State College, N. Mex.
Application February 14, 1956, Serial No. 565,510
1 Claim. (Cl. 312—28)



A combined sewing cabinet, individual work table and storage space device comprising a pair of hollow housing members, an upper horizontal wall supported upon the members and spacing the members, one of said members having a front wall with an opening therein and a closure for the opening, a horizontal guide track mounted in the said one of said members, a carriage slidably supported by the guide tracks, a vertically swingable sewing machine supporting panel pivoted to the carriage and movable into and out of the said one of the said members through said opening, and interconnecting means between the closure and the panel for retaining the panel in a horizontal position, level with the table top, when the panel is moved out of said one of said members and when the closure is in its open position perpendicular to said front wall, said interconnecting means including a plate secured to the under surface of

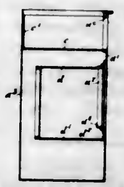
the panel and having a depending flange and a lug spaced from the flange, said closure including an upper edge received between the flange and the lug when the closure is open and the panel is raised.

2,746,826
AIR CONDITIONER INSTALLATION
Eric P. Cahn, Long Island City, N. Y.
Application September 17, 1953, Serial No. 380,765
3 Claims. (Cl. 312—101)



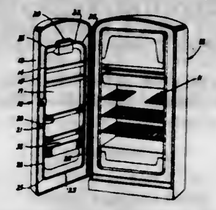
1. An air conditioning installation of a variable operative capacity, comprising an L-shaped bracket frame having an open front portion, means for permanent installation of said frame in a support with said front portion disposed in a recess of said support, and partitions dividing an inner space enclosed by said front portion into a plurality of equal adjacent compartments having openings to receive air conditioning units corresponding in shape to said openings and adapted to be freely movably entered into said compartments and to be removed therefrom, said portion having slots therein, to receive window panes displaceable in the slots to close compartments not occupied by said units.

2,746,827
COOKERS OR REFRIGERATORS
Frederick Dudley Felton, Springfield, Bellbroughton, and Joshua Howard Bissell, Wombourne, England, assignors to Revo Electric Co. Limited, Tipton, England, a British company
Application December 18, 1953, Serial No. 399,124
1 Claim. (Cl. 312—214)



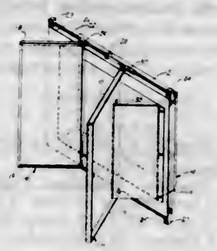
A cabinet for a cooker or refrigerator comprising a front panel and side panels formed from a single sheet of metal, said front panel having an opening therein, there being an inwardly extending stepped flange around the margin of said opening said stepped flange being continuous and being integral with said front panel, and a compartment having a top, a bottom and sides formed of sheet metal and having an open front, the edges of said top and sides that lie along said open front being welded to steps of said inwardly extending stepped flange and the edge of said bottom that lies below said open front having a vertical flange engaging the interior of said front panel and being welded thereto, said compartment being supported entirely by said front panel as a cantilever, the lower side of which is in compression thrusting said vertical flange against said front panel while the upper side of said compartment is in tension.

2,746,828
CABINET CONSTRUCTION
Leo J. Amore, Philadelphia, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application July 28, 1952, Serial No. 301,338
6 Claims. (Cl. 312—214)



1. A door construction comprising a panel, a pair of spaced outwardly projecting and vertically extending ridges on one face of said panel, a trim member secured to each of said ridges, said ridges and trim members being constructed so as to form at least a pair of pockets having apertures providing access thereto, the aperture of the pocket of one of said pair being disposed in confronting relation to the aperture of the other pocket of said pair, a shelf positioned on said door, and means on said shelf extending through said apertures within the pockets and supported by the latter in a manner permitting limited movement of said means within each pocket of said pair.

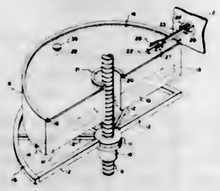
2,746,829
CABINET
Philip W. Spillane, Pico, Calif.
Application May 27, 1955, Serial No. 511,597
2 Claims. (Cl. 312—242)



1. A cabinet adapted to be mounted on a wall comprising a back wall, top, bottom and side walls projecting perpendicularly from said back wall marginally of the latter, a bracket projecting from the central point of each of said top and bottom walls, a rod extending longitudinally along each of said top and bottom walls adjacent the front edge thereof and supported at its mid-portion in the adjacent bracket, a pair of doors normally arranged in edge to edge relation parallel with and spaced from said back wall with their top and bottom ends adjacent said rods, a slide element adjacent the confronting edges of each of said doors and slidable on the rods adjacent each of said top and bottom ends pivotally connected to the confronting edges of said doors to thereby connect said doors to said rods for sliding movement toward and away from each other, a rigid upstanding plate having one side edge hingedly connected to the inner face of each of said doors intermediate the side edges thereof and having its other side edge hingedly connected to the adjacent side wall of said cabinet whereby execution of sliding movement of the confronting edge of either door away from the confronting edge of the other of said doors causes said door to be moved outwardly from

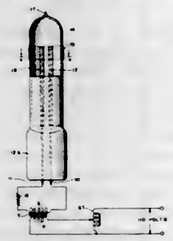
its position parallel to said back wall to a position at an angle to said back wall and away from the front of the cabinet.

2,746,830
ROTATING RECEPTACLE STRUCTURE FOR HOUSEHOLD REFRIGERATORS
Allen B. Fonda and Julius B. Horvay, Erie, Pa., assignors to General Electric Company, a corporation of New York
Application May 20, 1954, Serial No. 431,212
8 Claims. (Cl. 312—270)



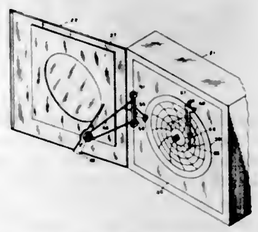
1. In a refrigerator cabinet having an inner liner defining a food storage compartment, a rotatable receptacle structure comprising a vertical shaft, a receptacle rotatably mounted on said shaft and having a normal position wherein it fits completely within said compartment, said receptacle having an access opening at the top thereof, a generally semi-circular lid having inner and outer curved edges, groove means formed on said receptacle for accommodating said edges to slidably support said lid on said receptacle and being effective to allow relative movement between said receptacle and said lid, said lid being adapted to cover said access opening when said receptacle is in said normal position, and means attaching said lid to said inner liner to cause said lid to be held stationary as said receptacle is rotated, whereby said access opening is uncovered by the relative motion between said lid and said receptacle upon the rotation of said receptacle outwardly from said normal position and re-covered upon the rotation thereof back into said normal position.

2,746,831
METHOD FOR CLEANING ELECTRODES
Edward B. Chapman, Poughkeepsie, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application August 27, 1952, Serial No. 306,554
4 Claims. (Cl. 316—26)



1. In the manufacture of a gaseous discharge tube having at least two metallic electrodes to be enclosed in an outer envelope the process of eliminating impurities from the electrodes including the following steps; evacuating said envelope while heating said envelope to a temperature less than the melting point thereof to thereby effect a cleaning thereof and liberation of occluded gases therefrom; injecting neon into said tube until a predetermined pressure is realized; applying an alternating current voltage of between 200 and 250 volts across said electrodes to ionize said neon until the temperature of said electrodes and said envelope approach a state of substantial thermal equilibrium; increasing the voltage across said electrodes to approximately 300 volts to vaporize metallic particles and impurities from said electrodes until a substantially opaque metallic sheet is deposited upon said envelope; evacuating said envelope to remove said neon and occluded gases therefrom and heating said envelope to evaporate metallic particles therefrom and deposit them upon the surface of said electrodes thereby providing a substantially pure metallic surface upon the electrodes.

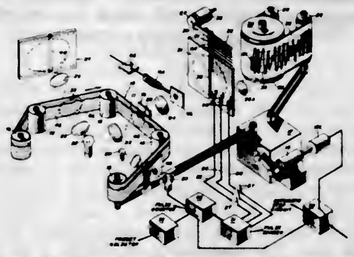
2,746,832
RECORDING AND INDICATING OR CONTROLLING INSTRUMENT
Clinton A. Blakeslee, Waterbury, Conn., assignor to The Bristol Company, Waterbury, Conn., a corporation of Connecticut
Application May 10, 1952, Serial No. 287,203
19 Claims. (Cl. 346—17)



7. In an instrument for producing upon a circular chart a record of a measured variable, a frame, a mounting on said frame providing a free-running central bearing for said chart, means engageable with the periphery of said chart for rotating the latter at constant angular velocity about the axis of said central bearing, a recording member adapted to inscribe a visual record upon a surface of said chart, a measuring element, means connecting said recording member and said measuring element to render the former responsive to measurements performed by the latter, rotary means extending through said mounting and journaled therein for rotation about said central bearing axis, a removable member positively engageable with said rotary means, splined means for establishing register between said removable member and said rotary means in a single relative position, a stationary scale element adjacent said chart, a pointer carried by said removable member for angular displacement therewith and cooperating with said scale to produce an indication commensurate with the angular position of said pointer, and means connected to said measuring element for operating said rotary means.

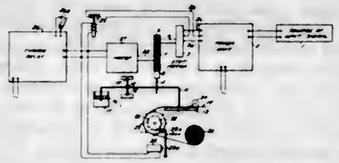
2,746,833
METHOD AND APPARATUS FOR CONTINUOUSLY REDUCING RECORDED TELEMETRIC DATA
T. Burr Jackson, Riverside, Calif., assignor to the United States of America as represented by the Secretary of the Navy
Application April 13, 1953, Serial No. 348,603
6 Claims. (Cl. 346—107)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. An apparatus for reproducing a record instrument divided longitudinally into a plurality of channels within the bounds of each of which is recorded a trace extending lengthwise of the instrument comprising a projection system including a light source, means for moving the record instrument through a light beam produced by said source, a light sensitive recording instrument, means for moving said recording instrument through said light beam at a speed different than the speed of the record instrument, said projection system causing an image of said traces to be formed in the plane of said recording instrument, a slotted mask between said record instrument and said recording instrument for permitting a small increment of said projected image to pass through to said recording instrument, and a selector plate positioned in the path of said light beam, said selector plate having



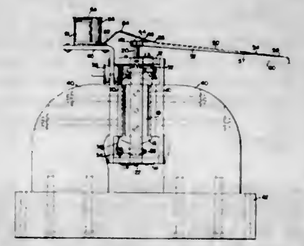
an aperture therein of a diameter equal to the width of one of said channels, and carriage means supporting said record instrument and being shiftable transversely of said selector plate whereby said plate aperture may be aligned with a selected one of said channels to permit the projection of a selected trace onto said recording instrument.

2,746,834
RECORDING DEVICE
Harold T. McLean, Troy, N. Y., assignor to General Electric Company, a corporation of New York
Application September 17, 1953, Serial No. 380,688
2 Claims. (Cl. 346—113)



1. In a recording device for recording a series of events an electrical power unit adapted to receive a signal denoting the occurrence of each event, means comprising a step motor electrically connected to said power unit for transmitting the signal as a mechanical movement through its shaft, gear means connected to said shaft to transmit its movement to a gear rack in mesh with said gear means, marking means attached to said rack for making an incremental transverse mark on a chart adjacent thereto in response to each signal, means comprising a motor connected to said gear means and actuated by a timing relay for returning said rack and said marking means to their original position after a desired number of marking operations, and means in circuit with said timing relay for advancing said chart coincidentally with the operation of said motor, said means comprising a solenoid operated armature in mesh with a ratchet wheel on the chart supply roll.

2,746,835
OSCILLOGRAPHS
Albert M. Grass, Quincy, Mass.
Original application October 9, 1947, Serial No. 778,921, now Patent No. 2,660,510, dated November 24, 1953. Divided and this application May 19, 1953, Serial No. 356,015
1 Claim. (Cl. 346—140)

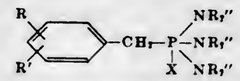


In a recording device, a pen including an ink-feeding tube, a support for the tube comprising a thin metal tapered plate having its sides turned downwardly and its forward end secured about the tube, the tube passing through the rear portion of the plate, a clamp member to be secured to a shaft, and a spring angle member having a leg portion secured to the rear portion of the plate and a second leg portion secured to the clamp, the angle member being stiff for lateral recording movements but relatively flexible in a direction perpendicular thereto.

CHEMICAL

2,746,836
PROCESS OF DYEING ACRYLONITRILE FIBERS
Elmer H. Roesia, Melrose, Mass., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
No Drawing. Application August 31, 1951, Serial No. 244,731
9 Claims. (Cl. 8—55)

1. A dyeing process which comprises immersing textile materials composed of at least 10% by weight of a fiber-forming hydrophobic heteropolymer containing at least 60% by weight of acrylonitrile and not more than 40% by weight of a compound copolymerizable therewith having the grouping $CH_2=<$, and containing a water-soluble benzyl tris (dialkylamino) phosphonium halide having the general formula:



wherein R and R′ are selected from the group consisting of chlorine, bromine, and hydrogen atoms and alkyl radicals containing from 1 to 5 carbon atoms, R″ is an alkyl radical containing from 1 to 4 carbon atoms, and X is selected from the group consisting of chlorine and bromine, in an aqueous bath containing a direct cotton dyestuff, raising the temperature of the dye bath above 70° C., maintaining the textile materials in contact with the bath at a temperature above 70° C. until the textile materials are dyed, and thereafter rinsing and drying said materials.

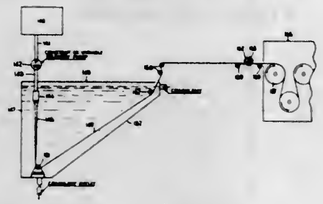
2,746,837
MANUFACTURE OF LEATHER USING A MODIFIED VINYL ETHER-MALEIC ANHYDRIDE COPOLYMER, AND RESULTING PRODUCT
Joseph S. Kirk, Newtown, Pa., assignor to General Aniline & Film Corporation, a corporation of Delaware
No Drawing. Application December 28, 1951, Serial No. 263,985
12 Claims. (Cl. 8—94.33)

1. A process comprising treating hides, skins and leather with a lower alkyl vinyl ether-maleic anhydride copolymer in which at least about 5 and no more than 15% of the anhydride groups have been converted to the salt-half amide with a member of the group consisting of ammonia and lower aliphatic primary and secondary amines.

2,746,838
PROCESS OF TANNING WITH ESTERS OF CHLORACETIC ACID
Bernhard Raecke, Duesseldorf, Germany, assignor to Henkel & Cie., G. m. b. H., Duesseldorf, Germany
No Drawing. Application July 28, 1952, Serial No. 301,386
7 Claims. (Cl. 8—94.33)

1. Process for tanning skins and hides which comprises contacting skins and hides with an ester of chloracetic acid and a hydroxyl compound containing an alkyl group of 8–25 carbon atoms and recovering the tanned material.

2,746,839
METHOD OF SPINNING SHAPED FILAMENTS OF PLASTIC MATERIALS
Samuel M. Terry and Joseph J. Reis, Jr., Pittsburgh, Pa., assignors to Pittsburgh Plate Glass Company
Application June 26, 1953, Serial No. 364,302
5 Claims. (Cl. 18—54)

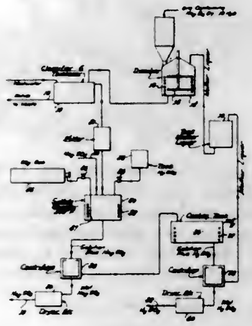


1. In a method of spinning a thread of periodically variable denier and uniform predetermined lobate section throughout the length of the filament, the steps which comprise spinning into a coagulating bath a spinnable solution of a plastic material in a liquid solvent therefor, the spinning being effected through an orifice formed in a plate, of a shape corresponding to the shape of the section desired in the thread, spinning further being effected by a differential of pressure upon the solution of plastic materials between opposed faces of the plate and being variable with the variation desired in the denier of the thread and withdrawing the freshly formed thread while maintaining the angle thereof with respect to the plate substantially constant during variations of pressure whereby to obviate bounce and intermittent sagging of the filament in the bath as it is spun.

2,746,840
PURIFICATION OF CONCENTRATED SALT SOLUTIONS
Clyde W. Davis, Antioch, Calif., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
No Drawing. Application July 24, 1952, Serial No. 300,767
6 Claims. (Cl. 23—97)

1. The method which comprises adding to a water solution of at least 40 per cent salt concentration wherein the principal solute is selected from the group consisting of zinc chloride, calcium chloride, magnesium chloride, and mixtures thereof, and which contains trace amounts of the oxide of the principal cation present and trace amounts of at least iron and copper salts as impurities, an excess of a water-soluble persulfate over the amount equivalent to the said iron and other cationic impurities present, at a temperature of at least 50° C. to form a precipitate by reaction between the persulfate and some of the said impurities; filtering to remove the precipitate; boiling the filtrate to decompose remaining persulfate; adding zinc dust to the hot solution; cooling the solution; and removing the remaining zinc dust together with the copper which has plated out thereon.

2,746,841
PRODUCTION OF BORIC ACID AND ANHYDROUS SODIUM SULFATE
Donald S. Taylor, Monrovia, Calif., assignor to Borax Consolidated, Limited, London, England, a corporation of Great Britain
Application July 10, 1952, Serial No. 298,092
4 Claims. (Cl. 23—121)



3. In a cyclic process for producing anhydrous sodium sulfate and boric acid, which process includes the steps of dissolving sodium borate in a mother liquor, adding sulfuric acid to the resulting solution to form sodium sulfate and boric acid, precipitating anhydrous sodium sulfate at a relatively elevated temperature, removing the precipitated sodium sulfate, precipitating boric acid from the resulting solution at a relatively lower temperature, and returning the remaining solution as mother liquor to repeat the cycle; the method of carrying the step of anhydrous sodium sulfate precipitation to substantial completion in the presence of a substance tending to stabilize supersaturation of anhydrous sodium sulfate, said method comprising dissolving solid sodium sulfate in the recycled mother liquor after the step of removing the boric acid precipitated during one cycle and before completion of the said treatment with sulfuric acid during the subsequent cycle and at a temperature appreciably lower than the said elevated temperature, then completing the said treatment with sulfuric acid and raising the temperature of the solution to the said elevated temperature, thereby precipitating a quantity of anhydrous sodium sulfate corresponding to the sum of the sodium sulfate dissolved from solid form and the sodium sulfate formed in solution by the said acid treatment.

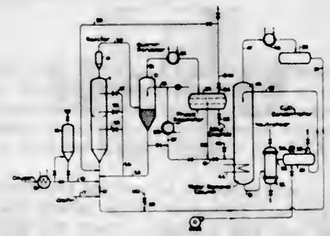
2,746,842
PRODUCTION OF ALUMINA
Herman S. Bloch, Chicago, and George L. Hervert, Downers Grove, Ill., assignors to Universal Oil Products Company, Des Plaines, Ill., a corporation of Delaware
No Drawing. Application January 21, 1954, Serial No. 405,508
14 Claims. (Cl. 23—143)

1. A process for producing alumina which comprises commingling aluminum and an aqueous solution of an acid which is reactable with aluminum to form hydrogen, reacting said solution and aluminum in the absence of mercury until at least 15% of the hydrogen which is stoichiometrically equivalent to the amount of acid initially present is evolved, subsequently adding a promoter comprising mercury, and effecting further reaction in the presence of said mercury and separately recovering alumina therefrom.

2,746,843
MANUFACTURE OF HYDROGEN CYANIDE
Frederick James Bellringer, Wimbledon, London, England, assignor to The Distillers Company Limited, Edinburgh, Scotland, a British company
No Drawing. Application October 28, 1952, Serial No. 317,360
Claims priority, application Great Britain November 6, 1951
9 Claims. (Cl. 23—151)

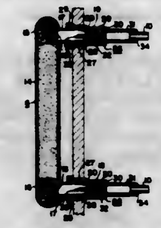
9. Process for the manufacture of hydrogen cyanide which comprises passing a gaseous mixture containing less than 5 litres of vaporised organic compound selected from the group consisting of methanol and formaldehyde in 100 litres of said mixture, ammonia in an amount such that the molar ratio of ammonia to said organic compound is more than 1, and more than one mole of free oxygen to each one mole of said organic compound charged, at a temperature between 340° and 450° C. over a catalyst comprising molybdenum oxide, the amount of ammonia in the reactant gas mixture being such that the gaseous reaction mixture leaving the reactor contains unreacted ammonia, neutralising said unreacted ammonia before the absorption of the hydrogen cyanide produced and recovering free hydrogen cyanide by distillation.

2,746,844
CATALYTIC HYDROGEN CHLORIDE OXIDATION PROCESS TO PRODUCE CHLORINE
Ava J. Johnson, Oakland, and Alexander J. Chernlavsky, San Francisco, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application June 27, 1952, Serial No. 295,994
3 Claims. (Cl. 23—219)



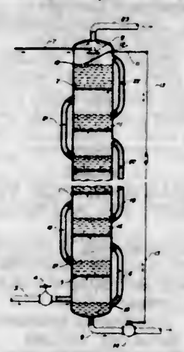
1. In a catalytic process wherein chlorine is produced by contacting oxygen and hydrogen chloride with a finely divided copper chloride-containing catalyst at hydrogen chloride oxidizing conditions in a reaction zone thereby forming reaction products comprising chlorine, water and hydrogen chloride, the steps which comprise passing said reaction products in admixture with a substantial portion of said catalyst at an elevated temperature from said reaction zone into a quenching zone, introducing a stream of cool liquid aqueous hydrogen chloride into said quenching zone under conditions bringing said catalyst-containing reaction products into direct contact with cool liquid aqueous hydrogen chloride in said quenching zone, thereby cooling said reaction products and said catalyst admixed therewith while forming a catalyst-containing liquid phase comprising aqueous hydrogen chloride and suspended solid catalyst and a catalyst-free gaseous phase comprising chlorine, water and hydrogen chloride in said quenching zone, passing said catalyst-containing liquid phase from said quenching zone into said reaction zone, passing said catalyst-free gaseous phase from said quenching zone through a cooling zone into a separating zone, separating a liquid phase comprising aqueous hydrogen chloride from a gaseous phase comprising chlorine in said separating zone, and passing at least a part of said liquid phase comprising aqueous hydrogen chloride from said separating zone into said quenching zone.

2,746,845
CARBON TRAIN
Lloyd V. Guild, Library, Pa.
Application November 13, 1951, Serial No. 255,928
3 Claims. (Cl. 23—254)



1. In a carbon train for analyzing carbon by combustion of a sample and passage of the gasses of combustion through the carbon train, a mounting panel having holes extending through it, fittings received in said holes and secured to said panel, a cartridge containing an absorbent for a constituent of the gas to be passed therethrough, said cartridge having integral side arms extending in the same direction from the cartridge end extending through the holes in said panel and received in said fittings, a resilient plug in the outer end of each side arm, and a hollow needle secured to and immovable relative to said fitting and adapted to pierce said resilient plug when said side arms are inserted in said fittings.

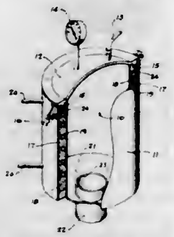
2,746,846
PROCESS AND APPARATUS FOR COUNTER-CURRENTLY CONTACTING FLUIDS
Glen R. Grunewald, Chicago, and Fred J. Pierce, La Grange, Ill., assignors to Universal Oil Products Company, Des Plaines, Ill., a corporation of Delaware
Application August 3, 1953, Serial No. 371,981
6 Claims. (Cl. 23—310)



1. A contacting apparatus which comprises in combination a vertically elongated column, vertically spaced, substantially horizontal, perforated partitions dividing the column into a plurality of contacting sections, a conduit connecting to the highest contacting section for supplying liquid thereto, a conduit connecting to the lowest contacting section for withdrawing liquid therefrom, flow-controlling means in at least one of the aforesaid conduits, a fluid supply conduit connecting to said lowest section, a fluid withdrawal conduit connecting to said highest section, each two adjacent contacting sections being connected with each other by a fluid transfer conduit having an upper opening above and a lower opening below the partition between said adjacent contacting sections and externally positioned with respect thereto, the upper opening of the transfer conduit connecting to the next lower section being at a higher elevation than the lower opening of the transfer conduit connecting to the next higher

section, and interface level sensing means in at least one of the contacting sections adapted to control liquid flow rate in response to variations in interface level between liquid and fluid and to maintain the interface in an adjacent section at a substantially constant level.

2,746,847
PROVOLONE AND CACCIACAVALLO CHEESE MANUFACTURE
Raymond T. Stahl, Homewood, Ill., assignor to Swift & Company, Chicago, Ill., a corporation of Illinois
Application November 20, 1952, Serial No. 321,614
6 Claims. (Cl. 31—89)



1. An extrusion device for cheese and the like comprising in combination: a chamber defining means; means associated with said chamber defining means for applying pressure to said chamber, and said chamber defining means having an outlet defining member of sufficient size to admit passage of said cheese extending thereinto and terminating on the interior end thereof in a sharp peripheral edge.

2,746,848
ETCHING
Rexford W. Jones, Columbus, Ohio, assignor, by mesne assignments, to Photo-Engravers Research, Inc., Savannah, Ga., a corporation of Georgia
No Drawing. Application January 19, 1955, Serial No. 482,869
10 Claims. (Cl. 41—42)

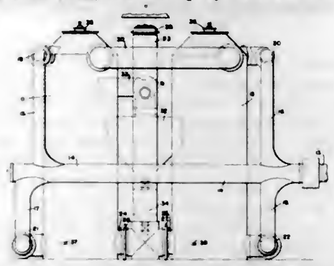
1. An aqueous ferric chloride etching solution containing thiourea, said thiourea being present in amounts from about 0.4 to 10.0 grams per liter of the solution.

2,746,849
METHOD OF IMPARTING HIGH BRILLIANCY TO ARTICLES MADE OF ALUMINUM AND ITS ALLOYS
Werner Heiling, Grevenbroich (Lower Rhine), Heinrich Neunzig, Gindorf, near Grevenbroich (Lower Rhine), and Johannes Rolle and Richard Lattey, Grevenbroich, (Lower Rhine), Germany
No Drawing. Application February 18, 1953, Serial No. 337,666
9 Claims. (Cl. 41—42)

1. A method for imparting high gloss to articles made of aluminum and its alloys comprising maintaining the said articles for a period of about 5 to 30 seconds at a temperature of 50 to 80° C., in an aqueous solution containing per liter 1.6 to 2.7 gram molecules of nitric acid, 1.8 to 3.5 gram molecules of ammonium, 3.5 to 7 gram molecules of hydrofluoric acid and from 25 times 10^{-5} to 25 times 10^{-4} gram molecules of lead nitrate.

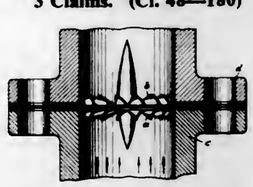
2,746,850
OIL GAS PROCESS AND APPARATUS
Ello E. Richardson, Medford, Mass., assignor to The Gas Machinery Company, Cleveland, Ohio, a corporation of Ohio
Application September 24, 1953, Serial No. 382,116
10 Claims. (Cl. 48—74)

1. Apparatus for producing oil gas by a cyclic process which includes a forward heat run, a forward make run, a reverse heat run and a reverse make run, said apparatus comprising a pair of refractory lined shells, checkerbrick structures within said shells, valved air inlet means at the top and bottom of each of said shells, a riser pipe, valved connections between the bottom of each shell and the bottom of the riser pipe, make oil spray means at the top of each shell, heat oil spray means at the top of



each shell, a plurality of conduits extending and affording communication between the tops of said shells, the ends of the conduits being disposed substantially tangentially with respect to the shell to which said ends are connected, the connections at the top of each shell being tangentially arranged so as to produce flow in the same circular direction within said shell.

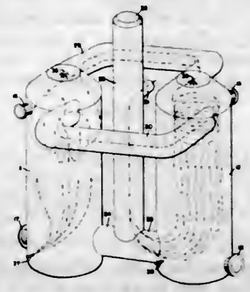
2,746,851
FUEL-AIR MIXER
Karl Holzhausen, Altena, Westphalia, Germany
Application October 29, 1952, Serial No. 317,423
Claims priority, application Germany November 3, 1951
3 Claims. (Cl. 48—180)



1. The combination of an internal combustion engine with an auxiliary carburetor of the turbine type installed in the air and fuel passage between the outlet of the main carburetor of said internal combustion engine and the intake of the same, said auxiliary carburetor comprising a stator positioned across the air and fuel passage and peripherally secured therein, and comprising imperforate stationary blades of turbodynamic design extending substantially completely across the air and fuel passage for guiding the air and fuel through said stator, a centrally disposed nose-like pointed projection on said stator extending axially of the air and fuel passage on both sides of the stator, at least one rotor mounted on said projection and solely supported thereby comprising imperforate vanes of turbodynamic design extending across the air and fuel passage.

2,746,852
OIL GAS PROCESS AND APPARATUS
Ello E. Richardson, Medford, Mass., and Vernon J. Pugh, Painesville, Ohio, assignors to The Gas Machinery Company, Cleveland, Ohio, a corporation of Ohio
Application July 8, 1954, Serial No. 441,996
4 Claims. (Cl. 48—215)

1. A method of producing oil gas in a set provided with a pair of shells, A and B, each containing checkerbrick therein, said process comprising a heat run to heat shell A by passing air upwardly through shell B, introducing a fluid fuel downwardly into the top of said shell B, withdrawing the combustion products in a plurality of streams from the top of shell B, introducing said streams of combustion products substantially tangentially into the top of shell A to produce helical flow in the top thereof, passing the combustion products down through the checkerbrick of shell A and venting said gases, carrying out a make gas run by introducing make oil into the tops of shells A and B, withdrawing oil vapors and oil gas produced in shell B in a plurality of streams from the top of shell B and introducing said streams of oil vapors and oil gas substantially tangentially into the top of shell A to



produce helical flow in the top thereof where said oil vapors and oil gas are admixed with the make oil, vapors and gases obtained from the make oil introduced into the top of shell A, passing said mixture of oil gases downwardly through shell A and withdrawing said oil gases from the bottom of shell A, passing said gases to storage, heating shell B by carrying out the first mentioned heat run in the reverse direction, then making oil gas by carrying out said make gas run in the reverse direction and then repeating the cycle of steps.

2,746,853
TOBACCO DESUCKERING PROCESS
Howard L. Yowell, Westfield, and Donald A. Caldwell, Mountainside, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application July 31, 1952, Serial No. 301,984
3 Claims. (Cl. 71—2.3)

1. The process of desuckering tobacco plants which comprises applying to said plants an aqueous emulsion of a petroleum mineral white oil, said emulsion exhibiting about 10 to 85 volume percent water separation on standing for one hour, said petroleum mineral white oil having a specific gravity in the range of about 0.800 to 0.885, a boiling range of about 550° to 1000° F., a viscosity of SUS at 100° F. of 80 to 370, and, as an emulsifying agent, an oil soluble compound selected from the group consisting of non-ionic and anionic emulsifier compound, the proportion of mineral oil to emulsifier being from 90 to 99.8 volume percent oil and 0.2 to 10 volume percent emulsifier.

2,746,854
TOBACCO DESUCKERING BACTERICIDAL COMPOSITION
Howard L. Yowell, Westfield, and Donald A. Caldwell, Mountainside, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application July 31, 1952, Serial No. 301,985
10 Claims. (Cl. 71—2.5)

1. An emulsifiable tobacco desuckering composition which comprises in combination a petroleum mineral white oil having a specific gravity in the range of about 0.800–0.885, a boiling point predominantly in the range of about 550–1000° F., being substantially free of aromatics, and a viscosity SUS at 100° F. of 80–370, in an amount of from 89.0–99.75 volume per cent; an oil-soluble, synthetic emulsifier selected from the group consisting of non-ionic and anionic emulsifiers in an amount of from 0.2–10 volume per cent, and an N-trichloromethylthio imide of a dicarboxylic acid in an amount of from 0.05 to 1.0 weight per cent.

2,746,855
POTASSIC NITROPHOSPHATE FERTILIZERS AND METHOD OF PREPARING THE SAME
Samuel Ruoch, Visp, Valais, Switzerland
No Drawing. Application December 7, 1950, Serial No. 199,714
Claims priority, application Switzerland December 9, 1949
1 Claim. (Cl. 71—39)

A method of preparing potassic nitrophosphates comprising the steps of decomposing crude phosphates with nitric acid, dehydrating the decomposed produce containing phosphate and calcium nitrate to a water content of substantially not more than about 2.4 moles of water per 1 mole of calcium nitrate, admixing potassium chloride to said decomposed product in an amount sufficient to obtain an end product of about 5 to 14 per cent of K_2O, kneading said mixture at a temperature of about 40 to 65° C. for a time insufficient to react more than 25 per cent of said potassium chloride with said calcium nitrate to form calcium chloride and potassium nitrate, thereby maintaining a ratio of less than one mole of potassium nitrate for each 5 moles of calcium nitrate, and granulating the mixture.

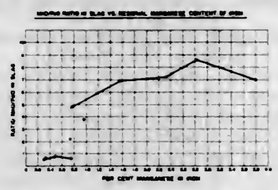
2,746,856
PROCESSES FOR TREATING MATERIALS CONTAINING NICKEL AND IRON
Edgar B. Mancke, Bethlehem, Pa., assignor to Bethlehem Steel Company, a corporation of Pennsylvania
No Drawing. Application February 28, 1952, Serial No. 274,655
6 Claims. (Cl. 75—1)

1. In a process of treating Mayari type ore, the steps of mixing a 10% to 70% by weight aqueous solution of nitric acid with the ore, the quantity of contained nitric acid being at least sufficient to meet the stoichiometric requirements of the nickel, cobalt, manganese and aluminum of the ore being treated but insufficient to meet such requirements and also nitrate a major portion of the iron of the ore, heating the mixture of solution and ore to a temperature of between 310° F. and 650° F. in an autoclave to produce a vapor pressure within the autoclave sufficient to retain water and nitric acid in the liquid phase, maintaining the mixture at such temperature for a sufficient time to dissolve most of the nickel and cobalt of the ore but retain most of the iron in the solid phase low in nickel content, and separating the solution containing nickel and cobalt from the treated ore.

2,746,857
METHOD OF MAKING FERRO-MANGANESE HAVING OVER 60% MANGANESE FROM WASTE STEEL MILL SLAGS AND LOW GRADE NATURAL ORES
Edwin C. Wright, University, Ala.
Application December 24, 1952, Serial No. 327,748
5 Claims. (Cl. 75—24)

1. A method of employing lean manganese-containing material such as steel mill slags and low grade ores containing from 2 to 20% manganese in the production of a ferro-manganese alloy containing at least about 60% manganese, not over 7.0% carbon, not over 1.5% silicon, and not over 0.30% phosphorus, which consists in supplementing a normal blast furnace charge with a sufficient quantity of such lean manganese material as to produce a pig iron containing in the neighborhood of 5% manganese; smelting such a charge in a blast furnace to the ex-

tent of producing pig iron containing substantially all the manganese included in the charge; blowing such pig iron while maintained at about 1650° C. and while contained in an acid lined vessel, with a blast containing gaseous oxygen to produce a slag on said bath rich in manganese oxide and silica, with a manganese to iron ratio of at least 4 to 1 and with less than 0.05% phosphorus; removing the slag so formed from the molten bath prior to reducing the manganese content of the bath below 0.8%; charging the slag so removed into a carbon-



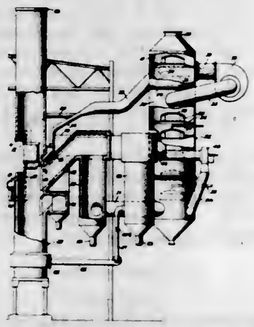
lined smelting furnace together with sufficient carbon to reduce the iron and manganese oxide content of such slag, and lime in the proportion of about two parts lime to one part silica in such slag; smelting the mixture at a temperature within the range of from about 1600° C. to 1700° C., increasing fluidity of the slag by the addition of fluorspar (CaF_2), and maintaining the mixture at such a smelting temperature until substantially all the manganese oxide content therein is reduced to manganese.

2,746,858

CUPOLA FURNACE AND METHOD OF TREATING GASES THEREFROM

Claude B. Schneible, Detroit, and Raymond H. Moore, Birmingham, Mich., assignors to Claude B. Schneible Company, Inc., Detroit, Mich., a corporation of Michigan

Application February 9, 1953, Serial No. 335,832
13 Claims. (Cl. 75—43)



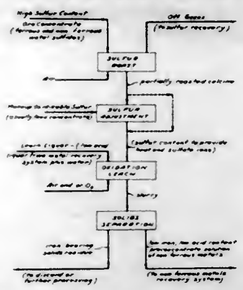
8. In a process for the purposes set forth for treating the gases of a cupola, the steps of discharging gases across said cupola to form a gaseous barrier therein effective to limit the flow of cupola gases therebeyond, withdrawing at spaced vertical points below said barrier two streams of gas from said cupola, introducing the upper stream into a liquid-washing zone, introducing the second stream into a combustion zone, adding oxygen to said combustion zone to consume combustible material in said second stream, thereby forming hot gases, cooling said gases by heat exchange relation thereof with atmospheric air, and introducing said cooled gases into said washing zone to blend said gases in said upper stream of gases.

2,746,859

METHOD OF RECOVERING NON-FERROUS METAL VALUES

Patrick John McGauley, Port Washington, Sydney Nashner, Roslyn, and Val Kudryk, New York, N. Y., assignors to Chemical Construction Corporation, New York, N. Y., a corporation of Delaware

Application December 22, 1951, Serial No. 262,988
5 Claims. (Cl. 75—115)



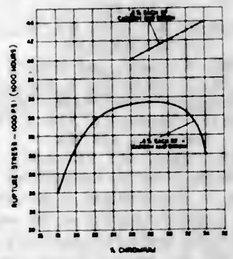
1. In a method of metal recovery involving roasting a metal-sulfide-containing ore, subjecting the calcine to oxidation-leaching with an aqueous sulfuric acid-liquor in the presence of oxygen and recovering metal from the leach liquor, the improved method of preconcentrating the nonferrous metal values from a high-sulfur-content metal-sulfide ore, containing ferrous and non-ferrous metal values, which comprises: determining, from the sulfur and non-ferrous and ferrous contents and ratios, the sulfur content for a concentrate of the ore lower than its initial content which will furnish on oxidation to sulfate sufficient heat to maintain the oxidation-leaching reaction rate and will, with any available sulfur in the leach liquor, provide at least stoichiometric equivalents of sulfur to metal sulfates of the non-ferrous metal values; roasting at least a part of the ore under temperature and rate conditions optimum for efficient sulfur removal; stopping the roasting at a residual sulfur content of from about 70% of said stoichiometric requirements to not more than that which will produce about 10% free sulfuric acid in the liquor after leaching; leaching the so-treated material at from about 250° to about 650° F. under an O_2 partial pressure of 50–300 pounds per square inch gauge of oxygen, whereby substantially all the oxidizable sulfur is converted to sulfate ions in a low iron-content liquor containing sulfuric acid and a dissolved preconcentrate of nonferrous metal values as sulfates.

2,746,860

HIGH TEMPERATURE Co-Cr ALLOYS

William O. Binder, Niagara Falls, N. Y., and Frederick C. Kroft, Jr., and Glenn A. Fritzlen, Kokomo, Ind., assignors to Union Carbide and Carbon Corporation, a corporation of New York

Application November 21, 1952, Serial No. 321,774
6 Claims. (Cl. 75—171)



1. A cobalt-base alloy capable of withstanding prolonged exposure to mechanical stress of at least 31,500 pounds per square inch at elevated temperatures of the order of 1,500° F. and above, said alloy containing 23% to 36% chromium; 12% to 16% tungsten; up to 3% molybdenum, the sum of tungsten and molybdenum not exceeding 16%; 2% to 15% nickel; 0.25% to less than 2% manganese; 0.3% to 0.9% carbon; up to 1% silicon; up to 0.25% nitrogen; less than 5% iron; 0.25% to 1.0% boron, the remainder cobalt, the composition of said alloy being so balanced that when its chromium content is in the range 23% to 30% its carbon content is 0.30% to less than 0.5%, its boron content is 0.25% to 0.8% and its minimum cobalt content is 45%; and when its chromium content is in the range 30% to 36% its carbon content is 0.5% to 0.9%, its boron content is 0.8% to 1.0%, and its minimum cobalt content is 35%.

2,746,861

TERNARY ZIRCONIUM BASE ALLOY CONTAINING Sn AND Ti

Walston Chubb, Jr., and Lyle L. Marsh, Jr., Columbus, Ohio, assignors to the United States of America as represented by the United States Atomic Energy Commission

No Drawing. Application July 17, 1953, Serial No. 376,279
1 Claim. (Cl. 75—177)

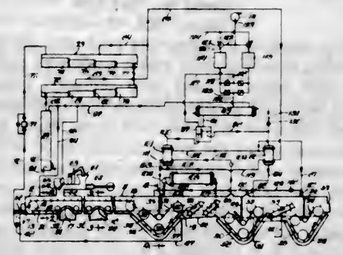
A ternary zirconium-base alloy containing about 4% by weight of tin and about 4% by weight of titanium.

2,746,862

DEWAXING METHODS AND APPARATUS

Dan McDonald, Aurora, Ill.

Application September 5, 1952, Serial No. 308,018
6 Claims. (Cl. 92—1.6)



2. In a continuous process for dewaxing wax-coated paper particles, the steps including continuously feeding the paper particles into and submerging them in a first bath and successively through a series of separated heated baths of halogenated hydrocarbon solvent selected from the group consisting of perchlorethylene, trichlorethylene, ethylene dichloride, tetrachlorethane and pentachlorethane, progressively separating the paper particles from the solvent of each bath before submerging them in the next succeeding bath, and separating them from the last bath of said series, introducing substantially wax-free solvent into the last of said series of baths and progressively advancing it from one bath to the next counter to the direction of travel of the paper particles whereby the wax concentration in the solvent baths progressively increases counter to the paper travel, vaporizing liquid solvent from the paper separated from the last bath by heating the paper and solvent with superheated solvent vapor, displacing adhering and absorbed solvent vapor from said superheated paper by passing the paper through a water bath having a temperature above the solvent-water azeotrope boiling point, and thereafter stripping residual solvent if any from the paper by forming therefrom a water-solvent azeotrope vapor and removing the same.

2,746,863

LIGHT SENSITIVE DIAZOTYPE MATERIAL

Joseph F. Kosalek, Binghamton, and John Sulich, Jr., Endicott, N. Y., assignors to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application February 10, 1954, Serial No. 409,522
9 Claims. (Cl. 95—6)

1. A light sensitive composition for diazotype materials comprising a compatible aqueous dispersion of a light sensitive diazonium compound, a coupling component, a water insoluble polyvinyl ester selected from the class consisting of those which are cationic and nonionic and finely divided alumina.

2,746,864

DETOXIFIED COTTONSEED OIL FOOTS

Frank C. Pack and Leo A. Goldblatt, New Orleans, La., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application May 27, 1955, Serial No. 511,814
2 Claims. (Cl. 99—2)
(Granted under Title 35, U. S. Code (1952), sec. 266)

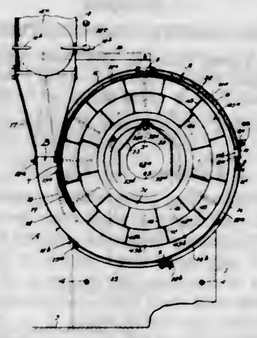
1. A process of converting cottonseed oil foots to detoxified cottonseed oil foots containing less than about 0.02% of free gossypol, comprising, heating cottonseed oil foots in a closed vessel to a temperature of from about 210° to 220° C. for from about 1 to 3 minutes.

2,746,865

ROASTING METHOD

Andrew H. Selzer, Evergreen Park, Eugene G. Berry, Chicago, and Ralph E. Williams, River Forest, Ill., assignors to B. F. Gump Co., Cicero, Ill., a corporation of Illinois

Application October 25, 1951, Serial No. 253,094
7 Claims. (Cl. 99—68)



1. The method of roasting products, which includes circulating a body of the products to be roasted about an open space, subjecting the inner surface of the body, through said open space, as it circulates about said open space, to controlled radiation from an incandescent source of radiation exterior to the open space but in direct and open communication therewith, supplying a mixture of air and fuel to said incandescent source sufficient to maintain a predetermined degree of incandescence and radiation, and maintaining a flow of scavenging air directly about the exterior of said body, while preventing entry of said scavenging air into or through said body, and maintaining an environment which does not support combustion within said body of products, while it is undergoing roasting.

2,746,866

INHIBITION OF CAKING OF SOLUBLE COFFEE AND THE INHIBITED PRODUCT

Samuel Lee, Fair Lawn, N. J., assignor, by mesne assignments, to American Home Products Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application November 12, 1954, Serial No. 468,557

5 Claims. (Cl. 99—71)

1. The method of inhibiting caking of powdered solid soluble coffee extract on exposure to moist air which comprises mixing with the coffee extract a minor amount of finely divided calcium gluconate.

2. The method of inhibiting caking of powdered solid soluble coffee extract on exposure to moist air which comprises mixing with the coffee extract a minor amount of lactose and a minor amount of finely divided calcium gluconate.

2,746,867

SOYBEAN OIL REFINING PROCESS

Emil F. Werly, Minneapolis, Minn., assignor to Pillsbury Mills, Inc., Minneapolis, Minn., a corporation of Delaware

No Drawing. Application March 10, 1952, Serial No. 275,859

4 Claims. (Cl. 99—118)

2. A process for making a non-reverting edible product from crude soybean oil having a mixture of soluble phosphatides and free fatty acids consisting in hydrating a portion of the phosphatides to reduce the content thereof to an aggregate weight of between .023 per cent and 0.3 percent of the weight of the oil, removing the hydrated phosphatides, and steam deodorizing the product at a temperature of between 200 to 400 degrees F. and at an absolute pressure of 5 millimeters.

2,746,868

FLUID SHORTENING COMPOSITION

Sherwood T. Cross, Elsmere, Del., and William C. Griffin, West Chester, Pa., assignors to Atlas Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 12, 1952, Serial No. 320,104

4 Claims. (Cl. 99—123)

1. A fluid shortening composition comprising an edible vegetable oil containing in suspension from 2% to 10% by weight of a baking improver selected from the group consisting of polyoxyethylene ethers of solid fatty acid partial esters of hexitans and mixtures of said polyoxyethylene ethers with solid fatty acid partial esters of hexitans; said ethers containing from 2 to 20 oxyethylene groups per mol, and said baking improver containing from 55% to 70% by weight of combined acyl radical and at least 3% by weight of combined oxyethylene radical.

2,746,869

CONDIMENT COMPOSITION

Grace Ellis, San Francisco, Calif.

No Drawing. Application February 25, 1953, Serial No. 338,893

2 Claims. (Cl. 99—144)

1. A condiment and food preparation comprising pulverized coriander, fenugreek, salt, garlic, dill seeds, allspice, saffron, turmeric, mace, bay leaves, cinammon, onions, cayenne pepper, ginger, cumin, white pepper corns and mustard seed, and coconut juice and peanut oil.

2,746,870

ANTIOXIDANT COMPOSITION

Henry R. Kraybill, Chicago, Ill., assignor to A. W. Brickman, Victor Conquest, Frank J. Madden, Wrisley B. Oleson, and Emery T. Filbrey, as trustees for the benefit of American Meat Institute Foundation, Chicago, Ill., a nonprofit corporation of Illinois

Application January 2, 1952, Serial No. 264,401

2 Claims. (Cl. 99—163)

1. Lard containing not over about 0.01% of a mixture comprising 2-tertiary butyl-4-hydroxyanisole and 3-tertiary butyl-4-hydroxyanisole containing from about 10% to 90% based on the said mixture, of 2-tertiary butyl-4-hydroxyanisole.

2,746,871

STABILIZATION OF ORGANIC COMPOUNDS

Ralph B. Thompson, Hinsdale, Ill., assignor to Universal Oil Products Company, Des Plaines, Ill., a corporation of Delaware

No Drawing. Application February 13, 1953, Serial No. 336,877

12 Claims. (Cl. 99—163)

1. An organic material tending to deteriorate due to oxygen containing a hydroxyspirochroman in a sufficient amount to retard said deterioration having a spiro linkage in the 2-position.

2,746,872

CITRUS FRUIT PACKAGING PAPER AND METHOD OF MOULD CONTROL THEREFOR

Robert G. Mispley, Camas, Wash., and John R. MacRill, Ontario, Calif., assignors to Crown Zellerbach Corporation, San Francisco, Calif., a corporation of Nevada

No Drawing. Application February 17, 1954, Serial No. 411,019

9 Claims. (Cl. 99—171)

1. The method of preserving packaged citrus fruit and controlling mould growth which comprises packaging the same with paper treated with diphenyl present in an amount sufficient to control decay but insufficient to cause adverse effects on the fruit, said paper being also treated with a citrus oil of the group consisting of lemon oil and bermagot oil and a mixture thereof in an amount not exceeding approximately 25% of the weight of diphenyl for protecting the fruit and neutralizing any odor that may be created by said diphenyl in the presence of the fruit.

3. Citrus fruit packaging paper treated with diphenyl present in an amount sufficient to control decay but insufficient to cause adverse effects on the fruit, and with a citrus oil of the group consisting of lemon oil and bergamot oil and a mixture thereof in a minor amount not exceeding approximately 25% by weight of the weight of diphenyl for protecting the fruit and neutralizing any odor that may be created by the diphenyl in the presence of the fruit.

8. A preservative composition for the treatment of citrus fruit packaging paper comprising diphenyl, a citrus oil of the group consisting of lemon oil and bergamot oil and a mixture thereof, and a carrier for said citrus oil consisting essentially of paraffin oil and wax, the amount of the citrus oil being about 1.25% to 25% of the weight of said diphenyl.

2,746,873

STAIN FILLER COMBINATION FOR WOOD

John W. Mayers, Grosse Ile, Mich., assignor to Chadeloid Corporation, Dayton, Ohio, a corporation of Delaware

No Drawing. Original application July 21, 1949, Serial No. 106,093, now Patent No. 2,632,710, dated March 24, 1953. Divided and this application October 14, 1952, Serial No. 314,749

4 Claims. (Cl. 106—34)

1. A wood staining and filling composition consisting essentially of the following ingredients in substantially the proportions given:

	Parts by weight
Gum accroides red	4.0
Tetrahydrofurfuryl alcohol	8.0
Calcium carbonate	30.0
Wood flour	3.0
Burnt umber	1.0
Toluol	15.0
Methanol	5.0
Activated charcoal	2.0
Carbon black	1.0

and 4 parts by weight of dye solution consisting essentially of:

	Parts by weight
Buffalo Black	0.5
Brilliant Croceine 3 BA	2.8
Metaline Yellow	1.7
Tetrahydrofurfuryl alcohol	50.0

2,746,874

ZIRCON REFRACTORIES

Osgood J. Whittemore, Jr., Princeton, Mass., assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts

No Drawing. Application October 22, 1954, Serial No. 464,187

4 Claims. (Cl. 106—57)

1. Zircon refractories consisting essentially of from 80% to 95% zircon, the remainder silicate bond including and analyzing within the following limits:

Calcium oxide from 23.3% to 48.2%
Alumina from 11.8% to 20.0%
Silica from 39.2% to 62.2%
Alkali oxide from .0% to 2.0%

said silicate bond having not more than 10% of oxide material other than said calcium oxide, alumina, silica and alkali oxide and said silicate bond having not more than 0.2% of material other than oxide material, all percentages being by weight.

2,746,875

WAX COMPOSITION

Ivor W. Mills, Glenolden, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

Application February 13, 1953, Serial No. 336,864

3 Claims. (Cl. 106—272)

1. A wax composition comprising mainly a microcrystalline petroleum wax having a penetration less than 10 at 77° F. and having incorporated therein colloidal hydrophobic silica of particle size less than 0.1 micron in minor amount within the range of about 2 to 6% by weight based on the mixture, but sufficient to substantially reduce the penetration.

2,746,876

OXIDIZED WAX COMPOSITION

Ivor W. Mills, Glenolden, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

No Drawing. Application February 13, 1953, Serial No. 336,865

3 Claims. (Cl. 106—272)

1. A composition comprising an oxidized microcrystalline petroleum wax having a saponification value of at least 30 and a penetration less than 15 at 77° F., and having incorporated therein colloidal hydrophobic silica of particle size less than 0.1 micron in minor amount sufficient to substantially reduce the penetration.

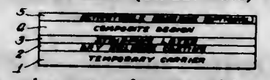
2,746,877

DRY RELEASE TRANSFER AND METHOD OF MAKING THE SAME

Carl F. Matthes, Wheaton, Ill., assignor to The Meyercord Co., Chicago, Ill., a corporation of Illinois

Application July 29, 1953, Serial No. 371,116

15 Claims. (Cl. 117—3.1)



1. A dry release transfer comprising a temporary carrier, a dry release coating on said carrier, a stripping layer on said coating comprising a resinous film-forming ingredient readily separable by dry release from said coating, and a compound design carried on said stripping layer and separable as a unit therewith, said design comprising a plurality of superimposed layers each consisting essentially of the residue from a lacquer of a different resinous film-forming material, the solvent in each lacquer layer as initially applied being selective for the resinous film-forming material contained therein and having substantially no solvent or softening effect on the resinous film-forming material of the underlying layer so that disfiguration of the respective layers is avoided.

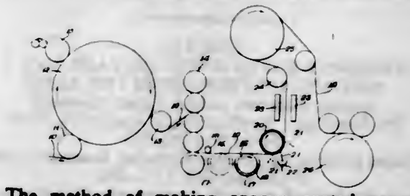
2,746,878

PRODUCTION OF COATED SHEET MATERIAL

James A. Rush, Stevens Point, Wis., assignor to Consolidated Water Power & Paper Co., Wisconsin Rapids, Wis., a corporation of Wisconsin

Application April 22, 1953, Serial No. 350,439

5 Claims. (Cl. 117—15)



1. The method of making opaque coated paper of enhanced physical properties and printability adapted for the production of waxed food wrapping which comprises coating a sheet of thin, porous, absorbent, translucent paper having a machine glazed surface by applying to said machine glazed surface an excess of an aqueous suspension containing mineral filler and opacifying pigment together with rubber latex as the principal organic binder therefor, doctoring excess coating from said surface after absorption of a portion thereof by the sheet and while the sheet is carried by a resilient moving surface, and then drying the resulting coated sheet.

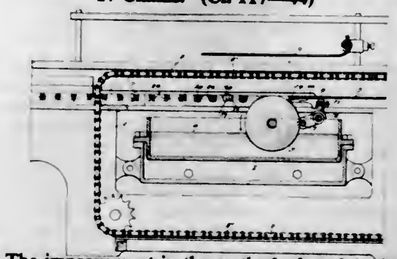
2,746,879

BOOK GLUING METHOD AND MEANS

Henry Sieb, Hammond, Ind.

Application August 25, 1953, Serial No. 376,367

17 Claims. (Cl. 117—44)



1. The improvement in the method of applying glue to the back edges of books by passing a group of them,

standing on edge and arranged side by side, over a rotating roller that carries a transferable glue coating, which consists in scraping the surface of the roller clear of glue along narrow circumferential bands, registering with the planes of contact between the books, before the books contact the roller.

2,746,880
ADHESIVE COTTON ARTICLE AND METHOD OF MAKING SAME
George L. Donleton, Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
Original application August 14, 1951, Serial No. 241,740, now Patent No. 2,706,690, dated April 19, 1955. Divided and this application September 22, 1952, Serial No. 310,904
12 Claims. (Cl. 117—63)

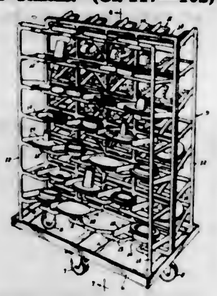


7. The method of producing an adhesive cotton yarn which comprises treating a cotton yarn with an aqueous alkaline solution of dextran, then treating the dextran-impregnated cotton yarn with an aqueous alkaline solution of an etherifying agent selected from the group consisting of alkylating and aralkylating agents, heating the impregnated yarn to complete reaction between the etherifying agent and the dextran in situ in the yarn, and thereafter treating the yarn with a solvent for the dextran ether to activate the ether to adhesive condition.

2,746,881
ADHESIVE PAPER SHEET OR TAPE AND A METHOD OF PREPARING THE SAME
August Wegener, Alfeld, Leine, Germany
No Drawing. Application December 29, 1950, Serial No. 203,563
Claims priority, application Germany January 3, 1950
5 Claims. (Cl. 117—76)

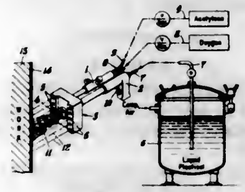
1. A method of preparing an evenly coated adhesive paper sheet material which will lie flat on printing, comprising the steps of applying to one face of a traveling paper web first a water-impervious resin layer, then the solution of a wetting agent and finally an aqueous water soluble adhesive, and drying the web, thereby obtaining a uniform adhesive surface completely covering the resinous ground layer.

2,746,882
COATED PARTS HANDLING BUGGY AND METHOD OF COATING SAME
Ferdinand H. Hamal, Royal Oak, Mich., assignor to Vinco Corporation, Detroit, Mich., a corporation of Michigan
Application August 20, 1952, Serial No. 305,331
5 Claims. (Cl. 117—102)



5. The method of applying a non-abrasive, resilient coating of varying and irregular depth to the surfaces of a rack for supporting delicate machine parts which comprises the steps of inverting the rack to be coated, dipping the rack in a vat of thermosetting plastic material, withdrawing the rack from the vat, draining the excess material from the rack and permitting the drain tips formed thereby to remain, and baking the rack thus coated at a temperature high enough and for a period of time long enough to effect a permanent set of the plastic material on the rack.

2,746,883
PROCESS FOR FLAME SPRAYING PLASTISOL
John Bernard Powers, Metuchen, N. J., assignor to Union Carbide and Carbon Corporation, a corporation of New York
Application March 27, 1952, Serial No. 278,909
10 Claims. (Cl. 117—103)



1. A process for applying a plastisol dispersion to a surface of a workpiece comprising, forming at a temperature below which appreciable solvation of the resin in the plasticizer occurs a finely atomized spray of plastisol, passing said spray in contact with the hot combustion products of a combustible gas flame thereby causing partial solvation of the resin in said plastisol to produce a partially jelled plastisol dispersion, and depositing said partially jelled plastisol dispersion as a thin film on said surface.

2,746,884
METHOD OF TIN PLATING AND ACTIVATED FATTY OIL COMPOSITION THEREFOR
Ludwig Rosenstein and Manuel H. Gorin, San Francisco, Calif.
No Drawing. Application August 13, 1952, Serial No. 304,215
18 Claims. (Cl. 117—114)

17. In a process of tinning metal plates by passing said plates through a body of molten tin, the step comprising passing the plates as they emerge from the body of molten tin through a body floating on said molten tin consisting essentially of a fatty non-drying oil which has dissolved therein, in an amount from 1% to 20%, a resinous substance selected from the group rosin, wood rosin, hydrogenated rosin, rosin esters, the rosin fraction of tall-oil, and rosin treated with paraformaldehyde.

2,746,885
METHOD OF PRODUCING A THERMOPLASTIC ADHESIVE AND PRODUCT THEREOF
Frederick W. Holt, Jr., Troy, Ohio, assignor to The Brown-Bridge Mills, Inc., Troy, Ohio, a corporation of Ohio
No Drawing. Application July 7, 1953, Serial No. 366,630
5 Claims. (Cl. 117—122)

2. In a method of producing a thermoplastic adhesive film characterized by nontackiness at room temperature and by the property of becoming tacky upon heating thereof to a predetermined temperature higher than room temperature and remaining tacky for a substantial time interval following subsequent cooling to substantially

room temperature and which comprises as the essential constituents thereof a major proportion of a thermoplastic resin and a specific thermoplastic plasticizer both having softening points higher than room temperature and at least one of said softening points being lower than the boiling point of water, the steps of forming a hot melt comprising at least said one of said essential constituents of said composition having said softening point lower than the boiling point of water, adding to said melt an aqueous dispersion of a rubbery material not readily soluble or otherwise incorporable from a dry state in said melt, heating said melt to a temperature sufficient to boil away the aqueous carrier from said dispersion while mixing said melt to effect thorough dispersion therein of said rubbery material irrespective of the degree of compatibility of said rubbery material in said melt, adding to said melt any of said essential constituents thereof not already present therein while maintaining the temperature of the melt above the softening points of all constituents thereof, applying said melt as a film on a supporting surface, cooling said film to a temperature below said softening point of said plasticizer, and then setting the resulting cooled but still tacky film to nontacky consistency by applying thereto a small quantity of the same said specific plasticizer in finely divided solid form.

3. An adhesive coated material comprising a base web having thereon a thermoplastic adhesive film prepared by the method defined in claim 2 and characterized by nontackiness at room temperature and by the property of becoming tacky without tendency to strike into said base web upon heating thereof over a substantial temperature range above the softening point thereof and of remaining tacky for a substantial time interval following subsequent cooling below the softening point thereof.

2,746,886
METHOD OF COATING SILICIOUS MATERIAL WITH INDIUM
Richard B. Belser, Tucker, Ga., assignor to Georgia Tech Research Institute, Atlanta, Ga., a corporation of Georgia
No Drawing. Application July 9, 1951, Serial No. 235,889
4 Claims. (Cl. 117—123)

1. The method of coating a silicious material with metal, comprising cleaning the silicious material to be coated, fusing an indium rich substance containing more than 75% of the metal indium alloyed with a metal of the class of face-centered cubic crystals, and flowing the fused indium rich substance onto the silicious material at a temperature slightly above the point of fusion of said indium rich substance.

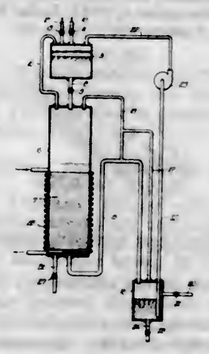
2,746,887
LUBRICATED FIBER STRAND
John B. O'Neil, Duxbury, Mass., assignor to Plymouth Cordage Company, Plymouth, Mass., a corporation of Massachusetts
No Drawing. Application June 17, 1953, Serial No. 362,387
7 Claims. (Cl. 117—139.5)

1. A lubricated fiber strand comprising a plurality of oriented fibers of vegetable origin and a lubricating medium for said fibers, said lubricating medium comprising an organic textile lubricant and an organophilic clay swellable therein, with the clay comprising between about 0.5 and 8% by weight of said medium and being situated at the fiber surfaces, part of the said textile lubricant being adsorbed by the clay and part being soaked into the body of the fibers.

2,746,888
METHOD OF FORMING TITANIUM COATING ON REFRACTORY BODY
Harry F. Ross, Rocky River, Ohio, assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application July 5, 1952, Serial No. 297,393
11 Claims. (Cl. 117—221)

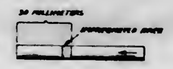
1. A method of forming a titanium coating on the surface of a refractory solid inert body which comprises immersing said solid body in a fused salt bath consisting essentially of a divalent titanium halide and not less than one of the group of halides selected from the group consisting of alkali and alkaline earth metals for a period of time and at a temperature sufficient to deposit a coating of titanium on said body.

2,746,889
INTERCONVERSION OF SUGARS USING ANION EXCHANGE RESINS
David P. Langlois and Roy F. Larson, Decatur, Ill., assignors to A. E. Staley Manufacturing Company, Decatur, Ill., a corporation of Delaware
Application July 27, 1954, Serial No. 445,986
8 Claims. (Cl. 127—36)



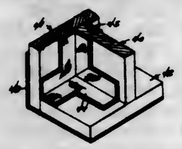
1. The method of treating sugar solutions which are subject to interconversion to interconvert the sugar content thereof which comprises contacting a substantially oxygen and ash-free sugar solution with a highly basic ion exchange resin at a temperature above room temperature and in the presence of an inert gas.

2,746,890
CIGARETTE DEVICE
Henry M. Legler, Larchmont, N. Y., assignor to Larus & Brother Company, Inc., Richmond, Va., a corporation of Virginia
Application September 14, 1950, Serial No. 184,778
3 Claims. (Cl. 131—4)



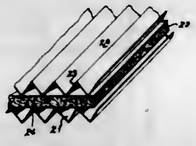
1. In a cigarette structure comprising a wrapper, a tobacco filler therefor and means indicating to the user the end to be inserted in the mouth, a flammable nontoxic substance incorporated in such structure over a length thereof for contact with the fire of the cigarette at a point intermediate the ends of the structure but not less than about 30 millimeters from the termination of the tobacco filler at said indicated end, said substance producing, on combustion, a smoke element perceptibly different to at least one of the human senses of smell and taste from the smoke produced by the combustion of the cigarette structure at points prior to said contact.

2,746,891
STRUCTURAL JOINT CONNECTION IN PANEL CONSTRUCTION
Arthur E. Deane, Stamford, Conn.
Application February 15, 1952, Serial No. 271,821
4 Claims. (Cl. 154—43)



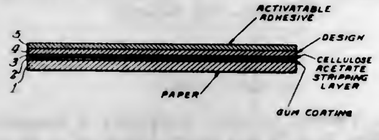
4. In a structural connection, a pair of panels arranged angularly with respect to each other, each of said panels being provided with recesses therein, a layer of fabric extending over one side of said panels and having portions extending into said recesses, and a plurality of layers extended over the other sides of said panels.

2,746,892
MULTI-LAYER HEAT INSULATING MATERIAL
Thore M. Elfving, San Mateo, Calif., assignor to Isoflex Corporation, Redwood City, Calif.
Application November 4, 1952, Serial No. 318,628
6 Claims. (Cl. 154—45)



1. In a multi-layer heat insulating board, the combination of a plurality of spaced impervious sheets of reflective metal foil each having corrugations extending parallel to each other, said sheets forming vapor, convection and radiation barriers, and a blanket of insulating material of substantial thickness disposed between said sheets and secured directly to the apexes of the corrugations and serving to provide insulation between foils, said corrugations being open and unobstructed whereby to provide drainage channels between the foil and the insulating material.

2,746,893
DRY STRIP TRANSFER
Carl F. Matthes, Wheaton, Ill., assignor to The Meyercord Co., Chicago, Ill., a corporation of Illinois
Application December 3, 1952, Serial No. 323,851
13 Claims. (Cl. 154—46.8)

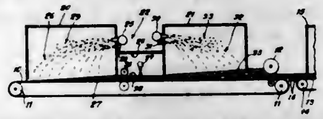


1. A dry strip transfer comprising a carrier, a gum coating on said carrier, a separable stripping layer directly against said gum coating, said stripping layer containing a major proportion by weight of cellulose acetate and a relatively minor amount of a modifying ingredient insufficient to cause strong adherence of the cellulose acetate to said gum coating whereby said stripping layer is readily releasable from said gum coating by dry stripping, and a design film over said stripping layer.

2,746,894
RESILIENT FIBER PAD AND METHOD OF MAKING SAME
Keith L. Orser and Richard D. Clapp, Auburn, N. Y., assignors to Columbian Rope Company, Auburn, N. Y., a corporation of New York
Application October 22, 1953, Serial No. 387,682
8 Claims. (Cl. 154—101)

1. The method of making a resilient fiber batt which comprises the steps of depositing fibers onto a moving conveyor, spraying said fibers with a rubber-like composition as they are being deposited on said conveyor, and after said fibers have formed a batt body spraying an outer surface of said batt with a sufficient amount of said rubber-like composition to form a skin on said outer surface of said batt but insufficient to substantially fill the pores of said batt.

2,746,895
MANUFACTURE OF FIBER FELTS
Thure C. Duvall, Cloquet, Minn., assignor to Wood Conversion Company, St. Paul, Minn., a corporation of Delaware
Application June 19, 1951, Serial No. 232,405
11 Claims. (Cl. 154—101)



1. The method of making a fiber felt comprising depositing fibers and bonding agent from air suspension in the form of a low-density open and porous unbonded mat subject to subsequent densification by compression, applying an additive in finely divided form to the topmost fibers on at least a portion of the exposed top of said mat whereby to change the surface characteristics of said fibers and to leave openings between the altered fibers, depositing additional substantially individualized fibers and bonding agent to form a mat on top of said first deposited low density mat whereby the additional deposited fibers mesh into the said openings of said first deposited mat for integrally felting the two mats together, densifying the interfelted unbonded mats to a higher degree of felting, and setting the bonding agent to maintain the felting.

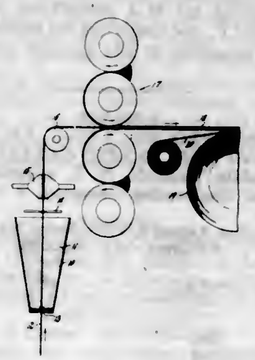
2,746,896
REINFORCED PLASTIC ARTICLES
Henry C. Thompson, Houston, Tex., assignor, by mesne assignments, to L-O-F Glass Fibers Company, Toledo, Ohio, a corporation of Ohio
No Drawing. Application December 6, 1951, Serial No. 260,335
8 Claims. (Cl. 154—128)

1. A method of producing highly translucent reinforced plastic articles comprising, incorporating glass fibers coated with a chromium compound of the Werner type in polyester resin containing from about 2% to about 30% by weight of a compound selected from the group consisting of alkyl esters of acrylic and methacrylic acid, and thereafter curing said resin having said coated glass fibers intimately incorporated therein.

2,746,897
METHOD FOR THE MANUFACTURE OF CELLULOSE-REINFORCED RUBBER ARTICLES
Hugo Levin Röder, Arnhem, and Georg Hennemann, Velp, Netherlands, assignors to American Enka Corporation, Enka, N. C., a corporation of Delaware
No Drawing. Application December 14, 1953, Serial No. 398,216
Claims priority, application Netherlands January 19, 1953
21 Claims. (Cl. 154—136)

1. In a method for the manufacture of composite rubber articles which are reinforced with plies of cord fabric made from cellulose products in which the cellulose product is treated with a finishing agent, is thereafter embedded in a mass of rubber, and the composite mass is then vulcanized to form the desired rubber article, the improved step of employing as the finishing agent a nitrogen compound having a high decomposition temperature in which one nitrogen valence is satisfied by a hydrophobic, chain-shaped radical containing more than 14 methylene groups and the other valencies of the nitrogen compound are satisfied by at least four ethoxy groups.

2,746,898
DRY ADHESION METHOD FOR ADHERING TEXTILE MATERIAL TO RUBBER
Howard M. Buckwalter and Joseph M. Almond, Detroit, Mich., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application October 29, 1953, Serial No. 389,118
7 Claims. (Cl. 154—139)



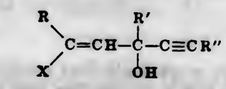
1. A method of adhering tire cord to a rubber carcass stock in which the rubber is selected from the group consisting of Hevea rubber and butadiene-styrene copolymer rubber comprising separately applying dry unreacted resorcinol as such and dry unreacted paraformaldehyde as such to the tire cord and carcass stock, respectively, thereafter uniting the tire cord and carcass stock, and thereafter heating the assembly to vulcanize the rubber and form a resorcinol-formaldehyde resin in situ at the interface of the tire cord and carcass stock.

2,746,899
PYRIDINE BY-PRODUCT INSECT REPELLENT AND PROCESS OF APPLICATION
Carolyn E. Tissot, Minneapolis, Minn., and Lyle D. Goodhue, Bartlesville, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware
No Drawing. Application January 2, 1952, Serial No. 264,641
22 Claims. (Cl. 167—33)

1. An insect repellent having as its essential active ingredient, in combination with a substantially inert adjuvant in a concentration of about 0.5 to 50 weight per cent, that portion which boils above 180° C., at one atmosphere, of at least one caustic treated, steam distilled reaction product resulting from the liquid phase condensation of ammonia with at least one member selected from the group consisting of ketones, aldehydes and cyclic trimers of aldehydes in the presence of a fluorine-containing catalyst.

2,746,900
HYPNOTIC AGENT AND METHOD OF MAKING THE SAME
Abraham Bavley, Brooklyn, and William M. McLamore, Flushing, N. Y., assignors to Chas. Pfizer & Co., Inc., Brooklyn, N. Y., a corporation of Delaware
No Drawing. Application April 20, 1953, Serial No. 349,938
7 Claims. (Cl. 167—52)

1. A compound having the following structure:



wherein R is selected from the group consisting of hydrogen and alkyl groups of from 1 to 6 carbon atoms; R' is an alkyl group of from 2 to 7 carbon atoms; R'' is selected from the group consisting of hydrogen, alkyl groups of from 1 to 6 carbon atoms and halogen; and X is halogen.

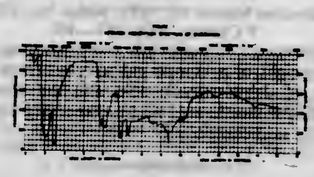
2,746,901
GLYCINAMIDE SALTS
William F. Bruce, Havertown, and Richard F. Tinlow, Philadelphia, Pa., assignors to American Home Products Corporation, New York, N. Y., a corporation of Delaware
No Drawing. Application June 14, 1954, Serial No. 436,685
4 Claims. (Cl. 167—65)

2. A therapeutic composition comprising as the active agent the acid sulfate salt of a glycinamide having the formula

$$(R)_2NCH_2CON(R_1)_2$$

wherein R represents a lower alkyl of 3 to 4 carbon atoms and R_1 stands for a lower alkyl of 2 to 3 carbon atoms, and a carrier for said active agent.

2,746,902
ENDOMYCIN AND PROCESS FOR ITS PRODUCTION
David Gottlieb, Champaign, and Herbert E. Carter, Urbana, Ill., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan
Application December 8, 1950, Serial No. 199,914
7 Claims. (Cl. 167—65)



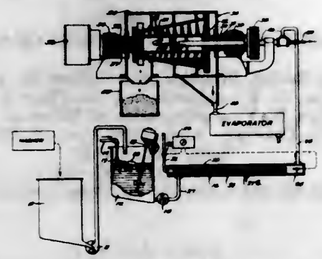
6. A substance effective in inhibiting the growth of fungi that has a molecular weight in the order of about 1300 to 1450, is soluble in water at pH 7.0 and greater and at pH 2.0 and lower and relatively insoluble in water at pH 4.0 to 6.0, substantially insoluble in ether, whose ultraviolet spectrum exhibits a characteristic doublet with maxima at 226 and 232 millimicrons, and whose infrared spectrum exhibits characteristic absorption maxima at the following wave lengths expressed in reciprocal centimeters: 3335, 2910, 1717, 1655, 1455, 1375, 1135, 1058, 986, 911, 853, 839 and 719.

2,746,903

PREPARATION OF LIVER ANTI-ANEMIA FACTOR

Robert H. Sifford, Clarendon Hills, and Lindson P. Anderson, Chicago, Ill., assignors to Armour and Company, Chicago, Ill., a corporation of Illinois

Application August 22, 1952, Serial No. 305,775
11 Claims. (Cl. 167—74.6)



1. A process for preparing a liver product comprising mixing one volume of a mammalian liver material with at least 2 volumes of water continuously passing the aqueous liver material in a confined stream through a heating zone, injecting steam into said material as it passes through said zone, condensing said steam while in contact with said material whereby said material is heated to the temperature of coagulation of said proteins contained therein, continuously passing the resulting mixture through a separation zone, separating coagulated proteins from aqueous extract in said separation zone while said proteins are at their point of maximum shrinkage, and evaporating moisture from the aqueous extract to leave a fraction containing the anti-anemia factor.

2,746,904

17-HYDROXYCORTICOSTERONE, 21-BETA-CYCLOPENTYL PROPIONATE AND COMPOSITIONS THEREOF

Arnold C. Ott, Kalamazoo, Mich., assignor to The Upjohn Company

No Drawing. Application September 1, 1951, Serial No. 244,860
7 Claims. (Cl. 167—77)

1. A therapeutic composition having prolonged adrenal cortical hormone-like activity comprising a sterile solution of 17-hydroxycorticosterone, 21-beta-cyclopentylpropionate in a non-toxic fluid vehicle.

2,746,905

DEHYDROACETIC ACID DENTAL COMPOSITIONS

Harold M. Bunn, Ladue, Mo., assignor to Warner-Lambert Pharmaceutical Company, a corporation of Delaware

Application March 31, 1952, Serial No. 279,648
9 Claims. (Cl. 167—93)

1. A therapeutic mouthwash comprising not less than 0.5% by weight of a compound selected from the group consisting of dehydroacetic acid and the water soluble salts of dehydroacetic acid and a dispersing vehicle compatible with said compound.

2,746,906

CARBOXYMETHYL DEXTRAN ETHER-STABILIZED CONTRAST COMPOSITIONS

Leo J. Novak and Walter S. Hogue, Dayton, Ohio, assignors, by mesne assignments, to Midland Chemical Corporation, Dayton, Ohio, a corporation of Delaware

No Drawing. Application April 5, 1954, Serial No. 421,189
6 Claims. (Cl. 167—95)

1. A stable, ingestable composition for use in radiography comprising from 99.5% to 99.8% of an aqueous suspension of barium sulfate containing from 5% to 30% of the sulfate and, as stabilizer for the suspension, from 0.2% to 0.5% of a carboxymethyl ether of native, unhydrolyzed dextran, said suspension having a pH between 5.0 and 9.5.

2,746,907

PROCESS FOR HYDRO-DESULFURIZATION OF LIGHT HYDROCARBONS USING A NICKEL OXIDE CATALYST

Ross A. Hanson, Fullerton, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California

No Drawing. Application January 11, 1952, Serial No. 266,184
2 Claims. (Cl. 196—28)

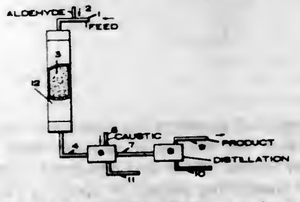
1. A process for desulfurizing a cracked gasoline containing between about 0.1% and 4% sulfur at low total pressures and low hydrogen pressures without substantial destructive cracking, which comprises contacting a mixture of hydrogen and said gasoline with a desulfurization catalyst consisting essentially of (1) between about 10% and 20% by weight of nickel oxide and (2) between about 90% and 80% by weight of an acid-washed, montmorillonite clay carrier, said contacting being carried out at a temperature between about 600° and 700° F., a pressure between about 50 and 150 p. s. i. g., a hydrogen ratio between about 100 and 400 s. c. f. per barrel of feed, and a space velocity between about 0.5 and 3 volumes of feed per volume of catalyst per hour, continuing said contacting until said catalyst has contacted between about 0.5 and 2.0 parts by weight of gasoline, then terminating said contacting and heating the catalyst in the presence of an oxygen-containing gas at a temperature between about 900° and 1200° F., and contacting the regenerated catalyst with further quantities of said gasoline under the stated conditions.

2,746,908

SWEETENING PROCESS USING AN ALDEHYDE AND A SOLID ACID CATALYST

Erving Arundale, Westfield, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application August 6, 1953, Serial No. 372,705
8 Claims. (Cl. 196—35)



1. A continuous process for the removal of undesirable constituents from a petroleum distillate boiling below about 700° F. comprising the steps of adding to said distillate from about 0.05% to about 5% by weight of an aldehyde, subsequently contacting the resulting mixture with a solid acid catalyst in the reaction zone in the temperature range of from about 75° F. to about 500° F., withdrawing treated petroleum product from said reaction zone, and separating aldehyde from treated petroleum product.

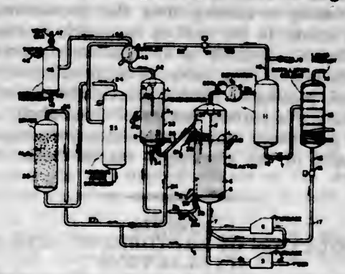
2,746,909

HYDROFORMING

Charles E. Hemminger, Westfield, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application January 31, 1955, Serial No. 485,150
6 Claims. (Cl. 196—50)

1. A continuous method for hydroforming naphthas which comprises providing a fluidized bed of a platinum-containing catalyst in a hydroforming zone, contacting the said catalyst in the said zone with naphthas and added dry substantially sulfur-free hydrogen-containing gas, maintaining hydroforming conditions of temperature and contact time in said hydroforming zone, maintaining a pressure of from 150–325 p. s. i. in said hydroforming zone, removing catalyst contaminated with carbonaceous and other deposits from said hydroforming zone and conducting it to a regeneration zone, forming the catalyst into a fluidized bed in said last-named zone and treating it with an oxygen-containing gas at regeneration conditions of temperature, withdrawing catalyst from the regeneration



zone, treating the said catalyst with a substantially dry and sulfur-free hydrogen-containing gas whereby a substantial portion of the sulfur and oxygen-containing material is stripped from the catalyst, thereafter transferring the catalyst to a stripping zone positioned in an upper portion of the hydroforming zone, treating the catalyst in said last-named zone with the product about to be removed from the hydroforming zone whereby sulfur and oxygen-containing materials still associated with the catalyst are substantially completely removed, returning the regenerated and stripped catalyst to the said fluidized bed in said hydroforming zone and recovering a hydroformed product from said hydroforming zone.

2,746,910

ADHESIVE WAX COMPOSITION

Ivor W. Mills, Glenolden, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

No Drawing. Application March 10, 1953, Serial No. 341,620
3 Claims. (Cl. 196—149)

1. An adhesive wax composition consisting essentially of a microcrystalline wax having a melting point above 175° F., and a hydrocarbon polymer derived from treatment of cracked gasoline with clay, said polymer having a bromine number above 100, an iodine number above 150, and a softening point above 125° F., the amount of such polymer being sufficient to substantially increase adhesion.

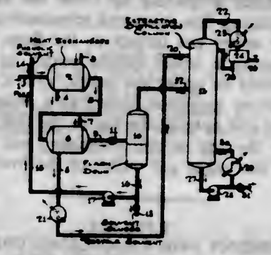
2,746,911

EXTRACTIVE DISTILLATION SLUDGE CONTROL PROCESS

Daniel S. Maisel, Union, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application October 22, 1952, Serial No. 316,255
5 Claims. (Cl. 202—39.5)

1. In an extraction distillation process for purifying a C_6 to C_8 aromatic hydrocarbon feed wherein the aromatic is mixed with C_5 to C_8 unsaturated hydrocarbons which polymerize and react with phenol solvent used in the extractive distillation, the improvement in pretreating the feed to said distillation process which comprises mixing said aromatic hydrocarbon feed with a minor proportion of said solvent, maintaining the mixture at a temperature sufficient to cause reaction of the said unsaturated hydrocarbons with said solvent, evaporating the heated mixture in a feed vaporizing zone at a pressure sufficient to maintain a portion of said solvent in liquid phase, passing the resulting vapors to an extractive distillation zone,



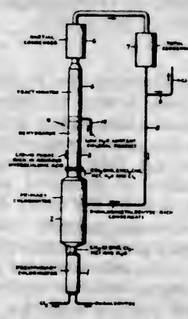
and withdrawing a liquid stream of sludge-containing solvent from said vaporizing zone.

2,746,912

PRODUCTION OF CHLORAL OF LOW WATER CONTENT

Ralph S. Park, Swarthmore, Pa., and Robert H. Stair, Collingswood, N. J., assignors to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

Application December 15, 1951, Serial No. 261,898
4 Claims. (Cl. 202—42)



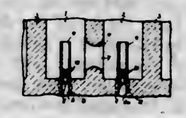
1. A method of producing a chloral product of 2–4% water content from a mixture of chloral and water comprising vaporizing said mixture, introducing therein at least one part by weight of HCl for every four parts of water vapor present, rectifying the resulting mixture at a boiling point of at least a portion of the mixture of hydrogen chloride and water vapor present and separating the gas phase containing said chloral product of 2–4% water content from the liquid phase rich in aqueous hydrochloric acid.

2,746,913

RICH GAS NOZZLE FOR REGENERATIVE COKE OVEN WITH RECIRCULATION HEATING

Heinrich Schürhoff, Essen-Stadtwald, Germany, assignor, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware

Application September 1, 1954, Serial No. 453,517
3 Claims. (Cl. 202—139)



2. A regenerative coke oven having vertical heating flues which are connected with one another at the top and bottom in such manner that waste gas recirculates therethrough, and with air regenerator ports and rich

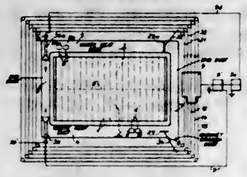
gas ports in the soles of the flues for introducing combustion air and rich gas into the bottoms of the flues and rich gas nozzles projecting up from the rich gas ports above the heating flue soles and terminating at their upper parts in upper gas outlets to the flues, said nozzles each comprising a lower nozzle seated in its rich gas port and having an upper gas outlet, with a free-standing upward, hollow extension detachably mounted on the lower nozzle and open at the top to the flue, with suction slots below the top of the extension and open to the flues above the upper gas outlet of the lower nozzle.

2,746,914

ARRANGEMENT FOR CHANGING THE HEATING DIRECTIONS OF REGENERATIVE FURNACES HEATED BY PRE-HEATED POOR GAS

Paul Van Ackeren, Essen, Germany, assignor, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware

Application April 1, 1953, Serial No. 346,142
4 Claims. (Cl. 202—142)



1. Apparatus for changing the heating direction of regenerative coke ovens heated by preheated poor gas, comprising: the combination with a coke oven heating flue system having two sets of regenerators, each comprising regenerators for inflow of preheated air and regenerators for inflow of preheated poor gas to the heating flue system, a waste gas outlet duct for each set of regenerators, separate chimney outlet valves for shutting off each waste gas duct from a chimney, separate valve controlled inlets for inflow of poor gas to each poor gas regenerator, a regenerator flow reversal box connecting each regenerator with its waste gas duct, each box having a valve device for controlling the flow through the box between the waste gas duct and a regenerator, of a reversing machine for reversing said valves, means for withdrawing waste gas from each waste gas duct and introducing it into the other waste gas duct, means under the control of the reversing machine to operate the poor gas valves for each of the sets of regenerators, means under the control of the reversing machine to operate the waste gas valve devices for each of the sets of regenerators, means under the control of the reversing machine to operate the means for withdrawing waste gas from each of the waste gas ducts and introducing it into the other waste gas duct, and means under the control of the reversing machine for operating the means for shutting off each of the waste gas ducts to a chimney, said reversing machine having its controls for all of the aforesaid means under the control of the reversing machine so set as to first operate, on operation for effecting a change in heating direction, to close the poor gas valves for one set of regenerators, and next operate the means for withdrawing waste gas from the waste gas duct for the other set of regenerators to introduce it into the waste gas duct for said one set of regenerators and also operate the means to operate the waste gas valve devices for said one waste gas duct to slightly open position, while the waste gas duct for said one set of regenerators is still shut off from a chimney and the waste gas duct for the other set of regenerators and their valve devices are still open to a chimney, for purging of the poor gas from the regenerators with waste heat gases.

2,746,915

ELECTROLYTIC METAL TREATMENT AND ARTICLE

William C. Gieseker, Watertown, and Richard K. Britton, Waterbury, Conn., assignors to The Autoyre Company, Inc., Oakville, Conn., a corporation of Connecticut

No Drawing. Application October 15, 1951, Serial No. 251,462
5 Claims. (Cl. 204—56)

5. The method of increasing the corrosion resistance of a steel article having a plating of chromium thereon which is normally cathodic to the steel of the article when immersed in a sodium chloride solution, which comprises forming a coating over the chromium plating which is anodic to the steel of the article by connecting the article as a cathode in an aqueous electrolyte consisting essentially of a hexavalent chromium-containing compound, passing an electric current through said electrolyte having a current density of from about .1 to 15 amperes per square foot of cathode, and maintaining the temperature of the electrolyte not in excess of about 200° F.

2,746,916

PRODUCTION OF LACTOBIONIC ACID AND ITS δ-LACTONE

Edward R. Magariello, Islip, N. Y., assignor to National Dairy Research Laboratories, Inc., Islip, N. Y., a corporation of Delaware

No Drawing. Application February 20, 1952, Serial No. 272,713
7 Claims. (Cl. 204—79)

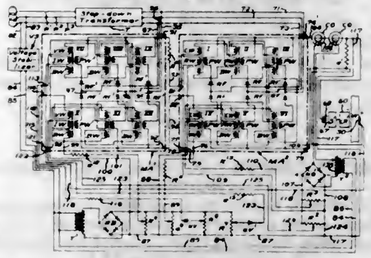
1. A process for the production of lactobionic acid δ-lactone which comprises subjecting lactose to electrolysis in an aqueous solution in the presence of a catalyst selected from the group consisting of iodine and bromine catalysts and an alkaline substance in an amount to maintain the pH above about 5.2, passing the crude electrolytic reaction solution through strongly acidic cation and weakly basic anion exchange resins, recovering as the effluent aqueous lactobionic acid solution, and spray-drying the effluent solution at a temperature sufficient to convert lactobionic acid to its δ-lactone.

2,746,917

ELECTROLYTIC GRINDING APPARATUS

George E. Comstock 3d, Holden, Mass., assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts

Application March 16, 1953, Serial No. 342,373
17 Claims. (Cl. 204—218)



1. In electrolytic grinding apparatus, in combination a work-support and rotatable wheel means having a plurality of conductive parts insulated from each other whereby a conductive work-piece and the faces of the wheel conductive parts are interrelated for relative movement therebetween, with means for supplying liquid electrolyte to the interfaces between the work-piece and said conductive parts for electrolytic decomposition at the work-piece face, a saturable-core magnetic amplifier having power winding means energized by alternating current and having rectifier means in circuit therewith to

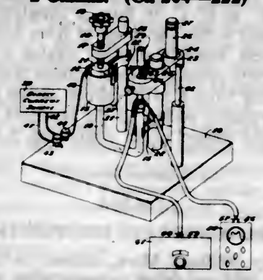
provide unidirectional current at its output terminals and having control winding means for affecting the core saturation thereof, a saturable-core control magnetic amplifier having power winding means energized by alternating current and having rectifier means in circuit therewith for energizing said control winding means of said first magnetic amplifier and having control winding means comprising a plurality of individual windings, one for each of said interfaces, for affecting its own core saturation, means connecting the positive side of said output terminals to the work-piece and a plurality of circuits connecting the negative said thereof to said wheel conductive parts to form a plurality of parallel electrolytic decomposition circuits, a plurality of current-responsive means, each comprising a para-magnetic core coupling member having an inductive winding thereon energizable by alternating current, there being one for each of said interfaces thereby forming a group and those of said group having their coupling members inductively coupled to respective conductors of said parallel circuits whereby to respond to the magnetic fluxes of the respective unidirectional interface currents flowing in said parallel circuits and there being another which has its coupling member inductively coupled to respond to the flux of the unidirectional current flowing in the circuit connecting said output to said workpiece, and means for selectively effecting energization of a plurality of said individual control windings under the control respectively of the current-responsive means of said group or effecting energization of one of said individual control windings under the control of said other current-responsive means.

2,746,918

APPARATUS FOR ELECTROLYTICALLY TUNING AN END WIRE FIXTURE

William E. Whittington, North Hollywood, Calif., assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa

Application February 13, 1953, Serial No. 336,677
2 Claims. (Cl. 204—222)



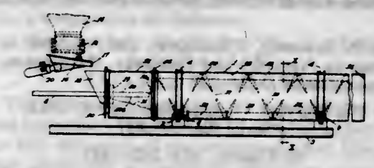
1. Means for electrolytically tuning an end wire fixture comprising, a base plate, a first upright mounted on said base plate, a first holding bracket attached to said first upright, a container having an open top supported by said first bracket, a U tube connected at one end to the bottom of said container and communicating therewith, the other end extending substantially to the top of the container and outside thereof, said container and said U tube adapted to contain a liquid electrolyte, a second bracket supported on said first upright, a plunger threadedly received through said second bracket and extending into said container, a second upright member mounted on said base plate, a third bracket supported on said second upright member adapted to support a filter assembly with an end wire extending into the confines of said U tube at said other end, means for applying a direct current potential between said end wire and said electrolyte so as to cause electrolytic action on said end wire, a driving coil mounted adjacent said other end of said U tube, a variable frequency oscillator connected to said driving coil, a pick-up coil mounted adjacent said other end of said U tube, and an indicating means attached to said pick-up coil to indicate the resonant frequency of said filter assembly.

2,746,919

APPARATUS FOR TREATING ACID WASTE PICKLE LIQUOR

John M. Wunderley, Liberty, Pa.

Application July 7, 1952, Serial No. 297,579
5 Claims. (Cl. 210—2)



1. An apparatus for treating waste pickle liquor comprising an elongated horizontal cylinder mounted for rotation about its longitudinal axis and having a charging opening at one end thereof and a discharge opening at the other end thereof, a hopper for introducing slag into said cylinder through said charging opening, a conduit extending through said opening for delivering a supply of liquor to be treated onto the surface of said slag, a spiral agitating vane comprising a coiled strip of several convolutions extending spirally of the interior surface of said cylinder between the inner end of the conduit and discharge end of the cylinder for mixing the slag and liquor introduced therein and for moving the mixture to said discharge end, and a plurality of straight vanes respectively extending axially of said cylinder between adjacent convolutions of said spiral vane for increasing the mixing action on said slag and liquor and for slowing down its movement to said discharge opening.

2,746,920

WASTE PICKLE LIQUOR DISPOSAL

John M. Wunderley, Liberty, Pa.

No Drawing. Application July 7, 1952, Serial No. 297,578
4 Claims. (Cl. 210—2)

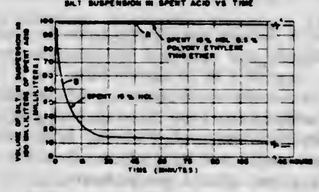
4. In the method of disposing of waste pickle liquor comprising sulphuric acid and ferrous sulphate in aqueous solution, the steps of mixing the liquor with a sufficient quantity of granulated basic ferrous slag to react with and substantially neutralize the acid of the solution, absorbing the solution into the slag during such mixing for reaction therewith and depositing of the reaction products thereon, then air drying the slag to fit the iron of the reaction products therein as substantially water-insoluble iron compounds.

2,746,921

ACIDIZING WELLS

Paul L. Menaul, Tulsa, Okla.

Application January 20, 1954, Serial No. 405,177
11 Claims. (Cl. 252—8.55)



1. A method of acidizing a calcareous formation penetrated by a well comprising injecting into said formation an acid solution capable of dissolving said formation and a polyoxyethylene thioether produced by react-

ing a dodecyl mercaptan with sufficient ethylene oxide to have an average molecular weight of about 660, the ratio of thioether to said acid being great enough to suspend in the spent acid silty residue produced by the reaction of said acid on said formation.

2,746,922

ESTERSIL-THICKENED LUBRICATING COMPOSITION MODIFIED WITH HYDROGEN-BONDING DONOR COMPOUND, AND PROCESS OF MAKING

Richard O. Braendle, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application June 4, 1952, Serial No. 291,807

10 Claims. (Cl. 252—28)

1. A lubricating composition comprising a major proportion of a mixture of a water-insoluble lubricating oil and a solid which is organophilic, being preferentially wetted by butanol in a butanol-water mixture, said solid comprising a supercolloidal substrate coated with —OR groups, the substrate having a surface of silica and having a specific surface area of from 1 to 900 square meters per gram, the coating of —OR groups being chemically bound to said silica, R being a hydrocarbon radical of from 2 to 18 carbon atoms wherein the carbon atom attached to oxygen is also attached to hydrogen, and a hydrogen bonding donor compound in which every electron donor atom is attached by at least one primary valence bond to an element other than silicon, the proportion of donor compound in the composition being about from 0.1 to 8.5 per cent by weight.

2,746,923

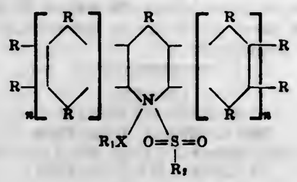
ADDITIVES FOR PETROLEUM PRODUCTS

Philip B. Gerhardt, Elizabeth, John O. Smith, Jr., North Plainfield, and Allen R. Jones, Fanwood, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application August 31, 1953, Serial No. 377,698

12 Claims. (Cl. 252—33)

1. A petroleum hydrocarbon product containing in the range of about 0.001 to 10% by weight of a material having the following formula:



wherein the R radicals are selected from the class consisting of hydrogen and saturated hydrocarbon groups having in the range of 1 to 20 carbon atoms, *n* is 0 to 1, X is selected from the class consisting of oxygen and sulfur, R_1 is selected from the class consisting of alkyl and aromatic hydrocarbon groups having in the range of 1 to 20 carbon atoms, and R_2 is selected from the class consisting of aryl and alkaryl groups having in the range of 6 to about 30 carbon atoms and a corrosion-inhibiting amount of zinc naphthenate.

12. As a new composition of matter, benzene sulfonyl lutidinum octadecyl sulfide.

2,746,924

SYNTHETIC OIL BASE LUBRICATING GREASE COMPOSITIONS

Delmer L. Cottle, Highland Park, David W. Young, Westfield, and Arnold J. Morway, Clark Township, Union County, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application May 16, 1952, Serial No. 288,301

6 Claims. (Cl. 252—42)

1. A lubricating composition which comprises a formal of the formula: $(RO)_2CH_2$, wherein R is a highly branched chain aliphatic radical corresponding to that of an alcohol having from 8 to 20 carbon atoms made by the interaction of an olefin with carbon monoxide and hydrogen in the Oxo process containing combined therein a grease forming amount of a metal soap.

2,746,925

LUBRICANTS AND ADDITIVES THEREFOR

John D. Garber, Cranford, William C. Hollyday, Jr., Fanwood, and Byron M. Vanderbilt, Westfield, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application September 27, 1951, Serial No. 248,634

10 Claims. (Cl. 252—59)

1. In a process for the formation of copolymers having the desirable characteristic of lowering the pour point and increasing the viscosity index of mineral lubricating oils with which they are blended wherein from 75% to 25% of a mono-olefin containing from 8 to 20 carbon atoms in a straight chain is copolymerized with from 25% to 75% of an olefin of substantially lower molecular weight containing from 2 to 6 carbon atoms, in the presence of an inert solvent acting as a refrigerant in the process and a Friedel-Crafts catalyst at a temperature within the range from —105° C. to 0° C. to form a copolymer having a molecular weight within the range of from 3,000 to 6,000, the improvement which comprises mixing a solution of the Friedel-Crafts catalyst in inert solvent with the mono-olefin containing from 8 to 20 carbon atoms in a straight chain, and thereafter adding to the resultant mixture the lower molecular weight olefin containing 2 to 6 carbon atoms.

2,746,926

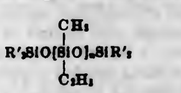
SILOXANE-SILICATE COMPOSITIONS

Arthur J. Barry, Midland, Mich., assignor to Dow Corning Corporation, Midland, Mich., a corporation of Michigan

No Drawing. Application June 19, 1953, Serial No. 362,968

1 Claim. (Cl. 252—78)

A composition of matter consisting essentially of from 1 to 30 per cent by weight of an ethylmethylpolysiloxane fluid having a viscosity of at least 100 cs. at 25° C. said ethylmethylpolysiloxane fluid being of a formula selected from the group consisting of $CH_3(C_2H_5)SiO$ and



where R′ is selected from the group consisting of ethyl, methyl and phenyl radicals and from 70 to 99 per cent by weight of an alkoxysilicate of the formula $Si(OR)_4$ in which R is an alkyl radical of from 2 to 10 carbon atoms and in which silicate there is an average of from 12 to 40 inclusive carbon atoms per silicon atom.

2,746,927

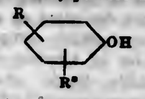
LOW FOAMING DETERGENTS

Manuel N. Fineman, Philadelphia, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application July 30, 1952, Serial No. 301,795

3 Claims. (Cl. 252—89)

1. A low-foaming composition consisting essentially of 7 to 25 parts of an alkylphenol of the formula



wherein R is an alkyl group of eight to ten carbon atoms and R° is selected from the class consisting of hydrogen and alkyl groups of not over ten carbon atoms, and 93 to 75 parts of an alkylphenoxypolyethoxyethanol having an alkyl group of 7 to 12 carbon atoms and having 8 to 30 ether groups, the total parts being 100 by weight.

2,746,928

GERMICIDAL DETERGENT COMPOSITIONS

John L. Darragh, Alamo, and Gordon B. Johnson, Berkeley, Calif., assignors to California Research Corporation, San Francisco, Calif., a corporation of Delaware

No Drawing. Application June 26, 1952, Serial No. 295,806

16 Claims. (Cl. 252—106)

1. A germicidal detergent composition consisting essentially of 70 to 99.5 parts by weight of an organic anionic detergent of the group consisting of water-soluble alkali metal salts of an organic sulfuric reaction product having in its molecular structure a higher molecular alkyl radical of from 8 to 18 carbon atoms and a radical selected from the group consisting of sulfonic acid and sulfuric acid ester radicals and 0.5 to 30 parts by weight of a quaternary ammonium germicide halogen complex consisting of from about 0.01 to about 1.0 mols of physically-bound elemental iodine per mol of quaternary ammonium germicide which are determinable by thiosulfate titration, and a quaternary ammonium germicide of the group consisting of long-chain alkyl dimethyl benzyl quaternary ammonium halides, long-chain alkyl phenoxy alkoxy alkyl dimethyl benzyl quaternary ammonium halides, long-chain alkyl pyridinium halides, long-chain alkyl trimethyl quaternary ammonium halides, long-chain alkyl benzyl di-ethyl ethanol ammonium halides and long-chain alkyl benzyl trimethyl ammonium halides, said complex being substantially free of unbound halogen as demonstrated by its failure to form halogen amines when exposed to ammonia vapors.

2,746,929

PROCESS FOR MAKING DETERGENT COMPOSITIONS

Louis E. Wells, Jr., and Henry V. Moss, Anniston, Ala., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application May 12, 1949, Serial No. 92,953

11 Claims. (Cl. 252—135)

1. The process of increasing the retentivity of a finely-divided inorganic hydratable alkali metal detergent builder for an oily detergent derived from the condensation of an alkylene oxide with a mercaptan containing at least 6 carbon atoms, which consists essentially in gradually adding an aqueous medium to said detergent builder while intimately mixing the latter in the finely divided solid state with said oily detergent in an amount varying from about 0.1 part to about 1 part of said oily detergent for each part of said builder, said aqueous medium supplying water only in an amount sufficient to form a hydrate of said hydratable alkali metal detergent builder and said water incorporated with said aqueous medium being retained in said mixture as a hydrate of said builder.

2,746,930

PROCESS FOR MAKING DETERGENT COMPOSITIONS

Louis E. Wells, Jr., and Henry V. Moss, Anniston, Ala., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application May 12, 1949, Serial No. 92,954

12 Claims. (Cl. 252—135)

1. The process of increasing the retentivity of a finely divided inorganic hydratable alkali metal detergent builder for an oily detergent of the polyglycol ether type, which consists essentially in gradually adding an aqueous medium to said builder while mixing the latter in the finely divided solid state with said oily detergent in an amount varying from about 0.1 part to about 1 part of said oily detergent for each part of said builder, said aqueous medium supplying water only in an amount sufficient to form a hydrate of said hydratable alkali metal detergent builder and said water incorporated with said aqueous medium being retained in said mixture as the hydrate of said builder.

2,746,931

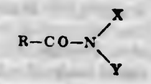
SYNTHETIC DETERGENT COMPOSITIONS

Peter T. Vitale and Muriel Eileen Liffin, Brooklyn, N. Y., assignors to Colgate-Palmolive Company, Jersey City, N. J., a corporation of Delaware

No Drawing. Application October 29, 1949, Serial No. 124,514

9 Claims. (Cl. 252—137)

1. A detergent composition comprising from about 10 to 50% by weight of water-soluble higher alkyl mononuclear aryl sulfonate detergent, in minor proportion thereto and from about 1 to about 10% of each by weight of a higher aliphatic alcohol of about 12 to 18 carbon atoms and a higher amide compound having the formula:



wherein R—CO— is an aliphatic acyl radical of about 10 to 20 carbon atoms, and X and Y are each selected from the group consisting of hydrogen and alkylol radicals having up to 5 carbon atoms, and the balance being primarily a mixture of water-soluble inorganic sulfate and phosphate salts.

2,746,932

SYNTHETIC DETERGENT COMPOSITIONS

Peter Tamburo Vitale, Brooklyn, N. Y., assignor to Colgate-Palmolive Company, a corporation of Delaware

No Drawing. Application October 8, 1949, Serial No. 120,409

8 Claims. (Cl. 252—138)

3. A cleansing and laundering composition consisting essentially of about 20 to 50% by weight of water-soluble higher alkyl aryl sulfonate detergent salt, about ½ to 10% by weight of a primary saturated fatty alcohol of 14 to 18 carbon atoms, and the balance being primarily a mixture of water-soluble inorganic sulfate and phosphate salts, said composition exhibiting improved soil removal upon washing of textile materials at a concentration of 0.4–0.75% in water.

2,746,933

FLUORIDE PHOSPHORS

Arthur L. J. Smith, Lancaster, Pa., assignor to Radio Corporation of America, a corporation of Delaware

Application April 28, 1953, Serial No. 351,595
7 Claims. (Cl. 252—301.4)

1. A luminescent material having the formula

$$x\mathrm{CaF_2}.y\mathrm{AlF_3}:z\mathrm{Mn}$$

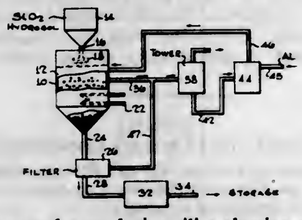
where $x+y=1$ (mole) and x may have values in the range of 0.99 to 0.1 mole and y correspondingly may have values in the range of 0.01 to 0.9 mole; and for one mole of phosphor z may have a value in the range of .001 to 0.1 mole.

2,746,934

PROCESS FOR MAKING SPHERICAL SILICA-ALUMINA CATALYSTS

Roger W. Richardson, Baton Rouge, and Robert E. Schexnailder, Jr., Hope Villa, La., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application June 18, 1952, Serial No. 294,164
5 Claims. (Cl. 252—448)



1. A process for producing silica-alumina micro-spherical or microspheroidal catalyst which comprises forming droplets of silica hydrosol above a liquid body of anhydrous aluminum alcoholate in a solution containing excess alcohol, causing the silica hydrosol droplets to pass down through and contact said liquid body of anhydrous aluminum alcoholate to hydrolyze the alcoholate with the water in the silica hydrosol droplets and taking up water by the excess alcohol to hasten gelation of the silica hydrosol droplets and at the same time depositing alumina from the hydrolyzed aluminum alcoholate on the silica hydrogel droplets as they are forming, removing silica hydrogel droplets impregnated with alumina from the bottom of said liquid body of solution and drying the impregnated silica hydrogel droplets to form microspheroidal or microspherical silica-alumina catalyst.

2,746,935

PROCESS FOR DRYING INORGANIC HYDROGELS PARTICLES

Paul B. Weisz, Pitman, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York

Application April 9, 1951, Serial No. 220,039
8 Claims. (Cl. 252—448)

1. A process for drying inorganic hydrogel particles, which comprises passing a stream of warm gas at atmospheric pressure in contact with said particles until shrinkage thereof is substantially complete, at which point the hydrogel contains approximately 30 per cent of its initial water content, exposing the shrunken particles so obtained to an atmosphere of steam at a pressure of at least about 250 but not more than about 3000 pounds per square inch and a temperature of at least about 400° F. but not more than about 900° F. for a period of at least about 1 hour but not more than about 6 hours, and thereafter completing drying of the particles to a desired moisture content with warm gas at substantially atmospheric pressure.

2,746,936

METHOD OF PREPARING CATALYSTS

Charles J. Plank, Woodbury, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York

No Drawing. Application November 14, 1951, Serial No. 256,389
4 Claims. (Cl. 252—465)

1. In the process of preparing a catalyst consisting essentially of chromia deposited on granular porous alumina, the improvement which comprises partially filling the pores of granules of alumina with a substantially completely volatizable liquid chemically unreactive therewith, contacting said partially filled granules of alumina with a solution of a chromium compound decomposable to chromia, maintaining said partially filled granules of alumina in contact with said solution for a period of time sufficient to permit said solution to penetrate into the pores of the alumina to a depth sufficient to place a catalytic amount of chromia within said pores, removing the granules of alumina so treated from contact with said solution before appreciable diffusion thereof into the pores occupied by said liquid ensues, thereafter drying the resulting product to remove substantially all of said volatizable liquid and the solvent of said solution to yield a granular catalyst having a core composed of alumina and a shell overlying said core composed of alumina impregnated with a catalytic amount of chromia.

2,746,937

PROCESS OF PREPARING PLATINUM-ALUMINA HYDROFORMING CATALYSTS

Edward A. Hunter and Charles N. Kimberlin, Jr., Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application May 1, 1951, Serial No. 224,065
4 Claims. (Cl. 252—466)

1. A process for manufacturing platinum-alumina and palladium-alumina catalysts which comprises preparing an alumina hydrosol by treating aluminum metal with a dilute acid in the presence of catalytic amounts of mercury, mixing a compound of a metal selected from the group consisting of platinum and palladium with said alumina hydrosol, drying and calcining the resultant product and treating the calcined mixture with hydrogen to activate the same.

2,746,938

SULFONATED METHYLBENZENE-HALOGENATED HYDROCARBON CONDENSATION PRODUCTS AS CATION EXCHANGE RESINS

Wilhelm Ehm and Robert Schnegg, Dormagen, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application May 6, 1952, Serial No. 286,420
Claims priority, application Germany May 10, 1951
16 Claims. (Cl. 260—2.2)

1. Process for the production of cation exchanging resins which comprises reacting (1) a liquid methyl-substituted benzene hydrocarbon with (2) a polyhalogenated saturated aliphatic hydrocarbon, which is substituted by at least two halogen atoms, selected from the group consisting of chlorine, bromine and iodine in the presence of a Friedel-Crafts catalyst and at elevated temperature, at least until the reaction products obtained are hard, non-plastic and infusible resins, and treating said resins with sulfonating agents.

2,746,939

MANUFACTURE OF CELLULAR ARTICLES

David J. Beaver, Richmond Heights, Mo., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application March 30, 1951, Serial No. 218,557
13 Claims. (Cl. 260—2.5)

1. The process of producing chemically blown sponge rubber which comprises heating a sulfur vulcanizable rubber and sulfur in the presence of at least 5% by weight on the rubber of a gas generating agent consisting essentially of a composition obtained by heating below the decomposition point an admixture of 23–80 parts by weight of maleic anhydride and 77–20 parts by weight of a rubber vulcanization accelerator having a carbon atom linked to two sulfur atoms and a nitrogen atom of the class consisting of thiazoles, thiuram sulfides and dithiocarbamates.

2,746,940

PRODUCTION OF CELLULAR POLYVINYL PLASTICS

Alfred Cooper and Leonard Baxter MacQueen, Croydon, England, assignors to Expanded Rubber Company Limited, Croydon, England, a British company

No Drawing. Application September 21, 1951, Serial No. 247,775
Claims priority, application Great Britain September 27, 1950
2 Claims. (Cl. 260—2.5)

1. A process for the production of hard cellular products from a polyvinyl type plastic selected from the group consisting of polyvinyl chloride, co-polymers of vinyl chloride with vinyl acetate, co-polymers of vinyl chloride with vinylidine chloride and mixtures of at least one of said co-polymers with butadiene acrylonitrile co-polymer, which process comprises in combination the following steps: (*a*) heating in a confined space a paste consisting of the powdered vinyl polymer, a polymerizable solvent selected from the group consisting of styrene, alkyl substituted styrenes in which the substituent is in the nucleus, methyl methacrylate and butyl methacrylate, and a blowing agent which at the temperature of gel formation will form an inert gas, and continuing the heating until the paste is converted into a gel; (*b*) cooling until the gel sets to a hard mass; (*c*) re-heating the mass without applied pressure until it is softened and expanded under the influence of the gas with which it is impregnated, and continuing the heating until the mass is hardened by polymerisation of the polymerizable solvent.

2,746,941

METHOD OF APPLYING NYLON FINISH TO GARMENTS

Robert S. Horn, Jr., Doylestown, and Roscoe F. Patt, Stony Creek Mills, Pa., assignors to Hans C. Bick, Inc., Reading, Pa., a corporation of Pennsylvania

No Drawing. Application November 21, 1951, Serial No. 257,652
2 Claims. (Cl. 260—9)

1. A solution for forming an aqueous emulsion when mixed with large quantities of water so as to deposit a linear polyamide coating on textiles when immersed in the emulsion, comprising, in proportion by weight: about 200 to 250 lbs. of water, about 800 to 900 lbs. of an alcohol having a boiling point less than 100° C. having dissolved therein about 35 to 45 lbs. of N-methoxymethyl polyhexamethylene adipamide, about 35 to 45 lbs. of a nonionic, surface active, emulsifying agent and about 35 to 45 lbs. of a partially stabilizing ester of a carbohydrate and organic acid, which will remain completely dissolved in said solution.

2,746,942

ESTERS OF CO-POLYMERS OF AN UNSATURATED FATTY ACID WITH A VINYL AROMATIC COMPOUND AND AN ALKOXY POLYSILOXANE

James H. Sample, Chicago, Ill., and Robert A. Sturges, Solon, Ohio, assignors to The Sherwin-Williams Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application September 9, 1952, Serial No. 308,688
26 Claims. (Cl. 260—23)

1. A resinous reaction product of a reactive polyorganosiloxane formed by heating (*a*) an interpolymer of an unsaturated monocarboxylic fatty acid and a monovinyl aromatic compound, (*b*) an aliphatic polyhydric alcohol, and after reacting (*a*) and (*b*), then introducing, (*c*) a reactive polyorganosiloxane selected from the group consisting of alkoxy polyorganosiloxanes, and alkoxy polyorganosiloxanes in which at least 1 alkoxy radical has been replaced with halogen, the alkyl portion of said alkoxy group having from 1 to 4 carbon atoms therein.

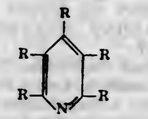
2,746,943

POLYMER COMPOSITIONS AND METHODS FOR PRODUCING THE SAME

James E. Pritchard, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application November 9, 1951, Serial No. 255,741
9 Claims. (Cl. 260—29.6)

1. In a process for emulsion polymerization of ethylenically unsaturated polymerizable organic compounds capable of forming high molecular weight linear polymers in an acid medium; the improvement of adding at least 0.5 part by weight per 100 parts of said polymerizable compounds of a salt of a polymer of a pyridine derivative of the formula



where R is selected from the group consisting of hydrogen, alkyl, vinyl, and alpha-methylvinyl groups; at least one and not more than two of said groups being vinyl or alpha-methylvinyl; and the total number of carbon atoms in the alkyl groups being not greater than 12, to the mixture as an emulsifying agent; adding a sufficient amount of a base to coagulate the polymer and to precipitate the polymer of the pyridine derivative, and recovering the resultant product, said product being a homogeneous blend of the two polymeric materials.

2,746,944

PROCESS FOR PREPARING VINYL HALIDE CO-POLYMERS AND COPOLYMERS PRODUCED THEREBY

Marguerite Naps, Oakland, and Fred E. Condo, El Cerrito, Calif., assignors to Shell Development Company, San Francisco, Calif., a corporation of Delaware

No Drawing. Application October 16, 1950, Serial No. 190,446
1 Claim. (Cl. 260—45.5)

A process for copolymerizing vinyl chloride and methyl methacrylate which consists of adding monomeric vinyl chloride to an aqueous emulsion consisting of water, from 0.1% to 5% by weight of an alkali metal alkyl sulfate as the emulsifying agent, and from 0.1% to 5% by weight of potassium persulfate, heating the mixture at a temperature between 35° C. and 60° C. at a pressure at which the vinyl halide is in the liquid state until a greater part of the vinyl chloride has been polymerized, removing the unpolymerized vinyl chloride, and then, without increasing the amount of emulsifying agent, add-

ing deoxygenated methyl methacrylate to the resulting mixture and continuing the polymerization in the dark at a temperature not in excess of 40° C. and a pressure not substantially in excess of atmospheric pressure until the methyl methacrylate has been polymerized.

2,746,945
MODIFIED POLYVINYL ACETAL RESIN COMPOSITIONS

Francis T. Buckley, Ludlow, Mass., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application August 14, 1952, Serial No. 304,449
4 Claims. (Cl. 260—45.7)

1. A composition of matter comprising a polyvinyl butyraldehyde resin, a plasticizer, 0.10 part of para-tertiary amyl phenol per 100 parts of resin and 2.0 parts of triphenyl fluorosilane per 100 parts of resin.

2,746,946
VINYL RESINS STABILIZED WITH ORGANOTIN SULFIDES

Elliott L. Weinberg, Long Island City, N. Y., and Hugh E. Ramsden, Metuchen, N. J., assignors to Metal & Thermit Corporation, New York, N. Y., a corporation of New Jersey

No Drawing. Application January 11, 1952, Serial No. 266,084
16 Claims. (Cl. 260—45.75)

1. A composition comprising a chlorine containing vinyl resin and a stabilizing amount of a hydrocarbontin sulfide the hydrocarbon groups of which are bonded to tin and the sulfur bonded only to tin.

2,746,947
POLYMERIZATION OF VINYL ACETATE WITH PEROXIDE, AMINE, SULFINIC ACID CATALYST SYSTEM

Tsuguo Kominami and Junji Ukita, Toyama-shi, Japan, assignors of one-fourth to Omni Products Corporation, New York, N. Y., a corporation of New York

No Drawing. Application February 19, 1953, Serial No. 337,878
Claims priority, application Japan February 21, 1952,
6 Claims. (Cl. 260—89.1)

1. The process which comprises polymerizing vinyl acetate in homogeneous liquid phase in the presence of a catalyst mixture containing a peroxide, an amine, and an aromatic sulfinic acid.

2,746,948
CRYSTALLINE COMPLEXES OF SULFUR COMPOUNDS WITH UREA

Lloyd C. Fetterly, Seattle, Wash., assignor to Shell Development Company, San Francisco, Calif., a corporation of Delaware

No Drawing. Application February 16, 1948, Serial No. 8,749
8 Claims. (Cl. 260—96.5)

1. A crystalline complex of urea and an organic sulfur compound of the group consisting of thiophene, straight chain alkyl mercaptans, straight chain dialkyl monosulfides and straight chain dialkyl disulfides, said mercaptans, monosulfides and disulfides having at least six carbon atoms per molecule.

2,746,949
PROCESS FOR EXTRACTING ANIMAL GLUE IN CONCENTRATED AQUEOUS SOLUTIONS

August L. Lolli, Chicago, Ill., assignor to Armour and Company, Chicago, Ill., a corporation of Illinois

Application April 27, 1953, Serial No. 351,409
10 Claims. (Cl. 260—118)

1. In a method of extracting animal glue, wherein animal glue stock solids are conditioned and wherein the conditioned glue stock solids are soaked in an aqueous acidic solution to obtain acid-swollen glue stock solids, the steps of contacting said acid-swollen glue stock solids with an essentially water-immiscible organic fat solvent in the absence of water other than that impregnated in said glue stock solids, said organic fat solvent being maintained at a glue-liberating temperature to cook out a concentrated aqueous solution of glue, and separating said concentrated aqueous solution of glue from residual glue stock solids.

2,746,950
CONTINUOUS METHOD OF EXTRACTING ANIMAL GLUE IN CONCENTRATED AQUEOUS SOLUTIONS

August L. Lolli, Chicago, Ill., assignor to Armour and Company, Chicago, Ill., a corporation of Illinois

Application April 27, 1953, Serial No. 351,410
6 Claims. (Cl. 260—118)

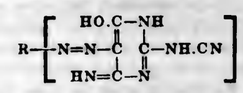
1. In a method of extracting animal glue, wherein animal glue stock solids are conditioned and wherein the conditioned glue stock solids are soaked in an aqueous solution to obtain water-impregnated glue stock solids, the steps of agitating said water-impregnated glue stock solids in contact with an essentially water-immiscible organic fat solvent in the absence of water other than that impregnated in said glue stock solids, said organic fat solvent being maintained at a glue liberating temperature to cook out a concentrated aqueous solution of glue, withdrawing a three-phase mixture comprising said concentrated aqueous solution of glue, the water-immiscible organic fat solvent, and the residual glue stock solids, and separating said concentrated aqueous solution of glue from the other phases in said mixture.

2,746,951
PYRIMIDINE AZO DYESTUFFS

Karl Taube, Leverkusen-Bayerwerk, Germany, assignor to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application April 30, 1952, Serial No. 285,303
Claims priority, application Germany May 7, 1951
8 Claims. (Cl. 260—154)

1. Azo dyestuffs of the general formula



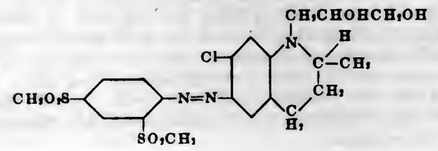
wherein R stands for a radical of the benzene series bearing at least one substituent selected from the group consisting of $—SO_3H$, —COOH and alkali salts thereof, and *n* stands for an integer from 1 to 2, inclusive.

2,746,952
2,4-BIS(METHYLSULFONYL)-BENZENEAZO-TETRAHYDRO-QUINOLINE COMPOUNDS

Joseph B. Dickey and George J. Taylor, Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application June 30, 1951, Serial No. 234,681
1 Claim. (Cl. 260—155)

The azo compound having the formula:

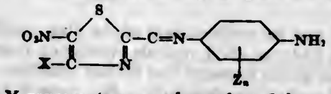


2,746,953
5-NITROTHIAZOLEAZOANILINE COMPOUNDS

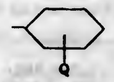
Joseph B. Dickey and Edmund B. Towne, Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application December 21, 1951, Serial No. 262,902
10 Claims. (Cl. 260—158)

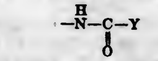
1. The azo compounds having the general formula:



wherein X represents a member selected from the group consisting of a hydrogen atom, an alkyl group having 1 to 6, inclusive, carbon atoms, a cyano group, a trifluoromethyl group and a



group, wherein Q represents a member selected from the group consisting of a hydrogen atom, a nitro group, a chlorine atom, a bromine atom and an alkyl group having 1 to 4, inclusive, carbon atoms, Z represents a member selected from the group consisting of an alkyl group having 1 to 4, inclusive, carbon atoms, an alkoxy group having 1 to 4, inclusive, carbon atoms, a chlorine atom, a bromine atom, a fluorine atom and a



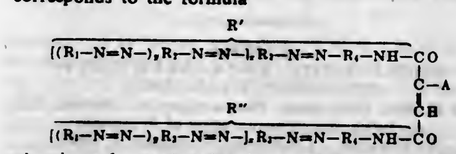
group, wherein Y represents an alkyl group having 1 to 3, inclusive, carbon atoms and *n* is selected from 0, 1 and 2.

2,746,954
DIS- AND POLYAZO DYESTUFFS

Philippe Grandjean, Basel, and Walter Wehrli, Riehen, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application March 27, 1953, Serial No. 345,249
Claims priority, application Switzerland April 4, 1952
6 Claims. (Cl. 260—166)

1. A water-soluble, non-metallizable azo dyestuff which corresponds to the formula



wherein each *x* and each *y* is one of the numerals 0 and 1, each R_1, R_2, R_3 and R_4 stands for a radical selected from the group consisting of substituted and unsubstituted radicals of the benzene and naphthalene series, such radicals possessing together at least one and at most three solubilizing groups, the substituents on the said radicals being selected from the class consisting of chlorine and bromine atoms and hydroxy, lower alkyl, lower alkoxy, acylamino, nitro, carboxylic acid and sulfonic acid groups, and A stands for a member selected from the group consisting of hydrogen, chlorine, bromine and methyl, and wherein the moieties R′ and R″ are not identical.

2,746,955
MANUFACTURE OF AZO DYESTUFFS

William H. Armento, Albany, N. Y., assignor to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application June 3, 1952, Serial No. 291,583
6 Claims. (Cl. 260—175)

1. In the process of manufacturing azo dyestuffs, wherein a diazo compound, which is unstable at temperatures above 30° C. is coupled under alkaline conditions with a coupling component; the improvement, which comprises adding said diazo compound, at a temperature below 30° C. and at which it is stable, to an alkaline solution of the coupling component maintained at alkaline conditions, and at a temperature within the range of 40 to 55° C. during such addition.

2,746,956
METHOD OF SILYLATING ORGANIC COMPOUNDS

John L. Speier, Pittsburgh, Pa., assignor to Dow Corning Corporation, Midland, Mich., a corporation of Michigan

No Drawing. Application June 16, 1953, Serial No. 362,133
4 Claims. (Cl. 260—210)

1. A method of silylating organic compounds which comprises reacting an organic compound containing at least one functional group selected from the group consisting of groups of the formulae –XH and –XM, where X is selected from the group consisting of oxygen and sulfur and M is a metal, there being present in said organic compound at least some XH groups, with a mixture of a chlorosilane of the formula R_3SiCl and a silazane of the formula $(R_3Si)_2NH$, in which chlorosilane and silazane each R is selected from the group consisting of alkyl radicals of less than 7 carbon atoms and phenyl radicals, the relative amounts of the chlorosilane and the silazane in said reaction being such that there is at least enough of an equimolar mixture of the chlorosilane and silazane to react with the desired amount of active hydrogen in the organic compound and to maintain the reaction mixture in a neutral condition throughout the reaction.

2,746,957
RECOVERY OF WATER SOLUBLE INOSITOL COMPOUNDS AND STEROL GLYCOSIDES

David Perlman and Morris Mattikow, New York, N. Y., assignors to Benjamin Clayton, doing business under the fictitious name and style of Refining, Unincorporated

Application September 23, 1952, Serial No. 310,947
8 Claims. (Cl. 260—210.5)

1. The process of recovering water-soluble inositol compounds from vegetable oil phosphatidic material containing bound inositol and sterol glycosides, which comprises, treating said material with a solution consisting essentially of a caustic alkali of a lower aliphatic alcohol containing not more than 5 carbon atoms to liberate water soluble inositol compounds, separating insoluble material containing said inositol compounds from materials in solution in said alcohol, and extracting said insoluble material with water to recover water-soluble inositol compounds.

2,746,958
CELLULOSE DERIVATIVES AND THEIR METHOD OF PREPARATION

George H. Pyle, Crescent Hills, Va., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 17, 1951, Serial No. 226,933
14 Claims. (Cl. 260—232)

1. The method for removing color bodies from an organic solvent-soluble cellulose ether containing alkaline metal attached to functional groups in said cellulose ether which comprises contacting said cellulose ether with an inorganic chlorite bleaching agent in the presence of an aqueous swelling medium for said cellulose ether.

2,746,959
DIPHENYLETHYLENEDIAMINE-PENICILLIN SALT

William F. Bruce, Havertown, and Roy S. Hanslick and Meier E. Freed, Philadelphia, Pa., assignors to American Home Products Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application June 2, 1953, Serial No. 359,212
4 Claims. (Cl. 260—239.1)

4. A penicillin salt of a compound having the formula



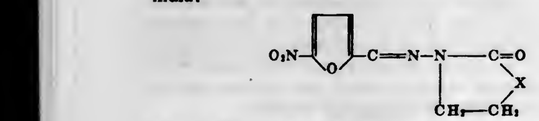
wherein R and R_1 each stand for a member of the group consisting of hydrogen and lower alkyl, with R_2 and R_3 each representing a member of the group consisting of phenyl and hydroxyphenyl.

2,746,960
NEW CHEMOTHERAPEUTIC NITROFURANS

Gabriel Gever, Oxford, and Julian G. Michels, Norwich, N. Y., assignors to The Norwich Pharmacal Company, Norwich, N. Y., a corporation of New York

No Drawing. Application May 26, 1955, Serial No. 511,435
4 Claims. (Cl. 260—240)

1. A new chemical compound having chemotherapeutic activity on oral administration and represented by the formula:



wherein X represents a member of the group consisting of sulfur, imino and methylene.

2,746,961
NOVEL PURINE COMPOUNDS FROM 6-CHLOROPURINE

George H. Hitchings, Tuckahoe, and Gertrude B. Elion, Bronxville, N. Y., assignors to Burroughs Wellcome & Co. (U. S. A.) Inc., Tuckahoe, N. Y., a corporation of New York

No Drawing. Application July 13, 1953, Serial No. 367,772
3 Claims. (Cl. 260—252)

1. The process of forming 6-chloropurine which comprises heating hypoxanthine with phosphoryl chloride at temperatures substantially above the boiling point of the latter but below 200° for 2 to 5 hours.

2,746,962
MORPHINAN DERIVATIVES

Otto Schnider, Basel, Switzerland, assignor to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application June 25, 1953, Serial No. 364,185
Claims priority, application Switzerland December 8, 1952
8 Claims. (Cl. 260—285)

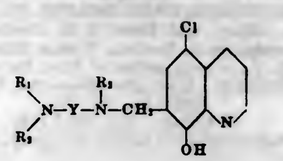
1. A compound selected from the group consisting of 2,17-dimethyl-3-hydroxy-morphinan and acid addition salts thereof.

2,746,963
SUBSTITUTED CHLOROQUINOLINOL COMPOUNDS

Joseph H. Burckhalter, Lawrence, Kans., assignor to Parke, Davis & Company, Detroit, Mich., a corporation of Michigan

No Drawing. Application March 19, 1954, Serial No. 417,485
6 Claims. (Cl. 260—286)

1. A compound of the class consisting of a free base and its acid addition salts, said free base having the formula,



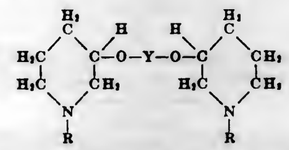
where R_1 and R_2 are members of the class consisting of alkyl and hydroxy alkyl radicals containing from one to ten carbon atoms inclusive and further members wherein R_1 and R_2 taken together with —N< form a radical of the class consisting of piperidino, morpholino and pyrrolidino, R_3 is a member selected from the class consisting of hydrogen, methyl and ethyl, and Y is a divalent alkylene group containing from two to five carbon atoms.

2,746,964
DICARBOXYLIC ACID ESTERS OF N-ALKYL-3-HYDROXYPIPERIDINE AND SALTS THEREOF

John H. Biel, Milwaukee, Wis., assignor to Lakeside Laboratories, Inc., a corporation of Wisconsin

No Drawing. Application November 2, 1953, Serial No. 389,847
12 Claims. (Cl. 260—294.3)

1. A member of the group consisting of (*a*) the basic esters of the formula:



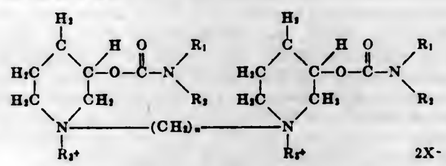
wherein R is a member of the class consisting of lower alkyl and aralkyl radicals in which the aryl is phenyl and the alkyl group of the aralkyl radical is a lower alkyl, and Y is a member of the class consisting of saturated and unsaturated dicarboxylic radicals having from 2 through 10 carbons; (*b*) acid addition salts thereof; and (*c*) quaternary ammonium salts thereof.

2,746,965
BIS-(N-SUBSTITUTED-3-CARBAMYLOXY-PIPERIDINIUM) ALKANES

John H. Biel, Milwaukee, Wis., assignor to Lakeside Laboratories, Inc., a corporation of Wisconsin

No Drawing. Application November 2, 1953, Serial No. 389,850
5 Claims. (Cl. 260—294.3)

1. A member of the group consisting of compounds of the formula:



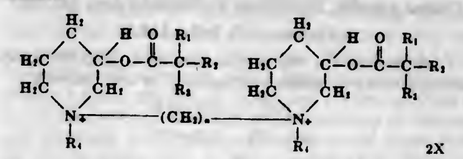
wherein *n* is an integer from 2 to 10; R_1 is a member of the class consisting of lower alkyl and monocyclic aryl radicals; R_2 is a member of the class consisting of lower alkyl, monocyclic aryl and aralkyl radicals in which the aryl group is monocyclic and the alkyl group of the aralkyl radical is a lower alkyl; R_3 is a member of the class consisting of lower alkyl and aralkyl radicals in which the aryl group is monocyclic and the alkyl group of the aralkyl radical is a lower alkyl; and X is the negative ion of a non-toxic acid.

2,746,966
ESTERS OF BIS-(N-SUBSTITUTED-3-HYDROXY-PIPERIDINIUM) ALKANES

John H. Biel, Milwaukee, Wis., assignor to Lakeside Laboratories, Inc., a corporation of Wisconsin

No Drawing. Application November 2, 1953, Serial No. 389,851
6 Claims. (Cl. 260—294.3)

1. A member of the group of compounds of the formula:



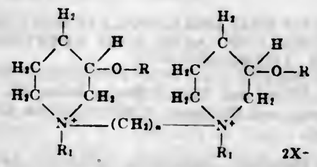
wherein *n* is an integer from 2 to 10; R_1 is a member of the class consisting of hydrogen, hydroxyl and lower alkyl radicals; R_2 is a member of the class consisting of hydrogen, lower alkyl and monocyclic aryl radicals; R_3 is a member of the class consisting of hydrogen, lower alkyl, monocyclic aryl and 2-thienyl radicals; R_4 is a member of the class consisting of lower alkyl and aralkyl radicals in which the aryl group is monocyclic and the alkyl group of the aralkyl radical is a lower alkyl; and X is the negative ion of a nontoxic acid.

2,746,967
DERIVATIVES OF BIS-(N-SUBSTITUTED-3-HYDROXYPIPERIDINIUM) ALKANES

John H. Biel, Milwaukee, Wis., assignor to Lakeside Laboratories, Inc., a corporation of Wisconsin

No Drawing. Application November 2, 1953, Serial No. 389,849
6 Claims. (Cl. 260—294.7)

1. A member of the group consisting of compounds of the formula:



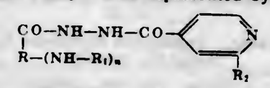
wherein *n* is an integer from 2 to 10; R is a member of the class consisting of hydrogen, lower alkyl, monocyclic aryl, and aralkyl radicals in which the aryl group is monocyclic and the alkyl group of the aralkyl radical is a lower alkyl; R_1 is a member of the class consisting of lower alkyl and aralkyl radicals in which the aryl group is monocyclic and the alkyl group of the aralkyl radical is a lower alkyl; and X is the negative ion of a non-toxic acid.

2,746,968
NOVEL DIACYLATED HYDRAZINES AND PROCESS FOR THE MANUFACTURE THEREOF

Balthasar Hegedüs, Basel, Switzerland, assignor to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application November 3, 1953, Serial No. 390,095
Claims priority, application Switzerland December 2, 1952
11 Claims. (Cl. 260—295)

5. A diacylated hydrazine represented by the formula



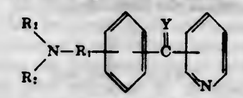
wherein R represents the radical of a naturally occurring α-amino acid, having less than 11 carbon atoms, from which the carboxy group and the amino group have been split off, R_1 presents a member of the group consisting of hydrogen, acyl, carbalkoxy and carbaralkoxy, R_2 represents a member of the group consisting of hydrogen and methyl, and *n* represents an integer from 1 to 2.

2,746,969
AMINOALKYLBENZENE DERIVATIVES

Frank Villani and Domenick Papa, Brooklyn, N. Y., assignors to Schering Corporation, Bloomfield, N. J., a corporation of New Jersey

No Drawing. Application August 3, 1950, Serial No. 177,572
5 Claims. (Cl. 260—296)

1. Compounds of the general formula



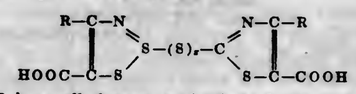
wherein R_1 is a saturated aliphatic hydrocarbon radical of 1 to 4 carbon atoms, R_2 are lower alkyl groups and Y is a number of the group consisting of 2H; H and OH; and O.

2,746,970
2,2'-THIOBIS(4-ALKYL-5-THIAZOLE CARBOXYLIC ACID)

John J. D'Amico, Charleston, W. Va., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application March 19, 1953, Serial No. 343,508
6 Claims. (Cl. 260—302)

1. A compound of the structure



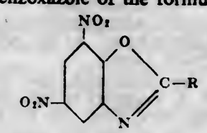
where R is an alkyl group and *x* is an integer.

2,746,971
DINITROBENZOXAZOLES

Robert O. Dorton, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application November 2, 1954, Serial No. 466,435
3 Claims. (Cl. 260—307)

1. A dinitrobenzoxazole of the formula



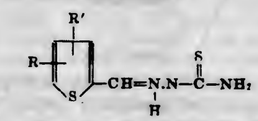
wherein R is an alkyl radical of the group consisting of ethyl and propyl.

2,746,972
THIOPHENE-2-CARBOXALDEHYDE THIOSEMICARBAZONE AND CERTAIN SUBSTITUTION DERIVATIVES

Le Roy W. Clemence, Highland Park, and Herman J. Eichel, Waukegan, Ill., assignors to Abbott Laboratories, North Chicago, Ill., a corporation of Illinois

No Drawing. Application May 11, 1950, Serial No. 161,487
11 Claims. (Cl. 260—329)

1. A compound of the formula:



wherein R is selected from the class consisting of hydro-

gen, chloro, bromo, nitro, amino and alkyl group having between 1 and 4 carbon atoms inclusive, and R' is selected from the class consisting of hydrogen, chloro and bromo.

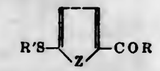
2,746,973

5-ALKYLMERCAPTO-2-HETEROCYCLIC ALDEHYDES AND KETONES

Walter A. Gregory, Wilmington, Del., and Algird Kreuchunas, Detroit, Mich., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 27, 1955, Serial No. 511,774
6 Claims. (Cl. 260—332.3)

1. A compound of the formula



where R is a member of the group consisting of hydrogen and lower alkyl and R' is lower alkyl and Z is a member of the group consisting of oxygen and sulfur.

6. Methyl (5-ethylmercapto-2-thienyl) ketone.

2,746,974

PROCESS FOR PRODUCING OCTACHLOROTHIOLANE

Charles E. Inman, Roslyn, Pa., assignor to The Pennsylvania Salt Manufacturing Company, Philadelphia, Pa., a corporation of Pennsylvania

No Drawing. Application February 19, 1953, Serial No. 337,871
6 Claims. (Cl. 260—332.5)

1. A process for preparing octachlorothiolane which comprises introducing elemental chlorine into a material selected from the group consisting of thiophene and chloro derivatives of thiophene containing less than 8 atoms of chlorine in the molecule and otherwise unsubstituted, at a temperature of 40 to 180° C., and in the presence of up to 0.25 gram atom of iodine per mol of said material, and continuing the introduction of chlorine at least until, over a 2 hour period, no appreciable increase in weight due to chlorine substitution and addition takes place.

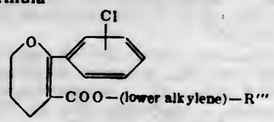
2,746,975

BASIC ESTERS AND AMIDES OF 5,6-DIHYDRO-4H-PYRAN-3-CARBOXYLIC ACID AND METHODS OF PRODUCING SAME

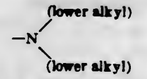
John Krapcho, New Brunswick, and William A. Lott, Maplewood, N. J., assignors to Olin Mathieson Chemical Corporation, New York, N. Y., a corporation of Virginia

No Drawing. Application January 30, 1952, Serial No. 269,124
4 Claims. (Cl. 260—345.8)

1. A compound of the class consisting of: bases of the general formula



wherein R''' is a member of the group consisting of



1-piperidyl, 1-pyrrolidyl and 4-morpholinyl; acid-addition salts of said bases; and quaternary ammonium salts of said bases.

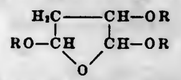
2,746,976

PROCESS FOR THE PREPARATION OF ALKOXY-TETRAHYDROFURANES

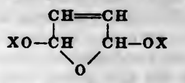
Arthur Stoll, Ariesheim, Ernst Jucker, Binningen, and Adolf Lindenmann, Basel, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application June 21, 1954, Serial No. 438,331
Claims priority, application Switzerland June 24, 1953
6 Claims. (Cl. 260—347.8)

1. A process for the preparation of a 2,3,5-trialkoxytetrahydrofurane which corresponds to the formula



wherein R is a member selected from the group consisting of CH_3, $-CH_2CH_3$, $-CH_2CH_2CH_3$ and $-CH(CH_3)_2$, which comprises treating a compound of the formula



wherein X stands for a member selected from the group consisting of

CH_3, $-CH_2CH_3$, $-CH_2CH_2CH_3$, $-CH(CH_3)_2$

and $-COCH_3$, in an alcohol of the formula

R.OH

wherein R has the aforesaid significance, with a member selected from the group consisting of hydrogen bromide and hydrogen chloride, while cooling and under anhydrous conditions.

2,746,977

METHOD OF PRECIPITATING 3,12-DIHYDROXY-7-KETOCHOLANIC ACID AND ADDITION COMPOUND THEREOF

Robert H. Sifferd and Jerry J. Svarz, Joliet, Ill., assignors to Armour and Company, Chicago, Ill., a corporation of Illinois

No Drawing. Application October 2, 1953, Serial No. 383,919
7 Claims. (Cl. 260—397.1)

1. In a process for preparing desoxycholic acid wherein an aqueous solution containing a mixture of 3,12-dihydroxy-7-ketocholanic acid with other keto derivatives of cholic acid is obtained, the method of separating 3,12-dihydroxy-7-ketocholanic acid characterized by the steps of extracting said keto derivatives from said aqueous solution thereof into ethyl acetate, adding glycerol to the ketone extract, precipitating an addition compound of glycerol and 3,12-dihydroxy-7-ketocholanic acid, and separating the addition compound from the mother liquor containing the other keto derivatives.

2,746,978

CORTISONE, 21-BETA-CYCLOPENTYL PROPIONATE

Arnold C. Ott, Kalamazoo, Mich., assignor to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application September 1, 1951, Serial No. 244,859
1 Claim. (Cl. 260—397.4)

Cortisone, 21-beta-cyclopentylpropionate.

2,746,979

PROCESS FOR ISOMERIZING UNSATURATED FATTY ACIDS OR DERIVATIVES THEREOF

Johannes Donatus von Mikusch-Buchberg, Hamburg-Harburg, Germany, assignor to Lever Brothers Company, New York, N. Y., a corporation of Maine

No Drawing. Application June 14, 1952, Serial No. 293,664
Claims priority, application Netherlands June 14, 1951
6 Claims. (Cl. 260—405.6)

1. The method of isomerizing a substance selected from the group consisting of unsaturated fatty acids and the ester and glyceride derivatives thereof comprising contacting said substance with a supported catalyst comprising a major portion of nickel and a minor portion of an element selected from the group consisting of selenium and tellurium at a temperature in the range from about 80° C. to about 220° C. for a period from about five minutes to about ten hours.

2,746,980

PRODUCTION OF MAHOGANY SULFONATES

Ulric B. Bray, Pasadena, Calif., assignor, by mesne assignments, to Bray Oil Company, Los Angeles, Calif., a limited partnership

Application October 27, 1952, Serial No. 317,098
8 Claims. (Cl. 260—429.9)

1. The process of making mahogany sulfonates which comprises sulfonating a hydrocarbon oil having a viscosity upwards of about 100 seconds Saybolt at 100° F. with sulfuric acid, then immediately without separation of sludge, neutralizing the reaction product with ammonia, thereby forming ammonium sulfate and sulfonates, separating the neutralized product in the presence of water and a mutual solvent into an oil phase, an aqueous phase and an intermediate phase, recovering preferentially water soluble sulfonates from the intermediate phase and recovering preferentially oil soluble mahogany sulfonates from the said oil phase.

2,746,981

DISPROPORTIONATION OF ARYLDICHLOROSILANES

George H. Wagner, Clarence, and Margaret M. Burnham, Eggertsville, N. Y., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application September 26, 1952, Serial No. 311,792
6 Claims. (Cl. 260—448.2)

1. Process of disproportionating an aryldichlorosilane containing one aryl group and one hydrogen atom attached to silicon which comprises heating said silane in the absence of other reactants to a temperature of at least 50° C. and at a pressure not to exceed atmospheric in the presence of a Friedel-Crafts type catalyst taken from the class consisting of aluminum chloride and boron chloride, and recovering a diaryldichlorosilane.

2,746,982

PREPARATION OF SILANE ESTERS

James Franklin Hyde, Midland, Mich., assignor to Dow Corning Corporation, Midland, Mich., a corporation of Michigan

No Drawing. Application February 1, 1954, Serial No. 407,586
2 Claims. (Cl. 260—448.8)

1. A method comprising reacting an organosiloxane of the formula

$$R_nSiO_{\frac{4-n}{2}}$$

where R represents a monovalent hydrocarbon radical, and n has an average value of 2–3 inclusive, with an alcohol of the group consisting of primary and secondary monohydric and dihydric alcohols which have boiling points exceeding that of isopropanol, by heating them in the presence of a catalytic amount of an alkali metal hydroxide with continuous removal from the reaction zone of the water formed by the reaction, whereby the siloxane is esterified to produce organosilicon esters.

2,746,983

PRODUCTION OF COMMERCIAL PARAFFIN WAXES

Robert Läben and Ewald Stiebling, Oberhausen-Sterkrade, Germany, assignors to Ruhrchemie Aktiengesellschaft, Oberhausen-Holten, Germany, a German corporation

No Drawing. Application January 23, 1951, Serial No. 207,441
13 Claims. (Cl. 260—450)

1. Method for the production of commercial paraffin waxes from industrial hydrocarbon mixtures which comprises separating the fractions boiling above about 320–340° C. from such mixture by distillation, thereafter contacting the said fractions with hydrogen at a temperature of about 200–260° C. and a pressure of at least 5 kg./cm.² in the presence of at least one of metal and metal oxide catalysts, thereupon contacting the hydrogenated fractions with an extraction solvent capable of dissolving any oily portions after cooling, while the solid constituents remain undissolved, and recovering paraffin fractions of predetermined melting points.

2,746,984

PROCESS FOR THE SEPARATION OF ALIPHATIC ALCOHOLS FROM HYDROCARBON-ALCOHOL MIXTURES

Walter Rottig, Oberhausen-Sterkrade-Nord, Germany, assignor to Ruhrchemie Aktiengesellschaft, Oberhausen-Holten, and Lurgi Gesellschaft für Wärmetechnik m. b. H., Frankfurt am Main Heddernheim, Germany, a German corporation

No Drawing. Application June 22, 1951, Serial No. 233,102
5 Claims. (Cl. 260—450)

1. In the method for the separation of aliphatic alcohols from mixtures of hydrocarbons and alcohols obtained from the catalytic hydrogenation of carbon monoxide, through the esterification of such mixtures with boric acid, the improvement which comprises contacting such an esterified mixture with a solvent capable of extracting the boric acid esters comprising a member selected from the group consisting of liquid alcohols and amines, said contacting being carried out to a point at which said solvent is not completely saturated with the boric acid esters to thereby form an extract solution substantially free from hydrocarbons, separating the extract solution from the remaining hydrocarbons by the formation of layers, treating the boric acid esters with steam, and recovering aliphatic alcohols by distillation.

2,746,985

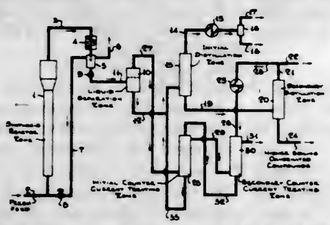
PROCESS OF RECOVERY OF OXYGENATED HYDROCARBONS FROM HYDROCARBON SYNTHESIS

Clinton H. Holder, Cranford, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application July 12, 1946, Serial No. 682,977
4 Claims. (Cl. 260—450)

1. In a process for separating and recovering neutral and acid oxygenated hydrocarbon products present in a synthesis vapor mixture of hydrocarbons and water formed by reaction of hydrogen with carbon monoxide, the improvement which comprises cooling said synthesis vapor mixture at 40° F. to 100° F. to condense therefrom an oil phase condensate containing oxygenated hydrocarbons dissolved in hydrocarbons and also an aqueous phase condensate containing mainly alcohols higher

boiling than methanol dissolved in said water, removing uncondensed vapors from said condensates, separating and removing the oil phase condensate from the aqueous phase condensate, passing the separated aqueous phase condensate into an initial distillation zone wherein a light fraction of C_1 to C_4 oxygenated hydrocarbons that distill with water at temperatures within the range of about 40° F. to 212° F. are separated from a heavier aqueous fraction containing acid products of the reaction dissolved in said aqueous phase condensate, passing said heavier fraction substantially free of alcohols having up through



5 carbon atoms in the molecule to a secondary distillation zone wherein an aqueous distillation fraction is distilled from a remaining residual fraction containing higher boiling oxygenated hydrocarbons, contacting the separated oil phase condensate, removed from said aqueous phase condensate, with said aqueous distillation fraction from said secondary distillation zone to extract oxygenated hydrocarbons therefrom and recovering neutral oxygenated hydrocarbons that are distilled from the initial distillation zone, neutral oxygenated hydrocarbons extracted from the oil phase, and acids concentrated in the residual fraction of the secondary distillation zone.

2,746,986

α-(META-HYDROXYPHENYL)-β-METHYLAMINOETHANOL CYCLOHEXYLSULFAMATE

Melville Sahyun and John A. Faust, Santa Barbara, Calif.; said Faust assignor to said Sahyun

No Drawing. Application June 2, 1952, Serial No. 291,326

2 Claims. (Cl. 260—501)

1. Levo - α - (meta-hydroxyphenyl)-β-methylaminoethanol cyclohexylsulfamate.

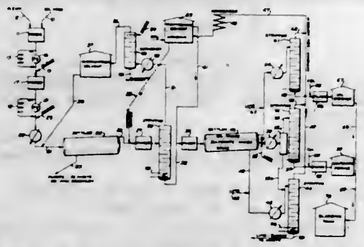
2,746,987

SULFONATE MANUFACTURE

Ulric B. Bray, Pasadena, Calif., assignor, by mesne assignments, to Bray Oil Company, Los Angeles, Calif., a limited partnership

Application September 15, 1952, Serial No. 309,730

9 Claims. (Cl. 260—504)



1. The method of making oil soluble sulfonates of metals which comprises sulfonating an aromatic type hydrocarbon lubricating oil, adding a hydrocarbon solvent, separating acid oil, containing dissolved oil soluble sulfonic acids and solvent from excess acid and sludge, neutralizing said acid oil and solvent solution, with ammonia, thereby converting the said sulfonic acids to ammonium sulfonates, heating said oil and sulfonates with a basic metal compound, thereby expelling vapors of ammonia and solvent and forming the metal sulfonate and recovering the oil and dissolved metal sulfonate.

2,746,988

ISOCYANATE-BISULFITE ADDUCT-FORMALDEHYDE REACTION AND PRODUCT

Arnold Doser, Koln-Mulheim, Germany, assignor to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application February 21, 1951, Serial No. 212,191

Claims priority, application Germany February 21, 1950

6 Claims. (Cl. 260—513)

6. The product obtained by reacting formaldehyde with the solid addition product of an alkali metal bisulfite and an organic isocyanate selected from the group consisting of aliphatic and aromatic isocyanates in the presence of water at an elevated temperature at least about 70° C.

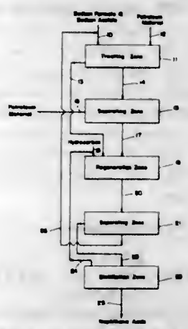
2,746,989

SEPARATION OF NAPHTHENIC ACIDS

James L. Jezl, Swarthmore, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

Application February 12, 1953, Serial No. 336,550

4 Claims. (Cl. 260—514)



1. Method for separating naphthenic acids from other petroleum constituents which comprises: contacting in a treating zone a petroleum fraction containing naphthenic acids with an alkali metal salt of an organic acid having dissociation constant in the range from 1×10^{-6} to 3×10^{-4} and having boiling point less than the boiling point of said naphthenic acids; maintaining in said treating zone conditions effective to vaporize said organic acid; reacting naphthenic acids with said salt in said treating zone to form alkali metal naphthenate and free organic acid; removing said free organic acid in vapor form from said treating zone; separating said alkali metal naphthenate from the petroleum fraction; reacting said free organic acid with alkaline-reacting material to form alkali metal salt of said organic acid; and introducing the salt thus formed into said treating zone to contact additional such petroleum fraction.

2,746,990

PREPARATION OF TEREPHTHALIC ACID

Jan Pieter Fortuin and Gottfried Ernst Rumscheidt, Amsterdam, Netherlands, assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application February 1, 1954, Serial No. 407,584

Claims priority, application Netherlands February 2, 1953

8 Claims. (Cl. 260—524)

1. A process for the production of terephthalic acid, which process comprises passing an oxygen-containing gas through a liquid-phase mixture comprising p-diisopropyl benzene, an organic solvent consisting of a lower saturated aliphatic monocarboxylic acid and an oxidation catalyst comprising a mixture of a cobalt carboxylate and a manganese carboxylate, together with from none to a minor amount of barium carboxylate at a temperature between 60° C. and 300° C., in said mixture of hydrocarbon, solvent and catalyst, the weight ratio of p-diisopropyl benzene to solvent being within the range of from about 10:1 to about 1:15, and the concentration of catalyst being within the range of from about 0.01% to about 5%, this concentration being calculated on the basis of the total weight of metal in the catalyst and the weight of p-diisopropyl benzene charged, adding a further amount of p-diisopropyl benzene, together with a further amount of said catalyst, regulating the addition of p-diisopropyl benzene and of said catalyst so that the rate of oxidation of p-diisopropyl benzene remains at a substantially constant level, and separating terephthalic acid as product.

2,746,991

PREPARATION OF MALEIC ACID

Isadore Miller, New York, N. Y.

Application September 19, 1952, Serial No. 310,376

1 Claim. (Cl. 260—537)

A process for the preparation of pure, substantially anhydrous, water-soluble, solid maleic acid from dilute aqueous solutions of said acid, said process including the steps of reacting the solution with sodium carbonate to produce sodium acid maleate, mechanically separating out said sodium acid maleate which is a water-insoluble salt, suspending said sodium acid maleate in acetone in which the sodium acid maleate is relatively insoluble, then converting said sodium acid maleate to maleic acid by reacting the same with concentrated sulfuric acid, said maleic acid being soluble in the acetone, said acetone being ineffective to dissolve any salts produced by reaction of the concentrated sulfuric acid and the sodium acid maleate and being inert to all compounds present in the process, mechanically separating out the resultant insoluble sodium sulfate, and then recovering the maleic acid from the acetone.

2,746,992

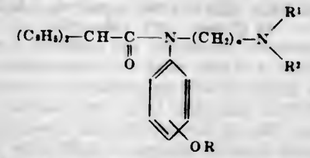
DIALKYLAMINOALKYL-DIPHENYL-ACETANILIDES

Moses Wolf Goldberg, Upper Montclair, and Sidney Teitel, Nutley, N. J., assignors to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application April 9, 1954, Serial No. 422,264

5 Claims. (Cl. 260—558)

1. A member of the group consisting of the free bases having the formula



wherein R is a member of the group consisting of hydrogen and lower alkyl, R^1 and R^2 represent lower alkyl, *n* represents an integer from 2 to 3, acid addition salts of said bases selected from the group consisting of hydrochloride, hydrobromide, sulfate, phosphate, toluenesulfonate, camphorsulfonate, citrate, tartrate and oxalate, and lower alkyl quaternary halides of said bases.

2,746,993

DEHYDROGENATION OF ALCOHOLS

Fred Dean, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application November 24, 1950, Serial No. 197,521

Claims priority, application Great Britain December 16, 1949

4 Claims. (Cl. 260—598)

1. A process for the continuous liquid phase dehydrogenation of primary alcohols to produce the corresponding aldehydes in high purity and in a yield in excess of about 60% by weight of the alcohol employed without the simultaneous production of large quantities of other products which comprises continuously treating said alcohol in the liquid phase in a reaction zone at a temperature within the range of from about 150° to about 250° C. and at a pressure so adjusted relative to the boiling point of said alcohol as to insure operation in the liquid phase, in the presence of a solid dehydrogenation catalyst, continuously removing the product of this treatment as it is formed from said reaction zone as a vapor in an atmosphere of hydrogen immediately fractionally distilling said vapor in a fractional distillation zone to recover said aldehyde as overhead product and refluxing to the reaction zone the material which has left said zone as a vapor with said aldehyde.

2,746,994

PROCESS FOR THE PREPARATION OF DITHIODIALKYLENE GLYCOLS

Warren D. Helmer, Levittown, Pa., assignor to Thiokol Chemical Corporation, Trenton, N. J., a corporation of Delaware

No Drawing. Application April 5, 1955, Serial No. 499,501

11 Claims. (Cl. 260—608)

1. The method of making a dithiodialkylene glycol which comprises reacting an alkylene oxide, in an aqueous solution, with an alkaline thiosulfate, a water-soluble alkaline monosulfide, and sufficient water-soluble acidic material for substantially neutralizing the alkaline hydroxide formed in the reaction.

2,746,995

PREPARATION OF MIXED ETHERS

Julian M. Mavity, Hinsdale, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application July 23, 1952, Serial No. 300,496

5 Claims. (Cl. 260—612)

1. A process for producing a mixed ether which comprises reacting dimethyl ether with another simple ether in the presence of a catalyst consisting essentially of silica and at least one metal oxide selected from the group consisting of alumina and zirconia at a temperature of from about 200° to about 700° F. and a pressure of from about 5 to about 2000 pounds per square inch.

2,746,996

CATALYTIC CRACKING OF HIGH BOILING TAR ACIDS

Martin B. Neuworth, Pittsburgh, Pa., assignor to Pittsburgh Consolidation Coal Company, Pittsburgh, Pa., a corporation of Pennsylvania

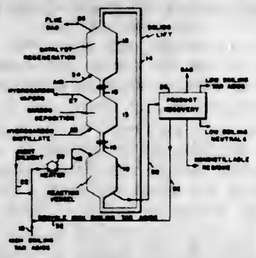
Application June 18, 1953, Serial No. 362,517

Claims priority, application Great Britain August 6, 1952

7 Claims. (Cl. 260—621)

6. The method of converting tar acids boiling above 230° C. into tar acids boiling below 230° C. which comprises passing the vapors of the tar acids boiling above 230° C. in admixture with neutral oil vapors through a

reaction zone containing a bed of silica-alumina catalyst having carbon deposited thereon in an amount equal to at least five per cent by weight of the catalyst, maintaining the temperature of said reaction zone between about 700 and 850° F., collecting the product vapors, withdrawing high carbon content catalyst from said reaction zone,



regenerating said withdrawn catalyst by burning the carbon deposited thereon, thereafter depositing a fresh layer of carbon on the regenerated catalyst in an amount equal to at least five per cent by weight of the catalyst, and returning the resulting carbon coated catalyst to said reaction zone to repeat the above steps.

2,746,997
PRODUCTION OF CYCLOHEXENE FLUOROCARBONS
Thomas S. Reid, New Canada Township, Ramsey County, George H. Smith, St. Paul, and Wilbur H. Pearlson, White Bear Township, Ramsey County, Minn., assignors to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a corporation of Delaware
No Drawing. Application July 27, 1951, Serial No. 239,022
2 Claims. (Cl. 260—648)

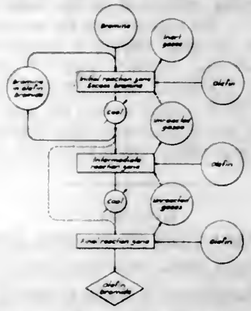
1. The process which comprises pyrolyzing a fully fluorinated cyclic carboxylic acid of the class consisting of perfluoro-cyclohexyl carboxylic acid (c-$C_6F_{11}COOH$) and perfluoro-methylcyclohexyl carboxylic acids having at least one ring-bonded trifluoromethyl group and having at least one beta fluorine atom, by heating the acid in vapor phase at a temperature of about 550° C., so as to cause a high-yield conversion to a cyclic olefinic fluorocarbon compound having a single double bond in a 6-carbon ring, and recovering the latter.

2,746,998
CHLORINATION PROCESS
David Brown and John W. Colton, New York, and Ralph Landau, East Hills, N. Y., assignors to Chempatents, Inc., New York, N. Y., a corporation of Delaware
No Drawing. Application October 18, 1954, Serial No. 463,068
7 Claims. (Cl. 260—654)

1. In a process for the preparation and recovery of chlorinated hydrocarbons and hydrogen chloride by the thermal chlorination of a member of the group consisting of aliphatic hydrocarbons having 1 to 4 carbon atoms in the molecule and partial chlorination derivatives thereof, the improvement which comprises rapidly quenching the hot exit gases from the reactor with a liquid body essentially containing liquid aqueous hydrochloric acid of at least 19% hydrogen chloride.

2,746,999
PREPARATION OF OLEFIN BROMIDES
Albert A. Gunkler, Douglas E. Lake, and Bobby C. Potts, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
Application August 29, 1952, Serial No. 307,064
6 Claims. (Cl. 260—660)

1. In a continuous process for the preparation of olefin bromides by addition reaction between bromine and normally gaseous olefins, the improvement which comprises the steps of forming a liquid solution of bromine and an olefin bromide, circulating a stream of such liquid solution through an initial reaction zone and through a cooling zone, feeding bromine into that liquid solution at a rate such as to maintain therein uncombined bromine, feeding to the initial reaction zone a normally gaseous olefin in the form of a gas stream and at a rate insufficient to consume all of the bromine in the initial reaction zone, contacting the gas stream and the liquid solution of bromine in the initial reaction zone substantially to consume



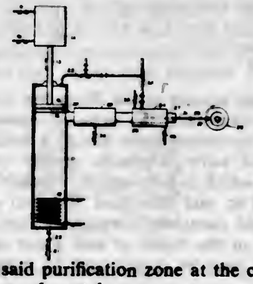
the olefin and to form thereby olefin bromide, withdrawing a portion of the stream of the liquid solution of bromine and olefin bromide from the cooling zone, passing that withdrawn portion to a final reaction zone, feeding a gas stream of a normally gaseous olefin to the final reaction zone at rate at least sufficient to consume all of the bromine in the final reaction zone, contacting the gas stream and the liquid solution in the final reaction zone substantially to consume the bromine and to form thereby olefin bromide, and withdrawing from the final reaction zone an olefin bromide product that is substantially free of unreacted bromine.

2,747,000
SELECTIVE SOLVENT FOR NAPHTHENE HYDROCARBON
William T. Nelson, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
No Drawing. Application May 25, 1953, Serial No. 357,345
11 Claims. (Cl. 260—666)

1. A process for the separation of naphthene hydrocarbons and paraffin hydrocarbons which comprises contacting said hydrocarbons with a dialkyl cyanamide wherein each alkyl radical contains no more than 3 carbon atoms, under operating conditions such that two liquid phases exist; and recovering a hydrocarbon product of increased naphthene content.

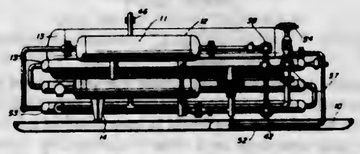
2,747,001
CRYSTAL PURIFICATION PROCESS
John A. Weedman, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application June 9, 1950, Serial No. 166,992
19 Claims. (Cl. 260—674)

1. A process for recovering and purifying a crystalline material from a liquid mixture which comprises subjecting said liquid mixture to cooling so as to freeze out crystals of said material; separating resulting crystals from mother liquor; introducing the resulting concentrated crystals into an elongated purification zone and compressing said crystals toward one end thereof so as to form a compact column of crystals in said end; melting the forward end of said column of crystals; removing only a portion of the resulting melt so as to force a portion thereof back through said column of crystals as reflux and washing occluded impurities therefrom; removing a liquid stream comprising reflux liquid and occluded impurities from said purification zone through a single crystal-impervious, liquid-impervious filter zone



disposed across said purification zone at the compression end of said column of crystals.

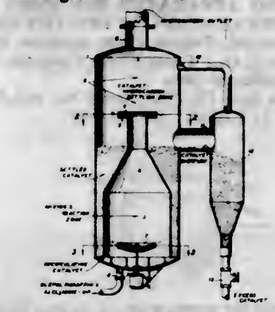
2,747,002
WELL FLUID SEPARATORS AND METHODS FOR SEPARATING WELL FLUIDS
Jay P. Walker, Clarence O. Glasgow, and Alex W. Francis, Jr., Tulsa, Okla., assignors to National Tank Company, Tulsa, Okla., a corporation of Nevada
Application October 24, 1952, Serial No. 316,632
19 Claims. (Cl. 260—676)



2. A well fluid separator including, an elongate horizontal vessel, means for maintaining a body of liquid in the lower portion of the vessel with an elongate horizontal gas space thereabove, a heating member in the lower portion of the vessel, a centrifugal separator enclosure having an open lower end disposed within the gas space in the upper portion of the vessel, a heating member in contact with the enclosure, a fluid inlet to the enclosure, means for passing a well fluid through the heating members, a conductor supplying a well fluid to the fluid inlet, pressure-reducing means in said conductor; a gas outlet from the vessel, and a liquid outlet from the vessel.

2,747,003
METHOD AND APPARATUS FOR INTIMATELY CONTACTING AND THEN SEPARATING IMMISCIBLE FLUIDS
Myron O. Kilpatrick, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application June 17, 1952, Serial No. 293,967
16 Claims. (Cl. 260—683.4)

1. The method of causing intimate contact between and subsequent separation of at least two substantially immiscible liquids which comprises providing in a laterally confined vertically disposed contacting zone a lower mixing section and an upper settling section; providing communication of said lower mixing section and said upper settling section by a laterally confined vertically disposed unimpeded riser zone in open communication with the lower central portion of said mixing section and the lower central portion of said upper settling section; internally in said laterally confined vertically disposed contacting zone, from a lower peripheral portion of said upper settling section, drawing peripherally downwardly a liquid heavier than a complete admixture of said liquids; passing said liquid to the periphery of the bottom of said contacting zone; then passing said liquid from the periphery of the bottom of said contacting zone into a lower central portion of said lower mixing section; in said lower central portion of said lower mixing section admixing with said liquid now therein additional liquids to be admixed therewith; rotating in said mixer section the liquid admixture thus obtained to impart a centrifugal force thereto; and passing the thus obtained liquid admixture centrally within said mixing section upwardly through said riser zone and then horizontally into said upper settling section to cause separation of said liquids by the centrifugal force thereof.



9. A combined fluids mixing and separation apparatus comprising in combination a substantially vertically disposed vessel; in said vessel an empty riser conduit having substanitally the shape of an inverted funnel in open communication at its lower end with a lower portion of said vessel and at its upper end with a portion of said vessel intermediate the upper and lower ends of said vessel and a rotatable mixer-impeller so arranged in the bottom of said vessel at the bottom end of said riser conduit and with respect to said riser conduit as to mix and rotatingly upwardly impel through said riser fluids which are in the bottom of said vessel.

2,747,004
MOLYBDENUM OXIDE-SILICA-ALUMINA ISOMERIZATION BY PURIFICATION OF HYDROGEN FEED
Norman C. Carter, Bartlesville, Okla., and John S. Cromeans, Louisville, Ky., assignors to Phillips Petroleum Company, a corporation of Delaware
No Drawing. Application October 1, 1951, Serial No. 249,228
9 Claims. (Cl. 260—683.5)

1. The isomerization of a paraffin hydrocarbon in the presence of an isomerization catalyst and hydrogen which comprises removing substantially all of the carbon oxide content of the hydrogen in the charge to said catalyst before effecting said isomerization and then effecting said isomerization.

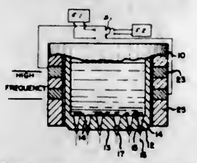
2,747,005
VULCANIZATION OF RUBBER AND COMPOSITIONS EMPLOYED THEREFOR
Richard O. Zerbe, Nitro, and Monte C. Throdahl, St. Albans, W. Va., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
No Drawing. Application November 14, 1951, Serial No. 256,364
16 Claims. (Cl. 260—763)

4. The composition consisting essentially of a homogeneous composite fused mixture of substantially equimolecular proportions of a 2,2'-dithiobis(arylenethiazole) and an N,N'-dithio secondary amine, the secondary amine radicals being selected from the group consisting of heterocyclic amino radicals and aliphatic amino radicals in which the substituents are selected from alkyl groups, substituted alkyl groups, alicyclic groups, aralkyl groups and mixtures thereof.

5. The process of vulcanizing a sulfur-vulcanizable rubber containing a reinforcing furnace black which comprises heating the rubber and black in the presence of the composition of claim 4.

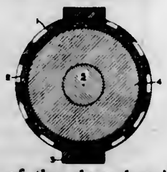
ELECTRICAL

2,747,006
METHOD AND APPARATUS FOR HIGH FREQUENCY PREPARATION OF MOLTEN GLASS
Randolph H. Barnard, Toledo, Ohio, assignor, by mesne assignments, to L. O. F Glass Fibers Company, Toledo, Ohio, a corporation of Ohio
Application June 23, 1953, Serial No. 363,476
14 Claims. (Cl. 13—6)



1. A process for the preparation of molten glass of uniform temperature suitable for drawing into filamentary form comprising inductively heating a body of molten glass at a plurality of frequencies and under conditions of temperature productive of electrical conductivity in the body of glass.

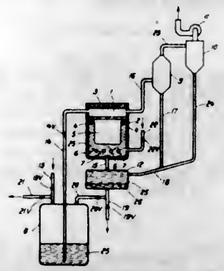
2,747,007
ELECTRODE FOR GALVANIC CELLS
Gustaf Eric Brandt, Nol, Sweden, assignor to Aktiebolaget Tudor, Stockholm, Sweden, a Swedish joint-stock company
Application August 15, 1951, Serial No. 241,929
2 Claims. (Cl. 136—14)



1. An electrode of the class described, comprising a central rod of conductive material which is surrounded by a disintegrable mass of active material, said active material being adapted to react electrochemically with a liquid electrolyte, a somewhat flexible breakage resistant thin-walled hollow tube formed of a vinyl polymer, said tube having perforations formed in said wall to permit the free circulation of said electrolyte therethrough, said tube laterally enclosing said mass of active material, and a coating of flexible porous fabric constructed of threads formed of glass fibers, the porosity of said fabric rendering said fabric permeable to said electrolyte while effectively preventing the escape therethrough of any particles released from said mass of active material by said disintegration, said fabric coating being applied to the inner wall surface of said tube and extending continuously over said inner wall surface and over said perforations.

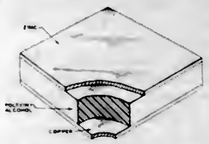
2,747,008
METHOD AND MEANS FOR DRYING ACCUMULATOR ELECTRODES
Erik Gustav Sundberg, Osbacken, Nol, and Bror Gunnar Ousbäck, Goteborg, Sweden, assignors to Aktiebolaget Tudor, Stockholm, Sweden, a Swedish joint-stock company
Application January 5, 1954, Serial No. 402,333
Claims priority, application Sweden May 21, 1952
12 Claims. (Cl. 136—33)

10. The method of drying a water-containing, charged porous battery electrode while simultaneously protecting the electrode against attack from the oxygen of the atmosphere, comprising the steps of: immersing said electrode in a treatment liquid having a boiling point higher than that of water, a specific gravity less than that of water, and which is substantially insoluble in water; supplying heat to said treatment liquid so as to cause said water in said electrode to evaporate; collecting and condensing all of the vapor of said water along with whatever vapor may be contributed by evaporation of said



treatment liquid; returning all of the condensate produced by said collecting and condensing steps into said treatment liquid in which said electrode is immersed at a level spaced below said electrode in a closed circulatory manner; and allowing the water in said condensate to settle; whereby the level of said treatment liquid in which said electrode is immersed remains substantially constant throughout the entire course of said evaporation and said electrode is maintained continuously immersed in said treatment liquid and thereby protected against exposure to the atmosphere.

2,747,009
STABLE VOLTAIC CELLS
John G. Kirkwood, Guilford, Conn., and Fred William West, Ridgefield, N. J., assignors to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware
Application January 20, 1954, Serial No. 405,197
16 Claims. (Cl. 136—103)

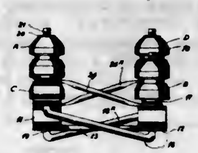


1. An essentially dry voltaic cell comprising a pair of electrodes at different potentials separated by a polymeric matrix containing ions of an electrolyte and less than about 10 per cent of moisture.

2,747,010
TRANSPOSITION BRACKET
Winford G. Milne and Frederick G. Ridgers, Hamilton, Ontario, Canada, assignors to N. Slater Company Limited, Hamilton, Ontario, Canada
Application November 7, 1952, Serial No. 319,216
2 Claims. (Cl. 174—33)

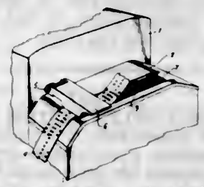
2. In combination, a member including a pair of parallel arms having apertured U-shaped end portions forming supports, one end of each of said arms being bent upwardly, each pair of diagonally remote ends of said arms being in the same plane and at a different level than the other diagonally remote pair of arms, a U-shaped

member the parallel legs of which extend upwardly through said end portions to project above the planes of said supports, a strut having apertured ends through which said parallel legs extend, said ends being supported by said U-shaped end portions, spool insulators rotatable on said parallel legs above said supports each pair of



diagonally remote insulators being at a different level, and means including pins through the upper portions of said parallel legs removably locking said insulators to said parallel legs and suspending said U-shaped member from said insulators, said struts and said U-shaped members acting in compression and tension respectively to resist displacement of said parallel legs one toward the other.

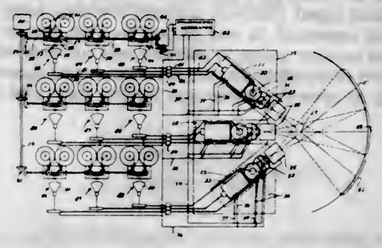
2,747,011
SCANNING APPARATUS FOR PERFORATED CODE TAPE
Otto Moser, Bern, Switzerland
Application January 12, 1955, Serial No. 481,421
Claims priority, application Switzerland January 15, 1954
2 Claims. (Cl. 178—1)



1. Scanning apparatus for perforated code tape, comprising a surface member having a guide-way forming a travel path for the tape to be scanned, a holder disposed on said member and extending across said guide-way for holding the tape in said guide-way, said guide-way being longer in the tape travel direction than said holder so as to have a visible portion beside said holder, said portion of said guide-way having a network of two groups of marking lines extending in said direction and perpendicular thereto respectively, the lines in each group being spaced from each other in accordance with the hole spacing of the tape, and said groups of lines having intersection points coincident with the correct center spacing of the tape holes, whereby said device inherently forms a tape-hole gauge.

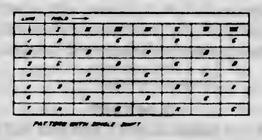
2,747,012
CLOSED LINK ELECTRONIC CAMERA CHAIN
Willis Robert Dresser, Long Hill, Conn., assignor to The Vitarama Corporation, Huntington, N. Y., a corporation of New York
Application April 10, 1953, Serial No. 348,047
6 Claims. (Cl. 178—5.4)

1. An electronic camera including a lens mount, a picture tube behind the lens mount, a photographic recorder including a film exposure station and a receiver tube on which signals from the picture tube reproduce successive light-modulated lines at the same position on the receiver tube and corresponding to the lines scanned on the picture tube behind the lens mount, a lens between the receiver tube and the film exposure station in position to image the light-modulated lines as transverse lines across the film at the exposure station, a common synchronization generator connected with the picture tube and the recorder, film feeding mechanism for the recorder including driving means that move the film with continuous motion and as least as far as a distance equal to the width of the light-modulated line within the time interval



between corresponding parts of the cycles of the scanning of the successive lines, and means co-ordinating the signal output of the picture tube with the continuous movement of the film.

2,747,013
POLYCHROME TELEVISION WITH COLOR SHIFT
George E. Sleeper, Jr., Berkeley, and Robert J. Stahl, Redwood City, Calif., assignors to Color Television Incorporated, San Francisco, Calif., a corporation of California
Application March 14, 1950, Serial No. 149,578
20 Claims. (Cl. 178—5.4)

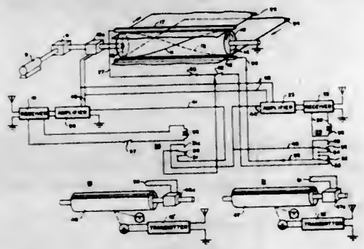


1. A cathode ray television receiver for producing either monochrome or polychrome image rasters comprising a deflection circuit to produce line deflection of the scanning cathode ray, a circuit to select each of synchronizing and phasing signal components from received composite television signals, a deflection control circuit connected to receive the selected incoming synchronizing signals and to be synchronized thereby, a counter circuit normally connected to receive the synchronizing signals and adapted to respond to a plurality of selected synchronizing signals for controlling the deflection circuit, said plurality of output signals coinciding with an integral number of component colors in the polychrome image, and a phasing circuit responsive to selected incoming phasing signals to recycle the counter following a plurality of deflections of the scanning ray under the control of the stable local source.

2,747,014
DUPLEX FACSIMILE APPARATUS
Charles E. Miller, Fair Haven, N. J.
Application October 2, 1950, Serial No. 188,046
1 Claim. (Cl. 178—6.6)
(Granted under Title 35, U. S. Code (1952), sec. 266)

Facsimile receiving apparatus comprising a single printing drum, first and second independently operable electrically conductive imprinting bars positioned parallel to the axis of said drum and at diametrically opposite points closely adjacent to the periphery of the drum, spiral imprinting ribs on the surface of said drum each occupying 180° of the periphery thereof, electrosensitive sheets disposed between said imprinting bars and the said spiral ribs, a first signal receiver, a normally closed relay switch

connected in the output lead from said first receiver, connections from the switch to both of said imprinting bars, manual switches in the said connections to said bars, power leads from said first receiver to the coil on said relay, said leads being continuously energized while power is fed to the receiver, a manual switch in said power leads, a second signal receiving element, a second relay having its coil connected to said second receiver, means in said second receiver acting to energize said coil only when the receiver is receiving signals, switches on said second relay acting to open the connection leading from said first re-



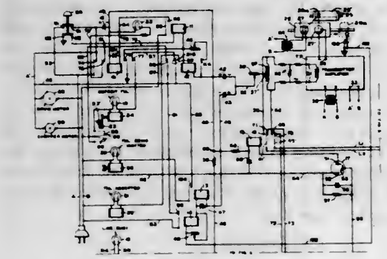
ceiver to the second imprinting bar and acting simultaneously to close a normally open circuit from the output of said second receiver to said second imprinting bar, a switch on said first relay normally closing the lead from the output of the first receiver to the printer bars and acting when the relay is energized to connect the output of the second receiver to the said straight printer bars and disconnect the first receiver therefrom, whereby facsimile records may be made upon the two electrosensitive papers from one or both of said receivers either one at a time or simultaneously by manipulating said manual switches.

2,747,015

TWO-WAY FACSIMILE SYSTEMS BETWEEN A MAIN TELEGRAPH OFFICE AND A PLURALITY OF OUT-STATIONS

Garvice H. Ridings, Summit, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a corporation of New York

Application August 11, 1950, Serial No. 178,815
21 Claims. (Cl. 178—6.6)



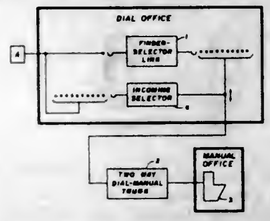
1. In a two-way facsimile communication system between a main telegraph office and an out-station, a transmitter and a recorder at the main office, a transmitter and a recorder at the out-station, a single pair of wires between the main office and the out-station for operatively connecting either transmitter with the distant recorder, the out-station transmitter having a normally closed chute for the deposit of messages, a start switch for the out-station transmitter, means controlled by the operation of said start switch for opening said chute, and means including a relay controlled by the out-station recorder and operative to prevent the opening of said chute when the out station recorder is in communication with the main office transmitter.

2,747,016

CONVERSATION TIMING CIRCUIT

William W. Pharis, Rochester, N. Y., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware

Application November 14, 1952, Serial No. 320,503
6 Claims. (Cl. 179—7.1)



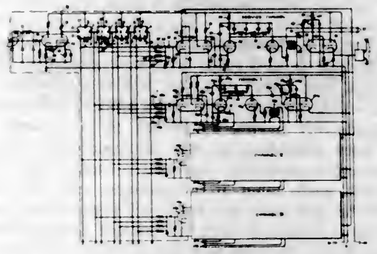
1. In a telephone system, a manual office, a dial office, said dial office including switching apparatus, a two-way trunk circuit, means for extending a connection from said manual office through said dial office by way of said trunk circuit and said switching apparatus, conversation timing means, means responsive to the extension of a connection from said manual office through said dial office for initiating the operation of said conversation timing means for timing the duration of said call and for releasing said switching apparatus if said call is not terminated within a predetermined time, lockout means, and means responsive to the release of said switching apparatus prior to disconnection at said manual office for causing said lockout means to lock out said trunk to prevent seizure from said dial office.

2,747,017

MULTIPLEX SYSTEM

Henry P. Thomas, Fayetteville, N. Y., assignor to General Electric Company, a corporation of New York

Application January 30, 1952, Serial No. 269,089
2 Claims. (Cl. 179—15)



1. The combination in a pulse multiplex system, a source of oscillations, a plurality of frequency dividers connected in cascade, the output of said source being connected to the input of said frequency dividers, a plurality of channel-gate devices, means to apply the output from at least two of said dividers to each of said gate devices, each gate device including means to produce a gating pulse when the summation of the outputs of the frequency dividers connected thereto exceeds a predetermined amount and said outputs as coupled to the different devices being so poled that different ones of said gate devices produce pulses at different times and in succession, means for intercepting a transmitted wave including pulse trains, each of said trains comprising a reference pulse followed by a series of information-carrying pulses, means for synchronizing said source of oscillations with said reference pulse portions of said trains, means for transmitting a pulse-type wave, means coupling said intercepting means to said transmitting means for relaying said intercepted wave, and means coupled to one of said gate

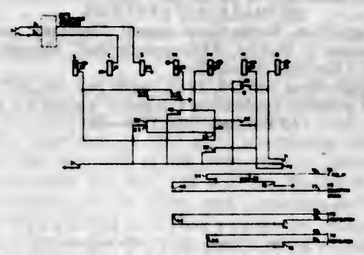
devices and to said last-mentioned means for disabling said last-mentioned means during the occurrence of a predetermined one of said series of information-carrying pulses in each of said trains.

2,747,018

IMPULSE CORRECTING REPEATER FOR AUTOMATIC TELEPHONE SYSTEM

Per Olaf Dahlman, Galion, Ohio, assignor to North Electric Company, a corporation of Ohio

Application July 17, 1952, Serial No. 299,311
13 Claims. (Cl. 179—16)



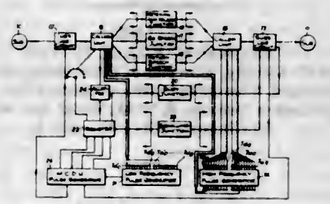
1. An impulse correcting arrangement for providing a corrected outgoing impulse for each impulse received over an incoming line comprising a set of timer relays connected to operate in a given cyclic sequence responsive to triggering of the set, at least a first and a second outgoing circuit, a first impulse generating means connected in said first circuit controlled by said timer relay set in each cycle to transmit thereover an impulse of a predetermined length independent of the duration of the incoming pulse, and a second impulse generating means connected in said second circuit controlled by said timer relays to transmit in said same cycle an impulse of a variable length as determined by the length of the corresponding incoming impulse.

2,747,019

AUTOMATIC TELEPHONE SYSTEMS

Alexander Albert Chubb, Coventry, England, and Maurice Moise Levy, Ottawa, Ontario, Canada, assignors to The General Electric Company Limited, London, England

Application January 31, 1952, Serial No. 269,158
Claims priority, application Great Britain
February 2, 1951
5 Claims. (Cl. 179—18)



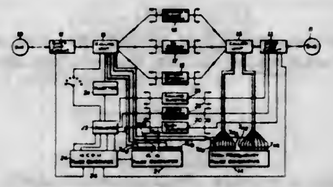
1. In combination, a selector device having a plurality of input terminals, an output terminal and selector means for selectively connecting the input terminals to said output terminal, means to apply pulse trains of different phases to said input terminals respectively, a control circuit to actuate said selector means, a source of control voltage connected to said control circuit to cause said selector means to select one of said input terminals for connection to said output terminal, a pulse demodulator, a pulse modulator and means to connect said output terminal to said demodulator and modulator.

2,747,020

TELECOMMUNICATION SYSTEMS EMBODYING AUTOMATIC EXCHANGES

Maurice Moise Levy, Ottawa, Ontario, Canada, assignor to The General Electric Company Limited, London, England

Application November 24, 1951, Serial No. 257,991
4 Claims. (Cl. 179—18)



1. An automatic telephone exchange comprising a first group of communication channels the number of channels in the group being small relatively to the number of subscribers connected to the exchange, a plurality of channel terminating means connected to terminate one end of the channels respectively, separate line terminating means terminating the subscribers' lines respectively in the exchange, means connecting the line terminating means to said channel terminating means, said line terminating means comprising means responsive to an initial calling signal from a calling subscriber to select a free one of said channel terminating means, a group of registers, allotting means connecting said registers and said channel terminating means to allot a register to a channel terminating means, a second group of communication channels extending from said registers to the said line terminating means respectively, the number of channels in said second group being equal to the number of said line terminating means, said registers comprising means responsive to a further calling signal representative of the number of a called subscriber to transmit in that one of the channels of the second group extending to the line terminating means of the called subscriber a signal to call said called subscriber, a further group of communication channels extending from said registers to said line terminating means respectively, said registers also comprising means responsive to said further calling signals to transmit to the line terminating means of the called subscriber a signal indicating the selected free one of said channel terminating means, further channel terminating means for terminating the other ends of the channels in said first group, and a plurality of control means connected between said line terminating means and said further channel terminating means, said line terminating means comprising selector apparatus responsive to said calling signals to select a free one of said control means and said control means being responsive to said signal indicating said selected free one of the first said channel terminating means to connect one of said further channel terminating means to the same channel as the selected one of the first said channel terminating means and to connect the called line terminating means to the said one of the further channel terminating means.

2,747,021

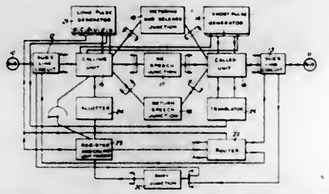
TELECOMMUNICATION SYSTEMS EMBODYING AUTOMATIC EXCHANGES

Alexander Albert Chubb, Coventry, England, and Maurice Moise Levy, Ottawa, Ontario, Canada, assignors to The General Electric Company Limited, London, England

Application September 18, 1951, Serial No. 247,072
Claims priority, application Great Britain
September 21, 1950
9 Claims. (Cl. 179—18)

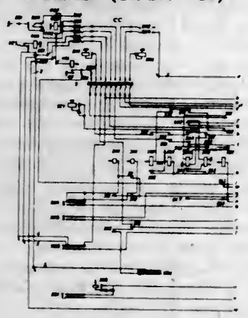
9. In a communication system a plurality of lines terminating in an exchange, means providing a plurality of communication channels in said exchange available to any of said lines for carrying speech signals, and means

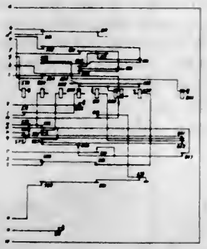
for connecting a calling line with a free one of said channels, characterized by the provision of means providing a second plurality of communication channels bypassing the first said channels and extending to the line terminating apparatus of the said lines respectively, means responsive to a calling signal representative of the number of a called subscriber to select the one of the second



plurality of communication channels which extends to the line terminating apparatus of the called subscriber and to transmit in the selected one of the second plurality of channels a signal identifying the selected free one of the said communication channels and further means responsive to the last said signal to connect the called subscriber's line terminating apparatus to the said free one of the first said plurality of communication channels.

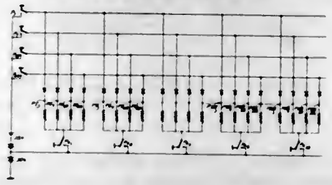
2,747,022
AUTOMATIC TELECOMMUNICATION SWITCHING SYSTEM
Henri Louis Lesigne, Vanves, and Jean Georges Demartres, Paris, France, assignors to Compagnie Industrielle des Telephones, Paris, France
Application June 16, 1952, Serial No. 293,758
Claims priority, application France July 5, 1951
1 Claim. (Cl. 179—18)





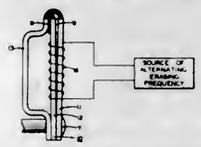
In a telecommunication exchange an automatic switching system comprising: a plurality of registers each of which contains a digit switch and a battery; link circuits each of which comprises a line finder and a selector and may be connected to any register; a marking wire multipled at one end to a contact of the digit switch of each register and at its other end to a contact of each selector; a first connection between a battery pole and the digit switch wiper; a second connection between the other battery pole and a selector wiper of the link circuit when the link circuit is connected to the register; and means for disconnecting the marking wire from the digit switch contact, for connecting the portion of the marking wire which is connected to the contact banks of the selectors with a wire multipled to a contact of a contact bank of each line finder and for connecting that portion of this first connection which is adjacent to the first mentioned pole of the battery with the wiper, which hunts over this contact bank, of the said line finder.

2,747,023
MARKER IMPULSE GENERATOR FOR SIGNALLING SYSTEMS
Kurt Hagenhaus, Berlin-Siemensstadt, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Munich, Germany, a German corporation
Application July 30, 1952, Serial No. 301,647
Claims priority, application Germany August 13, 1951
13 Claims. (Cl. 179—18)



1. An impulse generator comprising a plurality of groups of impulse receiving terminals each group comprising several terminals, a plurality of first switching means corresponding in number to the number of terminals in each group of terminals, circuit means for connecting several of said terminals with each of said first switching means, said circuit means comprising current control means for each terminal, a plurality of second switching means corresponding in number to the number of groups of said terminals, each of said second switching means being individual to one of said group of terminals, resistor means connected with each terminal in each group of terminals, means for connecting said resistor means in each group of terminals in multiple to the second switching means which is individual thereto, means for repeatedly sequentially and cyclically operating said first switching means, and means for actuating one of said second switching means during each cyclic operation of all of said first switching means for coordinating the operations of said first switching means with the operation of said second switching means to produce successively individual impulses at said impulse receiving terminals.

2,747,024
MAGNETIC ERASE HEADS
Clarence F. Sprosty, Cleveland, Ohio, assignor to Clevite Corporation, Cleveland, Ohio, a corporation of Ohio
Application October 4, 1954, Serial No. 460,049
10 Claims. (Cl. 179—100.2)



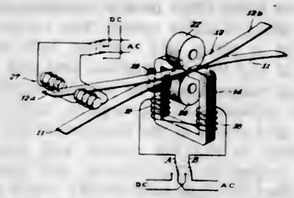
9. A magnetic erase head comprising three core segments spaced apart at one extremity to define two gaps and magnetically interconnected in spaced relation from said gaps, a coil for alternating erase current wound around two adjacent ones of said core segments for developing an erase field across each of said gaps having the same phase but differing in intensity.

2,747,025
MAGNETIC TAPE APPARATUS AND TAPE DRIVING MEANS THEREFOR
Walter T. Selsted, San Mateo, Calif., assignor to Ampex Corporation, a corporation of California
Application October 5, 1951, Serial No. 249,950
6 Claims. (Cl. 179—100.2)



1. In magnetic tape apparatus of the character described, a drum about a portion of the periphery of which an elongated pliable magnetic tape is adapted to be wrapped, said drum having at least one circumferential groove of a width less than that of the tape to be driven, at least one magnetic head disposed adjacent the drum at a position opposite the groove, a post, an arm movably supported on said post, a magnetic head carried by the free end of the arm, resilient means connected between the post and arm for biasing the head in the direction of the drum, and a vacuum distribution system for applying a partial vacuum to progressively changing portions of the drum, thus creating suction along respective changing portions of the groove thereby to drive the tape.

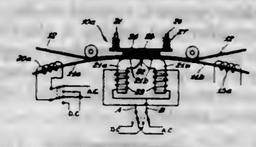
2,747,026
RECORDING APPARATUS AND METHOD FOR MAKING DUPLICATE MAGNETIC RECORDS
Marvin Camras, Chicago, Ill., assignor to Armour Research Foundation of Illinois Institute of Technology, Chicago, Ill., a corporation of Illinois
Application November 18, 1948, Serial No. 60,652
5 Claims. (Cl. 179—100.2)



1. In apparatus for duplicating onto a copy magnetic record member a magnetic pattern recorded on a master magnetic record member, each of said members being longitudinally movable and having an elongated longitudinal dimension, a width dimension, and a thickness dimension, the direction of the magnetic pattern on the master record member being other than across the width thereof, a magnetic field producing head assembly including a pair of pole faces and a gap therebetween, the gap having a dimension in the direction of flux of a field produced by said head assembly at least as great as the width dimension of said members, and means juxtaposing the record members in an overlying relation to each other between said pole faces whereby the field produced by said head assembly will have a direction through the width of said record members.

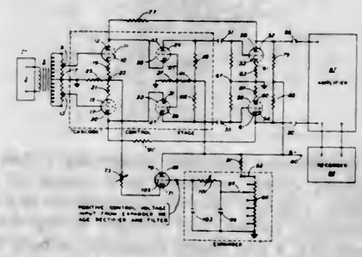
2,747,027
RECORDING APPARATUS AND METHOD FOR MAKING DUPLICATE MAGNETIC RECORDS
Marvin Camras, Chicago, Ill., assignor to Armour Research Foundation of Illinois Institute of Technology, Chicago, Ill., a corporation of Illinois
Application November 5, 1948, Serial No. 58,403
14 Claims. (Cl. 179—100.2)

1. The method of duplicating a magnetic pattern from a master magnetic medium on a magnetizable copy medium which comprises saturating said copy medium with a D. C. magnetic field, establishing a D. C. magnetic



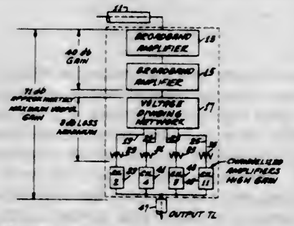
duplicating field, and placing said master medium and the saturated copy medium into contact with each other within said duplicating field.

2,747,028
AMPLIFIER CIRCUIT
Calvin M. Clark, Fullerton, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware
Application October 29, 1952, Serial No. 317,469
5 Claims. (Cl. 179—171)



5. In an amplifier a push pull connected cascode stage comprising a first pair of vacuum tubes each having an anode, a cathode, and a control electrode, a second pair of vacuum tubes each having an anode, a cathode, and a control electrode, means connecting the anodes of each of said first pair of vacuum tubes to the cathode of a respective second vacuum tube, a load connected between the anode of each of said second vacuum tubes and a source of voltage, means for maintaining the control electrode of each of said second vacuum tubes at a constant potential, means for operating said first pair of vacuum tubes in the microampere region, means for impressing a signal voltage between a point of predetermined potential and the control electrodes of the first pair of vacuum tubes, and means for impressing a control voltage between the cathodes of the first pair of vacuum tubes and the point of predetermined potential.

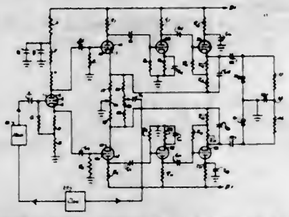
2,747,029
RADIO FREQUENCY AMPLIFIER SYSTEM
Roy Chester Abbett, Audubon, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application May 7, 1953, Serial No. 353,500
4 Claims. (Cl. 179—171)



1. In the field of receiving and distributing radio frequency signals occurring over a very wide band of frequency, an amplifier system including a relatively low-gain broadband amplifier capable of amplifying a band

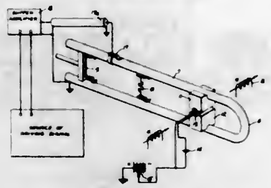
of frequencies having a wide frequency range of the order of four-to-one directly coupled to a source of such signals, a voltage divider network coupled to the output of said broadband amplifier and having a plurality of outputs, separate high-gain channel amplifiers coupled to each of said plurality of outputs from said voltage divider network, and means to combine the output signals from said separate channel amplifiers.

2,747,030
STABILIZED SYNCHRONOUS AMPLIFIERS
Richard G. Nuckolls, Chevy Chase, Md., assignor to the United States of America as represented by the Secretary of Commerce
Application October 17, 1952, Serial No. 315,439
7 Claims. (Cl. 179—171)
(Granted under Title 35, U. S. Code (1952), sec. 266)



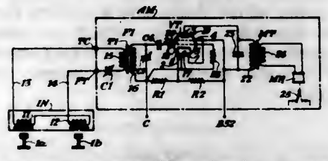
1. A synchronous amplifier, comprising a first input phase-splitting circuit connected to a source of modulated voltage, a second input circuit connected to a source of unmodulated voltage, said voltages having the same basic frequency, a first means connected to both of said input circuits for obtaining voltages equal to the sum and difference of said modulated voltage and said unmodulated voltage, separate amplifying means for amplifying the difference voltage and the sum voltage, means for feeding back a portion of the output of each of said amplifying means to the input thereof to stabilize the gains of said amplifying means, a detector means connected to the output of each of said amplifying means, and a filter connected in common to the outputs of each of said detector means.

2,747,031
MAGNETRON AMPLIFIER
Donald A. Wilbur, Albany, and Philip H. Peters, Jr., Schenectady, N. Y., assignors to General Electric Company, a corporation of New York
Application May 10, 1950, Serial No. 161,052
1 Claim. (Cl. 179—171)



A magnetron amplifier comprising a cathode, an anode including an array of spaced anode segments defining interaction gaps facing said cathode and spaced to sustain an oscillation at a traveling wave mode frequency, an output system coupled to said anode segments for sustaining an electromagnetic wave at said frequency traveling along the array, means for introducing an electron space charge between said cathode and said anode, means for establishing a static electric field between said anode segments and said cathode and means for establishing an applied static magnetic field perpendicular thereto, the ratio of the static electric field to the static magnetic field determining the average velocity of said space charge along said anode array, means coupling a source of high frequency signals to said output system to modify the electric field between said cathode and anode to cause high frequency energy to be generated through traveling wave mode operation by the electron space charge at the interaction gaps in excess of the coupled high frequency signals, said excess energy being obtained from said static electric field, and means for coupling said output system to a load.

2,747,032
VACUUM TUBE AMPLIFIER CIRCUITS FOR CODED CARRIER CURRENT
Leslie R. Allison, Pittsburgh, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Original application February 8, 1949, Serial No. 75,188, now Patent No. 2,662,934, dated December 15, 1953. Divided and this application May 22, 1953, Serial No. 356,675
4 Claims. (Cl. 179—171)

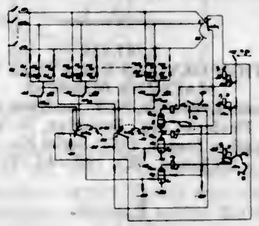


3. In vacuum tube amplifier circuits; a vacuum tube having an anode, a cathode, and a control grid; said tube provided with two external terminals one connected to each end of said control grid, an anode circuit including a power source connected to said anode and cathode to produce a current flow in the anode circuit as determined by voltages applied to said control grid, a winding adapted to at times receive signaling energy, a capacitor, a resistor, a direct voltage bias source; a grid circuit including in series said winding, said capacitor, said control grid and its two terminals and said resistor; said bias voltage source having its positive terminal connected to said cathode and its negative terminal connected to said grid circuit at the junction of said resistor and said winding to bias the control grid negative in potential with respect to said cathode, said bias potential being retained through said resistor when an open circuit occurs in said winding or capacitor and the loss of said bias potential being made gradual due to the charging of said capacitor by the bias voltage source through the tube space when an open circuit occurs in said resistor.

2,747,033
APPARATUS FOR TESTING SIGNAL IMPULSE GENERATORS
Kurt Hagenhaus, Berlin-Siemensstadt, and Gerd Tiesler, Berlin-Charlottenburg, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Munich, Germany, a German corporation
Application July 30, 1952, Serial No. 301,646
Claims priority, application Germany August 18, 1951
16 Claims. (Cl. 179—175.2)

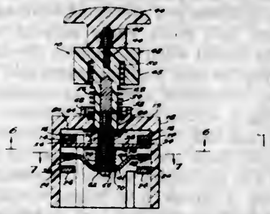
1. Apparatus for testing the operation of signal impulse generators having a plurality of a first type switching means and an individual conductor extending from each of said first type switching means and having a plurality of groups of control conductors each group having a plurality of control conductors one for each of said individual conductors and connected with such first conductor and having an impulse receiving terminal connected with each control conductor and having a plurality of a second type switching means one for each group of said control conductors and having means for successively actuating said second type switching means to connect a potential to

the associated group of control conductors and means for successively actuating said first type switching means to connect a potential successively to said individual conductors and therewith to said control conductors to produce impulses at said impulse receiving terminals of the group of control conductors associated with an actuated second type switching means, whereby impulses are successively produced at the impulse receiving terminals of the successive groups of control conductors; said apparatus com-



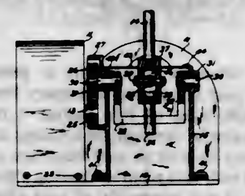
prising testing means, a first device for successively connecting to said testing means the potentials successively appearing on said individual conductors by the successive actuation of said first type switching means, and a second device for successively connecting to said testing means the potentials respectively connected by said second type switching means to the groups of control conductors respectively associated with said second type switching means, and means in said testing means for ascertaining the simultaneous occurrence of said potentials connected thereto.

2,747,034
THREE-POSITION PUSH BUTTON SWITCH
Herbert W. Machon, West Hartford, and Joseph P. Magnano, Portland, Conn., assignors to Federal Electric Products Company, Newark, N. J., a corporation
Application July 16, 1953, Serial No. 368,268
6 Claims. (Cl. 200—16)



1. A switch comprising a casing having an axial opening extending into the interior of the casing, a pair of companion contacts carried by said casing and disposed in laterally spaced relation therein, a second pair of companion contacts carried by said casing and disposed in laterally spaced relation therein, one of said pairs of contacts being spaced from the other of said pairs of contacts longitudinally of the casing, a first movable bridging contact member mounted for movement in the space between said pairs to open and close said first pair of contacts, a second movable bridging contact member mounted for movement in the space between said pairs to open and close said second pair of contacts, and means for actuating said bridging contact members comprising a stem slidably movable in said opening of the casing and spring biased to a first position in which one pair of said contacts are normally open and the other of said pair of contacts are normally closed, a guide sleeve disposed in line with said stem and connected thereto for axial movement therewith, said bridging members having openings through which said sleeve extends, said bridging members being movable longitudinally of said sleeve, a detent member having an opening through which said sleeve extends, said detent member being slidably movable on said sleeve longitudinally thereof, spring means surrounding said guide sleeve and resiliently engaging and holding said detent member in engagement with one of said bridging contact members and biasing both of said bridging contact members toward their contact engaging positions, respectively, and means including said sleeve for removably connecting said bridging contact members to said stem for actuation thereby, said last mentioned means including means releasably securing said sleeve to said stem.

2,747,035
DUPLEX SWITCH ACTUATOR
Gilbert H. Hansen, Batavia, and Nobel H. Koertge and Paul F. White, Glen Ellyn, Ill., assignors to Furnas Electric Company, Batavia, Ill., a corporation of Illinois
Application March 9, 1953, Serial No. 341,102
5 Claims. (Cl. 200—17)



1. In a dual switch unit, a pair of electric switches each having an actuating member movable in opposite directions to effect alternate forward and reverse operation of its switch, a crank shaft for moving one of said members in opposite directions, a rectilinear shaft for moving the other of said members in opposite directions, said shafts having intersecting axes, and a lever fulcrumed to swing about the point of intersection of said shaft axis and coacting with said shafts to either alternately or simultaneously move said switch actuating members.

2,747,036
FLUID-TIGHT ELECTRIC SWITCHES AND WATERPROOF SEPARABLE CONDUCTOR CONNECTING MEANS THEREFOR
Harry N. Brodsky and Blair H. Chamberlin, Detroit, Mich.; said Brodsky assignor to Riverside Mfg. & Electrical Supply Co., Inc., Dearborn, Mich., a corporation of Michigan, and said Chamberlin assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application April 12, 1954, Serial No. 422,563
5 Claims. (Cl. 200—51)



1. A fluid-tight electric switch unit comprising, a switch including a case for the commutating mechanism and an actuator extending through an opening in said case and a plurality of external terminals, sealing means for said opening in said case constructed to permit free operation of said actuator, a plurality of assemblies each of which is associated with a respective terminal and comprises a hollow flexible rubber boot and a male connector stud electrically connected to its associated terminal and disposed concentrically within the bore of a boot, and a molded mass of elastic and moisture impervious insulating material in which said case, said terminals and a greater portion of the outer surfaces of said boots are embedded in bonded and sealed relation, said assemblies constituting built-in receptacle portions of separable con-

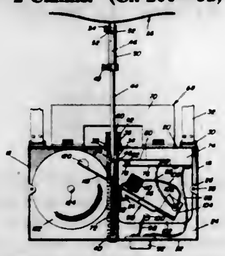
nectors into which complementary plug-in portions may be waterproofly fitted to effect connection between said switch unit and conductor leads.

2,747,037
ELECTRIC SWITCH
James P. Watson, Lynwood, Calif.
Application December 18, 1952, Serial No. 326,737
16 Claims. (Cl. 200—51.17)



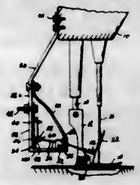
1. A switch assembly comprising a generally cylindrical casing, a pair of aligned stationary bearings at respectively opposite sides of said casing, a rotatable rod extending transversely through said casing and mounted for rotation about its axis in said bearings, an operating member for said rod, said member having a portion affixed to one end of said rod externally of said casing and normally extending in spaced relation to said casing from said portion in a plane generally perpendicular to said casing to the other end of said rod and being affixed to said rod at said other end externally of said casing, said member being tiltable out of said plane about the axis of said rod to rotate said rod in said bearings, and a switch mechanism in said casing, said mechanism comprising switch contact means and ratchet means, said ratchet means coupling said rod and switch contact means to operate said contact means in response to said tilting of said member from its said normal position, and centering means effective in response to rotational displacement of said rod by tilting of said member from said normal position to urge said rod to rotate in the direction necessary to return said member to said normal position in said plane.

2,747,038
DRIVER'S ALARM
Leo J. Perkovich, Pueblo, Colo.
Application July 27, 1953, Serial No. 370,338
2 Claims. (Cl. 200—52)



2. A switching means for sleep inhibiting alarm having a chin engaging assembly including a substantially vertical rod, comprising a guiding sleeve for the rod provided with a slot, a spring means urging the rod upwardly arranged within said guiding sleeve, an actuating pin projecting from said rod in a transverse direction, a pair of contact springs each carrying a contact with the springs biased for contact closure, one of said springs having an extension, said extension resting on the actuating pin of the chin engaging substantially vertical rod, the spring pressed rod normally tensioning and lifting said last named contact spring having an extension out of contact with the other contact spring of the pair, the action of the spring means on the chin engaging substantially vertical rod being overcome by a downwardly directed pressure acting on the rod, such pressure counteracting the action of the spring means on the rod and producing a vertical downward movement of the rod, releasing said contact spring having the extension.

2,747,039
STOP-MOTION DEVICES RELATING TO SEWING MACHINE BOBBINS
Edward Vossen, Lynbrook, N. Y., assignor to Stop-Motion Devices Corp., Brooklyn, N. Y.
Application June 1, 1953, Serial No. 358,822
2 Claims. (Cl. 200—61.18)

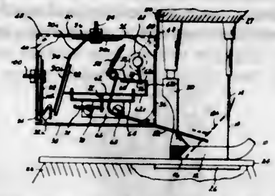


1. A stop-motion switch relating to sewing machine bobbin thread, comprising a bracket which is adapted to be secured to a sewing machine adjacent the presser foot and needle of said sewing machine, a pivotally mounted probe on said bracket which is adapted to project between the presser foot and needle of said machine for engagement with the needle thread of said machine when the bobbin thread breaks, an arm connected to said pivotally mounted probe and movable integrally therewith, a biased catch movably mounted on said bracket and engageable with said arm when the arm and probe occupy a given position in order to lock said arm and probe in said position, the catch being thereby itself locked in position and prevented from engaging in biased movement, said probe being adapted to be tripped by the needle thread when the bobbin thread breaks, thereby disengaging the arm from the catch and freeing the catch for biased movement, and means connected to said catch for closing a circuit when the probe is tripped by the needle thread and the catch is freed for biased movement, wherein the catch comprises a grooved pad of insulating material and the means which is connected to said catch for closing a circuit is a biased contact member, said insulated pad being mounted on said biased contact member and being biased therewith, the groove in said insulated pad being engageable with said arm to lock the arm and probe in their given position, said arm being itself a contact member and being engageable with the biased contact member to close the circuit when the probe is tripped and said arm is thereby dislodged from the groove in said insulated pad.

2,747,040
STOP-MOTION SWITCH FOR SEWING MACHINE BOBBIN THREAD
Edward Vossen, Lynbrook, N. Y., assignor to Stop-Motion Devices Corp., Brooklyn, N. Y.
Application June 1, 1953, Serial No. 358,823
5 Claims. (Cl. 200—61.18)

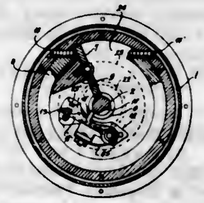
1. A stop-motion switch for a sewing machine, comprising a casing, fastening means adapted to secure the casing to a sewing machine adjacent its presser foot, a probe pivotally mounted on said casing and adapted to project between said presser foot and the needle of said machine, a trigger mechanism in said casing connected to and actuated by said probe, and a switch mechanism in said casing which is connected to and actuated by said

trigger mechanism, wherein the trigger mechanism comprises a pivotally movable arm and a longitudinally movable slide, both mounted in said casing, and each being engageable with the other, a spring connected to the pivotally mounted arm and tending to maintain said arm



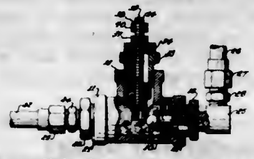
in engagement with the slide, and a second spring in engagement with the slide to thrust said slide in a predetermined direction relative to said arm when said arm is caused to disengage said slide against the action of the first mentioned spring.

2,747,041
INERTIA OPERATED SHOCK LOAD SWITCH
Edward Thomson, Mount Vernon, Ill.
Application December 22, 1952, Serial No. 327,254
13 Claims. (Cl. 200—61.46)



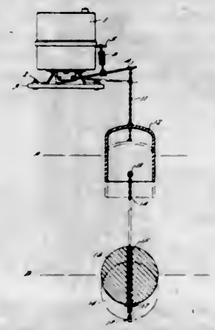
1. A shock load release switch comprising a casing, a shaft rotatably mounted therein, an annular inertia device mounted on said shaft for rotation with or relative to said shaft, an annular magnet secured in said inertia device and having a gap therein, an armature secured to said shaft and located within said gap and in contact with one end of said magnet, a non-magnetic adjusting means located in each end of the magnet for adjusting the spacing between the armature and magnet, a switch mounted on said inertia device, and a cam in said shaft for actuating said switch upon relative rotational movement of said inertia device and shaft, said armature aiding in completing the relative movement as it moves through said gap into engagement with the other end of said magnet.

2,747,042
ENGINE LOW OIL INDICATOR
Robert N. Zimmerman, Tucson, Ariz.
Application October 1, 1952, Serial No. 312,429
2 Claims. (Cl. 200—81.9)



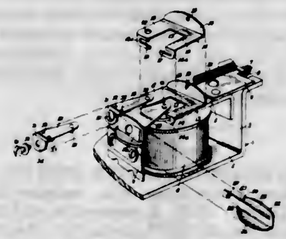
1. In a low oil indicator the combination which comprises a fitting having aligned inlet and outlet connections and a side connection positioned between the inlet and outlet connections, means connecting tubes to said inlet and outlet connections, a coupling connected to said side connection, a screw having a nipple on the inner end loosely extended through the coupling connected to said side connection, washers of insulating material mounted on said screw to insulate said screw from said side connection, lock nuts on said screw outwardly of said washers engaging said washers to firmly retain the washers in contact with said coupling and the screw spaced from said coupling, a bushing extended into said outlet connection, a ball freely mounted in said bushing, a spring positioned in the bushing for urging the ball outwardly of the bushing, said bushing positioned whereby in an outwardly extended position the ball contacts the nipple of the screw extended through the coupling connected to the side connection.

2,747,043
FLOAT OPERATOR
Carl A. Schaefer, Milwaukee, Wis., assignor to Square D Company, Detroit, Mich., a corporation of Michigan
Application February 6, 1953, Serial No. 335,535
9 Claims. (Cl. 200—84)



1. A float operated switch device for controlling the level of a liquid comprising an electric switch, an operator for operating said switch having two stable positions, biasing means for biasing said operator toward one of its stable positions, a plurality of counter-biasing means for biasing said operator toward the other of its stable positions comprising a suspended weight having an overall specific gravity greater than that of the controlled liquid and an inverted cup, and means mechanically interconnecting said cup and said weight to said operator with said cup disposed between said operator and said weight.

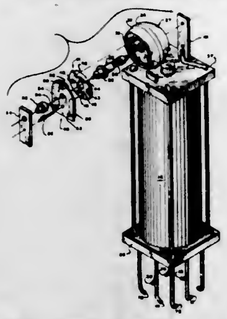
2,747,044
BY-PASS ASSEMBLY FOR ELECTRICAL REGULATORS
Louis Fortunato, Irvington, N. J.
Application July 30, 1953, Serial No. 371,219
5 Claims. (Cl. 200—87)



1. An electric regulator comprising an electromagnetic coil positioned between a pair of spaced support members, an armature connected to one of said support members and positioned over an axial end of said coil, a first arm connected to the other support member and positioned over said armature in spaced relationship therewith and

contactable therewith upon de-energization of said coil, a by-pass contact assembly comprising a U-shaped plate positioned on said armature with the said first arm directed between the legs of said U-shaped plate, a key member engageable with the support member connected to said first arm extending laterally beyond said support member, a second arm secured to the extended portion of said key member and positioned over a leg of said U-shaped member, contact points on said leg and on said second arm positioned for contact with each other, and spring means connecting said U-shaped plate with an anchor means positioned rearwardly of said plate.

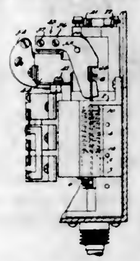
2,747,045
SIGNAL INDICATING DEVICE
Harry W. Parmer, Elberon, N. J.
Application April 2, 1953, Serial No. 346,550
6 Claims. (Cl. 200—93)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A magnetic circuit including a high permeability member and a relatively rotatable permanent magnet member to provide a flux through the circuit sufficient to retain said members in either of two positions of rest differing by nearly 180° relative rotation, operating coil means energizable to provide a magnetomotive force in either direction in said first member to modify said flux in the corresponding position of rest by opposing said flux from said second member to start relative rotation of said members and then aiding said flux from said second member to complete rotation to the other position of rest, and switch means operable by said relative rotation of said members including a lost motion connection permitting said relative rotation to occur freely until nearly completed and then utilizing the kinetic energy of rotation and the aiding relation of said magnet and said operating means to actuate said switch means near the end of the rotation of the members, said switch means including two alternately set spring contacts, the setting of one said contact at said one position of rest storing mechanical energy which is used in setting the other said contact at said other position of rest, said switching means being connected to said operating coil means to cancel the energization in the direction in which the coil has been energized to cause relative rotation when said rotation is substantially accomplished.

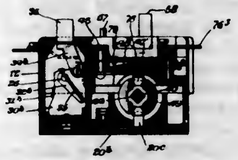
2,747,046
ACCELERATING MASTER SWITCH
Earl F. Mekelburg, Wauwatosa, Wis., assignor to Square D Company, Detroit, Mich., a corporation of Michigan
Application May 25, 1950, Serial No. 164,281
7 Claims. (Cl. 200—98)

3. In a device for controlling the acceleration of an electric motor, switching means, operating means for said switching means movable to effect switch operation in a predetermined sequence, an airtight enclosure, a piston operating within said enclosure and connected to said operating means for controlling the movement thereof, a plurality of individual pairs of interconnected openings forming inlet and outlet ports with each individual pair constituting separate rate control means for travel of said piston between the areas of said enclosure as defined by said pairs of openings, said openings being longitudinally spaced along and extending part way through the wall of said enclosure, a latch for holding said operating means in a desired position, means for maintaining said latch in



latching position, means including an electromagnetic coil for overcoming the effect of said last mentioned means to permit said latch to release said operating means whereby said operating means may move to operate said switching means, and means for independently varying the rate of fluid flow through said individual pairs of interconnected openings whereby the rate of movement of said piston is independently variable along different sections of its travel within said enclosure as defined by said individual pairs of openings.

2,747,047
INTERLOCKED SWITCH AND CIRCUIT BREAKER UNIT
Harold E. Schleicher, West Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a corporation of Connecticut
Application March 23, 1954, Serial No. 418,035
20 Claims. (Cl. 200—50)



8. Switching mechanism comprising contacts, manually operable means to cause closing and opening of said contacts, in combination with circuit breaker mechanism comprising contacts adapted to be opened and closed, current responsive means to cause operation of said circuit breaker contacts automatically on occurrence of predetermined conditions in the circuit, manually operable means to reset said circuit breaker mechanism, mechanical interlocking means between said switch and circuit breaker mechanisms, means movable concomitantly with said circuit breaker contacts engaging said interlocking means to latch said circuit breaker mechanism in auto-operated position, and means movable concomitantly with said switch operating means to de-activate said interlocking means in one position of said switching means.

2,747,048
SHOCKPROOF SOCKET
John C. Peters, Chicago, Ill.
Application June 2, 1953, Serial No. 359,143
1 Claim. (Cl. 200—51.09)

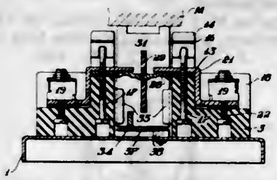
In a socket, a metal screw shell, a U-shaped bracket including a pair of spaced parallel legs secured to said shell, a web extending between said pair of legs, a partition slidably arranged within said bracket and provided

with a central opening, a tapered button slidably mounted in said opening, an insulated strip arranged contiguous to the inner surface of one of said legs and secured thereto, an insulated bar arranged contiguous to the inner surface of said web and secured thereto, a pair of spring contacts interposed between said bar and partition and adapted to be connected to a source of electrical energy, said contacts having one end portion secured to said partition and another end portion engaging said insulated bar, a first spring finger connected to one of said legs, a



second spring finger connected to said insulated strip, the inner ends of said spring fingers being mounted for movement into and out of engagement with said contacts, said first and second spring fingers being arranged in opposed relation with respect to each other, the inner ends of said spring fingers engaging the inner end of said button, said second spring finger having an outer portion overlying the outer end of said button, the distance from the spring fingers to said contacts being greater than the travel permitted of the button through the central opening in the partition.

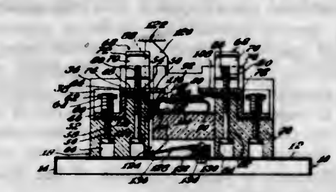
2,747,049
PLUG-IN METER SOCKET WITH SHUNT SWITCH AND SIGNAL
Ernest G. Johansson, Belmont, Mass., assignor to Anchor Manufacturing Company, Boston, Mass., a corporation of Massachusetts
Application February 1, 1954, Serial No. 407,535
14 Claims. (Cl. 200—51.1)



1. For receiving a device such as a meter which has a plurality of pairs of electrodes for connection to opposite sides of a gap in a circuit, a socket having a plurality of pairs of terminals for engagement with said pairs of electrodes respectively, each pair comprising two terminals spaced apart for connection to said sides respectively, the pairs being arranged side by side in a row extending parallel to a plane disposed between the two terminals of each pair, a switch for bridging each of said gaps when the device is removed from the socket, and a plunger carrying each of said switches, each plunger comprising a plate of insulation extending transversely of said plane between adjacent pairs of terminals to prevent arcing between adjacent pairs, the forward ends of the plungers projecting into the path of said device so that the switches are retracted when the device is inserted.

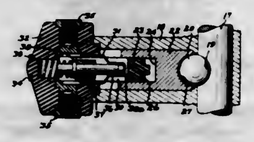
2,747,050
SHUNT SWITCH FOR PLUG-IN METER SOCKET AND THE LIKE
Ernest G. Johansson, Belmont, Mass., assignor to Anchor Manufacturing Company, Boston, Mass., a corporation of Massachusetts
Application July 28, 1953, Serial No. 370,775
5 Claims. (Cl. 200—51.10)

1. In a socket for use with a meter having a base and contact blades extending rearwardly therefrom, the combination of a support including two sections of insulation with a gap therebetween, terminals mounted on the support, the terminals having jaws to receive said blades from the front and contact surfaces facing rearwardly, a rigid bar extending across said gap with its ends engaging said surfaces respectively at opposite sides of the gap, a spring urging the bar forwardly against the surfaces, a guide groove on the face of one of said sections which



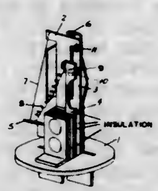
faces the other section, the grooves extending lengthwise of said jaws, and means for moving said bar from one of said surfaces, said means including a plunger slidable in said groove with its outer end projecting forwardly beyond the ends of the jaws into the path of the meter base, whereby when the meter is inserted in the socket the plunger, urged by the meter base, moves the bar away from a contact surface.

2,747,051
STARTER SWITCH
Fred A. Kommer and Albert W. Zab, St. Louis, Mo., assignors to Carter Carburetor Corporation, St. Louis, Mo., a corporation of Delaware
Application August 18, 1952, Serial No. 304,879
6 Claims. (Cl. 200—61.9)



1. A starting switch device for internal combustion engines comprising spaced, stationary switch contacts, a bridging contact therefor, and an actuator for said bridging contact comprising separate, aligned plunger members having spaced apart portions loosely receiving said bridging contact for shifting the same to and from switch closing position while permitting slight retraction and jiggling of said actuator, when in any switch closing position, without affecting said bridging contact, and switch adjusting means on said actuator operable independent of the spaced relation between said plunger members.

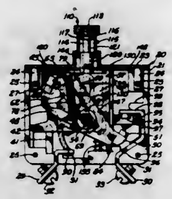
2,747,052
FLASHER SWITCHES
Carl T. Blume, West Newton, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application October 10, 1952, Serial No. 314,129
3 Claims. (Cl. 200—113)



1. A self-cycling, rapid-action make-and-break circuit comprising a base member, a first leaf spring mounted on said base member said first leaf spring including

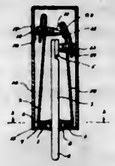
two arms, one of said arms having a contact point thereon, a second leaf spring adjacent to said first spring said second spring also having a contact point thereon, a bracket mounted on said base member, a tensioned heat-expansible resistance element attached to said bracket and to one of said arms, and spring means cooperating with the arms of said first leaf spring and responsive to relaxation of said tensioned element to move one of said contact points into engagement with the other, thereby substantially reducing current flow through said tensioned element, said means being thereafter responsive to the subsequent tightening of said tensioned element, as a result of such current flow reduction, to move said one contact point out of engagement with the other, thereby substantially increasing current flow through said tensioned element to relax its tension sufficiently to cause repetition of the make-and-break switching cycle.

2,747,053
CIRCUIT BREAKER
Ross E. Locher, San Marino, Calif., assignor to Zinsco Electrical Products, Los Angeles, Calif., a corporation of California
Application April 2, 1953, Serial No. 346,359
18 Claims. (Cl. 200—116)



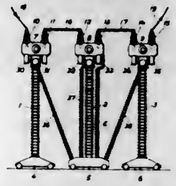
1. In a circuit breaker for interruption of an electrical circuit, the combination of: a housing; line and load terminals for said housing; a slide member supported by said housing and adapted to be reciprocally translated therein between upper and lower positions, said member providing a first bearing surface and a latching portion; a switch arm movable by said slide member and adapted upon downward movement of said member to move between a released position and a latched position, said arm including a second bearing surface for slidable abutment with said first bearing surface; a thermostatic element secured to said switch arm adapted to flex with respect to said second bearing surface and being in conductive relation with a portion of said arm, said element being adapted, when cold, to engage with said latching portion when said arm is in said latched position, said engagement being limited by the abutment of said first and second bearing surfaces; a conductive member between one of said terminals and said thermostatic element, association of said conductive member with said element being in such a position as to permit current to flow through said element when said circuit is completed; a stationary contact connected to the other of said terminals and positioned with relation to said housing so as to be in electrical contact and abutment with said switch arm portion when said arm is in the latched position to complete said circuit; and spring means intermediate said housing and said slide member to bias said member toward said upper position so as to urge said switch arm portion into abutment with said stationary contact when said switch arm is in the latched position, whereby flexure of said thermostatic element, when heated, results in disengagement thereof from said latching portion to permit said switch arm to move to said released position.

2,747,054
FRICTION THERMOSTAT
Robert Valverde, New York, N. Y.
Application December 17, 1953, Serial No. 398,670
14 Claims. (Cl. 200—138)



1. A thermostat built on a compression type hermetic header having a cylindrical shoulder on one side, a pin extending through the header and having a greater length on one side of the header than on the other, a fixed electrical contact on the longer end of the pin, a bimetal strip and a movable contact strip opposite each other and attached at their lower ends to the cylindrical shoulder of the header and extending lengthwise of the pin, the bimetal strip having a free end with threads therein, a set screw held in said threads, and extending toward the movable contact strip and of a length to bear against the movable contact strip when the bimetal has warped beyond a predetermined position, and an extension on the contact strip carrying the surface against which the screw bears, said surface extending in a direction to have a wiping movement on the screw as the movable element moves toward and from the pin to produce a friction couple that gives snap action to the thermostat.

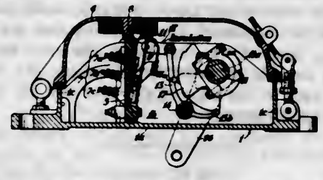
2,747,055
HIGH TENSION CIRCUIT BREAKERS
Haakon Forwald, Ludvika, Sweden, assignor to Allmänna Svenska Elektriska Aktiebolaget, Vasteras, Sweden, a Swedish corporation
Application May 28, 1953, Serial No. 357,942
Claims priority, application Sweden May 31, 1952
4 Claims. (Cl. 200—148)



1. An air blast circuit breaker having a plurality of series-connected breaking gaps and comprising a plurality of compressed air containers arranged in spaced relation to each other, contacts for said gaps arranged within said containers, a pillar insulator supporting each individual, each container having a volume so large that the compressed air contained therein is sufficient for at least one extinguishing of the arc between the breaking contacts therein, pipe lines extending directly between the spaced containers and providing for the passage of air from one of said containers to another, and at least one pipe line for the delivery of compressed air to said containers.

2,747,056
CIRCUIT CONTROLLER
Glen V. Jefferson, Edgewood, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application April 20, 1953, Serial No. 349,799
4 Claims. (Cl. 200—153)

1. In combination with a shaft rotatable from an intermediate position to two extreme positions, a crank secured to said shaft and rotatable therewith, a stud fixedly mounted a distance from said shaft greater than the length of said crank and so positioned that when said shaft is in its intermediate position said stud will be in radial alignment with said crank; a protrusion on opposite sides of the stud, and a U-shaped spring having an aperture at the end of each arm and being positioned around said shaft and crank, said spring being biased to clamp the stud between the spring arms when said shaft is in its



intermediate position, the stud protrusions registering in the apertures of the spring arms; said spring arms being disposed on both sides of said crank and in the arc of travel of said crank, the rotation of the shaft from its intermediate position to one of its extreme positions rotating said crank to move one of said spring arms out of engagement with one side of said stud, the other spring arm remaining in engagement with the other side of said stud.

2,747,057
SWITCH MOUNTING BRACKET FOR AIRPLANE CONTROL STICK
Thedore J. Obszarny, Chicago, Ill., assignor to Guardian Electric Manufacturing Co., Chicago, Ill., a corporation of Illinois
Application September 27, 1954, Serial No. 458,387
9 Claims. (Cl. 200—157)



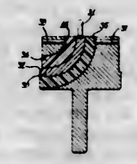
1. In combination, a control member in the form of a handgrip having a cavity therein, a multiple position switch having a cylindrical body mounted in an opening provided in and adjacent the outer end of said member, in open communication with said cavity, said body having a laterally extending lug, a mounting bracket fixedly secured within the cavity of the handgrip member and having a portion formed to conform to and seat against the arcaute wall of the switch body, said bracket being formed to provide a seat for said lug, and means engaging said lug for firmly securing said body to the mounting bracket.

2,747,058
CONTACT ADJUSTMENT SCREWS AND CONTACT ASSEMBLIES
Herman Ulanet, Maplewood, N. J.
Application August 27, 1952, Serial No. 306,603
5 Claims. (Cl. 200—166)



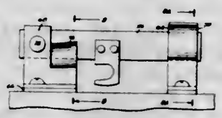
4. As an article of manufacture, a contact adjustment screw machined from a drawn, solid, composite rod, which is composed of a precious metal core and a surrounding, externally threaded base metal shell continuously bonded to each other throughout with a precious metal, the contact surface of said core being concentric with the shell, said shell at one end terminating short of the corresponding end of the core, and means for turning said screw.

2,747,059
COAXIAL SWITCH STRUCTURE AND METHOD OF MAKING SAME
Frank E. Cockerham, Parma, and John A. Darko, Cleveland, Ohio, assignors to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application May 23, 1952, Serial No. 289,582
10 Claims. (Cl. 200—166)



10. In a coaxial switch, a solid rotor having a curved elbow passage therein, a pair of semi-tubular sections respectively extending along the long and short curvature paths of said passage, and a conductor mounted coaxially within said passage by said sections, said sections being bent into said curvature paths so as to be urged by their inherent resiliency into frictional engagement with each other, with said conductor and with the interior surfaces of said passage.

2,747,060
ELECTRIC SWITCHES
Richard P. Ballou, Hartford, Conn., assignor to Federal Electric Products Company, Newark, N. J., a corporation
Application September 26, 1950, Serial No. 186,857
9 Claims. (Cl. 200—170)



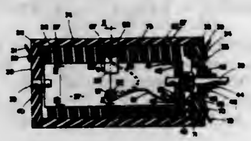
1. In an electric switch having a hinge contact, a stationary contact and a movable contact pivotally mounted on said hinge contact for releasable engagement with said stationary contact, the combination with said movable contact of means on said hinge contact for providing contact pressure between said movable contact and said hinge contact in the engaged condition of said movable contact, said means operating upon disengagement of said movable contact to relieve at least part of said contact pressure, said movable contact being movable laterally of said hinge contact, and said means being a resilient part on said hinge contact in yieldable contact engagement with a side surface of said movable contact only when the latter is engaged with said stationary contact, said stationary contact extending beyond said resilient part in the direction of pivotal movement of said movable contact to disengage said stationary contact, whereby significant friction is initiated in the closing movement of the movable contact when the movable contact first engages the resilient part at which point the movable contact is about to engage the stationary contact and significant friction is terminated in the opening movement of the movable contact when the movable contact disengages the resilient part.

2,747,061

MEANS AND METHODS OF IMPROVING THE ACCURACY AND RESOLUTION OF VARIABLE RESISTORS

Adelbert Paul Sorber, Los Angeles, Calif.; Gordon Paul Sorber, administrator of said Adelbert Paul Sorber, deceased

Application February 9, 1953, Serial No. 335,947
4 Claims. (Cl. 201—56)



1. In a variable resistor, a plurality of resistance elements disposed side by side throughout their lengths, said elements selected and arranged so that departures from the desired resistance in any unit of length of one element are at least partially compensated for by opposite variations in resistance in the corresponding unit of length of at least one other resistance element, a plurality of wipers each individual to one of said elements, and means common to all of said wipers for moving them simultaneously along the respectively associated elements.

2,747,062

ELECTRIC WELDING AND SOLDERING GUN

Karl Joel Aversten, Lidingo, Sweden

Application May 5, 1955, Serial No. 506,319
7 Claims. (Cl. 219—4)



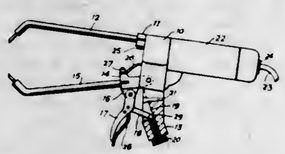
1. An electric welding and soldering gun for use with a pin having a fuse wire attached thereto comprising a chuck for engaging the pin, a current carrying member disposed in the gun inwardly from said chuck for engaging the fuse wire and means electrically insulating said current carrying member from said chuck.

2,747,063

PORTABLE ELECTRIC SPOT WELDING TOOLS

Frank Edgar Waring, Macclesfield, England, assignor to Triangle Products Limited, Hulme, Manchester, England, a British company

Application November 25, 1953, Serial No. 394,447
5 Claims. (Cl. 219—4)



1. A portable electric spot welding tool comprising a body part, an electric stepdown transformer in longitudinal alinement with said body part, a pillar type handgrip secured below and approximately at right angles to said body part and substantially at the center of gravity of said tool, a fixed longitudinal tong mounted on said body part and a movable tong hingedly mounted below said fixed tong, the two tongs being respectively connected to the low voltage secondary winding of said transformer and on the opposite side of said body part, electrode contact tips mounted on the ends of said tongs in such manner that when the said movable tong is moved towards said fixed tong the two contact tips will abut one another, a control lever pivoted on said movable tong to move said tong and by a linkage to said pillar type handgrip towards and away from said fixed tong, said control lever being adjacent to said pillar type handgrip, said tool being adapted to be supported by one hand and said control lever being operable by that hand, the rear end of the tool being capable of being held between the body and the upper part of the arm of the operator for positional control and partial support.

2,747,064

APPARATUS FOR MAKING CORRUGATED CORE STRUCTURAL SHEET MATERIAL

Carl A. van Pappelendam, Rivera, Calif., assignor to North American Aviation, Inc.

Application August 22, 1952, Serial No. 305,788
8 Claims. (Cl. 219—4)



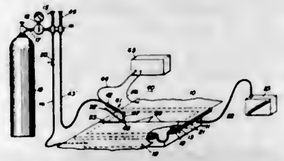
1. An improved method of making corrugated core sandwich-type weldable metallic structural sheet material comprising feeding flat sheet material continuously from a roll thereof, simultaneously scoring said material along uniformly spaced paths parallel to the direction of motion of said material and forming beads between said paths, folding said material into a corrugated section by bending along said paths, feeding flat sheet material from two rolls thereof into contact with said corrugated material on either side thereof, and continuously passing welding current through said flat sheet material and adjacent apexes of said corrugated material to thereby form a sandwich consisting of said corrugated material as a core and said flat material as facing sheets.

2,747,065

METHOD FOR WELDING A JOINT

Charles Diehl, Ridgefield, N. J., assignor to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware

Application November 1, 1951, Serial No. 254,427
12 Claims. (Cl. 219—10)



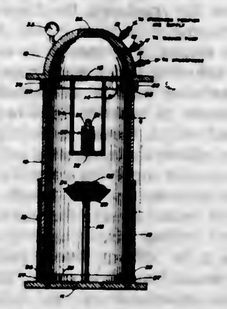
1. The method of welding a joint between metal parts having the edges to be joined of a thickness within the sheet metal range and not substantially in excess of ⅛ of an inch, which comprises abutting said edges along the line of the joint, fixedly positioning said metal parts relative to each other to maintain the abutment of said edges, apply heat to adjacent portions of said abutted edges at a rate sufficiently high to rapidly fuse completely through the full thickness thereof to the bottom face of the joint and to form a molten weld metal pool of approximately constant width throughout the depth thereof, providing a gas blanket at a positive static pressure against the bottom face of the joint during fusion and solidification of said weld metal pool, adjusting the thickness of said edges, the rate at which heat is applied to said adjacent portions of said edges and the static pressure maintained against said bottom face to provide a molten weld metal pool, as above set forth, which is held together in position between unfused metal without formation of discreet projections on the bottom face thereof and which is predeterminedly shaped during fusion and solidification, and maintaining the fixed positional relation of said metal parts during fusion and solidification of said weld metal pool.

2,747,066

HEAT TREATING APPARATUS

Porter H. Brace, Pittsburgh, Pa., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy

Original application November 17, 1949, Serial No. 127,858, now Patent No. 2,638,426, dated May 12, 1953. Divided and this application May 7, 1953, Serial No. 361,061
3 Claims. (Cl. 219—10.43)



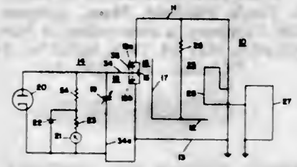
2. A furnace having a principal metal supporting member at one end and an auxiliary metal supporting member at its opposite end, and means including an induction heating coil wound about said furnace and movable to different positions between said furnace ends to apply the major heating effort toward a selected one of said metal supporting members.

2,747,067

VOLTAGE DETERMINING ARRANGEMENT FOR DIELECTRIC HEATERS

Carl E. Ellsworth, Anchorage, Ky., assignor to National Cylinder Gas Company, Chicago, Ill., a corporation of Delaware

Application August 13, 1953, Serial No. 374,083
3 Claims. (Cl. 219—10.55)



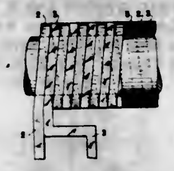
1. In a dielectric heating applicator having spaced heating electrodes, one of which is movable for variation in the spacing between the electrodes, and having means for developing between said electrodes a high-frequency, high-voltage electric field, the combination of a high-frequency, high-voltage measuring arrangement for determining the voltage between said heating electrodes comprising a first plate movable with said one of said heating electrodes as a unit and having a planar surface of large area extending in a direction parallel to the direction of movement of said one electrode, a normally stationary second plate having a planar surface extending in opposed parallel spaced relation to said planar surface of said first plate, said first and second plates comprising a capacitive measuring impedance, the area of said planar surface of said first plate being sufficiently greater than that of said second plate so that for all positions of said one electrode said first plate has an area opposite said second plate which is equal to the area of said second plate, whereby the capacitance of said measuring impedance is maintained constant throughout the range of movement of said one of said heating electrodes, a voltage divider comprised of said measuring impedance and a second impedance electrically connected with the other of said heating electrodes, and voltage responsive means in circuit with said second impedance to respond to its voltage as a measure of the voltage between said heating electrodes.

2,747,068

INDUCTION HEATING APPARATUS

Robert V. Lackner, Pittsburgh, Pa.

Application August 28, 1951, Serial No. 244,018
8 Claims. (Cl. 219—10.75)



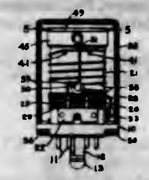
1. An induction heating apparatus comprising a source of two phase power an inductor formed from two coils, one phase of said two phase power source being connected to one of said coils, the other phase of said two phase power source being connected to the other coil, said coils extending side by side and being wound together into coils which extend substantially the length of the inductor.

2,747,069

PIEZOELECTRIC CRYSTAL OVEN

August E. Miller, Cliffside Park, N. J.

Application October 9, 1953, Serial No. 385,070
12 Claims. (Cl. 219—19)



1. A piezoelectric crystal oven comprising a base, an inner insulating housing carried on the base within which a crystal assembly is received, a metallic housing mounted on the base and surrounding the inner housing, a pair of thermostats carried upon the upper end of the metallic housing, a fast heater winding around the lower end of the metallic housing solely and connected with one thermostat, the fast heater winding being substantially spaced from the thermostats, a control winding around the metallic housing and extending the length thereof and connected with the other thermostat, and an outer insulating housing mounted on the base.

2,747,070

ELECTRIC HEATING ELEMENT

Robert Barzehr, Lauterach, Vorarlberg, Austria

Application September 4, 1953, Serial No. 378,608
Claims priority, application Austria September 8, 1952
5 Claims. (Cl. 219—19)

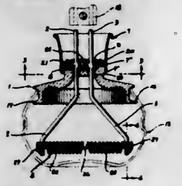
1. An electrical heating unit comprising a plate of heat-conducting material having on one face spaced ribs

forming a channel between said ribs, an electrical resistance element disposed in said channel and a continuous series of beads of insulating material strung on said element and received in said channel, each of said beads having a longitudinal bore to receive said element and



having in one side a slot extending lengthwise of the bead so that the bead is C-shaped in cross section, said slot being narrower than said bore and said beads being strung on said resistance element end-to-end with said slots aligned and facing said plate.

2,747,071
ELECTRIC RESISTANCE HEATER
Peter Schlumbohm, New York, N. Y.
Application June 24, 1954, Serial No. 439,054
2 Claims. (Cl. 219—19)



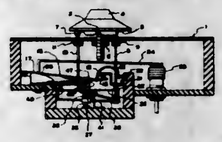
1. Electric resistance coil, characterized by a helical coil, which is in turnbuckle fashion partly wound with a left hand thread, and partly with a right hand thread, whereby the coil can be threaded at both free ends into engaging means by the same turning move.

2,747,072
TOASTER HEATING UNIT
John J. Lawser, Abington, Pa., assignor to Proctor Electric Company, Philadelphia, Pa., a corporation of Pennsylvania
Application September 11, 1953, Serial No. 379,649
25 Claims. (Cl. 219—19)



1. In a heating unit for a bread toaster, an open metal frame of substantially rectangular form, at least two insulating strips disposed respectively at two opposed sides of the rectangular frame and extending along said sides, a plurality of spaced fingers along each of said sides integral therewith and engaging the associated insulating strip to hold it in place, a heating element extending between said sides and supported by said insulating strips, said heating element engaging each of said strips at spaced points, the number of said fingers corresponding substantially to the number of said points, said fingers being aligned with the portions of said strips between said points, and a backing for said heating element supported by said frame and disposed immediately adjacent to the heating element.

2,747,073
TEMPERATURE REGULATOR FOR HEATING APPLIANCES
Stanley B. Welch and Milton S. Williams, Jr., Louisville, Ky., assignors to General Electric Company, a corporation of New York
Application September 27, 1954, Serial No. 458,643
4 Claims. (Cl. 219—20)



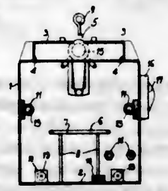
1. A temperature regulator for an electric oven having separate baking and broiling elements comprising first switch means for regulating the supply of current to said elements, thermo-responsive means for controlling said first switch means in response to oven temperature, a handle for adjusting said thermo-responsive means to different temperature settings, said handle having "off" and "broil" positions in addition to a range of "bake" positions, second switch means in circuit with said broiling element for selectively connecting said element to one of two power circuits supplying current at different voltages, first means operated by said handle for actuating said second switch means so as to connect said broiling element to the higher voltage circuit upon manual movement of said handle to its "off" or "broil" positions, said thermo-responsive means being operable to close said first switch means upon movement of said handle from its "off" position to an intermediate position, means responsive to subsequent opening of said first switch means upon thermostatic operation of said thermo-responsive means for actuating said second switch means so as to connect said broiling element to the lower voltage circuit, second means operated by said handle for opening said first switch means and maintaining it in open position during actuation of said second switch means by said first handle operated means, and third switch means having a pair of normally closed contacts arranged to be connected in series with said baking element and operable to open circuit position by said first handle operated means upon movement of said handle to its "off" or "broil" positions.

2,747,074
ELECTRIC SOLDERING IRON
Thomas E. Finch, Pittsfield, Mass., assignor to General Electric Company, a corporation of New York
Application May 24, 1949, Serial No. 94,979
8 Claims. (Cl. 219—26)



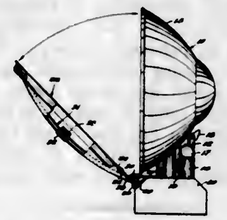
1. An electric soldering iron comprising a soldering head having a cavity therein, an elongated heating unit having one end corresponding closely in configuration with said cavity and positioned in said cavity in abutting relation therewith, said soldering head and said end being bonded together over substantially all of their abutting surfaces, said heating unit comprising an outer tubular metal sheath, a layer of electrically insulative heat conductive material positioned against the inner surface of said sheath, a helical coil of resistance heating wire inside said layer of electrically insulative material, a layer of powdered ceramic material inside said coil, and a center metal member made of a different metal than said outer sheath, said outer sheath and said center member being joined within said soldering head to form a thermocouple junction, said sheath and said coil being connected within said soldering head whereby said sheath forms a common conductor for said coil and said thermocouple junction, and a combined handle and connector member positioned on the other end of said heating unit.

2,747,075
EGG COOKER
Rosario Occhipinti, Joseph Giardinelli, and George Proniuk, New York, N. Y.
Application July 17, 1953, Serial No. 368,594
4 Claims. (Cl. 219—35)



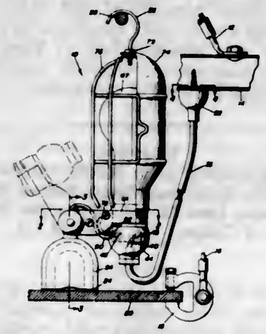
1. A device for cooking eggs comprising an oven enclosed on four sides and at the bottom by solid walls, partially enclosed at the top by a pair of doors attached to opposite vertical walls of the oven by means of hinges and adapted to open and close by pivoting upon the hinges, the doors in closed position being spaced apart from each other slightly to provide a vent lengthwise of the doors, an egg tray adapted to hold whole eggs in spaced relation to the walls of the oven, a number of insulated brackets attached to the vertical walls of the oven, a pair of electrical heating coils connected in series extending around the inside of the vertical walls held in spaced vertical relation and spaced relation to the verticial walls by the insulated brackets, the uppermost electrical heating coil having fewer coils per inch of lateral traverse than the lowermost electrical heating coil, and a means for electrically energizing the electrical heating coils.

2,747,076
PHOTOFLASH UNIT AND ACCESSORIES THEREFOR
Vaito K. Eloranta, Boston, Mass., assignor to Polaroid Corporation, Cambridge, Mass., a corporation of Delaware
Application October 10, 1952, Serial No. 314,181
8 Claims. (Cl. 240—1.3)



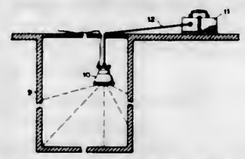
1. A flash gun for use with a camera and comprising a casing adapted to house electrical means for firing a flash bulb, a bulb-receiving socket extending from said casing, a concave reflector carried by said casing in surrounding relation to said bulb-receiving socket, a light-transmitting protective shield for closing the mouth of said reflector, said shield being of a size sufficient to engageably contact the periphery of said mouth, a hinge bracket mounted on said casing adjacent the mouth of said reflector, one edge of said shield being seated on said hinge bracket and said hinge bracket providing means for supporting said shield for pivotal movement on said edge toward and away from the mouth of said reflector, and an elongated spring member extending from said hinge bracket, said shield adjacent the edge thereof supported upon said bracket being provided with an opening therethrough and said spring member being engaged within said opening in bearing contact with an edge thereof and extending through said opening.

2,747,077
PORTABLE WELDING LAMP
John J. Salm, Vernon, N. Y.
Application July 27, 1953, Serial No. 370,285
4 Claims. (Cl. 240—2)



1. In an electric light attachment for a pair of welding cables, one being electrically connected to an electrode holder and the other being electrically attached to a work piece, the improvement comprising mounting means in engagement with the work piece to be welded, a light socket, means attaching said socket to said mounting means, a ground wire interconnecting said socket and mounting means, a current conductor leading from said socket and plug means on said conductor electrically attaching the same to the electrode holder whereby a shunt circuit is formed across the welding cables, said mounting means comprising a permanent magnet, an insulating sheath covering a portion of said magnet whereby the uncovered portions of the magnet are attached to the work piece, said ground wire being in contact with said magnet and permitting the same to be grounded when the magnet is attached to the work piece.

2,747,078
SAFETY LIGHTING UNIT
Merritt T. Kennedy, Jr., Port Washington, and Alexander C. Allen, East Setauket, N. Y., assignors to Pyrate Sales, Inc., Bayside, N. Y., a corporation of Nevada
Application May 6, 1953, Serial No. 353,274
3 Claims. (Cl. 240—11.3)



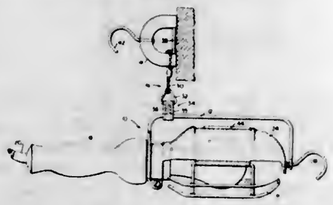
1. A lighting device safe for use in fire and explosion hazardous locations, comprising an electric lighting circuit, a lighting fixture containing a light chamber, a control box containing an explosion-proof chamber and a pressure chamber and a pressure responsive switch in said circuit located in said explosion-proof chamber and having a pressure responsive element in communication with said pressure chamber for operating the switch mechanism forming part of said switch, an inlet valve connecting into said pressure chamber for feeding a charge of

incombustible gas under pressure into said pressure chamber, and a relief valve connecting into said pressure chamber for limiting the maximum pressure of the gas charge in said pressure chamber, said circuit including an electric cord having one end connecting into said explosion-proof chamber and the other end adapted to be connected to a current feed station, and a flexible conduit extending between said fixture and said control box to contain the wires for said circuit and establishing pressure communication between said light chamber and said pressure chamber, said pressure responsive switch being operable to open said circuit automatically when the pressure in said pressure chamber drops below a predetermined value, said control box comprises a chamber for housing the major portions of said valves, the latter chamber having a cover plate removable to permit access to said valves, said pressure chamber being located between said explosion-proof chamber and the chamber housing the major portions of said valves.

2,747,079

TROUBLE LIGHT AND SUSPENSION MEANS

Ignas B. Kubiliunas, South Boston, Mass.
Application June 22, 1953, Serial No. 363,346
6 Claims. (Cl. 240—52.15)

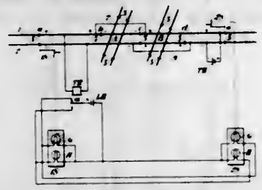


1. A trouble light having in combination, a base, a light mounted on said base, a reflector screen mounted on said base and extending part-way around said light; and means for suspending said light including a swivel element mounted on said base for motion around said base, a magnet, a flexible coupling connecting said magnet to said swivel element.

2,747,080

RAILWAY TRACK CIRCUIT FOR TRACK SECTIONS, INCLUDING NON-INSULATED PORTIONS OF TRACK

Richard R. McGuire, East Cleveland, Ohio, assignor to Westinghouse Air Brake Company, a corporation of Pennsylvania
Application November 22, 1950, Serial No. 197,057
3 Claims. (Cl. 246—41)

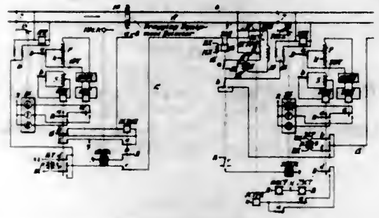


2. In combination, a plurality of adjacent track sections each having its parallel running rails electrically connected, each of said sections being insulated from the adjacent sections, a source of electrical energy, means for energizing said sections from said source so that adjacent sections have opposite relative polarities, and relay means connected to said source through said sections, whereby said relay means is shunted when adjacent sections are metallically connected by a car occupying said adjacent sections.

2,747,081

DRAGGING EQUIPMENT DETECTOR SYSTEM

James E. McMahon, Jr., Penn Township, Allegheny County, Pa., assignor to Westinghouse Air Brake Company, a corporation of Pennsylvania
Application October 31, 1950, Serial No. 193,063
3 Claims. (Cl. 246—219)



1. In a dragging equipment detector system for railroads, in combination, a stretch of railway track, a source of electrical energy, a first relay, a second relay associated with said stretch and having contacts that are picked up or released according as said stretch is occupied or unoccupied, a dragging equipment detector located adjacent said stretch and having a normally closed contact that is opened when said detector is actuated, a series electrical circuit including said normally closed contact, the winding of said first relay, a contact governed by said first relay in its energized position, and said source of electrical energy; a first shunt circuit including a first contact of said second relay connected in multiple with said contact governed by said first relay, a second shunt circuit including a second contact of said second relay connected in multiple with said normally closed contact, said shunt circuits being effective, except when a train occupies said stretch of track, to maintain said first relay energized even though said detector is actuated, a wayside signal located in advance of said dragging equipment detector, a line circuit extending from said dragging equipment detector location to said wayside signal location, an alternating current relay having one winding adapted to be energized by a source of alternating voltage of reference phase and a second winding connected in said line circuit, circuit means including contacts of said second relay for supplying alternating energy of said reference phase or of opposite phase to said line circuit according as the contacts of said second relay are picked up or released, circuit means governed by a contact of said first relay for opening or completing said line circuit according as the contacts of said first relay are in their deenergized or energized position, circuit means actuated by said alternating current relay in response to the presence or absence of energy in said line circuit for causing said wayside signal to display a first or second aspect, and circuit means actuated by said alternating current relay in response to the relative polarity of the energy in the line circuit for indicating the traffic condition in said stretch of said track provided that said contacts of the first relay are picked up.

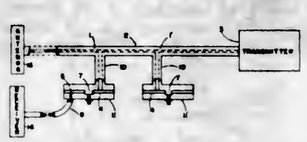
2,747,082

DECOUPLING SYSTEM

Arthur A. Varela, Washington, D. C.
Application October 18, 1945, Serial No. 623,162
3 Claims. (Cl. 250—13)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A terminal for a two-way signal transmission medium comprising an alternating signal wave generator, a signal receiver, common transmission means for transmitting the signal waves produced by said generator to said medium and for receiving alternating signal waves from said medium, a transmission line connecting said wave generator to said common transmission means, a

second branch transmission line including a cavity resonator tuned to the frequency of the signal waves produced by said generator and to the frequency of the signal waves received by said common transmission means from said medium, having its input directly coupled to the first transmission line and its output connected to said receiver, a spark gap across said cavity resonator adapted to discharge to produce an effective short circuit thereacross, and thus to reduce the voltage input to the receiver, in

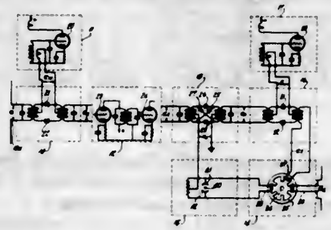


response to the resonant voltage applied to the input of said resonator by the outgoing waves transmitted from said generator over said first line, and to be maintained in the undischarged condition in response to the relatively lower resonant voltage applied to the input of said resonator by the incoming signal waves received over said first line from said common transmission means, so as to allow transmission of said incoming waves over said second line to said receiver with little loss.

2,747,083

FREQUENCY-MODULATED HIGH-FREQUENCY SYSTEM

Gustav Guanella, Zurich, Switzerland, assignor, by mesne assignments, to Radio Patents Company, a partnership
Application May 31, 1951, Serial No. 229,075
Claims priority, application Switzerland June 7, 1950
2 Claims. (Cl. 250—15)

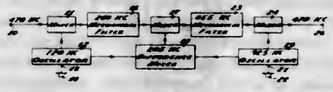


1. A radio relay system comprising means for receiving frequency modulated signals, a self-excited oscillation generator-transmitter having a frequency differing from the unmodulated carrier frequency of said signals, means for transmitting the generated oscillations, heterodyning means including means to produce a pair of auxiliary beating oscillations having different constant frequencies for converting the received signals and a portion of the generated signal energy, respectively, to a pair of intermediate frequency signals of equal frequency, a balanced phase detector excited by said intermediate frequency signals, to produce a direct current control signal varying in either positive or negative direction from zero in response to a relative phase deviation in a corresponding sense of said intermediate frequency signals from a normally balanced position, and means responsive to said control signal and effective to control the frequency of said generator, to maintain a phase balance between said intermediate frequency signals and to thereby cause the frequency of the generated oscillations to substantially instantaneously follow the modulation frequency changes of the received signals with a constant difference equal to the frequency difference between said beating oscillations.

2,747,084

VARIABLE BAND WIDTH INTERMEDIATE FREQUENCY SYSTEM

Melvin L. Doelz, Glendale, Calif., assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application May 7, 1953, Serial No. 353,644
6 Claims. (Cl. 250—20)

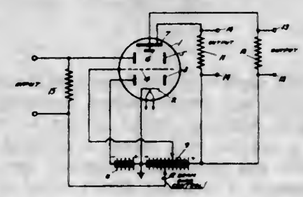


1. A variable band width apparatus comprising, a first mixer receiving an input signal, a first mechanical filter receiving the output of the first mixer, a second mixer receiving the output of the first mechanical filter, a second mechanical filter receiving the output of the second mixer, a third mixer receiving the output of the second mechanical filter, a first oscillator supplying an input to the first mixer, a second oscillator supplying an input to the third mixer, and a difference mixer receiving inputs from the first and second oscillators and supplying an output to the second mixer which is the difference frequency between the first and second oscillators.

2,747,085

NON-LINEAR BEAM DISPERSION DEVICES

Bernard C. Gardner, Los Altos, Calif., and Robert M. Unger, Waltham, Mass., assignors to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application March 10, 1952, Serial No. 275,809
7 Claims. (Cl. 250—27)



1. A beam dispersion non-linear output tube comprising an electron gun including a cathode for emitting electrons and electrode means for forming an electron beam, a first anode axially aligned with said electron beam and adapted to intercept a portion of said electron beam, a second anode positioned adjacent to said first anode and adapted to intercept that portion of said electron beam not intercepted by said first anode, a beam dispersion electrode positioned within said tube between said electrode means and said anodes and responsive to an input signal applied thereto for varying the cross-sectional area of said beam to thereby vary the number of electrons striking each of said anodes, and separate circuit means connected to each of said anodes for independently deriving conjugate output voltages therefrom which vary inversely with respect to one another.

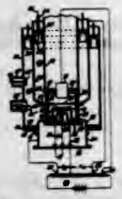
2,747,086

HIGH FREQUENCY ELECTRICAL SYSTEMS HAVING HIGH INPUT IMPEDANCE

Elmer D. McArthur, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application June 22, 1950, Serial No. 169,637
24 Claims. (Cl. 250—27)

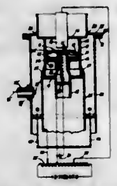
1. Apparatus having controllable high input impedance for translating high frequency oscillations comprising an electrical discharge device having a cathode, a parallel wire control grid and an electrode normally maintained at a potential positive with respect to said cathode and grid, means connecting said grid to said cathode and having

substantially zero impedance at the frequency of said oscillations, and an input circuit tuned to said high frequency oscillations having one point thereof connected to said electrode and another point connected to said grid



and cathode as a high frequency unit and means applying biasing potential to said control grid to control the electron transit angle and thereby the input impedance of said apparatus.

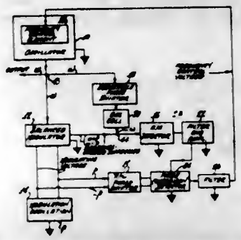
2,747,087
ELECTRIC DISCHARGE DEVICES AND HIGH FREQUENCY SYSTEMS THEREFOR
Elmer D. McArthur, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Continuation of abandoned application Serial No. 751,358, May 29, 1947. This application August 16, 1950, Serial No. 179,854
23 Claims. (Cl. 250—36)



1. Apparatus capable of sustaining high frequency electrical oscillations at a predetermined frequency comprising an electric discharge device having a cathode, an anode, and a control grid, means connecting said grid to said cathode and having a substantially zero impednce at said frequency, a resonant circuit tuned to said frequency having one point thereof connected to said grid and cathode as a high frequency unit, said anode being adapted to have imposed thereupon an energizing potential having a value at which the phase of electric currents between said anode and said cathode is displaced by a primary alternating electric field between said grid and said cathode from the phase of a corresponding high frequency voltage in said resonant circuit to sustain oscillations therein, said control grid comprising spaced substantially parallel wires to permit the flow of high frequency currents in said wires whereby a secondary alternating electric field is created between said grid and said cathode and said primary electric field is enhanced to increase said oscillations.

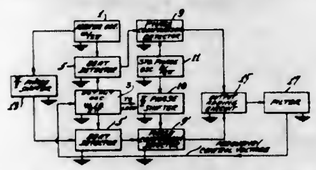
2,747,088
RESONANCE FREQUENCY CONTROL
Lowell E. Norton, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application June 8, 1953, Serial No. 360,296
22 Claims. (Cl. 250—36)

1. A frequency control system comprising a microwave oscillator having a frequency control element for controlling the operating frequency, an amplitude modulation detector, means for modulating the microwave energy at a modulation frequency and suppressing the carrier frequency to derive at least one side band component of frequencies displaced from said operating frequency, said means being connected in a first signal path between said microwave oscillator and said detector, an element resonant at said operating frequency connected in a second signal path between said microwave oscillator and said detector and through which element unmodulated energy from the said microwave oscillator is applied to said detector in phase quadrature with respect to the phase of said suppressed carrier, said signal paths having distinct portions, a phase comparison detector con-



nected to receive signals from said amplitude modulation detector and to receive signals from said modulating means to compare the phase of the said modulation frequency and the said amplitude modulation detector output, said phase comparison detector being connected to said oscillator to apply its output to said frequency control element.

2,747,089
MONOSTABLE OSCILLATOR CONTROL
Lowell E. Norton, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application June 22, 1951, Serial No. 233,034
The terminal 15 years of the term of the patent to be granted has been disclaimed
5 Claims. (Cl. 250—36)



1. A system for monostably controlling the frequency of a normally bi-stable oscillator comprising, a first oscillator for providing an output at frequency

$$\frac{\omega}{2\pi}$$

a second and normally bi-stable oscillator for providing an output at frequency

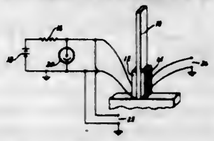
$$\frac{\omega \pm B}{2\pi}$$

first and second beat detectors, means for applying portions of the outputs of said first and second oscillators to said first beat detector, a 90° phase shifter, means for applying another portion of the output of said first oscillator to said phase shifter, means for applying the output of said phase shifter and another portion of the output of said second oscillator to said second beat detector, a first phase comparison circuit coupled to said first beat detector to receive the output of said first beat detector, a second phase comparison circuit coupled to said second beat detector to receive the output of said second beat detector, a third oscillator providing an output at frequency

$$\frac{B}{2\pi}$$

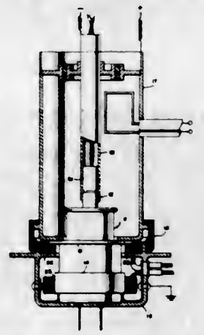
means for applying the output of said third oscillator to said first and second phase comparison circuits, means for combining the outputs of said first and second phase comparison circuits to produce a frequency control signal, and means for applying said frequency control signal to said second oscillator to monostably control its frequency.

2,747,090
ELECTROMECHANICAL OSCILLATOR DETECTOR SYSTEM
Albert L. Cavalieri, Jr., Philadelphia, Pa., and Robert W. Roop, Sewell, N. J., assignors to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application July 1, 1953, Serial No. 365,404
6 Claims. (Cl. 250—36)



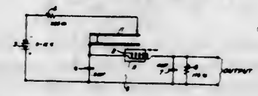
1. An electromechanical oscillator circuit comprising a mechanically vibratory system including a vibratory reed member and at least one electrostrictive member secured thereto in a position to be strained by the vibrations thereof, said electrostrictive member having spaced conductive area electrodes disposed thereon thereby to form a capacitor, said system being arranged to be excited into vibration by the rapid discharge of said capacitor and to cause an alternating voltage to appear across said capacitor as a result of said straining due to said vibrations, current limiting means connected in series with said capacitor, a source of D.-C. potential, means connecting said source across said series combination, and a gaseous discharge device connected in shunt with said capacitor, said gaseous discharge device having a firing potential less than the potential supplied by said source, the characteristic of said current limiting means being selected to be such that the interval between successive discharges of said capacitor through said gaseous discharge device is substantially equal to a fixed integral multiple of the period of vibration of said vibratory system.

2,747,091
STABILIZATION OF RADIO FREQUENCY OSCILLATORS
Cyrus H. Fraser, La Mesa, Calif.
Application November 21, 1951, Serial No. 257,629
3 Claims. (Cl. 250—36)
(Granted under Title 35, U. S. Code (1952), sec. 266)



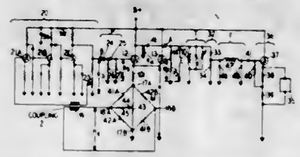
1. In a high frequency circuit employing a megatron tube on an intermittent duty cycle, means for stabilizing the frequency thereof comprising, a first electrical resistance element exterior of said tube and in mechanical contact with the anode terminal thereof, a second electrical resistance element exterior of said tube and in mechanical contact with the grid ring of said tube, a first variable resistance connected to one end of said first electrical resistance element, a second variable resistance connected to one end of said second resistance element, a relay having normally closed contacts, first electrical circuit means adapted to connect the other ends of said first and second electrical resistance elements together and to a source of electric power and said first and second variable resistances to said source of power, said relay having normally closed contacts, said contacts serially connected between said resistance elements and the source of power, and second electrical circuit means for energizing said relay when said tube is energized, whereby said first and second electrical resistance elements are connected to said source of power when said tube is de-energized to maintain said tube elements at a substantially constant temperature.

2,747,092
VIBRATING REED OSCILLATOR OF THE CONTACT TYPE
Lee G. Bostwick, Florham Park, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application August 26, 1953, Serial No. 376,645
13 Claims. (Cl. 250—36)



1. A wave generator comprising a sharply tuned mechanical vibrating system, an actuating contact circuit including contacting means adapted to be operated by the vibrating system, a coil for electromagnetically driving the vibrating system, an output circuit from which wave energy may be derived, and a low-pass filter-like network connecting the contact circuit and the output circuit, the filter network comprising the driving coil as one element and having a cut-off frequency at or near the resonance frequency of the tuned vibrating system to constitute means for providing a phase shift of substantially 90 degrees between the current in the contacting means and the current in the driving coil.

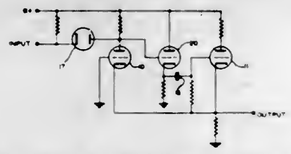
2,747,093
TELEMETERING OSCILLATORS
Edward L. Tarca, Lansdowne, and Francis A. Varallo, Philadelphia, Pa., assignors to Raymond Rosen Engineering Products, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application May 1, 1952, Serial No. 285,402
21 Claims. (Cl. 250—36)



1. A frequency-modulated oscillator for stably generating oscillations whose frequency varies in accordance with changes in magnitude of a measured condition comprising a cathode-coupled oscillator, resonant means included in said oscillator and primarily determining the frequency of the generated oscillations, impedance means inclusive of said frequency-determining resonance means and having a pair of terminals respectively connected to the oscillator cathode and to a point common to the grid and cathode circuits of the oscillator to provide a first feedback voltage, itself providing for sustained generation of oscillations at a base frequency corresponding with resonance of said resonant means and with a predetermined magnitude of said condition, said impedance means including a poten-

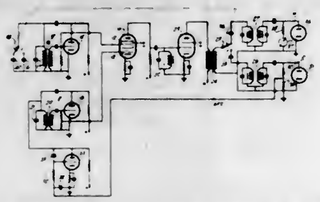
tial-divider network comprising resistance means whose resistance is varied in response to changes of said measured condition from said predetermined magnitude thereof to provide a second voltage of oscillator frequency and of magnitude varying in accordance with said changes in magnitude of said measured condition, means including an amplifier and a phase-determining network for applying said second voltage to said oscillator, the vector sum of said first feedback voltage and said second applied second voltage determining the frequency of the generated oscillations throughout a range corresponding with the range of response of said potential-divider network and including said base frequency.

2,747,094
DIVIDING CIRCUIT
Robert M. Walker, Belmont, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application December 10, 1945, Serial No. 634,109
8 Claims. (Cl. 250—36)



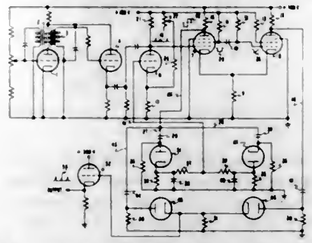
1. In a frequency divider circuit comprising a multivibrator having a first tube, a second tube, each of said tubes having at least an anode, a cathode and a grid, first circuit means connecting the anode of the first tube and the grid of the second tube, and second circuit means connecting the output of the second tube with the input of the first tube to control said first tube in response to said output, an input circuit, and a rectifier having one terminal connected to the anode of said first tube and another terminal connected to said input circuit.

2,747,095
TRANSLATION OF ELECTRICAL REACTANCE VALUES
Heinz Boucke, Tubingen, Germany, assignor, by mesne assignments, to Radio Patents Company, a partnership
Application November 30, 1950, Serial No. 198,331
Claims priority, application Germany April 28, 1949
9 Claims. (Cl. 250—36)



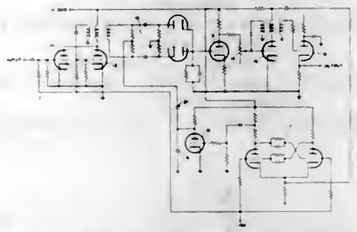
1. In a reactance translation system, an oscillator, a variable reactance to be translated, a stabilizing reactance, switch means to alternately and periodically connect said variable and stabilizing reactances to said oscillator to correspondingly control the oscillating frequency, a first frequency discriminator adapted to convert input frequency variations into proportionate output current changes, automatic frequency control means comprising a second frequency discriminator and reactance means controlled thereby and arranged to vary the frequency of said oscillator, and means operating in synchronism with said switch means to alternately connect the output of said oscillator to said first and second discriminator, to maintain alternating operating and stabilizing cycles of said oscillator, said automatic frequency control means having a time constant sufficient to cause the periodic frequency control to persist from the end of one to the beginning of the next stabilizing cycle of said oscillator.

2,747,096
PULSE REPETITION FREQUENCY DOUBLING CIRCUIT
Arthur L. Brockway, Jr., Baltimore, Md., assignor to Bendix Aviation Corporation, Towson, Md., a corporation of Delaware
Application June 7, 1951, Serial No. 230,409
6 Claims. (Cl. 250—36)



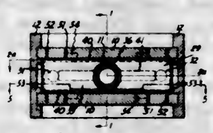
1. Means to maintain substantial equality between the durations of the excursions of the waveform of a monostable multivibrator, comprising: means having the output of said multivibrator applied thereto, the last named means comparing the durations of said excursions and deriving from said comparison a direct current voltage having an amplitude and polarity which are functions of said durations, and means applying said direct current voltage to said multivibrator as bias voltage to cause said durations to become substantially equal.

2,747,097
LOCKED-IN FREQUENCY MULTIPLIER
Herbert H. Naidich, Baltimore, Md., assignor to Bendix Aviation Corporation, Towson, Md., a corporation of Delaware
Application September 26, 1952, Serial No. 311,756
8 Claims. (Cl. 250—36)



1. A tracking pulse doubler for providing a pulse signal train of double the frequency of a reference pulse signal train, said reference train being subject to variations in recurrence frequency comprising, a phase detector having a first input circuit, a second input circuit, and rectifiers for receiving from said first input circuit opposed polarity signals and from said second input circuit like polarity signals and an output circuit, a pulse generator having a control voltage terminal for controlling the frequency thereof, means for applying to said terminal a control potential derived from said output circuit, means for providing the free-running frequency of said generator approximately equal to said double frequency, a bistable multivibrator triggered by said double frequency pulses, means coupled to said multivibrator for generating a saw-tooth waveform, a circuit coupling said saw-tooth waveform to said second input circuit, and means for energizing said first input circuit from said reference pulse signals.

2,747,098
HIGH FREQUENCY OSCILLATOR AND RESONATOR
William D. Myers, Los Altos, and Howard M. Zeidler, Palo Alto, Calif., assignors to Hewlett-Packard Company, Palo Alto, Calif., a corporation of California
Application February 4, 1952, Serial No. 269,878
10 Claims. (Cl. 250—36)



1. A tunable cavity resonator comprising a coaxial line having an outer conductor of generally rectangular cross section and an inner conductor, said outer conductor having a conducting wall at one end, a movable non-contacting plunger having an outer surface of substantially the same shape as said outer conductor and inner surface of substantially the same shape as said inner conductor, said plunger being movable axially along said coaxial line to adjust the resonant wavelength, and means for shifting the resonant wavelength of higher order circumferential resonances associated with the outer circumference of said plunger and having an even number of wavelengths per outer circumference of said plunger from the uncompensated resonant wavelength to a desired wavelength according to the position of said plunger, said wavelength shifting means including at least one slot cut substantially parallel to the axis of said coaxial line in said outer conductor.

2,747,099
WELL BORE LOGGING
Theodore J. Nowak, Whittier, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California
Application January 29, 1953, Serial No. 334,003
18 Claims. (Cl. 250—43.5)



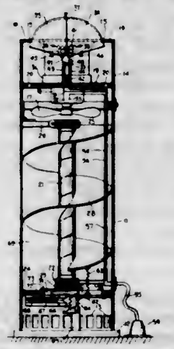
1. A method for logging boreholes drilled into the earth and which penetrate permeable strata producing immiscible fluids which comprises forming a radioactive injection fluid miscible with at least one but not all of the immiscible fluids produced from subsurface permeable strata, forcing said injection fluid indiscriminately into all of said permeable strata, subsequently placing the well bore back on production whereby fluids indigenous to said permeable strata flow therethrough into said borehole and are removed therefrom and whereby the radioactive injection fluid is more completely swept out of the strata producing a fluid miscible therewith than out of the strata producing a fluid immiscible therewith, subsequently logging said bore by measuring the radiation intensity with depth and thereby locating and distinguishing the less radioactive strata producing fluid miscible with said injection fluid from the more radioactive strata producing a fluid immiscible with said injection fluid.

2,747,100
METHOD AND APPARATUS FOR DISPLACING WELL FLUID WITH A FLUID HAVING SMALLER NEUTRON ATTENUATION CHARACTERISTICS
Malcolm R. J. Wyllie, Indiana Township, Allegheny County, and Charles W. Tittle, Oakmont, Pa., assignors to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware
Application September 19, 1952, Serial No. 310,382
10 Claims. (Cl. 250—43.5)



1. In the method of borehole logging wherein a probe including a neutron detector is moved through a borehole, an improvement for reducing undesired neutron attenuation by borehole fluid; said improvement comprising displacing a substantial portion of borehole fluid surrounding the probe by a fluid of low neutron-attenuation characteristics, constraining the last-mentioned fluid to move with the probe, expanding and contracting the horizontal extent of the last-mentioned fluid during movement of the probe to correspond to irregularities in borehole dimensions, and substantially preventing the movement of borehole fluid between the wall of the borehole and the fluid of low neutron attenuation characteristics by by-passing borehole fluid through the probe.

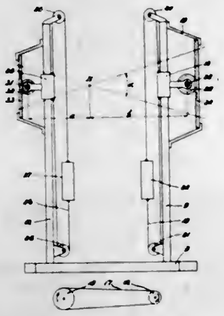
2,747,101
SMOKE DISSIPATING ASH TRAY
John Hays Hammond, Jr., Gloucester, Mass.
Application February 2, 1953, Serial No. 334,594
6 Claims. (Cl. 250—48)



6. In a device of the character described, a cylindrical casing, a lamp of the type producing ultra-violet rays in the germicidal band mounted axially of said casing, helical vanes disposed around said lamp to form helical air passages within said casing, a bottom closure plate for said casing having an air discharge port, valve means closing said port, means responsive to a predetermined air pressure within said casing to open said valve means and allow said air to discharge, and blower means drawing air from outside of said casing and forcing said air

along said helical air passages, whereby said air is exposed to the action of said ultraviolet rays for a period of time required to build up said predetermined pressure, said pressure responsive means comprising a latch for said valve means and a bellows responsive to said air pressure connected to release said latch when said pressure reaches the predetermined value.

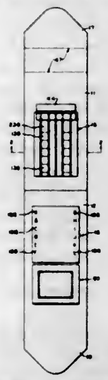
2,747,102
DIAGNOSTIC X-RAY TESTING APPARATUS
Kurt Weigel and Hansheinrich Verse, Hamburg-Fuhlsbuttel, Germany, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application November 13, 1952, Serial No. 320,174
Claims priority, application Germany December 20, 1951
6 Claims. (Cl. 250—50)



4. An apparatus for carrying out medical X-ray examination of a patient, comprising a base member having a circular guide portion extending in a horizontal plane, a support for the patient mounted on said base, means secured to the support for effecting movement thereof in a vertical plane of displacement in two directions at right angles to each other, said support being rotatable about an axis extending in the direction of its length and located in said vertical plane, the center of said circular guide lying on said axis, an X-ray tube for producing a cone of X-rays having a central axis disposed on one side of said patient support, an image receiver having a projection plane for receiving an X-ray image disposed on the other side of said support, said axis of said cone of X-rays passing through a given point of said projection plane and through a fixed point located in said vertical plane of displacement, a movable supporting system mounted on the circular guide portion of said base and moveable thereover in a circular path, said supporting system including a pair of vertical columns supporting, respectively, said X-ray tube and said image receiver, and means for moving said supporting system in said circular path to positions in which the axis of the cone of X-rays always passes through both said given point of said projection plane and said fixed point.

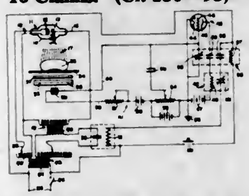
2,747,103
RADIATION DETECTION DEVICES
Murry N. Fairbank, Belmont, and William A. Shurcliff, Cambridge, Mass., assignors to Polaroid Corporation, Cambridge, Mass., a corporation of Delaware
Application March 28, 1951, Serial No. 218,042
12 Claims. (Cl. 250—68)

1. In a unit which contains photosensitive material for detecting and indicating the presence of nuclear radiation, in combination, an envelope having a pair of wall members which are each substantially impervious to processing liquid employed with the unit and which are arranged in superposed relation with respect to each other, said wall members also being further characterized by the fact that they are each substantially opaque to radiation of a wavelength within the visible spectrum and that they transmit shorter wavelength radiation including X-rays and gamma rays, a photosensitive element and a print-carrying element positioned within said envelope in superposed relation to each other, a rupturable container holding a liquid processing composition carried within said envelope and in a position so as to be capable of being ruptured and, upon rupture, of releasing its liquid content between said superposed photosensitive and print-carrying elements, said photosensitive element having at least one recording strip of photosensitive material comprising a heavy metal salt which, upon photoexposure to nuclear radiation to be detected, as well as to visible radiation, is capable of having formed therein latent image which is developable to the metal of said salt, said print-carrying element comprising a sheet material for supporting print-forming components transferred from said photosensitive element upon development and processing of latent image, said rupturable container holding as a processing liquid at least a thickening agent and a



solvent for photographic processing material, said envelope having positioned therein photographic processing material including at least a developer for said heavy metal salt, said material being rendered effective upon release of said liquid and being in sufficient quantity to process latent image in said photosensitive element and to provide a positive print by transfer on said image-carrying element, and a reference strip carried within said envelope and having means capable of providing a scale of gray tones extending in steps of increasing optical density from adjacent one end of said reference strip towards the other end of said reference strip and against which the optical density of the transfer print can be compared, said reference strip and said means thereof which are capable of providing a scale of gray tones being characterized by remaining substantially unaffected in the presence of radiation to be detected and indicated.

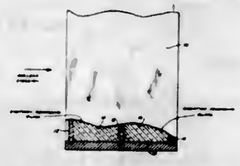
2,747,104
INTERVAL TIMING APPARATUS
John E. Jacobs, Milwaukee, Wis., assignor to General Electric Company, a corporation of New York
Application October 6, 1951, Serial No. 250,141
18 Claims. (Cl. 250—95)



18. The method of timing pulsating X-ray exposure intervals which consists in measuring the quanta of

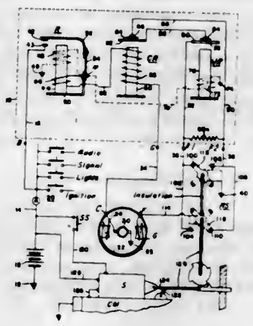
irradiation applied during an exposure interval by inducing proportional current flow in a ray sensitive electron donor semi-conductor during the irradiation interval, applying only the alternating current component of said current flow to an integrating condenser, previously charged to a predetermined level, to progressively reduce the charged condition of the condenser whereby to determine total ray quanta in terms of the residual charge of the condenser, and terminating the irradiation interval when said condenser charge reaches a selected low value.

2,747,105
TRANSPARENT NUCLEAR RADIATION SHIELD
John V. Fitzgerald and George S. Bachman, New Kensington, Pa., assignors to Pittsburgh Plate Glass Company
Application November 29, 1951, Serial No. 258,944
6 Claims. (Cl. 250—108)



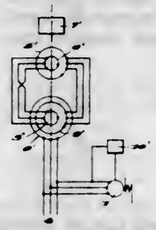
1. A nuclear radiation shield comprising, in combination, as assembly of two layers of glass materials each transparent to visible light, one layer being a glass consisting essentially of oxides of beryllium, lithium and boron and having the property of slowing down fast neutrons impinging thereon and of capturing slower neutrons, and the other layer being a dense lead-boro-silicate glass having the property of absorbing beta and gamma radiation, the combination being substantially opaque to harmful emanations from nuclear reactions.

2,747,106
GENERATOR REGULATION
Thomas C. Heath, Anderson, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application July 23, 1953, Serial No. 369,887
5 Claims. (Cl. 290—36)



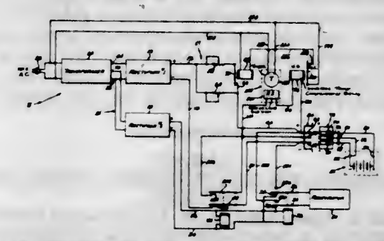
4. In a battery charging circuit, the combination comprising, a generator having a field winding, a ground connection for the field winding of said generator, said ground connection including a magnetizing coil and a pair of normally closed contacts in series therewith, a resistance in parallel with said winding and said contacts, and an intermittently operated reversing switch for reversing the direction of flow through said normally closed contacts, said resistance when the contacts are open reducing the field current of said generator.

2,747,107
ALTERNATING CURRENT GENERATING ARRANGEMENT FOR CONSTANT FREQUENCY
Karl Polasek, Trollbacken, and Kurt A. Jonason, Stockholm, Sweden
Application November 15, 1951, Serial No. 256,542
3 Claims. (Cl. 307—43)



2. An arrangement for generating a constant frequency voltage and adapted to be connected to a variable speed prime mover comprising, two similar induction generators, means for mechanically connecting the rotors of said generators to said prime mover to be driven at the same R. P. M., a pacemaker for delivering voltage at a constant frequency, means connecting the output of said pacemaker to the stator of the first induction generator so that the output at the rotor of said first generator will be at a frequency equal to the difference between the pacemaker frequency and the frequency caused by the speed of rotation of the rotor, means connecting the output of said first generator to the rotor of the second generator so that the voltage induced in the stator of the second generator will be at a frequency equal to the frequency of the output of the first generator plus the frequency created by the speed of rotation of the rotor of the second generator.

2,747,108
CONVERTIBLE ALTERNATING TO DIRECT CURRENT POWER SUPPLY AND BATTERY CHARGING MEANS FOR PORTABLE ELECTRICAL EQUIPMENT
Milton H. Polavin, Brooklyn, N. Y., assignor to Conitech, Ltd., New York, N. Y., a corporation of New York
Application August 28, 1953, Serial No. 375,374
11 Claims. (Cl. 307—66)

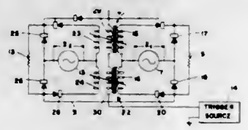


1. In an alternating current power supply, a transformer, a battery charging circuit and a direct current power supply circuit electrically independent of said charging circuit and energized in common therewith by said transformer, and rectifier means in each of said circuits, whereby a battery connected to said charging circuit and an electrical apparatus connected to said direct current power supply circuit will be electrically isolated from each other.

2,747,109
MAGNETIC FLIP-FLOP
Joseph Montner, Whittier, Calif., assignor to North American Aviation, Inc.
Application September 4, 1953, Serial No. 378,644
13 Claims. (Cl. 307—88)

12. In a magnetic flip-flop, two saturable reactors each comprising a saturable core, a load winding and a first

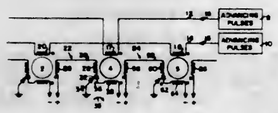
and second control winding, said load windings connected in series, said first control windings connected in series and said second control windings connected in series, a pair of diodes each in series with a respective load winding, a load disposed in the output of said series-connected load windings, a second pair of similarly directed diodes connected in series across said load, an alternating power source connected between the common connection of said series-connected load windings and the common connection of said second pair of diodes, an impedance connected in series with said control windings, a third pair of diodes each in series with a respective first control winding, an impedance connected in series with said diodes, a fourth pair of similarly directed diodes connected in series across said impedance, a feedback circuit connected from said load to said impedance, and a diode disposed in said feedback circuit, said second control windings adapted to receive pulses from a trigger source.



2,747,110
BINARY MAGNETIC ELEMENT COUPLING CIRCUITS

John Paul Jones, Pottstown, Pa., assignor to Burroughs Corporation, Detroit, Mich., a corporation of Michigan

Application February 14, 1955, Serial No. 487,857
9 Claims. (Cl. 307—88)

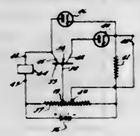


9. In combination, input and output binary magnetic cores, a transfer loop conductively coupling said cores including an amplifier device with three electrodes having two electrodes connected in said transfer loop to produce a transfer of signals of only one polarity through said loop, and a regenerative triggering circuit coupled with the amplifier device to cause the input one of said cores to switch from one binary state to another in response to triggering flux induced in said output core.

2,747,111
COUPLING CIRCUIT FOR SEMI-CONDUCTOR DEVICES

Winfield R. Koch, Marlton, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application July 2, 1953, Serial No. 365,709
10 Claims. (Cl. 307—88.5)

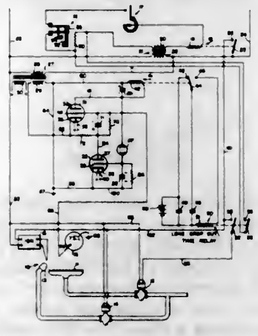


1. In an electronic signal translating system including a first signal circuit terminal, a second signal circuit terminal, means providing a point of fixed reference potential for said system, and a signal translating transistor having electrodes connected with said terminals, a coupling network for conveying signal variations from said first terminal to said second terminal comprising a pair of unilateral conducting devices connected in opposition between said terminals in said system, the first of said devices being characterized by providing a voltage drop thereacross which exceeds the voltage drop appearing across the second of said devices, and a source of direct current energizing potential connected between the junction of said devices and said point of fixed reference potential for providing energizing potential for said system.

2,747,112
FLAME DETECTOR

Fred T. Deziel, Bloomington, and Harvey J. Smith, St. Louis Park, Minn., assignors to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware

Application February 25, 1955, Serial No. 490,556
8 Claims. (Cl. 307—132)

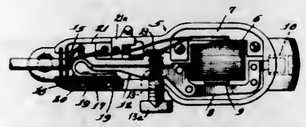


2. Flame detector comprising: a source of voltage, a first electron discharge device having an anode, a cathode and a control electrode, a relay having a winding and switch means, means connecting said first discharge device anode and cathode in series with said relay winding to said source of power to energize said winding when said first discharge device is conductive, an electrically operable flame sensor connected to said source of voltage and connected in controlling relation to said first discharge device control electrode to cause said first discharge device to normally be conductive in the absence of flame and nonconductive in the presence of flame, means including a gas tube connected to said relay winding and connected to control the voltage applied to said flame sensor to render said flame sensor inoperative to sense flame when the voltage across said relay winding is insufficient to break down said gas tube to thereby cause said relay switch means to cycle when said flame sensor is subjected to a flame, and means responsive to continuous cycling of said relay switch means.

2,747,113
ARMATURE ARM FOR ELECTRIC HAIR CLIPPER

Leo J. Wahl, Sterling, Ill., assignor to Wahl Clipper Corporation, Sterling, Ill., a corporation of Illinois

Application September 29, 1952, Serial No. 311,994
3 Claims. (Cl. 310—29)

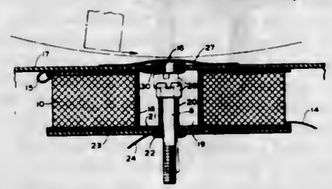


1. In a hair clipper having a casing of predetermined length, an electromagnet mounted in the forward portion thereof and an armature cooperating with said electromagnet: an arm for carrying said armature comprising a strip of spring stock rigidly connected at one end to said armature, said strip including a portion extending rearwardly from said armature substantially to the rear wall of said casing, a generally circular loop at its rear terminus, an end portion extending from said loop in substantial parallelism with said rearwardly extending portion and rigidly secured to the interior surface of the adjacent side wall of said casing, said surface being offset slightly from the center of said casing, whereby said rearwardly extending portion is substantially centrally located in said casing, and continuous lateral stiffening flanges on said rearwardly extending portion between said armature and said loop whereby all significant flexing action of the arm is confined to said loop.

2,747,114
MAGNETIC MOTOR FOR AN ANIMATED DISPLAY DEVICE

Archie E. Reitz, Los Angeles, Calif.

Application December 6, 1954, Serial No. 473,154
10 Claims. (Cl. 310—32)

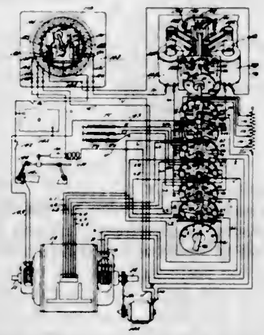


1. A magnetic motor comprising: an oscillating pendulum member carrying a bar magnet at its free end, an electromagnetic coil located below the pendulum member and directly below the path of swing of the pendulum member, said magnetic coil when energized producing a magnetic polarity the same as the polarity of the lower end of the bar magnet, a guide tube located centrally of the coil, a magnetically-attracted circuit-closing element slidable in the guide tube, a contact member in the path of sliding movement of the circuit-closing element whereby said circuit-closing member will, when attracted by the bar magnet, close circuit between the guide member and contact member to thereby energize the magnetic coil and produce a repelling force by which the bar magnet will be forced away from the coil.

2,747,115
VARIABLE RATIO TRANSMISSION RESPONSIVE TO SPEED OF LOAD

Fritz Schulte, Philadelphia, Pa., assignor to Thomas D. Bowes, Bala-Cynwyd, Pa.

Application March 17, 1953, Serial No. 342,847
15 Claims. (Cl. 310—102)

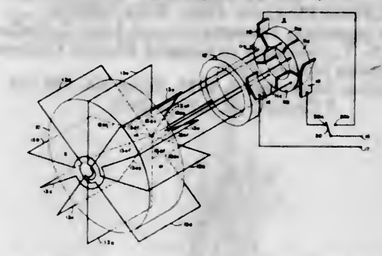


1. A transmission having a plurality of ratios having an input shaft for driven connection to a power plant and an output shaft for driving connection to a load, a positionable selector device, circuit controllers operative as functions of selector positioning, electrical means for moving the selector device, a pilot relay responsive to an electrical signal and having plural positions including at least one between no signal and maximum signal, switch means operatively associated with said pilot relay and selectively energized according to the position of said relay, said switch means controlling said electrical means, means emitting an electrical signal functional with the speed of said load, said pilot relay responsive to said signal and operating said switch means when said signal has a predetermined value to change the selector position to change the ratio of said transmission.

2,747,116
REVERSIBLE DIRECT-CURRENT MOTOR

Arthur B. Poole, Harwinton, Conn., assignor to Hayden Manufacturing Company, Inc., a corporation of Connecticut

Application August 10, 1953, Serial No. 373,291
3 Claims. (Cl. 310—128)

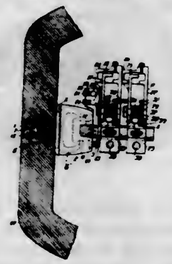


1. In a reversible direct-current motor including a field member having p pairs of angularly spaced poles of opposite polarities, an armature member rotatable relative to said field member and disposed in electrodynamic relation thereto comprising: a commutator having n segments per pair of field poles; n angularly spaced open windings per pair of field poles disposed to develop an armature field having p pairs of angularly spaced poles of opposite polarities, each having one end individually connected to a corresponding one of said commutator segments, the other ends of said windings being connected together for connection to one terminal of a direct-current supply circuit; and a pair of brushes per pair of field poles for selective connection to the other terminal of said supply circuit individually engaging said commutator at points spaced by approximately 180 electrical degrees to effect rotation of the motor in either direction.

2,747,117
STUD MOUNTINGS AND BRUSH HOLDER ASSEMBLIES

George W. Litz, Morristown, Tenn.

Application August 27, 1952, Serial No. 306,575
2 Claims. (Cl. 310—239)



1. An assembly unit for supporting a plurality of brush holders on the frame of an electric motor, said unit

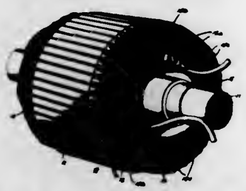
comprising an insulator having a pair of opposed sides, a threaded bolt extending from one side of said insulator, an elongated substantially cylindrical adapter plug having a coaxially aligned threaded opening formed therein, said adapter plug being threaded onto said bolt, said insulator having an internally formed threaded recess extending inwardly from the other side thereof, an elongated substantially cylindrical brush holder supporting rod having a threaded end and a radially extending flange formed intermediate the ends thereof, an elongated armature current clamp having an aperture formed therein adjacent one of its ends to receive said threaded end portion of said rod therethrough, said rod having its threaded end mounted within said recess formed in said insulator to clamp said armature current clamp between the said insulator and said flange, and said rod having a portion thereof extending between said flange and the other end of said rod for mounting a plurality of brush holders thereon.

2,747,118
SUPPORTING OF COIL END TURNS
Almy D. Coggeshall, Schenectady, and Linn T. Stafford, Scotia, N. Y., assignors to General Electric Company, a corporation of New York
Application September 9, 1953, Serial No. 379,165
8 Claims. (Cl. 310—260)



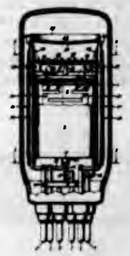
1. A member for a dynamoelectric machine comprising a core formed of magnetic material and having coil slots formed therein, coils in said slots having end turns projecting beyond the ends of said slots, and means for supporting said end turns comprising a supporting ring arranged concentrically with said end turns and an impregnated roving forming a plurality of clamps looped around a pre-selected number of the outer coil sides of said end turns and said ring, said roving comprising a flexible fibrous material impregnated with a thermosetting resinous composition baked after installation to produce clamps of high flexural strength to support said end turns from said ring notwithstanding a break of said roving.

2,747,119
BINDING OF ROTOR END TURNS
Maurice E. Petersen and Albert B. Zelasier, Schenectady, N. Y., assignors to General Electric Company, a corporation of New York
Application September 3, 1953, Serial No. 378,348
5 Claims. (Cl. 310—270)



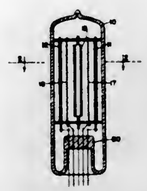
1. A member for a dynamoelectric machine comprising a core formed of magnetic material and having winding slots therein, windings in said slots having end turns projecting beyond the ends of said core and means for supporting said end turns against the effect of centrifugal force comprising a flexible roving impregnated with a heat-reactive thermosetting resinous composition forming a plurality of overlapping convolutions about the outer periphery of said end turns and also forming a plurality of loops spirally enveloping said peripheral convolutions and said end turns, said roving being baked after installation to integrally bond said loops and said convolutions into a rigid supporting structure.

2,747,120
SINGLE-ENDED THYRATRON DISCHARGE DEVICE
Harvey N. Price, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application June 5, 1951, Serial No. 229,931
9 Claims. (Cl. 313—38)



1. An electric discharge device comprising a cathode, a heat shield around said cathode having an opening therein, an anode spaced from said opening in said heat shield, a control grid interspaced between said opening and said anode, at least two anode leads supporting and connecting said anode and extending in proximity to said control grid, said control grid having indentations therein defining spacing between said anode leads and said control grid, and cooperating barrier means supported respectively from said heat shield and said control grid and inwardly of the marginal portions thereof to prevent electric discharge between said cathode and said anode over a path including said spacing between said control grid and said anode leads.

2,747,121
GASEOUS CONDUCTION DEVICE
Marvin N. Silver, New York, N. Y., assignor, by mesne assignments, to Gera Corporation, New York, N. Y., a corporation of New Jersey
Application July 23, 1953, Serial No. 369,799
3 Claims. (Cl. 313—54)



1. A gaseous conduction device having at least four electrodes comprising, an envelope filled with an ionizable gas, a cathode and an anode within said envelope, a source of ionizing radiation positioned between two control electrodes for ionizing the gas, a first control electrode positioned adjacent to the anode, a second control electrode positioned adjacent to the cathode, and barrier means partly enclosing the source of radiation for restricting the ionizing action to a region between the first and second control electrodes.

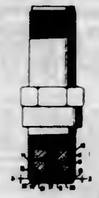
2,747,122
SPARK PLUGS
Ernest G. Booth, Sr., Tampa, Fla.
Application May 6, 1953, Serial No. 353,405
1 Claim. (Cl. 313—124)



A spark plug comprising a generally cylindrical base fabricated of conducting material and including an upper outwardly extending annular flange of increased diameter and having interior threads, said flange having flat faces on its outer surface for engagement by a tool, there being a longitudinally extending bore extending axially through the entire length of said base, said base having a lower cylindrical portion of decreased diameter provided with exterior threads, a pair of inwardly facing ignition contacts extending from said last named cylindrical portion and in electrical contact therewith, a body member fabricated of insulating material having a portion positioned in the bore of said base, an end portion of said body member projecting out of the end of said base and remote from said last named cylindrical portion, a pair of spaced parallel electrodes extending longitudinally through said body member, the ends of said electrodes extending beyond both ends of said body member, an annular shoulder arranged intermediate the ends of said body member, there being an enlarged cylindrical portion on said body member contiguous to said shoulder and of greater diameter than said shoulder, a support member fabricated of insulating material, said support member being transparent and including a lower threaded portion for engaging the threaded flange of said base, said transparent support member permitting visual observation of the interior of the spark plug, a conducting terminal including an intermediate threaded portion for engaging said support member, the inner end of said terminal being spaced from the inner ends of said electrodes and in close proximity thereto so that the sparks will have of necessity to jump from the end portion of the terminal to the pair of electrodes whereby there will be provided an increased volume of sparks between the outer ends of the electrodes and the contacts and whereby in the event one of the electrodes becomes grounded or inoperative, the other electrode will provide heavy condensed sparks, there being a chamber in said support member in which said terminal terminates, a portion of the outside of said base being knurled to facilitate manual handling of the spark plug, an inner portion of said support member being recessed for snugly receiving therein the enlarged cylindrical portion of said body member.

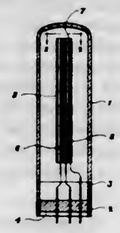
2,747,123
SPARKING DEVICE
Tullio Tognola, Sidney, N. Y., assignor to Bendix Aviation Corporation, New York, N. Y., a corporation of Delaware
Application September 29, 1952, Serial No. 311,969
7 Claims. (Cl. 313—131)

1. A sparking device comprising a tubular metallic shell, an electrode member extending across the end of said shell, an electrical insulator in the shell and seated on said member, and an annular electrode embedded in said insulator and having a surface thereof exposed by a shallow groove in the end face of said insulator, said electrode member having arcuate slots therethrough in substantial registry with said shallow groove, whereby the walls of said groove bridge spark gaps between the walls



of said slots and the exposed surface of said annular electrode.

2,747,124
HIGH-TEMPERATURE GETTERS FOR ELECTRONIC TUBES
Irving E. Levy, Malden, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application September 17, 1953, Serial No. 380,815
2 Claims. (Cl. 313—174)



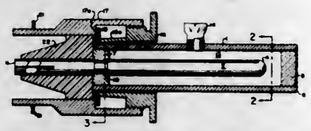
1. In an electronic tube, a getter structure including a core of zirconium and a shield of tungsten, an electrode element adapted to be maintained at high temperature adjacent said getter structure, said shield being interposed between said electrode element and said core and having an opening to permit access of gas within said tube to said core.

2,747,125
VOLTAGE REGULATOR TUBE
Francis C. Todd and Elmer C. Lusk, Columbus, Ohio, assignors to the United States of America as represented by the Secretary of the Army
Application November 29, 1951, Serial No. 258,934
16 Claims. (Cl. 313—214)



1. In an electron discharge device the combination comprising an envelope; an inert gas within said envelope; an electron collecting electrode; and means to provide a hollow, intensely illuminated cathode region which serves an electron emitting source, said means comprising two metallic sheets circularly and concentrically disposed about said collecting electrode to form cylinders; a first current carrying lead electrically connected to said collecting electrode; a second current carrying lead having a common electrical connection to one end of each of the said metallic sheets; a third current carrying lead electrically connected to the other end of the inner sheet and a fourth current carrying lead electrically connected to the other end of the outer sheet.

2,747,126
POWER OR VOLTAGE MEASURING MEANS
Donald J. Nigg, Prairie Village, Kans., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application May 13, 1954, Serial No. 429,714
3 Claims. (Cl. 313—216)



1. A device of the character described comprising the combination of a generally tubular electrical conductor, an elongate electrical conductor disposed within and extending generally longitudinally of a central axis of said tubular conductor having a generally rounded terminal portion spaced inwardly from and shielded by an adjacent end portion of the tubular conductor and having a portion projecting outwardly beyond an oppositely disposed end of the tubular member for connecting the tubular and elongate conductors with respective outer and inner conductors of a coaxial cable, substantially transparent means closing said adjacent end portion of the tubular conductor and spaced from said terminal portion, dielectric means closing said oppositely disposed end of the tubular conductor and supporting said elongate conductor therein spaced from the tubular conductor, and an ionizable gas within the space intermediate said tubular and elongate conductors and in immediate contact with said conductors throughout their entire lengths intermediate said transparent and dielectric means.

2,747,127
CONTACT DIODE
Robert Loosjes, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application January 27, 1953, Serial No. 333,416
Claims priority, application Netherlands March 10, 1952
3 Claims. (Cl. 313—235)

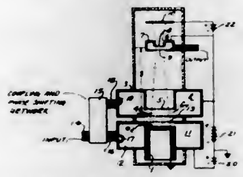


1. A contact diode comprising a hollow substantially cylindrical cathode electrode, an oxide coating on the outer surface of said cathode, and an anode mounted on and surrounding and abutting the oxide coating on the cathode, said anode having an inner surface abutting said oxide coating constituted of an emission-reducing material selected from the group consisting of gold, silver and thorium.

2,747,128
DIRECT CURRENT NEGATIVE CARBON ELECTRODE
John R. Whipple, Baton Rouge, La., assignor to Union Carbide and Carbon Corporation, a corporation of New York
No Drawing. Application August 30, 1952, Serial No. 307,369
3 Claims. (Cl. 313—354)

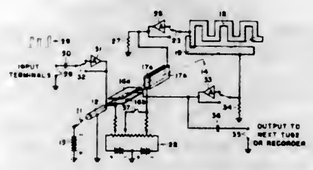
1. In a cored negative electrode for a direct current carbon arc of the blown-arc type, a shell consisting of carbon and an alkaline earth metal fluoride uniformly dispersed therein, such fluoride constituting 5% to 15% by weight of said shell and inhibiting the formation of a carbide tip on said electrode.

2,747,129
FREQUENCY MULTIPLIER
Ludwig J. Mayer, Dayton, Ohio, assignor to the United States of America as represented by the Secretary of the Air Force
Application April 16, 1952, Serial No. 282,668
4 Claims. (Cl. 315—6)
(Granted under Title 35, U. S. Code (1952), sec. 266)



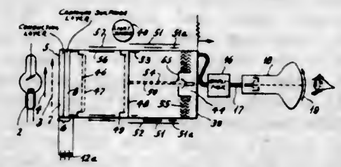
1. A klystron frequency multiplier comprising a cathode, a buncher having a velocity modulating gap and a resonant circuit associated with said gap and tuned to a fundamental frequency, a catcher having an energy extracting gap and a resonant circuit associated with said gap and tuned to a harmonic of said fundamental frequency, and an anode, said cathode, buncher, catcher and anode being aligned so that electrons pass from said cathode through the gaps of said buncher and catcher in succession to said anode, means for applying energy at said fundamental frequency to the resonant circuit of said buncher whereby a sine wave of voltage of said fundamental frequency is established across the gap of said buncher, and means for blocking the flow of electrons from the cathode to the velocity modulating gap of said buncher except during that part of the cycle of the voltage across said gap extending approximately from $-\pi/4$ to $\pi/8$ radians, said last named means comprising a grid positioned between said cathode and the entrance to the gap of said buncher, a resonant circuit tuned to said fundamental frequency associated with said grid and cathode, means for applying energy at said fundamental frequency to said resonant circuit whereby a sine wave of voltage at said fundamental frequency is established between said grid and cathode, means for biasing said grid negative relative to said cathode to such an extent that electron flow from said cathode to the gap of said buncher is cut off except during an angular interval of approximately $3/8\pi$ radians, relative to said fundamental frequency, which is centered with respect to the midpoint of the positive half-cycle of said sine wave of voltage between said grid and cathode, and means for timing the entry into said modulating gap of the electrons passed by said grid during said $3/8\pi$ interval so that said entry occurs during that part of the cycle of the voltage across said modulating gap extending from $-\pi/4$ to $\pi/8$ radians.

2,747,130
ELECTRONIC SYSTEM
Harold D. Goldberg, Bronx, and Milton I. Goldberg, Brooklyn, N. Y.
Application September 12, 1951, Serial No. 246,318
18 Claims. (Cl. 315—8.5)



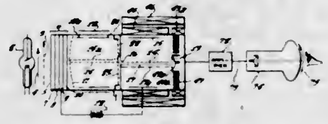
1. An electronic device comprising an electron gun for producing an electron beam, a pair of deflecting means for deflecting said beam in respective first and second independent directions, a target electrode having a plurality of edges extending in said first direction and defining a like plurality of stable beam positions, said electrode being coupled to one of said deflecting means for biasing said beam in one sense in said second direction in response to impingement of said beam on said target electrode, means coupled to said one deflecting means for fixedly biasing said beam in opposite sense in said second direction to assume a position off said target electrode in the absence of energization of said one deflecting means from said target electrode, whereby said stable beam positions are defined by balance of said two biases, a resetting electrode extending in said second direction and partially overlapping said target electrode, said resetting electrode being coupled to the other of said deflecting means for biasing said beam in one sense along said first direction, means fixedly biasing said beam in opposite sense along said first direction, and a pair of limiting electrodes extending along said second direction at opposite extremes of said target electrode and partially overlapping said target electrode, each one of said limiting electrodes being coupled to said other deflecting means for biasing said beam toward the other limiting electrode in response to impingement of said beam on said one limiting electrode, whereby said beam is maintained in the operating range of said target electrode.

2,747,131
ELECTRONIC SYSTEM SENSITIVE TO INVISIBLE IMAGES
Edward Emanuel Sheldon, New York, N. Y.
Application October 12, 1951, Serial No. 251,113
17 Claims. (Cl. 315—11)



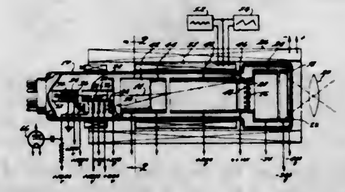
1. A vacuum tube comprising in combination a cathode disposed within said tube and comprising a layer of material which converts an invisible radiation image into electrical conductivity changes corresponding to said invisible image, and means for producing a beam of electrons modulated with said electrical conductivity changes on said cathode, said means being separated from said cathode, said layer furthermore having an uncovered surface presented to said means.

2,747,132
DEVICE SENSITIVE TO INVISIBLE IMAGES
Edward Emanuel Sheldon, New York, N. Y.
Application December 18, 1951, Serial No. 262,223
15 Claims. (Cl. 315—11)



1. A vacuum tube comprising in combination a first screen having an imperforate layer of material converting an invisible radiation image into an electrical pattern corresponding to said image, said layer receiving said invisible radiation through the wall of said tube, means for producing a broad electron beam, means for decelerating said electron beam and directing said broad electron beam to said screen for modulating said electron beam with said electrical pattern and for reflecting said electron beam from said screen by said electrical pattern, and a second screen for receiving said reflected electron beam.

2,747,133
TELEVISION PICKUP TUBE
Paul K. Weimer, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application July 5, 1950, Serial No. 172,065
6 Claims. (Cl. 315—11)



1. The method of generating a signal with a discharge device comprising a target electrode, said method comprising the steps of, scanning said target electrode with a low energy electron beam, biasing said target electrode to a potential in the order of several volts below the potential of the source of said electron beam to prevent landing of said beam on the target electrode and to reflect said beam from said target, establishing a charge distribution pattern on said target electrode to deflect said scanning beam from its reflected path, separating from the reflected beam electrons deflected by the charges on said target electrode and collecting only deflected electrons to provide a signal.

2,747,134
DUAL FOCUS CATHODE-RAY TUBES
Harrison S. Allwine, Trenton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application April 30, 1953, Serial No. 352,239
11 Claims. (Cl. 315—13)

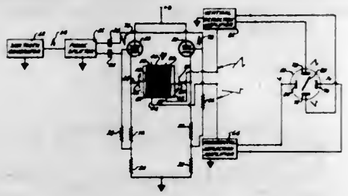


1. Method of operating a C. R. tube of the kind containing a plane-of-deflection and an apertured electrode through which beam electrons successively pass in their transit from an electron-gun to the ray-sensitive target surface of a mosaic screen, said method comprising, deriving an electron-beam of non-circular cross-section from said electron-gun, projecting said non-circular beam upon said plane of-deflection, and scanning said target-surface with said beam as modified in its cross-sectional contour by the presence in its path of said apertured electrode.

2,747,135
APPARATUS FOR PRODUCING A ROTATING TIME BASE DISPLAY
John F. McCoy, Haddonfield, N. J., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application August 28, 1953, Serial No. 377,096
7 Claims. (Cl. 315—24)

1. Apparatus for producing a rotating time base display on a cathode ray tube having deflection means, said

apparatus comprising means to produce an alternating voltage, phase-splitting means connected to said alternating voltage producing means to produce push-pull alternating output voltages, a push-pull cathode follower circuit comprising a pair of vacuum tubes each having an anode, a grid and a cathode, a sine-cosine potentiometer having a rotatable resistor, means connecting said rotata-



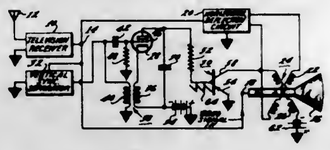
ble resistor between the cathodes of said pair of vacuum tubes, a plurality of brushes in slideable contact with said resistor, means coupled to said grids to apply said push-pull alternating output voltages thereto, and means connecting said brushes to said deflection means of said cathode ray tube.

2,747,136

CATHODE RAY BEAM DEFLECTION SYSTEM

Gerald B. Herzog, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application March 1, 1954, Serial No. 413,063
11 Claims. (Cl. 315—27)



1. In a cathode ray beam deflection system, the combination of: a source of charging potential; a capacitor and impedance means connected in series with one another to form a combination which is in turn connected in charging relation to said source of charging potential; means connected with said capacitor for conditionally discharging said capacitor whereby to conditionally cause discharge current flow from said capacitor followed by a charging current flow from said potential source to said capacitor; a semiconductor signal transducing device having connection terminals defining an input current path and an output current path; means connected with said connection terminals and said capacitor impedance combination to place said input circuit path in series with said capacitor for controlling said semiconductor device in accordance with capacitor current flow; and cathode ray beam deflection means coupled with said semiconductor transducing device connection terminals for control by said semiconductor device as a function of output path current therein resulting from capacitor current flow in said semiconductor transducing device current path.

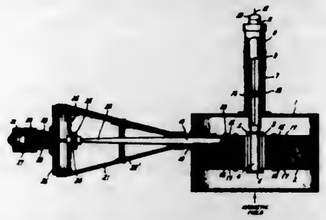
2,747,137

HIGH FREQUENCY ELECTRICAL APPARATUS

Lewi Tonks, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

Application May 12, 1945, Serial No. 593,493
9 Claims. (Cl. 315—39)

5. A high frequency electric discharge device of the magnetron type comprising, an anode structure including a plurality of mutually spaced anode sections defining a plurality of cavity resonators, conducting means connecting alternate anode sections together, a transmission line of the concentric type having the outer conductor thereof formed as a portion of one of said anode sections and



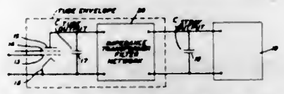
the inner conductor connected with adjacent anode sections by said conducting means.

2,747,138

BROAD BAND AMPLIFIER DEVICES

Charles T. Goddard, Basking Ridge, and Norman C. Wittwer, Jr., Oldwick, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application October 24, 1952, Serial No. 316,744
16 Claims. (Cl. 315—58)



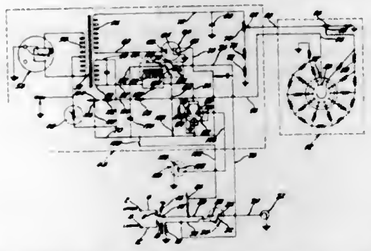
1. An electron discharge device with an increased figure of merit comprising an anode, a control grid, and a cathode positioned within the envelope of the device, and an impedance transforming band pass filter network connected to said anode and including a first shunt capacitance comprising only the anode interelectrode capacitance of the device, a distinct subsequent shunt capacitance comprising the stray output capacitance on exit of said network from the device and series filter elements within said envelope between said shunt capacitances, said network exiting from said envelope at a point where the shunt capacitance across the network is at least as great as the stray output capacitance.

2,747,139

INDICATING MEANS FOR AUTOMATIC HEADLIGHT DIMMING SYSTEM

Francis K. Foland, Elwood, and George W. Onksen and Harold E. Todd, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application October 4, 1952, Serial No. 313,156
4 Claims. (Cl. 315—83)



1. In automotive headlamp means having dim and bright filaments, a source of electrical power, light sensitive means connected thereto, amplifying means connected to the light sensitive means, relay switching means connected to the output of the amplifier and to the filaments to switch from one set of filaments to the other, depending upon the amount of light falling on the light sensitive means, manual switching means connected to the source, to the filaments and to the relay switching means, means for indicating whether the automatic light sensitive system or the manual means is in use to control the energization of the filaments, and a master switch connected between the manual switching means and the automatic light sensitive system determining which shall control the filament energization.

2,747,140

MEANS FOR FOCUSING A VARYING MAGNETIC FIELD

William D. Ryckman, Jr., Buechel, Ky., assignor to General Electric Company, a corporation of New York

Application April 22, 1953, Serial No. 350,489
2 Claims. (Cl. 315—344)



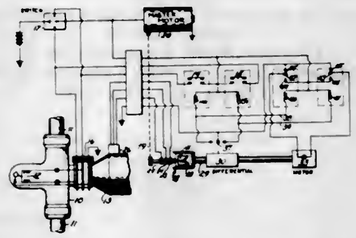
1. In combination, a direct current magnetron discharge device having a space charge chamber, magnetic means external to said discharge device for providing a magnetic field through said device, and means for focusing the magnetic field flux therein when the field is changing comprising a non-magnetic planar conductor having the outline of an annulus with a small radial sector in the plane of said conductor removed, said conductor surrounding the space charge chamber and positioned within said magnetic means in a plane transverse to the lines of flux.

2,747,141

SPEED CONTROL SYSTEM

Edward K. Hine, North Caldwell, N. J., assignor to Curtiss-Wright Corporation, a corporation of Delaware

Application October 6, 1950, Serial No. 188,745
3 Claims. (Cl. 317—6)



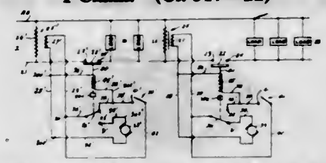
1. In a powerplant control system, a unit having an output element movable in accordance with the error in speed between actual powerplant speed and a desired powerplant speed, a phase reference means establishing a desired rotational relationship for said powerplant, and producing a phase reference signal, means to sense the instant rotational position of said powerplant producing an actual phase signal, means connected to said reference means and sensing means and actuated by their signals producing a phase error signal, a motor connected to said latter means and operated by the phase error signal therefrom, a mechanical differential having one input element connected to and driven by said motor, a second input element connected to and driven by said unit output element, said differential having an output member, and a powerplant speed control mechanism connected to and actuated by said differential output member.

2,747,142

AUTOMATIC LINE SECTIONALIZING AND SERVICE RESTORATION DEVICE

Fred L. Kradel and Arem Fodi, Greensburg, Pa., assignors to I-T-E Circuit Breaker Company, Philadelphia, Pa., a corporation of Pennsylvania

Application March 13, 1952, Serial No. 276,418
1 Claim. (Cl. 317—22)



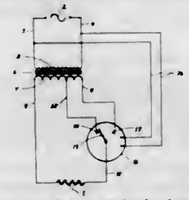
A sectionalizing and service restoration device comprising a switch; an electromagnet having an armature for operating said switch to opened and closed position; a time delay mechanism mechanically connected to said armature and operative upon de-energization of said electromagnet for controlling the time of operation of said switch to opened position; an energizing circuit for said electromagnet including a self-locking circuit; a connection from said armature for operating said self-locking circuit when said armature moves said switch to closed position; an electric motor; an open energizing circuit for said electric motor becoming closed by said armature upon de-energization of said electromagnet; a switch controlled by said electric motor which closes said second-mentioned switch a predetermined interval of time following the energization of said motor; and an open energizing circuit for said first-mentioned electromagnet being completed by said second-mentioned switch upon its closing.

2,747,143

CATALYTIC FUEL IGNITERS

Walter J. Kuczynski, Newark, and George J. Lehmann, Arlington, N. J., assignors to Baker & Co., Inc., Newark, N. J., a corporation of New Jersey

Application November 22, 1950, Serial No. 197,164
11 Claims. (Cl. 317—83)



1. In the operation of a catalytic igniter coil in a gas burner, the method including electrically heating said coil to an elevated temperature below that temperature at which the gas to be burned will ignite, supplying electrical energy to said coil at a constant level so as to maintain said coil at the elevated temperature and obtain standby operation, and temporarily applying heat to said coil to increase said elevated temperature at spaced intervals to a value sufficient to stimulate the activity of said coil while maintaining the atmosphere surrounding said coil free from any ignitable gases.

2,747,144

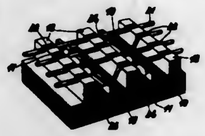
CONSTRUCTION ELEMENTS FOR CONTACT BANKS IN AUTOMATIC TELEPHONE SYSTEMS

Gerardus Marcus Petrus Adrianus Beers, Hilversum, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application January 2, 1953, Serial No. 329,381
Claims priority, application Netherlands January 10, 1952
4 Claims. (Cl. 317—112)

1. A construction element for a contact bank in an automatic telephone system, said construction element

comprising a flat insulating plate having parallel ribs raised thereon to form a plurality of parallel grooves, each of said ribs having spaced transverse recesses therein, a plurality of parallel flat contact strips having openings therein, said strips being embedded in said plate with the material thereof extending through said openings, said strips projecting from at least one edge of said



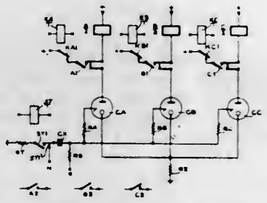
plate, said strips projecting with part of one edge into said grooves, the other edge of each of said strips being flush with the lower surface of said plate, and a plurality of parallel multiplying wires extending through the transverse recesses of said ribs perpendicularly with respect to said strips, each of said wires being connected to at least one of said strips.

2,747,145

GAS DISCHARGE TUBE CIRCUITS

Alexander Albert Chubb and John Scowcroft, Coventry, England, assignors to The General Electric Company Limited, London, England

Application February 18, 1952, Serial No. 272,163
Claims priority, application Great Britain February 22, 1951
10 Claims. (Cl. 317—140)



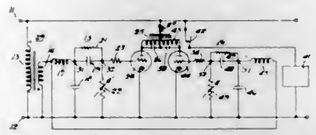
1. An electric switching circuit including: a plurality of gas-filled electric discharge valves each having at least an anode, a cathode and a trigger electrode; a plurality of electro-magnetic switching devices each having an operating winding and contacts controlled by said winding, the winding and contacts of each said device being connected in series with the anode-cathode discharge path of a corresponding one of the valves and constituting a series connected combination, the contacts being closed when the winding is not energized; a resistance; a source of direct current potential; means connecting said resistance and said source in series; means connecting all said series connected combinations in parallel with one another across the end terminals of the circuit comprising the resistance and the source connected in series, the potential of said source being less than that potential necessary to cause an anode-cathode discharge in any one of the valves without a discharge first occurring between the trigger electrode and the cathode, but greater than the minimum potential which will cause an anode-cathode discharge if a trigger electrode-cathode discharge is initiated, and the magnitude of the resistance being such that the potential drop across it on initiating an anode-cathode discharge in one of the valves reduces the anode potential of the valves to a value less than the said minimum but greater than the minimum anode-cathode discharge maintaining potential; means for normally maintaining in operation the potential of the trigger electrodes of all the valves at a value such that trigger electrode-cathode discharges are not initiated and for applying a triggering potential for a period less than the operating time of the electro-magnetic switching devices but greater than the time required to fire one of the valves to all the trigger electrodes when it is required to operate any one of the electro-magnetic switching devices; contact means associated with each electro-magnetic switching device for effecting a desired operation; and means associated with each electro-magnetic switching device for maintaining its contacts in the operated condition until the said required operation is completed.

2,747,146

FREQUENCY SENSITIVE CONTROL APPARATUS

Donald McDonald, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a corporation of Illinois

Application February 12, 1952, Serial No. 271,265
16 Claims. (Cl. 317—147)



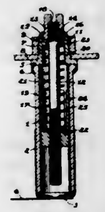
2. Circuit control apparatus connected to a periodic voltage source and adapted to respond to voltages of said source having frequencies within a predetermined range, comprising two gas-filled grid controlled tubes having cathodes connected to one side of said source, a relay having a coil connected between the anodes of said tubes, said coil having a center tap connected to the other side of said source, first phase-shifting means energized by said source and energizing the control grid of the first of said tubes to produce a lagging voltage for frequencies below said predetermined range, and a leading voltage within and above said range, and second phase-shifting means energized by said source and feeding the grid of the second of said tubes to produce a lagging voltage below and within said predetermined range and a leading voltage for frequencies above said range.

2,747,147

SMALL CAPACITY TUBULAR ADJUSTABLE CONDENSER

Charles L. Shull, Horseheads, N. Y.

Application January 4, 1954, Serial No. 401,809
5 Claims. (Cl. 317—249)



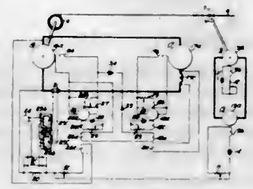
1. In a tubular trimmer condenser a dielectric tube having an exterior metallic sheath for a portion of its length forming the outer electrode, a hollow metallic mounting bushing fixedly attached to one end of the tube, a screw shaft swivelled in the bushing with freedom for limited universal movement, an inner electrode threaded on the screw shaft and slidable in the tube into and out of registry with the outer electrode, said bushing and inner electrode having coaxial facing counterbores, and means including a metallic compression spring loosely surrounding the screw shaft seated in said counterbores and nonrotatably anchored at its ends to the bushing and inner electrode respectively, for exerting axial pressure thereon to compress the universal connection, to resist rotation of the inner electrode, and to form a firm stationary continuous electrical connection between the bushing and inner electrode.

2,747,148

CONTROL SYSTEM FOR REEL MOTOR WITH VARIABLE ARMATURE CURRENT AND FIELD FLUX

Robert M. Peeples, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.

Application September 8, 1951, Serial No. 245,748
18 Claims. (Cl. 318—6)



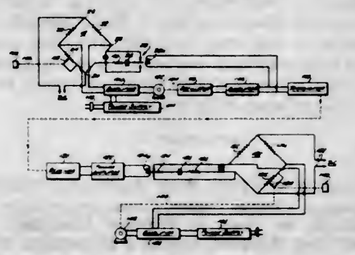
9. In a system for controlling a strip of material being wound on a reel, the combination of a motor for driving said reel, said motor having an armature winding and a field winding, a first generator for supplying current to said armature winding, a second generator for controlling the voltage of said first generator, said second generator having a first field winding, a second field winding and a third field winding, means for impressing on said first field winding a voltage proportional to said armature winding current, means for impressing on said second field winding a first substantially constant reference voltage, said second field winding acting differentially with respect to said first field winding to maintain said armature winding current substantially constant at a predetermined value determined by said reference voltage as said strip builds up on said reel to a predetermined diameter, a third generator having an armature winding for supplying current to said motor field winding to produce flux in said motor, said third generator having first field winding means, second field winding means and third field winding means, means connected to said motor for impressing on said first field winding means a voltage dependent upon the counterelectromotive force of said motor and the speed of said strip, means for impressing on said second field winding means a second substantially constant reference voltage, said first field winding means acting differentially with respect to said second field winding means to increase the voltage of said third generator armature winding to increase said flux as said strip builds up to said predetermined diameter, a source for producing a third substantially constant reference voltage, means connecting said third field winding and said third field winding means in series with said source across said third generator armature winding to form a first circuit, and a rectifier connected in said first circuit to permit current flow therethrough only when the voltage of said third generator armature winding exceeds said third reference voltage, the voltage of said third generator armature winding exceeding said third reference voltage when said strip builds up above said predetermined diameter, whereby upon build up of said strip above said predetermined diameter said third field winding is energized to increase said armature winding current above said predetermined value and said third field winding means is energized to maintain said flux substantially constant as said strip builds up to full diameter.

2,747,149

FREQUENCY RESPONSIVE DEVICE AND SYSTEM EMPLOYING THE SAME

Victor Azgapetian, Roslyn Heights, and Jurgen Worthing, Wantagh, N. Y., assignors to Servomechanisms, Inc., a corporation of New York

Application April 26, 1952, Serial No. 284,668
2 Claims. (Cl. 318—29)



1. A remote position control system comprising at each of two locations a bridge network energized by direct current and having resistors in two arms thereof, a controllable resistor in a third arm thereof and a virtual resistor in the fourth arm thereof, said virtual resistor comprising a condenser and a vibratory two-position switch adapted in one position to connect said condenser as the fourth arm of the bridge network and in the other position to disconnect and discharge said condenser, a source of electrical oscillations at one of said locations, means coupled to said source for vibrating both said switches at the frequency of the oscillations produced by said source, means responsive to unbalance of the network at said one location for varying the frequency of oscillations produced by said source in a direction to balance said last mentioned network, and means responsive to unbalance of the network at the other of said locations for adjusting the adjustable resistor of that network in a direction to balance that network whereby the adjustable resistor at said last location is made to follow adjustments made to the adjustable resistor of the network at the first location.

2,747,150

ELECTRIC CONTROL FOR MACHINE TOOLS

James Selby, Hatch End, England, assignor to Victoria Machine Tool Company Limited, London, England, a British company

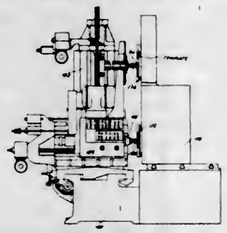
Application May 2, 1952, Serial No. 285,723
Claims priority, application Great Britain May 2, 1951
9 Claims. (Cl. 318—103)



7. An electric control apparatus, comprising a driven device which travels in reverse directions in a given path, two separate reversing electric motors operatively connected to said driven device for driving the same, one of said motors being adapted to drive said driven device slowly and the other being adapted to drive said driven device quickly, an electric switch mounted adjacent to said driven device, said switch having a normal position and an operative position, means whereby, upon momentary actuation of said switch to its operative position, a maintained circuit is initiated for driving said quick drive

motor for movement of said driven device quickly in one direction, a dog adapted to actuate said switch momentarily to said operative position upon said driven device reaching a given position when travelling in a driven direction, a hand switch having a normal position and an operative position, and means whereby, upon actuation of said hand switch to said operative position, said maintained circuit is interrupted, and a circuit is established for driving said slow drive motor for movement of said driven device in the other direction, and upon return of said hand switch to said inoperative position, said maintained circuit is re-established, and said circuit for driving said slow drive motor is interrupted.

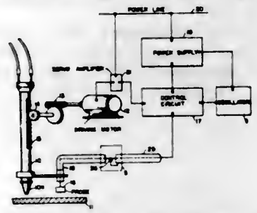
2,747,151
CONTROL SYSTEM FOR MACHINE TOOLS
Jacob J. Jaeger, Canton Center, Conn., assignor, by mesne assignments, to Pratt & Whitney Company, Incorporated, West Hartford, Conn., a corporation of Delaware
Continuation of application Serial No. 552,287, September 1, 1944. This application December 1, 1950, Serial No. 198,587
3 Claims. (Cl. 318—162)



1. A control arrangement for a profiling machine adapted to cooperate with electrical circuits of a tracer contacting the periphery of a template, including electrical automatically operable controller means controlling the movement of the tracer in first directions, at one time towards, and at other times away from the template, and in a second direction at an angle to said first directions, said directions being interchangeable with respect to up, down, right, and left movements in accordance with the relative position of the tracer on the template; a plurality of circuits selectively energizing said controller means for effecting movement of the tracer in predetermined directions with respect to the template and in predetermined sequence; switching means interconnecting said circuits; an electric comparison circuit connected to said circuits, said electric comparison circuit including an amplifying means, a storage means and a discharging means for said storage means, comparing the relative lengths of movement of the tracer in the first directions and in the second direction by the relative length of the charging and discharging time of said storage means; and circuit elements operable on the switching means and controlled by said comparison circuit to automatically change the sequence and direction of movement of the tracer with respect to the template, in a predetermined pattern.

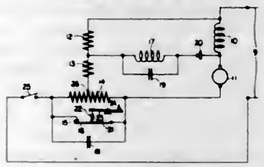
2,747,152
TORCH SPACING CONTROL
William J. Greene, Scotch Plains, N. J., assignor to Air Reduction Company, Incorporated, a corporation of New York
Application August 1, 1951, Serial No. 239,825
5 Claims. (Cl. 318—286)

4. Means for automatically maintaining substantially constant the distance between two relatively movable members, which include an electrical impedance element disposed in fixed relation to a first of said members, means for generating high-frequency current, means including said element for modifying said current in accordance with impedance variations in said element due to variations in electrical reaction of the second of said members on said element resulting from small changes in spacing between said element and said second member, said second member having an electrically conductive area in juxtaposition to said element and the medium between said element and said area having negligible di-



electric losses, a prime mover adapted to move at least one of said members with respect to the other so as to vary the distance therebetween, means for generating from said modified current an electric control signal which is a function of said spacing, a power source, means for operating said prime mover by power from said source, and means for controlling the operation of said prime mover in response to said control signal.

2,747,153
SPEED CONTROL SYSTEMS FOR ELECTRIC SEWING MOTORS
Leonard R. Campbell, New Brunswick, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application March 16, 1955, Serial No. 494,773
7 Claims. (Cl. 318—331)

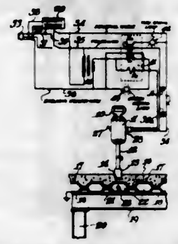


1. In an electrical control system, the combination with an electric motor having series-connected armature and field windings, of a tapped regulating resistance for controlling the flow of current to said motor, a relay having contacts which provide an intermittent short-circuit around said regulating resistance, a pair of series-connected resistances forming with said armature and field windings a bridge circuit, said tapped regulating resistance being included at least partly within said bridge circuit and an operating coil for controlling said relay contacts, said coil being connected to be energized by the voltage unbalance of said bridge circuit occasioned by a change in the back E. M. F. of said armature winding.

2,747,154
CONCRETE TOOL IMMOBILIZING CIRCUIT
Walter F. Abrams, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application September 30, 1953, Serial No. 383,328
5 Claims. (Cl. 318—445)

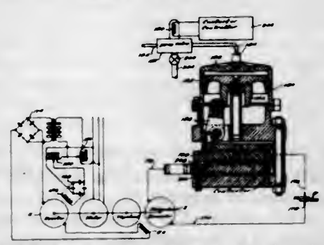
3. A concrete tool immobilizing circuit for an electrically driven tool comprising an electrical relay having four pairs of contacts, the first and third pairs of which are normally closed and the second and fourth pairs of which are normally open, a three-wire powering circuit for said tool consisting of a power, ground and neutral leads, a current source connected at one terminal to one side of the coil of said relay and at the other terminal to ground, said first pair of relay contacts being connected

in series relationship with an electrical safe operating indication device between the power supply side of said relay coil and said ground lead, said second pair of relay contacts being connected between the other side of said relay coil and said ground lead, said third pair of relay contacts being connected in circuit between said power



lead and the motor driving said tool, and said fourth pair of relay contacts being connected in series relationship with an electrical unsafe operating indication device between said power lead and said neutral lead, and electrically conductive means connected between said other side of said relay coil and the working head of said tool.

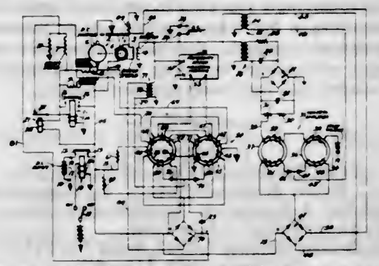
2,747,155
WELDING GENERATOR CONTROL APPARATUS
James V. Caputo, Youngstown, Ohio, and Thomas J. Crawford, Berkley, Mich.; said Crawford assignor to said Caputo
Original application October 16, 1947, Serial No. 780,170, now Patent No. 2,600,844, dated June 17, 1952. Divided and this application October 22, 1951, Serial No. 252,551
11 Claims. (Cl. 322—4)



1. In a motor generator apparatus, an electric motor, an electric generator having a greater power output than the power output of said motor and having a rotating part driven by said motor, a pair of electrical output terminals connected to be energized from said generator, a rotatable inertia device driven by said motor and arranged to supply rotating power to said generator as a function of a decreasing speed of said rotating part, said generator including an energizable winding normally supplied from a voltage source, and a voltage controlling means including an auxiliary electric potential generator connected between said voltage source and said energizable winding and polarized in opposite polarity to that of said voltage source actuated as a function of the speed of said generator for altering the voltage supplied to said terminals, said controlling means being effective to alter the degree of energization of said energizable winding.

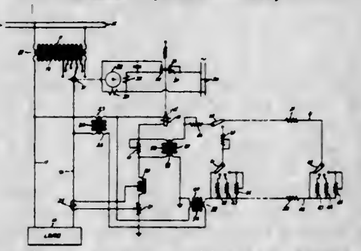
2,747,156
INVERTER CONTROL SYSTEM
Charles B. Grady, Jr., West Orange, N. J., assignor to The W. L. Maxson Corporation, New York, N. Y., a corporation of New York
Application September 24, 1952, Serial No. 311,294
11 Claims. (Cl. 322—24)

1. A frequency regulator for controlling the output frequency of an alternator driven by a direct current motor, said direct current motor having a field adapted for energization in varying degree for controlling the frequency of said alternator output, said regulator comprising: frequency error sensing means connected to said alternator output and producing a control potential; magnetic am-



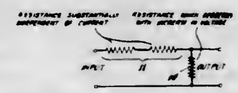
plifying means having a plurality of inputs and an output connected to vary the degree of energization of said motor field, one of said inputs being connected for response to said control potential; and circuit means connecting another of said inputs degeneratively across said motor field for stabilizing the operation of said regulator.

2,747,157
SYSTEM FOR REMOTE SELECTION OF VOLTAGE LEVEL
Harold E. Pinney, Pittsfield, Mass., assignor to General Electric Company, a corporation of New York
Application July 18, 1955, Serial No. 522,472
5 Claims. (Cl. 323—43.5)



1. Means for remotely controlling the voltage level of a variable electrical transformer system of the type employing a voltage regulating relay responsive to the winding voltage of the variable transformer to actuate a motor drive for controlling the voltage of the variable transformer comprising a voltage regulating relay having a coil coupled to a winding of said variable transformer, a first resistor in series with said coil, and circuit means including a substantially constant source of potential and variable resistor means connected in parallel with said first resistor for controlling the current flowing through said first resistor.

2,747,158
TEMPERATURE COMPENSATED CIRCUIT HAVING NON-LINEAR RESISTOR
Clarence J. Le Bel, New York, N. Y.
Application May 24, 1950, Serial No. 164,000
5 Claims. (Cl. 323—69)



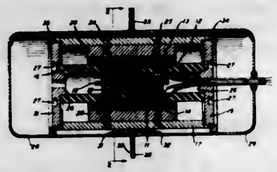
1. A non-linear circuit compensated for variation in temperature comprising a non-linear resistor having an instantaneous response to variation in input voltage and having a variation in its resistance upon changes in temperature, the resistor including one or more non-linear units connected together in series in a direction of like

resistive characteristic and in the direction in which increasing voltage results in decreasing resistance, output connections having the non-linear resistor solely therebetween, a linear resistance means in series therewith having a resistance which is substantially independent of current and having a variation in resistance upon changes in temperature in the same direction and of substantially a proportional amount as that of the non-linear resistor, and input connections including therebetween the non-linear resistor and the linear resistance means.

2,747,159
ELECTROMAGNETIC APPARATUS

James L. Potter, Highland Park, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application October 7, 1952, Serial No. 313,515
16 Claims. (Cl. 323—92)



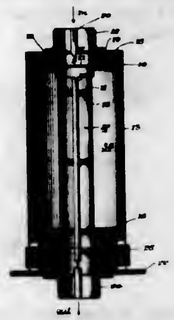
1. Electromagnetic apparatus comprising winding means having an axis extending between the end portions thereof and spaced from said axis by a maximum distance less than the length of said axis, a core coaxial with said winding means, means for supplying to said winding means alternating current from an alternating-current supply source and direct current from a direct-current supply source to cause to be set up a magnetic field having an alternating and a direct component, a permanent magnet fixedly spaced with respect to said axis by a distance longer than said maximum spacing of said winding means from said axis and having a rectilinear dimension extending between its opposite poles substantially parallel to said axis to set up at substantially all portions of said core a magnetic field substantially equal to and opposing the direct component of the magnetic field set up due to direct current supplied to said winding means, thereby reducing to a minimum value the resultant of said direct component magnetic field and the magnetic field due to said permanent magnet, and means for shielding said winding means and said permanent magnet from an extraneous magnetic field.

2,747,160
SHIELDING EFFICIENCY MEASURING DEVICE

Stanley P. Bird, Verona, N. J., assignor to Breeze Corporations, Inc., Newark, N. J., a corporation of New Jersey

Application December 21, 1951, Serial No. 262,872
20 Claims. (Cl. 324—58)

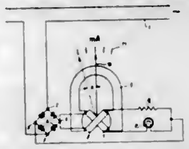
1. A device for measuring the shielding efficiency of an ignition wire covering structure of tubular shape comprising, a base plate, said plate being provided with an opening therein, a first cylindrical conductor overlying the plate and its opening, normal to but spaced from said plate, a second cylindrical conductor lying within the first conductor and concentric therewith, a length of shielding material to be tested disposed around and spaced from the second conductor and within the first conductor concentric with both of said conductors, a source of power connected to the first conductor, a signal receiver connected to the second conductor through the opening in the plate, a device for measuring the amount of electrical potential entering the first conductor associated with the said first conductor, and calibrated means associated with the receiver to measure the power of the signal penetrating the material to be tested and reaching the second conductor.



2,747,161
ARRANGEMENT FOR MEASURING THE R. M. S. VALUES OF ALTERNATING CURRENTS AND VOLTAGES

Helmut Dreyer and Leo Boller, Erlangen, Germany, assignors to P. Gossen & Co. G. m. b. H., Erlangen, Bavaria, Germany

Application April 10, 1953, Serial No. 347,964
Claims priority, application Germany April 17, 1952
4 Claims. (Cl. 324—132)



1. An arrangement for measuring the R. M. S. value of alternating currents, comprising a rectifier having two output terminals of opposite polarity and input terminals adapted to be connected in the alternating current circuit whose current is to be measured, a crossed-coil measuring instrument including a permanent field magnet, two moving coils, substantially constant resistance means, variable resistance means whose resistance value is a substantially invariable function of the R. M. S. value of the current traversing it, and connections between said output terminals, the two ends of each of said moving coils, the constant resistance means and the variable resistance means, said connections being arranged in such a way that a first complete circuit is formed through the first moving coil, the constant resistance means, and the two output terminals of the rectifier, while a second complete circuit is formed through the second moving coil, the variable resistance means, and the two output terminals of the rectifier, said measuring instrument being arranged to measure electrical quantities from a lowest value which is not less than one third of the highest value which can be measured.

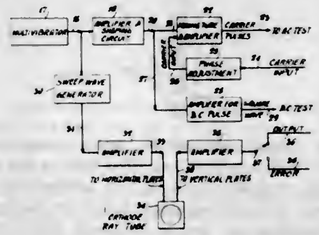
2,747,162
INSTRUMENT AND METHOD FOR CHECKING THE PERFORMANCE OF SERVOMECHANISMS AND AUTOMATIC CONTROL SYSTEMS

George M. Attura, Levittown, N. Y.

Application March 13, 1953, Serial No. 342,158
7 Claims. (Cl. 324—158)

1. An apparatus for use in the testing and alignment of servomechanisms by comparison of the wave shape of

the voltage obtained from the position of said servomechanism with the comparable wave shape so obtained when said servomechanism is operating in known proper alignment: comprising means for generating a square wave voltage of a pre-determined frequency in a pair of thermionic tubes arranged in a multivibrator circuit, means for amplifying and shaping one portion of said square wave voltage and impressing it upon said servomechanism, leads connected with the said servomechanism for obtaining from said servomechanism a second voltage functionally related to the position of said servomechanism, a thermionic amplifier circuit for amplifying the said second voltage, a cathode ray tube having two sets of deflecting plates, means for connecting said amplified second voltage with one set of said deflecting plates, means for differentiating a second portion of said square

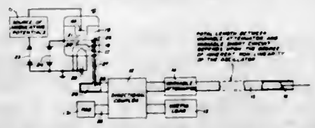


wave voltage, a gas-filled tube having a cathode, at least one grid, and a plate in parallel relationship with a condenser so arranged as to constitute a saw-tooth wave generator, means connecting said differentiating means with said grid of said gas-filled tube whereby said saw-tooth wave generator may be triggered by the differentiated voltage of said second portion to create a saw-tooth wave of the same frequency as the said square wave, means for connecting said saw-tooth wave with the other set of said deflecting plates whereby the wave form of said second voltage may be observed, and a transparent mask mounted over the face of said cathode ray tube, said mask having thereon a tracing of the wave-form of a voltage comparable to said second voltage and made at a time that the servomechanism under test was known to be operating properly.

2,747,163
LINEARIZER FOR FREQUENCY MODULATION GENERATOR

Glenn R. Frantz, Westfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application June 27, 1950, Serial No. 170,648
2 Claims. (Cl. 332—18)

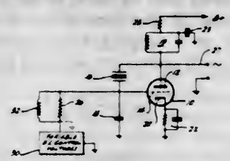


1. In a frequency modulation system, a reflex oscillator having a repeller electrode whereby the frequency of the oscillator may be modulated over a given extended frequency range by variation of the repeller voltage, said oscillator having a frequency versus repeller voltage characteristic with operating conditions of matched impedance which departs from linearity over said bandwidth in accordance with a predetermined deviation characteristic, a source of modulating potentials connected to said repeller electrode, a directional coupler, a load circuit loosely coupled to the oscillator through the coupled path of the directional coupler, a transmission line several wavelengths long within said frequency range closely coupled to the oscillator through the direct transmission path of the directional coupler, means including a short circuiting termination at the end of said transmission line for reflecting energy to said oscillator and for reacting on said oscillator in opposition to said deviation characteristic throughout said frequency range, and attenuator means in said transmission line for establishing the magnitude of the energy reflected from said termination to said oscillator to substantially eliminate said deviations from linearity.

2,747,164
FREQUENCY MODULATION OF CRYSTAL OSCILLATOR

Jerome E. Jacobs, Culver City, and Ercell Edd St. John, Hawthorne, Calif., assignors, by mesne assignments, to Hughes Aircraft Company, a corporation of Delaware

Application November 18, 1952, Serial No. 321,222
2 Claims. (Cl. 332—26)



1. A circuit arrangement for controlling the frequency of operation of a crystal-controlled oscillator to the extent of a few hundred parts per million, wherein said said oscillator employs an electron discharge device having at least an anode, a cathode, and a control grid, and a frequency-selective network for determining the frequency of the oscillatory wave to be generated by said oscillator including a piezoelectric crystal connected between said anode and said control grid, a capacitor connected between said control grid and a point of reference potential, and a parallel inductor-capacitor network resonant at a frequency below the resonant frequency of said crystal and connected to said anode and bypassed to a point of reference potential, said circuit arrangement comprising, in combination, a source of varying direct-current voltages, a first resistor connected between said control grid and one terminal of said varying voltage source, the other terminal of said varying voltage source being connected to said point of reference potential, an inductor element connected in shunt with said first resistor and operable therewith to provide a high impedance path to high-frequency oscillatory waves and a low impedance path for direct-current voltages, a grid bias network including a second resistor and a capacitor connected between said cathode and said point of reference potential, said second resistor having a resistance which is low compared to that of said first resistor, a source of constant direct-current voltage, and a third resistor connected between said parallel inductor-capacitor network and the positive terminal of said source and having a resistance intermediate that of said first and second resistors.

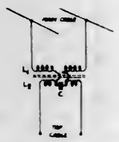
2,747,165
TRANSFORMERS AND NETWORKS FOR TAPPING OR BRANCHING CABLES CARRYING TWO OR MORE FREQUENCY BANDS

Dennis Quintrell Fuller, Cambridge, England, assignor to Pye Limited, Cambridge, England, a British company

Application July 3, 1950, Serial No. 171,989
Claims priority, application Great Britain July 7, 1949
4 Claims. (Cl. 333—5)

2. A system for distributing both television video frequency signals and audio frequency signals to a plurality of distribution points, comprising a balanced twin main cable of a constant impedance carrying both television video frequency and audio frequency signals, a plurality of tapping points at intermediate points on said main cable,

a plurality of balanced twin distribution cables the impedances of which are matched to that of the main cable at said video frequency for distributing a portion of the power available at said television video frequency and at said audio frequency to each of a plurality of remote points, a step-down transformer connected at each tapping point, each of said transformers having a primary winding consisting of a first primary part, and a second primary part similar to said first primary part, and at least one secondary winding consisting of a first secondary part and a second secondary part similar to said first secondary part, each secondary and each primary winding part having an inner end and an outer end, the number of secondary windings equaling the number of distribution cables connected to the tapping point at which said transformer is connected, and a core member common to both said primary winding and each secondary winding, means connecting the outer end of each primary winding part respectively to one of the conductors of said balanced twin main cable at a tapping point, means connecting the outer end of each secondary winding part respectively



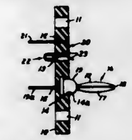
to one of the conductors of one of the balanced twin distribution cables connected to the same tapping point, a condenser for each transformer common to both said primary winding and said secondary windings and connected in series with said windings to the inner ends of said first and second primary winding parts and each of said first and second secondary winding parts, said primary winding and each of said secondary windings respectively consitituting winding balanced about said condenser, said condensers having a low impedance to said video frequency signals, each of said transformers being thereby rendered operative as a transformer for transferring a desired fraction of the power available at said video frequency to said at least one distribution cable connected to each transformer, and said condensers having a high impedance to said audio frequency signals, said transformers being thereby rendered ineffective as transformers at said audio frequencies with the windings thereof serving as direct connections to conduct said last-mentioned signals from the main cable to said at least one distribution cable connected to each transformer.

2,747,166
INTERLOCKED FLEXIBLE CONTACT ASSEMBLY FOR SHAFT
Odell H. Hoffarth, Cedar Rapids, Iowa, assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application December 13, 1954, Serial No. 474,939
5 Claims. (Cl. 339—5)



1. An interlocked flexible electrical contact assembly comprising, a pair of radially symmetrical members made of thin resilient conducting material, a plurality of arms formed in each member and extending in a radially symmetrical manner, each member having the same number of arms, each arm formed with a narrow inner portion and a wider outer portion, the outer portion of each arm deformed in an arcuate manner with the convex sides of the outer portions of a single member all arranged on the same side of that member, and the outer portions of the two members alternately interleaved so that the radial edges of each outer portion of one member are received against the concave sides of the adjacent outer portions of the other member, whereby the assembly only presents smooth rounded conducting surfaces on its opposite outer sides.

2,747,167
PLUG-IN MOUNT FOR A CIRCUIT UNIT
Frank W. Parrish, Bellflower, Calif., assignor to International Rectifier Corporation, El Segundo, Calif., a corporation of California
Application January 4, 1954, Serial No. 402,019
1 Claim. (Cl. 339—176)



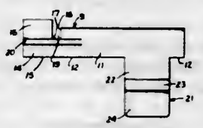
A plug-in mount adapted to make connection with a circuit unit which unit is provided with a lug terminal and a cavity terminal, said mount comprising: a flat insulating base having two sides, said base having a pair of slots therethrough, and a recessed seat therein, a resilient receptacle comprising a flat strip bent into a pair of spring arms for receiving said lug terminal, said spring arms being disposed in one of said slots and facing outward from one side of said base, said strip having a portion passing through the second of said slots to the other side of the base, a conductive prong having a longitudinal axis, which prong is seated in said recessed seat, facing from the same side of the base as the receptacle, and comprising flexible elements for expanding laterally with respect to said longitudinal axis so as to be compressible when inserted into the said cavity terminal, and a conductive member attached to said prong and passing through the insulating base.

2,747,168
SOCKET FOR ELECTRIC LIGHT BULBS
Joseph P. Arena, Astoria, N. Y.
Application July 19, 1952, Serial No. 299,872
3 Claims. (Cl. 339—176)



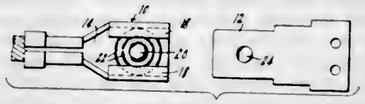
1. In an electric socket having a central contact member on its base and a second contact member on its side wall, a floating disc mounted in said socket above said base, said disc being movable toward and away from said base and relative to said central and second contact members and being spring-urged in the direction away from the base, said floating disc being also provided with a central opening whereby the central contact member of an electric light bulb is engageable with said central contact member of the socket through the opening in said disc, said disc being retractable under the pressure of an electric light bulb when said bulb is screwed into the socket in order to enable the central contact member of the bulb to enter into engagement with the central contact member of the socket through said opening in the floating disc, and, wherein a base disc is provided on the base of the socket below the floating disc, a pair of springs maintaining the floating disc in spaced relation to the base disc, a conductor which enters the socket and extends across the base disc to form the central contact member of said socket and a second conductor which enters the socket and projects upwardly along the side wall of the socket between said side wall and the base and floating discs, said second conductor constituting the second contact member of the socket.

2,747,169
CONTACT FOR PRINTED CIRCUITS
Bengt J. Johanson, Des Plaines, Ill., assignor to Cinch Manufacturing Corporation, Chicago, Ill., a corporation of Illinois
Application February 20, 1953, Serial No. 337,957
5 Claims. (Cl. 339—258)



5. A contact member comprising an elongated channeled body portion having a base portion and opposed spaced sidewalls terminating in free edges, prong-engaging elements integrally joined to said body portion at one end thereof, and each of said sidewalls having a resilient shouldered attaching element integrally joined to said free edge thereof and extending outwardly therefrom in generally perpendicular relation to the longitudinal axis of said channeled body portion, said attaching elements being in opposed relation and adapted for fastener engagement with a supporting panel through an opening thereof.

2,747,170
CONNECTOR MEMBER WITH RESILIENT CENTER
Hugh W. Batcheller, Newton, Mass., assignor to Kent Mfg. Corp., Newton, Mass., a corporation of Massachusetts
Application July 16, 1954, Serial No. 443,902
1 Claim. (Cl. 339—258)



In an electrical connector member of the kind having a floor, upstanding side walls, and inturned flanges at the tops of the side walls, a central boss in said floor projecting up above the level of the floor, and circular corrugations in said floor concentric with said boss, the ridges of said corrugations being substantially flush with the floor level.

2,747,171
MEANS FOR CONNECTING A MEMBER TO AN ELECTRICAL WIRE
Rene Martines, Warwick, R. I., assignor to The Crimpweld Corporation, a corporation of Rhode Island
Application May 6, 1952, Serial No. 286,298
3 Claims. (Cl. 339—276)



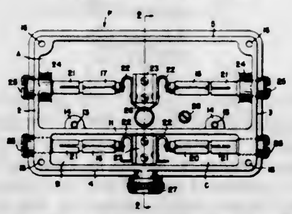
1. A wire terminal for a single conductor cable comprising a single metallic member having a connector portion and a shank portion, said shank portion of generally U-shape, the upstanding legs thereof forming upstanding right triangles, the central portion of said U-shaped shank portion having an inwardly extending longitudinal projection of uniform height and rounded cross section, said projection having a length substantially the width of said legs, said upstanding legs complementing each other when wrapped around a conductor in said shank portion to completely encircle a conductor and firmly press said conductor into said projection.

2,747,172
GEOPHONE ARRANGEMENT FOR SEISMIC PROSPECTING
Joseph F. Bayhi, Tulsa, Okla., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application November 12, 1954, Serial No. 468,303
7 Claims. (Cl. 340—15)



1. A geophone arrangement for seismic prospecting which comprises a plurality of geophones placed in contact with the earth in an array made up of a plurality of placement points evenly spaced along an essentially straight line, at least one geophone being positioned at each of said placement points, the arrangement being such that the amplitude of the geophone output is a maximum at the center of the array and tapers to a minimum at each end of the array, the outputs of the entire array of geophones being combined.

2,747,173
TAXIMETER INDICATORS
Arthur Neville Howarth, London, England, assignor to Bell Punch Company Limited, London, England, a British company
Application May 13, 1952, Serial No. 287,453
Claims priority, application Great Britain May 18, 1951
4 Claims. (Cl. 340—68)

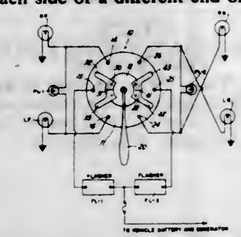


1. A taximeter indicator comprising a panel, a cover mounted on said panel and having a plurality of separate areas to be illuminated corresponding respectively to a plurality of indications to appear on the cover, each indication corresponding to a particular setting of a taximeter mechanism, lamps for illuminating said areas selectively, said lamps being of the type in which opposite terminals of the filaments are located at opposite ends of the lamps, means mounting and electrically connecting each of said lamps, each of said mounting means comprising a lamp socket receiving one end of a lamp and a spring contact engaging the other end of a lamp, contact carriers mounted on said panel and mounting said spring contacts, and openings in said panel mounting said lamp sockets.

2,747,174
FLASHING DIRECTION SIGNALLING SYSTEMS FOR VEHICLES
Jesse R. Hollins, Brooklyn, N. Y.
Application June 8, 1953, Serial No. 360,240
4 Claims. (Cl. 340—81)

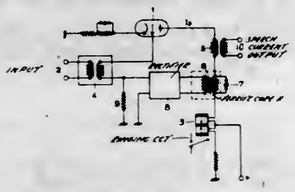
1. A direction signalling arrangement for automotive vehicle units including a first set of signal lamp means

mounted on either side of the front of the unit; a second set of signal lamp means mounted on either side of the rear of the unit; a pair of flashers connected to the vehicle electric energy source; a direction signal switch having first and second sets of contacts, each contact set including lamp contacts respectively connected to the lamp means on each side of a different end of the vehicle unit,



and a flasher contact, each flasher contact being connected to a different one of said flashers; and selector means selectively operable to simultaneously connect one of the flasher contacts to the associated lamp contact connected to the signal lamp means on one side of the front of the vehicle unit and the other flasher contact to the associated lamp contact connected to the signal lamp means on said one side of the rear of the vehicle unit.

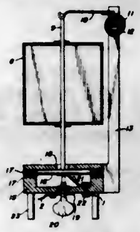
2,747,175
SELECTIVE RECEIVING DEVICE FOR RINGING SIGNALS OF TELECOMMUNICATION SYSTEMS
Jean Ernest Paul Brune, Paris, France, assignor to Lignes Telegraphiques & Telephoniques, Paris, France
Application December 2, 1954, Serial No. 472,699
Claims priority, application France December 16, 1953
2 Claims. (Cl. 340—164)



1. In a ringing signal receiver for a telecommunication system in which the ringing signals are transmitted at a predetermined frequency, having an electron tube including at least a cathode, a control grid and an anode, means for applying ringing signal voltages to said control grid, a relay energized by anode current of said tube, a transformer having a core of magnetic material and a first and a second winding, the first of which is traversed by said anode current and the second of which feeds a rectifier, means for applying direct-current voltage rectified by said rectifier to said control grid for causing said anode current to vary and a condenser in parallel connection with one of said windings; the improvement wherein the core of the transformer is made of a material the magnetic permeability of which varies rapidly with the intensity of a direct-current magnetic field applied thereto and wherein condenser has a capacity value such that said transformer be tuned at said predetermined frequency for a first predetermined value of said anode current and be off tuning for a second predetermined value of same said anode current.

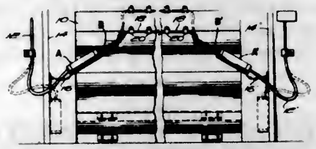
2,747,176
AUTOMATIC GAS ALARM
Ernest Cox, Hempstead, N. Y.
Application March 12, 1954, Serial No. 415,788
1 Claim. (Cl. 340—237)

A device for signalling the presence of gas, and in particular, manufactured or natural gas, such as is used for fuel, comprising a sealed hollow float and stem held in delicate suspension vertically in atmosphere by a lever and the tension on an adjustable flat spiral spring in such manner that when the float is surrounded by



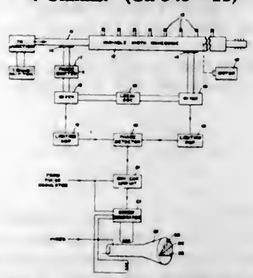
a gas or mixture of less weight than air, it will descend and strike the diaphragm of a sealed electric switch thus sounding an alarm and shutting the gas off at its source.

2,747,177
BURGLAR ALARM SYSTEM FOR A MOVABLE CLOSURE
Albert G. Keller, Forest Hills, N. Y., assignor to Holmes Electric Protective Company, New York, N. Y., a corporation of New York
Application August 2, 1952, Serial No. 302,390
7 Claims. (Cl. 340—276)



2. The combination with a movable closure having a frame at least partially surrounding the closure of a first conductor means stationarily attached to the frame and having at one end thereof electrical connecting means, a second conductor means fastened onto the closure for movement therewith and having a connecting means at one end thereof electrically separably connected with the first mentioned connecting means in such manner that movement of the closure separates the connector means and breaks the circuit, a signalling circuit including said first and second conductor means and connecting means whereby a signal is actuated upon movement of said closure.

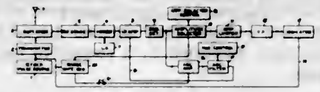
2,747,178
ANTENNA BEAM POSITION INDICATOR
William G. Alexander and Charles McL. Harden, Baltimore, Md., assignors to Bendix Aviation Corporation, Towson, Md., a corporation of Delaware
Application December 28, 1951, Serial No. 263,782
4 Claims. (Cl. 343—11)



1. A radar system comprising; a source of pulsed microwave energy, a narrow beam sweeping antenna energized from said source, said antenna comprising a section of

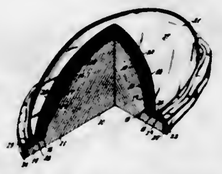
rectangular waveguide having an inside dimension uniform throughout the length of said section and adjustable within predetermined limits for sweeping said beam, and a plurality of radiators arranged along the length of said section for transducing electromagnetic energy between inside said waveguide and free space; means for periodically varying said dimension between said limits; a first directional coupler for deriving a portion of the forward traveling wave from said source; a second directional coupler for deriving a portion of the forward traveling wave at a predetermined point in said section; a local source of oscillations; means for heterodyning said portions with synchronous local oscillation energy from said local source to produce individual synchronous intermediate frequency signals; means for individual amplifying and eliminating envelope amplitude variations of said signals; means responsive to phase variations between said signals for producing a voltage representative of said phase variation; means for substantially sustaining said voltage between adjacent pulses of said source; a cathode-ray indicator; and means responsive to said sustained voltage for deflecting said ray in accordance with the sweeping of said beam.

2,747,179
AUTOMATIC AMPLITUDE SELECTION CIRCUIT
Sidney M. Kaplan, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application December 28, 1950, Serial No. 203,079
7 Claims. (Cl. 343—17.1)



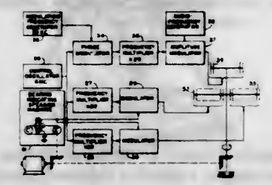
1. In combination, means to transmit recurrent pulses of electromagnetic energy toward remote objects, means to receive corresponding pulses from said remote objects after each transmitted pulse at times corresponding to the distance to the respective objects, said receiving means being sensitive to undesired noise pulses, means responsive to noise pulses received in said receiving means at a time after each transmitted pulse and after the occurrence of said corresponding received pulses to produce a voltage proportional to the average magnitude of said last named noise pulses, means to control the sensitivity of said receiving means in accordance with said voltage, means for selecting received pulses above a predetermined amplitude, means for amplitude clipping said selected pulses above a second predetermined amplitude, and means for utilizing said clipped pulses.

2,747,180
RADAR REFLECTOR
Milton Brucker, Los Angeles, Calif., assignor to Zenith Plastics Company, Gardena, Calif., a corporation of California
Application June 20, 1952, Serial No. 294,632
7 Claims. (Cl. 343—18)



1. A radar reflector comprising a generally dish-shaped structure, which structure, proceeding from the inner side thereof outwardly through the wall thereof, comprises a continuous layer of a fiber reinforced resinous laminate, a thin layer of metal, and a resinous cellular material substantially thicker than the metal, said fiber reinforced layer and said cellular material being securely adhered to said layer of metal by means of a resin interposed therebetween.

2,747,181
RADIO BEACONS
Carl-Erik Granqvist, Lidingo, Sweden, assignor to Hazeltine Research, Inc., Chicago, Ill., a corporation of Illinois
Application January 5, 1953, Serial No. 329,522
Claims priority, application Sweden February 23, 1952
12 Claims. (Cl. 343—106)



1. A radio beacon comprising: a radiating system having a first radiation pattern of the shape of a sharply concentrated beam and a second radiation pattern of the general shape of a figure eight disposed with its axis normal to the axis of said beam; a circuit for supplying an angularly velocity-modulated carrier-frequency wave signal; a circuit for supplying an audio-frequency modulation signal; modulation apparatus responsive to said carrier-frequency wave signal and said audio-frequency modulation signal for developing a first doubly modulated carrier-frequency wave signal; a circuit for supplying a second carrier-frequency wave signal modulated by periodically recurring audio-frequency bearing information; means for applying said carrier-frequency wave signals to said radiating system; and driving means coupled to said system for rotating said patterns synchronously with said recurring bearing information.

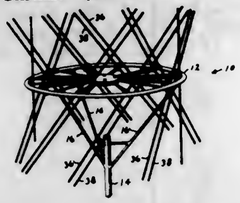
2,747,182
ANTENNA
Andrew Alford, Boston, Mass.
Application January 13, 1953, Serial No. 331,032
7 Claims. (Cl. 343—767)



1. An antenna for radiating horizontally polarized high frequency radio waves of a given band comprising a conducting cylinder having a longitudinally extending slot, means for feeding the cylinder with a transmission line with one terminal connected adjacent the slot at a point on one side and the other terminal adjacent the slot at a point sustantially opposite on the the other side, short circuit means across said slot spaced from both sides of said connecting point, the distance from said short circuit means to said connecting points being not substantially greater than .9 of the standing half wavelength along the cylinder with the internal cross sectional area of the cylinder being between $.0235\lambda^2$ and $.0115\lambda^2$ where λ is the wave length corresponding to a frequency within the band, said cylinder having a potential distribution curve from the point of feed connections in both directions along said tube which is convex and

said conducting cylinder having a length substantially not less than 1.5 free space wave lengths long between the short-circuit means.

2,747,183
TELEVISION ANTENNA
Wayne W. Edwards, Oklahoma City, Okla.
Application March 30, 1955, Serial No. 497,942
3 Claims. (Cl. 343—893)



1. An omnidirectional antenna, including: a horizontally disposed ring; a vertically disposed support; upwardly diverging legs rigidly connecting said ring to the upper portion of said support; a plurality of tubular brackets rigidly connected in spaced-apart relation to the inner periphery of said ring, said brackets each having short upper and lower inwardly extending arms disposed above and below, respectively, of the plane of said ring, each said arm having a through perforation angularly disposed with relation to the vertical; a plurality of inwardly converging conductors are carried at one end by the bore of each said bracket arm, respectively the length of said conductors being substantially one-third an average wave length; two pairs of superposed spaced-apart plates rigidly gripping the inwardly extending ends of said converging conductors; and a plurality of pairs of angularly disposed conductors carried intermediate their ends in parallel relation by the angularly disposed perforation of each said bracket arm, respectively, the length of said angularly disposed conductor elements being substantially an average wave length, whereby the upper and lower ends of said pairs of angularly disposed conductors overlap in vertical relation the respective upper and lower ends of each adjacent pair of angular conductors.

2,747,184
WAVE REFRACTING DEVICES
Winston E. Kock, Basking Ridge, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application June 23, 1950, Serial No. 169,968
20 Claims. (Cl. 343—909)

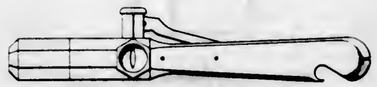


1. A reactive device for electromagnetic waves, comprising a plurality of spaced parallel bars of dielectric material distributed over an area transverse to the path of the waves, and a plurality of channel-shaped members of metal foil each supported by a respective one of said dielectric bars.

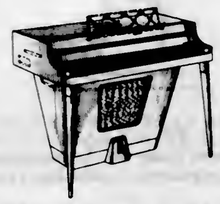
DESIGNS

MAY 22, 1956

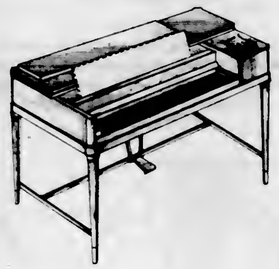
177,704
SMOKER'S ACCESSORY
Joseph N. Amigone, Buffalo, N. Y.
Application May 24, 1955, Serial No. 36,187
Term of patent 14 years
(Cl. D85—7)



177,705
PIANO
Clifford W. Andersen, De Kalb, Ill., assignor to The Rudolph Wurlitzer Company, North Tonawanda, N. Y., a corporation of Ohio
Application June 13, 1955, Serial No. 36,469
Term of patent 14 years
(Cl. D56—9)



177,706
PIANO
Clifford W. Andersen, De Kalb, Ill., assignor to The Rudolph Wurlitzer Company, North Tonawanda, N. Y., a corporation of Ohio
Application June 22, 1955, Serial No. 36,622
Term of patent 14 years
(Cl. D56—9)



177,707
PIANO
Clifford W. Andersen, De Kalb, Ill., assignor to The Rudolph Wurlitzer Company, North Tonawanda, N. Y., a corporation of Ohio
Application July 14, 1955, Serial No. 36,976
Term of patent 14 years
(Cl. D56—9)



177,708
SPOON OR SIMILAR ARTICLE
Jose Barata y Barrera, Baltimore, Md., assignor to The Stieff Company, Baltimore, Md., a corporation of Maryland
Application September 26, 1955, Serial No. 38,090
Term of patent 14 years
(Cl. D54—12)



177,709
STRINGED MUSICAL INSTRUMENT
Joe E. Barrick, Cloverdale, Calif.
Application July 26, 1955, Serial No. 37,132
Term of patent 14 years
(Cl. D56—9)



177,710
COMBINED CAN OPENER AND MEASURING CUP
Alyce L. Bird, Mission, Kans.
Application September 15, 1955, Serial No. 37,946
Term of patent 14 years
(Cl. D44—29)



177,711
WINDSHIELD
Stanley A. Blumberg, Baltimore, Md.
Application October 19, 1955, Serial No. 38,450
Term of patent 14 years
(Cl. D14—6)



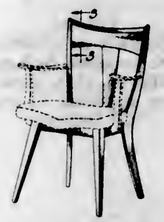
177,712
HAT
Billie Royse Boydston, Los Angeles, Calif.
Application December 20, 1954, Serial No. 33,612
Term of patent 3½ years
(Cl. D3—13)



177,713
DISPLAY STAND
Lester B. Bracken, St. Albans, Vt., assignor to Standard Packaging Corporation, Chicago, Ill., a corporation of Virginia
Application December 1, 1954, Serial No. 33,354
Term of patent 14 years
(Cl. D80—9)



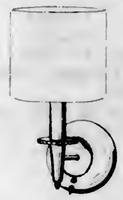
177,714
CHAIR
William J. Carr, Gardner, Mass., assignor to Heywood-Wakefield Company, Gardner, Mass., a corporation of Massachusetts
Application March 14, 1955, Serial No. 35,034
Term of patent 7 years
(Cl. D15—1)



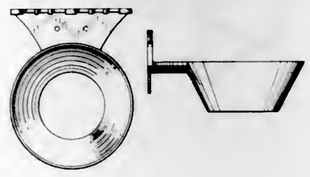
177,715
WALL LAMP
Charles W. Clemens, Nashville, Tenn., assignor to Aladdin Industries, Incorporated, Nashville, Tenn., a corporation of Illinois
Application August 18, 1955, Serial No. 37,546
Term of patent 3½ years
(Cl. D48—4)



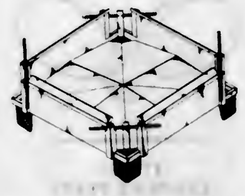
177,716
PIN-UP LAMP
Charles W. Clemens, Nashville, Tenn., assignor to Aladdin Industries, Incorporated, Nashville, Tenn., a corporation of Illinois
Application August 18, 1955, Serial No. 37,547
Term of patent 3½ years
(Cl. D48—4)



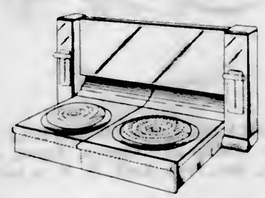
177,717
WALL BRACKET
Ernest R. Conrad, Arapahoe County, Colo.
Application July 14, 1955, Serial No. 36,974
Term of patent 14 years
(Cl. D33—3)



177,718
GAME BOARD
Eugene L. Coulon, Renton, Wash., and William B. Pond, Beaverton, Oreg.
Application April 26, 1954, Serial No. 30,166
Term of patent 7 years
(Cl. D34—5)



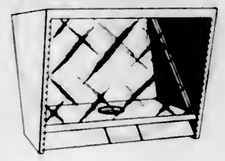
177,719
ELECTRIC HEATER UNIT
Roger L. Crispell, Birmingham, Mich., assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application February 10, 1955, Serial No. 34,455
Term of patent 7 years
(Cl. D81—10)



177,720
BARRETTE OR SIMILAR ARTICLE
Paul K. Dawson, Los Angeles, Calif.
Application February 21, 1955, Serial No. 34,604
Term of patent 14 years
(Cl. D86—10)



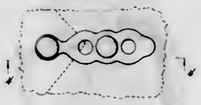
177,721
BANK OUTDOOR DEPOSIT WINDOW OR SIMILAR ARTICLE
Charles U. Deaton, Kirkwood, Mo., assignor to Diebold, Incorporated, Canton, Ohio, a corporation of Ohio
Application January 12, 1955, Serial No. 33,933
Term of patent 14 years
(Cl. D13—2)



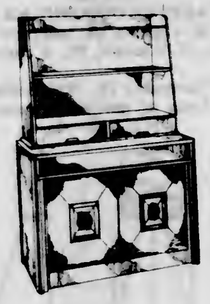
177,722
BARBER CHAIR OR SIMILAR ARTICLE
Clarence Long Dlouhy, Chicago, Ill., assignor to Emil J. Paidar Company, Chicago, Ill., a corporation of Illinois
Application August 5, 1955, Serial No. 37,324
Term of patent 14 years
(Cl. D15—3)



177,723
GAITER OR SIMILAR ARTICLE
Thomas Henry Doherty, South Bend, Ind., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a corporation of Indiana
Application June 20, 1955, Serial No. 36,577
Term of patent 14 years
(Cl. D17—3)



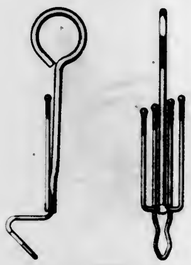
177,724
COMBINED CABINET AND EXTENSION TABLE
Abe J. Gaines, Glencoe, Ill., assignor to Saginaw Furniture Shops, Inc., Chicago, Ill., a corporation of Michigan
Application March 29, 1954, Serial No. 29,752
Term of patent 14 years
(Cl. D33—19)



177,725
TOP SHELL FOR AN EXPANSIBLE BRACELET
Edward L. Gay, Jr., Edgewood, and Wilfred H. Gay, Woonsocket, R. I.
Application July 13, 1955, Serial No. 36,953
Term of patent 3½ years
(Cl. D45—4)



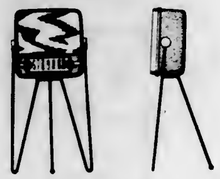
177,726
DRAPERY HOOK
James Leonard Golding, Chicago, Ill.
Application December 23, 1955, Serial No. 39,464
Term of patent 14 years
(Cl. D21—1)



177,727
ADVERTISING DISPLAY DEVICE
Jon W. Hauser, St. Charles, Ill., assignor to Hawley Products Company, St. Charles, Ill., a corporation of Delaware
Application February 16, 1955, Serial No. 34,531
Term of patent 14 years
(Cl. D1—2)



177,728
RADIO CABINET OR SIMILAR ARTICLE
Jon W. Hauser, St. Charles, Ill., assignor to Hawley Products Company, St. Charles, Ill., a corporation of Delaware
Application November 10, 1955, Serial No. 38,829
Term of patent 14 years
(Cl. D56—4)



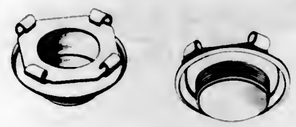
177,729
ELECTRIC RECEPTACLE
John A. Herrmann, Grosse Pointe Farms, and John B. Cataldo, Birmingham, Mich., assignor to BullDog Electric Products Co., Detroit, Mich., a corporation of West Virginia
Application March 3, 1954, Serial No. 29,304
Term of patent 14 years
(Cl. D26—1)



177,730
TEETHER
Saul D. Horwitz, New York, N. Y.
Application January 25, 1956, Serial No. 39,911
Term of patent 14 years
(Cl. D83—1)



177,731
CLOSURE PLUG
Charles Warren Hurley, Gaithersburg, Md., assignor to the United States of America as represented by the Secretary of the Army
Application July 23, 1954, Serial No. 31,583
Term of patent 14 years
(Cl. D58—10)



177,732
PLATE OR SIMILAR ARTICLE
Takeshi Inoue, Atsuta-ku, Nagoya, Japan, assignor to Noritake Co., Inc., New York, N. Y., a corporation of New York
Application November 29, 1954, Serial No. 33,269
Term of patent 7 years
(Cl. D44—15)



177,733
PLATE OR SIMILAR ARTICLE
Takeshi Inoue, Atsuta-ku, Nagoya, Japan, assignor to Noritake Co., Inc., New York, N. Y., a corporation of New York
Application November 29, 1954, Serial No. 33,272
Term of patent 7 years
(Cl. D44—15)



177,734
PLATE OR SIMILAR ARTICLE
Takeshi Inoue, Atsuta-ku, Nagoya, Japan, assignor to Noritake Co., Inc., New York, N. Y., a corporation of New York
Application November 29, 1954, Serial No. 33,282
Term of patent 7 years
(Cl. D44—15)



177,735
BOW TIE OR SIMILAR ARTICLE
Paul Kellner, New York, N. Y.
Application October 20, 1955, Serial No. 38,475
Term of patent 3½ years
(Cl. D3—16)



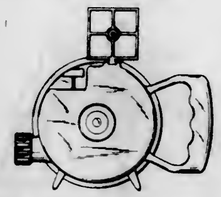
177,736
PRAYER BENCH
Warren D. Kennell, Rochester, N. Y.
Application July 28, 1955, Serial No. 37,176
Term of patent 14 years
(Cl. D15—8)



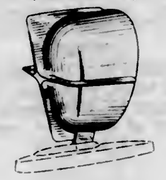
177,737
DISPLAY STAND
Fred T. King, Stanwood, Mount Kisco, and Eugene J. Casey, Westbury, N. Y., assignors to Standard Packaging Corporation, Chicago, Ill., a corporation of Virginia
Application November 18, 1954, Serial No. 33,156
Term of patent 14 years
(Cl. D80—9)



177,738
COMBINED WATERPROOF HOUSING AND CAMERA
Jordan Klein, Miami, Fla.
Application November 2, 1955, Serial No. 38,697
Term of patent 14 years
(Cl. D61—1)



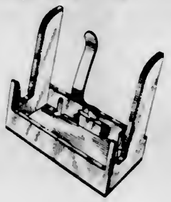
177,739
AUTOMOBILE REARVIEW MIRROR OR SIMILAR ARTICLE
Sol H. Lapidus, Great Neck, N. Y., assignor to U. S. Metal Products Company, Inc., New York, N. Y., a corporation of New York
Application December 7, 1955, Serial No. 39,201
Term of patent 7 years
(Cl. D14—6)



177,740
KNIFE
Peter A. Latham, Huntington, N. Y.
Application August 15, 1955, Serial No. 37,455
Term of patent 7 years
(Cl. D22—3)



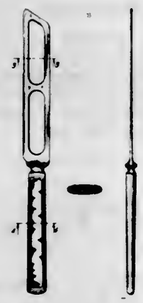
177,741
EYEGLASS HOLDER
Stanley J. Leverence, Chicago, Ill.
Application October 20, 1955, Serial No. 38,480
Term of patent 3½ years
(Cl. D57—1)



177,742
DEVICE FOR TESTING GAS LINES
Irwin M. Marx, University Heights, Ohio
Application September 21, 1954, Serial No. 32,381
Term of patent 14 years
(Cl. D52—1)



177,743
KITCHEN SLICING KNIFE
Joseph Marx, Woodside, N. Y.
Application April 18, 1955, Serial No. 35,553
Term of patent 14 years
(Cl. D22—3)



177,744
LAMP BASE
Louis A. Minea, St. Paul, Minn.
Application August 31, 1955, Serial No. 37,731
Term of patent 14 years
(Cl. D48—20)



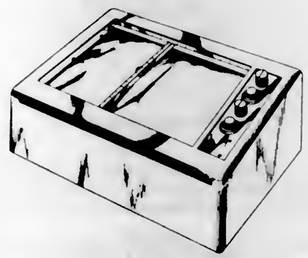
177,745
SKI REPAIR KIT
William S. Moody, Cranston, R. I., assignor to Moody Machine Products Co., Inc., a corporation of Rhode Island
Application February 8, 1954, Serial No. 28,912
Term of patent 3½ years
(Cl. D93—4)



177,746
BIRD FEEDING STATION
Albert B. Moore, Falls Village, Conn., assignor to Mold-Craft Inc., Port Washington, Wis., a corporation of Wisconsin
Application December 15, 1955, Serial No. 39,336
Term of patent 7 years
(Cl. D31—2)



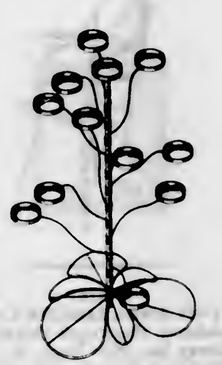
177,747
GRAPHIC RECORDER
Francis L. Moseley, Pasadena, Calif., assignor to F. L. Moseley Company, Pasadena, Calif., a corporation of California
Application February 28, 1955, Serial No. 34,787
Term of patent 14 years
(Cl. D26—5)



177,748
BUILDING FOR USE IN THE DISPENSING OF FOOD
Andrew J. Ochman, Girard, Ohio
Application December 30, 1954, Serial No. 33,762
Term of patent 14 years
(Cl. D13—1)



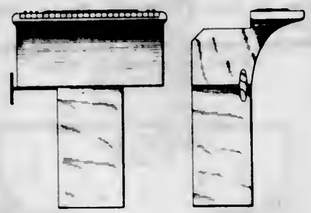
177,749
SUPPORTING STAND FOR POTTED PLANTS OR THE LIKE
Earl J. Oliver, Castro Valley, Calif.
Application August 9, 1955, Serial No. 37,391
Term of patent 14 years
(Cl. D35—3)



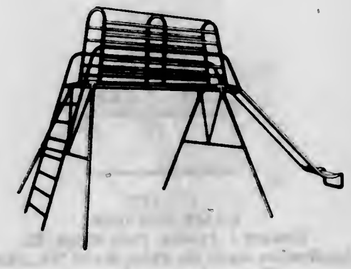
177,750
TABLECLOTH
Ferdinand P. Otto, Philadelphia, Pa., assignor to Quaker Lace Company, Philadelphia, Pa.
Application July 6, 1955, Serial No. 36,837
Term of patent 7 years
(Cl. D92—26)



177,751
ACCORDION TYPE MUSICAL INSTRUMENT
Amedeo Palmonella, New York, N. Y.
Application May 24, 1954, Serial No. 30,616
Term of patent 14 years
(Cl. D56—1)



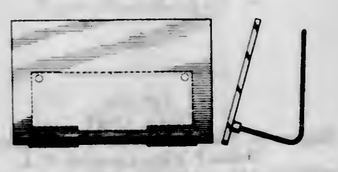
177,752
PLAY GYM STRUCTURE
Edwin L. Parker, Wadsworth, Ohio, assignor to Blazon, Inc., Akron, Ohio, a corporation of Ohio
Application November 2, 1955, Serial No. 38,699
Term of patent 14 years
(Cl. D34—5)



177,753
ADVERTISING DISPLAY DEVICE
Raymond O. Paul, Chicago, Ill.
Application January 18, 1956, Serial No. 39,825
Term of patent 14 years
(Cl. D1—2)



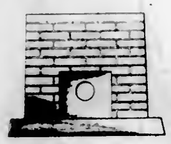
177,754
DESK CALENDAR OR THE LIKE
Howard V. Peterson, Paris, Ill., assignor to U. O. Colson Company, Paris, Ill., a corporation of Delaware
Application December 29, 1954, Serial No. 33,734
Term of patent 7 years
(Cl. D74—5)



177,755
RESTAURANT BUILDING
Francis C. Peterson, Erwin, Tenn.
Application November 25, 1955, Serial No. 39,038
Term of patent 14 years
(Cl. D13—1)



177,756
CHRISTMAS TREE STAND
Matt E. Peterson and Donive R. Randall, Whitefish, Mont.
Application July 10, 1953, Serial No. 25,850
Term of patent 14 years
(Cl. D35—3)



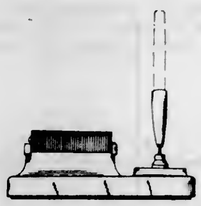
177,757
LAMP HOLDER
Edward J. Petrick, Park Ridge, Ill.
Application April 22, 1955, Serial No. 35,643
Term of patent 14 years
(Cl. D48—20)



177,758
ENVELOPE MOISTENER
Eugene W. Pike, Jr., Carteret, N. J., assignor to Helen P. Pike, Carteret, N. J.
Application November 18, 1955, Serial No. 38,948
Term of patent 7 years
(Cl. D74—10)



177,759
DESK UNIT
Eugene W. Pike, Jr., Carteret, N. J., assignor to Helen P. Pike, Carteret, N. J.
Application November 18, 1955, Serial No. 38,953
Term of patent 7 years
(Cl. D74—1)



177,760
FOLDING HIGH CHAIR
Louis Pokorny, Jr., Ronkonkoma, N. Y.
Application August 27, 1954, Serial No. 32,052
Term of patent 14 years
(Cl. D15—1)



177,761
COMBINED CAN AND CLOSURE CAP THEREFOR
Herman E. Reinhardt, Hasbrouck Heights, N. J., assignor to Boyle-Midway Inc., New York, N. Y., a corporation of Delaware
Application August 13, 1954, Serial No. 31,866
Term of patent 14 years
(Cl. D58—17)



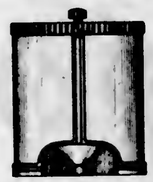
177,762
CEMETERY MEMORIAL PLAQUE OR THE LIKE
Robert J. Rettman, Pittsburgh, Pa., assignor to Jas. H. Matthews & Co., Pittsburgh, Pa., a corporation of Pennsylvania
Application November 17, 1954, Serial No. 33,133
Term of patent 14 years
(Cl. D79—2)



177,763
CEMETERY MEMORIAL PLAQUE OR THE LIKE
Robert J. Rettman, Pittsburgh, Pa., assignor to Jas. H. Matthews & Co., Pittsburgh, Pa., a corporation of Pennsylvania
Application November 17, 1954, Serial No. 33,135
Term of patent 14 years
(Cl. D79—2)



177,764
DISPENSER FOR POWDERED MATERIAL
Fred R. Richards, Denver, Colo., and Warren G. Richards, Arroyo Grande, Calif.
Application April 28, 1955, Serial No. 35,716
Term of patent 14 years
(Cl. D52—1)



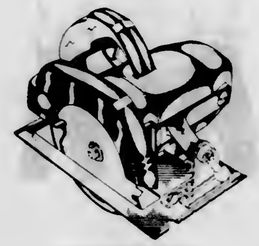
177,765
HYDRAULIC CHAIR FOR HAIRDRESSERS OR THE LIKE
Leopold S. Romito, Ravenna, Ohio
Application May 11, 1955, Serial No. 35,931
Term of patent 14 years
(Cl. D15—3)



177,766
AUTOMOBILE TAIL LAMP
Joseph R. Schemansky, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 27, 1955, Serial No. 39,469
Term of patent 7 years
(Cl. D48—32)



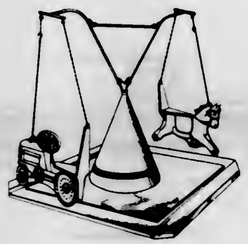
177,767
PORTABLE ELECTRIC SAW
George C. Seeger, Skokie, Ill., assignor to John Oster Manufacturing Company, Milwaukee, Wis., a corporation of Wisconsin
Application May 19, 1955, Serial No. 36,123
Term of patent 14 years
(Cl. D93—3)



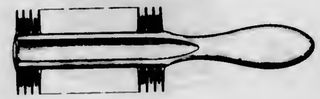
177,768
COMBINED BILLFOLD AND CARD CASE
Orval C. Sheetz, Cape Girardeau, Mo., assignor to Clarence Whitman & Sons, Inc., St. Louis, Mo., a corporation of Pennsylvania
Application October 14, 1955, Serial No. 38,372
Term of patent 14 years
(Cl. D87—3)



177,769
CHILDREN'S MERRY-GO-ROUND
Isaac Z. Smoker, Intercourse, Pa.
Application March 4, 1955, Serial No. 34,868
Term of patent 14 years
(Cl. D34—5)



177,770
HAIRBRUSH OR SIMILAR ARTICLE
Nathan L. Solomon, Englewood, N. J.
Application November 22, 1955, Serial No. 38,987
Term of patent 14 years
(Cl. D86—10)



177,771
FOUNDATION GARMENT
Alice Christina Sperandeoni, Valhalla, N. Y.
Application December 1, 1955, Serial No. 39,128
Term of patent 14 years
(Cl. D3—17)



177,772
TANK TRAILER
Clifford Brooks Stevens, Milwaukee, Wis., assignor to The Heil Co., Milwaukee, Wis., a corporation of Wisconsin
Application November 14, 1955, Serial No. 38,880
Term of patent 14 years
(Cl. D14—3)



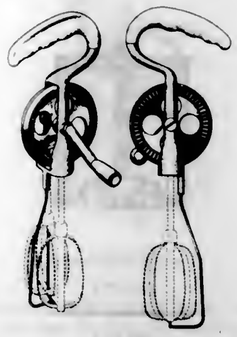
177,773
TRUCK
Luther W. Stier, Rochester, and Charles M. Jordan, Birmingham, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 26, 1955, Serial No. 36,236
Term of patent 7 years
(Cl. D14—3)



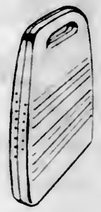
177,774
STOPPER OR SIMILAR ARTICLE
Roy E. Stroup, St. Joseph County, Ind.
Application August 8, 1955, Serial No. 37,374
Term of patent 7 years
(Cl. D58—10)



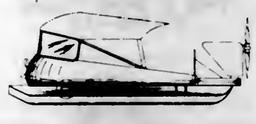
177,775
FOOD MIXER
Henry J. Talge, Kansas City, Mo., assignor to John C. Hockery, trustee, Kansas City, Mo.
Application December 15, 1955, Serial No. 39,338
Term of patent 14 years
(Cl. D44—1)



177,776
COMBINATION PORTABLE ELECTRIC COOK-STOVE AND SPACE HEATER
Glenn W. Tammen, Park Ridge, Ill., assignor to St. Joe Machines, Inc., St. Joseph, Mich., a corporation of Michigan
Application October 28, 1955, Serial No. 38,627
Term of patent 14 years
(Cl. D81—10)



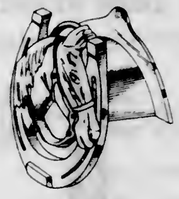
177,777
CONVERTIBLE LAND AND WATER CRAFT
Wilbur I. Thelen, Grand Ledge, Mich., assignor to Arthur Thelen, Fowler, Mich.
Application March 24, 1955, Serial No. 35,183
Term of patent 14 years
(Cl. D71—1)



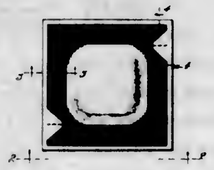
177,778
COMBINED SLICER AND FORK
Earl S. Tupper, Smithfield, R. I.
Application May 23, 1955, Serial No. 36,148
Term of patent 14 years
(Cl. D44—29)



177,779
WALL MOUNTED DEVICE FOR SUPPORTING ARTICLES DRAPED THEREON
George W. Turner, Youngstown, and Howard F. Herman, North Jackson, Ohio
Application June 29, 1955, Serial No. 36,756
Term of patent 7 years
(Cl. D33—8)



177,780
CRIMP-SEALED PACKAGE OR SIMILAR ARTICLE
Lloyd I. Volckening, Glen Ridge, N. J., assignor to Ivers-Lee Company, Newark, N. J., a corporation of New Jersey
Application January 21, 1953, Serial No. 23,241
Term of patent 14 years
(Cl. D58—2)



177,781
TABLECLOTH
Thelma Waldman, Philadelphia, Pa., assignor to Quaker Lace Company, Philadelphia, Pa.
Application July 6, 1955, Serial No. 36,838
Term of patent 7 years
(Cl. D92—26)



177,782
TABLECLOTH
Thelma Waldman, Philadelphia, Pa., assignor to Mayfair Mills, Inc., Philadelphia, Pa.
Application December 7, 1955, Serial No. 39,202
Term of patent 7 years
(Cl. D92—26)



177,783
ADJUSTABLE RECLINING CHAIR
James C. Witty, Troy, Ohio, assignor to The Troy Sunshade Company, Troy, Ohio, a corporation of Ohio
Application October 15, 1954, Serial No. 32,686
Term of patent 7 years
(Cl. D15—11)



177,784
WRAPPING PAPER OR SIMILAR ARTICLE
Walter L. Wolf, Philadelphia, Pa., assignor to Wolf Brothers, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application April 30, 1954, Serial No. 30,286
Term of patent 14 years
(Cl. D59—5)



177,785
TABLECLOTH
William Wolf, Philadelphia, Pa., assignor to Quaker Lace Company, Philadelphia, Pa.
Application July 6, 1955, Serial No. 36,839
Term of patent 7 years
(Cl. D92—26)



177,786
TABLECLOTH
William Wolf, Philadelphia, Pa., assignor to Quaker Lace Company, Philadelphia, Pa.
Application July 6, 1955, Serial No. 36,840
Term of patent 7 years
(Cl. D92—26)



177,787
LIPSTICK CONTAINER
Raymond W. Wolff, Bridgeport, Conn., assignor to Revlon, Inc., New York, N. Y., a corporation of Delaware
Application February 28, 1956, Serial No. 40,398
Term of patent 14 years
(Cl. D86—10)



LIST OF REISSUE PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 22ND DAY OF MAY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

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Andersen, Clifford W., to The Rudolph Wurlitzer Co. Piano. 177,705, 5-22-56, Cl. D56—9.

Andersen, Clifford W., to The Rudolph Wurlitzer Co. Piano. 177,706, 5-22-56, Cl. D56—9.

Andersen, Clifford W., to The Rudolph Wurlitzer Co. Piano. 177,707, 5-22-56, Cl. D56—9.

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Barrick, Joe E. Stringed musical instrument. 177,709, 5-22-56, Cl. D56—9.

Bird, Alyce L. Combined can opener and measuring cup. 177,710, 5-22-56, Cl. D44—29.

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Parker, Edwin L. 177,752.

Blumberg, Stanley A. Windshield. 177,711, 5-22-56, Cl. D14—6.

Boydston, Billie R. Hat. 177,712, 5-22-56, Cl. D3—13.

Boyle-Midway Inc.: *See*—
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BullDog Electric Products Co.: *See*—
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Casey, Eugene J.: *See*—
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Cataldo, John B.: *See*—
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Inoue, Takeshi, to Noritake Co., Inc. Plate or similar article. 177,733, 5-22-56, Cl. D44—15.

Inoue, Takeshi, to Noritake Co., Inc. Plate or similar article. 177,734, 5-22-56, Cl. D44—15.

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Leverence, Stanley J. Eyeglass holder. 177,741, 5-22-56, Cl. D57—1.

Marx, Irwin M. Device for testing gas lines. 177,742, 5-22-56, Cl. D52—1.

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Inoue, Takeshi. 177,734.
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Peterson, Francis C. Restaurant building. 177,755, 5–22–56, Cl. D13—1.
Peterson, Matt E., and D. R. Randall. Christmas tree stand. 177,756, 5–22–56, Cl. D35—3.
Petrick, Edward J. Lamp holder. 177,757, 5–22–56, Cl. D48—20.
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Rettman, Robert J., to Jas. H. Matthews & Co. Cemetery memorial plaque or the like. 177,763, 5–22–56, Cl. D79—2.
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Stroup, Roy E. Stopper or similar article. 177,774, 5–22–56, Cl. D58—10.
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Andersen, Clifford W. 177,706.
Andersen, Clifford W. 177,707.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 22ND DAY OF MAY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Abbett, Roy C., to Radio Corp. of America. Radio frequency amplifier system. 2,747,029, 5–22–56, Cl. 179—171.
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Bruce, William F., and Tislow. 2,746,901.
Lee, Samuel. 2,746,866.
American Meat Institute Foundation: *See*—
Kraybill, Henry R. 2,746,870.
American Steel Foundries: *See*—
Tack, Carl E. 2,746,572.
American Viscose Corp.: *See*—
Wollett, Ernest S. 2,746,224.
Ammon, Roscoe A. Sealed instrument case. 2,746,635, 5–22–56, Cl. 220—18.
Amore, Leo J., to Philco Corp. Cabinet construction. 2,746,828, 5–22–56, Cl. 312—214.
Ampex Corp.: *See*—
Selsted, Walter T. 2,747,025.
Anchor Mfg. Co.: *See*—
Johansson, Ernest G. 2,747,049.
Johansson, Ernest G. 2,747,050.
Andersen, Harold. Reversible ratchet wrench with supplementary drive means. 2,746,331, 5–22–56, Cl. 81—58.1.
Anderson, Alva E., to Bell Telephone Laboratories, Inc. Conditioning of semiconductor translators. 2,746,121, 5–22–56, Cl. 29—25.3.
Anderson, Donald C., to The Procter & Gamble Co. Carton feeding and squaring-up device. 2,746,363, 5–22–56, Cl. 93—53.
Anderson, Jack M.: *See*—
Anderson, Oscar W. and J. M. 2,746,253.
Anderson, John, to Gait Anderson Co. Clock and casing therefor. 2,746,237, 5–22–56, Cl. 58—56.
Anderson, Lindson P.: *See*—
Sifferd, Robert H., and Anderson. 2,746,903.
Anderson, Oscar W. and J. M. Brake fluid level control devices. 2,746,253, 5–22–56, Cl. 60—54.6.
Angelus Sanitary Can Machine Co.: *See*—
Peterson, William B., Jr. 2,746,413.
Archer, Irving M. Dough rolling mechanism of a dough molding machine. 2,746,401, 5–22–56, Cl. 107—9.
Arena, Joseph P. Socket for electric light bulbs. 2,747,168, 5–22–56, Cl. 339—176.
Armco Steel Corp.: *See*—
Hoover, George R. 2,746,090.
Armento, William H., to General Aniline & Film Corp. Manufacture of azo dyestuffs. 2,746,955, 5–22–56, Cl. 260—175.
Armour and Co.: *See*—
Lolli, August L. 2,746,949.
Lolli, August L. 2,746,950.
Sifferd, Robert H., and Anderson. 2,746,903.
Sifferd, Robert H., and Svara. 2,746,977.
Armour Research Foundation of Illinois Institute of Technology: *See*—
Camras, Marvin. 2,747,026.
Camras, Marvin. 2,747,027.
Army, United States of America as represented by the Secretary of the: *See*—
Dixon, Paul H. 2,746,357.
Todd, Francis C., and Lusk. 2,747,123.
Arnold, William H., and S. H. Cottrell, to Clark Equipment Co. Water muffler. 2,746,560, 5–22–56, Cl. 181—52.
Arrow-Hart & Hegeman Electric Co., The: *See*—
Schleicher, Harold E. 2,747,047.
Artzt, William W., to Trimless, Inc. Steaming attachment for cloth spreading machines. 2,746,278, 5–22–56, Cl. 68—5.
Arundale, Erving, to Esso Research and Engineering Co. Sweetening process using an aldehyde and a solid acid catalyst. 2,746,908, 5–22–56, Cl. 196—35.
Ashton, Benjamin N., to Electrol Inc. Self-contained power actuator. 2,746,251, 5–22–56, Cl. 60—52.
Ashton, Benjamin N., to Electrol Inc. Accumulator. 2,746,485, 5–22–56, Cl. 138—31.
Atchison, Leonard W., to General Electric Co. Defrosting arrangements for refrigerating systems. 2,746,270, 5–22–56, Cl. 62—126.
Atlantic Carton Corp.: *See*—
Turner, Walter E., and Whitehead. 2,746,639.
Atlantic Products Corp.: *See*—
Cart, Theodore S. 2,746,582.
Atlas Powder Co.: *See*—
Gross, Sherwood T., and Griffin. 2,746,868.
Attura, George M. Instrument and method for checking the performance of servomechanisms and automatic control systems. 2,747,162, 5–22–56, Cl. 324—158.
Auderheide, Richard H., to Rex Metal-Craft, Inc. Filter clogging indicator. 2,746,416, 5–22–56, Cl. 116—117.
Augustin, Darold A., to Bendix-Westinghouse Automotive Air Brake Co. Power steering apparatus. 2,746,557, 5–22–56, Cl. 180—79.2.
Ausmus, Bernell L. Fire hose holder and clamp. 2,746,064, 5–22–56, Cl. 7—4.
Automatic Tow Bar Co., Inc.: *See*—
Gross, Arthur R. 2,746,771.
Autoyer Co., Inc., The: *See*—
Gleeker, William C., and Britton. 2,746,915.
Aversten, Karl J. Electric welding and soldering gun. 2,747,062, 5–22–56, Cl. 219—4.
Ayensa, Robustiano G. Valves for watercloset tanks and mechanism for operating same. 2,746,059, 5–22–56, Cl. 4—53.
Ayers, Roy E. Harvester machine and sickle guard extension therefor. 2,746,231, 5–22–56, Cl. 56—318.

Ayres, Waldemar A., to White Sewing Machine Corp. Sewing machine. 2,746,407, 5–22–56, Cl. 112—228.

Ayres, Waldemar A., to White Sewing Machine Corp. Sewing machine. 2,746,408, 5–22–56, Cl. 112—229.

Asgapetian, Victor, and J. Worthing, to Servomechanisms, Inc. Frequency responsive device and system employing the same. 2,747,149, 5–22–56, Cl. 318—29.

B. B. Chemical Co.: *See*—
Paulsen, Hans C. 2,746,067.
Perkins, John L. 2,746,179.

Babcock & Wilcox Co., The: *See*—
McCullough, James D. 2,746,405.
Ratcliffe, Temple W. 2,746,105.

Babcock, William J. Telescoped driving connection for power tools. 2,746,493, 5–22–56, Cl. 143—68.

Bachman, George S.: *See*—
Fitzgerald, John V., and Barbman. 2,747,105.

Baker & Co., Inc.: *See*—
Kucaynski, Walter J., and Lehmann. 2,747,143.

Baker, John H., to General Electric Co. Reaction power plant variable discharge area nozzle control system. 2,746,244, 5–22–56, Cl. 60—35.6.

Bakke, Hans A., and S. Gabrielson, to General Electric Co. Sealed operating mechanism. 2,746,302, 5–22–56, Cl. 74—18.1.

Bakker, Willem, to American Enka Corp. Thread drying apparatus. 2,746,169, 5–22–56, Cl. 34—68.

Ballou, Richard P., to Federal Electric Products Co. Electric switches. 2,747,060, 5–22–56, Cl. 200—170.

Balsley, Denver C.: *See*—
Abbott, Fredric M., Balsley, and Bamesberger. 2,746,375.

Baltimore Paper Box Co., The: *See*—
Riley, Melvin A. 2,746,666.

Bamesberger, Henry F.: *See*—
Abbott, Fredric M., Balsley, and Balnesberger. 2,746,375.

Bamford, Arthur P., to E. G. Staude Mfg. Co., Inc. Printing cylinder elevating means. 2,746,386, 5–22–56, Cl. 101—153.

Band-It Co.: *See*—
Beardsley, Harold H. 2,746,324.
Mahn, Holbrook. 2,746,107.

Barbera, Richard J. Christmas tree stand. 2,746,700, 5–22–56, Cl. 248—44.

Barényi, Béla, to Daimler-Benz Aktiengesellschaft. Motor vehicle equipped with a defrosting system. 2,746,099, 5–22–56, Cl. 20—40.5.

Bargehr, Robert. Electric heating element. 2,747,070, 5–22–56, Cl. 219—19.

Barker, A. Lincoln. Easel assembly. 2,746,202, 5–22–56, Cl. 45—129.

Barkley, Dwight W., to Libbey-Owens-Ford Glass Co. Rear-view mirror. 2,746,354, 5–22–56, Cl. 88—77.

Barnard, Randolph H., to L. O. F. Glass Fibers Co. Method and apparatus for high frequency preparation of molten glass. 2,747,006, 5–22–56, Cl. 13—6.

Barron, James T., J. J. Dill, and J. H. Hotelling, to Brown & Sharpe Mfg. Co. Loading device for automatic screw and similar machines. 2,746,128, 5–22–56, Cl. 29—93.

Barroso, Alberto M. Apparatus for cleaning the evaporators used in the sugar industry. 2,746,535, 5–22–56, Cl. 159—1.

Barry, Arthur J., to Dow Corning Corp. Siloxane-silicate compositions. 2,746,926, 5–22–56, Cl. 252—78.

Bass, George H. Bulletin board word elements. 2,746,189, 5–22–56, Cl. 40—143.

Batcheller, Hugh W., to Kent Mfg. Corp. Connector member with resilient center. 2,747,170, 5–22–56, Cl. 339—258.

Battey, Alfred P., to R. Hoe & Co. Inc. Apparatus to maintain the top of a pile of sheets at a sensibly constant height. 2,746,753, 5–22–56, Cl. 271—31.

Baudat, Andre A.: *See*—
Swenson, Harvey F., Baudat, and Ryder. 2,746,730.

Baum, Harold M., to Warner-Lambert Pharmaceutical Co. Dehydroacetic acid dental compositions. 2,746,905, 5–22–56, Cl. 167—93.

Baum, Robert A. Treatment of liquids by means of dissolved gases. 2,746,605, 5–22–56, Cl. 210—53.

Bayley, Abraham, and W. M. McLamore, to Chas. Pfizer & Co., Inc. Hypnotic agent and method of making the same. 2,746,900, 5–22–56, Cl. 167—52.

Baxter, Floy. Ice cream mold. 2,746,402, 5–22–56, Cl. 107—19.

Baxter, Lee G., F. R. Smith, and A. L. Mottet; said Smith and said Mottet assors. to The Long-Bell Lumber Co. Felting apparatus. 2,746,096, 5–22–56, Cl. 19—155.

Bayhi, Joseph F., to Esso Research and Engineering Co. Geophone arrangement for seismic prospecting. 2,747,172, 5–22–56, Cl. 340—15.

Beach, Clarence E.: *See*—
Stratton, Robert R., and Munger. 2,746,679.

Beard, Donald M., P. P. Bruce, and K. Kriegsmann. Shoulder camera mount. 2,746,369, 5–22–56, Cl. 95—86.

Beardsley, Harold H., to Band-It Co. Tool for applying pressure clamps. 2,746,324, 5–22–56, Cl. 81—9.3.

Beautiful Bryans, Inc.: *See*—
Cobert, Arthur J. 2,746,275.

Beaver, David J., to Monsanto Chemical Co. Manufacture of cellular articles. 2,746,939, 5–22–56, Cl. 260—2.5.

Beber, Oral L., and B. B. Woerts, to The Pure Oil Co. Method and apparatus for cleaning filters in vapor systems of catalytic reactions. 2,746,561, 5–22–56, Cl. 183—61.

Beckman Instruments, Inc.: *See*—
McCord, Howard B., and McAllister. 2,746,417.

Bedford, William A., Jr., to United-Carr Fastener Corp. Panel engaging fastening device. 2,746,110, 5–22–56, Cl. 24—73.

Beers, Gerardus M. P. A., to Hartford National Bank and Trust Co., as trustee. Construction elements for contact banks in automatic telephone systems. 2,747,144, 5–22–56, Cl. 317—112.

Belek, Emil, to Bell Telephone Laboratories, Inc. Wire wrapping tool for coated wire. 2,746,124, 5–22–56, Cl. 29—33.

Bell Punch Co. Ltd.: *See*—
Howarth, Arthur N. 2,747,173.

Bell Telephone Laboratories, Inc.: *See*—
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Belek, Emil. 2,746,124.
Bostwick, Lee G. 2,747,092.
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Frants, Glenn R. 2,747,163.
Goddard, Charles T., and Wittwer. 2,747,138.
Kock, Winston E. 2,747,184.
Potter, James L. 2,747,159.

Bellringer, Frederick J., to The Distillers Co., Ltd. Manufacture of hydrogen cyanide. 2,746,843, 5–22–56, Cl. 23—151

Belser, Richard B., to The Georgia Tech Research Institute. Method of soldering to thin metallic films and to non-metallic substances. 2,746,140, 5–22–56, Cl. 29—471.1

Belser, Richard B., to The Georgia Tech Research Institute. Method of coating siliceous material with indium. 2,746,886, 5–22–56, Cl. 117—128.

Bendix Aviation Corp.: *See*—
Alexander, William G., and Harden. 2,747,178.
Bevins, James E. 2,746,247.
Bevins, James E. 2,746,294.
Brockway, Arthur L., Jr. 2,747,096.
Hastings, Donald F. 2,746,573.
Hunt, Scott F. 2,746,439.
Naldich, Herbert H. 2,747,097.
Tognola, Tullio, 2,747,123.

Bendix-Westinghouse Automotive Air Brake Co.: *See*—
Augustin, Darold A. 2,746,557.
Fitch, Ellery B., and Ralston. 2,746,255.

Benjamin, Judson E., to General Precision Laboratory Inc. Rotational storage device. 2,746,818, 5–22–56, Cl. 74—665.

Bennett, Orvan J. Water tank flush valve. 2,746,061, 5–22–56, Cl. 4—67.

Benson, Arthur E., to United States Rubber Co. Pneumatic track. 2,746,811, 5–22–56, Cl. 305—10.

Bens, Leonhardt W. Structural unit. 2,746,580, 5–22–56, Cl. 189—37.

Berger, C. L., & Sons, Inc.: *See*—
Churgin, Leopold, and Grundberg. 2,746,155.

Bergsten, Mary E.: *See*—
Bergsten, Ralph A. 2,746,373.

Bergsten, Peter A.: *See*—
Bergsten, Ralph A. 2,746,373.

Bergsten, Ralph A., ⅓ to M. E. Bergsten and ⅓ to P. A. Bergsten. Window guard and ventilator. 2,746,373, 5–22–56, Cl. 98—98.

Berkepeis, Lukas, to American Enka Corp. Cone holding apparatus. 2,746,689, 5–22–56, Cl. 242—46.3.

Berry, Eugene G.: *See*—
Selzer, Andrew H., Berry, and Williams. 2,746,736.
Selzer, Andrew H., Berry, and Williams. 2,746,865.

Bethlehem Steel Co.: *See*—
Mancke, Edgar B. 2,746,856.

Betts, Ross C.: *See*—
Woehlert, Walter E., and Betts. 2,746,359.

Bevins, James E., to Bendix Aviation Corp. Fuel control and regulating system for turbojet and turboprop engines. 2,746,247, 5–22–56, Cl. 60—39.28.

Bevins, James E., to Bendix Aviation Corp. Fluid pressure responsive measuring apparatus. 2,746,294, 5–22–56, Cl. 73—397.

Bichowsky, Francis R., and R. H. Canfield. Spaced wall combustion apparatus. 2,746,249, 5–22–56, Cl. 60—39.46.

Bick, Hans C., Inc.: *See*—
Horn, Robert S., Jr., and Patt. 2,746,941.

Bicknell, Alfred, Associates, Inc.: *See*—
Keyes, Frederick G. 2,746,264.

Biddulph, Maurice, to Universal Metal Products Ltd. Machine for coating, printing, and drying tubular containers. 2,746,421, 5–22–56, Cl. 118—46.

Biegert, George, to Mergenthaler Linotype Co. Punch and die machine for performing both blanking and trimming operations. 2,746,542, 5–22–56, Cl. 164—21.

Biel, John H., to Lakeside Laboratories, Inc. Dicarboxylic acid esters of N-alkyl-3-hydroxy-piperidine and salts thereof. 2,746,964, 5–22–56, Cl. 260—294.8.

Biel, John H., to Lakeside Laboratories, Inc. Bis-(N-substituted-3-carbamyloxy-piperidinium) alkanes. 2,746,965, 5–22–56, Cl. 260—294.3.

Biel, John H., to Lakeside Laboratories, Inc. Esters of bis-(N - substituted - 3 - hydroxy - piperidinium) alkanes. 2,746,966, 5–22–56, Cl. 260—294.8.

Biel, John H., to Lakeside Laboratories, Inc. Derivatives of bis - (N-substituted - 3 - hydroxy - piperidinium) alkanes. 2,746,967, Cl. 260—294.7.

Billian, Carroll J., to Owens-Illinois Glass Co. Decorating glassware by high energy radiation. 2,746,193, 5–22–56, Cl. 41—17.

Bily, Peter J., to Chiksan Co. Safety fitting for fluid handling structure. 2,746,773, 5–22–56, Cl. 285—1.

Binder, Richard, to Fichtel & Sachs A. G. Centrifugal clutches 2,746,585, 5–22–56, Cl. 192—48.

Binder, William O., F. C. Kroft, Jr., and G. A. Fritzlen, to Union Carbide and Carbon Corp. High temperature Co-Cr alloys. 2,746,860, 5–22–56, Cl. 75—171.

Bird, Stanley P., to Breeze Corporations, Inc. Shielding efficiency measuring device. 2,747,160, 5–22–56, Cl. 324—58.

Bisharat, Maurice H. Instrument support. 2,746,336, 5–22–56, Cl. 84—280.

Bissell, Joshua H.: *See*—
Felton, Frederick D., and Bissell. 2,746,827.

Bixler, Roy R. Nail clam. 2,746,788, 5–22–56, Cl. 294—117.

Blakeslee, Clinton A., to The Bristol Co. Recording and indicating or controlling instrument. 2,746,832, 5–22–56, Cl. 346—17.

Blattner, Emil H., to The Symington-Gould Corp. Snubber. 2,746,744, 5–22–56, Cl. 267—9.

Blevins, Eugene A., to American Blower Corp. Crane hoist mechanism. 2,746,583, 5–22–56, Cl. 192—2.

Bloch, Herman S., and G. L. Hervert, to Universal Oil Products Co. Production of alumina. 2,746,842, 5–22–56, Cl. 23—143.

Blomeley, Ralph. Insulating structure. 2,746,578, 5–22–56, Cl. 189—34.

Blondelle, Raymond, to Compagnie de Fives-Lille pour Constructions Mechaniques et Entreprises. Separation of solid substances of different densities. 2,746,603, 5–22–56, Cl. 209—172.5.

Blume, Carl T., to Raytheon Mfg. Co. Flasher switches. 2,747,052 5–22–56, Cl. 200—113.

Bobel, William S.: *See*—
Englehart, Oscar D., and Bobel. 2,746,102.

Bocchino, Ernest. Device for treating corns and callouses. 2,746,461, 5–22–56, Cl. 132—74.5.

Boller, Leo: *See*—
Dreyer, Helmut, and Boller. 2,747,161.

Bond, Scott R., to H. K. Lorentzen, Inc. Shock-resistant case and seal therefor. 2,746,824, 5–22–56, Cl. 312—7.

Booth, Ernest G., Sr. Spark plugs. 2,747,122, 5–22–56, Cl. 313—124.

Booth, Herbert G., to David Traum Co., Inc. Utility knife. 2,746,147, 5–22–56, Cl. 30—339.

Borax Consolidated, Ltd.: *See*—
Taylor, Donald S. 2,746,841.

Borg-Warner Corp.: *See*—
Oliver, Delbert S. 2,746,132.

Borrowdale, Orville J. Device for facilitating the unloading of material from a hopper. 2,746,617, 5–22–56, Cl. 214—17.

Bosch, Robert G. m. b. H.: *See*—
Voit, Willy. 2,746,800.

Bostwick, Lee G., to Bell Telephone Laboratories, Inc. Vibrating reed oscillator of the contact type. 2,747,092. 5–22–56, Cl. 250—36.

Bottcher, George I., to Allegheny Ludlum Steel Corp. Scrap charging bucket. 2,746,787. 5–22–56, Cl. 294—71.

Boucke, Heinz to Radio Patents Co. Translation of electrical reactance value. 2,747,095, 5-22-56, Cl. 250—36.

Bourdon, Pierre M., to Compagnie Generale des Etablissements Michelin. Detachable wheels for vehicles. 2,746,804, 5–22–56, Cl. 301—9.

Bowes, Thomas D.: *See*—
Schulte, Frits. 2,747,115.

Bowie, Frank W., and E. N. Sturdevant, to F. W. Bowie. Cylindrical grinding attachment for surface grinders. 2,746,218. 5–22–56, Cl. 51—237.

Bowser, Inc.: *See*—
Damon, Robert H. 2,746,745.

Bowser, Phillip C., to General Motors Corp. Wheel hop damper attachment for vehicle road wheels. 2,746,768. 5–22–56, Cl. 280—150.

Brace, Porter H., to the United States of America as represented by the Secretary of the Navy. Heat treating apparatus. 2,747,066, 5–22–56, Cl. 219—10.43.

Bradford, James H., ½ to Combined Metals Reduction Co. Material mixing burner for processing furnaces. 2,746,735, 5–22–56, Cl. 263—21.

Bradley, Robert O., and F. C. Carroll, to Toledo Scale Co. Printing weighing scale. 2,746,884, 5–22–56, Cl. 101—93.

Bradshaw, Thomas L. Self-cleaning grain gate construction. 2,746,656, 5–22–56, Cl. 222—561.

Braendle, Richard O., to E. I. du Pont de Nemours and Co. Esterail-thickened lubricating composition modified with hydrogen-bonding donor compound and process of making. 2,746,922, 5–22–56, Cl. 252—28.

Braet, John O.: *See*—
Sorensen, Knud B., and Braet. 2,746,770.

Bramel, Hadley R. Separating apparatus. 2,746,602, 5–22–56, Cl. 209—132.

Bramming, Carl, to Aladdin Industries, Inc. Flexible bottle closure. 2,746,632, 5–22–56, Cl. 215—52.

Brand, David, and M. Broedy; said Broedy assignor to said Brand. Child's feeding table and chair assembly. 2,746,524, 5–22–56, Cl. 155—123.

Brandt, Gustaf E., to Aktiebolaget Tudor. Electrode for galvanic cells. 2,747,007, 5–22–56, Cl. 136—14.

Branthoover, Harold, to Donovan Steel Pickling Co. Apparatus for unwinding coils. 2,746,511, 5–22–56, Cl. 153—54.

Bray Oil Co.: *See*—
Bray, Ulric B. 2,746,980.
Bray, Ulric B. 2,746,987.

Bray, Ulric B., to Bray Oil Co. Production of mahogany sulfonates. 2,746,980, 5–22–56, Cl. 260—429.9.

Bray, Ulric B., to Bray Oil Co. Sulfonate manufacture. 2,746,987, 5–22–56, Cl. 260—504.

Breeze Corporations, Inc.: *See*—
Bird, Stanley P. 2,747,160.

Brehm, Charles M., to Kelsey-Hayes Wheel Co. Die assembly in apparatus for trimming tubular pieces. 2,746,544, 5–22–56, Cl. 164—48.

Breier, Marcus I., to Marcus Breier Sons, Inc. Hem construction for garments. 2,746,057, 5–22–56, Cl. 2—243.

Breier, Marcus, Sons, Inc.: *See*—
Breier, Marcus I. 2,746,057.

Breisch, John H. Grinding wheel. 2,746,217, 5–22–56, Cl. 51—206.5.

Brelsford, Charles G., to Kelsey-Hayes Wheel Co. Oil burner. 2,746,531, 5–22–56, Cl. 158—76.

Brennecke, Arthur M., to Perfect Circle Corp. Piston ring. 2,746,820, 5–22–56, Cl. 309—45.

Brepson, Roland: *See*—
Drisch, Nicolas, and Brepson. 2,746,281.

Brickman, A. W., trustee: *See*—
Kraybill, Henry R. 2,746,870.

Bridgeport Brass Co.: *See*—
Efford, John T., and Mottram. 2,746,647.

Briggs, Southwick W. Filter element and method of making same. 2,746,608, 5–22–56, Cl. 210—205.

Bright, Stanley, Jr., to Troth Bright Page, Inc. Apparatus and method for making folding plastic containers. 2,746,360, 5–22–56, Cl. 93—36.

Bright, Thomas J. R. Draught excluding strips, beadings, mouldings and the like. 2,746,103, 5–22–56, Cl. 20—69.

Bristol Co., The: *See*—
Blakeslee, Clinton A. 2,746,832.

Britton, Carlyle P., J. T. Elker 3d, E. T. Ellis, and R. M. Lester, Jr., to E. I. du Pont de Nemours & Co. Process of web drying. 2,746,167, 5–22–56, Cl. 34—41.

Britton, Richard K.: *See*—
Gieseker, William C., and Britton. 2,746,915.

Broad Street Machine Co.: *See*—
Passons, Erby L. 2,746,410.

Brockway, Arthur L., Jr., to Bendix Aviation Corp. Pulse repetition frequency doubling circuit. 2,747,096, 5–22–56, Cl. 250—36.

Brodsky, Harry N., and B. H. Chamberlin; said Brodsky assor. to Riverside Mfg. & Electrical Supply Co., Inc., and said Chamberlin assor. to Cutler-Hammer, Inc. Fluid-tight electric switches and waterproof separable conductor connecting means therefor. 2,747,036, 5–22–56, Cl. 200—51.

Broedy, Morris: *See*—
Brand, David, and Broedy. 2,746,524.

Bromo-Mint Co., Inc.: *See*—
Steiner, Robert L. 2,746,644.

Brooks, Ernest G., and J. E. Cooper, to Thomas De La Rue & Co. Ltd. Safety control means for gas appliances. 2,746,534, 5–22–56, Cl. 158—129.

Brouwer, Benjamin W., and R. F. Dion, to Crompton & Knowles Loom Works. Checking means for loom picking mechanism. 2,746,487, 5–22–56, Cl. 139—147.

Brown, Boveri & Cie Aktiengesellschaft: *See*—
Katzenberger, Bernhard, and von Cube. 2,746,259.

Brown-Bridge Mills, Inc., The: *See*—
Holt, Frederick W., Jr. 2,746,885.

Brown, David, J. W. Colton, and R. Landau, to Chempatents, Inc. Chlorination process. 2,746,998, 5–22–56, Cl. 260—654.

Brown, Enoch N. Sectional ironing board. 2,746,186, 5–22–56, Cl. 38—138.

Brown, Robert, and T. Edwards, to City Tank Corp. Pump and motor hydraulic transmission and pressure responsive servo-motor control means for the prime mover thereof. 2,746,240, 5–22–56, Cl. 60—19.

Brown & Sharpe Mfg. Co.: *See*—
Barron, James T., Dill, and Hotelling. 2,746,128.

Bruce, Peter P.: *See*—
Beard, Donald M., Bruce, and Kriegsmann. 2,746,369.

Bruce, William F., and R. F. Tislow, to American Home Products Corp. Glycinamide salts. 2,746,901, 5–22–56, Cl. 167—65.

Bruce, William F., R. S. Hanslick, and M. E. Freed, to American Home Products Corp. Diphenylethylene diamine-penicillin salt. 2,746,959, 5–22–56, Cl. 260—239.1.

Brucker, Milton, to Zenith Plastics Co. Radar reflector. 2,747,180. 5–22–56, Cl. 343—18.

Brügger, Albert. Thread guide for winding machines. 2,746,688, 5–22–56, Cl. 242—43.

Brune, Jean E. P., to Lignes Telegraphiques & Telephoniques. Selective receiving device for ringing signals of telecommunication systems. 2,747,175, 5–22–56, Cl. 340—164.

Brunhoff Mfg. Co., The: *See*—
Sand, Carl A. 2,746,823.

Brunner, Joseph F., Jr., to Kay-Brunner Steel Products, Inc. Sealing device for relatively rotatable parts. 2,746,776, 5–22–56, Cl. 286—5.

Bryson, James L., to Bryson Mfg. Co., Inc. Clutch control device for sewing machines. 2,746,588, 5–22–56, Cl. 192—129.

Bryson Mfg. Co., Inc.: *See*—
Bryson, James L. 2,746,588.

Buckley, Francis T., to Monsanto Chemical Co. Modified polyvinyl acetal resin compositions. 2,746,945, 5–22–56, Cl. 260—45.7.

Buckwalter, Howard M., and J. M. Almand, to United States Rubber Co. Dry adhesion method for adhering textile material to rubber. 2,746,898, 5–22–56, Cl. 154—139.

Budai, Steve G., to The Globe-Wernicke Co. Structural fastener elements. 2,746,109, 5–22–56, Cl. 24—73.

Budd Co., The: *See*—
Ridway, Edmund T. 2,746,789.

Budnick, Arno A., to Schiess A. G. Setting gauge for toothed wheels. 2,746,161, 5–22–56, Cl. 33—185.

Bundy Tubing Co.: *See*—
Hobrock, Raymond H. 2,746,141.

Burckhalter, Joseph H., to Parke, Davis & Co. Substituted chloroquinolinol compounds. 2,746,963, 5–22–56, Cl. 260—286.

Burkart, Owen. Clamp for holding strip material on pad. 2,746,215, 5–22–56, Cl. 51—189.

Burnham, Margaret M.: *See*—
Wagner, George H., and Burnham. 2,746,981.

Burroughs Corp.: *See*—
Jones, John P. 2,747,110.
Parker, Charles A., and Rainey. 2,746,381.

Burroughs Wellcome & Co. (U. S. A.) Inc.: *See*—
Hitchings, George H., and Elion. 2,746,961.

Butler, Frank D. T-shaped rotor type of, multiple group expansion, opposite dual flow pressure velocity compounded, combustion gas turbine motive power assembly. 2,746,248, 5–22–56, Cl. 60—39.34.

Butler, Henry J., to Dunlop Rubber Co. Ltd. Brake with dust shield. 2,746,577, 5–22–56, Cl. 188—264.

C. V. Machinefabriek H. Vissers: *See*—
Vissers, Herbert. 2,746,650.

Cable Belt Ltd.: *See*—
Thomson, Charles. 2,746,596.

Cahn, Eric P. Air conditioner installation. 2,746,826, 5–22–56, Cl. 312—101.

Caldwell, Donald A.: *See*—
Yowell, Howard L., and Caldwell. 2,746,853.
Yowell, Howard L., and Caldwell. 2,746,854.

California Research Corp.: *See*—
Clark, Calvin M. 2,747,028.
Darragh, John L., and Johnson. 2,746,928.

Campbell, Joseph B., Jr. Liquid level signalling device. 2,746,415, 5–22–56, Cl. 116—109.

Campbell, Leonard R., to The Singer Mfg. Co. Speed control systems for electric sewing motors. 2,747,153, 5–22–56, Cl. 318—331.

Camras, Marvin, to Armour Research Foundation of Illinois Institute of Technology. Recording apparatus and method for making duplicate magnetic records. 2,747,026, 5–22–56, Cl. 179—100.2.

Camras, Marvin, to Armour Research Foundation of Illinois Institute of Technology. Recording apparatus and method for making duplicate magnetic records. 2,747,027, 5–22–56, Cl. 179—100.2.

Canfield, Robert H.: *See*—
Bichowsky, Francis R., and Canfield. 2,746,249.

Cannon, Fred F. Posthole digger. 2,746,720, 5–22–56, Cl. 255—19.

Canton Cast Products Co., The: *See*—
Cole, Ralph N. and W. T. 2,746,108.

Capewell Mfg. Co., The: *See*—
Craven, Wilbur J. 2,746,116.

Caputo, James V., and T. J. Crawford; said Crawford assor. to said Caputo. Welding generator control apparatus. 2,747,155, 5–22–56, Cl. 322—4.

Carlson, Lawrence A., Sr. Duster. 2,746,074, 5–22–56, Cl. 15—210.

Carnes, Hobert J.: *See*—
Rogers, Harlan N. 2,746,197.

Carpenter, Arley D. and J. A. Spring or cushion clamp. 2,746,701, 5–22–56, Cl. 248—73.

Carpenter, John A.: *See*—
Carpenter, Arley D. and J. A. 2,746,701.

Carpenter, Paul G., to Phillips Petroleum Co. Gas lift system. 2,746,395, 5–22–56, Cl. 103—233.

Carpenter, Walter H. Method for holding shrimp. 2,746,272, 5–22–56, Cl. 62—170.

Carroll, Frederick C.: *See*—
Bradley, Robert O., and Carroll. 2,746,384.

Cart, Theodore S., to Atlantic Products Corp. Luggage bags. 2,746,582, 5–22–56, Cl. 190—58.

Carter Carburetor Corp.: *See*—
Henning, Otto. 2,746,606.
Kommer, Fred A., and Zub. 2,747,051.

Carter, Herbert E.: *See*—
Gottlieb, David, and Carter. 2,746,902.

Carter, Norman C., and J. S. Cromeans, to Phillips Petroleum Co. Molybdenum oxide-silica-alumina isomerization by purification of hydrogen feed. 2,747,004, 5–22–56, Cl. 260—683.5.

Caruolo, Rocco. Bumper carrier. 2,746,659, 5–22–56, Cl. 224—42.07.

Casacci, Severin X.: *See*—
Peyrin, Henri, and Casacci. 2,746,713.

Cassimus, George S. Salt dispenser. 2,746,653, 5–22–56, Cl. 222—500.

Castner, George P., to Gamble-Skogmo, Inc. Snubbing mechanism for gyrating extractors. 2,746,569, 5–22–56, Cl. 188—1.

Cavalieri, Albert L., Jr., and R. W. Roop, to Philco Corp. Electromechanical oscillator detector system. 2,747,090, 5–22–56, Cl. 250—36.

Celotex Corp., The: *See*—
Muench, Carl G. 2,746,475.

Chadeloid Corp.: *See*—
Mavers, John W. 2,746,873.

Chamberlain, George H. Device for trimming sheet material. 2,746,545, 5–22–56, Cl. 164—77.

Chamberlin, Blair H.: *See*—
Brodsky, Harry N., and Chamberlin. 2,747,036.

Champlin, Charles L., and G. H. Steele, to The Ohio Boxboard Co. Carrier cartons. 2,746,638, 5–22–56, Cl. 220—105.

Chapman, Edward B., to International Business Machines Corp. Method for cleaning electrodes. 2,746,831, 5–22–56, Cl. 316—26.

Charun, Peter. Fountain brush and squeegee. 2,746,071, 5–22–56, Cl. 15—123.

Chemical Construction Corp.: *See*—
McGauley, Patrick J., Nashner, and Kudryk. 2,746,859.
Murakami, Masao, and Imamoto. 2,746,803.

Chempatents, Inc.: *See*—
Brown, David, Colton, and Landau. 2,746,998.

Cherniavsky, Alexander J.: *See*—
Johnson, Ava J., and Cherniavsky. 2,746,844.

Chicago Metallic Mfg. Co.: *See*—
Debs, Jerome H. 2,746,636.

Chicago Railway Equipment Co.: *See*—
Lewis, Frank W., and Spaeth. 2,746,576.

Chiksan Co.: *See*—
Bily, Peter J. 2,746,773.

Christensen, Howard, to Bell Telephone Laboratories, Inc. Method of producing a taut thin member. 2,746,129, 5–22–56, Cl. 29—155.5.

Chubb, Alexander A., and M. M. Levy, to The General Electric Co. Ltd. Automatic telephone systems. 2,747,019, 5–22–56, Cl. 179—18.

Chubb, Alexander A., and M. M. Levy, to The General Electric Co. Ltd. Telecommunication systems embodying automatic exchanges. 2,747,021, 5–22–56, Cl. 179—18.

Chubb, Alexander A., and J. Scowcroft, to The General Electric Co., Ltd. Gas discharge tube circuits. 2,747,145, 5–22–56, Cl. 317—140.

Chubb, Walston, Jr., and L. L. Marsh, Jr., to the United States of America as represented by the United States Atomic Energy Commission. Ternary zirconium base alloy containing Sn and Ti. 2,746,861, 5–22–56, Cl. 75—177.

Churgin, Leopold, and D. N. Grundberg, to C. L. Berger & Sons, Inc. Precision surveying instrument. 2,746,153, 5–22–56, Cl. 33—69.

Chvosta, Jerry F., to Tinnerman Products, Inc. Molding clips and the like. 2,746,111, 5–22–56, Cl. 24—73.

Cicchetti, Alfred G.: *See*—
Lee, Ferman N., MacKenzie, D'Arcey, and Cicchetti. 2,746,046.

Cinch Mfg. Corp.: *See*—
Johanson, Bengt J. 2,747,169.

Cincinnati Testing and Research Laboratories: *See*—
Warnken, Elmer P. 2,746,514.

City Tank Corp.: *See*—
Brown, Robert, and Edwards. 2,746,240.

Clague, James D., and A. W. Haas, to Toledo Scale Co. Fresh water pre-wash conveyor dishwasher. 2,746,466, 5–22–56, Cl. 134—72.

Clapp, Richard D.: *See*—
Orser, Keith L., and Clapp. 2,746,894.

Clark, Alfred S., to United Shoe Machinery Corp. Insole lip cutting and scoring machines. 2,746,068, 5–22–56, Cl. 12—40.

Clark, Calvin M., to California Research Corp. Amplifier circuit. 2,747,028, 5–22–56, Cl. 179—171.

Clark Equipment Co.: *See*—
Arnold, William H., and Cottrell. 2,746,560.

Clay, Stanley B., to Great Lakes Products, Inc. Fishing reel. 2,746,693, 5–22–56, Cl. 242—84.5.

Clayton, Anderson & Co.: *See*—
Sinclair, Stuart W. 2,746,630.

Clayton, Benjamin: *See*—
Perlman, David, and Mattikow. 2,746,957.

Clayton Mfg. Co.: *See*—
Cline, Edwin L. 2,746,289.

Clemence, Le Roy W., and H. J. Eichel, to Abbott Laboratories. Thiophene-2-carboxaldehyde thiosemicarbazone and certain substitution derivaties. 2,746,972, 5–22–56, Cl. 260—329.

Clements, Charles A. Cooling system for liquids. 2,746,271, 5–22–56, Cl. 62—141.

Clevite Corp.: *See*—
Sprosty, Clarence F. 2,747,024.

Cline, Edwin L., to Clayton Mfg. Co. Engine performance indicating means for use with chassis dynamometers. 2,746,289, 5–22–56, Cl. 73—117.

Clopay Corp.: *See*—
Johnson, Samuel J., and Schroeder. 2,746,538.

Cloud, Charles E., to W. S. Cloud. Constrictors. 2,746,225, 5–22–56, Cl. 53—370.

Cloud, William S.: *See*—
Cloud, Charles E. 2,746,225.

Coan, Abraham. Water supply valve for poultry watering troughs. 2,746,481, 5–22–56, Cl. 137—408.

Cobb, Clifton A., to Penn Controls, Inc. Pressure regulator and shut-off valve. 2,746,471, 5–22–56, Cl. 137—65.

Cobert, Arthur J., 50% to Beautiful Bryans, Inc. Yarn severing device for straight-bar knitting machines. 2,746,273, 5–22–56, Cl. 66—145.

Coble, Abram G., L. G. Hix, guardian of the property of said A. G. Coble. Smokers' pipe. 2,746,459, 5–22–56, Cl. 131—214.

Cockerham, Frank E., and J. A. Darko, to Thompson Products, Inc. Coaxial switch structure and method of making same. 2,747,059, 5–22–56, Cl. 200—166.

Cocklin, Clinton T. Starting device for internal-combustion engine. 2,746,445, 5–22–56, Cl. 123—185.

Coggeshall, Almy D., and L. T. Stafford, to General Electric Co. Supporting of coil end turns. 2,747,118, 5–22–56, Cl. 310—260.

Cole, Ralph N. and W. T., to The Canton Cast Products Co. Load binder. 2,746,108, 5–22–56, Cl. 24—68.

Cole, William T.: *See*—
Cole, Ralph N. and W. T. 2,746,108.

Coleman, Kenneth R., to Taylor, Taylor & Hobson Ltd. Projection optical objectives. 2,746,349, 5–22–56, Cl. 88—57.

Colgate-Palmolive Co.: *See*—
Vitale, Peter T., and Liftin. 2,746,931.
Vitale, Peter T. 2,746,932.

Collins, Aubrey L. Oscillating and like mechanism for electric fans. 2,746,673, 5–22–56, Cl. 230—256.

Collins Radio Co.: *See*—
Doelz, Melvin L. 2,747,084.
Hoffarth, Odell H. 2,747,166.
Kennedy, Charles J. 2,746,151.
Simmons, William E. 2,746,633.
Whittington, William E. 2,746,918.

Color Television Inc.: *See*—
Sleeper, George E., Jr., and Stahl. 2,747,013.

Colton, John W.: *See*—
Brown, David, Colton, and Landau. 2,746,998.

Columbian Rope Co.: *See*—
Orser, Keith L., and Clapp. 2,746,894.

Colvin, Oliver D.: *See*—
Colvin, Oliver D., Jr., Fabares, and Swaney. 2,746,684.

Colvin, Oliver D., Jr., E. N. Fabares, and F. J. Swaney, to O. D. Colvin. Apparatus for preventing corrosion in storage compartments. 2,746,684, 5–22–56, Cl. 236—44.

Combined Metals Reduction Co.: *See*—
Bradford, James H. 2,746,735.

Comino, Demetrius, to Dexion Ltd. Rigid angle joint. 2,746,780, 5–22–56, Cl. 287—54.

Comley, Mervyn R., to The International Nickel Co., Inc. Apparatus for producing porous metal plates. 2,746,742, 5–22–56, Cl. 266—5.

Commerce, United States of America as represented by the Secretary of the: *See*—
Nuckolls, Richard G. 2,747,030.

Commonwealth Engineering Co. of Ohio, The: *See*—
Denlston, George L. 2,746,880.
Drummond, Folsom E. 2,746,134.

Compagnie de Fives-Lille pour Constructions Mecaniques et Entreprises: *See*—
Blondelle, Raymond. 2,746,603.

Compagnie Generale des Etablissements Michelin: *See*—
Bourdon, Pierre M. 2,746,904.

Compagnie Industrielle des Telephones: *See*—
Lesigne, Henri L., and Demartres. 2,747,022.

Comstock, George E., 3d, to Norton Co. Electrolytic grinding apparatus. 2,746,917, 5–22–56, Cl. 204—218.

Condo, Fred E.: *See*—
Naps, Marguerite, and Condo. 2,746,944.

Conitech, Ltd.: *See*—
Pelavin, Milton H. 2,747,108.

Conkling, William C., to Wallace & Tiernan Inc. Gas controlling apparatus. 2,746,482, 5–22–56, Cl. 137—489.

Connell, J. Val: *See*—
Reese, Cole L. 2,746,252.

Conquest, Victor: *See*—
Kraybill, Henry R. 2,746,870.

Conso Metal Products, Inc.: *See*—
Loucony, Adolphe W. 2,746,539.

Consolidated Industries, Inc.: *See*—
Tower, George C. 2,746,227.

Consolidated Iron-Steel Mfg. Co., The: *See*—
Maine, James F. 2,746,143.

Consolidated Water Power & Paper Co.: *See*—
Rush, James A. 2,746,878.

Constellation Cup Corp.: *See*—
Vantlander, Edward, and Jacobs. 2,746,626.

Cook, Curtiss L., to Deere & Co. Plow disk. 2,746,371. 5–22–56, Cl. 97—217.

Cook Electric Co.: *See*—
McDonald, Donald. 2,747,146.

Cooper, Alfred, and L. B. MacQueen, to Expanded Rubber Co. Ltd. Production of cellular polyvinyl plastics. 2,746,940, 5–22–56, Cl. 260—2.5.

Cooper-Bessemer Corp., The: *See*—
Reed, Nelson G. 2,746,725.

Cooper, Calvin A., to F. J. Melges. Dismountable picnic table. 2,746,525, 5–22–56, Cl. 155—124.

Cooper, James E.: *See*—
Brooks, Ernest G., and Cooper. 2,746,534.

Cooper, John D., and R. D. Stackhouse. Locking means for coupling building wall panels. 2,746,098, 5–22–56, Cl. 20—4.

Copenhaver, Roy T. Adjustable table legs. 2,746,822, 5–22–56, Cl. 311—39.

Cosner, Robert R.: *See*—
Heimaster, John W., and Cosner. 2,746,615.

Cottle, Delmer L., D. W. Young, and A. J. Morway, to Esso Research and Engineering Co. Synthetic oil base lubricating grease compositions. 2,746,924, 5–22–56, Cl. 252—42.

Cottrell, Samuel H.: *See*—
Arnold, William H., and Cottrell. 2,746,560.

Covington, Mabel V. Fruit juice extractor. 2,746,379, 5–22–56, Cl. 100—108.

Cox, Ernest. Automatic gas alarm. 2,747,176, 5–22–56, Cl. 340—237.

Cox, Joseph B., to Oregon Saw Chain Corp. Saw chain with insert teeth. 2,746,494, 5–22–56, Cl. 143—135.

Crabs, Kerwin K., and J. A. Gaede. Combination shear set and sharpening device. 2,746,326, 5–22–56, Cl. 81—15.

Crane Co.: *See*—
Laird, Hubert C. 2,746,470.

Craven, Wilbur J., to The Capewell Mfg. Co. Separable link. 2,746,116, 5–22–56, Cl. 24—265.

Crawford, Thomas J.: *See*—
Caputo, James V., and Crawford. 2,747,155.

Crimpweld Corp., The: *See*—
Martines, Rene. 2,747,171.

Cromeans, John S.: *See*—
Carter, Norman C., and Cromeans. 2,747,004.

Crompton & Knowles Loom Works: *See*—
Brouwer, Benjamin W., and Dion. 2,746,487.
Hall, Kenneth J. 2,746,490.

Cross, Sherwood T., and W. C. Griffin, to Atlas Powder Co. Fluid shortening composition. 2,746,868, 5–22–56, Cl. 99—123.

Crow, Leonard R. Magnet holding block. 2,746,172, 5–22–56, Cl. 35—19.

Crown Cork & Seal Co., Inc.: *See*—
Day, Carl L., and Pahl. 2,746,663.

Crown Zellerbach Corp.: *See*—
Mapley, Robert G., and MacRill. 2,746,872.

Crutcher, Aubrey S.: *See*—
Cummings, James D. 2,746,516.

Cummings, James D., ¼ to A. S. Crutcher. Pipe line installation equipment. 2,746,516, 5–22–56, Cl. 154—41.

Cuny, Ernest A. Apparatus for cutting pipe at a predetermined radius and angle. 2,746,125, 5–22–56, Cl. 29—67.

Curley, Robert S., to Saco-Lowell Shops. Grid section. 2,746,094, 5–22–56, Cl. 19—95.

Curran, Vincent J., to Kigass Ltd. Atomisers. 2,746,801, 5–22–56, Cl. 299—120.

Curtiss-Wright Corp.: *See*—
Hine, Edward K. 2,747,141.

Custom Made Container Corp.: *See*—
Murphy, James J. 2,746,667.

Cusumano, Gioacchino, and I. L. Delin, to Swingline, Inc. Tackers. 2,746,044, 5–22–56, Cl. 1—49.

Cutler-Hammer, Inc.: *See*—
Chamberlin, Blair H. 2,747,036.

Cutler, Wallace M., E. S. Kant, and H. B. Greenough, deceased (by M. R. Greenough, administratrix), to United Shoe Machinery Corp. Heel attaching machines. 2,746,047, 5–22–56, Cl. 1—141.

Cutler, Wallace M., and E. S. Kant, to United Shoe Machinery Corp. Heel attaching machines. 2,746,048, 5–22–56, Cl. 1—141.

Cutter Corp.: *See*—
Spanel, Abraham N. 2,746,144.

Dacam Corp.: *See*—
Thompson, Wallace M., Swint, and Roberts. 2,746,662.

Dahlberg, Carl B., to Hemet Aircraft Corp. Baby walker and anchor. 2,746,517, 5–22–56, Cl. 155—23.

Dahlman, Per O., to North Electric Co. Impulse correcting repeater for automatic telephone system. 2,747,018, 5–22–56, Cl. 179—16.

Daimler-Benz Aktiengesellschaft: *See*—
Barényi, Béla. 2,746,099.
Nallinger, Friedrich K. H. 2,746,100.
Nallinger, Friedrich K. H. 2,746,433.
Nallinger, Friedrich K. H., and Müller. 2,746,556.
Nallinger, Friedrich K. H. 2,746,763.
Nallinger, Friedrich K. H. 2,746,766.

Dale, Charles F., 50% to W. R. Musick. Artificial lure. 2,746,200, 5–22–56, Cl. 43—42.04.

Dalrymple, William P., B. W. Mantle, and H. A. Sherwood, to A. M. Sherwood. Wheel drive transmission and clutch arrangement. 2,746,555, 5–22–56, Cl. 180—10.

D'Amico, John J., to Monsanto Chemical Co. 2,2'-thiobis(4-alkyl-5-thiasole carboxylic acid). 2,746,970, 5–22–56, Cl. 260—302.

Damman, Lee J. Tire remover with a rotatable wheel support. 2,746,528, 5–22–56, Cl. 157—1.26.

Damon, Robert H., to Bowser, Inc. Parking lot control system. 2,746,745, 5–22–56, Cl. 268—49.

D'Andrea, Nell J. Detachable umbrella cover. 2,746,469, 5–22–56, Cl. 135—34.

D'Antonio, Caesar H.: *See*—
Ringel, Harold A., and Meyer. 2,746,668.

D'Arcey, Alfred C.: *See*—
Lee, Ferman N., MacKenzie, D'Arcey, and Cicchetti. 2,746,046.

Darko, John A.: *See*—
Cockerham, Frank E., and Darko. 2,747,059.

Darneille, Joseph A. Road construction. 2,746,365, 5–22–56, Cl. 94—33.

Darragh, John L., and G. B. Johnson, to California Research Corp. Germicidal detergent compositions. 2,746,928, 5–22–56, Cl. 252—106.

Dauch, Erwin, to SKF Kugellagerfabriken Gesellschaft mit Beschraenkter Haftung. Textile drawing mechanism. 2,746,095, 5–22–56, Cl. 19—135.

Davidson, Donald T.: *See*—
Ye Chu, Ting, and Davidson. 2,746,731.

Davis, Charles, to Proctor Electric Co. Ironing table. 2,746,184, 5–22–56, Cl. 38—121.

Davis, Charles C., to Westrex Corp. Method of securing conductor to stylus. 2,746,130, 5–22–56, Cl. 29—155.5.

Davis, Clyde W., to The Dow Chemical Co. Purification of concentrated salt solutions. 2,746,840, 5–22–56, Cl. 23—97.

Davis, Maurice C., and L. K. McIntyre. Mobile camera mounting platform. 2,746,396, 5–22–56, Cl. 104—75.

Davis, Raymond C., ½ to L. H. Folland. Overload coil spring. 2,746,764, 5–22–56, Cl. 280—124.

Day, Carl L., and L. F. Pahl, to Crown Cork & Seal Co., Inc. Filling nozzle for apparatus for filling containers with liquid. 2,746,663, 5–22–56, Cl. 226—116.

Deakin, Thomas M. Drawing apparatus. 2,746,152, 5–22–56, Cl. 33—18.

Dean, Fred, to Imperial Chemical Industries Ltd. Dehydrogenation of alcohols. 2,746,993, 5–22–56, Cl. 260—598.

Debs, Jerome H., to Chicago Metallic Mfg. Co. Multiple baking pan assembly. 2,746,636, 5–22–56, Cl. 220—23.2.

De Camillis, Amilcare. Colostomy devices. 2,746,456, 5–22–56, Cl. 128—283.

Decker, Marjorie M.: *See*—
Morgan, Eugene F. 2,746,507.

Deere & Co.: *See*—
Altgelt, Herman E. 2,746,370.
Cook, Curtiss L. 2,746,371.
Foster, Jack F. 2,746,228.
Sorensen, Knud B., and Brnet. 2,746,770.
Stueland, Harold M. 2,746,624.

Deere Mfg. Co.: *See*—
McClellan, Marcus E., Skromme, Sutherland, Adams, and Griffin. 2,746,233.
Skromme, Arnold B. 2,746,584.

De Hardit, William M. Chain saw attachment for a tractor. 2,746,492, 5–22–56, Cl. 143—32.

De la Cuesta, Eduardo M. Rocking chairs with adjustable backs. 2,746,523, 5–22–56, Cl. 155—116.

De La Rue, Thomas, & Co. Ltd.: *See*—
Brooks, Ernest G., and Cooper. 2,746,534.

Delin, Irwin L.: *See*—
Cusumano, Gioacchino, and Delin. 2,746,044.

Del Papa, Torello A. Artificial teeth. 2,746,149, 5–22–56, Cl. 32—10.

Demartres, Jean G.: *See*—
Lesigne, Henri L., and Demartres. 2,747,022.
Dempsey, Charles D. and K. E., to Dempsey and Stanley, Inc. Cleaning apparatus. 2,746,467, 5–22–56, Cl. 134—111.
Dempsey, Kenneth E.: *See*—
Dempsey, Charles D. and K. E. 2,746,467.
Dempsey and Stanley, Inc.: *See*—
Dempsey, Charles D. and K. E. 2,746,467.
Dengler, Raymond J. Closure device for collapsible containers and the like. 2,746,654, 5–22–56, Cl. 222—508.
Denjston, George L., to The Commonwealth Engineering Co. of Ohio. Adhesive cotton article and method of making same. 2,746,880, 5–22–56, Cl. 117—63.
Descaling Equipment Co., Inc.: *See*—
Jaques, Elmo B. 2,746,127.
Desmond, Eric, and C. J. Thorp, to Smiths America Corp. Cleaning devices. 2,746,468, 5–22–56, Cl. 134—117.
Deutsche Gold- und Silber-Scheideanstalt vormals Roessler: *See*—
Pohl, Walter. 2,467,737.
Dexion Ltd.: *See*—
Comino, Demetrius. 2,746,780.
Deziel, Fred T., and H. J. Smith, to Minneapolis-Honeywell Regulator Co. Flame detector. 2,747,112, 5–22–56, Cl. 307—132.
Diamond Match Co., The: *See*—
Forney, Charles. 2,746,491.
Dickey, Joseph B., and G. J. Taylor, to Eastman Kodak Co. 2,4-Bis(methylsulfonyl)-benzeneazotetrahydroquinoline compounds. 2,746,952, 5–22–56, Cl. 260—155.
Dickey, Joseph B., and E. B. Towne, to Eastman Kodak Co. 5-Nitrothiazoleazoaniline compounds. 2,746,953, 5–22–56, Cl. 260—158.
Diebold, Inc.: *See*—
Pratt, Verneur E., and Gray. 2,746,344.
Diehl, Charles, to The M. W. Kellogg Co. Method for welding a joint. 2,747,065, 5–22–56, Cl. 219—10.
Dill, Joseph J.: *See*—
Barron, James T., Dill, and Hotelling. 2,746,128.
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Brouwer, Benjamin W., and Dion. 2,746,487.
Distillers Co. Ltd., The: *See*—
Bellringer, Frederick J. 2,746,843.
Diversey Corp., The: *See*—
Parlson, Robert E. 2,746,465.
Dixon, Guy E., Jr. Accordion folding door. 2,746,540, 5–22–56, Cl. 160—206.
Dixon, Paul H., to the United States of America as represented by the Secretary of the Army. Feed mechanism. 2,746,357, 5–22–56, Cl. 89—33.
Doane, Arthur E. Structural joint connection in panel construction. 2,746,891, 5–22–56, Cl. 154—43.
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Woehlert, Walter E., and Retts. 2,746,359.
Dodds, Earl B.: *See*—
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Doelz, Melvin L., to Collins Radio Co. Variable band width intermediate frequency system. 2,747,084, 5–22–56, Cl. 250—20.
Dole Valve Co., The: *See*—
Kraft, Elroy J., and Wasserman. 2,746,374.
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Doll, Franz: *See*—
Van Ackeren, Paul, and Doll. 2,746,786.
Doll, Walter, Jr., P. Martsolf, Jr., and C. R. Soderberg, Jr., to United Aircraft Corp. Compressor blading. 2,746,672, 5–22–56, Cl. 230—122.
Dolsa, John, E. W. Rohrbacher, and J. Zimmerman, to General Motors Corp. Gear pump. 2,746,394, 5–22–56, Cl. 103—126.
Dolsa, John, and R. D. Harvey, to General Motors Corp. Pressure sensing apparatus. 2,746,427, 5–22–56, Cl. 121—41.
Domenico, Stephen P. Apparatus for removal of paint from bowling pins. 2,746,069, Cl. 15—4.
Donald, Alexander, and L. McGihon, to A. R. Silva. Casing machine. 2,746,226, 5–22–56, Cl. 53—391.
Donovan, Howard W., to General Dynamics Corp. Adjustable stroke actuator. 2,746,314, 5–22–56, Cl. 74—424.8.
Donovan Steel Pickling Co.: *See*—
Branthoover, Harold. 2,746,511.
Dopheen, Isaiah. Mechanism to abstract liquid from gas. 2,746,476, 5–22–56, Cl. 137—204.
Dorn, Herman W.: *See*—
Grossman, Ralph E., and Dorn. 2,746,648.
Dorton, Robert O., to The Dow Chemical Co. Dinitrobensoxasoles. 2,746,971, 5–22–56, Cl. 260—307.
Doser, Arnold, to Farbenfabriken Bayer Aktiengesellschaft. Isocyanate-bisulfite adduct-formaldehyde reaction and product. 2,746,988, 5–22–56, Cl. 260—513.
Doughty, Hartwell T. Tire lug assembly. 2,746,508, 5–22–56, Cl. 152—218.
Dow Chemical Co., The: *See*—
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Dorton, Robert O. 2,746,971.
Gunkler, Albert A., Lake, and Potts. 2,746,999.
Dow Corning Corp.: *See*—
Barry, Arthur J. 2,746,926.
Hyde, James F. 2,746,982.
Speier, John L. 2,746,956.
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Rogers, Leonard M. 2,746,489.
Rogers, Leonard M. 2,746,693.
Dresser, Willis R., to The Vitarama Corp. Closed link electronic camera chain. 2,747,012, 5–22–56, Cl. 178—5.4.
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Drisch, Nicolas, and R. Brepson, to Societe Chimiotex. Apparatus for the fluid treatment of filaments. 2,746,281, 5–22–56, Cl. 68—205.
Dros, Albert A., J. A. L. Yser, and E. Heilingman, to Hartford National Bank and Trust Co., trustee. Hot-gas reciprocating engine. 2,746,241, 5–22–56, Cl. 60—24.
Drummond, Folsom E., to Commonwealth Engineering Co. of Ohio. Duplex metal sheet or article. 2,746,134, 5–22–56, Cl. 29—191.2.
Drummond, Warren W., W. R. Steitz, and W. F. Holtschulte, to Owens-Corning Fiberglas Corp. Apparatus for the packaging of continuously produced strands. 2,746,118, 5–22–56, Cl. 28—21.
Du Bois, Philip H. Translating apparatus. 2,746,681, 5–22–56, Cl. 235—61.6.
Ducrot, Albert. Reclining chair. 2,746,520, 5–22–56, Cl. 155—105.
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Abrams, Walter F. 2,747,154.
Braendle, Richard O. 2,746,922.
Britton, Carlyle P., Elker, Ellis, and Lester. 2,746,167.
Gregory, Walter A., and Kreuchunas. 2,746,973.
Ross, Harry F. 2,746,888.
Stevens, William H. 2,746,166.
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Duvall, Thure C., to Wood Conversion Co. Manufacture of fiber felts. 2,746,895, 5–22–56, Cl. 154—101.
Dyczkowski, Chester W. Multiple hook fishing device. 2,746,199, 5–22–56, Cl. 43—36.
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Dickey, Joseph B., and Towne. 2,746,953.
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Edgerton, Ira L. Asphalt pavement construction. 2,746,733, 5–22–56, Cl. 259—147.
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Brown, Robert, and Edwards. 2,746,240.
Edwards, Wayne W. Television antenna. 2,747,183, 5–22–56, Cl. 343—893.
Efford, John T., and C. P. Mottram, to Bridgeport Brass Co. Container with closure and dispensing valve. 2,746,647, 5–22–56, Cl. 222—130.
Eger, Ernst, to United States Rubber Co. Pneumatic track. 2,746,812, 5–22–56, Cl. 305—10.
Ehm, Wilhelm, and R. Schnegg, to Farbenfabriken Bayer Aktiengesellschaft. Sulfonated methylbenzene-halogenated hydrocarbon condensation products as cation exchange resins. 2,746,938, 5–22–56, Cl. 260—2.2.
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Britton, Carlyle P., Elker, Ellis, and Lester. 2,746,167.
Elmco Corp., The: *See*—
Schwarts, Daniel M., and Hendrickson. 2,746,625.
Eitzen, William C. H. Grade measuring attachment for carpenters' or builders' levels. 2,746,164, 5–22–56, Cl. 33—214.
Ekstrand, Sture O., and V. L. Ronci, to Bell Telephone Laboratories, Inc. Fabrication of electrodes for electron discharge devices. 2,746,123, 5–22–56, Cl. 29—25.18.
Elberfeld Mfg. Co., Inc.: *See*—
Kuhlenschmidt, Harol L. and F. E., and Arthur and Arnold Gelselman. 2,746,619.
Electrol Inc.: *See*—
Ashton, Benjamin N. 2,746,251.
Ashton, Benjamin N. 2,746,485.
Elfving, Thore M., to Isoflex Corp. Multi-layer heat insulating material. 2,746,892, 5–22–56, Cl. 154—45.
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Elliott, Harold V., to General Motors Corp. Method of making a circuit breaker lever. 2,746,131, 5–22–56, Cl. 29—155.55.
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Britton, Carlyle P., Elker, Ellis, and Lester. 2,746,167.
Ellis, Grace. Condiment composition. 2,746,869, 5–22–56, Cl. 99—144.
Ellsworth, Carl E., to National Cylinder Gas Co. Voltage determining arrangement for dielectric heaters. 2,747,067, 5–22–56, Cl. 219—10.55.
Eloranta, Valto K., to Polaroid Corp. Photoflash unit and accessories therefor. 2,747,076, 5–22–56, Cl. 240—1.3.
Emery, Alfred H., to The L. S. Starrett Co. Bensel holding ring. 2,746,785, 5–22–56, Cl. 292—256.6.
Emery, Richard L., to Keyes Fibre Co. Pulp molding apparatus. 2,746,358, 5–22–56, Cl. 92—56.
Emery, Victor W. Portable and collapsible barrel rack. 2,746,703, 5–22–56, Cl. 248—150.
Englehart, Oscar D., and W. S. Bobel, to Pittsburgh Plate Glass Co. Multiple glazed flexible spacer units. 2,746,102, 5–22–56, Cl. 20—56.5.
Engleson, Harry E., and E. A. Hartbauer, to F. B. Redington Co. Detector mechanism for a packaging machine. 2,746,222, 5–22–56, Cl. 53—75.
Engleson, Harry E., and E. D. Sramek, to F. B. Redington Co. Conveyer. 2,746,593, 5–22–56, Cl. 198—140.
Engleson, Harry E., and E. D. Sramek, to F. B. Redington Co. Endless conveyer. 2,746,594, 5–22–56, Cl. 198—151.

English Electric Co. Ltd., The: *See*—
Hughes, John O. P. 2,746,273.
Ennever, Harry H. Outdoor display. 2,746,187, 5–22–56, Cl. 40—125.
Eriksen, Morten. Carburetion apparatus. 2,746,440, 5–22–56. Cl. 123—133.
Ertegaard, Byron L., and H. F. Horner, Jr., to Toro Mfg. Corp. of Minnesota. Combined drive and throttle control. 2,746,815, 5–22–56, Cl. 74—472.
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Arundale, Erving. 2,746,908.
Bayhi, Joseph F. 2,747,172.
Cottle, Delmer L., Young, and Morway. 2,746,924.
Garber, John D., Hollyday, and Vanderbilt. 2,746,925.
Gerhardt, Philip B., Smith, and Jones. 2,746,923.
Hemminger, Charles E. 2,746,909.
Holder, Clinton H. 2,746,985.
Hunter, Edward A., and Kimberlin. 2,746,937.
Maisel, Daniel S. 2,746,911.
May, Walter G., and Matheson. 2,746,810.
Mitchell, Milton E., Jr. 2,746,550.
Moore, Thomas V. 2,746,721.
Mounce, Whitman D. 2,746,551.
Richardson, Roger W., and Schexnailder. 2,746,934.
Vickers, Herbert H. 2,746,086.
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Yowell, Howard L., and Caldwell. 2,746,854.
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Cooner, Alfred, and MacQueen. 2,746,940.
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Scholtse, Herman J. 2,746,762.
Fa. Krauss-Maffei A. G.: *See*—
Laubender, Ludwig. 2,746,446.
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Ehm Wilhelm, and Schnegg. 2,746,938.
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Ballon, Richard P. 2,747,060.
Machon, Herbert W., and Magnano. 2,747,034.
Federn, Klaus H. Hack, and W. Kurz, to Carl Schenck Maschinenfabrik G. m. b. H. Apparatus for the balance centering of revolvable bodies. 2,746,299, 5–22–56, Cl. 73—461.
Feis, Nikolaas, to Instituut voor Tuinbouwtechniek. Atomizer for liquids. 2,746,802, 5–22–56, Cl. 299—140.
Fell Developments Ltd.: *See*—
Fell, Louis F. R. 2,746,256.
Fell, Louis F. R., to Fell Developments Ltd. Controls for multiple engine power plants. 2,746,256, 5–22–56, Cl. 60—97.
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Ferguson, William T., to E. G. Ferguson. Tamping machine. 2,746,367, 5–22–56, Cl. 94—49.
Ferrell, A. T., & Co.: *See*—
Stricker, Gustave E. 2,746,808.
Fetterly, Lloyd C., to Shell Development Co. Crystalline complexes of sulfur compounds with urea. 2,746,948, 5–22–56, Cl. 260—96.5.
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Binder, Richard. 2,746,585.
Ficken, Wilbert A. Thrower type wheel excavator. 2,746,180, 5–22–56, Cl. 37—92.
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Filbrey, Emery T., trustee: *See*—
Kraybill, Henry R. 2,746,870.
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Fineman, Manuel N., to Rohm & Haas Co. Low foaming detergents. 2,746,927, 5–22–56, Cl. 252—89.
Finn, Robert R., and P. A. White, to Jones & Lamson Machine Co. Collapsible threading die for selectively cutting straight or taper threads. 2,746,066, 5–22–56, Cl. 10—95.
Fischer, Paul E., to E. G. Staude Mfg. Co., Inc. Apparatus for packaging of powder in small quantities. 2,746,223, 5–22–56, Cl. 53—180.
Fish, Richard H., ½ to E. Preston. Agricultural spraying machine. 2,746,794, 5–22–56, Cl. 299—45.
Fitch, Ellery R., and J. V. Ralston, to Bendix-Westinghouse Automotive Air Brake Co. Fluid pressure system. 2,746,255, 5–22–56, Cl. 60—57.
Fitzgerald, John V., and G. S. Bachman, to Pittsburgh Plate Glass Co. Transparent nuclear radiation shield. 2,747,105, 5–22–56, Cl. 250—106.
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Fleming, Myron T., to Proctor and Schwarts, Inc. Dryer for powdered material. 2,746,171, 5–22–56, Cl. 34—223.
Flowers, Henry F. Three-way rocker valve. 2,746,484, 5–22–56, Cl. 137—620.
Foland, Francis K., G. W. Onksen, and H. E. Todd, to General Motors Corp. Indicating means for automatic headlight dimming system. 2,747,139, 5–22–56, Cl. 315—83.
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Forney, Charles, to The Diamond Match Co. Machine for producing clothespin. 2,746,491, 5–22–56, Cl. 140—1.
Fortuin, Jan P., and G. E. Rumscheidt, to Shell Development Co. Preparation of terephthalic acid. 2,746,990, 5–22–56, Cl. 260—524.
Fortunato, Louis. By-pass assembly for electrical regulators. 2,747,044, 5–22–56, Cl. 200—87.
Forwald, Haakon, to Allmänna Svenska Elektriska Aktiebolaget. High tension circuit breakers. 2,747,055, 5–22–56, Cl. 200—148.
Foster, Jack F., to Deere & Co. Comb attachment for cotton strippers. 2,746,228, 5–22–56, Cl. 56—35.
Foster, James R., to Gamble-Skogmo, Inc. Stabilizing and snubbing mechanism for gyratory extractors. 2,746,568, 5–22–56, Cl. 188—1.
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Walker, Jay P., Glasgow, and Francis. 2,747,002.
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Frantz, Glenn R., to Bell Telephone Laboratories, Inc. Linearizer for frequency modulation generator. 2,747,163, 5–22–56, Cl. 332—18.
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French, Charles A. Power driven winch. 2,746,718, 5–22–56, Cl. 254—188.
French John J. Roof foiler for repairing shingles. 2,746,322, 5–22–56, Cl. 81—3.
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Gaire, Paul E. Slide rule magnifiers. 2,746,347, 5–22–56, Cl. 88—39.
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Gamundi, Reynold F., to Eaton Mfg. Co. Wheel covers. 2,746,805, 5–22–56, Cl. 301—37.
Garber, John D., W. C. Hollyday, Jr., and B. M. Vanderbilt, to Esso Research and Engineering Co. Lubricants and additives therefor. 2,746,925, 5–22–56, Cl. 252—59.
Gardiner, Duncan B., to Vickers Inc. Hydraulic power steering device. 2,746,426, 5–22–56. Cl. 121—40.
Gardner, Bernard C., and R. M. Unger, to Raytheon Mfg. Co. Non-linear beam dispersion devices. 2,747,085, 5–22–56, Cl. 250—27.
Gardner, Paul N. Film applicator for liquid or semi-liquid material. 2,746,075, 5–22–56, Cl. 15—236.

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Richardson, Ello E., and Pugh. 2,746,852.
Gates, Geoffrey E. G. Clutch-operated steering geer for vehicles. 2,746,819, 5–22–56, Cl. 74—710.5.
Gebhardt, Neil H. Ash removal unit. 2,746,809, 5–22–56, Cl. 302—39.
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Kuhlenschmidt, Harold L. and F. E., and Arthur and Arnold Geiselman. 2,746,619.
Geisler, Henry A., and R. J. Queisser, to Stewart-Warner Corp. Freeze prevention in jet aircraft purge gas generators. 2,746,245, 5–22–56, Cl. 60—39.07.
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Kirk, Joseph S. 2,746,837.
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Bakke, Hans A., and Gabrielson. 2,746,302.
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McLaren, James D. 2,746,683.
McLean, Harold T. 2,746,834.
Petersen, Maurice E., and Zelasler. 2,747,119.
Pinney, Harold E. 2,747,157.
Price, Harvey N. 2,747,120.
Ryckman, William D., Jr. 2,747,140.
Seaman, Lewis T. 2,746,300.
Sway, Henry C. 2,746,393.
Thomas, Henry P. 2,747,017.
Tonks, Lewi. 2,747,137.
Welch, Stanley B., and Williams. 2,747,073.
Wilbur, Donald A., and Peters. 2,747,031.
General Electric Co. Ltd., The: *See*—
Chubb, Alexander A., and Levy. 2,747,019.
Chubb, Alexander A., and Levy. 2,747,021.
Chubb, Alexander A., and Scowcroft. 2,747,145.
Levy, Maurice M. 2,747,020.
Sherwen, Joseph W. 2,746,598.
General Fireproofing Co., The: *See*—
McKinley, William H. 2,746,705.
General Industries Co., The: *See*—
Hartman, Herbert L. 2,746,306.
General Mills, Inc.: *See*—
Abbott, Fredric M., Balsley, and Ramesberger. 2,746,375.
General Motors Corp.: *See*—
Bowser, Phillip C. 2,746,768.
Dolsa, John, and Harvey. 2,746,427.
Dolsa, John, Rohrbacher, and Zimmerman. 2,746,394.
Elliott, Harold V. 2,746,131.
Foland, Francis K., Onksen, and Todd. 2,747,139.
Gibson, J. Lowell. 2,746,261.
Heath, Thomas C. 2,747,106.
Holin, William F. 2,746,400.
Hutchison, Robert R. 2,746,438.
Kinsey, Claude J. 2,746,759.
Lautenbach, Charles S. 2,746,747.
Schafer, Eugene P. 2,746,425.
Treseder, Robert C. 2,746,290.
Van Slooten, Louis J. 2,746,437.
Vann, William H. 2,746,429.
General Precision Laboratory Inc.: *See*—
Benjamin, Judson E. 2,746,318.
Georgia Tech Research Institute, The: *See*—
Belser, Richard B. 2,746,886.
Belser, Richard B. 2,746,140.
Gera Corp.: *See*—
Silver, Marvin N. 2,747,121.
Gerhardt, Philip B., J. O. Smith, Jr., and A. R. Jones, to Esso Research and Engineering Co. Additives for petroleum products. 2,746,923, 5–22–56, Cl. 252—33.
Gersben, Irvin J., to Pyro Plastics Corp. Container hinge assembly. 2,746,081, 5–22–56, Cl. 16—150.
Gershman, George L. Taper micrometer. 2,746,158, 5–22–56, Cl. 33—174.
Gever, Gabriel, and J. G. Michels, to The Norwich Pharmacal Co. New chemotherapeutic nitrofurans. 2,746,960, 5–22–56, Cl. 260—240.
Gesich, Stephen T. Dispenser for drawing out and serving a desirable length of tape. 2,746,543, 5–22–56, Cl. 164—42.
Giardinelli, Joseph: *See*—
Occhipinti, Rosario, Giardinelli, and Proniuk. 2,747,075.
Gibas, Joseph A. Chair shoe. 2,746,203, 5–22–56, Cl. 45—137.
Gibson, J. Lowell, to General Motors Corp. Refrigerating apparatus. 2,746,261, 5–22–56, Cl. 62—4.
Gleaker, William C., and R. K. Britton, to The Autoyre Co., Inc. Electrolytic metal treatment and article. 2,746,915, 5–22–56, Cl. 204—56.
Glichrist, Fred W., to Toledo Scale Co. Automatic tare device. 2,746,708, 5–22–56, Cl. 249—60.
Gillispie, Charles H.: *See*—
Hurlburt, Fred F., and Gillispie. 2,746,778.
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Kinchin, Joseph W. 2,746,575.
Glasgow, Clarence O.: *See*—
Walker, Jay P., Glasgow, and Francis. 2,747,002.
Gleason, James D. Hold down necktie. 2,746,055, 5–22–56, Cl. 2—145.
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Budal, Steve G. 2,746,109.
Goddard, Charles T., and N. C. Wittwer, Jr., to Bell Telephone Laboratories, Inc. Broad band amplifier devices. 2,747,138, 5–22–56, Cl. 315—58.
Goldberg, Harold D. and M. I. Electronic system. 2,747,130, 5–22–56, Cl. 315—8.5.
Goldberg, Milton I.: *See*—
Goldberg, Harold D. and M. I. 2,747,130.
Goldberg, Moses W., and S. Teitel, to Hoffmann-La Roche Inc. Dialkylaminoalkyl-diphenylacetamilides. 2,746,992, 5–22–56, Cl. 260—558.
Goldblatt, Leo A.: *See*—
Pack, Frank C., and Goldblatt. 2,746,864.
Golden, Jonathan. Automobile clothes support. 2,746,660, 5–22–56, Cl. 244—42.1.
Goldman, Sanford L. Display mount. 2,746,191, 5–22–56, Cl. 40—152.1.
Goldsmith, Hugo, to Sport Products, Inc. Baseball glove. 2,746,050, 5–22–56, Cl. 2—19.
Gondek, John T. Structural joints. 2,746,579, 5–22–56, Cl. 189—36.
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Tissol, Carolyn E., and Goodhue. 2,746,899.
Gorin, Manuel H.: *See*—
Rosenstein, Ludwig, and Gorin. 2,746,884.
Gosselin, Norman R. Shield device for an automobile convertible top. 2,746,791, 5–22–56, Cl. 296—107.
Gossen, P., & Co., G. m. b. H.: *See*—
Dreyer, Helmut, and Boller. 2,747,161.
Gottlieb, David, and H. E. Carter, to The Upjohn Co. Endomycin and process for its production. 2,746,902, 5–22–56, Cl. 167—65.
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Gottscho, Ira S. 2,746,380.
Gottscho, Ira S.: *See*—
Alessi, Andrew J., Jr., Gottscho, and Hirschey. 2,746,389.
Gottscho, Ira S., to Adolph Gottscho, Inc. Marking devices. 2,746,380, 5–22–56, Cl. 101—35.
Gourley, Joseph E. and L. M. Nursing bottle holder. 2,746,702, 5–22–56, Cl. 248—105.
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Gourley, Joseph E. and L. M. 2,746,702.
Grady, Charles B., Jr., to The W. L. Maxson Corp. Inverter control system. 2,747,156, 5–22–56, Cl. 322—24.
Graell, Alberto C. Bag with integral closing means. 2,746,502, 5–22–56, Cl. 150—3.
Grandjean, Philippe, and W. Wehrli, to Sandoz A. G. Disand polyazo dyestuff. 2,746,954, 5–22–56, Cl. 260—166.
Granqvist, Carl-Erik, to Hazeltine Research, Inc. Radio beacons. 2,747,181, 5–22–56, Cl. 343—106.
Grant, Max L. Fare box. 2,746,675, 5–22–56, Cl. 232—7.
Grass, Albert M. Oscillographs. 2,746,835, 5–22–56, Cl. 346—140.
Gratsmuller, Jean L. Fluid-tight assembly. 2,746,486, 5–22–56, Cl. 138—89.
Graves, Harold J., to Sawyers' Inc. Picture previewer and projector device. 2,746,345, 5–22–56, Cl. 88—27.
Gray, George F.: *See*—
Pratt, Verneur E., and Gray. 2,746,344.
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Greanias, Evon C., and R. B. Jacobs, to Standard Oil Co. Apparatus for automatic flash point testing. 2,746,286, 5–22–56, Cl. 73—36.
Great Lakes Products, Inc.: *See*—
Clay, Stanley B. 2,746,695.
Greeley, Leo O. Powered hand plane. 2,746,499, 5–22–56, Cl. 145—4.2.
Greene, William J., to Air Reduction Co., Inc. Torch spacing control. 2,747,152, 5–22–56, Cl. 318—286.
Greenlaw, Charles A. Device and method for preventing heating of a saw band. 2,746,495, 5–22–56, Cl. 143—138.
Greenough, Henry B.: *See*—
Cutler, Wallace M., Kant, and Greenough. 2,746,047.
Greenough, Mary R.: *See*—
Cutler, Wallace M., Kant, and Greenough. 2,746,047.
Greer, Elva O. Pocket protector. 2,746,058, 5–22–56, Cl. 2—249.
Gregory, Walter A., and A. Kreuchunas, to E. I. du Pont de Nemours and Co. 5-alkylmercapto-2-heterocyclic aldehydes and ketones. 2,746,973, 5–22–56, Cl. 260—332.3.
Griffin, Leo L.: *See*—
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Griffin, William C.: *See*—
Cross, Sherwood T., and Griffin. 2,746,868.
Grospas, Pierre J., to Societe anonyme dite: Etablissements Grospas. Cylindrical strainer or filter units. 2,746,552, 5–22–56, Cl. 166—235.
Gross, Arthur R., to Automatic Tow Bar Co., Inc. Automobile tow bar. 2,746,771, 5–22–56, Cl. 280—494.
Grossman, Ralph E., and H. W. Dorn. Apparatus for dispensing measured volumes of paint. 2,746,648, 5–22–56, Cl. 222—136.
Grubb, John J. Specific gravity measuring apparatus. 2,746,298, 5–22–56, Cl. 73—444.
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Churgin, Leopold, and Grundberg. 2,746,155.

Grunewald, Glen R., and F. J. Pierce, to Universal Oil Products Co. Process and apparatus for countercurrently contacting fluids. 2,746,846, 5–22–56, Cl. 23—310.
Gruver, John H., and L. F. Mitchell, to Addressograph-Multigraph Corp. Inking roller for an imprinting means. 2,746,388, 5–22–56, Cl. 101—367.
Guanella, Gustav, to Radio Patents Co. Frequency-modulated high-frequency system. 2,747,083, 5–22–56, Cl. 250—15.
Guardian Electric Mfg. Co.: *See*—
Obszarny, Theodore J. 2,747,057.
Guild, Lloyd V. Carbon train. 2,746,843, 5–22–56, Cl. 23—254.
Guillette, Louis J. Oscillator attachment for plating tanks. 2,746,732, 5–22–56, Cl. 250—112.
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Wylie, Malcolm R., J., and Tittle. 2,747,100.
Gump, B. F., Co.: *See*—
Selser, Andrew H., Berry, and Williams. 2,746,736.
Selser, Andrew H., Berry, and Williams. 2,746,865.
Gunkler, Albert A., D. E. Lake, and B. C. Potts, to The Dow Chemical Co. Preparation of olefin bromides. 2,746,990, 5–22–56, Cl. 260—660.
Güttinger, Walter, and G. Spiess, to Inventio Aktiengesellschaft. Braking devices for elevators. 2,746,567, 5–22–56, Cl. 187—29.
Haas, Arthur W.: *See*—
Clague, James D., and Haas. 2,746,466.
Hack, Heinrich: *See*—
Federn, Klaus, Hack, and Kurz. 2,746,299.
Hacklander, Hans, to The Singer Mfg. Co. Roller pressers for seaming machines. 2,746,750, 5–22–56, Cl. 271—2.3.
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Vetter, Otto B. 2,746,292.
Hagans, Kenneth W. Refrigerant charging and weighing device. 2,746,258, 5–22–56, Cl. 62—1.
Hagenhaus, Kurt, to Siemens & Halske, Aktiengesellschaft. Marker impulse generator for signalling systems. 2,747,023, 5–22–56, Cl. 179—18.
Hagenhaus, Kurt, and G. Tiesler, to Siemens & Halske, Aktiengesellschaft. Apparatus for testing signal impulse generators. 2,747,033, 5–22–56, Cl. 179—175.2.
Hall, Kenneth J., to Crompton & Knowles Loom Works. Electric weft ston motion for narrow ware loom. 2,746,490, 5–22–56, Cl. 139—371.
Hall, Owen W. Beverage dispensing stand. 2,746,646, 5–22–56, Cl. 222—113.
Hamal, Ferdinand H., to Vinco Corp. Coated parts handling buggy and method of coating same. 2,746,882, 5–22–56, Cl. 117—102.
Hammond, John H., Jr. Moving ball on magnetic track. 2,746,206, 5–22–56, Cl. 46—43.
Hammond, John H., Jr. Smoke dissipating ash tray. 2,747,101, 5–22–56, Cl. 250—48.
Hampson, John C., to Rockwell Spring and Axle Co. Attachment for wire coiling machine. 2,746,512, 5–22–56, Cl. 153—65.
Hansen, Francis F. Bread moulding. 2,746,403, 5–22–56, Cl. 107—54.
Hansen, Gilbert H., N. H. Koertge, and P. F. White, to Furnas Electric Co. Duplex switch actuator. 2,747,035, 5–22–56, Cl. 200—17.
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Bruce, William F., Hanslick, and Freed. 2,746,959.
Hanson, Ross A., to Union Oil Co. of California. Process for hydro-desulfurization of light hydrocarbons using a nickel oxide catalyst. 2,746,907, 5–22–56, Cl. 196—28.
Hanson, Walter J., to Pitney-Bowes, Inc. Value printing die cover means. 2,746,382, 5–22–56, Cl. 101—91.
Hård af Segerstad, Carl G., and A. T. Westberg, to Sandvikens Jernverks Aktiebolag. Balanced valve fluid-actuated control device. 2,746,424, 5–22–56, Cl. 121—38.
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Alexander, William G., and Harden. 2,747,178.
Harless, Charles A., to R. Hoe & Co., Inc. Movable nipping roller delivery for a printing machine. 2,746,748, 5–22–56, Cl. 270—41.
Harlow, Earl V., to Koppers Co., Inc. Purification of gases. 2,746,563, 5–22–56, Cl. 183—114.
Harris, Arch W., to United States Steel Corp. Wire-reinforced rubber article and method of making the same. 2,746,135, 5–22–56, Cl. 29—195.
Harris, Carl C., to The Rivet-O-Mfg. Co. Spring biased valve with lock. 2,746,073, 5–22–56, Cl. 15—138.
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Wood, James R. 2,746,312.
Hart, Richard H. Parachute. 2,746,699, 5–22–56, Cl. 244—145.
Hartbauer, Ellsworth A.: *See*—
Engleson, Harry E., and Hartbauer. 2,746,222.
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Hartford National Bank and Trust Co.: *See*—
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Loosjes, Robert. 2,747,127.
Weigel, Kurt, and Verse. 2,747,102.
Wijchman, Jan. 2,746,692.
Hartman, Herbert L., to The General Industries Co. Plural-speed drive mechanisms for phonograph turntables. 2,746,306, 5–22–56, Cl. 74—199.
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Ritter, Julius P., Jr. 2,746,381.
Harvey, Draper M. Hydraulic valve lifter mechanism. 2,746,436, 5–22–56, Cl. 123—90.
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Dolsa, John, and Harvey. 2,746,427.
Hastings, Donald F., to Bendix Aviation Corp. Automatic stop mechanism. 2,746,573, 5–22–56, Cl. 188—69.
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Thurston, Ernest B. 2,746,566.
Haviland, Girard S.: *See*—
Stoner, Arthur M., and Haviland. 2,746,758.
Hawkins, Scott F., to North American Aviation, Inc. Venturi control device for aircraft brake system. 2,746,250, 5–22–56, Cl. 60—51.
Haydon Mfg. Co., Inc.: *See*—
Poole Arthur B. 2,747,116.
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Granqvist, Carl-Erik. 2,747,181.
Heath, Thomas C., to General Motors Corp. Generator regulation. 2,747,104, 5–22–56, Cl. 290—36.
Heck, Norman C.: *See*—
Race, Austin T., Jr., and Heck. 2,746,772
Hedding Linnie K.: *See*—
Zygmunt, Henry J., and Hedding. 2,746,122.
Hedrick, William E. Threadless bolt rail joint. 2,746,687, 5–22–56, Cl. 238—252.
Heeley, Roland, to United Shoe Machinery Corp. Inserting machines having rotary anvils. 2,746,041, 5–22–56, Cl. 1—2.
Hegedüs, Balthasar, to Hoffmann-La Roche Inc. Novel diacylated hydrazines and process for the manufacture thereof. 2,746,963, 5–22–56, Cl. 260—295.
Heilbronner, Harry S., to The Perry Knitting Co. Garment construction. 2,746,054 5–22–56, Cl. 2—83.
Heimaster, John W., and R. R. Conner, to Union Carbide and Carbon Corp. Remotely controlled car uncoupling systems. 2,746 615, 5–22–56, Cl. 213—212.
Heller Corp., The: *See*—
Heller, Harold S. 2,746,043.
Heller, Harold S., deceased: M. S. Zaller, executor, to The Heller Corp. Magazine for stapling machines. 2,746,043, 5–22–56, Cl. 1—49.
Helling, Werner, H. Neunzig, J. Bolle and R. Lattey. Method of imparting high brilliancy to articles made of aluminum and its alloys. 2,746,849, 5–22–56, Cl. 41—42.
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Helmer, Warren D., to Thiokol Chemical Corp. Process for the preparation of dithiodialkylene glycols. 2,746,994, 5–22–56, Cl. 260—608.
Hemet Aircraft Corp.: *See*—
Dahlberg, Carl B. 2,746,517.
Hemminger, Charles E., to Esso Research and Engineering Co. Hydroforming. 2,746,909, 5–22–56, Cl. 196—50.
Henderson, Hayward W., to Minneapolis-Honeywel Regulator Co. Gyroscopic devices. 2,746,301, 5–22–56, Cl. 74—5.6.
Hendrickson, Donald E.: *See*—
Schwartz, Daniel M., and Hendrickson. 2,746,625.
Hendry, James W., to Tube Turns Plastics, Inc. Method for working synthetic organic plastic materials. 2,746,089, 5–22–56, Cl. 18—56.
Henkel & Cie, M. m. b. H.: *See*—
Raecke, Bernhard. 2,746,838.
Hennemann, Georg: *See*—
Röder, Hugo L., and Hennemann. 2,746 897.
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Hennessy Lubricator Co., Inc.: *See*—
Hennessy, James J. 2,746 817.
Henning, Otto, to Carter Carburetor Corp. Liquid filter for carburetor. 2,746,606, 5–22–56, Cl. 210—166.
Henseleit, Georg, to Koppers Co., Inc. Door-handling mechanism for the doors of horizontal coke ovens. 2,746,610, 5–22–56, Cl. 212—4
Henseleit, Gerge, to Koppers Co., Inc. Coke oven door handling machine. 2,746,611, 5–22–56, Cl. 212—4.
Hercules Powder Co.: *See*—
Pyle, George H. 2,746,958.
Hervert, George L.: *See*—
Bloch, Herman S., and Hervert. 2,746,842.
Hersog, Gerald B., to Radio Corp. of America. Cathode ray beam deflection system. 2,747,136, 5–22–56, Cl. 315—27.
Hess, Frederic O., to Selas Corp. of America. Porous membrane. 2,746,607, 5–22–56, Cl. 210—169.
Hewlett-Packard Co.: *See*—
Myers, William D., and Zeidler. 2,747,098.
Higgins, Richard L. Electrically-heated windshield wiper. 2,746,077, 5–22–56, Cl. 15—250.5.
Hildyard, Joseph M. Apparatus for the measurement and control of fluids. 2,746 480, 5–22–56, Cl. 137—386.
Hilkemeier, Louis G., to Worthington Corp. Agitator. 2,746,734, 5–22–56, Cl. 259—161.
Hine, Edward K., to Curtiss-Wright Corp. Speed control system. 2 747,141, 5–22–56, Cl. 317—6.
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Hiscock, Earle F., to Kip, Inc. Coffee makers. 2,746,376, 5–22–56, Cl. 99—295.
Hitchings, George H., and G. B. Elion, to Burroughs Wellcome & Co. (U. S. A.) Inc. Novel purine compounds from 6-chloropurine. 2,746,961, 5–22–56, Cl. 260—252.
Hix, L. G.: *See*—
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Hoad, Thomas C. Film-take up. 2,746,691, 5–22–56, Cl. 242—55.
Hobrock, Raymond H., to Bundy Tubing Co. Method of welding a tube. 2,746,141, 5–22–56, Cl. 29—473.5.
Hoe, R., & Co., Inc.: *See*—
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Harless, Charles A. 2,746,748.
Hoff, Clarence A. Space heater for busses and the like. 2,746,726, 5–22–56, Cl. 257—187.
Hoffarth, Odell H., to Collins Radio Co. Interlocked flexible contact assembly for shaft. 2,747,166, 5–22–56, Cl. 339—5.

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Goldberg, Moses W., and Teitel. 2,746,992.
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Schnider, Otto. 2,746,962.

Hogue, Walter S. : *See*—
Novak, Leo J., and Hogue. 2,746,906.

Holder, Clinton H., to Esso Research and Engineering Co. Process of recovery of oxygenated hydrocarbons from hydrocarbon synthesis. 2,746,985, 5–22–56, Cl. 260—450.

Holin, William F., to General Motors Corp. Railway vehicle traction motor cooling system. 2,746,400, 5–22–56, Cl. 105—59.

Hollingsworth, Jean P. Sanding attachment. 2,746,216, 5–22–56, Cl. 51—195.

Hollins, Jesse R. Flashing direction signalling system for vehicles. 2,747,174, 5–22–56, Cl. 340—81.

Hollyday, William C., Jr. : *See*—
Garber, John D., Hollyday, and Vanderbilt. 2,746,925.

Holmes Electric Protective Co. : *See*—
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Holrits, Edward W. Latch. 2,746,784, 5–22–56, Cl. 292—175.

Holmsten, Neil O. Oven. 2,746,448, 5–22–56, Cl. 126—19.

Holt, Frederick W., Jr., to The Brown-Bridge Mills, Inc. Method of producing a thermoplastic adhesive and product thereof. 2,746,885, 5–22–56, Cl. 117—122.

Holtschulte, William F. : *See*—
Drummond, Warren W., Steits, and Holtschulte. 2,746,118.

Holycross, Reginald R. Log-receiving trough having a rotating log-end stop and a bark-removing auger. 2,746,498, 5–22–56, Cl. 144—208.

Holshausen, Karl. Fuel-air mixer. 2,746,851, 5–22–56, Cl. 48—180.

Hoogendoorn, Harold W. Knockdown bicycle frame. 2,746,769, 5–22–56, Cl. 280—287.

Hoover, George R., to Armco Steel Corp. Method of paving pipe. 2,746,090, 5–22–56, Cl. 18—59.

Hopkins, Harold H., to W. Watson & Sons Ltd. Variable magnification optical systems. 2,746,350, 5–22–56, Cl. 88—57.

Horn, Robert S., Jr., and R. F. Patt, to Hans C. Bick, Inc. Method of applying nylon finish to garments. 2,746,941, 5–22–56, Cl. 260—9.

Horner, Herbert F., Jr. : *See*—
Ertsgaard, Byron L., and Horner. 2,746,315.

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Fonda, Allen B., and Horvay. 2,746,830.

Hotelling, Joseph H. : *See*—
Barron, James T., Dill, and Hotelling. 2,746,128.

Hough, Homer H. Pattern spraying lawn sprinkler. 2,746,792, 5–22–56, Cl. 299—18.

Howard, Ralph M. Receptacle. 2,746,505, 5–22–56, Cl. 150—52.

Howarth, Arthur N., to Bell Punch Co., Ltd. Taximeter indicators. 2,747,173, 5–22–56, Cl. 340—68.

Huber, J. M., Corp. : *See*—
Williams, Ira. 2,746,564.

Huber, Robert, to Societe d'Etudes et de Participations, Eau, Gaz, Electricite, Energie, S. A. Free piston motor-compressors. 2,746,670, 5–22–56, Cl. 230—56.

Huck Co. : *See*—
Huck, William F. 2,746,749.

Huck, William F., to Huck Co. Means for scanning traveling webs in printing machines and the like. 2,746,749, 5–22–56, Cl. 271—2.1.

Hudson, Raymond A., to Willson Products, Inc. Helmet. 2,746,049, 5–22–56, Cl. 2—3.

Hull, James R. Shaping tool for patterns having arcuate recesses. 2,746,496, 5–22–56, Cl. 144—136.

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Jacobs, Jerome E., and St. John. 2,747,164.

Hughes, Fred S. Bean and pea pod splitter. 2,746,458, 5–22–56, Cl. 130—30.

Hughes, John O. P., to The English Electric Co. Ltd. Flexible drives. 2,746,273, 5–22–56, Cl. 64—17.

Hunt, Scott F., to Bendix Aviation Corp. Carburetor. 2,746,439, 5–22–56, Cl. 123—119.

Hunter, Edward A., and C. N. Kimberlin, Jr., to Esso Research and Engineering Co. Process of preparing platinum-alumina hydroforming catalysts. 2,746,937, 5–22–56, Cl. 252—466.

Hurlburt, Edward M. : *See*—
Hurlburt, Fred F., and Gillispie. 2,746,778.

Hurlburt, Fred F., and C. H. Gillispie, 20% to H. F. Hurlburt, 20% to E. M. Hurlburt, and 20% to G. H. Leser. Journal box grease seal. 2,746,778, 5–22–56, Cl. 286—6.

Hurlburt, Harold F. : *See*—
Hurlburt, Fred F., and Gillispie. 2,746,778.

Hurley, John C. : *See*—
Matthews, Harry L. 2,746,554.

Husman, Chester N. : *See*—
Torrent, Ralph R., Husman, and Dyson. 2,746,279.

Hutchison, Robert R., to General Motors Corp. Automatic choke. 2,746,438, 5–22–56, Cl. 123—119.

Hyde, James F., to Dow Corning Corp. Preparation of silane esters. 2,746,982, 5–22–56, Cl. 260—448.8.

I-T-E-Circuit Breaker Co. : *See*—
Kradel, Fred L., and Foti. 2,747,142.

Ideal Stencil Machine Co. : *See*—
Taylor, Charles P. 2,746,546.

Illinois Tool Works : *See*—
Poupitch, Ougljesa J. 2,746,065.
Poupitch, Ougljesa J. 2,746,506.

Imamoto, Takeo : *See*—
Murakami, Masao, and Imamoto. 2,746,803.

Imperial Chemical Industries Ltd. : *See*—
Dean, Fred. 2,746,993.

Imperial Cold Storage and Supply Co. Ltd. : *See*—
Schamotta, Jacobus J. 2,746,782.

Infilco Inc. : *See*—
Adelson, Samuel L. 2,746,474.

Ingenieurs Bureau Voor Industrie Service N. V. : *See*—
Freyssinet, Eugène. 2,746,714.

Ingersoll-Rand Co. : *See*—
Loss, Isidor R. 2,746,418.

Inman, Charles E., to The Pennsylvania Salt Mfg. Co. Process for producing octachlorothiolane. 2,746,974, 5–22–56, Cl. 260—332.5.

Instituut voor Tuinbouwtechniek : *See*—
Feis, Nikolaas. 2,746,802.

International Business Machines Corp. : *See*—
Chapman, Edward B. 2,746,831.
Paris, Robert E., and Wieland. 2,746,548.
Roth, Robert I. 2,746,549.

International Latex Corp. : *See*—
Krieger, Larry L. 2,746,063.

International Nickel Co., Inc., The : *See*—
Comley, Mervyn A. 2,746,742.

International Rectifier Corp. : *See*—
Parrish, Frank W. 2,747,167.

International Staple and Machine Co. : *See*—
Spencer, Herman J. 2,746,045.

Inventio Aktiengesellschaft : *See*—
Güttinger, Walter, and Spiess. 2,746,567.

Iowa State College Research Foundation, Inc. : *See*—
Ye Chu, Ting, and Davidson. 2,746,731.

Isoflex Corp. : *See*—
Elfving, Thore M. 2,746,892.

Jackson, T. Burr, to the United States of America as represented by the Secretary of the Navy. Method and apparatus for continuously reducing recorded telemetric data. 2,746,833, 5–22–56, Cl. 346—107.

Jacobs, Foster : *See*—
Vantlander, Edward, and Jacobs. 2,746,626.

Jacobs, Jerome E., and E. E. St. John, to Hughes Aircraft Co. Frequency modulation of crystal oscillator. 2,747,164, 5–22–56, Cl. 332—26.

Jacobs, John E., to General Electric Co. Interval timing apparatus. 2,747,104, 5–22–56, Cl. 250—95.

Jacobs Mfg. Co., The : *See*—
Stoner, Arthur M., and Haviland. 2,746,758.

Jacobs, Robert B. : *See*—
Greanias, Evon C., and Jacobs. 2,746,286.

Jaeger, Jacob J., to Pratt & Whitney Co., Inc. Control system for machine tools. 2,747,151, 5–22–56, Cl. 318—162.

Jaques, Elmo B., to Descaling Equipment Co., Inc. Descaling wheel. 2,746,127, 5–22–56, Cl. 29—81.

Jaworowski, Joseph F. and N., to Shockey Corp. Rotary pump. 2,746,391, 5–22–56, Cl. 103—42.

Jaworowski, Norbert : *See*—
Jaworowski, Joseph F. and N. 2,746,391.

Jefferson, Glen V., to Westinghouse Air Brake Co. Circuit controller. 2,747,056, 5–22–56, Cl. 200—153.

Jeffrey Mfg. Co., The : *See*—
Moon, Sterling C. 2,746,597.

Jellinek, Guido. Nail cover. 2,746,460, 5–22–56, Cl. 132—73.

Jenkins, Charles C., and J. W. Lapointe. Core perforator for ink pad. 2,746,547, 5–22–56, Cl. 164—93.

Jenkins, Howard M., Jr., to Van Auken, Inc. Wheel trim structure. 2,746,806, 5–22–56, Cl. 301—37.

Jensch, Clyde K., to Nordberg Mfg. Co. Grinding assembly for drill bits. 2,746,212, 5–22–56, Cl. 51—92.

Jermyn, Arthur C. Masticators for artificial teeth. 2,746,148, 5–22–56, Cl. 32—2.

Jesl, James L., to Sun Oil Co. Separtion of naphthenic acids. 2,746,989, 5–22–56, Cl. 260—514.

Johanson, Bengt J., to Cinch Mfg. Corp. Contact for printed circuits. 2,747,169, 5–22–56, Cl. 339—258.

Johansson, Ernest G., to Anchor Mfg. Co. Plug-in meter socket with shunt switch and signal. 2,747,049, 5–22–56, Cl. 200—51.1.

Johansson, Ernest G., to Anchor Mfg. Co. Shunt switch for plug-in meter socket and the like. 2,747,050, 5–22–56, Cl. 200—51.10.

Johnson, Albert. Suspensory. 2,746,453, 5–22–56, Cl. 128—162.

Johnson, Ava J., and A. J. Cherniavsky, to Shell Development Co. Catalytic hydrogen chloride oxidation process to produce chlorine. 2,746,844, 5–22–56, Cl. 23—219.

Johnson, Charles R., to Rockwell Mfg. Co. Plug valves. 2,746,478, 5–22–56, Cl. 137—246.16.

Johnson, Gordon R. : *See*—
Darragh, John L., and Johnson. 2,746,928.

Johnson, Gustav R. Pivoted lever bottle cap removing device. 2,746,323, 5–22–56, Cl. 81—3.1.

Johnson, Robert E. Piano string. 2,746,335, 5–22–56, Cl. 84—199.

Johnson, Samuel J., and C. J. Schroeder, to Clopay Corp. Folding door. 2,746,538, 5–22–56, Cl. 160—84.

Jones, Allen R. : *See*—
Gerhardt, Philip B., Smith, and Jones. 2,746,923.

Jones, Glenn M. : *See*—
Klessig, Ernst F., and Jones. 2,746,892.

Jones, John P., to Burroughs Corp. Binary magnetic element coupling circuits. 2,747,110, 5–22–56, Cl. 307—88.

Jones & Lamson Machine Co. : *See*—
Finn, Robert R., and White. 2,746,066.

Jones, Marvin R., to Petroleum Mechanical Development Corp. Blowout preventer and ram therefor. 2,746,710, 5–22–56, Cl. 251—2.

Jones, Marvin R., to Petroleum Mechanical Development Corp. Wiping and sealing devices for well pipes. 2,746,781, 5–22–56, Cl. 288—2.

Jones, Rexford W., to Photo-Engravers Research, Inc. Etching. 2,746,848, 5–22–56, Cl. 41—42.

Jonsson, Kurt A. : *See*—
Polasek, Karl, and Jonsson. 2,747,107.

Joslin, Harry B. Awning shutter. 2,746,537, 5–22–56, Cl. 160—58.

Joy Mfg. Co. : *See*—
Paget, Win W. 2,746,329.

Josif, Josef. Combined starting and gear control device for motor-cycles. 2,746,444, 5–22–56, Cl. 123—179.

Jucker, Ernst : *See*—
Stoll, Arthur, Jucker, and Lindenmann. 2,746,976.

Kamm, Wunibald I. E., W. Krautter, and K. Staiger, to Stewart-Warner Corp. Resonant combustion device for heating engines and similar structures. 2,746,529, 5–22–56, Cl. 158—4.

Kant, Edwin S. : *See*—
Cutler, Wallace M., and Kant. 2,746,048.
Cutler, Wallace M., Kant, and Greenough. 2,746,047.

Kaplan, Samuel, to Kastar Inc. Portable clothes hanger holder and carrier. 2,746,661, 5–22–56, Cl. 224—42.45.

Kaplan, Sidney M., to General Electric Co. Automatic amplitude selection circuit. 2,747,179, 5–22–56, Cl. 343—17.1.

Karjala, Urho N. Furnace flue area reducing damper or baffle structure. 2,746,406, 5–22–56, Cl. 110—97.

Karpf, Jerome C. Toy spectacles. 2,746,204, 5–22–56, Cl. 46—1.

Karr, Leonard R. Water fowl decoys. 2,746,196, 5–22–56, Cl. 43—3.

Kasdan, Nathan, to Majestic Metal Specialties, Inc. Lady's face powder compact. 2,746,462, 5–22–56, Cl. 132—83.

Kastar Inc. : *See*—
Kaplan, Samuel. 2,746,661.

Katzenberger, Bernhard, and H. L. von Cube, to Brown, Boveri & Cie, Aktiengesellschaft. Air-conditioning and water-cooling apparatus. 2,746,259, 5–22–56, Cl. 62—3.

Kauppi, Hilmer F. Fishing reel. 2,746,694, 5–22–56, Cl. 242—84.4.

Kautenberg, W. E., Co. : *See*—
Kautenberg, William E. 2,746,235.

Kautenberg, William E., to W. E. Kautenberg Co. Flexible lawn rakes. 2,746,235, 5–22–56, Cl. 56—400.17.

Kay-Brunner Steel Products, Inc. : *See*—
Brunner, Joseph F., Jr. 2,746,776.

Kearney, James R., Corp. : *See*—
Runde, Kenneth R. 2,746,327.

Keating, Richard T. Gas burner. 2,746,532, 5–22–56, Cl. 158—114.

Keller, Albert G., to Holmes Electric Protective Co. Burglar alarm system for a movable closure. 2,747,177, 5–22–56, Cl. 340—276.

Keller, Theodore W., and C. W. Garvin, Garvin to Keller. Electrically controlled web feeding means for a bag making machine. 2,746,752, 5–22–56, Cl. 271—2.6.

Kellogg, M. W., Co., The : *See*—
Diehl, Charles. 2,747,065.
Kirkwood, John G., and West. 2,747,009.

Kelsey-Hayes Wheel Co. : *See*—
Brehm, Charles M. 2,746,544.
Brelsford, Charles G. 2,746,531.

Kennedy, Charles J., to Collins Radio Co. Tracking mechanism. 2,746,151, 5–22–56, Cl. 33—1.

Kennedy, Merritt T., Jr., and A. C. Allen, to Pyrate Sales, Inc. Safety lighting unit. 2,747,078, 5–22–56, Cl. 240—11.3.

Kenny, Clarence E., and C. L. Ringle, to Allis-Chalmers Mfg. Co. Valve actuating means. 2,746,711, 5–22–56, Cl. 251—26.

Kent Mfg. Corp. : *See*—
Batcheller, Hugh W. 2,747,170.

Kent-Moore Organization, Inc. : *See*—
Pfetzing, Henry V. 2,746,330.

Kerr, Samuel, to Monroe Calculating Machine Co. Predetermined value entering means for accounting machines. 2,746,676, 5–22–56, Cl. 235—60.47.

Keyes Fibre Co. : *See*—
Emery, Richard L. 2,746,338.

Keyes, Frederick G., to Alfred Bicknell Associates, Inc. Minature cooling unit. 2,746,264, 5–22–56, Cl. 62—92.

Kiesow, Arthur L., and P. E. Rehr. Wire straightening and tensioning attachment for baling machine. 2,746,513, 5–22–56, Cl. 153—104.

Kigass Ltd. : *See*—
Curran, Vincent J. 2,746,801.

Kilpatrick, Myron O., to Phillips Petroleum Co. Method and apparatus for intimately contacting and then separating immiscible fluids. 2,747,003, 5–22–56, Cl. 260—683.4.

Kimberlin, Charles N., Jr. : *See*—
Hunter, Edward A., and Kimberlin. 2,746,937.

Kinchin, Joseph W., to Girling Ltd. Disc brakes for road and other vehicles. 2,746,575, 5–22–56, Cl. 188—152.

King, Jack C., to The Shaw-Walker Co. Follower block construction. 2,746,815, 5–22–56, Cl. 308—4.

King, William R., to Phillips Petroleum Co. Feeding mechanism. 2,746,083, 5–22–56, Cl. 18—1.

King, William V., to Rowe Spacarb, Inc. Beverage dispensing machines. 2,746,641, 5–22–56, Cl. 222—2.

Kinsey, Claude J., to General Motors Corp. Chuck. 2,746,759, 5–22–56, Cl. 279—74.

Kip, Inc. : *See*—
Hiscock, Earle F. 2,746,376.

Kirk, John R., to The Lamson Corp. Pneumatic tube conveyor systems. 2,746,697, 5–22–56, Cl. 243—29.

Kirk, Joseph S., to General Aniline & Film Corp. Manufacture of leather using a modified vinyl ether-maleic anhydride copolymer, and resulting product. 2,746,837, 5–22–56, Cl. 8—94.33.

Kirkwood, John G., and F. W. West, to The M. W. Kellogg Co. Stable voltaic cells. 2,747,009, 5–22–56, Cl. 136—103.

Kistner, Merrill M., to Steam Iron Corp. Valve for steam iron. 2,746,183, 5–22–56, Cl. 38—77.

Kjellberg, George E. Tube end forming hand tool. 2,746,325, 5–22–56, Cl. 81—15.

Klein, Mathias A., Jr., and W. F. Wendt, to Mathias Klein & Sons. High leverage side cutting pliers. 2,746,145, 5–22–56, Cl. 30—186.

Klein, Mathias, & Sons : *See*—
Klein, Mathias A., Jr., and Wendt. 2,746,145.

Klessig, Ernst F., and G. M. Jones, to Vickers Inc. Power transmission. 2,746,392, 5–22–56, Cl. 103—42.

Klingens, Cornelis, to U. S. Slicing Machine Co., Inc. Juice trough assembly for a slicing machine having a rotatable knife. 2,746,500, 5–22–56, Cl. 146—102.

Knibel, Hanns. Dispenser for canned liquid goods. 2,746,645, 5–22–56, Cl. 222—86.

Knee, Simon. Wallet with improved foldable pass case. 2,746,503, 5–22–56, Cl. 150—35.

Knudsen Creamery Co. of California : *See*—
Sellatrom, Lawrence T. 2,746,267.
Sellatrom, Lawrence T. 2,746,268.

Koch, Winfield R., to Radio Corp. of America. Coupling circuit for semi-conductor devices. 2,747,111, 5–22–56, Cl. 307—88.5.

Kock, Winston E., to Bell Telephone Laboratories, Inc. Wave refracting devices. 2,747,184, 5–22–56, Cl. 343—909.

Koehring Co. : *See*—
Martinson, Edwin O. 2,746,618.

Koertge, Nobel : *See*—
Hansen, Gilbert H., Koertge, and White. 2,747,035.

Kofoid, Orville, 50% to R. B. Mfg. Corp. Diffusing apparatus. 2,746,795, 5–22–56, Cl. 299—69.

Komarnitsky, Rostislaw S. : *See*—
Puglielli, Alphonse, and Komarnitsky. 2,746,704.

Kominami, Tsuguo, and J. Ukita, ¼ to Omni Products Corp. Polymerization of vinyl acetate with peroxide, amine, sulfinic acid catalyst system. 2,746,947, 5–22–56, Cl. 260—89.1.

Kommer, Fred A., and A. W. Zub, to Carter Carburetor Corp. Starter switch. 2,747,051, 5–22–56, Cl. 200—61.9.

Koppers Co., Inc. : *See*—
Harlow, Earl V. 2,746,563.
Henselelt, Georg. 2,746,610.
Henselelt, Georg. 2,746,611.
Schürhoff, Heinrich. 2,746,913.
Van Ackeren, Paul. 2,746,914.
Van Ackeren, Paul, and Doll. 2,746,786.

Korn, Waldemar H., to Kornlube Products. Guard and oil-retaining means for railroad journal box. 2,746,777, 5–22–56, Cl. 286—6.

Kornlube Products : *See*—
Korn, Waldemar H. 2,746,777.

Kornylak, Andrew T., to Kornylak Engineering Corp. Conveyor belt. 2,746,595, 5–22–56, Cl. 198—195.

Kornylak Engineering Corp. : *See*—
Kornylak, Andrew T. 2,746,595.

Kosalek, Joseph F., and J. Sulich, Jr., to General Aniline & Film Corp. Light sensitive diazotype material. 2,746,863, 5–22–56, Cl. 95—6.

Kosfeld, Milton M., to General Electric Co. Air conditioning apparatus. 2,746,266, 5–22–56, Cl. 62—115.

Kradel, Fred L., and A. Foti, to I-T-E-Circuit Breaker Co. Automatic line sectionalizing and service restoration device. 2,747,142, 5–22–56, Cl. 317—22.

Kraft, Elroy J., and L. S. Wasserman, to The Dole Valve Co. Flutterless damper for a heat register structure. 2,746,374, 5–22–56, Cl. 98—108.

Krapcho, John, and W. A. Lott, to Olin Mathieson Chemical Corp. Basic esters and amides of 5,6-dihydro-4H-pyran-3-carboxylic acid and methods of producing same. 2,746,975, 5–22–56, Cl. 260—345.8.

Krause, Carl H., and J. J. Filliung, to Sloan Valve Co. Vacuum breakers. 2,746,477, 5–22–56, Cl. 137—218.

Krautter, Willy : *See*—
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Kraybill, Henry R., to A. W. Brickman, V. Conquest, F. J. Madden, W. B. Oleson, and E. T. Filbrey, as trustees for the benefit of American Meat Institute Foundation. Antioxidant composition. 2,746,870, 5–22–56, Cl. 99—163.

Kreidl, Werner H., to Traver Investments, Inc. Apparatus for treating polyethylene bodies. 2,746,084, 5–22–56, Cl. 18—1.

Kremser, Johann. Internal-combustion engine. 2,746,435, 5–22–56, Cl. 123—55.

Kremser, Johann. Two-stroke cycle internal-combustion engine. 2,746,441, 5–22–56, Cl. 123—139.

Kreuchunas, Algird : *See*—
Gregory, Walter A., and Kreuchunas. 2,746,973.

Krieger, Larry L., to International Latex Corp. Brassiere. 2,746,053, 5–22–56, Cl. 2—42.

Kriegsmann, Kurt : *See*—
Beard, Donald M., Bruce, and Kriegsmann. 2,746,369.

Krikorian, Albert P. Rocking chair convertible to non-rocking. 2,746,519, 5–22–56, Cl. 155—72.

Kroft, Frederick C., Jr. : *See*—
Binder, William O., Kroft, and Fritzlen. 2,746,860.

Krow, Cecil J. Fuel feeding device. 2,746,479, 5–22–56, Cl. 137—340.

Kubilunas, Ignas B. Trouble light and suspension means. 2,747,079, 5–22–56, Cl. 240—52.15.

Kuczynski, Walter, and G. J. Lehmann, to Baker & Co., Inc. Catalytic fuel igniters. 2,747,143, 5–22–56, Cl. 317—83.

Kudryk, Val : *See*—
McGauley, Patrick J., Nashner, and Kudryk. 2,746,859.

Kufner, Georg. Process for the manufacture of threads. 2,746,236, 5–22–56, Cl. 57—160.

Kuhlenschmidt, Floyd E. : *See*—
Kuhlenschmidt, Harold L. and F. E., and Arthur and Arnold Geiselman. 2,746,619.

Kuhlenschmidt, Harold L. and F. E., and Arthur and Arnold Geiselman, to Elberfeld Mfg. Co. Inc. Truck loading or unloading mechanism. 2,746,619, 5–22–56, Cl. 214—75.

Kuhlmann, Emil P., to National Registrier Kassen Augsburg G. m. b. H. Record material carriage shifting means for calculating machines. 2,746,304, 5–22–56, Cl. 74—99.

Kuntz, Harry A., to Libbey-Owens-Ford Glass Co. Sheet glass cutting machine. 2,746,153, 5–22–56, Cl. 33—27.

Kurz, Walter: *See*—
Federn, Klaus, Hack, and Kurz. 2,746,299.

L. O. F. Glass Fibers Co.: *See*—
Barnard, Randolph H. 2,747,006.

L-O-F Glass Fibers Co.: *See*—
Thompson, Henry C. 2,746,896.

Lackner, Robert V. Induction heating apparatus. 2,747,068, 5–22–56, Cl. 219—10.75.

Lady, William T., and T. M. Leonard. Body cavity examining instrument. 2,746,450, 5–22–56, Cl. 128—6.

Lafaye, Jacques M. P.: *See*—
Vorburger, René E. L., and Lafaye. 2,746,565.

Laird, Hubert C., to Crane Co. Construction and method for repair of valves under pressure. 2,746,470, 5–22–56, Cl. 137—15.

Lake, Douglas E.: *See*—
Gunkler, Albert A., Lake, and Potts. 2,746,999.

Lakeside Laboratories, Inc.: *See*—
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Biel, John H. 2,746,965.
Biel, John H. 2,746,966.
Biel, John H. 2,746,967.

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Brown, David, Colton, and Landau. 2,746,998.

Lang, Maxwell E. Broilers. 2,746,378, 5–22–56, Cl. 99—447.

Lang, Otto. Emergency traction cleat. 2,746,509, 5–22–56, Cl. 152—237.

Langford, Forrest L. Dotted line attachment for drafting machines. 2,746,157, 5–22–56, Cl. 33—174.

Langlois, David P., and R. F. Larson, to A. E. Staley Mfg. Co. Interconversion of sugars using anion exchange resins. 2,746,889, 5–22–56, Cl. 127—36.

Lapointe, John W.: *See*—
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Lattey, Richard: *See*—
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Laubender, Ludwig, to Fa. Krauss-Maffei A. G. Means for preventing the flow of lubricating oil into the exhaust ports of diesel engines. 2,746,446, 5–22–56, Cl. 123—193.

Lautenbach, Charles S., to General Motors Corp. Window regulator. 2,746,747, 5–22–56, Cl. 268—104.

Lavender, Hillery C. Power-steering device. 2,746,311, 5–22–56, Cl. 74—388.

Laverdisse, Edmond, to Les Glaceries de la Sambre, Societe Anonyme. Means for maintaining the constancy of the working plane of grinding and/or polishing tools. 2,746,213, 5–22–56, Cl. 51—112.

Lawser, John J., to Proctor Electric Co. Toaster heating unit. 2,747,072, 5–22–56, Cl. 219—19.

Leach, Ray B. Heat transfer system and electric controls therefor. 2,746,724, 5–22–56, Cl. 257—3.

Lear, Inc.: *See*—
Serge, Igor B. 2,746,419.

Le Baron, Theodore, and E. B. Dodds. Means for dispensing measured lengths of tape. 2,746,751, 5–22–56, Cl. 271—2.4.

Le Bel, Clarence J. Temperature compensated circuit having non-linear resistor. 2,747,158, 5–22–56, Cl. 323—69.

Le Blond, R. K., Machine Tool Co., The: *See*—
Meyer, Walter R., and Siekmann. 2,746,613.

Lee, Ferman N., W. F. MacKenzie, A. C. D'Arcey, and A. G. Ciechetti, to United Shoe Machinery Corp. Heel attaching machines. 2,746,046, 5–22–56, Cl. 1—141.

Lee, Julia S. Combination sewing cabinet, work table and storage space device. 2,746,825, 5–22–56, Cl. 312—28.

Lee, Samuel, to American Home Products Corp. Inhibition of caking of soluble coffee and the inhibited product. 2,746,866, 5–22–56, Cl. 99—71.

LeFiell, Sidney. Automatic switch for overhead track. 2,746,397, 5–22–56, Cl. 104—101.

Legler, Henry M., to Larus & Brother Co., Inc. Cigarette device. 2,746,890, 5–22–56, Cl. 131—4.

Lehmann, George J.: *See*—
Kuczynski, Walter J., and Lehmann. 2,747,143.

Leits, Ernst, G. m. b. H.: *See*—
Leits, Ludwig. 2,746,348.

Leitz, Ludwig, to Ernst Leitz, G. m. b. H. Optical viewing device with contrasting color phases. 2,746,348, 5–22–56, Cl. 88—39.

Lemos, Manuel G., to Underwood Corp. Upper feed roll control means for typewriting and like machines. 2,746,590, 5–22–56, Cl. 197—138.

Leonard, George H., to Machlett Laboratories, Inc. Mounting for articles. 2,746,775, 5–22–56, Cl. 285—165.

Leonard, Thomas M.: *See*—
Lady, William T., and Leonard. 2,746,450.

Les Glaceries de la Sambre, Societe Anonyme: *See*—
Laverdisse, Edmond. 2,746,213.

Lesigne, Henri L. and J. G. Demartres, to Compagnie Industrielle des Telephones. Automatic telecommunication switching system. 2,747,022, 5–22–56, Cl. 179—18.

Lester, Robert M., Jr.: *See*—
Britton, Carlyle P., Elker, Ellis, and Lester. 2,746,167.

Lever Brothers Co.: *See*—
Von Mikusch-Buchberg, Johannes D. 2,746 979.

Levy, Irving E., to Raytheon Mfg. Co. High-temperature getters for electronic tubes. 2,747,124, 5–22–56, Cl. 313—174.

Levy, Maurice M.: *See*—
Chubb, Alexander A., and Levy. 2,747,019.
Chubb, Alexander A., and Levy. 2,747,021.

Levy, Maurice M., to The General Electric Co. Ltd. Telecommunication systems embodying automatic exchanges. 2,747,020, 5–22–56, Cl. 179—18.

Levy, Sidney E., to University Loudspeakers, Inc. Reflex type loudspeakers. 2,746,558, 5–22–56, Cl. 181—27.

Lewis, Donald A., Jr. Sky lookout chair. 2,746,154, 5–22–56, Cl. 33—69.

Lewis, Francis B., to Paxton-Mitchell Co. Safety uncoupling rigging for locomotive draft gear. 2,746,614, 5–22–56, Cl. 213—166.

Lewis, Frank W., and I. J. Spaeth, to Chicago Railway Equipment Co. Brake beam connector. 2,746,576, 5–22–56, Cl. 188—210.

Lewis, Harold L. Floral-container support. 2,746,208, 5–22–56, Cl. 47—41.

Lewis, Norman J. Closure for resilient dispensers. 2,746,651, 5–22–56, Cl. 222—213.

Leser, Grace H.: *See*—
Hurlburt, Fred F., and Gillispie. 2,746,778.

Libbey-Owens-Ford Glass Co.: *See*—
Barkley, Dwight W. 2,746,354.
Gaiser, Romey A. 2,746,210.
Kuntz, Harry A. 2,746,153.
Mazur, Ferdinand J., and Ponce. 2,746,353.
Walters, Emmett L. 2,746,209.

Librascope, Inc.: *See*—
Pollock, William E. 2,746,303.

Lickteig, Albert F., to Durable Products Co. Friction hinge. 2,746,101, 5–22–56, Cl. 20—42.

Lieberknecht, Karl, Inc.: *See*—
Zesch, Eugene M. 2,746,274.

Liebich, John C., to Gendron Wheel Co. Leg supporting attachment for invalid chairs. 2,746,527, 5–22–56, Cl. 155—171.

Liftin, Muriel E.: *See*—
Vitale, Peter T., and Liftin. 2,746,931.

Lignes Telegraphiques & Telephoniques: *See*—
Brune, Jean E. P. 2,747,175.

Lindemann, Herbert, and E. Stirnemann. Cellular thermoplastic bodies. 2,746,088, 5–22–56, Cl. 18—48.

Lindenmann, Adolf: *See*—
Stoll, Arthur, Jucker, and Lindenmann. 2,746,976.

Lindle, John C. Loading device for elevated platforms. 2,746,620, 5–22–56, Cl. 214—77.

Linsley, Douglas F., to M. A. Walden. Control system for power transmissions. 2,746,309, 5–22–56, Cl. 74—335.

Lipe-Rollway Corp.: *See*—
Spase, Charles B. 2,746,587.

Litz, George W. Stud mountings and brush holder assemblies. 2,747,117, 5–22–56, Cl. 310—239.

Lobanoff, Val S., to United Centrifugal Pumps. Seal structure. 2,746,779, 5–22–56, Cl. 286—11.13.

Locher, Ross E., to Zinsco Electrical Products. Circuit breaker. 2,747,053, 5–22–56, Cl. 200—116.

Loeschnigg, Ladislaus S., and H. J. Folk. Universal chair. 2,746,526, 5–22–56, Cl. 155—127.

Lolli, August L., to Armour and Co. Process for extracting animal glue in concentrated aqueous solutions. 2,746,949, 5–22–56, Cl. 260—118.

Lolli, August L., to Armour and Co. Continuous method of extracting animal glue in concentrated aqueous solutions. 2,746,950 5–22–56, Cl. 260—118.

Long-Bell Lumber Co., The: *See*—
Baxter, Lee G., Smith, and Mottet. 2,746,096.

Lonnman, Horace F. Viewing and fishing device. 2,746,194, 5–22–56, Cl. 43—1.

Loosjes, Robert, to Hartford National Bank and Trust Co., as trustee. Contact diode. 2,747,127, 5–22–56, Cl. 313—235.

Loral Electronics Corp.: *See*—
Nisenson, Jules. 2,746,316.

Lorentzen, H. K., Inc.: *See*—
Bond, Scott R. 2,746,824.

Lorenz, Anton. Article of repose for supporting the body of a person. 2,746,521, 5–22–56, Cl. 155—106.

Lorenz, Anton. Reclining article of furniture. 2,746,522, 5–22–56, Cl. 155—106.

Loss, Isidor R., to Ingersoll-Rand Co. Position indicator for shafts. 2,746,418, 5–22–56, Cl. 116—124.

Lott, William A.: *See*—
K [illegible] John, and Lott. 2,746,975.

Loucony, Adolphe W., to Conso Metal Products, Inc. Venetian blind headbar and hardware therefor. 2,746,539, 5–22–56, Cl. 160—177.

Loveland, Roger S., and A. J. Maher, to Minneapolis Honeywell Regulator Co. Oven control. 2,746,686, 5–22–56, Cl. 236—94.

Lowe, Edwin C., to Norton Co. Process of making boron carbide containing aluminum, and products thereof. 2,746,133, 5–22–56, Cl. 29—182.8.

Lübeu, Robert, and E. Stiebling, to Ruhrchemie Aktiengesellschaft. Production of commercial paraffin waxes. 2,746,983, 5–22–56, Cl. 260—450.

Lubkin, Samuel, to Underwood Corp. Apparatus for measuring and recording pressures indicated by manometer tubes. 2,746,295, 5–22–56, Cl. 73—398.

Lucien, René, to Societe Aeronautiques et Mecaniques S. I. A. M. Hydraulic brake wear take-up device. 2,746,254, 5–22–56, Cl. 60—54.6.

Lumpkin, James L. Water spray for washing concrete pavement. 2,746,072, 5–22–56, Cl. 15—127.

Lurgi Gesellschaft für Wärmetechnik m. b. H.: *See*—
Rottig, Walter. 2,746,984.

Lusk, Elmer C.: *See*—
Todd, Francis C., and Lusk. 2,747,125.

Maanum, Dedrick A. Apparatus for handling a cartridge belt. 2,746,341, 5–22–56, Cl. 86—47.

Maccarone, Fred. Slip lasted shoe with a three section insole. 2,746,176, 5–22–56, Cl. 36—12.

Maccarone, Fred. Footwear and process of making same. 2,746,177, 5–22–56, Cl. 36—46.5.

Machlett Laboratories, Inc.: *See*—
Leonard, George H. 2,746,775.

Machon, Herbert W., and J. P. Magnano, to Federal Electric Products Co. Three-position push button switch. 2,747,034, 5–22–56, Cl. 200—16.

MacKenzie, William F.: *See*—
Lee, Ferman N., MacKenzie, D'Arcey, and Ciechetti. 2,746,046.

MacQueen, Leonard B.: *See*—
Cooper, Alfred, and MacQueen. 2,746,940.

MacRill, John R.: *See*—
Mispley, Robert G., and MacRill. 2,746,872.

Madden, Frank J., as trustee: *See*—
Kraybill, Henry R. 2,746,870.

Magariello, Edward R., to National Dairy Research Laboratories, Inc. Production of lactobionic acid and its δ-lactone. 2,746,916, 5–22–56, Cl. 204—79.

Magnano, Joseph P.: *See*—
Machon, Herbert W., and Magnano. 2,747,034.

Maher, Albert J.: *See*—
Loveland, Roger S., and Maher. 2,746,686.

Mahn, Holbrook, to Band-It Co. Pressure clamps. 2,746,107, 5–22–56, Cl. 24—23.

Maine, James F., to The Consolidated Iron-Steel Mfg. Co. Method of making a cooking vessel and handle thereon. 2,746,143, 5–22–56, Cl. 29—529.

Maisel, Daniel S., to Esso Research and Engineering Co. Extractive distillation sludge control process. 2,746,911, 5–55–56, Cl. 202—39.5.

Majestic Metal Specialties, Inc.: *See*—
Kasdan, Nathan. 2,746,462.

Mancke, Edgar B., to Bethlehem Steel Co. Processes for treating materials containing nickel and iron. 2,746,856, 5–22–56, Cl. 75—1.

Mannesmann Aktiengesellschaft: *See*—
Naeser, Gerhard. 2,746,741.

Mantle, Burr W.: *See*—
Dalrymple, William P., Mantle, and Sherwood. 2,746,555.

Marchant Calculators, Inc.: *See*—
Reynolds, Eugene E. 2,746,678.

Marsh, Lyle L., Jr.: *See*—
Chubb, Walston, Jr., and Marsh. 2,746,861.

Marshall, William R., Jr.: *See*—
Wilson, Jack P., and Marshall. 2,746,170.

Martel, Fred W. Spring mounted rocking horse. 2,746,754, 5–22–56, Cl. 272—52.

Martin, Desaix B.: *See*—
Molene, Jude M., and Martin. 2,746,181.

Martin, William T., to Minnesota and Ontario Paper Co. Apparatus for pulp sampling. 2,746,297, 5–22–56, Cl. 73—421.

Martines, Rene, to The Crimpweld Corp. Means for connecting a member to an electrical wire. 2,747,171, 5–22–56, Cl. 339—276.

Martinson, Edwin O., to Koehring Co. Air operated bucket. 2,746,618, 5–22–56, Cl. 214—59.

Martsolf, Philip, Jr.: *See*—
Doll, Walter, Jr., Martsolf, and Soderberg 2,746,672.

Massa, Frank. Means for reducing static friction. 2,746,813, 5–22–56, Cl. 308—1.

Mastercraft Trailers, Inc.: *See*—
Roy, Dwight B. 2,746,622.

Mastin, Ivan W. Serving tray mounted loud-speakers. 2,746,559, 5–22–56, Cl. 181—31.

Matheson, George L.: *See*—
May, Walter G., and Matheson. 2,746,810.

Matsubara, Toru, and D. Terayama, to Tokyo Juki Kogyo Kabushiki Kaisha. Thread tensioning device for sewing machines. 2,746,409, 5–22–56, Cl. 112—248.

Matthes, Carl F., to The Meyercord Co. Dry release transfer and method of making the same. 2,746,877, 5–22–56, Cl. 117—3.1.

Matthes, Carl F., to The Meyercord Co. Dry strip transfer. 2,746,893, 5–22–56, Cl. 154—46.6.

Matthews, Harry L., ½ to J. C. Hurley. Parking device for vehicles. 2,746,554, 5–22–56, Cl. 180—1.

Mattikow, Morris: *See*—
Perlman, David, and Mattikow. 2,746,957.

Maul, Michael. Record controlled machines with cross connecting board. 2,746,680, 5–22–56, Cl. 235—61.6.

Mavity, Julian M., to Universal Oil Products Co. Preparation of mixed ethers. 2,746,995, 5–22–56, Cl. 260—612.

Maxson, W. L., Corp., The: *See*—
Grady, Charles B., Jr. 2,747,156.

Maxwell, John A. Method of making a brake shoe. 2,746,142, 5–22–56, Cl. 29—522.

May, Walter G., and G. L. Matheson, deceased (by The Summit Trust Co., executor), to Esso Research and Engineering Co. Standpipe for coarse solids and method of operating. 2,746,810, 5–22–56, Cl. 302—52.

Mayer, Ludwig J., to the United States of America as represented by the Secretary of the Air Force. Frequency multiplier. 2,747,129, 5–22–56, Cl. 315—6.

Mayers, John W., to Chadeloid Corp. Stain filler combination for wood. 2,746,873, 5–22–56, Cl. 106—34.

Mayrath Machinery Co., Inc.: *See*—
Wilcoxen, Leon C. 2,746,592.

Mazur, Ferdinand J., and L. G. Ponce, to Libbey-Owens-Ford Glass Co. Reversible rearview mirror. 2,746,353, 5–22–56, Cl. 88—77.

Maxsel, Oswald. Coupling device. 2,746,115, 5–22–56, Cl. 24—230.

McAlister, Herbert E.: *See*—
McCord, Howard B., and McAlister. 2,746,417.

McArthur, Elmer D., to General Electric Co. High frequency electrical systems having high input impedance. 2,747,086, 5–22–56, Cl. 250—27.

McArthur, Elmer D., to General Electric Co. Electric discharge devices and high frequency systems therefor. 2,747,087, 5–22–56, Cl. 250—36.

McClellan, Marcus E., A. B. Skromme, G. R. Sutherland, H. E. Adams, and L. L. Griffin, to Deere Mfg. Co. Side delivery rake. 2,746,233, 5–22–56, Cl. 56—377.

McCord, Howard B., and H. E. McAlister, to Beckman Instruments, Inc. Indicating dial. 2,746,417, 5–22–56, Cl. 116—124.

McCoy, John F., to the United States of America as represented by the Secretary of the Navy. Apparatus for producing a rotating time base display. 2,747,135, 5–22–56, Cl. 315—24.

McCullough, James D., to The Babcock & Wilcox Co. Air cooled refractory wall construction for furnaces. 2,746,405, 5–22–56, C. 110—1.

McCutchen, Charles W. Suspension systems for motor road vehicles. 2,746,765, 5–22–56, Cl. 280—124.

McDonald, Dan. Dewaxing methods and apparatus. 2,746,862, 5–22–56, Cl. 92—1.6.

McDonald, Donald, to Cook Electric Co. Frequency sensitive control apparatus. 2,747,146, 5–22–56, Cl. 317—147.

McGauley, Patrick J., S. Nashner, and V. Kudryk, to Chemical Construction Corp. Method of recovering non-ferrous metal values. 2,746,859, 5–22–56, Cl. 75—115.

McGihon, Leonard: *See*—
Donald, Alexander, and McGihon. 2,746,226.

McGraw Electric Co.: *See*—
Thompson, Raymond A. 2,746,497.

McGuire, Richard R., to Westinghouse Air Brake Co. Railway track circuit for track sections, including non-insulated portions of track. 2,747,080, 5–22–56, Cl. 246—41.

McIntyre, Leland K.: *See*—
Davis, Maurice C., and McIntyre. 2,746,396.

McIntyre, William J. Seed box loader for grain drills. 2,746,621, 5–22–56, Cl. 214—83.32.

McKinley, William H., to The General Fireproofing Co. Chair base. 2,746,705, 5–22–56, Cl. 248—194.

McLamore, William M.: *See*—
Bayley, Abraham, and McLamore. 2,746,900.

McLaren, James D., to General Electric Co. Apparatus for measuring rotation of a shaft. 2,746,683, 5–22–56, Cl. 235—103.5.

McLean, Harold T., to General Electric Co. Recording device. 2,746,834, 5–22–56, Cl. 346—113.

McMahon, James E., Jr., to Westinghouse Air Brake Co. Dragging equipment detector system. 2,747,081, 5–22–56, Cl. 246—219.

Meierhofer, Hugo, to Zellweger A. G. Apparate- und Maschinenfabriken Uster. Device for arranging wire heddles on rods in warp drawing machines. 2,746,119, 5–22–56, Cl. 28—46.

Mekelburg, Earl F., to Square D Co. Accelerating master switch. 2,747,046, 5–22–56, Cl. 200—98.

Melges, Frederick J.: *See*—
Cooper, Calvin A. 2,746,525.

Mennal, Paul L. Acidising wells. 2,746,921, 5–22–56, Cl. 252—8.55.

Mergenthaler Linotype Co.: *See*—
Biegert, George. 2,746,542.
Rossetto, Louis. 2,746,600.

Merriman, Henry H. Pressure units. 2,746,317, 5–22–56, Cl. 74—503.

Metal & Thermit Corp.: *See*—
Weinberg, Elliott L., and Ramsden. 2,746,946.

Meyer, Frank E.: *See*—
Ringel, Harold A., and Meyer. 2,746,668.

Meyer, Walter R., and H. J. Siekmann, to The R. K. Le Blond Machine Tool Co. Work handling apparatus for machine tools. 2,746,613, 5–22–56, Cl. 212—135.

Meyer, Wolfgang E., to The Texas Co. Fuel injection pump. 2,746,443, 5–22–56, Cl. 123—139.

Meyercord Co., The: *See*—
Matthes, Carl F. 2,746,877.
Matthes, Carl F. 2,746,893.

Meyronneinc, Juliette: *See*—
Rebichon, André. 2,746,601.

Michels, Julian G.: *See*—
Gever, Gabriel, and Michels. 2,746,960.

Michie, John S., and A. L. Everroad, to The Reliance Electric and Engineering Co. Lubricated expansible V-pulley structure. 2,746,816, 5–22–56, Cl. 308—5.

Midland Chemical Corp.: *See*—
Novak, Leo J., and Hogue. 2,746,906.

Milne, Winford G., and F. G. Ridgers, to N. Slater Co, Ltd. Transposition bracket. 2,747,010, 5–22–56, Cl. 174—33.

Miller, August E. Piezoelectric crystal oven. 2,747,069, 5–22–56, Cl. 219—19.

Miller, Charles E. Duplex facsimile apparatus. 2,747,014, 5–22–56, Cl. 178—6.6.

Miller, Isadore. Preparation of maleic acid. 2,746,991, 5–22–56, Cl. 260—537.

Miller, Virginia E.: *See*—
Miller, William B. and V. E. 2,746,178.

Miller, William B. and V. E. Heel lift for shoes. 2,746,178, 5–22–56, Cl. 36—58.5.

Mills, Edgar A. Machine to abrade stereotyping packless matrices. 2,746,211, 5–22–56, Cl. 51—33.

Mills, Evan D. Container cooling device. 2,746,265, 5–22–56, Cl. 62—94.

Mills, Ivor W., to Sun Oil Co. Wax composition. 2,746,875, 5–22–56, Cl. 106—272.

Mills, Ivor W., to Sun Oil Co. Oxidized wax composition. 2,746,876, 5–22–56, Cl. 106—272.

Mills, Ivor W., to Sun Oil Co. Adhesive wax composition. 2,746,910, 5–22–56, Cl. 196—149.

Minneapolis-Honeywell Regulator Co.: *See*—
Dexiel, Fred T., and Smith, 2,747,112.
Henderson, Hayward. 2,746,301.
Loveland, Roger S., and Maher. 2,746,686.
Sogge, Melvin G. 2,746,472.

Minneapolis-Moline Co.: *See*—
Swenson, William E. 2,746,434.

Minnesota Mining & Mfg. Co.: *See*—
Reid, Thomas S., Smith, and Pearlson. 2,746,997.
Tierney, Hubert J. 2,746,696.

Minnesota and Ontario Paper Co.: *See*—
Martin, William T. 2,746,297.

Miner, Burt S., to Regan Forge & Engineering Co. Blowout preventer and packer and hole closer therefor. 2,746,709, 5–22–56, Cl. 251—1.

Mispley, Robert G., and J. R. MacRill, to Crown Zellerbach Corp. Citrus fruit packaging paper and method of mould control therefor. 2,746,872. 5–22–56, Cl. 99—171.

Mitchell, Lester F.: *See*—
Gruver, John H., and Mitchell. 2,746,388.

Mitchell, Milton E., Jr., to Esso Research and Engineering Co. Recovery of casing from wells. 2,746,550, 5–22–56, Cl. 166—4.

Moberg, Evan L. Key case. 2,746,282, 5–22–56, Cl. 70—456.

Molene, Jude M., and D. B. Martin. Road grading attachment. 2,746,181, 5–22–56, Cl. 37—153.

Monroe Calculating Machine Co.: *See*—
Kerr, Samuel. 2,746,676.

Monsanto Chemical Co.: *See*—
Beaver, David J. 2,746,939.
Buckley, Francis T. 2,746,945.
D'Amico, John J. 2,746,970.
Rossin, Elmer H. 2,746,836.
Wells, Louis E., Jr., and Moss. 2,746,929.
Wells, Louis E., Jr., and Moss. 2,746,930.
Zerbe, Richard O., and Throdahl. 2,747,005.

Montner, Joseph, to North American Aviation, Inc. Magnetic flip-flop. 2,747,109, 5–22–56, Cl. 307—88.

Moody, Arthur M. G., to The Trane Co. Plural stage refrigerating apparatus. 2,746,269, 5–22–56, Cl. 62—117.6.

Moon, Sterling C., to The Jeffrey Mfg. Co. Underground loading machine and frame thereof. 2,746,597, 5–22–56, Cl. 198—204.

Moore, Frank T. D. Ironing boards. 2,746,185, 5–22–56, Cl. 38—123.

Moore, George A. Sanitary hermetic sealing closures for containers. 2,746,669, 5–22–56, Cl. 229—43.

Moore, Raymond H.: *See*—
Schneible, Claude B., and Moore. 2,746,743.
Schneible, Claude B., and Moore. 2,746,858.

Moore, Thomas V., to Esso Research and Engineering Co. Apparatus for drilling. 2,746,721, 5–22–56, Cl. 255—24.

Moos, Albert, to Zellweger A. G. Apparate- und Maschinenfabriken Uster. Apparatus for cleaning threads. 2,746,120, 5–22–56, Cl. 28—64.

Morgan, Eugene F., deceased, M. Decker, administratrix. Traction device and applying means therefor. 2,746,507, 5–22–56, Cl. 152—214.

Moritz, Roy W., to The Pure Oil Co. Flange level. 2,746,163, 5–22–56, Cl. 33—207.

Morway, Arnold J.: *See*—
Cottle, Arnold J.: *See*—
Cottle, Delmar L., Young, and Morway. 2,746,924.

Moser, Otto. Scanning apparatus for perforated code tape. 2,747,011, 5–22–56, Cl. 178—1.

Moss, Henry V.: *See*—
Wells, Louis E., Jr., and Moss. 2,746,929.
Wells, Louis E., Jr., and Moss. 2,746,930.

Mosser, Raymond L. Toy gun cartridge. 2,746,390, 5–22–56, Cl. 102—38.

Mottet, Arthur L.: *See*—
Baxter, Lee G., Smith, and Mottet. 2,746,096.

Mottram, Charles P.: *See*—
Efford, John T., and Mottram. 2,746,647.

Mounce, Whitman D., to Esso Research and Engineering Co. Method of increasing permeability of a producing formation. 2,746,551, 5–22–56, Cl. 166—36.

Muench, Carl G., to The Celotex Corp. Consistency regulator. 2,746,475, 5–22–56, Cl. 137—91.

Müller, Ernst, to Precisa A. G. Rechenmaschinenfabrik. Type bars for calculating and bookkeeping machines. 2,746,385, 5–22–56, Cl. 101—109.

Müller, Josef: *See*—
Nallinger, Friedrich K. H., and Müller. 2,746,556.

Munice Gear Works, Inc.: *See*—
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Munger, William P.: *See*—
Strattan, Robert R., and Munger. 2,746,679.

Murakami, Masao, and T. Imamoto, to Chemical Construction Corp. Granulator. 2,746,803, 5–22–56, Cl. 299—144.

Murphy, James J., to Custom Made Container Corp. Shipping container with cushioning liner. 2,746,667, 5–22–56, Cl. 229—14.

Murrant, Kenneth B., to U. S. Slicing Machine Co., Inc. Slicing machine attachment for oblique slicing. 2,746,501, 5–22–56, Cl. 146—102.

Musacchia, Frank J. Universal follow up compressor. 2,746,457, 5–22–56, Cl. 129—30.

Musick, William R.: *See*—
Dale, Charles F. 2,746,200.

Myers, Errol L., to H. O. Trerice. Thermostatic valve for steam trap. 2,746,685, 5–22–56, Cl. 236—53.

Myers, Robert R., Jr. Method for producing flat printing plates. 2,746,106, 5–22–56, Cl. 22—203.

Myers, William D., and H. M. Zeidler, to Hewlett-Packard Co. High frequency oscillator and resonator. 2,747,098, 5–22–56, Cl. 250—36.

Naeser, Gerhard, to Mannesmann Aktiengesellschaft. Apparatus for the production of wrought metal shapes from metal powder. 2,746,741, 5–22–56, Cl. 266—5.

Naidich, Herbert H., to Bendix Aviation Corp. Locked-in frequency multiplier. 2,747,097, 5-22-56, Cl. 250—36.

Nallinger, Friedrich K. H., to Daimler-Benz Aktiengesellschaft. Window defrosting installation. 2,746,100, 5–22–56, Cl. 20—40.5.

Nallinger, Friedrich K. H., to Daimler-Benz Aktiengesellschaft. Internal combustion engine of injection type with a combustion chamber laterally offset from the cylinder space. 2,746,433, 5–22–56, Cl. 123—32.

Nallinger, Friedrich K. H., and J. Müller, to Daimler-Benz Aktiengesellschaft. Vehicle frame resiliently mounted on independently-sprung-wheel-supported, motor-carrying subframe. 2,746,556, 5–22–56, Cl. 180—12.

Nallinger, Friedrich K. H., to Daimler-Benz Aktiengesellschaft Vehicle frame. 2,746,763, 5–22–56, Cl. 280—106.

Nallinger, Friedrich K. H., to Daimler-Benz Aktiengesellschaft. Suspension of a rigid axle, particularly for motor vehicles. 2,746,766, 5–22–56, Cl. 280—124.

Naps, Marguerite, and F. E. Condo, to Shell Development Co. Process for preparing vinyl halide copolymers and copolymers produced thereby. 2,746,944, 5–22–56, Cl. 260—45.5.

Nashner, Sydney: *See*—
McGauley, Patrick J., Nashner, and Kudryk. 2,746,859.

National Cylinder Gas Co.: *See*—
Ellsworth, Carl E. 2,747,067.

National Dairy Research Laboratories, Inc.: *See*—
Magariello, Edward R. 2,746,916.

National Registrier Kassen Augsburg G. m. b. H.: *See*—
Kuhlmann, Emil. P. 2,746,304.

National Tank Co.: *See*—
Walker, Jay P., Glasgow, and Francis. 2,747,002.

Navy, United States of America as represented by the Secretary of the: *See*—
Brace, Porter H. 2,747 066.
Jackson, T. Burr. 2,746,833.
McCoy, John F. 2,747,135.
Walker, Robert M. 2,747,094.

Needles, John W. Bite recorder. 2,746,150, 5–22–56, Cl. 32—19.

Nelson, Lewen R. Sprinklers. 2,746,799, 5–22–56, Cl. 299—104.

Nelson, Morris E.: *See*—
Pitt, Paul A., and Nelson. 2,746,243.

Nelson, William T., to Phillips Petroleum Co. Selective solvent for naphthene hydrocarbon. 2,747,000, 5–22–56, Cl. 260—666.

Neumann, John W., to Rotographic, Inc. Rotary intaglio printing and embossing press. 2,746,387, 5–22–56, Cl. 101—155.

Neunzig, Henrich: *See*—
Helling, Werner, Neunzig, Rolle, and Lattey. 2,746,849.

Neuworth, Martin B., to Pittsburgh Consolidation Coal Co. Catalytic cracking of high boiling tar acids. 2,746,996. 5–22–56, Cl. 260—621.

Newberry, Meigs W., to Royal McBee Corp. Tabulating mechanism for typewriter or like machines. 2,746,591, 5–22–56, Cl. 197—178.

Newcomb, Philip P., to United Aircraft Corp. Compressor deicing and thrust balancing arrangement. 2,746,671, 5–22–56, Cl. 230—120.

Newman, Robert J., and D. S. Friend, to D. Trapow & Co., Ltd. Label feeding and gumming apparatus. 2,746,422, 5–22–56, Cl. 118—236.

Neyra, Charles S. Ladder support. 2,746,628, 5–22–56, Cl. 214—450.

Nielsen, Hans L. Plastic irrigation tubing outlet. 2,746,774, 5–22–56, Cl. 285—38.

Nigg, Donald J., to the United States of America, as represented by the United States Atomic Energy Commission. Power or voltage measuring means. 2,747,126, 5–22–56, Cl. 313—216.

Nisenson, Jules, to Loral Electronics Corp. Three-speed motor drive control. 2,746,316. 5–22–56, Cl. 74—472.

Nistri, Raffaello. Spherical housing type compass, especially suitable for use on aircraft. 2,746,165, 5–22–56, Cl. 33—222.

Nordberg Mfg. Co.: *See*—
Jensch, Clyde K. 2,746,212.

North American Aviation, Inc.: *See*—
Hawkins, Scott F. 2,746,250.
Montner Joseph. 2,747,109.
Van Pappelendam, Carl A. 2,747,064.

North Electric Co.: *See*—
Dahlman, Per Olaf. 2,747,018.

North Co.: *See*—
Alvord, Charles C. 2,746,214.
Comstock, George E., 3d. 2,746,917
Lowe, Edwin C. 2,746,133.
Whittemore, Osgood J., Jr. 2,746 874.

Norton, Lowell E., to Radio Corp. of America. Resonance frequency control. 2,747,088, 5–22–56, Cl. 250—36.

Norton, Lowell E., to Radio Corp. of America. Monostable oscillator control. 2,747,089, 5–22–56, Cl. 250—36.

Norton, Thomas L. Flexible and conforming finger printing device. 2,746,192, 5–22–56 Cl. 41—4.

Norwich Pharmacal Co., The: *See*—
Gever, Gabriel, and Michels. 2,746,960.

Novak, Leo J., and W. S. Hogue, to Midland Chemical Corp. Carboxymethyl dextran ether-stabilized contrast compositions. 2,746,906, 5–22–56, Cl. 167—95.

Nowak, Theodore J., to Union Oil Company of California. Well bore logging. 2,747,099. 5–22–56, Cl. 250—43.5.

Nuckolls, Richard G., to The United States of America as represented by the Secretary of Commerce. Stabilized synchronous amplifiers. 2,747,030, 5–22–56, Cl. 179—171.

Nursmatic Corp.: *See*—
Wits, Henry W. 2,746,631.

O'Brien, John J. Hanging fire wall and method of constructing same. 2,746,257, 5–22–56, Cl. 61—48.

Obsarny, Theodore J., to Guardian Electric Mfg. Co. Switch mounting bracket for airplane control stick. 2,747,057, 5–22–56, Cl. 200—157.

Occhipinti, Rosario, J. Giardinelli and G. Proniuk. Egg cooker. 2,747,075, 5–22–56, Cl. 219—35.

Ohio Boxboard Co., The: *See*—
Champlin, Charles L., and Steele. 2,746,638.

Ohlinger, Leo A., to the United States of America as represented by the United States Atomic Energy Commission. Valve means for charging containers with fluid. 2,746,473, 5–22–56, Cl. 137—74.

Olshel, John B. to Trico Products Corp. Windshield washer. 2,746,652, 5–22–56, Cl. 222—385.

Oleson, Wrinley B., trustee: *See*—
Kraybill, Henry B. 2,746,870.

Olin Mathieson Chemical Corp.: *See*—
Krapcho, John, and Lott. 2,746,975.

Oliver, Delbert S., to Borg-Warner Corp. Fixture and method of assembling gear pumps. 2,746,132, 5–22–56, Cl. 29—156.4.

Olson, Holly M., to Sealed Power Corp. Piston guide and piston ring wear shield. 2,746,819, 5–22–56, Cl. 309—44.

Omni Products Corp.: *See*—
Kominami, Tsuguo, and Ukita. 2,746,947.

O'Neil, John B., to Plymouth Cordage Co. Lubricated fiber strand. 2,746,887, 5–22–56, Cl. 117—139.5.

Onksen, George W. *See*—
Foland, Francis K., Onksen, and Todd. 2,747,139.

Oregan Saw Chain Corp.: *See*—
Cox, Joseph B. 2,746,494.

Orr, Francis L. Lawn edger. 2,746,229, 5–22–56, Cl. 56—256.

Orser, Keith L., and R. D. Clapp, to Columbian Rope Co. Resilient fiber pad and method of making same. 2,746,894, 5–22–56, Cl. 154—101.

Osner, Clarence W., to Pullman-Standard Car Mfg. Co. Counterbalanced berth arrangement. 2,746,063, 5–22–56, Cl. 5—9.

Ossino, Salvatore. Pole supported fruit picker with pivoted cutter. 2,746,232, 5–22–56, Cl. 56—336.

Ott, Arnold C., to The Upjohn Co. 17-hydroxycorticosterone, 21-beta-cyclopentyl propionate and compositions thereof. 2,746,904, 5–22–56, Cl. 167—77.

Ott, Arnold C., to The Upjohn Co. Cortisone, 21-beta-cyclopentylpropionate. 2,746,978, 5–22–56, Cl. 260—397.4.

Ott, Pierre-Georges-Robert: *See*—
Tissot, Germain, and Ott. 2,746,091.

Ousbäck, Bror G.: *See*—
Sundberg, Erik G., and Ousbäck. 2,747,008.

Owens-Corning Fiberglas Corp.: *See*—
Drummond, Warren W., Steits, and Holtschulte. 2,746,118.

Owens-Illinois Glass Co.: *See*—
Billian, Carroll J. 2,746,193.

Pack, Frank C., and L. A. Goldblatt, to the United States of America as represented by the Secretary of Agriculture. Detoxified cottonseed oil foots. 2,746,864, 5–22–56, Cl. 99—2.

Paget, Win W., to Joy Mfg. Co. Spinning device for drill pipe. 2,746,329, 5–22–56, Cl. 81—53.

Pagni, Alessandro, to Vittorio Necchi Societa per Azioni. Base plate for sewing machines. 2,746,411, 5–22–56, Cl. 112—260.

Pahl, Leo F.: *See*—
Day, Carl L., and Pahl. 2,746,663.

Palnut Co., The: *See*—
Sislik, Ivan. 2,746,340.

Papa, Domenick: *See*—
Villani, Frank, and Papa. 2,746,969.

Parechoc S. A.: *See*—
Vuilleumier, Marcel. 2,746,239.

Paris, Robert E., and J. A. Wieland, to International Business Machines Corp. Device for making perforated records in transit. 2,746,548, 5–22–56, Cl. 164—115.

Park, Ralph S., and R. H. Stair, to Allied Chemical & Dye Corp. Production of chloral of low water content. 2,746,912, 5–22–56, Cl. 202—42.

Parke, Davis & Co.: *See*—
Burckhalter, Joseph H. 2,746,963.

Parker, Charles A., and C. K. Rainey, to Burroughs Corp. Type bar control mechanism. 2,746,381, 5–22–56, Cl. 101—94.

Parker Mfg. Co.: *See*—
Parker, William E. 2,746,070.

Parker, Norman H. Orthopedic device for straightening and relieving pain of ingrown nails. 2,746,451, 5–22–56, Cl. 128—81.

Parker Pen Co., The: *See*—
Perlin, Fred. 2,746,277.

Parker, William E., to Parker Mfg. Co. Self-wringing mop. 2,746,070, 5–22–56, Cl. 15—119.

Parks, Ernest H. Outdoor cooking range. 2,746,377, 5–22–56, Cl. 99—421.

Parks, Regis E. Drink dispensing device. 2,746,642, 5–22–56, Cl. 222—15.

Parmer, Harry W. Signal indicating device. 2,747,045, 5–22–56. Cl. 200—93.

Parrish, Frank W., to International Rectifier Corp. Plug-in mount for a circuit unit. 2,747,167, 5–22–56, Cl. 339—176.

Parten Machinery Co.: *See*—
Welsh, Ormonde P. 2,746,364.

Passons, Erby L., to Broad Street Machine Co. Uniform tension feeding mechanism. 2,746,410, 5–22–56, Cl. 112—254.

Patentes Talgo, S. A.: *See*—
Tomás, Angel T. 2,746,398.
Tomás, Angel T. 2,746, 399.

Patt, Roscoe F.: *See*—
Horn, Robert S., Jr., and Patt. 2,746,941.

Patterson, Edward J., Jr., and J. L. Patterson. Shoe attachment. 2,746,174, 5–22–56, Cl. 36—7.7.

Patterson, Joseph L.: *See*—
Patterson, Edward J., Jr., and J. L. 2,746,174.

Paulsen, Hans C., to B. B. Chemical Co. Shoe cover transfer units. 2,746,067, 5–22–56, Cl. 12—1.

Paxton-Mitchell Co.: *See*—
Lewis, Francis B. 2,746,614.

Pearlson, Wilbur H.: *See*—
Reid, Thomas S., Smith, and Pearlson. 2,746,997.

Pearson, Olaf. Sliding door hanger for mounting on thin doors. 2,746,080, 5–22–56, Cl. 16—105.

Pechiney, Compagnie de Produits Chimiques et Electrometallurgiques: *See*—
Richaud, Henri. 2,746,136.

Pedersen, Charles W. Forming dies. 2,746,510, 5–22–56, Cl. 153—48.

Peeples, Robert M., to Allis-Chalmers Mfg. Co. Control system for reel motor with variable armature current and field flux. 2,747,148, 5–22–56, Cl. 318—6.

Pelavin, Milton H., to Conitech, Ltd. Convertible alternating to direct current power supply and battery charging means for portable electrical equipment. 2,747,108, 5–22–56, Cl. 307—66.

Penewell, John. Hawaiian guitar volume control arm. 2,746,333, 5–22–56, Cl. 84—1.16.

Penn Controls, Inc.: *See*—
Cobb, Clifton A. 2,746,471.

Pennsylvania Salt Mfg. Co., The: *See*—
Inman, Charles E. 2,746,974.

Perfect Circle Corp.: *See*—
Brenneke, Arthur M. 2,746,820.

Perkins, John L., to B. B. Chemical Co. Improved covers and cover materials for temporary protection of shoes. 2,746,179, 5–22–56, Cl. 36—72.

Perkovich, Leo J. Driver's alarm. 2,747,038, 5–22–56, Cl. 200—52.

Perlin, Fred, to The Parker Pen Co. Lighters. 2,746,277, 5–22–56, Cl. 67—7.1.

Perlman, David, and M. Mattikow, to B. Clayton, d. b. a. Refining, Unincorporated. Recovery of water soluble inositol compounds and sterol glycosides. 2,746,957, 5–22–56, Cl. 260—210.5.

Perry Knitting Co., The: *See*—
Heilbronner, Harry S. 2,746,054.

Perry, Roy R. Pipe organ improved Pitman windchests. 2,746,338, 5–22–56, Cl. 84—338.

Petch, Charles L., to Petch Mfg. Co. Block splitting machine. 2,746,447, 5–22–56, Cl. 125—23.

Petch Mfg. Co.: *See*—
Petch, Charles L. 2,746,447.

Peters, John C. Shockproof socket. 2,747,048, 5–22–56, Cl. 200—51.09.

Peters, Philip H., Jr.: *See*—
Wilbur, Donald A., and Peters. 2,747,031.

Petersen, Maurice E., and A. B. Zeissler, to General Electric Co. Binding of rotor end turns. 2,747,119, 5–22–56, Cl. 310—270.

Peterson, William B., Jr., to Angelus Sanitary Can Machine Co. Can end feeder. 2,746,413, 5–22–56, Cl. 113—114.

Petrea, James C., to Wright Machinery Co. Feed control means for weighing machines. 2,746,707, 5–22–56, Cl. 249—59.

Petroleum Mechanical Development Corp.: *See*—
Jones, Marvin R. 2,746,710.
Jones, Marvin R. 2,746,781.

Peyrin, Henri, and S. X. Casacci, to Etablissements Neyrpic. Distributor vane operating apparatus for hydraulic turbines. 2,746,713, 5–22–56, Cl. 253—155.

Pfetzing, Henry V., to Kent-Moore Organization, Inc. Unitary wrench and container oil filter remover. 2,746,330, 5–22–56, Cl. 81—53.

Pfizer, Chas., & Co., Inc.: *See*—
Bayley, Abraham, and McLamore. 2,746,900.

Pharis, William W., to General Dynamics Corp. Conversation timing circuit. 2,747,016, 5–22–56, Cl. 179—7.1.

Pharma-Craft Corp., The: *See*—
St. Germain, Wilfrid H. 2,746,796.

Phil Cord Corp.: *See*—
Smetana, Otto F. 2,746,276.

Philco Corp.: *See*—
Amore, Leo J. 2,746,828.
Cavalieri, Albert L., Jr., and Roop. 2,747,090.

Philippović, Joachim W., to Syntron Co. Device for continuous weighing. 2,746,739, 5–22–56, Cl. 265—28.

Phillips Petroleum Co.: *See*—
Carpenter, Paul G. 2,746,395.
Carter, Norman C., and Cromeans. 2,747,004.
Kilpatrick, Myron O. 2,747,003.
King, William R. 2,746,083.
Nelson, William T. 2,747,000.
Posey, Robert L., and Reese. 2,745,284.
Pritchard, James E. 2,746,943.
Tissot, Carolyn E., and Goodhue. 2,746,899.
Weedman, John A. 2,747,001.

Photo-Engravers Research, Inc.: *See*—
Jones, Rexford W. 2,746,848.

Picard, Maxime F. B., to Societe de Prospection Electrique Procedes Schlumberger. Apparatus for determining the deviation of a bore hole from the vertical axis. 2,746,162, 5–22–56, Cl. 33—205.

Pierce, Fred J.: *See*—
Grunewald, Glen R., and Pierce. 2,746,846.

Pillsbury Mills, Inc.: *See*—
Werly, Emil F. 2,746,867.

Pinney, Harold E., to General Electric Co. System for remote selection of voltage level. 2,747,157, 5–22–56, Cl. 323—43.5.

Pitney-Bowes, Inc.: *See*—
Hanson, Walter J. 2,746,382.
Rouan, Francis J., and Strother. 2,746,221.
Pitt, Paul A., and M. E. Nelson, to Solar Aircraft Co. Variable nozzle and sealing means therefor for jet engine. 2,746,243, 5–22–56, Cl. 60—35.6.
Pittsburgh Consolidation Coal Co.: *See*—
Neuworth, Martin B. 2,746,996.
Pittsburgh Plate Glass Co.: *See*—
Eakins, Merle M. 2,746,729.
Englehart, Oscar D., and Bobel. 2,746,102.
Fitsgerald, John V., and Bachman. 2,747,105.
Terry, Samuel M., and Reis. 2,746,839.
Plank, Charles J., to Socony Mobil Oil Co., Inc. Method of preparing catalysts. 2,746,936, 5–22–56, Cl. 252—465.
Pledger, S. E.: *See*—
Pledger, William A. 2,746,449.
Pledger Ventilator Co., The: *See*—
Pledger, William A. 2,746,449.
Pledger, William A., to S. E. Pledger, d. b. a. The Pledger Ventilator Co. Kitchen stove ventilator. 2,746,449, 5–22–56, Cl. 126—301.
Plymouth Cordage Co.: *See*—
O'Neil, John B. 2,746,887.
Pohl, Walter, to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler. Process for heating up apparatus for carrying out exothermic gas reactions. 2,746,737, 5–22–56, Cl. 263—52.
Polaroid Corp.: *See*—
Eloranta, Valto K. 2,747,076.
Fairbank, Murry N., and Shurcliff. 2,747,103.
Polasek, Karl, and K. A. Jonsson. Alternating current generating arrangement for constant frequency. 2,747,107, 5–22–56, Cl. 307—43.
Pollet, René M. A. J.: *See*—
Remané, Roger. 2,746,797.
Pollock, William E., to Librascope, Inc. Sine-cosine mechanism. 2,746,303, 5–22–56, Cl. 74—62.
Pomerleau, Edward. Mixer for solids and liquids. 2,746,728, 5–22–56, Cl. 259—4.
Ponce, Lucien G.: *See*—
Masur, Ferdinand J., and Ponce. 2,746,353.
Poole, Arthur B., to Haydon Mfg. Co., Inc. Reversible direct-current motor. 2,747,116, 5–22–56, Cl. 310—128.
Posey, Robert L., and H. E. Reese, to Phillips Petroleum Co. Pycnometer for volatile liquids. 2,746,284, 5–22–56, Cl. 73—32.
Potter, James L., to Bell Telephone Laboratories, Inc. Electromagnetic apparatus. 2,747,159, 5–22–56, Cl. 323—92.
Potts, Bobby C.: *See*—
Gunkler, Albert A., Lake, and Potts. 2,746,999.
Poupitch, Ougljesa J., to Illinois Tool Works. Method of making preassembled washers and rotary fasteners. 2,746,065, 5–22–56, Cl. 10—86.
Poupitch, Ougljesa J., to Illinois Tool Works. Screw and washer assembly. 2,746,506, 5–22–56, Cl. 151—37.
Powell, Harry. Billfold. 2,746,504, 5–22–56, Cl. 150—38.
Powers, John B., to Union Carbide and Carbon Corp. Process for flame spraying plastisol. 2,746,883, 5–22–56, Cl. 117—103.
Powers, John J. Utility truck-body. 2,746,717, 5–22–56, Cl. 254—139.1.
Pratt, Verneur E., and G. F. Gray, to Diebold, Inc. Microfilm reader. 2,746,344, 5–22–56, Cl. 88—24.
Pratt & Whitney Co., Inc.: *See*—
Jaeger, Jacob J. 2,747,151.
Tinker, Wayne E. 2,746,287.
Precisa A. G. Rechenmaschinenfabrik: *See*—
Müller, Ernst. 2,746,385.
Preston, Evalyn: *See*—
Fish, Richard H. 2,746,794.
Price, Berry G., to Tuboscope Co. Caliper having magnetically controlled recorder. 2,746,160, 5–22–56, Cl. 33—178.
Price, Harvey N., to General Electric Co. Single-ended thyratron discharge device. 2,747,120, 5–22–56, Cl. 313—38.
Pritchard, James E., to Phillips Petroleum Co. Polymer compositions and methods for producing the same. 2,746,943, 5–22–56, Cl. 260—29.6.
Procter & Gamble Co., The: *See*—
Anderson, Donald C. 2,746,363.
Proctor Electric Co.: *See*—
Davis, Charles. 2,746,184.
Lawser, John J. 2,747,072.
Wagner, Robert J. 2,746,305.
Proctor and Schwartz, Inc.: *See*—
Fleming, Myron T. 2,746,171.
Wilson, Jack P., and Marshall. 2,746,170.
Proniuk, George: *See*—
Occhipinti, Rosario, Giardinelli, and Proniuk. 2,747,075.
Pugh, Vernon J.: *See*—
Richardson, Ello E., and Pugh. 2,746,852.
Puglielli, Alphonse, and R. S. Komarnitsky, to Rockwell Spring and Axle Co. Mount for metallographic specimens. 2,746,704, 5–22–56, Cl. 248—175.
Pullman-Standard Car Mfg. Co.: *See*—
Osner, Clarence W. 2,746,063.
Pure Oil Co., The: *See*—
Beber, Oral L., and Woertz. 2,746,561.
Moritz, Roy W. 2,746,163.
Pye Ltd.: *See*—
Fuller, Dennis Q. 2,747,165.
Pyle, George H., to Hercules Powder Co. Cellulose derivatives and their method of preparation. 2,746,958, 5–22–56, Cl. 260—232.
Pyrate Sales, Inc.: *See*—
Kennedy, Merritt T., Jr., and Allen. 2,747,078.
Pyro Plastics Corp.: *See*—
Gershen, Irvin J. 2,746,081.
Quelsser, Roger J.: *See*—
Geisler, Henry A., and Quelsser. 2,746,245.
Quist, Harold A., to Sun Oil Co. Apparatus for determination of average temperature of fluids in storage. 2,746,293, 5–22–56, Cl. 73—353.
R. B. Mfg. Corp.: *See*—
Kofoid, Orville. 2,746,795.
Race, Austin T., Jr., and N. C. Heck, to Race & Race, Inc. Pipe guiding ribbed apron for irrigation pipe. 2,746,772, 5–22–56, Cl. 285—1.
Race & Race, Inc.: *See*—
Race, Austin T., Jr., and Heck. 2,746,772.
Rader, James C. Non-sag gate latch. 2,746,783, 5–22–56, Cl. 292—173.
Radio Corp. of America: *See*—
Abbett, Roy C. 2,747,029.
Allwine, Harrison S. 2,747,134.
Hersog, Gerald B. 2,747,136.
Koch, Winfield R. 2,747,111.
Norton, Lowell E. 2,747,088.
Norton, Lowell E. 2,747,089.
Smith, Arthur L. J. 2,746,933.
Weimer, Paul K. 2,747,133.
Radio Patents Co.: *See*—
Boucke, Heinz. 2,747,095.
Guanella, Gustav. 2,747,083.
Raecke, Bernhard, to Henkel & Cie., G. m. b. H. Process of tanning with esters of chloracetic acid. 2,746,838, 5–22–56, Cl. 8—94.33.
Rafferty, George T., to John B. Stetson Co. Welt edge hat. 2,746,056, 5–22–56, Cl. 2—178.
Rainey, Clifton K.: *See*—
Parker, Charles A., and Rainey. 2,746,381.
Raizen, Charles S. Bubble producing toys. 2,746,205, 5–22–56, Cl. 46—7.
Ralston, James V.: *See*—
Fitch, Ellery R., and Ralston. 2,746,255.
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Weinberg, Elliott L., and Ramsden. 2,746,946.
Raper, George F., to T. M. M. (Research) Ltd. Apparatus for detecting and correcting irregularities of thickness of a textile silver. 2,746,093, 5–22–56, Cl. 19—70.
Ratcliffe, Temple W., to The Babcock & Wilcox Co. Control system for continuous casting. 2,746,105, 5–22–56, Cl. 22—57.2.
Ratte, Joseph P. G. Quadruple seasoning shaker. 2,746,649, 5–22–56, Cl. 222—142.9.
Raybestos-Manhattan, Inc.: *See*—
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Raytheon Mfg. Co.: *See*—
Blume, Carl T. 2,747,052.
Gardner, Bernard C., and Unger. 2,747,085.
Levy, Irving E. 2,747,124.
Rebichon, André, to J. Rebichon (born Meyronneinc). Clasps for uniting the ends of strip irons encircling parcels. 2,746,601, 5–22–56, Cl. 206—65.
Rebichon, Juliette: *See*—
Rebichon, André. 2,746,601.
Redington, F. B., Co.: *See*—
Engleson, Harry E., and Hartbauer. 2,746,222.
Engleson, Harry E., and Sramek. 2,746,593.
Engleson, Harry E., and Sramek. 2,746,594.
Reed, Edwin D. Stem caliper for shallow bores. 2,746,156, 5–22–56, Cl. 33—143.
Reed, Everell E. Vibrating strike-off. 2,746,366, 5–22–56, Cl. 94—45.
Reed, Nelson G., to The Cooper-Bessemer Corp. Heat exchanger. 2,746,725, 5–22–56, Cl. 257—6.
Reed, Wendell E., to Solar Aircraft Co. Pressure responsive indicating, sensing, and controlling devices. 2,746,242, 5–22–56, Cl. 60—35.6.
Reese, Cole L., 21½% to J. H. Stroman, and 5% to J. V. Connell. Safety cylinder for hydraulic brakes. 2,746,252, 5–22–56, Cl. 60—54.5.
Reese, Robert E.: *See*—
Posey, Robert L., and Reese. 2,746,284.
Refining, Unincorporated: *See*—
Perlman, David, and Mattikow. 2,746,957.
Regan Forge & Engineering Co.: *See*—
Minor, Burt S. 2,746,709.
Rehr, Paul E.: *See*—
Kiesow, Arthur L., and Rehr. 2,746,513.
Reid, Thomas S., G. H. Smith, and W. H. Pearlson, to Minnesota Mining & Mfg. Co. Production of cyclohexene fluorocarbons. 2,746,997, 5–22–56, Cl. 260—648.
Reimer, Lulu H.: *See*—
Reimer, William A. 2,746,230.
Reimer, William A., deceased, L. H. Reimer, administratrix, to L. H. Reimer. Adjustable cutter means having crop lifting means. 2,746,230, 5–22–56, Cl. 56—312.
Reis, Eugen. Counting machines for coins and similar flat bodies. 2,746,464, 5–22–56, Cl. 133—8.
Reis, Joseph J., Jr.: *See*—
Terry, Samuel M., and Reis. 2,746,839.
Reiser, George C., to Toledo Scale Co. Wheel load truck scale. 2,746,738, 5–22–56, Cl. 265—5.
Reitz, Archie E. Magnetic motor for an animated display device. 2,747,114, 5–22–56, Cl. 310—32.
Reliance Electric and Engineering Co., The: *See*—
Michle, John S., and Everroad. 2,746,816.
Remané, Roger, to R. M. A. J. Pollet. Atomizing apparatus. 2,746,797, 5–22–56, Cl. 299—95.
Renner, Philip F. Device for removing scales from fish. 2,746,082, 5–22–56, Cl. 17—7.
Renwick, Charles S., Jr. Decoy. 2,746,195, 5–22–56, Cl. 43—3.
Revo Electric Co., Ltd.: *See*—
Felton, Frederick D., and Bissell. 2,746,827.

Rex Metal-Craft, Inc.: *See*—
Aufderheide, Richard H. 2,746,416.
Reynolds, Eugene E., to Marchant Calculators, Inc. Fugitive one mechanism. 2,746,678, 5–22–56, Cl. 235—61.
Rhodesian Jute Industries Ltd.: *See*—
Thompson, Herbert D., and Wightwick. 2,746,092.
Richardson, Ello E., to The Gas Machinery Co. Oil gas process and apparatus. 2,746,850, 5–22–56, Cl. 48—74.
Richardson, Ello E., and V. J. Pugh, to The Gas Machinery Co. Oil gas process and apparatus. 2,746,852, 5–22–56, Cl. 48—215.
Richardson, John W. High low trailer axle mounting. 2,746,761, 5–22–56, Cl. 280—104.5.
Ricardson, Roger W., and R. E. Schexnailder, Jr., to Esso Research and Engineering Co. Process for making spherical silica-alumina catalysts. 2,746,934, 5–22–56, Cl. 252—448.
Richaud, Henri, to Pechiney, Compagnie de Produits Chimiques et Electrometallurgiques. Treatment of aluminum and its alloys prior to electro-plating with lead. 2,746,136, 5–22–56, Cl. 29—197.
Rickabaugh, Charles A., to American Cynamid Co. Continuous drying apparatus. 2,746,168, 5–22–56, Cl. 34—51.
Ridgers, Frederick G.: *See*—
Milne, Winford G., and Ridgers. 2,747,010.
Ridgway, Edmund T., to The Budd Co. Corrugated sheathing spot-welded to frame members, especially for vehicle bodies. 2,746,789, 5–22–56, Cl. 296—29.
Ridings, Garvice H., to The Western Union Telegraph Co. Two-way facsimile systems between a main telegraph office and a plurality of out-stations. 2,747,015, 5–22–56, Cl. 178—6.6.
Riley, Melvin A., to The Baltimore Paper Box Co. Fiberboard protective structure for television sets. 2,746,666, 5–22–56, Cl. 229—14.
Ringel, Harold A., and F. E. Meyer, ¼ to C. H. D'Antonio and ¼ to E. D. Flanders. Merchandise case having a detachable moisture proof bottom tray. 2,746,668, 5–22–56, Cl. 229—23.
Ringle, Charles L.: *See*—
Kenny, Clarence E., and Ringle. 2,746,711.
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Riverside Mfg. & Electrical Supply Co., Inc.: *See*—
Brodsky, Harry N., and Chamberlin. 2,747,036.
Rivet-O-Mfg. Co., The: *See*—
Harris, Carl C. 2,746,073.
Roberts, Alvin T., Jr.: *See*—
Thompson, Wallace M., Swint, and Roberts. 2,746,662.
Roberts, Robert. Retrievable anchor. 2,746,414, 5–22–56, Cl. 114—206.
Robertson Development Corp.: *See*—
Robertson, James L. 2,746,553.
Robertson, James L., to Robertson Development Corp. Aircraft lateral control systems. 2,746,553, 5–22–56, Cl. 170—135.24.
Rockwell Mfg. Co.: *See*—
Johnson, Charles B. 2,746,478.
Rockwell Spring and Axle Co.: *See*—
Hampson, John C. 2,746,512.
Puglielli, Alphonse, and Komarnitsky. 2,746,704.
Röder, Hugo L., and G. Hennemann, to American Enka Corp. Method for the manufacture of cellulose-reinforced rubber articles. 2,746,897, 5–22–56, Cl. 154—136.
Rogers, Harlan N., 50% to H. J. Carnes. Fishing device. 2,746,197, 5–22–56, Cl. 43—15.
Rogers, Leonard M., to Draper Corp. Cloth roll support means for looms. 2,746,489, 5–22–56, Cl. 139—304.
Rogers, Leonard M., to Draper Corp. Cloth roll. 2,746,693, 5–22–56, Cl. 242—74.
Rohm & Haas Co.: *See*—
Fineman, Manuel N. 2,746,927.
Rohrbacher, Earl W.: *See*—
Dolza, John, Rohrbacher, and Zimmerman. 2,746,394.
Rolle, Johannes: *See*—
Helling, Werner, Neunzig, Rolle, and Lattey. 2,746,849.
Ronci, Victor L.: *See*—
Ekstrand, Sture O., and Ronci. 2,746,123.
Roop, Robert W.: *See*—
Cavalieri, Albert L., Jr., and Roop. 2,747,090.
Roosa, Vernon D. Metering valve for fuel pump. 2,746,442, 5–22–56, Cl. 123—139.
Root, Robert J. Taps for dancing shoes. 2,746,175, 5–22–56, Cl. 36—8.3.
Röpke, Willi. Mechanism for driving tape-shaped sound record carriers. 2,746,690, 5–22–56, Cl. 242—54.
Roseman, Leo. Method of stitching fastener tape for forming fastener sections. 2,746,412, 5–22–56, Cl. 112—262.
Rosen, Raymond, Engineering Products, Inc.: *See*—
Tarca, Edward L., and Varallo. 2,747,093.
Rosenblom, Karl E. R. Coin operated liquid controller. 2,746,589, 5–22–56, Cl. 194—13.
Rosenstein, Ludwig, and M. H. Gorin. Method of tin plating and activated fatty oil composition therefor. 2,746,884, 5–22–56, Cl. 117—114.
Ross, Harry F., to E. I. du Pont de Nemours & Co. Method of forming titanium coating on refractory body. 2,746,888, 5–22–56, Cl. 117—221.
Ross, Jewel G. Hand control for steering aircraft on land or in air. 2,746,698, 5–22–56, Cl. 244—50.
Rossetto, Louis, to Mergenthaler Linotype Co. Typographical casting machines. 2,746,600, 5–22–56, Cl. 199—53.
Rossi, Giovanni. Tubular conduit system for boilers and the like. 2,746,432, 5–22–56, Cl. 122—360.
Rossin, Elmer H., to Monsanto Chemical Co. Process of dyeing acrylonitrile fibers. 2,746,836, 5–22–56, Cl. 8—55.
Roth, Robert I., to International Business Machines Corp. Selective film control for card punch. 2,746,549, 5–22–56, Cl. 164—115.
Rotographic, Inc.: *See*—
Neumann, John W. 2,746,387.
Rottersmann, Maurice H. Sectional flame suppressor tube. 2,746,404, 5–22–56, Cl. 110—1.
Rottig, Walter, to Ruhrchemie Aktiengesellschaft, and Largi Gesellschaft für Wärmetechnik m. b. H. Process for the separation of aliphatic alcohols from hydrocarbon-alcohol mixtures. 2,746,984, 5–22–56, Cl. 260—450.
Rouan, Francis J., and J. A. Strother, to Pitney-Bowes, Inc. Envelope transfer mechanism. 2,746,221, 5–22–56, Cl. 53—31.
Roubal, Alexander J., to Allis-Chalmers Manufacturing Co. Grinding mill support base. 2,746,313, 5–22–56, Cl. 74—397.
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Roy, Dwight B., to Mastercraft Trailers, Inc. Trailer for transporting a boat. 2,746,622, 5–22–56, Cl. 214—84.
Royal McBee Corp.: *See*—
Newberry, Meigs W. 2,746,591.
Ruhrchemie Aktiengesellschaft: *See*—
Libben, Robert, and Stiebling. 2,746,983.
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Runde, Kenneth R., to James R. Kearney Corp. Crimping tools with replaceable dies. 2,746,327, 5–22–56, Cl. 81—15.
Runion, Boyce W. Feeding station for small stock. 2,746,423, 5–22–56, Cl. 119—52.
Ruosch, Samuel. Potassic nitrophosphate fertilizers and method of preparing the same. 2,746,855, 5–22–56, Cl. 71—39.
Rush, James A., to Consolidated Water Power & Paper Co. Production of coated sheet material. 2,746,878, 5–22–56, Cl. 117—15.
Russell Mfg. Co., Inc., The: *See*—
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Russell, Robert A., to The Russell Mfg. Co., Inc. Cone for dyeing yarn. 2,746,280, 5–22–56, Cl. 68—198.
Rutter, Harley E. Angle brush holder. 2,746,076, 5–22–56, Cl. 15—246.
Ryall, Edward W. Device for removing liquid and liquefiable vapors from gas. 2,746,562, 5–22–56, Cl. 55—7.
Ryckman, William D., Jr., to General Electric Co. Means for focusing a varying magnetic field. 2,747,140, 5–22–56, Cl. 315—344.
Ryder, Herman: *See*—
Swenson, Harvey F., Bandat, and Ryder. 2,746,730.
SFK Kugellagerfabriken Gesellschaft mit beschraenkter Haftung: *See*—
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S. & S. Industries, Inc.: *See*—
Schwartz, Marcus. 2,746,052.
Saco-Lowell Shops: *See*—
Curley, Robert S. 2,746,094.
Sahyun, Melville, and J. A. Faust; Faust to Sahyun, α-(meta-hydroxyphenyl)-β-methylaminoethanol cyclohexylsulfamate. 2,746,986, 5–22–56, Cl. 260—501.
Sailors, William E. Applicator for plastic material. 2,746,085, 5–22–56, Cl. 18—3.5.
St. Germain, Wilfrid H., to The Pharma-Craft Corp. Metering valve aerosol bottle. 2,746,796, 5–22–56, Cl. 299—95.
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Saito, Tomizo. Device for opening and closing a cover plate for a pulverizing apparatus. 2,746,746, 5–22–56, Cl. 268—74.
Salm, John J. Portable welding lamp. 2,747,077, 5–22–56, Cl. 240—2.
Sample, James H., and R. A. Sturges, to The Sherwin-Williams Co. Esters of co-polymers of an unsaturated fatty acid with a vinyl-aromatic compound and an alkoxy polysiloxane. 2,746,942, 5–22–56, Cl. 260—23.
Sand, Carl A., to The Brunhoff Mfg. Co. Collapsible table. 2,746,823, 5–22–56, Cl. 311—110.
Sandland, Milton E. Log skidding sled device. 2,746,629, 5–22–56, Cl. 214—323.
Sandos A. G.: *See*—
Grandjean, Philippe, and Wehrli. 2,746,954.
Stoll, Arthur, Jucker, and Lindenmann. 2,746,976.
Sandvikens Jernverks Aktiebolag: *See*—
Härd af Segerstad, Carl G., and Westberg. 2,746,424.
Sawyers' Inc.: *See*—
Graves, Harold J. 2,746,345.
Saylors, Rodger D. Cast-cutting device. 2,746,452, 5–22–56, Cl. 128—91.
Schaefer, Carl A., to Square D Co. Float operator. 2,747,043, 5–22–56, Cl. 200—84.
Schafer, Eugene P., to General Motors Corp. Automatic return air piston and cylinder device. 2,746,425, 5–22–56, Cl. 121—38.
Schamotta, Jacobus J., to Imperial Cold Storage and Supply Co. Ltd. Releasable door fastening. 2,746,782, 5–22–56, Cl. 292—92.
Schenck, Carl, Maschinenfabrik G. m. b. H.: *See*—
Federn, Klaus, Hack, and Kurz. 2,746,299.
Schenkman, Murray. Picture frame. 2,746,190, 5–22–56, Cl. 40—152.1.
Schering Corp.: *See*—
Villani, Frank, and Papa. 2,746,969.
Schexnailder, Robert E., Jr.: *See*—
Richardson, Roger W., and Schexnailder. 2,746,934.
Schiess A. G.: *See*—
Budnick, Arno A. 2,746,161.
Schiro, Stephen C. Cutting tool. 2,746,146, 5–22–56, Cl. 30—272.
Schleicher, Harold E., to The Arrow-Hart & Hegeman Electric Co. Interlocked switch and circuit breaker unit. 2,747,047, 5–22–56, Cl. 200—50.

Schlumbohm, Peter. Electric resistance heater. 2,747,071, 5–22–56, Cl. 219—19.
Schmidt, Alfred T. Means for teaching piano playing. 2,746,339, 5–22–56, Cl. 84—478.
Schmitz, Werner, to P. Wolters. Needled cover for pressing platen. 2,746,182, 5–22–56, Cl. 38—66.
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Schneible, Claude B., and R. H. Moore, to Claude B. Schneible Co., Inc. Cupola furnace provided with means to produce a gaseous curtain in its opening. 2,746,743, 5–22–56, Cl. 266—17.
Schneible, Claude B., and R. H. Moore, to Claude B. Schneible Co., Inc. Cupola furnace and method of treating gases therefrom. 2,746,858, 5–22–56, Cl. 75—43.
Schneible, Claude B., Co., Inc.: *See*—
Schneible, Claude B., and Moore. 2,746,743.
Schneible, Claude B., and Moore. 2,746,858.
Schneider, Charles. Spring-type rocking chair. 2,746,518, 5–22–56, Cl. 155—54.
Schneider, Henry F. Shoring devices. 2,746,706, 5–22–56, Cl. 248—354.
Schneider, Jacob. Reversible drill bit. 2,746,722, 5–22–56, Cl. 255—61.
Schnider, Otto, to Hoffmann-La Roche Inc. Morphinan derivatives. 2,746,962, 5–22–56, Cl. 260—285.
Scholtae, Herman J., to F. A. B. Mfg. Co., Inc. Axle alignment guide in dual axle undercarriages. 2,746,762, 5–22–56, Cl. 280—104.5.
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Johnson, Samuel J., and Schroeder. 2,746,538.
Schroeder, Florence M. Automobile steering wheel table. 2,746,821, 5–22–56, Cl. 311—21.
Schulte, Fritz, to T. D. Bowes. Variable ratio transmission responsive to speed of load. 2,747,115, 5–22–56, Cl. 310—102.
Schürhoff, Heinrich, to Koppers Co., Inc. Rich gas nozzle for regenerative coke oven with recirculation heating. 2,746,913, 5–22–56, Cl. 202—139.
Schwartz, Daniel M., and D. E. Hendrickson, to The Elmco Corp. Pivoted bucket loader. 2,746,625, 5–22–56, Cl. 214—131.
Schwartz, Marcus, to S. & S. Industries, Inc. Brassiere frame. 2,746,052, 5–22–56, Cl. 2—42.
Scott, Robert E., to Toledo Scale Co. Spring testing scale. 2,746,288, 5–22–56, Cl. 73—94.
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Seaman, Leo V. Gas stove fuel supply system, including a valve. 2,746,533, 5–22–56, Cl. 158—120.
Seaman, Lewis T., to General Electric Co. Gyroscope setting system. 2,746,300, 5–22–56, Cl. 74—5.4.
Selas Corp. of America: *See*—
Hess, Frederic O. 2,746,607.
Selby, James, to Victoria Machine Tool Co. Ltd. Electric control for machine tools. 2,747,150, 5–22–56, Cl. 318—103.
Seligman, Alain R. Drilling device for large bores. 2,746,719, 5–22–56, Cl. 255—19.
Sellstrom, Lawrence T., to Knudsen Creamery Co. of California. Self-refrigerated highway truck. 2,746,267, 5–22–56, Cl. 62—117.1.
Sellstrom, Lawrence T., to Knudsen Creamery Co. of California. Self-refrigerated highway truck. 2,746,268, 5–22–56, Cl. 62—117.1.
Selsted, Walter T., to Ampex Corp. Magnetic tape apparatus and tape driving means therefor. 2,747,025, 5–22–56, Cl. 179—100.2.
Selzer, Andrew H., E. G. Berry, and R. E. Williams, to B. F. Gump Co. Roasting devices. 2,746,736, 5–22–56, Cl. 263—33.
Selzer, Andrew H., E. G. Berry, and R. E. Williams, to B. F. Gump Co. Roasting method. 2,746,865, 5–22–56, Cl. 99—68.
Serge, Igor B., to Lear, Inc. Dial mechanism. 2,746,419, 5–22–56, Cl. 116—124.1.
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Sheldon, Edward E. Electronic system sensitive to invisible images. 2,747,131, 5–22–56, Cl. 315—11.
Sheldon, Edward E. Device sensitive to invisible images. 2,747,132, 5–22–56, Cl. 315—11.
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Fortuin, Jan P., and Rumscheidt. 2,746,990.
Johnson, Ava J., and Cherniavsky. 2,746,844.
Naps, Marguerite, and Conde. 2,746,944.
Sherrod, Virgil J. Wire guiding device. 2,746,715, 5–22–56, Cl. 254—134.3.
Sherwen, Joseph W., to The General Electric Co. Ltd. Vibratory conveyors and the like. 2,746,598, 5–22–56, Cl. 198—220.
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Dalrymple, William P., Mantle, and Sherwood. 2,746,555.
Sherwood, Henry A.: *See*—
Dalrymple, William P., Mantle, and Sherwood. 2,746,555.
Sherwood, William E.: *See*—
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Jaworowski, Joseph F. and N. 2,746,391.
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Sieb, Henry. Book gluing method and means. 2,746,879, 5–22–56, Cl. 117—44.
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Sifferd, Robert H., and L. P. Anderson, to Armour and Co. Preparation of liver anti-anemia factor. 2,746,903, 5–22–56, Cl. 167—74.6.
Sifferd, Robert H., and J. J. Svars, to Armour and Co. Method of precipitating 3,12-dihydroxy-7-ketocholanic acid and addition compound thereof. 2,746,977, 5–22–56, Cl. 260—397.1.
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Simon, Paul J. Baseboard cord clip. 2,746,112, 5–22–56, Cl. 24—129.
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Sislik, Ivan, to The Palnut Co. Sheet metal push on fastener with stud biting teeth. 2,746,340, 5–22–56, Cl. 85—36.
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Smit, Johannes H. Chord-changing device. 2,746,337, 5–22–56, Cl. 84—317.
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Smith, Arthur L. J., to Radio Corp. of America. Fluoride phosphors. 2,746,933, 5–22–56, Cl. 252—301.4.
Smith, Frank R.: *See*—
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Reid, Thomas S., Smith, and Pearlson. 2,746,997.
Smith, Harvey J.: *See*—
Deziel, Fred T., and Smith. 2,747,112.
Smith, Joe C. Sectional thermos food containers. 2,746,634, 5–22–56, Cl. 220—16.
Smith, John. Electric fish gigger. 2,746,198, 5–22–56, Cl. 43—19.2.
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Gerhardt, Philip B., Smith, and Jones. 2,746,923.
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Smith, John W. Hand warmer construction method. 2,746,138, 5–22–56, Cl. 29—451.
Smith, Marvin M., and C. O. Fields, to Muncie Gear Works, Inc. Hydraulic trailer hitch. 2,746,574, 5–22–56, Cl. 188—112.
Smith, Samuel. Rotary swaging machines. 2,746,321, 5–22–56, Cl. 78—22.
Smith, William H. Vehicle mounted shovel loader. 2,746,623, 5–22–56, Cl. 214—103.
Smith, Willie K. Game board structure. 2,746,755, 5–22–56, Cl. 273—118.
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Sorber, Adelbert P. 2,747,061.
Sorensen, Hans W. Intravenous needle. 2,746,454, 5–22–56, Cl. 128—221.
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Spase, Charles B., to Lipe-Rollway Corp. Drive structure for automobile engine accessories. 2,746,587, 5–22–56, Cl. 192—104.
Speier, John L., to Dow Corning Corp. Method of silylating organic compounds. 2,746,956, 5–22–56, Cl. 260—210.
Spencer, Herman J., to International Staple and Machine Co. Magazine and staple feed means for stapling machines. 2,746,045, 5–22–56, Cl. 1—49.
Spiess, Gustav: *See*—
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Spillane, Philip W. Cabinet. 2,746,829, 5–22–56, Cl. 312—242.
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Sprosty, Clarence F., to Clevite Corp. Magnetic erase heads. 2,747 024, 5–22–56, Cl. 179—100.2
Spurlin, William V., to Syntron Co. Vacuum cleaner. 2,746,078, 5–22–56, Cl. 15—344.
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Schaefer, Carl A. 2,747,043.
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Engleson, Harry E., and Sramek. 2,746,594.
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Cooper, John D., and Stackhouse. 2,746,098.
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Stahmer, Bernhardt. Trailer safety device. 2,746,570, 5–22–56, Cl. 188—4.
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Stair, Robert H.: *See*—
Park, Ralph S., and Stair. 2,746,912.
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Starr, Norbert T., to Gar Wood Industries, Inc. Pressure fluid telescopic cylinder motor. 2,746,428, 5–22–56, Cl. 121—46.
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Emery, Alfred H. 2,746,785.
Staude, E. G., Mfg. Co., Inc.: *See*—
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Steigerwald, Karl H. Apparatus for evaporating and depositing a material. 2,746,420, 5–22–56, Cl. 118—8.
Steiner, Robert L., to Bromo-Mint Co., Inc. Toy water pistol. 2,746,644, 5–22–56, Cl. 222—79.
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Stoll, Arthur, E. Jucker, and A. Lindenmann, to Sandoz A. G. Process for the preparation of alkoxy-tetrahydrofuranes. 2,746,976, 5–22–56, Cl. 260—347.8.
Stone, Donald C. Logs for marine vessels. 2,746,677, 5–22–56, Cl. 235—61.
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Vossen, Edward. 2,747,040.
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Stratton, Robert R., and W. P. Munger, ½ to C. E. Beach. Apparatus and systems for automatically recording, classifying, totalizing and auditing business transactions. 2,746 679, 5–22–56, Cl. 235—61.6.
Stricker, Gustave E., to A. T. Ferrell & Co. Non-clogging pneumatic conveying apparatus. 2,746,808, 5–22–56, Cl. 302—36.
Strmic, Victor C. Adjustable stand for lavatories. 2,746,664, 5–22–56, Cl. 228—45.
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Stuart, Mary. Guide for the application of lipstick to the lips. 2,746,463, 5–22–56. Cl. 132—88.5.
Stueland, Harold M., to Deere & Co. Attachment frame for tractors. 2,746,624, 5–22–56, Cl. 214—131.
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Mills, Ivor W. 2,746,910.
Quist, Harold A. 2,746,293.
Sundberg, Erik G., and B. G. Ousbäck, to Aktiebolaget Tudor. Method and means for drying accumulator electrodes. 2,747,008 5–22–56, Cl. 136—33.
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Sweetman, George E. Extendable sign exhibitor. 2,746,188, 5–22–56, Cl. 40—139.
Swengel, Robert C. Fluid velocity measuring system. 2,746,291, 5–22–56, Cl. 73—194.
Swenson, Harvey F. Portion control for dispensing freezer. 2,746,260, 5–22–56, Cl. 62—4.
Swenson, Harvey F. Batch feeders. 2,746,640, 5–22–56, Cl. 222—440.
Swenson, Harvey F., A. A. Baudat and H. Ryder, to Sweden Freezer Mfg. Co. Dispensing freezer. 2,746,730, 5–22–56, Cl. 259—9.
Swenson, William E., to Minneapolis-Moline Co. Engine cooling and flywheel mechanism. 2,746,434, 5–22–56, Cl. 123—41.43.
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Talbot, Thomas W., to R. Tollefsen. Distributor cap cleaning tool. 2,746,219, 5–22–56, Cl. 51—241.
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Tarca, Edward L., and F. A. Varallo, to Raymond Rosen Engineering Products, Inc. Telemetering oscillators. 2.747,093, 5–22–56, Cl. 250—36.
Tash, Thomas. Hold-down bracket for window shades. 2,746,541, 5–22–56, Cl. 160—349.
Taube, Karl, to Farbenfabriken Bayer Aktiengesellschaft. Pyrimidine azo dyestuffs. 2,746,951, 5–22–56, Cl. 260—154.
Taylor, Barney L. Motion picture apparatus. 2,746,343, 5–22–56, Cl. 88—16.8.
Taylor, Bert L. Portable wheel position indicator. 2,746,571, 5–22–56, Cl. 188—32.

Taylor, Charles P., to Ideal Stencil Machine Co. Dispenser having a tape severing knife and automatically acting tape-brake. 2,746,546, 5–22–56, Cl. 164—84.5.

Taylor, Donald S., to Borax Consolidated, Ltd. Production of boric acid and anhydrous sodium sulfate. 2,746,841, 5–22–56, Cl. 23—121.

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Thomas, Emil L. Grinding wheel cooling device. 2,746,220, 5–22–56, Cl. 51—266.

Thomas, Henry P., to General Electric Co. Multiplex system. 2,747,017, 5–22–56, Cl. 179—15.

Thompson, Henry C., to L-O-F Glass Fibers Co. Reinforced plastic articles. 2,746,896, 5–22–56, Cl. 154—128.

Thompson, Herbert D., and H. D. Wightwick, ⅛ to Rhodesian Jute Industries Ltd. Means for the treatment of vegetable fibres. 2,746,092, 5–22–56, Cl. 19—10.

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Thompson, Ralph B., to Universal Oil Products Co. Stabilization of organic compounds. 2,746,871, 5–22–56, Cl. 99—163.

Thompson, Raymond A., to McGraw Electric Co. Taper tool for tapering fiber conduit or pipe in the field. 2,746,497, 5–22–56, Cl. 144—205.

Thompson, Wallace M., A. G. Swint, Jr., and A. T. Roberts, Jr., to Dacam Corp. Automatic carton-case loading machine. 2,746,662, 5–22–56, Cl. 226—14.

Thomson, Charles, to Cable Belt Ltd. Conveyors. 2,746,596, 5–22–56, Cl. 198—203.

Thomson, Edward. Inertia operated shock load switch. 2,747,041, 5–22–56, Cl. 200—61.46.

Thorp, Charles J.: *See*—
Desmond, Eric, and Thorp. 2,746,468.

Throdahl, Monte C.: *See*—
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Thurston, Ernest B., to Haughton Elevator Co. Delay for directional preference control for parked elevator cars. 2,746,566, 5–22–56, Cl. 187—29.

Tierney, Hubert J., to Minnesota Mining & Mfg. Co. Adhesive tape supply roll. 2,746,696, 5–22–56, Cl. 242—159.

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Tissot, Carolyn E., and L. D. Goodhue, to Phillips Petroleum Co. Pyridine by-product insect repellent and process of application. 2,746,899, 5–22–56. Cl. 167—33.

Tissot, Germain, and P.-G.-R. Ott, to Societe de Constructions Mecaniques de Stains. Method and apparatus for the manufacture of blended yarns. 2,746,091, 5–22–56, Cl. 19—0.41.

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Todd, Francis C., and E. C. Lusk, to the United States of America as represented by the Secretary of the Army. Voltage regulator tube. 2,747,125, 5–22–56, Cl. 313—214.

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Todd, Hobart H., and P. C. Whitney, to R. P. Whitney. Abrasion resistant liner. 2,746,637, 5–22–56, Cl. 220—63.

Tofani, Arthur M., Jr. Soundproof building construction. 2,746,097, 5–22–56, Cl. 20—2.

Tognola, Tullio, to Bendix Aviation Corp. Sparking device. 2,747,123, 5–22–56, Cl. 313—131.

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Tolman, Edgar B., and R. W. Williams, to United Conveyor Corp. Apparatus for discharging pulverulent material. 2,746,807, 5–22–56, Cl. 302—29.

Tomás, Angel T., to Patentes Talgo, S. A. Axle steering mechanism for railway vehicles. 2,746,398, 5–22–56, Cl. 105—4.

Tomás, Angel T., to Patentes Talgo, S. A. Articulated railway trains. 2,746,399, 5–22–56, Cl. 105—4.

Tonks, Lewi, to General Electric Co. High frequency electrical apparatus. 2,747,137, 5–22–56, Cl. 315—39.

Toro Mfg. Corp. of Minnesota: *See*—
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Torrent, Ralph R., C. N. Husman, and E. K. Dyson. Portable washing, sterilising and drying machine. 2,746,279, 5–22–56, Cl. 68—20.

Tower, George C., to Consolidated Industries, Inc. Rotary lawn mower. 2,746,227, 5–22–56, Cl. 56—25.4.

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Tranmal, Sigurd. Vacuum held footwear. 2,746,173, 5–22–56, Cl. 36—2.5.

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Traum, David, Co., Inc.: *See*—
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Kreidl, Werner H. 2,746,084.

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Troyano, Benedict V. Valve control means. 2,746,060, 5–22–56, Cl. 4—67.

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Turner, Alonzo R. Portable stapling machine. 2,746,042, 5–22–56, Cl. 1—44.4.

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Cutler, Wallace M., Kant, and Greenough. 2,746,047.
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Utley, Arthur B. Leaf rake. 2,746,234, 5–22–56, Cl. 56—400.12.

Vahle, Raymond, to Robert Gair Co., Inc. Method and apparatus for assembling cartons. 2,746,362, 5–22–56, Cl. 93—37.

Valota, Alessandro. Axial flow gas turbine. 2,746,246, 5–22–56, Cl. 60—39.16.

Valvano, Ralph A. Stud puller and driver wrench. 2,746,328, 5–22–56. Cl. 81—53.

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Van Ackeren, Paul, to Koppers Co., Inc. Arrangement for changing the heating directions of regenerative furnaces heated by pre-heated poor gas. 2,746,914, 5–22–56, Cl. 202—142.

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Van Duyn, Adrianus, to U. S. Slicing Machine Co., Inc. Weighing scale. 2,746,342, 5–22–56, Cl. 88—1.

Van Duyn, Adrianus, to U. S. Slicing Machine Co., Inc. Knife and bearing structure for weighing scales. 2,746,814, 5–22–56. Cl. 308—2.

Vann, William H., to General Motors Corp. Crankshaft rear bearing cap oil seal. 2,746,429. 5–22–56, Cl. 121—194.

Van Pappelendam, Carl A. Method of fabricating structural sandwiches. 2,746,139, 5–22–56, Cl. 29—455.

Van Pappelendam, Carl A., to North American Aviation, Inc. Apparatus for making corrugated core structural sheet material. 2,747,064, 5–22–56. Cl. 219—4.

Van Slooten, Louis J., to General Motors Corp. Hydraulic valve lifter. 2,746,437, 5–22–56. Cl. 123—90.

Vantlander, Edward, and F. Jacobs, to Constellation Cup Corp. Cup-making machine. 2,746,626, 5–22–56, Cl. 214—146.5.

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Vissers, Herbert, to C. V. Machinefabriek H. Vissers. Machines for spreading artificial fertilizers and the like. 2,746,650, 5–22–56, Cl. 222—177.

Vitale, Peter T. to Colgate-Palmolive Co. Synthetic detergent compositions. 2,746,932, 5–22–56, Cl. 252—138.

Vitale, Peter T., and M. E. Liftin, to Colgate-Palmolive Co. Synthetic detergent compositions. 2,746,931. 5–22–56, Cl. 252—137.

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ISSUED MAY 22, 1956

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162: 2,747,151
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331: 2,747,153
445: 2,747,154
322— 4: 2,747,155
24: 2,747,156
323—43.5: 2,747,157
69: 2,747,158
92: 2,747,159
324— 58: 2,747,160
132: 2,747,161
158: 2,747,162
332— 18: 2,747,163
26: 2,747,164
333— 5: 2,747,165
339— 5: 2,747,166
176: 2,747,167
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276: 2,747,171
340— 15: 2,747,172
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343— 11: 2,747,178
17.1: 2,747,179
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767: 2,747,182
893: 2,747,183
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346— 17: 2,746,832
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140: 2,746,835

D 1— 2: Des. 177,727
Des. 177,753
D 3—13: Des. 177,712
16: Des. 177,735
17: Des. 177,771
D13— 1: Des. 177,721
Des. 177,748
Des. 177,755
D14— 3: Des. 177,772
Des. 177,773
6: Des. 177,711
Des. 177,739
D15— 1: Des. 177,714
Des. 177,760

D15— 3: Des. 177,722
Des. 177,765
8: Des. 177,736
11: Des. 177,783
D17— 3: Des. 177,723
D21— 1: Des. 177,726
D22— 3: Des. 177,740
Des. 177,743
D26— 1: Des. 177,729
5: Des. 177,747
D31— 2: Des. 177,746
D33— 3: Des. 177,717
8: Des. 177,779
19: Des. 177,724

D34— 5: Des. 177,718
Des. 177,752
Des. 177,760
D35— 3: Des. 177,749
Des. 177,756
D44— 1: Des. 177,775
15: Des. 177,732
Des. 177,733
Des. 177,734
29: Des. 177,710
Des. 177,778
D45— 4: Des. 177,725
D48— 4: Des. 177,715
Des. 177,716

D48—20: Des. 177,744
Des. 177,757
22: Des. 177,766
D52— 1: Des. 177,742
Des. 177,764
D54—12: Des. 177,708
D56— 1: Des. 177,751
4: Des. 177,728
9: Des. 177,705
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Des. 177,707
Des. 177,709
D57— 1: Des. 177,741
D58— 2: Des. 177,780

D58—10: Des. 177,731
Des. 177,774
17: Des. 177,761
D59— 2: Des. 177,784
D61— 1: Des. 177,738
D71— 1: Des. 177,777
D74— 1: Des. 177,759
5: Des. 177,754
10: Des. 177,758
D79— 2: Des. 177,762
Des. 177,763
D80— 9: Des. 177,713
Des. 177,737
D81—10: Des. 177,719

D81—10: Des. 177,776
D82— 1: Des. 177,730
D85— 7: Des. 177,704
D86—10: Des. 177,720
Des. 177,770
Des. 177,787
D87— 3: Des. 177,768
D92—26: Des. 177,750
Des. 177,781
Des. 177,782
Des. 177,785
Des. 177,786
D93— 3: Des. 177,767
4: Des. 177,745

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
May 22, 1956 Volume 706 Number 4

TRADEMARKS

NOTICES

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 43,381 (Amalie), L. Sonneborn Sons, Inc., Lubricating oils and lubricating greases and pastes, **filed** Apr. 24, 1956, D. C. Del. (Wilmington), Doc. 1811, *L. Sonneborn Sons, Inc. v. American Liberty Oil Co. (Inc.)*.

TM 388,600 (Melmac), American Cyanamid Co., Condensation products of aldehydes and amines, such as synthetic resins and compositions thereof; **TM 514,501**, same, Tableware, consisting of cups, etc., **filed** Apr. 26, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c766, *American Cyanamid Co. v. Spaulding Industries, Inc.*

TM 514,501. (See TM 388,600.)

TM 527,679 (Mueller Climatrol), L. J. Mueller Furnace Co., Coal, oil, and gas fired warm air furnaces, etc., **filed** Apr. 26, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16493, *Worthington Corp. v. Pasquale A. Gronata et al.*

TM 507,075 (Mediterranea), Heritage Furniture, Inc., Furniture—namely, upholstered, wood, plastic or metal furniture for household and public use, etc., **filed** Apr. 19, 1956, D. C., S. D. N. Y., Doc. 109/32, *Heritage Furniture Inc. v. Boris Kroll Fabrics Inc.*

TM 616,123 ("Rain-ette Baby Shields" and design), L. S. Shimabukuro, Wind and rain guards for baby strollers; **2,735,716**, L. S. Shimabukuro, Baby stroller protector, **filed** Apr. 19, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c721, *Leona S. Shimabukuro v. Barney Mfg. Corp. et al.*

CONDITION OF TRADEMARK APPLICATIONS AS OF APRIL 27, 1956

Total number of applications awaiting action [excluding renewals and Sec. 12 (c)]	8,736
Date of oldest new application	Oct. 3, 1955
Date of oldest amended application	Dec. 13, 1955

MERCHANT, JOHN, Director, Trademark Examining Operation TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application	
	New	Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	11-21-55	1-11-56
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	10-3-55	12-19-55
III. WENDT, C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	10-3-55	12-13-55
Renewals (All Classes)	2-16-56	
Sec. 12 (c) Publications (All Classes)	2-24-56	4-18-56

Applications Filed During Week Ending April 27, 1956—432

Registrations Issued 395—No. 627,167 to No. 627,561
Renewals Issued 79

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.

As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 682,795. Herbert Glatt, d. b. a. Magla Products, Newark, N. J. Filed Mar. 4, 1955.

OLIUM

For Foam Rubber Padding Sold in Sheet Form.
First use Nov. 11, 1954.

SN 685,261. Eastman Kodak Company, Rochester, N. Y. Filed Apr. 11, 1955.

VERIL

For Synthetic Staple Fiber.
First use Mar. 28, 1955.

SN 692,649. The Stearns & Foster Company, Cincinnati, Ohio. Filed Aug. 8, 1955.

FIBERLOFT

For Quilting Cotton Impregnated With Resin and Used as a Backing or Filler.
First use Mar. 7, 1955.

SN 694,754. United States Industrial Diamond Corp., New York, N. Y. Filed Sept. 15, 1955.

DIADEM

For Diamond Compound in Paste and Powder Form.
First use Sept. 6, 1955.

CLASS 2

SN 671,706. The American Paper Goods Company, Kensington, Conn., to Continental Can Company, Inc., New York, N. Y. Filed Aug. 16, 1954.



For Paper Cups.
First use July 1, 1954.

SN 686,478. Revlon Products Corporation, New York, N. Y., to Revlon, Inc., New York, N. Y. Filed Apr. 28, 1955.

'FUTURAMA

For Unfilled Lipstick Cases.
First use Apr. 25, 1955.

SN 687,161. ACF Industries, Incorporated, New York, N. Y. Filed May 10, 1955.

Duradome

For Fluid Shipping and Storage Tanks and Parts Thereof.
First use Mar. 24, 1955.

SN 688,218. Davis & Geck, Inc., Danbury, Conn. Filed May 25, 1955.

SURGILOPE

For Sterile Pack.
First use May 11, 1954.

SN 690,583. Universal Machine Co. Inc., Baltimore, Md. Filed June 30, 1955.

BESTPOINT

For Paper Cups.
First use on or about June 20, 1955.

SN 693,591. Bradley Container Corporation, Maynard, Mass. Filed Aug. 24, 1955.

2-M-E

For Containers Having a Plastic Body and Metal Ends Secured Thereto.
First use June 24, 1955.

SN 694,116. American Viscose Corporation, Philadelphia, Pa. Filed Sept. 2, 1955.

AVISCO

For Tubing and Casings of Regenerated Cellulose or Cellulosic Material, Such as Cellulose Ethers, for Sausage, Other Foodstuffs and Materials.
First use Aug. 1, 1955.

SN 697,628. Heeger, Inc., d. b. a. LMB, Los Angeles, Calif. Filed Nov. 3, 1955.

LMB

For Metal Chassis, Metal Box Chassis, and Metal Boxes
First use July 24, 1948.

SN 1,559. Food Machinery and Chemical Corporation, New York, N. Y. Filed Feb. 23, 1956.

Uni-Hopper

For Portable Hopper for the Transportation and Storage of Powder, Granular and Flake Chemicals, and Other Materials.
First use Dec. 29, 1955.

SN 1,619. The New Haven Board & Carton Company, New Haven, Conn. Filed Jan. 27, 1956.

WINDOW-MATIC

For Corrugated and Paper Board Folding Cartons.
First use Dec. 16, 1955.

SN 1,631. Southern Fabricators Corporation, Shreveport, La. Filed Jan. 27, 1956.

Orna-Metal

For Mailboxes.
First use January 1950.

SN 1,733. Standard Packaging Corporation, Chicago, Ill. Filed Jan. 30, 1956.

Sterling

For Paper Plates and Paper Cups.
First use July 8, 1955.

SN 1,953. H. D. Hudson Manufacturing Company, Chicago, Ill. Filed Feb. 2, 1956. Sec. 2(f).

HUDSON

Owner of Reg. No. 436,301.
For Metal Tanks, Cisterns, and Troughs Used in the Care of Livestock.
First use Sept. 1, 1917.

CLASS 3

SN 683,712. Rico Leather Specialty, Inc., Chicago, Ill. Filed Mar. 17, 1955.

Montclair

For Ladies' and Men's Billfolds, Key Cases, and Pocket Secretaries.
First use Mar. 9, 1955.

CLASS 4

SN 671,689. Hiram F. Turner, d. b. a. H. F. Turner & Company, Richmond, Va. Filed Aug. 13, 1954.

TURNER'S Colonial Maid



No claim is made to the name "Turner's" apart from the mark shown.
For Silver Polish.
First use July 17, 1954.

SN 683,405. Frederick W. Lindblad, d. b. a. United States Diamond Wheel Co., Aurora, Ill. Filed Mar. 14, 1955.

PRESSURELOK

For Abrading Wheels Incorporating Diamond Abrasive.
First use July 25, 1954.

SN 694,126. Clipper Diamond Tool Co., Inc., New York, N. Y. Filed Sept. 2, 1955.

CERA-MET

For Diamond Impregnated Grinding Wheels.
First use March 1955.

SN 698,143. Delta Chemical Company, Memphis, Tenn. Filed Nov. 14, 1955.

FOREMOST

Owner of Reg. No. 607,419.
For Floor Waxes.
First use Aug. 19, 1955.

SN 698,217. Sanitek Products, Inc., Los Angeles, Calif. Filed Nov. 14, 1955. Sec. 2(f).

TUFF-SHEEN WAX

Applicant disclaims the word "Wax" apart from the mark as shown. Owner of Reg. No. 546,149.
For Floor Wax.
First use September 1943.

CLASS 5

SN 696,166. Mounties, Inc., Boston, Mass. Filed Oct. 10, 1955. Sec. 2(f).

STIC

Owner of Reg. No. 517,008.
For Gummed Paper Sealing Tape for Sealing Packages and for Parcel Post Sets Consisting of a Container Enclosing a Number of Parcel Post Labels and a Roll of Gummed Tape Adapted for the Sealing of Parcel Post and Express Packages.
First use Feb. 1, 1943.

CLASS 6

SN 668,695. Pittsburgh Coke & Chemical Company, Pittsburgh, Pa. Filed June 22, 1954.

PRO-PHION

For Herbicides.
First use June 1, 1954.

SN 682,661. Nordmark-Werke Gesellschaft mit beschrankter Haftung, Hamburg, Germany. Filed Mar. 2, 1955.

NORDMARK

For L-Cystine, L(+)Cysteine Hydrochloride, L(+)-3,5-Diiodotyrosine, Haematoporphyrin, Heparin, Nicotinic Acid Benzylester, Nicotinic Acid Methyl Ester, 6-Sulfa-Dimethyl-Diazine, Sulfaguanidine, Sulfanilamide, Sulfapyridine, and l(−)Tyrosine.

First use Sept. 17, 1948, on haematoporphyrin: In commerce Apr. 23, 1953, on L-cystine.

SN 683,383. Gallowhur Chemical Corporation, New York, N. Y. Filed Mar. 14, 1955.

PURASAN

For Cationic Germicidal Concentrates Sold for Manufacturing Purposes.

First use on or about Jan. 16, 1950.

SN 683,389. Gallowhur Chemical Corporation, New York, N. Y. Filed Mar. 14, 1955.

MERSYNATE

For Chemical Composition Containing Phenyl Mercuric Acetate and Potassium 2,4,6-Trichlorophenate as the Active Ingredients Sold for Manufacturing Purposes.

First use on or about Feb. 28, 1952.

SN 684,287. The Dow Chemical Company, Midland, Mich. Filed Mar. 28, 1955.

TEN-TEN

For Weed Killing Composition.

First use Mar. 3, 1955.

SN 684,288. The Dow Chemical Company, Midland, Mich. Filed Mar. 28, 1955.

99

For Weed Killing Composition.

First use Mar. 3, 1955.

SN 684,307. Hercules Powder Company, Wilmington, Del. Filed Mar. 28, 1955.

PENTON

For Chlorinated Polyether Thermoplastic Polymers.

First use Dec. 13, 1954.

SN 685,189. Heyden Chemical Corporation, New York, N. Y. Filed Apr. 8, 1955.

TCB

For Herbicides.

First use on or about Mar. 18, 1955.

SN 685,900. Food Machinery and Chemical Corporation, New York, N. Y. Filed Apr. 20, 1955.

FAIRFIELD

The drawing is lined for red.

For Dye Intermediates; Propellents; Insecticide and Herbicide Chemicals and Concentrates; Fine Chemicals for Use as Intermediates in the Pharmaceutical and Cosmetic Industries; and Chemicals—Namely, Allyl Acetone, Hexadiene, Heptenoate, Allethrolone, Chrysanthemum Acid Chloride, Diethyl Carbonate, Ethyl Chloroformate, Isopropyl Chloroformate, Ethyl Benzoyl Acetate, Ethyl Sodium Oxal Acetate, Refined Fusel Oil, Ethyl Acetoacetate, Diethyl Oxalate, Amyl Alcohol, Ethylene, Methallyl Chloride, Methallyl Amine, Dimethyl Phthalate, Methallyl Acetate, Methallyl Alcohol, Dichloromaleic Anhydride, Hydroxy Ethyl Stearamide, Methallyl Abietate, Dichlorocyanuric Acid.

First use Feb. 3, 1955.

SN 687,699. Hercules Powder Company, Wilmington, Del. Filed May 17, 1955.



For Pentaerythritol, a Tetrahydric Alcohol Used in the Manufacture of Alkyd Resins, Rosin and Tall Oil Esters, and Other Chemical Products.

First use Jan. 12, 1945.

SN 689,013. American Cyanamid Company, New York, N. Y. Filed June 7, 1955.

AERO

Owner of Reg. Nos. 124,650, 139,053, and 124,434.

For Acetone Cyanohydrin, Guanidine Hydrochloride, and Guanidine Nitrate.

First use Apr. 13, 1955, on guanidine nitrate.

SN 689,037. Hercules Powder Company, Wilmington, Del. Filed June 7, 1955.

DI-CUP

For Dicumyl Peroxide, a Catalyst for Vinyl Polymerization and a Curing and Vulcanizing Agent for Plastics and Rubber and Allied Chemical Uses.

First use Feb. 14, 1955.

SN 690,896. Olin Mathieson Chemical Corporation, New York, N. Y. Filed July 7, 1955.

DIAGLASE

For Diagnostic Agent for Detection of Glucose in Urine.

First use June 23, 1955.

SN 691,603. Auto-Lite Battery Corporation, Toledo, Ohio, to The Electric Auto-Lite Company, Toledo, Ohio. Filed July 20, 1955.

Activite

For Packaged Battery Electrolyte.

First use May 24, 1955.

SN 692,094. Southeastern Insecticide Corporation, Estill, S. C. Filed July 28, 1955.

ATOMIC

The drawing is lined for the color green, but no claim is made to color.

For Agricultural Insecticides and Fungicides.

First use Apr. 18, 1955.

SN 692,337. Manufacturers' Supply Co., Inc., Providence, R. I. Filed Aug. 2, 1955.

QUICK

For Soft Soldering Fluid.

First use January 1933.

SN 692,825. Food Machinery and Chemical Corporation, New York, N. Y. Filed June 27, 1955.

FOSVEX

For Insecticide.

First use on or about Nov. 21, 1947.

SN 692,905. Continental Midway Corp., Baltimore, Md. Filed Aug. 12, 1955.

WOOD BREZE

For Room Deodorant.

First use May 23, 1955.

SN 692,908. Continental Midway Corp., Baltimore, Md. Filed Aug. 12, 1955.

Maiden Fair

For Room Deodorant.

First use May 1, 1954.

SN 692,909. Continental Midway Corp., Baltimore, Md. Filed Aug. 12, 1955.

BABY FAIR

For Room Deodorant.

First use Apr. 28, 1955.

SN 693,028. Delta Chemical Company, Memphis, Tenn. Filed Aug. 15, 1955.

ForeMost

Owner of Reg. No. 607,419.

For Insecticides, Disinfectants, Household and Industrial Deodorants.

First use June 28, 1954.

SN 694,119. American Viscose Corporation, Philadelphia, Pa. Filed Sept. 2, 1955.

AVISCO

For Cellulose Ethers and Cellulose Esters.

First use Aug. 8, 1955.

SN 694,781. Dearborn Chemical Company, Chicago, Ill. Filed Sept. 16, 1955.

ENDCOR

For Oil Field Corrosion Inhibitors.

First use Apr. 26, 1955.

SN 697,070. Harris-Seybold Company, Cleveland, Ohio. Filed Nov. 9, 1955.

V-COAT

For Chemical Compositions for Surface Treating Lithographic, Offset, and Other Printing Plates To Prepare the Same for Printing and Similarly To Form Design on Name Plates and the Like.

First use 1941.

Subj. to Intf. with SN 687,980.

CLASS 9

SN 688,663. David W. Pontions, Columbus, Ohio. Filed June 1, 1955. Sec. 2(f).

BRIGHT SPOT

For Marker Loads Consisting of Firearm Type Cartridges of Any Caliber Containing a Color Marking Agent for Showing on Road Surfaces the Exact Place Where Detonation Occurred.

First use Jan. 31, 1949.

CLASS 10

SN 684,509. Garfield Williamson, Inc., Jersey City, N. J. Filed Mar. 29, 1955.

TURFSAVER

For Fertilizers.

First use Oct. 2, 1954.

SN 688,785. The Standard Oil Company, Cleveland, Ohio. Filed May 9, 1955.

SOHIO

The drawing is lined for the colors red and blue, but no claim is made to color.
For Fertilizer.
First use about Apr. 1, 1955.

CLASS 12

SN 678,286. United States Gypsum Company, Chicago, Ill. Filed Dec. 13, 1954.

CORRUTONE

For Metal Acoustical Panels.
First use June 28, 1954.

SN 683,133. Permanente Cement Company, Oakland, Calif. Filed Mar. 9, 1955.



Owner of Reg. Nos. 413,798, 542,848, and others.
For Modified High-Early Strength Cement.
First use in or about April 1946.

SN 690,080. Benjamin Foster Company, Philadelphia, Pa. Filed June 23, 1955.

SAFETEE MASTIC
60-80

For Asphalt Mastic for Use as a Protective Coating and a Caulking Material.
First use June 2, 1955.

SN 693,633. Sidall Industries, Inc., Detroit, Mich. Filed Aug. 24, 1955.

TEMPLE STONE

The word "Stone" is disclaimed apart from the mark as shown.
For Individually Cast Artificial Stone Used in Interior and Exterior Building Construction.
First use Oct. 1, 1954.

SN 695,318. The Lubrizol Corporation, Wickliffe, Ohio. Filed Sept. 26, 1955.

THERMOSHIELD

For Asphalt Emulsions Used in Preparing Thermal Insulation.
First use Aug. 3, 1955.

SN 695,806. Duralite Window Corporation, Knoxville, Tenn. Filed Oct. 4, 1955.

VISTA-WALLS

For Aluminum Windows.
First use Mar. 21, 1953.

SN 697,270. N. V. Betonfabriek de Meteoor, De Steeg, Netherlands. Filed Oct. 28, 1955.



Owner of Dutch Reg. No. 111,081, dated Jan. 26, 1952; and U. S. Reg. Nos. 306,213 and 504,995.
For Concrete Products and Asphalt Products or Artificial Products Composed With Any Other Binding Agent, Such as Tiles, Curbs, Plates, Blocks, Stones, Etc., Provided With a Cover or Layer To Check Wastage, Made of or With Metal, Stone, Wood, Ceramics, Concrete, Asphalt, Tar, Pitch, Etc., as Well as These Layers and Their Composing Parts Separately.

SN 700,605. Granite City Steel Company, Granite City, Ill. Filed Dec. 27, 1955. Sec. 2(f).

STRONGBARN

Owner of Reg. No. 511,527.
For Corrugated Steel Sheeting.
First use Aug. 14, 1945.

SN 700,630. Laminated Plas-Tex Corporation, Springfield, Ohio. Filed Dec. 27, 1955.

LAM-O-TILE

For Laminated Vinyl Sheeting for Use in Covering Walls and Other Flat Surfaces.
First use on or about Nov. 2, 1955.

SN 700,631. Laminated Plas-Tex Corporation, Springfield, Ohio. Filed Dec. 27, 1955.

LAM-O-WALL

For Laminated Vinyl Sheeting for Use in Covering Walls and Other Flat Surfaces.
First use on or about Nov. 2, 1955.

SN 700,693. United States Gypsum Company, Chicago, Ill. Filed Dec. 27, 1955. Sec. 2(f).

TRUSSTEEL

Owner of Reg. No. 412,860.
For Metal Structural Elements—Namely, Studs and Runner Plates.
First use Aug. 4, 1937.

SN 700,782. The Carter-Waters Corp., Kansas City, Mo. Filed Dec. 29, 1955.

BLOK-MESH

Owner of Reg. No. 535,480.
For Welded Wire Reinforcements for Embodying in Concrete or Mortar of Walls of Buildings and the Like.
First use Dec. 31, 1946.

SN 700,783. Childers Manufacturing Co., Houston, Tex. Filed Dec. 29, 1955.

LAP-SEAL

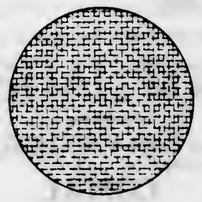
For Aluminum Weatherproof Jacketing for Insulated Lines and the Like.
First use Mar. 31, 1955.

SN 700,785. Empire Petroleum Company, Denver, Colo. Filed Dec. 29, 1955.

EMPIRE

For Asphalts for Road Surfacing and the Like and Asphalt Cements.
First use Jan. 1, 1950.

SN 700,898. Roddis Plywood Corporation, Marshfield, Wis. Filed Dec. 30, 1955.



The drawing is lined for gold. Owner of Reg. Nos. 275,853, 519,570, and 538,563.
For Wooden Doors.
First use Nov. 18, 1955.

CLASS 13

SN 686,271. Beaton & Corbin Manufacturing Company, Southington, Conn. Filed Apr. 26, 1955.

SPACER-ROD

For Shower Rods.
First use Feb. 21, 1955.

SN 688,102. Universal-Rundle Corporation, New Castle, Pa. Filed May 23, 1955.

EASY LIVING KITCHENS

For Kitchen Sinks and Sink Trim Packs Including Faucet, Sprayer and Aerator, and Basket Strainer.
First use Feb. 1, 1953.

SN 696,753. U. S. Expansion Bolt Co., York, Pa. Filed Oct. 19, 1955. Sec. 2(f).

MULTI-DIA

For Fastening Device Anchoring Means—Namely, Screw Anchors.
First use Nov. 11, 1949.

SN 697,654. Westinghouse Air Brake Company, Wilmerding, Pa. Filed Nov. 3, 1955.

Owner of Reg. Nos. 106,386, 396,576, and others.
For Piping Devices—Namely, Lubricating Units, Pressure Reducing Valves, Fittings, Check Valves, Anti-Freezer Devices for Distributing Methyl Alcohol Vapor in a Pneumatic Pipe-Line System and Pulsation Dampeners.
First use Jan. 26, 1955.

SN 697,746. Master Pneumatic, Inc., Detroit, Mich. Filed Nov. 4, 1955.

mp

For Traps.
First use June 30, 1955.

SN 698,754. Kobar Mfg. Company, Chicago, Ill. Filed Nov. 22, 1955.

STA•FAST

For Combination Drills and Anchors and Expansion Shells.
First use on or about Sept. 12, 1955.

SN 699,078. The Independent Nail & Packing Company, Inc., Bridgewater, Mass. Filed Nov. 29, 1955.

THE Stronghold Line
BETTER FASTENINGS FOR EVERY PURPOSE

Applicant disclaims the expression "Better Fastenings for Every Purpose" apart from the mark as shown. Owner of Reg. Nos. 367,448, 588,496, and 601,516.
For Nails, Screws, Drive Screws, Screw Nails, Sinkers, Rivets, Hooks, Staples, Wire Fasteners, Wire Forms, and Tacks.
First use Sept. 27, 1949.

SN 182. Wetzell Gummiwerke Aktiengesellschaft, Hildesheim, Germany. Filed Jan. 4, 1956.

DYNAT.

Owner of German Reg. No. 672,930, dated Mar. 14, 1955.
For Slide Fasteners.

SN 334. Irrigation Equipment Co., Inc., Eugene, Oreg. Filed Jan. 9, 1956.

TITELUME

For Couplers, T's, and Other Fittings for Use on or With Pipe Lines for Transporting Air, Gas, Water, and Other Fluids.
First use Sept. 30, 1955.

SN 335. Irrigation Equipment Co., Inc., Eugene, Oreg. Filed Jan. 9, 1956.

GATELUME

For Couplers, T's, and Other Fittings for Use on or With Irrigation Pipe Systems.
First use May 31, 1955.

SN 392. Wrought Iron Range Company, St. Louis, Mo. Filed Jan. 9, 1956.

HOME COMFORT — SINCE 1864 — ST. LOUIS, MO.

The words "Since 1864" and "St. Louis, Mo." are disclaimed apart from the mark as shown. Owner of Reg. Nos. 61,357, 588,530, and others.
For Cabinets Equipped With Sinks.
First use Oct. 1, 1951.

SN 481. The Carroll Chain Company, Columbus, Ohio. Filed Jan. 11, 1956.

THERMOPRUF

For Metallic Chains.
First use Sept. 23, 1955.

SN 526. Star Expansion Southwest, Inc., New York, N. Y. Filed Jan. 11, 1956.

PIN·GRIP

For Expansion Anchors.
First use Oct. 31, 1955.

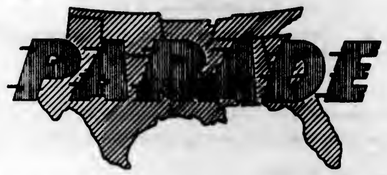
CLASS 15

SN 692,394. Gulf Oil Corporation, Pittsburgh, Pa. Filed Aug. 3, 1955.

Good Gulf

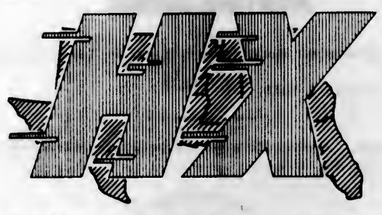
Owner of Reg. No. 610,572.
For Gasoline.
First use June 2, 1955.

SN 695,158. Hunt Oil Company, Dallas, Tex. Filed Sept. 22, 1955.



In the drawing the letters are lined to indicate the use of a solid red color.
For Gasoline.
First use July 14, 1955.

SN 695,159. Hunt Oil Company, Dallas, Tex. Filed Sept. 22, 1955.



In the drawing the letters are lined to indicate the use of a solid red color.
For Gasoline.
First use July 20, 1955.

SN 695,289. Esso Standard Oil Company, New York, N. Y. Filed Sept. 26, 1955.

COMAL

Owner of Reg. No. 335,189.
For Cutting, Cooling, and Lubricating Materials in Liquid and Semi-Solid Form.
First use May 31, 1935.

SN 700,133. Sociedad Industrial de Productos Para Automocion, S. L., Pasajes (Guipuzcoa), Spain. Filed Dec. 16, 1955.

Krafft

Owner of Spanish Reg. No. 271,324, dated Sept. 23, 1954.
For Graphite Suspensions for Lubrification.

SN 700,261. Page M. Simpson, d. b. a. Dew-Coated Lubricants, Chicago, Ill. Filed Dec. 19, 1955.

DEW-COATED

For Lubricating Oils.
First use on or about Apr. 21, 1934.

CLASS 16

SN 683,915. The Reardon Company, St. Louis, Mo. Filed Mar. 21, 1955.

R REARDON

Owner of Reg. Nos. 260,703, 614,165, and others.
For Wall Size, Texture Paint, Primer, Paint for Concrete and Masonry Structures, Dry Wall Primer Sealer, Cold Water Paint, Art Colors, Casein Paint, Primer Sealer for Concrete Floors and Walls, Hot Water Paint, and Masking Liquid.
First use Oct. 27, 1954, on masking liquid.

SN 687,651. United Lacquer Mfg. Corp., Linden, N. J. Filed May 16, 1955.

MULTAKOLOR

For Speckled Paint.
First use Mar. 15, 1948.

SN 688,793. American-Marietta Company, d. b. a. Berry Brothers, Chicago, Ill. Filed June 3, 1955.

"400"

For Paints and Enamels.
First use in or about 1941.

SN 688,988. Wolverine Finishes, Grand Rapids, Mich. Filed June 6, 1955.

CASUALTONE

For Stain-Type Wood-Finishing Material.
First use Apr. 26, 1954.

SN 692,886. Whittaker, Clark & Daniels, Inc., New York, N. Y. Filed Aug. 11, 1955.

SOLAR SHADE

For Water Paint for Greenhouses.
First use June 1, 1937.

SN 698,144. Denton & Jutsum, Limited, Barking, England. Filed Nov. 14, 1955.

DENTOLITE

Owner of British Reg. No. 707,891, dated June 6, 1952.
For Paints, Varnishes (Other Than Insulating Varnishes), Enamels (in the Nature of Paints), Lacquers, Distempers and Painters' Colours.

SN 698,156. General Paint Corporation, San Francisco, Calif. Filed Nov. 14, 1955.

L&S

Owner of Reg. No. 116,854.
For Ready-Mixed Paints.
First use Oct. 24, 1912.

SN 700,669. Seidlitz Paint and Varnish Company, Kansas City, Mo. Filed Dec. 27, 1955.

MEDALLION

For Architectural Enamel.
First use Dec. 14, 1955.

SN 700,814. Rockford Paint Manufacturing Co., Rockford, Ill., to Butler Brothers, Chicago, Ill. Filed Dec. 29, 1955.

Home'n Garden

For Paint, Enamel, Varnish, Shellac, and Metallic Paint.
First use on or about Dec. 1, 1952.

SN 282. W. W. Lawrence & Company, Pittsburgh, Pa. Filed Jan. 10, 1956.

IDENTICOLOR

For Ready-Mixed Paints and Paint Enamels.
First use on or about Nov. 10, 1939.

SN 1,039. Rogers Paint Products, Inc., Detroit, Mich. Filed Jan. 11, 1956.

Detro-Tone

Owner of Reg. No. 215,989.
For Paints in Paste and Ready Mixed Form.
First use Mar. 1, 1946.

CLASS 18

SN 672,236. Frederick G. Mayer, South Norwalk, Conn., to Zotox Pharmacal Company, Incorporated, Stamford, Conn. Filed Aug. 25, 1954.

TRIOCIN

For Medicinal Skin Ointment.
First use June 2, 1954.

SN 676,165. Armour and Company, Chicago, Ill. Filed Nov. 8, 1954.

CYTOLAV

For Cytopathological Diagnostic Aids in Medicinal Dosage Form for Oral Administration.
First use Nov. 18, 1953.

SN 676,166. Armour and Company, Chicago, Ill. Filed Nov. 8, 1954.

TRI-SYNAR

For Antispasmodic Preparation.
First use Sept. 8, 1954.

SN 682,659. Nordmark-Werke Gesellschaft mit beschrankter Haftung, Hamburg, Germany. Filed Mar. 2, 1955.

NORDMARK

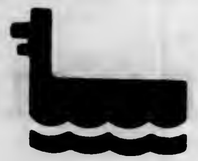
For Adrenotropic Compositions, Antacids, Compositions for the Treatment of Vascular Alterations and Arteriosclerosis, Fungicides, Cardiac Stimulants, Anti-Cytostic Compositions, Amino Acid Compositions, Anti-Anemia Compositions, Anti-Convulsives, Anti-Tussic Compositions, Chemo-Therapeutics, Compositions for Aiding Digestion, Blood Clotting Agents, Hormone Preparations, Lipolytic Agents, Anti-Mononucleocytosis Compositions, Central Nervous Stimulants, Spasmolytic Compositions, Vitamin Preparations, Anti-Coagulants, Mineral Preparations, Rubefacients or Counterirritants, and Insomnia Producing Agents.
First use 1927.

SN 682,660. Nordmark-Werke Gesellschaft mit beschrankter Haftung, Hamburg, Germany. Filed Mar. 2, 1955.



For Adrenotropic Compositions, Antacids, Compositions for the Treatment of Vascular Alterations and Arteriosclerosis, Fungicides, Cardiac Stimulants, Anti-Cytostic Compositions, Amino Acid Compositions, Anti-Anemia Compositions, Anti-Convulsives, Anti-Tussic Compositions, Chemo-Therapeutics, Compositions for Aiding Digestion, Blood Clotting Agents, Hormone Preparations, Lipolytic Agents, Anti-Mononucleocytosis Compositions, Central Nervous Stimulants, Spasmolytic Compositions, Vitamin Preparations, Anti-Coagulants, Mineral Preparations, Rubefacients or Counterirritants, and Insomnia Producing Agents.
First use 1927.

SN 682,662. Nordmark-Werke Gesellschaft mit beschrankter Haftung, Hamburg, Germany. Filed Mar. 2, 1955.



For Adrenotropic Compositions, Antacids, Compositions for the Treatment of Vascular Alterations and Arteriosclerosis, Fungicides, Cardiac Stimulants, Anti-Cytostic Compositions, Amino Acid Compositions, Anti-Anemia Compositions, Anti-Convulsives, Anti-Tussic Compositions, Chemo-Therapeutics, Compositions for Aiding Digestion, Blood Clotting Agents, Hormone Preparations, Lipolytic Agents, Anti-Mononucleocytosis Compositions, Central Nervous Stimulants, Spasmolytic Compositions, Vitamin Preparations, Anti-Coagulants, Mineral Preparations, Rubefacients or Counterirritants, and Insomnia Producing Agents.
First use 1927.

SN 683,334. American Home Products Corporation, d. b. a. Wyeth Laboratories, Division of American Home Products Corporation, Philadelphia, Pa. Filed Mar. 14, 1955.

WYAMINE

Owner of Reg. No. 512,863.
For N-Methylphenyl-Tertiary-Butylamine Sulfate in Injectable, Topical, and Oral Dosage Forms, as an Antidepressant, Decongestant, and Pressor Agent.
First use Dec. 11, 1947, on the goods in topical dosage form as a decongestant.

SN 683,906. Ortho Pharmaceutical Corporation, Raritan, N. J. Filed Mar. 21, 1955.

Gentersal

Owner of Reg. No. 413,789.
For Therapeutic Vaginal Cream.
First use Aug. 3, 1944.

SN 685,616. Irving Schwartz, d. b. a. Glenco Pharmacal Co., Glen Rock, N. J. Filed Apr. 15, 1955.

VA-TIC

For Therapeutic Vitamin Products in Solid and Liquid Form for Oral and Parenteral Administration.
First use Mar. 22, 1955.

SN 685,673. The Drug Products Co., Inc., Brooklyn, N. Y. Filed Apr. 18, 1955.

PULVOIDS

For Medicinal Tablets Used for Bronchial Asthma and Dysmenorrhea; as an Antipyretic and Analgesic; as an Intestinal Antispasmodic and Antiacid; and Tablets for the Treatment of Various Other Ailments.
First use Dec. 24, 1914.

SN 687,503. Schering Corporation, Bloomfield, N. J. Filed May 13, 1955.

METIMYD

For Anti-Inflammatory, Anti-Bacterial Steroid-Sulfonamide Preparation.
First use Mar. 17, 1955.

SN 691,376. Lakeside Laboratories, Inc., Milwaukee, Wis. Filed July 15, 1955.

CAYTINE

For Tablet Medication To Be Used as a Broncho-Dilator.
First use Mar. 1, 1955.

SN 691,738. American Home Products Corporation, d. b. a. Wyeth Laboratories, Division of American Home Products Corporation, Philadelphia, Pa. Filed July 22, 1955.

VISOLYSEN

For Medicinal Preparation for the Treatment of Hypertension.
First use Apr. 12, 1955.

SN 691,739. American Home Products Corporation, d. b. a. Wyeth Laboratories, Division of American Home Products Corporation, Philadelphia, Pa. Filed July 22, 1955.

EQUANIL

Owner of Reg. No. 530,348.
For Interneuronal Blocking Agent.
First use June 21, 1955.

SN 692,818. Sunkist Growers, Inc., Los Angeles, Calif. Filed Aug. 10, 1955.

FLAVA-CAL

For Flavonoids Derived From Citrus Fruits for Pharmaceutical Use.
First use June 23, 1955.

SN 693,176. John R. Murray, d. b. a. The Ray Drug Co., Oakland, Calif. Filed Aug. 16, 1955.



The drawing is lined for the color blue.
For Aid to Appetite Appeasement and a Vitamin Dietary Supplement.
First use Aug. 4, 1955.

SN 693,231. Burroughs Wellcome & Co. (U. S. A.) Inc., Tuckahoe, N. Y. Filed Aug. 17, 1955.

ECLORIL

For Medicinal Preparation Used in the Treatment of Chronic Lymphocytic Leukemia and Other Lymphomas.
First use July 20, 1955.

SN 693,877. Vitamin Council Incorporated, St. Paul, Minn. Filed Aug. 29, 1955.

KEROVALS

For Vitamin Preparations.
First use August 1954.

SN 693,878. Vitamin Council Incorporated, St. Paul, Minn. Filed Aug. 29, 1955.

KEO-RON

For Vitamin Preparations.
First use August 1954.

SN 693,879. Vitamin Council Incorporated, St. Paul, Minn. Filed Aug. 29, 1955.

KINAMINS

For Vitamin Preparations.
First use August 1954.

SN 694,032. Schenley Laboratories, Inc., New York, N. Y. Filed Aug. 29, 1955.

Diarostat

For Antidiarrheal Preparation.
First use Aug. 9, 1955.

SN 694,514. Ru-Vita Corporation, Kansas City, Mo. Filed Sept. 12, 1955.

RU-VITA

For Feed Supplement Containing Natural Live Rumen Organisms and Organism Nutrients for Ruminant Animals.
First use Dec. 27, 1954.

SN 696,109. Bristol Laboratories Inc., New York, N. Y. Filed Oct. 10, 1955.

AQUARACYCLINE

For Antibiotic Preparation for the Treatment of Diseases in Fish.
First use July 15, 1955.

SN 696,132. Farmaceutici Italia S. A., Milan, Italy. Filed Oct. 10, 1955.

CRISEOCICLINA

Priority claimed under Sec. 44(d) on Italian application filed July 25, 1955; Reg. No. 125,223, dated Oct. 4, 1955.
For Pharmaceutical Specialties Based on the Antibiotic Tetracyclin—Namely, an Antibiotic Indicated in Infections From Gram-Positive and Gram-Negative Microorganisms, From Some Virus, Rickettsiae and Protozoa.

SN 696,271. Vio Bin Corporation, Monticello, Ill. Filed Oct. 11, 1955.

PROMETOL

For Wheat Germ Oil Concentrate as a Food Supplement.
First use Sept. 15, 1955.

SN 696,293. Endo Products Inc., Richmond Hill, N. Y. Filed Oct. 12, 1955.

PERCOBARB

Owner of Reg. No. 507,983.
For Medicinal Preparation Used as a General Analgesic.
First use Sept. 1, 1954.

SN 696,315. Nutrilite Products, Inc., Buena Park, Calif. Filed Oct. 12, 1955.

NUTRIETTES

For Vitamin and Mineral Food Supplement in Cookie Form for Children.
First use June 30, 1955.

SN 696,317. Chas. Pfizer & Co., Inc., Brooklyn, N. Y. Filed Oct. 12, 1955.

TETRABON

For Liquid Antibiotic Preparation for Oral Use.
First use July 21, 1955.

SN 696,332. Vick Chemical Company, New York, N. Y. Filed Oct. 12, 1955.

VAPOSTEAM

For Inhalant Tablet.
First use Sept. 19, 1955.

SN 696,333. Vick Chemical Company, New York, N. Y. Filed Oct. 12, 1955.

ACCELERINE

For Cold Tablets.
First use Oct. 3, 1955.

SN 696,442. Irwin, Neisler & Company, Decatur, Ill. Filed Oct. 14, 1955.

RAWYNOL

For Hypotensive Agent.
First use Aug. 29, 1955.

SN 696,572. Robert J. Mock, d. b. a. H. P. R. Laboratory, Endicott, N. Y. Filed Oct. 17, 1955.

H.P.R.

For Ointment for Hemorrhoids and Pile Relief.
First use Aug. 11, 1955.

SN 696,744. Schering Corporation, Bloomfield, N. J. Filed Oct. 19, 1955.

SIGMAGEN

For Steroid Analgesic Preparation.
First use Aug. 10, 1955.

SN 696,797. Grove Laboratories, Inc., St. Louis County, Mo. Filed Oct. 20, 1955.

JELAMINT

For Tablets for the Treatment of Stomach Hyperacidity.
First use Sept. 1, 1955.

SN 696,814. Nepera Chemical Co., Inc., Yonkers, N. Y. Filed Oct. 20, 1955.

CETADIOL

For Hypotensive Agent.
First use Sept. 16, 1955.

SN 696,858. John L. Alloway, d. b. a. J. L. Alloway Medicine Co., Etowah, Tenn. Filed Oct. 21, 1955.



For Laxative.
First use Sept. 21, 1955.

SN 697,184. The E. L. Patch Company, Stoneham, Mass. Filed Oct. 26, 1955.

MYOPURIN

For Cardiac Tablets.
First use Oct. 18, 1955.

CLASS 19

SN 682,918. John B. Greene, Dunkirk, Ind. Filed Mar. 7, 1955.

CARE-A-MITE

For Baby Walkers.
First use Nov. 23, 1948.

SN 690,937. Cook County Trailer Co., Chicago, Ill. Filed July 8, 1955.

Nor-wood

For Camping Trailers.
First use June 15, 1955.

SN 695,190. The Symington-Gould Corporation, Depew, N. Y. Filed Sept. 22, 1955. Sec. 2(f).

COIL-ELLIPTIC

For Nests of Springs for Railway Trucks.
First use Aug. 9, 1932.

SN 695,549. Kendall, Nathason & Co., Los Angeles, Calif. Filed Sept. 29, 1955.



For Amphibious House Trailers.
First use Sept. 2, 1955.

SN 698,076. The Porta Company, Inc., Canton, Ohio. Filed Nov. 10, 1955.

PACKET

Owner of Reg. No. 540,239.
For Collapsible Boats, Chairs for Use Therein and Blinds for Use Therewith.
First use Jan. 6, 1950.

SN 1,516. General Motors Corporation, Detroit, Mich. Filed Jan. 26, 1956.

AEROTRAIN

For Railroad Passenger Trains.
First use Aug. 21, 1955.

SN 1,965. "M" System, Inc., Texarkana, Tex. Filed Feb. 2, 1956.

THE TEXAN

For House Trailers.
First use Aug. 1, 1955.

SN 1,997. A. George Volpe, d. b. a. Volpe Marine Sales Co., Rosedale, N. Y. Filed Feb. 2, 1956.



For Steel Hull Cruisers.
First use Oct. 1, 1955.

SN 2,172. James Neale and Sons Limited, Birmingham, England. Filed Feb. 6, 1956.

RAYDYOT

Owner of British Reg. No. 743,748, dated June 25, 1955; and U. S. Reg. No. 608,638.
For Rear View Mirrors.

CLASS 21

SN 661,407. Campbell-Norquist & Co., Portland, Oreg. Filed Feb. 23, 1954. Sec. 2(f).

Stirling Dial-A-Talk

For Electrically Actuated Inter-Communicating Sound Amplifying and Transmitting Systems Comprising Speakers, Amplifiers, Microphones, Inter-Connecting Circuits, and Energizing Devices Whereby Conversation at Either Point May Be Heard at the Other Point of Communication.
First use Feb. 1, 1948.

SN 674,634. Superior Separator Company, Hopkins, Minn. Filed Oct. 11, 1954.

Air-Brella

For Electrically Operated Blower for Producing a Tubular Air Curtain for Surrounding a Person To Exclude Insects, Dust and the Like.
First use July 19, 1954.

SN 675,270. Eberbach Corporation, Ann Arbor, Mich. Filed Oct. 22, 1954. Sec. 2(f).

POWER-STIR

For Electrical Mixing Equipment.
First use June 2, 1947.

SN 676,584. Artistic Lamp Mfg. Co. Inc., New York, N. Y. Filed Nov. 15, 1954. Sec. 2(f).

TRILITE

Owner of Reg. No. 351,276.
For Electric Floor and Table Lamps.
First use Mar. 10, 1933.

SN 680,058. Art Specialty Co., Chicago, Ill. Filed Jan. 18, 1955.



The drawing is lined for blue but color is not claimed as a part of the mark.
For Fluorescent and Incandescent Lamps of the Table, Desk, and Floor Types, for Home and Office Use.
First use June 1, 1954.

SN 681,386. Danfoss ved Mads Clausen, Nordborg, Als, Denmark. Filed Jan. 6, 1955.

Danfoss

Owner of Danish Reg. No. 1429/52, dated Oct. 11, 1952.
For Fans, Flatirons; Electric Heating Apparatus, Parts and Supplies Therefor; Transformers; Electric Alarm Systems, Parts and Supplies Therefor; Switchboards, Parts and Supplies Therefor; Electric Thermionic Amplifiers; Lighting Installations and Fittings; Transistors; and Electrical Equipment Including Transistors and Parts and Supplies Therefor.

SN 681,736. American Stair-Glide Corporation, Kansas City, Mo. Filed Feb. 16, 1955.

STAIR-GLIDE

For Electrically Actuated Stair Elevators.
First use Aug. 16, 1952.

SN 684,393. Brennen, Bucci & Weber, Inc., New York, N. Y. Filed Mar. 29, 1955.

BRENWELD

For Electrical Welders and Welding Apparatus.
First use Apr. 19, 1954.

SN 687,168. The Ansonia Wire & Cable Company, Ansonia, Conn. Filed May 10, 1955.

ANKOFOAM

Owner of Reg. No. 511,421.
For Communication Cables Carrying Electrical Conductors.
First use on or about Apr. 20, 1955.

SN 688,334. Luminiere Manufacturing Company, New York, N. Y. Filed May 26, 1955.

Golden Heritage

For Electric Lamps and Glass Lamp Bodies for Electric Lamps.
First use Mar. 16, 1955.

SN 688,612. Zenith Radio Corporation, Chicago, Ill. Filed May 31, 1955.



Owner of Reg. No. 537,855.
For Electric Lamps.
First use Mar. 29, 1955.

SN 691,109. The Welsbach Corporation, Philadelphia, Pa. Filed July 11, 1955. Sec. 2(f).

WELSBACH

For Electrically Energized Ionisers and Ozonators.
First use late 1948.

SN 691,733. Allen Electric and Equipment Company, Kalamazoo, Mich. Filed July 22, 1955.

DYNA-CHARGER

For Apparatus for Charging Storage Batteries.
First use Aug. 28, 1952.

SN 691,967. Societe Anonyme Francaise du Ferodo, Paris, France. Filed July 26, 1955.

CENTREL

Owner of French Reg. No. 451,318, dated June 3, 1955 (Seine); Natl. Inst. No. 57,776.
For Electromagnetic Clutches for Motor Vehicles.

SN 692,314. The Cordey China Company, Trenton, N. J. Filed Aug. 2, 1955.

Cordey

For Electric Lamps and Component Parts Thereof.
First use July 2, 1946.

SN 697,739. H. V. Smith Company, d. b. a. H. V. Smith & Company, St. Paul, Minn. Filed Nov. 4, 1955.

STANZOL

For Electric Floor Polishers.
First use July 1, 1935.

SN 697,805. S. & M. Lamp Co., Los Angeles, Calif. Filed Nov. 7, 1955.

"RED CAP"

For Electrical Flood Lights.
First use on or about Jan. 31, 1933.

SN 698,957. Craftools, Inc., New York, N. Y. Filed Nov. 28, 1955.

craftool DUSTMAN

For Electrically Operated Vacuum Dust Collecting Apparatus.
First use on or about Sept. 15, 1955.

CLASS 22

SN 658,228. American Metal Specialties Corporation, Hatboro, Pa. Filed Dec. 21, 1953.

"LET'S PLAY GROWN UP" Amsco DOLL-E-TOYS & KIDD-E-TOYS

No claim is made to the words "Doll-E-Toys & Kidd-E-Toys" and "Let's Play Grown Up" except in the association shown. Owner of Reg. Nos. 539,036 and 539,703.
For Children's Toys—Namely, Play Pools, Dolls' Baths, Dolls' Beds, Dolls' High Chairs, Dolls' Swings; and Dolls' Nursing Sets.
First use June 1, 1953.

SN 668,025. James D. Easton, Los Angeles, Calif. Filed June 10, 1954.

XX75

For Aluminum Alloy Tubular Arrows, and the Tubing Employed in Making the Same.
First use on or about Dec. 1, 1948.

SN 668,258. Earl C. Jones and Geneva F. Jones, Indianapolis, Ind. Filed June 15, 1954.

STROKEPLAY

For Board Game Involving Socketed Playing Fields and a Plurality of Pegs To Be Placed in the Field Sockets.
First use June 9, 1954.

SN 683,164. Aron Z. Allan, New York, N. Y. Filed Mar. 10, 1955.

HANDISCORE

For Baseball, Basketball, Football, Tennis, Golf, and Similar Type Score-Cards.
First use Feb. 13, 1954.

SN 683,783. The Krause & Gartner Co., Mishawaka, Ind. Filed Mar. 18, 1955.

ED (MOOSE) KRAUSE

Consent of Edward F. Krause, also known as Ed (Moose) Krause, is of record.
For First Down Tape Rule, Used in Football.
First use Feb. 23, 1955.

SN 684,452. Memphis Plastic Enterprises, Inc., Memphis, Tenn. Filed Mar. 29, 1955.

RouRou

For Hand Manipulable Toy, Consisting of a Wooden Drum With a Hole in One End Tethered by a Length of String to a Handle With a Peg, the Object of the Toy Being To Catch the Drum on the Handle and Peg by Tossing the Drum in the Air.
First use Feb. 15, 1955.

SN 685,157. American Metal Specialties Corporation, Hatboro, Pa. Filed Apr. 8, 1955. Sec. 2(f).

DOLL-E-HICHAIR

For Dolls' High Chairs.
First use Feb. 1, 1947.

SN 685,994. Pressman Toy Corp., New York, N. Y. Filed Apr. 21, 1955.

CAT'S EYE

For Marbles.
First use Oct. 8, 1954.

SN 688,108. Harold Warp, Chicago, Ill. Filed May 23, 1955.



For Toy Vehicles, Cars, Wagons, Implements, Guns and Gun and Holster Sets; Dolls, Drums, Telescopes, Whistles, Puzzles, Rattles, Sparkers, Pennants, Trick Items, Tops, Craft Sets, Indian Headdress and Bands.
First use May 15, 1953; and on or about Sept. 1, 1950, as to "Pioneer Village."

SN 693,978. C. B. Donald Company, St. Paul, Minn. Filed Aug. 31, 1955.

TIDDLE-TAC-TOE

For Game Employing Playing Chips, a Board Including Receptacles for Such Chips, and Chip Means for Projecting Said Playing Chips Into Said Receptacles.
First use Feb. 21, 1955.

SN 2,250. Princess Grace Doll Inc., New York, N. Y. Filed Feb. 7, 1956.

PRINCESS GRACE

For Dolls.
First use Feb. 2, 1956.

CLASS 23

SN 627,376. Aviation Developments Limited, London, England. Filed Apr. 1, 1952.

AVDEL

Owner of British Reg. No. 663,190, dated Oct. 10, 1947.
For Machine Tools—Namely, Pneumatically, Hydraulically, and Manually Operated Riveting Guns.

SN 645,444. Tri-Pak Machinery Service, Inc., Harlingen, Tex. Filed Apr. 16, 1953.

tapetyte

For Machines for Applying and Sealing Pressure Sensitive Tape to Packages.
First use Feb. 13, 1953.

SN 667,176. Textile Engineering Corporation, Whitman, Mass. Filed May 26, 1954.

UNILINE

For Textile Spinning Machinery.
First use Feb. 24, 1954.

SN 676,850. Gebrüder Wacker Kommanditgesellschaft, Munich, Germany. Filed Nov. 17, 1954.



For Vibrating and Ramming Tools and Machines—Namely, External Vibrators, Internal Vibrators, Vibrating Rammers, Pavement Breakers, Vibrating Plates, Vibrating Screeds and Tie Tampers, and Internal Combustion Engine Generating Sets, and Parts Thereof.
First use in 1950.

SN 681,690. Erik Johan von Heidenstam, Stockholm, Sweden. Filed Feb. 15, 1955.

PROMETO

Owner of Swedish Reg. No. 63,211, dated July 11, 1947.
For Machines for Manufacture of Structural Blocks Operating With or Without Vibration; Vibrators; Jacks; Edge Tools; Mechanical Tools and Apparatus for Construction Purposes, Cement and Concrete Work for Moulding Purposes, for Wood and Metal Work, for Stone Dressing, for Clay and Earth Working; Liquid Pumps, Liquid Spraying Apparatus; Mechanical Oil Cleaning and Lubricating Apparatus; Mechanical Transmissions, Couplings and Bearings for Machines; and Conveying, Loading, Unloading and Hoisting Apparatus.

SN 683,046. Hydraulic Tools Corporation, Sheboygan, Wis. Filed Mar. 8, 1955.



For Vehicle Lifting and Lowering Jacks.
First use on or about Nov. 5, 1954.

SN 685,277. Kearney & Trecker Corporation, West Allis, Wis. Filed Apr. 11, 1955.



The words "Milling Head" are disclaimed apart from the mark as shown. Owner of Reg. Nos. 531,092, 539,403, and others.
For Milling Heads.
First use Jan. 10, 1955.

SN 685,493. Gray Company, Inc., Minneapolis, Minn. Filed Apr. 14, 1955.

Presto-Pak

For Bearing Packer.
First use Feb. 23, 1953.

SN 685,786. U. S. Industries, Inc., New York, N. Y. Filed Apr. 18, 1955. Sec. 2(f).

FRAY

For Milling Machines.
First use in the year 1934.

SN 686,037. F & B Mfg. Company, Bryan, Tex. Filed Apr. 22, 1955.



The drawing is lined for green and black. The words "Line Marker" are disclaimed apart from the mark as shown.
For Athletic Field Marker.
First use Jan. 1, 1953.

SN 686,153. The Christensen Machine Company, Racine, Wis. Filed Apr. 25, 1955. Sec. 2(f).



Owner of Reg. No. 180,833.
For Signature Gathering and Wire Stitching Machines, Sheet Bronzing Machines and Bronze Collecting Attachments Therefor, and Sheet Dusting Machines and Dust Collecting Attachments Therefor.
First use on or about May 11, 1929, on signature gathering and wire stitching machines; and first used on such goods about April 1907 as to "Christensen."

SN 686,616. Consolidated Vacuum Corporation, Rochester, N. Y., to Consolidated Electrodynamics Corporation, Pasadena, Calif. Filed May 2, 1955.

EVACUTRON

For Vacuum Pumps and the Like.
First use Apr. 14, 1955.

SN 696,003. Stulz-Sickles Company, Newark, N. J. Filed Oct. 6, 1955.

WING-DING

For Manganese Steel Replacement Points for Teeth of Power Shovels.
First use Dec. 8, 1954.

SN 697,372. Inflico Incorporated, Tucson, Ariz. Filed Oct. 31, 1955.

ACCELAPAK

Owner of Reg. No. 371,146.
For Composite Liquid Treating Plants Including Machines for Mixing and for Chemical Treatment and Sterilization of Liquids, and for the Separation of Solids From Liquid, and Taste and Odor Removal Plants, and Parts of Such Composite Plants.
First use July 28, 1955.

SN 699,242. William H. Mead, Belmont, Calif. Filed Dec. 1, 1955.

VACU-BLASTER

Owner of Reg. Nos. 527,468 and 606,376.
For Abrasive Blast Machines in Industrial Use for Cleaning and Abrading Surfaces of Wood, Metal, Stone, Brick and Concrete and Other Similar Surfaces, and for Parts Therefor.
First use Aug. 17, 1945.

CLASS 26

SN 658,921. Mauser-Werke AG, Oberndorf am Neckar, Germany. Filed Jan. 4, 1954. Sec. 2(f).



The lining indicates shading. Owner of German Reg. No. 242,803, dated Feb. 18, 1920; and U. S. Reg. No. 537,881.
For Compasses, Patterns, Calipers, Angle and Inclination Measuring Micrometers, Triangles, Rules, Levels, Plumb Bobs, Slide Rules, Protractors, Dividers, Punch-Measuring Gauges, Flexible Rules, Cast Steel Rules, Vernier Calipers, Vernier Height Gauges, Micrometer Calipers, Standard End Measuring Gauges, Inside Micrometer Calipers, Standard Caliper Gauges, Adjustable Caliper Ganges, Standard Internal and External Cylindrical Gauges, and Thread Gauges.
First use June 1, 1925; in commerce June 1, 1925.

SN 668,528. Myron A. Coler, d. b. a. Markite Company, New York, N. Y. Filed June 21, 1954.

MARKITE

For Potentiometers and Thermistors.
First use in or about April 1951.

SN 670,087. Baptist Machine Company, Inc., Stamford, Conn. Filed July 16, 1954.

MICROFINISH COMPARATOR

For Surface Finish Gauges.
First use on or about Sept. 1, 1953.

SN 671,601. Schneider & Kern, Niedernhall, Wuerttemberg, Germany. Filed Aug. 12, 1954.

Helios

For Slide Rules, Rulers, Calipers, Height Gauges, Button Calipers, Bore Calipers, Measuring Tables, Curved Rulers, Squares, Speedometers, Revolution Counters, Protractors, Vernier Scales, Micrometers, Tape Measures, Thread Gauges, Inside Calipers, Measuring Stands, and Bubble Levels.
First use Nov. 22, 1913, on slide rules and micrometers.

SN 672,271. Claude E. Cox, Highland Park, Mich. Filed Aug. 26, 1954.

STEREO TRAVELS

For Film Slides, Slide Carriers, Slide Files, and Projector Equipment Accessories.
First use July 30, 1954.

SN 678,304. Booth Industries Inc., Newtonville, Mass. Filed Dec. 14, 1954.

Micro-Stop

For Precision Drill Gauges Adapted To Be Attached to Cutting Tools, Such as Counterbores, End Mills, Reamers, Drills, Taps, Form Tools and the Like, to Accurately Control the Depth of the Hole Bored by the Tool.
First use Oct. 29, 1954.

SN 679,818. American Optical Company, Southbridge, Mass. Filed Jan. 13, 1955.



Owner of Reg. Nos. 268,217, 444,749, and others.
For Ophthalmic Mountings, Spectacle Frames, Accessories and Parts Therefor: Ophthalmic and Optical Lenses of All Kinds Generally and the Blanks Therefor; Objectives; Lens Systems; Corrector Plates; Occluders; Prisms; Mirrors, Reflectors, and Filters Associated With or Forming a Part of Optical Devices; Magnifiers; Sunglasses and Parts Therefor; Head and Eye Protective Devices Including Helmets, Shields, Goggles, and Eye Protectors, and Plates, Lenses, and Parts for Said Helmets, Shields, Goggles and Eye Protectors; Projectors, Parts and Accessories Therefor; Cameras, Parts and Accessories Therefor; Equipment and Devices for Editing Motion Picture Film, Accessories and Parts Therefor; Cases for Spectacles, Lenses and Various Instruments; Drop Ball Testers; Gauges; Face and Spectacle Frame Measuring Devices and Like Devices Used in Prescribing and/or Fitting Spectacle Frames to the Facial Requirements of Wearers, Such as Nose Gauges, Face Measures, Temple Measures and the Like; Eye Testing, Measuring and Observing Devices, Accessories and Parts Therefor; Lens Testing, Lens Centering, Lens Inspecting and Lens Measuring Devices, Accessories and Parts Therefor; Trial Lens Sets, the Cases and Lenses Therefor; Instruments Provided With Lenses for Testing and Examining the Eye and Other Objects; Ballistic Scientific and Ballistic Laboratory Apparatus, Accessories and Parts Therefor; Refracting Instruments and Parts Therefor; Tangent Screens; Refractometers and Parts Therefor; Microfilm Readers, Accessories, and Parts Therefor; Illuminators; Instruments for Measuring Optical Properties, Accessories and Parts Therefor; Microscopes, Accessories and Parts Therefor; Devices Such as Periscopes; Stereoscopes; Loupes; Colony Counters; Camera Lucidas; Colorimeters; Profile Comparators; Microscope Illuminators; Finger Print Magnifiers; Goniometers; Haemacytometers; Hemoglobinometers; Hardness Testers; Micrometers; Microtomes; Microtome Knives; Photomicrographic Apparatus; Light Polarizing Apparatus and Devices; Spectrometers; Optical Instruments for Examining and Counting Particles in Blood, Urine, Milk and Mold; Perimeters; Polariscopes; Microscopic Drawing Apparatus; Microscope Object Slides; Microscope Cover Glasses; Microscope Slide Receptacles and Holders; Laboratory Incubators; Balances; Helixometers; Nephelometers; Range Finding Apparatus; Spectrographs; Spectroscopes; Spectrophotometers; Surveying Levels; Telescopes; Orthoptic Devices; Metallographs; and Accessories and Parts for Such Devices.
First use January 1942 as to spectacle frames.

SN 682,431. Walter L. Hudson, d. b. a. Less Car Company, Atlanta, Ga. Filed Feb. 28, 1955.

Less Car

For Machines for Feeding Consumable Electrodes in Motion Picture Projectors.
First use July 1954.

SN 685,219. Leta S. Taylor, d. b. a. J. Y. Taylor Company, Garland, Tex. Filed Apr. 8, 1955.

SPOTLIGHT

For Projectors for Opaque Materials and Stands or Tables for Projectors, and Parts Thereof.
First use 1949.

SN 685,335. Automatic Control Company, St. Paul, Minn. Filed Apr. 12, 1955.

Autocon

For Automatic Electrical Controls for Liquid Distribution and Supply Systems and for Sewage Systems, Automatic Elec-

trical Apparatus for Measurement and Control of Fluid Pressure and Liquid Level, Automatic Electrical Protective Alarm and Detection Systems, Alternators for Controlling the Sequence of Operation of Electrical Equipment, and Electrical Apparatus for Monitoring and Transmitting Electrical Impulses Used in Conjunction With the Above Described Controls, Apparatus and Systems.

First use on or about Nov. 7, 1949.

SN 685,336. Automatic Control Company, St. Paul, Minn. Filed Apr. 12, 1955.

TELESCAN

For Electrical Apparatus for the Monitoring and Transmission of Electrical Impulses Over Electrical Transmission Systems for the Purposes of Detection, Measurement, Control or Recording of Liquid Level or Pressure or Gas Pressure for Use in Water Systems, Sewage Systems, and Industrial Processing Systems.

First use on or about Jan. 21, 1955.

SN 685,337. Automatic Control Company, St. Paul, Minn. Filed Apr. 12, 1955.

TELESTEP

For Electrical Apparatus for the Transmission of Electrical Impulses Over Electrical Transmission Systems for the Purpose of Detection, Measurement, Control or Recording of Liquid Level or Pressure or Gas Pressure for Use in Water Systems, Sewage Systems, and Industrial Processing Systems.

First use on or about Feb. 4, 1955.

SN 685,422. Baird Associates, Inc., Cambridge, Mass. Filed Apr. 13, 1955.



Owner of Reg. No. 609,553.

For Spectrographic Equipment and Spectrometers.

First use Oct. 7, 1954.

SN 686,958. Kenneth D. Curry, Hattiesburg, Miss. Filed May 6, 1955.



Applicant disclaims "Tire Truer" and "Balancer" except as used in connection with the trademark design and term "Ken's-Way" applied for registration herein.

For Tire Truer and Balancer Machine.

First use June 10, 1954.

SN 688,661. Philco Corporation, Philadelphia, Pa. Filed June 1, 1955.

transac

For Transistorized Automatic Computers.

First use Mar. 16, 1955.

SN 689,619. Walter Futter, New York, N. Y. Filed June 16, 1955.

KIPTAR

For Projection Lenses for Motion Pictures and Still Pictures.

First use Dec. 7, 1953.

Subj. to Intf. with Reg. No. 624,960.

SN 690,156. Walter Futter, New York, N. Y. Filed June 24, 1955.

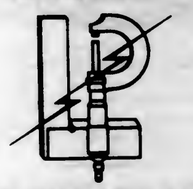
SUPER - KIPTAR

For Projection Lenses for Motion Pictures and Still Pictures.

First use Dec. 7, 1953.

Subj. to Intf. with Reg. No. 624,960.

SN 692,356. Irwin R. Sheldon, d. b. a. Precision Laboratories, Brooklyn, N. Y. Filed Aug. 2, 1955.



For Sound Reader Used in Editing or Checking of Various Recorded Passages on Magnetic Tape, Magnetic Film, Magnetic Stripping, Optical Film or Similar Sound Devices.

First use Aug. 15, 1950.

SN 694,358. Escher Wyss Aktiengesellschaft, Zurich, Switzerland. Filed Sept. 8, 1955.



No claim is made to the exclusive use of the word "Centrifuges." Owner of Swiss Reg. No. 154,694, dated Feb. 4, 1955.

For Centrifuges for Research, Scientific, and Medical Purposes.

SN 694,359. Escher Wyss Aktiengesellschaft, Zurich, Switzerland. Filed Sept. 8, 1955.



No claim is made to the exclusive use of the words "Rapid" and "Centrifuges." Owner of Swiss Reg. No. 154,695, dated Feb. 4, 1955.

For Laboratory-Centrifuges.

SN 697,122. Rotofilm Company, Hartford, Conn. Filed Oct. 25, 1955.

ROTOFILM

For Continuous Film Feeder Attachment for Motion Picture Projectors.

First use Sept. 23, 1955.

SN 697,429. Wales-Strippit Corporation, North Tonawanda, N. Y. Filed Oct. 31, 1955.

"STRIP TEMPLATE"

The word "Template" is disclaimed apart from the mark as shown.

For Auxiliary Templates for Use in Positioning Perforating and Notching Units in a Punch Press.

First use May 1948.

SN 698,309. Taller & Cooper, Inc., Brooklyn, N. Y. Filed Nov. 15, 1955.

TOLL-AMATION

Owner of Reg. No. 613,919.

For Automatic Toll Collection Equipment, and Parts Thereof.

First use Oct. 11, 1955.

SN 698,520. Wallace W. Hansen, d. b. a. Optical Import Co., Bellingham, Wash. Filed Nov. 18, 1955.

COMPACTO

For Instrument That Measures the Vertex Power (Diopter Strength) of Ophthalmic and Precision Lenses and Prisms and Combinations Thereof.

First use June 15, 1949.

SN 698,760. The American Automobile Association (Incorporated), Washington, D. C. Filed Nov. 23, 1955.



For Automobile Driver Education, Training and Testing Apparatus—Namely, Automobile Mechanism Demonstration Models, and Apparatus for Testing Vision, Distance Judgment, Visual Acuity, Reaction Time and Color Vision: Jerk Recorders, Steadiness Testers, and Decelerometers.

First use 1936.

SN 698,986. La Belle Industries, Inc., Oconomowoc, Wis. Filed Nov. 28, 1955.

PAL

For Cameras and Camera Carrying Cases.

First use Sept. 12, 1955.

SN 1,882. Ketcham and McDougall, Roseland, N. J. Filed Feb. 1, 1956.

AQUA METER

For Speedometers.

First use January 1940.

SN 1,952. H. D. Hudson Manufacturing Company, Chicago, Ill. Filed Feb. 2, 1956. Sec. 2(f).

HUDSON

Owner of Reg. No. 430,874.

For Thermostat Wafers, Thermostat Valves, and Thermometers.

First use 1930.

SN 2,128. Graflex, Inc., Rochester, N. Y. Filed Feb. 6, 1956.

"DEPTHMASTER"

For Cameras.

First use Aug. 19, 1955.

SN 2,192. Ralston Purina Company, St. Louis, Mo. Filed Feb. 6, 1956.

CHECK-R-MIXER

Owner of Reg. Nos. 269,158 and 527,483.

For Computers for Formulas for Poultry and Animal Feeds.

First use Dec. 13, 1955.

SN 2,268. Utility Appliance Corp., Los Angeles, Calif. Filed Feb. 7, 1956.

OVEN SENTINEL

For Oven Thermostats.

First use Dec. 16, 1955.

CLASS 27

SN 690,228. Compagnie des Montres Favre-Leuba SA., Geneva, Switzerland. Filed June 27, 1955.



For the purpose of this registration, applicant hereby disclaims the exclusive right to the use of the word "Favre-Leuba" apart from the other features of the mark as shown.

Owner of Swiss Reg. No. 113,995, dated Nov. 5, 1945.

For Watches and Parts Thereof.

SN 693,814. Enicar S. A., Bienne, Switzerland. Filed Aug. 29, 1955.



Owner of Swiss Reg. No. 110,524, dated May 16, 1945.

For Watches, Watch Movements, Blanks and All Parts of Watches.

SN 695,402. Fabrique d'Horlogerie de Fontainemelon S. A., Fontainemelon, Switzerland. Filed Sept. 27, 1955.

FONTOBLOC

Priority claimed under Sec. 44(d) on Swiss Reg. No. 156,401, dated June 7, 1955. Owner of U. S. Reg. No. 566,273.

For Watches, Parts of Watches, Watch Movements, Watch Dials, Watch Cases, and Articles for Packing the Same.

SN 699,462. Alstater Watch Corp., New York, N. Y. Filed Dec. 6, 1955.

ALSTA

BELLETTE

Owner of Reg. No. 611,045.

For Watches.

First use Jan. 1, 1955.

SN 2,477. Hamilton Watch Company, Lancaster, Pa. Filed Jan. 26, 1956.

DYNAVAR

For Watch Mainspring.
First use in 1948.

CLASS 28

SN 677,244. Charles Rothman Company, Inc., Providence, R. I. Filed Nov. 24, 1954.



For Ladies' Costume Jewelry.
First use May 27, 1954.

SN 686,077. Olsen & Ebann Jewelry Co., Chicago, Ill. Filed Apr. 22, 1955. Sec. 2(f).



For Jewelry for Personal Wear—Namely, Finger Rings, Bracelets, Bar Pins, Scarf Pins, Cuff Links, Watch Chains, Neck Chains, Lavalieres, Necklaces, and Fraternal Jewelry, All Made of Gold and Either Plain or Carrying Diamonds or Other Jewels.
First use June 1913.

SN 692,407. La Rel Originals, New York, N. Y. Filed Aug. 3, 1955.



The word "Originals" and "Rhinestone Magic" are disclaimed apart from the mark as shown.
For Costume Jewelry—Namely, Rings, Earrings, Bracelets, Lockets, Pendants, Pins, and Brooches.
First use June 14, 1955; and on Apr. 8, 1953, as to "La Rel Originals."

SN 698,077. J. Posner & Sons, Inc., New York, N. Y. Filed Nov. 10, 1955.

Sayposon

For Finger Rings, Charms, Pendants, Brooches, Religious Jewelry, Cuff Links, Tie Bars, Money Clips, Earrings, Key Chains, Necklaces and Neck Chains, Bracelets, Watch Bands, Belt Buckles, Diamonds, and Lockets, All Made of Precious Metal or Plated With Precious Metal.
First use December 1948.

SN 699,217. Foster Metal Products Incorporated, Attleboro, Mass. Filed Dec. 1, 1955.

SIDEWALK SUPERINTENDENTS

For Men's Jewelry.
First use Nov. 21, 1955.

SN 979. David E. Gaare, d. b. a. The David Co., St. Paul, Minn. Filed Jan. 18, 1956.

GÄWOOD

For Various Articles of Costume Jewelry, Particularly Earrings, Hair Clips, Ornamental Pins, and Cuff Links.
First use Dec. 20, 1955.

SN 2,289. Gorham Manufacturing Company, Providence, R. I. Filed Feb. 8, 1956.

CERES

For Silverplated Flatware and Table Cutlery.
First use Jan. 27, 1956.

SN 2,523. The Gemex Corporation, Union, N. J. Filed Feb. 13, 1956.

CAROUSEL

For Bracelets and Watch Bracelets and Watch Straps.
First use Oct. 27, 1955.

CLASS 29

SN 687,323. Rubon, Incorporated, Kansas City, Mo. Filed May 11, 1955.

RUBON
RO-TA-REE

Owner of Reg. No. 206,454.
For Mops and Mop Heads.
First use on or about Feb. 4, 1955.

SN 700,745. Ohio Wiping Cloth Manufacturing Company, Cleveland, Ohio. Filed Dec. 28, 1955.



For Polishing Cloth, Knitted or Otherwise Formed From Natural and/or Artificial Yarns, Especially Yarns Composed of Cotton or Rayon.
First use Nov. 2, 1948.

CLASS 30

SN 413. Cordey China Company, Trenton, N. J. Filed Jan. 10, 1956.

Cordey

For Boxes and Bottles All Made of China.
First use July 2, 1946.

SN 2,817. Raymond's, Inc., Boston, Mass. Filed Feb. 16, 1956.

INCOGNITO

For China Tableware.
First use Oct. 28, 1954.

CLASS 32

SN 653,524. Rowe Spacarb, Inc., Stamford, Conn., from Spacarb, Inc. Filed Sept. 21, 1953.

Auto-Snak

For Full Fronts for Housing Vending Equipment.
First use Aug. 22, 1953.

SN 685,600. Masterkraft, Brooklyn, N. Y. Filed Apr. 15, 1955.

DUBL-LIFE

For Kitchen Furniture—Namely, Chairs.
First use April 1954.

SN 691,803. Vermont Furniture Co., Inc., Union, N. J. Filed July 22, 1955.

"Whipple House Group"

For Furniture for Homes—Namely, Bedroom and Dining Room Furniture, Consisting of Beds, Dressers, Chests of Drawers, Night Stands, Commodes, Mirrors, Chairs, Dining Room Tables, Buffets, Servers, and China Cabinets.
First use Apr. 1, 1955.

SN 698,151. Fashioncraft Furniture Corporation, Portland, Oreg. Filed Nov. 14, 1955.



For Upholstered Furniture—Namely, Davenports, Davenos, Folding Beds, and Chairs.
First use Apr. 15, 1950.

SN 794. The Illinois Shade Cloth Corporation, Chicago Heights, Ill. Filed Jan. 16, 1956.



For Window Shades.
First use Dec. 1, 1950.

SN 797. The Illinois Shade Cloth Corporation, Chicago Heights, Ill. Filed Jan. 16, 1956.

Colonial

For Window Shades.
First use May 1, 1944.

SN 829. Premier-Hall Manufacturing Co., Inc., Chicago, Ill. Filed Jan. 16, 1956.

PAN-O-RAMIC

For Bathroom Medicine Cabinets.
First use Dec. 27, 1955.

SN 1,206. Cal-Wood Manufacturing Company, Incorporated, Gardena, Calif. Filed Jan. 23, 1956. Sec. 2(f).

CAL-WOOD

Owner of Reg. No. 564,786.
For Chairs, Love Seats, Tables, Hutches, Desks, Dressers, and Tea Carts.
First use Feb. 20, 1947.

SN 1,432. Drexel Furniture Company, Drexel, N. C. Filed Jan. 25, 1956.

COUNTERPOINT

For Bedroom Furniture—Namely, Chests, Dressers, Mirrors, Vanity Desks, Beds, Night Stands; Dining Room Furniture—Namely, Buffets, Decks, Storage Decks, Tables, Chairs, Serving Carts, and Chinas; and Living Room Furniture—Namely, Bookcase Decks, Cupboards, TV Cases, Corner Units, Desks, Room Dividers, Tables, Chairs, and Sofas.
First use Jan. 13, 1956.

SN 1,444. J F D Manufacturing Co., Inc., Brooklyn, N. Y. Filed Jan. 25, 1956.



For Metal Cot.
First use Dec. 5, 1955.

CLASS 33

SN 686,975. Higgins Handcrafted Glass, Chicago, Ill. Filed May 6, 1955.



For Ornamental Glass Products, Such as, Glass Table Tops, Glass Utility Dishes, Glass Table Dishes, Glass Plates, Glass Bowls, Glass Wall Plaques, Glass Tiles, Glass Trays, Glass Push Plates, Ornamental Windows, and Glass Partitions.
First use March 1949.

SN 690,222. Chance Brothers Limited, Smethwick, England. Filed June 27, 1955.

PROTEX

Owner of British Reg. No. 361,794, dated June 12, 1914.
For Glass for Goggles or Spectacles Used by Welders and Other Industrial Operatives.

SN 2,816. Raymond's, Inc., Boston, Mass. Filed Feb. 16, 1956.

INCOGNITO

For Glassware for Table or Household Purposes.
First use Oct. 1, 1954.

CLASS 34

SN 657,751. Wilhelm Baier K. G. Webasto-Werk, Stockdorf-Munich, Germany. Filed Dec. 10, 1953.

WEBASTO

For Apparatus for Heating and Preheating, Cooking, Cooling, Drying, and Ventilating, for Vehicles and Enclosed Areas, Water Supply Systems, Hot Water Generators and Hot Water Storage Tanks, and Parts Thereof.
First use March 1951.

SN 673,154. Aktiebolaget Svenska Flaktfabriken, Stockholm, Sweden. Filed Sept. 14, 1954.

Flakt

For Fans, Unit Ventilators, Unit Heaters, Unit Coolers, Grills, Registers, Humidifiers, Dehumidifiers, Heat Recovery Apparatus, Preheaters for Pulps and Other Materials, Driers for Pulp, Lumber, Wallboard, Veneer, Grain, Textiles and Other Materials, Drying Silos, Dust Collecting Apparatus.
First use 1938.

SN 682,150. The Hotstream Heater Company, Cleveland, Ohio. Filed Feb. 23, 1955.

EVERGLAS

For Water Heaters.
First use Feb. 4, 1955.

SN 682,790. Fairchild Engine and Airplane Corporation, Bay Shore, N. Y. Filed Mar. 4, 1955.

STRATOS

For Aircraft Compartment Pressure Regulating and Air Conditioning Apparatus and Replacement Parts Therefor.
First use on or about July 30, 1945.

SN 682 829. Ruud Manufacturing Company, Pittsburgh, Pa. Filed Mar. 4, 1955.

Enameline

For Hot Water Heaters.
First use Feb. 9, 1955.

SN 688,572. Peerless Manufacturing Corporation, Louisville, Ky. Filed May 31, 1955. Sec. 2(f).

Peerless

For Unvented Room Space Heaters, Vented Room Space Heaters, Unit Heaters and Vented Recessed Heaters.
First use 1929.

SN 688,635. Sam W. Folsom, d. b. a. Jet-Aire Sales Co., Dallas, Tex. Filed June 1, 1955.

JET-AIRE

For Attic Fans, Window Fans, and Evaporative Coolers.
First use on or about May 15, 1948; and in the identical form shown in or about the early summer of 1950.
Subj. to Intf. with SN 665,162.

SN 698,232. Surface Combustion Corporation, Toledo, Ohio. Filed Nov. 14, 1955.

BALCO

For Furnaces.
First use Apr. 19, 1948.

SN 698,578. Caloric Appliance Corporation, Philadelphia, Pa. Filed Nov. 21, 1955.

THERMO-SET

For Top Burners Forming Part of Gas Burning Stoves.
First use on or about Sept. 4, 1955.

SN 570. Chelsea Products, Incorporated, Plainfield, N. J. Filed Jan. 12, 1956.

Constellation ★★★★

For Window Fans.
First use Nov. 21, 1955.

CLASS 35

SN 657,192. Wilkening Manufacturing Company, Philadelphia, Pa. Filed Nov. 30, 1953.

EQUALIZER

For Expanders for Piston Rings.
First use Dec. 26, 1950.

SN 664,636. Wilkening Manufacturing Company, Philadelphia, Pa. Filed Apr. 15, 1954. Sec. 2(f).

Pedrick

For Piston Rings for Internal-Combustion Engines and Other Machinery.
First use January 1894.

SN 1,361. The Goodyear Tire & Rubber Company, Akron, Ohio. Filed Jan. 24, 1956.

TERRA-TIRE

For Tires.
First use Sept. 15, 1955.

SN 1,362. The Goodyear Tire & Rubber Company, Akron, Ohio. Filed Jan. 24, 1956.

HY-R

For Tires.
First use Oct. 27, 1955.

CLASS 36

SN 694,791. Electric & Musical Industries Limited, Hayes, England. Filed Sept. 16, 1955.



Owner of British Reg. No. B644,561, dated Feb. 6, 1946.
For Phonographic Styluses and Grooved Phonograph Records.

SN 700,603. Theodore J. Goon, Santa Monica, Calif. Filed Dec. 27, 1955. Sec. 2(f).

GOON-BONES

For Clappers.
First use Aug. 28, 1948.

CLASS 37

SN 650,592. David Kahn, Inc., North Bergen, N. J. Filed July 21, 1953.

WEAREVER

Owner of Reg. Nos. 267,704, 413,562, and others.
For Pen Points.
First use June 22, 1948; and 1918 as to "Wearever."

SN 658,189. Kleen-Stik Products, Inc., Chicago, Ill. Filed Dec. 18, 1953.

FLEX-STIK

For Paper Stock or the Like Impregnated With an Adhesive for Use in Making Labels, Tags, and Displays.
First use on or about Jan. 5, 1953.

SN 660,110. Martin Chalfin, d. b. a. Standard Items Company, Newark, N. J. Filed Jan. 26, 1954.

ACORN

The representation of the goods is disclaimed apart from the mark as shown.
For Holders for the Reception of Cards on Which Prices and Other Merchandising Indicia Are Displayed.
First use July 15, 1938.

SN 682,098. Norcross, Inc., New York, N. Y. Filed Feb. 17, 1955.

SIGNATURE NOTES

No claim is made to the term "Notes" apart from the mark as shown. Owner of Reg. No. 428,903.
For Decorative Letter Paper and Decorative Note Paper.
First use May 20, 1945.

SN 682,709. A. M. Collins Manufacturing Company, Philadelphia, Pa. Filed Mar. 3, 1955.

TRIFLEX

For Printing Paper.
First use Feb. 14, 1955.

SN 686,575. Royal McBee Corporation, New York, N. Y. Filed Apr. 29, 1955.

KEYCARD

Owner of Reg. Nos. 328,414 and 566,787.
For Employee Identification Card Used With Duplicating Punch Machines.
First use on or about Nov. 15, 1954.

SN 688,109. Harold Warp, Minden, Nebr. Filed May 23, 1955.

PIONEER VILLAGE

For Letter Openers, Pens, Albums, Pads, Tablets and Boxes of Writing Paper and Envelopes, and Table Napkins.
First use May 15, 1953; the words "Pioneer Village" first use on or about Sept. 1, 1950.

SN 689,094. The Sterilek Company, Inc., New York, N. Y. Filed June 7, 1955.

PLAID

For Bathroom Tissue.
First use Dec. 28, 1933.

SN 689,297. William S. Hamilton, d. b. a. Newark Printing Co., Newark, Del. Filed June 10, 1955.

PERFELOPE

For Continuous Envelope.
First use June 1, 1955.

SN 689,357. Crocker, Burbank Papers Inc., Fitchburg, Mass. Filed June 13, 1955.

ARABESQUE

For Printing Paper.
First use May 1950.

SN 691,756. Esleeck Manufacturing Co., Franklin, Mass. Filed July 22, 1955. Sec. 2(f).

Clearcopy

For Onion Skin Paper.
First use 1932.

SN 691,933. J. L. Darling Corporation, Tacoma, Wash. Filed July 26, 1955. Sec. 2(f).

"Rite in the Rain"

Owner of Reg. No. 435,576.
For Writable Waterproof Forms for Outdoor Use by Engineers, Loggers, and Others, Which Are Blank or Partially Printed.
First use September 1929.

SN 696,241. Keystone Business Forms, Scranton, Pa. Filed Oct. 11, 1955.

KWIK KEY SETS

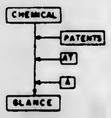
For Commercial Printed Forms.
First use June 1, 1955.

CLASS 38

SN 681,540. Fred C. Philpitt, Washington, D. C. Filed Feb. 11, 1955.

CHEMICAL

PATGRAMS



The words "Chemical Patents at a Glance" are disclaimed apart from the mark as shown.
For Periodicals.
First use Feb. 1, 1955.

SN 681,781. Norcross, Inc., New York, N. Y. Filed Feb. 16, 1955.

Safari

For Greeting Cards and Printed Greeting Folders.
First use Jan. 21, 1955.

SN 682,516. The Washington Post Company, Washington, D. C. Filed Feb. 28, 1955.

Sports Addition

For Column in a Newspaper.
First use at least as early as Jan. 2, 1949.

SN 682,821. Norcross, Inc., New York, N. Y. Filed Mar. 4, 1955.

Sugar Puss

For Greeting Cards and Printed Greeting Folders.
First use Sept. 22, 1954.

SN 683,617. Norcross, Inc., New York, N. Y. Filed Mar. 16, 1955.

HI JINKS

For Greeting Cards and Printed Greeting Folders.
First use Feb. 23, 1955.

SN 683,618. Norcross, Inc., New York, N. Y. Filed Mar. 16, 1955.

HIGH STYLE

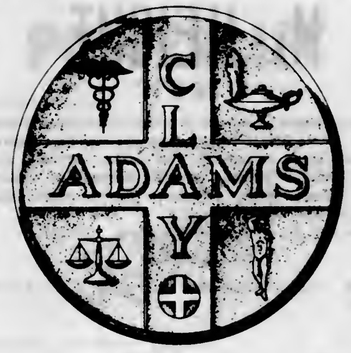
For Greeting Cards and Printed Greeting Folders.
First use Feb. 23, 1955.

SN 683,904. Merle Norman Cosmetics, Inc., Los Angeles, Calif. Filed Mar. 21, 1955.

Skin Deep

For Column in a Monthly Publication.
First use during September 1942.

SN 684,633. Clay-Adams, Inc., New York, N. Y. Filed Mar. 31, 1955.



For Catalogs, Pamphlets, Leaflets, and Sections of Specialized Trade Publications Issued Periodically.
First use on or about Mar. 1, 1955.

SN 685,171. Cook Laboratories, Inc., Stamford, Conn. Filed Apr. 8, 1955.

Audio Bucket

For House Organ.
First use Feb. 1, 1955.

SN 685,437. Doane Agricultural Service, Inc., St. Louis, Mo. Filed Apr. 13, 1955. Sec. 2(f).

DOANE

Owner of Reg. Nos. 539,511 and 565,035.
For Farm Publications Published From Time to Time.
First use September 1946.

SN 686,371. Jackmeyer Label Corporation, New York, N. Y. Filed Apr. 27, 1955.

Jackmeyer

For Printed Labels and Tags.
First use January 1929.

SN 686,639. Hearst Consolidated Publications, Inc., New York, N. Y. Filed May 2, 1955.

Pictorial TView

Applicant disclaims the word "Pictorial" except as part of the mark shown.
For Newspaper Section or Magazine.
First use Jan. 16, 1955.

SN 687,231. Travel Courier, Inc., New York, N. Y. Filed May 10, 1955.



For Magazines and Newspapers.
First use Mar. 1, 1955.

SN 689,622. Gold Shield Hotels, Inc., Tomah, Wis. Filed June 16, 1955.

Gold Shield Adchek

For Coupons Given as a Discount on Hotel Room Rentals.
First use Mar. 8, 1955.

SN 694,372. Irving Levy, d. b. a. Goldback Stamp Company, Shreveport, La. Filed Sept. 8, 1955.

GOLD BACK

For Trading Stamps.
First use Apr. 1, 1954.

SN 700,476. The Meyercord Co., Chicago, Ill. Filed Dec. 22, 1955. Sec. 2(f).

MEYERCORD

For Decalcomania Transfers.
First use 1899.

SN 700,522. National Comics Publications, Inc., New York, N. Y. Filed Dec. 23, 1955.

The Three Mouseketeers

For Periodical Publication.
First use June 14, 1944.

SN 700,598. Funk & Wagnalls Company, New York, N. Y. Filed Dec. 27, 1955. Sec. 2(f).

STANDARD

For Dictionaries.
First use 1880.

CLASS 39

SN 658,125. Milco Undergarment Co. Inc., New York, N. Y. Filed Dec. 17, 1953.

Columbia Maid

Owner of Reg. Nos. 550,603 and 526,522.
For Women's Undergarments—Namely, Panties, Slips, and Petticoats.
First use January 1937.

SN 666,818. Alamo Manufacturing Co., Inc., New York, N. Y. Filed May 21, 1954.

Pina-Short

For One Piece Outer Garments of the Utility Type for Misses and Women—Namely, Combination Halter and Shorts.
First use Apr. 21, 1954.

SN 670,232. Porter Originals of Arizona, Phoenix, Ariz. Filed July 19, 1954. Sec. 2(f) as to "Porter."

Porter Originals
OF ARIZONA

The words "Originals" and "Arizona" are disclaimed apart from the mark as shown.
For Western Neckwear, Dress Neckwear, and Western Shirts for Men, Women, and Children.
First use Jan. 1, 1950; and 1875 as to "Porter."

SN 676,781. Edythe Belmont, New York, N. Y., to Jamaica House, Inc., New York, N. Y. Filed Nov. 17, 1954.

JAMAICA HOUSE

For Sportswear—Namely, Ladies' and Men's Shirts, Shorts, Slacks, Jackets, and Coats and Ladies' Dresses and Skirts.
First use Oct. 11, 1954.

SN 679,128. Bunzl & Biach Aktiengesellschaft, Vienna, Austria. Filed Dec. 29, 1954.

NEOGLAZE

Priority claimed under Sec. 44(d) on Austrian application filed June 29, 1954; Reg. No. 31,216, dated Oct. 6, 1954.
For Felt Hat Bodies, Felt Hats.

SN 681,735. American Firstcraft Corporation, New York, N. Y. Filed Feb. 16, 1955.

Mac Gomber

For Outer Shirts, Coats, Jackets, Slacks, Pants, Workclothes, Workcoats, and Workpants, Overalls, Underwear, Blouses, and Athletic Costumes, for Men, Women, and Boys.
First use Dec. 23, 1954.

SN 683,238. Rothschild Bros., Inc., St. Louis, Mo. Filed Mar. 10, 1955.

Rovi

For Women's Sportswear—Namely, Sweaters, Swimming Apparel, T Shirts, Bermuda Shorts, Coordinates (Matching Blouse and Pants or Skirts), and Pants.
First use Feb. 24, 1955.

SN 683,892. Joseph M. Klein, Inc., New York, N. Y. Filed Mar. 21, 1955.

Mr. HEIGHT
6' to 6'11"

Without waiver of common law rights no claim is made to the phrase "6' to 6'11"" apart from the mark as shown.
For Men's Suits, Overcoats, Top Coats, Surcoats, Jackets, Raincoats, Shirts, Slacks, Shorts, Bathrobes, Underwear, Pajamas, Formal Wear, Cabana Sets, Sweaters, Hosiery, Gloves, Shoes, and Ties.
First use Mar. 10, 1955, on men's shirts.

SN 683,936. Tepper's Plainfield, Plainfield, N. J. Filed Mar. 21, 1955.

Tepper-Flex



For Children's Shoes.
First use July 1, 1954.

SN 684,076. Francis W. Slater, Denver, Colo. Filed Mar. 23, 1955.

Showerette

For Cape for Use in Taking a Shower or the Like.
First use Jan. 17, 1955.

SN 684,363. Tandy Leather Company, Fort Worth, Tex. Filed Mar. 28, 1955.

Kuffy-Mok

For Pre-Cut Leather Moccasins With Holes Punched, Ready for Assembly.
First use Sept. 1, 1952.

SN 684,775. The Warner Brothers Company, Bridgeport, Conn. Filed Apr. 1, 1955.



The drawing is lined for blue. Owner of Reg. Nos. 50,062, 224,451, and others.
For Foundation Garments Including Brassieres, Bandeaux, Corsets, Corselettes, Girdles, All-in-Ones, Combinations of a Girdle and Brassiere, Step-Ins, Pantie Girdles, Pants, and Briefs.
First use Apr. 6, 1949, on girdles.

SN 685,223. United States Rubber Company, New York, N. Y. Filed Apr. 8, 1955.

POWERLIFT

For Athletic Shoes.
First use Feb. 9, 1955.

SN 685,424. H. Borgenicht Corp., New York, N. Y. Filed Apr. 13, 1955.

Helène

For Women's and Misses' Blouses.
First use Mar. 31, 1938.

SN 685,705. Haft, Mann & Gaines Inc., New York, N. Y. Filed Apr. 18, 1955.

Chalfonte
ORIGINAL

Without waiving its common law rights and for purposes of this registration only applicant makes no claim herein to the word "Original" apart from the mark as shown.
For Women's Coats and Suits.
First use Mar. 7, 1955.

SN 685,932. Salant & Salant, Inc., New York, N. Y. Filed Apr. 20, 1955.

SNOW MATES

Owner of Reg. No. 602,179.
For Boys' and Juvenile Outer Shirts, Jackets, and Longies.
First use Mar. 30, 1955.

SN 687,062. Forest City Manufacturing Company, St. Louis, Mo. Filed May 9, 1955.

Jane Jordan

Owner of Reg. No. 366,954.
For Women's and Misses' Dresses.
First use Feb. 7, 1938.

SN 687,804. Palm Beach Company, Sanford, Maine. Filed May 18, 1955.

UNION LEAGUE

For Sport Coats, Slacks, Walking Shorts, and Sport Shirts.
First use Mar. 22, 1955.

SN 688,036. Good Luck Glove Company, Carbondale, Ill. Filed May 23 1955.

WELD-R'S-TAN

For Leather Palm Work Gloves.
First use Feb. 1, 1955.

SN 688,333. Knitcraft Foundations, Inc., New York, N. Y. Filed May 26, 1955.

Poisefair

For Panties, Girdles, and Panty Girdles.
First use May 2, 1955.

SN 689,026. Dandy Dry Goods Company, New York, N. Y. Filed June 7, 1955.

DAN DEE

For Gloves and Mittens.
First use 1937.
Subj. to Intf. with SN 697,709.

SN 690,386. I. Mathews & Bros., New Bedford, Mass. Filed June 28, 1955.

NBU

For Babies' and Young Ladies' Panties.
First use June 15, 1955.

SN 692,294. Air Baby, Inc., New York, N. Y. Filed Aug. 2, 1955.

ALASKINS

For Men's, Women's, and Children's Waterproof Mittens.
First use June 15, 1955.

SN 692 989. Darlene Juniors, Incorporated, Decatur, Ill. Filed June 27, 1955.

Thunderbird Prints

The word "Prints" is disclaimed apart from the mark except as shown in the drawing.
For Women's and Girls' Dresses.
First use May 14, 1955.
Subj. to Intf. with SN 697,788.

SN 693,431. S. A. Beltex, Arzo, Switzerland. Filed Aug. 22, 1955.

ARZONISED

Owner of Swiss Reg. No. 115,493, dated Apr. 23, 1946.
For Shirts, Collars, and Cuffs.

SN 693,432. Berg's, Inc., Stockton, Calif. Filed Aug. 22, 1955.

MR. HOLLYWOOD

For Men's Suits, Sport Coats, Topcoats, Slacks, Jackets, Shirts, and Sweaters.
First use Oct. 19, 1949, on men's suits.

SN 693,472. The May Department Stores Company, New York, N. Y. Filed Aug. 22, 1955.

Yorkshire

Owner of Reg. No. 362,842.
For Men's Suits, Topcoats, Jackets and Slacks; Women's and Misses Coats.
First use Sept. 30, 1937, on women's and misses coats.

SN 693,678. Mr. John, Inc., New York, N. Y. Filed Aug. 25, 1955.

MR. John Junior

John P. John, president of the applicant, is the designer known as "Mr. John." Owner of Reg. No. 549,819.
For Women's and Misses' Hats.
First use Apr. 6, 1955.

SN 695,745. Milam Manufacturing Company, Tupelo, Miss. Filed Oct. 3, 1955.

KID KOORDINATES BY MILAM

For Infants' and Children's Outerwear of All Kinds.
First use May 12, 1955.

SN 697,375. Ivan-Frederics of California, Los Angeles, Calif. Filed Oct. 31, 1955.

Ivan-Frederics
OF CALIFORNIA

No claim is made to the words "Of California" apart from the mark shown.
For Ladies' Dresses, Blouses, and Skirts.
First use in or about April 1946.

SN 697,376. Ivan-Frederics of California, Los Angeles, Calif. Filed Oct. 31, 1955.

Ivan-Frederics

For Ladies' Dresses, Blouses, and Skirts.
First use in or about April 1946.

SN 697,387. National Merchandising Corporation, New York, N. Y. Filed Oct. 31, 1955.

NAN NOBLE

For Ladies' Wear—Namely, Coats, Sweaters, Blouses, Skirts, Bathing Suits, Nylon Hosiery, Gloves, Handkerchiefs, Slips, Brassieres, Girdles, Corsets, Pajamas, Panties, Underwear, Petticoats, and Briefs.
First use April 1945.

SN 697,708. Stahl-Urban Company, Terre Haute, Ind. Filed Nov. 4, 1955.

STUR-DEE

Owner of Reg. No. 249,246.
For Blouses, Trousers, Shirts, Jackets, and Coats, for Men and Boys.
First use on or about Oct. 1, 1926.

SN 697,709. Stahl-Urban Company, Terre Haute, Ind. Filed Nov. 4, 1955.

Dan' Dee

For Blouses, Trousers, Shirts, Overalls, Jackets, and Coats, for Men and Boys.
First use on or about Mar. 21, 1921.
Subj. to Intf. with SN 689,026.

SN 697,710. Stahl-Urban Company, Terre Haute, Ind. Filed Nov. 4, 1955.

SPORT-DEE

For Trousers, Blouses, Shirts, Jackets, and Coats, for Men and Boys.
First use on or about Mar. 16, 1931.

SN 697,732. Apparel, Inc., d. b. a. Pacific Trail Sportswear, Seattle, Wash. Filed Nov. 3, 1955.

TRAIL-GLO

For Coats for Outer Wear for Men, Women, and Children.
First use on or about July 1, 1955.

SN 698,099. White Stag Mfg. Co., Portland, Oreg. Filed Nov. 10, 1955.

SUD N' DRY

For Men's and Women's Apparel—Namely, Jackets, Outer Shirts, Slacks, Outer Shorts, Pedal Pushers, Coats, Vests, Trousers, Coveralls, Pants, Caps, Scarfs; and Women's Skirts.
First use Sept. 16, 1955.

SN 698,179. Keystone Adjustable Cap Co., d. b. a. Keystone Adjustable Cap Company, Philadelphia, Pa. Filed Nov. 14, 1955.

SANACAP

Owner of Reg. No. 335,869.
For Disposable Protective Headwear.
First use on or about August 1933.

SN 698,180. Keystone Adjustable Cap Co., d. b. a. Keystone Adjustable Cap Company, Philadelphia, Pa. Filed Nov. 14, 1955.

SANACAP

Owner of Reg. No. 335,869.
For Disposable Protective Headwear.
First use on or about August 1933.

SN 758. The Dantan Company, Dumas, Ark. Filed Jan. 16, 1956.

PETTI PAT SPORTSWEAR
A DANTAN CREATION

No exclusive claim is made to the word "Sportswear" apart from the mark as shown.
For Ladies' Sportswear—Namely, Blouses, Shorts, Pedal Pushers, Skirts, Beach Jackets, and Dresses.
First use Jan. 24, 1955, on shorts and skirts.

SN 771. M. Fine & Sons Mfg. Co., Inc., New York, N. Y. Filed Jan. 16, 1956.

Sport Queen

For Women's and Girls' Outer Shorts, Pedal Pushers, Slacks, Pants, Shirts, and Blouses.
First use Dec. 9, 1955.

SN 952. Boepple Sportswear Mills, Inc., New York, N. Y. Filed Jan. 18, 1956.

BANLORE

For Ladies', Misses', and Girls' Slipover and Cardigan Sweaters.
First use Feb. 1, 1955.

SN 1,091. Kops Bros., Inc., New York, N. Y. Filed Jan. 19, 1956.

FREE FLIGHT

For Foundation Garments.
First use Jan. 9, 1956.

SN 1,117. I. Schneierson & Sons, Inc., New York, N. Y. Filed Jan. 19, 1956.

prest-O-magic

For Ladies' and Children's Slips and Petticoats.
First use Oct. 3, 1955.

SN 1,118. I. Schneierson & Sons, Inc., New York, N. Y. Filed Jan. 19, 1956.

Crepe-de-lure

For Ladies' and Children's Slips and Petticoats.
First use Oct. 3, 1955.

SN 1,174. Standard Garment Co. Inc., New York, N. Y. Filed Jan. 20, 1956.

GARDEN CLUB

For Ladies', Misses', and Girls' Dresses, Suits, Dusters, and House Coats.
First use Dec. 15, 1955.

SN 1,175. Standard Garment Co. Inc., New York, N. Y. Filed Jan. 20, 1956.

TEE & TURF

For Ladies', Misses', and Girls' Dresses, Suits, Dusters, and House Coats.
First use June 6, 1955.

SN 1,239. Hollywood-Maxwell Co., Los Angeles, Calif. Filed Jan. 23, 1956.

RENOIR

For Garter Belts.
First use Jan. 4, 1956.

SN 1,403. Straus, Royer & Strass, Inc., Baltimore, Md. Filed Jan. 24, 1956.

CASUAL A.C.

Without waiving its common law rights and for purposes of this registration only applicant makes no claim herein to the word "Casual" apart from the mark as shown. Owner of Reg. No. 598,523.
For Misses', Women's, and Children's Dresses, Playsuits, Skirts, Outer Shorts and Shirts, Blouses, Slacks, Culottes, Overalls, Outer and Midriff Bras, Jackets, Boleros, Middies, Suits, Vests, and Vestees.
First use Feb. 1, 1954.

SN 1,405. Susquehanna Waist Company, Upland, Pa. Filed Jan. 24, 1956.

GLEN ISLE

For Ladies' Blouses.
First use Jan. 13, 1956.

CLASS 40

SN 661,429. General Drapery Company, Inc., Seattle, Wash. Filed Feb. 23, 1954.

NEET-PLEAT

For Drapery Hooks and Heading Tape Sold as a Unit.
First use May 1953.

SN 666,729. Chez Nous, Inc., New York, N. Y. Filed May 20, 1954.

PETER POCKET

For Men's, Women's, and Children's Bed Pockets.
First use Apr. 6, 1954.

CLASS 42

SN 674,168. Marlboro Fabrics, Inc., New York, N. Y. Filed Oct. 1, 1954.

TEX-GLO

For Interlining Fabrics of Glass, Cotton, Silk, Wool, Rayon, Nylon, and Other Synthetic Fibers.
First use June 15, 1954.

SN 674,715. Toyo Rayon Co., Ltd., Chuo-ku, Tokyo, Japan. Filed Oct. 12, 1954.



Priority claimed under Sec. 44(d) on Japanese application filed July 20, 1954, Reg. No. 474,830, dated Dec. 26, 1955.
For Fabrics Made Wholly or Principally of Synthetic Fibre.

SN 678,724. Howard Stores Corporation, Brooklyn, N. Y. Filed Dec. 21, 1954.

Royal Fabrics

The word "Fabrics" is disclaimed apart from the mark as shown. The drawing is lined for red.
For Fabrics of Wool and Mixtures of Wool and Synthetic Fabrics of the Weight and Kind Employed in Men's Outer Suits and Overcoats.
First use Sept. 1, 1953.

SN 684,630. Marcus Breier Sons, Inc., Amsterdam, N. Y. Filed Mar. 31, 1955.

infra-red

For Lining Fabrics for Garments Such as Jackets, Coats, Etc.
First use Jan. 13, 1955.

SN 685,097. Crown Rubber Company, Fremont, Ohio. Filed Apr. 7, 1955.

FABRI-FOAM

For Textile Rugs and Carpets Having a Foam Rubber Backing.
First use Mar. 10, 1955.

SN 688,760. Wm. Simpson, Sons & Co., Inc., New York, N. Y. Filed June 2, 1955.

OKLAHOMA CALICOS

For Printed Fabrics.
First use May 20, 1955.

SN 688,762. Wm. Simpson, Sons & Co., Inc., New York, N. Y. Filed June 2, 1955.

FIRELINE

For Carded Broadcloth Fabrics.
First use March 1955.

SN 689,545. Botany Mills, Inc., Passaic, N. J. Filed June 15, 1955.

BOTANA

Owner of Reg. Nos. 75,638, 570,398, and others.
For Fabrics in the Piece Made of Wool and Synthetic Fibers.
First use May 31, 1955.

SN 690,006. Haartz Auto Fabric Company, Newton, Mass. Filed June 22, 1955.

JONARTS

For Rubberized Fabrics.
First use Sept. 1, 1928.

SN 691,917. Wyandotte Worsted Company, Inc., Waterville, Maine. Filed July 25, 1955.

MARWYN

For Piece Goods of Wool and Fur Fibre.
First use June 7, 1955.

SN 691,918. Wyandotte Worsted Company, Inc., Waterville, Maine. Filed July 25, 1955.

WYN-LLAMA

For Piece Goods of Wool and Llama.
First use June 1, 1955.

SN 694,563. Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. Filed Sept. 13, 1955.

CUPRADOR

Owner of German Reg. No. 663,240, dated Sept. 24, 1954.
For Netted and Woven Fabrics of Synthetic Fibers or Mixed Synthetic and Natural Fibers, Felts, Table Cloths, Bed Sheets, and Pillow Cases.

SN 696,186. Stehli & Co., Inc., New York, N. Y. Filed Oct. 10, 1955.

Cima

For Textile Piece Goods Consisting in Whole or in Part of Pure or Weighted Silk, Rayon, Synthetic Yarn or Yarns, or Wool.
First use Aug. 1, 1955.

SN 696,943. J. Capps & Sons, Ltd., Jacksonville, Ill. Filed Oct. 24, 1955.

ESTATE

For Worsted Fabrics Made Up Into Men's Outer Garments.
First use Oct. 14, 1955.

SN 696,944. J. Capps & Sons, Ltd., Jacksonville, Ill. Filed Oct. 24, 1955.

ARGONNE

For Woven Fabrics Made Up Into Men's Outer Garments.
First use Oct. 14, 1955.

SN 696,945. J. Capps & Sons, Ltd., Jacksonville, Ill. Filed Oct. 24, 1955.

COLOSSEUM

For Woven Cloth Made Up Into Men's Outer Garments.
First use Oct. 14, 1955.

SN 697,196. J. P. Stevens & Co., Inc., New York, N. Y. Filed Oct. 26, 1955.

MAGIC CORNER

For Fitted Sheets.
First use Sept. 2, 1955.

SN 697,336. J. P. Stevens & Co., Inc., New York, N. Y. Filed Oct. 28, 1955.

NIMBUS

Owner of Reg. No. 531,334.
For Pillow Cases and Dress Goods.
First use Sept. 8, 1949, on pillow cases.

SN 697,517. I. A. Wyner & Co., Inc., New York, N. Y. Filed Nov. 1, 1955.

LAND-O'-COTTON

For Cotton Knit Fabrics.
First use Sept. 29, 1955.

SN 697,821. National Shoe Products Corporation, Boston, Mass. Filed Nov. 7, 1955.

STARLITE

For Vinyl Coated Fabrics for Use in the Shoe Industry.
First use June 28, 1955.

SN 698,971. Glen Raven Cotton Mills, Inc., Glen Raven, N. C. Filed Nov. 28, 1955.

AURORA

For Synthetic Fiber Awning Fabrics.
First use Nov. 19, 1955.
Subj. to Intf. with SN 700,858.

SN 700,858. D. B. Fuller & Co., Inc., New York, N. Y. Filed Dec. 30, 1955.

AURORA

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
First use Feb. 7, 1955.
Subj. to Intf. with SN 698,971.

SN 700,870. Kemp & Beatley, Inc., New York, N. Y. Filed Dec. 30, 1955.

EYE-O-LETS

For Table Cloths, Napkins, Luncheon Sets, Pillow Cases, Guest Towels, Doilies, and Dresser Scarfs.
First use Oct. 21, 1955.

CLASS 43

SN 657,654. Steckborn Kunatseide A. G., Steckborn, Switzerland. Filed Dec. 8, 1953.

DECORA

Owner of Swiss Reg. No. 92,906, dated Apr. 1, 1938.
For Rayon Yarns, Especially Spun Dyed Rayon Yarns.

SN 697,835. Proban Limited, London, England. Filed Nov. 7, 1955.

PROBAN

Priority claimed under Sec. 44(d) on British Reg. No. 745,071, dated Aug. 9, 1955.
For Threads and Yarns.

SN 699,878. Belding Heminway Company, Inc., New York, N. Y. Filed Dec. 13, 1955.

GLASMO

For Plastic Coated Glass Yarn.
First use Sept. 7, 1954.

SN 700,937. The Elmore Corporation, Spindale, N. C. Filed Dec. 28, 1955.



The drawing is lined for the color red.
For Cotton Thread.
First use Mar. 23, 1925.

CLASS 44

SN 691,183. Willson Products Inc., Reading, Pa. Filed July 12, 1955.

MONO Mask

For Respirators in the Form of Face Pieces and Gas Masks for Industrial Safety.
First use Oct. 26, 1954.

SN 692,402. Johnson & Johnson, New Brunswick, N. J. Filed Aug. 3, 1955.

Robin Hood

For First Aid and Emergency Cases Consisting of First Aid and Surgical Supplies—Namely, Ointments for Burns, Scalds, Sunburn and Like Uses, Adhesive Sheets, Tapes and Plasters, Adhesive and Other Bandages, Bandage Rolls, Antiseptics, Ointments, Ammonia, First Aid Booklets and Charts, Scissors, Drinking Cups, and Gauze in Roll, Strip, Fold or Loose Form; and Surgical Dressings, Adhesive and Other Bandages, Bandage Rolls, and Gauze in Roll, Strip, Fold, or Loose Form.
First use July 27, 1955.

SN 693,581. Abbott Laboratories, North Chicago, Ill. Filed Aug. 24, 1955.

VENOTUBE-ETTE

Owner of Reg. No. 534,360.
For Disposable Ready-to-Use Unit Intended for the Parenteral Administration of Fluids.
First use June 27, 1955.

SN 696,265. Stephenson Corporation, Red Bank, N. J. Filed Oct. 11, 1955. Sec. 2(f).



For Resuscitators and Surgical Appliances.
First use on or about January 1947.

CLASS 45

SN 677,413. Earl N. Johnson, Denver, Colo.; Gerald R. Johnson, administrator of the said Earl N. Johnson, deceased. Filed Nov. 29, 1954. Sec. 2(f).



The lining on the drawing designates the colors gold, red, and green, although color is not an essential feature of the mark.
For Soft Drink.
First use on or about June 5, 1922.

CLASS 46

SN 657,525. Golden Broad Marketing Assn., Inc., Seattle, Wash. Filed Dec. 7, 1953.

Golden Broad

For Packaged Fresh and Frozen Chickens.
First use on or about Sept. 1, 1949.

SN 676,707. Berns & Koppstein, Inc., New York, N. Y. Filed Nov. 16, 1954.

AGRARIUS

For Lard and Extra Oleo Stock.
First use Sept. 16, 1954.

SN 681,510. J. O. Gilbert Chocolate Company, Jackson, Mich. Filed Feb. 11, 1955.

CABALLERO

For Candy.
First use Oct. 15, 1953.

SN 682,460. The Ohio Provision Company, Cleveland, Ohio. Filed Feb. 28, 1955.



Owner of Reg. No. 373,344.
For Fresh, Smoked, Pickled, Dry Salted, and Otherwise Cured Cuts of Pork Carcasses, Pork Offals, Lard, and Meat Loaves and Spreads and Sausages Containing Pork.
First use Feb. 14, 1939, on bacon.

SN 685,215. Swift & Company, Chicago, Ill. Filed Apr. 8, 1955.

BOMIN

For Animal Feeds—Namely, Cattle Feed, Poultry Feed, Sheep Feed, and Swine Feed.
First use Apr. 17, 1929.

SN 686,657. Kellogg Company, Battle Creek, Mich. Filed May 2, 1955. Sec. 2(f).

Kellogg's

The trademark is a facsimile of the surname, in the possessive case, of Will K. Kellogg, founder of applicant and its predecessors, in his handwriting. Owner of Reg. Nos. 105,213, 574,216, and others.
For Prepared Mixes for Baking Cakes.
First use Oct. 11, 1954.

SN 687,211. National Rolls, Inc., Rushville, Ind. Filed May 10, 1955.

BUTTER-TOP

For Cinnamon Rolls.
First use on or about Apr. 15, 1949.

SN 687,275. Food Fair Stores, Inc., Philadelphia, Pa. Filed May 11, 1955.

FYNE-BAKE

Owner of Reg. Nos. 535,599, 555,817, and 590,938.
For Vegetable Shortening and Food Flavoring Extracts, Particularly Almond, Vanilla, and Lemon.
First use Jan. 18, 1951, on shortening.

SN 687,830. Standard Brands Incorporated, New York, N. Y. Filed May 18, 1955. Sec. 2(f).

Chase & Sanborn

Owner of Reg. Nos. 214,918, 592,510, and others.
For Tea.
First use June 1, 1953; the term "Chase & Sanborn's" first used in March 1892.

SN 690,130. Bryn Mawr-Coachella Valley Groves, Bryn Mawr, Calif. Filed June 24, 1955.



The translation of "Oro de Coachella" into English means "Gold of Coachella."
For Fresh Citrus Fruit.
First use Apr. 3, 1955.

SN 690,612. Eatmor Cranberries, Inc., Chicago, Ill. Filed July 1, 1955.

Eatmor

Owner of Reg. Nos. 114,671 and 193,249.
For Frozen Cranberries.
First use July 26, 1916.

SN 691,081. Pikle-Rite Company, Inc., Chicago, Ill. Filed July 11, 1955.

POLKA

For Bottled Pickles.
First use Sept. 20, 1932.

SN 691,528. Fred Usinger, Inc., Milwaukee, Wis. Filed July 18, 1955. Sec. 2(f) as to "Usinger's."



The words "Made in Milwaukee Since 1880" are disclaimed apart from the mark.
For Sausage.
First use June 23, 1955; "Usinger's" first used in 1880.

SN 692,177. Tennessee Foods, Inc., Portland, Tenn. Filed July 29, 1955.

10 e c

Owner of Reg. No. 441,141.
For Fresh Frozen Vegetables, and Shrimp and French Fried Potatoes.
First use Jan. 1, 1950.

SN 692,404. Klentzel Noodle Company, Inc., St. Louis, Mo. Filed Aug. 3, 1955.

MA'S BRAND

The term "Brand," per se, is disclaimed.
For Egg Noodles, Noodle Soup Mix, Vegetable Soup Mix, Chicken Noodle Soup Mix, Egg Noodle Dumplings, and Macaroni (Paste) Products Such as Macaroni, Spaghetti, Elbows, and Seashells.
First use 1925 on egg noodles.

SN 692,634. Nelson-Ricks Creamery Company, d. b. a. Banquet Better Foods, Salt Lake City, Utah. Filed Aug. 8, 1955. Sec. 2(f).

GRAND TETON

For Cheese.
First use on or about Dec. 1, 1947.

SN 693,671. Favro, Inc., Jersey City, N. J., to Favro Corp., Jersey City, N. J. Filed Aug. 25, 1955.

FAVRO

For Pudding Powders; Gelatine Dessert Powders; Meringue Powder; Dry Gravy Powder; Dry Preparation To Be Added to Milk and Cream for Whipping Purposes; Bread Crumbs; Pancake Mix; Potato Pancake Mix; Cake Mixes; Spices; Mustard; Egg White Stabilizer Mix.
First use 1927.

SN 693,896. The Borden Company, New York, N. Y. Filed Aug. 30, 1955.

GLACIER FREEZE

Owner of Reg. Nos. 186,189 and 609,253.
For Ice Milk.
First use June 2, 1954.

SN 693,916. Otto L. Kuehn Co., Milwaukee, Wis. Filed Aug. 30, 1955.

O.K.

Owner of Reg. Nos. 405,441 and 543,073.
For Pickled Herring, Salted Herring, and Canned Sardines.
First use 1896.

SN 695,450. Shell Chemical Corporation, New York, N. Y. Filed Sept. 27, 1955.

VIANOL

For Chemical Used as an Antioxidant for Live Stock Feeds.
First use July 21, 1955.

SN 695,556. Minute Maid Corporation, New York, N. Y. Filed Sept. 29, 1955. Sec. 2(f).

MINUTE MAID

Owner of Reg. No. 555,105.
For Frozen Steaks.
First use on or about June 1, 1955.

SN 697,318. Paul Peters Company, Inc., Boston, Mass. Filed Oct. 28, 1955.

CALJACK

For Cheese.
First use Sept. 10, 1954.

SN 697,439. Waples-Platter Company, Fort Worth, Tex. Filed Oct. 10, 1955.

CONCHO

For Canned Goods—Namely, Fruits, Vegetables, Berries, Oysters, and Salmon.
First use 1898.

SN 697,466. Burnett's Foods, Inc., Newark, N. J. Filed Nov. 1, 1955.

PLUMETTE

For Love Bird and Parakeet Moulting Food and Feather Builder.
First use in or about February 1953.

SN 697,468. Burnett's Foods, Inc., Newark, N. J. Filed Nov. 1, 1955.

GLANDEX

For Fish Food.
First use on or about July 1929.

SN 697,489. Naas Foods, Inc., Portland, Ind. Filed Nov. 1, 1955.

LEMON KISSED

For Canned Mixed Vegetable Juices.
First use August 1951.

SN 697,577. Pee Dee Company, Memphis, Tenn. Filed Nov. 2, 1955.

OLD FASHION

Owner of Reg. No. 614,596.
For Pork Sausage Seasoning.
First use Sept. 23, 1949.

SN 698,052. Milk Maid Ice Cream Co., Inc., Rochester, N. Y. Filed Nov. 10, 1955.

"C-IT-ALL"

For Ice Cream and Frozen Custard.
First use Oct. 14, 1955.

CLASS 47

SN 678,072. Real Companhia Vinicola do Norte de Portugal, S. A. R. L., Oporto, Portugal. Filed Dec. 3, 1954.

LAGOSTA

The Portuguese word "Lagosta" can be translated in English as "lobster" or "crayfish." Owner of Portuguese Reg. No. 4,766, dated Feb. 27, 1902.
For Wines.

SN 691,822. Canandaigua Industries Co., Inc., Canandaigua, N. Y. Filed July 25, 1955.

Wild Irish Rose

For Wines.
First use May 16, 1955.

CLASS 48

SN 673,449. Heidelberg Brewing Co., Tacoma, Wash. Filed Sept. 20, 1954. Sec. 2(f).

Columbia

For Beer and Ale.
First use Feb. 15, 1900.

SN 689,306. Schultheiss-Brauerei Aktiengesellschaft, Berlin, Charlottenburg, Germany. Filed June 10, 1955.

Schultheiss

The German word "Schultheiss" means "mayor" in English. Owner of German Reg. No. 672,241, dated Mar. 1, 1955; and U. S. Reg. No. 310,334.
For Beer.

SN 691,031. A. Gettelman Brewing Co., Milwaukee, Wis. Filed July 11, 1955. Sec. 2(f).

Owner of Reg. Nos. 322,391 and 348,822.
For Beer.
First use 1893.

CLASS 49

SN 675,314. Schenley Industries, Inc., New York, N. Y. Filed Oct. 22, 1954. Sec. 2(f) as to "Schenley."
Owner of Reg. Nos. 544,397 and 619,192.

SCHENLEY H. R. H.

For Whiskey.
First use Sept. 3, 1954; and the word "Schenley" was first used in or about December 1892.

SN 684,495. Lawrence Taub, Elizabeth, N. J. Filed Mar. 29, 1955. Sec. 2(f).

BALTIMORE CLUB

For Whiskey.
First use the year 1868.

SN 696,974. Glencoe Distilling Company, Beverly Hills, Calif. Filed Oct. 24, 1955.

FORTUNA

For Whiskey.
First use 1895.

CLASS 50

SN 650,609. Harold Warp, Minden, Nebr. Filed July 21, 1953.

PIONEER VILLAGE

For Miniatures, Souvenirs, Figurines, Trinkets and Mementos of Events, Places, Objects and People of Historical Interest; Objects of Art, Back Scratchers, Trays, Coasters, Hot Pads, Plate Hangers and Holders, Cup Holders, and Combination Cup and Plate Holders.
First use May 15, 1953; the words "Pioneer Village" first used on or about Sept. 1, 1950.

SN 668,215. Velveray Corporation, New York, N. Y. Filed June 14, 1954.

VELBAC

Owner of Reg. Nos. 287,011, 563,691, and others.
For Flannel Backed Plastic Sheet Materials for General Tarpaulin Purposes or for Protecting Materials From Dirt, Dust, and Rain.
First use Apr. 15, 1954.

SN 683,816. The Silent Glow Oil Burner Corporation, d. b. a. The Little Red Hen Equipment Company, Hartford, Conn.

LITTLE RED HEN

Filed Mar. 18, 1955.
For Poultry Brooders and Component Parts Thereof.
First use April 1954.

SN 683,817. The Silent Glow Oil Burner Corporation, d. b. a. The Little Red Hen Equipment Company, Hartford, Conn. Filed Mar. 18, 1955.

For Poultry Brooders and Component Parts Thereof.
First use April 1954.

SN 684,042. Gould Monument Works, Jacksonville, Tex. Filed Mar. 23, 1955.

TRADITION MEMORIALS

The word "Memorials" is disclaimed apart from the mark.
For Monuments.
First use Aug. 1, 1951.

SN 687,980. Polychrome Corporation, Yonkers, N. Y. Filed May 20, 1955.

V-KOTE

For Paper Base Offset Printing Plates.
First use Feb. 9, 1955.
Subj. to Intf. with SN 697,070.

SN 688,725. Goodren Products Corporation, Englewood, N. J. Filed June 2, 1955.

MAGIC-COVER

For Self-Adhering Decorative Plastic Coating Trim and Cover Material.
First use May 2, 1955.

SN 690,192. Revlon Products Corporation, New York, N. Y., to Revlon, Inc., New York, N. Y. Filed June 24, 1955.

'Weekender'

For Kit Comprising Nail Enamel, Basecoat, Cuticle Remover, Velvety Remover, Cuticle Scissor, Nail File, Pusher, Cuticle Stick, and Emery Boards.
First use June 6, 1955.

SN 690,193. Revlon Products Corporation, New York, N. Y., to Revlon, Inc., New York, N. Y. Filed June 24, 1955.

'Grand Tour'

For Kit Comprising Nail Enamel, Basecoat, Cuticle Remover, Non-Smear Remover, Lipsticks, Nail Scissor, Cuticle Nipper, Tweezer, Nail File, Pusher, Cuticle Sticks, and Emery Boards.
First use June 6, 1955.

SN 696,188. Stempel Manufacturing Company, Dallas, Tex. Filed Oct. 10, 1955.

STEMPEL

For Office Accessories—Namely, Arch Boards, Clip Boards, and Chalk Boards.
First use June 1947 on arch boards.

SN 696,580. Panel-Lok Corporation, Clearwater, Fla. Filed Oct. 17, 1955.

PANEL-LOK

For Non-Electric Outdoor Advertising Signs.
First use Mar. 12, 1954.

SN 697,274. James C. Cook, Detroit, Mich. Filed Oct. 28, 1955.

THE FLYING SAUCER

For Non-Electrical Rotary Advertising Signs.
First use Aug. 31, 1955.

SN 697,278. Film Container Company, Inc., Chicago, Ill. Filed Oct. 28, 1955.

JUSNAP

For Combined Rain Hood, Key Chain, and Coin Purse.
First use Sept. 30, 1955.

SN 700,722. The Educational Equipment Company, Cleveland, Ohio. Filed Dec. 28, 1955.

"VITRO-BOARD"

For Steel Chalkboards.
First use June 20, 1955.

CLASS 51

SN 682,209. Texize Chemicals, Inc., Greenville, S. C. Filed Feb. 23, 1955.

TC-99

For Blend of Anionic Sulfonates, the Active Ingredient in Proprietor's Tooth Paste.
First use Jan. 12, 1955.

SN 682,501. Margaret Akin Thomas, d. b. a. Akin-Thomas Company, Dallas, Tex. Filed Feb. 28, 1955.

ACTIV-8

For Hair Dressing.
First use Feb. 8, 1955.

SN 687,191. Ferdinand Mülhens, d. b. a. Eau de Cologne- & Parfümerie-Fabrik Glockengasse No. 4711 Gegenüber der Pferdepost von Ferd. Mulhens, Cologne, Rhine, Germany. Filed May 10, 1955.

FRISCOOL

Owner of Reg. Nos. 347,371 and 350,182.
For Eau de Cologne, Perfumes, Skin and Hair Tonic, After Shaving Lotion, Tooth Paste, Mouth Wash, Bath Salt, Bath, Face, and Talcum Powder, Cosmetic Creams, Brilliantine.
First use Aug. 1, 1953.

SN 687,499. Rozelle, Ltd., New York, N. Y. Filed May 13, 1955.

TV TOUCH

For Cosmetic Preparation in Paste Form To Conceal Skin Discolorations and Blemishes.
First use July 28, 1954.

SN 688,084. Shulton, Inc., Clifton, N. J. Filed May 23, 1955.



The mark comprises letters forming "Shulton," as a calligraph. Owner of Reg. No. 345,234.
For Hand Lotions, Day Creams, Toilet Water, Talcum Powder, and Dusting Powder.
First use Dec. 1, 1936.

SN 688,383. Beardmore Products, Inc., East Rutherford, N. J. Filed May 27, 1955.

Sof-n-ets

For Bath Water Softener.
First use May 3, 1955.

CLASS 52

SN 662,583. Tropdis Co., Miami, Fla. Filed Mar. 12, 1954.

MIRA-KLEEN

For Cleaning Compound in Liquid Form for Manikins, Fixtures, and Plastics.
First use June 2, 1953.

SN 672,925. The Bon Ami Company, New York, N. Y. Filed Sept. 9, 1954.

SYNERGIC ENERGY

For Cleanser and Polisher in Powder or Cake Form for Household Use and for Cleaning the Hands.
First use July 20, 1954.

SN 684,232. Pine-O-Pine Company of Texas, Houston, Tex. Filed Mar. 25, 1955.

"Melody in Water"

Owner of Reg. No. 515,794.
For Liquid Detergent for Household Use.
First use Mar. 17, 1955.

SN 691,522. Texize Chemicals, Inc., Greenville, S. C. Filed July 18, 1955.

TRU-WAY

Owner of Reg. No. 525,503.
For Liquid Detergent Which, Upon Dilution With Water, Produces Suds for Dishes and a Liquid Detergent Which Serves as an All Purpose Cleaner.
First use Mar. 13, 1955.

SN 694,659. Nyanza Color & Chemical Co. Inc., New York, N. Y. Filed Sept. 14, 1955.

NYAPON

For Synthetic Detergents for Industrial Uses in the Textile, Cosmetic, Fur Processing and Metal Industries; and for Household Uses, Such as in Washing Machines, Hand Laundering, Dish Washing, Car Washing, and Other Household Uses.
First use 1932.

SN 696,877. The Diversey Corporation, Chicago, Ill. Filed Oct. 21, 1955.

TIG

Owner of Reg. No. 530,934.
For Concentrated General Liquid Cleaner for Dishes, Automobiles, Floors, and Walls.
First use Jan. 3, 1955.

SERVICE MARKS

CLASS 100

SN 648,865. Kiwanis International, Chicago, Ill. Filed June 16, 1953. COLLECTIVE MARK.

KIWANIS INTERNATIONAL

No registration rights are claimed in the word "International" apart from the mark as shown. Owner of Reg. Nos. 141,995 and 383,361.
For Sponsoring Civic Projects, Underprivileged Child and Youth Welfare Work; Building Individual and Civic Character; Promoting Educational, Medical and Recreational Facilities and Programs for Children, Students and Members; Fostering Patriotism, National and International Good Will, and Higher Business, Social and Professional Standards; Improving Community Life; and Furthering the Civic and Educational Objectives and Ideals of the Club.
First use January 1925.

SN 678,740. National Board of the Young Women's Christian Association of the U. S. A., New York, N. Y. Filed Dec. 21, 1954. COLLECTIVE MARK.

YWCA

Owner of Reg. Nos. 581,709 and 606,539.
For Building a Fellowship of Women and Girls Devoted to the Task of Realizing in Their Common Life Those Ideals of Personal and Social Living to Which They Are Committed by Their Faith as Christians.
First use in or about 1918.

SN 687,842. Archery Manufacturers and Dealer Association, Waverly, Iowa. Filed May 19, 1955.

For Trade Association Services—Namely, Promoting the Sport of Archery and the Dissemination of Information Among Its Members and the General Public.
First use July 10, 1954.

SN 696,289. Dog n Suds, Inc., Champaign, Ill. Filed Oct. 12, 1955.

DOG n SUDS

For Restaurant Services.
First use Nov. 15, 1954.

SN 696,290. Dog n Suds, Inc., Champaign, Ill. Filed Oct. 12, 1955.



For Restaurant Services.
First use Mar. 2, 1955.

CLASS 101

SN 677,078. Meredith Publishing Company, Des Moines, Iowa. Filed Nov. 22, 1954.

Better Homes & Gardens

Owner of Reg. Nos. 203,616, 602,407, and 608,350.
For Newspaper Advertising Service—Namely, Supplying Food Stores With Recipes, Meal Plans, Cooking Ideas, Suggested Advertising Layouts, and Like Material To Be Used by Such Stores in Advertising and Promoting the Sale of Their Goods.
First use October 1954.

SN 693,729. Advertisers Associates, Incorporated, Pittsburgh, Pa. Filed Aug. 26, 1955.



For Designing and Preparation for Clients of Advertising Leaflets, Booklets and the Like, Principally for Direct Mailing.
First use June 23, 1955.

CLASS 105

SN 677,323. Kingsway Transports Limited, Montreal, Québec, Canada. Filed Nov. 26, 1954.

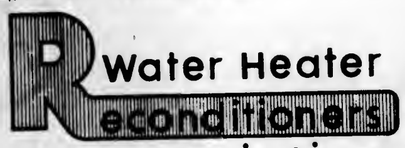


Priority is claimed under Sec. 44(d) on Canadian application filed Oct. 2, 1954; Reg. No. 101,770, dated Oct. 28, 1955.
For Motor Van Transportation of General Merchandise.
First use Sept. 1, 1953.

CERTIFICATION MARKS

CLASS A

SN 699,031. Water Heater Reconditioners Association, Los Angeles Calif. Filed Nov. 28, 1955.



The drawing is lined to indicate the color red. The mark certifies that the work or labor on the goods was performed by members of applicant and meets certain recognized safety standards.
For Reconditioned Water Heaters.
First use Nov. 1, 1955.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

627,167. SILVACEL. Weyerhaeuser Timber Company. SN 661,245. Pub. 9–21–54. Filed 2–17–54.

627,168. MELOSO. American Hide and Leather Company. SN 672,207. Pub. 3–6–56. Filed 8–25–54.

627,169. CURTISS WRIGHT CW CURIFOAM AND DESIGN. Curtiss-Wright Corporation. SN 678,602. Pub. 3–6–56. Filed 12–20–54.

627,170. PMI PLASTICS AND DESIGN. Plastic Materials, Inc. SN 687,887. Pub. 3–6–56. Filed 5–19–55.

CLASS 2

627,171. REVERETONE. Standard Packaging Corporation. SN 673,624. Pub. 3–6–56. Filed 9–22–54.

627,172. POLY PIPPIN. Central States Paper & Bag Co. SN 674,051. Pub. 5–31–55. Filed 9–30–54.

627,173. VISIPAK. Rosenberg Bros. & Co., Inc. SN 680,488. Pub. 3–6–56. Filed 1–25–55.

627,174. CHAMPION. The Champion Company. SN 681,676. Pub. 3–6–56. Filed 2–15–55.

627,175. DESIGN OF HAND AND KEY. P. O. Moore, Inc. SN 686,324. Pub. 3–6–56. Filed 4–26–55.

627,176. METCO. Metallizing Engineering Co. Inc. SN 687,963. Pub. 3–6–56. Filed 5–20–55.

627,177. L C AND DESIGN. Schenley Distillers, Inc. SN 688,269. Pub. 3–6–56. Filed 5–25–55.

627,178. HYDROCEL. Walker Potteries. SN 693,102. Pub. 3–6–56. Filed 8–15–55.

627,179. CUSHION SEAL. Continental Can Company Inc. SN 693,441. Pub. 3–6–56. Filed 8–22–55.

627,180. FLEXAR. Standard Packaging Corporation. SN 693,500. Pub. 3–6–56. Filed 8–22–55.

CLASS 3

627,181. ST. REGIS. McKesson & Robbins, Incorporated. SN 680,287. Pub. 3–6–56. Filed 1–21–55.

627,182. DESIGN OF HEART. Rico Leather Specialty, Inc. SN 694,006. Pub. 3–6–56. Filed 8–31–55.

627,183. ATOM-LITE. Reliable Trunk & Bag Company, Inc., now by change of name to Reliable Luggage Inc. SN 694,153. Pub. 3–6–56. Filed 9–2–55.

627,184. TRAVEL-SMART. Reliable Trunk & Bag Company, Inc., now by change of name to Reliable Luggage Inc. SN 694,154. Pub. 3–6–56. Filed 9–2–55.

627,185. TRAVEL-JOY. Reliable Trunk & Bag Company, Inc., now by change of name to Reliable Luggage Inc. SN 694,155. Pub. 3–6–56. Filed 9–2–55.

CLASS 6

627,186. LIFE. Protection Products Manufacturing Company. SN 670,852. Pub. 10–18–55. Filed 7–30–54.

627,187. AERO. American Cyanamid Company. SN 680,845. Pub. 3–6–56. Filed 2–1–55.

627,188. CERENOX. Farbenfabriken Bayer Aktiengesellschaft. SN 685,486. Pub. 3–6–56. Filed 4–14–55.

627,189. ISOLAN. Farbenfabriken Bayer Aktiengesellschaft. SN 686,962. Pub. 3–6–56. Filed 5–6–55.

627,190. VISCOLOR. Farbenfabriken Bayer Aktiengesellschaft. SN 687,776. Pub. 3–6–56. Filed 5–18–55.

627,191. SCOTCHPLY. Minnesota Mining & Manufacturing Company. SN 688,169. Pub. 3–6–56. Filed 5–24–55.

627,192. FORMULA 5 AND DESIGN. Morton Salt Company. SN 689,231. Pub. 3–6–56. Filed 6–9–55.

627,193. WURMSUP. Joseph L. Ryerson, d. b. a. Engineering Development Service. SN 689,240. Pub. 3–6–56. Filed 6–9–55.

627,194. BARON. The Dow Chemical Company. SN 689,270. Pub. 3–6–56. Filed 6–10–55.

627,195. FLASH-DRI. Klenzade Products, Incorporated. SN 689,391. Pub. 3–6–56. Filed 6–13–55.

627,196. COPE. O. M. Scott and Sons Company. SN 689,661. Pub. 3–6–56. Filed 6–16–55.

627,197. "CRAVENETTE." The Cravenette Company, U. S. A. SN 690,067. Pub. 3–6–56. Filed 6–23–55.

627,198. MINT-SOL. Alamont Laboratories, Inc. SN 690,112. Pub. 3–6–56. Filed 6–24–55.

627,199. ALKATERGE. Commercial Solvents Corporation. SN 690,366. Pub. 3–6–56. Filed 6–28–55.

627,200. CAN-O-GAS. Virginia Smelting Company. SN 690,419. Pub. 3–6–56. Filed 6–28–55.

627,201. CLINISTIX. Ames Company, Inc. SN 690,988. Pub. 3–6–56. Filed 7–11–55.

627,202. CLINISTYX. Ames Company, Inc. SN 690,989. Pub. 3–6–56. Filed 7–11–55.

627,203. CLINITAB. Ames Company, Inc. SN 690,990. Pub. 3–6–56. Filed 7–11–55.

627,204. CLINITAPE. Ames Company, Inc. SN 690,991. Pub. 3–6–56. Filed 7–11–55.

627,205. CLINISTRIP. Ames Company, Inc. SN 691,114. Pub. 3–6–56. Filed 7–12–55.

CLASS 7

627,206. STAG. Stenson Twine Company. SN 680,631. Pub. 9–13–55. Filed 1–27–55.

627,207. CHAMPION AND DESIGN. Bob Stone Cordage Co. SN 683,933. Pub. 3–6–56. Filed 3–21–55.

627,208. WEST-CORD. Earl E. Barton, d. b. a. Western Cordage Company. SN 687,338. Pub. 3–6–56. Filed 5–12–55.

627,209. DURAGRIP. The Colorado Fuel and Iron Corporation. SN 693,664. Pub. 3–6–56. Filed 8–25–55.

CLASS 8

627,210. PUROCEL. Benson & Hedges. SN 676,300. Pub. 6–28–55. Filed 11–9–54.

CLASS 10

627,211. SOHIGRO. The Standard Oil Company, to Sohio Chemical Company. SN 688,780. Pub. 3–6–56. Filed 5–9–55.

627,212. SOHIOGEN IN OVAL DESIGN. The Standard Oil Company, to Sohio Chemical Company. SN 688,781. Pub. 3–6–56. Filed 5–9–55.

627,213. SOHIOGEN IN LEAF DESIGN. The Standard Oil Company, to Sohio Chemical Company. SN 688,782. Pub. 3–6–56. Filed 5–9–55.

627,214. SOHIOGEN IN OVAL WITH TRACTOR DESIGN. The Standard Oil Company, to Sohio Chemical Company. SN 688,783. Pub. 3–6–56. Filed 5–9–55.

627,215. SOHIGREEN. The Standard Oil Company, to Sohio Chemical Company. SN 688,786. Pub. 3–6–56. Filed 5–9–55.

627,216. ADD. American Dross Disposal Corporation. SN 689,258. Pub. 3–6–56. Filed 6–10–55.

627,217. NYTRON. Allied Chemical & Dye Corporation. SN 690,853. Pub. 3–6–56. Filed 7–7–55.

627,218. AMMO-GRO. Specialty Oil Products. SN 695,040. Pub. 3–6–56. Filed 9–20–55.

CLASS 12

627,219. MASTERPLY AND DESIGN. Aetna Plywood & Veneer Company. SN 677,632. Pub. 3–6–56. Filed 12–2–54.

627,220. BOLTA. The General Tire & Rubber Company. SN 690,452. Pub. 3–6–56. Filed 6–29–55.

627,221. PERF-A-TRIM. United States Gypsum Company. SN 693,639. Pub. 3–6–56. Filed 8–24–55.

627,222. AWN-O-MATIC. Gate City Sash & Door Company. SN 696,137. Pub. 3–6–56. Filed 10–10–55.

627,223. STUC-CRETE. Rocform Corporation. SN 696,175. Pub. 3–6–56. Filed 10–10–55.

627,224. "ATOMITE." Poloron Products, Inc. SN 696,318. Pub. 3–6–56. Filed 10–12–55.

627,225. FLEETLITE. Fleet of America, Inc. SN 696,424. Pub. 3–6–56. Filed 10–14–55.

CLASS 13

627,226. SAFETYMIX. Symmons Engineering Company. SN 659,683. Pub. 3–6–56. Filed 1–18–54.

627,227. CENTURYWARE. Century Tool & Manufacturing Company. SN 665,560. Pub. 3–6–56. Filed 5–3–54.

627,228. LOCKE. Locke Manufacturing Company. SN 674,404. Pub. 3–6–56. Filed 10–6–54.

627,229. WELL-NUTS. The Rawlplug Company Limited. SN 684,067. Pub. 3–6–56. Filed 3–23–55.

CLASS 14

627,230. DESIGN OF DIAGONAL STRIPES. Scovill Manufacturing Company. SN 683,064. Pub. 3–6–56. Filed 3–8–55.

627,231. KALOY. Kay-Brunner Steel Products, Inc. SN 696,365. Pub. 3–6–56. Filed 10–13–55.

627,232. STRONGTITE. Granite City Steel Company. SN 696,434. Pub. 3–6–56. Filed 10–14–55.

627,233. POWER-CUT. The DoAll Company. SN 684,819. Pub. 3–6–56. Filed 4–4–55.

CLASS 15

627,234. MONTEX MYSTIK-LUBE. Thurman Floyd Scott, d. b. a. Montex Oil & Specialty Company. SN 687,989. Pub. 3–6–56. Filed 5–20–55.

627,235. ENERGOL. The British Petroleum Company Limited. SN 688,014. Pub. 3–6–56. Filed 5–23–55.

627,236. Q. Quaker State Oil Refining Corporation. SN 688,666. Pub. 3–6–56. Filed 6–1–55.

627,237. KAYLUBE. The Kaynar Company. SN 690,786. Pub. 3–6–56. Filed 7–5–55.

627,238. BULKO. Bulk Petroleum Corporation. SN 691,748. Pub. 3–6–56. Filed 7–22–55.

CLASS 16

627,239. MINNCOTE. Minnesota Paints, Inc. SN 658,197. Pub. 3–6–56. Filed 12–18–53.

627,240. P=5 CO-POLYMER FINISH. Watson-Standard Company. SN 694,173. Pub. 3–6–56. Filed 9–2–55.

CLASS 17

627,241. CROSBY SQUARE. The Bloch Brothers Tobacco Co. SN 693,433. Pub. 3–6–56. Filed 8–22–55.

627,242. LONDON DOCK. The Bloch Brothers Tobacco Co. SN 693,434. Pub. 3–6–56. Filed 8–22–55.

627,243. BIG INJUN AND DESIGN. Brown & Williamson Tobacco Corporation. SN 696,210. Pub. 3–6–56. Filed 10–11–55.

627,244. GOLD BLOCK. British-American Tobacco Company, Limited. SN 696,632. Pub. 3–6–56. Filed 10–18–55.

627,245. CARRIAGE TRADE. R. R. Tobin Tobacco Co. SN 698,936. Pub. 3–6–56. Filed 11–25–55.

CLASS 18

627,246. ACROAGONINE. Ugo Cerletti. SN 649,766. Pub 3–6–56. Filed 7–3–53.

627,247. IODO-NIACIN. Cole Chemical Company. SN 666,440. Pub. 3–6–56. Filed 5–17–54.

627,248. RAY VITAM AND DESIGN. Ray Wolfe, d. b. a. Ray-Vitam Products Co. SN 667,006. Pub. 3–6–56. Filed 5–24–54.

627,249. VITO. Browar Products, Inc. SN 671,413. Pub. 3–6–56. Filed 8–10–54.

627,250. ROSEBUD. Rosebud Perfume Company, a trusteeship under the will of George F. Smith. SN 683,138. Pub. 3–6–56. Filed 3–9–55.

627,251. SALSAR AND DESIGN. Carl S. Jorgensen, d. b. a. Desert Chemical Co., to Salsar Laboratories. SN 684,733. Pub. 3–6–56. Filed 3–24–55.

627,252. ENER-C. The Ener-C Company. SN 685,571. Pub. 3–6–56. Filed 4–15–55.

627,253. PRESTONAL. Geigy Chemical Corporation. SN 687,371. Pub. 3–6–56. Filed 5–12–55.

627,254. COCHISE. Charles C. Chatham, d. b. a. Chatham Pharmacal. SN 687,535. Pub. 3–6–56. Filed 5–16–55.

627,255. TREXINEST. Hynson, Westcott & Dunning, Incorporated. SN 688,421. Pub. 3–6–56. Filed 5–27–55.

627,256. LUDRIN. Waite, Inc. SN 688,487. Pub. 3–6–56. Filed 5–27–55.

627,257. SLIM-AGAIN. The Fleetwood Company. SN 688,921. Pub. 3–6–56. Filed 6–6–55.

627,258. S-MEZ. Imperial Chemical (Pharmaceuticals) Limited. SN 691,372. Pub. 3–6–56. Filed 7–15–55.

627,259. SYNERGISTIN. Consolidated Midland Corporation. SN 691,665. Pub. 3–6–56. Filed 7–21–55.

627,260. MOEBIQUIN. Consolidated Midland Corporation. SN 691,668. Pub. 3–6–56. Filed 7–21–55.

627,261. ENTEROSULFON. Consolidated Midland Corporation. SN 691,669. Pub. 3–6–56. Filed 7–21–55.

627,262. CODELCORTONE. Merck & Co., Inc. SN 691,704. Pub. 3–6–56. Filed 7–21–55.

627,263. TRYO-MIST AND DESIGN. S. Pfeiffer Mfg. Co., now by change of name The Pfeiffer Co. SN 692,262. Pub. 3–6–56. Filed 8–1–55.

627,264. METHULOSE AND DESIGN. Professional Pharmacal Co., Inc. SN 692,490. Pub. 3–6–56. Filed 8–4–55.

CLASS 19

627,265. STANDARD OF THE WORLD. General Motors Corporation. SN 667,879. Pub. 3–6–56. Filed 6–8–54.

627,266. COMPACTO. Weld-Built Body Co., Inc. SN 680,339. Pub. 3–6–56. Filed 1–21–55.

627,267. FEND-AIRE. Bump-Air, Inc. SN 683,842. Pub. 3–6–56. Filed 3–21–55.

627,268. MOUNTAIN BREEZE ETC. AND DESIGN. Cecil A. Dulle. SN 684,407. Pub. 3–6–56. Filed 3–29–55.

627,269. THUNDERBIRD ETC. AND DESIGN. Theodore A. Bettker, d. b. a. Crestline Mobile Homes. SN 685,090. Pub. 3–6–56. Filed 4–7–55.

627,270. POIRE-BULB-COSTA-PERA-BIRNE. Malerform S. A. SN 685,451. Pub. 3–6–56. Filed 4–13–55.

627,271. CRANE CARRIER CORP. AND DESIGN. Crane Carrier Corporation. SN 693,530. Pub. 3–6–56. Filed 8–23–55.

627,272. ASA ETC. AND DESIGN. Automotive Safety Associates. SN 696,404. Pub. 3–6–56. Filed 10–14–55.

627,273. CHAMP. Mid-Empire Corporation. SN 696,569. Pub. 3–6–56. Filed 10–17–55.

CLASS 20

627,274. SEQUIN AND DESIGN. Congoleum-Nairn Inc. SN 679,368. Pub. 3–6–56. Filed 1–4–55.

627,275. CON-TACT. United Merchants and Manufacturers, Inc. SN 688,978. Pub. 3–6–56. Filed 6–6–55.

CLASS 21

627,276. LEADER. American Brake Shoe Company. SN 672,775. Pub. 3–6–56. Filed 9–7–54.

627,277. SPEECH Q. Tele Q Corporation. SN 681,722. Pub. 3–6–56. Filed 2–15–55.

627,278. MISSIONARY AND DESIGN. Audio-Video Corporation. SN 682,385. Pub. 3–6–56. Filed 2–28–55.

627,279. FLUOR. Trojan Battery Company. SN 683,001. Pub. 3–6–56. Filed 3–7–55.

627,280. API AND DESIGN. American Pamcor, Inc. SN 683,835. Pub. 3–6–56. Filed 3–21–55.

627,281. B & G AND DESIGN. Bell & Gossett Company. SN 684,012. Pub. 3–6–56. Filed 3–23–55.

627,282. PHONE MATE AND DESIGN. Pioneer Equipment Sales Co. SN 693,083. Pub. 3–6–56. Filed 8–15–55.

627,283. SPEEDI SMOOTH. Lyndon V. Grover, d. b. a. Grover Photo Products. SN 693,141. Pub. 3–6–56. Filed 8–16–55.

627,284. KEMFUZE. Bel Fuse Inc. SN 696,283. Pub. 3–6–56. Filed 10–12–55.

627,285. EXPO. Holloway Electronics Corporation. SN 696,300. Pub. 3–6–56. Filed 10–12–55.

627,286. DEENA. Deena Products Company. SN 696,417. Pub. 3–6–56. Filed 10–14–55.

627,287. ELECTROC. Sprague Electric Company. SN 696,673. Pub. 3–6–56. Filed 10–18–55.

627,288. SAKS FIFTH AVENUE. Saks & Company. SN 696,835. Pub. 3–6–56. Filed 10–20–55.

627,289. SHO-GLO AND DESIGN. Berg Sho-Glo Corp. SN 696,933. Pub. 3–6–56. Filed 10–24–55.

627,290. DIETZ AND DESIGN. Henry G. Dietz, d. b. a. The Henry G. Dietz Company. SN 696,959. Pub. 3–6–56. Filed 10–24–55.

627,291. PULSELECTOR. A. R. F. Products, Incorporated. SN 697,071. Pub. 3–6–56. Filed 10–25–55.

627,292. PULSENDER. A. R. F. Products, Incorporated. SN 697,072. Pub. 3–6–56. Filed 10–25–55.

627,293. STABIL-THERM. Blue M Electric Company. SN 699,353. Pub. 3–6–56. Filed 12–5–55.

CLASS 22

627,294. BEAD CHAIN. The Bead Chain Manufacturing Company. SN 656,488. Pub. 3–6–56. Filed 11–17–53.

627,295. TRU-NOTE AND DESIGN. The Hit Products Corporation. SN 660,022. Pub. 3–6–56. Filed 1–25–54.

627,296. LADY-B-LOVELY. George B. Ritter, d. b. a. Ritco Routine Laboratories. SN 677,001. Pub. 3–6–56. Filed 11–19–54.

627,297. BIG BUCK. Moore Butcher Supply Company, d. b. a. Moore-Bilt Products Company. SN 677,081. Pub. 3–6–56. Filed 11–22–54.

627,298. BRIC-BLOX. Bric-Blox Co. SN 679,636. Pub. 3–6–56. Filed 1–10–55.

627,299. SPORTEX TURBO AND DESIGN. Sportex GmbH. SN 680,491. Pub. 3–6–56. Filed 1–25–55.

627,300. WHEEL-TOP. Joseph F. Chamberlin, d. b. a. Chamberlin Metal Products. SN 683,663. Pub. 3–6–56. Filed 3–17–55.

627,301. HIT-A-HOMA. Hit-A-Homa, Inc. SN 687,283. Pub. 3–6–56. Filed 5–11–55.

627,302. MARVELOUS MIKE. Saunders Tool & Die Company. SN 687,326. Pub. 3–6–56. Filed 5–11–55.

627,303. LITTLE NAUSEA. B. H. Mickam, d. b. a. Jay Original. SN 687,613. Pub. 3–6–56. Filed 5–16–55.

627,304. ASTRON. Parker Brothers, Inc. SN 687,727. Pub. 3–6–56. Filed 5–17–55.

627,305. "POW." Selchow & Righter Company. SN 690,755. Pub. 3–6–56. Filed 7–5–55.

627,306. WUFFLE TREE. Selchow & Righter Company. SN 690,757. Pub. 3–6–56. Filed 7–5–55.

627,307. ROCK HOPPER. South Bend Bait Company. SN 690,760. Pub. 3–6–56. Filed 7–5–55.

627,308. PAUTZKE'S FLUORESCENT BALLS O'FIRE AND DESIGN. Otto Keith Williams, d. b. a. Pautzke Bait Co. SN 690,851. Pub. 3–6–56. Filed 7–6–55.

627,309. "BUZZ." Selchow & Righter Company. SN 690,975. Pub. 3–6–56. Filed 7–8–55.

CLASS 23

627,310. AERO-JETS. Ralph A. Shade, d. b. a. Advance Automotive Products Co. SN 653,403. Pub. 4–12–55. Filed 9–18–53.

627,311. STANDARD OF THE WORLD. General Motors Corporation. SN 667,877. Pub. 3–6–56. Filed 6–8–54.

627,312. MOHAWK SIZE-OPTIONAL SUB-LAND. Mohawk Tools, Inc. SN 679,475. Pub. 3–6–56. Filed 1–5–55.

627,313. M AND DESIGN. Phillips Manufacturing Co. SN 683,805. Pub. 3–6–56. Filed 3–18–55.

627,314. LE GRIMPEUR. Ateliers & Chantiers de la Manche. SN 685,236. Pub. 3–6–56. Filed 4–11–55.

627,315. FALCON. Falcon Alarm Co., Inc. SN 687,928. Pub. 3–6–56. Filed 5–20–55.

627,316. GOPHER THRO-WAY. Gopher Grinders, Inc. SN 688,138. Pub. 3–6–56. Filed 5–24–55.

627,317. SHIMER AND DESIGN. Wisconsin Knife Works. SN 691,808. Pub. 3–6–56. Filed 7–22–55.

627,318. WEBB-X. Jervis B. Webb Company. SN 692,443. Pub. 3–6–56. Filed 8–3–55.

627,319. JIFFY. V-B Products Co. SN 693,218. Pub. 3–6–56. Filed 8–16–55.

627,320. FLEXIDYNE. Dodge Manufacturing Corporation. SN 695,081. Pub. 3–6–56. Filed 9–21–55.

627,321. AQUA-PAK. Universal Motor Company. SN 695,193. Pub. 3–6–56. Filed 9–22–55.

627,322. ELK-CO. Merl G. Whitehead. SN 695,198. Pub. 3–6–56. Filed 9–22–55.

627,323. SUPERBA. Imperial Knife Company, Inc. SN 695,226. Pub. 3–6–56. Filed 9–23–55.

627,324. MOORE AND DESIGN. Moore Business Forms, Inc. SN 695,235. Pub. 3–6–56. Filed 9–23–55.

627,325. QUIETAIRE. C. W. Morris Company. SN 695,748. Pub. 3–6–56. Filed 10–3–55.

627,326. TRU-SPRU AND DESIGN. Roy F. Nosek, d. b. a. Kason Industries. SN 695,836. Pub. 3–6–56. Filed 10–4–55.

627,327. GREIST PRODUCTS AND DESIGN. The Greist Manufacturing Company. SN 695,914. Pub. 3–6–56. Filed 10–5–55.

627,328. PROPANIZER. Hudson Engineering Corporation. SN 695,916. Pub. 3–6–56. Filed 10–5–55.

627,329. VIBROMATIC. Pioneer Engineering Works, Inc. SN 695,935. Pub. 3–6–56. Filed 10–5–55.

627,330. BULOVA. Bulova Watch Company, Inc. SN 696,110. Pub. 3–6–56. Filed 10–10–55.

627,331. SWISH-A-WAY. Gruendler Crusher and Pulverizer Company. SN 696,540. Pub. 3–6–56. Filed 10–17–55.

627,332. WHIR-WIN. Gruendler Crusher and Pulverizer Company. SN 696,541. Pub. 3–6–56. Filed 10–17–55.

627,333. SU-PRE-ME. Gruendler Crusher and Pulverizer Company. SN 696,542. Pub. 3–6–56. Filed 10–17–55.

627,334. CISCO. Connally Implement Supply Co., Inc. SN 696,872. Pub. 3–6–56. Filed 10–21–55.

627,335. ABC AND RECTANGLES DESIGN. Kochs Adlernähmaschinen Werke A. G. SN 698,286. Pub. 3–6–56. Filed 11–15–55.

627,336. INTERNATIONAL. The International Silver Company. SN 698,616. Pub. 3–6–56. Filed 11–21–55.

627,337. SCIMITAR AND DESIGN. Power Development Company. SN 698,637. Pub. 3–6–56. Filed 11–21–55.

627,338. PATHFINDER AND DESIGN. Oil Country Equipment Co., Inc. SN 698,998. Pub. 3–6–56. Filed 11–28–55.

627,339. INFINIDEX. William C. Niiges, d. b. a. Industrial Dynamics Company. SN 699,089. Pub. 3–6–56. Filed 11–29–55.

627,340. HURRICLEAN. Oakite Products, Inc. SN 699,243. Pub. 3–6–56. Filed 12–1–55.

627,341. RACKMAN. The Gene Olsen Corporation. SN 699,422. Pub. 3–6–56. Filed 12–5–55.

627,342. VENDORAMA. Victor Vending Corporation. SN 699,442. Pub. 3–6–56. Filed 12–5–55.

627,343. TRIG-A-MATIC. Vital Products Manufacturing Company. SN 699,535. Pub. 3–6–56. Filed 12–6–55.

627,344. RUSTON. Ruston & Hornsby, Ltd. SN 699,660. Pub. 3–6–56. Filed 12–8–55.

627,345. ECONO-MOW. Sensation Mower, Inc. SN 699,667. Pub. 3–6–56. Filed 12–8–55.

CLASS 26

627,346. H20. Milton Roy Company. SN 662,393. Pub. 3–6–56. Filed 3–10–54.

627,347. ROBERTSON "SEVENTEEN." Robertson Photo-Mechanix, Inc. SN 677,738. Pub. 3–6–56. Filed 12–3–54.

627,348. WESTON. Weston Electrical Instrument Corporation, to Weston Electrical Instrument Corporation. SN 681,230. Pub. 3–6–56. Filed 2–7–55.

627,349. WESTON. Weston Electrical Instrument Corporation, to Weston Electrical Instrument Corporation. SN 681,233. Pub. 3–6–56. Filed 2–7–55.

627,350. PRESTIGE AND DESIGN. Astra Trading Corporation. SN 681,900. Pub. 3–6–56. Filed 2–18–55.

627,351. WEIGH-O-MATIC. Oil Metering and Processing Equipment Corporation. SN 681,935. Pub. 3–6–56. Filed 2–18–55.

627,352. ARTISOL. Zeiss Ikon A. G. SN 689,193. Pub. 3–6–56. Filed 6–8–55.

627,353. MAMIYA–6. Mamiya Koki Kabushiki-Kaisha (in English style Mamiya Camera Co., Ltd.). SN 690,013. Pub. 3–6–56. Filed 6–22–55.

627,354. DESIGN OF AN EYE ETC. Auto-Photo Company. SN 690,673. Pub. 3–6–56. Filed 7–5–55.

627,355. GENIAC. Geniac Project. SN 691,563. Pub. 3–6–56. Filed 7–19–55.

627,356. YASHICA. Yashima Kogaku Seiki Kabushiki-Kaisha (in English style Yashima Kogaku Seiki Co., Ltd.). SN 691,920. Pub. 3–6–56. Filed 7–25–55.

627,357. SPEED TALLY. Sperry Rand Corporation. SN 694,924. Pub. 3–6–56. Filed 9–19–55.

627,358. GRADU TEMP. Assembly Products, Inc. SN 695,261. Pub. 3–6–56. Filed 9–26–55.

627,359. RAMAC. International Business Machines Corporation. SN 695,630. Pub. 3–6–56. Filed 9–30–55.

627,360. RETINA. Eastman Kodak Company. SN 695,902. Pub. 3–6–56. Filed 10–5–55.

627,361. CAVALCADE. Eastman Kodak Company. SN 695,903. Pub. 3–6–56. Filed 10–5–55.

627,362. PANAVISION. Panavision Incorporated. SN 695,934. Pub. 3–6–56. Filed 10–5–55.

627,363. VARIDOT. Simpson Electric Company, division of American Gage & Machine Company. SN 696,074. Pub. 3–6–56. Filed 10–7–55.

627,364. TWINR. Bourns Laboratories, Inc. SN 696,107. Pub. 3–6–56. Filed 10–10–55.

627,365. PORTO-GLARE. Porto-Clinic Instruments, Inc. SN 696,259. Pub. 3–6–56. Filed 10–11–55.

627,366. SUNARAMA. Willson Products, Inc. SN 696,613. Pub. 3–6–56. Filed 10–17–55.

627,367. CORMALITE. Cormac Industries, Inc. SN 696,776. Pub. 3–6–56. Filed 10–20–55.

627,368. MILEOMATIC. Aaron Wiley Sherwood. SN 696,841. Pub. 3–6–56. Filed 10–20–55.

627,369. "EDPM." International Business Machines Corporation. SN 696,989. Pub. 3–6–56. Filed 10–24–55.

CLASS 27

627,370. COMBAT. Cosmo Spignese. SN 689,175. Pub. 3–6–56. Filed 6–8–55.

627,371. TROY. General Time Corporation. SN 692,923. Pub. 3–6–56. Filed 8–12–55.

627,372. BULOLOY INSERTOPAK. Bulova Watch Company, Inc. SN 693,008. Pub. 3–6–56. Filed 8–15–55.

CLASS 28

627,373. CHI-CHI. Davette Products, Inc. SN 692,581. Pub. 3–6–56. Filed 8–8–55.

627,374. TRIVITRAY. Gorham Manufacturing Company. SN 696,031. Pub. 3–6–56. Filed 10–7–55.

627,375. WINEY CREATIONS AND DESIGN. H. Weinreich Company Inc. SN 696,339. Pub. 3–6–56. Filed 10–12–55.

CLASS 30

627,376. TODAY WE LOVE ETC. Lily Frona B. Holder, d. b. a. Bond Wedding Cups. SN 697,792. Pub. 3–6–56. Filed 11–7–55.

CLASS 31

627,377. FLOATING AIR. Ed Friedrich, Inc. SN 695,717. Pub. 3–6–56. Filed 10–3–55.

627,378. REFINITE. The Refinite Corporation. SN 695,762. Pub. 3–6–56. Filed 10–3–55.

627,379. SUPER AUTO-KLEAN. The Cuno Engineering Corporation. SN 697,674. Pub. 3–6–56. Filed 11–4–55.

627,380. PORO-KLEAN. The Cuno Engineering Corporation. SN 697,675. Pub. 3–6–56. Filed 11–4–55.

627,381. HARV-O-METIC. Harvill Corporation. SN 699,397. Pub. 3–6–56. Filed 12–5–55.

627,382. DESIGN OF CIRCLE ETC. Robert Bosch Gesellschaft mit beschraenkter Haftung. SN 699,614. Pub. 3–6–56. Filed 12–8–55.

CLASS 32

627,383. DRIVEREST. Paul Becker. SN 668,431. Pub. 3–6–56. Filed 6–18–54.

627,384. GEOMETRIC DESIGN. Aktiebolaget Akerblomstolen. SN 682,693. Pub. 3–6–56. Filed 3–3–55.

627,385. PLAY-A-ROUND. Tigrett Industries, Inc., d. b. a. Tigrett Enterprises. SN 687,648. Pub. 3–6–56. Filed 5–16–55.

627,386. SEAT COAT. Lipschultz Brothers. SN 689,582. Pub. 3–6–56. Filed 6–15–55.

627,387. SPRED BAR. Doetsch & Bauer Company. SN 690,868. Pub. 3–6–56. Filed 7–7–55.

627,388. SYKO-ETTE. The Rest-Rite Bedding Company. SN 691,889. Pub. 3–6–56. Filed 7–25–55.

627,389. SINEW. Kay Manufacturing Corporation. SN 696,048. Pub. 3–6–56. Filed 10–7–55.

627,390. SINU-SPRINGS. Kay Manufacturing Corporation. SN 696,049. Pub. 3–6–56. Filed 10–7–55.

627,391. DANIA AND DESIGN. American Furniture Company, Inc. SN 696,094. Pub. 3–6–56. Filed 10–10–55.

627,392. STEMPCO AND DESIGN. Stempel Manufacturing Company. SN 696,187. Pub. 3–6–56. Filed 10–10–55.

CLASS 34

627,393. MIAMI AND DESIGN. Gross Furnace Mfg. Co. SN 661,705. Pub. 3–6–56. Filed 2–26–54.

627,394. HICKORY-Q. Hunt Heater Corporation. SN 668,756. Pub. 3–6–56. Filed 6–23–54.

627,395. CLEO-MATIC. Lingle Refrigerator Co., Inc. SN 679,168. Pub. 3–6–56. Filed 12–30–54.

627,396. ZAVODY V. I. LENINA PLZEN AND DESIGN. Zavody V. I. Lenina Plzen, Narodni Podnik. SN 679,442. Pub. 3–6–56. Filed 1–4–55.

627,397. CARBOTRONIK. Ipsen Industries, Inc. SN 679,782. Pub. 3–6–56. Filed 1–12–55.

627,398. DEWTRONIK. Ipsen Industries, Inc. SN 679,783. Pub. 3–6–56. Filed 1–12–55.

627,399. ALUMILUX. Clayton & Lambert Manufacturing Company. SN 690,135. Pub. 3–6–56. Filed 6–24–55.

627,400. FIBERGLO. Holophane Company, Inc. SN 690,274. Pub. 3–6–56. Filed 6–27–55.

627,401. SEQUOIA. Sequoia Manufacturing Company. SN 690,334. Pub. 3–6–56. Filed 6–27–55.

627,402. RAINAIRE R AND DESIGN. Schecter Brothers Co. SN 691,155. Pub. 3–6–56. Filed 7–12–55.

627,403. AIRCON. McQuay, Inc. SN 691,494. Pub. 3–6–56. Filed 7–18–55.

627,404. SMOKE-TRIP. Robbins & Myers, Inc. SN 691,637. Pub. 3–6–56. Filed 7–20–55.

627,405. SELECTOTHERM. American Air Filter Company, Inc. SN 691,811. Pub. 3–6–56. Filed 7–25–55.

627,406. RHEEMGLAS. Rheem Manufacturing Company. SN 691,890. Pub. 3–6–56. Filed 7–25–55.

627,407. AIRTROL. Bell & Gossett Company. SN 692,114. Pub. 3–6–56. Filed 7–29–55.

627,408. VORNADO. The O. A. Sutton Corporation, Inc. SN 692,175. Pub. 3–6–56. Filed 7–29–55.

627,409. VENTAHOOD. Ventahood Company. SN 693,874. Pub. 3–6–56. Filed 8–29–55.

CLASS 35

627,410. HYPAK. International Packings Corporation. SN 686,055. Pub. 3–6–56. Filed 4–22–55.

627,411. EZESEAL. Universal Packing & Gasket Company. SN 696,084. Pub. 3–6–56. Filed 10–7–55.

CLASS 36

627,412. HARMONY. The Harmony Company. SN 688,732. Pub. 3–6–56. Filed 6–2–55.

CLASS 37

627,413. PERMA-SCALE. Eugene Dietzgen Co. SN 645,702. Pub. 7–26–55. Filed 4–22–53.

627,414. ADMATS. Fort Howard Paper Company. SN 689,377. Pub. 2–7–56. Filed 6–13–55.

CLASS 38

627,415. ANGEL AND DESIGN. Field Enterprises, Inc. SN 660,858. Pub. 8–2–55. Filed 2–10–54.

627,416. U. S. LADY. American Service Publishing Co., Inc. SN 694,764. Pub. 3–6–56. Filed 9–16–55.

CLASS 39

627,417. HELICOPTER. Wellco Shoe Corporation. SN 654,626. Pub. 3–6–56. Filed 10–12–53.

627,418. ZEPHYR WEIGHT AND DESIGN. Jesse Lasar, d. b. a. Jesse Lasar Co. SN 660,416. Pub. 3–6–56. Filed 2–1–54.

627,419. BY GILBERT TOGS, NEW YORK AND DESIGN. Ben Rosen, d. b. a. Gilbert Togs. SN 664,472. Pub. 3–6–56. Filed 4–13–54.

627,420. VENÉ. Vene Gowns, Inc. SN 670,264. Pub. 3–6–56. Filed 7–19–54.

627,421. SURE FIT. Universal Overall Company. SN 678,287. Pub. 3–6–56. Filed 12–13–54.

627,422. NIKKA AND DESIGN. Nikka Rubber Co., Ltd. SN 678,339. Pub. 3–6–56. Filed 12–14–54.

627,423. GLEN CREST AND DESIGN. L. Solomon & Sons. SN 678,749. Pub. 11–29–55. Filed 12–21–54.

627,424. KASHMIR. Martin J. Dubin, d. b. a. American Hosiery Company. SN 679,521. Pub. 3–6–56. Filed 1–6–55.

627,425. LAMBELLA. Little Empress Coats, Inc. SN 681,021. Pub. 3–6–56. Filed 2–3–55.

627,426. BILTMORE ETC. Biltmore Hats Limited. SN 682,233. Pub. 3–6–56. Filed 2–24–55.

627,427. FORESTER. Fox River Valley Knitting Company. SN 682,631. Pub. 3–6–56. Filed 3–2–55.

627,428. "KILTY"-MOCS AND DESIGN. Alco of Texas, d. b. a. Alco of Texas, Inc. SN 683,163. Pub. 3–6–56. Filed 3–10–55.

627,429. POWDER PUFF AND DESIGN. International Latex Corporation. SN 685,025. Pub. 12–27–55. Filed 4–6–55.

627,430. NO-BAG. J. Schoeneman, Incorporated (Maryland corporation), now by change of name Slade, Inc., to J. Schoeneman, Incorporated (Delaware corporation). SN 687,130. Pub. 3–6–56. Filed 5–9–55.

627,431. SUPER WHITEHALL. F. Jacobson & Sons, Inc. SN 687,204. Pub. 3–6–56. Filed 5–10–55.

627,432. DESIGN OF YELLOW OVAL. So-Lo Works, Inc. SN 688,362. Pub. 3–6–56. Filed 5–26–55.

627,433. GOLDOR. Tania Tarshish, d. b. a. A. Tarshish. SN 688,683. Pub. 3–6–56. Filed 6–1–55.

627,434. RICH'S CHEVY CHASERS. B. Rich's Sons. SN 688,856. Pub. 3–6–56. Filed 6–3–55.

627,435. PARADISE TROPICAL. J. Schoeneman, Inc. (Maryland corporation), now by change of name Slade, Inc., to J. Schoeneman, Incorporated (Delaware corporation). SN 688,968. Pub. 3–6–56. Filed 6–6–55.

627,436. CARLENE. Kensington Rubber Works, Inc. SN 689,632. Pub. 3–6–56. Filed 6–16–55.

627,437. MANNEQUINS THE MODEL SHOE. Mannequin Shoes, Inc. SN 689,729. Pub. 3–6–56. Filed 6–17–55.

627,438. POWDER PUFF. Dumari Textile Co., Inc. SN 690,442. Pub. 12–27–55. Filed 6–29–55.

627,439. AMERICAN ACE AND DESIGN. Shelburne Shirt Co., Inc. SN 690,652. Pub. 3–6–56. Filed 7–1–55.

627,440. NYLURA. Dutchess Underwear Corporation. SN 693 724. Pub. 3–6–56. Filed 8–18–55.

627,441. JOLLY ROGER. Holgood Hosiery Mills. SN 695,092. Pub. 3–6–56. Filed 9–21–55.

627,442. BARKAROLLE Barkin, Levin & Co., Inc. SN 695,382. Pub. 3–6–56. Filed 9–27–55.

627,443. ONELLA. Philip Shlansky & Sons, Inc. SN 695,451. Pub. 3–6–56. Filed 9–27–55.

627,444. PREST-O-FLEX. Bates Shoe Company. SN 695,682. Pub. 3–6–56. Filed 10–3–55.

627,445. KERRY SOX. Murphy, Brill and Sahner, Inc. SN 695,834. Pub. 3–6–56. Filed 10–4–55.

627,446. PAGANIS. Laird, Schober & Co., Inc. SN 695,983. Pub. 3–6–56. Filed 10–6–55.

627,447. WILBORN. Wilborn Hosiery Co. SN 696,008. Pub. 3–6–56. Filed 10–6–55.

627,448. HELENE ANN. Green Lane Hosiery Company, Inc. SN 696,142. Pub. 3–6–56. Filed 10–10–55.

627,449. ESSEX JUNIOR SX AND DESIGN. Interwoven Stocking Company. SN 696,147. Pub. 3–6–56. Filed 10–10–55.

627,450. PARK-A-SEAL. H. H. Brown Shoe Co., Inc. SN 696,207. Pub. 3–6–56. Filed 10–11–55.

627,451. NEKCONIT. The New England Knitting Company, to Winsted Hosiery Company. SN 697,256. Pub. 3–6–56. Filed 10–14–55.

CLASS 40

627,452. U EMBROID CURTAINS AND NEEDLE DESIGN. International Flouncing Co., Inc. SN 676,502. Pub. 3–6–56. Filed 11–12–54.

627,453. DURO-PLANT. Zunino-Altman, Inc. SN 695,963. Pub. 3–6–56. Filed 10–5–55.

627,454. AQUA-ETTES AND DESIGN. California Forms, Inc. SN 696,113. Pub. 3–6–56. Filed 10–10–55.

CLASS 42

627,455. S SUSA. Cotonificio Valle di Susa. SN 678,944. Pub. 3–6–56. Filed 12–17–54.

627 456. S SUSA IN A PANEL. Cotonificio Valle di Susa. SN 678,945. Pub. 3–6–56. Filed 12–17–54.

627,457. MELLOGLAZE. Crompton Company. SN 693,314. Pub. 2–28–56. Filed 8–18–55.

627,458. SEMBRIT. J. Semler Limited. SN 695,060. Pub. 3–6–56. Filed 10–7–55.

627,459. DUVA. Forstmann Woolen Co. SN 698,475. Pub. 3–6–56. Filed 12–2–55.

627 460. JERSELLA. Forstmann Woolen Co. SN 698,476. Pub. 3–6–56. Filed 12–2–55.

627 461. KASHMIRAC. Forstmann Woolen Co. SN 698,477. Pub. 3–6–56. Filed 12–2–55.

CLASS 44

627,462. TIP TONI. The Gillette Company, d. b. a. The Toni Company. SN 689,482. Pub. 3–6–56. Filed 6–14–55.

CLASS 45

627,463. MOONSHINE. Albert William Brown. SN 677,386. Pub. 3–6–56. Filed 11–29–54.

CLASS 46

627,464. EDDY'S BREAD AND DESIGN. Eddy Bakeries, Inc. SN 561,736. Pub. 8–18–53. Filed 7–20–48.

627,465. FARMER BROTHERS. Farmer Bros. Co. SN 617,750. Pub. 3–6–56. Filed 8–16–51.

627,466. PALETTOS. Barricini, Inc. SN 631,265. Pub. 3–6–56. Filed 6–17–52.

627,467. HIGH LIFE. Miller Brewing Company. SN 640,218. Pub. 1–24–56. Filed 12–31–52.

627,468. "HA-LUSH-KA." Weiss Noodle Company. SN 644,651. Pub. 3–6–56. Filed 4–2–53.

627,469. ARCTIC CIRCLE. Arctic Circle Company. SN 657,675. Pub. 3–6–56. Filed 12–9–53.

627,470. FINEST YET. C. S. Justman. SN 659,196. Pub. 3–6–56. Filed 1–8–54.

627,471. NATURE'S. Fred Fear & Co. SN 660,935. Pub. 7–5–55. Filed 2–11–54.

627,472. BABIES ARE OUR BUSINESS . . . OUR ONLY BUSINESS! AND DESIGN. Gerber Products Company. SN 663,779. Pub. 3–6–56. Filed 4–2–54.

627,473. 57. H. J. Heinz Company. SN 673,918. Pub. 3–6–56. Filed 9–28–54.

627,474. IXL. Kraft Foods Company. SN 674,261. Pub. 5–31–55. Filed 10–4–54.

627,475. FIRST—IN FAVOR AND FLAVOR. Hershey Chocolate Corporation. SN 675,699. Pub. 3–6–56. Filed 10–29–54.

627,476. DOLE AND DESIGN. Hawaiian Pineapple Company, Limited, d. b. a. Dole Sales Company. SN 675,790. Pub. 3–6–56. Filed 11–1–54.

627,477. "SPEEDSTER." Miller and Carrell Mfg. Co. SN 676,389. Pub. 3–6–56. Filed 11–10–54.

627,478. MING AND DESIGN. Stephen Leeman Products Corporation, to Heublein, Inc. SN 677,154. Pub. 3–6–56. Filed 11–23–54.

627,479. NORSE TWINS AND DESIGN. Mogens Canning Co. A/S. SN 677,630. Pub. 3–6–56. Filed 12–1–54.

627,480. SLIM-O. Lo-Calory Food Corporation. SN 678,547. Pub. 3–6–56. Filed 12–17–54.

627,481. MOR-GAIN AND DESIGN. Northwestern Distributing Co., Inc. SN 678,805. Pub. 3–6–56. Filed 12–22–54.

627,482. STRATO LINER AND DESIGN. Joe Coleman. SN 679,081. Pub. 3–6–56. Filed 12–29–54.

627,483. PEACH RIDGE ETC. AND DESIGN. Peach Ridge Fruit Growers Association. SN 679,321. COLLECTIVE MARK. Pub. 3–6–56. Filed 1–3–55.

627,484. GEMELLI TWINS ETC. AND DESIGN. V. Arena & Sons, Inc. SN 680,568. Pub. 3–6–56. Filed 12–30–54.

627,485. SAXET. Fred W. Graves, d. b. a. Food Center. SN 682,423. Pub. 3–6–56. Filed 2–28–55.

627,486. IN-JUNE. Moody Farms Company. SN 683,528. Pub. 3–6–56. Filed 3–15–55.

627,487. BIRD OF PARADISE. The John McHutchion Limited. SN 683,609. Pub. 3–6–56. Filed 3–16–55.

627,488. QUEEN. Milwaukee Cheese Co. SN 684,057. Pub. 3–6–56. Filed 3–23–55.

627,489. POP-OPEN AND DESIGN. The Borden Company. SN 685,243. Pub. 3–6–56. Filed 4–11–55.

627,490. SWEET LASSY AND DESIGN. Schreiber Mills, Inc. SN 685,855. Pub. 3–6–56. Filed 4–19–55.

627,491. SALAD MATE. John A. De Vita, d. b. a. De Vita Fruit Co. SN 687,266. Pub. 3–6–56. Filed 5–11–55.

627,492. MILROSE. Kay Packing Co. SN 687,384. Pub. 3–6–56. Filed 5–12–55.

627,493. BELL RINGER. J. P. Molica, d. b. a. J. P. Molica Company. SN 687,395. Pub. 3–6–56. Filed 5–12–55.

627,494. STRATO. Key Brands Company. SN 688,428. Pub. 3–6–56. Filed 5–27–55.

627,495. MOOSE. Cucamonga Mesa Growers. SN 688,804. Pub. 3–6–56. Filed 6–3–55.

627,496. BISON. Cucamonga Mesa Growers. SN 688,805. Pub. 3–6–56. Filed 6–3–55.

627,497. THE "BRISK" TEA. Thomas J. Lipton, Inc. SN 688,830. Pub. 3–6–56. Filed 6–3–55.

627,498. CERTS AND DESIGN. American Chicle Company. SN 689,114. Pub. 3–6–56. Filed 6–8–55.

627,499. TALLYHO FARMS. Hershey Creamery Company. SN 689,383. Pub. 3–6–56. Filed 6–13–55.

627,500. MR. CHERRY AND DESIGN. Prentice Packing & Cold Storage Co. SN 690,834. Pub. 3–6–56. Filed 7–6–55.

627,501. MYŌNE. Pearl L. Davis, d. b. a. Myone Seed Co. SN 690,867. Pub. 3–6–56. Filed 7–7–55.

627,502. A-CERO. Sasson-King Inc. SN 690,906. Pub. 3–6–56. Filed 7–7–55.

627,503. A-C-RO. Sasson-King Inc. SN 690,907. Pub. 3–6–56. Filed 7–7–55.

627,504. SHAMROCK. Irish Preserves Ltd. SN 691,476. Pub. 3–6–56. Filed 7–18–55.

627,505. KEM. Perk Foods Co., d. b. a. Kem Dog Food Co. SN 691,579. Pub. 3–6–56. Filed 7–19–55.

627,506. CROWN PRINCE AND DESIGN. North Platte Rendering Company, d. b. a. Star Sales Company. SN 691,706. Pub. 3–6–56. Filed 7–21–55.

627,507. THE ORIGINAL ANDREW H. BROWN. Andrew H. Brown, d. b. a. Smokehouse Food Processing Plant. SN 691,747. Pub. 3–6–56. Filed 7–22–55.

627,508. GUISEPPE'S. J. D. Tortolini. SN 692,284. Pub. 3–6–56. Filed 8–1–55.

CLASS 47

627,509. GRANDEUR. D. Recher & Co. SN 683,555. Pub. 3–6–56. Filed 3–15–55.

CLASS 48

627,510. GUNTHER. Gunther Brewing Company. SN 689,567. Pub. 3–6–56. Filed 6–15–55.

CLASS 49

627,511. PIKINA AND DESIGN. Picon & Cie. SN 689,516. Pub. 3–6–56. Filed 6–14–55.

CLASS 50

627,512. SWING DINGS MOBILE AND DESIGN. Modern Toy Company. SN 659,491. Pub. 3–6–56. Filed 1–14–54.

627,513. OAKES. The Oakes Manufacturing Company, Inc. SN 678,550. Pub. 3–6–56. Filed 12–17–54.

CLASS 51

627,514. STA-FREE. The Rilling-Dermetics Company, d. b. a. Rilling Dermetics Co. SN 673,053. Pub. 3–6–56. Filed 9–10–54.

627,515. B-FREE. The Rilling-Dermetics Company, d. b. a. Rilling Dermetics Co. SN 673,054. Pub. 3–6–56. Filed 9–10–54.

627,516. GAYE CONTESSA. Contessa, Ltd. SN 678,517. Pub. 3–6–56. Filed 12–17–54.

627,517. JAGUAR. Contessa, Ltd. SN 678,518. Pub. 3–6–56. Filed 12–17–54.

627,518. MIRAMAR. Contessa, Ltd. SN 678,519. Pub. 3–6–56. Filed 12–17–54.

627,519. TAWN. McKesson & Robbins, Incorporated. SN 679,920. Pub. 3–6–56. Filed 1–14–55.

627,520. LEG-CHARM. Coleman Cosmetics, Inc. SN 679,981. Pub. 3–6–56. Filed 1–17–55.

627,521. SHERRY NAIL. Sherry Lynn Products Co., Inc. SN 688,162. Pub. 3–6–56. Filed 5–24–55.

627,522. DOUBLE LUCKY. Valmor Products Co., d. b. a. Famous Products Co. SN 688,375. Pub. 3–6–56. Filed 5–26–55.

627,523. SUPER-FINISH. Helena Rubinstein, Inc. SN 688,467. Pub. 3–6–56. Filed 5–27–55.

627,524. DOROTHY STEVENS. The Gillette Company, d. b. a. The Toni Company. SN 688,523. Pub. 3–6–56. Filed 5–31–55.

627,525. NEARNESS. Avon Products, Inc. SN 688,618. Pub. 3–6–56. Filed 6–1–55.

627,526. TRAVEL-TANS. August L. Franke, d. b. a. Q-W Laboratories. SN 689,222. Pub. 3–6–56. Filed 6–9–55.

627,527. BARBER-CHIEF. The Mimson Company. SN 689,506. Pub. 3–6–56. Filed 6–14–55.

CLASS 52

627,528. SILVER RAIN ETC. The Gillette Company, d. b. a. The Toni Company. SN 673,441. Pub. 6–21–55. Filed 9–20–54.

627,529. WISK. Lever Brothers Company. SN 695,636. Pub. 1–10–56. Filed 9–30–55.

Service Marks

CLASS 100

627,530. AQUATROL. Aquatrol Laboratories, Inc. SN 669,164. Pub. 3–6–56. Filed 6–30–54.

627,531. MAGIC MIRROR AND DESIGN. Magic Mirror Beauty Salons, Inc. SN 689,397. Pub. 3–6–56. Filed 6–13–55.

627,532. CONCATENATED ORDER OF HOO-HOO AND DESIGN. International Concatenated Order of Hoo-Hoo. SN 689,723. Pub. 3–6–56. Filed 6–17–55.

CLASS 101

627,533. SAY IT WITH CHEER. Clarence N. Durant. SN 614,932. Pub. 3–6–56. Filed 6–8–51.

627,534. OFFICE TEMPORARIES, INC. AND DESIGN. Office Temporaries, Inc. SN 668,461. Pub. 3–6–56. Filed 6–18–54.

627,535. BONUS BUCKS. Bonus Bucks of Du Bois, Inc. SN 679,820. Pub. 3–6–56. Filed 1–13–55.

627,536. BRINK'S INCORPORATED AND DESIGN. Brinks, Incorporated. SN 687,346. Pub. 3–6–56. Filed 5–12–55.

627,537. EYE OPENERS AND DESIGN. Ben Lass. SN 688,829. Pub. 3–6–56. Filed 6–3–55.

CLASS 102

627,538. THE CASHERE PLAN AND DESIGN. A. A. Murphy & Co., Inc. SN 622,219. Pub. 3–6–56. Filed 12–7–51.

627,539. THE TRUE LEASE TERNAN, CLAUSON & CO., INC. AND DESIGN. Ternan, Clauson & Co., Incorporated. SN 678,278. Pub. 3–6–56. Filed 12–13–54.

CLASS 103

627,540. AM AND DESIGN. Addressograph-Multigraph Corporation. SN 676,856. Pub. 3–6–56. Filed 11–18–54.

CLASS 106

627,541. VELVERIZED. Velveray Corporation. SN 663,704. Pub. 3–6–56. Filed 3–31–54.

627,542. RAINBOWCOLOR PROCESSED BY MOVIELAB AND DESIGN. Movielab Film Laboratories, Inc., to Rainbowlab, Inc. SN 667,572. Pub. 3–6–56. Filed 6–2–54.

CLASS 107

627,543. DISC-A-TOONS. Steve Bodnarchuk. SN 673,499. Pub. 3–6–56. Filed 9–21–54.

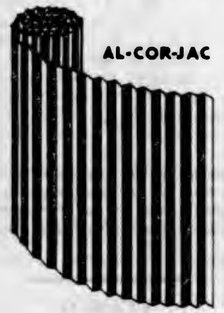
627,544. CORNY THE CLOWN. Robert J. Keeshan. SN 682,270. Pub. 3–6–56. Filed 2–24–55.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 12

627,545. Aljon Manufacturing Co., Inc., Roselle, N. J. SN 669,386. Filed P. R. 7–6–54. Am. S. R. 3–7–56.



For Corrugated Aluminum Jacketing To Cover Pipe Insulation.
First use Nov. 15, 1953.

CLASS 19

627,546. Maybach-Motorenbau G. m. b. H., Friedrichshafen, Germany. SN 676,987. Filed 11–19–54.

Maybach

For Rail Vehicles, Road Vehicles, Motor Driven Rail-, Road-, and Cross-Country Vehicles, Motorcycles, Bicycles, Wheel- and Caterpillar-Type Cross-Country Vehicles, Watercraft, Aircraft, and Structural Parts Thereof.
First use on or about Oct. 1, 1924.

627,547. Glas-Craft, Inc., Fort Worth, Tex. SN 678,392. Filed P. R. 12–15–54. Am. S. R. 2–1–56.

Glas-Craft

Applicant disclaims the word "Craft" apart from the mark as shown.
For Small Boats and Prefabricated Kits for Assembling the Same.
First use Sept. 1, 1953.

627,548. Steelbilt Boats, Inc., West Memphis, Ark. SN 681,719. Filed P. R. 2–15–55. Am. S. R. 2–2–56.

Trailer Craft

For Inboard or Outboard Motor Boats With Retractable Wheel.
First use Jan. 6, 1955.

627,549. The Goodyear Tire & Rubber Company, Akron, Ohio. SN 682,639. Filed P. R. 3–2–55. Am. S. R. 2–14–56.

TRU-SEAL

For Vehicle Rims.
First use Feb. 8, 1955.

CLASS 23

627,550. Grand Sheet Metal Products Co., Melrose Park, Ill. SN 671,997. Filed P. R. 8–20–54. Am. S. R. 2–15–56.

Quiet-tone

For Mufflers for Automobile Engines.
First use April 1953.

CLASS 26

627,551. Leta S. Taylor, d. b. a. J. Y. Taylor Company, Garland, Tex. SN 685,217. Filed P. R. 4–8–55. Am. S. R. 1–5–56.

VISIBLE

For Float Gauges and Parts Thereof.
First use 1946.

CLASS 28

627,552. Ruth Strauss, Woodmere, N. Y. SN 682,684. Filed P. R. 3–2–55. Am. S. R. 12–15–55.

Hi-Lo

For Earrings.
First use Dec. 2, 1954.

627,553. Markson Bros., Boston, Mass. SN 686,758. Filed P. R. 5–3–55. Am. S. R. 3–12–56.

d'Armand

For Men's Jewelry—Namely, Cuff Links, Tie Clips, Tie Pins, and Collar Pins.
First use Sept. 23, 1954.

627,554. Coro, Inc., New York, N. Y. SN 686,812. Filed P. R. 5–4–55. Am. S. R. 3–15–56.

WATCH LOCKET

For Necklaces, Bracelets, Fobs, and Brooches.
First use February 1955.

CLASS 46

627,555. Flotill Products, Incorporated, Stockton, Calif. SN 691,026. Filed P. R. 7–11–55. Am. S. R. 2–20–56.

"SWEETNIN"

For Artificially Sweetened Dietary Liquid Sweetener.
First use Sept. 8, 1950.

CLASS 51

627,556. Helena Rubinstein, Inc., New York, N. Y. SN 665,862. Filed P. R. 5–6–54. Am. S. R. 3–22–56.

Tan-in-a-Minute

For Liquid Beauty Preparation for Making Up Suntanned Face, Body, and Legs.
First use Feb. 4, 1954.

627,557. Sales Affiliates, Inc., New York, N. Y. SN 680,905. Filed P. R. 2–1–55. Am. S. R. 2–20–56.

firmwave

For Permanent Waving Lotion and Neutralizer.
First use Nov. 24, 1954.

627,558. Murray Frank and Associates, Chicago, Ill. SN 686,634. Filed P. R. 5–2–55. Am. S. R. 3–19–56.

NO RUB

For Hair Dye Stain Remover.
First use October 1952.

627,559. Lancôme, S. A., Paris, France. SN 691,219. Filed 7–13–55.



The mark consists of the container bottle for the goods, which is in the form of an imaginary tree twig with representations of stars thereon. Owner of French Reg. No. 451,009, dated May 13, 1955 (Seine); Natl. Inst. No. 56,776.
For Perfume.

CLASS 52

627,560. Louis Spiegel, Cincinnati, Ohio. SN 672,601. Filed P. R. 9–1–54. Am. S. R. 1–12–56.

Suede-Brite

For Sponge Impregnated With Non-Poisonous Chemicals for Use as a Shoe Cleaner and for Cleaning Articles Made of Suede Leather.
First use Aug. 10, 1953.

Service Mark

CLASS 107

627,561. Frank B. Childress, New Market, Va. SN 662,076. Filed P. R. 3–5–54. Am. S. R. 9–23–55.

Dr. CHILDRESS SNAKE FARM

For Entertainment and Education Service Consisting of Displays, Lectures, and Demonstrations Dealing With Snakes.
First use June 15, 1928.

TRADEMARK REGISTRATIONS RENEWED

108,250. SOLCUT. Cl. 15. 1–25–16.
109,261. MIMEOSCOPE. Cl. 26. 3–28–16.
109,376. PROTOO. Cl. 37. 4–4–16.
109,538. HERATI. Cl. 42. 4–11–16.
109,949. CRECIUM. Cl. 21. 4–25–16.
110,094. BAKEMORE. Cl. 46. 5–2–16.
110,814. DIAMOND. Cl. 19. 6–13–16.
110,815. DESIGN OF DIAMOND. Cl. 19. 6–13–16.
110,816. T. Cl. 19. 6–13–16.
111,205. BELINDA AND DESIGN. Cl. 17. 7–4–16.
111,291. AVALANCHE AND DESIGN. Cl. 46. 7–4–16.
111,638. TRANSVERTER. Cl. 21. 7–25–16.
330,318. BACKIN. Cl. 46. 11–26–35.
331,010. MILLSIDE FARMS. Cl. 46. 12–24–35.
331,452. STANDARD MULTIPLATE PPGCO. Cl. 33. 1–7–36.
331,454. HI-POWER MULTIPLATE PPGCO. Cl. 33. 1–7–36.
331,489. ALPAGORA. Cl. 39. 1–7–36.
331,559. RED CENTER WHEEL. Cl. 23. 1–14–36.
331,940. STEECHAN. Cl. 19. 1–28–36.
332,092. WARCO JUNIOR. Cl. 13. 2–4–36.
332,149. DESIGN OF RECTANGLE. Cl. 38. 2–4–36.
332,185. HOLLYHOCK. Cl. 28. 2–4–36.
332,217. WHOLE WHEAT PUFFETS AND DESIGN. Cl. 46. 2–4–36.
332,222. BULKAN. Cl. 2. 2–4–36.
332,223. 2 WAY. Cl. 45. 2–4–36.
332,374. SHIELD-ARC. Cl. 14. 2–11–36.
332,464. ROSE-MAR. Cl. 39. 2–18–36.
333,292. CHOCO MILK AND DESIGN. Cl. 46. 3–17–36.
333,311. THE SOUND AND THE FURY. Cl. 38. 3–17–36.
333,509. FERMENTASE. Cl. 46. 3–24–36.
333,511. PREMOSE. Cl. 46. 3–24–36.
333,515. 721. Cl. 51. 3–24–36.
333,539. DESIGN OF MAN'S HEAD. Cl. 38. 3–24–36.
333,693. KALVAN. Cl. 6. 3–31–36.
333,793. PATRIA. Cl. 46. 4–7–36.
333,964. ARGYLE. Cl. 35. 4–14–36.
333,985. FRUZERT. Cl. 46. 4–14–36.
334,295. MELCHIOR, ARMSTRONG, DESSAU CO. MELCO AND DESIGN. Cl. 31. 4–28–36.
334,337. COINTREAU AND DESIGN. Cl. 49. 4–28–36.
334,360. COINTREAU. Cl. 49. 4–28–36.
334,418. ATLAS. Cl. 29. 5–5–36.
334,493. FOUR HORSEMEN. Cl. 15. 5–5–36.
334,584. CARBO-COKE AND DESIGN. Cl. 1. 5–5–36.
334,683. SURF KING AND DESIGN. Cl. 22. 5–12–36.
334,790. PHOTOTEST. Cl. 26. 5–12–36.
334,891. PERSIANAIR. Cl. 39. 5–19–36.
334,892. GROUSEMOOR. Cl. 39. 5–19–36.
334,967. FORBIDDEN LOVE. Cl. 51. 5–19–36.
334,981. NUIT ESPAGNOLE NOCHE ESPANOLA. Cl. 51. 5–19–36.
334,982. LE CLAIRAC. Cl. 51. 5–19–36.
334,983. KISMAJU. Cl. 51. 5–19–36.
335,020. ECLIPSE AND DESIGN. Cl. 21. 5–19–36.
335,054. SWORN PERFECT DIAMOND AND DESIGN. Cl. 28. 5–19–36.
335,292. VITAPOISE. Cl. 39. 6–2–36.
335,391. BRITISH WALKERS AND DESIGN. Cl. 39. 6–2–36.
335,700. OLD COLONY AND DESIGN. Cl. 46. 6–9–36.
335,750. PEDACO. Cl. 46. 6–16–36.
335,762. FETHER-WEVE AND DESIGN. Cl. 39. 6–16–36.
335,806. COINTREAU AND DESIGN. Cl. 49. 6–16–36.
335,882. COLONEL GLEN AND DESIGN. Cl. 49. 6–16–36.
335,890. RED BIRD AND DESIGN. Cl. 15. 6–16–36.
336,224. UNIVERSAL. Cl. 39. 6–30–36.
336,227. HUCK FINN AND DESIGN. Cl. 49. 6–30–36.
336,235. McCAFFREY FILES AND DESIGN. Cl. 23. 6–30–36.
336,251. LA PALOMA. Cl. 47. 6–30–36.
336,253. OLD MILL. Cl. 46. 6–30–36.
336,287. VAPSKIM. Cl. 46. 6–30–36.
336,345. COINTREAU TRIPLE SEC AND DESIGN. Cl. 49. 6–30–36.
336,348. DESIGN OF WINGED PISTON. Cl. 35. 6–30–36.
336,385. POSTURE TRED. Cl. 39. 7–7–36.
336,402. WESCOTE. Cl. 16. 7–7–36.
336,434. DRY-TEX. Cl. 6. 7–7–36.
336,436. PALATA. Cl. 46. 7–7–36.
336,589. FATHER CHARLES AND DESIGN. Cl. 49. 7–7–36.
336,590. CHARWOOD AND DESIGN. Cl. 49. 7–7–36.
336,900. NACCONOL. Cl. 52. 7–21–36.
336,901. NACCONOL. Cl. 6. 7–21–36.
336,925. SEA BREEZE AND DESIGN. Cl. 46. 7–21–36.
337,165. REZICOTE. Cl. 16. 7–28–36.

TRADEMARK REGISTRATIONS CANCELED

Section 7

348,193. BUSINESS DIGEST. Cl. 38. 7–20–37.

Section 8

46,365. JERSEY ROASTED COFFEE AND REPRESENTATION OF COW AND CALF WITHIN CIRCULAR DESIGN. Cl. 46. 9–12–05.
73,878. LA VENDA AND REPRESENTATION OF WOMAN ON BACKGROUND DESIGN. Cl. 17. 5–25–09.
124,823. HOME AND DESIGN. Cl. 9. 3–18–19.
175,032. TRUE AMERICAN AND REPRESENTATION OF INDIAN. Cl. 9. 10–30–23.
188,211. AERO. Cl. 46. 8–19–24.
189,981. SAFETY STRIKE ANYWHERE SWAN DIAMOND MATCHES AND REPRESENTATION OF SWAN WITHIN RECTANGULAR DESIGN. Cl. 9. 9–30–24.
196,915. GOOD WILL. Cl. 46. 3–31–25.
219,452. NEW YORK AMERICAN. Cl. 38. 10–19–26.
236,898. SPICK AND SPAN. Cl. 39. 12–27–27.
249,460. RING TRUE BOHN BEARINGS WITHIN CIRCULAR DESIGN. Cl. 23. 11–13–28.
254,306. MAYFAIR KNITWEAR FOR KIDDIES AND DESIGN. Cl. 39. 3–19–29.
260,732. THE WONDER COAL. Cl. 1. 8–27–29.
261,621. SONOCHROME. Cl. 26. 9–17–29.
264,659. BEAU-BROOKE. Cl. 39. 12–3–29.
265,174. REPRESENTATION OF WRAPPER WITH TWISTED ENDS. Cl. 46. 12–17–29.
265,186. REPRESENTATION OF WRAPPER WITH TWISTED ENDS. Cl. 46. 12–17–29.
265,356. MODEL D. Cl. 29. 12–24–29.
266,064. TUBEROSE WITHIN CIRCULAR DESIGN. Cl. 46. 1–14–30.
266,065. ULTIMATE WITHIN OVAL DESIGN. Cl. 46. 1–14–30.
269,871. GREEN GLO AND REPRESENTATION OF WOMAN. Cl. 9. 4–22–30.
306,715. GREEN GODDESS AND DESIGN. Cl. 9. 9–26–33.
306,716. GREEN GODDESS. Cl. 9. 9–26–33.
308,577. PROTEX. Cl. 52. 12–12–33.
334,605. FIRMATEX SUITING BY JACK TAR RUB 'EM TUB 'EM SCRUB 'EM THEY COME UP SMILING. Cl. 39. 5–5–36.
345,935. ENTHEORATE. Cl. 18. 5–11–37.
406,594. "DIXIE MAID". Cl. 21. 4–11–44.
407,427. AMERICA'S FIRST SAFETY MATCH ETC. AND DESIGN. Cl. 9. 6–6–44.
407,428. AMERICA'S OWN SAFETY MATCH ETC. AND DESIGN. Cl. 9. 6–6–44.
408,361. IDEAL SAFETY MATCH ETC. AND DESIGN. Cl. 9. 8–8–44.

413,604. NODOR. Cl. 6. 5-1-45.
419,079. EMPIRE. Cl. 39. 2-5-46.
421,711. SWAN BRAND DIAMOND MATCHES AND REPRESENTATION OF SWAN WITHIN RECTANGULAR DESIGN. Cl. 9. 6-11-46.
421,712. TRUE AMERICAN BRAND DIAMOND MATCHES AND REPRESENTATION OF INDIAN WITHIN RECTANGULAR DESIGN. Cl. 9. 6-11-46.
443,221. RED ROBBIN. Cl. 39. 8-16-49.
519,841. ORIENTAL SAPPHIRE. Cl. 51. 1-17-50.
519,842. DELTA AND DESIGN. Cl. 16. 1-17-50.
519,847. MEYER-DUMORE. Cl. 23. 1-17-50.
519,851. "TAXI TALKIE". Cl. 21. 1-17-50.
519,853. MAP-O-TEX. Cl. 46. 1-17-50.
519,857. B & G WITHIN OVAL DESIGN. Cl. 21. 1-17-50.
519,861. FLEXOPRENE. Cl. 16. 1-17-50.
519,873. LOCKER OPERATOR. Cl. 38. 1-17-50.
519,878. BELL & GOSSETT COMPANY B & G WITHIN OVAL DESIGN. Cl. 21. 1-17-50.
519,881. MUSTANG AND REPRESENTATION OF HORSE ON BACKGROUND DESIGN. Cl. 16. 1-17-50.
519,885. SPEZIA. Cl. 46. 1-17-50.
519,887. TEN BELO. Cl. 39. 1-17-50.
519,889. FORT GARLAND ON BACKGROUND DESIGN. Cl. 46. 1-17-50.
519,898. DAVIS BROS. Cl. 46. 1-17-50.
519,908. LADY LEISURE AND REPRESENTATION OF WOMAN. Cl. 46. 1-17-50.
519,910. ENZO. Cl. 46. 1-17-50.
519,913. SNO-LADY AND REPRESENTATION OF GIRL. Cl. 46. 1-17-50.
519,915. COLORAMA. Cl. 38. 1-17-50.
519,916. WHITE ENSIGN. Cl. 46. 1-17-50.
519,920. HI-CLASS. Cl. 46. 1-17-50.
519,922. KAUMAGRAPH. Cl. 38. 1-17-50.
519,923. CAMBRIDGE. Cl. 16. 1-17-50.
519,924. KDT AND DESIGN. Cl. 38. 1-17-50.
519,926. MID KRAFT. Cl. 19. 1-17-50.
519,927. TWINKLE THE STAR THAT CAME DOWN FROM HEAVEN AND DESIGN. Cl. 38. 1-17-50.
519,928. PLAYVILLE. Cl. 39. 1-17-50.
519,931. SIGNA-LARM. Cl. 21. 1-17-50.
519,933. A REVELATION STYLED BY KIM AND DESIGN. Cl. 39. 1-17-50
519,947. LAPLANT CHOATE. Cl. 19. 1-17-50.
519,952. CALIENTE AND DESIGN. Cl. 21. 1-17-50.
519,954. STRETCH KING AND REPRESENTATION OF CROWN. Cl. 24. 1-17-50.
519,956. TIBBETTS BROOK. Cl. 46. 1-17-50.
519,961. MINGBLEN LUXURIOUS RUSSIAN WEASEL AND REPRESENTATION OF WEASEL. Cl. 39. 1-17-50.
519,964. "THE ONE WHEEL SHAY". Cl. 19. 1-17-50.
519,965. DING HAU. Cl. 39. 1-17-50.
519,971. DOUBLE AA COTTONS AND DESIGN. Cl. 39. 1-17-50.
519,973. IMPERIAL AND REPRESENTATION OF CROWN. Cl. 38. 1-17-50.
519,975. RIMA. Cl. 39. 1-17-50.
519,982. SPEEDMASTER. Cl. 26. 1-17-50.
519,988. MOORE'S AND M WITHIN SHIELD DESIGN. Cl. 24. 1-17-50.
519,990. AROUND THE CLOCK. Cl. 38. 1-17-50.
519,991. LEE-ROY. Cl. 38. 1-17-50.
519,993. KING OF THE FIELD AND REPRESENTATION OF HORSE. Cl. 46. 1-17-50.
519,997. YANKEE MAID APPLES ETC. AND DESIGN. Cl. 46. 1-17-50.
519,998. HOBBY ARC. Cl. 21. 1-17-50.
520,005. MICROTRIP. Cl. 21. 1-17-50.
520,007. THE FLORIDA SUN. Cl. 38. 1-17-50.
520,008. WIL-MOR. Cl. 46. 1-17-50.
520,009. PINKY TOWN ORIGINALS AND DESIGN. Cl. 39. 1-17-50.
520,014. B G AND SHIELD DESIGN. Cl. 21. 1-17-50.
520,015. PRO. Cl. 46. 1-17-50.
520,017. IMPERIAL. Cl. 2. 1-17-50.
520,018. PATTY PAN. Cl. 46. 1-17-50.
520,031. MANDARIN. Cl. 21. 1-17-50.
520,040. GIFT TESTER. Cl. 46. 1-17-50.
520,041. CARNIVAL. Cl. 46. 1-17-50.
520,042. PARCELETTE. Cl. 19. 1-17-50.
520,043. WARO. Cl. 2. 1-17-50.
520,044. BOSTON. Cl. 46. 1-17-50.
520,045. ANICE. Cl. 39. 1-17-50.
520,047. DEC ART. Cl. 21. 1-17-50.
520,052. BRITTCO. Cl. 21. 1-17-50.
520,053. HENDEY. Cl. 23. 1-17-50.
520,056. CLEMENTS AND SHIELD DESIGN. Cl. 21. 1-17-50.
520,057. PERFECT SEAL. Cl. 21. 1-17-50.
520,060. RELAX-O. Cl. 18. 1-17-50.
520,062. KALEIDOSCOPE. Cl. 38. 1-17-50.
520,063. LUCKY BUCKS. Cl. 38. 1-17-50.
520,064. SANTIKE. Cl. 39. 1-17-50.
520,066. PET. Cl. 39. 1-17-50.
520,070. LITTLE DOTS PLAYWAYS. Cl. 38. 1-17-50.
520,071. MUSICAL STARLETS. Cl. 38. 1-17-50.
520,072. APC AND DESIGN. Cl. 19. 1-17-50.
520,075. INTACTEIN. Cl. 18. 1-17-50.
520,076. OLOTHORB. Cl. 18. 1-17-50.
520,078. FACTASIA. Cl. 38. 1-17-50.
520,080. GOODDING'S. Cl. 18. 1-17-50.
520,085. UPASERTINE. Cl. 18. 1-17-50.
520,090. GEORGE SUPER V. Cl. 23. 1-17-50.
520,093. LONGPOINT. Cl. 24. 1-17-50.
520,094. RITEWRAP. Cl. 2. 1-17-50.
520,096. THE HOUSE OF LIGHT AND REPRESENTATION OF HOUSE. Cl. 21. 1-17-50.
520,098. NALL. Cl. 23. 1-17-50.
520,099. ZENO'S RANCH SHOP AND DESIGN. Cl. 39. 1-17-50.
520,102. MAILLARD'S VELOUR CHEST. Cl. 2. 1-17-50.
520,106. NU-LOOK MISSY STYLED. Cl. 39. 1-17-50.
520,107. SNUGFIT. Cl. 39. 1-17-50.
520,108. "FEED-A-BIB". Cl. 39. 1-17-50.
520,113. RONDEAU'S MEDICINE AND DESIGN. Cl. 18. 1-17-50.
520,114. IT'S THE "KNOW HOW" THAT COUNTS. Cl. 42. 1-17-50.
520,115. BI-WAY. Cl. 2. 1-17-50.
520,116. BLAC-LINK. Cl. 21. 1-17-50.
520,118. "STYLITE". Cl. 3. 1-17-50.
520,119. "WE MEND ALL BUT BROKEN HEARTS". Cl. 103. 1-17-50.
520,121. E I INC AND DESIGN. Cl. 44. 1-24-50.
520,122. FARM TOWN AND DESIGN. Cl. 39. 1-24-50.
520,123. CLIFFORD. Cl. 27. 1-24-50.
520,124. RITE PITCH AND REPRESENTATION OF PROPELLER. Cl. 22. 1-24-50.
520,126. GREYLOCK. Cl. 1. 1-24-50.
520,127. ATHENIA 202 SQUIDDER U. S. A. WITHIN CIRCULAR DESIGN. Cl. 22. 1-24-50.
520,137. BOWL ROSES FLORAL MEMENTOS ETC. AND DESIGN. Cl. 1. 1-24-50.
520,142. MALACOOL. Cl. 39. 1-24-50.
520,143. TRIPLE PAY BRAND CHICKS TEXAS BRED AND REPRESENTATION OF CHICK AND STAR WITHIN CIRCULAR DESIGN. Cl. 1. 1-24-50.
520,154. VITANE. Cl. 15. 1-24-50.
520,159. ARROW. Cl. 5. 1-24-50.
520,160. BRUXSHU WITHIN DIAMOND DESIGN. Cl. 39. 1-24-50.
520,162. WED-LUCK. Cl. 28. 1-24-50.
520,173. BLAW-KNOX WITHIN DIAMOND DESIGN. Cl. 12. 1-24-50.
520,177. SHAF-TEE. Cl. 22. 1-24-50.
520,178. PERMACRETE HOMES AND REPRESENTATION OF HOUSE WITHIN RECTANGULAR DESIGN. Cl. 12. 1-24-50.
520,183. BABY LAND. Cl. 22. 1-24-50.
520,189. DEL-CROFT. Cl. 1. 1-24-50.
520,190. KIDDY CYCLIST. Cl. 22. 1-24-50.
520,191. CARWELL. Cl. 39. 1-24-50.
520,193. TACKLE-SMASHER. Cl. 22. 1-24-50.
520,194. AIR MAIL. Cl. 22. 1-24-50.
520,196. WEARTEX. Cl. 39. 1-24-50.
520,198. STREAMLINES AND DESIGN. Cl. 22. 1-24-50.
520,199. PLAYOLA. Cl. 22. 1-24-50.
520,202. H WITHIN CIRCULAR DESIGN. Cl. 22. 1-24-50.
520,203. REPRESENTATION OF PENNANT. Cl. 22. 1-24-50.
520,206. KUTWELL. Cl. 15. 1-24-50.
520,210. DY-DEE. Cl. 22. 1-24-50.
520,211. HIPP-O-DROME. Cl. 22. 1-24-50.

520,212. STA-VIS FLIGHT TESTED S AND REPRESENTATION OF AIRPLANE WITHIN CIRCULAR DESIGN. Cl. 15. 1-24-50.
520,215. ALL-DAY-PLAY. Cl. 22. 1-24-50.
520,216. BRAND-U. Cl. 39. 1-24-50.
520,218. TRYSTAN. Cl. 22. 1-24-50.
520,221. NORMAL TRED ARCH. Cl. 39. 1-24-50.
520,226. C-CRUISE WITHIN CIRCULAR DESIGN. Cl. 22. 1-24-50.
520,227. SLEEP ART AND REPRESENTATION OF PALETTE. Cl. 39. 1-24-50.
520,229. FROST LOOM. Cl. 39. 1-24-50.
520,231. FISHOCRAT CLICKS AND REPRESENTATION OF FISH AND FISHING EQUIPMENT. Cl. 22. 1-24-50.
520,232. MARVELLA ZENITH QUALITY. Cl. 28. 1-24-50.
520,233. MOORE'S AND M WITHIN SHIELD DESIGN. Cl. 22. 1-24-50.
520,235. THE ORIGINAL EUREKA. Cl. 44. 1-24-50.
520,237. TIPPO. Cl. 22. 1-24-50.
520,240. "BETTY BURP". Cl. 22. 1-24-50.
520,241. GEE TEENS. Cl. 39. 1-24-50.
520,246. FISTFLIP. Cl. 22. 1-24-50.
520,247. MAGIC-STRIDE. Cl. 39. 1-24-50.
520,248. SMOOTHIE. Cl. 22. 1-24-50.
520,257. POTTY BABY. Cl. 22. 1-24-50.
520,259. SAT-JAK. Cl. 39. 1-24-50.
520,263. "BEAR" BOTTOM AND REPRESENTATION OF CHILD HOLDING TOILET SEAT. Cl. 13. 1-24-50.
520,271. VF WITHIN CIRCULAR DESIGN. Cl. 51. 1-24-50.
520,273. KU-GLU. Cl. 5. 1-24-50.
520,275. ICEMASTER. Cl. 13. 1-24-50.
520,276. AUTOTHERM. Cl. 13. 1-24-50.
520,277. C F & I GOLDEN POPPY ETC. AND DESIGN. Cl. 13. 1-24-50.
520,279. GOLDEN POPPY. Cl. 13. 1-24-50.
520,280. SILHOUETTE OF CAMEL WITHIN CIRCULAR DESIGN. Cl. 13. 1-24-50.
520,281. MILEY. Cl. 13. 1-24-50.
520,286. "LOVE STORY". Cl. 28. 1-24-50.
520,287. BABE RUTH AND PORTRAIT DESIGN. Cl. 27. 1-24-50.
520,293. COBRINA. Cl. 28. 1-24-50.
520,294. APERO. Cl. 27. 1-24-50.
520,295. BASIS. Cl. 27. 1-24-50.
520,312. OMODOX AND DESIGN. Cl. 27. 1-24-50.
520,320. ROY EDWARDS. Cl. 38. 1-24-50.
520,322. RETAILING HOME FURNISHINGS. Cl. 38. 1-24-50.
520,325. GLEASON'S. Cl. 46. 1-24-50.
520,326. QUIK-EN-EZY. Cl. 30. 1-24-50.
520,329. GENUINE SHELTON. Cl. 3. 1-24-50.
520,331. PENN LITE. Cl. 3. 1-24-50.
520,332. STORE MODERNIZATION REPORTER. Cl. 38. 1-24-50.
520,333. ANN SHANNON. Cl. 38. 1-24-50.
520,334. WRESTLING AS YOU LIKE IT AND DESIGN. Cl. 38. 1-24-50.
520,337. PHILADELPHIA "COMFORT" HANDLE. Cl. 3. 1-24-50.
520,338. PHILADELPHIA "RESILIENT" HANDLE. Cl. 3. 1-24-50.

Section 18

90,456. MINNESOTA. Cl. 16. 2-25-13. Canc. 5463.
340,640. SKY CHIEF AND DESIGN. Cl. 21. 11-17-36. Canc. 6604.
356,837. TUSSET. Cl. 6. 5-10-38. Canc. 6596.
414,497. LATIN QUARTER. Cl. 6. 6-12-45. Canc. 6598.
429,880. NOB HILL. Cl. 39. 5-20-47. Canc. 6583.
443,112. J AND DESIGN. Cl. 13. 7-19-49. Canc. 6632.
589,691. LARAMA. Cl. 42. 5-11-54. Canc. 6630.

Vacation of Order of Cancellation

The order of cancellation dated July 20, 1955, cancelling Reg. No. 315,554, was inadvertently entered and has been vacated.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

68,502. MARLBORO. Cl. 17. 4-14-08. Philip Morris & Co., Ltd. Philip Morris Incorporated, New York, N. Y. Amended to appear:

Marlboro

392,975. QUICKY. Cl. 45. 1-20-42. Ansel P. Berry, doing business as Farr Company. Cott Beverage Corporation, New Haven, Conn. Amended to appear:

QUIKY

501,766. ROTHMOOR. Cl. 39. 8-24-48. Rothmoor Corporation, Chicago, Ill. Corrected: In the printed copy of the registration, "Section 2(f)" should be deleted.

614,096. GLASS HOUSE AND DESIGN. Cl. 100. 10-11-55. The Interstate Co., doing business as "Glass House," Chicago, Ill. Corrected: In column 2 of the printed copy of the registration, the last sentence should be deleted and the following inserted in lieu thereof: *First used June 1, 1952; in commerce June 1, 1952; December 19, 1937 as to "Glass House."*

620,732. RONETTE. Cl. 21. 2-7-56. "Ronette" Piezo-Electrische Industrie (Ronette P. E. I.) N. V., Amsterdam, Netherlands. Corrected: In lines 5 and 6 of the printed copy of the registration, "machine" should be *matching*.

620,940. PERFORMANCE. Cl. 42. 2-7-56. Burlington Mills Corporation, by change of name Burlington Industries, Inc., Greensboro, N. C. Corrected: In the certificate, line 13, after "to" *Burlington Industries, Inc., by change of name from* should be inserted, and in line 1 of the printed copy of the registration, after "(Delaware corporation)", *by change of name Burlington Industries, Inc.* should be inserted.

623,346. AMIGDORECTOL. Cl. 18. 3-20-56. Industrial Farmaceutica y de Especialidades S. A., Bilbao, Spain. Corrected: In the certificate, lines 2 and 14, and in line 1 of the printed copy of the registration, the word "de" appearing after "Industrial" should be deleted.

624,154. BEAULIEU BV AND DESIGN. Cl. 47. 3-27-56. Beaulieu Vineyard, San Francisco, Calif. Corrected: In column 2, line 4 of the printed copy of the registration, "G. Latour" should be *G. de Latour*.

TRADEMARK REGISTRATIONS—NEW CERTIFICATES

New Certificates issued under sections 7(c), 7(f), 7(g) of the Trademark Act of 1946 for the unexpired term of the original registrations.

176,506. VITAMINERAL. Cl. 46. Albert T. Peters, doing business as Vitamineral Products Co. 11-27-23. New Cert. Sec. 7(c), to Vitamineral Products Co., Peoria, Ill., 5-22-56.

376,849. VIAFERM. Cl. 6. Paul S. Casey, doing business as Vitamineral Products Company. 4-9-40. New Cert. Sec. 7(c), to Vitamineral Products Co., Peoria, Ill., 5-22-56.

377,488. VIA-D-MINERAL. Cl. 6. Paul S. Casey, doing business as Vitamineral Products Company. 5–7–40. New Cert. Sec. 7(c), to Vitamineral Products Co., Peoria, Ill., 5–22–56.

378,449. CON-O-MINERAL. Cl. 6. Paul S. Casey, doing business as Vitamineral Products Company. 6–11–40. New Cert. Sec. 7(c), to Vitamineral Products Co., Peoria, Ill., 5–22–56.

378,450. VIAMINERAL. Cl. 6. Paul S. Casey, doing business as Vitamineral Products Company. 6–11–40. New Cert. Sec. 7(c), to Vitamineral Products Co., Peoria, Ill., 5–22–56.

531,751. RIB-AD. Cl. 46. Vitamineral Products Company. 10–10–50. New Cert. Sec. 7(c), to Vitamineral Products Co., Peoria, Ill., 5–22–56.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 12

437,136. Mar. 9, 1948. Frederick B. Hill, Jr., d. b. a. S & W Moulding Company, Columbus, Ohio. Pub. by Miraplas Tile Company, Columbus, Ohio.

MIRAPLAS

For Plastic Wall Tile.

440,158. Aug. 17, 1948. Frederick B. Hill, Jr., d. b. a. S & W Moulding Company, Columbus, Ohio. Pub. by Miraplas Tile Company, Columbus, Ohio.

MIRACHROM

For Trims, Mouldings, and Edgings, Made of Aluminum and Steel Alloys, for Use on Linoleum and Wall Boards.

440,159. Aug. 17, 1948. Frederick B. Hill, Jr., d. b. a. S & W Moulding Company, Columbus, Ohio. Pub. by Miraplas Tile Company, Columbus, Ohio.

MIRALITE

For Trims, Mouldings, and Edgings, Made of Aluminum and Steel Alloys, for Use on Linoleum and Wall Boards.

CLASS 19

331,040. Dec. 24, 1935. Saginaw Stamping & Tool Company, Saginaw, Mich. Pub. by Saginaw Products Corporation, Saginaw, Mich.

RACEAWAY

For Trailers (Baggage), Utility Trucks, Barrel Trucks, Factory Trucks, and Vehicle Wheels.

CLASS 27

108,232. Jan. 18, 1916. Western Clock Co., Peru, Ill. Pub. by General Time Corporation, La Salle, Ill.

WESTCLOX

For Watches and Clocks.

CLASS 29

331,072. Dec. 24, 1935. Good Humor Corporation of America, Brooklyn, N. Y. Pub. by Good Humor Corporation, Brooklyn, N. Y.

Good Humor

For Toothbrushes.

CLASS 46

108,273. Jan. 25, 1916. Stokely Brothers & Co., Newport, Tenn. Pub. by J. Edward White, Vienna, Ga.



For Canned Vegetables.

214,834. July 6, 1926. The Kirk Milling Company, Findlay, Ohio. Pub. by registrant.

KIRK'S

For Wheat Flour, Pancake Flour, Corn Meal, Cereal (Wheat Grits), and Cake Flour.

214,835. July 6, 1926. The Kirk Milling Company, Findlay, Ohio. Pub. by registrant.

QUALITY
INN

For Pancake Flour Consisting of Buckwheat, Whole Wheat, Corn, and Mixtures Thereof With Wheat Flour.

217,569. Sept. 7, 1926. The Kirk Milling Company, Findlay, Ohio. Pub. by registrant.

NEW PROCESS

For Wheat Flour.

334,906. May 19, 1936. West's Products Co., Milwaukee, Wis. Pub. by Petpak Products Co., Milwaukee, Wis.



For Bird Seed.

383,762. Dec. 24, 1940. The Kirk Milling Company, d. b. a. Superior Food Products Co., Findlay, Ohio. Pub. by registrant.

brunch

For Pancake Flour.

CLASS 47

331,394. Jan. 7, 1936. Italian Swiss Colony, San Francisco, Calif. Pub. by registrant.



For Wines.

CLASS 51

331,137. Dec. 31, 1935. Good Humor Corporation of America, Brooklyn, N. Y. Pub. by Good Humor Corporation, Brooklyn, N. Y.

Good Humor

For Dentifrices.

LIST OF REGISTRANTS OF TRADEMARKS

A. R. F. Products, Inc., River Forest, Ill. 627,291–2, pub. 3–6–56. Cl. 21.
Addressograph-Multigraph Corp., Cleveland, Ohio. 627,540, pub. 3–6–56. Cl. 103.
Advance Automotive Products Co.: *See*—
Shade, Ralph A.
Aetna Plywood & Veneer Co., Chicago, Ill. 627,219, pub. 3–6–56. Cl. 12.
Aktiebolaget Akerblomstolen, Stockholm, Sweden. 627,384, pub. 3–6–56. Cl. 32.
Alamont Laboratories, Inc., Montgomery, Ala. 627,198, pub. 3–6–56. Cl. 6.
Alco of Texas, d. b. a. Alco of Texas, Inc., San Angelo, Tex. 627,428, pub. 3–6–56. Cl. 39.
Alco of Texas, Inc.: *See*—
Alco of Texas.
Aljon Mfg. Co., Inc., Roselle, N. J. 627,545. Cl. 12.
Allen Products Corp., Detroit, Mich. 520,072, canc. Cl. 19.
Allied Chemical & Dye Corp.: *See*—
National Aniline & Chemical Co., Inc.
Allied Chemical & Dye Corp., New York, N. Y. 627,217, pub. 3–6–56. Cl. 10.
American Air Filter Co., Inc., Louisville, Ky. 627,405, pub. 3–6–56. Cl. 34.
American Brake Shoe Co., New York, N. Y. 627,276, pub. 3–6–56. Cl. 21.
American Bulb Growers of California, Inc., San Francisco, Calif. 520,189, canc. Cl. 1.
American Character Doll Co., New York, N. Y. 520,257, canc. Cl. 22.
American Chicle Co., Long Island City, N. Y. 627,498, pub. 3–6–56. Cl. 46.
American Cyanamid Co., New York, N. Y. 627,187, pub. 3–6–56. Cl. 6.
American Drosa Disposal Corp., Oklahoma City, Okla. 627,216, pub. 3–6–56. Cl. 10.
American Furniture Co., Inc., Martinsville, Va. 627,391, pub. 3–6–56. Cl. 32.
American Hide and Leather Co., Boston, Mass. 627,168, pub. 3–6–56. Cl. 1.
American Hosiery Co.: *See*—
Dubin, Martin J.
American Maple Products Corp., Newport, Vt. 335,700, ren. 6–9–56. Cl. 46.
American Pamcor, Inc., Havertown, Pa. 627,280, pub. 3–6–56. Cl. 21.
American Playsuit Co. Inc., New York, N. Y. 519,928, canc. Cl. 39.
American Service Publishing Co., Inc., Arlington, Va. 627,416, pub. 3–6–56. Cl. 38.
America's Own Match Co., New York, N. Y. 407,427–8, canc. Cl. 9.
America's Own Match Co., New York, N. Y. 408,361, canc. Cl. 9.
Ames Co., Inc., Elkhart, Ind. 627,201–5, pub. 3–6–56. Cl. 6.
Amstel, Felix, d. b. a. Amstel Trading Co., New York, N. Y. 520,287, canc. Cl. 27.
Amstel Trading Co.: *See*—
Amstel, Felix.
Anaheim Citrus Fruit Association, Anaheim, Calif. 520,041, canc. Cl. 46.
Anderson, R. E., Aurora, Ill. 519,952, canc. Cl. 21.
Anice, New Canaan, Conn. 520,045, canc. Cl. 39.
Antibitol Co. Ltd.: *See*—
La Cie Antibitol Limitee.
Aquatrol Laboratories, Inc., Clifton, N. J. 627,530, pub. 3–6–56. Cl. 100.
Arctic Circle Co., Salt Lake City, Utah. 627,469, pub. 3–6–56. Cl. 46.
Arena, V., & Sons, Inc., Norristown, Pa. 627,484, pub. 3–6–56. Cl. 46.
Assembly Products, Inc., Chesterland, Ohio. 627,358, pub. 3–6–56. Cl. 26.
Associated Distributors Inc.: *See*—
Associated Products, Inc.
Associated Products, Inc., Chicago, Ill., by change of name from Associated Distributors, Inc., to Chen Yu, Inc., New York, N. Y. 519,841, canc. Cl. 51.
Astra Trading Corp., New York, N. Y. 627,350, pub. 3–6–56. Cl. 26.
Ateliers & Chantiers de la Manche, Dieppe (Seine Maritime), France. 627,314, pub. 3–6–56. Cl. 23.
Atlas Supply Co., Newark, N. J. 334,418, ren. 5–5–56. Cl. 29.
Atlas Supply Co., Newark, N. J. 334,790, ren. 5–12–56. Cl. 26.
Atlas Toy Co.: *See*—
Gold, Ira.
Audio-Video Corp., Westfield, N. J. 627,278, pub. 3–6–56. Cl. 21.
Automotive Safety Associates, Los Angeles, Calif. 627,272, pub. 3–6–56. Cl. 19.
Auto-Photo Co., Los Angeles, Calif. 627,354, pub. 3–6–56. Cl. 26.
Avon Products, Inc., New York, N. Y. 627,525, pub. 3–6–56. Cl. 51.
B. & P. Research & Sales Co.: *See*—
Boyse, Robert E.
Barker Brands, Inc., Sea Bright, N. J. 520,015, canc. Cl. 46.
Barkin, Levin & Co., Inc., New York, N. Y. 627,442, pub. 3–6–56. Cl. 39.
Baron, Lawrence, Inc., Yonkers, N. Y. 519,956, canc. Cl. 46.
Barricini, Inc., Long Island City, N. Y. 627,466, pub. 3–6–56. Cl. 46.
Barton, Clay, Whittier, Calif. 520,096, canc. Cl. 21.
Barton, Earl E., d. b. a. Western Cordage Co., Loveland, Colo. 627,208, pub. 3–6–56. Cl. 7.
Bates Shoe Co., Webster, Mass. 627,444, pub. 3–6–56. Cl. 39.
Bead Chain Mfg. Co., The, Bridgeport, Conn. 627,294, pub. 3–6–56. Cl. 22.
Beaulieu Vineyard, San Francisco, Calif. 624,154, cor. Cl. 47.
Becker, Paul, Springfield, Ill. 627,383, pub. 3–6–56. Cl. 32.
Beenstock, Jack N., d. b. a. Standard Kiddies Sportswear, Brooklyn, N. Y. 520,326, canc. Cl. 39.
Behrens, Armin A., New York, N. Y. 519,982, canc. Cl. 26.
Bel Fuse Inc., Union City, N. J. 627,284, pub. 3–6–56. Cl. 21.
Bell & Gossett Co., Morton Grove, Ill. 519,857, canc. Cl. 21.
Bell & Gossett Co., Morton Grove, Ill. 519,878, canc. Cl. 21.
Bell & Gossett Co., Morton Grove, Ill. 627,281, pub. 3–6–56. Cl. 21.
Bell & Gossett Co., Morton Grove, Ill. 627,407, pub. 3–6–56. Cl. 34.
Bendix Aviation Corp.: *See*—
Eclipse Aviation Corp.
Benson & Hedges, New York, N. Y. 627,210, pub. 6–28–55. Cl. 8.
Berg Sho-Glo Corp., Chicago, Ill. 627,289, pub. 3–6–56. Cl. 21.
Berry, Ansel P., d. b. a. Farr Co. Cott Beverage Corp., New Haven, Conn. 392,975. Am. 7(d). Cl. 45.
Bettker, Theodore A., d. b. a. Crestline Mobile Homes, Harbor City, Calif. 627,269, pub. 3–6–56. Cl. 19.
Biltmore Hats Ltd., Guelph, Ontario, Canada. 627,426, pub. 3–6–56. Cl. 39.
Blaw-Knox Co., Pittsburgh, Pa. 520,173, canc. Cl. 12.
Bloch Brothers Tobacco Co., The, Wheeling, W. Va. 627,241–2, pub. 3–6–56. Cl. 17.
Blue M Electric Co., Blue Island, Ill. 627,293, pub. 3–6–56. Cl. 21.
Bodnarchuk, Steve, Rockville, Md. 627,543, pub. 3–6–56. Cl. 107.
Bohn Aluminum & Brass Corp., Detroit, Mich. 249,460, canc. Cl. 23.
Bond Wedding Cups: *See*—
Holder, Lily F. B.
Bosch, Robert, Gesellschaft mit beschraenkter Haftung, Stuttgart-W, Germany. 627,382, pub. 3–6–56. Cl. 31.
Bonus Bucks of Du Bois, Inc., Du Bois, Pa. 627,535, pub. 3–6–56. Cl. 101.
Bonwit Teller, Inc., to Hoving Corp., New York, N. Y. 333,515, ren. 3–24–56. Cl. 51.
Borden Co., The, New York, N. Y. 627,489, pub. 3–6–56. Cl. 46.
Bourns Laboratories, Inc., Riverside, Calif. 627,364, pub. 3–6–56. Cl. 26.
Boyse, Robert E., d. b. a. B. & P. Research & Sales Co., Saginaw, Mich. 520,263, canc. Cl. 13.
Breitung, Albert, Chicago, Ill. 73,878, canc. Cl. 17.
Bric-Blox Co., Baltimore, Md. 627,298, pub. 3–6–56. Cl. 22.
Bridgeport Brass Co.: *See*—
Russell, W. A., & Co.
Brinks, Inc., Chicago, Ill. 627,536, pub. 3–6–56. Cl. 101.
British-American Tobacco Co., Ltd., Millbank, London, England. 627,244, pub. 3–6–56. Cl. 17.
British Petroleum Co. Ltd., The, London, England. 627,235, pub. 3–6–56. Cl. 15.
Brittains Ltd., Staffordshire, England. 520,052, canc. Cl. 21.
Broadcasters' Guild, Inc., Kansas City, Mo., and Hollywood, Calif. 520,014, canc. Cl. 21.
Brooks Shoe Mfg. Co., also d. b. a. Brooks Shoe Mfg. Co., Philadelphia, Pa. 520,160, canc. Cl. 39.
Browar Products, Inc., Elwell, Mich. 627,249, pub. 3–6–56. Cl. 18.
Brown, Albert W., Burbank, Calif. 627,463, pub. 3–6–56. Cl. 45.
Brown, Andrew H., d. b. a. Smokehouse Food Processing Plant, Lakeland, Fla. 627,507, pub. 3–6–56. Cl. 46.
Brown, H. H., Shoe Co., Inc., Worcester, Mass. 627,450, pub. 3–6–56. Cl. 39.
Brown & Williamson Tobacco Corp., Louisville, Ky. 627,243, pub. 3–6–56. Cl. 17.
Brunswick-Balke-Collender Co., The, Chicago, Ill. 520,273, canc. Cl. 5.
Buchheit, Bernard H., Greensburg, Pa. 520,063, canc. Cl. 38.
Buckeye Glove Co., Toledo, Ohio. 519,887, canc. Cl. 39.
Bulk Petroleum Corp., Chicago, Ill. 627,238, pub. 3–6–56. Cl. 15.
Bulova Watch Co., Inc., Flushing, N. Y. 627,330, pub. 3–6–56. Cl. 23.
Bulova Watch Co., Inc., Flushing, N. Y. 627,372, pub. 3–6–56. Cl. 27.
Bump-Air, Inc., Barberton, Ohio. 627,267, pub. 3–6–56. Cl. 19.
Burlington Industries, Inc.: *See*—
Burlington Mills Corp.
Burlington Mills Corp. by change of name Burlington Industries, Inc., Greensboro, N. C. 620,940, cor. Cl. 42.
C-Cruise Corp., West Salem, Oreg. 520,226, canc. Cl. 22.
Caldwell, Dick: *See*—
Caldwell, Richard W.

Caldwell, Richard W., d. b. a. Dick Caldwell and Patty Pan Produce Co., Raymondville, Tex. 520,018, canc. Cl. 46.
California Forms, Inc., Culver City, Calif. 627,454, pub. 3–6–56. Cl. 40.
California Wineries & Distilleries, Inc., Oakland, to Italian Swiss Colony, San Francisco, Calif. 336,251, ren. 6–30–56. Cl. 47.
California Wire Cloth Corp., The, Oakland, Calif. 520,277, canc. Cl. 13.
California Wire Cloth Corp., The, Oakland, Calif. 520,279, canc. Cl. 13.
Cannon Laboratories Inc., New York, N. Y. 356,837, canc. Cl. 6.
Carter, Hannah, Mamaroneck, N. Y. 520,333, canc. Cl. 38.
Case, W. A., and Son Mfg. Co., Buffalo, N. Y. 520,280, canc. Cl. 13.
Casey, Paul S., d. b. a. Vitamineral Products Co., to Vitamineral Products Co., Peoria, Ill. 377,488, new cert. Cl. 6.
Casey, Paul S., d. b. a. Vitamineral Products Co., to Vitamineral Products Co., Peoria, Ill. 378,449–50, new cert. Cl. 6.
Cato Perfumers, Chicago, Ill. 414,497, canc. Cl. 6.
Central States Paper & Bag Co., St. Louis, Mo. 627,172, pub. 5–31–55. Cl. 2.
Century Tool & Mfg. Co., Rockford, Ill. 627,227, pub. 3–6–56. Cl. 13.
Cerletti, Ugo, Rome, Italy. 627,246, pub. 3–6–56. Cl. 18.
Chamberlin, Joseph F., d. b. a. Chamberlin Metal Products, Chicago, Ill. 627,300, pub. 3–6–56. Cl. 22.
Chamberlin Metal Products: *See*—
Chamberlin, Joseph F.
Champion Co., The, Springfield, Ohio. 627,174, pub. 3–6–56. Cl. 2.
Chase-Shawmut Co., The, Newburyport, Mass. 520,116, canc. Cl. 21.
Chatham, Charles C., d. b. a. Chatham Pharmacal, Bisbee, Ariz. 627,254, pub. 3–6–56. Cl. 18.
Chatham Pharmacal: *See*—
Chatham, Charles C.
Chen Yu, Inc.: *See*—
Associated Products, Inc.
Childress, Frank B., New Market, Va. 627,561. Cl. 107.
Chique Foundations Corp., New York, N. Y. 520,066, canc. Cl. 39.
Church Mfg. Co., Inc., Middlebury, Ind. 519,926, canc. Cl. 19.
Clayton & Lambert Mfg. Co., Louisville, Ky. 627,399, pub. 3–6–56. Cl. 34.
Clements Mfg. Co., Chicago, Ill. 520,056–7, canc. Cl. 21.
Cointreau Corp.: *See*—
Societe a Responsabilite Limitee Cointreau.
Cole Chemical Co., St. Louis, Mo. 627,247, pub. 3–6–56. Cl. 18.
Coleman Cosmetics, Inc., Evansville, Ind. 627,520, pub. 3–6–56. Cl. 51.
Coleman, Joe, Florida, N. Y. 627,482, pub. 3–6–56. Cl. 46.
Colorado Fuel and Iron Corp., The, Denver, Colo. 627,209, pub. 3–6–56. Cl. 7.
Colorado Milling & Elevator Co., The: *See*—
St. Anthony Milling & Elevator Co., The.
Commercial Solvents Corp., New York, N. Y. 627,199, pub. 3–6–56. Cl. 6.
Congoleum-Nairn, Inc., Kearny, N. J. 627,274, pub. 3–6–56. Cl. 20.
Connally Implement Supply Co., Inc., Amarillo, Tex. 627,334, pub. 3–6–56. Cl. 23.
Consolidated Midland Corp., Katonah, N. Y. 627,259–61, pub. 3–6–56. Cl. 18.
Contessa, Ltd., New York, N. Y. 627,516–18, pub. 3–6–56. Cl. 51.
Continental Can Co. Inc., New York, N. Y. 627,179, pub. 3–6–56. Cl. 2.
Conway Import Co., Inc., Long Island City, N. Y. 336,436, ren. 7–7–56. Cl. 46.
Cormac Industries, Inc., New York, N. Y. 627,367, pub. 3–6–56. Cl. 26.
Coro, Inc., New York, N. Y. 627,554. Cl. 28.
Cotonificio Valle di Susa, Milan, Italy. 627,455–6, pub. 3–6–56. Cl. 42.
Cott Beverage Corp.: *See*—
Berry, Ansel P.
Crane Carrier Corp., Tulsa, Okla. 627,271, pub. 3–6–56. Cl. 19.
Cravenette Co., U. S. A., The, Hoboken, N. J. 627,197, pub. 3–6–56. Cl. 6.
Crestline Mobile Homes: *See*—
Bettker, Theodore A.
Crompton Co., Crompton, R. I. 627,457, pub. 2–28–56. Cl. 42.
Cucamonga Mesa Growers, Upland, Calif. 627,495–6, pub. 3–6–56. Cl. 46.
Cummins, George A., d. b. a. Fishocrat Creations, San Francisco, Calif. 520,231, canc. Cl. 22.
Cuno Engineering Corp., The, Meriden, Conn. 627,379–80, pub. 3–6–56. Cl. 31.
Curtiss-Wright Corp., Carlstadt, N. J. 627,169, pub. 3–6–56. Cl. 1.
Cutino Co., The, Kansas City, Mo. 265,356, canc. Cl. 29.
Dabrowski, Fred, d. b. a. The Greylock Sand & Gravel Co., Adams, Mass. 520,126, canc. Cl. 1.
Duvette Products, Inc., Clayton, Mo. 627,373, pub. 3–6–56. Cl. 28.
Davidson, R. M., Fort Worth, Tex. 520,099, canc. Cl. 39.
Davis Bros. Fisheries Co., Inc., Gloucester, Mass. 519,898, canc. Cl. 46.
Davis, Pearl L., d. b. a. Myone Seed Co., Grants Pass, Oreg. 627,501, pub. 3–6–56. Cl. 46.
Dayton Spice Mills Co., The, Dayton, Ohio. 46,365, canc. Cl. 46.
Deena Products Co., Chicago, Ill. 627,286, pub. 3–6–56. Cl. 21.
Delta Color Corp., New York, N. Y. 519,842, canc. Cl. 16.
Desert Chemical Co.: *See*—
Jorgensen, Carl S.
De Vita Fruit Co.: *See*—
De Vita, John A.
De Vita, John A., d. b. a. De Vita Fruit Co., Lima, Ohio. 627,491, pub. 3–6–56. Cl. 46.
Diamond Match Co., The, Chicago, Ill. 124,823, canc. Cl. 9.
Diamond Match Co., The, Chicago, Ill. 175,032, canc. Cl. 9.
Diamond Match Co., The, Chicago, Ill. 189,981, canc. Cl. 9.
Diamond Match Co., The, Chicago, Ill. 269,871, canc. Cl. 9.
Diamond Match Co., The, New York, N. Y. 306,715–16, canc. Cl. 9.
Diamond Match Co., The, New York, N. Y. 421,711–12, canc. Cl. 9.
Diamond T Motor Car Co., Chicago, Ill. 110,814–16, ren. 6–13–56. Cl. 19.
Dick, A. B., Co., Niles, Ill. 109,261, ren. 3–38–56. Cl. 26.
Dietz, Henry G., d. b. a. The Henry G. Dietz Co., Long Island City, N. Y. 627,290, pub. 3–6–56. Cl. 21.
Dietz, Henry G., Co., The: *See* —
Dietz, Henry G.
Dietsgen, Eugene, Co., Chicago, Ill. 627,413, pub. 7–26–55. Cl. 37.
DoAll Co., The, Des Plaines, Ill. 627,233, pub. 3–6–56. Cl. 15.
Dodge Mfg. Corp., Mishawaka, Ind. 627,320, pub. 3–6–56. Cl. 23.
Doetsch & Bauer Co., Chicago, Ill. 627,387, pub. 3–6–56. Cl. 32.
Dole Sales Co.: *See*—
Hawaiian Pineapple Co., Ltd.
Dow Chemical Co., The, Midland, Mich. 627,194, pub. 3–6–56. Cl. 6.
Dubin, Martin J., d. b. a. American Hosiery Co., Philadelphia, Pa. 627,424, pub. 3–6–56. Cl. 39.
Dulle, Cecil A., Fort Worth, Tex. 627,268, pub. 3–6–56. Cl. 19.
Dumarl Textile Co., Inc., New York, N. Y. 627,438, pub. 12–27–55. Cl. 39.
Duon, Inc., Coral Gables, Fla., and Dayton, Ohio. 520,271, canc. Cl. 51.
Duplate Corp., to Pittsburgh Plate Glass Co., Pittsburgh, Pa. 331,452, ren. 1–7–56. Cl. 33.
Duplate Corp., to Pittsburgh Plate Glass Co., Pittsburgh, Pa. 331,454, ren. 1–7–56. Cl. 33.
Durant, Clarence N., Bass River, Mass. 627,533, pub. 3–6–56. Cl. 101.
Duro-Matic Products Co., Hollywood, Calif. 520,203, canc. Cl. 22.
Dutchess Underwear Corp., New York, N. Y. 627,440, pub. 3–6–56. Cl. 39.
Eastman Kodak Co., Rochester, N. Y. 261,621, canc. Cl. 26.
Eastman Kodak Co., Rochester, N. Y. 627,360, pub. 3–6–56. Cl. 26.
Eastman Kodak Co., Flemington, N. J. 627,361, pub. 3–6–56. Cl. 26.
Eclipse Aviation Corp., East Orange, N. J., to Bendix Aviation Corp., Detroit, Mich. 335,020, ren. 5–19–56. Cl. 21.
Eddy-Bakeries, Inc., Helena, Mont. 627,464, pub. 8–18–53. Cl. 46.
Electrical Industries, Inc., Newark, N. J. 520,121, canc. Cl. 44.
Empire Petroleum Co., Denver, Colo. 519,881, canc. Cl. 16.
Empire Sporting Goods Mfg. Co., Inc., New York, N. Y. 419,079, canc. Cl. 22 and 39.
Endel Pants Co., Inc., New York, N. Y. 520,107, canc. Cl. 39.
Ener-C Co., The, Hartford, Conn. 627,252, pub. 3–6–56. Cl. 18.
Engineering Development Service: *See*—
Ryerson, Joseph L.
Enzo Jel Co., Sheboygan, Wis. 519,910, canc. Cl. 46.
Eriksen, Marius, Oslo, Norway. 520,198, canc. Cl. 22.
Esquire, Inc., Chicago, Ill., to Esquire, Inc. (1939), New York, N. Y. 332,149, ren. 2–4–56. Cl. 38.
Esquire, Inc., Chicago, Ill., to Esquire, Inc. (1939), New York, N. Y. 333,311, ren. 3–17–56. Cl. 38.
Esquire, Inc., Chicago, Ill., to Esquire, Inc. (1939), New York, N. Y. 333,539, ren. 3–24–56. Cl. 38.
Esquire, Inc. (1939): *See*—
Esquire, Inc.
Esso Standard Oil Co., Wilmington, Del., and New York, N. Y. 520,206, canc. Cl. 15.
Eureka Coppersmith and Plumbing Co., Inc., The, Baltimore, Md. 520,235, canc. Cl. 44.
Fairchild Publications, Inc.: *See*—
Women's Wear Co.
Falcon Alarm Co., Inc., Summit, N. J. 627,315, pub. 3–6–56. Cl. 23.
Famous Products Co.: *See*—
Valmor Products Co.
Fansteel Metallurgical Corp.: *See*—
Pfanstiehl Co.
Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. 627,188–90, pub. 3–6–56. Cl. 6.
Farmer Bros. Co., Los Angeles, Calif. 627,465, pub. 3–6–56. Cl. 46.
Farr Co.: *See*—
Berry, Ansel P.
Fear, Fred, & Co., Brooklyn, N. Y. 627,471, pub. 7–5–55. Cl. 46.
Federal Milling Co., Lockport, N. Y., to International Milling Co., Minneapolis, Minn. 110,094, ren. 5–2–56. Cl. 46.
Fernandez, Manuel L., to F. Pallcio y Compania, S. A., Habana, Cuba. 111,205, ren. 7–4–56. Cl. 17.

Field Enterprises, Inc., Chicago, Ill. 627,415, pub. 8–2–55. Cl. 38.
Filice & Perrelli Canning Co., Inc., Richmond, Calif. 333,985. ren. 4–14–56. Cl. 46.
Finlay Straus, Inc., to Finlay Straus, Inc. (1955), New York, N. Y. 335,054, ren. 5–19–56. Cl. 28.
Finlay Straus, Inc. (1955): *See*—
Finlay Straus, Inc.
First Industrial Corp., Freeport, Ill. 520,005, canc. Cl. 21.
Fishocrat Creations: *See*—
Cummins, George A.
Fleet of America, Inc., Buffalo, N. Y. 627,225, pub. 3–6–56. Cl. 12.
Fleetwood Co., The, Chicago, Ill. 627,257, pub. 3–6–56. Cl. 18.
Fleischaker and Baum Division of Noma Electric Corp.: *See*—
Noma Electric Corp.
Flotill Products, Inc., Stockton, Calif. 627,555. Cl. 46.
Food Center: *See*—
Graves, Fred W.
Forstmann Woolen Co., Passaic, N. J. 627,459–61, pub. 3–6–56. Cl. 42.
Fort Howard Paper Co., Green Bay, Wis. 627,414, pub. 2–7–56. Cl. 37.
Fox River Valley Knitting Co., Appleton, Wis. 627,427, pub. 3–6–56. Cl. 39.
Franco-Italian Packing Co., Terminal Island, Calif. 519,885, canc. Cl. 46.
Frank, Murray, and Associates, Chicago, Ill. 627,558. Cl. 51.
Franke, August L., d. b. a. Q-W Laboratories, Plainfield, N. J. 627,526, pub. 3–6–56. Cl. 51.
Freed Mfg. Co., Inc., New York, N. Y. 340,640, canc. Cl. 21.
Friedrich, Ed, Inc., San Antonio, Tex. 627,377, pub. 3–6–56. Cl. 31.
Friedrichs, E. H. & A. C., Co., New York, N. Y. 519,923, canc. Cl. 16.
Gamble-Skogmo, Inc., Minneapolis, Minn. 520,122, canc. Cl. 39.
Gastwirth Bros., New York, N. Y., and Philadelphia, Pa. 520,241, canc. Cl. 39.
Gate City Sash & Door Co., Fort Lauderdale, Fla. 627,222, pub. 3–6–56. Cl. 12.
Gelgy Chemical Corp., New York, N. Y. 627,253, pub. 3–6–56. Cl. 18.
General Motors Corp., Detroit, Mich. 627,265, pub. 3–6–56. Cl. 19.
General Motors Corp., Detroit, Mich. 627,311, pub. 3–6–56. Cl. 23.
General Time Corp.: *See*—
Western Clock Co.
General Time Corp., New York, N. Y. 627,371, pub. 3–6–56. Cl. 27.
General Tire & Rubber Co., The, Akron, Ohio. 627,220, pub. 3–6–56. Cl. 12.
Geniac Project, New York, N. Y. 627,355, pub. 3–6–56. Cl. 26.
George, Frank C., d. b. a. F. C. George Machine Co., Orlando, Fla. 520,090, canc. Cl. 23.
George, F. C. Machine Co.: *See*—
George, Frank C.
Gerber Products Co., Fremont, Mich. 627,472, pub. 3–6–56. Cl. 46.
Gilbert Togs: *See*—
Rosen Ben.
Gillette Co., The, d. b. a. The Toni Co., Boston, Mass. 627,462, pub. 3–6–56. Cl. 44.
Gillette Co., The, d. b. a. The Toni Co., Boston, Mass. 627,524, pub. 3–6–56. Cl. 51.
Gillette Co., The, d. b. a. The Toni Co., Boston, Mass. 627,528, pub. 6–21–55. Cl. 52.
Ginsberg, S., Sons, Baltimore, Md. 520,142, canc. Cl. 39.
Glas-Craft, Inc., Fort Worth, Tex. 627,547. Cl. 19.
"Glass House": *See*—
Interstate Co., The.
Gleason's Catering Service, Salem, Oreg. 520,325, canc. Cl. 46.
Glendora Lemon Growers Assn., Glendora, Calif. 188,211, canc. Cl. 46.
Glendora Lemon Growers Assn., Glendora, Calif. 196,915, canc. Cl. 46.
Glenmore Distilleries Co., Owensboro, to Glenmore Distilleries Co., Louisville, Ky. 335,882, ren. 6–16–56. Cl. 49.
Gold, Ira, to Atlas Toy Co., Chicago, Ill. 520,199, canc. Cl. 22.
Good Humor Corp.: *See*—
Good Humor Corp. of America.
Good Humor Corp. of America, by Good Humor Corp., Brooklyn, N. Y. 331,072, 12(c) pub. 5–22–56. Cl. 29.
Good Humor Corp. of America, by Good Humor Corp., Brooklyn, N. Y. 331,137, 12(c) pub. 5–22–56. Cl. 51.
Goodall-Sanford, Inc., Sanford, Maine. 589,691, canc. Cl. 42.
Goodding, R. A., College Point, N. Y. 520,080, canc. Cl. 18.
Goodyear Tire & Rubber Co., The, Akron, Ohio. 627,549. Cl. 19.
Gopher Grinders, Inc., Anoka, Minn. 627,316, pub. 3–6–56. Cl. 23.
Gorham Mfg. Co., Providence, R. I. 627,374, pub. 3–6–56. Cl. 28.
Gralnick Brothers, Inc., Philadelphia, Pa. 520,118, canc. Cl. 3.
Granat Bros., Inc., San Francisco, Calif. 520,162, canc. Cl. 28.
Grand Sheet Metal Products Co., Melrose Park, Ill. 627,550. Cl. 23.
Granite City Steel Co., Granite City, Ill. 627,232, pub. 3–6–56. Cl. 14.
Graves, Fred W., d. b. a. Food Center, Jacksonville, Tex. 627,485, pub. 3–6–56. Cl. 46.
Great Lakes Carbon Corp.: *See*—
Great Lakes Coal & Coke Co.
Great Lakes Coal & Coke Co., Chicago, Ill., to Great Lakes Carbon Corp., New York, N. Y. 334,584, ren. 5–5–56. Cl. 1.
Green Lane Hosiery Co., Inc., Green Lane, Pa. 627,448, pub. 3–6–56. Cl. 39.
Gregory & Read Co., Lynn, Mass. 520,247, canc. Cl. 39.
Greist Mfg. Co., The, New Haven, Conn. 627,327, pub. 3–6–56. Cl. 23.
Greylock Sand & Gravel Co., The: *See*—
Dabrowski, Fred.
Gross Furnace Mfg. Co., Roanoke, Va. 627,393, pub. 3–6–56. Cl. 34.
Grossman, I., & Son, New York, N. Y. 520,106, canc. Cl. 39.
Grover, Lyndon V., d. b. a. Grover Photo Products, Los Angeles, Calif. 627,283, pub. 3–6–56. Cl. 21.
Grover Photo Products: *See*—
Grover, Lyndon V.
Gruendler Crusher and Pulverizer Co., St. Louis, Mo. 627,331–3, pub. 3–6–56. Cl. 23.
Guarantee Mfg. Co.: *See*—
Schiffmann, Robert P.
Gunther Brewing Co., Baltimore, Md. 627,510, pub. 3–6–56. Cl. 48.
Harmony Co., The, Chicago, Ill. 627,412, pub. 3–6–56. Cl. 36.
Hart Schaffner & Marx, Chicago, Ill. 520,229, canc. Cl. 39.
Harvill Corp., Los Angeles, Calif. 627,381, pub. 3–6–56. Cl. 31.
Hawaiian Pineapple Co., Ltd., d. b. a. Dole Sales Co., San Francisco, Calif. 627,476, pub. 3–6–56. Cl. 46.
Heide Babe Products, Chicago, Ill. 520,108, canc. Cl. 39.
Heinz, H. J., Co., Pittsburgh, Pa. 627,473, pub. 3–6–56. Cl. 46.
Hemming, Thomas, & Son Ltd., Redditch, England. 520,202, canc. Cl. 22.
Hendey Machine Co., The, Torrington, Conn. 520,053, canc. Cl. 23.
Hershey Chocolate Corp., Hershey, Pa. 627,475, pub. 3–6–56. Cl. 46.
Hershey Creamery Co., Harrisburg, Pa. 627,499, pub. 3–6–56. Cl. 46.
Hertner Electric Co., The: *See*—
Hertner Electric and Mfg. Co., The.
Hertner Electric and Mfg. Co., The, to The Hertner Electric Co., Cleveland, Ohio. 111,638, ren. 7–25–56. Cl. 21.
Heublein, Inc.: *See*—
Leeman Stephen, Products Corp.
Hill, Frederick B., Jr., d. b. a. S & W Moulding Co., by Miraplas Tile Co., Columbus, Ohio. 437,186, 12(e) pub. 5–22–56. Cl. 12.
Hill, Frederick B., Jr., d. b. a. S & W Moulding Co., by Miraplas Tile Co., Columbus, Ohio. 440,158–9, 12(e) pub. 5–22–56. Cl. 12.
Hilt-A-Homa, Inc., Hinsdale, Ill. 627,301, pub. 3–6–56. Cl. 22.
Hilt Products Corp., The, South Norwalk, Conn. 627,295, pub. 3–6–56. Cl. 22.
Hodson Corp., The, Chicago, Ill. 334,493, ren. 5–5–56. Cl. 15.
Holder, Lily F. B., d. b. a. Bond Wedding Cups, Temple City, Calif. 627,376, pub. 3–6–56. Cl. 30.
Holgood Hosiery Mills, Hickory, N. C. 627,441, pub. 3–6–56. Cl. 39.
Holloway Electronics Corp., Fort Lauderdale, Fla. 627,285, pub. 3–6–56. Cl. 21.
Holophane Co., Inc., New York, N. Y. 627,400, pub. 3–6–56. Cl. 34.
Home Products Mfg. Co., Inc., Norfolk, Va. 520,093, canc. Cl. 24.
Hornstein-Newman, Inc., to Stratbury Mfg. Co., Galion, Ohio. 331,489, ren. 1–7–56. Cl. 39.
Houghton, E. F., & Co., Philadelphia, Pa. 108,250, ren. 1–25–56. Cl. 15.
Hoving Corp.: *See*—
Bonwit Teller, Inc.
Hudson Engineering Corp., Houston, Tex. 627,328, pub. 3–6–56. Cl. 23.
Hunt Heater Corp., Nashville, Tenn. 627,394, pub. 3–6–56. Cl. 34.
Hynson, Westcott & Dunning, Inc., Baltimore, Md. 627,255, pub. 3–6–56. Cl. 18.
Ideal Novelty & Toy Co., Hollis, N. Y. 520,237, canc. Cl. 22.
Ideal Novelty & Toy Co., Hollis, N. Y. 520,240, canc. Cl. 22.
Imperial Chemical (Pharmaceuticals) Ltd., Millbank, London, England. 627,258, pub. 3–6–56. Cl. 18.
Imperial Knife Co., Inc., Providence, R. I. 627,323, pub. 3–6–56. Cl. 23.
Imperial Publishers, Howells, Nebr. 519,973, canc. Cl. 38.
Industrial Dynamics Co.: *See*—
Nilges, William C.
Industrial Farmaceutica y de Especialidades S. A., Bilbao, Spain. 623,346, cor. Cl. 18.
Interchemical Corp., New York, N. Y. 519,861, canc. Cl. 16.
International Business Machines Corp., New York, N. Y. 627,359, pub. 3–6–56. Cl. 26.
International Business Machines Corp., New York, N. Y. 627,369, pub. 3–6–56. Cl. 26.
International Concatenated Order of Hoo-Hoo, Milwaukee, Wis. 627,532, pub. 3–6–56. Cl. 100.
International Flouncing Co., Inc., New York, N. Y. 627,452, pub. 3–6–56. Cl. 40.
International Latex Corp., Dover, Del. 627,429, pub. 12–27–55. Cl. 39.
International Milling Co.: *See*—
Federal Milling Co.
International Packings Corp., Bristol, N. H. 627,410, pub. 3–6–56. Cl. 35.

International Shoe Co., St. Louis, Mo. 335,292, ren. 6–2–56. Cl. 39.
International Silver Co., to The International Silver Co., Meriden, Conn. 332,185, ren. 2–4–56. Cl. 28.
International Silver Co., The: *See*—
International Silver Co.
International Silver Co., The, Meriden, Conn. 627,336, pub. 3–6–56. Cl. 23.
Interstate Co., The, d. b. a. "Glass House," Chicago, Ill. 614,096, cor. Cl. 100.
Interstate Concrete Products, Inc., Port Chester, N. Y. 520,017, canc. Cl. 2.
Interwoven Stocking Co., New Brunswick, N. J. 627,449, pub. 3–6–56. Cl. 39.
Iowa Soap Co., Burlington, Iowa. 308,577, canc. Cl. 52.
Ipsen Industries, Inc., Rockford, Ill. 627,397–8, pub. 3–6–56. Cl. 34.
Irish Preserves Ltd., Dublin, Ireland. 627,504, pub. 3–6–56. Cl. 46.
Italian Swiss Colony: *See*—
California Wineries & Distilleries, Inc.
Italian Swiss Colony, San Francisco, Calif. 331,394, 12(c) pub. 5–22–56. Cl. 47.
Jacobson, F., & Sons, Inc., New York, N. Y. 627,431, pub. 3–6–56. Cl. 39.
Jarecki Mfg. Co., Erie, Pa. 443,112, canc. Cl. 13.
Jay Original: *See*—
Mickam, B. H.
Jorgensen, Carl S., d. b. a. Desert Chemical Co., to Salsar Laboratories, Long Beach, Calif. 627,251, pub. 3–6–56. Cl. 18.
Joseph & Feiss Co., The, Cleveland, Ohio. 335,762, ren. 6–16–56. Cl. 39.
Justman, C. S., Brawley, Calif. 627,470, pub. 3–6–56. Cl. 46.
Kaleidoscope, Inc., New York, N. Y. 520,062, canc. Cl. 38.
Karagheusian, A. & M., Inc., New York, N. Y. 109,538, ren. 4–11–56. Cl. 42.
Karstens, Robert H., Pasadena, Calif. 520,137, canc. Cl. 1.
Kaufman, Sol, d. b. a. The Mayfair Knitting Mills, Baltimore, Md. 254,306, canc. Cl. 39.
Kaumagraph Co., Wilmington, Del. 519,922, canc. Cl. 38.
Kaumagraph Co., Wilmington, Del. 519,924, canc. Cl. 38.
Kay-Brunner Steel Products, Inc., Alhambra, Calif. 627,231, pub. 3–6–56. Cl. 14.
Kay Mfg. Corp., Brooklyn, N. Y. 627,389–90, pub. 3–6–56. Cl. 32.
Kay Packing Co., Baltimore, Md. 627,492, pub. 3–6–56. Cl. 46.
Kaynar Co., The, Los Angeles, Calif. 627,237, pub. 3–6–56. Cl. 15.
Keeshan, Robert J., West Islip, N. Y. 627,544, pub. 3–6–56. Cl. 107.
Kem Dog Food Co.: *See*—
Perk Foods Co.
Kemp, Edward F., Somerville, Mass. 265,174, canc. Cl. 46.
Kemp, Edward F., Somerville, Mass. 265,186, canc. Cl. 46.
Kelly, William, Milling Co., The, Hutchinson, Kans. 519,913, canc. Cl. 46.
Kensington Rubber Works, Inc., Brooklyn, N. Y. 627,436, pub. 3–6–56. Cl. 39.
Kerr, R. W., Plastic Co., Hastings, Nebr. 520,177, canc. Cl. 22.
Keson Industries: *See*—
Nosek, Roy F.
Key Brands Co., Los Angeles, Calif. 627,494, pub. 3–6–56. Cl. 46.
Kingston Products Co.: *See*—
Kingston, R. H., Jr.
Kingston, R. H., Jr., d. b. a. Kingston Products Co., New York, N. Y. 520,047, canc. Cl. 21.
Kirk Milling Co., The, Findlay, Ohio. 214,834–5, 12(c) pub. 5–22–56. Cl. 46.
Kirk Milling Co., The, Findlay, Ohio. 217,569, 12(c) pub. 5–22–56. Cl. 46.
Kirk Milling Co., The, d. b. a. Superior Food Products Co., Findlay, Ohio. 383,762, 12(c) pub. 5–22–56. Cl. 46.
Klenzade Products, Inc., Beloit, Wis. 627,195, pub. 3–6–56. Cl. 6.
Kochs Adlernähmaschinen Werke A. G., Bielefeld, Germany. 627,335, pub. 3–6–56. Cl. 23.
Koerner, John, Sons, Inc., Brooklyn, N. Y. 520,042, canc. Cl. 19.
Kohler, Fred, Chicago, Ill. 520,334, canc. Cl. 38.
Kraft Foods Co., Chicago, Ill. 627,474, pub. 5–31–55. Cl. 46.
Krasnow Belt Co., Inc., New York, N. Y. 520,216, canc. Cl. 39.
Kresge Department Store Corp., Newark, N. J. 264,659, canc. Cl. 39.
La Cie Antibitol Limitee, d. b. a. Antibitol Co. Ltd., Montreal, Quebec, Canada. 520,113, canc. Cl. 18.
Lady Leisure, Inc., Rochester, N. Y. 519,908, canc. Cl. 46.
Laird, Schober & Co., Inc., Haverhill, Mass. 627,446, pub. 3–6–56. Cl. 39.
Lancôme, S. A., Paris, France. 627,559. Cl. 51.
La Plant-Choate Mfg. Co., Inc., Cedar Rapids, Iowa. 519,947, canc. Cl. 19.
Lasar, Jesse, d. b. a. Jesse Lasar Co., New York, N. Y. 627,418, pub. 3–6–56. Cl. 39.
Lasar, Jesse, Co.: *See*—
Lasar, Jesse.
Lass, Ben, Clayton, Mo. 627,537, pub. 3–6–56. Cl. 101.
Laucks, I. F., Inc., Seattle, Wash., to Monsanto Chemical Co., St. Louis, Mo. 337,165, ren. 7–28–56. Cl. 16.
Leeman, Stephen, Products Corp., Teaberryport, West Nyack, N. Y., to Heublein, Inc., Hartford, Conn. 627,478, pub. 3–6–56. Cl. 46.
Lever Brothers Co., New York, N. Y. 627,529, pub. 1–10–56. Cl. 52.
Lincoln Electric Co., The, Cleveland, Ohio. 332,374, ren. 2–11–56. Cl. 14.
Lingle Refrigerator Co., Inc., Kansas City, Mo. 627,395, pub. 3–6–56. Cl. 34.
Lipschultz Brothers, St. Paul, Minn. 627,386, pub. 3–6–56. Cl. 32.
Lipton, Thomas J., Inc., Hoboken, N. J. 627,497, pub. 3–6–56. Cl. 46.
Lisboa, Miguel, New York, N. Y. 520,211, canc. Cl. 22.
Little Empress Coats, Inc., New York, N. Y. 627,425, pub. 3–6–56. Cl. 39.
Little Grey Gift Shop, New York, N. Y. 520,119, canc. Cl. 103.
Lo-Calory Food Corp., New York, N. Y. 627,480, pub. 3–6–56. Cl. 46.
Locke Mfg. Co., Lodi, Ohio. 627,228, pub. 3–6–56. Cl. 13.
Locker Publications Co.: *See*—
Whitehead, George W.
Lutterworth Periodicals Ltd., London, Redhill, England. 520,070, canc. Cl. 38.
M. & S. Doll Co., New York, N. Y. 520,183, canc. Cl. 22.
MacFadden Publications, Inc., New York, N. Y. 520,078, canc. Cl. 38.
Magic Mirror Beauty Salons, Inc., Los Angeles, Calif. 627,531, pub. 3–6–56. Cl. 100.
Maierform S. A., Geneva, Switzerland. 627,270, pub. 3–6–56. Cl. 19.
Maillard Corp., The, New York, N. Y. 520,102, canc. Cl. 2.
Mamiya Camera Co., Ltd.: *See*—
Mamiya Koki Kabushiki-Kaisha.
Mamiya Koki Kabushiki-Kaisha (in English style Mamiya Camera Co., Ltd.), Bunkyo-ku, Tokyo-to, Japan. 627,358, pub. 3–6–56. Cl. 26.
Mandel & Cohen, New York, N. Y. 236,898, canc. Cl. 39.
Mannequin Shoes, Inc., New York, N. Y. 627,437, pub. 3–6–56. Cl. 39.
Markson Bros., Boston, Mass. 627,553. Cl. 28.
Marthinsen, Mads, Michigan City, Ind. 520,275, canc. Cl. 13.
Maybach-Motorenbau G. m. b. H., Friedrichshafen, Germany. 627,546. Cl. 19.
Mayfair Knitting Mills, The: *See*—
Kaufman, Sol.
McHutchion, John, Ltd., The, Brantford, Ontario, Canada. 627,487, pub. 3–6–56. Cl. 46.
McKesson & Robbins, Inc., New York, N. Y. 627,181, pub. 3–6–56. Cl. 3.
McKesson & Robbins, Inc., New York, N. Y. 627,519, pub. 3–6–56. Cl. 51.
McKim Dental Service: *See*—
McKim, Orville E.
McKim, Orville E., d. b. a. McKim Dental Service, Port Chester, N. Y. 413,604, canc. Cl. 6.
McQuay, Inc., Minneapolis, Minn. 627,403, pub. 3–6–56. Cl. 34.
Meichior, Armstrong, Dessau Co. of Delaware, Inc., Ridgefield, N. J. 334,295, ren. 4–28–56. Cl. 31.
Menasha Wooden Ware Corp., Menasha, Wis. 520,115, canc. Cl. 2.
Merck & Co., Inc., Rahway, N. J. 627,262, pub. 3–6–56. Cl. 18.
Metallizing Engineering Co. Inc., Westbury, N. Y. 627,176, pub. 3–6–56. Cl. 2.
Meyer, Geo. J., Mfg. Co., Cudahy, Wis. 519,847, canc. Cl. 23.
Miami Beach Publishing Co., Miami Beach, Fla. 520,007, canc. Cl. 38.
Mickam, B. H., d. b. a. Jay Original, Cincinnati, Ohio. 627,303, pub. 3–6–56. Cl. 22.
Mid-Empire Corp., Milwaukee, Wis. 627,273, pub. 3–6–56. Cl. 19.
Mid-States Gummed Paper Co., Chicago, Ill. 520,159, canc. Cl. 5.
Midwest Milling Co., Denver, Colo., to The Quaker Oats Co., Chicago, Ill. 332,217, ren. 2–4–56. Cl. 46.
Miley, L. J., Co., Chicago, Ill. 520,281, canc. Cl. 18.
Milford Shoe Co., Milford, Mass. 336,385, ren. 7–7–56. Cl. 39.
Miller Brewing Co., Milwaukee, Wis. 627,467, pub. 1–24–56. Cl. 46.
Miller and Carrell Mfg. Co., Denver, Colo. 627,477, pub. 3–6–56. Cl. 46.
Miller Electric Mfg. Co., Appleton, Wis. 519,998, canc. Cl. 21.
Millside Farms, Inc., Delran, N. J. 331,010, ren. 12–24–55. Cl. 46.
Milwaukee Cheese Co., Milwaukee, Wis. 627,488, pub. 3–6–56. Cl. 46.
Minson Co., The, Moncks Corner, S. C. 627,527, pub. 3–6–56. Cl. 51.
Minnesota Linseed Oil Paint Co., Minneapolis, Minn. 90,456, canc. Cl. 16.
Minnesota Mining & Mfg. Co., St. Paul, Minn. 627,191, pub. 3–6–56. Cl. 6.
Minnesota Paints, Inc., Minneapolis, Minn. 627,239, pub. 3–6–56. Cl. 16.
Miraplas Tile Co.: *See*—
Hill, Frederick B., Jr.
Mobile Communications Co., Long Beach, Calif. 519,851, canc. Cl. 21.
Modern Toy Co., Chicago, Ill. 627,512, pub. 3–6–56. Cl. 50.
Mogens Canning Co. A/S, Stavanger, Norway. 627,479, pub. 3–6–56. Cl. 46.
Mohawk Tools, Inc., Montpelier, Ohio. 627,312, pub. 3–6–56. Cl. 23.
Molica, J. P., d. b. a. J. P. Molica Co., Delano, Calif. 627,493, pub. 3–6–56. Cl. 46.
Molica, J. P., Co.: *See*—
Molica, J. P.

Monsanto Chemical Co.: *See*—
Laucks, I. F., Inc.
Montex Oil & Specialty Co.: *See*—
Scott, Thurman F.
Moody Farms Co., Bakersfield, Calif. 627,486, pub. 3–6–56. Cl. 46.
Moore-Bilt Products Co.: *See*—
Moore Butcher Supply Co.
Moore Business Forms, Inc., Niagara Falls, N. Y. 627,324, pub. 3–6–56. Cl. 23.
Moore Butcher Supply Co., d. b. a. Moore-Bilt Products Co., Salt Lake City, Utah. 627,297, pub. 3–6–56. Cl. 22.
Moore, P. O., Inc., New York, N. Y. 627,175, pub. 3–6–56. Cl. 2.
Moore, William S., d. b. a. Moore's of Ohio, Newark, Ohio. 519,988, canc. Cl. 24.
Moore, William S., d. b. a. Moore's of Ohio, Newark, Ohio. 520,233, canc. Cl. 22.
Moore's of Ohio: *See*—
Moore, William S.
Morris, C. W., Co., Detroit, Mich. 627,325, pub. 3–6–56. Cl. 23.
Morris, Philip, & Co., Ltd. Philip Morris Inc., New York, N. Y. 68,502. Am. 7(d). Cl. 17.
Morris, Philip, Inc.: *See*—
Morris, Philip, & Co., Ltd.
Morton Salt Co., Chicago, Ill. 627,192, pub. 3–6–56. Cl. 6.
Mountain View Fruit Association, d. b. a. Mountain View Orange and Lemon Growers Association, Upland, Calif. 519,916, canc. Cl. 46.
Mountain View Orange and Lemon Growers Association: *See*—
Mountain View Fruit Association.
Movielab Film Laboratories, Inc., to Rainbowlab, Inc., New York, N. Y. 627,542, pub. 3–6–56. Cl. 106.
Murphy, A. A., & Co., Inc., St. Paul, Minn. 627,538, pub. 3–6–56. Cl. 102.
Murphy, Brill and Sahner, Inc., New York, N. Y. 627,445, pub. 3–6–56. Cl. 39.
Mutual Buying Syndicate, Inc., New York, N. Y. 520,196, canc. Cl. 39.
Myone Seed Co.: *See*—
Davis, Pearl L.
Nail Corp., The, St. Charles, Ill. 520,098, canc. Cl. 23.
Natelson, Alvin, Amityville, N. Y. 520,227, canc. Cl. 39.
National Aniline & Chemical Co., Inc., to Allied Chemical & Dye Corp., New York, N. Y. 336,900, ren. 7–21–56. Cl. 52.
National Aniline & Chemical Co., Inc., to Allied Chemical & Dye Corp., New York, N. Y. 336,901, ren. 7–21–56. Cl. 6.
National Nugrape Co., Atlanta, Ga. 332,223, ren. 2–4–56. Cl. 45.
Neva-Wet Corp. of America, Inc., New York, N. Y., to Royce Chemical Co., Carlton Hill, N. J. 336,434, ren. 7–7–56. Cl. 6.
New England Knitting Co., The, to Winsted Hosiery Co., Winsted, Conn. 627,451, pub. 3–6–56. Cl. 39.
New York American, Inc., New York, N. Y. 219,452, canc. Cl. 38.
Nicholson File Co., Providence, R. I. 336,235, ren. 6–30–56. Cl. 23.
Nikka Rubber Co., Ltd., Kurume, Japan. 627,422, pub. 3–6–56. Cl. 39.
Nilges, William C., d. b. a. Industrial Dynamics Co., Bay Village, Ohio. 627,339, pub. 3–6–56. Cl. 23.
Nob Hill of California, San Francisco, Calif. 429,880, canc. Cl. 39.
Noma Electric Corp., d. b. a. Fleischaker and Baum Division of Noma Electric Corp., New York, N. Y. 520,210, canc. Cl. 22.
Norcross, Inc., New York, N. Y. 519,990–1, canc. Cl. 38.
North Platte Rendering Co., d. b. a. Star Sales Co., North Platte, Nebr. 627,506, pub. 3–6–56. Cl. 46.
Northwestern Distributing Co., Inc., Mason City, Iowa. 627,481, pub. 3–6–56. Cl. 46.
Nosek, Roy F., d. b. a. Keson Industries, Berwyn, Ill. 627,326, pub. 3–6–56. Cl. 23.
Nutone, Inc., Cincinnati, Ohio. 519,931, canc. Cl. 21.
Oakes Mfg. Co., Inc., The, Tipton, Ind. 627,513, pub. 3–6–56. Cl. 50.
Oakite Products, Inc., New York, N. Y. 627,340, pub. 3–6–56. Cl. 23.
Oetker, Dr. August, to Dr. August Oetker (1942), Bielefeld, Germany. 330,318, ren. 11–26–55. Cl. 46.
Oetker, Dr. August, (1942): *See*—
Oetker, Dr. August.
Office Temporaries, Inc., New York, N. Y. 627,534, pub. 3–6–56. Cl. 101.
Ohio Dress and Coat Co., The, to Schaeffer Garment Co., Cincinnati, Ohio. 332,464, ren. 2–18–56. Cl. 39.
Oil Country Equipment Co., Inc., Houston, Tex. 627,338, pub. 3–6–56. Cl. 23.
Oil Metering and Processing Equipment Corp., Houston, Tex. 627,351, pub. 3–6–56. Cl. 26.
Olsen, Gene, Corp., The, Adrian, Mich. 627,341, pub. 3–6–56. Cl. 23.
Omodox Watch G. m. b. H., Lengnau, Switzerland. 520,312, canc. Cl. 27.
Orange County Valencia Association, Anaheim, Calif. 519,920, canc. Cl. 46.
Pabst Brewing Co.: *See*—
Premier-Pabst Corp.
Palicio, F., y Compania, S. A.: *See*—
Fernandez, Manuel L.
Panavision Inc., Los Angeles, Calif. 627,362, pub. 3–6–56. Cl. 26.
Parker Brothers, Inc., Salem, Mass. 627,304, pub. 3–6–56. Cl. 22.
Parker Brothers, Inc., Salem, Mass. 520,194, canc. Cl. 22.
Patty Pan Produce Co.: *See*—
Caldwell, Richard W.
Pautzke Bait Co.: *See*—
Williams, Otto K.
Peach Ridge Fruit Growers Association, Sparta, Mich. 627,483, pub. 3–6–56. Cl. 46.
Peck & Peck, New York, N. Y. 520,191, canc. Cl. 39.
Penn Luggage Co., Philadelphia, Pa. 520,331, canc. Cl. 3.
Perk Foods Co., d. b. a. Kem Dog Food Co., Chicago, Ill. 627,505, pub. 3–6–56. Cl. 46.
Peters, Albert T., d. b. a. Vitamineral Products Co., to Vitamineral Products Co., Peoria, Ill. 176,506, new cert. Cl. 46.
Petpak Products Co.: *See*—
West's Products Co.
Pevely Dairy Co., St. Louis, Mo. 335,750, ren. 6–16–56. Cl. 46.
Pevely Dairy Co., St. Louis, Mo. 386,287, ren. 6–30–56. Cl. 46.
Pfanstiehl Co., to Fansteel Metallurgical Corp., North Chicago, Ill. 109,949, ren. 4–25–56. Cl. 21.
Pfeiffer Co.: *See*—
Pfeiffer, S., Mfg. Co.
Pfeiffer, S., Mfg. Co., St. Louis, Mo., now by change of name The Pfeiffer Co. 627,263, pub. 3–6–56. Cl. 18.
Philadelphia Brief Case Co., Philadelphia, Pa. 520,337–8, canc. Cl. 3.
Phillips Mfg. Co., Chicago, Ill. 627,313, pub. 3–6–56. Cl. 23.
Picon & Cie, Levallois-Perret, Seine, France. 627,511, pub. 3–6–56. Cl. 49.
Picot Laboratories, Inc., Mount Vernon, N. Y. 333,292, ren. 3–17–56. Cl. 46.
Pioneer Engineering Works, Inc., Minneapolis, Minn. 627,329, pub. 3–6–56. Cl. 23.
Pioneer Equipment Sales Co., Pasadena, Calif. 627,282, pub. 3–6–56. Cl. 21.
Pittsburgh Plate Glass Co.: *See*—
Duplate Corp.
Pittsburgh Plate Glass Co., Pittsburgh, Pa. 331,559, ren. 1–14–56. Cl. 23.
Plastic Materials, Inc., Westbury, N. Y. 627,170, pub. 3–6–56. Cl. 1.
Polls & Hagan, Edinburg, Tex. 519,853, canc. Cl. 46.
Pollak, Henry, Inc., New York, N. Y. 519,965, canc. Cl. 39.
Poloron Products, Inc., New Rochelle, N. Y. 627,224, pub. 3–6–56. Cl. 12.
Porter, N., Saddle and Harness Co., Phoenix, Ariz. 520,329, canc. Cl. 3.
Porto-Clinic Instruments, Inc., New York, N. Y. 627,365, pub. 3–6–56. Cl. 26.
Power Development Co., Avon, Ohio. 627,337, pub. 3–6–56. Cl. 23.
Premier-Pabst Corp., Peoria Heights, to Pabst Brewing Co., Chicago, Ill. 333,509, ren. 3–24–56. Cl. 46.
Premier-Pabst Corp., Peoria Heights, to Pabst Brewing Co., Chicago, Ill. 333,511, ren. 3–24–56. Cl. 46.
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U. S. GOVERNMENT PRINTING OFFICE: 0—1956

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
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NOTICES

Disciplinary Action Under Rule 348 in the Matter of Charges Preferred Against Edward C. Healy

Under the provisions of Rule 348, a hearing on the above matter was held in San Francisco, California, on January 17, 1956, before a Hearing Examiner because of respondent's inability to make an appearance in the Patent Office, Washington, D. C., where such hearings are ordinarily conducted.

The Hearing Examiner found that the evidence established that respondent failed and neglected to process two patent applications although paid to do so; delayed the filing of a third application for more than a year after he was fully paid for this service; and made untruthful statements to one of the first applicants regarding the status of the latter's application, knowing that the statements were untrue.

The Hearing Examiner's findings of fact have been accepted as completely consistent with the evidence adduced and his recommended suspension of respondent for a period of one year would be fully warranted as a penalty for respondent's misconduct and deception, notwithstanding the mitigating circumstances taken into consideration by the Hearing Examiner.

A decision has been rendered by the Assistant Commissioner holding that proceedings under Rule 348 are not punitive in character but rather are intended to compel compliance with the rules of this Office and the laws, with the result that a wide discretion is permitted in the consideration of mitigating circumstances. In the exercise of this discretion, the Assistant Commissioner has given full weight to the fact that respondent's age and health are such that a suspension from practice for any substantial period of time would be tantamount to disbarment. It is stated in the decision that compliance with the rules can be exacted in this instance without depriving respondent of his means of livelihood or denying him the opportunity to demonstrate his adherence to the rules in the future. Accordingly, the Examiner's recommendation that respondent be suspended for one year has not been adopted, although the existence of adequate grounds for such suspension is recognized. However, respondent's misconduct and deception were found to fully merit censure, and the respondent, Edward C. Healy, was severely reprimanded and censured for misconduct detrimental to his client's interest, falsity, and deception of a client.

It is ordered in the decision of the Assistant Commissioner that the charges made against the respondent, respondent's answer to the charges, the transcript of the hearing, the Hearing Examiner's recommended decision and the final decision in the matter be made of record in respondent's file where it will be considered in dealing with any evidence of respondent's misconduct which may come to the attention of this Office in the future. It is further ordered that the substance of the decision be published in the OFFICIAL GAZETTE of the United States Patent Office.

May 9, 1956.

Adjudicated Patents

(D. C. Nebr.) Chenault Patent No. 2,069,873 (99—9), for process for the preservation of organic material. Claims 7–10 *Held* invalid. *Chenault* v. *Nebraska Farm Products, Inc.*, 138 F. Supp. 772; 108 USPQ 208.

(Ct. Cl.) Hineline Patent No. 2,366,621 (343—12), for altitude indicating system, *Held* not infringed. *Hineline* v. *U. S.*, 138 F. Supp. 866; 108 USPQ 441.

Disclaimer

2,649,564.—*Frederick William Meredith*, London, England. AUTOMATIC CONTROL SYSTEMS. Patent dated Aug. 18, 1953. Disclaimer filed Apr. 25, 1956, by the assignee, *Minneapolis-Honeywell Regulator Company*.

Hereby enters this disclaimer to claims 13, 14, 15, and 16 of said patent.

Patents Available for Licensing or Sale

2,730,365. Stick Horse Toy. Caesar O. Godoy, 912 W. First St., Los Angeles 12, Calif.

2,736,213. Combination Planetary Gear and Fluid Brake Type Transmission. David Farjon, Mercuriusstraat 22, Willemstad, Curacao, Netherlands Antilles.

2,739,479. Pocket Hygrometer. Hiram M. Dean, 5109 Manila Ave., Oakland 9, Calif.

2,742,956. Combination Walking Cane, Chair, and Clothing Tree. Salvatore J. Cannata, 175 West Palisade Ave., Englewood, N. J.

2,743,551. Drafting Table Paper Crease-Proof Attachment. Chong-Hung Zee, 160 Claremont Ave., Apt. 3H, New York 27, N. Y.

New Applications Received During March 1956

Patents	6,583
Designs	445
Plants	3
Reissues	19
Total	7,050

Issue

Patents	1,203—No.	2,747,185 to No.	2,748,387, incl.
Designs	103—No.	177,788 to No.	177,890, incl.
Plants	1—No.	1,480	
Reissues	5—No.	24,156 to No.	24,160, incl.
Total	1,312		

CONDITION OF PATENT APPLICATIONS AS OF MARCH 30, 1956

Total number of pending applications (excluding Designs)	219,645
Total number of pending Design applications	6,977
Total number of applications awaiting action (excluding Designs)	123,900
Total number of Design applications awaiting action	2,491
Date of oldest new application	Nov. 23, 1954
Date of oldest amended application	Nov. 6, 1953

ROSA, M. C., Director, Patent Examining Operation

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 44, 46, 48, 51, 54, 69, 70
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 10, 18, 22, 28, 45, 47.
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE.	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	3-7-55	6-14-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	6-17-55	1-13-55
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	7-13-55	3-29-54
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	6-10-55	8-6-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	6-21-55	12-10-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic Amides, Amines, General Organic Processes	5-18-55	6-9-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	7-6-55	3-4-54
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	2-24-55	6-1-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	6-13-55	6-1-54
10. (VI) BOYD, S., Firearms; Ordnance; Ammunition; Explosive Charge Making	12-17-54	1-20-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	7-13-55	9-8-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	4-4-55	11-17-53
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	3-23-55	2-10-54
14. (III) MANIAN, J. C. (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	3-11-55	4-7-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	7-1-55	4-7-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	5-16-55	2-2-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	4-27-55	7-19-54
18. (VI) BLUM, A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	2-15-55	5-14-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	6-3-55	7-8-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	6-7-55	5-20-54
21. (III) MADER, R. C., Textiles	7-5-55	4-20-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	6-17-55	7-12-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	11-23-54	11-6-53
24. (III) DRACOPOULOS, P. T. (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	5-10-55	12-2-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	7-1-55	7-2-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	7-15-55	1-3-55
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	7-6-55	10-8-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	5-26-55	8-24-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	4-12-55	1-3-55
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	9-19-55	9-13-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	4-21-55	10-28-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	6-17-55	12-3-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	7-13-55	3-9-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	6-10-55	3-8-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	6-6-55	10-20-54
36. (V) McFADYEN, A. D., Measuring and Testing	4-7-55	1-31-55
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	6-9-55	10-6-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g., Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	7-1-55	11-1-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	7-25-55	5-11-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	7-1-55	1-3-55
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	4-1-55	4-14-54
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	1-10-55	7-19-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	5-18-55	7-15-54
44. (II) EVANS, N. H., Antennas; Automatic Pilots; Directive Radio Systems; Mass Spectrometers; Nuclear Batteries; Nuclear Resonant Devices; Neutron Detecting and Measuring; Radar; Sonar; Torpedoes	1-3-55	1-28-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	6-14-55	1-6-55
46. (II) WILES, W. G., Actinide Series (e. g., fissionable) Compounds; Sintered Metal Stock; Explosives; Power Plants (part); Metallurgy (part); Blasting; Surgery (part); Radioactive Medicines; Irradiation Chemistry; Carbon Chemistry (part)	3-10-55 7-13-55	8-20-54 12-6-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles		
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	3-10-55	4-12-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	5-2-55	10-1-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	6-20-55	4-15-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	6-24-55	4-2-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	5-11-55	7-15-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	7-15-55	12-2-54
54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	4-25-55	4-30-54
55. (VII) KLINE, J. R., Surgery; Dentistry; Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	3-11-55	3-24-54
56. (I) KEELY, J. E. (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	7-1-55	12-20-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	10-11-55	8-11-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	7-1-55 5-19-55	4-5-54 5-19-54
59. (I) HENKIN, B. (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	6-10-55	1-3-55
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	6-7-55	10-1-54
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	6-10-55	7-6-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	6-29-55	4-26-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	5-16-55	4-6-54
66. (V) LISANN, I. (BUCHLER, M., acting), Geometric Instruments; Automatic Weighing Scales; Acoustics	5-10-55	2-28-55
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	5-16-55	11-27-53
60. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators		
70. (II) BREWRINK, J. L., Security laws administration.	6-1-55	1-11-55
CLASS. DIVS. I (VII) LANHAM, B. E., Paper Making	7-1-55	2-2-55
CLASS. DIVS. II (II) LADY, J. E., Oscillators; Amplifiers	8-29-55	1-31-55
CLASS. DIVS. III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	6-24-55	12-27-54
CLASS. DIVS. IV (VI) SMITH (Mrs.), M. P., Harrows; Plows; Earth Rollers	7-1-55	6-2-55
CLASS. DIVS. V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	8-18-55	9-22-55
DESIGNS (III) A—BREHM, G. L., Industrial Arts	8-5-55	9-12-55
DESIGNS (III) B—GRAY, M. A., Household, Personal and Fine Arts		

The following divisions have been abolished: 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during May 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1955*.

Patents ..... Numbers 2,156,257 to 2,160,804, inclusive

DECISIONS IN PATENT AND TRADEMARK CASES

U. S. Court of Customs and Patent Appeals

MAGNAFLUX CORP. v. SONOFLUX CORP.

No. 6193. *Decided April 3, 1956*

[— F.2d —: — USPQ —]

1. APPEAL TO THE U. S. COURT OF CUSTOMS AND PATENT APPEALS—ABANDONED REASON OF APPEAL.

Held that a matter raised in a reason of appeal, but not discussed in appellant's brief, might properly be assumed to have been abandoned.

2. TRADEMARKS—CONFUSING SIMILARITY—PART OF MARK IS DESCRIPTIVE.

"While the question of confusing similarity of marks is to be determined from the marks as a whole, it is also proper to note that if a part of the mark is descriptive in nature, and has little or no trademark significance, it cannot be regarded as dominant and will generally be given less weight than more arbitrary portions of the marks."

3. SAME—SAME—SAME.

"Clearly appellant's registration and use of a trademark including the syllable 'flux,' for an apparatus whose operation depends upon magnetic flux, should not preclude others who market the same type of device from employing that syllable as a portion of their marks."

4. SAME—SAME—"MAGNAFLUX" AND "SONOFLUX."

Held that the marks "Magnaflux" and "Sonoflux," applied to devices for detecting flaws in magnetic bodies, are not confusingly similar.

5. SAME—SAME—"SONOFLUX" AND "SONIZON."

"Regardless of the exact extent to which sound vibrations play a part in the operation of appellee's device, we are of the opinion that the syllable 'Son' in the mark 'Sonoflux,' as well as in 'Sonizon,' would be generally understood to be suggestive of sound, and would, therefore, be somewhat descriptive in nature. * * * therefore, that syllable is not as significant in determining the question of confusing similarity as it would be if it were purely arbitrary."

APPEAL from the Patent Office. Cancellation No. 5,916.

AFFIRMED.

Hill, Sherman, Meroni, Gross & Simpson (*Carlton Hill* and *Wm. T. Estabrook* of counsel) for Magnaflux Corp.

Thomas O. Arnold (*Hutcheson, Taliaferro & Hutcheson* of counsel) for Sonoflux Corp.

Before JOHNSON, *Acting Chief Judge*, and WORLEY and JACKSON (retired), *Associate Judges*

WORLEY, *J.*, delivered the opinion of the court.

This is an appeal from the decision of the Assistant Commissioner of Patents affirming the decision of the Examiner of Interferences, dismissing a petition by appellant, Magnaflux Corporation, for cancellation of Registration No. 558,222, granted to appellee, Sonoflux Corporation on April 29, 1952, for the trademark "Sonoflux," for "Vibro-Magnetic Inspection Instrument To Detect Flaws in Ferro-Magnetic Materials."

The petition for cancellation was predicated on prior use and registration by petitioner of the trademark "Magnaflux" applied to "Electrical Apparatus for Magnetic Testing of Metal Articles" and "Metallic Comminuted Paramagnetic Material for Use in Locating Defects in Magnetic Bodies," as well as prior use of the trademark "Sonizon" for "Apparatus for Measuring Wall Thickness From One Side Only by Means of Ultrasonics."

As stated by the Examiner of Interferences, there is no question of priority, petitioner having proved ownership of the registrations and prior use of the marks relied upon. That proof was not questioned by the respondent. The sole issue, therefore, is whether the respective marks, as applied to the goods of the parties, are confusingly similar.

The record contains evidence of use by appellant of "Magnaflux Sonizon" in combination. The Examiner of Interferences pointed out that such use had not been pleaded in the petition for cancellation, and held that the evidence did not unequivocally establish such a use in combination prior to appellee's use of "Sonoflux."

[1] The decision of the Assistant Commissioner does not refer to the use of the combination of marks and, while appellant's reasons of appeal to this court allege error in the failure to sustain the petition for cancellation on the basis of such use, the matter is not discussed in appellant's brief here and may, therefore, properly be assumed to have been abandoned (*Paulson* v. *Hyland*, 30 CCPA (Patents) 1150, 136 F.2d 695, 58 USPQ 275), but in any event, we think the holding of the Examiner of Interferences is correct. Accordingly, the question as to whether the combination "Magnaflux Sonizon" is confusingly similar to "Sonoflux" will not be considered.

The goods to which appellant's mark "Magnaflux" and appellee's mark "Sonoflux" are applied are substantially identical, being, in each case, a device for detecting flaws in magnetic bodies by magnetizing the bodies and applying to them a finely divided magnetic material which is caused to assume a form corresponding to any defect in the body. Since that result is obtained through the instrumentality of magnetic flux, it would seem the "flux" portion of each of the marks under consideration has a descriptive significance.

[2] It is well settled that, while the question of confusing similarity of marks is to be determined from the marks as a whole, it is also proper to note that if a part of the mark is descriptive in nature, and has little or no trademark significance, it cannot be regarded as dominant and will generally be given less weight than more arbitrary portions of the marks. *Miles Laboratories, Inc.* v. *United Drug Co.*, 27 CCPA (Patents) 1273, 112 F.2d 814, 46 USPQ 59; *West Disinfecting Co.* v. *Lan-O-Sheen Co.*, 35 CCPA (Patents) 706, 163 F.2d 566, 75 USPQ 77; *Nestle's Milk Products, Inc.* v. *Baker Importing Co., Inc.*, 37 CCPA (Patents) 1066, 182 F.2d 193, 86 USPQ 80; and *Kensington Steel Company* v. *Nichols Engineering & Research Corp.*, 38 CCPA (Patents) 979, 188 F.2d 397, 89 USPQ 330.

[3] Clearly appellant's registration and use of a trademark including the syllable "flux," for an apparatus whose operation depends upon magnetic flux, should not preclude others who market the same type of device from employing that syllable as a portion of their marks.

The Assistant Commissioner held that since the goods here involved are relatively expensive and are sold to discriminating purchasers, those factors were to be considered in determining likelihood of confusion.

Appellant ably argues that the type of purchasers should not be controlling here, and cites cases in which marks have been held to be confusingly similar notwithstanding the fact that the goods involved were expensive and were sold to discriminating buyers.

It is, of course, true that two marks may be so similar as to make confusion likely regardless of the type of purchasers involved, but it has been repeatedly held, and we think properly so, that, other things being equal, confusion is less likely where goods are expensive and are purchased after careful consideration than where they are inexpensive and are purchased casually. *International Silver Co.* v. *The American Silver Co.*, 17 CCPA (Patents) 871, 38 F.2d 622, 4 USPQ 180; *Synchromatic Air Conditioning Corp.* v. *Williams Oil-O-Matic Heating Corp.*, 27 CCPA (Patents) 1010, 109 F.2d 784, 44 USPQ 598; and *L. J. Mueller Furnace Co.* v. *United Conditioning Corp.*, 42 CCPA (Patents) 982, 222 F.2d 755, 106 USPQ 112.

[4] We are of the opinion the Patent Office tribunals properly held that the marks "Magnaflux" and "Sonoflux" are not confusingly similar.

The apparatus to which appellant's mark "Sonizon" is applied was designed initially for measuring the thickness of metal sheets by reflecting high frequency sound waves from the back surfaces of such sheets. However, if flaws are present the waves are reflected sooner, thus indicating the presence of the flaws. Accordingly, the goods to which appellant's mark "Sonizon" is applied are generally similar to those to which appellee applies the mark "Sonoflux," although the similarity in goods is not so close as in the case of the goods bearing the marks "Magnaflux" and "Sonoflux."

There is some controversy as to the meaning of the syllable "Son" in the marks under consideration. That syllable appears in the Latin word "sono" meaning a sound, which is the root of such words as "sonorous" and "sonic," and its use frequently indicates some connection with sound. That this is true in the case of "Sonizon" is shown by the following testimony of a Mr. Carl E. Betz, executive vice president of Magnaflux Corporation:

XQ10. Mr. Betz, you testified that the trademark "Sonizon" was used on equipment which used ultrasonic principles in the measurement of the thickness of metal walls, is that correct? A. That is right.

XQ11. Is it not fair to say then that the syllable "Son-" or "Soni." in the case of "Sonizon," has some descriptive connotation in its use in that trademark, that one part of the trademark has some descriptive connotation? A. I would say so, yes.

In the case of the apparatus to which the mark "Sonoflux" is applied, the association with sound is not so clear or direct, since the apparatus does not function through the action of sound waves, but of magnetic flux. The only sound involved is the 60 cycle hum of the alternating current used in the magnetizing process. However, a Mr. W. H. Hopkins, president of Sonoflux Corporation, testified that "the term 'sono' came from the fact that we used sonic vibrations in magnetizing the material to be inspected."

[5] Regardless of the exact extent to which sound vibrations play a part in the operation of appellee's device, we are of the opinion that the syllable "Son" in the mark "Sonoflux," as well as in "Sonizon," would be generally understood to be suggestive of sound, and would, therefore, be somewhat descriptive in nature. For the reasons given above, therefore, that syllable is not as significant in determining the question of confusing similarity as it would be if it were purely arbitrary.

Since the goods to which the marks "Sonoflux" and "Sonizon" are applied are expensive and are sold to discriminating purchasers, the decisions cited above on that point are pertinent.

In the final analysis the question as to confusing similarity is one of opinion, and prior decisions are not of great value in resolving such issues. *North Star Manufacturing Co.* v. *Wells Lamont Corporation*, 39 CCPA (Patents) 764, 193 F.2d 204, 92 USPQ 128, and *L. J. Mueller Furnace Co.* v. *United Conditioning Corp.*, supra.

It is our opinion that concurrent use of the marks "Sonoflux" and "Sonizon" would not be likely to result in confusion. Accordingly, the decision appealed from is affirmed.

AFFIRMED.

JACKSON, *J.*, retired, recalled to participate.

O'CONNELL and COLE, *JJ.*, because of illness, did not participate in the hearing or decision of this case.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

2,654,989. (See 2,732,327.)

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2,378,702. (See 2,378,700.)

2,378,882. (See 2,378,700.)

2,461,270. (See 2,378,700.)

2,461,271. (See 2,378,700.)

2,465,476. (See 2,732,327.)

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2,743,979. (See 2,743,978.)

Re. 24,007. (See 2,703,660.)

REISSUES

MAY 29, 1956

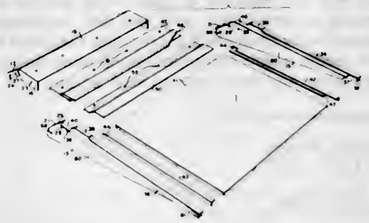
Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,156
VERTICALLY SWINGABLE WINDOW SASH

James Monroe Markley, Miami, Fla.

Original No. 2,684,735, dated July 27, 1954, Serial No. 102,371, June 30, 1949. Application for reissue July 7, 1955, Serial No. 520,640

11 Claims. (Cl. 189—62)



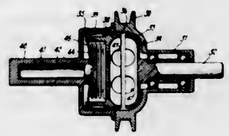
4. In a window structure, a sash frame including plate-like side frame members having front edge channel flanges offset outwardly of the outer sides of said members, a glass pane wider than the distance between said members with side edges inserted in said flanges, an upper cross bar connecting said members in overlapping relation to the upper edge of said pane, and a felt sealing strip folded upon itself and fixed along said bar above said upper edge of the pane with edges straddling said upper edge portion of the pane and inserted at the ends of said strip into said channel flanges to seal said pane along said upper edge portion.

24,157
THERMOSTATIC FLUID COUPLING MECHANISM

Clarence Johnson, Euclid, Ohio

Original No. 2,633,697, dated April 7, 1953, Serial No. 77,709, February 23, 1949. Application for reissue September 23, 1954, Serial No. 458,719

4 Claims. (Cl. 60—12)



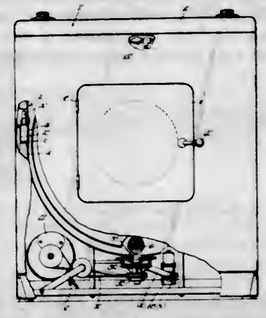
2. A fluid coupling comprising: a housing defining a space therein; a first vaned rotor in said space fixed for rotation with said housing; a second vaned rotor in said space in opposed relation to said first vaned rotor and rotatable with respect to said housing; a working fluid partially filling said space; fluid pressure operated means for moving one of said rotors axially relative to the other rotor and varying the volume of said space so that the distance between said rotors and level of liquid in said space are substantially simultaneously varied, said means including an expansible chamber device interposed between said first rotor and part of said housing effecting a seal therebetween.

24,158
CONTROL MEANS FOR A CLOTHES DRIER OR THE LIKE

Thomas R. Smith, Newton, Iowa, assignor to The Maytag Company, Newton, Iowa, a corporation of Delaware

Original No. 2,680,914, dated June 15, 1954, Serial No. 335,186, February 5, 1953. Application for reissue February 27, 1956, Serial No. 568,146.

13 Claims. (Cl. 34—44)



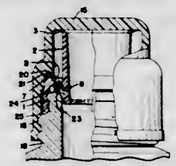
1. In a clothes drier, the combination of a casing, a drum within said casing for receiving clothes to be dried, a motor for rotating said drum, heating means for evaporating moisture contained within said clothes, conduit means for supplying a cooling liquid into said casing to condense the vapor within said casing produced during a drying operation, means for discharging said liquid and condensed vapor from sald casing, a control circuit including said motor and heating means therein, a switch in said circuit, means responsive to an abnormal rise in the liquid level in said casing to operate said switch whereby said circuit is rendered inoperative should the liquid in said casing reach said abnormal level, and means also responsive to the pressure in said conduit means for controlling operation of said switch to render said circuit inoperative in the absence of liquid pressure in said conduit means even though said circuit has been conditioned for operation of said drier.

24,159
CONTAINER ADAPTER PROVIDED WITH POURING SPOUT, DRIP RETURN AND CAP

Jay G. Livingstone, Akron, Ohio

Original No. 2,715,480, dated August 16, 1955, Serial No. 341,208, March 9, 1953. Application for reissue September 9, 1955, Serial No. 533,535

11 Claims. (Cl. 222—111)

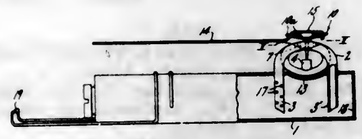


1. An adapter of flexible plastic for a container, the adapter being provided with a spout for pouring liquid

therethrough, a wall around the spout, a channel between said wall and the spout for the collection of liquid dripping from the spout and liquid running down the outer wall of the spout, and a slit in the channel dividing at least a part of the channel into one part that adheres to the spout and another part that adheres to the wall, whereby when the spout is depressed with respect to said wall the slit is opened and liquid in the channel drains therethrough.

24,160
BURNER STRUCTURE
Josef Borde, Zurich, Switzerland
Original No. 2,637,378, dated May 5, 1953, Serial No. 174,331, July 17, 1950. Application for reissue March 31, 1954, Serial No. 420,226. In Switzerland July 20, 1949
8 Claims. (Cl. 158—63)

1. A burner structure for gasifiable fuel comprising a housing adapted to contain said fuel, a tubular body seated on said housing, a nozzle arranged on said tubular body, said tubular body terminating in two end portions extending into said housing and connected with the latter whereby the interior of said housing communicates through said tubular body with said nozzle, needle means in operative connection with and movable relatively to said nozzle, a plate member supporting said needle means and guiding the same, said plate member being provided with a plurality of openings for diverting fuel gas emanating from said nozzle, and an end disk affixed to said needle



means above said plate member and forming baffle means against which said fuel gas may be impinged for intimate mixture with air, whereby a combustible air-fuel mixture for ignition is constituted, said end disk including arms, [said arms being rotatable] *for rotating the latter* to actuate said needle means and to move the same through said plate member and relatively to said nozzle.

PLANT PATENTS

GRANTED MAY 29, 1956

Owing to the fact that almost all of the illustrations of the plant patents are in colors, it is not practicable to print a cut of the drawing.

1,480
ROSE PLANT
Thomas Edison Motose, Fairport, N. Y.
Application June 21, 1955, Serial No. 517,097
1 Claim. (Cl. 47—61)

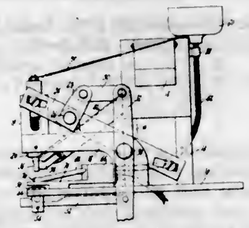
A new and distinct variety of rose plant of the hybrid tea class, characterized as to novelty by the color combination, shape and long lasting quality, of its bloom, the capacity or tendency of its flowers to attain their fullest or greatest beauty when their petals are fully unfurled, its prolific and recurrent blooming habit and the vigor of its growth and hardiness, substantially as described herein and also shown in the accompanying colored photograph.

PATENTS

GRANTED MAY 29, 1956

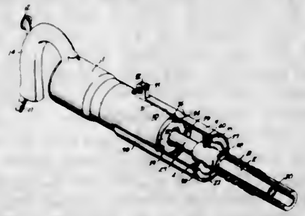
GENERAL AND MECHANICAL

2,747,185
MACHINE FOR STAPLING PLASTIC BEADS TO CLOTH
Anton Effgen, Westwood, Mass., assignor to Globe Tool and Gauge Works, Boston, Mass., a partnership
Application April 29, 1955, Serial No. 504,906
2 Claims. (Cl. 1—3)



1. In a machine having a frame, an anvil on said frame with a cupped top face, means on said frame for driving successive staples toward said anvil, and a chute for guiding a succession of staples to said driving means; a hopper for spherical beads, a tube extending from said hopper to said anvil to guide beads thereto, and means for heating a portion of said tube near the anvil.

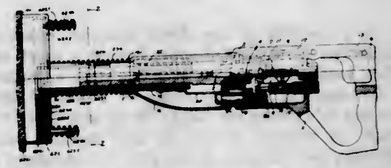
2,747,186
TOOL ATTACHING MECHANISMS
Malcolm H. Fox, Seattle, Wash.
Application January 11, 1954, Serial No. 403,317
11 Claims. (Cl. 1—44.4)



1. Tool attaching mechanism for securing a tool rod to a driver, comprising a sleeve having one end engageable with a driver, internal stop means carried by said sleeve between its ends and limiting movement of said sleeve onto said driver, means operable to secure such sleeve end to the driver, a tool rod having one end portion received in said sleeve with the remainder of said rod projecting beyond the end of said sleeve remote from its driver-engageable end, and means interengageable between said rod and said internal stop means and operable to limit movement of said rod into said sleeve.

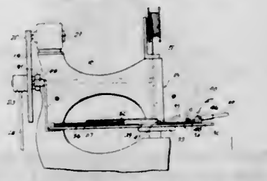
2,747,187
SAFETY SHIELD FOR EXPLOSIVELY DRIVEN TOOL
Robert T. Catlin and Paul Hickman, Trumbull, Conn., assignors to Remington Arms Company, Inc., Bridgeport, Conn., a corporation of Delaware
Application September 7, 1954, Serial No. 454,526
6 Claims. (Cl. 1—44.5)

1. In a stud driving tool having a barrel through which a fastening device may be projected into a work surface by the combustion of an explosive propellant, a safety shield comprising in combination a shield plate structure having a barrel aperture, mounting means on said tool supporting said shield plate structure normal to said barrel with said aperture surrounding said barrel, a skirtlike member having a dependent work surface contacting edge, said shield plate structure being marginally enclosed by said skirtlike member and reciprocable therein from a tool firing position in which a face of said shield plate structure is in engagement with said work surface in the plane of said work surface contacting edge to a chamber forming position in which said shield plate



structure is recessed with respect to said work surface contacting edge and forms with said skirtlike member a hollow chamber surrounding the muzzle end of said barrel, spring means engaged between said skirtlike member and said shield plate structure for yieldably urging said skirtlike member and said shield plate in opposite directions of movement to chamber forming position, said spring means thereby retaining said dependent work surface contacting edge of said skirtlike member against a work surface as said shield plate structure is moved from said firing position by the explosive propellant forces incidental to the projection of a fastening device.

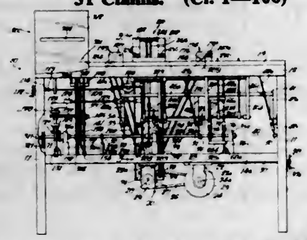
2,747,188
TERMINAL APPLYING MECHANISM
Raymond A. Greener, Clarendon Hills, Ill., and Andrew Hunter, Clearwater, Fla., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application November 6, 1953, Serial No. 390,658
7 Claims. (Cl. 1—92)



1. In a machine for attaching wire terminals to an article, a wire inserting means, a holder for the article, means for guiding said holder for reciprocable movement through a predetermined distance to guide said article relative to the inserting means, means for stressing said holder for movement in one direction, a ratchet bar connected to said holder for movement therewith and having two parallel sets of ratchet teeth, a pawl for each of said sets of ratchet teeth, means for reciprocating said pawls into and out of engagement with said two sets of ratchet teeth, whereby when one pawl is moved out of engagement with one set of teeth the other pawl is moved into engagement with the other set of teeth and permits move-

ment of the holder through one step in said one direction, means for actuating said inserting means, and means operable in timed relation to said inserting means for controlling said pawl reciprocating means to effect the step by step movement of said holder and the attaching of wire terminals onto said article.

2,747,189
PAMPHLET FORMING MACHINE
Orris D. Fenimore, Woodward, Okla.
Application July 1, 1954, Serial No. 440,779
31 Claims. (Cl. 1—106)



1. In a machine of the above described character, the combination of a rigid support having a sheet receiving surface, means including at least one sheet engaging member for engaging the rear edges of stacks of sheet material and advancing the stacks along said sheet receiving surface, an element carried by said support, means for positioning said element in the path of movement of each of said stacks when said stacks are advanced whereby said element engages the front edge of said stacks and the stacks are held between said element and said sheet engaging member in order to align the sheets in the stacks along their front and rear edges, means including transversely movable fingers for simultaneously engaging both of the side edges of said stacks when the stacks are held between said element and said sheet engaging member in order to align the sheets along their side edges, and manually operable means for adjusting the position of said element along said sheet receiving surface to enable the machine to form pamphlets from sheets of different size.

2,747,190
ARMORED GARMENT
Louis W. Foster, Merion, Pa.
Application March 9, 1953, Serial No. 341,202
4 Claims. (Cl. 2—2.5)



1. In armored structure for protecting the torso, a loose-fitting, vest-like garment having inner and outer body fabrics, a plurality of pockets disposed between said body fabrics to cover the waist, chest and back areas of the garment, said pockets being arranged in vertically offset rows extending circumferentially around the garment with the pockets of one row partially overlapping those of an adjoining row, each row of pockets being secured to the garment along a line substantially coincident with the upper ends of the pockets forming the row thereof and the several rows of pockets being respectively secured alternately to the inner and outer body fabrics of the garment whereby the lower ends of all of the pockets are entirely free of the body fabrics of the garment, certain of said pockets being arranged in side by side relation with their adjoining edges overlapping and with the side edge of a given one of said pockets secured to the inner face of its adjoining pocket along a vertical line spaced inwardly from the side edge of said adjoining pocket, and a plurality of armor plates respectively disposed in said pockets, each of said plates being of a size to completely fill its accommodating pocket whereby said armor plates are all disposed in the same overlapping relation as are the said pockets.

2,747,191
ADJUSTABLE MEANS FOR FACE PROTECTIVE DEVICE
George R. Hoffmaster, Esterly, Pa., assignor to Willson Products, Inc., Reading, Pa., a corporation of Pennsylvania
Application November 21, 1952, Serial No. 321,843
2 Claims. (Cl. 2—8)



2. In combination with a face protecting element, a headgear including a headband comprising a strip of flexible material bent into substantially oval shape with overlapping end portions, girth adjusting means rearwardly of said headband, comprising a thin flattened tubular element of flexible material closely surrounding said overlapping end portions and secured to one of them and conforming to the curvature of said end portions in the longitudinal direction of said oval shaped strip, a pair of pedestal type bearings supported on a thin flexible base element secured to the outer surface of said tubular element, a worm wheel mounted on a shaft, said shaft being journaled in said bearings and extending longitudinally in spaced, substantially parallel relationship with said tubular element, and the threads of the worm wheel being exposed so that they may be grasped by the fingers of the wearer and easily turned, the other of said end portions having cut out thereof a plurality of slots arranged in spaced parallel relationship at a small angle with respect to the transverse axis of said end portions and engaging said threads so as to provide substantially tangential driving relationship between the threads of said worm wheel and said slots, whereby rotation of said worm wheel in one direction will increase the girth, and in an opposite direction, will decrease the girth of said headband, said base element being a strip of metal having an opening centrally thereof through which said worm wheel projects, the teeth of said worm wheel being serrated in the longitudinal direction of said shaft to provide frictional resistance so as to facilitate manual turning movement of the worm wheel.

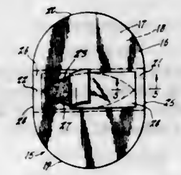
2,747,192
NECKTIE PROTECTOR
Sara Sinkoe Katz, Memphis, Tenn.
Application September 27, 1954, Serial No. 458,484
1 Claim. (Cl. 2—46)



Necktie protector for a conventional four-in-hand tie the front portion of which tie terminates in convergent

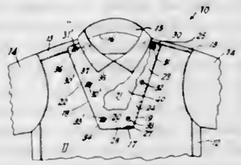
end edges, and which tie has progressively divergent side edges extending from the knot to said end edges, said protector comprising a shield of thin flexible sheet material having front and rear plies, the front ply being substantially coextensive in shape and size with that part of the front portion of a tied four-in-hand necktie below the knot, said rear ply congruently underlying the lower part of said front ply and secured at its lateral and bottom edges to corresponding edges of said front ply, said rear ply terminating in a free transverse top edge at an intermediate point in the length of said shield above said end edges, said plies forming a pocket for the free ends of the necktie substantially fitting the lower part of the front portion of said tie, and fastening means at the top of said shield for embracing the tie at the neck of the knot.

2,747,193
DISCARDABLE UNDERARM GARMENT SHIELD
Marie Pulsifer, Bronx, N. Y.
Application January 7, 1955, Serial No. 480,329
1 Claim. (Cl. 2—56)



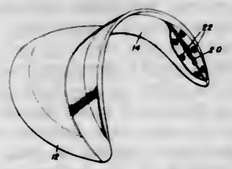
A dress shield to protect dresses and other garments from underarm perspiration comprising a saddle bag-shaped flexible absorbent and disposable sheet having two flaps and a center portion with a bend line therein, said center portion being disposed between the two flaps and having a central opening along the bend line, said sheet having two faces, an adhesive strip covering the central opening, said strip having a tacky side adhered to one face of the sheet adjacent the central opening and disposed in the central opening, and a discardable protective covering strip on the other face of the sheet over the central opening and the tacky side of the adhesive strip disposed in the central opening and held thereby.

2,747,194
SHIRT CONSTRUCTION
George B. Ranieri, New York, N. Y., assignor to Piedmont Shirt Company, New York, N. Y., a corporation of South Carolina
Application June 4, 1954, Serial No. 434,420
1 Claim. (Cl. 2—119)



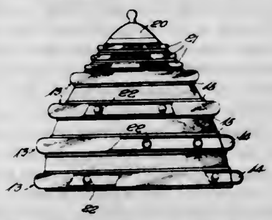
A shirt comprising a front panel, a back panel seamed thereto, a yoke seamed to said panels and a collar seamed to said yoke and front panel, said front panel being formed with a centrally located opening extending upwardly to said yoke and collar, a pair of similar front sections within said opening, one of said sections being seamed to said front panel along one side edge of the opening therein and along the bottom edge of said opening to the midpoint thereof and leaving an unseamed portion along the remainder of the bottom edge of said one section, the other section being seamed to said front panel along the other side edge of the opening therein and along the remaining portion of the bottom edge of said opening to the midpoint thereof and leaving an unseamed portion along the remainder of the bottom edge of said other section, each of said sections including laterally spaced wing portions at the upper end thereof with one wing portion seamed to said front panel, yoke and collar and the other wing portion forming the upper end of the unseamed flap portion, each of said sections having buttons arranged along the seamed edges thereof and buttonholes along the unseamed edges thereof whereby said flap portions may be disposed relative to each other in a variety of arrangements and secured in a selected arrangement.

2,747,195
HAT
Dorothy H. Applegate, Newport News, Va.
Application August 20, 1953, Serial No. 375,356
1 Claim. (Cl. 2—175)



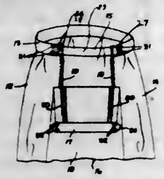
A hat comprising an elongated arcuate body portion having a forward and rear edge formed of two overlying elongated pieces of arcuate material having ends and forward and rear edges generally conforming to the central vertical cross-sectional shape of a wearer's head for positioning thereon, said material being secured together at one end and the forward and rear edges thereby forming a pocket therebetween having an access opening at the other end of the material, a generally forwardly and upwardly extending visor portion integrally formed with the forward edge of the body portion, an elongated arcuate member of resilient material removably positioned in said pocket through the access opening in said pocket, and a plurality of closure fasteners detachably securing the edges of the opening in said pocket together for retaining the resilient member in said pocket, said resilient member being substantially U-shaped and generally conforming to the central vertical cross-sectional shape of a wearer's head for gripping and fitting over the head of a wearer in substantially a central vertical position.

2,747,196
NOVELTY HAT
Alfred Kaye, New York, N. Y.
Application December 10, 1953, Serial No. 397,499
4 Claims. (Cl. 2—175)



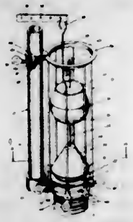
3. A hat having a crown, a plurality of vertically spaced horizontally extending inwardly opening channeled rings of transparent material mounted upon the outer side of said crown, said rings each forming a tunnel with said crown, and a ball freely mounted in each of said tunnels.

2,747,197
SKIRT WITH REMOVABLE INSERT
Howell A. Bailey, Brooklyn, N. Y.
Application April 22, 1954, Serial No. 424,975
1 Claim. (Cl. 2—211)



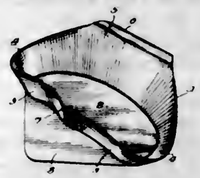
A skirt comprising a first waistband portion and a body portion having aligned spaced vertical edges defining an opening in the front thereof, a removable insert panel extending from the level of the first waistband to the bottom of the skirt, said first waistband portion extending around the back of the skirt from one edge to the other; a second waistband portion complementary to said first waistband portion having outwardly extending tabs, said second waistband portion being secured to the upper portion of said insert panel; complementary fastening means upon said tabs and said first waistband portion, additional spaced complementary slide fastener elements upon the edges of the body portion and the opposite sides of said insert panel spaced inwardly from the edges thereof, said slide fastener elements being spaced from the lower portion of said first waistband portion and extending to the bottom of said skirt; an elastic securing member permanently fastened to said first waistband portion at one vertical edge thereof spanning said opening, and removably secured to said first waistband portion at the opposite vertical edge of the body portion so that the insert may be removed from the opening and another insert substituted without removing the skirt from the body of the wearer.

2,747,198
GUIDE APPARATUS FOR USE WITH A TOILET FLUSHING MECHANISM
Gerald D. Clapp, Santa Barbara, Calif.
Application November 8, 1954, Serial No. 467,430
2 Claims. (Cl. 4—57)



1. Guide apparatus for use with a toilet flushing mechanism having a lift lever, a discharge pipe formed with a valve seat, an upstanding overflow pipe, a stopper that seats on said valve seat and an upstanding stopper rod, comprising: a cylindrical frame open at its upper end and formed at its lower end with a plurality of radially extending threaded bores; a scerw element disposed in each of said bores for engagement with said discharge pipe; means for securing the upper portion of said frame to said overflow pipe; a guide member that includes a hollow body having an outside diameter slightly smaller than the inside diameter of said frame, the bottom portion of said body being open, and a disc coaxially secured within the upper portion of said body; a vertical bore coaxially formed in said disc that axially slidably supports said stopper rod; and, a tension element interconnecting said disc and said lift lever.

2,747,199
BED PAN
James W. Flexman and Ralph T. Lidge, Chicago, Ill.
Application July 9, 1953, Serial No. 367,034
6 Claims. (Cl. 4—112)



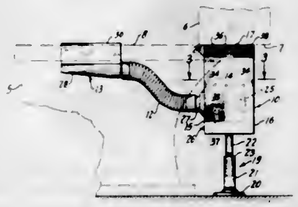
1. An elongated pan-shaped receptacle provided at the front wall with at least one more or less V-shaped portion at the top edge and with the apex of the V-shaped portion extending outwardly, and said receptacle also having a back wall of greater height than the front wall, with the top portion intermediate the ends rolled outwardly and down, the pan provided at the bottom on the front side with a flat portion extending from the bottom at the front wall.

2,747,200
FOLDING SHOWER DOOR
Abram R. Finkel, Elkins Park, Pa.
Application May 14, 1953, Serial No. 355,051
1 Claim. (Cl. 4—148)



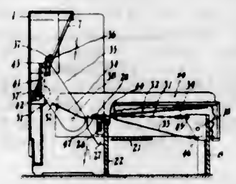
A folding closure for use with a bathtub having its two ends abutting against opposing walls comprising a bottom track member, U-shaped in cross-section and extending along the opposed bathtub side between the two opposing walls, a top track member U-shaped in cross-section spaced from and running between the opposing walls parallel to said bottom track member, a fixed section, a middle folding section, and a wall mounted folding section, each of said sections consisting of a glass panel packed with a surrounding rectangular frame, said fixed section being positioned in a fixed vertical plane in alignment with said top and bottom members and having one vertical edge secured to one of said opposing walls, the opposite vertical edge of said fixed section having an L-shaped strip adapted to act as a stop for said middle folding section, said wall mounted folding section having one vertical edge hingedly mounted to the other of said opposing walls and being adapted to swing about a vertical axis flush with said bottom and top track members, said middle folding section having one free vertical edge and having one vertical edge pivotally mounted to the unsecured vertical edge of said wall mounted section, a pair of rollers rotatably supported about a vertical axis adjacent the free vertical edge of said middle folding section, one of said rollers being mounted upon the upper portion of said middle folding section and positioned within said top track member, the other of said rollers being mounted upon the lower portion of said middle folding section and positioned within said bottom track member, a compression spring actuated ball latch mounted upon the free vertical edge of said middle folding section and adapted to cooperate with a keeper affixed to said L-shaped strip on said fixed section, and downwardly arcuate drip deflectors longitudinally extending along the bottom portion of each of said sections to divert water into the bathing facility.

2,747,201
TOILET DEODORIZER
James R. Herriott, Alamo, Calif.
Application July 14, 1953, Serial No. 367,920
4 Claims. (Cl. 4—213)



4. In combination, a toilet bowl having a floor supporting the same, a flushing tank fixedly mounted rearwardly of the bowl in spaced relation to the floor, a deodorizing cabinet disposed on the floor underneath the tank, a post supporting the cabinet and having threaded means for screwing the top of the cabinet into clamping contact with the bottom of the tank, and suction means for drawing air from the bowl through the cabinet for discharge into the atmosphere.

2,747,202
FOLDING BEDS
Wilfred D. Driver, Thessalon Township, Ontario, Canada
Application August 17, 1953, Serial No. 374,702
4 Claims. (Cl. 5—2)



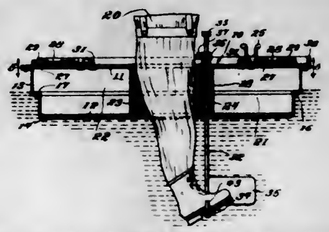
4. A folding bed arrangement of the character described comprising an upright shell having enclosing walls and a frontal opening, said walls defining a storage chamber for a bed when the bed is swung from a normal horizontal attitude to a vertical storage position, said frontal opening serving to admit the bed, said bed including a bed support structure, a mattress, and bed clothing; said bed support structure being pivoted in said shell rearwardly of the central vertical plane of the horizontal bed, whereby said bed supporting structure assumes the form of a cantilever having an inner short arm and an outer long arm, a paddle arranged transversely of said bed to overlie said bed coverings, an upright actuating arm having a lower end pivoted to said short arm of said bed supporting structure to swing in a plane transversely of said bed to and away from the centre line of said bed, a hinge bar carried by the upper end of said actuating arm to overlie said bed coverings, means hingedly connecting said hinge bar to the medial portion of said paddle, resilient means pressing said actuating arm toward said longer arm of said bed supporting structure to cause said paddle to bear on said bed coverings, and restraining means connected to said shell for reversely turning said actuating arm about its pivot as said bed is swung down to horizontal attitude.

2,747,203
BED LIFT
Charles E. Dawson, Santa Ana, Calif.
Application July 18, 1952, Serial No. 299,671
1 Claim. (Cl. 5—69)



For use in an invalid bed having a pivoted supporting structure and means operable to alter the position of said supporting structure including an actuating screw, an adjusting system comprising a reversible motor, a driving means adapted to connect said motor in driving relation to said screw, a supply circuit for said motor, a control circuit controlling the connection of said supply circuit to said motor, said control circuit being energized at a reduced voltage from said supply circuit, a housing, a motor mounting platform, said motor being mounted on said motor mounting platform, a pivotal connection between one side of said motor mounting platform and said housing, said driving means providing support for the other side of said motor mounting platform, a bell crank pivoted on said housing, said crank being rotatable into supporting relation to said motor mounting platform.

2,747,204
DUCK HUNTER'S BOAT
Charles J. Erickson and Charles R. Erickson, Salt Lake City, Utah
Application January 8, 1954, Serial No. 403,000
3 Claims. (Cl. 9—5)

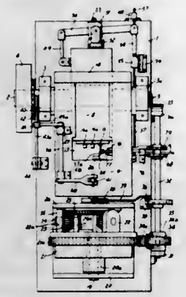


1. A duck hunter's and fisherman's boat comprising a body having a top surface and a bottom surface positioned in coplanar relation, a continuous border wall connecting said top and bottom surfaces, a bulkhead in said body arranged to divide said body into a forward and a rear compartment, said rear compartment having a vertically walled aperture therethrough adapted to accommodiate an occupant, an upstanding pipe in said rear compartment extending through said top and bottom surfaces, a rudderpost slidably extending through said pipe, a rudder on the lower end of said rudder post, and foot rest means on said rudderpost adjacent the lower end to support an occupant in said aperture.

2,747,205
HEADING MACHINES FOR BOLTS, SCREWS, RIVETS, AND THE LIKE
Victor Hill Fray, Auckland, New Zealand
Application November 12, 1952, Serial No. 319,834
Claims priority, application New Zealand November 12, 1951
15 Claims. (Cl. 10—13)

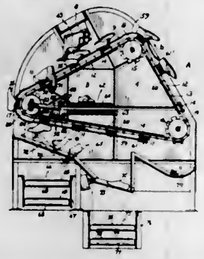
1. In a heading machine, a frame, a pair of cross heads mounted therein for reciprocating movements toward and

from each other, one of said cross heads carrying a plurality of spaced-apart punches and the second carrying a plurality of spaced-apart dies with which said punches cooperate, a die block rotatably mounted in the second cross head in a face of which block said dies are mounted. means including a crank shaft mounted in the frame for



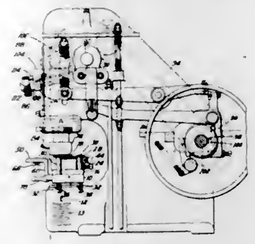
reciprocating both said cross heads simultaneously, one in a direction opposite to the other, and indexing means, actuated from said crank shaft, for intermittently rotating said die block, during its reciprocating movement, about an axis substantially parallel to the direction of its reciprocation, to bring the dies into registration with one after another of the punches.

2,747,206
STRIPPING MACHINE
Robert M. Fraser, Buenos Aires, Argentina, assignor to Fabrica Argentina de Alpargatas Sociedad Anonima Industrial y Commercial, Buenos Aires, Argentina, a corporation of Argentina
Application December 22, 1953, Serial No. 399,760
19 Claims. (Cl. 12—1)



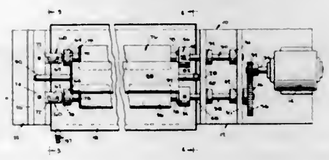
1. An automatic machine for stripping shaped objects from the cores on which they are formed and for removing the denuded cores from rods on which the latter are mounted; said machine comprising a supporting frame, an endless moving conveyor carried by said frame, means for driving said conveyor, means on said conveyor for receiving successive rods carrying cores having shaped objects thereon to transport the rods along the path of travel of said conveyor, object stripping means disposed adjacent said path of travel and operative to strip the shaped objects from the cores carried by the successive rods as the latter pass thereby, means disposed adjacent said path of travel at a location following said stripping means and operative to remove the stripped objects from their respective cores, means disposed adjacent said path of travel at a location following said object removing means and operative to remove the denuded cores from the successive rods, and means for receiving the removed shaped objects and for receiving the removed denuded cores and including auxiliary conveying means operative to transport the received objects and cores to segregated zones.

2,747,207
TOE MOLDING MACHINES
Charles Martin Bagshaw and Lawrence Denis Kirk, Leicester, England, assignors to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application February 2, 1954, Serial No. 407,736
Claims priority, application Great Britain February 27, 1953
5 Claims. (Cl. 12—97)



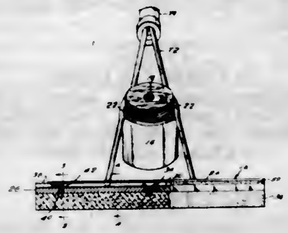
1. A machine for molding the toe portions of shoe uppers unsupported by a last, having, in combination, an outer mold, an inner mold, supports for the molds, power operated means for moving one of the molds relatively to the other to effect a molding operation, means for positioning an upper relatively to said molds, a member mounted on the support for the outer mold and arranged yieldingly to clamp the margin of the upper between it and the outer mold so as to hold the upper in outspread position while allowing it to slip, under tension, as it is forced into the outer mold, thereby to prevent formation of wrinkles in the margin of the upper and to produce a straight, unflanged margin around the toe portion of the upper, and means for moving the outer mold toward said member to clamp the upper yieldingly prior to commencement of the molding operation.

2,747,208
ROLLER WASHING APPARATUS
Charles C. Schafer, Cleveland, Ohio
Application June 13, 1951, Serial No. 231,307
7 Claims. (Cl. 15—4)



7. A roller washing apparatus comprising means for rotatably mounting a roller to be washed, means for rotatably mounting a second roller to be washed in parallel spaced relation to the first roller to be washed with the axis of said first and second rollers lying substantially in a horizontal plane, means for drivingly rotating one of the rollers and a third roller rotatably mounted in parallel surface engaging relation upon the first and second mounted rollers providing for the rotation of the third roller as engaged by the drivingly rotated roller, and for transmitting rotation of the drivingly rotated roller to the one of the first two rollers which is not drivingly rotated, said means for mounting the first and second rollers, each including an axially movable tail stock member for supporting one end of the roller, and the means for mounting the roller which is drivingly rotated including a chuck for supporting the end of the drivingly rotated roller opposite the tail stock supported end thereof.

2,747,209
WAX APPLICATING AND DISPENSING UNIT
Axel A. Johnson, Holly, Mich.
Application May 23, 1952, Serial No. 289,565
13 Claims. (Cl. 15—119)



1. An applicator device comprising in combination a handle, a bifurcated member having resilient arms attached to said handle, the resilient arms of said bifurcated member having arcuate gripping sections for detachably holding a dispensing container, an applicator attached to the ends of said bifurcated member, said applicator comprising a rectangularly shaped cover plate, a pair of backing plates, one of said backing plates being rigidly secured to the underside of said cover plate, the other of said backing plates hingedly connected to said rigidly secured backing plate, said rectangularly shaped cover plate being of size to extend over and provide a backing for said pair of backing plates, an absorbent pad attached to said backing plates and latching means detachably connecting said hingedly connected backing plate to said cover plate for holding said hingedly connected backing plate in longitudinal alignment with said rigidly secured backing plate.

2,747,210
COATING APPLICATOR
Walter L. Canning, Detroit, Frederick N. Canning, Birmingham, and William O. Bohm, Detroit, Mich.
Application September 8, 1953, Serial No. 378,838
6 Claims. (Cl. 15—230)



3. A coating applicator including an axle shaft constituting the axis of the device, a cylindrical shell rotatably disposed on said axle shaft; said shell comprising paired plates paralleling said axle shaft disposed in back to back relationship having contiguous surfaces secured together lying on radii of said axle shaft and having paired oppositely directed arcuate portions located midway between the radially outer edges of said plates together forming a tubular axle shaft receiving and housing portion outwardly concentric of said axle shaft constituting a journal surrounding said axle shaft, arcuate flanges leading in opposite directions from the radially outer edges of said plates adapted to terminate short of contact with each other forming an interrupted cylindrical shell; said arcuate flanges being spring-like in character so as to be capable of exerting a spring pressure radially outwardly of said axis so as to constitute means for holding a paint roller sleeve thereon, means for securing said shell axially of said axle shaft, and a handle on said axle shaft.

2,747,211
ROLLER MOUNTING DEVICE FOR A PAINT APPLICATOR
Vern T. Touchett, Whitefish Bay, Wis., assignor, by mesne assignments, to E Z Paintr Corporation, Milwaukee, Wis., a corporation of Delaware
Application July 25, 1951, Serial No. 238,439
3 Claims. (Cl. 15—230)



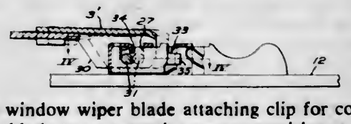
1. In a paint applicator having a hollow cylindrical paint-applying member, manipulating apparatus removably engageable therewith, comprising: a handle portion, and a core member rotatable thereon and insertable within the cylindrical member, the core member including a pair of spaced collars and a segment of a cylinder extending therebetween, the segment including end portions enclosed by the collars to hold the core member assembled, an outwardly-extending spring edge portion located between but having its ends spaced from the collars, each end of the spring edge portion being defined by a deep notch in the segment adjacent to a collar with the edge of the notch further from the collar having a relatively great slope away from the adjacent collar toward the free edge of the spring edge portion to act as an inclined plane lever and force the spring edge portion inwardly when the cylindrical paint-applying member is forced over this edge.

2,747,212
WINDSHIELD WIPER BLADE CONNECTOR
Anthony C. Scinta, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y.
Original application May 12, 1947, Serial No. 747,374, now Patent No. 2,649,605, dated August 25, 1953. Divided and this application January 16, 1953, Serial No. 331,577
6 Claims. (Cl. 15—250)



1. A windshield cleaner comprising a holder unit having a primary yoke stamped from sheet stock to provide a raised arm attaching clip portion integral therewith intermediate its ends, said clip portion being formed with an arcuate top wall part for nesting into a curved tongue on an actuating arm and with an arm receiving opening adjacent thereto, and a spring member strung across the open lower end of said clip portion in opposition to said arcuate wall part and acting to hold such inserted arm tongue nestingly thereagainst.

2,747,213
WINDSHIELD WIPER BLADE CONNECTOR
John R. Oishei, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y.
Application November 15, 1952, Serial No. 320,690
8 Claims. (Cl. 15—250)



1. A window wiper blade attaching clip for connecting a wiper blade to an actuating arm comprising, a housing.

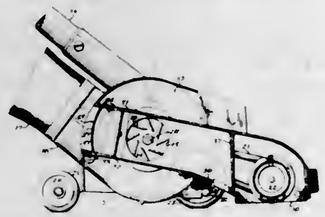
means defining an arm part receiving recess in said housing, shoulder means partially overhanging said recess, and locking means movable in said housing to position an arm part in said recess beneath said shoulder means, said locking means having a laterally extending portion resiliently bearing against said housing to lock the arm part in such position.

2,747,214
REMOVABLE TOOL HOLDER FOR VACUUM CLEANER
Oliver L. Allen, Riverside, Conn., assignor to Electrolux Corporation, Old Greenwich, Conn., a corporation of Delaware
Application April 24, 1953, Serial No. 350,874
4 Claims. (Cl. 15—323)



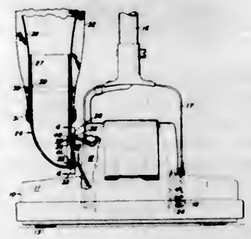
1. The combination together with a tank-type vacuum cleaner having a normally horizontally disposed casing, a top trim member, a handle, and an electrical plug receptacle including a pivoted cover openable for the insertion and removal of an electric plug of a plate member having a cross-section conforming substantially with the upper surface of said cleaner, said plate member having a slot for accommodating said handle and a portion adjacent said slot superpositionable over said plug cover assembly to prevent opening of said pivoted cover, attaching means on said plate member for securing the latter to said top trim member, and a plurality of holding members mounted upon said plate member in a manner to retain cleaning tools for said vacuum cleaner in close proximity to said casing.

2,747,215
CONVERTER CONTROLLING HANDLE POSITION IN SUCTION CLEANER
Louis E. Segesman, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application April 3, 1951, Serial No. 218,947
3 Claims. (Cl. 15—333)



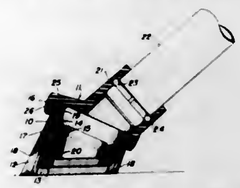
1. A suction cleaner comprising: a body having suction creating means, means defining an inlet to said suction creating means, a surface cleaning nozzle, an air passageway between said nozzle and inlet, a port in said air passageway for inserting a converter adapted to extend into communication with said inlet and interrupt flow of air between said inlet and said nozzle, a handle mounted on said body for movement to different positions, a barrier for said port mounted for movement with said handle and at all times arranged at one side of said inlet to remain in non-interrupting relation between said inlet and nozzle during movement of said handle to different positions, said barrier obstructing said port when said handle is in one position and movable with said handle to non-obstructing position beyond said port to permit said insertion of said converter upon movement of said handle to another position, said converter when inserted being arranged with respect to said barrier to prevent movement of the latter and thus said handle from said another position.

2,747,216
SUCTION CLEANERS
Donald B. Tschudy, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application June 5, 1953, Serial No. 359,923
14 Claims. (Cl. 15—351)



1. In combination, a suction cleaner of the floor type having a dirty air discharge conduit, a propelling handle pivoted to said cleaner adjacent said discharge conduit, a filter assembly for said cleaner, means supporting one end of said assembly from said handle so that said assembly pivots with said handle, and a filter adapter for coupling the lower end of said assembly to said discharge conduit so that said adapter is free to swivel about the end thereof throughout the normal operating range of movement of said propelling handle, means for swivelly coupling said filter adapter and discharge conduit including interlocking detent means which normally interengage during the swiveling of said filter assembly during said normal operation but which disengage from one another when said adapter is pivoted beyond said normal operating range whereby said filter assembly can be uncoupled from said cleaner.

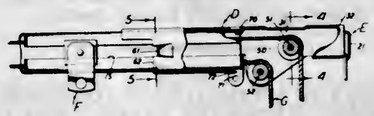
2,747,217
COMBINATION DUSTING BRUSH
Maurice D. Stahl, North Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application October 31, 1952, Serial No. 318,029
6 Claims. (Cl. 15—374)



1. A hollow suction brush for use with a suction cleaner comprising, a tubular shank for attaching the brush to the end of a suction air conduit, a brush back secured to the inlet end of said shank and having a passage extending therethrough in communication with said tubular shank, said back having concentrically arranged upper and lower flanges surrounding said passage and in spaced planes traversing said passage to provide anchorages for concentric rows of bristles, an endless row of relatively long and flexible bristles anchored in said upper flange, an endless row of relatively short and stiff bristles anchored in said lower flange, a flexible tubular shroud member closely spaced

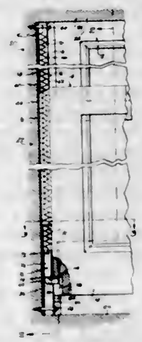
inwardly of said row of short bristles, and the free ends of said rows of bristles terminating in closely spaced parallel planes with the ends of said shorter bristles terminating above the free ends of said longer bristles, whereby the ends of the shorter bristles may be brought into contact with the surface being cleaned by pressing downwardly on said tool and deflecting said longer bristles, and said planes inclined with respect to planes through the anchored ends of said bristles whereby the lengths of both rows of bristles gradually varies from the front to the back of the brush thereby enabling the user to obtain cleaning action of varying intensity depending on which portions of the rows of bristles are brought into contact with the surface being cleaned.

2,747,218
DRAPERY OR CURTAIN MOUNTING
George Fredric McMurray, Glendale, Calif.
Application January 26, 1953, Serial No. 333,072
7 Claims. (Cl. 16—94)



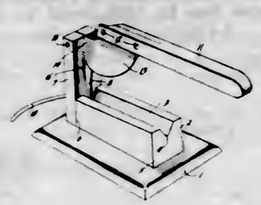
1. In combination, a mounting bracket, a track holder carried by the bracket, an elongate track C-shaped in cross-section and having spaced parallel side edges along one side thereof, one end of the track being engaged with and carried by the holder, the holder including, a body with top, bottom and side walls slidably engaged around the track, a stop on the top wall of the body adapted to limit engagement of the track with the holder, and lock means carried by the body and engageable with the track, said means including a deformable tongue projecting outwardly from one side of the body and adapted to project through and frictionally engage the side edges of the C-shaped track.

2,747,219
SELF-LOCKING SASH BALANCE
Glenn B. Haas, Oak Harbor, Ohio, assignor to Formetal, Inc., Oak Harbor, Ohio, a corporation of Ohio
Application April 12, 1954, Serial No. 422,350
14 Claims. (Cl. 16—197)



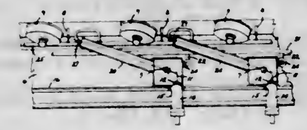
1. A resilient sash balance for removable sliding sash windows which is automatically locked in its tensioned condition in response to sash removal at a given location and automatically released in response to sash replacement and return to said given location, said sash balance comprising an elongated spring housing adapted to be secured to the window frame adjacent the sash and having an elongated opening in a side wall thereof, an elongated resilient element disposed in said housing and anchored at its upper end, a locking member carrier connected to the lower end of said resilient element and having a portion projecting through said opening, and a locking member tiltably mounted on said projecting portion and having a trigger portion projecting beyond said pivot into the path of travel of said sash for engagement thereby, said locking member having gripping portions adapted to slide freely relatively to said housing in response to the engagement of said trigger portion by said sash and adapted to tilt into gripping engagement with said housing in response to the disengagement of said sash from said trigger portion.

2,747,220
CLAM OPENER
George Thompson, West Atlantic City, N. J.
Application May 17, 1954, Serial No. 430,275
3 Claims. (Cl. 17—9)



1. In a clam opener, a base, an anvil mounted on said base provided with a V-shaped groove in its upper surface whose angularity to the base remains constant throughout its length, a standard also secured at the base and adjacent the forward end of the anvil, said standard provided with a longitudinal cut-out portion in vertical alignment with the V-shaped groove in the anvil, a convex knife blade provided with a toe at its forward end and said toe pivoted in the standard centrally of the aforementioned cut-out portion, a handle secured to said blade whereby a downward movement of the handle will force the blade through the muscle of a clam held in the anvil and aligned in the cut-out portion of the standard.

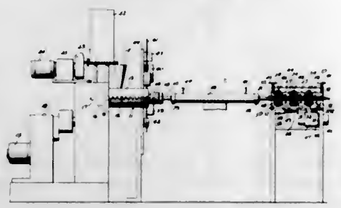
2,747,221
LIQUID APPLICATOR FOR A RUNNING YARN
James Bennett, Front Royal, Va., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application March 15, 1952, Serial No. 276,887
9 Claims. (Cl. 18—8)



1. In combination with a spinneret and a support therefor, a liquid applicator for a running strand generated from the spinneret comprising a compartment, a trough extending horizontally lengthwise away from a sidewall of the compartment, the sidewall being open between the interior regions of the compartment and the trough, inlet means for liquid extending through the end of the trough furthest from the compartment for admitting liquid into the trough, the applicator having a pair of apertures, overflow means for the compartment disposed at a level below that of either aperture, one aperture extending through an upper portion of the applicator into the compartment for extension of the support thereinto and disposition of the spinneret within the compartment, the other aperture being disposed adjacent the inlet means for passage of the strand from the in-

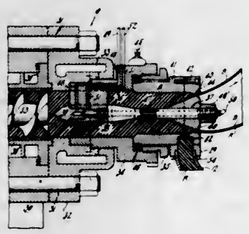
terior region of the trough and being aligned with respect to the spinneret in its spinning position within the compartment to dispose a strand along a substantially straight path extending from the spinneret lengthwise of the trough with a substantial length of the path disposed below the level of the overflow means, size of a cross section of the compartment extending perpendicularly to said path being, in general, substantially greater than the size of a cross section of the trough parallel to said cross section, the compartment and the trough having a continuous common opening above said path, and cover means for said opening.

2,747,222
PRODUCTION OF NYLON ROD
Robert B. Koch, Reading, and Ralph E. James, Jr., Lincoln Park, Pa., assignors to The Polymer Corporation, Reading, Pa., a corporation of Pennsylvania
Application June 11, 1951, Serial No. 230,912
5 Claims. (Cl. 18—12)



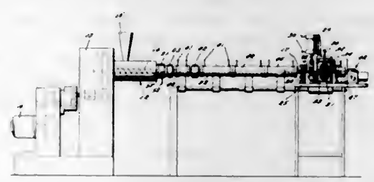
5. The method for forming elongated shapes from synthetic linear polyamides comprising delivering a stream of molten polyamide into the entrance end of a forming tube, advancing the polyamide through the tube by exerting a force thereon, progressively solidifying the polyamide in the tube by heat transfer through the tube wall during such advancement, in which method the pressure in the molten polyamide in the entrance end of the tube and the resistance to advancement of the polyamide through the tube tend to vary together spasmodically and irregularly, and controlling the pressure in the entrance end of the tube to maintain said pressure within predetermined upper and lower limits by varying the magnitude of said force in accordance with variations in pressure.

2,747,223
APPARATUS FOR MAKING INNER TUBES FOR TIRES
John E. Cady, Indianapolis, Ind., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application October 24, 1950, Serial No. 191,800
1 Claim. (Cl. 18—14)



Apparatus for manufacturing multiple stock seamless tubing comprising, a die head provided with a compression chamber and an annular discharge orifice, an extruder connected to said die head for forcing stock therethrough to form a continuous tubular body, the wall of said compression chamber having a circumferentially extending comparatively narrow slot formed therein, the extent of said slot being in excess of 180° of the circumference of said compression chamber and of increased width at its extremities, a second extruder for forcing a second stock through said slot into said compression chamber, means providing a passageway interconnecting said second extruder and said slot through which said second stock can pass from said second extruder to said slot, and means positioned in said passageway for distributing said second stock along the full length of said slot so that said second stock is introduced through said slot into said compression chamber as a comparatively thin sheet of substantially uniform thickness and of a width substantially equal to the length of said slot and will be united with said first mentioned stock by the pressure exerted thereon in the compression chamber as the stocks move to the discharge orifice of the die head, whereby the completed tube is extruded with the second stock embedded in the outer surface thereof and integrally bonded thereto.

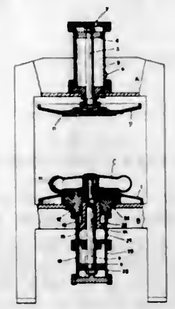
2,747,224
METHOD AND APPARATUS FOR CONTINUOUSLY FORMING ELONGATED SHAPES FROM THERMOPLASTIC MATERIALS
Robert B. Koch and Ralph E. James, Jr., Reading, Pa., assignors to The Polymer Corporation, Reading, Pa., a corporation of Pennsylvania
Application August 6, 1952, Serial No. 302,969
16 Claims. (Cl. 18—14)



1. Equipment for continuously forming elongated shapes from softened plastic material comprising a screw feed device for continuously advancing a stream of the softened plastic material under pressure, the screw feed device having variable control mechanism for regulating the speed of the screw, a hollow forming device through which said stream is forced by the feed device in contact with the interior of said forming device to impart the desired shape thereto, a connection between the screw device and the forming device having a passage for delivering said stream from the former to the latter, a pressure responsive element in said passage, and a control connection between the pressure responsive element and the control mechanism of the screw feed device acting to decrease the screw speed when the pressure in said passage exceeds a median value and to increase the screw speed when the pressure in said passage falls below said median value.

9. A method for continuously forming elongated shapes from softened thermoplastic material, comprising continuously feeding a stream of softened material under pressure into the inlet end of a forming device having open inlet and discharge ends, cooling the material to the point of solidification during passage thereof through the forming device in contact with the interior of said forming device, establishing and maintaining a substantially uniform rate of delivery of the solidified shape from the discharge end of said forming device, and establishing and maintaining a substantially uniform pressure of the softened material in the inlet end of the forming device.

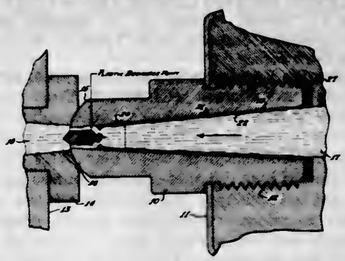
2,747,225
APPARATUS FOR SHAPING TIRE CASINGS
Vittorio Zona, Milan, Italy, assignor to Pirelli S. p. A., Milan, Italy
Application June 10, 1952, Serial No. 292,684
Claims priority, application Italy October 25, 1951
3 Claims. (Cl. 18—17)



1. An apparatus for shaping a flat-built tire band by making it adhere, by approaching of its annular beads, to a pneumatic core remaining associated with the tire during the vulcanization and for removing said core from said tire after the vulcanization, comprising a frame, a circular plate fixedly mounted thereon, a double acting cylinder comprising a piston and stem mounted on said frame, a circular plate mounted on said stem and being coaxial with said fixed plate, whereby said movable plate may be moved to and from said fixed plate along said axis, said plates engaging said annular beads to approach same towards one another, a pneumatic core in the form of a flattened cylinder, said core having end walls, and being of a diameter substantially corresponding to the inner diameter of the shaped tire, one of said core end walls having a single reduced diameter circular mouth centrally located therein, said fixed plate having a central opening corresponding to said mouth, a suction and blowing head passing through said opening and extending into said mouth, means in said suction and blowing head cooperating with an inner edge of said opening for detachably keeping the core at its mouth, a stem axially slidable in said head and cooperating with the core wall opposite to said mouth for deforming said core, means for connecting the inside of said core alternatively with a vacuum and a pressure supply, a single acting cylinder having a piston, said stem being connected to said latter mentioned piston, a second double acting cylinder connected in series with the single acting cylinder and having a piston, the suction and blowing head being fixed to the piston of said second double acting cylinder and being mounted in the manner of a telescope with respect to said stem.

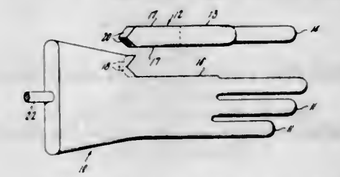
2,747,226
ANTISTRINGING INJECTION NOZZLE
Homer D. Schnitzius and John M. Cox, Indianapolis, Ind., assignors to The Richardson Company, Cincinnati, Ohio, a corporation of Ohio
Application July 25, 1952, Serial No. 300,912
4 Claims. (Cl. 18—30)

1. A device for use in an injection nozzle having a tapered bore therein which comprises an insert member configured to correspond to said tapered bore, said insert member having a bore within its larger end and a plurality of grooves in its exterior face adjacent its smaller end, said grooves and bore being connected by a plurality of holes, and the extreme smaller end of said insert member extending beyond the end of said injection nozzle, the face of said nozzle determined by said tapered bore cooperating with said grooves to form a plurality of passageways designed to discharge material



from said nozzle in a plurality of streams about said extreme smaller end of said insert member.

2,747,227
REVERSIBLE GLOVE DIPPING FORM
Livingston B. Reuter, Warwick, R. I., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application July 31, 1952, Serial No. 301,903
3 Claims. (Cl. 18—41)



1. A reversible glove dipping form including in combination, a thumb unit comprising a thumb and forefinger, a palm unit having thereon fingers, the forefinger on said thumb unit and the fingers on said palm unit being adapted to extend in a common direction and said thumb being adapted to project from the plane of said fingers when the units are assembled, a first face on said palm unit adapted to receive the thumb unit and to arrest its lateral movement, a second face on said palm unit angularly disposed to the finger direction and adapted to receive the base of said thumb unit to prevent longitudinal movement thereof toward the base of said form, two faces constituting the sides of said thumb unit, said faces on said thumb unit being substantially symmetrically disposed relative to an axis substantially parallel to the axis of the forefinger and about which said thumb unit is adapted to be rotated to reverse said thumb unit, said faces on said thumb unit being adpated to abut against the first face on said palm unit alternately when said form is assembled to receive a right or left hand glove, and a face at the base of said thumb unit adapted to abut against said second face on said palm unit when said form is assembled.

2,747,228
PRODUCTION OF COLLAGEN STRANDS
Emil Braun, Weinheim an der Bergstrasse, and Bernd Braun, Melsungen, Germany, assignors to Firma B. Braun, Melsungen, Germany, a body corporation
No Drawing. Application January 19, 1955, Serial No. 482,881
11 Claims. (Cl. 18—47.5)

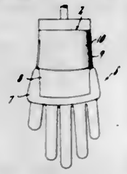
1. Process for the production of collagen strands from animal tendons which comprises mechanically disintegrating tendons into fibers, acidulating the fibers within a pH range of about 2.5–4.5 by mixing the fibers with acid to form a swollen mass, diluting said swollen mass with water to form a castable mass, casting said mass into a thin foil, and forming strands from said foil.

2,747,229

METHOD AND COMPOSITION FOR MAKING LINED DIPPED GOODS FROM LATEX

Merwyn C. Teague, Sparta, N. J., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

Application September 3, 1952, Serial No. 307,627
8 Claims. (Cl. 18—58.5)



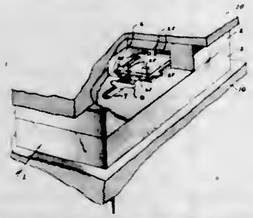
3. A method of making fabric-lined vulcanized rubber latex dipped articles which comprises providing a dipping form having the desired shape, coating the form with a composition comprising styrene-isobutylene resin and polyterpene, applying a desired fabric lining against the thus-coated form in adhesive relation therewith, dipping the form in rubber latex, coagulating the latex on the form, heating the thus-deposited rubber film to vulcanize the same, and thereafter stripping the resulting fabric-lined rubber article from the form.

2,747,230

METHOD FOR PRODUCING PLASTIC ENCASED ARTICLES

Finn H. Magnus, Essex Fells, N. J.

Application April 24, 1952, Serial No. 284,157
3 Claims. (Cl. 18—59)



1. A method of producing a plastic encased article comprising the steps of providing a preliminary form including two sections of cold and hard fusible transparent plastic material shaped to enclose said article between adjacent sides of the section of the preliminary form, positioning the article between said adjacent sides of said two sections of the preliminary form, cementing the juxtaposed surfaces of said two sections together in encircling relation to the article, thereby completely enclosing said article in said preliminary form, and molding and embedding said preliminary form in molten transparent plastic material and forming a body of a predetermined shape at a temperature and pressure only sufficient to fuse together the outer surface portions of the preliminary form and the molten plastic material so that the article is protected by the preliminary form against the heat and pressure of the molten material and appears to have been directly molded into said plastic body, and permitting the molten material to cool and harden in situ.

2,747,231

METHOD OF PRESSING POWDER COMPACTS

Herbert P. Reinhardt, Indianapolis, Ind., assignor to P. R. Mallory & Co., Inc., Indianapolis, Ind., a corporation of Delaware

Application January 26, 1953, Serial No. 333,055
4 Claims. (Cl. 18—59.3)

1. The method of pressing from metallic powder a coherent body which comprises introducing a measured amount of the powder into a die, applying a preform punch of predetermined configuration against the top surface of said powder in the substantial absence of pressure, vibrating said die to cause the powder to flow and to assume the shape of the cavity defined by said die and punch, replacing said preform punch with a pressing



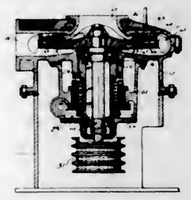
punch of the desired configuration, and then pressing said powder into a coherent body, the shape of said preform punch being so determined with respect to that of said pressing punch as to "pile" the powder in each region of said preform punch in accordance with the fill ratio of the powder and the thickness of the pressed body in such region measured in the direction of pressing.

2,747,232

PROCESS FOR DECORTICATING FIBROUS MATERIALS

Bruce Armstrong, Saginaw, Mich., assignor to Jackson & Church Company, Saginaw, Mich., a corporation of Michigan

Application July 3, 1952, Serial No. 297,078
6 Claims. (Cl. 19—9)



1. In a method for decorticating bundles of fibrous vegetable material, which bundles consist of relatively long, flexible and tough fibers bonded together with natural bonding agents, the steps comprising: suspending said bundles independently of each other in a fluid stream and conducting said stream and bundles suspended therein through a decorticating zone; applying a bending moment to said bundles while same remain suspended in said fluid stream, said bending moment being applied to said respective bundles over a predetermined length thereof; repeatedly applying subsequent bending moments to said bundles and progressively diminishing the distance over which said bending moment is applied as said fluid-supported bundles move through said decorticating zone; conducting said fluid and the decorticated material supported thereby out from said zone.

2,747,233

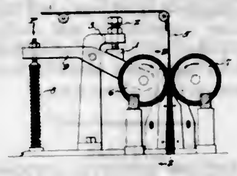
ADJUSTABLE STOP CRIMPER

Ira Virgil Hitt, Waynesboro, Va., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

Application July 25, 1952, Serial No. 300,871
4 Claims. (Cl. 19—66)

1. In a crimper having cooperating feed rolls one of which is mounted on a pivot member so as to be capable

of being moved away from the other roll, the improvement comprising a stop limiting the movement of said



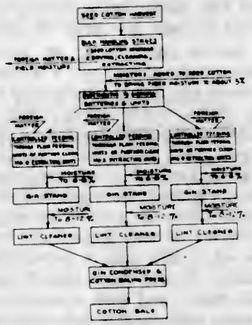
pivotal feed roll so that it cannot come in contact with said other roll.

2,747,234

METHOD OF MOISTURE RESTORATION TO COTTON

Charles C. Speakes and Anselm C. Griffin, Jr., Leland, Miss.; dedicated to the free use of the People of the United States

Application July 14, 1952, Serial No. 298,877
2 Claims. (Cl. 19—66)
(Granted under Title 35, U. S. Code (1952), sec. 266)



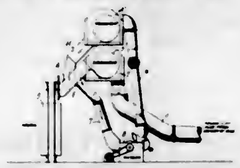
2. A process for the treatment of cotton comprising contacting seedcotton with an aqueous medium to adjust the fiber moisture content of the seedcotton to about 5%, cleaning the seedcotton to remove foreign matter, contacting the cleaned seedcotton with additional aqueous medium to increase the fiber moisture content of the seedcotton to from 6 to 8%, ginning the seedcotton to separate the seeds from the fibers, contacting the ginned cotton with an aqueous medium to adjust its fiber moisture content to from 8 to 12% and baling the cotton.

2,747,235

SYSTEM FOR CLEANING GINNED COTTON PRIOR TO BALING

Jeffrey J. Wallace, Amite, La., assignor to Gullett Gin Company, Amite, La., a corporation of Louisiana

Application May 13, 1955, Serial No. 508,239
3 Claims. (Cl. 19—67)



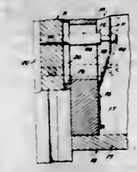
1. System for post-gin cleaning of cotton comprising the following sequence of cotton handling instrumentalities in the following positional relationship, the trunk lint flue from a battery of gins, the battery condenser, the press, and a supplemental lint cleaner and supplemental condenser between said battery condenser and press, said supplemental lint cleaner being at low level, said battery condenser being above said press and said supplemental condenser being above said battery condenser, said trunk lint flue being connected to said battery condenser, a downwardly inclined chute from said battery condenser to said press, a valve in said chute, a downwardly inclined chute from said supplemental condenser connected into said battery condenser chute at the pressward side of said valve and a downwardly inclined chute from said battery condenser to said supplemental lint cleaner at the opposite side of said valve, said valve being movable from a position closing communication between said battery condenser chute and the chute to said supplemental lint cleaner, to a position closing said battery condenser chute and opening the chute so said supplemental lint cleaner, and a suction conduit from said supplemental lint cleaner to said supplemental condenser open to atmosphere at said supplemental lint cleaner.

2,747,236

WORK STATION FIXTURES

William G. French, Baltimore, Md., assignor, by mesne assignments, to Aetna Steel Products Corporation, New York, N. Y., a corporation of New York

Application September 30, 1952, Serial No. 312,309
3 Claims. (Cl. 20—4)



1. In a self-supporting, movable, room dividing partition structure comprising a plurality of partition forming units having abutting vertical edges, means interlockingly joining adjacent units at their abutting vertical edges, said interlocking means including a horizontal stud fixed at one end to one unit and projecting from the abutting edge of said one unit, the adjacent unit having an aperture in the abutting edge thereof into which said stud projects, said stud having an enlarged head on the free end thereof, said adjacent unit having a hollow space into which said aperture opens, keeper means disposed in said hollow space in communication with said aperture interlockingly engaging the enlarged head of said stud, said keeper means including a relatively stiff generally vertically extending resilient leaf spring attached to said adjacent unit only at one end portion thereof and having an inclined portion extending from said one end portion away from the fixed end of said stud terminating in a freely movable unattached portion including a generally flat section through which said stud projects disposed on a plane generally perpendicular to said stud, said unattached portion maintaining tension on the enlarged head of said stud to maintain the units in abutment under changing physical forces.

2,747,237

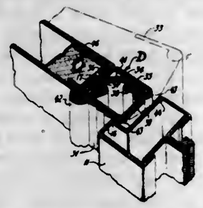
SWINGING DOOR INSTALLATION

Milton P. du Pleasis, Berkeley, Calif., assignor to Price Building Specialties Co., San Francisco, Calif., a partnership, composed of Longueville H. Price, Sr., and Longueville H. Price, Jr.

Application August 31, 1953, Serial No. 377,449
7 Claims. (Cl. 20—16)

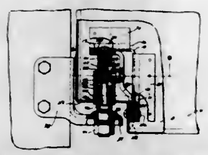
1. A swinging door construction in combination with a jamb opposite the hinged side of the door and relative to which the door swings open and shut, comprising: means hingedly supporting said door with the unhinged door edge spaced from its adjacent jamb a substantial distance; a fire-stop member projecting outwardly from said

door edge at the door opening side of said door toward said jamb and parallel to the plane of said door to a point closely adjacent said jamb when the door is closed; said door edge and said fire stop member defining a sub-



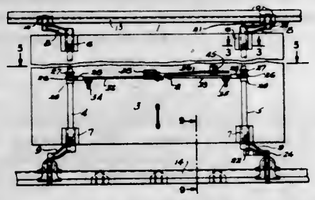
stantially L-shaped recess; a generally rectangular strip of manually compressible cushioning material dimensioned to fit within and substantially fill said L-shaped recess when said door is in closed position.

2,747,238
SELF-CLOSING DOOR AND INTERIOR DOOR HINGE ASSEMBLY
Robert H. Jones, Phoenix, Ariz., and John F. Svoboda, Milwaukee, Wis., assignors to Milwaukee Stamping Company, Milwaukee, Wis., a corporation of Wisconsin
Application June 18, 1953, Serial No. 362,508
15 Claims. (Cl. 20—16)



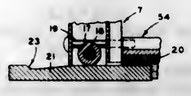
1. In a door having face panels and provided with a cavity between such panels at its lower corner, the combination of bracket means in fixed connection with at least one of said face panels and disposed within the cavity, and a hinge for said door having a portion fixed to the bracket means and comprising a pintle and a gravity closing cam both mounted within the cavity, said bracket means comprising door support means for lifting said door on said gravity closing cam and supporting said door on said cam from said face panel.

2,747,239
RAILWAY REFRIGERATOR CAR DOOR
Thomas C. Soddy, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application April 8, 1953, Serial No. 347,471
12 Claims. (Cl. 20—23)



1. In a door construction for a refrigerator car having a wall provided with a door opening, the combination with a door adapted to close said opening of means for supporting the door and moving the same bodily laterally into and from said opening, comprising a pair of vertically disposed operating shafts journaled on the door and having cranks arranged for support at their outer ends on the car wall, a hand lever on each of said shafts for rotating the same, an operating lever pivotally mounted on the end portion of one of said hand levers, and elements on the end portion of the other hand lever and on the door at a point on the latter intermediate said shafts and adapted to be engaged by the end portion of said operating lever to actuate both of said hand levers in final closing and initial opening movements of the door.

2,747,240
WINDOW CONSTRUCTION
Gerald D. Peterson, Detroit, Mich.
Application February 18, 1953, Serial No. 337,492
2 Claims. (Cl. 20—52)



1. In a window frame having an opening therethrough, said frame having a sill and a pair of panels for closing said opening, said panels being arranged in a generally side-by-side relationship laterally of said window frame, at least one of said panels being held in a horizontally movable sash to overlay the other of said panels, the improvement therein comprising: an upstanding ridge extending longitudinally of said sill; a bottom rail on said sash having a resiliently lined, downwardly opening channel adapted to embrace said ridge; a pair of rollers on said movable sash, said rollers bearing on said ridge, said rollers being positioned respectively adjacent each end of the bottom of said movable sash; the top of said channel being vertically spaced above the bottom of said rollers, whereby said rollers are adapted to support said sash with said top surface of said channel out of engagement with said ridge when said sash is moved horizontally; a pair of depressions in said ridge spaced apart the same distance as said rollers and each adapted to receive one of said rollers when said movable sash is in closed position, the depth of said depressions being at least equal to the spacing of said rail from said sill when said rollers are out of said depressions, whereby said resilient lining in said channel engages said ridge when said movable sash is in closed position.

2,747,241
WINDOW STRUCTURE
William T. Marousky, Shenandoah, Pa.
Application August 18, 1953, Serial No. 374,926
5 Claims. (Cl. 20—52.2)



4. In combination, a window frame having side rails provided with vertically extending grooves in the inner faces of the rails, sliding sashes in said frame having grooves opposed to the grooves in the frame, removable slides lying in the grooves in the frame and sash and detachably connected to the sash for movement therewith, each slide having one of its ends flared outwardly in the plane of the sash and also transversely of said plane to form a sealing wedge between the sash and frame.

2,747,242
AWNING
Samuel H. Ellman, Detroit, Mich., assignor to Harris-Ellman, Inc., Detroit, Mich., a corporation of Michigan
Application March 25, 1954, Serial No. 418,495
6 Claims. (Cl. 20—57.5)



1. A means for supporting and holding the slats of a parallel slat type awning comprising an elongated frame bar in the form of an inverted substantially U-shaped channel, the base of said channel being formed with struck-out portions each being substantially rectangular in shape and being bent at the channel base to form a leg extending upwardly from said base, the free ends of said struck-out portions being bent into a slat engaging flange, a finger being struck out of the portion of the leg near the bar and joined to the leg at a point remote from the bends at the channel base and being bent forwardly to extend towards said channel base.

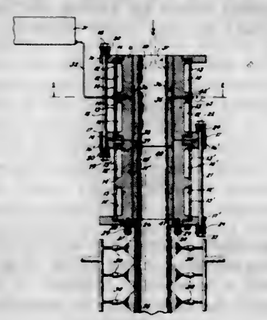
2,747,243
POLE CONSTRUCTION
Robert J. Hoyle, Jr., Syracuse, N. Y., assignor, by mesne assignments, to The MacGillis & Gibbs Company, Milwaukee, Wis., a corporation of Wisconsin
Application September 28, 1953, Serial No. 382,564
8 Claims. (Cl. 20—99)



1. A fabricated pole comprising a plurality of side members extending longitudinally of said pole with the edges of adjacent members in abutting relation forming a hollow polygonal cross section, hinge means connecting the abutting edges of the adjacent members together and permitting collapsing of such hollow polygonal cross section, and securing means extending through opposite side members retaining said side members in the hollow polygonal cross section form.

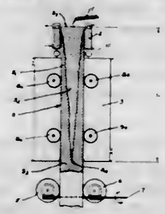
2,747,244
POROUS MOLD FOR THE CONTINUOUS CASTING OF METALS
Norman P. Goss, Mayfield Heights, Ohio
Application July 15, 1953, Serial No. 368,152
6 Claims. (Cl. 22—57.2)

1. A mold for the continuous casting of metal from the molten state comprising a cooled tubular sleeve of heat conducting material, a sleeve of porous material of high heat conductivity having a labyrinth of fine interconnected capillary pores and disposed inside of said first named sleeve, said porous sleeve being in heat-conducting contact with said first named sleeve over sub-



stantially the entire area of the outer face of said porous sleeve save for lubricant supply passages, and means for introducing in said passages a lubricant adapted to pass through said pores.

2,747,245
PROCESS FOR CONTINUOUS CASTING OF METAL BILLETS
Siegfried Junghans, Schorndorf, Germany
Application June 29, 1951, Serial No. 234,195
2 Claims. (Cl. 22—200.1)

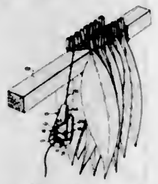


1. A process for the continuous casting of metal billets comprising continuously pouring molten metal into an open mold shell, cooling the molten metal and thereby forming an embryo billet composed of a solidified casing about a molten core, withdrawing the embryo billet from the bottom of the mold, then reducing the cooling by hot gas means in order to maintain the molten core at a depth sufficient for its fluid pressure to eliminate segregations, while at the same time laterally supporting the billet without distortion pressure thereon, solidifying said billet adjacent the bottom of said gas means, and then gripping said billet with billet withdrawal means adjacent the lower end of the molten core at a point where the billet has obtained sufficient solidification to withstand the pressure of the gripping means without forming fissures in the solidified billet.

2,747,246
TOBACCO TYING SHUTTLE
Jasper M. Oldham, Richmond, Va.
Application January 8, 1953, Serial No. 330,310
4 Claims. (Cl. 24—115)

1. A tobacco tying shuttle comprising a hollow substantially frusto-conical body having with regard to its transverse dimension a relatively long axis and a slot along such axis in its large end portion, a diagonal slot extending from the first slot, and a second axially slotted portion extending from the far end of the diagonally slotted portion, the hollow portion of said body forming a passage for twine, a pair of tension members having slightly spaced portions disposed inwardly of the first portion of

said slot and having curved mounting portions conforming to the surface curvature of the large end of said body, fastening means for securing said tension members in position, adjusting means for varying the tension of said tension members so that twine disposed between the



cooperating portions thereof will be gripped, the ends of said tensioning members being rolled to prevent cutting the twine, and a hand strap attached to said body by means of which the device may be retained in the hand of the user.

2,747,247
FASTENING DEVICES
Bert M. Mercer, New York, N. Y.
Application August 23, 1954, Serial No. 451,569
6 Claims. (Cl. 24—157)



1. A fastening device for securing the tail of a catamenial bandage, comprising a substantially flat frame having side and transverse members, a prong in said frame lying substantially in the plane thereof and integral at one end with one transverse member proximate to one end of the frame and projecting in a direction longitudinally of the frame part way of the length of said frame and terminating upwardly in a tip directed toward the other end of said frame for receiving the material of said tail after said material is inserted through the frame, and a pivoted guard swingable to and from a closed position adjacent to said tip and located in its closed position adjacent to said tip, said guard having a pivot at a location on the frame substantially alined with said prong above the tip to retain the tail on said prong and to obstruct the passage of said tail upwardly off said prong.

2,747,248
PIN TYPE FASTENING DEVICE
Bert M. Mercer, New York, N. Y.
Application October 4, 1952, Serial No. 313,104
3 Claims. (Cl. 24—158)



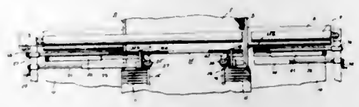
1. A fastening device for securing the tail of a catamenial bandage, comprising a frame, a prong in said frame for receiving a part of said tail thereon, a lateral extension at the side of said frame of formation constituting a rectilinear guiding slideway, a slidable guard in said slideway movable transversely to said prong to a position in close proximity to said prong, and detent means for releasably retaining said guard in said position.

2,747,249
METHOD AND APPARATUS FOR MAKING PRESTRESSED CONCRETE ARTICLES
Thomas J. Chiverton, Regina, Saskatchewan, Canada, assignor to The Preload Co., Inc., New York, N. Y., a corporation of New York
Application May 14, 1952, Serial No. 287,748
5 Claims. (Cl. 25—128)



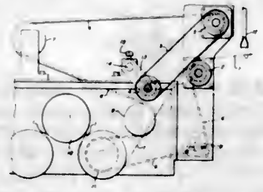
1. A method of making prestressed concrete articles that comprises establishing a first tensioned wire between two spaced points on a molding apparatus defining a mold cavity so that said wire extends through at least a portion of said mold cavity, anchoring the ends of the wire in the molding apparatus, molding concrete in a portion of said mold cavity to cover said wire, establishing another tensioned wire in the free portion of said mold cavity which extends through the mold cavity in a direction different from said first wire, resisting the forces of said other wire by the molding apparatus, molding concrete in the remaining portion of the mold cavity, and transferring the forces of said wires to the molded concrete uniformly and simultaneously.

2,747,250
FABRIC SPREADER
James J. Bramhall, Jr., Greenville, S. C., and Richard T. Scott, Harrison, N. Y., assignors to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Original application December 3, 1939, Serial No. 131,006. Divided and this application September 4, 1953, Serial No. 378,572
6 Claims. (Cl. 26—54)



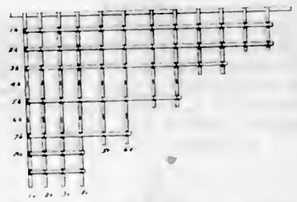
1. In apparatus for uncurling the edges of a fabric having curled edges, a vessel for containing a liquid through which the fabric is passed, guiding means supported in the vessel for controlling the path of the fabric through the vessel, a guide plate supported in inclined relation to the vessel, means for continuously feeding a fabric downwardly over the inclined guide plate to the vessel in a substantially untensioned condition, a pair of rotatable fluid conduits supported over said guide plate in spaced relation thereto, walls defining at least one fluid orifice in each of said conduits, means for rotating each of the conduits on its axis to vary the angle at which fluid is discharged from the orifices against the fabric passing over the guide plate, and means for simultaneously moving each of said conduits in a transverse path across and above the surface of the guide plate.

2,747,251
YARN APPARATUS
William Thomas Reed Kinraide, Bolton, Mass., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application July 12, 1950, Serial No. 173,395
7 Claims. (Cl. 28—35)



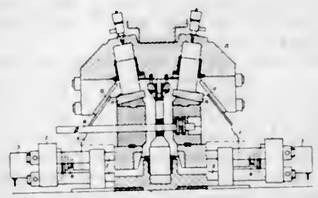
1. Apparatus for uniformly tensioning yarn ends in a warp which comprises a driven roll; an endless belt driven at essentially the speed of said driven roll and located to form a slight nip with said driven roll through which nip said warp runs, said belt located at an angle to said warp to deflect any broken end out of the plane of said warp; a collecting device to receive said broken end; and means to adjust the pressure of said belt against said driven roll.

2,747,252
TRELLIS DRAPE
Geneva K. Fry, Reading, Pa.
Application March 3, 1953, Serial No. 340,055
1 Claim. (Cl. 28—78)



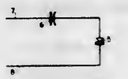
A trellis drape comprising a series of spaced, parallel strips of flat, thin material disposed in substantially the same plane, a second series of spaced, parallel strips of flat, thin material disposed at right angles to said first series and in substantially said plane, a plurality of small flexible loops fastened to one of said series of strips at the points of intersection with the other series and through which said last mentioned series extends so as to be supported thereby.

2,747,253
DEVICE FOR FORGING PARTS HAVING LARGE CROSS-SECTIONAL VARIATIONS
Joseph Antoine Conchon, Saint Chamond, France, assignor to Compagnie des Forges et Aciéries de la Marine et d'Homécourt, Paris, France
Application September 21, 1951, Serial No. 247,636
Claims priority, application France February 19, 1951
1 Claim. (Cl. 29—6)



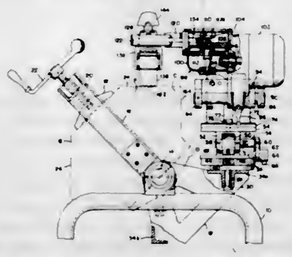
In a forging apparatus of the type described for forging crankshafts and similar elements which includes a base having a longitudinal slide, two cradles sliding upon said slide having slopes on both sides, an upper cross-member having slopes complementing said cradle slopes for coaction therewith, a central pair of swages between said cradles adapted to engage a blank at the site of a crank to be formed therein, clamps in said cradles engaging said blank to either side of said site and first hydraulic means for simultaneously forcing said cradles towards each other longitudinally of the blank and for bodily urging said central swages transversely of the blank, the provision of complementary hydraulic means mounted on said base and acting on said cradles at the base thereof to urge them towards each other, a first hydraulic distributor control unit for operating said first hydraulic means, and a complementary hydraulic distributor control unit adjacent to said first control unit for operating said complementary hydraulic means in synchronism with said first control unit.

2,747,254
MANUFACTURE OF SELENIUM RECTIFIERS
William R. Harding, Ebenezer, N. Y., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application June 14, 1952, Serial No. 293,616
5 Claims. (Cl. 29—25.3)



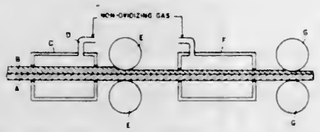
1. A method of treating rectifier cells consisting of a layer of selenium interposed between a metal base plate and a metal counterelectrode, said method comprising applying a substantially constant alternating voltage across a rectifier cell and a capacitor in series.

2,747,255
UNIVERSAL SLOTTING MACHINE
Alfred F. Millington, Northville, Mich., assignor to Novi Equipment Company, Novi, Mich., a corporation of Michigan
Application October 6, 1952, Serial No. 313,281
9 Claims. (Cl. 29—73)



1. A slotting machine comprising a base, means on said base for supporting a work piece, a horizontal rail on said base, a support slide adjustable longitudinally of said rail, a first plate mounted on said slide for angular adjustment about a vertical axis, a second plate swivelled to said first plate for angular adjustment about a horizontal axis, an upwardly extending tool support column swivelled to said second plate for angular adjustment about an axis perpendicular to and intersecting said horizontal axis, a tool slide on said column adjustable longitudinally thereof, a slotting cutter carried by said tool slide, and adjustable means intermediate said slotting cutter and tool slide providing for rectilinear adjustment of said cutter in a plane perpendicular to the direction of adjustment of said tool slide on said column and for angular adjustment about an axis parallel to the direction of its rectilinear adjustment.

2,747,256
PROCESS OF FORMING COMPOSITE STRIPS OF BACKING AND BEARING METALS
Wilbur E. Wyatt, Greensburg, Ind., and John M. Robertson, Birmingham, Mich., assignors to Bohn Aluminum & Brass Corporation, Detroit, Mich., a corporation of Michigan
Application August 31, 1953, Serial No. 377,452
2 Claims. (Cl. 29—149.5)



1. The process of forming composite strips of bearing and reinforcing metal comprising advancing a backing strip of reinforcing metal in the direction of its length, depositing a layer of comminuted aluminum base bearing metal at normal temperature on said strip and to a predetermined depth at one point in its advancement, passing said strip with the deposited layer of comminuted metal thereon through a heat treating furnace having a non-oxidizing atmosphere therein to sinter the comminuted metal and bond the same to said backing strip, and rolling to densify the sintered metal and increase the strength of said bond.

2,747,257
PRODUCTION OF ELECTRIC FUSEHEADS
Donald George Ashcroft, Saltcoats, and Ian Charles McLean Bell, Glasgow, Scotland, assignors to Imperial Chemical Industries Limited, London, England, a corporation of Great Britain
Application October 21, 1954, Serial No. 463,688
Claims priority, application Great Britain December 9, 1953
5 Claims. (Cl. 29—155.5)



1. A process for the production of electric fuseheads including two metal foil pole pieces separated by a sheet of non-conducting material so that a surface of each foil is united to an opposing surface of the sheet of non-conducting material and having one end of each metal foil pole piece connected together by an electric resistance wire which is embedded in a bead of deflagrating composition, said process comprising providing a narrow strip of metal foil conducting material having along its length a line of rectangularly evenly spaced slots of substantially greater length than width parallel to the edges of said strip, applying resistance wire to said strip so that the said wire passes transversely across the top surface of the strip at a position intermediate between the ends of each of said spaced slots, securing said resistance wire to said strip by means of metallic wire covering the resistance wire close to and on each side of the slots and attaching said metallic wire to the said strip, bending said strip longitudinally and ultimately to about 180 degrees over at least one strip of insulating material to form a unitary structure with the material, cutting the thus formed unitary structure into a comb of wired teeth, embedding the tip of each wired tooth in at least one deflagrating composition and thereafter cutting the thus treated comb into individual fuseheads.

2,747,258
METHOD OF ASSEMBLING HEAT TRANSFER COILS
Israel Kramer, Trenton, N. J., assignor to Mercer Engineering Co. Trenton, N. J., a copartnership
Application November 13, 1952, Serial No. 320,188
5 Claims. (Cl. 29—157.3)



1. A method of assembling heat transfer coils which includes the following steps: bending a tube into a sinuous form comprising substantially straight parallel portions connected by curved portions; flattening said curved portions at both sides of the bent tube; providing a plurality of fins each having series of apertures conforming in shape to but slightly larger than the combined cross section of a flattened curved portion and its connecting straight portions of the tube; providing header plates each having a series of apertures corresponding to the apertures in the fins; causing relative movement of the bent tube and fins in line with the straight portions of the tube to seat the fins on said straight portions; causing similar relative movement of the tube and header plates to seat the latter on said straight portions; and thereafter expanding the straight portions of the tube to bring them into operative contact with the fins and header plates thereon and expanding the flattened curved portions to at least approximately their original form.

2,747,259
METHOD OF FORMING A RING HAVING EMBEDDED METAL INSERTS THEREIN
Ulcric Victor Brioux, Toronto, Ontario, Canada, assignor, by mesne assignments, to Baker & Company, Incorporated, Newark, N. J., a corporation of New Jersey
Application April 23, 1952, Serial No. 283,955
3 Claims. (Cl. 29—160.6)



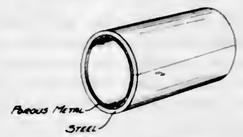
1. The method of forming a ring or the like having embedded metal inserts therein comprising forming a ring blank of annular discrete configuration, drilling at least one hole in the outer periphery of the blank to a depth less than the thickness of said blank, displacing the metal by plastic deformation immediately adjacent said hole inwardly within said hole so as to conform said opening in a desired configuration, and placing a metal insert in said opening having a mating configuration therewith.

2,747,260
METAL-CERAMIC MATERIALS AND METHOD OF MAKING SAME
George M. Carlton and Lee S. Busch, Indianapolis, Ind., assignors to P. R. Mallory & Co., Inc., Indianapolis, Ind., a corporation of Delaware
No Drawing. Application February 26, 1952, Serial No. 273,569
18 Claims. (Cl. 29—182.5)

1. The method of making metal-ceramic bodies which comprises bringing, an intermetallic constituent of molybdenum disilicide into contact with a finely divided ceramic constituent essentially consisting of a refractory oxide selected from the group consisting of the oxides of aluminum, zirconium, chromium, silicon and beryllium and with a fluxing amount of an alkaline earth metal compound, and heating the constituents to a temperature sufficient to cause bonding thereof and the formation of an integral metal-ceramic body in which said constituents are uniformly distributed, the relative proportions of said constituents being so determined that the intermetallic constituent forms between 10% and 90% by volume of the body.

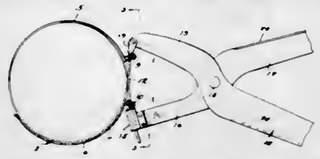
14. A metal-ceramic body consisting of about 77.7% $MoSi_2$, about 21.5% Al_2O_3, and about 0.8% CaO.

2,747,261
BEARING AND METHOD OF MAKING SAME
Athan Stosuy, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 28, 1952, Serial No. 290,426
3 Claims. (Cl. 29—191.2)



1. A bearing comprising a steel backing member and an anti-friction facing having good anti-galling properties coextensively bonded thereto, said facing consisting of a sintered and rolled layer of porous ferrous material including phosphorus in quantities of from .25% to 1.25% together with combined carbon in quantities of from .40% to .90%.

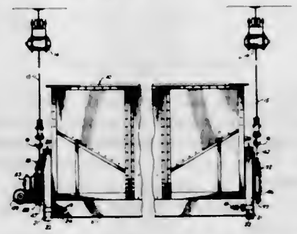
2,747,262
TOOLS FOR COMPRESSING PISTON RINGS
James E. Lightwine, Arlington, Calif.
Application December 3, 1954, Serial No. 473,018
1 Claim. (Cl. 29—224)



In a tool for compressing piston rings, a body comprising a split band having overlapped ends, a laterally extended bearing having an opening, secured to one end of said split band, a curved metal band strip adjustably connected to said split band, a bearing having an opening extending laterally from the other end of said metal strip, a pair of crossed handles pivotally connected together and providing a pair of jaws, and a guide rod connected to one of said jaws, said rod slidably engaging through said openings in said bearings and slidable through the other of said jaws whereby said jaws engage said bearings moving the split band and strip to thereby effect contracting said band and compressing a piston ring held in said band as said handles are pressed together.

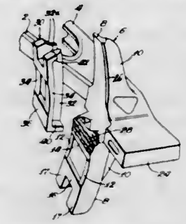
2,747,263
CAR TURNOVER DEVICE
Frank W. Green, Fairfield, Ala., assignor to Pullman-Standard Car Manufacturing Company, Chicago, Ill., a corporation of Delaware
Application September 26, 1951, Serial No. 248,413
4 Claims. (Cl. 29—284)

1. A turnover device for a car having a rigid tubular member of non-circular section, comprising a supporting member, an external ring gear secured to the supporting member, an attaching member having securing means for attachment thereof to said tubular car member, said securing means including a rigid thrust block corresponding to the section of the tubular member and engageable in the end thereof and means to lock the block against disengagement therefrom, a shaft element fixed to the attaching member journaled in said gear to support the attaching member for rotation about the gear axis, driving means fixed to the attaching member, a pinion on the driving means and driven thereby in mesh with the gear for epicycloidal travel thereon to rotate the attaching member, and means fixedly mounted relative to said



attaching member for holding the attaching member in selected rotated position relative to the gear, said holding means including a brake applicable to prevent pinion travel, biasing means urging the brake to applied position, and solenoid means energized and deenergized in accordance with actuation and non-actuation of the driving means acting against the biasing means to dispose the brake in released position when energized and causing application of the brake when deenergized.

2,747,264
RENEWING BRAKE HEADS
John A. Buvelot, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application June 30, 1950, Serial No. 171,511
2 Claims. (Cl. 29—401)



2. The method of repairing a damaged brake head segment of a brake beam having permanently attached upper and lower brake head segments each provided with a front wall and two side walls projecting forwardly from the front wall, which method comprises torch cutting away the side walls of the damaged brake head segment, cutting away and beveling the lateral edges of the front wall of the damaged segment to facilitate welding, cutting beveled welding portions on the rear edges of spaced side walls of a replacement segment having ties interconnecting the front edges of its spaced side walls, assembling the replacement segment on the front wall of the damaged brake head segment, and then welding the beveled portions of the side walls of the replacement segment to the beveled lateral edges of the front wall of the damaged brake head segment.

2,747,265
RECLAIMING SCRAP METAL
Helmich W. Boessenkool, South Easton, Mass., assignor to Metals & Controls Corporation, Attleboro, Mass., a corporation of Massachusetts
Application June 29, 1951, Serial No. 234,246
8 Claims. (Cl. 29—403)

1. The method of forming composite multi-layer metal stock and salvaging scrap resulting from removal of part

of the stock, comprising the steps of squeezing the metal layers together at such temperature and with such reduction as to effect an incipient bonding of opposing faces of the metal layers across substantially the entire interfacial area of the metal layers, with a bond of insufficient strength to prevent the metal layers from being intentionally peeled apart and capable of being increased by a subsequent heat treatment at temperatures below that at which a liquid phase is formed at the interface, removing part of the resultant multi-layer stock with consequent formation of multi-layer scrap, the layers of which are only incipiently bonded, and peeling apart the layers of the scrap.



2,747,266

METHOD OF COLD WORKING BLOCKS BETWEEN DIES

Guillaume Schaming, Richmond (Surrey), England, assignor to Societe Schostal, Vaduz, Liechtenstein, a joint-stock company

Application January 7, 1953, Serial No. 330,103
Claims priority, application France July 18, 1952
4 Claims. (Cl. 29—417)



1. The method of cold-forming a cylindrical disc cut from bar stock to decrease its thickness and increase its diameter within the confines of a circular die without producing edge cracks in the resulting blank comprising the steps of subjecting the disc to axial pressure to cause it to flow radially outwardly toward the wall of said die, and causing the outwardly flowing material to the disc to flow into at least one annular ridge in a zone spaced from the periphery of the flattened disc.

2,747,267

METHOD OF COLD FLATTENING BLOCKS

Guillaume Schaming, Richmond (Surrey), England, assignor to Societe Schostal, Vaduz, Liechtenstein, a joint-stock company

Application January 7, 1953, Serial No. 330,104
Claims priority, application Switzerland January 15, 1952
4 Claims. (Cl. 29—417)



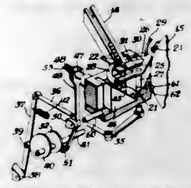
1. The method of cold-forming a cylindrical block cut from bar stock to decrease its thickness and increase its diameter within the confines of a circular die without producing edge cracks in the resulting blank comprising the steps of subjecting the block to axial pressure to cause it to flow radially outwardly toward the wall of said die, and causing the thus outwardly flowing material of the block to flow between outwardly radially converging surfaces whereby the resulting blank has a slight spherical convexity on at least one of its faces.

2,747,268

METHOD AND APPARATUS FOR CUTTING THE HEAD FROM AN ELONGATED MEMBER AND MOVING THE MEMBER TO A PREDETERMINED POSITION

John G. Baumgartner, Oswego, Ill.

Application April 18, 1951, Serial No. 221,651
7 Claims. (Cl. 29—418)



1. The method of positioning an elongated member having ends of different configuration into a holding fixture having a horizontal opening for receiving the member, with the ends of the member extending in predetermined positions in the fixture, said method including the steps of, forming said member with a head on one end thereof, sliding the member on the head thereof into a desired position, molding said member by the head thereof in a substantially vertical position, cutting the head off the member and allowing the member to drop, controlling the movement of the elongated member from a substantially vertical position through an intermediate inclined position to a substantially horizontal position, and moving the elongated member horizontally into the opening in the fixture.

2,747,269

INSULATING STRUCTURES

Leonard W. Atchison, Erie, Pa., assignor to General Electric Company, a corporation of New York

Application September 27, 1952, Serial No. 311,921
9 Claims. (Cl. 29—455)



1. The method of manufacturing a sealed panel of the vacuum type which comprises providing two complementary walls, partially welding the adjacent edges of said walls together for mechanical engagement and for providing an incomplete seal having relatively small gaps therein, coating at least said edges of said walls with porcelain enamel frit to cover said gaps, placing said panel in a chamber, evacuating said chamber whereby the interior of said panel is evacuated through said gaps and through said frit, heating said frit to its firing temperature, and allowing said panel to cool below the solidification temperature of said enamel while maintaining said panel in said evacuated chamber whereby said solidified enamel fills said gaps and effects sealing of said panel.

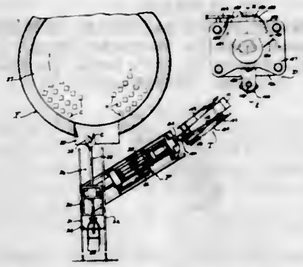
2,747,270

FORGING PROCESS

John F. Crawford, deceased, late of Racine, Wis., by Maude A. Crawford, executrix, Racine, Wis.; said John F. Crawford assignor to J. I. Case Company, Racine, Wis., a corporation of Wisconsin

Original application April 28, 1945, Serial No. 590,896, now Patent No. 2,545,229, dated March 13, 1951. Divided and this application March 8, 1951, Serial No. 214,605
4 Claims. (Cl. 29—534)

1. The method of forging a hollow object which comprises supporting a billet from below, initiating a piercing operation from above in a manner to enlarge the upper end of the billet at its outer margins to form a permanent outwardly extending stretching shoulder, additionally supporting the billet at said outer margins at its upper end by means of said permanent stretching shoulder and continuing the piercing operation with sufficient force to overcome the lower support and stretch the billet between the point being pierced at the moment and said shoulder, the piercing force being resisted partly by the upper support and partly by said lower support.

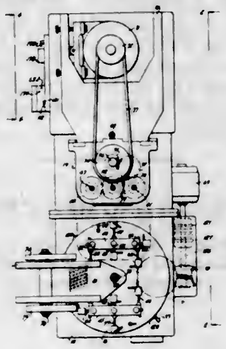


2,747,271

PROCESS OF MACHINING

Emery C. Raehrs, Cincinnati, and William D. Averill, Mariemont, Ohio, assignors to The Cincinnati Milling Machine Co., Cincinnati, Ohio, a corporation of Ohio

Application February 10, 1951, Serial No. 210,314
5 Claims. (Cl. 29—558)



1. The process of high production machining consisting in effecting an arcuate shifting of a work piece at a rapid traverse rate to a working position, interrupting said arcuate shifting and effecting a slow relative feeding movement between the work piece and a milling cutter to mill a surface thereon, reestablishing rapid traverse arcuate shifting of the work piece, and performing a broaching operation on said milled surface during said reestablished rapid traverse arcuate shifting thereof.

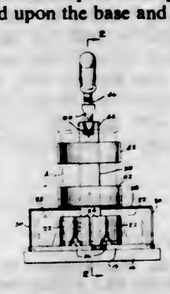
2,747,272

CAN OPENER

John Lester Smith and Glenn Richard Parker, Gainesville, Fla.

Application September 23, 1955, Serial No. 536,205
6 Claims. (Cl. 30—6.1)

1. A device for opening cans of different sizes comprising a base; a standard projecting upwardly therefrom; means on the standard providing a stop for a can to be opened; a lever handle swingably mounted upon said standard, said handle including means depending from the handle adapted to penetrate the top of a can disposed adjacent said standard in position to be opened; and a pair of blocks adapted to support a smaller can, pivotally mounted upon the base and adapted to be spread by a larger can on movement of the larger can into position to be opened.



2,747,273

LIQUID DISPENSING RAZOR

Gustaf A. Olsson, Los Angeles, Calif.

Application December 9, 1952, Serial No. 324,969
2 Claims. (Cl. 30—41)



2. A safety razor comprising a body having an aperture therethrough, a container secured to said body, a tube secured to said body passing through said aperture and extending into said container, and a cutting head secured to said body, said head comprising a backing plate and a cap, said backing plate and said cap having aligned apertures therein, said tube extending out of said body through said apertures and extending into said backing plate, said cap having a transversely extending groove in its rear surface, said tube communicating with said groove.

2,747,274

POWER OPERATED PIPE CUTTER

Ralph J. Willard, Seattle, and Riley T. Brown, Medina, Wash., assignors to Spring Load Manufacturing Corp., Seattle, Wash., a corporation of Washington

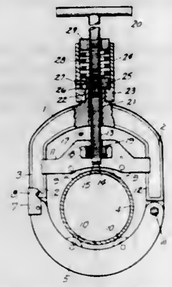
Application May 18, 1953, Serial No. 355,568
6 Claims. (Cl. 30—97)



1. In a pipe cutter, a frame ring formed of a plurality of sections; a tool carrying ring formed of a plurality of sections and rotatively supported within said frame ring; an annular cam plate formed of a plurality of sections and adjustably disposed within said frame ring; detachable means securing the sections of said frame ring together, whereby said two rings and said cam plate may be applied to a pipe from the side of the pipe; pipe clamping jaws carried by said frame ring; means operated by said annular cam plate, whereby said jaws are radially moved into and out of clamping positions; driving

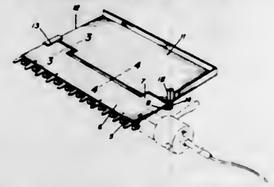
means interconnecting said two rings adapted to rotate said tool carrying ring relative to said frame ring; a pipe cutting tool carried by said tool carrying ring; tool feeding devices carried by said tool carrying ring and connected with said pipe cutting tool; and fixed means on said frame ring positioned in the path of said tool feeding devices, whereby said pipe cutting tool is fed radially inward in response to relative rotation of said two rings.

2,747,275
PIPE CUTTER
Axel V. Jonasson, Erie, Pa., assignor to Reed Manufacturing Company, Erie, Pa., a corporation of Pennsylvania
Application July 29, 1955, Serial No. 525,129
3 Claims. (Cl. 30—101)



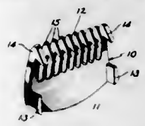
1. A pipe cutter comprising wheels journaled in a common plane for engaging opposite sides of a pipe, a rigid frame including a guide member on one side of the pipe and guided on the frame for movement in said plane, wheel journals respectively in the guide member on one side of the pipe and in the rigid frame on the opposite side of the pipe, a pressure screw axially slidable through the rigid frame and extending transverse to and into pressure transmitting relation with the guide member, a spring housing fixed to the rigid frame, a coil spring in the housing surrounding the pressure screw, a first spring seat supported in the housing for the end of the spring remote from the guide member, said spring seat having an opening therein through which the pressure screw slidably extends, and a second spring seat for the other end of the spring including a nut threaded on the pressure screw and slidable but non-rotatable relative to the housing.

2,747,276
CLIPPING CATCHER FOR POWER HEDGE TRIMMERS
John Frank Yatsko, Wilkes-Barre, Pa.
Application November 25, 1953, Serial No. 394,297
4 Claims. (Cl. 30—132)



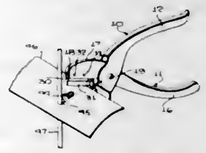
1. A clipping accumulator for hedge trimmers comprising a flat shield adapted for attaching to the trimmer, a tray-like catcher, a hinge structure connecting the catcher to the shield at the rear of the trimmer for swinging adjustment of the catcher relative to the plane of the trimmer, said hinge structure including a hinge pin rotatably connected to the shield and fixed to the catcher, an angularly extending arm at one end of the hinge pin, and a channel-shaped clip carried by the arm and in which an edge portion of the shield is engageable to lock the catcher in a predetermined position with respect to the trimmer.

2,747,277
ATTACHMENT FOR ELECTRIC CLIPPER
Antonio Esposito, Worcester, Mass.
Application February 13, 1953, Serial No. 336,855
1 Claim. (Cl. 30—200)



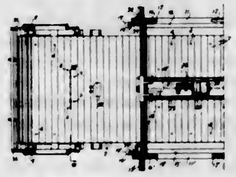
An attachment for electric hair clippers formed of one piece of aluminum comprising a base portion having a first plane surface adapted to lie against one surface of the bottom of the clipper, fingers integral with the base having inner surfaces lying in a plane which meets the first plane surface at a large obtuse angle and which is adapted to lie against another surface of the bottom of the clipper, a tooth integral with each finger and having an edge meeting the inner surface of the finger at an acute angle in which the edge of the clipper may reside, and a clamping member integral with each side of the base and having a plane surface adapted to lie against a side of the clipper, the edge of the base portion opposite the fingers being in the shape of the arc of a circle, the outer surfaces of the base portion and the fingers lying in a substantially cylindrical surface the axis of which extends transversely of the attachment, the side edges of the base portion and end fingers being inclined inwardly, the narrow end of the attachment being at the end occupied by the fingers, the curve of the outer surface approaching the first plane surface at the edge opposite the fingers.

2,747,278
TOOL FOR SLOTTING METAL VENETIAN BLIND SLATS
Hobert G. Buyas, Burbank, Calif.
Application July 31, 1953, Serial No. 371,547
2 Claims. (Cl. 30—258)



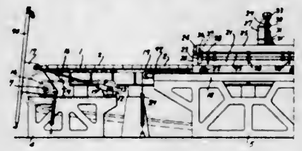
1. For use with metal Venetian blind slats having transversely elongated closed apertures therein for receiving an elevator cord therethrough, a tool for cutting a slot in a slat to extend from an aperture in the slat through one longitudinal edge of the slat to facilitate removal of an elevator cord, said tool comprising a cutter head and a die head both arranged at one end of the tool for movement toward and away from each other in intersecting arcuate paths and adapted to receive the one longitudinal edge of the slat therebetween, said cutter head including a cutter projecting therefrom toward said die head, said die head including a die block having a groove therein opening through opposite ends thereof and through one side thereof adjacent said cutter head for receiving therein said cutter to afford a shearing action therewith as the heads are advanced into intersecting relation to cut a slot in said slat, a clip carried by said die head in surrounding relation thereto and having a bight spaced outwardly from the free end of said die head, a positioning finger received by said clip in the space between said bight and said die head and projecting toward said cutter head, said finger being adapted to be received in an aperture in the slat to position said cutter head and said die head relative to said slat and said aperture so that the slat cut by said tool will extend from the aperture to the longitudinal edge of the slat received between said heads.

2,747,279
STOP DEVICE FOR AUTOMATIC GLASS CUTTING APPARATUS FOR CROSS CUTTING
Motoharu Kurata, Shibuya-ku, Tokyo, Japan, assignor to Asahi Garasu Kabushiki Kaisha, Tokyo, Japan, a corporation of Japan
Application January 5, 1953, Serial No. 329,504
5 Claims. (Cl. 33—32)



1. In an automatic glass cutting apparatus for cross cutting, a stop device comprising a conveyor adapted to be loaded at a predetermined position with glass plate being cut, means moving said conveyor intermittently, a guide frame, a slide bed mounted on said guide frame, a cross cutting device having cutting tools and connected with said slide bed, said frame being of rectangular shape and comprising front and rear guide rails having a rack bar along the inside thereof and connecting bars connected substantially at right angles with said guide rails, slide rests having sliding grooves formed therein, rollers carried by said connecting bars and projecting from the outside thereof, said rollers sliding in said grooves, whereby the guide frame is caused to advance for a small distance by the inertia when the conveyor stops, impact pieces having arms and pivoted to both outer ends of the front guide rail of said guide frame, turning members having arms and pivoted in the middle of said guide rail, and connecting members connecting respectively arm of each of said impact pieces with an arm of each of said turning members, said connecting members being adapted to be actuated by the swing action of the other arm of the impact pieces as soon as a projection of slide bed strikes said other arm of the impact piece during the travelling of the slide bed and causes said arm to swing.

2,747,280
APPARATUS FOR AUTOMATICALLY CUTTING GLASS SHEETS
Motoharu Kurata, Tokyo, Japan, assignor to Asahi Garasu Kabushiki Kaisha, Tokyo, Japan, a corporation of Japan
Application January 5, 1953, Serial No. 329,503
9 Claims. (Cl. 33—32)



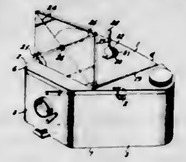
1. In an automatic glass cutting apparatus, the combination which comprises a conveyor on which the glass sheet to be cut is loaded, said conveyor having a recess, a guide frame bridged across above said conveyor, a slide bed having side walls and so mounted as to be capable of making a forward and backward movement on said frame, a cross cutting or scoring device provided on at least one side wall of said bed, carrying any suitable number of glass cutting tools for cross cutting or scoring capable of changing the position freely as well as of ascending and descending, an engaging lever having a bent portion falling in said recess of the conveyor and bumping against the rear edge portion of said recess, and means connecting said lever with said guide frame.

2,747,281
GUN SIGHT
Frederick W. Sampson, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 8, 1952, Serial No. 286,723
10 Claims. (Cl. 33—56)



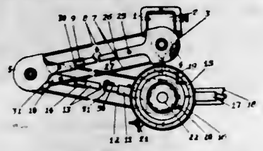
1. In a gun sight, the combination including, a support adapted to be secured to the receiver portion of a gun, a sight barrel extension rotatably mounted on said sight mount but restrained against axial movement relative thereto, a sight barrel having threaded engagement with said sight barrel extension whereby relative rotation therebetween will effect axial movement of said sight barrel, a non-rotatable sight operatively engaging said sight barrel such that axial movement of said sight barrel and rotation of said sight barrel will effect axial movement of said sight, the construction and arrangement being such that a vertical zeroing adjustment of said sight may be accomplished by effecting relative rotation between said sight barrel and said sight barrel extension, and means operable to prevent relative rotation between said sight barrel and said sight barrel extension for maintaining said vertical zeroing adjustment.

2,747,282
CAMERA VIEW FINDER
Walter Alexander Lea, Los Angeles, Calif., assignor to Earl V. Ehrhardt, Altadena, Calif.
Original application September 13, 1946, Serial No. 696,706. Divided and this application February 25, 1950, Serial No. 146,271
2 Claims. (Cl. 33—64)



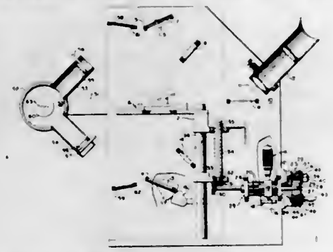
2. A camera casing having a top, a recess in said top, a transparent plate fitting in said recess, a hinge at the front of said recess for said plate, said plate having a central sight window, a rear obturator sight having a hinge support in said recess, said rear sight having an extension adapted to overlie the rear edge of said plate when said plate is in said recess overlying said rear sight, and a catch for said extension to hold said rear sight upright when said plate is upright.

2,747,283
BAND TENSION ARRANGEMENTS FOR DRAFTING MACHINES
Morris Sanders, Rochelle Park, N. J.
Application June 18, 1954, Serial No. 437,708
1 Claim. (Cl. 33—79)



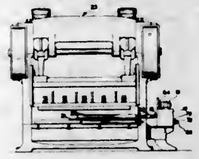
In a drafting machine of the band and pulley type, which has pivoted to each other a pair of arms each of which is provided at each end with a bracket that has a tubular portion and contains a pulley on which runs an endless band, a band tensioning arrangement comprising a tube having one of its end portions slidably extended into the tubular portion of a first one of said brackets, a longitudinal member being slidably extended into the aforementioned end portion of said tube and having annular grooves in both of its end sections, a first screw extending through the tubular portion of said first bracket into the first one of said grooves in said longitudinal member, a second screw extending through said tube into the second one of said grooves in said longitudinal member, a cam member adjacent one end of said longitudinal member being rotatably extended through said tube, a thrust receiving member adjacent the other end of said longitudinal member being provided on said first bracket, an operating lever secured to said cam member outside of said tube for turning said cam member, a sleeve member extended from and secured to the other end portion of said tube being partially extended into the tubular portion of a second one of said brackets, means for preventing a rotation of said tube relative to said second bracket being provided on said sleeve member, and a nut screwed upon that portion of said sleeve member which is not extended into said second bracket and extends beyond the tubular portion thereof.

2,747,284
DOUBLE IMAGE MICROMETER
Walter P. Christoph, Riverdale, Md.
Application February 25, 1955, Serial No. 490,710
9 Claims. (Cl. 33—125)
(Granted under Title 35, U. S. Code (1952), sec. 266)



9. A double image measuring device comprising a means for supporting an object having a plurality of marks thereon in the common symmetry plane of the device, means for orienting the object on said supporting means, means including a beam splitter disposed in said common symmetry plane for providing a pair of substantially symmetrical optical paths, means for focusing the images of the said marks from each optical path in a common focal plane and in a superimposed position therein, means for viewing the images at said focal plane, means to provide a proportional displacement of the beams of both of said optical paths whereby the images of the marks in the respective optical paths are brought into coincidence before said viewing means, and means movable in correlation with said displacement means for providing a measurement of the movement thereof.

2,747,285
LENGTH CONTROL APPARATUS FOR USE IN FEEDING STRIP STOCK
Kenneth L. Bandy, Youngstown, Ohio, assignor to The McKay Machine Company, Youngstown, Ohio, a corporation of Ohio
Application July 19, 1951, Serial No. 237,650
7 Claims. (Cl. 33—132)



1. Apparatus of the character described comprising an overrunning clutch having a driver adapted to be connected to a measuring roll and a driven element comprising a forwardly rotatable control shaft, a length-indicating dial associated with said control shaft and mounting a circuit-controlling device adapted to establish a control circuit upon said shaft reaching a predetermined rotational position with respect to said dial, a sleeve rotatably mounted on a portion of said shaft and interconnected with said shaft through reduction gearing and a second overrunning clutch, said sleeve being adapted to be driven in a forward direction, a second length-indicating dial associated with said sleeve and mounting a circuit controlling device adapted to establish a second control circuit upon said sleeve reaching a predetermined rotational position relative to said second dial, means including reduction gearing interconnecting said dials to rotate said dials to an adjusted position and to retain the same in such position, and recycling means to rotate said shaft and said sleeve in forward directions to their initial starting positions upon the completion of each cycle of operation.

2,747,286
LINE MEASURING DEVICE
Berkley W. Bedell, Spirit Lake, Iowa
Application September 24, 1954, Serial No. 458,065
2 Claims. (Cl. 33—134)



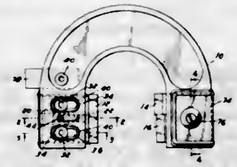
1. A measuring device for determining the length of a line comprising, a mounting structure, a wheel rotatably mounted on the mounting structure and having a periphery adapted to frictionally engage a line and be rotated proportionately to the travel of said line, said wheel being provided with an axial shaft, a worm drive on said shaft, a disc having radially toothed circumference rotatably mounted on a fixed axis disposed laterally to that of said wheel and normally in driving connection with the worm drive, a reference pointer fixed with respect to said mounting structure, and resilient means bearing on said disc and permitting forcible displacement of said disc out of its axial position and driving connection with the worm drive to permit rotation by manually grasping the toothed circumference and resetting thereof with respect to said reference pointer.

2,747,287
MEASURING INSTRUMENTS
Louis J. Petion, Garden City, N. Y.
Application May 9, 1955, Serial No. 506,950
6 Claims. (Cl. 33—141)



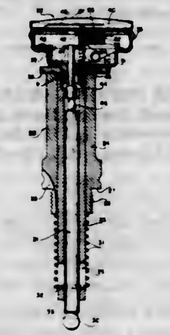
1. In a measuring instrument including a wheel housing having a slot, said slot having an enlarged inner portion, a wheel protruding through this slot, a hub on this wheel located inside the housing, another wheel inside the enlarged portion, a barrel carried by the housing, a bracket at the other end of the barrel, said bracket holding another wheel, a circular band mounted over the circumferences of the wheel hub of the protruding wheel and the other two wheels, and a roll of paper or other flexible material imprinted with scales and each end of this roll mounted and rolled onto a shaft, both shafts seated with one end in the wheel housing and the other end protruding through the wheel bracket.

2,747,288
GAUGE
Jan Reef, East Detroit, Mich.
Application April 20, 1953, Serial No. 349,718
4 Claims. (Cl. 33—163)



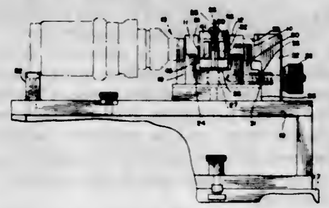
1. A gauge comprising a generally U-shaped frame having aligned channel guideways extending transversely across one face of the frame arms adjacent to the ends thereof, each arm having a bore extending transversely thereinto from the outer edge of the frame overhanging and parallel to the guideway of the arm, each bore being counter-bored for a portion of its length from the outer edge of the arm and being threaded throughout the remaining portion of its length toward the inner edge of the arm, such counter-bore opening into the guideway, a blade slidably mounted within each guideway and adjustable therethrough, said blade being exposed within the counter-bore and provided with a kerf extending transversely of the blade and opening into the counter-bore, a head adjusting screw threaded into the threaded portion of the bore and having a head of a size larger than the size normal to the threaded portion of the screw, said head disposed rotatably within the kerf of the blade to move the blade upon the threaded adjustment of the screw, each arm having an elongate slot extending transversely thereof opening into the face opposite to the face provided with the guideway, said slot extending parallel to and superposing the guideway and opening thereinto throughout the length of the slot, said arm provided with a counter-bore encircling the slot, a headed screw extending through the slot and threaded into the blade below the slot, an elongate hardened steel spring washer seated within the slot underneath the head of the screw, said washer being convex upwardly toward the head of the screw to exert a tension tending to hold the blade against the bottom of the guideway.

2,747,289
ENGINE INDICATOR PROBE
Thomas C. Jenkins, Altadena, Calif., assignor to Lockheed Aircraft Corporation, Burbank, Calif.
Application March 25, 1954, Serial No. 418,732
1 Claim. (Cl. 33—172)



A device for indicating movement of a piston in a cylinder having a threaded spark plug opening including a body screwed in said opening, a shoulder on the body engaging the exterior of the cylinder to locate the body, an elongate tubular part on the body extending into the cylinder and having a longitudinally extending slot, a stem slidably guided in the tubular part and having one end protruding from said part to be engaged and moved by the piston, a helical spring arranged around said tubular part to have an end engage against the body, a finger on the other end of the spring extending into said slot and secured to the stem, the spring being under compression to yieldingly urge the stem toward the piston, and said finger serving to prevent angular movement of the stem and being engageable with the ends of said slot to limit axial movement of the stem an indicator on the body at the exterior of the cylinder including a dial occupying a plane substantially parallel with said shoulder, a movable pointer cooperating with the dial, and a mechanism for moving the pointer comprising a movable spring urged rod engaging the other end of the stem and movable upon axial movement of the stem to actuate said mechanism.

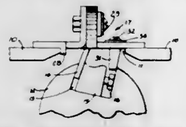
2,747,290
GAUGES
Jerry V. Simek, Berwyn, and Walter M. Thomas, Oak Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application July 13, 1954, Serial No. 443,032
5 Claims. (Cl. 33—174)



1. A fixture for holding a cathode mount for use with an optical gauge to determine the distance between the midpoint between two spaced collars on the cylindrical portion of a cathode mount and one end of the cylindrical portion spaced from the collars, which comprises a cradle for supporting such a cathode mount having a cylindrical portion and spaced collars on the cylindrical portion spaced from an end thereof, a reference stop, means for moving the cradle to a position in which said end of the

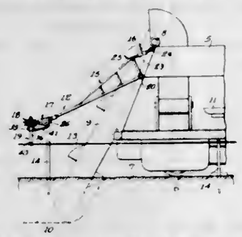
cathode mount is in engagement with the stop, a pair of relatively movable slides slidable along the cylindrical portion for engaging the ends of the collars, resilient means for urging the slides apart to positions in which the slides engage the ends of the collars, an indicator blade mounted between the slides, and means for centering the blade between the slides.

2,747,291
GAUGE FOR SETTING PLANER BLADES
Holcomb Snyder, Dayton, Ohio
Application November 7, 1952, Serial No. 319,331
13 Claims. (Cl. 33—185)



11. For use with a woodworking machine having a rotary cutter head and a table overlying said cutter head, said cutter head having blade slots opening through the periphery thereof and said table having an opening above said cutter head, a blade setting gauge for mounting on said table, magnet means on said gauge, a first dependent portion on said gauge received in said opening and engageable against one marginal edge thereof and another dependent portion on said gauge received in a blade slot and rotatively adjusting said cutter head relatively to said magnet means.

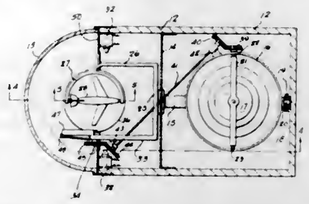
2,747,292
DITCH-DIGGING GAUGE
Walter Dumler, Covina, Calif.
Application March 22, 1954, Serial No. 417,599
4 Claims. (Cl. 33—185)



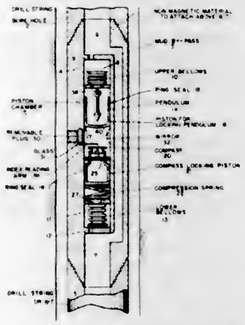
4. A gauge for a ditch-digging machine comprising a gauge arm, said arm having one end mounted on a ditch-excavating boom and the other end disposed in the medial longitudinal plane of said boom, a horizontal swivel rotatable about a vertical axis mounted on said other end of said arm, a clevis connected to and rotatable with said swivel, said clevis having a horizontal pivot bolt across the fork thereof, a pendulum suspended from said bolt, said pendulum being rotatable in a plane transverse to the medial longitudinal plane of said boom, a laterally directed rod carried by said pendulum, said rod also being rotatable in a transverse plane and in operative association with a gauge line, and resilient means interconnecting said clevis and the other end of said arm to bias said bolt in a longitudinal direction.

2,747,293
GYROSCOPIC ATTITUDE INDICATOR FOR AIRCRAFT
Horace C. Lyons, Tucson, Ariz.
Application October 9, 1953, Serial No. 385,123
4 Claims. (Cl. 33—204)

1. In an aircraft, an attitude indicator comprising a gyroscope mounted in the aircraft for universal rotation relative to said aircraft and being stabilized relative to earth, said gyroscope being provided with an outer gimbal ring, a shaft element rotatably supported on the aircraft for rotation around a longitudinal axis relative to the aircraft and being rigidly connected to said outer gimbal ring, an inner gimbal ring rotatably mounted in said outer gimbal ring for rotation around an axis transverse to the rotational axis of said shaft element, a U-shaped member having its bight secured to said shaft element, a reference member connected to one of the legs of said U-shaped member for rotation around an axis transverse to the rotational axis of said shaft element, means gearingly coupling the transverse axis of said inner gimbal ring to the transverse axis of said reference member and arranged to rotate said reference member around its transverse axis in accordance with dive or climb attitudes of the aircraft, said reference member being rotated by said shaft element around said longitudinal axis in accordance with bank attitude of the aircraft, an indicator element mounted on the other leg of said U-shaped member for rotation around a longitudinal axis relative to said aircraft, and means magnetically coupling said indicator element to the aircraft for stabilizing said indicator element relative to the aircraft.



2,747,294
BOREHOLE INCLINOMETER
Alexander B. Hildebrandt and Fredric H. Deily, Tulsa, Okla., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application May 26, 1953, Serial No. 357,538
3 Claims. (Cl. 33—205)



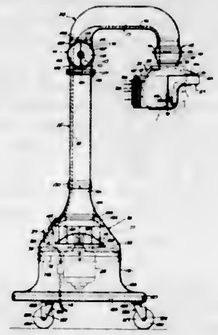
1. Improved bore hole inclinometer assembly adapted for insertion in a string of drill pipe above a drill bit in a bore hole, comprising: an elongated casing member attachable to said drill string and having a top central opening and a bottom central opening communicating with the bore of the drill string, an upper bellows chamber positioned within said casing member, an upper bellows within said upper chamber, a piston chamber positioned below said upper bellows chamber, in fluid communication with the interior of said upper bellows, a lower bellows chamber positioned below said piston chamber, a lower bellows positioned within said lower bellows chamber with the interior of said lower bellows in fluid communication with said piston chamber, a pendulum suspended within said piston chamber, a first piston slidably positioned within said piston chamber adapted to move into contact with and thereby lock said pendulum, a compass mounted within said piston chamber, a second piston slidably positioned within said piston chamber adapted to move into contact with and thereby lock said compass, a spring urging at least one of said pistons into locking position, fluid filling said piston chamber and said bellows, means establishing fluid communication between said upper bellows chamber and said top central opening, means establishing fluid communication between said lower bellows chamber and said bottom central opening, and a channel within said casing connecting said top central opening with said bottom central opening, said channel presenting greater resistance to fluid flow than said top and bottom central openings, whereby fluid circulation through said drill string will exert a pressure differential, communicable to said pistons through said bellows, sufficient to move said pistons out of locking position against the action of said spring.

2,747,295
COMBINATION POCKET LEVEL
Eddie L. Drawdy, Odum, Ga.
Application March 6, 1953, Serial No. 340,759
2 Claims. (Cl. 33—216)



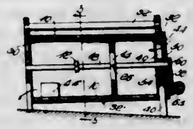
1. A combination level comprising a body having longitudinally aligned recesses opening inwardly from its opposite ends and including at least one bubble tube assembly; a plumb bob cord coiled in one of said recesses and secured at one end to the inner end wall of said one recess, the other recess having facing grooves in its side wall; a soap stone marker frictionally engaged at its opposite side edges in said facing grooves; and a pencil marker frictionally gripped between said soap stone marker and the adjacent side wall of said other recess, said pencil and soap stone marker being adjustable longitudinally of their associated recess independently of one another, for selective use thereof.

2,747,296
APPARATUS FOR DRYING HAIR
Richard S. M. Mitchell, Detroit, Mich.
Application September 6, 1951, Serial No. 245,335
1 Claim. (Cl. 34—90)



A hair drier comprising a base, a helmet-supporting conduit extending upward from said base, an air-circulating fan disposed in said base and discharging air upwardly into said helmet-supporting conduit, and a helmet shaped to fit the head and connected to the upper end of said helmet-supporting conduit, said helmet having an inner casing containing a head chamber with a head opening and a head opening sealing element therein, said inner casing having a multiplicity of air inlet apertures disposed around the lower part thereof in circumferentially-spaced relationship adjacent the portion of said chamber adapted to be occupied by the sides of the head, said inner casing having a moist air outlet opening in the upper portion thereof remote from said air inlet apertures, an outer casing spaced outwardly from and extending around said lower part of said inner casing adjacent said air inlet apertures to form an air inlet chamber between said casings, and a pair of air supply conduits connected to and extending downwardly from said helmet-supporting conduit on opposite sides of said helmet, the lower portions of said air supply conduits being connected to one of said casings and communicating with said air inlet chamber on opposite sides thereof whereby said air supply conduits also serve as brackets supporting said helmet.

2,747,297
PROFILE BLOCK TOY
Albert M. Zalkind, Arlington, Va.
Application April 2, 1953, Serial No. 346,429
2 Claims. (Cl. 35—8)



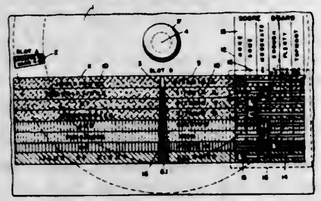
1. A profile block toy comprising a plate having a plurality of apertures therethrough of varying geometric pattern, means for rotatively supporting said plate, a relatively fixed wall having an aperture alignable with the apertures in said plate as said plate is rotated, a receptacle disposed to receive objects passed through said aperture in said wall, a plurality of blocks shaped to fit respective apertures in said plate so as to be insertable therethrough and through the aperture in said wall and into said receptacle, including means for rotating said plate to bring the apertures thereof into selective alignment with the aperture in said wall.

2,747,298
EDUCATIONAL AND AMUSEMENT DEVICE
Mary W. Sullivan, Freeport, N. Y.
Application June 15, 1954, Serial No. 436,840
2 Claims. (Cl. 35—26)



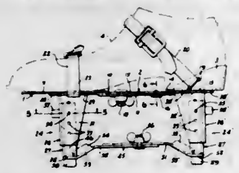
1. An educational and amusement device including a base, a plurality of spaced straight line markers delineated thereon in a predetermined pattern, and individual line filling means in the nature of small sticks longer than the markers alined on each individual marker to complete a pictorial representation delineated by the pattern.

2,747,299
NUTRITIVE EVALUATING FOOD ITEM SELECTOR
Rupert C. Herzog and Gladys R. Arnold, Chicago, Ill.
Application August 18, 1951, Serial No. 242,516
4 Claims. (Cl. 35—74)



1. A nutrient scoring chart, comprising a data sheet and a mask sheet relatively movable along a fixed path, said data sheet having thereon a listing zone with a series of spaces arranged along said path each containing the name of a food item with a measure of a service portion thereof, said data sheet having a nutrient rating zone at one side of and paralleling said listing zone and subdivided by crossing sets of lines into rows of spaces both paralleling and transverse to the row of spaces in said listing zone, each transverse row corresponding in relative position to a respective food item space of said listing zone, said mask sheet overlying said data sheet and being slotted to expose one food item space of said listing zone and a respective row of rating zone spaces corresponding thereto, said mask sheet having on its face opposite said such exposed rating zone space the name of a respective nutrient, said mask sheet having thereon in line with each such nutrient name a scoring scale having a sliding count indicator thereon, each such scale being subdivided into a like number of scoring units counting intervals representing like fractional parts of a certain predetermined ration of the respective nutrient, and said data sheet having, in each said transverse row of spaces in the rating zone, indicia indicating the number of scoring unit quantities of the respective nutrients contained in the service portion of the food listed in the listing zone in relation to such transverse row of spaces.

2,747,300
VERTICALLY ADJUSTABLE PLATFORM ATTACHMENT FOR SHOES
Harmon L. Field, West Englewood, N. J.
Application March 9, 1954, Serial No. 414,998
4 Claims. (Cl. 36—7.5)



1. A novel platform attachment for shoes of different sizes, comprising a longitudinally adjustable platform shaped to support the bottom of a shoe, vertically adjustable supporting means connected to the under surface of said platform, and longitudinally adjustable strut means connected to said vertically adjustable supporting means.

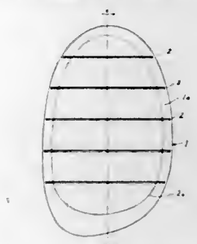
2,747,301
MOLDED PULP SLIPPER
Harold S. Crane, Palmer, Mass., assignor, by mesne assignments, to The Diamond Match Company, New York, N. Y., a corporation of Delaware
Application August 4, 1953, Serial No. 372,251
4 Claims. (Cl. 36—9)

1. As an article of manufacture, a flexible one-piece sheet-like form of pulp fibers of uniform thickness which is suitable for use as a sandal, comprising a relatively elongated longitudinally extending member curved in upwardly convex cross-sectional outline throughout substantially the entire length thereof from a rear heel-forming portion to a forward toe-forming portion, said member having a forward vamp-forming wing integrally connected therewith which flares upwardly and outwardly at an acute outward angle to the vertical from a forward side margin of said longitudinally extending



member adjacent said toe portion in a convex, outwardly rounded cross-sectional contour, said wing being adapted to be moved upwardly about it connection with said longitudinally extending member as a fulcrum and terminating in a free edge opposite its integral connection to said longitudinally extending member, said form being self-sustaining in the outlined described and the upper surface of said wing between said free edge and said integral connection with said longitudinally extending member being free of inward re-entrant overhang.

2,747,302
SUPPLEMENTAL RUBBER HALF SOLE
William F. Heisterkamp, Pittsburgh, Pa.
Application February 23, 1955, Serial No. 489,954
1 Claim. (Cl. 36—32)



A rubber half sole for cementing directly to a leather sole without the necessity of an intermediate layer, said half sole having a plurality of transversely extending parallel grooves extending continuously throughout their length and having open ends and extending throughout most of the depth or thickness of the rubber half sole so as to leave a remaining thickness of rubber between adjoining sections defined by said grooves sufficient only for elastically holding said rubber sole together as an integral unit and constituting the sole means for so holding said sole together so that when said rubber half sole is adhered directly to said leather sole, the said sections will freely move away from each other without transmission of any significant longitudinal pulling forces between said sections as a consequence of bending of the leather sole during walking, whereby the tendency of said rubber sole to become detached from the leather sole during the life of the rubber half sole as a result of said bending will be substantially completely eliminated.

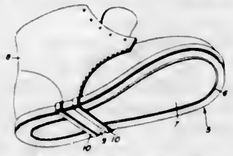
2,747,303
PROTECTOR FOR SHOES
Lillian L. Abrahams, Long Island City, N. Y.
Application October 22, 1952, Serial No. 316,243
3 Claims. (Cl. 36—72)

1. A flexible shoe toe protector comprising a front sole portion tapered toward its rear edge and thickened at its front edge, a top toe portion integral with said front sole portion, said top toe portion having a thickened front portion tapering toward its rearward upper edge, a front thickened vertical portion substantially at right angles to said front sole portion, said top toe thickened front portion thinner than said thickened front edge of said front sole portion an arcuate V-shaped inner ridge



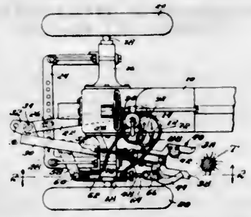
between said top toe portion and said front thickened vertical portion, said front thickened vertical portion substantially at right angles to said front sole portion for lodging at the juncture where the bottom of the toe upper meets the upper portion of the sole of the toe of the shoe.

2,747,304
PROTECTIVE SHIELD FOR SHOES
Henry K. Linenkohl, Augusta, Ga.
Application December 7, 1954, Serial No. 473,657
1 Claim. (Cl. 36—72)



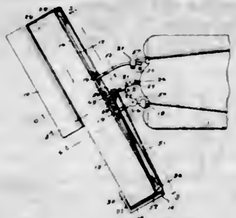
A protective shoe shield of the character described comprising: an elongated elastic rubber band for enclosing the marginal portions of a shoe sole and heel, an elastic rubber shank strap traversing the band at an intermediate point and having its end portions overlying said band and secured thereon, said strap including a central portion and marginal side portions, said side portions overlying said central portion and being secured thereon, and pairs of longitudinally spaced, ductile clamps enclosed in said marginal side portions of the strap on the end portions of said strap and engageable around the edges of and over the sole for anchoring said strap thereto under tension.

2,747,305
GRUBBING ATTACHMENT FOR A FARM TRACTOR
Asa C. Marshall, Willis, Va.
Application March 16, 1954, Serial No. 416,628
1 Claim. (Cl. 37—2)



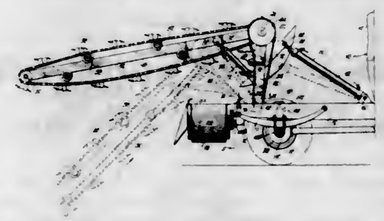
A grubbing attachment for a farm tractor comprising a beam adapted to be attached adjacent one end to the draw bar of a farm tractor and to extend forwardly therefrom beneath the axle housing of the tractor, a grubbing fork carried by the beam in advance of the axle housing and having its open end disposed toward the front of the tractor, a yoke connected to the beam adjacent the fork and extending upwardly and rearwardly therefrom, a flexible cable connected to the yoke and extending rearwardly therefrom across the rear axle above the top thereof, a bolt connected to the cable and adjustably coupled to the beam adjacent the side of the axle housing remote from the yoke for supporting the beam on the axle housing, a hook carried by the fork for movement in an arcuate path across the open end thereof, a bracket carried by the beam and projecting outwardly therefrom between the draw bar and the axle housing, manually controlled hydraulically actuated means carried by the bracket and operatively connected to the hook for moving the hook in its arcuate path, and a jaw carried by the fork and projecting thereinto for biting into and gripping the work as the hook moves across the open end of the fork.

2,747,306
SNOW SHOVEL CONVEYOR
Millard Hasenbuhler, Cumberland, Md.
Application August 13, 1952, Serial No. 304,201
3 Claims. (Cl. 37—45)



1. In a snow shovel attachment, the combination which comprises an L-shaped frame positioned to provide a horizontal section and a vertical section, conveyor pulleys journaled on the ends of said sections of the frame, belts trained over the pulleys providing belt conveyors, a scraper blade extended forwardly from the horizontal section of the frame, a yoke extended from the vertical section of the frame and having a hub on the extended end thereof for pivotally mounting the frame on a vehicle, another yoke having an arcuate arm extended therefrom for adjustably connecting the frame to said vehicle, a connecting shaft having universal joints at the ends thereof extended from a power take off of the vehicle and means driving the conveyors from said connecting shaft.

2,747,307
ADJUSTING MECHANISM FOR ENDLESS CONVEYOR TYPE DITCHING MACHINE
Mark C. Griffin, Merriam, Kans.
Application April 23, 1951, Serial No. 222,445
1 Claim. (Cl. 37—90)



A ditching machine adapted for mounting on a truck frame having a lateral conveyor at the rearmost end thereof, said machine comprising an upright member pivotally mounted on said frame forwardly of the conveyor for swinging movement about a horizontal axis parallel with the direction of travel of the conveyor; an excavating conveyor swingably mounted on said member at the uppermost end of the latter for swinging movement on a horizontal axis and extending rearwardly from the member in overlying relationship to the lateral conveyor, said excavating conveyor including an endless chain provided

with a plurality of flight elements for dragging dirt from within an excavation upwardly and forwardly onto the lateral conveyor; double acting hydraulic piston and cylinder means pivotally interconnecting the frame forwardly of said member with the latter adjacent the uppermost end of said member for swinging the member reawardly and downwardly into overlying relationship to the lateral conveyor; and double-acting hydraulic piston and cylinder means pivotally interconnecting the member and the excavating conveyor for altering the angle of inclination of the excavating conveyor when the member is in overlying relationship to the lateral conveyor.

2,747,308
BOWL AND APRON ADJUSTMENT FOR DOUBLE FRAME CARRY TYPE SCOOP
Kirk L. Brimhall, Torrance, Calif., assignor, by mesne assignments, to Western Equipment Mfg. Co., Glendale, Calif., a corporation of California
Application December 27, 1949, Serial No. 135,205
8 Claims. (Cl. 37—129)



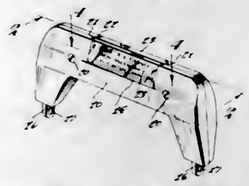
1. In a hauling scraper, a bowl-carrying frame, a bowl thereon, a draft frame, means connecting said frames so that one frame may be raised and lowered relative to the other, wheels on one of said frames, an apron mounted on one of said frames for movement to open and close the bowl, an upstanding post fixed to one of said frames and extending above the other frame, a lever fulcrumed between its ends on said post above said frames, a link connecting one end of said lever with said apron for moving the apron into positions for opening and closing the bowl on the rocking of said lever, a slide member on said post below said lever, a flexible element connecting said slide member with the other end of said lever for effecting and controlling movement of said lever upon the sliding movement of said slide member, and raising and lowering means associated with said slide member, post and said frames for raising and lowering the bowl-carrying frame and at the same time moving said slide member so as to rock said lever for disposing the apron to open and close the bowl.

2,747,309
COMBINATION RIPPER ATTACHMENT FOR SCRAPERS AND BULLDOZERS
Samuel W. Cooper, Coleman, Tex.
Application May 29, 1953, Serial No. 358,271
2 Claims. (Cl. 37—145)



1. A ripping attachment for earth moving equipment of the type having a plate-like, earth-engaging member, comprising: a plurality of ripper bars extendable adjacent said member; clamp means at one end of each of said bars engageable with one edge of said member, for effecting a fixed connection of the bars to the member, said clamp means including a plate-like body engageable against said edge of the earth-engaging member, a flange on said body adapted to hook over said edge, said body having an opening, a socket connected to said body in which the associated ripper bar is slidably engaged, the ripper bar having a plurality of longitudinally spaced openings, and an L-shaped clamping bolt having a lateral extension at one end engaged in a selected opening of the ripper bar, the other end of the bolt being slidable in the opening of said plate-like body and having a take-up nut threaded thereon against said body, for adjusting the ripper bar longitudinally of said body; a cross member extending between the respective bars and proportioned to engage the opposite edge of said member; and ripping tooth means on the several ripper bars.

2,747,310
IDENTIFICATION MEANS PARTICULARLY FOR A LUGGAGE HANDLE
Robert J. Tierney, Fort Lewis, Wash.
Application July 13, 1953, Serial No. 367,453
1 Claim. (Cl. 40—10)



An identification means comprising a pair of complementary handle halves, means for releasably securing said halves together, each of said halves having along their upper longitudinal edges transversely aligned cut outs, a transparent window disposed within each of said cut outs, means for securing said window to the corresponding of said handle halves, identification means disposed intermediate said transparent windows, and the said means for securing said window within its corresponding cut out comprising said handle halves having at the end of said cut outs a vertical, upwardly tapered groove and the said window having a complementary shaped tapered end to fit within said groove, thereby locking said window in said cut out against transverse, as well as sliding upward movement.

2,747,311
DISPLAY FRAME
Norman C. Fulmer, Montclair, N. J.
Application December 27, 1952, Serial No. 328,230
2 Claims. (Cl. 40—156)



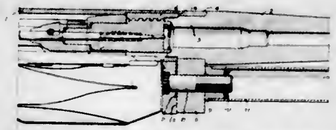
1. A display frame comprising a substantially flat and rigid front member having a pair of oppositely disposed mutually parallel edges, and a back member comprising a substantially flat portion having a surface positioned in closely spaced parallelism with a surface of said front member thereby to hold a displayed object between said surfaces, at least one of said members being transparent, said back member further comprising a pair of clamping members respectively engaging said parallel edges of the front member, and a lever member attached to one of said clamping members and extending outwardly from said one clamping member beyond the respectively engaged edge of the front member in a direction substantially away from said front and back members whereby the front surface of said lever member is capable of manual engagement, said back member being sufficiently resilient so that when said lever member is forced backwardly by manual pressure against the front surface of said lever member said last-mentioned clamping member is substantially released from engagement with said front member thereby disengaging said front member from said back member.

2,747,312
GUN COMPASS ATTACHMENT
Frank J. Kaszynski, Wilmington, Mass.
Application October 25, 1952, Serial No. 316,856
1 Claim. (Cl. 42—71)



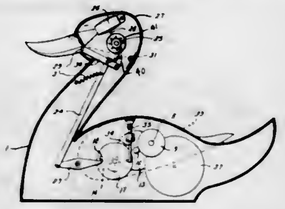
An anchor plate for attaching a compass to the butt of the pistol grip of a gun stock comprising a rigid nonmetallic plate of generally oval shape having front and rear sides, said front side having a convex surface simulating in appearance the surface of a conventional butt plate, a circular well extending through the plate from front to rear for receiving the case of a compass, and a groove in the wall of the well for receiving a friction ring to hold the compass in the well, a raised shoulder at the rear side of the plate extending marginally thereof, said shoulder providing a narrow annular bearing surface for contact with the marginal edge of the butt, an apertured hub situated centrally of the back concentric with the well, the rear face of the hub being situated below the edge of the shoulder and the front face being situated at the bottom of the well and constituting an abutment against which the bottom of the compass case rests when seated in the hole, said aperture at the front face of the hub being countersunk to receive the filleted head of a non-ferrous fastening screw for attaching the plate to the butt, and radial ribs connecting the hub to the plate, said ribs extending from the hub across the back to the inner wall of the shoulder, the inner ends of the ribs being integral with the hub, the inner edges of the ribs being integral with the rear surface of the plate, and the outer ends of the ribs being integral with the inner wall of the shoulder.

2,747,313
BARREL TO RECEIVER CONNECTION ON A FIREARM
Lexie Ray Crittendon, Wilmington, Del., and William Gail, Jr., Ilion, N. Y., assignors to Remington Arms Company, Inc., Bridgeport, Conn., a corporation of Delaware
Application February 12, 1953, Serial No. 336,536
2 Claims. (Cl. 42—75)



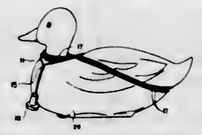
1. In a firearm having a barrel and a receiver with an apertured forward wall to receive said barrel, the combination comprising a barrel bracket formed with a bore having circumferentially continuous engagement in a forced interference fit with the exterior of the chambered portion of said barrel to exert a compressive force on and thereby reinforce said chambered portion, means threaded on said barrel to additionally secure the barrel bracket on said barrel, and tension exerting means engaged only between the forward wall of the receiver and the barrel bracket forming the sole means of securing the bracket in engagement with the receiver, and thereby securing the barrel to said receiver.

2,747,314
DECOY
Thurman M. McGregor, Houston, Tex.
Application November 12, 1952, Serial No. 319,919
1 Claim. (Cl. 43—3)



In a decoy, a hollow body shaped to simulate a swimming fowl, movable wings mounted on said body, a main spring mounted in said body adapted to furnish power, a train of gears adapted to be rotated by said main spring, an axle within said body having a speed governor mounted thereon to control the speed of rotation of said gears, a disc element having an outwardly projected stud mounted on and adapted to be rotated by said axle, lifting means mounted in said body and connected to the wings of the body, said stud on said disc being adapted to contact said lifting means and lift the same upon each rotation of the disc, a rocking arm mounted in said body and adapted to be contacted by said stud adjacent one end, an upwardly extended arm having one end connected to the opposite end of said rocking arm, a movable lower beak on said body, the opposite end of said upwardly extending arm being connected with said beak and a noise maker mounted in the head portion of said body having an activating disc element adapted to be rotated with each upward stroke of said arm.

2,747,315
SPORTSMAN'S ACCESSORIES
Casimer A. Clemas, St. Paul, Minn.
Application December 1, 1952, Serial No. 323,464
1 Claim. (Cl. 43—3)



In a decoy anchor for maintaining a fowl type of decoy in a substantially stationary position relative to the surface of a body of water, a weight of substantially cylindrical form, having a flange at its lower end only of substantially greater extent than the diameter of the cylinder, said cylinder having its upper end tapered, a substantially non-corrodible flexible semi-rigid cable of loop form having substantially parallel strands with their free ends embedded in the cylinder, said free ends having adjacent the terminals thereof a collar fixed thereto, said collar being adapted to maintain said free ends in embedded condition within the cylinder, and a sleeve provided with a bore of sufficient diameter to frictionally maintain the sleeve in slidable condition on the strands of the loop, whereby the sleeve in one position may engage the upper end of the cylinder and is adapted to be moved and maintained in various positions on the strands of the loop to change the size and shape of the opening provided by the loop to various areas to facilitate application and removal of the loop and, whereby the loop may be expanded to surround the neck of the decoy or may be used to tie a line secured to the decoy.

2,747,316
DECOY
Frank J. Benedetto, Chicago, Ill.
Application August 17, 1953, Serial No. 374,691
12 Claims. (Cl. 43—3)



1. A decoy wing construction comprising a pair of wing portions in generally superposed relationship connected adjacent their forward ends for relative sideways pivotal movement, resilient means tending to maintain said wing portions in normal generally superposed relationship, means for movably connecting one of said wing portions to the back portion of a decoy, and wing portion actuating mechanism for being connected to an anchor line and having a portion thereof for cooperating with the other wing portion to move the same outwardly upon movement of said actuating mechanism.

2,747,317
DEVICE FOR AUTOMATICALLY HOOKING FISH
Roman G. Blaskow, Birmingham, Ala.
Application July 10, 1952, Serial No. 298,030
2 Claims. (Cl. 43—15)



1. An automatic device of the character described for hooking fish comprising a case shaped substantially like an ordinary bell, a screw-eye, a frame removably supported in said case by means of said screw-eye extending through the top of the case and into a portion of the top of the frame, said horizontal pin mounted in the upper portion of said frame, a lever arm attached pivotally by one end on said pin, a coil spring mounted on said pin and set to urge the free end of the lever arm toward the top of said frame, a lever setting line, a fishhook line, two additional pins attached in the frame for limiting the movement space of said lever arm, the said lever arm being provided with a centrally disposed hole through which is passed said lever setting line and said fishhook line, and the said lines being secured to the lever arm above the hole; a trigger arm, a pin attached in the lower portion of said frame, said trigger arm attached pivotally by one end thereof on said last-mentioned pin in the lower portion of the frame, a coil spring mounted on the trigger arm pin, said last-mentioned spring set to urge the free end of the trigger arm toward the top of the frame, and a pin attached in the frame at a position to make contact with the free end of the trigger arm, the trigger arm having a V-shaped end adapted by manual means to make contact with the free end of the lever arm, the trigger arm being provided with two holes, one to permit passage of the fishhook line, the other passage of the setting line, and the fishhook line being provided with a knot designed to engage and release the trigger arm when a downward pull occurs on the said fishhook line.

2,747,318
FISH LURE
William J. Bailey, Detroit, Mich.
Application October 2, 1953, Serial No. 383,784
1 Claim. (Cl. 43—42.51)



A one-piece lure of the spinner type comprising an elongated main body having parallel longitudinal edges and including a flat intermediate portion extending longitudinally thereof, said intermediate portion defining an elongated shank and a head, a pair of similar symmetrically formed fins carried by said shank, each of said fins being disposed along an opposite longitudinal edge of said shank and projecting perpendicularly therefrom with the fins disposed in opposite directions and terminating at one end at said head, each of said fins being arcuately shaped along its outer periphery, and a pair of ears extending laterally from said head and being disposed on opposite sides thereof, said ears being disposed at opposite angles with respect to each other to impart rotation to the lure as it is being drawn through the water.

2,747,319
FISHING CASTING FLOAT PLATE
Joseph Rondello, Bronx, N. Y.
Application April 2, 1954, Serial No. 420,604
2 Claims. (Cl. 43—43.13)



1. A casting float for a fishing line comprising a flat metal elongated body, substantially symmetrical in shape and of different widths at its ends, opposed slanting wings at the smaller end of the body, opposed laterally extending wings on the wide end of the body, and S-shaped hook members hingedly connected to both ends of the body for attachment to a fishing line, said slanting wings being provided with outstruck curved flanges for causing wabbling of the body when being pulled through the water.

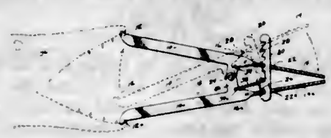
2,747,320
FISH LINE LEADER
Daniel P. Boland, Deer Creek, Ill.
Application May 7, 1954, Serial No. 428,229
5 Claims. (Cl. 43—44.98)



1. A leader for a fish line comprising an elongated strip having a midportion and two end portions, said

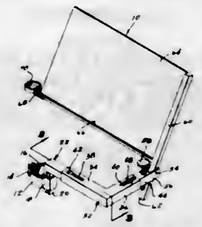
midportion being of greater width than thickness, each of said end portions being substantially circular in cross section and adapted to be connected one each to a hook and a fishing line, said end portions each having a cross sectional area equal to the cross sectional area of said midportion.

2,747,321
FISH MOUTH SPREADER
Donald L. Thompson, Belmond, Iowa, assignor to Mar-Don Manufacturing Company, Belmond, Iowa
Application January 26, 1953, Serial No. 333,214
3 Claims. (Cl. 43—53.5)



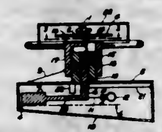
1. In a fish mouth spreader, a pair of flat metal levers, two bearing ears each being secured to a different one of said pair of flat metal levers, means secured to each of said bearing ears pivotally securing them together; corresponding portions on the rear end portions of said levers being twisted to form rear handle portions; said handle portions each having a slot therein and to the rear of said bearing ears, a ratchet bar slidably engaged in slots in said lever handle portions; said ratchet bar having a notch near one end and ratchet teeth at the other end portion, and a spring secured to said ratchet bar and one of said bearing ears and yieldingly urging said ratchet bar toward the edges of said slots; said notch in said ratchet bar engaging the edge of one of said slots and said ratchet teeth selectively engaging the other of said slots; said ratchet teeth being straight on their under sides that face the top of the handle engaged by said notch and slanted on their other outer sides.

2,747,322
ATTACHMENT FOR SUPPORTING A MAGAZINE AND AN ASH TRAY CONVENIENTLY IN FRONT OF A PERSON SEATED IN FRONT OF A HAIR DRYER
Fred Van Egghen, Albany, N. Y.
Application January 8, 1954, Serial No. 402,977
2 Claims. (Cl. 45—82)



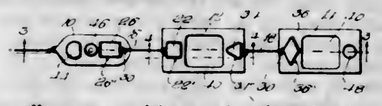
2. An attachment for supporting a magazine and an ash tray conveniently in front of a person seated in front of a hair dryer, said attachment comprising, a collar mounted on the supporting column of a conventional hair dryer intermediate the upper and lower ends thereof, an angle member carried by the collar and extending horizontally outwardly therefrom, a bar telescopically entering the angle member and extending horizontally outwardly therefrom, spaced ears carried by the bar and extending longitudinally therefrom adjacent the end thereof remote from the angle member, a beam mounted between the ears to rock in a vertical arcuate path adjacent the ends of the ears remote from the bar, a magazine support carried by the beam and extending laterally outwardly therefrom for movement therewith in a vertical arcuate path to one side of the bar, a screw threadedly carried by the bar and impinging on the beam for holding the magazine support at a selected angle to the vertical, and an ash tray support carried by the magazine support for tilting adjustment relative thereto.

2,747,323
TOY STEERING DEVICE
George H. Lee, Oak Ridge, Tenn.
Application December 17, 1952, Serial No. 326,509
7 Claims. (Cl. 46—1)



1. A toy steering device for use in a moving vehicle comprising two elements visible to the operator of the device and individually rotatable about a common axis, the first of said elements representing a toy car and the second of said elements representing a roadway upon which the toy car appears to be travelling, a toy steering wheel manually rotatable by the operator of the device, a mechanical interconnection between said toy steering wheel and the first of said elements for turning the toy car to change its apparent direction of travel with respect to said roadway, a weight member movable in response to inertia forces induced by changes in the velocity of the moving vehicle, and a mechanical interconnection between said weight member and the second of said elements for turning the roadway to change its orientation with respect to said car, whereby turning the steering wheel then steers the car to keep it in its proper roadway path.

2,747,324
EDUCATIONAL PULL TOY
Albert M. Zalkind, Arlington, Va.
Application April 2, 1953, Serial No. 346,428
4 Claims. (Cl. 46—17)



3. A pull toy comprising a plurality of units to be assembled in tandem and coupling means for assembling said units comprising blocks of dissimilar polygonal shapes, said blocks being connected by flexible strand means, said units having sockets matching the shape of respective blocks, said sockets slidably receiving said respective blocks to join said units in tandem, said blocks being readily removable from said sockets.

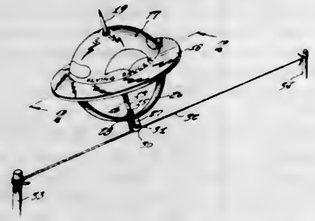
2,747,325
CHILDREN'S PLAYING BLOCKS
Paul George Kutscha, Union, N. J.
Application April 28, 1952, Serial No. 284,773
1 Claim. (Cl. 46—25)



In a child's block comprising a pair of square plates and a pair of posts intermediate said plates, secured thereto, and maintaining said plates in spaced parallel,

aligned relation, said posts having axes disposed in a plane midway between and parallel to a pair of opposite edges of said block and said posts being spaced relative their thickness so that the spacing between posts is equal to twice the distance from either post to the edge nearest thereto, said posts having a length relative to the thickness of said plates such that the block is a cube, the improvement which consists of providing a groove on the outer surface of each of said plates and running midway between parallel edges thereof and a pair of grooves on the inner surface of each of said plates parallel to said outer grooves and to each other and on respective opposite sides of said posts and spaced substantially midway between said posts and the respective parallel edges of said block, any of said grooves being adapted to receive therewithin the surface edge of a plate of an identical block.

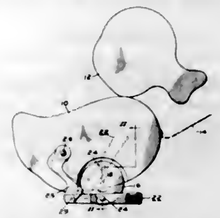
2,747,326
TOY GYRO SAUCER
William J. Doyle, Bay Village, Ohio
Application August 2, 1954, Serial No. 447,077
2 Claims. (Cl. 46—50)



1. A toy gyro saucer comprising a central shaft, a wheel mounted thereon, an upper, hollow, substantially hemispherical shell, a separable resilient strap member having enlarged, substantially dove-tail shaped ends, the inside of said shell at oppositely disposed portions at the lower open end thereof having substantially dove-tail shaped grooves into which the ends of said strap are snapped, said shaft at opposite ends thereof being pointed, a hollow, substantially conical shaped bearing member mounted within the top of said hemispherical shell and rotatably mounting the upper pointed end of said central shaft, the yoke-shaped member integrally formed with an externally threaded shank screwthreaded into the central portion of said strap and extending upwardly therethrough, the upper end of said shank being provided with a substantially conical recess rotatably mounting the lower pointed end of said shaft, a pulley intermediate the sides of said yoke-shaped member, and a pin piercing said yoke-shaped member and rotatably mounting said pulley therebetween, said shaft near the lower pointed end thereof having an opening therethrough receiving one end of the string wound around said shaft and extending outwardly below said hemispherical shell whereby to spin said wheel upon pulling said string outwardly when said shell is held stationary.

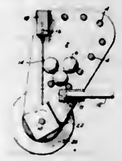
2,747,327
WHEELED FIGURE TOY
Leslie W. Sly, Walter P. Doe, and Herman G. Fisher, East Aurora, N. Y., assignors to Fisher-Price Toys, Inc., East Aurora, N. Y.
Application January 28, 1953, Serial No. 333,708
1 Claim. (Cl. 46—105)

An action toy comprising in combination, an animal body simulating portion, wheel means mounting said body portion for rolling movement along a pavement or the like, an animal foot simulating member fulcrumed intermediately of its ends to said wheel means at a position thereon offset from the center of rotation thereof, said foot member having a transverse bar portion spaced lengthwise of said foot member from the fulcrum connection between said foot member and said wheel means, an animal leg simulating member comprising a link de-



vice pivotally connected at its upper end to said body portion at a position above and behind the center of rotation of said wheel means and having a C-shaped lower end portion slip-fitted into encirclement with said foot member bar portion.

2,747,328
PUSH TOY
Albert M. Zalkind, Arlington, Va.
Application April 24, 1952, Serial No. 284,024
17 Claims. (Cl. 46—114)



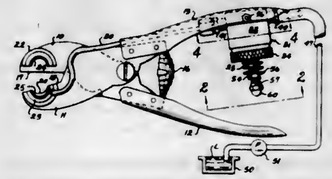
1. A push toy comprising a receptacle having a plurality of loose objects movable about therein at random, said receptacle being mounted on roller means, a plurality of actuating elements engageable with said objects, said actuating elements being motivated by said roller means and being spaced widthwise of said receptacle when said toy is pushed so as to propel said objects about in said receptacle in a chance and random manner, said actuating elements having access to said loose objects at points spaced along the axis of said roller means and said loose objects being free to move to any position in said receptacle to be engaged by any of said actuating elements.

2,747,329
MARIONETTE FIGURES
Lou A. Gruenewaelder, University City, Mo.
Application May 5, 1952, Serial No. 286,086
1 Claim. (Cl. 46—161)



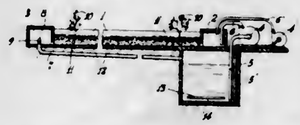
A sheet material marionette figure comprising a body portion, a head portion, a pair of arms and a pair of legs, and means for attaching said arms and said legs to said body portion for swinging movement with respect thereto, said means comprising a tightly rolled piece of sheet material extended through and beyond said body portion and through openings formed in said arms, and a tightly rolled piece of sheet material extended through and beyond said body portion and through openings formed in said legs, said tightly rolled pieces of sheet material serving as shafts about which said arms and legs swing, inner portions of said tightly rolled pieces of sheet material serving as cores of the rolled shafts and means for preventing unrolling of said tightly rolled pieces of sheet material and for retaining said arms and legs thereon, said means comprising elements wound about said tightly rolled pieces of sheet material at opposite ends thereof.

2,747,330
COMBINATION PLANT CUTTER AND LIQUID APPLICATOR
Isaac A. Simpkins, Thomasville, N. C.
Application May 24, 1954, Serial No. 431,997
4 Claims. (Cl. 47—1)



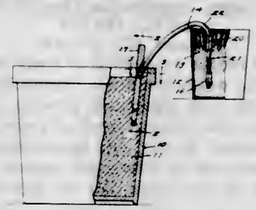
1. In a clipping implement having a pair of pivotally connected members provided with blades thereon for cutting the stalks of plants and the like; the combination therewith of a pump structure for automatically delivering a predetermined amount of fluid under a minimum pressure to the stalk simultaneously with the cutting thereof, said pump structure comprising a closed cylinder having one end fixed to one of said members, first and second substantially alined tubular fittings communicatively connected to said cylinder adjacent said one end, first and second conduits attached to the respective first and second fittings and respectively leading to a source of liquid and to a point adjacent said blades, a fluid-ingress-permitting check valve in the first fitting, a fluid-egress-permitting check valve in the second fitting, a spring-pressed piston in said cylinder normally urged away from said one end thereof, and a piston rod connected to said piston, extending outwardly through the other end of said cylinder and being engageable by the other of said members when the pivotally connected members are moved toward each other.

2,747,331
HYDROPONICS
Abram Arie Steiner, The Hague, Netherlands, assignor to De Nederlandse Centrale Organisatie Voor Toegepast Natuurwetenschappelijk Onderzoek, The Hague, Netherlands, a corporation of the Netherlands
Application July 2, 1952, Serial No. 296,799
13 Claims. (Cl. 47—1.2)



1. In an installation for hydroponics, a culture bed having a water-impervious bottom, means for introducing a flowing layer of nutrient solution discontinuously at one side into said bed to a desired level, means for removing said flowing layer of nutrient solution at the opposite side of said bed, means for maintaining a substantially thinner continuously flowing layer of nutrient solution on the bottom of said bed, and means for maintaining both layers of nutrient solution at a desired temperature.

2,747,332
FLOWER POT WATERING DEVICE
Silas A. Morehouse, Dayton, Ohio
Application June 15, 1953, Serial No. 361,489
1 Claim. (Cl. 47—38)



A flower pot watering device comprising an elongated tubular fibrous absorbent member, a relatively flexible non-absorbent stiffening means in said member, a metal band about one end of said member tightly securing said one end of said member relative to said stiffening means and constituting a non-buoyant means for holding said one end submerged in water, a rigid tubular dirt piercing member having an opening between the ends thereof, said fibrous member extending loosely through said opening and projecting below one end of said dirt piercing member, said one end of said dirt piercing member being constricted to tightly secure said fibrous member thereto, and a second band about said fibrous member fixed relative thereto and spaced from said first band, said second band being adjustable relative to said stiffening means by movement lengthwise thereof and being held in each adjusted position by friction between said stiffening means and the portion of the fibrous member which said band surrounds whereby to contract or expand that portion of said fibrous member between said second band and said dirt piercing member to thereby regulate the capillary flow of water along said fibrous member.

2,747,333
FLOWER HOLDER
Paul F. K. Erbguth, Great Neck, N. Y.
Application March 5, 1953, Serial No. 340,579
4 Claims. (Cl. 47—41)

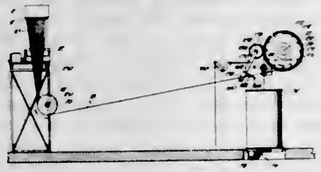


1. A flower holder adaped for attachment to a flat surface and comprising vertically spaced upper and lower resilient members made of a thermoplastic material, each of said members including a central portion having a plurality of alined holes and the upper one of said members having integral offset ends extending down to a position below the lower member for contact with the flat surface; means securing the ends of said member to said downwardly-extending portions of said upper member; a post having one end affixed to the lower one of the said members and the other end extending through a central hole in the other of said members; a suction cup disposed below said member and secured to the affixed end of the post, the edge of said suction cup and the edges of the said offset ends normally lying substantially in the same plane; the recited arrangement being such that a downward movement of the post causes a flexing of the lower member and the attachment of the suction cup to the flat surface, after which the holder remains affixed to the surface by reason of the upward force exerted on the suction cup by the lower member and the downward force exerted against the surface by the said offset ends.

2,747,334
CULTIVATION OF PLANT TISSUE
John B. Routien, Tenafly, N. J., and Louis G. Nickell, Brooklyn, N. Y., assignors to Chas. Pfizer & Co., Inc., New York, N. Y., a corporation of Delaware
No Drawing. Application May 20, 1952, Serial No. 288,954
7 Claims. (Cl. 47—58)

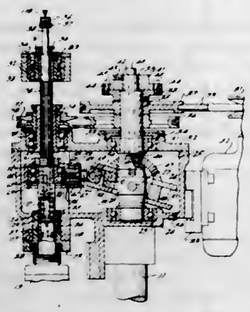
1. A process for the production of finely divided masses of plant cells, which comprises inoculating a nutrient aqueous medium with vigorously growing, undifferentiated plant cells from plants classified above the Thallophytes in systematic botany, and maintaining said plant cells under conditions of submerged, agitated aeration in the presence of an embryonic-type cell growth stimulant.

2,747,335
GLASS FIBER DRAWING MECHANISM
Joseph F. Courtney, Chicago, and Adelbert C. Radtke, Oak Park, Ill., assignors to International Harvester Company, a corporation of New Jersey
Application April 18, 1951, Serial No. 221,596
4 Claims. (Cl. 49—17)



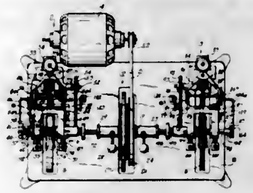
3. A device for attenuating elongatable material such as glass strand and the like, a rotatable circular cylinder comprising peripheral material engaging drawing face, means for obtaining suction through said face for holding the material thereagainst and comprising rigid means on said cylinder extending radially outwardly of said face and provided with a series of passages having inlets open through said face and having outlets, said outlets disposed farther outwardly from the axis of rotation of said cylinder than said inlets.

2,747,336
HONING MACHINE
Douglas T. Peden, Ann Arbor, Mich., assignor to Micromatic Hone Corporation, Detroit, Mich., a corporation of Michigan
Application February 6, 1953, Serial No. 335,521
10 Claims. (Cl. 51—34)



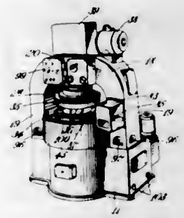
1. In a honing machine, a base, a standard on said base, a casing supported by said standard, a shaft mounted in said casing, a swash plate mounted on said shaft for tilting movement, a pair of pulleys mounted on said shaft, a motor for driving one of said pulleys, an arbor mounted for reciprocation and rotation on said casing, a pulley on said arbor, a belt connecting said arbor pulley to the other pulley on said shaft, means for connecting said swash plate to said arbor for producing the reciprocation thereof, an expansible honing tool on said arbor, a housing carried by said arbor, a rod in said arbor for expanding said tool and adjusting means carried by said housing for operating said rod for producing the expansion of the honing tool.

2,747,337
AUTOMATIC EDGE GRINDER FOR OPTICAL LENSES
John H. Geula, New York, N. Y.
Application September 2, 1953, Serial No. 378,045
7 Claims. (Cl. 51—101)



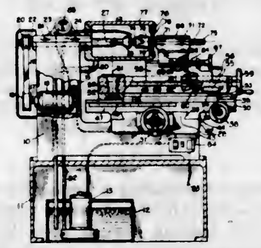
1. Lens edge grinding apparatus comprising a rotatable grinding stone having a peripheral grinding a surface, a lens holding structure including a vertical supporting column, a carriage movably supported on said column and adjustable to a desired height relative to said stone, a yoke pivotally connected to said carriage for oscillation in the horizontal plane, a rocking frame pivotally coupled to said yoke for oscillation in the vertical plane, a spindle mounted for rotation on said frame and constituted by two axially aligned sections, a pair of clamping heads mounted on the inner ends of said sections, a former secured to the outer end of one of said sections and a gear train mounted on said lens holding structure for transmitting rotary motion to said spindle, a continuous chain belt for transmitting rotary motion to said gear train, means bearing on said belt to maintain same taut for any adjusted height of said carriage, and resilient means for normally maintaining said heads in axial alignment with said stone when said lens is pressed into frictional engagement therewith during a grinding operation and for shifting said heads out of alignment with said stone when said frictional engagement is substantially reduced.

2,747,338
MACHINES FOR LAPPING AND GRINDING
Stanley William Hoare, Peterborough, England, assignor to The Newall Engineering Company Limited, Peterborough, England, a British company
Application February 2, 1953, Serial No. 334,560
Claims priority, application Great Britain September 12, 1952
8 Claims. (Cl. 51—118)



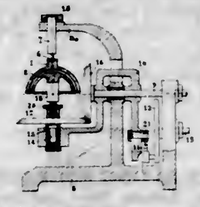
1. A lapping machine comprising in combination a machine base, an over-frame on the base said over-frame having two upstanding limbs with their lower ends anchored to the base and a bridge portion supported between the upper ends of the limbs, a lower lap mounted upon the base and between the limbs of the over-frame for rotation about a substantially vertical axis said lower lap bearing above the base a substantially horizontal upwardly-facing lapping surface, an upper lap mounted upon the bridge portion of the over-frame above the lower lap for both vertical movement and rotation about an axis co-linear with the axis of the lower lap, said upper lap bearing a substantially horizontal downwardly-facing lapping surface to co-operate with the lapping surface of the lower lap, driving means for relatively rotating the upper and lower laps, hydraulically-operated means for lowering and lifting the upper lap towards and away from the lower lap, a hydraulically-operated dresser unit mounted on one of the limbs of the over-frame for dressing the lapping surfaces, said dresser unit comprising guide means secured to the limb of the over-frame, a guide-member slidable in said guide means and dressing heads on the guide-member to traverse the lapping surfaces as the guide-member slides, and a piston-and-cylinder dresser-operating unit connected to the guide-member and hydraulic connections including pressure supply and exhaust lines extending to the means for lowering and lifting the upper lap and the dresser unit.

2,747,339
LENS GRINDING MACHINE
George C. Schelling, Irondequoit, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a corporation of New York
Application January 18, 1954, Serial No. 404,640
5 Claims. (Cl. 51—124)



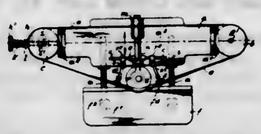
1. In a lens grinding machine the combination of a frame an annular cup type grinding wheel mounted to rotate about a horizontal axis fixed relative to said frame and extending longitudinally thereof, said grinding wheel having an arcuate grinding surface with a pitch circle extending therearound which is the locus of centers of the radius of curvature for said grinding surface, said grinding surface having a plane passing through said locus of centers perpendicular to the horizontal axis of the grinding wheel and parallel to a plane lying tangent to the foremost portions of the grinding surface, a carriage movably mounted on the frame, a turntable movably mounted on said carriage to turn about a vertical axis fixed with respect to the carriage, means for moving said carriage longitudinally and transversely of said frame for positioning said vertical axis relative to said grinding surface, a slide element on said turntable radially movable relative to said vertical axis, and a lens blank support movably mounted on said slide element to move a fixedly mounted lens blank radially relative to said vertical axis and in position to be engaged by the grinding wheel, whereby the vertical axis may be positioned relative to the grinding wheel in accordance with the selected type and amount of curvature to be generated on the lens blank by the grinding wheel when the turntable is swung about said vertical axis.

2,747,340
MACHINE FOR POLISHING OPTICAL SURFACES
Pierre Angénieux, Paris, France
Application November 8, 1952, Serial No. 319,575
Claims priority, application France November 17, 1951
2 Claims. (Cl. 51—124)



1. Machine for polishing spherical optical surfaces comprising a supporting frame, a concave spherical element constituting the polishing tool and a convex spherical element of same centre of curvature and same axis of symmetry as said concave element, which consists of the optical surfaces, said convex element being disposed within and in engagement with said concave element, said concave element resting freely on said convex element, a pivot pin provided with a spherical extremity and guided in said supporting frame, the axis of symmetry of said pivot pin passing through the common centre of curvature of both elements, said concave element being mounted for free rotation about said pivot pin under the influence of the friction resulting from the movements of said convex element, an arm carried by said supporting frame and having impressed thereto an oscillatory movement about an axis at right angles to the common axis of symmetry of said concave and convex spherical elements and passing through their common centre of curvature, said arm being underslung so as to support said convex element through the medium of a shaft coaxial with the axis of symmetry of said convex element and so mounted as to be rotatable about said arm, power means for oscillating said arm together with the convex element supported thereby, a first transmission wheel keyed on the shaft of said convex element, another transmission wheel in meshing engagement with said first wheel and coaxial with the axis of oscillation of said oscillating arm, said other transmission wheel being fixed with respect to said supporting frame, whereby the movement of rotation transmitted to said convex element about its axis of symmetry is of alternating character and of the same velocity in one and the other direction.

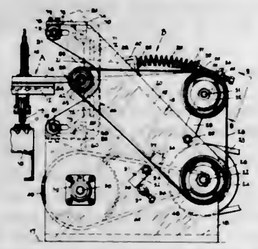
2,747,341
GRINDING MACHINE
Karl Heesemann, Bad Oeynhausen-Rehme, Germany
Application April 21, 1953, Serial No. 350,118
Claims priority application Germany April 28, 1952
5 Claims. (Cl. 51—141)



1. In a profile and edge grinding machine having a column, two laterally extending arms integral with said column, two rotatably adjusting flanges, each one of which is mounted to the free end of each of said arms, a motor mounted to one of said rotatably adjustable flanges and carrying a roller driven by said motor, a second roller mounted to the other rotatably adjustable flange, an endless sanding belt led around the two rollers, an adjustable guiding means shaped conforming to the workpieces to be ground and interchangeably disposed between said two rollers in the same plane so as to form a triangular

unit, means for adjustably mounting the second roller for movement toward and away from the first roller to adjust the sanding belt, and an adjustable table disposed in front of said column and adapted to carry the workpieces, the endless belt being of such width that its edges project beyond the adjustable guiding means and are non-abrasive, and means for guiding each projecting edge of the sanding belt at the front, the back and the lateral side of the edge, and arranged at opposite sides of the area of contact of said adjustable guiding means with said belt, so that proper tracking of the sanding belt is ensured.

2,747,342
OSCILLATING EDGE GRINDER
George F. Ritter, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio
Application December 27, 1951, Serial No. 263,580
5 Claims. (Cl. 51—142)



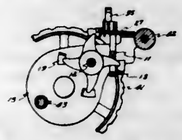
1. In an edge treating device, a rigid framework, blocks pivotally attached to said framework, links connected at one end to said blocks, a mounting member pivotally connected to and supported by the opposite ends of said links so as to be movable in a predetermined oscillatory curved path with respect to said framework and said edge to be treated, adjustable attaching means connecting said links with said blocks and being adjustable to permit the effective length of said links between the pivotal connections of said links and the corresponding blocks therefor to be changed so as to correspondingly change the radius of curvature of said curved path, an edge grinding tool supported on said member intermediate the pivotal connections for said mounting member, and drive means for moving said mounting member in said oscillatory path and simultaneously moving the surface of said tool relative to said mounting member and in a direction substantially perpendicular to the edge to be treated.

2,747,343
ABRASIVE ARTICLES AND THE LIKE AND HOLDERS THEREFOR
Donald N. Gellert, Chicago, Ill., assignor to Contur Abrasive Company, Inc., Crystal Lake, Ill., a corporation of Illinois
Application September 2, 1954, Serial No. 453,795
12 Claims. (Cl. 51—168)



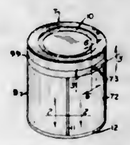
12. A rotatable holder for finishing articles comprising a generally cylindrical plate, an axial tubular extension for said plate including a portion projecting from one surface of said plate, said plate and extension defining an axial bore and a plurality of bores circumferentially spaced about a circle concentric with said axial bore, a generally cylindrical stem having a reduced pin like axial extension, said stem being disposed in said tubular extension with said pin like extension projecting through said axial bore beyond the opposite surface of said plate, and a plurality of headed pins fixed in said circumferentially spaced bores with the heads thereof disposed in spaced relation to said opposite surface of said plate.

2,747,344
PORTABLE LAWNMOWER SHARPENER
William Julius Kickbush, Owosso, Mich.
Application February 12, 1953, Serial No. 336,518
2 Claims. (Cl. 51—250)



1. In a portable lawnmower sharpener, for sharpening reel type mowers having a shaft carrying the spiral blade, the combination including: a pair of pivot pins alignably mounted upon each side of a mower frame offset from and parallel with the spiral blade shaft; mounting arms pivotally and removably engaging said pivot pins; a guide bar connected fixedly between said mounting arms and resting on the cutter bar blade; a cutting bar dresser reciprocably and removably mounted upon said guide bar; abrasive plates detachably mounted upon said cutting bar dresser; and a spiral blade rotating lug extending from said dresser.

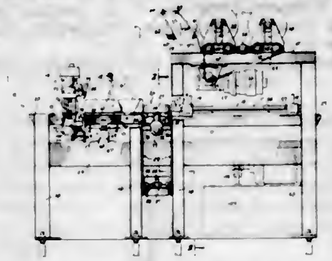
2,747,345
METHOD OF SEALING CANS
James J. Plastino, Pueblo, Colo.
Application October 3, 1949, Serial No. 119,363
8 Claims. (Cl. 53—17)



1. A method of providing a removable seal for a can adapted to contain a foodstuff, which comprises forming a can body by bending a metal strip into a generally circular shape and locking the longitudinal edges together to form a seam, heating said metal at said seam and flowing solder into said seam, and filling with solder at least a portion of said seam adjacent one end of said can body to prevent the formation of a groove which will be bridged by a resilient strip of tape, stretched thereover; attaching a can bottom to the opposite end of said can body; forming a top for said can having a peripheral depending flange adapted to interfit with the upper end of said can body; placing footstuff or the like in said can; placing said top on said can; applying under tension a resilient, non-metallic strip having an adhesive undersurface circumferentially around the joint between said top flange and said can body, the ends of said strip being overlapped; and producing a differential in pressure between the inside and outside of said can so that the vacuum effect thereby produced will cause a portion of said strip to flow into said joint.

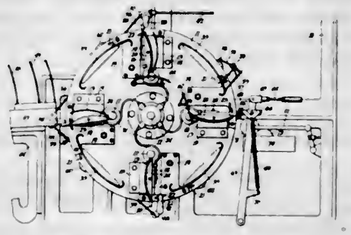
2,747,346
METHOD OF FORMING PACKAGES
Louis Tigerman and Gale V. Clough, Milwaukee, Wis., assignors to Robert A. Johnston Company, Milwaukee County, Wis., a corporation of Wisconsin
Application March 13, 1951, Serial No. 215,228
1 Claim. (Cl. 53—28)

A method of packaging, which comprises: progressively forming one end portion of a web of pliable packaging material in sheet form into tubing of a length sufficient to receive a charge of material to be packaged; transversely sealing the tubing at a point remote from said web to provide a first closed end for the tubing; with the tubing stationary and its closed end unsupported from the exterior, pushing a charge of material into the closed end portion of the tubing and at the same time projecting a rigid member longitudinally into the tubing and against the closed end thereof to thereby advance the charged tubing endwise, solely by the application of force



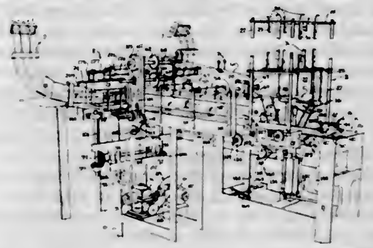
to the closed end thereof from inside the tubing, a distance at least equal to the length of said charge longitudinally of the tubing; utilizing such advancing motion of the charged tubing to progressively form the web of packaging material into another length of tubing continuous with the first and in which the next charge of material may be packaged; withdrawing said rigid member from the charged tubing; and transversely sealing the tubing in back of said charge of material therein to close the tubing about said charge and to provide a first closed end on said other length of tubing.

2,747,347
APPARATUS FOR WRAPPING MAGAZINES
Douglas Hamilton Pope, Brisbane, Queensland, Australia
Application August 26, 1952, Serial No. 306,407
Claims priority, application Australia August 29, 1951
6 Claims. (Cl. 53—52)



1. Apparatus for wrapping magazines including a carrier; a pair of holding members mounted endwise on the carrier, one of the holding members being a laterally curved plate fixed to the carrier, the other holding member having a correspondingly curved convex face and being hingedly movable about a longitudinal axis to open position away from, or to closed position towards, the fixed holding member, the two holding members being adapted to receive between them substantially the whole of a magazine when the hinged holding member is in open position, and to hold and impart a corresponding lateral curve to substantially the whole of the magazine when the hinged holding member is in closed position; spring-loading means urging the hinged holding member to closed position; a release mechanism adapted to bring the hinged holding member intermittently to open position; suction holes in the curved face of the hinged holding member; a suction pump; means for intermittently connecting the suction pump to the suction holes, the suction pump being adapted to apply such vacuum at the suction holes as to cause a side of the cover of the magazine to be held to the hinged holding member; a wrapper feed mechanism adapted to insert between the suctionally held side of the cover and the succeeding leaf of the magazine an end of a flexible wrapper when the hinged holding member is in open position; a wrapping member adapted to be moved to pass the remainder of the wrapper about the holding members and engaged magazine when the hinged holding member is in closed position; a gumming mechanism adapted to secure the free end or flap of the wrapper adhesively to the part of the wrapper passed about the holding members; and an ejector adapted to eject slidably the magazine together with the engaging wrapper at least partly from the holding members.

2,747,348
CARTON FILLER
Allen S. Rose, San Jose, Calif.
Application November 19, 1951, Serial No. 257,057
8 Claims. (Cl. 53—63)

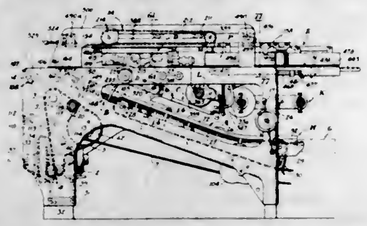


1. A carton feeder and filler comprising a magazine for holding a stack of flat-folded tubular cartons, a can retaining ear on each carton, a conveyor mounted adjacent said magazine, a plurality of spaced carton propelling elements carried by said conveyor, means for moving said conveyor and said carton propelling elements along a predetermined path, means controlled by successive carton propelling elements to withdraw successive cartons from said magazine and to deposit said cartons on the conveyor ahead of said conveyor elements for movement thereby along said path, means mounted to erect each carton deposited on said conveyor, means for supporting each erected carton at a predetermined station along said path, a can inserter mounted for movement toward and away from said station, means normally retaining said can inserter in position away from said station, means for feeding a charge of cans to said inserter when moved away from said station, and means mounted for actuation by a succeeding carton at a predetermined point along said path ahead of said station to move said inserter toward said station to insert a charge of cans into a carton therein.

2,747,349
WRAPPING MACHINE
Arthur A. Kottmann, Davenport, Iowa, assignor, by mesne assignments, to American Machine & Foundry Company, New York, N. Y., a corporation of New Jersey
Application October 6, 1950, Serial No. 188,686
30 Claims. (Cl. 53—111)

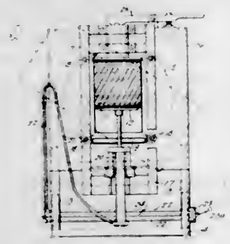
1. A wrapping machine comprising superposed article runways, an elevator for receiving articles from the lower runway and transferring the same to the upper runway, means for supporting a web of wrapping material for movement toward said elevator with the end thereof adjacent the elevator draped between the lower runway and the elevator, means for moving an article on the lower runway against the draped end of said web and onto said elevator, means on the elevator for clamping the web to the article, power driven means controlled by

tension exerted on the article engaging end of the web for feeding said web toward the elevator when tension is exerted on said end of the web, and a continuously driven elevator actuating mechanism comprising means for moving the elevator up and down with a dwell in alinement with each runway, and means for imparting a bodily movement to the elevator in the direction of the paper feed during its upward movement.



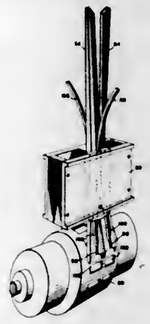
16. A wrapping machine comprising superposed article runways, an elevator for receiving articles from the lower runway and transferring the same to the upper runway, means including a horizontal supporting member above the discharge end of the lower runway for supporting a web of wrapping material and draping an end thereof between the lower runway and elevator, means for holding said supporting member in different positions of vertical adjustment that provide close clearance between said supporting member and the tops of articles of different heights passing beneath the same on said lower runway, means for moving an article on the lower runway across the space between said supporting member and said lower runway, against the draped end of said web and onto the elevator, means on the elevator for clamping the web to the article, power driven means controlled by tension exerted on the article engaging end of the web for feeding said web toward the elevator when tension is exerted on said article engaging end of said web, and means for actuating the elevator.

2,747,350
APPARATUS FOR CLOSING AND SEALING CARTONS
Sylvester H. Cargill, Excelsior, and William L. Harkess, Minneapolis, Minn.; said Harkess assignor to said Cargill
Application September 8, 1952, Serial No. 308,468
4 Claims. (Cl. 53—124)



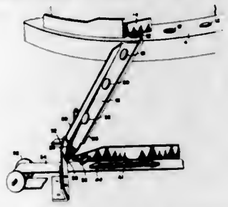
1. Apparatus for packaging a plurality of articles within a carton to tightly engage the carton against the articles on at least the top and bottom of the articles, said apparatus comprising a rigid supporting structure, a rotatable frame journalled on said structure, compression equipment carried by said frame and consisting in a reciprocated plunger and a fixed backing member rigidly fixed to said frame and mounted in opposed relation to said plunger, said plunger having a peripheral shape and size to be received within an open bottomed carton, and mechanism under the control of the operator for forcibly projecting said plunger upwardly to securely press the carton contents against the closed carton top which in turn is pressed against said backing member, said rotatable frame permitting said carton and its contents to be inverted while held between the plunger and backing member to facilitate closure of the carton bottom.

2,747,351
TAPE SEALING MACHINE FOR PACKAGING ARTICLES IN THERMOPLASTIC TAPE
Alten E. Whitecar, Westville, N. J., assignor to Smith, Kline & French Laboratories, Philadelphia, Pa., a corporation of Pennsylvania
Application December 20, 1951, Serial No. 262,564
1 Claim. (Cl. 53—141)



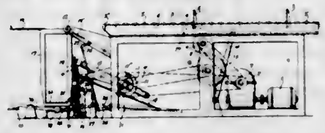
In a tape sealing machine adapted for sealing objects in a package of thermoplastic tape and having a channel for feeding a plurality of objects between a pair of die rolls, said channel being exposed to the atmosphere, means for feeding two strips of tape between said die rolls, and tape guiding means adjacent said channel, the improvement which comprises heating means mounted adjacent the discharge end of said channel and said tape guiding means whereby condensation of moisture in said channel is prevented, and whereby said tape is conditioned by passing over said guide, and pneumatic means to direct a jet of air into the lower end of said channel whereby an object in said channel is forced out of said channel and between said strips of tape.

2,747,352
APPARATUS FOR PACKAGING WAFER TABLETS
Alten E. Whitecar, Westville, N. J., assignor to Smith, Kline & French Laboratories, Philadelphia, Pa., a corporation of Pennsylvania
Application July 11, 1952, Serial No. 298,353
9 Claims. (Cl. 53—159)



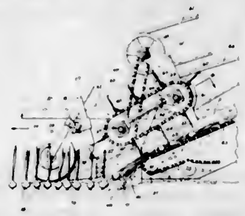
1. Apparatus for packaging wafer tablets comprising a conveyor, means including an inclined chute having an upturned lower end portion for receiving tablets and projecting the tablets substantially horizontally and in overlapping relation upon said conveyor, means for moving the tablets from the substantially horizontal position on the conveyor to a substantially vertical position, and means for delivering a predetermined quantity of vertically positioned tablets into a container therefor.

2,747,353
AUTOMATIC PACKING APPARATUS FOR GLASS SHEETS
Sunao Shibata, Yokohama City, Kanagawa-ken, Japan, assignor to Asahi Garasu, Kabushiki Kaisha, Tokyo, Japan, a corporation of Japan
Application January 5, 1953, Serial No. 329,545
8 Claims. (Cl. 53—249)



1. An automatic glass sheet packing apparatus comprising: a runway; an intermittent feeding means for feeding sheets of glass along said runway; a crate holding device at one end of said runway; means for turning said crate holding device from a vertical to a horizontal position; and lifting means within said device for lifting a crate positioned therein.

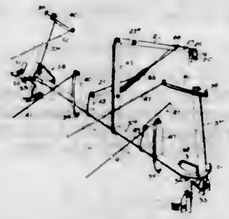
2,747,354
BELOW GROUND ROW CROP HARVESTING UNIT
William H. Bloser, Salinas, Calif., assignor to Major Distributing Company, Salinas, Calif., a corporation of California
Application September 29, 1953, Serial No. 382,961
1 Claim. (Cl. 55—51)



In combination with a transverse below-ground row-crop digging element and a dug-crop elevating conveyor having its forward end a predetermined distance rearwardly of and above the digging element, a dug-crop lifting and bridging unit comprising a plurality of transversely spaced fingers sloping upwardly to the rear and mounted in a fixed position relative to the digging element and conveyor and extending from adjacent and rearwardly of the digging element to adjacent and ahead of the conveyor; the upper surface of the fingers being substantially flush with the upper edge of the digging element and with the upper face of the forward end of the conveyor.

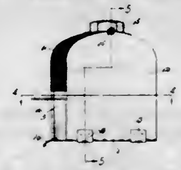
2,747,355
TRACTOR DRAWN IMPLEMENTS
Frederick C. Warne, Mansfield, Ohio, assignor, by mesne assignments, to Pittsburgh Forgings Company, Coraopolis, Pa., a corporation of Delaware
Original application June 12, 1944, Serial No. 539,850, now Patent No. 2,655,854, dated October 20, 1953. Divided and this application February 23, 1952, Serial No. 273,474
2 Claims. (Cl. 55—84)

2. In a ground working implement, the combination of a transverse main drawbar section having an end section hinged thereto, frames with ground working means thereon connected to each of said drawbar sections, a latch mechanism for releasably maintaining the end drawbar section and attached frame in rigid alignment with the main drawbar section to prevent downward movement or alternatively in a rigid raised transport position, said latch mechanism comprising a member secured to one of said drawbar sections and presenting a plurality of spaced abutments, and a member secured to the other of said drawbar sections presenting a hook member engageable with one of the abutments to retain the drawbar section in rigid alignment against downward movement such that the end drawbar section may only move upward, the hook member being freely movable out of engagement



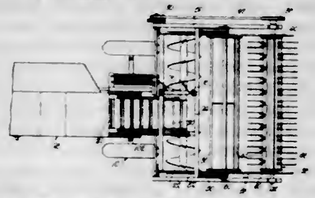
with said one abutment by a vertical swinging movement of the end section and freely engageable with another of said abutments, after the end section has been swung upward to the raised transport position, said last named abutment rigidly retaining said hook member such that a horizontal force inwardly or outwardly on the elevated end section will not dislodge the hook member from the abutment.

2,747,356
LAWN MOWER GRASS COLLECTOR
George Peterson, North Muskegon, Mich.
Application December 27, 1954, Serial No. 477,896
3 Claims. (Cl. 56—202)



1. Structure as described comprising, a receptacle having a bottom, spaced sides and top, an open rear end and a movable detachably secured closure for said rear end, said top and sides of the receptacle having air passing openings therethrough and one side of said receptacle at its front lower portion having a relatively large opening therethrough, and a baffle secured at its front portion to, located over, and extending from said bottom toward but short of the top spaced from both sides of said receptacle, said baffle having a free rear portion extending toward but terminating short of the rear end of the receptacle adapted to be moved laterally toward either side of said receptacle and remain in any position to which moved.

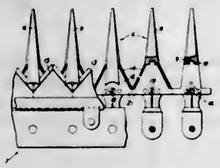
2,747,357
ADJUSTABLE REEL FOR CROP HANDLING IMPLEMENT
Raymond E. Bert and Joseph L. Wetta, Maize, Kans.
Application October 13, 1952, Serial No. 314,428
2 Claims. (Cl. 56—221)



1. In a crop handling implement, a rotatable, pick-up, reel assembly comprising a rotatable, elongated axle; a

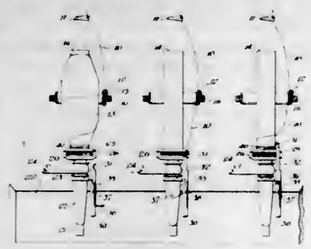
pair of spaced, circular, end plates rigidly mounted on the axle adjacent its ends; a plurality of elongated rods extending between and rigidly interconnecting said plates, said rods being disposed in a circle about said axle in parallelism with each other and the axle; and a plurality of elongated, resilient fingers rigidly mounted on each rod respectively and spaced longitudinally along the latter, said fingers extending outwardly from the rods in substantially radial, normal relationship to the axle.

2,747,358
GUARD FINGER HAVING A LEDGER PLATE
George H. Frazee, Colusa, Calif.
Application January 13, 1955, Serial No. 481,574
1 Claim. (Cl. 56—309)



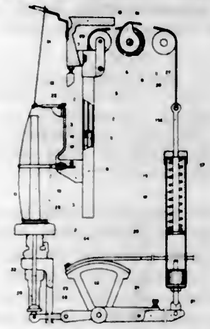
A cutter bar of the character described comprising a guard including a finger, said finger having a threaded opening in its rear end portion, upstanding pins on the finger on opposite sides of the opening, a triangular ledger plate of a substantial width removably mounted on the finger and having spaced openings therein accommodating the pins, said ledger plate further having a tapered opening therein between the first named openings, and a countersunk screw engaged in the last named opening and threaded into the finger.

2,747,359
PROCESS AND APPARATUS FOR WINDING HEAVY DENIER YARN PACKAGES
Robert L. Keefe, Jr., Collins Park, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application September 26, 1951, Serial No. 248,382
4 Claims. (Cl. 57—34.5)



1. A winding machine for twist-winding yarn packages of heavy denier yarn supplied at constant speed which comprises a rotatable spindle carrying a whorl, bobbin and a waste spool, said spool being located on the spindle below and in axial alignment with said bobbin, constant speed driving means making frictional contact with said whorl and arranged to rotate said spindle at high speed, a traveler guide slidably supported on a ring surrounding said spindle for guiding yarn onto said bobbin when winding a package, a stationary guide supported in position to guide yarn onto said waste spool while stringing up the yarn preparatory to winding onto said bobbin, means for moving said stationary guide to a position opposite said bobbin for winding a transfer tail, and means for releasing the yarn from said stationary guide after the transfer tail has been wound.

2,747,360
DAMPENED THREAD GUIDE
Luigi Vella, Cogozzo Valtrompia, Italy
Application June 15, 1953, Serial No. 361,783
Claims priority, application Italy May 7, 1952
8 Claims. (Cl. 57—108)



1. In a ring spinning frame, a ring carrier plate, a drawing frame, a thread guide, a support for the thread guide, a supporting guide member for the thread guide support in which the thread guide support is vertically movable, means to connect the supporting guide member to the drawing frame, a tiltable separator mounted on the thread guide support for movement about a horizontal axis, a piston and cylinder unit, a flexible connection extending between said thread guide support and the piston rod of the piston and cylinder unit, and a cam member about which the flexible connection is trained whereby the movement of the ring carrier plate transmits variably the amplitude of movement from the piston rod of the piston and cylinder unit to the support for the thread guide to dampen said thread guide support.

2,747,361
SELF-LUBRICATING SHAFT BEARINGS
Walter Kohlhagen, Elgin, Ill., assignor to The E. Ingraham Company, Bristol, Conn., a corporation of Connecticut
Application June 3, 1952, Serial No. 291,465
6 Claims. (Cl. 58—52)

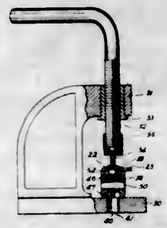


2. In a movement of a timepiece, the combination of pillar-spaced end plates; a plurality of staffs; and self-lubricating staff bearings comprising opposite pairs of bearing plates mounted in superposed fashion on the inner faces of the end plates, respectively, the bearing plates of each pair being spaced from each other and from the adjacent inner face of the respective end plate to define therebetween capillary spaces, respectively, each for holding a lubricant supply film, and the bearing plates of each pair being provided with sets of aligned apertures, respectively, which are in axial alignment with the apertures of the sets, respectively, in the bearing plates of the opposite pair, the apertures of the axially aligned sets receiving said staffs, respectively, with capillary clearance therefrom, and said end plates having filler holes, respectively, through which to introduce lubricant into the capillary spaces.

2,747,362
ANVIL FOR A CHAIN RIVET REMOVING DEVICE
Joseph B. Cox, Portland, Oreg., assignor, by mesne assignments, to Oregon Saw Chain Corp., a corporation of Oregon
Application September 18, 1951, Serial No. 247,048
1 Claim. (Cl. 59—7)

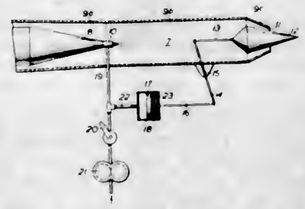
A rivet remover adapted for use with saw chains of the type having longitudinally spaced-apart, centrally

disposed links pivotally joined to pairs of oppositely disposed side plates by means of rivets provided with a central enlarged annular shoulder cooperatively received by said links, each of the extending end portions of said rivets being cooperatively received by an opening in a side plate of lesser diameter than said shoulder, said rivets being peened over said side plates at the extreme ends thereof so as to hold said side plates in position, the longitudinal edges of said side plates being substantially straight and parallel, said centrally disposed link extending beyond said edges, said rivet remover comprising a frame including a horizontally disposed base portion and a head portion spaced above said base portion, a punch mounted on said head portion for movement toward and away from said base portion, an anvil block, said anvil block comprising a pair of upwardly projecting parallel shoulders defining a groove open at both



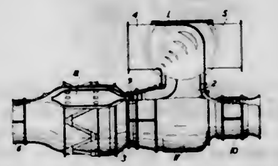
ends, said groove having a width substantially equal to the distance between the longitudinal edges of the side plates of a saw chain of predetermined size whereby the anvil will support such a chain beneath said punch with a side plate of the chain disposed between said anvil shoulders and with the said extending portions of the centrally disposed links resting on said anvil shoulders, said groove being of a depth at least as great as the thickness of a said side plate plus the heighth of a peened over end portion of a said rivet and the axial length of the rivet shoulder, said anvil having a transverse circular aperture of a diameter slightly greater than the diameter of said rivet shoulder, and cooperative mounting means on said anvil block and on said base for centering said groove beneath said punch with the longitudinal direction of said groove extending transversely of the frame between said base and head portions and for centering said aperture beneath said punch.

2,747,363
JET PROPULSION PLANT WITH INTERCONNECTED AFTERBURNER AND JET NOZZLE AREA CONTROL
Henry Cohen, Newcastle-upon-Tyne, and John Henry Hamilton Darth, Sutton, England, assignors to Power Jets (Research and Development) Limited, London, England, a British company
Application October 13, 1952, Serial No. 314,536
Claims priority, application Great Britain September 14, 1944
7 Claims. (Cl. 60—35.6)



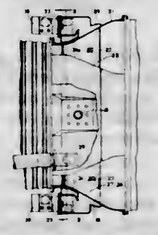
1. An aircraft jet propulsion power plant comprising a jet pipe having a jet nozzle for the rearward discharge of a propulsive jet stream, obturating means to vary the area of said jet nozzle, a fuel burner within said jet pipe, means for supplying fuel to said burner including controlling means operable to turn said fuel supply on and off and means operatively interconnected with said controlling means and operable to move said obturating means to increase the jet nozzle area when said controlling means is operated to turn on the supply of fuel to the burner.

2,747,364
TWO-WAY ROTARY FLUID VALVE
Sidney Henry Albert Magin, Crouch End, London, England, assignor to D. Napier & Son Limited, London, England, a company of Great Britain
Application June 11, 1954, Serial No. 436,181
4 Claims. (Cl. 60—39.07)



1. A two-way rotary fluid valve comprising a cylindrical valve chamber formed with three closely spaced ports in its circumferential wall, and a rotary valve member mounted for rotation within the chamber and having a transfer passage therein directing the flow of fluid through the valve, the circumferential distance between adjacent parts of the two remote ports being substantially less than the overall circumferential distance between the remote sides of the opposite ends of the transfer passage in the rotary valve member, while the circumferential distance between the adjacent sides of the opposite ends of the transfer passage is substantially less than the circumferential width of the intermediate port, thus maintaining a fluid path of substantial cross-sectional area through the valve at all positions of the rotary valve member.

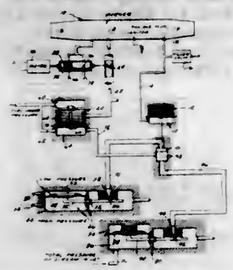
2,747,365
SUPPLY OF HOT AIR FROM A GAS TURBINE ENGINE FOR ANTI-ICING OR OTHER PURPOSES
Horace S. Rainbow, Coventry, England, assignor to Armstrong Siddeley Motors Limited, Coventry, England
Application June 29, 1954, Serial No. 440,193
Claims priority, application Great Britain July 3, 1953
8 Claims. (Cl. 60—39.09)



1. A gas turbine engine having an axial-flow compressor, a combustion chamber system, an intermediate structural section forming an outlet diffuser of the compressor and connected to the combustion chamber system, the intermediate structural section consisting of inner and outer frusto-conical casings which are interconnected by aerofoil-section spokes, a channel-section member at the outer ends of said spokes constituting part of a hollow closed-section casing, means interconnecting the interiors of said outlet diffuser and said closed-section casing to supply hot air from the former to the latter, a manifold having at least one outlet point and having its interior connected with the interior of said closed-section casing.

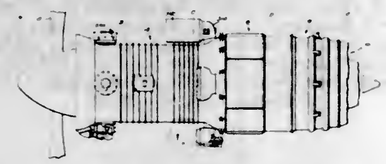
and at least one controllable valve in the connection between the interiors of the manifold and said closed-section casing.

2,747,366
STARTING SYSTEM FOR RAMJETS
Robert T. Barnes, Saratoga Springs, N. Y., and George D. Lewis, Manchester, Conn., assignors to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application April 13, 1953, Serial No. 348,412
15 Claims. (Cl. 60—39.14)



14. In a ramjet power plant having a combustion chamber, a source of fuel under pressure, regulator means for controlling the flow of fuel to the combustion chamber including a throttle valve, a first means responsive to a parameter of power plant operation for controlling regulator means, and secondary means operatively connected to said regulator means for controlling said regulator means during starting of the power plant independently of said first means.

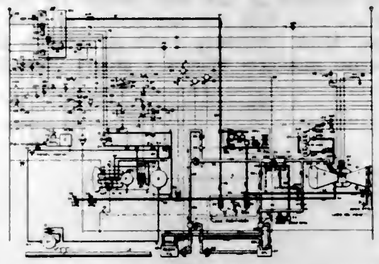
2,747,367
GAS TURBINE POWER PLANT SUPPORTING STRUCTURE
Bennett S. Savin, Jr., Wethersfield, Conn., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application March 21, 1950, Serial No. 150,858
8 Claims. (Cl. 60—39.16)



1. In a gas turbine power plant, a multistage compressor having at least two independently rotatable high and low pressure rotors, a multistage turbine having at least two independently rotatable rotors, one turbine rotor being connected to each compressor rotor, a supporting frame for the power plant, bearings carried by said supporting frame for separately and independently supporting each compressor rotor at opposite ends and its associated turbine at one side thereof, and mounting means for said bearings extending between the supporting frame and the bearings.

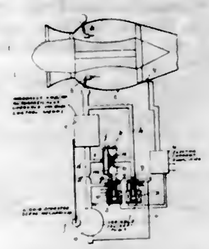
2,747,368
LOW-SPEED IDLING OF ENGINES
John J. Stamm, Export, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application November 23, 1954, Serial No. 470,607
11 Claims. (Cl. 60—39.18)

1. In combination, a fuel-consuming engine which normally requires a certain costly idling-speed fuel-input to maintain a desirable self-sustaining idling speed; a means for increasing the fuel-input substantially above the amount which is necessary for said desirable self-sustaining idling speed, when said engine is delivering power; a major useful-load device which is driven by the power produced by said engine when said engine is receiving said increased fuel-input; a source of external power which is cheaper than the operation of said engine at said desirable self-sustaining idling speed; a low-idling means, for operating said engine at an abnormally low idling speed, substantially below said desirable self-sustaining idling speed, with external-power assistance, with a reduced fuel-input, and with substantially no power-delivery to said major useful-load device, said low-idling



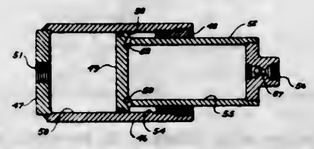
means comprising: a means for decreasing said fuel-input to a point which is a substantial amount which is nevertheless substantially below the normal idling-speed fuel-input, and a means for using said source of external power to supply sufficient driving-power to said engine to maintain said abnormally low idling speed under said conditions; and an idling-restoring means, for discontinuing the low-idling operation of the engine, said idling-restoring means comprising: a means for increasing said fuel-input, while still temporarily using said source of external power to supply driving-power to said engine, and a means for finally discontinuing the application of driving-power to said engine from said source of external power.

2,747,369
ENGINE TEMPERATURE RESPONSIVE MEANS TO CONTROL FUEL SUPPLY BYPASS AND SPILL LINES
Owen Napier Lawrence, Dorridge, England, assignor to Joseph Lucas (Industries) Limited, Birmingham, England
Application January 28, 1953, Serial No. 333,634
Claims priority, application Great Britain February 13, 1952
2 Claims. (Cl. 60—39.28)



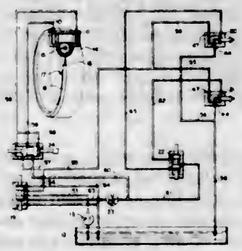
1. A system for supplying liquid fuel to a jet engine, gas turbine, or like prime mover, comprising in combination with a fuel pump, a main path and a by-pass path through which fuel can be supplied from the pump to the prime mover, the by-pass path being in parallel with a portion of the main path, a volume-control means in the main path, means for establishing a pressure difference in the main path, a means responsive to the said pressure difference for controlling the flow in the by-pass path, a pair of valves in the by-pass path, a spill path for fuel from the main path, and electromagnetic means responsive to a temperature of the motive fluid in the prime mover for opening the valves with increase of the said temperature, one of the valves being located in and serving to close the by-pass path, and the other of the valves being located between the main path and the spill path and serving, when open, to permit fuel flow from the main path to the spill path.

2,747,370
FLUID PRESSURE DEVICE
William A. Trout, McAllen, Tex.
Application January 15, 1952, Serial No. 266,570
5 Claims. (Cl. 60—52)



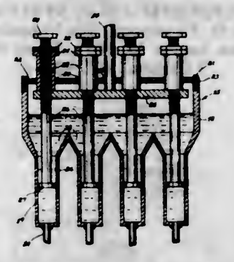
2. A fluid pressure device comprising a cylinder, a piston reciprocable therein, a fluid inlet port at one end of said cylinder, an axial extension of said piston of slightly less diameter than the interior of said cylinder, an annular cylinder head fitting said extension for reciprocation of the latter therethrough and closing the end of said cylinder opposite the fluid inlet end thereof, thereby forming a small annular chamber defined by said cylinder, said piston, said extension and said head, a chamber within said extension of much larger capacity than the maximum capacity of said annular chamber, a passage connecting said respective chambers through the wall of said extension.

2,747,371
HYDRAULIC SYSTEM AND PERIODICALLY FLUSHED THROTTLE VALVE THEREFOR
William C. Critchley, Brighton, N. Y., assignor to The Gleason Works, Rochester, N. Y., a corporation of New York
Application November 13, 1952, Serial No. 320,302
17 Claims. (Cl. 60—52)



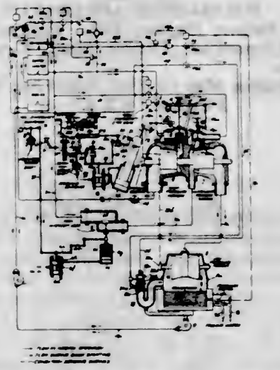
1. A throttle valve comprising a casing having a piston movable therein, the casing having a chamber adjacent each of the two end faces of the piston and a port opening into each chamber, the piston having a passage therethrough extending from one end face thereof to a port in the casing other than the aforementioned ports, the chamber adjacent said one end face of the piston having a wall portion which together with said one end face of the piston forms a throttling throat communicating with said passage, a stop for limiting motion of the piston toward said wall portion, and means for adjusting the relative positions of said wall portion and said stop to thereby vary the width of the throat.

2,747,372
MULTIPLE MASTER CYLINDER FOR THE HYDRAULIC FEED SYSTEM OF A MOTOR VEHICLE
Lawrence York, Pearl River, N. Y.
Application June 8, 1953, Serial No. 360,189
5 Claims. (Cl. 60—54.6)



5. In a motor vehicle having hydraulic wheel brake cylinders, a master cylinder comprising a housing formed with cylinders connected to the respective wheel brake cylinders, respective pistons in said second-named cylinders, said pistons having piston rod portions, a common actuating member having a portion thereof inside said housing, said inside portion being threadedly engaged by said piston rod portions, said piston rod portions extending through a wall of said housing, and means to individually rotate said piston rod portions relative to said common actuating member from outside the housing.

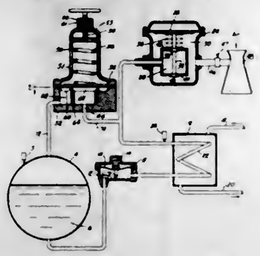
2,747,373
QUICK-STARTING GOVERNING SYSTEM FOR REHEAT TURBINE
Markus A. Eggenberger and Peter G. Ipsen, Schenectady, N. Y., assignors to General Electric Company, a corporation of New York
Application September 24, 1952, Serial No. 311,248
11 Claims. (Cl. 60—73)



11. In governing mechanism for a reheat turbine powerplant having conduits connecting in series a steam generator, high pressure turbine, reheater, main intercept valve, intermediate pressure turbine, and condenser, the combination of first governing valve means regulating the admission of steam to the high pressure turbine, bypass conduit means with second bypass valve means communicating between the reheater and the intermediate pressure turbine, first motor means connected to open said first and second valves substantially simultaneously, second motor means connected to open the main intercept valve, means for disabling said second motor means whereby the main intercept valve will remain closed while the first motor means causes the first and second valve means to open to a preselected position, and linkage

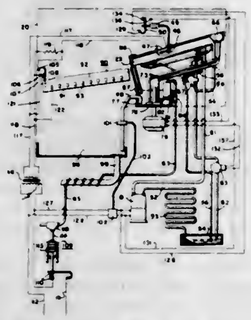
means connecting the first motor means to the second motor means to open the main intercept valve proportional to movement of said first and second valve means in the opening direction beyond said preseleted position.

2,747,374
LIQUEFIED GAS SYSTEM
William O. Thompson, San Francisco, Calif.
Application August 30, 1951, Serial No. 244,389
3 Claims. (Cl. 62—1)



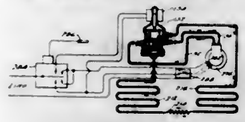
1. In a system for vaporizing liquified gas including a storage tank and a vaporizer for liquified gas, said vaporizer having an outlet and an inlet, said inlet being connected to the bottom of the storage tank whereby liquid from the bottom of the tank can enter the vaporizer, a pressure operated valve having two lines leading thereto and means whereby pressure in either of said lines causes said valve to open placing said lines in communication with each other, one of said lines being connected to the outlet of said vaporizer and the other of said lines being connected to the vapor space above the liquid in the storage tank, whereby said valve will be opened upon application of a predetermined pressure in either the vaporizer or the vapor space above the storage tank.

2,747,375
ICE MAKING APPARATUS
Joseph R. Pichler, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 14, 1953, Serial No. 355,061
2 Claims. (Cl. 62—4)



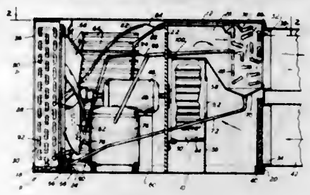
1. An ice maker comprising in combination, a cabinet, a refrigerating system including a refrigerant evaporator within said cabinet and a refrigerant translating device, conduit means in said cabinet exposed to the temperature produced by said evaporator for directing water thereover, a make up water supply pipe for furnishing water under a normal substantially constant pressure to said conduit means, said refrigerating system being capable of reducing the temperature of said evaporator below 32° F. for freezing water directed thereover into ice, means actuated independently of conditions in said refrigerating system automatically and directly in response to a drop in pressure of water in said make up water supply pipe below said normal pressure therein to cause the temperature of said evaporator to increase above 32° F. and prevent freezing of water in the water directing conduit means within said cabinet, and said last named means also being actuated automatically in response to restoration of said normal water pressure in said make up water supply pipe for causing the temperature of said evaporator to be lowered below 32° F.

2,747,376
REVERSIBLE REFRIGERATING SYSTEMS
Glenn Muffly, Springfield, Ohio
Application September 24, 1953, Serial No. 382,047
17 Claims. (Cl. 62—4)



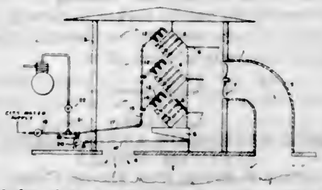
1. In a refrigerating system of the reversible heat pump type including a compressor and a motor to drive the same, valve means controlling a plurality of ports and operable to reverse the flow of refrigerant in a part of said system, electrical means for actuating said valve means, and a multiple-throw switch for connecting a source of current with said motor and with said electrical means, said switch including contacts to close two parallel circuits at one throw whereby one of said circuits energizes said motor while the other circuit energizes said electrical means, the other throw of said switch being arranged to energize said motor while the circuit of said electrical means remains open.

2,747,377
AIR CONDITIONING UNIT
Ralph S. Lowensohn, Wichita, Kans., assignor to The O. A. Sutton Corporation, Inc., Wichita, Kans., a corporation of Kansas
Application May 2, 1955, Serial No. 505,361
6 Claims. (Cl. 62—4)



1. In an air conditioning unit, a casing having an opening in a vertical wall thereof, a condenser structure within said casing and extending across said opening, said condenser structure having an upper section and a lower section, two separate cooling systems each having a motor-compressor unit and an evaporator positioned in said casing, one of said condenser sections being connected in series in one of said systems and the other of said condenser sections being connected in series in the other of said systems, a fan for directing air to be cooled through said evaporators to cool said air and cause water vapor to be condensed on said evaporators, a water reservoir below said condenser structure, means for collecting condensed water from said evaporators and delivering it into said reservoir, and a fan adjacent said condenser structure for directing cooling air outwardly therethrough, said fan having a slinger ring dipping into said reservoir to throw said water upon the heat exchange areas of said condenser structure in contact with said cooling air, said lower condenser section having substantially less of said heat exchange area in proportion to the capacity of its associated motor-compressor unit and evaporator than said upper condenser section.

2,747,378
DEFROSTING ARRANGEMENT FOR A REFRIGERATING COIL
Howard T. Noone, Atlanta, Ga., assignor to Carrier Corporation, Syracuse, N. Y., a corporation of Delaware
Application March 18, 1955, Serial No. 496,211
1 Claim. (Cl. 62—102)



In a defrosting arrangement, the combination of a first compartment adapted to contain articles to be refrigerated, a second compartment in communication with said first compartment, a fan associated with said second compartment adapted to induce an air stream from said first compartment through the second compartment and back into said first compartment, at least one evaporator coil located in said second compartment, said evaporator being in heat exchange relation with the air stream induced through second compartment, a plurality of spray nozzles operatively associated with said evaporator so that fluid issuing from said spray nozzles will substantially cover the evaporator surface, a header operatively connected to said spray nozzles and adapted to supply a defrosting fluid to said spray nozzles, said header passing from said second compartment to points remote from said first and second compartments, a drain valve located in said header remote from said second compartment, a line operatively connected to a source of defrosting fluid, a line connected to a source of compressed gas, said last mentioned lines being operatively connected to said header valve means being located in each of said lines and being adapted to selectively pass defrosting fluid or compressed gas through said header, said header being so disposed so that gravity will drain substantially all fluid from said lines through said drain valve when said valves in said lines are in closed position, a drip pan disposed below said evaporator to collect all defrosting fluid dripping therefrom, said drip pan being connected to a drain line adapted to pass defrosting fluid from said second compartment, closure means associated with said last mentioned drain line adapted to minimize heat transfer through said drain line into said second compartment, at least one damper member being located in said second compartment, said damper member being adapted to be closed during the defrosting process so as to restrict the flow of air through the second compartment during the defrosting process.

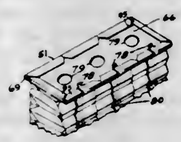
2,747,379
LAMINAE FREEZER
Crosby Field, Brooklyn, N. Y., assignor to Flakice Corporation, Brooklyn, N. Y., a corporation of Delaware
Application April 9, 1952, Serial No. 281,377
17 Claims. (Cl. 62—106)

1. In congealing apparatus of the character described, the combination of, a freezing tube assembly comprising a plurality of axially aligned freezing tube sections of different and successively greater diameters along the axis and presenting metal surfaces upon which laminae of ice are formed and so arranged that the smaller diameter laminae are moved axially during successive cycles whereby larger laminae are formed around smaller laminae to build up a body of ice which has its end projected from the end of the largest freezing tube section, ice breaking means which is moved along a path into contact



with the body of ice projecting from said freezing tube assembly, and cycle means to freeze the laminae of ice and thereafter break the projecting body of ice free and to subsequently cause the laminae to move axially whereby another body of ice projects from the freezing tube assembly.

2,747,380
ICE CUBE PACKAGE OR MOLD
Robert H. Ridnour, San Diego, Calif.
Original application August 2, 1950, Serial No. 177,299, now Patent No. 2,645,092, dated July 14, 1953. Divided and this application July 13, 1953, Serial No. 367,608
3 Claims. (Cl. 62—108.5)

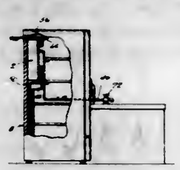


1. A unit for forming ice cubes comprising a foldable and collapsible container normally in compressed position, said container expanding to a substantially maximum volume upon admission of water therein to thereby provide an ice cube package when the said water is frozen, said unit including a plurality of partitioned portions therein whereby a plurality of ice cubes will be formed therein, openings communicating to said unit and through said partitions for admission of said water therein, said container including tear-strips along the outer surfaces thereof whereby the ice cubes thus formed can be removed.

2,747,381
FORCED CONVECTION EVAPORATOR AND WATER CHILLER
Joseph H. Lazar, Chicago, Ill.
Application June 14, 1952, Serial No. 293,605
4 Claims. (Cl. 62—128)

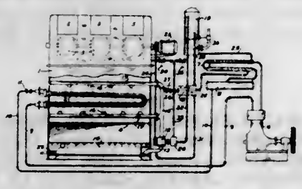
1. A portable refrigeration system enclosed in a casing comprising a water source, a plurality of water coils in fluid connection with said water source, a plurality of refrigerant coils in heat exchange relationship with said water coils, a water reservoir in addition to said

water source, said reservoir having its outlet side connected to the water coils, and fan means for drawing



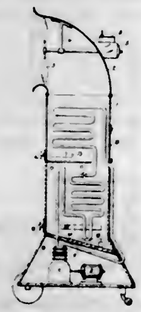
air between said coils and thence across said reservoir to prechill the water therein.

2,747,382
SYSTEM FOR CONCENTRATING ANTI-FREEZE SOLUTION
Harry Sloan, Waukesha, Wis., assignor to The Vilter Manufacturing Co., Milwaukee, Wis., a corporation of Wisconsin
Application December 17, 1952, Serial No. 326,457
3 Claims. (Cl. 62—140)



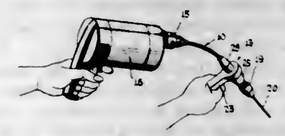
2. In a defrosting system for air stream refrigerated cooling surfaces, means for constantly circulating abundant quantities of hygroscopic solution having low freezing point over the air cooling surfaces to prevent frost deposits thereon by causing the solution to absorb frost producing moisture from the air stream, means for withdrawing regulated quantities of the frost preventing solution mixed with absorbed moisture from the solution circulating means and for distilling the withdrawn mixture under vacuum to concentrate the solution thereof, means for returning the concentrated distilled solution to said circulating means, and means for returning removed moisture resulting from said distillation to the air stream beyond said cooling surfaces to humidify the cooled air.

2,747,383
DEHUMIDIFIER APPARATUS FOR AIR CONDITIONING
Peter Schlumbohm, New York, N. Y.
Application April 22, 1953, Serial No. 350,312
2 Claims. (Cl. 62—140)



1. Air conditioner for a single person comprising a vertical cylindrical tube with a ninety-degree elbow joining its upper end and being closed at its lower end to form at this lower end a watertight container and having an upper section below said elbow and a lower section above the level of the water in said watertight container, a refrigerant condenser being arranged in said upper section, a refrigerant evaporator being arranged in said lower section, said vertical tube having a slot in said lower section below said evaporator to allow air to enter said lower section, said slot being adjustable in its width by a sliding member having an operating knob, said cylindrical tube having a slot in said upper section below said condenser and said slot having a sliding member with an operating knob, said two knobs being arranged on that side of said cylindrical tube towards which the elbow is directed, said elbow forming the housing for air-propelling means whereby air can be sucked in through said slots in said cylindrical tube and can be directed through said elbow towards a person in front of it.

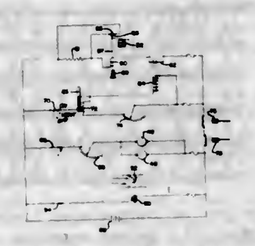
2,747,384
FLEXIBLE EXTENSION ATTACHMENT FOR ELECTRIC DRILLS
Arthur P. Beam, West Haven, Conn.
Application May 6, 1954, Serial No. 428,013
4 Claims. (Cl. 64—2)



1. A flexible extension attachment for connection to the output shaft of a hand drill comprising a one-piece elongate handle having a gripping portion adapted to be held in one hand and having an enlarged head at one end provided with an enlarged boss projecting from one face thereof, said head and boss having a bore therethrough normal to said gripping portion, a bearing bushing secured in the bore and having a portion projecting from the head in the direction opposite said boss, a spindle rotatably mounted in said bushing to project beyond the ends thereof, the end of said spindle projecting from the boss having a tool-receiving chuck thereon, and the end of the spindle projecting from the bushing having an out-of-round socket therein, a sleeve detachably secured to the projecting portion of the bushing and having one end of a flexible sheath detachably secured thereto, the other end of the sheath having a bearing collar detachably secured thereto, a flexible drive shaft disposed within the sheath and having a coupling portion at one end freely disposed in the out-of-round socket to form a drive connection therewith and having a stub shaft secured to the other end and rotatably mounted in the bearing collar and adapted to be connected to the output shaft of the electric hand drill, said stub shaft being provided with a flange cooperating with the collar to limit movement of the stub shaft outwardly of the collar and maintain the other end of the drive shaft in the socket in the spindle.

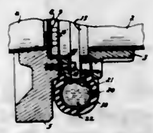
2,747,385
REFRIGERATING APPARATUS
James W. Jacobs, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 26, 1953, Serial No. 376,606
3 Claims. (Cl. 62—4)

3. In combination with a car having a passenger compartment and an engine compartment, an engine within said engine compartment, a compressor, torque transmitting means between said engine and said compressor including a clutch, a solenoid for energizing said clutch, a refrigerant evaporator, blower means for circulating air to be conditioned for said passenger compartment in thermal exchange with said evaporator, a condenser, refrigerant flow connections between said compressor, condenser and evaporator, a source of electrical energy, circuit means connecting said solenoid to said source, switch means in said circuit means for controlling the operation of said



solenoid, and means for reducing the flow of current to said solenoid upon actuation of said clutch by said solenoid so as to reduce the amount of electrical energy required to maintain said clutch in compressor driving position.

2,747,386
FLEXIBLE COUPLING
Robert W. Ayling, Syracuse, N. Y., assignor to Carrier Corporation, Syracuse, N. Y., a corporation of Delaware
Application October 19, 1953, Serial No. 386,800
3 Claims. (Cl. 64—11)



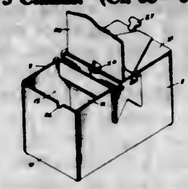
1. In a flexible coupling adapted to transmit forces of rotation from the shaft of a driving member to the shaft of a driven member, the combination of a flexible, hollow annular member, having its inner portion terminating in spaced flanges, a clamping ring to clamp one flange against a member to be driven, means securing the ring in clamping position, a second clamping ring clamping the opposite flange against a driving member, means securing the second ring in clamping position, and a tube within the hollow member, said tube being partially filled with a viscous fluid.

2,747,387
DOUBLE CUP
Leo F. Sweem, Sacramento, Calif., assignor of one-half to Harry H. Hart, Sacramento, Calif.
Application February 6, 1953, Serial No. 335,575
1 Claim. (Cl. 65—13)



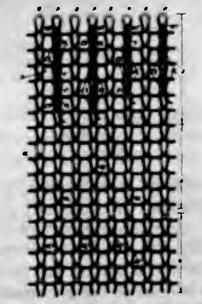
An integral double drinking cup unit including a lower cup body having a bottom and a bellied side wall, and defined at its upper end by a flat upwardly sloping and radially narrow annular ledge, and a bottomless upper cup body comprising a bellied side wall substantially the same in both shape and size as the corresponding side wall of the lower body; said upper body swelling upwardly and outwardly from the radially inner edge of said ledge.

2,747,388
COVERED DISH
Edward Dolar, McHenry, Ill.
Application June 15, 1953, Serial No. 361,668
3 Claims. (Cl. 65—60)



1. A dual chamber condiment holder comprising, a box-like container having front, rear, and side walls, a bottom and an open top; a partition in said container in perpendicular relationship to said front and rear walls and bottom, dividing the container into two separate chambers; a hinge-retaining compartment provided by front and rear walls, side walls and a bottom, and having an open top, hinge pin slots in the front and rear walls of said hinge-retaining compartment, the said hinge-retaining compartment being fixedly attached to said partition; a pair of cover members having hinge pins removably mounted in said slots providing closures for said chambers; and a coil spring holding said hinge pins in said slots in restrained fashion.

2,747,389
SEAMLESS ARTICLE OF KNITTED FOOTWEAR AND IN METHOD OF PRODUCING THE SAME
Alfred Percy Saunders, Leicester, England, assignor to Wildt and Company Limited, Leicester, England, a British company
Application March 8, 1955, Serial No. 492,961
Claims priority, application Great Britain March 15, 1954
8 Claims. (Cl. 66—172)



1. A seamless article of knitted footwear comprising a leg and an instep portion of a foot incorporating outwardly facing plain knitted loops, and a turn-over top knitted in one piece with the remainder of the article, said top including plain knitted loops of a ground yarn having combined therewith embroidery stitches formed from individually incorporated wrap striping threads, said plain knitted loops in the top, before the latter has been folded over, facing inwardly and being formed in the opposite direction to the aforesaid outwardly facing plain loops in the leg and the instep portion of the foot.

2,747,390
STOCKING AND METHOD OF MAKING THE SAME
Bernard Thornton Reymes Reymes-Cole, Burbage, near Hinckley, England, assignor to The Kendall Company, Boston, Mass., a corporation of Massachusetts
Application March 9, 1955, Serial No. 493,196
7 Claims. (Cl. 66—173)

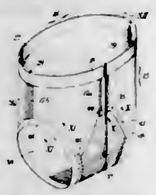
1. The method of knitting an article of hosiery including leg courses and a welt portion knitted integrally

thereto on a circular knitting needle series having needles shiftable to inoperative position spaced between other needles including a group of such spaced needles shiftable from said inoperative position to add fashioning wales, and on cooperating welting instruments, which comprises the steps of moving all of said spaced needles to an inactive loop holding position, feeding thread to the remaining needles for an initial welt course, and operating the welting instruments to receive and to hold the



thread kinks of said initial welt course that otherwise would be received by said inactive needles, returning all of said spaced inactivated needles into activity immediately following the initial welt course and during the subsequent knitting of the welt, transferring kinks from spaced welting instruments disposed between other welting instruments to the associated needles, causing all of the needles to knit at least one course, and thereafter causing said other welting instruments to transfer their kinks to the associated needles.

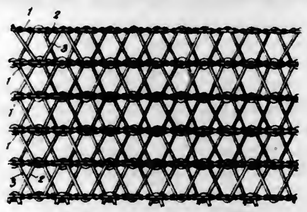
2,747,391
GARMENT
William A. Burkey, Hamburg, Pa., assignor to Burkey Underwear Company, Hamburg, Pa., a corporation of Pennsylvania
Application March 18, 1954, Serial No. 417,026
16 Claims. (Cl. 66—177)



1. As a new article of manufacture, a garment of the trunk variety comprising an integrally-knitted flat fashioned selvage-edged rear fabric panel having a rectangular upper portion, a somewhat longer downwardly tapering intermediate portion and a narrow tail portion of a length equal substantially to that of the intermediate portion; an integrally-knitted flat fashioned selvage-edged front fabric panel having an upper rectangular portion corresponding in shape and size to upper portion of the front panel, and a shorter abruptly tapered portion, said front panel being superimposed upon the rear panel with its rectangular upper portion coinciding with the upper portion of the rear panel, and the tail portion of the rear panel being lapped upwardly over upon the front panel; stitching uniting the matching side edges of the upper portions of the two panels; and stitching connecting the edges of the lapping portion of the rear panel to the front panel, with attendant provision of leg holes at opposite sides of the garment.

2,747,392
OPEN-MESH FABRIC
Max Sadinoff and Abe Holtz, New York, N. Y.
Application June 22, 1954, Serial No. 438,366
2 Claims. (Cl. 66—193)

1. An open mesh or net fabric having a plurality of knitted warp chain threads, there being located between each pair of chain threads a plurality of undulated serpentine unknitted threads which zig-zag back and forth between the warp threads and engage with the loops thereof, one of the serpentine threads situated



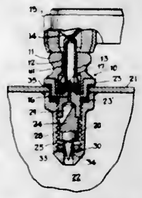
between each pair of warp chains having undulations which cross those of a second serpentine thread located between the same pair of warp threads, the warp chains engaging with the serpentine threads at the apices thereof.

2,747,393
CANDLE HOLDER
Martha Isabel Thorn, Indianapolis, Ind.
Application November 13, 1953, Serial No. 391,798
1 Claim. (Cl. 67—23)



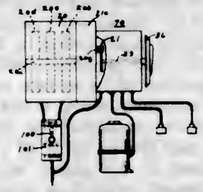
The combination with a base having a plurality of upstanding needles for supporting a flower arrangement, of a candle holder insertable among the flowers and engaging said needles for its support, comprising a hollow cylinder of elastic material of uniform diameter throughout its length, the lower end portion of the cylinder being slotted longitudinally thereof dividing that lower end into a plurality of downwardly extending spades, the lower edges of the spades being bluntly rounded and the side edges of the spades being straight and parallel throughout their lengths providing uniform widths thereof, the upper rim of the cylinder being downwardly notched at intervals therearound providing upper edges in circumferentially extending lines in a common plane between notches, the rim portion between the notches being equal in extent to the circumferential width of said spades and being outwardly flared in a frusto-conical manner, said spades being removably inserted between, around, and supported by the needles of said base and resting on the base.

2,747,394
GAS LIGHTER FUEL REGULATING MECHANISM
Warren I. Nissen, Basking Ridge, N. J., assignor to Ronson Corporation, Newark, N. J., a corporation of New Jersey
Application June 17, 1954, Serial No. 437,505
4 Claims. (Cl. 67—87)



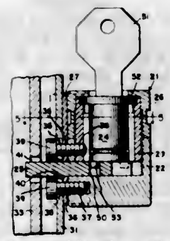
4. A gas fueled lighter of the character described, having a reservoir for containing fuel under pressure, a burner structure mounted on a wall of the reservoir, a valve member carried within the burner structure, which valve member is mounted to move between open and closed positions, said burner structure having a housing extending inwardly of said valve member, a slug of deformable material supported within said housing and interposed between said valve member and reservoir, said slug having its outer portions expanded into sealing engagement with said housing, a tapered piercing pin interposed between said valve member and slug, and means for moving said pin longitudinally of the housing between positions wherein it respectively penetrates through said slug to deform the latter and thereby define an orifice through the slug having a wall conforming to the surface of the penetrating portion of the pin, and other positions wherein said pin is partially withdrawn with respect to said orifice to thereby regulate the height of the flame produced by the lighter when said valve member is open.

2,747,395
SEQUENTIALLY OPERATED WASHING MACHINE
Robert R. Candor, Dayton, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Original application October 4, 1946, Serial No. 701,116. Divided and this application June 29, 1951, Serial No. 234,402
7 Claims. (Cl. 68—12)



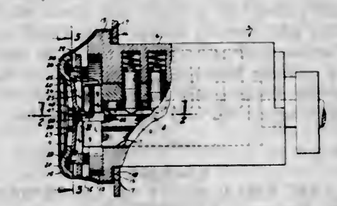
1. In a washing machine, a tub, rotating means to rotate said tub, agitating means to agitate articles to be washed in said tub, a connector adapted to be connected to a source of liquid, a conduit from said connector to said tub, a valve controlling the flow of liquid into said tub through said conduit, a rotatable timer means establishing a first period of time for opening said valve, a second period of time for operation of said agitating means and a third period of time for operation of said rotating means, and means to vary the rate of rotation of said rotatable timer means to vary one of said periods of time while maintaining normal rotation to maintain normal the other periods of time.

2,747,396
SECURITY LOCK
Littleton B. Gamby, Baltimore, Md.
Application June 15, 1954, Serial No. 436,908
1 Claim. (Cl. 70—185)



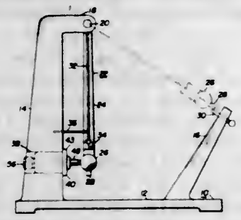
A lock comprising in combination a housing having an internally threaded aperture extending inwardly from one end thereof to a point adjacent its opposite end, an externally threaded rotary lock mechanism carrying cylinder threadably receivable within said housing, an internally threaded cylinder retaining cap adapted to screw over the outer end of the cylinder and means for fixedly securing said cap to the housing, the housing extending beyond the inner end of the said aperture and having a slot extending outwardly through the housing at a ninety degree angle to the elongated axis of the housing and adjacent the inner end of the aperture, the inner end of the lock carrying cylinder having a recess formed in the cylinder walls of substantially the same dimensions as the opening in the housing, the recess extending across the inner end of the lock carrying cylinder, a locking tongue adapted to be slidably receivable within said slot in the housing and the recess adjacent the end of the cylinder, said tongue having a slot extending inwardly from one edge and adjacent one end thereof, a pin mounted on the inner end of the lock mechanism eccentrically to the elongated axis of the lock mechanism adapted to register with the said slot in the said tongue for moving the said tongue along the slots and beyond the said housing as the lock mechanism is rotated.

2,747,397
KEYHOLE SHUTTER FOR PIN TUMBLER LOCK
Edward N. Jacobi, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a corporation of Delaware
Application June 11, 1952, Serial No. 292,838
16 Claims. (Cl. 70—455)



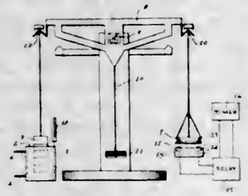
2. In a lock device of the type having a lock cylinder with an axial key slot opening to its front rotatable in a forwardly opening bore in a case, means for closing the key slot opening, comprising: a carrier plate substantially larger than the front of the cylinder and having an aperture substantially larger than the mouth of the key slot; cooperating locating means on the front of the cylinder and on the carrier plate, said locating means including axially extending fingers holding the carrier plate spaced forwardly of the front of the cylinder, normal to the axis thereof, with the aperture in the carrier plate in line with the mouth of the key slot; a front trim member for the lock device having a diameter substantially larger than that of the cylinder and an aperture to admit a key for actuating the cylinder; means on the lock device securing the trim member in front of the carrier plate with the aperture in the trim member aligned with the mouth of the key slot in the cylinder; a shutter having a flap portion flatwise engageable with the rear surface of the trim member around the aperture therein, said flap portion being large enough to cover said aperture in the trim member but small enough to swing flatwise through the aperture in the carrier plate; cooperating trunnion means on the shutter and on the carrier plate mounting the shutter on the carrier plate for swinging motion of the shutter whereby its flap portion is carried toward and from flatwise engagement with the rear surface of the trim member closing the aperture therein; and spring means on the lock mechanism reacting against the shutter to bias it toward a position of flatwise engagement of its flap portion with the trim member.

2,747,398
VISCOSITY METER
Peter William Haas, Jr., Scranton, Pa.
Application July 23, 1953, Serial No. 369,977
4 Claims. (Cl. 73—56)
(Granted under Title 35, U. S. Code (1952), sec. 266)



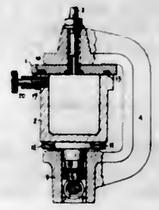
1. A meter for determining the viscosity of a liquid, said meter comprising a frame, an enlongated gravity actuated impact member journaled at one of its ends in said frame to swing therein from an upper position to a lower-most position and beyond said lower-most position, said lower-most position being the position which said member assumes when supported solely by said journaling, a support for releasably retaining said member in said upper position, a cylinder adapted to contain said liquid, a piston in said cylinder, a piston rod on said piston, an orifice in said cylinder, said cylinder being so secured in said frame that said impact member strikes said piston rod to drive said piston towards said orifice when said member swings beyond said lower-most position, whereupon said liquid is forced at least in part from said cylinder through said orifice, and means for indicating the distance that the piston travels when said piston rod is struck by said weighted member.

2,747,399
STATIC YIELD POINT MEASUREMENT
Robert W. Foreman, Cleveland, Ohio, assignor to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio
Application August 12, 1953, Serial No. 373,830
4 Claims. (Cl. 73—57)



1. In material testing apparatus of the character described, an open top container for the material to be examined, said container being equipped with a jacket for the flow of a temperature adjusting medium thereabout, an adjustable balance adjacent the container, a stainless steel plate having negligible edge area suspended from one end of said balance in a vertical plane, the plate being thus held generally centrally within the container for immersion in the material, a horizontally oriented weight-receiving pan suspended from the other end of said balance, an electrical contact member carried by said pan for movement with the same, a switch comprising exposed and spaced-apart mercury pools positioned normally at a predetermined distance beneath said contact member, an electrically operated clock timer, and circuit control means for said clock including connections to said mercury pools, said control means being operative to interrupt energization of the timer when lowering of the pan causes the contact member to engage and electrically bridge the mercury pools.

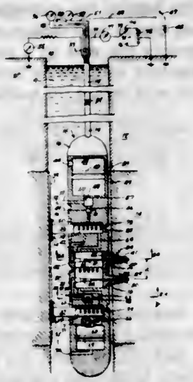
2,747,400
APPARATUS FOR VOLUMETRIC MEASUREMENTS
Paul Fatio, Bellevue, Geneva, Switzerland
Application May 6, 1952, Serial No. 286,310
6 Claims. (Cl. 73—149)



1. In an apparatus for volumetric measurements comprising a container, a means for creating a pressure in said container, a pressure gauge connected to said container and to said pressure creating means therefor, and a clamping means for closing said container, the improvements comprising, in combination, a thick-walled container, a cover for said container, said cover having a groove on that portion of its surface contacting the top surface of said container walls, a flexible gasket positioned in said groove contacting the top surface of the container walls, said groove being of a volume at least equal to the volume of said gasket, whereby said gasket cannot be compressed beyond its elastic limit, thereby preventing permanent deformation of said gasket, a U-shaped arm support integral with said cover and laterally open with respect to said container walls, and a first means projecting beneath said container and positioned opposite to said cover for producing a clamping force by said container against said cover greater than that necessary for compressing the said gasket between the container walls and said cover, said first means including a vertically movable flexible plate having a hollow cup-shaped upper portion and peripheral portions forming the walls of said cup-shaped upper portion, said peripheral portions being in contact with the base portion of said container at points thereon opposite to said gasket positioned in said groove of said cover, said first means being integral with said support and including a second means for producing a flexible deformation of said portion of said first means, whereby the container is tightly closed by said cover and is negligibly deformed.

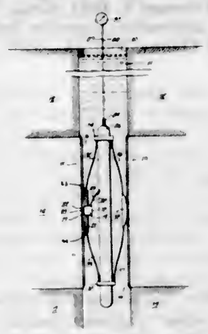
2,747,401
METHODS AND APPARATUS FOR DETERMINING HYDRAULIC CHARACTERISTICS OF FORMATIONS TRAVERSED BY A BOREHOLE
Henri-Georges Doll, Ridgefield, Conn., assignor to Schlumberger Well Surveying Corporation, Houston, Tex., a corporation of Delaware
Application May 13, 1952, Serial No. 287,582
22 Claims. (Cl. 73—151)

1. In a method for ascertaining a hydraulic characteristic of a geological formation traversed by a bore hole, the steps of forming a confined flow channel between the bore hole and a point within the formation, passing fluid through the channel for creating a pressure gradient substantially surrounding said point within the formation, and determining the difference in pressure between said point and a reference point, thereby to



derive information indicative of the desired characteristic.

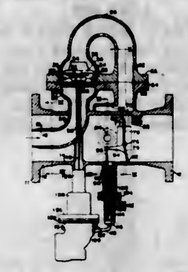
2,747,402
DIFFERENTIAL PRESSURE WELL LOGGING
Henri-Georges Doll, Ridgefield, Conn., assignor to Schlumberger Well Surveying Corporation, Houston, Tex., a corporation of Delaware
Application September 27, 1951, Serial No. 248,620
10 Claims. (Cl. 73—152)



1. Apparatus for well logging comprising a pad movable in a borehole, a laterally projecting surface portion on said pad delimited by cutting edges, a port in said surface portion, a manometer coupled between said port and the interior of the borehole, and means for forcing said pad against the wall of the borehole to bring at least said surface portion thereof into relatively fluid-tight engagement with the wall of the borehole, whereby the cutting edges cause said surface to penetrate at least partially any mud cake formed on said wall.

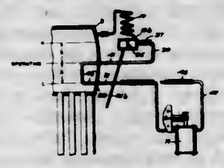
2,747,403
FLUID METER
Wilbur W. Stevenson, Pittsburgh, Pa.
Application May 25, 1953, Serial No. 356,992
9 Claims. (Cl. 73—203)

9. In a fluid meter, a conduit conveying a gas to be measured, by-pass means intercepting a part of the gas in the conduit at one point and returning the gas to another point downstream, a turbine rotatable over two similar ranges of velocity at high and low gas flow rates in said conduit, the by-pass means conveying gas to the turbine, a baffle means including a baffle and a pivotal mounting therefor located in the conduit at the said another point, the baffle means including a snap-over mechanism whereby the baffle assumes an open position or a substantially full-closed position upstream of said another point, said snap-over mechanism including a resilient holding means connected by a lever of variable effective length to the baffle to hold the baffle in the substantially fully closed position at the low gas flow rates in the conduit, the baffle being mounted eccentrically on the pivotal mounting so that gas flowing in the conduit exerts a turning force on the baffle opposing the resilient holding means such that on reaching a predetermined gas flow the force applied thereby on the baffle exceeds the force of the resilient means and snap action to open position occurs, the gas flow through the by-pass means varying with the baffle position, a register connected to the turbine to integrate



the turns of the turbine, a two speed gear shift mechanism disposed between the turbine and the register, the gear shift mechanism providing for an output of either of two different speeds for a given turbine speed input, said gear shift mechanism including a gear shift lever controlling the output speed, an actuator member for moving the gear shift lever, means connected to the baffle means to move the actuator member and thereby move the gear shift lever, so that at low gas flow rates the output of the gear shift mechanism produces the lower output speed while at high flow rates the higher output speed is produced, the output speeds being correlated to the baffle position, the gear shift mechanism thereby enabling the register to integrate the actual flow of gaseous fluid in the conduit.

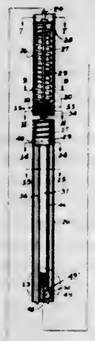
2,747,404
LIQUID LEVEL INDICATOR
Ernest E. Van Hass, Somerville, Mass., assignor to Jerguson Gage & Valve Company, Somerville, Mass., a corporation of Massachusetts
Application July 26, 1954, Serial No. 445,813
6 Claims. (Cl. 73—302)



6. A water level measuring device for boilers wherein a water column of predetermined altitude and a water column of an altitude varying with the depth of water in the boiler are placed in communication with the sides of a differential manometer, the first column comprising a container exterior to the boiler shell at a point at least as high as the high water level of the boiler, means for keeping the container filled with condensate from the boiler to a predetermined level at least as high as the said high water level, a pipe opening from said container substantially at said level and extending thence substantially horizontally to provide for bringing water contained therein to the ambient temperature, the pipe then extending downwardly to a low level, means for heating that portion of the pipe which extends between an operating level intermediate between the high and low water levels of the

boiler and said low level to the internal temperature of the boiler, an offtake from said pipe at said low level extending substantially horizontally to provide for cooling water passing thereto to ambient temperature, a conduit leading from the water-containing space of the boiler and extending exteriorly thereto at the same low level as a substantially horizontal offtake providing for cooling water passing therethrough to the ambient temperature exterior to the boiler and means for connecting the extremities of the two offtakes to the sides of the manometer passing from said extremities to a level at least as low as the second mentioned offtake.

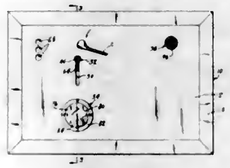
2,747,405
SUB-SURFACE BORE HOLE GAGES
Gerald B. Thomas, Los Angeles, and James Moon, Corona del Mar, Calif., assignors to Signal Oil and Gas Company, Los Angeles, Calif., a corporation of Delaware
Application October 10, 1951, Serial No. 250,714
4 Claims. (Cl. 73—345)



1. A sub-surface temperature, pressure gage comprising a tubular housing, a cylindrical chart holder mounted coaxially in the upper part of said tubular housing, a stylus in marking relation to said chart holder, a stylus supporting rod mounted axially of said tubular housing, an annular bellows mounted in said tubular housing, a collar, a mechanical connection between said bellows and said collar for movement of said collar with said bellows axially of said chart holder, said stylus support rod being rotatably mounted in said collar, a mechanical connection between said collar and said stylus support rod for movement of said stylus support rod with said collar axially of said chart holder a barometric fluid motor mounted in said tubular housing, an operative fluid connection between said barometric motor and the annulus of said annular bellows, a thermal fluid motor, said thermal fluid motor comprising a Bourdon tube, a second collar, a mechanical connection between said second collar and the end of said Bourdon tube, means for rotatably mounting said second collar in said tubular housing, said rod being slidably received in said second collar, means for restricting said second collar against longitudinal movement axially of said rod, said rod having a keyway axially thereof, a key in said second collar, said keyway being adapted to travel along said key.

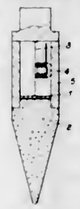
2,747,406
INDOOR GOLF DEVICES
Sam Cutler, Yonkers, N. Y.
Application October 14, 1953, Serial No. 385,930
5 Claims. (Cl. 73—379)

1. A golf practice device comprising a housing including a platform, a ball element assembly mounted in said housing and including a swingable arm and a ball element on the arm, gauge means operatively connected to the arm and adapted to provide a reading signifying to a user the force with which the ball element is struck by a golf club, means for halting the movement of the arm at its point of furthest travel, and means under the control of a user for returning the arm to a normal position at which said ball element is properly located for striking thereof by said club, said means for halting the arm move-



ment including a shoe on said arm and a spring-pressed holding member mounted in the housing and frictionally gripping the shoe, said means under the control of a user for returning the arm to normal position including a depressible pedal having a connection to said holding member effective for retracting the holding member out of engagement with the shoe.

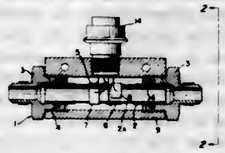
2,747,407
APPARATUS FOR MEASURING THE PRESSURE OF FLUIDS LOCATED WITHIN BODIES OF SOLID MATERIAL
Werner Knoll, Hamburg, Germany, assignor to H. Maihak A. G., Hamburg, Germany
Application February 6, 1953, Serial No. 335,421
Claims priority, application Germany February 9, 1952
2 Claims. (Cl. 73—395)



1. Apparatus for measuring the pressure of a fluid located within a body of solid material, comprising, in combination, a hollow support adapted to be located in the body of material; a membrane extending across and carried by said hollow support for sensing the pressure of the fluid in the body of solid material; transmission means in said hollow support operatively engaging said membrane for transmitting movements thereof with respect to said hollow support; and a filter mounted on said support and located opposite said membrane to protect the latter from the body of solid material, said filter being in the form of a solid body made of metal and having pores small enough to draw liquid through the filter by capillary action and said filter being spaced from said membrane by a distance small enough to draw liquid into the space between said filter and membrane by capillary action.

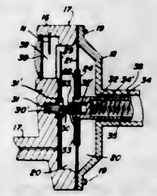
2,747,408
ELECTRICAL PRESSURE CELL TRANSDUCER
John E. Boytim and Howard A. Jonard, Akron, Ohio, assignors, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio
Application July 2, 1953, Serial No. 365,744
4 Claims. (Cl. 73—398)

1. An electrical transducer comprising a tube having a reduced wall thickness pressure sensitive length intermediate the ends thereof, coupling means engaging opposite ends of the outer walls of said tube, sealing means engaging said tube with said coupling means and leaving the ends of said tube free for longitudinal compressive movement and exposing the ends walls of said tube for application of compressive fluid forces thereto, a safety en-



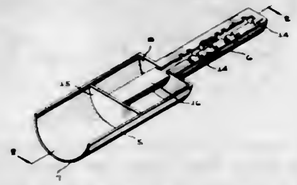
closure surrounding said tube intermediate said coupling means, a plurality of resistance wire strain gauges carried by said tube at spaced portions thereof, and electrical connection means carried by said safety enclosure and connecting to said strain gauges.

2,747,409
READY-SIGHT-READING TIRE PRESSURE GAGE
Frederick Trinca, Middle Village, N. Y.
Application October 27, 1953, Serial No. 388,830
1 Claim. (Cl. 73—408)



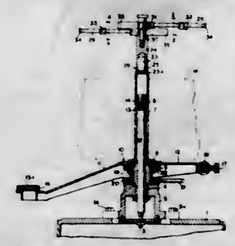
A pressure gage for a pneumatic tire, said gage comprising a body portion having a chamber therein, said chamber comprising a wall movable in response to air pressure changes therein; means, including a tubular stem projecting from the body portion, for communicating said chamber with the interior of the tire; a circular disc rotatably mounted in said chamber and having angular markings designating pressure intervals; means for rotating said disc in angular amounts corresponding to movements of the wall, said means comprising a shaft carried by the disc on one side thereof and axially disposed relative thereto, said shaft having a helical groove; a ball carried by the movable wall and engaged with said groove; a threaded spindle carried by the disc and projecting axially therefrom on the other side; said body portion having a threaded socket threadedly engaging said spindle; said wall portion including a transparent panel adjacent said disc for viewing said markings; and an indicator fixed to the body portion adjacent said markings.

2,747,410
MEASURING SCOOP
Pauline E. D. Dubin, San Luis Obispo, Calif.
Application February 25, 1955, Serial No. 490,492
2 Claims. (Cl. 73—429)



1. In a measuring scoop, a semi-cylindrical scoop body having an open front end and a rear end, a rear wall secured to and closing said rear end, said rear wall having a central opening therethrough, a hollow handle having an open front end registered with said opening and secured to said rear wall, said handle having a top wall provided with a longitudinal slot having a front end opening through said scoop body rear wall, a semi-circular ejector plate disposed slidably and conformably in said scoop body and positioned at right angles to the length of the scoop body, said ejector plate having a rear side, an arm disposed slidably through said opening and in said handle, said arm having a front end and a rear end, the front end of the arm being fixed to the rear side of the ejector plate, said arm having an upper side, said upper side being provided with a socket near the rear end of the arm, a button block having a base portion confined in said socket for vertical movement relative to the arm, said base portion being wider than said slot and engaged with the underside of the handle top wall, said button block having a narrower upper portion on said base portion slidably engaged through said slot, and spring means compressed between said arm and said button block and yieldably urging said button block in an upward direction.

2,747,411
METHOD AND MACHINE FOR TESTING UNIVERSAL BALANCE
Joseph P. Lannea, Detroit, Mich., assignor to Micro-Poise Engineering and Sales Company, Detroit, Mich., a partnership
Application July 22, 1952, Serial No. 300,261
14 Claims. (Cl. 73—483)

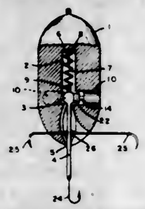


14. In a balance testing machine of the type comprising a work carrier, a support, a universal pivot mounting the carrier on the support, means on the carrier for substantially centering work at an axis established by said pivot, means for indicating carrier deflections about said pivot, and means operatively mounting the indicating means on the carrier, the combination with the specified elements, of an elongated weighing beam, means swiveling such beam on the carrier about an axis substantially parallel to said centering axis, a weight adjustable on and along the beam at one side of said swivel axis, the beam having two scales of graduations and associated linear values for measuring the weight adjustment and such scales having coincident zero points, the units of one scale being one half those of the other for the same indicated linear values, and a counterbalancing weight carried by the beam at the opposite side of its swivel axis.

2,747,412
RELEASE MECHANISM
Donald E. Hanka, Proctor, Minn.
Application November 5, 1954, Serial No. 466,995
2 Claims. (Cl. 74—2)

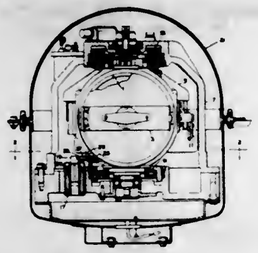
1. A trip mechanism comprising: a body member having an axial opening therein, a trip lever reciprocably carried in said opening and extending axially off said body, a portion of said lever extending outwardly of said body, a ball member on the inner end of said lever within said body, means biasing said lever toward an inward position within said body, and means holding said lever in

an outward position relative to said body, said last mentioned means including plunger mechanisms having a piston reciprocably carried therein, spring means biasing said piston toward an extended position, and said pistons



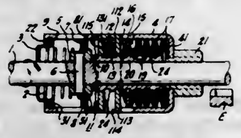
being movable from said extended position by movement of the portion of the lever extending outwardly of said housing to release said lever to travel toward said inward position.

2,747,413
GYROSCOPE
Charles E. Huriburt, River Edge, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application December 15, 1954, Serial No. 475,349
9 Claims. (Cl. 74—5.2)



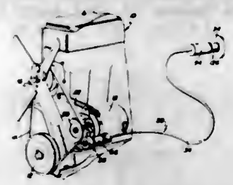
1. In a device of the class described, a three-degree of freedom gyroscope having a spinning rotor mounted in inner and outer supports for angular movement about mutually perpendicular axes, and spring cushioned slide means carried by the outer support engageable yieldingly with a solenoid controlled plunger during rundown of the rotor for restraining angular movement of the outer support during rundown without entirely preventing such movement, said means preventing said outer support from accelerating into a spin with the rotor.

2,747,414
STARTER
Harold J. Cromwell and William H. Taylor, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 11, 1952, Serial No. 325,478
4 Claims. (Cl. 74—7)



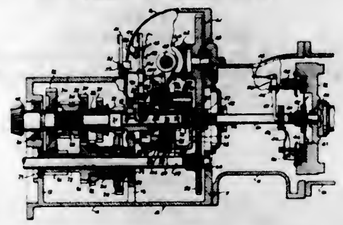
1. An engine starter drive comprising a screw shaft connectible with a starting motor shaft, a toothed collar on the motor shaft for one-way drive of the screw shaft, a pinion movable axially along the motor shaft into mesh with an engine gear, a nut threadedly connected with the screw shaft, a casing secured to the pinion and enclosing the collar, screw shaft and nut, means within the casing for yieldingly transmitting motion axially between the nut and pinion, means for non-yieldingly transmitting rotary motion between the nut and pinion and means for positively latching the nut to the screw shaft when the nut has moved along the screw into a position for meshing of the pinion with the gear and releasable when the pinion is rotating at a predetermined speed, said means including a member of cylindrical form movable in response to centrifugal force in a direction normal to the axis of said screw shaft and away from said shaft in order to release the nut, a cylindrical recess in the peripheral surface of the screw shaft and engageable by said nut when in latching position, and a spring for holding the latching member in engagement with said recess until the pinion is rotated at a predetermined speed.

2,747,415
POWER TAKE-OFF
Marvin F. Bennett, Hastings, Nebr.
Application July 19, 1950, Serial No. 174,737
3 Claims. (Cl. 74—15.8)



1. Drive means for a flexible cable comprising an elongated housing having an axial through bore provided with a reduced end adapted to fit over one end of a sheath of a flexible cable, means in said housing adapted to secure one end of a flexible cable sheath in said reduced end of the bore, an axially bored axle journaled in the other end of said bore and projecting out of one end of the housing, and attachable over one end of a flexible cable extending out of a cable sheath, a friction drum drivingly mounted on said axle outwardly of said other end of the housing, and clamping means clampingly engaging said housing and clampingly engageable with a belt driven generator of an internal combustion engine to engage said drum with a belt.

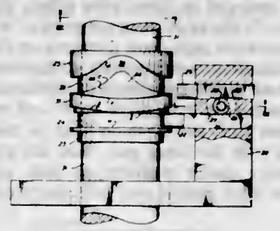
2,747,416
DRIVE FOR TRACTOR TRANSMISSION AND POWER TAKE-OFF
William E. Swenson and Fred C. Nielsen, St. Paul, Minn., assignors to Minneapolis-Moline Company, Hopkins, Minn., a corporation of Minnesota
Application October 16, 1950, Serial No. 190,272
11 Claims. (Cl. 74—15.84)



1. For a tractor including a change speed transmission with an input drive shaft and co-axial engine operated shaft, a two speed drive connection for said shafts whereby the output speed of the transmission may be varied at any change speed adjustment thereof, comprising a rotatably supported planetary gear cage, a sun gear on each shaft, connected planet gears on the cage

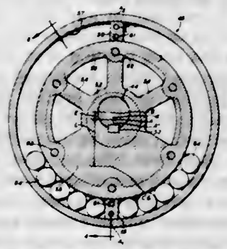
meshing with the respective sun gears, a clutch normally connecting the cage to rotate with one of said shafts whereby the planet and sun gears rotate in unison and transmit torque without speed change from the engine operated shaft to the input shaft, means for holding the cage against rotation when the cage is declutched in order then to transmit torque from the sun gear on the engine operated shaft through the planet gears to the sun gear on the input drive shaft at a speed determined by the relative sizes of the gears, means for controlling the clutch, a power take-off shaft, and a drive connection from the power take-off shaft to the engine operated shaft by-passing the said two-speed connection to rotate the take-off shaft independently of the described change speed adjustments.

2,747,417
COMPLEX MOTION-GENERATING MECHANISM
Lowell R. Brown, Royal Oak, Mich., assignor to Davis Tool & Engineering Company, Detroit, Mich., a corporation of Michigan
Application February 3, 1955, Serial No. 485,855
19 Claims. (Cl. 74—57)



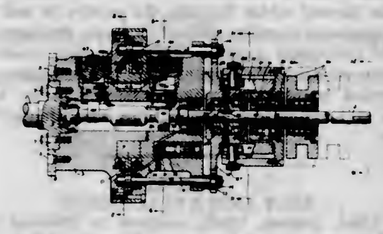
1. A motion generating mechanism comprising a displaceable element, means connected therewith for causing said element to move in one path while permitting said element to reciprocate in another path, first and second angularly related cams on said element, two retractible followers positioned adjacent the element for reception on alternate ones of said cams at different periods, and a transition cam arranged between the first and second cams, said transition cam having cam portions common to portions of at least one of said first and second cams, and means between the followers whereby retractive movement of either follower will be accompanied by an initial movement of the other follower into engagement with the transition cam and a final movement of the other follower into its cam.

2,747,418
GYRATORY DEVICE
William A. Eckley, Palos Heights, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application October 7, 1954, Serial No. 460,802
10 Claims. (Cl. 74—87)



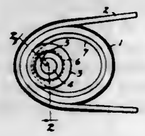
1. Means for vibrating a body in an orbital path having an amplitude which is substantially uniform regardless of the condition of loading of said body, comprising a shaft describing an orbital path about an axis of gyration in its rotation, said body being mounted on said shaft for orbital movement therewith, a flywheel mounted on said shaft eccentrically thereof and during normal loading of said body rotating upon a center corresponding to the center of the orbit of movement of the body, and means operable when the center of rotation of said flywheel moves in an orbital path to return said center to a position of non-orbital movement comprising a pair of opposed semi-circular races on said flywheel and having their center corresponding to the geometric center of said flywheel, and at least one freely movable weight in each of said races movable in a corrective direction.

2,747,419
VALVE CONTROL MECHANISM FOR POWER TRANSMISSION MEANS
Gustaf Arthur Arvidson, Davenport, Iowa, assignor of forty per cent to William J. Huis, Davenport, Iowa
Application October 26, 1951, Serial No. 253,400
6 Claims. (Cl. 74—107)



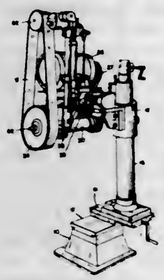
1. A hydraulic device of the class described, comprising: a housing having a rotary valve intermediate its ends and coaxially journaling a main shaft projecting from one end thereof; a pair of parallel valve-operating shafts journaled in the housing on diametrically opposed axes as respects the main shaft, each operating shaft having an end portion at said one end of the housing provided with a pinion; a control gear coaxially disposed at said one end of the housing and surrounding the main shaft, said gear having diametrically opposed portions meshing respectively with the pinions and further having diametrically opposed arcuate slots angularly intermediate the pinions and concentric with the main shaft; a pair of axially extending parallel guide pins secured to and projecting from said one end of the housing and respectively through said arcuate slots and enabling angular movement of the gear relative to the housing within the extent of said arcuate slots; a hollow hub rigid on and extending coaxially from the gear in surrounding relation to the main shaft, said hub having diametrically opposed portions provided respectively with externally opening cam grooves directed angularly and axially thereof; combined radial-load and axial-thrust bearing means journaling the hub and gear on the main shaft and holding said hub and gear against axial displacement relative to said main shaft; a sleeve concentrically surrounding the hub and having diametrically opposed axially directed guide slots therein respectively receiving the guide rods to hold the sleeve against rotation while enabling axial shifting of said sleeve relative to the housing, said sleeve having a radial end wall portion apertured centrally to receive the main shaft; means journaling the sleeve for rotation relative to the main shaft; an axially shiftable and rotatable collar on the main shaft; means interconnecting the collar and the sleeve for shifting of the collar and sleeve axially in unison while enabling relative rotation between the two; and a pair of diametrically opposed cam followers carried by the sleeve and received respectively by the cam grooves on the sleeve to incur angular movement of the hub and gear in response to axial shifting of the collar and sleeve.

2,747,420
BELT TAKE-UP MECHANISM
Howard G. Beck, Akron, Ohio, assignor to The General Tire and Rubber Company, Akron, Ohio, a corporation of Ohio
Application January 21, 1953, Serial No. 332,149
6 Claims. (Cl. 74—219)



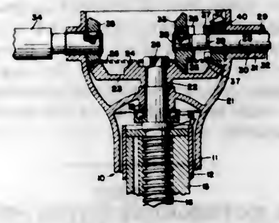
6. A combination comprising a shaft, a pulley mounted on said shaft with a groove formed in the outer circumference having side walls which converge centrally of the pulley, a resilient, initially cylindrical take-up member of rubberlike material disposed over said pulley and provided with a continuous rib on the inner circumference thereof which fits into the groove in said pulley and engages said pulley without slippage, the inner radius of said cylindrical member being materially greater than the outer radius of the pulley, and a belt passing over said cylindrical member whereby the tension in the belt deforms said cylindrical member into a substantially oval shape.

2,747,421
BELT ARM ATTACHMENT
Otto Thiel, Detroit, Mich., assignor to Midwest Supply and Manufacturing Company, Ferndale, Mich., a corporation of Michigan
Application June 22, 1953, Serial No. 363,129
18 Claims. (Cl. 74—242.15)



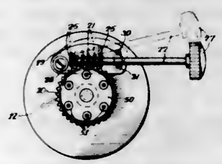
1. A belt arm attachment for a machine having a first shaft housing, a rotary shaft in the housing, and an operating head carried by the shaft beyond one end of the housing: said attachment comprising a main arm having clamping means at one end for mounting said arm on the housing, a bracket carried by said arm at its other end, a shaft mounted for rotation in said bracket, said shaft having an axial opening therethrough, a second housing fixedly secured to said shaft and having a journal perpendicular to and offset from the axis of said shaft, a support arm having a shaft portion received in said journal, and a tension roll on said support arm having its axis perpendicular to said journal, the axis of said journal intersecting said roll intermediate its ends, a short lever fixed to said shaft portion within said second housing, a pin extending through the opening in said shaft and operatively connected to said lever, means for adjusting said pin to angularly adjust said roll about the axis of said journal, and resilient means connecting said main arm and said second housing and biasing said second housing for angular movement about said shaft.

2,747,422
TWO-SPEED LANDING GEAR FOR TRAILERS
Daniel A. Walther, Dayton, Ohio, assignor to The Dayton Steel Foundry Company, Dayton, Ohio, a corporation of Ohio
Application October 30, 1952, Serial No. 317,639
4 Claims. (Cl. 74—333)



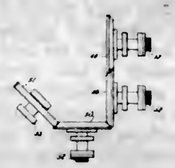
1. In a landing gear for semi-trailers having a vertical jack screw enclosed in telescoping tubes, the outer tube being outwardly flared at its upper portion to form a gear housing, concentric gear faces mounted on the jack screw within said housing, a drive shaft at right angles to said jack screw and slidably mounted in said housing, an idler pinion journaled on said drive shaft and meshing with the outer gear face, and a pinion fixed on said drive shaft for meshing with the inner gear face, the pinions having complementary clutch elements on their adjacent faces whereby the fixed pinion may selectively drive the idler pinion.

2,747,423
GEAR DISENGAGING DEVICES FOR WORM GEARS
Morris Sanders, Rochelle Park, N. J.
Application June 4, 1954, Serial No. 434,447
2 Claims. (Cl. 74—405)



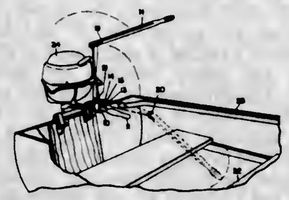
1. A gear disengaging device for a worm gear, which has a gear wheel normally engaged by a worm, comprising a base member on which said gear wheel is rotatably mounted and which is provided with a perforation, a bracket member on which said worm is rotatably mounted being pivoted to one side of said base member adjacent said gear wheel so as to allow said worm to engage said gear wheel in a first pivot position of said bracket member and to disengage said worm from said gear wheel in a second pivot position of said bracket member, a lever pivoted intermediate its ends to the other side of said base member, a connecting member extending through the perforation in said base member and connecting said bracket member to one end of said lever in such a manner as to cause a swinging movement of said lever when said bracket member swings around its pivot, and resilient means interposed between the other end of said lever, and said base member tending to maintain said bracket member in its first and second pivot positions relative to said base member.

2,747,424
CONICAL INVOLUTE GEARING
Joseph J. Osplack and Albert S. Beam, Detroit, Mich., assignors to Vinco Corporation, Detroit, Mich.
Application December 15, 1950, Serial No. 200,996
8 Claims. (Cl. 74—459.5)



1. A conical involute gear formed on a right circular cone whose element make an angle in excess of 20° with its axis.

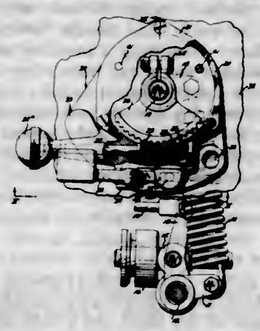
2,747,425
ARTICULATED EXTENSION HANDLE FOR OUTBOARD MOTORS
Frank Ohlau, Rochester, N. Y.
Application July 21, 1952, Serial No. 300,110
2 Claims. (Cl. 74—480)



1. An extension handle for outboard motors comprising in combination, an extension arm adapted for a vertical pivot at one end and a horizontal pivot at the other end, a clamping yoke, a clamp having a horizontal clamping portion for cooperating with said yoke when clamped about the handle of an outboard motor, said clamp having an angular vertical portion, a handle bifurcated at one end and being free of connections at the other end, means for pivotally connecting said one end of said extension arm to said vertical portion of said clamp to permit said extension arm to pivot vertically through substantially 90 degrees relative to the horizontal clamping portion of said clamp, and means for pivotally connecting said bifurcated end of said handle to said other end of said extension arm to permit said handle to pivot through substantially 90 degrees at right angles to the direction of pivot of said extension arm relative to said clamp.

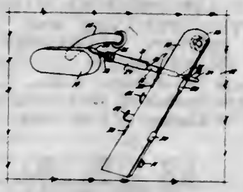
2,747,426
ENGINE SPEED CONTROL MECHANISM
Ronald R. Robinson, Morton, Ill., assignor to Caterpillar Tractor Co., Peoria, Ill., a corporation of California
Application October 16, 1952, Serial No. 315,054
2 Claims. (Cl. 74—507)

1. In an engine speed control mechanism which includes a shaft to vary engine speed upon rocking motion, a worm and gear assembly associated with the shaft, a control lever to rock the shaft by swinging said assembly as a unit, means on the control lever to rotate the worm to rock the shaft while the unit is stationary, and means to latch the assembly against swinging movement during such rotation of the worm whereby a required engine speed may be established by rotation of the worm and



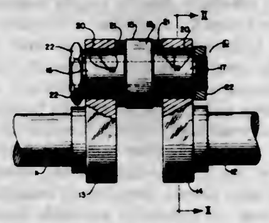
reestablished by subsequent return of the assembly to its latched position.

2,747,427
THROTTLE PEDAL DEPRESSING DEVICES
Jesse J. Morsch, Douglas, Wyo.
Application August 17, 1953, Serial No. 374,630
8 Claims. (Cl. 74—529)



1. A device for holding the throttle pedal of an automotive vehicle in a depressed position comprising: a pedal clamp adapted to be clamped to the throttle pedal of said vehicle; an elongated inner tube member pivotally mounted on said clamp at one side of said pedal; an outer tube member telescopically fitted over said inner tube member; means on said outer tube member adapted to engage the brake pedal of said automotive vehicle; and latching means arranged to maintain said outer tube member in an extended position on the inner tube member sufficient to maintain said throttle pedal depressed by reaction against said brake pedal.

2,747,428
COMPOSITE CRANKSHAFT
Oskar E. Peter, Oberkochen, Wurttemberg, and Ernst Kreisig, Krefeld-Uerdingen, Germany
Application April 24, 1951, Serial No. 222,686
Claims priority, application Germany April 27, 1950
2 Claims. (Cl. 74—598)



1. A composite crankshaft built up of elements which are assembled with variable clamping forces and which can be disassembled again, comprising a pair of parallel shaft elements having opposite ends spaced apart axially, a pair of arms secured to said ends and extending transversely therefrom, said arms having concentric bores

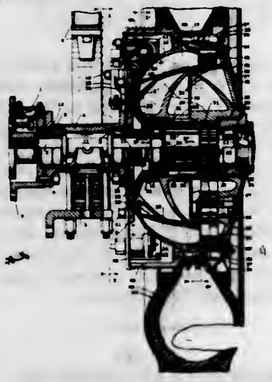
through their projecting ends, a pin having opposite ends extending in spaced relation through said bores, ring springs in the annular spaces between said arm bores and pin ends, the set of ring springs between each pin end and arm bore comprising a plurality of outer ring springs each slidable along the bore when relaxed and clampable against the bore when radially expanded, and a plurality of inner ring springs each slidable along the pin end when relaxed and clampable against the pin end when radially contracted, the adjacent inner and outer rings having conical interengaging surfaces for wedging the rings radially when they are compressed axially, a nut threaded around the outside of the outer end of each pin end for pressing axially against an adjacent ring spring, the nut being rotatable without rotating said adjacent ring spring, and means extending around the pin and having annular opposite sides each rigidly engaging a side of one of the arms and a side of the nearest ring spring in the bore of said arm, thereby serving to space the arms and to restrain the said nearest rings against axial movement toward the middle of the pin when the nuts are advanced toward each other to wedge the respective sets of rings into solid clamping engagement with each other and adjacent arm bores and pin ends.

2,747,429

INTERNAL FLUID PRESSURE VARIABLE, COMBINED HYDRODYNAMIC AND PLANETARY GEARING DRIVEN, REVERSIBLE SUN-GEAR TYPE OF TRANSMISSION COUPLER

Frank David Butler, Venice, Calif.

Application September 18, 1951, Serial No. 247,095
9 Claims. (Cl. 74—688)



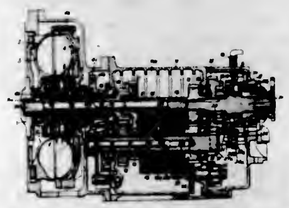
1. In a closed type of combined hydrodynamical and planetary gearing driven transmission coupler equipped with a reversible shaft mounted elongated sun-gear forming the gearing driving member of the coupler; a coaxially rotatable, conically shaped, axially displaceable, combined dual row vaned fluid impeller and planet-gear-carrier forming the hydrodynamical driving and intermediate member of the coupler; an annual shaped, coaxially rotatable, multiple-curved-bucketed, combined closed fluid receptacle casing and orbit-gear-carrier forming the gearing and hydrodynamically driven member of the coupler wherein said driving member sun-gear is engaged with planet gears of the intermediate driving member and the orbit-gear of said driven member is engaged with said planet gears; and, an externally remotely located manually operable variable fluid pressure means applicable at will to within said closed casing, improvements in such a coupler assembly by the following provision therein of; means, providing said intermediate member with a plurality of radially extending differential area clutching surfaces with one located at each end thereof; means, providing said driven member with a plurality of radially extending matching differential area clutching surfaces with one located at each internal end thereof; means, providing said dual row of vanes and multiple-curved-buckets respectively of said intermediate and driven members as the fluid circulating elements within said closed casing and to consist of, one row of helically extending convex shaped fluid impelling vanes provided to simultaneously force fluid axially within said intermediate member towards the smaller area end of the latter and radially outward into said buckets of said driven member, during normal operation, and to thereby provide said intermediate member with an initial axial clutching thrust against the larger area clutching surface of said driven member, and one row of helically extending concave shaped vaned fluid induction scoops provided to simultaneously induce fluid inward radially from said buckets and to force it axially towards the smaller area end of said intermediate member in between said row of fluid impelling vanes thereof, during such normal operation, and to thereby provide said intermediate member with an additional axial clutching thrust against said larger area clutching surface of said driven member; means, applicable during the reverse rotation of said reversible shaft and said intermediate and driven members, whereby said impelling vanes become induction scoops and the first mentioned induction scoops become fluid impelling vanes and wherein the axial clutching thrust of said intermediate member is then in the opposite direction and against the smaller area clutching surface of said driven member due to the reversal of the fluid flow within the coupler; means, applicable during the acceleration of said intermediate member in either direction of shaft rotation, whereby said intermediate and driven members are simultaneously progressively hydrodynamically locked and clutched together and then rotate in synchronism as a single unit; and, means, applicable during the supply of fluid from said variable fluid pressure means to within said closed casing, whereby the hydrodynamically actuated progressive locking and clutching of said intermediate member respectively with and against said driven member may be variably bolstered during either direction of rotation of the rotative elements of the coupler.

2,747,430

CHANGE SPEED GEAR WITH HYDRODYNAMIC CLUTCH

Hans-Joachim M. Förster and Karl A. Kollmann, Stuttgart-Bad Cannstatt, and Theodor F. Kümmich, Stuttgart, Germany, assignors to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany

Application May 23, 1951, Serial No. 227,846
Claims priority, application Germany May 23, 1950
31 Claims. (Cl. 74—732)



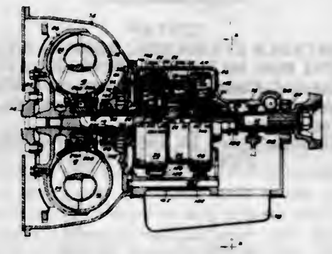
1. Change speed gear comprising a driving member, a hydrodynamic clutch with a driving clutch part which is connected with the driving member, and a driven clutch part, an interior shaft, a second clutch for coupling the driving clutch part of the hydrodynamic clutch with the interior shaft, a hollow shaft surrounding said interior shaft connected with the driven part of the hydrodynamic clutch, a driven gear member, transmission members between the hollow shaft and the driven gear member, a third clutch for the said transmission members and means for directly coupling the interior shaft with the driven gear member.

2,747,431

TRANSMISSION

Clifton R. Roche, Los Angeles, Calif.

Application October 13, 1950, Serial No. 189,981
25 Claims. (Cl. 74—765)



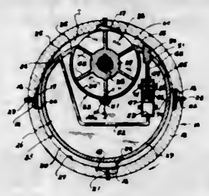
1. In a transmission, the combination of a drive member, a driven member, a planetary gear set having a sun gear, a ring gear, a planet gear, and a planet gear carrier, means connecting the drive member with the sun gear, a clutch element for the ring gear, a clutch element for the driven member engageable with the clutch element for the ring gear, brake means engageable with the planet gear carrier for preventing rotation of the planet gear carrier, brake means engageable with the ring gear for preventing rotation of the ring gear, biasing means for engaging said last-mentioned brake means, power-operated servomotor means for causing engagement of either of said brake means, a controller for controlling the actuating means, a selecting device for controlling the engagement of the clutch elements, timing means associated with said selecting device and controller so that the clutch elements are completely engaged before the controller allows engagement of either one of said brake means, and means associated with the controller and selecting device for obtaining a combination whereby the clutch element for the driven member is engaged with the clutch element for the ring gear and the brake means for the ring gear is concurrently engaged therewith thereby to provide a brake for the driven member while the drive member is freely rotatable.

2,747,432

HYDRAULIC TRANSMISSIONS

Dennis Miller, Detroit, Mich.

Application June 14, 1955, Serial No. 515,340
4 Claims. (Cl. 74—774)



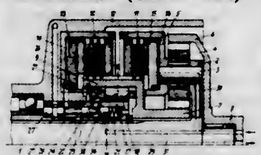
1. A hydraulic transmission comprising a housing having a cylindrical wall and two end walls, a driving shaft axially secured to one end wall, a driven shaft axially journalled in the other end wall, a drum mounted within the housing for a rotary movement with relation to said housing, the drum having a cylindrical wall and two end walls, a chamber within the drum, said chamber being, in part, defined by an arcuate wall opening towards the circular wall of the housing, a paddle wheel mounted within the chamber for rotation with relation to said drum, a liquid medium between the circular wall of the drum and the circular wall of the housing, vane means projecting radially from the circular wall of the housing towards the circular wall of the drum, the vanes being adapted to propel said liquid medium along the periphery of the drum towards the paddle wheel to impart a rotary movement thereto, the paddle wheel including an axial shaft having one end projecting outwardly of the drum, a pinion axially mounted upon said end of the shaft, and a gear wheel in mesh with the pinion, the gear wheel being axially mounted upon the driven shaft and adapted to impart a rotary movement thereto.

2,747,433

SHIFTING MECHANISM WITH FREE-WHEEL DEVICE, ESPECIALLY FOR PLANETARY GEARINGS

Hans J. M. Forster, Harthausen a. F., Kr. Esslingen (Neckar), Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany

Application July 19, 1950, Serial No. 174,687
Claims priority, application Germany July 22, 1949
25 Claims. (Cl. 74—781)



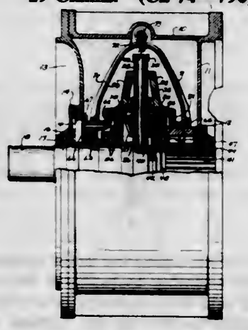
1. In a planetary change-speed transmission providing two transmission ratios and having a plurality of rotating transmission members including a first transmission member and a second transmission member in driving connection with each other and means operatively connected with one of said first and second transmission members to change the transmission ratio from a first ratio to a second ratio, a free-wheeling device operatively connected between said first and second transmission members, said free-wheeling device being normally operative to be moved into a gripping position in the one as well as in the other relative direction of rotation of said first and second transmission members with respect to each other, and means for preventing said free-wheeling device from assuming only one of said two gripping positions, while enabling said free-wheeling device to assume the other of said gripping positions.

2,747,434

INFINITELY VARIABLE SPEED TRANSMISSION

Alfred G. Bade, Milwaukee, Wis., assignor to The Falk Corporation, Milwaukee, Wis., a corporation of Wisconsin

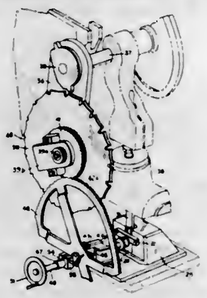
Application May 14, 1951, Serial No. 226,163
29 Claims. (Cl. 74—796)



1. In a power transmission for changing a variable speed to a constant speed and vice versa, a variable speed

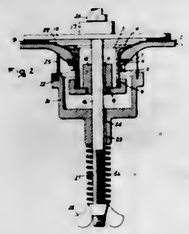
shaft, rollers subjected to centrifugal force by rotation of the variable speed shaft, the rollers severally having a peripheral edge at an angle to the axis of the rollers, a constant speed shaft, gearing connecting the rollers and the constant speed shaft, a pair of disks each having a surface engageable with the rollers at diametrically opposite points on the rollers and said surfaces being radially outwardly convergent, the disks having the adjacent and roller contacting surfaces at the angle of the peripheral edges of the rollers, and means for mounting the disks for movement in a given relation with the roller axes and at an angle to such axes.

2,747,435
APPARATUS FOR AND METHOD OF MANUFACTURING HOLE SAWS
Howard F. Burton, Towson, Md., assignor to The Black & Decker Manufacturing Company, Towson, Md., a corporation of Maryland
Application December 6, 1954, Serial No. 473,155
13 Claims. (Cl. 76—29)



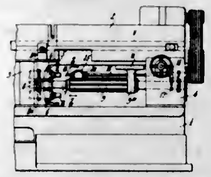
4. A hole saw tooth forming machine having two spaced apart die structures, a two way acting punch structure having upper and lower tooth forming edges and a swingable work blank holding means for maintaining a work blank juxtaposed to the punch and dies while permitting the blank to alternately float toward the respective die structures whereby the teeth formed by the punch and dies will be alternately offset.

2,747,436
ROTARY CUTTING APPARATUS
James H. Powers, Anchorage, Ky., assignor to General Electric Company, a corporation of New York
Original application September 17, 1952, Serial No. 310,001. Divided and this application November 2, 1953, Serial No. 389,714
3 Claims. (Cl. 77—2)



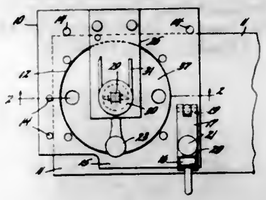
1. Apparatus for enlarging the drain opening of a sink comprising a hub assembly including a member adapted to be mounted in said drain opening and a shaft supporting bracket adapted to rest on the bottom wall of said sink, a rotatable shaft supported by said hub assembly and extending through said drain opening, a cup-shaped saw blade holder secured to said shaft for rotation therewith below the bottom wall of said sink, said holder being mounted for axial movement with respect to said shaft, a rotary saw blade secured to said holder and adapted to be rotated in cutting engagement with the lower surface of the bottom wall of said sink, and spring means cooperating with said shaft and said holder so as to urge said saw blade into cutting engagement with the bottom wall of said sink.

2,747,437
ADJUSTABLE ECCENTRIC BORING ATTACHMENT FOR MULTIPLE SPINDLE LATHES
Roy J. Garrand, Plainfield, N. H., assignor to Cone Automatic Machine Company, Inc., Windsor, Vt., a corporation of Vermont
Application March 16, 1955, Serial No. 494,695
5 Claims. (Cl. 77—3)



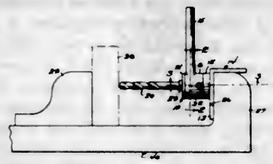
1. In combination, a rotary work-carrying spindle, means for rotating said spindle, a rotary shaft in substantial alinement with said spindle, a support for said rotary shaft, means for rotating said shaft at the same angular velocity as said spindle, an eccentric shaft located between said spindle and said rotary shaft and coupled to said rotary shaft to be rotated thereby, a tool holder journaled with respect to said eccentric shaft, a boring tool carried by said holder, and means preventing said holder and tool from rotating with said eccentric shaft while permitting orbital motion of said holder and tool with said eccentric shaft, and means for moving said tool holder and tool lengthwise of said spindle.

2,747,438
DRILL TEMPLATE HAVING A CIRCULAR SAW FOR CUTTING HOLES IN PIECE PARTS
George Nevrincean, Winston-Salem, N. C., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application October 22, 1952, Serial No. 316,154
8 Claims. (Cl. 77—13)



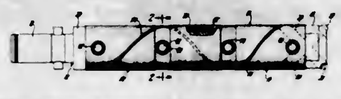
1. In a combined template and work-cutter, a base having a circular aperture therein, locating pins depending from said base for engaging a work-piece to be cut to locate said circular aperture in a predetermined position over said work-piece, a shaft rotatably and reciprocably mounted on said base and having its axis coincident with the axis of said circular aperture, a saw attached to said shaft and reciprocable in said circular aperture and threadedly adjustable pivoted means for clamping said base to a projecting portion of said work-piece overhanging said base to retain said aperture and the saw in said predetermined position over the work-piece.

2,747,439
VISE DRILL PRESS
Charles A. Bruere, Sheridan, Wyo.
Application August 29, 1952, Serial No. 307,096
6 Claims. (Cl. 77—44)



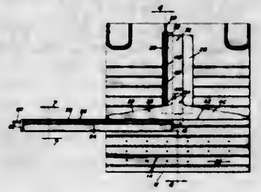
1. A drill press comprising an L-shaped base having a short arm and a long arm, a spindle journaled in the long arm of said base and extending inwardly of the long arm of the base below a plane passing through the short arm of the base, said spindle having a drill holding socket in one end and a row of ratchet teeth in the peripheral surface, a handle journaled on said spindle and a ratchet in said handle and positioned to coact with the ratchet teeth of the spindle for rotating the spindle and a drill therein by the handle.

2,747,440
REAMER
Chauncey S. Kyser, Mason, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application February 5, 1953, Serial No. 335,241
3 Claims. (Cl. 77—58)



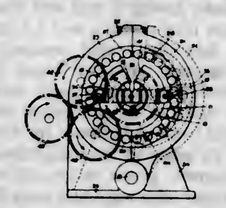
1. Tube reaming means comprising a frame adapted to engage a rotating drive member, a shank on said frame having one end thereof adapted to support tool means, said shank having planular surfaces thereon, a pair of rigid members having parallel arms thereon adapted to embrace said shank and engage said planular surfaces, a semi-cylindrical resilient member bonded to each of said rigid members, the exterior of said resilient members being shaped to form a substantially unbroken cylindrical surface when said rigid members are secured to said shank, said cylindrical surface being adapted to rotate with said tool means.

2,747,441
SPOT AND BORE MACHINE
Bernard G. Johnson and Harold S. Johnson, Brookfield, Ill.
Application August 28, 1953, Serial No. 377,114
5 Claims. (Cl. 77—63)



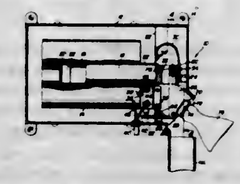
1. A spot and bore machine including a rotary drill head adjustably supported above a table, said table having a pair of fixed guide blocks attached thereto, a first tram rod carried by a first of said guide blocks, a slide adjustably positioned on said table between said guide blocks, a back work piece engaging member carried by said slide, said member being engaged by said tram rod, and a stationary guide secured on said table, having a second tram rod adjustably carried thereby extending perpendicular to said first tram rod.

2,747,442
SWAGING MACHINES
Harold Simpson and John T. D. Spence, Kidderminster, England, assignor to National Standard Company Limited, Kidderminster, England, a British company
Application July 3, 1951, Serial No. 234,922
7 Claims. (Cl. 78—21)



3. A swaging machine comprising a housing having a cylindrical opening therein, a pair of fixedly mounted rigid supports disposed adjacent each end of said opening, an integral, substantially cylindrical head member mounted coincident with the central axis of said opening and journalled in said supports, said head having a slot formed therein extending radially outwardly from said central axis to the outer periphery of said head, said head carrying swaging means radially disposed with respect to said head, said housing being divided into two sections with at least one of said sections being movable away from said head about an axis substantially parallel to said central axis for introduction of material to be swaged into said slot, means for clamping said sections together, cam means disposed along at least a portion of the outer periphery of said opening, a driven gear fixed to said head, said gear having a gap therein aligned with said slot, and a pair of spaced apart driving gears cooperating with said driven gear to continuously rotate said head, the arrangement being such that as said head is rotated, said swaging means is actuated by said cam means to swage the material received in said slot.

2,747,443
AUTOMATIC BOTTLE CAP REMOVER
Walter E. Vandre, Mankato, Minn.
Application January 19, 1955, Serial No. 482,768
4 Claims. (Cl. 81—3.2)



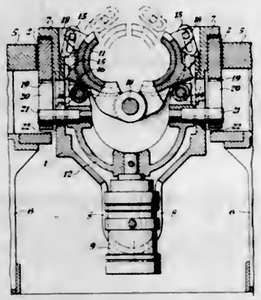
1. A bottle cap remover comprising a main support, a reciprocating member mounted on said support, means for operating said reciprocating member, means for selectively actuating said operating means, a cap removing member slidably and pivotally attached to said reciprocating member, a hooked portion on said cap removing member for engaging under a cap on a bottle, and interconnecting means extending between the cap removing member and the selective actuating means for operating the reciprocating member upon movement of the cap removing member caused by movement of the bottle and cap thereon thereby moving said reciprocating member and moving the hooked portion away from the bottle in a direction for removing the bottle cap.

2,747,444
PNEUMATIC PECK HAMMER
Paul Shepherd, Bonner Springs, Kans.
Application December 7, 1953, Serial No. 396,650
3 Claims. (Cl. 81—15)



1. A single impact, pneumatic peck hammer comprising an elongated cylinder having a rear end closure provided with an air pressure inlet portion, and a front end closure provided with a laterally angled opening; a peck pin slidable in said opening; an anvil block having an inclined surface directly engageable with said pin and reciprocable in the cylinder longitudinally thereof toward and away from said front end closure for forcing the peck pin outwardly at an angle to the longitudinal axis of the cylinder; and a hammer piston reciprocable in the cylinder longitudinally thereof toward and away from the anvil block for imparting hammer blows to the anvil block under influence of air pressure admitted to the said port.

2,747,445
PIPE GRIPPER ACTUATED BY GUIDED YOKE
William Mynard McConnell, McKeesport, and John R. Von Hofen, Pittsburgh, Pa., assignors to Taylor-Wilson Manufacturing Company, McKees Rocks, Pa., a corporation of Pennsylvania
Original application September 6, 1951, Serial No. 245,304, now Patent No. 2,707,876, dated May 10, 1955. Divided and this application February 25, 1955, Serial No. 490,588
2 Claims. (Cl. 81—17.2)



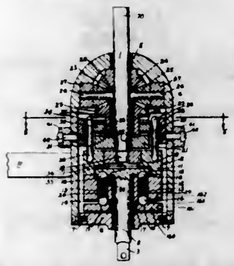
1. A gripper adapted to seize a length of pipe comprising a cage mounted upon spaced plates and being slidable thereon, a pair of jaws pivoted therein, said jaws being adapted, when closed, to embrace the length of pipe, a yoke mounted in said cage and having guided movement therein, means for actuating said yoke, said yoke having means adapted to engage said jaws whereby reciprocation of said yoke opens and closes said jaws, and means on said yoke cooperating with said spaced plates to position the cage at a predetermined location when said yoke is moved to open said jaws.

2,747,446
PLIERS WITH PIVOTALLY ATTACHED CAM ACTUATED SUPPLEMENTARY JAWS
George J. Eder, Port Washington, N. Y.
Application July 8, 1953, Serial No. 366,703
5 Claims. (Cl. 81—47)

1. A plier tool comprising a pair of main gripping jaws pivotally united for gripping motion in a direction towards each other, a pair of supplementary gripping jaws each having a gripping edge defining with said main jaws a gripping opening of predetermined contour, said supplementary jaws extending substantially transverse to said main jaws and each pivotally anchored to only a corresponding one of said main jaws, and a curved camming shoulder on each main jaw against which one edge of the corresponding supplementary jaw on the other main jaw abuts for imparting a positive thrust to said supplementary jaws as said main jaws are being closed.

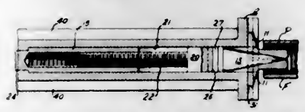


2,747,447
REVERSIBLE ROTARY IMPACT TOOL
Arthur C. Burleigh, Wellesley, Mass.
Application November 1, 1954, Serial No. 466,053
8 Claims. (Cl. 81—52.3)



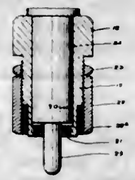
1. A reversible rotary impact tool comprising a rotatable driving shaft, a tool-carrying shaft coaxial therewith, a rotatable power-transmitting member also coaxial with said driving shaft, impact producing means operatively connecting the power-transmitting member to the tool-carrying shaft, and a reversible driving connection for transmitting rotary motion from the driving shaft to the power-transmitting member, said reversible driving connection comprising a first driving member rigid with the driving shaft, a second driving member mounted for rotation about the driving shaft, means operated by the driving shaft for rotating the second driving member in a direction opposite to that in which the driving shaft is rotated, and means for operatively connecting the power-transmitting member to either driving member.

2,747,448
EXPANDING JAW WRENCH WITH SLIDING WEDGE OPERATOR
Malcolm McCafferty, Chester, Pa.
Application June 1, 1954, Serial No. 433,502
1 Claim. (Cl. 81—72)



In a device for removing a pipe end from a fitting or the like, a housing having interior walls defining a longitudinal rectangular bore, means defining a transverse T-slot in said housing adjacent one end of the bore, opposed jaw members having a T-shaped base portion slidably mounted in said T-slot for relative separation and closing, and having a serrated substantially semi-cylindrical body portion projecting longitudinally from said base portion beyond said housing, the interior faces of said body portions in closed position lying flush against each other to present a substantially cylindrical body for insertion in the bore of the pipe end, means to actuate said jaw members between the open and closed positions comprising a rectangular block slidable longitudinally in the rectangular bore of said housing and having a transverse open-ended T-slot therein, a wedge member having a T-shaped extension mounted in the T-slot of said block for longitudinal movement with said block and engaged against the opposite interior walls of said housing to prevent lateral disengagement from the T-slot of said block, longitudinal lips on said wedge member projecting outwardly therefrom in parallel relation to the wedge surfaces confronting said movable jaw members, said jaw members having a tapered groove on the interior face thereof to receive the wedge member, the face of said groove engaging the wedge surface of the wedge member having an inclination corresponding to the inclination of said wedge surface so as to lie flush against the same, and lugs on said jaw members projecting into the groove thereof and engageable behind said lip to displace said jaw members inwardly toward each other upon retraction of said wedge member, to thereby release the engagement of said jaw members with the bore of the pipe end.

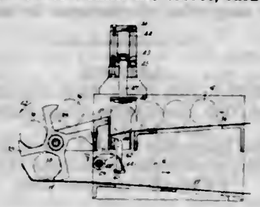
2,747,449
TOOL FOR INSTALLING INSERTS
Philip Armitage Metcalf, Malton, Ontario, Canada, assignor to A. V. Roe Canada Limited, Malton, Ontario, Canada, a corporation
Application August 26, 1952, Serial No. 306,387
10 Claims. (Cl. 81—121)



1. A tool for installing an insert of the type having a threaded portion adapted to be screwed axially into a hole in parent material and also having a collar with external locking formations thereon, said tool comprising a unitary shank having internal formations engageable with such locking formations in torque-transmitting relationship, the shank being slidable axially of an insert and out of engagement with such locking formations of an insert, means on the shank whereby torque may be applied to the shank, the shank having a threaded portion, a nut threadably engaging the threaded portion of the shank for movement axially of the shank, and means for locking the nut in predetermined axial relationship to the shank, the nut being engageable with a surface of such parent material as an insert is advanced axially into its hole to limit axial movement of the shank when engaged with such an insert whereby further application of torque to the shank causes such an insert to advance into its hole until its locking formations become disengaged from the shank.

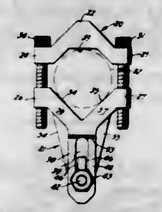
2,747,450
LATHE
Willy Tabet, Forest-Brussels, Belgium, assignor to S. A. Le Progres Industriel, Lot Brussells, Belgium
Application March 23, 1953, Serial No. 344,039
Claims priority, application France January 8, 1953
3 Claims. (Cl. 82—2.5)

1. In a lathe, the provision of conveyor means for feeding and discharging workpieces comprising, a feed ramp, a discharge ramp, a rotatable cradle member positioned to receive workpieces from said feed ramp and to deposit machined workpieces on said discharge ramp, a turret mounted for rotational movement about an axis parallel to that of the lathe spindle and having a passage therein offset from and parallel to said rotational axis, means to rotate said turret between positions in which the passage therein is aligned respectively with a workpiece on the cradle member and the lathe spindle axis, a pusher reciprocable within the turret, said pusher being



engageable in one position with the workpiece on the cradle member thereby to move said workpiece through the turret passage, and being engageable in another position with the machined workpiece in the lathe thereby to move said machined workpiece through the turret passage to deposit it on the cradle member, means to rotate the turret and to operate the pusher in mutually timed relationship, and means to effect intermittent rotation of the cradle member in timed relation to the rotation of the turret and the operation of the pusher.

2,747,451
UNIVERSAL DRIVING DOGS FOR LATHES AND MILLING MACHINES
Fred L. Button, North Bergen, N. J., assignor, by direct and mesne assignments, of one-half to Charles A. Morton, Baldwin, N. Y.
Application June 20, 1951, Serial No. 232,549
1 Claim. (Cl. 82—41)



In a universal driving dog and in combination, two clamping members, each clamping member having two forked arms, means for adjustably securing said clamping members together to form a dog-assembly for clamping work between said forked arms, one of said clamping members being invertible and the forked arms thereof being sized to nest between the forked arms of the other clamping member, said clamping member when so inverted being adjustable to clamp smaller work between the clamping members of said dog-assembly, a shank extending radially outwards from the juncture of the forked arms of the other clamping member, said forked arms and said shank in conjunction being of Y-shaped configuration, a tail-piece reversibly mountable upon said shank and radially slidable therealong to adjustably secure the dog-assembly to the dog plate of a lathe or to the dividing head center of a milling machine to drive the dog and the work clamped in the dog, said tail-piece when mounted, projecting from the shank at an acute angle thereto so that said tail-piece will be inclined inwardly toward the centre of the dog plate or dividing head when mounted in one position upon said shank and outwardly away from the centre of a dog plate or dividing head when mounted in the

reverse position upon said shank to increase the adjustment range of the tail-piece, said tail-piece having its oppositely disposed side faces flattened to insure that the work is aligned to rotate concentric with the axis of rotation of the dog plate or dividing head when the work is locked thereto, and said clamping members and said shank being so proportioned that when clamped to smaller work said members and said shank are substantially in counterbalance relative to the axis of rotation of the work, and the slidable adjustment of the tail-piece along said shank effecting closer counterbalance between the said members.

2,747,452
SHOULDER REST FOR VIOLINS
Ernö Meir Goldberger, Givat Rambam, near Tel Aviv, Israel
Application December 9, 1952, Serial No. 324,952
Claims priority, application Switzerland October 22, 1952
5 Claims. (Cl. 84—280)



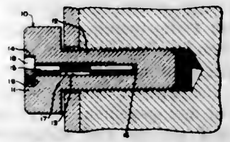
1. In a shoulder rest for violins comprising a relatively stiff yet flexible plate to each of the opposite ends of which is secured a clamp having bearing faces to engage the lower rim of the violin body and disposed at a certain distance from said plate, and having fingers to yieldingly engage the sidewall of the violin body between the lower and upper rims thereof, each clamp comprising a first and a second resilient structure each having two sections providing one of said faces and one of said fingers, respectively, and extending in a plane perpendicular to that of the plate, the improvement defined by the fact that those of said sections which belong to said first resilient structure, of each clamp, are situated substantially in the prolongation of the longitudinal axis of the plate, while those of said sections which belong to the second structure, of each clamp, are disposed at a sufficiently large spacing transversely of the longitudinal axis of the plate from those of the first one so that the fingers formed by some of said sections engage the violin body on both sides of a plane passing transversely through the widest portions of said body.

2,747,453
HEADLESS NAIL
Charles M. Lindstrom, Westerly, R. I., assignor to Bostitch, Inc., Stonington, Conn., a corporation of Rhode Island
Application December 16, 1952, Serial No. 326,234
2 Claims. (Cl. 85—10)



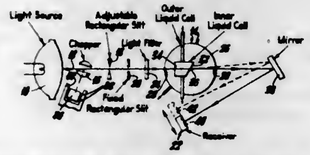
1. An improved staple having opposite legs of substantially uniform cross-section joined together at the top in a closed loop with the sides of said loop in contiguous abutting relationship throughout a relatively short portion of the length of the legs and extending in parallelism with a median vertical plane, the remaining relatively long portions of the legs being of equal length diverging at an angle to each other, said loop at all times being within the lateral width of said legs whereby a headless brad is formed, the terminal end of each leg of the staple being beveled on opposite sides to provide a central sharpened point for penetration into the work whereby to cause the legs to retain their close abutting relationship without spreading apart as the staple is driven in the form of a headless brad.

2,747,454
BOLT WITH FRANGIBLE, EJECTABLE TENSION INDICATING MEANS
Charles F. Bowersett, Laurel, Md.
Application January 18, 1952, Serial No. 267,183
5 Claims. (Cl. 85—62)
(Granted under Title 35, U. S. Code (1952), sec. 266)



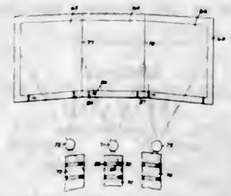
1. A bolt having means for indicating a predetermined elongation resulting from the tightening thereof comprising, in combination, an elongated threaded member having a head at one end thereof and an axial bore extending part way therethrough, said bore being reduced at the closed end thereof and enlarged at the open end thereof to provide a shoulder within said bore, a rod composed of brittle material and having a pair of mutually spaced cylindrical elements, one of said elements being disposed within and secured to said bolt at the reduced end of said bore, means disposed within the reduced end of said bore in engagement with said one cylindrical element and the bolt for securing the rod to the bolt, a weakened portion of reduced cross sectional area integrally formed with said cylindrical elements and disposed therebetween, an indicating head integrally formed with the other cylindrical element and set in the enlarged end of the bore normally engaging said shoulder whereby the weakened portion of the rod will be broken and said indicating head will be forcibly ejected from said elongated bore in response to the sudden release of stress forces within the rod when said threaded member is elongated by tightening the bolt sufficiently to effect said predetermined elongation.

2,747,455
DIFFERENTIAL REFRACTOMETER
Stanford B. Spracklen and Donald N. Campbell, St. Albans, W. Va., assignors to Union Carbide and Carbon Corporation, a corporation of New York
Application August 20, 1954, Serial No. 451,279
11 Claims. (Cl. 88—14)



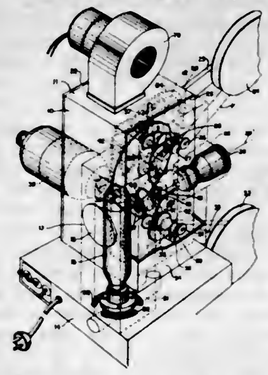
1. A differential refractometer for measuring the difference between the refractive indices of two liquids comprising, means for forming a wedge of light of controlled direction and dimensions; a first cell, positioned in said wedge of light, having optically opposed light inlet and light exit wall portions pervious to the transmission of said wedge of light therethrough, the surface of said light inlet portion being positioned normal to said wedge of light in the region of light inlet and said light exit wall portion being shaped to form a surface having equal circular cross-sections in the planes in which refraction of said wedge of light occurs; a second cell positioned in the path of said wedge of light, said second cell having optically-opposed light inlet and light exit wall portions pervious to the transmission of light therethrough, said inlet portion being positioned normal to the path of said wedge of light in the region of light inlet, said exit portion being positioned at the geometric center of said cross-sectional circles of said light exit portion of said first cell; means associated with said cells for passing said liquids thereto; and means responsive to the change in direction of said wedge of light emerging from said light exit portion of said first cell for correlating said change in direction of said emergent wedge of light with the change in the differential refractive index caused by a change in the refractive index of one of said liquids.

2,747,456
AUTOMATIC MAGNIFICATION CONTROL FOR PROJECTOR
Fred Waller, Huntington, N. Y., and Willis Robert Dresser, Long Hill, Conn., assignors to The Vitarama Corporation, Huntington Station, N. Y., a corporation of New York
Original application December 14, 1946, Serial No. 716,344. Divided and this application April 6, 1951, Serial No. 219,597
6 Claims. (Cl. 88—17)



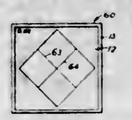
4. Motion picture projection apparatus for projecting an image that constitutes an area of a mosaic picture on a screen with at least one edge of the image abutting another area of the mosaic picture, said apparatus including a projector comprising a film gate, a lens mount, apparatus for advancing a film, mechanism that moves a portion of the projector in directions that change the location of the projected image area horizontally on the screen, other mechanism for moving a portion of the projector in axial directions to change the magnification of the image area to adjust the size of said image to fill a desired area of the screen, and separate control means for the respective mechanisms, said control means including light-responsive devices located in front of the projector in the path of light projected through the film.

2,747,457
PNEUMATIC ARRANGEMENT FOR ADVANCING AND REGISTERING A FILM STRIP
Raymond W. Wengel, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application November 17, 1950, Serial No. 196,152
5 Claims. (Cl. 88—18)



1. In photographic apparatus, the combination with a gate member provided with an aperture, and an advancing means for engaging spaced portions of a film strip and for continuously feeding said film strip into an upper preformed film loop and from a lower preformed film loop, said film loops having a contracted position determined by the shortest film path between an instantaneous position of said advancing means and said gate member, of an air chamber above and below said gate member, said chambers being adjacent said gate member and having open ends adapted to be substantially enclosed by said film loops, a positioning pin located adjacent the aperture in said gate member for intermittently engaging a perforation in said film strip during the contracted position of said upper loop, having a first surface in a fixed plane with respect to the direction of film movement for engaging the edge of said perforation to register an image thereon with said aperture and a second surface inclined toward said first surface for permitting movement of said film strip over said pin, means for applying air under pressure to said upper and lower air chambers, and valve means adapted to admit said air under pressure alternatively and in properly timed relation to said lower and upper air chambers, the air pressure in said lower chamber tending to expand said lower film loop for moving said film strip over said second surface and past said aperture and rapidly contracting said upper film loop until the instantaneous position of said advancing means locates a succeeding predetermined film perforation opposite to and in position for engagement by said positioning pin, and the air pressure in said upper chamber tending to expand said upper loop to concurrently cause retrograde movement of said film strip for moving one edge of the perforation engaging said positioning pin against said first surface thereof and maintaining said edge against said first surface as long as said air is admitted to said upper chamber.

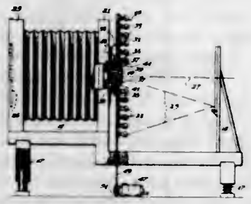
2,747,458
STEREOSCOPIC TARGETS WITH DIAGONAL MARKINGS
John M. Richards, Santa Barbara, Calif.
Original application August 14, 1947, Serial No. 768,672, now Patent No. 2,603,124, dated July 15, 1952. Divided and this application January 15, 1952, Serial No. 266,507
8 Claims. (Cl. 88—20)



1. A set of target members for testing the eyes of a patient for asymmetrical tonic extra-ocular muscle imbalance, said apparatus comprising a first target member having an observation field on which there are two intersecting diagonal lines serving as target means for observation by the right eye, a second target member having an observation field on which there are two corresponding diagonal lines serving as target means on said second target member for observation by the left eye, said corresponding target lines on the second target member being at the same angle of intersection and similarly located in the observation field as the target lines on the first target member for the right eye, and other target members for observation with the first or second target member, there being similar diagonal target lines on each of said other target members intersecting one another at angles which differ from those of said first and second target members, and also from one another, by known angular increments, the observation field on all of the target members being free of any target lines other than the intersecting diagonal lines, the various combinations of target members when viewed binocularly producing different apparent turning of the plane deter-

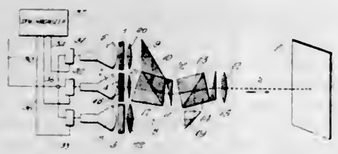
mined by the target lines in accordance with the degree of any muscular imbalance of the patient, there being indicia on the respective target members outside the observation field for indicating the position of each target member in the set of target members in the order of the different angles of intersection of the target lines from those of the other target members having the next most similar angles of intersection of its target lines.

2,747,459
PHOTOGRAPHIC APPARATUS
George L. Morrison, Evanston, Ill.
Original application December 2, 1948, Serial No. 63,037, now Patent No. 2,609,293, dated September 2, 1952. Divided and this application August 18, 1952, Serial No. 305,005
4 Claims. (Cl. 88—24)



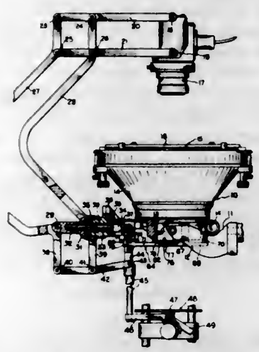
1. In apparatus for photographing printing surfaces, printing forms, and the like, means providing a support for the material to be photographed, a camera which includes a lens, and a generally flat source of illumination which is positioned in a plane extending substantially parallel to the surface plane of the material to be photographed, said source of illumination including a plurality of individual light-sources and a rotatable support for said light-sources, said rotatable support being disposed adjacent said lens, and means for rotating said support and the light-sources mounted thereon during the operation of said apparatus.

2,747,460
IMAGE COMBINING MEANS FOR COLOR TELEVISION APPARATUS
Pericles Caivi, Buenos Aires, Argentina
Application July 15, 1952, Serial No. 298,973
2 Claims. (Cl. 88—24)



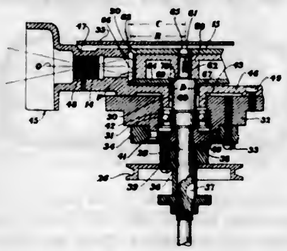
1. In an image projection system, in combination with means for producing a plurality of adjacent images on substantially parallel and coplanar surfaces, a common viewing surface on which all of said images are to be projected in superposed relationship, and a common objective lens means for focusing all of said images on said viewing surface, said objective lens having an optical axis directed toward said viewing surface and substantially normal to said coplanar surfaces, said axis being displaced from alignment with one of said surfaces and in substantial alignment with another one of said surfaces, the provision of image combining means including at least one reflecting prism disposed to direct light from said displaced one of said coplanar surfaces toward said optical axis of said objective lens means, combined reflecting and refractive prism means disposed substantially in alignment with said optical axis and positioned to receive light from said reflecting prism and to direct said light toward said objective lens means combined with light from said aligned one of said coplanar surfaces in a direction angularly displayed from parallelism with said axis, wedge-shaped prism means interposed between said combined prism means and said objective lens means, said wedge-shaped prism means bending light from said combined prism means into true alignment with said axis, and compensating lens means included in at least one optical path from one of said coplanar surfaces to said objective lens means, said compensating lens means being included in a portion of said optical path individual to said last-named one of said coplanar surfaces, said compensating lens means being dimensioned to correct for the difference between the effective length of the optical path in which said compensating lens means is included and another optical path from another of said coplanar surfaces to said objective lens means.

2,747,461
PHOTOGRAMMETRIC PROJECTION APPARATUS
Olin W. Boughton, Canandaigua, and Heinz E. R. Gruner, Irondequoit, N. Y., assignors to Bausch & Lomb Optical Company, Rochester, N. Y., a corporation of New York
Application November 4, 1953, Serial No. 390,129
4 Claims. (Cl. 88—24)



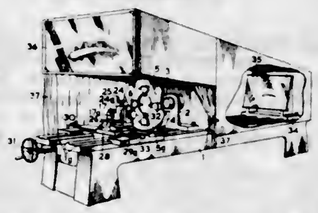
1. In an aerial map plotter having a projection assembly comprising a housing for supporting a diapositive, a light projector movable relative to said diapositive, a lens barrel in the lower portion of said housing movable along an axis perpendicular to the plane of the diapositive, a cam connected to and movable with the light projector and shaped to partially correct the radial distortion of a lens carried by the barrel, a lever pivoted to the lower portion of the housing for moving the lens barrel, said lever having a follower for engagement with the cam, and resilient means urging the lever toward both the cam and the lens barrel to engage the follower with the cam whereby movement of the cam will control the movement of the lever in moving the lens barrel, the combination of means for adjusting the amount of axial displacement transmitted to the lens barrel by the lever comprising a plate carried by the lever, a contact pad on said plate in engagement with the lower end portion of the lens barrel, and coacting means on the lever and plate for adjustably positioning the plate along the lever in a direction substantially parallel to the axis of the lever whereby shifting the plate and contact pad on the lever will adjust the amount of axial displacement transmitted to the lens barrel.

2,747,462
DEVICE FOR SUPPORTING AN OBJECTIVE AND FILM DRIVE ROLL
George S. Jones, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application May 29, 1952, Serial No. 290,721
6 Claims. (Cl. 88—24)



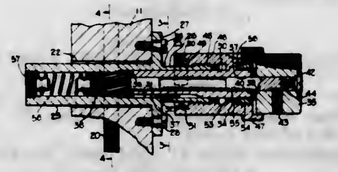
1. In photographic apparatus having an optical axis, the combination with an exposure station aligned with said optical axis, and a rotatable drive shaft having an axis perpendicular to said optical axis, of an objective having a focal plane for imaging an object in said exposure station, a film drive roll including an extending member having a predetermined relation with respect to the axis of said film drive roll and adapted to be operatively connected to said drive shaft for moving a film strip through the focal plane of said objective and said exposure station, and an objective mount for supporting said objective along said optical axis and in a position in which said focal plane coincides with the film strip on said film drive roll, said objective mount having a portion thereof arranged with respect to said drive shaft axis for permitting said film drive roll to be operatively connected to said drive shaft and for preventing operative connection to said drive shaft of a film drive roll which is adapted to position said film strip between said focal plane and said objective and provided with a hole concentric with the axis of said drive shaft for receiving the extending member of said film drive roll and permitting said film drive roll to be operatively connected to said drive shaft and for preventing operative connection to said drive shaft of a film drive roll which is adapted to position said film strip beyond said focal plane and has an extending member having a relation greater than said predetermined relation with respect to the axis of the film drive roll.

2,747,463
OPTICAL INSPECTION DEVICE
Raymond Henry Biggs, Forest End, Sandhurst, England, assignor to Power Jets (Research and Development) Limited, London, England, a British company
Application December 6, 1951, Serial No. 260,250
Claims priority, application Great Britain December 18, 1950
4 Claims. (Cl. 88—24)



1. In an inspection device for inspecting the profile of at least part of a chosen cross-sectional plane through an elongated object under inspection by illuminating the object around said profile and viewing the object from one end thereof, illuminating means consisting of a member having a face transverse to the direction of view, and a plurality of illuminating devices, each slidably adjustably mounted on said face for movement parallel to said plane, each said illuminating device including a lamp, a lamp holder, a lens system positioned to direct a beam of light from said lamp on to the object under inspection and a sharply delineated mask positioned in said beam, each said illuminating device also having a contact surface bearing against said face, the said contact surfaces in all the illuminating devices being accurately preset at the same distance from the cut-off edges of the sharply delineated masks.

2,747,464
FINE ADJUSTMENT MEANS FOR MICROSCOPES
Clarence J. Bowerman, Pittsford, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a corporation of New York
Application February 19, 1954, Serial No. 411,322
4 Claims. (Cl. 88—39)



1. In a microscope the combination of a support, a lens member slidably mounted on said support, a tubular housing extending through said support, a rack carried by said member, a shaft mounted for rotational and axial movement within said housing, a helical pinion fixed on the shaft adjacent one end thereof and in operative engagement with the rack, a knob fastened on the other end of the shaft for rotating the pinion to effect coarse adjustment of said member, a sliding member positioned within the housing and extending parallel to the shaft, one end of the sliding member being connected to one end of the pinion whereby motion of the sliding member will be transmitted to the pinion, means on said sliding member and said housing for limiting the sliding member to longitudinal movement relative to the housing, a tubular knob coaxially mounted relative to said shaft and in threaded engagement with the outside of said tubular housing, coacting means on said tubular knob and said sliding member for transmitting the axial movement of the tubular knob to the sliding member, and frictional drag means acting on the sliding member and the shaft to provide resistance against rotation of the pinion whereby rotation of the tubular knob will move the pinion transversely relative to the rack for effecting fine adjustment of the lens member.

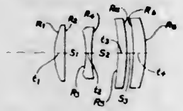
2,747,465
RADIO AND/OR TV LOG HOLDER
Marsene T. Carden, Gilroy, Calif.
Application March 2, 1953, Serial No. 339,818
4 Claims. (Cl. 88—39)



1. A device for holding a printed sheet such as a radio or television log, comprising a base having a pair of up-

standing parallel arms at its sides, a pair of fore and aft rolls supported on said arms in parallel spaced relation, means on said rolls to facilitate manual turning thereof, each said roll adapted to have one end of said sheet secured thereto for stretching an intermediate portion of said sheet tangentially from and between said fore and aft rolls, a pair of flexible rails releasably secured between said upstanding arms in parallel relation to said fore and aft rolls and spaced from each other sufficiently to expose the intermediate portion of said sheet to full view, a magnifying lens including a flat surface disposed in surface contact with said intermediate portion of said sheet, said lens having its fore and aft edges disposed to press said sheet against said fore and aft rolls respectively, and means on said lens provided with a pair of axially aligned guide openings adapted for sliding fit upon said flexible rails whereby the latter afford pressure of said lens into surface contact with said intermediate portion of said sheet and for gripping the latter substantially at its line of tangential extension from said fore and aft rolls for tensioning said sheet against movement with said rolls other than by manipulation.

2,747,466
OPTICAL SCANNING OBJECTIVE LENS SYSTEM FOR INSPECTION DEVICES
William Donald Orser, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application March 31, 1954, Serial No. 420,056
5 Claims. (Cl. 88—57)



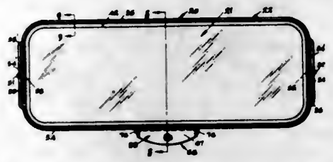
1. An objective for use in scanning systems and corrected for use with an aperture stop in front of the objective, consisting of a negative component axially aligned and spaced between two positive components and including at most four lens elements, in which the radii of curvature R of the outer surfaces of the components, the refractive indices N of the strongest element in the respective components, and the separations s between components, each numbered by subscripts from front to rear, are within the following specified ranges:

$$0.25\ F < +R_1 < 0.40\ F$$
$$0.75\ F < -R_2 \leq \infty$$
$$0.18\ F < -R_3 < 0.44\ F$$
$$0.26\ F < +R_4 < 0.41\ F$$
$$0.90\ F < -R_5 < 10\ F$$
$$0.18\ F < -R_6 < 0.35\ F$$
$$1.60 < N_1 < 1.64$$
$$1.70 < N_2 < 1.74$$
$$1.68 < N_3 < 1.72$$
$$0.08\ F < s_1 < 0.14\ F$$
$$0.09\ F < s_2 < 0.18\ F$$

where F is the focal length of the objective as a whole and where the + and − values of the radii denote surfaces respectively convex and concave toward the front of the objective, and in which the thickness of each lens element is less than 0.05 F.

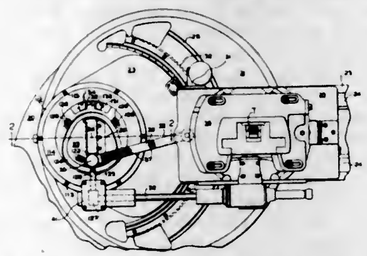
2,747,467
MOUNTING FOR REARVIEW MIRRORS
Lucien G. Ponce, Hancock, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio
Application June 29, 1950, Serial No. 171,108
4 Claims. (Cl. 88—77)

1. A reversible rear view mirror, comprising a supporting case including a rear wall provided with mounting means therefore and open at the front thereof, a frame hingedly connected to said case, a mirror element in a position normally closing the front of the case and having two oppositely facing reflective surfaces of different reflecting values, a bezel surrounding the mirror element, means on said bezel rotatably supporting the mirror element in said frame, actuating arms pivotally carried on one end by said supporting case, and cam



slots in the other end of said arms receiving said mirror element supporting means, the said mirror element supporting means and cam slots being so formed and related to one another that they coact to cause said bezel and mirror element to rotate in the frame when the frame is swung sequentially outwardly and inwardly relative to said case to reverse the positions of the reflecting surfaces of said mirror element.

2,747,468
MACHINE FOR PRODUCING GEARS
Ernest Wildhaber, Brighton, N. Y., assignor to The Gleason Works, Rochester, N. Y., a corporation of New York
Application February 6, 1951, Serial No. 209,665
14 Claims. (Cl. 90—6)

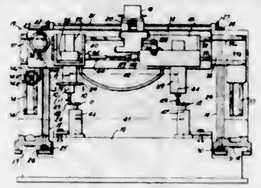


1. A gear cutting machine having a rotatable work support, a tool support, a tool carrier reciprocable on the tool support, a rotatable tool drive member connected to the work support to move in predetermined velocity relationship therewith, a driven member having rotatable therewith a crank for reciprocating the tool carrier, and a variable leverage connection between the drive and driven members for causing them to move in varying velocity relationship to each other, said variable leverage connection including a cam that is shaped to provide a non-harmonic motion of the tool carrier during at least the cutting portion of its operating cycle.

2,747,469
CUTTER POSITION COMPENSATING MECHANISM FOR PROFILING MACHINES
Hans Ernst, Cincinnati, and Hans Fritschi, Amberley Village, Ohio, assignors to The Cincinnati Milling Machine Co., Cincinnati, Ohio, a corporation of Ohio
Application May 10, 1954, Serial No. 428,752
17 Claims. (Cl. 90—13)

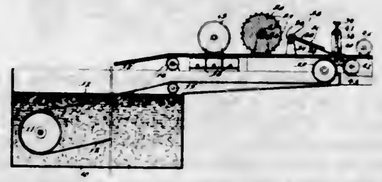
1. In a profiling machine having a rotary tracer head and a cutter spindle supported on the machine with their axes in parallel relation and normally spaced in accordance with the spacing of a pattern and work piece to be engaged thereby, the combination of a tracer finger carrier by the tracer head in co-axial relation therewith, means to laterally adjust the tracer finger to offset its

axis relative to the axis of the tracer head, and means supporting the cutter spindle for lateral movement relative to the axis of the tracer head whereby the cutter



spindle may be laterally offset with respect to its said normal position an amount equal to said offset of the tracer finger.

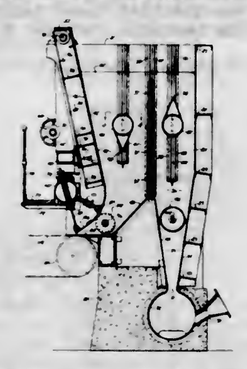
2,747,470
METHOD AND APPARATUS FOR FISSURING WET FELTED FIBER BOARD
William R. Jones, Wabash, Ind., assignor to The Celotex Corporation, Chicago, Ill., a corporation of Delaware
Application July 8, 1949, Serial No. 103,558
6 Claims. (Cl. 92—39)



3. Apparatus for felting and fissuring a thick fiber sheet formed from a fiber suspension and including a traveling screen on which the fiber sheet is felted and suction boxes over which the felted sheet passes for dewatering, in combination with fissuring means positioned above the screen, beyond the dewatering station considered according to the direction of travel of the screen and extending transversely across the width of the screen, the said fissuring means comprising a cylinder, a plurality of blade-like elements projecting outwardly and substantially radially beyond the surface of the cylinder, the blade-like elements each of substantially equal width and projecting beyond the cylinder surface to substantially the same extent, arranged in groups positioned on spaced sinuous lines extending in general in the lengthwise direction of the cylinder and the blade-like elements substantially uniformly spaced along the such sinuous lines, the spacing thereof in excess of the width of the individual elements, and positioned above the screen, beyond the fissuring means, in the direction of travel of the screen, and extending substantially transversely across the width of the apparatus a screed device comprising thin flexible blade members, pivot means to which an end of a blade member is mounted and an adjustable blade flexing member mounted over and intermediate the length of the blade member and at an end contacting and pressing upon the blade member.

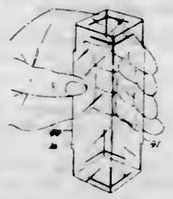
2,747,471
HEAD BOX FOR PAPER MAKING MACHINES
Wesley S. Corbin and Charles M. Pearson, Watertown, N. Y., assignors, by mesne assignments, to The Black-Clawson Company, Hamilton, Ohio, a corporation of Ohio
Application November 6, 1952, Serial No. 319,156
6 Claims. (Cl. 92—44)

1. A head box for a Fourdrinier paper machine comprising front and rear walls and a pair of side walls forming a main chamber, partition means extending between said side walls and defining a rear compartment and a front compartment in said chamber, means for delivering stock to the bottom end of said rear compartment for flow therein upwardly and over said partition means into said front compartment, means defining a slice including an extended flexible lip depending from the lower end of said front wall, means supporting the upper end of said front wall for pivotal movement on said side walls toward and away from said partition means, means establishing a forward limit position of said front wall wherein said front wall is tilted upwardly and forwardly with respect to said partition means at a substantial angle to the vertical wherein substantially the entire said front wall is inclined forwardly from the upper end of said flexible lip to cause air bubbles in the downwardly flowing stock in said forward compartment to be guided



upwardly out of said chamber before reaching said slice, a beam mounted on said front wall forwardly of the lower end of said front wall, means forming a plurality of adjustable connections between said beam and the front edge of said slice lip for adjusting the alignment of said lip edge, means for raising and lowering said beam with accompanying flexing of said slice lip to change the outlet opening through said slice, means for adjusting said front wall pivotally on said supporting means with accompanying forward and rearward movement of said slice lip, and adjustable means forming a plurality of bracing connections extending between said beam and said lip in laterally spaced relation across the width of said lip intermediate the upper and lower edges thereof for conforming the curvature thereof with the desired outlet through said slice while reinforcing said lip against vibration.

2,747,472
METHOD OF MAKING PLASTIC FOLDING CONTAINERS
Stanley Bright, Jr., Haverford, Pa., assignor to Troth Bright Page, Inc., Paoli, Pa., a corporation of Pennsylvania
Application July 12, 1950, Serial No. 173,353
3 Claims. (Cl. 93—36)



1. A method of making a folding container blank comprising extruding a relatively stiff elastic tube from bulk plastic stock, flattening said tube along fold lines to form

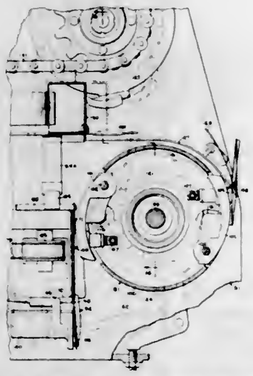
oppositely positioned substantially flat walls, cutting the flattened tube into a plurality of blanks, cutting unidirectionally through both walls of the end portions of each blank to form interlockable closure elements, separating the walls of each blank to form a tubular section, and flattening the tubular section along fold lines between the original fold lines to position the closure elements so that they may be folded upon each other and interlocked to form end closures for said tubular section.

2,747,473
FEEDING AND ERECTING MECHANISM FOR CARTON BLANKS

Charles Z. Monroe and Dwight German, Detroit, Mich., assignors to Ex-Cell-O Corporation, Detroit, Mich., a corporation of Michigan

Original application March 30, 1948, Serial No. 18,034, now Patent No. 2,665,044, dated January 5, 1954. Divided and this application November 6, 1951, Serial No. 255,074

7 Claims. (Cl. 93—53)



1. In a feeding and erecting mechanism for carton blanks, the combination of a feeder magazine for holding a stack of folded carton blanks, a peeler wheel disposed in proximity to the discharge end of said magazine, one face of said wheel overlying the exposed marginal edge portion of the foremost blank in the stack, means on said peeler wheel for engaging the rear face of said marginal edge portion so as to effect positive separation of said foremost blank from the stack, a power driven carton conveyor, a rotary transfer turret having means for holding a separated blank and carrying it through an arcuate path to present the separated blank to said conveyor, a stationary V-shaped spreader having a relatively long curved guide spaced radially from and following the periphery of said transfer turret and a relatively short diverging guide for partially erecting the separated blank while the latter is carried by said turret, and a rigid three-sided rectangular receptacle on said conveyor, said receptacle being open on one side and having the partially erected blank pressed therein to square up the blank into a fully erected condition as an incident to its presentation from said turret to said conveyor.

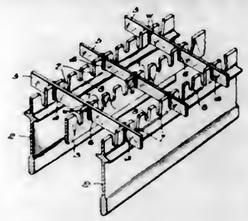
2,747,474
GRATINGS

Harold Nagin, Pittsburgh, Pa., assignor to Reliance Steel Products Company, McKeesport, Pa., a corporation of Pennsylvania

Application February 19, 1952, Serial No. 272,306

4 Claims. (Cl. 94—30)

1. A grating having parallel bearing bars of deep section, cross bars of substantially less depth set into and secured in the top edge portion of the bearing bars at regular intervals, and a plurality of open notches in the top edge of the bearing bars which notches are intermediate the cross bars, said notches having a depth



at least as great as the depth of the cross bars where they are secured in the bearing bars.

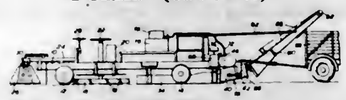
2,747,475
ROAD PLANING MACHINES

Frederick Charles West, Emmer Green, Reading, England

Application December 3, 1951, Serial No. 259,517

Claims priority, application Great Britain December 4, 1950

1 Claim. (Cl. 94—40)



In a road machine, a wheeled chassis having a front end and a rear end, a heating hood supported adjacent the front end of the chassis for directing heat against a worn bituminous road surface, a planing device depending from the chassis rearwardly of the heating hood for planing the heated bituminous surface, a trough depending from the chassis and arranged transversely thereof and having an open front end to receive the planed off material while the material is still hot, a pair of blades depending from the chassis and extending between the planing device and the trough, said blades converging rearwardly to the trough to direct the heated material into the trough as soon as it is planed off and while it is still hot, a pipe overlying the trough and having downwardly directed outlet means for directing fluxing oil onto the heated bituminous material in the trough, a plurality of mixing paddles rotatably mounted in the trough, means mounting the paddles for rotation about an axis transverse to the longitudinal axis of the chassis, means for rotating the paddles to mix the fluxing oil with the heated material and thereby regenerate the material and render it fit for reuse, a transverse pivot support for the rear end of the tough connected to the chassis and about which the trough is vertically adjustable, said front end of the trough being carried by the blades, means vertically adjusting the blades, an elevator extending rearwardly and upwardly from the trough and having a lower end positioned within the trough to receive the material, as it is forced in being mixed with the fluxing oil rearwardly in the trough, and to remove the regenerated material from the trough.

2,747,476
DUMP TRUCK BODY

Joseph Manuel, New York, N. Y.

Application November 25, 1952, Serial No. 322,459

9 Claims. (Cl. 94—44)

3. A truck body comprising a floor and side walls, a vertically disposed rear end frame, spaced extension beams fixed perpendicularly to said end frame and slidably connected to the floor to extend the end frame from a position abutting the floor to a position spaced from the floor, a tail gate hingedly connected along its lower edge to said end frame at approximately floor level whereby when the end frame is in extended position the tail gate can be swung forwardly to form an extension of said floor or can be swung into lowered vertical position to act as a spreader plate for gravel which may be dumped from said truck floor ahead of the rear end frame, means for secur-



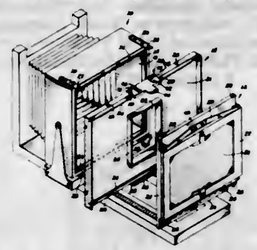
ing said extension beams in various extended positions relative to the truck floor, and means for securing said tail gate in either raised vertical, horizontal or in lowered position.

2,747,477
QUICK-CONVERTIBLE CAMERA BACK

Jerome J. Hannafin, Indianapolis, Ind.

Application April 23, 1953, Serial No. 350,547

6 Claims. (Cl. 95—36)



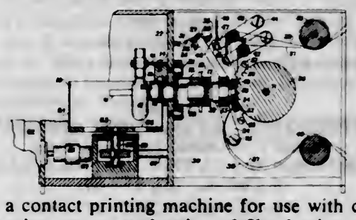
1. For use with a camera having a film exposure aperture in the rear thereof with a seating surface surrounding said aperture, a compound back member for said camera to close said aperture, said back member being quickly convertible from a sliding-type, multiple-exposure back to a stationary-type, single-exposure back, said back member comprising a film carrying frame having a perimetral flange portion adapted to be telescopically receivable in the camera aperture to form a light-tight seal about said aperture when said film carrying frame is positioned in said camera, latch means carried by said camera and engageable with said film carrying frame to releasably retain it in such position, a supporting frame having a diminutive aperture therein and a flange portion similar to the flange portion on said film carrying frame, said flange portion being telescopically receivable in the camera aperture to form a light-tight seal about said aperture when said supporting frame is positioned on said camera with the aperture in said supporting frame in registry with the said aperture in said camera, said latch means being engageable with said supporting frame to releasably retain it in such position, said supporting frame being further provided with a pair of spaced, mutually facing, parallel rail members along opposite edges thereof, the flange portions of said film carrying frame being enterable between said rail members to guide said film carrying frame for edgewise movement on said supporting frame between a position in which one portion of the surface of the film in said film carrying frame is positioned behind the aperture in said supporting frame and a position in which another portion of such film surface is positioned behind said aperture, a first bracket mounted along one edge of said supporting frame adjacent one of said rail members and providing a lip turned toward the other of said rail members to define a channel opening toward said other rail member, one edge of said film carrying frame being enterable in said channel when said film carrying frame is positioned on said supporting frame, a second bracket, mounting means for said second bracket supporting said bracket along the opposite edge of said supporting frame, said second bracket providing a lip turned toward said first bracket to define a channel between said lip and the adjacent rail member opening toward the opposite rail member, the opposite edge of said film carrying frame being enterable in said channel after said one edge thereof has been so entered in the first said channel, said second bracket being movable to shift the lip thereon toward and away from the other said bracket to permit the entrance and removal of the said opposite edge of said film carrying frame into and out of the channel defined by the lip of said second bracket, and resilient means engaging said second bracket to urge the lip thereon toward the first said bracket.

2,747,478
CONTINUOUSLY DRIVEN PRINTING MACHINE

John G. Capstaff and Charles W. Clutz, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application April 28, 1951, Serial No. 223,504

7 Claims. (Cl. 95—75)



1. In a contact printing machine for use with continuously moving, superposed strips of film having perforations along an edge thereof, a rotatable sprocket for advancing said films, means for guiding said films into engagement with the sprocket and stripping means for removing the films from the sprocket, said guide means and stripping means being so positioned relative to each other and to the sprocket that the films have only limited engagement with the sprocket, a source of illumination for producing a printing beam, a rotatable drum having an inclined slot therein through which each picture frame is intermittently exposed to the printing beam, means for synchronously rotating the drum and sprocket, the width and inclination of the drum slot being such and the rotation of the drum being so synchronized with that of the sprocket that the printing beam is caused to move in synchronism with the films upon the sprocket whereby a substantially complete picture frame is continuously exposed during the exposure interval while the films are in motion upon the sprocket, said sprocket having a row of teeth along its peripheral edge, the teeth being of a width substantially equal to the width of the film perforations and of a thickness less than the height of the perforations, the leading edges of said teeth being so spaced on the sprocket and the rotation of the drum being so synchronized with the rotation of the sprocket that but one such edge is in contact with the aligned edges of the perforations of the superposed film strips during the exposure interval.

2,747,479
PHOTOGRAPHIC COPYING APPARATUS

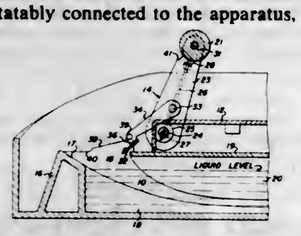
David L. Babcock and Matthew N. Nowak, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application September 27, 1952, Serial No. 311,914

12 Claims. (Cl. 95—89)

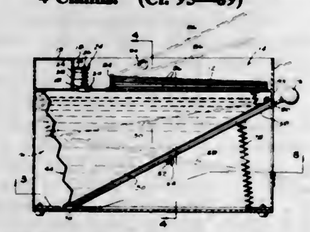
3. In a processing and image-transfer apparatus, a tank for containing a processing liquid, a first pair of arms each rotatably connected at one of their ends to the apparatus and adapted to be rotated into operative and inoperative positions, a roller rotatably secured to and positioned between the other ends of said pair of arms, means on said tank adapted to be engaged by the roller

along a line parallel to the axis of the roller when said pair of arms is rotated into operative position and to be spaced therefrom when said arms are rotated into inoperative position, a second pair of arms pivotally connected to the first pair of arms at points intermediate those at which the roller is secured and those at which they are rotatably connected to the apparatus, a squeegee



device secured between the free ends of the second pair of arms, and guide means on the apparatus adapted to support at least one of said second pair of arms adjacent the free end thereof and to restrict the rotation of said second pair of arms relative to the apparatus thereby as the first pair of arms is rotated from inoperative to operative position whereby the squeegee device is also guided into contact with said means on said tank.

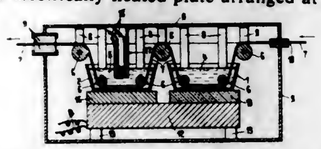
2,747,480
PHOTOGRAPHIC DEVELOPING APPARATUS
Walter L. Siemens, Julesburg, Colo.
Application May 13, 1955, Serial No. 508,136
4 Claims. (Cl. 95—89)



2. A photographic developing apparatus comprising a receptacle; a horizontal partition dividing the interior of the receptacle into an upper, processing compartment and a lower, solution compartment; a plurality of collapsible containers within the solution compartment each adapted to hold a different solution, the partition having openings, one for each container, communicating between the processing compartment and the respective containers; valves normally closing said openings; and means for collapsing each container independently of the others to force into the processing compartment through the associated opening the solution hold in said container, comprising a shaft supported at its ends upon opposite walls of the receptacle, said shaft extending below the several containers, and a plurality of levers spaced longitudinally of the shaft and fulcrumed intermediate their ends upon the shaft for rocking movement independently of one another, said levers bearing against the respective containers, for collapsing of the containers responsive to rocking of the levers in one direction, said levers projecting at one end exteriorly of the receptacle for swinging of the levers by a user in a container collapsing direction.

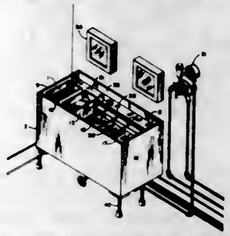
2,747,481
SYSTEM FOR DEVELOPING A FILM
Turolf Normann, Gjovik, Norway, assignor to Omega Louis Brandt & Frere S. A., Bienne, Switzerland
Application March 22, 1954, Serial No. 417,799
Claims priority, application Switzerland April 21, 1953
4 Claims. (Cl. 95—94)

4. A film processing device through which a film is adapted to be drawn to subject the film successively to two processing liquids, comprising, in combination, a hollow casing formed with a film inlet and a film outlet, two tanks arranged side by side in the casing and containing a developing bath and a fixing bath respectively, a set of rollers adapted to guide the film through the baths, an electrically heated plate arranged at the bottom



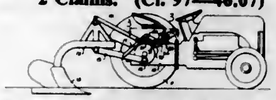
of the casing, a semi-heat insulating plate. and a heat conducting plate supported by the said electrically heated plate, the developing tank supported by the said semi-heat insulating plate and the fixing tank supported by the said heat conducting plate, so that the fixing bath is heated to a temperature higher than that of the developing bath.

2,747,482
FILM DEVELOPING AND PROCESSING TANK
Leonard W. Gacki, Jamaica, and Walter A. Winfield, Bronx, N. Y., assignors to X-ray Instrument Corporation, a corporation of New York
Application January 18, 1954, Serial No. 404,739
4 Claims. (Cl. 95—96)



2. In an X-ray film processing tank equipped for control by fluid contact of the temperature of solutions in separately suspended auxiliary containers within a processing compartment, the improvement comprising a barrier extending the full width of said processing compartment at a height substantially below the tops of said containers in suspension; a relatively shallow bottomed compartment bounded by said barrier and extensions of the walls of said processing compartment; means circulating temperature controlled fluid in a direction normal of said barrier and means for vertically disposing of fluid cascaded over said barrier exteriorly of the walls of said tank.

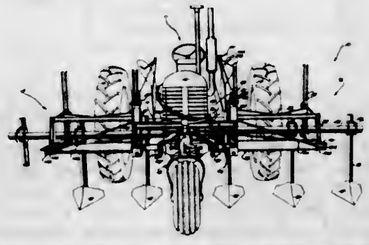
2,747,483
LEVEL CONTROL FOR TRACTOR-DRAWN IMPLEMENTS
Arthur H. Gross, Forest City, N. C.
Application August 6, 1953, Serial No. 372,749
2 Claims. (Cl. 97—46.07)



1. In a tractor having means for the attachment of an implement including a pair of lifting arms, a power-operated control unit comprising a pump and a device operable by fluid from the pump for imparting movement to said arms and, accordingly, for moving the implement up and down with reference to the tractor, valve means for the device, a manually movable lever for moving said valve means, means operable automatically upon movement of said manually movable lever to a predetermined position for closing said valve means for holding the implement on a predetermined level, and a shaft on which the manually movable lever is fixed and being

movable with the manually movable lever for controlling said valve means; the combination of a control arm having a disk portion thereon oscillatable on said shaft, a friction disk engaging said disk portion, means on said manually movable lever for engaging the side of said friction disk opposite from the disk portion on said arm, spring means normally urging the friction disk, the disk portion of said control arm and the means on said manually movable lever in contacting engagement, a lifting arm extension movable with said lifting arms, and a link connecting the free ends of said extension and said control arm whereby said manually movable lever may be moved to a predetermined position for raising or lowering the implement to the required depth of cut and whereby any variations in the level of the implement will automatically effect movement to the manually movable lever for operating said valve means to return the implement to said predetermined position to thereby maintain the implement at a constant depth of cut.

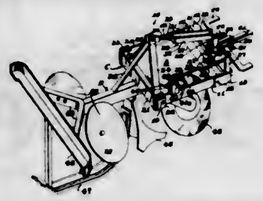
2,747,484
TRACTOR MOUNTED TOOL BAR
John B. Fraga, Stockton, Calif., assignor to J. I. Case Company, Racine, Wis., a corporation of Wisconsin
Application December 5, 1952, Serial No. 324,369
10 Claims. (Cl. 97—46.51)



2. In combination with a tractor, a tractor-mounted cultivator comprising a transverse tool bar secured to said tractor adjacent one end thereof and extending laterally therefrom, a lift arm carried by said tool bar and rockable about the axis thereof, an upwardly extending standard rigidly secured to said tool bar adjacent said lift arm, a toggle linkage connected with said lift arm and with said upwardly extending standard at a point spaced above said transverse tool bar, an actuating link pivotally connected to said toggle linkage adjacent the apex thereof, a transverse rock shaft carried by said tractor, said rock shaft having formed thereon a rock arm, power operated means connected with said tractor and carried by said tool bar for rocking said rock shaft in one direction, pivot means for connecting said rock arm to said actuating link wherein upon said rock shaft's being rocked in said one direction, said toggle linkage is caused to buckle sufficiently to swing said lift arm upwardly from a working position to a transport position.

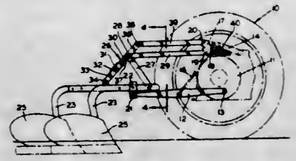
2,747,485
TRACTOR IMPLEMENT SUPPORTING ATTACHMENT
Donald G. Smith, Jacksonville, Fla., assignor to Hester Plow Company, Inc., Jacksonville, Fla., a corporation of Florida
Application March 2, 1953, Serial No. 339,515
5 Claims. (Cl. 97—46.59)

1. An agricultural apparatus for bearing ground engaging implements and adapted to be drawn by a tractor, comprising a frame having spaced side members and transverse front and rear members pivotally secured to the front and rear ends of said side members respectively, an upstanding post secured to one of said side members, a bell crank-shaped lost motion link having one upstanding arm and one downwardly extending arm, said link being pivotally mounted on said post, means secured to said upstanding arm for rotating said link to a position wherein said downwardly extending arm engages said last



mentioned side member, said means being secured to said transverse front member whereby said side members and said rear transverse member will be raised about said first transverse member upon continued operation of said means.

2,747,486
IMPLEMENT FRAME
Raymond W. Wilson, Ferndale, Mich., assignor, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application April 21, 1953, Serial No. 350,055
6 Claims. (Cl. 97—47.8)

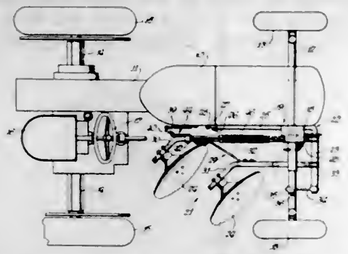


3. In an implement protection connection having a ground-working element and an implement frame rigid with said element and having a tendency to rotate under draft forces generated by said element to elevate said element from its working position, the improvements of a pair of differentially longitudinally displaceable members, a pair of movable overcenter toggle links operatively connecting said frame and said members to subject one of said members to a compression force directly proportional to implement draft as determined by the tendency of said frame to rotate, said members and said toggle links preventing such rotation, and means actuated by differential displacement of said members when implement draft exceeds a predetermined amount to move said toggle links from overcentered position, thereby releasing said frame for rotation.

2,747,487
TRACTOR MOUNTED PLOW
James Morkoski, Memphis, Tenn., assignor to International Harvester Company, a corporation of New Jersey
Application April 20, 1953, Serial No. 349,713
4 Claims. (Cl. 97—47.37)

1. For use with a tractor having a transverse wheel-carrying axle structure pivotally mounted on a central horizontal axis for floating movement of the wheeled ends of the axle structure in a vertical plane about said pivot axis: an agricultural implement comprising a draft member having a transverse portion adjacent and generally parallel to the axle structure at one side of said axis and a longitudinally extending portion pivotally mounted in draft-transmitting relation on the tractor on a horizontal axis substantially in alignment with the pivot axis of said axle structure, means connecting the transverse portion of the draft member to the axle at a location spaced

from the latter's pivot axis to accommodate floating movement of said draft member in a vertical plane with the axle



structure, and an earth-working tool-carrier mounted on the transverse portion of said draft member.

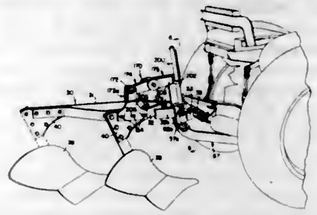
2,747,488
CULTIVATOR ATTACHMENTS
Eugene Norton, Fayetteville, N. C.
Application January 14, 1953, Serial No. 331,199
2 Claims. (Cl. 97—47.43)



1. A cultivator attachment for a tractor, said tractor comprising a support between the front and rear wheels thereof and actuating means for raising and lowering said support, said cultivator attachment comprising a horizontally extending bracket and means for attaching said bracket to said support on the tractor with said bracket extending generally transversely of said tractor, said bracket having a generally W-shaped construction comprising an intermediate angular portion and arms extending laterally outwardly from the ends of said angular portion, said bracket being provided with a socket opening in each of said arms and a socket opening in the region of the apex of said intermediate angular portion, vertical standards secured in said socket openings and extending downwardly from said bracket, and cultivating discs connected to said standards, said bracket of generally W-shaped construction mounting said vertical standards in position for supporting said cultivating discs in substantially parallel planes in staggered substantially end to end relation and with a relatively wide transverse spacing therebetween such that grass, weeds, stones, etc., will pass freely between said discs and cannot accumulate between said discs to such extent as to clog the space between said discs, said standards each having a separate adjustable mounting in its socket opening providing for individual vertical and angular adjustment of each of said discs.

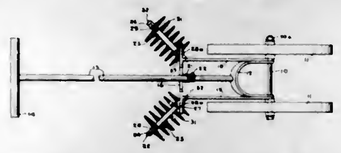
2,747,489
TRACTOR-MOUNTED PLOW
Walter H. Silver, Moline, Ill., and William V. Lohrman, Davenport, Iowa, assignors to Deere & Company, Moline, Ill., a corporation of Illinois
Application December 9, 1950, Serial No. 200,028
5 Claims. (Cl. 97—47.51)

1. The combination with a tractor having a vertically swingable bail and means on the tractor for swinging said bail, of an agricultural machine including a ground working tool and an attaching part shaped to receive the rear portion of said bail, means for connecting said attaching part to said bail, a rigid member connected with said tool and extending forwardly of the tractor beyond said bail, means pivotally connecting said tool and rigid member to said attaching part for movement about a generally transverse axis, a bracket having a portion longitudinally adjustable relative to said ground working tool, and overload



release means connected between said rigid member and said bracket portion for releasably holding said tool and rigid member against relative movement about said transverse axis.

2,747,490
COIL SPRING TYPE ROW CROP CULTIVATOR
Harrison Brown, Fargo, N. Dak.
Application December 8, 1952, Serial No. 324,681
4 Claims. (Cl. 97—59)

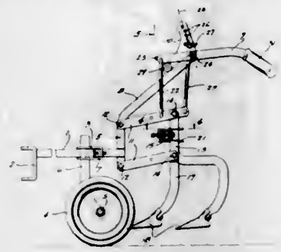


3. A cultivator for row crops, comprising a wheeled frame, a pair of inverted U-shaped supporting members mounted on said frame in laterally spaced side-by-side relationship, a pair of ground working tools consisting of spring steel helical coils of high flexibility formed with the turns of the coils in spaced relationship with each other and with the opposite ends of the coils disposed on a horizontal axis extending through the center of the respective coils, each of said coils adapted for mounting on the wheeled frame at diverging angles to the path of movement of the frame for disposition on either side of one crop row and between two adjacent crop rows, and adjustable means loosely journaling the opposite ends of each of the coils to the respective supporting members permitting rotary movement of each coil about its axis and adjustable longitudinal and wobbling movement of all or a portion of the turns thereof within the limits of the arms of the supporting member according to the condition which the coils encounter in the soil and without possible injury to plants in any of the crop rows.

2,747,491
TRACTOR DRAWN CULTIVATOR WITH IMPROVED LIFT
Mervil Hallead, Milwaukee, Wis., assignor to The Midland Company, South Milwaukee, Wis., a corporation of Wisconsin
Application December 22, 1950, Serial No. 202,329
3 Claims. (Cl. 97—157)

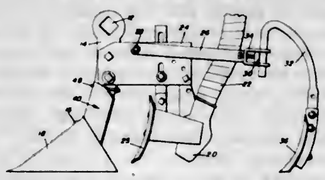
2. In a tractor-driven garden implement including a series of tools for working the soil, a frame, means connecting said tools and said frame for drawing the tools at selected depths in the soil and providing limited relative vertical movement allowing raising of the tools above the level of the soil, support means for said tools including a crank and linkage means connecting said crank and said tools, abutment means limiting rotation of said crank between upper and lower positions, the lower position being spaced rotationally from the lower dead center of said crank respecting said connecting member and at which said tools are supported thereby from

said frame in a lower position, the upper position being located over and past the upper dead center of said crank respecting said connecting member and at which said tools are supported from said frame member in a raised position, and a manually operable lever having handle means carried by said frame rearwardly thereof and forwardly of the operator's position, said lever being con-



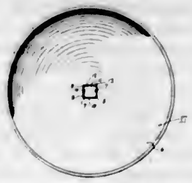
nected to said tools and disposed for raising of the tools with the manual downward movement of said handle means, said crank providing the securement of the tools in the raised position and the securement of the handle means in a convenient lower position for lifting of the implement and manipulation of the implement by said same handle means.

2,747,492
CLOD KNOCKER
Edward F. Doskocil, Burlington, Tex.
Application January 19, 1954, Serial No. 404,932
2 Claims. (Cl. 97—205)



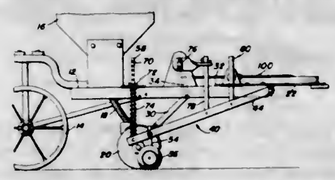
1. In combination with a planter, a clod knocker attachment, said planter including a sweep support having a shank, a sweep carried by said shank, said clod knocker attachment being in the form of a plate having a central portion overlying and secured to said shank, and rearwardly and outwardly directed wings, said wings being disposed rearwardly of said sweep and having lower portions engaging the rear of said sweep to form a direct continuation of said sweep, said central portion terminating above lower edges of said wings and said shank passing between said wings.

2,747,493
HARROW DISK WITH KNOCKOUT CENTER
Henry J. Noll, Milwaukee, Wis.
Application October 23, 1951, Serial No. 252,649
1 Claim. (Cl. 97—217)



A harrow disk comprising a body having an axial opening therein of a square shape, notches in the corners in the opening defining lips projecting equidistantly into the opening, said lips being divided from the body by fine lines opening into said corner notches, each of said lips having fine lines arranged in spaced parallel relation to the first fine lines and opening into said corner notches, and a plurality of equidistantly spaced notches in each lip arranged at right angles to the fine lines forming a plurality of independent breakable portions.

2,747,494
FIELD MARKER
Arnold R. Rasmussen, Sharon, N. Dak.
Application September 17, 1951, Serial No. 246,961
2 Claims. (Cl. 97—230)

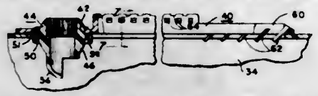


1. In an agricultural implement including a vehicular frame attachable to a draft vehicle, tool means pivotally supported within the confines of said frame, a rotatable lifter bar journalled transversely on said frame, linkage means extending between said tool means and lifter bar, said lifter bar including end portions extending laterally beyond side portions of said frame, and means operatively connected to said lifter bar for adjusting said tool means between an operative and inoperative position; a field marker attachment for defining a reference mark transversely of the vehicular frame, said field marker attachment including a marker arm, a forward end portion of said marker arm including means thereon for pivotally connecting said arm to a forward portion of the vehicular frame, an opposite end portion of said marker arm including a pivotally connected vertical first guide member extending upwardly through a first guide plate attachable in outward spaced relation to said vehicle frame, resilient means engageable between said marker arm and guide plate for urging said marker arm in a downward direction, a ground engaging marking tool dependingly supported on said marker arm on an intermediate portion thereof, an upwardly extending lift rod pivotally supported on an intermediate portion of said marker arm between the forward end portion thereof and said ground engaging marking tool, a lift arm including a portion containing a horizontal opening loosely receiving therethrough the lift rod, stop means included on an end portion of said lift rod extending through said lift arm, said stop means being engageable with an upper surface of said lift arm, said lift arm including a portion connectable to one end portion of the lift bar on said frame and rotatable therewith for raising and lowering said marking arm and marking tool in unison with said tool means on the frame, and lock means operatively connected to said marker arm for optionally restraining said marker arm in a raised position independently of the position of the tool means on said frame.

2,747,495
REFRIGERATED AIR DISTRIBUTING APPARATUS
Lloyd E. Muller, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 26, 1952, Serial No. 328,037
4 Claims. (Cl. 98—2)

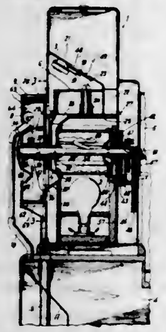
1. In a system for conditioning the air for the passenger compartment of an automobile having a front seat and a back seat; an air distributing duct extending along the side wall of said passenger compartment at an elevation above said seats; said duct having a first air outlet

adjacent said back seat; a first outlet grill for said first air outlet comprising an air deflector supporting socket adjacent one end thereof, an air deflector mounted in said socket for adjustably directing one portion of the incoming air in any desired direction; said air deflector including means for shutting off the flow of air therethrough; one portion of said first grill having a curved surface provided with first series of outlets for directing a curtain of air towards the ceiling of the passenger compartment and second series of outlets for directing a curtain of air downwardly adjacent the side wall of said compartment, and means for shutting off the flow of air through said first and second series of outlets; said duct having a second air outlet adjacent said front seat; and



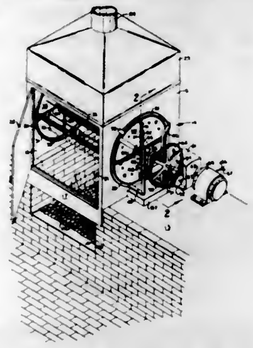
a second outlet grill for said second air outlet comprising an escutcheon plate having an air deflector supporting socket adjacent one end thereof, an air deflector mounted in said last named socket for adjustably directing one portion of the incoming air in any desired direction; an air outlet grill formed adjacent the opposite end of said escutcheon plate, said outlet grill having fixed louvers integrally formed with said last named plate for directing a second portion of the incoming air in a direction forwardly relative to said front seat; the mid-portion of said last named escutcheon plate having a curved surface provided with first outlet means for directing a curtain of air towards the ceiling of the passenger compartment and second outlet means for directing a curtain of air downwardly adjacent the side wall of said compartment.

2,747,496
AGITATOR FOR REMOVING CHAFF FROM ROASTED COFFEE
Herman Schmid and Albert P. Hobush, Kingston, N. Y., assignors to Incoro, Inc., Kingston, N. Y., a corporation of New York
Original application December 16, 1949, Serial No. 133,427, now Patent No. 2,700,225, dated January 25, 1955. Divided and this application August 21, 1951, Serial No. 242,852
9 Claims. (Cl. 99—236)



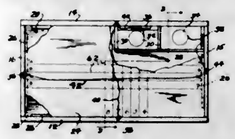
1. Roasting apparatus comprising a housing, a roasting cylinder therein, an external fixed casing on one side of the housing in line with one end of the cylinder, a shaft in the housing for supporting said cylinder, a short shaft in the casing detachably keyed to one end of the first named shaft, an agitator member enclosed in the casing on said short shaft, a sleeve in the housing receiving the other end of the first-named shaft and having a detachable operative connection therewith, a bearing in the housing enveloping said sleeve, and means on the sleeve to rotate the sleeve, the shafts, the cylinder and the agitator member.

2,747,497
BARBECUING APPARATUS
Jay T. Brown, York, S. C.
Application June 12, 1952, Serial No. 293,156
4 Claims. (Cl. 99—427)



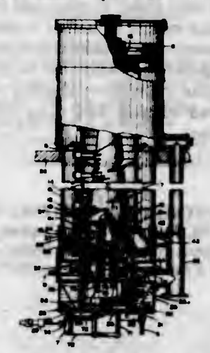
1. In a barbecuing apparatus having a housing and a driven rotatable reel mounted therein and wherein the reel includes reel heads fixed on each end of a reel axle, means in association with said reel for holding articles of meat and the like for cooking the same without piercing comprising a plurality of groups of inner fixed cage elements secured to said reel in circularly-spaced relation around said reel axle and each group being formed from a plurality of longitudinally extending spaced rods having their ends secured to said reel heads, said reel heads having a plurality of radially extending slots therein communicating with the periphery of said reel heads and being spaced from the axis of said reel heads, there being one of said slots in each of said reel heads for each of said fixed cage elements disposed between said reel heads, a plurality of outer movable cage elements slidably mounted in said slots, there being one of said movable cage elements for each group of said fixed cage elements, said movable cage elements comprising a plurality of longitudinally extending members and a plurality of arcuate members secured to the longitudinally extending members, and means for resiliently clamping the movable cage elements against articles positioned in the fixed cage elements.

2,747,498
PAPER AND MAGAZINE RACK AND BALER
Menno Bellar, Fitchburg, Mass.
Application November 27, 1953, Serial No. 394,640
4 Claims. (Cl. 100—34)



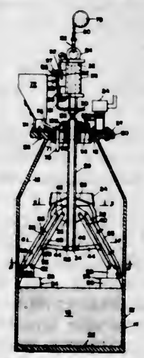
1. A storage rack and bale for periodicals comprising front, rear, and connecting side walls, a horizontal partition for supporting the periodicals, means for loosely holding the horizontal partition enclosed by said walls intermediate the top and bottom of the rack, a cord holder beneath the partition, a cord guide, one of said walls having a vertical bore removably receiving said cord guide, and means in a wall opposite said one wall for holding a cut end of cord, said last-named means including means forming a notch at the top of said wall and a solid plate secured in notch covering position at the interior side of said wall, and a loose cover closing the rack and covering said guide and said cord-holding means.

2,747,499
DISCHARGE STRUCTURE FOR A PULP PRESS
Claude C. Beeman, Saginaw, Mich., assignor to Jackson & Church Company, Saginaw, Mich., a corporation of Michigan
Application January 16, 1953, Serial No. 331,622
6 Claims. (Cl. 100—147)



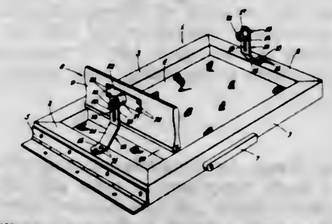
1. In a discharge structure for a pulp press having a vertically cylindrical screen and a concentric, radially outwardly spaced outer housing, the combination comprising: a base plate having a central opening therethrough, a pair of upstanding annular housings arranged concentric with said central opening of said base plate and each connected at its lower edge to said base plate; an annular trough connected with the upper edge of the outermost of said annular housings, the radially inner and outer upper edges of said annular trough respectively adapted for connecting to the lower edges of the screen and said outer housing, respectively; a spider positioned concentrically with said central opening in said base plate and having upstanding legs at the ends of the arms of said spider, said upstanding legs being spaced radially inwardly of the inner wall of the innermost annular housing; a conical wedge ring supported at the upper ends of said upstanding legs; an external skirt depending from said ring and engaging an inner surface of said inner annular housing, said ring being movable vertically with respect to said inner housing for varying clearance between said ring and the lower edge of the radially inner wall of said trough; means extending through said central opening for imposing a pressure of constant value onto said ring for urging same upwardly.

2,747,500
TAMPING TOOL
Earl R. Weatherly, Media, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
Application July 8, 1953, Serial No. 366,766
7 Claims. (Cl. 100—217)



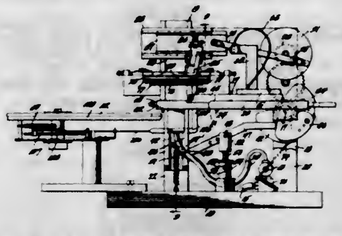
1. A tamping tool for use in receptacles with constricted openings comprising a support plate, a sleeve extending through the plate in sliding engagement therewith, a plurality of laterally movable vibrators suspended from the sleeve, means to control the lateral movement of said vibrators through the sleeve, rotating means engaging said sleeve, means for coordinating the rotary motion and lateral movement of the vibrators, and means to conduct the material to be tamped through the plate to the loci of the vibrators.

2,747,501
SQUEEGEE HOLDER FOR SILK SCREEN-PRINTING
Herbert C. Latimer, Modesto, Calif.
Application August 19, 1954, Serial No. 450,986
7 Claims. (Cl. 101—114)



5. In silk-screen printing equipment the combination with an open frame, a silk-screen supported on the frame, and a transverse squeegee supported on and upstanding from the screen and movable by hand lengthwise of the frame, between the ends thereof; of a magnetic holding assembly for the squeegee comprising a bracket secured to and upstanding from one end of the frame, a fixed magnet secured on the bracket and projecting toward the squeegee, and a holding plate secured on the squeegee and facing the magnet for contacting engagement therewith.

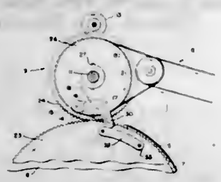
2,747,502
SCREEN PRINTERS
Henry A. Gattuso, Adams, Mass.
Application January 21, 1953, Serial No. 332,325
8 Claims. (Cl. 101—126)



1. A stencil printing machine comprising a holder for a stencil, a work holder reciprocally mounted for moving work placed thereon into and out of contact with the stencil, a spreader mounted for movement parallel with the plane of the stencil and transversely to the plane thereof, means for moving the work holder to and away from the stencil, means for adjusting the stroke of the work holder to vary the contact pressure between the work and the stencil, means for adjusting the period of contact between the work and the stencil, means for reciprocating the spreader parallel with the stencil, including means for adjusting the length of stroke and speed of travel, means for raising the spreader from the stencil, means for positively and resiliently urging the spreader against the stencil, said spreader reciprocating means and raising means being keyed to raise said spreader at the end of a spreader stroke in one direction of reciprocation, and to permit lowering of said spreader by said resilient means at the end of a spreader stroke in the other direction of re-

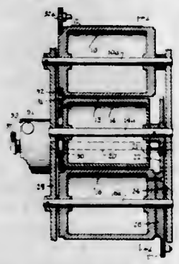
ciprocation, said work holder moving means being keyed to said spreader reciprocating means to bring a work into stencil contact during spreader stroke in the first of said directions, and to remove the work away from the stencil during spreader stroke in the second of said directions.

2,747,503
ROTARY PRINTING PRESS SHEET TAKE-OFF-DEVICE
Oscar A. Fors, Chicago, Ill., assignor to Steelograph, Inc., a corporation of Illinois
Application July 7, 1952, Serial No. 297,543
3 Claims. (Cl. 101—232)



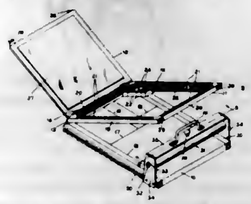
1. Drive means for imparting intermittent rotary motion to a shaft, comprising: a drive gear continuously meshing with a driven gear idly mounted upon the shaft; a plate-like member keyed to the shaft and having an outwardly extending projection movable in a circular path about the shaft; an elongated, circumferentially extending lug mounted near the periphery of the drive gear and movable in a path intersecting the path of movement of the projection, said lug having an arcuate surface concentric with the gear and carried intermittently into the path of the projection, said projection being first arrested by moving against said lug surface and then sliding over said arcuate surface of the lug as the lug is carried forwardly by the drive gear, to arrest rotary movement of said plate-like member and shaft until the lug passes; and frictional drive means adjacent said driven gear on the shaft, said drive means being yieldably urged against said plate-like member to impart rotary movement to the shaft when the lug and projection are out of engagement.

2,747,504
REGISTERING MECHANISM FOR ROTARY OFFSET PRINTING MACHINES
James P. Fay, Norwalk, Conn.
Application April 20, 1953, Serial No. 349,652
5 Claims. (Cl. 101—248)



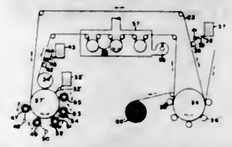
1. In an offset printing press, a plate cylinder and blanket cylinder geared together at one end of the cylinder for simultaneous rotation; an impression cylinder cooperating with the blanket cylinder and having a driving gear at the other end of the cylinder and means for feeding paper to the impression cylinder in timed relation to the rotation of the impression cylinder, the combination of a drive shaft having a first gear secured thereto adjacent one end of the cylinders and connected to the gear of the impression cylinder to drive the same; a second gear mounted on the shaft for relative rotation with respect to said shaft, said second gear being located adjacent the other end of the cylinders and connected to the gearing connecting the plate and blanket cylinders to drive said plate and blanket cylinders; and means for adjustably connecting said second gear to said shaft and normally operative to rotate said second gear in phase with said first gear to drive said plate, blanket and impression cylinders in unison, said means including a differential mechanism having a manually rotated adjustable gear to alter the phase relation between said first and second gears to simultaneously alter the relative angular relation between said interconnected blanket and plate cylinders and the impression cylinder.

2,747,505
SIGN PRINTING OR PAINTING MACHINE
Ernest M. Bailey, North Canton, Ohio
Application September 1, 1953, Serial No. 377,889
5 Claims. (Cl. 101—287)



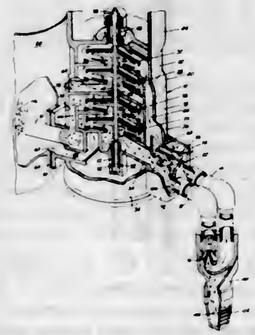
1. A device of the character described comprising a work supporting platen, a type chase, means hinging one edge of the type chase to a corresponding edge of the platen, a rod-like member detachably supported in the type chase, type blocks detachably mounted upon the rod-like member, type upon the under sides of the type blocks and corresponding indicia on the upper sides thereof, a pressure plate, means hingedly connecting the pressure plate to the hinged edge of the type chase, means for locking the swinging edge of the pressure plate to the swinging edge of the type chase, a pressure roller, and means for moving the pressure roller over the top surface of the pressure plate for pressing the type blocks toward the platen.

2,747,506
METHOD OF CLEANING TEXTILE PRINT WASH BLANKETS
William C. Ross, Winchester, and Alec W. Niconchuk, Peabody, Mass., assignors to W. R. Grace & Co., a corporation of Connecticut
Application February 6, 1952, Serial No. 270,188
4 Claims. (Cl. 101—424)



1. The method of continuously cleaning an endless textile print wash blanket on a printing range which includes as continuous steps working into the inter-fiber space of the working face of a textile print blanket having a working face composed of a textile layer formed from elastic cold-drawn fibers of a synthetic, linear, crystalline, high polymer, said fibers being essentially insoluble in and impermeable to textile printing colors and water, a solution of a liquid petroleum hydrocarbon rubber extender in a low rubber solvency volatile liquid hydrocarbon, drying the blanket to leave a substantially dry film of the rubber extender on the face and fibers thereof, passing the dry blanket through the printing station and depositing textile coloring matter on said dried film on the working face thereof, flooding the blanket with water and passing the blanket under brushes to remove surface color from the blanket, re-applying the rubber extender solution, and repeating the succession of steps continuously during the operation of the printing range.

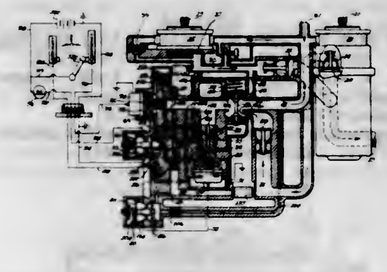
2,747,507
SELF-PRIMING DEEP WELL PUMPING SYSTEM
Candido Jacuzzi, Lafayette, and Floyd M. Nash, Berkeley, Calif., assignors to Jacuzzi Bros., Inc., Richmond, Calif., a corporation of California
Application February 9, 1953, Serial No. 335,742
6 Claims. (Cl. 103—5)



1. A pump system comprising a pump unit having a plurality of impeller stages mounted on a shaft in a common casing, a motor mounted on said casing in driving relation with said shaft, partition means dividing said impeller stages into lower and upper groups of series-connected stages, a tank forming a priming chamber, an injector assembly, a pressure line interconnecting the output side of said upper group of stages and said injector assembly, a suction line interconnecting said injector assembly with the input side of said lower group of stages, separate flow connections between said chamber and the output side of said lower group of stages and between said chamber and the input side of said upper group of stages, an accessibly located check valve disposed in said suction line adapted upon cessation of flow through said injector assembly to prevent a reverse flow through said suction line, an accessibly located valve disposed in said pressure line, a diaphragm to open and close said pressure line valve, and means ensuring rapid opening and closing of said pressure line valve comprising means exposing one side of said diaphragm to the pressure condition in said pressure line above said valve, and means exposing the other side of said diaphragm to the pressure condition in said suction line above said suction line valve, said pressure line valve being adapted to close when said pressure conditions are substantially equalized and being adapted to open upon relative increase of said pressure line pressure condition with respect to said suction line pressure condition.

2,747,508
DUAL FUEL SUPPLY FOR A GAS TURBINE
Leonard W. Kell, Wayne, Mich., assignor to Holley Carburetor Company, Detroit, Mich., a corporation of Michigan
Application July 26, 1951, Serial No. 238,680
16 Claims. (Cl. 103—11)

1. A dual fuel pump system for a prime mover having a primary pump, a secondary emergency pump, means by which both are constantly rotated by said prime mover, an outlet from the primary pump to said prime mover, a first non-return valve therein, a first escape passage leading from said outlet upstream of said first non-return valve, an outlet from the emergency pump leading to the prime mover a second non-return valve in said outlet a second escape passage from said emergency pump, a cylindrical chamber having two larger end diameters and a smaller intermediate portion leaving a shoulder in between the two ends, a first annular port at one end, a second annular port at the other end of said cylindrical chamber, a double-headed piston acting as a selector valve sliding in the cylinder and designed to close one port and to open the other two annular valve seats at the two changes in diameter of said cylinder located one on each side of said shoulder, two corresponding shoulders on said piston valve adapted to engage alternatively with the seats on said intermediate shoulder, the first escape passage terminating in said first annular port, the 2nd escape passage terminating in said 2nd annular port, a first spring means for biasing

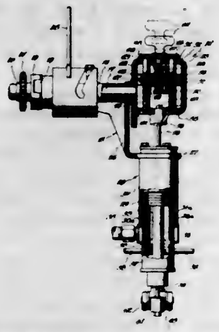


the double-headed valve so as to close the second annular port and means for reversing the motion of said piston selector valve including a servomotor valve controlling said piston valve, one high and a first and second low pressure ports in said servomotor valve, second spring means adapted to bias said servomotor valve into a position in which its first low pressure ports admits low pressure to that end of said cylinder towards which the first spring means tends to move said slave valve, a moving wall connected to said servomotor valve, a pressure chamber associated therewith, a passage leading therefrom to the pressure in first escape passage generated by said primary pump so as to move said servomotor valve and said moving wall against said second spring so as to disconnect said first low pressure port from one end of said cylinder and to admit high pressure fluid to the first mentioned end of said cylinder to overcome the first spring means so as to move said piston valve to open the escape port from said secondary pump and to close the escape port from said primary pump.

2,747,509
AMMONIA METERING PUMP
Stuart D. Pool, Moline, Ill., assignor to International Harvester Company, a corporation of New Jersey
Application November 2, 1951, Serial No. 254,605
11 Claims. (Cl. 103—38)

1. In a pump having a support, a cylinder carried by the support, a piston and rod slidable in the cylinder, a driven shaft rotatably carried by the support, an eccentric drive member mounted on said shaft and rotatable therewith, said member being radially adjustable to vary its eccentricity, means serving as a pitman connected at one end to said rod, a connecting element at the other end of the pitman, means for connecting said element to said eccentric member for reciprocating the pitman in response to rotation of the shaft, means for adjusting said

element to vary the effective length of said pitman, and means operatively connecting said adjusting means to said



eccentric member for simultaneously adjusting the eccentricity thereof.

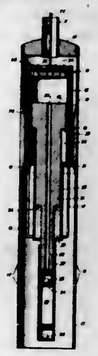
2,747,510
PUMP FOR FLUID AND SEMI-FLUID MATERIALS SUCH AS PLASTER AND THE LIKE
Ernest A. von Seggern, Burbank, Calif., assignor to Soundrive Pump Company, Hollywood, Calif., a corporation of California
Application January 12, 1952, Serial No. 266,226
22 Claims. (Cl. 103—44)



1. In a pump, the combination of: a flexible tube, an intake valve in communication with one end of said tube, an exhaust valve in communication with the other end of said tube, another flexible tube having one end in communication with said exhaust valve of said first-mentioned tube, chamber means for each of said tubes for enclosing a hydraulic liquid body therearound, liquid displacing means for each of said liquid bodies for accomplishing successive expansion and contraction of the tubes, the liquid displacing means for the liquid body around said first-mentioned tube having a greater volumetric liquid displacement per stroke than the liquid displacing means for the liquid body around the second-mentioned tube, and means for actuating the liquid displacing means for the two tubes with a phase difference such that the expansion period for the second tube overlaps a substantial portion of the contraction period for the first tube, all in such manner that the liquid displacing means of larger volumetric displacement pumps material from the first tube both into and through the second tube during the period of overlapping first tube contraction and second tube expansion.

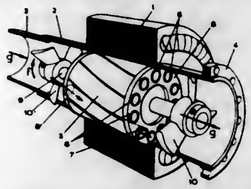
2,747,511
DEEP WELL PUMP
Marshall C. Turner and Theodore Miles, Long Beach, Calif., assignors to Phillips Petroleum Company, a corporation of Delaware
Application November 25, 1952, Serial No. 322,444
6 Claims. (Cl. 103—46)

1. In a liquid powered oil well pumping assembly of the character described, a stationary oil flow tubing disposed in an oil well, a pump case disposed fluid-tight in the lower end of said flow tubing, said pump case having an upper and large diameter cylinder, a bottom and small diameter cylinder and a cylinder of intermediate diameter disposed rigidly to and between said large diameter cylinder and said small diameter cylinder, a reciprocating piston element in said case comprising a large diameter piston, a small diameter piston, and an intermediate diameter piston disposed rigidly therebetween, the three pistons being disposed operatively in the three corresponding cylinders, said cylinders and said pistons disposed along a common axis, a tubular opening along the axis of said piston element, a valve in the lower end of said tubular opening adapted to pass production oil upward, a second valve in the lower end of the small diame-



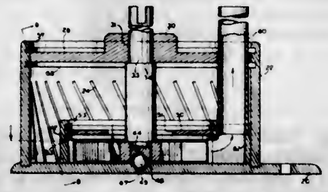
ter cylinder and below said first valve, said second valve being adapted to pass production oil into said small diameter cylinder, sealing means intermediate the large diameter cylinder and the oil flow tubing to prevent leakage of production oil therebetween, and a tube means communicating with the intermediate diameter cylinder at a level below said intermediate diameter piston at the bottom end of its stroke for introduction of power liquid to lift said reciprocating element and force production oil upward in said oil flow tubing and for exhausting power liquid therefrom at such time as the fluid pressure in said oil flow tubing forces said piston element downward on its return stroke.

2,747,512
MOTOR PUMP
René Paul Fouché, Paris, France
Application May 22, 1952, Serial No. 289,381
Claims priority, application France May 24, 1951
2 Claims. (Cl. 103—87)



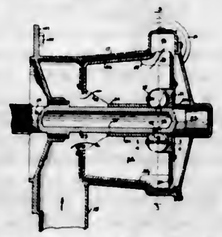
1. A motor-pump comprising a fluid feeding pipe including a rectilinear portion of circular cross-section, an annular stator disposed around said rectilinear portion and secured to said pipe, means for energizing said stator, bearings inside said rectilinear portion, a rotor adapted to rotate inside said rectilinear portion with a slight clearance between said rotor and said rectilinear portion, said rotor being disposed around a spindle revolving inside said bearings and consisting of a first and a second one of two spaced electrically conductive plates, each one of said plates having a same number of passages provided therein, and of a number of tubular members of an electrically conductive material, equal to the number of passages provided in each of said plates, each one of said tubular members being helically wound around the axis of said rotor and connecting a passage provided in said first plate to a passage provided in said second plate.

2,747,513
BILGE PUMP
Herbert J. Atkinson, Sudbury, Mass.
Application January 10, 1955, Serial No. 480,881
1 Claim. (Cl. 103—103)



A bilge pump comprising an outer casing, an inner casing in the lower part only of said outer casing and substantially spaced therefrom and having an inner annular intake opening from the interior of said outer casing, an impeller rotatable in said inner casing, and an exhaust connection from said inner casing, said outer casing having a slotted cylindrical side wall and having a manually-removable slotted top plate which also provides a top bearing for the impeller.

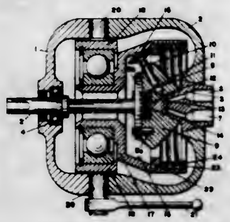
2,747,514
SCAVENGE LINE CENTRIFUGE
Miles Lowell Edwards, Portland, Oreg.
Continuation of abandoned application Serial No. 529,372, April 3, 1944. This application July 22, 1952, Serial No. 300,161
7 Claims. (Cl. 103—113)



1. In a centrifuge for separating the gaseous and foam content from lubricating oil in an internal combustion engine lubrication system, a casing adapted to be mounted on said engine, a rotor in said casing comprising a peripheral wall defining a rotor chamber, a rotor shaft having an end extending from said casing for driving engagement by an internal combustion engine, a longitudinal passage in said shaft, radial ports in said shaft providing communication between said passage and rotor chamber, radially movable valve means on said shaft for said ports, said valve means having sufficient weight to open said ports by centrifugal force when immersed in said foam content and having sufficient buoyancy to close said ports when immersed in the liquid content of said oil and a vent port in said extending end of said shaft to vent foam and oil particles through said rotor shaft when said radial ports are open.

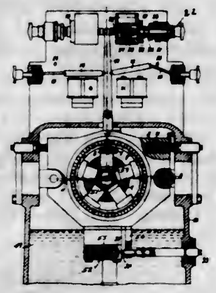
2,747,515
ROTATIONAL PISTON PUMP
Carl Oscar Josef Montelius, Stockholm, Sweden
Application December 28, 1951, Serial No. 263,822
6 Claims. (Cl. 103—161)

1. A hydraulic device of the type described comprising a rotatable member providing cylinders, pistons slidably disposed in said cylinders, and a cam member providing a cam surface, said pistons having rounded ends engaging the cam surface, said pistons and cam surface being inclined toward each other and at acute angles relatively to the axis of said rotatable member with the rounded ends of said pistons engaging the cam surface laterally



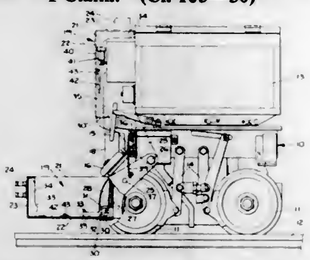
of the longitudinal axes of said pistons in all operative positions of said cam and said pistons, whereby, during displacement of said pistons in said cylinders, the rounded piston ends will roll upon the cam surface with attendant rotary movements of the pistons about their own longitudinal axes.

2,747,516
RADIAL MACHINE
Hans Gastrow, Berlin-Lichterfelde, Germany
Application August 16, 1952, Serial No. 304,739
Claims priority, application Germany August 20, 1951
4 Claims. (Cl. 103—161)



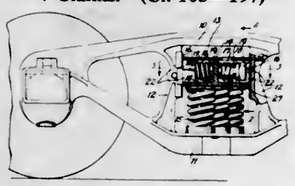
1. A radial piston pump or motor comprising in combination: inlet and outlet conduit means, a cylinder barrel provided with a plurality of radially arranged cylinders, a plurality of pistons mounted in said cylinders for movement relative thereto and for cooperation with said inlet and outlet conduit means, shiftable guide ring means surrounding said pistons and movable selectively from a position concentric to said barrel to a position eccentric thereto and vice versa, slide block means surrounding said shiftable guide ring means and operable to shift the latter, lever means operatively connected to said shift ring means, toggle means provided with a knife edge portion engaging said lever means, electromagnetic means arranged for actuating said toggle means, first spring means acting upon said lever means to maintain the latter in a position corresponding to a desired maximum delivery position of said shift ring means, said first spring means being arranged to yield in response to a predetermined pressure of said pump, second spring means operable in response to the yielding of said first spring means to act upon said lever means to maintain said shift ring means in a position for reduced delivery, said second spring means being arranged to yield in response to a second predetermined pressure of said pump to thereby allow said shift ring means to move into substantially zero position.

2,747,517
TRAMMING LOCOMOTIVE
Glenn E. Edmunds, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, a corporation of Ohio
Application February 24, 1953, Serial No. 338,284
1 Claim. (Cl. 105—50)



A locomotive including a main frame, a box-like means at one end of said main frame forming an operator's platform and a drawbar including a floor, opposite upright side means and an end member, a pair of axially aligned pivot means one pivotally attaching each of said upright side means at one end and above said floor to said locomotive main frame whereby said box-like means can be swung from a generally horizontal position to an upright position to decrease the overall length of said locomotive, means between said spaced side means extending along the floor of said platform between said end member and said locomotive main frame adapted to transmit pushing and pulling forces between said end member and said main frame, and disconnectible fastening means interconnecting said last named means and said main frame at a position below said aligned pivot means, said disconnectible means cooperating with said pivot means for securing said platform and drawbar to said main frame in said generally horizontal position.

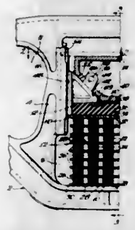
2,747,518
STABILIZED TRUCK
David S. Campbell, Glen Ellyn, Ill., assignor to Cardwell Westinghouse Company, a corporation of Delaware
Application September 5, 1952, Serial No. 308,082
7 Claims. (Cl. 105—197)



1. In a railroad car truck, a side frame including spaced columns, a spring supported bolster between said columns having opposed pockets opening toward said columns and each defined by upper, lower, and side walls, an assembly of friction shoes in each of said pockets having surfaces bearing on one of said columns and on each of the walls of said pocket, a rubber-like block bearing against said shoes and urging said surfaces thereof against said column and each of said walls with balanced pressure, and resilient means compressed between a portion of the bolster and the block to urge the latter against the shoes.

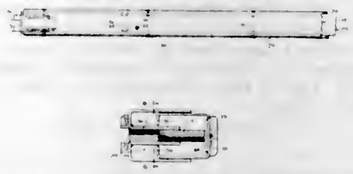
2,747,519
SNUBBED TRUCK
Charles L. Heater, Flossmoor, Ill., and Albert F. Seelig, Jr., Lemay, Mo., assignors to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application November 13, 1950, Serial No. 195,182
11 Claims. (Cl. 105—197)

1. In a friction snubbing device for a railway car truck having a bolster structure moveable within a bolster opening of a frame member; the combination of a composite resilient unit supporting said structure from said frame member, said unit including a plurality of spaced resilient pads of flowable material with spring plates sandwiched therebetween, friction surfaces at opposite sides of said



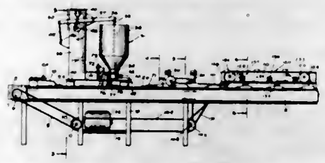
opening, friction shoes engageable with respective surfaces, and operating means for each shoe comprising at least two angularly related surfaces on a resilient pad acting against angularly related surfaces of the shoe for thrusting the shoe against the related friction surface.

2,747,520
LOADING BAR, ESPECIALLY FOR RAILWAY CARS
William F. Brown, Jr., Glenside, and Frank W. Myers, Philadelphia, Pa., assignors to The Budd Company, Philadelphia, Pa., a corporation of Pennsylvania
Application August 24, 1951, Serial No. 243,484
7 Claims. (Cl. 105—369)



7. Loading bar for freight cars and the like comprising: a first member and a second member, both coextensive with the length of the bar, said first member being provided with means for anchoring its ends in supporting structures such as reticulated plates secured to the side walls of a freight car, said first member being a U-section slidingly receiving between its side walls said second member, transverse spacers bracing at certain intervals the side walls of said first member, transverse slots formed in said second member for the passage therethrough of said spacers and forming with said spacers means for guiding said two members relative to each other transversely to their longitudinal extent, and means located at intervals along the length of said members for moving the two members away from each other.

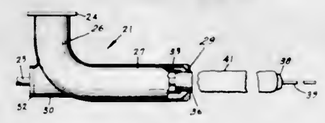
2,747,521
FOLDED CAKE MAKING MACHINE
Hubert N. Gardner, San Francisco, Calif., assignor to Langendorf United Bakeries, Inc., San Francisco, Calif., a corporation of Delaware
Application August 13, 1949, Serial No. 110,069
6 Claims. (Cl. 107—1)



1. In a cake former for folded cakes which includes a conveyor for supporting flat circular layers of cake

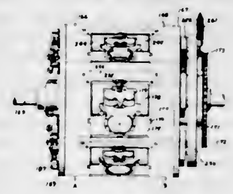
for movement along a predetermined path of travel and a dispenser over said path and positioned centrally of the latter for depositing a filler on each of said layers prior to folding thereof: positioning means engageable with said layers during said movement for centering said layers on said path in a position to receive a quantity of filler from said dispenser centrally between the lateral side edges of said layers, said means including a pair of fixed layer engaging elements spaced transversely of said path a distance less than the diameter of said layers and adapted to yieldably engage the leading edge of each of said layers at points adjacent to but on opposite sides of the centers of said layers whereby said layers will be shifted laterally of said path to a position centrally of the same.

2,747,522
MACHINE FOR MAKING AN EDIBLE PRODUCT
Dietz Newland, Cedar Rapids, Iowa
Application June 22, 1953, Serial No. 363,329
3 Claims. (Cl. 107—1)



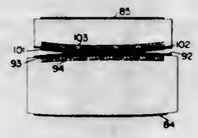
1. A combining machine for producing a food product with an edible center and an edible coating thereon comprising, a hopper with the edible coating therein, a tubular extension attached to the lower portion of the hopper, a first shaft rotatably supported in the tubular extension, a spiral feed attached to the first shaft, a ninety degree bend formed in the tubular extension, the end of the tubular extension reduced in cross-section, and a second tube extending through the tubular extension at said bend and terminating adjacent the end of the tubular extension.

2,747,523
PRETZEL TWISTING MACHINE
Edwin I. Groff, West Reading, Pa., assignor to Quinlan Pretzel Company, Inc., Reading, Pa., a corporation of Pennsylvania
Application September 21, 1951, Serial No. 247,631
7 Claims. (Cl. 107—8)



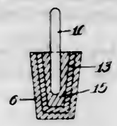
1. In a pretzel twisting machine including a drum mounted for rotation about a fixed horizontal shaft and having a plurality of forming units incorporated therein, together with a cross-support for each forming unit secured to said drum, each of said forming units including a twister plate pivotally carried thereby, a cam fixedly mounted on said shaft within the interior of said drum and providing a cam track, a lever pivotally mounted on each of said cross-supports, a cam follower on one end of each of said levers and disposed on said cam track, and operative connections between the other end of each of said levers and its respective twister plate for causing pivotal revolution of said twister plates.

2,747,524
ROLLER APRON ASSEMBLY FOR PRETZEL TWISTING MACHINE
Edwin I. Groff, West Reading, Pa., assignor to Quinlan Pretzel Company, Inc., Reading, Pa., a corporation of Pennsylvania
Original application September 21, 1951, Serial No. 247,631. Divided and this application August 30, 1952, Serial No. 307,287
3 Claims. (Cl. 107—9)



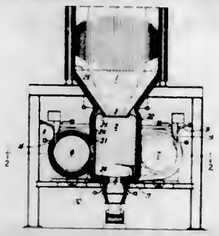
1. In a pretzel-twisting machine, a roller apron assembly for rolling a piece of dough into elongated cylindrical strips, said assembly comprising: an upper roller apron in the form of an endless belt having a bottom flight, a steel plate having a transverse outward curvature within said belt and in sliding engagement with the upper surface of said bottom flight throughout the major part of the extent thereof, and a lower roller apron in the form of an endless belt having a top flight spaced relative to the bottom flight of said upper roller apron, and a steel plate having a transverse outward curvature and in sliding engagement with the undersurface of the top flight of said lower roller apron throughout the major portion of the extent thereof, said steel plates engaging the flights of the respective aprons to impart transverse outward curvatures thereto.

2,747,525
PROCESS OF MAKING FROZEN CONFECTIONS
Clinton O. Lund, Chicago, Ill.
Application February 20, 1948, Serial No. 9,751
3 Claims. (Cl. 107—54)



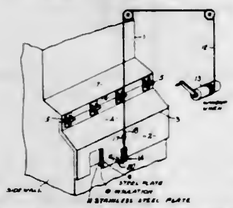
3. The process of making a composite frozen edible substance composed of a plurality of layers of differently flavored edible substances, which are normally liquid at temperatures above the freezing point of water, consisting in filling a mold with a liquid mixture of the edible substance of which the outer layer of the composite frozen edible substance is to be composed, said liquid mixture having a freezing point below the freezing point of water; subjecting said mold, with said liquid mixture therein, to the freezing action of a freezing medium for a period of time sufficiently long to produce a frozen layer of the desired thickness of said liquid mixture on the inside of said mold, and with a portion of said liquid mixture within said frozen layer remaining in an unfrozen liquid state; removing the unfrozen remaining portion of the liquid mixtures from within said frozen layer; freezing in the same manner a plurality of succeeding frozen layers of differently flavored edible liquid mixtures, said liquid mixtures having freezing points below the freezing point of water, within said frozen layer until a solid frozen confection has been formed finally by freezing all of the last used liquid mixture; whereby, a composite frozen edible substance composed of a plurality of layers of differently favored edible substances is formed for removal as an integral unit from said mold.

2,747,526
CYCLONE FURNACES
Herbert Seidl, Oberhausen, Germany, assignor to The Babcock & Wilcox Company, New York, N. Y., a corporation of New Jersey
Application July 7, 1952, Serial No. 297,424
Claims priority, application Germany July 12, 1951
8 Claims. (Cl. 110—28)



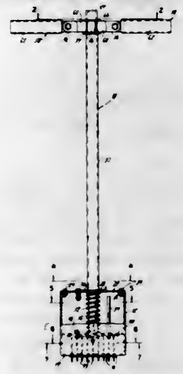
1. A cyclone furnace unit for burning ash-containing solid fuel which comprises a primary cyclone chamber of substantially circular cross-section arranged with its longitudinal axis substantially horizontal, means for introducing a stream of air and ash-containing fuel in suspension into said chamber and effecting a helical path of travel thereof along the circumferential wall of said chamber, said primary chamber having an outlet passage for products of combustion opening therefrom in tangential relation to said wall, a secondary cyclone chamber of substantially circular cross-section arranged with its longitudinal axis substantially vertical and having an inlet passage forming a continuation of said outlet passage and arranged tangentially of said secondary chamber for developing a helical gas flow stream along the circumferential wall of said secondary chamber, a slag discharge opening from the lower portion of said secondary chamber, and a gas outlet formed at the upper end of said secondary chamber.

2,747,527
FURNACE DOORS
Norman C. Fuller, Fairview Park, Ohio, assignor to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio
Application October 4, 1952, Serial No. 313,149
2 Claims. (Cl. 110—176)



1. In a furnace having a generally upright wall structure in which an opening is provided for access to the furnace interior, a door for closure of such opening comprising upper, intermediate and lower panels, said door being hingedly secured at its upper panel to the wall structure at the top of the opening in the latter for swinging movement about a substantially horizontal axis, the intermediate panel of the door being off-set at an angle such that it slopes downwardly and outwardly when the door is in closed condition with the upper and lower panels being substantially vertically disposed, the furnace wall structure about such opening having a corresponding profile and above the opening being recessed to provide clearance for the door in fully open condition, the door being substantially completely inverted in moving from the closed to the fully open condition thereof, a hoisting cable suspended from a region spaced substantially vertically above the door in all positions of the latter, take-up means for said cable, and a channel member arranged and secured to the door so as to extend in closed condition of the door inwardly therebeyond at the lower door edge, said channel member in closed condition of the door opening downwardly and having the hoisting cable attached to the same only at a point spaced inwardly of the door, the cable in closed condition of the door extending from such point outwardly within the channel member and then upwardly about the lower edge of the door, the effective terminal engagement of the cable with the door thus being shifted from the lower edge to the actual point of connection in movement of the door from closed to open condition respectively.

2,747,528
GROUND PERFORATOR AND SEEDER
Everett Demming Hunkins, University City, Mo., assignor to Garden Tools, Inc., St. Louis, Mo., a corporation of Missouri
Application June 21, 1952, Serial No. 294,860
3 Claims. (Cl. 111—92)



1. A ground perforator and seeder, comprising a container for seeds having a bottom wall provided with a plurality of spaced openings therein; a cover for said container; a tubular housing supported on the cover and extending upwardly therefrom; a shaft mounted for reciprocal movement in the tubular housing and having an upper end extending upwardly above the upper end of said housing; said shaft also having a lower end extending into said container; a prong assembly mounted on the lower end of the shaft within the container, the prong assembly including depending prongs in substantial alignment with the openings in the bottom wall of the container; a bracket fastened to the tubular housing adjacent its upper end so as to extend transversely thereof; a flange on the upper end of the shaft for contacting the bracket so as to limit the downward movement of the shaft relative to the housing; and opposed handle members pivotally mounted adjacent the outer ends of the bracket inwardly of the outer ends of the handle members, the inner ends of the handle members being disposed below and for engagement with the flange on the shaft whereby when the outer ends of the handle members are pivoted downwardly, the shaft and the prong assembly are moved upwardly relative to the bottom wall of the container.

2,747,529
BASEBALL SEWING APPARATUS
Otto R. Haas, Wenham, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application July 12, 1952, Serial No. 298,518
18 Claims. (Cl. 112—2)

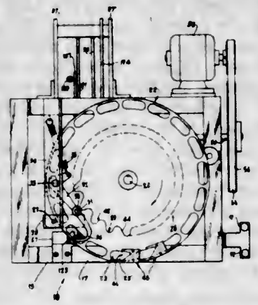
1. A baseball sewing machine having stitch forming and ball feeding devices, in combination with a ball

holder comprising a pair of hollow spherical bilobate clamping members arranged to complement each other



when disposed on a spherical supporting surface with spaced edges located in parallel relation and provided with index elements cooperating with the feeding devices.

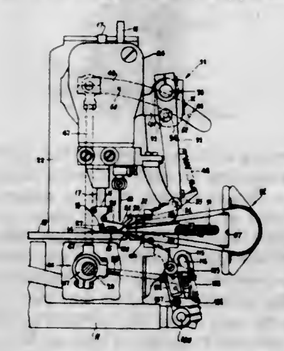
2,747,530
MACHINE HAVING A PLURALITY OF HOOKED FEEDING NEEDLES AND MEANS FOR FORMING INTERLINKED HAIRS ON A PLASTIC HEAD OF A DOLL AND THE LIKE
Max Goldberg and Robert J. Garwin, New York, N. Y.
Application May 11, 1954, Serial No. 428,944
10 Claims. (Cl. 112—79.5)



1. In combination with a machine having a plurality of hooked needles and means whereby the needles feed the material worked upon to form interlinked looped hairs, a substantially upright elongated arm mounted adjacent said needles and having a work support at its upper end for supporting a plastic doll's head, said work support having through slots through which said needles move up and down, means for supporting thread filament spools, means for feeding said thread filaments in tensioned relation to said needles, a presser-foot mounted above said work support, a drive shaft carrying eccentrics, and means for actuating said needles and said presser-foot in timed relation from said eccentrics, means for moving said presser-foot to said work support in spaced-apart relation therefrom to permit said needles to feed said doll's head with ease for each movement of the needles and means for measuring and cutting the thread filaments secured to said doll's head to form hairs of uniform predetermined length on the head of said doll.

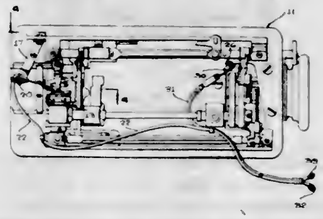
2,747,531
DOUBLE RUFFLING MECHANISM FOR SEWING MACHINES
Joseph Galkin, New York, N. Y.
Application August 28, 1953, Serial No. 377,043
1 Claim. (Cl. 112—132)

In a sewing machine having needles, a work supporting base, a needle plate, upper and lower ruffling and stripping blades and means for actuating said ruffling blades from opposite directions relative to said base to form ruffles on opposite faces of a single, flat and non-folded fabric strip; comprising a two-direction folder fixed to said work supporting base and having a vertical inlet adapted to receive a flat and non-folded strip of fabric in a direction transverse to the line of stitching, said folder having means for folding the upper and lower edges of said strip and for folding said strip into U-shaped form while supported vertically at the longitudinal front edge portion of said base, said folder having means for refolding said folded strip ninety degrees so as to cause said strip to face in direction of the line of stitching, said folder having means for causing said folded strip to leave said folder in direction parallel with the line of stitching and in horizontally positioned U-shaped form, said upper and lower ruffling blades being positioned to form tucks in the upper and lower edge portions of said folded strip, said ruffling blades being resiliently supported in angular



relation with said needles, said needle plate having a front portion removed and having a downwardly bevelled front edge portion in alignment with and close to said needles to permit said lower ruffling blade to closely approach said needles, said lower ruffling blade being positioned below said needle plate and reciprocatingly movable toward and away from the same, said ruffling blades being actuated to form tucks in the lower edge portion of said horizontally positioned U-shaped strip simultaneously with the formation of tucks in the upper edge portion of said strip, stripping blades fixedly mounted between said ruffling blades, said stripping blades being spaced apart to permit entrance therebetween for a body fabric for attaching said post-folded double tucked strip to an edge portion of said body fabric.

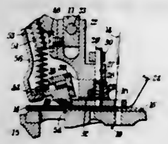
2,747,532
AUTOMATIC WARNING DEVICE FOR SEWING MACHINES
Arthur Wayne Allen, Marshalltown, Iowa
Application July 31,1953, Serial No. 371,541
2 Claims. (Cl. 112—218)



1. In a metallic sewing machine of the type having a frame carrying a head thereon and a bobbin case dependingly carried by the frame with a thread extending between a bobbin in said case and a needle mounted in said head for reciprocatory movement, an automatic warning device for indicating the absence of a connected thread between the bobbin and the needle, said device compris-

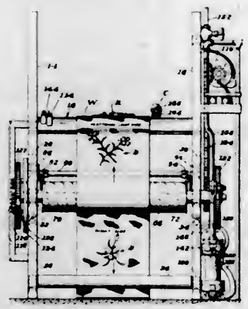
ing a grounding switch carried by said machine adjacent said bobbin and adapted to be held open by engaging the bobbin thread during sewing operation of the machine and to close in the absence of bobbin thread.

2,747,533
THREAD-SEVERING DEVICES FOR SEWING MACHINES
John P. Enos, Union, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application October 29, 1951, Serial No. 253,623
4 Claims. (Cl. 112—252)



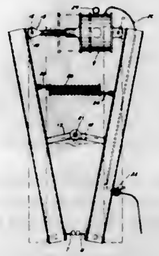
1. In a sewing machine, a presser-bar, a work-support, a feed-dog extending through said work support and provided with a thread cutting blade, a presser-foot shank attached to said presser-bar, a sole plate carried by said shank, a cutter bar, means operatively connecting said cutter bar to said shank, said means including a plurality of pivotal connections having skewed pivotal axes, a stop having a ridge parallel to one of said axes engageable in line contact by said cutter bar to limit its motion about one of said axes, said stop being adjustable relative to said sole-plate, and a spring urging said cutter bar into engagement with said stop.

2,747,534
METHOD OF EMBROIDERING AND CLIPPING TERRY CLOTH
Frank R. Piper and James M. Gardner, Fairfax, Ala., assignors to West Point Manufacturing Company, Shawmut, Ala., a corporation of Alabama
Original application May 14, 1951, Serial No. 226,238, now Patent No. 2,710,438, dated June 14, 1955. Divided and this application November 13, 1952, Serial No. 320,318
3 Claims. (Cl. 112—266)



3. A method of embroidering terry cloth, in which the pile loops on one side stand out from the cloth web and those on the other side are flattened against the web in a common direction, comprising the steps of applying embroidery to the web in such manner that the ravellings remain on the flattened loop side thereof, tensioning the embroidered web over a convexly curved surface with the flattened loop side outermost, and then clipping the ravellings from the flattened loop side of the web by means of a device moved relatively to the web in the direction of the flattened loops.

2,747,535
PNEUMATIC CLAMP
Elmer P. Curry, Columbus, Ga.
Application January 16, 1953, Serial No. 331,716
2 Claims. (Cl. 113—99)



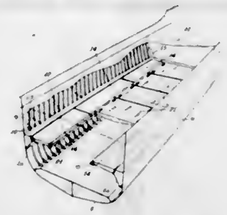
1. A pneumatically operable clamping device of the character described comprising, two main members consisting of channel and flat pieces of metal welded together, a piece of railroad rail attached to one end of each member to thus form a pair of clamping jaws, each member having an arm attached to its middle portion, the free end of each arm having a round hole therethrough, a pin through said holes connecting the arms to thus form a fulcrum, an air cylinder and piston therefor mounted between the other ends of said main members, said cylinder being pivotally attached at its closed end to the end of one main member, the free end of the piston rod having a round hole therethrough, said rod end being pivotally attached to the end of the opposite main member, a rod attached to each main member approximately midway between the said fulcrum arms and said cylinder, a coil spring, said rods positioned through said spring with one end of each rod attached to the spring ends opposite each other with the spring tension set to pull the main members toward each other; a hose with valve therein attached to said cylinder adapted to supply compressed air from an independent source into said cylinder to thus expand two ends of the main members away from each other and simultaneously contract the other ends of the main members having rail piece jaws thereon for clamping an object between the jaws; an eye-bolt attached in the wall of the cylinder and positioned for controlling by independent power means the movement of the entire assembled clamping device.

2,747,536
HULL HAVING PIVOTAL HULL UNITS
Linus E. Russell, Springfield, Ohio, assignor to Peters & Russell, Inc., Springfield, Ohio, a corporation of Ohio
Application May 21, 1952, Serial No. 289,043
1 Claim. (Cl. 114—77)



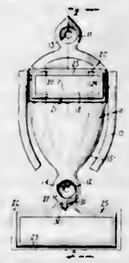
A propeller driven boat including a hull structure having recesses on each side of the hull at the stern thereof, a package power unit including power supply means and an enclosure for the power supply means forming a continuation of the hull across said recess, each of said power units being pivotally supported adjacent its forward end on the hull structure, a piston and cylinder arrangement connected to each of the power units and to the hull structure forming means for pivoting each of the power units independently.

2,747,537
SHIPHOLD MOUNTING OF ELEMENTS ADAPTED TO WORK UNDER TORSION STRESS
Henri Kummerman, Neuilly-sur-Seine, France
Application November 18, 1952, Serial No. 321,127
Claims priority, application France March 13, 1952
4 Claims. (Cl. 114—79)



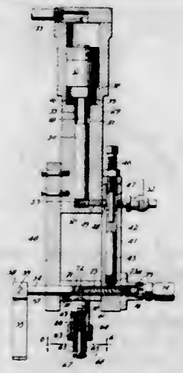
1. In a shiphold having side walls and partitions secured transversely between said walls and disposed in longitudinally spaced relation; a platform structure comprising a beam extending alongside at least one of the side walls in unattached relation therewith and secured solely at its ends to a pair of adjoining partitions, said beam having top and bottom portions, a platform section hingedly secured to the beam and disposed at the inner side thereof, hinge means securing said section to the beam for movement of the section from a raised vertical position resting on top of the beam to a lowered horizontal position extending laterally inwardly from the beam, cooperative abutment means on the beam and the section supporting the section in a horizontal position and supporting means extending laterally inwardly from said side wall and disposed intermediate and immediately adjacent said top and bottom portions and in unattached relationship therewith to prevent deformation of the beam, said beam transmitting all torsional stresses imposed thereon by loads on the platform section, when such section is in a horizontal position, to the partitions.

2,747,538
DOOR KNOCKER
John B. Morse, Jr., Hamden, and Fritz C. Benson, West Haven, Conn., assignors to The H. B. Ives Company, New Haven, Conn., a corporation of Connecticut
Application November 26, 1952, Serial No. 322,758
4 Claims. (Cl. 116—148)



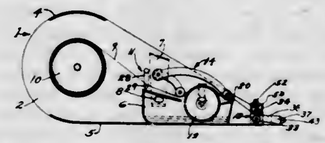
1. A door knocker comprising a body portion and a knocker bail carried thereby, the lower end of the body portion being reduced in size relatively to the upper part, a card holding bracket having a lug projecting upwardly therefrom, and said lug being received beneath the lower reduced end of the body portion of the knocker when the bracket is disposed below the knocker, registering openings in said lug and lower portion of the knocker to receive a fastening member, and cooperating engaging means on said body portion and lug to prevent rotation of the bracket relatively to the knocker about said fastening member.

2,747,539
PAN GREASING APPARATUS
Alrid B. Peffer, Philadelphia, Pa.
Application December 23, 1952, Serial No. 327,483
9 Claims. (Cl. 118—2)



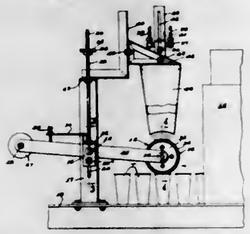
1. In pan greasing apparatus where the pans are moved past the grease delivery point, the combination of a grease delivery nozzle of a length sufficient to project into the pans and mounted in a position which, normally, is directly in the path of movement of a pan side, said mounting including a pivot upon which the nozzle can swing to clear the pan side and then return to its normal position where it will project into the pans, means controlled by the position of the pan and adapted to swing the nozzle on its pivot to clear the pan side as aforesaid and then to permit its return to normal position where it will project into the pan, means for delivering grease to and discharging it from said nozzle, valve means normally closing the nozzle outlet, a motor means for opening said valve means to permit grease discharge, and tripping means for activating said motor means, said tripping means being controlled by the position of the pan and constructed and arranged to effect actuation of said motor means only when the nozzle projects into the pan.

2,747,540
HAND MACHINE FOR APPLYING PASTE TO A PAPER STRIP
Frank V. Moore, Los Angeles, Calif.
Application January 8, 1953, Serial No. 330,264
3 Claims. (Cl. 118—41)



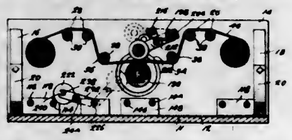
1. In a machine for applying paste to one side of a strip, a paste-applying roller over which said side of the strip is adapted to pass, two strip-engaging rollers, one on the forward or incoming side of the applying roller and the other on the rearward or outgoing side thereof, a common pivotal mount for said strip-engaging rollers above and forward of the applying roller, said strip-engaging rollers gravitationally pressing the strip in a direction to form a bight over the applying roller, and means to adjust the roller on the incoming side relative to the roller on the outgoing side to vary the degree of contact with the applying roller of the bight.

2,747,541
APPARATUS FOR SURFACE COATING GLASSWARE
Clarence Chew, Godfrey, Ill., assignor to Owens-Illinois Glass Company, a corporation of Ohio
Application June 21, 1954, Serial No. 438,258
4 Claims. (Cl. 118—211)



1. Apparatus of the character described positionable over a ware conveyor at the exit end of an annealing chamber, comprising a horizontal applicator roll having a soft resilient peripheral facing for rolling contact with the upper ends of glass containers moving with said conveyor, a pivoted counterweighted frame supporting said applicator roll, adjustable means for regulably controlling the pressure of the applicator roll upon the glass containers, means for spraying a wax solution onto the periphery of said applicator roll, and means whereby the applicator roll supporting frame and said spraying means may be adjusted vertically relative to the conveyor to accommodate glass containers of different height.

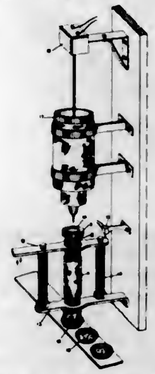
2,747,542
RIBBON AND ROLL INKER FOR CASH REGISTERS AND LIKE MACHINES
Aloysius A. Nowicki and John N. Gordon, Milwaukee, Wis.
Application November 6, 1953, Serial No. 390,637
5 Claims. (Cl. 118—235)



1. A ribbon inking machine comprising an inking roller having an inner ink supply, an absorbent sleeve circumposed on the roller, means controlling the flow of ink from the roller to the sleeve, means mounting a pair of ribbons spools, means associated with such mounting means for selectively rotating the spools, guide means for the ribbon for guiding it between the spools and in contact with the sleeve and a spring urged notched roller engaging the ribbon and pressing it into engagement with the sleeve with the inking roller rotating under such engagement as the ribbon moves past thereagainst, said spool mounting means including a slide member, a spindle carried by the slide member, means locking the slide member in adjusted position and spring means for said spindle which is retractable against the urgement of the spring means and an axially located spindle in spaced complementary relation to said first spindle, the spindles journaling a spool.

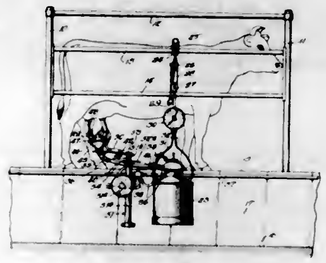
2,747,543
FLUID APPLICATOR FOR CAP MAKING MACHINES
Victor A. Navikas, Lancaster Township, Lancaster County, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a corporation of Pennsylvania
Application June 3, 1953, Serial No. 359,376
3 Claims. (Cl. 118—241)

1. In a device for applying a relatively viscous coating composition to a surface to be coated, the elements comprising a reservoir, a core of absorbent material disposed in said reservoir, a flexible diaphragm disposed across one end of said reservoir and in engagement with said core of absorbent material, a resilient member in engagement with the other end of said core of absorbent material to urge said core firmly into engagement with said flexible diaphragm, said flexible diaphragm being provided with openings through which the liquid passes when



the diaphragm is flexed to further compress the core material, the openings in said diaphragm being of a size that the fluid will not pass therethrough normally but will pass through when the diaphragm is flexed, and means for bringing said flexible diaphragm into engagement with the article to be coated with sufficient force to flex said diaphragm and for elevating said diaphragm away from said article.

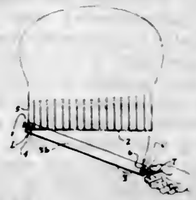
2,747,544
TEAT CUP SUPPORT ASSEMBLY
Chester A. Thomas, Lake Forest, Ill., assignor to Babson Bros. Co., a corporation of Illinois
Original application August 18, 1948, Serial No. 44,948. Divided and this application November 29, 1951, Serial No. 258,855
9 Claims. (Cl. 119—14.13)



1. In connection with a milking parlor stall, supporting apparatus for a teat cup assembly, including: a first arm projecting into said stall and pivotally mounted at its outer end; and a second arm pivotally mounted on the inner end of the first arm and projecting backwardly therefrom, both pivotal mountings providing movability of the arms substantially only in a horizontal plane and at least the second arm being of spring material for applying a downward pull to the teats during milking.

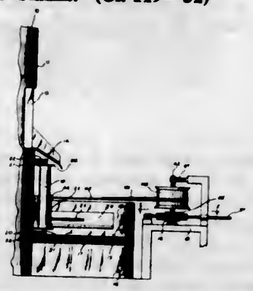
2,747,545
REMOVABLE BOTTOM FOR BIRD CAGES
Mack Baldwin, Redondo Beach, Calif.
Application September 27, 1954, Serial No. 458,343
3 Claims. (Cl. 119—17)

1. A bird cage comprising a rectangular base pan, a straight perpendicular wall of resilient material extending around said pan and connected thereto, a rectangular cage portion having a bottom edge formed from horizontally extending wire, the bottom portion of said cage being dimensioned to be slightly smaller than said base pan so that said bottom portion will fit just inside said wall of said base pan, with the bottom wire edge of said cage positioned adjacent the bottom of said pan, and a plu-



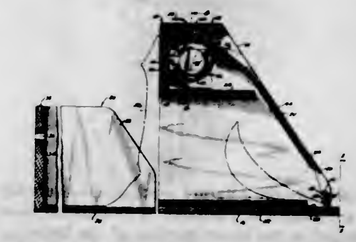
rality of fixed oppositely disposed lugs extending inwardly from the walls of said base pan, said lugs having heads of increased diameter thereon passable through said cage and extendible over said bottom edge wire by appropriate flexure of said wall, said pan being supported by said lugs resting on said bottom wire, said lugs being movable outwardly to clear said bottom wire by outward flexure of said wall to remove said pan from said cage.

2,747,546
FEED DISPENSING SILO
Melvin Winter, Russell, Minn.
Application April 12, 1955, Serial No. 500,836
3 Claims. (Cl. 119—52)



1. In combination, a stationary cylindrical silo adapted to hold a quantity of feed, silage and the like, said silo including a cylindrical outer wall provided with an opening, a bunker arranged around said silo and including a vertically disposed wall and a horizontally disposed bottom wall defining a feed trough for receiving material from the opening in said silo, a plurality of vertically disposed spaced parallel rollers journaled around the outside of said silo and including circular flanges on their ends, a rotary circular rim arranged in engagement with said rollers, a plurality of paddles extending outwardly from said rim and secured thereto, said paddles projecting into said feed trough, braces extending between said paddles, means for rotating said rim and paddles, said means comprising a base spaced outwardly of said bunker, a motor mounted on said base and adapted to be connected to a source of electrical energy, a drive shaft operated by said motor, a driven shaft spaced from said drive shaft, drive means connecting said driven shaft to said drive shaft, a drum on said driven shaft, a cable trained over said drum and said rim, said drive means comprising a first shaft member spaced from said drive shaft, a first pulley on said first shaft member, a second shaft member spaced from said first shaft member and having a second pulley thereon, an endless belt trained over said pulleys, a sprocket on said second shaft member, a sprocket wheel spaced from said sprocket, an endless chain trained over said sprockets, a shaft member driven by said sprocket wheel, a worm on said last named shaft member, and a worm gear meshing with said worm and connected to said driven shaft.

2,747,547
STENOGRAPHIC RECORD HOLDER
Clyde Drasher, Conyngham, Pa.
Application October 7, 1955, Serial No. 539,065
1 Claim. (Cl. 120—31)



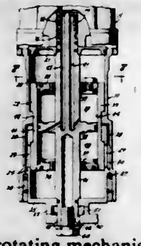
In a copyholder for stenographic record strips comprising a box including a base member, parallel side walls having vertical rear edges and front edges inclined upwardly and rearwardly secured to said base member and top edges spaced above said base, a top member secured to the top edges of said side walls, an inclined front wall secured to said side walls and extending therebetween and upwardly and rearwardly from a point spaced above and closely adjacent said base member to a point below said top, said inclined front wall extending beneath said top and terminating at the said rear edge of the said side walls, said inclined front wall forming a supporting surface for a stenographic record strip movable thereover, and driving means for moving said stenographic strip mounted in said box and engaging said stenographic strip; the improvement which consists of a pair of superposed rotatable rod-members extending between and journaled in said side walls and positioned in the opening between the lowermost edge of said inclined front wall and said base and adapted to engage the stenographic record strip, and maintain said strip substantially taut between the point of engagement of said driving means and said strip and the point of engagement of said rotatable rods and said strip.

2,747,548
ATTACHMENT FOR LEAD PENCILS
Emil Platzke, Minneapolis, Minn.
Application September 13, 1952, Serial No. 309,443
1 Claim. (Cl. 120—38)



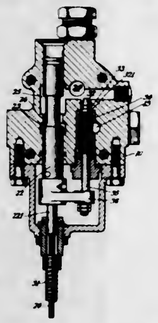
In a pencil attachment, a tubular eraser, a tube, one end portion of which is telescoped into the eraser and secured thereto, said tube being movable from a retracted to a projected position, a clip, a spring connecting the tube and the clip, and a latch attached to the clip and engageable with one of the convolutions of the spring for holding the spring retracted, said clip being applicable to a pencil in a fixed position with the eraser, the tube and the spring encircling the pencil.

2,747,549
COMBINATION HYDRAULIC STEERING AND DAMPING DEVICE
Julian E. Gerry, Van Nuys, and Howard G. McMannus, Glendale, Calif., assignors to Menasco Manufacturing Company, Burbank, Calif., a corporation of California
Application March 24, 1952, Serial No. 278,292
6 Claims. (Cl. 121—38)



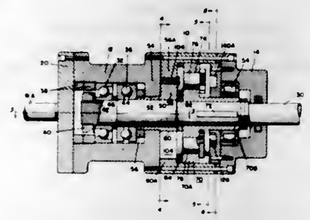
1. In a hydraulic rotating mechanism a tubular housing having a cylindrical chamber, a cylindrical sleeve rotatably secured in the lower portion of the housing, a piston rod mounted centrally within the chamber and secured at one end to the tubular housing and rotatably secured at the other end in said cylindrical sleeve, means forming a pair of hydraulic passages leading into the chamber, a hollow piston slidably mounted on the piston rod and within the chamber and separating the chamber into two lubricant pockets, said piston having end walls and an intermediate wall forming one compartment in communication with one of said hydraulic passages and another compartment in communication with the other of said hydraulic passages, said walls being relatively movable and adapted thereby to change the relative capacity of said compartments, interengaging diagonally directed spline means respectively on the housing and hollow piston, longitudinally directed spline means on the sleeve interengaging spline means on the hollow piston resistant to mutual rotation and permissive of relative longitudinal movement therebetween, said spline means on the housing being adapted to effect rotation of the hollow piston and the sleeve in response to axial movement of the hollow piston, and said pockets being adapted to dispense and receive a fluid lubricant forced over said splines during movement of the hollow piston.

2,747,550
CONTROL VALVES FOR HYDRAULIC TIPPING-HOISTS FOR VEHICLES
James Cosgrove, Bolton, England, assignor to Edwards Brothers (Tippers) Limited, Bolton, England
Application April 24, 1953, Serial No. 350,993
Claims priority, application Great Britain May 2, 1952
2 Claims. (Cl. 121—46.4)



1. A hydraulic control valve for a fluid pressure operated member having a cylinder, comprising a casing, an inlet port in said casing, a source of fluid under pressure communicating with said port, a feed duct connecting said port to said cylinder through which the fluid moves to actuate said member, a check valve in said feed duct urged to seated position and adapted to unseat under the force of said fluid, a reservoir, an overload conduit connecting said feed duct to said reservoir, a check valve in said overload conduit normally closing the same and adapted to open should the pressure exceed a predetermined maximum, a by-pass duct branching from said feed duct and communicating with said reservoir, a piston valve movable longitudinally from a first position closing said by-pass duct to a second position opening said duct to a third position at which said duct is still open, an exhaust duct communicating between said cylinder and said reservoir, a needle valve normally urged to a position closing said exhaust duct, a connection between said piston valve and said needle valve whereby movement of said piston valve to said third position moves said needle valve to open said by-pass duct, reverse movement of said piston valve being independent of said needle valve, and means for moving said piston valve.

2,747,551
ROTARY MOTOR AND PUMP
Harold W. Baker, Jr., Bryn Mawr, Pa.
Application July 24, 1952, Serial No. 300,727
5 Claims. (Cl. 121—93)

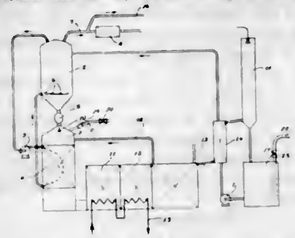


1. A motor comprising a hollow casing having an input and an outlet opening, said casing having in its interior a relatively narrow passageway and a relatively wide passageway connecting the input and outlet openings, a rotor, arcuate blades rotatably mounted on said rotor and projecting into said passageways, arcuate fins between said blades and fixedly secured to the rotor, said fins having a thickess substantially equal to the width of the relatively narrow passageway and each fin being spaced from its adjacent fins an arcuate distance less than the arcuate length of the relatively narrow passageway and said blades having a slightly smaller thickness than said fins and having a width substantially equal to the width of the relatively wide passageway, a fixed cam adjacent said rotor, cam follower means engaging said cam and connected to said blades respectively to position the blades to block the relatively wide passageway and to pass through the relatively narrow passageway, said blades and fins forming a substantially continuous ring section when passing through said relatively narrow passageway to provide substantially complete occupancy of said relatively narrow passageway.

2,747,552
METHOD OF GENERATING VAPOUR FROM WASTE SULFITE LIQUOR OR DREGS
Gunnar Kyrklund, Kuusankoski, Finland
Application April 5, 1952, Serial No. 280,831
7 Claims. (Cl. 122—31)

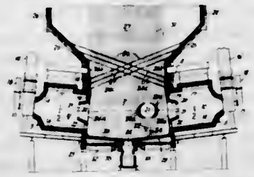
1. The method of generating vapour from waste sulfite liquor and dregs, which comprises, introducing a quantity of said liquor into an evaporating chamber, heating said waste liquor to drive off vapour therefrom and to leave combustible liquid remaining, drawing off said combustible liquid from said evaporation chamber, burning said

combustible liquid in a combustion chamber, drawing off the vapour generated in said evaporation chamber and superheating said vapour by passing the vapour through said combustion chamber, introducing additional waste



liquor into said evaporating chamber and heating said additional waste liquor to drive off vapour therefrom by introducing said superheated vapour into the evaporator in heat exchange relationship with said additional waste liquor.

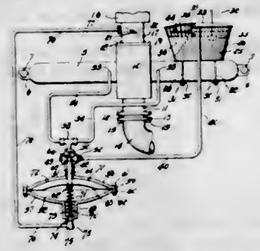
2,747,553
VAPOR GENERATOR FURNACE
Andreas Sifrin, Oberhausen, Germany, assignor to The Babcock & Wilcox Company, Rockleigh, N. J., a corporation of New Jersey
Application August 25, 1951, Serial No. 243,607
Claims priority, application Germany August 30, 1950
4 Claims. (Cl. 122—336)



2. Apparatus for burning a slag forming fuel comprising a plurality of primary fuel burning furnaces each of substantially cylindrical formation about a horizontally arranged axis, said primary furnaces being of a type in which the combustion of ash-containing solid fuel is substantially completed therein at temperatures above the ash-fusion temperature, a secondary chamber having upright wall portions defining a lower slag collecting section of said chamber of symmetrical cross section about a central vertical axis, said upright wall portions being arranged at substantially equal spacings from said vertical axis, said primary furnaces being arranged at substantially equal spaced locations relative to said vertical axis and each having an end wall formed with a gas outlet and a subjacent molten slag outlet opening into said lower slag collecting section, said primary furnaces being arranged with their horizontal axes in separate vertical planes respectively parallel and adjacent to the nearest adjacent upright wall portions of said lower slag collecting section and tangent to a central upright imaginary cylinder of substantial diameter in said lower slag collecting section at locations circumferentially spaced about said vertical axis, whereby slag is deposited by centrifugal action on the upright wall portions of said slag collecting section from the gases rotating therein, and means for discharging molten slag from said slag collecting section.

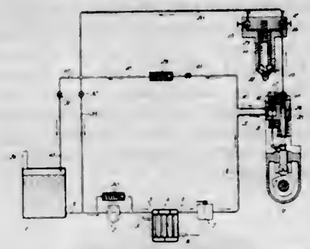
2,747,554
AIR INJECTION MEANS FOR AUTOMOTIVE ENGINES
William P. Coffman, Saginaw, Mich.
Application April 8, 1952, Serial No. 281,130
14 Claims. (Cl. 123—25)

1. In combination with the intake and exhaust manifolds of an internal combustion engine providing a pair of flow paths for conducting a fuel-air mixture to the engine and discharging exhaust gases therefrom respectively, a reservoir adapted to contain a liquid mounted in heat transfer relation with the exhaust manifold and adapted to be heated by the exhaust gases traveling along the flow path thereof, said reservoir being provided with inclined corrugated side walls and a horizontal baffle in the upper portion thereof, a closed delivery pipe projecting into said



chamber, an intake pipe opening into the delivery pipe and open to said liquid, said delivery pipe conducting vapor to the fuel-air mixture passing along the flow path of said intake manifold, and a pressure responsive valve interposed in said delivery pipe and responsive to subatmospheric pressures in the intake manifold and fuel-air mixture pathway to control said vapor passing to said intake manifold.

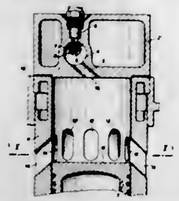
2,747,555
FUEL SUPPLY SYSTEM FOR INTERNAL COMBUSTION ENGINES
Alfred Brunner, Winterthur, Switzerland, assignor to Sulzer Freres, Societe Anonyme, Winterthur, Switzerland
Application March 29, 1952, Serial No. 279,483
Claims priority, application Switzerland April 3, 1951
4 Claims. (Cl. 123—32)



1. A fluid fuel supply circulating system for internal combustion engines comprising a fuel supply tank having a supply outlet and a recirculation return inlet, a fuel injection valve having an injection nozzle, a fuel chamber internally adjacent the injection nozzle of the valve, an inlet channel to said fuel chamber, and an outlet channel from said fuel chamber; a fuel injection pump, the discharge of said fuel injection pump being connected to the inlet channel of the fuel injection valve; a suction chamber in said fuel injection pump; a pressure chamber in said fuel injection pump; a conduit inter-connecting said suction and pressure chambers; a supply inlet to said suction chamber; a recirculation outlet from said suction chamber; a fuel circulating pressure pump connected to the supply outlet of said fuel tank; a heat exchanger serially connected between the discharge of said pressure pump and said supply inlet of said suction chamber; a first valved connection between said recirculation outlet from said suction chamber and said recirculation return inlet of said fuel supply tank; and a second valved connection between said outlet channel from said fuel chamber and said recirculation return inlet of said fuel supply tank, whereby fuel circulated through and heated by the

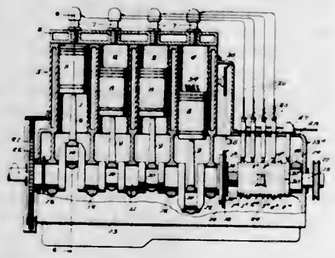
heat exchanger may be selectively circulated either through the suction chamber of the fuel injection pump or serially through both the suction and pressure chambers of the injection pump and the channels and chamber of the injection valve.

2,747,556
INTERNAL-COMBUSTION ENGINES
Erich Schreiber, Graz, Austria, assignor to Gustav Ospelt, Vaduz, Liechtenstein
Application January 5, 1953, Serial No. 329,689
Claims priority, application Austria January 4, 1952
2 Claims. (Cl. 123—32)



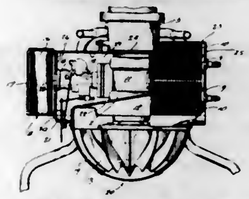
1. In an internal combustion engine of the compression-ignition type, comprising a cylinder, a cylinder head, a piston in the said cylinder having a cylinder wall, intake ports and exhaust ports in the said cylinder wall and controlled by the said piston, a whirling chamber in the said cylinder head, a connecting duct connecting the said whirling chamber to the said cylinder, the internal surface of the said whirling chamber being spherical, and the said connecting duct discharging approximately tangentially into the said whirling chamber, an ignition element located approximately in an axis of said spherical whirling chamber disposed at right angles to the plane determined by the axis of said connecting duct and the center of said whirling chamber, the said connecting duct causing a whirling motion of the gases compressed by the said piston and discharged into the said whirling chamber around the said first-named axis, the said plane lying approximately in an axial sectional plane of the said cylinder distant from said exhaust ports, and the said axis of the said connecting duct being disposed from top to bottom obliquely relative to the axis of said cylinder, the said axial sectional plane of the cylinder going through the region of the said cylinder wall in which the said intake ports are located.

2,747,557
DIESEL ENGINES
William J. Silva, New Orleans, La.
Application November 9, 1953, Serial No. 390,858
6 Claims. (Cl. 123—32)



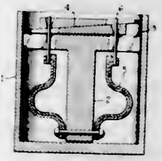
1. In a two cycle automatically reversible diesel engine having cylinders, pistons, crank shaft, injector spray nozzles, piston-controlled exhaust and air admission ports, and a blower for supplying air to said cylinders through said air admission ports; fuel injector pumps mounted near said crank shaft, tubes connecting said injector pumps with said injector spray nozzles respectively, a cam sleeve surrounding a portion of said crank shaft, said cam sleeve having one set of cams for operating said injector pumps when the engine is to rotate to the right, said cam sleeve having a second set of cams for operating said injector pumps when the engine is to rotate to the left, said sleeve being axially shiftable in response to drag forces when the crankshaft is turned over for starting in one direction to one position in which said one set of cams becomes effective and being axially shiftable in response to drag forces when the crank shaft is turned over for starting in the other direction to a second position in which said second set of cams becomes effective, stop means for limiting the axial movement of said sleeve when it reaches either of said positions.

2,747,558
AIR-COOLED ENGINE AND AIR INTAKE THEREFOR
Elmer C. Kiekhaefer, Cedarburg, Wis.
Application October 18, 1952, Serial No. 315,547
3 Claims. (Cl. 123—41.62)



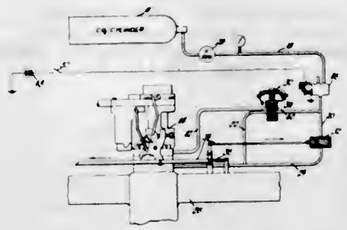
1. In an engine for chain saws and the like, an impeller driven by an engine for cooling the same, a casing for said impeller and having a discharge opening, a hood enclosing said engine and communicating with said opening to receive the air driven by the impeller and to direct the air over the engine for maximum effective cooling thereof, a carburetor for said engine having an intake opening adjacent to said hood, and vent means in said hood comprising a number of ports for the diversion of a part of the cooling air therein and disposed to direct such air past said intake opening to preclude the entry therein of foreign particles, the discharge opening of said impeller housing being directed away from said vent ports whereby foreign particles drawn into the housing by the impeller are directed within said hood away from said vent ports.

2,747,559
VALVE TAPPET WITH TEMPERATURE RESPONSIVE CLEARANCE COMPENSATION
Osmon B. Campbell, St. Joseph, Mo.
Application July 13, 1953, Serial No. 367,672
2 Claims. (Cl. 123—90)



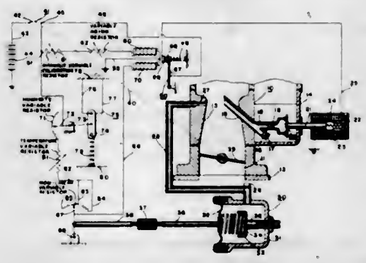
1. A valve lifter comprising a cylindrical body member having an axial bore, said body being closed at the bottom and open at the top, a second member with flattened top extending upward from the bottom, a pair of wedges movably supported upon said flattened top of the second member, two thermal elements, one on each side of the second member, affixed at one end to said second member, and each engaging one of the wedges at its other end, all in combination and in operative relation to vary the total thickness of the wedges in the clearance, when flexing of the thermal elements occurs in response to changes in temperature.

2,747,560
CARBON DIOXIDE AS AN ANTI-KNOCK AGENT
Fred G. Rounds, Ralph E. Schwind, and Lloyd L. Withrow, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application September 4, 1952, Serial No. 307,806
2 Claims. (Cl. 123—119)



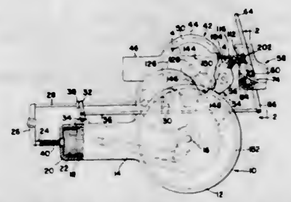
1. A method of reducing the speed of combustion reactions in a multi-cylinder internal combustion engine which comprises injecting substantially pure carbon dioxide into the intake manifold of said engine at a pressure of about 1 to 10 pounds per square inch and at a flow rate equal to approximately 0.5% to 2% of the flow rate of the air intake stream, said carbon dioxide being introduced into said intake manifold at a point between the combustion chambers of said engine and that portion of the engine carburetor at which the air and hydrocarbon fuel are mixed to thereby not affect the air-fuel ratio of said engine and to distribute the carbon dioxide approximately equally to said combustion chambers, the flow rate of said carbon dioxide and the duration of said injection being regulated by an automatic control valve system operating in response to changes in engine manifold pressure and to the throttle setting of said engine.

2,747,561
ANTI-DETONATING CARBURETOR
Howard H. Dietrich, Rochester, N. Y., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 6, 1954, Serial No. 428,075
11 Claims. (Cl. 123—119)



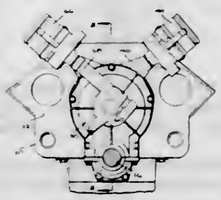
1. In an internal combustion engine having a carburetor and an intake passage, means to enrich the combustible mixture produced by said carburetor, and means for actuating said mixture enrichment means comprising a solenoid, a circuit for energizing said solenoid including a switch, a relay for closing said switch having a pair of windings arranged in bucking relation; and means responsive to certain engine conditions indicative of incipient engine detonation for differentially energizing said windings so as to effect energization of said relay and said solenoid.

2,747,562
STARTING SYSTEM FOR INTERNAL COMBUSTION ENGINE
Richard A. Wittren, Cedar Falls, Iowa, assignor to Deere Manufacturing Co., Dubuque, Iowa, a corporation of Iowa
Application January 4, 1954, Serial No. 402,004
16 Claims. (Cl. 123—179)



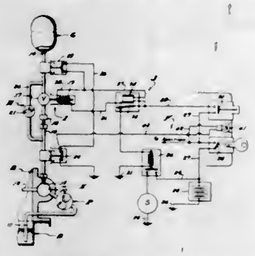
1. In combination: a main engine having a combustion chamber, relief means for relieving compression in said chamber, and a starter gear; a starting engine having a driven shaft, a starter pinion keyed to said shaft and shiftable thereon from a position normally disengaged from to a position engaging the starter gear, a selectively engageable clutch normally disengaged between the starting engine and said shaft, and an energizable starter motor connected to the starting engine; a control member movable selectively in first and second opposite directions; first means connected between the control member and the starter motor for energizing said motor upon first-direction movement of said member to start the starting engine; second means connected between the control member and the relief means for relieving compression in the main engine combustion chamber upon initial second-direction movement of said member; and third means connected between the control member, the clutch and the starter pinion for substantially simultaneously causing engagement of the clutch and shifting of the starter pinion into engagement with the main engine starter gear upon subsequent second-direction movement of the control member.

2,747,563
DUAL DISTRIBUTOR FOR INTERNAL-COMBUSTION ENGINES
Ollie L. Doster, Atlanta, Ga.
Application November 27, 1953, Serial No. 394,750
3 Claims. (Cl. 123—195)



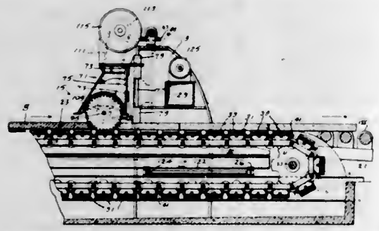
1. A dual distributor attachment for an internal combustion engine which includes a cylinder block having a timing gear chamber opening through one end, a crank shaft extending through said chamber, a cam shaft extending through said chamber in parallel relation to the crank shaft, and intermeshing timing gears carried by the crank shaft and the cam shaft within said chamber, said attachment comprising a spacer mounted on the cylinder block adjacent the open end of and in registration with the chamber, a cover carried by the spacer and closing the open end of the chamber, a distributor carried by the spacer and operatively connected to the cam shaft, and a second distributor carried by the cover and operatively connected to the cam shaft in longitudinally spaced relation to the first mentioned distributor.

2,747,564
OILING APPARATUS
Julius J. Wehling, Lynwood, Calif.
Application April 29, 1955, Serial No. 504,885
3 Claims. (Cl. 123—196)



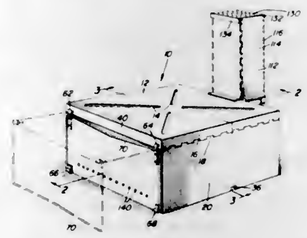
1. In combination, an internal combustion engine, a pressure oiling system for the engine and including, a main oil line adapted to deliver oil to the running parts of the engine and an oil pump driven by the engine and adapted to deliver oil into the main oil line under pressure, an electrical starting system for the engine including, a starter motor, a battery, a power line from the battery to the starter motor, a starter relay switch in the power line, a starter line from the battery to the starter relay, and a starter switch in the starter line and controlling flow of current to the relay, an oiling apparatus adapted to deliver oil under pressure into the main oil line of the oiling system before the engine is put into operation and including, an oil accumulator, a flow duct between the main oil line and the accumulator, a normally closed control valve in the flow duct and adapted to be opened prior to starting the engine to oil the engine, charging means for the accumulator including, a charging line between the main oil line and the accumulator and adapted to conduct oil from the main oil line into the accumulator when the engine is in operation, and a check valve in the charging line adapted to check flow of oil from the accumulator through the charging line and into the main oil line, and control means related to the starting system and adapted to open the control valve in the flow line including, a solenoid operator on the control valve, a relay switch in the starter line and under control of the starter switch, a line from the relay switch to the operator, a ground line connected with the relay and the operator, and a pressure responsive switch in the ground line and related to the accumulator and adapted to open when the pressure in the accumulator drops to a predetermined pressure.

2,747,565
CONTINUOUS FEED STONE WORKING MACHINE
Claude B. Henderson, Bedford, Ind., assignor to Ingalls Stone Company, Bedford, Ind., a corporation of Delaware
Application December 17, 1954, Serial No. 476,009
4 Claims. (Cl. 125—13)



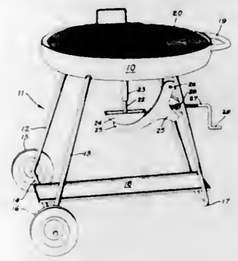
1. A stone cutting machine comprising a base frame, an endless conveyor disposed lengthwise of said frame, a saw carriage above said conveyor, guide means for said carriage carried by said frame, means vertically adjusting said carriage, a saw blade arbor rotatably carried by said carriage, a plurality of blades fixed on said arbor, means spraying the opposite sides of each blade with water, a fluid operator for said conveyor, means rotating said arbor, and a gravity operated conveyor extending from the discharge end of said endless conveyor.

2,747,566
COLLAPSIBLE CAMP COOKER
George H. Werden, Englewood, Colo.
Application March 17, 1955, Serial No. 494,887
7 Claims. (Cl. 126—9)



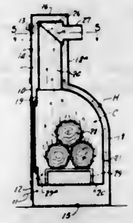
1. A collapsible cooker comprising a top member, side members hingedly secured to said top member, a back member hingedly secured to said top member, said back member having an opening therein, a U-shaped member secured to said back member, a support plate hingedly secured to said back member, means engaging said U-shaped member for holding said support plate in a horizontal position, and a collapsible chimney member received in said U-shaped member and seating on said support plate, said chimney member communicating with said opening.

2,747,567
PORTABLE BRAZIER
Fred W. Goodwin, Berkeley, Calif.
Application January 19, 1953, Serial No. 332,043
3 Claims. (Cl. 126—25)



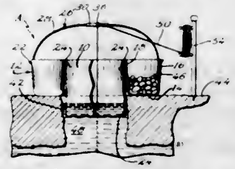
1. A brazier unit comprising a bowl supported in a generally upright position and having a central aperture in the bottom thereof, a lever supported beneath said bowl for pivotal movement in substantially a vertical plane, a receptacle rigidly supported on said lever under the aperture in the bottom of said bowl, a bar resting endwise in said receptacle and extending loosely through the aperture in said bowl, a grill seated on said bar above said bowl, said receptacle being effective to collect grease flowing from said grill downwardly along said bar through the aperture in said bowl and means for effecting pivotal movement of said lever to cause said receptacle to act as a cam effective to shift the vertical position of said bar and said grill seated thereon.

2,747,568
AIR-HEATING FIREPLACE STRUCTURE
Raymond R. Dupler, Toledo, Ohio
Application March 18, 1952, Serial No. 277,189
1 Claim. (Cl. 126—121)



A furnace, comprising an outer casing of sheet metal, said casing having a substantially vertical front wall, a rear wall offset forwardly intermediate its height to provide a lower section of relatively great horizontal depth from front to rear, and an upper section of relatively shallow depth from front to rear, a top wall for the upper section, side walls and a bottom wall said front wall having an inlet opening in the lower portion thereof for entrance of cold air and an outlet opening in the upper portion for exit or heated air, an inner sheet metal casing within the lower portion of the outer casing and having bottom, side, front and rear walls spaced from the corresponding walls of the outer casing so as to provide passages for air to be heated, said inner casing having a top wall provided with a series of laterally spaced openings, upright tubes having their lower ends communicating with said openings, said upright tubes lying within the upper portion of said outer casing and being disposed to the rear of the exit opening in the upper portion of the outer casing, a box-like collecting chamber supported on the upper ends of said upright tubes, and having the interior thereof connecting with the interiors of said tubes, said collecting chamber having all walls thereof spaced from the walls of said outer casing, a smoke pipe extending from the collecting chamber through the rear wall of the outer casing, there being registering, substantially similar door openings through the front walls of the lower portion of the outer casing and the front wall of said inner casing, a door hingedly mounted on the outer casing, said door having substantially coextensively superposed spaced apart front and rear glass panels for closing the door openings in said outer and inner panels, said door having marginal bottom and top openings located between the glass panels and communicating with the space therebetween, such openings communicating with the spaces between the front walls of the outer and inner casing below and above the door openings respectively when the door is closed, said door openings being disposed above the outer casing air inlet and below the outer casing air outlet, and a fuel support centrally disposed on the bottom wall of the inner casing.

2,747,569
FISHERMAN'S DEICER
Arman W. Holm and Gunnar M. Larson, St. Paul, Minn.
Application January 23, 1952, Serial No. 267,716
9 Claims. (Cl. 126—367)



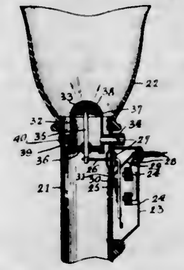
1. A heating device for preventing the refreezing of holes cut in the ice for winter fishing comprising in combination a fire pot receptacle for containing a heat supporting medium, and an open ended, thin downwardly depending metal flange having an upper portion in partial heat conductive relation with said receptacle, said receptacle extending laterally outward from said flange.

2,747,570
MEANS FOR ASSISTING RETURN CIRCULATION OF FLUIDS IN AN ANIMAL BODY
Conrad Jobst, Toledo, Ohio
Application May 19, 1954, Serial No. 430,770
5 Claims. (Cl. 128—60)



1. Means for stimulating fluid flow within an animal body comprising a non-elastic envelope adapted to fit about and in contact with a portion of the body to surround the same and extend longitudinally thereof with negligible pressure thereon, and means for circumferentially contracting said envelope and alternately releasing the same to produce a pulsating radially inward directed pressure against said body.

2,747,571
HYDROMASSAGING DEVICE
Charles Aimé Fortin, Montreal, Quebec, Canada, assignor of ninety per cent to Paul Pouliot, Montreal, Quebec, Canada
Application November 1, 1954, Serial No. 466,176
2 Claims. (Cl. 128—66)

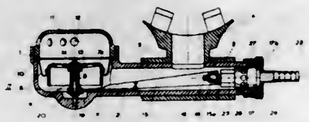


1. A hydromassaging device comprising a tube, a cup at one end thereof, a valve body secured in said tube and having a ported domed end at the throat of said cup, a water inlet to said body, said body being spaced from the wall of said tube to provide a water outlet, a slotted slide valve in said body at said ported end, and an electric vibrator connected to said valve and adapted to slide it over said end.

2,747,572
BREATHING APPARATUS
Emile Gagnan, Montreal, Quebec, Canada, assignor to La Spirotechnique, Paris, France
Application September 29, 1952, Serial No. 312,052
5 Claims. (Cl. 128—142)

2. In a breathing apparatus for divers, in combination, a hollow cylindrical body provided with a radially extending tubular portion, a rigid bell arranged in the cylin-

drical body, means for guiding said bell by allowing it to move along the axis of said cylindrical body, a flexible skirt having an edge secured to the side surface of the bell and the other edge secured to the cylindrical body so as to act as a diaphragm, a valve-box adapted to close the outer end of the tubular portion, and to be connected to a source of a breathable gas under pressure, an inlet-



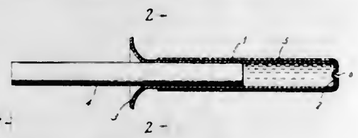
valve in said box for controlling the breathable gas delivering into said tubular portion, means for operatively coupling the bell and inlet-valve, an expiration valve located at the vicinity of said bell and adapted to discharge outside the gas contained in the hollow body when its pressure is greater than the outer pressure, and a mouth piece connected to the tubular portion at the vicinity of the inlet-valve.

2,747,573
VALVED NURSING NIPPLE
Wilbur A. Schaich, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a corporation of Ohio
Application July 16, 1954, Serial No. 443,855
6 Claims. (Cl. 128—252)



1. In combination, a feeding nipple of flexible material having a base portion and a bulbous feeding tip, said nipple defining a central fluid passage extending from said base portion to said feeding tip, said nipple also defining an annular valve-seating surface formed in surrounding relation to said central fluid passage, an impervious valve member axially movably mounted in said central fluid passage and having an annular portion engageable with said valve-seating surface to resist fluid flow in said central fluid passage in the direction away from said feeding tip, and means in the wall of said central fluid passage defining axially extending fluid passages disposed outwardly of said valve member, whereby fluid flow toward said feeding tip may occur whenever said valve member is displaced from said valve-seating surface.

2,747,574
DISPOSABLE PACKAGE AND APPLICATOR FOR SUPPOSITORIES
Joseph P. De Lorenzo, Houston, Tex.
Application September 29, 1954, Serial No. 459,032
2 Claims. (Cl. 128—261)



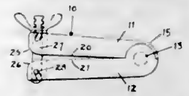
2. A disposable package and applicator for suppositories comprising a tubular barrel and a tubular cap each closed at one end, the closed end of the barrel being received bodily within the cap and the open end of the barrel being flared outwardly, and a plunger received within the barrel, the barrel being acted upon by the cap whereby the barrel is caused to grip the plunger sufficiently to prevent the plunger from pulling out, an opening being formed in the closed end of the barrel and the closed end of the cap having means for engagement with the opening to seal it.

2,747,575
CATAMENIAL BANDAGES
Berton M. Mercer, New York, N. Y.
Application August 15, 1952, Serial No. 304,533
10 Claims. (Cl. 128—290)



1. A catamenial bandage comprising an elongated absorbent pad, said pad having a medial hump longitudinally of and at the top thereof, a hump-retaining means at the base of said hump, said pad having margins longitudinally thereof each making a single bend outwardly upward directly from the base of said hump and each providing a single valley in said pad between the hump and margin at the region of said bend, and a wrapping of pervious material around said pad retaining said margins bent upwardly.

2,747,576
CIRCUMCISION CLAMP
Harry Bronstein, Brooklyn, N. Y.
Application February 3, 1955, Serial No. 485,944
4 Claims. (Cl. 128—346)



3. A circumcision clamp comprising a pair of substantially flat mating jaws pivotally connected to one another at the rear portion thereof and adapted to embrace a foreskin; each of said jaws being provided with a transverse slot at the front thereof open on three sides, and a cut-out portion upon the bottom surface of each of said jaws in abutting relationship to its mating surface and extending upwardly and outwardly therefrom, a stem member movable within the transverse slots of said jaws pivotally secured to one of said jaws at the front portion thereof and having a threaded end, and an operating member upon said threaded end adapted to bear against the other of said jaws so as to pivotally move said jaws toward one another and secure them in the moved position so as to exert pressure upon the foreskin therebetween.

2,747,577
BINDER ELEMENTS FOR LOOSE LEAF SHEETS
Albert Freundlich, New York, N. Y., assignor to Freundlich-Gomez Machinery Corp., College Point, N. Y., a corporation of New York
Application October 1, 1952, Serial No. 312,559
2 Claims. (Cl. 129—1)

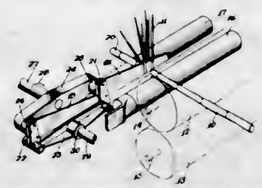
1. A binder of resilient material comprising an elongated backbone, a plurality of spaced fingers unitary with

one side of the backbone and having free ends extending to the opposite side of said backbone, said opposite side of said backbone having a sinuous edge providing alternating notches and humped projections, said projections rising to substantially the same height, the free ends of each finger having a sinuous edge providing a central notch



and opposite humped side tabs, the notch of each finger normally receiving one of said humped projections on the backbone, the tabs being normally disposed in adjacent notches in said backbone, and the projections on the backbone including one between each two adjacent fingers which projects outwardly beyond the portions of said notches in said backbone which receive the tabs.

2,747,578
CONTROLLED MOVEMENT FOR THE KNIVES IN A COMBINATION CANE STALK CUTTER AND LEAF STRIPPER
Elof K. Karlsson, Moline, Ill., assignor to International Harvester Company, a corporation of New Jersey
Continuation of application Serial No. 192,744, October 28, 1950. This application October 19, 1954, Serial No. 463,297
3 Claims. (Cl. 130—31)



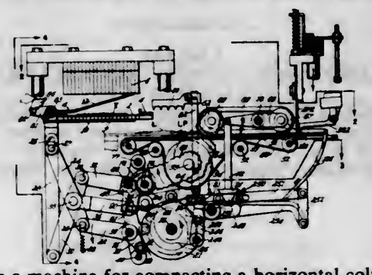
1. A knife arm having a substantially straight knife edge for use in conjunction with a cane treating machine having cooperative rolls rotating inwardly toward each other and forming a downwardly moving surface therebetween, comprising a rotatable structure, said knife arm fixed to said rotatable structure and adapted to be moved downwardly through the juncture between the cooperative rolls, and parallogram linkage means associated with the rotatable structure and said knife arm for controlling the path of movement of said knife arm to accomplish a constant velocity of all points of said knife arm and a parallel positioning of said straight knife edge with respect to said cooperative rolls at all positions thereof.

2,747,579
FILTER TIP CIGARETTE
Milton G. Gage, Chicago, Ill., and Thomas L. Gage, Boulder, Colo.
Application December 10, 1952, Serial No. 325,178
2 Claims. (Cl. 131—4)



1. A cigarette comprising a filler of tobacco enclosed within a paper wrapper, a filter element at one end of the filler, said filter element and filler having adjacent ends in abutting contact lying in a plane and a tip of relatively non-absorbent material encompassing the filter element and contiguous portion of the filler, said tip comprising two cylindrical sections slightly spaced axially to provide therebetween a severance line for the wrapper extending circumferentially of the cigarette in the plane of the abutting ends of the filter and filler for exposing the wrapper at said plane to facilitate manual separation of the filter and the surrounding portion of the tip as a unit from the contiguous portions of the filler and tip.

2,747,580
FILLER FEED MECHANISM
Joseph A. Neumair, Hollis, N. Y., assignor to International Cigar Machinery Co., a corporation of New Jersey
Application June 5, 1952, Serial No. 291,888
15 Claims. (Cl. 131—21)



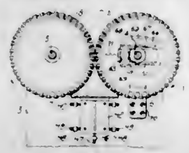
1. In a machine for compacting a horizontal column of tobacco and having positive feed means to move said tobacco forward, a yieldable horizontal member positioned above said horizontal column of tobacco, a yieldable finger positioned transversely to said column to oppose the forward motion thereof at a predetermined point, means operatively connected to said yielding finger to arrest the movement of said feed means upon a yielding movement of said finger, said means including a link positioning said yielding finger, said link having at least two overlapping parts whereby its effective length may be increased and decreased, and a device moved by said yieldable horizontal member and operative to increase or decrease the effective length of said link whereby to vary the position of the point of opposition of said finger.

14. The method of forming cigar bunch charges having some laminae of whole leaf width portions comprising, forming a thin stream of whole tobacco leaves placed longitudinally in said stream, severing sections of bunch charge length in said stream to form lengths having corrugations at the ends, placing said sections side by side in shingled relationship to form a second stream with said corrugations of adjacent lengths in register with each other, compacting said shingled sections to a predetermined density and severing bunch charge widths to form bunch charges from the forward end of said shingled compacted stream.

2,747,581
APPARATUS FOR SHAPING AND DRYING CIGAR BUNCHES OR THE LIKE
Karl Erik Granstedt, Stockholm, Sweden, assignor to Arenco Aktiebolag, Stockholm, Sweden, a Swedish joint-stock company
Application April 6, 1954, Serial No. 421,273
Claims priority, application Sweden April 24, 1953
3 Claims. (Cl. 131—79)

1. An apparatus for shaping and drying cigar bunches or the like comprising a pair of adjoining rotatable drums having each in their peripheries an endless series of radially open mould pockets adapted to receive the bunches, means for transferring the bunches from a pocket in one of said drums to a temporarily oppositely disposed pocket in the other drum, a heating element located between said drums and having a pair of sta-

tionary converging heat radiation surfaces having substantially the same curved shape as said drums and being located close to the peripheries of said drums and adapted to cover and to substantially close the open sides of said



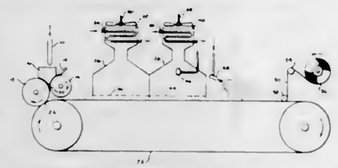
pockets in transit and each extending over a plurality of adjoining mould pockets, and means for adjusting said heating element laterally in a direction substantially parallel to a plane including the axes of both the drums.

2,747,582
MACHINE FOR STEMMING AND BLANKING TOBACCO LEAVES
Willy Richter, Hamburg-Bergedorf, and Alexander Flocke, Hamburg-Rienbek, Germany, assignors to Kurt Korber & Co. K. G., Hamburg-Bergedorf, Germany
Application March 10, 1950, Serial No. 148,772
10 Claims. (Cl. 131—131)



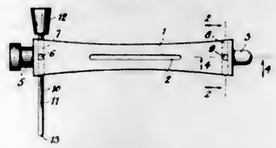
1. A machine for stemming and blanking tobacco leaves, comprising a frame, a roller rotatably mounted in said frame, a counter member for cooperating with said roller, cutting blades on said roller adapted for a stemming operation, other cutting blades on said roller forming a closed contour and disposed between said first-mentioned cutting blades and the end of the roller, and means on said counter member for cooperation with said first-mentioned and said other cutting blades so as to enable simultaneous stemming and blanking of the tobacco leaves.

2,747,583
CONTINUOUS TOBACCO SHEET PRODUCTION
Walter G. Frankenburg, Millersville, and Alfred M. Gottscho, Lancaster, Pa., assignors to General Cigar Co., Inc., New York, N. Y., a corporation of New York
Application September 8, 1953, Serial No. 378,722
11 Claims. (Cl. 131—140)



6. A continuous process for the production of a thin, coherent tobacco sheet of extensive length, which comprises coating the surface of a moving steel belt with a thin layer of an aqueous paste containing pulverized tobacco and an innocuous water-soluble binding agent, impinging a flow of warmed air having a temperature up to 160° F. and a relative humidity of not more than about 25% on said layer for a predetermined period of time to warm and partially dry said layer, impinging on the thus warmed and partially dried layer another flow of warmed air having a temperature at least 10° F. below the first-mentioned temperature but not below 110° F. for a period of time substantially equal to said predetermined period so that said partially dried layer is converted into a visually dry and coherent tobacco sheet adherent to said belt, and stripping said coherent tobacco sheet from said belt after remoistening said coherent tobacco sheet.

2,747,584
HAIR CURLERS
William G. Polykranas, Flushing, N. Y.
Application August 4, 1954, Serial No. 447,740
1 Claim. (Cl. 132—33)



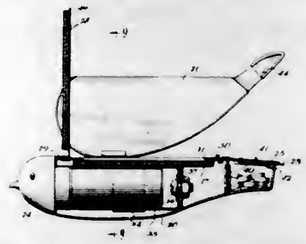
A hair curler having an elongated spindle upon which a curl is wound and the spindle positioned with its longitudinal axis extending substantially parallel to the surface of the scalp, the spindle having an opening adjacent to one end, a pin thrust through said opening and having ends extending laterally from the spindle, one of the ends contacting the scalp and preventing rotation of the spindle, the other end constituting a finger piece, the pin being detachable from the spindle to permit separation of the spindle from the formed curl.

2,747,585
CURLING ROD FOR USE IN THE COLD PERMANENT WAVING OF HAIR
Lyman H. Allen, Jr., Mountain Lakes, N. J., assignor to Foster D. Snell, Inc., New York, N. Y., a corporation of New York
Application October 6, 1950, Serial No. 188,854
16 Claims. (Cl. 132—42)



1. A hair curling rod comprising a rod of water-proof material adapted to receive a coil of hair and capable of fracture under light mechanical force which has a permanently sealed internal chamber substantially filled with a cold waving solution and a position of weakness on its hair-receiving surface adjacent its internal chamber which will permit the rod to be broken at the point of weakness by the application of light mechanical force after a strand of hair has been wound on the rod, the said cold waving solution being present in the said chamber in a predetermined volume such that it will wet substantially all parts of a strand of hair wound upon the rod without any substantial excess to flow out of the hair, upon the application of the said mechanical force.

2,747,586
POWDER COMPACT
Mortimer L. Vogelman, Elgin, Ill., assignor to Elgin American, Inc., a corporation of Illinois
Application October 9, 1951, Serial No. 250,403
8 Claims. (Cl. 132—83)



1. A cosmetics compact of the character described comprising: a body section having an aperture therein disposed for the reception of a lipstick container; a pair of

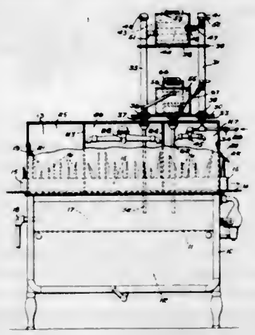
covers hinged to said body section, one of said covers having a portion overlapping the other; biasing means for swinging said covers outwardly; and a single latch retaining both covers in closed position.

2,747,587
APPARATUS FOR QUENCHING AND REELING RODS
Alexander W. Strachan, Monongahela, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Original application March 13, 1950, Serial No. 149,351, now Patent No. 2,658,012, dated November 3, 1953. Divided and this application August 14, 1953, Serial No. 374,200
2 Claims. (Cl. 134—57)



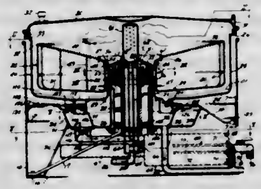
1. Apparatus for quenching and reeling hot rolled rods comprising water quenching means through which the rod passes, an electric eye on the entry side of said quenching means in line with the path of travel of said rods, a reel at the exit side of said quenching means for receiving said rod, a conduit for supplying water to said quenching means, a valve in said conduit, a solenoid for opening and closing said valve, and means operable by said electric eye to energize said solenoid.

2,747,588
DISHWASHING MACHINE
William C. Bonner, Watertown, Mass.
Application May 20, 1953, Serial No. 356,289
14 Claims. (Cl. 134—93)



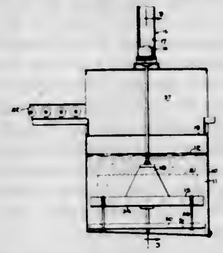
12. A device for supplying cleaning agents to a dishwashing machine having a water supply pipe comprising: a first tank adapted to contain a soluble cleaning agent mounted above said machine; a conduit communicating with said pipe and discharging into said tank; an opening in the side of said tank spaced from the bottom thereof; a discharge pipe leading from said opening down into the machine; a second tank mounted above said machine; a perforated partition dividing said second tank into an upper compartment, adapted to hold a soluble disinfecting agent, and a lower compartment; means for conducting water from said pipe to said second tank; and an outlet in the bottom of said lower compartment communicating with the interior of the machine.

2,747,589
DISHWASHER CONTRAROTARY; SOLUTION RECIRCULATION MEANS AND ATTACHMENTS
Frank Cicero, Los Angeles, Calif.
Application January 15, 1952, Serial No. 266,522
32 Claims. (Cl. 134—96)



3. A machine of the type referred to including: a rotatable tub for containing liquids, a driving connection for said tub being mounted coaxially thereto on a tubular support and said tub having an upwardly extended tubular hub surrounding said support; a spout and a valve thereof connected to the bottom of the tub adjacent the hub and adaptable to eject the drainage from within the tub during and off its rotation; and a stabile annular receiver mounted below and vertically aligned with said spout for disposing of said drainage during and off said rotation.

2,747,590
WASHER FOR WORKPIECES
Harold N. Ipsen, Rockford, Ill.
Application October 4, 1951, Serial No. 249,768
4 Claims. (Cl. 134—105)

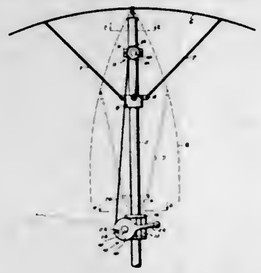


1. A washer comprising, in combination, a walled receptacle defining a washing chamber adapted to hold a body of liquid and having an opening in a horizontal upper wall thereof, a casing enclosing said opening and defining a drying chamber communicating with said washing chamber through the opening, an elevator having a work supporting platform movable vertically through said opening between an upper position in said drying chamber and a lower position in said washing chamber, a cover for said opening, means operable as an incident to the raising and lowering of said platform to move said cover to open and close the opening, and a conduit in heat exchanging relation with said liquid and adapted to conduct heated gases therethrough, said conduit having an outlet opening into said drying chamber above said cover and below said platform whereby to permit the heated gases to circulate about said platform and to dry the work supported thereby.

2,747,591
RAISING AND LOWERING MEANS FOR LAWN UMBRELLAS
Floyd H. Ogden, Fort Lauderdale, Fla.
Application January 26, 1955, Serial No. 484,141
2 Claims. (Cl. 135—20)

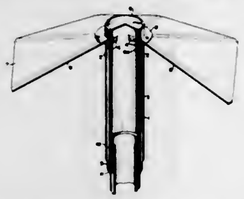
1. In combination with a lawn umbrella having a supporting pole and a cover connected thereto to be raised and lowered, a collar slidable upon the pole and having means connected thereto to raise and lower the umbrella,

a cable winding device that is clamped upon the pole below the collar, a cable guide pulley clamped to the pole above the collar, a cable wound upon the winding device and extending upwardly and about the guide pulley and with the free end of the cable being connected to the collar, manual means for actuating the winding device to wind the cable thereon whereby to cause the collar to be elevated upon the pole for raising the umbrella and latch means associated with the winding device whereby to prevent the winding device from moving in a reverse direction when the umbrella has been raised, the latch means when released permitting the umbrella to be lowered by gravity as the cable is unwound from the winding device, the said winding device comprising a pair of mating clamping plates having opposed faces that are vertically grooved whereby to partially embrace the pole when the clamps are in clamping posi-



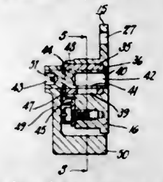
tion, screws for binding the plates upon the pole, one clamping plate provided with an extension that is apertured for the non-rotatable support of a forwardly extending shaft, a winding drum rotatable on the shaft and with the drum having end flanges, one flange adjacent the clamping plate being provided with a plurality of spaced apart apertures, the other of said flanges being provided with an aperture for the anchoring connection of one end of the cable, the said last named flange being provided with a winding handle, the clamp plates each provided with a cylindrical opening and with the openings being in axial alignment, the said latch means comprising a latch pin slidable jointly in the openings whereby the pin may be shifted to engage in a selected aperture of the apertured first named flange whereby to prevent rotation of the winding drum accidentally when the umbrella is in the raised position.

2,747,592
COLLAPSIBLE UMBRELLA
Stanley H. Epstein, Far Rockaway, N. Y.
Application June 23, 1955, Serial No. 517,545
5 Claims. (Cl. 135—20)



1. A collapsible umbrella comprising a tubular handle member having a plurality of transverse openings near its upper end, an actuating member frictionally mounted within the tubular handle member and adapted to slide therein, at least one additional element mounted within the actuating member and adapted to extend the length of the handle, a plurality of ribs whose inner ends are bent to an angle and extend through the transverse openings into the tubular handle member, whereby downward movement of the actuating member will act upon the inner ends of the ribs to open the umbrella.

2,747,593
VALVE MECHANISM
Darrell E. Royer, Vandalia, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application July 3, 1952, Serial No. 297,066
6 Claims. (Cl. 137—45)



1. Valve mechanism including, a valve housing having a bore therethrough, a ported cylinder disposed within said bore, a ported piston rotatably journalled within said cylinder, said piston having an annular groove intermediate its ends, a retaining member having a semi-circular notched portion adapted for engagement with said piston groove to prevent axial movement of the piston relative to the housing, said retaining member being rigidly connected to said housing, means including said retaining member for preventing relative movement between said cylinder and housing, and gravity actuated means operatively connected with said piston for determining the position of said ported piston within said ported cylinder.

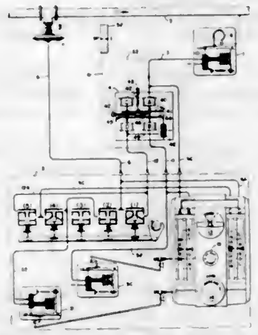
2,747,594
COMBINATION SAFETY PRESSURE AND VACUUM RELEASE DEVICE
John H. Boetjer, Independence, Mo., assignor to Black, Sivalls & Bryson, Inc., Kansas City, Mo., a corporation of Delaware
Application July 20, 1954, Serial No. 444,547
4 Claims. (Cl. 137—71)



3. A combination vacuum and pressure-release device including a collar forming a flow opening and having an annular seat surrounding the flow opening, diaphragm retaining means spaced outwardly from said annular seat and encircling the flow opening to provide an opening from atmosphere, a flexible ring fixed to the diaphragm retaining means and having bearing support on the annular seat for closing the opening from atmosphere and adapted to unseat by atmospheric pressure when pressure in the flow opening drops below atmospheric pressure, and a frangible diaphragm carried by said diaphragm retaining means for covering said flow opening including the flexble ring and for cooperating with the flexible ring in maintaining a working pressure in the flow opening and relieving pressure when the pressure in the flow opening reaches a predetermined maximum.

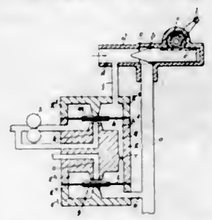
2,747,595
FLUID PRESSURE SELECTOR STATION FOR CONTROL SYSTEMS
Paul S. Dickey, East Cleveland, Ohio, assignor to Bailey Meter Company, a corporation of Delaware
Application May 9, 1952, Serial No. 287,074
2 Claims. (Cl. 137—82)

1. A fluid pressure selector station for varying the magnitude of a control fluid pressure and having three manually positionable elements, including in combination a first manually positionable control element having alternate operating positions selectively placing the station under hand domination or automatic domination, a second manually positionable control element operable to vary the magnitude of the control fluid pressure, a third manually positionable control element operable to vary the magnitude of a fluid pressure representative of set point pressure, and an interlocking valve assembly jointly



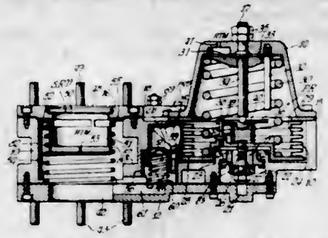
responsive to actuation of the three manually positionable control elements and positioned by the first manually positionable control element in the automatic position thereof to render ineffective the second manually positionable control element and effective the third manually positionable control element, and in the hand position of the first manually positionable control element rendering ineffective the third manually positionable control element and effective the second manually positionable control element.

2,747,596
LIQUID SUPPLY AND FLOW REGULATING MEANS
Richard Joseph Ifield, Dural, New South Wales, Australia, assignor to Joseph Lucas (Industries) Limited, Birmingham, England
Application August 11, 1952, Serial No. 303,764
1 Claim. (Cl. 137—100)



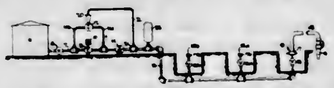
A liquid supply and flow regulating means comprising in combination a first chamber, a first flexible diaphragm dividing the first chamber into first and second compartments, a second chamber, a second flexible diaphragm dividing the second chamber into first and second compartments, a passage for admitting liquid under variable pressure to the first compartment of the first chamber, a second passage for admitting liquid under a variable pressure, lower than that of the liquid admitted through the first passage to the first compartment of the first chamber, to the first compartment of the second chamber, a restricted passage interconnecting the second compartments of the first and second chambers, a pump for supplying liquid under pressure to the second compartment of the first chamber, and thence through the restricted passage to the second compartment of the second chamber, a liquid pressure relief outlet leading from the second compartment of the first chamber, a first valve member operable by the first diaphragm for controlling communication between the last mentioned compartment and the liquid pressure relief outlet so that variation of liquid pressure in the first compartment of the first chamber is accompanied by movement of the first valve member for causing a proportional variation in the liquid pressure in the second compartment of the first chamber, a second liquid outlet leading from the second compartment of the second chamber, and a second valve member operable by the second diaphragm for controlling liquid flow from the last mentioned compartment to the second liquid outlet, whereby liquid flow through the second outlet is proportional to the difference between the liquid pressures in the first compartments of the two chambers.

2,747,597
FUEL DROP TANK VALVE
John W. Keckler, Bryan, Ohio, assignor to Aro Equipment Corporation, Bryan, Ohio, a corporation of Ohio
Application October 29, 1951, Serial No. 253,734
6 Claims. (Cl. 137—107)



1. In a valve for a fuel drop tank, a valve body having an inlet and an outlet, a pressure regulator in said valve body between said inlet and said outlet for reducing air pressure received in said inlet and feeding the reduced air pressure to said outlet, said outlet being adapted for connection with the fuel tank, a suction relief valve in said valve body between said presure regulator and said outlet and having an inlet from atmosphere, a valve disc normally seated on said last inlet and being subject externally to atmospheric pressure upon reduction of pressure in said valve body between said pressure regulator and said valve body outlet for opening when there is a vacuum therein to thereby permit flow of atmospheric air to said outlet, and an automatic vent in said valve body comprising a normally open valve, pressure means to close said valve, said pressure means being connected to said valve body inlet, and said valve being connected between the outlet of said pressure regulator and atmosphere to close communication between said last outlet and atmosphere when pressure is applied to said valve body inlet, and to open communication between said last outlet and atmosphere upon cessation of the application of pressure to said valve body inlet.

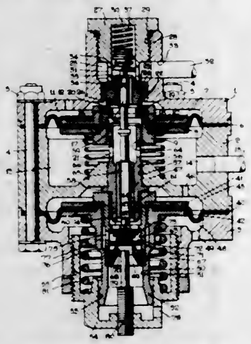
2,747,598
LIQUID-DISPENSING SYSTEM WITH REMOTE CONTROL
James Arthur Wooldridge, Great St. Helen's, London, England, assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application July 22, 1952, Serial No. 300,183
Claims priority, application Great Britain July 31, 1951
19 Claims. (Cl. 137—108)



1. A liquid-dispensing system including: a pump having suction and discharge sides; a delivery pipe line con-

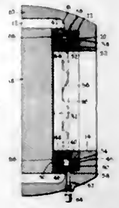
nected to the discharge side of said pump; at least one dispensing device including a delivery valve connected to said delivery pipe line; a non-return valve in said delivery pipe line, said non-return valve being disposed to permit liquid flow from said pump to the dispensing device but not vice versa; a by-pass line providing a low-resistance flow path for liquid between the discharge and suction sides of said pump; a by-pass valve in said by-pass line which is operative to vary the resistance to liquid flow through said by-pass line; and a pressure-responsive valve actuator for said by-pass valve connected to respond to the pressure in said delivery pipe line at a point therein located between said non-return valve and the said delivery valve, said actuator being disposed to actuate the by-pass valve to decrease the said resistance to flow through the by-pass line when the pressure at said point in the delivery pipe line rises to a predetermined value.

2,747,599
FLUID PRESSURE REGULATING DEVICE
Robert E. Watson, Edgewood, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application July 21, 1953, Serial No. 369,489
10 Claims. (Cl. 137—116.5)



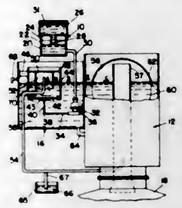
10. A fluid pressure control valve device for controlling the pressure of fluid in an apparatus, said device comprising a casing, a seat element carried by said casing and having a through opening connecting a supply chamber and a delivery chamber in said casing, a fluid pressure supply valve controlling a supply communication through said opening and normally seated against said seat element for closing such communication, two spaced apart movable abutment means subject on their adjacent faces to pressure of fluid in said delivery chamber, regulating means for exerting a preload on one of said movable abutment means in opposition to pressure of fluid in said delivery chamber according to a chosen value of pressure desired in said delivery chamber, actuating means carried by said one movable abutment means operative in response to a reduction in pressure in said delivery chamber below said chosen value to unseat said supply valve, a fluid pressure release valve, normally seated, carried by said one movable abutment means for controlling a release communication from said delivery chamber, means adjustable relative to said casing for engaging and unseating said release valve upon movement of said one movable abutment means against resistance of said regulating means responsive to attainment of a chosen higher value of pressure in said delivery chamber, a fluid pressure relief valve normally seated against said seat element controlling communication between said delivery chamber and a relief chamber in said casing surrounding said opening, the other of said two movable abutment means controlling operation of said relief valve, and spring means acting on said other movable abutment means opposing pressure of fluid in said relief chamber such that said relief valve will be unseated only if pressure in said delivery chamber is reduced a corresponding degree below that in said relief chamber.

2,747,600
VALVE LUBRICATING SYSTEM
Milton P. Laurent, Houston, Tex., assignor, by mesne assignments, to W-K-M Manufacturing Company, Inc., a corporation of Delaware
Application March 13, 1952, Serial No. 276,278
15 Claims. (Cl. 137—246.22)



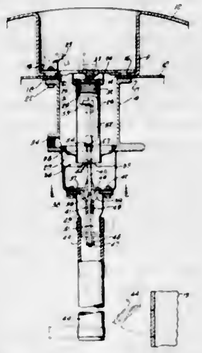
1. In a gate valve having a housing forming a valve chamber provided with aligned ports having opposed valve seats and a valve gate slideable between the seats, the combination comprising: means defining an annular recess in one of the seats and surrounding the corresponding port; floating ring means mounted in said recess and providing at least two concentric radially-spaced annular surfaces for sliding engagement with one face of the valve gate; means for introducing lubricant under pressure into said recess behind said ring means; and means defining a passage through said ring means for conducting lubricant from therebehind to the annular space between said concentric gate-engaging surfaces.

2,747,601
PRESSURE RESPONSIVE LIQUID SUPPLY FOR BREATHER VALVE
Harold A. Quist, Swarthmore, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
Application November 24, 1954, Serial No. 471,035
7 Claims. (Cl. 137—253)



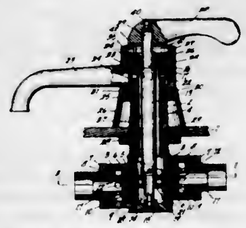
6. In combination with a reciprocating liquid-sealed pressure relief valve, flue connected to and adapted to transmit pressure and vacuum conditions from storage receptacles, a sealing liquid supply system responsive to the pressure conditions to be relieved comprising a liquid transmission chamber adjacent the relief valve positioned to support the operating liquid level of said valve therein, a reservoir of sealing liquid above said transmission chamber, a conduit connected therewith, a valve in the connecting conduit submerged in the liquid in said transmission chamber, an operating chamber supporting a diaphragm and adapted to contain a fixed volume of operating liquid, said operating chamber being positioned to keep the diaphragm submerged in the liquid of the transmission chamber at a depth to place the liquid therein on a level with the surrounding liquid under normal operating conditions, an inverted pressure cup in said operating chamber partially submerged in the operating liquid, the relative areas of the inverted pressure cup and the operating chamber being proportionate to the area covered by the reciprocating relief valve and the total area of sealing liquid externally of the operating chamber and said valve, a conduit connecting the relief valve flue connection to the pressure space in the pressure cup thereby transferring like actuating pressures to both the relief valve and the inverted cup, and valve operating means connecting the reservoir conduit valve and the diaphragm.

2,747,602
FILLER VALVE FOR OIL TANKS
Ferdinand M. Trobridge, Dayton, Ohio, assignor to United Aircraft Products, Inc., Dayton, Ohio, a corporation of Ohio
Application November 18, 1954, Serial No. 469,668
5 Claims. (Cl. 137—264)



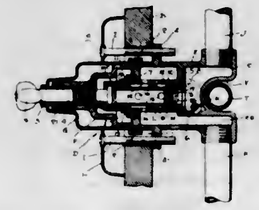
1. In an oil tank having a hopper and a main chamber outside said hopper, said tank having a fill opening in the wall thereof, a filler valve assembly including a substantially cup-shaped body dependent from said tank wall in said main chamber in position to receive oil introduced through said fill opening, said body having side openings for discharge of oil into said main chamber and a bottom opening, a connection from said bottom opening to said hopper, a valve reciprocable in said body for opening and closing said bottom opening, a stem to which said valve is fixed having an outer end extending toward said fill opening and manually accessible therethrough, means on said body providing a bearing for said stem, a handle on the outer end of said stem shaped as a hook, and means defining a joint in said stem between said handle and said bearing.

2,747,603
MIXING VALVE
Hughlin E. Klingler, Elkhart, Ind.
Application November 6, 1951, Serial No. 255,077
8 Claims. (Cl. 137—343)



6. A mixing valve comprising an elongated generally tubular body member defining a mixing chamber and having laterally projecting inlet arms with ports adjacent its inner end communicating with the mixing chamber, inlet valves coacting with said ports and provided with stems projecting through said ports, a body member support surrounding and having threaded engagement with said body, a coacting clamping nut threaded on said body and disposed between said inlet ports and said support, said body having a plurality of discharge ports adjacent its outer end, a discharge spout adjustably sleeved upon said body member in supported relation to said support and having an internal channel registering with said outlet ports, a retaining nut threaded upon the body member and clamping said spout against said support, a spindle disposed longitudinally within said body member to project therefrom and provided with cams coacting with said inlet valve stems, and a handle secured to said spindle.

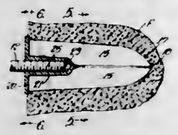
2,747,604
MIXING VALVE
James Fraser, Wilmington, Del., assignor to Speakman Company, Wilmington, Del., a corporation of Delaware
Application August 13, 1952, Serial No. 304,109
2 Claims. (Cl. 137—360)



1. A mixing valve structure having separate cold and hot water supply inlets and a discharge outlet adjacent one end of the structure, a valve actuator extending out of the valve structure at its opposite end, said valve structure being arranged for mounting in a vertical wall with said inlets and outlet at one side of the wall and with said valve actuator accessible for adjustment at the opposite side of the wall, said inlets having their axes approximately parallel to said wall and at approximately the same distances from the latter and opening at opposite sides of a vertical plane transverse to said wall and intersecting said valve body, and said outlet opening downwardly and having its axis substantially parallel to said wall and nearer to the latter than are said inlets, a discharge pipe connected to said outlet and extending downward away from the latter through the space between said wall and said inlets, said valve structure being formed with an indentation between said inlets, said indentation being of such depth as to extend substantially to the side of the inlets nearest the wall and extending entirely through the casing in a vertical direction, a twin-ell pipe fitting having an inlet to which the lower end of said discharge pipe is connected and having two outlets, one of which is alongside the last mentioned inlet, piping arranged to connect the last mentioned outlet to a showerhead at said opposite side of said wall and above said valve structure and including a lower pipe section having its lower end connected to the last mentioned outlet and having an upper portion within said indentation, and conduit means connected to the second of said twin-ell outlets and arranged to extend horizontally through said wall, valve means mounted in said valve structure for adjustment by said valve actuator to open and close communication between each supply inlet and said discharge outlet and to separately regulate the amount of water passing to said discharge outlet for said supply inlet, and means operable to permit or prevent flow through the conduit means connected to said second twin-ell outlet.

2,747,605
VALVE FLOAT AND COUPLING THEREFOR
Paul L. Adams, Dubuque, Iowa
Original application April 9, 1951, Serial No. 220,089, now Patent No. 2,678,074, dated May 11, 1954. Divided and this application September 28, 1953, Serial No. 382,819

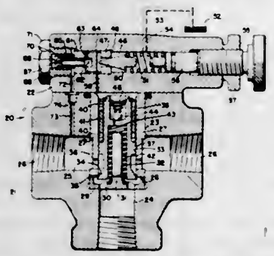
2 Claims. (Cl. 137—452)



1. A float comprising a solid plastic elongated coupling formed for attachment to a rod or the like, a body of buoyant material of a plastic material homogeneous with that of the coupling and characterized throughout by cellular walls having a low resistance to crushing such as to permit insertion of the coupling into the float body when the coupling is advanced endwise thereinto with pressure, the cellular walls thus crushed to accommodate the coupling defining within the float body an opening conforming closely to the size and cross sectional form of the coupling and the cellular walls immediately surrounding the opening remaining intact and exerting upon the coupling a reactive pressure tending to frictionally hold the coupling in assembled relation with the float body, and a fusion-producing adhesive between the contacting surfaces of the coupling and body, the adhesive producing a fusion bond therebetween without impairment of the structures of the coupling and float body.

2,747,606
PRESSURE REDUCING VALVE
Cecil E. Adams and Ellis H. Born, Columbus, Ohio, assignors to The Denison Engineering Company, Columbus, Ohio
Application October 6, 1951, Serial No. 250,164

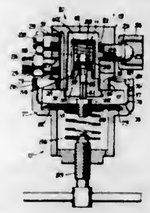
13 Claims. (Cl. 137—489.5)



1. A pressure reducing valve comprising a body having a chamber and main and secondary pressure ports connected therewith; a valve element disposed for movement in said chamber to control communication between said main and secondary pressure ports; yieldable means urging said valve element toward a position to prevent such communication; passage means connecting said main pressure port and said chamber to apply fluid under pressure to said valve element to move the same in opposition to said yieldable means; an exhaust passage communicating with said first-mentioned passage means; a resiliently closed valve for controlling fluid flow through said exhaust passage; and a constant volume flow control valve including a movable element in said first-mentioned passage between the point of communication of said exhaust passage therewith and the connection with said main pressure port, said flow control valve being normally open and responsive to a fluid pressure differential to move toward a closed position.

2,747,607
PRESSURE REGULATOR
John L. Matasovic, Chicago, Ill.
Application December 12, 1951, Serial No. 261,205

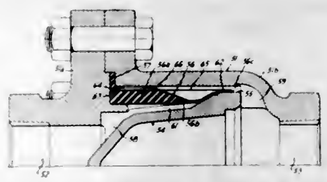
1 Claim. (Cl. 137—505.42)



In a pressure regulator, in combination, a high pressure body consisting of a single integral metal bar, with a high pressure cavity comprising a central bore extending inwardly into said bar from one end thereof, a mounting boss immediately surrounding said bore, and a relatively narrow annular face bordering said cavity; an inlet fitting and an outlet fitting on said high pressure body with a gas inlet port extending from the inlet fitting to the high pressure cavity and a gas outlet port extending from the outlet fitting to said annular face; a unitary, bodily detachable, self-contained diaphragm housing entirely independent of and separate from the aforementioned inlet and outlet fittings and comprising a base secured to and supported wholly upon the aforementioned base; with a cavity in the base, a detachable shell, clamping means securing the base and shell to each other, and a diaphragm secured therebetween whereby said diaphragm and cavity define a low pressure chamber; together with a unitary, removable, self-contained valve unit comprising a plug positioned in the high pressure cavity and sealing the open end thereof, said valve assembly including a valve and valve seat enclosed by and held in assembled relation with respect to each other by a dust cap affixed to and supported wholly by said plug, with an operating pin on said valve unit extending directly to the aforementioned diaphragm whereby removal of the diaphragm housing from the high pressure body will afford access to the valve unit for removal and replacement of the valve and valve seat thereof without disturbing connections attached to the inlet and outlet fittings or loosening the diaphragm from its housing.

2,747,608
REINFORCED RESILIENT SLEEVE TYPE VALVE CONSTRUCTION
Marvin Henry Grove, Piedmont, Calif., assignor to Grove Valve and Regulator Company, a corporation of California
Application October 28, 1950, Serial No. 192,763

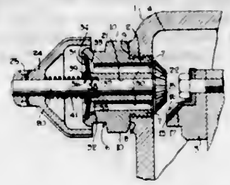
5 Claims. (Cl. 137—525)



1. In a valve construction, a body having inflow and outflow passages, a core within the body forming a flow barrier between the inflow and outflow passages, the barrier having a peripheral sealing surface, a resilient tube surrounding the core, said tube having one end portion of the same sealed to the body and having its other end portion disposed to surround the barrier, the interior of the tube being exposed to the inflow passage and the exterior of the tube being exposed to the outflow passage, a metal spring disposed about said other end of the tube and serving to urge the tube into sealing engagement with said peripheral sealing surface, said spring being uniformly yieldable in the direction of its length about the circumference of the tube, and means serving to retain said spring against displacement from the tube.

2,747,609
ACCELEROMETER TESTING DEVICE
Charles J. Sekera, Denver, Colo., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application August 21, 1951, Serial No. 242,945

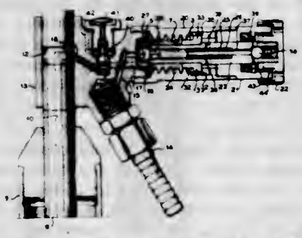
1 Claim. (Cl. 137—560)



A testing device for a rotary inertia brake controller device of the type including a casing having a screw-threaded exhaust port extending from the exterior of the casing to an interior chamber containing a flywheel member having an annular surface in coaxial relationship therewith accessible from the exterior of said casing through said exhaust port, said flywheel member being turnable to unseat a pilot valve for releasing fluid under pressure to said chamber, said testing device comprising a casing element having a screw-threaded portion at one end for permanent attachment within said exhaust port to said casing, said casing element having a bore in coaxial relationship to said one end and also having exhaust passages arranged around said bore, which bore and passages extend longitudinally through said casing element from end to end thereof, said casing element also having at the opposite end a first annular shoulder coaxial with said bore and encircling the adjacent ends of said exhaust passages and a second annular shoulder coaxial with said first annular shoulder located between said passages and said bore and spaced inwardly of said first annular shoulder, a rod extending through and slidably mounted in said bore for rotary and axial movement relative to said casing element, an annular driving element of lesser diameter than said exhaust port to accommodate insertion therethrough for disposition within said chamber and attached to the inner end of said rod for axial movement therewith into and out of driving engagement with said annular surface, a handle disposed beyond said opposite end of said casing element and secured to the outer end of said rod for manual axial and rotary actuation thereof, an annular resilient disc disposed at said opposite end of said casing element in encirclement of said rod for contact at one side adjacent its outer peripheral edge with said first annular shoulder and for contact adjacent its inner peripheral edge with said second annular shoulder, an annular retaining element encircling said rod and engaging the opposite side of said resilient disc adjacent its said inner peripheral edge, and a coil spring encircling said rod and interposed under pressure between said retaining element and said handle for restoring the said driving element to a retracted position out of engagement with said annular surface and for maintaining engagement of said resilient disc with said second annular shoulder thereby to stress said resilient disc to cause its biased seating engagement with said first annular shoulder.

2,747,610
CONTROLLING DEVICES FOR ROCK DRILL FEEDING MECHANISMS
Jan August Larcen, Stockholm, and Sven Laurentius Ytterfors, Stensberg, Nacka, Sweden, assignors to Aktiebolaget Atlas Diesel, Nacka, Sweden, a corporation of Sweden
Original application July 19, 1949, Serial No. 105,640, now Patent No. 2,617,388, dated November 11, 1952. Divided and this application January 5, 1952, Serial No. 265,182

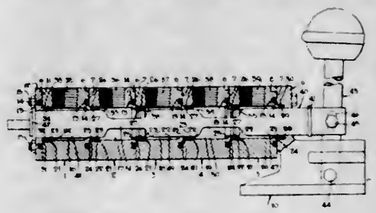
4 Claims. (Cl. 137—620)



1. A controlling device for rock drill feeding mechanisms comprising a housing separate from the drill, a first passage in said housing for supplying pressure fluid, a second passage in the housing for conveying pressure fluid from the housing to the feeding mechanism, a third passage in the housing for conveying pressure fluid from the feeding mechanism to the atmosphere, an automatically closing spring actuated release valve in said third passage operable from the exterior of the housing to open the third passage for releasing fluid pressure in the feeding mechanism, a control valve in the housing operable from closed position to different open positions to control the flow of pressure fluid from said first passage to said second passage and acted upon in opening direction by the fluid pressure in the first passage, a spring acting on said valve in closing direction, a member rotatable in the housing for controlling the tension of said spring, a screw thread in the housing, a screw member forming an abutment for said control valve and engaging said screw thread and operable by turning of said rotatable member to change the tension of said spring acting on the control valve, a coupling between said rotatable member and the housing comprising toothed members one of which being locked against rotation in the housing and the other rotatable together with said control member, a spring actuating one of said toothed members to bring it into engagement with said other toothed member in various positions of the rotatable member.

2,747,611
CONTROL VALVE DEVICE
Ellis E. Hewitt, Ruffsdale, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application January 23, 1953, Serial No. 332,831

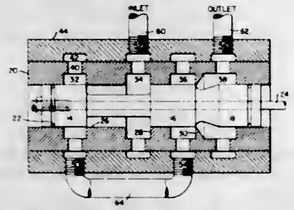
2 Claims. (Cl. 137—622)



1. A control valve device comprising, in combination, a plurality of identical casing sections each having at opposite ends plane surfaces and arranged in end to end relation by abutting engagement of the plane surfaces of

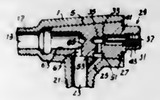
each two adjacent casing sections, end-caps engaging the outermost plane surfaces of the two end casing sections, respectively, said casing sections and said end-caps having, respectively, coaxially aligned bores open to each other and each of said casing sections also having a pipe-connecting bore leading from the first mentioned casing bore to an external surface of the respective casing section, each of said casing sections and one of said end-caps further having integrally formed therewith at one of the corresponding ends thereof an annular boss-like flange extending beyond the corresponding plane surface into a counterbore of the adjacent end of the adjacent casing section and the other end-cap, respectively, for coaxial alignment of said casing sections and said end-caps, said flange forming one half of an annular channel and being provided with an annular lip spaced inwardly from the cylindrical wall of said counterbore and extending toward the adjacent casing section or end-cap, as the case may be, a retaining ring disposed in said counterbore of the adjacent casing section to form the other half of said channel and also provided with a lip of the same diameter as and extending toward the first mentioned lip but terminating short thereof thereby providing a restricted annular opening to said channel, a sealing gasket disposed in an annular groove opening to the plane surface of each casing section and one of the end-caps for sealing engagement with the adjacent plane surface of the adjacent casing section and the other end-cap, respectively, securing means holding said casing sections and said end-caps in assembled relation, a reciprocable spool type slide valve having alternately arranged lands and connecting portions of smaller diameter extending through said coaxially aligned bores and supported at opposite ends in the bores in said end-caps, and a resilient O-ring mounted in each of said channels having a cross-sectional diameter slightly greater than the width of the respective annular opening and the radial depth of the respective channel and extending through the annular opening for sliding and sealing contact with one of said valve lands.

2,747,612
FORCE-COMPENSATED FLOW VALVE
Shih-Ying Lee, Arlington, Mass., assignor to Research Corporation, New York, N. Y., a corporation of New York
Application April 24, 1951, Serial No. 222,591
3 Claims. (Cl. 137—622)



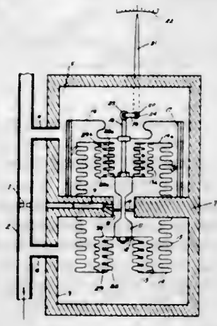
1. A force-compensated flow valve comprising a valve body and a valve element movable therein, the valve body having inlet and outlet passages, inlet and outlet chambers in the body communicating with the inlet and outlet passages, lands between the chambers, the movable valve element having lands and chambers cooperating with the lands and chambers of the valve body to provide between chambers in the valve body a pair of flow-control orifices in series when the valve element is displaced from closed position, one of said orifices having square-edged lands possessing a positive force-displacement characteristic with valve opening, and the other of said orifices having a configuration to provide a force-displacement characteristic approximating in magnitude but opposite in direction to that of the first-mentioned orifice, said other orifice discharging into an adjacent chamber in the movable valve element and cooperating chamber in the valve body, the movable valve element having at the entrance to the said downstream chamber therein an inwardly sloping surface disposed at an angle approximating the direction of the fluid flow into said chamber from the adjacent orifice, and the movable valve element having at the end of said chamber remote from said orifice a surface inclined in the opposite direction to the entrance surface and at a substantially smaller angle than the angle of the entrance surface, so that the component of momentum in one direction of movement of the valve element, due to flow efflux from the chamber, is greater than the component of momentum in the other direction due to flow influx to said chamber.

2,747,613
DUAL GAS VALVES
Harold C. Reinhart, Ferguson, Mo., assignor to Magic Chef, Inc., a corporation of New Jersey
Application October 10, 1951, Serial No. 250,620
7 Claims. (Cl. 137—625.16)



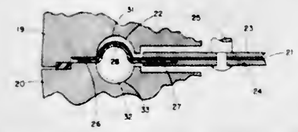
1. A valve for controlling the flow of gas to the simmer burner and main burner of a dual gas range burner, comprising a valve body having a bore opening at one end of the body to a main burner outlet, the body having a simmer burner inlet and a main burner inlet leading laterally into the bore and spaced axially with respect to the body with the main burner inlet toward said one end of the body, the body also having a lateral simmer burner outlet leading from the bore in the lateral plane of the inner end of the simmer burner inlet, a valve member rotary in the body having axially spaced first and second chambers therein in throttled communication through a restricted orifice, said chambers extending axially in the valve member with the first chamber intersecting the lateral plane of the inner end of the simmer burner inlet and the second chamber being located toward the other end of the valve body, said valve member also having a peripheral groove in the lateral plane of the simmer burner inlet and outlet, a first passage leading from said groove to the first chamber, a second and a third passage leading from opposite points in the periphery of the valve body in the lateral plane of the simmer burner inlet and outlet to the second chamber, a fourth passage in the lateral plane of the main burner inlet leading into a fifth axial main burner outlet passage in the end of the valve body toward the main burner outlet, and a sixth passage leading from the main burner outlet passage to a point in the periphery of the valve body in the lateral plane of the simmer burner outlet, the arcwise span of the groove and the angular relationship of the groove and the passages being such that the valve member has an "Off" position in which both inlets are blocked, a first open position in which gas flows only from the simmer burner inlet to the simmer burner outlet via said second passage, the second chamber, the restricted orifice, the first chamber, said first passage and the groove, a second open position in which gas flows directly from the simmer burner inlet to the simmer burner outlet via the groove, a third open position in which gas flows from the simmer burner inlet to the simmer burner outlet via the groove, said first passage, the first chamber, the restricted orifice, the second chamber, and the third passage, a fourth open position of restricted flow from the main burner inlet to the main burner outlet through the main burner outlet passage and concomitant flow to the simmer burner outlet as in the third position, and a fifth position in which gas flows unrestricted from the main burner inlet to the main burner outlet through the main burner outlet passage and from the main burner outlet passage through said sixth passage to the simmer burner outlet.

2,747,614
DIFFERENTIAL PRESSURE RESPONSIVE BELLOWS DEVICE
Robert B. Gray, Erie, Pa., assignor to American Meter Company, Incorporated, Erie, Pa., a corporation of Delaware
Application December 10, 1954, Serial No. 474,535
4 Claims. (Cl. 137—781)



1. A device responding to the difference in pressure on opposite sides of a partition comprising a pair of opposed bellows, one on each side of the partition, said bellows forming an envelope filled with liquid, and a rod extending through the partition and having a force transmitting connection to each of the bellows, one of the connections including a spring and another bellows, means providing a restricted passageway connecting the other bellows to the envelope whereby said other bellows upon change in pressure differential on opposite sides of the partition provides a modified rate to the force transmitted to the rod.

2,747,615
PRESSURE RESPONSIVE DEVICE HAVING A SLOTTED METAL DIAPHRAGM
Kenneth L. Tate, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a corporation of New York
Application February 25, 1953, Serial No. 338,658
3 Claims. (Cl. 137—784)



1. In a fluid pressure responsive device having an internal compartment defined by a pair of abutting housing sections, a diaphragm dividing said compartment into a pair of chambers and comprising a disk of metallic material having an annular corrugation therein, a peripheral portion of said diaphragm outside said corrugation being fixedly clamped between said housing sections with a central portion thereof inside said corrugation beng interposed and clamped between a pair of relatively rigid push plates, said corrugation having a plurality of spaced slots extending transversely therethrough and an annular strip of semi-flexible impermeable material having outer and inner peripheral portions maintained in sealing engagement with portions of said metallic diaphragm respectively clamped between said housing sections and said push plates, the intermediate portion of said annular strip between said peripheral portions thereof being flexibly movable with respect to and engageable with a surface of said corrugation.

2,747,616
PIPE STRUCTURE
Carl de Ganahl, Greenlawn, N. Y.
Application July 7, 1951, Serial No. 235,646
6 Claims. (Cl. 138—55)

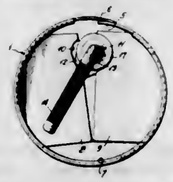


1. A pipe consisting essentially of a multiplicity of fibrous elements bonded together by and substantially embedded in a monolithic and substantially impervious hollow cylindrical body of plastic material, a portion of said fibrous elements being disposed helically and the remainder being disposed longitudinally substantially parallel to the axis of the pipe, said helically disposed fibrous elements being arranged at an angle a to a plane normal to the axis of the pipe such that

$$3\sin^2 a+\left(\frac{2}{m}\right)\sin a=1$$

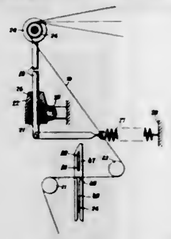
in which m is the ratio of the total cross-sectional area of all the fibers of the helically disposed elements to the total cross-sectional area of all the fibers of the longitudinally disposed elements.

2,747,617
THREAD PROTECTORS
John Walden, San Angelo, Tex.
Application May 27, 1953, Serial No. 357,864
7 Claims. (Cl. 138—96)



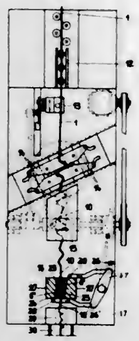
5. A protector for externally threaded pipe ends comprising, a spring steel longitudinally split sleeve, spreader plates attached along one edge to the internal side wall of said sleeve near one end thereof and on opposite sides of the split in the sleeve, said spreader plates lying in the same plane and having confronting edges in substantial abutment with one another when the sleeve is in its normal unsprung position, said plates having companion recesses in the confronting edges thereof to form an opening, a cam of the same shape and size as said opening seated therein, said cam having a square hole therein, a handle having a portion to bear against one side of said spreader plates and a square shank seated in said hole in said cam, a stud projecting from said shank, a washer on the shank, and means to lock the handle and cam in assembled relation.

2,747,618
CIRCULAR LOOMS
Jean Catry, Flixecourt, France, and Robert Norrie Low, Dundee, Scotland, assignors to Fairwest (U. K.) Limited, London, England, a British company
Application February 24, 1953, Serial No. 338,453
Claims priority, application Great Britain February 22, 1952
7 Claims. (Cl. 139—13)



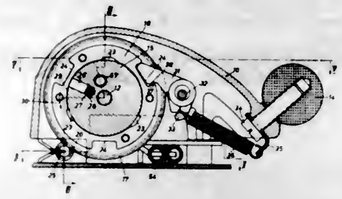
1. In a circular loom, a bar over which passes a section of the warp threads on their way to the shedding mechanism, a single supporting rod on which said bar is mounted, a spring acting on said supporting rod in one direction, and means for permitting movement of said rod in a direction angular to action of said spring.

2,747,619
METHOD OF PRODUCTION OF CONNECTING WIRES FOR A SET OF COIL SPRINGS
Hugo Büttner, Wuppertal-Vohwinkel, Germany
Original application February 12, 1953, Serial No. 336,612, now Patent No. 2,733,454, dated February 7, 1956. Divided and this application March 31, 1954, Serial No. 420,136
Claims priority, application Germany March 1, 1952
2 Claims. (Cl. 140—71)



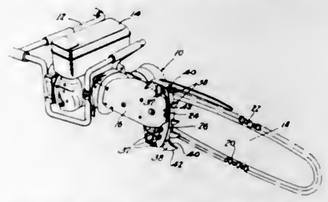
1. The method of forming a connecting wire, having a plurality of laterally open and alternately in opposite directions disposed double clamps consisting of three legs and two heads arranged between the latter and bridge portions between each pair of adjacent double clamps for connection of the windings of individual coil springs of a frameless spring-insert in mattresses or the like, from a length of wire, comprising the steps of forming said length of wire at points equally spaced apart to a plurality of sinus-shaped bendings with bridge portions between each pair of adjacent sinus-shaped bendings, bending progressively each of said sinus-shaped bendings along an imaginary line to double hook formations having said heads pointing in the same direction and disposed in planes spaced apart from each other, said bending step simultaneously resiliently twisting at least the preceding one of said sinus-shaped bendings in one direction of rotation and at least the adjacent already formed double hook formation in the opposite direction of rotation.

2,747,620
WIRE TYING MACHINE
Wilhelm Jansen, deceased, late of Munchen-Gladbach, Germany, by Elisabeth Jansen, widow and heir and guardian of minor heirs, Munchen-Gladbach, Germany
Application November 20, 1951, Serial No. 257,381
Claims priority, application Germany December 9, 1950
11 Claims. (Cl. 140—93.6)



1. In a wire tying machine, a housing, a reciprocable operating lever, a pair of tensioning levers pivotally mounted within the housing, aligned wire gripping mechanisms carried by said respective tensioning levers, at least one cam rigidly secured to said operating lever, a slotted twisting pinion rotatably mounted in said housing between said mechanisms, a gear wheel meshing with said pinion, at least one wire-cutting means including a wire cutting blade, a ratchet wheel rotatably mounted with respect to said cam, said gear wheel being rigidly secured to said ratchet wheel, means associated with said cam for spreading apart the ends of said tensioning levers carrying the wire gripping mechanisms during the initial stage of a forward stroke of said operating lever, means associated with said cam for actuating said ratchet wheel and hence said gear wheel and pinion during a later stage of forward movement of said operating lever, means associated with said ratchet wheel for holding said ratchet wheel and hence said gear wheel and pinion stationary during a return stroke of said operating lever, and means associated with said cam for actuating said cutting blade during the return stroke of said operating lever, prior to release of said spread-apart tensioning levers.

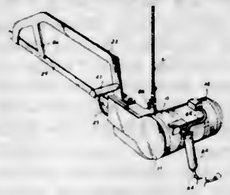
2,747,621
CHAIN-SAW HOLDING CLAW
Albert F. Stone and Ernest A. Hayden, Callahan, Calif.
Application October 9, 1951, Serial No. 250,538
5 Claims. (Cl. 143—32)



1. A holding claw attachment for a portable power driven chain-saw comprising a curved plate adapted to be attached to the bumper shoe of a saw, a row of spaced pointed prongs projecting from the convex side of said plate and the points of said prongs lying along a curved path which lies eccentric to the curvature of the plate.

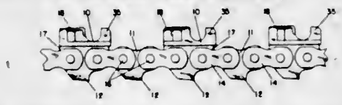
2,747,622
CARCASS SAW WITH WASTE-DIVERTING SHIELD
Charles Walter Saye, Northboro, Iowa
Application October 26, 1953, Serial No. 388,252
2 Claims. (Cl. 143—68)

1. In a carcass saw, a housing, a frame extending forwardly from said housing, a bar member slidably mounted in the forward end portion of said housing, a power means for reciprocating said bar, a saw blade having its teeth extending downwardly and being reciprocatably supported by said frame; said saw blade detachably connected to said bar member, and a wide guard shield member extending



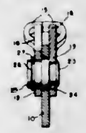
from said housing in a horizontal plane below the teeth of said saw blade, thence upwardly in a curved path and having its free end portion split and extending upwardly at each side of the rear portion of said saw blade to a plane above the plane of said blade.

2,747,623
SAW CHAIN CUTTER
Joseph B. Cox, Portland, Oreg., assignor, by mesne assignments, to Oregon Saw Chain Corp., a corporation of Oregon
Application May 26, 1953, Serial No. 357,526
13 Claims. (Cl. 143—135)



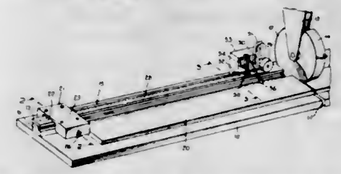
1. An elongate saw chain cutter tooth element having a pair of spaced-apart kerf side wall cutting edge defining portions and a kerf bottom cutting edge defining portion joining said side wall cutting edge defining portions, said side wall cutting edge portions being offset with respect to each other in the direction longitudinally of the element.

2,747,624
SAW CHAIN WITH SNAP RING FASTENERS
Joseph B. Cox, Portland, Oreg., assignor, by mesne assignments, to Oregon Saw Chain Corp., a corporation of Oregon
Application August 17, 1953, Serial No. 374,589
1 Claim. (Cl. 143—135)



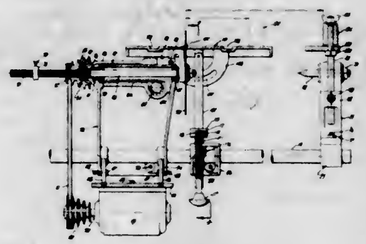
In a saw chain, a center link, a side plate, and a cutter tooth disposed on opposite sides of said link, a pivot pin extending transversely through said link, side plate and cutting tooth and pivotally connecting the same, said pin comprising an enlarged, annular central portion cooperatively fitting in a circular opening formed in said link, the opposite end portions of said pin being of reduced diameter relative to said central portion whereby said central portion defines a pair of shoulders, one of said end portions extending through a cooperative opening in said cutting tooth, the terminal part of said one end portion being expanded against the outer surface of said cutting tooth securely to bind the same against the corresponding shoulder of said pivot pin, the opposite end portion of said pivot pin extending through a cooperating opening in said side plate and being of a diameter intermediate the diameter of said one end portion and said central portion, said opposite end portion having a circumferential groove therein spaced from said central portion by the thickness of said side plate, and a snap ring of larger outer diameter than said opposite end portion seated in said groove and engaging the outer surface of said plate to secure the same on said pin.

2,747,625
BLOCK-AND-TAPE LUMBER MEASURING DEVICE FOR BENCH SAWS
Samuel N. Small, Valley Stream, N. Y., assignor, by mesne assignments, to Atkins Industries, Inc., Ozone Park, N. Y.
Application November 12, 1954, Serial No. 468,423
5 Claims. (Cl. 143—174)



1. A workpiece measuring device for bench saws, said device comprising an elongated grooved strip extending longitudinally of the table of a bench saw, a rail fixed to said strip and having side edges overlying adjacent edges of said strip, a stop block slidably mounted on said rail, means for guiding the block on the rail and said table, an elongated measuring tape having one end fixed to said block, a spring control spool supporting the other end of said tape, a saw movable transversely of said table for cutting lumber supported on the table at an end of said rail, means adjacent and in spaced relation to said end of the rail for indicating on the tape a predetermined workpiece length between said stop block and said saw, and means for fixedly retaining the tape and stop block in predetermined measurement positions.

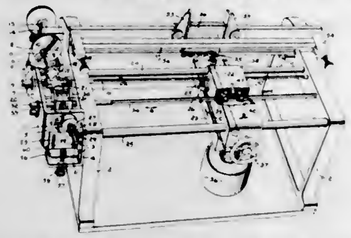
2,747,626
CIRCULAR SAW WORK SUPPORTING TABLE
Hans Goldschmidt, Atherton, Calif., assignor to Magna Engineering Corporation, San Francisco, Calif., a corporation of California
Original application August 18, 1947, Serial No. 769,148. Divided and this application November 5, 1952, Serial No. 318,885
4 Claims. (Cl. 144—1)



1. A tool comprising, a supporting frame having rectilinear guide means thereon, a headstock unit on said guide means having a tool-supporting spindle rotatably mounted thereon on an axis substantially parallel to said guide means, a tool on said spindle, a first table support unit mounted directly on said guide means, a first work supporting table adjustable on said first table support for movement toward and from said guide means, a second table support unit mounted directly on said guide means and a second work supporting table mounted thereon for adjustment toward and from said guide means through generally the same range of movement as said first table,

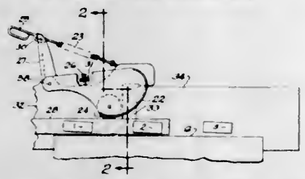
at least two of said units being independently adjustable along said guide means toward and from the third unit and each other whereby workpieces of various lengths may be supported on said tables and operated on at desired positions by said tool.

2,747,627
SEMI-AUTOMATIC DOVETAILING MACHINE
Jaroslav Havlik, Preston, Ontario, Canada
Application January 5, 1955, Serial No. 479,959
6 Claims. (Cl. 144—85)



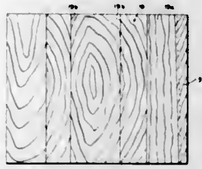
1. A copy dovetailing machine having a cutter for cutting recesses between two male dovetails; a single template for controlling the movements of the cutter; and a copying body of continuously increasing diameter adapted for co-operation with said template; a shift, a linkage system, a slide and a control lever, said copying body being mounted on said control lever operatively connected on the one hand with said shaft and said linkage system for imparting operative feeding movement to the cutter and on the other hand with said slide for imparting spacing movements to the cutter; means for adjusting said copying body relatively to the template in a direction parallel to the axis of the copying body; a dividing apparatus adapted to produce selective spacing operation of the cutter in one or the other direction of a workpiece, spacing movement being imparted to the cutter through the intermediary of said dividing apparatus; means for adjusting the path of travel of said copying body to limit the operative feeding movement to said cutter; tension means for guiding said copying body along the pattern of said template; and means for actuating said control lever.

2,747,628
GUARD FOR CUTTING TOOL OF WOODWORKING MACHINE
Robert S. Ford, Pascagoula, Miss.
Original application July 19, 1950, Serial No. 174,763, now Patent No. 2,679,871, dated June 1, 1954. Divided and this application April 19, 1954, Serial No. 423,922
1 Claim. (Cl. 144—249)



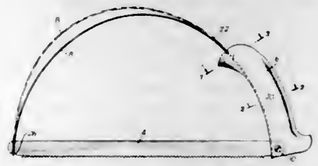
In a woodworking tool the combination of a guard for the operator of the machine and a holder for the workpiece to be operated upon by the tool, said combination comprising a guard body adapted to overlie the workpiece, a wheel rotatably mounted on the guard body and extending therebelow into contact with the workpiece, a fixed abutment on the tool, a pivotal connection between the guard body and the abutment and disposed eccentrically of the rotatable mounting for the wheel whereby to make possible the raising or lowering of the wheel relative to the workpiece, an arm on the body extending radially of the pivotal connection between the body and abutment and provided with a flange extending parallel with the axis of said pivotal connection between the body and abutment, said flange having a series of openings therein, each opening being disposed progressively farther from said last mentioned pivotal connection, a tension spring, means securing one end of the spring to the abutment at a point removed from the said last-mentioned pivotal connection, a hook secured to the other end of the spring and engaging a selected one of the series of openings in the flange, and a handle on the hook adapted to be grasped by the operator for shifting the hook from one to another of the series of openings, whereby to change the torque exerted by the spring on the guard body and the force exerted by the guard body upon the wheel and workpiece.

2,747,629
METHOD OF MANUFACTURING TUB STAVES
Paul L. Blum, Marshfield, Wis., assignor to Blum Bros. Box Company, Marshfield, Wis., a corporation of Wisconsin
Original application May 9, 1950, Serial No. 160,904, now Patent No. 2,673,585, dated March 30, 1954. Divided and this application February 10, 1954, Serial No. 409,378
5 Claims. (Cl. 144—309)



1. The improved method of producing tub and pail staves which comprises the steps of preparing a blank having a length greater than a finished stave and a width greater than a finished stave, then sawing the blank lengthwise along two convergent lines and in downwardly convergent planes to produce a stave piece of desired longitudinal taper and longitudinal edge bevel, cutting the stave piece to length, then dividing such stave piece lengthwise on an arcuate line lying between the side faces of the piece and extending from and through one beveled edge to the other to produce two incomplete staves each having one transversely curved finished face, and finally planing the other face of such incomplete stave to a transverse curvature substantially paralleling the said one finished face thereof.

2,747,630
BOW SAW WITH SPRING METAL SAW BOW
Johan Evert Hammarström, Sandviken, Sweden, assignor to Sandvikens Jernverks Aktiebolag, Sandviken, Sweden, a corporation of Sweden
Application March 12, 1953, Serial No. 341,893
Claims priority, application Sweden September 9, 1952
12 Claims. (Cl. 145—33)



1. In a bow saw, the combination of, a saw bow comprising a flat strip of spring metal having an opening at one end by which it is connected to the end of a saw blade and having an open slot at its other end into which the other end of the saw blade is slideably received, a handle rockably connected to said other end of the saw blade and presenting a flat arcuate saw bow contacting surface against which said saw bow rests, said saw bow and said handle being interengaged whereby said saw bow exerts substantial force holding the outer surface of the saw bow into frictional engagement with said contacting surface, said saw bow and said contacting surface intersecting the line of the edge of said saw blade at an angle of the order of 80°, said slotted end of said saw bow being slidable along said contacting surface while maintaining a predetermined relationship.

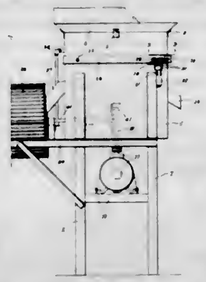
2,747,631
ANGULARLY ADJUSTABLE SAW
Knut G. Behlefeldt, Los Angeles, Calif.
Application February 18, 1954, Serial No. 411,077
3 Claims. (Cl. 145—108)



1. In an adjustable saw, the combination comprising: a handle structure having a mounting plate provided at one side with an extended flat bearing face, and a hand grip secured to said mounting plate; a pivot member secured to said plate and projecting laterally from said bearing face; a plurality of positioning members secured to said plate and projecting laterally from said bearing face a shorter distance than said pivot member, said positioning members being equally spaced from said pivot member and being spaced from each other at equal angular intervals about said pivot member; a blade structure having at its rear end a thin flat base portion engaging said bearing face; said base portion having a slot extending inward from its edge, of such width as to receive said pivot member; said base portion also having a plurality of openings therethrough spaced from said slot and spaced at equal angular intervals about the inner end portion of said slot, the angular intervals of said openings being equal to those of said positioning members so that a plurality of said openings can receive and engage a plurality of said positioning members when said pivot member extends within the inner end portion of said slot; and a clamping member threadedly engaging said pivot member for screw movement toward and away from said plate by rotation of said clamping member relative to said plate and said pivot member, said clamping member having an inner face formed to engage and clamp said base portion between said inner face and the bearing face of said plate, and also having an annular recess extending outward from said inner face concentric with said pivot member and of such depth and radial extent as to receive said positioning members during screw movement of said clamping member toward said plate to bring said inner face into engagement with said base portion.

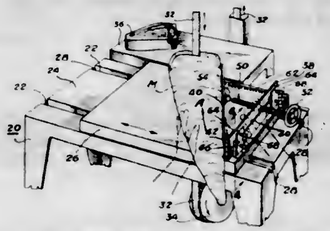
2,747,632
NUT HULLING MACHINE
Robert P. Barton, Escalon, Calif.
Application December 10, 1953, Serial No. 397,362
3 Claims. (Cl. 146—8)

1. In a nut hulling means which comprises a cylindrical vertical shell, a circular hulling plate rotatably mounted in the shell, means connected to the plate to rotate the same, and means to feed nuts onto the central portion of the plate; a circular brush unit in the shell and means mounting the brush unit in the shell for vertical adjustment; said last named means comprising pins



mounted on the unit radially thereof the shell having arcuate upwardly sloping slots in the shell through which the pins slidably project, a band turnably embracing the shell and connected to said pins exteriorly of the shell, and means to rotate the band.

2,747,633
MEAT SLICER GUIDE
Philip Burlin, Bayonne, N. J.
Application June 18, 1953, Serial No. 362,581
4 Claims. (Cl. 146—88)

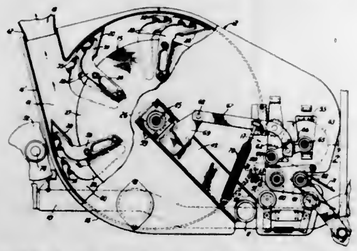


1. For use in slicing bone-containing cuts of meat or the like, an adjustable guide constructed and arranged to hold the cut of meat in predetermined angular relationship to the cutting element, said guide comprising a relatively thin flat elongated back plate and a relatively thin flat elongated guide plate, a double-leaf hinge pivotally connecting said plates at one end, releasable engaging means securing the back plate to the carriage of a slicing machine in fixed generally right-angular relationship to the cutter, an elongated adjusting arm screw-threadedly mounted on the back plate and extending in fixed right-angular relationship therethrough, an operating member mounted at the outer end of said arm, a bearing member swivelably mounted at the inner end of said arm and having a flat surface slidably bearing against the inner face of the guide plate, and means for effecting sliding interconnection between the bearing member and the inner face of the guide plate, whereby axial movement of the adjusting arm causes pivotation of the guide plate relative to the back plate.

2,747,634
CUTTING MECHANISM FOR FORAGE CHOPPING MACHINES
Herman G. Klemm, Birmingham, and Brantford G. Elliott, Royal Oak, Mich., assignors to Harry Ferguson, Inc., Detroit, Mich., a corporation of Delaware
Application September 11, 1952, Serial No. 309,108
2 Claims. (Cl. 146—118)

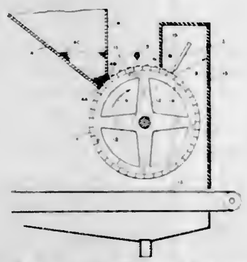
1. A cutter head for forage chopping machines comprising, in combination, a rotatably supported frame, a

plurality of elongated knives in the form of relatively thin flat strips bent into spiral configuration and each having a longitudinally extending cutting edge, means supporting said knives around the periphery of said frame with their cutting edges positioned to travel in a cylindrical path having a diameter approximately twice the axial length of the head, said supporting means including a pair of arms for each knife, each of said arms having a shank portion extending radially inwardly of the frame and rigidly secured thereto, a knife-carrying portion rigid



with said shank portion and extending outwardly at an obtuse angle to said shank portion, means securing the knives to the arms, each of said knives having a width approximately one-fourth of its length and being inclined rearwardly and inwardly with respect to a plane tangent to the cylindrical path defined by the knife edges, the inclination of said knives coupled with their width adapting them to carry the cut off material and discharge it tangentially as the cutter head rotates through less than one-half of a revolution.

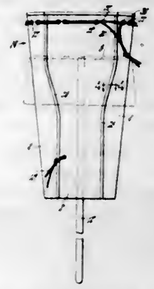
2,747,635
ELECTRIC NUT CRACKING
Melvin J. Kofoid, Seattle, Wash., assignor to Northwest Nut Growers, Portland, Oreg., a corporation of Oregon
Application July 25, 1952, Serial No. 300,897
4 Claims. (Cl. 146—227)



1. The method of electrically cracking nuts which comprises subjecting a nut to a high voltage and high current electric surge discharge and preventing said discharge from flashing around said nut by surrounding a portion of said nut between said electrodes with a barrier of a liquid having sufficient dielectric strength to cause said discharge to pass through said nut.

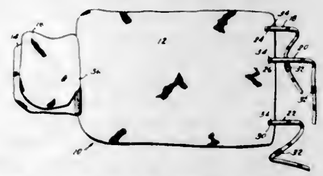
2,747,636
GOLF BOOT
Anthony Couture, Springfield, Mass.
Application July 29, 1955, Serial No. 525,228
3 Claims. (Cl. 150—1.5)

1. A club supporting insert for golf bags comprising, an elongated tubular open ended boot, an assembly of longitudinal transverse partitions within said boot having longitudinal portions secured to one another and to the wall of said boot providing separate elongated club pockets, said partitions terminating at distances downwardly away from the upper end of said boot, the lower portion of said boot being insertable in the open upper end of a golf bag, the upper portion of said boot above the upper ends of said partitions being foldable between an operating position encircling the outside of the upper portion of the golf bag and a non-operating position



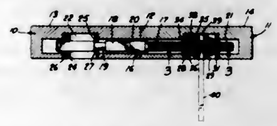
extending upwardly and outwardly from said partitions wherein to act as a closure for the upper end of said boot and the golf bag, and means adjacent the upper edge of said boot for drawing the upper portion of said boot together.

2,747,637
GOLF CART COVER
Mary Virginia Brown, Missoula, Mont.
Application February 17, 1954, Serial No. 410,876
1 Claim. (Cl. 150—52)



A cover comprising a flexible body portion adapted to be wrapped about an article, a pair of anchor flaps attached to said body adjacent one end thereof and adapted to extend outwardly of said body in facing relationship, fastening means secured to the opposite end of said body and comprising a strap extending outwardly therefrom, a fastener element attached to said body, a mating fastener element adapted to mate with the first mentioned fastener element in a removably attached relationship adjustably mounted on said strap.

2,747,638
BOLT WITH LOCKING AND RETAINING MEANS
Emanuel L. Cederquist, Los Angeles, Calif.
Original application December 23, 1950, Serial No. 202,509, now Patent No. 2,648,248, dated August 11, 1953. Divided and this application June 15, 1953, Serial No. 361,513
2 Claims. (Cl. 151—61)



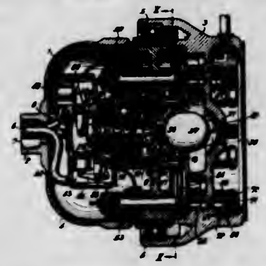
1. In a device of the class described, a bolt threaded at one end and having a square cross-sectional configuration adjacent the other except for a short reduced cylindrical neck, a cyindrical check laterally applied to said other end having a recess in the side edge thereof in which the reduced cylindrical neck is disposed, the sides of the recess being spaced from each other a distance greater than the diameter of the reduced cylindrical neck to enable the neck to be received therebetween but less than the thickness of the square end so as to prevent the squared portion from passing axially therebetween, said check having opposed parallel edges arranged diametrically opposite the recess bearing against sides of the squared portion, the spacing of the end edges being but slightly greater than the thickness of the squared portion so as to permit the squared portion to slide laterally therebetween but being insufficient to permit the squared portion to rotate therebetween.

2,747,639
ANTISKID COVER FOR TIRES
Stephan Mertz, Pittsburgh, Pa.
Application June 9, 1955, Serial No. 514,194
5 Claims. (Cl. 152—173)



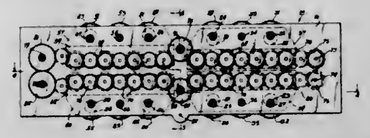
1. An antiskid cover for a vehicle tire, comprising an endless band adapted to encircle the tread of a tire in engagement therewith and having a radial flange at one edge only for overlapping the outer sidewall of the tire, whereby the band is applied to a tire by sliding it inward across the tread, said band and flange being formed from flexible material provided with circumferentially spaced passages extending edgewise therethrough, retaining straps extending from the front of the cover through half of said passages and across the back of the cover and then forward through the remaining passages and across the front of the cover, buckles on the straps for connecting their ends together, and cross chains extending across said band and having their ends anchored therein near its opposite edges.

2,747,640
APPARATUS FOR MAINTAINING A PREDETERMINED PRESSURE IN THE TIRE OF A VEHICLE
Fritz Kress, Wolfenbuttel, Germany
Application August 7, 1951, Serial No. 240,644
Claims priority, application Germany August 10, 1950
12 Claims. (Cl. 152—417)



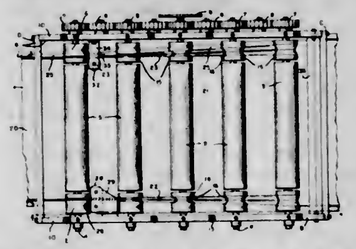
1. An arrangement for maintaining a given air pressure in the tire of a vehicle, comprising in combination, a first housing portion; a second housing portion mating with said first housing portion and being rotatably mounted with respect thereto; valve means mounted in one of said housing portions; first duct means located in the other of said housing portions and being mounted for movement between a first position where it is out of communication with said valve means and a second position where it is in communication with said valve means; second duct means leading to said first duct means for feeding compressed air thereto; and operating means mounted in said other of said housing portions and being located adjacent to said valve means for operating the same, said operating means comprising an elongated member having a free end located opposite said valve means and being mounted for movement along its axis and lever means connected to said elongated member for moving the same.

2,747,641
COMMERCIAL "S" SLIP FORMING MACHINE
Solomon Lapidus, Brooklyn, N. Y.
Application February 18, 1953, Serial No. 337,477
9 Claims. (Cl. 153—28)



1. A forming machine comprising a frame having two spaced side members, vertically aligned sets of eccentric drive rolls rotatably mounted on the side members, upper and lower die carriages mounted on said rolls for reciprocating movement toward and away from each other, an upper die fixed to the upper carriage and a lower die fixed to the lower carriage, a plurality of spaced sets of feed rollers rotatably mounted on one of the side members to feed material to be formed between the dies and continuously through the machine, and means to gear the feed rolls to the eccentric drive rolls for continuous and synchronized forming and feeding.

2,747,642
MACHINE FOR MAKING ROOFING AND THE LIKE
Alfred W. Kuettel, Duluth, Minn.
Application January 14, 1953, Serial No. 331,140
3 Claims. (Cl. 153—28)



1. In a device for making spaced parallel ribs in sheets of metal for standing seam roofing, and the like, one of said ribs being located on each longitudinal edge of said sheets and the ribs of one edge of one sheet being adapted to be fitted over the rib on the opposite edge of an adjacent sheet and said device having a base, a frame carried on said base, and a plurality of shafts rotatably carried transversely of said frame, said shafts being arranged in vertically spaced parallel pairs: a cylindrical roller carried on each of said shafts, a die carried at opposite ends of each of said rollers, said dies being arranged to perform successive bending operations on a sheet of metal passing from the front to the rear of said frames and between said rollers, said dies having alined inner edges on each side of said frames whereby said metal is formed with a central portion of uniform width throughout its length, said dies along one end of said rollers being shaped to form a narrow rib upstanding from said sheet in inwardly spaced relation to the adjacent longitudinal edge of said sheet, said dies along the opposite end of said rollers being shaped to form a wider

rib which will fit over said narrow rib, and means to control and assist in the final shaping of said narrow rib comprising a rigid guide carried by said frame, an arcuately shaped end portion on said rigid guide adapted to engage the end of a partially formed narrow rib and guide same into alinement with the final die, and a guide roller carried by said frame in slightly spaced relation to said rigid guide, said guide roller having its rotative axis extending normal to a sheet passing thereunder and having a cylindrical shape so as to engage the other side of said narrow rib opposite said rigid guide and assist in forming same in conjunction with said rigid guide whereby said narrow rib will be directed into said final guide in substantially finished condition.

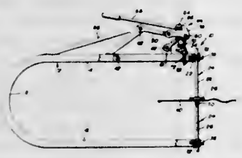
2,747,643

METAL SMOOTHER

Samuel A. Richmond, Dalton, Ga.

Application May 15, 1953, Serial No. 355,347

3 Claims. (Cl. 153—32)



1. A metal smoother comprising a generally C-shaped frame, said frame including a pair of spaced legs connected by an intermediate portion, opposed metal rolling die supports carried by said legs, one of said legs having a hinge connection intermediate its ends providing a hinged leg portion on which one of said die supports is carried to facilitate positioning of said die supports relative to each other, adjustable brace means to retain said hinged portion of said leg in adjusted positions, said brace means including a compound linkage in the plane of said C-shaped frame and having a first link pivotally connected at one end to the fixed portion of said leg, an intermediate link pivotally connected at one end to the other end of said first link, a third link pivotally connected at one end to the other end of said intermediate link, said third link being pivotally connected at its opposite end to said hinged leg portion, said third link being inclined toward the free end of said hinged leg portion when the axes of said first and said intermediate links are in alignment and said hinged leg portion is either in alignment with or at a small angle with respect to said fixed leg portion, and an adjustable stop secured to said hinged leg portion and arranged on said hinged leg portion for adjustment to engage a surface on said intermediate link concentric with its connection to said third link when said hinged leg portion occupies a position either in alignment with or at a small angle to the fixed leg portion.

2,747,644

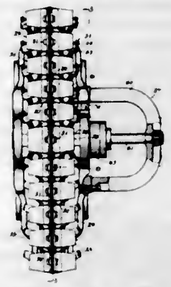
ARTICULATED WORK-HOLDING JAW

Walter G. Wheeler, Los Angeles, and Kingsley C. Drone, Manhattan Beach, Calif., assignors to James H. Kindelberger, Pacific Palisades, Calif.

Application November 1, 1952, Serial No. 318,158

11 Claims. (Cl. 153—32)

1. A jaw adapted to grip one end of a sheet while being wrapped around a die during relative movement of the jaw and die, said jaw comprising a plurality of clamps, hinges connecting the clamps in series and in parallel relationship, the axes of said hinges extending toward the work-receiving ends of the clamps, and means within the



clamps on both sides of the hinges to angularly adjust the clamps relatively.

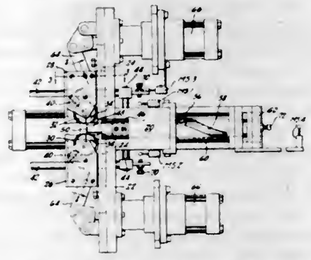
2,747,645

APPARATUS FOR FORMING METAL PARTS

Charles A. Nichols and Carl L. Clevenger, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application February 5, 1952, Serial No. 270,074

5 Claims. (Cl. 153—78)



1. A twisting device for producing a predetermined angle of twist in an elongate workpiece, comprising; a pair of rolls movable towards and away from one another, means for causing said rolls to move toward and away from one another whereby said rolls are adapted to hold a workpiece therebetween when moved towards one another, a workpiece holder retractable from a point adjacent said rolls a distance at least equal to the length of that portion of the workpiece to be twisted, means for concomitantly rotating said rolls, means for retracting said holder in positive lineal relation to the speed of rotation of the rolls and a camming surface having a predetermined pitch corresponding to the desired angle of twist to be imparted to said blade, said surface being associated with said holder for effecting rotative movement of the holder during retraction thereof.

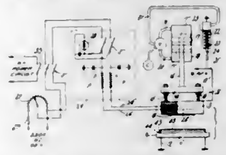
2,747,646

PROCESS OF AND APPARATUS FOR PRODUCING APPLIQUE ORNAMENTATIONS

Gerald Lippman, Kew Gardens, N. Y.

Application October 26, 1955, Serial No. 542,831

14 Claims. (Cl. 154—1)



11. The process of bonding a plurality of sheets of thermoplastic material to one another, comprising the steps of arranging said sheets in superposed and surface contact relation with respect to each other between pressure-applying means and backing means, forcing said pressure-applying means against the outermost one of said sheets remote from said backing means, softening said outermost sheet through the action of radiant heat imparted to said pressure-applying means in bringing the temperature of the latter to a value approximating the fusion temperature of said material, and simultaneously applying radio frequency heat to said sheets, whereby heat imparted to said outermost sheet by said pressure-applying means supplements said radio frequency heat to bring about uniform bonding of said sheets to one another.

14. An apparatus for bonding to one another a plurality of sheets of thermoplastic material arranged in surface contact relation with respect to one another, comprising die means having a contact face for engagement with one of the outermost sheets of said plurality of sheets, backing means for engagement with the other outermost sheet of said plurality of sheets, power means connected to said die means for reciprocally displacing the latter toward and away from said backing means, respectively, so as to apply pressure to said sheets when located between said die means and said backing means, heating means carried by said die means and arranged to radiantly heat the latter to a temperature sufficient to soften said one outermost sheet, radio frequency heat generating means operatively connected across said die means and said backing means for heating said sheets when located between said die means and said backing means, whereby said heat imparted to said one outermost sheet by said die means supplements said radio frequency heat to ensure uniform bonding of said sheets to one another, interrupter means electrically connected to at least said radio frequency heat generating means, and means actuating said interrupter means to cut off the operation of said radio frequency heat generating means upon termination of said bonding of said sheets.

2,747,647

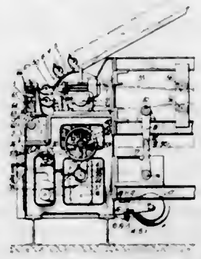
MANUFACTURE OF FABRICS HAVING A TUFTED SURFACE

Esme Tatton Cecil Brinton and Harry Frederick Lowe, Kidderminster, England, assignors to Brintons Limited, Kidderminster, England, a British company

Application January 24, 1955, Serial No. 483,635

Claims priority, application Great Britain January 27, 1954

7 Claims. (Cl. 154—1.1)



1. A machine for the production of fabric having a tufted surface in which tufts of yarn from a plurality of spools each having a plurality of lengths of yarn wound thereon are attached to a backing, comprising a chain having mounting means for supporting said spools with the ends of said lengths of yarn projecting, a plurality of means supporting said chain in a closed circuit, means for driving said chain around said closed circuit, first and second engagement means connected to each said mounting means, said engagement means being spaced apart in the general direction of movement of said chain, a rotating spider, driving connection means between said spider and said driving means, said spider being formed with a plurality of substantially radial slots in its opposite faces, a plurality of first arms located for sliding movement in said slots in one face of said spider, each said first arm being shaped for cooperation with said first engagement means, a plurality of second arms located for sliding movement in said slots in the other face of said spider, each said second arm being shaped for cooperation with said second engagement means, a first cam-follower connected to each said first arm, a first cam-track cooperating with each said first cam-follower, a second cam-follower connected to each said second arm, a second cam-track cooperating with each said second cam-follower, whereby during rotation of said spider said first and second arms are given a sliding movement in said slots, thus giving a corresponding movement to successive said first and second engagement means to give the composite motion to said yarn ends necessary for embodiment in said backing, means for driving said backing in a path adjacent the path of said composite motion, means for securing said yarn ends to said backing, and means for severing said yarn ends.

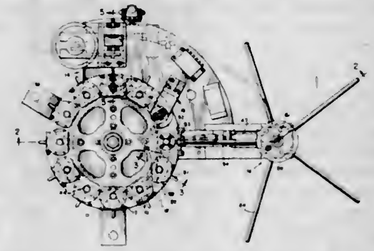
2,747,648

APPARATUS FOR UNITING PLASTIC WASHERS WITH ANNULAR PLASTIC PADS

Darwin H. Bingham and Leonard O. Larsen, Indianapolis, Ind., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York

Application September 28, 1953, Serial No. 382,716

7 Claims. (Cl. 154—1.5)



2. An apparatus for assembling articles, which comprises a holder for supporting an annular plastic article thereon, a transfer plate, a carrier supporting the holder and also supporting the transfer plate pivotally thereon for moving the holder and the plate along a given path, a dispenser positioned at one point along said path for applying an appropriate solvent to said article to soften the same carried therepast by the holder, a rod extending laterally from the path at a third point therealong and means for swinging the transfer plate over the rod to deposit articles carried thereby on the rod.

2,747,649

METHOD AND APPARATUS FOR FABRICATING A TUBULAR ARTICLE FROM A FIBROUS STRAND

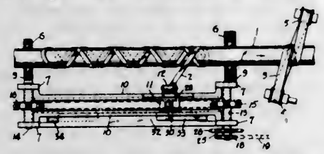
Daniel J. Reed, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York

Application December 2, 1954, Serial No. 472,636

8 Claims. (Cl. 154—1.7)

1. An apparatus for winding a fibrous strand to form a tubular article which comprises a generally cylindrical mandrel, means to rotate the mandrel, means for moving said mandrel longitudinally as said mandrel is rotated, a winding head to carry the fibrous strand and wind said strand on the mandrel, drive means for reciprocating said winding head between fixed limits in a path generally parallel to the longitudinal axis of the mandrel to wind the strand on the mandrel in a double helical pat-

tern, and means for automatically varying the speed of said drive means to effect a greater speed of movement of the winding head in a direction corresponding to the direction of longitudinal movement of the mandrel and



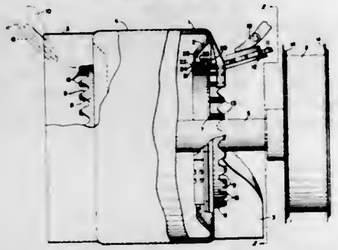
to effect a lesser speed of movement of the winding head in a direction opposite to the direction of longitudinal movement of the mandrel to produce a double helical pattern of substantially constant helix angle.

2,747,650

METHOD AND APPARATUS FOR BUILDING TIRES

Jorgen I. Haase, Akron, Ohio, assignor, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio

Application November 1, 1951, Serial No. 254,236
39 Claims. (Cl. 154—9)



1. In a tire-building machine in which a tire-building drum is employed for building a tire and the material is initially arranged on the surface of the drum with a sleeve-like portion of said material projecting from at least one end of said drum, the improvement which comprises the combination with said drum of a pleating ring mounted coaxially therewith adjacent said end of said drum and having a sinuous surface thereon against which the projecting part of said sleeve-like portion may be moved into substantial conformity therewith to form pleats in the material.

13. The method of building a tire in which the end portions of cylindrical bands are turned inwardly and these ends are then wrapped about beads, that improvement which consists in forming generally radial fluted portions in the material of the inwardly turned end portions of the bands and then substantially simultaneously collapsing all of said fluted portions by a substantially wholly axially directed force.

2,747,651

METHOD OF MAKING BUILDING INSULATION AND PRODUCT

Stephen Lighter, Madison, Wis.

Application December 1, 1954, Serial No. 472,369
3 Claims. (Cl. 154—28)



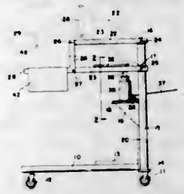
1. The method of retarding the passage of heat through a relatively thick sheet of fibrous building material, which comprises, forming local substantially spherical zone concavities throughout the major area of at least one side of the sheet, coating the entire concave face of each concavity with a continuous layer of metal having a bright heat ray reflecting surface exposed to the concavity interior, and hermetically sealing all of the concavities with a relatively thin and impervious sheet of material adhesively secured to the thick fibrous sheet.

2,747,652

DEVICE FOR MOVING INVALIDS AND THE LIKE

George E. Marsh, Fort Collins, Colo., assignor to Robert M. Morrell, Fort Collins, Colo.

Application December 29, 1952, Serial No. 328,459
9 Claims. (Cl. 155—28)



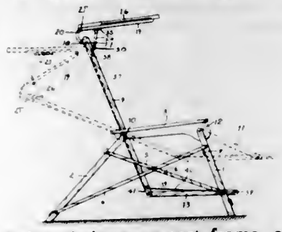
3. An invalid moving device comprising a wheeled base; a vertically extending support mounted forwardly on said base; vertically spaced parallel links extending rearwardly from and pivoted at their front ends on said support, one pair of links being pivoted in vertically spaced relation at each side of said support; means for moving said links upwardly and downwardly; and means for supporting a patient, mounted on and movable upwardly and downwardly with said parallel links and a portion thereof extending from the position of each said pair of links toward the opposite pair.

2,747,653

RECLINING CHAIR WITH HORIZONTALLY MAINTAINED CANOPY

Drago Obradovich, Toronto, Ontario, Canada

Application July 17, 1952, Serial No. 299,318
13 Claims. (Cl. 155—106)



1. In a reclining chair, a support frame, a back and seat, means swingably supporting said back and seat from said frame for continuous adjustment under shifting of an occupant's weight, a canopy supported for angular adjustment relative said back, and means controlled by the swinging of said back and seat to continuously maintain said canopy substantially horizontal throughout the range of continuous adjustment of said back and seat, said canopy being supported solely on said back.

2,747,654

STACKING CHAIR

David Chapman, Chicago, Ill., and Richard G. Reineman, Muskegon, Mich., assignors to The Brunswick-Balke-Collender Company

Application February 13, 1953, Serial No. 336,771
12 Claims. (Cl. 155—194)

5. A chair having, in combination, a seat, a back and two U-shaped tubular metal leg members with the cross

parts thereof placed alongside each other and secured together and positioned under said seat and transversely



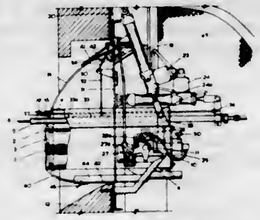
thereof with legs extending downwardly beyond the side edges of the seat to positions to the front and rear of said cross parts.

2,747,655

IGNITION BURNER FOR PULVERIZED-FUEL-BURNING FURNACE

Rex Couvelas Farnham, Woodley, Reading, England

Application August 25, 1952, Serial No. 306,147
Claims priority, application Great Britain August 27, 1951
9 Claims. (Cl. 158—1)



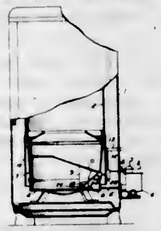
1. In a pulverized fuel burning furnace including a furnace wall having an opening therein, a burner arrangement comprising: a support adapted to be mounted externally of said furnace wall and adjacent said opening, means for pivotally mounting the burner on said support whereby the burner may be pivotally moved to extend through said opening in the operative position, closure means carried by said burner for closing said furnace opening when the burner is pivoted to inoperative position and power means mounted between said furnace wall and said burner for withdrawing said closure means by pivoting the burner from the inoperative position to the operative position.

2,747,656

ELECTRIC IGNITION SYSTEM FOR AN OIL BURNER

Don F. Jones and Vaughn H. Hill, Lansing, Mich., assignors to Motor Wheel Corporation, Lansing, Mich., a corporation of Michigan

Application April 9, 1951, Serial No. 219,904
10 Claims. (Cl. 158—28)



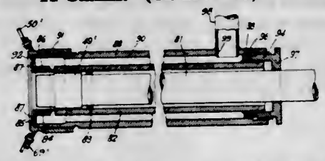
1. In a heater having a vaporizing pot type burner, an electrical ignition system for the burner comprising a source of electricity, an electrical resistance heating element positioned in the burner, a temperature responsive element, a second electrical resistance element in heat exchange relation to said temperature responsive element, switch contacts arranged to be closed manually for completing a circuit through the heating element in the burner and a circuit through said second heating element, said two circuits being in shunt relation to each other, said temperature responsive element when heated by the second heating element being operative to open said manually closed switch within a predetermined time interval, said temperature responsive element also being in heat exchange relation with said burner and effective to hold said manually closable switch contacts open whenever the burner is at or above a temperature at which it can be safely ignited.

2,747,657

HIGH CAPACITY OIL BURNER WITH IMPELLER HUB AIR JET RING

John F. Harvey, Akron, and Arthur W. Hermandorfer, Barberton, Ohio, and Jacob A. Mason, Maplewood, N. J., assignors to The Babcock & Wilcox Company, New York, N. Y., a corporation of New Jersey

Application April 25, 1952, Serial No. 284,268
11 Claims. (Cl. 158—73)



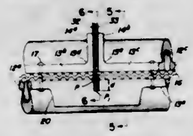
1. In combination with a furnace wall having a fuel burner port therein, a burner arranged in operative relation to such port and including a tubular distance piece; a fluid fuel burner nozzle constructed and arranged to discharge a stream of fluid fuel in the form of a whirling spray cone from discharge port means at the discharge end of the nozzle, said nozzle being mounted through said distance piece; a supply of fluid fuel under pressure connected to said nozzle; means mounted in embracing relation on the nozzle end of said distance piece having an inner surface spaced from the distance piece outer surface and end wall means engaged with the end of said distance piece to form, with said distance piece, an air chamber embracing said nozzle; a bladed aperture conical impeller mounted on the discharge end of the air chamber for directing a whirling air stream into admixture with the fuel spray cone; air register means embracing said impeller to direct the major portion of the combustion air through said burner port; said end wall means having a series of apertures therein forming air discharge ports around said nozzle periphery inwardly of said impeller; and a supply of air under pressure connected to said chamber for discharge through said air discharge ports in impinging relation on the spray cone of fluid fuel discharged through said nozzle discharge port means.

2,747,658

DUAL BAND TYPE GAS BURNER WITH CROSS-OVER FLAME CONNECTION

Otto Wildermann, River Edge, N. J., assignor to Ensign Ribbon Burners, Inc., Pelham Manor, N. Y., a corporation of New York

Application September 14, 1954, Serial No. 455,989
4 Claims. (Cl. 158—99)



1. A dual band gas burner having a longitudinal burner housing provided with a pair of opposedly arranged longi-

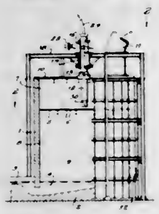
tudinal burner mouths presenting longitudinal gas passage areas for establishing a lateral flame along each side of the housing, and provided with a cross-over flame connection extending between said lateral burner mouths for establishing a transverse flame across the top of the burner housing, to allow flame ignition to propagate from one longitudinal burner mouth thereof through said cross-over connection to the opposite burner mouth, a longitudinal insert for each burner mouth to subdivide the gas passage area thereof into a multitude of minute gas passages, and an arcuate cross-over insert mounted in said cross-over flame connection to similarly subdivide the gas passage area thereof into a multitude of minute gas passages; characterized by the fact that the transverse gas passage area has at each end a downward extension intersecting with respective longitudinal gas passage areas, and by the provision of retaining means for said cross-over insert to hold the same interconnected with the respective longitudinal inserts, which retaining means comprise recessed end portions provided upon said cross-over insert to extend and fit into said downward extensions of the transverse gas passage area, said recessed end portions having fitted therein the respective longitudinal inserts in locked relationship therewith, whereby there is established a continuity of said minute flame openings together with flame continuity at the transitions between said longitudinal inserts and said cross-over insert.

2,747,659

METHOD AND APPARATUS FOR CONCENTRATING SCALE-FORMING PHOSPHORIC ACID SOLUTIONS AND THE LIKE

Andre Delruelle, Trooz, Belgium, assignor, by mesne assignments, to Panmetals and Processes Inc., Panama, Panama, a corporation of Panama

Application December 1, 1950, Serial No. 198,517
Claims priority, application France April 27, 1950
13 Claims. (Cl. 159—4)



2. A method of concentrating a scale-forming phosphoric acid solution or similar liquid, which comprises continuously projecting a strong jet of the liquid horizontally over a horizontally disposed foraminous distributing surface while continuously changing the course of the jet, thus spreading and maintaining a layer of the liquid over said surface and continually churning the liquid layer and scrubbing said surface by the force of the jet, continuously draining a multiplicity of streams of the liquid through said surface and showering them downwardly into a concentration zone below said surface, and continuously passing a hot gas in contact with the liquid shower in said zone and thence upwardly through liquid in said layer.

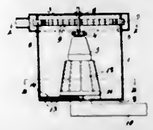
2,747,660

IMPROVEMENT IN THE METHOD OF OPERATING SPRAY DRIERS FOR EVAPORATING SOLUTIONS, EMULSIONS, SUSPENSIONS, AND THE LIKE

Lisa Olof Jan Campbell, Jonkoping, Sweden

Application November 29, 1950, Serial No. 198,069
Claims priority, application Sweden December 8, 1949
3 Claims. (Cl. 159—48)

1. A method of operating a spray drier for evaporating aqueous solutions, emulsions, suspensions and the like which comprises atomizing the liquid to be evaporated and dispersing it radially in a drying zone, introducing a desiccating medium at a temperature *ti* into said drying zone upstream of the liquid admission and in the vicinity of said atomized liquid and causing said medium to flow axially through said zone along helical paths in contact



with said liquid, removing said medium at a temperature *tu* from the opposite end of said zone, and removing the residual evaporation product of said liquid from said opposite end of said zone, the axial velocity V of the desiccating medium in flowing axially through said zone being maintained at a high value such that the expression

$$\frac{ti-tu}{tu}\cdot\frac{V}{G}$$

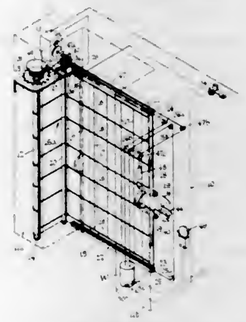
has a numerical value greater than 5 wherein *ti* and *tu* are expressed in degrees centigrade, V is expressed as meters per second, and G is the evaporation rate in kilograms per second of water evaporated in the drying zone.

2,747,661

PROTECTIVE DEVICE

Michael Lucas, Bridgeport, Conn.

Application September 20, 1954, Serial No. 457,182
16 Claims. (Cl. 160—10)



1. A protective device adapted to close an aperture in a building or the like comprising a spindle mounted adjacent the aperture, a flexible wall portion of open lattice construction and having a leading bar, said wall portion being adapted to be wound and unwound upon said spindle, means including a weight and a cable connected to said wall portion and normally urging said wall portion to unwound position extending over the aperture, means holding said spindle against rotation with the wall portion wound thereon, means releasing said spindle to permit unwinding said wall portion therefrom and close said aperture, means locking said wall in unwound position, and switch means actuated by said weight upon completion of the movement of the wall portion to operate a signal only after the wall portion is in unwound position.

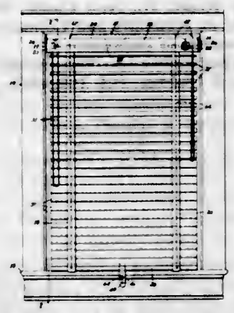
2,747,662

VENETIAN BLIND

Herbert H. Reiners and Myrtle E. Reiners, Orlando, Fla.

Application January 11, 1954, Serial No. 403,258
4 Claims. (Cl. 160—178)

1. A blind comprising a pivoted top rail, a bottom rail and a plurality of flexible members depending from said upper rail and supporting said bottom rail, each of said flexible members comprising a front tape and a rear tape, a plurality of horizontal parallel slats arranged between said front and rear tapes and spaced in sequence at uniform distances apart from said top rail to said bottom rail, means for supporting said slats with the



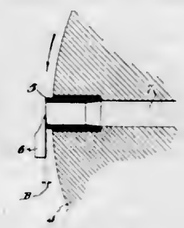
edges thereof in fixed relation to the adjacent portions of said tapes, all of the tapes on one side of said blind being elastic and those on the opposite side being non-elastic, means on said bottom rail for stretching said elastic tapes, and means cooperating therewith for holding the tapes in stretched position.

2,747,663

YARN CUTTER

Harry M. Cook, Staunton, Va., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

Application December 28, 1951, Serial No. 263,806
14 Claims. (Cl. 164—38)



1. In apparatus for producing staple fibers from continuous filaments comprising a stationary knife and a rotating member having a passageway therein to feed said filaments through said member to said knife, an insert in said passageway protruding from the exit end of said passageway, said insert being composed of a soft, shaveable material.

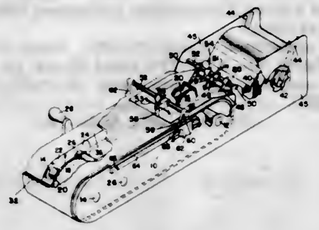
2,747,664

PRESSURE-SENSITIVE TAPE DISPENSING MACHINE

Ralph Corson, Arlington, N. J.

Application January 16, 1953, Serial No. 331,712
1 Claim. (Cl. 164—38)

A pressure sensitive tape dispensing machine including an elongated housing, an idler shaft at one end of said housing for receiving a roll of sheet adhesive material, an endless belt adapted to receive the sheet material from said roll, means for actuating said belt, a fixed shaft located above the path of movement of said sheet near one end of said belt, cutters carried by said shaft for slitting the sheet material moving thereunder into strips of predetermined widths, a movable shaft, located above the path of movement of said belt, a cutter carried by said movable shaft and movable transversely of said belt for severing said strips, and a floating roll disposed transversely of, and resting on, said sheet material between



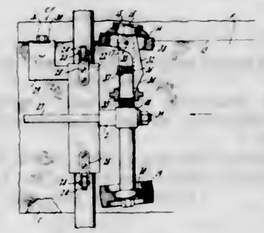
said fixed shaft and said idler shaft, the surface of said belt being ribbed longitudinally of its path of movement to reduce the contact between the underside of the said strips cut from said sheet and the surface of said belt.

2,747,665

EDGE TRIMMER FOR ADVANCING SHEET MATERIAL

Samuel S. Miner, Mishawaka, Ind., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

Application February 3, 1954, Serial No. 407,865
10 Claims. (Cl. 164—39)



1. A trimmer adapted to trim sheet material when advancing in a given direction and having a juncture of two materials having different co-efficients of friction with a given object, said juncture having a component of its length extending in the direction of advance of said sheet material, said trimmer comprising a carriage, means adapted to support said carriage for movement along a path disposed in angular relation to the juncture and having a component of its length transverse to the direction of advance of the sheet material, a roller on said carriage adapted to be positioned to roll along the juncture in frictional engagement with the sheet material, said roller being canted on said carriage with respect to the direction that the sheet material is adapted to advance past the carriage and in a direction to roll toward the material having the lesser co-efficient of friction with said roller, means to urge said carriage in a direction adapted to position said roller on that material having the greater co-efficient of friction with said roller, said means being adapted to develop a force which is sufficient to counteract the transverse force of said roller on said carriage when said roller is rolling along the juncture of the two materials, and cutting means carried by said carriage adapted to cut the sheet material, whereby said carriage is adapted to be moved along the path to a position wherein said cutting means may be positioned in substantially constant relation with the juncture of the sheet material.

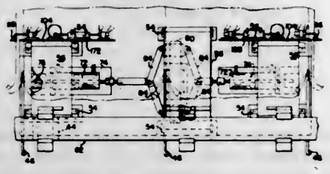
2,747,666

SLITTING MACHINE HAVING TWO LATERALLY MOVABLE OUTER KNIVES AND A CENTER KNIFE MAINTAINED MIDWAY BETWEEN THE OUTER KNIVES

Harold H. Brooks, Columbus, Ohio, assignor to Columbus Coated Fabrics Corporation, Columbus, Ohio, a corporation of Ohio

Original application March 19, 1952, Serial No. 277,401, now Patent No. 2,738,729, dated March 20, 1956. Divided and this application July 28, 1953, Serial No. 370,695

4 Claims. (Cl. 164—39)



1. In a machine of the character described, in combination a frame, means for passing a web through the machine and supporting the web, three spaced cutter knives engaging the web across its width, feeler means engaging the edges of the web adjacent the outer of said knives, means guided by said feelers for maintaining the adjacent knives a predetermined distance inward of the side edges of the web, and means connecting the two outer knives with the center knife and operable through guiding contact with said feelers to maintain the center knife midway between the outer knives in all positions thereof.

2,747,667

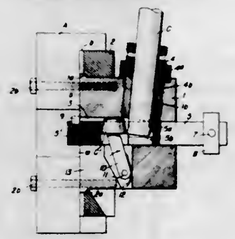
APPARATUS FOR PRODUCING DISKS FROM METAL BARS

Guillaume Schaming, Richmond, England, assignor to Societe Schostal, Vaduz, Liechtenstein, a joint-stock company

Application January 7, 1953, Serial No. 330,101

Claims priority, application Switzerland January 15, 1952

1 Claim. (Cl. 164—40)



Apparatus for the production of disks or slugs of uniform weight from ferrous metal bar stock comprising, in combination, a fixed block, an opening therethrough, a slide-block slidably mounted in said opening, means for reciprocating said slide-block, said slide-block having a shoulder forming with an external face thereof a shearing edge conforming, when in contact with the bar, to the shape of an exterior portion of the bar to be cut throughout the extent of said cutting edge, a bar-supporting floor in said slide-block spaced from said edge to determine the length of stock to be cut, an externally threaded guide bushing for said bar stock extending through a threaded opening in said block whereby it may be longitudinally adjusted by rotation therein, said bushing having a bore shaped to closely surround the bar stock and having an end face adjacent said shearing edge and having an end opening in said end face lying in a plane perpendicular to the longitudinal axis of the bushing, the plane of said end face making a rake angle of from about 4° to 7° with the plane of movement of said shearing edge on said slide-block.

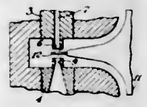
2,747,668

NOZZLE FOR USE WITH FLYING KNIFE CUTTER IN STAPLE PRODUCTION

Robert Le Roy Keefe, Jr., New Castle, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

Application September 23, 1952, Serial No. 311,061

2 Claims. (Cl. 164—60)



1. In staple fiber cutting apparatus comprising a flying knife cutter having a horizontal cutting plane, a delivery tube above the cutter and an exit tube below the cutter in axial alignment with the delivery tube whereby filamentary material is directed vertically downward past the cutter, the improvement which comprises rounded interior edges at the exit of the delivery tube and at the entry in the exit tube.

2,747,669

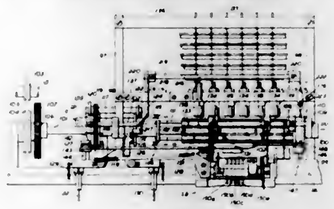
MACHINE CONTROLLED BY STATISTICAL RECORD CARDS

Arthur Thomas, Wallington, England, assignor to Powers-Samas Accounting Machines Limited, London, England, a British company

Application July 30, 1953, Serial No. 371,249

Claims priority, application Great Britain October 2, 1952

10 Claims. (Cl. 164—114)



1. In a machine for recording data-indicating signals on a tape under control of statistical record cards, apparatus for recording on the tape end-of-card signals of predetermined significance in succession to signals representative of data recorded on a record card, said apparatus comprising a sensing device responsive to data indications on a record card and movable stepwise column by column in relation to a record card, a tape recording unit including tape feeding means and recording elements operable to record signals on a tape fed by the tape feeding means, a continuously rotatable driving shaft coupled to the sensing device and to the tape recording unit to effect operation thereof, the tape recording unit being operable to record a signal on the tape during each revolution of the driving shaft, conditioning means to receive signals from the sensing device and to condition the recording elements for a recording operation in accordance with the signals so received, a plurality of code bars each appropriated to an end-of-card signal of predetermined significance and connected with said recording element conditioning means to effect operation thereof, a signal selector unit including manually pre-settable cam-pieces carried by a normally inactive rotatable carrier mounted for axial movement to and from a datum position thereof to position the cam-pieces relative to the code bars to effect operation thereof on rotation of the carrier, a stop basket including stops selectively settable under control of the sensing device to determine the extent of axial movement of the carrier from said datum position thereof, and actuating means operable to effect rotation of the carrier on completion of the sensing of a record card by the sensing device.

2,747,670

METHOD OF INCREASING OIL RECOVERY

Jack A. King and Wayne S. Fallgatter, Tulsa, Okla., assignors to Cities Service Research and Development Company, New York, N. Y., a corporation of New Jersey

Application November 1, 1954, Serial No. 466,006

13 Claims. (Cl. 166—21)

1. The method of selectively adjusting the permeability of oil producing formations which comprises introducing into the formation in the vicinity of undesirable fluid flow two solutions, insoluble in oil, capable of reacting on contact to produce an insoluble precipitate adapted to adjust the permeability of the strata and reduce undesirable fluid flow therein, and controlling the area and position of the precipitate in the formation being regulated by separating said solutions during their introduction and passage through the formation with a spacing medium, the volume of said spacing medium being determined according to the equation $V=2\pi rwhps$, wherein r=distance from well bore at which reaction is to start; w=width of spacer liquid band desired; h=thickness of zone being treated; p=porosity of strata; and s=average water saturation up to the point where the reaction is to start.

2,747,671

TREATMENT OF OIL-BEARING FORMATIONS

Theodore J. Nowak, Whittier, and Paul W. Fischer, East Whittier, Calif., assignors to Union Oil Company of California, Los Angeles, Calif., a corporation of California

No Drawing. Application October 5, 1951, Serial No. 250,026

7 Claims. (Cl. 166—33)

1. The method of differentially shutting off water in an oil well penetrating both oil- and water-bearing formations which comprises forcing down the well and into said formation a plugging composition comprising an organic solvent having dissolved therein between about 0.5 and about 10 per cent by weight of a water-insoluble cellulose derivative selected from the class consisting of cellulose nitrate, cellulose ethers of alcohols containing less than five carbon atoms and cellulose esters of acids containing less than five carbon atoms, between about 0.1 and about 5 per cent by weight of an alkyl silicate, the alkyl group of which contains less than five carbon atoms and between about 0.1 and about 5 per cent by weight of an oil-soluble resin; allowing the formation fluids to act upon said composition, whereby said formations are rendered less permeable to water flow than to oil flow; and thereafter removing unchanged plugging composition from said well.

2,747,672

METHOD OF HEATING SUBTERRANEAN FORMATIONS

Clarke N. Simm, Fullerton, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware

No Drawing. Application September 11, 1953, Serial No. 379,723

7 Claims. (Cl. 166—38)

1. The method of heating a subterranean formation penetrated by a well bore comprising the steps of introducing into said well bore a dispersion of phosphorus in a substance to which said phosphorus is inert, applying pressure to said dispersion to impregnate the wall of said well bore with said phosphorus, and introducing into said well bore in contact with said phosphorus an oxygen-containing gas capable of initiating exothermic reaction with said phosphorus.

2,747,673

PULLING TOOL

Richard R. Lawrence, Liberty, Tex.

Application October 23, 1952, Serial No. 316,410

13 Claims. (Cl. 166—98)



1. A tool for pulling stuck objects from a well, said tool adapted to be suspended in its entirety from an operating string of tubing and comprising, in combination, a grapple at the lower portion of the tool adapted to be attached to such stuck objects and a self-contained, wholly hydraulic, closed circuit, pump-and-motor assembly, which includes a pump unit connected to and actuated by movement of said string, a motor unit having parts relatively movable by fluid pumped by said pump unit, the first of said parts being connected to said grapple, and means for holding the second of said parts in a stationary position in the well, whereby the fluid may operate to move the first part with respect to said second part to move said grapple, and fluid circulating conduits between the pump-and-motor units.

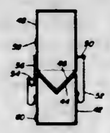
2,747,674

AUTOMATIC FIRE EXTINGUISHER FOR AUTOMOBILES

Robert H. Hodges, Columbia, S. C.

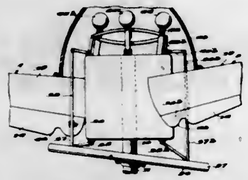
Application January 29, 1953, Serial No. 333,942

11 Claims. (Cl. 169—2)



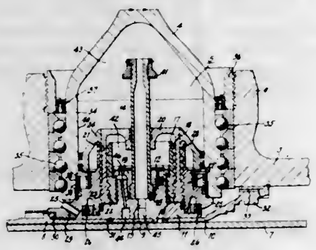
11. An inertia actuated fire extinguisher comprising a first container and a second container having fire extinguishing fluid therein, said first container being mounted on said second container, and a breakable connector having an aperture therethrough attaching said first container to said second container whereby upon application of a predetermined force said containers will move relatively to each other to break said connector and permit said fire extinguishing fluid to escape from said extinguisher.

2,747,675
VARIABLE PITCH PROPELLER MECHANISM FOR WINGED AIRCRAFT
Emrullah Âli Yildiz, Istanbul, Turkey
Application August 1, 1952, Serial No. 302,046
5 Claims. (Cl. 170—160.16)



1. Variable pitch propeller mechanism comprising a propeller rotatable about an axis parallel to the line of flight and having variable pitch propeller blades, each blade comprising a fixed pitch blade section and a variable pitch blade section, and automatic mechanism operable during downward rotation of the blades to increase the pitch of the variable pitch blade sections above their normal pitch and operable during upward rotation of the blades to decrease the pitch of the variable pitch blade sections below the normal pitch, further including centrifugally responsive means rotatable with the blades and exerting centrifugally developed forces on the variable pitch blade sections during increased and decreased pitch changes of the variable pitch blade sections by the automatic pitch changing mechanism.

2,747,676
PROPELLER MECHANISM
Kenneth L. Berninger and William S. Neef, Jr., Dayton, and Clifford B. Wright, Tipp City, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 23, 1952, Serial No. 283,956
8 Claims. (Cl. 170—160.33)



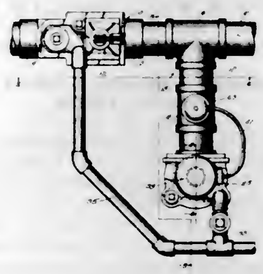
1. In a variable pitch propeller having blades movable within a range of pitch positions, the combination including, a propeller hub having a plurality of radially extending sockets, a fixed shaft extending through said hub and about which said hub is supported for rotation, a pair of axially spaced sleeves attached to said hub and encompassing said fixed shaft, a floating island supported on said sleeves and having a plurality of radial extensions disposed coaxially within the hub sockets, means journaling said propeller blades for rotation within said hub sockets, a torque unit mounted in each of the hub sockets, said torque units comprising a cylinder having its side walls and one end wall formed by the hollow root portion of each blade and a piston within said cylinder and mounted for reciprocal movement therein under the urge of fluid pressure, and means interconnecting said pistons and said blades to provide for adjustment of blade pitch upon movement of said pistons.

2,747,677
AUXILIARY DRIVE FOR EARTH MOVING MACHINE
Walter Barfield, Upper Darby, Pa.
Application September 1, 1953, Serial No. 377,883
1 Claim. (Cl. 180—54)



An earth moving machine including a chassis, front and rear wheels for supporting said chassis, a main engine unit supported on said front wheels for driving said wheels, said unit being connected to one end of said chassis, an auxiliary engine, drive rolls carried and driven by said engine adapted to engage said rear wheels, means pivotally mounting said auxiliary engine on said chassis for movement to a first position in which said drive rolls are out of engagement with said rear wheels and to a second position in which said drive rolls engage said rear wheels, and power means driven by and operatively connected to said auxiliary engine for moving it to either of its first or second positions.

2,747,678
FLOOD CONTROL SYSTEM
Elra F. Howe, Chicago, Ill.
Application January 19, 1953, Serial No. 332,054
1 Claim. (Cl. 182—1)

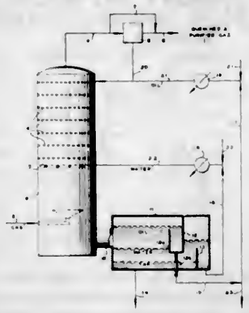


Basement flood control apparatus for use with a sewer pipe comprising, in combination, a backwater valve in the sewer pipe constructed to close automatically upon the existence of flood conditions in the sewer pipe downstream of the valve to block flow in either direction through said pipe, a branching T section of pipe connected to the sewer pipe upstream of the valve, a booster pump having an intake connected to the leg of the T section, a discharge pipe connecting the discharge of the pump with the sewer pipe downstream of the valve, a float in said leg of the T section and movable in response to the existence of flood conditions in said leg, a housing upstanding from the pump to terminate above the floor of the basement, an electric motor on the top of the housing, a drive shaft rotatably mounted in the housing connecting the motor to the pump, a second housing upstanding from the leg of said section above the float to terminate above the floor of the basement, a switch assembly on the top of the second housing, a rod in said second housing connecting the switch assembly to the float, and means connecting the switch assembly to the motor to energize the same upon movement of the float.

2,747,679
RECOVERY OF PLATINUM IN CATALYTIC GAS REACTIONS
Konrad Ruthardt, Hanau (Main), Germany, assignor to W. C. Heraeus G. m. b. H., Platinschmelze, Hanau (Main), Germany
Application January 23, 1953, Serial No. 332,999
Claims priority, application Germany January 29, 1952
9 Claims. (Cl. 183—1)

1. In the recovery of platinum used at least as a component of a platinum containing catalyst in a catalytic gas reaction carried out at elevated temperature, the connection in series behind the catalyst of a gas-pervious arrangement having a surface consisting of at least one base metal of the 4th and 5th groups of the periodic system which are temperature-resistant and resistant to the passing gases.

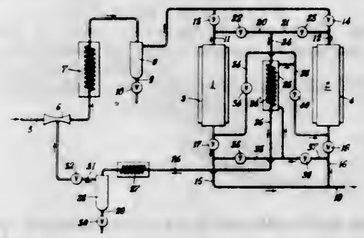
2,747,680
WATER QUENCH AND TAR REMOVER FOR CRACKED GASES
Myron O. Kilpatrick, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application March 10, 1952, Serial No. 275,840
13 Claims. (Cl. 183—2)



11. A process for quenching a cracked gas and removing tar therefrom which comprises passing said gas upwardly through a quenching zone, contacting said gas with water in a lower part of said zone, contacting said gas with an oil in an upper part of said zone, causing oil to flow downwardly through the entirety of said zone and water to flow downwardly through the entirety of said lower part of said zone recovering a quenched and purified gas from an upper part of said zone, removing a liquid mixture from a lower part of said zone, causing said mixture to stratify into an oil layer, a water layer and a tar layer, and recovering each of said layers separately.

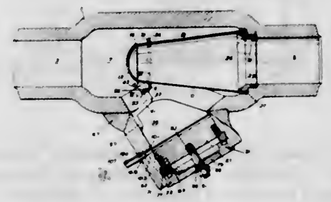
2,747,681
REGENERATION OF ADSORBENT UNITS
Paul Maurice Schuftan, Richmond Hill, and Thomas John Webster, London, England, assignors to The British Oxygen Company Limited, a British company
Application August 30, 1952, Serial No. 307,218
Claims priority, application Great Britain
September 5, 1951
2 Claims. (Cl. 183—4.7)

1. An apparatus for the regeneration of adsorbents in a raw gas treating plant including two adsorbent holding chambers connected for alternate operation, said chambers each having untreated raw gas inlets connected to a raw gas supply, treated gas outlets, stop valves interposed in the inlets and outlets, and means associated with each chamber for controllably heating the adsorbent therein; said apparatus comprising a heat exchanger having a warm end and a cold end and passages therebetween in heat exchange relation for gas to be heated and gas to be cooled; means connecting the warm end of the passage for gas to be cooled to either of said inlets on the chamber sides of the inlet valves; means connecting the cold end of said passage for gas to be cooled to a purge gas conduit; valved conduit means connecting the cold end of the passage for gas to be heated to either of the outlets of said chambers on the downstream sides of the



outlet valves; and valved conduits connecting the warm end of said passage for gas to be heated to either of the outlets of said chambers upstream of said outlet valves, the valves being operable to pass gas from the inlet of the chamber to be regenerated through said passage for gas to be cooled to the purge gas conduit, and to pass a portion of treated gas from the outlet of the operating chamber, through said passage for gas to be warmed to the outlet of the chamber being regenerated.

2,747,682
STRAINERS
John Hendry Gibson, Wallington, England, assignor to Dewrance & Co. Limited, London, England, a British company
Application November 17, 1953, Serial No. 392,691
Claims priority, application Great Britain
November 17, 1952
4 Claims. (Cl. 183—34)

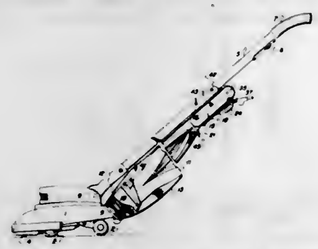


1. A strainer suitable for a high pressure steam line, comprising a body formed in one piece and having an inlet and an outlet coaxial with the inlet, deflecting means in the path of fluid flowing from the inlet; a perforated sleeve downstream of the deflecting means which is disposed within and is spaced from the body and extends axially between the inlet and the outlet, the end of the sleeve nearer the inlet being closed and the end thereof nearer the outlet being open; a sump for the collection of particles separated from the fluid flow by the deflecting means and in the form of a branch which communicates with the interior of the body, is provided at the end thereof remote from the body with a removable cover, and is inclined to the common axis of the inlet to and outlet from the body from the inner end of the branch to the outer end thereof in the direction of the outlet from the body, the branch being formed so as to permit insertion and withdrawal of the sleeve therethrough; and a valve controlled blow-down pipe communicating with the interior of the sump.

2,747,683
SUCTION CLEANER WITH HANDLE MOUNTED CORD REEL

Brandt F. Ziegler, Jr., Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio

Application August 18, 1953, Serial No. 375,037
11 Claims. (Cl. 183—36)

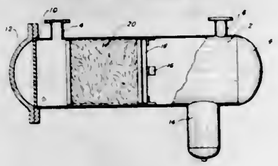


1. In an electrically energized suction cleaning apparatus having a floor supported cleaning section including an air discharge conduit, and a manipulating handle pivotally connected to the cleaning section offset from the discharge conduit, the combination of a filter-cord reel assembly comprising a filter attached to and communicating with the discharge conduit, a filter casing attached to the cleaning section and encasing the filter, a cord reel embraced by the filter casing and disposed at the upper end thereof, means attaching the cord reel to the handle remotely from the cleaning section and resilient means for maintaining the filter casing tensioned as the handle pivots.

2,747,684
REPACK CARTRIDGE

Warner Lewis, Sr., and Jasper P. Cox, Tulsa, Okla., assignors to Warner Lewis Company, Tulsa, Okla., a corporation of Delaware

Application January 12, 1951, Serial No. 205,746
2 Claims. (Cl. 183—47)



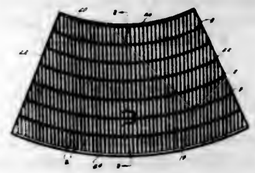
1. In a repack cartridge for a separator comprising a preformed cylindrically shaped bundle of uniformly and evenly packed excelsior, a screen at each end of the bundle, a plurality of wires extending longitudinally through the bundle, and a compression grid over each screen connected to said wires for retaining the uniformly packed excelsior bundle under compression, each of said compression grids comprising a ring conforming substantially to the diameter of the bundle, and cross bars secured to the inner periphery of the ring to distribute the compressive force uniformly over the respective end area of the bundle.

2,747,685
INLET SCREEN SEGMENT

John R. Foley, Manchester, Conn., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware

Application January 12, 1954, Serial No. 403,510
4 Claims. (Cl. 183—51)

1. A screen for an air inlet for a jet engine, said screen including a series of streamlined closely-spaced flat bars having arcuate leading edges and substantially sharp trailing edges, said flat bars being constructed to be placed edgewise to the air flow, the cross-sectional length of said bars being substantially 10 times the cross-sectional width, said bars being spaced apart a distance approximately 5 to 6 times the thickness of the bars, and a second series of smaller streamlined bars extending substantially at right angles to said first bars for

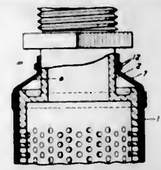


bracing them, the bars of said second series being much more widely spaced than those of the first series, said first bars having notches at an acute angle to, and extending rearwardly from, the leading edge to receive said second bars, said second bars being substantially one-half the cross-sectional length of said first bars.

2,747,686
FILTER

Harry L. Riley and John Norris, Treeton, near Rotherham, England, assignors to United Coke & Chemicals Company Limited, Treeton, near Rotherham, England

Application December 8, 1952, Serial No. 324,768
Claims priority, application Great Britain December 17, 1951
7 Claims. (Cl. 183—69)

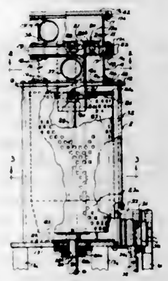


1. A filter for collecting catalyst particles to be blown back into a reaction vessel comprising a hollow rigid frame and a flexible wrapping around the frame, said wrapping comprising alternate layers of glass fabric and glass felt, glass tape being wound around said layers whereby the wrapping will yield slightly on block-back to detach the caked catalyst particles.

2,747,687
CENTRIFUGAL SEPARATORS FOR PARTICLE-LADEN GASEOUS MEDIA

William Rupert Carter, Minneapolis, Minn., assignor to Superior Separator Company, Hopkins, Minn., a corporation of Delaware

Application August 9, 1952, Serial No. 303,594
1 Claim. (Cl. 183—77)



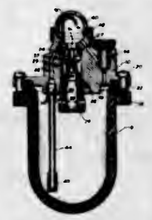
A centrifugal separating machine for removing particles from a particle-laden gaseous stream comprising, a separating chamber through which the moving gaseous

stream is passed, a power-driven rotor of hollow, symmetrical construction mounted within said chamber in spaced relation to the walls thereof to provide an annularly arranged, first stage, centrifugal separation chamber, said chamber having a gaseous stream inlet adjacent one end thereof, said rotor having a densely foraminated peripheral wall of circular cross section defining interiorly an unobstructed passage for substantially the full length thereof to permit simultaneous radial and axial movement of the gaseous stream through the rotor and with the foraminations of such size as to freely permit passing of particles radially in either direction during rotor revolution, said foraminated wall being adapted in revolution to set up a first stage, exterior separation vortex and a second stage interior separation vortex, said rotor having an imperforate, annular end portion substantially closing one end of said peripheral wall and disposed adjacent said stream inlet to direct incoming flow radially outward about the periphery of said rotor, a "clean" gas withdrawal tube of substantially smaller diameter than said rotor connected at its outer end with gas withdrawal means and having an inner open end extending axially within the interior of said rotor through said annular, imperforate rotor end portion and having a sealed relation with said portion, said inner end of said tube functioning to concentrate the apex of said inner separation vortex axially of said imperforate end portion of the rotor whereby with said exterior, first stage separation vortex, the particle-laden gaseous medium passes in a vortex-like path from adjacent one end of said rotor towards the opposing end, then enters the interior of said hollow rotor and reverses its direction to pass in the secondary spiral vortex-like path towards the inner end of said "clean" gas withdrawal tube and in its opposite spiral travel the angular velocity of the stream increases with the decrease in diameter of the path to subject the remaining particles carried by the stream to an increasing centrifugal force, thereby separating the particles from the gas and centrifugally directing the particles radially through said foraminations to the space peripherally of the rotor for discharge, the end portion of said rotor opposite from the recited imperforate end portion diminishing in diameter to its extremity whereby velocity pressure within said chamber is lowest about said diminished end portion to facilitate spiral travel of the gaseous medium in the external vortex towards said diminished end portion of flow of said gaseous stream through and into said rotor at said diminished end portion.

2,747,688
LUBRICATOR

Delbert G. Faust, Englewood, Colo., assignor to C. A. Norgren Co., Englewood, Colo., a corporation of Colorado

Application May 27, 1953, Serial No. 357,729
6 Claims. (Cl. 184—55)

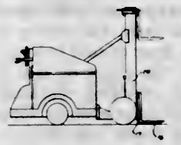


1. A lubricator for supplying a lubricating mist of lubricant into a stream of fluid comprising a lubricant reservoir, a body secured to said reservoir, a fluid passage associated with said body, said passage having an inlet and an outlet, a chamber in said body, a variable venturi plug in said passage interconnected with said chamber, a diffusion plug interconnecting said venturi plug and said reservoir, a substantially unrestricted lubricant supply passageway from said reservoir to said chamber, fluid passage means from the top of said reservoir to said outlet, and variable passage means from the top of said reservoir to said chamber.

2,747,689
TIER LIFT TRUCK

Edward J. Abbe, Cleveland Heights, Ohio, assignor to Elwell-Parker Electric Company, Cleveland, Ohio, a corporation of Ohio

Application August 30, 1952, Serial No. 307,349
6 Claims. (Cl. 187—9)

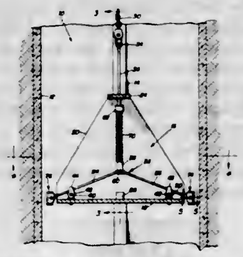


1. A load tiering mechanism comprising a telescopic mast structure consisting of a relatively fixed frame and an elevatable frame, a load carriage elevatable on the elevatable frame, a compound hydraulic mechanism disposed within the frame members comprising two hollow pistons and two cylinders forming two ram mechanisms hydraulically arranged to be in communication through ports formed in the cylindrical walls thereof whereby one piston and its cylinder are operable as a ram mechanism to effect complete vertical extension of the mast structure, sprocket chain means anchored to the carriage and to the elevatable frame, sprocket means carried by the piston of other of the hydraulic ram mechanisms and over which the sprocket chain means extends for acting on the sprocket chain means to effect elevating movement of the carriage relative to the elevatable frame, and a loose load transmitting connection between the elevatable frame and the last named hydraulic ram mechanism.

2,747,690
MINE SAFETY CATCH

Henry W. Vandergriff, Atkins, Va.

Application December 19, 1952, Serial No. 326,865
2 Claims. (Cl. 187—81)



1. In combination, a hoist for movement in a vertical shaft having vertical guide rails secured on opposite side wall portions, a floor, a pair of opposite end members extending vertically from said floor, a top extending transversely across opposite side edge portions of said end members in parallel relationship to said floor, a pair of oppositely disposed guide brackets extending laterally from the end members of the hoist for sliding and guided engagement with the vertical guide rails of the vertical shaft, a lift member including a bight portion medially securable to a lift cable, the bight portion of said lift member terminating at opposite ends in depending force transmitting legs extending through the top of the hoist

in parallel relation to the end members, a lateral support bracket extending from the opposite end members of the hoist and including a vertical apertured portion reciprocably receiving a force transmitting leg therethrough, said legs each including a lower end portion having a bridle element pivotally supporting a transversely extending articulated brake rod, a compressible coil spring circumposed on each leg of the lift member between the bridle element and the lateral support bracket through which the leg extends, the articulated brake rod including a pair of elongated arms pivotally supported at one end on a horizontal pivot axis in the bridle element, the opposite ends of said arms extending transversely beyond opposite edges of the floor of the hoist, articulated brake shoes supported on a horizontal pivot axis on an end portion of said arms beyond the edge of the floor for engagement with opposite side wall portions of the vertical shaft, and stirrup elements extending upwardly from the floor of said hoist in transverse spaced alignment adjacent the edges of said floor, said stirrups including a portion overlying the arms and including a horizontally pivoted roller element supported therein and engageable with a lower intermediate portion of said arms.

2,747,691

RETRACTABLE TRACTION AND ANTISKID DEVICE FOR VEHICLES

Frank J. Lakey, Cleveland, Ohio, and John Ulakovic, McKeesport, Pa.

Application November 5, 1952, Serial No. 318,902
16 Claims. (Cl. 188—4)



1. An antiskid device for use with an automotive vehicle having a driving axle encased in a tubular housing and a wheel at one end of the axle and secured thereto in driving relation, said device comprising a track member formed with an elongated slot, a slide received in the slot of the track member and supported by the latter for relative sliding movement, the slide having flat bearing surfaces engageable with the walls of the elongated slot to resist lateral thrust forces and to prevent turning of the slide in the slot, means for securing the track member to the axle housing so that movement of the slide in the slot carries the slide to or from the wheel of the vehicle, a rotatable head on the slide, and a plurality of resilient deformable elements projecting radially from the head, said elements having sufficient stiffness and rigidity to support themselves cantilever fashion for bodily movement with the slide and into contacting relation with the wheel of the vehicle and to be carried under the latter as the head rotates on the slide.

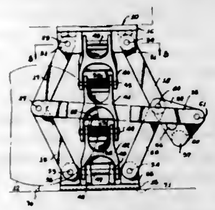
2,747,692

FOOT ACTUATED, GROUND ENGAGING BRAKE FOR HAND TRUCKS AND THE LIKE

Tracy S. Holmes, Los Angeles, Calif.

Application September 29, 1952, Serial No. 312,063
4 Claims. (Cl. 188—5)

1. A foot actuated brake of the class described comprising: a horizontal base pad having three pairs of spaced upstanding ears thereon with horizontally aligned pairs of bearings in each pair of ears, two of said bearing pairs being arranged on parallel axes and one bearing pair on an axis transverse to said first axes; a horizontal plate above said pad having three pairs of pendant flanges thereon with horizontally aligned pairs of bearings in each pair of flanges, two of said last bearing pairs being on axes mutually parallel and parallel to those of said first two pairs, and the remaining bearing pair being aligned on an axis parallel to said transverse axis; shafts in all of said bearings; four substantially identical struts each comprising a cross-braced pair of spaced parallel arms with bearings in the ends of said arms aligned on axes transverse thereto, said struts being hinged together in pairs by hinge shafts received in said arm bearings at adjoining ends thereof and hinged at the other ends thereof to said shafts in said ear and flange bearings, respec-



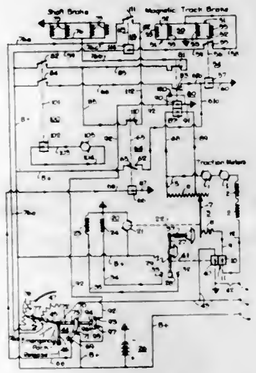
tively, whereby to interconnect said plate and pad with a pantograph linkage having six parallel pivot axes, said strut pairs being arranged to buckle outwardly or toward each other selectively to raise or lower said pad; at least two links hinged together and to said transverse hinge bearings in said ears and flanges on mutually parallel hinge axes transverse to said first six axes whereby to constrain movement of said pad to vertical translation; and toggle means interconnecting the respective hinge shafts of said strut pairs to urge said last hinge shafts toward or away from each other selectively to raise or lower said pad.

2,747,693

ELECTRICAL CONTROL SYSTEM FOR BRAKES

Claude M. Hines, Verona, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania

Application November 24, 1951, Serial No. 258,066
5 Claims. (Cl. 188—33)



1. On a railway vehicle, the combination with a source of electrical energy, of track brake magnet coils means energizable and deenergizable to apply and release, respectively, track brakes on said vehicle, shaft brake release solenoid means energizable and deenergizable to release and apply, respectively, spring-applied shaft brakes on said vehicle, an electro-dynamic braking circuit through which dynamic braking current generated by the vehicle's traction motors flows during a dynamic brake application, operator's brake control means operable manually to effect a dynamic brake application during

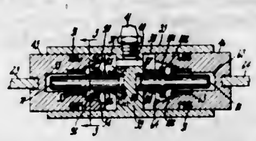
travel of the vehicle, a track brake supply wire connected to said source, track brake control switch means having an input terminal connected to said supply wire and an output terminal connected to said track brake magnet coil means, track brake control relay coil means energizable and deenergizable to close and open, respectively, said track brake control switch means, a first lockout relay switch having an output connection with said track brake control relay coil means, a second lockout relay switch having an output connection with said shaft brake release solenoid means, speed interlock switch means having an input connection with said source and an output connection with the inputs of the first and second lockout relay switches, a track brake interlock switch having an input connection with the output of said speed interlock switch means and having an output connection also with said shaft brake release solenoid means, track brake interlock relay coil means energized and deenergized by establishment and disestablishment of flow of current through said track brake supply wire to cause said track brake interlock switch to close and open, respectively, means responsive to vehicle speeds above and below a certain speed value to close and open, respectively, said speed interlock switch means, and lockout relay coil means responsive to dynamic braking currents above a certain current value to open and close the first and second lockout relay switches, respectively, and responsive to reduction in flow of dynamic braking current below said certain current value to close and open the first and second lockout relay switches, respectively, said certain current value being generated by the traction motors during normal operation of dynamic braking at vehicle speeds below said certain speed value.

2,747,694

BRAKE WEAR COMPENSATOR

James O. Helvern, Lewisburg, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application April 5, 1951, Serial No. 219,352
6 Claims. (Cl. 188—79.5)



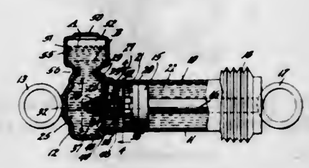
1. In a brake having a rotatable drum in which two oppositely disposed brake shoes are normally held out of drum engagement and against abutment members by retractor spring means, the combination with a cylinder having oppositely disposed reciprocative pistons each engaging a respective brake shoe, said pistons being operative by fluid pressure introduced into the cylinder, to move the shoes into frictional engagement with the drum, of detention means supported in the cylinder so as to be longitudinally reciprocative with the pistons for a predetermined limited range of movement in either direction, said detention means extending into a recess in the respective pistons, the entrance ends of said recesses being tapered; and a ball clutch interposed between each piston and the detention means extending thereinto, said ball clutches releasing the pistons from their respective detention means when the pistons are pressure actuated beyond the range of movements of their respective detention means, the ball clutches being operative also immovably to secure the pistons to their respective detention means and thereby limit return movement of said pistons by the retractor spring means to the predetermined range of movement of said detention means.

2,747,695

HORIZONTAL SHOCK ABSORBER WITH RESERVOIR

Christian Marie Lucien Louis Bourcier de Carbon, Neuilly-sur-Seine, France

Application October 30, 1952, Serial No. 317,756
12 Claims. (Cl. 188—88)



1. A hydraulic shock absorber of the class described comprising, in combination, a cylinder closed at one end and containing a working fluid in liquid form, a piston disposed for reciprocation in the cylinder, a piston rod having one of its ends secured to said piston and extending through an opening in the opposite end of said cylinder, means providing for the restricted by-passage of working fluid from one side to the other of the piston during reciprocation of the latter in the cylinder in operation; a partition extending transversely of the cylinder setting off an auxiliary expansion chamber within the first named end of the cylinder from the working chamber in which the piston reciprocates, said expansion chamber containing a volume of trapped air above the variable surface level of the liquid working fluid and adapted to compensate for the displacement of the piston rod as it moves into and out of the cylinder, a plurality of openings through said partition, said openings occurring only upon one side of the area of the partition, the segment of the partition which is uppermost when the cylinder is tilted for operation out of the vertical position being imperforate; a radially extending baffle plate within the expansion chamber, said plate being provided with a plurality of openings, the perforated baffle plate serving to break up currents of working fluid which may pass into the expansion chamber during operation, said openings occurring only upon one side of the area of the plate, the segment of the plate which is uppermost when the cylinder is tilted being imperforate; and a bulbous extension on the side of the cylinder adjacent the portion thereof within which the expansion chamber is located, said extension containing a supplemental chamber, and a passageway providing free communication between said expansion chamber and said supplemental chamber, the extension being on the side of the cylinder which is uppermost when tilted, all whereby in most positions of tilted operation the trapped air will be contained in the bulbous extension chamber and in all positions of tilted operation the air will be prevented from passing from the expansion chamber into the working chamber.

2,747,696

SNUBBER ATTACHING MEANS

Emil H. Blattner, Williamsville, N. Y., assignor to The Symington-Gould Corporation, Depew, N. Y., a corporation of New York

Application May 15, 1951, Serial No. 226,477
19 Claims. (Cl. 188—129)

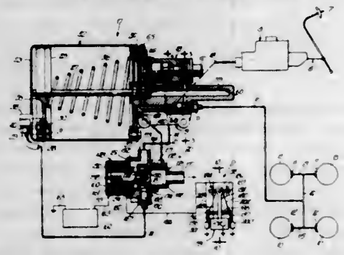
2. The combination with side frame and bolster members of a snubber interposed between and connected to each of said members, said snubber including a casing, friction units and an energizing spring within said casing.

a second spring within said casing, and means including a bolt extending through said second spring for placing



the latter under compression, said bolt serving as the connection between said bolster and said snubber.

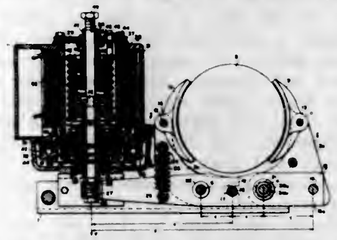
2,747,697
VACUUM POWERED HYDRAULIC BRAKES WITH ANTI-SKID CONTROLS
Oscar H. Banker, Evanston, Ill., assignor to New Products Corporation, Chicago, Ill., a corporation of Delaware
Application August 9, 1952, Serial No. 303,519
16 Claims. (Cl. 188—152)



1. In combination with a hydraulic brake system which includes a master cylinder, manually-operable means operatively connected with the master cylinder for operating the same, wheel brake units and conduit means interconnecting the master cylinder in fluid pressure-responsive relationship with the brake units, a power unit interconnected in series relationship in said conduit means having passageways therein including a pressure cylinder providing a path in series with said conduit means for the flow of brake fluid from said master cylinder to said brake units and comprising power means for forcing a plunger member through a seal into said pressure cylinder so as temporarily to sever said path and pressurize brake fluid therein in communication with said brake units, control valve means for said power means for controllably actuating the same and being interconnected in direct hydraulic pressure-responsive relationship with both said master cylinder and said pressure cylinder, said power means remaining inactive until the hydraulic pressure in the system rises to a predetermined value whereupon said power means is actuated to force said plunger member into said pressure cylinder and pressurize the hydraulic fluid therein in proportion to increases in pressure developed by said master cylinder, and skid control means operatively interconnected with said power means for deactivating the same whenever a vehicle equipped with said brake system goes into a skid.

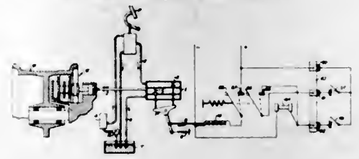
2,747,698
SELF-ADJUSTING BRAKE
Gilbert Currie, Williamsville, N. Y., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application October 3, 1951, Serial No. 249,497
19 Claims. (Cl. 188—171)

1. A brake for controlling rotative movement of a brake wheel, comprising, a pair of pivotally mounted brake arms, a brake shoe mounted on each brake arm and adapted to engage and disengage said brake wheel upon movement of said brake arms, a brake actuating lever assembly comprising a lever pivotally connected with each brake arm at a point on each brake arm displaced from the point of pivoting of the respective brake arms, a friction connection between said lever and one brake arm permitting relative angular movement therebetween in the presence of braking forces on said lever and preventing relative angular movement therebetween in the presence of brake releasing forces on said lever,



a part on said lever assembly being connected with said lever and being disposed for movement along a predetermined path to actuate said lever, and movable actuating means disposed adjacent said path of movement of said part for movement between inoperative and operative positions and having a movement responsive member disengaged with said part when said movable actuating means is in said inoperative position and engaging said part and moving said part along said path in response to movement of said actuating means from said inoperative position toward operative position.

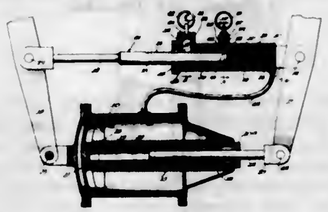
2,747,699
AUTOMATIC BRAKE REGULATOR FOR AIRCRAFT WHEELS AND THE LIKE
René Lucien, Paris, France, assignor to Societe d'Inventions Aeronautiques et Mecaniques S. I. A. M., Fribourg, Switzerland, a corporation of Switzerland
Application November 7, 1951, Serial No. 255,268
Claims priority, application France November 7, 1950
3 Claims. (Cl. 188—181)



1. An automatic anti-skid brake regulating device for the wheels of aircraft and the like comprising a brake cylinder for applying the brakes to the wheel, pressure fluid control means for actuating the brake including a valve having an inlet connected to a source of pressure fluid and two chambers connected respectively to the brake and to a sump, an electromagnet for actuating the valve, an electrical circuit controlling the electromagnet to shift the valve and establish a communication between the source and the cylinder when no current flows through the circuit and between the cylinder and the sump when current flows, a circular plate coaxial with the wheel and rotatable therewith, a flywheel freely rotatable about the axis of the circular plate, a spiral spring connected at one end to the plate and at the other end to the flywheel, abutments mounted respectively on the plate and on the flywheel and mutually engageable to limit the relative angular movement thereof, the initial tension of the spring being such as to cause an abutment of the flywheel to engage an abutment of the plate, cams coaxial with the flywheel and rotatable therewith, and switches

on the plate included in the circuit and actuatable by the cams for closing and opening the circuit in accordance with the relative angular positions of the plate and flywheel.

2,747,700
SLACK ADJUSTING DEVICES FOR AIR BRAKES
John J. Daly, Cheyenne, Wyo.
Application September 4, 1952, Serial No. 307,850
5 Claims. (Cl. 188—196)



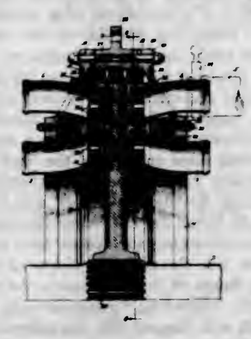
1. A slack adjuster for an air brake system which comprises a tie-connection between said levers including a cylinder having one of its ends pivotally connected to and supported on one of said levers, a hollow piston slidably mounted in said cylinder, a rod-section having one of its ends pivotally connected to the other of said levers, its other end extending into and movable in said hollow piston, and provided with a toothed rack, a spring-pressed dog mounted in the cylinder of the connection and having one-way sliding engagement with the rack, a second spring-pressed dog mounted on the piston and having one-way toothed engagement with the rack for moving, and movement relatively to, the rack, pneumatic means for shifting the hollow piston with the dog mounted thereon in the cylinder of the tie-connection, and a spring for retracting the hollow pistons and second dog.

2,747,701
BRAKE LINING WITH WIRE REINFORCEMENT
George K. Newell, Pitcairn, Pa., assignor to Westinghouse Air Brake Company, a corporation of Pennsylvania
Application December 7, 1950, Serial No. 199,593
2 Claims. (Cl. 188—251)



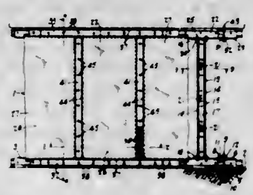
1. A brake block assemblage comprising a body of composition friction material molded with a braking surface having a radius of curvature conforming substantially to the radius of curvature of a rotatable element to be braked thereby, and a plurality of longitudinally curved foraminated metallic reinforcing members embedded in said body in spaced concentric relationship with each other in the direction of the thickness of said body as measured from the braking surface and with respective radii of curvature less than the radius of curvature of the braking surface, the respective centers of curvature of which radii are so located that only the opposite longitudinal ends of said members are exposed to the braking surface and the portions thereof intermediate said ends are embedded in said body away from said braking surface, and such that during wear of the braking surface of said body through use the opposite ends of said members exposed to said braking surface will be progressively worn and thereby reduce the length of such intermediate portions until each of said members is successively substantially worn away, and such that until each of said members is thus worn away the corresponding intermediate portions thereof will be protected from wear and continue to provide reinforcement by remaining embedded in said body without exposure to said braking surface.

2,747,702
HYDRAULIC BRAKE WITH COOLING MEANS
Willem D. van Zelm, Ruxton, Md.
Application June 3, 1953, Serial No. 359,332
4 Claims. (Cl. 188—264)



1. An energy absorption device for a rotating shaft comprising a disc mounted concentrically on said shaft, peripheral friction material secured to each side of said disc, a pair of opposed annular brake shoes mounted adjacent said disc of a radial width to engage said friction material, a housing surrounding said disc, torque lugs on said housing to engage corresponding torque lugs on said brake shoes, said housing having flanges extending around the periphery of said discs, each of said flanges having a groove formed therein facing said disc and located opposite said peripheral friction material, an annular piston in each of said grooves, resilient sealing means between said pistons and the bottom of each of said grooves, whereby said pistons may be moved by hydraulic pressure, an annular channel member intermediate said piston and said annular brake shoes, said brake shoes being formed with passages therethrough for the flow of coolant, inlet and outlet connections to said passages, means to introduce hydraulic pressure into said groove for effecting simultaneous opposed axial motion of said brake shoes, and means for circulating coolant through said passages as said brake shoes engage said disc.

2,747,703
WALL PANEL CONSTRUCTION
Leonard E. Broberg, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application March 29, 1952, Serial No. 279,409
2 Claims. (Cl. 189—34)



1. An all-metal building structure, comprising an open sided foundation channel resting on the foundation of the structure with the open side of said channel facing said foundation and with the sides of said channel being substantially flat and turned outwardly adjacent the foundation to form a pair of diverging flanges, an open sided ceiling channel disposed above said foundation channel with the open side of said ceiling channel facing upwardly and with the sides of said channel being substantially flat and turned outwardly adjacent said open side to form a pair of diverging flanges, a plurality of laterally spaced

studs extending vertically between the foundation and ceiling channels and secured to the web of each channel, a plurality of wall panels to form the wall surfaces of the structure and having a generally rectangular main panel surface bounded by an inwardly diverging section and terminating in a peripheral edge section which is inwardly offset from and parallel to the main panel surface, and said offset edge section adjacent the top of the panels being disposed flatwise against the side of the ceiling channel and the offset edge section adjacent the bottom of said panels being disposed flatwise against the side of the foundation channel, means securing the vertically extending edge section of the wall panels to said studs a plurality of horizontally extending foundation locking channels having converging side flanges with the uppermost side flange thereof being disposed flatwise over the lowermost diverging surface of said panels and with the lowermost side flange being disposed flatwise against the diverging flange of the foundation channel, a plurality of horizontally extending ceiling locking channels having converging side flanges with the uppermost of the ceiling locking channel side flanges being disposed flatwise against the diverging flange of the ceiling channel and the lowermost of said ceiling locking channel side flanges being disposed flatwise against the upper diverging section of said panels, and securing means extending through said channels and attaching the locking channels to the respective foundation and ceiling channels and firmly securing said panels between the locking channels and the respective foundation and ceiling channels.

2,747,704
NAIL-RECEIVING BEAMS
Charles B. Gorey, Grosse Pointe, Mich., assignor to National Steel Corporation, a corporation of Delaware
Application June 2, 1948, Serial No. 30,596
9 Claims. (Cl. 189—37)



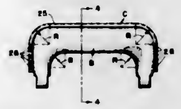
1. An elongated structural member formed from a single piece of sheet metal of such thickness as to be not readily puncturable by a driven nail comprising a web section including spaced substantially parallel nail guiding elements providing a nail receiving slot therebetween, the nail guiding elements extending substantially throughout the length of the structural member and including marginal portions forming an elongated longitudinally extending entry throat for the nail receiving slot, a pair of outwardly extending coplanar side flanges having inner longitudinal edges joined to the marginal portions of the nail guiding elements, the side flanges being substantially perpendicular to the nail guiding elements and extending substantially throughout the length of the structural member, a continuous cover member overlying the pair of coplanar flanges and being connected to the outer longitudinal edges of the coplanar flanges and extending substantially throughout their length, and a medially positioned continuous longitudinal imperforate depression in the cover member coextensive with the entry throat of the nail receiving slot, the depression being V-shaped in cross-section with its apex extending into the entry throat, the apex of the depression being relatively thinner than the remaining portions of the depression to render the cover member at the apex of the depression readily puncturable by a driven nail and the metal of the apex being cold-worked to increase its tensile strength by an amount sufficient to offset the decrease in strength of the apex due to the thinning thereof.

2,747,705
REVERSIBLE METAL DOORS
Ernest A. Bagnard, Lake County, Ill., assignor to Ceco Steel Products Corporation, Omaha, Nebr., a corporation of Nebraska
Application October 18, 1952, Serial No. 315,555
7 Claims. (Cl. 189—46)



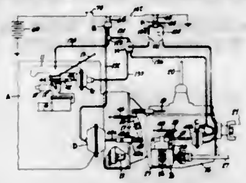
1. A door structure including a frame formed of connected members having inwardly opening longitudinally extending grooves, molding members having projecting legs adapted to be frictionally engaged in said grooves for detachably mounting the molding members on the frame members, and locking members for spreading and holding said legs in separated relation against the opposite sides of its groove whereby said molding members are locked to the frame member.

2,747,706
HANDLE
William Finkelstein, Philadelphia, Pa.
Application November 12, 1954, Serial No. 468,279
1 Claim. (Cl. 190—57)



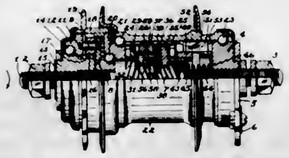
A handle comprising an annular-like metal stamping which is concave-convex in cross section and forms a grip portion after being folded upon itself, said grip portion having upper and lower edges, said upper and lower edges extending inwardly, a tongue interposed between the upper edges of said folded stamping and extending above the uppermost surface of said grip portion, a covering cemented to the outside of said metal stamping, portions of said covering overlying the sides of said tongue which extend above the upper portion of said metal stamping, other portions of said covering lying between the lower adjoining edges of said folded metal stamping, and a channeled metal strip having parallel legs joined by a bight portion and overlapping the top of said tongue and the portions of said covering which engage the sides of said extending portion of said tongue above the metal stamping, and said metal strip secured to the uppermost edges of said covering by staking of the legs of said channeled strip against said covering whereby said covering and said tongue will be held together by said channeled strip.

2,747,707
POWER TRANSMISSION CONTROL SYSTEM
Chester A. Dillinger, Portland, Oreg.
Application January 19, 1953, Serial No. 331,887
13 Claims. (Cl. 192—.092)



2. A power transmission control system comprising a transmission shifting unit, a clutch operating unit, and a throttle adjusting unit, a manual control member movable between two positions, means controlled by said member in one of said positions for operating said shifting unit to engage a driven member with the transmission, means controlled by said member in the other of said positions for operating said shifting unit to disengage said driven member from the transmission, means controlled by said member in said two positions to actuate said throttle adjusting unit toward open and closed throttle positions, respectively, and means controlled by said member in an intermediate position for actuating said clutch unit.

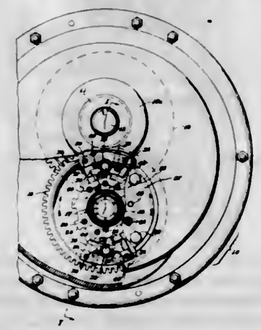
2,747,708
AUTOMATIC TWO-SPEED GEARING FOR BICYCLES
Merle E. Peterson, Elmira, N. Y., assignor to Bendix Aviation Corporation, a corporation of Delaware
Application February 14, 1955, Serial No. 487,766
8 Claims. (Cl. 192—6)



1. In a two-speed coaster brake for velocipedes and the like, a fixed axle, a low-speed screw shaft rotatably mounted thereon, a high speed driving member including an oppositely threaded screw shaft rotatably mounted on the low-speed shaft, means for rotating the low-speed shaft from the high speed shaft at reduced speed, an anchor member fixed on the axle, a hub member journalled on the high speed driving member and the anchor member, a high-speed driving clutch member threaded on the high speed screw shaft, a low speed driving clutch member threaded on the low speed screw shaft, a driven clutch member splined in the hub member for alternative engagement with the driving clutch members, a control nut on the low-speed screw shaft, and means including a spring member connecting the control nut to the driven clutch member for shifting the latter into position to engage one or the other of the driving clutch members.

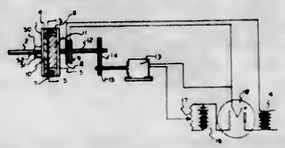
2,747,709
REVERSE ROTATION CHECK MEANS
Richard A. Bennett, Elkins Park, Pa., assignor to The American Pulley Company, Philadelphia, Pa., a corporation of Pennsylvania
Application December 10, 1952, Serial No. 325,189
4 Claims. (Cl. 192—7)

1. Reverse rotation check means for a speed change drive device having an oil tight casing with an input shaft extending through one of the side walls of the casing for power application, an output shaft extending through the opposite side wall for connection to a shaft of a machine or apparatus to be driven, and a train of speed change gear wheels within the casing for transmitting power from the input to output shaft: said rotation check means including a circular stop element with a notched periphery affixed to a closure plate removably secured over an access opening in one of the side walls



of the casing in coaxial relationship with one of the enclosed gear wheels of the train; at least one detent pivotally connected to confronting face of said one gear wheel to cooperate with the notched stop element; and means on said one gear wheel for limiting outward swing of said detent under influence of said centrifugal force during normal operation of the device in driving the shaft of the machine or apparatus in the desired direction.

2,747,710
VARIABLE SPEED DRIVE
Edward W. Smith, Melrose Highlands, Mass.
Application August 30, 1950, Serial No. 182,239
2 Claims. (Cl. 192—84)

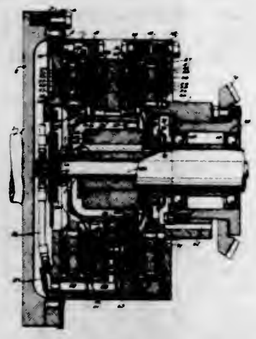


1. A variable speed drive comprising a first shaft an independent driving source providing power for said first shaft, a second shaft adapted to be driven by the first shaft, a pair of opposing clutch plates mounted one on each of said shafts with means for permitting their motion together in opposing gripping relation, electromagnetic means for drawing said clutch plates together, means for energizing said electromagnetic means intermittently, comprising a gaseous control tube having a cathode, an anode and an alternating current power source in series therewith, a grid control element for said tube, means providing a direct current potential source applied to said grid controlled in potential magnitude by the velocity of said second shaft for permitting a flow of current only during successive similar portions of the alternating current cycle of said alternating power source for adjustably controlling the grip between said clutch plates.

2,747,711
MULTIPLE CLUTCH-COUPLING UNIT
Walter P. Schmitter and Alfred G. Bade, Milwaukee, Wis., assignors to The Falk Corporation, Milwaukee, Wis., a corporation of Wisconsin
Application June 30, 1950, Serial No. 171,412
8 Claims. (Cl. 192—87)

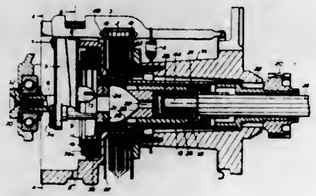
1. In a clutch, the combination of driving and driven clutch members severally comprising a housing and a

plate disposed in said housing and rotatable therewith, means supporting one of said members for relative tilting



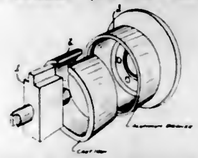
action between said members, and fluid pressure-operable means in said housing for pressing said plate into frictional torque-transmitting relation with said housing.

2,747,712
CLUTCH MECHANISM
Reginald Dennis Salmon and Leonard Alfred George Nash, Croydon, England, assignors to Creed and Company Limited, Croydon, England, a British company
Application February 20, 1952, Serial No. 272,672
Claims priority, application Great Britain February 26, 1951
6 Claims. (Cl. 192—102)



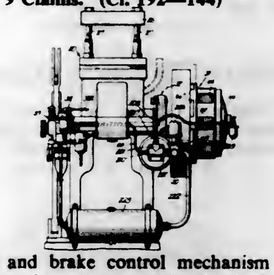
1. Apparatus comprising a fixed frame, rotatable means and continuously rotating means both rotatably mounted on said frame, a utilization device, a pair of relatively movable stop cooperating members coupled to said rotatable means, first spring means coupled between said members for normally maintaining said members at a predetermined angular spacing with respect to each other, an expansible element having one end thereof coupled to a first of said members, second spring means disposed between said second member and the other end of said expansible element, said element adapted in its normal position to engage said rotatable means with said rotating means, stopping means movably mounted on said frame for arresting said members at predetermined angular positions, said stopping means adapted to arrest said first member in advance of said second member, said first spring means adapted to absorb a first portion of the kinetic energy of said rotatable means upon engagement of said first member with said stopping means, the relative movement between said members after engagement of said first member with said stopping means adapted to cause said expansible means to disengage said rotatable means from said rotating means, adjustable means disposed between said second spring and said second member for adjusting the predetermined angular spacing of said members, and kinetic energy absorbing means coupled between said utilization device and said rotatable means, said kinetic energy absorbing means adapted to absorb the balance of said kinetic energy.

2,747,713
COMPOSITION OF MATERIAL SUITABLE FOR USE IN A COUPLING
James W. Light, Greenville, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 15, 1952, Serial No. 314,887
6 Claims. (Cl. 192—107)



1. As a new article of manufacture, a friction coupling including, a driving member composed of cast iron having a matrix with a maximum of 20% ferrite, and a driven member composed of aluminum bronze having at least 84.5% copper.

2,747,714
AIR-OPERATED CLUTCH-BRAKE MECHANISM
Clarence M. Eason, Waukesha, Wis., assignor to Industrial Clutch Corporation, Waukesha, Wis., a corporation of Wisconsin
Application March 19, 1952, Serial No. 277,509
9 Claims. (Cl. 192—144)

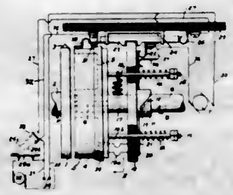


1. In clutch and brake control mechanism for controlling the operation of a machine having a moving part adapted for single cycle or repeating operations at relatively high speeds, or for preliminary setting operations at relatively low speeds capable of being stopped substantially at any desired point, the combination of a compressed air operated clutch operative to drive said moving part, a compressed air operated brake operative to stop said moving part, electrically operated primary valve mechanism for admitting the compressed air at relatively high pressures to said clutch and to said brake for obtaining single cycle or repeating operations of said moving part, switch means controlling said electrically operated valve mechanism, timing means moving in synchronism with said moving part for controlling said electrically operated valve mechanism, manually actuated means for controlling said electrically operated valve mechanism, and a hand operated modulating valve for admitting compressed air to said clutch and to said brake at relatively low pressures for obtaining relatively low speeds of said moving part.

2,747,715
STOPPING MECHANISM FOR SEWING AND OTHER MACHINES
Hendrik W. Brinkman, Leiden, and Bernardus J. Brinkman, Utrecht, Netherlands, assignors to Louis Johannes Mario Reher, called Wiggermann, Amsterdam, Netherlands
Continuation of application Serial No. 210,782, February 13, 1951. This application April 15, 1953, Serial No. 348,868
4 Claims. (Cl. 192—146)

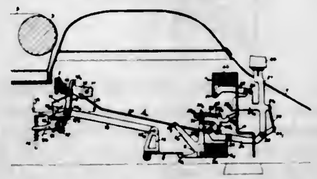
1. In control mechanism for a sewing machine, in combination: a brake element for retarding the movement of

the machine, a rotary part rotatable with the machine and adapted to be engaged by said brake element, means supporting the brake element for rotational movement together with said rotating part of the machine, a slow speed driving means, means connecting said driving means with said brake element and permitting a limited angular movement of the brake element with respect to the driv-



ing means, an interruptor member movable with the machine, electrical means for operating the slow speed driving means and the brake element, and a control member for said electrical means adapted to be moved, upon the relative limited angular movement of the brake element into the path of the said interruptor member for actuation thereby to disconnect said electrical means.

2,747,716
AUTOMATICALLY LOCKING CONTROL MECHANISM FOR VARIABLE ESCAPEMENT TYPEWRITERS
Albert Rix, Wilhelmshaven, Germany, assignor to Olympia Werke Aktiengesellschaft, Wilhelmshaven, Germany
Application January 27, 1955, Serial No. 484,523
Claims priority, application Germany January 27, 1954
4 Claims. (Cl. 197—84)

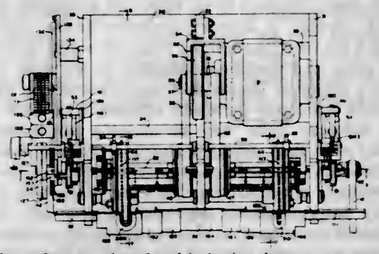


1. In a typewriter, an automatically locking key actuated control mechanism comprising a key-actuated lever, a second lever to which said key-actuated lever is pivoted, means supporting said key-actuated lever for substantially vertical movement, a control member connected to and movable by said second lever from a normal to an actuated position upon a depression of said key-actuated lever, locking means movable by said second lever into locked position upon a first depression of said key-actuated lever, thereby to lock said control mechanism in actuated position, and means on said key-actuated lever for unlocking said locking means upon a second depression thereof.

2,747,717
PAPER FEEDING DEVICE
James M. Cunningham, Endicott, Francis L. Pratt, Endwell, and Paul M. Kovach, Vestal, N. Y., assignors to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application December 23, 1954, Serial No. 477,286
29 Claims. (Cl. 197—133)

1. In an automatic control device controlled by a tape having a plurality of control channels for control indicia, means for advancing said tape in synchronism with operation of the control device, a series of sets of sensing devices for said indicia, each set comprising a plurality of relatively adjustable sensing devices for

responding to said indicia at variable intervals, and means under control of said sensing devices for effecting a



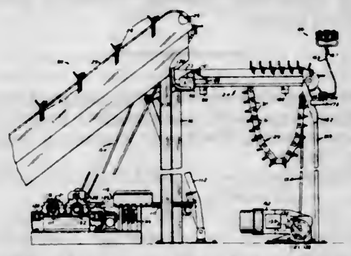
plurality of controls of said device in response to each indicium of the tape.

2,747,718
RIBBON SHIFT MECHANISM FOR BUSINESS MACHINES
Joseph E. May, Norwalk, Conn., assignor, by mesne assignments, to Sperry Rand Corporation, New York, N. Y., a corporation of Delaware
Application May 18, 1953, Serial No. 355,757
10 Claims. (Cl. 197—157)



1. A ribbon shift mechanism which comprises a driving means, a driven shift lever, a latch pivoted on the lever by pin-and-slot connection, spring means forming a resilient connection between the latch and lever, a fully automatic linkage associated with the latch and actuated during a predetermined machine operation and adapted to control the positional disposition of the latch, a tiltable plate connected to the shift lever and having spaced arms, a ribbon guide resting on each arm, and upright posts adjacent the arms, said ribbon guides being apertured to slide up and down on said posts as they are raised and lowered by said arms.

2,747,719
ARTICLE HANDLING AND STORAGE APPARATUS
Paul Ruttkay, Opequon District, Frederick County, Va., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application April 22, 1953, Serial No. 350,311
11 Claims. (Cl. 198—24)



4. Apparatus for temporarily storing articles periodically discharged from a supply conveyor and transferring

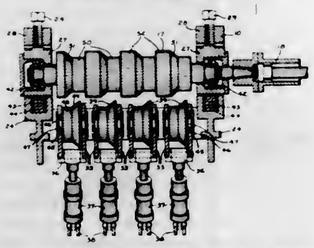
them to continuously advancing conveyor hooks, which comprises an endless chain composed of a plurality of pivotally interconnected links, each link having an article engaging portion, a support structure having one end positioned for receiving articles from the supply conveyor and its other end positioned adjacent to the path of the advancing conveyor hooks, said support structure having a guideway associated therewith wherein a variable number of adjacent links may be slidably positioned sequentially with their associated article engaging portions projecting above the article supporting surface of the support structure, the remaining links not positioned in the guideway being pendantly supported in a variable length loop beneath the support structure, means for periodically positioning successive links of the chain in the guideway each time an article is deposited by the supply conveyor onto the support structure, the last-positioned link engaging the article last discharged by the supply conveyor to transport said article, and means for indexing the series of links positioned in the guideway to advance the articles on their associated links toward the discharge end of the support structure, whereby the leading link of said series discharges its associated article onto a passing conveyor hook and becomes disengaged from the guideway.

2,747,720

BILLET TURNING APPARATUS

Myles Morgan, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a corporation of Massachusetts

Application November 19, 1952, Serial No. 321,366
7 Claims. (Cl. 198—33)



1. An apparatus for turning billets and the like, comprising: an upper roll member having adjacent coaxial conical and cylindrical portions, a lower roll member having a similar conical and cylindrical portions, the rolls being mounted for rotation about spaced parallel axes, which axes are the axes of their respective cylindrical and conical portions, means for driving one of the roll members, the lower roll member being mounted for free rotation and for movement vertically toward and away from the upper roll member, means for causing the lower roll member to partake of the above-mentioned movement, the conical portion of the upper roll member being coextensive with the cylindrical portion of the lower roll member, and the conical portion of the lower roll member being coextensive with the cylindrical portion of the upper roll member.

2,747,721

POWER DRIVEN CONVEYING MECHANISM

John B. Long, Fayetteville, and Richard J. Frye, Oak Hill, W. Va., assignors to The Long Company, a corporation of West Virginia

Application December 11, 1950, Serial No. 200,236
12 Claims. (Cl. 198—95)

3. In a conveying mechanism, two elongated conveyors having their adjacent ends in cascade relationship, the receiving conveyor supporting a guide plate thereabove, said plate having sides, a front end and a rear end and fabricated to provide a passageway through which material may drop by gravity from the discharge conveyor upon the receiving conveyor, two arcuate guide walls symmetrically arranged at each side of a first line substantially midway between the sides of the plate, and two abutments located in a second line normal to said first line and located equidistant one to each side of the latter adjacent the rear end of the plate, and from the zones of which



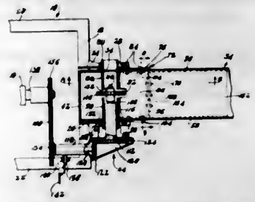
abutments said arcuate guide walls are radiused, and the discharge conveyor provided with two depending elements at its delivery end portion spaced apart at a third line normal to the longitudinal axis of the discharge conveyor equidistant from said axis, said depending elements engaging said abutments when the conveyors are in a line and engaging one of said abutments and one of said guide walls when the conveyors are in angular relationship.

2,747,722

WAGON ELEVATOR SUPPORT FOR HARVESTERS

Wayne E. Slavens, Des Moines, Iowa, assignor to Deere Manufacturing Co., Dubuque, Iowa, a corporation of Iowa

Application June 11, 1953, Serial No. 361,007
10 Claims. (Cl. 198—122)



1. A wagon elevator mounting for a harvester, comprising: a support having thereon a pair of spaced apart and alined mounting elements; an elevator housing having opposite upright side walls spaced apart on the order of and received between the mounting elements, at least one of said walls having an opening therein alined with the proximate mounting element; a pair of alined trunnions, one fixed to each side wall, respectively received by the mounting elements to sustain the elevator housing on the support, one of said trunnions being hollow and in register with the aforesaid side wall opening; a single shaft projecting through the hollow trunnion and said side wall opening and having an inner end including a driven portion within the housing and an outer end including a driving portion outside the housing, said shaft being out of contact with said trunnions and any part of the elevator housing; and means fixed rigidly to the support outside and out of contact with the elevator housing and trunnions and journaling the shaft solely at its outer end so that the shaft extends into the housing as a cantilever.

2,747,723

BUCKET CONVEYOR WITH PROTECTED PIVOT SHAFT

Henry W. Hapman, Hickory Corners, Mich., assignor of forty per cent to Hannah Jane Hapman, Hickory Corners, Mich.

Original application July 30, 1948, Serial No. 41,511. Divided and this application November 7, 1952, Serial No. 319,205
2 Claims. (Cl. 198—148)

1. A bucket conveyor comprising a conveyor supporting structure, a pair of conveyor chains spacedly mounted

on said structure, a bucket supporting rod extending between said conveyor chains and having its opposite ends connected thereto, a pair of bucket pan supporting end members spacedly mounted on said rod, a trough-shaped bucket pan connected to said end members, and a tubular cover member surrounding said rod and extending out-



wardly beyond said end members into close proximity to said conveyor chains, said tubular cover member throughout substantially its entire length having a bearing bore pivotally receiving and engaging said rod whereby to provide both protection and a journal bearing surface for said rod.

2,747,724

GUIDED CARRIER CONVEYOR

Andrew T. Kornylak, Jersey City, N. J., assignor to Kornylak Engineering Corporation, Jersey City, N. J., a corporation of New Jersey

Application September 12, 1952, Serial No. 309,264
5 Claims. (Cl. 198—155)



1. An endless guided carrier conveyor comprising intersected first and second endless track channels having their open sides in a substantially common plane, which channels define for said conveyor an operative reach, an inoperative reach, a folding span interconnecting said operative and inoperative reaches at the terminal extreme of said operative reach, an unfolding span interconnecting said inoperative and operative reaches at the initial extreme of said operative reach, the width and depth of said first channel being respectively greater and less than the corresponding dimensions of said second channel; a carrier; a control member rigidly fixed to the end of said carrier; first and second track followers rotatably mounted on said control member and slidably engaged in said first and second channels respectively, the diameter and length of each of said track followers being similar respectively to the width and depth of the channel engaging that track follower; and means for maintaining said track followers in engagement with their respective channels, whereby each track follower is confined to defined courses through the intersections of said channels.

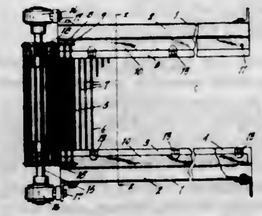
2,747,725

BELT TYPE CONVEYOR

Charles T. Hatch and Raymond H. Marshall, Albion, Mich., assignors to Union Steel Products Company, Albion, Mich.

Application April 10, 1951, Serial No. 220,192
7 Claims. (Cl. 198—195)

1. In a conveyor, the combination of spaced parallel side rails of inwardly facing channel section providing inwardly projecting arms, the arms of the side rails terminating in integral upwardly facing upper and lower angled ways, a conveyor belt comprising a plurality of spaced parallel rods having links at the ends thereof terminating in eyes embracing the adjacent rods, the eyes constituting bearing elements slidable upon the ways as the belt is translated upon the ways, elongated bearing strips of nylon disposed upon the supporting surfaces of the ways, one



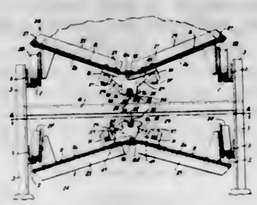
end of the strips being secured to the ways, spaced clips on the ways engaging the outer edges of the bearing strips and overlapping the same while permitting expansion and contraction thereof from their ends attached to the ways, said clips being positioned rearwardly of said securing means relative to the direction of travel of the reaches of the belt on the ways, and thrust strips of nylon secured at spaced intervals to the upright portions of the ways to receive the edge thrust of the belt.

2,747,726

ENDLESS-BELT CONVEYORS

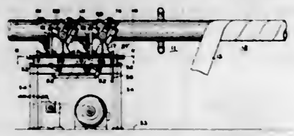
Samuel Davis Robins, Lawrence, N. Y.

Application July 3, 1952, Serial No. 297,064
6 Claims. (Cl. 198—203)



1. A belt-conveyor system for transporting material over long distances, horizontal or inclined, comprising upper and lower tracks; an endless drive cable; a cradle-belt assembly comprising an endless belt and wheeled cradle structures mounted at spaced intervals on said belt for supporting said belt in its upper and lower runs in rolling engagement with said upper and lower tracks, respectively, said cradle structures each being articulated and comprising each at least a pair of rigid beam members disposed cross-wise of said belt and secured thereto in end-to-end relationship to each other, each of said pair of beam members having means forming a tong jaw at its contiguous end, the tong jaws of said beam members together providing a weight-actuated tong for connecting the cradle structure to said cable at certain points in the belt circuit and disconnecting it at others, each said tong when connected to said cable having its hinge axis located between said cable and said belt and having its jaws constructed and arranged to grip said cable in its upper and lower runs, respectively, between different pairs of gripping surfaces; means for raising and lowering the hinge axis of said cradle structures for releasing the connection between said cradle structures and said cable at certain points in the belt circuit, and reengaging at others; and, means for raising and lowering said cradle structures toward and away from said cable in its upper and lower runs when disconnected from said cable.

2,747,727
PIPE HANDLING APPARATUS
Clifford F. Morain, Youngstown, Ohio
Application March 10, 1953, Serial No. 341,546
11 Claims. (Cl. 203—75)



1. In apparatus for handling pipe the combination of a pair of horizontally movable platforms, means to move said platforms simultaneously toward or away from each other, a driving head mounted on each of said platforms, each of said driving heads comprising a pair of spaced driving rolls, separate journal means for each of said rolls, means comprising a shaft for pivotally connecting said journal means, driving means connecting said shaft and each of said rolls, means comprising a cylindrical member secured to one of said journal members for rotatably mounting said driving heads, a support member rigidly secured to said one of said journal members, said support member having an arcuate lower surface, an arcuate bearing plate supported on said platform and arranged to engage the lower surface of said support member, and means to yieldably urge said journal members together.

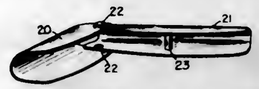
2,747,728
APPARATUS FOR REMOVING THREAD WASTES ON THREAD CARRIERS USED IN TEXTILE MACHINES
Walter Stutz, Kempten, near Wetzikon, Switzerland, assignor to Stutz & Cie., Kempten, near Wetzikon, Switzerland
Application August 14, 1953, Serial No. 374,180
Claims priority, application Switzerland August 16, 1952
2 Claims. (Cl. 203—355)



1. A device for removing thread remainders from bobbins, comprising a hollow rotatable drum having a perforated cylindrical wall, means for rotating said drum, the cylindrical wall of said drum having an adhesive outer surface for catching a thread remainder coming from a bobbin, a stationary cylindrical chamber fitting inside said drum and having a longitudinal slot extending substantially the full length of said drum, a blower rotatably supported in said chamber and extending substantially the full length thereof and means for rotating said blower to blow air out through said slot, said slot being circumferentially spaced from a zone in which said thread remainders are caught on said drum so that said thread remainders travel part way around the drum and are then blown off by air from said blower when they reach said slot.

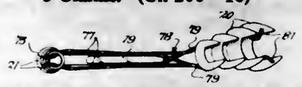
2,747,729
SPECTACLE CASE
Raymond F. E. Stegeman, Greece, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a corporation of New York
Application December 27, 1954, Serial No. 477,693
2 Claims. (Cl. 206—6)

2. A spectacle case comprising a pair of elongated, U-shaped, open-ended body members formed of resilient sheet material and having substantially the same size and shape, the side portions at one end of one member being positioned between the side portions at one of the other member with the open sides of the members facing each other, pivot means pivotally connecting the adjacent side portions of the members whereby the members are adapted to be moved towards each other into overlapping relation



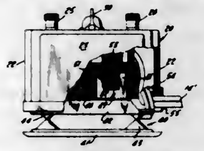
to form an enclosure for a spectacle, the overlapping sides of the members being in frictional engagement with each other whereby the members are releasably held in position, and a stop member connecting the pivot means and extending between the side ends of the said one member to limit the endwise movement of the spectacle for retaining it in the case.

2,747,730
HOLDERS FOR TOOLS
Adam P. Zubricky, Cheektowaga, N. Y.
Application August 31, 1951, Serial No. 244,586
5 Claims. (Cl. 206—16)



1. A wrench set including wrenches of gradually decreasing size from the lowest to the uppermost wrench, said wrenches having openings in opposite end portions thereof, and a holder for releasably securing said wrenches in said relation to each other, that improvement in which said holder is made of a single piece of wire having one end thereof bent to form a hook and extending upwardly through all of the openings in one end of said set of wrenches and gripping the uppermost of said wrenches, said wire beyond said hook extending along one side of said wrench set, then across the uppermost wrench and along the other side of said set to the lowest wrench and then upwardly through the opening at the opposite end of the lowest wrench and into gripping engagement therewith.

2,747,731
PACKAGES
Joseph L. Bonanno, South Orange, N. J., assignor to The Lionel Corporation, New York, N. Y., a corporation of New York
Original application July 26, 1949, Serial No. 106,860, now Patent No. 2,641,743, dated June 9, 1953. Divided and this application October 28, 1952, Serial No. 317,211
5 Claims. (Cl. 206—46)



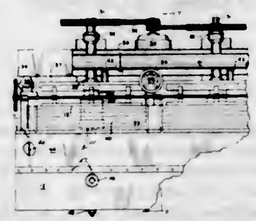
1. In combination, a filler of predetermined size, a housing made of plastic material, closed at the top and having side walls provided with means for receiving and positioning the filler in a predetermined position, the housing walls having internally disposed vertical ribs extending alongside the filler, and a bottom closure member engaged with the bottom of the filler and having upwardly extending bifurcated metal gripper members having downwardly and inwardly facing teeth which bite into the sides of the ribs and prevent separation of the base and cover.

2,747,732
SHIPPING CASE AND STORAGE CHEST
Harold A. Fischer, Park Ridge, Ill., assignor to Compco Corporation, Chicago, Ill., a corporation of Illinois
Application March 13, 1952, Serial No. 276,265
3 Claims. (Cl. 206—52)



1. In a chest of the character set forth, a board of fibrous material folded upon itself to provide bottom, end, top, front sidewalls and rear sidewalls, the end walls being double walls and the front wall being folded upon itself along a median line to provide a double wall of reduced height, the front wall being provided with at least one slot along its top edge, said top wall normally resting upon the top of the double end walls and being provided with a closure flap normally resting, in closed position, upon the top edge of the folded front wall, said closure flap being provided with a latch tongue adapted to extend through the slot in said front wall, a pair of spaced members extending between the front and rear walls and provided with aligned slots, and reels received within the slots of said spaced members.

2,747,733
DUAL CIRCULATION AERATION APPARATUS
Arthur C. Daman, Denver, Colo., assignor to Mining Process and Patent Company, Denver, Colo., a corporation of Delaware
Application July 18, 1950, Serial No. 174,472
9 Claims. (Cl. 209—168)



1. In a multi-cell froth flotation machine of the type having a series of upright partitions dividing its interior into a plurality of treatment cells and aerating and pulp circulating means in each cell for the progressive movement of pulp through the succession of cells, the improvement which comprises at least one constricted, tubular passage extending through a partition adjacent a corner of the cell, said passage being adjacent the bottom of the cell and in substantially the horizontal plane of the pulp circulating means in the next successive cell for inducing circulation of nonfloated solids from one cell directly into the next said cell independently of the normal circulation in the cell.

2,747,734
COMPOSITION OF MATTER FOR REMOVING ABRADANT SUBSTANCES FROM EXFOLIATED VERMICULITE AND PROCESS OF USING SAME
Milton F. Rose, Prescott, and Jack E. A. Stone, Phoenix, Ariz.
No Drawing. Application June 12, 1953, Serial No. 361,432
3 Claims. (Cl. 209—173)

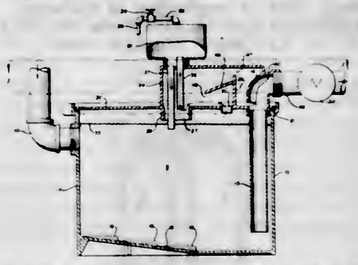
1. The method of cleaning particles of exfoliated vermiculite by removing particles of abradants therefrom consisting of, mixing the said vermiculite particles to be cleaned, with slight agitation, in a fluid composition of matter composed of water 1200 parts; commercial hydrogen peroxide 1 part; commercial ammonium hydroxide 1 part; and commercial sodium hypochlorite 1 part; all parts by volume; allowing the mixture to stand quiescent until the vermiculite particles float on the surface of said fluid composition and the abradants sink in said fluid composition; skimming the cleaned vermiculite particles from the surface of said fluid composition, and discarding the substances in said fluid composition which do not float.

2,747,735
ENDLESS BELT MAGNETIC SEPARATOR
Bernhard Andreas Palm, Milwaukee, Wis., assignor to Dings Magnetic Separator Co., Milwaukee, Wis., a corporation of Wisconsin
Application March 25, 1954, Serial No. 418,524
9 Claims. (Cl. 209—223)



1. In a magnetic separator, a casing forming a separating chamber having a tailings and liquid delivery spout at one end and a concentrate discharge chute at its opposite end disposed at a higher level than said spout, an endless conveyor having a lower run inclined and advancing upwardly from a position in close proximity to said spout to a similar position relative to said chute, means for creating a field of magnetic influence along the lower face of said conveyor run, and an inlet duct formed to introduce magnetic slurry upwardly into said field between said spout and said chute and in the direction of advancement of said conveyor run, said duct being spaced from the bottom of said casing to provide an unobstructed passage for conducting tailings bearing liquid from said chamber to said spout beneath the slurry inlet.

2,747,736
GREASE AND OIL INTERCEPTOR AND METHOD OF SEPARATING FLUIDS OF DIFFERENT SPECIFIC GRAVITIES
William R. Mobley, Miami, Fla.
Application September 16, 1952, Serial No. 309,752
7 Claims. (Cl. 210—56)



1. An apparatus for the recovery of greases and oils from waste water comprising a continuous flow grease separating trap body having a separating chamber and an outlet located above the inlet and an air sealed top closure member whereby the grease separating chamber of the body is adapted to be a flow part of a waste water line, said closure member comprising a chambered structure disposed above the separating chamber of the body and comprising an air chamber, a second chambered

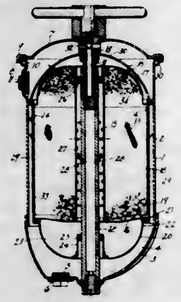
structure sealed to the atmosphere and disposed above the chamber of the closure structure, and a conduit extending downwardly from the second chambered structure to the top level region of the separating chamber for the hydrostatic conveyance of separated grease and oils from the separating chamber upwardly past the air chamber to the second chamber when the passageway and the separating chamber and the second chamber are filled with liquid to form a hydrostatic column and said air chamber structure having an air outlet extending into the discharge outlet below the normal liquid level of the device.

2,747,737
SELF-CLEANING SAND AND SEDIMENT TRAP FOR PUMP LINES
Melvin L. Bryer, Beeville, Tex., assignor of fifty per cent to Frank Coughlin, Beeville, Tex.
Application April 14, 1955, Serial No. 501,270
7 Claims. (Cl. 210—57)



1. A self cleaning sand and sediment trap for location in pump lines comprising a base portion having an upstanding rigid tube thereon provided with a passageway for pumping of liquids therethrough, and an inverted cone having an upwardly convergent passageway therethrough mounted with respect to the tube so that the upper portion of the tube projects into a portion of the wider lower end of the passage of the cone in spaced relation therewith.

2,747,738
OIL FILTER
Stephen I. Johnson and James W. Wilkinson, Hastings, Mich., assignors to Hastings Manufacturing Company, Hastings, Mich., a corporation of Michigan
Application April 24, 1953, Serial No. 350,789
12 Claims. (Cl. 210—140)



1. In an oil filter, the combination of a cylindrical container open at the top and provided with a removable cover and having a closed bottom constituting a sump and provided with a drain opening, a centrally disposed inlet pipe mounted on the bottom of the container to extend upwardly therefrom centrally of the container and internally threaded at its upper end, a removable filter cartridge comprising concentric outer and inner foraminate walls, a closed bottom wall and a foraminate domed top wall, said bottom and top walls connecting said outer and inner cartridge walls in spaced relation and coacting therewith to define a chamber filled with fibrous filtering material, the inner cartridge wall spacedly surrounding said inlet pipe, the outer cartridge wall being spaced from the container wall which is provided with an outlet, the inlet pipe having discharge openings communicating with the space within the inner cartridge wall, an imperforate sump wall peripherally connected to the bottom of the outer cartridge wall below the said cartridge bottom wall and constituting a sump chamber opening to the space between said inner cartridge wall and said inlet pipe, said sump wall having an opening for said inlet pipe provided with a gasket slidably and supportedly engaging said inlet pipe, said inner cartridge wall being provided with a gasket slidably and supportedly engaging said inlet pipe adjacent the upper end thereof and above its discharge openings, a cover attaching bolt disposed through said cover and threaded into said inlet pipe and having a longitudinal pressure relief passage therein opening to said inlet pipe and within the container above the cartridge, said relief passage being provided with a pressure relief valve, and a domed foraminate cartridge positioning member carried by said bolt and spacedly embracing the top wall of the cartridge.

2,747,739
REMOVABLE FABRIC TYPE STRAINER
Irving M. Bissonnette and Harold F. Bissonnette, Chicago, Ill.
Application April 30, 1954, Serial No. 426,708
3 Claims. (Cl. 210—159)



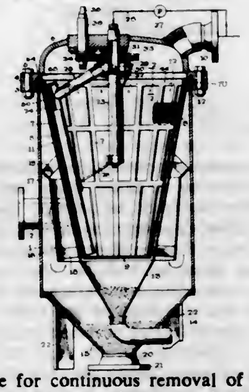
1. A paint strainer comprising a body having an aperture, a depending collar about said aperture, a split screen supporting band hingedly mounted on said body adjacent one side of said collar and adapted to move into and out of embracing relation with said collar, a spring connected between the ends of said split band, a spring engaging lug mounted on said collar between the ends of said split band for latching said band in embracing relation.

2,747,740
VACUUM TYPE COFFEE STRAINER
Wilbur D. Curtis, Los Angeles, Calif., assignor to Wilbur Curtis Company, Inc., Los Angeles, Calif., a corporation of California
Application January 29, 1953, Serial No. 334,046
5 Claims. (Cl. 210—162)



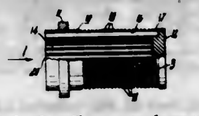
1. In a coffee maker for the vacuum process of making coffee by use of an upper bowl with a downwardly extending neck and a lower bowl, the combination of a strainer device comprising a shaft adapted to extend into the neck having an outwardly bent hook at one end adapted to engage beneath the lower edge of said neck, a dome-shaped frame, a fine mesh screen permanently fastened over the outwardly curved part of the frame, a spider comprising two legs secured at upper ends thereof to opposite sides of the rim of said frame, each said leg extending from the upper end upwardly, inwardly and downwardly in a resilient arc to a transverse yoke at the lowermost end, said legs being adapted to resiliently engage at mid-portions thereof the inside wall of said neck, said yoke having a hole therein receiving a lower portion of said shaft, and the center of said frame having a hole therein receiving an upper portion of said shaft.

2,747,741
DEVICE FOR CONTINUOUS REMOVAL OF SOLIDS FROM FLUIDS
Eugene W. Jacobson, Oakmont, Pa., assignor to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware
Application August 21, 1952, Serial No. 305,603
6 Claims. (Cl. 210—165)



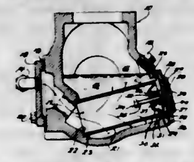
1. A device for continuous removal of solids from a flowing liquid which comprises an enclosing shell having liquid inlet and outlet connections and, at the bottom thereof, a reject discharge connection for the removal therefrom of precipitated solids; within the said shell and interposed in the passageway from the inlet to the outlet connections thereof, a strainer element comprising a rigid frame in the general shape of an inverted truncated cone, carrying on its exterior a strainer surface comprising a plurality of strainer bars encircling the said rigid frame with each bar spaced uniformly from its adjacent bars and thereby forming constricted openings therebetween, and with each successive bar from the top to the bottom of said inverted truncated cone of greater diameter than the next lower bar; the said device for removal of solid from flowing liquid further comprising a second inverted truncated cone surrounding the strainer surface, imperforate below the top of said strainer surface, positioned coaxially therewith and slightly removed therefrom; passages to direct the flowing liquid from the inlet connection into the second inverted cone at a point not substantially lower than the top of the strainer surface; a second reject discharge connection to permit the discharge of rejected solids from the bottom of the second inverted truncated cone; a rotatable member positioned within the rigid frame, positioned coaxially therewith and carrying an arm extending from top to bottom of the strainer surface and adjacent thereto, a continuous passage through the interior of said rotatable member and the said arm extending therefrom, a plurality of orifices extending through the wall of said arm and positioned to direct jets of liquid from the interior passage thereof against the inner face of the strainer surface; a pump; a conduit for the passage of liquid from a point on the outlet side of the straining device to the inlet side of the pump, and a second connection for the passage of liquid from the discharge side of said pump to the passage through the interior of said rotatable member.

2,747,742
FILTER AND METHOD OF MAKING SAME
Darrell E. Royer, Vandalia, and John H. Smith, Dayton, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 31, 1952, Serial No. 291,032
2 Claims. (Cl. 210—169)



1. An aircraft hydraulic control system filter of small area for fluid line mounting comprising, a thin tubular member having an integral annular mounting shoulder at one end and a separate sealing cap bonded to the opposite end thereof, a plurality of longitudinal flutes of rectangular cross section broached radially to a depth of between one-half and three-fourths into one circumferential surface of said tubular member, a transverse, continuous, thread-like spiral portion with a spiral V-shaped groove formed in the other circumferential surface, said spiral groove having a depth intersecting said flutes to form a plurality of accurate, uniformly-sized, filtering apertures in said thin tubular member, said continuous spiral portion serving to retain rigidity of said thin tubular member both during the aperture forming and during efficient high pressure fluid filtering in said aircraft hydraulic system.

2,747,743
FILTER WITH BY-PASS
John F. Talak, Silvis, Ill., assignor to J. I. Case Company, Racine, Wis., a corporation of Wisconsin
Application September 23, 1950, Serial No. 186,418
5 Claims. (Cl. 210—177)

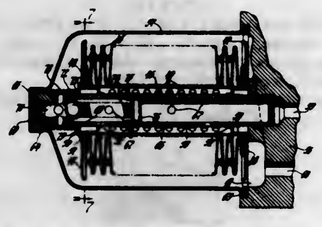


4. In a hydraulic system having a tubular filter element of the edge-filtration type, a means of releasing liquid pressure within said element comprising a cap having a seat resting solely upon one end of said element and liftable therefrom upon an increase in pressure within said element and a plurality of projections on said cap spaced radially from said element and preventing lateral displacement of said cap relative to said element upon axial displacement of said cap from said element, and means to maintain contact between said element and said cap against pressure below a predetermined amount.

2,747,744
OIL FILTER
John R. Gretzinger, Lake Fenton, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 4, 1948, Serial No. 58,283
9 Claims. (Cl. 210—183)

1. A filter element comprising a one-piece bellows of filter material, said bellows consisting of a plurality of

transversely disposed pleats arranged in a number of longitudinal series, each pleat of the alternate longitudinal series being connected by a fold line to a portion of a pleat of each intermediate longitudinal series located immediately above and below said each pleat, the inner folded edges of the pleats defining a central aperture through said bellows, a perforated tube positioned in said aperture, a clamping plate positioned inside the alternate



end pleats at each end of the bellows and positioned on top of the intermediate end pleats located immediately below said alternate pleats, a portion of said intermediate end pleats being folded over said clamping plate, an end plate engaging said end pleats, means fastening said end plate and clamping plate to secure and seal the end of said bellows, and support means supporting said plates on said tube.

2,747,745
PARCEL RACKS FOR VEHICLES
Herman W. Southeim, Verdun, Quebec, Canada, assignor to The Robert Mitchell Co. Limited, St. Laurent, Montreal, Quebec, Canada
Application June 7, 1954, Serial No. 434,809
2 Claims. (Cl. 211—90)



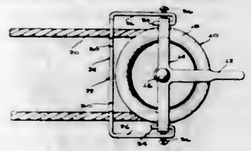
1. A parcel rack installation for vehicles comprising a plurality of spaced transversely extending brackets, front and rear mouldings secured to and underlying the front and rear ends of said brackets and extending between said brackets, said mouldings having their opposing edges stepped to provide upper and lower horizontally disposed supporting steps supporting thereon front and rear members of removable article supporting racks arranged between said brackets, each of said article supporting racks comprising front and rear angle members, each presenting a downwardly extending limb, a plurality of laterally spaced article supporting bars extending between and secured to said angle members, the ends of said bars extending through slots in the downwardly extending limbs of the angle members and being anchored to the undersides of the horizontally extending limbs of said angle members and resting on the lower supporting step of said front and rear mouldings.

2,747,746
HANGING APPLIANCES FOR DRYING AND AIRING LIGHTWEIGHT GARMENTS
Malcolm Laughton, Birmingham, England, assignor to Twinco Limited, Birmingham, England, a British company
Application August 26, 1954, Serial No. 452,374
2 Claims. (Cl. 211—113)



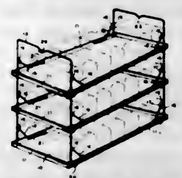
1. A garment hanger for drying and airing lightweight garments comprising a central suspending rod and cross members, spaced protuberances along the suspending rod for supporting the cross members, a gapped and bored boss at the middle of each cross member, the upper part of the bore of each boss being of diameter enabling the suspending rod to slide easily through it but not to permit the passage of a protuberance, the lower part of the bore of each boss being of diameter such as to receive at least a part of a protuberance, the gap of each boss being of width substantially equal to the diameter of the suspending rod to enable the boss to be passed laterally on to the suspending rod, whereupon it may be lowered to receive and rest upon a protuberance, and the part of the suspending rod immediately above each protuberance being increased to a diameter slightly greater than the width of the gaps of the bosses for preventing unintentional removal of the cross members from the suspending rod.

2,747,747
CLOTHESLINE PULLEY HAND GUARD
Reinhart G. Klare, Middletown, Conn.
Application February 11, 1955, Serial No. 487,528
3 Claims. (Cl. 211—119.02)



1. A hand guard attachment for a clothes line pulley of the type including a pulley wheel and a line guide extending diametrically of said wheel, comprising a C-shaped body including a bight having intermediate its ends spaced guide slots for the flights of an endless clothes line, said slots being of L-shape, each slot having an outer portion extending transversely of the bight and opening upon one side edge of the bight to engage the bight with the line by lateral movement of the bight toward the line, legs extending laterally from the ends of said bight for disposition proximate the ends of the line guide, and means on the leg adapted to clampably engage said ends of the guide.

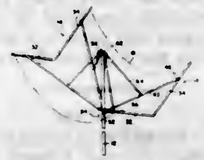
2,747,748
BREAD CARRIER
Josie C. Barefoot, Charlotte, N. C.
Application October 19, 1953, Serial No. 386,683
4 Claims. (Cl. 211—126)



3. A relatively shallow tray having a base and an upstanding rim, a handle pivotally mounted at each end of said tray, said handle comprising a cross member having legs at each end with oppositely disposed portions journalled between opposite portions of said rim so that said handle may swing from a collapsed position close to the body of the tray to an extended position substantially at right angles to the tray, and brace members pivoted to the intermediate portion of said legs the side portions of the rim each having an elongated slot with an upwardly extending enlargement at the outer end thereof, each brace having a lateral extension projecting through the slot and having a U-shaped pressure member integral therewith with the pressure member adapted to press

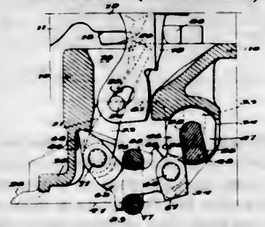
against the supporting surface of the tray and maintain the lateral extension in the enlargement in the slot, said brace members serving to maintain said handles in substantially rigid extended position, a supporting projection on the underside of said body adjacent but inwardly of each corner of the same in a manner to be disposed between the handles of a similar tray when such handles are extended and the tray is placed thereupon and thereby maintain the trays in cooperative longitudinal relation, and cooperating means between the underside of the tray and each of said handles for maintaining the trays in the proper transverse relation.

2,747,749
COLLAPSIBLE CLOTHESLINE DRYER
Charles Shore and Morton Shore, Philadelphia, Pa.
Application May 11, 1954, Serial No. 429,004
2 Claims. (Cl. 211—178)



1. A collapsible clothesline dryer having a central post adapted to be retained in a vertical position, a pair of unitary clothesline supporting arms adapted in the fully unfolded position of the dryer to be disposed in substantially parallel horizontal positions on opposite sides of said central post and in the collapsed position of the dryer to be disposed closely adjacent said central post, means operatively connecting said supporting arms to said central post whereby said arms are movable from the collapsed to the unfolded position, each of said supporting arms being resiliently deformable substantially at its center to provide two arm sections which are in horizontal alignment in the folded position of the dryer and which extend in substantially vertical positions adjacent each other and said central post when the dryer is in its collapsed position, each of said supporting arms including an elongated hollow tube which is flexible at least in a direction perpendicular to its longitudinal axis and a pair of elongated rigid members received in said tube, the inner ends of said rigid members being spaced from each other at a position substantially centrally of said hollow tube, the outer ends of said rigid members extending beyond and being connected to said means operatively connecting said supporting arms to said central post.

2,747,750
COUPLER LOCK OPERATING MECHANISM
Harry H. Wolfe, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio
Application February 9, 1953, Serial No. 335,850
13 Claims. (Cl. 213—148)



1. In a coupler, a coupler head having a cavity therein, a lock including a leg depending into said cavity, means providing a rotor lever mounted on the coupler head for swinging movements in a vertical plane, a link pivotally connected to the rotor lever and said lock leg, an operating member, a portion of said operating member extending across the entire width of an intermediate portion of said rotor lever and resting thereon, other portions on the operating member extending downwardly along a side and transversely along an under surface thereof, and means carried by the coupler head preventing disengagement of said hook shaped end from the rotor lever.

2,747,751
APPARATUS FOR HANDLING PIPE IN A DERRICK
Albert L. Stone, Palos Verdes Estates, and George E. Daverin, Long Beach, Calif., assignors to Humble Oil & Refining Company, a corporation of Texas
Original application March 14, 1950, Serial No. 149,514. Divided and this application November 3, 1951, Serial No. 254,783
4 Claims. (Cl. 214—2.5)



1. Apparatus for use in a derrick having a travelling block flexibly suspended from the upper end of the derrick at the center line thereof, comprising a cable member adapted to be mounted substantially upright in the derrick and of a length at least that of a stand of pipe to be racked in the derrick with a first end fixed to the derrick, a runner member mounted on said block and engaging said cable member for guided movement therealong and a power device operatively connected to the second end of said cable for varying the effective length thereof thereby selectively to cause said block to travel along a laterally offset path or to permit said block to travel along its path of free suspension.

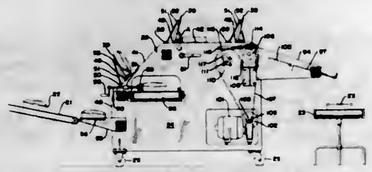
2,747,752
METHOD AND APPARATUS FOR AUTOMATICALLY SPOT LOADING PLATE GLASS ON A CONVEYOR
Motoharu Kurata, Shibuya-ku, Tokyo, Japan, assignor to Asahi Garasu Kabushiki Kaisha, Tokyo, Japan, a corporation of Japan
Application January 5, 1953, Serial No. 329,505
3 Claims. (Cl. 214—91)



1. A conveyor for feeding sheets of glass to be cut, comprising, an endless chain; sprocket wheels over which said chain travels, one of said wheels driving said chain; a series of horizontal supports fastened to said chain adapted to support a sheet of glass; a normally vertical framework pivotally mounted adjacent the conveyor on the axis of one of said sprocket wheels; an extensible member joined to said framework at one end and serving to retain sheets of glass against the framework; and a

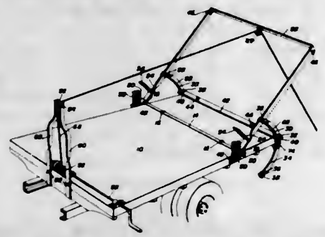
roller rotatably supported on said framework contiguous to a sheet of glass placed thereon and adapted to be actuated to move said sheet when the framework is pivoted into the plane of the conveyor.

2,747,753
BREAD DEPANNER
Gerald A. Jorgenson, York, Pa., assignor to Read Standard Corporation, a corporation of Delaware
Application March 1, 1951, Serial No. 213,357
7 Claims. (Cl. 214—308)



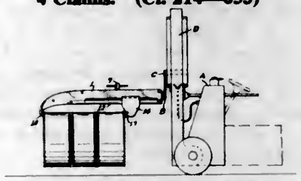
2. In an apparatus for removing baked products from a pan set of laterally spaced pans rigidly connected by straps, the combination of a pan set carrier movable along an upwardly extending and then along a forwardly extending run, said carrier having a surface disposed to support a filled pan set along said upwardly extending run and to tilt said pan set to an overbalancing position on said forwardly extending run, means for arresting fall of said pan set in its inverted position to dislodge baked products therefrom, and laterally spaced upright fingers on said forwardly extending run adapted to project through the spaces between adjacent pans of a pan set and engage the pan straps for arresting forward momentum of said pan set.

2,747,754
TRUCK MOUNTED HOIST
Harrison Maynard, Williamson, W. Va., assignor of one-half to Clarice Maynard, Williamson, W. Va.
Application September 13, 1954, Serial No. 455,729
1 Claim. (Cl. 214—523)



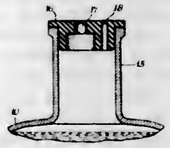
A hoist for use in combination with a truck bed comprising a mounting shaft secured to said truck bed and extending transversely relative thereto, a substantially U-shaped frame member rotatably mounted on said shaft, a pulley carried by said frame member and having a hoisting line entrained therearound, winch means for operating said hoisting line, an end plate secured to said truck bed and having guide slots therein, arcuate guides receivable in said slots and having stop means thereon engageable with said end plate, said guide being attached to said U-shaped member, said winch means including a winch mounted on said truck bed, and an upwardly extending support carrying another pulley on which said hoisting line is engaged, a pair of support brackets secured to said truck bed, springs mounted on said brackets, and stop plates secured to said frame member engageable with said springs, and means engaging said guides and said truck bed for locking said frame member in a secured position.

2,747,755
DRUM HANDLING DEVICES FOR LIFT TRUCKS
Edwin R. Kughler, Rye, N. Y.
Application February 12, 1952, Serial No. 271,087
4 Claims. (Cl. 214—653)



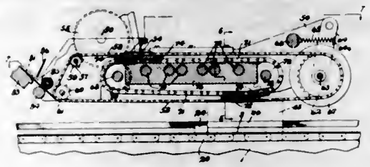
1. A drum handling device comprising a pair of drum engaging members, a support for one of said members, said member being mounted for movement on said support toward and away from the other member, interengaging parts on said support and said movable member for locking said parts against relative movement at different distances from the other drum engaging member, and means operatively connected to a drum engaging member for bringing said parts into locking engagement by the weight of the barrel on said drum engaging member.

2,747,756
RUBBER CLOSURE
William L. Hartop, Jr., and Edward J. Morrisey, Jr., Waukegan Township, Lake County, Ill., assignors to Abbott Laboratories, North Chicago, Ill., a corporation of Illinois
Application July 10, 1952, Serial No. 298,046
7 Claims. (Cl. 215—47)



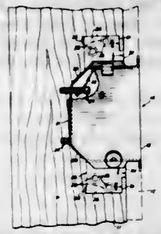
5. A closure member for a pharmaceutical container which comprises a container closure member comprised essentially of rubber and adapted to form a sealing engagement with the said container and having on the surface adapted to be in direct communication with the interior of the said container an insoluble firmly adherent coating of a polymerized linear synthetic methyl polycarbonamide having a minor proportion of the amide groups thereof substituted with alkoxy groups.

2,747,757
LABELING MACHINE
Joseph L. Golubski, Grand Rapids, Mich., assignor to Oliver Machinery Company, Grand Rapids, Mich., a corporation of Michigan
Application November 28, 1952, Serial No. 323,061
10 Claims. (Cl. 216—21)



1. In a labeling machine having means for moving packages in succession, one following another in a continuous, horizontal, straight path of movement, and having additional means for depositing a label at the upper side of each package, the improvement comprising, a horizontally located endless carrier located over the path of travel of said packages, blocks carried by said carrier adapted to bear against labels, one in succession to another, and press a label against the upper side of an associated package and transmit heat thereto, means for heating said blocks between engagements thereof with labels and means for driving said carrier at the same speed as the speed of movement of said packages.

2,747,758
ELECTRICAL BOX AND MOUNTING THEREFOR
Arthur I. Appleton, Northbrook, Ill.
Application May 31, 1952, Serial No. 290,903
1 Claim. (Cl. 220—3.92)



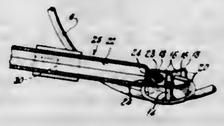
In a box for housing electrical outlets, switches and the like, said box having an open end and being mountable on the side surface of a support with the open end adjacent the finished surface of a wall or ceiling panel to be installed in abutting position relative to the front face of the support, the combination comprising a pair of opposed side panels, a spacer panel fixed between said side panels and defining therewith the open end of the box, a counting bracket fixed to one of said side panels and extending beyond the dimension of the side panel proper, and a plurality of graduated indexing shoulders in the edge of said bracket adjacent the open end of said box, said graduated indexing shoulders being spaced respectively at predetermined distances from the plane of the open end of the box so as to correspond to different wall or ceiling panel thickness, said indexing shoulders being adapted when selectively alined with the front face of the support to position said box with its open end in predetermined and selected position relative to the finished surface of the wall or ceiling panel, such selective alinement of the indexing shoulders with the face of the support being conveniently accomplished by sense of touch on the part of the installer.

2,747,759
COMBINATION CARRYING CASE AND ARTICLE CONTAINER
Richard C. J. Palson, Needham, Mass., assignor to Farrington Manufacturing Company, Boston, Mass., a corporation of Massachusetts
Application March 3, 1953, Serial No. 340,095
3 Claims. (Cl. 220—17)



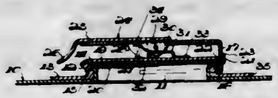
1. In combination, an article holder and a detachable carrying case therefor, said article holder comprising a bottom wall, a pair of opposed end walls connected to said bottom wall and a pair of opposed side walls connected to said bottom wall and said end walls, and an open top, said carrying case comprising a bottom section and a cover section, said bottom section including a bottom wall and opposed side walls connected to said bottom wall and open ends, said cover section being hinged to one of said side walls of said bottom section and having open ends, said carrying case enfolding said bottom wall and side walls of said article holder when said article holder and carrying case are in assembled relation, fastening means on said carrying case for retaining the same in position enfolding said article holder, said cover section of said carrying case being adapted to be hinged open relative to said bottom section to give access to the interior of said article holder enfolded within said bottom section, and said article holder being adapted, upon opening of said cover section, for bodily separation from said carrying case, said end walls of said article holder extending outwardly beyond said side walls of said carrying case to provide outwardly extending rim portions, said bottom section of said carrying case having marginal end portions seated between said rim portions to prevent longitudinal relative movement between said carrying case and article holder.

2,747,760
CONTAINER HAVING INTEGRAL SUPPORT MEANS
James J. Jacobson, New York, N. Y.
Application October 14, 1950, Serial No. 190,131
4 Claims. (Cl. 220—18)



1. A container, comprising receptacle and cover members hingedly connected to each other at one side thereof, means providing a releasable closure for said members, each of said members having tab-like projecting support structure at one end thereof provided with a transversely extending groove, said support structure being disposed for engagement in the closed condition of said members with said grooves being in alignment and disposed on the external surfaces of said support structure, said grooves being adapted for engagement with vertically disposed channel display means whereby to support the container in generally horizontal, laterally extending position.

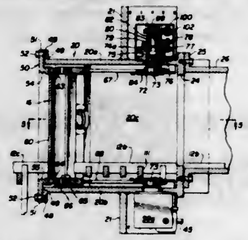
2,747,761
SLIP-ON CLOSURE CAP
Stanley F. Staples, Arlington, Va., assignor to the United States of America as represented by the Secretary of the Army
Application December 16, 1954, Serial No. 475,852
8 Claims. (Cl. 220—24)



2. In a closure cap for a container opening having a top bead or the like therearound, said cap being formed with depending means having radially inwardly directed means engaging under said bead as said cap is slid laterally across said opening, and a closure plate in said cap thereafter sealing said opening; the improvement comprising connecting means connecting said plate to said depending means and providing for limited, vertical axial movement of said plate relative to said depending means and cap, cam means carried by said cap in engagement with said plate, pivot means pivotally mounting said cam means on said cap, means for pivoting said cam means so as to force said plate downwardly into sealing engagement

with said bead, said cam means comprising a pair of downwardly directed integrally connected arcuate flanges, said spring means comprising a leaf spring carried by said closure plate and extending substantially diagonally upwardly thereof between said cam-providing flanges, crank means on said flanges below and in operative engagement with said spring, and said crank means and cam being loaded by said spring in a direction to force said plate into sealing relation with said bead.

2,747,762
PRESSURE CHAMBER CLOSURE APPARATUS
Robert B. Meuser, Oakland, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application August 5, 1952, Serial No. 302,851
4 Claims. (Cl. 220—30)



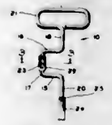
1. In an airlock for a cyclotron vacuum chamber secured to and extending horizontally from a wall portion of said chamber and surrounding a wall opening of substantial area therein, said airlock including inwardly extending marginal elements defining an inner opening constituting the rectangular boundary of a cylindric surface curved about a vertical axis, closure apparatus comprising a curved track disposed in said airlock and extending in a horizontal plane below and laterally beyond said inner opening a cylindrically curved, rigid closure for said inner opening mounted for movement across and along said track, and mechanism disposed in non-obstructing relation to said inner opening in the open position of said closure for effecting said movement, said mechanism including vertically aligned means connected to vertically spaced points on said closure and similarly spaced points on said airlock for rotating the former from a fully open position to a blocking position in front of but variably spaced from said inner opening in the rotated direction of said closure and for thereafter moving said closure into perimetric contact with the boundary of said inner opening.

2,747,763
CLOSURE CAPS FOR THE FILLER NECKS OF AUTOMOBILE PETROL TANKS
Clarence Edward Sach, Ivanhoe, near Melbourne, Victoria, Australia
Application October 30, 1951, Serial No. 253,778
Claims priority, application Australia November 1, 1950
4 Claims. (Cl. 220—40)



1. A closure cap, for an externally-flanged filler neck of an automobile petrol tank, including a cover, a spinner member rotatably mounted in the cover, the spinner member comprising a flat ring portion with a recess and an integral short cylindrical portion with an outwardly-beaded edge and being rotatably mounted within the cover, a circular retaining member for said spinner having a flange turned in under the lower edge of the spinner, inwardly-directed pins on said spinner engageable with the externally-flanged filler neck, sealing means in the cover closing the mouth of the filler neck, a fixed flat plate within said cover, a lever mounted on said fixed plate and having one end engageable in the recess in said spinner member thereby holding it against rotation relative to the cover, means tilting the lever engageably into the said recess, and means pivoting said lever in disengagement.

2,747,764
KEY FOR OPENING CANS
Sterling M. Hooser, Palo Alto, Calif.
Application August 13, 1953, Serial No. 374,056
2 Claims. (Cl. 220—52)



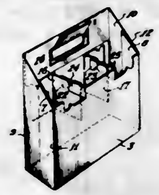
1. A key for removing a tear-strip from a can comprising a strand of stiff wire bent in spaced relation to both ends to form a laterally extending double crank intermediate the ends, and providing aligned crank shafts on both sides of the double crank, one end of said strand being bent to form a handle extending from opposite sides of the adjacent crank shaft portion of the strand, the portion of the strand between the arms of the double crank having an opening for receiving an end portion of a tear-strip.

2,747,765
CONTAINER WITH IMPROVED ATTACHABLE BAIL EAR
Ralph K. Pottle, Georgetown, Conn., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application June 5, 1952, Serial No. 291,936
3 Claims. (Cl. 220—91)



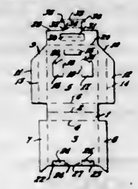
1. The combination of a container having a finished top seam with an outwardly projecting portion and an inner countersunk wall portion and a snap-on bail ear detachably secured to said seam, said bail ear comprising an outer depending plate member having a bail carrying apertured portion therein, said plate member above said apertured portion being bent over the top rim of said seam and inwardly and downwardly against said countersunk wall portion in an inverted U-shaped grip member, said plate member further having spaced vertical slits on opposite sides of said apertured portion to set off a pair of laterally spaced locking tongues which are inclined inwardly against the container body wall and terminate upwardly in edges spaced downwardly from the top of said grip member substantially the height of said projecting portion of the top seam, the said upper edges of the tongues thereby substantially abutting against the lower outer surface of said seam so that said grip member and said pair of locking tongues between them grip the inner and outer surfaces of said seam in a removable snap-on connection.

2,747,766
SINGLE ROW CARRIER
Robert M. Bergstein, Wyoming, Ohio, assignor to The Bergstein Packaging Trust, a trust composed of Robert M. Bergstein and Frank D. Bergstein, trustees
Application December 17, 1952, Serial No. 326,536
4 Claims. (Cl. 220—113)



1. In a one-piece, collapsible single row carrier, opposed side walls connected to each other along three edges by panels collapsing on medial lines of fold, one of said side wall panels extending above the other and having a hand-hole opening formed therein spaced from the top edge of said last named side wall, a reinforcing panel articulated to the top edge of said last named side wall, said reinforcing panel having a flap formed therein defining, when displaced from the plane of said reinforcing panel, a hand-hole opening adapted to be juxtaposed to said first named hand-hole opening, said flap being divided by a longitudinal score line into a pair of articulated reinforcing portions said reinforcing panel being infolded and secured to said last named side wall with said reinforcing portions juxtaposed to each other and interposed between said last named side wall and said reinforcing panel in the area above said hand-hole openings, thereby providing a quadruple thickness reinforced carrying handle, transverse partition elements formed in said last named body wall below said reinforcing panel, and locking flaps formed in the other of said side walls adjacent the top edge thereof for engagement with said transverse partition elements to divide said carrier into a plurality of cells.

2,747,767
REINFORCED SINGLE ROW CARRIER
Robert M. Bergstein, Wyoming, Ohio, assignor to The Bergstein Packaging Trust, a trust composed of Robert M. Bergstein and Frank D. Bergstein, trustees
Application August 27, 1953, Serial No. 376,795
4 Claims. (Cl. 220—113)



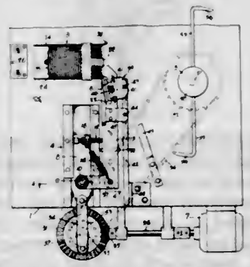
1. In a knocked-down carrier structure, juxtaposed side wall panels connected to each other along three edges by panels collapsed on medial lines of fold, one of said side wall panels extending above the other to define a carrying handle, a handle reinforcing panel secured to the inner surface of the extending portion of said last named side wall panel, transverse partition elements formed in said side wall panels and articulated thereto along spaced apart, vertically disposed score lines, said reinforcing panel including a projecting neck portion extending downwardly between the transverse partition elements formed in said first named side wall panel, said projecting neck having a width substantially equal to the distance between the score lines connecting said transverse partition elements to the said side wall panel, said projecting neck being adhesively secured to the said side wall panel, an extension connected to the lower edge of said projecting neck along a line for severance, said extension being adhesively secured to the other of said side wall panels between the spaced apart score lines therein, whereby to reinforce the said last named side wall panel adjacent the line of articulation of the said transverse partition element thereto, said extension being adapted to be separated from said projecting neck portion along the said line for severance upon erection of the carrier.

2,747,768
GOLF TEE DISPENSING PACKAGE
Allen W. Raines, Woodside, N. Y.
Application April 15, 1954, Serial No. 423,352
2 Claims. (Cl. 221—25)



1. An assembly of nested golf tees, each tee having a stem and an internal longitudinally tapered and curved cavity having a wall which is of substantially the same thickness throughout so that the stem of another like tee is received in said cavity with the adjacent curved tee surfaces spaced apart at the upper portions of said tees, the stems having spaced circular unevennesses, and means frictionally engaging and adhesively contacting and holding the tees together releasable from the lowermost tee by longitudinal frictional engagement of the latter with the ground, said means comprising an outer casing of adhesive tape having self-overlapping adhesive margins adherent on themselves.

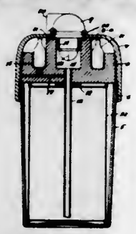
2,747,769
SEAL STRIPPING AND OPENING DEVICE
Warren E. Erickson, Madison, Wis., assignor to Giboit Machine Company, Madison, Wis., a corporation of Wisconsin
Application February 9, 1952, Serial No. 270,838
11 Claims. (Cl. 221—225)



1. In a machine for applying tubular seals to bottle tops and the like, a device for partially opening and transferring said seals comprising, means for supporting a seal in flat folded condition with the corresponding adjacent end edges thereof being in a common plane and having a closed slit therebetween, a tool of substantially spear shape having a forward pointed edge of a length less than the length of the slit between the corresponding adjacent edges of the folded seal, means supporting said tool with the pointed edge thereof substantially in the

plane of the folded seal and with said pointed edge facing and aligned with the slit between the seal edges, means to move said tool supporting means towards said seal whereby the tool enters the closed slit edge of the seal and effects separation of seal walls, clamp means for retaining a seal upon said tool for movement therewith after entry of the tool between seal walls, and means to actuate said clamp in correlation to the movement of said tool.

2,747,770
PRESSURE APPLICATOR
Humberto Pereira, Essex, Conn., assignor, by mesne assignments, to Frank E. Wolcott, West Hartford, Conn.
Application April 8, 1953, Serial No. 347,510
3 Claims. (Cl. 222—80.5)



1. A pressure applicator including a receptacle for receiving a container therein, a cover threaded to said receptacle, a pressure head fitting within said cover, a pressure tube mounted on said head independently of the cover and extending downwardly from said pressure head and adapted to project into a container within said receptacle, a pressure chamber within said pressure head; said pressure tube opening into said chamber, a dispensing valve communicating with said pressure chamber, a recess in said pressure head for holding a pressure bulb, a tubular piercing member in said recess for piercing a pressure bulb therein, and means communicating said piercing member with the said pressure tube and chamber.

2,747,771
SPOUTS
Bert M. Mercer, New York, N. Y.
Application May 25, 1953, Serial No. 357,251
6 Claims. (Cl. 222—81)



1. A spout for puncturing a hole in and detachably remaining in said hole of a carton, comprising a channel body constructed to pierce a wall of a paperboard carton and to be completely inserted into said hole of the carton, and a series of saw-teeth on the rear end of said channel located to make continuous contact with and grip the opposing pasteboard in final mounted position of said channel body in the carton to prevent displacement of the spout from its inserted position.

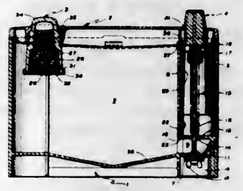
2,747,772
DISPENSER
Edward J. Ernst, St. Johns, Mich.
Application April 22, 1955, Serial No. 503,222
4 Claims. (Cl. 222—100)

4. A dispensing device for collapsible tubes including: a box-like receptacle adapted to be attached to a vertical wall; a transverse cradle for holding erect a collapsible tube and connecting the side walls of said receptacle; a cover provided with spaced apart longitudinal guide rails on the inner face thereof pivotally attached to said receptacle and opening outwardly from the face of said receptacle; slotted tube winding means on the pivotal axis



of said cover and extending through said cover and said receptacle for receiving the crimped end of a collapsible tube; knobs keyed to each end of said winding means and having bosses journaled by the side walls of said receptacles which knobs, upon rotation, open said cover outwardly and urge the contents from a collapsible tube attached to said winding means.

2,747,773
COFFEE PRESERVING AND DISPENSING APPARATUS
Oscar E. Norberg and Le Roy H. Laflin, Cincinnati, Ohio, assignors to Avco Manufacturing Corporation, Cincinnati, Ohio, a corporation of Delaware
Application November 18, 1953, Serial No. 392,819
3 Claims. (Cl. 222—190)

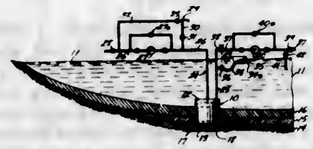


1. In a coffee preserving and dispensing apparatus, a container, a lid for said container, a desiccating unit secured to said lid in communication with the interior of said container, said container including a vertical partitioning wall defining a port near the bottom of said container, said container also defining a measuring cavity in communication with the port, a plunger slidably positioned adjacent said vertical partitioning wall in position to obstruct the port in the course of its movement, and normally closed valve means operated by said plunger in the course of its movements for discharging coffee from the measuring cavity.

2,747,774
FLUID STORAGE SYSTEM
Vernon A. Breitenbach, Maple Heights, Ohio, assignor to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio
Application October 31, 1952, Serial No. 318,001
2 Claims. (Cl. 222—395)

1. In a storage vessel system for a fluid lighter than water and immiscible therewith, in combination, a storage vessel disposed in a body of water, the vessel being closed on all sides except for the entry of the hereafter mentioned conduits and weighted to rest on a formation at the bottom of the body of water so as to be fully enveloped thereby, first conduit means for the fluid product to be stored, said first conduit means having one end communicating with the inside of the closed vessel near the upper end thereof and having another end to receive and

discharge the fluid, second conduit means comprising a stand pipe having one of its ends communicating with the inside of the vessel near the lower end thereof and having another end disposed above the vessel and near the surface of said body of water and adapted to receive and discharge water, whereby water may enter and leave the closed vessel only through the second conduit means, means affording a water input to said second conduit means for maintaining a hydrostatic head on the con-



tents within the vessel which will substantially counteract the hydrostatic pressure on the outside of the vessel, and pumping means connected to said vessel for establishing a flow of the fluid product into and out of the vessel through the first conduit means and for correspondingly establishing a flow of water respectively out of and into the vessel through the second conduit means, whereby the inflow of water to the vessel via the stand pipe is maintained relatively free of silt or the like.

2,747,775
MEASURING VALVE CLOSURE
Thomas R. Pritchard, Kearny, N. J., assignor to Tamra Manufacturing Co., Orange, N. J., a corporation of New Jersey
Application April 29, 1953, Serial No. 351,996
4 Claims. (Cl. 222—400.7)



1. The combination of a pressure vessel and a dispensing valve closure, comprising a pressure vessel opening out through a neck; a closure seal slideable within such neck; a closure seal seat at the outer end of the neck; yieldable means urging the closure seal against the seat; a valve body having a recess at one end within which recess the said neck is disposed in hermetically sealing engagement; a chamber within the valve body; a tube disposed in said neck and being of such length as to unseat the said closure from its seat thereby providing communication between the interior of the pressure vessel and the chamber in the valve body; a passage connecting the chamber with the tube; an outlet port in the side of the valve body; a second passage connecting the chamber with the outlet port; a plunger slideable within the chamber in selective sealing engagement alternatively with the opening of each passage leading therefrom; and a finger piece external of the valve body operatively connected with the plunger.

2,747,776
FILLER CAN
Karl Heutschke, Altena, and Wilhelm Lynker, Carthausen, Germany
Application July 2, 1952, Serial No. 296,814
Claims priority, application Germany July 13, 1951
5 Claims. (Cl. 222—456)



1. A dispensing receptacle, comprising in combination, container means formed of transparent synthetic resin material and having a side wall, a closed bottom and an open top, said side wall having an annular ledge spaced from said closed bottom; partition wall means arranged in said container means and supported by said annular edge thereof so as to form above itself a storage compartment and below itself a metering compartment, said partition wall means being formed with an opening connecting said compartments; a tubular conduit member independent of and spaced from said side wall of said container means and arranged therein extending upwardly from said partition wall means above the level of said open top of said container means, said tubular conduit member communicating through said partition wall means with said metering compartment; and a cover member surrounding said tubular conduit member and closing said open top of said container means, said cover member being formed with a filler opening passing therethrough adapted to be closed by a closure cap.

2,747,777
DISPENSER
Justice Q. Friend, Charleston, W. Va.
Application December 11, 1953, Serial No. 397,721
2 Claims. (Cl. 222—517)



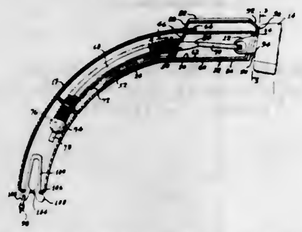
1. In a material sifting dispenser, an elongated hollow body member open at its top, a semi-spherical cap removably secured on the upper open end of the body member, said cap having a plurality of material dispensing apertures therein, a hood of segmental form overlying said cap and pivotally connected thereto, a circumferential flange extending outwardly from the body member adjacent the base of said cap, and yieldable means disposed externally of said cap and being engaged with said hood operative to bias the same to neutral aperture covering position while permitting the hood to be moved to an aperture uncovering position, said yieldable means comprising a pair of elongated U-form wire springs, said flange being provided with a pair of diametrically opposed upwardly opening recesses in which portions of the bends of said springs are disposed, and the legs of said springs engaging opposed edges of said hood.

2,747,778
NEEDLE THREADER
Rudolf Balzer, Sepulveda, Calif.
Application August 17, 1953, Serial No. 374,696
2 Claims. (Cl. 223—99)



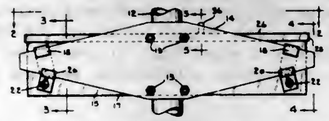
1. A needle threader including, an elongate rigid body member substantially rectangular in cross section provided with a notch transversely extending inwardly from one end so as to provide spaced shoulders, one of said shoulders being provided with an inwardly extending slot for the full height thereof, the end of said slot being in alignment with the end of said notch, the other of said shoulders being flat and substantially at right angles to the aligned ends of the respective notch and slot and adapted to serve as a stop, and an elongate rigid hook stationary in the body and formed of a length of strap material and having a forwardly convergent head with an upwardly and forwardly extending thread receiving notch projecting forward into the notch in the body and in vertical alignment with the slot to enter and project through the eye of a needle fully engaged in the notch and slot with its tip on the shoulder.

2,747,779
WATCH BANDS
Kurt Speck, Palisades Park, and Seymour Hauser, North Bergen, N. J., and Joseph L. Hajos, New York, N. Y., assignors to Jacques Kreisler Manufacturing Corporation, North Bergen, N. J., a corporation of New Jersey
Application March 8, 1955, Serial No. 492,888
7 Claims. (Cl. 224—4)



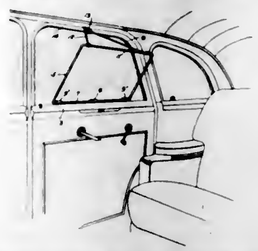
1. A watch band adapted for securement to a watch, comprising a hollow member adapted to conform to a wearer's wrist and having an open end adapted to be disposed adjacent the watch, a slotted shoulder adjacent said open end of said hollow member in fixed relation thereto, a connector element disposed on one side of said slotted shoulder adjacent said open end of said hollow member and adapted to be connected to the keeper of a watch, an arcuate member fixedly secured to said connector element and slidably extending through the slot in said shoulder and terminating within said hollow member, a helical compression spring disposed about said arcuate member and abutting against said slotted shoulder at one end, means adjacent the end of said arcuate member remote from said connector element for operatively engaging said spring to prevent the latter from being removed off said arcuate member, said spring being effective for normally yieldably holding said connector element in a position within said hollow member, whereby when said connector element is secured to the keeper of a watch, said spring is effective for drawing said connector element and keeper into said hollow member to thereby give said watch band and watch a unitary, custom-made appearance.

2,747,780
TOOL BOXES
Leo C. Puddy, Fond du Lac, Wis.
Application December 15, 1952, Serial No. 325,937
1 Claim. (Cl. 224—42.42)



The combination with a vertical post, a substantially horizontal steering rod carried by said post, and a lamp bracket secured to said post below said rod, of a tool box carried by said bracket below said steering rod and on the opposite side of said post from said lamp bracket, said box having a flat front wall with an inward bend of general U-shape in cross-section to provide a well fitting partly around said post, said box having its bottom cut away in alinement with said well, a cover hinged to said box so as to have a front edge in alinement with said front wall which swings upwardly and away from said front wall to open position, the front edge of said cover having an opening alined with said well in the closed position of said cover and partly fitting around said post, said opening receiving said steering rod therein during the opening of said cover, a pair of hooks secured to said front wall and fitted over the upper edge of said bracket to support said box, and a pair of adjustable clamps on said front wall overlapping the lower edge of said bracket to secure said box in position.

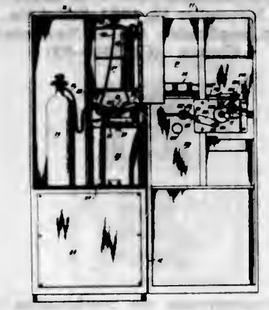
2,747,781
PORTABLE CLOTHES HANGER FOR MOTOR VEHICLES
Hazen A. Schofield, Dallas, Tex.
Application May 2, 1955, Serial No. 505,109
2 Claims. (Cl. 224—42.45)



1. In a garment hanger for positioning in a motor vehicle window opening, comprising a rectangular hanger frame, a clip pivotally connecting to said hanger frame, adapted to be positioned between a window sill and a window operating therethrough, said garment hanger including an upper horizontal bar on which garment hangers are hung, a hanger arm pivotally connected with said main frame, and a double-ended hook having one end hooked over said hanger arm holding said hanger arm in its active position, the other end of said hook being hooked into the window frame.

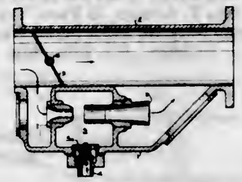
2,747,782
MACHINE FOR VENDING BEVERAGE IN CUPS
Jack J. Booth, Dallas, Tex.
Application June 9, 1951, Serial No. 230,779
12 Claims. (Cl. 226—46.6)

1. In a mixed drink dispensing machine: a carbonator having a central chamber for holding water; a water inlet extending into said carbonator and adapted to be connected to a source of water; a gas inlet extending into said central chamber and opening adjacent the bottom of said chamber and adapted to be connected to a source of gas under pressure; a mixing and dispensing valve; a water outlet opening adjacent the bottom of said chamber and connected to said valve for delivering water from said chamber to said valve; a gas outlet adjacent the top of said chamber and provided with a check valve; a syrup tank having a gas inlet connected to said gas out-



let whereby gas from said chamber is delivered to said syrup tank when the pressure difference between said carbonator chamber and said syrup tank exceeds a predetermined value; and a syrup outlet opening adjacent the bottom of said syrup tank and connected to said mixing and dispensing valve for delivering syrup from said tank to said mixing and dispensing valve.

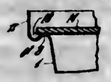
2,747,783
LIQUID DISPENSING AND WITHDRAWING APPARATUS
James Arthur Wooldridge, Great St. Helen's, London, England, assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application July 8, 1952, Serial No. 297,688
Claims priority, application Great Britain July 12, 1951
22 Claims. (Cl. 226—125)



1. Apparatus for dispensing liquid into and withdrawing liquid from receptacles or the like comprising: a liquid flow duct adapted to be connected at one end thereof to a source of said liquid under pressure and having at the other end thereof coupling means adapted to be connected to said receptacle; a closed vacuumized auxiliary container; a suction withdrawal connection between said auxiliary container and said liquid flow duct for applying suction to the flow duct; a liquid flow-operated suction device for generating a partial vacuum having a suction inlet and connected in said flow duct for actuation by liquid flowing through said flow duct; and a connection between said auxiliary container and said suction inlet of the suction device for vacuumizing said auxiliary container.

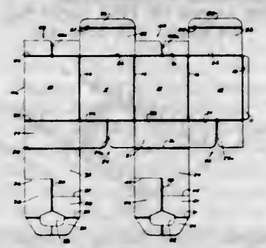
2,747,784
CONTAINERS
Richard J. Gaudreau, Longmeadow, Mass., assignor to Standard Foil Products Corp., Springfield, Mass., a corporation of Massachusetts
Application August 9, 1954, Serial No. 448,438
1 Claim. (Cl. 229—2.5)

A discardable container for foods comprising in combination, a receptacle formed from aluminum foil a few thousandths in thickness and a closure therefor, said receptacle including a horizontal bottom wall having a side wall diverging upwardly from said bottom wall and terminating in a rim portion, said rim portion curving upwardly and outwardly from the upper edge of said side wall forming an annular ledge for a closure and then downwardly and outwardly and upwardly and outwardly



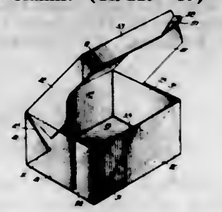
forming an annular groove around and in a plane below the plane of said ledge and terminating in a vertically disposed flange, said closure being flat and, resting on said ledge having a peripheral edge disposed inwardly from said flange and over said groove, and said flange adapted to be displaced inwardly over onto the peripheral portion of said closure.

2,747,785
CARTONS
Raymond E. Fink, East Haven, Conn., assignor to The New Haven Pulp and Board Co., New Haven, Conn., a corporation of Connecticut
Application December 14, 1953, Serial No. 397,815
8 Claims. (Cl. 229—28)



1. A carton blank which comprises four side wall panels lying in a row and separated by crease lines, a pair of transversely slotted flaps attached to alternate panels at the bottom ends thereof, a pair of solid flaps attached to the intermediate panels at the bottom ends thereof, a pair of like partition panels connected to the free ends of respective solid flaps, each partition panel having a central longitudinal fold line extending inwardly from its free end and a pair of cuts extending laterally from the fold line to the opposite side edges of the panel in offset relation, a pair of solid flaps attached to said alternate side wall panels at the upper ends thereof, and a pair of transversely slotted flaps attached to the upper ends of said intermediate side wall panels.

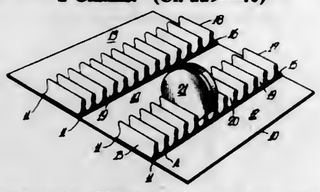
2,747,786
COLLAPSIBLE CONTAINER
Edwin L. Arneson, Morris, Ill., assignor to Morris Paper Mills, Chicago, Ill., a corporation of Illinois
Application January 10, 1952, Serial No. 265,817
8 Claims. (Cl. 229—39)



1. A container formed from a single blank of cardboard material which is cut and scored to divide the same into a

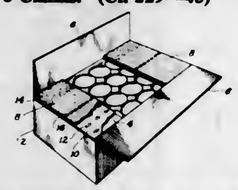
plurality of connected panels, which panels form when the container is erected, bottom, side and end walls and a cover, said cover being hinged along one edge to one side wall and having a securing tongue along the opposite edge adapted to be adhered in overlapping relation to the margin of the opposite side wall, one of said end walls comprising a flap hingedly connected along adjoining edges to an end edge of the bottom wall and of one side wall, a cooperating flap hingedly connected to the opposite side wall and having a portion of one face thereof secured to said first mentioned flap, said last mentioned flap being foldable upon itself along a diagonal score line and a third flap hingedly connected to the adjacent end edge of said cover and adapted to move into non-connected interleaved relation with said first and second mentioned flaps when the container is in erected condition, said third flap being connected at the forward end thereof to said securing tongue and being foldable into flattened relation with said cover and said securing tongue when said container is collapsed.

2,747,787
COMBINED PACKAGING AND SUPPORTING MEMBERS
Alfred George Davidson, Jr., North Haven, Conn., assignor to The American Rondo Corporation, Hamden, Conn., a corporation of Connecticut
Application August 10, 1953, Serial No. 373,203
2 Claims. (Cl. 229—40)



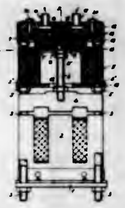
1. A rectangular blank having at least four parallel score lines defining at least five panels, three of which are adjacent, of substantially similar width and define two opposed and one intermediate panel, each of said opposed panels having secured thereto a similar undulate strip forming similar article receiving channels, the walls of each channel being in spaced relation with the walls of an adjacent channel and the width of each channel at the open end thereof being slightly less than the width at its base, the channels on said opposed panels being in alinement, and the combined depth of said alined channels being substantially equal to two thirds the width of said intermediate panel, each undulated strip being substantially coextensive in length with that of the panel to which it is attached, said blank being adapted when articles are placed in said channels to be folded along said score lines with the said panels in angular relation to each other to enclose said articles in the container formed thereby.

2,747,788
SEALING INSERT FOR CONTAINERS
James O. Tilly, Tulsa, Okla.
Application July 18, 1951, Serial No. 237,469
8 Claims. (Cl. 229—45)



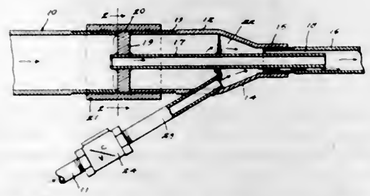
1. A sealing insert for containers comprising two sheets of material each of which has a surface resistant to penetration by an adhesive, said sheets being lapped with said surfaces facing each other, and spaced areas of adhesive between said surfaces and uniting said sheets.

2,747,789
AIR COMPRESSORS
George Szekely, Tel Aviv, Israel
Application November 12, 1952, Serial No. 319,947
Claims priority, application Austria November 22, 1951
6 Claims. (Cl. 230—55)



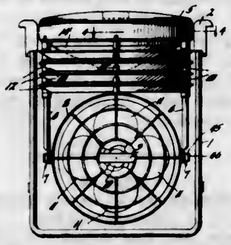
1. In an air compressor the combination of: electromagnetic means including an energizable electromagnet and a vibratile armature operatively associated with said electromagnet, a membrane rigidly connected with said armature, said membrane and said armature being normally in a first position, and resilient means interposed between said armature and said membrane, said resilient means being compressed upon energization of said electromagnet and the resulting attraction of said armature to said electromagnet into a second position, said resilient means returning said membrane and said armature to said first position upon deenergization of said electromagnet, said resilient means including an annular resilient member, at least one end face of said annular resilient member conically tapering towards its center.

2,747,790
FLUID SUCTION AND MIXING DEVICE
Pies E. Schnitz, El Paso, Tex.
Application May 18, 1953, Serial No. 355,830
1 Claim. (Cl. 230—95)



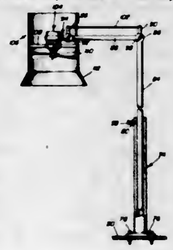
A fluid suction and mixing device coupling high and low pressure fluid lines to a common transmission line comprising a hollow cylindrical body having inlet and outlet ends, external threads formed on said body at the inlet end thereof, an internally threaded sleeve engaged over the threaded end of said body and adapted to connect said body to a high pressure fluid line, a nipple having a diameter substantially less than the diameter of said body, a tapered extension integrally joining said nipple to said body, a disc-shaped head threadedly engaged in said sleeve between the adjacent ends of said body and said high pressure fluid line, said head having a bore extending therethrough with the axis of said bore common with the axis of said body, a small diameter hollow nozzle projecting through said bore and secured to said head, said nozzle extending through said nipple into said common transmission line in radially inwardly spaced relation thereto, an obliquely inclined tube extending rearwardly from a point on said body adjacent said tapered extension for communicating said body to a low pressure line, and a forwardly opening check valve connected between the rear end of said tube and said low pressure line.

2,747,791
AIR CIRCULATOR
George C. Edmonds, Huntington, W. Va.
Application July 2, 1952, Serial No. 296,790
14 Claims. (Cl. 230—259)



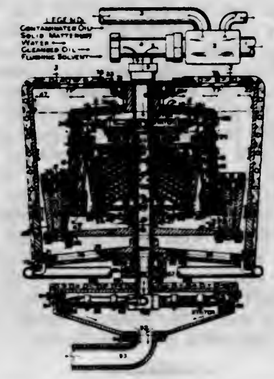
1. A hassock-type air circulator having an upstanding support with two opposed side members, a supporting structure pivotally mounted on said side members, a pair of arms each having one end rigidly connected to said supporting structure, an air deflector carried by said arms, louvers carried by said arms adjacent to said air deflector, a fan-motor assembly pivotally mounted between the other ends of said arms, said fan-motor assembly having a shaft mounted therein, a fan in said assembly mounted on said shaft rotatable on an axis normal to the axis of the said pivotally-mounted fan-motor assembly, means positioned adjacent the fan-motor assembly for maintaining the fan-motor assembly in any selected position, and means positioned on the supporting structure for releasably securing the supporting structure in non-rotatable position with respect to said upstanding support.

2,747,792
FAN ATTACHMENT FOR COMBINES
Olaf Bakke, New England, N. Dak.
Application June 8, 1953, Serial No. 360,203
2 Claims. (Cl. 230—273)



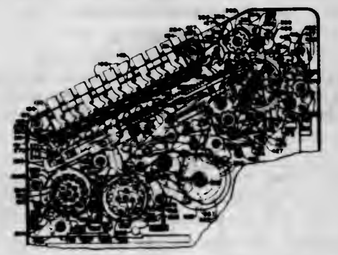
1. An attachment for combines for maintaining a dust free condition around an operating station thereof, comprising a vertical standard, a shaft journalled within said standard and extending vertically therefrom and having a bifurcated upper end providing spaced ears and a vertical ear, an arm having one end received between said spaced ears, a bracket member at the other end of said arm having clamping legs between which said other end of said arm is received, said bracket member being provided with a lateral ear, associated bolt and wing nut assemblies for said spaced ears and clamping legs to selectively permit pivotal movement of said arm and said bracket member, an idler link pivotally secured at its ends to said vertical and lateral ears and an electric fan carried by said bracket.

2,747,793
MULTIPLE ANGULAR, ENERGY COMPENSATING CENTRIFUGE
Alfred M. Caddell, Philadelphia, Pa.
Application December 18, 1952, Serial No. 326,715
23 Claims. (Cl. 233—18)



22. A centrifuge, the combination comprising a stationary casing for housing a rotor assembled around a hollow shaft, a stationary inlet tube for supplying to said rotor an externally pressured fluid carrying in suspension substances having higher specific gravities than that of said fluid, a combination side-wall and parallel-walled, internally ribbed structure having increasing radii from top to bottom, means for focussing said pressured fluid against said ribs, said structure opening at its bottom into a contaminant chamber located outwardly adjacent the greatest diametered end of said structure, said chamber being comprised of a plate encompassing and being secured to said hollow shaft, the top of said plate sloping downwardly toward drain openings in the base thereof, said plate thereafter rising outwardly and upwardly to form the side of a bowl-like construction, the top of said latter wall being secured to said rotor's side-wall by apertured flange means, said apertures providing access spaces therebetween, removable cover plates for bridging said spaces, a plurality of removable doors in the side of said casing positioned adjacent said cover plates and adjacent said removable base sections for providing access to the interior of said contaminant chamber.

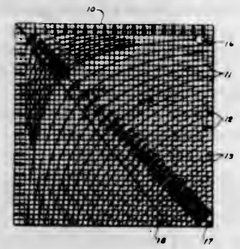
2,747,794
ZERO PRINTING CONTROL MECHANISM
Everett H. Placke and Willis E. Eickman, Dayton, Ohio, assignors to The National Cash Register Company, Dayton, Ohio, a corporation of Maryland
Application April 4, 1952, Serial No. 280,534
20 Claims. (Cl. 235—60.28)



10. In a machine of the class described, the combination of a keyboard having a plurality of banks of keys, a differential means controlled by each bank of keys, a control plate settable into a fixed position during each machine operation, and thereafter being reset under con-

trol of the differential means to represent the value of a depressed key, a type carrier settable by the control plate, said type carrier being set to a zero eliminated position by the control plate when the control plate is moved into said fixed position, coupling means to couple the differential means to the control plate, means to restore the differential means to home position after the control plate has been coupled to the differential means to thereby set the type carrier into a position commensurate with the setting of the differential means under control of a depressed key, restoring means controlled by the differential means when in zero position to restore the differential means to home position before the coupling means becomes effective to prevent setting of zeros at the printing line, means to disable the restoring means for a plurality of lower order differential means to cause printing of zeros in said lower orders, a normally disabled restoring means for a higher order differential means, a manipulative device, and means actuated under control of said manipulative device to render the restoring means for the said plurality of lower order differential means effective and to render the restoring means for the said higher order differential means ineffective.

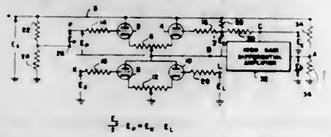
2,747,795
MEASURING AND CALCULATING DEVICE
John D. E. Kreuttner, New York, N. Y.
Application October 15, 1952, Serial No. 314,889
4 Claims. (Cl. 235—61)



1. A calculating device for directly determining the areas of rectangular and circular geometric figures drawn to scale, comprising a planar sheet of material having a pair of perpendicularly arranged series of coordinate numbers arranged in arithmetic progression and determining a rectangular coordinate field, a family of curves on said field each representing the locus of points of equal coordinate product, and each bearing the numerical designation of its respective product, and a straight line on said field extending from the origin of said coordinates and of a slope substantially equal to

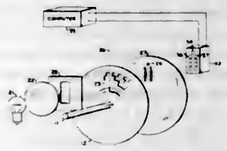
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2,747,796
COMPUTING CIRCUITS
Omar L. Patterson, Media, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
Application May 28, 1954, Serial No. 433,139
10 Claims. (Cl. 235—61)



7. A circuit for performing multiplication and division comprising a first pair of triodes having their anodes connected and their cathodes connected, a second pair of triodes having their anodes connected and their cathodes connected, the anodes of the triodes of the second pair being connected to the cathodes of the triodes of the first pair so that the total anode-cathode current of the first pair flows in the parallel anode-cathode arrangement of the second pair, each of the triode grids being connected to a corresponding input terminal, a differential amplifier having a pair of input terminals and an output terminal, one of said input terminals of the differential amplifier being connected to a source of substantially constant potential, the other input terminal of the different amplifier being connected to the connection between the cathodes of the first pair of triodes and the anodes of the second pair of triodes, and the output terminal of the differential amplifier being connected to the input terminal of one of said triodes.

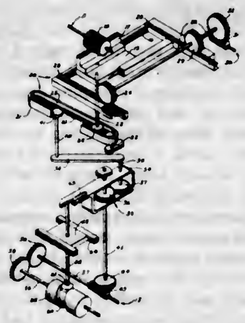
2,747,797
ROTATIONAL ANALOGUE-TO-DIGITAL CONVERTERS
James O. Beaumont, Los Angeles, Calif., assignor, by mesne assignments, to Hughes Aircraft Company, a corporation of Delaware
Application August 20, 1951, Serial No. 242,598
16 Claims. (Cl. 235—61)



1. An optical binary protractor for converting the magnitude of the rotational angle of a shaft into a binary digital number having a plurality of digits, said converter comprising: a source of light; a binary-calibrated disk positioned in the path of the light from said source and being rotatable by the shaft, said disk having a plurality of spaced annular rings, one for each digit, each of said rings being provided with alternate areas transparent and opaque, respectively, to the light from said source; a photosensitive device responsive to the light transmitted through said disk for indicating the digits of the number, said device including a first photosensitive element positioned in alignment with one of said rings and with a radial line on said disk for indicating the digit associated with said one ring, and a plurality of pairs of photosensitive elements, one pair being operable to indicate the digit associated with each of the others of said plurality of rings, the elements of each of said pairs of photosensitive elements being positioned in alignment with their associated ring and on opposite sides of said radial line, respectively; and means responsive to energization of said first photosensitive element for selectively rendering operable one element of each of said pairs of photosensitive elements.

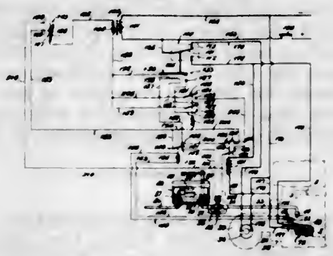
2,747,798
EROSION-CORRECTION MECHANISM
Anton Briglia, New York, N. Y.
Continuation of application Serial No. 678,180, June 21, 1946. This application November 9, 1950, Serial No. 194,881
7 Claims. (Cl. 235—61.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)

2. In gun-erosion-correction mechanism that includes a variable-lever-arm linkage comprising a driving lever, a sight-angle input adjustable according to range, epicyclic gearing comprising an epicyclic arm and a gear train embodying a driving sun gear and a driven planet gear, a drive from the sight-angle input through the gear train, a drive from the planet gear to the driving lever of the variable-lever-arm linkage, a cam driven by the sight-angle input in time with the gear train of the epicyclic



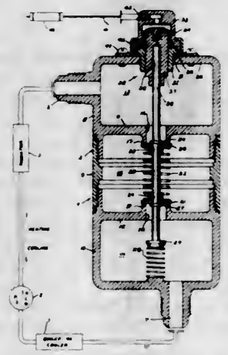
gearing, a follower for the cam operable to swing the epicyclic arm for differential drive of the planet gear to correct for erosion in accordance with sight-angle input.

2,747,799
LIQUID FUEL BURNING APPARATUS AND CONTROL
Wilbur A. Schultz, Lakewood, and Arthur R. Moore, Cleveland, Ohio, assignors, by mesne assignments, to Hupp Corporation, Detroit, Mich., a corporation of Virginia
Application January 23, 1952, Serial No. 267,844
9 Claims. (Cl. 236—1)



1. In combination, a liquid fuel burner, electrical means for effecting delivery of fuel to the burner, an electrical igniter for the burner, a thermostatic circuit-closer subjected to the temperature to be controlled, a thermosensitive device in heat exchange relation to the igniter and to the zone of combustion of the burner, a first switch having a first set of contacts and a second set of contacts, the former set being biased toward closed position and the second set being biased toward open position, an electrical actuator for said switch which, when energized, opens the first set of contacts and closes the second set, an electric circuit energized in response to said thermosensitive device, when heated, including said electrical actuator, a thermal timer comprising a thermostat and a circuit-closer rendered effective thereby when the thermostat is heated and an electrical heater for heating the thermostat, an electromagnetically operated relay characterized by a switch including a first set of contacts that are biased toward contacting position and a second set and a third set of contacts, each second and third set being closed when the relay is energized, a first source of voltage, a second circuit including said first source of voltage, the thermostatic circuit-closer, the electrical heater of the thermal timer, the first set of contacts of said first switch, and the first set of contacts of the switch of said relay, a third circuit including said first source, the circuit-closer of the thermal timer and said relay, a fourth circuit including, with the aforesaid first source of voltage, said relay and its second set of contacts thereby to function as a holding circuit for the relay switch, a thermal timer auxiliary comprising an electromagnetic means and a switch operated thereby including a first set of contacts biased to open position and that are engaged when said electromagnetic means is energized, a fifth circuit including said first source of voltage, the second set of contacts of the first switch, the electrical means effecting delivery of fuel, the second set of contacts of the thermal timer auxiliary, and the third set of said relay switch, a sixth circuit including, with said first source of voltage, the first set of contacts of the thermal timer auxiliary and the electrical heater of the thermal timer, a further switch including a set of contacts biased to open position, operative connections between said further switch and the thermostat of the thermal timer whereby the set of contacts of said further switch are closed when said thermostat is heated, a second source of voltage, and a circuit system including the second source of voltage, said set of contacts of said further switch, the electrical igniter, and the electromagnetic means of the thermal timer auxiliary.

2,747,800
HEATING AND COOLING SYSTEM AND CONTROL VALVE THEREFOR
Neal J. Mosely, Mt. Lebanon, Pa., assignor to Detroit Controls Corporation, a corporation of Michigan
Application July 31, 1952, Serial No. 301,947
6 Claims. (Cl. 236—1)



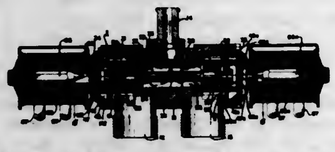
2. In a thermostatic valve, a hollow valve casing having a first fluid flow opening at one end and a second fluid flow opening at the other end, two walls within said casing dividing the same into two end chambers and a central chamber, said walls having aligned valve seats facing into said central chamber providing valve ports for flow of fluid therethrough, a pair of valve members in said central chamber cooperable one with each of said valve seats, a spring positioned between and engaging each of said valve members and urging the same toward closed position, said valve members having aligned central apertures therein, an operating rod slidably positioned in said valve member apertures, a pair of abutments on said rod on the end chamber sides of each of said valve members, said rod being operable upon movement in one direction to engage one of said abutments with one of said valve members to move the same toward open position and upon movement in the opposite direction to engage the other abutment with the other valve member to move the same toward open position, and thermostatic means for moving said rod in one direction upon increase in temperature and in the opposite direction upon decrease in temperature.

2,747,801

MIXING VALVE FOR DOMESTIC APPLIANCES

Edward J. Frey, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application November 18, 1952, Serial No. 321,258
21 Claims. (Cl. 236—12)



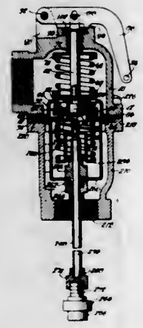
1. A fluid regulating structure having: two unmixed fluid inlets; a mixed fluid outlet; a channel having ends in fluid flow relationship to said inlets respectively and connected to said outlet; pressure operated diaphragm valves at said ends; a thermostatic element of fixed length responsive to fluid temperatures in said channel and having lost-motion connection with said valves; and means to cause longitudinal movement of said thermostatic element and of said valves with respect to the ends of said channel.

2,747,802

PRESSURE AND TEMPERATURE RELIEF VALVES

Leopold J. Kmiecik, Chicago, Ill., assignor to McDonnell & Miller, Inc., Chicago, Ill., a corporation of Delaware

Application February 8, 1952, Serial No. 270,699
6 Claims. (Cl. 236—92)



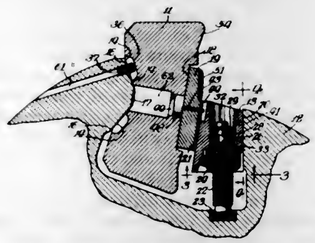
1. A temperature and pressure responsive valve comprising a first hollow body member having an outlet port therein, a second hollow body member having an inlet port therein, said body members being secured together with their interiors in communication with one another, a valve seat stamping sealingly confined between said body members including a tubular portion extending into said first body member and terminating in a valve seat, a valve member including a valve stem mounted in said first body member for reciprocal movement coaxial with said valve seat, said valve member comprising a cup-shaped stamping of a size larger than said tubular portion carried by said stem and normally fitting over said tubular portion of said valve seat stamping, said valve member including a wall encircling said tubular portion of said valve seat stamping in radially spaced relation thereto to define a huddling chamber upon movement of said cup-shaped stamping away from said valve seat, a strap confined between said body members extending into said first body member and guiding said valve stem for reciprocal movement of said cup-shaped stamping toward and away from said valve seat, a compression spring confined between said first body member and said valve member normally biasing said cup-shaped stamping into engagement with said valve seat, an adjusting member adjustably mounted on said first body member and having operative engagement with said spring to vary the biasing force of said spring on said valve member, said cup-shaped stamping being responsive to the pressure of fluid entering said second body member through said inlet port to be moved away from said valve seat when the force of fluid pressure acting on the portion of said cup-shaped stamping exposed through said tubular portion of said valve seat stamping exceeds the adjusted biasing force of said spring to relieve the system with which the valve is associated of excessive pressure conditions, a second strap confined between said body members and extending into said second body member, a pressure insensitive-temperature responsive unit supported by said second strap coaxial with said valve member to be directly exposed to fluid in the path of normal fluid flow through the system with which the valve is associated, said unit including a rigid cylinder element, a relatively movable piston element and a temperature responsive actuating means confined between said elements, one of said elements being supported by said second strap, the other of said elements extending axially toward and being operatively engageable with said valve member, said other element upon excessive variation from normal of the temperature of the fluid in the system being moved into operative engagement with said valve member to move said cup-shaped stamping off said valve seat to vent the system with which the valve is associated, an adjusting member of effectively variable length adjustably mounted between said valve member and said other element to vary the temperature at which said other element opens the valve, and a second spring in said second body member operatively confined between said other element and a stationary member of the valve normally biasing said other element away from said valve member, said other element being operatively engageable with but mechanically independent of said valve member, whereby the valve is opened upon occurrence of a predetermined fluid pressure irrespective of the temperature of the fluid and is opened upon occurrence of a predetermined fluid temperature irrespective of the fluid pressure.

2,747,803

HAMMER ROTOR FOR HAMMERMILLS

Albert Benard Hanse, Cedar Rapids, Iowa, assignor to Pettibone Mulliken Corporation, Chicago, Ill., a corporation of Delaware

Application July 9, 1952, Serial No. 297,905
10 Claims. (Cl. 241—191)



1. A hammer rotor for hammermills including a rotor base, a hammer bar having its rear face seated on the rotor base with a V-type of engagement in which one part seats with self-centering action on opposite sides of the nose of the mating part, a wedge tapering generally radially outwardly and wedged outwardly between the front face of the hammer and the rotor base, screw means for forcing said wedge outwardly, and means for locking the screw means, comprising a member having angularly interlocking engagement with both the screw means and the wedge.

2,747,804

GYRATORY CRUSHER CONCAVE ADJUSTMENT

Harvey H. Rumpel, Whitefish Bay, Wis., assignor to Smith Engineering Works, Milwaukee, Wis., a corporation of Wisconsin

Application July 10, 1953, Serial No. 367,196
12 Claims. (Cl. 241—286)



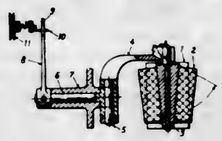
1. In a gyratory crusher, a frame having an annular wall provided with screw threads, a concave having screw threads cooperable with said frame threads to effect adjustment of the concave relative to the frame, a lock nut having screw threads also cooperable with said frame threads and being engageable with said concave to lock the latter in various positions of adjustment, means coacting with a fixed part of the crusher for rotating said nut, and means also coacting with a fixed part of the crusher for positively preventing rotation of said concave while said nut is being driven into locking engagement therewith.

2,747,805

DEVICE FOR THE PLACEMENT OF THE THREAD DURING QUICK TRAVERSE WINDING

Walter Schweiter and Karl Marx, Horgen, Switzerland, assignors to Schweiter Limited, Horgen, Switzerland, a Swiss company

Application October 22, 1953, Serial No. 387,570
Claims priority, application Switzerland November 20, 1952
2 Claims. (Cl. 242—18)



1. A device for placement of the thread on a bobbin which cooperates with a grooved cylinder, during the winding operation on quick traverse winding machines: comprising a pivot member operatively connected with said bobbin and about which said bobbin rocks, and a fixed bearing, on which said pivot member is mounted for rocking movement about a horizontal axis, said bearing axis being arranged a distance amounting to at least one-fifth of the width of said grooved cylinder and extending at least approximately parallel to the horizontal plane passing through the line of contact between said grooved cylinder and said bobbin.

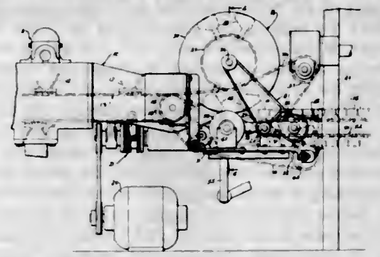
2,747,806

MACHINE FOR OPERATING UPON BOBBINS

Robert E. Borchardt, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a corporation of Illinois

Application March 30, 1953, Serial No. 345,562
5 Claims. (Cl. 242—19)

1. In a machine for operating upon bobbins, the combination of a first conveyor, a second conveyor driven in timed relation to the first conveyor, mechanism disposed between the two conveyors for operating upon bobbins to remove surplus yarn therefrom and means for transferring bobbins from the first conveyor to said mechanism and then from said mechanism to said second conveyor comprising a carrier having a pair of bobbin clamping members, means for alternately opening and closing said members at spaced points in the travel of the carrier, said first conveyor operating to deliver bobbins to the carrier while said members are open, and means also operating



during said open relationship of the members to restore bobbins from said mechanism to the carrier.

2,747,807

ROLL POSITIONING DEVICE FOR TAPE DISPENSER

August C. Hummel, Cincinnati, Ohio

Application June 26, 1953, Serial No. 364,345
7 Claims. (Cl. 242—55.2)



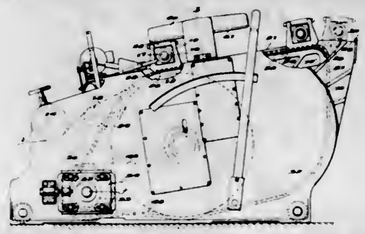
7. In a tape dispensing device wherein a tape roll is supported for unwinding movement, a spaced apart pair of resilient guide members for contacting opposite sides of the tape roll, said guide members extending freely upwardly from the base of said dispenser so that a roll of tape may be conveniently positioned between said guide members, said guide members being flexed inwardly so as to make resilient contact with opposite sides of the tape roll, and spacing means for selectively adjusting the spacing of the guide members to accommodate tape rolls of varying widths, said spacing means comprising a plurality of spacing bars in side-by-side contacting relation, said guide members being adapted to be selectively positioned between adjacent pairs of said spacing bars.

2,747,808

INCHING DEVICE FOR AUTOMATIC DRUM WINDER

Frank F. Kaiser, Highland Park, N. J., assignor to John Waldron Corporation, New Brunswick, N. J., a corporation of New Jersey

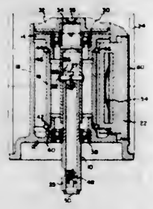
Application May 19, 1954, Serial No. 430,789
12 Claims. (Cl. 242—65)



1. In a web winding machine having a constantly driven friction drum over which the web passes, a core on which the web is wound into a bundle by peripheral contact thereof with said drum, movably mounted bearings in which said core is journalled, means for providing an

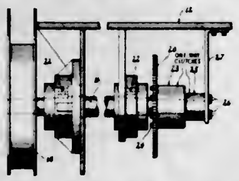
initial pressure on said bearings in addition to the weight of the core and initially-wound web thereon during the early part of the bundle winding operation to provide the necessary nip between the periphery of the drum and the periphery of the initially-wound web and weight supporting means separate from said bearings and cooperating therewith for at times supporting at least a portion of the weight of the core and web wound thereon; the improvement comprising means for slowly moving said bearings selectively along said weight supporting means away from or toward a position substantially directly above the drum axis including a chain, an electric motor for driving said chain, means responsive to slight bundle lift by said drum due to increase in diameter of said bundle to actuate said motor in a direction to move said bearings "away" and means responsive to excessive lowering of the bundle from partial support on the said drum to actuate the motor in the opposite direction.

2,747,809
BOBBIN CHUCK
Donald William Selby, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Continuation of abandoned application Serial No. 336,694, February 13, 1953. This application January 6, 1954, Serial No. 402,431
4 Claims. (Cl. 242—72)



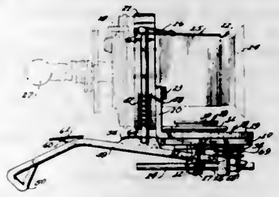
1. A bobbin chuck which comprises a plurality of radially extending axial vanes for supporting a bobbin core, a chuck housing for supporting said vanes for radial movement inward at the urging of resilient members extending between said housing and said vanes and outward against the inside of a bobbin core at the urging of resilient rings contained within said housing under the ends of said vanes and carried on a grooved member provided with V-shaped grooves of adjustable size for retaining said rings in position and for forcing said rings outwardly when the width of said grooves is reduced.

2,747,810
COILING APPARATUS
Richard F. Herr, Warren, Ohio, assignor, by mesne assignments, to The Herr Equipment Corporation, Warren, Ohio, a corporation of Ohio
Application September 25, 1952, Serial No. 311,491
1 Claim. (Cl. 242—80)



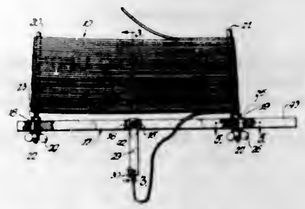
Coiling apparatus comprising a pair of rotatably supported, spaced-apart shafts, a reel carried by each of said shafts, drive means connected to each of said shafts for effecting rotation thereof, said drive means being selectively rotatable in either direction, a first one-way clutch means interposed between said drive means and each of said shafts, said first clutch means providing for driving engagement between said drive means and one or the other of said shafts depending upon the direction of rotation of said drive means, and a second one-way clutch means for each of said shafts, each second clutch means being secured to a non-rotatable portion of the apparatus for restraining rotation of its respective shaft in a direction opposite to the direction of rotation effected by said driving engagement.

2,747,811
FISHING REEL
Ernest S. Jefferson, Belhaven, N. C.
Application October 1, 1953, Serial No. 383,477
3 Claims. (Cl. 242—84.1)



1. In a fishing reel, a stationary disk, a pair of spaced parallel posts depending from said disk and secured thereto, a clamp arranged below said disk for attachment to a fishing rod, said clamp having a pair of apertured ears for connection to the posts, a body member secured to said disk and including an upper collar provided with an annular groove, an L-shaped bracket rotatably mounted on said body member, said bracket including a base arranged contiguous to said disk and a leg arranged at right angles with respect to said base, a spool connected to said leg, a spring member in said groove and having one end connected to said body member and its other end connected to said leg, the bracket being provided with a channel, a hammer, movably mounted in said channel and having a transverse finger on its upper end provided with a groove, said groove adapted to be selectively engaged by a loop in the fishing line, the lower end of said hammer being bifurcated, a spring pressed arm pivotally connected to said disk and provided with a projection for engagement by the bifurcated end of said hammer, a spring pressed lever pivotally connected to said disk and a pawl carried by said lever for selectively engaging said bracket and base.

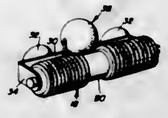
2,747,812
DEVICE FOR STORING LINES
Arnold A. Lassen, Chicago, Ill.
Application May 5, 1953, Serial No. 353,178
5 Claims. (Cl. 242—96)



1. A storage device for a line, one end of which is to be cast in a predetermined direction, said device comprising a pair of spaced rods around which a line is adapted to be wound, one end of each rod being free and the rods being disposed in spaced relation to one another and in substantially the same plane with the free ends pointing in substantially the same direction, said line when wound

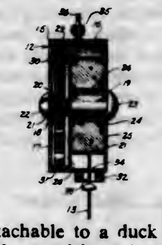
around the rods being free to leave the rods by sliding off the free ends thereof, means for holding the rods in said spaced relation, said holding means comprising a base member having an opening for each rod, each opening being elongated longitudinally of the base member and in the plane of the pair of rods, each said rod extending through its respective opening, threads on the rods on either side of said openings, a pair of spaced nuts on the rods, one nut on each side of the base member and adapted to hold the rods in the openings, said base member extending laterally beyond one of said rods to form a handle by which the device may be carried, and means for supporting the device on the ground at an angle to the general plane of the ground, said means comprising an elongated pate, means for mounting one end of said plate on the base member for swinging movement with respect thereto, from a position in which the plate is aligned with the base member to a position in which the plate is at right angles thereto and extends from the base member in a direction opposite to that in which the free ends of the rods extend from said base member and means for tilting the plate relative to the base member such that when the free end of the plate and the base member contact the ground, the free ends of the rods will be tilted upwardly in the direction in which the line is to be cast.

2,747,813
CLOTHESLINE REEL
William M. Priest, Carthage, N. C.
Application March 16, 1953, Serial No. 342,430
1 Claim. (Cl. 242—102)



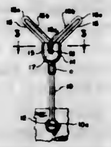
A demountable clothesline assembly comprising a U-shaped bracket, means for detachably mounting the bight portion of the bracket to a vertical supporting surface, a shaft extending between the free ends of the legs of the brackets, means for locking the shaft to one of said legs for preventing rotation thereof, a hollow cylindrical roller journaled on said shaft in spaced parallel relation to the bight portion of the bracket, a coil spring encircling said shaft with the longitudinal axis of the spring generally coinciding with the longitudinal axis of the shaft, one end of the spring being secured to the shaft with the other end of the spring being secured to the roller for resiliently resisting rotation of the roller in one direction, an elongated length of flexible clothesline, means detachably securing the terminal ends of the clothesline to the periphery of the roller adjacent the remote ends thereof thereby forming a loop, said roller and bight portion being spaced apart a distance to permit the clothesline to be wound upon the roller, a diametrically bored spherical member of resilient material mounted centrally on said clothesline, said diametric bore of the spherical member frictionally and resiliently engaging the clothesline, said spherical member having a diameter greater than the distance between the roller and the bight portion of the bracket for forming a stop member for engagement with the roller and bight portion of the bracket when the clothesline is wound upon the roller, the length of said roller being substantially longer than the diameter of the spherical member whereby the spherical member acts as a handle with the portions of the clothesline on each side thereof extending in diverging relation for winding of the clothesline on the roller in a spiral manner whereby the engagement of the spherical member with the roller and bracket centralizes the spherical member on the clothesline.

2,747,814
CORD REEL
Ralph S. Taylor, Cicero, Ill.
Application November 14, 1952, Serial No. 320,428
1 Claim. (Cl. 242—107)



A cord reel attachable to a duck decoy for holding a decoy anchor cord comprising a housing having an annular wall and an end wall closing one end of said annular wall, a shaft disposed in said housing substantially perpendicular to said end wall and rigidly secured at one end to said end wall centrally of the latter, a winding spool journaled on said shaft and spaced from said end wall, an apertured boss on said annular wall, said annular wall having an aperture therein registering with the aperture in said boss, a cord wound on said spool and extending through said registering apertures, a cord rewinding spring disposed between said spool and said end wall with one end secured to said shaft and its other end connected to said spool, a releasable fastener secured to said annular wall at a location opposite said apertured boss for detachably connecting said reel to a decoy, a clip pivotally mounted on said apertured boss for movement in an arcuate path into the aperture in said boss and with one end positioned to intercept and engage said cord at the outer end of said boss, and spring means disposed between said boss and said clips resiliently urging said clip into the aperture in said boss and into engagement with said cord to hold the latter against movement into or out of said housing, said clip being manually movable against the force of said spring to free said cord.

2,747,815
YARN GUIDE
Leonard Trapido, Kew Gardens, N. Y., assignor to Kahn & Feldman, Inc., New York, N. Y., a corporation of New York
Application August 21, 1953, Serial No. 375,674
8 Claims. (Cl. 242—157)



1. A yarn guide, which comprises a shank, a pair of wire arms extending upwardly in spaced relation from the top of the shank to define a seat and terminating in loops extending divergently upwardly above the seat, and an insert of wear-resistant material mounted in the seat and held in place by the arms, the insert having an open top slot extending through it at an angle to the plane of the seat, the loops having free ends near opposite ends of the slot and lying substantially aligned in a direction transverse to said plane.

2,747,816
CANARD TYPE AIRPLANE AND CONTROLS THEREFOR
Ben O. Howard, Los Angeles, Calif.
Application May 11, 1950, Serial No. 161,440
12 Claims. (Cl. 244—45)

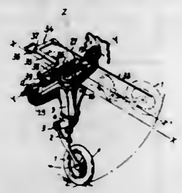
1. A tandem airplane comprising a fuselage, a main wing section, the center of lift of said main wing section

being located aft of the center of gravity of the airplane, propulsion means, and a pair of forwardly disposed floating wings having each a freely rotating pivotal connection to the airplane on opposite sides thereof forward of the center of gravity, each of said floating wings having an axis of rotation extending longitudinally intermediate leading and trailing edges thereof and said axes being deflected at equal angles from the horizontal, control tabs pivotally mounted on the trailing edges of the floating wings for movement throughout positive and negative angles with respect to the floating wings, a control column having connections therefrom to the tabs



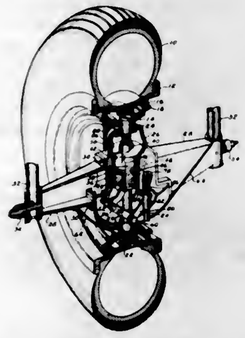
adapted to move both said tabs simultaneously in the same direction, rudder pedals having connections to said tabs interconnected with said first identified connections and adapted to move said tabs in directions opposite to each other, trim tabs pivotally mounted on the floating wings in axial alignment with the control tabs, a vertical trim setter in the airplane having connections therefrom to the trim tabs adapted to move said trim tabs simultaneously in the same direction and a direction trim setter having connections to said trim tabs interconnected with the connections from the vertical trim setter to the trim tabs adapted to move said trim tabs in opposite directions.

2,747,817
RETRACTABLE LANDING GEARS
Raymond Saulnier, Paris, France
Application August 5, 1954, Serial No. 447,972
Claims priority, application France August 11, 1953
2 Claims. (Cl. 244—50)



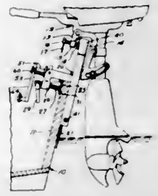
1. A retractable landing gear for aircraft comprising, a tubular strut supporting member pivotally mounted on a shaft carried by the aircraft and a wheel carrying strut rotatably mounted within said supporting member, an externally toothed sleeve member carried by said supporting member to rotate relative thereto and to be moved lengthwise thereof between operative and inoperative positions, a tubular rack-bar slidably mounted on said shaft and retained thereby in meshing relation with the external teeth of said sleeve member, the planes of symmetry of the teeth of said rack-bar being perpendicular to the axis of said shaft and the end faces of said rack-bar teeth extending along a circular arc corresponding to the angular displacements of said strut between retracted and extended positions thereof so that said meshing relation is maintained whatever the angular position of the strut between said retracted and extended positions, a releasable drive connection between said sleeve member and said strut to rotate the strut with said sleeve member in the operative position thereof, said drive connection being releasable upon movement of said sleeve member towards its inoperative position, resilient means to urge said sleeve member towards said operative position and camming means on said sleeve member and said supporting member arranged to move said sleeve member into said inoperative position against the action of said resilient means, said camming means being effective upon rotation of said sleeve member beyond a predetermined range of angular movement thereof, and steering means connected to said rack-bar to move the same along said shaft so as to rotate said strut about its own axis, the arrangement being such that said strut may be rotated by said steering means only within said predetermined range of angular movement of the sleeve member.

2,747,818
NOSE LANDING GEAR WITH INTERNALLY CASTERED AND STEERED WHEEL
Daniel Grudin, Trenton, N. J., assignor to Stroukoff Aircraft Corporation, West Trenton, N. J., a corporation of New York
Application October 9, 1953, Serial No. 385,063
10 Claims. (Cl. 244—50)



1. A steerable castering wheel comprising: a wheel; means journally supporting said wheel; an axle; kingpin means disposed in the mid-plane of said wheel and fixed to and pivotally mounting said wheel supporting means on said axle for castering movement of said wheel; and controllable means attached to said kingpin means for pivoting said kingpin means to steer said wheel.

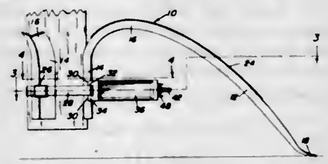
2,747,819
ADJUSTABLE BRACKET FOR OUTBOARD MOTOR
Donovan D. Aldrich, El Paso, Le Roy A. Kiebler, De Witt, and Dale W. Weller, Perry, Mich.
Application May 1, 1953, Serial No. 352,545
1 Claim. (Cl. 248—4)



An adjustable outboard motor supporting bracket adapted for attachment to the transom of a boat, said bracket comprising a first bracket part including an upstanding plate adapted to be disposed at the outer side of the transom, splines carried by said plate and extending laterally outwardly therefrom along opposite longitudinal side edges thereof, a clamp carried by said plate at the upper end thereof and adapted for releasable attachment to the transom, a second bracket part having a web and spaced upstanding flanges extending along opposite longitudinal edges of the web, said flanges having grooves extending longitudinally thereof in opposed relation and receiving said splines therein whereby said second bracket part is slidably mounted on said first bracket part for

movement in a rectilinear path longitudinally thereof with said web in spaced parallel relation to the adjacent side of said plate, a gear toothed rack bar carried by and extending longitudinally of said web and disposed in the space between said web and said plate and between said flanges, manually operable means carried by said first bracket part including a shaft rotatable about an axis perpendicular to said rack bar, a gear carried on said shaft for rotation therewith disposed in the space between said web and said plate and meshed with teeth on said rack bar to move said second bracket part in its rectilinear path upon rotation of said shaft and a guide rod carried by said upstanding flanges of said second bracket part and extended therebetween adjacent the lower end of said second bracket part to bear against the adjacent side of said plate to define a guide means for said second bracket part as it is moved in its rectilinear path.

2,747,820
CHRISTMAS TREE STAND
Marshall A. Blu, Fort Lauderdale, Fla.; Harriet I. Blu, executrix of said Marshall A. Blu, deceased
Application May 18, 1953, Serial No. 355,759
2 Claims. (Cl. 248—44)



1. A Christmas tree stand comprising a plurality of circumferentially spaced radially disposed inverted U-shaped leg members each having an inner vertical limb, said vertical limbs being V-shaped in cross-section and facing each other and adapted to seat against a tree, a flexible tightening band extending about the inner limbs of said leg members, a U-shaped housing having its ends secured to one of said limbs, said housing including a web portion with an aperture, an eye element positioned in said housing and having a threaded shank portion slidably received in said aperture, the ends of said band being secured to said eye element, and a handle having an end engaging said web portion and threaded on said shank portion to tighten the band about the limbs, portions of both sides of the V-shaped limbs of the other leg members being cut through in a manner to slidably accommodate said band to restrict upward and downward sliding movement of the band relative to said other limbs.

2,747,821
CLAMPING DEVICE FOR TUBING AND THE LIKE
Joseph Falk, Glastonbury, Conn.
Application November 7, 1951, Serial No. 255,302
2 Claims. (Cl. 248—71)



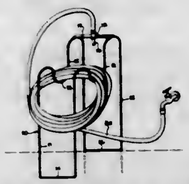
2. A fastening device to clamp pipe, tubing and like articles to a supporting structure comprising a tapered shank portion to penetrate the supporting structure to which the articles are to be clamped and having a head portion at one end of the shank having a flat driving portion extending angularly upwardly to the axis of said shank to facilitate the driving of the fastener into the supporting structure; an article-gripping portion extending laterally of said shank and having an outer surface merging with said head portion and an inner part having a plurality of surfaces having different radii of curvatures to engage and clamp to the supporting structure articles having curved surfaces similar to either one of said radii of curvature on said article-gripping portion; and a notch on said flat shank extending into the side opposite the article-gripping portion adjacent the head and adjacent to said surfaces so as to be clear of the supporting structure, when the fastener has been driven thereinto to clamp an article, said notch extending across the back of the shank and comprising a lower inclined wall extending inwardly and upwardly from the rear edge of the shank and intersecting a transverse wall located inwardly from the end of the shank and cooperating with removing means to apply a withdrawing force along a line within said shank to withdraw the fastener from the supporting structure.

2,747,822
FIRE EXTINGUISHER NOZZLE RETAINING MEANS
Frank B. Allen, Towaco, and Norman H. Siebens, Cedar Grove, N. J., assignors to Pyrene-C-O-Two Corporation, a corporation of Delaware
Application April 20, 1953, Serial No. 349,908
7 Claims. (Cl. 248—79)



1. An unbreakable retaining cap for a fire extinguisher discharge nozzle comprising a cup-shaped flexible member adapted to receive the end of the nozzle, and means in the closed end thereof for attaching means, the interior of the member formed to retain the end of the nozzle.

2,747,823
HOSE RACK
Sophie B. Sweanholt, Tucson, Ariz.
Application June 28, 1951, Serial No. 234,063
1 Claim. (Cl. 248—85)



A hose rack for supporting a hose free from contact with the ground, said rack comprising a bar having two legs formed from the ends thereof, and other legs formed from the intermediate portion thereof, segments of said bar joining the legs formed from the ends of said bar with the legs formed from the intermediate portion thereof, said segments of the bar forming an upwardly facing U-shaped cradle adapted to support a coiled hose, the lowermost portion of said cradle being spaced a substantial distance from the bottoms of said legs, the legs formed from the ends of said bar being longer than the legs formed from the intermediate portion thereof, whereby said legs formed from the ends of said bar may be inserted into the ground to form a stable base for said

rack, a brace secured to the lower portion of each of the legs formed from the ends of the bar and spaced from the ends of said bar, said brace being adapted to limit the distance, said legs may be inserted into the ground.

2,747,824
GARMENT BAGGING DEVICE
William E. Darnell, Jr., Mattoon, Ill.
Application October 1, 1953, Serial No. 383,467
2 Claims. (Cl. 248—161)



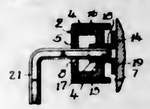
1. In a garment bagging apparatus, a garment supporting stand comprising a telescoping standard including a fixed tubular lower section and a vertically slidable upper section therein, said lower section having an upper end provided with a V-shaped edge groove, a ball in the groove and frictionally engaging and locking the upper section in vertically adjusted position, a cap on said lower section confining the ball in the groove a ball releasing member movable upwardly in the lower section and having an upper end underlying the ball, and pedal actuating means for moving said member upwardly to move its upper end against and raise the ball in the groove for releasing the upper section of the standard.

2,747,825
PAINT PAIL HOLDER
Roman A. Lachenmayer, St. Paul, Minn.
Application June 28, 1952, Serial No. 296,139
2 Claims. (Cl. 248—210)



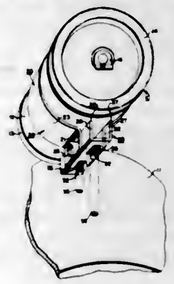
1. A paint pail holder including two main portions formed of metal rod material, one of said portions comprising a ladder engaging bracket portion and the other a paint container holding portion, said ladder engaging bracket portion comprising a single strip of metal rod material having a central loop section to accommodate a pivot bolt, an integral pair of aligned oppositely directed rod end portions bent in right angles to provide a pair of spaced ladder rail supports and inwardly directed ladder rung hook ends facing one another in spaced relationship to said pair of spaced ladder rail supports, said paint pail holding portion comprising a metal rod having a supporting eye section to accommodate a pivot bolt, an integral rod section extending downwardly from said eye section in offset relationship thereto to engage against a ladder rail, an integral pail supporting rod section extending horizontally from said downwardly extending section, an integral upwardly directed section connected to the horizontally extended section and having a can encircling ring at the end thereof on a plane parallel to the axis of the said horizontally extending supporting rod section, and pivot bolt means connecting the ladder engaging bracket portion to the paint pail holding portion at said hook and eye sections.

2,747,826
LEVELING DEVICE FOR A STANDARD
Herbert R. Fisher, Highland Park, Ill., assignor to Garden City Plating & Manufacturing Co., a corporation of Illinois
Application July 12, 1952, Serial No. 298,515
1 Claim. (Cl. 248—243)



A leveler for use with a standard having an apertured web and two side walls, to facilitate mounting said standard on uneven surfaces, said leveler comprising a holding member having a flat plate adapted to fit frictionally between the side walls of said standard and a plurality of flanges extending at right angles from said plate for spacing said plate from said web, an adjusting screw having a flat inner end surface engageable with the uneven surface on which said standard is to be mounted and a shank threaded through said flat plate, and an axial bore of non-circular cross section in said shank, said axial bore being aligned with the aperture in the web of said standard.

2,747,827
MOUNTING STRUCTURE FOR CAPACITOR
Alexander M. Georgiev, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 30, 1953, Serial No. 352,234
1 Claim. (Cl. 248—316)



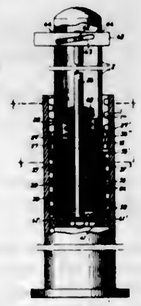
In a mounting structure for a capacitor, the combination of, a longitudinally extending generally U shaped channel member having relatively parallel edges on the free ends of the walls forming the side walls of the U shaped channel member, an opening in each of the side walls of the channel member intermediate opposite ends thereof, said openings being coaxially aligned, other openings in the bottom wall of the channel member, one of said other openings being disposed between each of opposite ends of said channel member and the openings in the side walls thereof, a cylindrical casing member positioned on said channel member with the axis of the casing member parallel with the longitudinal length of the channel member and the periphery of the casing member being supported by the longitudinal edges of the side walls of the channel member, a longitudinally inextensible but transversely flexible ribbon strap encircling the periphery of said casing and having opposite ends of the strap bent substantially normal in the same direction from one face of the strap, said bent ends respectively engaging opposite side walls of said channel member and having openings therein coaxially aligned with the openings in the side walls of said channel member, said channel member being of a length substantially greater than the width of said strap for extension of the channel member beyond each of opposite side edges of the strap for longitudinal support of the casing thereby to prevent rotation of the casing about the axis of the holes in the side walls of the channel member, and fastening means extending through said holes in said ends of said strap and in the side walls of said channel member securing thereby said casing onto said channel member.

2,747,828
MINE POST
Arnold Haarmann, Braubauer, Westphalia, Germany, assignor to Becorit-Grubenausbau G. m. b. H., Recklinghausen, Germany, a German firm
Application April 17, 1951, Serial No. 221,353
Claims priority, application Germany April 18, 1950
1 Claim. (Cl. 248—354)



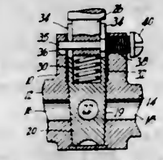
A mine prop comprising an outer tubular base member and an inner tubular upper member adapted to vertically slide in said base member, a locking member for said two prop members and supported upon the upper end of said base member, a locking jaw supported by said locking member, said locking jaw contacting the outer face of said slidable upper prop member and having an approximately half circular recess located at a distance equalling one sixth of the entire length of said locking jaw underneath its median line, an abutment jaw located in said locking member and having an approximately half circular recess corresponding in shape to the recess of said locking jaw and a wedge shaped locking arm located with its opposite sides in the recess of said locking jaw and of said abutment.

2,747,829
MINE PROP
Alexander Schubert, Dortmund-Scharnhorst, Germany
Application December 7, 1951, Serial No. 260,519
Claims priority, application Germany June 9, 1951
4 Claims. (Cl. 248—355)



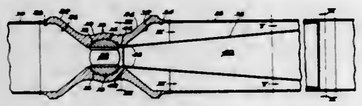
1. In a tubular mine prop, an outer tubular prop member having on its interior a thread, an inner tubular prop member displaceable axially relative to said outer prop member in response to rock pressure and having an end portion disposed on the interior of said outer prop member, said prop members being non-rotational relative to each other, a hollow rotatable lock unit adjacent said inner prop member and taking up the pressure thereof and comprising an external thread engaged in said thread of said outer prop member and turnable on said thread relative to said prop members for axial displacement of said inner prop member, and releasable clutch means operable for releasably retarding and arresting and, respectively releasing the rotational movement of said lock unit comprising an element disposed adjacent said lock unit oppositely of said inner prop member and being non-rotational against said prop members and being displaceable axially of said outer prop member between a braking position and a release position, respectively, a bushing disposed in said lock unit defining therewith an interior chamber, a series of lamellae superposed in said chamber and alternate of said lamellae being in rotational driving connection with said lock unit and the other of said lamellae being in rotational driving connection with said bushing, a releasable clutch between said bushing and said element and operable for connecting said bushing to said element in the braking position of said element thereby restraining rotation of said bushing for braking the rotation of said lock unit by said lamellae, and respectively being disengaged from said element in the release position of said element for unobstructed rotation of said lock unit and said bushing, spring means operable for resiliently pressing said lamellae together to increase the friction therebetween, and means operable for shifting said element between said positions.

2,747,830
VALVE
Casper S. Stuckenholt, Cleveland, Ohio, assignor to The W. J. Schoenberger Co., Cleveland, Ohio
Application June 22, 1951, Serial No. 232,926
3 Claims. (Cl. 251—97)



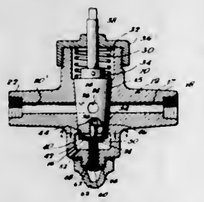
1. In a rotary plug type valve, a body portion, a rotary plug fitted into said body portion and rotatable therein between valve "off" and "on" positions, a valve actuating stem telescopically fitted to said plug, a shouldered locking pin carried by said stem and having a portion extending into lost motion connection with said plug, a spring arranged to bias said plug and stem apart, said valve body including a collar portion adjacent said plug having a recess formed therein generally concentric of the axis of rotation of said plug and including a lateral branch portion, one end portion of said locking pin being dimensioned to extend into said recess, said locking pin having a shouldered portion bearing against one of the telescopically fitted parts of said stem and plug to prevent retraction of said pin from said stem through said recess, whereby upon rotation of said plug to valve "off" position said spring biases said pin member into the lateral branch portion of said recess thereby locking said stem against rotation relative to said body member and whereby said stem may be manually displaced against the action of said spring so as to release said pin from the lateral branch portion of said recess whereupon said stem may be rotated to turn said valve plug to valve "open" position, said body collar portion having an aperture therethrough whereby the pin may be inserted through said aperture during assembly of the device, and a closure device arranged in conjunction with said aperture for blocking the latter against accidental retraction of said pin from said plug through said aperture.

2,747,831
VALVE AND PIPE LINE ASSEMBLIES
Frank M. Van Deventer, Westfield, N. J., assignor, by mesne assignments, to Walworth Company, New York, N. Y., a corporation of Massachusetts
Application November 10, 1948, Serial No. 59,257
6 Claims. (Cl. 251—124)



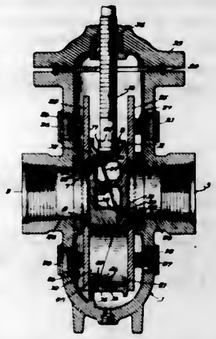
2. A plug valve for pipe line assembly comprising a valve casing adapted for insertion between the ends of a pair of oppositely disposed tubular pipe sections, said valve casing having opposite end portions the terminus of which is of substantially circular cross section, one of said casing portions defining an inlet passage converging in one direction to a valve seat from the diameter of one of the pipe sections with which it is adapted to be associated, the other of said portions including an outlet passage extending in an opposite direction from the valve seat, a rotatable plug valve member cooperable with said seat and having a port of substantially rectangular cross-section, said passages having at least the portion adjacent their intersection with the valve seat formed of substantially rectangular cross-section with which said plug port is adapted to register to form a supplemental connecting conduit in the open position of said valve member, and a tapered pipe section positioned at said outlet passage end of said casing and engaging at its smaller end with said valve casing, said smaller end being of substantially rectangular cross-section forming a continuation of said outlet passage portion and diverging into substantially circular cross-section at its larger end, said tapered pipe section having an included angle in its major dimension of approximately ten degrees, said tapered pipe section adapted to be surrounded by the other of the tubular pipe sections and at the larger end thereof adapted to be connected to the other of the tubular pipe sections.

2,747,832
VALVES
Alfred Vischer, Jr., Park Ridge, Ill., assignor of two-thirtieths to William Vischer, two-thirtieths to Alfred Vischer III, two-thirtieths to Alfred Vischer, Jr., as trustee, four-thirtieths to Walter W. Zitzewitz, four-thirtieths to Elmer K. Zitzewitz, one-thirtieth to Gertrude J. Zitzewitz, one-thirtieth to Barbara O. Zitzewitz, and two-thirtieths to Gertrude V. Bouton
Application December 11, 1953, Serial No. 397,625
14 Claims. (Cl. 251—161)



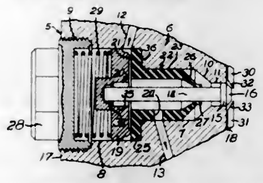
1. A valve comprising a valve body with a tapered control element receiving chamber provided with a valve seat, a tapered control element mounted in said chamber, spring means acting axially on said element for maintaining it seated in said chamber, and thermal responsive means movable axially of the control element in response to variations in the temperature of said valve and operatively connected to said element for opposing movement of said element by said spring means.

2,747,833
WEDGE VALVE
Emil Langner, Chicago, Ill., assignor to Crane Co., Chicago, Ill., a corporation of Illinois
Application August 31, 1951, Serial No. 244,634
1 Claim. (Cl. 251—196)



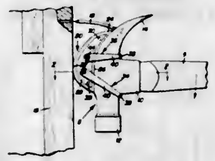
In a conduit type of gate valve, the structure comprising a pair of disc halves in back-to-back relation and having blanked and ported portions, the oppositely disposed surface portions of the backs of each of the disc halves consisting of a pair of converging inclined surfaces to form therebetween substantially vertically disposed V-surfaces having raised face portions, the converging inclined surfaces of one disc half being nested within and snugly bearing against the converging inclined surfaces of the other disc half, each of said raised face portions having oppositely disposed relieved portions defining the inner and outer peripheral limits of the said raised face portions, the said raised face portions being of circular configuration, each of said latter portions being machinable independently by rotation on their axial centers forming the circular configuration, each of the said disc halves at the point of convergence of the said inclined V-surfaces having a further relieved portion therebetween extending substantially transversely to the V-surfaces and the vertical plane of the said disc halves.

2,747,834
SEALING MEANS
Eugene E. Meusy, Milwaukee, Wis., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis., a corporation of Wisconsin
Application July 27, 1953, Serial No. 370,413
2 Claims. (Cl. 251—335)



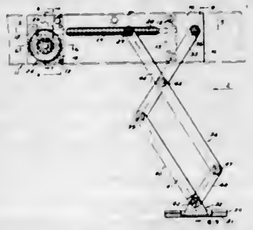
1. A combined valve seat and valve stem seal for valves having a bore, having an annular shoulder surrounding one end of said bore, and having a valve member provided with a movable valve stem extending within said bore, comprising, a sleeve of resilient material having an outwardly directed annular flange, said sleeve being coaxially positioned in said bore in surrounding relationship with respect to said stem and with said annular flange abutting said annular shoulder to provide a valve seat, said sleeve also having first and second annular extents, said first extent having a normal diameter larger by predetermined amount than the diameter of said bore, wherefore predetermined radial compression of said first extent is effected by the disposition of said extent within said bore, said radial compression being sufficient by itself to hold said resilient member in operative position within said bore and to effect the gas tight seal between said first extent and the surface of said bore, said first extent being radially spaced from said stem, and said second extent being radially spaced from said bore surface and sealingly and slidably engaging said stem.

2,747,835
HAMMER ATTACHMENT
Truly M. Belgard, Alexandria, La.
Application February 23, 1954, Serial No. 411,785
2 Claims. (Cl. 254—26)



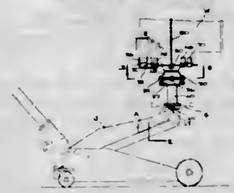
1. A claw hammer attachment which functions to provide increased leverage and assists greatly in the act of pulling and extracting relatively long nails comprising a compressibly resilient hammer head fulcruming block, said block being generally wedge-shaped in side elevation and arcuately curved to provide a concave surface to conformingly contact a surface of said hammer head and a convex surface to rest yieldingly against and fulcrum upon a work surface, said block being rectangular in cross-section and the side surfaces thereof being flat and parallel to one another, rigid metal plates embedded in said side surfaces, the marginal edges of the plates being spaced inwardly from the corresponding marginal edges of the side surface portions of the block and being flush with said side surfaces, and a pair of complemental U-shaped adapters, the latter each including a pair of spaced parallel arms joined by way of a bight-portion, the free end portions of the arms straddling said block and plates and being separably bolted to said plates by way of complemental bolts passing through said block.

2,747,836
POWER OPERATED JACK ASSEMBLY
Floyd A. Sherman, Birmingham, Mich., assignor to Motor Products Corporation, Detroit, Mich., a corporation of New York
Application March 1, 1954, Serial No. 413,039
7 Claims. (Cl. 254—86)



1. A power operated lifting jack assembly attachable as a unit to a channel shaped sill of a vehicle and comprising a mounting plate attachable to said sill at the open side of said channel whereby said plate cooperates with the channel of said sill to form an elongated housing, a rotatable screw mounted upon said plate so as to be within and extend lengthwise of said housing, an electric motor carried by said plate, means also carried by said plate so as to be within said housing and operable by said motor for rotating said screw, a nut non-rotatably mounted on said screw and movable thereby lengthwise of said housing, a ground engaging foot movable vertically relative to said housing, and means connected to said nut and plate and operable when said nut is moved lengthwise of said housing by said rotatable screw for moving said foot vertically.

2,747,837
TRANSMISSION LIFTING ATTACHMENT FOR A MOBILE LIFTING JACK
James M. Turner, San Fernando, Calif.
Application February 12, 1954, Serial No. 409,908
4 Claims. (Cl. 254—134)



1. A mobile jack attachment for supporting a heavy object comprising: a column including means at one end thereof to detachably connect the same to a jack; a generally horizontal table on the other end of the column; spaced pairs of bars carried by the table, the bars of each pair extending in closely spaced, parallel relation, one bar of each pair including an upwardly projecting finger at one end and the other bar of the same pair including an upwardly projecting stop finger at its opposite end, the bars of each pair being slidable on the table in the direction of their lengths independently of each other; hold-down clamps each extending transversely of and overlying both of the bars of each pair; and means connecting each clamp to the table and adapted for drawing the clamp toward the table, to bind the bars between the table and clamps against movement from selected positions to which the bars are slidably adjusted.

2,747,838
WINCH ASSEMBLAGE
Howard C. Riemann, West Allis, Wis., assignor to The Fulton Company, West Allis, Wis., a corporation of Wisconsin
Application March 17, 1954, Serial No. 416,880
2 Claims. (Cl. 254—186)



1. In a winch, a frame having an axle mounted thereon and being provided with a notch remote from said axle, a winding drum having driving gearing at an end thereof and being rotatable about the axis of said axle, an elongated holding latch having a manipulating handle at one end and a hook at its opposite end engageable with said gearing while its medial portion is pivotally suspended directly from said drum to swing concentrically of said axis and is provided with a laterally open recess remote from and swingable across the axis of said axle, a medially slotted toggle link having an integral projection extending laterally from one end and pivotally engaging said recess while its other end is swingable about said projection on the other side of said axle, and a helical tension spring connecting said swingable link

end with said frame notch and being cooperable with said link to retain said pivotal projection within said recess and to alternately retain said latch in drum holding and release positions.

2,747,839
METHOD FOR CORRECTING LOST CIRCULATION OF DRILLING FLUIDS

Fitzhugh L. Moore, Odessa, Tex., assignor, by mesne assignments, to Socony Mobil Oil Company, Inc., a corporation of New York

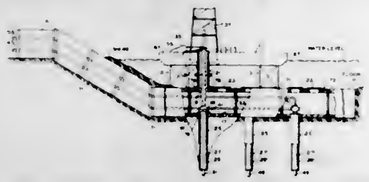
No Drawing. Application April 30, 1951, Serial No. 223,819
2 Claims. (Cl. 255—1.8)

1. In the process of drilling a well bore in the ground wherein a drilling fluid is pumped from the surface of the ground through said well bore and thence back to the surface of the ground and lost circulation of said drilling fluid is encountered by reason of said drilling fluid entering a lost circulation zone within said well bore, said lost circulation zone containing water, the improvement in correcting lost circulation of said drilling fluid comprising discontinuing pumping of said drilling fluid from the surface of the ground through said well bore, pumping into said well bore to contact said lost circulation zone oil containing a first agent which will assist in stabilization of an emulsion and also containing a second agent which will assist in stabilization of an emulsion, said second agent consisting of blown asphalt, whereby said oil will admix with said water in said lost circulation zone and form an emulsion therein and said blown asphalt will flocculate, which emulsion will adhere to the walls of the interstices of said lost circulation zone and which flocculated blown asphalt will adhere with the emulsion to the walls of the interstices of said lost circulation zone to form a matting therein, thereafter pumping into said well bore to contact said lost circulation zone a suspension of shredded leather in a liquid whereby said shredded leather will adhere to said matting within said lost circulation zone to form within said lost circulation zone a barrier to the entry of drilling fluid, and thereafter pumping drilling fluid from the surface of the ground through said well bore.

2,747,840
APPARATUS FOR DEVELOPING UNDERWATER RESERVOIRS

Theodore Miles, Long Beach, Calif., assignor to Phillips Petroleum Company, a corporation of Delaware

Application June 12, 1953, Serial No. 361,188
7 Claims. (Cl. 255—2.5)

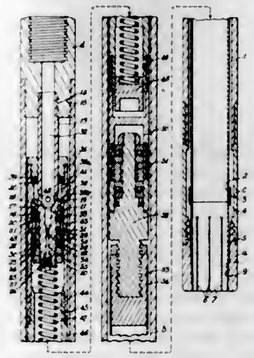


1. An apparatus for off-shore drilling comprising, in combination, an underwater cellar, an alleyway leading from said cellar to the shore, said cellar and said alleyway being countersunk into the earth beneath a body of water to such an extent that the tops of said cellar and alleyway are about flush with the earth surface beneath said body of water, a barge support resting on said cellar, a floatable drilling barge at least partially submerged resting upon said barge support, a deep well drilling rig disposed on said barge, a first opening in the bottom of said cellar, said first opening being in water-tight contact with the earth, a second opening in the roof of said cellar directly above said first opening, a tube attached water-tight to the cellar roof surrounding said second opening and extending to a level above the level of said body of water, the openings and said tube being adapted to accommodate casing and drilling equipment and said first opening being further adapted to accommodate production equipment.

2,747,841
CORE-LIFTING MEANS FOR ROTARY DRILLS

William Murdoch Adamson, Germiston, Transvaal, and George Bernard Weldon, Johannesburg, Transvaal, Union of South Africa

Application August 15, 1952, Serial No. 304,602
Claims priority, application Union of South Africa September 8, 1951
5 Claims. (Cl. 255—72)



1. In a rotary drill having a core barrel, a hollow drill rod connected at one end to said core barrel, a drill bit connected to the forward end of said core barrel, whereby fluid under pressure is passed through said drill rod to said drill bit, core-lifting means within said core barrel and comprising, in combination, a cylinder and a piston therefor, the piston being fixed relative to the core barrel and the cylinder being movable relative to the piston; a contractable core gripper; a mechanical connection between the cylinder and the core gripper; contraction structure within the forward end of the core barrel; a passage within the core barrel for conveying fluid under pressure from said drill rod to the drill bit; port means connecting said passage with the interior of said cylinder on one side of said piston and allowing fluid under pressure to enter the cylinder to cause the cylinder to move relative to the piston and by virtue of its connection with the core gripper, to move the core gripper away from the contraction structure into an expanded inoperative position and spring means arranged to act against the aforesaid movement of the cylinder and to move the core gripper into engagement with the contraction structure and thus into a contracted operative position in which it will tightly grip the core when fluid pressure to said cylinder is released or at least substantially reduced.

2,747,842
AIR CONDITIONING SYSTEM

Nicholas S. Shataloff, New York, N. Y., assignor to Buensod-Stacey, Incorporated, New York, N. Y., a corporation of Delaware

Application February 9, 1953, Serial No. 335,725
9 Claims. (Cl. 257—3)

1. In an air conditioning system the combination including centrally located air conditioning means, air distributing means in at least one zone to be conditioned, cold air and warm air supply ducts connecting said central conditioning means with said air distributing means for supplying cold and warm air thereto, means normally

forcing air through both of said ducts at substantially the same pressures, and means responsive to increased air demands in one air supply duct for passing air from the other air duct into said one air supply duct, said

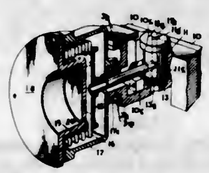


last mentioned means including interconnecting duct means between said air supply ducts and other conditioning means in said interconnecting duct means for further conditioning air passed from said other duct to said one duct.

2,747,843
SEALS

Martin Cox, Cove, Farnborough, and Raymond Kenneth Peter Stevens, Farnham, England, assignors to Power Jets (Research and Development) Limited, London, England, a British company

Application August 28, 1952, Serial No. 306,818
Claims priority, application Great Britain September 12, 1951
9 Claims. (Cl. 257—6)

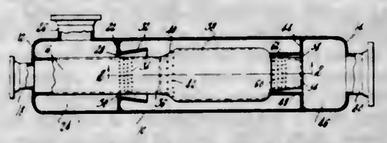


9. In an apparatus comprising a rotor and a stator which together define separate high and low pressure passageways, both extending through said stator and said rotor, the combination comprising an articulated sealing device mounted on said stator, at least two slidable sealing blocks in said sealing device, each having a face coacting with a face on said rotor to constitute a substantially fluid-tight seal, a hinge between said sealing blocks, a hollow hinge pin in said hinge presenting to said rotor face a face which firstly is substantially level with the said faces of the sealing blocks, and secondly is pierced by an opening affording leakage into the interior of the hinge pin, expansible-chamber means for urging said seal-block faces towards said rotor face, a hollow tubular thrust rod connecting said expansible-chamber means to said hinge pin, the interior of said rod being in communication with the interiors of said expansible chamber and said hinge pin to form with them a common fluid-receiving space, means defining a leakage vent from said common space, means on said stator constituting a substantially fluid-tight guiding enclosure for said slidable sealing blocks and defining a leakage-receiving space behind said blocks, a casing mounted on said stator and enveloping said expansible-chamber means, and means defining a communication between the interior of said casing and said leakage-receiving space to form with them a second common space wherein a face on the rear of each said sealing block and an opposed external face of said expansible-chamber device are exposed to the pressure of leakage fluid in said second common space acting on them equally in opposite senses.

2,747,844
DEVICE FOR MIXING FLUIDS

Rudolf S. Slayter, Weston, Mass.

Application December 22, 1954, Serial No. 476,878
2 Claims. (Cl. 259—4)

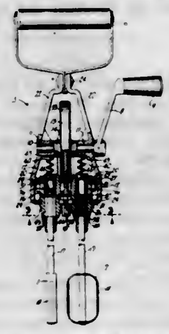


1. A fluid mixing device comprising a cylindrical outer tube with a head at each end, an axial inlet fitting opening through one said head, an axial outlet fitting opening through the other said head, an inner tube coaxial with the outer tube, one end of the inner tube being secured to the head at the inlet end around the orifice of said inlet fitting, the other end of said inner tube being spaced from said other head, an annular partition in the outer tube forming a chamber at the inlet end of the outer tube, the inner edge of said partition being spaced radially from said inner tube, a second inlet fitting opening through the wall of said outer tube between its inlet end and said partition, a short flaring tubular member extending from the inner edge of said partition toward the outlet end of the device and forming with the adjacent portion of the inner tube a longitudinally extending passage, said inner tube having a multiplicity of small apertures in its wall opening into said passage, a diaphragm secured within said inner tube at a point beyond said apertures, said inner tube also having small apertures therethrough beyond but near to said diaphragm, and a second annular partition in said outer tube near the outlet end thereof, the outlet end portion of said inner tube having two coaxial walls spaced from each other and perforated, the outer of said two walls being secured to the inner edge of said second partition, the inner of said two walls being closed at its extremity.

2,747,845
HOUSEHOLD MIXER WITH AXIALLY YIELDABLE BEATERS

Erich Eugene Kohls, Mequon, and Glenn S. Thompson, Milwaukee, Wis., assignors to John Oster Manufacturing Company, Milwaukee, Wis., a corporation of Wisconsin

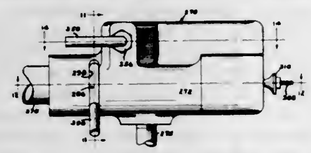
Application September 16, 1954, Serial No. 456,398
9 Claims. (Cl. 259—131)



1. An egg beater type mixer comprising: a body structure; a pair of driven gears each having a bore; bearing means on the body structure mounting said driven gears

on the body structure for rotation on spaced apart parallel axes and preventing axial motion of the gears relative to the body structure; a drive gear carried by the body structure; bearings on the body structure rotatably mounting the drive gear with a portion disposed between said driven gears and meshing therewith to impart rotation in opposite directions to the driven gears; a pair of elongated beater shafts each having beater blades on one end portion and having its opposite end portion slidably received in the bore of one of said driven gears to be guided thereby for motion relative to the body structure in opposite axial directions; a driving connection between each driven gear and the end portion of the beater shaft in its bore, said driving connection constraining the beater shaft to rotation with its driven gear without interfering with a substantial degree of endwise motion of the beater shaft in the bore of its driven gear, relative to the body structure; means for limiting end-wise motion of the shafts in a direction outwardly of the body structure; and means for normally yieldingly holding each shaft at its outward limit of motion comprising a spring in the body structure extending between the bearings for the drive gear and each driven gear and acting upon the adjacent end portion of the beater shaft therein.

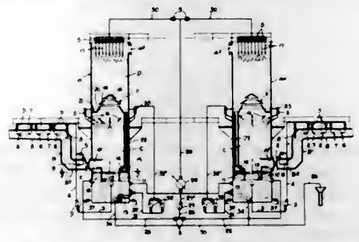
2,747,846
GUN FOR DIRECTING PLASTIC MATERIAL AGAINST WORK
Max M. True, Tulsa, Okla.
Original application March 17, 1953, Serial No. 342,952. Divided and this application October 18, 1954, Serial No. 462,947
4 Claims. (Cl. 259—151)



1. A gun for directing against work an adhesive plasticized aggregate, said gun comprising an elongated body having aligned recesses entering opposite ends and defining aggregate inlet and aggregate discharge passages, said body having spaced converging passages extending therein and establishing communication between the aligned recesses, an air tube carried by the body and projecting axially through the aggregate discharge passage, said body having an air chamber therein for receiving air under pressure, said body also having an air duct therein which communicates with the chamber and the air tube, and valve means in said body and interposed in the air duct between the chamber and the tube for regulating the flow of air through the air tube.

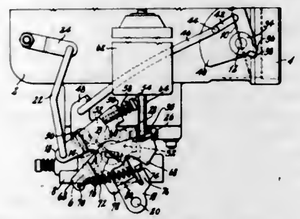
2,747,847
COKE OVEN GAS COOLER
Carl Otto, Manhasset, N. Y.
Continuation of abandoned application Serial No. 83,715, March 26, 1949. This application January 26, 1953, Serial No. 333,250
3 Claims. (Cl. 261—11)

1. An apparatus for multi-stage cooling gas withdrawn from a collecting main receiving hot gas from by-product coke ovens, comprising in combination, a structure enclosing substantially unobstructed first, second and third cooling spaces through which the gas being cooled may successively pass, said structure being a vertically elongated tank comprising a lower section surrounding a liquor holding space, an intermediate section surrounding said second space, an upper section surrounding said third space, partition means between said intermediate and upper portions formed with passages for the flow of gas from said intermediate section into said upper section and forming a wall of a collecting space for liquor sprayed into said third space, and partition means dividing said liquor holding space into three sections, a conduit for passing liquor from said collecting space into one of said liquor holding sections, separate spray nozzles associated with each of said spaces for spraying liquor into said spaces, means for withdrawing liquor from said first space including condensate and liquor previously sprayed into said space, a liquor cooler, means including a pump for moving liquor withdrawn from said first space through said cooler and into the nozzles associated with said third space, means for withdrawing liquor from



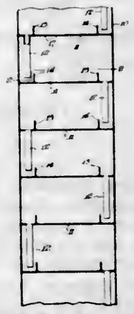
said third space including condensate and liquor previously sprayed into said third space, means for passing liquor withdrawn from said third space into the nozzles associated with said second space, means for withdrawing liquor from said second space including condensate and liquor previously sprayed into said second space and means for passing the liquor withdrawn from said second space into said spray nozzles associated with the first space, said tank having an inlet for the passage of gas from said first space into said second space, and for the passage of liquor from said first space into a second liquor holding section, the third liquor holding section being open at its upper end to receive liquor sprayed into said second space.

2,747,848
CARBURETOR
Ellsworth A. Kehoe, Rochester, N. Y., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 26, 1952, Serial No. 295,731
16 Claims. (Cl. 261—52)



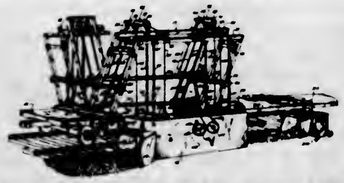
1. In a carburetor having an air inlet, a mixture outlet passage, a choke valve controlling the admission of air and a throttle valve for regulating the quantity of combustible mixture supplied to the engine; means for controlling the operation of said throttle valve including a member operable by said choke valve when moved to closed position for holding said throttle valve open to a greater degree than its normal idle position, in order to secure faster than normal idling, said member being movable by the choke valve during its opening movement to a position where movement of the throttle to normal idle position is permitted and being effective when in such position to prevent return of the choke valve to its closed position, means for holding said member in such position when the throttle is in normal idle position, and means operated automatically when the engine is inoperative for opening the throttle at least as far as the fast idle position to release said member and permit its return to normal position.

2,747,849
VAPOR AND LIQUID CONTACTING
Allan P. Colburn, Newark, James B. Jones, Wilmington, and Cyrus Pyle, New Castle, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
Application July 30, 1953, Serial No. 371,282
1 Claim. (Cl. 261—114)



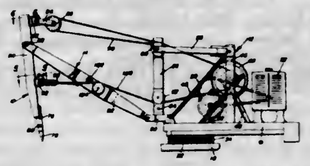
In the contacting of liquids and gases in which the liquid moves downward over and across successive sieve-type trays in spaced relation in a tower, a series of trays having wide slots and narrow slots in spaced relation in the ratio of between 4:1 and 15:1 in which the width of the wider slots is between 0.02 and 0.03 inch and the width of the narrow slots is between 0.006 inch and 0.02 inch, said trays being adapted to being maintained in a state of active bubbling and substantially free of leakage of reflux liquid at low vapor rates and substantially free of excessive pressure drop at high vapor rates.

2,747,850
SUSPENSION MEANS FOR RAILWAY BALLAST CLEANING APPARATUS
Sebastian F. Judd, Milwaukee, Wis., and Harry W. Protzeller, deceased, late of Milwaukee, Wis., by Sebastian F. Judd, executor, Milwaukee, Wis., assignors to Railway Ballast Engineers, Inc., Milwaukee, Wis., a corporation of Wisconsin
Application February 8, 1950, Serial No. 143,002
15 Claims. (Cl. 262—2)



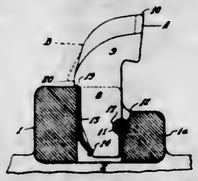
1. In an apparatus for cleaning railway ballast having a car adapted to be moved along a railroad track, having a ballast cleaning unit, and having means on said car for suspending said unit therefrom in operative position adjacent a side of said car: a draft member connected at one end to said cleaning unit; means releasable in response to a predetermined stress on said draft member for normally connecting the other end of said member to said car; a pair of spaced horizontally extending hook-shaped members on the side of said car having open rear ends; and a pair of spaced vertically extending hook-shaped members on said cleaning unit and having open lower ends, said hook-shaped members being positioned for interlocking engagement when said cleaning unit is in operative position, said hook-shaped members also being positioned to permit movement of said unit upwardly or rearwardly from its operative position relative to said car while at the same time preventing lateral movement of said unit relative to said car.

2,747,851
IMPACT TYPE FROST BREAKER
Clarence E. Marsh, Wauwatosa, Wis.
Application November 23, 1953, Serial No. 393,564
2 Claims. (Cl. 262—14)



1. The combination with a machine having a boom, of an elongated tool supporting member standing substantially upright and a penetrating tool mounted on said member adjacent its lower end, coupling means including a pivot connecting said tool supporting member to said boom at a point materially spaced from said tool, means for lifting said boom, tool supporting member and tool to a height from which the tool, tool supporting member and boom are released to fall by gravity, said tool supporting member and tool falling in a direction which is longitudinal of said member to deliver an impact blow upon an underlying surface, means for pivoting the tool supporting member about said pivot and holding the tool supporting member in pivotally adjusted position whereby the angle of the tool with respect to said underlying surface is adjustable, the connection between said coupling means and said tool supporting member being disposed substantially above the tool at the time of impact whereby stresses resulting from said blow are transmitted substantially longitudinally of said member between said boom and tool supporting member.

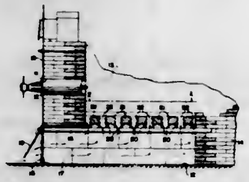
2,747,852
CUTTER BITS IN CUTTER CHAIN SOCKETS
Claude B. Krekeler, Cincinnati, Ohio, assignor to The Cincinnati Mine Machinery Company, Cincinnati, Ohio, a corporation of Ohio
Application May 4, 1953, Serial No. 352,759
10 Claims. (Cl. 262—33)



8. In a cutter chain assembly, a socket member having an elongated socket-forming opening therein, a cutting member having an elongated shank extending into said opening, a pivoting element in said opening intermediate the length thereof, a depression in the forward edge of said shank intermediate its length in engagement with said pivoting element, said shank being movable about said pivoting element from a tilted position to a seated position, the lower portion of the rear edge of said shank comprising a cutaway portion extending below said depression to permit the lower end of the shank to clear the rear wall of the said opening as the shank is moved from the tilted to the seated position, the upper portion of the rear edge of the shank comprising a face which

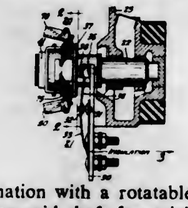
seats against the rear wall of the opening when the shank is in the seated position, the cutaway lower rear edge portion of the shank lying in spaced relation to the rear wall of the opening when the shank is in the seated position, and a shank engaging means in the space between the rear wall of the opening and the cutaway lower rear edge portion of the seated shank, said shank engaging means contacting the cutaway lower rear edge portion of the shank and acting to secure the shank in the seated position.

2,747,853
PREHEATED AIR CONSTRUCTION FOR FLUENT FUEL BURNING FURNACES
John F. Straitz, Philadelphia, Pa., assignor to National Airoil Burner Company, Incorporated, Philadelphia, Pa., a corporation of Delaware
Application March 16, 1953, Serial No. 342,512
6 Claims. (Cl. 263—51)



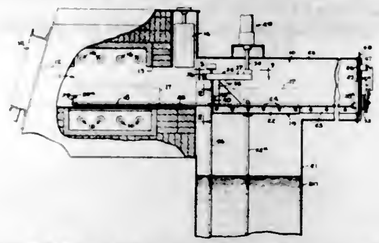
3. A furnace floor tile of a solid body of refractory material having a longitudinal horizontal bottom face, parallel vertical longitudinal inner side faces extending upwardly from said bottom face, oppositely disposed horizontal longitudinal faces extending outwardly from the upper margins of said side faces and and providing with said side faces supporting and positioning portions, outer longitudinal side faces extending upwardly from the outer margins of said horizontal faces, said longitudinal faces having horizontal grooves therealong, and a longitudinal top face connecting the margins of said outer side faces, said top face having the central portions thereof elevated.

2,747,854
SNAP ACTING SPEED RESPONSIVE DEVICE
William K. Schnepf, Webster, N. Y., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 27, 1951, Serial No. 233,741
6 Claims. (Cl. 264—15)



1. In combination with a rotatable shaft and a member supported on said shaft for axial movement relative thereto, a speed responsive device for effecting snap action axial movement of said member at a predetermined rotational speed of said shaft comprising; a support fixedly mounted on said shaft, a pair of opposed main weights pivotally mounted on said support and operatively connected to said member such that outward pivotal movement of said main weights will effect axial movement of the said member, a pair of auxiliary weights pivotally mounted on said main weights, and spring means connecting portions of said auxiliary weights and opposing outward movement thereof under the urge of centrifugal force due to rotation of said shaft, said spring means being connected with said auxiliary weights so that upon the attainment of said predetermined rotational speed of said shaft said auxiliary weights will pivot outwardly a sufficient distance to reduce the tension of said spring means whereby said main weights will instantly pivot outwardly so as to effect snap action axial movement of the said member.

2,747,855
HEAT TREATING APPARATUS
Harold N. Ipsen, Rockford, Ill.
Application September 11, 1951, Serial No. 246,088
9 Claims. (Cl. 266—4)



3. In a heat treating apparatus, the combination of, a furnace having a heating chamber and a door-controlled opening to permit a work tray to be slid along the floor of said chamber and out of said furnace, a platform adjacent said furnace opening and at the level of said floor, a quench tank disposed beneath said platform, mechanism for lowering said platform into said tank, two parallel rods mounted above said platform to slide endwise through said opening between a first position above said floor and a second position above said platform and laterally spaced apart to receive and hold a work tray between them, a finger rigidly mounted on each of said rods and projecting laterally therefrom to swing in behind a transverse part of a tray to pull the latter from said floor to said platform when said rods slide from said first position to said second position, and means to turn said rods thereby to swing said fingers into and out of engagement with a work tray.

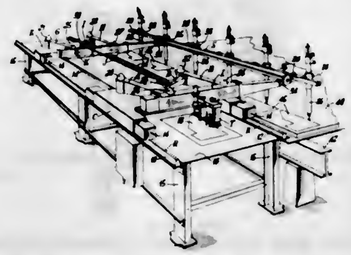
2,747,856
SUPPORT FOR BLOW TORCH
Howard A. Burdwood, South Portland, Maine
Application August 29, 1951, Serial No. 244,192
1 Claim. (Cl. 266—23)



In combination with a bracket member adapted to be releasably secured to a blow torch nozzle, a rigid strip having a straight portion adapted to bear against said bracket member, a relatively short end portion at one end of said straight portion making therewith an angle of 135°, and an extension at the other end of said straight portion and of a length to touch a plane surface perpendicularly abutted by said short end portion, and means releasably and adjustably securing said strip to said bracket member.

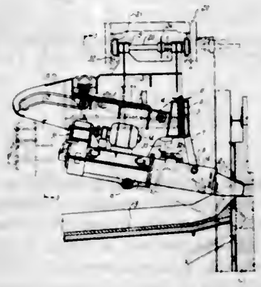
2,747,857
MULTIPLE BLOWPIPE SHAPE CUTTING MACHINE
Lloyd W. Young, Elizabeth, N. J., assignor to Union Carbide and Carbon Corporation, a corporation of New York
Application January 7, 1955, Serial No. 480,440
2 Claims. (Cl. 266—23)

1. For use with a reproducing machine having a carriage movable along a track, a pair of parallel swinging arms pivoted on said carriage, a transverse bar pivotally connecting said arms, and a tracer on said bar; an attachment for supporting a longitudinal row of reproducing tools comprising a bell crank arm rigid with one of said parallel arms, a trailer connected to said carriage and



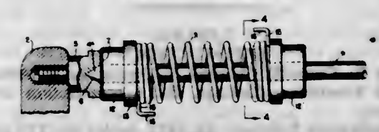
movable along said track and having corresponding parallel swinging arms and bell crank arm, a longitudinal link pivotally connecting said bell cranks, a transverse bar pivotally connecting said trailer arms, and a longitudinal tool supporting bar mounted on corresponding end portions of said transverse bars.

2,747,858
MOVABLE, TILTABLE, ADJUSTABLE MUD GUNS
James Russell Miller, Pittsburgh, Pa., assignor to William M. Bailey Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application September 18, 1952, Serial No. 310,313
1 Claim. (Cl. 266—42)



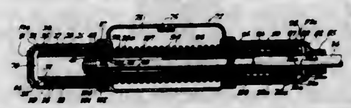
In a mud gun for sealing the tapping holes of multiple melting furnaces in which the tapping holes are arranged at varying vertical levels, an overhead support having spaced rails traversing the fronts of said multiple furnaces, said rails being disposed above the tapping holes, spaced axles having wheels mounted on said rails for movement on said rails, a carriage housing having laterally spaced extensions journalled on said axles, said housing having a plurality of cam tracks, a gun carriage having wheels supported on said cam tracks and having a rack engaged by a gear journalled in said carriage housing for moving said gun carriage on said cam tracks in the direction of the tapping holes, a mud gun pivotally mounted on said gun carriage and having a link connected at one end adjacent the nozzle end of the gun and connected at its other end to an adjustable screw mounted on the gun carriage, said carriage housing having brackets for mounting independent motors and gear reducing mechanism to actuate respectively the carriage housing on its wheeled axles to traverse the tapping hole side of the furnaces and to actuate the gun carriage in its forward and tilting movements.

2,747,859
SPRING BUFFERS
Donald M. Rager, Sunbury, Pa.
Application January 4, 1954, Serial No. 402,067
5 Claims. (Cl. 267—1)



1. A picker buffer comprising a cylindrical coiled spring, the middle convolutions of which are spaced relatively far apart, while the end convolutions are closely wound, and a plug of impact resisting material screw threaded into the closely wound convolutions of each end of said spring, the final turn of said spring terminating in an arm extending outwardly a substantial distance from the coil, said arm acting as a lever whereby the end convolutions may be loosened to release the plug when it is desired to remove the same.

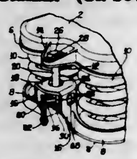
2,747,860
FORCE REVERSING BUFFER MECHANISMS
Kenneth J. J. McGowan, Pittsburgh, Pa., assignor to Westinghouse Air Brake Company, a corporation of Pennsylvania
Application September 30, 1950, Serial No. 187,789
13 Claims. (Cl. 267—1)



4. A buffer mechanism comprising a cylinder containing a fluid, a cylindrical piston assembly reciprocable in said cylinder, valve means for said piston assembly normally biased to a closed position, a leak orifice in said relief valve, said piston assembly being provided with relief ports for venting the interior of said assembly, a cylindrical member telescoping with said cylindrical piston assembly in a fluid tight arrangement, a spring interposed between said piston assembly and said cylindrical member biasing said assembly toward the end of said cylinder, a rod receivable within said cylindrical member and said piston assembly, a piston fixed to said rod and reciprocable in said piston assembly, a first relief valve normally biased to a closed position for sealing the relief ports venting the interior of said cylindrical piston assembly, a second relief valve coacting with said first valve and normally biased closed to bound a cavity within the cylindrical piston assembly between the piston and said valves and a second cavity between the valves and the cylindrical member, means for moving said piston assembly from its normal position upon movement of said piston rod in a first direction, the movement of said rod in said first direction moving said piston and said cylindrical piston assembly to increase the fluid pressure in said second cavity to open said second relief valve to equalize the pressure in both said cavities, the increased pressure in said cavities moving the cylindrical piston assembly ahead of the piston to bias said spring, the second valve closing when motion of the rod ceases, the biased spring tending to return the cylindrical piston assembly to its initial position thereby closing the piston assembly valve means and tending to increase the pressure within said piston assembly behind said piston for moving the piston in said first direction thereby increasing the pressure in said first cavity to open said first valve to relieve the pressure through said relief ports, the release of pressure permitting the biased spring to return the cylindrical piston assembly to its normal position, the

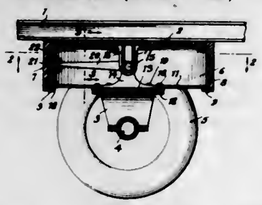
return of said cylindrical piston assembly increasing the pressure behind said piston to move said piston and rod additional increments of the distance the rod was moved in the first direction.

2,747,861
SPRING GROUP
Robert B. Cottrell, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application February 23, 1952, Serial No. 273,022
6 Claims. (Cl. 267—4)



1. A device of the class described comprising spaced spring plates having inturned flanges, a plurality of coil springs compressed between said plates and positioned by said flanges, a substantially horizontal ledge projecting from one of the plates externally of the flange, a housing having spaced substantially vertical lateral walls integrally formed with the flanges of the other plate, said housing comprising a substantially horizontal wall interconnecting said lateral walls, an opening in said horizontal wall, an elongated member rigidly secured to the ledge and projecting through said opening, an abutment fixed with respect to said member and facing the horizontal wall in said housing, and height restrainer means clamped by said springs on opposite sides of said member, said height restrainer means comprising compression dowels between the abutment and the horizontal wall, a spring engaging said dowels and operative upon releasing of pressure against said dowels to eject same from between the abutment and horizontal wall.

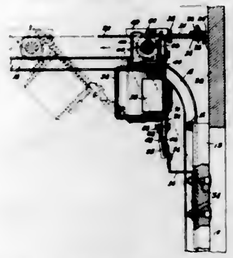
2,747,862
PNEUMATIC SUSPENSION DEVICES FOR VEHICLES
Rene Goulrand, New York, N. Y.
Application May 4, 1955, Serial No. 506,002
14 Claims. (Cl. 267—65)



1. In a vehicle, a pneumatic chamber having a bottom wall composed of a central disk surrounded by an annular flexible diaphragm, means for attaching an axle to the disk, a connecting rod located within the chamber and having one end pivotally attached to a wall thereof, a bracket secured to the disk and located within the chamber, the second end of the connecting rod being attached to said bracket.

2,747,863
DOOR OPENING DEVICE
Perry I. Huppert and Sidney Huppert, Schenectady, N. Y., assignors to J. P. S. Products, Inc., Schenectady, N. Y.
Application November 24, 1954, Serial No. 470,960
2 Claims. (Cl. 268—59)

1. In a door operating mechanism for an overhead opening door, a pair of relatively movable plates, a resilient means connecting said plates and adapted to resist relative movement of said plates, a socket mounted on one of said plates, a plug in alignment with said socket and mounted on the other said plate, said socket and plug adapted to be in engagement in the normal position of said plates and resilient means, one of said plates being



attached to said door, means mounted on the other said plate for operating said door, whereby when said door encounters an obstruction in closing and stops movement said plates will move apart against the action of said resilient means until said socket and plug have become disconnected thereby inactivating said operating means.

2,747,864
DOOR OPERATING APPARATUS
Harold L. Miller, Detroit, Mich., assignor to Robot Appliances, Inc., a corporation of Michigan
Original application November 1, 1951, Serial No. 254,300, now Patent No. 2,687,297, dated August 24, 1954. Divided and this application December 10, 1952, Serial No. 325,077
3 Claims. (Cl. 268—59)

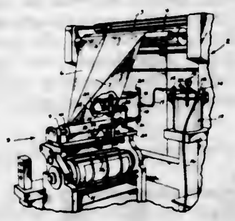


2. In an overhead door operating apparatus, a horizontal hollow rail, a reciprocal member extending longitudinally within said hollow rail, a reversible electric motor to move said reciprocal member in either direction longitudinally of said rail, a carrier member slidable along said rail and attached to said reciprocal member, said carrier member being adapted for attachment to a door, a switch controlling said reversible electric motor, a rotatable shaft extending longitudinally of and within said hollow rail, said shaft being operatively connected to and for operating said switch, a laterally extending arm attached to and rotatable with said shaft, and cam means on said carrier within said hollow rail to rotate said arm.

2,747,865
BOOKLET FORMING MEANS AND METHOD
Joseph R. Marshall, Jr., Portland, Oreg.
Application June 2, 1951, Serial No. 229,560
7 Claims. (Cl. 270—32)

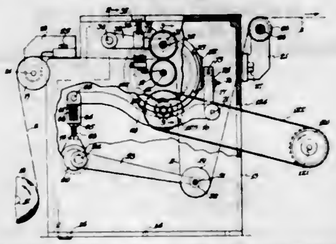
1. In combination with a paper folder for forming a multipage booklet from a sheet of paper, a pressurized liquid adhesive applicator means including a hollow nozzle member having a fine orifice means for emitting a controlled thin jet of liquid adhesive without admixture with air or other gas, and means for moving a sheet of paper past said jet at a uniform velocity and in a straight line to trace and to define a thin, straight line of adhesive over said sheet and paper folder means for associating an additional sheet section with said sheet, to be secured

thereto along said line of adhesive, and subsequently folding said two sections along said line of adhesive to



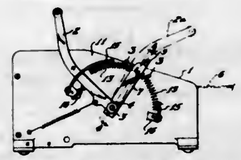
form a multipage booklet about said line of adhesive as a binding.

2,747,866
VARIABLE SPEED MEANS FOR WEB FEEDERS
Edgar H. Schmidt, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
Application February 27, 1952, Serial No. 273,754
6 Claims. (Cl. 271—2.3)



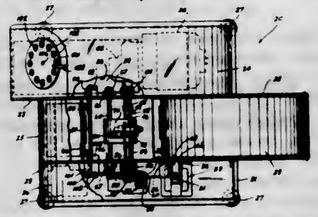
1. In a web feeder the combination comprising a pull roll set through which the web is threaded and a dancer roll around which the web is passed, a drive shaft connected to said pull roll set, an over-running clutch mounted on said drive shaft, a constant speed power source operatively connected with said drive shaft through said over-running clutch to turn said drive shaft in the direction in which said clutch transmits power and to thereby turn said pull roll set at a preselected web-supplying speed slightly lower than the mean speed of processing equipment served by said web feeder, a planetary differential having a sun gear fixedly attached to said drive shaft, planet gears journaled in a support operatively connected with a constant speed power source and turned in the same direction as said drive shaft and an internal ring gear, and means retarding movement of said ring gear with respect to said sun gear and said planet gears in response to a decrease in the size of the loop maintained by said dancer roll to thereby transmit additional turning power to said drive shaft through said planetary differential in a direction increasing the rate of feed of said web through said pull roll set.

2,747,867
PRODUCTION LEVER FOR TAPE DISPENSERS
August C. Hummel, Cincinnati, Ohio
Application June 26, 1953, Serial No. 364,347
4 Claims. (Cl. 271—2.4)



1. In a tape dispenser wherein a shaft is rotated to dispense the tape in a length proportional to the degree of rotation of the shaft, and wherein one end of the shaft extends outwardly beyond a wall of the dispenser and an actuating arm for rotating the shaft is fixed to the extending end thereof and adapted to be moved in an arcuate path, means for arresting dispensing movement of the actuating arm at a predetermined degree of rotation of the shaft, said means comprising a lever arm journaled on the shaft between the actuating arm and the said wall of the dispenser for movement independently of said actuating arm in an arcuate path paralleling the path of said actuating arm, a projecting abutment on said lever arm adapted to lie in the path of said actuating arm to prevent movement thereof beyond said lever arm, interengaging means carried by said lever arm and the wall of said dispenser for selectively maintaining the lever arm in predetermined positions, said lever arm being in substantially face-to-face contact with the said wall of the dispenser and capable of having its outermost end flexed outwardly so as to disengage said interengaging means to permit movement of said lever arm to a different position, the distance between the inner surface of the actuating arm and the said wall of the dispenser being greater than the thickness of the lever arm and yet smaller than the combined thickness of the lever arm and the interengaging means carried thereon, whereby when the actuating arm is juxtaposed to said lever arm during dispensing movement thereof, said lever arm is prevented from being flexed outwardly so as to disengage said interengaging means.

2,747,868
DIAL CONTROL SYSTEM FOR ELECTRICALLY ACTUATED AND CONTROLLED TAPE MEASURING AND DISPENSING MACHINES
Herbert W. Hempel, Belleville, Ill., assignor to Marsh Stencil Machine Company, Belleville, Ill., a corporation of Illinois
Original application September 12, 1949, Serial No. 115,238. Divided and this application December 12, 1951, Serial No. 261,204
12 Claims. (Cl. 271—2.4)

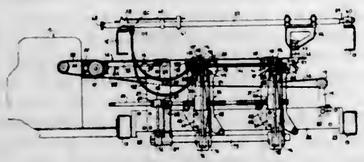


1. In an automatic tape measuring and dispensing machine comprising tape feeding mechanism, tape measuring mechanism, and electrically powered means for actuating said tape feeding and measuring mechanisms: an electrical control system comprising a rotatable non-return dial for selecting a tape segment to be measured and dispensed, switch means connected with said dial for actuation thereby for effecting energization of said powered means to effect tape measuring and dispensing, and displaceable means connected to the tape measuring mechanism for effecting deenergization of said powered means as measuring of the selected tape segment is completed.

2,747,869
SHEET HANDLING APPARATUS
Emmon Bach, Scarborough, Edwin W. Goodwin, New Rochelle, and Richard H. Rauecker, Jamaica, N. Y., assignors to Dexter Folder Company, Pearl River, N. Y., a corporation of New York
Application November 14, 1951, Serial No. 256,202
13 Claims. (Cl. 271—54)

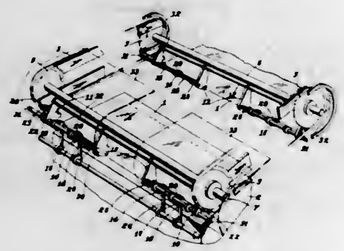
1. In a sheet handling apparatus, conveyor means for receiving sheets successively and advancing said sheets to

a transferring position, sheet transferring means comprising a plurality of reciprocable fingers spaced longitudinally of said conveyor means and adapted to engage each sheet in turn at and along a longitudinal edge thereof and move said sheet transversely of said conveyor means,



means for periodically imparting to said fingers reciprocations crosswise of said conveyor means, and means operable while said fingers are in motion for simultaneously adjusting said fingers in opposite directions transversely of said conveyor means.

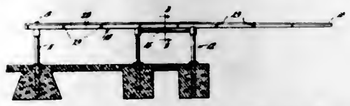
2,747,870
SHEET CONVEYOR
Headley Townsend Backhouse, Nassau, Bahamas, British West Indies
Application February 26, 1952, Serial No. 273,494
Claims priority, application Great Britain February 28, 1951
7 Claims. (Cl. 271—79)



1. A sheet conveyor of the kind comprising two endless chains, sprocket wheels for supporting the chains to travel in unison in opposed relation in two spaced parallel vertical planes, at least two rearwardly facing sheet-grippers spaced apart along a line perpendicular to the two planes, means for attachment of the grippers to the chains for movement therewith between sheet receiving and sheet delivery stations, and operating means to cause the grippers to take hold of the leading edge of a sheet at the receiving station and to hold the sheet while travelling to the delivery station and there to release the sheet, there being a substantial central portion of the space between the chains without grippers, which conveyor is characterised by the features that the attachment means for the grippers comprise bars carrying the two grippers at opposite sides of the said central portion of the space extending perpendicular to the said planes of the chains, each bar being attached at one end to one of the two chains, and that there are means supporting the other ends of the bars and bridging the said central portion of the space, whereby access to the central portion of a sheet held by the grippers is provided.

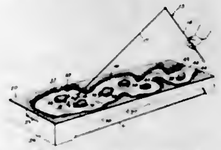
2,747,871
DIVING BOARD
Paul E. Brandt and Ernst J. De Ridder, Louisville, Ky., assignors to Reynolds Metals Company, Richmond, Va., a corporation of Delaware
Application July 22, 1953, Serial No. 369,589
2 Claims. (Cl. 272—66)

1. A lightweight metal diving board comprising a top channel section having downwardly projecting edge flanges and at least one downwardly projecting longitudinal rib spaced from said downwardly projecting edge flanges, a bottom section identical to said top section having upwardly projecting edge flanges and at least one upwardly projecting longitudinal rib spaced from said upwardly projecting edge flanges, said top channel section and said bottom channel section each having a constant cross-section throughout the entire length of each



of said sections, said sections positioned in back to back relationship with said flanges and rib of said top section overlapping the said flanges and rib of said bottom section a varying predetermined amount in the longitudinal direction whereby the board is provided with a predetermined taper, and attaching means at said edge flanges whereby said sections are retained against relative displacement.

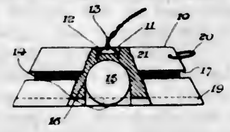
2,747,872
MAGNETIC FISHING GAME
Louis A. Harvey, Detroit, Mich.
Application October 13, 1952, Serial No. 314,438
1 Claim. (Cl. 273—1)



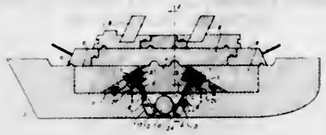
A magnetic toy fish pond game comprising an open-centered upstanding panel-supporting structure, a horizontally-disposed transparent panel mounted on the upper part of said structure, an obstacle and barrier arrangement disposed adjacent the lower side of said panel and defining a tortuous open-bottomed passageway extending thereacross, a shelf mounted below said panel in closely-spaced relationship thereto with its inner end terminating short of the entrance to said passageway, said panel-supporting structure having an inlet opening therethrough from the exterior thereof to the space between said shelf and said panel; a toy fish of narrower width than said inlet opening and passageway having a magnetically-attracted portion therein, and a magnetic fish bait adapted to be placed on the upper side of said panel and having therein a magnet of sufficient power to lift from said shelf a fish inserted through said inlet opening and to hold said fish against the lower side of said panel against the counterpull of gravity thereon but of insufficient power to lift a fallen fish from the nearest horizontal surface underlying said shelf and panel, whereby the withdrawal of said magnetic fish bait from proximity to the fish by the collision of the fish with said obstacle and barrier arrangement while being drawn through said passageway by said magnet removes the magnetic sustaining force from said fish and causes the fish to be temporarily lost by falling downward onto the underlying surface beyond the lifting range of said magnet.

2,747,873
TETHERED BALL GAME APPARATUS
Yale Carroad, Elmhurst, N. Y.
Application October 15, 1952, Serial No. 314,781
2 Claims. (Cl. 273—95)

1. A tethered ball game apparatus for use in conjunction with paddles comprising, a unitary block member, a swivel secured to the block, an elastic tether tied at one end to the swivel, a ball secured to the free end of the tether, and an opening in the bottom of the block in the form of a hemi-spheric bottom well having a diameter slightly smaller than that of the ball, said opening being adapted to compressively receive the ball therein, said block being provided with longitudinal grooves cut into the bottom of the block, the sides of which grooves slope inwardly toward the center of the block to receive and hold the tether.



2,747,874
RUPTURABLE TOY OBJECT
Michael John Cappella, Jr., and Bernard A. Fraulo, New Haven, Conn.
Application October 16, 1953, Serial No. 386,426
3 Claims. (Cl. 273—102.1)



1. In a rupturable toy, a base having a recess opening through a side of the base, a block secured to said base and bridging said recess, said block having a top surface, a plunger mounted on said base for movement crosswise of the base, said plunger having an outer portion extending through said opening and reaching beyond one side of the base, said plunger having an inner portion located within said recess, at least one vane fixed on and projecting laterally from said inner portion of the plunger, said vane having an opening defining a retaining edge on the vane, at least one projecting member, said projecting member comprising a vertical bar positioned through the vane opening, said bar having a lower end having a stop for engagement with the underside of the vane and an upper end, a depression in the top surface of said block, an upper portion of said bar being located in said depression, a retaining disc on the upper end of the bar, a projecting helical spring circumposed on the bar and compressed between said disc and a portion of said depression, said bar having a notch intermediate its ends, said notch being engageable with said retaining edge on the same in a compressed condition of the projecting member, and a retracting helical spring on said outer portion of the plunger, said retracting spring being compressed between a portion on said plunger and the said one side of the base, said retracting spring serving to releasably maintain said retaining edge engaged in said notch.

2,747,875
BUCKETBALL GAME
Rush E. Martin, Oshkosh, Wis.
Application July 28, 1955, Serial No. 524,945
5 Claims. (Cl. 273—105)



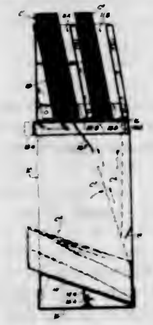
1. A game apparatus of the class described, comprising a box-like housing having an inclined bottom, a trough inclined from the bottom and leading from said housing into which balls deposited in said housing gravitate to the front end of said game apparatus, a plurality of pivoted supporting bars disposed transversely of said housing, numbered receptacles having open upper ends, supported on said pivoted supporting bars, said receptacles adapted to receive and hold balls tossed into said receptacle in playing the game, and means for simultaneously tilting said supporting bars and buckets forwardly, releasing said balls from said receptacles into said housing and trough.

2,747,876
ARROW AND METHOD OF MAKING SAME
Clarence Roy Teller, Duluth, Minn.
Application August 12, 1953, Serial No. 373,743
3 Claims. (Cl. 273—106.5)



1. In an arrow, a tubular shaft of bonded laminated glass fiber cloth, a solid glass fiber plug cemented in one end of said shaft and extending therefrom, a nock having a recess of a shape to engage said plug and press fit over said plug, a second solid glass fiber plug cemented in the other end of said shaft and extending therefrom, and a metal pile having a recess of a shape to receive said second solid plug and press fit over said second plug, said metal pile being crimped on said plug.

2,747,877
CARD SHUFFLING MECHANISM
Joseph O. Howard, Chicago, Ill.
Application October 24, 1950, Serial No. 191,749
2 Claims. (Cl. 273—149)



1. In a card-shuffling machine including a casing having upper and lower card chambers and a horizontal traveling card drop-out plate; improvements comprising, to wit: means mounting said plate to reciprocate between said chambers and to project to a normal starting position beyond said casing in one direction of its travel; for manual engagement; a stud on said plate; a driving gear in said casing closely adjoining said stud; means on said gear providing a radial slot drivingly coupling said gear to said stud; a long helical spring attached at one

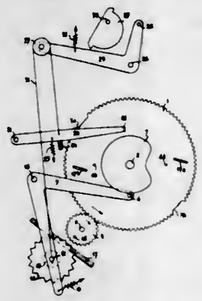
end to a radially extended part on said gear, and anchored at its opposite end within said casing; movement of the projecting part of the shuffle plate inwardly of the casing from said normal position turning said gear to tension said spring for returning said gear; and escapement means for regulating the spring-driven turning of said gear to produce a slow return of the drop-out plate to said normal position.

2,747,878
GOLF STROKE CORRECTION INDICATOR
Harrison B. Paton, Lansing, Mich.
Application May 11, 1953, Serial No. 354,281
6 Claims. (Cl. 273—186)



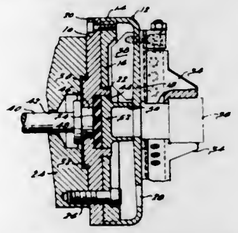
2. In a device for detecting predetermined characteristics in a golf swing, the combination comprising: a golf club having a shaft, a head at one end of the shaft and a hand grip at the other end of the shaft; a tube closed at one end and open at the other; a bracket affixing said tube to said shaft with said open end of said tube facing toward said hand grip.

2,747,879
TALKING MACHINE WITH AN AUTOMATIC DISC CHANGING DEVICE
Eric Bacher, Yverdon, Switzerland, assignor to Paillard S. A., Sainte-Croix, Switzerland, a Swiss company
Application January 16, 1952, Serial No. 266,687
Claims priority, application Switzerland July 7, 1951
5 Claims. (Cl. 274—10)



1. In a talking machine with an automatic changing device, an apparatus for insuring a pause between the playing of two succeeding records and comprising, a cyclic mechanism means for controlling the change of records, said means including a control wheel and a cam positioned on said control wheel, a pinion means operatively associated with said control wheel for intermittently driving said cyclic mechanism including said control wheel, a first pivoted lever positioned in operative relationship with said control wheel, said lever having a finger member at one end thereof, a first spring means for urging said finger member on the end of said lever against said cam, said spring means being operatively connected to said lever at the other end thereof, a shaft journaled in said lever at the end thereof and adjacent to the point at which said spring means is operatively connected thereto, a wheel fixed to said shaft and engageable with said pinion, said cam controlling the position of said first lever and thereby the engagement of the wheel with said pinion, a second pivoted lever positioned in operative relationship with said control wheel, a second spring means operatively connected to said second lever at one end thereof for urging said second lever to a position for stopping said control wheel, stop means positioned on said control wheel for engaging said second lever at one end thereof, ramp means positioned on said control wheel adjacent said stop means for engaging said second lever at one end thereof after said end disengages the said stop means, a flexible member having one end attached to said shaft, said flexible member being wound on said shaft during engagement of said wheel with said pinion, said flexible member being operatively associated with said second lever, whereby said second lever is moved for restarting said cyclic mechanism including the control wheel when a predetermined length of said flexible member has been wound on said shaft.

2,747,880
RUBBER POWER BOOSTER
George Hohwart, Farmington Township, Oakland County, and Ernest Frederick Hohwart, Detroit, Mich., assignors to N. A. Woodworth Company, Ferndale, Mich., a corporation of Michigan
Application February 23, 1952, Serial No. 273,106
10 Claims. (Cl. 279—4)

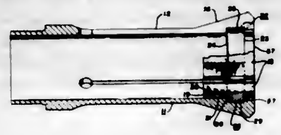


1. A diaphragm chuck comprising a backing plate, a cup-shaped diaphragm fastened peripherally to said plate, a plurality of clamping jaws arranged substantially centrally in annular series on said diaphragm, means forming a central chamber behind said diaphragm and said chamber having an annular wall defining an opening to said chamber, an elastomeric material in the bottom of said chamber, a pusher member behind and bearing against said diaphragm slidably supported by the annular wall of said chamber and operative to flex the diaphragm so as to operate said clamping jaws, a tubular member interposed between said elastomeric material and said pusher member and slidably supported by the annular wall of said chamber, one end of said tubular member bearing against said pusher member, the other end of said tubular member bearing against said elastomeric material, and an actuator in and slidably supported by said tubular member having a radial surface bearing against said elastomeric material, said actuator and said tubular member jointly cooperating to confine said elastomeric material in the chamber, and said actuator adapted to transmit pressure through said elastomeric material through said tubular member and thence to said pusher member whereby to force the latter against the diaphragm.

2,747,881
MASTER COLLET JAW INSERTS
Charles W. Simpson, Cleveland, Ohio, assignor to The National Acme Company
Application July 20, 1953, Serial No. 369,042
16 Claims. (Cl. 279—46)

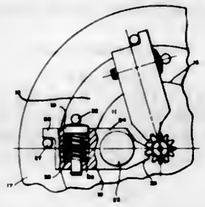
1. A collet for hollow spindles comprising a tubular member longitudinally slotted to form a plurality of resilient segments, replaceable jaw members for said resilient segments, a transverse undercut rib on one of said members and a transverse undercut groove in the other of said members, said undercut ribs and grooves being

defined by surfaces extending arcuately, and at least one of said surfaces also extending axially to thus establish



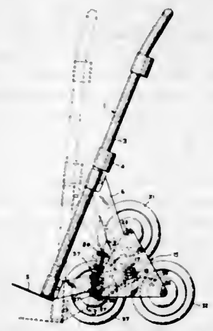
one of said ribs and grooves tapered in an arcuate direction for interlocking engagement upon relative arcuate movement between said collet and jaw members.

2,747,882
GEAR CHUCK
Ralph P. Garrison, James O. Garrison, and David D. Walker, Dayton, Ohio, assignors to Garrison Machine Works, Inc., Dayton, Ohio, a corporation of Ohio
Application September 28, 1953, Serial No. 382,702
11 Claims. (Cl. 279—106)



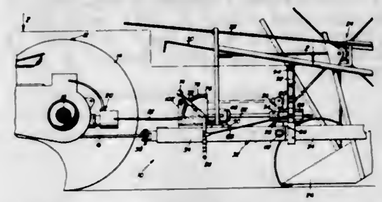
1. A chuck, including a rotary body having a central work piece mounting area, a series of chuck jaws in surrounding relation to said central area, said jaws being pivotally mounted on said body, a relatively rotatable ring supported on said body in concentric relation to said central area, portions on said ring engaging said jaws and rocking said jaws between gripping and releasing positions of adjustment in response to relative rotary motion of said body and ring, and spring means maintaining said portions in engaging relation to said chuck jaws.

2,747,883
HAND TRUCK WITH MULTIPLE WHEEL PAIRS
Frank S. Frost, Oak Park, Ill.
Application November 23, 1953, Serial No. 393,755
1 Claim. (Cl. 280—5.26)



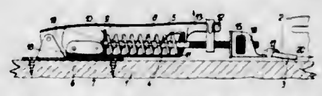
A hand truck adapted to be moved over flat surfaces and obstacles comprising, a main axle, a frame on said axle movable in an arc about said axle, wheel supporting members rotatably mounted on each end of the axle, at least three wheels mounted in equally spaced relation on each of said wheel supporting members, and means rotatable with said frame including spaced rods disposed to move in opposite directions substantialy parallel to said main axle, spring members to hold said horizontal rods out of engagement with said wheel supporting members, a latch member including a pin having a cam surface, said cam surface to coact and engage said rods on their inner ends on downward movement thereof to move said rods into said releasable engagement with the periphery of said wheel supporting members at two spaced points in the arc of movement of said frame, said means and frame adapted to coact at each of said points of contact whereby movement of said frame will allow only one wheel on either side of the frame to touch the surface of movement, and a lever member to move said pin outwardly to allow said springs to actuate the rods out of engagement with said wheel supporting members to allow the same to rotate freely.

2,747,884
LEVELING ATTACHMENT FOR FARM IMPLEMENT HITCHES
Arthur De Vilder, Brooklyn, Iowa
Application December 2, 1954, Serial No. 472,570
9 Claims. (Cl. 280—6)



1. A leveling attachment for vehicles having a fluid pressure system and a drawbar for pulling implements equipped with a tongue, said attachment comprising an articulated tongue having a first section adapted to be attached to a vehicle drawbar and a second section attached to the implement, said sections being pivotally secured together, and means interconnecting the first and second sections for adjusting the angular relation between said sections for retaining the second section level, said means being responsive to variations in the ground surface traversed by the vehicle and implement, said means being actuated by the fluid pressure system on the vehicle, said means including an upstanding bracket mounted on each of said sections, an extensible and retractable piston and cylinder interconnecting said brackets, means for supplying and exhausting pressurized fluid from the piston and cylinder, and control means for controlling the movement of the piston and cylinder, said control means including a control valve, a lateral arm extending from said control valve, a pendulum swingably mounted on said second section, a link interconnecting said pendulum and arm for actuating said control valve when the second section is moved to an inclined position thereby actuating the piston and cylinder for returning the second section to a horizontally level position.

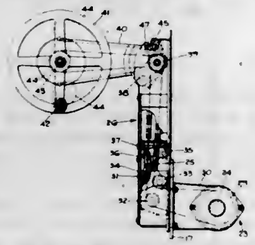
2,747,885
SKI BINDING WITH TENSION CABLE
Alois Rehacek, Vienna, Austria, assignor to Weiner Metallwaren- und Schnallenfabrik Schar-Smolka, Wein, Austria, a firm
Application April 13, 1954, Serial No. 422,955
7 Claims. (Cl. 280—11.35)



4. In a ski binding, in combination, a tension cable, a base, first anchor means secured to said cable, second anchor means secured to said base, a rigid elongated mem-

ber having one end connected to one of said anchor means, a coil spring having one end connected to the other end of said member in coaxial relationship therewith, a spring support engaging the other end of said spring, a lever pivotally connected to said support, and link means coupling said lever to the other of said anchor means; said link means, said spring and said member exerting upon said lever a torque tending to swing said lever into a cable-slackening position in response to tension of said cable; and detent means secured to said member intermediate said spring and said one of said anchor means and normally engaging a part of said lever, said detent means disengaging said lever part in response to excessive cable tension corresponding to an abnormal deformation of said spring; thereby enabling said lever to assume said cable-slackening position.

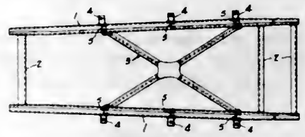
2,747,886
VERTICALLY ADJUSTABLE STEERING WHEEL AND SUPPORT ASSEMBLY
Arthur L. Lee, Upper Arlington, Ohio, assignor to The Jeffrey Manufacturing Company, a corporation of Ohio
Original application August 30, 1947, Serial No. 771,542, now Patent No. 2,618,491, dated November 18, 1952. Divided and this application January 3, 1951, Serial No. 204,213
1 Claim. (Cl. 280—87)



A shuttle car including a load carrying body having a generally upright side wall and an operator's station at one side of said wall, oppositely facing operators' seats at said operator's station, steering mechanism for said shuttle car located at said operator's station constructed and arranged so as to provide leg room for an operator free of steering mechanism, said steering mechanism including an arm extending laterally and generally horizontally outwardly into said operator's station between said seats and above the legs of an operator seated thereon and on an axis transverse to the direction in which said operator faces, a pair of oppositely facing steering wheel means on the outer end of said arm on an axis extending transversely thereof, means mounting the inner end of said arm on said upright wall for pivotal movement about a horizontal axis thereby to adjust the effective height of said steering wheel means, and locking means adjacent the inner end of said arm including a scalloped edged slot and a tapered clamping hand operated means cooperating with said scalloped edged slot.

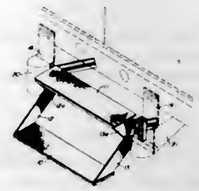
2,747,887
BOX FRAME BULKHEAD
Arnold G. Schilberg, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application November 6, 1953, Serial No. 390,516
3 Claims. (Cl. 280—106)

1. In a vehicle frame, a pair of horizontally spaced integrally joined hollow side rails having walls of rectangularly shaped cross-section, an X-frame member disposed between the side rails with the spaced arms thereof extending only to the inner wall of the side rails and secured to said wall at the meeting juncture of the arms and walls, body support members extending horizontally outwardly from each side rail and secured to the side rails, said X-frame member and said body support members acting under load in service as external forces on the side rails and tending to deform the rectangular section thereof and effect parallelogramming of said rails, and a bulkhead disposed within the side rails transversely of



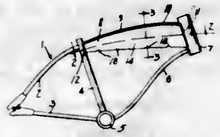
the same at locations therein generally centrally of the junctures respectively between the said rails and the X-member arms and body support members where said members are secured to the side rails to counteract said external forces, said bulkheads extending to each of the four walls of the respective rails to increase the rigidity of the side rails and prevent parallelogramming of each rail in service.

2,747,888
RETRACTABLE TRAILER STEP
Lowell R. Jones, Columbus, Ohio
Application June 30, 1953, Serial No. 365,092
3 Claims. (Cl. 280—166)



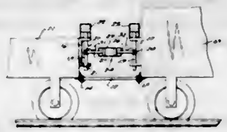
1. In combination with a vehicle having a bumper bar extending transversely thereof at the rear end and below the bed frame thereof, said bumper bar being carried by brackets depending from said bed frame, a step structure movable between extended and retracted positions through the space between said bumper bar and the rear end of the bed frame and between said brackets, a pair of guides each of which is composed of spaced parallel bars having their rear ends secured to said brackets and their forward ends secured to supports depending from the bed frame and extending downwardly and forwardly from said bar, a transverse rod extending through openings in the step structure and into said guides to connect the step structure to said guides so that when in extended position the step structure is in engagement with and is supported by said bar and when in retracted position is disposed ahead of and in engagement with said bar, said step structure including a pair of steps each of which is in horizontal position when the step structure is extended and the lower one of which is in angular position when the step structure is retracted and will wedge against said bar to keep the ends of the rod at the forward lower ends of said guides, said lower step being attached to the lower ends of side plates, the upper step being attached to triangular plates secured to the upper ends of said side plates and each of said triangular plates having a vertical forward edge which is the edge that engages the rear edge of the bumper bar when the step structure is retracted, the upper ends of said side plates having a vertical edge which coincides with said edge of the triangular plates and a horizontal edge which engages the upper ends of the bumper bar, said side plates having forwardly extending lugs which have the openings which receive said pivot rod.

2,747,889
REACH BAR ASSEMBLY FOR BICYCLE FRAME
Homer L. Mueller, Cleveland, Ohio, assignor, by mesne assignments, to American Machine & Foundry Company, a corporation of New Jersey
Application February 26, 1953, Serial No. 339,049
2 Claims. (Cl. 280—281)



1. The combination with a bicycle frame of the type which includes a steering head and a saddle post mast, of a generally horizontally extending frame member having its opposite ends complemental with and laterally interlockingly secured to said head and said mast respectively, and comprising a pair of complemental shells of which one has a peripheral flange provided with resilient end portions laterally interlocked with said head and said mast whereby said one shell may be jumped into place and the other also has a peripheral flange with end portions which fit within the end portions of said one shell and with a longitudinally extending portion which is in laterally overlapped relation with a corresponding longitudinally extending portion of the flange of said one shell.

2,747,890
VEHICLE COUPLING FOR PRODUCING ADDITIONAL GROUND PRESSURE OF THE COUPLED VEHICLES
Walter Gerhardt and Alfred Schropp, Traunstein, Germany, assignors to Hans Albert Sicklinger, Providence, R. I.
Application November 6, 1951, Serial No. 255,094
Claims priority, application Germany November 16, 1950
4 Claims. (Cl. 280—406)



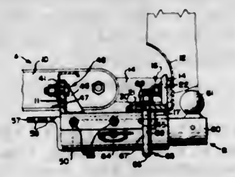
1. In a device for transferring weight between a pair of vehicles each having longitudinally spaced ground engaging elements and simultaneously shifting the ground pressures between said elements, a pair of vertically spaced coupling members connecting said vehicles, one of said coupling members being of relatively fixed length, means for extending and retracting the other of said coupling members for respectively pushing said vehicles apart and pulling them toward each other, means on one of said vehicles for holding one end of one of said coupling members against vertical movement in one direction, a force-transmitting member on the other of said vehicles movable in a vertical direction, and means connecting said one coupling member with said force-transmitting member, whereby said one coupling member may be forced in said vertical direction by said force-transmitting member.

2,747,891
TOWING DEVICE WITH ADJUSTABLE BUMPER CLAMPS
Edward A. Neff, Chicago, Ill.
Application November 13, 1953, Serial No. 391,884
4 Claims. (Cl. 280—480)

4. A towing device including a flexible tow line for vehicles comprising a pair of clamp members having gripping portions adapted to embrace the opposed lateral edge portions of a vehicle bumper, a first member of said pair being secured to one end of said tow line and having sufficient tensile strength to withstand substantially the entire towing strain, an elastic member having one end secured to the same end of said tow line, the second member of said pair of clamp members being secured to the other end of said elastic member in spaced-apart relation to said first clamp member, said spaced-apart distance being less than the distance between said opposed lateral edge portions when said elastic member is in unstretched condition, said elastic member being stretchable to permit said clamp members to embrace said bumper and to prevent said clamp members from disengaging from said bumper when the tension on said tow line is relaxed, and buckle means on said second clamp member for adjusting the spaced-apart distance between said clamp members.

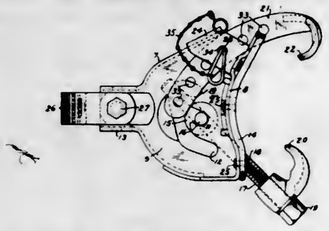


2,747,892
DETACHABLE BUMPER ATTACHED TRAILER HITCH
James E. Jones, near Chattanooga, Tenn.
Application October 20, 1954, Serial No. 463,565
6 Claims. (Cl. 280—491)



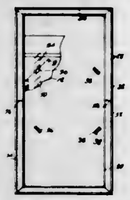
1. A trailer hitch for a vehicle having a chassis including a rear cross frame member and a bumper assembly, including a bumper bar disposed rearwardly of the rear cross frame member and resilient braces connected between the chassis and the bumper bar, said trailer hitch including bumper bar-attaching means; cross frame member-attaching means including a substantially horizontally-disposed portion comprising a substantially flat elongated plate and flanges extending downwardly at the longitudinal edges of said plate, said cross frame member-attaching means also including an upwardly-extending portion, rigid with said plate; means for attaching said upwardly-extending portion to said rear cross frame member; coupling support means, including an elongated socketed member, having outer surfaces to slidably receive said flanges in face to face relationship with said surfaces, and a surface to slidably receive said plate in face to face relationship; means to detachably connect said socketed member with said rear cross frame-attaching means, coupling means carried by said coupling support means, including a cylinder slidable in the socket of the socketed member; means to detachably secure said coupling support means and coupling means together with a portion of said cylinder extending outwardly of said socketed member rearwardly of said bumper bar; and connecting means directly connecting said socketed member and bumper bar-attaching means and supporting said socketed member.

2,747,893
VEHICLE TOWING BUMPER CLAMP
Steen Strand, West Allis, Wis., assignor to The Fulton Company, West Allis, Wis., a corporation of Wisconsin
Application January 11, 1955, Serial No. 481,055
3 Claims. (Cl. 280—502)



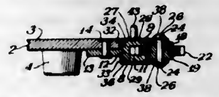
3. In a vehicle towing bumper clamp, a unitary draft frame having a yoke and a rear wall interconnecting spaced side walls provided with several superimposed sets of horizontally alined pivot sockets and also having a draft applying portion located between said walls forwardly of said sockets, a resilient bumper engaging pad mounted upon said rear frame wall rearwardly of and extending above and below all of said sockets, a swing nut confined between said side walls and having horizontally alined pivots interchangeably cooperable with any selected set of said sockets, an elongated bolt having a threaded upper end portion adjustable directly through said nut transversely of said pivots, a lower bumper edge clamping hook carried by said lower bolt remote from said swing nut, an elongated arcuate upper member slidably adjustable within said yoke, means for retaining said upper member in various positions of adjustment, and an upper bumper edge clamping hook secured to said upper member remote from said sockets, said bolt being adjustable within said swing nut to always cause said hooks to force the medial portion of an intervening bumper against said pad in horizontal alinement with said draft applying frame portion.

2,747,894
LEDGER AND STATEMENT COLLATING MEANS
Arthur C. Porter, Rexburg, Idaho
Application November 30, 1951, Serial No. 259,225
1 Claim. (Cl. 281—1)



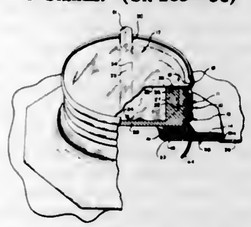
A frame for inserting rectangular statements into rectangular ledger sheets of that type having a plurality of vertically arranged downwardly and outwardly extending parallel slits adjacent each side of the upper portion thereof and a plurality of vertically arranged downwardly and inwardly extending parallel slits adjacent each side of the lower portion thereof, said slits defining straps therebetween, said frame comprising a rectangular board, a first upper projection affixed to said board adjacent one side thereof, a first lower projection affixed to said board adjacent said one side thereof, a second upper projection affixed to the board adjacent the other side thereof, and a second lower projection affixed to the board adjacent the other side thereof, said upper and lower projections in each case being in vertical planes in spaced parallel relation to the adjacent side of the board, said upper projections being in a plane in spaced parallel relation to the upper edge of the board, said lower projections being in a plane in spaced parallel relation with the lower edge of the board, said projections each being elongated and relatively short, the longitudinal axes of said projections extending at a 45° angle with respect to the sides of the board, and the longitudinal axes of the first and second upper projection being respectively parallel to the longitudinal axes of the second and first lower projection, said projections being adapted to engage certain straps in said ledger sheet whereby to spread them to receive the corner portions of the statement.

2,747,895
POSTING DEVICE
Marchand Blanchard Hall, Chicago, Ill.
Application March 26, 1953, Serial No. 344,845
6 Claims. (Cl. 282—29)



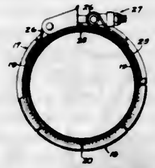
1. In a posting device, a board having a writing surface, a guide bar secured along a side edge of said board and having an inner guide surface parallel to and spaced from said edge, equidistantly spaced abutments provided along the outer edge of said bar, a carriage having top and bottom walls snugly slidably engaging the top and bottom surfaces respectively of said bar and having an apertured web spaced outwardly from said abutments connecting said top and bottom walls along the outer edge of the carriage and said carriage having also a guide flange at the inner edge of the carriage downturned into the space between said side edge of the board and the inner guide surface of the guide bar and slidably engaged with said inner guide surface, and rotatable means journaled directly on said carriage top and bottom walls including knurled wheel means normally bridging two adjacent abutments and an operating wheel projecting through the aperture in the carriage web for manual rotation to turn said wheel means and thereby move the carriage step by step along the guide bar.

2,747,896
SPUT CONNECTION FOR FLEXIBLE PLATE
Michael J. Quillinan, Bronx, N. Y.
Application May 5, 1952, Serial No. 286,097
5 Claims. (Cl. 285—38)



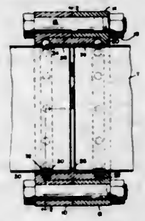
1. An annular closure fitting and container wall in combination, said fitting including a first collar having a flange projecting inwardly from its lower edge, an outer collar complementary to said first collar and having a flange projecting outwardly from the lower edge of said outer collar, the flanges of said collars resting on said container wall, an annular rigid member affixed to said container wall beneath the plane thereof for supporting each of said collars and flanges, the inner edge of said annular rigid member overlying said inwardly projecting flange, the upper free edge of said first collar overlying the upper free edge of said outer collar, and sealing portions on said container wall provided in the area of joinder of said collars and flanges.

2,747,897
SERRATED SEMI-V-BAND COUPLING
Francis Leighton, Altadena, Calif., assignor to Marman Products Company, Inc., Los Angeles, Calif., a corporation of California
Application May 16, 1955, Serial No. 508,345
7 Claims. (Cl. 285—129)



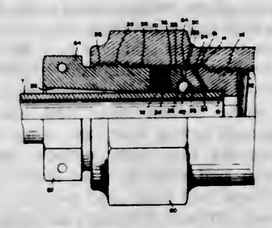
1. In a flexible tube coupling: a pair of coupling collars adapted to be attached to respective tube sections to be coupled, said collars having respective end flanges for end-abutting, sealing contact with one another and having respective remote end parts displaced radially outwardly from the body diameter of said collars; a coupling sleeve having a diameter such as to encompass said remote end parts, having at one end a reentrant latching part adapted for end-engagement with one of said end parts, and having adjacent its other end a series of circumferentially separated resilient latching fingers including respective camming shoulder portions converging toward said other end and engageable against the other of said end parts with a camming action for drawing said collars together to establish flattening deflection of said flanges against one another in response to radially inward movement of said fingers; and a band clamp encircling said fingers endwardly thereof from said shoulders and operable, by constriction, to effect said radially inward movement of the fingers.

2,747,898
BALL DETENT TUBE COUPLING
Sumner D. Wiltse, Detroit, Mich.
Application June 16, 1952, Serial No. 293,712
7 Claims. (Cl. 285—142)



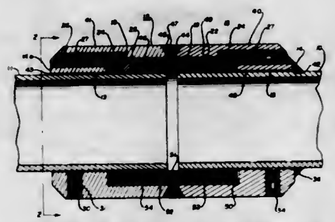
1. A tube coupling comprising a pair of axially aligned, generally tubular, rigid, annular members having their inner ends spaced apart prior to assembly with tubes to be coupled and having at the outer ends thereof generally radially inwardly extending flanges, a rigid annular spacer disposed within said annular members and having end surfaces spaced axially inwardly from said flanges, the confronting surfaces of said flanges and the end surfaces of said spacer being conical to define radially outwardly narrowing spaces therebetween, a ball cage assembly in each of said spaces including an annular array of rigid balls and an annular body of deformable material in which said balls are embedded, the cross-sectional shape of said cage conforming substantially to that of said spaces, said deformable material and balls substantially filling said spaces and said balls being substantially tangent to the end and radially inner surfaces of said ball cages, and clamping means extending between said annular members and effective to move said members only in an axial direction toward each other whereby the confronting surfaces of said flanges and the end surfaces of said spacer both engage said balls to force said balls inwardly toward the axis of said coupling to form individual separate substantially spherical seats in tube ends.

2,747,899
BALL COMPRESSION TYPE TUBE FITTING
Sumner D. Wiltse, Detroit, Mich.
Application June 16, 1952, Serial No. 293,711
13 Claims. (Cl. 285—166)



5. A fitting comprising a body having an outwardly open tube receiving recess, a concavely conical annular seat in said recess, a generally conical annular ferrule engaging said seat, the inner portion of said ferrule being formed to provide an axially outwardly extending short annular flange, an inner ball thrust race having a portion engageable with said flange to press said flange into engagement with the outer surface of a tube received in said fitting, a ball cage assembly comprising an annular body of deformable material having a plurality of balls embedded therein, an outer ball thrust race, said inner and outer ball thrust races having confronting annular surfaces defining a radially outwardly narrowing space therebetween, said surfaces being engageable with said balls, an expansible sealing gasket engaging the axially outer surface of said outer race, and a member threaded to said body having a portion engageable with the axially outer portion of said gasket to press against said gasket and to apply pressure therethrough to said outer race to force said balls radially inwardly into engagement with the tube, and to press said inner race against the axially bent flange of said ferrule.

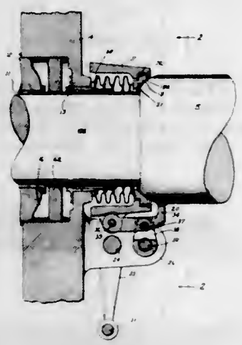
2,747,900
PACKED SLEEVE PIPE COUPLING
Joseph B. Smith, Berea, Ohio
Application September 6, 1952, Serial No. 308,182
1 Claim. (Cl. 285—196)



A pipe coupling for repair of pipelines or the like, comprising, first and second sleeve sections in substantially abutting relationship, each of said sleeve sections comprising inner and outer portions, each of said outer portions having flat radial inner and outer walls defining the longitudinal extent of such portions, said inner and outer portions having inner surfaces defining continuous concentric axial bores therethrough, said inner walls defining connecting walls between said inner and outer portion inner surfaces, an annular ring sleeve liner having an inner surface defining a through bore and a cylindrical outer surface, said sleeve liner being carried by said inner portions, said inner portion inner surfaces

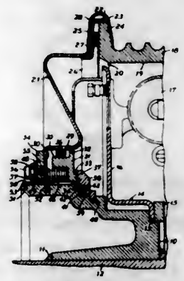
being in snug peripheral engagement with said liner outer surface, said sleeve sections and said liner being welded together, said liner having first and second end walls, said liner end walls being spaced from said sleeve section inner walls to provide a pair of inwardly directed grooves, first and second annular packing rings carried in said grooves, said first packing ring being interposed between said first liner end wall and said first sleeve section inner wall, said second packing ring being interposed between said second liner end wall and said second sleeve section inner wall, first and second annular unitary thrust rings, said first thrust ring being interposed between said first packing ring and said first sleeve section inner wall, said second thrust ring being interposed between said second packing ring and said second sleeve section inner wall, said thrust and packing rings each having inner and outer surfaces, said thrust and packing ring outer surfaces being in close association with said inner portion inner surfaces, said outer end portion, said liner, said packing ring and said thrust ring inner surfaces defining a through substantially cylindrically contoured bore, said outer portions each having at least three threaded bores extending longitudinally therethrough, the threaded bores being continuous with said inner portion bores, a thrust screw threaded into each of said threaded bores to press the thrust rings axially toward one another to axially compress and radially expand the packing rings, and clamping means carried by said sleeve sections to fix the coupling to prevent axial relative movement of the coupling and pipes which are to be connected.

2,747,901
AUXILIARY SEAL AND SUPPORT FOR A SHAFT WITHIN A HOUSING
Thomas W. Clavell, Hempstead, N. Y., assignor to Fairchild Engine and Airplane Corporation, Farmingdale, N. Y., a corporation of Maryland
Application April 25, 1955, Serial No. 503,594
4 Claims. (Cl. 286—11)



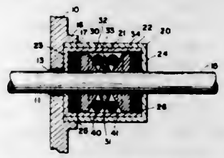
1. An auxiliary seal for a shaft which operates within a sealed housing comprising a sealing element supported for movement relative to the shaft from a retracted inoperative position to an operative position in sealing contact with the periphery of the shaft, an expandable sealing means connected between the housing and the sealing element, forming a continuous seal therebetween, actuating means to shift the sealing element from the inoperative, retracted position into sealing contact with the shaft, a support for said shaft, said shaft support being normally in an inoperative position, and means controlled by said actuating means to move the support into supporting contact with said shaft.

2,747,902
SEAL FOR WHEEL BRAKE
Frank E. Payne, Glencoe, and Harry I. Sole, Chicago, Ill., assignors to Crane Packing Company, Chicago, Ill., a corporation of Illinois
Application September 19, 1950, Serial No. 185,638
3 Claims. (Cl. 286—11.14)



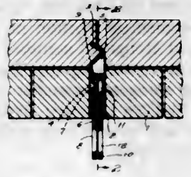
1. A seal for sealing the annular space existing between a stationary central supporting hub presenting an outer cylindrical surface and a concentric surrounding brake drum, said seal comprising a generally circular disk-like shield having its outer peripheral regions secured to and sealed with respect to the outer end of said brake drum, said shield extending radially inwardly toward said hub and having a laterally turned portion providing a cylindrical wall spaced from said hub, and a radial flange extending inwardly from the outer end of said cylindrical wall to a region in close proximity to said hub, thus providing a central opening closely surrounding the hub, a seal seat mounted on said hub and presenting a radially extending outwardly facing seat surface, a sealing washer surrounding said hub and having a radially extending inwardly facing sealing surface designed for running contact with the opposed sealing surface on the seal seat, said washer being disposed within the cylindrical confines of said cylindrical wall on the shield, a first flexible deformable sealing element disposed between the washer and the cylindrical wall on said shield, means establishing a driving connection between the washer and shield, means yieldingly urging said washer toward said seat to cause the running sealing surfaces on the washer and seat to bear against each other in sealing relationship, and a second flexible deformable sealing element surrounding said hub and secured to said shield adjacent the edge of the central opening provided therein and having a lip bearing against the cylindrical surface on said hub and having wiping contact therewith, said first flexible deformable sealing element and said opposed running surfaces on the sealing washer and seal seat on the one hand and said second flexible deformable sealing element on the other hand providing an annular chamber therebetween adapted to contain a lubricant.

2,747,903
ROTARY SEAL
August H. Heinrich, Euclid, Ohio, assignor to Metal Seal & Products, Inc., Euclid, Ohio, a corporation of Ohio
Application February 29, 1952, Serial No. 274,155
7 Claims. (Cl. 286—11.15)



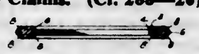
1. A rotary seal for a shaft comprising, a pair of axially spaced rigid abutments freely surrounding the shaft, a pair of annular sealing members each carried by the shaft adjacent one of said abutments, a rigid partition fixedly carried by the shaft intermediate said annular sealing members, a pair of movable rigid partitions each movably supported on the shaft intermediate said fixed partition and a different one of said sealing members, a pair of resilient rings each concentrically disposed about the shaft intermediate said fixed partition and a different one of said movable partitions, and means in the form of an adjacent beveled face on a corresponding partition for supporting each of said rings in radially expanded condition between the fixed partition and each of said movable partitions to axially urge the respective movable partitions against the adjacent end seals and maintain a fluid tight seal between the shaft and the corresponding abutments.

2,747,904
DEVICE FOR REMOVABLY CONNECTING AN ELEMENT TO A WALL
Karl Koch, Frankfurt am Main, Germany
Application November 14, 1951, Serial No. 256,260
Claims priority, application Germany November 24, 1950
4 Claims. (Cl. 287—23)



1. A device for removably connecting an element to a wall, said device comprising in combination, an elongated hollow member fixedly mounted in said wall and having at least one open end located adjacent to the outer wall surface, said hollow member having a projection located at an intermediate inner surface portion thereof and projecting transversely into the interior thereof, said projection having an extremity spaced from the inner surface portion of said hollow member located opposite said extremity; a pair of identical elongated support members each having a pair of openings extending transversely therethrough and respectively located adjacent the outer and inner ends thereof, each of said support members being of a thickness slightly less than the distance from said extremity of said projection to said opposite inner surface portion of said hollow member, one of said support members being located in said hollow member and having said opening adjacent the inner end thereof located about said projection so as to be secured against longitudinal movement, and the other of said support members being located adjacent to said one support member in said hollow member so as to maintain said one support member in engagement with said projection, and the openings at the outer end portions of said support members being coaxially aligned with respect to each other.

2,747,905
COMPOSITE GASKET FORMED IN SITU
Robert Clade, Detroit, Mich., assignor, by mesne assignments, to W-K-M Manufacturing Company, Inc., a corporation of Delaware
Application August 18, 1950, Serial No. 180,223
5 Claims. (Cl. 288—20)



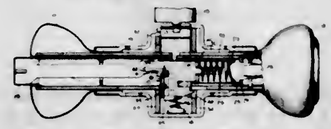
1. A gasket for insertion between overhanging surfaces comprising, a pair of substantially concentric reinforcing ring members inclosing an annular area, and a resilient member positioned in and completely filling said annular area and having portions overlapping the upper-most and lower-most portions of said rings whereby said members are mutually held in assembled position and said rings are maintained out of contact with the overhanging surfaces.

2,747,906
INSIDE CONTROL FOR REFRIGERATOR DOOR LATCHES
Walter E. Emmert, Los Angeles, Calif., assignor, by direct and mesne assignments, of one-half to Horace Fong, Oakland, Calif.
Application October 3, 1952, Serial No. 312,978
8 Claims. (Cl. 292—92)



1. For use in a door lock comprising a pair of relatively movable interengageable holding elements to be mounted one to an outer side of a door member and the other to an adjacent support member and adapted for release from said outer side of the door; the combination with a first of said holding elements of mechanism for controlling said first holding element from the inner side of the door, said mechanism comprising an elongated longitudinally movable push rod operatively connected to said first holding element and extending through one of said members, a latch element extending into a transverse opening in said push rod at said inner side of the door and support to prevent longitudinal movement of the rod toward said outer side thereof, a handle telescopically carried by and longitudinally movable relative to said push rod at said inner side of the door and support, and wedge means operable by said handle upon predetermined longitudinal movement thereof relative to said push rod and toward said outer side of the door and support to release said latch element, said combination including means movable with said handle and forming a shoulder engageable with said push rod after said predetermined movement of the handle relative thereto to transmit further longitudinal movement of the handle to the push rod.

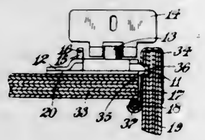
2,747,907
LOCKING MECHANISM FOR TUBULAR LOCK
Abraham H. Golden and Raymond W. Schmid, Stamford, Conn., and Paul P. Kubik, Bronx, N. Y., assignors to The Yale & Towne Manufacturing Company, Stamford, Conn., a corporation of Connecticut
Application October 14, 1952, Serial No. 314,644
7 Claims. (Cl. 292—169)



1. In a lock of the class described, a bolt retractor movable transversely of said lock, a dog having a base lying in a seating position with one side against said bolt retractor, a spring holding said dog with its base seated against the retractor and yielding to enable the dog to move relatively to the retractor away from seating position, a detent lug on said dog extending from that side of said base opposite the seated side of said base in an

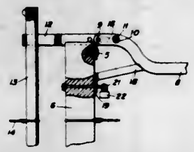
angular direction, a push piece moving transversely of said bolt retractor between locking and unlocking positions and spring pressed toward unlocking position, a part on said push piece moving in contact with said detent lug as the push piece moves against the thrust of its spring from unlocking to locking position whereby to cam said dog angularly away from its seat with said dog fulcrumming relatively to said retractor, said push piece part when thus coacting with the detent lug contributing considerable movement to said dog against the pressure of its spring to allow said push piece part to pass by said detent lug, and said detent lug thereafter moving with said dog behind said push piece part to dog said push piece in locking position.

2,747,908
FASTENER
Henry George Bennison, London, England, assignor to Microcell Limited, London, England, a British company
Application November 17, 1953, Serial No. 392,670
8 Claims. (Cl. 292—241)



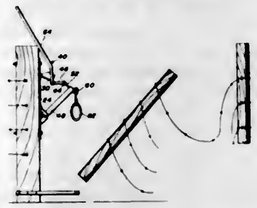
1. A packing case comprising a surrounding wall, an internal abutment on said wall spaced away from a free edge thereof, a removable lid resting on said abutment, an inwardly directed shoulder on said wall outside said lid, a housing secured to the outside of the lid, a rotatable fastening element in said housing and having a cam face adapted during rotation to project from the housing, and to engage said shoulder and draw the lid against the abutment, a spindle fixed to the rotatable element and projecting through a bearing in said housing, a manipulating handle pivotally connected to said spindle, a projection on the housing arranged to extend through a hole in the manipulating member when the latter is swung flat against the housing, a hole in said projection for receiving a locking member.

2,747,909
WIRE GATE FASTENER
Rudolph W. Fuhringer, Dutton, Mont.
Application June 7, 1955, Serial No. 513,683
2 Claims. (Cl. 292—247)



2. A wire gate fastener of the character described comprising: a hand lever mounted for swinging movement in a vertical plane on the fence post, a yoke pivotally mounted on said lever and engageable over the upper end portion of the wire gate bar for operatively connecting the lever thereto, and means for securing the lever in operative position, said means including a leg fixed on the lever at an intermediate point, a foot on the free end of said leg engageable with the post, said foot having a slot therein, an eye bolt mounted horizontally in the post and engageable in the slot, and a lock engaged in the eye bolt for anchoring said foot thereto.

2,747,910
FLEXIBLE GATE FASTENER AND TIGHTENER
Vina W. Salmon, Deadwood, S. Dak.
Application August 18, 1954, Serial No. 450,620
7 Claims. (Cl. 292—247)



7. A device for drawing two fence posts together, said device comprising a plate adapted for mounting on one fence post, a bracket swingably mounted on said plate, lever means swingably attached to the free end of said bracket, an intermediate portion of said lever means between the side edges of said bracket extending normally in a plane at an angle to the plane of said plate, an elongated member swingably attached at one end thereto to said plate remote from said bracket, means pivotally connected to said intermediate portion of said lever means and attached to said elongated member adjacent the free end thereof whereby swinging movement of the lever means swings said elongated member toward and away from said plate, and an element extending from said elongated member and having means thereon for attachment to the other fence post.

2,747,911
FOOD HANDLING AND SCRAPING TOOL FOR USE WITH GRILLS
Paul H. Kuever, San Gabriel, Calif.
Application September 30, 1954, Serial No. 459,344
3 Claims. (Cl. 294—7)



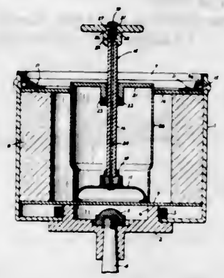
3. In a food handling and scraping tool: a flat member having a plurality of notches along at least one edge in which each of said notches is shaped to form a portion of an elliptical curve, and in which there is provided an auxiliary notch along another edge, other than said one edge of said flat member.

2,747,912
KITCHEN TONGS
Murry H. Franklin, Bastrop, La.
Application November 17, 1952, Serial No. 320,908
2 Claims. (Cl. 294—29)



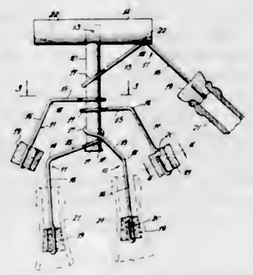
1. Tongs comprising two pivoted members, finger pieces secured to an end of each of said members, the ends of said members remote from said finger pieces having secured thereto curvilinear inwardly concave holding portions, flanges at the ends of said holding portions, inwardly extending prongs secured to said flanges, said prongs being offset from the center lines of said flanges, said prongs meeting when said tongs are closed, and convergent inwardly extending spikes secured to said holding portions, said spikes not meeting when said tongs are closed, said spikes being offset from the center lines of said holding portions.

2,747,913
SUCTION CAKE REMOVING TOOL
Henry J. McDermott, Collingdale, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application March 31, 1953, Serial No. 346,000
3 Claims. (Cl. 294—64)



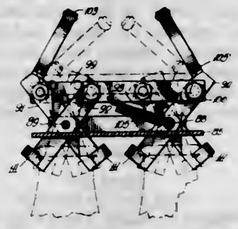
1. A cake lifter for removing yarn cakes from spinning buckets having false bottoms comprising an elongated shank, a suction member secured to one end of said shank, a handle secured to the opposite end of said shank, walls defining a bore in the shank providing fluid communication between the atmosphere and the interior of the suction cup, a manually operable spring-loaded valve for selectively opening and closing said bore, means adjacent the handle for actuating said valve, and a sleeve mounted on said shank between the handle and the suction member and enclosing the suction member.

2,747,914
BOTTLE CARRIER
Frank W. Lyons, Arlington Heights, Ill., assignor to himself and Alice Rose Lyons, Arlington Heights, Ill., jointly
Application February 20, 1952, Serial No. 272,632
4 Claims. (Cl. 294—87)



4. A bottle carrier of the class described comprising a handle having a depending stem extending perpendicularly therefrom at the approximate center thereof, and a plurality of hangers carried by said stem, each of said hangers comprising an elongated, intermediately bent, wire-like member having a loop at one end, encircling the stem and slidable therealong and a compressible plug at the other end yieldingly engageable in the neck of a bottle, said handle having a groove at each end thereof with which the intermediately bent portion of each hanger is selectively engageable.

2,747,915
BOTTLE LIFTER AND CARRIER
Leslie A. Mapes, Palisade, N. J.
Original application June 26, 1951, Serial No. 233,611. Divided and this application July 10, 1953, Serial No. 367,211
2 Claims. (Cl. 294—87.24)



2. A bottle lifter comprising, in combination, a substantially rectangular plate adapted to engage the top of a group of bottles, a pair of bearing supports mounted on the top of said plate near the opposite ends thereof, rods extending in a generally longitudinal direction mounted in said bearing supports near the opposite sides of said plate, a pair of scissors-like levers pivotally mounted on said rods near each of the four corners of said plate and having the lower ends of said levers extending below said plate and the upper ends of said levers extending above said plate, arms connecting the upper ends of oppositely disposed levers for movement of said levers in unison with four levers moving in one direction and the other four in the opposite direction, clamps secured to the lower ends of the scissors-like levers, said lower ends extending a distance below the plate such that the clamps carried thereby engage the necks of the bottles when the plate is in contact with the tops of the bottles, and a pair of handles secured to the upper ends of said scissors-like levers to move them in unison, said handles being so positioned that when engaged by the hand of the operator and the hand is clenched, said oppositely disposed levers are moved to cause said clamps to move towards each other to firmly engage the necks of said bottles.

2,747,916
GRAPPLING HOOK FOR BANANA HANDLING EQUIPMENT
Walter A. Reich, Kansas City, Mo., assignor to A. Reich & Sons, Inc., Kansas City, Mo., a corporation of Missouri
Application May 10, 1954, Serial No. 428,530
2 Claims. (Cl. 294—106)



1. In a grappling hook, a support; a crosshead rigidly mounted on the support at one end of the latter, said crosshead being provided with a pair of opposed wings extending laterally from the support in opposite directions; a jaw member on one face of each wing respectively in opposed relationship to the support; pivot means mounting the jaw members on the wings for swinging movement on parallel axes, cooperable gripping elements integral with the proximal faces of the jaw members; intermeshing cogs on said faces of the jaw members separate from said gripping elements interlocking the jaw members for simultaneous swinging movement, said co-

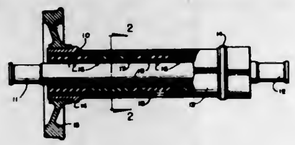
operable gripping elements comprising elongated, alternately offset serrations substantially parallel with said axes of swinging movement of the jaw members, said intermeshing cogs comprising continuations of the serrations and being disposed between the serrations and the crosshead; an outwardly flared finger integral with each jaw member respectively, presenting a substantially V-shaped entrance mouth to the serrations, said serrations being disposed between the fingers and the cogs; and an L-shaped projection integral with the crosshead intermediate the ends thereof and having a laterally-extending leg overlying the jaw members for engagement thereby to limit the extent of upward swinging movement of the jaw members.

2,747,917
MELON CARRIER
Willard C. Smith, Dade City, Fla.
Application August 11, 1953, Serial No. 373,469
2 Claims. (Cl. 294—116)



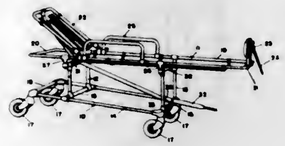
1. In an apparatus of the character described, an article carrier comprising a pair of smooth surface inwardly concaved arcuate plates movable toward each other to form a substantially cylindrical grip, at least one pair of upwardly extending support arms secured one to each plate, means pivotally securing each of said pairs of arms to each other, upwardly extending second arms on each of said pairs of arms extending at an obtuse thereto, and handle means movable on said upwardly extending second arms operable to move each of said support arms and said arcuate plates toward each other around an article to be carried.

2,747,918
RAILWAY VEHICLE AXLES
Waves Blackwood, Los Angeles, Calif.
Application February 12, 1953, Serial No. 336,618
1 Claim. (Cl. 295—36)



A railway vehicle axle assembly comprising an axle having bearing journals on the respective opposite ends thereof, a hollow cylindrical outer axle having respectively at the opposite ends thereof end portions with ridges of annular form and serving as abutments, a vehicle wheel press fitted on at least one of the end portions and the other end portion adapted to correspondingly receive a vehicle wheel, a plurality of resilient cylindrical members extending throughout the length of the outer axle and between the inner and outer axles, each of the resilient members comprising an inner metal shell, an outer metal shell and an intervening cylinder of rubber, said inner shell having a radially outwardly pressed portion, said outer shell having a radially inwardly pressed portion, whereby said rubber will be compressed between the metal shells so that the friction between the rubber and the metal is sufficient to hold the shells and the rubber in assembled relationship, whereby any shocks will be taken away from the inner axle and will be absorbed to a large degree by the rubber resilient members and the load will be more evenly distributed throughout the axle than with the conventional structures.

2,747,919
MULTI-LEVEL AMBULANCE COT
Richard H. Ferneau and Maynard E. Miley, Washington Court House, Ohio, assignors to Washington Mortuary Supply Company, Washington Court House, Ohio, a corporation of Ohio
Application October 30, 1952, Serial No. 317,732
1 Claim. (Cl. 296—20)



An ambulance cot comprising a frame mounted on rollers and including longitudinally-extending resilient rods, a frame adapted to bear the patient and mounted on the first-named frame, and means for adjustably connecting the second frame to the first frame so that it can be adjusted from a lower position adjacent to the first frame to an upper position spaced above the first frame, said means comprising a pair of legs at each end of the cot hinged to the first frame and to the second frame and swingable in vertical planes when the second frame is adjusted relative to the first frame, one pair of said legs being pivoted to the first frame adjacent the end thereof and the other pair of said legs being pivoted to the first frame at a location spaced substantially from the end thereof, said legs being connected to the second frame by rigid brackets depending from the second frame, the lower ends of said brackets engaging the first frame when the second frame is in its lower position, the pair of brackets at one end engaging the longitudinal rods of the first frame at its end and the other pair of brackets engaging said rods of the first frame at a point spaced substantially from its end, springs anchored to the first frame and operatively connected to one of the pair of legs tending to urge said legs downwardly and to fold the frame together, and means for holding said second frame in its upper position, said holding means comprises a locking bar which is pivoted to the second frame adjacent one end thereof and cooperates with a lock on the first frame adjacent the other end thereof, said bar being pivoted to the second frame for vertical swinging movement, a yoke lock on the first frame through which said bar slidably passes, a locking notch in the upper edge of said bar for engaging said yoke lock, and a spring carried by the first frame engaging said bar and tending to swing it upwardly into contact with said yoke lock.

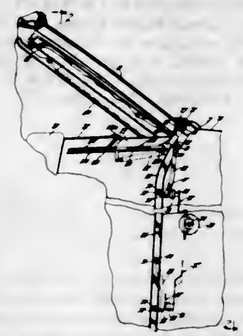
2,747,920
COWL VENTILATORS
Theodore Ulrich, Detroit, Mich., assignor to American Motors Corporation, a corporation of Maryland
Application December 8, 1952, Serial No. 324,647
2 Claims. (Cl. 296—28)

2. A body construction for an automotive vehicle comprising an enclosure formed by a shelf arranged on a dash board of said vehicle and a panel included in a cowl panel assembly of said vehicle, said enclosure extending nearly the whole length of said cowl panel and having double end walls made up of spaced end flanges integral with said shelf and said cowl panel, an actuating mechanism mounted on said dash board,



said actuating mechanism wholly enclosed by said enclosure.

2,747,921
RETRACTABLE REAR WINDOW FOR AN AUTOMOBILE
Charles P. Hooverson, Pontiac, and Mathew H. Schumer, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 22, 1952, Serial No. 327,314
16 Claims. (Cl. 296—44)



1. Apparatus of the character described, including: a window; means for moving said window between two terminal positions in different planes; a closure panel in the path of movement of the window comprising a shelf located adjacent one edge of the window when the window is in one terminal position; means adjacent said window for mounting said panel for lateral bodily movement relative to said window; and operating means on said panel engaging said window, movement of said window in one direction causing lateral bodily movement of said closure panel in another direction.

2,747,922
VEHICLE WINDOW WELL DRAINAGE AND SEALING MEANS
Frank M. Gibson, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 30, 1952, Serial No. 317,688
3 Claims. (Cl. 296—44)

1. Automobile body sealing apparatus of the character described, including: a body rocker panel having a substantially vertical portion comprising an exterior wall of an automobile body, said portion having a drainage opening therethrough; an outer body panel having a substantially vertical portion spaced from said rocker panel and a substantially horizontal portion joined with said rocker panel along the lower edge thereof, said horizontal portion having a depression providing a drainage trough to said drainage opening; and a flexible check valve



mounted on the exterior surface of said rocker panel adjacent said opening and adapted to allow drainage from said automobile body, but to prevent entry of dust into said automobile body through said opening.

2,747,923
RETRACTABLE REAR WINDOW FOR AN AUTOMOBILE
Robert F. McLean, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application February 10, 1951, Serial No. 210,306
9 Claims. (Cl. 296—44)

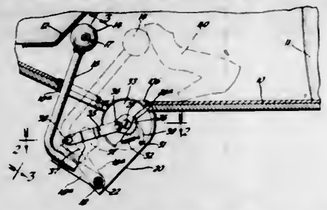


1. An automobile rear window construction of the character described, including: an automobile body comprising a rear deck having a generally horizontal surface portion with a narrow elongated opening therein, said opening extending transversely of and substantially across said body and being generally crescent-shaped with end portions extending in directions forwardly of said body; a crescent-shaped window; and means for mounting said window on said body for swingable movement in an arcuate path from a retracted position wherein said window is within said opening and entirely below said surface to an extended position wherein said window projects out of said opening, said means comprising a first arm having one end connected to said window at the lower edge thereof and extending forwardly of said body beneath said surface, a lever arm pivotally mounted on said body beneath said surface forwardly of said opening and connected to the other end of said first arm, and a hydraulic cylinder and piston device mounted on said body and connected to said lever arm for pivoting said lever arm to move said window between retracted and extended positions.

2,747,924
ADJUSTABLE FOOT REST FOR VEHICLES
Frederick C. Walther, Grosse Pointe, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 1, 1952, Serial No. 302,082
10 Claims. (Cl. 296—75)

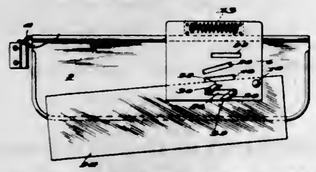
1. An adjustable foot rest of the character described, including: a foot rest; means for mounting said foot rest for reciprocating movement; a member movable in only one direction; means constantly restraining movement of

said member except in said one direction; and means connecting said foot rest and member to provide for recipro-



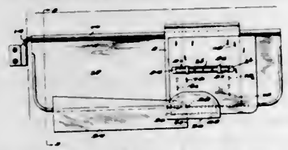
cating movement of said foot rest upon movement of said member in said one direction.

2,747,925
ANTI-GLARE SCREEN HOLDER
Robert B. Ralls, Tucson, Ariz.
Application December 18, 1952, Serial No. 326,721
15 Claims. (Cl. 296—97)



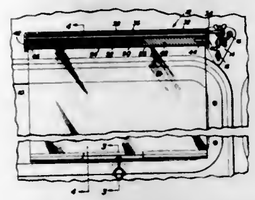
1. A holder for an anti-glare screen, comprising substantially coextensive front and rear plates, spring hinge means connecting said plates near their upper edges, and urging them toward each other, whereby the holder may be detachably clamped over the edge of the usual visor in a motor vehicle, each of said plates being provided with a slot therethrough; said plates having a vertical width substantially as great as the vertical width of the sun visor; two tinted, transparent anti-glare screens; and latching means, carried by said screens and projecting respectively through said slots and engageable with one face of the corresponding slotted plate, for holding said screens in position on their respective plates.

2,747,926
ANTI-GLARE ATTACHMENT FOR MOTOR VEHICLES
Robert B. Ralls, Tucson, Ariz.
Application August 12, 1953, Serial No. 373,715
4 Claims. (Cl. 296—97)



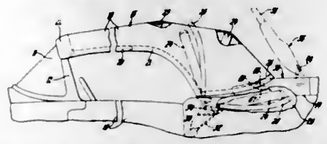
1. An anti-glare device for motor vehicles, comprising a base plate, means for detachably securing said plate to the sun visor of a motor vehicle, said plate being provided at its lower edge with a forwardly and horizontally extending bracket terminating in an upwardly extending front portion spaced from said plate, said bracket being provided with a horizontally extending stop shoulder on the lower portion thereof, a translucent anti-glare screen having adjacent edges and pivoted at one corner thereof near the intersection of said adjacent edges, to said upwardly extending front portion, above said stop shoulder, whereby when said screen is swung about its pivot, one of said edges engages against said stop shoulder for positioning the screen in operative position and whereby when the screen is swung in the opposite direction about its pivot the other adjacent edge rests on said bracket for holding it in inoperative position.

2,747,927
ROLLER TYPE SUN VISOR
Edward J. Burkhead, Lamesa, Tex.
Application July 13, 1954, Serial No. 443,088
2 Claims. (Cl. 296—97)



1. A sun visor for an automotive vehicle comprising a housing, means for pivotally mounting said visor on the vehicle for positioning in alignment with a window thereof, a shade roller rotatably mounted in said housing, a substantially transparent shade attached to said roller and having a bottom edging rod attached thereto, and a hook slidably adjustably secured to said rod, said means including a mounting plate having an ear attached thereto, a mounting link adjustably pivotally attached to said ear, a bar adjustably pivotally secured to said link, said housing being of substantially inverted U-shape and having a slot therein, said bar extending through said slot to support and reinforce said housing.

2,747,928
FOLDING TOP COMPARTMENT COVER
Jules A. Olivier, Grosse Pointe Farms, and William J. Tell, Holly, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 13, 1953, Serial No. 330,988
4 Claims. (Cl. 296—107)

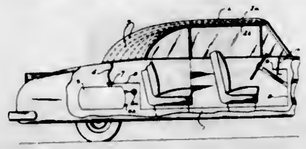


3. Apparatus of the character described, including: an automobile body having a foldable top with supporting means and a U-shaped compartment for storing said top and its supporting means when folded, the supporting means being pivotally mounted on the body within said compartment; U-shaped closure means for said compartment comprising a main panel and oppositely disposed side panels; means hingedly connecting said main panel to said body; means for holding said main panel in open position to permit access into said compartment; means hingedly connecting each side panel to said main panel for pivotal movement between extended position wherein said side panels form extensions of said main panel and retracted position wherein said side panels underlie said main panel; and means for latching said side panels in either of said positions, said panels completely covering said compartment when the side panels are extended and providing an opening through which said top supporting means may project when the side panels are retracted.

2,747,929
PNEUMATIC CONVERTIBLE TOP FOR AUTOMOBILES
Thomas Masano, Reading, Pa.
Application May 4, 1953, Serial No. 352,629
3 Claims. (Cl. 296—117)

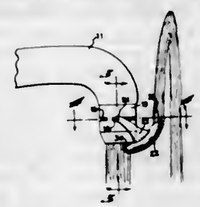
1. A convertible top for automobiles or the like, comprising an inflatable roof formed of an upper layer and a lower layer sealed together to form an inflatable bag, said layers being of air-impervious and flexible material, a

plurality of strips adapted to extend vertically and longitudinally in spaced rows in said top and being progressively staggered in a downward direction adjacent the side portions of hte top to impart curvature thereto, the upper portions of said strips being fastened to said top layer and the lower sections thereof fastened to said



lower layer so as to limit the extent of separation of said layers as a consequence of inflation by the introduction of air under pressure in said top and so as to provide the top with a substantially convex shape, spaced looped elements attached to said bottom section and arranged in longitudinal parallel rows, and tensioning bands extending through said elements to effect longitudinal collapsing of said top when deflated.

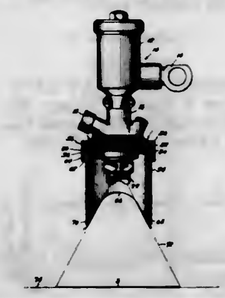
2,747,930
DRINKING FOUNTAIN ATTACHMENT
Robert W. Hyde, Cincinnati, Ohio, assignor to The Schaible Company, Cincinnati, Ohio, a corporation of Ohio
Application May 6, 1953, Serial No. 353,384
2 Claims. (Cl. 299—11)



1. In combination, a drinking fountain attachment and a faucet aerating device, said aerating device having air inlet openings at opposite sides thereof, said attachment comprising an arcuate tube, a pair of arms extending from the inwardly curved side of said arcuate tube, said arms configurated to provide a substantially U-shaped spring clip, said clip embracing the respective opposite sides of said aerating device, and a pin at each of the respective ends of said arms, the respective pins being disposed upon the same horizontal axis and engaged in the respective air inlet openings to pivotally mount said attachment for vertical movement between a raised position of non-use and a lowered position in which said arcuate tube is disposed to intercept a portion of a stream of water issuing from said aerator and direct upwardly said portion for drinking purposes.

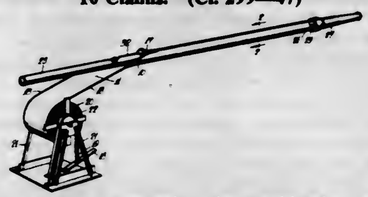
2,747,931
GUN SHROUD
Rufus W. Wilson, Huntingdon, Pa., assignor to Wald Industries Inc., Huntingdon, Pa., a corporation of Pennsylvania
Application May 27, 1952, Serial No. 290,276
3 Claims. (Cl. 299—28.5)

1. In an atttachment for a road marking spray gun from which a spray pattern is discharged, an upper nut threadedly engaging said spray gun, a lower nut threadedly engaging said upper nut, a cylindrical shroud body interlocked between said upper nut and said lower nut in concentric relation therewith and surrounding the spray gun nozzle, said upper nut having a plurality of passages formed therein extending into the interior of said shroud body, said passages adapted to admit air from the surrounding atmosphere into the interior of said shroud body for preventing the collection of paint mist along the inner surfaces thereof, said shroud body being cut out at the lower portion thereof to define oppositely dis-



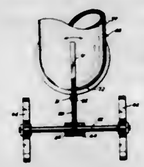
posed concave sections and oppositely disposed curved lower lip sections, said lower lip sections adapted to define the width of the spray pattern and to prevent air currents from disturbing said spray pattern.

2,747,932
HOSE AND METHODS OF MAKING THE SAME
Victor F. Volk, Brooklyn, N. Y.
Application December 31, 1952, Serial No. 328,841
10 Claims. (Cl. 299—47)



1. In a hose construction, in combination, a liquid supply pipe, a band of a width approximately equal to the circumference of said pipe and having slide fastener elements along its opposite edges, means secured to said pipe for progressively connecting together the opposite edges of the band around said pipe as said band is moved lengthwise along said pipe to form said hose, and means on the exterior of said pipe for preventing the flow of liquid back along the exterior thereof.

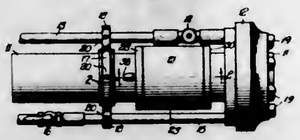
2,747,933
FIRE CONTROL APPARATUS
Albert Voigt, Garfield, N. J.
Application August 11, 1953, Serial No. 373,475
6 Claims. (Cl. 299—47)



1. Fire control apparatus comprising a riser pipe, means supporting the riser pipe for movement to a selected location at which a discharge of an extinguishing fluid is desired, a foraminous head on said riser pipe through which said fluid is forced, a feed pipe communicating with the riser pipe, said foraminous head being rotatable upon the riser pipe and having means associated therewith to effect rotary motion of the same responsive to the passage of water through the riser pipe, said means including a turbine fixed to the head and depending within the upper end portion of the riser pipe, the turbine

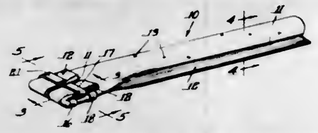
comprising an annular flange rotating within the upper end portion of the riser pipe, a circumferential series of blade support arms depending from and rigid with said flange, and a series of pitched blades respectively connected to the blade support arms.

2,747,934
CHEMICAL SPRAY GUN
Emery J. Fisher, Chicago, Ill.
Application October 5, 1951, Serial No. 249,832
2 Claims. (Cl. 299—86)



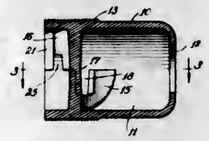
1. A device for injecting a second material into intimate admixture with a central flow stream of a first material, comprising, a central conduit formed by two conduit sections disposed in coaxial end-to-end relationship with one another with a sufficient space between the adjacent ends to form a band-shaped inlet opening in the wall of said conduit, the adjacent ends of said conduit sections being matingly beveled so as to give a pitch to said band-shaped opening, a housing fitting over said conduit in fluid-tight relationship so as to form an outer annular chamber thereabout with the opposite ends of said housing lying on opposite sides of said band-shaped opening, and a ring-shaped baffle within said chamber adjacent the end of that conduit section which has the male bevel on its end, said baffle having a plurality of openings circumferentially arranged therein, said openings having approximately the same pitch as the pitch of said band-shaped opening and being in flow alignment therewith, and said housing having an inlet opening therein located to the side of said baffle opposite the band-shaped opening whereby when a second fluid material is introduced into said chamber it is distributed through said baffle openings and then through said band-shaped opening into said central conduit.

2,747,935
END CLOSURE FOR FLEXIBLE COLLAPSIBLE TUBE
Elmer Szantay, Chicago, Ill., assignor to Sandee Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application April 14, 1955, Serial No. 501,351
4 Claims. (Cl. 299—104)



1. In a closure for the end of a flexible collapsible tube, a single piece metallic plate having a plurality of fingers extending from one end edge of the plate and a plurality of fingers extending from the opposite end edge of the plate, said tube being collapsed adjacent its end and being folded over a side edge of the plate and overlying both faces of the plate, some of the fingers being bent over from the opposed end edges of the plate in one direction against that portion of the tube overlying one face of the plate and the other fingers being bent over from the opposed edges of the plate in the opposite direction against that portion of the tube overlying the other face of the plate, whereby the end portion of the tube is secured in folded condition and clamped between the plate and the fingers.

2,747,936
WHIRL SPRAY NOZZLE
Fred W. Wahlin, Kane County, Ill., assignor to Spraying Systems Co., Bellwood, Ill., a corporation of Illinois
Application November 17, 1953, Serial No. 392,645
4 Claims. (Cl. 299—114)



1. A molded one-piece spray nozzle comprising a body which has a chamber therein extending from end to end thereof and defined by a surrounding annular wall, the said chamber having an entrance at one end and a spray discharge orifice at the other end of substantially less area than the entrance and defined by an inwardly extending portion of the surrounding wall, the said annular wall being formed at the inner side with a pair of flat web portions thereon which are located at the opposite sides respectively of and project edgewise toward a chamber bisecting axial plane and are oppositely inclined in crosswise relation to one another to provide deflecting vanes which obstruct the path of flow through the chamber and impart a whirling movement around the longitudinal axis of the chamber to material flowing through the chamber from the entrance to the discharge orifice thereof, the said chamber being substantially cylindrical at the place where the said webs are located therein and having a substantially semi-cylindrical portion thereof at each side of said bisecting plane and the said web portions being located respectively in the said substantially cylindrical portions with each web portion of a generally semicircular form corresponding to the transverse area of the substantially semi-cylindrical portion in which it is located and each said web portion extending obliquely along the portion of the annular wall which defines the outer side of the substantially semi-cylindrical portion in which it is located and projecting inwardly from said wall portion directly toward the said bisecting plane and having its opposite side faces lying in planes converging relatively to one another toward said bisecting plane.

2,747,937
SPRINKLER HEAD
Walter J. Reed, Big Spring, Tex.
Application January 6, 1954, Serial No. 402,505
2 Claims. (Cl. 299—114)



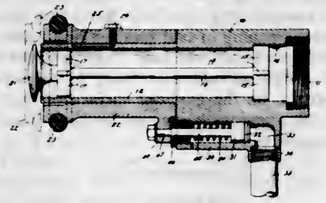
1. A sprinkler head comprising a substantially flat, hollow, circular body having a plurality of circumferentially elongated inlets at its side portions and a central outlet at its top portion, and a plurality of fluid supply lines connected in a tangential position to the respective inlets to set up a circular swirling action of the fluid internally of the head, said supply lines extending outwardly in parallel relation to each other at one side of the circular body and merging into a common neck having a coupling for attaching to a fluid supply source.

2,747,938
COUPLINGS FOR SPRINKLERS AND NOZZLES
Albert T. Scheiwer, Erie, Pa.
Application December 15, 1952, Serial No. 325,961
12 Claims. (Cl. 299—131)



12. A nozzle comprising an outer tubular member and an inner tubular member telescopically disposed in said outer member, a locking sleeve telescopically disposed on said outer tubular member, said inner tubular member having a wall at one end thereof, apertures therein adjacent said wall, a valve attached to said wall, said valve adapted to cooperate with said outer tubular member to control a stream of fluid through said nozzle in accordance with the relative position of said outer and said inner tubular members, means to hold said outer and said inner tubular members in adjusted position, said means comprising longitudinally spaced grooves on said inner member, balls held in radial apertures in said outer tubular member and engaging one of said grooves, and longitudinally spaced grooves with a blocking portion therebetween on said locking sleeve, said sleeve being biased to a position with said blocking portion engaging said balls and movable in one direction to allow said balls to enter one locking sleeve groove and movable in the other direction to allow the balls to enter the other groove.

2,747,939
FIRE HOSE NOZZLE
Peter Caird, Santa Rosa, Calif., assignor to Clarissa E. Caird, Santa Rosa, Calif.
Application September 8, 1952, Serial No. 308,344
3 Claims. (Cl. 299—136)



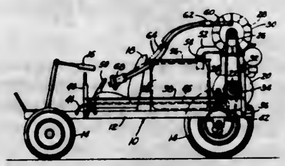
1. An improved fire hose nozzle of the remote control type comprising a base portion having a threaded recess on the back portion to receive a main water supply, a forward tube portion attached to said base portion, a continuous water passage located through said base and tube portion, a slidable spray sleeve located around said tube portion, means for limting the movement of said sleeve portion, said spray sleeve being adjustable to vary a spray from a circular spray to a convering solid stream of water as it leaves the end of the hose nozzle, a valve stem with spider leg portions located within said continuous water passage, said legs maintaining said stem in a central position in said passage, a valve tip located on the forward end of said valve stem, means for providing transverse rotary motion of said valve tip around said valve stem, a hydraulic cylinder located in said base portion, a piston influenced by a compression spring located in said hydraulic cylinder, said piston connecting with a hydraulic head of water and having a piston stem portion extending forwardly therefrom, the extremity of said piston stem engaging with said spray sleeve thereby to move the sleeve forwardly and rearwardly and remote control means for admitting and releasing hydraulic pressure to said piston.

2,747,940
ANTI-THEFT LOCK FOR VEHICLE HUB CAPS
Harold G. Tracy, Detroit, Mich.
Application October 7, 1953, Serial No. 384,654
4 Claims. (Cl. 301—37)



1. An anti-theft hub cap lock adapted to be installed upon the threaded tire valve stem which projects through a hole in the hub cap of a vehicle wheel, said lock comprising an inner lock member having a threaded portion adapted to threadedly engage said threaded portion of said valve stem, an outer lock member of larger size than said hub cap hole loosely and rotatably connected to said inner lock member, and a cover unit having a threaded central portion threadedly engaging the outer end of said valve stem and a marginal portion overlying and covering said inner lock member.

2,747,941
COTTON PICKING MACHINE
Wendell B. Tyson, Rocky Mount, N. C.
Application August 16, 1955, Serial No. 528,600
2 Claims. (Cl. 302—27)

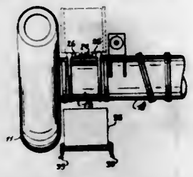


1. In a self-propelled manual cotton picking machine, a horizontal chassis having forward steerable ground-engaging wheel means and rear fixed drive wheel means, a forward driver's seat on the chassis, a motor mounted on the chassis over the rear drive wheel means, a suction blower mounted on said motor, first means operatively connecting the motor to said blower, second means operatively connecting the motor to said rear drive wheel means, said blower having cotton inlet means and cotton discharge means, a hopper on said chassis between said motor and the driver's seat into which said discharge means discharges, cotton suction hoses having rear ends connected to the cotton discharge means and open forward ends reaching forwardly to the region of the driver's seat, and manual means on the forward ends of the hoses for directing the forward ends of the hoses from the driver's seat.

2,747,942
CLEAN-OUT MECHANISM FOR HYDRAULIC DREDGE
Carl P. Kaufmann, Baltimore, Md., assignor to Ellicott Machine Corporation, Baltimore, Md., a corporation of Maryland
Application September 9, 1953, Serial No. 379,218
4 Claims. (Cl. 302—64)

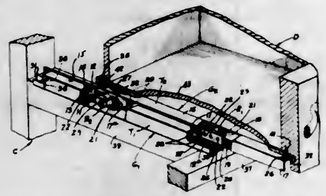
1. In combination, a centrifugal dredge pump, a horizontally disposed fluid conduit connected to the pump, said conduit formed with an opening therein adjacent the pump extending circumferentially around the conduit for about one half of the periphery thereof, a closure member for said opening formed with a radius of curva-

ture at the inside of the closure member corresponding substantially to the radius of curvature at the inside of the conduit, a shaft mounted on the exterior of said conduit, said shaft having an axis parallel to the axis of said



conduit and above the axis of said conduit, said closure member being pivotally supported by said shaft, hydraulic actuated power means operatively connected to said closure member to rotate said closure member about said pivot to open and close said opening.

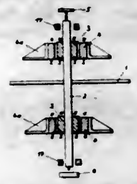
2,747,943
GUIDE STRUCTURE FOR DRAWERS AND THE LIKE
Frank H. Metcalf, Los Angeles, Calif.
Application August 10, 1953, Serial No. 373,397
9 Claims. (Cl. 308—3.8)



1. A guide structure for drawers and the like, comprising: two guides each comprising a horizontally elongated hollow track of generally rectangular cross-section, each track having a horizontal mounting wall and being formed to provide a narrow longitudinally extending slot adjacent one corner thereof spaced vertically from said mounting wall; each track having an inner side wall projecting substantially vertically from its mounting wall and extending slidably through the slot in the other track and within the other track adjacent said inner side wall of the other track; each track also having a second horizontal wall spaced vertically from its mounting wall, and an outer side wall spaced horizontally from its inner side wall and connecting the two horizontal walls of that track; said two horizontal walls and outer side wall of each track being located outside of the other track; and each guide further comprising a roller mounted on said inner side wall of its track for rotation about a transverse horizontal axis and disposed within the other track and between the two horizontal walls of said other track, said rollers being mounted adjacent opposite ends of the respective tracks.

2,747,944
BEARINGS FOR INSTRUMENTS AND MACHINES
Max Baermann, Bensberg-Wulfshof, Bezirk Koln, Germany
Application September 16, 1950, Serial No. 185,233
Claims priority, application Germany September 19, 1949
4 Claims. (Cl. 308—10)

1. A bearing for instruments and machines, comprising a rotary shaft, a casing at least partly enclosing said shaft, at least one mechanical support for said shaft, a cylindrical axially magnetized permanent magnet mounted upon said shaft and rotatable therewith, and a second cylindrical axially magnetized permanent magnet firmly mounted upon said casing concentrically to the first-mentioned magnet and enclosing the first-mentioned magnet, said magnets having poles of the same polarity located opposite each other, whereby the magnets repel



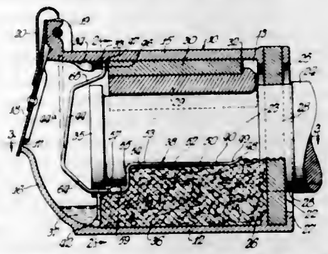
each other, and a ring of non-magnetic material of high tensile strength which encloses the first-mentioned magnet.

2,747,945
LUBRICATING MEANS
George P. Fulton, Coventry, Conn., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application March 4, 1954, Serial No. 414,063
19 Claims. (Cl. 308—77)



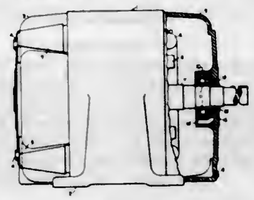
1. A bearing structure comprising a first bearing ring, a second bearing ring, said first bearing ring having a race, said second bearing ring having a race, a series of balls located in said races between said first and second bearing rings, a retainer ring, said retainer ring being located between said first and second bearing rings and having an opening for each ball, a wick fixed to one surface of said retainer ring, said wick having an opening for each ball, each opening in said retainer ring forming in an external surface of said retainer ring an aperture, each opening for a ball on said wick being in correspondence with an aperture on the external surface of said retainer ring, said wick openings being smaller than the apertures in said retainer ring.

2,747,946
PACKING RETAINER
Milton F. Brunner, Chicago, Ill., assignor to Spring Packing Corporation, Chicago, Ill., a corporation of Illinois
Application January 22, 1953, Serial No. 332,644
1 Claim. (Cl. 308—89)



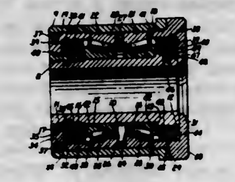
In a railway car journal box having top and side walls and a rounded bottom with a car wheel axle journal in said box and a bearing engaging said journal with a wedge disposed between said bearing and the top wall of the box, said wedge having an opening at its outer end and said journal having a radially projecting collar at its outer end normally spaced from the adjacent end of the journal box, a packing waste retainer formed from a single length of relatively heavy resilient wire and comprising a pair of packing retainer side arms with one of said side arms being spaced laterally from and parallel to each side of said axle journal and with each of said arms being disposed lower than the axis of the axle journal, said side arms each including an elongated loop of said wire with the outer strand of each loop engaging the journal box side walls and an inner strand of each loop parallel to the respective outer strands, said loops having at their axially inward ends portions slightly upwardly bent an amount sufficient to avoid snagging packing waste in the journal box when the retainer is installed in its operative position and said loops having at their axially outward ends reversely bent stiffening and overlapping portions which are adapted to engage one another, each of said side arms having a downwardly offset portion which includes two strands of said wire connected to the respective inner and outer strands of said loops axially outwardly of said reversely bent portions, said downwardly offset portions providing clearance from the axle journal collar upon any possible position of the latter and including engaging parts spaced inwardly from the adjacent walls of said journal box; a connecting section extending between and connected to axially outward ends of respective strands of said downwardly offset portions of the side arms, said connecting section having portions engaging the bottom of said journal box; a pair of clips connecting the downwardly offset portions of said side arms for holding the strands of each arm together with said reversely bent portions in engagement to rigidify the side arms, said clips being connected to said engaging parts of the downwardly offset portions whereby the clips are spaced from the walls of said journal box; and elongated end sections connected to the respective downwardly offset portions of said side arms and extending upwardly and axially outwardly therefrom, said end sections including portions engaging the side walls of said journal box for substantially the full height of the walls and then extending axially inwardly toward one another at a point above any possible position of said collar on the journal, the terminating ends of said end sections engaging in the opening in said wedge to position and secure said retainer in the journal box.

2,747,947
BEARING CONSTRUCTION
James H. Penney, East Amherst, and Harry C. Werner and Ephraim H. Anderson, Buffalo, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application February 26, 1954, Serial No. 412,874
7 Claims. (Cl. 308—187.1)



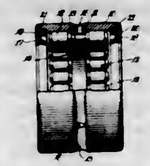
1. A bearing construction for an enclosed machine, said construction including a bearing housing, a grease-lubricated anti-friction bearing supported in the housing, means for substantially closing the outer side of the housing, and the housing having an air passage therein bypassing the bearing, said passage being unobstructed for free flow of air therethrough, one end of said passage terminating within the housing on the outer side of the bearing and the other end of the passage erminating immediately adjacent the inner side of the bearing at a location such that the pressure difference across the bearing is substantially zero.

2,747,948
PILOT BEARING
John G. Jergens, Shaker Heights, Ohio
Application November 12, 1954, Serial No. 468,233
5 Claims. (Cl. 308—187.1)



1. A pilot bearing comprising two relatively rotatable concentric sleeves forming an annular chamber between them, the outer of said sleeves having tubular collars screwed into its opposite ends, each collar having an inwardly projecting closure flange at its outer end, said inner sleeve having a tubular clamping collar screwed into one end thereof and a portion of enlarged diameter at its opposite end that provides a circumferential shoulder, a roller bearing comprising outer oppositely tapered race rings fitting in said outer sleeve between the inner ends of said flanged collars, inner race rings within said outer race rings and fitting on said inner sleeve between said clamping collar and said shoulder and tapered rollers between the inner and outer race rings, an annular sealing assembly mounted in each of said flanged collars and including a sealing ring engaging an end face of an inner race ring radially outwardly of the interior edges of said closure flanges.

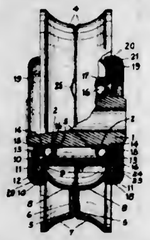
2,747,949
SELF-CONTAINED SEAL AND BEARING ASSEMBLY
Richard J. Smith, Valparaiso, Ind., assignor to McGill Manufacturing Company, Inc., Valparaiso, Ind., a corporation of Indiana
Application April 15, 1953, Serial No. 348,852
1 Claim. (Cl. 308—187.2)



A roller bearing assembly having a self-contained sealing means for excluding dirt and for retaining lubricant in the assembly including in combination, an open-ended cylindrical race ring having a raceway on the inner surface thereof, a series of rollers disposed within the axial limits of said raceway and each roller having a depressed annular portion, said race ring having first and second end portions respectively adjacent the two open ends thereof and extending axially beyond said rollers a distance sufficient to provide a friction mount for respective members to be supported thereon, annular guiding means integral with said race ring, centrally thereof and positioned within the depressed portion of each roller for limiting axial motion of said rollers and for retaining said rollers in position within said raceway, so that there is no end thrust on a roller so as to move that roller axially into either the first or the second end portions, said race ring having an annular lubricating groove extending around its outer periphery and having at least one aperture extending therethrough from said groove for introducing lubricant into the roller bearing assembly, respective members supported in friction mount on the race ring, with each of said respective members comprising a resilient rubber sealing washer affixed to a metallic

washer in coaxial relation therewith, said metallic washer having a bent-over axially-extending annular portion and a radial inwardly-extending portion, with said sealing washer being embraced within said metallic washer and said sealing washer having a portion extending radially inwardly beyond the radially-extending portion of said metallic washer, and said annular portion of said metallic washer engaging the corresponding one of said end portions of said race ring and being forced thereagainst by said sealing washer when said roller bearing assembly is fully mounted for a bearing operation and the sealing washer is performing its sealing function, with said sealing washer thereby assisting in retaining the metallic washer in friction fit with said race ring and with said sealing washer sealing that corresponding one of said open ends of said race ring.

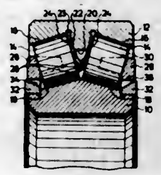
2,747,950
WHEEL AND BEARING ASSEMBLY
John W. Black, Jr., Kalamazoo, Mich., assignor to Pemco Wheel Company, Kalamazoo, Mich.
Application September 27, 1954, Serial No. 458,408
6 Claims. (Cl. 308—187.2)



1. A wheel and bearing assembly comprising a nonrotatable spindle member having axially spaced bearing member seats provided with outwardly facing shoulders at their inner ends, wheel members formed as sheet metal stampings and including annular web portions fixedly secured in side by side relation, and outwardly offset radially inner portions, outer bearing members having outturned flanges at their outer edges lapped upon and fixedly secured to the outer sides of said outwardly offset radially inner portions of said wheel members with the edges of the flanges spaced from the wheel members, inner bearing members disposed on said bearing member seats of said spindle member in supported engagement with the shoulders thereof, said spindle member being upset into lapping retaining engagement with the axially outer ends of said inner bearing members, the upsets constituting outwardly facing annular shoulders, anti-friction bearing elements coacting with said outer and inner bearing members, a tubular resilient lubricant chamber wall member disposed between said outwardly offset inner portions of said wheel members in embracing relation to the outer bearing members, and bearing closure members of resilient material having openings therein through which the ends of said spindle member project, and axially inturned internally grooved peripheral flanges engaged with the outer edges of said outer bearing member flanges with the closure members in engagement with said second mentioned outwardly facing shoulders of said spindle member.

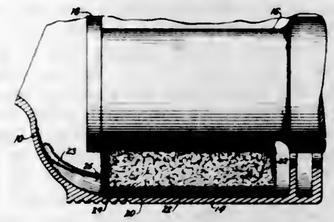
2,747,951
ROLLER BEARING
August Gunnar Ferdinand Wallgren, Goteborg, Sweden
Application October 9, 1953, Serial No. 385,230
Claims priority, application Sweden October 10, 1952
6 Claims. (Cl. 308—214)

1. A roller bearing comprising outer and inner annular bearing members each having two conical bearing races for two rows of rollers disposed therebetween and a flange secured to one of said members for guiding said rollers in axial direction, said flange having tapering lateral faces converging toward the axis of the bearing and the races of the outer bearing member increasing in diameter in the direction toward the plane of said flange,



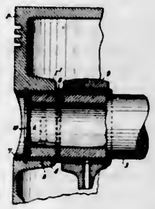
and two separate washer-like members of anti-friction material centered on the lateral faces of said flange, said annular members each having portions projecting inwardly of said flange and formed to engage inwardly projecting portions of the other member.

2,747,952
HANDLE FOR JOURNAL BOX PACKING
Robert J. Harkenrider, Winona, Minn., assignor to Rudolph W. Miller and Benjamin A. Miller, Winona, Minn.
Application March 30, 1953, Serial No. 345,552
1 Claim. (Cl. 308—243)



In a journal box lubricator including a flexible envelope looped about a resilient core, the improvement comprising a one-piece strap having its ends overlapped and secured together to form a loop, said strap being looped about the core between the core and the envelope and extending lengthwise of the lubricator, said overlapped ends of said strap abutting one end of the core and having the two sides of the loop secured together closely adjacent the other end of the core to form a second loop, said second loop extending outwardly of the envelope and providing a handle for the lubricator.

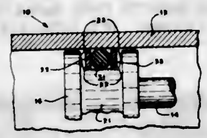
2,747,953
PISTON ARRANGEMENT FOR INTERNAL COMBUSTION ENGINES
Ludwig Laubender, Kassel, Germany, assignor to Krauss-Maffei Aktiengesellschaft, Munchen-Allach, Germany
Application April 12, 1954, Serial No. 422,565
Claims priority, application Germany May 19, 1953
10 Claims. (Cl. 309—19)



1. In an internal combustion engine, in combination, a piston having opposed side wall portions each of which

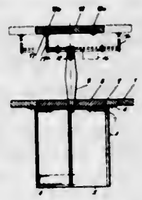
is formed with an opening passing therethrough; a bearing sleeve freely turnably arranged in each of said openings and consisting of a material softer than the material of said piston; a wrist pin extending between said openings and having opposite end portions respectively freely turnably arranged in said freely turnable bearing sleeves; and means for limiting axial displacement of said bearing sleeves with respect to said piston and said wrist pin.

2,747,954
HYDRAULIC PACKING
Carl A. Damm, Upper Black Eddy, and William Paraskewik, Lansdale, Pa.
Application August 5, 1953, Serial No. 372,613
6 Claims. (Cl. 309—23)
(Granted under Title 35, U. S. Code (1952), sec. 266)



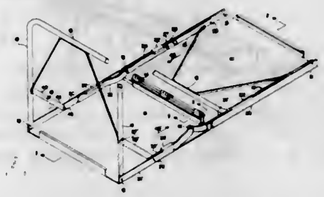
1. A fluid seal for use between two closely spaced relatively sliding surfaces including a groove in one surface extending transversely of the direction of relative motion and generally trapezoidal in cross section with side walls diverging from a relatively narrow bottom to a relatively wide opening and substantial arcuately curved camming means between the bottom and the respective side walls, a strip composed of a resilient material and circular in cross section extending longitudinally along the groove, a first flat elongated member highly resistant to local distortion and rectangular in cross section disposed edgewise in the groove adjacent to one side of the strip of resilient material and a second flat elongated member rectangular in cross section and disposed edgewise in the groove adjacent the other side of the strip of resilient material, whereby fluid pressure applied in the direction of relative movement by-passes the second member and distorts the strip of resilient material, which in turn exerts a uniformly distributed pressure upon the first member, forcing this member against the sloped side wall and up on the substantial arcuately curved camming means so that one edge of the member is forced into continuous engagement with the second relatively sliding surface by the camming action of said fillet on the diagonally opposed edge of said first member as it is forced against the sloped side wall of the groove.

2,747,955
MULTIPLE TIER TABLE WITH EXTENSIBLE TOP
Mauritius Ehrlich, Zurich, Switzerland
Application May 20, 1953, Serial No. 356,171
Claims priority, application Switzerland May 23, 1952
4 Claims. (Cl. 311—30)



1. In a table having an opening in its top, vertically-spaced upper and lower slabs arranged for selective positioning within said opening to form a continuation of said top, said upper slab comprising two complementary portions, and a substantially vertical post connecting said slabs; extending means mounted about said post intermediate said slabs and connected with said upper slab portions, respectively, and socket means carried by said extending means, whereby upon arrangement of said lower slab within said opening said upper slab portions may be extended to provide access to said socket means for providing a heating source therein to heat a dish disposed on said upper slab.

2,747,956
FOLDING SECTIONAL TABLE OR THE LIKE
Henry Saul Leichter, Philadelphia, Pa.
Application May 19, 1954, Serial No. 430,802
3 Claims. (Cl. 311—89)



1. In combination, a working surface made of at least two hinged body sections, at least one leg pivotally connected to the free end of one of said body sections and movable to a folded position in which it extends parallel to and abuts said one body section and to an erected position in which said leg is substantially normal to and supports said one section, a supporting bar slidably mounted on the underside of said working surface, said bar being made of at least two portions hinged together, and means pivotally connecting one end of one of the portions of said bar to said leg in such a manner that the movement of said leg into its erected, supporting position moves the hinge of said bar portions out of registration with the hinge of the body sections of said working surface, and so that the movement of said leg into its folded position moves the hinge of said bar portions into registration with the hinge of said body sections.

2,747,957
FOLDABLE SECTIONAL TOP TABLE
Julius J. Lencioni, Chicago, Ill., assignor to Mell-Hoffmann Mfg. Co., Chicago, Ill., a corporation of Delaware
Application February 12, 1954, Serial No. 409,790
6 Claims. (Cl. 311—90)



1. In a folding table of the type having a pair of load supporting panels pivoted to one another for movement between face-to-face relation and coplanar relation, and foldable supporting structure pivotally mounted on said panels; latching mechanism comprising a sheet metal latch member pivotally mounted from one of said panels, and keeper means on the other of said panels for cooperative engagement with said latch member to latch said panels in coplanar relation, said sheet metal latch member comprising an elongated strip of sheet metal,

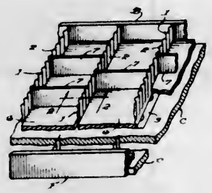
said strip having at one end a reversely bent flange cooperable with the keeper means, a looped portion greater than a semicircle intermediate the ends of the strip for receiving a pivotal mounting member, and a heel portion at the opposite end from said flange and curved convexly oppositely to said flange for engagement with a part of said supporting structure upon folding thereof to retract the flange of said latch member from said keeper means to allow relative pivoting of said panels to substantially face-to-face relation.

2,747,958
FOLDING SECTIONAL TABLE
Kermit H. Wilson, Minneapolis, Minn.
Application December 14, 1954, Serial No. 475,214
13 Claims. (Cl. 311—92)



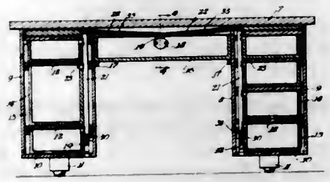
1. In a portable folding table, a pair of table top sections having adjacent ends pivotally connected for relative swinging movements from operative aligned generally horizontal positions to inoperative upstanding positions, a pair of outer leg structures each pivotally connected to a different one of the table top sections, an intermediate floor-engaging leg structure, a pair of like rigid control arms each pivotally connected to said intermediate leg structure and pivotally anchored to a different one of the table top sections intermediate the pivotal connection of the outer leg structure of that respective table top section and the pivotal connection between the adjacent ends of the two table top sections and a pair of rigid control links each pivotally connected to the longitudinal intermediate portion of a different one of said control arms and to a longitudinally intermediate portion of a different one of said outer leg structures to maintain the outer leg structures in generally vertical positions at all positions of tthe table top sections.

2,747,959
BIN DIVIDER CONSTRUCTION
Howard S. Ingelson, Glendale, Calif.
Application June 5, 1953, Serial No. 359,919
3 Claims. (Cl. 312—140.3)



1. In a counter bin divider construction, a pair of spaced, parallel primary divider elements extending between opposite vertical walls on a counter top and comprising oppositely disposed walls of a bin; each of said divider elements comprising a vertically disposed portion having a plurality of vertical corrugations forming divider element receiving grooves on both sides thereof extending from the upper edge thereof to a point adjacent the counter top and a longitudinally co-extensive foot portion extending horizontally from the lower edge of the corrugated portion and resting on the counter top, a false bottom board forming the bottom of the bin and overlying the foot portions of said divider elements, and a secondary divider element extending transversely to and between said primary divider elements and held in vertical position by engagement of the ends thereof with a pair of concavely opposed corrugations in said primary divider elements and forming at least a third side of said bin.

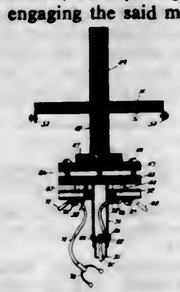
2,747,960
LOCKING MECHANISM FOR DESK DRAWERS
Mario J. Ambrosino, River Forest, Ill.
Application June 23, 1953, Serial No. 363,496
1 Claim. (Cl. 312—219)



In combination with a desk of the type that embodies an elevated top with a horizontal depending strip along a portion of its front margin, a horizontally slidable main drawer positioned directly beneath the strip and provided on the front thereof with a key operable bolt-equipped lock adapted to lock the main drawer in its closed position and arranged so that the bolt thereof is movable in response to manipulation of the key upwards and downwards into and out of a locked position wherein it is in lapped relation with the inner side surface of the strip, and a vertical series of horizontally slidable side drawers positioned at one side of the main drawer, a locking mechanism adapted releasably to lock all of the side drawers in their closed position and comprising a vertical lock bar mounted for vertical sliding movement adjacent the front portions of the inner sides of the side drawers when the latter are in their closed position, having coacting latch means between it and the side drawers, and operative when slid downwards to bring the latch means into latched relation and effect locking of the side drawers and when slid upwards to bring the latch means out of latched relation and effect release of said side drawers, and means operative to control the lock bar so that it is automatically slid downwards when the bolt of the lock for the main drawer is manipulated by the key into its locked position while the main drawer as in its closed position and is automatically slid upwards when the bolt of said lock is manipulated by the key out of its said locked position while the main drawer is in its closed position, said last mentioned means embodying a spring for urging the lock bar upwards, and a substantially horizontal lever positioned for the most part directly behind and in sliding engagement with said inner side surface of the strip and having its central portion mounted on a fixed horizontal pivot member on said strip so that it is free to tilt in a vertical plane, said lever being straight from end to end and having one end thereof overlying and slidably engaging the upper end of the lock bar and its other end arranged so that it overlies, and is engageable with, the upper end of the bolt of the lock when the main drawer is in its said closed position.

2,747,961
FIXTURE FOR ADJUSTING THE CATHODE OF AN ELECTRONIC TUBE
Cornelius L. Coyne, Jr., Aurora, Ill., and Gerald A. Mitchell, White Bear Lake, Minn., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application October 1, 1953, Serial No. 383,682
8 Claims. (Cl. 316—27)

1. A fixture for manually adjusting the position of an internal member of an electronic tube during the operation thereof while observing the electrical characteristics of the tube during adjustment, comprising a handle of insulating material, a metal shield projecting laterally from a lower position of the handle and connectible to ground, a plurality of spaced insulators connected to the lower end of the handle, an adjusting means secured to the insulators for engaging the said member of the elec-



tronic tube to be adjusted, and means carried by the insulator for making electrical connections to the tube.

CHEMICAL

2,747,962
REMOVAL OF OTHER ACID GASES FROM MIXTURES CONTAINING CARBON DIOXIDE
Robert G. Heitz and Albert L. Rocklin, Concord, Calif., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
No Drawing. Application May 14, 1953, Serial No. 355,168
2 Claims. (Cl. 23—2)

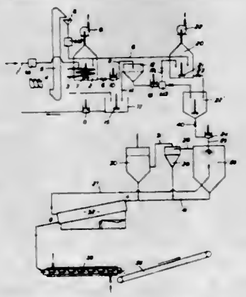
1. A method for effecting substantial separation of hydrogen cyanide from carbon dioxide in gas mixtures in which these are the principal acidic constituents which comprises bringing a rapidly moving stream of such a gas mixture into contact with a relatively slowly moving stream of an aqueous solution of a material from the group consisting of alkali metal hydroxide and mixtures thereof with alkali metal cyanide, and maintaining said contact only for a period of less than 0.05 second.

2,747,963
METHOD OF PROCESSING FLUORSPAR
Alfred M. Thomsen, San Francisco, Calif.
No Drawing. Application March 23, 1955, Serial No. 496,349
4 Claims. (Cl. 23—66)

1. The method of processing fluorspar which comprises; commingling the ground ore with ammonium sulphate and heating until all ammonia has been volatilized; leaching the resultant calcines with water to remove metallic sulphates relatively more soluble than calcium sulphate; commingling the resultant leached calcium sulphate residual with ammonium carbonate to form calcium carbonate and a solution of ammonium sulphate; separating said calcium carbonate and re-cycling said ammonium sulphate to fresh fluorspar containing ore.

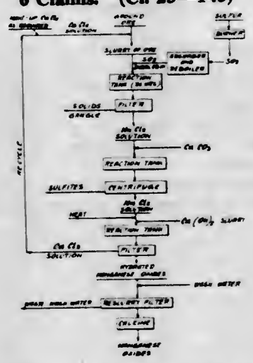
2,747,964
MANUFACTURE OF POLYMERIC PHOSPHATES
Cyril Godfray Bacon, Ufford, near Woodbridge, and David Friend, Trimley St. Martin, near Ipswich, England, assignors to Fisons Limited, Felixstowe, Suffolk, England
Application March 27, 1953, Serial No. 344,948
Claims priority, application Great Britain April 2, 1952
5 Claims. (Cl. 23—107)

1. A process for the manufacture of polymeric sodium tripolyphosphate containing less than about 1% of sodium metaphosphates and less than 1% of sodium pyrophosphates, consisting in neutralising phosphoric acid to produce monosodium phosphate, filtering the liquid mixture to remove impurities, dividing the filtrate into a larger and a smaller part, substantially in the ratio of 2 parts of the filtrate to the larger part to 1 part of the filtrate to the smaller part, neutralising the larger part of the filtrate to form disodium phosphate, mixing the disodium phosphate with the remaining one part of the monosodium phosphate solution to produce a mixed solution in which the constituents are in the ratio of two molecules of disodium phosphate to one molecule of monosodium



phosphate, spray drying said mixed solution and subsequently further heating the resultant dried material at a temperature in the range of about 350° C. to about 450° C. for a period of at least 15 minutes to convert it to sodium tripolyphosphate.

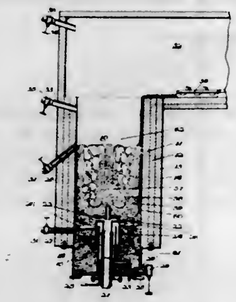
2,747,965
RECOVERY OF MANGANESE FROM ORES
Charles C. Daugherty, New Bern, N. C., assignor to Republic Steel Corporation, Cleveland, Ohio, a corporation of New Jersey
Application January 9, 1953, Serial No. 330,511
6 Claims. (Cl. 23—145)



1. In a method of extracting manganese values from ore containing iron and manganese principally in its dival-

ent state, the step of leaching the ore in the absence of external oxidizing agents by bringing the ore into contact with calcium chloride solution and then saturating said ore-containing solution with sulfur dioxide to bring manganese values into solution as manganese chloride, while leaving the iron values undissolved.

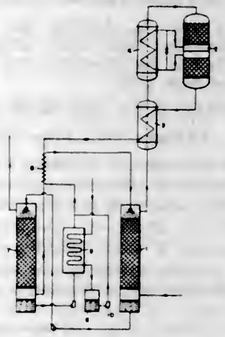
2,747,966
PROCESS OF MANUFACTURING PIGMENT ZINC OXIDE
John H. Calbeck, Columbus, Ohio, assignor to American Zinc, Lead & Smelting Company, St. Louis, Mo., a corporation of Maine
Application September 4, 1951, Serial No. 244,951
9 Claims. (Cl. 23—148)



1. The process of manufacturing pigment zinc oxide which comprises maintaining a body of comminuted zinciferous material in a fluidized bed by passing current of mixed hydrocarbon gas and air through said bed, continuously adding zinciferous material to said fluidized body in particle size no coarser than 10 mesh and 70% coarser than 325 mesh, said current of mixed hydrocarbon gas having a vertical velocity through said bed of from one to five feet per second at reactor temperatures, alternately increasing and decreasing the air-hydrocarbon gas ratio to first produce a rapid heating condition in said body of zinciferous material and then to produce a strongly reducing condition therein, said alternations being so timed and ranging from approximately 5 to 2½ minutes that the temperature within said material does not fall below 1100° C. and does not exceed 1300° C., removing the evolved elemental zinc containing vapors obtained during the reducing cycles from the fluidized material, and mixing air with said zinc vapors to oxidize said vapors to zinc oxide.

2,747,967
CATALYTIC METHOD FOR CONVERTING CARBON MONOXIDE AND STEAM INTO CARBON DIOXIDE AND HYDROGEN
Ferdinand Markert and Ludwig Raichle, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen am Rhine, Germany
Application January 15, 1953, Serial No. 331,399
Claims priority, application Germany January 15, 1952
5 Claims. (Cl. 23—150)

1. In a catalytic method for converting carbon monoxide and steam into carbon dioxide and hydrogen wherein circulating water is heated in indirect heat exchange by hot reaction gas and fresh carbon monoxide-containing gas is contacted with the resulting hot circulating water prior to the conversion, the improvement which comprises supplying heat required for the said conversion additionally to that resulting therefrom to the said circulating water by heating the latter in indirect heat exchange with steam during its cycle subsequent to its said contact with said fresh gas and prior to the said heatinug thereof by said



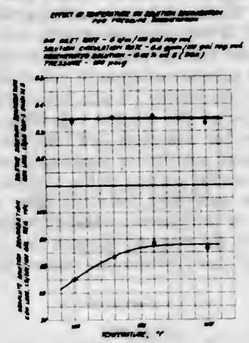
reaction gas, said heating steam being under a pressure below that of the said conversion.

2,747,968
DRY PROCESS FOR THE RECOVERY OF SULFUR FROM GASES
Pierre Gustave Marie Adolphe Pigache, London, England
No Drawing. Application April 26, 1952, Serial No. 284,645
Claims priority, application Great Britain May 7, 1951
1 Claim. (Cl. 23—178)

A dry process for the recovery of sulphur from gases of a reducing character which comprises the steps of reacting such gases at a temperature of 100 to 300° C. with a desulphurizing agent containing metallic copper initially prepared by calcination treatment at a temperature below 400° C. for sulphidation of the copper with a gas containing H_2S, incorporating with said desulphurizing agent an aluminous carrier together with a binding material assisting the sintering of said aluminous carrier, then subjecting the sulphided admixture at a temperature of about 350 to 850° C. to a process of regeneration which prevents any compound being formed between the copper and the components of the carrier, and then subjecting the resulting sulphurized copper compounds to regeneration first by treatment at 350 to 850° C. with an oxidising gas which causes approximately half the quantity of fixed sulphur to be evolved as SO_2 and then by treatment with a reducing gas containing hydrogen which causes the remainder of the fixed sulphur to be evolved as SO_2, thereby re-converting said desulphurizing agent to a condition suitable for cyclical re-use.

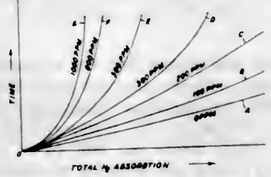
2,747,969
RESTRICTED NON-CATALYTIC OXIDATIVE REGENERATION
Elwood B. Backensto and Kenneth F. Hayden, Woodbury, N. J., assignors to Socony Mobil Oil Company, Inc., a corporation of New York
Application March 12, 1952, Serial No. 276,216
2 Claims. (Cl. 23—184)

1. The non-catalytic method of regenerating aqueous alkaline solutions containing alkali metal alkyl phenolates which solutions have been used to extract weakly acidic sulfur compounds from petroleum fluids which comprises contacting at temperatures of about 130° F. to about 200° F. and at pressures of about 80 to about 100 p. s. i. an aqueous alkaline solution containing alkali metal mercaptides, at least 132 grams per liter of alkali metal hydroxide, and at least 200 grams per liter of alkyl phenols, but devoid of amounts of phenolic oxidation promoter effective to accelerate the conversion of mercaptides to polysulfides with an amount of oxygen in excess of the stoichiometric equivalent of said mercaptides as a gas containing free oxygen to convert a portion of said mercaptides to polysulfides but to leave unconverted about 0.05 to about 0.3 weight per cent mercaptide sulfur in said aqueous solution, and separating polysulfides from said aqueous alkaline solution to provide a regenerated



aqueous alkaline solution to be used for extracting weakly acidic sulfur compounds from petroleum fluids and containing said unconverted mercaptide sulfur and the original amount of alkali metal hydroxide reduced by not more than about 0.49 pound of alkali metal hydroxide per pound of mercaptide sulfur converted to polysulfides.

2,747,970
PURIFICATION OF COMMERCIAL HYDROGEN
Edgar F. Rosenblatt, Montclair, N. J., assignor to Baker & Co., Inc., Newark, N. J., a corporation of New Jersey
Application October 16, 1951, Serial No. 251,517
3 Claims. (Cl. 23—210)



1. In the process of removing CO and CO_2 present in commercially prepared hydrogen gas; the step consisting of directly contacting said hydrogen gas containing said CO and CO_2 with a supported catalyst consisting of from 0.01% to 2.0% of a metal selected from the group consisting of ruthenium and rhodium on a support of an activated earth metal oxide, and maintaining said contact at a reaction temperature of at least 120° C. until the carbon content of the CO and CO_2 is substantially completely converted to methane over said catalyst.

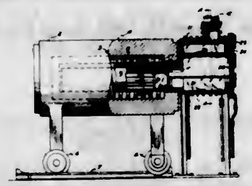
2,747,971
PREPARATION OF PURE CRYSTALLINE SILICON
Carl C. Hein, Pittsburgh, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application July 20, 1953, Serial No. 368,980
8 Claims. (Cl. 23—223.5)

1. In the process of recrystallizing a mass of silicon, the steps comprising preparing a longitudinally disposed mass of silicon to be recrystallized, applying in contact with one end of the longitudinally disposed mass a body of gold-silicon alloy having not in substantial excess of about 69 atom percent of gold, heating a narrow zone comprising the body of the alloy and the immediate adjacent silicon to a temperature above the melting point of the gold-silicon alloy but substantially below the melting point of silicon, the means producing such heating concentrating the maximum temperatures to a relatively narrow zone including the body of gold-silicon alloy and only a small part of the immediately adjacent mass of silicon, the temperature at the face of the body furthest removed from the mass of the silicon being maintained at a temperature substantially less than at the face in contact with the mass of silicon, slowly advancing the heated zone into the mass of the silicon whereupon silicon heated to the said maximum temperatures alloys with



the molten gold-silicon alloy at the face with which it is in contact to produce more molten alloy rich in silicon at the advancing side of the zone, while at the receding side of the zone the gold-silicon alloy is cooled and thereupon deposits out silicon, the body of molten gold-silicon alloy thereby advancing with the advance of the heating means, and continuing such advancing of the heated zone through the longitudinally disposed mass of silicon and simultaneously traversing the molten gold-silicon alloy therethrough, whereby the silicon is dissolved in the alloy and recrystallized therefrom.

2,747,972
CHARGE BOAT FOR VOLATILIZATION
Roy Krohn, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application September 9, 1944, Serial No. 553,447
8 Claims. (Cl. 23—264)

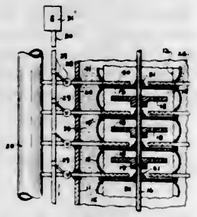


1. A sublimation apparatus comprising a chamber having an elongated heating portion and a condensing portion communicating with said heating portion, an elongated removable substantially closed container positioned within said heating portion, said container having a relatively narrow opening at its top extending along the entire length thereof, and an elongated tray structure removably positioned within said container, said tray structure having a plurality of normally substantially horizontal shelves for supporting portions of a charge to be sublimed in layers in said heating portion, said tray structure including means for pivotally supporting said shelves for rotation about respective axes which parallel the longitudinal axis of said container, whereby said shelves may be rotated to substantially a vertical position and the tray structure may thereafter be removed through the opening in the top of said container.

2,747,973
METHOD AND APPARATUS FOR FRACTIONAL PRECIPITATION OF MIXTURES

Luther Hinrichs, Detroit, Mich.

Application November 18, 1953, Serial No. 392,872
7 Claims. (Cl. 23—283)

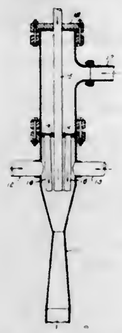


1. Fractionation apparatus comprising an upright fluid impervious cylinder, a plurality of longitudinally spaced horizontally positioned filter discs in superimposed relation to each other within said cylinder throughout substantially its length defining a plurality of aligned cells, a container above said cylinder adapted for delivering a fluid mixture thereinto, a pair of upright supply tubes adjacent said cylinder adapted to contain different reagents under pressure, a plurality of parallel horizontally arranged injector tubes joined at their one ends in communication with the interior of one of said supply tubes with their other ends extending into a cell respectively, adapted to deliver momentarily a precipitant to each of said cells simultaneously, an outlet drain at the bottom of said cylinder intermittently openable and adapted to permit downward filtration movements of the non-precipitated contents of one cell to an adjacent cell, a plurality of parallel horizontally arranged injector tubes joined at their one ends in communication with the interior of the other supply tube, with their other ends extending into a cell respectively, adapted to deliver momentarily a dissolving solvent alternately to each of said cells simultaneously, a flow control valve in each of said injector tubes, each valve having an adjustable valve element, and separate reciprocal shafts joined respectively to the valve elements of each set of injector tubes.

2,747,974
MIXER

James N. Felger, Kenmore, N. Y., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia

Application August 18, 1953, Serial No. 374,913
1 Claim. (Cl. 23—284)

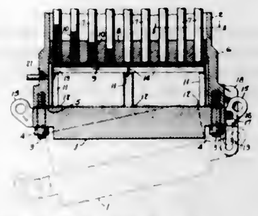


A mixer suitable for use in rapidly mixing vapor phase ammonia, liquid phase ammonia and an aqueous solution of chloroamine in the Raschig synthesis for the production of hydrazine comprising a conduit composed of a cylindrical portion and a venturi portion, the cylindrical portion being divided into two sections by a transverse plate, the section of the cylindrical portion furthest removed from the venturi portion having an end closure member, a pipe having its axis substantially perpendicular to the axis of the conduit in communication with the conduit at a point between the plate and closure member suitable for injecting vapor phase ammonia into the conduit space between the closure member and plate, a pipe having its axis substantially perpendicular to the axis of the conduit and in communication with the conduit at a point between the venturi portion and the plate suitable for injecting an aqueous solution of chloroamine into the conduit, a first tube having its axis substantially coinciding with the axis of the conduit extending through the end closure member and plate and into the venturi portion of the conduit suitable for injecting liquid phase ammonia into the venturi portion of the conduit, and at least one second tube extending from the plate and into the venturi portion of the conduit whereby vapor phase ammonia present in the conduit between the closure member and the plate can flow into the venturi portion of the conduit.

2,747,975
COMBINATION CATALYST SCREEN SUPPORT AND COVER

Phillip A. Thompson, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York

Application June 17, 1953, Serial No. 362,289
3 Claims. (Cl. 23—288)



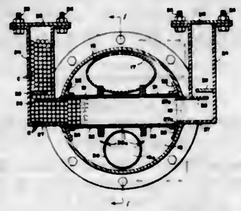
1. In a cover and screen unit for a reactor having a plurality of tubes, a screen disposed immediately beneath the reactor tubes to support a catalyst within the tubes, a cover plate provided at the lower end of the reactor beneath said tubes, means on said cover free of said reactor to effect raising and lowering of said cover, means secured to said cover plate and to said screen to secure said screen to the cover and hold the screen in position beneath the tubes within said reactor and substantially removed from said cover at a position requiring lowering of the screen to permit pivoting of the screen from within the reactor, and vertically sliding pivotal hinge means connecting said cover plate and reactor to effect lowering of said cover plate and screen and then tipping to permit the flow of loose catalyst off of the screen without complete disassembly of the cover plate and screen from the reactor.

2,747,976
SURFACE TYPE CATALYSIS

Eugene J. Houdry, Ardmore, Pa., assignor to Oxy-Catalyst, Inc., a corporation of Pennsylvania

Application May 10, 1951, Serial No. 225,498
6 Claims. (Cl. 23—288)

1. A catalytic device for use with vehicles and the like powered by internal combustion engines for eliminating obnoxious components of exhaust gases therefrom comprising a chamber for catalyst particles fastened to said vehicle and adapted to provide a substantially horizontal layer of catalyst particles exposed to the flow of exhaust gases, a catalyst hopper extending generally vertically from said catalyst chamber and having an opening at its lower end arranged so as to permit catalyst particles to flow by gravity from said hoper into said chamber to replace catalyst lost by attrition, means comprising horizontal, stationary baffle plates located at said opening for supporting the column of fresh catalyst in said hopper and for restricting the flow of catalyst through said opening, said baffle plates being spaced vertically from one another and each extending partially across said opening in such manner as to provide restricted discharge ports out

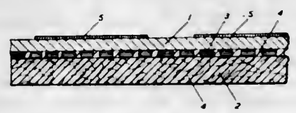


of line with one another through which fresh catalyst from said hopper may flow by gravity into said chamber, thereby keeping said chamber substantially filled with catalyst particles but at the same time avoiding tight packing thereof, whereby said particles are free to vibrate slightly in response to the vibration of said vehicle but are protected from violent impact otherwise occasioned by failure to maintain said catalyst chamber sufficiently full.

2,747,977
METHOD OF MAKING PRINTED CIRCUITS

Paul Eisler, London, England, assignor to Technograph Printed Circuits Limited, London, England, a company of Great Britain

Application July 15, 1952, Serial No. 298,963
Claims priority, application Great Britain July 16, 1951
22 Claims. (Cl. 41—43)



1. In the manufacture of a printed circuit product in form of an insulation backed electrically conductive pathway pattern, the steps of joining one side of a metal sheet to a temporary support sheet by an adhesive layer including at least two different adhesive materials, one of said materials being resistant to chemical attack by an agent capable of chemically attacking the metal sheet material but sensitive to heat and the other material being resistant to heat but sensitive to attack by said chemical agent, the said layer being formed by applying one of the adhesive materials in form of discrete particles to one of said sheets and by filling within the thickness of said layer the interstices between the discrete particles with the other material whereby each material substantially extends through the thickness of said adhesive layer and provides adhesion between the two sheets independent one from the other, subjecting the metal sheet to chemical action for producing therefrom the desired pathway pattern by removing the areas of the metal sheet other than those forming part of the pathway pattern, covering the exposed side of the remaining metal sheet areas with an insulation layer by application of heat, the said layer forming a permanent support base, and removing the temporary sheet thereby transferring the metal sheet from its temporary base to a permanent support.

2,747,978
STABILIZED ORGANIC COMPOSITIONS

Katherine Weiss Closson and James Cowan Boag, Detroit, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application July 26, 1952, Serial No. 301,166
3 Claims. (Cl. 44—69)

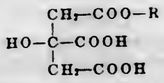
1. A new composition stable to oxidation and consisting essentially of gasoline normally tending to deteriorate in the presence of oxygen and containing a synergistic antioxidant composition consisting essentially of substantially equal amounts by weight N,N'-di-sec-butyl-p-phenylene diamine and lead N,N,N',N'-tetra-n-butyl dithiocarbamate, each being present within the range of 0.1 to 15 milligrams per 100 milliliters of said gasoline.

2,747,979
MONO-ESTERS OF CITRIC ACID AS METAL DEACTIVATORS FOR MOTOR FUELS

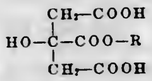
John W. Thompson, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application November 14, 1952, Serial No. 320,607
6 Claims. (Cl. 44—70)

1. A motor fuel comprising a cracked gasoline containing a harmful catalytically-active metal reagent intimately admixed with from about 0.0001 to about 0.01 per cent based on the weight of the gasoline of a monoester of citric acid having one of the following formulas:



and



wherein R represents a substituent selected from the group consisting of an alkyl radical containing from 1 to 18 carbon atoms and an aryl radical of the benzene series containing from 6 to 10 carbon atoms.

2,747,980
DEACTIVATING CATALYTIC EFFECT OF METALS

William K. T. Gleim, Orland Park, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application November 21, 1951, Serial No. 257,643
19 Claims. (Cl. 44—72)

1. An organic material containing a metal which normally catalyzes oxidative deterioration of said organic material and additionally containing a metal deactivating amount of a compound selected from the group consisting of the diimido esters and diamidines of oxalic, malonic, succinic, glutaric and adipic acids.

7. Cracked gasoline containing a metal which catalyzes oxidative deterioration of said gasoline and additionally containing from about 0.0001% to about 0.5% by weight of a compound selected from the group consisting of the diimido esters and diamidines of oxalic, malonic, succinic, glutaric and adipic acids.

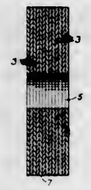
2,747,981

PRODUCTION OF WEAR-RESISTANT CLOTH AND BUFFING WHEEL MADE OF THE SAME

Alfred S. Brown, Hamilton, and Angus M. Brown, Utica, N. Y., assignors to Divine Brothers Company, Utica, N. Y., a corporation of New York

Application June 5, 1951, Serial No. 229,977

17 Claims. (Cl. 51—297)



1. A buff having a relatively high degree of wear resistance, comprising a plurality of plies of woven textile fabric arranged in side by side relation and collectively having an approximately cylindrical peripheral working face, each of said plies of fabric being impregnated throughout substantially its entire mass with a mixture of a substantial quantity of polyethylene glycol having a molecular weight in the neighborhood of 400 and a substantial quantity of polyethylene glycol having a molecular weight in the neighborhood of 6000, the glycols in the impregnating mixture being in the proportion of not less than one part and not more than two parts of said glycol having a molecular weight in the neighborhood of 6000 to each one part of said glycol having a molecular weight in the neighborhood of 400.

2,747,982

METHOD AND COMPOSITION FOR THE CONTROL OF THE GROWTH OF VEGETATION

Dorsey R. Mussell, Clare, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application May 11, 1955, Serial No. 507,731

9 Claims. (Cl. 71—2.3)

1. The method which comprises exposing growing plants and plant parts to the action of a growth inhibiting amount of a member of the group consisting of 4-chloro-2,6-disecondarybutyl phenol and 4-bromo-2,6-disecondarybutyl phenol.

2,747,983

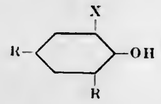
METHOD AND COMPOSITION FOR THE CONTROL OF THE GROWTH OF VEGETATION

Dorsey R. Mussell, Clare, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application May 11, 1955, Serial No. 507,730

13 Claims. (Cl. 71—2.3)

1. A method which comprises exposing growing plants and plant parts to the action of a growth inhibiting amount of a 2-halo-4,6-ditertiaryalkylphenol of the formula



wherein X represents a member of the group consisting of bromine and chlorine and R represents a member of the group consisting of tertiarybutyl and tertiaryamyl.

2,747,984

CONCENTRATED HERBICIDE COMPOSITIONS

Leeds C. White, Jr., Bay City, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application March 18, 1954, Serial No. 417,229

8 Claims. (Cl. 71—2.6)

1. A concentrate composition comprising as an active herbicidal toxicant a mixture of the isopropyl ester of 2,4-dichlorophenoxyacetic acid and the n-butyl ester of 2,4-dichlorophenoxyacetic acid, said isopropyl ester comprising from 15 to 45 percent by weight of the combined weight of said isopropyl and n-butyl esters present in the composition.

2,747,985

METHODS OF PRODUCING COMMERCIALLY PURE IRON

Vincenzo Stefano Arata, Rome, Italy

No Drawing. Application May 5, 1952, Serial No. 286,213

7 Claims. (Cl. 75—11)

1. An industrial process for producing iron of high purity, namely, iron having a total content of the elements C, S, Mn, Si, and P not exceeding 0.1%, in a single operation from ferriferous oxides, which comprises: preparing an intimate, non-agglomerated mixture of finely comminuted ferriferous oxide, finely comminuted charcoal and a calcareous flux in small lumps in such proportions that said charcoal be, taking into account mechanical and combustion losses involved in the successive operation of the furnace, insufficient to reduce all of the iron contained in said ferriferous oxide and that the molten iron produced when said mixture is initially melted during said process shall contain substantially .06% carbon; charging said mixture into a furnace having neither an oxidizing nor a reducing action; supplying to all or parts of said mixture sufficient heat to start and maintain the reduction process and to melt, after said reduction has taken place, the resulting content of said furnace; removing the slag; ascertaining that neither the carbon nor the sulphur content of the molten bath exceeds 0.06%; forming a new slag by charging limestone ($CaCO_3$) and a small amount of ferriferous oxide; extracting a metal sample and checking whether it exhibits the prerequisite features; and tapping the iron if said prerequisite features have been attained or continuing, if this is not the case, alternatingly to form and remove new slag and to check the features of samples until these correspond to said prerequisites, and then removing the slag and tapping the iron.

2,747,986

RECOVERING METALS FROM HYDROFORMYLATION PRODUCTS

Bernard H. Gwynn, Fawn Township, Allegheny County, and William A. Horne, Oakmont, Pa., assignors to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware

No Drawing. Application June 1, 1951, Serial No. 229,526

3 Claims. (Cl. 75—28)

1. A process which comprises hydroformylating a charge comprising carbon monoxide, hydrogen and an olefin with a cobalt hydroformylation catalyst at selected temperatures within the range of about 260° to about 440° F. and a selected pressure in the range of about 1500 to about 7500 pounds per square inch, thereby forming a liquid hydroformylation product containing cobalt carbonyl, reducing the temperature and pressure on said hydroformylation product, passing said latter hydroformylation product downwardly through a demetalling zone containing a combustible, porous, carbonaceous support, passing steam upwardly through said demetalling zone to obtain a temperature of about 375° F. adjacent the bottom of said demetalling zone and a temperature of about 70° F. adjacent the top of said demetalling zone so as to decompose the cobalt carbonyl into elemental cobalt and deposit the same upon said support, and thereafter recovering the cobalt from said support.

2,747,987

PROCESS FOR SEPARATING IRON VALUES FROM TITANIFEROUS IRON MATERIAL

John M. Daubenspeck, Westfield, and Robert S. McNeil, Long Branch, N. J., assignors to National Lead Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application February 27, 1952, Serial No. 273,768

3 Claims. (Cl. 75—30)

1. A method for separating iron from a titaniferous oxidic iron material by selective chlorination which comprises smelting said material by heating said material to a temperature of at least about 1500° C. to provide in said titaniferous iron material reduced titanium values in an amount sufficient to accept substantially all of the oxygen of the iron values in said material and reacting said material with chlorine to convert substantially all of the iron values to volatile ferric chloride and separating the latter from the residual titanium values.

2,747,988

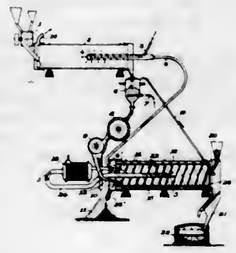
METHOD FOR THE RECOVERY OF PURE IRON OXIDE AND IRON FROM OXIDIC IRON ORES

Kurd von Haken, Murnau, Germany, assignor of one-third to Kenneth R. Marsden, Chicago, Ill.

Application April 16, 1952, Serial No. 282,561

Claims priority, application Germany April 23, 1951

5 Claims. (Cl. 75—33)



1. In a method for the production of pure iron from poor iron ores including the reduction of the ore to Fe_3O_4 and a consecutive oxidation of the same in the presence of steam to gamma Fe_2O_3 at a temperature beneath 400° C. the step of grinding and magnetic separating gamma Fe_2O_3 from the gangue and of reducing the separated Fe_2O_3 at a temperature of 420 to 860° C.

2,747,989

FERRITIC ALLOYS

Henry William Kirkby and Charles Sykes, Sheffield, England, assignors, by mesne assignments, to Firth-Vickers Stainless Steels Limited, Sheffield, England, a British company

No Drawing. Application April 1, 1953, Serial No. 346,257

Claims priority, application Great Britain May 28, 1952

3 Claims. (Cl. 75—128)

1. A forgeable high strength ferritic alloy comprising carbon up to 0.1%, silicon 1.5 to 6.0%, manganese 0.5 to 5.0%, nickel 0.5 to 6.0%, chromium 3.0 to 16.0%, and the balance iron with residual impurities in ordinary amounts.

2,747,990

PROCESS OF PRODUCING GREY CAST IRON

Henton Morrogh, Tanworth-in-Arden, England, assignor to The British Cast Iron Research Association, Alvechurch, Birmingham, England

No Drawing. Application May 25, 1953, Serial No. 357,348

13 Claims. (Cl. 75—130)

1. Process for the production of a grey cast iron containing calcium and having its graphite content at least predominantly in nodular form, in which a molten iron which when cast gives a grey cast iron hypereutectic in relation to carbon is treated at temperatures below 1650° C. under non-oxidizing conditions with a calcium-providing substance selected from the group consisting of calcium, calcium alloys and calcium compounds other than those which form calcium oxide, even under non-oxidizing conditions, in the molten iron at temperatures below 1650° C., the amount of said calcium-providing substance employed being in excess of that required to reduce the sulphur content to not over 0.02% and also to remove, as calcium oxide, any oxygen present in the molten iron.

2,747,991

MAGNESIUM-BASE ALLOYS

Alfred H. Hesse, Worthington, Ohio, assignor, by mesne assignments, to Olin Mathieson Chemical Corporation, a corporation of Virginia

No Drawing. Application September 14, 1945, Serial No. 616,161

1 Claim. (Cl. 75—168)

A magnesium-base alloy consisting of about 2% of zinc, about 4% of aluminum, about 2% of tin, about 3.7% of lithium, with the balance being magnesium.

2,747,992

THERMO-ELECTRIC NICKEL-BASE ALLOYS

Gösta Erik Hildebrand Hildebrand and Björn Edwin, Hallstahammar, Sweden, assignors to Aktiebolaget Kanthal, Hallstahammar, Sweden, a corporation of Sweden

No Drawing. Application December 8, 1951, Serial No. 260,778

Claims priority, application Sweden December 8, 1950

7 Claims. (Cl. 75—170)

3. A negative thermo-electric nickel base alloy comprising 1.5 to 3% of silicon and 0.01 to 1.5% of an auxiliary metal for influencing the thermo-electric force of the alloy, said auxiliary metal being a metal which will cause a maximum change of 0.4 millivolt in the thermo-electric force against platinum when the content of said metal in said alloy is changed by 0.01%, the balance being nickel.

2,747,993

HIGH TEMPERATURE NICKEL-BASE ALLOY

Robert B. Johnson, Cincinnati, Ohio, assignor to General Electric Company, a corporation of New York

No Drawing. Application December 26, 1951, Serial No. 263,517

4 Claims. (Cl. 75—171)

1. A nickel base alloy for high temperature applications containing as essential alloying ingredients, by weight, from 0.1 to 0.2 percent carbon, 18 to 20 percent chromium, 6 to 11 percent molybdenum, 9 to 11 percent cobalt, 2.25 to 2.75 percent titanium, 0.25 to 1.25 percent aluminum, not over 5 percent iron, balance nickel except for deoxidizing quantities of manganese and silicon.

2,747,994

REINFORCED CEMENTITIOUS INSULATING MATERIAL AND METHOD OF PREPARATION THEREOF

Harry P. Hoopes, Berkeley, Calif., assignor to Pabco Products Inc., San Francisco, Calif., a corporation of Delaware

No Drawing. Application October 17, 1952, Serial No. 315,427

7 Claims. (Cl. 92—3)

1. A relatively light weight mass of porous cementitious heat insulating material containing reenforcing fiber consisting essentially of a major proportion of asbestos fiber and a minor proportion of yarn-type glass fiber filaments, the asbestos fiber being at least 75% by weight of the total weight of the fiber and the glass fiber being present in an amount up to approximately 25% by weight of the total weight of the fiber, and substantially all of the glass fiber being longer than the asbestos fiber.

6. The method of providing a reenforced, relatively light weight mass of porous cementitious heat insulating material which comprises forming an aqueous slurry of said material; incorporating reenforcing fiber in said slurry in an amount of from 5% to 17.5% by weight of the total mass, said reenforcing fiber consisting essentially of at least 75% by weight asbestos fiber substantially all longer than ⅛ inch, and less than 25% by weight of yarn-type glass fiber roving composed of a plurality of individual filaments that are substantially all longer than said asbestos fiber but are less than substantially 3½ inches in length; mixing said slurry and said reenforcing fiber until said asbestos fiber and said glass fiber are substantially uniformly dispersed in the slurry and the major proportion of said glass fiber roving is divided into individual filaments; pouring said fiber containing slurry into a mold, and shaping the fiber-containing slurry in said mold.

2,747,995

METHOD OF PULP PRODUCTION

John Francis Hooper and Ben Thoburn Briggs, Shelton, Wash., assignors to Rayonier Incorporated, Shelton, Wash., a corporation of Delaware

No Drawing. Application March 12, 1952, Serial No. 276,224

8 Claims. (Cl. 92—11)

1. In the acid sulfite precooking of wood chips followed by alkaline digestion, the improvement which comprises removing the major proportion of the spent acid sulfite liquor from the precooked chips, fortifying the spent acid sulfite liquor by adding a sufficient amount of chemicals and water to replace the chemicals and water left with the wood chips, using the fortified spent acid sulfite liquor for a similar precooking operation on a fresh batch of chips, subjecting the precooked chips of each batch without washing and containing the residual adhering and imbibed spent acid liquor with its dissolved organic matter to an alkaline digestion, and removing alkaline black liquor from the alkaline digestion containing chemicals and organic matter from both the acid and alkaline stages, said precooking and removal of spent acid sulfite liquor being carried out so that the amount of organic matter in the liquor left with the chips from the precooking is substantially equal to the amount of organic matter removed from the chips in the precooking and the organic matter in the fortified spent acid sulfite liquor reaches a substantially stable value, whereby the alkaline black liquor contains such a concentration of chemicals and organic matter that it can be treated efficiently for the recovery of chemicals and heat.

2,747,996

PHOTOGRAPHIC ELEMENT PROTECTED AGAINST ACTION OF ULTRAVIOLET RADIATION

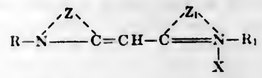
Richard O. Edgerton and Cyril J. Staud, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 31, 1952, Serial No. 318,096

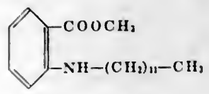
13 Claims. (Cl. 95—2)

7. A method of preventing image degradation in a finished photographic element comprising a support and superposed thereon a plurality of developed and fixed photographic emulsion layers containing coupled-dye images, at least one of said dye images being subject to fading by the action of ultraviolet light, said emulsion layer containing a coupled-dye image subject to fading lying between said support and a gelatin layer containing an ultraviolet light absorbing compound selected from those represented by the following formulas:

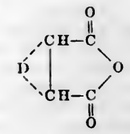
(a)



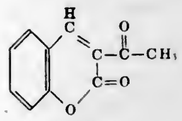
(b)



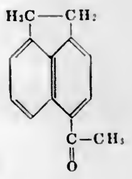
(c)



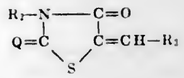
(d)



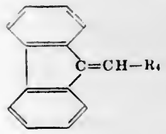
(e)



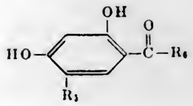
(f)



(g)

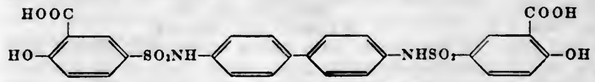


(h)

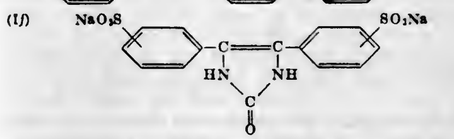


wherein R and R_1 each represents an alkyl group, R_2 represents a member selected from the group consisting of a hydrogen atom, and alkyl group of 1 to 3 carbon atoms, and a monocyclic aryl group, R_3, R_4 and R_6 each represents a monocyclic aryl group, R_5 represents a member selected from the group consisting of an alkyl group and an alkoxyl group, Q represents a member selected from the group consisting of an oxygen atom, a sulfur atom, and an imino group, X represents an anion, Z and Z_1 each represents a non-metallic atom necessary to complete a heterocyclic nucleus selected from the group consisting of those of the benzoxazole series, those of the thiazole series, those of the thiazoline series, and those of the benzothiazole series, and D represents the non-metallic atoms necessary to complete a fluoranthene nucleus, said ultraviolet light absorbing compound affording temporary protection only against the harmful effects of ultraviolet light due to decomposition on exposure to said ultraviolet light, which comprises bathing said photographic element in an aqueous non-collodial solution of a compound selected from those represented by the following formulas:

(i)



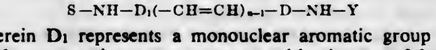
(j)



(k)



(l)



wherein D_1 represents a monouclear aromatic group of the benzene series, *n* represents a positive integer of from 1 to 3, and Y represents a member selected from the group consisting of a s-triazinyl group and an acyl group of a mononuclear aromatic carboxylic acid, said compounds *i*, *j*, *k* and *l* being absorbent of ultraviolet light of wavelength between 300 and 400 millimicrons but transmissive of light of wavelength longer than 400 millimicrons.

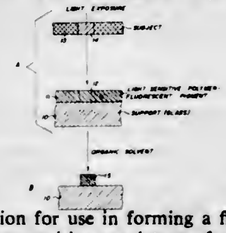
2,747,997

DECORATION OF CELLULOSIC, METAL AND VITREOUS SURFACES

James G. Smith and Earl I. Sundeen, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application October 1, 1952, Serial No. 312,478

1 Claim. (Cl. 95—7)



A composition for use in forming a fluorescent image on a surface, comprising a mixture of a member of the class consisting of zinc phosphate, zinc sulfide and zinc orthosilicate and a light-sensitive substantially fully esterified cinnamic acid ester of polyvinyl alcohol.

2,747,998

GELATION OF SOLUBLE POLYMERS WITH ATTACHED AMINO GROUPS

Edward Val Sayre, Bellport, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application August 12, 1952, Serial No. 303,997

2 Claims. (Cl. 95—7)

1. A photographic element comprising polyvinyl alcohol modified by reacting with the β-amino diethyl acetal, hardened by exposure to vapors of formaldehyde, and containing a light-sensitive silver halide salt.

2,747,999

PHOTOGRAPHIC REPRODUCTION PROCESS

Henry C. Yutzy and Burt H. Carroll, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application March 16, 1953, Serial No. 342,375

3 Claims. (Cl. 95—88)

1. A photographic reproduction process which comprises exposing to an illuminated subject a hydrophilic layer containing a diffusible diazonium salt to decompose the salt in the region of exposure, pressing the exposed layer into contact with a hydrophilic surface containing a basic hydrated salt and an azo dye coupling component while said layer and surface are substantially dry, heating the exposed layer and hydrophilic surface while in contact until moisture has been released from the hydrated salt, and the undecomposed diazonium salt has diffused imagewise to the hydrophilic surface and coupled with the coupling component to form a dye image on the hydrophilic surface.

2,748,000

REMOVING SILVER AND SILVER HALIDE FROM PHOTOGRAPHIC ELEMENTS

Paul M. Mader, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application April 1, 1954, Serial No. 420,302

15 Claims. (Cl. 95—88)

5. A process for the removal of silver from photographic elements which comprises treating a supported hydrophilic organic colloid layer containing silver with an aqueous solution of a mixture of (1) a member of the class consisting of quinone and an alkali metal ferricyanide, and (2) a compound having the general formula

$$HOOC—CH_2—(S—CH_2—CH_2)_n—S—CH_2—COOH$$

wherein *n* represents a positive integer of from 1 to 3 and alkali metal and ammonium salts thereof.

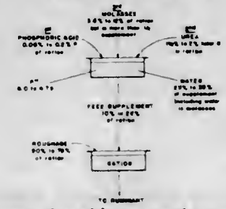
2,748,001

FEED SUPPLEMENTS FOR RUMINANTS

Philip C. Anderson, Crete, Nebr., and Frank N. Rawlings, North Ogden, Utah; said Anderson assignor to Feed Service Corporation, a corporation of Nebraska

Application August 6, 1953, Serial No. 372,774

2 Claims. (Cl. 99—6)



1. The process of making a molasses-urea-phosphoric acid feed supplement for ruminants that is free-flowing, non-fermentable, non-attractive to insects, vitamin-stabilizing, and provdes its essential nutrients in solution for the rumen's micro-organisms upon which the host animal is dependent, which comprises mixing in the presence of phosphoric acid, urea, molasses and water to form a homogeneous mixture thereof, in which mixture the molasses is in quantity more than one-half the supplement by weight, the urea is in quantity lying in a range of from 2% to 20% of the supplement by weight, the water present including water in the molasses lies in a range of from 25% to 35% of the supplement by weight, and the phosphoric acid is in quantity sufficient

to provide phosphorus in a range of from 0.27% to 2.0% of the supplement by weight, whereby there is yielded a supplement so palatable to the ruminant that the ruminant by its own free choice will consume it as well as its normally-consumed roughage.

2,748,002

MANUFACTURE OF STABILIZED BEER

Eric Kneen, Milwaukee, Wis., assignor of two-thirds to The Kurth Malting Company, Milwaukee, Wis., a corporation of Wisconsin, and one-third to Wisconsin Malting Company, Milwaukee, Wis., a corporation of Wisconsin

No Drawing. Application October 22, 1951, Serial No. 252,571
13 Claims. (Cl. 99—48)

1. In the stabilization of beer, the process which comprises mixing a stabilizing compound, selected from a class consisting of ethylenediamine tetra acetic acid and its non-toxic alkali and alkaline earth metal salts, with a green malt, kilning the malt to form a special malt impregnated with the stabilizing compound, adding a sufficient quantity of the special malt to the mash used in brewing to produce an estimated content of stabilizing compound in the finished beer amounting to from about 5 to 250 p. p. m., and producing a beer from the mash.

2,748,003

CITRUS PEEL PRODUCT AND METHOD

Walter F. Straub, Chicago, Ill., assignor to W. F. Straub & Company, Chicago, Ill., a corporation of Illinois

No Drawing. Application June 4, 1952, Serial No. 291,793
11 Claims. (Cl. 99—102)

1. A citrus peel product comprising subdivided citrus peel and liquid honey, the subdivided citrus peel being of sufficient particle size to possess a tendency to become tough, and the honey exerting a plasticizing and tenderizing effect on the peel.

2,748,004

METHOD OF INHIBITING BACTERIA, MOLD, FUNGUS, ETC., GROWTH IN CITRUS FRUITS, AND OTHER FRESH FOODS

Herman J. Keller, Dunedin, Fla., assignor, by mesne assignments, to Minute Maid Corporation, New York, N. Y., a corporation of Florida

No Drawing. Application November 29, 1951, Serial No. 259,005
13 Claims. (Cl. 99—154)

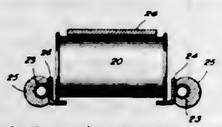
1. A method of inhibiting the development of destructive organisms in fruits and vegetables including citrus fruit comprising the step of subjecting the same at least about twenty-four hours in a closed space to an atmosphere containing a member of the group consisting of tetrachloroethane and pentachloroethane gas, wherein the concentration for each one hundred cubic feet of unoccupied space ranges from about 30 to 70 cubic centimeters of liquid for said member.

2,748,005

METHOD OF CANNING FOODS

Willard E. Baier, Ontario, Calif., assignor to Sunkist Growers, Inc., Los Angeles, Calif., a corporation of California

Application August 4, 1952, Serial No. 302,539
13 Claims. (Cl. 99—182)



1. In a method of canning food in a sanitary type can, the steps of sterilizing the food by heating rapidly, immediately placing the hot food in the can and sealing a lid thereon by means of a seam, sterilizing the interior of the can by manipulating it to assure contact of the hot food with all parts of the interior, sterilizing the seam by placing it in contact with a surface having a temperature greater than that of the can contents to rapidly increase the seam temperature without materially increasing the temperature of the food or other portions of the can, and immediately thereafter rapidly cooling the can and its contents.

2,748,006

OPTICAL GLASS

Norbert J. Kreidl, Brighton, and Earl K. Davis, Brockport, N. Y., assignors to Bausch & Lomb Optical Company, Rochester, N. Y., a corporation of New York

No Drawing. Application December 6, 1952, Serial No. 324,598
1 Claim. (Cl. 106—54)

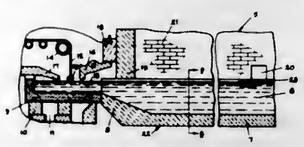
A borosilicate glass having substantially neutral light absorbing properties in the visible range of the spectrum consisting essentially of by weight 45–65% SiO_2, 1–19% Al_2O_3, 1–19% B_2O_3, up to 14% K_2O, up to 14% Na_2O, up to 6% Li_2O, 1–5% ZnO, .5–5% Fe_2O_3, .5–2% F, .05–2% C, and .001–.01% Co_3O_4, the total Al_2O_3 and B_2O_3 being 10–21%, the total K_2O plus Na_2O being 8–14%, the total K_2O plus Na_2O plus Li_2O being 10–16% and the remainder of the composition comprising compatible oxides.

2,748,007

GLASS REFRACTORY COMPOSITION

Alfred E. Badger and Donald E. Sharp, Maumee, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio

Application September 12, 1951, Serial No. 246,317
7 Claims. (Cl. 106—66)



1. A glass contact refractory consisting essentially of from 30 to 45% aluminum oxide, 50 to 70% silicon oxide, and from 1 to 5% of an oxide of a metal selected from the group consisting of chromium and vanadium.

2,748,008

METHOD OF MAKING POROUS CALCIUM SILICATE PRODUCTS

George L. Kalousek, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a corporation of Ohio

No Drawing. Application April 3, 1952, Serial No. 280,397
9 Claims. (Cl. 106—120)

8. The method of making light apparent density products from stable suspensions of finely divided reactive solids, which method comprises forming an aqueous slurry having dispersed therein reacted hydrous calcium silicate crystals in discrete particle form, and finely divided reactive solids of lime and silica, said discrete particles being of lath-like shape and having colloidal dimensions and the chemical composition $4CaO.5SiO_2.5H_2O$, said particles having surface areas of approximately 48 to 15 square meters per gram of weight, the molar ratio of lime to silica being 0.8:1, mixing said slurry to uniformly disperse both the discrete particles and the solids through the liquid to thereby form a stable suspension thereof, the liquid to solids ratio being in excess of 1:1 by volume, and reacting the reactive solids of said slurry by subjecting same to a temperature and pressure in excess of 175° C. and 130 p. s. i. abs., respectively.

2,748,009

CASEIN COMPOUNDS

Harold K. Salzberg, Bainbridge, N. Y., assignor to The Borden Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application January 28, 1952, Serial No. 268,679
4 Claims. (Cl. 106—146)

1. The combination of casein with a compound selected from the group consisting of alkyl substitution products of imidazole and imidazoline nuclei, the alkyl groups consisting entirely of carbon and hydrogen, containing at least 8 carbon atoms, and being attached at the 2 position in the said nuclei and the said compound being in the proportion to cause the combination of casein therewith to be insoluble in water and alcohol and soluble in mixed alcohol and water.

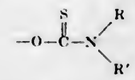
2,748,010

COMPOSITIONS COMPRISING REACTION PRODUCTS OF CELLULOSE THIOURETHANES AND ACRYLIC ACID DERIVATIVES

Arthur L. Allewelt, West Chester, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware

No Drawing. Original application April 1, 1952, Serial No. 279,921. Divided and this application May 8, 1953, Serial No. 353,901
18 Claims. (Cl. 106—186)

1. A composition of matter comprising (1) a thiourethane of an ether cellulose in which some of the hydroxyl groups in the cellulose are replaced by thiourethane groups



and by $-OCH_2CH_2X$ in which X is selected from the class consisting of CN groups and CONYY′ groups in which Y and Y′ are each selected from the group consisting of hydrogen and alkyl radicals containing from 1 to 3 carbon atoms, and R and R′ are each selected from the group consisting of hydrogen, saturated and unsaturated aliphatic hydrocarbon radicals containing from 1 to 8 carbon atoms, alicyclic radicals having a single 4- to 6-membered carbocyclic ring, heterocyclic nitrogen radicals having a single 5- to 6-membered ring, aryl radicals of the benzene series containing no hydrocarbon group attached to the benzene ring, and aryl radicals of the benzene series having hydrocarbon groups containing a total of not more than two carbon atoms attached to the benzene ring, and (2) another plastic material selected from the group consisting of cellulose esters, polymethylene terephthalates and polymers of monoethylenically unsaturated monomers.

2,748,011

COMPOSITION AND METHOD FOR EXTENDING DRYING OILS

Marion W. Pickell, Oklahoma City, Okla., assignor to Kerr-McGee Oil Industries, Inc., a corporation of Delaware

No Drawing. Application April 14, 1953, Serial No. 348,820
3 Claims. (Cl. 106—246)

1. A composition comprising a fatty drying oil and from 20 to 60 percent by weight of an essentially asphaltene-free resin-oil fraction of a bituminous material.

2,748,012

SEALING COMPOSITION FOR JOINTS IN CONCRETE STRUCTURES

Francis T. Helm, Downingtown, and Thomas D. Just, Ambler, Pa., assignors to West Bank Oil Terminal Co., Inc., Philadelphia, Pa., a corporation of Pennsylvania

No Drawing. Application December 27, 1952, Serial No. 328,258
2 Claims. (Cl. 106—269

2. A joint-sealing filler composition for use in sealing joints in concrete structures and the like comprising a water-in-oil bituminous emulsion which essentially consists of a liquified bitumen, a water insoluble fatty acid soap in colloidal state derived as the reaction product of an aqueous solution of a fatty acid soap mixed with a salt of a heavy metal capable of reacting with the soap to render it water-insoluble in the presence of said liquified bitumen and an amine of the group consisting of alkyl and alkylene amines containing from 5 to 10 carbon atoms and has intimately admixed therewith a petroleum wax and a water-insoluble resilient, finely comminuted and inherently compressible aggregate, said bituminous emulsion, petroleum wax and aggregate being respectively present in the composition in the proportions of 55 to 83 per cent, 25 to 10 per cent and 20 to 7 per cent of the total weight of the final composition.

2,748,013

PETROLEUM MICROCRYSTALLINE WAX COATING COMPOSITION

William B. Watson, Park Forest, Ill., assignor to Sinclair Refining Company, New York, N. Y., a corporation of Maine

No Drawing. Application June 5, 1953, Serial No. 359,969
8 Claims. (Cl. 106—270)

1. A coating composition which essentially comprises an air-blown mixture of an aromatic petroleum oil and about 3 to 50 weight per cent of a petroleum microcrystalline wax.

2,748,014

SWELLING AGENTS FOR CELLULOSE ACETATE

William F. Stahl, Kenilworth, and Fred V. Collins, Des Plaines, Ill.; said Collins assignor to said Stahl

Original application May 3, 1950, Serial No. 159,756. Divided and this application March 4, 1952, Serial No. 274,761
5 Claims. (Cl. 106—316)

1. A chemical bath for rapidly swelling thin layers of a plastic from the class consisting of cellulose acetates, consisting essentially of a mixture of organic solvents for the plastic, one of the solvents being an active solvent and taken from the group consisting of tetrahydrofuran and furfural and being in the proportion of about 60 parts, and a less action solvent taken from the group consisting of acetone and ethylene glycol monomethyl ether and being in the proportion of from about 40 to 50 parts, and about 10 parts of methyl isobutyl ketone.

2,748,015

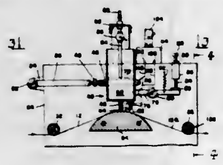
PRODUCTION OF MAGNETIC SOUND TAPE

William C. Speed, Riverside, and James J. Dwyer, Stamford, Conn., assignors to Audio Devices, Inc., New York, N. Y., a corporation of New York

Application December 21, 1950, Serial No. 201,991
4 Claims. (Cl. 117—7)

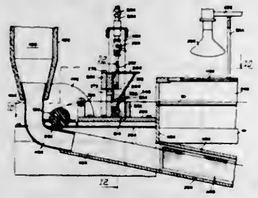
1. In the method of producing magnetic sound-recording and sound-reproducing tape by passing a relatively long and narrow tape base of the moving picture sound type with marginal sprocket holes, which tape base has an obstruction thereon, while the tape base is under tension, successively through a coating zone and a drying zone, one flat surface of the tape base being coated with

a layer of free-flowing magnetic material suspended in a liquid vehicle while moving through the coating zone and the coating being dried while moving through the drying zone, the improvement which comprises providing and maintaining in the coating zone a gap of predetermined minimum uniform height wider than the thickness of the tape base between a bottom support for the tape base and a superposed transverse liquid body of the free-flowing magnetic material, moving the tape base containing the obstruction through the gap with its bottom side in surface-to-surface contact with the top of the support in a generally horizontal direction and its top side normally out of contact with and at a predetermined minimum distance below the liquid body of magnetic material to assure a coating of predetermined thickness on the top side of the tape base, confining the application of the coating to the top surface of the tape base between the sprocket holes thereof, increasing momentarily the height



of the gap in response to the obstruction on the tape base as the obstruction enters the gap by raising the source of magnetic material so that the obstruction may pass between the support and the liquid body of magnetic material without substantial physical damage to the tape base, restoring the gap to its former predetermined minimum uniform height by lowering the source of magnetic material as soon as the obstruction passes therethrough, depositing from the liquid body a layer of the magnetic material of predetermined thickness transversely across the top side of the moving tape base, the amount of increase in the height of the gap being no more than that necessary to permit passage of the obstruction through the gap so that the thickness of the coating adjacent each side of the obstruction, in the direction of travel of the tape base, is of the same uniform thickness as the coating on the remainder of the tape base, and passing the tape base thus coated with magnetic material to and through the drying zone.

2,748,016
PRODUCTION OF MAGNETIC SOUND TAPE
William C. Speed, Riverside, and James J. Dwyer, Stamford, Conn., assignors to Audio Devices, Inc., New York, N. Y., a corporation of New York
Application December 21, 1950, Serial No. 201,974
9 Claims. (Cl. 117—7)



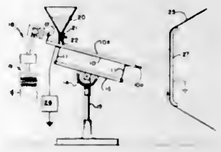
1. In the method of producing magnetic sound-recording and sound-reproducing tape by passing a relatively long and narrow tape base having an obstruction thereon successively through a coating zone and a drying zone, one side of the tape base being coated with a layer of free-flowing magnetic material suspended in a liquid vehicle while moving through the coating zone and the coating being dried while moving through the drying zone, the improvement which comprises providing and maintaining in the coating zone a gap of predetermined minimum uniform height wider than the thickness of the tape base between a bottom support for the tape base and a superposed transverse liquid body of the free-flowing magnetic material, moving the tape base containing the obstruction through the gap with its bottom side in surface to surface contact with the top of the support in a generally horizontal direction and its top side normally out of contact with and at a predetermined minimum distance below the liquid body of magnetic material to assure a coating of predetermined thickness on the top side of the tape base, increasing momentarily the height of the gap in response to the obstruction on the tape base as the obstruction enters the gap so that the obstruction may pass between the support and the liquid body of magnetic material without substantial physical damage to the tape base, restoring the gap to its former predetermined minimum uniform height as soon as the obstruction passes therethrough, depositing from the liquid body a layer of the magnetic material of predetermined thickness transversely across the top side of the moving tape base, the amount of increase in the height of the gap being no more than that necessary to permit passage of the obstruction through the gap so that the thickness of the coating adjacent each side of the obstruction, in the direction of travel of the tape base, is of the same uniform thickness as the coating on the remainder of the tape base, and passing the tape base thus coated with magnetic material to and through the drying zone.

2,748,017
PROJECTION SLIDE AND METHOD OF PREPARING THE SAME
Frederick V. Hunt, Belmont, Mass.
Application May 1, 1953, Serial No. 352,408
2 Claims. (Cl. 117—8)



1. A projection slide having a pattern containing intelligence to be projected comprising a sheet of light-transparent material a continuous surface of which is optically roughened throughout to provide the continuous surface with a matte constituted of very small closely positioned light-scattering and light-diffusing depressions, the matte having a portion in the shape of the pattern in the depressions of which there is deposited a substantially light-opaque substance for rendering the said portion of the matte substantially opaque, and the depressions in the non-pattern-shaped portion of the matte containing a light-transparent filler that renders the sheet light-transparent through the non-pattern-shaped portion.

2,748,018
APPARATUS AND METHOD OF ELECTROSTATIC POWDERING
Emery P. Miller, Indianapolis, Ind., assignor to Ransburg Electro-Coating Corp., Indianapolis, Ind., a corporation of Indiana
Application June 5, 1953, Serial No. 359,809
8 Claims. (Cl. 117—17)



5. A method of applying powder to a surface of an extended sheet comprising moving said sheet along a substantially vertical path, establishing an electrostatic field over the surface of said sheet, said field having an extended ionizing zone remote from but coextensive with the surface, supplying powder to a region adjacent said ionizing zone, vibrating the powder to move it at a controlled rate into the ionizing zone of said electrostatic field, and electrostatically moving the powder from said zone through said field and depositing the powder on the surface of said sheet, said field constituting the sole force for depositing the powder.

2,748,019
METALLIZED FABRIC
August F. Schramm, Jr., White Plains, N. Y.
Application October 1, 1953, Serial No. 383,593
2 Claims. (Cl. 117—31)



1. In making a metallized sheet, the process which comprises applying to a surface of a flexible, fibrous, air permeable sheet an aqueous dispersion of fine, undissolved particles of normally solid, non-volatile, thermoplastic resin binder material in limited proportion to avoid saturation of the sheet and to supply the said particles in spaced relationship to each other, then applying over the spaced particles of water-wet binder material a layer of heat reflecting metal flakes in uncovered condition, removing those of the applied flakes not adhered to the dispersed binder material, subjecting the sheet material so treated to an elevated temperature to volatilize the water present and soften the thermoplastic binder material, pressing the applied metal flakes upon the said sheet and the binder therein in softened condition, and then cooling the whole, the result being a sheet having the binder material adhered to the sheet and metal flakes adhered to the binder, the flakes having uncovered reflecting faces, and the flakes defining between them spaces that are permeable to air.

2,748,020
GLASS HAVING INTERFACE OF REDUCED LEAD AND DIFFUSED SILVER
William F. Parsons, Rochester, N. Y., and Juanita N. Little, Gainesville, Fla., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Original application October 27, 1950, Serial No. 192,467, now Patent No. 2,649,387, dated August 12, 1953. Divided and this application April 17, 1953, Serial No. 349,408
3 Claims. (Cl. 117—33.3)



1. A glass article having on at least one surface a non-reflecting graded interface of reduced lead and diffused silver.

2,748,021
SOLUBILIZED BENZAL DERIVATIVES OF α-METHYL-α-PHENYL HYDRAZINES AND ULTRAVIOLET RADIATION ABSORBING PRODUCTS THEREOF
James A. Van Allan, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
No Drawing. Application June 24, 1953, Serial No. 363,907
13 Claims. (Cl. 117—33.3)

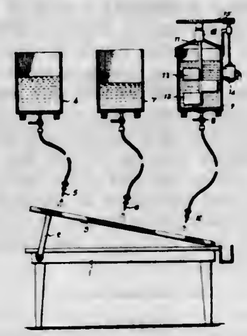
5. Solubilized benzal derivatives of alpha-methyl-alpha-phenyl-hydrazine formed by condensing alpha-methyl, alpha-phenyl hydrazine with an aldehyde selected from the class consisting of 4-methoxy-3-sulfobenzaldehyde, 4-hydroxy benzaldehyde-3-sulfonic acid, o-sulfobenzaldehyde and 2,6-di-tert.-butyl-4-hydroxybenzaldehyde.

6. A photographic print having a coating thereon comprising a solubilized derivative of alpha-methyl-alpha-phenyl hydrazine as described in claim 5.

2,748,022
CELLULOSE ESTER PHOTOGRAPHIC EMULSIONS
Edwin H. Hilborn, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
No Drawing. Application August 8, 1952, Serial No. 303,401
8 Claims. (Cl. 117—34)

1. A method of preparing a photographic product which comprises preparing an emulsion comprising silver halide and, as the carrier therefor, a solution of a cellulose ester of fatty acids of 2–4 carbon atoms, which ester contains at least 1½ acyl groups per C_6 unit of cellulose having incorporated therein a carbonate of ammonium, coating the thus formed emulsion composition upon a support in the form of a thin layer and subjecting to a temperature of at least approximately 96° F. to decompose the carbonate of ammonium and impart a porous structure to the emulsion layer.

2,748,023
METHOD AND APPARATUS FOR DEPOSITING COPPER
Max Meth, Atlantic City, N. J.
Application November 16, 1954, Serial No. 469,285
4 Claims. (Cl. 117—35)

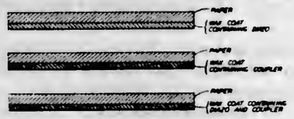


2. The method of producing a copper plated silvered mirror including the steps of mounting a transparent plate on a supporting rack, chemically depositing a silver reflective coating from a silver depositing solution on said plate while in its mounted position, and then while the silver reflecting surface is still wet with rinse water and the plate in place on the rack, simultaneously intermingling and spraying onto said surface a copper sulphate solution and a substantially homogeneous fluid suspension of finely divided cadmium dust to thereby deposit a copper protective layer, said dust having a fineness such that substantially all of it will pass through a screen having 300 openings per square inch.

2,748,024
TRANSFER SHEET FOR USE IN A HECTOGRAPH DUPLICATING PROCESS
Robert J. Klimkowski, Chicago, and Robert T. Florence, Park Ridge, Ill., assignors to A. B. Dick Company, Niles, Ill., a corporation of Illinois
Application May 13, 1952, Serial No. 287,616
13 Claims. (Cl. 117—36)

1. A transfer sheet for the preparation of an imaged duplicating master comprising a base sheet and a com-

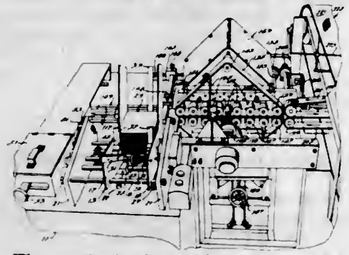
position, the major proportion of which exists as a coating on the surface of the base sheet to permit substantially complete transfer therefrom, said composition containing a dye forming component consisting essentially of from 20 to 75 percent by weight of a water and alcohol soluble diazo dye intermediate substantially free of color.



2,748,025
MACHINE FOR APPLYING SEALING MATERIAL TO ARTICLES

James J. Sackett, Inkster, Donald F. Mead, Garden City, and Delbert V. Miller, Allen Park, Mich., assignors to The Wolf Detroit Envelope Company, Detroit, Mich., a corporation of Michigan

Application April 9, 1953, Serial No. 347,808
17 Claims. (Cl. 117—44)

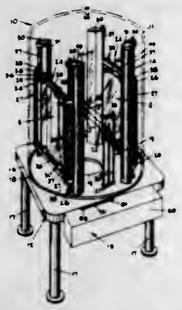


16. The method of applying a strip of latex to the inside surface of the closure flaps of envelopes and a strip of latex to the surface of the envelope adjacent to the flap which consists in moving a series of envelopes progressively and in fixed relation with respect to each other and at a point in the progressing of the envelopes, applying strips of latex upon the underside of the envelope flap and the surface adjacent to said flap by a rolling action, that is, rolling the latex strips upon the envelope as above noted, and subsequent to applying latex to the envelopes progressing the envelopes in a reversed position so that the latex portion of the envelope is facing upwardly and drying the said latex.

2,748,026
METHOD AND APPARATUS FOR THERMAL EVAPORATION

James C. Ogle, Jr., Tarentum, Pa., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio

Application March 26, 1953, Serial No. 344,755
13 Claims. (Cl. 117—45)



7. In the method of applying a plurality of coatings of thermally evaporable material onto a surface of a support body, the steps of fixedly mounting a plurality of evaporation sources of said materials in spaced relation along a defined contour within a vacuum chamber, mounting said support body with the surface thereof to be coated facing and opposite a first source of material, establishing a vacuum within said chamber and evaporating material from said first evaporation source to provide a first coating on said surface, moving said support body a fixed distance along a defined path to place a portion of the surface coated by said first source opposite and facing a second source of evaporable material, said path being spaced equidistantly from said sources and parallel to the contour thereof, and thermally evaporating material from said second source onto said support body.

2,748,027
SIZING OF VINYLIDENE CHLORIDE COPOLYMER SURFACES

John Warren Meier, Madison, Tenn., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

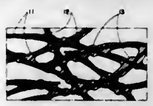
No Drawing. Application May 29, 1953, Serial No. 358,547
2 Claims. (Cl. 117—76)

1. A process for improving the surface characteristics of regenerated cellulose film coated with a protective coating of a copolymer of vinylidene chloride and at least one ethylenically unsaturated monomer polymerizable with vinylidene chloride, said copolymer containing not less than 75% vinylidene chloride which consists in spraying said coated film with an aqueous dispersion containing from 0.5% to 20% by weight, based on the total weight of dispersion, of particles of a copolymer of vinylidene chloride and at least one ethylenically unsaturated monomer polymerizable with vinylidene chloride said copolymer containing not less than 75% vinylidene chloride, and thereafter drying the resulting sprayed film, the amount of dispersion sprayed being sufficient to deposit from 0.025 to 0.1 gram of solids per square meter of film surface per side, the spray being of such fineness and drying being under such conditions as to form on the film deposited particles having an average particle diameter of 25 microns and a range of from 10 to 50 microns in diameter.

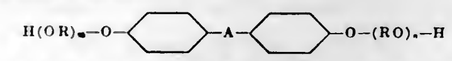
2,748,028
GLASS FIBER PRODUCT AND PROCESS

Henry M. Richardson, Springfield, Mass., assignor to Atlas Powder Company, Wilmington, Del., a corporation of Delaware

Application July 11, 1951, Serial No. 236,137
13 Claims. (Cl. 117—126)



1. A superficially dry, pliable mat consisting essentially of glass fibers and, in adherent relation thereto a dry solid, fusible, curable resin composition comprising a solid pulverulent polymerizable polyester of melting point at least 80° C., and a minor proportion of a vinyl polymerization catalyst said polyester being the esterification product of an ethene dicarboxylic acid with a substantially stoichiometric quantity of a polyhydric alcohol selected from the group consisting of (*a*) dihydric alcohols conforming to the formula



wherein R is an alkylene radical containing from 2 to 3 carbon atoms, A is a 2-alkylidene radical containing from 3 to 4 carbon atoms, *m* and *n* are each at least one, and

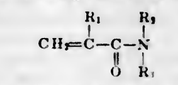
the average sum of $m+n$ is not over 3; and (*b*) mixtures consisting of at least 50 mol percent of a dihydric alcohol conforming to the said formula, from 0 to 50 mol percent of a member of the group ethylene glycol, diethylene glycol and propylene glycol, and from 0 to 10 mol percent of a polyhydric alcohol containing from 3 to 6 carbon atoms and at least three hydroxyl groups, the proportion of said curable resin composition to glass fiber being sufficient to form, upon subjection of the mat to heat and pressure alone, a hard, dense, glass-reinforced, thermoset solid.

2,748,029
TUB SIZING OF PAPER

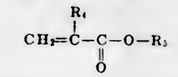
Donald R. Spear and William F. Fowler, Jr., Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application April 27, 1953, Serial No. 351,472
9 Claims. (Cl. 117—155)

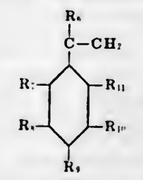
1. A process for tub sizing photographic paper wherein the paper is sized by a hydrosol prepared by polymerizing together in an aqueous system an unsaturated aliphatic amide having the following structural formula:



wherein R_1 is a substituent selected from the group consisting of hydrogen, halogen, alkyl and cyano, and R_2 and R_3 are selected from the group consisting of hydrogen and alkyl, a monomer having the structural formula:



wherein R_4 is a substituent selected from the group consisting of hydrogen, halogen and alkyl, and R_5 is a substituent selected from the group consisting of alkyl, cyano alkyl and halogenated alkyl, and a monomer having the formula:



wherein R_6 is a substituent selected from the group consisting of hydrogen, halogen and alkyl, and R_7, R_8, R_9, R_{10} and R_{11} are substituents, each of which is selected from any of the following: hydrogen, halogen, alkyl, nitro, cyano and dialkyl amino, each of the first two monomers constituting at least 2% of the total monomer present, and their sum being at least 30% thereof, and the third monomer being no more than 70% of the total monomer present and using the hydrosol as originally formed.

2,748,030
HIGH TEMPERATURE RESILIENT DRY LUBRICATION

Herman I. Silversher and George W. Burnett, Los Angeles, Calif., assignors to Electrofilm, Inc., North Hollywood, Calif., a corporation of California

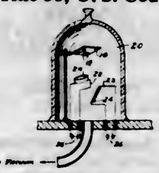
No Drawing. Application May 20, 1954, Serial No. 431,259
9 Claims. (Cl. 117—161)

1. An article having a surface that is subjected in use to substantial mechanical friction for prolonged periods of time under high heat conditions, said surface being substantially completely covered with boron nitride bonded thereto by a heat hardened resin binding agent.

2,748,031
REPRODUCTION OF PRINTED PATTERNS BY VACUUM EVAPORATION

Emanuel Kafig, Silver Spring, Md.

Application December 31, 1952, Serial No. 329,155
8 Claims. (Cl. 117—212)
(Granted under Title 35, U. S. Code (1952), sec. 266)

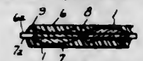


1. The process of producing a pattern of metallic areas upon a supporting base material, comprising the steps of applying a layer of a soluble substance having a configuration which is the negative of the desired pattern, depositing by vapor deposition of a layer of silicon monoxide on the surface of the base material, retaining in vacuo said supporting base material having thereon said aforementioned layer of silicon monoxide to prevent oxidation of said silicon monoxide, depositing by vapor deposition upon the second mentioned layer of an overall layer of the desired metal, covering the entire layered area with a second layer of silicon monoxide, and removing the layer of soluble substance and those portions of metal overlying said soluble substance by the action of a liquid solvent applied thereto.

2,748,032
METHOD OF COATING THIN FLAT DIELECTRIC PLATES

Bobby L. Joyner, Erie, Pa., assignor to Erie Resistor Corporation, Erie, Pa., a corporation of Pennsylvania

Application October 8, 1953, Serial No. 384,839
5 Claims. (Cl. 117—213)



1. The method of making thin flat ceramic plates having a thickness small compared to both length and width which comprises casting a plurality of spaced apart fired ceramic plates of greater than finished thickness flatwise side by side with adjacent edges of plates out of contact with each other in a flat body of plastic thicker than the plates to produce a composite plastic body having the ceramic plates with edges and opposite faces embedded therein and with opposite faces of the ceramic plates generally parallel to opposite faces of the plastic body, grinding away opposite faces of the composite plastic body to a depth below the opposite faces of the ceramic plates to produce a flat composite plate with both the plastic and ceramic ground to said finished thickness of the ceramic plates and with the edges of the ceramic plates held therein and with opposite faces of the ceramic plates flush with the ground surfaces, coating both the plastic and ceramic portions of the opposite faces of the composite plate with a metal ceramic paint of the type settable by firing to a metal coating, and firing the paint coated faces to burn away the plastic and to set the paint to the ceramic plates.

2,748,033
METHOD OF MAKING GAS DISCHARGE TUBE AND RECTIFIER

Charles Harold Raymond Gentry, Wallington, Alban William James Gollin, Mitcham, and Nora Herzfeld, London, England, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

No Drawing. Application May 1, 1952, Serial No. 285,562
Claims priority, application Great Britain May 3, 1951
4 Claims. (Cl. 117—224)

1. In the method of manufacturing a thermionic cathode the steps of, coating a refractory metal base with

a layer of a mixture of at least one alkaline earth carbonate and a formate of a refractory metal of good conductivity, and reducing the alkaline earth carbonate to a layer of the corresponding oxide.

2,748,034

METHOD OF DEPOSITING SILVER IN AN ELECTROLYTIC ANODE AND COMPOSITION THEREFOR

Michael A. Bobal, Parma, Ohio, assignor to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application September 14, 1953, Serial No. 380,096
14 Claims. (Cl. 117—227)

1. In the manufacture of a carbonaceous electrolytic anode containing as impregnants both a fatty drying oil and silver, the improvement which comprises preparing an impregnating solution containing a fatty drying oil, a silver salt, and an organic solvent for said silver salt which solvent is also miscible with said oil, impregnating said anode with said impregnating solution and heating said anode after impregnation for a time sufficient for the purpose of removing said solvent, reducing said silver salt to metallic silver and drying said fatty drying oil.

2,748,035

METHOD OF AND COMPOSITION FOR CLEANING CONTAINERS CONTAINING ALUMINUM AND TIN

Ira J. Duncan, Detroit, Mich., assignor to Detrex Corporation, Detroit, Mich., a corporation of Michigan

No Drawing. Application July 21, 1953, Serial No. 369,532
3 Claims. (Cl. 134—2)

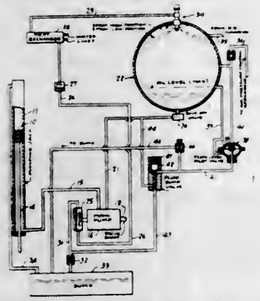
3. In a method of removing incrustations from a work object having a surface selected from the group including tin, aluminum and their oxides, in which method the object is immersed in a hot, aqueous, strong alkali cleaning solution in the presence of a dissimilar surface selected from the group consisting of tin, aluminum and their oxides, which solution tends to attack the surface of said work object by galvanic corrosive action, the novel step which comprises inhibiting said corrosive action by incorporating about 2% to 8% by weight ferricyanide ions into said solution.

2,748,036

METHOD FOR PROVIDING A PRESSURE RESPONSIVE VARIABLE SPRAY

Roy H. Deitrickson, Toledo, Ohio, assignor to The National Supply Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application May 10, 1954, Serial No. 428,546
2 Claims. (Cl. 134—24)



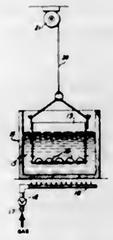
1. The method for the introduction of constant pressure anti-corrosive make-up liquid into a spherical pressure tank that is subject to substantial changes of interior pressure and volume of liquid therein and that is subject to corrosion on its walls, said method consisting of introducing into said tank at its upper center, a circular, outwardly directed spray of make-up liquid comprising a material that is anti-corrosive to the interior surface of said tank, maintaining a constant pressure on the make-up liquid being supplied to said spray and varying the vertical cross sectional area of said spray inversely to the volume of liquid and the pressure in said tank whereby said spray impinges on the walls of said tank at a high point when the pressure therein is high and at a lower point when the pressure in said tank is reduced and a fluctuating tank pressure causes said spray to sweep vertically over said walls.

2,748,037

METHOD OF TREATING ARTICLES REQUIRING ANNEALING

Thomas C. Burnham, San Diego, Calif., assignor to Rohr Aircraft Corporation, Chula Vista, Calif., a corporation of California

Application March 23, 1951, Serial No. 217,257
6 Claims. (Cl. 148—6.15)



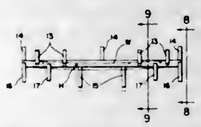
1. The method of annealing producing a smooth surface of substantially uniform texture and having the natural color of the alloy on a plurality of similar stainless steel articles formed to a curved shape and having internal stresses due to the forming, comprising the steps of wetting the entire articles simultaneously with an aqueous solution of a surface tension-reducing agent and a salt of the group consisting of sodium nitrate, sodium carbonate and trisodium phosphate to form a coating on the articles; supporting the articles in spaced apart positions in a reducing atmosphere so that the entire coated surfaces of the articles are exposed to the reducing amosphere and simultaneously heating the coated articles to an annealing temperature; cooling the annealed articles simultaneously; immersing the articles simultaneously in a hot aqueous solution of ferric sulphate and hydrofluoric acid to dissolve the scale on the articles; and washing the articles to remove the dissolved scale.

2,748,038

METHOD AND APPARATUS FOR ROLL QUENCHING AND STRAIGHTENING CYLINDRICAL ELONGATED WORKPIECES

Robert V. Adair, Rochester, Earl D. Dammert, Penfield, and Edward C. Van Beers, Brighton, N. Y., assignors to The Gleason Works, Rochester, N. Y., a corporation of New York

Application April 13, 1953, Serial No. 348,512
14 Claims. (Cl. 148—12.4)



1. A rolling quench machine having a quenching chamber and two sets of rollers for supporting a workpiece in the chamber while a quenching medium is there applied to it, means for moving one set of rollers relatively toward and away from the other set respectively to and from an operative relationship wherein rollers of both sets engage the workpiece, and means for rotating the workpiece upon the rollers while they are in such operative relationship, characterized by the provision of a means to simultaneously change the alignment of rollers of both sets while they are in their operative relationship and a workpiece is being rotated between them.

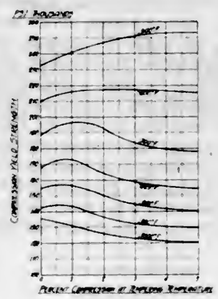
11. The method of quenching and straightening a heated workpiece of elongated generally cylindrical form which comprises rotating the workpiece while it is being held substantially straight or slightly bowed between two sets of rollers, applying a quenching medium to the workpiece while it is being so held and rotated, then bowing or further bowing the axis of the workpiece by changing the alignment of rollers of both of the two sets, and rotating the workpiece about such bowed axis.

2,748,039

METHOD OF HEAT TREATING METALLIC PIPES

Orlando P. Adams, McKeesport, and William O. Clinedinst, Pittsburgh, Pa., assignors to United States Steel Corporation, a corporation of New Jersey

Application December 17, 1951, Serial No. 262,148
3 Claims. (Cl. 148—12.4)



1. The method of producing heat treated pipe having a D/t ratio in excess of 10 comprising forming pipe of steel containing

.15 to .50% carbon
.50 to 2.00% manganese
.01 to .15% phosphorus
.06% max. sulphur

Balance iron and other elements in amounts which do not adversely affect the properties,

heating said pipe to above the upper critical temperature thereof, quenching said heated pipe to obtain in said steel a martensitic structure which when compressed at a temperature above 600 and below 1000° F. will first increase in compression yield strength and upon further compression within said temperature range will then decrease in compression yield strength, the quenching of said pipe causing ovality therein, heating the quenched pipe to a temperature within the aforementioned range, reducing the diameter of said pipe an amount sufficient to remove said ovality but not over 3% by compression while in said temperature range to first increase the compression yield strength of the pipe and then decrease the same, and regulating the amount of compression within said range to an amount insufficient to reduce said yield strength substantially below the value of the same if the quenched pipe were simply tempered at the temperature of said heating and compression.

2,748,040

POROUS ALLOYED WELDING FLUXES

William M. Conn, Kansas City, Mo.

No Drawing. Application April 3, 1952, Serial No. 280,385
4 Claims. (Cl. 148—26)

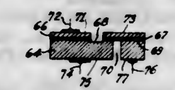
1. A welding flux based on the alumina-silica system with the addition of glass-forming oxides and composed of porous particles and adapted when used in welding to produce a crust and slag having crystalline inclusions therein, said flux consisting essentially of 23.0%–34.2% of SiO_2; 3.0%–3.6% of TiO_2; 42.0%–64.3% of Al_2O_3 containing in a trace amount as an impurity Fe_2O_3; 4.7%–5.1% of CaO; 5.0%–8.5% of MnO.

2,748,041

SEMICONDUCTOR DEVICES AND THEIR MANUFACTURE

Humboldt W. Leverenz, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application August 30, 1952, Serial No. 307,231
The terminal 15 years of the term of the patent to be granted has been disclaimed
1 Claim. (Cl. 148—33)



A semiconductor device comprising a block of semiconductor material of one type of conductivity, a layer of a substance alloyed and diffused into one surface of said block whereby a rectifying barrier and a layer of material of opposite conductivity are formed within said surface and adjacent to the main body of said block in the order named, a channel formed in said alloyed layer and extending through said layer of opposite conductivity material and said rectifying barrier whereby a plurality of diffusion junctions are formed, and another channel formed in the main body of said block and extending up to said layer of alloyed material whereby two portions of said semiconductor block are formed.

2,748,042

LAMINATED MATERIALS

Giusto Borgese, Milan, Italy, assignor to Societa Del Linoleum, Societa Per Azioni, Milan, Italy

Application November 23, 1954, Serial No. 470,728
7 Claims. (Cl. 154—49)



2. An improved laminate useful for floor coverings characterized by a markedly reduced tendency toward dimentional changes resulting from shrinkage and relaxation, comprising a facing layer of a polyvinyl resinous material substantially free from fillers and containing 20–30% by weight plasticizer, said facing layer being 0.5–1 mm. in thickness and characterized by relatively high resiliency and resistance to wear and scratching, and a second layer characterized by relatively low resiliency bonded to said facing layer and substantially coextensive therewith, said second layer being 0.5–0.6 mm. in thickness and being composed of at least about 90% by weight polyvinyl resin and not more than 1 part by weight plasticizer per each 10 parts by weight resin.

2,748,043

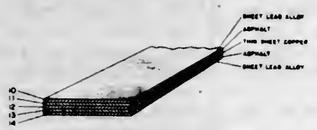
LAMINATED MATERIALS

William T. Mullen, Philadelphia, Pa.

Application July 7, 1953, Serial No. 366,520
2 Claims. (Cl. 154—51)

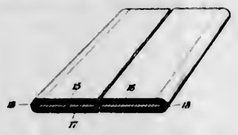
1. Sheet material comprising a first lamina of asphalt impregnated paper, a first asphaltic coating adherent to

said first lamina, a second lamina of paper adherent to said first coating, a second asphaltic coating adherent to second paper lamina, a third lamina of lead foil adherent to said second coating, a third asphaltic coating adherent to said third lamina, a fourth lamina of electrolytic sheet copper adherent to said third asphaltic coating, a fourth asphaltic coating adherent to said fourth lamina, a fifth



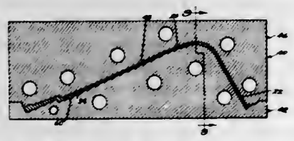
lamina of lead foil adherent to said fourth coating, a fifth asphaltic coating adherent to said fifth lamina, a sixth lamina of paper adherent to said fifth coating, a sixth asphaltic coating adherent to said sixth lamina, and a seventh lamina of asphalt impregnated paper adherent to said sixth coating, said sheet material being readily bendable and retaining the shape to which it is bent.

2,748,044
CONVEYER BELTING
Arthur J. Seiler, Chadds Ford, Pa., assignor to Main Products Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Original application January 28, 1952, Serial No. 268,620, now Patent No. 2,696,865, dated December 14, 1954. Divided and this application January 5, 1954, Serial No. 402,303
7 Claims. (Cl. 154—52.1)



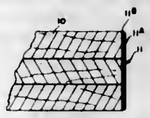
1. As a new product of manufacture, belting comprising a core strip of thin flexible sheet metal; and a surrounding sheathing composed of several longitudinally-extending strips of rubber, at least one of said rubber strips having portions surrounding the lengthwise edges of the core strip and bonded in marginally lapping relation to at least one of the other rubber strips.

2,748,045
METHOD OF MAKING MOLDED PLASTIC WASHING MACHINE AGITATOR
William L. Kelly, Chicago, Ill.
Application November 17, 1953, Serial No. 392,640
2 Claims. (Cl. 154—110)



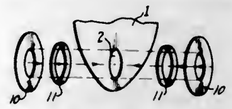
1. A method of making a coated washing machine agitator of generally circular form, said method comprising molding a plurality of complementary individual sector-shaped sections, each of said sections being molded by providing a mold having a plurality of parts with respective molding surfaces, shaping said surfaces to correspond with a fraction of the agitator, orienting the mold with its molding surfaces generally horizontal, applying an initial continuous coating of a liquid resinous material to the molding surface of one part of the mold, adding a fibrous reinforcing material and a resinous body material to said coating, and bringing the parts of the mold together under heat and pressure to amalgamate the coating, the fibrous material, and the body material into an intimately bonded mass, assembling the complementary sections, and securing the complementary sections together to form a complete agitator having a continuously coated outer surface.

2,748,046
METHOD OF EDGE-SURFACING WOODY PRODUCTS
William R. Works, Camas, Wash., and Thomas R. Miles, Beaverton, Oreg., assignors to Crown Zellerbach Corporation, San Francisco, Calif., a corporation of Nevada
Application April 12, 1954, Serial No. 422,294
6 Claims. (Cl. 154—116)



1. In the finishing of a woody product, the process of forming a surfaced edge of said woody product, which process comprises employing a specially-prepared edge-surfacing strip consisting of a flexible fibrous cellulosic backing sheet coated on one face, with a continuous, substantially dry, film of heat-activatable adhesive, said adhesive having a thermosetting, alkaline water-soluble phenol-aldehyde resin as its major ingredient and a minor proportion of a thermo-plastic resin selected from the group consisting of polyvinyl acetate, plasticized polystyrenes and polyamides, the amount of adhesive being sufficient to produce a film weighing from about 30 pounds to 150 pounds per 3,000 square feet of sheet surface, covering at least one entire edge face of said woody product with said strip, the coated side of said strip being applied against said edge face, and securing said strip to said edge face by means of pressure and heat sufficient to produce a permanent bond between the strip and said edge face of said woody product and a smooth and uniform surfacing.

2,748,047
REINFORCED WALLS OF HOLES IN PLASTIC MEMBERS AND METHOD OF MAKING SAME
Ralph L. Kuss, Findlay, Ohio
Application September 29, 1954, Serial No. 459,103
11 Claims. (Cl. 154—116)



1. The method of reinforcing the walls of registering holes in two opposed members of flexible plastic material, which consists in interposing between said members in close surrounding relation to the holes a stiff and strong plastic insert having a melting temperature less than that of said members, applying heat and pressure to the members in the marginal outer edge portions thereof which extend beyond said insert to effect a seal thereabout, then applying heat and pressure to the members and insert in the area of the latter to soften and flow the insert material within said seal and to integrally unite the materials of the members and insert.

9. A reinforcement for the wall of a hole in a sheet of plastic material, comprising a plastic reinforcing member around the hole with the plastic of the member stiff and non-elastic and being of a nature to melt at a lower temperature than the sheet material, and a covering member for the reinforcing member of a material similar to that of the sheet and overlapping the reinforcing member

at its outer edge entirely around the same, the sheet, the reinforcing member and the covering member being integrally sealed together with the sealing occurring in the marginal outer edge portions of the covering member which extend beyond the reinforcing member.

2,748,048
PLASTIC STRUCTURAL MEMBER
Alfred W. Russell, Farmingdale, N. Y., assignor to Russell Reinforced Plastics Corporation, a corporation of New York
Application March 30, 1954, Serial No. 419,720
19 Claims. (Cl. 154—116)



10. The method of forming a plastic structural member which comprises the steps of superimposing two layers of resin with a strip of material non-adherent to said resin of less width than said layers of resin interposed therebetween, said layers of resin extending beyond the longitudinal edges of said non-adherent strip, bonding the longitudinal edges of said resinous layers together with a pocket extending longitudinally between said bonded edge portions, separating said pocket portions, and curving them symmetrically from the longitudinal center thereof to each longitudinal edge of said laminate.

2,748,049
PROCESS OF ADHERING TEXTILE FIBERS TO RUBBERS AND PRODUCT THEREOF
Edward F. Kalafus, Akron, Ohio, assignor to The General Tire and Rubber Company, Akron, Ohio, a corporation of Ohio
No Drawing. Application February 9, 1953, Serial No. 335,997
8 Claims. (Cl. 154—139)

2. The process of adhering textile fibers to sulfur vulcanizable rubbers comprising the steps of immersing said fibers in an aqueous dispersion of (*a*) 70 to 95 parts by dry solids weight of a copolymer of from 65 to 90 parts by weight of a conjugated diolefinic compound of less than 7 aliphatic carbon atoms and from 10 to 35 parts by weight of an unsaturated aldehyde of the general formula

$$R{=}C{-}CHO$$
$$\quad\;|$$
$$\quad R'$$

where R is a bivalent saturated aliphatic hydrocarbon radical of less than 4 carbon atoms and R′ is a member of the group consisting of hydrogen and methyl and (*b*) 5 to 40 parts by dry solids weight of a condensatation product of an aldehyde reactive compound capable of combining with an aldehyde to form a resole type resin, and an aldehyde, said condensation product being reacted so as to be only partially soluble in water, drying said treated, immersed fibers at 75 to 140° C. for 1 to 20 minutes, adhering the treated fibers to uncured, sulfur-vulcanizable rubber, and curing said rubber in contact with said treated fibers.

3. The process of adhering textile fibers to sulfur vulcanizable rubbers comprising the steps of immersing said fibers in an aqueous dispersion of (*a*) 70 to 95 parts by dry solids weight of a copolymer of from 65 to 90 parts by weight of a conjugated diolefinic compound of less than 7 aliphatic carbon atoms and from 10 to 35 parts by weight of an unsaturated aldehyde of the general formula:

$$R{=}C{-}CHO$$
$$\quad\;|$$
$$\quad R'$$

where R is a bivalent, saturated, aliphatic hydrocarbon radical of less than 4 carbon atoms and R′ is a member of the group consisting of hydrogen and methyl and (*b*) 5 to 40 parts by dry solids weight of a partially water soluble resorcinol-formaldehyde condensation product, drying said treated, immersed fibers at 75 to 140° C. for 1 to 20 minutes, adhering the treated fibers to uncured, sulfur-vulcanizable rubber, and curing said rubber in contact with said treated fibers.

2,748,050
METHOD OF BONDING USING ADHESIVE COMPOSITIONS COMPRISING MONOMERIC DISUBSTITUTED ETHYLENES
Newton H. Shearer and Harry W. Coover, Jr., Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
No Drawing. Application February 11, 1954, Serial No. 409,757
12 Claims. (Cl. 154—140)

2. An adhesive composition consisting predominantly of a monomer of the formula

$$CH_2{=}CXY$$

wherein X and Y are different radicals and X is a member of the group consisting of —SO_2R and —SO_3R radicals and Y is a member of the group consisting of —CN, —COOR, —$COCH_3$, —SO_2R and —SO_3R radicals, R being an alkyl group of from 1 to 4 carbon atoms, said composition including dissolved therein a stabilizing amount of sulfur dioxide as a polymerization inhibitor.

7. The method of bonding two solid materials together which comprises applying to the surface of at least one of said materials a thin film of an adhesive composition comprising a monomer of the formula

$$CH_2{=}CXY$$

wherein X and Y are different radicals and X is a member of the group consisting of —SO_2R and —SO_3R radicals, and Y is a member of the group consisting of —CN, —COOR, —$COCH_3$, —SO_2R and —SO_3R radicals, R being an alkyl group of from 1 to 4 carbon atoms, bringing together the materials to be bonded, and polymerizing said thin film of said monomer while in contact with both of said materials.

2,748,051
METHOD OF TREATING AIR SAC INFECTION IN POULTRY WITH PARA-AMINO-BENZOATE COMPOSITION
Thomas W. Zbornik and Oliver Herdien Peterson, Charles City, Iowa, assignors to Dr. Salsbury's Laboratories, a corporation of Iowa
No Drawing. Application April 18, 1952, Serial No. 283,114
2 Claims. (Cl. 167—53.1)

1. A process of treating air sac infection in fowl which comprises introducing into the intestinal tract of the bird infected with the causative agent of said disease a poultry feed containing approximately 0.1% of a compound selected from the group consisting of para-amino-benzoic acid, water soluble salts of para-amino-benzoic acid and mixtures thereof and maintaining said treatment for a period of not less than five days.

2,748,052
THERAPEUTICALLY ACTIVE COMPOSITIONS CONTAINING AMPHETAMINE
Armin Rosner, Brooklyn, N. Y.
No Drawing. Application December 17, 1952, Serial No. 326,585
2 Claims. (Cl. 167—55)

1. A therapeutically active composition of amphetamine salts, containing at least one salt of the group consisting of methamphetamine saccharate and methamphetamine mucate in an amount of about 10 to 90% by weight, based on the total weight of the amphetamine salts, the balance consisting of amphetamine salts, other than the saccharate and mucate, and a pharmaceutical carrier.

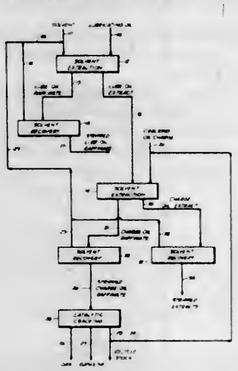
2,748,053
SOLUBLE ASCOSIN COMPOSITION AND METHOD FOR PREPARING SAME
Richard J. Hickey, Havertown, Pa., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a corporation of Maryland
No Drawing. Application September 8, 1954, Serial No. 454,836
9 Claims. (Cl. 167—65)

1. A water-soluble ascosin composition which consists of the lyophilized residue of a solution in a mixture of water and a member selected from the group consisting of pyridine, picolines, lutidines, quinoline and isoquinoline of ascosin and at least about a weight equal to that of the ascosin of a member selected from the group consisting of sodium bicarbonate and potassium bicarbonate.

2,748,054
STABLE VITAMIN B_{12} AND SOLUBLE FOLIC ACID SALT MIXTURE
Alfred E. Jurist, Brooklyn, N. Y., assignor to Olin Mathieson Chemical Corporation, New York, N. Y., a corporation of Virginia
No Drawing. Application October 16, 1951, Serial No. 251,637
9 Claims. (Cl. 167—81)

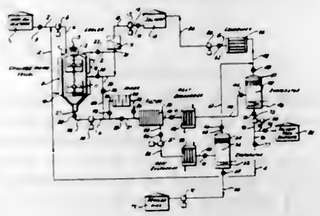
7. A parenterally-administrable therapeutic preparation essentially comprising the following components dissolved in an aqueous vehicle: a vitamin B_{12}; a pharmacologically-acceptable water-soluble salt of folic acid; and a pharmacologically-acceptable amino acid in a water-soluble state selected from the group consisting of amino-acetic acid, alpha-alanine, beta-alanine, N-(β-hydroxyethyl)-β-alanine, l-valine, l-tyrosine, tryptophane, l-leucine, alpha-amino-butyric acid, alpha-amino-isobutyric acid, mono-sodium glutamate, the sodium salt of beta-phenyl-alanine, and sodium aspartate, the ratio of amino acid component to folic acid salt component being of the order of .08 to 2.

2,748,055
HYDROCARBON CONVERSION PROCESS
Grady L. Payne, Mickleton, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York
Application January 4, 1952, Serial No. 264,951
16 Claims. (Cl. 196—14.11)



1. A hydrocarbon conversion process which comprises contacting an aromatic-containing cracking charge hydrocarbon stock having a Saybolt Universal viscosity at 122° F. of about 35 to about 200 seconds and having a boiling range of about 350° to about 1000° F. with the extract phase resulting from the refining of a petroleum lubricating oil having a Saybolt Universal viscosity at 210° F. of about 35 to about 200 seconds with a solvent selected from the class of solvents which have a preferential selectivity for the relatively more aromatic type constituents as compared to the relatively more paraffinic type constituents, separating the resulting extract and raffinate fractions, removing solvent from said separated raffinate fraction and subjecting the resulting raffinate fraction, freed of solvent, to catalytic cracking.

2,748,056
DEOILING OF WAX-OIL MIXTURES
Peter Stanley Backlund, Anaheim, and Edward A. Pullen, Fullerton, Calif., assignors to Union Oil Company of California, Los Angeles, Calif., a corporation of California
Application September 8, 1952, Serial No. 308,332
8 Claims. (Cl. 196—20)



1. A process for deoiling wax-oil mixtures containing about 60% to about 98% wax, which comprises bringing said mixtures to a temperature sufficient to dissolve the wax in the oil, adding a diluent consisting of foots oil recovered in said process to said wax-oil solution, cooling the resulting diluted wax-oil solution with agitation to crystallize wax and to produce a mass which is fluid at said cooling temperature, commingling said cooled fluent wax-oil mass with a cooled solvent to dissolve the oil present, separating the solvent solution of oil as filtrate from the crystallized wax, evaporating solvent from said filtrate to leave a foots oil and recycling a portion of said foots oil as said diluent for the wax-oil mixture to be separated.

2,748,057
CATION EXCHANGE MATERIALS AND THEIR PREPARATION
Mayer B. Goren, Oklahoma City, Okla., assignor to Kerr-McGee Oil Industries, Inc., a corporation of Delaware
No Drawing. Application March 16, 1953, Serial No. 342,728
20 Claims. (Cl. 196—22)

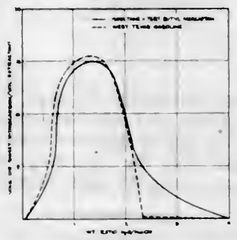
1. A process of preparing a carbonaceous cation exchange material which comprises sulfonating an asphalt-type bituminous material with concentrated sulfuric acid, further sulfonating each part by weight of the resultant product with from 2 to 10 parts by weight of oleum and washing excess acid out of the resultant product.

17. A carbonaceous cation exchange material comprising each part by weight of the reaction product of an asphalt-type bituminous material with concentrated sulfuric acid further reacted with from 2 to 10 parts by weight of oleum and washed free of excess acid.

2,748,058
DESULFURIZATION OF PETROLEUM PRODUCTS WITH ALKALI METAL FOLLOWED BY AQUEOUS FORMALDEHYDE
Joseph Frederic Walker, Lewiston, N. Y., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application July 29, 1953, Serial No. 371,165
7 Claims. (Cl. 196—26)

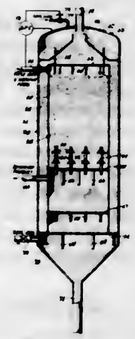
1. The method of treating a petroleum product containing an objectionable amount of sulfur compound impurities comprising treating said product in the liquid phase at an elevated temperature with an alkali metal and subsequently treating said product with an aqueous solution of formaldehyde.

2,748,059
REMOVING MERCAPTANS FROM HYDROCARBONS WITH ACTIVE CARBON IMPREGNATED WITH ALKALI
Alan C. Nixon, Berkeley, and Harry B. Minor, Orinda, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application May 18, 1953, Serial No. 355,634
4 Claims. (Cl. 196—32)



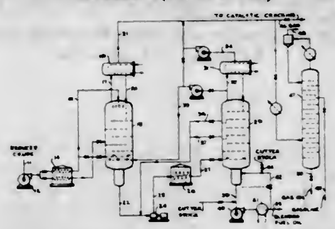
1. In a method of treating a mercaptan-containing hydrocarbon for the removal of mercaptans therefrom, the step comprising contacting said hydrocarbon with a solid extractant consisting essentially of an activated carbon which has been impregnated to saturation with an aqueous solution of from about 5 to 50% by weight of an alkali metal hydroxide, drained of free liquid excess of such solution, and dried at an elevated temperature from about 80 to about 200° C. to reduce the water content thereof to no greater than 85% of the water content at saturation while maintaining the same alkali metal hydroxide content and also to an extent such that the weight ratio of water to alkali metal hydroxide in the resulting solid extractant is from about 0.5 to about 2.0.

2,748,060
HYDROCARBON CONVERSION PROCESS AND APPARATUS THEREFOR
John S. Hicks, Wenonah, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York
Application May 9, 1952, Serial No. 286,953
13 Claims. (Cl. 196—50)



13. The method of continuously contacting a fluid with granular contact material which possesses good insulating qualities at high temperature which comprises: gravitating solid contact material downwardly through a central reaction zone as a compact column, passing a contacting fluid through the central reaction zone, so as to contact the granular material, gravitating a laterally separated annular column of said contact material downwardly about the reaction zone, at only a fraction of the mass flow rate of the column in the reaction zone, so as to insulate the housing wall confining said annular column, and maintain it at a temperature substantially below that in the conversion zone, and introducing a seal gas into the annular column, at a pressure sufficiently high only to keep contacting fluid out of said annular column.

2,748,061
THERMAL TREATMENT AND SEPARATION PROCESS
Ralph C. Olberg, Walnut Creek, and Charles P. Brewer, El Cerrito, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application August 18, 1951, Serial No. 242,524
4 Claims. (Cl. 196—50)



1. The method of thermally treating and separating a reduced mixed-base crude containing not over about 60% by weight of distillable components having a molecular weight up to about 500, the remainder being higher molecular weight distillable components and at least a substantial portion of non-distillable residue components, to produce and recover therefrom oil distillate having improved catalytic cracking characteristics and a residue product enriched in non-distillable components in reduced amount which is readily blendable to a stable fuel oil, which method comprises: (1) subjecting the reduced crude to a mild thermal treatment at a temperature of from about 425° C. to about 475° C. under substantially atmospheric pressure and for a correlated time of from about 0.5 to about 6 minutes to produce light gas oil components from heavy oil components and separating gas, gasoline and light gas oil components from a remaining residual product containing a substantial proportion of non-distillable residue components, in admixture with a heavy gas oil product recovered as hereinafter described, (2) subjecting the remaining residual product under substantially super-atmospheric pressure of 100–300 p. s. i. g. and while maintained essentially in the liquid phase to a more severe thermal treatment at a temperature of from about 440° C. to about 470° C. to convert further heavy oil components to light gas oil components while minimizing degradation by condensation of heavy oil components, (3) subjecting the thus-treated admixture of residual product and heavy gas oil to a separation operation under substantially subatmospheric pressure below about 100 mm. of Hg pressure and recovering further light gas oil components, a heavy gas oil fraction, and a remaining residue product of a high molecular weight, essentially non-distillable components which is blendable with a suitable blending oil to a stable fuel oil, and recycling the recovered heavy gas oil fraction for utility in step 2.

2,748,062
HYDROCARBON CONVERSION CATALYST AND PROCESS
Thomas F. Doumani, Los Angeles, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California
No Drawing. Application July 6, 1951, Serial No. 235,579
17 Claims. (Cl. 196—50)

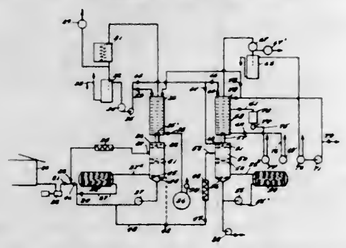
1. A process for the catalytic hydroforming of gasoline-boiling-range hydrocarbons to increase the octane rating

thereof with a minimum of hydrocracking which comprises contacting said hydrocarbons at a temperature between about 800° and 1200° F. with hydrogen and a catalyst, said catalyst consisting essentially of an intimate mixture of (1) a major proportion of an adsorbent oxide carrier, (2) between about 4% and 30% by weight of a compound selected from the group consisting of molybdenum oxide and molybdenum sulfide, and (3) between about 0.5% and 20% by weight of an impregnated sulfate of a metal having an atomic number of 22 to 58.

2,748,063
DISTILLATION OF COAL TAR

Arthur H. Radasch, Upper Montclair, N. J., assignor to Alan Wood Steel Company, Conshohocken, Pa., a corporation of Pennsylvania

Application October 21, 1952, Serial No. 315,898
2 Claims. (Cl. 196—76)



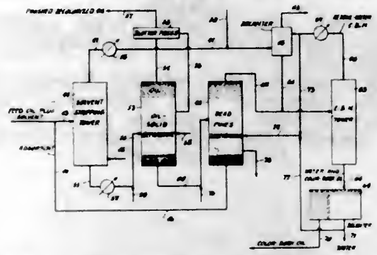
2. The process of distilling coal tar containing a substantial amount of naphthalene and separating it into fractions, which comprises continuously feeding the coal tar containing moisture into a first stage maintained at an absolute pressure of 50 to 150 mm. of mercury and at a temperature of between 140° C. and 200° C. and there flashing water and oil into vapor and producing a dehydrated tar containing less than one-half of one percent of water by volume, fractionating the vapors to produce a naphthalene fraction containing a part of the naphthalene present in the original tar, condensing water and oil vapors to produce a coal tar solvent fraction that does not deposit crystals at temperatures between 0° and 40° C., continuously removing dehydrated tar from the first stage and feeding it into a second stage maintained at an absolute pressure of 10 to 80 mm. of mercury and at a temperature of 160 to 275° C., continuously feeding coal tar solvent fraction produced in the first stage and in liquid form into the second stage at a point and in a manner such that vapors from the coal tar solvent will mix with vapors produced from the dehydrated tar in the second stage, fractionating the vapors in the second stage in a fractionating column to produce a second naphthalene fraction at a temperature above 80° C. and an overhead fraction that does not deposit crystals at temperatures between 0° and 40° C., producing a pool of residue of distillation and removing accumulation of residue from the second stage.

2,748,064
METHOD OF DECOLORIZING OIL

Harold C. Myers, Woodbury, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York

Application June 6, 1952, Serial No. 292,017
2 Claims. (Cl. 196—147)

1. That method for the decolorization of oils which comprises: admixing a finely pulverulent solid adsorbent having a grain size which will pass through a 100 mesh Tyler screen originally produced by the co-gelation of silica and alumina with a liquid mixture of oil and a solvent capable of removing adsorbed color bodies from the adsorbent when said adsorbent is spent, passing the mixture of oil, solid and solvent into a stripping tower wherein solvent is removed as vapor while the adsorbent removes color bodies from the oil, removing the oil together with contaminated adsorbent from the said stripper, treating the mixture of oil and contaminated adsorbent

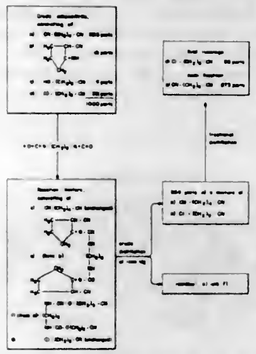


with hot water and settling the same, thereby obtaining an oil phase of improved color substantially free of water and substantially free of entrained adsorbent; passing the spent adsorbent from the separating step to a regenerating step, regenerating the spent adsorbent by dissolving

2,748,065
PURIFICATION OF ADIPONITRILE

Hans-Georg Trieschmann, Ludwigshafen (Rhine), and Lothar Reuter, Ludwigshafen (Rhine-Oppau), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

Application April 27, 1954, Serial No. 426,022
8 Claims. (Cl. 202—57)



3. A process for the purification of adiponitrile prepared by the reaction of 1,4-dichlorobutane with an alkali cyanide, which contains as byproducts delta chloro valeronitrile, 1-cyano-2-iminocyclopentane and delta hydroxy valeronitrile, which comprises adding to the said impure adiponitrile an amount of an organic isocyanate, which is equivalent in respect of the isocyanate groups to the NH- and OH-groups contained in the byprcducts of the adiponitrile, and then distilling off the adiponitrile and the delta chloro valeronitrile from the urea and urethane derivatives formed by the interaction of the isocyanate with the 1-cyano-2-iminocyclopentane and the delta hydroxy valeronitrile.

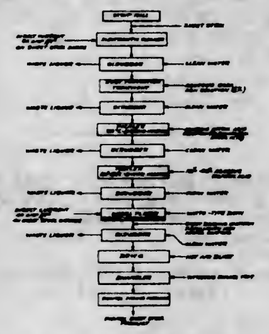
2,748,066
PROCESS OF ENAMELING STEEL

Irving P. Whitehouse, Cleveland, Fred E. Kendall, Chagrin Falls, and Paul Golar, South Euclid, Ohio, assignors to Republic Steel Corporation, Cleveland, Ohio, a corporation of New Jersey

Application September 20, 1951, Serial No. 247,466
10 Claims. (Cl. 204—34)

1. The method of producing a tenaciously adhering, uniform and continuous porcelain enamel finish coat on

a steel article having a carbon content between about 0.01% and about 0.30% which consists essentially of the steps of uniformly and regularly removing a surface portion of said article equivalent to at least about 0.01 gram per square inch and thereby producing a surface on the article substantially free of gas-retaining recesses due to excessive pitting, etching or roughness, chemically but

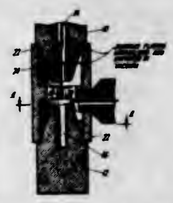


non-galvanically applying to said recess-free surface a coating of non-ferrous metal selected from the group consisting of nickel, cobalt, molybdenum and antimony ranging in thickness between about two and about ten millions of an inch, applying porcelain enamel slip substantially free from adherence promoting oxides directly to the resulting coating, and firing said slip and producing said enamel finish coat.

2,748,067
PROCESSING PLATED PARTS

Marshall C. Pease III, Needham, and John P. Jasionis, Belmont, Mass., assignors to Sylvania Electric Products Inc., a corporation of Massachusetts

Application July 20, 1951, Serial No. 237,766
9 Claims. (Cl. 204—37)



1. The method of processing a plated metal part to be exposed to the interior of an electric discharge device, including the steps of electroplating the part of a base metal with a porous layer of a different metal whose melting temperature is lower than that of said base metal, heating the plated part in vacuum over a period and at a temperature sufficient to remove the gasses contained in the part without however sintering the plating, and thereafter raising the temperature sufficient to sinter the plating while maintaining a vacuum of a high order.

2,748,068
COMPOSITION AND PROCESS FOR ELECTROPLATING BRIGHT NICKEL

Charles L. Faust and William H. Safranek, Columbus, Ohio, assignors, by mesne assignments, to Rockwell Spring and Axle Company, Coraopolis, Pa., a corporation of Pennsylvania

No Drawing. Application July 20, 1953, Serial No. 369,224
8 Claims. (Cl. 204—43)

1. A composition of matter for depositing a bright nickel electroplate which comprises an acidic solution of a major amount of nickel, an organic material selected from the group consisting of sulfonated phthalide and sulfonated naphthalide in an amount equivalent to at least 2 g./l. sulfonated phthalide and from 0.1 to 1.0 g./l. of a metal selected from the group consisting of zinc, cadmium and thallium.

2,748,069
TRIVALENT CHROMIUM PLATING SOLUTION

Jean Jacques Georges Icxl, Paris, France

No Drawing. Application July 27, 1953, Serial No. 370,640
Claims priority, application France March 20, 1948
13 Claims. (Cl. 204—51)

1. A chromium electroplating bath of a pH of about 7 consisting of an aqueous solution of at least one complex salt of trivalent chromium corresponding to the formula:

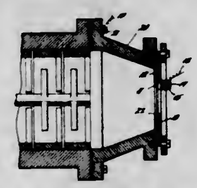
$$Cr\ (Acid)\ \frac{6}{n}\ (Amine),$$

wherein "acid" designates at least one organic carboxylic acid radical having less than six carbon atoms, "n" designates the number of carboxylic groups in said acid radical, and "amine" designates at least one radical selected from the group consisting of amine and ammonium radicals, said amine radical having at most six carbon atoms.

2,748,070
ELECTRICAL LUBRICATION OF DETERGENT SHAPING DEVICES

Robert C. Head, Glendale, Ohio, assignor to The Procter and Gamble Company, Ivorydale, Ohio, a corporation of Ohio

Application February 26, 1953, Serial No. 338,947
3 Claims. (Cl. 204—180)



1. In the process of extrusion of plastic bar of detergent compositions consisting essentially of soap high in mechanically produced beta phase and containing also soap in the unsolidified neat soap phase, said detergent compositions being in a condition of pasty cohesiveness, the steps of establishing an extrusion temperature within the beta-forming region and above the temperature range in which smooth surfaced soap is obtained in absence of electrical lubrication, and passing a direct electric current at a potential not in excess of 400 volts across the interface between the extrusion orifice and the extruding soap at a current density of 0.2 to 25.0 amperes per square inch of electrically conducting interface at a rate of 0.1 to 10.0 coulombs per square foot of extruded bar surface, to produce an extruded soap having a smooth surface.

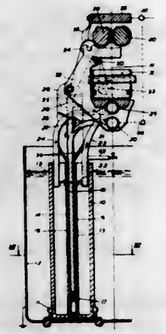
2,748,071
APPARATUS FOR REGENERATION OF ETCHING MEDIA

Paul Eisler, London, England, assignor to Technograph Printed Circuits Limited, London, England, a British company

Application August 30, 1951, Serial No. 244,427
5 Claims. (Cl. 204—208)

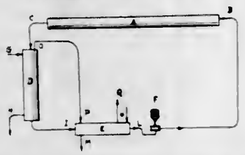
1. An apparatus comprising an electrolytic cell formed of a tank, a cathode and anode, the inside walls of said tank being composed substantially of carbon constituting

the anode of said cell, two partitions composed of porous polyvinyl chloride disposed vertically within said tank, said partitions constituting the walls of a cathodic chamber, a pair of rollers, one positioned within said cathodic chamber at the base thereof, the other positioned substantially above said chamber, a continuous narrow stainless steel band lacquered on its inside face and



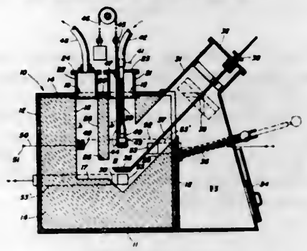
mounted upon said pair of rollers and constituting the cathode of said cell, a fluid inlet pipe extending into and terminating near the base of said cathodic chamber, a fluid outlet pipe extending from the anode area of said electrolyte cell near its mouth, and a water tank, the said electrolyte cell being positioned within said water tank.

2,748,072
APPARATUS FOR PRODUCING ALKALI METAL HYDROXIDE
Carlo Paoloni and Pietro Pennetti, Turin, Italy, assignors to Rumianca S. p. A., Turin, Italy
Application September 24, 1952, Serial No. 311,282
Claims priority, application Italy July 2, 1952
1 Claim. (Cl. 204—220)



A system for continuously producing highly concentrated alkali metal hydroxide, which comprises a mercury cathode electrolytic cell for producing an alkali metal amalgam, and means for decomposing said alkali metal amalgam to produce highly concentrated alkali metal hydroxide from said amalgam which comprises a co-currently operating vertical decomposer unit and a counter-currently operating horizontal decomposer unit, said vertical decomposer unit comprising a vertically-disposed vessel adapted to contain an alkali metal amalgam-decomposing catalyst, inlet means for said amalgam and water inlet means in the upper portion of said vessel, gas outlet means in the upper portion of said vessel, and an alkali metal hydroxide outlet and a partially-decomposed amalgam outlet in the lower portion of said vessel, and said horizontal decomposing unit comprising a horizontally-disposed vessel adapted to contain an alkali metal amalgam decomposing catalyst, a partially-decomposed amalgam inlet at a first end of said horizontally-disposed vessel, a gas inlet and an alkali metal hydroxide outlet at said first end, and a water inlet and a gas outlet at the other end of said horizontally-disposed vessel, conduit means connecting the partially decomposed amalgam outlet of the vertical decomposer vessel with the partially decomposed amalgam inlet of the horizontal decomposer vessel for conducting partially decomposed vessel amalgam from said vertical decomposer to said horizontal decomposer vessel, further conduit means connecting the gas outlet means of the vertical decomposer vessel with the gas inlet of the horizontal decomposer for conducting evolved gases from the vertical to the horizontal decomposer vessel, means connecting the amalgam inlet means at the upper portion of the vertical decomposer vessel with the cell for conducting the amalgam from the cell to the decomposer, and conduit means connecting the other end of the horizontal decomposer vessel with the cell for removing liberated mercury from said horizontal decomposer vessel to return it to the electrolytic cell.

2,748,073
FUSED SALT ELECTROLYTIC CELL FOR THE PRODUCTION OF REFRACTORY METALS
Svante Mellgren, Laurence Harbor, N. J., assignor to National Lead Company, New York, N. Y., a corporation of New Jersey
Application December 11, 1951, Serial No. 260,961
4 Claims. (Cl. 204—246)

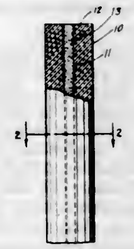


1. In an electrolytic cell comprising a receptacle adapted to contain an electrolyte, the combination including: an anode; a fixed tubular cathode; means for supplying electric current to said anode and cathode; means including said tubular cathode arranged to feed a vaporous halide of a refractory metal into said electrolyte adjacent said cathode to form readily displaceable masses of porous refractory metal continuously on said cathode; cathode stripping means in said cell comprising a member engaged around said cathode and movable relative thereto; means arranged to actuate said stripping member to successively strip masses of porous refractory metal from said cathode; and metal collecting means comprising an air-tight collecting-and-storage chamber arranged exteriorly of said cell receptacle, a passage sealed from the atmosphere and extending from a point in said cell beneath said cathode to said collecting-and-storage chamber, and a basket movably mounted in said passage, said basket having a handle arranged to be operated from a point exteriorly of said cell to move said basket in said passage to and from a position beneath said fixed cathode, thereby to receive the refractory metal stripped from said cathode and to carry said metal out of said electrolyte into said air-tight collecting-and-storage chamber.

2,748,074
ELECTROPHORETIC MICROCELL
William W. Davis, Greenwood, and Thomas V. Parke, Indianapolis, Ind., assignors to Eli Lilly and Company, Indianapolis, Ind., a corporation of Indiana
Application August 31, 1951, Serial No. 244,677
3 Claims. (Cl. 204—299)

1. A microcell for receiving samples in electrophoretic apparatus, comprising a cylindrical glass tube having a refractive index of about 1.474 and of an external diameter of substantially 7.5 mm., and having a cylindrical bore of a diameter of substantially 1.75 mm. extending axially therethrough, said bore being filled with an aqueous

sample-carrying medium having substantially the refractive index of a dilute salt solution for receiving a sample introduced therein, and said filled bore serving additional-



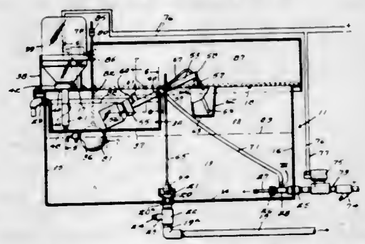
ly to produce a divergent refracting effect sufficient to neutralize the convergent refracting effect of the air-glass surfaces of the oppositely disposed side wall sections of said tube lying adjacent said bore.

2,748,075
AQUARIUM DEVICE
Norman G. Hovlid, Long Beach, Calif.
Application November 29, 1955, Serial No. 550,039
3 Claims. (Cl. 210—16)



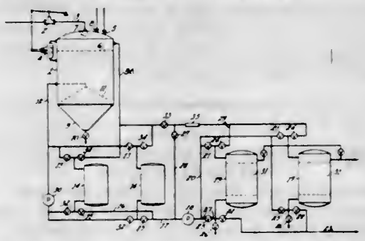
1. Water purifying apparatus usable within a container with a conversion bed of fine, loose, water-insoluble particles for converting waste material into non-toxic compounds, comprising: a substantially uniplanar support for said conversion bed spaced vertically above the bottom of said container so as to define a clean-water collection chamber between the underside of said support and said bottom, said support being formed over substantially its entire area with a plurality of openings which permit the free downward movement of water into said clean-water collection chamber, said openings each being smaller in dimension than said particles whereby said particles will be restrained from falling into said clean-water chamber and said openings collectively constituting a minimum of ten per cent of the total area of said support.

2,748,076
LIQUID PROPORTIONER
Hoyt H. Bohannon, Albertville, Ala.
Application January 8, 1954, Serial No. 402,854
3 Claims. (Cl. 210—19)



1. A liquid proportioning apparatus comprising a tank, means supplying a first liquid under pressure to said tank, an open top receptacle, means supporting said receptacle adjacent a wall of the tank, means supplying a second liquid to said receptacle for automatically maintaining a predetermined liquid level of the second liquid within the receptacle, a pipe, means fulcruming said pipe at a point spaced from its ends above the level of said receptacle, a measuring container connected to one end of said pipe and communicating therewith and supported thereby for swinging movement with said pipe end into and out of the receptacle, said measuring container being in communication with the second liquid when said measuring container is disposed within the receptacle to be filled with a predetermined quantity of the second liquid, an open top container supported on and disposed beneath the other discharge end of the pipe and supported thereby within or above the tank, a conduit having one end connected to said first liquid supply means and an opposite end discharging into said open top container whereby when liquid is supplied to the open top container through said conduit said pipe will be rocked about the fulcrum means to elevate the measuring container above the level of the discharge end of the pipe whereby a pre-measured quantity of the second liquid will be discharged from the outlet end of the pipe to be mixed with the first liquid within said open top container, and means for draining the contents of the open top container into the tank when the supply of the first liquid thereto is shut off for lightening said open top container whereby the weight of the measuring container will rock the pipe in the opposite direction about the fulcrum means to return the measuring container to a position within the receptacle to be refilled with the second liquid, said tank having an outlet in the bottom thereof from which the mixed liquids are discharged, a valve closing said tank outlet, and means connecting said valve to said pipe whereby the valve is moved to an open position when the discharge end of the pipe is elevated and returned to a closed position when the discharge end of the pipe is lowered for discharging the second liquid from the measuring container into the tank.

2,748,077
MEANS AND METHOD FOR BACKWASHING THE ZEOLITE IN A HOT LIME HOT ZEOLITE WATER SOFTENING SYSTEM
Theodore J. Hodan, Milwaukee, Wis., and William M. Woods, Oak Ridge, Tenn., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application October 8, 1952, Serial No. 313,741
4 Claims. (Cl. 210—24)



4. The method of treating water in a hot lime hot zeolite softening apparatus comprising the steps of: establishing a flow of said water through a plurality of zones; adding lime to said water in a lime softening zone to partially reduce the carbonate hardness of said water; filtering the lime softened water in a filtering zone; passing one part of the filtered lime softened water from the filtering zone in the normal forward direction through a first ion exchange zeolite softening zone to complete the softening of said part of said water; simultaneously passing the remainder of the lime softened water through a second ion exchange zeolite softening zone in the direction reverse of the normal forward direction to backwash said second ion exchange zeolite softening zone for a time interval sufficient to eliminate channels of nonuniform hydraulic

resistance and to carry off suspended material in said second zone; returning a part of the backwash water leaving said second zone to said second ion exchange zeolite softening zone; and passing the remainder of said backwash water through said first ion exchange softening zone.

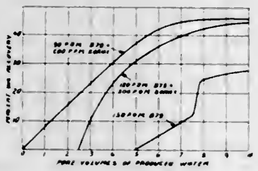
2,748,078
FIRE EXTINGUISHING FOAM-FORMING COMPOSITION
Joseph M. Perri, West Chester, and Benjamin Sloviter, Philadelphia, Pa., assignors to National Foam System, Inc., West Chester, Pa., a corporation of Delaware
No Drawing. Application January 15, 1953, Serial No. 331,499
3 Claims. (Cl. 252—8.05)

1. An alcohol-water base foam forming composition in clear solution formed by the admixture in said base of the following ingredients: a foamable proteinaceous hydrolysate, a fatty acid containing 8–18 carbon atoms, a metal organic salt reactable with the fatty acid to produce a water insoluble metal-fatty acid soap, the organic radical of said salt being chosen from the group consisting of lactate, gluconate, and citrate, an alkylaryl sulfonate as a solubilizer for the soap, and a lower alkanol amine as a solvent for the fatty acid; said ingredients being present approximately in the following percentages of the composition by weight: percentage of hydrolysate in said composition being equivalent to that had with 50% to 70% of said composition being an aqueous solution of hydrolysate of specific gravity 1.170, fatty acid 2% to 4% of said composition, salt 2% to 8% of said composition, solubilizer 5% to 10% of said composition, and fatty acid solvent 1% to 3% of said composition.

2,748,079
DRILLING FLUIDS
Walter J. Weiss, Rolling Hills Area, Calif., assignor to Texaco Development Corporation, New York, N. Y., a corporation of Delaware
No Drawing. Application September 6, 1950, Serial No. 183,462
8 Claims. (Cl. 252—8.5)

1. A brine base oil emulsion type of drilling fluid for drilling through subsurface formations characterized by its resistance to contamination by calcium ions and salt, said fluid comprising a substantially saturated water solution of a salt selected from the group consisting of alkali metal and alkaline earth metal salts, said saturated solution containing oil emulsified therein as an oil-in-brine emulsion and including saponin in an amount effective to stabilize the emulsion of oil-in-brine.

2,748,080
SECONDARY RECOVERY OF PETROLEUM BY WATER FLOODING
Jack Newcombe and Jerry D. Doane, Pawhuska, Okla., assignors to Cities Service Research and Development Company, New York, N. Y., a corporation of New Jersey
Application March 2, 1953, Serial No. 339,526
5 Claims. (Cl. 252—8.55)



1. The process of recovering oil from oil reservoirs which consists in flooding the reservoir with an aqueous liquid comprising from about 40 to about 125 parts per million of a non-ionic surfactant and from about 100 to about 1000 parts per million of borax.

2,748,081
WATER-RESISTANT NON-SOAP GREASE CONTAINING ALKALINE AGENTS
Walter H. Peterson, Point Richmond, and Thurston Skel, Lafayette, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware
No Drawing. Application June 2, 1952, Serial No. 291,336
10 Claims. (Cl. 252—28)

10. A grease composition comprising a water-insoluble lubricating oil having dispersed therein an inorganic grease-forming gel of the group consisting of silicate gels and silica gels, said gels having their normal water content replaced by the lubricating oil and having adsorbed on the surfaces thereof between about 25% and about 100% by weight of the gel of a cationic hydrophobic surface-active agent, and an inorganic water-soluble alkali metal alkaline agent in an amount between about 0.1% and about 1% by weight of said grease, said alkaline agent when dissolved in water causing the pH thereof to be above 9.5.

2,748,082
LUBRICATING COMPOSITIONS
John Zachar, Berkeley, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
No Drawing. Application August 18, 1953, Serial No. 375,064
12 Claims. (Cl. 252—47.5)

1. A non-aqueous lubricating composition comprising a major amount of a mineral lubricating oil and from about 0.5 to about 15% by weight of an oil-soluble petroleum sulfonamide derived from a petroleum fraction rich in aromatics.

2,748,083
POLYMERIZATION PROCESS
William C. Hollyday, Jr., Fanwood, Thomas S. Tutwiler, Watchung, and Carol F. Ford, Eatontown, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application November 30, 1953, Serial No. 395,296
5 Claims. (Cl. 252—51.5)

1. In a process for the preparation of lubricating oil additive materials having the desirable characteristic of improving the viscosity index of lubricating oils into which they have been incorporated which comprises copolymerizing a vinyl alkoxy ether having the general formula

$$R—(O—R')_n—O—CH=CH_2$$

wherein R is an alkyl group containing from 1 to 20 carbon atoms, R' is a bivalent radical chosen from the group consisting of methylene, ethylene, propylene and butylene, and n is an integer from 1 to 3 with a vinyl alkyl ether having the general formula

$$R''—O—CH=CH_2$$

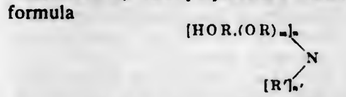
wherein R'' is an alkyl group containing from 1 to 20 carbon atoms. R. R', and R'' being chosen so that the average of $R+nR'$ and R'' in the resulting copolymer is at least 4 carbon atoms when $n=1$, at least 6 carbon atoms when $n=2$, and at least 8 carbon atoms when $n=3$, the improvement which comprises adding a relatively minor proportion of phenyl alpha-naphthylamine to a lubricating oil solution of said copolymer and raising to a temperature of about 150° to 250° F. to further polymerize said copolymer.

2,748,084
METHOD FOR CLEANING CARBONACEOUS MATERIAL AND SOIL FROM SURFACES
Earl R. De Lew, Corte Madera, and Fred G. Michaelis, San Francisco, Calif., assignors to Yosemite Chemical Co., San Francisco, Calif., a corporation of California
No Drawing. Application November 19, 1952, Serial No. 321,512
2 Claims. (Cl. 252—172)

1. The method of cleaning electrical equipment dirtied with soil including carbonaceous material and graphite which comprises wetting said equipment with an emulsion of water and a grease solvent in which emulsion the water is the dispersed phase, said grease solvent comprising a mixture of hydrocarbons and halogenated organic compounds which are immiscible with said water, the amount of water in said emulsion being approximately 1% to 20% by volume of the total volume of said water and said solvent, and said emulsion containing an emulsifying agent free of amine groups and incapable of conducting electricity in the amount of from about 2% to 8% by volume of the total volume of said emulsion, allowing said emulsion to penetrate said soil to loosen the graphite by interfacial tension between the solvent and the water, and subsequently subjecting said equipment to a fresh amount of said emulsion.

2,748,085
PROCESS FOR INHIBITING FOAM
Louis T. Monson, Puente, Calif., assignor to Petrolite Corporation, a corporation of Delaware
No Drawing. Application December 18, 1951, Serial No. 262,326
8 Claims. (Cl. 252—321)

1. A process for inhibiting foam, characterized by subjecting a non-detersive foaming composition to the action of not more than 1% of an oxyalkylated derivative of a surface-active, heat-polymerized aminoalcohol of the formula



wherein OR is an alkylene oxide radical having not over 3 carbon atoms and selected from the class consisting of ethylene oxide and propylene oxide radicals; R' is a member of the class consisting of hydrogen atoms and alkyl radicals having less than 7 carbon atoms; m represents a numeral varying from 0 to 3; n represents a numeral from 2 to 3; and $n+n'=3$.

2,748,086
PROCESS FOR INHIBITING FOAM
Louis T. Monson, Puente, Calif., assignor to Petrolite Corporation, a corporation of Delaware
No Drawing. Application December 18, 1951, Serial No. 262,324
8 Claims. (Cl. 252—321)

1. A process for inhibiting foam characterized by subjecting a non-detersive foaming composition to the action of not more than 1 per cent of an acidic esterification product of a dicarboxy acid and a polyalkylene glycol in which the ratio of equivalents of dicarboxy acid to polyalkylene glycol is within the range of 1.1 to 2.0, in which the alkylene group has from 2 to 3 carbon atoms and in which the molecular weight of the product lies between 1,500 and 4,000.

2,748,087
PROCESS FOR INHIBITING FOAM
Louis T. Monson, Puente, Calif., assignor to Petrolite Corporation, a corporation of Delaware
No Drawing. Application December 18, 1951, Serial No. 262,322
14 Claims. (Cl. 252—321)

1. A process for inhibiting foam, characterized by subjecting a non-detersive foaming composition to the action of not more than 1% of a hydrophile oxyalkylated 2,4,6 C_4- to C_{14}-hydrocarbon-substituted monocyclic phenol—C_1- to C_3-aldehyde resin; the alkylene radicals of the oxyalkylene groups being selected from the class consisting of propylene and mixtures of ethylene and propylene radicals; with the proviso that at least one-half by weight of said oxyalkylated resin consist of a multiple of the divalent oxypropylene group, C_3H_6O.

2,748,088
PROCESS FOR INHIBITING FOAM
Louis T. Monson, Puente, Calif., assignor to Petrolite Corporation, a corporation of Delaware
No Drawing. Application December 18, 1951, Serial No. 262,325
9 Claims. (Cl. 252—321)

1. A process for inhibiting foam, characterized by subjecting a non-detersive foaming composition to the action of not more than 1% of an oxyalkylated terpene alcohol, the alkylene radicals of the oxyalkylene groups being selected from the class consisting of propylene and mixtures of ethylene and propylene radicals.

2,748,089
PROCESS FOR INHIBITING FOAM
Louis T. Monson, Puente, Calif., assignor to Petrolite Corporation, a corporation of Delaware
No Drawing. Application December 18, 1951, Serial No. 262,323
5 Claims. (Cl. 252—321)

1. A process for inhibiting foam, characterized by subjecting a non-detersive foaming composition to the action of not more than 1 per cent of an oxyalkylated and acylated material selected from the group consisting of triethanolamine and its condensation polymers, said oxyalkylated and acylated material being such that there is introduced into the triethanolamine structure as a substituent for a hydroxyl hydrogen atom at least one occurrence of the radical RCO, which is the acyl radical of a monocarboxy detergent-forming acid having 8 to 32 carbon atoms, and a plurality of oxyalkylene groups selected from the class consisting of oxypropylene and mixtures of oxypropylene and oxyethylene groups, with the proviso that the molecular weight of said material exclusive of oxyalkylation-introduced elements be at least 273 and not more than 4,000 and with the further proviso that at least one-half by weight of the oxyalkylated and acylated material consist of a multiple of the oxypropylene group, C_3H_6O.

2,748,090
MANUFACTURE OF SOLID POLYMERIZATION CATALYSTS
Charles H. Watkins, Western Springs, Ill., assignor to Universal Oil Products Company, Des Plaines, Ill., a corporation of Delaware
No Drawing. Application February 28, 1955, Serial No. 491,188
13 Claims. (Cl. 252—433)

1. A process for the manufacture of a solid polymerization catalyst which comprises admixing a metal salt with an acidic oxide of phosphorus, adding said mixture to a solid adsorbent, drying and calcining said composite, and thereafter treating the resultant composite with a boron halide.

2,748,091
CELLULOSE DERIVATIVE COMPOSITIONS
Arthur L. Alleweit, West Chester, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
No Drawing. Original application April 1, 1952, Serial No. 279,922. Divided and this application May 8, 1953, Serial No. 353,902
15 Claims. (Cl. 260—17)

1. A composition of matter comprising (1) a thiourethane of cellulose acetate, the thiourethane being selected

from the group consisting of thiourethane, phenylthiourethane, ethylthiourethane, amylthiourethane, mono-benzyl thiourethane, dibenzyl thiourethane, allylthiourethane, methallylthiourethane, cyclohexylthiourethane, dibutylthiourethane, dimethylthiourethane and pyridylthiourethane and (2) a plastic material selected from the group consisting of polymethylene terephthalates and polymers of mono-ethylenically unsaturated monomers.

2,748,092

MODIFIED ALKYD RESIN AND PROCESS OF PREPARING SAME

John H. Daniel, Jr., and Ray T. Corkum, Stamford, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application March 4, 1952, Serial No. 274,838

8 Claims. (Cl. 260—22)

1. A process for the preparation of a modified alkyd resin which comprises heating reactants consisting of (1) a polycarboxylic acid consisting essentially of a polycarboxylic acid free from non-benzenoid unsaturation, (2) a polyhydric alcohol and (3) a material selected from the group consisting of natural drying oils, semi-drying oils, their acids, and monoglycerides, until an acid number of less than 30 is reached, adding thereto a mixture of monomers consisting of (4) a monomeric styrene selected from the group consisting of alpha methylstyrene, alpha chlorostyrene, ortho methylstyrene, para methylstyrene, meta methylstyrene, 2,4-dimethyl styrene, 2,4,5-trimethyl styrene, para ethylstyrene, ortho bromostyrene, para isopropylstyrene, para chlorostyrene, 2,4-dichlorostyrene, and styrene and (5) a monomeric acrylonitrile selected from the group consisting of acrylonitrile, methacrylonitrile, ethacrylonitrile, alpha ethacrylonitrile, alpha chloroacrylonitrile, and heat reacting the mixture in the presence of a peroxide catalyst and a mutually inert solvent until a 60% solids solution of the modified resin in a hydrocarbon solvent has a viscosity of F-Z5 on the Gardner-Holdt scale at 25° C., wherein the combined weight of the monomers varies between 15 and 60% of the total combined weight of the alkyd and monomers; the weight ratios of said monomeric styrene to said monomeric acrylonitrile is within the range of 19:1 and 1:1, respectively.

2,748,093

SCREEN VEHICLE COMPRISING DIPHENYL, UNMODIFIED HYDROGENATED ROSIN, AND ITS GLYCOL ESTERS

William C. Morris, Mayfield Heights, Ohio, assignor to The Harshaw Chemical Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Original application October 21, 1950, Serial No. 191,481, now Patent No. 2,617,740, dated November 11, 1952. Divided and this application November 3, 1951, Serial No. 254,791

2 Claims. (Cl. 260—27)

1. A composition suitable for use as a vehicle for the application of enamel by a screen process, the same comprising diphenyl to the extent of 40 to 90 parts by weight; a hydrogenated rosin of melting point about 168° F., acid value about 162, and density at 25° C. about 1.045, to the extent of from 2 to 20 parts by weight; an ethylene glycol ester of hydrogenated rosin of melting point about 131° F., acid value about 15, and density at 25° C. about 1.06, to the extent of from 10 to 30 parts by weight; a diethylene glycol ester of hydrogenated rosin of melting point about 104° F., acid value about 15, and density at 25° C. about 1.05, up to 30 parts by weight; and polybutene, molecular weight from 40,000 to 120,000, up to 10 parts by weight.

2,748,094

LACQUERS FROM NAPHTHALENE-FORMALDEHYDE RESINS WHICH ARE ELASTIC AFTER DRYING OUT

Hans Krzikalla, Heidelberg, and Frederic van Taack-Trakranen, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application April 20, 1953, Serial No. 349,978

Claims priority, application Germany April 23, 1952

1 Claim. (Cl. 260—28)

A lacquer from a naphthalene-formaldehyde resin which yields coatings being elastic after drying comprising a solution of a naphthalene-formaldehyde resin containing less than 5% of oxygen and a substantially non-volatile, highly chlorinated paraffin with a chlorine content of 20% to 70% in an organic solvent, the proportion of the naphthalene-formaldehyde resin to the said chlorinated paraffin being of the order of 100 parts to from 5 to 30 parts.

2,748,095

FOILS AND COATINGS FROM MIXTURES OF PASTES OF VINYL CHLORIDE POLYMERS AND PLASTICIZERS AND AQUEOUS PARAFFIN WAX EMULSIONS

August Kling, Mannheim, Germany, assignor to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application March 4, 1953, Serial No. 340,381

Claims priority, application Germany March 13, 1952

7 Claims. (Cl. 260—28.5)

1. A composition for the production of foils and coatings comprising a pulverulent linear vinyl chloride polymer containing a preponderate proportion of vinyl chloride dispersed in a plasticizer therefor, the ingredients of the dispersion being present in amounts such that the dispersion is a paste at atmospheric temperature, and an aqueous paraffin wax emulsion dispersed therein in an amount providing a paraffin wax content of about 1% to 10% by weight of the amount of said polymer and plasticizer, said emulsion having a liquid content such that the resulting dispersion is a paste at atmospheric temperature.

2,748,096

RUBBERS STABILIZED BY A BIS(2-HYDROXY-3-α-ALKYL - CYCLOALKYL - 5 - METHYLPHENYL)-METHENE OR SALTS THEREOF

Arthur Lambert and Boris Nicholas Leyland, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application December 8, 1952, Serial No. 324,822

Claims priority, application Great Britain December 19, 1951

6 Claims. (Cl. 260—29.7)

1. A composition comprising a rubbery polymer selected from the group consisting of natural rubber, butadiene synthetic rubber, and chlorobutadiene synthetic rubber having incorporated therein at least one cycloalkyl compound selected from the group consisting of bis-(2-hydroxy - 3 - alpha - alkyl - cycloalkyl - 5 - methylphenyl)-methanes and the basic and normal aluminum, barium, calcium, magnesium, strontium and zinc salts of such methanes, the cycloalkyl group in the latter being selected from the group consisting of cyclopentyl, methylcyclopentyl, cyclohexyl and methylcyclohexyl and the alkyl substituent has not more than four carbon atoms and is attached to the alpha-carbon atom of the cycloalkyl group, which is the carbon atom joined to the phenyl radical.

2,748,097

POLYACRYLONITRILE SOLUTIONS CONTAINING GELATION INHIBITORS

Donald Olcott Niederhauser, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application March 19, 1953, Serial No. 343,515

14 Claims. (Cl. 260—30.2)

1. A process for increasing the gelation time at temperature of at least 100° C. of a solution of an acrylonitrile polymer formed from monoethylenically unsaturated monomeric material and containing in the polymer molecule at least 85% of acrylonitrile by weight, comprising adding to said solution about 0.2% to about 2.5%, based on the weight of said solution, of a compound soluble in said solution and corresponding to the following formula

$$R_1-C=C-H$$
$$\quad\;\; |\quad\;\; |$$
$$\quad R_2\;\; R_3$$

wherein R_1 and R_2 are from the group consisting of hydrogen and alkyl and aryl radicals, and R_3 is linked to the rest of the molecule by a carbon-to-carbon bond and is from the group consisting of nitrile and N-heterocyclic radicals.

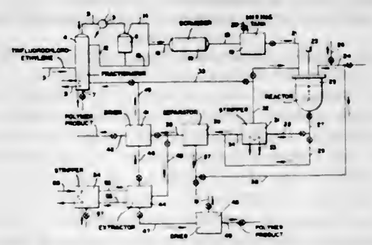
2,748,098

PLASTICIZATION OF PERHALOCARBON POLYMERS

Herbert J. Passino, Englewood, N. J., assignor to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware

Application March 29, 1952, Serial No. 279,275

16 Claims. (Cl. 260—33.8)



15. A solid polymer of tetrafluoroethylene plasticized with polychlorotrifluoroethylene in the oil to wax range obtained from the polymerization of trifluorochloroethylene, said plasticized tetrafluoroethylene polymer being produced by polymerizing monomeric tetrafluoroethylene in the presence of said polychlorotrifluoroethylene.

2,748,099

POLYAMIDE COMPOSITIONS CONTAINING A HIGH PERCENTAGE OF METAL FILLER

Walter M. Bruner and Peter J. Wayne, Wilmington, Del., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application September 4, 1952, Serial No. 307,924

8 Claims. (Cl. 260—37)

8. As a new composition of matter a linear synthetic polycarbonamide admixed with a finely divided metal filler, said metal being of the class consisting of copper and lead, the quantity of said metal being from 8 to 15 times the quantity of said polycarbonamide, said metal being uniformly distributed throughout said polycarbonamide, said polycarbonamide being a linear polycarbonamide wherein the carbonamide groups are an integral part of the main chain and in which the said carbonamide groups are separated by hydrocarbon groups of at least two carbon atoms.

2,748,100

STABILIZATION OF A SULFUR VULCANIZABLE RUBBER WITH A MIXTURE OF 6- AND 8-ALKOXY DIHYDROTRIALKYLQUINOLINES

James O. Harris, St. Albans, and Wendell P. Metzner, Charleston, W. Va., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application May 23, 1952, Serial No. 289,678

20 Claims. (Cl. 260—45.8)

1. The process of improving the resistance to degradation and atmospheric cracking of a sulfur vulcanizable rubber which comprises incorporating therein an admixture of a 6-alkoxy dihydrotrialkylquinoline and an 8-alkoxy dihydrotrialkylquinoline obtained by the condensation of the alkoxyanilines and a ketone.

2,748,101

WATER-SOLUBLE PHENOL-FORMALDEHYDE CONDENSATION PRODUCTS

Harold M. Shappell, Bound Brook, N. J., assignor to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application December 24, 1952, Serial No. 327,913

5 Claims. (Cl. 260—60)

1. An alkaline-catalyzed, water-soluble, heat-hardenable condensate of one mol phenol and between 1.1 and 3.0 mols formaldehyde reacted at a reaction pH between 8.4 and 11.5 in the presence of an inorganic alkaline catalyst which does not form water-insoluble products with boric acid to form a reaction product having a water-miscibility value not less than 500 per cent and neutralized with boric acid to a pH value between 7.0 and 8.0, said boric acid neutralized condensate having a water-miscibility value not less than 500 per cent.

2,748,102

PRODUCTION OF POLYURETHANES USING TRI- OR TETRA-FUNCTIONAL REACTANTS

Guenther Daumiller, Ludwigshafen (Rhine), Germany, assignor to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application March 18, 1953, Serial No. 343,230

Claims priority, application Germany March 20, 1952

12 Claims. (Cl. 260—77.5)

1. A process for the production of polyurethanes having an improved rigidity and dimensional stability which comprises reacting in major amount, a diprimary aliphatic diamine with a bis-chlorocarbonic acid ester in the presence of an acid binding agent, and in minor amount a compound having functionality greater than two, selected from the class consisting of aliphatic triamines, aliphatic tetraamines, tris-chlorocarbonic acid esters, and tetrakis-chlorocarbonic acid esters, said tri- and tetraamines containing on every nitrogen atom at least one hydrogen atom, the molar ratio of the major reactants to the minor reactants being 1:0.005 to 0.1, and the total amount of amino groups being substantially equivalent to the total amount of chlorocarbonic ester groups.

2,748,103

COPOLYMERS OF VINYL ESTERS WITH N-ALLYL URETHANES AND HYDROLYSIS PRODUCTS THEREOF

William J. Priest, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application June 10, 1952, Serial No. 292,717

8 Claims. (Cl. 260—77.5)

1. A copolymer of from 95.0 to 99.9 percent by weight of vinyl alcohol and from 5.0 to 0.1 percent by weight of allylamine.

2,748,104
CURING OF POLYISOBUTYLENE

Paul Viohl, Ramsey, N. J., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application October 8, 1952, Serial No. 313,781

2 Claims. (Cl. 260—79.5)

1. A method of curing elastomeric polyisobutylene which comprises heating the elastomer in the presence of at least about one-half percent by weight of sulfur, from about two to seven percent by weight of tertiary-butyl peroxide, and at least about 0.5 percent by weight of a chemical from the group consisting of quinone dioxime, p-dinitrosobenzene, and poly-p-dinitrosobenzene, based on the weight of the uncured polyisobutylene.

2,748,105
PROCESS FOR CHLORINATING ETHYLENE POLYMERS IN SOLUTION

Wilhelm Becker and Otto Bayer, Leverkusen-Bayerwerk, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application December 29, 1951, Serial No. 264,237

Claims priority, application Germany January 18, 1951

3 Claims. (Cl. 260—85.3)

1. A process for the manufacture of highly chlorinated high molecular weight polymers of ethylene which comprises preparing a solution of said polymers in an inert solvent consisting essentially of (1) chloroform and (2) a member of the group consisting of carbon tetrachloride, trichloroethylene and chlorobenzene mixture and subjecting said solution to the action of chlorine at temperatures from about 70° C. to about 80° C. in the absence of a light catalyst, the reaction being carried out entirely in solution.

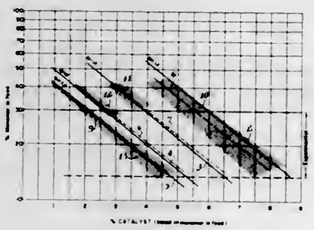
2,748,106
POLYMERIZATION

Robert Albert Scheiderbauer, Waynesboro, Va., and Leonard Stack Pitts, Bridgeport, Conn., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

Application March 11, 1953, Serial No. 347,282

(Filed under Rule 47(a) and 35 U. S. C. 116)

6 Claims. (Cl. 260—88.7)



1. Process of converting ethylenically unsaturated monomeric material in aqueous medium having pH from about 2½ to about 3½ into polymeric material (having intrinsic viscosity η) containing in the polymer molecule at least 85% acrylonitrile by weight, in continuous manner, comprising feeding together ethylenically unsaturated monomeric material of at least about 85% acrylonitrile, acidic aqueous liquor sufficient to maintain the indicated acidity, and catalyst and activator members of a redox catalytic system in which the amount of activator by weight is from 1½ to 2 times as much as the amount of catalyst and the ratio of catalyst amount to the amount of monomeric material in the feed is equivalent in per cent by weight to about

$$0.77 \log \frac{55}{\%M} + 0.8 \log \frac{4}{\eta^3}$$

where "%M" is the percentage of monomeric material by weight in the feed and is at least 16, whereby at least 75% of the monomeric material so fed is converted to the corresponding indicated polymeric material.

2,748,107
GLUCOSIDE AZO DYESTUFFS

Rudolph Hendrickson, Lake Alfred, and James W. Kesterson, Winter Haven, Fla., assignors to Research Corporation, a corporation of New York

No Drawing. Application December 30, 1952, Serial No. 328,828

3 Claims. (Cl. 260—144)

1. Monoazo dyestuffs comprising the products obtained by coupling in an alkaline medium a diazotized arylmonoamine containing not more than two aryl rings and a glucoside of the group consisting of naringin and hesperidin.

2,748,108
PROCESSES OF HYDROGENATION AND TO NOVEL CATALYTIC AGENT THEREFOR

Raymond Etienne Paul, Versailles, and Paul Jean Clement Buisson and Nicole Marie Joseph, Paris, France, assignors to Societe des Usines Chimiques Rhone-Poulenc, Paris, France, a French body corporate

No Drawing. Application December 26, 1951, Serial No. 263,505

Claims priority, application France December 29, 1950

10 Claims. (Cl. 260—210)

1. A process for the production of a catalyst which comprises reacting an alkali borohydride with a mixture of a salt of a metal selected from the group consisting of cobalt and nickel and a compound of a promoter metal selected from the class consisting of molybdenum, tungsten, iron and chromium.

3. A process of catalytic hydrogenation of a salt of streptomycin which comprises effecting such hydrogenation in the presence of a catalyst obtained by reacting an alkali borohydride with a mixture of a salt of a metal selected from the group consisting of cobalt and nickel and a compound of a promoter metal selected from the class consisting of molybdenum, tungsten, iron and chromium.

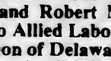
2,748,109
THIOURETHANES OF CELLULOSE ESTERS

Arthur L. Allewelt, West Chester, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application April 1, 1952, Serial No. 279,922

7 Claims. (Cl. 260—216)

5. A celluiose derivative, some of the hydroxyl groups from which the derivative is derived being replaced by acetate groups



and thiourethane groups selected from the group consisting of thiourethane, phenylthiourethane, ethylthiourethane, amylthiourethane, mono-benzyl thiourethane, dibenzyl thiourethane, allylthiourethane, methallylthiourethane, cyclohexylthiourethane, dibutylthiourethane, dimethylthiourethane and pyridylthiourethane.

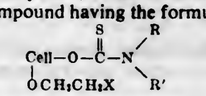
2,748,110
THIOURETHANES OF CELLULOSE ETHERS

Arthur L. Allewelt, West Chester, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application April 1, 1952, Serial No. 279,921

8 Claims. (Cl. 260—216)

1. As a new compound, a thiourethane of an ether of cellulose, said compound having the formula



in which cell is the cellulose molecule, X is selected from the class consisting of CN groups and CONYY′ groups in which Y and Y′ are each selected from the group consisting of hydrogen and alkyl radicals containing from 1 to 3 carbon atoms, and R and R′ are each selected from the group consisting of hydrogen, saturated and unsaturated aliphatic hydrocarbon radicals containing from 1 to 8 carbon atoms, alicyclic radicals having a single 4- to 6-membered carbocyclic ring, heterocyclic nitrogen radicals having a single 5- to 6-membered ring, aryl radicals of the benzene series containing no hydrocarbon group attached to the benzene ring, and aryl radicals of the benzene series having hydrocarbon groups containing a total of not more than two carbon atoms attached to the benzene ring.

2,748,111
PREPARATION OF CELLULOSE ETHER DERIVATIVES

Vernon R. Grassie, Landenberg, Pa., and Eugene D. Klug, Wilmington, Del., assignors to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application October 25, 1950, Serial No. 192,138

6 Claims. (Cl. 260—226)

1. In a process for the preparation of hydroxyethyl cellulose acetate the improvement which consists essentially of the following steps in the order named: (1) washing a crude hydroxyethyl cellulose containing not more than about 1.4 hydroxyethyl groups for each anhydroglucose unit in the cellulose to an ash content less than about 0.2% by weight with an aqueous medium free of alkalinity to phenolphthalein, and containing at least about 20% by weight of water, (2) displacing the aqueous washing medium from the hydroxyethyl cellulose with an inert, volatile, water-miscible organic solvent containing not more than about 15% by weight of water, (3) subjecting the hydroxyethyl cellulose wet with displacing solvent to drying at a temperature up to about 70° C. to remove said displacing solvent substantially completely from said hydroxyethyl cellulose and produce a dry, solvent-free, uniformly highly reactive hydroxyethyl cellulose having a uniformly soft, open, porous physical structure, (4) acetylating the so-treated hydroxyethyl cellulose to produce uniformly substituted hydroxyethyl cellulose acetate having a degree of polymerization corresponding to an intrinsic viscosity in acetone of at least about 0.8, and (5) recovering the hydroxyethyl cellulose acetate.

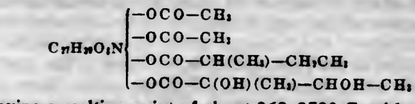
2,748,112
NEW PHYSIOLOGICALLY ACTIVE ALKALOIDS AND METHODS FOR THEIR RECOVERY

Harold A. Nash and Robert M. Brooker, Indianapolis, Ind., assignors to Allied Laboratories, Inc., Kansas City, Mo., a corporation of Delaware

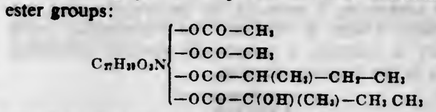
No Drawing. Application November 7, 1952, Serial No. 319,433

6 Claims. (Cl. 260—236)

1. The process which comprises subjecting protoveratrine to a countercurrent distribution treatment employing an acidified aqueous-chlorinated solvent system to effect recovery of an alkaloid, protoveratrine B represented by the following partial empirical formula indicating the ester groups:



having a melting point of about 268–270° C. with decomposition, $(\alpha)_D^{25}$ of −37.0° in pyridine, $(\alpha)_D^{25}$ of −3.5° in chloroform, and which on hydrolysis yields one mole each of protoverine, 2-methylbutyric acid, 2,3-dihydroxy-2-methylbutyric acid and two moles of acetic acid, and recovery of an alkaloid, protoveratrine A represented by the following partial empirical formula indicating the ester groups:



having a melting point of about 267–269° C. with decomposition, $(\alpha)_D^{25}$ of −40.5° in pyridine, $(\alpha)_D^{25}$ of −10.5° in chloroform, and which on hydrolysis yields one mole each of protoverine, 2-methylbutyric acid, 2-hydroxy-2-methylbutyric acid and two moles of acetic acid.

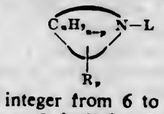
2,748,113
POLYMETHYLENEIMINOALKANOLS

Frederick F. Blicke, Ann Arbor, Mich., assignor to Regents of The University of Michigan, Ann Arbor, Mich., a corporation of Michigan

No Drawing. Application April 17, 1953, Serial No. 349,560

6 Claims. (Cl. 260—239)

1. A polymethyleneiminoalkanol selected from the group consisting of (*a*) those having the formula:



wherein *n* is an integer from 6 to 8, inclusive, *p* is an integer from zero to 2, inclusive, L is lower-alkyl-ol and R is lower-alkyl and (*b*) acid addition and quaternary ammonium salts thereof.

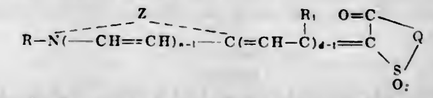
2,748,114
MEROCYANINE DYES CONTAINING A SULFONE GROUP

Leslie G. S. Brooker and Donald W. Heseltine, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application July 12, 1954, Serial No. 442,930

14 Claims. (Cl. 260—240.4)

14. A merocyanine dye selected from those represented by the following general formula:



wherein R represents an alkyl group of the formula C_mH_{2m+1} wherein *m* represents a positive integer of from 1 to 4, R_1 represents a member selected from the group consisting of a hydrogen atom and a methyl group, *d* represents a positive integer of from 1 to 2 when R_1 represents a member selected from the group consisting of a hydrogen atom and a methyl group and *d* represents 3 when R_1 represents a hydrogen atom, Q represents the non-metallic atoms necessary to complete a heterocyclic nucleus containing 5 atoms in the heterocyclic ring, 3 of said atoms being carbon atoms, 1 of said atoms being a sulfur atom, and 1 of said atoms being selected from the group consisting of a carbon atom and a nitrogen atom, Z represents the non-metallic atoms necessary to complete

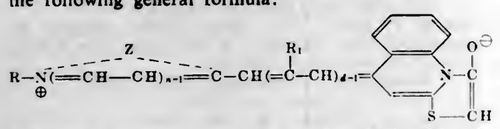
a heterocyclic nucleus containing from 5 to 6 atoms in the heterocyclic ring selected from the group consisting of those of the thiazole series, those of the benzothiazole series, those of the naphthothiazole series, those of the thianaphthenc-7',6',4,5-thiazole series, those of the oxazole series, those of the benzoxazole series, those of the naphthoxazole series, those of the selenazole series, those of the benzoselenazole series, those of the naphthoselenazole series, those of the thiazoline series, those of the 2-quinoline series, those of the 4-quinoline series, those of the 1-isoquinoline series, those of the 3,3-dialkylindolenine series, those of the 2-pyridine series, and those of the 4-pyridine series, and *n* represents 1 when Z represents the non-metallic atoms necessary to complete a heterocyclic nucleus containing 5 atoms in the heterocyclic ring and *n* represents 2 when Z represents the non-metallic atoms necessary to complete a heterocyclic nucleus containing 6 atoms in the heterocyclic ring.

2,748,115
UN-IONIZED CYANINE DYES

Leslie G. S. Brooker and Earl J. Van Lare, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application September 8, 1954, Serial No. 454,846
11 Claims. (Cl. 260—240.6)

1. A cyanine dye selected from those represented by the following general formula:



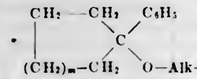
wherein R represents an alkyl group of the formula C_mH_{2m+1} wherein *m* represents a positive integer of from 1 to 4, R_1 represents a member selected from the group consisting of a hydrogen atom, an alkyl group containing from 1 to 4 carbon atoms, and a mononuclear aromatic group of the benzene series, *d* and *n* each represents a positive integer of from 1 to 2, and Z represents the non-metallic atoms necessary to complete a heterocyclic nucleus containing five atoms in the heterocyclic ring when *n* is 1 and six atoms in the heterocyclic ring when *n* is 2, said heterocyclic nucleus being selected from the group consisting of those of the thiazole series, those of the benzothiazole series, those of the naphthothiazole series, those of the thianaphtheno-7',6',4,5-thiazole series, those of the oxazole series, those of the benzoxazole series, those of the naphthoxazole series, those of the selenazole series, those of the benzoselenazole series, those of the naphthoselenazole series, those of the thiazoline series, those of the 2-quinoline series, those of the 4-quinoline series, those of the 1-isoquinoline series, those of the 3-isoquinoline series, those of the benzimidazole series, those of the 3,3-dialkylindolenine series, those of the 2-pyridine series, and those of the 4-pyridine series.

2,748,116
ARYLCYCLOALKYLOXYALKYLAMINE DERIVATIVES AND METHODS FOR THEIR PREPARATION

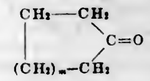
John W. Cusic, Skokie, and Clinton A. Dornfeld, Mundelein, Ill., assignors, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application December 20, 1951, Serial No. 262,664
2 Claims. (Cl. 260—247.7)

1. The process of preparing a compound of the structural formula



wherein *m* is a positive integer smaller than 3, Alk is an alkylene radical containing at least two and not more than four carbon atoms and B is an amino radical selected from the group consisting of N-piperidino, N-morpholino and di(lower alkyl)-amino radicals, which comprises mixing of a cycloalkanone of the structural formula



with a phenyl-(alkali metal) compound, followed by heating of the reaction mixture with a compound of the structural formula

Halogen—Alk—B

2,748,117
QUINOXALINIUM SALTS

Jean Druey, Riehen, and Albrecht Hueni, Basel, Switzerland, assignors to Ciba Pharmaceutical Products, Inc., Summit, N. J.

No Drawing. Application May 27, 1953, Serial No. 357,903
Claims priority, application Switzerland May 30, 1952
8 Claims. (Cl. 260—250)

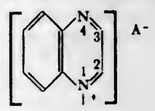
1. 1-lower hydroxyalkyl-3-phenyl-quinoxalinium salts, the anion of which is a therapeutically useful one, and which are unsubstituted in the 2-, 5-, 6-, 7- and 8-position.

2,748,118
N-ALKYL-QUINOXALINIUM SALTS

Jean Druey, Riehen, and Albrecht Hueni, Basel, Switzerland, assignors to Ciba Pharmaceutical Products, Inc., Summit, N. J.

No Drawing. Application May 27, 1953, Serial No. 357,904
Claims priority, application Switzerland May 30, 1952
3 Claims. (Cl. 260—251)

3. 1-(R_2)-3-(R_1)-quinoxalinium salts which are unsubstituted in 2-position and have the nucleus of the formula



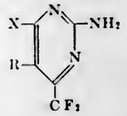
wherein R_1 is a phenyl radical, R_2 represents a lower alkyl radical and A^- stands for a therapeutically useful anion, and in which the carbocyclic ring of the quinoxaline nucleus is a member selected from the group consisting of an unsubstituted benzene ring and benzene rings substituted solely by chlorine atoms.

2,748,119
6-FURYL AND 6-THIENYL DERIVATIVES OF 4-TRIFLUOROMETHYL-2-PYRIMIDINAMINES

Kurt J. Rorig, Evanston, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

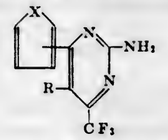
No Drawing. Application June 23, 1954, Serial No. 438,863
11 Claims. (Cl. 260—256.4)

1. A compound of the structural formula

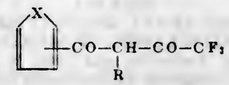


wherein R is a member of the class consisting of hydrogen and lower alkyl radicals and X is a member of the class consisting of furyl and thienyl radicals.

7. The process of preparing a compound of the structural formula



wherein R is a member of the class consisting of hydrogen and lower alkyl radicals and X is a member of the class consisting of oxygen and sulfur which comprises the condensation of guanidine with a compound of the structural formula

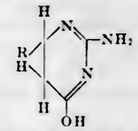


2,748,120
2-AMINO-6-ARYL-5,6-DIHYDRO-4-HYDROXY-PYRIMIDINES

Robert R. Burtner, Skokie, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

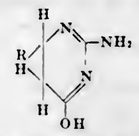
No Drawing. Application June 17, 1954, Serial No. 437,560
11 Claims. (Cl. 260—256.4)

1. A compound of the formula



wherein R is selected from the group consisting of phenyl, methoxyphenyl, hydroxymethoxyphenyl, and dichlorophenyl radicals.

9. In a process for the manufacture of compounds of the formula



wherein R is selected from the group consisting of phenyl, methoxyphenyl, hydroxymethoxyphenyl, and dichlorophenyl radicals, the step which comprises reacting guanidine with an ester of the formula

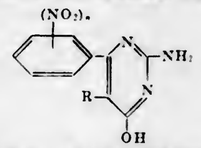
wherein R is defined as above and Z is a lower alkyl radical.

2,748,121
6-NITROARYL DERIVATIVES OF 2-AMINO-4-PYRIMIDOLS

Kurt J. Rorig, Evanston, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application June 17, 1954, Serial No. 437,562
3 Claims. (Cl. 260—256.4)

1. A compound of the structural formula



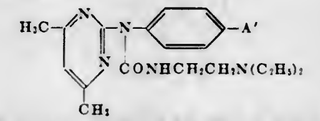
wherein R is a lower alkyl radical and *n* is a positive integer less than three.

2,748,122
2-ANILINO-4,6-DIMETHYLPYRIMIDINES

Robert R. Burtner, Skokie, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application May 6, 1954, Serial No. 428,139
2 Claims. (Cl. 260—256.4)

1. A compound of the formula



wherein A' is a lower alkoxyl radical containing less than 6 carbon atoms.

2,748,123
2-(γ-DIETHYLAMINO-PROPOXY)-4,6-DIMETHYL-PYRIMIDINE, ITS SALTS, AND PROCESSES FOR THE MANUFACTURE THEREOF

Robert R. Burtner, Skokie, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application May 6, 1954, Serial No. 428,138
5 Claims. (Cl. 260—256.4)

1. A compound selected from the group consisting of 2-(γ-diethylaminopropoxy)-4,6-dimethylpyrimidine, and non-toxic acid addition and quaternary ammonium salts thereof.

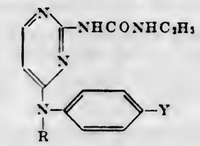
2. In a process for the preparation of a compound selected from the group consisting of 2-(γ-diethylaminopropoxy)-4,6-dimethylpyrimidine and non-toxic acid addition and quaternary ammonium salts thereof, the step which comprises reacting a 4,6-dimethyl-2-halopyrimidine with γ-diethylaminopropanol in the presence of sodium as a condensing agent, using a non-polar inert organic solvent as the reaction medium, and temperatures in the range of 65°–130° centigrade.

2,748,124
1-(4-ANILINO-2-PYRIMIDINO)-3-ALKYLUREAS

Robert R. Burtner, Skokie, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

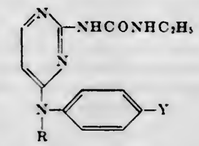
No Drawing. Application May 6, 1954, Serial No. 428,136
8 Claims. (Cl. 260—256.4)

1. A compound of the formula



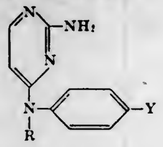
wherein Y is selected from the group consisting of hydrogen and lower alkoxyl radicals containing less than 3 carbon atoms, and R is selected from the group consisting of hydrogen and lower alkyl radicals containing less than 3 carbon atoms.

6. In a process for the manufacture of compounds of the formula



wherein Y is selected from the group consisting of hydrogen and lower alkoxyl radicals containing less than 3

carbon atoms, and R is selected from the group consisting of hydrogen and lower alkyl radicals containing less than 3 carbon atoms, the step which comprises contacting at temperatures of the order of 85–120° centigrade for periods of time amounting to between 6 and 18 hours an anilino pyrimidine of the formula



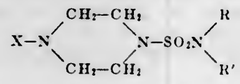
wherein Y and R have the meanings assigned above, with ethyl isocyanate, using a nonpolar organic liquid medium.

2,748,125
1-SUBSTITUTED-4-SULFAMYLPIPERAZINE AND METHOD OF PREPARING THE SAME

Corris M. Hofmann, Bound Brook, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application April 26, 1954, Serial No. 425,764
8 Claims. (Cl. 260—256.5)

1. Compounds of the group consisting of those having the formula:



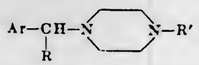
in which R and R′ are lower alkyl radicals and X is a member of the group consisting of phenyl, pyridyl, pyrimidyl, and thiazolyl and therapeutically useful acid salts thereof.

2,748,126
PHENYLCYCLOALKYLCARBINYL PIPERAZINES AND METHOD OF MAKING

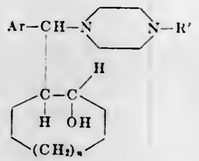
Richard Baltzly, Tuckahoe, and Peter B. Russell, Crestwood, N. Y., assignors to Burroughs Wellcome & Co. (U. S. A.) Inc., Tuckahoe, N. Y., a corporation of New York

No Drawing. Application July 9, 1954, Serial No. 442,431
9 Claims. (Cl. 260—268)

1. The method of preparing a compound of the formula

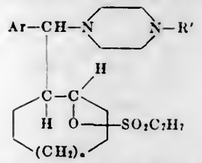


wherein R′ is a lower alkyl radical and R is selected from the class consisting of the cyclohexyl and cycloheptyl radicals which comprises reacting an amino alcohol of the formula



wherein *n* is an integer from 4 to 5 and Ar and R′ have the values previously assigned, with a reagent selected from the class consisting of the aryl and lower alkyl sulfonyl halides having not over seven carbon atoms to form the corresponding sulfonate ester of the amino alcohol and reducing this sulfonate with a reagent selected from the class consisting of lithium aluminum hydride and sodium borohydride and sodium trimethoxy borohydride to give the base of the formula first mentioned.

5. A compound of the formula



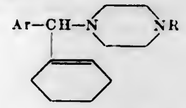
wherein Ar is a phenyl radical, R′ is a lower alkyl radical, and *n* is an integer from 4 to 5.

2,748,127
N-[α-CYCLOHEXENYL BENZYL] PIPERAZINES AND METHOD OF MAKING

Richard Baltzly, Tuckahoe, and Peter B. Russell, Crestwood, N. Y., assignors to Burroughs Wellcome & Co. (U. S. A.) Inc., Tuckahoe, N. Y., a corporation of New York

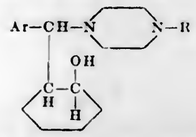
No Drawing. Application July 27, 1954, Serial No. 446,170
8 Claims. (Cl. 260—268)

1. A compound selected from the class consisting of a free base, its nontoxic acid addition salts and its lower-alkyl mono-quaternary ammonium salts, said free base having the formula—



wherein Ar is a phenyl radical and R is a lower alkyl group.

3. The process of preparing an N-[α-1′-cyclohexenyl-benzyl]N′-lower alkyl piperazine which consists of reacting with a reagent selected from the class consisting of the aryl and lower alkyl sulfonyl chlorides having not over seven carbon atoms in an aromatic heterocyclic base as solvent a compound of the formula—



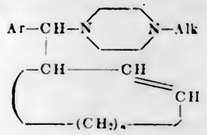
wherein Ar is a phenyl radical and R is a lower alkyl group.

2,748,128
N-(α-CYCLOALKENYLBENZYL) PIPERAZINES AND METHOD OF MAKING

Richard Baltzly, Tuckahoe, and Peter B. Russell, Crestwood, N. Y., assignors to Burroughs Wellcome & Co. (U. S. A.) Inc., Tuckahoe, N. Y., a corporation of New York

No Drawing. Application July 27, 1954, Serial No. 446,169
9 Claims. (Cl. 260—268)

1. A compound selected from the class consisting of the free base, acid addition salts and mono-quaternary salts, derived from therapeutically acceptable acids, of compounds having the free base formula:



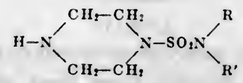
wherein Ar is a phenyl radical, alk is a lower alkyl radical and *n* is an integer from 3–4.

2,748,129
SULFAMYLPIPERAZINES AND METHOD OF PREPARING THE SAME

Corris M. Hofmann, Bound Brook, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application April 26, 1954, Serial No. 425,763
4 Claims. (Cl. 260—268)

1. Compounds of the group consisting of those having the formula:



in which R and R′ are lower alkyl radicals and therapeutically useful acid salts thereof.

2,748,130
PRODUCTION OF COMPOUNDS OF THE PYRIDINE SERIES

Walter Reppe, Heinrich Pasedach, and Matthias Seefelder, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application April 13, 1953, Serial No. 348,566
Claims priority, application Germany April 19, 1952
5 Claims. (Cl. 260—290)

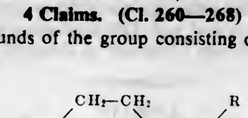
1. An improved process for the production of pyridine bases which comprises gradually introducing a member of the group consisting of glutaric dialdehyde, alkyl glutaric dialdehydes and 2-alkoxy- and 2-acyloxy-2,3-dihydropyranes at temperatures between 90° C. and 220° C. into aqueous solutions of at least equimolecular amounts hydroxylammonium salts.

2,748,131
STABILIZATION OF POLYMERIZABLE HETEROCYCLIC NITROGEN COMPOUNDS

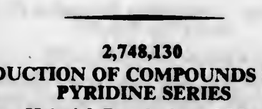
Warren L. Smith and Mack F. Potts, Bartlesville, Okla., and Paul S. Hudson, Iowa City, Iowa, assignors to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application November 3, 1952, Serial No. 318,514
13 Claims. (Cl. 260—290)

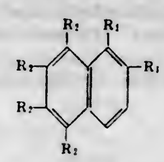
1. A polymerizable heterocyclic nitrogen base selected from the group consisting of compounds having the formula



and



where *n* is an integer selected from the group consisting of 1 and 2, R is selected from the group consisting of H and CH_3, and R′ is selected from the group consisting of H and alkyl groups, not more than 12 carbon atoms being present in the total of said R′ groups, said heterocyclic nitrogen base being stabilized by the addition of a stabilizing amount of a naphthylamine sulfonic acid selected from the group consisting of compounds having the formula



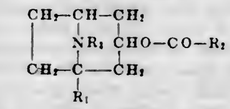
wherein R_1 is selected from the group consisting of hydrogen and amino groups, at least one R_1 being an amino group, and R_2 is selected from the group consisting of hydrogen and —SO_3H groups, at least one and not more than two —SO_3H groups being present.

2,748,132
NORTROPANE DERIVATIVES

Paul Karrer, Zurich, and Jindrich Kebrle, Basel, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application February 28, 1955, Serial No. 491,204
Claims priority, application Switzerland March 3, 1954
4 Claims. (Cl. 260—292)

1. A compound selected from the group consisting of nortropanes which correspond to the formula



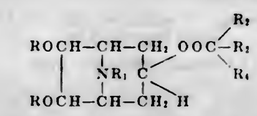
therapeutically-useful salts thereof with acids, and the quaternary ammonium compounds thereof, wherein R_1 stands for a member selected from the group consisting of carbomethoxy, methoxymethyl, acetoxymethyl and diphenyl-acetoxy-methyl, R_2 stands for a member selected from the group consisting of phenyl, benzhydryl and ω-cyclohexyl-benzyl, and R_3 stands for lower alkyl.

2,748,133
NORTROPANOL ESTERS

Paul Karrer, Zurich, and Jindrich Kebrle, Basel, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application February 28, 1955, Serial No. 491,205
Claims priority, application Switzerland March 3, 1954
6 Claims. (Cl. 260—292)

1. A compound selected from the group consisting of nortropanol esters which correspond to the formula



therapeutically-useful salts thereof with acids, and tne quaternary ammonium compounds thereof, wherein each of R and R_1 is lower alkyl, R_2 is a member selected from the group consisting of hydrogen and hydroxyl, and each of R_3 and R_4 is a member selected from the group consisting of phenyl and cyclohexyl.

2,748,134

AMIDE-LIKE DERIVATIVES OF PIPERIDINE

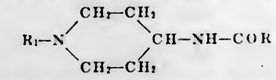
Arthur Stoll, Arlesheim, near Basel, and Jean Pierre Bourquin, Basel, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application January 12, 1954, Serial No. 403,634

Claims priority, application Switzerland January 20, 1953

7 Claims. (Cl. 260—294)

1. A compound selected from the group consisting of the piperidine derivatives corresponding to the formula



and the salts thereof with therapeutically applicable acids, wherein R_1 stands for a lower alkyl group, and R stands for a radical selected from the group consisting of phenyl, p-chlorophenyl, p-bromophenyl, p-nitrophenyl, p-lower alkylphenyl, p-lower alkylaminophenyl, p-lower alkoxyphenyl, p-lower ω-alkoxyalkyl-ω'-aminophenyl and β-pyridyl radicals.

2,748,135

INTERMEDIATES FOR THE SYNTHESIS OF PYRIDOXINE

Reuben G. Jones, Indianapolis, Ind., assignor to Eli Lilly and Company, Indianapolis, Ind., a corporation of Indiana

No Drawing. Application April 29, 1954, Serial No. 426,563

12 Claims. (Cl. 260—294.9)

1. A method of preparing 2-methyl-3-hydroxy-4,5-pyridinedicarboxylic acid which comprises reacting a di-lower alkyl ester of oxalacetic acid with a trialkoxyacetic acid lower alkyl ester in the presence of an aliphatic carboxylic acid anhydride to yield a lower trialkyl ester of α-keto-γ-alkoxyaconitic acid, reacting said ester with β-aminocrotononitrile to produce a tri-lower alkyl ester of 2-methyl-3-cyano-4,5,6-pyridinetricarboxylic acid, reacting said pyridine compound sequentially with sulfuric acid and a metal hypohalite to produce 2-methyl-3-amino-4,5,6-pyridinetricarboxylic acid, reacting said amino compound with nitrous acid to produce 2-methyl-3-hydroxy-4,5,6-pyridintricarboxylic acid, and heating the tricarboxylic acid to cause decarboxylation and the formation of 2-methyl-3-hydroxy-4,5-pyridinedicarboxylic acid.

9. Triethyl α-keto-γ-ethoxyaconitate.

11. Triethyl 2 - methyl - 3 - cyano - 4,5,6 - pyridinetricarboxylate.

12. 2 - methyl - 3 - amino - 4,5,6 - pyridinetricarboxylic acid

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2,748,136

PROCESS FOR SEPARATING NICOTINIC ACID FROM ISONICOTINIC ACID

Martin Everett Hultquist, Bound Brook, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application May 17, 1952, Serial No. 288,530

12 Claims. (Cl. 260—295)

8. In a process of separately recovering substantially pure nicotinic and isonicotinic acids from mixtures thereof, the combination of steps which comprises (1) dissolving the mixed acids in a hot aqueous alcohol solvent containing 40 to 90% of a water-soluble alcohol by the volume, the amount of said hot solvent being sufficient to dissolve both of said acids, (2) adding calcium hydroxide to the hot aqueous alcohol thereof in amounts sufficient to convert said acids into the respective calcium salts thereof, (3) maintaining the reaction mixture at an elevated temperature until the reaction is substantially complete and solid calcium nicotinate is precipitated therefrom, (4) filtering the hot liquid to separate the solid calcium nicotinate from the hot aqueous alcohol solution of the calcium isonicotinate, (5) separating the calcium isonicontinate from the filtrate so obtained, (6) recovering the isonicotinic acid from the calcium isonicotinate so obtained and (7) recovering the nicotinic acid from the calcium nicotinate so obtained.

2,748,137

PROCESS FOR PREPARING ISONICOTINIC ACID

Martin Everett Hultquist, Bound Brook, and Robert S. Barker, Plainfield, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application September 26, 1952, Serial No. 311,775

2 Claims. (Cl. 260—295)

1. A process of preparing isonicotinic acid from a mixture of gamma and beta picoline which comprises (1) reacting the mixed picolines with benzaldehyde to convert the gamma picoline into 4-styryl pyridine and produce a reaction mixture containing beta picoline and said 4-styryl pyridine, (2) heating said mixture with a strongly acid oxidizing agent at a temperature from 100° to 145° C. until said 4-styryl pyridine is oxidized and converted into isonicotinic acid, the temperature and time of heating being sufficient to convert the 4-styryl pyridine into isonicotinic acid but insufficient to oxidize any substantial amount of the beta picoline, (3) recovering the isonicotinic acid so obtained, and (4) separately recovering the unreacted beta picoline.

2,748,138

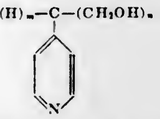
OXIDATION OF MIXED TAR BASES

Robert S. Barker and Robert H. Ebel, Plainfield, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application September 26, 1952, Serial No. 311,776

2 Claims. (Cl. 260—295)

1. A process of preparing isonicotinic acid from a mixture of gamma and beta picoline which comprises (1) reacting the mixed picolines with aqueous formaldehyde to convert the gamma picoline into a methylolated derivative thereof having at least one methylol group attached to the carbon atom of the gamma methyl group thereof and produce a reaction mixture containing beta picoline and a methylolated gamma picoline having the following formula



wherein n is an integer from 1 to 3 and m is $3-n$, (2) heating said mixture with a strongly acid oxidizing agent at a temperature of at least 100° C. until said methylolated gamma picoline is oxidized and converted into isonicotinic acid, the temperature and time of heating being sufficient to convert the said methylolated gamma picoline into isonicotinic acid but insufficient to oxidize any substantial amount of the beta picoline, (3) recovering the unreacted beta picoline, and (4) separately recovering the isonicotinic acid.

2,748,139

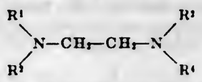
AROMATIC CARBOXYLIC ACID SALTS OF TETRA ALKYL ETHYLENE DIAMINES

John V. Scudi, Springfield, N. J., and Floyd E. Anderson, Yonkers, N. Y., assignors to Nepera Chemical Co., Inc., Yonkers, N. Y., a corporation of New York

No Drawing. Application October 29, 1953, Serial No. 389,154

17 Claims. (Cl. 260—295.5)

1. The water soluble salts of tetra-alkyl ethylenediamines of the general formula:



in which R^1 is an alkyl group containing 6 to 14 carbon atoms, and R^2, R^3, and R^4 are lower alkyl radicals containing 1 to 3 carbon atoms, with a member of the group consisting of homocyclic mononuclear aromatic carboxylic acids and heterocyclic mononuclear carboxylic acids.

2,748,140

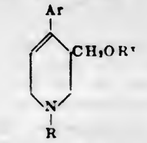
3-HYDROXYMETHYL-4-PHENYLTETRAHYDROPYRIDINES AND THEIR ESTERS

Claude J. Schmidle, Moorestown, and Richard C. Mansfield, Haddonfield, N. J., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application October 7, 1954, Serial No. 461,024

6 Claims. (Cl. 260—295.5)

1. Compounds of the structure



where R is a member of the class consisting of benzyl and alkyl groups, R^x is a member of the class consisting of hydrogen, acyl groups of two to four carbon atoms and the benzoyl group, and Ar is a member of the class consisting of the C_6H_5— and $CH_3C_6H_4$— groups.

2,748,141

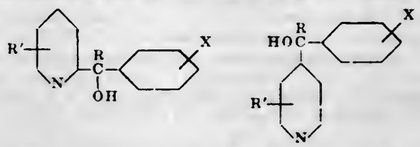
PROCESS OF MAKING PHENYLPYRIDYLCARBINOLS

Francis E. Cislak, Indianapolis, Ind., assignor to Reilly Tar & Chemical Corporation, Indianapolis, Ind., a corporation of Indiana

No Drawing. Application February 1, 1956, Serial No. 562,641

5 Claims. (Cl. 260—297)

1. The process of preparing a compound of the class consisting of phenyl-2-pyridylcarbinols and phenyl-4-pyridylcarbinols having the following general formulae:



in which R represents one of the group consisting of hydrogen, lower alkyl, phenyl, and benzyl, R′ represents hydrogen or lower alkyl, and X represents one of the group consisting of hydrogen and a halogen, which comprises reacting at an elevated temperature a mixture of acetic acid, hydrogen peroxide, and a compound of the class consisting of a 2-phenylpyridyl-methane and a 4-phenylpyridylmethane, heating the resulting reaction product with acetic anhydride and recovering the thus formed phenylpyridyl carbinol.

2,748,142

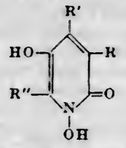
DERIVATIVES OF N-HYDROXY PYRIDONES AND PROCESS OF PRODUCTION

Niels K. F. W. Clauson-Kaas, Haifa, Israel, and Niels Elming and Jorgen Tormod Nielsen, Copenhagen, Denmark, assignors to A/S Sadolin & Holmblad, Copenhagen, Denmark

No Drawing. Application February 15, 1955, Serial No. 488,407

9 Claims. (Cl. 260—297)

1. A compound of the general formula



wherein R and R′ are each a member of the group consisting of H and lower alkyl, and R″ is a 4–10 carbon atom hydrocarbon group.

2,748,143

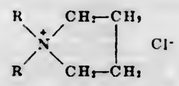
N,N-DI FATTY PYRROLIDINIUM HALIDES

John G. Erickson, Minneapolis, Minn., assignor to General Mills, Inc., a corporation of Delaware

No Drawing. Application March 28, 1952, Serial No. 279,252

6 Claims. (Cl. 260—313)

6. Process of preparing compounds having the following formula



in which the R groups are aliphatic hydrocarbon groups containing from 8 to 22 carbon atoms, which comprises reacting the secondary fatty amine, R_2NH, with a 1,4-dichlorobutane in the presence of a low aliphatic alcohol at approximately reflux temperature.

2,748,144

PROCESS FOR PREPARING ARYL THIOPHENES

Thomas Kenneth Hanson, Drayton, near Abingdon, and Leonard Matthew Kinnard, Appleby, near Scunthorpe, England, assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application January 17, 1952, Serial No. 267,014

Claims priority, application Great Britain January 22, 1951

5 Claims. (Cl. 260—329)

1. A process for the production of thiophene derivatives which comprises reacting at elevated temperatures sulfur with an olefinic compound having the formula $RCH=CH_2$, wherein R represents a radical selected from the group consisting of phenyl and lower alkyl substituted phenyl, in contact with a rubber vulcanization accelerator and wherein about one mole of H_2S per mole of olefinic compound reacted is evolved during the reaction.

2,748,145

CHALCOGENOUS COMPLEXES

Earl L. Muetterties, Hockessin, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application July 27, 1953, Serial No. 370,653

8 Claims. (Cl. 260—329)

1. An addition complex of phosphorus pentafluoride with an organic Lewis base having a donor atom which

is a bivalent chalcogen of atomic weight less than 33 which chalcogen has each of its valences bonded to carbon, said phosphorus pentafluoride and Lewis base being present in said complex in a molar ratio of positive integers up to 1 mole of the pentafluoride for each said donor atom in one molecule of the Lewis base.

7. An addition complex of phosphorus pentafluoride with tetramethylene sulfide.

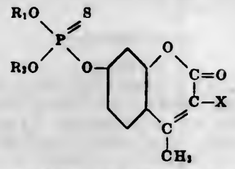
2,748,146

THIOPHOSPHORIC ACID ESTERS OF 3-HALOGEN-HYDROXY-COUMARINS

Gerhard Schrader, Opladen-Bruchhausen, Germany, assignor to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application July 22, 1952, Serial No. 300,324
Claims priority, application Germany July 30, 1951
4 Claims. (Cl. 260—343.2)

1. Esters of thiophosphoric acid corresponding to the general formula:



wherein R_1 and R_2 stand for lower alkyl radicals and X is a member of the group consisting of chlorine and bromine.

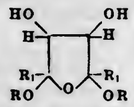
2,748,147

2,5 - DIALKOXY - 3,4 - DIHYDROXYTETRAHYDROFURANS AND THEIR HYDROLYSATES, AND METHODS OF PRODUCING THEM

Niels Konrad Friedrich Wilhelm Clauson-Kaas, Klampenborg, Denmark, assignor to A/S Sadolin & Holmblad, Copenhagen, Denmark

No Drawing. Application June 23, 1952, Serial No. 295,126
Claims priority, application Denmark July 5, 1951
9 Claims. (Cl. 260—347.4)

1. 2,5 - dialkoxy - 3,4 - dihydroxy - tetrahydrofurans of the general formula:



where R is an alkyl group containing less than 7 carbon atoms and R_1 is selected from the group consisting of hydrogen, an alkyl group containing less than 4 carbon atoms, and the following saturated aliphatic groups comprising carbon, hydrogen and oxygen only, containing less than 4 carbon atoms: $—CH_2—O-$(lower fatty acid acyl); —CH(O-lower alkyl)$_2$; and —COO-(lower alkyl).

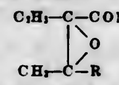
2,748,148

SUBSTITUTED N-CARBAMYL GLYCIDAMIDES

Otis E. Fancher and Dale A. Stauffer, Elkhart, Ind., assignors to Miles Laboratories, Inc., Elkhart, Ind., a corporation of Indiana

No Drawing. Application January 2, 1953, Serial No. 329,477
4 Claims. (Cl. 260—348)

1. Compositions of matter having the formula



wherein R is selected from the group consisting of H and methyl.

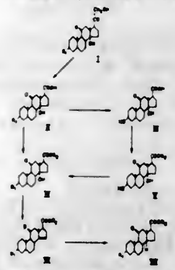
4. The method of making glycidureides which comprises oxidizing the double bond of an alpha, beta unsaturated ureide with a peraromatic-carboxylic acid in a chloroform medium.

2,748,149

ETIOCHOLANIC ACID DERIVATIVES AND A PROCESS OF MAKING SAME

Tadeus Reichstein, Basel, Switzerland, assignor to Organon Inc., Orange, N. J., a corporation of New Jersey

Application September 30, 1953, Serial No. 383,335
Claims priority, application Netherlands October 4, 1952
1 Claim. (Cl. 260—397.1)



In a process of preparing 3β-acetoxy-11-keto-etiocholanic acid methyl ester, the steps comprising dissolving 3β-acetoxy-14β,21-dihydroxy pregnanedione-(11,20) in dioxane, adding thereto a solution of periodic acid in water, allowing the mixture to stand for several hours, esterifying the resulting 3β-acetoxy-14-β-hydroxy-11-keto etiocholanic acid by means of diazomethane, heating the resulting methyl ester in pyridine with phosphorus oxychloride in the presence of water for several hours at about 70° C., extracting the resulting unsaturated acid ester by means of ether from the reaction mixture, dissolving said ester in glacial acetic acid, hydrogenating the solution in the presence of a platinum catalyst, oxidizing the hydrogenation product in glacial acetic acid with chromium trioxide, extracting 3β-acetoxy-11-keto etiocholanic acid methyl ester from the reaction mixture, and purifying said saturated etiocholanic acid ester by chromatographic treatment.

2,748,150

10,13 - DIMETHYL - 17 - ACETYL - PERHYDRO-15H-CYCLOPENTA [a] PHENANTHRENE-2,3-DIONE

Clarence G. Bergstrom, Chicago, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application July 29, 1953, Serial No. 371,160
3 Claims. (Cl. 260—397.4)

1. The process of heating a 2-bromo-10,13-dimethyl-17-acetylperhydro-15H-cyclopenta[a]phenanthrene with a secondary amine of a dissociation constant between 10^{-1} and 10^{-5}, in the presence of water, to produce a mixture of 2 - hydroxy-10,13-dimethyl-17-acetyl-3,4,5,6,7,8,9,10,11,-12,13,14,16,17-tetradecahydro-15H-cyclopenta[a]phenanthren-3-one, 10,13 - dimethyl - 17 - acetyl-perhydro-15H-cyclopenta[a]phenanthrene-3,20-dione, and 3 - hydroxy-10,13 - dimethyl - 17 - acetyl-1,2,5,6,7,8,9,10,11,12,13,14,-16,17 - tetradecahydro-15H-cyclopenta[a]phenanthren-2-one.

2,748,151

PURIFICATION OF ACID CHLORIDES

Kenneth C. D. Hickman and Edward E. Harris, Rochester, N. Y.

No Drawing. Application July 22, 1954, Serial No. 445,175
11 Claims. (Cl. 260—408)

1. A process for purifying a crude saturated higher fatty acid chloride containing minor amounts of unsaturated compounds as impurities which comprises subjecting said crude chloride to the action of a halogenating agent to reduce the iodine number to a value below about 1.0 and thus to effect substantial addition halogenation of the double bonds of the unsaturated impurities but substantially no substitution halogenation of the acid chloride, and then distilling the resulting material under vacuum.

2,748,152

RENDERING PROCESS FOR RECOVERY OF FAT AND GELATIN

Robert H. Sifferd, Joliet, and Lindson P. Anderson, Chicago, Ill., assignors to Armour and Company, Chicago, Ill., a corporation of Illinois

Application October 2, 1952, Serial No. 312,682
2 Claims. (Cl. 260—412.6)

1. A process for rendering animal fat wherein gelatin is obtained as a by-product, comprising the steps of comminuting animal material composed principally of fat and containing a lesser amount of collagen, passing the comminuted material in the form of an aqueous slurry continuously through an elongated restricted zone and while maintaining said material in turbulent agitation by means of a plurality of steam jets within said restricted zone, heating said material within said zone to a temperature sufficient to liquefy substantially all of the fat therein without hydrolizing the collagen therein beyond the gelatin stage, thereby liberating the fat in said material and at the same time converting the collagen to gelatin, recovering the liquified fat from said slurry, and then recovering gelatin as a by-product from the remaining liquid portion of said slurry.

2,748,153

PREPARATION OF ACYL PHOSPHORIC ESTERS

Arthur C. Cope, Belmont, Mass., and Harold L. Jackson, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 5, 1951, Serial No. 224,832
8 Claims. (Cl. 260—461)

1. A process for the preparation of acylphosphoric esters wherein a carboxylic acid halide is reacted with essentially equivalent amounts of a basic tertiary amine free from Zerewitinoff active hydrogen and having only single bonds on a tertiary amino nitrogen and of a diester of orthophosphoric acid, the only active hydrogen of said diester being the one phosphoric acid hydrogen and the carbons joined to phosphoric acid oxygen being aliphatic in character.

2,748,154

PREPARATION OF CYANOHYDRINS

Glen E. Journeay, Texas City, Tex., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application February 27, 1953, Serial No. 339,449
11 Claims. (Cl. 260—465)

1. A process for preparing a cyanohydrin which comprises reacting hydrocyanic acid and a compound of the group consisting of aldehydes and ketones, in the liquid phase, in a solvent medium, and in the presence of a catalyst comprising a mixture of an aliphatic monocarboxylic acid containing from 1 to 6 carbon atoms and an alkali metal salt of said acid.

2,748,155

PROCESS FOR PREPARING MERCAPTO-ALKYL CYANIDES

John D. Wordie, Fullerton, Calif., assignor to The Texas Company, New York, N. Y., a corporation of Delaware

No Drawing. Application April 9, 1953, Serial No. 347,841
5 Claims. (Cl. 260—465.1)

1. A process for obtaining 2-mercapto-alkyl cyanides as the major product of reaction between hydrogen sulfide and 1-alkenyl cyanides which comprises charging said hydrogen sulfide to a reaction vessel, adding a 1-alkenyl cyanide containing 2 to 20 carbon atoms in the alkenyl group to said hydrogen sulfide, effecting reaction between said 1-alkenyl cyanide and hydrogen sulfide in the absence of a catalyst at a temperature less than 75° C. and at a pressure between 100 and 500 p. s. i. g. and recovering 2-mercapto-alkyl cyanide from the reaction product.

2,748,156

PRODUCTION OF ACRYLONITRILE

Rudolf Keller and Kurt Eder, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application March 16, 1953, Serial No. 345,224
(Filed under Rule 47(a) and 35 U. S. C. 116)
Claims priority, application Germany March 14, 1952
4 Claims. (Cl. 260—465.3)

1. A process of producing acrylonitrile which comprises reacting hydrocyanic acid with a gas mixture containing from 5 to 10% by volume of acetylene and from 10 to 40% by volume of carbon monoxide obtained by the incomplete combustion of saturated gaseous aliphatic hydrocarbons in a solution heated at a temperature from 60° to 90° C. of a cuprous salt as a catalyst and a solubilizer therefor, the catalyst solution containing also a compound selected from the class consisting of a cerium-III-salt and a lanthanum salt and being adjusted by the addition of a strong acid to a pH-value from 0.2 to 4.

2,748,157

REGENERATION OF COPPER CHLORIDE CATALYSTS EMPLOYED IN THE PRODUCTION OF ACRYLONITRILE

Keith M. Taylor, La Marque, Tex., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application March 26, 1953, Serial No. 344,887
6 Claims. (Cl. 260—465.3)

4. In a process for the production of acrylonitrile by the reaction of acetylene and hydrocyanic acid in the presence of aqueous acid cuprous chloride catalysts, the improvement which comprises regenerating the copper chloride catalyst by diluting the catalyst with water to precipitate the cuprous chloride, filtering, and washing the cuprous chloride precipitate with acetonitrile.

2,748,158

MANUFACTURE OF ACRYLONITRILE

Albert L. Van Amburg, Jr., Dayton, Ohio, assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

Application January 21, 1953, Serial No. 332,441
3 Claims. (Cl. 260—465.3)

1. A process for the production of acrylonitrile which comprises bringing acetylene together with hydrogen cyanide into contact with an aqueous acid reacting solution of cuprous chloride, said solution containing also an inorganic chloride selected from the group consisting of sodium, potassium and ammonium chlorides and mixtures thereof, while maintaining the concentration of soluble

cyanide present therein within the limits of from about 0.6% to about 1.8% by weight of catalyst solution, calculated as CN, by the addition of hydrochloric acid.

2,748,159
PURIFICATION AND DECOLORIZATION OF ESTERS

Anthony F. Finelli, Akron, Ohio, assignor, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio

No Drawing. Application September 8, 1952, Serial No. 308,509
5 Claims. (Cl. 260—475)

1. The process of purifying and decolorizing organic ester derivatives of a phthalic acid having molecular weights above 190, viscosities above 9 centipoises at 20° C. and boiling points above 150° C. at 4 millimeters pressure comprising the successive steps of treating said esters with a cation exchange material under substantially anhydrous conditions and then with a decolorizing material.

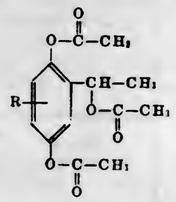
2,748,160
PROCESS FOR PREPARING 2,5-DIACETOXYSTYRENE AND INTERMEDIATES THEREFOR

Delbert D. Reynolds and Jack L. R. Williams, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application April 15, 1952, Serial No. 282,456
10 Claims. (Cl. 260—479)

1. A process for the preparation of 2,5-diacetoxystyrene which comprises pyrolyzing 2,5-dihydroxyphenylmethyl carbinol triacetate at a temperature of from about 400° C. to about 650° C.

9. A substituted phenylmethyl carbinol triacetate having the formula:



wherein R represents a substituent selected from those consisting of a hydrogen atom, a methyl radical and an ethyl radical.

2,748,161
METHOD OF FORMING PHTHALALDEHYDIC ACID FROM PENTACHLOROXYLENE

James D. Head and Owen D. Ivins, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application March 31, 1952, Serial No. 279,683
8 Claims. (Cl. 260—515)

1. A method of forming phthalaldehydic acid which comprises hydrolyzing a pentachloro-ortho-xylene, having the formula:



by heating the same in admixture with an aqueous solution containing from 8 to 45 per cent by weight of an aromatic sulfonic acid selected from the group consisting of the sulfonated aromatic hydrocarbons of the benzene and the naphthalene series and the sulfonated nuclear halogenated derivatives thereof, at a reaction temperature between 90° and 120° C.

2,748,162
PREPARATION OF PHTHALALDEHYDIC ACID FROM PENTACHLOROXYLENE

James D. Head and Owen D. Ivins, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application March 31, 1952, Serial No. 279,682
9 Claims. (Cl. 260—515)

1. A method of forming phthalaldehydic acid which comprises hydrolyzing a pentachloro-ortho-xylene, having the formula:



in admixture with an aqueous solution containing at least 10 per cent by weight of a hydrohalic acid selected from the group consisting of hydrochloric acid and hydrobromic acid, and from 4 to 35 per cent by weight of at least on metal halide selected from the group consisting of zinc chloride, zinc bromide, ferric chloride, ferric bromide, cadmium chloride and cadmium bromide, by heating a mixture of the ingredients at a reaction temperature between 90° and 250° C.

2,748,163
PROCESS FOR THE SEPARATION OF FATTY ACIDS FROM REACTION MIXTURES PRODUCING SAME

Shirley P. Lingo, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a corporation of Maryland

No Drawing. Application January 2, 1953, Serial No. 329,480
4 Claims. (Cl. 260—540)

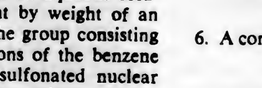
1. The process of separating a substantially pure fatty acid containing from two to six carbon atoms per molecule and nitroalkanes containing from two to six carbon atoms per molecule substantially free of acidic impurities from a mixture comprising the fatty acid, nitroalkanes, and inorganic acid, which comprises subjecting the said mixture to washing with from about 5% to about 7.5% by volume of water, contacting the resulting water-washed mixture with an anion exchange material which has been converted into the form of a salt of the fatty acid being separated by contact with a fatty acid-containing fraction from the distillation of a previous batch of the said mixture from which the inorganic acid has been removed, subjecting the effluent from the said anion exchange material to distillation to remove a first nitroalkane fraction consisting essentially of a mixture of nitroalkane, water, and a trace of inorganic acid, a second nitroalkane fraction consisting essentially of a mixture of nitroalkane, water and fatty acid and a purified fatty acid fraction, contacting the second nitroalkane fraction separated in the distillation with an anion exchange material in alkaline form to recover nitroalkanes substantially free of acidic impurities and to convert the resin into a salt of the fatty acid for subsequent contact with a water-washed mixture of fatty acid, ntiroalkane and inorganic acid.

2,748,164
SULFONYLACETAMIDES

Raymond M. Dodson, Park Ridge, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application July 2, 1954, Serial No. 441,161
11 Claims. (Cl. 260—558)

6. A compound of the formula



wherein R′ is selected from the group consisting of phenyl

radicals and phenyl radicals substituted by chlorine; and R″ is selected from the group consisting of monovalent aromatic hydrocarbon radicals containing less than 8 carbon atoms, lower alkyl radicals, and cyclohexyl radicals.

2,748,165
PROCESS FOR THE SIMULTANEOUS PRODUCTION OF PHENOLS AND OXIMES

Hugo Kroeper, Heidelberg, and Georg Hummel, Mannheim, Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application July 14, 1954, Serial No. 443,435
6 Claims. (Cl. 260—566)

1. A process for the simultaneous production of a phenol and an oxime which comprises reacting one mole of a compound selected from the class consisting of phenylcyclohexylhydroperoxide and cumene-hydroperoxide with an aqueous acid solution of from about one to two moles of a member of the group consisting of a hydroxylamine salt and a hydroxylamine-sulfonic acid at from ordinary temperature to about 100° C.

2,748,166
PRODUCTION OF OXIMES

Heinrich Hopff, Zurich, Switzerland, and Otto von Schickh and Hans-Joachim Riedl, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

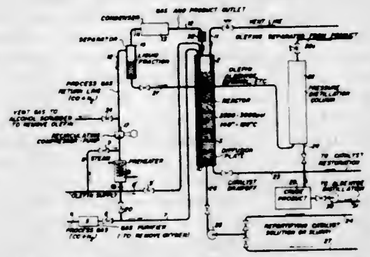
No Drawing. Application June 16, 1953, Serial No. 362,125
Claims priority, application Germany July 2, 1952
4 Claims. (Cl. 260—566)

1. A process for the production of ketoximes which comprises reducing a member of the group consisting of the alkali metal, alkaline earth metal and ammonium salts of secondary mono-nitro derivatives of saturated aliphatic hydrocarbons containing from 3 to 6 carbon atoms and of cyclopentane, cyclohexane and methyl cyclohexane by means of an about equivalent amount of a water soluble salt of hyposulfurous acid in the presence of excess mineral acid.

2,748,167
PROCESS OF PRODUCING OXYGENATED ORGANIC COMPOUNDS

Hugh J. Hagemeyer, Jr., Kingsport, Tenn., and David C. Hull, Longview, Tex., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application November 5, 1952, Serial No. 318,888
9 Claims. (Cl. 260—604)

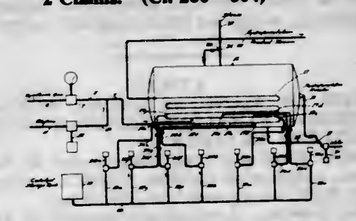


1. An improved continuous process for preparing butyraldehyde by the catalytic reaction of propylene, carbon monoxide and hydrogen at 40–700 atmospheres and 75–250° C., characterized by the steps of continuously feeding propylene and preheated carbon monoxide and hydrogen under pressure into a reaction zone comprising an enclosed body of butanol in which is suspended a reduced cobalt-containing catalyst carried on a finely divided inert carrier, removing gases as they are evolved from said zone, heating said gases and then recycling them to the reaction zone to attain the reaction temperature of 75–250° C., thereafter continuing said feed and continuously removing substantially all of the aldehyde product together with reactants and butanol in gaseous and vapor form as soon as they are volatilized from said body of butanol and catalyst, thereby promoting such volatilization which, together with the correlation of the olefin content of the feed and the amount of heat added to the recycle gases, constitutes the sole means for maintaining the reaction temperature within the upper limit of the reaction temperature range, condensing liquid products and butanol removed from said reaction zone to separate them from gaseous reactants, continuing the recycling of the separated gases in relatively large quantities to said reaction zone to provide a high degree of agitation and thereby a high rate of reaction and volatilization, while the heat added thereto in the reheating step assists in maintaining the reaction temperature within the lower limit of the reaction temperature range as well as assisting in volatilization of products, and passing the liquid products and butanol separated by said condensation to further separatory treatments which provide substantially the sole source of aldehyde product.

2,748,168
HYDROFORMYLATION PROCESS USING COIL REACTOR

Bernard H. Gwynn, Fawn Township, Allegheny County, Pa., assignor to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware

Application December 30, 1950, Serial No. 203,589
2 Claims. (Cl. 260—604)



1. A process for controlling the temperature of a hydroformylation reaction in an elongated coil reactor to maintain substantially isothermal reaction conditions therein which comprises maintaining said elongated coil reactor immersed in a bath of a heat transfer medium, passing a synthesis gas comprising hydrogen and carbon monoxide in a mol ratio of 0.5:1 to 8:1 and an olefin through said elongated coil reactor at selected temperatures within the range of about 260° to about 460° F. and a total hydroformylation pressure of about 1500 to about 7500 pounds per square inch, while simultaneously introducing a hydroformylation catalyst consisting essentially of a cobalt salt of a higher aliphatic acid in portions at spaced intervals in the first third of said elongated reaction zone, and adjusting the amounts of said catalyst introduced at said intervals so that the amounts of olefins converted in each increment between the points of introduction of said catalyst are substantially the same.

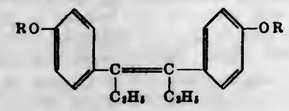
2,748,169
NOVEL CHEMOTHERAPEUTIC AGENTS COMPRISING DIALKYNYL ETHERS OF DIETHYLSTILBESTROL

Alfred Distelmaier, Wuppertal-Vohwinkel, Germany, assignor to Schenley Industries, Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application July 19, 1951, Serial No. 237,661
Claims priority, application Germany July 22, 1950
2 Claims. (Cl. 260—613)

1. As a novel chemotherapeutic agent useful in estrogenic therapy and characterized by maintaining high blood

levels of estrogenic material for prolonged periods following parenteral administration, a dialkynyl ether of diethylstilbestrol represented by the formula:



wherein R is an alkynyl radical that comprises at most three carbon atoms.

2,748,170

SYNTHETIC LUBRICANT PRODUCT OF POLYMERIZATION OF A VINYL ETHER WITH AN OLEFIN

George J. Benoit, Jr., San Anselmo, and Andrew D. Abbott, Ross, Calif., assignors to California Research Corporation, San Francisco, Calif., a corporation of Delaware

No Drawing. Application September 26, 1952, Serial No. 311,815

3 Claims. (Cl. 260—614)

1. A lubricant composition comprising a reaction product obtained by reacting ethylene with vinyl butyl ether at a temperature of about 150° C. in the presence of a free radical initiating catalyst, said reactants being employed in the ratio of from about 0.1 to 0.5 mole of the ether per mole of ethylene, and distilling off from the resulting reaction mixture at least that portion thereof boiling below about 150° C. at 5 mm. Hg, leaving as residue the desired lubricant composition having an average molecular weight of from about 400 to 700.

2,748,171

PROCESS OF MANUFACTURING MONO-ALKYL ETHERS OF ETHYLENE GLYCOL AND OF POLYETHYLENE GLYCOLS

Gaylord K. Finch and Hugh J. Hagemeyer, Jr., Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application September 12, 1952, Serial No. 309,356

2 Claims. (Cl. 260—615)

1. A process of manufacturing the mono-methyl ether of ethylene glycol, which comprises cooling ethylene oxide to the liquid state and feeding the cold, liquid ethylene oxide onto the surface of an excess of methanol of the order of 400%, in the presence of sulfuric acid as a catalyst, while keeping the temperature of the reaction mixture between 0° C. and 30° C., and maintaining the pH of the reaction mixture at a value below 1.0, by adding sulfuric acid to the initial charge of methanol and continuously feeding in sulfuric acid during the reaction, the content of sulfuric acid in the reaction mixture being maintained within the range of 0.2% to 2.0% by weight.

2,748,172

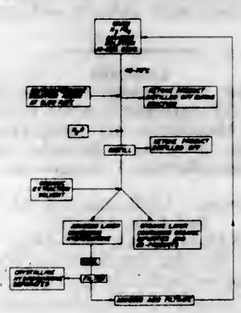
PREPARATION OF HYDROQUINONE

George F. Rodgers, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application September 18, 1952, Serial No. 310,369

12 Claims. (Cl. 260—621)

12. A process for preparing hydroquinone comprising adding an acetone solution of p-di-isopropyl benzene dihydroperoxide slowly to an aqueous solution of phosphoric acid of about 10–85% concentration and at a temperature of about 40–75° C., the addition being carried out only as fast as the dihydroperoxide decomposes, agitating the reaction mixture for a short period of time after the reaction is complete, adding additional water to the reaction mixture, raising the temperature of the mixture to about 95° C. to distill off acetone, extracting the residue from the distillation with benzene, and separating



the extract into an organic layer and a hydroquinone containing aqueous layer.

2,748,173

PROCESS FOR PREPARING MONOCHLOROHYDROQUINONE

George F. Rodgers, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application September 10, 1952, Serial No. 308,919

4 Claims. (Cl. 260—623)

1. The process for preparing monochlorohydroquinone which comprises reacting chlorine with a concentrated solution of hydroquinone in aqueous acetic acid containing about 20% to about 50% by weight water, based on the weight of the acetic acid, at a temperature of from about 55° C. to about 105° C. and wherein the proportions of chlorine and hydroquinone employed are such that substantially no more than one mole of chlorine per mole of hydroquinone is employed.

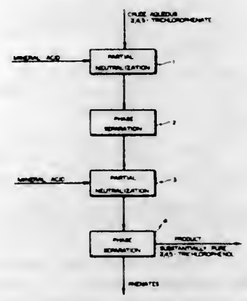
2,748,174

PROCESS FOR THE RECOVERY OF PURE 2,4,5-TRICHLOROPHENOL FROM PRODUCTS OF THE ALKALINE HYDROLYSIS OF 1,2,4,5-TETRACHLOROBENZENE

Theodore M. Jenney and Bernard H. Nicolaisen, Kenmore, N. Y., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia

Application February 2, 1953, Serial No. 334,746

2 Claims. (Cl. 260—623)



1. A process for the production of 2,4,5-trichlorophenol from aqueous mixtures of crude 2,4,5-trichlorophenate obtained by caustic hydrolysis of 1,2,4,5-tetrachlorobenzene, which comprises adding mineral acid to the crude 2,4,5-trichlorophenate mixture in amount sufficient to neutralize excess alkalinity and a minor proportion of the phenates present, which form corresponding phenols, separating the phenols as separate phase from dilute aqueous mixture having a phenol-phenate content of not more than about 10% by weight, adding mineral acid to the separated aqueous phase in an amount sufficient to convert less than the total quantity of remaining phenates to corresponding phenols, and separating 2,4,5-trichlorophenol from the aqueous phase.

2,748,175

PROCESS FOR REDUCING ALKYL ESTERS OF FATTY ACIDS

Glenn R. Wilson, Detroit, Mich., assignor to Ethyl Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application July 28, 1952, Serial No. 301,387

4 Claims. (Cl. 260—638)

1. A process for reducing an alkyl ester of a fatty acid, comprising reacting said ester with an alkali metal and reducing alcohol in the presence of an essentially inert hydrocarbon solvent and in the further presence of about 2 to 20% of a pyridine based on the weight of the ester.

2,748,176

PURIFICATION OF DICHLOROETHANE

Herbert E. Morris, La Marque, Tex., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application August 23, 1952, Serial No. 306,059

4 Claims. (Cl. 260—652)

1. In a process for the purification of dichloroethane containing chloroprene as an impurity, the step which comprises subjecting said dichloroethane to chlorination by bubbling chlorine gas therethrough, at a temperature below 50° C., whereby the chloroprene present is selectively chlorinated to higher chlorinated compounds and separating dichloroethane therefrom by fractional distillation.

2,748,177

FLUORINATION

Charles B. Miller, Lynbrook, N. Y., and John D. Calfee, Dayton, Ohio, assignors to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

No Drawing. Application August 3, 1951, Serial No. 240,289

4 Claims. (Cl. 260—653)

1. The process for making a saturated chlorofluorocarbon compound containing not more than two carbon atoms which process comprises introducing, into a reaction zone containing substantially anhydrous aluminum fluoride catalyst, a gas phase mixture of substantially anhydrous hydrogen fluoride and a saturated organic completely halogenated carbon compound starting material containing not more than two carbon atoms and having at least two chlorine atoms attached to the same carbon atom and selected from the group consisting of CCl_4, CCl_3CClF_2, $CClF_3CF_3$ and CCl_2FCClF_2, said catalyst having crystallite size not substantially greater than about 500 Angstrom units radius and having been derived by reaction of aluminum chloride and HF, heating said mixture in said zone in contact with said catalyst at fluorination temperature in the range of about 175° C. to about 450° C. for time sufficient to fluorinate a substantial amount of said starting material to form gaseous reaction product comprising a saturated organic completely halogenated compound consisting of carbon, chlorine and fluorine and containing from one to five fluorine atoms and more fluorine than said starting material discharging said product from said zone, and recovering from said product a saturated organic completely halogenated compound consisting of carbon, chlorine and fluorine and containing from one to five fluorine atoms and more fluorine than said starting material.

2,748,178

CONDENSATION OF AN AROMATIC COMPOUND WITH AN UNSATURATED ORGANIC COMPOUND IN THE PRESENCE OF AN ALKALI METAL AND A PEROXY COMPOUND

Herman Pines and Vladimir N. Ipatieff, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application April 4, 1951, Serial No. 219,315

9 Claims. (Cl. 260—668)

1. A process which comprises reacting a non-conjugated olefinic hydrocarbon and an aromatic compound selected from the group consisting of carbocyclic aromatic and heterocyclic aromatic ring compounds having attached to a nuclear carbon atom a carbon atom of a saturated hydrocarbon group and to which last named carbon atom is attached at least one hydrogen atom at a temperature of from about 100° to about 350° C. and a pressure of from about 5 to about 50 atmospheres in the presence of an alkali metal and of an organic peroxy compound, and recovering the resultant condensation product.

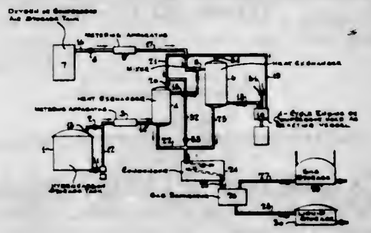
2,748,179

GAS MANUFACTURE

Edmond R. Retaillian, Cranford, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

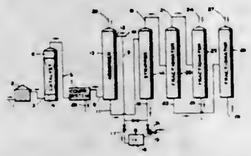
Application October 25, 1951, Serial No. 253,108

9 Claims. (Cl. 260—673)



1. An improved process for converting low molecular weight, normally liquid hydrocarbons into valuable, predominantly hydrocarbon fuels, which comprises the steps of preheating to a temperature in the range of 200°–400° F. a gaseous feed mixture comprising said hydrocarbons and a limited amount of a free oxygen-containing gas, the ratio of free oxygen to hydrocarbon being in the range of about 0.5 to 2.8 mols of oxygen per mol of hydrocarbon, and being insufficient to support complete combustion; passing at least a portion of said mixture to an externally unheated reaction zone; compressing said mixture in said zone rapidly to about $\frac{1}{10}$ to $\frac{1}{20}$ of the original volume of said reaction zone about 100 to 450 times a minute for a reaction period of less than about 0.005 minute so that its temperature is increased substantially exclusively by said compression to a level conducive to a limited reaction during said compression between the hydrocarbon and the free oxygen to produce carbon compounds having less hydrogen per molecule than the hydrocarbon; rapidly thereafter expanding the reaction products to reduce their temperature; and withdrawing reaction products from said zone having a greater number of molecules than the gaseous feed mixture, and comprising valuable, predominantly hydrocarbon fuel products.

2,748,180
BUTENE-1 SEPARATION IN THE PRESENCE OF AN ANTIFOAM AGENT
Ludwig A. Webber, Borger, Tex., assignor to Phillips Petroleum Company, a corporation of Delaware
Application January 5, 1953, Serial No. 329,533
9 Claims. (Cl. 260—683.3)



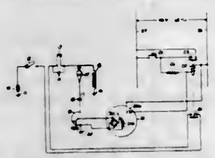
1. A process for manufacturing olefins from normal butane comprising the steps of catalytically dehydrogenating normal butane to said olefins whereby hydrogen and other hydrocarbons boiling above and below the boiling point of normal butane are produced, subjecting the dehydrogenation product to absorption conditions in the presence of a mineral seal oil containing a minor amount of a polydimethyl siloxane to produce a lean residue gas and a rich mineral seal oil, stripping said rich mineral seal oil of its absorbed hydrocarbon content to produce a lean mineral seal oil and stripped vapors, fractionating said stripped vapors to produce an overhead product comprising propane, butene-1, butadiene and a minor proportion of n-butane, and a bottoms product comprising butene-2, and n-butane of increased yield as another product of the process.

2,748,181
RUBBERY POLYMERS STABILIZED WITH METAL SALTS OF α,α-BIS(2-HYDROXY - 3:5 - DIALKYLPHENYL) ALKANES
Harry Edward Jackson, Boris N. Leyland, and John Francis Wood, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain
No Drawing. Application July 3, 1952, Serial No. 297,182
Claims priority, application Great Britain July 16, 1951
8 Claims. (Cl. 260—810)

1. A process for preventing the deterioration by oxidation of a rubber selected from the group consisting of natural and synthetic rubbers obtained by polymerizing a di-olefinic compound before and after vulcanization which comprises incorporating into said rubber prior to curing a material selected from the group consisting of normal and basic aluminum, barium, calcium, magnesium, strontium and zinc salts of αα-bis-(2-hydroxy-3:5-dialkyl-phenyl) alkanes.

ELECTRICAL

2,748,182
OVERSPEED DEVICE
Carl H. Ericson, Buffalo, N. Y., assignor to General Electric Company, a corporation of New York
Application December 5, 1950, Serial No. 199,282
9 Claims. (Cl. 123—148)

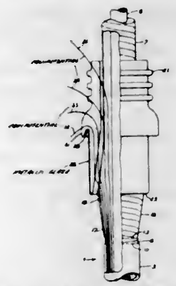


1. A control system for a machine comprising means for deriving a pulsating voltage having a frequency proportional to the speed of the machine comprising a source of direct voltage and a circuit supplied from said source including make and break contacts opened and closed in response to the speed of the machine, a first impedance whose value varies with frequency connected to be energized by said voltage, a second impedance whose value is relatively unaffected by frequency connected to be energized in series with said first impedance, said first impedance being larger than said second impedance over at least most of the operating range of said speed responsive device whereby the amplitude of the current in said series circuit is responsive principally to the value of said first impedance, and a voltage responsive device connected in shunt with said second impedance and arranged to perform a control operation in connection with said machine when the voltage drop across said second impedance reaches a predetermined value corresponding to a selected speed of said machine.

2,748,183
ELECTROLYTE FOR DRY CELLS
Clarence K. Morehouse and Jay Y. Welsh, Hamden, Conn., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia
No Drawing. Application October 28, 1952, Serial No. 317,366
4 Claims. (Cl. 136—103)

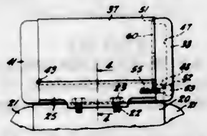
1. An electrolyte for primary cells of the Leclanche type consisting essentially of an aqueous solution of 5 per cent to 15 per cent zinc chloride and 15 per cent to 25 per cent ammonium chloride, containing 0.4 to 0.5 gram to a cubic centimeter of a modified starch which has been reacted with a bifunctional ether-forming reagent, said modified starch having the property of inhibited gelatinization when dispersed in water under normal gelatinization conditions.

2,748,184
HIGH VOLTAGE ELECTRIC TERMINATOR
James H. Nicholas, Chicago, Ill., assignor to G & W Electric Specialty Company, Chicago, Ill., a corporation of Illinois
Application April 4, 1951, Serial No. 219,294
8 Claims. (Cl. 174—19)



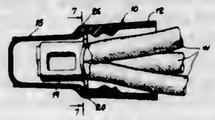
4. In a terminator for a high voltage insulated cable-conductor, a sealed housing of insulation into which the cable-conductor extends and which seals the end of the conductor from the outside atmosphere, an outer and grounded member surrounding the insulator at one end thereof and exposed to the atmosphere, and means for controlling the electrostatic field between the cable-conductor and the grounded member comprising the cable insulation retained on the cable-conductor at the portion thereof within the housing which is past the grounded member, an insulating stress cone surrounding the conductor insulation, a ceramic insulator surrounding the stress cone within the insulating housing and radially spaced from the cone to permit expansion thereof, and a grounded shield within the housing and surrounding the end of the stress cone which is closest to the cable-conductor receiving end of the housing, said shield extending past the grounded member and being on the outside of the ceramic insulator within the housing, and terminating within said ceramic insulator.

2,748,185
CONDENSER HOUSING AND MOUNTING THEREFOR
Earl H. Brunke, Rochester, N. Y., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application September 1, 1951, Serial No. 244,816
5 Claims. (Cl. 174—52)



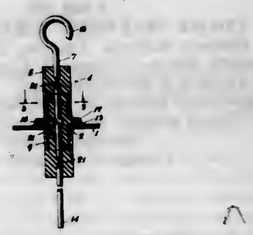
1. The combination with a condenser having a housing of insulating material with an open end, opposite exterior sidewalls of said housing having longitudinal grooves therein, and a cap of insulating material constructed and arranged to be attached to said housing so as to close said open end; of a mounting bracket having opposed, inwardly extending portions arranged to be received in said longitudinal grooves and retained therein by said cap so as to preclude relative movement between the bracket and the condenser housing.

2,748,186
TWO-PIECE PIGTAIL CONNECTOR
Asa Ren Lee, Cranford, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a corporation of New Jersey
Application December 20, 1954, Serial No. 476,407
8 Claims. (Cl. 174—87)



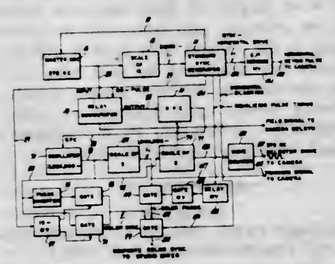
1. In a device of the class described, the combination of two preformed elements in telescopic relation, the inner of said two elements constituting a metallic splicer sleeve, a portion of which is of cylindrical form and fashioned to be crimped onto conductors in its bore before the sleeve is inserted in the outer element, said sleeve provided at one end with a pair of diametrically extending outstanding lobes disposed substantially in a plane extending at right angles to the axis of the sleeve and whose outer edges define a circle of greater diameter than the cylindrical part, the outer of said two elements forming a molded cap of resilient insulating material having a bore open at one end for receiving the sleeve, a mid-length portion of said bore being provided with a spiral, tapered thread forming between its turns a groove of progressively less diameter from its entrance end toward its discharge end, and in which groove the lobes turn with a screw-threaded engagement, the entrance end of the spiral groove having a diameter slightly greater than said lobe-forming circle and its other end having a diameter less than that of said circle, and said mid-length portion of the bore on the side of the groove opposite its receiving end provided with an annular channel for receiving the lobes when discharged from the groove, and said channel having a diameter slightly greater than the least diameter of the groove and slightly greater than the lobe-forming circle, the portion of the molded cap containing the channel being deformed outwardly by reason of the distending action of the lobes therein, and said cap in its resilient tendency to revert to its initial form frictionally binding on the lobes in the channel to resist accidental unscrewing of the sleeve in the cap.

2,748,187
ELECTRIC TERMINAL
Julius M. F. Conrad, Warren Township, Somerset County, N. J., assignor to Brilhart Research Corporation, Mineola, N. Y., a corporation of Delaware
Application June 28, 1951, Serial No. 234,121
8 Claims. (Cl. 174—153)



2. An electric terminal comprising in combination a thermoplastic insulating body, a conductor extending through the body, a metal tubular member surrounding said conductor and spaced therefrom and surrounding at least a portion of said insulating body, an annular enlargement on said tubular member having substantially parallel radially directed side walls spaced axially forming an annular groove on the interior of said enlargement and protruding from the insulating body for soldering to a casing, said insulating body entering only a portion of the annular groove and forming a gastignt pocket in the base of the groove, and a gas under pressure in the gastight pocket.

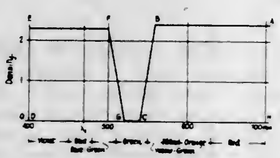
2,748,188
COLOR TELEVISION SYNCHRONIZING APPARATUS
Robert J. Stahl, Redwood City, and Norman L. Heikes, San Francisco, Calif., assignors to Color Television Incorporated, San Francisco, Calif., a corporation of California
Application September 11, 1950, Serial No. 184,187
19 Claims. (Cl. 178—5.4)



1. A generator of synchronizing signals for color television systems comprising a frequency stabilized oscillator tuned to a harmonic of half line frequency to produce electrical waves of a sub-harmonic of the desired synchronizing frequency, means fed by said oscillator for producing from said waves a plurality of waves of said sub-harmonic frequency but mutually displaced phase, switching means for connecting said phase-displaced waves successively into a common output circuit, an oscillator tuned to approximately said synchronizing fre-

quency and including means for varying its frequency of oscillation in response to a bias voltage applied thereto, a frequency divider connected to said synchronizing frequency oscillator for stepping the frequency supplied thereby down to said sub-harmonic frequency, a discriminator connected to said common output circuit and said frequency divider and operative to develop an error signal varying as a function of the phase difference of signals applied thereto, and circuit connections for applying such error signal to bias said frequency varying means in such sense as to cause a variation in frequency in opposite direction to the variation producing said error signal.

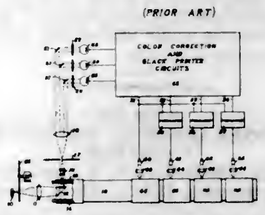
2,748,189
COLOR TELEVISION TRANSMISSION
Leslie Herbert Bedford, London, England, assignor to Marconi's Wireless Telegraph Company Limited, London, England, a British company
Application January 5, 1954, Serial No. 402,357
Claims priority, application Great Britain January 6, 1953
4 Claims. (Cl. 178—5.4)



1. A color filter device for use with a color television system wherein separable color signals are obtained by interposing the device in the picture imaging light path to the photo-electric cathode of a camera tube, said device having regularly and relatively differently spaced sets of filter strips, the sets being of different colors, there being an interval in the color scale between the color at which the density of the strips of any one set falls away towards the density of the space between two filter strips thereof, and the color at which the density of another set of strips increases from the space density and approaches its maximum value, the filter device producing in the strip separation spaces the required neutral density, whereby light of any one color traversing the filter device is modulated by its associated set of filter strips but is substantially unmodulated by the filter strips associated with other wave lengths of light, the filter device being adapted to be arranged with respect to the direction of line scanning in the camera tube so that different color picture signals are generated by said tube during the scanning of said cathode, the color picture signals thereby produced being carried upon different separable fundamental frequencies, determined by the sequential positioning of said color strips in the sets thereof.

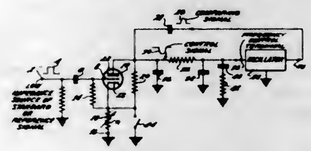
2,748,190
BLACK PRINTERS AND ELECTROOPTICAL METHODS OF MAKING THEM
John A. C. Yule, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application September 15, 1951, Serial No. 246,861
21 Claims. (Cl. 178—5.4)

1. In an electrooptical color reproduction process having three circuit channels carrying signals respectively proportional to the primary red, green and blue components from a scanned multicolored positive original and carrying in subsequent sections of the channels color corrected signals corresponding positively to said primary components, the method of producing a black printer signal which comprises producing in a fourth channel a signal proportional to the greatest of the color corrected



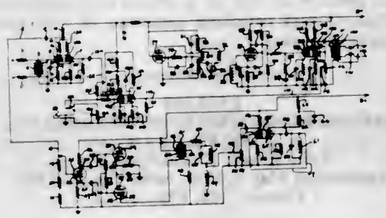
signals and decreasing said greatest signal by a factor inversely proportional to said green and red components.

2,748,191
OSCILLATOR SYNCHRONIZATION
Richard W. Sonnenfeldt, Haddonfield, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application August 12, 1952, Serial No. 303,855
2 Claims. (Cl. 178—69.5)



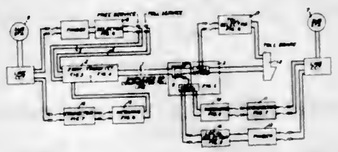
1. In an unbalanced phase detecting circuit for developing a control voltage whose magnitude is a function of the relative timing between a first and a second electrical signal of which said first electrical signal is subject to fortuitous interruptions, it being desired in said circuit that the effects of said interruptions on the magnitude of developed control voltage be at a minimum, the combination of: an electrical signal potential datum means; a first source of periodic electrical signal subject to fortuitous interruptions, said source having a discrete output impedance and referenced to said datum means; a second source of periodic electrical signal not subject to the same interruptions as said first source and referenced to said datum means; an amplifying device having electrodes respectively corresponding to a vacuum tube anode, cathode and control electrode; a first resistor connected between said cathode and said datum means; a first capacitor connected from said second source of signals to said anode for coupling said signals to said anode with a polarity tending to produce anode current flow in said amplifier; a second resistor directly connected between said anode and said cathode of sufficient value to permit said anode current flow to develop a control voltage at said anode whose average value is of a desired magnitude, the connection of said second resistor further providing means for developing a signal variation at said cathode corresponding to signals from said second signal source; a second capacitor connected from said first signal source to said control electrode; and a third resistor galvanically connected directly from said control electrode to said cathode, the value of said third resistor being substantially greater than said first signal source output impedance and further valued to form an integrating network with said second capacitor for said signal variations appearing at said cathode such that said signal variation at said cathode swings said cathode in a positive polarity direction relative to said control electrode, the value of said third resistor being further established to allow but a small percentage change in the average D.-C. potential of said anode upon fortuitous interruption of signals from said first source.

2,748,192
REVERBERATION GENERATOR
Lewis S. Goodfriend, New York, N. Y.
Application June 15, 1950, Serial No. 168,346
2 Claims. (Cl. 179—1)



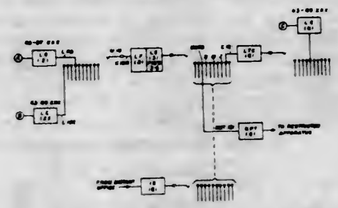
1. A means for generating reverberations superposed on a train of waves, comprising first amplifier means having a plurality of input means one of which is responsive to said train of waves and a common output means, recorder means responsive to the output of said amplifier means, a semi-permanent magnetic record produced thereby, reproducer means responsive to said record, means coacting with said recording and reproducing means for varying the elapsed time between the recording and the reproduction of said train of waves, second amplifier means having input means and a plurality of output means, said second amplifier input means being responsive to said reproducer means, attenuator means including means for varying the operation thereof locally and remotely responsive to an output of said second amplifier output means and coacting with another of said input means to said first amplifier input means, and output means for said train of waves.

2,748,193
DUPLEX SIGNALING SYSTEM
James D. Canfield, Rochester, N. Y., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application June 24, 1952, Serial No. 295,278
12 Claims. (Cl. 179—16)



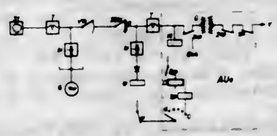
7. The combination of a two way trunk circuit including a long line link consisting of a two wire communication channel and a derived signal circuit, consisting of a differential duplex arrangement including a differential relay in said derived signal circuit at each end thereof, polar duplex relays in said derived signal circuit at each end thereof and means at one end of said trunk responsive to the seizure thereof for excluding the said polar duplex relay thereat and means responsive to an operation of said differential duplex arrangement for excluding said polar duplex relay at the distant end of said trunk, said trunk circuit having a plurality of outgoing terminals at each end thereof and means selectively responsive to the seizure of said trunk over one or another of said outgoing terminals for transiently operating said polar duplex relay at the distant end thereof.

2,748,194
DROP-BACK SELECTOR
Ernest H. Gatzert, Rochester, N. Y., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application May 2, 1955, Serial No. 505,463
18 Claims. (Cl. 179—18)



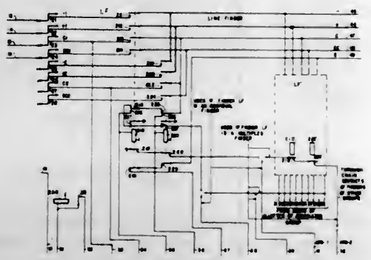
1. In a telephone system, a selector comprising a switch including a set of wipers having a normal position and a plurality of levels of contacts disposed for engagement by said wiper set and including a particular level, means for transmitting directive signals to said selector, means in said selector responsive to the receipt of directive signals for moving said wiper set in a primary direction to any one of said levels, means for selectively restoring said set of wipers to said normal position following selected primary movements, means for advancing said wiper set in a secondary direction within said any one level, means operative in response to each of a series of successive primary movements of said wiper set to certain of said levels for operating said restoring means and for registering each of said series of movements and thereafter operative in response to a subsequent primary movement of said wiper set to said any one level for rendering said secondary means operative, and other means operative in response to the first registering operation of said registering means and to a subsequent primary movement of said wiper set to said particular level for rendering said secondary means operative.

2,748,195
AUTOMATIC P. B. X TELEPHONE SYSTEM
Karl Faber, Munich, Germany, assignor to Siemens & Halske Aktiengesellschaft, Munich, Germany, a corporation of Germany
Application January 19, 1955, Serial No. 482,899
17 Claims. (Cl. 179—18)



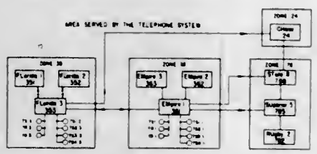
1. In an automatic private branch exchange telephone system having semiprivileged lines entitled to make outside calls limited to a predetermined zone and having fully privileged lines entitled to make, responsive to dialing a predetermined number, outside calls extending beyond such zone, first switching means responsive to the dialing of said predetermined number by a semiprivileged line for preventing the setting up of the corresponding call to a zone beyond said predetermined zone, second switching means, a source having a frequency lying outside the audible range, circuit means for connecting said source to a fully privileged line for the purpose of operatively affecting said second switching means, and means actuated by said second switching means upon extension of a call from said fully privileged line for inhibiting the operative actuation of said first switching means to permit said fully privileged line to extend the corresponding call to a zone beyond said predetermined zone.

2,748,196
TELEPHONE SYSTEM
Alfred H. Faulkner, Chicago, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Application May 1, 1953, Serial No. 352,370
45 Claims. (Cl. 179—18)



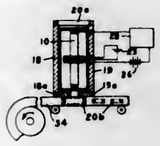
1. In a telephone system, a switch of the absence of ground hunting type having wiper and bank means including test wiper and bank means and magnet means for actuating said wiper means, means for marking predetermined positions of said switch by the absence of ground and the presence of battery on said test bank means in said positions, a test relay for said switch, said test wiper means being connected both to said test relay and said magnet so that said test relay remains shunted and said magnet means activated for advancing said wiper means as long as ground is encountered by said wiper means, said test relay operating incident to said test wiper means ceasing to encounter ground, and control means for causing said test bank means to be checked for the presence of battery in the position reached, the condition of said control means being changed responsive to the operation of said test relay for making the above-mentioned connection of said test relay ineffective and placing said relay in a holding connection depending on battery being encountered by said test wiper means, the subsequent release of said test relay if battery is absent from the test bank means in said position causing the magnet means to be re-activated and the connection of said test relay with said magnet means and said test wiper means subsequently to be rendered effective again, whereby the absence of ground hunting action of said switch is resumed in the following position of said switch.

2,748,197
TELEPHONE SYSTEMS
John E. Ostline, Chicago, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Original application February 12, 1949, Serial No. 75,985. Divided and this application January 14, 1952, Serial No. 266,253
13 Claims. (Cl. 179—27)



4. In a telephone system, a calling line, a called line, switching apparatus, a register sender normally controllable over said calling line for operating said switching apparatus to set up a connection from said calling line to said called line, identity means normally controllable to identify said calling line during the setting up of said connection, operator position, blocking means controlled by the failure of said identity means to identify said calling line for blocking said register sender after a partially completed connection has been established but before completion of the setting up of said connection to said called line, and means controlled by said operation of said blocking means for connecting said calling line to said operator position by way of a branch connection including certain of said switching apparatus of said partially completed connection.

2,748,198
MAGNETRONIC CIRCUIT-CONTROLLING DEVICES
Kube Krisch, Philadelphia, Pa.
Application May 7, 1951, Serial No. 224,980
7 Claims. (Cl. 179—100.2)



1. A circuit-controlling device comprising a non-oscillatory vacuum tube having a thermally-emissive cathode and an anode concentric therewith, and magnetic means including pole pieces of low reluctance for producing magnetic flux traversing the anode-cathode space of said tube and essentially all of which is unidirectional and continuously in fixed direction substantially parallel to the common axis of said anode and cathode and continuously of uniform intensity axially of said anode-cathode space, said magnetic means including a magnetic control member movable with respect to said low reluctance pole pieces to vary the intensity of the uniform flux through the tube so to vary the anode-cathode current of the tube while maintaining said axial uniformity and fixed direction of the magnetic flux.

2,748,199
CHANNEL-SHAPED STYLUS
Roy Dally, Liverpool, N. Y., assignor to General Electric Company, a corporation of New York
Application September 25, 1951, Serial No. 248,113
10 Claims. (Cl. 179—100.41)



1. A cantilever stylus arm adapted to vibrate between two magnetic poles and to carry magnetic flux thereto from a magnet spaced therefrom comprising a rigid, elongated, magnetic body portion of channel-shaped cross-section adapted to vibrate laterally between said pole pieces and extending from said pole pieces to said magnet whereby the flux path from said magnet to said pole pieces extends longitudinally through said body portion and a flexible supporting portion, having a dimension transverse to the longitudinal axis of said body portion less than the transverse dimension of said portion to provide for substantial compliance in a plane transverse to said longitudinal axis, extending axially from said body portion for attachment to a fixed support at a point sufficiently distant from said body portion and magnet to permit vibrations of said body portion in accord with undulation of a groove of a record to be reproduced due to flexure of said supporting portion.

2,748,200
TWO-WAY REPEATERS
Frederick B. Llewellyn, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application August 11, 1951, Serial No. 241,477
5 Claims. (Cl. 179—170)



1. A two-way repeater in the form of a lattice network in which the impedance of each of the series arms is equal to substantially

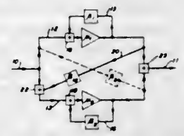
$$Z_I\frac{1-\sqrt{\Gamma_0}}{1+\sqrt{\Gamma_0}}$$

and the impedance of each of the cross arms is equal to substantially

$$Z_I\frac{1+\sqrt{\Gamma_0}}{1-\sqrt{\Gamma_0}}$$

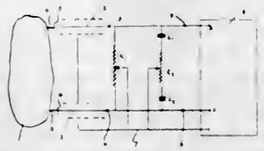
where Z_I is the image impedance of the repeater and Γ_0 is the image gain of the repeater and is greater than unity.

2,748,201
MULTIPLE-FEEDBACK SYSTEMS
Brockway McMillan, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York N. Y., a corporation of New York
Application September 21, 1951, Serial No. 247,699
22 Claims. (Cl. 179—171)



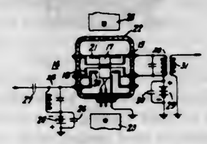
1. A signal translating system comprising a plurality of signal translating channels connected in multiple with each other between a common signal source and a common load, an individual independent feedback loop embracing each of said channels, a cross feedback connection from the output of one of said channels to the input of another, and means in each channel for confining the energy transfer between channels to energy so transferred by said cross feedback connection.

2,748,202
AMPLIFIER WITH INTERFERENCE REDUCING CIRCUIT
Edward Samuel McCallister, Chiswick, London, and Kazimierz Wladyslaw Woznica, Putney, London, England, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application January 13, 1953, Serial No. 331,066
Claims priority, application Great Britain January 25, 1952
2 Claims. (Cl. 179—171)



1. In a system including a signal source and an amplifier for said signal, a network for coupling said source to said amplifier and for reducing unwanted signals arising from stray fields, said network including a pair of input terminals for connection to said source to be supplied differentially with the desired signal with respect to ground; a pair of output terminals for connection to said amplifier to supply said signals differentially thereto relative to ground; and means to cause the unwanted signal at each output terminal to have equal amplitudes and phases relative to ground, said means including a first potentiometer connected across said input terminals and having a sliding contact connected to ground, a pair of capacitors, and a second potentiometer each end of which is connected through a respective capacitor to a respective input terminal, said second potentiometer having a sliding contact connected to ground.

2,748,203
HIGH FREQUENCY POWER AMPLIFIER
Philip H. Peters, Jr., Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application July 24, 1952, Serial No. 300,656
8 Claims. (Cl. 179—171)



4. A power amplifier comprising an electron discharge device having an envelope containing an elongated electron emitting cathode extending along a given axis, a pair of cylindrical anodes surrounding said cathode and coxial therewith, said anodes having facing end surfaces transverse to said axis spaced along said axis to define a gap between them and each presenting a continuous cylindrical surface facing said cathode, and a pair of control electrodes having facing surfaces transverse to said axis and spaced from said gap on opposite sides thereof, means providing a static axial magnetic field in the space between said cathode and said cylindrical members and means providing a static radial electrical field between said cathode and said anodes to establish a generally rotating space charge around said cathode between said cathode and said anodes, means for applying a negative bias to at least one of said control electrodes with respect to said cathode to axially compress the rotating space charge, and means for applying signal voltage between said control electrodes to axially move the compressed space charge across the gap between said pair of anodes.

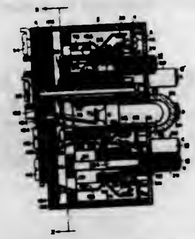
2,748,204
CIRCUIT CONTROLLERS
Robert A. Woods, Verona, and Herbert L. Bone, Forest Hills, Pa., assignors to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application October 23, 1952, Serial No. 316,336
16 Claims. (Cl. 200—4)



1. In a circuit controller, the combination comprising a cam assembly longitudinally movable between first and second positions and rotatably movable into a plurality of angular positions, an operating lever for moving said cam assembly longitudinally and rotatably, a first resilient means biasing said cam assembly to a position intermediate its first and second longitudinal positions, said resilient means also holding said cam assembly in its

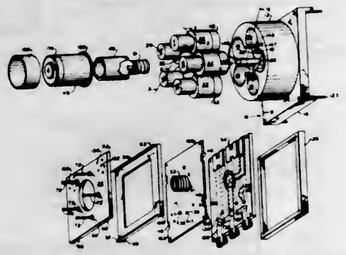
angular positions, and means cooperating with said cam assembly permitting the longitudinal movement of the cam assembly to its first position and to its second position only when said cam assembly is in a predetermined angular position.

2,748,205
SWITCH
Edward E. Forstrom, Bridgeport, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a corporation of Connecticut
Application December 14, 1951, Serial No. 261,723
15 Claims. (Cl. 200—5)



1. A switch comprising, a switch casing, a plurality of pushbutton operating members projecting through openings in one wall of said casing, respectively, a plurality of switches mounted in said casing each of which includes a stationary contact and a movable contact, there being at least one switch for each pushbutton, means on each pushbutton for operating the movable contact of its switch in response to pushbutton movement, a plurality of cam members slidably mounted in said casing in a direction substantially at right angles to the movement of said pushbuttons and located at the inner ends of said pushbuttons, rollers mounted on the inner ends of said pushbuttons by a connection having lost motion in the direction of the sliding movement of said cam members to permit both rotational movement and translatory movement of the rollers in the direction of the sliding movement of said cam members, and each of said rollers being located between adjacent cam members so as to be engageable therewith and to cause sliding movement thereof in opposite directions upon depression of its associated pushbutton and thereby to cause elevation of the other pushbuttons.

2,748,206
MULTIPLE ELECTRIC SWITCH FOR DOMESTIC RANGE
John Lewis Andrews, Fairfield, Ill.
Application December 10, 1948, Serial No. 64,481
31 Claims. (Cl. 200—5)



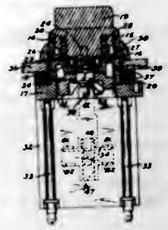
1. A multiple electric switch comprising a body member, a plurality of push buttons slidably supported by said body member, an actuator plate slidably disposed for motion in at least three directions on said body member, and a plurality of posts carried by said plate, each of said buttons having a cam surface disposed to selectively engage a respective post when pressed, said cam surfaces being disposed to face in predetermined relatively radially arranged directions whereby said plate will be shifted in a corresponding direction by pressure on a selected button, and means including contact members actuatable by said plate to control electric circuits.

2,748,207
SWITCH
David P. Clayton and George W. Oaksen, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 13, 1952, Serial No. 287,474
2 Claims. (Cl. 200—16)



1. A switch comprising an open sided housing; a cover supported by the housing; a plurality of rows of three spaced terminals supported by the housing; a movable carrier supported within the housing and movable from a medial position to positions on opposite sides of the medial position; a bridging member carried on opposite sides of the carrier, each formed to provide contact portions respectively, adapted to engage a terminal of one row and a pair of terminals in another row, said end bridging members being spaced so that in one side position of the carrier one of said end bridging members will engage at least three terminals while the other end bridging member engages at least one terminal and vice versa; a pair of adjacent intermediate bridging members movable with the carrier, each providing a pair of contact portions, said contact portion being arranged so that when the carrier is in the medial position the center terminal of the three terminals in one row will be engaged by both bridging members but when the carrier is in either side position only the center and one side terminal of said one row will be engaged by the intermediate bridging members.

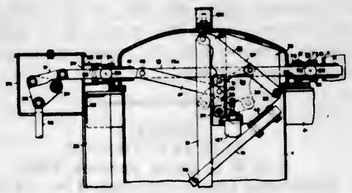
2,748,208
OILTIGHT ROTARY SELECTOR SWITCH
Nobel H. Koertge, Glen Ellyn, Ill., assignor to Furnas Electric Company, Batavia, Ill., a corporation of Illinois
Application September 15, 1951, Serial No. 246,749
2 Claims. (Cl. 200—16)



1. In an electric switch, a unitary base having oppositely directed coaxial bores of approximately like diameter terminating at an integral inwardly directed flange provided with a central opening and also being provided with flat surfaces at the inner ends of said bores, one of said bores having a pair of inwardly directed keys therein near said flange, a switch terminal actuating rotor rotatable within said keyed bore and having a manipulating portion at one end extending outwardly beyond said bore and also having an axial projection extending

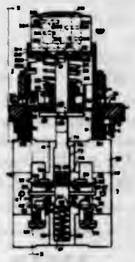
through said flange opening into the other bore, an indexing plate seated against the flat flange surface at the inner end of said keyed bore and having peripheral notches coacting with said keys to prevent rotation of the plate relative to said body, said plate also having therein a central opening registering with said flange opening and an annular series of through holes surrounding said openings, latch balls selectively cooperable with said holes and with said rotor to hold the latter in various predetermined angular positions, a compression spring interposed directly between said rotor and each latch ball, a switch contact actuating cam carried by said rotor projection and being resiliently urged into engagement with the other of said flat flange surfaces and confined within said other body bore by said ball engaging springs, and means for detachably securing said cam to the free end of said rotor projection.

2,748,209
CIRCUIT INTERRUPTER
Fritz E. Florschutz and Carl G. Lentjes, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application August 4, 1951, Serial No. 240,368
12 Claims. (Cl. 200—18)



1. In a circuit interrupter, the combination of a plurality of enclosed receptacles, bearing means forming closed passages between said receptacles, a member extending through said receptacles and said bearing means, roller means in each of said bearing means supporting said member for straight-line reciprocating movement, said roller means substantially closing each of said bearing means to thereby form baffles substantially preventing flow through said bearing means from one to another of said receptacles.

2,748,210
ELECTRIC SWITCHES
Stanley L. Frank, Beaver, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application March 19, 1952, Serial No. 277,466
8 Claims. (Cl. 200—44)



1. A switch comprising at least one set of upper stationary contacts, at least one set of lower stationary contacts, movable contact operating means including one or more guided plungers each having a bridging contact movable in response to movement of each of said plungers, a circular outwardly biased pushbutton including a barrel having a key actuated contractible latch laterally movable in response to movement of said key, a plate attached to said pushbutton and movable in direct relation to movement of the said pushbutton, said plate being positioned directly above each of said plungers causing said plungers to move in equal distance as said plate moves, said barrel being positioned within a cylindrical housing having three separate circumferential slots into any one of which said latch may extend and definitely position said barrel, said disk and said plungers in positions corresponding to said slots, said housing having a longitudinal slot therein with a notch in one side of the slot, and said lock barrel having a projection disposed in said slot, said projection entering said notch by applying a turning force on the lock barrel during longitudinal movement of the barrel, thereby positioning said latch opposite the intermediate circumferential slot.

2,748,211
DISCONNECTING SWITCH
Lothar Butz, Nussbaumen, near Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie, Baden, Switzerland, a joint-stock company
Application June 7, 1955, Serial No. 513,730
Claims priority, application Switzerland June 9, 1954
7 Claims. (Cl. 200—48)



1. In a disconnecting switch the combination comprising an extensible lever system mounted upon an insulating support and movable between a retracted open circuit position to an extended closed circuit position, a movable contact assembly carried by the upper end of said lever system, said assembly including a yoke mounted for rotation thereon to make and break contact with an overhead conductor, gearing means for effecting rotation of said yoke, and means controlled by movement of said lever system for actuating said gearing means and hence also said yoke.

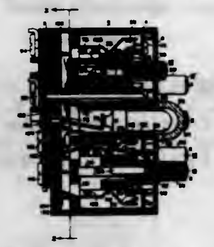
2,748,212
SINGLE-PILLAR SCISSOR-TYPE DISCONNECT SWITCH FOR HIGH-TENSION INSTALLATIONS
Lothar Butz, Nussbaumen, near Baden, Switzerland, assignor to Aktiengeselischaft Brown, Boveri & Cie, Baden, Switzerland
Application May 31, 1955, Serial No. 512,079
Claims priority, application Switzerland June 10, 1954
2 Claims. (Cl. 200—48)



1. A single-pillar scissor-type disconnector for high tension installations comprising an insulator head, two

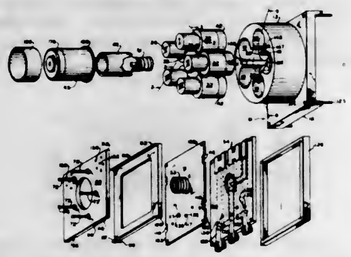
angular positions, and means cooperating with said cam assembly permitting the longitudinal movement of the cam assembly to its first position and to its second position only when said cam assembly is in a predetermined angular position.

2,748,205
SWITCH
Edward E. Forstrom, Bridgeport, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a corporation of Connecticut
Application December 14, 1951, Serial No. 261,723
15 Claims. (Cl. 200—5)



1. A switch comprising, a switch casing, a plurality of pushbutton operating members projecting through openings in one wall of said casing, respectively, a plurality of switches mounted in said casing each of which includes a stationary contact and a movable contact, there being at least one switch for each pushbutton, means on each pushbutton for operating the movable contact of its switch in response to pushbutton movement, a plurality of cam members slidably mounted in said casing in a direction substantially at right angles to the movement of said pushbuttons and located at the inner ends of said pushbuttons, rollers mounted on the inner ends of said pushbuttons by a connection having lost motion in the direction of the sliding movement of said cam members to permit both rotational movement and translatory movement of the rollers in the direction of the sliding movement of said cam members, and each of said rollers being located between adjacent cam members so as to be engageable therewith and to cause sliding movement thereof in opposite directions upon depression of its associated pushbutton and thereby to cause elevation of the other pushbuttons.

2,748,206
MULTIPLE ELECTRIC SWITCH FOR DOMESTIC RANGE
John Lewis Andrews, Fairfield, Ill.
Application December 10, 1948, Serial No. 64,481
31 Claims. (Cl. 200—5)



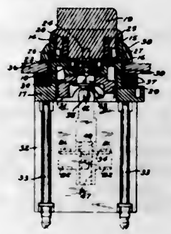
1. A multiple electric switch comprising a body member, a plurality of push buttons slidably supported by said body member, an actuator plate slidably disposed for motion in at least three directions on said body member, and a plurality of posts carried by said plate, each of said buttons having a cam surface disposed to selectively engage a respective post when pressed, said cam surfaces being disposed to face in predetermined relatively radially arranged directions whereby said plate will be shifted in a corresponding direction by pressure on a selected button, and means including contact members actuatable by said plate to control electric circuits.

2,748,207
SWITCH
David P. Clayton and George W. Onksen, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 13, 1952, Serial No. 287,474
2 Claims. (Cl. 200—16)



1. A switch comprising an open sided housing; a cover supported by the housing; a plurality of rows of three spaced terminals supported by the housing; a movable carrier supported within the housing and movable from a medial position to positions on opposite sides of the medial position; a bridging member carried on opposite sides of the carrier, each formed to provide contact portions respectively, adapted to engage a terminal of one row and a pair of terminals in another row, said end bridging members being spaced so that in one side position of the carrier one of said end bridging members will engage at least three terminals while the other end bridging member engages at least one terminal and vice versa; a pair of adjacent intermediate bridging members movable with the carrier, each providing a pair of contact portions, said contact portion being arranged so that when the carrier is in the medial position the center terminal of the three terminals in one row will be engaged by both bridging members but when the carrier is in either side position only the center and one side terminal of said one row will be engaged by the intermediate bridging members.

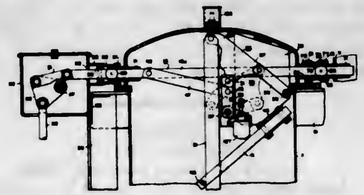
2,748,208
OILTIGHT ROTARY SELECTOR SWITCH
Nobel H. Koertge, Glen Ellyn, Ill., assignor to Furnas Electric Company, Batavia, Ill., a corporation of Illinois
Application September 15, 1951, Serial No. 246,749
2 Claims. (Cl. 200—16)



1. In an electric switch, a unitary base having oppositely directed coaxial bores of approximately like diameter terminating at an integral inwardly directed flange provided with a central opening and also being provided with flat surfaces at the inner ends of said bores, one of said bores having a pair of inwardly directed keys therein near said flange, a switch terminal actuating rotor rotatable within said keyed bore and having a manipulating portion at one end extending outwardly beyond said bore and also having an axial projection extending

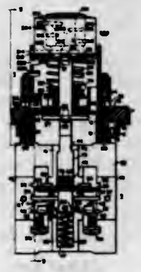
through said flange opening into the other bore, an indexing plate seated against the flat flange surface at the inner end of said keyed bore and having peripheral notches coacting with said keys to prevent rotation of the plate relative to said body, said plate also having therein a central opening registering with said flange opening and an annular series of through holes surrounding said openings, latch balls selectively cooperable with said holes and with said rotor to hold the latter in various predetermined angular positions, a compression spring interposed directly between said rotor and each latch ball, a switch contact actuating cam carried by said rotor projection and being resiliently urged into engagement with the other of said flat flange surfaces and confined within said other body bore by said ball engaging springs, and means for detachably securing said cam to the free end of said rotor projection.

2,748,209
CIRCUIT INTERRUPTER
Fritz E. Florschutz and Carl G. Lentjes, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application August 4, 1951, Serial No. 240,368
12 Claims. (Cl. 200—18)



1. In a circuit interrupter, the combination of a plurality of enclosed receptacles, bearing means forming closed passages between said receptacles, a member extending through said receptacles and said bearing means, roller means in each of said bearing means supporting said member for straight-line reciprocating movement, said roller means substantially closing each of said bearing means to thereby form baffles substantially preventing flow through said bearing means from one to another of said receptacles.

2,748,210
ELECTRIC SWITCHES
Stanley L. Frank, Beaver, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application March 19, 1952, Serial No. 277,466
8 Claims. (Cl. 200—44)



1. A switch comprising at least one set of upper stationary contacts, at least one set of lower stationary contacts, movable contact operating means including one or more guided plungers each having a bridging contact movable in response to movement of each of said plungers, a circular outwardly biased pushbutton including a barrel having a key actuated contractible latch laterally movable in response to movement of said key, a plate attached to said pushbutton and movable in direct relation to movement of the said pushbutton, said plate being positioned directly above each of said plungers causing said plungers to move in equal distance as said plate moves, said barrel being positioned within a cylindrical housing having three separate circumferential slots into any one of which said latch may extend and definitely position said barrel, said disk and said plungers in positions corresponding to said slots, said housing having a longitudinal slot therein with a notch in one side of the slot, and said lock barrel having a projection disposed in said slot, said projection entering said notch by applying a turning force on the lock barrel during longitudinal movement of the barrel, thereby positioning said latch opposite the intermediate circumferential slot.

2,748,211
DISCONNECTING SWITCH
Lothar Butz, Nussbaumen, near Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie, Baden, Switzerland, a joint-stock company
Application June 7, 1955, Serial No. 513,730
Claims priority, application Switzerland June 9, 1954
7 Claims. (Cl. 200—48)



1. In a disconnecting switch the combination comprising an extensible lever system mounted upon an insulating support and movable between a retracted open circuit position to an extended closed circuit position, a movable contact assembly carried by the upper end of said lever system, said assembly including a yoke mounted for rotation thereon to make and break contact with an overhead conductor, gearing means for effecting rotation of said yoke, and means controlled by movement of said lever system for actuating said gearing means and hence also said yoke.

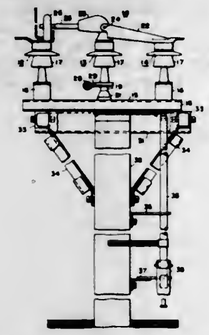
2,748,212
SINGLE-PILLAR SCISSOR-TYPE DISCONNECT SWITCH FOR HIGH-TENSION INSTALLATIONS
Lothar Butz, Nussbaumen, near Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie, Baden, Switzerland
Application May 31, 1955, Serial No. 512,079
Claims priority, application Switzerland June 10, 1954
2 Claims. (Cl. 200—48)



1. A single-pillar scissor-type disconnector for high tension installations comprising an insulator head, two

spaced apart rotatable axles mounted in said head, means interlocking said axles for simultaneous rotation in the same direction, means for rotating said axles, a pair of arms of substantially equal length mounted on said axles and rotatable therewith, one of said arms being rigid and the other being divided into two portions by a knee joint permitting the portion remote from the axle to swing toward the other arm, rods hinged to the free ends of said arms, said rods crossing each other and being pivoted to each other at the point of intersection, and a spring positioned between said hinges.

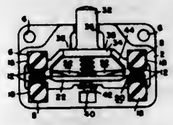
2,748,213
DISCONNECTING SWITCH WITH OPERATING MECHANISM
James B. Owens, East McKeesport, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application October 21, 1952, Serial No. 316,043
7 Claims. (Cl. 200—48)



1. In a switch structure for mounting on a vertical pole at the top of the pole, in combination, a supporting frame comprising a centrally disposed cross member for attaching to the pole and longitudinal members attached to the cross member, three switch units mounted on the frame in substantially equally spaced relation, each switch unit having three insulators mounted on a common base, the intermediate insulator of each unit being rotatable for actuating the switch, tie rods connecting the rotatable insulators of the outer units with the rotatable insulator of the center unit, a shaft for mounting vertically on the pole to drive said insulators, said shaft being offset from the rotatable insulator of the center switch unit to be underneath and substantially in alignment with one of the end insulators of the center switch unit, a first crank arm driven by the shaft, a second crank arm secured to the rotatable insulator of the center switch unit, bearing means in the base of the center switch unit for said crank arms, the bearing means for the first crank arm being underneath the end insulator of the center switch unit, the bearing means for the second crank arm being underneath the rotatable insulator of the center switch unit, and a tie bar connecting said crank arms, said crank arms and said tie bar being underneath the base of the center switch unit.

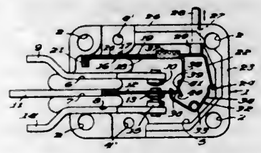
2,748,214
SWITCH
Ralph B. Immel, Williamsville, N. Y., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application April 21, 1951, Serial No. 222,203
7 Claims. (Cl. 200—67)

1. A switch comprising, a casing of insulating material, spaced contacts stationarily mounted in said casing, a bridging contact member mounted in said casing for movement toward and away from opposite sides of the casing into and out of engagement with said spaced contacts, said bridging contact member having a central opening therethrough, a push button operating member extending through an opening in one of said opposite sides of the casing and having stop means limiting its outward movement, operating spring means seated in a groove in the inner end of said push button and having spaced ends disposed externally of the push button, said spring means being held in stressed condition by toggle means interposed between the spaced ends of said spring



means and said bridging contact member for operating said bridging contact member with a snap action, and return spring means acting directly between said push button and the other of said opposite walls of the casing to normally maintain said push button at extended position relative to said casing and said movable bridging contact member at one of its positions, said return spring means extending from the side of the casing opposite the push button through the opening in the bridging contact member and between the spaced ends of the spring means to the push button.

2,748,215
ELECTRIC SWITCH
Allen V. C. Davis, Burbank, Calif.
Application June 1, 1954, Serial No. 433,390
6 Claims. (Cl. 200—67)

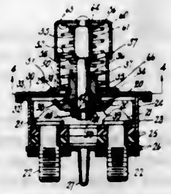


1. In an electric switch, a base, a movable contact means and a stationary contact carried by said base, reciprocable means for moving said movable contact means into and out of engagement with said stationary contact; said reciprocable means including a resilient, bell crank like, torsion spring means having its respective ends operatively engaging a member of said reciprocable means and said movable contact means; said spring being normally effective to impart snap action movement to said movable contact means as it is moved past its mid-travel position by movement of said member of said reciprocable means, and yielding detent means movable with said member of said reciprocable means, and engaging said movable contact means effective to resist the tendency of said spring means to move said movable contacts means until said member of said reciprocable means has reached a point between its mid-travel position and the end of its path of travel toward which it is being moved.

2,748,216
SWITCH
Paul L. Schneider and William H. Taylor, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application February 21, 1952, Serial No. 272,736
2 Claims. (Cl. 200—77)

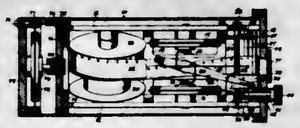
1. In a switch, the combination with a casing supporting a plurality of stationary contacts, a plate and a cover

for the casing; a movable contact; a movable carrier slidably supported by the plate and cover and carrying the movable contact; an external annular groove formed in the carrier; a plunger rod slidably mounted in the carrier; a spring positioned between the cover and the plunger rod for maintaining the rod and carrier in a normal position to hold the movable contact out of engagement with the stationary contacts; a second spring positioned between the carrier and the rod for transmitting motion to the carrier to close the contacts; a detent spring disposed between the plate and cover co-



operating with the groove for holding the movable contact out of engagement with the stationary contacts when the switch is inoperative but which can be overcome by movement of the plunger in a direction for contact closing; and means associated with the plunger for transmitting motion to the carrier from the rod after the rod has moved a certain distance to compress the first and second mentioned springs free of the third spring whereby the second spring is operative to move the movable contact with a snap action into engagement with the stationary contacts.

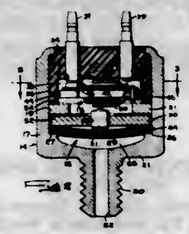
2,748,217
ALTITUDE SWITCH
Frederick C. Melchior, New York, N. Y.
Application August 2, 1951, Serial No. 239,993
7 Claims. (Cl. 200—83)



1. An instrument of the character described including a casing having an air-tight chamber therein, a pair of pressure capsules mounted in said air-tight chamber and connected by a flexure movement, a lever on said flexure movement, a cradle pivotally mounted and adapted to be positioned by means outside of said air-tight chamber for contact with said lever to close a circuit, a valve in said air-tight chamber communicating with a chamber open to the atmosphere and a pressure sensitive capsule controlling said valve.

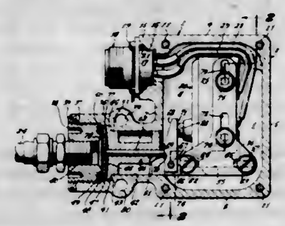
2,748,218
FLUID OPERATED CYCLIC CONTROL FOR BRAKE LIGHT CIRCUITS
Max Leichsenring, Chicago, Ill.
Application July 8, 1952, Serial No. 297,709
5 Claims. (Cl. 200—83)

4. A unitary electrical control device comprising, in combination, a hollow casing, a pair of electrical terminals on said casing, a fluid pressure responsive actuator mounted in said casing, means defining a fluid inlet in said casing communicating with said actuator, a switch element cooperating with said terminals and movable between off and on positions, a mechanical control means interposed between said actuator and said switch element and so arranged that said element is moved toward its on position upon a change of pressure in said actuator, and



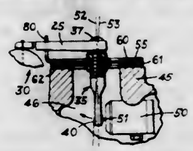
means responsive to the resulting flow of current between said terminals for cyclically breaking the electrical circuit.

2,748,219
HYDRAULIC PRESSURE OPERATED SWITCH
J. D. Buchanan, Burbank, Calif.
Application February 16, 1953, Serial No. 337,044
7 Claims. (Cl. 200—83)



1. A hydraulic pressure operated switch comprising a casing having a bore, a mount removably fitting said bore, said mount having a slide bearing bore, a pin slidable in said bearing bore, a diaphragm in abutting relation to one end of said pin, a lever having one side in abutting relation to the other end of said pin, a fulcrum for said lever on said mount, a bracket on said mount, a switch casing on said bracket, said switch casing having contacts having a plunger in abutting relation to the other side of said lever, said bracket having slot means extending in a direction lengthwise of said pin and screw means therefor for adjusting said switch casing to adjust the abutting relation of said switch plunger, said lever, said pin and said diaphragm.

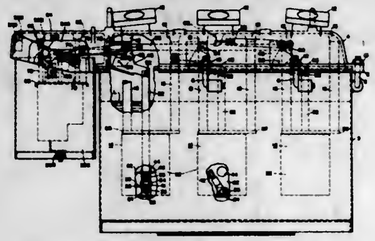
2,748,220
SEALED FLOAT SWITCH
Kenneth R. Lung, Dayton, Ohio, assignor to The Tait Manufacturing Company, a corporation of Ohio
Application April 29, 1955, Serial No. 504,782
7 Claims. (Cl. 200—84)



1. A float operated sealed switch assembly including the combination of a switch, a housing enclosing said switch and having an opening therein, an operating arm extending through said opening and having means on the end thereof within said housing for operating said switch, a diaphragm covering said opening and having an aperture therethrough for receiving said operating arm, means for fixing said diaphragm in sealing relation to said operating arm and said housing to cover said opening, fulcrum means adjacent said diaphragm and supporting said operating arm for tilting movement to actuate said switch

operating means, a lever arm attached to said operating arm outwardly of said housing, a weight, means for suspending said weight from said lever arm into a body of liquid, and a float retained on said suspending means and freely movable between said lever arm and said weight for selectively exerting forces thereon in response to changes in the liquid level.

2,748,221
CIRCUIT INTERRUPTER OPERATING MECHANISM
Andrew W. Edwards, East McKeesport, and Alvin W. Ogg, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application September 12, 1950, Serial No. 184,482
13 Claims. (Cl. 200—89)



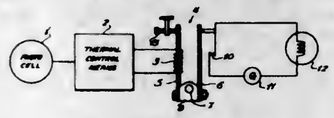
1. A circuit interrupter comprising, separable contacts, operating mechanism for said contacts including a longitudinally movable contact rod, a longitudinally movable lockout member normally biased to separate said contacts and a toggle linkage connected with and normally preventing movement of said member and having two overcenter pivots, releasable latch means cooperating with one of said overcenter pivots for holding the toggle associated therewith extended when said contacts are closed, stop means for holding the toggle associated with the other overcenter pivot at an extended position when said contacts are closed, and operating means connected to one lever of the toggle associated with said other overcenter pivot to move that lever overcenter in both directions for selectively moving the lockout member and opening and closing the contacts.

2,748,222
THERMAL SWITCHES
Ralph W. De Lancey, Meriden, Conn.
Application August 11, 1953, Serial No. 373,471
4 Claims. (Cl. 200—122)



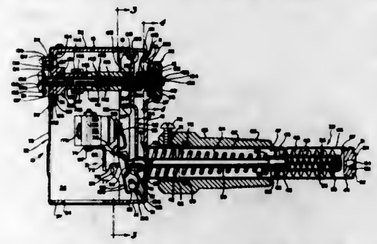
1. A thermal switch comprising a tubular resistance heater provided with terminals, a heater support, two metallic strips having narrowed portions in the heater provided with contacts for controlling a circuit and widened mounting portions, at least one of the strips being bimetallic, a pair of terminal plates, wires connecting the terminal plates with the heater terminals, a plurality of insulating places between which the bracket, the widened portions of the metallic strips, heater support and the terminal plates are interposed, and bolts for clamping the insulating plates and interposed parts into a stack.

2,748,223
THERMOSTATIC CONTROL MEANS
Karl Frank, Franklin Square, N. Y., assignor to Micro Balancing, Inc., New Hyde Park, N. Y., a corporation of New York
Application August 21, 1952, Serial No. 305,644
3 Claims. (Cl. 200—122)



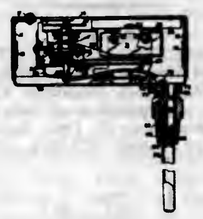
1. Thermal control means comprising a first straight bi-metallic strip, a second straight bi-metallic strip, means connecting one end of each of said bi-metallic strips in a U configuration, said strips being arranged to bend equally in the same direction when heated equally, means to apply control heat to one of said strips, means to pivotally mount said joined strips so that said application of said control heat will additionally displace the position of said other strip from said first strip, and a switch adjacent the free end of said other strip and adapted to be actuated thereby.

2,748,224
CONTROL DEVICE
Earnest J. Dillman and Fred C. Galley, Detroit, Mich., assignors to Detroit Controls Corporation, Detroit, Mich., a corporation of Michigan
Application August 17, 1954, Serial No. 450,496
17 Claims. (Cl. 200—140)



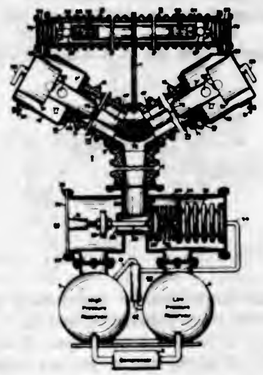
5. In a control device, a casing having a wall with a threaded aperture therethrough, a first lever positioned in and pivotally secured to said casing, an actuating lever pivotally secured to said first lever, a switch secured in said casing and having a plunger for actuation by said actuating lever, a spring member biasing said plunger to a first position, a portion of said actuating lever having direct operative engagement with said plunger, a temperature responsive power element secured to said casing, a rod member positioned within said casing and having one end secured to said power element and movable therewith, said rod member other end being operable to engage directly against said actuating lever between said pivot connection and said plunger engaging portion upon a predetermined elevation in temperature and rotate said first lever about its pivotal connection, and a shaft member positioned in said casing substantially normal to said first lever and having a threaded end portion extending through said threaded aperture, said shaft member having an abutment portion engageable with said first lever and operable to oppose said rod member movement in a direction toward said actuating lever so that said actuating lever will rotate about its pivotal connection and move said plunger against the bias of said spring to a second position, said shaft member being operable upon rotation to position said abutment portion relative to said first lever so that the relative movement of said rod member necessary to move said plunger to its second position may be changed.

2,748,225
CONTROL DEVICE
Murrell F. Kautz, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application March 2, 1953, Serial No. 339,798
11 Claims. (Cl. 200—140)



1. A condition responsive device comprising, a frame, a rod having a bearing adjacent a first end in said frame, means on the second end of said rod for rotating said rod in said frame, cooperating indicia on the second end of said rod and on said frame exhibiting condition value in accordance with the rotated position of said rod, a nut cooperating with screw threads on said rod, said nut having a cylindrical surface which has a bearing in said frame adjacent the second end of said rod, a collar engaging an enlarged annular surface on said nut, cooperating abutments on said collar and said frame preventing rotation of said collar; a spring biasing said collar toward the enlarged surface of said nut with sufficient force to prevent rotation of said nut on rotation of said rod, means on said nut for rotating said nut with respect to said collar, condition responsive means axially positioning said rod, and control means actuated by said nut on axial movement thereof.

2,748,226
COMPRESSED-GAS CIRCUIT INTERRUPTER
John B. MacNeill, Pittsburgh, and Benjamin P. Baker, Turtle Creek, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application February 26, 1953, Serial No. 339,083
25 Claims. (Cl. 200—148)



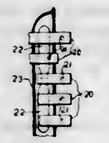
1. A circuit interrupter of the compressed-gas type including an interrupting assemblage, the interrupting assemblage including a pair of serially-related interrupting units extending outwardly at an angle, a supporting column for supporting the interrupting units, and a pair of end-to-end impedance columns extending in substantially a straight line connected across the outer ends of the interrupting units.

2,748,227
ELECTRIC CIRCUIT BREAKERS
George Caton, Leeds, England, assignor of one-half to Yorkshire Switchgear & Engineering Company Limited, Leeds, England, a British company
Application October 17, 1952, Serial No. 315,315
7 Claims. (Cl. 200—150)



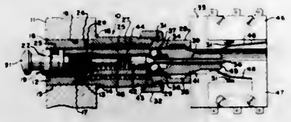
1. An oil immersed electric circuit breaker including a pair of fixed contacts and a movable bridging contact cooperating with said fixed contacts to make and break a circuit, an arc quenching chamber in an insulating carrier structure associated with the bridging contact, said chamber extending between spaced arcing points provided by contacts cooperating within the chamber, said arc quenching chamber having at least one restricted outlet passage arranged so that under pressure of gas generated by arcing at one arcing point a stream of oil under pressure is directed across the arcing path at the other arcing point, said arc quenching chamber being formed within an assemblage of plate members disposed in the plane of movement of the carrier the interior surface areas of said plate members forming the entire walls of said chamber being of insulative material thereby providing continuous insulating interior surfaces extending along all walls of said chamber between the fixed arcing contacts when disposed within the chamber.

2,748,228
INDICATING MEANS
Ernest N. Calhoun, Pittsburgh, Pa., assignor to Edwin L. Wiegand Company, a corporation of Pennsylvania
Application May 28, 1953, Serial No. 358,125
1 Claim. (Cl. 200—167)



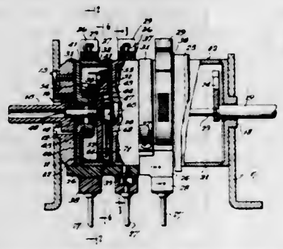
Push button switch means for control of electrical apparatus having a plurality of operating characteristics, comprising a casing having an opening, an elongated push button reciprocable through said opening and having an outer end portion engaged by an operator to push said button in a direction inwardly of said casing from an outer position to an inner position, said push button having an inner portion associated with an electrical switch to effect switching operation, a light source within said casing and positioned adjacent to said push button, said push button being formed of one-piece solid light transmitting material with an opaque coating covering all but the terminal surface of said outer end portion, and said push button having an aperture extending cross-wise of said outer end portion and disposed outwardly of said casing in the outer position of said push button whereby it is not exposed to light from said light source, said outer portion being disposed at least partially within said casing in the inner position of said push button to dispose its aperture in light receiving relation with said light source whereby light enters said aperture and is transmitted through said push button to said terminal surface to thereby provide a visible signal of the position of said switch.

2,748,229
WATER TIGHT SWITCH
Edwin H. Block, Austin, Tex., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application December 1, 1953, Serial No. 395,635
2 Claims. (Cl. 200—169)



1. Apparatus for operating and locking electrical switches comprising, in combination, a hollow cylindrical housing, means on one end of said housing for supporting said switches thereon, said switches having spring actuating arms mounted thereon, a hollow plunger slidably mounted in said housing, said plunger including a tubular member and a pushbutton member threaded in one end of the tubular member, cam means on the other end of said tubular member, a spring sleeved about said tubular member and adapted to urge the plunger into an unoperated position, said plunger being adapted to be manually moved into an operated position by pressure on the pushbutton member from the exterior of the apparatus, said cam means being adapted to engage said spring actuating arms when the plunger is in the operated position thereby to energize the switches, a ball locking groove in the housing, ball locking means in said plunger and adapted to move into locking engagement with the ball locking groove when the plunger is in the operated position, yieldable means in said tubular member for urging the ball locking means into engagement with said ball locking groove, said yieldable means including a movable element engaging the ball locking means and a compression spring interposed between said element and pushbutton member, relative movement between the threaded pushbutton member and tubular member serving to adjust the compression of the compression spring, and a rod-like extension on said element passing through said cam means and adapted to receive pressure from the exterior of the apparatus for moving the element toward the pushbutton member against the urging of the compression spring and unlocking the ball locking means; thereby allowing the plunger to return to an unoperated position and deenergizing the switches.

2,748,230
GANGED POTENTIOMETER CONSTRUCTION
Lauren M. Burgess, Lexington, Mass., assignor, by mesne assignments, to Acton Laboratories, Inc., Boston, Mass.
Application September 23, 1953, Serial No. 381,900
10 Claims. (Cl. 201—55)



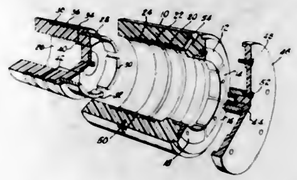
1. A support assembly for potentiometers having terminals on top arranged in a horizontal gang for a single control comprising a base having a plurality of electrical contact prongs for engaging a connector socket, a pair of finger grips extending upwardly from said base, said grips having a reduced inner surface to receive electrical conductors inter-connecting said prongs with the terminals of a potentiometer, said base having an arcuate recess for receiving the cylindrical case of a potentiometer, an arcuate locking band in a plane parallel to the plane of said finger grips, said band having openings at each end, and screw means passing through said openings into said base.

2,748,231
ELECTRICAL INDICATOR
Kenneth Clifford Hudson, Philadelphia, Pa., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application September 30, 1954, Serial No. 459,315
15 Claims. (Cl. 201—55)



1. A variable electrical resistance device comprising a ceramic capillary tube having an electrically conducting but resistive coating positioned on the inner surface of the capillary, electrical contacting means positioned at spaced points along said capillary and engaging said coating, an electrically conducting fluid having a negligible electrical resistance disposed in cooperative relation with said coating to variably shunt the electrical resistance of said coating between said points, and an elongated element supported within and extending coaxially along the length of said capillary tube, said element having a cross sectional diameter less than that of the inner portion of said tube.

2,748,232
LIQUID POTENTIOMETER
Robert Rubega, New London, Conn., assignor to the United States of America as represented by the Secretary of the Navy
Application March 15, 1955, Serial No. 494,590
10 Claims. (Cl. 201—57)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A liquid potentiometer comprising a liquid-tight casing filled with a lossy dielectric having a given specific resistivity, first, second and third spaced electrodes each having a given area thereof in contact with said liquid, whereby the magnitude of the resistance provided by said liquid existing between any two of said first, second and third electrodes depends upon the orientation of said areas thereof relative to each other, said areas of said first and second electrodes being oriented relative to each other to provide a fixed magnitude of resistance therebetween, and means for varying the orientation of said area of said third electrode relative to said areas of said first electrode to vary the magnitude of the resistance therebetween from a given minimum magnitude to a given maximum magnitude, further including fourth and fifth spaced electrodes each having a given area thereof in contact with said liquid, said fourth electrode having a fixed orientation relative to said first electrode and said fifth electrode having a fixed orientation relative to said third electrode, means electrically connecting said fifth electrode directly to said third electrode, and said areas of said fourth and fifth electrodes being oriented relative to each other to provide a fixed magnitude of resistance therebetween.

2,748,233
ELECTRICAL RESISTOR
Marvin W. Craine, Dexter, Mich., assignor, by mesne assignments, to Simon A. Bahr, New Brunswick, N. J.
Application February 20, 1952, Serial No. 272,581
9 Claims. (Cl. 201—67)



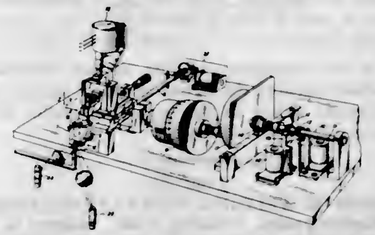
1. A resistor comprising a length of insulated wire wound into a resistance coil and fashioned into generally circular shape, a sheet metal shell supporting and substantially completely enclosing said coil, said shell having a tubular portion of ring shape which snugly encloses and embraces said coil, and a flat central disc portion surrounded by said tubular portion, said disc portion being joined integrally with said tubular portion.

2,748,234
ELECTRIC RESISTORS
Walter Wilson Hugh Clarke, Ottawa, Ontario, Canada, and Charles Alan Mann, Formby, England, assignors to British Insulated Callender's Cables Limited, London, England, a British company
Application October 12, 1953, Serial No. 385,664
Claims priority, application Great Britain October 14, 1952
11 Claims. (Cl. 201—73)



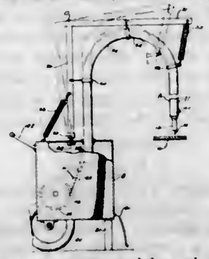
1. A resistor comprising an insulating support, a terminal carried by said support, a main resistance element, consisting of a thin layer of metal liable to be corroded or oxidized by the atmosphere carried by said support, electrically connected at one end to said terminal, a protective layer of insulating material applied to said layer of metal before it has been exposed to the atmosphere, and an auxiliary resistance element consisting of a layer of second metal of better stability when in contact with the atmosphere than the metal of the main resistance element, and adapted for fine and accurate adjustment in value by the removal of an appropriate quantity of said second metal, carried by said support and electrically connected to the end of said main resistance element opposite to that connected to said terminal.

2,748,235
MACHINE FOR AUTOMATIC FABRICATION OF TETRODE TRANSISTORS
Robert L. Wallace, Jr., Plainfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application February 4, 1955, Serial No. 486,121
18 Claims. (Cl. 219—4)



17. In the art of fabricating a two-junction transistor tetrode from a minute bar of semiconductor material of which the body is of one conductivity type while a thin zone, extending transversely of the bar from side to side thereof, is of opposite conductivity type, said zone being bounded on one side by an emitter junction and on the other side by a collector junction, the method which comprises applying a beam of light to said bar, meanwhile passing an alternating current from end to end of said bar, said junctions acting on said current as opposed rectifiers of unlike characteristics to cause the flow through said bar of an average current of polarity dependent on the orientation of said bar, and thereupon orienting said bar in an attitude such that said average current is of a preassigned reference polarity.

2,748,236
APPARATUS FOR CONTINUOUS ARC WELDING
George G. Landis, South Euclid, and Harold S. Payne, Cleveland Heights, Ohio, assignors to The Lincoln Electric Company, Cleveland, Ohio, a corporation of Ohio
Application November 12, 1952, Serial No. 319,907
17 Claims. (Cl. 219—8)

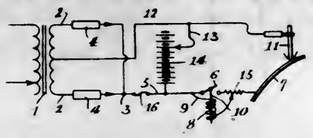


1. Welding apparatus comprising, in combination, a welding head adapted to have welding material fed therethrough toward a workpiece, a base unit adapted to supply welding material to said welding head and mast means mounted on said base unit and extending first upwardly and thence outwardly therefrom, the end of said mast means remote from said base unit being resiliently movable in both a vertical and horizontal direction and at least in part supporting the weight of said welding head.

2,748,237
WELDING APPARATUS
Edmour Laporte, Montreal, Quebec, Canada
Application June 28, 1954, Serial No. 439,813
6 Claims. (Cl. 219—8)

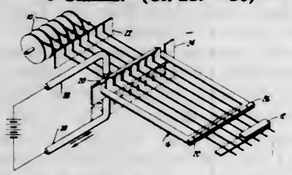
1. A welding apparatus comprising a transformer, a conductor joining the ends of the secondary winding thereof, rectifying means in said conductor, a metal work-

ing base, a second conductor extending from the first conductor to said base, a welding cement coated electrode at said base, a third conductor extending from the mid-



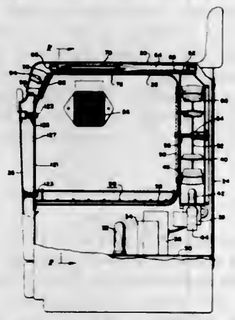
point of the secondary winding to said electrode, an accumulator between the second and third conductor, and an automatic switch in the second conductor between said accumulator and said base.

2,748,238
METHOD OF WELDING WIRES UNDER TENSION
Rena Zaphiropoulos, Oakland, Calif., assignor to Chromatic Television Laboratories, Inc., New York, N. Y., a corporation of California
Application June 21, 1954, Serial No. 438,153
8 Claims. (Cl. 219—10)



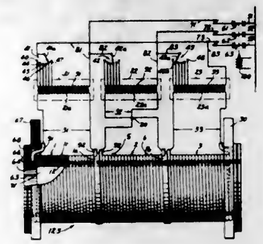
1. In the art of welding a plurality of tensioned wires to a frame made up of two sets of oppositely-disposed sections so that the wires extend in substantially parallel relationship across the window area defined by the two sets of oppositely-disposed sections, the steps which include positioning said tensioned wires so that they have substantially the relative positions desired after welding, bringing said frame into contact with said wires so that each particular wire of the latter contacts two oppositely-disposed frame sections, spot-welding each wire to each of the two said oppositely-disposed frame sections, and compressing said wire during the welding operation against that particular frame section which is being welded for a sufficient distance along said wire in each direction from the welding area so that the tension in said wire across the window area of said frame is retained regardless of the detensioning effect induced by softening of the wire material as a result of the welding operation.

2,748,239
DOMESTIC APPLIANCE
George B. Long, Dayton, and James M. Valentine, Vandalia, Ohio, assignors to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application September 5, 1952, Serial No. 308,012
10 Claims. (Cl. 219—10.55)



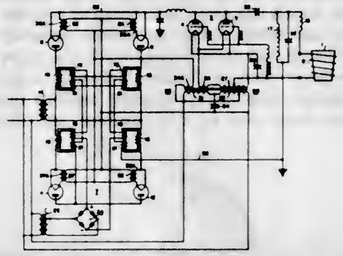
7. An electronic oven including a metal oven lining enclosing an oven compartment, said lining having an opening therein, an electronic microwave generating apparatus provided with a dipole radiator, a wave guide connecting said dipole radiator with said opening, and a stirrer rotatably mounted within said wave guide substantially concentric with said opening for improving the distribution of microwave energy, and a cover of a material having a low dielectric loss for said opening.

2,748,240
INDUCTION HEATING SYSTEMS
Bruce E. McArthur, Youngstown, Ohio, assignor to Magnethermic Corporation, Youngstown, Ohio, a corporation of Ohio
Application July 29, 1952, Serial No. 303,342
2 Claims. (Cl. 219—10.75)



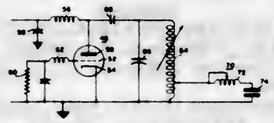
1. In an electrical system for an induction heating furnace of the type described for the heating of metal work-pieces, which comprises an inductor which employs at least one set of three longitudinally aligned, successively arranged coil sections, each said coil section comprising a plurality of coil convolutions, said sections being disposed in end-to-end relationship to each other to jointly provide, interiorly of their convolutions, an elongated heating compartment within which metal work-pieces may be inductively heated in response to concurrent energization of all of said sections, each section being energized by the effect of a single-phase low-frequently current passed therethrough, electrical communicating means for deriving from a source of three-phase low-frequency alternating current, three separate flows of single phase low frequency current which are in three-phase timed relation to each other, and electrical means for so distributing said flows as to cause a first flow thereof to traverse the convolutions of a first endmost one of said set of coil sections, a second flow thereof to traverse the convolutions of the intermediate of said set of coil sections, and a third flow thereof to traverse the convolutions of the relatively third section of said set of inductor coil sections, the said first, second, and third single phase flows being in the same phase relation to each other as are three successive phases of a three-phase cyclic system, and said electrical communicating means comprising means for causing the said second flow to traverse the convolutions of said intermediate coil section in that circuitous direction which is relatively reversed with respect to the relatively opposite circuitous direction in which said first flow traverses the convolutions of said first end coil section and also in which said third flow traverses the convolutions of said third section, of said set of three coil sections, to cause the phase of magnetomotive force of magnetic flux produced by energization of said second coil section to be relatively reversed, and thereby to cause the phase relations between the magnetomotive forces which are produced by energization of the three coil sections, and which are effective to cause inductive heating of, and to create magnetic force effects upon, any said work-piece which is disposed in said compartment, to be in that relatively timed relation to each other which characterizes three successive phases of a 6-phase cyclic system.

2,748,241
PLATE VOLTAGE AND GRID CURRENT CONTROL
Glenn R. Mohr, Baltimore, Md., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application March 11, 1953, Serial No. 341,868
6 Claims. (Cl. 219—10.77)



1. In electrical apparatus operable with a source of alternating current, the combination of a rectifier, an oscillator connected to said rectifier, and a reactor including a magnetic core and at least first, second and third windings on said core, a source of direct current, said first winding being adapted for connection between said source of alternating current and said rectifier such that said first winding is energized by current flow to said rectifier, said second winding being connected to said source of direct current, and said third winding being connected to said oscillator such that the third winding is energized by current flow through said oscillator.

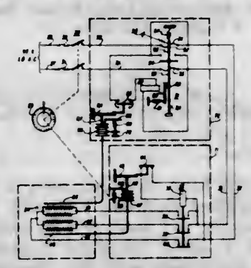
2,748,242
TANK CIRCUIT
Robert M. Baker and Taylor A. Birckhead, Baltimore, Md., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application March 14, 1951, Serial No. 215,592
2 Claims. (Cl. 219—10.77)



1. In apparatus for heating a dielectric load, the combination of a radio frequency generator, a pair of heating electrodes between which said load can be placed for heat treatment, a frequency-determining tank circuit for the generator comprising a parallel-connected capacitance and a first inductance, said first inductance including two sections, one of the sections being variable and the other section having a plurality of taps adapted for connection to a load circuit, and a load circuit connected to one of said taps, said load circuit including a second inductance which is variable and connected in series with said heating electrodes, whereby the load circuit can be initially tuned to series resonance by means of the second inductance and until a maximum load current is thereby obtained, and the first inductance can be then employed to vary the operating frequency of the generator to the series resonant frequency of the load circuit.

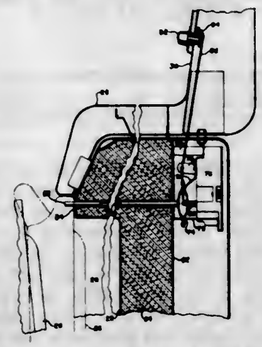
2,748,243
CONTROL CIRCUITS FOR ELECTRIC FRY KETTLES
Harold A. Michaelis, Elmhurst, Ill., assignor to General Electric Company, a corporation of New York
Application December 15, 1953, Serial No. 398,290
13 Claims. (Cl. 219—20)

1. In an electric fry kettle including a fat container, a heating unit arranged in said fat container and normally submerged in the fat therein, feed conductors connected to said heating unit, a source of electric power, a control switch selectively operative into closed and open positions respectively to connect and to disconnect said source with respect to said feed conductors in order selectively to energize said heating unit, and manually operable means for selectively operating said control switch; the combination comprising protective links arranged in said feed conductors, said links being subject to fusion in response to the passage therethrough of an abnormally high and



unsafe electric current, mechanism operative both to sever said links and to short-circuit said feed conductors on the heating unit side of said links in order positively to insure rupture of said links and the consequent disconnection of said source from said heating unit, thermal responsive means operatively associated with said fat container and governed by an abnormally high and unsafe temperature for operating said mechanism, and a metal-clad housing for said links and said mechanism that is inaccessible to the user of the fry kettle.

2,748,244
DOMESTIC APPLIANCE
James H. Nellis, Dayton, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application May 16, 1951, Serial No. 226,610
7 Claims. (Cl. 219—20)



2. An electric oven including a plurality of electric heating units, a selective double throw switch means including two normally stationary normally separated contacts and a movable contact mounted for movement between and into contact with the normally stationary contacts, a movable mounting for one of said normally stationary contacts providing sufficient movement for said one contact to allow it to be moved into contact with the movable contact when the movable contact is in engagement with the other stationary contact, a supply conductor connected to one terminal of two of said electric heating units, a second supply conductor connected to said movable contact, one of said two heating units having a second terminal connected to said other stationary contact, the other of said two heating units being provided with

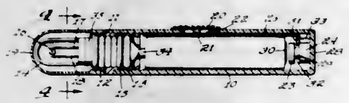
a terminal connected to a supply conductor other than the first mentioned supply conductor, said other heating unit being provided with an intermediate tap electrically connected with said movably mounted normally stationary contact.

2,748,245
SOLDERING TOOLS
Herbert Pearce and Desmond Harrison, London, England
Application June 16, 1953, Serial No. 362,096
Claims priority, application Great Britain June 16, 1952
9 Claims. (Cl. 219—27)



1. In an electric hand tool comprising a tubular non-fusible work-engaging electrode connected to one pole of an electric supply and lined with an insulating sleeve through which a solder electrode connected to the other pole of said supply may be advanced into contact with the work in order to cause electric current to flow through the latter and generate sufficient heat to melt solder in contact therewith, means for retracting said solder electrode from said tubular electrode, an auxiliary non-fusible electrode connected to said other pole of the supply and normally disposed in a position out of the path of said solder electrode, means for guiding said auxiliary electrode along a path leading into said sleeve, and means for displacing said auxiliary electrode along said path from its normal position to a position in which it extends through said sleeve into contact with the work in order to cause electric current to flow through the latter and generate sufficient heat to melt solder thereon.

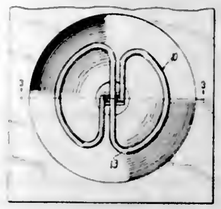
2,748,246
CIGARETTE LIGHTER
Agnes Jackson Lewis, Detroit, Mich.
Application October 26, 1954, Serial No. 464,759
2 Claims. (Cl. 219—32)



1. A cigarette lighter comprising an elongated tubular housing, a coupling threaded in one end of the housing, a heating element extended from a base threaded in the coupling, said base having a contact on the end opposite to the end from which the heating element extends a closure cap having an opening in one side and threaded on the coupling, a tray also having an opening on one side rotatably mounted on the heating element, a battery mounted in the housing positioned with a terminal at one end in engagement with the contact on the base of the heating element and a button slidably mounted on the housing for completing a circuit from the battery to the heating element.

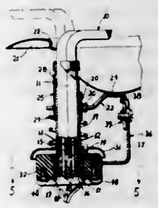
2,748,247
INFRARED DEVICE
Lloyd S. Kozbelt, Pittsburgh, Pa., assignor to Edwin L. Wiegand Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application April 10, 1953, Serial No. 347,929
1 Claim. (Cl. 219—34)

An infra-red device for use in heating by radiation, comprising a bowl-like reflector having a central aperture, an elongated metallic-sheathed electrical resistance element disposed in fixed position within the reflector bowl, said element having an intermediate heat generating portion of configuration like the figure 8 including a rectilinear central portion and two oppositely disposed arcuate portions disposed in a common plane and respectively continuing from opposite ends of said rectilinear portion and curving back to the ends of the latter opposite to the ends from which the respective opposite arcuate portions originate, said rectilinear portion being disposed between and connecting said arcuate portions in the plane thereof, said resistance element further including a pair of coplanar straight non-heat generating sections respectively continuing from said arcuate portions and disposed in



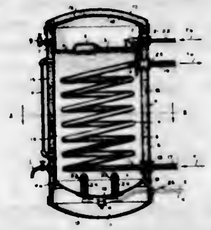
spaced parallel relation to and on opposite sides of said rectilinear portion, the free ends of said straight sections being bent into a plane normal to the plane of said heating portion of the element and disposed in spaced proximity to constitute terminal portions extending through said reflector aperture for connection to a source of electrical energy, whereby said intermediate radiant heating portion of said resistance element is co-extensive only with said rectilinear central portion and the opposed connected arcuate portions, said straight sections and said terminal portions of the element being relatively free of heat to minimize mutual heating between adjacent parts of said resistance element.

2,748,248
ELECTRIC HEATING UNITS
Joseph McOrily, Wilkinsburg, Pa., assignor to Edwin L. Wiegand Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application June 10, 1953, Serial No. 360,702
10 Claims. (Cl. 219—37)



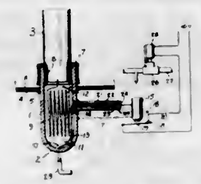
1. A range-type electric heating unit, comprising a support, a convoluted, sheathed electric heating element having a heat-generating portion and also having a terminal portion extending from said heat-generating portion, said terminal portion being pivotally secured to said support and providing an axis about which said heating element is shiftable toward and away from a heat-dispensing position, and means comprising a first portion carried by said terminal portion and shiftable therewith and a second portion carried by said support, said first and second portions being cooperable in the heat-dispensing position of said heating element to provide for current flow thereto and said first and second portions being shifted from cooperation thereby interrupting current flow upon movement of said heating element from its heat-dispensing position.

2,748,249
METHOD OF AND APPARATUS FOR HEATING FLUIDS
Mario Collerati, Montevideo, Uruguay
Application March 9, 1953, Serial No. 341,216
7 Claims. (Cl. 219—38)



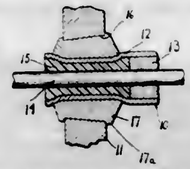
1. A heater for supplying heated liquid under pressure comprising a closed tank for liquid, a conduit extending through said tank and communicating with the interior thereof and adapted to be connected with a supply of liquid, valve means in said conduit and means responsive to the level of liquid in said tank to close said valve when the liquid level reaches a point in the upper portion of said tank which is spaced from the top thereof, heating means extending into said tank for heating the liquid therein, said means comprising electric heating elements adapted to be connected to a source of electrical energy, a safety valve arranged in communication with the upper end of said tank at a point above the level of liquid maintained in said tank, a continuous tubular coil positioned within said tank below the level of liquid maintained therein and having an inlet and outlet exterior of said tank whereby liquid may be passed through said coil under pressure and heated by the hot liquid within said tank, and a drain cock communicating with the lower portion of said tank.

2,748,250
THERMOELECTRIC PROTECTIVE UNIT
Orrin E. Andrus, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application August 31, 1953, Serial No. 377,515
11 Claims. (Cl. 219—38)



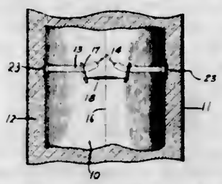
1. A thermoelectric protective apparatus for insuring cathodic protection of a metallic structure in contact with a heated liquid, which comprises an anode supported in contact with said liquid, a thermoelectric generator having a positive terminal connected to said anode and having a negative terminal connected to said structure, electrical insulation disposed between said anode and said structure to permit maintenance of a potential difference therebetween by said thermoelectric generator, a separate source of relatively low heat for energization of the thermoelectric generator, an electrical heat control device connected to the heat source for said liquid, and said thermoelectric generator being electrically connected to said heat control device to discontinue the heating of said liquid if the current from said thermoelectric generator falls below a predetermined value.

2,748,251
HEATING DEVICES
Lester D. Drugmand, Pittsburgh, Pa., assignor to Edwin L. Wiegand Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application April 20, 1953, Serial No. 349,906
10 Claims. (Cl. 219—38)



1. An immersion heater for use with water heater tanks and the like, comprising a sheathed-type heating element, a mounting member for securing said heater to the tank, said member having a tapered aperture through which said heating element extends, and sleeve means interposed between said heating element and said mounting member and molded under pressure into intimate relation with respective adjoining surfaces to provide a unitary assembly, the tapered aperture in said mounting member and the corresponding taper of said sleeve means providing for wedging the various parts of said immersion heater together with increasing force when pressure is developed in the interior of the tank.

2,748,252
WATER HEATERS
Michael Williams and Gerald H. Kreake, Warren, Ohio, assignors to Edwin L. Wiegand Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application October 4, 1954, Serial No. 460,044
15 Claims. (Cl. 219—38)

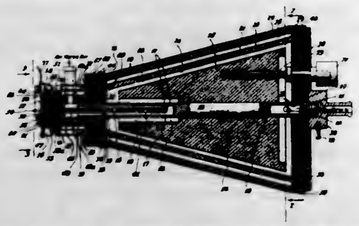


5. A water heater construction, comprising a water storage tank generally circular in cross section and having its wall indented along a transverse axis to provide an inwardly directed, discontinuous groove, an elongated sheathed electric resistance heater having an intermediate portion positioned within said groove and having end portions extending beyond respective terminal portions of said groove, a flexible ring-like band completely encircling said tank and having one portion adjacent the end portions of said heater and another portion adjacent and overlying the intermediate portions of said heater, and resilient means interposed between said one portion of said band and the portion of said tank adjacent the terminal portions of said groove and yieldably urging said one band portion away from said tank thereby drawing said other band portion about said heater to insure seating thereof within said groove and to provide good thermal conductivity between said heater and said tank.

2,748,253
APPARATUS AND METHOD FOR HEATING A LIQUID BY ELECTRICAL CONDUCTION
Hermann F. Bremer, Bronx, N. Y., assignor to Indevco, Inc., New York, N. Y., a corporation of New York
Application April 27, 1953, Serial No. 351,461
14 Claims. (Cl. 219—40)

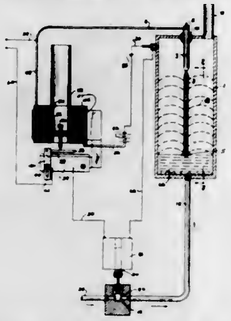
1. Apparatus for heating water by electrical conduction comprising a primary electrode and at least two second-

ary electrodes insulated from each other, all of said electrodes being adapted to be in contact with the water, a source of current, a relatively stationary switch contact electrically connected to one of said secondary electrodes, a second relatively stationary switch contact electrically connected to the other of said secondary electrodes, said relatively stationary switch contacts being electrically insulated from each other, a pair of relatively movable switch



contacts, a movable element mechanically and electrically interconnecting said movable contacts together and adapted to shift said contacts towards and from said relatively stationary contact members to make and break the electrical circuits therethrough, means thermally responsive to the temperature of the water in contact with said electrodes to actuate said movable element and means connecting the source of current across the primary electrode and said element.

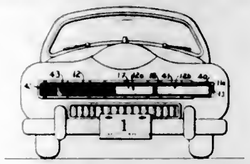
2,748,254
METHOD OF BALANCING CURRENT VOLUME AND STEAM GENERATION BY USE OF CURRENT CONDUCTING FILMS
Glenn W. Watson, Detroit, Mich.
Application January 4, 1954, Serial No. 402,010
3 Claims. (Cl. 219—40)



1. The method of balancing current volume and steam generation by use of current consuming and steam producing conducting films, consisting in mounting an electrode in initial surface contact with a body of liquid contained in a current-conducting vessel, whereby films of liquid rise between said electrode and the walls of said vessel, providing a fluid inlet to the bottom of said vessel with a valve in said inlet, incorporating in the circuit of said films and vessel an electrical means operable on pre-determined current strengths to actuate said valve, whereby the operation of said valve is dependent on the amount of current consumed by the varying quantity of said number of films in said vessel.

2,748,255
AUTOMOTIVE VEHICLE HEADLIGHT
William E. Decker, Battle Creek, Mich.
Application May 27, 1953, Serial No. 357,811
6 Claims. (Cl. 240—7.1)

1. In a headlight, a reflecting casing having an opening in its rear side and an externally threaded flange projecting rearwardly around said opening, a rearwardly open test-tube shaped bulb container forwardly inserted through said opening and having an external rib behind the rear edge of said flange, a sleeve having a large front end, a small rear end, and a shoulder joining said large and small ends, said large sleeve end being threaded upon said flange and disposing said shoulder to hold said bulb container in place, said small sleeve end having a longitudinal slot, a bulb holding socket within said small sleeve



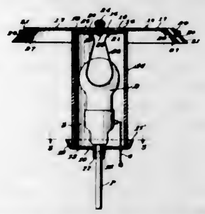
end and having a radial stud projecting through said slot, a manually rotatable focusing collar surrounding said small sleeve end and having a helical groove receiving the projecting end of said stud, whereby turning of said focusing collar will positionally adjust said bulb holding socket for bulb focusing, and locking means threaded on said small sleeve end behind said focusing collar for frictionally clamping said collar against said shoulder after adjustment.

2,748,256
INFLATABLE ILLUMINABLE FIGURE
James G. Moran, Burbank, Calif.
Application November 12, 1953, Serial No. 391,411
11 Claims. (Cl. 240—10)



1. In an ornamental device, a flexible light-permeable envelope having a flexible wall portion defining a re-entrant chamber therein, said envelope being inflatable to an ornamental shape, means to mount a lamp within said re-entrant chamber to interiorly illuminate the walls of said envelope, and means to maintain said flexible wall portion of said re-entrant chamber spaced from said lamp to prevent its burning and puncturing with consequent deflation of said envelope.

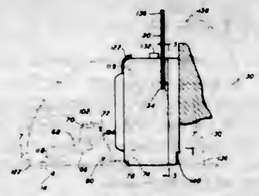
2,748,257
DECORATIVE LAMP
Norman Bennett, Washington, D. C.
Application December 15, 1953, Serial No. 398,279
3 Claims. (Cl. 240—10)



1. In combination with a lamp pedestal supporting a lamp socket in which is disposed a light bulb; a base plate supported on the pedestal beneath the socket, a cylindrical light bulb enclosing member disposed above the base

plate in surrounding relation to the light bulb, a shade supporting unit detachably mounted on said bulb enclosing member, said unit comprising an ornamentation attaching ring surrounding and spaced from the light bulb enclosing member in concentric relation thereto, a plurality of arms extending radially of said light bulb enclosing member and said ring and having their outer ends connected to the latter, the inner ends of said arms being connected to a member disposed inwardly of the plane of said arms and seated within the upper end of said light bulb enclosing member, and a disk supported on said member and removably secured thereto.

2,748,258
FLASHLIGHT
James L. Henning, Piano, Ill., assignor to Piano Molding Company, Piano, Ill., a corporation of Illinois
Application April 6, 1955, Serial No. 499,670
3 Claims. (Cl. 240—10.65)



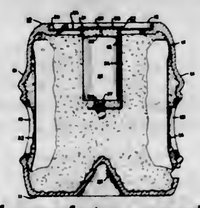
1. A flashlight comprising a casing for holding a flashlight battery, a cover for said casing, a flashlight bulb and reflector therefor resiliently and detachably mounted on said cover, a first resilient friction hinge interconnecting said cover and said casing and including means holding said reflector in operative position and forming an electrical connection between said reflector and one terminal of a flashlight battery mounted within said casing, and a second resilient friction hinge interconnecting said cover and said casing, said second resilient friction hinge including means holding said flashlight bulb in operative position upon said reflector and providing an electrical connection between said flashlight bulb and the other terminal of the flashlight battery, said friction hinges holding said cover at any desired position with respect to said casing and providing means to mount the flashlight battery within said casing.

2,748,259
PHOTO-FLASH ASSEMBLIES
Bernard L. Friedman, Natick, Mass.
Application February 11, 1954, Serial No. 409,601
4 Claims. (Cl. 240—11.4)



1. In a compression assembly for a light tube, an outer housing comprising a unitary, open, bowl-like receptacle with a terminal flange on its open end and a body flange, a dielectric plate having a central recessed portion and shaped to seat upon said body flange, a curved reflector having at its small end an orifice and a tubular extension shaped to seat in said recessed portion and having at its large end a terminal flange shaped to fit against said receptacle terminal flange, a light tube attached to said recessed portion and protruding through said tubular extension and orifice, a transparent shield shaped to cover the open end of said receptacle and said reflector flange, and retaining means for holding said terminal flanges and shield in position; the entire assembly being so constructed that when the said parts are assembled as indicated, said reflector, shield and dielectric plate are held firmly in position without additional attaching means.

2,748,260
MOLDED DOUBLE-FACED JACK-O'-LANTERN
Arthur J. Nelson, Milwaukee, Wis., assignor to Pulp Reproduction Company, Milwaukee, Wis., a corporation of Wisconsin
Application February 9, 1953, Serial No. 335,790
1 Claim. (Cl. 240—16)



An article of manufacture comprising, a hollow unitary seamless molded pulp body of substantially uniform wall thickness throughout and having a flat base and an inwardly directed top flange integrally connected by a continuous side wall, said top flange defining a recess and an access opening therein communicating with the body interior, and said saide wall being formed with a pair of oppositely directed similar facial representations each having eye and mouth openings of corresponding contour also communicating with the body interior, a pair of thin light transmitting flexible sheets each disposed within and secured at the upper portions only thereof to said side wall of said hollow body below said top flange and each spanning one set of said eye and mouth openings, said sheets each bearing dissimilar indicia thereon exteriorly visible through the respective sets of eye and mouth openings to impart of themselves different expressions to the respective facial representations, a cover removably cooperable with said top flange within the recess defined thereby to close said access opening, and a self-contained light emitting unit carried solely by said cover and depending therefrom for disposition through said top opening within the space defined by said hollow body and between and spaced from said sheets.

2,748,261
ADJUSTABLE LIGHTING FIXTURE SUPPORTS
Isidore Wolar, Mount Vernon, N. Y.
Application October 3, 1951, Serial No. 249,598
2 Claims. (Cl. 240—67)

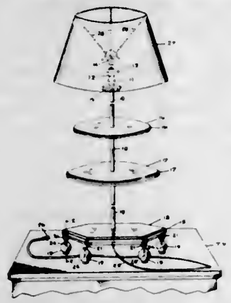
1. A device for supporting the body of a lighting fixture in adjustable fixed relation with respect to a relatively fixed element and for enclosing wiring extending from the said relatively fixed element to the fixture body, comprising two thin walled telescoping tubes, one outside the other and having their exposed ends threaded for connection to the fixture body and the relatively fixed element, one tube having a slot extending longitudinally from the threaded end and spaced lateral slots communicating with the longitudinal slot and having longitudinal extensions, the other tube having two radially projecting lugs bent out of the side wall of the tube and movable in the slots and adapted to be placed in two adjacent selected longitudinal slot extensions to lock the tubes against telescoping movement and prevent angular movement, whereby, when the tubes are in extended relation, the said other tube has its free end displaced from the threaded end of the first tube, and a wiring protecting

liner secured to the end of the outer tube and extending into the inner tube and inside the slotted tube for substan-



tially the slotted length thereof to prevent contact of the wiring with the slotted portion of said slotted tube.

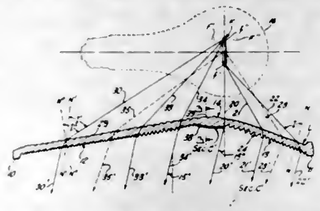
2,748,262
TELEVISION LAMP
William J. McCrea, Wilmington, Del.
Application June 4, 1951, Serial No. 229,807
1 Claim. (Cl. 240—81)



A television lamp comprising a base, a single column rising vertically therefrom, a source of illumination at the upper end of such column, a shade disposed around said source of illumination and deflecting light rays downwardly therefrom, and a set of substantially transparent, synthetic plastic disks axially mounted on said column in vertically spaced aligned relationship, the said disks picking up illumination from said source as directed downwardly by said shade and transmitting illumination to the peripheral edges of said disks, successive disks decreasing in diameter and in vertical spacing in an upward direction from the base toward the source of illumination and each disk being beveled to provide an edge of reduced thickness as compared with the thickness of the disk radially inwardly thereof, the said base being composed of the same material as the disks and being provided with means for adjustably supporting it in a horizontal position irrespective of the configuration of the surface on which the lamp is set.

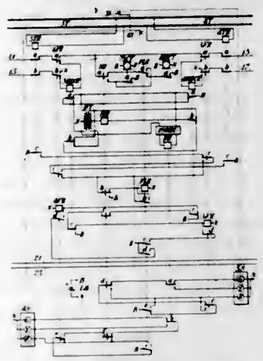
2,748,263
DIRECT LIGHTING LUMINAIRES
Kurt Franck and Robert G. McPhail, Newark, Ohio, assignors to Holophane Company, Inc., New York, N. Y., a corporation of Delaware
Application August 11, 1952, Serial No. 303,652
14 Claims. (Cl. 240—106)

1. A lens for producing downwardly oblique light beams for the lighting of a rearwardly disposed vertical surface below the level of the lens, said lens having an asymmetric anticlinal profile steeper and narrower toward the front than the rear, the opposed surfaces of the front portion constituting prisms of variant refracting power to deviate light received from a superposed source



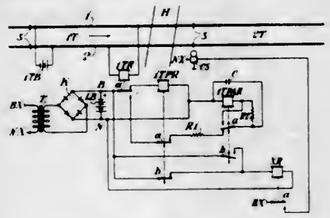
near the vertical plane through the top of the anticline across the nadir and into uniform relatively steep angles from the nadir, the opposed surfaces of the rear portion constituting prisms of variant refracting power to lower the rearward light from said source into directions substantially parallel with the light from the front portion.

2,748,264
DIRECTIONAL RELAY CIRCUITS FOR CODED RAILWAY SIGNALING SYSTEMS
Thomas W. Tizzard, Downers Grove, Ill., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application December 16, 1952, Serial No. 326,228
5 Claims. (Cl. 246—33)



1. In a coded railway signaling system, in combination, a stretch of railway track comprising adjoining first and second track sections, a first and a second code following relay located at the adjoining ends of said first and said second track sections, said first and said second code following relays being operated at times by coded energy supplied thereto from the remote ends of said first and said second sections respectively, according to traffic conditions in and beyond the associated section, a first and a second directional code detecting relay associated with said first and said second code following relays, circuit means governed by the recurrent operation of said code following relays for energizing the associated directional code detecting relays, a code decoding lays for energizing said traffic stick relay, circuit means code following relays, a traffic stick relay, circuit means including contacts of said directional code detecting relays for energizing said traffic stick relay, circuit means for maintaining said traffic stick relay energized when said code decoding relay is released, stick circuit means including a front contact of said traffic stick relay for maintaining said first and said second directional code detecting relays energized as long as said traffic stick relay is energized, and traffic governing means controlled by said directional code detecting relays.

2,748,265
ELECTRICAL RELAY OPERATING CIRCUIT FOR CONTROL OF HIGHWAY CROSSING SIGNALS
Arthur E. Dodd, Edgewood, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application November 12, 1952, Serial No. 319,871
6 Claims. (Cl. 246—130)



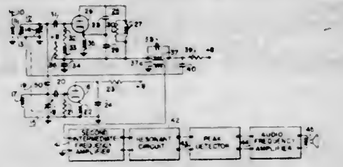
1. In combination with a stretch of railway track intersected by a highway, a slow releasing relay which may occupy a first and a second position, circuit means for maintaining said slow releasing relay in its first position closed when the stretch of track is unoccupied, a time delay relay, a capacitor in multiple with a winding of said time delay relay; circuit means for energizing said time delay relay and said capacitor in multiple closed when said stretch of track is occupied, said slow releasing relay is in its first position, and said time delay relay is released; and a highway crossing signal adjacent said intersection controlled jointly by said slow releasing relay and said time delay relay.

2,748,266
RADIANT ENERGY RELAY SYSTEM
Richard C. Boyd, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application December 18, 1952, Serial No. 326,751
1 Claim. (Cl. 250—15)



In a two-way radiant energy relay signaling system having a first terminal location and a second terminal location with terminal relay transmitting and receiving stations at each of said terminal locations and a first plurality of mobile relay signaling stations moving in a first continuously progressing succession from said first terminal location to said second terminal location and a second plurality of mobile relay signaling stations moving in a second continuously progressing succession from said second terminal location to said first terminal location, the method of operating the system by using a plurality of carrier frequencies for relaying radiant energy signals over different portions of said system, said method comprising employing first and second carrier frequencies for alternate use in relaying signals from one mobile station to the next mobile station in each of said progressing successions, continuously using a third carrier frequency for transmitting said signals between the end mobile relay stations in said first succession and their respectively associated terminal stations, continuously using a fourth carrier frequency for transmitting said signals between the end mobile relay stations in said second succession and their respectively associated terminal stations, employing said fourth carrier frequency for emergency use in relaying said signals between two of said mobile relay stations in said first succession which are spaced apart by an intermediate mobile relay station in the same succession in the event of a failure of said intermediate station, and employing said third carrier frequency for emergency use in relaying said signals between two of said mobile relay stations in said first succession which are spaced apart by an intermediate mobile relay station in the same succession in the event of a failure of said intermediate station.

2,748,267
SUPERREGENERATIVE SUPERHETERODYNE WAVE-SIGNAL RECEIVER
Donald Richman, Flushing, N. Y., assignor to Hazeltine Research, Inc., Chicago, Ill., a corporation of Illinois
Application May 16, 1952, Serial No. 288,107
13 Claims. (Cl. 250—20)



2. A superregenerative superheterodyne wave-signal receiver comprising: a circuit for supplying a received wave signal; circuit means for supplying one or more heterodyne wave signals having a frequency differing substantially from that of said received signal; a regenerative oscillatory circuit having a free oscillation frequency substantially equal to the frequency difference between said received signal and one of said heterodyne signals and coupled to said supply circuits for deriving from said received signal and said one of said heterodyne signals a first wave signal having substantially said free oscillation frequency; a quench circuit couple to said regenerative circuit for effecting alternate oscillation build-up and oscillation decay intervals therein to cause superregenerative amplification of said first signal; said regenerative circuit also being responsive to said amplified first signal and to one of said heterodyne signals for deriving therefrom a second wave signal having a frequency differing substantially from that of any of the above-mentioned wave signals; and a frequency-responsive circuit coupled to said regenerative circuit and primarily responsive to said second signal for selecting at least one component thereof.

2,748,268
BACKWARD-WAVE OSCILLATOR MIXER
John Roy Whinnery, Orinda, Calif., assignor to Hughes Aircraft Company, Culver City, Calif., a corporation of Delaware
Application June 15, 1955, Serial No. 515,624
5 Claims. (Cl. 250—20)



5. A microwave oscillator-mixer comprising a waveguiding structure folded periodically about a predetermined path for propagating an electromagnetic wave therealong at a velocity substantially less than the velocity of light; means for launching an electromagnetic signal wave in said waveguiding structure along said path in one direction; means disposed at one end of said wave-

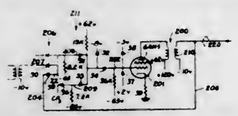
guiding structure for producing an electron stream; means for directing said electron stream along said path in a direction opposite to said one direction and at a velocity to effectively interact with said signal wave and of a current to simultaneously produce a backward-oscillatory wave; and detection means disposed at one end of said waveguiding structure responsive to said signal and backward-oscillatory waves for producing an output signal representative of said signal wave and having a frequency equal to the difference between the frequency corresponding to said signal wave and the frequency corresponding to said backward-oscillatory wave.

2,748,269

REGENERATIVE SHAPING OF ELECTRIC PULSES

Ralph J. Slutz, Kensington, Md., assignor to the United States of America as represented by the Secretary of Commerce

Application November 2, 1950, Serial No. 193,696
4 Claims. (Cl. 250—27)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In the art of electric pulse circuitry, wherein timed pulses of a predetermined shape, amplitude, and phase are utilized to control the energization of certain components in serial fashion, an arrangement for reshaping and retiming input pulses which comprises input gate means having at least two input leads and so arranged that energization of any input lead by a signal voltage will transmit a signal voltage to a common output lead; coincidence gate means having at least two input leads and an output lead so arranged and constructed that only while all input leads are energized can a signal appear on an output lead, one of said input leads being connected to the output of said input gate means and the other input lead being supplied with periodic clock pulses of the desired shape and phase, an amplifier having its input fed from the output of the coincidence gate means, and its output connected to the primary of a transformer, a lead from the secondary of said transformer to one of the input leads of said input gate means, an output lead from the secondary of said transformer for utilization in a following stage, and means for supplying an input pulse, which is to be reshaped, to the other input lead of said input gate means in such phase relation that the leading edge of the clock pulse will coincide with a substantial portion of the supplied input pulse.

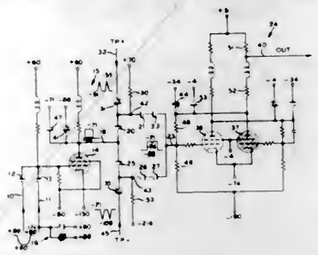
2,748,270

GATING SYSTEM

John Presper Eckert, Jr., Gladwyne, and James R. Weiner, Philadelphia, Pa., assignors to Sperry Rand Corporation, a corporation of Delaware

Application March 31, 1952, Serial No. 279,716
16 Claims. (Cl. 250—27)

1. A clock gate circuit for retiming and reforming a degraded pulse under control of positive and negative timing pulses comprising: a bridge circuit containing four arms, the junction points of said arms employed as, an input terminal, an output terminal, a first bridge supply terminal, and a second bridge supply terminal opposite the first such terminal; an input circuit, the voltage of which is controlled by the degraded pulse and which is connected to the input terminal of the bridge; a flip-flop circuit for providing a retimed and reformed pulse, said flip flop circuit having an input connected to the output terminal of the bridge; a source of positive potential connected to the first bridge supply terminal and a source of negative potential connected to the second bridge supply terminal; each of said arms including a diode arranged to pass current only in a direction from the positive supply terminal; first circuit means



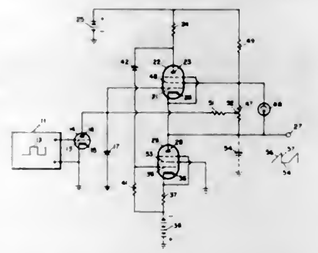
connected to the first supply terminal for applying a positive-going timing pulse in series with a diode; and second circuit means connected to the second supply terminal for applying a negative-going timing pulse in series with a diode.

2,748,271

SWEEP CIRCUIT

Robert F. Casey, Pompton Plains, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware

Application April 26, 1952, Serial No. 284,608
7 Claims. (Cl. 250—27)



1. A signal generating circuit comprising a saw-tooth wave forming condenser, a voltage source connected to charge said condenser, means to vary the charging rate thereof, a cathode follower circuit having an input electrode connected to said saw forming condenser and an anode and a cathode, an impedance connected to said anode, a load impedance connected to said cathode and comprising an electronic load tube having a control electrode and having a cathode and an anode to which load connections are made and a capacitance effectively in shunt across said last-named anode and cathode, means connected to supply current thorugh said cathode follower circuit and said cathode load impedance, and signal coupling means connected between said anode of said cathode follower and said control electrode of said load tube.

2,748,272

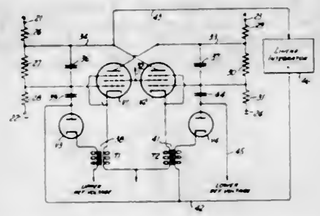
FREQUENCY GENERATOR

Norman B. Schrock, Los Altos, Calif., assignor to Hewlett-Packard Company, Palo Alto, Calif., a corporation of California

Application June 27, 1952, Serial No. 295,917
8 Claims. (Cl. 250—27)

1. In a frequency generator, a bistable unit serving to generate a square waveform, said unit including two vacuum tubes connected regeneratively whereby said tubes are alternately conductive responsive to application of

trigger voltage, each tube of said unit having a circuit connected between its control grid and cathode comprising a diode, a condenser and a transformer, the condenser being connected between the plate of the diode and the control grid of the associated tube and the transformer having its primary connected between the cathode and the negative side of the plate battery supply and its secondary connected to a source of reference voltage and to the diode cathode, thereby providing amplitude com-



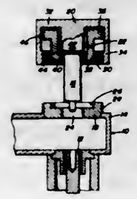
parison means to effect triggering of the associated tube to shift the same to non-conductive state responsive to application of a trigger voltage which equals the reference voltage, means for applying reference voltages to both said circuits, an integrator coupled to the output of the bistable unit, and means for feeding back triggering voltage from the output of the integrator to each of said circuits for periodic triggering of the same, whereby triggering of said bistable unit occurs at the peaks of the triangular waveform developed by said integrator.

2,748,273

CRYSTAL HOLDER

Leon W. Rustad, Linthicum, and John W. Taylor, Jr., Baltimore, Md., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Navy

Application September 19, 1952, Serial No. 310,392
2 Claims. (Cl. 250—31)



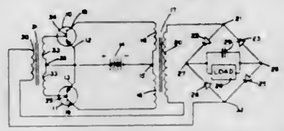
1. A device for facilitating the insertion and removal of an elongated crystal having one end thereof flanged in and from supporting apparatus, comprising a mounting base affixed to said supporting apparatus, a cap having a depending skirt, an annular fastening element at the open end of said skirt for attaching the cap to the base, a lug depending axially from said cap within the skirit space, said lug having a blunt end forming a pressure surface for engagement with the flanged end of said crystal, a plug centrally apertured to enclose said lug within said skirt space, said plug having an annular outer shoulder at the cap end thereof and an inner flange at the other end thereof for supporting engagement with the flange of said crystal, the diameter of said plug shoulder being greater than the diameter of said cap skirt fastening device whereby said fastening device serves as a limit stop for preventing separation of said plug and cap while allowing free limited axial relative movement therebetween.

2,748,274

TRANSISTOR OSCILLATOR WITH CURRENT TRANSFORMER FEEDBACK NETWORK

Alan R. Pearlman, Brighton, Mass., assignor, by mesne assignments, to Clevite Corporation, Cleveland, Ohio, a corporation of Ohio

Application May 23, 1955, Serial No. 510,485
14 Claims. (Cl. 250—36)



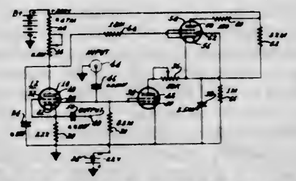
4. A transistor oscillator comprising a pair of transistors connected in push-pull relation and each having an input and an output, an output transformer having a primary winding connected across the transistor outputs, a secondary winding on said output transformer inductively coupled to said primary winding, a load coupled to said secondary winding, a feedback transformer having a primary winding coupled to the load to carry a current which varies with the load current, and a secondary winding on the feedback transformer inductively coupled to said primary winding on the feedback transformer and connected across the transistor inputs to supply regenerative feedback energy thereto which varies with the load current.

2,748,275

WAVEFORM GENERATOR

Irving Maron, Haddonfield, and Herbert S. Broadwell, Audubon, N. J., assignors to Radio Corporation of America, a corporation of Delaware

Application June 29, 1953, Serial No. 364,788
15 Claims. (Cl. 250—36)



1. A waveform generator comprising an oscillator circuit including a gas discharge tube having a control electrode, and means for controlling the oscillation of said oscillator circuit including another gas discharge tube having a control electrode, means providing a direct voltage connection between said control electrodes of said tubes to provide a tube-conductive-bias voltage at said control electrode of said first-mentioned tube in response to conduction of said other tube, and circuit means connected to said tubes permitting periods of simultaneous conduction of said tubes, said circuit means including means for controlling the state of conduction in said other tube.

2,748,276

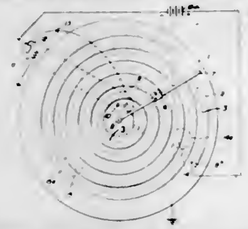
SHIELDED-LINE TUNABLE RESONATOR

Francis J. Gaffney, Malverne, and Herbert A. Finke, Brooklyn, N. Y., assignors to Polytechnic Research and Development Company Incorporated, Brooklyn, N. Y., a corporation of New York

Application November 27, 1951, Serial No. 258,494
6 Claims. (Cl. 250—36)

1. A broad band electric resonator comprising a flat metallic plate, a metallic strip of uniform width secured along one edge thereof to one face of said plate and being arranged in a spiral formed of a number of uniformly spaced convolutions, said plate and said strip forming a spiral trough, a line conductor, insulating means sup-

porting said line conductor within said trough throughout the length of said trough, and a slider mounted for movement along said trough for establishing a sliding short-circuiting connection between said line conductor and



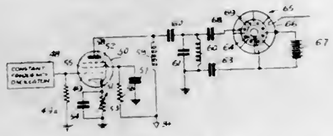
said spiral strip, said line conductor being formed of a metallic strip of uniform thickness mounted with its broad face arranged parallel with the axis of said spiral, and said line conductor strip having a width which varies along the length of said conductor.

2,748,277

MAGNETRON NOISE GENERATORS

Duane B. Haagensen, Wayland, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware

Application November 23, 1951, Serial No. 257,830
6 Claims. (Cl. 250—36)



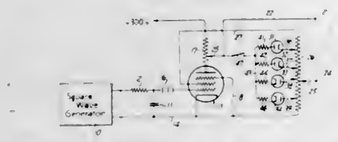
1. An electron discharge device system for generating noise comprising an evacuated envelope containing an electron source, a signal wave transmission network comprising a multiplicity of anode members adjacent ones of which at least partially define a plurality of cavity resonators resonant at a first frequency, means for directing electrons along paths adjacent said network, an auxiliary electrode positioned outside said paths, a tuned circuit resonant at a second frequency substantially lower than said first frequency coupled between said auxiliary electrode and said electron source, and means for supplying an external modulating signal of said second frequency to said auxiliary electrode.

2,748,278

SINE WAVE GENERATOR

Otto J. M. Smith, Berkeley, Calif., assignor to Hewlett-Packard Company, Palo Alto, Calif., a corporation of California

Application May 21, 1951, Serial No. 227,368
9 Claims. (Cl. 250—36)



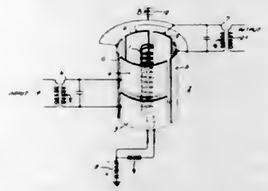
1. In electrical apparatus for the generation of electrical pulses of sine wave form, means for generating pulses of a predetermined frequency and of uniform non-sine wave form, and a sine function generator coupled to receive pulses from said first means and having an output circuit, said sine function generator serving to produce a sine wave in the output circuit from the non-sine wave applied to the same by said first means, said sine function generator including a plurality of devices connected in the output circuit and having asymmetric non-linear characteristics, and including means biasing and poling said devices whereby the generator will produce a plurality of contiguous wave segments defining a composite sine wave in said output circuit.

2,748,279

MAGNETRON AMPLIFIER

Donald A. Wilbur, Albany, N. Y., assignor to General Electric Company, a corporation of New York

Application July 25, 1952, Serial No. 300,929
5 Claims. (Cl. 250—36)



5. A frequency doubling amplifier including a magnetron discharge device comprising an elongated cathode extending along a given axis and an anode assembly of a given length surrounding said cathode in a cylindrical array coaxial therewith, said anode assembly including a plurality of laterally spaced segments each of said length and a pair of axially spaced anode segments having a combined length equal to said length, the width of each of said pair of segments being substantially equal to twice the width of each of said plurality of said segments, all of said segments lying on substantially the same cylindrical surface and defining an annular reentrant space charge region between said segments and said cathode, means coupling said pair of segments to a source of input signals of a given frequency and maintaining them at a positive voltage with respect to said cathode, and means coupling said plurality of segments to an output circuit tuned to a frequency equal to twice said given frequency.

2,748,280

MAGNETRON AMPLIFIER

Richard B. Nelson, Mountain View, Calif., and Donald A. Wilbur, Albany, N. Y., assignors to General Electric Company, a corporation of New York

Application July 25, 1952, Serial No. 300,928
8 Claims. (Cl. 250—36)



1. A frequency multiplying amplifier comprising an electron discharge device of the magnetron type having an elongated electron emitting cathode and a plurality of spaced anode segments surrounding said cathode with their inner surfaces defining a unitary cylindrical space charge chamber coaxial therewith; an input circuit tuned to a given frequency coupled to an input anode section comprising at least one of said segments, an output circuit substantially independent of said input circuit tuned to an integral multiple of said frequency and coupled to an output anode section comprising other segments of said plurality of said segments, said at least one segment of said input section subtending an angle with said axis substantially equal to the product of said multiple times the angle subtended by each of the segments of said output section, and means for establishing an axially directed magnetic field and a radially electric field within said space charge chamber, said means being adjusted to maintain the amplifier slightly below the oscillation threshold.

2,748,281

CIRCUIT ARRANGEMENT FOR SYNCHRONIZING AN OSCILLATOR ON A CONTROL OSCILLATION

Leendert Johan van de Polder, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application October 29, 1952, Serial No. 317,438
Claims priority, application Netherlands November 6, 1951
2 Claims. (Cl. 250—36)



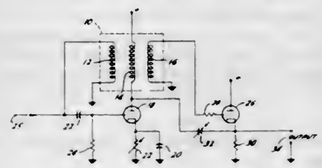
1. In a circuit for synchronizing a local oscillator in accordance with a control oscillation; the combination comprising a device to be controlled by local oscillations produced by said oscillator, a phase-comparison stage, means including a first supply circuit to feed a first oscillation derived from said control oscillation as an input to said stage, means to feed a second oscillation derived from said local oscillator as another input to said stage to compare in phase with said first oscillations to produce a control voltage depending on the phase difference therebetween, means coupled to said stage to apply said control voltage to said oscillator to effect said synchronism, means including a second supply circuit coupled to said oscillator to apply said local oscillations to said device to effect control thereof, said second supply circuit further including a voltage-responsive phase-shifting network, and means coupled to said stage to apply said control voltage to said network to vary the shift thereof as a function of said control voltage.

2,748,282

BLOCKING OSCILLATOR CIRCUIT

Alexander A. Gorski, Palmyra, N. J., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania

Application June 29, 1953, Serial No. 364,589
10 Claims. (Cl. 250—36)



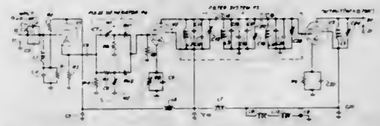
1. In a blocking oscillator circuit including an electron amplifier tube having at least an anode, a cathode and a control grid, a transformer regeneratively coupling the anode circuit of the electron tube so said control grid thereof and means for initiating anode current flow in said electron tube at spaced intervals of time to cause a negative voltage pulse to be generated at the anode of said electron tube, means for controlling the duration of said generated pulse comprising: means energized by said blocking oscillator circuit for generating a positive voltage pulse substantially in time coincidence with said negative pulse, and capacitive coupling means coupling the output of said positive pulse generating means to the anode of said blocking oscillator circuit.

2,748,283

FREQUENCY MULTIPLIER APPARATUS

Francis G. Merrill, Chatham, and Lewis C. Thomas, North Plainfield, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application August 19, 1953, Serial No. 375,222
11 Claims. (Cl. 250—36)



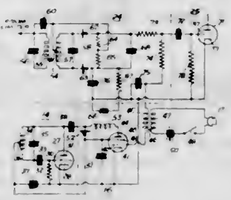
1. Pulse generator apparatus comprising a source of single phase input frequency sine waves, means including a pair of parallel-connected branch circuits connected to said source for providing a pair of sine waves from said single phase input source waves, means comprising a phase shift network disposed in each of said respective branch circuits for selectively spacing the relative forward and backward phase shift between said pair of waves sufficiently to provide desired wave shapes suitable for selecting therefrom substantially triangular shaped pulses, means comprising rectifiers connected with said respective networks and disposed in said respective branch circuits for selecting said substantially triangular shaped pulses from said pair of phase shifted waves, and means connected with said rectifiers for taking off said pulses therefrom in a common output load circuit, one of said phase shift networks being disposed in one of said pair of parallel-connected circuits and comprising series and shunt impedance means for shifting said waves therein forward in phase with respect to the phase of said input source waves, and another of said phase shift networks being disposed in the other of said pair of parallel-connected circuits and comprising series and shunt impedance means for shifting said waves therein backward in phase with respect to said phase of said input source waves.

2,748,284

REACTANCE MODULATOR CIRCUITS

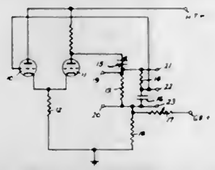
Carl A. Segerstrom, Winchester, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware

Application July 31, 1952, Serial No. 301,952
2 Claims. (Cl. 250—36)



1. In a frequency-modulated oscillator a frequency-determining circuit comprising an inductor and a first capacitor connected in parallel, a second capacitor and a rectifier of the type that varies its impedance with the voltage applied to it connected in series with each other and in parallel across the first capacitor and inductor, and means to vary the voltage applied to the rectifier to determine the operating frequency of the oscillator comprising an electron discharge device having a cathode, a first and second grid and an anode, an inductance connected in series with the rectifier between the anode and second grid and a source of positive potential connected between the second grid and the cathode.

2,748,285
START-STOP OSCILLATOR
Raymond Beaufoy, Taplow, England, assignor to British Telecommunications Research Limited, Buckinghamshire, England, a British company
Application March 27, 1950, Serial No. 152,249
Claims priority, application Great Britain April 5, 1949
5 Claims. (Cl. 250—36)



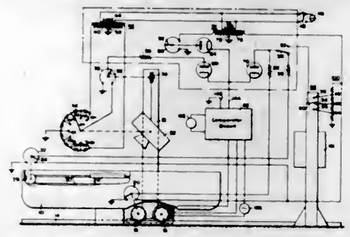
1. A start-stop oscillator responsive to a start signal abruptly to start oscillating and responsive to a stop signal abruptly to stop oscillating, the said start-stop oscillator comprising a resistance-capacity oscillator including an electron discharge valve amplifier and a resistance-capacity phase-shift network connected between the output and input of said amplifier to provide frequency-determining regenerative feedback, and control means for controlling the amount of said regenerative feedback, said control means including two further electron discharge valves, a resistive impedance in the cathode lead of each of said further valves, means coupling the anode of each of said further valves to a control electrode of the other, two output terminals, a rectifier device connecting the cathode of one of said further valves to one of said output terminals, a second rectifier device connecting the cathode of the other of said further valves to the other of said output terminals, said output terminals being connected across at least a part of said network, and an input terminal for applying said start and stop signals to a control electrode of one of said further valves to alter the conductivity of said rectifier devices.

2,748,286
COMBINED VERY-HIGH-FREQUENCY AND ULTRA-HIGH-FREQUENCY TUNER FOR TELEVISION RECEIVER
Emmery J. H. Bussard, Cincinnati, Ohio, assignor to Avco Manufacturing Corporation, Cincinnati, Ohio, a corporation of Delaware
Original application June 29, 1951, Serial No. 234,174, now Patent No. 2,694,150, dated November 9, 1954. Divided and this application December 3, 1952, Serial No. 323,775
8 Claims. (Cl. 250—40)



2. A band-pass selector network for tuning the input of a radio frequency amplifier stage comprising, in combination, a pair of input terminals, a tunable series circuit including a lumped inductor, first capacitor, first conductor, and second capacitor connected in series between said input terminals and in the order named, a second conductor connected directly to said inductor and disposed in parallel with said first conductor to form an open-wire tuning line, said first capacitor being connected across the end of said line adjacent said inductor, a first conductive short-circuiting means for adjusting said inductor to tune said stage in the V. H. F. band, and a second conductive short-circuiting means for adjusting said line to tune said stage in the U. H. F. band.

2,748,287
X-RAY APPARATUS
Martin E. Hayes, Severn Heights, and Kenneth A. Kiesel, Catonsville, Md., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application January 25, 1955, Serial No. 483,932
10 Claims. (Cl. 250—65)



1. In X-ray apparatus including an X-ray source and an X-ray responsive member, the combination of an X-ray diaphragm fastened to said X-ray responsive member, a tubestand fastened to said X-ray source, tubestand position responsive first means having an output signal proportional to the position of said tubestand, a diaphragm position responsive second means having an output signal proportional to the position of said diaphragm, and control means responsive to the output of said first means and the output of said second means for maintaining a predetermined relationship between the position of said diaphragm and the position of said tubestand.

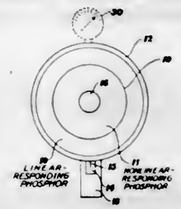
2,748,288
ELECTRON PHOTOGRAPHY PLATE CONSTRUCTION
Theodore A. Saulnier, Jr., Lancaster, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Application October 1, 1953, Serial No. 383,549
16 Claims. (Cl. 250—65)



1. An electron-sensitive photographic plate comprising a metallic base having a coating of an organic material disposed thereon, said material being insolubilizable by electron bombardment, and a semitransparent metallic film disposed over and coextensive with said coating on the opposite surface of said coating from said metallic base for preventing accumulation of electron charges on said coating.

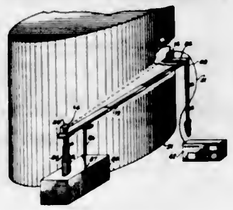
2,748,289
ULTRAVIOLET PHOTOMETER
Franz Urbach, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application July 7, 1952, Serial No. 297,449
11 Claims. (Cl. 250—79)

1. A photometer for measuring the intensity of fluorescigenous radiation comprising juxtaposed patches of phosphors of substantially identical fluorescent hues, one of the phosphors being a normal approximately linear-responding phosphor and the other being a non-linear-responding phosphor, the two phosphors matching in brightness at any one point of the dividing line between them at only one level of fluorescigenous intensity, and highly heat-conducting support means for the patches to



maintain substantially uniform temperature across the non-linear-responding phosphor.

2,748,290
MEASUREMENT OF WALL THICKNESS
Paul P. Reichertz, Dallas, Tex., assignor, by mesne assignments, to Socony Mobil Oil Company, Inc., a corporation of New York
Application May 31, 1951, Serial No. 229,209
9 Claims. (Cl. 250—83.6)



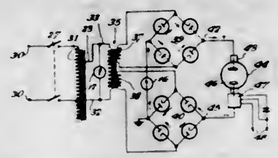
1. Apparatus for use in measuring the thickness of a wall comprising in combination a base, an arm support attached to said base, a telescopic arm attached to said support, a source of penetrative radiation mounted at one end of said arm, a detector for said penetrative radiation mounted at the other end of said arm, and means for rotating said arm through a measurable angle in the plane of a straight line between said source of penetrative radiation and said detector for said penetrative radiation.

2,748,291
PORTABLE DOSIMETER FOR RADIO-ACTIVE RADIATION
Nicolaas Warmoltz, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application August 12, 1952, Serial No. 303,877
Claims priority, application Netherlands August 29, 1951
4 Claims. (Cl. 250—83.6)



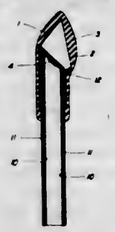
1. A portable dosimeter for measuring radio-active radiation comprising a sealed envelope, an ionizable medium in said envelope, a first pair of electrodes disposed within said envelope including a high-voltage electrode which is wholly within the envelope and free of any external conductive connections, an electrometer disposed within said envelope and connected to said high-voltage electrode, a second pair of electrodes disposed in said envelope and spaced from said high-voltage electrode, and means for applying a high voltage between said second pair of electrodes to produce a discharge therebetween and thereby charge up the high-voltage electrode.

2,748,292
SIMPLIFIED X-RAY APPARATUS
Jesse Loyal Worden, Chicago, Ill., assignor to Continental X-Ray Corporation, Chicago, Ill.
Application May 14, 1953, Serial No. 355,145
6 Claims. (Cl. 250—100)



1. A simple-operating X-ray equipment which is adapted to operate from a single-phase A. C. line of relatively low voltage and at relatively low load conditions, which comprises an X-ray tube of the type providing a constant focal spot for all conditions of radiographic use, a full wave rectifier directly connected across the tube and providing constant current to the tube under all conditions of radiographic use, a high voltage transformer connected to the line and having its output connected to the rectifier, means for varying the primary voltage of the transformer, a voltmeter connected for reading the said primary voltage and said meter being calibrated to read directly thickness of the part being X-rayed as a function of peak kilovoltage applied to the tube at the said constant current for proper exposure of said part, and a timing device connected to close the circuit of the X-ray tube for a predetermined time.

2,748,293
IRRADIATION APPLICATOR FOR X-RAY THERAPY
Friedrich Reiniger, Hamburg-Fuhlsbuttel, Germany, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application June 26, 1952, Serial No. 295,663
Claims priority, application Germany September 8, 1951
3 Claims. (Cl. 250—105)

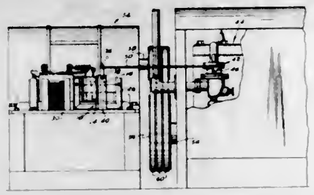


1. An irradiation compressor attachment for X-ray therapy adapted to fit over an end of an X-ray tube from which radiation emanates comprising a hollow tubular elongated member having an end wall portion through which radiation of desired intensity emanates, said end wall portion being constituted of an X-ray resistant synthetic hardenable cast resin plastic and having an exterior convex curvature adapted to conform to the surface of tissue with which it is to be placed in contact.

2,748,294
SPEED CONTROL APPARATUS
Delmer H. Kimberling, Holdrege, Nebr., assignor to Allmand Brothers Manufacturing Company, Holdrege, Nebr., a partnership
Application June 8, 1954, Serial No. 435,193
7 Claims. (Cl. 290—40)

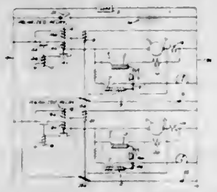
1. In the combination of a prime mover and throttle means for controlling the operation thereof with a means for producing an alternating current signal of a frequency proportional to the speed of said prime mover, a resonant

circuit connected for excitation by said signal producing means, said resonant circuit including a capacitor and an inductance and having a resonant frequency which is approximately equal to the frequency of the signal



produced by said signal producing means under a predetermined load condition of said prime mover, and means responsive to the strength of the magnetic field produced by said inductance for controlling said throttling means.

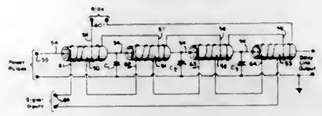
2,748,295
GENERATOR CONTROL SYSTEM
Edward L. Bottemiller, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application July 23, 1953, Serial No. 369,797
5 Claims. (Cl. 307—84)



1. In combination, main and auxiliary generators for supplying power to a common load, a pair of voltage regulators, one for each of said generators and responsive to its voltage for controlling its excitation, an equalizer circuit connection from an armature terminal of one of said generators to the corresponding terminal of the other, means for modifying the action of said regulators to effect a predetermined division of load between said generators comprising an auxiliary winding on each of said regulators, said auxiliary windings being connected in said equalizer circuit connection, a separate non-linear resistance electrically associated with each of said regulators, means responsive to reversal of current in the armature circuit of one of said generators for disconnecting it from the load circuit, means responsive to a decrease in the voltage of said disconnected generator for interrupting said equalizer circuit connection and completing a circuit responsive to the armature current of the other of said generators including the auxiliary winding of its voltage regulator with said auxiliary winding poled to effect a droop in its voltage characteristic and also including one of said non-linear resistances for limiting the response of the non-linear resistance included in said circuit to values of armature current in excess of a predetermined value thereby to provide current limiting operation of the regulator of the active generator.

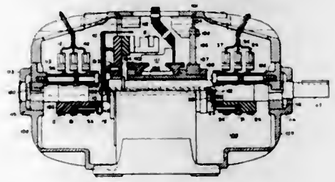
2,748,296
VARIABLE DELAY LINE NETWORK
Daniel M. Lipkin, Philadelphia, Pa., assignor to Sperry Rand Corporation, a corporation of Delaware
Application March 4, 1955, Serial No. 492,116
20 Claims. (Cl. 307—88)

20. A pulse control system comprising a variable delay line, signal means coupled to said delay line for selectively changing the delay time of said line, a first pulse source coupled to one end of said delay line, a gate having a first input terminal thereof coupled to the other end of said delay line whereby pulses from said first source arrive at said first input terminal at times dependent upon said signal means, and a second pulse source



coupled to a second input terminal of said gate whereby said gate selectively produces an output in response to the substantially simultaneous occurrence of pulses at its first and second terminals.

2,748,297
SPECIAL REGULATING RHEOSTAT
Edwin R. Johnson, Ironwood, Mich., and Donald E. Plumb, Williamsville, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application May 29, 1953, Serial No. 358,248
8 Claims. (Cl. 307—151)



1. In apparatus for effecting the operation of a motor operated rheostat, in combination, a frame structure in design and construction substantially like the housing of an electric motor and thus having a mid part and end bells on said part provided with bearings, a shaft disposed in said bearings, a sleeve disposed in spaced relation about the shaft and supported by said mid part, a commutator having a selected number of bars mounted on the sleeve, a resistor connected in a loop circuit, said bars from the first to the last being connected, through suitable leads, at equally spaced points on said resistor, a pair of terminals energized with direct current, one of said terminals being connected at one point on the resistor and the other terminal being connected at the diametrically opposite point on the resistor, a plurality of brushes secured to the shaft for rotation therewith, said brushes being disposed to ride on the commutator, and a plurality of load circuits connected to said brushes.

2,748,298
ULTRASONIC VIBRATORY DEVICES
Carlo L. Calosi, Rome, Italy, and Preston B. Carwile, deceased, late of Cambridge, Mass., by Lois C. K. Carwile, executrix, Cambridge, Mass., assignors to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Original application March 15, 1951, Serial No. 215,844, now Patent No. 2,704,333, dated March 15, 1955. Divided and this application January 12, 1955, Serial No. 481,296
9 Claims. (Cl. 310—26)

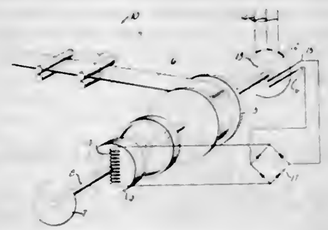
1. A vibratory device comprising an electromechanical source of periodic mechanical oscillations, means for increasing the amplitude of said oscillations comprising a medium for transmitting said mechanical oscillations attached to said source, said medium being solid at the point of attachment thereof to said source, a portion of said medium decreasing in cross-sectional area as it

extends away from said source and having a first rate of change of the transverse cross-sectional area thereof with respect to displacement along the longitudinal axis and a second rate of change of the square of a cross-sectional



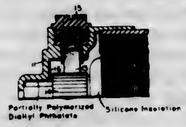
dimension of said medium with respect to said displacement, said first rate of change being different than said second rate of change, and impact tool means at the free end of said medium.

2,748,299
AUTOMATIC TORQUE CONTROLLER
Robert J. Weesner and Herbert L. Kelley, Milwaukee, Wis., assignors to The Louis Allis Company, Milwaukee, Wis., a corporation of Wisconsin
Application June 19, 1953, Serial No. 362,734
2 Claims. (Cl. 310—95)



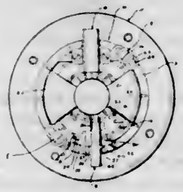
1. An automatic torque control system for maintaining substantially uniform tension on a web or strand being wound onto or unwound from a reel at some predetermined substantially uniform rate of linear travel, comprising: an electromagnetic coupling having complementary elements with an air gap therebetween, and having a winding for producing a magnetic attraction between said elements to render said coupling capable of transmitting a torque which varies with the strength of the magnetic attraction across the air gap; means for positively drivingly connecting one of the elements of the magnetic coupling with the reel so that it turns therewith; means connected with the other element of the coupling for constraining it to a predetermined substantially uniform R. P. M.; the impositive torque transmitting connection between the elements of the coupling enabling the speed of the reel to be determined by the rate of linear travel of the web or strand and the diameter of the coil on the reel at any instant; a frequency converter having primary and secondary windings, output terminals for the secondary windings, and a rotor; means drivingly connecting the rotor of the frequency converted with the reel so that the rotor turns at a speed proportional to that of the reel; means connecting the primary windings of the frequency converter to a source of electrical power to produce a flux which rotates in the direction of rotor rotation so that the voltage across the output terminals of the secondary windings varies inversely with the speed of the reel; means connected with the output terminals of the secondary windings for rectifying the A. C. output of the frequency converter; and means for impressing the rectified output of the frequency converter across the ends of the winding of the electromagnetic coupling whereby the coupling winding is excited with a voltage which is inversely proportional to the speed of the reel, so that the torque transmitted by the coupling increases as the speed of the reel decreases.

2,748,300
CARBON BRUSHES FOR DYNAMOELECTRIC MACHINES
Lawrence E. Moberly, Plum Township, Allegheny County, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application April 21, 1955, Serial No. 502,760
7 Claims. (Cl. 310—228)



1. In a dynamoelectric machine having a closed case and windings provided with silicone insulation which during operation of the dynamoelectric machine gives off silicone vapors, in combination, a carbon brush for conducting electrical current in cooperation with the windings, the brushes being disposed in the case and exposed to the silicone vapors, and a quantity of diallyl phthalate monomers in the case to react with the silicone vapors whereby the silicone vapors do not affect the carbon brushes.

2,748,301
ELECTRIC MOTOR BRUSH HOLDER AND FRAME ADAPTED THERETO
Milton H. Spielman, Cuyahoga Falls, Ohio, assignor, by mesne assignments, to The Lamb Electric Company, Kent, Ohio, a corporation of Delaware
Application July 21, 1953, Serial No. 369,362
7 Claims. (Cl. 310—241)



1. In a commutating motor, the combination of brush holder units and mounting means on the motor frame adapted to receive and secure the holder units in proper mutual relation to each other and to the commutator; each said brush holder unit comprising a brush element, a metal brush guide tube adapted to receive said brush element with an end projecting from one end of the guide tube toward the commutator, an anchor element secured at the other end of said metal tube, a brush compression spring interposed between said brush and said anchor element biasing said brush element outwardly from said guide tube, a flexible conductor having one end secured to the inner end of said brush element and the other end to said anchor element for retaining a portion of the brush element within said guide tube, an insulation tube receiving therein said guide tube and having formed thereon stop means for endwise positioning of the said guide tube, said insulation tube having near the brush end thereof a projection extending perpendicularly to the direction of the guide tube length and oppositely disposed longitudinally extended lateral fins thereon, said insulation tube also having a shallow recess in the inner surface thereof extended longitudinally inward from the commutator end thereof, and a brush lead connector adapted in size and shape for insertion into said recess in wedging contact betwen said metal tube and said insulation tube and having an outer end projecting from said recess providing an area for a brush lead soldered thereto; and said mounting means comprising a motor frame end member at the commutator end of said motor having for each brush holder

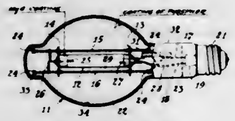
unit a seat formation and a perforated holder clamping plate at each side of the seat formation, each plate having an edge bearing on the top of a corresponding said fin and an opposite edge suported by the seat formation, a clamping screw through each perforated plate threaded into the frame end member, each said seat formation including a slot formation directed toward the commutator adapted to embrace a portion of the length and of the periphery of said insulating tube and to engage said projection against movement outwardly relative to said commutator, and a frame portion extending laterally from each side of said slot for supporting the bottom of a corresponding fin and having a threaded aperture at each side of and spaced from said slot for each said clamping screw, said frame portion also having a shoulder formation extended parallel to the slot and spaced outward of each said aperture providing a surface supporting said opposite plate edge, whereby each said brush holder unit is secured in said seat formations.

2,748,302
BRUSH HOLDER ASSEMBLY FOR DYNAMO-ELECTRIC MACHINE
John W. Boeckel, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application June 11, 1953, Serial No. 360,945
7 Claims. (Cl. 310—247)



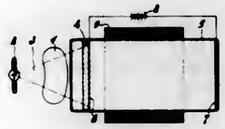
1. A brush holder assembly for a dynamoelectric machine comprising a brush holder tube member having a longitudinal opening formed therethrough for guiding a contact brush toward a current collector member, and a dust stopping member formed of resilient material and secured to said brush holder tube member adjacent its current collector end, said dust stopping member having an opening formed therein adapted to receive said contact brush slidingly and with a slight interference fit thereby preventing entrance of dirt into said brush holder tube member opening.

2,748,303
COLOR-CORRECTED LIGHT SOURCE AND PHOSPHORS THEREFOR
Luke Thorington, Bloomfield, N. J., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application November 10, 1949, Serial No. 126,506
11 Claims. (Cl. 313—25)



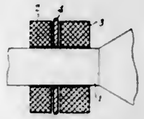
6. In combination, a power-operable source of ultraviolet radiation, a light-transmitting envelope surrounding said source, and a coating on the surface of said envelope comprising a phosphor for which production of light in the red region of the spectrum by said radiation has a maximum at a temperature of about 350° C., and means causing the phosphor-bearing portion of said envelope to operate near said temperature.

2,748,304
ELECTRIC DISCHARGE TUBE FOR INTENSIFYING FLUORESCENT IMAGES PRODUCED WITH THE USE OF X-RAYS
Theodoor Peter Johannes Botden, Marten Cornelis Teves, Taeke Tol, and Floris de Boer, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application March 1, 1951, Serial No. 213,352
Claims priority, application Netherlands March 27, 1950
5 Claims. (Cl. 313—65)



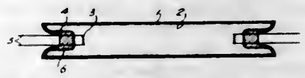
1. An image amplifier tube for intensifying X-ray images, comprising an evacuated envelope, a luminescent screen responsive to X-radiation and mounted within said envelope, said screen including a pair of spaced parallel plates and a member disposed around the periphery of the plates and united to the edges thereof to produce a closed space, a mass of granular luminescent material disposed within and substantially completely filling up said closed space, and a photo-electric cathode disposed on that side of the screen remote from the side on which X-radiation impinges.

2,748,305
CATHODE RAY TUBES FOR TELEVISION AND LIKE PURPOSES
Eric Davies, Burnham-on-Crouch, England, assignor to Marconi's Wireless Telegraph Company Limited, London, England
Application December 21, 1954, Serial No. 476,667
Claims priority, application Great Britain January 15, 1954
10 Claims. (Cl. 313—76)



1. A television or like cathode ray tube of the kind having focusing and deflection coils next to one another about the neck thereof, wherein at least one magnetic screen is mounted between said coils and said neck, the screen being sub-divided and constructed so as to provide a large number of magnetic paths, said paths together presenting relatively low reluctance to magnetic lines of force running substantially radially with respect to the neck of the tube, and relatively high reluctance to magnetic lines of force running substantially parallel to the axis of the tube.

2,748,306
ELECTRIC DISCHARGE TUBE WITH LUMINESCENT SUBSTANCE COATING
Karl Åke Gerhard Björkman, Hammarbyhojden, Sweden, assignor to Lumalampan Aktiebolag, Stockholm, Sweden, a corporation of the Kingdom of Sweden
Application June 5, 1951, Serial No. 229,898
5 Claims. (Cl. 313—109)



1. A gaseous electric discharge lamp comprising a light transmitting envelope coated with a luminescent material and having an electrode disposed at each end of

the envelope, each of said electrodes being provided with a foot within and connected with the envelope and with at least one lead-in wire, said foot extending along and around the lead-in wire within the envelope but not around the electrode and being coated with a UV-reflecting coating consisting of a metal oxide.

2,748,307
MAGNETICALLY FOCUSED ELECTRON DISCHARGE DEVICE
John S. Hickey, Jr., Cohoes, N. Y., assignor to General Electric Company, a corporation of New York
Application March 6, 1952, Serial No. 275,155
5 Claims. (Cl. 313—155)



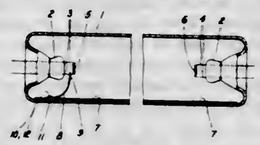
1. An electron discharge device comprising a first magnetic pole piece having therein a groove from which a convergent fringing flux extends in a direction generally perpendicular to the base of said groove, a control electrode spaced from said first magnetic pole piece, said control electrode including a pair of elongated non-magnetic conductive members having longitudinal axes substantially parallel to the surface of said first magnetic pole piece into which said groove extends and being transversely spaced apart to provide an aperture aligned with said groove, an anode spaced from said control electrode including a second magnetic pole piece having a boss opposed to the aperture between said elongated conductive members and having a cross section substantially coextensive with the cross section of the aperture between said elongated conductive members whereby said convergent fringing flux extends between said first and second magnetic pole pieces through the aperture in said control electrode, and an elongated cathode disposed in said groove for producing electrons which are constrained to follow said convergent fringing flux through the aperture in said control electrode without striking the conductive members thereof.

2,748,308
LOW-PRESSURE ARC-DISCHARGE TUBE SUPPLIED WITH DIRECT CURRENT
Dirk Kolkman and Adolf Jan de Vleer, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application June 12, 1953, Serial No. 361,342
6 Claims. (Cl. 313—185)



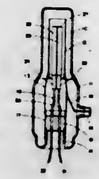
1. A low-pressure arc-discharge tube for direct current operation, comprising an elongated envelope having a gas-filling at a pressure of about 2 to 5 mm. of Hg, a pair of activated main electrodes each having two terminals and each being located at one end of said envelope and both defining a discharge space therebetween, a pair of strip-shaped auxiliary electrodes each constituted of resistance material, each of said auxiliary electrodes being mounted on the inner wall of the envelope and extending substantially throughout the length of the tube, each of said auxiliary electrodes being electrically connected to one of said main electrodes within the discharge space and being insulated from the other main electrode, only one external contact member mounted at each end of the envelope, only one terminal of the main electrode adjacent each contact member being electrically connected thereto, and an auxiliary conductor electrically connected to the other terminal of the main electrode and extending in the direction of but spaced from the auxiliary electrode insulated from said main electrode.

2,748,309
GAS OR VAPOR DISCHARGE TUBE
Adrianus Antonius Hurx, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application December 18, 1952, Serial No. 326,628
Claims priority, application Netherlands January 15, 1952
3 Claims. (Cl. 313—197)



1. In an electric discharge tube comprising an insulating envelope, an electrode within said envelope, and a conductive layer on the inner surface of said envelope; a metal tape having one end electrically connected to said electrode and the other end effecting electrical connection to said conductive layer, said other end of said tape being divided in the direction of its length forming at least two adjacent portions, and adhesive means rigidly securing at least one of the adjacent portions to the conductive layer, at least another of said adjacent portions being only in direct electrical contact engagement with the conductive layer and being free of said adhesive means.

2,748,310
FILAMENT STRUCTURE
George J. Agule, Stamford, Conn., assignor to Machlett Laboratories, Incorporated, Springdale, Conn., a corporation of Connecticut
Application September 16, 1952, Serial No. 309,855
5 Claims. (Cl. 313—247)



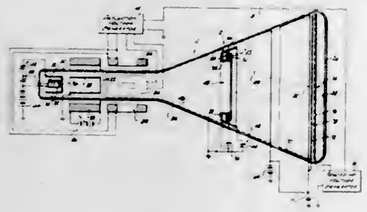
1. A filament structure comprising a plurality of refractory metal strips of arcuate cross-sectional shapes symmetrically arranged about an axis to form a substantially cylindrical emission surface, all of which strips extend generally in the same direction, are the same length and terminate at the same level, means symmetrical to the said axis conductively connecting together adjacent ends at one end of the strips and support conductor means having cylindrical segment mounting surfaces conforming to the shapes of and connecting the opposed ends of the strips.

2,748,311
FILAMENT STRUCTURE
Howard D. Doolittle, Stamford, Conn., assignor to Machlett Laboratories, Incorporated, Springdale, Conn., a corporation of Connecticut
Application May 27, 1952, Serial No. 290,173
3 Claims. (Cl. 313—264)



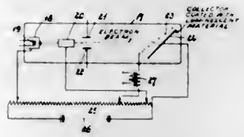
1. An electron tube embodying a pair of relatively closely spaced elongated electrodes, one of said electrodes comprising an elongated filament structure embodying a length of filament wire formed into a plurality of bights and having its ends both located at the same end of the filament structure and in spaced relation to the bights, and spacing means for retaining the bights in spaced relation from the other electrode and from each other comprising an electrical insulating member disposed between the bights and connected to the respective bights by separate relatively fine high thermal resistance wires secured directly to the filament wire, the connecting wires being of a diameter substantially smaller than the diameter of the filament wire.

2,748,312
CATHODE-RAY STORAGE TUBE SYSTEM
Chester Donald Beintema, Santa Monica, Calif., assignor to Hughes Aircraft Company, Culver City, Calif., a corporation of Delaware
Application November 19, 1954, Serial No. 470,025
3 Claims. (Cl. 315—12)



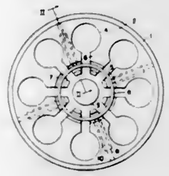
1. In a cathode-ray type storage tube having a target electrode for storing an electrostatic charge pattern provided thereon by a writing beam, an electron gun for producing a parallel, univelocity electron stream to flood the target electrode with electrons, said electron gun comprising an annular cathode symmetrically disposed about the path of the writing beam and adapted not to interfere therewith, a filament disposed within said cathode for directly heating said cathode, a refractory material disposed between said filament and said cathode within said cathode, a cylindrical current control electrode having two inwardly extending rims partially enclosing said cathode, focusing means disposed adjacent said control electrode on the side of said cathode opposite the target electrode for focusing said stream, and means for maintaining said focusing means at a potential to cause the inner surface of the stream produced by said electron gun to meet substantially in a point at the target electrode.

2,748,313
ELECTRON BEAM TUBE
Jean Robert Perilhou and Johan Lodewijk Hendrik Jonker, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application April 10, 1952, Serial No. 281,612
Claims priority, application Netherlands May 2, 1951
6 Claims. (Cl. 315—25)



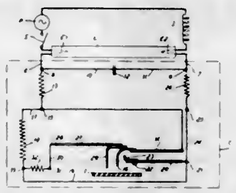
1. A circuit-arrangement comprising a cathode-ray tube including a cathode for producing electrons, means including an accelerating anode for forming said electrons into an electron beam, a planar collector electrode positioned in the path of said electron beam, a planar grid electrode positioned in the path of said electron beam between said collector electrode and said anode, the planes of said collector electrode and grid electrode being oblique to the path of said electron beam, means connected to apply to said collector electrode a positive-polarity potential with respect to said cathode whereby a voltage field is produced which has a finite value in the region of said grid electrode, means connected to apply to said grid electrode a potential intermediate the potentials of said cathode and collector electrode and having a value which is negative with respect to said finite value whereby said grid assumes a negative charge thereby to cause said electron beam to converge as it approaches said collector electrode, and a source of alternating voltage connected to said grid electrode to produce a varying deflection of said beam with respect to said collector electrode, said grid electrode being substantially completely transmissive for said electron beam so that substantially all of said electron beam passes through said grid electrode at all times and impinges upon said collector electrode.

2,748,314
TUNED MAGNETRON
Ernest C. Okress, Elmira, N. Y., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application July 15, 1954, Serial No. 443,589
12 Claims. (Cl. 315—39.69)



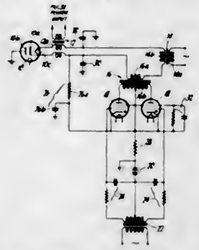
1. A magnetron comprising a central cathode surrounded by an anode which comprises a plurality of segments projecting inward toward said cathode and separated by resonating cavities, an annular conductor surrounding said cathode and disposed adjacent said segments, said conductor being outside the direct path between said segments and said cathode, and means having a coaxial line structure connecting alternate segments to said annular conductor.

2,748,315
CURRENT CONTROL CIRCUIT
Wade B. Martin, Ramsey, N. J., and Harry Talberth, Brooklyn, N. Y.
Application July 14, 1950, Serial No. 173,716
6 Claims. (Cl. 315—100)



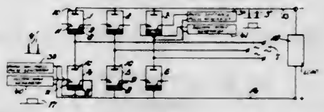
1. A current control circuit comprising in combination first and second electric terminal leads, a resistor, electrically conductive coupling means for coupling said resistor across and between said leads, a shunt circuit connected across said resistor, a bimetallic switch connected in series in said shunt circuit, said shunt circuit being normally closed only by virtue of said bimetallic switch being normally cold and in a closed position, and heating means for heating said bimetallic switch for deflecting it to an open position for opening said shunt circuit, said heating means including an electric heating element connected in series in said shunt circuit and disposed in heat radiating relation to said bimetallic switch, said electrically conductive coupling means including accelerating means for accelerating said deflection of said bimetallic switch, said accelerating means comprising a resistance wire heating element disposed in heat conducting relation to said bimetallic switch and electrically coupled across and between said terminal leads in series with said resistor.

2,748,316
MAGNETRON HEATER CIRCUIT
Louis A. Stevenson, Jr., Boston, Mass., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts
Application December 2, 1952, Serial No. 323,546
3 Claims. (Cl. 315—106)



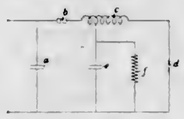
1. A magnetron heater supply circuit, including a magnetron having an anode and a cathode and an electron-discharge space between said cathode and said anode, and a heater for producing thermionic emission of the cathode in the magnetron, an alternating-current supply having connections to said heater, a transformer having the primary winding interposed in said connections so as to be connected in series with the magnetron heater, said transformer having a secondary winding, a thyratron circuit connected as a controlled load on said secondary winding, a pulse power supply having energizing connections to said anode and said cathode including a condenser in series with the said anode-cathode electron-discharge space, and a biasing circuit for said thyratron circuit including a low pass filter and having input connections to said condenser so as to vary the degree of short-circuiting of said secondary winding as a function of the magnetron current.

2,748,317
MUTATOR SYSTEM, MORE PARTICULARLY A RECTIFYING SYSTEM, IN THE GRAETZ ARRANGEMENT, AND TO A METHOD OF CONTROLLING SUCH A SYSTEM
Alfred Van De Wiel, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application January 4, 1951, Serial No. 204,298
Claims priority, application Netherlands January 26, 1950
7 Claims. (Cl. 315—144)



1. In a mutator system for an alternating voltage wherein discharge tubes are connected in a Grätz arrangement, said tubes each having a cathode, an ignition electrode, an auxiliary anode and a main anode, control apparatus for said system comprising means to apply an igniting voltage to the ignition electrode of each tube at a desired instant with respect to the cycle of alternating voltage, and means to connect periodically an auxiliary voltage to said auxiliary anode in each tube for more than 180 degrees but less than 360 degrees of said cycle, the value of said auxiliary voltage being sufficient to maintain auxiliary arcs following extinguishment of the main arcs in said tubes.

2,748,318
ELECTRIC SPARK IGNITION APPARATUS
John Andrew Laird, Coventry, England, assignor to Joseph Lucas (Industries) Limited, Birmingham, England
Application June 27, 1952, Serial No. 296,015
Claims priority, application Great Britain July 12, 1951
1 Claim. (Cl. 315—180)

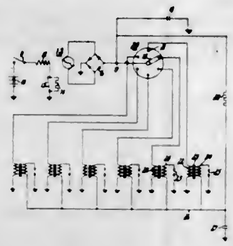


An electric spark ignition apparatus comprising in combination an intermittently chargeable and dischargeable principal condenser, a fixed control gap connected in series with the principal condenser to determine the voltage at which the condenser is dischargeable, a spark gap connected in series with the principal condenser and control gap, the latter being situated between the principal condenser and spark gap, an inductance connected at least in part in series with the principal condenser, control gap and spark gap, and between the control gap and spark gap, for prolonging the duration of discharge of the principal condenser across the spark gap, and an additional condenser connected in parallel with the principal condenser and in series with a part of the inductance remote from the spark gap so that the latter can serve also as a step-up transformer for initiating discharge of the principal condenser across the spark gap.

2,748,319
IGNITION SYSTEM
Brooks H. Short, Anderson, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application March 20, 1951, Serial No. 216,641
3 Claims. (Cl. 315—213)

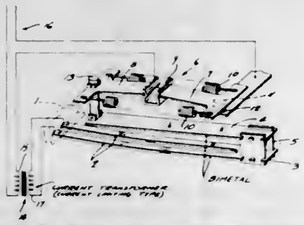
1. An ignition system for automotive vehicle engines comprising a constant source of relatively high D. C. voltage, a main condenser charged thereby, a distributor having posts and an engine driven rotor carrying a con-

tact which is connected to the source and which closely approaches the posts in succession, ignition coils each connected with a post and having a primary winding through which the main condenser discharges progressively when the rotor contact is in close proximity to the post connected with the primary winding of each



of said coils, each coil having a secondary winding connected with an engine spark plug, and an auxiliary condenser which is charged by and connected to the source through a resistor and which is also connected in series with all of said secondary windings and spark plugs, the auxiliary condenser discharging across the spark plug gaps in succession when they fire.

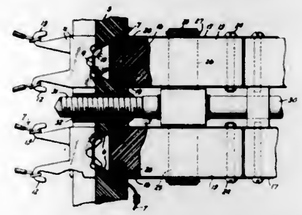
2,748,320
CIRCUIT INTERRUPTERS
Anthony Van Ryan, South Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application April 13, 1951, Serial No. 220,771
2 Claims. (Cl. 317—14)



1. An overload circuit interrupter comprising snap switch means connected in a power line and having a snap opening and a snap closing action, a bimetal actuator strip operatively connected to, and furnishing power for the actuation of, said switch means for opening said switch means on overload, and a current transformer having its primary connected in said power line and having its secondary connected to said bimetal actuator strip, said bimetal actuator strip being operatively connected to said switch means to close said switch means when said bimetal actuator strip cools, said transformer being of the current limiting type, whereby said bimetal actuator strip is protected against undue warping upon the occurrence of excessive overloads in said power line.

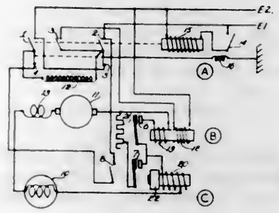
2,748,321
ELECTRICAL ASSEMBLIES
Lawrence J. Kamm, New York, N. Y.
Application July 31, 1952, Serial No. 302,010
18 Claims. (Cl. 317—101)

1. An electrical assembly comprising a pair of insulating members each carrying an electrically conductive coating pattern having a set of exposed contact portions which mate with each other, compressible resilient insulating means providing a backing means to yieldably back at least one of each pair of mating contact portions on at least one of said members, one of said pair of insulating members being arranged for bringing said contact portions into electrical contact by sliding contact during which the yieldably-backed contact portions yield



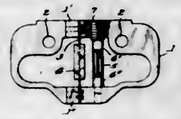
to permit said contact portions to be brought into positive engagement, and for rearward movement to break said engagement.

2,748,322
LIFTING MAGNET CONTROL SYSTEM
Joseph V. Oswald, Chicago, Ill.
Continuation of application Serial No. 229,063, May 31, 1951. This application April 2, 1953, Serial No. 346,356
5 Claims. (Cl. 317—123)



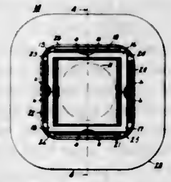
1. In a lifting magnet control system, a lifting magnet having windings energized from a generator driven by a suitable prime mover, said generator having a separately excited main field winding; a separate source of electrical power suitable for the excitation of said separately excited main field winding; a first switch means operable to reversibly connect said separately excited main field winding to said separate source of electrical power to effect a reversal of the polarity of the potential of said generator and consequently effect a stoppage or reversal of the direction of the current flow between said generator and said lifting magnet windings, a second switch means electro-responsive to the current flow between said generator and said lifting magnet and operable to close upon substantial current flow from said generator to said lifting magnet in one direction, said second switch operable to open after a predetermined time-current interval of current flow from said generator to said lifting magnet windings in a reverse direction, a first winding on the actuating magnet of said second switch adapted to be excited by the current flow between said generator and said lifting magnet windings, a second winding on said second switch comprising a continuous winding of electrically conductive material short-circuited upon itself and placed in mutually inductive relation to said first winding, such arrangement effecting a delay in the response of said second switch to de-energization of said first winding; contact means on said second switch connected into the reverse sequence connection of said first switch, opening of said contact means adapted to disconnect said separately excited main field winding from said separate source of electrical power.

2,748,323
SUSPENSION JOURNAL FOR ROTATABLE ELEMENTS OF ELECTRICAL APPARATUS, AND ESPECIALLY FOR ARMATURES OF RELAYS
Max Dressler, Munich, and Josef Fischer, Munich-Pasing, Germany, assignors to Siemens & Halske Aktiengesellschaft, Munich, Germany, a corporation of Germany
Application October 31, 1952, Serial No. 318,126
9 Claims. (Cl. 317—198)



1. In electrical apparatus of the class described having a rotatable operating element and a device for rotatably mounting said element, said device comprising a frame-like carrier member having walls defining an opening, an elongated suspension member carrying said operating element, means for securing the opposite ends of said suspension member in engagement with opposite relatively yieldable walls of said carrier member, and a spring interposed in bearing relationship between said opposite walls of said carrier member exerting outward pressure on said walls tending to spread such walls apart for tensioning said suspension member.

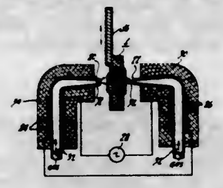
2,748,324
DEFLECTION YOKE FOR CATHODE RAY TUBE
Harold W. Lord, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application October 26, 1951, Serial No. 253,241
2 Claims. (Cl. 317—200)



1. A deflection yoke for a cathode ray tube comprising a frame-type magnetic core including four similar L-shaped contiguous sections having four pairs of adjacent end portions, a plurality of coils, each having convolutions receiving one of said pairs of adjacent end portions to bridge the junction formed by said portions in said one pair of portions, oppositely disposed pairs of said coils being poled to provide, in the presence of a common energizing signal, individual magnetic field components directed across said frame in the same polarity sense relative to one another, and a frame-type shield of electrically conductive non-magnetic material including four similar L-shaped contiguous sections, each overlying one of said L-shaped sections of said core and received at least in part by the convolutions of the coils associated with the core section.

2,748,325
SEMI-CONDUCTOR DEVICES AND METHODS FOR TREATING SAME
Dietrich A. Jenny, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application April 16, 1953, Serial No. 349,296
17 Claims. (Cl. 317—234)

8. A semi-conductor device comprising a body of semi-conductive material having fused to a surface thereof a body of impurity-yielding material, a P–N rectifying junction disposed within said semi-conductive body adjacent to said impurity-yielding body and a film of an inert insulating material upon the surface of said device, said film comprising compounds of said semi-



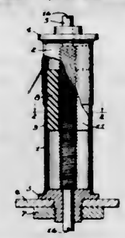
conductive material and of said impurity-yielding material.

2,748,326
SEMICONDUCTOR TRANSLATORS AND PROCESSING
Robert C. Ingraham, Boston, Mass., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts
Application March 28, 1950, Serial No. 152,418
6 Claims. (Cl. 317—236)



1. The method of producing stable germanium devices of a point-contact type which includes the steps of soldering a germanium element to a metal support, etching the exposed surface of the germanium, washing the etched and mounted germanium, then baking the mounted germanium for a prolonged period, coating the exposed germanium surface with a fluid silicone, contacting the germanium with a point-contact element projected through the silicone coating within an enclosing cartridge and simultaneously fixing the assembly of the whisker and the germanium and hermetically sealing the cartridge by a soldering operation effected with the aid of a corrosive flux that is prevented from spattering the crystal of the germanium surface by virtue of a protective silicone.

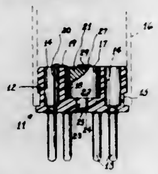
2,748,327
TRIMMER CONDENSER
Howard M. Wadsworth, Liverpool, N. Y.
Application November 23, 1953, Serial No. 393,605
6 Claims. (Cl. 317—249)



1. In a tubular trimmer condenser a dielectric tube having an outer metal envelop constituting one electrode, a screw shaft rotatably mounted coaxially in said tube, and an inner electrode mounted on the screw shaft comprising a slotted hollow cylinder of elastically deformable rubber-like material and a sheet of electrically conductive material wrapped around said cylinder and pressed into full surface contact with the interior of the dielectric tube by the expansion of the elastically deformable material, and with its end portions entering the cylinder

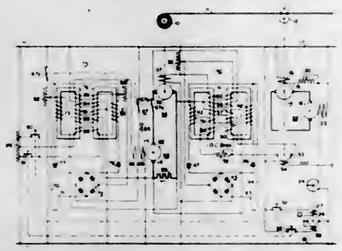
through the slot and embracing the screw shaft, said end portions being expanded into conformity with the interior surface of the elastic cylinder to serve as anchorages maintaining said conductive sheet under tension around the exterior of said cylinder.

2,748,328
COMBINATION PRONGED BASE FOR ELECTRICAL DEVICES
Ramon Font, Richmond Hill, and Anthony Herman, Queens Village, N. Y., assignors to Premier Research Laboratories, Inc., New York, N. Y.
Application December 14, 1953, Serial No. 397,824
5 Claims. (Cl. 317—257)



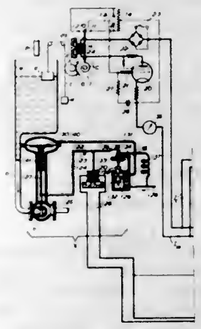
1. In an electrical device, a base member, a plurality of prongs rigidly secured to said base member and adapted to be electrically connected to the device, said base member being formed with a cylindrical recess, the bottom wall of said recess being formed with a central aperture, an arcuately curved conductive plate element disposed in said recess adjacent the wall thereof and defining one plate of a condenser, a conductive rotor block rotatably mounted in said recess, said block having an arcuate surface located adjacent said plate element, said arcuate surface being in capacitive relation to said plate element, means connecting said plate element to one of the prongs, a resilient arm connected to another prong and pivotally engaging the top of the block at a point axially located relative to the recess, dielectric means disposed between the arcuate surface of the block and said plate element, and an axially extending stud element on the bottom of said block extending into said central aperture, whereby it may be engaged from below the base member to rotate the block and adjust the capacity of said condenser.

2,748,329
REEL AND TENSION CONTROL SYSTEM
Eugene F. Allbert, Buffalo, and Raymond W. Moore, Snyder, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application October 29, 1954, Serial No. 465,690
7 Claims. (Cl. 318—6)



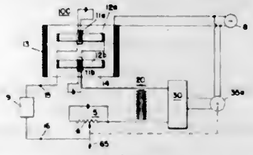
3. In a control system for a motor having an armature connected in driving relation with an unwinding reel for supplying a material to an adjacent work device and having a field excitation means, a generator having an armature connected in a closed circuit with the motor armature and having field excitation means, circuit means for effecting energization of the motor excitation means, bias means for effecting energization of the generator excitation means in a sense to produce a current in the motor armature to cause the motor to exert a predetermined pull on the material when the work device is stalled, and regulating means responsive to the armature current for effecting energization of the generator excitation means in an opposite sense for regulating the armature current during both stalled and running conditions.

2,748,330
PROPORTIONAL BAND ADJUSTING ELECTRICAL CONTROL APPARATUS
Stephen Archbold Bergen, London, England, assignor to Evershed & Vignoles Limited, London, England, a British company
Application March 28, 1952, Serial No. 279,157
Claims priority, application Great Britain April 11, 1951
11 Claims. (Cl. 318—22)



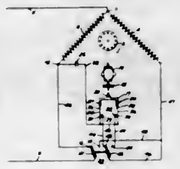
1. In an electric control system for controlling the magnitude of a physical quantity subject to variation from a desired value, the combination of means for producing a first electric current proportional to the magnitude of the departure of said physical quantity from said desired value, means for producing a second electric current proportional to said first electric current, means for varying the proportionality between said first and second electric currents, means controlled by said second electric current for establishing a third electric current conforming with the integral with respect to time of said second electric current, and electro-motive means controlled by said second and third electric currents and producing a response proportional to the sum of said second and third electric currents and adapted to control a device affecting the magnitude of said variable quantity.

2,748,331
MAGNETRONIC SERVO AND CONVERTER SYSTEM AND APPARATUS
Kube Krisch, Philadelphia, Pa.
Application July 30, 1951, Serial No. 239,295
12 Claims. (Cl. 318—28)



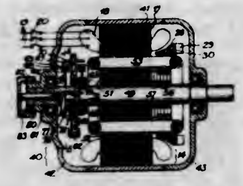
1. In a measuring system including a source of a low-level, electrical input signal varying in accordance with changes in magnitude of a condition under measurement, a non-oscillatory magnetron system for producing substantially rectangular unidirectional current pulses of fixed audio-frequency and whose duration and spacing varies in accordance with changes in magnitude of said input signal comprising a magnetron device having concentric electrodes including at least a cylindrical anode and a thermally-emissive cathode with a direct-current potential-difference between them and having field-producing means providing axially of said electrodes a magnetic field which jointly with said potential-difference determines the critical value of the conductance characteristic of said magnetron device, a source of fixed chopping frequency electrically connected to said magnetron device to vary its conductance about said critical value to produce substantially rectangular output current pulses of said fixed audio-frequency, and conductor means for connecting said source of low-level electrical input signal to the magnetron device to vary the fraction of each cycle of said fixed frequency for which the magnetron is conductive and so to vary the duration of said fixed-frequency output-current pulses.

2,748,332
REVERSING MOTOR CIRCUIT
Wilbur W. Warner, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application January 4, 1954, Serial No. 402,030
1 Claim. (Cl. 318—207)



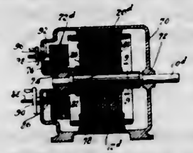
A reversible self starting single phase alternating current motor comprising a pair of windings, a pair of running circuits and a pair of starting circuits respectively including said windings for selectively energizing said windings, a condenser common to said starting circuits, two pairs of contacts associated respectively with said starting circuits and serially connected with said condenser, a two-pole double throw switch for selecting one of said running circuits and one of said starting circuits whereby one of said windings is directly energized through the selected running circuit associated therewith and the other of said windings is simultaneously energized through the selected starting circuit, said switch including one contact arm arranged to be selectively connected to one of said running circuits, and including a second contact arm mechanically secured to said first contact arm so as to be movable therewith and arranged to be selectively serially connected to one of said pairs of contacts thereby to complete one of said starting circuits, and means responsive to the direction of rotation of said motor, said responsive means being cooperable with said pairs of contacts and adapted to selectively open one of said pairs of contacts at a predetermined speed thereby to open the selected starting circuit so as to disconnect that one of said windings which is being energized through said condenser, the other of said pairs of contacts remaining closed whereby upon actuation of said switch the other of said circuits will be energized and a circuit will immediately be completed rapidly to reverse the direction of rotation of said motor.

2,748,333
INDUCTION MOTORS
Royal Lee, Elm Grove, Wis.
Application April 5, 1952, Serial No. 280,806
7 Claims. (Cl. 318—232)



4. In an induction motor having relatively rotatable core members with respective primary and polyphase secondary windings, and a speed-regulating switch rotatable with one of said core members and opening upon increase of motor speed and closing upon decrease of motor speed, said switch being connected in circuit with the phases of the secondary winding to interrupt current flow in each of said phases for controlling the speed of the motor.

2,748,334
VARIABLE SPEED INDUCTION MOTOR
George L. Miller, Hackensack, N. J., assignor of one-half to Frederick J. Miller, Hackensack, N. J.
Application February 6, 1953, Serial No. 335,419
3 Claims. (Cl. 318—243)

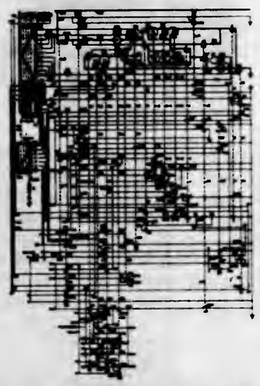


1. In a variable speed induction motor a stator disposed about a common axis, a rotor mounted within the stator to rotate about the common axis and to move longitudinally along said axis from a position wholly within said stator to a position in which it is partially withdrawn from said stator, a mass of magnetically responsive metal mounted adjacent said rotor to move longitudinally therewith from a position wholly within the stator to a position wholly without said stator, and means carried by the stator and operatively connected to the rotor for moving the rotor longitudinally along said axis, and means carried by the rotor moving means for moving the mass longitudinally along said axis relative to the rotor.

2,748,335
TRACTION-MOTOR CONTROL
George R. Purifoy and Frank H. Fowler, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application March 19, 1954, Serial No. 417,472
7 Claims. (Cl. 318—274)

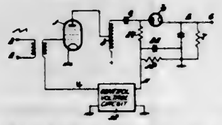
1. A motor-controlling assembly, including the combination, with a direct-current series-motor means to be controlled, said series-motor means including a motor-armature and a series main-field winding connected in series therewith, of: (*a*) a supply-circuit for the series-motor means; (*b*) a power-switch means, for establishing a power-circuit for energizing the series-motor means from the supply-circuit; (*c*) a braking-switch means, for establishing a dynamic-braking circuit for the series-motor means; (*d*) a progressively operating multi-step accelerating-controlling means, for controlling the accelerating-adjustment of the power-circuit during power-operating conditions; (*e*) a progressively operating multi-step braking-controlling means, for controlling the

braking-adjustment of the dynamic-braking circuit during dynamic-braking conditions; and (*f*) an electromagnetic limit-relay means, operable at times to stop the progressions of the accelerating-controlling means and the braking-controlling means during power-operating conditions and dynamic-braking conditions, respectively; said limit-relay means comprising: (*g*) a



shunt relay-coil which produces a substantial current-responsive operating-flux of the limit-relay means; (*h*) an inductive-impedance means, connected in series with a portion of the motor-circuit which is common to both the power-operating conditions and the dynamic-braking conditions; and (*i*) circuit-connections for connecting the shunt relay-coil in shunt across the inductive-impedance means.

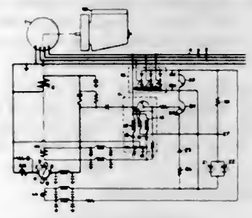
2,748,336
ELECTRIC CIRCUIT-ARRANGEMENT
José Jean Philippe Valeton, Bernardus Willem van Ingen Schenau, and Gerrit Jan Lubben, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application March 8, 1950, Serial No. 148,324
Claims priority, application Netherlands March 22, 1949
4 Claims. (Cl. 321—2)



1. Apparatus for deriving from an incoming variable voltage a control voltage which varies in the opposite sense, said apparatus comprising a closed series circuit constituted by a rectifying element in connection with an impedance element, means to supply said incoming voltage and an auxiliary alternating voltage whose amplitude is substantially constant and exceeds that of said incoming voltage to said closed series circuit to produce across each of said elements an alternating output voltage whose amplitude is dependent upon the instantaneous value of said incoming voltage, and means including an amplitude detector and coupled to one of said elements to derive said control voltage from said output voltage.

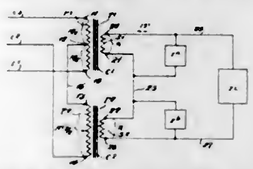
2,748,337
ELECTRICAL REGULATORS
Harry S. Sechrist and Murray Rosenblatt, Schenectady, N. Y., assignors to General Electric Company, a corporation of New York
Application May 14, 1953, Serial No. 355,042
4 Claims. (Cl. 321—16)

1. A device for regulating an electrical quantity comprising a metallic rectifier having a negative temperature coefficient resistance characteristic, a voltage comparison network comprising a source of substantially constant direct reference voltage having its negative terminal connected to the negative output terminal of said rectifier, a source of variable signal voltage comprising a voltage divider connected across the output terminals of said rectifier and having an intermediate voltage tap, network output voltage terminals connected to the positive terminal of



said reference voltage source and to said intermediate tap, and means for compensating the output voltage of said comparison network for variations resulting from variations in the ambient temperature of said rectifier comprising a second metallic rectifier included in said voltage divider between said negative terminal and said voltage tap and having a negative temperature coefficient resistance characteristic substantially identical with said characteristic of said first rectifier.

2,748,338
PHASE CONVERTER
James W. Williamson, Cleveland, Ohio
Application October 6, 1950, Serial No. 188,793
2 Claims. (Cl. 321—57)



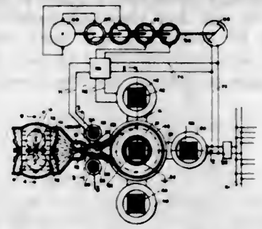
1. In apparatus of the type described, a pair of transformers each having first windings with n number of turns, said windings being connected in series with a single-phase electrical system which can be represented by a resistance R in parallel with a finite reactance X, one of said transformers having a center tapped second winding having N number of turns, said winding being connected across two lines of a three-phase electric system, the other transformer having a second winding with $\frac{1}{2}N\sqrt{3}$ number of turns, said last mentioned winding being connected across the third line of the three-phase system and the center tap of the first mentioned second winding, a reactance X_a electrically coupled with one of said first windings so as to be effectively in shunt therewith and a reactance X_b electrically coupled with said other first winding so as to be effectively in shunt therewith, said reactances having values when transferred to said first windings in relation to the square of the ratio of the voltages across the reactance and the respective first winding to satisfy the relationship

$$\frac{1}{X_b}-\frac{1}{X_a}=\frac{2}{R}$$

and a reactance X′ connected across terminals of said transformers having a voltage e_x' thereacross of the same phase as the voltage e_x across said single-phase electrical system and a value of

$$-X\left(\frac{e_x'}{e_x}\right)^2$$

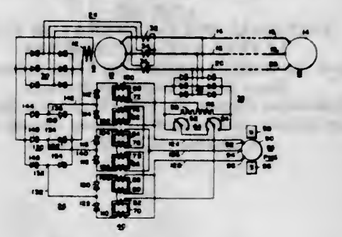
2,748,339
CHARGED PARTICLE A. C. GENERATOR
Reinhold Rüdenberg, Belmont, Mass.
Application August 17, 1951, Serial No. 242,286
32 Claims. (Cl. 322—2)



1. The method of converting into alternating current the energy of electrically charged particles emitted from a carrier of radiant atomic energy which includes periodically directing a bundle of said charged particles into substantially circular orbits around a magnetic flux and causing the particles to revolve thereabout, and by periodically changing said flux, decelerating the motion of said particles on said orbits and thus producing thereon, as a primary circuit, a convection current of periodically alternating particle velocity and causing said primary convection current by means of said magnetic flux to induce, in a conductive secondary circuit linked with said magnetic flux, a secondary alternating current, thus converting the kinetic energy of the decelerating particles into alternating current energy and finally leading off the charges of the de-energized particles.

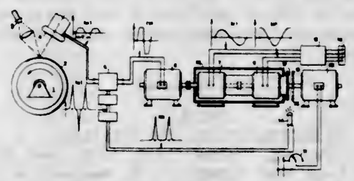
6. An apparatus for converting into alternating current energy the energy of electrically charged particles of great velocity collected in a bundle of unidirectional, substantially parallel rays, said apparatus including a toroidal vacuum chamber, an energy transformer comprising a magnetic core, a secondary winding on said core, network means for connecting said secondary winding to an alternating current network, said toroidal chamber being disposed upon and linked with said magnetic core; a conduit opening into said toroidal chamber for leading said bundle thereto; a deflector system being disposed about said bundle, a steering circuit with control and synchronizing means being connected to the deflector system for producing in said deflector a space field traversing said bundle and alternating rhythmically so as to steer said bundle in one direction into said chamber and thereon to deflect it into another direction; a guiding space field system including a pair of polarized field producing elements extended so as to confine between themselves a gap, said toroidal chamber being disposed in said gap, a guiding circuit system with control and synchronizing means for establishing a guiding space field between said polarized field producing elements and traversing said toroidal chamber and for controlling said guiding space field so as to vary in its intensity dependent upon the velocity of said particles thereby to cause the particles to revolve irrespective of their velocity on substantially constant circular orbits in the chamber as a closed orbital space; a magnetizing circuit coupled with said secondary winding of the energy transformer for producing in said energy transformer core a rhythmically alternating magnetizing field linked with said toroidal chamber and directed in relation to the sense of revolution of the particles in the chamber so that this field, during the decreasing and increasing periods of its cycles, decelerates the particles revolving in the chamber and charged thereto during other periods of the magnetizing field cycles; said toroidal chamber with the stream of decelerating particles revolving therein as a convection current forming the primary of said energy transformer and the kinetic energy of the decelerating particles being converted, by electromagnetic induction in the energy transformer, into alternating current energy to be supplied into said alternating current network from said secondary transformer winding.

2,748,340
EXCITATION SYSTEM FOR A VARIABLE FREQUENCY GENERATOR
Harry C. Brunner and Schuyler L. Bradley, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application November 19, 1952, Serial No. 321,338
5 Claims. (Cl. 322—24)



1. In an excitation system for a variable frequency generator in which the variable frequency generator supplies power to a load remote from the variable frequency generator, the combination comprising, two excitation circuits for the variable frequency generator, one of said two excitation circuits being responsive to generator load current, and the other of the said two excitation circuits comprising a rectifier having an input and an output, the input of the rectifier being responsive to the output voltage of the variable frequency generator, a bridge circuit having an input and an output, the output of the rectifier being connected to the input of the bridge circuit, an amplifier having a control input and an output, the output of the amplifier being connected to supply a portion of the generator excitation, and circuit means for connecting the output of the bridge circuit to the control input of the amplifier so as to control the output of the amplifier in accordance with the output current of the bridge circuit.

2,748,341
PHOTOELECTRICALLY CONTROLLED GENERATOR
Klaus Federn, Darmstadt, Germany, assignor to Carl Schenck Maschinenfabrik G. m. b. H., a corporation of Germany
Application February 26, 1953, Serial No. 338,984
Claims priority, application Germany March 4, 1952
5 Claims. (Cl. 322—26)



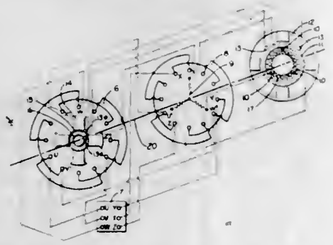
5. Electric apparatus for producing alternating current in synchronism with a rotation body, comprising a rotatable surface member with an annular surface zone having two zone sections of optically different reflectivity, a photoelectric pickup responsive to radiation reflected from said zone to produce a current pulse during each full rotation of said member, an amplifier connected to said pickup, a motor-generator set having a drive motor connected to said amplifier to revolve in synchronism with said pulses, said set having an alternating-current generator for providing a current wave in syn-

chronism with said pulses, an indicator mark on said set to revolve together therewith, phase-shift means connected with said set and having a structure rotationally adjustable about the axis of revolution of said set for phase displacing said generator current wave relative to said pulses, a reference mark disposed on said structure in relation to the revolving path of said indicator mark, a stroboscopic light source disposed for illuminating said two marks and connected with said amplifier for receiving therefrom voltage pulses synchronous with said current pulses.

2,748,342
INTERNAL POLE GENERATOR FOR ALTERNATING CURRENTS

Edmund van Kaick, Frankfurt am Main, Germany, and Hugo Hess, Zurich, Switzerland

Application August 27, 1952, Serial No. 306,644
Claims priority, application Germany August 28, 1951
4 Claims. (Cl. 322—28)



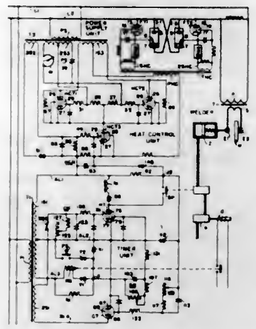
1. In an alternating current generator having a main stator winding, a shaft having a main rotor winding thereon which is rotated with the shaft to impress a voltage across said main stator winding and an exciter for the main rotor winding including an exciter armature on said shaft connected electrically to said main rotor winding, a collector ring and stationary poles; regulating means for maintaining a constant voltage output as the load across said main stator winding varies, said regulating means comprising an auxiliary stator winding, means for connecting said auxiliary winding in series with the main stator winding so that the voltage across said auxiliary winding varies in accordance with the load, a star-connected rotor winding on said shaft in operative association with said auxiliary stator winding so that a regulating current is induced in said star-connected winding which corresponds to the load and phase displacement angle of the generator, and means connecting said star-connected rotor winding to said collector ring of the exciter at points spaced 120° around the latter so that the exciting current for the main rotor winding is influenced by the current generated in said star-connected rotor to maintain the voltage output at a substantially constant value.

2,748,343
ELECTRONIC SEAM WELDER

Edward C. Hartwig, Walnut Creek, Calif., and Hubert W. Van Ness, East Aurora, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application September 4, 1953, Serial No. 378,444
11 Claims. (Cl. 323—36)

1. In combination a first conductor, a second conductor, a third conductor, means for impressing alternating potentials in opposite phase relationship between said first conductor and said second conductor and between said third conductor and said second conductor, first rectifier means, second rectifier means, third rectifier means, impedance means, inductive reactance means, means for connecting said first rectifier means to said second conductor poled so as to conduct positive current to said second conductor, means for connecting said second rectifier means and said reactance means in series between said first rectifier means and said third conductor, said second rectifier means being poled to conduct positive current from said third conductor to said first rectifier means, means for connecting said third rectifier means between said second conductor and said first rectifier means in a sense to conduct positive current from said

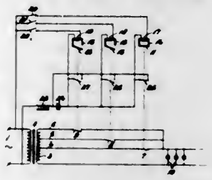


second conductor to said first rectifier means, means for connecting said impedance means between said third rectifier means and said third conductor, an electric discharge device having an anode, a cathode and a control electrode, a time constant network, means for connecting said anode and cathode between said first and second conductors respectively, and means for connecting said network between the junction of said third rectifier means and said impedance means and said control electrode.

2,748,344
TAPPED-TRANSFORMER SYSTEM

Theodorus Hebenkamp, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application June 29, 1953, Serial No. 364,746
Claims priority, application Netherlands July 31, 1952
2 Claims. (Cl. 323—43.5)

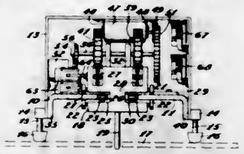


1. A device for selectively applying one of a plurality of predetermined voltages to a given load comprising a tapped transformer connected to a voltage source, said transformer having a secondary winding having a plurality of taps for providing said plurality of voltages, a switch connected between each of said taps and said load, an electromagnetic relay operatively coupled to each of said switches, a plurality of operating switches, each of said relays having an energizing winding connected to one of said operating switches, and a common lead including a series combination of an inductor and a capacitor connecting said relays via said operating switches to a source of alternating voltage, said inductor and said capacitor being tuned substantially to series resonance at the frequency of the voltage of said alternating voltage source, each of said electromagnetic relays having an auxiliary contact and means connecting said auxiliary contact to short-circuit said capacitor in the energized condition of the respective relay.

2,748,345
STANDING WAVE DEVICE

Edwin N. Phillips, Cedar Rapids, Iowa, assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa

Application February 2, 1953, Serial No. 334,626
8 Claims. (Cl. 324—58)

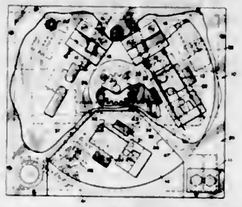


6. A system for reciprocating a probe carriage utilized in a standing wave indicating device comprising, a portion of waveguide formed with a longitudinal slot, a track mounted on said waveguide adjacent to said slot, the probe carriage slideably supported on said track, sprocket means supported by said waveguide, chain means connected to said carriage and engaged by said sprocket means, an electric motor supported by said waveguide and connected to drive said sprocket means, a plurality of limit switches mounted adjustably on said waveguide adjacent said slot, relay means electrically connected to said limit switches and motor to reverse said motor upon actuation of said limit switch by said carriage, and a control switch connected serially with said motor to start-stop and reverse it.

2,748,346
APPARATUS FOR TESTING ARTICLES

Vincent C. Lafferty, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York

Application June 7, 1954, Serial No. 434,989
10 Claims. (Cl. 324—73)



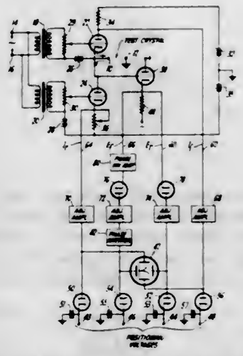
3. A testing apparatus, which comprises an oscillatory shaft, a turntable sector keyed to the shaft and movable thereby through a predetermined path, a pinion keyed to the shaft, a rack meshing with the pinion, first article-testing means positioned at one end of the path of movement of the sector, second article-testing means positioned at the other end of the path of movement of the sector, first article-holding means on the sector for moving an article to the article-testing means, second article-testing means on the sector for moving an article into engagement with the second article-testing means, a solenoid operable by the first testing means for pulling the rack in a direction such that the sector swings that article away from the first testing means and a second article to the second testing means, and a second solenoid operable by the second article-testing means for pulling the rack in the opposite direction.

2,748,347
ELECTRICAL TEST CIRCUITS

Francis E. Flaherty, Dorchester, Mass., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts

Application May 27, 1950, Serial No. 164,648
7 Claims. (Cl. 324—158)

2. A test circuit for a two-terminal non-linear electrical device, said circuit having branch circuits for impressing electrical potential of alternating polarity and variable magnitude on the terminals of the test device and including unidirectionally conductive devices poled oppositely in the respective circuits and means impressing time-varying electrical energization in said circuits when conductive, resistors in each of said branch circuits, and means for displaying separately the current-voltage characteristics of the test device in each direction of conductivity including direct connections to said test de-

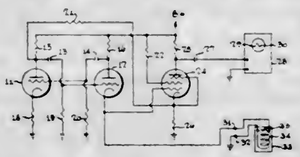


vice to obtain signals representing the applied voltage and connections to said resistors to obtain signals representing the corresponding currents passed by said test device in each direction, the displaying means including a single beam cathode-ray tube having a horizontal pair of the deflection plates and a vertical pair of deflection plates, said resistors each having a connection to a respective one of said vertical plates and said test device having alternately conductive connections to said horizontal plates in alternation.

2,748,348
TESTING GEOPHONE PERFORMANCE

Ed Raymond McCarter, Tulsa, Okla., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application May 7, 1952, Serial No. 286,652
6 Claims. (Cl. 324—158)



1. An apparatus for checking the performance of a geophone comprising a pulse source automatically furnishing periodic electrical pulses, means feeding said pulses through the coil of the geophone and means for measuring the wave forms of the pulses generated in the geophone as the result of said periodic pulses.

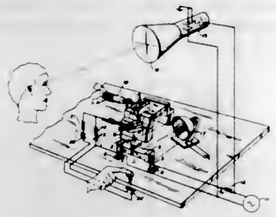
2,748,349
FABRICATION OF JUNCTION TRANSISTORS

Emil Dickten, Jr., Totowa, Richard P. Riesz, Morristown, and Robert L. Wallace, Jr., Plainfield, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application February 4, 1955, Serial No. 486,073
5 Claims. (Cl. 324—158)

1. The method of determining the exact location, on a semiconductor body of which the end portions are of one conductivity type, of an intermediate zone of opposite conductivity type, which comprises applying a voltage

from end to end of said body, engaging a probe with said body, biasing said probe in the reverse polarity with respect to the material of said intermediate zone, advancing said probe in steps over the surface of said body, causing a momentary current pulse to flow through said probe to said body after each step, thereby to establish



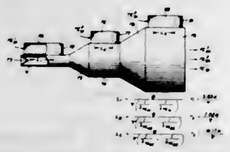
ohmic contact between said probe and said body, measuring the current flowing through said body, and noting the location of said probe on said body at which the current flowing through said body is significantly modified by the joint influence of the bias on said probe and of said current pulse.

2,748,350

ULTRA-HIGH FREQUENCY SELECTIVE MODE DIRECTIONAL COUPLER

Stewart E. Miller, Middletown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application September 5, 1951, Serial No. 245,210
34 Claims. (Cl. 333—10)



1. A selective mode transducer for multimode high frequency electrical transmission systems comprising a first shielded transmission line having a transverse cross-section, said line adapted to support wave energy in a plurality of modes of propagation including a first mode, said line having a guide wavelength λ_1 for said first mode, a second transmission line located adjacent said first line and coupled with a given coupling distribution to said first line over a longitudinal length of said lines, said second line having a transverse cross-section of dimensions different from those of said first line cross-section, said dimensions of said second line providing a guide wavelength for a second mode of propagation therein substantially equal to said λ_1, said first mode and said second mode being different modes of wave energy propagation, said longitudinal length of coupling being substantially equal to

$$\frac{\theta}{\left(\frac{1}{\lambda_1}-\frac{1}{\lambda_2}\right)}$$

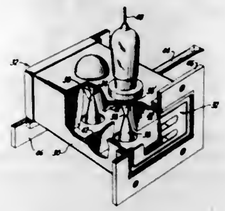
wherein θ is at least the value of the periodic angle of the Fourier transform of said coupling distribution at which the characteristic of the transform first passes through zero, wherein λ_2 is the guide wavelength of a mode of said plurality nearest said λ_1, whereby wave energy propagated in said second mode in said second line will be transferred to said first mode in said first line and all other modes of said plurality will be suppressed in said first line.

2,748,351

MICROWAVE WINDOWS AND GASEOUS DEVICES

Lawrence J. Varnerin, Jr., Milton, Mass., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts

Application December 19, 1950, Serial No. 201,535
12 Claims. (Cl. 333—13)



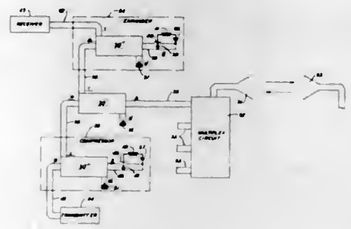
1. A microwave transmission control unit including a length of wave-guide and a window sealed across an end thereof, said window including a metal frame portion and plural openings therein, all of said openings having parameters selected to provide window resonance at a predetermined operating frequency and being sealed by glass closures and said openings having a free transmission path therebetween at each of the opposite sides of the windows.

2,748,352

NON-RECIPROCAL WAVE TRANSMISSION NETWORKS

Stewart E. Miller, Middletown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application December 27, 1951, Serial No. 263,600
7 Claims. (Cl. 333—14)



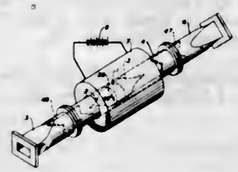
1. Apparatus for modifying the range of applied electro-magnetic wave energy which is subject to variation in amplitude level over a range, said apparatus comprising connected sections of wave guide each adapted to support said wave energy in a plurality of polarizations, a pair of polarization-selective connections at one section of said guide each coupled to one of a pair of orthogonal polarizations of wave energy therein, a polarization-selective connection at another section of said guide coupled to a polarization of wave energy therein related by an angle to one of said polarizations in said one section, means for applying said wave energy to one of said connections, a load circuit connected to a second of said connections, an impedance which is non-linear with respect to the amplitude of said wave energy connected to the remaining connection, said impedance being matched to said remaining connection only for an amplitude level of said applied wave energy at an extreme of said range of variation, an antireciprocal rotator for producing a Faraday-effect rotation of the polarization of said energy interposed in a section of said guide between said one and said other sections.

2,748,353

NON-RECIPROCAL WAVE GUIDE ATTENUATOR

Clarence L. Hogan, Madison, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Original application May 26, 1951, Serial No. 228,379. Divided and this application October 22, 1951, Serial No. 252,432
1 Claim. (Cl. 333—81)



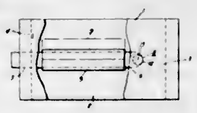
A nonreciprocal electromagnetic wave transmission device comprising first and second sections of wave guide adapted to support wave energy in orthogonal polarizations, a polarization-selective wave guide connection for said first section adapted to couple to and from one of said polarizations in said first section, a polarization-selective wave guide connection for said second section adapted to couple to and from one of said polarizations in said second section that is related by an angle to said one polarization in said first section, an antireciprocal rotating element for rotating the plane of polarization of said energy by said angle interposed between and connecting said sections, a first vane of resistive material disposed in said first section in a plane that is normal to said one polarization therein to dissipate a major portion of the wave energy originating in said second section and rotated into the other of said polarizations in said first section on passing through said rotating element, the edges of said first vane inherently reflecting a minor portion of said last defined energy back toward said rotating element, and a second vane of resistive material disposed in said second section in a plane that is related to the plane of said first vane by said angle of rotation to dissipate said wave energy reflections from the edges of said first vane.

2,748,354

WIDE BAND TELEVISION TUNING CIRCUIT

Norman T. Lavoo, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

Application May 31, 1950, Serial No. 165,163
2 Claims. (Cl. 333—82)



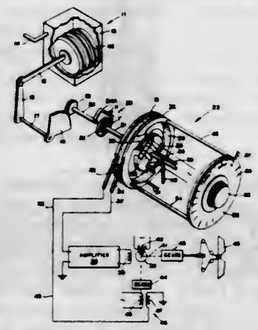
1. A high frequency tuning circuit tunable over a frequency range comprising a pair of flat metallic plates located in parallel planes and short-circuited at one end, a flat metallic strip located in a third plane, said third plane being parallel to said pair of parallel planes and being located therebetween, means opposite said one end forming a high frequency short circuit and a direct current insulator between said strip and plates for mounting said strip in said third plane, said circuit being resonated at the high frequency end of the tuning range by the position of said mounting means, a pair of dielectric slabs located between said strip and said plates, the amount of said slabs located between said strip and said plates being adjustable to tune said circuit.

2,748,355

ALTITUDE RESPONSIVE SIGNAL GENERATOR

John Jarvis, Dumont, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware

Application March 9, 1951, Serial No. 214,799
2 Claims. (Cl. 336—30)



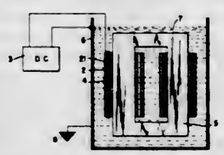
1. An altitude preselecting device for aircraft comprising a base, altitude response means having an end fixed to said base and the other end movable relative to said one end in response to change in altitude, an inductive device having rotor and stator elements which are rotatable relative to each other for producing an electrical output corresponding in phase and amplitude to the direction and extent of relative rotation, motion transmission means connecting said other end of said altitude responsive means and rotor element for rotation of said rotor element by said altitude responsive means in response to change in altitude, means for rotating said stator element to a position corresponding to a selected altitude, means for limiting the relative rotation of said rotor and stator elements to a predetermined extent whereby the amplitude of said output is limited and said rotor element is rotated with said stator element after said stator element is rotated said predetermined extent relative to said rotor element, and said transmission means including torsion storing over-travel means, whereby the relative rotation of said rotor element and said altitude responsive means due to said stator element is absorbed by said overtravel means without injury to said altitude responsive means.

2,748,356

ELECTRO-CONVECTION COOLING OF TRANSFORMERS AND THE LIKE

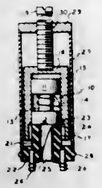
Frank J. Kaehni, Cleveland, Ohio, assignor, by mesne assignments, to The Electric Heat Control Company, Youngstown, Ohio, a corporation of Ohio

Application July 26, 1951, Serial No. 238,733
14 Claims. (Cl. 336—58)



1. In apparatus of the character described, the combination of a casing adapted to contain a fluid, an element within the casing and from which heat is to be removed, a fluid in the casing in contact with said element, and means including a source of high potential unidirectional current for subjecting the fluid adjacent said element to a high potential unidirectional electrostatic field.

2,748,357
TUNABLE INDUCTOR
Arthur Garcia, Cincinnati, Ohio, assignor to Avco Manufacturing Corporation, Cincinnati, Ohio, a corporation of Delaware
Application August 27, 1953, Serial No. 376,845
14 Claims. (Cl. 336—83)



1. A variable radio-frequency inductor comprising a cylindrical magnetic bobbin, a coil on said bobbin, said bobbin having a shoulder of predetermined diameter at each end thereof, a hollow magnetic one-piece sleeve extending completely over said bobbin, said magnetic sleeve having a length greater than that of said bobbin and an internal diameter generally substantially equal to said predetermined diameter to provide a contacting fit but being formed with an enlarged annular bore opening out into one end thereof, and means for relatively axially moving said sleeve and said bobbin to move one of said shoulders into said enlarged bore.

2,748,358
COMBINATION OIL WELL TUBING AND ELECTRICAL CABLE CONSTRUCTION
Daniel S. Johnston, Rolling Hills, Calif., assignor to Signal Oil and Gas Company, Los Angeles, Calif., a corporation of Delaware
Application January 8, 1952, Serial No. 265,424
5 Claims. (Cl. 339—16)



1. In combination, a stand of pipe having an integral externally threaded tool joint pin element positioned at one end thereof and an integral internally threaded tool joint box element positioned at the other end thereof, said pin and box elements being adapted to threadingly mate directly with box and pin elements respectively of other similar stands of pipe, a flexible electrical cable section extending through said first stand of pipe, said cable having electrical coupling means comprising prong and socket connectors at each end adapted to mate with complementary coupling means of cable sections extending through said other stands of pipe, and means positioned adjacent one of said elements of said first stand supporting said first cable section adjacent one end thereof, said last mentioned means and cable section supported thereby being formed to provide a passage within the stand carrying the same to permit fluid flow throughout the length of this stand, said first cable depending with one of its connectors freely from said supporting means with its other end extending freely beyond the other of said first stand elements, whereby said extending cable section end may be united with a complementary coupling means of an end of a cable section extending through a similar axially juxtaposed stand, and the adjacent elements of the juxtaposed stands may be directly united to provide a continuous fluid conduit with independently supported cable sections therein.

2,748,359
ELECTRICAL CONNECTOR
Raymond A. Swan, St. Louis, Mo., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application January 24, 1952, Serial No. 268,031
1 Claim. (Cl. 339—28)



An electrical connector comprising a push-pull type of contact adapted to coact with a mating contact on a mobile support to establish an electrical connection, handle means associated with the contact to permit ready manipulation of the contact in either direction along a push-pull axis, two-ended electrical conduit means having a conduit axis and electrically connected at one end to the contact with the conduit axis substantially at right angles to the push-pull axis, and a second push-pull contact at the other end of the conduit, the push-pull direction of disengagement of the second contact being parallel to the conduit axis.

2,748,360
ELECTRIC CONNECTING CORD FOR PHOTOFLASH UNITS
Morris Schwartz and William Castedello, Plainville, Conn., assignors to The Kalart Company Inc., Plainville, Conn.
Application March 31, 1953, Serial No. 345,910
9 Claims. (Cl. 339—31)

3. A connecting cord for connecting a photoflash unit with a socket on the casing of a photographic camera, the said cord comprising two electric wires electrically insulated from each other, an inner contact sleeve permanently connected with one of said wires, the said sleeve being formed with at least one circumferential groove in its outer wall, a contact pin permanently connected with the other wire and fixedly disposed within said sleeve coaxially therewith and electrically insulated therefrom, an outer contact sleeve coaxially slideable upon said inner sleeve, and retaining means for releasably retaining said outer sleeve in a predetermined position relative to said inner sleeve, said retaining means comprising a locking nose releasably engageable with said groove, the said inner sleeve and the said contact pin forming an inner plug and the said outer sleeve when in contact with said inner sleeve and the said contact pin forming an outer plug, the said plugs being selectively insertable in corresponding sockets on the camera casing.

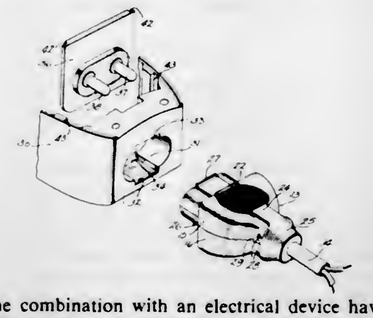
2,748,361
ELECTRIC CABLE COUPLING DEVICES
Henry Johnson Dixon, West Kirby, and Arthur Glyn Gauterin, Liverpool, England, assignors to British Insulated Callender's Cables Limited, London, England, a British company
Application June 13, 1950, Serial No. 167,744
Claims priority, application Great Britain July 4, 1949
13 Claims. (Cl. 339—64)

1. A detachable two-part multiple pin and socket coupling comprising a pair of moulded bodies of inelastic insulating material, a multiplicity of pin contacts having socket-engaging parts of solid circular section and held by being embedded in one of said bodies, a corresponding number of socket contacts each embedded substantially throughout the length of its socket portion in the other of said bodies, said pin contacts having elastically deflectable portions projecting beyond a face of the body in



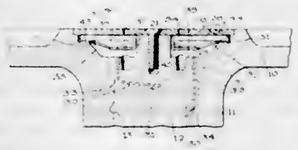
which they are held by a distance approximately at least equal to twice the axial length of the sockets which receive them, whereby when the two parts of the coupling are fully engaged, at least the rear half of the projecting part of each pin contact is left laterally unsupported by the moulded insulating material, the diameter of the laterally unsupported rear half being small relative to its length.

2,748,362
QUICK DETACHABLE ELECTRICAL CONNECTION
Mathew Andis, Racine, Wis., assignor to Andis Clipper Co., Racine, Wis., a corporation of Wisconsin
Application August 19, 1950, Serial No. 180,445
22 Claims. (Cl. 339—75)



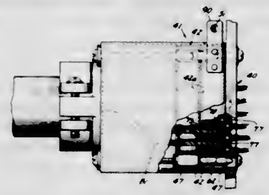
1. The combination with an electrical device having a socketed body of an electrical connector receivable in the socket for electrical connection to the device, said connector comprising a plug and a cord coupled thereto, and a resilient clip forming a releasable mechanical connection between the connector and the body, said clip being anchored at one end to the connector where the cord is coupled to the plug and extending from said anchorage along the exterior of the plug and into said body socket, said anchorage comprising a resilient member biased to bow said clip away from the connector whereby on pressure toward the connector the clip is releasable from the body.

2,748,363
PUSH-IN TYPE TERMINAL UNIT FOR LAMP RECEPTACLES
Victor R. Despard, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Syracuse, N. Y., a corporation of New York
Application June 25, 1954, Serial No. 439,280
9 Claims. (Cl. 339—95)



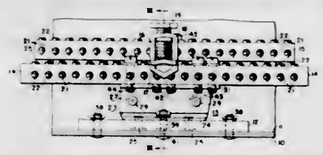
1. A push-in type wire gripping terminal for electric wiring devices comprising in combination, a base of insulating material having a depression therein, a sheet metal wire gripper comprising wings with spaced parallel adjacent edges and each having one end attached to a conductor strap, the opposite ends of said wings being free and each having a foot normal thereto, said wings being inclined laterally and oppositely to guide a wire end into the slot between and spacing said wings, the outer edges of said wings being confined against lateral spreading by engaging the walls of said depression below the surface of the said base, and a cover for said base adapted to hold the said gripper in position thereon, said cover having an opening therein for the entrance of a wire into said slot, said wing feet substantially engaging said cover to prevent misalignment of the wings or wire cut-off on excessive withdrawal tension.

2,748,364
ELECTRICAL CONNECTORS
Lawrence J. Kamm, Yonkers, N. Y.
Application October 20, 1951, Serial No. 252,333
20 Claims. (Cl. 339—176)



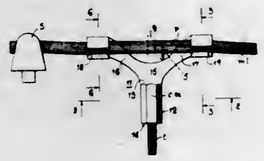
5. An electrical connector assembly comprising a pair of mating groups of superposed spaced multiple-contact units having alined contacts on the sides thereof, at least certain of said units being transversely compressible and said units being mutually movable in said transverse direction to compress said compressible units and to compact the superposed units to bring said alined contacts into firm engagement, resilient means to separate said units and to maintain said groups in uncompacted condition for easy mating, means generally parallel to said units for transmission of pressure to the contacts thereof, and means to apply pressure to said transmission means to compact said groups when said units are superposed and said contacts alined.

2,748,365
NEUTRAL BAR ASSEMBLY
Willis A. Speck, Union, N. J., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application August 30, 1952, Serial No. 307,283
10 Claims. (Cl. 339—198)



1. In a neutral bar assembly, in combination, a base, a generally L-shaped member having one leg secured to the base, a second L-shaped member having one leg secured to one leg of the first member and the other leg disposed parallel to and spaced from the base, an integrally formed tongue on the first member extending parallel to and spaced from the base, and a neutral bar attached to the part of one of said members which is disposed parallel to the base, said other parallel extending part being available for the addition of a second neutral bar.

2,748,366
Y-SHAPED WIRE AND CABLE TAP
Martin D. Bergan, Westfield, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a corporation of New Jersey
Application July 10, 1952, Serial No. 298,090
10 Claims. (Cl. 339—243)



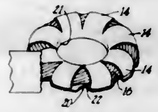
4. A one-piece metallic casting forming a connector for connecting a tap wire electrically to a main line at any point along the same without cutting the main line, said casting being of substantially Y-form and including a vertically extending post and two widely spreading arms projecting in opposite directions upwardly and outwardly from the upper end of the post, said arms at their outer ends forming massive saddles U-shaped in cross section prior to being secured to the main line and each provided therein with an open-sided slot with at least one of the slots facing downwardly, said slots being in alignment and adapted to receive the main line therein through the open sides of the slots and the center of mass of the connector being in the post and below the saddles whereby when the connector is hung with its downwardly-facing slot hooked over the main line the post will extend vertically, and means carried by the post for securing a tap wire thereto in position to cause the tap wire to act as a weighted tail and tend to keep the connector in the vertical plane containing the conductor before the connector is secured to the conductor and the sides of the saddles outlining the slots being of relatively narrow width with their free ends forming inwardly inclined guide faces and said sides forming fingers sufficiently ductile to permit them to be bent inwardly each over its associated slot and with their inclined faces in end-to-end contact to form the sides circular in cross section and to condense therein the portion of the main line crimped thereby.

2,748,367
ELECTRICAL CONNECTOR
Robert K. Schelke and Carl M. Huth, Richmond, Ind., assignors to Belden Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application February 28, 1952, Serial No. 273,954
13 Claims. (Cl. 339—252)



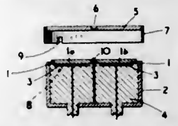
1. In combination, a lead wire which includes an electrical conductor, an electrical terminal connector having a tubular section adapted to receive a bared end portion of said conductor, a compression-resisting sleeve member disposed within said conductor-receiving portion, an end portion of the electrical conductor of said lead wire extending between the outer surface of said sleeve and the inner surface of said conductor-receiving section, and said conductor, said sleeve and the conductor-receiving section of said terminal connector being united by crimped-in sections formed therein.

2,748,368
ELECTRIC WIRE TERMINALS
Sylvester L. Gookin, Cohasset, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application April 13, 1953, Serial No. 348,477
5 Claims. (Cl. 339—276)



1. A wire terminal comprising an eye formed by looping the free end of a wire in a given circular direction, and a clenched eyelet the throat of which is installed within the eye, the eyelet having a crowned flange and deflecting means on the wire engaging side of the flange for jamming the wire of the eye against the throat portion to thereby prevent the wire from being pulled free from the eyelet.

2,748,369
TRANSDUCER
Charles Norman Smyth, London, England, assignor to The Birmingham Small Arms Co. Limited, Birmingham, England, a British company
Application December 7, 1951, Serial No. 260,529
5 Claims. (Cl. 340—10)



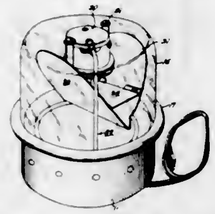
1. An electromechanical device suitable for use in sound-wave-ranging apparatus consisting of two juxtaposed sections of a piezo-electric crystal slab which is cut into two sections and mounted side by side in a common housing, one of said crystal sections having upon one of its faces at least one electrode connected to a pulse generator and the other crystal section having at least one electrode connected to the receiver amplifier, the other face of the crystal section connected to the said pulse generator being operative to transmit an interrogating pulse through a medium which is under investigation.

2,748,370
SEISMOMETER
Robert W. Baltosser, Tulsa, Okla., assignor to Seismograph Service Corporation, Tulsa, Okla., a corporation of Delaware
Application June 26, 1951, Serial No. 233,605
15 Claims. (Cl. 340—17)



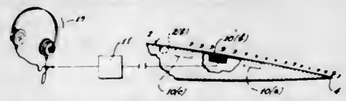
1. In apparatus for use in seismic geophysical exploration comprising a cup-shaped casing, a magnet assembly comprising a permanent magnet, a pole piece and a pole ring assembled to define an annular air gap between said pole piece and said pole ring having a substantially uniform radial flux distribution thereacross, means including an annular coil disposed in said air gap, means comprising a pair of flat disk suspension springs, means for supporting said springs within said casing, means for connecting the central portions of said springs together and to said means including said annular coil thereby to support said coil within said air gap for relative movement with respect to said magnet assembly, at least one element of said magnet assembly, said means for supporting said springs, and said springs, all having a diameter closely conforming to the internal diameter of said casing and being arranged in a stack in predetermined superimposed relationship in said casing, and means engageable with said casing for applying pressure to one end of said stack and comprising the sole means for holding said stack in assembled relationship, and in accurately related positions whereby said annular coil is concentrically disposed in said air gap regardless of the relative positions of said coil and magnet assembly as determined by said flat disk suspension springs.

2,748,371
SIGNAL LIGHT
Joseph E. Wilcox, Redwood City, and Evan A. Jensen, San Carlos, Calif., assignors to United Air Lines, Inc., Chicago, Ill., a corporation of Delaware
Application July 6, 1953, Serial No. 366,190
5 Claims. (Cl. 340—25)



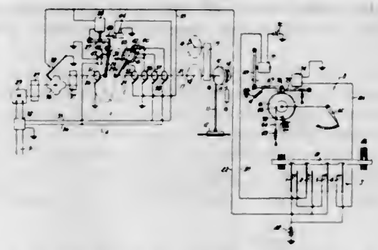
1. A signal light comprising a light source for emitting a circular beam of substantially parallel rays, a reflector arranged in said beam, and means for moving said reflector through a fixed cycle of movement whereby the beam of right reflected therefrom may trace a fixed pattern in space, said reflector being tilted about a diameter of said circular beam with respect to a plane perpendicular to said beam, said reflector being curved in a direction to produce a given angle of dispersion of the beam of light reflected therefrom as measured in a plane containing the axis of said circular beam and perpendicular to said diameter, such curvature of said reflector being of smaller radius in the portions thereof adjacent said diameter than in the portions thereof remote from said diameter.

2,748,372
STALL WARNING DEVICE
Charles N. Bunds, Jr., Compton, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application October 16, 1953, Serial No. 386,515
4 Claims. (Cl. 340—27)



1. A stall warning indicator for an aircraft having upper and lower skin sheets and a leading and trailing edge, electrical pickup means enclosed wholly within said wing and coupled with the under surface of said upper skin to respond to turbulent flow vibration of said skin as air flows thereover in flight, and an indicator responsive to the output of said electrical pickup means.

2,748,373
TELEMETERING SYSTEM FOR REMOTE INDICATION
Ellsworth A. Hosmer, Kenwood, Calif., assignor, by mesne assignments, to Shand and Jurs Company, Berkeley, Calif., a corporation of California
Application September 2, 1952, Serial No. 307,444
2 Claims. (Cl. 340—151)

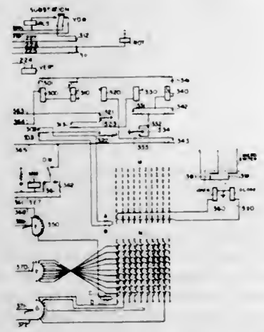


1. In a system of the character described, a sending station and a receiving station, circuit means including a single conductor interconnecting said stations, an element at said sending station arranged to be displaced from a base position in accordance with a variable quantity, a first member at said sending station arranged to be displaced a distance proportional to the displacement of said element, a movable second member at said sending station cooperating with said first member, pulsing contacts at said sending station and in said circuit means, motive means for moving said second member from a starting position and operating said pulsing contacts in synchronism therewith to generate a number of pulses in said circuit means proportional to the displacement of said second member, stopping means on said first member engageable by said second member when it reaches a position corresponding to the position of the first member for stopping said motive means and thereby terminates said pulses, an indicating member at said receiving station movable from an initial position to a position to indicate the displacement of said element, means at the receiving station responsive to said pulses to so position said indicating member, selectively operable means at said receiving station operable to start said motive means when said second member is in its starting position, operable to initiate return of said second member from said stopping means to said starting position, and operable to reset said indicating member to its initial position, and means for stopping said second member at its starting position.

2,748,374
REMOTE CONTROL SYSTEM
Leonard F. Crabtree, Downers Grove, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Application January 7, 1953, Serial No. 329,957
3 Claims. (Cl. 340—163)

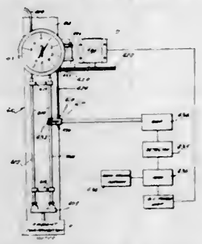
1. In a remote control system having a control position, a substation having a plurality of apparatus units, a switching means in the substation, conductors interconnecting said control position and said switching means, manually operated means at the control station for seizing said switching means over one of said conductors, means at the control station for transmitting impulses to said switching means via said one of said conductors corresponding to a plurality of digits, said switching means operated in accordance with the impulses received from said control position for selecting one of said plurality of apparatus units, a scanning switch in the substation having a plurality of banks of contacts, each of several of said banks corresponding to a different digital sequence, means including said switching means for marking in each of said several banks a contact corresponding

to one digit of said number in its digital sequence, means for time releasing said switching means, means for operating said switch for finding each of said marked contacts in sequence and for sending timed pulses to said control position via another of said conductors dependent on said marked contacts and corresponding in number and in sequence to the digits dialled for thereby indicating that said selection was properly made, means for automatically cutting off the timed pulses and said switch after one operation thereof to prepare a circuit



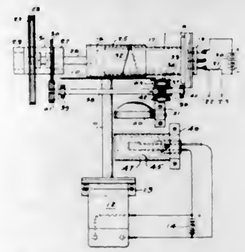
to the said switching means, means controlled over said circuit to prepare another circuit to the selected apparatus unit, said manually operated means operated to its normal position for initiating the operation of said time releasing means via said first of said conductors to initiate the release of said switching means, and means controlled by the release of part of said switching means for completing said prepared circuit for said selected apparatus unit before the switching means is completely released.

2,748,375
CALIBRATION DEVICE
Thomas Lee Fischer, South Gate, Calif., assignor to Standard Coil Products Co., Inc., Los Angeles, Calif., a corporation of Illinois
Application June 21, 1952, Serial No. 294,801
3 Claims. (Cl. 340—187)



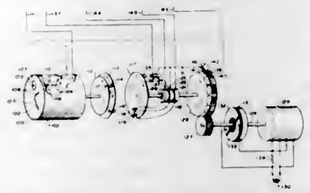
1. In a radiosonde calibration device comprising a visual pressure indicating instrument, a pressure responsive fluid column, the height of said fluid column changing with variations of pressure in conjunction with indications in said visual indicating instrument, means for recording said variations in height in said fluid column, a carriage movable along said column, said means being mounted on said carriage, an oscillator also mounted on said carriage, said oscillator comprising an oscillator coil, said coil being wound loosely around said column, the frequency of oscillation of said oscillator being a function of the amount of fluid enclosed by said coil, an amplifier for amplifying the output from said oscillator, a filter circuit connected to the output of said amplifier for transforming the amplified frequency variations of said oscillator into amplitude variations, a detector connected to the output of said filter and detecting the amplitude modulated signals from said filter, means compensating the variations in amplitude of the output signals from said oscillator, an amplifier stage being connected to the output of said diode detector and said compensating means, a second stage of amplification directly coupled to the output of said first stage of amplification, a follow-up motor for moving said carriage together with said fluid at variations of pressure, the windings of said follow-up motor being connected to the output of said direct coupled amplifier, means overcoming the friction of said carriage and of said mechanical coupling means, said means comprising a multi-vibrator circuit, the output from said multi-vibrator circuit being applied to the first stage of said direct coupled amplifiers, said multi-vibrator causing said follow-up motor to move back and forth to overcome the friction of said carriage and of said mechanical coupling means.

2,748,376
ELECTRONIC CODING DEVICE
Claude R. Daum and Robert H. Kuemmich, Boulder, and Walter U. Garstka, Denver, Colo.
Application July 15, 1953, Serial No. 368,242
12 Claims. (Cl. 340—190)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In combination plane spiral means, means for rotating said spiral means at a substantially constant rate of speed about the axis of said spiral, helical means mounted adjacent to said spiral and on an axis at right angles to the axis of said spiral, means for angularly positioning said helical means in accordance with certain intelligence, a stationary cylinder having a linear slot on a predetermined plane including the axes of the spiral means and the helical means, and light responsive means for producing an indication when any part of said spiral means and any part of said helical means coincides on the predetermined plane.

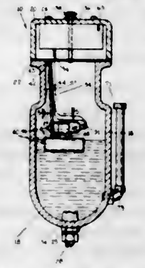
2,748,377
TELEMETERING TRANSMITTER
Joseph W. Gratian, Rochester, N. Y., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Original application February 1, 1952, Serial No. 269,496, now Patent No. 2,730,699, dated January 10, 1956. Divided and this application August 25, 1953, Serial No. 378,525
8 Claims. (Cl. 340—206)



1. In a telemetering system, the combination of a plurality of index members having a common axis and

mounted for independent rotation about said axis; a plurality of magnetic means, each of said magnetic means being mounted for rotation with individual ones of said index members about said axis; a continuously-rotating scanning member; a plurality of magnetic pickup means located on said scanning member, the individual ones of said magnetic pickup means being mounted for encounter with the corresponding individual ones of said magnetic means at least once in each scanning period, whereby said encounters cause pulses to be induced in each said pickup means, said pulses occurring at random times relative to each other, depending on the relative positions of said index members; and means for combining pulses from each said pickup means into a single waveform such that in case of time coincidence of an individual pulse from one of said pickup means with an individual pulse from another of said pickup means there results a single pulse having an amplitude substantially the same as that of the larger of the said individual pulses.

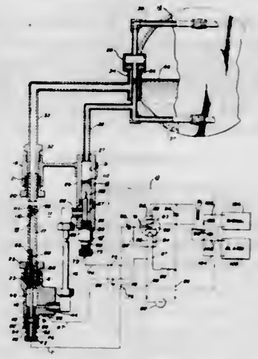
2,748,378
BRAKE FLUID LEAK DETECTORS
Joseph S. Feins, New York, N. Y.
Application February 12, 1953, Serial No. 336,495
1 Claim. (Cl. 340—244)



A self-contained brake fluid leak detector device for a vehicle having a hydraulic brake system which comprises a housing having a bottom container of conductive material adapted to be connected to and grounded upon a metal part of the vehicle and a cover plate removably secured to the bottom container to close the same, a partition wall dividing the housing into two compartments, one of said compartments adapted to contain brake fluid and provide a reservoir therefor, conduit means adapted to connect the housing and the fluid compartment to the vehicle brake system, the other compartment providing a dry space isolated from the reservoir compartment, an electrical alarm device mounted in said other compartment and having two electric terminals, a float suspended in said reservoir compartment and means for mounting the float upon the interior of the housing for pivotal movement about an axis running parallel to the longitudinal axis of the vehicle, a mercury switch mounted upon the float and having two terminals, one of said switch terminals grounded to said housing, a wire extending between the compartments and from the other of said switch terminals to one of the alarm device terminals, and an outlet wire extending out of the housing from the other terminal of the alarm device and adapted for attachment to an electric source upon the vehicle.

2,748,379
LONG PROBE MANOMETER
John Rowland Brown, Cleveland, Ohio, assignor to The Reliance Gauge Column Company
Application May 5, 1953, Serial No. 353,159
13 Claims. (Cl. 340—244)

1. A gauge adapted for electrical connection to an indicator mechanism and hydrostatic connection to a reservoir for electrically indicating the liquid level in said reservoir, said indicator mechanism being responsive to a change in electrical impedance on the input thereof, said gauge comprising a generally U-shaped housing having first and second generally upright legs and an offset fluid connection therebetween, first and second surfaces defining generally upright calibration bores in said first and second legs, respectively, first and second openings in the bottom of said first and second legs and substantially concentrically aligned with said bores, the bottom of said first leg being at a level below that of the bottom of said second leg, said offset fluid connection interconnecting the interior of said bores at locations other than at said openings, the wall of said second calibration bore being electrically conductive, a first probe concentrically disposed in said first opening of said housing, said probe including a conducting rod extending into said first calibration bore and an insulating sleeve concentrically surrounding said rod for a distance substantially greater than the diameter of said

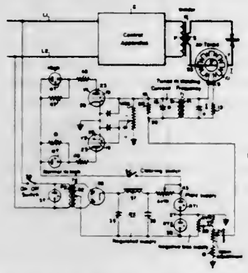


sleeve, a conducting ground sleeve connected to said housing and surrounding part of and spaced from said rod for substantially the entire exposed length thereof, a second probe concentrically disposed in said second opening of said housing, said second probe including a second conducting rod extending into said second calibration bore and a second insulating sleeve concentrically surrounding said second rod for a distance substantially greater than the diameter of said sleeve, said ground sleeve and the wall of said second calibration bore being connectable to a common conductor, said probes and said common conductor adapted to be connected to said indicator mechanism input, both of said probes adapted to be contacted by first and second fluids having different electrical impedances in accordance with different liquid levels in said reservoir, said fluids subject to being contaminated by foreign substances, and movement of said fluids being longitudinal of said rods and sleeves to wash clean said probes of foreign substances to inhibit false indications.

2,748,380
RESISTANCE WELDING CURRENT INDICATING DEVICE
William N. Platte and William L. Roberts, McKeesport, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application June 26, 1952, Serial No. 295,644
18 Claims. (Cl. 340—253)

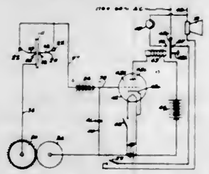
1. A resistance-welding current indicator including an air toroid adapted to be coupled to the welding circuit; an integrating network connected to said air toroid; a resonant network connected to said integrating network; a first discharge device having a pair of principal electrodes and a control electrode; a second discharge device having a pair of principal electrodes and a control electrode; a first biasing means for supplying a first bias potential in circuit with the control electrode of said first

device; a second biasing means for supplying a second bias potential of greater magnitude than said first biasing potential in circuit with said control electrode of said second device; means for connecting the output of said resonant network in circuit with the control electrodes



of both said devices to tend to counteract said first and second biasing potentials; indicating means in circuit with the principal electrodes of said first and second devices and means cooperative with said first and second biasing means to set said biasing means so that said devices indicate that the welding current lies between desired limits.

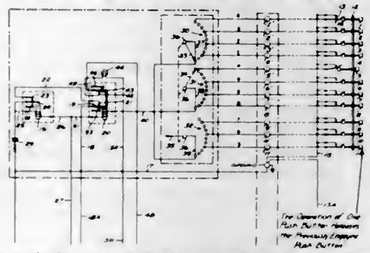
2,748,381
APPARATUS FOR DETECTING HOLES IN FABRIC
Roy C. Baker, Winston-Salem, N. C.
Application October 14, 1952, Serial No. 314,586
19 Claims. (Cl. 340—259)



1. Apparatus for detecting holes in tubular fabric, comprising a spreader of conducting material around and over which the fabric passes in one direction lengthwise of the fabric, a feeler engageable with the fabric outwardly of said spreader and movable into electrical contact therewith upon the passing of a hole in the fabric under said feeler, and a detecting circuit including said feeler and said spreader, said circuit further comprising a pair of contact devices, one carried by and electrically connected to said spreader, and the other arranged externally of the fabric and in electrical engagement with said one contact device throughout movement of the fabric over said spreader.

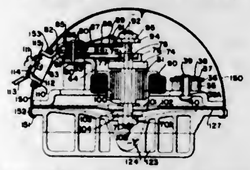
2,748,382
SELECTIVELY RESPONSIVE INDICATOR
Ellsworth H. Hults, Baldwin, N. Y., assignor to Smith-Meeker Engineering Company, New York, N. Y., a corporation of New York
Application November 22, 1952, Serial No. 321,995
2 Claims. (Cl. 340—316)

1. An indicator comprising a rotary switch having a movable wiper and a plurality of contacts, means including a motor magnet for moving said wiper into successive engagement with said contacts and including a winding, a control relay having a winding, a normally closed make and break switch arranged to be opened by the motor when the motor winding is energized and to be automatically restored into closed position when the motor winding is deenergized, a normally opened breaker switch arranged to be opened by the relay when the winding of said relay is energized and to be closed automatically when the winding of said relay is deenergized, a source of electric current, means connecting said motor winding, said make and break switch and said breaker switch in series in a loop across said source of current, means connecting said relay winding and said rotary switch in series across said source of current in another loop in parallel with said first mentioned loop, a plurality of manual selector switches, each being connected in series with said



rotary switch and said relay winding and having a pair of contacts, one contact of each selector switch being connected to one side of said source of electric current and the other contact of each selector switch being connected to a corresponding contact of said rotary switch, said selector switches being of the type wherein the closing of one selector switch opens the previously closed selector switch, and indicating means driven by said motor magnet synchronously with said wiper.

2,748,383
ELECTROMAGNETIC DIAPHRAGM HORN
Joe White and William F. Brundage, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Original application March 11, 1949, Serial No. 80,854, now Patent No. 2,677,875, dated May 11, 1954. Divided and this application October 29, 1953, Serial No. 388,968
4 Claims. (Cl. 340—388)

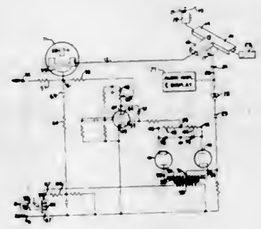


1. A horn assembly comprising a frame having a central opening therein, at least four upstanding lugs spaced on the periphery of said opening integrally formed on said frame, a sound projector secured to said frame, a diaphragm interposed between said frame and projector, an electromagnetic motor for vibrating said diaphragm, said motor including; a T-shaped armature assembly having the leg of the T secured to and supported by said diaphragm, a coil winding assembly having an E-shaped laminated pole assembly with a coil winding disposed between the arms of said E-shaped pole and at least four lugs extending from said pole assembly and disposed for being attached to the lugs of said frame for maintaining said pole assembly in a predetermined spaced relation to the arms of the T of the armature and within the opening of said frame.

2,748,384
AUTOMATIC FREQUENCY CONTROL CIRCUIT
Robert Crane, Jr., White Plains, and Michael W. McKay, Tarrytown, N. Y., assignors to General Precision Laboratory Incorporated, a corporation of New York
Application April 2, 1953, Serial No. 346,312
8 Claims. (Cl. 343—17.2)

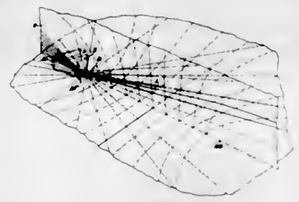
1. An automatic frequency control circuit comprising, a microwave generator, means for frequency modulating said generator at a selected low frequency, means having a signal transfer characteristic which is a null at a selected frequency and which increases in proportion to the departure from said selected frequency, a phase detector energized by the output of said last mentioned means and a source of energy at said selected low frequency, and means for controlling the frequency of said generator by the output of said phase detector.

7. An automatic frequency control circuit comprising, a microwave generator, a transmitting and receiving antenna, a utilization circuit, frequency sensitive duplexing means interconnecting said generator, antenna and utilization circuit, said duplexing means having the characteristic of maximum transfer of energy in the direction from



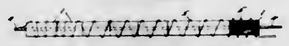
said generator to said antenna at a selected operating frequency, minimum transfer of energy in the direction from said generator to said utilization circuit at said selected operating frequency with increase transfer of energy in proportion to the departure in frequency from said selected frequency and maximum transfer in the direction from said antenna to said utilization circuit at said selected frequency, a low frequency signal source, means for frequency modulating said generator by the low frequency signal of said source, phase discriminating means having said low frequency signal and energy of the same low frequency derived from said utilization circuit impressed thereon, and means operated by the output of said phase discriminating means for controlling the frequency of said discriminator.

2,748,385
RADIO NAVIGATION AIDS FOR AIRCRAFT
Noel Meyer Rust, Danbury Common, and Christopher Sydney Cockerell, Danbury, England, assignors to Marconi's Wireless Telegraph Company Limited, London, England, a company of Great Britain
Application March 12, 1951, Serial No. 215,092
Claims priority, application Great Britain March 15, 1950
7 Claims. (Cl. 343—108)



1. A radio navigation aiding system for guiding aircraft in to land along the runway along a desired glide path in a desired approach plane, comprising a first radio installation of the type providing a space pattern of hyperbolic surfaces, said installation comprising at least one pair of electrically tied aerials, the aerials of any one pair being situated on different sides of said approach plane so that said installation has foci on a substantially horizontal line substantially at right angles to the desired approach plane, and a second installation also of the type providing a space pattern of hyperbolic surfaces, said second installation comprising at least one pair of electrically tied aerials, the aerials of any one pair being spaced vertically and situated to one side of said approach plane so that said second installation has foci situated to one side of said approach plane and disposed on a line which slightly falls away from the vertical in a plane parallel to said approach plane and in the direction of flight of said aircraft, the aerials of said installations being also so positioned that the intersection of a predetermined one of the hyperbolic surfaces of one installation with a predetermined one of the hyperbolic surfaces of the other, defines the desired glide path in the desired approach plane.

2,748,386
ANTENNA SYSTEMS
Wladimir J. Polydoroff, Kensington, Md.
Application December 4, 1951, Serial No. 259,770
10 Claims. (Cl. 343—787)



1. A coil antenna comprising an elongated ferromagnetic element having its length to effective diameter ratio not less than about 8 and not more than about 100 and said element having an effective permeability of not less than about 4 and not more than about 420, an axially associated conductive member, and a conductive winding surrounding but insulated from said ferromagnetic element the turns of said winding being spaced between themselves and spread over substantially the entire length of said element thereby materially to increase the electromagnetic radiation pick-up properties of said antenna in the space occupied by said antenna.

2,748,387
ANTENNA STRUCTURE
Frank J. Klancnik, Jr., Chicago, Ill., assignor to Hi-Lo TV Antenna Corp., Chicago, Ill., a corporation of Illinois
Application December 23, 1953, Serial No. 400,071
19 Claims. (Cl. 343—793)

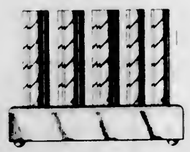


1. Antenna structure embodying a pair of rods forming a dipole antenna combination, and an auxiliary antenna component for each rod comprising a length of wire supported each on its associated rod and embodying a medial coil portion encircling and spaced outwardly of the rod on which it is supported the opposite ends of each wire being electrically interconnected.

DESIGNS

MAY 29, 1956

177,788
HOLDER FOR BRUSHES OR THE LIKE
Joseph Abadessa, Jr., Rutherford, Frank Abadessa, Glen Rock, and William L. Burgess, Hasbrouck, N. J.
Application April 27, 1954, Serial No. 30,198
Term of patent 3½ years
(Cl. D9—3)



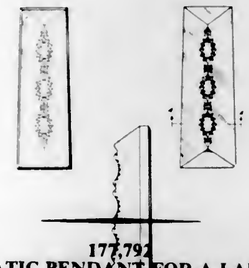
177,789
ELECTRIC LAMP BASE
David Borowitz, Chicago, Ill.
Application August 18, 1955, Serial No. 37,542
Term of patent 3½ years
(Cl. D48—20)



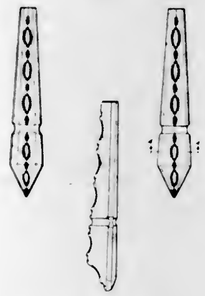
177,790
SHOWERHEAD
Ernest H. Bucknell, Los Angeles, Calif., assignor of ten per cent to Ralph E. Bletcher, twelve and one-half per cent to Ernest H. Bucknell, twelve and one-half per cent to Mabel Bucknell, ten per cent to Pearl White Bletcher, twenty and one-half per cent to Marcia Bucknell Liston, ten per cent to James H. Bletcher, ten per cent to Hazel Bletcher Skinner, ten per cent to Charlotte R. B. Robertson (also known as Mrs. F. K. Robertson), and four and one-half per cent to Daniel G. Liston
Application May 5, 1955, Serial No. 35,818
Term of patent 14 years
(Cl. D91—3)



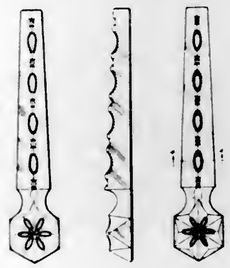
177,791
PRISMATIC PENDANT FOR A LAMP OR SIMILAR ARTICLE
Abraham L. Buschman, New York, N. Y.
Application March 2, 1955, Serial No. 34,818
Term of patent 7 years
(Cl. D48—3)



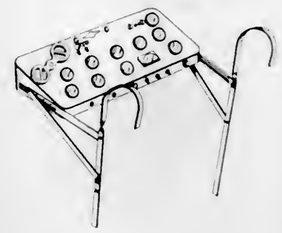
177,792
PRISMATIC PENDANT FOR A LAMP OR SIMILAR ARTICLE
Abraham L. Buschman, New York, N. Y.
Application March 2, 1955, Serial No. 34,819
Term of patent 7 years
(Cl. D48—3)



177,793
PRISMATIC PENDANT FOR A LAMP OR SIMILAR ARTICLE
Abraham L. Buschman, New York, N. Y.
Application March 2, 1955, Serial No. 34,820
Term of patent 7 years
(Cl. D48—3)



177,794
CHILD'S CAR SEAT TOY
Perce R. Christians, Sioux City, Iowa
Application May 25, 1955, Serial No. 36,198
Term of patent 14 years
(Cl. D14—6)



177,795
COMBINED TABLE AND EASEL
James C. Cole, Redwood City, Calif.
Application May 25, 1955, Serial No. 36,197
Term of patent 14 years
(Cl. D33—14)



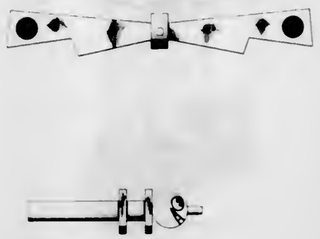
177,796
CONTAINER DISPENSING SPOUT
Leonard M. Collins, Hollywood, Calif., assignor to Pressure Dispensers, Inc., Hollywood, Calif., a corporation
Application September 13, 1954, Serial No. 32,248
Term of patent 14 years
(Cl. D58—26)



177,797
CLOCK
Ellworth R. Danz, La Salle, Ill., assignor to General Time Corporation, New York, N. Y., a corporation of Delaware
Application April 5, 1955, Serial No. 35,365
Term of patent 14 years
(Cl. D42—7)



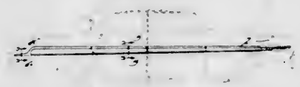
177,798
TOY WHIRLER OR SIMILAR ARTICLE
Francis J. Delaney, Fresno, Calif.
Application March 7, 1955, Serial No. 34,895
Term of patent 14 years
(Cl. D34—15)



177,799
GOLF CART
Stephen De Orlow, Jackson, Mich.
Application February 10, 1955, Serial No. 34,451
Term of patent 14 years
(Cl. D14—3)



177,800
MOULDING STRIP
Virgil M. Exner, Birmingham, and Clifford C. Voss, Clawson, Mich., assignors to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application May 11, 1955, Serial No. 35,934
Term of patent 14 years
(Cl. D14—6)



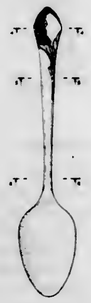
177,801
GAME BOARD OR SIMILAR ARTICLE
Carolyn G. Fairtile, Fall River, Mass.
Application March 22, 1955, Serial No. 35,154
Term of patent 14 years
(Cl. D34—5)



177,802
HOBBYIST'S LATHE OR SIMILAR ARTICLE
Milton Garvin, Cincinnati, Ohio, assignor to Edward F. Winkle, Cincinnati, Ohio
Application July 29, 1954, Serial No. 31,648
Term of patent 14 years
(Cl. D34—15)



177,803
SPOON OR SIMILAR ARTICLE
William H. Gerth, New York, N. Y., assignor to Oneida Ltd., Oneida, N. Y., a corporation of New York
Application November 7, 1955, Serial No. 38,782
Term of patent 14 years
(Cl. D54—12)



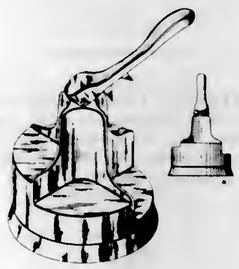
177,804
DISPLAY CONTAINER FOR POCKET HANDKERCHIEFS OR SIMILAR ARTICLE
Joseph M. Gindi, Brooklyn, N. Y.
Application April 14, 1955, Serial No. 35,522
Term of patent 14 years
(Cl. D80—5)



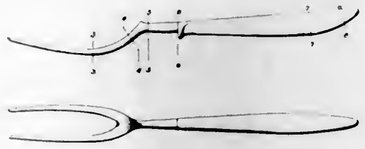
177,805
BOOKMARK
Irving Greenblatt, New York, N. Y.
Application April 26, 1955, Serial No. 35,687
Term of patent 7 years
(Cl. D6—2)



177,806
CAN PUNCH
Richard P. Hanner, near Charlotte, N. C.
Application July 7, 1955, Serial No. 36,863
Term of patent 14 years
(Cl. D44—29)



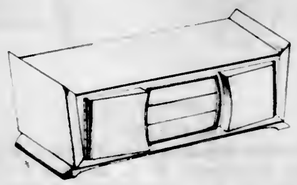
177,807
CARVING FORK
Irving Harper, New York, N. Y., assignor to Chas. D. Briddell, Inc., Crisfield, Md., a corporation of Maryland
Application August 1, 1955, Serial No. 37,243
Term of patent 14 years
(Cl. D54—12)



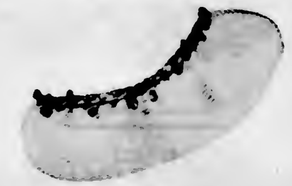
177,808
AWNING
Herbert M. Helt, Pittsburgh, and Philip Fellman, Library, Pa., assignors to National Aluminum Products Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application February 21, 1955, Serial No. 34,603
Term of patent 3½ years
(Cl. D21—6)



177,809
DRESSER
Ernest Herrmann, South Norwalk, Conn.
Application May 11, 1955, Serial No. 35,930
Term of patent 7 years
(Cl. D33—6)



177,810
ELASTIC SLIPPER OR SIMILAR ARTICLE
Preston E. Hiestand and Eugene V. Mills, Princeton, Wis., assignors to Handcraft Company, Inc., Princeton, Wis., a corporation of Wisconsin
Application June 20, 1955, Serial No. 36,586
Term of patent 14 years
(Cl. D7—7)





177,811
FIRE ALARM BOX OR SIMILAR ARTICLE
Willis G. Holmes, Pembroke, Mass.
Application December 7, 1955, Serial No. 39,212
Term of patent 14 years
(Cl. D72—1)



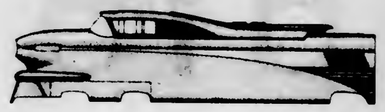
177,812
CHILD'S HANDBAG
Sidney Hyman, New York, N. Y.
Application December 27, 1955, Serial No. 39,501
Term of patent 3½ years
(Cl. D87—3)



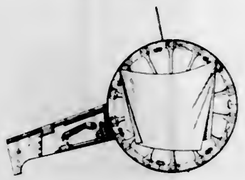
177,813
ROSARY OR THE LIKE
Arthur C. Jermyn and Gerard E. Gagnier, Rochester, N. Y.
Application November 19, 1954, Serial No. 33,169
Term of patent 14 years
(Cl. D45—16)



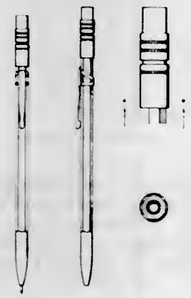
177,814
LOCOMOTIVE BODY
Charles M. Jordan, Birmingham, and Masaji B. Sugano, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 16, 1955, Serial No. 37,506
Term of patent 7 years
(Cl. D66—1)



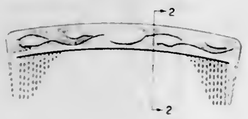
177,815
DISPLAY PIECE FOR BOTTLES
Cecil P. Kahmann, San Carlos, Calif., assignor to Schenley Industries, Inc., New York, N. Y., a corporation of Delaware
Application December 12, 1955, Serial No. 39,287
Term of patent 14 years
(Cl. D80—9)



177,816
WRITING INSTRUMENT
Julius M. Kahn, Englewood, N. J., assignor to David Kahn, Inc., North Bergen, N. J., a corporation of New Jersey
Application May 3, 1955, Serial No. 35,797
Term of patent 14 years
(Cl. D74—17)



177,817
COMB OR SIMILAR ARTICLE
Lester Reute Kahn, deceased, late of Jersey City, N. J., by Alice Sabina Kahn, executrix, Jersey City, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application November 30, 1955, Serial No. 39,107
Term of patent 7 years
(Cl. D86—8)



177,818
FINGER RING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application May 5, 1955, Serial No. 35,839
Term of patent 7 years
(Cl. D45—10)



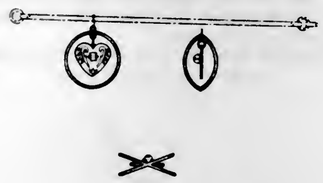
177,819
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application October 19, 1955, Serial No. 38,440
Term of patent 7 years
(Cl. D45—16)



177,820
JEWELRY FINDING OR SIMILAR ARTICLE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application October 25, 1955, Serial No. 38,550
Term of patent 7 years
(Cl. D45—1)



177,821
CHARM BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application June 16, 1955, Serial No. 36,547
Term of patent 7 years
(Cl. D45—16)



177,822
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application October 6, 1955, Serial No. 38,262
Term of patent 7 years
(Cl. D45—9)



177,823
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application October 17, 1955, Serial No. 38,381
Term of patent 7 years
(Cl. D45—16)



177,824
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application October 17, 1955, Serial No. 38,394
Term of patent 7 years
(Cl. D45—9)



177,825
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application October 17, 1955, Serial No. 38,395
Term of patent 7 years
(Cl. D45—16)



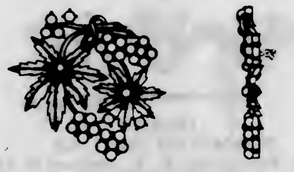
177,826
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,732
Term of patent 7 years
(Cl. D45—16)



177,827
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,733
Term of patent 7 years
(Cl. D45—9)



177,828
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,734
Term of patent 7 years
(Cl. D45—19)



177,829
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,735
Term of patent 7 years
(Cl. D45—16)

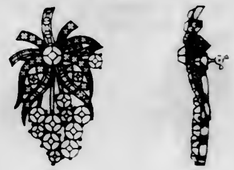


177,830
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,736
Term of patent 7 years
(Cl. D45—16)

177,831
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,737
Term of patent 7 years
(Cl. D45—19)



177,832
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,738
Term of patent 7 years
(Cl. D45—19)



177,833
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,739
Term of patent 7 years
(Cl. D45—16)



177,834
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,740
Term of patent 7 years
(Cl. D45—19)



177,835
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,741
Term of patent 7 years
(Cl. D45—19)



177,836
PIN-CLIP OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,742
Term of patent 7 years
(Cl. D45—19)



177,837
PIN-CLIP OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,743
Term of patent 7 years
(Cl. D45—19)



177,838
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,744
Term of patent 7 years
(Cl. D45—19)



177,839
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,745
Term of patent 7 years
(Cl. D45—16)



177,840
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,746
Term of patent 7 years
(Cl. D45—9)



177,841
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 4, 1955, Serial No. 38,747
Term of patent 7 years
(Cl. D45—19)



177,842
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 10, 1955, Serial No. 38,832
Term of patent 7 years
(Cl. D45—16)



177,843
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 10, 1955, Serial No. 38,833
Term of patent 7 years
(Cl. D45—9)



177,844
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 10, 1955, Serial No. 38,834
Term of patent 7 years
(Cl. D45—16)



177,845
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 10, 1955, Serial No. 38,835
Term of patent 7 years
(Cl. D45—9)



177,846
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 10, 1955, Serial No. 38,838
Term of patent 7 years
(Cl. D45—9)



177,847
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 10, 1955, Serial No. 38,839
Term of patent 7 years
(Cl. D45—19)



177,848
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 10, 1955, Serial No. 38,841
Term of patent 7 years
(Cl. D45—9)



177,849
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 10, 1955, Serial No. 38,842
Term of patent 7 years
(Cl. D45—19)



177,850
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 10, 1955, Serial No. 38,843
Term of patent 7 years
(Cl. D45—16)



177,851
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 10, 1955, Serial No. 38,844
Term of patent 7 years
(Cl. D45—9)



177,852
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 10, 1955, Serial No. 38,847
Term of patent 7 years
(Cl. D45—9)



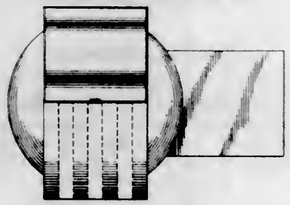
177,853
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 38,994
Term of patent 7 years
(Cl. D45—19)



177,854
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 38,996
Term of patent 7 years
(Cl. D45—9)



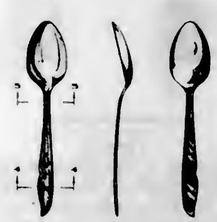
177,855
PROTECTIVE HOUSING FOR AN OPTICAL, RADAR AND OTHER TRACKING DEVICES
Edward L. Morgan, Asheville, N. C., assignor to Oerlikon Tool & Arms Corporation of America, Swannanoa, N. C., a corporation of Delaware
Application July 13, 1955, Serial No. 36,966
Term of patent 7 years
(Cl. D13—1)



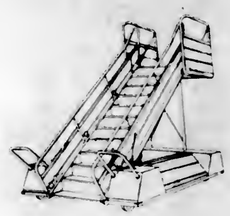
177,856
SPOON OR SIMILAR ARTICLE
Frank R. Perry, Oneida, N. Y., assignor to Oneida Ltd., Oneida, N. Y., a corporation of New York
Application November 7, 1955, Serial No. 38,784
Term of patent 14 years
(Cl. D54—12)



177,857
SPOON OR SIMILAR ARTICLE
Frank R. Perry, Oneida, N. Y., assignor to Oneida Ltd., Oneida, N. Y., a corporation of New York
Application November 29, 1955, Serial No. 39,083
Term of patent 14 years
(Cl. D54—12)



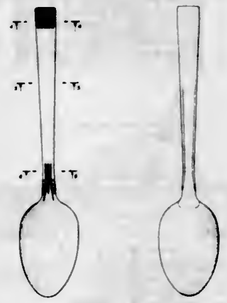
177,858
PORTABLE LANDING STAIRS OR SIMILAR ARTICLE
George E. Phelps, Los Angeles, Calif.
Application October 7, 1955, Serial No. 38,296
Term of patent 7 years
(Cl. D14—3)



177,859
CONTROL CABINET FOR MEDICAL ELECTRODES
Elmer A. Piar, Cleveland, Ohio
Application January 18, 1956, Serial No. 39,827
Term of patent 14 years
(Cl. D83—1)



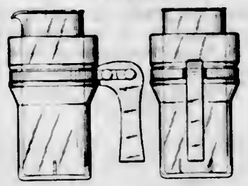
177,860
SPOON OR SIMILAR ARTICLE
Leonard G. Ressegger, Sr., Oneida, N. Y., assignor to Oneida Ltd., Oneida, N. Y., a corporation of New York
Application November 16, 1955, Serial No. 38,911
Term of patent 14 years
(Cl. D54—12)



177,861
STEP LADDER
Edward J. Savrsnik, Sheboygan, Wis.
Application August 24, 1955, Serial No. 37,638
Term of patent 7 years
(Cl. D15—8)



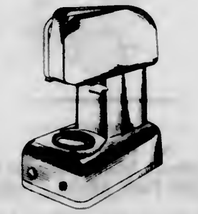
177,862
TEAMAKER OR SIMILAR ARTICLE
Peter Schlumbohm, New York, N. Y.
Application June 27, 1955, Serial No. 36,710
Term of patent 14 years
(Cl. D44—26)



177,863
SPECTACLE FRONT
Harry Weissman, New Hyde Park, N. Y.
Application December 27, 1955, Serial No. 39,470
Term of patent 7 years
(Cl. D57—1)



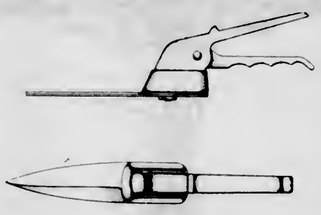
177,864
COFFEE BREWER
Daniel M. Wells and James H. Tarrant, Los Angeles, Calif., assignors to Western Urn Mfg. Corp., Los Angeles, Calif., a corporation of California
Application August 22, 1955, Serial No. 37,616
Term of patent 14 years
(Cl. D2—3)



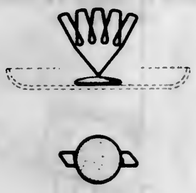
177,865
CLOCK
Lawrence H. Wilson, Grosse Pointe, Mich., assignor to General Time Corporation, New York, N. Y., a corporation of Delaware
Application September 7, 1955, Serial No. 37,830
Term of patent 14 years
(Cl. D42—7)



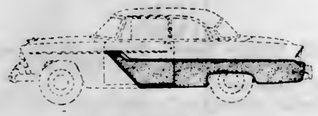
177,866
GRASS SHEARS
Henry R. Winogrond, Watertown, Wis., assignor to The Village Blacksmith Co., a corporation of Wisconsin
Application October 25, 1955, Serial No. 38,573
Term of patent 14 years
(Cl. D22—5)



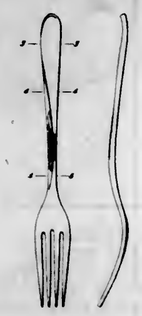
177,867
CIGARETTE REST
Paul Kenlman, Chicago, Ill.
Application June 10, 1954, Serial No. 30,909
Term of patent 14 years
(Cl. D85—2)



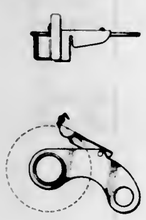
177,868
AUTOMOBILE
Henry T. King, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application May 11, 1955, Serial No. 35,937
Term of patent 14 years
(Cl. D14—3)



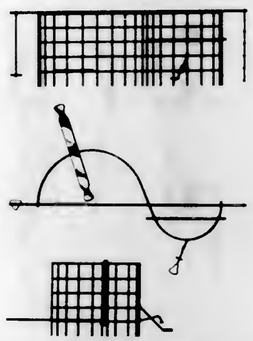
177,869
FORK OR THE LIKE
Robert J. King, Newburyport, Mass., assignor to Towle Manufacturing Company, Newburyport, Mass., a corporation of Massachusetts
Application February 8, 1955, Serial No. 34,413
Term of patent 14 years
(Cl. D54—12)



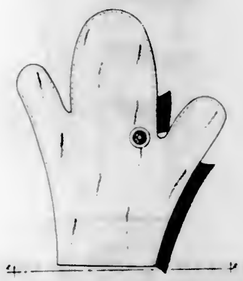
177,870
HAND DISPENSER FOR TAPE OR THE LIKE
Ernest Loeb, Berwyn, Ill.
Application May 9, 1955, Serial No. 35,881
Term of patent 14 years
(Cl. D74—1)



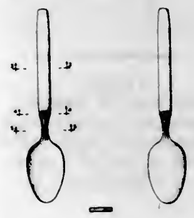
177,871
PLAYGROUND APPARATUS
Robert E. Martens, Charleston, W. Va.
Application March 7, 1955, Serial No. 34,872
Term of patent 14 years
(Cl. D34—5)



177,872
MITTEN
Marjorie E. McCarthy, San Francisco, Calif.
Application December 5, 1955, Serial No. 39,165
Term of patent 14 years
(Cl. D3—11)



177,873
SPOON OR SIMILAR ARTICLE
Frank R. Perry, Oneida, N. Y., assignor to Oneida, Ltd., Oneida, N. Y., a corporation of New York
Application May 17, 1955, Serial No. 36,029
Term of patent 14 years
(Cl. D54—12)



177,874
ANIMAL TOY OR SIMILAR ARTICLE
Alan Reed, Beverly Hills, Calif.
Application July 25, 1955, Serial No. 37,122
Term of patent 14 years
(Cl. D34—2)



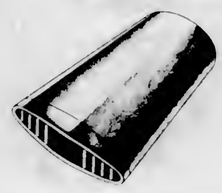
177,875
AUTOMOBILE
Frederick Reynolds, Bloomfield Hills, and Herbert F. Weissinger, Franklin, Mich., assignors to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application May 11, 1955, Serial No. 35,932
Term of patent 14 years
(Cl. D14—3)



177,876
DOLL WITH LOLLIPOP EYES
Robert H. Ross and Claire C. Ross, North Hollywood, Calif.
Application April 26, 1954, Serial No. 30,192
Term of patent 14 years
(Cl. D34—4)



177,877
AUTOMOBILE EXHAUST EXTENSION
William B. Sandler, Newton, Mass.
Application March 1, 1955, Serial No. 34,804
Term of patent 14 years
(Cl. D14—6)



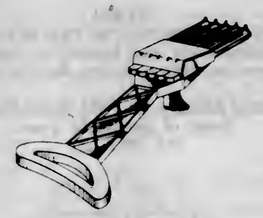
177,878
FLOWER POT HOLDER OR SIMILAR ARTICLE
David E. Sceeles, Seattle, Wash.
Application February 21, 1955, Serial No. 34,599
Term of patent 14 years
(Cl. D35—3)



177,879
DISPOSABLE BLOOD LANCET
Irving A. Speelman, Brooklyn, N. Y., assignor to Propper Manufacturing Company, Inc., Long Island City, N. Y., a corporation of New York
Application October 12, 1954, Serial No. 32,638
Term of patent 14 years
(Cl. D83—1)



177,880
TOY ROCKET LAUNCHER
Albert M. Steiner, Cincinnati, Ohio, assignor to Bromo-Mint Company, Inc., Cincinnati, Ohio, a corporation of Ohio
Application November 29, 1955, Serial No. 39,081
Term of patent 14 years
(Cl. D34—15)



177,881
ROSARY BEAD OR THE LIKE
Francis C. St. Mary, Malone, and Arthur C. Jernaya and Gerard E. Gagnier, Rochester, N. Y., assignors to J. G. and St. Mary Company, Rochester, N. Y., a partnership
Application April 28, 1953, Serial No. 24,713
Term of patent 14 years
(Cl. D45—19)



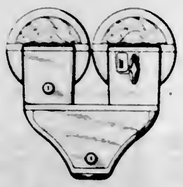
177,882
ROSARY BEAD OR THE LIKE
Francis C. St. Mary, Malone, and Arthur C. Jermyn and Gerard E. Gagnier, Rochester, N. Y., assignors to J. G. and St. Mary Company, Rochester, N. Y., a partnership
Application April 28, 1953, Serial No. 24,717
Term of patent 14 years
(Cl. D45—19)



177,883
FLEXIBLE ESOPHAGOSCOPE
Ludwig Streifeneder, Chicago, Ill.
Application April 11, 1955, Serial No. 35,454
Term of patent 14 years
(Cl. D83—1)



177,884
DUPLEX PARKING METER HOUSING
Lester D. Sollenberger and Rodney J. Faxon, Chicago, Ill., assignors to Miller Meters, Inc., a corporation of Illinois
Application January 19, 1955, Serial No. 34,070
Term of patent 14 years
(Cl. D52—3)



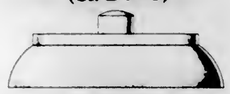
177,885
BADGE OR SIMILAR ARTICLE
Christopher L. Stange, Richmond Heights, Mo.
Application September 8, 1955, Serial No. 37,850
Term of patent 3½ years
(Cl. D29—2)



177,886
CHAIR
Herbert V. Thaden, Roanoke, Va., assignor to Thaden Engineering Company, Roanoke, Va., a company of Virginia
Application February 3, 1955, Serial No. 34,348
Term of patent 14 years
(Cl. D15—1)



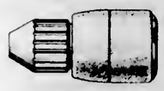
177,887
SUCTION CUP
Daniel Waldman, Brooklyn, N. Y.
Application February 24, 1955, Serial No. 34,647
Term of patent 7 years
(Cl. D4—3)



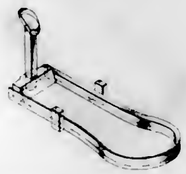
177,888
BRACKET FOR SAWHORSES
Alex A. Wambach, Jr., Granville Township, Milwaukee County, Wis.
Application January 24, 1955, Serial No. 34,161
Term of patent 14 years
(Cl. D54—2)



177,889
TORQUE GAUGE
Robert A. Waters, Weston, Mass.
Application November 16, 1954, Serial No. 33,117
Term of patent 14 years
(Cl. D52—1)



177,890
MERCHANDISE DISPLAY STAND OR SIMILAR ARTICLE
Fritz Westernacher, New York, N. Y.
Application November 3, 1954, Serial No. 32,953
Term of patent 14 years
(Cl. D80—9)



LIST OF REISSUE PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 29TH DAY OF MAY, 1956

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Arvidson, Gustaf A., 40% to W. J. Hulls. Valve control mechanism for power transmission means. 2,747,419. Cl. 74—107.
Asahi Garasu Kabushiki Kaisha: *See*— Kurata, Motoharu. 2,747,279. Kurata, Motoharu. 2,747,280. Kurata Motoharu. 2,747,752. Shibata, Sunao. 2,747,353.
Ashcroft, Donald G., and I. C. M. Bell, to Imperial Chemical Industries Ltd. Production of electric fuseheads. 2,747,257, 5–29–56, Cl. 29—155.5.
Atchison, Leonard W., to General Electric Co. Insulating structures. 2,747,269, 5–29–56, Cl. 29—455.
Atkins Industries, Inc.: *See*— Small, Samuel N. 2,747,625.
Atkinson, Herbert J. Bilge pump. 2,747,513, 5–29–56, Cl. 103—103.
Atlas Powder Co.: *See*— Richardson, Henry M. 2,748,028.
Audio Devices, Inc.: *See*— Speed, William C., and Dwyer. 2,748,015. Speed William C., and Dwyer. 2,747,016.
Automatic Electric Laboratories, Inc.: *See*— Crabtree, Leonard F. 2,748,374. Faulkner, Alfred H. 2,748,196. Ostline, John E. 2,748,197.
Avco Mfg. Corp.: *See*— Bussard, Emmery J. H. 2,748,286. Garcia, Arthur. 2,748,357. Norberg, Oscar E. and Lafin. 2,747,773.
Averill, William D.: *See*— Raehrs, Emery C., and Averill. 2,747,271.

Ayling, Robert W., to Carrier Corp. Flexible coupling. 2,747,386, 5–29–56, Cl. 64—11.

Babcock, David L., and M. N. Nowak, to Eastman Kodak Co. Photographic copying apparatus. 2,747,479, 5–29–56, Cl. 95—89.

Babcock & Wilcox Co., The: *See*—
Harvey, John F., Hermandorfer and Mason. 2,747,657.
Seidl, Herbert. 2,747,526.
Sifrin, Andreas. 2,747,553.

Babson Bros. Co.: *See*—
Thomas, Chester A. 2,747,544.

Bach, Emmon, E. W. Goodwin, and R. H. Raunecker, to Dexter Folder Co. Sheet handling apparatus. 2,747,869, 5–29–56, Cl. 271—54.

Bacher, Eric, to Paillard S. A. Talking machine with an automatic disc changing device. 2,747,879, 5–29–56, Cl. 274—10.

Bakenato, Elwood B., and K. F. Hayden, to Socony Mobil Oil Co., Inc. Restricted non-catalytic oxidative regeneration. 2,747,969 5–29–56, Cl. 23—184.

Backhouse, Headley T. Sheet conveyor. 2,747,870, 5–29–56, Cl. 271—79.

Backlund, Peter S., and E. A. Pullen, to Union Oil Co. of California. Deoiling of wax-oil mixtures. 2,748,056, 5–29–56, Cl. 196—20.

Bacon, Cyril G., and D. Friend, to Fisons Ltd. Manufacture of polymeric phosphates. 2,747,964, 5–29–56, Cl. 23—107.

Bade, Alfred G.: *See*—
Schmitter, Walter P., and Bade. 2,747,711.

Bade, Alfred G., to The Falk Corp. Infinitely variable speed tranamission. 2,747,434, 5–29–56, Cl. 74—796.

Badger, Alfred E., and D. E. Sharp, to Libbey-Owens-Ford Glass Co. Glass refractory composition. 2,748,007, 5–29–56, Cl. 106—66.

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Kroeper, Hugo, and Hummel. 2,748,165.
Krzikalla, Hans, and van Taak-Trakranen. 2,748,094.
Markert, Ferdinand, and Raichle. 2,747,967.
Reppe, Walter, Pasedach and Seefelder. 2,748 130.
Trieschmann, Hans-Georg, and Reuter. 2,748,065.

Baermann, Max. Bearings for instruments and machines. 2,747,944, 5–29–56, Cl. 308—10.

Bagnard, Ernest A., to Ceco Steel Products Corp. Reversible metal doors. 2,747.705, 5–29–56, Cl. 189—46.

Bagshaw, Charles M., and L. D. Kirk, to United Shoe Machinery Corp. Toe molding machines. 2,747,207, 5–29–56, Cl. 12—97.

Bahr, Simon A.: *See*—
Craine, Marvin W. 2,748,233.

Baier, Willard E., to Sunkist Growers, Inc. Method of canning foods. 2,748,005 5–29–56, Cl. 99—182.

Bailey, Ernest M. Sign printing or painting machine. 2,747,505, 5–29–56, Cl. 101—287.

Bailey, Howell A. Skirt with removable insert. 2,747,197, 5–29–56, Cl. 2—211.

Bailey Meter Co.: *See*—
Dickey, Paul S. 2,747,595.

Bailey, William J. Fish lure. 2,747,318, 5–29–56, Cl. 43—42.51.

Bailey, William M., Co.: *See*—
Miller, James R. 2,747,858.

Baker, Benjamin P.: *See*—
MacNeil, John B., and Baker. 2,748,226.

Baker & Co., Inc.: *See*—
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Brioux, Uleric V. 2 747,259.

Baker, Harold W., Jr. Rotary motor and pump. 2,747,551, 5–29–56, Cl. 121—93.

Baker, Robert M., and T. A. Birckhead, to Westinghouse Electric Corp. Tank circuit. 2,748,242, 5–29–56, Cl. 219—10.77.

Baker, Roy C. Apparatus for detecting holes in fabric. 2,748,381 5–29–56, Cl. 340—259.

Bakke, Olaf. Fan attachment for combines. 2,747,792. 5–29.56, Cl. 230—273.

Baldwin, Mack. Removable bottom for bird cages. 2,747,545 5–29–56, Cl. 119—17.

Baltosser, Robert W., to Seismograph Service Corp. Seismometer. 2,748,370. 5–29–56, Cl. 340—17.

Baltzly, Richard, and P. B. Russell, to Burroughs Wellcome & Co. (U. S. A.) Inc. Phenylcycloalkylcarbinyl piperazines and method of making. 2,748,126, 5–29–56, Cl. 260—268.

Baltzly, Richard, and P. B. Russell, to Burroughs Well- & Co. (U. S. A.) Inc. N-[α-cyclohexenyl benzyl]piperazines and method of making. 2,748 127. 5–29–56. Cl. 260—268.

Baltzly, Richard, and P. B. Russell, to Burroughs Wellcome & Co. (U. S. A.) Inc. N-(α-cycloalkenylbenzyl) piperazines and method of making. 2,748,128, 5–29–56, Cl. 260—268.

Balzer, Rudolf. Needle threader. 2,747,778, 5–29–56, Cl. 223—199.

Bandy, Kenneth L., to The McKay Machine Co. Length control apparatus for use in feeding strip stock. 2,747,285, 5–29–56, Cl. 33—132.

Banker, Oscar H. to New Products Corp. Vacuum powered hydraulic brakes with anti-skid controls. 2,747,697, 5–29–56. Cl. 188—152.

Barber-Colman Co.: *See*—
Borchardt, Robert E. 2,747,806.

Barefoot, Josie C. Bread carrier. 2,747,748, 5–29–56, Cl. 211—126.

Barfield, Walter. Auxiliary drive for earth moving machine. 2,747,677 5–29–56, Cl. 180—54.

Barker, Robert S.: *See*—
Hultquist, Martin E., and Barker. 2,748,137.

Barker, Robert S., and R. H. Ebel, to American Cyanamid Co. Oxidation of mixed tar bases. 2,748,138, 5–29–56, Cl. 260—295.

Barnes, Robert T., and G. D. Lewis, to United Aircraft Corp. Starting system for ramjets. 2,747,366, 5–29–56, Cl. 60—39.14.

Barton, Robert P. Nut bulling machine. 2,747,632, 5–29–56, Cl. 146—8.

Baumgartner, John G. Method and apparatus for cutting the head from an elongated member and moving the member to a predetermined position. 2,747,268, 5–29–56, Cl. 29—418.

Bausch & Lomb Optical Co.: *See*—
Boughton, Olin W., and Gruner. 2,747,461.
Bowerman, Clarence J. 2,747,464.
Kreidl, Norbert J., and Davis. 2,748,006.
Schelling, George C. 2,747,339.
Stegeman, Raymond F. E. 2,747,729.

Bayer, Otto: *See*—
Becker, Wilhelm, and Bayer. 2,748,105.

Beam, Albert S.: *See*—
Osplack, Joseph J., and Beam. 2,747,424.

Beam, Arthur P. Flexible extension attachment for electric drills. 2,747,384, 5–29–56, Cl. 64—2.

Beaufoy, Raymond, to British Telecommunications Research Ltd. Start-stop oscillator. 2,748,285, 5–29–56, Cl. 250—36.

Beaumont, James O., to Hughes Aircraft Co. Rotational analogue-to-digital converters. 2,747,797, 5–29–56, Cl. 235—61.

Beck, Howard G., to The General Tire and Rubber Co. Belt take-up mechanism. 2,747,420, 5–29–56, Cl. 74—219.

Becker, Wilhelm, and O. Bayer, to Farbenfabriken Bayer Aktiengesellschaft. Process for chlorinating ethylene polymers in solution. 2,748,105, 5–29–56, Cl. 260—85.3.

Becorit-Grubenausbau G. m. b. H.: *See*—
Haarmann, Arnold. 2,747,828.

Bedell, Berkley W. Line measuring device. 2,747,286, 5–29–56, Cl. 33—134.

Bedford, Leslie H., to Marconi's Wireless Telegraph Co. Ltd. Color television transmission. 2,748,189, 5–29–56, Cl. 178—5.4.

Beeman, Claude C., to Jackson & Church Co. Discharge structure for a pulp press. 2,747,499, 5–29–56, Cl. 100—147.

Behlefeldt, Knut G. Angularly adjustable saw. 2,747,631, 5–29–56, Cl. 145—108.

Beintema, Chester D., to Hughes Aircraft Co. Cathode-ray storage tube system. 2,748,312, 5–29–56, Cl. 315—12.

Beldon Mfg. Co.: *See*—
Schelke, Robert K., and Huth. 2,748,367.

Belgard, Truly M. Hammer attachment. 2,747,835, 5–29–56, Cl. 254—26.

Bell, Ian C. M.: *See*—
Ashcroft, Donald G., and Bell. 2,747,257.

Bell Telephone Laboratories, Inc.: *See*—
Boyd, Richard C. 2,748,266.
Dickten, Emil, Jr., Riesz, and Wallace. 2,748,349.
Hogan, Clarence L. 2,748,353.
Llewellyn, Frederick B. 2,748,200.
McMillan, Brockway. 2,748,201.
Merrill, Francis G., and Thomas. 2,748,283.
Miller, Stewart E. 2,748,350.
Miller, Stewart E. 2,748,352.
Wallace, Robert L., Jr. 2,748,235.

Bellar, Menno. Paper and magazine rack and baler. 2,747,498. 5–29–56, Cl. 100—34.

Bendix Aviation Corp.: *See*—
Hurlburt, Charles E. 2,747,413.
Jarvis, John. 2,748,355.
Peterson, Merle E. 2,747,708.

Benedetto, Frank J. Decoy. 2,747,316, 5–29–56, Cl. 43—3.

Bennett, James, to American Viscose Corp. Liquid applicator for a running yarn. 2,747,221, 5–29–56, Cl. 18—8.

Bennett, Marvin F. Power take-off. 2,747,415, 5–29–56, Cl. 74—15.8.

Bennett, Norman. Decorative lamp. 2,748,257, 5–29–56, Cl. 240—10.

Bennett, Richard A., to The American Pulley Co. Reverse rotation check means. 2,747,709, 5–29–56, Cl. 192—7.

Bennison, Henry G., to Microcell Ltd. Fastener. 2,747,908, 5–29–56, Cl. 292—241.

Benoit, George J., Jr., and A. D. Abbott, to California Research Corp. Synthetic lubricant product of polymerization of a vinyl ether with an olefin. 2,748,170, 5–29–56, Cl. 260—614.

Benson, Fritz C.: *See*—
Morse, John B., Jr., and Benson. 2,747,538.

Bergan, Martin D., to The Thomas & Betts Co. Y-shaped wire and cable tap. 2,748,366, 5–29–56, Cl. 339—243.

Bergen, Stephen A., to Evershed & Vignoles Ltd. Proportional band adjusting electrical control apparatus. 2,748,330, 5–29–56, Cl. 318—22.

Bergstein Packaging Trust, The: *See*—
Bergstein, Robert M. 2,747,766.
Bergstein, Robert M. 2,747,767.

Bergstein, Robert M., to The Bergstein Packaging Trust. Single row carrier. 2,747,766, 5–29–56, Cl. 200—113.

Bergstein, Robert M., to The Bergstein Packaging Trust. Reinforced single row carrier. 2,747,767, 5–29–56, Cl. 220—113.

Bergstrom, Clarence G., to G. D. Searle & Co. 10,13-dimethyl-17-acetyl-perhydro-15H-cyclopenta [a] phenanthrene-2,3-dione. 2,748,150, 5–29–56, Cl. 260—397.4.

Berninger, Kenneth L., W. S. Neef, Jr., and C. B. Wright, to General Motors Corp. Propeller mechanism. 2,747,676, 5–29–56, Cl. 170—160.33.

Bert, Raymond E., and J. L. Wetta. Adjustable reel for crop handling implement. 2,747,357, 5–29–56, Cl. 56—221.

Biggs, Raymond H., to Power Jets (Research and Development) Ltd. Optical inspection device. 2,747,463, 5–29–56, Cl. 88—24.

Bingham, Darwin H., and L. O. Larsen, to Western Electric Co., Inc. Apparatus for uniting plastic washers with annular plastic pads. 2,747,648, 5–29–56, Cl. 154—1.5.

Birckhead, Taylor A.: *See*—
Baker, Robert M., and Birckhead. 2,748,242.

Birmingham Small Arms Co. Ltd., The: *See*—
Smyth, Charles N. 2,748,369.

Bissonnette, Harold F.: *See*—
Bissonnette, Irving M. and H. F. 2,747,739.

Bissonnette, Irving M. and H. F. Removable fabric type strainer. 2,747,739, 5–29–56, Cl. 210—159.

Björkman, Karl Å. G., to Lumalampan Aktiebolag. Electric discharge tube with luminescent substance coating. 2,748,306, 5–29–56, Cl. 313—109.

Black-Clawson Co., The: *See*—
Corbin, Wesley S., and Pearson. 2,747,471.

Black & Decker Mfg. Co., The: *See*—
Burton, Howard F. 2,747,435.

Black, John W., Jr., to Pemco Wheel Co. Wheel and bearing assembly. 2,747,950, 5–29–56, Cl. 308—187.2.

Black, Sivalls & Bryson, Inc.: *See*—
Boetjer, John H. 2,747,594.

Blackwood, Waves. Railway vehicle axles. 2,747,918, 5–29–56, Cl. 295—36.

Blaskow, Roman G. Device for automatically hooking fish. 2,747,317, 5–29–56, Cl. 43—15.

Blattner, Emil H., to The Symington-Gould Corp. Snubber attaching means. 2,747,696, 5–29–56, Cl. 188—129.

Blicke, Frederick F., to Regents of The University of Michigan. Polymethyleneiminoalkanols. 2,748,113, 5–29–56, Cl. 260—239.

Block, Edwin H., to the United States of America as represented by the Secretary of the Navy. Water tight switch. 2,748,229, 5–29–56, Cl. 200—169.

Bloser, William H., to Major Distributing Co. Below ground row crop harvesting unit. 2,747,34, 5–29–56, Cl. 55—51.

Blu, Harriet I.: *See*—
Blu, Marshall A. 2,747,820.

Blu, Marshall A., deceased; H. I. Blu, executrix of said M. A. Blu. Christmas tree stand. 2,747,820, 5–29–56, Cl. 248—44.

Blum Bros. Box Co.: *See*—
Blum, Paul L. 2,747,629.

Blum, Paul L., to Blum Bros. Box Co. Method of manufacturing tub staves. 2,747,629, 5–29–56, Cl. 144—309.

Boag, James C.: *See*—
Closson, Katherine W., and Boag. 2,747,978.

Bobal, Michael A., to Union Carbide and Carbon Corp. Method of depositing silver in an electrolytic anode and composition therefor. 2,748,034, 5–29–56, Cl. 117—227.

Broeckel, John W., to General Electric Co. Brush holder assembly for dynamo-electric machine. 2,748,302, 5–29–56, Cl. 310—247.

Boessenkool, Helmich W., to Metals & Controls Corp. Reclaiming scrap metal. 2,747,265, 5–29–56, Cl. 29—403.

Boetjer, John H., to Black, Sivalls & Bryson, Inc. Combination safety pressure and vacuum release device. 2,747,594, 5–29–56, Cl. 137—71.

Bohannon, Hoyt H. Liquid proportioner. 2,748,076, 5–29–56, Cl. 210—19.

Bohm, William O. *See*—
Canning, Walter L. and F. N., and Bohm. 2,747,210.

Bohn Aluminum & Brass Corp.: *See*—
Wyatt, Wilbur E., and Robertson. 2,747,236.

Boland, Daniel P. Fish line leader. 2,747,320, 5–29–56, Cl. 43—44.98.

Bonanno, Joseph L., to The Lionel Corp. Packages. 2,747,731, 5–29–56, Cl. 206—46.

Bone, Herbert L.: *See*—
Woods, Robert A., and Bone. 2,748,204.

Bonner, William C. Dishwashing machine. 2,747,588, 5–29–56, Cl. 134—93.

Booth, Jack J. Machine for vending beverage in cups. 2,747,782, 5–29–56, Cl. 226—46.6.

Borchardt, Robert E., to Barber-Colman Co. Machine for operating upon bobbins. 2,747,806, 5–29–56, Cl. 242—19.

Borden Co., The: *See*—
Salzberg, Harold K. 2,748,009.

Borgese, Giusto, to Societa Del Linoleum, Societa Per Azioni. Laminated materials. 2,748,042, 5–29–56, Cl. 154—49.

Born, Ellis H.: *See*—
Adams, Cecil E., and Born. 2,747,606.

Bostitch, Inc.: *See*—
Lindstrom, Charles M. 2,747,453.

Botden, Theodoor P. J., M. C. Teves, T. Tol, and F. de Boer, to Hartford National Bank and Trust Co., as trustee. Electric discharge tube for intensifying fluorescent images produced with the use of X-rays. 2,748,304, 5–29–56, Cl. 313—65.

Bottemiller, Edward L., to General Electric Co. Generator control system. 2,748,295, 5–29–56, Cl. 307—84.

Boughton, Olin W., and H. E. R. Gruner, to Bausch & Lomb Optical Co. Photogrammetric projection apparatus. 2,747,461, 5–29–56, Cl 88—24.

Bourcier de Carbon, Christian M. L. L. Horizontal shock absorber with reservoir. 2,747,695, 5–29–56, Cl. 188—88.

Bourquin, Jean P.: *See*—
Stoll, Arthur, and Bourquin. 2,748,134.

Bouton, Gertrude V.: *See*—
Vischer, Alfred, Jr. 2,747,832.

Bowerman, Clarence J., to Bausch & Lomb Optical Co. Fine adjustment means for microscopes. 2,747,464, 5–29–56, Cl. 88—39.

Bowersett, Charles F. Bolt with frangible, ejectable tension indicating means. 2,747,454, 5–29–56, Cl. 85—62.

Boyd, Richard C., to Bell Telephone Laboratories, Inc. Radiant energy relay system. 2,748,266, 5–29–56, Cl. 250—15.

Boytim, John E., and H. A. Jonard, to The Goodyear Tire & Rubber Co. Electrical pressure cell transducer. 2,747,408, 5–29–56, Cl. 73—398.

Bradley, Schuyler L.: *See*—
Brunner, Harry C., and Bradley. 2,748,340.

Bramhall, James J., Jr., and R. T. Scott, to American Viscose Corp. Fabric spreader. 2,747,250, 5–29–56, Cl. 26—54.

Brandt, Paul E., and E. J. De Ridder, to Reynolds Metals Co. Diving board. 2,747,871, 5–29–56, Cl. 272—66.

Braun, Bernd: *See*—
Braun, Emil and B. 2,747,228.

Braun, Emil and B., to F. B. Braun. Production of collagen strands. 2,747,228, 5–29–56, Cl. 18—47.5.

Breitenbach, Vernon A., to The Standard Oil Co. Fluid storage system. 2,747,774, 5–29–56, Cl. 222—395.

Bremer, Hermann F., to Indevco, Inc. Apparatus and method for heating a liquid by electrical conduction. 2,748,253, 5–29–56, Cl. 219—40.

Brewer, Charles P.: *See*—
Olberg, Ralph C., and Brewer. 2,748,061.

Briggs, Ben T.: *See*—
Hooper, John F., and Briggs. 2,747,995.

Briggs & Stratton Corp.: *See*—
Jacobi, Edward N. 2,747,397.

Bright, Stanley, Jr., to Troth Bright Page, Inc. Method of making plastic folding containers. 2,747,472, 5–29–56, Cl. 93—36.

Briglia, Anton. Erosion-correction mechanism. 2,747,798, 5–29–56, Cl. 235—61.5.

Brilhart Research Corp.: *See*—
Conrad, Julius M. F. 2,748,187.

Brimhall, Kirk L., to Western Equipment Mfg. Co. Bowl and apron adjustment for double frame carry type scoop. 2,747,308, 5–29–56, Cl. 37—129.

Brinkman, Bernardus J.: *See*—
Brinkman, Hendrik W. and B. J. 2,747,715.

Brinkman, Hendrik W., and B. J., to L. J. M. Reher called Wiggermann. Stopping mechanism for sewing and other machines. 2,747,715, 5–29–56, Cl. 192—146.

Brinton, Esme T. C., and H. F. Lowe, to Brintons Ltd. Manufacture of fabrics having a tufted surface. 2,747,647, 5–29–56, Cl. 154—1.1.

Brintons Ltd.: *See*—
Brinton, Esme T. C., and Lowe. 2,747,647.

Brioux, Uleric V., to Baker & Co. Inc. Method of forming a ring having embedded metal inserts therein. 2,747,259, 5–29–56, Cl. 29—160.6.

British Cast Iron Research Association, The: *See*—
Morrogh, Henton. 2,747,990.

British Insulated Callender's Cables Ltd.: *See*—
Clarke, Walter W. H., and Mann. 2,748,234.
Dixon, Henry J., and Gauterin. 2,748,361.

British Oxygen Co. Ltd.: *See*—
Schuftan, Paul M., and Webster. 2,747,681.

British Telecommunications Research Ltd.: *See*—
Beaufoy, Raymond. 2,748,285.

Broadwell, Herbert S.: *See*—
Maron, Irving, and Broadwell. 2,748,275.

Broberg, Leonard E., to A. O. Smith Corp. Wall panel construction. 2,747,703, 5–29–56, Cl. 189—34.

Bronstein, Harry. Circumcision clamp. 2,747,576, 5–29–56, Cl. 128—346.

Brooker, Leslie G. S., and D. W. Heseltine, to Eastman Kodak Co. Merocyanine dyes containing a sulfone group. 2,748,114, 5–29–56, Cl. 260—240.4.

Brooker, Leslie G. S., and E. J. Van Lare, to Eastman Kodak Co. Un-ionized cyanine dyes. 2,748,115, 5–29–56, Cl. 260—240.6.

Brooker, Robert M.: *See*—
Nash, Harold A., and Brooker. 2,748,112.

Brooks, Harold H., to Columbus Coated Fabrics Corp. Slitting machine having two laterally movable outer knives and a center knife maintained midway between the outer knives. 2,747,666, 5–29–56, Cl. 164—39.

Brown, Alfred S. and A. M., to Divine Brothers Co. Production of wear-resistant cloth and buffing wheel made of the same. 2,747,981, 5–29–56, Cl. 51—297.

Brown, Angus M.: *See*—
Brown, Alfred S. and A. M. 2,747,981.

Brown, Harrison. Coil spring type row crop cultivator. 2,747,490, 5–29–56, Cl. 97—59.

Brown, Jay T. Barbecuing apparatus. 2,747,497, 5–29–56, Cl. 99—427.

Brown, John R., to The Reliance Gauge Column Co. Long probe manometer. 2,748,379, 5–29–56, Cl. 340—244.

Brown, Lowell R., to Davis Tool & Engineering Co. Complex motion-generating mechanism. 2,747,417, 5–29–56. Cl. 74—57.

Brown, Mary V. Golf cart cover. 2,747,637, 5–29–56, Cl. 150—52.

Brown, Riley T.: *See*—
Willard, Ralph J., and Brown. 2,747,274.

Brown, William F., Jr., and F. W. Myers, to The Budd Co. Loading bar, especially for railway cars. 2,747,520, 5–29–56, Cl. 105—369.

Bruere, Charles A. Vise drill press. 2,747,439, 5–29–56, Cl. 77—44.

Brundage, William F.: *See*—
White, Joe, and Brundage. 2,748,383.

Bruner, Walter M., and P. J. Wayne, to E. I. du Pont de Nemours and Co. Polyamide compositions containing a high percentage of metal filler. 2,748,099, 5-29-56, Cl. 260—37.

Brunke, Earl H., to General Motors Corp. Condenser housing and mounting therefor. 2,748,185, 5-29-56, Cl. 174—52.

Brunner, Alfred, to Sulzer Freres, Societe Anonyme. Fuel supply system for internal combustion engines. 2,747,555, 5-29-56, Cl. 123—22.

Brunner, Harry C., and S. L. Bradley, to Westinghouse Electric Corp. Excitation system for a variable frequency generator. 2,748,340, 5-29-56, Cl. 322—24.

Brunner, Milton F., to Spring Packing Corp. Packing retainer. 2,747,946, 5-29-56, Cl. 308—89.

Brunswick-Balke-Collender Co., The: *See*—
Chapman, David, and Reineman. 2,747,654.

Bryant Electric Co., The: *See*—
Forstrom, Edward E. 2,748,205.

Bryer, Melvin L., 50% to F. Coughlin. Self-cleaning sand and sediment trap for pump lines. 2,747,737, 5-29-56, Cl. 210—57.

Buchanan, J. D. Hydraulic pressure operated switch. 2,748,219, 5-29-56, Cl. 200—83.

Buckeye Steel Castings Co., The: *See*—
Wolfe, Harry H. 2,747,750.

Budd Co., The: *See*—
Brown, William F., Jr., and Myers. 2,747,520.

Buensod-Stacey, Inc.: *See*—
Shataloff, Nicholas S. 2,747,842.

Buisson, Paul J. C.: *See*—
Paul, Raymond E., Buisson, and Joseph. 2,748,108.

Bunds, Charles N., Jr., to Northrop Aircraft, Inc. Stall warning device. 2,748,372, 5-29-56, Cl. 340—27.

Burdwood, Howard A. Support for blow torch. 2,747,856, 5-29-56, Cl. 266—23.

Burgess, Lauren M., to Acton Laboratories, Inc. Ganged potentiometer construction. 2,748,230, 5-29-56, Cl. 201—55.

Burkey Underwear Co.: *See*—
Burkey, William A. 2,747,391.

Burkey, William A., to Burkey Underwear Co. Garment. 2,747,391, 5-29-56, Cl. 66—177.

Burkhead, Edward J. Roller type sun visor. 2,747,927, 5-29-56, Cl. 296—97.

Burleigh, Arthur C. Reversible rotary impact tool. 2,747,447, 5-29-56, Cl. 81—52.3.

Burlin, Philip. Meat slicer guide. 2,747,633, 5-29-56, Cl. 146—88.

Burnett, George W.: *See*—
Silversher, Herman I., and Burnett. 2,748,030.

Burnham, Thomas C., to Rohr Aircraft Corp. Method of treating articles requiring annealing. 2,748,037, 5-29-56, Cl. 148—6.15.

Burroughs Wellcome & Co. (U. S. A.) Inc.: *See*—
Baltzly, Richard, and Russell. 2,748,126.
Baltzly, Richard, and Russell. 2,748,127.
Baltzly, Richard and Russell. 2,748,128.

Burtner, Robert R., to G. D. Searle & Co. 2-Amino-6-aryl-5,6-dihydro-4-hydroxypyrimidines. 2,748,120, 5-29-56, Cl. 260—256.4.

Burtner, Robert R., to G. D. Searle & Co. 2-anilino-4,6-dimethylpyrimidines. 2,748,122, 5-29-56, Cl. 260—256.4.

Burtner, Robert R., to G. D. Searle & Co. 2-(γ-diethylaminopropoxy)-4,6-dimethylpyrimidine, its salts, and processes for the manufacture thereof. 2,748,123, 5-29-56, Cl. 260—256.4.

Burtner, Robert R., to G. D. Searle & Co. 1-(4-anilino-2-pyrimidino)-3-alkylureas. 2,748,124, 5-29-56, Cl. 260—256.4.

Burton, Howard F., to The Black & Decker Mfg. Co. Apparatus for and method of manufacturing hole saws. 2,747,435, 5-29-56, Cl. 76—29.

Busch, Lee S.: *See*—
Carlton, George M., and Busch. 2,747,260.

Bussard, Emmery J. H., to Avco Mfg. Corp. Combined very-high-frequency and ultra-high-frequency tuner for television receiver. 2,748,286, 5-29-56, Cl. 250—40.

Butler, Frank D. Internal fluid pressure variable, combined hydrodynamic and planetary gearing driven, reversible sun-gear type of, transmission coupler. 2,747,429, 5-29-56, Cl. 74—688.

Büttner, Hugo. Method of production of connecting wires for a set of coil springs. 2,747,619, 5-29-56, Cl. 140—71.

Button, Fred L., ¼ to C. A. Morton. Universal driving dogs for lathes and milling machines. 2,747,451, 5-29-56, Cl. 82—41.

Butz, Lothar, to Aktiengesellschaft Brown, Boveri & Cie. Disconnecting switch. 2,748,211, 5-29-56, Cl. 200—48.

Butz, Lothar, to Aktiengesellschaft Brown, Boveri & Cie. Single-pillar scissor-type disconnect switch for high tension installations. 2,748,212, 5-29-56, Cl. 200—48.

Buvelot, John A., to American Steel Foundries. Renewing brake heads. 2,747,264, 5-29-56, Cl. 29—401.

Buyas, Hobert G. Tool for slotting metal Venetian blind slats. 2,747,278, 5-29-56, Cl. 30—258.

Caddell, Alfred M. Multiple angular, energy compensating centrifuge. 2,747,793, 5-29-56, Cl. 233—18.

Cady, John E., to United States Rubber Co. Apparatus for making inner tubes for tires. 2,747,223, 5-29-56, Cl. 18—14.

Caird, Clarissa E.: *See*—
Caird, Peter. 2,747,939.

Caird, Peter, to Clarissa E. Caird. Fire hose nozzle. 2,747,939, 5-29-56, Cl. 299—136.

Calbeck, John H., to American Zinc, Lead & Smelting Co. Process of manufacturing pigment zinc oxide. 2,747,966, 5-29-56, Cl. 23—148.

Calfee, John D.: *See*—
Miller, Charles B., and Calfee. 2,748,177.

Calhoun, Ernest N., to Edwin L. Wiegand Co. Indicating means. 2,748,228, 5-29-56, Cl. 200—167.

California Research Corp.: *See*—
Benoit, George J., Jr., and Abbott. 2,748,170.
Simm, Clarke N. 2,747,672.

Calosi, Carlo L., and P. B. Carwile, deceased (L. C. K. Carwile, executrix), to Raytheon Mfg. Co. Ultrasonic vibratory devices. 2,748,298, 5-29-56, Cl. 310—26.

Calvi, Pericles. Image combining means for color television apparatus. 2,747,460, 5-29-56, Cl. 88—24.

Campbell, David S., to Cardwell Westinghouse Co. Stabilised truck. 2,747,518, 5-29-56, Cl. 105—197.

Campbell, Donald N.: *See*—
Spraekien, Stanford B., and Campbell. 2,747,455.

Campbell, Liss O. J. Improvement in the method of operating spray driers for evaporating solutions, emulsions, suspensions, and the like. 2,747,660, 5-29-56, Cl. 159—48.

Campbell, Osmon B. Valve tappet with temperature responsive clearance compensation. 2,747,559, 5-29-56, Cl. 123—90.

Candor, Robert B., to General Motors Corp. Sequentially operated washing machine. 2,747,395, 5-29-56, Cl. 68—12.

Canning, Frederick N.: *See*—
Canning, Walter L. and F. N., and Bohm. 2,747,210.

Canning, Walter L. and F. N., and W. O. Bohm. Coating applicator. 2,747,210, 5-29-56, Cl. 15—230.

Cappella, Michael J., Jr., and B. A. Fraulo. Rupturable toy object. 2,747,874, 5-29-56, Cl. 273—102.1.

Capstaff, John G., and C. W. Cluts, to Eastman Kodak Co. Continuously driven printing machine. 2,747,478, 5-29-56, Cl. 95—75.

Carden, Marsene T. Radio and/or TV log holder. 2,747,465, 5-29-56, Cl. 88—39.

Cardwell Westinghouse Co.: *See*—
Campbell, David S. 2,747,518.

Cargill, Sylvester H., and W. L. Harkess; said Harkess assor. to said Cargill. Apparatus for closing and sealing cartons. 2,747,350, 5-29-56, Cl. 53—124.

Carlton, George M., and L. S. Busch, to P. R. Mallory & Co., Inc. Metal-ceramic materials and method of making same. 2,747,260, 5-29-56, Cl. 29—182.5.

Carrier Corp.: *See*—
Ayling, Robert W. 2,747,386.
Noone, Howard T. 2,747,378.

Carroad, Yale. Tethered ball game apparatus. 2,747,873, 5-29-56, Cl. 273—95.

Carroll, Burt H.: *See*—
Yutzy, Henry C., and Carroll. 2,747,999.

Carter, William R., to Superior Separator Co. Centrifugal separators for particle-laden gaseous media. 2,747,687, 5-29-56, Cl. 183—77.

Carwile, Lois C. K., executrix: *See*—
Calosi, Carlo L., and Carwile. 2,748,298.

Carwile, Preston B.: *See*—
Calosi, Carlo L., and Carwile. 2,748,298.

Case, J. I., Co.: *See*—
Crawford, John F. 2,747,270.
Fraga, John B. 2,747,484.
Talak, John F. 2,747,743.

Casey, Robert F., to Allen B. Du Mont Laboratories, Inc. Sweep circuit. 2,748,271, 5-29-56, Cl. 250—27.

Castedello, William: *See*—
Schwartz, Morris, and Castedello. 2,748,360.

Caterpillar Tractor Co.: *See*—
Robinson, Ronald R. 2,747,426.

Catlin, Robert T., and P. Hickman, to Remington Arms Co., Inc. Safety sleid for explosively driven tool. 2,747,187, 5-29-56, Cl. 1—44.5.

Caton, George, ½ to Yorkshire Switchgear & Engineering Co. Ltd. Electric circuit breakers. 2,748,227, 5-29-56, Cl. 200—150.

Catry, Jean, and R. N. Low, to Fairwest (U. K.) Ltd. Circular looms. 2,747,618, 5-29-56, Cl. 139—13.

Ceco Steel Products Corp.: *See*—
Bagnard, Ernest A. 2,747,705.

Cederquist, Emanuel L. Bolt with locking and retaining means. 2,747,638, 5-29-56, Cl. 151—61.

Celotex Corp., The: *See*—
Jones, William R. 2,747,470.

Chapman, David, and R. G. Reineman, to The Brunswick-Balke-Collender Co. Stacking chair. 2,747,654, 5-29-56, Cl. 155—194.

Chew, Clarence, to Owens-Illinois Glass Co. Apparatus for surface coating glassware. 2,747,541, 5-29-56, Cl. 118—211.

Chicago Railway Equipment Co.: *See*—
Soddy, Thomas C. 2,747,239.

Chiverton, Thomas J., to The Preload Co., Inc. Method and apparatus for making prestressed concrete articles. 2,747,249, 5-29-56, Cl. 25—128.

Christoph, Walter P. Double image micrometer. 2,747,284, 5-29-56, Cl. 33—125.

Chromatic Television Laboratories, Inc.: *See*—
Zaphiropoulos, Renn. 2,748,238.

Ciba Pharmaceutical Products, Inc.: *See*—
Druey, Jean, and Hueni. 2,748,117.
Druey, Jean, and Hueni. 2,748,118.

Cicero, Frank. Dishwasher contrarotary; solution recirculation means and attachments. 2,747,589, 5-29-56, Cl. 134—96.

Cincinnati Milling Machine Co., The: *See*—
Ernst, Hans, and Fritschi. 2,747,469.
Raehrs, Emery C., and Averill. 2,747,271.

Cincinnati Mine Machinery Co., The: *See*—
Krekeler, Claude B. 2,747,852.

Cislak, Francis E., to Reilly Tar & Chemical Corp. Process of making phenylpyridylcarbinols. 2,748,141, 5-29-56, Cl. 260—297.

Cities Service Research and Development Co.: *See*—
King, Jack A., and Fallgatter. 2,747,670.
Newcombe, Jack, and Doane. 2,748,080.

Clade, Robert, to W-K-M Mfg. Co., Inc. Composite gasket formed in situ. 2,747,905, 5-29-56, Cl. 288—20.

Clapp, Gerald D. Guide apparatus for use with a toilet flushing mechanism. 2,747,198, 5-29-56, Cl. 4—57.

Clarke, Walter W. H., and C. A. Mann, to British Insulated Callender's Cables Ltd. Electric resistors. 2,748,234, 5-29-56, Cl. 201—73

Clauson-Kaas, Niels K. F. W., N. Elming, and J. T. Nielsen, to A/S Sadolin & Holmblad. Derivatives of n-hydroxy pyridones and process of production. 2,748,142, 5-29-56, Cl. 260—297.

Clauson-Kaas, Niels K. F. W., to A/S Sadolin & Holmblad. 2,5-dialkoxy-3,4-dihydroxytetrahydrofurans and their hydrolysates, and methods of producing them. 2,748,147, 5-29-56, Cl. 260—347.4.

Clavell, Thomas W., to Fairchild Engine and Airplane Corp. Auxiliary seal and support for a shaft within a housing. 2,747,901, 5-29-56, Cl. 286—11.

Clayton, David P., and G. W. Onksen, to General Motors Corp. Switch. 2,748,207, 5-29-56, Cl. 200—16.

Clemas, Casimer A. Sportsman's accessories. 2,747,315, 5-29-56, Cl. 43—3.

Clevenger, Carl L.: *See*—
Nichols, Charles A., and Clevenger. 2,747,645.

Clevite Corp.: *See*—
Pearlman, Alan R. 2,748,274.

Clinedinst, William O.: *See*—
Adams, Orlando P., and Clinedinst. 2,748,039.

Closson, Katherine W., and J. C. Boag, to Ethyl Corp. Stabilized organic compositions. 2,747,978, 5-29-56, Cl. 44—69.

Clough, Gale V.: *See*—
Tigerman, Louis, and Clough. 2,747,346.

Cluts, Charles W.: *See*—
Capstaff, John G., and Cluts. 2,747,478.

Cockerell, Christopher S.: *See*—
Rust, Noel M., and Cockerell. 2,748,385.

Coffman, William P. Air injection means for automotive engines. 2,747,554, 5-29-56, Cl. 123—25.

Cohen, Henry, and J. H. H. Darth, to Power Jets (Research and Development) Ltd. Jet propulsion plant with interconnected afterburner and jet nozzle area control. 2,747,363, 5-29-56, Cl. 60—35.6.

Colburn, Allan P., J. B. Jones, and C. Pyle, to E. I. du Pont de Nemours & Co. Vapor and liquid contacting. 2,747,849, 5-29-56, Cl. 261—114.

Collerati, Mario. Method of and apparatus for heating fluids. 2,748,249, 5-29-56, Cl. 219—38.

Collins, Fred V.: *See*—
Stahl, William F., and Collins. 2,748,014.

Collins Radio Co.: *See*—
Phillips, Edwin N. 2,748,345.

Color Television Inc.: *See*—
Stahl, Robert J., and Heikes. 2,748,188.

Columbus Coated Fabrics Corp.: *See*—
Brooks, Harold H. 2,747,666.

Commerce, United States of America as represented by the Secretary of: *See*—
Slutz, Ralph J. 2,748,269.

Commercial Solvents Corp.: *See*—
Hickey, Richard J. 2,748,053.
Lingo, Shirley P. 2,748,163.

Compagnie des Forges et Aciéries de la Marine et d'Homécourt: *See*—
Conchon, Joseph A. 2,747,253.

Compco Corp.: *See*—
Fischer, Harold A. 2,747,732.

Conchon, Joseph A., to Compagnie des Forges et Aciéries de la Marine et d'Homécourt. Device for forging parts having large cross-sectional variations. 2,747,253, 5-29-56, Cl. 29—6.

Cone Automatic Machine Co., Inc.: *See*—
Garrand, Roy J. 2,747,437.

Confeld, James D., to General Dynamics Corp. Duplex signaling system. 2,748,193, 5-29-56, Cl. 179—16.

Conn, William M. Porous alloyed welding fluxes. 2,748,040, 5-29-56, Cl. 148—26.

Conrad, Julius M. F., to Brilhart Research Corp. Electric terminal. 2,748,187, 5-29-56, Cl. 174—153.

Continental X-Ray Corp.: *See*—
Worden, Jesse L. 2,748,292.

Contur Abrasive Co., Inc.: *See*—
Gellert, Donald N. 2,747,343.

Cook, Harry M., to E. I. du Pont de Nemours and Co. Yarn cutter. 2,747,663, 5-29-56, Cl. 164—38.

Cooper, Samuel W. Combination ripper attachment for scrapers and bulldozers. 2,747,309, 5-29-56, Cl. 37—145.

Coover, Harry W., Jr.: *See*—
Shearer, Newton H., and Coover. 2,748,050.

Cope, Arthur C., and H. L. Jackson, to E. I. du Pont de Nemours & Co. Preparation of acyl phosphoric esters. 2,748,153, 5-29-56, Cl. 260—461.

Corbin, Wesley S., and C. M. Pearson, to The Black-Clawson Co. Head box for paper making machines. 2,747,471, 5-29-56 Cl. 92—44.

Corkum, Ray T.: *See*—
Daniel, John H., Jr., and Corkum. 2,748,092.

Corson, Ralph. Pressure-sensitive tape dispensing machine. 2,747,664, 5-29-56, Cl. 164—38.

Cosgrove, James, to Edwards Brothers (Tippers) Ltd. Control valves for hydraulic tipping-hoists for vehicles. 2,747,550, 5-29-56, Cl. 121—46.4.

Cottrell, Robert B., to American Steel Foundries. Spring group. 2,747,861, 5-29-56, Cl. 267—4.

Coughlin, Frank: *See*—
Bryer, Melvin L. 2,747,737.

Courtney, Joseph F., and A. C. Radtke, to International Harvester Co. Glass fiber drawing mechanism. 2,747,335, 5-29-56, Cl. 49—17.

Couture, Anthony. Golf boot. 2,747,636, 5-29-56, Cl. 150—1.5.

Cox, Jasper P.: *See*—
Lewis, Warner, Sr., and Cox. 2,747,684.

Cox, John M.: *See*—
Schnitzius, Homer D., and Cox. 2,747,226.

Cox, Joseph B., to Oregon Saw Chain Corp. Anvil for a chain rivet removing device. 2,747,362, 5-29-56, Cl. 59—7.

Cox, Joseph B., to Oregon Saw Chain Corp. Saw chain cutter. 2,747,623, 5-29-56, Cl. 143—135.

Cox, Joseph B., to Oregon Saw Chain Corp. Saw chain with snap ring fasteners. 2,747,624, 5-29-56, Cl. 143—135.

Cox, Martin, and R. K. P. Stevens, to Power Jets (Research and Development) Ltd. Seals. 2,747,843, 5-29-56, Cl. 257—6.

Coyne, Cornelius L., Jr., and G. A. Mitchell, to Western Electric Co., Inc. Fixture for adjusting the cathode of an electronic tube. 2,747,961, 5-29-56, Cl. 316—27.

Crabtree, Leonard F., to Automatic Electric Laboratories, Inc. Remote control system. 2,748,374, 5-29-56, Cl. 340—163.

Craine, Marvin W., to S. A. Bahr. Electrical resistor. 2,748,233, 5-29-56, Cl. 201—67.

Crane Co.: *See*—
Langner, Emil. 2,747,633.

Crane, Harold S., to The Diamond Match Co. Molded pulp slipper. 2,747,301, 5-29-56, Cl. 36—9.

Crane Packing Co.: *See*—
Payne, Frank E., and Sole. 2,747,902.

Crane, Robert, Jr., and M. W. McKay, to General Precision Laboratory Inc. Automatic frequency control circuit. 2,748,384, 5-29-56, Cl. 343—17.2.

Crawford, John F., deceased, by M. A. Crawford, executrix, to J. I. Case Co. Forging process. 2,747,270, 5-29-56, Cl. 29—534.

Crawford, Maude A.: *See*—
Crawford, John F. 2,747,270.

Creed and Co., Ltd.: *See*—
Salmon, Reginald D., and Nash. 2,747,712.

Critchley, William C., to The Gleason Works. Hydraulic system and periodically flushed throttle valve therefor. 2,747,371, 5-29-56, Cl. 60—52.

Crittendon, Lexie R., and W. Gail, Jr., to Remington Arms Co., Inc. Barrel to receiver connection on a firearm. 2,747,313, 5-29-56, Cl. 42—75.

Cromwell, Harold J., and W. H. Taylor, to General Motors Corp. Starter. 2,747,414, 5-29-56, Cl. 74—7.

Crown Zellerbach Corp.: *See*—
Works, William R., and Miles. 2,748,046.

Cunningham, James M., F. L. Pratt, and P. M. Kovach, to International Business Machines Corp. Paper feeding device. 2,747,717, 5-29-56, Cl. 197—133.

Currie, Gilbert, to Westinghouse Electric Corp. Self-adjusting brake. 2,747,698, 5-29-56, Cl. 188—171.

Curry, Elmer P. Pneumatic clamp. 2,747,535, 5-29-56, Cl. 113—99.

Curtis, Wilbur, Co., Inc.: *See*—
Curtis, Wilbur D. 2,747,740.

Curtis, Wilbur D., to Wilbur Curtis Co., Inc. Vacuum type coffee strainer. 2,747,740, 5-29-56, Cl. 210—162.

Cusic, John W., and C. A. Dornfeld, to G. D. Searle & Co. Arylcycloalkyloxyalkylamine derivatives and methods for their preparation. 2,748,116, 5-29-56, Cl. 260—247.7.

Cutler, Sam. Indoor golf devices. 2,747,406, 5-29-56, Cl. 73—379.

Daimler-Benz Aktiengesellschaft: *See*—
Forster, Hans J. M. 2,747,433.
Förster, Hans-Joachim M., Kollmann, and Kümmich. 2,747,430.

Daily, Roy, to General Electric Co. Channel-shaped stylus. 2,748,199, 5-29-56, Cl. 179—100.41.

Daly, John J. Slack adjusting devices for air brakes. 2,747,700, 5-29-56, Cl. 188—196.

Daman, Arthur C., to Mining Process and Patent Co. Dual circulation aeration apparatus. 2,747,733, 5-29-56, Cl. 209—168.

Damm, Carl A., and W. Paraskewik. Hydraulic packing. 2,747,954, 5-29-56, Cl. 309—23.

Dammert, Earl D.: *See*—
Adair, Robert V., Dammert, and Van Beers. 2,748,038.

Daniel, John H., Jr., and R. T. Corkum, to American Cyanamid Co. Modified alkyd resin and process of preparing same. 2,748,092, 5-29-56, Cl. 260—22.

Darnell, William E., Jr. Garment bagging device. 2,747,824, 5-29-56, Cl. 248—161.

Darth John H. H.: *See*—
Cohen, Henry, and Darth. 2,747,363.

Daubenspeck, John M., and R. S. McNeil, to National Lead Co. Process for separating iron values from titaniferous iron material. 2,747,987, 5-29-56, Cl. 75—30.

Daugherty, Charles C., to Republic Steel Corp. Recovery of manganese from ores. 2,747,965, 5-29-56, Cl. 23—145.

Daum, Claude R., R. H. Kuemmich, and W. U. Garstka. Electronic coding device. 2,748,376, 5-29-56, Cl. 340—190.

Daumiller, Guenther, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Production of polyurethanes using tri- or tetra-functional reactants. 2,748,102, 5-29-56, Cl. 260—77.5.

Daverin, George E.: *See*—
Stone, Albert L., and Daverin. 2,747,751.

Davidson, Alfred G., Jr., to The American Rondo Corp. Combined packaging and supporting members. 2,747,787, 5-29-56, Cl. 229—40.

Davies, Eric, to Marconi's Wireless Telegraph Co. Ltd. Cathode ray tubes for television and like purposes. 2,748,305, 5–29–56, Cl. 313—76.

Davis, Allen V. C. Electric switch. 2,748,215, 5–29–56, Cl. 200—67.

Davis, Earl K.: *See*—
Kreidl, Norbert J., and Davis. 2,748,006.

Davis Tool & Engineering Co.: *See*—
Brown, Lowell R. 2,747,417.

Davis, William W., and T. V. Parke, to Eli Lilly and Co. Electrophoretic microcell. 2,748,074, 5–29–56, Cl. 204—299.

Dawson, Charles E. Bed lift. 2,747,203, 5–29–56, Cl. 5—69.

Dayton Steel Foundry Co., The: *See*—
Walther, Daniel A. 2,747,422.

De Boer, Floris: *See*—
Botden, Theodoor P. J., Teves, Tol, and de Boer. 2,748,304.

Decker, William E. Automotive vehicle headlight. 2,748,255, 5–29–56, Cl. 240—7.1.

Deere & Co.: *See*—
Silver, Walter H., and Lohrman. 2,747,489.

Deere Mfg. Co.: *See*—
Slavens, Wayne E. 2,747,722.
Wittren, Richard A. 2,747,562.

De Ganahl, Carl. Pipe structure. 2,747,616, 5–29–56, Cl. 138—55.

Delly, Fredric H.: *See*—
Hildebrandt, Alexander B., and Delly. 2,747,294.

Deitrickson, Roy H., to The National Supply Co. Method for providing a pressure responsive variable spray. 2,748,036, 5–29–56, Cl. 134—24.

De Lancey, Ralph W. Thermal switches. 2,748,222, 5–29–56, Cl. 200—122.

De Lew, Earl R., and F. G. Michaelis, to Yosemite Chemical Co. Method for cleaning carbonaceous material and soil from surfaces. 2,748,084, 5–29–56, Cl. 252—172.

De Lorenzo, Joseph P. Disposable package and applicator for suppositories. 2,747,574, 5–29–56, Cl. 128—261.

Delruelle, Andre, to Pannetals and Processes Inc. Method and apparatus for concentrating scale-forming phosphoric acid solutions and the like. 2,747,659, 5–29–56, Cl. 159—4.

De Nederlandse Centrale Organisatie Voor Toegepast Natuurwetenschappelijk Onderzoek: *See*—
Steiner, Abram A. 2,747,331.

Denison Engineering Co., The: *See*—
Adams, Cecil E., and Born. 2,747,606.

De Ridder, Ernst J.: *See*—
Brandt, Paul E., and De Ridder. 2,747,871.

Despard, Victor R., to Pass & Seymour, Inc. Push-in type terminal unit for lamp receptacles. 2,748,363, 5–29–56, Cl. 339—95.

Detrex Corp.: *See*—
Duncan, Ira J. 2,748,035.

Detroit Controls Corp.: *See*—
Dillman, Earnest J., and Galley. 2,748,224.
Mosely, Neal J. 2,747,800.

De Vilder, Arthur. Leveling attachment for farm implement hitches. 2,747,884, 5–29–56, Cl. 280—6.

De Visser, Adolf J.: *See*—
Kolkman, Dirk, and de Visser. 2,748,308.

Dewrance & Co. Ltd.: *See*—
Gibson, John H. 2,747,682.

Dexter Folder Co.: *See*—
Bach Emmon, Goodwin, and Raunecker. 2,747,869.

Diamond Match Co., The: *See*—
Crane, Harold S. 2,747,301.

Dick, A. B., Co.: *See*—
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Dickey, Paul S., to Bailey Meter Co. Fluid pressure selector station for control systems. 2,747,595, 5–29–56, Cl. 137—82.

Dickten, Emil, Jr., R. P. Riesz, and R. L. Wallace, Jr., to Bell Telephone Laboratories, Inc. Fabrication of junction transistors. 2,748,349, 5–29–56, Cl. 324—158.

Dietrich, Howard H., to General Motors Corp. Anti-detonating carburetor. 2,747,561, 5–29–56, Cl. 123—119.

Dillinger, Chester A. Power transmission control system. 2,747,707, 5–29–56, Cl. 192—.092.

Dillman, Earnest J., and F. C. Galley, to Detroit Controls Corp. Control device. 2,748,224, 5–29–56, Cl. 200—140.

Dings Magnetic Separator Co.: *See*—
Palm, Bernhard A. 2,747,735.

Distelmaier, Alfred, to Schenley Industries, Inc. Novel chemotherapeutic agents comprising dialkynyl ethers of diethylstilbestrol. 2,748,169, 5–29–56, Cl. 260—613.

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Dodd, Arthur E., to Westinghouse Air Brake Co. Electrical relay operating circuit for control of highway crossing signals. 2,748,265, 5–29–56, Cl. 246—130.

Dodson, Raymond M., to G. D. Searle & Co. Sulfonylacetamides. 2,748,164, 5–29–56, Cl. 260—558.

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Sly, Leslie W., Doe, and Fisher. 2,747,327.

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Doll, Henri-Georges, to Schlumberger Well Surveying Corp. Methods and apparatus for determining hydraulic characteristics of formations traversed by a borehole. 2,747,401, 5–29–56, Cl. 73—151.

Doll, Henri-Georges, to Schlumberger Well Surveying Corp. Differential pressure well logging. 2,747,402, 5–29–56, Cl. 73—152.

Doolittle, Howard D., to Machlett Laboratories, Inc. Filament structure. 2,748,311, 5–29–56, Cl. 313—264.

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Cusic, John W., and Dornfeld. 2,748,116.

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Doster, Ollie L. Dual distributor for internal-combustion engines. 2,747,563, 5–29–56, Cl. 123—195.

Doumani, Thomas F., to Union Oil Co. of California. Hydrocarbon conversion catalyst and process. 2,748,062, 5–29–56, Cl. 196—50.

Dow Chemical Co., The: *See*—
Head, James D., and Ivins. 2,748,161.
Head, James D., and Ivins. 2,748,162.
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Mussell, Dorsey R. 2,747,983.
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Doyle, William J. Toy gyro saucer. 2,747,326, 5–29–56, Cl. 46—50.

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Zbornik, Thomas W., and Peterson. 2,748,051.

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Driver, Wilfred D. Folding beds. 2,747,202, 5–29–56, Cl. 5—2.

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Druey, Jean, and A. Hueni, to Ciba Pharmaceutical Products, Inc. N-alkyl-quinoxalinium salts. 2,748,118, 5–29–56, Cl. 260—251.

Drugmand, Lester D., to Edwin L. Wiegand Co. Heating devices. 2,748,251, 5–29–56, Cl. 219—38.

Dubin, Pauline E. D. Measuring scoop. 2,747,410, 5–29–56, Cl. 73—429.

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Speed, William C., and Dwyer. 2,748,016.

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Brooker, Leslie G. S., and Van Lare. 2,748,115.
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Eckley, William A., to Goodman Mfg. Co. Gyratory device. 2,747,418, 5–29–56, Cl. 74—87.

Eder, George J. Pliers with pivotally attached cam actuated supplementary jaws. 2,747,446, 5–29–56, Cl. 81—47.

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Edmunds, Glenn E., to The Jeffrey Mfg. Co. Tramming locomotive. 2,747,517, 5–29–56, Cl. 105—50.

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Egghen, Fred V. Attachment for supporting a magazine and an ash tray conveniently in front of aperson seated in front of a hair dryer. 2,747,322, 5–29–56, Cl. 45—82.

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Electrolux Corp.: *See*—
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Elgin American, Inc.: *See*—
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Emmert, Walter E., ½ to H. Fong. Inside control for refrigerator door latches. 2,747,906, 5–29–56, Cl. 292—92.

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Epstein, Stanley H. Collapsible umbrella. 2,747,592, 5–29–56, Cl. 135—20.

Erbguth, Paul F. K. Flower holder. 2,747,333, 5–29–56, Cl. 47—41.

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Erickson, Charles J. and C. R. 2,747,204.

Erickson, John G., to General Mills, Inc. N,N-di fatty pyrrolidinium halides. 2,748,143, 5–29–56, Cl. 260—313.

Erickson, Warren E., to Gisholt Machine Co. Seal stripping and opening device. 2,747,769, 5–29–56, Cl. 221—225.

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Ernst, Edward J. Dispenser. 2,747,772, 5–29–56, Cl. 222—100.

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Esposito, Antonio. Attachment for electric clipper. 2,747,277, 5–29–56, Cl. 30—200.

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Faber, Karl, to Siemens & Halske Aktiengesellschaft. Automatic P. B. X telephone system. 2,748,195, 5–29–56, Cl. 179—18.

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Fairchild Engine and Airplane Corp.: *See*—
Clavell, Thomas W. 2,747,901.

Fairwest (U. K.) Ltd.: *See*—
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Schmitter, Walter P., and Bade. 2,747,711.

Falk, Joseph. Clamping device for tubing and the like. 2,747,821, 5–29–56, Cl. 248—71.

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Fatio, Paul. Apparatus for volumetric measurements. 2,747,400, 5–29–56, Cl. 73—149.

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Faust, Charles L., and W. H. Safranek, to Rockwell Spring and Axle Co. Composition and process for electroplating bright nickel. 2,748,088, 5–29–56, Cl. 204—43.

Faust, Delbert G., to C. A. Norgren Co. Lubricator. 2,747,688, 5–29–56, Cl. 184—55.

Fay, James P. Registering mechanism for rotary offset printing machines. 2,747,504, 5–29–56, Cl. 101—248.

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Feins, Joseph S. Brake fluid leak detectors. 2,748,378, 5–29–56, Cl. 340—244.

Felger, James N., to Olin Mathieson Chemical Corp. Mixer. 2,747,974, 5–29–56, Cl. 23—284.

Fenimore, Orris D. Pamphlet forming machine. 2,747,189, 5–29–56 Cl. 1—106.

Ferguson, Harry, Inc.: *See*—
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Ferneau, Richard H., and M. E. Miley, to Washington Mortuary Supply Co. Multi-level ambulance cot. 2,747,919, 5–29–56, Cl. 296—20.

Field, Crosby, to Flakice Corp. Laminae freezer. 2,747,379, 5–29–56, Cl. 62—106.

Field, Harmon L. Vertically adjustable platform attachment for shoes. 2,747,300, 5–29–56, Cl. 36—7.5.

Finch, Gaylord K., and H. J. Hagemeyer, Jr., to Eastman Kodak Co. Process of manufacturing mono-alkyl ethers of ethylene glycol and of polyethylene glycols. 2,748,171, 5–29–56 Cl. 260—615.

Finelli, Anthony F., to The Goodyear Tire & Rubber Co. Purification and decolorization of esters. 2,748,159, 5–29–56, Cl. 260—475.

Fink, Raymond E., to The New Haven Pulp and Board Co. Cartons. 2,747,785, 5–29–56, Cl. 229—28.

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Fischer, Thomas L., to Standard Coil Products Co., Inc. Calibration device. 2,748,375, 5–29–56, Cl. 340—187.

Fisher, Emery J. Chemical spray gun. 2,747,934, 5–29–56, Cl. 299—86.

Fisher, Herbert R., to Garden City Plating & Mfg. Co. Leveling device for a standard. 2,747,826, 5–29–56, Cl. 248—243.

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Sly, Leslie W., Doe, and Fisher. 2,747,327.

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Flexman, James W., and R. T. Lidge. Bed pan. 2,747,199, 5–29–56, Cl. 4—112.

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Forster, Hans J. M., to Daimler-Benz Aktiengesellschaft. Shifting mechanism with free-wheel device, especially for planetary gearings. 2,747,433, 5–29–56, Cl. 74—781.
Förster, Hans-Joachim M., K. A. Kollmann, and T. F. Kümmich, to Daimler-Benz Aktiengesellschaft. Change speed gear with hydrodynamic clutch. 2,747,430, 5–29–56, Cl. 74—732.
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Fortin, Charles A., 90% to P. Pouliot. Hydromassaging device. 2,747,571, 5–29–56, Cl. 128—66.
Foster, Louis W. Armored garment. 2,747,190, 5–29–56, Cl. 2—2.5.
Fouché, René P. Motor pump. 2,747,512, 5–29–56, Cl. 103—87.
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Spear, Donald R., and Fowler. 2,748,029.
Fox, Malcolm H. Tool attaching mechanisms. 2,747,186, 5–29–56, Cl. 1—44.4.
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Franck, Kurt, and R. G. McPhail, to Holophane Co., Inc. Direct lighting luminaires. 2,748,263, 5–29–56, Cl. 240—106.
Frank, Karl, to Micro Balancing, Inc. Thermostatic control means. 2,748,223, 5–29–56, Cl. 200—122.
Frank, Stanley L., to Westinghouse Electric Corp. Electric switches. 2,748,210, 5–29–56, Cl. 200—44.
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Franklin, Murry H. Kitchen tongs. 2,747,912, 5–29–56, Cl. 294—29.
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Fray, Victor H. Heading machines for bolts, screws, rivets, and the like. 2,747,205, 5–29–56, Cl. 10—13.
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Freundlich-Gomez Machinery Corp.: *See*—
Freundlich, Albert. 2,747,577.
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Friedman, Bernard L. Photo-flash assemblies. 2,748,259, 5–29–56, Cl. 240—11.4.
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Bacon, Cyril G., and Friend. 2,747,964.
Friend, Justice Q. Dispenser. 2,747,777, 5–29–56, Cl. 222—517.
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Frost, Frank S. Hand truck with multiple wheel pairs. 2,747,883, 5–29–56, Cl. 280—5.26.
Fry, Geneva K. Trellis drape. 2,747,252, 5–29–56, Cl. 28—78.
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Fulmer, Norman C. Display frame. 2,747,311, 5–29–56, Cl. 40—156.
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Gacki, Leonard W., and W. A. Winfield, to X-ray Instrument Corp. Film developing and processing tank. 2,747,482, 5–29–56, Cl. 95—96.
Gaffney, Francis J., and H. A. Finke, to Polytechnic Research and Development Co., Inc. Shielded-line tunable resonator. 2,748,276, 5–29–56, Cl. 250—36.
Gage, Milton G. and T. L. Filter tip cigarette. 2,747,579, 5–29–56, Cl. 131—4.
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Galkin, Joseph. Double ruffling mechanism for sewing machines. 2,747,531, 5–29–56, Cl. 112—132.
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Gamby, Littleton B. Security lock. 2,747,396, 5–29–56, Cl. 70—185.
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Garrison, Ralph P. and J. O., and Walker. 2,747,882.
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Gastrow, Hans. Radial machine. 2,747,516, 5–29–56, Cl. 103—161.
Gattuso, Henry A. Screen printers. 2,747,502, 5–29–56, Cl. 101—126.
Gatzert, Ernest H., to General Dynamics Corp. Drop-back selector. 2,748,194, 5–29–56, Cl. 179—18.
Gaudreau, Richard J., to Standard Foil Products Corp. Containers. 2,747,784, 5–29–56, Cl. 229—2.5.
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Gentry, Charles H. R., A. W. J. Gollin, and N. Herzfeld, to Hartford National Bank and Trust Co., trustee. Method of making gas discharge tube and rectifier. 2,748,033, 5–29–56, Cl. 117—224.
Georgiev, Alexander M., to General Motors Corp. Mounting structure for capacitor. 2,747,827, 5–29–56, Cl. 248—316.
Gerhardt, Walter, and A. Schropp, to H. A. Sickinger. Vehicle coupling for producing additional ground pressure of the coupled vehicles. 2,747,890, 5–29–56, Cl. 280—406.
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Gleim, William K. T., to Universal Oil Products Co. Deactivating catalytic effect of metals. 2,747,980, 5–29–56, Cl. 44—72.
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Goldberger, Ernö M. Shoulder rest for violins. 2,747,452, 5–29–56, Cl. 84—280.
Golden, Abraham H., R. W. Schmid, and P. P. Kubik, to The Yale & Towne Mfg. Co. Locking mechanism for tubular lock. 2,747,907, 5–29–56, Cl. 292—169.
Goldschmidt, Hans, to Magna Engineering Corp. Circular saw work supporting table. 2,747,626, 5–29–56, Cl. 144—1.
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Gorski, Alexander A., to Philco Corp. Blocking oscillator circuit. 2,748,282, 5–29–56, Cl. 250—36.
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Gray, Robert B., to American Meter Co., Inc. Differential pressure responsive bellows. 2,747,614, 5–29–56, Cl. 137—781.
Green, Frank W., to Pullman-Standard Car Mfg. Co. Car turnover device. 2,747,263, 5–29–56, Cl. 29—284.
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Groff, Edwin L., to Quinlan Pretzel Co., Inc. Roller apron assembly for pretzel twisting machine. 2,747,524, 5–29–56, Cl. 107—9.
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Haas, Peter W., Jr. Viscosity meter. 2,747,398, 5–29–56, Cl. 73—56.
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Head, James D., and O. D. Ivins, to The Dow Chemical Co. Preparation of phthalaldehydic acid from pentachloroxylene. 2,748,162, 5–29–56, Cl. 260—515.

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Heesemann, Karl. Grinding machine. 2,747,341, 5–29–56, Cl. 51—141.

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Hodan, Theodore J., and W. M. Woods, to Allis-Chalmers Mfg. Co. Means and method for backwashing the zeolite in a hot lime hot zeolite water softening system. 2,748,077, 5–29–56, Cl. 210—24.

Hodges, Robert H. Automatic fire extinguisher for automobiles. 2,747,674, 5–29–56, Cl. 169—2.

Hoffmaster, George R., to Willson Products, Inc. Adjustable means for face protective device. 2,747,191, 5–29–56, Cl. 2—8.

Hofmann, Corris M., to American Cyanamid Co. 1-substituted-4-sulfamylpiperazine and method of preparing the same. 2,748,125, 5–29–56, Cl. 260—256.5.

Hofmann, Corris M., to American Cyanamid Co. Sulfamylpiperazines and method of preparing the same. 2,748,129, 5–29–56, Cl. 260—268.

Hogan, Clarence L., to Bell Telephone Laboratories, Inc. Non-reciprocal waveguide attenuator. 2,748,353, 5–29–56, Cl. 333—81.

Hohwart, Ernest F.: *See*—
Hohwart, George and E. F. 2,747,880.

Hohwart, George and E. F., to N. A. Woodworth Co. Rubber power booster. 2,747,880, 5–29–56, Cl. 279—4.

Holly Carburetor Co.: *See*—
Kell, Leonard W. 2,747,508.

Holliday, William C., Jr., T. S. Tutwiler, and C. F. Ford, to Esso Research and Engineering Co. Polymerization process. 2,748,083, 5–29–56, Cl. 252—51.5.

Holm, Arman W., and G. M. Larson. Fisherman's deicer. 2,747,569, 5–29–56, Cl. 126—367.

Holmes, Tracy S. Foot actuated, ground engaging brake for hand trucks and the like. 2,747,692, 5–29–56, Cl. 188—5.

Holophane Co., Inc.: *See*—
Franck, Kurt, and McPhail. 2,748,263.

Holtz, Abe: *See*—
Sadinoff, Max, and Holtz. 2,747,392.

Hooper, John F., and B. T. Briggs, to Rayonier Inc. Method of pulp production. 2,747,995. 5–29–56, Cl. 92—11.

Hoopes, Harry P., to Pabco Products Inc. Reinforced cementitious insulating material and method of preparation thereof. 2,747,994, 5–29–56, Cl. 92—3.

Hooser, Sterling M. Key for opening cans. 2,747,764, 5–29–56, Cl. 220—52.

Hoover Co., The: *See*—
Segesman, Louis E. 2,747,215.
Stahl, Maurice D. 2,747,217.
Tschudy, Donald B. 2,747,216.
Ziegler, Brandt F., Jr. 2,747,683.

Hooverson, Charles P., and M. H. Schumer, to General Motors Corp. Retractable rear window for an automobile. 2,747,921, 5–29–56, Cl. 296—44.

Honff, Heinrich, O. von Schikh, and H. J. Riedl, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Production of oximes. 2,748,166, 5–29–56, Cl. 260—566.

Horne, William A.: *See*—
Gwynn, Bernard H., and Horne. 2,747,986.

Hosmer, Ellsworth A., to Shand and Jurs Co. Telemetering system for remote indication. 2,748,373, 5–29–56, Cl. 340—151.

Houdry, Eugene J., to Oxy-Catalyst, Inc. Surface type catalysis. 2,747,976, 5–29–56, Cl. 23—288.

Hovlid, Norman G. Aquarium device. 2,748,075, 5–29–56, Cl. 210—16.

Howard, Ben O. Canard type airplane and controls therefor. 2,747,816, 5–29–56, Cl. 244—45.

Howard, Joseph O. Card shuffling mechanism. 2,747,877, 5–29–56, Cl. 273—149.

Howe, Elra F. Flood control system. 2,747,678, 5–29–56, Cl. 182—1.

Hoyle, Robert J., Jr., to The MacGillis & Gibbs Co. Pole construction. 2,747,243, 5–29–56, Cl. 20—99.

Hudson, Kenneth C., to Minneapolis-Honeywell Regulator Co. Electrical indicator. 2,748,231, 5–29–56, Cl. 201—55.

Hudson, Paul S.: *See*—
Smith, Warren L., Potts, and Hudson. 2,748,131.

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Druey, Jean, and Huenl. 2,748,117.

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Beaumont, James O. 2,747,797.

Huenl, Albrecht: *See*—
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Hughes Aircraft Co.: *See*—
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Whinnery, John R. 2,748,268.

Hull, David C.: *See*—
Hagemeyer, Hugh J., Jr., and Hull. 2,748,167.

Huls, William J.: *See*—
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Hultquist, Martin E., to American Cyanamid Co. Process for separating nicotinic acid from isonicotinic acid. 2,748,136, 5–29–56, Cl. 260—295.

Hultquist, Martin E., and R. S. Barker, to American Cyanamid Co. Process for preparing isonicotinic acid. 2,748,137, 5–29–56, Cl. 260—295.

Hults, Ellsworth H., to Smith-Meeker Engineering Co. Selectively responsive indicator. 2,748,382, 5–29–56, Cl. 340—316.

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Stone, Albert L., and Daverin. 2,747,751.

Hummel, August C. Roll positioning device for tape dispenser. 2,747,807, 5–29–56, Cl. 242—55.2.

Hummel, August C. Production lever for tape dispensers. 2,747,867, 5–29–56, Cl. 271—2.4.

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Kroeper, Hugo, and Hummel. 2,748,165.

Hunkins, Everett D., to Garden Tools, Inc. Ground perforator and seeder. 2,747,528, 5–29–56, Cl. 111—92.

Hunt, Frederick V. Projection slide and method of preparing the same. 2,748,017, 5–29–56, Cl. 117—8.

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Greener, Raymond A., and Hunter. 2,747,188.

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Huppert, Perry I. and S., to J. P. S. Products, Inc. Door opening device. 2,747,863, 5–29–56, Cl. 268—59.

Huppert, Sidney: *See*—
Huppert, Perry I. and S. 2,747,863.

Hurlburt, Charles E., to Bendix Aviation Corp. Gyroscope. 2,747,413, 5–29–56, Cl. 74—5.2.

Hurx, Adrianus A., to Hartford National Bank and Trust Co., as trustee. Gas or vapor discharge tube. 2,748,309, 5–29–56, Cl. 313—197.

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Schelke, Robert K., and Huth. 2,748,367.

Hyde, Robert W., to The Schaible Co. Drinking fountain attachment. 2,747,930, 5–29–56, Cl. 299—11.

Icxl, Jean J. G. Trivalent chromium plating solution. 2,748,069, 5–29–56, Cl. 204—51.

Ifield, Richard J., to Joseph Lucas (Industries) Ltd. Liquid supply and flow regulating means. 2,747,596, 5–29–56, Cl. 137—100.

Imnel, Ralph B., to Westinghouse Electric Corp. Switch. 2,748,214, 5–29–56, Cl. 200—67.

Imperial Chemical Industries Ltd.: *See*—
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Jackson, Harry E., Leyland, and Wood. 2,748,181.
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Incoro, Inc.: *See*—
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Indevco, Inc.: *See*—
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Ingelson, Howard S. Bin divider construction. 2,747,959, 5–29–56, Cl. 312—140.3.

Ingraham, E., Co., The: *See*—
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Ingraham, Robert C., to Sylvania Electric Products Inc. Semiconductor translators and processing. 2,748,326, 5–29–56, Cl. 317—236.

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International Cigar Machinery Co.: *See*—
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International Harvester Co.: *See*—
Courtney, Joseph F., and Radtke. 2,747,335.
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Ipsen, Harold N. Heat treating apparatus. 2,747,855, 5–29–56, Cl. 266—4.

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Eggenberger, Markus A., and Ipsen. 2,747,373.

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Head, James D., and Ivins. 2,748,162.

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Cope, Arthur C., and Jackson. 2,748,153.

Jackson, Harry E., B. N. Leyland, and J. F. Wood, to Imperial Chemical Industries Ltd. Rubbery polymers stabilized with metal salts of α,α-bis(2-hydroxy-3 : 5-dialkylphenyl) alkanes. 2,748,181, 5–29–56, Cl. 260—810.

Jacobi, Edward N., to Briggs & Stratton Corp. Keyhole shutter for pin tumbler lock. 2,747,397, 5–29–56, Cl. 70—455.

Jacobs, James W., to General Motors Corp. Refrigerating apparatus. 2,747,385, 5–29–56, Cl. 62—4.

Jacobson, Eugene W., to Gulf Research & Development Co. Device for continuous removal of solids from fluids. 2,747,741, 5–29–56, Cl. 210—165.

Jacobson, James J. Container having integral support means. 2,747,760, 5–29–56, Cl. 220—18.

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Jacuzzi, Candido, and Nash. 2,747,507.

Jacuzzi, Candido, and F. M. Nash, to Jacuzzi Bros., Inc. Self-priming deep well pumping system. 2,747,507, 5–29–56, Cl. 103—5.

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Jansen, Elisabeth: *See*—
Jansen, Wilhelm. 2,747,620.

Jansen, Wilhelm, deceased, by E. Jansen, widow and heir and guardian of minor heirs. Wire tying machine. 2,747,620, 5–29–56, Cl. 140—93.6.

Jarvis, John, to Bendix Aviation Corp. Altitude responsive signal generator. 2,748,355, 5–29–56, Cl. 336—30.

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Jefferson, Ernest S. Fishing reel. 2,747,811, 5–29–56, Cl. 242—84.1.

Jeffrey Mfg. Co., The: *See*—
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Lee, Arthur L. 2,747,886.

Jenkins, Thomas C., to Lockheed Aircraft Corp. Engine indicator probe. 2,747,289, 5–29–56, Cl. 33—172.

Jenney, Theodore M., and B. H. Nicolaisen, to Olin Mathieson Chemical Corp. Process for the recovery of pure 2,4,5-trichlorophenol from products of the alkaline hydrolysis of 1,2,4,5-tetrachlorobenzene. 2,748,174, 5–29–56, Cl. 260—623.

Jenny, Dietrich A., to Radio Corp. of America. Semi-conductor devices and methods for treating same. 2,748,325, 5–29–56, Cl. 317—234.

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Wilcox, Joseph E., and Jensen. 2,748,371.

Jergens, John G. Pilot bearing. 2,747,948, 5–29–56, Cl. 308—187.1.

Jerguson Gage & Valve Co.: *See*—
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Jobst, Conrad. Means for assisting return circulation of fluids in an animal body. 2,747,570, 5–29–56, Cl. 128—60.

Johnson, Axel A. Wax applicating and dispensing unit. 2,747,209, 5–29–56, Cl. 15—119.

Johnson, Bernard G. and H. S. Spot and bore machine. 2,747,441, 5–29–56, Cl. 77—63.

Johnson, Edwin B., and D. E. Plumb, to Westinghouse Electric Corp. Special regulating rheostat. 2,748,297, 5–29–56, Cl. 307—151.

Johnson, Harold S.: *See*—
Johnson, Bernard G. and H. S. 2,747,441.

Johnson, Robert B., to General Electric Co. High temperature nickel-base alloy. 2,747,993, 5–29–56, Cl. 75—171.

Johnson, Stephen I., and J. W. Wilkinson, to Hastings Mfg. Co. Oil filter. 2,747,738, 5–29–56, Cl. 210—140.

Johnston, Daniel S., to Signal Oil and Gas Co. Combination oil well tubing and electrical cable construction. 2,748,358, 5–29–56, Cl. 339—16.

Johnston, Robert A., Co.: *See*—
Tigerman, Louis, and Clough. 2,747,346.

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Boytim, John E., and Jonard. 2,747,408.

Jonasson, Axel V., to Reed Mfg. Co. Pipe cutter. 2,747,275, 5–29–56, Cl. 30—101.

Jones, Don F., and V. H. Hill, to Motor Wheel Corp. Electric ignition system for an oil burner. 2,747,656, 5–29–56, Cl. 158—28.

Jones, George S., to Eastman Kodak Co. Device for supporting an objective and film drive roll. 2,747,462, 5–29–56, Cl. 88—24.

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Colburn, Allan P., Jones, and Pyle. 2,747,849.

Jones, James E. Detachable bumper attached trailer hitch. 2,747,892, 5–29–56, Cl. 280—491.

Jones, Lowell R. Retractable trailer step. 2,747,888, 5–29–56, Cl. 280—166.

Jones, Reuben G., to Eli Lilly and Co. Intermediates for the synthesis of pyridoxine. 2,748,135, 5–29–56, Cl. 260—294.9.

Jones, Robert H., and J. F. Svoboda, to Milwaukee Stamping Co. Self-closing door and interior door hinge assembly. 2,747,238, 5–29–56, Cl. 20—16.

Jones, William R., to The Celotex Corp. Method and apparatus for fissuring wet felted fiber board. 2,747,470, 5–29–56, Cl. 92—39.

Jonker, Johan L. H.: *See*—
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Joyner, Bobby L., to Erie Resistor Corp. Method of coating thin flat dielectric plates. 2,748,032, 5–29–56, Cl. 117—213.

Judd, Sebastian F., and H. W. Protseller, deceased, by S. F. Judd, executor, to Railway Ballast Engineers, Inc. Suspension means for railway ballast cleaning apparatus. 2,747,850, 5–29–56, Cl. 262—2.

Junghans, Siegfried. Process for continuous casting of metal billets. 2,747,245, 5–29–56, Cl. 22—200.1.

Jurist, Alfred E., to Olin Mathieson Chemical Corp. Stable vitamin B_{12} and soluble folic acid salt mixture. 2,748,054, 5–29–56, Cl. 167—81.

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Fafig, Emanuel. Reproduction of printed patterns by vacuum evaporation. 2,748,031, 5–29–56, Cl. 117—212.

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Kaiser, Frank F., to John Waldron Corp. Inching device for automatic drum winder. 2,747,808, 5–29–56, Cl. 242—65.

Kalafus, Edward F., to The General Tire and Rubber Co. Process of adhering textile fibers to rubbers and product thereof. 2,748,049, 5–29–56, Cl. 154—139.

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Kalousek, George L., to Owens-Illinois Glass Co. Method of making porous calcium silicate products. 2,748,008, 5–29–56, Cl. 106—120.

Kamm, Lawrence J. Electrical assemblies. 2,748,321, 5–29–56, Cl. 317—101.

Kamm, Lawrence J. Electrical connectors. 2,748,364, 5–29–56, Cl. 339—176.

Karlsson, Elof K., to International Harvester Co. Controlled movement for the knives in a combination cane stalk cutter and leaf stripper. 2,747,578, 5–29–56, Cl. 130—31.

Karrer, Paul, and J. Kebrle, to Sandoz A. G. Nortropane derivatives. 2,748,132, 5–29–56, Cl. 260—292.

Karrer, Paul, and J. Kebrle, to Sandoz A. G. Nortropanol esters. 2,748,133, 5–29–56, Cl. 260—292.

Kassynski, Frank J. Gun compass attachment. 2,747,312, 5–29–56, Cl. 42—71.

Katz, Sara S. Necktie protector. 2,747,192, 5–29–56, Cl. 2—46.

Kaufmann, Carl P., to Ellicott Machine Corp. Clean-out mechanism for hydraulic dredge. 2,747,942, 5–29–56, Cl. 302—64.

Kauts, Murrell F., to Minneapolis-Honeywell Regulator Co. Control device. 2,748,225, 5–29–56, Cl. 200—140.

Kaye, Alfred. Novelty hat. 2,747,196, 5–29–56, Cl. 2—175.

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Keckler, John W., to Aro Equipment Corp. Fuel drop tank valve. 2,747,597, 5–29–56, Cl. 137—107.

Keefe, Robert L., Jr., to E. I. du Pont de Nemours and Co. Process and apparatus for winding heavy denier yarn packages. 2,747,359, 5–29–56, Cl. 57—34.5.

Keefe, Robert L., Jr., to E. I. du Pont de Nemours and Co. Nozzle for use with flying knife cutter in staple production. 2,747,668, 5–29–56, Cl. 164—60.

Kehoe, Ellsworth A., to General Motors Corp. Carburetor. 2,747,848, 5–29–56, Cl. 261—52.

Kell, Leonard W., to Holly Carburetor Co. Dual fuel supply for a gas turbine. 2,747,508, 5–29–56, Cl. 103—11.

Keller, Herman J., to Minute Maid Corp. Method of inhibiting bacteria, mold, fungus, etc., growth in citrus fruits, and other fresh goods. 2,748,004, 5–29–56, Cl. 99—154.

Keller, Rudolf, and K. Eder, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Production of acrylonitrile. 2,748,156, 5–29–56, Cl. 260—465.3.

Kellogg, M. W., Co., The: *See*—
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Kelly, Herbert L.: *See*—
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Kelly, William L. Method of making molded plastic washing machine agitator. 2,748,045, 5–29–56, Cl. 154—110.

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Kendall, Fred E.: *See*—
Whitehouse, Irving P., Kendall, and Golar. 2,748,066.

Kerr-McGee Oil Industries, Inc.: *See*—
Goren, Mayer B. 2,748,057.
Pickell, Marion W. 2,748,011.

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Kickbush, William J. Portable lawnmower sharpener. 2,747,344, 5–29–56, Cl. 51—250.

Kiebler, Le Roy A.: *See*—
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Kiekhaefer, Elmer C. Air-cooled engine and air intake therefore. 2,747,558, 5–29–56, Cl. 123—41.62.

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Kilpatrick, Myron O., to Phillips Petroleum Co. Water quench and tar remover for cracked gases. 2,747,680, 5–29–56, Cl. 183—2.

Kimberling, Delmer H., to Allmand Brothers Mfg. Co. Speed control apparatus. 2,748,294, 5–29–56, Cl. 290—40.

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King, Jack A., and W. S. Fallgatter, to Cities Service Research and Development Co. Method of increasing oil recovery. 2,747,670, 5–29–56, Cl. 166—21.

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Kinraide, William T. R., to E. I. du Pont de Nemours and Co. Yarn apparatus. 2,747,251, 5–29–56, Cl. 28—35.

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Klancnik, Frank J., Jr., to Hi-Lo TV Antenna Corp. Antenna structure. 2,748,387, 5–29–56, Cl. 343—793.

Klare, Reinhart G. Clothesline pulley hand guard. 2,747,747, 5–29–56, Cl. 211—119.02.

Klemm, Herman G., and B. G. Elliott, to Harry Ferguson, Inc. Cutting mechanism for forage chopping machines. 2,747,634, 5–29–56, Cl. 146—118.

Klimkowski, Robert J., and R. T. Florence, to A. B. Dick Co. Transfer sheet for use in a hectograph duplicating process. 2,748,024, 5–29–56, Cl. 117—36.

Kling, August, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Foils and coatings from mixtures of pastes of vinyl chloride polymers and plasticisers and aqueous paraffin wax emulsions. 2,748,095, 5–29–56, Cl. 260—28.5.

Klingler, Hughlin E. Mixing valve. 2,747,603, 5–29–56, Cl. 137—343.

Klug, Eugene D.: *See*—
Grassie, Vernon R., and Klug. 2,748,111.

Kmiecik, Leopold J., to McDonnell & Miller, Inc. Pressure and temperature relief valves. 2,747,802, 5–29–56, Cl. 236—92.

Kneen, Eric, ⅔ to The Kurth Malting Co., and ⅓ to Wisconsin Malting Co. Manufacture of stabilised beer. 2,748,002, 5–29–56, Cl. 99—48.

Knoll, Werner, to H. Maihak A. G. Apparatus for measuring the pressure of fluids located within bodies of solid material. 2,747,407, 5–29–56, Cl. 73—395.

Koch, Karl. Device for removably connecting an element to a wall. 2,747,904, 5–29–56, Cl. 287—23.

Koch, Robert B., and R. E. James, Jr., to The Polymer Corp. Production of nylon rod. 2,747,222, 5–29–56, Cl. 18—12.

Koch, Robert B., and R. E. James, Jr., to The Polymer Corp. Method and apparatus for continuously forming elongated shapes from thermoplastic materials. 2,747,224, 5–29–56, Cl. 18—14.

Koertge, Nobel H., to Furnas Electric Co. Oiltight rotary selector switch. 2,748,208, 5–29–56, Cl. 200—16.

Kofoid, Melvin J., to Northwest Nut Growers. Electric nut cracking. 2,747,635, 5–29–56, Cl. 146—227.

Kohlhagen, Walter, to The E. Ingraham Co. Self-lubricating shaft bearings. 2,747,361, 5–29–56, Cl. 58—52.

Kohls, Erich E., and G. S. Thompson, to John Oster Mfg. Co. Household mixer with axially yieldable beaters. 2,747,845, 5–29–56, Cl. 259—131.

Kolkman, Dirk, and A. J. de Vlieser, to Hartford National Bank and Trust Co., trustee. Low-pressure arc-discharge tube supplied with direct current. 2,748,308, 5–29–56, Cl. 313—185.

Kollmann, Karl A.: *See*—
Forster, Hans-Joachim M., Kollmann, and Kümmich. 2,747,430.

Korber, Kurt, & Co. K. G.: *See*—
Richter, Willy, and Flocke. 2,747,582.

Kornylak, Andrew T., to Kornylak Engineering Corp. Guided carrier conveyor. 2,747,724, 5–29–56, Cl. 198—155.

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Cunningham, James M., Pratt, and Kovach. 2,747,717.

Kozbelt, Lloyd S., to Edwin L. Wiegand Co. Infrared device. 2,748,247, 5–29–56, Cl. 219—34.

Kramer, Israel, to Mercer Engineering Co. Method of assembling heat transfer coils. 2,747,258, 5–29–56, Cl. 29—157.3.

Krauss-Maffei Aktiengesellschaft: *See*—
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Kreidl, Norbert J., and E. K. Davis, to Bausch & Lomb Optical Co. Optical glass. 2,748,006, 5–29–56, Cl. 106—54.

Kreisler, Jacques, Mfg. Corp.: *See*—
Speck, Kurt, Hauser, and Hajos. 2,747,779.

Kreissig, Ernst: *See*—
Peter, Oskar E., and Kreissig. 2,747,428.

Krekeler, Claude B., to The Cincinnati Mine Machinery Co. Cutter bits in cutter chain sockets. 2,747,852, 5–29–56, Cl. 262—33.

Kreske, Gerald H.: *See*—
Williams, Michael, and Kreske. 2,748,252.

Kress, Fritz. Apparatus for maintaining a predetermined pressure in the tire of a vehicle. 2,747,640, 5–29–56, Cl. 152—417.

Kreuttner, John D. E. Measuring and calculating device. 2,747,795, 5–29–56, Cl. 235—61.

Krisch, Kube. Magnetronic circuit-controlling devices. 2,748,198, 5–29–56, Cl. 179—100.2.

Krisch, Kube. Magnetronic servo and converter system and apparatus. 2,748,331, 5–29–56, Cl. 318—28.

Kroeper, Hugo, and G. Hummel, to Badische Anilin- & Soda-Fabrik, Aktiengesellschaft. Process for the simultaneous production of phenols and oximes. 2,748,165, 5–29–56, Cl. 260—566.

Krohn, Roy, to the United States of America as represented by the United States Atomic Energy Commission. Charge boat for volatilization. 2,747,972, 5–29–56, Cl. 23—264.

Krzikalla, Hans, and F. van Taack-Trakranen, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Lacquers from naphthalene-formaldehyde resins which are elastic after drying out. 2,748,094, 5–29–56, Cl. 260—28.

Kubik, Paul P.: *See*—
Golden, Abraham H., Schmid, and Kubik. 2,747,907.

Kuemmich, Robert H.: *See*—
Daum, Claude R., Kuemmich, and Garatka. 2,748,376.

Kuettel, Alfred W. Machine for making roofing and the like. 2,747,642, 5–29–56, Cl. 153—28.

Kuever, Paul H. Food handling and scraping tool for use with grills. 2,747,911, 5–29–56, Cl. 294—7.

Kughler, Edwin R. Drum handling devices for lift trucks. 2,747,755, 5–29–56, Cl. 214—653.

Kummerman, Henri. Shiphold mounting of elements adapted to work under torsion stress. 2,747,587, 5–29–56, Cl. 114—79.

Kümmich, Theodor F.: *See*—
Förster, Hans-Joachim M., Kollmann, and Kümmich. 2,747,430.

Kurata, Motoharu, to Asahi Garasu Kabushiki Kaisha. Stop device for automatic glass cutting apparatus for cross cutting. 2,747,279, 5–29–56, Cl. 33—32.

Kurata, Motoharu, to Asahi Garasu Kabushiki Kaisha. Apparatus for automatically cutting glass sheets. 2,747,280, 5–29–56, Cl. 33—32.

Kurata, Motoharu, to Asahi Garasu Kabushiki Kaisha. Method and apparatus for automatically spot loading plate glass on a conveyor. 2,747,752, 5–29–56, Cl. 214—91.

Kurth Malting Co., The: *See*—
Kaeen, Eric. 2,748,002.

Kuss, Ralph L. Reinforced walls of holes in plastic members and method of making same. 2,748,047, 5–29–56, Cl. 154—116.

Kutschas, Paul G. Children's playing blocks. 2,747,325, 5–29–56, Cl. 46—25.

Kyrklund, Gunnar. Method of generating vapour from waste sulfite liquor or dregs. 2,747,552, 5–29–56, Cl. 122—31.

Kyser, Chauncey S., to General Motors Corp. Reamer. 2,747,440, 5–29–56, Cl. 77—58.

Lachenmayer, Roman A. Paint pail holder. 2,747,825, 5–29–56, Cl. 248—210.

Lafferty, Vincent C., to Western Electric Co., Inc. Apparatus for testing articles. 2,748,346, 5–29–56, Cl. 324—73.

Laflin, Leroy H.: *See*—
Norberg, Oscar E., and Laflin. 2,747,773.

Laird, John A., to Joseph Lucas (Industries) Ltd. Electric spark ignition apparatus. 2,748,318, 5–29–56, Cl. 315—160.

Lakey, Frank J., and J. Ulakovic. Retractable traction and antiskid device for vehicles. 2,747,691, 5–29–56, Cl. 188—4.

Lamb Electric Co., The: *See*—
Spielman, Milton H. 2,748,301.

Lambert, Arthur, and B. N. Leyland, to Imperial Chemical Industries Ltd. Rubbers stabilised by a bis (2-hydroxy-3-α-alkyl-cycloalkyl-5-methylphenyl)-methene or salts thereof. 2,748,096, 5–29–56, Cl. 260—29.7.

Landis, George G., and H. S. Payne, to The Lincoln Electric Co. Apparatus for continuous arc welding. 2,748,236, 5–29–56, Cl. 219—8.

Langendorf United Bakeries, Inc.: *See*—
Gardner, Hubert N. 2,747,521.

Langner, Emil, to Crane Co. Wedge valve. 2,747,833, 5–29–56, Cl. 251—196.

Lannen, Joseph P., to Micro-Poise Engineering and Sales Co. Method and machine for testing universal balance. 2,747,411, 5–29–56, Cl. 73—483.

Lapidus, Solomon. Commercial "S" slip forming machine. 2,747,641, 5–29–56, Cl. 153—28.

Laporte, Edmour. Welding apparatus. 2,748,237, 5–29–56, Cl. 219—8.

Larcen, Jan A., and S. L. Ytterfors, to Aktiebolaget Atlas Diesel. Controlling devices for rock drill feeding mechanisms. 2,747,610, 5–29–56, Cl. 137—620.

Larsen, Leonard O.: *See*—
Bingham, Darwin H., and Larsen. 2,747,648.

Larson, Gunnar M.: *See*—
Holm, Arman W., and Larson. 2,747,569.

La Spiroteehnique: *See*—
Gagnan, Emile. 2,747,572.

Lassen, Arnold A. Device for storing lines. 2,747,812, 5–29–56, Cl. 242—96.

Latimer, Herbert C. Squeegee holder for silk screen-printing. 2,747,501, 5–29–56, Cl. 101—114.

Laubender, Ludwig, to Krauss-Maffei Aktiengesellschaft. Piston arrangement for internal combustion engines. 2,747,953, 5–29–56, Cl. 309—19.

Laughton, Malcolm, to Twinco Ltd. Hanging appliances for drying and airing lightweight garments. 2,747,746, 5–29–56, Cl. 211—113.

Laurent, Milton P., to W-K-M Mfg. Co., Inc. Valve lubricating system. 2,747,600, 5–29–56, Cl. 137—246.22.

Lavoo, Norman T., to General Electric Co. Wide band television tuning circuit. 2,748,354, 5–29–56, Cl. 333—82.

Lawrence, Owen N., to Joseph Lucas (Industries) Ltd. Engine temperature responsive means to control fuel supply bypass and spill lines. 2,747,369, 5–29–56, Cl. 60—39.28.

Lawrence, Richard R. Pulling tool. 2,747,673, 5–29–56, Cl. 166—98.

Lazar, Joseph H. Forced convection evaporator and water chiller. 2,747,381, 5–29–56, Cl. 62—128.

Lea, Walter A., to E. V. Ehrhardt. Camera view finder. 2,747,282, 5–29–56, Cl. 33—64.

Lee, Arthur L., to The Jeffrey Mfg. Co. Vertically adjustable steering wheel and support assembly. 2,747,886, 5–29–56, Cl. 280—87.

Lee, Asa R., to The Thomas & Betts Co. Two-piece pigtail connector. 2,748,186, 5–29–56, Cl. 174—87.

Lee, George H. Toy steering device. 2,747,323, 5–29–56, Cl. 46—1.

Lee, Royal. Industion motors. 2,748,333, 5–29–56, Cl. 318—232.

Lee, Shih-Ying, to Research Corp. Force-compensated flow valve. 2,747,612, 5–29–56, Cl. 137—622.

Leichsenring, Max. Fluid operated cyclic control for brake light circuits. 2,748,218, 5–29–56, Cl. 200—83.

Leichter, Henry S. Folding sectional table or the like. 2,747,956, 5–29–56, Cl. 311—89.

Leighton, Francis, to Marman Products Co., Inc. Serrated semi-V-band coupling. 2,747,897, 5–29–56, Cl. 285—129.

Lencioni, Julius J., to Meil-Hoffmann Mfg. Co. Foldable sectional top table. 2,747,957, 5–29–56, Cl. 211—90.

Lentjes, Carl G.: *See*—
Florschutz, Fritz E., and Lentjes. 2,748,209.

Leverens, Humboldt W., to Radio Corp. of America. Semiconductor devices and their manufacture. 2,748,041, 5–29–56, Cl. 148—33.

Lewis, Agnes J. Cigarette lighter. 2,748,246, 5–29–56, Cl. 219—32.

Lewis, George D.: *See*—
Barnes, Robert T., and Lewis. 2,747,366.

Lewis, Warner, Co.: *See*—
Lewis, Warner, Sr., and Cox. 2,747,684.

Lewis, Warner, Sr., and J. P. Cox, to Warner Lewis Co. Repack cartridge. 2,747,684. 5–29–56, Cl. 183—47.

Leyland, Boris N.: *See*—
Jackson, Harry E., Leyland, and Wood. 2,748,181.

Leyland, Boris N.: *See*—
Lambert, Arthur, and Leyland. 2,748,096.

Libbey-Owens-Ford Glass Co.: *See*—
Badger, Alfred E., and Sharp. 2,748,007.
Ogle, James C., Jr. 2,748,026.
Ponce, Lucien G. 2,747,467.
Ritter, George F. 2,747,342.

Lidge, Ralph T.: *See*—
Flexman, James W., and Lidge. 2,747,199.

Light, James W., to General Motors Corp. Composition of material suitable for use in a coupling. 2,747,713, 5–29–56, Cl. 192—107.

Lighter, Stephen. Method of making building insulation and product. 2,747,651, 5–29–56, Cl. 154—28.

Lightwind, James E. Tools for compressing piston rings. 2,747,262, 5–29–56, Cl. 29—224.

Lilly, Eli, and Co.: *See*—
Davis, William W., and Parke. 2,748,074.
Jones, Reuben G. 2,748,135.

Lincoln Electric Co., The: *See*—
Landis, George G., and Payne. 2,748,236.

Lindstrom, Charles M., to Bostitch, Inc. Headless nail. 2,747,453, 5–29–56, Cl. 85—10.

Linenkohl, Henry K. Protective shield for shoes. 2,747,304, 5–29–56, Cl. 36—72.

Lingo, Shirley P., to Commercial Solvents Corp. Process for the separation of fatty acids from reaction mixtures producing same. 2,748,163, 5–29–56, Cl. 260—540.

Lionel Corp, The: *See*—
Bonanno, Joseph L. 2,747,731.

Lipkin, Daniel M., to Sperry Rand Corp. Variable delay line network. 2,748,296, 5–29–56, Cl. 307—88.

Lippman, Gerald. Process of and apparatus for producing applique ornamentations. 2,747,648, 5–29–56, Cl. 154—1.

Little, Juanita N.: *See*—
Parsons, William F., and Little. 2,748,020.

Llewellyn, Frederick B., to Bell Telephone Laboratories, Inc. Two-way repeaters. 2,748,200, 5–29–56, Cl. 179—170.

Lockheed Aircraft Corp.: *See*—
Jenkins, Thomas C. 2,747,289.

Lohrman, William V.: *See*—
Silver, Walter H., and Lohrman. 2,747,489.

Long Co., The: *See*—
Long, John B., and Frye. 2,747,721.

Long, George B., and J. M. Valentine, to General Motors Corp. Domestic appliance. 2,748,239, 5–29–56, Cl. 219—10.55.

Long, John B., and R. J. Frye, to The Long Co. Power driven conveying mechanism. 2,747,721, 5–29–56, Cl. 198—95.

Lord, Harold W., to General Electric Co. Deflection yoke for cathode ray tube. 2,748,324, 5–29–56, Cl. 317—200.

Low, Robert N.: *See*—
Catry, Jean, and Low. 2,747,618.

Lowe, Harry F.: *See*—
Brinton, Esme T. C., and Lowe. 2,747,647.

Lowensohn, Ralph S., to The O. A. Sutton Corp., Inc. Air conditioning unit. 2,747,377, 5–29–56, Cl. 62—4.

Lubben, Gerrit J.: *See*—
Valeton, Josué J. P., Schenau, and Lubben. 2,748,336.

Lucas, Joseph (Industries), Ltd.: *See*—
Ifield, Richard J. 2,747,596.
Laird, John A. 2,748,318.
Lawrence, Owen N. 2,747,369.

Lucas, Michael. Protective device. 2,747,661, 5–29–56, Cl. 160—10.

Lucien, René, to Societe d'Inventions Aeronatiques de Mecaniques S. I. A. M. Automatic brake regulator for aircraft wheels and the like. 2,747,699, 5–29–56, Cl. 188—181.

Lumalampan Aktiebolag: *See*—
Björkman, Karl Å. G. 2,748,306.

Lund, Clinton O. Process of making frozen confections. 2,747,525, 5–29–56, Cl. 107—54.

Lung, Kenneth R., to The Tait Mfg. Co. Sealed float switch. 2,748,220, 5–29–56, Cl. 200—84.

Lynker, Wilhelm: *See*—
Hentschke, Karl, and Lynker. 2,747,776.

Lyons, Alice R.: *See*—
Lyons, Frank W. 2,747,914.

Lyons, Frank W., to himself, and A. R. Lyons, jointly. Bottle carrier. 2,747,914, 5–29–56, Cl. 294—87.

Lyons, Horace C. Gyroscopic altitude indicator for aircraft. 2,747,293, 5–29–56, Cl. 33—204.

MacGillis & Gibbs Co., The: *See*—
Hoyle, Robert J., Jr. 2,747,243.

Machlett Laboratories, Inc.: *See*—
Agule, George J. 2,748,310.
Doolittle, Howard D. 2,748,311.

MacNeill, John B., and B. P. Baker, to Westinghouse Electric Corp. Compressed-gas circuit interrupter. 2,748,226, 5–29–56, Cl. 200—148.

Mader, Paul M., to Eastman Kodak Co. Removing silver and silver halide from photographic elements. 2,748,000, 5–29–56, Cl. 95—88.

Magic Chef, Inc.: *See*—
Reinhart, Harold C. 2,747,613.

Magin, Sidney H. A., to D. Napier & Son Ltd. Two-way rotary fluid valve. 2,747,364, 5–29–56, Cl. 60—39.07.

Magna Engineering Corp.: *See*—
Goldschmidt, Hans. 2,747,626.

Magnethermic Corp.: *See*—
McArthur Bruce E. 2,748,240.

Magnus, Finn H. Method for producing plastic encased articles. 2,747,230, 5–29–56, Cl. 18—59.

Maibak, H. A. G.: *See*—
Knoll, Werner. 2,747,407.

Main Products Corp.: *See*—
Seiler, Arthur J. 2,748,044.

Major Distributing Co.: *See*—
Bloser, William H. 2,747,354.

Mallory, P. R., & Co., Inc.: *See*—
Carlton, George M., and Busch. 2,747,260.
Reinhardt, Herbert P. 2,747,231.

Mann, Charles A.: *See*—
Clarke, Walter W. H., and Mann. 2,748,234.

Mansfield, Richard C.: *See*—
Schmidle, Claude J., and Mansfield. 2,748,140.

Manuel, Joseph. Dump truck body. 2,747,476, 5–29–56, Cl. 94—44.

Mapes, Leslie A. Bottle lifter and carrier. 2,747,915, 5–29–56, Cl. 294—87.24.

Marconi's Wireless Telegraph Co. Ltd.: *See*—
Bedford, Leslie H. 2,748,189.
Davies, Eric. 2,748,305.
Rust, Noel M., and Cockerell. 2,748,385.

Mar-Don Mfg. Co.: *See*—
Thompson, Donald L. 2,747,321.

Markert, Ferdinand, and L. Raichle, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Catalytic method for converting carbon monoxide and steam into carbon dioxide and hydrogen. 2,747,967, 5–29–56, Cl. 23—150.

Marman Products Co., Inc.: *See*—
Leighton, Francis. 2,747,897.

Maron, Irving, and H. S. Broadwell, to Radio Corp. of America. Waveform generator. 2,748,275, 5–29–56, Cl. 250—36.

Marousky, William T. Window structure. 2,747,241, 5–29–56, Cl. 20—52.2.

Marsden, Kenneth R.: *See*—
Von Haken, Kurd. 2,747,988.

Marsh, Clarence E. Impact type frost breaker. 2,747,851, 5–29–56, Cl. 262—14.

Marsh, George E., to R. M. Morrell. Device for moving invalids and the like. 2,747,652, 5–29–56, Cl. 155—28.

Marsh Stencil Machine Co.: *See*—
Hempel, Herbert W. 2,747,868.

Marshall, Asa C. Grubbing attachment for a farm tractor. 2,747,306, 5–29–56, Cl. 37—2.

Marshall, Joseph E., Jr. Booklet forming means and method. 2,747,865, 5–29–56, Cl. 270—32.

Marshall, Raymond H.: *See*—
Hatch Charles T., and Marshall. 2,747,725.

Martin, Rush E. Bucketball game. 2,747,875, 5–29–56, Cl. 273—105.

Martin, Wade B., and H. Talberth. Current control circuit. 2,748,315, 5–29–56, Cl. 315—100.

Marx, Karl: *See*—
Schweiter, Walter, and Marx. 2,747,805.

Masano Thomas. Pneumatic convertible top for automobiles. 2,747,929 5–29–56, Cl. 296—117.

Mason, Jacob A.: *See*—
Harvey, John E., Hermandorfer, and Mason. 2,747,657.

Matasovic, John L. Pressure regulator. 2,747,607, 5–29–56, Cl. 137—505.42.

May, Joseph E., to Sperry Rand Corp. Ribbon shift mechanism for business machines. 2,747,718, 5–29–56, Cl. 197—157.

Maynard, Clarice: *See*—
Maynard, Harrison. 2,747,754.

Maynard, Harrison, ½ to C. Maynard. Truck mounted hoist. 2,747,754 5–29–56, Cl. 214—523.

McArthur, Bruce E., to Magnethermic Corp. Induction heating systems. 2,748,240, 5–29–56, Cl. 219—10.75.

McCafferty, Malcolm. Expanding jaw wrench with sliding wedge operator. 2,747,448, 5–29–56, Cl. 81—72.

McCallister, Edward S., and K. W. Wosnica, to Hartford National Bank and Trust Company, trustee. Amplifier with interference reducing circuit. 2,748,202, 5–29–56, Cl. 179—171.

McCarter, Ed R., to Esso Research and Engineering Co. Testing geophone performance. 2,748,348, 5–29–56, Cl. 324—158.

McConnell, William M., and J. R. Von Hofen, to Taylor-Wilson Mfg. Co. Pipe gripper actuated by guided yoke. 2,747,445, 5–29–56, Cl. 81—17.2.

McCrea, William J. Television lamp. 2,748,262, 5–29–56, Cl. 240—81.

McDermott, Henry J., to American Viscose Corp. Suction cake removing tool. 2,747,913, 5–29–56, Cl. 294—64.

McDonnell & Miller, Inc.: *See*—
Kmiecik, Leopold J. 2,747,802.

McGill Mfg. Co., Inc.: *See*—
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McGowan, Kenneth J. J., to Westinghouse Air Brake Co. Force reversing buffer mechanisms. 2,747,860, 5–29–56, Cl. 267—1.

McGraw Electric Co.: *See*—
Van Ryan, Anthony. 2,748,320.

McGregor, Thurman M. Decoy. 2,747,314, 5–29–56, Cl. 43—3.

McKay Machine Co., The: *See*—
Randy, Kenneth L. 2,747,285.

McKay, Michael W.: *See*—
Crane, Robert, Jr., and McKay. 2,748,384.

McLean, Robert F., to General Motors Corp. Retractable rear window for an automobile. 2,747,923, 5–29–56, Cl. 296—44.

McMannus, Howard G.: *See*—
Gerry, Julian E., and McMannus. 2,747,549.

McMillan, Brockway, to Bell Telephone Laboratories, Inc. Multiple-feedback systems. 2,748,201, 5–29–56, Cl. 179—171.

McMurray, George F. Drapery or curtain mounting. 2,747,218, 5–29–56, Cl. 16—94.

McNeil, Robert S.: *See*—
Daubenspeck, John M., and McNeil. 2,747,987.

McOrily, Joseph, to Edwin L. Wiegand Co. Electric heating units. 2,748,248, 5–29–56, Cl. 219—37.

McPhail, Robert G.: *See*—
Franck, Kurt, and McPhail. 2,748,263.

Mead, Donald F.: *See*—
Sackett, James J., Mead, and Miller. 2,748,025.

Meier, John W., to E. I. du Pont de Nemours and Co. Sizing of vinylidene chloride copolymer surfaces. 2,748,027, 5–29–56, Cl. 117—76.

Melchior, Frederick C. Altitude switch. 2,748,217, 5–29–56, Cl. 200—83.

Melligren, Svante, to National Lead Co. Fused salt electrolytic cell for the production of refractory metals. 2,748,073, 5–29–56, Cl. 204—246.

Mell-Hoffmann Mfg. Co.: *See*—
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Menasco Mfg. Co.: *See*—
Gerry, Julian E., and McMannus. 2,747,549.

Mercer, Bert M. Fastening devices. 2,747,247, 5–29–56, Cl. 24—157.

Mercer, Bert M. Pin type fastening device. 2,747,248, 5–29–56, Cl. 24—158.

Mercer, Bert M. Spouts. 2,747,771, 5–29–56, Cl. 222—81.

Mercer, Berton M. Catamenial bandages. 2,747,575, 5–29–56, Cl. 128—290.

Mercer Engineering Co.: *See*—
Kramer, Israel. 2,747,258.

Merill, Francis G., and L. C. Thomas, to Bell Telephone Laboratories, Inc. Frequency multiplier apparatus. 2,748,283, 5–29–56, Cl. 250—36.

Merts, Stephan. Antiskid cover for tires. 2,747,639, 5–29–56, Cl. 152—173.

Metal Seal & Products, Inc.: *See*—
Heinrich, August H. 2,747,903.

Metals & Controls Corp.: *See*—
Boessenkool, Helmich W. 2,747,265.

Metcalf, Frank H. Guide structure for drawers and the like. 2,747,943, 5–29–56, Cl. 308—3.8.

Metcalf, Philip A., to A. V. Roe Canada Ltd. Tool for installing inserts. 2,747,449, 5–29–56, Cl. 81—121.

Meth, Max. Method and apparatus for depositing copper. 2,748,023, 5–29–56, Cl. 117—35.

Metzner, Wendell P.: *See*—
Harris, James O., and Metzner. 2,748,100.

Meuser, Robert B., to the United States of America as represented by the United States Atomic Energy Commission. Pressure chamber closure apparatus. 2,747,762, 5–29–56, Cl. 220—30.

Meusy, Eugene E., to Milwaukee Gas Specialty Co. Sealing means. 2,747,834, 5–29–56, Cl. 251—335.

Michaelis, Fred G.: *See*—
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Michaelis, Harold A., to General Electric Co. Control circuits for electric fry kettles. 2,748,243, 5–29–56, Cl. 219—20.

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Microcell Ltd.: *See*—
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Micromatic Hone Corp.: *See*—
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Micro-Poise Engineering and Sales Co.: *See*—
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Midland Co., The: *See*—
Hallead, Mervil. 2,747,491.

Midwest Supply and Mfg. Co.: *See*—
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Miles Laboratories, Inc.: *See*—
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Miles, Theodore: *See*—
Turner, Marshall C., and Miles. 2,747,511.

Miles, Theodore, to Phillips Petroleum Co. Apparatus for developing underwater reservoirs. 2,747,840, 5–29–56, Cl. 255—2.5.

Miles, Thomas R.: *See*—
Work, William R., and Miles. 2,748,046.

Miley, Maynard E.: *See*—
Ferneau, Richard H., and Miley. 2,747,919.

Miller, Benjamin A.: *See*—
Harkenrider, Robert J. 2,747,952.

Miller, Charles B., and J. D. Calfee, to Allied Chemical & Dye Corp. Fluorination. 2,748,177, 5–29–56, Cl. 260—653.

Miller, Delbert V.: *See*—
Sackett, James J., Mead, and Miller. 2,748,025.

Miller, Dennis. Hydraulic transmissions. 2,747,432, 5–29–56, Cl. 74—774.

Miller, Emery P., to Ransburg Electro-Coating Corp. Apparatus and method of electrostatic powdering. 2,748,018, 5–29–56, Cl. 117—17.

Miller, Frederick J.: *See*—
Miller, George L. 2,748,334.

Miller, George L., ½ to F. J. Miller. Variable speed induction motor. 2,748,334. 5–29–56, Cl. 318—243.

Miller, Harold L., to Robot Appliances, Inc. Door operating apparatus. 2,747,864. 5–29–56, Cl. 268—59.

Miller, James R., to William M. Bailey Co. Movable, tiltable, adjustable mud guns. 2,747,858, 5–29–56, Cl. 266—42.

Miller, Rudolph W.: *See*—
Harkenrider, Robert J. 2,747,952.

Miller, Stewart E., to Bell Telephone Laboratories, Inc. Ultra-high frequency selective mode directional coupler. 2,748,350, 5–29–56, Cl. 333—10.

Miller, Stewart E., to Bell Telephone Laboratories, Inc. Nonreciprocal wave transmission networks. 2,748,352, 5–29–56, Cl. 333—14.

Millington, Alfred F., to Novi Equipment Co. Universal slotting machine. 2,747,255, 5–29–56, Cl. 29—73.

Milwaukee Gas Specialty Co.: *See*—
Meusy, Eugene E. 2,747,834.

Milwaukee Stamping Co.: *See*—
Jones, Robert H., and Svoboda. 2,747,238.

Miner, Samuel S., to United States Rubber Co. Edge trimmer for advancing sheet material. 2,747,665, 5–29–56, Cl. 164—39.

Mining Process and Patent Co.: *See*—
Daman, Arthur C. 2,747,733.

Minneapolis-Honeywell Regulator Co.: *See*—
Hudson, Kenneth C. 2,748,231.
Kautz, Murrell F. 2,748,225.

Minneapolis-Moline Co.: *See*—
Swenson, William E., and Nielsen. 2,747,416.

Minor, Harry B.: *See*—
Nixon, Alan C., and Minor. 2,748,059.

Minute Maid Corp.: *See*—
Keller, Herman J. 2,748,004.

Mitchell, Gerald A.: *See*—
Coyne, Cornelius L., Jr., and Mitchell. 2,747,961.

Mitchell, Richard S. M. Apparatus for drying hair. 2,747,296, 5–29–56, Cl. 34—90.

Mitchell, Robert, Co. Ltd., The: *See*—
Sontheim, Herman W. 2,747,745.

Moberly, Lawrence E., to Westinghouse Electric Corp. Carbon brushes for dynamoelectric machines. 2,748,300, 5–29–56, Cl. 310—228.

Mobley, William R. Grease and oil interceptor and method of separating fluids of different specific gravities. 2,747,736, 5–29–56, Cl. 210—56.

Mohr, Glenn R., to Westinghouse Electric Corp. Plate voltage and grid current control. 2,748,241, 5–29–56, Cl. 219—10.77.

Monroe, Charles Z., and D. German, to Ex-Cell-O Corp. Feeding and erecting mechanism for carton blanks. 2,747,473, 5–29–56, Cl. 93—53.

Monsanto Chemical Co.: *See*—
Harris, James O., and Metzner. 2,748,100.
Journeay, Glen E. 2,748,154.
Morris, Herbert E. 2,748,176.
Taylor, Keith M. 2,748,157.

Monson, Louis T., to Petrolite Corp. Process for inhibiting foam. 2,748,085, 5–29–56, Cl. 252—321.

Monson, Louis T., to Petrolite Corp. Process for inhibiting foam. 2,748,086, 5–29–56, Cl. 252—321.

Monson, Louis T., to Petrolite Corp. Process for inhibiting foam. 2,748,087, 5–29–56, Cl. 252—321.

Monson, Louis T., to Petrolite Corp. Process for inhibiting foam. 2,748,088, 5–29–56, Cl. 252—321.

Monson, Louis T., to Petrolite Corp. Process for inhibiting foam. 2,748,089, 5–29–56, Cl. 252—321.

Montelius, Carl O. J. Rotational piston pump. 2,747,515, 5–29–56, Cl. 103—161.

Moon, James: *See*—
Thomas, Gerald B., and Moon. 2,747,405.

Moore, Arthur R.: *See*—
Schultz, Wilbur A., and Moore. 2,747,799.

Moore, Fitzhugh L., to Socony Mobil Oil Co., Inc. Method for correcting lost circulation of drilling fluids. 2,747,839, 5–29–56, Cl. 255—1.8.

Moore, Frank V. Hand machine for applying paste to a paper strip. 2,747,540, 5–29–56, Cl. 118—41.

Moore, Raymond W.: *See*—
Albert, Eugene F., and Moore. 2,748,329.

Morain, Clifford F. Pipe handling apparatus. 2,747,727, 5–29–56, Cl. 203—75.

Moran, James G. Inflatable illuminable figure. 2,748,256, 5–29–56, Cl. 240—10.

Morehouse, Clarence K., and J. Y. Welsh, to Olin Mathieson Chemical Corp. Electrolyte for dry cells. 2,748,183, 5–29–56, Cl. 136—103.

Morehouse, Silas A. Flower pot watering device. 2,747,332, 5–29–56, Cl. 47—38.

Morgan Construction Co.: *See*—
Morgan, Myles. 2,747,720.

Morgan, Myles, to Morgan Construction Co. Billet turning apparatus. 2,747,720, 5–29–56, Cl. 198—33.

Morkoski, James, to International Harvester Co. Tractor mounted plow. 2,747,487, 5–29–56, Cl. 97—47.37.

Morrell, Robert M.: *See*—
Marsh, George E. 2,747,652.

Morris, Herbert E., to Monsanto Chemical Co. Purification of dichloroethane. 2,748,176, 5–29–56, Cl. 260—652.

Morris Paper Mills: *See*—
Arneson, Edwin L. 2,747,786.

Morris, William C., to The Harshaw Chemical Co. Screen vehicle comprising diphenyl, unmodified hydrogenated rosin, and its glycol esters. 2,748,093. 5–29–56, Cl. 260—27.

Morrisey, Edward J., Jr.: *See*—
Hartop, William L., Jr., and Morrisey. 2,747,756.

Morrison, George L. Photographic apparatus. 2,747,459, 5–29–56, Cl. 88—24.

Morrogh, Henton, to The British Cast Iron Research Association. Process of producing grey cast iron. 2,747,990, 5–29–56, Cl. 75—130.

Morsch, Jesse J. Throttle pedal depressing devices. 2,747,427, 5–29–56, Cl. 74—529.

Morse, John B., Jr., and F. C. Benson, to The H. B. Ives Co. Door knocker. 2,747,538, 5–29–56, Cl. 116—148.

Morton, Charles A.: *See*—
Button, Fred L. 2,747,451.

Mosely, Neal J., to Detroit Controls Corp. Heating and cooling system and control valve therefor. 2,747,800, 5–29–56, Cl. 236—1.

Motor Products Corp.: *See*—
Sherman, Floyd A. 2,747,836.

Motor Wheel Corp.: *See*—
Jones, Don F., and Hill. 2,747,656.

Mueller, Homer L., to American Machine & Foundry Co. Reach bar assembly for bicycle frame. 2,747,889, 5–29–56, Cl. 280—281.

Muetterties, Earl L., to E. I. du Pont de Nemours and Co. Chalcogenous complexes. 2,748,145, 5–29–56, Cl. 260—329.

Muffly, Glenn. Reversible refrigerating systems. 2,747,376, 5–29–56, Cl. 62—4.

Mullen, William T. Laminated materials. 2,748,043, 5–29–56 Cl. 154—51.

Muller, Lloyd E., to General Motors Corp. Refrigerated air distributing apparatus. 2,747,495, 5–29–56, Cl. 98—2.

Mussell, Dorsey R., to The Dow Chemical Co. Method and composition for the control of the growth of vegetation. 2,747,982, 5–29–56, Cl. 71—2.3.

Mussell, Dorsey R., to The Dow Chemical Co. Method and composition for the control of the growth of vegetation. 2,747,983, 5–29–56, Cl. 71—2.3.

Myers, Frank W.: *See*—
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Nagin, Harold, to Reliance Steel Products Co. Gratings. 2,747,474, 5–29–56, Cl. 94—30.

Napier, D., & Son Ltd.: *See*—
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Nash, Floyd M.: *See*—
Jacuzzi, Candido, and Nash. 2,747,507.

Nash, Harold A., and R. M. Brooker, to Allied Laboratories, Inc. New physiologically active alkaloids and methods for their recovery. 2,748,112, 5–29–56, Cl. 260—236.

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National Acme Co., The: *See*—
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National Cash Register Co., The: *See*—
Placke, Everett H., and Eickman. 2,747,794.

National Foam System, Inc.: *See*—
Perri, Joseph M., and Sloviter. 2,748,078.

National Lead Co.: *See*—
Daubenspeck, John M., and McNeil. 2,747,987.
Mellgren, Svante. 2,748,073.

National Standard Co. Ltd.: *See*—
Simpson, Harold, and Spence. 2,747,442.

National Steel Corp.: *See*—
Gorey, Charles B. 2,747,704.

National Supply Co., The: *See*—
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Neff, Edward A. Towing device with adjustable bumper clamps. 2,747,891, 5–29–56, Cl. 280—480.

Nellis, James H., to General Motors Corp. Domestic appliance. 2,748,244, 5–29–56, Cl. 219—20.

Nelson, Arthur J., to Pulp Reproduction Co. Molded double-faced jack-o'-lantern. 2,748,260, 5–29–56, Cl. 240—16.

Nelson, Richard B., and D. A. Wilbur, to General Electric Co Magnetron amplifier. 2,748,280, 5–29–56, Cl. 250—36.

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Neumair, Joseph A., to International Cigar Machinery Co. Filler feed mechanism. 2,747,580, 5–29–56, Cl. 131—21.

Nevrincean, George, to Western Electric Co., Inc. Drill template having a circular saw for cutting holes in piece parts. 2,747,438, 5–29–56, Cl. 77—18.

Newall Engineering Co., Ltd., The: *See*—
Hoare, Stanley W. 2,747,338.

Newcombe, Jack, and J. D. Doane to Cities Service Research and Development Co. Secondary recovery of petroleum by water flooding. 2,748,080, 5–29–56, Cl. 252—8.55.

Newell, George K., to Westinghouse Air Brake Co. Brake lining with wire reinforcement. 2,747,701, 5–29–56, Cl. 188—251.

New Haven Pulp and Board Co., The: *See*—
Fink, Raymond E. 2,747,785.

Newland, Dietz. Machine for making an edible product. 2,747,522, 5–29–56, Cl. 107—1.

New Products Corp.: *See*—
Banker, Oscar H. 2,747,697.

Nicholas, James H., to G. & W. Electric Specialty Co. High voltage electric terminator. 2,748,184, 5–29–56, Cl. 174—19.

Nichols, Charles A., and C. L. Clevenger, to General Motors Corp. Apparatus for forming metal parts. 2,747,645, 5–29–56, Cl. 153—78.

Nickell Louis G.: *See*—
Routien, John B., and Nickell. 2,747,334.

Nicolaisen, Bernard H.: *See*—
Jenney, Theodore M., and Nicolaisen. 2,748,174.

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Ross, William C., and Niconchuk. 2,747,506.

Niderhauser, Donald O., to E. I. du Pont de Nemours and Co. Polyacrylonitrile solutions containing gelation inhibitors. 2,748,097, 5–29–56, Cl. 260—30.2.

Nielsen, Fred C.: *See*—
Swenson, William E., and Nielsen. 2,747,416.
Nielsen, Jorgen T.: *See*—
Clauson-Kaas, Niels K. F. W., Elming, and Nielsen. 2,748,142.
Nissen, Warren I., to Ronson Corp. Gas lighter fuel regulating mechanism. 2,747,394, 5–29–56 Cl. 57—87.
Nixon, Alan C., and H. B. Minor, to Shell Development Co. Removing mercaptans from hydrocarbons with active carbon impregnated with alkali. 2,748,059, 5–29–56, Cl. 196—32.
Noll, Henry J. Harrow disk with knockout center. 2,747,493, 5–29–56, Cl. 97—217.
Noone, Howard T., to Carrier Corp. Defrosting arrangement for a refrigerating coil. 2,747,378, 5–29–56, Cl. 62—102.
Norberg, Oscar E., and L. H. Laflin, to Avco Mfg. Corp. Coffee preserving and dispensing apparatus. 2,747,773, 5–29–56, Cl. 222—190.
Norgren, C. A., Co.: *See*—
Faust, Delbert G. 2,747,688.
Normann, Turolf, to Omega Louis Brandt & Frere S. A. System for developing a film. 2,747,481, 5–29–56. Cl. 95—94.
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Riley, Harry L., and Norris. 2,747,686.
Northrop Aircraft, Inc.: *See*—
Bunds, Charles N., Jr. 2,748,372.
Northwest Nut Growers: *See*—
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Norton, Eugene. Cultivator attachments. 2,747,488, 5–29–56, Cl. 97—47.43.
Novi Equipment Co.: *See*—
Millington, Alfred F. 2,747,255.
Nowak, Matthew N.: *See*—
Babcock, David L., and Nowak. 2,747,479.
Nowak, Theodore J., and P. W. Fischer, to Union Oil Co. of California. Treatment of oil-bearing formations. 2,747,671, 5–29–56, Cl. 166—33.
Nowicki, Aloysius A., and J. N. Gordon. Ribbon and roll inker for cash registers and like machines. 2,747,542, 5–29–56, Cl. 118—235.
Obradovich, Drago. Reclining chair with horizontally maintained canopy. 2,747,653, 5–29–56, Cl. 155—106.
Ogden, Floyd H. Raising and lowering means for lawn umbrellas. 2,747,591, 5–29–56, Cl. 135—20.
Ogg, Alvin W.: *See*—
Edwards, Andrew W., and Ogg. 2,748,221.
Ogle, James C., Jr., to Libbey-Owens-Ford Glass Co. Method and apparatus for thermal evaporation. 2,748,026, 5–29–56, Cl. 117—45.
Ohlau, Frank. Articulated extension handle for outboard motors. 2,747,425, 5–29–56, Cl. 74—480.
Olshel, John R., to Trico Products Corp. Windshield wiper blade connector. 2,747 213, 5–29–56, Cl. 15—250.
Okress, Ernest C., to Westinghouse Electric Corp. Tuned magnetron. 2,748,314, 5–29–56, Cl. 315—39.69.
Olberg, Ralph C., and C. P. Brewer, to Shell Development Co. Thermal treatment and separation process. 2,748,061, 5–29–56, Cl. 196—50.
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Olin Mathieson Chemical Corp.: *See*—
Feiger, James N. 2,747,974.
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Jenney, Theodore M., and Nicolaisen. 2,748,174.
Jurist, Alfred E. 2,748,054.
Morehouse, Clarence K., and Welsh. 2,748,183.
Oliver Machinery Co.: *See*—
Golubski, Joseph L. 2,747,757.
Olivier, Jules A., and W. J. Tell, to General Motors Corp. Folding top compartment cover. 2,747,928, 5–29–56, Cl. 296—107.
Olsson, Gustaf A. Liquid dispensing razor. 2,747,273, 5–29–56, Cl. 30—41.
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Rix, Albert. 2,747,716.
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Clayton, David P., and Onksen. 2,748,207.
Oregon Saw Chain Corp.: *See*—
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Cox, Joseph B. 2,747,623.
Cox, Joseph B. 2,747,624.
Organon Inc.: *See*—
Reichstein, Tadeus. 2 749,149.
Orser, William D., to Eastman Kodak Co. Optical scanning objective lens system for inspection devices. 2,747,466, 5–29–56. Cl. 88—57.
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Schreiber, Erich. 2,747,556.
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Oster, John, Mfg. Co.: *See*—
Kohls, Erich E., and Thompson. 2,747,845.
Ostline, John E., to Automatic Electric Laboratories, Inc. Telephone systems. 2,748,197, 5–29–56, Cl. 179—27.
Oswald, Joseph V. Lifting magnet control system. 2 748,322, 5–29–56, Cl. 317—123.
Otto, Carl. Coke oven gas cooler. 2,747,847, 5–29–56, Cl. 261—11.
Owens-Illinois Glass Co.: *See*—
Chew, Clarence. 2,747,541.
Kalousek, George L. 2,748,008.
Schaich, Wilbur A. 2,747 573.
Owens, James B., to Westinghouse Electric Corp. Disconnecting switch with operating mechanism. 2,748,213, 5–29–56, Cl. 200—48.
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Bacher, Eric. 2,747,879.
Palm, Bernhard A., to Dings Magnetic Separator Co. Endless belt magnetic separator. 2,747,735, 5–29–56, Cl. 209—223.
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Panmetals and Processes Inc.: *See*—
Delruelle, Andre. 2,747,659.
Paoloni, Carlo, and P. Pennetti, to Rumianca S. p. A. Apparatus for producing alkali metal hydroxide. 2,748,072, 5–29–56, Cl. 204—220.
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Paton, Harrison B. Golf stroke correction indicator. 2,747,878, 5–29–56, Cl. 273—186.
Patterson, Omar L., to Sun Oil Co. Computing circuits. 2,747,796, 5–29–56, Cl. 235—61.
Paul, Raymond E., P. J. C. Buisson, and N. M. Joseph, to Societe des Usines Chimiques Rhone-Poulenc. Processes of hydrogenation and to novel catalytic agent therefor. 2,748,108, 5–29–56, Cl. 260—210.
Payne, Frank E., and H. I. Sole, to Crane Packing Co. Seal for wheel brake. 2,747,902, 5–29–56, Cl. 286—11.14.
Payne, Grady L., to Socony Mobil Oil Co., Inc. Hydrocarbon conversion process. 2,748,055, 5–29–56, Cl. 196—14.11.
Payne, Harold S.: *See*—
Landis, George G., and Payne. 2,748,236.
Pearce, Herbert, and D. Harrison. Soldering tools. 2,748,245, 5–29–56, Cl. 219—27.
Pearlman, Alan R., to Clevite Corp. Transistor oscillator with current transformer feedback network. 2,748,274, 5–29–56, Cl. 250—36.
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Peden, Douglas T., to Micromatic Hone Corp. Honing machine. 2,747,336, 5–29–56, Cl. 51—34.
Peffer, Alrid B. Pan greasing apparatus. 2,747,539, 5–29–56, Cl. 118—2.
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Black, John W., Jr. 2,747,950.
Pennetti, Pietro: *See*—
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Penney, James H., H. C. Werner, and E. H. Anderson, to Westinghouse Electric Corp. Bearing construction. 2,747,947, 5–29–56, Cl. 308—187.1.
People in the Territory of the United States, dedicated to the free use of the: *See*—
Speakes, Charles C., and Griffin. 2,747,234.
Pereira, Humberto, to F. E. Wolcott. Pressure applicator. 2,747,770, 5–29–56, Cl. 222—80.5.
Perlhou, Jean E., and J. L. H. Jonker, to Hartford National Bank and Trust Co., as trustee. Electron beam tube. 2,748,313, 5–29–56, Cl. 315—25.
Perri, Joseph M., and B. Sloviter, to National Foam System, Inc. Fire extinguishing foam-forming composition. 2,748,078, 5–29–56, Cl. 252—8.05.
Peter, Oskar E., and E. Kreissig. Composite crankshaft. 2,747,428, 5–29–56, Cl. 74—598.
Peters, Philip H., Jr., to General Electric Co. High frequency power amplifier. 2,748,203, 5–29–56, Cl. 179—171.
Peters & Russell, Inc.: *See*—
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Peterson, George. Lawn mower grass collector. 2,747,356, 5–29–56, Cl. 56—202.
Peterson, Gerald D. Window construction. 2,747,240, 5–29–56, Cl. 20—52.
Peterson, Merle E., to Bendix Aviation Corp. Automatic two-speed gearing for bicycles. 2,747,708, 5–29–56, Cl. 192—6.
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Peterson, Walter H., and T. Skei, to Shell Development Co. Water-resistant non-soap grease containing alkaline agents. 2,748,081, 5–29–56, Cl. 252—28.
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Miles, Theodore. 2,747,840.
Smith, Warren L., Potts, and Hudson. 2,748,131.
Turner, Marshall C., and Miles. 2,747,511.
Webber, Ludwig A. 2,748,180.
Pichler, Joseph R., to General Motors Corp. Ice making apparatus. 2,747,375, 5–29–56, Cl. 62—4.
Pickell, Marion W., to Kerr-McGee Oil Industries, Inc. Composition and method for extending drying oils. 2,748,011, 5–29–56, Cl. 106—248.
Piedmont Shirt Co.: *See*—
Ranieri, George B. 2,747,194.
Pigache, Pierre G. M. A. Dry process for the recovery of sulfur from gases. 2,747,968, 5–29–56, Cl. 23—178.
Pines, Herman, and V. N. Ipatieff, to Universal Oil Products Co. Condensation of an aromatic compound with an unsaturated organic compound in the presence of an alkali metal and a peroxy compound. 2,748,178, 5–29–56, Cl. 260—668.
Piper, Frank R., and J. M. Gardner, to West Point Mfg. Co. Method of embroidering and clipping terry cloth. 2,747,534, 5–29–56, Cl. 112—266.
Pirelli S. p. A.: *See*—
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Pitts, Leonard S.: *See*—
Scheiderbauer, Robert A., and Pitts. 2,748,106.
Pittsburgh Forgings Co.: *See*—
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Placke, Everett H., and W. E. Eickman, to The National Cash Register Co. Zero printing control mechanism. 2,747,794, 5–29–56, Cl. 235—60.28.
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Platte, William N., and W. L. Roberts, to Westinghouse Electric Corp. Resistance welding current indicating device. 2,748,380, 5–29–56, Cl. 340—253.
Platzke, Emil. Attachment for lead pencils. 2,747,548, 5–29–56, Cl. 120—38.
Plumb, Donald E.: *See*—
Johnson, Edwin R., and Plumb. 2,748,297.
Polydoroff, Wladimir J. Antenna systems. 2,748,386, 5–29–56, Cl. 343—787.
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Koch, Robert B., and James. 2,747,224.
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Ponce, Lucien G., to Libbey-Owens-Ford Glass Co. Mounting for rear view mirrors. 2,747,467, 5–29–56, Cl. 88—77.
Pool, Stuart D., to International Harvester Co. Ammonia metering pump. 2,747,509, 5–29–56, Cl. 103—38.
Pope, Douglas H. Apparatus for wrapping magazines. 2,747,347, 5–29–56, Cl. 53—52.
Porter, Arthur C. Ledger and statement collating means. 2,747,894, 5–29–56, Cl. 281—1.
Pottle, Ralph K., to American Can Co. Container with improved attachable bail ear. 2,747,765, 5–29–56, Cl. 220—91.
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Pouliot, Paul: *See*—
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Power Jets (Research and Development) Ltd.: *See*—
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Cohen, Henry, and Darth. 2,747,363.
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Powers, James H., to General Electric Co. Rotary cutting apparatus. 2,747,436, 5–29–56, Cl. 77—2.
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Pratt, Francis L.: *See*—
Cunningham, James M., Pratt, and Kovach. 2,747,717.
Preload Co., Inc., The: *See*—
Chiverton, Thomas J. 2,747,249.
Premier Research Laboratories, Inc.: *See*—
Font, Ramon, and Herman. 2,748,328.
Price Building Specialties Co.: *See*—
Du Plessis, Milton P. 2,747,237.
Priest, William J., to Eastman Kodak Co. Copolymers of vinyl esters with N-allyl urethanes and hydrolysis products thereof. 2,748,103, 5–29–56, Cl. 260—77.5.
Priest, William M. Clothesline reel. 2,747,813, 5–29–56, Cl. 242—102.
Pritchard, Thomas R., to Tapra Mfg. Co. Measuring valve closure. 2,747,775, 5–29–56, Cl. 222—400.7.
Procter and Gamble Co., The: *See*—
Head, Robert C. 2,748,070.
Protseller, Harry W.: *See*—
Judd, Sebastian F., and Protseller. 2,747,850.
Puddy, Leo C. Tool boxes. 2,747,780, 5–29–56, Cl. 224—42.
Pullen, Edward A.: *See*—
Backlund, Peter S., and Pullen. 2,748,056.
Pullman-Standard Car Mfg. Co.: *See*—
Green, Frank W. 2,747,263.
Pulp Reproduction Co.: *See*—
Nelson, Arthur J. 2,748,260.
Pulsifer, Marie. Discardable underarm garment shield. 2,747,193, 5–29–56, Cl. 2—56.
Purifoy, George R., and F. H. Fowler, to Westinghouse Electric Corp. Traction-motor control. 2,748,335, 5–29–56, Cl. 318—274.
Pyle, Cyrus: *See*—
Colburn, Allan P., Jones, and Pyle. 2,747,849.
Pyrene-C-O-Two Corp.: *See*—
Allen, Frank B., and Siebens. 2,747,822.
Quillinan, Michael J. Sput connection for flexible plate. 2,747,896, 5–29–56, Cl. 283—38.
Quinlan Pretzel Co., Inc.: *See*—
Grof, Edwin I. 2,747,523.
Grof, Edwin I. 2,747,524.
Quist, Harold A., to Sun Oil Co. Pressure responsive liquid supply for breather valve. 2,747,601, 5–29–56, Cl. 137—233.
Radasch, Arthur H., to Alan Wood Steel Co. Distillation of coal tar. 2,748,063, 5–29–56, Cl. 196—76.
Radio Corp. of America: *See*—
Jenny, Dietrich A. 2,748,325.
Leverenz, Humboldt W. 2,748,041.
Maron, Irving, and Broadwell. 2,748,275.
Saulnier, Theodore A., Jr. 2,748,288.
Sonnenfeldt, Richard W. 2,748,191.
Radtake, Adelbert C.: *See*—
Courtney, Joseph F., and Radtke. 2,747,335.
Raehrs, Emery C., and W. D. Averill, to The Cincinnati Milling Machine Co. Process of machining. 2,747,271, 5–29–56, Cl. 29—558.
Rager, Donald M. Spring buffers. 2,747,859, 5–29–56, Cl. 267—1.
Raichle, Ludwig: *See*—
Markert, Ferdinand, and Raichle. 2,747,967.
Railway Ballast Engineers, Inc.: *See*—
Judd, Sebastian F., and Protseller. 2,747,850.
Rainbow, Horace S., to Armstrong Siddeley Motors Ltd. Supply of hot air from a gas turbine engine for anti-icing or other purposes. 2,747,365, 5–29–56, Cl. 60—39.09.
Raines, Allen W. Golf tee dispensing package. 2,747,763, 5–29–56, Cl. 221—25.
Ralls, Robert B. Anti-glare screen holder. 2,747,925, 5–29–56, Cl. 296—97.
Ralls, Robert B. Anti-glare attachment for motor vehicles. 2,747,926, 5–29–56, Cl. 296—97.
Ranieri, George B., to Piedmont Shirt Co. Shirt construction. 2,747,194. 5–29–56. Cl. 2—119.
Ransburg Electro-Coating Corp.: *See*—
Miller, Emery P. 2,748,018.
Rasmussen, Arnold R. Field marker. 2,747,494, 5–29–56, Cl. 97—230.
Raunecker, Richard H.: *See*—
Bach, Emmon, Goodwin, and Raunecker. 2,747,869.
Rawlings, Frank N.: *See*—
Anderson, Philip C., and Rawlings. 2,748,001.
Rayonier Inc.: *See*
Hooper, John F., and Briggs. 2,747,995.
Raytheon Mfg. Co.: *See*—
Calosi, Carlo L., and Carwile. 2,748,298.
Haagensen, Duane B. 2,748,277.
Segerstrom, Carl A. 2,748,284.
Read Standard Corp: *See*—
Jorgenson, Gerald A. 2,747,753.
Reed, Daniel J., to A. O. Smith Corp. Method and apparatus for fabricating a tubular article from a fibrous strand. 2,747,649. 5–29–56, Cl. 154—1.7.
Reed Mfg. Co.: *See*—
Jonasson, Axel V. 2,747,275.
Reed, Walter J. Sprinkler head. 2,747,937, 5–29–56, Cl. 299—114.
Reef, Jan. Gauge. 2,747,288, 5–29–56, Cl. 33—163.
Rahacek, Alois, to Weiner Metallwaren- und Schnallenfabrik Schar-Smolka. Ski binding with tension cable. 2,747,885, 5–29–56, Cl. 280—11.35.
Reher, Louis J. M.: *See*—
Brinkman, Hendrik W. and B. J. 2,747,715.
Reich, A., & Sons, Inc.: *See*—
Reich, Walter A. 2,747,916.
Reich, Walter A., to A. Reich & Sons, Inc. Grappling hook for banana handling equipment. 2,747,916, 5–29–56, Cl. 294—106.
Reicherts, Paul P., to Socony Mobil Oil Co., Inc. Measurement of wall thickness. 2,748,290. 5–29–56, Cl. 50—83.6.
Reichstein, Tadeus, to Organon, Inc. Etiocholanic acid derivatives and a process of making same. 2,748,149, 5–29–56, Cl. 260—397.1.
Reilly Tar & Chemical Corp: *See*—
Cislak, Francis E. 2,748,141.
Reineman, Richard G.: *See*
Chapman, David, and Reineman. 2,747,654.
Reiners, Herbert H. and M. E. Venetian blind. 2,747,662, 5–29–56, Cl. 160—178.
Reiners, Myrtle E.: *See*—
Reiners, Herbert H. and M. E. 2,747,662.
Reinhardt, Herbert P., to P. R. Mallory & Co., Inc. Method of pressing powder compacts. 2,747,231, 5–29–56, Cl. 18—59.3.
Reinhart, Harold C., to Magic Chef, Inc. Dual gas valves. 2,747,613, 5–29–56, Cl. 137—625.16.
Reiniger, Friedrich, to Hartford National Bank and Trust Co, as trustee. Irradiation applicator for X-ray therapy.. 2,748,293, 5–29–56, Cl. 250—105.
Reliance Gauge Column Co., The: *See*—
Brown, John R. 2,748,379.
Reliance Steel Products Co.: *See*—
Nagin, Harold. 2,747,474.
Remington Arms Co., Inc.: *See*—
Catlin, Robert T., and Hickman. 2,747,187.
Crittendon, Lexie R., and Gail. 2,747,313.
Reppe, Walter, H. Pasedach, and M. Seefelder, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Production of compounds of the pyridine series. 2,748,130, 5–29–56, Cl. 260—290.
Republic Steel Corp.: *See*—
Daugherty, Charles C. 2,747,965.
Whitehouse, Irving P., Dendall, and Golar. 2,748,066.

Research Corp.: *See*—
Hendrickson, Rudolph, and Kesterson. 2,748,107.
Lee, Shih-Ying. 2,747,612.

Retailliau, Edmond R., to Esso Research and Engineering Co. Gas manufacture. 2,748,179, 5–29–56, Cl. 260—673.

Reuter, Livingston B., to United States Rubber Co. Reversible glove dipping form. 2,747,227, 5–29–56, Cl. 18—41.

Reuter, Lothar: *See*—
Trieschmann, Hans-Georg, and Reuter. 2,748,065.

Reymes-Cole, Bernard T. R., to The Kendall Co. Stocking and method of making the same. 2,747,390, 5–29–56, Cl. 66—173.

Reynolds, Delbert D., and J. L. R. Williams, to Eastman Kodak Co. Process for preparing 2,5-diacetoxystyrene and intermediates therefor. 2,748,160, 5–29–56, Cl. 260—479.

Reynolds Metals Co.: *See*—
Brandt, Paul E., and De Ridder. 2,747,871.

Richards, John M. Stereoscopic targets with diagonal markings. 2,747,458, 5–29–56, Cl. 88—20.

Richardson Co., The: *See*—
Schnitzius, Homer D., and Cox. 2,747,226.

Richardson, Henry M., to Atlas Powder Co. Glass fiber product and process. 2,748,028, 5–29–56, Cl. 117—126.

Richman, Donald, to Haseltine Research, Inc. Superregenerative superheterodyne wave-signal receiver. 2,748,267, 5–29–56, Cl. 250—20.

Richmond, Samuel A. Metal smoother. 2,747,643, 5–29–56, Cl. 153—32.

Richter, Willy, and A. Flocke, to Kurt Korber & Co. K. G. Machine for stemming and blanking tobacco leaves. 2,747,582, 5–29–56, Cl. 131—131.

Ridnour, Robert H. Ice cube package or mold. 2,747,380, 5–29–56, Cl. 62—108.5.

Riedl, Hans-Joachim: *See*—
Hopff, Heinrich, von Schickh, and Riedl. 2,748,166.

Riemann, Howard C., to The Fulton Co. Winch assemblage. 2,747,838, 5–29–56, Cl. 254—186.

Riess, Richard P.: *See*—
Dickten, Emil, Jr., Riess, and Wallace. 2,748,349.

Riley, Harry L., and J. Norris, to United Coke & Chemicals Co. Ltd. Filter. 2,747,686, 5–29–56, Cl. 183—69.

Ritter, George F., to Libbey-Owens-Ford Glass Co. Oscillating edge grinder. 2,747,342, 5–29–56, Cl. 51—142.

Rix, Albert, to Olympia Werke Aktiengesellschaft. Automatically locking control mechanism for variable escapement typewriters. 2,747,716, 5–29–56, Cl. 197—84.

Roberts, William L.: *See*—
Platte, William N., and Roberts. 2,748,380.

Robertson, John M.: *See*—
Wyatt, Wilbur E., and Robertson. 2,747,256.

Robins, Samuel D. Endless-belt conveyors. 2,747,726, 5–29–56, Cl. 198—203.

Robinson, Ronald R., to Caterpillar Tractor Co. Engine speed control mechanism. 2,747,426, 5–29–56, Cl. 74—507.

Robot Appliances, Inc.: *See*—
Miller, Harold L. 2,747,864.

Roche, Clifton R. Transmission. 2,747,431, 5–29–56, Cl. 74—765.

Rocklin, Albert L.: *See*—
Heitz, Robert G., and Rocklin. 2,747,962.

Rockwell Spring and Axle Co.: *See*—
Faust, Charles L., and Safranek. 2,748,068.

Rodgers, George F., to Eastman Kodak Co. Preparation of hydroquinone. 2,748,172, 5–29–56, Cl. 260—621.

Rodgers, George F., to Eastman Kodak Co. Process for preparing monochlorohydroquinone. 2,748,173, 5–29–56, Cl. 260—623.

Roe, A. V., Canada Ltd.: *See*—
Metcalf, Philip A. 2,747,449.

Rohm & Haas Co.: *See*—
Schmidle, Claude J., and Mansfield. 2,748,140.

Rohr Aircraft Corp.: *See*—
Burnham, Thomas C. 2,748,037.

Rondello, Joseph. Fishing casting float plate. 2,747,319, 5–29–56, Cl. 43—43.13.

Ronson Corp.: *See*—
Nissen, Warren I. 2,747,394.

Rorig, Kurt J., to G. D. Searle & Co. 6-furyl and 6-thienyl derivatives of 4-trifluoromethyl-2-pyrimidinamines. 2,748,119, 5–29–56, Cl. 260—256.4.

Rorig, Kurt J., to G. D. Searle & Co. 6-nitroaryl derivatives of 2-amino-4-pyrimidols. 2,748,121, 5–29–56, Cl. 260—256.4.

Rose, Allen S. Carton filler. 2,747,348, 5–29–56, Cl. 53—63.

Rose, Milton F., and J. E. A. Stone. Composition of matter for removing abradant substances from exfoliated vermiculite and process of using same. 2,747,734, 5–29–56, Cl. 209—173.

Rosenblatt, Edgar F., to Baker & Co., Inc. Purification of commercial hydrogen. 2,747,970, 5–29–56, Cl. 23—210.

Rosenblatt, Murray: *See*—
Sechrist, Harry S., and Rosenblatt. 2,748,337.

Rosner, Armin. Therapeutically active compositions containing amphetamine. 2,748,052, 5–29–56, Cl. 167—55.

Ross, William C., and A. W. Niconchuk, to W. R. Grace & Co. Method of cleaning textile print wash blankets. 2,747,506, 5–29–56, Cl. 101—424.

Rounds, Fred G., R. E. Schwind, and L. L. Withrow, to General Motors Corp. Carbon dioxide as an anti-knock agent. 2,747,560, 5–29–56, Cl. 123—119.

Routien, John B., and L. G. Nickell, to Chas. Pfizer & Co., Inc. Cultivation of plant tissue. 2,747,334, 5–29–56, Cl. 47—58.

Royer, Darrell E., to General Motors Corp. Valve mechanism. 2,747,593, 5–29–56, Cl. 137—45.

Royer, Darrell E., and J. H. Smith, to General Motors Corp. Filter and method of making same. 2,747,742, 5–29–56, Cl. 210—169.

Rubega, Robert, to the United States of America as represented by the Secretary of the Navy. Liquid potentiometer. 2,748,232, 5–29–56, Cl. 201—57.

Rüdenberg, Reinhold. Charged particle A. C. generator. 2,748,339, 5–29–56, Cl. 322—2.

Rumianca S. p. A.: *See*—
Paoloni, Carlo, and Pennetti. 2,748,072.

Rumpel, Harvey H., to Smith Engineering Works. Gyratory crusher concave adjustment. 2,747,804, 5–29–56, Cl. 241—286.

Russell, Alfred W., to Russell Reinforced Plastics Corp. Plastic structural member. 2,748,048, 5–29–56, Cl. 154—116.

Russell, Linus E., to Peters & Russell, Inc. Hull having pivotal hull units. 2,747,536, 5–29–56, Cl. 114—77.

Russell, Peter B.: *See*—
Baltzly, Richard, and Russell. 2,748,126.
Baltzly, Richard, and Russell. 2,748,127.
Baltzly, Richard, and Russell. 2,748,128.

Russell Reinforced Plastics Corp.: *See*—
Russell, Alfred W. 2,748,048.

Rust, Noel M., and C. S. Cockerell, to Marconi's Wireless Telegraph Co. Ltd. Radio navigation aids for aircraft. 2,748,385, 5–29–56, Cl. 343—108.

Rustad, Leon W., and J. W. Taylor, Jr., to the United States of America as represented by the Secretary of the Navy. Crystal holder. 2,748,273, 5–29–56, Cl. 250—31.

Ruthardt, Konrad, to W. C. Heraeus, G. m. b. H., Platinschmelze. Recovery of platinum in catalytic gas reactions. 2,747,679, 5–29–56, Cl. 183—1.

Ruttkay, Paul, to Western Electric Co., Inc. Article handling and storage apparatus. 2,747,719, 5–29–56, Cl. 198—24.

S. A. Le Progres Industriel: *See*—
Tabet, Willy. 2,747,450.

Sach, Clarence E. Closure caps for the filler necks of automobile petrol tanks. 2,747,763, 5–29–56, Cl. 220—40.

Sackett, James J., D. F. Mead, and D. V. Miller, to The Wolf Detroit Envelope Co. Machine for applying sealing material to articles. 2,748,025, 5–29–56, Cl. 117—44.

Sadinoff, Max, and A. Holtz. Open-mesh fabric. 2,747,392, 5–29–56, Cl. 66—193.

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Salmon, Reginald D., and L. A. G. Nash, to Creed and Co., Ltd. Clutch mechanism. 2,747,712, 5–29–56, Cl. 192—102.

Salmon, Vina W. Flexible gate fastener and tightener. 2,747,910, 5–29–56, Cl. 292—247.

Salzberg, Harold K., to The Borden Co. Casein compounds. 2,748,009, 5–29–56, Cl. 106—146.

Sampson, Frederick W., to General Motors Corp. Gun sight. 2,747,281, 5–29–56, Cl. 33—56.

Sandee Mfg. Co.: *See*—
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Sanders, Morris. Band tension arrangements for drafting machines. 2,747,283, 5–29–56, Cl. 33—79.

Sanders, Morris. Gear disengaging devices for worm gears. 2,747,423, 5–29–56, Cl. 74—405.

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Karrer, Paul, and Kebrle. 2,748,132.
Karrer, Paul, and Kebrle. 2,748,133.
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Saulnier, Raymond. Retractable landing gears. 2,747,817, 5–29–56, Cl. 244—50.

Saulnier, Theodore A., Jr., to Radio Corp. of America. Electron photography plate construction. 2,748,288, 5–29–56, Cl. 250—65.

Saunders, Alfred P., to Wildt and Co. Ltd. Seamless article of knitted footwear and in method of producing the same. 2,747,389, 5–29–56, Cl. 66—172.

Savin, Bennett S., Jr., to United Aircraft Corp. Gas turbine power plant supporting structure. 2,747,367, 5–29–56, Cl. 60—39.16.

Saye, Charles W. Carcass saw with waste-diverting shield. 2,747,622, 5–29–56, Cl. 143—68.

Sayre, Edward V., to Eastman Kodak Co. Gelation of soluble polymers with attached amino groups. 2,747,998, 5–29–56, Cl. 95—7.

Schafer, Charles C. Roller washing apparatus. 2,747,208, 5–29–56, Cl. 15—4.

Schaible Co., The: *See*—
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Schaich, Wilbur A., to Owens-Illinois Glass Co. Valved nursing nipple. 2,747,573, 5–29–56, Cl. 128—252.

Schaming, Guillaume, to Societe Schostal. Method of cold working blocks between dies. 2,747,266, 5–29–56, Cl. 29—417.

Schaming, Guillaume, to Societe Schostal. Method of cold flattening blocks. 2,747,267, 5–29–56, Cl. 29—417.

Schaming, Guillaume, to Societe Schostal. Apparatus for producing disks from metal bars. 2,747,667, 5–29–56, Cl. 164—40.

Scheiderbauer, Robert A., and L. S. Pitts, to E. I. du Pont de Nemours and Co. Polymerization. 2,748,106, 5–29–56, Cl. 260—88.7.

Scheiwer, Albert T. Couplings for sprinklers and nozzles. 2,747,938, 5–29–56, Cl. 299—131.

Schelke, Robert K., and C. M. Huth, to Belden Mfg. Co. Electrical connector. 2,748,367, 5–29–56, Cl. 339—252.

Schelling, George C., to Bausch & Lomb Optical Co. Lens grinding machine. 2,747,339, 5–29–56, Cl. 51—124.

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Schenck, Carl, Maschinenfabrik G. m. b. H.: *See*—
Federn, Klaus. 2,748,341.

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Schilberg, Arnold G., to A. O. Smith Corp. Box frame bulkhead. 2,747,887, 5–29–56, Cl. 280—106.

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Doll, Henri-Georges. 2,747,402.

Schlumbohm, Peter. Dehumidifier apparatus for air conditioning. 2,747,383, 5–29–56, Cl. 62—140.

Schmid, Herman, and A. P. Hobush, to Incoro, Inc. Agitator for removing chaff from roasted coffee. 2,747,496, 5–29–56, Cl. 99—236.

Schmid, Raymond W.: *See*—
Golden, Abraham H., Schmid, and Kubik. 2,747,907.

Schmidle, Claude J., and R. C. Mansfield, to Rohm & Haas Co. 3-Hydroxymethyl-4-phenylitetrahydropyridines and their esters. 2,748,140, 5–29–56, Cl. 260—295.5.

Schmidt, Edgar H., to E. I. du Pont de Nemours & Co. Variable speed means for web feeders. 2,747,866, 5–29–56, Cl. 271—2.8.

Schmitter, Walter P., and A. G. Bade, to The Falk Corp. Multiple clutch-coupling unit. 2,747,711, 5–29–56, Cl. 192—87.

Schneider, Paul L., and W. H. Taylor, to General Motors Corp. Switch. 2,748,216, 5–29–56, Cl. 200—77.

Schnepf, William K., to General Motors Corp. Snap acting speed responsive device. 2,747,854, 5–29–56, Cl. 264—15.

Schnits, Pies E. Fluid suction and mixing device. 2,747,790, 5–29–56, Cl. 230—95.

Schnitzius, Homer D., and J. M. Cox, to The Richardson Co. Antistringing injection nossle. 2,747,226, 5–29–56, Cl. 18—30.

Schoenberger, W. J., Co., The: *See*—
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Schofield, Hasen A. Portable clothes hanger for motor vehicles. 2,747,781, 5–29–56, Cl. 224—42.45.

Schrader, Gerhard, to Farbenfabriken Bayer Aktiengesellschaft. Thiophosphoric acid esters of 3-halogen-hydroxycoumarins. 2,748,146, 5–29–56, Cl. 260—343.2.

Schramm, August F., Jr. Metallized fabric. 2,748,019, 5–29–56. Cl. 117—31.

Schreiber, Erich, to G. Ospelt. Internal-combustion engines. 2,747,556, 5–29–56, Cl. 123—32.

Schrock, Norman B., to Hewlett-Packard Co. Frequency generator. 2,748,272, 5–29–56, Cl. 250—27.

Schropp, Alfred: *See*—
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Schubert, Alexander. Mine prop. 2,747,829, 5–29–56, Cl. 248—355.

Schuftan, Paul M., and T. J. Webster, to The British Oxygen Co. Ltd. Regeneration of adsorbent units. 2,747,681, 5–29–56. Cl. 183—4.7.

Schults, Wilbur A., and A. R. Moore, to Hupp Corp. Liquid fuel burning apparatus and control. 2,747,799, 5–29–56, Cl. 236—1.

Schumer, Mathew H.: *See*—
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Schweiter, Walter, and K. Marx, to Schweiter Ltd. Device for the placement of the thread during quick traverse winding. 2,747,805, 5–29–56, Cl. 242—18.

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Rounds, Fred G., Schwind, and Withrow. 2,747,560.

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Scudi, John V., and F. E. Anderson, to Nepera Chemical Co., Inc. Aromatic carboxylic acid salts of tetra alkyl ethylene diamines. 2,748,139, 5–29–56, Cl. 260—295.5.

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Burtner, Robert R. 2,748,120.
Burtner, Robert R. 2,748,122.
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Sechrist, Harry S., and M. Rosenblatt, to General Electric Co. Electrical regulators. 2,748,337, 5–29–56, Cl. 321—16.

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Reppe, Walter, Pasedach, and Seefelder. 2,748,130.

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Segesman, Louis E., to The Hoover Co. Converter controlling handle position in suction cleaner. 2,747,215, 5–29–56, Cl. 15—333.

Seidl, Herbert, to The Babcock & Wilcox Co. Cyclone furnaces. 2,747,526, 5–29–56, Cl. 110—28.

Seiler, Arthur J., to Main Products Corp. Conveyer belting. 2,748,044, 5–29–56, Cl. 154—52.1.

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Sekera, Charles J., to Westinghouse Air Brake Co. Accelerometer testing device. 2,747,609, 5–29–56, Cl. 137—560.

Selby, Donald W., to E. I. du Pont de Nemours and Co. Bobbin chuck. 2,747,809, 5–29–56, Cl. 242—72.

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Shappell, Harold M., to Union Carbide and Carbon Corp. Water-soluble phenol-formaldehyde condensation products. 2,748,101, 5–29–56, Cl. 260—60.

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Badger, Alfred E., and Sharp. 2,748,007.

Shataloff, Nicholas S., to Buensod-Stacey, Inc. Air conditioning system. 2,747,842, 5–29–56, Cl. 257—8.

Shearer, Newton H., and H. W. Coover, Jr., to Eastman Kodak Co. Method of bonding using adhesive compositions comprising monomeric disubstituted ethylenes. 2,748,050, 5–29–56, Cl. 154—140.

Shell Development Co.: *See*—
Nixon, Alan C., and Minor. 2,748 059.
Olberg, Ralph C., and Brewer. 2,748,061.
Peterson, Walter H., and Skei. 2,748,081.
Wooldridge, James A. 2,747,598.
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Zachar, John. 2,748,082.

Shepherd, Paul. Pneumatic peck hammer. 2,747,444, 5–29–56, Cl. 81—15.

Sherman, Floyd A., to Motor Products Corp. Power operated jack assembly. 2,747,836, 5–29–56. Cl. 254—86.

Shibata, Sunao, to A. Garasu. Automatic packing apparatus for glass sheets. 2,747,353, 5–29–56, Cl. 53—249.

Shore, Charles and M. Collapsible clothesline dryer. 2,747,749, 5–29–56, Cl. 211—178.

Shore, Morton: *See*—
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Short, Brooks H., to General Motors Corp. Ignition system. 2,748,319, 5–29–56, Cl. 315—213.

Sickinger, Hans A.: *See*—
Gerhardt, Walter, and Schropp. 2,747,890.

Siebens, Norman H.: *See*—
Allen, Frank B., and Siebens. 2,747,822.

Siemens & Halske Aktiengesellschaft: *See*—
Dressler, Max, and Fischer. 2,748,323.
Faber, Karl. 2,748,195.

Siemens, Walter L. Photographic developing apparatus. 2,747,480. 5–29–56, Cl. 95—89.

Sifferd, Robert H., and L. P. Anderson, to Armour and Co. Rendering process for recovery of fat and gelatin. 2,748,152, 5–29–56, Cl. 260—412.6.

Sifrin, Andreas, to The Babcock & Wilcox Co. Vapor generator furnace. 2,747,553, 5–29–56, Cl. 122—336.

Signal Oil and Gas Co.: *See*—
Johnston, Daniel S. 2,748,358.
Thomas, Gerald B., and Moon. 2,747,405.

Silva, William J. Diesel engines. 2,747,557, 5–29–56, Cl. 123—32.

Silver, Walter H., and W. V. Lohrman, to Deere & Co. Tractor-mounted plow. 2,747,489, 5–29–56, Cl. 97—47.51.

Silversher, Herman I., and G. W. Burnett, to Electrofilm, Inc. High temperature resilient dry lubrication. 2,748,030, 5–29–56, Cl. 117—161.

Simek, Jerry V., and W. M. Thomas, to Western Electric Co., Inc. Gauges. 2,747,290, 5–29–56, Cl. 33—174.

Simm, Clarke N., to California Research Corp. Method of heating subterranean formations. 2,747,672, 5–29–56, Cl. 166—38.

Simpkins, Isaac A. Combination plant cutter and liquid applicator. 2,747,330, 5–29–56, Cl. 47—1.

Simpson, Charles W., to The National Acme Co. Master collet jaw inserts. 2,747,881, 5–29–56, Cl. 279—46.

Simpson, Harold, and J. T. D. Spence, to National Standard Co. Ltd. Swaging machines. 2,747,442, 5–29–56, Cl. 78—21.

Sinclair Refining Co.: *See*—
Watson, William B. 2,748,013.

Singer Mfg. Co., The: *See*—
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Skei, Thurston: *See*—
Peterson, Walter H., and Skei. 2,748,081.

Slavens, Wayne E., to Deere Mfg. Co. Wagon elevator support for harveaters. 2,747,722, 5–29–56, Cl. 198—122.

Slayter, Rudolf S. Device for mixing fluids. 2,747,844, 5–29–56, Cl. 259—4.

Sloan, Harry, to The Vilter Mfg. Co. System for concentrating anti-freese solution. 2,747,382, 5–29–56, Cl. 62—140.

Sloviter, Benjamin: *See*—
Perri, Joseph M., and Sloviter. 2,748,078.

Slutz, Ralph J., to the United States of America as represented by the Secretary Commerce. Regenerative shaping of electric pulses. 2,748,269, 5–29–56, Cl. 250—27.

Sly, Leslie W., W. P. Doe, and H. G. Fisher, to Fisher-Price Toys, Inc. Wheeled figure toy. 2,747,327, 5–29–56, Cl. 46—105.

Small, Samuel N., to Atkins Industries, Inc. Block-and-tape lumber measuring device for bench saws. 2,747,625, 5–29–56, Cl. 143—174.

Smith, A. O., Corp.: *See*—
Andrus, Orrin E. 2,748,250.
Broberg, Leonard E. 2,747,703.
Reed, Daniel J. 2,747,649.
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Thompson, Phillip A. 2,747,975.

Smith, Donald G., to Hester Plow Co., Inc. Tractor implement supporting attachment. 2,747,485, 5–29–56, Cl. 97—46.50.

Smith, Edward W. Variable speed drive. 2,747,710, 5–29–56, Cl. 192—84.

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Smith, James G., and E. I. Sundeen, to Eastman Kodak Co. Decoration of cellulosic, metal and vitreous surfaces. 2,747,997, 5–29–56, Cl. 95—7.

Smith, John H.: *See*—
Royer, Darrell E., and Smith. 2,747,742.

Smith, John L., and G. R. Parker. Can opener. 2,747,272, 5–29–56, Cl. 30—6.1.

Smith, Joseph B. Packed sleeve pipe coupling. 2,747,900, 5–29–56, Cl. 285—196.

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Whitecar, Alten E. 2,747,351.
Whitecar, Alten E. 2,747,352.

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Smith, Otto J. M., to Hewlett-Packard Co. Sine wave generator. 2,748,278, 5–29–56, Cl. 250—36.

Smith, Richard J., to McGill Mfg. Co., Inc. Self-contained seal and bearing assembly. 2,747,949, 5–29–56, Cl. 308—187.2.

Smith, Warren L., M. F. Potts, and P. S. Hudson, to Phillips Petroleum Co. Stabilization of polymerizable heterocyclic nitrogen compounds. 2,748,131, 5–29–56, Cl. 260—290.

Smith, Willard C. Melon carrier. 2,747,917, 5–29–56, Cl. 294—116.

Smyth, Charles N., to The Birmingham Small Arms Co. Ltd. Transducer. 2,748,369, 5–29–56, Cl. 340—10.

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Snyder, Holcomb. Gauge for setting planer blades. 2,747,291, 5–29–56, Cl. 33—185.

Societa Del Linoleum, Societa Per Azioni: *See*—
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Backensto, Elwood B., and Hayden. 2,747,969.
Hicks, John S. 2,748,060.
Moore, Fitzhugh L. 2,747,839.
Myers, Harold C. 2,748,064.
Payne, Grady L. 2,748,055.
Reicherts, Paul P. 2,748,290.

Soddy, Thomas C., to Chicago Railway Equipment Co. Railway refrigerator car door. 2,747,239, 5–29–56, Cl. 20—23.

Sole, Harry I.: *See*—
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Sonnenfeldt, Richard W., to Radio Corp. of America. Oscillator synchronization. 2,748,191, 5–29–56, Cl. 178—69.5.

Sontheim, Herman W., to The Robert Mitchell Co. Ltd. Parcel racks for vehicles. 2,747,745, 5–29–56, Cl. 211—90.

Soundrive Pump Co.: *See*—
Von Seggern, Ernest A. 2,747,510.

Speakes, Charles C., and A. C. Griffin, Jr., dedicated to the free use of the People in the Territory of the United States. Method of moisture restoration to cotton. 2,747,234, 5–29–56, Cl. 19—66.

Speakman Co.: *See*—
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Spear, Donal E., and W. F. Fowler, Jr., to Eastman Kodak Co. Tub sizing of paper. 2,748,029, 5–29–56, Cl. 117—155.

Speck, Kurt, S. Hauser, and J. L. Hajos, to Jacques Kreisler Mfg. Corp. Watch bands. 2,747,779, 5–29–56, Cl. 224—4.

Speck, Willis A., to Westinghouse Electric Corp. Neutral bar assembly. 2,748,365, 5–29–56, Cl. 339—198.

Speed, William C., and J. J. Dwyer, to Audio Devices, Inc. Production of magnetic sound tape. 2,748,015, 5–29–56, Cl. 117—7.

Speed, William C., and J. J. Dwyer, to Audio Devices, Inc. Production of magnetic sound tape. 2,748,016, 5–29–56, Cl. 117—7.

Spence, John T. D.: *See*—
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Sperry Rand Corp.: *See*—
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Spielman, Milton H., to The Lamb Electric Co. Electric motor brush holder and frame adapted thereto. 2,748,301, 5–29–56, Cl. 310—241.

Sprackling, Stanford B., and D. N. Campbell, to Union Carbide and Carbon Corp. Differential refractometer. 2,747,455, 5–29–56, Cl. 88—14.

Spraying Systems Co.: *See*—
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Spring Load Mfg. Corp.: *See*—
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Spring Packing Corp.: *See*—
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Stahl, Maurice D., to The Hoover Co. Combination dusting brush. 2,747,217, 5–29–56, Cl. 15—374.

Stahl, Robert J., and N. L. Heikes, to Color Television Inc. Color television synchronising apparatus. 2,748,188, 5–29–56, Cl. 178—5.4.

Stahl, William F., and F. V. Collins; said Collins assor. to said Stahl. Swelling agents for cellulose acetate. 2,748,014, 5–29–56, Cl. 106—316.

Stamm, John J., to Westinghouse Electric Corp. Low-speed idling of engines. 2,747,368, 5–29–56, Cl. 60—39.18.

Standard Coil Products Co., Inc.: *See*—
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Standard Foil Products Corp.: *See*—
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Standard Oil Co., The: *See*—
Breitenbach, Vernon A. 2,747,774.
Foreman, Robert W. 2,747,399.
Fuller, Norman C. 2,747,527.

Staples, Stanley F., to the United States of America as represented by the Secretary of the Army. Slip-on closure cap. 2,747,761, 5–29–56, Cl. 220—24.

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Stauffer, Dale A.: *See*—
Fancher, Otis E., and Stauffer. 2,748,148.

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Stegeman, Raymond F. E., to Bausch & Lomb Optical Co. Spectacle case. 2,747,729, 5–29–56, Cl. 206—6.

Steiner, Abram A., to De Nederlandse Centrale Organisatie Voor Toegepast Natuurwetenschappelijk Onderzoek. Hydroponics. 2,747,331, 5–29–56, Cl. 47—1.2.

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Stevenson, Wilbur W. Fluid meter. 2,747,403, 5–29–56, Cl. 73—203.

Stoll, Arthur, and J. P. Bourquin, to Sandoz A. G. Amide-like derivatives of piperidine. 2,748,134, 5–29–56, Cl. 260—294.

Stone, Albert F., and E. A. Hayden. Chain-saw holding claw. 2,747,621, 5–29–56, Cl. 143—32.

Stone, Albert L., and G. E. Daverin, to Humble Oil & Refining Co. Apparatus for handling pipe in a derrick. 2,747,751, 5–29–56, Cl. 214—2.5.

Stone, Jack E. A.: *See*—
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Stosuy, Athan, to General Motors Corp. Bearing and method of making same. 2,747,261, 5–29–56, Cl. 29—191.2.

Strachan, Alexander W., to United States Steel Corp. Apparatus for quenching and reeling rods. 2,747,587, 5–29–56, Cl. 134—57.

Straitz, John F., to National Airoil Burner Co., Inc. Preheated air construction for fluent fuel burning furnaces. 2,747,853, 5–29–56, Cl. 263—51.

Strand, Steen, to The Fulton Co. Vehicle towing bumper clamp. 2,747,893, 5–29–56, Cl. 280—502.

Straub, W. F., & Co.: *See*—
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Straub, Walter F., to W. F. Straub & Co. Citrus peel product and method. 2,748,003, 5–29–56, Cl. 99—102.

Stroukoff Aircraft Corp.: *See*—
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Stutz & Cie.: *See*—
Stutz, Walter. 2,747,728.

Stutz, Walter, to Stutz & Cie. Apparatus for removing thread wastes on thread carriers used in textile machines. 2,747,728, 5–29–56, Cl. 203—355.

Sullivan, Mary W. Educational and amusement device. 2,747,298, 5–29–56, Cl. 35—26.

Sulzer Freres, Societe Amonyme: *See*—
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Quist, Harold A. 2,747,601.
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Sundeen, Earl I.: *See*—
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Sutton, O. A., Corp., Inc., The: *See*—
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Swenholt, Sophie B. Hose rack. 2,747,823, 5–29–56, Cl. 248—85.

Swenson, William E., and F. C. Nielsen, to Minneapolis-Moline Co. Drive for tractor transmission and power take-off. 2,747,416, 5–29–56, Cl. 74—15.84.

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Symington-Gould Corp., The: *See*—
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Szantay, Elmer, to Sandee Mfg. Co. End closure for flexible collapsible tube. 2,747,935, 5–29–56, Cl. 299—104.

Szekely, George. Air compressors. 2,747,789, 5–29–56, Cl. 230—55.

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Talt Mfg. Co., The: *See*—
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Talak, John F., to J. I. Case Co. Filter with by-pass. 2,747,743, 5–29–56, Cl. 210—177.

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Tate, Kenneth L., to Taylor Instrument Companies. Pressure responsive device having a slotted metal diaphragm. 2,747,615, 5–29–56, Cl. 137—784.

Taylor Instrument Companies: *See*—
Tate, Kenneth L. 2,747,615.

Taylor, John W., Jr.: *See*—
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Taylor, Keith M., to Monsanto Chemical Co. Regeneration of copper chloride catalysts employed in the production of acrylonitrile. 2,748,157, 5–29–56, Cl. 260—465.3.

Taylor, Ralph S. Cord reel. 2,747,814, 5–29–56, Cl. 242—107.

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Thomas, Arthur, to Powers-Samas Accounting Machines Ltd. Machines controlled by statistical record cards. 2,747,669, 5–29–56, Cl. 164—114.

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Thomas, Lewis C.: *See*—
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Thompson, Donald L., to Mar-Don Mfg. Co. Fish mouth spreader. 2,747,321, 5–29–56, Cl. 43—53.5.

Thompson, George. Clam opener. 2,747,220, 5–29–56, Cl. 17—9.

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Thompson, John W., to Eastman Kodak Co. Mono-esters of citric acid as metal deactivators for motor fuels. 2,747,979, 5–29–56, Cl. 44—70.

Thompson, Phillip A., to A. O. Smith Corp. Combination catalyst screen support and cover. 2,747,975, 5–29–56, Cl. 23—288.

Thompson, William O. Liquefied gas system. 2,747,374, 5–29–56, Cl. 62—1.

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Thorington, Luke, to Westinghouse Electric Corp. Color-corrected light source and phosphors therefor. 2,748,303, 5–29–56, Cl. 313—25.

Thorn, Martha I. Candle holder. 2,747,393, 5–29–56, Cl. 67—23.

Tierney, Robert J. Identification means particularly for a luggage handle. 2,747,310, 5–29–56, Cl. 40—10.

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Traut, William A. Fluid pressure device. 2,747,370, 5–29–56, Cl. 60—52.

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Trinca, Frederick. Ready-sight-reading tire pressure gage. 2,747,409, 5–29–56, Cl. 73—408.

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ISSUED MAY 29, 1956

NOTE.—First number = class, second number = subclass, third number = patent number

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60: 2,748,101
77.5: 2,748,102
2,748,103
79.5: 2,748,104
85.3: 2,748,105
88.7: 2,748,106
144: 2,748,107
210: 2,748,108
216: 2,748,109
2,748,110
226: 2,748,111
236: 2,748,112
239: 2,748,113
240.4: 2,748,114
240.6: 2,748,115
247.7: 2,748,116
250: 2,748,117
251: 2,748,118
256.4: 2,748,119
2,748,120
2,748,121
2,748,122
2,748,123
2,748,124

260—256.5: 2,748,125
268: 2,748,126
2,748,127
2,748,128
2,748,129
290: 2,748,130
2,748,131
292: 2,748,132
2,748,133
294: 2,748,134
294.9: 2,748,135
295: 2,748,136
2,748,137
2,748,138
295.5: 2,748,139
2,748,140
297: 2,748,141
2,748,142
313: 2,748,143
329: 2,748,144
2,748,145
343.2: 2,748,146
347.4: 2,748,147
348: 2,748,148
397.1: 2,748,149
397.4: 2,748,150
408: 2,748,151
412.6: 2,748,152
461: 2,748,153
465: 2,748,154
465.1: 2,748,155
465.3: 2,748,156
2,748,157
2,748,158
475: 2,748,159
479: 2,748,160
515: 2,748,161
2,748,162
540: 2,748,163
558: 2,748,164
566: 2,748,165
2,748,166
604: 2,748,167
2,748,168
613: 2,748,169
614: 2,748,170
615: 2,748,171
621: 2,748,172
623: 2,748,173
2,748,174
638: 2,748,175
652: 2,748,176
653: 2,748,177
668: 2,748,178
673: 2,748,179
683.3: 2,748,180
810: 2,748,181
261— 11: 2,747,847
52: 2,747,848
114: 2,747,849
262— 2: 2,747,850
14: 2,747,851
33: 2,747,852
263— 51: 2,747,853
264— 15: 2,747,854
266— 4: 2,747,855
23: 2,747,856
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42: 2,747,858
267— 1: 2,747,859
2,747,860
4: 2,747,861
65: 2,747,862
268— 59: 2,747,863
2,747,864
270— 32: 2,747,865
271— 2.3: 2,747,866
2.4: 2,747,867
2,747,868
54: 2,747,869
79: 2,747,870
272— 66: 2,747,871
273— 1: 2,747,872
95: 2,747,873
102.1: 2,747,874
105: 2,747,875
106.5: 2,747,876
149: 2,747,877
186: 2,747,878
274— 10: 2,747,879
279— 4: 2,747,880
46: 2,747,881
106: 2,747,882
280— 5.26: 2,747,883
6: 2,747,884
11.35: 2,747,885
87: 2,747,886
106: 2,747,887
166: 2,747,888
281: 2,747,889

280— 406: 2,747,890
480: 2,747,891
491: 2,747,892
502: 2,747,893
281— 1: 2,747,894
282— 29: 2,747,895
285— 38: 2,747,896
129: 2,747,897
142: 2,747,898
166: 2,747,899
196: 2,747,900
286— 11: 2,747,901
11.14: 2,747,902
11.15: 2,747,903
287— 23: 2,747,904
288— 20: 2,747,905
290— 40: 2,748,294
292— 92: 2,747,906
169: 2,747,907
241: 2,747,908
247: 2,747,909
2,747,910
294— 7: 2,747,911
29: 2,747,912
64: 2,747,913
87: 2,747,914
87.24: 2,747,915
106: 2,747,916
116: 2,747,917
295— 36: 2,747,918
296— 20: 2,747,919
28: 2,747,920
44: 2,747,921
2,747,922
2,747,923
75: 2,747,924
97: 2,747,925
2,747,926
2,747,927
107: 2,747,928
117: 2,747,929
299— 11: 2,747,930
28.5: 2,747,931
47: 2,747,932
2,747,933
86: 2,747,934
104: 2,747,935
114: 2,747,936
2,747,937
131: 2,747,938
136: 2,747,939
301— 37: 2,747,940
302— 27: 2,747,941
64: 2,747,942
307— 84: 2,748,295
88: 2,748,296
151: 2,748,297
308— 3.8 2,747,943
10: 2,747,944
77: 2,747,945
89: 2,747,946
187.1: 2,747,947
2,747,948
187.2: 2,747,949
2,747,950
214: 2,747,951
243: 2,747,952
309— 19: 2,747,953
23: 2,747,954
310— 26: 2,748,298
95: 2,748,299
228: 2,748,300
241: 2,748,301
247: 2,748,302
311— 30: 2,747,955
89: 2,747,956
90: 2,747,957
92: 2,747,958
312—140.3: 2,747,959
219: 2,747,960
313— 25: 2,748,303
65: 2,748,304
76: 2,748,305
109: 2,748,306
155: 2,748,307
185: 2,748,308
197: 2,748,309
247: 2,748,310
264: 2,748,311
315— 12: 2,748,312
25: 2,748,313
39.69: 2,748,314
100: 2,748,315
106: 2,748,316
144: 2,748,317
180: 2,748,318
213: 2,748,319
316— 27: 2,747,961
317— 14: 2,748,320
101: 2,748,321

317— 123: 2,748,322
198: 2,748,323
200: 2,748,324
234: 2,748,325
236: 2,748,326
249: 2,748,327
257: 2,748,328
318— 6: 2,748,329
22: 2,748,330
28: 2,748,331
207: 2,748,332

318— 232: 2,748,333
243: 2,748,334
274: 2,748,335
321— 2: 2,748,336
16: 2,748,337
57: 2,748,338
322— 2: 2,748,339
24: 2,748,340
26: 2,748,341
28: 2,748,342
323— 36: 2,748,343

323— 43.5: 2,748,344
324— 58: 2,748,345
73: 2,748,346
158: 2,748,347
2,748,348
2,748,349
333— 10: 2,748,350
13: 2,748,351
14: 2,748,352
81: 2,748,353
82: 2,748,354

336— 30: 2,748,355
58: 2,748,356
83: 2,748,357
339— 16: 2,748,358
28: 2,748,359
31: 2,748,360
64: 2,748,361
75: 2,748,362
95: 2,748,363
176: 2,748,364
198: 2,748,365

339— 243: 2,748,366
252: 2,748,367
276: 2,748,368
340— 10: 2,748,369
17: 2,748,370
25: 2,748,371
27: 2,748,372
151: 2,748,373
163: 2,748,374
187: 2,748,375
190: 2,748,376

340— 206: 2,748,377
244: 2,748,378
2,748,379
253: 2,748,380
259: 2,748,381
316: 2,748,382
386: 2,748,383
343—17.2: 2,748,384
108: 2,748,385
787: 2,748,386
793: 2,748,387

Classification of Designs

D 2— 3: Des. 177,864
D 3—11: Des. 177,872
D 4— 3: Des. 177,867
D 6— 2: Des. 177,805
D 7— 7: Des. 177,810
D 9— 2: Des. 177,788
D13— 1: Des. 177,855
D14— 3: Des. 177,799
Des. 177,858
Des. 177,868
Des. 177,878
6: Des. 177,794
Des. 177,800
Des. 177,877
D15— 1: Des. 177,886
8: Des. 177,861
D21— 6: Des. 177,808
D22— 5: Des. 177,866

D29— 2: Des. 177,885
D33— 6: Des. 177,809
14: Des. 177,795
D34— 2: Des. 177,874
4: Des. 177,876
5: Des. 177,801
Des. 177,871
15: Des. 177,796
Des. 177,802
Des. 177,880
D35— 3: Des. 177,878
D42— 7: Des. 177,797
Des. 177,865
D44—26: Des. 177,862
29: Des. 177,806
D45— 1: Des. 177,820
9: Des. 177,822

D45— 9: Des. 177,824
Des. 177,827
Des. 177,840
Des. 177,843
Des. 177,845
Des. 177,846
Des. 177,848
Des. 177,851
Des. 177,852
Des. 177,854
10: Des. 177,818
16: Des. 177,813
Des. 177,819
Des. 177,821
Des. 177,823
Des. 177,825
Des. 177,826

D45—16: Des. 177,829
Des. 177,830
Des. 177,833
Des. 177,839
Des. 177,842
Des. 177,844
Des. 177,850
19: Des. 177,828
Des. 177,831
Des. 177,832
Des. 177,834
Des. 177,835
Des. 177,836
Des. 177,837
Des. 177,838
Des. 177,841
Des. 177,847

D45—19: Des. 177,849
Des. 177,853
Des. 177,881
Des. 177,882
D48— 3: Des. 177,791
Des. 177,792
Des. 177,793
20: Des. 177,789
D52— 1: Des. 177,889
3: Des. 177,884
D54— 2: Des. 177,888
12: Des. 177,803
Des. 177,807
Des. 177,856
Des. 177,857
Des. 177,860
Des. 177,869

D54—12: Des. 177,873
D57— 1: Des. 177,863
D58—26: Des. 177,796
D66— 1: Des. 177,814
D72— 1: Des. 177,811
D74— 1: Des. 177,870
17: Des. 177,816
D80— 5: Des. 177,804
9: Des. 177,815
Des. 177,880
D83— 1: Des. 177,859
Des. 177,879
Des. 177,883
D85— 2: Des. 177,887
D86— 8: Des. 177,817
D87— 3: Des. 177,812
D91— 3: Des. 177,790

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
May 29, 1956 Volume 706 Number 5

TRADEMARKS

NOTICES

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 24,395 (Representation of a symbol for the name "Phillips"), The Charles H. Phillips Chemical Co., Essential oils and chemicals; **TM 176,217** (Phillips'), same, Preparations of magnesia, preparations of cod liver oil, and tonic medicines; **TM 176,613**, same, Cocoa and chocolate; **TM 213,935** (Z. B. T.), The Crystal Chemical Co., Inc., Powders for nursery and toilet use; and ointments—namely, preparations for sunburn, burns, cuts, etc.; **TM 218,853**, same, Soaps and soap shaving creams, **filed** Apr. 25, 1956, D. C., S. D. N. Y., Doc. 109/89, *Sterling Drug Inc.* v. *International Solgo Inc.*

TM 176,217. (See TM 24,395.)

TM 176,613. (See TM 24,395.)

TM 190,897 (Jomar), Jos. Martinson & Co., Coffee; **TM 581,583** (Martinson's Jomar), Jos. Martinson & Co., Inc., same, **filed** Apr. 27, 1956, D. C., S. D. N. Y., Doc. 109/124, *Java Coffee Co. Inc.* v. *Jos. Martinson & Co., Inc.*

TM 213,935. (See TM 24,395.)

TM 218,853. (See TM 24,395.)

TM 283,831, TM 510,236 (Alka-Seltzer), Miles Laboratories, Inc., Anti-acid effervescent preparations; **TM 345,004** (Representation of a carton for the name "Alka-Seltzer"), same, **filed** Mar. 8, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c455, *Miles Laboratories, Inc.* v. *Wieboldt Stores, Inc.*

TM 345,004. (See TM 283,831.)

TM 382,350. (See TM 424,123.)

TM 424,123, TM 561,144 (Teena Paige), Epstein Garment Co., Inc., Ladies' dresses: **TM 382,350** ("Junior-Ill-Lite" by Peggy Paige and design), Epstein Garment Corp., Ladies' and misses' dresses, coats, etc., **filed** Apr. 25, 1956, D. C., S. D. N. Y., Doc. 109/88, *Epstein Garment Co., Inc., et al.* v. *Smoler Brothers Inc.*

TM 510,236. (See TM 283,831.)

TM 561,144. (See TM 424,123.)

TM 566,213 (Chromspun), Tennessee Eastman Corp., Synthetic staple fiber; **TM 571,024**, same, Eastman Kodak Co., Synthetic yarn, **filed** Apr. 30, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16504, *Eastman Kodak Co.* v. *David Glasgow et al.* Same, **filed** May 2, 1956, D. C., S. D. N. Y., Doc. 109/179, *Eastman Kodak Co.* v. *A. H. Screiber Co. Inc.*

TM 571,024. (See TM 566,213.)

TM 581,583. (See TM 190,897.)

Service by Publication

A petition to cancel each of the registrations identified below having been filed, and the notice of such proceedings sent by registered mail to each registrant at the last known address having been returned by the post office as undeliverable, notice is hereby given that unless the registrants listed herein, their assigns or legal representatives, shall enter an appearance within thirty days from the date of this publication, the cancellation will be proceeded with as in the case of default.

Cordell Products Inc., New York, N. Y., Reg. No. 547,864, Canc. 6663.

Del Monte-Hickey Company, Inc., New York, N. Y., Reg. Nos. 349,057 and 349,293, Canc. 6670.

M. & S. Farms, Fresno, Calif., Reg. No. 419,448, Canc. 6676.

House of Charm Cosmetic Co., Chicago, Ill., Reg. No. 377,556, Canc. 6678.

George R. Rideout, Chicago, Ill., Reg. No. 354,052, Canc. 6679.

The F. W. F. Corporation, Cleveland, Ohio, Reg. No. 416,106, Canc. 6688.

DAPHNE LEEDS,
Assistant Commissioner of Patents.

CONDITION OF TRADEMARK APPLICATIONS AS OF MAY 4, 1956

Total number of applications awaiting action [excluding renewals and Sec. 12 (c)]	8,459
Date of oldest new application	Oct. 14, 1955
Date of oldest amended application	Dec. 13, 1955

MERCHANT, JOHN, Director, Trademark Examining Operation

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application	
	New	Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	11-21-55	1-11-56
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	10-14-55	12-19-55
III. WENDT, C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	10-18-55	12-13-55
Renewals (All Classes)	2-28-56	.....
Sec. 12 (c) Publications (All Classes)	3-1-56	4-27-56

Applications Filed During Week Ending May 4, 1956—455

Registrations Issued	477—No. 627,562 to No. 628,038
Renewals Issued	70

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.
As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 658,141. Rutgerswerke-Aktiengesellschaft, Frankfurt am Main, Germany. Filed Dec. 17, 1953.



Priority claimed under Sec. 44(d) on German Reg. No. 634,105, dated Feb. 13, 1953. (Claim based on copending application filed Jan. 27, 1953.)

For Plastic-Impregnated Paper in Sheet Form for General Use in the Industrial Arts, Plastic-Impregnated Fabrics in Sheet Form for General Use in the Industrial Arts, Molded or Injection Molded Parts and Articles Which Are Made of Resinous Binders and Fillers and Are Parts or Accessories of Apparatus and Machines, Synthetic Resinous Materials Consisting of Organic Resinous Condensation and Polymerization Products in Solid or Dissolved Form, Synthetic Resinous Intermediate Products in the Form of Powder, Grains, Chips, Lumps, Foils, Plates, Blocks, Rods, Tubes, Plastic Foils for Laminated Sheet Products, Artificial Wood Consisting of a Mixture of Wood and a Resinous Binder in the Form of Moldable Compositions or Molded Articles, Coal Tar, Asphalt, Pitch.

SN 667,929. Cheslam Corporation, Yonkers, N. Y. Filed June 9, 1954.

CELLOTHENE

For Combination of Polyethylene Film and Cellophane Film.
First use Apr. 17, 1953.

SN 667,932. Chester Packaging Products Corp., Yonkers, N. Y. Filed June 9, 1954.

TF

For Polyethylene Film.
First use Mar. 5, 1952.

SN 669,808. Sealite, Inc., Oakland, Calif. Filed July 12, 1954.



The drawing is lined in part for a red color.
For Pipe-Caulking Yarns.
First use Mar. 5, 1953.

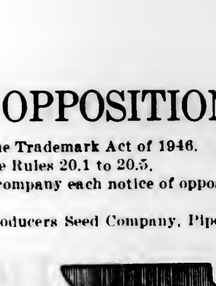
SN 686,387. Producers Seed Company, Piper City, Ill. Filed Apr. 27, 1955.



No claim is made to the word "Seeds" or to the representation of the outline of the State of Illinois, apart from the mark as shown. The drawing is lined for red and blue, but the mark claimed is not limited to those colors.
For Field Seeds and Hybrid Seed Corn.
First use on or about June 1, 1949.

SN 690,716. Kingsford Chemical Co., Iron Mountain, Mich. Filed July 5, 1955.

Heart-O-Hickory



Owner of Reg. No. 593,456.
For Hickory Chips for Imparting Flavor to Meats, Fish, Etc.
First use Dec. 29, 1954.

SN 691,455. The Firestone Tire & Rubber Company, Akron, Ohio. Filed July 18, 1955.

FOAMEX

Owner of Reg. Nos. 515,029, 383,253, and others.
For Sponge Rubber Sheets and Slabs for Use in Insoles, Outsoles, Arch Cushions, Heel Cushions, and Insulation Lining for Footwear.
First use on or about Feb. 15, 1952.

SN 691,776. Peterlite Products Limited, London, England. Filed July 22, 1955.

PETERLITE

Priority claimed under Sec. 44(d) on British Reg. No. 739,561, dated Feb. 22, 1955.
For Plastics in Sheet, Rod, and Tube Form and Shaped Sections.

SN 691,995. The Goodyear Tire & Rubber Company, Akron, Ohio. Filed July 27, 1955.

PLIOFLEX

Owner of Reg. No. 403,774.
For Synthetic Rubber.
First use Apr. 30, 1955.

SN 692,388. The General Tire & Rubber Company, Akron, Ohio. Filed Aug. 3, 1955. Sec. 2(f).

Bolta

Owner of Reg. Nos. 301,800, 585,004, and others.
For Colored Plastic Sheets With Various Finishes for General Industrial Use.
First use July 11, 1950.

SN 695,426. Liberty Dressing Company, Inc., Gloversville, N. Y. Filed Sept. 27, 1955.



For Processed Leather Suitable for Use as Leather Sponge and Polisher.
First use Aug. 4, 1955.

CLASS 2

SN 697,536. Continental Can Company, Inc., New York, N. Y. Filed Nov. 2, 1955.

BULK-O-MATIC

For Large Paper Containers, Corrugated Cartons, Portable Bins, and Other Large Packages for Empty Cans.
First use Oct. 19, 1955.

CLASS 3

SN 685,098. H. B. Davis Corp., New York, N. Y. Filed Apr. 7, 1955.

Lady Davis

For Wallets and Pocketbooks.
First use Feb. 21, 1955.

SN 685,099. H. B. Davis Corp., New York, N. Y. Filed Apr. 7, 1955.

Lord Davis

For Wallets.
First use Feb. 21, 1955.

SN 685,770. Sloves Mechanical Binding Co., Inc., New York, N. Y. Filed Apr. 18, 1955.

ZIPPALOPE

For Portfolios.
First use Mar. 1, 1954.

SN 691,644. The Triangle Paper Bag Manufacturing Company, Covington, Ky. Filed July 20, 1955.

EASY-KARY

For Shopping Bags.
First use June 3, 1955.

SN 695,979. Gold Seal Importers, Inc., New York, N. Y. Filed Oct. 6, 1955.

Sophisticated Casuals

The word "Casuals" is disclaimed apart from the mark as shown.
For Ladies' Handbags.
First use June 1955.

CLASS 4

SN 669,456. Majo Company, Philadelphia, Pa. Filed July 6, 1954.



No claim is made to the words "Cleans," "Waxes," "Seals," "Triple Action," "Wax," and "In One Easy Operation" except in the association shown.
For Automobile Wax Polish.
First use Jan. 6, 1954.

SN 679,649. Dan Cu Chemical Co., Oklahoma City, Okla. Filed Jan. 10, 1955.

photoptic

For Composition That Is a Combined Cleaner and Polish and Which Provides a Protective Coating for Photographic Lens.
First use Dec. 15, 1954.

SN SN 679,650. Dan Cu Chemical Co., Oklahoma City, Okla. Filed Jan. 10, 1955.



For Composition That Is a Combined Cleaner and Polish and Which Provides a Protective Coating for Display Glass and Mirrors.
First use Dec. 15, 1954.

SN 679,653. Dan Cu Chemical Co., Oklahoma City, Okla. Filed Jan. 10, 1955.



For Composition That Is a Combined Cleaner and Polish and Which Provides a Protective Coating for Windshields.
First use Dec. 15, 1954.

SN 679,654. Dan Cu Chemical Co., Oklahoma City, Okla. Filed Jan. 10, 1955.

optico

For Composition That Is a Combined Cleaner and Polish and Which Provides a Protective Coating for Optical Lenses.
First use Dec. 15, 1954.

SN 693,594. Chisholm Industries, Inc., Lynn, Mass. Filed Aug. 24, 1955.

NY-COL

For Cleaning and Polishing Liquids, Polishes and Polish Impregnated Applicators for Automobile Bodies and Similar Surfaces.
First use Dec. 9, 1954.

SN 699,550. Dan Cu Chemical Co., Oklahoma City, Okla. Filed Dec. 7, 1955.

SUPER VISEX

For Cleaner and Protective Coating Polish for Exterior Windows and Plate Glass.
First use Sept. 2, 1955.

SN 699,551. Ekco Products Company, Chicago, Ill. Filed Dec. 7, 1955.

EKCO

For Compound for Polishing Copper, Stainless Steel, Chrome, Brass, and Like Metals.
First use Oct. 1, 1952.

SN 699,938. Ultra Chemical Works, Inc., Paterson, N. J. Filed Dec. 13, 1955. Sec. 2(f).

ULTRA GLOSS

Owner of Reg. Nos. 345,149, 578,130, and 588,901.
For Wax Polishes, Floor Polishes, and Industrial Waxes.
First use July 1935.

CLASS 5

SN 686,742. Herts Pharmaceuticals Limited, Welwyn Garden City, England. Filed May 3, 1955.

LASSO

Owner of British Reg. No. 624,297, dated July 12, 1943.
For Adhesive Tapes for Industrial Purposes.

SN 691,379. Mid-States Gummed Paper Co., Chicago, Ill. Filed July 15, 1955.

GLASLOK

For Reinforced, Laminated Tape.
First use June 25, 1955.

SN 691,679. Devon Tape Corp., Mount Vernon, N. Y. Filed July 21, 1955.



Applicant disclaims exclusive right to the words "Self Adhesive Tape" apart from the mark as shown.
For Adhesive Tapes, Transparent Tapes, and Adhesive Materials Such as Textiles and Plastics, Made Self-Adhering by Means of Resin or Synthetic Adhesives, Gums, Mucilages, or Pastes.
First use Aug. 19, 1954.

SN 699,345. United Merchants and Manufacturers, Inc., New York, N. Y. Filed Dec. 2, 1955.

CON-TACT

Owner of Reg. Nos. 424,988 and 615,845.
For Pressure Sensitive Adhesive Plastic Tapes.
First use on or about Sept. 21, 1955.

SN 699,903. W. R. Grace & Co., Cambridge, Mass. Filed Dec. 13, 1955.

DARAWELD

For Bonding Agent for Masonry and Concrete.
First use May 21, 1954.

CLASS 6

SN 669,778. Lermer Plastics, Inc., Garwood, N. J. Filed July 12, 1954.

JOLITE

For Plastic Composition Used To Make the Plastic Capsul Vials.
First use May 25, 1954.

SN 675,066. Foote Mineral Company, Berwyn, Pa. Filed Oct. 19, 1954.

CALGRAN

For Natural Calcium Carbonate Prepared From Marble for Use as a Flux in Metallurgical Applications and for Use as a Slag Forming and Fluxing Constituent in Welding Electrode Coatings.
First use Sept. 14, 1954.

SN 676,033. Balcom Industries, Inc., Greeley, Colo. Filed Nov. 4, 1954.

Balcom's
BALCITE

Owner of Reg. Nos. 421,260 and 502,593.
For Agriculture Chemicals—Namely, Insecticides, Herbicides, and Fungicides.
First use May 30, 1952.

SN 683,387. Gallowhur Chemical Corporation, New York, N. Y. Filed Mar. 14, 1955.

PURASEED

For Seed Disinfectant and Protectant for Wheat, Oats, Barley, Rye, Sugar Beets, and Flax.
First use on or about Jan. 7, 1955.

SN 685,823. Eastman Kodak Company, Rochester, N. Y. Filed Apr. 19, 1955.

Eastofix

For Dyes, Dye Intermediates, and Compounds Having a General Use in the Dyeing Art.
First use Nov. 2, 1954.

SN 687,434. Scheidemandel-Motard-Werke, A. G., Berlin-Spandau, Germany. Filed Mar. 22, 1955.

AGSOFLOR

Owner of German Reg. No. 649,708, dated Dec. 10, 1953.
For Flotation Preparations.

SN 687,698. Hercules Powder Company, Wilmington, Del. Filed May 17, 1955.

HERCULES

For Pentaerythritol, a Tetrahydric Alcohol Used in the Manufacture of Alkyd Resin, Rosin, and Tall Oil Esters, and Other Chemical Products.
First use Jan. 12, 1945.

SN 687,859. Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. Filed May 19, 1955.

Tuzet

Owner of German Reg. No. 653,896, dated Feb. 24, 1954.
For Orchard Spray.

SN 688,773. Universal Oil Products Company, Des Plaines, Ill. Filed June 2, 1955.

REXFORMING

For Solid Catalyst.
First use Apr. 6, 1955.

SN 690,927. American Cyanamid Company, New York, N. Y. Filed July 8, 1955.

DIBS

For Accelerator for the Vulcanization of Rubber.
First use May 27, 1955.

SN 691,140. Metal & Thermit Corporation, New York, N. Y. Filed July 12, 1955.

TETC

For Organic Chemicals Containing Tin.
First use on or about June 27, 1955.

SN 691,141. Metal & Thermit Corporation, New York, N. Y. Filed July 12, 1955.

TBTH

For Organic Chemicals Containing Tin.
First use on or about June 27, 1955.

SN 691,142. Metal & Thermit Corporation, New York, N. Y. Filed July 12, 1955.

TETA

For Organic Chemicals Containing Tin.
First use on or about June 27, 1955.

SN 691,143. Metal & Thermit Corporation, New York, N. Y. Filed July 12, 1955.

TETH

For Organic Chemicals Containing Tin.
First use on or about June 27, 1955.

SN 691,144. Metal & Thermit Corporation, New York, N. Y. Filed July 12, 1955.

TBTA

For Organic Chemicals Containing Tin.
First use on or about June 27, 1955.

SN 691,145. Metal & Thermit Corporation, New York, N. Y. Filed July 12, 1955.

TBTC

For Organic Chemicals Containing Tin.
First use on or about June 27, 1955.

SN 691,913. J. Russell Verbrycke, Jr., Washington, D. C. Filed July 25, 1955.

RAZO

For Chemical, Rust-Inhibiting Preparation Having Incidental Sterilizing and Cleansing Properties, Used for Razors, Cutting Appliances, Surgeon's Instruments, et cetera.
First use July 6, 1955.

SN 692,907. Continental Midway Corp., Baltimore, Md. Filed Aug. 12, 1955.

SWAT

For Insecticide.
First use May 23, 1955.

SN 693,125. The Diversey Corporation, Chicago, Ill. Filed Aug. 16, 1955. Sec. 2(f).

D-GLAZER

Owner of Reg. No. 526,457.
For Chemical Product in Granular Form for Stripping Silicon Glaze Coatings From Bake Pans.
First use Dec. 23, 1948.

SN 693,695. Robert E. Olson Co., Inc., San Antonio, Tex. Filed Aug. 25, 1955.



For Metal Surface Composition in Tablet Form for Use in Automobile Engines To Increase Mileage and Decrease Oil Consumption.
First use May 4, 1953.

SN 694,191. The Borden Company, New York, N. Y. Filed Sept. 6, 1955.

METHAC

For Methanol-Methyl Acetate Mixture.
First use Sept. 17, 1953.

SN 694,658. Nyanza Color & Chemical Co. Inc., New York, N. Y. Filed Sept. 14, 1955.

NYANTHROL

For Sulfonated Fatty Alcohols, Sodium Alkylarylsulfonate With Organic Solvents, Dyeing Assistants.
First use 1948.

SN 694,843. American Viscose Corporation, Philadelphia, Pa. Filed Sept. 19, 1955.

AVISCO

For Sodium Sulfate.
First use Sept. 1, 1955.

SN 694,929. Sun Chemical Corporation, Long Island City, N. Y. Filed Sept. 19, 1955. Sec. 2(f).

DUST ON

For Colored Hardener for Concrete Floors.
First use 1944.

SN 694,940. Western Electrochemical Company, Henderson, Nev., now American Potash & Chemical Corporation (Nevada). Filed Sept. 19, 1955.

WECCO

For Sodium Chlorate, Potassium Chlorate, Potassium Perchlorate, Ammonium Perchlorate, and Synthetic Electrolytic Gamma-Phase Manganese Dioxide in Powder Form.
First use June 14, 1955, on sodium chlorate.

SN 694,950. Atlas Powder Company, Wilmington, Del. Filed Sept. 20, 1955.

ATLAS

Owner of Reg. No. 367,578.
For Emulsifying, Wetting, and Dispersing Agents Being Surface Active Esters and Ethers of Polyhydric Alcohols.
First use May 9, 1950.

SN 694,963. Calor Gas Co., San Francisco, Calif. Filed Sept. 20, 1955.

Calor

For Propane Gas Used for Heating and Illuminating.
First use December 1951.

SN 695,049. Timely Products, Inc., Asheboro, N. C. Filed Sept. 20, 1955.

Twill

For Whitening Agent for Use Upon All Types of Fabrics, Including but not Limited to Nylon Fabrics.
First use June 8, 1955.

SN 695,400. Dow Corning Corporation, Midland, Mich. Filed Sept. 27, 1955.

SYLFLEX

For Compositions Used in the Preparation of Leather To Impart Permanent Water Repellence to the Leather.
First use Apr. 22, 1955.

SN 695,454. Willy Spangenberg & Co., Hamburg-Eidelstedt, Germany. Filed Sept. 27, 1955.

Hco SPANGOL

For Plasticizers for Use in the Rubber Industry.
First use Jan. 5, 1955; in commerce Apr. 18, 1955.

CLASS 8

SN 677,235. Georges Monnet, Cognac, France. Filed Nov. 24, 1954.

PIPARETTE

For Ladies' Pipes.
First use Aug. 16, 1954; in commerce Aug. 16, 1954.

SN 695,076. William S. Collens, Brooklyn, N. Y. Filed Sept. 21, 1955.

DETOX

For Cigarette Filter Holder.
First use on or about Sept. 10, 1955.

CLASS 13

SN 690,133. Emanuel L. Cederquist, d. b. a. E. L. Cederquist Company, Los Angeles, Calif. Filed June 24, 1955. Sec. 2(f).

Tite-Joint FASTENER

For Bolt and Check Type Fasteners for Tightening and Holding Panels in Edge to Edge Relationship.
First use May 20, 1949.

SN 691,450. Ekco Products Company, Chicago, Ill. Filed July 18, 1955.

FLINT-WARE

For Stainless Steel Cooking Utensils—Namely, Sauce Pans, Skillets, Frying Pans, Double Boilers, Dutch Ovens, Percolators, Steamers, and Egg Poachers.
First use Apr. 5, 1954.

SN 692,108. Bell & Gossett Company, Morton Grove, Ill. Filed July 29, 1955. Sec. 2(f).

Hydro-Flo

Owner of Reg. Nos. 542,172, 554,429, and 555,376.
For Water Mixing Valves, Check Valves Pressure Actuated To Close and Gravity Actuated To Open, Air Charger and Tank Drainer Valves, Valves for Use With Water Heating Coils Arranged To Reverse the Flow Through and Backwash the Coils When a Faucet Is Opened, Boiler and Expansion Tank Fittings for Hot Water Heating Systems Each Including Separate Air and Water Passages, Tank Hangers, Relief Valve Strainers, Oil Strainers for Straining Quenching Oil, and Combination Units for Hot Water Heating Systems Including a Pressure Reducing Valve, a Pressure Relief Valve and a Safety High Limit Switch Conditioned To Supply Cold Water to the System Under Stated Conditions.
First use Oct. 23, 1948, on tank hangers.

SN 693,394. Pullman Manufacturing Corporation, Rochester, N. Y. Filed Aug. 19, 1955. Sec. 2(f).

PULLMAN

For Window Sash Counterbalances.
First use during the year 1906.

SN 693,550. Chas. O. Larson Co., Sterling, Ill. Filed Aug. 23, 1955. Sec. 2(f).

Larson

For Display Hooks; Flat Display Irons; Corner Display Braces; Tool Holders; Curtain Rod Hooks; Price Tag Holders; Corner or Shelf Braces; Hardware Assortments Including Turnbuckles, Bolts, Hooks, Eyes, Braces, Hangers, Handles or Turn Buttons With Metal Background Plate and Wall Bracket Display or With Revolving Display Stand; Gate Hooks and Eyes; Screw Hooks; Screw Eyes; Cup Hooks; Eye Bolts; Pipe Hooks; Clothes Line Hooks; Safety Hooks and Staples; Hooks and Staples; Garden Tool Stands; Hammock Hooks; Bird Cage or Plant Hooks; Clothes Rod Brackets; Wardrobe Hooks; Coat and Hat Hooks; Garment Hooks; Utility Hooks; Corner Braces; Picture Hangers; Chair and Table Glides; Corrugated Fasteners; Sash Hangers; Turn Buttons; Push Clips; Screen and Drawer Handles; Pin and Angle Fasteners; Door Braces; S Hooks; Shoulder Hooks; Cornice Hooks; Fruit Tree Screw Eyes; Hand Rail Stays; Dowel Screws; Clothes Line Hook Bolts; Clothes Line Eyebolt and Turnbuckle Assemblies; Turnbuckles; U Bolts; Porch Swing Hooks; Double Convex Hooks With or Without Eyes; Staples; Sash Operators; Guy Wire Eye Bolts; Guy Wire Screw Eyes; U Bolts With Clamps; C Clamps; Tool Racks; Eye Bolts and Wing Nuts; S Hook Assortments; and Construction Hardware for Making Saw Horses, Flat Top Saw Horses, Folding Saw Horses, Tilt Top Picnic Benches, Carpenter Saw Horses, Step Stools, Lawn Benches, Power Tool Benches, Folding Work Benches, Teeter-Totters, Tables With Folding Legs, Tables With Rigid Legs, Over-the-Door Hangers, 3-Row Tool Holders, Garden Tool Stands, Broom and Tool Racks, Ladder Gyms, Two-Swing Gyms, Single Swing Gyms, Clothesline Supports, Quick Shelf Links, Picnic Tables and Benches, Pipe Hooks, Hall Trees, Wood Slat Awnings, Lawn Tables, Wrought Iron Folding Leg Tables, Fabric Folding Tables, Fabric Folding Chairs, Fabric Folding Lawn Benches, Peg Board Hangers, Peg Board Plate Hooks, Heavy Steel Hooks and Quick Frames or Corner Clamps, Sold in Individual Sets and in Assortments Including Counter Models.
First use during 1925.

SN 693,551. Chas. O. Larson Co., Sterling, Ill. Filed Aug. 23, 1955. Sec. 2(f).

One of the many LARSON Make Your Own CONSTRUCTION SETS

For Construction Hardware for Making Saw Horses, Flat Top Saw Horses, Folding Saw Horses, Tilt Top Picnic Benches, Carpenter Saw Horses, Step Stools, Lawn Benches, Power Tool Benches, Folding Work Benches, Teeter-Totters, Tables With Folding Legs, Tables With Rigid Legs, Over-the-Door Hangers, 3-Row Tool Holders, Garden Tool Stands, Broom and Tool Racks, Ladder Gyms, Two-Swing Gyms, Single Swing Gyms, Clothesline Supports, Quick Shelf Links, Picnic Tables and Benches, Pipe Hooks, Hall Trees, Wood Slat Awnings, Lawn Tables, Wrought Iron Folding Leg Tables, Fabric Folding Tables, Fabric Folding Chairs, Fabric Folding Lawn Benches, Peg Board Hangers, Peg Board Plate Hooks, Heavy Steel Hooks and Quick Frames or Corner Clamps, Sold in Individual Sets and in Assortments Including Counter Models.
First use during 1947.

SN 694,478. Crosby Steam Gage & Valve Company, Wrentham, Mass. Filed Sept. 12, 1955.

PROTECTO SEAL

For Relief Valves.
First use Aug. 15, 1955.

SN 695,460. M. Wille Co., New York, N. Y. Filed Sept. 27, 1955.

Georges Briard

For Metallic Serving Trays, Platters, Plates, Casseroles, and Coffee Warmers.
First use March 1950.

SN 697,356. Mrs. Veronica J. Buedingen, d. b. a. Art Enterprises, Rochester, N. Y. Filed Oct. 31, 1955.

PIC CLIP

For Metal Clip for Fastening Paintings, Pictures, and the Like in Frames.
First use Oct. 19, 1955.

SN 698,389. Joseph A. Vogel Company, Wilmington, Del. Filed Nov. 16, 1955. Sec. 2(f).

VOGEL

For Toilets, Including Toilet Bowls, Toilet Seats, Toilet Tanks and Toilet Valves, and Toilet Outfits Consisting of Toilet Bowls, Toilet Seats, Toilet Tanks and Toilet Valves, and Hydrants.
First use June 1909.

SN 699,106. The Shelby Spring Hinge Company, Shelby, Ohio. Filed Nov. 29, 1955. Sec. 2(f) as to "Shelby."

Shelby

Owner of Reg. No. 579,769.
For Floor Hinges, Door Hinges, Door Pulls, Pneumatic Door Closers, Door Holders, Door Guards, Door Chains, Sash Lifts, Sash Locks, Window Fasteners and Closet Rods.
First use Dec. 14, 1953.

SN 784. Hannifin Corporation, Des Plaines, Ill. Filed Jan. 16, 1956.

Crown HANNIFIN

For Air Line Filters, Air Line Regulators, Air Line Lubricators, and Units Constituting Combinations Thereof.
First use Nov. 30, 1955.

SN 819. Northern Indiana Brass Company, Elkhart, Ind. Filed Jan. 16, 1956.

NIBCO

Owner of Reg. No. 190,106.
For Pipe Fittings, Consisting of Couplings, Joints, Connectors, Unions, Adapters and Mechanical Valves for Fluid Conduits and Systems, All of Ferrous and Non-Ferrous Metals.
First use Jan. 1, 1928.

SN 1,001. Mineralac Electric Company, Chicago, Ill. Filed Jan. 18, 1956.

MIN-A-CLIP

For Pipe, Conduit, and Cable Hangers and Clips.
First use Nov. 25, 1955.

SN 1,106. Clayton P. Nielsen, d. b. a. Nielsen Manufacturing Co., Los Angeles, Calif. Filed Jan. 19, 1956.

LOOKOUT

For Residential Door Hardware.
First use Dec. 5, 1955.

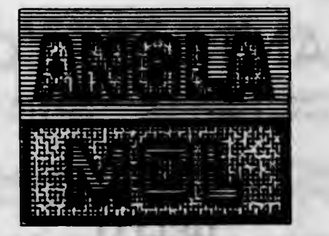
CLASS 15

SN 689,929. L. A. Dreyfus Company, Oak Tree, N. J. Filed June 21, 1955.

L WAX D

For Modified Waxes, Which Are Usually Petroleum Waxes To Which Varying Amounts of Resins and/or Elastomers Have Been Added.
First use June 14, 1955.

SN 695,826. The Lubrizol Corporation, Wickliffe, Ohio. Filed Oct. 4, 1955.



The drawing is lined for gold and blue.
For Lubricants and Lubricant Concentrates, Oils and Greases.
First use Sept. 20, 1955.

SN 700,689. Tar-Gon Products, Inc., d. b. a. Pope Chemical Co., Chicago, Ill. Filed Dec. 27, 1955.

MOTOR OVERHAUL

For Chemical Compound Which Is Added to the Oil in the Crankcase of a Combustion Engine for Increasing the Life and Efficiency of the Engine.
First use November 1953.

SN 700,751. The Pure Oil Company, Chicago, Ill. Filed Dec. 28, 1955.

HYPRONOX

For Lubricating Grease.
First use on or about Nov. 21, 1955.

CLASS 18

SN 659,521. Armour and Company, Chicago, Ill. Filed Jan. 15, 1954.

TUSSAR

For Cough Medicine.
First use Sept. 11, 1953.

SN 670,971. S. Pfeiffer Manufacturing Company, St. Louis, Mo., now by change of name The Pfeiffer Co. Filed Aug. 2, 1954.

RUMAR

For Medicinal Preparation for the Temporary Relief of Aches and Pains of Arthritis and Rheumatism.
First use July 12, 1954.

SN 678,699. Woodmere, Inc., Homewood, Ill. Filed Dec. 20, 1954.

X-7

For Medicines and Pharmaceutical Preparations—Namely, a Liquid Oil Compound Only for Psoriasis.
First use Sept. 15, 1954.

SN 683,258. American Home Products Corporation, d. b. a. Ayerst Laboratories, Division of American Home Products Corporation, New York, N. Y. Filed Mar. 11, 1955.

TIMOVAN

For Central Nervous System Depressant, in Dosage Form.
First use Feb. 15, 1955.

SN 683,259. American Home Products Corporation, d. b. a. Ayerst Laboratories, Division of American Home Products Corporation, New York, N. Y. Filed Mar. 11, 1955.

COTHERA

For Antitussive Compound.
First use Feb. 15, 1955.

SN 683,260. American Home Products Corporation, d. b. a. Ayerst Laboratories, Division of American Home Products Corporation, New York, N. Y. Filed Mar. 11, 1955.

G-THERIN

For Hormone, Enzyme, and Vitamin Complex, in Dosage Form.
First use Feb. 15, 1955.

SN 683,261. American Home Products Corporation, d. b. a. Ayerst Laboratories, Division of American Home Products Corporation, New York, N. Y. Filed Mar. 11, 1955.

ADAQUETS

For Dietary Supplement in Dosage Form, Comprising Vitamins and Minerals.
First use Feb. 15, 1955.

SN 688,367. Thoroughbred Remedy Corp., Elmont, N. Y. Filed May 26, 1955.



For Veterinary Preparations—Namely, Vitaminic Dietary Supplements; Colic Anodyne; Medicated Ointments for Skin Diseases, Skin Irritations and Congestions Due to Minor Colds; Medicated Dressings; Cough Mixture; Carminative and Antispasmodic Preparations; Liniments; Medicated Powders for the Treatment of Inflammations and Fevers; Diuretic; Glycinerated Phlogestic Poultice; Worming Compound; Laxatives; Medicated Astringents; and Analgesics.
First use Mar. 7, 1933.

SN 690,118. Armour and Company, Chicago, Ill. Filed June 24, 1955.

D-40

For Corticotropin Product for Veterinary Use.
First use Nov. 29, 1954.

SN 690,235. Wynn Pharmacal Corporation, Philadelphia, Pa. Filed June 27, 1955.

DURA-TAB S.M.

For Sustained Medication Tablets for Providing Controlled Continuous Release Over a Long Period of Time of a Therapeutic Agent.
First use November 1953.

SN 691,740. American Home Products Corporation, d. b. a. Wyeth Laboratories, Division of American Home Products Corporation, Philadelphia, Pa. Filed July 22, 1955.

PEN–Vee–ORAL

For Antibiotic—Namely, Penicillin.
First use May 18, 1955.

SN 692,184. The Upjohn Company, Kalamazoo, Mich. Filed July 29, 1955.

Solu-Cortef

Owner of Reg. No. 583,191.
For Hormonal Preparation for the Treatment of Endocrine Disturbances.
First use Mar. 3, 1955.

SN 692,428. Dr. Salsbury's Laboratories, Charles City, Iowa. Filed Aug. 3, 1955.

WAVAC

Owner of Reg. No. 615,173.
For Infectious Bronchitis Vaccine and Mixtures of Newcastle and Infectious Bronchitis Vaccines for Use in Drinking Water for Fowl.
First use on or about Mar. 15, 1955.

SN 692,626. Merck & Co., Inc., Rahway, N. J. Filed Aug. 8, 1955.

CODELTRA

Owner of Reg. Nos. 503,514 and 553,939.
For Hormonal Compound for Medicinal and Pharmaceutical Use.
First use May 25, 1955.

SN 692,693. American Home Products Corporation, d. b. a. Wyeth Laboratories, Division of American Home Products Corporation, Philadelphia, Pa. Filed Aug. 9, 1955.

ARTELYSIN

For Ganglionic Blocking Agent.
First use Mar. 14, 1955.

SN 693,169. Merck & Co., Inc., Rahway, N. J. Filed Aug. 16, 1955.

ANTILEPTO

For Antigenic Preparation for Veterinary Use.
First use May 2, 1955.

SN 693,816. Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. Filed Aug. 29, 1955.

DELIAL

Owner of German Reg. No. 455,850, dated Apr. 29, 1933.
For Medicinal Agents for Humans and Animals, Chemical Products for Medicinal Purposes, Pharmaceutical Drugs and Preparations, and Disinfectants.

SN 693,876. Vitamin Consumers Service, a division of General Products Corp., Los Angeles, Calif. Filed Aug. 29, 1955.

VITAMIN CONSUMERS SERVICE

The word "Vitamin" is hereby disclaimed apart from the mark as shown.
For Multi Vitamin Mineral Tablets.
First use June 23, 1955.

SN 693,880. Vitamin Council Incorporated, St. Paul, Minn. Filed Aug. 29, 1955.

KUMENAK

For Vitamin Preparations.
First use August 1954.

SN 693,881. Vitamin Council Incorporated, St. Paul, Minn. Filed Aug. 29, 1955.

THERA-KARE

For Vitamin Preparations.
First use August 1954.

SN 694,110. Harry L. Williams, d. b. a. Pruvo Pharmacal Co., Milwaukee, Wis. Filed Sept. 1, 1955.

Pruvo

For Medicinal Preparation for Use in Relieving Pain of Arthritis and Rheumatism.
First use in the year 1949.

SN 694,222. Foster-Milburn Company, Buffalo, N. Y. Filed Sept. 6, 1955.

FOSTEX

Owner of Reg. No. 357,166.
For Medicinal Preparation for the Treatment of Seborrheic Dermatitis and Acne.
First use July 11, 1955.

SN 694,558. Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. Filed Sept. 13, 1955.

ALGERIL

Owner of German Reg. No. 605,518, dated Mar. 5, 1951.
For Medicinal Agents for Humans and Animals.

SN 694,564. Fleetwood Company, Chicago, Ill. Filed Sept. 13, 1955.

LARSON'S S. M. D.

The word "Larson's" is disclaimed apart from the mark as shown.
For Dietary Supplement.
First use May 4, 1954.

SN 694,621. American Home Products Corporation, d. b. a. Wyeth Laboratories, Division of American Home Products Corporation, Philadelphia, Pa. Filed Sept. 14, 1955.

DECLOTANE

For Analgesic in Dosage Form.
First use Aug. 18, 1955.

SN 694,654. Olin Mathieson Chemical Corporation, New York, N. Y. Filed Sept. 14, 1955.

FLORDISTRIN

For Preparation for the Treatment of Bovine Mastitis.
First use Aug. 5, 1955.

SN 695,173. Millpax, Inc., Peoria, Ill. Filed Sept. 22, 1955.

MILL RUE

For Medicinal Tonic Used for Stomach Disorders and as a Vitamin Dietary Supplement.
First use May 13, 1955.

SN 695,204. Armour and Company, Chicago, Ill. Filed Sept. 23, 1955.

SOMAR

For Somatotropin.
First use Dec. 10, 1953.

SN 695,252. Travenol Laboratories, Inc., Morton Grove, Ill. Filed Sept. 23, 1955.

RUBILEXIN

For Myoneural Blocking Agent Consisting of Succinylcholine Chloride.
First use July 25, 1955.

SN 695,275. Broemmel Pharmaceuticals, San Francisco, Calif. Filed Sept. 26, 1955.

SMOG-PAK

For Medicated Eye Drops.
First use Aug. 19, 1955.

SN 696,238. The Iatrite Corporation, Chicago, Ill. Filed Oct. 11, 1955.

Home-Spa

For Natural Mineral Product for the Relief of Aches and Pains Such as Those Accompanying Arthritis, Rheumatism, Lumbago, Sciatica and Kindred Ailments; Also for Relief of Tension, and Soreness Caused by Overexertion.
First use Oct. 5, 1955.

SN 696,770. Buffington's, Incorporated, Worcester, Mass. Filed Oct. 20, 1955.

TOTAMIN

For Multiple Vitamin Tablet for the Prophylaxis and/or Treatment of Vitamin Deficiencies, Widely Employed as a Dietary Supplement.
First use Sept. 29, 1949.

SN 696,823. Purepac Corporation, New York, N. Y. Filed Oct. 20, 1955.

BIO-HIST

For Nasal Spray and Cough Syrup.
First use Aug. 26, 1955.
Subj. to Intf. with SN 697,760.

SN 697,029. Siroil Laboratories, Inc., Santa Monica, Calif. Filed Oct. 24, 1955.

EXOIL

For Preparation for the Treatment of Psoriasis and Similar Skin Affections.
First use December 1934.

SN 697,030. Siroil Laboratories, Inc., Santa Monica, Calif. Filed Oct. 24, 1955.

SIROIL

For Preparation for the Treatment of Psoriasis.
First use November 1933.

SN 697,101. Merck & Co., Inc., Rahway, N. J. Filed Oct. 25, 1955.

SHARSTREPEN

For Antibiotic Preparation.
First use May 2, 1955.

SN 697,102. Merck & Co., Inc., Rahway, N. J. Filed Oct. 25, 1955.

RESTOLIC

Owner of Reg. Nos. 521,158 and 435,080.
For Preparation Useful in the Treatment of Conditions of the Vascular System, Particularly Hyperpiesia, and Having Vasodilator and/or Sedative Properties.
First use Aug. 15, 1955.

SN 697,103. Merck & Co., Inc., Rahway, N. J. Filed Oct. 25, 1955.

HYDELTRA

Owner of Reg. Nos. 503,514 and 553,939.
For Hormonal Compound for Medicinal and Pharmaceutical Use.
First use July 28, 1955.

SN 697,108. Charles J. Milton, Inc., Coral Gables, Fla. Filed Oct. 25, 1955.

La femme

For Douche Preparation.
First use Aug. 10, 1955.

SN 697,187. Chas. Pfizer & Co., Inc., Brooklyn, N. Y. Filed Oct. 26, 1955.

MISTAVITE

For Liquid Preparation Containing Vitamins.
First use Oct. 17, 1955.

SN 697,216. Foods Plus, Inc., New York, N. Y. Filed Oct. 27, 1955.

BIO-CEE

For Nutritional Supplement Containing Citrus Bioflavonoids and Vitamin C.
First use Jan. 5, 1955.

SN 697,217. Foods Plus, Inc., New York, N. Y. Filed Oct. 27, 1955.

TRINSIVITE

For Hematinic Capsule for Treatment of Nutritional Anemias.
First use Jan. 5, 1955.

SN 697,218. Foods Plus, Inc., New York, N. Y. Filed Oct. 27, 1955.

VITEMIA

For Hematinic Capsule With Multi-Vitamins and Minerals for Nutritional Anemia.
First use Sept. 19, 1955.

SN 697,331. Solco Société de Laboratoires Chimiques S. A., Basel, Switzerland. Filed Oct. 28, 1955.

AURUBIN

Owner of Swiss Reg. No. 154,725, dated Dec. 17, 1954.
For Pharmaceutical Preparation Used for the Treatment of Rheumatism, Polyarthritis, Arthroses, Psoriasis, Lupus Erythematodes.

SN 697,332. Solco Société de Laboratoires Chimiques S. A., Basel, Switzerland. Filed Oct. 28, 1955.

SOLCORUBIN

Owner of Swiss Reg. No. 156,505, dated May 26, 1955.
For Pharmaceutical Preparation Used for the Treatment of Rheumatism, Polyarthritis, Arthroses, Psoriasis, Lupus Erythematodes.

SN 697,353. Bio-Pharmacal Specialties, Inc., Long Beach, Calif. Filed Oct. 31, 1955.



Balance

For Dietary Supplement To Aid in Human Nutrition.
First use Aug. 1, 1955.

SN 697,760. The Carroll Chemical Co., Baltimore, Md. Filed Nov. 7, 1955.

BIO-HIST

For Nasal Spray.
First use Sept. 1, 1955.
Subj. to Intf. with SN 696,823.

SN 1,037. Joseph E. Maupin, d. b. a. Maup Drug Co., Ashland, Ky. Filed Jan. 12, 1956.



ETOX

For Tonic Preparation Taken Internally.
First use Apr. 1, 1939.

SN 3,331. C. A. Mosso Company, Chicago, Ill. Filed Mar. 9, 1956.

Oil-O-Sol

For Antiseptic.
First use May 16, 1929.

CLASS 21

SN 677,117. Westric Battery Company, Denver, Colo. Filed Nov. 22, 1954.

Westric
SURE-POWER

For Storage Batteries.
First use May 1951; and about Jan. 1, 1920, as to "Westric."

SN 683,581. Consolidated Electronics Industries Corp., Waterbury, Conn. Filed Mar. 16, 1955.

CON-ELECTRON

For Relays, Direct Current and Alternating Current Electric Motors, and Electrically Driven Timers, Governors, and Stopclocks.
First use Feb. 15, 1955.

SN 683,916. Reuland Electric Co., Alhambra, Calif. Filed Mar. 21, 1955.



The words "Flavors & Cures" and "Fish Fowl All Meats" are disclaimed apart from the mark as shown.
For Electrically Operated Food Smoking Ovens.
First use Sept. 27, 1954.

SN 684,486. George D. Smith, New York, N. Y. Filed Mar. 29, 1955.

Coloraction

For Illuminated Signs for Advertising Purposes.
First use Mar. 16, 1955.

SN 685,519. Raylite Electric Corp., New York, N. Y. Filed Apr. 14, 1955.

TRIMS-EEZY

For Decorative Lighting Outfits.
First use Mar. 31, 1955.

SN 685,629. Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Filed Apr. 18, 1955.

QUICK-CLEAN

For Electric Motors.
First use May 21, 1941.

SN 685,668. Dilectron, Division of the Gudeman Co., Monrovia, Calif. Filed Apr. 18, 1955.

D AUTO-CAP

Owner of Reg. No. 600,699.
For Automation Capacitors Used in Radio and Television Automation Programs.
First use Feb. 15, 1954.

SN 685,960. Clements Mfg. Co., Chicago, Ill. Filed Apr. 21, 1955. Sec. 2(f).

Cadillac

Owner of Reg. No. 527,628.
For Electric Vacuum Cleaners, Blowers, and Suction Apparatus, for Cleaning, Ventilating, and Air Supplying.
First use on or about Mar. 1, 1911.

SN 686,013. Ward Leonard Electric Co., Mount Vernon, N. Y. Filed Apr. 21, 1955.

VARISTAT

For Variable Auto Transformer.
First use Dec. 18, 1953.

SN 686,258. Zenith Radio Corporation, Chicago, Ill. Filed Apr. 25, 1955.

TOLLVISION

For Subscription Television Decoding Apparatus and Parts Thereof.
First use Mar. 9, 1955.

SN 686,259. Zenith Radio Corporation, Chicago, Ill. Filed Apr. 25, 1955.

PV

For Television Receiving Sets and Parts Thereof.
First use Mar. 1, 1955.

SN 686,276. Central Battery Company, Inc., Jackson, Miss. Filed Apr. 26, 1955.

QUAKER

For Storage Batteries.
First use on or about May 5, 1950.

SN 686,892. The De Laval Separator Company, Poughkeepsie, N. Y. Filed May 5, 1955.

Owner of Reg. Nos. 356,899 and 574,331.
For Electrical Water Heaters.
First use on or about Jan. 27, 1947.

SN 686,928. The Sterilonic Corporation, Washington, D. C. Filed May 5, 1955.

AIRION

For Air Purifiers—Namely, Combined Electrostatic Accumulators and Bactericidal Lamps.
First use Apr. 25, 1955.

SN 687,197. General Cable Corporation, New York, N. Y. Filed May 10, 1955.

FORMEZE

For Electrical Wires.
First use Mar. 12, 1955.

SN 687,543. Collins Radio Company, Cedar Rapids, Iowa. Filed May 16, 1955. Sec. 2(f).

AUTOPOSITIONER

For Automatic Shaft Positioning Mechanisms.
First use Apr. 11, 1950.

SN 688,282. Thermel, Inc., Chicago, Ill. Filed May 25, 1955. Owner of Reg. No. 591,607.

THERMAHEATER

For Electric Heating Elements and Cast-In Heating Units.
First use Mar. 16, 1950.

SN 691,001. Bourns Laboratories, Inc., Riverside, Calif. Filed July 11, 1955.

PALIRIUM

For Electrical Contacts.
First use Jan. 22, 1954.

SN 691,507. Pye Limited, Cambridge, England. Filed July 18, 1955.

CATHODEON

Owner of British Reg. No. B701,717, dated Oct. 4, 1951.
For Electronic Discharge Devices and Gas Discharge Tubes, None Being for Lighting Purposes; Electronic Valves, Television Picture Generator Tubes and Television Pick-Up Tubes; Electric Switches; and Glass to Metal Terminal Seals, and Quartz Crystals.

SN 691,866. Magnatex Limited, Harlington, England. Filed July 25, 1955.

MAGNACELL

Priority claimed under Sec. 44(d) on British Reg. No. 743,724, dated June 24, 1955.
For Electric Storage Batteries.

SN 691,867. Magnatex Limited, Harlington, England. Filed July 25, 1955.

MAGNA

Priority claimed under Sec. 44(d) on British Reg. No. 740,077, dated July 5, 1955.
For Combined Flashlight and Electrically Ignited Cigar and Cigarette Lighter.

SN 694,003. Pacific Tire & Rubber Company, Oakland, Calif. Filed Aug. 31, 1955.

Pacific

For Storage Batteries.
First use Dec. 1, 1948.

SN 694,480. Diamond Wire & Cable Company, Sycamore, Ill. Filed Sept. 12, 1955.



The shaded area represents the color red which is not claimed and is not considered an important part of the mark.
For Electrical Insulated Wire and Cable and Cord Sets.
First use on or about Apr. 1, 1955.

SN 695,755. Abram Podolsky, d. b. a. Lektron Specialties, Chelsea, Mass. Filed Oct. 3, 1955.

KITKING

For Electrical Wire, Electrical Capacitors, Tubular and Twist Lock Electrolytics, Capacitors, Resistors, Potentiometers, Diodes, Electrical Bulbs and Sockets, Terminal Strips, Pilot Lights, Electrical Coils, Shields and Tubing.
First use Aug. 10, 1955.

SN 695,775. C. H. Stevens & Co., Inc., Cornwall Bridge, Conn. Filed Oct. 3, 1955.

WELDLINE

For Welding Units.
First use May 31, 1955.

SN 696,024. Felts Corporation, South Pasadena, Calif., now by change of name to Microdot Inc. Filed Oct. 7, 1955.



The trademark consists of a configuration somewhat resembling the Greek letter Mu with a large dot at the beginning of the first stroke of the configuration.
For Electrical Cables, Electrical Cable Assemblies, Electrical Harnesses, Electrical Fittings, Including Adapters, Connectors, Couplings, Dust Caps, Feed Throughs, Grounding Caps, Receptacles, Jacks, Plugs, and Terminals.
First use Apr. 1, 1952, on electrical cables, electrical cable assemblies, couplings, connectors, feed throughs, and terminals.

SN 696,068. Rome Cable Corporation, Rome, N. Y. Filed Oct. 7, 1955.

RoSeal

For Wire and Cable.
First use Sept. 22, 1954.

SN 696,103. The Bellows Co., Akron, Ohio. Filed Oct. 10, 1955.

PULSA-PAK

For Electronic Device To Store and Momentarily Release an Electrical Impulse.
First use Aug. 13, 1953.

SN 696,674. Spruce Pine Mica Company, Spruce Pine, N. C. Filed Oct. 18, 1955.

MICA-RAMIC

For Electrical and Heat Insulation for Toasters, Irons, Percolators, Stoves, and the Like.
First use Sept. 30, 1955.

SN 696,979. Henry Engineering Company, Burbank, Calif. Filed Oct. 24, 1955.

HECO PRODUCTS

For Protective Covers for Electrical Terminal Strips; and Electrical Conduits.
First use July 22, 1952, on protective covers for electrical terminal strips.

SN 698,034. Heinemann Electric Company, Trenton, N. J. Filed Nov. 10, 1955.

HECO

The cross hatching represents black. Owner of Reg. Nos. 528,383 and 542,569.
For Circuit Breakers and Electrical Relays.
First use May 1947 on circuit breakers.

SN 698,155. General Motors Corporation, Detroit, Mich. Filed Nov. 14, 1955.

SPORTABLE

For Radio Receiving Sets and Parts Thereof.
First use Nov. 2, 1955.

SN 698,331. American Hard Rubber Company, New York, N. Y. Filed Nov. 16, 1955.

Amer/Ace

Owner of Reg. No. 133,892.
For Containers, Covers, and Vents for Storage Batteries.
First use Oct. 21, 1955.

SN 698,617. Jensen Manufacturing Company, Chicago, Ill. Filed Nov. 21, 1955.

TRIAX

Owner of Reg. No. 616,782.
For Loud Speaker Reproducer Units.
First use Nov. 18, 1955.

SN 698,670. Whirlpool-Seeger Corporation, Wilmington, Del. Filed Nov. 21, 1955.

Whirlpool

Owner of Reg. No. 581,480.
For Electric Garbage Grinders.
First use May 2, 1955.

SN 699,779. Continental Electric Company, Geneva, Ill. Filed Dec. 12, 1955. Sec. 2(f).

CETRON

For Electronic and Lighting Devices—Namely, Photo-Electric Tubes, Rectifier Tubes, Charger Bulbs, Electronic Tubes, Projector Lamps, Space Discharge Lamps, Neon Lamps, and Gas Discharge Lamps.
First use during 1934.

SN 700,016. C. Conradty, Nurnberg, Germany. Filed Dec. 15, 1955.

NORIS-CHROMO

Owner of German Reg. No. 70,926, dated July 9, 1904.
For Electrical and Galvanic Carbons.

SN 700,215. Essex Wire Corporation, Detroit, Mich. Filed Dec. 19, 1955.

"Ship-n-Store" SX Spool Pak

For Magnet Wire Package.
First use on or about Jan. 1, 1955.

SN 700,235. Charles W. Keich, d. b. a. C. Keich Manufacturers' Agency, Encino, Calif. Filed Dec. 19, 1955.

step-saver

For Inter-Com and Radio Combination Systems for Use in Homes.
First use July 23, 1955.

SN 700,277. Sunbeam Corporation, Chicago, Ill. Filed Dec. 19, 1955.

Sunbeam

Owner of Reg. No. 390,181.
For Stands for Use With Portable Electric Tools.
First use Oct. 26, 1954.

SN 700,280. Sunbeam Corporation, Chicago, Ill. Filed Dec. 19, 1955.

DRILLMASTER

Owner of Reg. No. 367,025.
For Stands for Use With Portable Electric Tools.
First use Oct. 26, 1954.

SN 700,520. McKesson & Robbins, Incorporated, New York, N. Y. Filed Dec. 23, 1955.

ST. REGIS

Owner of Reg. No. 279,042.
For Electric Heating Pads and Electric Blankets.
First use Apr. 6, 1939, on electric heating pads.

CLASS 22

SN 690,018. Louis Marx & Company, Inc., New York, N. Y. Filed June 22, 1955.

Johnny Tremaine

For Toy Guns, Powder Horns, and Canteens, and Assembled Kits Consisting of a Combination of a Toy Gun, Powder Horn, Canteen, and Hat.
First use May 27, 1955.

SN 690,518. Wilson Sporting Goods Co., Chicago, Ill. Filed June 29, 1955. Sec. 2(f).

It's a Wilson

Owner of Reg. No. 379,814.
For Baseball Gloves.
First use May 1, 1926.

SN 691,864. Kewtee Bear Incorporated, Los Angeles, Calif. Filed July 25, 1955.

KEWTEE BEAR

For Toy Stuffed Bear.
First use July 26, 1954.

SN 692,446. James H. Alexander, d. b. a. J. H. Alexander & Son, Memphis, Tenn. Filed Aug. 4, 1955.

INDIAN HEAD

For Poles for Fishing.
First use Oct. 1, 1945.

SN 693,454. Flex-Guide Co., Los Angeles, Calif. Filed Aug. 22, 1955.

FLEX



GUIDE

That portion of the trademark consisting of the word "Guide" is disclaimed apart from the mark as shown.
For Line Guides for Fishing Rods.
First use Aug. 8, 1955.

SN 693,462. Himalayan Pak Company, Redwood City, Calif. Filed Aug. 22, 1955.



The drawing is lined for blue, but color is not claimed as a feature of the mark.
For Safety Back Packs for Mounting Oxygen or Other Gas Supply Tanks for Skin Divers.
First use Mar. 1, 1955.

SN 694,492. The Lakeside Supply Co., Lakeside, Calif. Filed Sept. 12, 1955.



For Javelins.
First use May 1, 1955.

SN 694,939. The S. J. Wegman Company, Lynbrook, N. Y. Filed Sept. 19, 1955.

STAR JET

For Toy Space Ship.
First use July 20, 1955.

SN 694,961. Bruck Tackle & Manufacturing Company, Portland, Oreg. Filed Sept. 20, 1955.

TRI-SPIKE

For Fish Hooks.
First use Aug. 12, 1955.

SN 695,037. Simon and Schuster Inc., New York, N. Y. Filed Sept. 20, 1955.

WORD TRAP

For Word Game in Form of a Book.
First use Nov. 30, 1954.

SN 695,105. The Oak Rubber Company, Ravenna, Ohio. Filed Sept. 21, 1955.

STRING pak

For Packaged Toy Balloons.
First use July 1, 1955.

CLASS 23

SN 647,584. C. J. Bates & Son, Chester, Conn. Filed May 25, 1953.

MARVELOOM

For Hand Weaving Loom.
First use May 13, 1953.

SN 649,339. T. D. Williamson, Inc., Tulsa, Okla. Filed June 24, 1953.



No claim is made to the exclusive right to use the term "T. D. Williamson" apart from the mark as shown.
For Machines for Tapping Openings in Pipe Lines and Other Conduits, Accessories for Such Machines, Consisting of Reducers and Plugs, and Parts of Such Machines, Consisting of Cutters, Cutter Holders, and Boring Bar Extensions.
First use Jan. 6, 1953, on tapping machine parts.

SN 668,197. Protect-Al Company, Houston, Tex. Filed June 14, 1954.

PLASTEEL

For Drill Bit Protectors.
First use on or about May 15, 1954.

SN 673,993. Industrial Acoustics Company, Inc., New York, N. Y. Filed Sept. 29, 1954.



For Mufflers for Use With Gaseous Streams, Such as Jet Motors, Air Conditioning Equipment, and the Like.
First use July 1953.

SN 677,399. Donaldson Company, Inc., St. Paul, Minn. Filed Nov. 29, 1954. Sec. 2(f).



Owner of Reg. Nos. 514,998 and 527,067.
For Mufflers or Silencers for Internal Combustion Engines.
First use Mar. 14, 1949.

SN 684,788. Aerojet-General Corporation, Azusa, Calif. Filed Apr. 4, 1955.

AEROCUTTER

For Ballistic Cutting Devices Comprising a Knife or Blade Driven by the Force of an Explosive, for Cutting Cable, Conduit, Pipe and the Like, and Components of Such Devices.
First use in about February 1955.

SN 685,785. U. S. Industries, Inc., New York, N. Y. Filed Apr. 18, 1955. Sec. 2(f).

ALL ANGLE

For Attachment for Milling Machines.
First use in the year 1939.

SN 686,514. The Patterson Foundry & Machine Co., East Liverpool, Ohio. Filed May 5, 1955.

PATTERSON Jet MILL

Owner of Reg. No. 225,828.
For Industrial and Commercial Mixer Dispersion Units for the Dispersion of Pigments in Oil, Such as Paints, Lacquers, Paper Coatings and Various Types of Coatings With Oil, Water, or Other Base; Water, Oil and Wax Emulsions for Either Cold or Hot Cutting of Material and Synthetic Gums; and for Creating Suspension of Solids.
First use July 15, 1953.

SN 691,441. Dale Products Corp., New York, N. Y. Filed July 18, 1955.

PRO-PINKER

For Pinking Shears.
First use July 12, 1955.

SN 692,018. Richards-Wilcox Manufacturing Company, Aurora, Ill. Filed July 27, 1955.

SAFE-RAIL

For Industrial Track Equipment Comprising Overhead Carriers and Conveyors.
First use June 6, 1955.

SN 692,033. Allison-Erwin Company, Charlotte, N. C. Filed July 28, 1955.

Alwin

Owner of Reg. Nos. 505,537 and 534,155.
For Mechanics' Hand Tools.
First use December 1954.

SN 693,014. Chem-Therm Mfg. Co., Inc., Monrovia, Calif. Filed Aug. 15, 1955.

CHEM-SPIN

Owner of Reg. No. 424,461.
For Mechanically Operated Automobile Wheel Washing Assembly and Power-Operated Brushes for Automobile Body Washing Units.
First use July 28, 1955.

SN 696,546. Charles R. Jahn, Chicago, Ill. Filed Oct. 17, 1955.

CHEF'S-AIDE

For Knife Sharpeners.
First use July 12, 1955.

SN 697,066. Wonder Klip Corporation, Chicago, Ill. Filed Oct. 24, 1955. Sec. 2(f).

trim

For Electric Hair Clippers.
First use June 4, 1949.

SN 697,971. Markus Freiser & Son, Inc., New York, N. Y. Filed Nov. 9, 1955.

M·F

For Transmission Gears and Parts, Universal Joints and Parts, Clutches and Parts, Carburetors and Parts, Fuel Pumps and Parts, Water Pumps and Parts, Mufflers, and Tail and Exhaust Pipes.
First use May 1, 1952.

SN 698,671. Whirlpool-Seeger Corporation, Wilmington, Del. Filed Nov. 21, 1955.

Whirlpool

Owner of Reg. No. 581,480.
For Sewing Machines.
First use Aug. 9, 1955.

SN 699,264. Thor Power Tool Company, Aurora, Ill. Filed Dec. 1, 1955.

THOR

Owner of Reg. No. 561,048.
For Gasoline Engine Driven Power Trowels.
First use Oct. 25, 1955.

SN 699,729. Clyde R. Klicpera, d. b. a. The Clyde Company, Racine, Wis. Filed Dec. 9, 1955.

Clyde

For Abrasive Blades for Concrete Sawing.
First use on or about Dec. 1, 1955.

SN 699,730. Clyde R. Klicpera, d. b. a. The Clyde Company, Racine, Wis. Filed Dec. 9, 1955.

TURNPIKE

For Abrasive Blades for Concrete Sawing.
First use on or about Sept. 23, 1955.

SN 700,536. Standard Tool Co., Cleveland, Ohio. Filed Dec. 23, 1955.

ST

Owner of Reg. No. 530,263 and others.
For Twist Drills, Chucks, Reamers, Taps, Dies, Milling Cutters, Arbors, Mandrels, Lathe Centers, Sleeves, Sockets, Screw Extractors.
First use June 1, 1948, on twist drills.

SN 700,832. Waring Products Corporation, New York, N. Y. Filed Dec. 29, 1955.

ICE JET

For Ice Crusher Attachment for Electric Blenders.
First use June 1954.

SN 1,824. Turissa—Sewing Machine Factory Ltd., Dietikon, Switzerland. Filed Jan. 31, 1956.

ANTIBLOC

Owner of Swiss Reg. No. 158,947, dated Dec. 1, 1955.
For Sewing Machines and Parts Thereof.

SN 1,846. Carrier Conveyor Corporation, Louisville, Ky. Filed Feb. 1, 1956.

NATURAL FREQUENCY

For Vibratory Conveyors.
First use July 1, 1951.

SN 1,916. Union Steel Products Co., Albion, Mich. Filed Feb. 1, 1956.

WENDWAY

For Conveyor Systems.
First use on or about Sept. 15, 1949.

SN 1,917. Union Steel Products Co., Albion, Mich. Filed Feb. 1, 1956.

PANWAY

For Conveyor Apparatus.
First use on or about Sept. 15, 1949.

SN 1,936. The Bristol Aeroplane Company Limited, Bristol, England. Filed Feb. 2, 1956.

PROTEUS

Owner of British Reg. Nos. 642,415 and 742,862, dated Nov. 29, 1945, and May 31, 1955, respectively.
For Internal Combustion Engines and Gas Turbines for Land, Aircraft, and Water Vehicles.

SN 1,937. The Bristol Aeroplane Company Limited, Bristol, England. Filed Feb. 2, 1956.

ORPHEUS

Owner of British Reg. Nos. 726,177 and 726,178, both dated Jan. 27, 1954.
For Engines (Not for Land Vehicles), Engines for Land Vehicles.

SN 1,942. Dayton Perforators, Inc., Dayton, Ohio. Filed Feb. 2, 1956.

JEKTOLE

For Piercing Punches and Dies.
First use July 19, 1955.

SN 1,951. H. D. Hudson Manufacturing Company, Chicago, Ill. Filed Feb. 2, 1956. Sec. 2(f).

HUDSON

Owner of Reg. Nos. 223,040, 430,438, and 430,544.
For Fire Pumps, Trombone, Barrel and Bucket Pumps; Sprayers and Dusters and Attachments and Parts Thereof; Bull Staffs; Chain and Lever Hoists; Hay Unloading Tools—Namely, Carriers, Hay Slings, and Attachments and Parts Thereof; Commercial and Industrial Overhead Conveying Equipment—Namely, Carriers, Chain and Lever Hoists, Carrier Trucks, Pulleys, Grapples, and Attachments and Parts Thereof; Cross-Draft Carriers; Deadlocks; Pulleys; Hay Carriers, Hay Forks and Grapples; Swinging Cranes; Shaft Hangers; Litter Carriers; Litter Carrier Tracks and Switches; Hay Tracks and Switches; Overhead Conveyor Tracks and Switches.
First use Sept. 1, 1917.

SN 2,055. Poor & Company, Chicago, Ill. Filed Feb. 3, 1956.

HY-TON

For Crushing Equipment—Namely, Hammer, Ring, and Impact Mills, Breakers, Roll and Jaw Crushers, and Parts Thereof.
First use August 1955.

SN 2,238. Koehring Company, Milwaukee, Wis. Filed Feb. 7, 1956. Sec. 2(f).

twinbatch

Owner of Reg. No. 372,056.
For Concrete Mixing and Paving Machines.
First use Dec. 27, 1937.

SN 2,336. The Black-Clawson Company, Hamilton, Ohio. Filed Feb. 9, 1956.

"HYFLO"

For Paper Making Machinery—Namely, Machines for Separating Liquid and Fibrous Material for Making Paper and Paper Board Products.
First use Jan. 20, 1956.

SN 2,348. R. A. Frederick Co., Inc., Cincinnati, Ohio. Filed Feb. 9, 1956.

RAFco

For Household Kitchen Implements, Such as Cheese Slicer, Egg Slicer, French Fry Cutter, and Butter Cutter.
First use Mar. 1, 1955.

SN 2,395. R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Filed Feb. 9, 1956.

CONTEMPO

For Stainless Steel Flatware, i. e., Knives, Forks, and Spoons.
First use October 1954.

SN 2,471. Champion Dish Washing Machine Co., Erie, Pa. Filed Jan. 16, 1956.



Owner of Reg. No. 123,594.
For Dish Washing Machines.
First use January 1932.

SN 2,472. Champion Dish Washing Machine Co., Erie, Pa. Filed Jan. 16, 1956.



Owner of Reg. No. 123,594.
For Vegetable Paring Machines.
First use May 1, 1944.

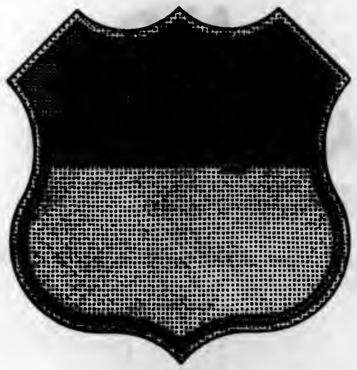
CLASS 26

SN 689,743. Phillips Petroleum Company, Bartlesville, Okla. Filed June 17, 1955.

66

The drawing is lined for black. Owner of Reg. No. 605,773.
For Triple Point Calorimeters, Spectrocomputers, Infrared Analyzers, Detonation Meters, Signal Generators, Running Time Meters, and Flame Detectors.
First use Nov. 18, 1947.

SN 689,752. Phillips Petroleum Company, Bartlesville, Okla. Filed June 17, 1955.



The drawing is lined for mandarin orange and black. Owner of Reg. No. 605,773.
For Triple Point Calorimeters, Spectrocomputers, Infrared Analyzers, Detonation Meters, Signal Generators, Running Time Meters, and Flame Detectors.
First use Nov. 18, 1947.

SN 697,568. Medical Research Institute, Inc., Cincinnati, Ohio. Filed Nov. 2, 1955.

MIR INC.

For Electronic Thermometers.
First use Sept. 1, 1954.

SN 699,002. The Remnant Shop, Portland, Oreg. Filed Nov. 28, 1955.

COPY CAT

For Clothing Patterns.
First use Nov. 26, 1953.

CLASS 27

SN 2,031. R. Gsell & Co. Inc., New York, N. Y. Filed Feb. 3, 1956. Sec. 2(f).

FULTON

For Watches and Parts Thereof, Watch Cases, and Watch Movements.
First use Apr. 25, 1935.

SN 2,049. Mt. Vernon Watch Co., New York, N. Y. Filed Feb. 3, 1956. Sec. 2(f).

NORWOOD

For Watches and Parts Thereof, Watch Cases, and Watch Movements.
First use Apr. 25, 1935.

SN 2,133. The Gruen Watch Company, Cincinnati, Ohio. Filed Feb. 6, 1956.

WRIST-TROPHY

For Watches, Watch Cases, and Watch Movements.
First use Jan. 25, 1956.

SN 2,209. Viking Mercantile Corp., New York, N. Y. Filed Feb. 6, 1956.

Robin Hood



For Watches.
First use Aug. 17, 1948.

SN 2,424. R. Gsell & Co. Inc., New York, N. Y. Filed Feb. 10, 1956. Sec. 2(f).

Fleetwood

For Watches and Parts Thereof, Watch Cases, and Watch Movements.
First use Oct. 1, 1935.

SN 2,629. General Time Corporation, New York, N. Y. Filed Feb. 14, 1956.

SNOWFLAKE

For Clocks.
First use Jan. 4, 1956.

CLASS 28

SN 686,705. H. Weinreich Company Inc., d. b. a. H. Weinreich Co. Inc., Philadelphia, Pa. Filed May 2, 1955.

Dainty Maid

For Bracelets, Brooches, Finger Rings, Earrings, Lockets, Necklaces, Ornamental Pins Wholly or Partly Plated With Precious Metals, Anklets, and Barrettes.
First use on or about Mar. 1, 1952.

CLASS 29

SN 700,112. Masterset Brushes, Incorporated, New York, N. Y. Filed Dec. 16, 1955.

masterset

For Paint Brushes.
First use Feb. 14, 1947.

CLASS 32

SN 692,028. Vermont Marble Company, Proctor, Vt. Filed July 27, 1955.

VERMARCO

For Garden Furniture—Namely, Benches, Seats, and Gazing Globes, Coffee and Cocktail Tables, and Bookends.
First use on or about Mar. 1, 1955.

SN 1,833. American Seating Company, Grand Rapids, Mich. Filed Feb. 1, 1956.

Classmates

For Classroom Furniture, Specifically Chairs, Desks, Combination Chair-Desks, Tablet Arm Chairs, and Tables.
First use Jan. 12, 1956.

SN 2,101. Douglas Furniture Corporation, Chicago, Ill. Filed Feb. 6, 1956.

Dusk Ash

For Kitchen and Dinette Tables and Chairs.
First use Nov. 7, 1955.

SN 2,102. Douglas Furniture Corporation, Chicago, Ill. Filed Feb. 6, 1956.

Fawn Ash

For Kitchen and Dinette Tables and Chairs.
First use Nov. 7, 1955.

SN 2,103. Douglas Furniture Corporation, Chicago, Ill. Filed Feb. 6, 1956.

Andrea

For Kitchen and Dinette Tables and Chairs.
First use Sept. 19, 1955.

CLASS 33

SN 669,465. Owens-Illinois Glass Company, Toledo, Ohio. Filed July 6, 1954.

Hostess Set

For Glassware, Particularly Tumblers and Stemware.
First use on or about Dec. 1, 1945.

SN 3,511. Armstrong Cork Company, Lancaster, Pa. Filed Feb. 28, 1956.

ALA

For Square Wide Mouth Amber Glass Jars.
First use Feb. 12, 1941.

CLASS 34

SN 677,705. Elgen Manufacturing Corporation, Long Island City, N. Y. Filed Dec. 3, 1954.

DAMPERSET

For Hardware for Mounting and Interconnecting the Blades of a Multi-Blade Damper.
First use Aug. 20, 1954.

SN 681,389. Danfoss ved Mads Clausen, Nordborg, Als, Denmark. Filed Jan. 6, 1955.

Danfoss

Owner of Danish Reg. No. 1429/52, dated Oct. 11, 1952.
For Installations for Heating, Steam Generating, Cooking, Ventilating.

SN 698,098. Whirlpool-Seeger Corporation, St. Joseph, Mich. Filed Nov. 10, 1955.

Whirlpool

Owner of Reg. No. 581,480.
For Air Conditioners, Dehumidifiers, Gas Ranges, and Water Heaters.
First use May 2, 1955, on air conditioners and dehumidifiers.

SN 698,700. General Motors Corporation, Detroit, Mich. Filed Nov. 22, 1955.

GENERAL MOTORS

Owner of Reg. No. 141,126.
For Complete Residential Oil and Gas Heating Units, Oil and Gas Burners, Boilers, Furnaces, Service Water Heaters, Air Conditioners, and Parts Thereof.
First use in or before April 1938.

SN 700,734. Dunbar Kapple, Inc., Geneva, Ill. Filed Dec. 28, 1955.

PARA-FLEX

For Flexible Metal Duct Assemblies.
First use September 1955.

SN 759. Detroit Radiant Products Co., Detroit, Mich. Filed Jan. 16, 1956.

REVERBER-RAY

For Radiant Gas Heaters.
First use Oct. 10, 1955.

SN 779. General Water Heater Corp., Burbank, Calif. Filed Jan. 16, 1956.

BIG G

For Water Heaters.
First use Oct. 28, 1955.

CLASS 35

SN 691,039. William G. Holz, d. b. a. Holz Tire & Rubber Co., Lodi, Calif. Filed July 11, 1955.

Pivot-Flite

For Conveyor Belt Cleats.
First use Feb. 2, 1955.

SN 698,295. Minnesota Rubber and Gasket Co., Minneapolis, Minn. Filed Nov. 15, 1955.

Teflex

The drawing is lined to be suggestive of fabric and is not indicative of color.
For Reciprocating and Other Moveable Seals Made From Elastomeric Materials and Incorporating Low Friction Components.
First use Nov. 8, 1955.

CLASS 36

SN 700,439. Dukane Corporation, St. Charles, Ill. Filed Dec. 22, 1955.

DUKANE

Owner of Reg. No. 542,675.
For Mechanical Grooved Disc Phonograph Records.
First use January 1954.

CLASS 37

SN 655,903. Gunther Wagner, Hannover, Germany. Filed Nov. 5, 1953.



Pelikan

"Pelikan" is the German equivalent of "pelican." Owner of German Reg. No. 353,054, dated June 2, 1926.
For Bristol Board for Drawings, Rubber Erasers, Permanent Stencils, and Fountain Pens.

SN 682,750. Old Town Corporation, Brooklyn, N. Y. Filed Mar. 3, 1955.

GRAFOTRON

For Copy Paper for Use in Duplicating Machines.
First use Jan. 20, 1955.

SN 686,380. Morgan & Lindsey, Inc., Jasper, Tex. Filed Apr. 27, 1955.

Morlin

For Correspondence Paper, Ruled and Unruled Tablets, and Envelopes.
First use 1934.

SN 689,346. Crocker, Burbank Papers Inc., Fitchburg, Mass. Filed June 13, 1955.

THERMOWRAP

For Protective Paper for Packaging Articles for Storage or Shipment.
First use January 1950.

SN 689,973. Sitrue Incorporated, New York, N. Y. Filed June 21, 1955.

QUEEN QUALITY

Owner of Reg. No. 425,835.
For Facial Tissues.
First use June 1, 1955.

SN 690,040. Sherman Paper Products Corporation, Newton, Mass. Filed June 22, 1955.

SPARKLE CARBON

Owner of Reg. No. 616,571.
For Flexible Corrugated or Formed Sheets of Paper, Plastic Material, and Laminated Metal Foil, Used as Wrappings, Liners, Cushioning Pads, Blanks for Trays and Cups, and Ornamental Displays.
First use Sept. 3, 1954.

SN 691,289. Fox River Paper Corporation, Appleton, Wis. Filed July 14, 1955.

Raglite

For Writing Paper.
First use Oct. 18, 1934.

SN 692,289. Winfield Associates, Princeton Junction, N. J. Filed Aug. 1, 1955.

COLOR-STIK

For Color Coated Paper on the Back of Which Is a Pressure Sensitive Adhesive and a Backing Paper.
First use Apr. 15, 1955.

SN 692,412. Neenah Paper Company, Neenah, Wis. Filed Aug. 3, 1955.

Speedmaster

For Bond Paper.
First use about May 25, 1955.

SN 692,796. The Montgomery Printing Company, Troy, Ohio. Filed Aug. 10, 1955.

"Spinebinder"

For Proposal and Brief Covers.
First use Mar. 25, 1955.

SN 693,789. Western Paper Converting Company, Salem, Oreg., to Western Tablet and Stationery Corporation, Dayton, Ohio. Filed Aug. 26, 1955.



The drawing is lined for gold. Owner of Reg. No. 401,848.
For Paper Tablets; Papeteries, i. e., Stationery Comprising Envelopes or Paper Either Flat or Folded Put Up in Boxes, Portfolios or Banded Packages; and Correspondence and Mailing Envelopes.
First use on or about Jan. 2, 1947.

SN 693,823. Gulf States Paper Corporation, Tuscaloosa, Ala. Filed Aug. 29, 1955.

CHESTNUT

Owner of Reg. No. 612,424.
For Wrapping and Butchers' Paper.
First use on or about May 9, 1955.

SN 694,309. A. W. Faber-Castell Pencil Co., Inc., Newark, N. J. Filed Sept. 7, 1955. Sec. 2(f).



For Wood Encased Lead Pencils.
First use June 15, 1938.

SN 695,210. Clopay Corporation, Cincinnati, Ohio. Filed Sept. 23, 1955.

CLOPANE CLEAR WRAP

No claim is made to the exclusive right to the use of the notation "Clear Wrap" separate and apart from the mark as shown. Owner of Reg. No. 593,728.
For Wrappers for Window Shades Made From Transparent Sheet Material.
First use Sept. 9, 1955.

SN 696,637. Delva Plastics, Inc., New York, N. Y. Filed Oct. 18, 1955.

DELVA

For Pens.
First use January 1948.

SN 696,740. Rhinelander Paper Company, Rhinelander, Wis. Filed Oct. 19, 1955. Sec. 2(f).

KLEERWRAP

Owner of Reg. No. 603,007.
For Unwaxed, Waxed, or Wax-Laminated, Plain, Tinted, or Colored Glassine Paper.
First use Mar. 8, 1933.

CLASS 38

SN 689,152. Norcross, Inc., New York, N. Y. Filed June 8, 1955.

Sophisti-Cat

For Greeting Cards and Printed Greeting Folders.
First use on or about May 18, 1955.

SN 690,613. Electrical Apparatus Company, Inc., Boston, Mass. Filed July 1, 1955. Sec. 2(f).

ELECTRICAL APPARATUS NEWS

For Publication Published From Time to Time.
First use Nov. 16, 1940.

SN 692,026. United Feature Syndicate, Inc., New York, N. Y. Filed July 27, 1955.

AMY VANDERBILT'S ETIQUETTE

Consent of Amy Vanderbilt is of record.
For Newspaper Column Published Daily Except Saturday and Sunday.
First use May 23, 1955.

SN 692,702. Berry Bearing Company, Chicago, Ill. Filed Aug. 9, 1955.

BEARINGRAM

For Technical Bulletins, Issued Periodically.
First use June 1948.

SN 693,385. Milner Products Company, Jackson, Miss. Filed Aug. 19, 1955.

Mrs. Homemaker's Forum

For Syndicated News Column, the Subject Matter of Which Is Hints for Improved Housekeeping.
First use July 7, 1955.

SN 694,326. McGraw-Hill International Corporation, New York, N. Y. Filed Sept. 7, 1955.

McGRAW-HILL INTERNATIONAL

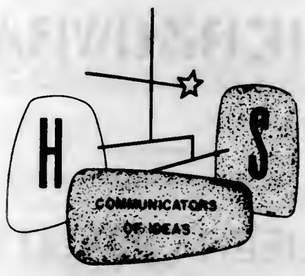
Management Digest

For Magazine Published Periodically.
First use Aug. 15, 1955.

SN 695,239. New Era Letter Company, Inc., New York, N. Y. Filed Sept. 23, 1955.

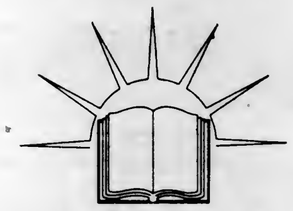
For Typewritten and Printed Letters.
First use December 1925.

SN 695,659. Henry Strauss & Company, Inc., New York, N. Y. Filed Sept. 30, 1955.



Without waiver of common law rights the wording "Communicators of Ideas" are disclaimed apart from the mark as shown.
For Booklets, Reports, Displays, and Posters Published From Time to Time for Clients of the Applicant and Dealing With Sales Promotion, Customer and Industrial Relations, Personnel Training and Related Topics.
First use on or about Dec. 11, 1952.

SN 695,835. National Council of the Churches of Christ in the United States of America, New York, N. Y. Filed Oct. 4, 1955.



For Booklets, Pamphlets, Cards, Miniature Newspapers, and Other Reading Material.
First use November 1946.

SN 695,944. Saks & Company, New York, N. Y. Filed Oct. 5, 1955. Sec. 2(f).

Saks Fifth Avenue

For Engraved Social Announcements, Invitations, Announcement Cards, and Visiting Cards; Greeting Cards; Christmas Cards and Seals, Printed Return Address Stickers; Books; Puzzle Books; Pictures; Decorative Calendars Embellished With Pictures; and Maps.
First use Sept. 15, 1924.

SN 696,666. Powell Magazines, Inc., New York, N. Y. Filed Oct. 18, 1955. Sec. 2(f).

modern

SANITATION

Owner of Reg. No. 526,468.
For Periodical Publication in the Field of Industrial and Institutional Sanitation.
First use on or about Mar. 3, 1949.

SN 696,707. John Gruden, Bergenfield, N. J. Filed Oct. 19, 1955.

LETTAMAGIC

For Educational Books.
First use May 25, 1951.

SN 696,876. Di-Noc Chemical Arts, Inc., Cleveland, Ohio. Filed Oct. 21, 1955.

DINO-THERM

Owner of Reg. Nos. 196,223, 613,197, and others.
For Decalcomanias and Sheet Material Having Such Decalcomanias Applied Thereto.
First use Sept. 26, 1955.

SN 696,896. The Meyercord Co., Chicago, Ill. Filed Oct. 21, 1955.

TAC-DECAL

Owner of Reg. No. 506,930.
For Decalcomanias.
First use Aug. 28, 1951.

SN 697,106. Metal Working Publishing Corp., White Plains, N. Y. Filed Oct. 25, 1955. Sec. 2(f).

METAL-WORKING

Owner of Reg. No. 544,986.
For Periodicals Published From Time to Time.
First use September 1949.

SN 697,722. United Newspapers Magazine Corporation, New York, N. Y. Filed Nov. 4, 1955.

THE CERFBOARD

For Syndicated Column or Magazine Section.
First use Nov. 5, 1950.

SN 697,723. United Newspapers Magazine Corporation, New York, N. Y. Filed Nov. 4, 1955.

QUIZ 'EM

For Syndicated Column or Magazine Section.
First use Jan. 31, 1943.

SN 697,782. Flight Refueling, Incorporated, Baltimore, Md. Filed Nov. 7, 1955.

RANGE

For House Organ.
First use March 1954.

SN 698,244. United Newspapers Magazine Corporation, New York, N. Y. Filed Nov. 14, 1955.

YOUTH FRONTIER

For Syndicated Column or Magazine Section.
First use Feb. 27, 1955.

SN 699,813. Marcie Corporation, Woodside, N. Y. Filed Dec. 12, 1955.

REMINDEX

For Printed Charts With an Indicating Device Thereon.
First use August 1954.

SN 700,341. The Society for the Preservation and Encouragement of Barber Shop Quartet Singing in America, Inc., Detroit, Mich. Filed Dec. 20, 1955.

HARMONIZER

For Magazine Published Periodically.
First use March 1943.

CLASS 39

SN 666,404. Arthur Weinreb, d. b. a. Nob Hill of California, San Francisco, Calif. Filed May 14, 1954.

NOB HILL of California

The geographically descriptive phrase "of California" is disclaimed apart from the mark shown.
For Ladies' Suits.
First use Feb. 24, 1953.

SN 670,800. Queen Knitting Mills, Inc., Philadelphia, Pa. Filed July 29, 1954.

Queen Casuals

For Sweaters.
First use Mar. 1, 1954.

SN 680,405. W. F. Paine, Limited, Godalming, England. Filed Jan. 24, 1955.



The word "Cashmere" is disclaimed apart from the mark as shown.
For Knitwear, Specifically Sweaters, Sport Shirts, Jackets, Vests, Made in Whole or in Part of Cashmere.
First use Oct. 1, 1954, on men's sweaters.

SN 681,451. Rite Form Corset Co., Inc., New York, N. Y. Filed Feb. 10, 1955.

HI-TIME by Rite Form

Owner of Reg. No. 159,073.
For Brassieres and Corsets.
First use Jan. 19, 1955.

SN 683,850. Colonial Manufacturing Company, St. Paul, Minn. Filed Mar. 21, 1955.

Colonial MAID

For Women's Aprons.
First use during the year 1930.

SN 687,951. David Lee's, Birmingham, Ala. Filed May 20, 1955.

David Lee's

For Clothing Comprising Ready to Wear Garments for Men, Women, and Children, Consisting of Overcoats, Suits, and Underwear for Men, Women, and Children.
First use Nov. 10, 1948.

SN 688,712. Davis Sportswear Co., Inc., Brockton, Mass. Filed June 2, 1955.

The Lodencoat STYLED BY Davis

"The Lodencoat Styled by Davis" is disclaimed apart from the mark as shown.
For Ladies' and Misses' Coats, Suits, and Jackets.
First use May 6, 1955.

SN 688,745. Mona Lisa Furs, Inc., New York, N. Y. Filed June 2, 1955.

CRYSTAL RIVER

For Coats, Capes, Stoles, and Jackets of Beaver and Otter Fur Skins and Cloth.
First use Apr. 12, 1955.

SN 690,017. Louis Marx & Company, Inc., New York, N. Y. Filed June 22, 1955.

Johnny Tremaine

For Hats.
First use June 7, 1955.

SN 690,101. I. Schneierson & Sons, Inc., New York, N. Y. Filed June 23, 1955.

kit 'n suede

Applicant disclaims the word "Suede" apart from the mark, without waiving any common law rights thereto.
For Ladies' and Children's Slips and Petticoats of a Textile Fabric.
First use Feb. 2, 1937.

SN 690,590. Alix of Miami, Inc., Miami, Fla. Filed July 1, 1955.

Alix OF MIAMI

Applicant disclaims the words "of Miami" apart from the mark as shown. The drawing is lined for blue color but the particular color forms no part of the trademark.
For Women's Outer Camisoles and Bras, Outer Shorts and Shirt Combinations, Swim Suits, Pedal Pushers, Slacks, Jackets, Blouses, Skirts, Beach Coats and Dresses and Men's Shirts, Shorts, Slacks, Swim Suits, Sport Jackets, and Beach Coats.
First use Mar. 15, 1951.

SN 690,635. North Star Woolen Mill Company, Lima, Ohio. Filed July 1, 1955.

NORTH STAR

Owner of Reg. Nos. 378,875, 582,959, and others.
For Garments of Wool and Part Wool—Namely, Men's and Boys' Suits, Shirts, and Sweaters, and Snow Suits.
First use May 23, 1955.

SN 690,845. Stern Shoe Company, Philadelphia, Pa. Filed July 6, 1955. Sec. 2(f).

MARCELLI

For Women's Shoes.
First use October 1954.

SN 691,571. Hub Clothiers Ltd., d. b. a. The Hub, Honolulu, Territory of Hawaii. Filed July 19, 1955.

VALUBILT

Owner of Reg. No. 318,852.
For Men's Clothing—Namely, Suits, Coats, Pants, Vests, and Overcoats.
First use 1932.

SN 692,436. Chas. A. Stevens & Co., Chicago, Ill. Filed Aug. 3, 1955.

STEVIE COAT

No claim is made to the word "Coat" apart from the mark as shown.
For Young Women's and Girls' Coats.
First use Aug. 15, 1954.

SN 692,752. Wembley, Inc., New Orleans, La. Filed Aug. 9, 1955.

"Color Guide"

For Men's Necktles.
First use Aug. 5, 1955.

SN 693,393. Peek-A-Boot, Inc., Los Angeles, Calif. Filed Aug. 19, 1955.

Weather-All

For Plastic Overshoes for Misses and Children.
First use Aug. 1, 1955.

SN 694,125. Charvet et Fils, Inc., New York, N. Y. Filed Sept. 2, 1955.

CHARVET ET FILS

Owner of Reg. Nos. 425,729 and 425,728.
For Articles of Men's Clothing, Comprising Neckties, Outer Shirts, Sport Shirts, Suspenders, Mufflers, Scarves, Pajamas, Underwear, Dressing Gowns, and Sweaters.
First use January 1924.

SN 694,167. Tabin-Picker & Co., Chicago, Ill. Filed Sept. 2, 1955.

GIANA

Owner of Reg. No. 345,720.
For Sportswear for Women and Girls—Namely, Skirts, Slacks, Jackets, Shorts, Bermuda Shorts, Blouses, and Halters.
First use Aug. 24, 1955.

SN 694,348. Robert Hoffman Aranda, Los Angeles, Calif. Filed Sept. 8, 1955.



For Mexican Shawls (Sarapes), Sombreros, Mexican Ties, and Mexican Sport Shirts (Guallaveras).
First use Aug. 10, 1955.

SN 694,550. Joseph H. Cohen & Sons, Inc., New York, N. Y. Filed Sept. 13, 1955.

HANOVER SQUARE

For Men's and Boys' Outer Garments—Namely, Coats, Suits, Jackets, Top Coats, Overcoats, Slacks, Trousers, and Vests.
First use June 21, 1954.

SN 694,596. Rockford Textile Mills, Inc., McMinnville, Tenn. Filed Sept. 13, 1955.

Silver Knight

For Socks.
First use Aug. 2, 1955.

SN 694,670. Rockford Textile Mills, Inc., McMinnville, Tenn. Filed Sept. 14, 1955.



The word "Stretch" is disclaimed apart from the mark as shown.
For Socks.
First use July 22, 1955.

SN 694,686. Regent, Limited, Boston, Mass. Filed Sept. 30, 1955.

BRIGADOON

For Women's and Girls' Non-Knitted Sportswear—Namely, Shirts, Skirts, Jackets, Slacks, Play Suits, and Shorts.
First use Mar. 24, 1947.

SN 694,727. Marlboro Shirt Company, Inc., Baltimore, Md. Filed Sept. 15, 1955.

OAK 'N IVY

For Shirts.
First use Aug. 15, 1955.

SN 695,687. Blue Bell, Inc., Greensboro, N. C. Filed Oct. 3, 1955.

BLUE BELL

Owner of Reg. Nos. 429,770 and 530,349.
For Men's, Boys', and Kiddies' Bib Overalls, Western Dungarees, Shirts; Kiddies' Overall Shorties; Men's, Boys', Ladies', Girls', and Kiddies' Dungarees; Men's Work Pants and Coveralls; Men's and Boys' Work Shirts, Matched Sets, Coats, Jackets, Slacks; Kiddies' and Boys' Boxer Shorts and Boxer Longees.
First use Mar. 1, 1948, on dungarees.

SN 695,688. Blue Bell, Inc., Greensboro, N. C. Filed Oct. 3, 1955.

CASEY JONES

Owner of Reg. Nos. 132,419 and 416,313.
For Men's, Women's, Boys', and Girls' Overalls, Jumpers, Work Jackets, Work Shirts, Work Pants, Matched Shirts, Matched Pants, Dungarees, Blanket Lined Coats, Cossack Style Coats, One-Piece Suits, and Men's and Boys' Dress Slacks.
First use May 6, 1918, on dungarees.

SN 695,689. Blue Bell, Inc., Greensboro, N. C. Filed Oct. 3, 1955.

BIG BEN

Owner of Reg. Nos. 387,980 and 534,184.
For Men's, Women's, Boys', and Girls' Overalls, Jumpers, Work Jackets, Work Shirts, Work Pants, Matched Shirts, Matched Pants, Dungarees, Blanket Lined Coats, Cossack Style Coats, One-Piece Suits, and Men's and Boys' Dress Slacks.
First use on or about July 1, 1915, on dungarees.

SN 695,730. Jack & Jill Togs, Inc., New York, N. Y. Filed Oct. 3, 1955.

TUCKERTONE

For Children's Suits, Jackets, Overalls, Blouses, Shirts, Skirts, Dresses, Pants, Snow Suits, Outer Shorts and Skirts, Hats, Caps, Leggings, Ski Pants, and Slacks.
First use Aug. 25, 1955, on children's suits.

SN 695,928. Merit Clothing Company, Mayfield, Ky. Filed Oct. 5, 1955. Sec. 2(f).

MAYFIELD

Owner of Reg. No. 551,410.
For Men's Suits.
First use Aug. 8, 1949.

SN 695,953. Smoler Bros., Inc., Chicago, Ill. Filed Oct. 5, 1955.

Alice Page

For Women's and Misses' Sportswear—Namely, Dresses, Suits, Skirts, Jackets, Coats, Shirts, Blouses, Sweaters, and Slacks.
First use Aug. 5, 1955.

SN 696,098. Anvil Brand, Incorporated, High Point, N. C. Filed Oct. 10, 1955.

SHERATON

For Trousers, Shorts, and Outer Shirts for Men, Women, and Children.
First use on or about Jan. 15, 1938, on outer shirts.

SN 696,292. Edmont Manufacturing Company, Coshocton, Ohio. Filed Oct. 12, 1955.

JOB-FITTED

For Work Gloves Made of Fabric and Coated or Impregnated With Natural Rubber, Synthetic Rubber, or Plastic.
First use on or about Sept. 15, 1952.

SN 696,361. Louis Goldsmith, Inc., Philadelphia, Pa. Filed Oct. 13, 1955.

POLARON

For Men's Clothing—Namely, Coats, Trousers, and Vests.
First use Dec. 28, 1954.

SN 696,990. International Shoe Company, St. Louis, Mo. Filed Oct. 24, 1955.

The Turnpike

For Women's Shoes.
First use Aug. 24, 1955.

SN 697,550. Imperial Chemical Industries Limited, London, England. Filed Nov. 2, 1955.

TERYLENE

Owner of British Reg. No. 696,265, dated Feb. 23, 1951; and U. S. Reg. No. 526,887.
For Boots, Shoes, Slippers, Suits, Coats, Jackets, Trousers, Slacks, Skirts, Overcoats, Rainwear, Sweaters, Bathing Suits, Trunks, Shorts, Dungarees, Overalls, Shirts, Undershirts, Briefs, Drawers, Union Suits, Pajamas, Night-Shirts, Sleeping-Coats, Hose, Half-Hose, Socks, Stockings, Anklets, Neckties, Handkerchiefs, Gloves, Mittens, Caps, Hats, Dresses, Play-suits, Sunsuits, Bathrobes, Beach Robes, Housecoats, Aprons, Smocks, Pinafores, Blouses, Brassieres, Corsets, Girdles, Slips, Petticoats, Panties, Nightgowns, Negligees, Bed Jackets, Scarves, and Mufflers.

SN 697,608. American Cyanamid Company, New York, N. Y. Filed Nov. 3, 1955.

CRESLAN

Owner of Reg. Nos. 558,354, 559,401, and 566,621.
For Clothing—Namely, Hosiery, Containing Synthetic Fiber.
First use Oct. 13, 1955.

SN 697,736. Olympic Knitwear, Inc., Hempstead, N. Y. Filed Nov. 3, 1955. Sec. 2(f).

TISH-U-KNIT DESIGNED BY LEON

For Knitted Sweaters.
First use July 7, 1937.

SN 697,753. Bannon Mills, Lebanon, Pa. Filed Nov. 7, 1955.

DUTCHTEX

For Knitwear for Infants and Children—Namely, Underwear, Sweaters, Creepers, Cardigans, Knit Suits, Polo Shirts.
First use Oct. 21, 1955.

SN 698,174. Mr. John, Inc., New York, N. Y. Filed Nov. 14, 1955.

MR. JOHN JUNIORETTE

"Mr. John" is the name of the well-known designer, who is president of applicant corporation and who executed this application. Owner of Reg. No. 549,819.
For Children's Hats and Dresses.
First use Sept. 24, 1955.

SN 698,322. Fat Men's Shop, Inc., New York, N. Y. Filed July 27, 1955. Sec. 2(f).



FAT MEN'S SHOP

For Men's Dress Shirts, Work Shirts, Undershirts, Underdrawers, Union Suits, Collars, Sweaters, Bathrobes, Bathing Shirts, Bathing Trunks, Neckties, Belts for Outer Wear, Suspenders, Garters, Trousers, Office Coats, Lumber Jackets, Raincoats, Rain Jackets and Suits.
First use May 1, 1888.

SN 698,878. I. C. Isaacs & Company, Inc., Baltimore, Md. Filed Nov. 25, 1955.

BRONCHO

Owner of Reg. Nos. 352,008 and 562,330.
For Ladies' and Girls' Dungarees and Slacks.
First use September 1952.

SN 698,892. Marx & Newman Company, Inc., New York, N. Y. Filed Nov. 25, 1955.

TINTORETTO

For Ladies' Shoes.
First use Sept. 15, 1955.

SN 699,579. Loralyn Cottons, Inc., New York, N. Y. Filed Dec. 7, 1955.

LYNN DAVIS

For Ladies' House Dresses.
First use Oct. 25, 1955.

SN 699,633. Fitts Cotton Goods Company, Atlanta, Ga. Filed Dec. 8, 1955.

CHUMY

For Infants' Diapers.
First use Nov. 14, 1945.

SN 699,753. Louis Walter & Co. Inc., Kansas City, Mo. Filed Dec. 9, 1955.



The word "Coat" is disclaimed apart from the mark as shown. Owner of Reg. No. 333,474.
For Ladies' Coats and Suits.
First use Oct. 27, 1955.

SN 699,899. Frank Brothers Footwear, Inc., New York, N. Y. Filed Dec. 13, 1955.

Viscount

For Men's Shoes and Slippers.
First use Oct. 6, 1955.

SN 1,240. Hollywood-Maxwell Co., Los Angeles, Calif. Filed Jan. 23, 1956.



For Brassieres.
First use Jan. 4, 1956.

CLASS 40

SN 695,981. Joyal and Van Dale Co., Pawtucket, R. I. Filed Oct. 6, 1955.



For Rubber Treated Cotton Shoelaces.
First use July 1, 1955.

SN 698,118. American Hard Rubber Company, New York, N. Y. Filed Nov. 14, 1955.

Crystalon

For Combs for Dressing, Ornamenting, and Cleaning the Hair.
First use Sept. 22, 1955.

CLASS 41

SN 685,023. R. A. Humphrey's Sons, Inc., Philadelphia, Pa. Filed Apr. 6, 1955.

SoloShade

For Sun Umbrellas.
First use Mar. 7, 1955.

CLASS 42

SN 674,982. Harry Lunitz, d. b. a. Jacob Lunitz & Son, New York, N. Y. Filed Oct. 18, 1954.

HARMO

For Textile Fabrics Made of Cotton and Jute Mixture.
First use Sept. 13, 1954.

SN 682,656. Herman Miller Furniture Company, Zeeland, Mich. Filed Mar. 2, 1955.



For Fabrics for Draperies and Upholstery.
First use in or about June 1952.

SN 694,374. Emile Marghab, Incorporated, New York, N. Y. Filed Sept. 8, 1955.

MARCASUAL

For Rough-Textured Linen Cloth.
First use July 22, 1955.

SN 697,194. Wm. Simpson, Sons & Co., Inc., New York, N. Y. Filed Oct. 26, 1955.

SPIN UP

For Fabric—Namely, Combed Novelty Loop Cord.
First use September 1955.

SN 699,310. D. B. Fuller & Co., Inc., New York, N. Y. Filed Dec. 2, 1955.

PERFECT VISION

Owner of Reg. No. 534,686.
For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
First use Apr. 5, 1954.

SN 699,700. Chopak-Solow Corporation, New York, N. Y. Filed Dec. 9, 1955.

KRINOLETTE

For Acetate, Rayon, and Nylon Piece Goods.
First use Nov. 18, 1955.

SN 699,910. A. D. Juilliard & Co., Inc., New York, N. Y. Filed Dec. 13, 1955.

FORECAST COLLECTION

For Draperies and Bedspread Ensembles and Slip Cover and Upholstery Fabrics in the Piece, All Made of Cotton, Rayon, Acetate and/or Other Synthetic or Natural Fibers, and Combinations Thereof.
First use on or about Nov. 16, 1955.

SN 699,935. Textile Corporation of America, Los Angeles, Calif. Filed Dec. 13, 1955.



Owner of Reg. No. 546,787.
For Textile Piece Goods of Cotton, Wool, Silk, Synthetic Fibres, and Combinations Thereof.
First use Sept. 22, 1955.

SN 699,990. J. P. Stevens & Co., Inc., New York, N. Y. Filed Dec. 14, 1955.

DURA-RIB

For Grey and Finished Corduroy in the Piece.
First use Oct. 25, 1955.

SN 699,991. J. P. Stevens & Co., Inc., New York, N. Y. Filed Dec. 14, 1955.

VELVA-WALE

For Grey and Finished Corduroy in the Piece.
First use Oct. 26, 1955.

SN 700,731. House Beautiful Curtains, Inc., New York, N. Y. Filed Dec. 28, 1955. Sec. 2(f).

*House Beautiful**

Owner of Reg. Nos. 396,016 and 429,275.
For Window Curtains, Shower Curtains, Drapes, Bedspreads, Tablecloths, and Textile Fabrics in the Piece for Said Goods.
First use Dec. 15, 1937.

SN 700,852. Erwin Mills, Inc., Durham, N. C. Filed Dec. 30, 1955.



Without waiving its common law rights and for purposes of this registration only applicant makes no claim herein to the words "Quality Fabrics" apart from the mark as shown.
Owner of Reg. Nos. 143,331, 610,781, and others.
For Denim Piece Goods.
First use Oct. 21, 1955.

CLASS 44

SN 683,335. American Home Products Corporation, d. b. a. Wyeth Laboratories, Division of American Home Products Corporation, Philadelphia, Pa. Filed Mar. 14, 1955.

WYAMINE

Owner of Reg. No. 512,863.
For Inhaler for Holding a Medicament for the Relief of Nasal Congestion.
First use Dec. 11, 1947.

SN 686,741. Herts Pharmaceuticals Limited, Welwyn Garden City, England. Filed May 3, 1955.

LASSO

Owner of British Reg. No. 724,883, dated Dec. 16, 1953.
For Medical and Surgical Adhesive Plaster.

SN 691,070. Neurotronics Inc., Oceanside, N. Y. Filed July 11, 1955.

INFRASONIC

For Electrical and Electronic Sonic Generating Equipment for Therapeutic Purposes Including Components Therefor.
First use May 7, 1955.

SN 692,651. Stephenson Corporation, Red Bank, N. J. Filed Aug. 8, 1955. Sec. 2(f).

STEPHENSON

For Resuscitators and Cardiac Defibrillators.
First use January 1947 on resuscitators.

SN 699,395. General Mills, Inc., Minneapolis, Minn. Filed Dec. 5, 1955.

Tampone

For Menstrual Tampons.
First use Dec. 9, 1954.

SN 699,526. Jacob A. Saffir, Los Angeles, Calif. Filed Dec. 6, 1955.

LIVING TEETH

For Artificial Teeth.
First use Oct. 1, 1955.

SN 699,794. General Mills, Inc., Minneapolis, Minn. Filed Dec. 12, 1955.

CEL-O-SORB

For Surgical Sponges.
First use October 1953.

SN 699,877. The W. E. Bassett Company, Derby, Conn. Filed Dec. 13, 1955. Sec. 2(f).

TRIM

Owner of Reg. Nos. 433,832, 530,527, and 614,895.
For Finger and Toenail Clippers.
First use Sept. 22, 1947.

CLASS 45

SN 683,687. Large-Charge, Incorporated, Tarpon Springs, Fla. Filed Mar. 17, 1955.



For Powders Used in the Making of Soft Drinks.
First use Jan. 17, 1955.

SN 697,193. The Seven-Up Company, St. Louis, Mo. Filed Oct. 26, 1955.



Owner of Reg. Nos. 252,850, 504,531, and others.
For Carbonated Soft Drinks.
First use June 2, 1955.

SN 698,086. TV Time Foods, Inc., Chicago, Ill. Filed Nov. 10, 1955.

TV TIME

Owner of Reg. Nos. 553,867 and 589,179.
For Prepared Powders or Mixes for Making Soft Drinks.
First use Aug. 31, 1955.

SN 698,722. Peters Products Company, Inc., Savannah, Ga. Filed Nov. 22, 1955.

LEMON HEAD

For Sourmix, Comprising Lemon Oil Flavoring Mixed With Citric Acid.
First use July 23, 1955.

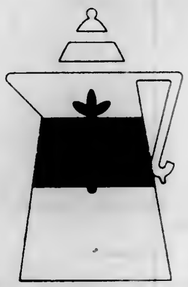
CLASS 46

SN 637,162. Beatrice Foods Co., Chicago, Ill. Filed Oct. 25, 1952. Sec. 2(f).



For Butter, Fresh Eggs, Cheese, Mayonnaise Dressing, Ice Cream, Ice Cream Cakes, Fluid Milks, Fluid Creams, Cottage Cheese, Salad Dressing, Sandwich Spread, Ice Cream Pie, Ice Cream Tarts, Buttermilk, and Chocolate Flavored Food Drink.
First use June 2, 1946.

SN 649,129. Continental Coffee Company, Chicago, Ill. Filed June 22, 1953. Sec. 2(f) as to "America's Leading Restaurant Coffee."



Owner of Reg. No. 400,719.
For Coffee.
First use in or about 1936 or 1937.

SN 662,934. Karl Hoefelmayr, d. b. a. Edelweiss-Milchwerke K. Hoefelmayr, Kempten, Allgau, Germany. Filed Mar. 19, 1954.



For Cheese.
First use Sept. 5, 1892; in commerce not later than Dec. 21, 1920.

SN 667,362. John G. Ackerlind, Costa Mesa, Calif. Filed June 1, 1954.

Yetta
A LITTLE BITE OF SWEDEN MADE IN USA

No claim of exclusive rights is made of the words "A Little Bite of Sweden Made in USA" except as they appear in the drawing.
For Confectionery of the Swedish Type Characterized as a Fluffy Candy of Marshmallow Consistency.
First use Apr. 16, 1954.

SN 674,491. Windbrook, Incorporated, Boston, Mass. Filed Oct. 7, 1954.

WINDBROOK

For Canned and Packaged Fruits; Canned and Bottled Vegetables, Fish, Salad Dressings, Jams, and Vegetable and Fruit Juices; Packaged Candies; Canned Evaporated Milk; and Fresh Butter, Margarine, and Eggs.
First use Mar. 1, 1939.

SN 675,111. Tri-Sum Potato Chip Co., Inc., Leominster, Mass. Filed Oct. 19, 1954.

TRI-SUM

For Potato Chips, French Fried and Cheese Flavored Popcorn, Cheese Crackers, and Potato Sticks and Curls.
First use March 1930 on potato chips.

SN 678,079. Industrias Cima S. A., Colloto-Oviedo, Spain. Filed Dec. 9, 1954.



Owner of Spanish Reg. No. 41,113, dated Jan. 4, 1922.
For Cider.

SN 681,955. Tri Foods Co., Springfield, Mo. Filed Feb. 18, 1955.

WEYSOL

For Feed for Livestock and Poultry.
First use September 1948.

SN 684,110. California Walnut Growers Association, Los Angeles, Calif. Filed Mar. 24, 1955.



Owner of Reg. No. 511,213.
For Walnuts in the Shell and Shelled Walnuts.
First use Oct. 8, 1954.

SN 686,465. Ledward, Bibby & Co., Inc., New York, N. Y. Filed Apr. 28, 1955.

MR. 'DOWN UNDER'

For Frozen Lobster Tails.
First use Apr. 5, 1955.

SN 689,129. Federal Nut Co., Inc., New York, N. Y., now by change of name to Chock Full O'Nuts Corp. Filed June 8, 1955.

CHOCK FULL O' NUTS—THE HEAVENLY COFFEE

Owner of Reg. Nos. 399,446 and 564,547.
For Coffee.
First use July 1, 1953.

SN 690,428. H. C. Brill Company, Inc., Newark, N. J. Filed June 29, 1955. Sec. 2(f) as to "Brill's."

Brill's
MAGIC WHEAT

Applicant disclaims the word "Wheat" apart from the mark as shown. Owner of Reg. Nos. 261,267, 615,894, and others.
For Natural Whole Wheat Kernel.
First use Mar. 29, 1955.

SN 690,465. W. H. Hairston, d. b. a. Hairston Produce Company, Dallas, Tex. Filed June 29, 1955.



The pictures are those of applicant's grandsons. Consent of their parents is of record.
For Fresh Vegetables and Fruits—Namely, Potatoes, Onions, Celery, Spinach, Carrots, Tomatoes, Peppers, Lettuce, Oranges, Lemons, Grapefruit, Apples, and Frozen Orange Juice.
First use Oct. 15, 1953.

SN 690,843. Snively Groves, Inc., Winter Haven, Fla. Filed July 6, 1955.

CYPRESS GARDENS

Owner of Reg. No. 564,619.
For Fresh Citrus Fruits, Canned Citrus Fruits, and Canned Citrus Fruit Juices.
First use Sept. 1, 1950, on canned citrus fruits, and canned citrus fruit juices.

SN 691,012. The Cudahy Packing Company, Omaha, Nebr. Filed July 11, 1955.

FORTNITE

For Fresh Beef in the Form of Carcasses.
First use Apr. 11, 1955.

SN 692,534. Nesbitt Fruit Products, Inc., Los Angeles, Calif. Filed Aug. 5, 1955. Sec. 2(f).

Nesbitt's

Owner of Reg. No. 266,706.
For Crushed Fruits in Containers and Chocolate Syrup.
First use on or about Feb. 22, 1927.

SN 694,376. Milwaukee Cheese Co., Milwaukee, Wis. Filed Sept. 8, 1955. Sec. 2(f).

Beer Cheese

No claim is made for the word "Cheese" apart from the mark shown. Owner of Reg. Nos. 345,535 and 608,403.
For Brick Cheese.
First use October 1932.

SN 695,245. F. H. Soldwedel Company, Pekin, Ill. Filed Sept. 23, 1955.

del-betic

For Low Calorie Frozen Milk for Use as a Dessert.
First use on or about Mar. 15, 1952.

SN 698,100. Williamson Candy Company, Chicago, Ill. Filed Nov. 10, 1955.

THAT'S MINE!

For Candy.
First use Nov. 2, 1955.

SN 698,377. Southern States Cooperative, Incorporated, Richmond, Va. Filed Nov. 16, 1955.



The drawing is lined for yellow. Owner of Reg. No. 533,652.
For Dog Food.
First use Oct. 24, 1955.

SN 698,495. The Borden Company, New York, N. Y. Filed Nov. 18, 1955.

SNOW FROST

Owner of Reg. No. 614,564.
For Ice Milk Sandwich.
First use Sept. 22, 1953.

SN 698,496. The Borden Company, New York, N. Y. Filed Nov. 18, 1955.

ZEST

Owner of Reg. Nos. 253,305 and 589,466.
For Modified Skimmed Milk.
First use Nov. 10, 1951.

CLASS 47

SN 680,143. Gonzalez, Byass & Co. Limited, d. b. a. Gonzalez, Byass y Ca and as Gonzalez, Byass & Co./ London, England. Filed Jan. 19, 1955. Sec. 2(f).

GONZALEZ

Owner of Reg. Nos. 310,793, 341,608, and others.
For Sherry Wine and Port Wine.
First use 1836 ; in commerce 1880.

SN 691,737. Almaden-Santa Clara Vineyards, Inc., d. b. a. Almaden Vineyards and as O. J. Goulet Vineyards, Los Gatos, Calif. Filed July 22, 1955.

ALMADEN

GRENACHE ROZAY

Applicant makes no claim to the words "Grenache" or "Rozay" apart from the mark as a whole. Owner of Reg. Nos. 602 208, 604,040, and 605,570.
For Pink Wine.
First use Jan. 14, 1955.

SN 698,280. Duff Gordon & Co., Port St. Mary's, Spain. Filed Nov. 15, 1955. Sec. 2(f).

CLUB DRY

Owner of Reg. No. 334,839.
For Wines.
First use December 1933 ; in commerce December 1933.

CLASS 48

SN 689,555. Adolph Coors Company, Golden, Colo. Filed June 15, 1955.



Owner of Reg. Nos. 156,155 and 519,643.
For Beer.
First use 1923 ; and since 1882 without the letter "C."

SN 689,568. Gunther Brewing Company, Baltimore, Md. Filed June 15, 1955. Sec. 2(f) as to "Gunther."



The drawing is lined for red and gold. Owner of Reg. Nos. 357,315 and 511,281.
For Beer.
First use Feb. 28, 1955 ; and 1881 as to "Gunther."

SN 690,221. Carling Brewing Company, Incorporated, Cleveland, Ohio. Filed June 27, 1955. Sec. 2(f).

CARLING

Owner of Reg. Nos. 305,860 and 319,486.
For Beer and Ale.
First use 1840.

SN 698,710. Liebmann Breweries, Inc., Brooklyn, N. Y. Filed Nov. 22, 1955.

RHEINGOLD

Owner of Reg. Nos. 291,673, 533,124, and others.
For Beer and Ale.
First use about 1882.

SN 698,897. National Beer Sales, Inc., Milwaukee, Wis. Filed Nov. 25, 1955.

DORF

The word "Dorf" is the German word for "Village."
For Beer.
First use Nov. 7, 1955.

CLASS 49

SN 671,159. Imperial Distillers, Ltd., St. Thomas, Virgin Islands, to Harrison-Purdy & Co., Inc., Philadelphia, Pa. Filed Aug. 5, 1954.

GRAND DUKE

For Vodka.
First use Jan. 21, 1954.

SN 695,377. Jose Arechabala, S. A., Cardenas, Matanzas Province, Cuba. Filed Sept. 27, 1955. Sec. 2(f).

HAVANA CLUB

Owner of Reg. Nos. 335,919, 578,679, and 578,680.
For Rum.
First use Sept. 4, 1933 ; in commerce Sept. 4, 1933.

CLASS 50

SN 692,364. United Engravers, Los Angeles, Calif. Filed Aug. 2, 1955.



For Branding Kit, Comprising a Master Handle With Interchangeable Branding Irons of Different Patterns.
First use July 14, 1955.

SN 700,226. Glitter-Craft Co., Inc., Los Angeles, Calif. Filed Dec. 19, 1955.

GLITTER-CRAFT

For Sequin Decorated Novelties—Namely, Christmas Stockings and Christmas Decorations.
First use May 1952.

CLASS 51

SN 654,223. Milco, Inc., San Jose, Calif. Filed Oct. 5, 1953.



For Hand Cream That Forms a Film for Protecting Hands Against Dirt, Grime, Paint, Ink, Greases, Etc.
First use on or about Aug. 1, 1953.

SN 674,881. Max Factor & Co., Hollywood, Calif. Filed Oct. 15, 1954.

GOLDEN LAVENDER

For Cosmetics in the Nature of Lotions and Colognes.
First use Sept. 2, 1954.

SN 677,588. Olin Mathieson Chemical Corporation, New York, N. Y., to Lentheric, Inc., New York, N. Y. Filed Dec. 1, 1954.

JEWEL OF EDEN

For Lipstick.
First use Nov. 13, 1954.

SN 680,710. Aloe Creme Laboratories, Inc., Fort Lauderdale, Fla. Filed Jan. 31, 1955.

ALO-CREME
Aloe Tan

Owner of Reg. No. 590,472.
For Lotion for Skin-Grooming.
First use Feb. 3, 1953.

SN 682,014. International Laboratory Associates, Inc., Waupun, Wis. Filed Feb. 21, 1955.



For Colorless, Odorless Liquid Formulated To Be Used Directly on the Feet To Keep Them Warm and Dry.
First use Jan. 4, 1955.

SN 686,202. Mildred Miller, Hollywood, Calif. Filed Apr. 25, 1955.



For Cosmetics—Namely, Cold Cream, Liquid Cleanser, Liquid Stimulant, Powder Foundation, and Emollient.
First use Feb. 20, 1955.

SN 689,049. Les Parfumeries de Gabilla, Societe Anonyme, Paris, France. Filed June 7, 1955.

FOLLE PASSION

The expression "Folle Passion" means "foolish passion" in English.
For Perfumes, Lotions, Toilet Waters and Creams, Toilet Powders and Rouges, and Dentifrices in Paste, Powder, and Liquid Form.
First use Aug. 23, 1910.

SN 690,483. Patricia Still Laboratories, Inc., also d. b. a. Patricia Still, Narberth, Pa. Filed June 29, 1955.

Patti·Nail

For Fingernail Conditioning Preparations in Powder and Liquid Form for Lengthening, Strengthening and Protecting the Nails and Manicuring Kits Consisting of Said Preparations Along With Mixing Bowls, Guides for Lengthening Nails and Application Brushes for Applying Said Preparations to Fingernails.
First use September 1954.

SN 692,629. Mildred Miller, Hollywood, Calif. Filed Aug. 8, 1955.

Steady Date

For Cosmetics—Namely, Skin Cleansing Creams, Skin Stimulants, and Skin Lotions.
First use July 12, 1955.

SN 692,751. The J. R. Watkins Company, Winona, Minn. Filed Aug. 9, 1955.

Sweeteen

For Perfume, Cologne, and Cosmetics—Namely, Face Cream, Hand Cream, Bath Powder, Face Powder, Face Lotion, Body Lotion, Cream Rouge, and Sachet.
First use July 5, 1955.

SN 693,417. Max Factor & Co., Los Angeles, Calif. Filed Aug. 18, 1955.

HYDRA-MAGIC

For Hand Lotion.
First use July 6, 1955.

SN 694,413. Charles of the Ritz, Inc., New York, N. Y. Filed Sept. 9, 1955.

Spring Rain

Owner of Reg. No. 393,585.
For Dusting Powder.
First use March 1942.

SN 694,415. Charles of the Ritz, Inc., New York, N. Y. Filed Sept. 9, 1955.

Directoire

The word "Directoire" means in English "Directory."
Owner of Reg. Nos. 440,836 and 441,018.
For Bath Oil and Bath Salts.
First use March 1950 on bath oil.

SN 694,416. Charles of the Ritz, Inc., New York, N. Y. Filed Sept. 9, 1955.

Ishah

Owner of Reg. No. 596,083.
For Bath Salts.
First use July 1955.

SN 694,475. Charles of the Ritz, Inc., New York, N. Y. Filed Sept. 12, 1955.

REVENESCENCE

Owner of Reg. No. 365,361.
For Beautifying Skin Lotions.
First use April 1941.

CLASS 52

SN 520,069. Harry R. Stevens, d. b. a. Peerless Chemical Company; Anna Marie Stevens, administratrix for estate of Harry R. Stevens, Baltimore, Md., to Peerless Chemical Company, Baltimore, Md. Filed, act of 1905, Apr. 2, 1947; am. act of 1946, Aug. 20, 1952. Sec. 2(f).

CHINA-BRITE

Assignee owner of Reg. No. 412,761.
For Soap Powder (in Cake or Bulk) for Washing Dishes, Silverware, and Glasses.
First use October 1936.

SN 672,544. Sun Chemical Corporation, Long Island City, N. Y. Filed Aug. 31, 1954.

NU-FLOOR

Owner of Reg. No. 313,243.
For Paint Removers.
First use Sept. 9, 1950.

SN 683,262. Anderson Chemical Company, Macon, Ga. Filed Mar. 11, 1955.

ANCO

For Condenser Cleaners, Scale Removers, Ice Machine Cleaners and Air Washer Cleaners.
First use June 1946.

SN 691,267. Armour and Company, Chicago, Ill. Filed July 14, 1955.

chiffon

Owner of Reg. No. 622,827.
For Liquid Detergents.
First use May 3, 1955.

SN 692,656. United Research and Development Associates, Inc., Newark,, N. J. Filed Aug. 8, 1955.



For Abrasive-Free Hand Cleaner.
First use Oct. 14, 1953.

SN 693,711. Victor Chemical Works, Chicago, Ill. Filed Aug. 25, 1955.

QUESTEX

For Ingredient Used in Detergents and Soap Products for Stabilization, Increase of Detergency, and Otherwise Increasing the Effectiveness of the Detergents and Soap Products.
First use Feb. 17, 1955.

SN 695,583. The Tremco Manufacturing Company, Cleveland, Ohio. Filed Sept. 29, 1955.

TREMSTRIP

Owner of Reg. Nos. 270,849 and 568,038.
For Paint and Varnish Remover.
First use Apr. 15, 1955.

SN 695,713. Fenco Corporation, San Francisco, Calif. Filed Oct. 3, 1955.

Oven-SPRITE

For Oven Cleaner.
First use Sept. 10, 1955.

SN 696,551. John E. Larkin, d. b. a. Quality Products Company, Westerly, R. I. Filed Oct. 17, 1955.

nomel

For Liquid Detergent for Washing Dishes and Glassware, Laundering Clothes, and Other General Cleaning Purposes.
First use Aug. 1, 1955.

SN 696,938. Boyer Chemical Company, Chicago, Ill. Filed Oct. 24, 1955. Sec. 2(f).

GLASS-GLOW

For Glass Cleaner in Liquid Form.
First use July 1, 1934.

SN 697,022. Safeway Stores, Incorporated, Oakland, Calif. Filed Oct. 24, 1955.

Scamper

For Liquid Detergent for General Household Use.
First use July 19, 1955.

SN 697,136. Oscar Willen, d. b. a. Nu-Hair Laboratories, Philadelphia, Pa. Filed Oct. 25, 1955.

NU-HAIR

For Hair Shampoo.
First use during the first week of January 1954.

SN 699,780. Curley Company, Incorporated, Philadelphia, Pa. Filed Dec. 12, 1955.

OLEEN

Owner of Reg. No. 376,397.
For Lather Oil Shampoo, Cream Shampoo, and Cocoanut Oil Shampoo.
First use Aug. 1, 1937.

SERVICE MARKS

CLASS 100

SN 684,880. The Questers, Ambler, Pa. Filed Apr. 4, 1955.

THE QUESTERS

For Establishment and Maintenance of Membership of a National Organization of Gronps of Persons Who Have the Desire To Study and Appreciate Antiques, Objects of Art, and Historical Backgrounds, and To Stimulate an Interest in the Collecting of Antiques, by Providing Program Assistance to Chapters, Maintaining Files of Resource Material Available to Members for Preparing Study Papers and the Like, Directing Publications, Organizing New Chapters, and Handling Public Relations and Other Business Relating to the Foregoing.
First use in or about October 1950.

SN 688,441. Montana-Dakota Utilities Co., Minneapolis, Minn. Filed May 27, 1955.



For Utility Services—Namely, Supplying Gas for Heat and Power.
First use Aug. 10, 1951.

SN 692,681. Super Market Institute, Inc., Chicago, Ill. Filed July 13, 1955. Sec. 2(f).



Owner of Reg. No. 575,356.

For Conducting Research for Its Members Relating Both to Their Industrial and Merchandising Problems as Saving Operational Costs, Improving Service and Expansion and to Their Personnel Problems Relating to Pension, Profit Sharing and Incentive Plans; and Advising the Members as to the Results Thereof.

First use January 1949.

SN 693,923. Minnesota Span Association, Minneapolis, Minn. Filed Aug. 30, 1955.

SPAN

For Promoting International Friendship and Understanding by Granting Scholarships and Providing Guidance to Students for the Purpose of Permitting Such Students to Visit Foreign Countries and There Work on a Project of His Own Choosing While in Actual Contact With the Methods, Customs, and Politics of the People and Country.

First use October 1946.

CLASS 101

SN 691,953. James R. Meade, d. b. a. Associated Sales Engineers, Richboro, Pa. Filed July 26, 1955.

THE SOURCE OF SOURCES

For Sales Agency Service.

First use April 1955.

SN 693,657. Banner Trading Stamps, Inc., Fort Smith, Ark. Filed Aug. 25, 1955.

BANNER

For Sales Promotion of the Goods of Others Through the Medium of Trading Stamps Which Are Redeemable in Merchandise.

First use Aug. 6, 1955.

SN 696,029. Karl Mervin Geiselhart, Campbell, Calif. Filed Oct. 7, 1955.

TELEBARGAINS

For Specialized Advertising Service Which Provides to All Telephone Subscribers Who Dial a Given Number, a Recorded Listing of the "Top Six Bargains-of-the-Day" in the City in Which Operating.

First use Nov. 15, 1954.

SN 697,945. Telanserphone, Inc., New York, N. Y. Filed Oct. 25, 1955.

TELANSERPHONE

For Telephone Answering Service.

First use Apr. 1, 1947.

CLASS 102

SN 650,880. Credit Key Company, d. b. a. Charge Key Company, San Rafael, Calif. Filed July 27, 1953.



For Extension of Credit to Customers Certified by Applicant Who Purchase at Subscribing Retail Outlets, and Making Collections From Such Customers Through a Central Billing System.

First use June 10, 1953.

SN 686,083. Pierce Insurance Company, North Hollywood, Calif. Filed Apr. 22, 1955.



Applicant disclaims the words "Family Protection" apart from the mark as shown. Owner of Reg. No. 594,347.

For Underwriting of Life Insurance Usually in Conjunction With Prearranged Funeral Services.

First use Mar. 11, 1955.

SN 694,099. State Farm Mutual Automobile Insurance Company, Bloomington, Ill. Filed Sept. 1, 1955.



The words "Auto," "Life," "Fire," and "Insurance" are disclaimed apart from the mark as shown.

For Underwriting and Conduct of a Life, Casualty, and Fire Insurance Business.

First use Feb. 19, 1953.

SN 694,101. State Farm Mutual Automobile Insurance Company, Bloomington, Ill. Filed Sept. 1, 1955.

STATE FARM INSURANCE

For Underwriting and Conduct of a Life, Casualty, and Fire Insurance Business.

First use Mar. 1, 1930.

SN 694,591. The Peoples Bank and Trust Company, Cedar Rapids, Iowa. Filed Sept. 13, 1955.



The words "Pre-Arranged Personal Credit Plan" are disclaimed.

For Banking Service—Namely, a Pre-Arranged Personal Credit Plan.

First use July 18, 1955.

SN 696,577. North American Life and Casualty Company, Minneapolis, Minn. Filed Oct. 17, 1955.

SELF-COMPLETION

For Underwriting of Life Insurance.

First use on or about June 1, 1948.

CLASS 104

SN 692,883. The Western Union Telegraph Company, New York, N. Y. Filed Aug. 11, 1955.



Owner of Reg. No. 526,408.

For Public and Private Telegraph, Facsimile, Television, and Other Wire and Wireless Message Transmission, and the Sending and Delivery of Messages by Mail and by Messenger.

First use on or about Feb. 1, 1951.

CLASS 105

SN 677,453. Sita-Adventure Trails, Inc., New York, N. Y. Filed Nov. 29, 1954.



For Conducting Escorted Travel Tours.

First use Oct. 31, 1953.

SN 682,074. Robert J. Smith, d. b. a. Travelure Adventours, Elmhurst, Ill. Filed Feb. 21, 1955.

Travelure ADVENTOURS

For Travel Agency Services.

First use on or about Apr. 1, 1950.

SN 686,941. American Automobile Touring Alliance, Ltd., Philadelphia, Pa. Filed May 6, 1955.



Owner of Reg. No. 615,009.

For Services Rendered to Motor Vehicle Owners, Motorists and Travelers Generally—Namely, Disseminating Travel Information; Making Travel Arrangements and Hotel Reservations; Planning Automobile Itineraries and Supplying Itineraries and Maps for Use in Connection Therewith.

First use on or about Feb. 26, 1932.

SN 693,285. Wales Trucking Company, Dallas, Tex. Filed Aug. 17, 1955.



For Transportation of Freight by Truck and Oil Field Hauling by Truck.

First use Oct. 1, 1945.

SN 694,501. North American Van Lines, Inc., Fort Wayne, Ind. Filed Sept. 12, 1955.

"WIFE-APPROVED"

For Transportation of Household Goods by Motor Van.

First use Jan. 14, 1955.

CLASS 106

SN 679,023. Utica Drop Forge & Tool Corporation, Utica, N. Y. Filed Dec. 27, 1954. Sec. 2(f).



Owner of Reg. Nos. 83,793, 614,211, and others.

For Custom Forging and Designing of Metal Shapes.

First use on or about Oct. 28, 1946.

SN 687,102. Pawtucket Dyeing & Bleaching Co., Inc., Pawtucket, R. I. Filed May 9, 1955.

TOW-HUE

For Chemically Processing Synthetic Fibers of Others.

First use Jan. 11, 1955.

CLASS 107

SN 677,388. A. M. Cadwell, Herbert Wemberly, and Paul P. Rubincam, Albuquerque, N. Mex. Filed Nov. 29, 1954. Sec. 2(f).

the people speak

For Entertainment Service Through the Medium of a Radio Program Involving Audience Participation.
First use June 1952.

SN 690,644. Radio Cincinnati, Inc., Cincinnati, Ohio. Filed July 1, 1955.

Sports Vue

For Title of a Radio Program Concerning Sporting News and Events.
First use June 20, 1955.

CERTIFICATION MARKS

CLASS A

SN 681,095. Monarch Manufacturing Co., d. b. a. The Armoloy Company, Fort Worth, Tex. Filed Feb. 4, 1955.

ARMOLOY

The mark certifies that the goods have been treated with a metallic electro-deposition for increasing the hardness of the surface thereof.
For Metals and Metal Castings and Forgings.
First use Oct. 10, 1954.

SN 686,386. Parker Rust Proof Company, Detroit, Mich. Filed Apr. 27, 1955.

BONDERIZING

The mark certifies that the goods have been treated with materials sold by Parker Rust Proof Company under its trademark "Bonderite," to provide a high quality corrosion resistant paint holding coating.
For Metals and Metal Castings and Forgings Which Have Been Chemically Treated To Obtain Corrosion Resistant Coatings on the Surfaces Thereof.
First use May 1931.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

627,562. LAMIN-ART. The Eagle-Picher Company. SN 689,474. Pub. 3–13–56. Filed 6–14–55.

627,563. CARB-X. Chromium Mining & Smelting Corporation, Limited. SN 689,699. Pub. 3–13–56. Filed 6–17–55.

627,564. CASHUA CALF. A. F. Gallun & Sons Corporation. SN 689,831. Pub. 3–13–56. Filed 6–20–55.

627,565. SAGA. Oslo Skinnauksjoner S/L. SN 690,482. Pub. 3–13–56. Filed 6–29–55.

CLASS 2

627,566. BOTTOM VUE. Standard Folding Trays Corp. SN 667,656. Pub. 3–13–56. Filed 6–3–54.

627,567. JOTTIES AND DESIGN. Joshua B. Mitchell. SN 690,832. Pub. 3–13–56. Filed 7–6–55.

627,568. PLY-BOUND. Atlas Plywood Corporation. SN 696,761. Pub. 3–13–56. Filed 10–20–55.

627,569. SAKS-FIFTH AVENUE. Saks & Company. SN 696,838. Pub. 3–13–56. Filed 10–20–55.

CLASS 3

627,570. LUXURY WITHOUT EXTRAVAGANCE. Ronay, Inc. SN 674,696. Pub. 3–13–56. Filed 10–12–54.

627,571. GOLDEN WONDER MESH. Aristocrat Leather Products, Inc. SN 692,999. Pub. 3–13–56. Filed 8–15–55.

627,572. TURKEYMATE. The D. S. Brown Company. SN 694,773. Pub. 3–13–56. Filed 9–16–55.

627,573. DSB AND DESIGN. The D. S. Brown Company. SN 694,774. Pub. 3–13–56. Filed 9–16–55.

627,574. EL DORADO. Hartmann Luggage Company. SN 694,881. Pub. 3–13–56. Filed 9–19–55.

CLASS 5

627,575. CELLUX AND DESIGN. Feldmuhle Ltd. SN 689,374. Pub. 3–13–56. Filed 6–13–55.

627,576. RESYN. National Starch Products Inc. SN 689,644. Pub. 3–13–56. Filed 6–16–55.

CLASS 6

627,577. TOOLCAST. American Resin Corporation. SN 685,632. Pub. 3–13–56. Filed 4–18–55.

627,578. CYPEL. American Cyanamid Company. SN 686,597. Pub. 3–13–56. Filed 5–2–55.

627,579. 205. Shell Chemical Corporation. SN 687,637. Pub. 3–13–56. Filed 5–16–55.

627,580. METCO AND DESIGN. Metallizing Engineering Co. Inc. SN 687,965. Pub. 3–13–56. Filed 5–20–55.

627,581. Q-GAS. Nuclear Instrument and Chemical Corporation. SN 688,066. Pub. 3–13–56. Filed 5–23–55.

627,582. LAWNTROL. Boyle-Midway Inc. SN 688,210. Pub. 3–13–56. Filed 5–25–55.

627,583. GERM-D-PHONE. H. & S. Product. SN 688,325. Pub. 3–13–56. Filed 5–26–55.

627,584. 66. Phillips Petroleum Company. SN 689,739. Pub. 3–13–56. Filed 6–17–55.

627,585. DRYETTE. The Cravenette Company, U. S. A. SN 690,068. Pub. 3–13–56. Filed 6–23–55.

627,586. STABL-SEAL AND DESIGN. Fred V. McNair, d. b. a. M & H Chemical Company. SN 690,290. Pub. 3–13–56. Filed 6–27–55.

627,587. QUAT-SAN. Tesco Chemicals, Inc. SN 690,771. Pub. 3–13–56. Filed 7–5–55.

627,588. HI PV. American Cyanamid Company. SN 690,792. Pub. 3–13–56. Filed 7–6–55.

627,589. PERMA PATCH. Mill Creek Transit Mix, Inc. SN 693,759. Pub. 3–13–56. Filed 8–26–55.

CLASS 7

627,590. TIE-RITE. Corn Belt Products, Inc. SN 691,832. Pub. 3–13–56. Filed 7–25–55.

CLASS 8

627,591. ROCKY BRIAR. The Reiss-Premier Corporation, to S. M. Frank and Co. Inc. SN 683,710. Pub. 3–13–56. Filed 3–17–55.

627,592. MANHATTAN. Manhattan Briar Pipes' Ltd. SN 699,332. Pub. 3–13–56. Filed 12–2–55.

CLASS 9

627,593. PAK-O-POPPERS. Walton E. Wilfong, d. b. a. Stars and Stripes Fireworks. SN 695,256. Pub. 3–13–56. Filed 9–23–55.

CLASS 10

627,594. PYRAMIDEX. Anthony Mushynsky, d. b. a. Eage Company. SN 695,749. Pub. 3–13–56. Filed 10–3–55.

627,595. ROBOT GARDENER. Walter Ratner, d. b. a. The Grant Company. SN 696,066. Pub. 3–13–56. Filed 10–7–55.

CLASS 11

627,596. COMMERCIAL. S. S. Stafford, Inc. SN 684,489. Pub. 3–13–56. Filed 3–29–55.

627,597. SPEEDINX. Gaetjens, Berger & Wirth, Inc. SN 695,907. Pub. 3–13–56. Filed 10–5–55.

627,598. SAKS-FIFTH AVENUE. Saks & Company. SN 695,948. Pub. 3–13–56. Filed 10–5–55.

CLASS 12

627,599. JASCO. Jasco Aluminum Products Corporation. SN 642,476. Pub. 8–18–53. Filed 2–19–53.

627,600. MR. ESPEY SPRING PACKING CORPORATION AND DESIGN. Spring Packing Corporation. SN 656,601. Pub. 3–13–56. Filed 11–18–53.

627,601. A H AND DESIGN. American Houses, Inc. SN 665,464. Pub. 3–13–56. Filed 4–30–54.

627,602. PRECISION-BUILT QUALITY HOMES AND DESIGN. Homasote Company. SN 685,022. Pub. 3–13–56. Filed 4–6–55.

627,603. SHOK-ABSORB AND DESIGN. Chas. H. Anderson Floors, Inc. SN 686,523. Pub. 3–13–56. Filed 4–29–55.

627,604. TYWAL. Tywal Company. SN 689,598. Pub. 3–13–56. Filed 6–15–55.

627,605. STALLPACK AND DESIGN. Carthage Marble Corporation. SN 692,380. Pub. 3–13–56. Filed 8–3–55.

627,606. SATIN-WHITE. Paul Jacobi Taxey. SN 693,869. Pub. 3–13–56. Filed 8–29–55.

627,607. LOUV-A-LURE AND DESIGN. Waltzinger, Inc. SN 694,534. Pub. 3–13–56. Filed 9–12–55.

627,608. INSULPANEL. Keasbey & Mattison Company. SN 694,577. Pub. 3–13–56. Filed 9–13–55.

627,609. MET-L-GLIDE AND DESIGN. Lock-Joint Window Company. SN 694,891. Pub. 3–13–56. Filed 9–19–55.

627,610. PERMACUSHION. Sexton D. Nelson. SN 695,238. Pub. 3–13–56. Filed 9–23–55.

627,611. WEATHERPAD. The Ruberoid Co. SN 695,941. Pub. 3–13–56. Filed 10–5–55.

627,612. BETTER BILT DOOR AND DESIGN. Better Bilt Door Co. SN 696,106. Pub. 3–13–56. Filed 10–10–55.

627,613. ARMAFLEX. Armstrong Cork Company. SN 696,631. Pub. 3–13–56. Filed 10–18–55.

627,614. KOLDROK. Selby, Battersby & Company. SN 696,745. Pub. 3–13–56. Filed 10–19–55.

627,615. SUN KING AND DESIGN. Sun-King Manufacturing & Sales Co. SN 696,846. Pub. 3–13–56. Filed 10–20–55.

627,616. EVEN-UP. Ajax Floor Products Corp. SN 700,146. Pub. 3–13–56. Filed 11–14–55.

627,617. METAFORMS. Metal Forms Corporation. SN 700,159. Pub. 3–13–56. Filed 12–19–55.

CLASS 13

627,618. GREASE MASTER. Percy Jepson. SN 667,805. Pub. 3–13–56. Filed 6–7–54.

627,619. SWINGIN' SPRAY. Meinor Metal Products Co., Inc. SN 668,266. Pub. 3–13–56. Filed 6–15–54.

627,620. K KELLER TOOLS AND DESIGN. Keller Tool Company, to Gardner-Denver Company. SN 677,964. Pub. 3–13–56. Filed 12–8–54.

627,621. EZEGLIDE. Harrison (Birmingham) Ltd. SN 682,920. Pub. 3–13–56. Filed 3–7–55.

627,622. B & G AND DESIGN. Bell & Gossett Company. SN 684,010. Pub. 3–13–56. Filed 3–23–55.

627,623. ARBYCRAFT. Arbycraft Company. SN 684,794. Pub. 3–13–56. Filed 4–4–55.

627,624. ARNED. Arned Manufacturing Co., to Arned Manufacturing Company, Inc. SN 688,886. Pub. 3–13–56. Filed 6–6–55.

CLASS 14

627,625. TENN-TEX ALLOY & CHEMICAL CORPORATION T AND DESIGN. Tenn-Tex Alloy & Chemical Corporation. SN 666,227. Pub. 3–13–56. Filed 5–12–54.

627,626. SMQ. A. Finkl & Sons Company. SN 693,517. Pub. 3–13–56. Filed 4–13–55.

627,627. TRANSONIC. United States Steel Corporation. SN 697,725. Pub. 3–13–56. Filed 11–4–55.

627,628. MULTIGRAPH. Addressograph-Multigraph Corporation. SN 698,007. Pub. 3–13–56. Filed 11–10–55.

627,629. INCOLOY "901." The International Nickel Company, Inc. SN 698,038. Pub. 3–13–56. Filed 11–10–55.

627,630. STONEWALL. United American Metals Corporation. SN 698,315. Pub. 3–13–56. Filed 11–15–55.

627,631. CRAIRMO. Henry Disston & Sons, Incorporated. SN 698,589. Pub. 3–13–56. Filed 11–21–55.

CLASS 15

627,632. ORE-LUBE ETC. AND DESIGN. Hyman Silverstein, d. b. a. Keystone Lamp Company. SN 690,103. Pub. 3–13–56. Filed 6–23–55.

627,633. B AND DESIGN OF AN ELEPHANT. Bulk Petroleum Corporation. SN 691,750. Pub. 3–13–56. Filed 7–22–55.

627,634. ISONOL. Shell Chemical Corporation. SN 692,090. Pub. 3–13–56. Filed 7–28–55.

CLASS 16

627,635. WHITE ANNULAR BAND ENCIRCLING DRUM. Nuodex Products Co., Inc. SN 576,879. Pub. 3–13–56. Filed 4–9–49.

627,636. CARSLEY AND DESIGN. Carsley Products, Inc. SN 643,638. Pub. 3–13–56. Filed 3–16–53.

627,637. ALKROME. Del-Krome Corp. SN 657,696. Pub. 3–13–56. Filed 12–9–53.

627,638. ADDEX. The Lubrizol Corporation. SN 658,534. Pub. 3–13–56. Filed 12–24–53.

627,639. REE-STORE. Ree-Store, Inc. SN 680,097. Pub. 3–13–56. Filed 1–18–55.

627,640. REPRESENTATION OF BOY SKIING. Aktiebolaget Wallco. SN 689,601. Pub. 3–13–56. Filed 6–16–55.

627,641. NALPLEX. National Lead Company. SN 694,247. Pub. 3–13–56. Filed 9–6–55.

627,642. LIMBER KOTE. Norm-Mil Marine Paint Company. SN 696,722. Pub. 3–13–56. Filed 10–19–55.

627,643. CEMENTECT. W. W. Lawrence & Company. SN 700,154. Pub. 3–13–56. Filed 12–15–55.

627,644. TIGER BRAND. W. W. Lawrence & Company. SN 700,158. Pub. 3–13–56. Filed 12–15–55.

CLASS 18

627,645. ROERIG AND DESIGN. Chas. Pfizer & Co., Inc. SN 671,115. Pub. 3–13–56. Filed 8–4–54.

627,646. VETTERIN AND DESIGN. Edward Olson. SN 675,309. Pub. 3–13–56. Filed 10–22–54.

627,647. SERVICE PHARMACY AND DESIGN. Service Pharmacy, Inc. SN 675,833. Pub. 3–13–56. Filed 11–1–54.

627,648. GLENVIEW LES-I-THIN. Glenview Laboratories, Inc. SN 675,883. Pub. 3–13–56. Filed 11–2–54.

627,649. VESTIBULINE. The Purdue Frederick Company. SN 676,532. Pub. 3–13–56. Filed 11–12–54.

627,650. ES. The Upjohn Company. SN 680,429. Pub. 3–13–56. Filed 1–24–55.

627,651. ROYAGEL. Recherches et Propagande Scientifiques Société à Responsabilité Limitée. SN 684,344. Pub. 3–13–56. Filed 3–28–55.

627,652. PROSTATORIES. W. Watt Summers, d. b. a. Watt's Products Company. SN 684,357. Pub. 3–13–56. Filed 3–28–55.

627,653. ALUGEL. Societe Anonyme Dite: Etablissements Schmitt-Jourdan. SN 686,001. Pub. 3–13–56. Filed 4–21–55.

627,654. DOZOFF AND DESIGN. Manhattan Drug Company. SN 688,166. Pub. 3–13–56. Filed 5–24–55.

627,655. MIOKON. Mallinckrodt Chemical Works. SN 689,398. Pub. 3–13–56. Filed 6–13–55.

627,656. PEGANONE. Abbott Laboratories. SN 690,587. Pub. 3–13–56. Filed 7–1–55.

627,657. S-ALGIN. Barnes-Hind Laboratories, Inc. SN 690,857. Pub. 3–13–56. Filed 7–7–55.

627,658. KAODENE. S. Pfeiffer Mfg. Co., now by change of name The Pfeiffer Co. SN 690,965. Pub. 3–13–56. Filed 7–8–55.

627,659. DARCOPHEROL. Norman Dartell, d. b. a. Dartell Laboratories. SN 691,014. Pub. 3–13–56. Filed 7–11–55.

627,660. A-P-N. Miles Laboratories, Inc. SN 691,064. Pub. 3–13–56. Filed 7–11–55.

627,661. IMUFORT. Chas. Pfizer & Co., Inc. SN 691,146. Pub. 3–13–56. Filed 7–12–55.

627,662. CORYBAN. Chas. Pfizer & Co., Inc. SN 691,147. Pub. 3–13–56. Filed 7–12–55.

627,663. WYNLIT TIMOREX AND DESIGN. Wynlit Pharmaceuticals, Inc. SN 691,184. Pub. 3–13–56. Filed 7–12–55.

627,664. MAGNEURAL. Nordmark-Werke Gesellschaft mit beschrankter Haftung. SN 691,230. Pub. 3–13–56. Filed 7–13–55.

627,665. HOMAGENETS. The S. E. Massengill Company. SN 691,491. Pub. 3–13–56. Filed 7–18–55.

627,666. HYPERTENCIN. Consolidated Midland Corporation. SN 691,667. Pub. 2–28–56. Filed 7–21–55.

627,667. ABSOLVO. Absolvo Manufacturing Company. SN 700,144. Pub. 3–13–56. Filed 11–22–55.

CLASS 19

627,668. HERITAGE. Studebaker-Packard Corporation. SN 692,876. Pub. 3–13–56. Filed 8–11–55.

CLASS 21

627,669. HAVANA. Viking Manufacturing Co., Inc. SN 665,457. Pub. 3–13–56. Filed 4–29–54.

627,670. ECC AND DESIGN. Electronic Components Corp. SN 684,028. Pub. 3–13–56. Filed 3–23–55.

627,671. STROMBERG-CARLSON. General Dynamics Corporation, from Stromberg-Carlson Company. SN 685,530. Pub. 3–13–56. Filed 4–14–55.

627,672. MID-CO. Midco Photo Service, also d. b. a. Mid-Co Color Service and Mid-Continent Engineering Company. SN 689,853. Pub. 3–13–56. Filed 6–20–55.

627,673. SPINFAST. Scranton Storage Battery Corp. SN 690,650. Pub. 3–13–56. Filed 7–1–55.

627,674. MIXMASTER. Sunbeam Corporation. SN 692,652. Pub. 3–13–56. Filed 8–8–55.

627,675. DRILLMASTER. Sunbeam Corporation. SN 692,653. Pub. 3–13–56. Filed 8–8–55.

627,676. ELECTRO FLAME. Joe Del Francia Company. SN 696,778. Pub. 3–13–56. Filed 10–20–55.

627,677. FERNETIC SHIELDING. Perfection Mica Company. SN 696,901. Pub. 3–13–56. Filed 10–21–55.

627,678. CO-NETIC SHIELDING. Perfection Mica Company. SN 696,902. Pub. 3–13–56. Filed 10–21–55.

627,679. NETIC SHIELDING. Perfection Mica Company. SN 696,903. Pub. 3–13–56. Filed 10–21–55.

627,680. SUNBEAM. Sunbeam Corporation. SN 697,040. Pub. 3–13–56. Filed 10–24–55.

627,681. SUNBEAM. Sunbeam Corporation. SN 697,041. Pub. 3–13–56. Filed 10–24–55.

627,682. SUNBEAM. Sunbeam Corporation. SN 697,042. Pub. 3–13–56. Filed 10–24–55.

627,683. SUNBEAM. Sunbeam Corporation. SN 697,045. Pub. 3–13–56. Filed 10–24–55.

627,684. ELENCO. Elkhart Engineering Corporation. SN 697,214. Pub. 3–13–56. Filed 10–27–55.

627,685. GUIDE T-3 SAFETY-AIM AND DESIGN. General Motors Corporation. SN 697,220. Pub. 3–13–56. Filed 10–27–55.

627,686. SAFE-T-ALARM. Safe-T-Alarm, Inc. SN 697,324. Pub. 3–13–56. Filed 10–28–55.

627,687. IRC AND DESIGN. International Resistance Company. SN 697,373. Pub. 3–13–56. Filed 10–31–55.

627,688. COPALUM. Aircraft-Marine Products, Inc. SN 697,519. Pub. 3–13–56. Filed 11–2–55.

627,689. SHETLAND FOODSMITH. The Shetland Co., Inc. SN 697,706. Pub. 3–13–56. Filed 11–4–55.

627,690. CERAMO. Thermo Electric Co., Inc. SN 697,720. Pub. 3–13–56. Filed 11–4–55.

627,691. WHIRL TENNA. K-G Electronics Corp. SN 697,797. Pub. 3–13–56. Filed 11–7–55.

627,692. MIXMASTER. Sunbeam Corporation. SN 697,862. Pub. 3–13–56. Filed 11–7–55.

CLASS 22

627,693. JUNIOR. Junior Toy Corporation. SN 679,882. Pub. 3–13–56. Filed 12–20–54.

627,694. KLIP KARD. Joseph F. Chamberlin, d. b. a. Chamberlin Metal Products. SN 680,364. Pub. 3–13–56. Filed 1–24–55.

627,695. BEN HOGAN. Ben Hogan Company. SN 684,839. Pub. 3–13–56. Filed 4–4–55.

627,696. SWING BAND. New York Merchandising Co., Inc. SN 686,209. Pub. 3–13–56. Filed 4–25–55.

627,697. SPIN WHEEL AND DESIGN. James E. Lyons, Sr., d. b. a. Lyons Tackle Co. SN 686,669. Pub. 3–13–56. Filed 5–2–55.

627,698. SINKER. Marlen Metal Products Company. SN 690,288. Pub. 3–13–56. Filed 6–27–55.

627,699. ERNIE'S LITTLE DEMON "MINNO." John H. Ernenputsch. SN 690,445. Pub. 3–13–56. Filed 6–29–55.

627,700. FAMOUS PLAYERS. Wilson Sporting Goods Co. SN 690,516. Pub. 3–13–56. Filed 6–29–55.

627,701. GOLFCRAFT AND DESIGN. Golfcraft, Inc. SN 690,548. Pub. 3–13–56. Filed 6–30–55.

627,702. HOBBILURE. Par Manufacturing Co. SN 690,637. Pub. 3–13–56. Filed 7–1–55.

627,703. HUB'S CHUB. Warren D. Hubbard, Jr. SN 690,883. Pub. 3–13–56. Filed 7–7–55.

627,704. GOOF'T. Harold C. Manley, d. b. a. Gopher Game Co. SN 690,894. Pub. 3–13–56. Filed 7–7–55.

627,705. GOLDEE-BEARS. Harold C. Manley, d. b. a. Gopher Game Co. SN 690,895. Pub. 3–13–56. Filed 7–7–55.

627,706. HED-MITS. Charles F. Clark, Inc. SN 691,006. Pub. 3–13–56. Filed 7–11–55.

627,707. GLITTER SPIN. Cheerio Toys, Inc. SN 691,432. Pub. 3–13–56. Filed 7–18–55.

627,708. "WASH OUT." Selchow & Righter Company. SN 691,518. Pub. 3–13–56. Filed 7–18–55.

CLASS 23

627,709. AIRTEX ETC. AND DESIGN. Chefford Master Mfg. Co. Inc., now by change of name Airtex Products Inc. SN 637,239. Pub. 3–13–56. Filed 10–27–52.

627,710. SUPER-CENTACTOR. The Sharples Corporation. SN 661,667. Pub. 3–13–56. Filed 2–25–54.

627,711. CLEVELAND SPEED VARIATOR AND DESIGN (CIRCULAR). The Cleveland Worm & Gear Company. SN 663,356. Pub. 3–13–56. Filed 3–26–54.

627,712. FRIODUR. J. A. Henckels Zwillingswerk A. G. SN 663,909. Pub. 3–13–56. Filed 4–5–54.

627,713. EMHART. Emhart Manufacturing Company. SN 666,340. Pub. 3–13–56. Filed 5–14–54.

627,714. HE IN CIRCLE. Emhart Manufacturing Company. SN 666,341. Pub. 3–13–56. Filed 5–14–54.

627,715. SPRAY-LUBE. C. A. Norgren Company. SN 666,508. Pub. 3–13–56. Filed 5–17–54.

627,716. MOTREX. Fred M. Schwartz, d. b. a. Motor Exchange. SN 668,590. Pub. 3–13–56. Filed 6–21–54.

627,717. SOHN SUPER SLICER. Allen O. Sohn, d. b. a. Sohn Machine Co. SN 672,110. Pub. 3–13–56. Filed 8–23–54.

627,718. C/R AND DESIGN. Chicago Rawhide Manufacturing Company. SN 679,559. Pub. 3–13–56. Filed 1–7–55.

627,719. TWINLIGHT BRAND. Luther Walling, d. b. a. Walling Supply Company. SN 679,620. Pub. 3–13–56. Filed 1–7–55.

627,720. CLEAR-VIEW. Hazel J. Hawkinson. SN 679,905. Pub. 3–13–56. Filed 1–14–55.

627,721. DYNA-CRIMP. Aircraft-Marine Products, Inc. SN 680,652. Pub. 3–13–56. Filed 1–28–55.

627,722. HYDROPUMP. Zephyr Laundry Machinery Company, d. b. a. The Hydraxtor Company. SN 680,708. Pub. 3–13–56. Filed 1–28–55.

627,723. TORMAG AND DESIGN. Tormag Transmissions Limited. SN 681,221. Pub. 3–13–56. Filed 2–7–55.

627,724. BAITAIR AND DESIGN. Baitair Corporation, Ltd. SN 682,533. Pub. 9–27–55. Filed 3–1–55.

627,725. ROTO-WEDGE-LOCK. Harris Products. SN 688,326. Pub. 3–6–56. Filed 5–26–55.

627,726. DORRCO D-SANDER. Dorr-Oliver Incorporated. SN 688,914. Pub. 3–13–56. Filed 6–6–55.

627,727. STROMBOLISATION. Societe Francaise d'Etudes et de Realisations d'Inventions Coanda. SN 689,090. Pub. 3–13–56. Filed 6–7–55.

627,728. SILEX-HANDYHOT. The Silex Company. SN 690,839. Pub. 3–13–56. Filed 7–6–55.

627,729. HI=TONS. Robert L. Fetty. SN 691,614. Pub. 3–13–56. Filed 7–20–55.

627,730. TRACE-A-MATIC AND DESIGN. U. S. Industries, Inc., d. b. a. Axelson Manufacturing Company, Division of U. S. Industries, Inc. SN 691,818. Pub. 2–7–56. Filed 7–25–55.

627,731. ALMA. Alma Office Machine Corp. SN 693,583. Pub. 3–13–56. Filed 8–24–55.

627,732. ALMA AND DESIGN. Alma Office Machine Corp. SN 693,584. Pub. 3–13–56. Filed 8–24–55.

627,733. JOLSON ALMA AND DESIGN. Alma Office Machine Corp. SN 693,585. Pub. 3–13–56. Filed 8–24–55.

627,734. ROTO-KING. Viking Pump Company. SN 694,105. Pub. 3–13–56. Filed 9–1–55.

627,735. CHEM-THERM. Chem-Therm Mfg. Co., Inc. SN 694,198. Pub. 3–13–56. Filed 9–6–55.

627,736. STREET MASTER. Marion A. Elliotte. SN 694,216. Pub. 3–13–56. Filed 9–6–55.

627,737. VACFORM AND DESIGN. Vacuum Forming Corporation. SN 694,396. Pub. 3–13–56. Filed 9–8–55.

627,738. ROL-R-DOLLY. Arnolt Corporation. SN 695,070. Pub. 3–13–56. Filed 9–21–55.

627,739. NICO. National Iron Company. SN 695,102. Pub. 3–13–56. Filed 9–21–55.

627,740. MONOMAST. Hyster Company. SN 695,225. Pub. 3–13–56. Filed 9–23–55.

627,741. SAKS-FIFTH AVENUE. Saks & Company. SN 695,353. Pub. 3–13–56. Filed 9–26–55.

627,742. TUFMATIC. The Osborn Manufacturing Company. SN 695,564. Pub. 3–13–56. Filed 9–29–55.

627,743. DIECO. E. W. Bliss Company. SN 695,603. Pub. 3–13–56. Filed 9–30–55.

627,744. ECHOTONE. Hollywood Deep Tone Mfg. Co. SN 695,626. Pub. 3–13–56. Filed 9–30–55.

627,745. WORM-O-MAT BAIT-O-MAT. Ross Allen, Jr. and Bernard M. Chaffin. SN 695,794. Pub. 3–13–56. Filed 10–4–55.

627,746. STRONG ARM AND DESIGN. Gar Wood Industries, Inc. SN 695,813. Pub. 3–13–56. Filed 10–4–55.

627,747. VAN BRODE AND DESIGN. Van Brode Milling Co., Inc. SN 695,859. Pub. 3–13–56. Filed 10–4–55.

627,748. BLAKESLEE. G. S. Blakeslee & Co. SN 695,884. Pub. 3–13–56. Filed 10–5–55.

627,749. MEMCO. Modern Engraving & Machine Co. SN 695,929. Pub. 3–13–56. Filed 10–5–55.

627,750. TRU FLEX. Sutton Tool Company. SN 695,957. Pub. 3–13–56. Filed 10–5–55.

627,751. EC AND DESIGN. East Chicago Machine Tool Corp. SN 695,974. Pub. 3–13–56. Filed 10–6–55.

627,752. REDI-FLOW. Barber-Greene Company. SN 696,011. Pub. 3–13–56. Filed 10–7–55.

627,753. FROST TWINS AND DESIGN. Millers Falls Company. SN 696,452. Pub. 3–13–56. Filed 10–14–55.

627,754. "WIDETRAK." Cochran Equipment Company. SN 696,500. Pub. 3–13–56. Filed 10–17–55.

627,755. BOROPTIC. Societe Genevoise d'Instruments de Physique. SN 696,672. Pub. 3–13–56. Filed 10–18–55.

627,756. SUNBEAM. Sunbeam Corporation. SN 697,043. Pub. 3–13–56. Filed 10–24–55.

627,757. BURR-KING. Donald W. MacCarthy, d. b. a. MacCarthy Manufacturing Co. SN 697,230. Pub. 3–13–56. Filed 10–27–55.

627,758. DESIGN OF SCOTCHMAN. National Engineering Company. SN 697,311. Pub. 3–13–56. Filed 10–28–55.

627,759. ATLAS. Atlas Supply Company. SN 697,895. Pub. 3–13–56. Filed 11–8–55.

627,760. COLUMBUS AND DESIGN. Roberto Meli, d. b. a. Roberto Meli Officine Elettromeccaniche. SN 698,190. Pub. 3–13–56. Filed 11–14–55.

627,761. JIFFY-BAK. Lummis Mfg. Co. SN 698,443. Pub. 3–13–56. Filed 11–17–55.

627,762. ROCKETDYNE. North American Aviation, Inc. SN 698,542. Pub. 3–13–56. Filed 11–18–55.

627,763. INTERNATIONAL CUB. International Harvester Company. SN 698,876. Pub. 3–13–56. Filed 11–25–55.

627,764. LO BOY. International Harvester Company. SN 698,877. Pub. 3–13–56. Filed 11–25–55.

627,765. UNICON. National Water Lift Company, to The Cleveland Pneumatic Tool Company. SN 698,899. Pub. 3–13–56. Filed 11–25–55.

627,766. MICRO-TWIN. Sunbeam Corporation. SN 699,114. Pub. 3–13–56. Filed 11–29–55.

627,767. VISE GRIP AND DESIGN. Petersen Manufacturing Company, Inc. SN 699,590. Pub. 3–13–56. Filed 12–7–55.

627,768. CARDOX. Cardox Corporation. SN 699,772. Pub. 3–13–56. Filed 12–12–55.

627,769. CARDOX FOAM-MAKER. Cardox Corporation. SN 699,773. Pub. 3–13–56. Filed 12–12–55.

627,770. PAYLIFTER. The Frank G. Hough Co. SN 700,028. Pub. 3–13–56. Filed 12–15–55.

627,771. PAYFORK. The Frank G. Hough Co. SN 700,029. Pub. 3–13–56. Filed 12–15–55.

627,772. BARCALO. Barcalo Manufacturing Company. SN 700,175. Pub. 3–13–56. Filed 12–19–55.

627,773. E-B. Sunbeam Corporation. SN 700,275. Pub. 3–13–56. Filed 12–19–55.

627,774. SLANT. R. Wallace & Sons Manufacturing Company. SN 700,284. Pub. 3–13–56. Filed 12–19–55.

627,775. LIDO AND DESIGN. Amswiss Sewing Machine Inc. SN 700,293. Pub. 3–13–56. Filed 12–20–55.

627,776. DAVIS-STANDARD. The Standard Machinery Company. SN 700,393. Pub. 3–13–56. Filed 12–21–55.

CLASS 24

627,777. RESUDSER. Borg-Warner Corporation. SN 691,821. Pub. 3–13–56. Filed 7–25–55.

CLASS 26

627,778. RESULTA. Paul Bruning, d. b. a. Paul Bruning Maschinen- und Werzeugfabrik. SN 668,233. Pub. 8–30–55. Filed 6–15–54.

627,779. (See Class 38 for this trademark.)

627,780. MONOSTROB. Strobo Research. SN 678,822. Pub. 3–13–56. Filed 12–22–54.

627,781. W AND DESIGN. H. Dudley Wright, d. b. a. Wright Engineering Company. SN 680,498. Pub. 3–13–56. Filed 1–25–55.

627,782. DANFOSS. Danfoss ved Mads Clausen. SN 681,387. Pub. 1–31–56. Filed 1–6–55.

627,783. B & G AND DESIGN. Bell & Gossett Company. SN 684,013. Pub. 3–13–56. Filed 3–23–55.

627,784. RIEHLE. American Machine and Metals, Inc. SN 685,234. Pub. 3–13–56. Filed 4–11–55.

627,785. GORDON ENTERPRISES SERVING THE WORLD AND DESIGN. Alan B. Gordon, d. b. a. Gordon Enterprises. SN 685,701. Pub. 3–13–56. Filed 4–18–55.

627,786. VITAMETER. Electronic Test Instrument Corp. SN 688,289. Pub. 3–13–56. Filed 5–31–55.

627,787. CERTO. Certo-Camera-Werk von der Gönna und Söhne. SN 688,708. Pub. 3–13–56. Filed 6–2–55.

627,788. WESTAGON. Isco Optische Werke G. m. b. H. SN 688,824. Pub. 3–13–56. Filed 6–3–55.

627,789. WESTANAR. Isco Optische Werke G. m. b. H. SN 688,825. Pub. 3–13–56. Filed 6–3–55.

627,790. MAMIYA–16. Mamiya Koki Kabushiki-Kaisha (in English style Mamiya Camera Co., Ltd.). SN 690,014. Pub. 3–13–56. Filed 6–22–55.

627,791. MAMIYA–35. Mamiya Koki Kabushiki-Kaisha (in English style Mamiya Camera Co., Ltd.). SN 690,015. Pub. 3–13–56. Filed 6–22–55.

627,792. MAMIYAFLEX. Mamiya Koki Kabushiki-Kaisha (in English style Mamiya Camera Co., Ltd.). SN 690,016. Pub. 3–13–56. Filed 6–22–55.

627,793. ANATOMICAL. The Kono Manufacturing Company, to Kono Manufacturing Co. Inc. SN 690,954. Pub. 3–13–56. Filed 7–8–55.

627,794. VARI-FLEX. Hamner Electronics Company, Inc. SN 691,857. Pub. 3–13–56. Filed 7–25–55.

627,795. VORNADO. The O. A. Sutton Corporation, Inc. SN 692,174. Pub. 3–13–56. Filed 7–29–55.

627,796. TRI-SITE. Clay-Adams, Inc. SN 692,575. Pub. 3–13–56. Filed 8–8–55.

627,797. RHEOMETER. Drage Products, Inc. SN 692,583. Pub. 3–13–56. Filed 8–8–55.

627,798. ROLLEIDOSCOP. Franke & Heidecke, Fabrik Photographischer Präzisions-Apparate. SN 693,910. Pub. 3–13–56. Filed 8–30–55.

627,799. PERCEPTOSCOPE. Perceptual Development Laboratories, Incorporated. SN 695,108. Pub. 3–13–56. Filed 9–21–55.

627,800. SAKS-FIFTH AVENUE. Saks & Company. SN 695,354. Pub. 3–13–56. Filed 9–26–55.

627,801. AL-SI-CO. Allied Scientific Corporation. SN 695,674. Pub. 3–13–56. Filed 10–3–55.

627,802. BL AND DESIGN. Benson-Lehner Corporation. SN 696,012. Pub. 3–13–56. Filed 10–7–55.

627,803. ALGHA. M. Wiseman & Co., Ltd. SN 696,341. Pub. 3–13–56. Filed 10–12–55.

627,804. WEATHER-KEY. Longines-Wittnauer Watch Co., Inc. SN 696,449. Pub. 3–13–56. Filed 10–14–55.

627,805. RAKSCOPE. Waterman Products Company, Inc. SN 696,679. Pub. 3–13–56. Filed 10–18–55.

627,806. 4TH DIMENSIONAL. Kono Manufacturing Co. Inc. SN 696,992. Pub. 3–13–56. Filed 10–24–55.

627,807. MICRO-TWIN. Bell & Howell Company. SN 697,079. Pub. 3–13–56. Filed 10–25–55.

627,808. COUNT-O-LARM. Robert Zelinsky, d. b. a. Count-O-Larm Co. SN 697,129. Pub. 3–13–56. Filed 10–25–55.

627,809. PRINCE. Quick-Set, Incorporated. SN 697,413. Pub. 3–13–56. Filed 10–31–55.

627,810. GEARAPAN. Quick-Set, Incorporated. SN 697,414. Pub. 3–13–56. Filed 10–31–55.

CLASS 27

627,811. DUREX. Cosmo Spignese. SN 689,176. Pub. 3–13–56. Filed 6–8–55.

627,812. CLEBAR. Edward Trauner, Inc. SN 689,250. Pub. 3–13–56. Filed 6–9–55.

627,813. GOODRICH. Benrus Watch Company, Inc. SN 693,799. Pub. 3–13–56. Filed 8–29–55.

627,814. SAKS-FIFTH AVENUE. Saks & Company. SN 695,350. Pub. 3–13–56. Filed 9–26–55.

CLASS 28

627,815. OXFORD. Gemex Company. SN 683,390. Pub. 3–13–56. Filed 3–14–55.

627,816. JEMS BY JMS AND DESIGN. JMS Jewlery Mfg. Co. SN 684,846. Pub. 3–13–56. Filed 4–4–55.

627,817. COLORART. The Stylist Sprayers Co. SN 694,528. Pub. 3–13–56. Filed 9–12–55.

627,818. SAKS-FIFTH AVENUE. Saks & Company. SN 695,647. Pub. 3–13–56. Filed 9–30–55.

CLASS 29

627,819. ALEXANDRA DE MARKOFF. Alexandra de Markoff Sales Corporation. SN 694,785. Pub. 3–13–56. Filed 9–16–55.

627,820. ROBIN HOOD. Johnson & Johnson. SN 696,044. Pub. 3–13–56. Filed 10–7–55.

627,821. SAKS-FIFTH AVENUE. Saks & Company. SN 696,743. Pub. 3–13–56. Filed 10–19–55.

CLASS 30

627,822. CARRARA MODERN BY IROQUOIS. Iroquois China Company. SN 673,453. Pub. 9–6–55. Filed 9–20–54.

CLASS 31

627,823. MAJESTIC. The Wilcox-Gay Corporation. SN 660,686. Pub. 3–13–56. Filed 2–5–54.

627,824. KING FROST FROSTER KING. Edward J. King. SN 668,390. Pub. 3–13–56. Filed 6–17–54.

627,825. MICROPAK. Purolator Products, Inc. SN 676,661. Pub. 3–13–56. Filed 11–15–54.

627,826. CRUIS-PAK. Outboard, Marine & Manufacturing Company. SN 684,058. Pub. 3–13–56. Filed 3–23–55.

627,827. FROSTY-PAK. Strauss Stores Corporation. SN 684,168. Pub. 3–13–56. Filed 3–24–55.

627,828. SAVAGE AND DESIGN. Savage Arms Corporation. SN 699,598. Pub. 3–13–56. Filed 12–7–55.

627,829. SAVAGE AND DESIGN. Savage Arms Corporation. SN 699,599. Pub. 3–13–56. Filed 12–7–55.

627,830. DESIGN OF INDIAN HEAD. Savage Arms Corporation. SN 699,600. Pub. 3–13–56. Filed 12–7–55.

CLASS 32

627,831. SAMAS. Powers-Samas Accounting Machines Limited. SN 663,207. Pub. 3–13–56. Filed 3–24–54.

627,832. SAMAS PUNCHED CARD ACCOUNTING AND DESIGN. Powers-Samas Accounting Machines Limited. SN 663,208. Pub. 3–13–56. Filed 3–24–54.

627,833. ARTCO CORPORATION RAK-A-TIER AND DESIGN. Artco Corporation. SN 663,416. Pub. 3–13–56. Filed 3–29–54.

627,834. DOR-BAK AND DESIGN. Dor-Bak Corporation. SN 672,273. Pub. 3–13–56. Filed 8–26–54.

627,835. BIRCHCRAFT BY BAUMRITTER AND DESIGN. T. Baumritter Co. Inc. SN 677,029. Pub. 3–13–56. Filed 11–22–54.

627,836. CARTERLOK. Ralph E. Driskel, d. b. a. Driskel Co. SN 678,973. Pub. 3–13–56. Filed 12–27–54.

627,837. DRISCOTOP. Ralph E. Driskel, d. b. a. Driskel Co. SN 678,974. Pub. 3–13–56. Filed 12–27–54.

627,838. STURDI-BILT. Sturdi-Bilt Steel Products, Inc. SN 679,808. Pub. 3–13–56. Filed 1–12–55.

627,839. COUNTRY FLAIR. Herbert Cordier, d. b. a. Continental House. SN 682,239. Pub. 3–13–56. Filed 2–24–55.

627,840. COUNTRY BAROQUE. Herbert Cordier, d. b. a. Continental House. SN 682,240. Pub. 3–13–56. Filed 2–24–55.

627,841. POSTURE-PLUS. Columbia Bedding Company. SN 690,431. Pub. 3–13–56. Filed 6–29–55.

627,842. SHOW-PIECES AND DESIGN. General Plywood Corporation. SN 696,430. Pub. 3–13–56. Filed 10–14–55.

627,843. TRANS-EAST. Consider H. Willett, Inc. SN 696,482. Pub. 3–13–56. Filed 10–14–55.

627,844. ELDORADO. American Seating Company. SN 696,488. Pub. 3–13–56. Filed 10–17–55.

627,845. LUTERMA V AND DESIGN. Venesta Limited. SN 696,607. Pub. 3–13–56. Filed 10–17–55.

CLASS 34

627,846. MESSER. Adolf Messer G. m. b. H. SN 671,847. Pub. 3–13–56. Filed 8–17–54.

627,847. MOTOR STOKOR. Hershey Motorstokor, Inc. SN 692,231. Pub. 3–13–56. Filed 8–1–55.

627,848. FIREHOOD AND DESIGN. Condon-King Co., Inc. SN 692,384. Pub. 3–13–56. Filed 8–3–55.

627,849. RAYPAK AND DESIGN. Raypak Company, Inc. SN 692,546. Pub. 3–13–56. Filed 8–5–55.

627,850. LAWSON AND DESIGN. Price Supply Company. SN 693,186. Pub. 3–13–56. Filed 8–16–55.

627,851. MURALITE. Holophane Company, Inc. SN 693,381. Pub. 3–13–56. Filed 8–19–55.

627,852. M-PEL-AIR. Brookside Products Co., Inc. SN 693,520. Pub. 3–13–56. Filed 8–23–55.

627,853. JETLESS-SELFVAPO BRAND. George J. Heberlein, d. b. a. Heberlein Manufacturing Co. SN 693,547. Pub. 3–13–56. Filed 8–23–55.

627,854. GLASS GUARD DEARBORN AND DESIGN. Dearborn Stove Company. SN 693,668. Pub. 3–13–56. Filed 8–25–55.

CLASS 35

627,855. "REALITE." American Extruded Products Co. SN 684,789. Pub. 3–13–56. Filed 4–4–55.

627,856. SO-TITE AND DESIGN. T-M Products, Inc. SN 687,328. Pub. 3–13–56. Filed 5–11–55.

627,857. SOUTHERN DOUBLE=LOCK AND DESIGN. Southern Friction Materials Company. SN 697,033. Pub. 3–13–56. Filed 10–24–55.

627,858. POWER-LUG. Seiberling Rubber Company. SN 697,326. Pub. 3–13–56. Filed 10–28–55.

CLASS 36

627,859. AMERICAN TRIUMPH. Harry Pedler & Sons, Inc. SN 679,603. Pub. 3–13–56. Filed 1–7–55.

627,860. BLACK DIAMOND. National Musical String Co. SN 695,639. Pub. 3–13–56. Filed 9–30–55.

627,861. SAKS-FIFTH AVENUE. Saks & Company. SN 696,837. Pub. 3–13–56. Filed 10–20–55.

CLASS 37

627,862. BOND STREET. Crocker, Burbank Papers Inc. SN 689,356. Pub. 3–13–56. Filed 6–13–55.

627,863. HOL-DEX. Cel-U-Dex Corporation. SN 690,602. Pub. 3–13–56. Filed 7–1–55.

627,864. PRIZE. Sterling Pulp & Paper Company. SN 690,660. Pub. 3–13–56. Filed 7–1–55.

627,865. KVP KALAFOIL AND DESIGN. Kalamazoo Vegetable Parchment Co. SN 690,714. Pub. 3–13–56. Filed 7–5–55.

CLASS 38

627,779. RURAL AMERICA REVIEW. Sam Orleans & Associates, Inc. SN 671,579. Pub. 3–13–56. Filed 8–12–54.

627,866. STEPLAN. Aluminum Company of America. SN 683,013. Pub. 3–13–56. Filed 3–8–55.

627,867. BONANZAGRAM. General Features Corporation. SN 683,592. Pub. 3–13–56. Filed 3–16–55.

627,868. NOZZLE NEWS AND DESIGN. Western Mineral Products Company. SN 686,120. Pub. 3–13–56. Filed 4–22–55.

627,869. LITTLE COUSIN. L. C. Page & Company, Inc. SN 694,085. Pub. 3–13–56. Filed 9–1–55.

627,870. GREAT MOMENTS IN SPORTS. Brown & Bigelow. SN 694,470. Pub. 3–13–56. Filed 9–12–55.

627,871. GOOD MORNING. The Hearst Corporation. SN 694,645. Pub. 3–13–56. Filed 9–14–55.

627,872. GOOD EVENING. The Hearst Corporation. SN 694,646. Pub. 3–13–56. Filed 9–14–55.

627,873. MERIDIAN BOOKS. The Noonday Press. SN 694,812. Pub. 3–13–56. Filed 9–16–55.

627,874. KANVET. Chicago Show Printing Company. SN 694,855. Pub. 3–13–56. Filed 9–19–55.

627,875. AMERICAN SPECTATOR. Judy Publishing Company. SN 694,886. Pub. 3–13–56. Filed 9–19–55.

627,876. SR. Social Register Association. SN 694,923. Pub. 3–13–56. Filed 9–19–55.

627,877. GOODSTIX. Goodren Products Corporation. SN 694,996. Pub. 3–13–56. Filed 9–20–55.

627,878. MANAGERS' ROUND TABLE. Quigley Publishing Company, Inc. SN 695,179. Pub. 3–13–56. Filed 9–22–55.

627,879. MOTION PICTURE HERALD. Quigley Publishing Company, Inc. SN 695,182. Pub. 3–13–56. Filed 9–22–55.

627,880. WALLIS & WILLIS. George H. Haessler. SN 695,304. Pub. 3–13–56. Filed 9–26–55.

627,881. SALESMAN'S OPPORTUNITY. Opportunity Publishing Company. SN 695,487. Pub. 3–13–56. Filed 9–28–55.

627,882. ARCTIC. The Arctic Institute of North America. SN 696,622. Pub. 3–13–56. Filed 10–14–55.

CLASS 39

627,883. SPRIGHTLY STYLES. Jaunty Juniors, Inc. SN 668,737. Pub. 3–13–56. Filed 6–23–54.

627,884. G. T. DOWLING MATE-UP. Gus T. Dowling. SN 670,547. Pub. 3–13–56. Filed 7–26–54.

627,885. SIMON SIMPLE ETC. AND DESIGN. Simon Simple Craft and Toy Company. SN 678,887. Pub. 3–13–56. Filed 12–23–54.

627,886. VEGA DE MADRID AND DESIGN. Stratford Neckwear Co., Inc. SN 679,017. Pub. 3–13–56. Filed 12–27–54.

627,887. ROSSINI. Meyer Waldman. SN 679,123. Pub. 3–13–56. Filed 12–29–54.

627,888. BUCKINGHAM. Saks & Company. SN 684,885. Pub. 3–13–56. Filed 4–4–55.

627,889. WEEKENDER. Irwill Knitwear Corp. SN 685,712. Pub. 3–13–56. Filed 4–18–55.

627,890. "DIRTY BIRD." John R. Alongi. SN 686,872. Pub. 3–13–56. Filed 5–5–55.

627,891. LADY BRIT. Gutstein-Tuck, Inc. SN 691,036. Pub. 3–13–56. Filed 7–11–55.

627,892. DAUREINE. Saks & Company. SN 691,089. Pub. 3–13–56. Filed 7–11–55.

627,893. DOTTY KAY. Anvil Brand, Incorporated, d. b. a. Tractor Brand. SN 691,412. Pub. 3–13–56. Filed 7–18–55.

627,894. BULLDOGGING. Anvil Brand, Incorporated, d. b. a. Tractor Brand. SN 691,414. Pub. 3–13–56. Filed 7–18–55.

627,895. RULL. Bolton Leathers Limited. SN 691,428. Pub. 3–13–56. Filed 7–18–55.

627,896. CHA-CHA-CHA. Cherie Brassiere Co., Inc. SN 691,433. Pub. 3–13–56. Filed 7–18–55.

627,897. HAT-NIP. Danciger Bros. Inc. SN 691,442. Pub. 3–13–56. Filed 7–18–55.

627,898. ROBERT OF HOLLYWOOD AND DESIGN. Samuel E. Schlein, Inc. SN 691,512. Pub. 3–13–56. Filed 7–18–55.

627,899. NANCY WAYNE. Pollak Bros. Inc. SN 692,639. Pub. 3–13–56. Filed 8–8–55.

627,900. NITEY NITE BUNKEROOS ETC. The Perry Knitting Company. SN 693,268. Pub. 3–13–56. Filed 8–17–55.

627,901. DUCKLYN. S. Augstein & Co., Inc. SN 693,361. Pub. 3–13–56. Filed 8–19–55.

627,902. "SLIMTITE." Irving H. Elfenbein Co. Inc. SN 693,449. Pub. 3–13–56. Filed 8–22–55.

627,903. SERVITOR. Murphy, Brill and Sahner, Inc. SN 695,335. Pub. 3–13–56. Filed 9–26–55.

627,904. EVANS. L. B. Evans' Son Company. SN 695,472. Pub. 3–13–56. Filed 9–28–55.

CLASS 40

627,905. CONANSON AND DESIGN. Julius Cohen & Sons, Inc. SN 691,119. Pub. 3–13–56. Filed 7–12–55.

627,906. COLORTEX PROCESS. Colortex, Inc. SN 697,142. Pub. 3–13–56. Filed 10–26–55.

627,907. "PELOUSE." Armand Schwab & Co., Inc. SN 697,937. Pub. 3–13–56. Filed 11–8–55.

627,908. "MILITLACE." H. W. Schwab Textile Corp. SN 697,938. Pub. 3–13–56. Filed 11–8–55.

CLASS 42

627,909. REPRESENTATION OF A DRAGON. The Toyo Spinning Co., Ltd. SN 653,943. Pub. 3–13–56. Filed 9–29–53.

627,910. LAMP LIGHTER. Antel's, to Weldon H. Green, d. b. a. Wm. H. Green Co. SN 671,707. Pub. 3–13–56. Filed 8–16–54.

627,911. "MALIBU." Antel's, to Cabin Crafts, Inc. SN 671,708. Pub. 3–13–56. Filed 8–16–54.

627,912. BUPPO. Henry M. Smith, d. b. a. H. M. Smith Manufacturing Co. SN 673,948. Pub. 3–13–56. Filed 9–28–54.

627,913. JAXCOLITE. Gordon C. Jackson, to Jaxind, Inc. SN 678,458. Pub. 3–13–56. Filed 12–16–54.

627,914. SATIN SYLFAIRE. The Barbison Corporation. SN 687,668. Pub. 3–13–56. Filed 5–17–55.

627,915. RECOLLECTION. The Barbison Corporation. SN 687,669. Pub. 3–13–56. Filed 5–17–55.

627,916. REPRESENTATION OF A LION. G. Garnett & Sons Limited. SN 688,522. Pub. 3–13–56. Filed 5–31–55.

627,917. WEATHERAMA. All State Garment Corporation. SN 691,347. Pub. 3–13–56. Filed 7–15–55.

627,918. CHINABEE. Reliable Textile Company, Inc. SN 693,274. Pub. 3–13–56. Filed 8–17–55.

627,919. PEAUTIQUE. A. D. Juilliard & Co., Inc. SN 693,751. Pub. 3–13–56. Filed 8–26–55.

627,920. JUILLARA. A. D. Juilliard & Co., Inc. SN 693,752. Pub. 3–13–56. Filed 8–26–55.

627,921. ALL TASKS. J. P. Stevens & Co., Inc. SN 694,015. Pub. 3–13–56. Filed 8–31–55.

627,922. SILK PLUS. Laros Textiles Company. SN 695,166. Pub. 3–13–56. Filed 9–22–55.

627,923. GLUVSUEDE. Handi-Bag Co., Inc. SN 695,418. Pub. 3–13–56. Filed 9–27–55.

627,924. SNUGSTER. Gordon Bernard Company, Inc. SN 695,602. Pub. 3–13–56. Filed 9–30–55.

CLASS 43

627,925. TERLENKA. Algemene Kunstzijde Unie N. V. SN 691,600. Pub. 3–13–56. Filed 7–20–55.

627,926. MONARCH AND DESIGN. Gudebrod Bros. Silk Co., Inc. SN 698,863. Pub. 3–13–56. Filed 11–25–55.

CLASS 44

627,927. CLUE. R. D. Bruce & Company. SN 692,451. Pub. 3–13–56. Filed 8–4–55.

CLASS 45

627,928. FRENCH DRY. Natale Olivieri, also d. b. a. Natale Oliveri. SN 684,460. Pub. 3–13–56. Filed 3–29–55.

627,929. EMCO AND DESIGN. Essential Products Co., Inc. SN 684,645. Pub. 3–13–56. Filed 3–31–55.

627,930. CLIMAX. Home Brewing Company, Inc., d. b. a. Climax Beverage Company. SN 700,148. Pub. 3–13–56. Filed 11–14–55.

CLASS 46

627,931. GENTRY. Consolidated Foods Corporation, d. b. a. Gentry Division, Consolidated Foods Corporation, from Gentry, Inc. SN 514,602. Pub. 3–13–56. Filed, act of 1905, 12–20–46; am. act of 1946, 2–11–54.

627,932. FARMER BROTHERS CONSISTENTLY GOOD! AND DESIGN. Farmer Bros. Co. SN 617,751. Pub. 3–13–56. Filed 8–16–51.

627,933. CLORETS. American Chicle Company. SN 633,249. Pub. 3–13–56. Filed 7–30–52.

627,934. STAFF. Fisher Flouring Mills Company. SN 677,049. Pub. 3–13–56. Filed 11–22–54.

627,935. ROLAND. Bruno Scheidt, d. b. a. American Roland Food Co. SN 682,362. Pub. 3–13–56. Filed 2–25–55.

627,936. IDAHO GEM AND DESIGN. J. R. Simplot Co. SN 682,989. Pub. 3–13–56. Filed 3–7–55.

627,937. MANOLA. Strohmeyer & Arpe Company. SN 683,066. Pub. 3–13–56. Filed 3–8–55.

627,938. DAVID BERG AND DESIGN. David Berg & Co. SN 684,389. Pub. 3–13–56. Filed 3–29–55.

627,939. TORO. Feinberg Kosher Sausage Co., d. b. a. Bells Meat Products Co. SN 684,648. Pub. 3–13–56. Filed 3–31–55.

627,940. SALKO. Lo-Calory Food Corporation. SN 684,736. Pub. 3–13–56. Filed 4–1–55.

627,941. JIM DANDY. Western Grain Company. SN 685,540. Pub. 3–13–56. Filed 4–14–55.

627,942. ALL WEST. Johnson Fruit & Cold Storage Co. SN 685,718. Pub. 3–13–56. Filed 4–18–55.

627,943. MARY OF PUDDIN HILL AND DESIGN. Mary of Puddin Hill. SN 685,728. Pub. 3–13–56. Filed 4–18–55.

627,944. WINTER-GREEN. Shimamoto & Sons. SN 686,000. Pub. 3–13–56. Filed 4–21–55.

627,945. COFFEE TIME. F & F Laboratories, Inc. SN 686,174. Pub. 3–13–56. Filed 4–25–55.

627,946. MALLOWDEES. Fireside Marshmallow Company. SN 686,363. Pub. 3–13–56. Filed 4–27–55.

627,947. KELLKO. Spencer Kellogg and Sons, Inc. SN 686,488. Pub. 3–13–56. Filed 4–28–55.

627,948. FIESTA. McCormick & Company, Incorporated. SN 686,555. Pub. 3–13–56. Filed 4–29–55.

627,949. VITTORIA. Maillard & Schmiedell, d. b. a. Vittoria Importing Company and Fratelli Calvo. SN 686,757. Pub. 3–13–56. Filed 5–3–55.

627,950. HOLMES. General Baking Company, from Holmes & Son, Inc. SN 686,795. Pub. 3–13–56. Filed 5–12–55.

627,951. TI BETE AND DESIGN. Burrus Mills, Incorporated. SN 687,179. Pub. 3–13–56. Filed 5–10–55.

627,952. MORNING GLORY. Hales & Hunter Co. SN 687,282. Pub. 3–13–56. Filed 5–11–55.

627,953. HARDY. Briggs Lemon Association. SN 687,531. Pub. 3–13–56. Filed 5–16–55.

627,954. EL RIO ORCHARD AND DESIGN. Di Giorgio Fruit Corporation. SN 687,547. Pub. 3–13–56. Filed 5–16–55.

627,955. M. M. G. Superior Brands, Inc. SN 688,679. Pub. 3–13–56. Filed 6–1–55.

627,956. CALL-4. International Foodcraft Corporation. SN 691,539. Pub. 3–13–56. Filed 7–18–55.

627,957. IMPERIAL CLUB AND DESIGN. The E. Kahn's Sons Company. SN 691,695. Pub. 3–13–56. Filed 7–21–55.

627,958. ARCTIC C AND DESIGN. Fishery Products, Inc. SN 691,848. Pub. 3–13–56. Filed 7–25–55.

627,959. LIBERTY STREAMERS. Luce & Company, Inc. SN 692,408. Pub. 3–13–56. Filed 8–3–55.

627,960. 808. Charles William Midgley. SN 692,532. Pub. 3–13–56. Filed 8–5–55.

627,961. DESIGN OF POLICEMAN. Phelan & Taylor Produce Co., Inc. SN 692,538. Pub. 3–13–56. Filed 8–5–55.

627,962. RED GARTER AND DESIGN. Westside Farms. SN 692,667. Pub. 3–13–56. Filed 8–8–55.

627,963. CAP SHEAF. Walter Freund Bread Company. SN 692,676. Pub. 3–13–56. Filed 7–5–55.

627,964. S AND DESIGN. McCormick & Company, Incorporated. SN 693,474. Pub. 3–13–56. Filed 8–22–55.

627,965. JAZZ SUGARED PIGLETS. Cosby-Hodges Milling Company. SN 698,342. Pub. 3–13–56. Filed 11–16–55.

CLASS 47

627,966. FLEUR D'ALSACE. F. E. Hugel & Fils. SN 664,761. Pub. 3–13–56. Filed 4–19–54.

627,967. COURONNE D'ALSACE. F. E. Hugel & Fils. SN 664,865. Pub. 3–13–56. Filed 4–20–54.

627,968. STARLIGHT. De La Salle Institute, d. b. a. Mont La Salle Vineyards and as The Christian Brothers of California. SN 695,466. Pub. 3–13–56. Filed 9–28–55.

627,969. YOSEMITE. Yosemite Winery Association. SN 695,791. Pub. 3–13–56. Filed 10–3–55.

CLASS 49

627,970. HIGH & DRY. Booth's Distilleries Limited. SN 679,205. Pub. 3–13–56. Filed 12–31–54.

CLASS 50

627,971. CROWN AND DESIGN. Crown Cork & Seal Company, Inc. SN 671,493. Pub. 3–13–56. Filed 8–11–54.

627,972. ERBE AND DESIGN. Terminal Construction Corp. SN 679,243. Pub. 3–13–56. Filed 12–31–54.

627,973. PAR-T-WARE. Bachmann Bros., Inc. SN 685,088. Pub. 3–13–56. Filed 4–7–55.

627,974. SKWEEG-IT. C. G. Mitchell, Inc. SN 695,637. Pub. 3–13–56. Filed 9–30–55.

CLASS 51

627,975. THE ANSWER TO THE BURNING QUESTION. Mathieson Chemical Corporation, now by merger and change of name Olin Mathieson Chemical Corporation. SN 663,929. Pub. 3–13–56. Filed 4–5–54.

627,976. APISERUM. Josephine Grasser. SN 672,948. Pub. 3–13–56. Filed 9–9–54.

627,977. CORALLE. Hans Schwarzkopf. SN 679,241. Pub. 3–13–56. Filed 12–31–54.

627,978. PINK FROSTING. The Andrew Jergens Company, d. b. a. Jergens. SN 681,016. Pub. 3–13–56. Filed 2–3–55.

627,979. DOUBLE BARREL. Olin Mathieson Chemical Corporation. SN 688,447. Pub. 3–13–56. Filed 5–27–55.

627,980. REPEATER. Olin Mathieson Chemical Corporation. SN 688,449. Pub. 3–13–56. Filed 5–27–55.

627,981. REPRESENTATION OF TWO CROSSED RIFLES. Olin Mathieson Chemical Corporation. SN 689,736. Pub. 3–13–56. Filed 6–17–55.

627,982. HOLLYWOOD-PERLGLOS. Waite of Hollywood Inc. SN 689,902. Pub. 3–13–56. Filed 6–20–55.

627,983. GUM-TONE. Gum-Tone Corporation. SN 691,035. Pub. 3–13–56. Filed 7–11–55.

627,984. CAMPUS. Colonial Dames, Inc. SN 691,551. Pub. 3–13–56. Filed 7–19–55.

627,985. SPRING FANCY. Prince Matchabelli, Inc. SN 691,576. Pub. 3–13–56. Filed 7–19–55.

627,986. JAZZ. Helena Rubinstein, Inc. SN 691,582. Pub. 3–13–56. Filed 7–19–55.

CLASS 52

627,987. FULLCLEAN. The Fuller Brush Company. SN 688,030. Pub. 3–13–56. Filed 5–23–55.

627,988. CREME FOAM. Elmo, Inc. SN 689,996. Pub. 3–13–56. Filed 6–22–55.

627,989. BRITE TOP AND DESIGN. Import Auto Service and Sales. SN 690,009. Pub. 3–13–56. Filed 6–22–55.

627,990. DEOTERGE. Airkem, Inc. SN 694,114. Pub. 3–13–56. Filed 9–2–55.

627,991. SPRING RAIN. Charles of the Ritz, Inc. SN 694,414. Pub. 3–13–56. Filed 9–9–55.

Service Marks

CLASS 100

627,992. AMERICAN TESTING LABORATORIES INC. AND DESIGN. Manu-Mine Research & Development Co. SN 682,450. Pub. 3–13–56. Filed 2–28–55.

CLASS 101

627,993. SOUTHERN STAMPS. Southern Premium Stamp Company. SN 670,013. Pub. 3–13–56. Filed 7–14–54.

627,994. BOWLERO AND DESIGN. Bowlero Consultants Company. SN 682,393. Pub. 3–13–56. Filed 2–28–55.

CLASS 104

627,995. FARM & HOME RADIO AND DESIGN. Town and Farm Company, Inc. SN 690,776. Pub. 3–13–56. Filed 7–5–55.

CLASS 105

627,996. UNITED AIR LINES AND DESIGN. United Air Lines, Inc. SN 657,391. Pub. 11–15–55. Filed 12–3–53.

CLASS 106

627,997. HOLLANDER SNOWFLAKE. A. Hollander & Son, Inc. SN 680,195. Pub. 3–13–56. Filed 1–20–55.

CLASS 107

627,998. BOUNCY BUNNY AND DESIGN. Alma S. Baron. SN 659,920. Pub. 3–13–56. Filed 1–22–54.

627,999. THE NAVIGATORS AND DESIGN. The Navigators. SN 680,289. Pub. 3–13–56. Filed 1–21–55.

Certification Mark

CLASS A

628,000. DALMATIAN. Sage Exporters' Centre. SN 698,324. Pub. 3–13–56. Filed 12–1–55.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 3

628,001. Salvatore A. Lovico, d. b. a. Durable Canvas Products Co., Brooklyn, N. Y. SN 664,162. Filed P. R. 4–8–54. Am. S. R. 2–21–55.



For Knapsacks.
First use Feb. 15, 1954.

CLASS 13

628,002. The Independent Nail and Packing Company, Inc., Bridgewater, Mass. SN 682,559. Filed P. R. 3–1–55. Am. S. R. 2–21–56.

SQUAREHED

For Nails.
First use Dec. 17, 1954.

628,003. De Witt Mfg. Co., Chicago, Ill. SN 691,752. Filed P. R. 7–22–55. Am. S. R. 3–5–56.

SOAP–SERVER

For Soap Dispensing Devices.
First use Sept. 19, 1953.

CLASS 16

628,004. Carolina Packing House Supplies, Inc., Tabor City, N. C. SN 678,960. Filed P. R. 12–27–54. Am. S. R. 2–23–56.

KEEP'EM SEALED

For Wax Used as a Preservative Coating on Fruits and Vegetables.
First use Dec. 4, 1954.

CLASS 19

628,005. Edwin B. Clarke, d. b. a. Budge Manufacturing Company, Philadelphia, Pa. SN 694,966. Filed 9–20–55.

"ROLLIT" TERRY COVERALL

For Automobile Seat Covers.
First use July 12, 1948.

CLASS 21

628,006. Peerless Electric, Inc., New York, N. Y. SN 671,906. Filed P. R. 8–18–54. Am. S. R. 3–21–56.

COFFEE-QUIK

For Electric Coffee Maker.
First use Aug. 6, 1954.

628,007. Capehart-Farnsworth Company, a division of International Telephone and Telegraph Corporation, New York, N. Y. SN 674,221. Filed P. R. 10–4–54. Am. S. R. 1–16–56.

SPEAKING PICTURE

For Domestic Radio and Television Receiving Sets.
First use Sept. 7, 1954.

CLASS 22

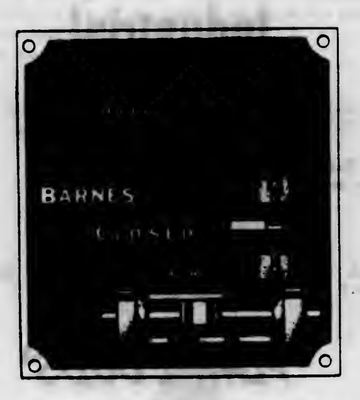
628,008. Kentworth Corporation, Redwood City, Calif. SN 647,933. Filed P. R. 5–29–53. Am. S. R. 12–13–55.



The drawing is lined for red.
For Child's Toy Consisting of a Transparent Outer Envelope Which Is Filled With a Liquid and Within Which There Are a Plurality of Small Bodies, Some of Which Are Heavier Than the Liquid and Some of Which Are Lighter and in Which, When the Ends of the Toy Are Reversed, the Heavier and Lighter Articles Change Position.
First use Feb. 14, 1953.

CLASS 23

628,009. John S. Barnes Corporation, Rockford, Ill. SN 660,636. Filed P. R. 2–5–54. Am. S. R. 4–2–56.



For Apparatus Used for Hydraulically Actuating and Controlling Operational Movements, for Example, Starting, Stopping, Feeding, Reversing, Etc., of Machine Tools and the Like, Including, in Assembly, Electric Motors, Pumps, Valves, Cylinders, Pistons, Oil Reservoirs, and the Like.
First use Sept. 16, 1953.

628,010. Seawol Distributors, Inc., Los Angeles, Calif. SN 693,938. Filed P. R. 8–30–55. Am. S. R. 3–22–56.

REMINGTON

For Sewing Machines.
First use Oct. 15, 1954.

CLASS 24

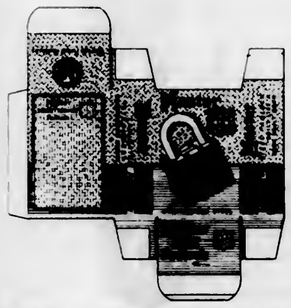
628,011. Maria De'Aguiar Joost Osborne, d. b. a. E-Z Press Pressing Paper Co., New York, N. Y. SN 654,836. Filed P. R. 10–15–53. Am. S. R. 2–7–56.

E-Z DRI-PRESS

For Paper for Dry Pressing Garments.
First use July 25, 1950.

CLASS 25

628,012. Master Lock Company, Milwaukee, Wis. SN 700,411. Filed 11–18–55.



The drawing is lined for orange, yellow, and blue.
For Locks.
First use Apr. 10, 1945.

CLASS 26

628,013. C. P. Goerz American Optical Company, Inwood, N. Y. SN 679,042. Filed P. R. 12–28–54. Am. S. R. 3–13–56.



For Lenses.
First use Aug. 1, 1954; and 1895 as to "Goerz."

628,014. Bolsey Corporation of America, New York, N. Y. SN 679,202. Filed P. R. 12–31–54. Am. S. R. 4–4–56.

AUTOWIND

For Cinematographic and Photographic Apparatus and Accessories Thereto—Namely, Photographic Cameras and Projectors, Motion Picture Cameras and Projectors, Lenses, Filters, Filter Holders, Fading Apparatus, Apparatus for Delayed Exposure, Shutters, Photographic Enlargers, Titling Apparatus, Splicers, Film Viewers, Film Winders, Projection Screens, Exposure Meters, Film Printing and Developing Apparatus, Developing Tanks, Film Magazines, Tripods and Tripod Heads.
First use Dec. 8, 1954.

628,015. Leta S. Taylor, d. b. a. J. Y. Taylor Company, Garland, Tex. SN 685,216. Filed P. R. 4–8–55. Am. S. R. 1–5–56.

Visible

For Float Gauges and Parts Thereof.
First use 1946.

628,016. Exact Level & Tool Mfg. Co., Inc., High Bridge, N. J. SN 689,372. Filed P. R. 6–13–55. Am. S. R. 3–1–56.

EXACT - HANDYLEVEL

For Spirit Levels.
First use February 1955.

628,017. Irwin R. Sheldon, d. b. a. Precision Laboratories, Brooklyn, N. Y. SN 692,355. Filed P. R. 8–2–55. Am. S. R. 3–22–56.

PRECISION

For Sound Reader Used in Editing or Checking of Various Recorded Passages on Magnetic Tape, Magnetic Film, Magnetic Stripping, Optical Film or Similar Sound Devices.
First use Aug. 15, 1950.

CLASS 37

628,018. Spencer Rubber Products Company, Manchester, Conn. SN 667,845. Filed P. R. 6–7–54. Am. S. R. 2–16–56.

COOL-COT

For Finger Stalls.
First use May 13, 1954.

628,019. Brown Company, Berlin, N. H. SN 671,918. Filed P. R. 8–18–54. Am. S. R. 2–20–56.

NIBROC
SOFWITE

For Toilet Tissue.
First use Nov. 16, 1953.

628,020. Vanity Fair Electronics Corporation, Brooklyn, N. Y. SN 672,259. Filed P. R. 8–25–54. Am. S. R. 6–29–55.

rigid-lite

For Cardboard.
First use June 15, 1954.

CLASS 38

628,021. Gayton Tom Velardi, White Plains, N. Y. SN 660,623. Filed P. R. 2–4–54. Am. S. R. 2–27–56.

WESTCHESTER Entertainment

For Periodical.
First use Jan. 28, 1954.

628,022. Philip W. Battelle, d. b. a. Battelle Publishing Company, Los Angeles, Calif. SN 667,773. Filed P. R. 6–7–54. Am. S. R. 1–12–56.

WESTERN
Appliances & Television

For Magazine Published Monthly.
First use Sept. 15, 1951.

628,023. Atlantic Fisherman, Inc., Goffstown, N. H. SN 668,622. Filed P. R. 6–22–54. Am. S. R. 1–13–56.

NATIONAL FISHERMAN

For Periodical Published Monthly.
First use June 18, 1954.

628,024. Meat Merchandising, Inc., St. Louis, Mo. SN 672,521. Filed P. R. 8–31–54. Am. S. R. 3–2–56.

Meat and Food Merchandising

For Monthly Magazine of Interest to Dealers in Meat.
First use September 1952.

628,025. Haywood Publishing Company, Chicago, Ill., to Illinois Haywood Publishing Company, Chicago, Ill. SN 674,513. Filed P. R. 10–8–54. Am. S. R. 3–2–56.

Industrial Packaging

For Magazine Published Monthly.
First use Sept. 27, 1954.

CLASS 39

628,026. Charles Pindyck, Inc., New York, N. Y. SN 658,017. Filed P. R. 12–15–53. Am. S. R. 3–2–56.

FLAN-L-DUDS

For Sleeping and Playing Clothes for Infants and Small Children—Namely, Tops, Pants, and Bootees, and Sets Thereof.
First use Nov. 1, 1952.

628,027. Shirt Center, Inc., New York, N. Y. SN 659,155. Filed P. R. 1–7–54. Am. S. R. 2–20–56.

"Buy the Box"

For Men's Outer Shirts.
First use Sept. 30, 1950.

628,028. Harry Rothman, Inc., New York, N. Y. SN 666,599. Filed P. R. 5–18–54. Am. S. R. 2–2–56.

"The Showplace Of Bargains"

For Men's Suits, Top Coats, Sport Coats, Overcoats, Jackets, Sport Jackets, Slacks, Trousers, and Outer Shirts.
First use Mar. 1, 1954.

628,029. Converse Rubber Corporation, Malden, Mass. SN 668,642. Filed P. R. 6–22–54. Am. S. R. 12–13–55.



The mark as shown on the drawing is in the form in which it appears on the insole of the left shoe. The mark as it

appears on the insole of the right shoe is a mirror image of the trademark as shown on the drawing. The drawing is lined for the color orange, the continuous lines thereon being colored green as the mark is used. The words "Cushion Heel" are disclaimed apart from the mark as shown on the drawing.
For Rubber Sole Canvas Shoes.
First use October 1946.

628,030. Converse Rubber Corporation, Malden, Mass. SN 668,643. Filed P. R. 6–22–54. Am. S. R. 12–13–55.



The drawing is lined for green.
For Rubber Sole Canvas Shoes.
First use December 1952.

628,031. Converse Rubber Corporation, Malden, Mass. SN 668,645. Filed P. R. 6–22–54. Am. S. R. 12–13–55.



The mark as shown on the drawing is in the form in which it appears on the insole of the left shoe. The mark as it appears on the insole of the right shoe is a mirror image of the trademark as shown on the drawing. The drawing is lined for the color brown, the word "Converse" and the continuous lines on the drawing being of a deeper brown as the mark is used.
For Rubber Sole Canvas Shoes.
First use October 1946.

CLASS 40

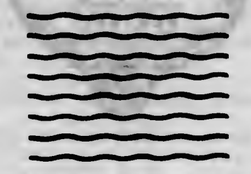
628,032. Theodore E. Namey, d. b. a. Christy Enterprises, Washington, D. C. SN 673,931. Filed P. R. 9–28–54. Am. S. R. 1–6–56.



For Collar Stay, Made of Non-Precious Metal.
First use May 7, 1952.

CLASS 42

628,033. Chicopee Manufacturing Corporation of New Hampshire, New Brunswick, N. J., to Chicopee Manufacturing Corporation, New Brunswick, N. J. SN 615,818. Filed P. R. 6–28–51. Am. S. R. 12–14–54.



The mark consists of wavy lines applied to the fabrics at regular intervals from selvage to selvage.
For Non-Woven Textile Fabrics of Cotton, Rayon, and/or Synthetic Fibres for Industrial Cutting or Use.
First use Mar. 11, 1942.

628,034. Derry Damask Mills, Inc., Gaffney, S. C. SN 663,644. Filed P. R. 3–31–54. Am. S. R. 12–28–55.

The Williamsburg
BY DERRY

For Bedspreads.
First use Feb. 18, 1954.

CLASS 46

628,035. Cascade Frozen Foods, Inc., Burlington, Wash. SN 696,623. Filed P. R. 10–21–55. Am. S. R. 4–24–56.



For Quick Frozen Sliced Strawberries.
First use Nov. 1, 1944.

CLASS 47

628,036. Francesco Bertolli S. P. A., Rome, Italy. SN 655,977. Filed P. R. 11–6–53. Am. S. R. 12–20–55.



Priority claimed under Sec. 44(d) on Italian application filed May 26, 1953; Reg. No. 117,170, dated Apr. 27, 1954. The Italian phrase "Vini Classici D'Italia" means "Classical Wines of Italy."

For Rose Wines.

Service Marks

CLASS 100

628,037. National Approved Motel Association, Sioux City, Iowa. SN 688,172. COLLECTIVE MARK. Filed P. R. 5–24–55. Am. S. R. 1–31–56.



The drawing is lined for red.

For Motel Services.

First use May 15, 1954.

CLASS 102

628,038. Trip-Charge, Inc., Pittsburgh, Pa. SN 660,906. Filed P. R. 2–10–54. Am. S. R. 2–16–56.

Trip-Charge

For the Extension of Credit to Persons Certified by Applicant Who Purchase Goods or Receive Services From Subscribers of Applicant and Making Collections From Said Persons Through a Central Billing System.

First use Oct. 27, 1952.

TRADEMARK REGISTRATIONS RENEWED

108,262. P AND DESIGN OF DIAMOND. Cl. 28. 1–25–16.
108,689. WDC AND DESIGN. Cl. 8. 2–22–16.
108,733. DESIGN OF KEYSTONE. Cl. 6. 2–22–16.
108,734. DUM DUM. Cl. 16. 2–22–16.
108,803. AGAROL. Cl. 18. 2–29–16.
108,965. ZELL'S. Cl. 10. 3–14–16.
109,008. AVONDALE AND DESIGN. Cl. 46. 3–14–16.
109,247. O-SO-GUD. Cl. 46. 3–28–16.
109,364. NATIONAL. Cl. 19. 4–4–16.
109,783. DAISY. Cl. 13. 4–18–16.
109,891. CF. Cl. 13. 4–25–16.
111,027. RIZ FRANCAIS. Cl. 8. 6–20–16.
111,470. MILAPACO. Cl. 37. 7–18–16.
111,615. TREO. Cl. 39. 7–25–16.
331,658. TWO IN ONE. Cl. 24. 1–14–36.
331,735. QPID AND DESIGN. Cl. 45. 1–21–36.
331,775. REPLY-O. Cl. 38. 1–21–36.
331,799. AVENEX. Cl. 46. 1–21–36.
331,942. LA PIERRE. Cl. 29. 1–28–36.
332,075. PERMA-STAIN. Cl. 16. 2–4–36.
332,078. MULSOMASTIC. Cl. 12. 2–4–36.
332,234. DUO-MET. Cl. 14. 2–4–36.
332,344. DESIGN OF RED, WHITE AND BLUE CIRCLES. Cl. 4. 2–11–36.
332,385. INFLATION. Cl. 39. 2–11–36.
332,482. NACITRA. Cl. 18. 2–18–36.
332,495. CITROSANCO. Cl. 18. 2–18–36.
332,523. ALETE. Cl. 46. 2–18–36.
332,570. BREWTONE. Cl. 48. 2–18–36.
332,580. CINDERELLA FROCKS AND DESIGN. Cl. 39. 2–18–36.
332,582. ZARMO. Cl. 24. 2–18–36.
332,748. HK. Cl. 13. 2–25–36.
332,813. MEATONE. Cl. 46. 2–25–36.
332,818. BON CACHET AND DESIGN. Cl. 46. 2–25–36.
332,833. ERUSTO-CETIC. Cl. 6. 2–25–36.
332,892. SPUN. Cl. 19. 3–3–36.
332,900. THERM-O-BESTOS. Cl. 12. 3–3–36.
333,189. JACK AND JILL. Cl. 46. 3–10–36.
333,357. HK. Cl. 23. 3–17–36.
333,391. DELIGHT. Cl. 46. 3–17–36.
333,394. KENTUCKY DALE AND DESIGN. Cl. 49. 3–17–36.
333,738. DESIGN OF OIL CAN COLORED RED AND BLACK. Cl. 15. 4–7–36.
333,832. DOZETS AND DESIGN. Cl. 18. 4–7–36.
334,082. HAND LASTED BY FLAVIANO DI FALCO. Cl. 39. 4–21–36.
334,348. DIHEXYLIN. Cl. 18. 4–28–36.
334,404. WILBUR AND DESIGN. Cl. 46. 5–5–36.
334,444. FASHION TOPSTER. Cl. 39. 5–5–36.
334,473. TEXALOX. Cl. 50. 5–5–36.
334,515. FASCINATION. Cl. 28. 5–5–36.
335,104. WUL-O-NOL. Cl. 6. 5–26–36.
335,223. RAY-O-NOL. Cl. 6. 5–26–36.
335,224. COT-O-NOL. Cl. 6. 5–26–36.
335,497. ROUGH-IN. Cl. 39. 6–2–36.
335,646. CHAS. W. HOUSE & SONS RAMSCOAT. Cl. 42. 6–9–36.
335,672. DESIGN OF JAPANESE CHARACTERS ETC. Cl. 46. 6–9–36.
335,701. ROZEL AND DESIGN. Cl. 18. 6–9–36.
336,326. SAENTIS AND DESIGN. Cl. 23. 6–30–36.
336,401. DESIGN OF HOUSE ETC. Cl. 46. 7–7–36.
336,437. MOULIN ROUGE. Cl. 46. 7–7–36.
336,677. PEERLESS MAID ETC. Cl. 46. 7–14–36.
336,704. DIURBITAL. Cl. 18. 7–14–36.
336,730. RATIOMOTOR. Cl. 23. 7–14–36.
336,903. DESIGN OF TWO MEN. Cl. 38. 7–21–36.
336,904. THE NUT BROS. CHES & WAL AND DESIGN. Cl. 38. 7–21–36.
336,917. SAVOY-SATIN AND DESIGN. Cl. 16. 7–21–36.
336,969. DURA-ZINC-ALLOY. Cl. 24. 7–21–36.
337,128. RUGGERS. Cl. 39. 7–28–36.
337,134. THE TOPPER AND DESIGN. Cl. 39. 7–28–36.
337,166. STAPEX. Cl. 6. 7–28–36.
337,252. CLUB CAR. Cl. 49. 8–4–36.
337,404. POLAROID. Cl. 26. 8–4–36.

TRADEMARK REGISTRATIONS CANCELED

Section 8

33,744. EAGLE AND REPRESENTATION OF EAGLE. Cl. 46. 11–14–99.
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265,502. KOMAC. Cl. 1. 12–31–29.
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520,970. CUMMINS DEPENDABLE DIESELS AND DESIGN. Cl. 103. 2–7–50.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 18

22,266. Dec. 27, 1892. James Scott Robinson, Memphis, Tenn. Pub. by Mary A. Robinson, Memphis, Tenn.

STORM'S

LIVER

REGULATOR

For Medicinal Preparation for Diseases of the Liver, Stomach, or Bowels.

343,099. Feb. 9, 1937. Mrs. James S. Robinson, d. b. a. James S. Robinson, Apothecary, Memphis, Tenn. Pub. by Mary A. Robinson, Memphis, Tenn.

KAREN

For Tonic Preparation for Use in the Treatment of Diseases of the Colon.

343,541. Feb. 23, 1937. Mrs. James S. Robinson, d. b. a. James S. Robinson, Apothecary, Memphis, Tenn. Pub. by Mary A. Robinson, Memphis, Tenn.

THEORUD

For Medicinal Preparation—Namely, a Vasodilator-Hypertension in Tablet Form.

CLASS 26

399,899. Feb. 2, 1943. Alexander Kono, d. b. a. The Kono Manufacturing Company, Woodside, N. Y. Pub. by Kono Manufacturing Co. Inc., Woodside, N. Y.

E-Kono-mize

For Eye-Glass and Spectacle Frames and Parts Therefor, Including Nose Pieces, Temples, and the Like, of Metal, Shell, and Various Plastic Compositions.

406,248. Mar. 21, 1944. Alexander Kono, d. b. a. Kono Manufacturing Company, Woodside, N. Y. Pub. by Kono Manufacturing Co. Inc., Woodside, N. Y.

SMALLFRY

For Eyeglass and Spectacle Frames and Parts Therefor—Namely, Nosepieces, Temples, Made of Metal, Shell, and Various Plastic Compositions.

410,920. Dec. 26, 1944. The Kono Manufacturing Company, Woodside, N. Y. Pub. by Kono Manufacturing Co. Inc., Woodside, N. Y.

KONOFLEX

For Eyeglass and Spectacle Frames and Parts Therefor.

411,530. Jan. 23, 1945. Alexander Kono, d. b. a. Kono Manufacturing Company, Woodside, N. Y., to The Kono Manufacturing Company. Pub. by Kono Manufacturing Co. Inc., Woodside, N. Y.

Ace-Hi

For Eyeglass and Spectacle Frames and Parts Therefor—Namely, Nosepieces, and Temples, Made of Metal, Shell, and Various Plastic Compositions.

CLASS 39

261,273. Sept. 10, 1929. Standard Hosiery Mills, Inc., Burlington, N. C. Pub. by Chester H. Roth Co., Inc., New York, N. Y.

National Maid

For Women's Hosiery.

440,580. Sept. 14, 1948. Hart Schaffner & Marx, Chicago, Ill. Pub. by registrant.

"Frost Loom"

For Men's and Boys' Suits, Coats, Overcoats, Topcoats, Vests, Trousers, Knickerbockers and Breeches, All Made From Woolen Fabric.

CLASS 45

24,058. Jan. 16, 1894. The Charles E. Hires Company, Philadelphia, Pa. Pub. by The Charles E. Hires Co., Philadelphia, Pa.

Hires Rootbeer.

For Root Beer.

CLASS 46

115,222. Jan. 30, 1917. S. S. Pierce Co., Boston, Mass. Pub. by registrant.

CHOISA

For Coffee.

122,345. July 23, 1918. Savannah Sugar Refining Corporation, Savannah, Ga. Pub. by registrant.

DIXIE CRYSTALS

For Sugar.

369,107. July 18, 1939. L. Cohen Grocer Company, St. Louis, Mo. Pub. by Gaylor-Fox Wholesale Grocery and Paper Company, East St. Louis, Ill.

ELCO

For Canned Fish, Canned Fruits, Canned Vegetables, Canned Berries, Potted Meats, Malt Syrup for Food Purposes, Breakfast Cereals, Canned Apple Sauce, Canned Chili Con Carne, Canned Pork and Beans, Canned Prunes, Canned Sweet Potatoes, Canned Hominy, Canned Soups, Canned Sauerkraut, Canned Oysters, Canned Spaghetti, Canned Tamales, Canned Tomato Juice, Canned Grapefruit, Canned Grapefruit Juice for Food Purposes, Canned Salad Fruits, Canned Fruit Cocktail, Canned Cranberry Sauce, Canned Pumpkin, and Canned Pineapple, and Pepper.

LIST OF REGISTRANTS OF TRADEMARKS

Abbott Laboratories, North Chicago, Ill. 627,656, pub. 3–13–56. Cl. 18.
Abel Sales Corp., Columbus, Ohio. 377,606, canc. Cl. 35.
Absolvo Mfg. Co., San Benito, Tex. 627,667, pub. 3–13–56. Cl. 18.
Acme Shoulder Pad Co. Inc., New York, N. Y. 520,528, canc. Cl. 40.
Addressograph-Multigraph Corp., Cleveland, Ohio. 627,628, pub. 3–13–56. Cl. 14.
Aircraft-Marine Products, Inc., Harrisburg, Pa. 627,688, pub. 3–13–56. Cl. 21.
Aircraft-Marine Products, Inc., Harrisburg, Pa. 627,721, pub. 3–13–56. Cl. 23.
Airkem, Inc., New York, N. Y. 627,990, pub. 3–13–56. Cl. 52.
Airlectron Co., Caldwell, N. J. 520,424, canc. Cl. 21.
Airtex Products Inc.: *See*—
Chefford Master Mfg. Co. Inc.
Airway Fruit & Vegetable Co., to Airway Fruit & Vegetable Co., Inc., Baltimore, Md. 520,433, canc. Cl. 46.
Airway Fruit & Vegetable Co., Inc.: *See*—
Airway Fruit & Vegetable Co.
Ajax Floor Products Corp., New York, N. Y. 627,616, pub. 3–13–56. Cl. 12.
Aktiebolaget Wallco, Hasslelholm, Sweden. 627,640, pub. 3–13–56. Cl. 16.
"Alete" Pharmazeutische Produkte G. m. b. H., München, Germany. 332,523, ren. 2–18–56. Cl. 46.
Alexander Brothers: *See*—
Armour and Co.
Algemene Kunstzijde Unie N. V., Arnhem, Netherlands. 627,925, pub. 3–13–56. Cl. 43.
Allen, Ross, Jr., and Bernard M. Chaffin, Helena, Mont. 627,745, pub. 3–13–56. Cl. 23.
Allied Scientific Corp., Richmond, Va. 627,801, pub. 3–13–56. Cl. 26.
All State Garment Corp., New York, N. Y. 627,917, pub. 3–13–56. Cl. 42.
Alma Office Machine Corp., New York, N. Y. 627,731–3, pub. 3–13–56. Cl. 23.
Alongi, John R., Du Quoin, Ill. 627,890, pub. 3–13–56. Cl. 39.
Aluminum Co. of America, Pittsburgh, Pa. 627,866, pub. 3–13–56. Cl. 38.
American Agricultural Chemical Co., to The American Agricultural Chemical Co., New York, N. Y. 106,733, ren. 2–22–56. Cl. 6.
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American Agricultural Chemical Co., The, to The American Agricultural Chemical Co., New York, N. Y. 108,965, ren. 3–14–56. Cl. 10.
American Chicle Co., Long Island City, N. Y. 627,933, pub. 3–13–56. Cl. 46.
American Continental Corp., Paterson, N. J. 520,464, canc. Cl. 43.
American Cyanamid Co., New York, N. Y. 627,578, pub. 3–13–56. Cl. 6.
American Cyanamid Co., New York, N. Y. 627,588, pub. 3–13–56. Cl. 6.
American Extruded Products Co., Los Angeles, Calif. 627,855, pub. 3–13–56. Cl. 35.
American Houses, Inc., New York, N. Y. 627,601, pub. 3–13–56. Cl. 12.
American Laundry Machinery Co., The, Cincinnati, Ohio. 332,582, ren. 2–18–56. Cl. 24.
American Machine and Metals, Inc., Wilmington, Del. 627,784, pub. 3–13–56. Cl. 26.
American Resin Corp., Chicago, Ill. 627,577, pub. 3–13–56. Cl. 6.
American Roland Food Co.: *See*—
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American Seating Co., San Francisco, Calif. 627,844, pub. 3–13–56. Cl. 32.
American Sugar Refining Co., The, New York, N. Y. 33,744–5, canc. Cl. 46.
American Tobacco Co., The, New York, N. Y. 520,703, canc. Cl. 17.
Amswiss Sewing Machine Inc., New York, N. Y. 627,775, pub. 3–13–56. Cl. 23.
Anderson, Chas. H., Floors, Inc., Chicago, Ill. 627,603, pub. 3–13–56. Cl. 12.
Animal Foods Co., d. b. a. Delight Dog Food Co., San Jose, Calif., to V. M. Coan Doudell, d. b. a. Animal Foods Co., Santa Clara, Calif., and Houston, Tex. 333,391, ren. 3–17–56. Cl. 46.
Antel's, to Weldon H. Green, d. b. a. Wm. H. Green Co., Los Angeles, Calif. 627,910, pub. 3–13–56. Cl. 42.
Antel's, Los Angeles, Calif., to Cabin Crafts, Inc., Dalton, Ga. 627,911, pub. 3–13–56. Cl. 42.
Anvil Brand, Inc., d. b. a. Tractor Brand, High Point, N. C. 627,893–4, pub. 3–13–56. Cl. 39.
Arbycraft Co., Philadelphia, Pa. 627,623, pub. 3–13–56. Cl. 13.
Arco Co. (1934), The: *See*—
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Arco Co., The, to The Arco Co. (1934), Cleveland, Ohio. 108,734, ren. 2–22–56. Cl. 16.
Arctic Institute of North America, The, Montreal, Quebec, Canada. 627,882, pub. 3–13–56. Cl. 38.
Aristocrat Leather Products, Inc., New York, N. Y. 627,571, pub. 3–13–56. Cl. 3.
Armand Schwab & Co., Inc., New York, N. Y. 627,907, pub. 3–13–56. Cl. 40.
Armour and Co., d. b. a. Alexander Brothers, Chicago, Ill. 520,641, canc. Cl. 35.
Armstrong Cork Co., Lancaster, Pa. 520,720, canc. Cl. 12.
Armstrong Cork Co., Lancaster, Pa. 627,613, pub. 3–13–56, Cl. 12.
Arned Mfg. Co., to Arned Mfg. Co., Inc., Stillwater, Minn. 627,624, pub. 3–13–56. Cl. 13.
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Arnolt Corp., Warsaw, Ind. 627,738, pub. 3–13–56. Cl. 23.
Artco Corp., Flourtown, Pa. 627,833, pub. 3–13–56. Cl. 32.
Associated Physicians Laboratories, San Francisco, Calif. 520,672, canc. Cl. 18.
Atkins & Durbrow, Inc., New York, N. Y. 520,855, canc. Cl. 1.
Atlantic Fisherman, Inc., Goffstown, N. H. 628,023. Cl. 38.
Atlas Plywood Corp., Boston, Mass. 627,568, pub. 3–13–56. Cl. 2.
Atlas Supply Co., Newark, N. J. 627,759, pub. 3–13–56. Cl. 23.
Augstein, S., & Co., Inc., College Point, N. Y. 627,901, pub. 3–13–56. Cl. 39.
Austin Dental Laboratories, Chicago, Ill. 520,933, canc. Cl. 44.
Axelson Mfg. Co., Division of U. S. Industries, Inc.: *See*—
U. S. Industries, Inc.
B. V. D. Co., Inc., The, Baltimore, Md., to The B. V. D. Co., Inc., New York, N. Y. 337,128, ren. 7–28–56. Cl. 39.
Bachmann Bros., Inc., Philadelphia, Pa. 627,973, pub. 3–13–56. Cl. 50.
Baitair Corp., Ltd., Houston, Tex. 627,724, pub. 9–27–55. Cl. 23.
Baker Furniture, Inc., Grand Rapids, Mich. 520,598, canc. Cl. 32.
Bakers Associates Inc., Chicago, Ill. 520,923, canc. Cl. 101.
Barber-Greene Co., Aurora, Ill. 627,752, pub. 3–13–56. Cl. 23.
Barbizon Corp., The, New York, N. Y. 627,914–15, pub. 3–13–56. Cl. 42.
Bar-Brook Mfg. Co., Inc., Wilmington, Del., and Shreveport, La. 520 692, canc. Cl. 34.
Barcalo Mfg. Co., Buffalo, N. Y. 627,772, pub. 3–13–56. Cl. 23.
Barnes-Hind Laboratories, Inc., San Francisco, Calif. 627,657, pub. 3–13–56. Cl. 18.
Barnes, John S., Corp., Rockford, Ill. 628,009. Cl. 23.
Baron, Alma S., Madison, Wis. 627,998, pub. 3–13–56. Cl. 107.
Battelle, Philip W., d. b. a. Battelle Publishing Co., Los Angeles, Calif. 628,022. Cl. 38.
Battelle Publishing Co.: *See*—
Battelle, Philip W.
Baumritter, T., Co. Inc., New York, N. Y. 627,835, pub. 3–13–56. Cl. 32.
Bay State Fishing Co., Boston, Mass., to General Foods Corp., White Plains, N. Y. 333,189, ren. 3–10–56. Cl. 46.
Beau Brummell Ties, Inc.: *See*—
Welsbaum Bros., Brower Co., The.
Beautymasters of Beverly Hills, Inc., Milwaukee, Wis. 520,386, canc. Cl. 51.
Belknap Hardware & Mfg. Co., Louisville, Ky. 520,725, canc. Cl. 12.
Bell & Gossett Co., Morton Grove, Ill. 627,622, pub. 3–13–56. Cl. 13.
Bell & Gossett Co., Morton Grove, Ill. 627,783, pub. 3–13–56. Cl. 26.
Bell & Howell Co., Chicago, Ill. 520,578–81, canc. Cl. 26.
Bell & Howell Co., Chicago, Ill. 627,807, pub. 3–13–56. Cl. 26.
Bells Meat Products Co.: *See*—
Feinberg Kosher Sausage Co.
Benrus Watch Co., Inc., New York, N. Y. 627,813, pub. 3–13–56. Cl. 27.
Benson-Lehner Corp., Los Angeles, Calif. 627,802, pub. 3–13–56. Cl. 26.
Berg, David, & Co., Chicago, Ill. 627,938, pub. 3–13–56. Cl. 46.
Bernard, Gordon, Co., Inc., Cincinnati, Ohio. 627,924, pub. 3–13–56. Cl. 42.
Bertolli, Francesco, S. P. A., Rome, Italy. 628,036. Cl. 47.
Bertolli, Giovanni, Corp., Brooklyn, N. Y. 520,870, canc. Cl. 46.
Better Bilt Door Co., Egg Harbor City, N. J. 627,612, pub. 3–13–56. Cl. 12.
Blakeslee, G. S., & Co., Cicero, Chicago, Ill. 627,748, pub. 3–13–56. Cl. 23.
Bliss, E. W., Co., Cleveland, Ohio. 627,743, pub. 3–13–56. Cl. 23.
Bolsey Corp. of America, New York, N. Y. 628 014. Cl. 26.
Bolton Leathers Ltd., Bolton, England. 627,895, pub. 3–13–56. Cl. 39.
Booth's Distilleries Ltd., London, England. 627,970, pub. 3–13–56. Cl. 49.
Borg-Warner Corp., Chicago, Ill. 520,837, canc. Cl. 31.
Borg-Warner Corp., Chicago, Ill. 627,777, pub. 3–13–56. Cl. 24.
Boston Gear Works: *See*—
Boston Gear Works, Inc.
Boston Gear Works, Inc., to The Murray Co. of Texas, Inc., d. b. a. Boston Gear Works, North Quincy, Mass. 336,730, ren. 7–14–56. Cl. 23.

Bowlero Consultants Co., Cleveland, Ohio. 627,994, pub. 3–13–56. Cl. 101.
Boyle-Midway Inc., New York, N. Y. 627,582, pub. 3–13–56. Cl. 6.
Bradas & Gheens: *See*—
Gheens, C. Edwin.
Bradford Dyeing Association (U. S. A.), Westerly, R. I., and New York, N. Y. 520,967, canc. Cl. 106.
Bradford Dyeing Association (U. S. A.), Westerly, R. I., and New York, N. Y. 520,969, canc. Cl. 106.
Brandwein, A., & Co., Chicago, Ill. 520,861, canc. Cl. 32.
Briggs Lemon Association, Santa Paula, Calif. 627,953, pub. 3–13–56. Cl. 46.
Brookside Products Co., Inc., McCordsville, Ind. 627,852, pub. 3–13–56. Cl. 34.
Brown & Bigelow, St. Paul, Minn. 627,870, pub. 3–13–56. Cl. 38.
Brown Co., Berlin, N. H. 628 019. Cl. 37.
Brown, D. S., Co., The, North Baltimore, Ohio. 627,572–3, pub. 3–13–56. Cl. 3.
Bruce, R. D., & Co., Chicago, Ill. 627,927, pub. 3–13–56. Cl. 44.
Bruning, Charles, Co., Inc., New York, N. Y. 520,824, canc. Cl. 26.
Bruning, Paul, d. b. a. Paul Bruning Maschinen- und Werzeugfabrik, Berlin-Borsigwalde, Germany. 627,778, pub. 8–30–55. Cl. 26.
Bruning, Paul, Maschinen- und Werzeugfabrik: *See*—
Bruning, Paul.
Budge Mfg. Co.: *See*—
Clarke, Edwin B.
Bulk Petroleum Corp., Chicago, Ill. 627,633, pub. 3–13–56. Cl. 15.
Burrus Mills, Inc., Dallas, Tex. 627,951, pub. 3–13–56. Cl. 46.
Cabin Crafts, Inc.: *See*—
Antel's.
Camel Lead Color & Chemical Products Mfg. Corp., Brooklyn, N. Y. 260 465, canc. Cl. 16.
Cameron Corp., Cleveland, Ohio. 520,950, canc. Cl. 23.
Candy Artists, Inc., San Francisco, Calif. 520,448, canc. Cl. 46.
Capehart-Farnsworth Co., a Division of International Telephone and Telegraph Corp., New York, N. Y. 628,007. Cl. 21.
Carborundum Co., The, to The Carborundum Co., Niagara Falls, N. Y. 334,473, ren. 5–5–56. Cl. 50.
Cardox Corp., Chicago, Ill. 627,768–9, pub. 3–13–56. Cl. 23.
Carolina Packing House Supplies, Inc., Tabor City, N. C. 628 004. Cl. 16.
Carolina Washboard Co., to F. V. Fonville, Raleigh, N. C. 331,658, ren. 1–14–56. Cl. 24.
Carpenter Paper Co., Omaha, Nebr. 520,858, canc. Cl. 37.
Carsley Products, Inc., New York, N. Y. 627,636, pub. 3–13–56. Cl. 16.
Carter, Ralph B., Co., Hackensack, N. J. 158,199, canc. Cl. 23.
Carthage Marble Corp., Carthage, Mo. 627,605, pub. 3–13–56. Cl. 12.
Cascade Frozen Foods, Inc., Burlington, Wash. 628,035. Cl. 46.
Cel-U-Dex Corp., Brooklyn, N. Y. 627,863, pub. 3–13–56. Cl. 37.
Central Foundry Co., The, Newark, N. J. 109,891, ren. 4–25–56. Cl. 13.
Central Mfg. Co., Ford City, Pa. 520,780, canc. Cl. 21.
Certo-Camera-Werk von der Gönna und Söhne, Dresden, Germany. 627,787, pub. 3–13–56. Cl. 26.
Chaffin, Bernard M.: *See*—
Allen, Ross, Jr., and Bernard M. Chaffin.
Chamberlin, Joseph F., d. b. a. Chamberlin Metal Products, Chicago, Ill. 627,694, pub. 3–13–56. Cl. 22.
Chamberlin Metal Products: *See*—
Chamberlin, Joseph F.
Chance, A. B., Co., Centralia, Mo. 520,611, canc. Cl. 23.
Charles of the Ritz, Inc., New York, N. Y. 627,991, pub. 3–13–56. Cl. 52.
Chatfield Paper Corp., The, Cincinnati, Ohio. 520,534, canc. Cl. 37.
Cheerio Toys, Inc., Chicago, Ill. 627,707, pub. 3–13–56. Cl. 22.
Chefford Master Mfg. Co. Inc., Fairfield, Ill., now by change of name Airtex Products Inc. 627,709, pub. 3–13–56. Cl. 23.
Chem-Therm Mfg. Co., Inc., Monrovia, Calif. 627,735, pub. 3–13–56. Cl. 23.
Cherie Brassiere Co., Inc., Brooklyn, N. Y. 627,896, pub. 3–13–56. Cl. 39.
Chicago Rawhide Mfg. Co., Chicago, Ill. 627,718, pub. 3–13–56. Cl. 23.
Chicago Show Printing Co., Chicago, Ill. 627,874, pub. 3–13–56. Cl. 38.
Chicago Spring Products Co., Chicago, Ill. 520,840, canc. Cl. 32.
Chicopee Mfg. Corp.: *See*—
Chicopee Mfg. Corp. of New Hampshire.
Chicopee Mfg. Corp. of New Hampshire to Chicopee Mfg. Corp., New Brunswick, N. J. 628,033. Cl. 42.
Chore-Boy Milking Machine Co., Lansing, Mich. 520,883. canc. Cl. 21.
Christian Brothers of California, The: *See*—
De La Salle Institute.
Christy Enterprises: *See*—
Namey, Theodore E.
Chromium Mining & Smelting Corp., Ltd., Sault Ste. Marie, Ontario, Canada. 627,563, pub. 3–13–56. Cl. 1.
Citrus By-Products Corp., McAllen, Tex. 520,812, canc. Cl. 46.
Clark, Charles F., Inc., Chicago, Ill. 627,706, pub. 3–13–56. Cl. 22.
Clarke, Edwin B., d. b. a. Budge Mfg. Co., Philadelphia, Pa. 628,005. Cl. 19.
Clary Multiplier Corp., Los Angeles, Calif. 520,960, canc. Cl. 11.
Clay-Adams, Inc., New York, N. Y. 627,796, pub. 3–13–56. Cl. 26.
Cleveland Pneumatic Tool Co., The: *See*—
National Water Lift Co.
Cleveland Worm & Gear Co., The, Cleveland, Ohio. 627,711, pub. 3–13–56. Cl. 23.
Climax Beverage Co.: *See*—
Home Brewing Co., Inc.
Cochran Equipment Co., Salinas, Calif. 627,754, pub. 3–13–56. Cl. 23.
Cohen, Julius, & Sons, Inc., New York, N. Y. 627,905, pub. 3–13–56. Cl. 40.
Cohen, L., Grocer Co., St. Louis, Mo., by Gaylor-Fox Wholesale Grocery and Paper Co., East St. Louis, Ill. 369,107, 12 (c) pub. 5–29–56. Cl. 46.
Colonial Dames, Inc., Los Angeles, Calif. 627,984, pub. 3–13–56. Cl. 51.
Colorphone, Inc., Oakland, Calif. 520,958, canc. Cl. 21.
Colortex, Inc., New York, N. Y. 627,906, pub. 3–13–56. Cl. 40.
Columbia Bedding Co., Chicago, Ill. 627,841, pub. 3–13–56. Cl. 32.
Columbian Rope Co., Auburn, N. Y. 332,344, ren. 2–11–56. Cl. 4.
Como-Tex Co., The, Chicago, Ill. 520,701, canc. Cl. 50.
Condon-King Co., Inc., Seattle, Wash. 627,848, pub. 3–13–56. Cl. 34.
Conklin Pen Co., Inc., The, Chicago, Ill. 520,425, canc. Cl. 37.
Conrow, Jonathan, Inc., New York, N. Y. 520,770–2, canc. Cl. 21.
Consolidated Foods Corp., d. b. a. Gentry Division, Consolidated Foods Corp., Chicago, Ill., from Gentry, Inc. 627,931, pub. 3–13–56. Cl. 46.
Consolidated Midland Corp., Katonah, N. Y. 627,666, pub. 2–28–56. Cl. 18.
Consolidated Tea Co., Inc., New York, N. Y. 277,875, canc. Cl. 46.
Continental House: *See*—
Cordier, Herbert.
Converse Rubber Corp., Malden, Mass. 628,029–31. Cl. 39.
Conway Import Co., Inc., Long Island City, N. Y. 336,437, ren. 7–7–56. Cl. 46.
Cordier, Herbert, d. b. a. Continental House, Beverly Hills, Calif. 627,839–40, pub. 3–13–56. Cl. 32.
Corn Belt Products, Inc., Omaha, Nebr. 627,590, pub. 3–13–56. Cl. 7.
Corona Soapcrafters: *See*—
Rothschild, Lee.
Cosby-Hodges Milling Co., Birmingham, Ala. 627,965, pub. 3–13–56. Cl. 46.
Count-O-Larm Co.: *See*—
Zelinsky, Robert.
Cravenette Co., U. S. A., The, Hoboken, N. J. 627,585, pub. 3–13–56. Cl. 6.
Crawford-Austin Mfg. Co., Waco, Tex. 520,792, canc. Cl. 42.
Creomulsion Co., Atlanta, Ga. 520,681, canc. Cl. 18.
Crocker, Burbank Papers, Inc., Fitchburg, Mass. 627,862, pub. 3–13–56. Cl. 37.
Crown Cork & Seal Co., Inc., Baltimore, Md. 520,652, canc. Cl. 50.
Crown Cork & Seal Co., Inc., Baltimore, Md. 627,971, pub. 3–13–56. Cl. 50.
Crown Zellerbach Corp., also d. b. a. The National Paper Products Co., and Nata Products Co., San Francisco, Calif. 520,628–9, canc. Cl. 37.
Crystal, Edwina, d. b. a. Princess Products, Newark, N. J. 520,482, canc. Cl. 51.
Cummins Engine Co., Inc., Columbus, Ind. 520,970, canc. Cl. 103.
Dabs Creations, Inc., Chicago, Ill. 520,405, canc. Cl. 3.
Danciger Bros. Inc., New York, N. Y. 627,897, pub. 3–13–56. Cl. 39.
Danfoss ved Mads Clausen, Nordborg, Alas, Denmark. 627,782, pub. 1–31–56. Cl. 26.
Dartell Laboratories: *See*—
Dartell, Norman.
Dartell, Norman, d. b. a. Dartell Laboratories, Los Angeles, Calif. 627,659, pub. 3–13–56. Cl. 18.
Davis Bakery: *See*—
Davis Baking Co.
Davis Baking Co., d. b. a. Davis Bakery, Cleveland Heights, Ohio. 520,686, canc. Cl. 46.
Dearborn Stove Co., Dallas, Tex. 627,854, pub. 3–13–56. Cl. 34.
Deerfield Glassine Co., Monroe Bridge, Mass. 520,590, canc. Cl. 37.
De La Salle Institute, d. b. a. Mont La Salle Vineyards and as The Christian Brothers of California, Napa, Calif. 627,968, pub. 3–13–56. Cl. 47.
Del Francia, Joe, Co., Los Angeles, Calif. 627,676, pub. 3–13–56. Cl. 21.
Delight Dog Food Co.: *See*—
Animal Foods Co.
Del-Krome Corp., Walton, N. Y. 627,637, pub. 3–13–56. Cl. 16.
De Markoff, Alexandra, Sales Corp., New York, N. Y. 627,819, pub. 3–13–56. Cl. 29.
Demuth, William, & Co., to William Demuth & Co., Inc., New York, N. Y. 108,689, ren. 2–22–56. Cl. 8.
Demuth, William, & Co., Inc.: *See*—
Demuth, William, & Co.
Derry Damask Mills, Inc., Gaffney, S. C. 628,034. Cl. 42.
De Witt Mfg. Co., Chicago, Ill. 628,003. Cl. 13.

Diamond Alkali Co., Cleveland, Ohio. 443,396, canc. Cl. 6.
Diamond Alkali Co., Cleveland, Ohio. 443,478, canc. Cl. 6.
Dick, A. B., Co., Chicago, Ill. 520,430, canc. Cl. 37.
Di Giorgio Fruit Corp., San Francisco, Calif. 627,954, pub. 3–13–56. Cl. 46.
Disston, Henry, & Sons, Inc., Philadelphia, Pa. 627,631, pub. 3–13–56. Cl. 14.
Dor-Bak Corp., Chicago, Ill. 627,834, pub. 3–13–56. Cl. 32.
Dorr-Oliver Inc., Stamford, Conn. 627,726, pub. 3–13–56, Cl. 23.
Dorward & Sons Co., San Francisco, Calif. 520,687, canc. Cl. 16.
Doudell, V. M. Coan: *See*—
Animal Foods Co.
Dowling, Gus T., Atlanta, Ga. 627,884, pub. 3–13–56. Cl. 39.
Drage Products, Inc., Union City, N. J. 627,797, pub. 3–13–56. Cl. 26.
Driskel Co.: *See*—
Driskel, Ralph E.
Driskel, Ralph E., d. b. a. Driskel Co., Alhambra, Calif. 627,836–7, pub. 3–13–56. Cl. 32.
Duplan Corp., The, New York, N. Y. 520,510, canc. Cl. 43.
Durable Canvas Products Co.: *See*—
Lovico, Salvatore A.
Durbrow Bros. Canning Co., Cedar Rapids, Iowa. 520,871, canc. Cl. 46.
Dussi-Wallace and Co., New York, N. Y. 520,367, canc. Cl. 37.
E. A. Laboratories, Inc., Brooklyn, N. Y. 520,620, canc. Cl. 21.
E-Z Press Pressing Paper Co.: *See*—
Osborne, Maria D. A. J.
Eagle-Picher Co., The, Cincinnati, Ohio. 520,842, canc. Cl. 16.
Eagle-Picher Co., The, Cincinnati, Ohio. 627,562, pub. 3–13–56. Cl. 1.
East Chicago Machine Tool Corp., East Chicago, Ind. 627,751, pub. 3–13–56. Cl. 23.
Eastern States Farmers' Exchange, West Springfield, Mass. 520,904, canc. Cl. 35.
Electronic Components Corp., Chicago, Ill. 627,670, pub. 3–13–56. Cl. 21.
Electronic Test Instrument Corp., Detroit, Mich. 627,786, pub. 3–13–56. Cl. 26.
Elfenbein, Irving H., Co. Inc., New York, N. Y. 627,902, pub. 3–13–56. Cl. 39.
Elkhart Engineering Corp., Plymouth, Wis. 627,684, pub. 3–13–56. Cl. 21.
Elliotte, Marion A., Pontiac, Mich. 627,736, pub. 3–13–56. Cl. 23.
Elmo, Inc., Philadelphia, Pa. 627 988, pub. 3–13–56. Cl. 52.
Emhart Mfg. Co., Hartford, Conn. 627,713–14, pub. 3–13–56. Cl. 23.
Empire Projector Corp., New York, N. Y. 520,347, canc. Cl. 26.
Empire Silk Co., Wilmington, Del., and New York, N. Y. 127,823 canc. Cl. 42.
Enke, J. E. Ohlsens, Copenhagen, Denmark. 520,805, canc. Cl. 1.
Ernenputsch, John H., Peru, Ill. 627,699, pub. 3–13–56. Cl. 22.
Escalante, Jose, & Co., Chicago, Ill., to The Henry Straus Co., Cincinnati, Ohio. 520,597, canc. Cl. 17.
Esge Co.: *See*—
Mushynsky, Anthony.
Essential Products Co., Inc., New York, N. Y. 627,929, pub. 3–13–56. Cl. 45.
Evans', L. B., Son Co., Wakefield, Mass. 627,904, pub. 3–13–56. Cl. 39.
Exact Level & Tool Mfg. Co., Inc., High Bridge, N. J. 628,016. Cl. 26.
F & F Laboratories, Inc., Chicago, Ill. 627,945, pub. 3–13–56. Cl. 46.
Farmer Bros. Co., Los Angeles, Calif. 627,932, pub. 3–13–56. Cl. 46.
Fashion Frocks, Inc., Cincinnati, Ohio. 334,444, ren. 5–5–56. Cl. 39.
Federal Mfg. & Engineering Corp., Brooklyn, N. Y. 520,358, canc. Cl. 26.
Federal Telephone & Radio Corp., Clifton, N. J. 520,714, canc. Cl. 21.
Feinberg Kosher Sausage Co., d. b. a. Bells Meat Products Co., Minneapolis, Minn. 627,939. pub. 3–13–56. Cl. 46.
Feldmuhle Ltd., Rorschach, Switzerland. 627,575, pub. 3–13–56. Cl. 5.
Fetty, Robert L., Schuyler, Nebr. 627,729, pub. 3–13–56. Cl. 23.
Fibus, Murray M., d. b. a. The Steel City Mfg. Co., Youngstown, Ohio. 520,820, canc. Cl. 31.
Finkl, A., & Sons Co., Chicago, Ill. 627,626, pub. 3–13–56. Cl. 14.
Fireside Marshmallow Co., Chicago, Ill. 627,946, pub. 3–13–56. Cl. 46.
Firestone Tire & Rubber Co., The, Akron, Ohio. 520,826, canc. Cl. 5.
Fisher Flouring Mills Co., Seattle, Wash. 627,934, pub. 3–13–56. Cl. 46.
Fishery Products, Inc., Cleveland, Ohio. 627,958, pub. 3–13–56. Cl. 46.
Fonville, F. V.: *See*—
Carolina Washboard Co.
Food Machinery and Chemical Corp.: *See*—
Food Machinery Corp.
Food Machinery Corp., San Jose, Calif., now by merger Food Machinery and Chemical Corp. 520,659, canc. Cl. 6.
Formfit Co., The, Chicago, Ill. 332,385, ren. 2–11–56. Cl. 39.
Frank, S. M., and Co. Inc.: *See*—
Reisa-Premier Corp., The.
Franke & Heidecke, Fabrik Photographischer Präzisions-Apparate, Braunschweig, Germany. 627,798, pub. 3–13–56. Cl. 26.
Fran-Stef Mfg. Co., New York, N. Y. 520,507, canc. Cl. 3.
Fratelli Calvo: *See*—
Mailliard & Schmiedell.
Freund, Walter, Bread Co., St. Louis, Mo. 627,963, pub. 3–13–56. Cl. 46.
Friedstrass Co., The, New York, N. Y. 520,515, canc. Cl. 7.
Fritzsche Tire & Reliner Co., Chicago, Ill. 520,563, canc. Cl. 35.
Fuller Brush Co., The, Hartford, Conn. 627,987, pub. 3–13–56. Cl. 52.
Fullerton Mutual Orange Association, Fullerton, Calif. 520,406, canc. Cl. 46.
Gaetjens, Berger & Wirth, Inc., Brooklyn, N. Y. 627,597, pub. 3–13–56. Cl. 11.
Gallun, A. F., & Sons Corp., Milwaukee, Wis. 627,564, pub. 3–13–56. Cl. 1.
Gardner-Denver Co.: *See*—
Keller Tool Co.
Garnett, G., & Sons Ltd., Bradford, England. 627,916, pub. 3–13–56. Cl. 42.
Gaylor-Fox Wholesale Grocery and Paper Co.: *See*—
Cohen, L., Grocer Co.
Gemex Co., Union, N. J. 627,815, pub. 3–13–56. Cl. 28.
General Baking Co., New York, N. Y., from Holmes & Son, Inc. 627,950, pub. 3–13–56. Cl. 46.
General Dynamics Corp., New York, N. Y., from Stromberg-Carlson Co. 627,671, pub. 3–13–56. Cl. 21.
General Features Corp., New York, N. Y. 627,867, pub. 3–13–56. Cl. 38.
General Foods Corp.: *See*—
Bay State Fishing Co.
General Motors Corp., Detroit, Mich. 627,685, pub. 3–13–56. Cl. 21.
General Plywood Corp., Louisville, Ky. 627,842, pub. 3–13–56. Cl. 32.
General Tire & Rubber Co., The, Akron, Ohio. 520,552, canc. Cl. 21.
Gentry Division, Consolidated Foods Corp.: *See*—
Consolidated Foods Corp.
Gentry, Inc.: *See*—
Consolidated Foods Corp.
Gerry, Norman G., New York, N. Y. 520,819, canc. Cl. 26.
Gheens, C. Edwin, d. b. a. Bradas & Gheens, Louisville, Ky. 188,491, ren. 8–26–24. Cl. 46.
Gillett Canning Co., Gillett, Wis. 211,890, canc. Cl. 46.
Glenview Laboratories, Inc., Chicago, Ill. 627,648, pub. 3–13–56. Cl. 18.
Goerz, C. P., American Optical Co., Inwood, N. Y. 628,013. Cl. 26.
Golfcraft, Inc., Escondido, Calif. 627,701, pub. 3–13–56. Cl. 22.
Good Earth Soil Co., Inc., The, Fort Worth, Tex. 520,799, canc. Cl. 1.
Goodren Products Corp., Englewood, N. J. 627,877, pub. 3–13–56. Cl. 38.
Gopher Game Co.: *See*—
Manley, Harold C.
Gordon, Alan B., d. b. a. Gordon Enterprises, North Hollywood, Calif. 627,785, pub. 3–13–56. Cl. 26.
Gordon Enterprises: *See*—
Gordon, Alan B.
Gotham Tissue Corp., Salem, N. Y. 267,111, canc. Cl. 37.
Gould, William L., Albany, N. Y. 520,752, canc. Cl. 52.
Grant Chemical Co.: *See*—
Grant, George W.
Grant Chemical Co., Inc.: *See*—
Grant, George W.
Grant Co., The: *See*—
Ratner, Walter.
Grant, George W., d. b. a. Grant Chemical Co., to Grant Chemical Co., Inc., New York, N. Y. 336,704, ren. 7–14–56. Cl. 18.
Grant, W. T., Co., New York, N. Y. 520,862, canc. Cl. 35.
Grasser, Josephine, Paris, France. 627,976, pub. 3–13–56. Cl. 51.
Great American Tea Co., The, New York, N. Y. 520,738, canc. Cl. 29.
Green, Robert M., & Sons, Inc., Philadelphia, Pa. 520,674, canc. Cl. 32.
Green, Weldon H.: *See*—
Antel's.
Green, Wm. H., Co.: *See*—
Antel's.
Gudebrod Bros. Silk Co., Inc., Philadelphia, Pa. 627,926, pub. 3–13–56. Cl. 43.
Guerlain, Inc., New York, N. Y. 520,902, canc. Cl. 51.
Gum-Tone Corp., New York, N. Y. 627,983, pub. 3–13–56. Cl. 51.
Gummed Products Co., The, Troy, Ohio. 520,600, canc. Cl. 5.
Gutstein-Tuck, Inc., Boston, Mass. 627,891, pub. 3–13–56. Cl. 39.
Gyro International, Cleveland, Ohio. 520,520, canc. Cl. 100.
H. & S. Product, Camden, N. J. 627,583, pub. 3–13–56. Cl. 6.
Haessler, George H., Detroit, Mich. 627,880, pub. 3–13–56. Cl. 38.
Hainke, Paul W., d. b. a. Hainke Sales and Distributing Co., Hutchinson, Kans. 520,471, canc. Cl. 19.
Hainke Sales and Distributing Co.: *See*—
Hainke, Paul W.
Haire Publishing Co., The, New York, N. Y. 261,505, canc. Cl. 38.
Hales & Hunter Co., Chicago, Ill. 627,952, pub. 3–13–56. Cl. 46.

Hammill & Gillespie, Inc., New York, N. Y. 520,740, canc. Cl. 16.
Hamner Electronics Co., Inc., Princeton, N. J. 627,794, pub. 3–13–56. Cl. 26.
Handi-Bag Co., Inc., New York, N. Y. 627,923, pub. 3–13–56. Cl. 42.
Hanson-Van Winkle-Munning Co., Matawan, N. J. 520,723, canc. Cl. 52.
Harris Products, Lynwood, Calif. 627,725, pub. 3–6–56. Cl. 23.
Harrison (Birmingham) Ltd., Birmingham, England. 627,621, pub. 3–13–56. Cl. 13.
Hart Schaffner & Marx, Chicago, Ill. 440,580, 12(c) pub. 5–29–56. Cl. 39.
Hartmann Luggage Co., Racine, Wis. 627,574, pub. 3–13–56. Cl. 3.
Hawkinson, Hazel J., San Diego, Calif. 627,720, pub. 3–13–56. Cl. 23.
Haywood Publishing Co., to Illinois Haywood Publishing Co., Chicago, Ill. 628,025. Cl. 38.
Hearst Corp., The, New York, N. Y. 502,921, canc. Cl. 104.
Hearst Corp., The, New York, N. Y. 627,871–2, pub. 3–13–56. Cl. 38.
Heberlein, George J., d. b. a. Heberlein Mfg. Co., Ault, Colo. 627,853, pub. 3–13–56. Cl. 34.
Heberlein Mfg. Co.: *See*—
Heberlein, George J.
Heminway & Bartlett Mfg. Co., The, Watertown, Conn. 520,506, canc. Cl. 43.
Henckels, J. A., Zwillingswerk A. G., Solingen, Germany. 627,712, pub. 3–13–56. Cl. 23.
Hershey Motorstoker, Inc., Manheim, Pa. 627,847, pub. 3–13–56. Cl. 34.
Hickey Sales Co.: *See*—
Kleinberg, Harry I.
Hires, Charles E., Co., The, by The Charles E. Hires Co., Philadelphia, Pa. 24,058, 12(c) pub. 5–29–56. Cl. 45.
Hogan, Ben, Co., Fort Worth, Tex. 627,695, pub. 3–13–56. Cl. 22.
Holland-Colombo Trading Society, Inc., Dover, Del., and New York, N. Y. 520,643, canc. Cl. 34.
Hollander, A., & Son, Inc., Newark, N. J. 627,997, pub. 3–13–56. Cl. 106.
Hollywood Deep Tone Mfg. Co., Canoga Park, Calif. 627,744, pub. 3–13–56. Cl. 23.
Holmes & Son, Inc.: *See*—
General Baking Co.
Holo-Krome Screw Corp., The, Elmwood, Conn. 332,748, ren. 2–25–56. Cl. 13.
Holo-Krome Screw Corp., The, Elmwood, Conn. 333,357, ren. 3–17–56. Cl. 23.
Holophane Co., Inc., New York, N. Y. 627,851, pub. 3–13–56. Cl. 34.
Homasote Co., Trenton, N. J. 627,602, pub. 3–13–56. Cl. 12.
Home Brewing Co., Inc., d. b. a. Climax Beverage Co., Richmond, Va. 627,930, pub. 3–13–56. Cl. 45.
Hough, Frank G., Co., The, Libertyville, Ill. 627,770–1, pub. 3–13–56. Cl. 23.
House, Chas. W., & Sons, to Chas. W. House & Sons, Inc., Unionville, Conn. 335,646, ren. 6–9–56. Cl. 42.
House, Chas. W., & Sons, Inc.: *See*—
House, Chas. W., & Sons.
House of Rothchild, Inc., The, New York, N. Y. 520,535, canc. Cl. 46.
Hubbard, Warren D., Jr., Indianapolis, Ind. 627,703, pub. 3–13–56. Cl. 22.
Huffman Mfg. Co., The, Dayton, Ohio. 348,373, canc. Cl. 19.
Huffman Mfg. Co., The, Dayton, Ohio. 440,223, canc. Cl. 19.
Hugel, F. E., & Fils, Riquewihr, Haut-Rhin, France. 627,966–7, pub. 3–13–56. Cl. 47.
Huribut Paper Co., South Lee, Mass. 520,372, canc. Cl. 37.
Hydraxtor Co., The: *See*—
Zephyr Laundry Machinery Co.
Hyster Co., Portland, Oreg. 627,740, pub. 3–13–56. Cl. 23.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. 266,174, canc. Cl. 6.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. 266,374, canc. Cl. 6.
Illinois Canning Co., The, Hoopeston, Ill. 520,436, canc. Cl. 46.
Illinois Haywood Publishing Co.: *See*—
Haywood Publishing Co.
Import Auto Service and Sales, Long Beach, Calif. 627,989, pub. 3–13–56. Cl. 52.
Independent Nail and Packing Co., Inc., The, Bridgewater, Mass. 628,002. Cl. 13.
Inman Brush Co., Highland Park, Ill. 520,874, canc. Cl. 29.
Insulated Window Co. of America, Minneapolis, Minn. 520,719, canc. Cl. 12.
International Foodcraft Corp., Brooklyn, N. Y. 627,956, pub. 3–13–56. Cl. 46.
International Harvester Co., Chicago, Ill. 627,763–4, pub. 3–13–56. Cl. 23.
International Nickel Co., Inc., The, New York, N. Y. 627,629, pub. 3–13–56. Cl. 14.
International Resistance Co., Philadelphia, Pa. 627,687, pub. 3–13–56. Cl. 21.
International Silver Co., to The International Silver Co., Meriden, Conn. 331,942, ren. 1–28–56. Cl. 29.
International Silver Co., to The International Silver Co., Meriden, Conn. 334,515, ren. 5–5–56. Cl. 28.
International Silver Co., The: *See*—
International Silver Co.
Iroquois China Co., Solvay, N. Y. 627,822, pub. 9–6–55. Cl. 30.
Irwill Knitwear Corp., New York, N. Y. 627,889, pub. 3–13–56. Cl. 39.
Isco Optische Werke G. m. b. H., Gottingen-Weende, Germany. 627,788–9, pub. 3–13–56. Cl. 26.
JMS Jewlery Mfg. Co., Bloomfield, N. J. 627,816, pub. 3–13–56. Cl. 28.
J. T. Mfg. Co.: *See*—
Turulis, John W.
Jackes-Evans Mfg. Co., St. Louis, Mo. 520,572, canc. Cl. 31.
Jackson, Gordon C., Sturtevant, Wis., to Jaxind, Inc., Danville, Ill. 627,913, pub. 3–13–56. Cl. 42.
Jasco Aluminum Products Corp., New Hyde Park, N. Y. 627,599, pub. 8–18–53. Cl. 12.
Jaunty Juniors, Inc., New York, N. Y. 627,883, pub. 3–13–56. Cl. 39.
Jaxind, Inc.: *See*—
Jackson, Gordon C.
Jepson, Percy, Oakland, Calif. 627,618, pub. 3–13–56. Cl. 13.
Jergens: *See*—
Jergens, Andrew, Co., The.
Jergens, Andrew, Co., The, d. b. a. Jergens, Cincinnati, Ohio. 627,978, pub. 3–13–56. Cl. 51.
Johns-Manville Corp., New York, N .Y. 332,900, ren. 3–3–56. Cl. 12.
Johnson, Bernard G., Willow Springs, Ill. 520,951, canc. Cl. 2.
Johnson Fruit & Cold Storage Co., Selah, Wash. 627,942, pub. 3–13–56. Cl. 46.
Johnson & Johnson, New Brunswick, N. J. 627,820, pub. 3–13–56. Cl. 29.
Judy Publishing Co., Chicago, Ill. 627,875, pub. 3–13–56. Cl. 38.
Juilliard, A. D., & Co., Inc., New York, N. Y. 627,919–20, pub. 3–13–56. Cl. 42.
Junior Toy Corp., Hammond, Ind. 627,693, pub. 3–13–56. Cl. 22.
K-G Electronics Corp., Chicago, Ill. 627,691, pub. 3–13–56. Cl. 21.
Kahn's, E., Sons Co., The, Cincinnati, Ohio. 627,957, pub. 3–13–56. Cl. 46.
Kalamazoo Vegetable Parchment Co., Parchment, Mich. 520,830, canc. Cl. 37.
Kalamazoo Vegetable Parchment Co., Parchment, Mich. 520,833–4, canc. Cl. 37.
Kalamazoo Vegetable Parchment Co., Parchment, Mich. 627,865, pub. 3–13–56. Cl. 37.
Keasbey & Mattison Co., Ambler, Pa. 627,608, pub. 3–13–56. Cl. 12.
Keller Tool Co., Grand Haven, Mich., to Gardner-Denver Co., Quincy, Ill. 627,620, pub. 3–13–56. Cl. 13.
Kellogg, Spencer, and Sons, Inc.: *See*—
Shellabarger Grain Products Co.
Kellogg, Spencer, and Sons, Inc., Buffalo, N. Y. 627,947, pub. 3–13–56. Cl. 46.
Kelly, William, Milling Co., The, Hutchinson, Kans. 520,648, canc. Cl. 46.
Kennedy, David E., Inc., Brooklyn, N. Y. 520,685, canc. Cl. 34.
Kensington, Inc., New Kensington, Pa. 520,786–7, canc. Cl. 32.
Kentworth Corp., Redwood City, Calif. 628,008. Cl. 22.
Keystone Lamp Co.: *See*—
Silverstein, Hyman.
King, Edward J., Wheaton, Ill. 627,824, pub. 3–13–56. Cl. 31.
Kleinberg, Harry I., d. b. a. Hickey Sales Co., Pittsburgh, Pa. 520,639, canc. Cl. 33.
Klingfast Rubber Co., Akron, Ohio. 502,910, canc. Cl. 44.
Kono, Alexander, d. b. a. The Kono Mfg. Co., by Kono Mfg. Co. Inc., Woodside, N. Y. 399,899, 12 (c) pub. 5–29–56. Cl. 26.
Kono, Alexander, d. b. a. Kono Mfg. Co., by Kono Mfg. Co. Inc., Woodside, N. Y. 406,248, 12(c) pub. 5–29–56. Cl. 26.
Kono, Alexander, d. b. a. Kono Mfg. Co., to The Kono Mfg. Co., by Kono Mfg. Co. Inc., Woodside, N. Y. 411,530, 12(c) pub. 5–29–56. Cl. 26.
Kono Mfg. Co.: *See*—
Kono, Alexander.
Kono Mfg. Co. Inc.: *See*—
Kono, Alexander.
Kono Mfg. Co., The.
Kono Mfg. Co. Inc., Woodside, N. Y. 627,806, pub. 3–13–56. Cl. 26.
Kono Mfg. Co., The: *See*—
Kono, Alexander.
Kono Mfg. Co., The, by Kono Mfg. Co. Inc., Woodside, N. Y. 410,920, 12(c) pub. 5–29–56. Cl. 26.
Kono Mfg. Co., The, to Kono Mfg. Co. Inc., Woodside, N. Y. 627,793, pub. 3–13–56. Cl. 26.
Koppers Co., The, Pittsburgh, Pa. 265,502, canc. Cl. 1.
Kroehler Mfg. Co., Naperville, Ill. 275,549, canc. Cl. 32.
Kroger Co., The: *See*—
Kroger Grocery & Baking Co., The.
Kroger Grocery & Baking Co., The, to The Kroger Co., Cincinnati, Ohio. 109,008, ren. 3–14–56. Cl. 46.
Kuhlman, Rolla W., Waco, Tex. 520,443, canc. Cl. 37.
Laros Textiles Co., Bethlehem, Pa. 627,922, pub. 3–13–56. Cl. 42.
Latrobe Electric Steel Co., to Latrobe Steel Co., Latrobe, Pa. 332,234, ren. 2–4–56. Cl. 14.
Latrobe Steel Co.: *See*—
Latrobe Electric Steel Co.
Lawrence, W. W., & Co., Pittsburgh, Pa. 627,643–4, pub. 3–13–56. Cl. 16.
Leake, W. E., Co., Inc., Birmingham, Ala. 520,595, canc. Cl. 34.
Lesters, The: *See*—
Sermay, Lester J.
Liberty Bags, Inc., New York, N. Y. 520,508, canc. Cl. 3.
Lindsay Co., The, St. Paul, Minn. 520,906, canc. Cl. 31.
Lo-Calory Food Corp., New York, N. Y. 627,940, pub. 3–13–56. Cl. 46.
Lock-Joint Window Co., Oklahoma City, Okla. 627,609, pub. 3–13–56. Cl. 12.

Longines-Wittnauer Watch Co., Inc., New York, N. Y. 627,804, pub. 3–13–56. Cl. 26.
Lovico, Salvatore A., d. b. a. Durable Canvas Products Co., Brooklyn, N. Y. 628,001. Cl. 3.
Lubash, Maurice, d. b. a. Ru-Ell Novelties, New York, N. Y. 520,392, canc. Cl. 40.
Lubrizol Corp., The, Wickliffe, Ohio. 627,638, pub. 3–13–56. Cl. 16.
Lucatelli Packing Co., West New York, N. J. 520,400, canc. Cl. 46.
Luce & Co., Inc., Jersey City, N. J. 627,959, pub. 3–13–56. Cl. 46.
Lummis Mfg. Co., Pasadena, Calif. 627,761, pub. 3–13–56. Cl. 23.
Lynch, S. H., & Co., Dallas, Tex. 520,926, canc. Cl. 107.
Lyons, James E., Sr., d. b. a. Lyons Tackle Co., Portland, Oreg. 627,697, pub. 3–13–56. Cl. 22.
Lyons Tackle Co.: *See*—
Lyons, James E., Sr.
M & H Chemical Co.: *See*—
McNair, Fred V.
MacCarthy, Donald W., d. b. a. MacCarthy Mfg. Co., El Monte, Calif. 627,757, pub. 3–13–56. Cl. 23.
MacCarthy Mfg. Co.: *See*—
MacCarthy, Donald W.
Mailliard & Schmiedell, d. b. a. Vittoria Importing Co., and Fratelli Calvo, San Francisco, Calif. 627,949, pub. 3–13–56. Cl. 46.
Mal-Art Inc., New York, N. Y. 520,678, canc. Cl. 32.
Mallinckrodt Chemical Works, St. Louis, Mo. 627,655, pub. 3–13–56. Cl. 18.
Mamiya Camera Co., Ltd.: *See*—
Mamiya Koki Kabushiki-Kaisha.
Mamiya Koki Kabushiki-Kaisha (in English style Mamiya Camera Co., Ltd.), Tokyo-to, Japan. 627,790–2, pub. 3–13–56. Cl. 26.
Manhattan Briar Pipes' Ltd., New York, N. Y. 627,592, pub. 3–13–56. Cl. 8.
Manhattan Drug Co., Brooklyn, N. Y. 627,654, pub. 3–13–56. Cl. 18.
Manley, Harold C., d. b. a. Gopher Game Co., Forest Lake, Minn. 627,704–5, pub. 3–13–56. Cl. 22.
Mann-Mine Research & Development Co., Mohnton, Pa. 627,992, pub. 3–13–56. Cl. 100.
Marlen Metal Products Co., Hazel Park, Mich. 627,698, pub. 3–13–56. Cl. 22.
Marshall Field & Co., Chicago Ill. 520,509. canc. Cl. 43.
Marv of Puddin Hill, Greenville Tex. 627,943, pub. 3–13–56. Cl. 46.
Mascia, Mary C.: *See*—
Mascia, Oreste E.
Mascia, Oreste E., deceased, to M. C. Mascia, administratrix, Port Chester, N. Y. 331,735, ren. 1–21–56. Cl. 45.
Massengill, S. E., Co., The, Bristol, Tenn. 627,665, pub. 3–13–56. Cl. 18.
Master Lock Co., Milwaukee, Wis. 628,012. Cl. 25.
Mathieson Chemical Corp., New York, N. Y., now by merger and change of name Olin Mathieson Chemical Corp. 627,975 pub. 3–13–56. Cl. 51.
May, Maude B., Co. (Not Inc.), Chicago, Ill. 520,616, canc. Cl. 33.
Mayflower Dress Co., Inc., New York, N. Y. 520,532, canc. Cl. 39.
McCormick & Co., Inc., Baltimore, Md. 627,948, pub. 3–13–56. Cl. 46.
McCormick & Co., Inc., Baltimore, Md. 627,964, pub. 3–13–56. Cl. 46.
McCreary, John T., Chicago, Ill. 335,701, ren. 6–9–56. Cl. 18.
McDougall-Butler Co., Inc., Buffalo, N. Y. 149,439–40, canc. Cl. 16.
McDougall-Butler Co., Inc., Buffalo, N. Y. 200,726, canc. Cl. 16.
McDougall-Butler Co., Inc., Buffalo, N. Y. 207,905, canc. Cl. 16.
McDougall-Butler Co., Inc., Buffalo, N. Y. 232,835, canc. Cl. 16.
McDougall-Butler Co., Inc., Buffalo, N. Y. 382,416, canc. Cl. 16.
McDougall-Butler Co., Inc., Buffalo, N. Y. 410,143, canc. Cl. 16.
McGovern, E. B., d. b. a. McGovern and McGovern, Seattle, Wash. 520,655, canc. Cl. 46.
McGovern and McGovern: *See*—
McGovern, E. B.
McNair, Fred V., d. b. a. M & H Chemical Co., San Leandro, Calif. 627,586, pub. 3–13–56. Cl. 6.
McNeil Laboratories, Inc., Philadelphia, Pa. 332,482, ren. 2–18–56. Cl. 18.
McNeil Laboratories, Inc., Philadelphia, Pa. 332,495, ren. 2–18–56. Cl. 18.
Meat Merchandising, Inc., St. Louis, Mo. 628,024. Cl. 38.
Melchior, Armstrong, Dessau Co. of Delaware, Inc., Ridgefield, N. J. 520,907, canc. Cl. 31.
Meli, Roberto, d. b. a. Roberto Meli Officine Elettromeccanica, Bergamo, Italy. 627,760, pub. 3–13–56. Cl. 23.
Meli, Roberto, Officine Elettromeccanica: *See*—
Meli, Roberto.
Melnor Metal Products Co., Inc., Long Island City, N. Y. 627,619, pub. 3–13–56. Cl. 13.
Melvin Co., South Pasadena, Calif. 333,832, ren. 4–7–56. Cl. 18.
Merz, Richard, Chicago, Ill., to Warner-Lambert Pharmaceutical Co., New York, N. Y. 108,803, ren. 2–29–56. Cl. 18.
Messer, Adolf, G. m. b. H., Frankfurt am Main, Germany. 627,846, pub. 3–13–56. Cl. 34.
Metal Forms Corp., Milwaukee, Wis. 627,617, pub. 3–13–56. Cl. 12.
Metallising Engineering Co. Inc., Westbury, N. Y. 627,580, pub. 3–13–56. Cl. 6.
Meyer Woolen, Inc., New York, N. Y. 520,437, canc. Cl. 42.
Mid-Co Color Service: *See*—
Midco Photo Service.
Midco Photo Service, also d. b. a. Mid-Co Color Service and Mid-Continent Engineering Co., Wichita, Kans. 627,672, pub. 3–13–56. Cl. 21.
Mid-Continent Engineering Co.: *See*—
Midco Photo Service.
Midgley, Charles W., Sacramento, Calif. 627,960, pub. 3–13–56. Cl. 46.
Miles Laboratories, Inc., Elkhart, Ind. 627,660, pub. 3–13–56. Cl. 18.
Mill Creek Transit Mix, Inc., Salt Lake City, Utah. 627,589, pub. 3–13–56. Cl. 6.
Millers Falls Co., Greenfield, Mass. 627,753, pub. 3–13–56. Cl. 23.
Milwaukee Lace Paper Co., Milwaukee, Wis. 111,470, ren. 7–18–56. Cl. 37.
Mitchell, C. G., Inc., Binghamton, N. Y. 627,974, pub. 3–13–56. Cl. 50.
Mitchell, Joshua B., Long Beach, N. Y. 627,567, pub. 3–13–56. Cl. 2.
Mizermobile Manufacturers, Portland, Oreg. 520,441, canc. Cl. 23.
Modern Engraving & Machine Co., Hillside, N. J. 627,749, pub. 3–13–56. Cl. 23.
Mont La Salle Vineyards: *See*—
De La Salle Institute.
Moto-Sway Corp. of America, South Pasadena, Calif. 520,380, canc. Cl. 52.
Moto-Sway Corp. of America, South Pasadena, Calif. 520,727, canc. Cl. 52.
Motordry Co., Glendale, Calif. 520,527, canc. Cl. 21.
Motor Exchange: *See*—
Schwartz, Fred M.
Mountain View Fruit Association, Upland, Calif. 520,374, canc. Cl. 46.
Multiple V-Belt Drive and Mechanical Power Transmission Association, Chicago, Ill. 520,927, canc. Cl. 35.
Murphy, Brill and Sahner, Inc., New York, N. Y. 627,903, pub. 3–13–56. Cl. 39.
Murphysboro Grocery Co., Murphysboro, Ill. 520,612, canc. Cl. 52.
Murray Co. of Texas, Inc., The: *See*—
Boston Gear Works, Inc.
Musher Foundation, Inc.: *See*—
Quaker Oats Co., The.
Mushynsky, Anthony, d. b. a. Esge Co., New York, N. Y. 627,594, pub. 3–13–56. Cl. 10.
NEA Service, Inc., Cleveland, Ohio. 336,903–4, ren. 7–21–56. Cl. 38.
Namey, Theodore E., d. b. a. Christy Enterprises, Washington, D. C. 628,032. Cl. 40.
Nash Inc., Jersey City, N. J. 520,512, canc. Cl. 3.
Nata Products Co.: *See*—
Crown Zellerbach Corp.
National Approved Motel Association, Sioux City, Iowa. 628,037. Cl. 100.
National Biscuit Co.: *See*—
York Pretzel Bakery.
National Engineering Co., Chicago, Ill. 627,758, pub. 3–13–56. Cl. 23.
National Iron Co., Duluth, Minn. 627,739, pub. 3–13–56. Cl. 23.
National Lead Co., New York, N. Y. 627,641, pub. 3–13–56. Cl. 16.
National Malleable and Steel Castings Co., Cleveland, Ohio. 332,892, ren. 3–3–56. Cl. 19.
National Musical String Co., New Brunswick, N. J. 627,860, pub. 3–13–56. Cl. 36.
National Paper Products Co., The: *See*—
Crown Zellerbach Corp.
National Screw and Mfg. Co., The: *See*—
National Screw & Tack Co., The.
National Screw & Tack Co., The, to The National Screw and Mfg. Co., Cleveland, Ohio. 109,364, ren. 4–4–56. Cl. 19.
National Starch Products Inc., New York, N. Y. 627,576, pub. 3–13–56. Cl. 5.
National Water Lift Co., Kalamazoo, Mich., to The Cleveland Pneumatic Tool Co., Cleveland, Ohio. 627,765, pub. 3–13–56. Cl. 23.
Navigators, The, Los Angeles, Calif. 627,999, pub. 3–13–56. Cl. 107.
Nelson, Sexton D., Chicago, Ill. 627,610, pub. 3–13–56. Cl. 12.
Newcastle Industries, Inc., New York, N. Y. 520,823, canc. Cl. 12.
New England Grain Products Co., Waterville, Maine. 520,929, canc. Cl. 18.
New Haven Vibrator Co., New Haven, Conn. 520,603, canc. Cl. 23.
New Process Metals Corp., Newark, N. J. 520,759, canc. Cl. 34.
New York Merchandising Co., Inc., New York, N. Y. 627,696, pub. 3–13–56. Cl. 22.
Noble Mfg. Co., Inc., Haydenville, Mass. 520,677, canc. Cl. 50.
Noonday Press, The, New York, N. Y. 627,873, pub. 3–13–56. Cl. 38.
Nordmark-Werke Gesellschaft mit beschraenkter Haftung, Hamburg, Germany. 627,664, pub. 3–13–56. Cl. 18.
Norgren, C. A., Co., Englewood, Colo. 627,715, pub. 3–13–56. Cl. 23.
Norm-Mil Marine Paint Co., Paducah, Ky. 627,642, pub. 3–13–56. Cl. 16.
North American Aviation, Inc., Los Angeles, Calif. 627,762, pub. 3–13–56. Cl. 23.

Nuclear Instrument and Chemical Corp., Chicago, Ill. 627,581, pub. 3–13–56. Cl. 6.
Nuodex Products Co., Inc., Elizabeth, N. J. 627,635, pub. 3–13–56. Cl. 16.
Oak Ridge Mfg. Co., Charleston, S. C. 520,453, canc. Cl. 37.
Oak Ridge Mfg. Co., Charleston, S. C. 520,785, canc. Cl. 37.
Olin Mathieson Chemical Corp.: *See*—
Mathieson Chemical Corp.
Olin Mathieson Chemical Corp., New York, N. Y. 627,979–81, pub. 3–13–56. Cl. 51.
Oliveri, Natale: *See*—
Olivieri, Natale.
Olivieri, Natale, d. b. a. Natale Oliveri, Garfield, N. J. 627,928, pub. 3–13–56. Cl. 45.
Olson, Edward, Lynbrook, N. Y. 627,646, pub. 3–13–56, Cl. 18.
Opportunity Publishing Co., Chicago, Ill. 627,881, pub. 3–13–56. Cl. 38.
Orleans, Sam, & Associates, Inc., Knoxville, Tenn. 627,779, pub. 3–13–56. Cl. 38.
Osborn Mfg. Co., The, Cleveland, Ohio. 627,742, pub. 3–13–56. Cl. 23.
Osborne, Maria De' Aguiar Joost, d. b. a. E-Z Press Pressing Paper Co., New York, N. Y. 628,011. Cl. 24.
Oslo Skinnauksjoner S/L, Oslo, Chr., Norway. 627,565, pub. 3–13–56, Cl. 1.
Outboard, Marine & Mfg. Co., Waukegan, Ill. 627,826, pub. 3–13–56. Cl. 31.
Pacific Exploration Co., Inc., Seattle, Wash. 520,884, canc. Cl. 46.
Page, L. C., & Co., Inc., Boston, Mass. 627,869, pub. 3–13–56. Cl. 38.
Pairpoint Corp., The, New Bedford, Mass. 108,262, ren. 1–25–56. Cl. 28.
Par Beverage Corp.: *See*—
Tom Collins Corp., The.
Par Mfg. Co., Vallejo, Calif. 627,702, pub. 3–13–56. Cl. 22.
Parichy Roofing and Shingle Co., Forest Park, Ill. 520,680, canc. Cl. 12.
Parke, Davis & Co., Detroit, Mich. 334,348, ren. 4–28–56. Cl. 18.
Parkway Foods, Inc., New York, N. Y. 520,844, canc. Cl. 46.
Pedler, Harry, & Sons, Inc., Elkhart, Ind. 627,859, pub. 3–13–56. Cl. 36.
Peerless Confection Co., Chicago, Ill. 336,677, ren. 7–14–56. Cl. 46.
Peerless Electric, Inc., New York, N. Y. 628,006. Cl 21.
Pennsylvania Salt Mfg. Co., The: *See*—
Sterling Products Co.
Peoria Creamery Co., Peoria, Ill. 520,868, canc. Cl. 46.
Perceptual Development Laboratories, Inc., St. Louis, Mo. 627,799, pub. 3–13–56. Cl. 26.
Perfection Mica Co., Chicago, Ill. 627,677–9, pub. 3–13–56. Cl. 21.
Perma Products Co., The: *See*—
Perma-Stain Co., The.
Perma-Stain Co., The, Cleveland, Ohio, to The Perma Products Co., Winlock, Wash. 332,075, ren. 2–4–56. Cl. 16.
Perry Knitting Co., The, Perry, N. Y. 627,900, pub. 3–13–56. Cl. 39.
Peter Pan Bakers: *See*—
Petersen, P. F., Baking Co.
Petersen Mfg. Co., Inc., De Witt, Nebr. 627,767, pub. 3–13–56. Cl. 23.
Petersen, P. F., Baking Co., d. b. a. Peter Pan Bakers, Omaha, Nebr. 520,594, canc. Cl. 46.
Pfeiffer Co., The: *See*—
Pfeiffer, S., Mfg. Co.
Pfeiffer, S., Mfg. Co., St. Louis, Mo., now by change of name The Pfeiffer Co. 627,658, pub. 3–13–56. Cl. 18.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 627,645, pub. 3–13–56. Cl. 18.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 627,661–2, pub. 3–13–56. Cl. 18.
Phelan-Faust Paint Mfg. Co., to Phelan-Faust Paint Mfg. Co., St. Louis, Mo. 336,917, ren. 7–21–56. Cl. 16.
Phelan & Taylor Produce Co., Inc., Oceano, Calif. 627,961, pub. 3–13–56. Cl. 46.
Phillips Petroleum Co., Bartlesville, Okla. 627,584, pub. 3–13–56. Cl. 6.
Phoenix Trimming Co., Chicago, Ill. 302,295, canc. Cl. 42.
Pierce, S. S., Co., Boston, Mass. 115,222, 12(c) pub. 5–29–56. Cl. 46.
Pindyck, Charles, Inc., New York, N. Y. 628,026. Cl. 39.
Polaroid Corp.: *See*—
Sheet Polarizer Co., Inc.
Pollack, Max, & Co., Inc., New York, N. Y. 520,516, canc. Cl. 43.
Pollak Bros. Inc., Fort Wayne, Ind. 627,899, pub. 3–13–56. Cl. 39.
Porter, Donald I., Columbus, Ohio. 520,827, canc. Cl. 12.
Powers-Samas Accounting Machines Ltd., London, England. 627,831–2, pub. 3–13–56. Cl. 32.
Practical Sales Producers Inc., to The Reply-O Products Co., New York, N. Y. 331,775, ren. 1–21–56. Cl. 38.
Pratt Food Co., Philadelphia, Pa. 520,942, canc. Cl. 46.
Precision Laboratories: *See*—
Sheldon, Irwin R.
Price Supply Co., Amarillo, Tex. 627,850, pub. 3–13–56. Cl. 34.
Prince Matchabelli, Inc., New York, N. Y. 627,985, pub. 3–13–56. Cl. 51.
Princess Products: *See*—
Crystal, Edwina.
Purdue Frederick Co., The, New York, N. Y. 627,649, pub. 3–13–56. Cl. 18.
Purolator Products, Inc., Rahway, N. J. 627,825, pub. 3–13–56. Cl. 31.
Quaker Chemical Products Corp., Conshohocken, Pa. 335,104, ren. 5–26–56. Cl. 6.
Quaker Chemical Products Corp., Conshohocken, Pa. 335,223–4, ren. 5–26–56. Cl. 6.
Quaker Oats Co., The, Chicago, Ill., to Musher Foundation, Inc., New York, N. Y. 331,799, ren. 1–21–56. Cl. 46.
Quick-Set, Inc., Skokie, Ill. 627,809–10, pub. 3–13–56. Cl. 26.
Quigley Publishing Co., Inc., New York, N. Y. 627,878–9, pub. 3–13–56. Cl. 38.
Ratner, Walter, d. b. a. The Grant Co., Chicago, Ill. 627,595, pub. 3–13–56. Cl. 10.
Raybestos-Manhattan, Inc., Passaic, N. J. 520,893, canc. Cl. 34.
Raypak Co., Inc., El Monte, Calif. 627,849, pub. 3–13–56. Cl. 34.
Reading Dart Board Co.: *See*—
Walter, C. Robert.
Recherches et Propagande Scientifiques Société à Responsabilité Limitée, Paris, Seine, France. 627,651, pub. 3–13–56. Cl. 18.
Ree-Store, Inc., Matawan, N. J. 267,639, pub. 3–13–56. Cl. 16.
Reid, M. L., d. b. a. Reid's Rancho Palos Verdes, Tucson, Ariz. 520,702, canc. Cl. 46.
Reid's Rancho Palos Verdes: *See*—
Reid, M. L.
Reiss-Premier Corp., The, West New York, N. J., to S. M. Frank and Co. Inc., New York, N. Y. 627,591, pub. 3–13–56. Cl. 8.
Reliable Textile Co., Inc., New York, N. Y. 627,918, pub. 3–13–56. Cl. 42.
Reply-O Products Co., The: *See*—
Practical Sales Producers Inc.
Rice Growers Association of California, Sacramento, Calif. 335,672, ren. 6–9–56. Cl. 46.
Robinson, James S.: *See*—
Robinson, Mrs. James S.
Robinson, James S., by M. A. Robinson, Memphis, Tenn. 22,266, 12(c) pub. 5–20–56. Cl. 18.
Robinson, Mary A.: *See*—
Robinson, James S.
Robinson, Mrs. James S.
Robinson, Mrs. James S., d. b. a. James S. Robinson, Apothecary, by M. A. Robinson, Memphis, Tenn. 343,099, 12(c) pub. 5–29–56. Cl. 18.
Robinson, Mrs. James S., d. b. a. James S. Robinson, Apothecary, by M. A. Robinson, Memphis, Tenn. 343,541, 12(c) pub. 5–29–56. Cl. 18.
Rochelle Furniture Mfg. Co., Rochelle, Ill. 520,705, canc. Cl. 32.
Rochester Ropes, Inc., Culpeper, Va. 520,478, canc. Cl. 7.
Rockwell Silver Co., The, Meriden, Conn. 520,546, canc. Cl. 30.
Rockwell Silver Co., The, Meriden, Conn. 520,547, canc. Cl. 33.
Roman Meal Co., Tacoma, Wash. 262,911, canc. Cl. 46.
Ronay, Inc., New York, N. Y. 627 570, pub. 3–13–56. Cl. 3.
Rose, Billy, d. b. a. Billy Rose Candy Co. of N. Y., New York, N. Y. 520 530, canc. Cl. 46.
Rose, Billy Candy Co. of N. Y.: *See*—
Rose, Billy.
Rosenau Bros., Inc., to Rosenau Brothers, Inc., Philadelphia, Pa. 332,580 ren. 2–18–56. Cl. 39.
Rosenau Brothers, Inc.: *See*—
Rosenau Bros., Inc.
Roth, Chester H., Co., Inc.: *See*—
Standard Hosiery Mills, Inc.
Rothman, Harry, Inc., New York, N. Y. 628,028. Cl. 39.
Rothschild, Lee, d. b. a. Corona Soapcrafters, Redlands, Calif. 520,716, canc. Cl. 52.
Rough Wear Clothing Co., Inc., New York, N. Y. 335,497, ren. 6–2–56. Cl. 39.
Ruberoid Co., The, South Bound Brook, N. J. 627,611, pub. 3–13–56. Cl. 12.
Rubinstein, Helena, Inc., New York, N. Y. 627,986, pub. 3–13–56. Cl. 51.
Ru-Ell Novelties: *See*—
Lubash, Maurice.
S. F. Appliances, Ltd., Ridgefield, N. J. 520,875, canc Cl. 34.
Saentis, Inc., Union City, N. J. 336 326, ren. 6–30–56. Cl. 23.
Safe-T-Alarm, Inc., Chelsea, Mass. 627,686, pub. 3–13–56. Cl. 21.
Sage Exporters' Centre, Dubrovnik, Yugoslavia. 628,000, pub. 3–13–56. Cl. A.
Saks & Co., New York, N. Y. 627,569, pub. 3–13–56. Cl. 2.
Saks & Co., New York, N. Y. 627,598, pub. 3–13–56. Cl. 11.
Saks & Co., New York, N. Y. 627,741, pub. 3–13–56. Cl. 23.
Saks & Co., New York, N. Y. 627,800, pub. 3–13–56. Cl. 26.
Saks & Co., New York, N. Y. 627,814, pub. 3–13–56. Cl. 27.
Saks & Co., New York, N. Y. 627 818, pub. 3–13–56. Cl. 28.
Saks & Co., New York, N. Y. 627 821, pub. 3–13–56. Cl. 29.
Saks & Co., New York, N. Y. 627,861, pub. 3–13–56. Cl. 36.
Saks & Co., New York, N. Y. 627,888, pub. 3–13–56. Cl. 39.
Saks & Co., New York, N. Y. 627,892, pub. 3–13–56. Cl. 39.
Savage Arms Corp., Utica, N. Y. 627,828–30, pub. 3–13–56. Cl. 31.
Savannah Sugar Refining Corp., Savannah, Ga. 122,345, 12(c) pub. 5–29–56. Cl. 46.
Sazerac Co., Inc., New Orleans, La. 333,394, ren. 3–17–56. Cl. 49.
Schacht Rubber Mfg. Co., Huntington, Ind. 109,783, ren. 4–18–56. Cl. 13.
Scheidt, Bruno, d. b. a. American Roland Food Co., New York, N. Y. 627,935, pub. 3–13–56. Cl. 46.
Schlein, Samuel E., Inc., New York, N. Y. 627,898, pub. 3–13–56. Cl. 39.
Schreyer & Michaels, New York, N. Y. 520,872, canc. Cl. 16.
Schwab, H. W., Textile Corp., New York, N. Y. 627,908, pub. 3–13–56. Cl. 40.

Schwartz, Fred M., d. b. a. Motor Exchange, Philadelphia, Pa. 627,716, pub. 3–13–56. Cl. 23.
Schwarzkopf, Hans, Hamburg-Altona, Germany. 627,977, pub. 3–13–56. Cl. 51.
Scioto Canning Co., The: *See*—
Sears & Nichols Corp., The.
Scovill Mfg. Co., Racine, Wis., Waterbury, Conn., and elsewhere. 520,750, canc. Cl. 21.
Scranton Storage Battery Corp., Archbald, Pa. 627,673, pub. 3–13–56. Cl. 21.
Sears & Nichols Corp., The, d. b. a. The Scioto Canning Co., Chillicothe, Ohio. 261,360, canc. Cl. 46.
Seawol Distributors, Inc., Los Angeles, Calif. 628,010. Cl. 23.
See-Jay Exterminating Service, Inc., Oklahoma City, Okla. 520,886, canc. Cl. 6.
Seeman, J. E., Co., Inc., Los Angeles, Calif. 520,957, canc. Cl. 8.
Selberling Rubber Co., Barberton, Ohio. 627,858, pub. 3–13–56. Cl. 35.
Selby, Battersby & Co., Philadelphia, Pa. 627,614, pub. 3–13–56. Cl. 12.
Selchow & Righter Co., New York, N. Y. 627,708, pub. 3–13–56. Cl. 22.
Sermay, Lester J., Island Park, N. Y., d. b. a. The Lesters. 520,953, canc. Cl. 46.
Service Pharmacy, Inc., Washington, D. C. 627,647, pub. 3–13–56. Cl. 18.
Sharp & Dohme, Inc., Philadelphia, Pa. 520,480, canc. Cl. 18.
Sharples Corp., The, Philadelphia, Pa. 627,710, pub. 3–13–56. Cl. 23.
Shaw, H. E., Co., Worcester, Mass. 520,796, canc. Cl. 17.
Sheet Polarizer Co., Inc., Union City, N. J., to Polaroid Corp., Cambridge, Mass. 337,404, ren. 8–4–56. Cl. 26.
Sheldon, Irwin R., d. b. a. Precision Laboratories, Brooklyn, N. Y. 628,017. Cl. 26.
Shell Chemical Corp., New York, N. Y. 627,579, pub. 3–13–56. Cl. 6.
Shell Chemical Corp., New York, N. Y. 627,634, pub. 3–13–56. Cl. 15.
Shellabarger Grain Products Co., Decatur, Ill., to Spencer Kellogg and Sons, Inc., Buffalo, N. Y. 332,570, ren. 2–18–56. Cl. 48.
Shellabarger Grain Products Co., Decatur, Ill., to Spencer Kellogg and Sons, Inc., Buffalo, N. Y. 332,813, ren. 2–25–56. Cl. 46.
Sherman Paper Products Corp., Newton, Mass. 520,866, canc. Cl. 37.
Sherwin Williams Co., The, Cleveland, Ohio. 520,359, canc. Cl. 42.
Shetland Co., Inc., The, Lynn, Mass. 627,689, pub. 3–13–56. Cl. 21.
Shimamoto & Sons, Imperial, Calif. 627,944, pub. 3–13–56. Cl. 46.
Shirt Center, Inc., New York, N. Y. 628,027. Cl. 39.
Shotwell Mfg. Co., The, Chicago, Ill. 339,179, canc. Cl. 46.
Shuwall, Edward, & Co., Inc., Pottstown, Pa. 354,574, canc. Cl. 39.
Silex Co., The, Hartford, Conn. 627,728, pub. 3–13–56. Cl. 23.
Silverstein, Hyman, d. b. a. Keystone Lamp Co., New York, N. Y. 627, 632, pub. 3–13–56. Cl. 15.
Simon Simple Craft and Toy Co., Orange, N. J. 627,885, pub. 3–13–56. Cl. 39.
Simplex Oil Heating Corp., New York, N. Y. 520,640, canc. Cl. 34.
Simplot, J. R., Co., Caldwell, Idaho. 627,936, pub. 3–13–56. Cl. 46.
Sinagnan, Frances, et Cie., Inc., New York, N. Y. 332,818, ren. 2–25–56. Cl. 46.
Singer, Walter E., d. b. a. Walter E. Singer Co., New York, N. Y. 520,915, canc. Cl. 27.
Singer, Walter E., Co.: *See*—
Singer, Walter E.
Sloane, W. & J., New York, N. Y. 520,797, canc. Cl. 8.
Smith, H. M., Mfg. Co.: *See*—
Smith, Henry M.
Smith, Henry M., d. b. a. H. M. Smith Mfg. Co., St. Paul, Minn. 627,912, pub. 3–13–56. Cl. 42.
Social Register Association, New York, N. Y. 627,876, pub. 3–13–56. Cl. 38.
Societe Anonyme d'Exploitation des Papeteries L. Lacroix Fils, Angouleme, France. 111,027, ren. 6–20–56. Cl. 8.
Societe Anonyme Dite: Etablissements Schmitt-Jourdan, Paris, France. 627,653, pub. 3–13–56. Cl. 18.
Societe Francaise d'Etudes et de Realisations d'Inventions Coanda, Clichy (Seine), France. 627,727, pub. 3–13–56. Cl. 23.
Societe Genevoise d'Instruments de Physique, Geneva, Switzerland. 627,755, pub. 3–13–56. Cl. 23.
Sohn, Allen O., d. b. a. Sohn Machine Co., Plymouth, Wis. 627,717, pub. 3–13–56. Cl. 23.
Sohn Machine Co.: *See*—
Sohn, Allen O.
Southern Advance Bag & Paper Co. Inc., Bangor, Maine, and Boston, Mass. 520,544, canc. Cl. 37.
Southern Friction Materials Co., Charlotte, N. C. 520,463, canc. Cl. 42.
Southern Friction Materials Co., Charlotte, N. C. 627,857, pub. 3–13–56. Cl. 35.
Southern Premium Stamp Co., Atlanta, Ga. 627,993, pub. 3–13–56. Cl. 101.
Spalding Brothers, Inc., Ponder, Tex. 520,472, canc. Cl. 6.
Spencer Rubber Products Co., Manchester, Conn. 628,018. Cl. 37.
Spignese, Cosmo, Oceanside, Calif. 627,811, pub. 3–13–56. Cl. 27.
Spring Packing Corp., Chicago, Ill. 627,600, pub. 3–13–56. Cl. 12.
Stafford, S. S., Inc., New York, N. Y. 627,596, pub. 3–13–56. Cl. 11.
Staley, A. E., Mfg. Co., Decatur, Ill. 337,166, ren. 7–28–56. Cl. 6.
Standard Folding Trays Corp., Brooklyn, N. Y. 627,566, pub. 3–13–56. Cl. 2.
Standard Hosiery Mills, Inc., Burlington, N. C., by Chester H. Roth Co., Inc., New York, N. Y. 261,273, 12(c) pub. 5–29–56. Cl. 39.
Standard Machinery Co., The, Mystic, Conn. 627,776, pub. 3–13–56. Cl. 23.
Stars and Stripes Fireworks: *See*—
Wilfong, Walton H.
Steel City Mfg. Co., The: *See*—
Fibus, Murray M.
Stein, Lawrence M., Co., Chicago, Ill. 520,791, canc. Cl. 21.
Sterling Products Co., Easton, to The Pennsylvania Salt Mfg. Co., Philadelphia, Pa. 332,833, ren. 2–25–56. Cl. 6.
Sterling Pulp & Paper Co., Eau Claire, Wis. 627,864, pub. 3–13–56. Cl. 37.
Stevens, J. P., & Co., Inc., New York, N. Y. 627,921, pub. 3–13–56. Cl. 42.
Stier, Joseph B., New York, N. Y. 320,422, canc. Cl. 23.
Stone-Tarlow Co., Inc., Brockton, Mass. 344,082, ren. 4–21–56. Cl. 39.
Stratford Neckwear Co., Inc., New York, N. Y. 627,886, pub. 3–13–56. Cl. 39.
Straus, Henry, Co., The: *See*—
Escalante, Jose, & Co.
Strauss Stores Corp., Maspeth, N. Y. 627,827, pub. 3–13–56. Cl. 31.
Strobo Research, Milwaukee, Wis. 627,780, pub. 3–13–56. Cl. 26.
Strohmeyer & Arpe Co., New York, N. Y. 627,937, pub. 3–13–56. Cl. 46.
Stromberg-Carlson Co.: *See*—
General Dynamics Corp.
Stronghold Screw Products, Inc., Chicago, Ill. 520,949, canc. Cl. 13.
Strouse-Baer Co., The: *See*—
Strouse-Baer-Friedman Co., The.
Strouse-Baer-Friedman Co., The, Baltimore, Md., now by change of name The Strouse-Baer Co. 520,523, canc. Cl. 39.
Studebaker-Packard Corp., Detroit, Mich. 627,668, pub. 3–13–56. Cl. 19.
Sturdi-Bilt Steel Products, Inc., Chicago, Ill. 627,838, pub. 3–13–56. Cl. 32.
Stylist Sprayers Co., The, New York, N. Y. 627,817, pub. 3–13–56. Cl. 28.
Summers, W. Watt, d. b. a. Watt's Products Co., Columbus, Ohio. 627,652, pub. 3–13–56. Cl. 18.
Sunbeam Corp., Chicago, Ill. 627,674–5, pub. 3–13–56. Cl. 21.
Sunbeam Corp., Chicago, Ill. 627,680–3, pub. 3–13–56. Cl. 21.
Sunbeam Corp., Chicago, Ill. 627,692, pub. 3–13–56. Cl. 21.
Sunbeam Corp., Chicago, Ill. 627,756, pub. 3–13–56. Cl. 23.
Sunbeam Corp., Chicago, Ill. 627,766, pub. 3–13–56. Cl. 23.
Sunbeam Corp., Chicago, Ill. 627,773, pub. 3–13–56. Cl. 23.
Sun-King Mfg. & Sales Co., San Jose, Calif. 627,615, pub. 3–13–56. Cl. 12.
Super-Foam Co., Brooklyn, N. Y. 520,959, canc. Cl. 32.
Superior Brands, Inc., New York, N. Y. 627,955, pub. 3–13–56. Cl. 46.
Sutton, O. A., Corp., Inc., The, Wichita, Kans. 627,795, pub. 3–13–56. Cl. 26.
Sutton Tool Co., Sturgis, Mich. 627,750, pub. 3–13–56. Cl. 23.
Synco Products: *See*—
Synco Products Co., Inc.
Synco Products Co., Inc., d. b. a. Synco Products, Chattanooga, Tenn. 520,756, canc. Cl. 6.
T-M Products, Inc., Evansville, Ind. 627,856, pub. 3–13–56. Cl. 35.
Tasty Baking Co., Philadelphia, Pa. 520,605, canc. Cl. 46.
Taxey, Paul Jacobi, Chicago, Ill. 627,606, pub. 3–13–56. Cl. 12.
Taylor, J. Y., Co.: *See*—
Taylor, Leta S.
Taylor, Leta S., d. b. a. J. Y. Taylor Co., Garland, Tex. 628,015. Cl. 26.
Tenn-Tex Alloy & Chemical Corp., Nashville, Tenn. 627,625, pub. 3–13–56. Cl. 14.
Terminal Construction Corp., Woodridge, N. J. 627,972, pub. 3–13–56. Cl. 50.
Terrell, Reta, Perfumes, Chicago, Ill. 520,764, canc. Cl. 44.
Texco Chemicals, Inc., Atlanta, Ga. 627,587, pub. 3–13–56. Cl. 6.
Texas Co., The, New York, N. Y. 333,738, ren. 4–7–56. Cl. 15.
Thermo Electric Co., Inc., Saddle River Township, N. J. 627,690, pub. 3–13–56. Cl. 21.
Thomas, S. B., Inc., Long Island City, N. Y. 336,401, ren. 7–7–56. Cl. 46.
Tom Collins Corp., The, Covington, Ky., to Par Beverage Corp., Cincinnati, Ohio. 337,252, ren. 8–4–56. Cl. 49.
Tormag Transmissions Ltd., Vancouver, British Columbia, Canada. 627,723, pub. 3–13–56. Cl. 23.
Town and Farm Co., Inc., Grand Island, Nebr. 627,995, pub. 3–13–56. Cl. 104.
Toyo Spinning Co., Ltd., The, Kita-ku, Osaka, Japan. 627,909, pub. 3–13–56. Cl. 42.
Tractor Brand: *See*—
Anvil Brand, Inc.
Trauner, Edward, Inc., New York, N. Y. 627,812, pub. 3–13–56. Cl. 27.
Tremco Mfg. Co., The, Cleveland, Ohio. 332,078, ren. 2–4–56. Cl. 12.
Treo Co., Inc., Jamaica, N. Y. 111,615, ren. 7–25–56. Cl. 39.

Triangle Rubber Co., Inc., New York, N. Y. 520,710, canc. Cl. 35.
Trip-Charge, Inc., Pittsburgh, Pa. 628,038. Cl. 102.
True, Dr. J. F., & Co., Inc., Auburn, Maine. 80,092, canc. Cl. 18.
True, Dr. J. F., & Co., Inc., Auburn, Maine. 134,832, canc. Cl. 18.
Turullis, John W., d. b. a. J. T. Mfg. Co., Gary, Ind. 520,876, canc. Cl. 8.
Tywal Co., Center Point, Iowa. 627,604, pub. 3-13-56. Cl. 12.
United Air Lines, Inc., Chicago, Ill. 627,996, pub. 11-15-55. Cl. 105.
United American Metals Corp., Brooklyn, N. Y. 627,630, pub. 3-13-56. Cl. 14.
United Associates, Inc., Jersey Shore, Pa. 520,673, canc. Cl. 23.
U. S. Industries, Inc., d. b. a. Axelson Mfg. Co., Division of U. S. Industries, Inc., Los Angeles, Calif. 627,730, pub. 2-7-56. Cl. 23.
United States Steel Corp., Pittsburgh, Pa. 627,627, pub. 3-13-56. Cl. 14.
Upjohn Co., The, Kalamazoo, Mich. 627,650, pub. 3-13-56. Cl. 18.
Vacuum Forming Corp., Port Washington, N. Y. 627,737, pub. 3-13-56. Cl. 23.
Van Brode Milling Co., Inc., Clinton, Mass. 627,747, pub. 3-13-56. Cl. 23.
Vanity Fair Electronics Corp., Brooklyn, N. Y. 628,020. Cl. 37.
Velardi, Gayton T., White Plains, N. Y. 628,021. Cl. 38.
Venesta Ltd., London, England. 627,845, pub. 3-13-56. Cl. 32.
Viking Mfg. Co., Inc., Stratford, Conn. 627,669, pub. 3-13-56. Cl. 21.
Viking Pump Co., Cedar Falls, Iowa. 627,734, pub. 3-13-56. Cl. 23.
Vittoria Importing Co. : *See*—
Maillard & Schmiedell.
Waldman, Meyer, Brooklyn, N. Y. 627,887, pub. 3-13-56. Cl. 39.
Wallace, R., & Sons Mfg. Co., Wallingford, Conn. 627,774, pub. 3-13-56. Cl. 23.
Walling, Luther, d. b. a. Walling Supply Co., Belford, N. J. 627,719, pub. 3-13-56. Cl. 23.
Walling Supply Co. : *See*—
Walling, Luther.
Walte of Hollywood Inc., Los Angeles, Calif. 627,982, pub. 3-13-56. Cl. 51.
Walter, C. Robert, d. b. a. Reading Dart Board Co., West Lawn, Pa. 520,938, canc. Cl. 22.
Waltzinger, Inc., Chicago, Ill. 627,607, pub. 3-13-56. Cl. 12.
Warner-Lambert Pharmaceutical Co. : *See*—
Merz, Richard.
Waterman Products Co., Inc., Philadelphia, Pa. 627,805, pub. 3-13-56. Cl. 26.
Watt's Products Co. : *See*—
Summers, W. Watt.
Welsbaum Bros., Brower Co., The, to Beau Brummell Ties, Inc., Cincinnati, Ohio. 337,134, ren. 7-28-56. Cl. 39.
Western Grain Co., Birmingham, Ala. 627,941, pub. 3-13-56. Cl. 46.
Western Mineral Products Co., Minneapolis, Minn. 627,868, pub. 3-13-56. Cl. 38.
Westside Farms, Phoenix, Ariz. 627,962, pub. 3-13-56. Cl. 46.
Wheeling Corrugating Co., Wheeling, W. Va. 336,969, ren. 7-21-56. Cl. 24.
White, Abe J., Houston, Tex. 520,642, canc. Cl. 51.
Wilbur-Suchard Chocolate Co., to Wilbur-Suchard Chocolate Co., Inc., Lititz, Pa. 334,404, ren. 5-5-56. Cl. 46.
Wilbur-Suchard Chocolate Co., Inc. : *See*—
Wilbur-Suchard Chocolate Co.
Wilcox-Gay Corp., The, Charlotte, Mich. 627,823, pub. 3-13-56. Cl. 31.
Wilfong, Walton E., d. b. a. Stars and Stripes Fireworks, Fort Worth, Tex. 627,593, pub. 3-13-56. Cl. 9.
Willett, Consider H., Inc., Louisville, Ky. 627,843, pub. 3-13-56. Cl. 32.
Wilson Sporting Goods Co., Chicago, Ill. 627,700, pub. 3-13-56. Cl. 22.
Wiseman, M., & Co., Ltd., London, England. 627,803, pub. 3-13-56. Cl. 26.
Wood, Gar, Industries, Inc., Wayne, Mich. 627,746, pub. 3-13-56. Cl. 23.
Wright Engineering Co. : *See*—
Wright, H. Dudley.
Wright, H. Dudley, d. b. a. Wright Engineering Co., Pasadena, Calif. 627,781, pub. 3-13-56. Cl. 26.
Wynlit Pharmaceuticals, Inc., Madison, N. J. 627,663, pub. 3-13-56. Cl. 18.
York Pretzel Bakery, York, Pa., to National Biscuit Co., New York, N. Y. 109,247, ren. 3-28-56. Cl. 46.
York-Shipley, Inc., York, Pa. 520,931, canc. Cl. 34.
Yosemite Winery Association, Madera, Calif. 627,969, pub. 3-13-56. Cl. 47.
Zajc, Karol, New York, N. Y. 520,937, canc. Cl. 50.
Zelinsky, Robert, d. b. a. Count-O-Larm Co., Chicago, Ill. 627,808, pub. 3-13-56. Cl. 26.
Zephyr Laundry Machinery Co., d. b. a. The Hydraxtor Co., Chicago, Ill. 627,722, pub. 3-13-56. Cl. 23.

U. S. GOVERNMENT PRINTING OFFICE: 0—1956

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
June 5, 1956 Volume 707 Number 1

PATENTS

NOTICES

International Convention for the Protection of Industrial Property

Adherence of Monaco to the London 1934 Revision

The Secretary of State has been notified by the Legation of Switzerland of the adherence, effective Apr. 29, 1956, of Monaco to the International Convention for the Protection of Industrial Property as last revised at London on June 2, 1934.

ROBERT C. WATSON,
Commissioner of Patents.

May 17, 1956.

Adjudicated Patents

(C. A. S. C.) Davis Patent No. 2,176,622 (273—176), for carpet golf course, *Held* invalid. *Davis et al.* v. *Buck-Jackson Corp.*, 230 F.2d 655 ; 108 USPQ 281.

(D. C. Ill.) Drain Patent No. 2,440,741 (4—187), for sink mounting. Claims 1, 2, 3, 5, and 6 *Held* valid and infringed. *Church of Religious Science* v. *Kinkead Industries Inc.*, 138 F. Supp. 954 ; 108 USPQ 290.

Disclaimer

2,731,785.—*Alfred W. Vibber*, Ridgewood, N. J. METHOD OF AND APPARATUS FOR PLYING STRANDS. Patent dated Jan. 24, 1956. Disclaimer filed May 2, 1956, by the inventor.

Hereby enters this disclaimer to claims 16 and 17 of said patent.

Patents Available for Licensing or Sale

2,462,161. Hose Supporters. Howard F. Callis, 3807 Granby St., Apt. D1, Norfolk, Va.

2,692,453. Animal Trap (for Catching Live Gophers or the Like). Grover L. Wingfield, P. O. Box 93, Sandstone, W. Va.

2,728,360. Adjustable Clips (in a Picker Assembly for the Picker Stick of an Under-Pick Loom). Harry Hargreaves, "Danemoor," North Road, Glossop, England. Correspondence to : Michael S. Striker, 511 Fifth Ave., New York 17, N. Y.

General Electric Company is prepared to grant non-exclusive licenses under the following 35 patents on reasonable terms to domestic manufacturers.

Applications for license may be addressed to : General Electric Company, Patent Counsel, Industrial Power Components Division, Plainville, Conn.

2,156,644. Switch Box & Method of Making Same.
2,161,266. Wire Terminal.
2,191,645. Bus Duct.
2,201,679. Trolley Collector for Bus Bar Conduit Systems.
2,209,918. Electric Switch.
2,218,033. Switch Box.
2,240,771. Fuse Holder.
2,247,231. Electric Switch.
2,272,145. Latch for Electric Switch Cabinets.
2,344,938. Two-Position Switch.
2,455,799. Electric Switch Actuating Mechanism.
2,457,497. Electric Switch.
2,460,599. Electric Switch Actuator.
2,465,933. Electric Switch.
2,494,313. Source Transfer Switch.
2,506,147. Safety Switch.
2,506,148. Safety Switch.
2,515,449. Snap Operating Means for Actuating Detachable Switches.
2,523,888. Clamp and Fixture Support for a Bus Duct System of Power Distribution.
2,540,491. Electric Circuit Breaker.
2,632,786. Monitor Box Unit for Bus Bar Duct Systems.
2,657,292. Thermal Element for Switch Mechanisms.
2,679,565. Self Protecting Bimetal Member.
2,692,929. Tripping Mechanism.
2,692,931. Electric Circuit Breaker.
2,696,533. Bus Bar Duct System and Attachment.
2,700,086. Electric Circuit Breaker.
2,719,423. Panelboard Latch and Lock Mechanism.
2,723,329. Folding Handle Construction for Electric Switchgear.
2,724,028. Electric Switching Apparatus.
2,732,455. Overload Releasing Mechanism for Automatic Circuit Breaker.
2,733,289. Bus Bar Support.
2,738,390. Fusible Electric Switch Unit.
2,738,444. Panelboard Construction.
2,738,473. Load Center Bus Bar Assembly.

New Applications Received During April 1956

Patents	6,497
Designs	420
Plants	5
Reissues	19
Total	6,941

Issue

Patents	1,158	No. 2,748,388 to No. 2,749,545, incl.
Designs	63	No. 177,891 to No. 177,953, incl.
Plants	1	No. 1,481
Reissues	3	No. 24,161 to No. 24,163, incl.
Total	1,225	

CONDITION OF PATENT APPLICATIONS AS OF APRIL 30, 1956

Total number of pending applications (excluding Designs)	219,129
Total number of pending Design applications	6,908
Total number of applications awaiting action (excluding Designs)	122,613
Total number of Design applications awaiting action	2,652
Date of oldest new application	Jan. 12, 1955
Date of oldest amended application	Nov. 30, 1953

ROSA, M. C., Director, Patent Examining Operation

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 60, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 44, 46, 48, 51, 54, 69, 70.
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 10, 18, 22, 28, 45, 47
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE.	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	4-7-55	6-30-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	8-1-55	2-1-55
3. (VII) LE ROY, C. A. (WINDHAM, R. K., acting), Metal Founding and Treatment; Metallurgy (Process and apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	8-9-55	3-29-54
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths.	7-8-55	10-8-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	7-18-55	1-14-55
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic Amides, Amines, General Organic Processes	5-18-55	8-9-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	8-10-55	3-29-54
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	3-7-55	6-9-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	6-22-55	7-12-54
10. (VI) BOYD, S., Firearms; Ordnance; Ammunition; Explosive Charge Making	3-4-55	5-5-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	8-8-55	9-2-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	4-4-55	1-8-54
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	4-6-55	2-23-54
14. (III) MANIAN, J. C., Metal Working (part), e. g. Sheet Metal, Wire Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	3-22-55	4-19-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	8-1-55	4-29-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	6-17-55	2-24-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	7-1-55	7-19-54
18. (VI) BLUM, A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	4-22-55	6-29-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	7-5-55	8-16-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	7-29-55	5-20-54
21. (III) MADER, R. C., Textiles	7-26-55	5-21-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	7-26-55	7-26-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	1-12-55	11-30-53
24. (III) DRACOPOULOS, P. T. (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	6-13-55	1-27-55
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	8-1-55	10-1-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	8-17-55	1-3-55
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	7-11-55	11-22-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	6-17-55	9-3-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	5-2-55	1-27-55
30. (VII) O'LEARY, R. A. (MICHAEL, E. J., acting), Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	10-18-55	6-24-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons		
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	4-21-55	11-4-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	7-20-55	2-1-55
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	8-1-55	4-6-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	7-11-55	4-6-54
36. (V) McFADYEN, A. D., Measuring and Testing	7-18-55	11-2-54
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	5-26-55	3-8-55
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g., Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	6-24-55	10-20-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	8-1-55	12-1-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	8-23-55	6-23-54
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	8-2-55	2-2-55
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	4-25-55	4-27-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	2-18-55	7-27-54
44. (II) EVANS, N. H., Antennas; Automatic Pilots; Directive Radio Systems; Mass Spectrometers; Nuclear Batteries; Nuclear Resonant Devices; Neutron Detecting and Measuring; Radar; Sonar; Torpedoes	6-6-55	8-16-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	1-26-55	3-26-54
46. (II) WILES, W. G., Actinide Series (e. g., fissionable) Compounds; Sintered Metal Stock; Explosives; Power Plants (part); Metallurgy (part); Surgery (part); Radioactive Medicines; Irradiation Chemistry; Carbon Chemistry (part)	6-28-55	1-10-55
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	4-11-55	8-20-54
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	8-12-55	1-7-55
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	5-6-55	6-4-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resin Compositions, Synthetic Rubber Compositions, Natural Rubber	5-17-55	10-26-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	6-24-55	4-19-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	8-1-55	4-16-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	5-31-55	7-28-54
54. (II) NILSON, R. G. (SAX, E. J., acting), Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	9-2-55	2-1-55
55. (VII) KLINE, J. R., Surgery; Dentistry; Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	6-2-55	6-1-54
56. (I) KEELY, J. E. (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	8-29-55	5-6-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	8-4-55	3-3-55
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	11-4-55	8-31-54
59. (I) HENKIN, B. (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	8-2-55	4-13-54
60. (I) MANGAN, P. E., Carbon Chemistry (part), e. g., Synthetic Resins, Synthetic Rubber	5-27-55	6-2-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	7-1-55	5-7-54
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	7-13-55	1-24-55
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	7-13-55	11-17-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	7-15-55	9-3-54
66. (V) LISANN, I. (BUCHLER, M., acting), Geometric Instruments; Automatic Weighing Scales; Acoustics	8-1-55	5-17-54
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	7-1-55	4-6-54
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	5-20-55	4-26-55
70. (II) BREWRINK, J. L., Security laws administration.	6-1-55	1-13-54
CLASS. DIVS. I (VII) LANHAM, B. E., Paper Making; Photographic Processes and Products	5-10-55	1-11-55
CLASS. DIVS. II (II) LADY, J. E., Oscillators; Amplifiers; Resistances and Rheostats	8-1-55	2-24-55
CLASS. DIVS. III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	9-21-55	9-29-54
CLASS. DIVS. IV (VI) SMITH (Mrs.), M. P., Harrows and Diggers; Plows; Fluid Sprinkling, Spraying and Diffusing	8-1-55	12-27-54
CLASS. DIVS. V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	8-1-55	7-1-55
DESIGNS (III) A—BREHM, G. L., Industrial Arts	10-31-55	10-11-55
DESIGNS (III) B—GRAY, M. A., Household, Personal and Fine Arts	10-3-55	10-10-55

The following divisions have been abolished: 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during June 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1955*.

Patents	Numbers 2,160,805 to 2,164,301, inclusive
Plant Patents	Numbers 330 to 333, inclusive

DECISIONS IN PATENT AND TRADEMARK CASES

U. S. Court of Customs and Patent Appeals

JEPSON v. EGLY ET AL.

Nos. 6158 and 6159. Decided April 3, 1956

[— F.2d — ; — USPQ —]

1. INTERFERENCE—EVIDENCE—CORROBORATION REQUIRED OF INVENTOR'S TESTIMONY

"Regardless of the high character of an inventor and the persuasiveness of the testimony, the court is bound by the well-established rule of patent law that independent corroboration of the testimony of an inventor is essential to establish actual reduction to practice of an invention, and that reports, official or otherwise, which are self-serving statements cannot be considered as corroborative evidence of such reduction to practice."

2. SAME—SAME—RECORDS OF TESTS SHOULD BE PRODUCED.

Where appellant's employer was accustomed to keeping testing records *Held* that it would seem that such records should have been produced.

3. SAME—PRIORITY—TRAVELLING LAWN SPRINKLERS.

Held that priority of invention in two interferences relating to travelling lawn sprinklers was properly awarded to the senior party.

APPEAL from the Patent Office. Interference Nos. 85,640 and 86,202.

AFFIRMED.

George R. Clark, Mason, Kolehmainen, Rathburn & Wyss, and *Walther E. Wyss* (*George R. Jones* of counsel) for Jepson.

Eugene C. Knoblock for Egly et al.

Before O'CONNELL, *Acting Chief Judge*, and JOHNSON, WORLEY, COLE, and JACKSON (retired), *Associate Judges*

JOHNSON, *J.*, delivered the opinion of the court.

These are appeals by Ivar Jepson from the decision of the Board of Interference Examiners of the United States Patent Office awarding priority of invention to the joint parties William D. Egly and Columbus W. Harris in Interference Nos. 85,640 and 86,202.

Interference No. 85,640 (Appeal No. 6158) involves the Jepson application, Serial No. 107,653, filed July 30, 1949, and the Egly and Harris joint application, Serial No. 53,492, filed October 8, 1948. Interference No. 86,202 (Appeal No. 6159) involves the Jepson application, Serial No. 126,857, filed November 12, 1949, and the above-mentioned Egly and Harris joint application.

The proceedings below in both interferences have been consolidated into a single record because of the related nature of the subject matter. We will therefore treat both appeals in one opinion. However, for the sake of clarity, this opinion will treat each appeal under a separate heading.

Interference No. 85,640 (Appeal No. 6158)

The inventions in issue relate to travelling lawn sprinklers. Both parties to the interference broadly disclose a lawn sprinkler having a rotatable sprinkling head mounting a plurality of nozzles each of which sprays a stream of water. The lawn sprinkler is adapted to be attached to a flexible hose which supplies water thereto. The travelling sprinklers have structure thereon which is placed in contact with the flexible hose so that as the rotatable sprinkling head rotates because of water pressure, the travelling sprinkler is caused to pull itself along the hose and thus traverse the path defined by the hose.

One of the issues before us is whether the two counts involved in the interference read on one modification of the invention set forth in the Jepson application. In order to answer this question, we deem it expedient to briefly describe the pertinent structure disclosed in each of the applications, namely, the structure which causes the sprinkler to travel.

In the Egly-Harris disclosure, the rotatable sprinkling head is caused to rotate by the water under pressure which is supplied thereto. Two vertical shafts are journalled in the sprinkler housing. Gears transmit motion from the rotating head to *each* of these shafts. The shafts have rollers fixedly mounted on them. The rollers are adapted to clamp the hose between them, and as the shafts and the rollers rotate the sprinkler is pulled along the hose and thus is caused to travel.

Jepson discloses an embodiment of his invention which is similar to the Egly-Harris structure. However, it is different in the sense that only one shaft which mounts a hose gripping roller is positively driven through gearing connecting it to the rotatable sprinkling head. A second roller which is not positively driven co-acts with the positively driven roller to grip the hose therebetween. The second roller merely rotates idly as the sprinkler is pulled along the hose by traction between the positively driven roller and the hose.

The following two counts are in issue in this case:

1. A travelling lawn sprinkler comprising a housing adapted to be connected to a flexible water conduit, a water reactance sprinkler unit rotatably mounted by said housing, and rotatable drive members actuated by said unit and including a pair of rotatable members gripping said conduit therebetween to propel said housing.

2. A sprinkler of the rotary reaction type having nozzles revolving about a vertical axis comprising a support for rotatably supporting said nozzles, a pair of rotatable members associated with said support adapted to receive a water supply conduit therebetween, means for biasing said rotatable members to grip said conduit, and means responsive to rotation of said nozzles for rotating said members to cause said sprinkler to propel itself along said conduit by traction with said conduit.

The Board of Interference Examiners was of the opinion that the above-described Jepson structure did not read on the above counts. The reasons for the Board's opinion can best be stated by directly quoting the following portion of the Board's opinion:

In the modification shown in Figures 13 an [sic] 14, the "pair of rotatable members" recited near the end of count 1 can only be the pair of rollers 212 and 213. According to the count they must form a part of the "drive members actuated by said unit" (the "water reactance sprinkler unit"), since the count refers to the "drive members" as "including" the "pair of rotatable members." In order for roller 213 to be connected to the other parts of the "drive members" so that it will, with them, be "actuated by said unit" it is necessary to include the hose 21 or the ground as part of the "drive members." However, the "drive members" must be part of "a travelling lawn sprinkler" since the count is drawn to such a sprinkler "comprising drive members." Obviously the hose or the ground are not part of such a sprinkler, particularly since neither the ground nor the portion of hose between the rollers travels with the other parts of the sprinkler. Thus in attempting to apply count 1 to the sprinkler shown in Figures 13 and 14 one must use something external to the sprinkler itself. This is not necessary with respect to the devices shown in the other figures of Jepson's application or in his opponent's application.

• • • In addition, count 1 describes the "drive members" as "rotatable" which is not true in any pertinent sense of the hose or the ground.

Similar considerations apply as to count 2 relative to the type of device shown in Jepson's Figures 13 and 14 wherein the "pair of rotatable members—adapted to receive a water supply conduit therebetween" are rollers 212 and 213. "Means for rotating said members" must include the hose (conduit) or ground for in their absence roller 213 will not be rotated; but neither the hose or ground is a part of the sprinkler, nor is either "responsive to rotation of said nozzles." Moreover, it seems inapt to say that roller 213 is rotated "to cause said sprinkler to propel itself along said conduit" when it is such relative movement of the sprinkler and hose that causes the freely rotatable roller 213 to rotate. We accordingly hold that the type of sprinkler shown in Figures 13 and 14 of Jepson and in his Exhibits 9 and 10 does not support either count.

The first question we must answer is whether the Board was correct in its above holding. It is well settled that counts of an interference should be given the broadest interpretation which they will reasonably support, *Tansel* v. *Higonnet et al.*, 42 CCPA (Patents) 732, 215 F.2d 457, 103 USPQ 58, and the word *reasonably* should not be deleted, *de Benneville* v. *Anderson*, 41 CCPA (Patents) 891, 212 F.2d 612, 101 USPQ 403. Furthermore, while, on one hand, limitations not included in the counts cannot be subsequently read into them, *Tansel* v. *Higonnet et al.*, supra, on the other hand, limitations expressed in the counts may not be disregarded, *Kropa* v. *Robie et al.*, 38 CCPA (Patents) 858, 187 F.2d 150, 88 USPQ 478.

In the light of the foregoing law, we concur with the Board's conclusion. Count 1 calls for "rotatable drive members actuated by said unit and including a pair of rotatable members gripping said conduit." In the Jepson structure there is only one rotatable drive member disclosed, namely, the shaft which drives one of the rollers. We are therefore of the opinion that to say the Jepson structure, which only discloses one "member," reads on the count, which calls for "members," would be to disregard a limitation expressed in the count and thus give the count an unreasonable interpretation. Relative to count 2, we are of the opinion that a reasonable interpretation thereof also dictates that it does not read on the Jepson structure. This count recites "a pair of rotatable members • • • adapted to receive a water supply conduit therebetween." This structure is the rollers which grip the hose. The count further recites "means responsive to rotation of said nozzles for rotating said members to cause said sprinkler to propel itself along said conduit by traction with said conduit." However, the Jepson sprinkler does not have "means for rotating said members;" it only has means for rotating one member. Therefore, to give count 2 an interpretation which would include the above-described Jepson structure would, in our opinion, be disregarding a limitation of the count which in turn would result in an unreasonable interpretation thereof. In view of the foregoing reasons, it is our belief that the above-described Jepson structure, which has only one driven member, does not read on counts 1 and 2.

It is to be noted that evidence was submitted on behalf of Jepson for proving that the above-described sprinkler having but one driven member was actually built before February 1948, prior to the filing of the Egly-Harris application on October 8, 1948. This evidence included Exhibits 11 and 12, which are photographs of the sprinkler having one driven member. However, since a sprinkler having only one driven member will not conform to the above counts, the question of when such a sprinkler was built is immaterial, and therefore need not be considered.

There is another embodiment in the above-mentioned Jepson application which was conceded by appellees to satisfy the counts. It is urged by appellant that this embodiment, Exhibit 24, was conceived, built and tested prior to October 8, 1948, the filing date of the Egly-Harris application. In this respect an actual sprinkler, Exhibit 24, was submitted in evidence. However, the Board was of the opinion that Egly and Harris were the first to complete the invention because of their earlier constructive reduction to practice, and that Jepson had not established prior actual reduction to practice by adequate corroborating testimony.

In the present case, Jepson is the junior party. Since the junior party is relying on an actual reduction to practice in order to prove priority, he must prove either an actual reduction to practice prior to the earliest date to which appellee may be entitled for actual or constructive reduction, *Holslag* v. *Steinert*, 31 CCPA (Patents) 1116, 143 F.2d 661, 62 USPQ 77, or prior conception coupled with the exercise of reasonable diligence from just prior to the senior party's entry into the field to a later actual reduction to practice, *Hull* v. *Davenport*, 24 CCPA (Patents) 1194, 90 F.2d 103, 33 USPQ 506. Furthermore, this being an interference between applicants, the junior party has the burden of proving priority of invention by a preponderance of the evidence. *Clark* v. *Camras*, 40 CCPA (Patents) 963, 204 F.2d 273, 97 USPQ 434.

In the present case, the Board found that there was not enough corroborating evidence to prove an actual reduction to practice by the appellant Jepson. There is no question of diligence involved here. Therefore, our opinion will treat the question of whether an actual prior reduction to practice by Jepson was proved in the manner required by law.

Appellant, Jepson, urges that he successfully reduced his sprinkler, which satisfies the counts, to practice prior to appellee's filing date. In addition to the actual sprinkler, Exhibit 24, appellant has submitted a layout drawing of Exhibit 24. The layout drawing is designated Exhibit 65, and is dated September 25, 1948. A photograph of Exhibit 24 was also submitted, and designated Exhibit 25. This photograph has a date "10–1–48" appearing therein on a card which is positioned in front of the sprinkler.

Jepson himself testified that Exhibit 24 was tested on Jepson's own lawn and on the roof of a building several times prior to October 1, 1948. In this respect, the following testimony was given by Mr. Jepson:

Q. 284. Would you be able to recall about when this model was made or being made?

A. I believe it was made in August or September of 1948.

• • • • • • • •

Q. 290. Mr. Jepson, I hand you herewith a photograph that has been marked for identification as Jepson Exhibit 25, and ask you whether this is a photograph of the model which has been marked for identification as Jepson Exhibit 24?

A. Yes, it is a photograph of the Exhibit 24, and this photograph was taken on October 1, 1948.

Q. 291. Does that mean, then, Mr. Jepson, that the model, Exhibit 24, was built sometime before October 1948? Was it in complete form by that time?

A. That is correct.

• • • • • • • •

Q. 294. Mr. Jepson, would you refer to Jepson Exhibit 5–B and determine whether any of your model makers spent time somewhat prior to October 1948, which would indicate that they were working on this model, Jepson Exhibit 24?

A. Yes, I find one model maker, Mr. Sigman. That I know definitely. He worked on the model that is shown as Exhibit 24. His time record shows that he worked on the walking sprinkler from 8–29–48 until 10–10–48.

Q. 295. And you know for a fact that he did some work on this travelling sprinkler?
A. I know definitely because I worked with him when he made it and I helped him out several times on problems that he had with it.

• • • • • • •

Q. 298. Would you say, therefore, that tests were made on this model before October 1, 1948?
A. Yes, it must have been, because we didn't put the rubber on until a little later.
Q. 299. Where did you test this model, Jepson Exhibit 24?
A. Well, we tested it up on the roof of the development building, and I had it home on my own lawn several times to find out how it worked.

Two things are evident from the foregoing quoted testimony. The first is that there is no statement therein by Jepson just who the "we" were who tested the model on the roof of the development building, and whether anyone saw Mr. Jepson test it on his own lawn. (See question 299, supra.) The second is that while Mr. Jepson testified that the photograph, Exhibit 25, was taken on October 1, 1948, and that Exhibit 24 was complete by that time, Mr. Jepson also testified that one model maker worked on a walking sprinkler from "8–29–48 until 10–10–48." According to the phraseology used in answering question 294, supra, it appears that the walking sprinkler referred to is Exhibit 24. On cross examination, the following testimony was obtained from Mr. Jepson:

XQ. 483. Now, referring to Exhibit 25, have you any way, except for the date which appears upon it, for establishing the date on which that photograph was taken?
A. I can tie that date up with some model work that was done on this model by looking at the time cards.
XQ. 484. Exhibit 5–B?
A. I can see, from this card, that the model maker, Mr. Sigman spend [sic] some time on the model from August 29, 1948, until October 10, 1948. He evidently made some corrections on the model after the photograph was taken, because the photograph was taken nine days before this last date appears.

One portion of Jepson's testimony is to the effect that Exhibit 24 was complete on "10–1–48," the date given in the photograph. However, Jepson's statement that "He evidently made some corrections on the model after the photograph was taken, * * *" seems to detract from the conclusiveness of the date of completion. However, we do not base any of our conclusions directly on the discrepancy of the foregoing dates, but on the well-settled law.

It has uniformly been held in interference matters that the claim of an *applicant* that the subject matter in issue was fully completed, tested, and operated prior to the date of filing requires corroboration in order to succeed. *John T. Janette* v. *Geo. R. Folds and Lawrence M. Persons*, 17 CCPA (Patents) 879, 38 F.2d 361, 4 USPQ 360. *Jira* v. *Weber et al.*, 40 CCPA (Patents) 762, 201 F.2d 914, 96 USPQ 372. [1] Regardless of the high character of an inventor and the persuasiveness of the testimony, the court is bound by the well-established rule of patent law that independent corroboration of the testimony of an inventor is essential to establish actual reduction to practice of an invention, and that reports, official or otherwise, which are self-serving statements cannot be considered as corroborative evidence of such reduction to practice. *Crane et al.* v. *Carlson*, 29 CCPA (Patents) 879, 125 F.2d 709, 52 USPQ 495.

The foregoing law, in our opinion, is determinative of the weight to be given appellant Jepson's testimony. It is to be noted from Jepson's testimony that no one was mentioned therein who saw Mr. Jepson perform the tests on his lawn. Furthermore, there is no statement in the testimony who the people referred to as "we" were who made the tests on the roof. Thus there have been no statements made as to who could corroborate Mr. Jepson's testimony. Furthermore, the photograph, Exhibit 25, is not only self serving for the purpose of showing that the device was built by "10–1–48," but neither does it corroborate that it was successfully tested by this date. In short, therefore, there has been no testimony given or evidence presented up to this point which would corroborate Jepson's testimony.

However, there is testimony in the record which was given by associates of Jepson which must be reviewed to determine whether it sufficiently corroborates that Exhibit 24 was reduced to practice. The first of these witnesses is Mr. Kukulski, a development engineer who worked with Mr. Jepson. His testimony is in part as follows:

Q. 378. Do you remember doing any testing of the Jepson Exhibit 24?
A. Yes I tested it myself.
Q. 379. Where did you test it?
A. This job here we tested across the street from our plant. There is a school, a high school stadium, a football field at the northeast corner of Central and Roosevelt and they have a large spot of grass there and we tested this unit out there, right out on the grass.
Q. 380. Where do you get the water out there?
A. From a hydrant, from a regular fire hydrant. We obtained permission from the caretaker of the grounds there, and we have an adapter that fits the hydrant. This adapter is a reducer and contains a pressure guage and a valve and things of that nature.
Q. 381. Did you do this alone?
A. I did that with Mr. Lane.
Q. 382. When did you do this?
A. Oh. I would say, that was in the Fall of 1948. I would say about October. It was rather cool. I remember the weather was nice.

• • • • • • •

Q. 389. Mr. Kukulski, I hand you herewith a photograph which has been introduced in evidence as Jepson Exhibit 25. Do you recognize this?
A. That is a photograph of this unit Exhibit 24.
Q. 390. Do you remember when it was taken?
A. The date here is October 1, 1948.
Q. 391. You assisted in taking the photographs, Jepson Exhibits 11 and 12. Did you on this one?
A. I did on that too, yes, sir.
Q. 392. And was it taken on October 1, 1948?
A. That is right.
Q. 393. When you tested this sprinkler on the lawn across from the Sunbeam plant, was it like this model or was it like the photograph?
A. Of Jepson Exhibit 25 and the model of Exhibit 24, no. It was like the model. I noticed on the photograph they have a rubber facing here. Mr. Ottosen put that sponge rubber facing on the inside of the wheels. He was conducting some sort of a test. That is the only difference.
Q. 394. Did you ever see any tests made while the rubber was on there?
A. Yes, I saw them making a test in the lab.
Q. 395. When was that made, before or after your tests?
A. That was done after, I think. It may have been before. I am not absolutely sure on that.

On cross examination, Mr. Kukulski testified as follows:

XQ. 639. Now you said that you made some tests on the Exhibit 24 device on the high school football field across the street from your plant?
A. Correct.
XQ. 640. You said that it was in the Fall of 1948?
A. That is right.
XQ. 641. Can you come any closer than that to setting the date of those tests?
A. We could ascertain it rather closely from the drawings.

Mr. KNOBLOCK: Could I have the drawings on the wheels?
Mr. WYSS: We don't have the drawings on the wheels. This is the only drawing.

The Witness: Just about this time. September 25th, I would say, somewhere the beginning of October.
XQ. 642. You mean the beginning of November?
A. I can't remember that close now. I would say it was shortly after this layout.
XQ. 643. Could it have been the following Spring?
A. No. Shortly after this.

It is our opinion that the foregoing testimony does not clearly show that the device was successfully tested prior to appellees' filing date of October 8, 1948. Furthermore, appellant has neither argued nor made a showing of diligence from a time immediately preceding appellees' entry into the field to a subsequent reduction to practice as required by the rule stated in *Hull* v. *Davenport*, supra. Therefore, this aspect of interference law is not before us. However, our analysis of the testimony of Kukulski, both cross and direct, does not definitely show that Exhibit 24 was adequately tested prior to appellees' filing date, nor are there sufficient facts given which would lead to such a conclusion. We are therefore of the opinion that Kukulski's testimony does not adequately corroborate Jepson's testimony.

Mr. Ottosen, head of the Model Shop wherein Exhibit 24 was made, testified as follows:

Q. 115. When did you build the sprinkler, Jepson Exhibit 24? When would you say that you completed it?
A. That would be the same year, 1948.
Q. 116. Would you be able to tell what part of the year it was?
A. Yes. It was early summer.
Q. 117. Early summer of 1948?
A. Yes, because immediately after we made that one, we found that we didn't get quite enough traction—I mean pull—as we wanted. We always like to have double of what we need. At the same time, we knew by driving with two wheels we would get more traction than we would with one. That is why we went and designed this with the double drive.
Q. 118. Did you see that sprinkler that you built, Mr. Ottosen, which is Jepson Exhibit 24, tested or did you test it yourself?
A. I tested it and when it was tested it was on the roof. That we run on the roof.
Q. 119. Do you happen to know of your own knowledge whether it was tested on any lawns?
A. We did test it across the street.
Q. 120. By across the street you mean——
A. Across from the plant there is a parkway owned by the Board of Education.
Q. 121. Did you see it tested there?
A. I saw it tested there.
Q. 122. Would you be able to tell about when that was?
A. That was in the summer of 1948.

The Board summarized part of Ottosen's testimony as follows:

The layout above referred to is Exhibit 65, which was finished September 25, 1948 (page 180 Qs. 361, 362). Jepson says after he conceived the idea he "at first" asked Kukulski to make a layout and "later on" authorized the model shop to building up makers just worked from the layout" (page 65 Q. 281; page 66 Q. 283). Ottosen nevertheless says he never saw the layout before he built Exhibit 24 (page 241 Q. 102A). Since this testimony is in conflict with that of other witnesses it would appear to be in error particularly as to the date, since the testimony of the others conforms to contemporaneous records. * * *

We feel, as did the Board, that Ottosen's testimony is in conflict with other of the testimony which was given both as to the time when Exhibit 24 was built and as to when it was tested. It is therefore our opinion that it does not corroborate Jepson's testimony of a successful reduction to practice prior to the filing date of appellees' application.

Mr. Vaillant, an engineer in charge of the testing laboratory having the function of testing models, gave the following testimony:

Q. 96. Mr. Vaillant, I hand you herewith a photograph which has ben offered in evidence as Jepson Exhibit 25. Did you take the photograph?
A. Yes, I did.
Q. 97. When did you take it?
A. I would say, 10/1/48.
Q. 98. Are you sure that you took it on that date?
A. That was the date.
Q. 99. Have you ever seen the device that is photographed there?
A. Yes, I have.
Q. 100. Did you make any tests on it?
A. Yes, I have. I tested that sprinkler personally on the roof. There again, we were interested in the amount of torque that was developed by the amount of pull.
Q. 101. Is that the same sprinkler that I hand you herewith, which has been marked Jepson Exhibit 24?
A. That is correct, the same sprinkler.
Q. 102. And you tested that personally on the roof?
A. Yes, I did.
Q. 103. Did you test it anywhere else?
A. No. I didn't test it anywhere else, just on the roof.
Q. 104. What would you say of the results of the test that you made on the roof?
A. We found it to be very satisfactory. If I remember right, we had much more torque with this model. As a matter of fact, I think the torque was at least twice as much, if I recall rightly.

While this testimony indicates that the photograph was taken on "10–1–48," there is no statement therein as to when the actual sprinkler, Exhibit 24, was tested. It is therefore our opinion that this testimony is insufficient to corroborate Jepson's testimony to the effect that Exhibit 24 was completely tested prior to the filing date of appellees' application.

The Board found that no test records were produced by appellant with respect to Exhibit 24. In this respect the Board stated:

• • • When Ottosen turned the Exhibit 24 device over to the testing department (page 244 Q. 129) it would appear that this "first model of the double drive" (page 241 Q. 100) would be subjected to the "official testing" described above. However, no records are produced from the test report file (Cf. page 265 Q. 47 and page 267) that concern the Exhibit 24 sprinkler. Such records, Exhibits 67 to 69, were produced with respect to the earlier sprinkler shown in Exhibits 11 and 12. Those tests were made by the technician Lane (page 267 Q. 63) and Lane later made tests of the Exhibit 24 device with Kukulski on the football field (pages 182, 183); but Vaillant does not testify concerning those tests. Vaillant testifies that he himself tested the Exhibit 24 sprinkler on the roof, and "just on the roof" (pages 273, 274 Qs. 100 to 103). He does not state when that was, and testifies as follows as to the "results" (page 274): • • •

The Board's statement is not controverted. [2] However, the record does show that the concern which employs Jepson is accustomed to keeping testing records. It would seem that such records should have been produced. See *MacGregor* v. *Johnston*, 21 CCPA (Patents) 1216, 71 F.2d 165, 22 USPQ 42.

Appellant urges that no extensive testing of Exhibit 24 was required because another model having one driven member (the model which we held not to read on the counts) was extensively tested. However, it is our opinion that the testing of that other model has no bearing on the reduction to practice of Exhibit 24 since that embodiment relates to a species of the invention which is not supported by the counts.

It is our opinion, after making the foregoing analysis of the facts of this case in the light of the applicable law, that Jepson's testimony of a successful reduction to practice prior to appellees' filing date has not been adequately corroborated by the testimony of the other witnesses. In short, reviewing the Board's decision, the record, and the briefs, we are of the opinion that the junior party, Jepson, has not met the burden of proving priority of invention by a preponderance of the evidence.

For the foregoing reasons, the decision of the Board of Patent Interferences is affirmed.

AFFIRMED.

Interference No. 86,202 (Appeal No. 6159)

Interference No. 86,202 (Appeal No. 6159) involves the Jepson application, Serial No. 126,857, filed November 12, 1949, and the Egly and Harris joint application, Serial No. 53,492, filed October 8, 1948. This interference resulted from the granting of a motion for an additional interference by Jepson in the companion interference. Jepson is the junior party.

The Egly-Harris application was partly described in conjunction with the above companion interference. However, in addition to the above-described structure, the application discloses a mechanical arrangement consisting of a lever fixed to an eccentric disk mounted on the sprinkler housing. The *disk* is in turn mechanically coupled to one of the shafts, which is driven by the water motor. By manipulating the lever, the shaft is caused to change its position for the ultimate purpose of causing the roller which is affixed to said

shaft to move toward another roller for the purpose of clamping the hose therebetween.

The Jepson structure disclosed in application Serial No. 126,857, is a travelling sprinkler of the general type described in conjunction with the above companion interference. The sprinkler consists of a housing in which is mounted a horizontal shaft having two portions of worm gearing thereon. As the water motor operates suitable gearing causes the horizontal shaft to rotate. The wormed portions of the shaft are each geared to and thus rotate vertical shafts journalled in bearings. Each bearing can move in the housing. Levers are operatively positioned relative to said bearings to cause said bearings and shafts, when the levers are manipulated, to move toward and away from each other against the bias of springs. The function of the foregoing structure is to facilitate the positioning of the garden hose between the rollers by causing the rollers to move toward and away from each other.

The following four counts are in issue in this case:

1. In a self-propelling lawn sprinkler, a movable carriage, a motor associated with said carriage and rotatable in response to the conversion of water under pressure supplied thereto through a hose or the like to mechanical motion, means for supporting said carriage, a pair of spaced vertical shafts supported by said carriage and drivingly connected to said water motor, a pair of friction drive rollers one connected to each of said shafts adapted to receive therebetween said hose, means for biasing said rollers into frictional engagement with a hose disposed therebetween whereby said sprinkler is pulled along said hose in response to operation of said motor, and water distributing means on said carriage for sprinkling an area surrounding said carriage when water under pressure is supplied to said water distributing means.

2. For use in a self-propelling lawn sprinkler of the type comprising a movable carriage and a water motor associated therewith and rotatable in response to the conversion of water under pressure supplied thereto through a hose or the like to mechanical motion, the combination of a pair of spaced vertical shafts capable of being drivingly connected to said water motor, and a pair of friction drive rollers one connected to each of said shafts for receiving therebetween said hose, said rollers and associated shafts being movable apart when it is desired to insert said hose between said rollers.

3. A travelling lawn sprinkler comprising a housing adapted to be connected to a flexible water conduit, a water reactance sprinkler unit rotatably mounted by said housing, rotatable drive members actuated by said unit and adapted for frictional driving engagement with said conduit to propel said housing, and means for locking said drive members in conduit-gripping relation.

4. A travelling lawn sprinkler comprising a housing adapted to be connected to a flexible water conduit, a water reactance sprinkler unit rotatably mounted by said housing, rotatable drive members actuated by said unit and including a pair of rotatable conduit-clamping rollers having frictional driving engagement with said conduit to propel said housing, and a plurality of spaced ground-engaging supports connected to said housing.

The Board granted priority to the parties Egly and Harris.

As stated above, Jepson is the junior party. In order to obtain priority he must prove either an actual reduction to practice prior to the earliest date to which appellee may be entitled for actual or constructive reduction, *Holslag* v. *Steinert*, supra, or prior conception coupled with the exercise of reasonable diligence from just prior to the senior party's entry into the field to a later actual or constructive reduction to practice, *Hull* v. *Davenport*, supra.

The Board found that there was no reasonable continuous diligence on the part of Jepson up to the time of the filing of his application on November 12, 1949. Appellant has found no error in this holding. This aspect of the case is therefore not before us.

Appellant urges, however, that the mechanism described in the counts was successfully reduced to practice prior to appellees' filing date. Relative to counts 3 and 4 appellant relies on the actual reduction to practice of the structure of Exhibits 11 and 12, and Exhibit 24.

We discussed the structure of Exhibits 11 and 12 at great length in the above companion appeal, and were of the opinion that they did not meet the counts. Counts 3 and 4 of the present interference call for "rotatable drive members actuated by said unit." Count 1 of the companion interference calls for the same structure. For reasons given in the companion appeal, we are of the opinion that the structure of Exhibits 11 and 12 does not meet this limitation in the counts. Therefore the structure of Exhibits 11 and 12 cannot be used as a reduction to practice of counts 3 and 4.

We reviewed the evidence relative to the reduction to practice of Exhibit 24 in the companion appeal. For the same reasons given therein, we are of the opinion that appellant has not proved by a preponderance of the evidence that he actually reduced Exhibit 24 to practice prior to appellees' filing date. We therefore deem it unnecessary to discuss this subject matter again at this point.

It is to be noted that counts 3 and 4 contain certain limitations which are not present in the counts of the companion appeal. These limitations are the locking means (count 3) and the ground engaging supports (count 4). However, since we have already determined that Exhibits 11, 12, and 24 cannot be relied upon for a reduction to practice of those counts, it is unnecessary for us to determine whether those exhibits possess the aforementioned limitations.

Appellant Jepson strongly urges that Exhibit 18 clearly supports every element called for by count 2, supra, and that this exhibit was successfully reduced to practice before any date upon which the appellees can rely. Exhibit 18 is a mechanical movement which was built for Jepson for the purpose of testing certain principles of operation of a self-propelled lawn sprinkler. This exhibit is not a complete travelling sprinkler, but a sub-combination of parts which allegedly could be used in such a sprinkler. It is not necessary for the purposes of this opinion to describe Exhibit 18 in great detail. It is only necessary to state that Exhibit 18 is a device adapted to be cranked by hand and relates primarily to gearing for causing a single rotary motion input to positively drive two shafts having rollers affixed thereon, said rollers being adapted to clamp a hose therebetween. It is to be noted that Exhibit 18 does not have the structure recited in the preamble of count 2, nor does it possess the water motor or certain other parts necessary for a complete travelling sprinkler.

Appellant strongly urges that count 2 is not directed to a travelling lawn sprinkler but "to a mechanical movement or mechanism which is capable of being used in a travelling lawn sprinkler of the type having a water motor, and that the preamble of count 2 is not a limitation of the count. Appellant then in essence concludes that the Exhibit 18 mechanical movement constitutes a reduction to practice of count 2.

It is our opinion that appellants' argument is not sound. In *Kropa* v. *Robie et al.*, supra, we made an exhaustive analysis of the effect of the preamble on claims or counts. In the course of our opinion, we stated:

> • • • This court has often had before it the Jepson problem (243 O. G. 527–1917)—whether the preamble to claims in ex parte cases or to counts in interference cases should be considered as limitations in the claims or counts. Of the thirty-seven cases of this court we have reviewed with respect to this problem it appears that the preamble has been denied the effect of a limitation where the claim or count was drawn to a structure and the portion of the claim following the preamble was a self-contained description of the structure not depending for completeness upon the introductory clause; • • • In those cases, the claim or count apart from the introductory clause completely defined the subject matter, and the preamble merely stated a purpose or intended use of the subject matter. On the other hand, in those ex parte and interference cases where the preamble to the claim or count was expressly or by necessary implication given the effect of a limitation, the introductory phrase was deemed essential to point out the invention defined by the claim or count. In the latter class of cases, the preamble was considered necessary to give life, meaning, and vitality to the claims or counts. Usually, in those cases, there inhered in the article specified in the preamble a problem which transcended that before prior artisans and the solution of which was not conceived by or known to them. • • •

An analysis of count 2 shows that the portion of the count following the preamble is not a self-contained description of structure not depending for completeness upon the introductory clause. More specifically, the body of count 2, by reciting the water motor, relies for completeness on the preamble of the count. Furthermore, it is our opinion in the present case that the preamble to count 2 is essential to point out the invention defined by the count, and is necessary to give life, meaning, and vitality to the count. It can readily be seen that if the preamble and the reference to the water motor are deleted from the count, there is very little left to the count. Thus it is our opinion that count 2 does not merely recite a mechanical movement subcombination, but is directed to a self-propelling lawn sprinkler.

Since count 2, in our opinion, is directed to a travelling lawn sprinkler, and since Exhibit 18 is but a mechanical movement, we are of the opinion that Exhibit 18 cannot constitute a reduction to practice of count 2 since it is not directed to the same device recited in the count. This being the case, it is unnecessary to review the evidence which has been submitted of proving a reduction to practice of Exhibit 18.

Appellant urges that a successful reduction to practice of count 2 effectively amounts to a successful reduction of count 1 of this interference. In essence, appellant states that since Exhibit 18, which is but a mechanical movement, was reduced to practice, it must serve as a reduction to practice of count 1 which is directed to a travelling sprinkler because it was obvious that Exhibit 18 could be driven by the water motor of a travelling sprinkler so that no testing of a device such as recited in count 1 was required. We have already determined, in connection with count 2, that the mechanical movement of Exhibit 18 and a travelling sprinkler do not relate to the same device. Furthermore, appellant's argument that the reduction to practice of Exhibit 18 constitutes a reduction to practice of count 1 seems to be refuted by the facts of the case. The following testimony was given by Mr. Jepson on his cross-examination:

> • • • Did you ever make a model incorporating the mechanism of Exhibit 18 as mounted on wheels separate from the rollers, as illustrated in the patent application 126,857?
>
> Mr. WYSS: He has already answered by saying he did not.
>
> A. I believe I did answer that. We did not— It looked too complicated. That is why I went back to this other type——
>
> Mr. KNOBLOCK: For the record, I wanted it repeated. That is all.

It would appear that if the inventor himself thought it was too complicated to incorporate Exhibit 18 into a travelling sprinkler, it cannot now be urged that the building of Exhibit 18 constituted a reduction to practice of the travelling sprinkler.

We therefore cannot subscribe to appellant's argument, and we hold that Exhibit 18 does not constitute a reduction to practice of count 1.

It is to be noted that appellant did not include in the record appellees' Exhibit 42, an article which was published in a magazine. The exhibit was added on stipulation of the parties to correct diminution of the record, said stipulation having been instigated by appellees. This added matter was not necessary for a proper decision in this case, and costs for making such addition are therefore assessed against appellees.

We have carefully reviewed the record of this case, the briefs, and the Board's exhaustive and complete decision. However, we are of the opinion that appellant as junior party has not proved by a preponderance of the evidence that he was the first inventor.

[3] For the foregoing reasons, the decisions appealed from are affirmed.

AFFIRMED.

JACKSON, *J.*, retired, recalled to participate.

O'CONNELL, *Acting Chief Judge*, and COLE, *J.*, were present at the argument of this case, but, by reason of illness, did not participate in the decision.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

2,155,792, G. P. Johnson, Spring cushion, **filed** Nov. 4, 1954, D. C., N. D. Ill. (Chicago), Doc. 54c1632, *Gustave Pontus Johnson, Jr., et al.* v. *Pullman Couch Co.* Joint motion for dismissal of complaint and counterclaim with prejudice May 3, 1956.

2,177,627, R. G. Drew, Adhesive sheeting, **filed** Nov. 7, 1951, D. C., N. D. Ill. (Chicago), Doc. 51c1789, *Minnesota Mining & Mfg. Co.* v. *Neisner Brothers, Inc., et al.* Final judgment; patent held valid and infringed; defendants enjoined May 8, 1956.

2,192,479, J. P. Nissen, Jr., Implement for applying fluid and semipaste materials, **filed** May 4, 1956, D. C., N. D. Ga. (Atlanta), Doc. 5623, *Reynolds Pen Co.* v. *Scripto, Inc.*

2,201,000, L. Slagboom, Tentering clip, **filed** Sept. 22, 1949, D. C. N. J. (Newark), Doc. 729/49, *Louis Slagboom* v. *Van Vlaanderen Machine Co.* Judgment declaring patent invalid; complaint and amended complaint dismissed May 10, 1956.

2,225,171, J. W. Hammes, Garbage disposal apparatus, **filed** Aug. 3, 1953, D. C., E. D. Mich. (Detroit), Doc. 12797, *In-Sink-Erator Mfg. Co.* v. *Graybar Electric Co. et al.* Stipulation and order of dismissal with prejudice Jan. 31, 1956.

2,313,382, M. M. Kistner, Steam hand iron; **2,384,839**, same, Steam-electric pressing and ironing device, **filed** May 9, 1956, D. C., S. D. Fla. (Tampa), Doc. 2915–T, *Steam Iron Corp. et al.* v. *Webb's City, Inc., et al.*

2,384,839. (See 2,313,382.)

2,405,866. (See Re. 23,619.)

2,456,356, J. S. Aber, Packing gasket and static seal, **filed** Feb. 13, 1953, D. C. N. J. (Camden), Doc. 115/53, *Joseph S. Aber et al.* v. *United States Gasket Co.* Stipulation of dismissal May 3, 1956.

2,459,110, S. P. Midouhas, Collapsible clothesline, **filed** Mar. 9, 1956, D. C., S. D. N. Y., Doc. 107/370, *Kamkap, Inc.* v. *Worldwide Industries, Inc.* Judgment dismissing action (notice May 9, 1956).

2,555,007, J. W. Robinson, Separation of immiscible liquids, **filed** May 4, 1956, D. C. N. J. (Newark), Doc. 382/56, *Selas Corp. of America et al.* v. *Purolator Products, Inc.*

2,569,711, A. D. Foster, Conveyer and switch means for

checkout counters, filed June 25, 1954, D. C., E. D. Mich. (Detroit), Doc. 13543, *Almor Co.* v. *Jenitzen-Miller Co.* Consent judgment; complaint and counterclaim dismissed with prejudice May 4, 1956.

2,633,328, B. E. Wallace, Winch, filed May 8, 1956, D. C., E. D. Pa. (Philadelphia), Doc. 20690, *The Lug All Co.* v. *H. E. Fortna & Bro. et al.*

2,646,638, C. T. Nichols, Apparatus for packaging commodities with trough member supported between plates; TM 562,711 (Quik Pac), Quik Pac Division of H. Wesley Hutchins Company, Guiding trough for use in filling bags and like receptacles, filed May 8, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c847, *Quik-Pac, Inc.* v. *Lincoln Bag Co., Inc., et al.*

2,673,590, B. F. Hamilton, Vertically adjustable pedestal chair; **2,732,157**, E. F. Hamilton, Chair base, filed May 10, 1956, D. C., S. D. N. Y., Doc. 109/265, *Hamilton Mfg. Corp.* v. *Cole Steel Equipment Co. Inc.*

2,699,054, L. H. Conover, Tetracycline, filed Jan. 25, 1955, D. C., S. D. N. Y., Doc. 98/222, *The Upjohn Co.* v. *Chas. Pfizer & Co., Inc.* Stipulation and order of dismissal May 7, 1956. Same, filed Oct. 28, 1955, D. C., S. D. N. Y., Doc. 104/266, *Chas. Pfizer & Co., Inc.* v. *The Upjohn Co.* Decree as above. Same, Doc. 104/268, *Chas. Pfizer & Co., Inc.* v. *Bristol Laboratories, Inc.* Decree as above. Same, filed Jan. 25, 1955, D. C., S. D. N. Y., Doc. 98/221, *Bristol Laboratories, Inc.* v. *Chas. Pfizer & Co., Inc.* Decree as above. Same, filed Oct. 28, 1955, D. C., S. D. N. Y., Doc. 104/267, *Chas. Pfizer & Co.* v. *Olin Mathieson Chemical Corp.* Decree as above. Same, filed Jan. 25, 1955, D. C., S. D. N. Y., Doc. 98/223, *Olin Mathieson Chemical Corp.* v. *Chas. Pfizer & Co., Inc.* Stipulation and order of discontinuance May 7, 1956.

2,702,201, Romanelli and Miller, Hose adapter coupling for faucet spigots, filed May 8, 1956, D. C., S. D. N. Y., Doc. 109/246, *Ram Products, Inc.* v. *Lafayette Brass Co. Inc. et al.*

2,717,176, L. Osrow et al., Detergent dispenser, filed May 8, 1956, D. C., S. D. N. Y., Doc. 109/249, *Osrow Products Co. Inc.* v. *Empire Brushes Inc.*

2,732,157. (See 2,673,590.)

Re. 23,619 (of **2,405,866**), C. E. Weller, Electrical heating apparatus, filed Apr. 1, 1952, D. C., N. D. Ill. (Chicago), Doc. 52c714, *Weller Mfg. Co.* v. *Wen Products Inc. et al.* Mandate of C. C. A. filed affirming decision of District Court; claims of Patent Re. 23,619 held valid; defendants enjoined May 8, 1956.

REISSUES

JUNE 5, 1956

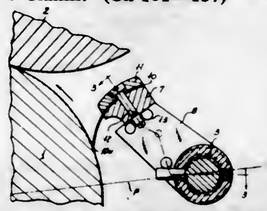
Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,161
DOCTOR BLADE AND MOUNTING FOR ROTO-GRAVURE PRINTING MACHINES

Edmund A. Rogge, Jackson Heights, and William A. Roehm, Rockville Centre, N. Y.

Original No. 2,704,026, dated March 15, 1955, Serial No. 376,046, August 24, 1953. Application for reissue February 27, 1956, Serial No. 568,144

5 Claims. (Cl. 101—157)



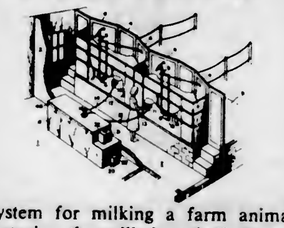
1. An assembly of the character described comprising: an intaglio printing cylinder mounted to rotate on its axis, a blade holder mounted for pivotal movement on an axis parallel to the axis of the cylinder, a thin resilient blade carried by said blade holder and bearing against the surface of the cylinder with the cylinder engaging edge of the blade facing in a direction oppositely to the direction of rotation of the cylinder and [contacting with the cylinder above] *in the direction* of the plane which includes the axes of both the cylinder and the blade holder, and means for retractably maintaining said edge of the blade in contact with the cylinder.

24,162
VACUUM CONTAINER MILKING SYSTEM AND APPARATUS THEREFOR

George R. Duncan, Washington, Mo., assignor to Zero Manufacturing Company, Washington, Mo.

Original No. 2,702,019, dated February 15, 1955, Serial No. 311,771, September 26, 1952. Application for reissue January 10, 1956, Serial No. 558,400

18 Claims. (Cl. 119—14.09)



1. In a system for milking a farm animal and for cooling and storing the milk in a bulk receptacle as it comes from the animal, comprising milking means and first conduit means extending therefrom, a milk cooler having insulating walls, a bulk milk metallic vacuum receptacle in said cooler, said bulk milk receptacle being generally cylindrical with ends which are semi-spherical in shape, and having a portion extending through a top wall of said cooler, said first conduit means extending into the interior of said bulk milk receptacle through said portion, means for cooling said receptacle during the milking operation including a refrigerating means and a second conduit means leading therefrom and having a metallic portion thereof in heat exchange metal to metal contact with said receptacle, whereby the milk in said receptacle may be continuously cooled by the circulation of the refrigerant in said metallic portion of said second conduit means at least during the milking operation, and a third conduit means, said third conduit means extending into said receptacle through said receptacle portion whereby to maintain a continuous vacuum in said bulk milk receptacle during the milking operation.

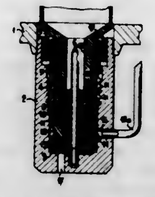
24,163
VALVES FOR FILLING PYROPHORIC LIGHTERS FOR LIQUIFIED GAS

Conrad Zellweger, Pregny, Geneva, Switzerland, assignor to La Nationale S. A., Geneva, Switzerland, a company of Switzerland

Original No. 2,710,506, dated June 14, 1955, Serial No. 341,881, March 12, 1953. Application for reissue January 13, 1956, Serial No. 559,092

Claims priority, application Switzerland March 17, 1952

12 Claims. (Cl. 62—1)



1. In a [pyrophoric] lighter for liquified gas, the combination including, a casing having a reservoir, filler valve means for the reservoir, comprising, a fixed valve member having a tubular wall provided over a part of its length with interior threads, said valve member secured to and extending within the casing and opening at its outer end to the atmosphere and also having a reservoir gas escape port in the side wall thereof, a transverse wall at the inner end of the fixed valve member providing an internal valve seat at one side of the gas escape port, said wall having a fluid inlet port communicating with the reservoir, a movable valve member having external threads interrupted by a transverse milled groove leading to the atmosphere, said threads engaging the interior threads on the said tubular wall of the fixed valve member, and said movable valve member also having its open outer end of a cross section to form key means to receive the mating key neck of a filler container whereby rotation of the container will cause said movable valve member to move angularly and axially relative to the fixed valve member when they are interlocked, a transverse wall at the inner end of the movable valve member, a hollow needle in said transverse wall and pointed and laterally ported at its outer end and its inner end opening below said valve seat, and valve seat closure means carried by the movable member and located between the transverse wall on the movable valve member and the valve seat on the fixed valve member and normally covering said inlet port, and whereby, upon axial outward movement of the movable valve member said valve seat means will uncover said filler port to let fuel into the reservoir and simultaneously permit the gas escape port to communicate with the milled groove to vent gas trapped in the reservoir to the atmosphere through said milled groove.

PLANT PATENTS

GRANTED JUNE 5, 1956

Owing to the fact that almost all of the illustrations of the plant patents are in colors, it is not practicable to print a cut of the drawing.

1,481
CARNATION PLANT
Willard Ralph Singleton, Suffolk County, N. Y., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application September 6, 1955, Serial No. 532,812
1 Claim. (Cl. 47—60)

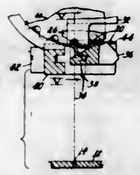
The new and distinct variety of carnation plant as herein described and illustrated, characterized particularly by its generally white flowers which are completely free of the red sinus blotch even when bruised characteristic of the white flowers of the variety "White Sim" (unpatented).

PATENTS

GRANTED JUNE 5, 1956

GENERAL AND MECHANICAL

2,748,388
COMPONENT INSERTING MACHINES
Charles P. Cardani, Hamilton, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application February 8, 1955, Serial No. 486,764
4 Claims. (Cl. 1—2)



1. In a component inserting machine, a head movable into register with a pair of lead receiving holes formed in a chassis, lead forming mechanism in said head operable on the oppositely extending leads of successive coaxial components at predetermined distances from their bodies, said mechanism including two lead-receiving grooves lying in the plane containing the axes of said chassis holes, a pair of spaced cutters arranged in said head exteriorly of said mechanism and actuable to sever the successive leads to be formed thereby, each of said cutters having a lead deflecting surface arranged to engage and aline a lead in the plane of said grooves prior to severance, and a driver bar reciprocable in said head and cooperative with said forming mechanism to move the severed and formed leads endwise from said grooves and into said lead receiving holes respectively.

2,748,389
STAPLER FOR SAUSAGE PACKAGE
Edmund K. Buchy, Greenville, Ohio
Application July 5, 1952, Serial No. 297,259
3 Claims. (Cl. 1—187)



1. A sausage stapling machine adapted for closing a staple around the neck of a filled sausage casing with minimum space between the contents of the casing and the point of closing comprising a staple magazine, an anvil, a staple driver mounted for driving successive staples from said magazine against said anvil, and a casing holder in fixed position relative to said anvil, said holder including a plate affixed at one side of said anvil, an inwardly converging throat in said plate spaced from said staple driver and defining at its inner end a restricted portion for receiving and confining the neck of said filled casing in closing position adjacent said anvil, one side of said plate forming a working face for receiving the shoulder of a filled casing pressed thereagainst and the other side of said plate forming guide means for guiding successive staples from said magazine to said casing neck close to the juncture of said neck and said shoulder for being closed around said neck against said anvil effectually at said juncture.

2,748,390
GUN SLING RETAINER
Andrew C. Carlson, New Castle, Pa.
Application February 14, 1952, Serial No. 271,591
3 Claims. (Cl. 2—2)



2. For use on the shoulder portion of a hunter's coat or the like, an attachment of a size to accommodate a gun sling comprising a substantially flat relatively wide strip of malleable material ample in length for satisfactory attachment to a shoulder portion of the stated coat and of a width sufficient to provide a substantial retainer for the stated sling, a pliant jacket made up of duplicate layers of the stated material superimposed upon each other and completely stitched together around their marginal edges, said jacket being wide at one end and narrow at the opposite end, said malleable strip fitting into said jacket and being of a length substantially commensurate with the length of the jacket and having one end portion fitting into the narrow end of the jacket and abutting the corresponding transverse end of the jacket and having its opposite end abutting the other transverse end of the jacket, the wide end of said jacket providing flexible attaching flaps, said flaps extending beyond the adjacent longitudinal edge portions of said strip and being thus adapted for attachment to the aforementioned shoulder portion.

2,748,391
MISSILE-RESISTANT GARMENT
Frederick J. Lewis, Jr., Norfolk, Va., and John F. Quinlan, Jacksonville, N. C., assignors to the United States of America as represented by the Secretary of the Navy
Application March 30, 1953, Serial No. 345,746
8 Claims. (Cl. 2—2.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)

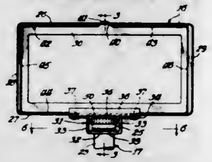
1. A missile-resistant garment comprising complementary sections one of which sections is adapted to cover the shoulders of the wearer and the second section being adapted to envelope the portion of the torso immediately below the shoulders, flexible armor elements attached to said shoulder covering section and adapted to drape snugly over the shoulders of the wearer, rigid armor elements comprising a part of the torso covering section, certain of said rigid armor elements being disposed in overlapping suspended relationship to the lower edges of said flexible armor elements, inner and outer jacket elements joined at the shoulder and waist lines, and a plurality of horizontally disposed rows of pockets secured to said jacket elements

and adapted to receive said rigid armor elements, alternate rows of pockets being secured to one of said jacket elements, and the intervening pockets being secured to the



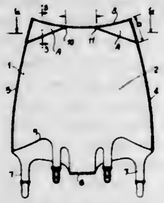
other of said jacket elements thereby facilitating relative vertical displacement of said rows of pockets and the armor elements received therein.

2,748,392
VIEWER DEVICE OR THE LIKE
Louis R. Christensen, Cicero, Ill.
Application May 2, 1955, Serial No. 505,138
2 Claims. (Cl. 2—8)



1. In a viewer device of the class embodying a glass holding frame and a support therefor, that improvement comprising upper, lower and side walls for the frame defining a four-sided enclosure, a flange extending inwardly from each wall, a U-shaped stirrup depending from said lower wall, said stirrup including an annulus part in a plane parallel with said frame lower wall downwardly offset from said lower wall and a pair of legs, outturned ends on said legs, a plate between said outturned ends and said lower wall, rivets passing through said plate and said legs respectively and secured to said lower wall, an upturned edge part on said plate projecting into said enclosure and inturned toward said flanges, a rectangular spring wire member received in said frame having its lower reach bowed toward said upturned edge part to abut said edge part, other of its reaches being urged thereby toward said flange, a hump in the wire upper reach, and a slot in said upper wall receiving said hump.

2,748,393
SHAPE-RETAINING REINFORCEMENT OF DEPOSITED RUBBER UNDERGARMENT
Fred W. Andrews, Dover, Del., assignor to International Latex Corporation, Dover, Del., a corporation of Delaware
Application July 22, 1952, Serial No. 300,319
8 Claims. (Cl. 2—36)



1. A supporting girdle of the type having a restricting wall readily stretchable in transverse and longitudinal directions for encircling the lower portion of the human torso, comprising an upper elastic wall portion including front and rear panels interconnected at their corresponding laterally disposed sides, said wall portion being thickened throughout areas disposed on laterally opposite sides of the center of said girdle, said thickened areas extending from the upper edge downwardly at respectively opposite sides and thence inwardly over said front and rear panels toward the center of said girdle and terminating closely adjacent the upper edges of said front and rear panels, said inwardly extending portions of said thickened areas gradually diminishing in width from the sides of said girdle toward the center, the innermost extent of said thickened areas on said front panel being disposed relative to each other.

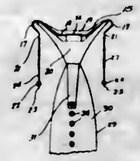
2,748,394
SHIRT
Charles Solomon, Thomasville, Ala.
Application October 21, 1954, Serial No. 464,051
1 Claim. (Cl. 2—115)



A pullover type shirt comprising a front member, a back member, said members having side edge-connected portions and armhole portions, said front member having a straight top marginal edge, a shoulder portion integral with the back member and extending forwardly thereof, the forward edge of said shoulder portion being unattached, a portion of said forward edge being shaped to constitute a semi-circular neck opening, the remaining portions of said forward edge extending laterally from the front ends of the neck opening in a curved line to points forwardly of the top marginal edge of the front member thereby providing closable gaps communicating with the neck opening and extending as reentrant slits laterally in both directions from the neck opening, the top marginal edge of the front member loosely overlapping the unattached front curved edge portions of the shoulder portion, a folded collar secured to the semi-circular neck opening of the shoulder portion, said collar having diverging pointed ends forming an inverted V-shaped front end, and fastening members spaced along and adjacent the meeting edges of said gaps for removably securing the overlapped meeting edges for closing said gaps, the top marginal edge of the front member being so positioned as to traverse approximately the apex of the collar opening's inverted V-angle when the gaps are closed, said collar having openings in its pointed ends adapted to receive the fastening members on the meeting edges of the gaps for securing said pointed ends in selected positions along the top marginal edge of the front member.

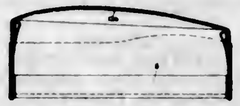
2,748,395
NECKTIE STRUCTURES
Robert J. Woluns, Windsor, Conn.
Application November 24, 1953, Serial No. 393,998
2 Claims. (Cl. 2—153)

1. A necktie structure comprising a hollow tapering body having open upper and lower ends simulating a knot, corner portions carried by said body and projecting obliquely outwardly and upwardly from opposite sides of said body at the upper end thereof to define wings adapted to extend beneath the collar tabs of an associated shirt collar, each of said wings having a notch therein opening through the end thereof remote from said body, a generally U-shaped stay member of wire material having a bight and side arms extending from opposite ends of the bight, said stay member having a looped portion formed at the juncture of each of said arms with said bight, each of said looped portions being received in one of said notches with said body being disposed between said arms,



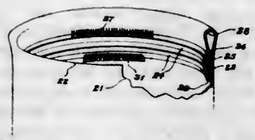
said arms adapted to have their free ends engaged to the fabric of the collar tab, a main necktie body extending through said hollow body and looped over said bight, said necktie body comprising a relatively wide front section and a relatively narrow rear section depending from said bar within said hollow body and through the open lower end of the hollow body.

2,748,396
REINFORCED CAP
Frank K. Lipschutz and Samuel Rosenberg, Louisville, Ky.
Application May 28, 1954, Serial No. 433,010
7 Claims. (Cl. 2—195)



1. In a cap construction of the overseas type comprising side panels of pliable material having arcuate upper edges, said side panels being united at their upper edges to form a curved crest and being united at their front and rear edges to form front and rear prows, the combination of a prop member of spring material, said prop member consisting of a middle chine portion and legs depending from the opposite ends of said chine portion, said chine portion being of a length at least as long as said crest, said legs being in a common plane and normally diverging outwardly and downwardly from said chine portion and of a length conforming substantially to the height of said prows, said chine portion being disposed adjacent said crest, and said prows engaging and compressing said opposed legs to bow said chine portion into tensioning engagement with said crest.

2,748,397
STOCKING WITH GARTER
Herman F. Stolzenberg, Ansonia, Conn., assignor to The Merrow Machine Company, Hartford, Conn., a corporation of Connecticut
Application August 7, 1953, Serial No. 372,987
2 Claims. (Cl. 2—240)



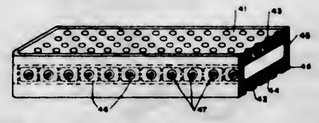
2. A self-supporting hose formed of knitted material and having its distal edge folded inwardly at the top of the hose, an elastic band secured to said distal edge by a stretchable seam and depending from said distal edge to define a band of elastic material presenting an exposed inner face extending entirely around the inner surface of said hose, frictional material projecting from the exposed inner face of said band, and a blind stitch seam securing the lower edge of said band to said hose.

2,748,398
CONVERTIBLE SEAT BED WITH FORWARDLY OVER-TURNING SEAT
Joseph R. Thomas, Chicago, Ill.
Application March 9, 1953, Serial No. 341,179
12 Claims. (Cl. 5—13)



1. In a convertible seat bed structure, a frame having a front board fixed therein and extending upwardly, a sectional seat and bed frame having connected seat, back and intermediate sections, the back section and the intermediate section being foldable at right angles to each other within the frame, means connecting the seat section with the intermediate section to overturn forwardly from its seat position, means for mounting the back and intermediate sections to swing within the frame, and coordinating means consisting of connected links and levers pivoted to the seat section and the other sections for folding and unfolding them together in a continuous predetermined manner and for sequentially inverting the seat section forwardly at the front of the bed frame as the sections are swing upwardly and forwardly out of the frame over and clear from contact with the top of the front board and into alignment at the front of the frame.

2,748,399
LIGHT-WEIGHT FOAM RUBBER CUSHIONING STRUCTURE
Joseph Rockoff, Dayton, Ohio, assignor to The Dayton Rubber Company, a corporation of Ohio
Application May 25, 1950, Serial No. 164,080
4 Claims. (Cl. 5—348)

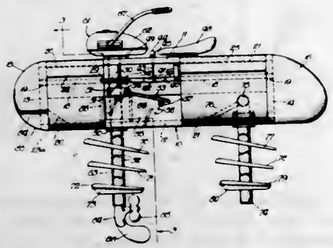


1. An improved mattress construction comprising a layer of foam type cellular rubber supported upon a continuous, unitary hollow, flexible, resilient, inflatable member having a continuous planar surface contiguous and coextensive therewith, said inflatable member having a multicelled compartmented structure with the individual compartments thereof formed by vertical partitions extending transversely to the longitudinal axis of the mattress and wherein the cells in the intermediate longitudinal section of the mattress are inflated to a relatively greater pressure than the cells at the opposite ends of the mattress.

2,748,400
HYDROFOIL AQUATIC DEVICE
Casimir James Krezall, Chicago, Ill.
Application January 14, 1955, Serial No. 481,809
8 Claims. (Cl. 9—18)

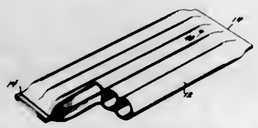
1. In an aquatic device of the character described, a body comprising an elongated substantially rectangular flat sided frame generally oblong in plan and of slight width relative to its length, a substantially segmo-spherical

nose member secured to the front of said frame and extending beyond the sides thereof, motor means mounted on said frame for propelling said body, supports secured to and extending downward beyond said frame, hydrofoils mounted on said supports effective for raising said body out of the water when travelling at comparatively high speed, and pontoons at opposite sides of said frame adjacent said nose member and pivotally mounted at their upper portions for swinging movements about axes substantially parallel with said frame, said pontoons being of a generally segmo-cylindrical cross section corresponding



approximately to the respective portions of said nose member extending beyond the sides of said frame, said pontoons having flat inner side faces substantially conforming to the sides of said frame and being movable downward and inward toward said frame into close proximity thereto when said body is raised out of the water and movable upward and outward away from said frame to positions substantially perpendicular thereto when said body frame is submerged, said pontoons when in fully lowered position at the sides of said frame providing therewith and with said nose member a structure of substantially circular cross section having a rounded nose.

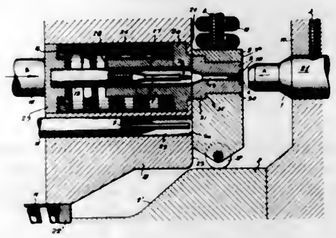
2,748,401
EXTRUDED FLEXIBLE AND HOLLOW ARTICLES AND METHOD OF MAKING SAME
Thomas W. Winstead, Baltimore, Md., assignor to Hedwin Corporation, Baltimore, Md., a corporation of Maryland
Application June 30, 1952, Serial No. 296,402
6 Claims. (Cl. 9—21)



4. An inflatable float or similar article comprising a one piece extruded plastic material multi-cellular body, the longitudinal ends in the direction of extrusion being sealed and closing the body, the remainder of the body being seamless, the inner walls of the cells extending the full length of the cells and being diagonally notched to facilitate sealing and longitudinally notched adjacent the ends thereof intermediate of and spaced from the transverse edges of the web to provide communication between the cells.

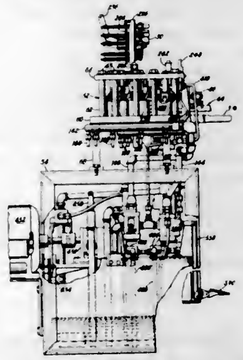
2,748,402
RIVET BLANK HOLDER TRANSVERSELY MOVABLE BETWEEN HEADER AND EJECTOR STATIONS
Heinz Weigand, Frondenberg (Ruhr), Germany, assignor of one-half to Peltzer & Ehlers K. G., Krefeld, Germany
Application May 26, 1953, Serial No. 357,500
5 Claims. (Cl. 10—11)

1. An apparatus for cold-pressing blanks into rivets, comprising two counteracting and only linearly movable pressing members, one of these members containing a punch and the other one containing a piercing tool such as a core bar, a die movably arranged between the said pressing members and being movable in a direction perpendicular to the moving directions of the said pressing members respectively, a rivet ejector movable parallel to and spaced from the said piercing tool in the moving direction of the said die and a cam structure attached to the first named pressing member and adapted to control the



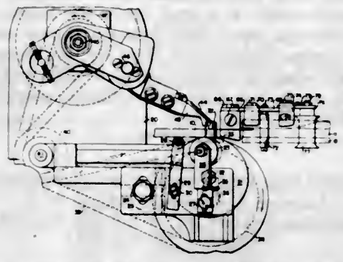
movement of the die in cooperation with a stop and a spring in such a manner that the said die charged with a blank is moved in line with the said punch and the said piercing tool respectively, held in this position during a pressing stroke of the said pressing member, is then moved in line with the said ejector and held in this other position during action of the said ejector, whereby a semi-hollow rivet pressed of the said blank is removed from the said die.

2,748,403
LASTING MACHINES
Sidney J. Finn, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application March 26, 1953, Serial No. 344,730
60 Claims. (Cl. 12—8.5)



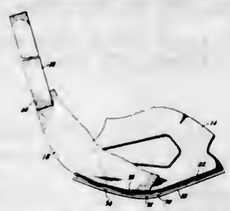
30. In a machine for lasting the heel and shank portions of a shoe, a plurality of heel wipers mounted for advancing movements in converging paths to wipe the lasting margin of the upper materials of a shoe on a last around the heel end of the shoe inwardly over, and to press the lasting margin against the bottom of the heel end of the shoe, a plurality of shank wipers located on the opposite sides of the shank portion of the shoe and mounted for movement to wipe the lasting margin of the upper materials inwardly over, and to press said lasting margin against the bottom of the shank portion of the shoe, and a plurality of retarders each adapted to cooperate respectively with certain of said heel wipers and with certain of said shank wipers to cause said wipers also to exert a pull on the lasting margin tending to tension the upper materials heightwise of the last, each of said retarders comprising a finger mounted for yielding arcuate movement inwardly from the marginal edge of the shoe bottom and heightwise of the shoe away from said shoe bottom in response to pressure of the lasting margin of the upper materials thereagainst by the inwardly moving wiper.

2,748,404
MACHINE FOR APPLYING RIBS TO SHOE SOLES
Manfred E. Pehrson, Malden, Mass., assignor to Prime Manufacturing Company, Lynn, Mass., a corporation of Massachusetts
Application September 23, 1954, Serial No. 457,953
9 Claims. (Cl. 12—20)



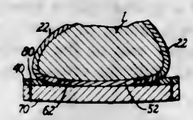
1. A rib applying machine comprising a frame, a freely rotating sole supporting roll mounted therein, a bias feed roll mounted on the frame at one side of the supporting roll for rotating with its work engaging surface located in the same plane as that of the sole-supporting roll, and an edge gauge roll at the other side of the sole-supporting roll and located in position to receive the thrust of a sole imparted to it by the biased feed roll, means supported on the frame for guiding a binding strip with adhesively coated margins to the bite of the edge gauge roll and the sole edge with one margin of the binding strip located above the face of the sole, and an intermittently acting feed foot mounted on the frame and movable for advancing the sole and pressing the margin of the binding strip into adhesive union therewith.

2,748,405
METHODS OF MAKING SLIP-LASTED SHOES
Alfred S. Clark, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Original application January 9, 1952, Serial No. 265,660. Divided and this application December 29, 1953, Serial No. 400,966
3 Claims. (Cl. 12—142)



1. That improvement in methods of making high arch platform shoes which consists in providing a platform sole with a layer of thin flexible material secured to the inner surface thereof with the edge portion of said material free from the sole, securing one side of the forepart of the vamp of an upper and the free edge portion of the flexible material only together by a seam of stitches passing through the edge of the vamp and the edge of the flexible material without penetrating the platform sole, applying one end of a wrapper strip of variable width and curvature to the upper when the shank of the shoe is reached with one edge of the strip in register with the edge of the upper, and continuing the seam along the edges of the parts from the shank entirely around the sole and across the end of the wrapper strip first applied to the shoe at the shank.

2,748,406
METHODS OF MAKING PREWELT SHOES
Karl A. Stritter, Nahant, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application January 22, 1953, Serial No. 332,629
2 Claims. (Cl. 12—142)



1. That improvement in methods of making prewelt shoes which consists in selecting a last, providing a prewelted upper to fit the last and to have a lasting allowance projecting beyond the welt, providing a sock lining smaller than the last bottom, disposing the projecting portion of the lasting allowance and the sock lining with their edges flush, securing their edges together by overedge stitching off the last, inserting the selected last into the shoe to dispose the lasting allowance and the sock lining in the same plane, providing a sole, and attaching the sole to the welt.

2,748,407
WEDGE FILLERS FOR SUSPENSION BRIDGE CABLES
John I. Copp, Bethlehem, Pa., assignor to Bethlehem Steel Company, a corporation of Pennsylvania
Application December 26, 1951, Serial No. 263,355
3 Claims. (Cl. 14—22)

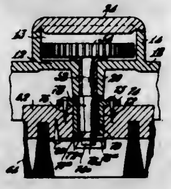


1. A device for preventing cable slippage through a stationary annular member, comprising a plurality of stepped packs of thin metal strips with serrated edges, each pack being adapted to be positioned directly beneath and supporting a single cable strand while resting upon and being supported by a pair of subjacent cable strands and conforming thereto under the pressure of the strands, said serrated edges constituting a plurality of teeth adapted under said pressure of the strands to be spread apart and bent upward to grip the strands thereby increasing the outer diameter of the overlying portion of the cable to exceed the minimum inner diameter of the annular member and securely prevent slippage therethrough.

2,748,408
APPLYING AND POLISHING APPARATUS
Louis Zaiger, Swampscott, and Robert I. Lappin, Marblehead, Mass.
Application November 8, 1951, Serial No. 255,374
2 Claims. (Cl. 15—49)

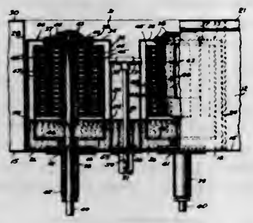
1. In an applicator a substantially symmetrical frame, a motor mounted on the frame at the geometrical center thereof with its drive shaft perpendicular to the frame and coinciding with the geometrical center thereof, a pair of spaced parallel, rigid applicator shafts journaled on the frame at equally spaced points at opposite sides of the

motor shaft in a plane extending transversely of the frame through the axis of the motor shaft for rotation about their vertical axes, means operably connecting the motor shaft to the applicator shafts, said means being symmetrically disposed about the motor shaft, each shaft having a tapered lower portion of polygonal right cross-section for drivably receiving the head block of an applicator, and a cylindrical end portion of smaller diameter than the smaller end of the tapered portion, each shaft having an annular shoulder at the junction of the tapered portion and the cylindrical portion and an annular groove in the cylindrical portion, an applicator mounted on the tapered portion of each shaft having a central opening in which is fixed a hollow sleeve having an inner polygonal surface corresponding in cross-section to the cross-section of the larger end of the tapered portion of the shaft and being of uniform cross-section throughout, so



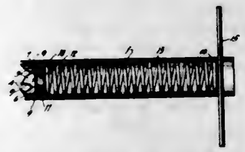
that there is lateral play between the sleeve and the shaft which permits rocking the applicator on the shaft, an annular, inwardly extending shoulder at the lower end of the sleeve constituting a thrust bearing against which the shoulder on the shaft bears, and a latch pivotally fastened to the underside of the head block adjacent the sleeve opening for arcuate swinging movement relative thereto, to lock the head block to the shaft or release it, said latch having a slotted recess therein engageable with the annular groove in the shaft to retain the applicator on the shaft, the portions of the latch at opposite sides of the slotted recess being yieldable in the plane of the latch to permit play of the applicator on the shaft with respect thereto as afforded by the tapered portion of the shaft, and said latch being comprised of a thin spring sheet metal elastically yieldable perpendicular to its plane to permit the applicator to move axially on the shaft.

2,748,409
DRINKING UTENSIL CLEANING APPARATUS
Homer Frank Lyman, Nutley, N. J.
Application November 28, 1950, Serial No. 197,919
6 Claims. (Cl. 15—75)



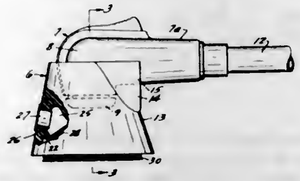
1. In utensil washing and cleansing apparatus comprising a rectangular-shaped, liquid-tight tank open at the top thereof, said tank having a glasswashing compartment therein, the glasswashing apparatus comprising a cylindrically-shaped, vertically extending fluid-tight container mounted within said compartment, the bottom edge of said container being in fluid-tight relationship with the bottom of said compartment, the container having an opening in the top thereof to receive a cylindrically-shaped glass in an inverted position, the container being of such height that the top thereof is below the top of said compartment, means associated with the opening to maintain the glass against rotation, a vertically extending inner brush in the container and having bristles projecting toward the periphery of the container, said inner brush being rotatable on a vertical axis and adapted to engage the inner periphery of said glass, a vertically extending outer brush in the container and having bristles projecting toward said inner brush in the container and rotatable on a vertical axis and disposed to engage the outer periphery of the glass, the bristles of the brushes extending from a point adjacent the top of said container to a point in spaced relationship with the bottom thereof, means for rotating said brushes, and a conduit communicating with said container to conduct wash fluid thereinto, said container having a fluid outlet therein at a level below the bristles of said brushes through which wash fluid drains into said glass-washing compartment and a drain for said compartment at a level below the bristles of the brushes and through which the wash fluid drains from the glasswashing compartment.

2,748,410
DEVICE FOR CLEANING GREASE FITTINGS
Linwood R. Chapman, Albany, N. Y.
Application January 12, 1953, Serial No. 330,644
6 Claims. (Cl. 15—105)



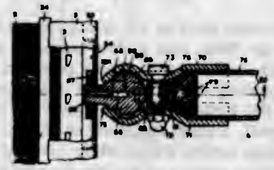
1. A device for cleaning a grease fitting and comprising a tubular element of an internal diameter substantially exceeding the exterior diameter of said fitting, whereby it is adapted to receive said fitting within one end thereof; a rubber annulus within said element adjacent said one end thereof adapted to receive and frictionally engage the surface of said fitting for removing the dirt therefrom when pushed forcibly into contact with and over the end of said fitting; a comparatively stiff compression spring in said element cooperating with said annulus for yieldingly holding said annulus adjacent said one end of said tubular element; and means adjacent the other end of said element for holding said spring therein.

2,748,411
SPRAY GUARD
Vincent Richard O'Brien, St. Paul, Minn., assignor to Fastee Products, Inc., St. Paul, Minn., a corporation of Minnesota
Application August 7, 1952, Serial No. 303,094
8 Claims. (Cl. 15—129)



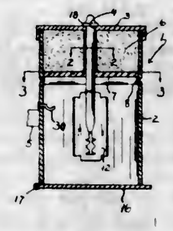
3. A spray guard for use in conjunction with a spray valve and nozzle assembly in the cleaning of surfaces comprising a tubular member formed of a resilient, water-resistant material, said member having inner walls the upper portions of which are complementary in shape to the external surface of the spray valve and nozzle assembly and are adapted to receive the same therewithin from above in positive tight-fitting non-threaded frictionally-engaging relation, the lower portions of said inner walls diverging downwardly from the spray nozzle and terminating at the lower peripheral edge of said member in substantially the same plane throughout, and an open channeled shoulder member formed of resilient material carried exteriorly by said member adjacent its upper end and extending laterally therefrom, said shoulder member having its channel open at the top and facing upwardly and being shaped to conform to the shape of the neck portion of said assembly to support and positively engage the same to thereby resist positively the separation of said tubular member from the spray valve and nozzle assembly.

2,748,412
BRUSH CONSTRUCTION
Ruben O. Peterson, University Heights, Ohio, assignor to The Osborn Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application April 14, 1950, Serial No. 155,803
5 Claims. (Cl. 15—129)



1. A brushing tool comprising an elongated, substantially straight and narrow cup-shaped receptacle back, and two lengths of brush strip secured in side-by-side relationship within said back but spaced from the bottom thereof, each said strip having a relatively flat layer of brush material extending in side-by-side relationship therefrom, and a fluid entry port communicating with such space between the bottom of said receptacle back and said brush strip.

2,748,413
RAZOR BLADE DRYING HOLDER
Sam C. Morrow, Summit, Ohio
Application August 25, 1953, Serial No. 376,419
6 Claims. (Cl. 15—218)



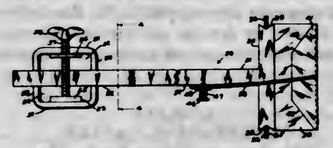
1. A razor blade storage article comprising an airtight container having a bottom cover movably secured thereto and having a removable top cover, said top cover having an elongate slot therein, a pin extending through said slot into said container and slotted at its inner end for engaging a razor blade, and desiccant receiving means positioned in only a portion of said container immediately adjacent said slot in said top cover, said desiccant receiving means including leather means for contacting and confining desiccant and for providing a slot in said desiccant receiving means in register with and connecting said slot in said top cover to the interior of said container to pass a razor blade thereinto for storage spaced from all parts of said container and desiccant receiving means.

2,748,414
SANITARY NECK DUSTER
John L. Glunt, Roaring Spring, Pa.
Application January 14, 1954, Serial No. 403,998
2 Claims. (Cl. 15—226)



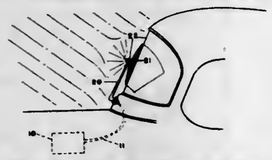
1. A sanitary neck duster comprising, in combination, a hollow cylindrical handle open at one end and closed at the other end, a readily insertable and removable throw-away brush of disposable material, a clamp for said brush embodying a first member having an inner end portion telescoping into the handle by way of said open end and an outer portion projecting through and outwardly beyond said open end and constituting a jaw, a second member opposed to said first member and having an inner end portion telescoping into said handle also by way of said open end, and an outer portion projecting through and outwardly beyond said open end and constituting a jaw which is complemental with said first named jaw, said second member being provided intermediate its ends with a pair of arms operable within the confines of the handle and straddling cooperating intermediate portions of said first member, an assembling and hinging pin passing through diametrically opposite portions of the wall of the handle, through said arms and also through the cooperating portions of said first member and permitting the jaws to open and close as intended, spring means interposed between the respective inner end portions of the respective members and biasing said jaws toward normally closed position, said handle having a push button hole therein, and a push button operable in said hole and joined to the inner portion of said second member whereby upon exerting finger pressure on said button relative to said handle, the stated jaws may be spread apart to open position.

2,748,415
DEVICE FOR ATTACHMENT WITH A HANDLE
George Rushing, Jr., Little Rock, Ark.
Application January 17, 1950, Serial No. 139,024
1 Claim. (Cl. 15—236)



In a device for attachment with a handle, a longitudinal frame member comprising a head carrying portion and an attaching portion, said head carrying portion being offset from the attaching portion, and terminating in a T-shaped portion, a slot and indentations in said T-shaped portion, a blade having cooperating indentations for engagement with said T-shaped portion, a spring member adapted to be snapped over said indentations to bind said T-shaped portion and said blade together, and a spring blade protector secured to the head carrying portion and engaging the sharp edge of said blade.

2,748,416
WINDSHIELD WIPER WITH COMPRESSED AIR NOZZLE
Joseph A. Benoit, Vivian, La.
Application December 9, 1953, Serial No. 397,214
2 Claims. (Cl. 15—250.4)



1. A windshield wiping mechanism for use on a vehicle supplied with an air compressor comprising a bushing placed through the body wall of said vehicle, means for anchoring said bushing to said body wall, a hollow shaft rotatably positioned in said bushing and adapted for rotative movements by a wiper actuating unit provided on said vehicle, an air delivery line connecting the inner end of said hollow shaft and the air compressor, a hollow wiper arm connected to the outer end of said hollow shaft, a valve body at the upper end of said wiper arm, a windshield wiper blade connected to said valve body and disposed to move with said wiper arm and said hollow shaft and a valve in said valve body arranged to disperse air from said compressor unit in a diverging cone away from said wiper arm.

2,748,417
MACHINE FOR ASSEMBLING LANTERN SLIDES AND THE LIKE
Irwin Helm, Valley Stream, N. Y.
Application January 12, 1953, Serial No. 330,646
8 Claims. (Cl. 15—308)



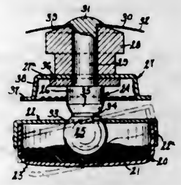
1. A machine for preassembling an intermediate component and two protective components to form a stack of sandwiches, said machine having two horizontally spaced stacking chambers, one for the protective components and one for the intermediate components, a sandwich receiving chute between the stacking chambers and at a lower level, horizontal guides leading from the stacking chambers to the chute, there being a discharge opening from each chamber on the side toward the chute and of a height to permit the passage of one component only from each stack, a reciprocatory shifter movable back and forth under each chamber and acting on the forward stroke to shift one component only from the chamber toward the chute, and common driving means for the shifters which times the shifter to deposit an intermediate component between each alternate pair of protective components.

2,748,418
NON-BINDING CASTER
John Armour, Delray Beach, Fla.
Application March 1, 1955, Serial No. 491,259
9 Claims. (Cl. 16—18)



1. A non-binding caster comprising a yoke, a shaft extending through said yoke, a wheel carried on said shaft within said yoke, and cutter means intermediate the yoke and wheel, said cutter means including a pair of adjacent, rubbing cutter discs which are smaller than the diameter of the wheel and movable relative to one another when said wheel is rotated.

2,748,419
CASTER GLIDE
Michael Kramcsak, Jr., Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a corporation of Connecticut
Application March 12, 1954, Serial No. 415,725
3 Claims. (Cl. 16—38)



1. In a caster glide of the tilting type, a hollow base for engaging the floor, and a stem partially disposed in and rising from the base and tiltably related to the base, said base comprising a shallow sheet metal cup with a substantially flat bottom and an upstanding substantially cylindrical wall, a sheet metal cover for the cup resting on said wall and having a depending substantially cylindrical flange standing outside of and tightly against said cup wall, and an elastic cushion member in the lower part of said cup in the form of a disk lying flatwise against the bottom of the cup, said stem having at the lower end an integral partly spherical head held by said cover against said disk under pressure and in distorting relationship thereto to form a socket, said cover where it is adjacent the upper portion of said head being shaped to conform closely to the head and thereby to hold the head in distorting relationship to said disk, said head extending partially below the disk level to a slight extent, but the greater part of the head standing above the level of the disk, said stem having a portion extending upwardly beyond the seat provided in said cover and provided with an upwardly facing shoulder for supporting a furniture leg, said shoulder being disposed at a level substantially above said cover.

2,748,420
REVERSIBLE HINGE
Leonard Wilkendorf Clover, San Jose, Calif.
Application June 9, 1952, Serial No. 292,528
2 Claims. (Cl. 16—170)

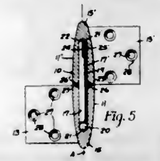
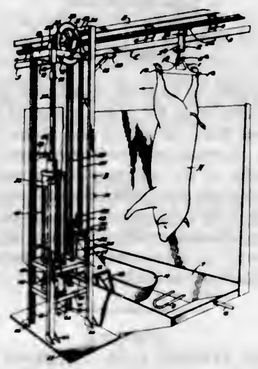


Fig. 5

1. In a hinge of the type having identical upper and lower hinge halves each including a wing portion formed integrally with a socketed barrel portion adapted to be joined for swinging relation by a hinge pin; a slit formed in one end of said hinge pin to a depth between one and two diameters of said pin, the portions of the pin on opposite sides of the slit being bowed outwardly relative to each other for press fit into the socket in the barrel of the upper of said hinge halves whereby the remaining portion of said hinge pin will extend from the barrel in which it is press fitted without falling out irrespective of the pendant position of said remaining portion of said hinge pin relative to the barrel in which it is press fitted for ready insertion into the socket formed in the barrel of the lower one of said hinge halves, the opposing faces of said barrel portions being countersunk coaxially of the sockets therein for guiding the free end of said hinge pin extending from the upper of said hinge halves into the socket formed in the barrel of the lower hinge half.

2,748,421
HOG HEAD COATING APPARATUS
Otto Hedstrom, Chicago, Ill., assignor to Armour and Company, Chicago, Ill., a corporation of Illinois
Application December 9, 1950, Serial No. 200,061
4 Claims. (Cl. 17—1)



1. In an apparatus for coating a portion of an object with a liquid material, means for supporting the object from its upper end portion with its lower end portion hanging downwardly, an open-topped container for holding said liquid material positioned beneath said supporting means and dimensioned to receive the lower end portion of said object, an elevator mechanism positioned adjacent said container and extending upwardly therefrom toward said supporting means to a point spaced above the lower portion of said object, said container being mounted on said elevator mechanism, said elevator mechanism being operative to lift said container from a position beneath said object to a position above the lower portion thereof and being arranged so that during its upward movement the lower portion of said object will be received in said container and engaged thereby, and means operatively associated with said elevator mechanism for automatically controlling its movements and thereby the movements of said container between said positions, said control means including force-responsive means automatically stopping the upward movement of said elevator mechanism and thereby the rise of said container when said container begins to lift said object by engaging the lower portion thereof, said automatic stopping means being actuated by the force exerted on said container when said container engages and begins to lift said object.

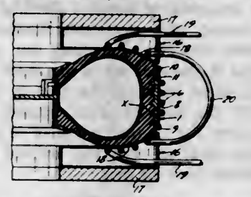
2,748,422
APPARATUS FOR ADVANCING AND WORKING PLASTIC COMPOUNDS
Grant S. Brown, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application June 21, 1951, Serial No. 232,825
9 Claims. (Cl. 18—12)

1. An apparatus for advancing and working plastic compounds, which comprises an extruding cylinder having a bore therein, a stock screw having a bore therein extending from one end thereof, means for closing the bore in the stock screw at a point between the ends thereof, means connected to the bore-closing means for shifting the bore-closing means along the bore in the screw, and means for supplying a heat exchange fluid to the



portion of the bore in the stock screw on one side of the bore-closing means.

2,748,423
TIRE MOLD
Earle W. Hawkinson, Minneapolis, Minn., assignor to Paul E. Hawkinson Company, Minneapolis, Minn., a corporation of Minnesota
Application February 11, 1955, Serial No. 487,497
4 Claims. (Cl. 18—18)



1. In a device of the class described, a primary mold element, said primary mold element being formed from sheet metal and providing a relatively wide endless radially inwardly opening central matrix receiving channel and relatively narrow cylindrical flanges at its opposite marginal edges, a plurality of segmental matrix sections in end to end relationship in said channel, opposed secondary mold elements adapted to engage the opposite sides of a tire casing and make sealing engagement with said flanges, and heating means for said mold sections.

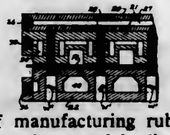
2,748,424
ROTARY PELLETING PRESS MODIFICATION
Bernard F. Fay, Harford Manor, Army Chemical Center, Md.
Application May 28, 1954, Serial No. 433,315
4 Claims. (Cl. 18—20)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In a pelleting press comprising a rotary table, means for rotating said table, an annular series of dies mounted in said table, each of said dies comprising a vertical bore, a lower punch mounted for vertical reciprocation in said bore, a series of upper punches carried by said table, each of said upper punches being mounted for vertical reciprocation into and out of one of said bores, first cam means carried by said press and successively engaging each of said lower punches, second cam means carried by said press successively engaging each of said upper punches, feed means arranged to fill said bores with powder to be compressed, said cams being so constructed and arranged as to cause each pair of corresponding lower and upper punches to move through an identical series of operations in which the said lower punch is moved downwardly to a filling position, the bore is filled with powder, the corresponding upper punch is pressed downwardly into said bore compressing said powder forming a tablet and then withdrawn, and the lower punch is moved upwardly, ejecting the tablet from the bore; the improvement wherein the punches of different corresponding pairs are of

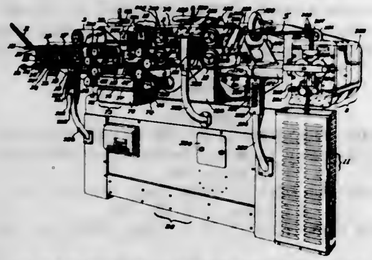
different lengths, said lengths being so selected that the tablets produced have substantially the same densities but different heights.

2,748,425
METHOD FOR FORMING CHECK VALVES AND THE LIKE
Irven E. Coffey, Clayton, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a corporation of Delaware
Application July 12, 1951, Serial No. 236,403
7 Claims. (Cl. 18—55)



1. A method of manufacturing rubber articles comprising the sequence of steps of feeding an uncured rubber sheet coated with a suitable lubricant, gripping the sheet between the dies, punching out a portion of the sheet gripped in the dies while the sheet is gripped, compressing the sheet between the dies to form the articles and to sever the articles from unused portions of the sheet, salvaging the unused portions of the sheet for reuse, applying heat to cure the articles, and then stripping the articles from the dies.

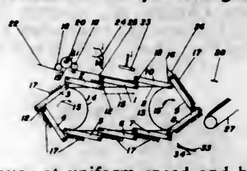
2,748,426
APPARATUS FOR PRODUCING STAPLE FIBERS
William K. Wyatt, Souderton, Pa., assignor to Turbo Machine Company, Lansdale, Pa., a corporation of Pennsylvania
Application June 12, 1953, Serial No. 361,292
28 Claims. (Cl. 19—.37)



1. In apparatus for converting tow consisting of multiple continuous synthetic textile filaments into a sliver of staple fibers, pairs of differentially driven upper and lower horizontal axis feed and delivery nip rolls in spaced relation; a cooperative pair of rotary breaker elements in the interval between the feed and the delivery rolls; means for laterally spreading the filaments enroute to the feed rolls; and an auxiliary roll rotated at a surface speed equal to that of the feed rolls having notched inset bars at circumferentially spaced intervals for definitely separating the filaments after spreading thereof and before entry between the feed rolls.

2,748,427
PROCESS AND DEVICE FOR CONVERTING A CONTINUOUS TOW OF ARTIFICIAL FILAMENTS INTO A SLIVER COMPRISING STAPLE LENGTHS
Ian Fraser Stewart and John Bryan Seed, Dumfries, Scotland, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain
Application September 11, 1953, Serial No. 379,564
Claims priority, application Great Britain October 20, 1952
3 Claims. (Cl. 19—.48)

1. A device for the conversion of a continuous tow of endless filaments into a sliver of staple fiber comprising in combination means for intermittently feeding a predetermined length of a continuous tow of filaments forwardly to a combing station, means at said combing station for combing said predetermined length of continuous tow from a free end thereof by steps of progressively greater length while said tow is held stationary by said feeding means, and means for cutting the combed and opened predetermined length of said tow into staple of desired length, wherein said means for combing comprises an endless conveyor having means for driving said conveyor at uniform speed and having on said conveyor a plurality of flat plates mounted in step formation by pivoted links, certain of said plates bearing combing elements thereon and extending over successively different lengths of the different plates, and wherein the spacing and direction of movement of said conveyor in relation to said feeding means is such as to bring the combing elements on the different plates successively into engagement with said tow for combing the same while held by said intermittent feeding means.



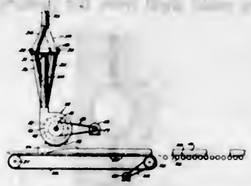
2,748,428
CONDENSER APRONS FOR CARDING MACHINES
Rene G. Pechin, Jr., Huntingdon Valley, Pa.
Application July 25, 1952, Serial No. 300,851
1 Claim. (Cl. 19—153)



In a condenser apron for subjecting rovings simultaneously to a longitudinal advancing movement and to a transverse rolling movement, the combination comprising an inner base in the form of an endless sheet of leather, an outer facing of unreinforced sheet neoprene on said leather, said leather being about twice as thick as said neoprene, said neoprene extending over substantially the entire surface of said leather and having a side edge which coincides with the side edge of the leather base, an intermediate bond of neoprene cement which is affixed to said neoprene facing and to said leather base to secure the same together, a plurality of guide buttons disposed at spaced points upon the inner surface of said leather base, and a plurality of rivets, each of which extends through the leather, the neoprene and one of said buttons, each said rivet having a flange which is anchored in the neoprene facing and in direct contact with said neoprene.

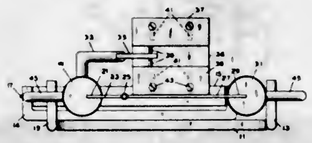
2,748,429
APPARATUS FOR FORMING FIBROUS STRUCTURES
James D'A. Clark, Longview, Wash., assignor to A. B. Dick Company, Niles, Ill., a corporation of Illinois
Application May 8, 1952, Serial No. 286,716
7 Claims. (Cl. 19—156)

1. Apparatus for preparing structures of fibrous elements of substantial dimension comprising an elongate cylinder having a separating wall in the underside thereof formed with a plurality of openings arranged in spaced apart relation across the separating wall, a collecting wall spaced below the separating wall, means for feeding fibrous elements in uniform distribution into the cylinder across



the length thereof in amounts exceeding that capable of passing immediately through the openings but insufficient to fill any portion of the cylinder, means for imparting rotational movement to all of the fibers contained therein constantly to move the excess as a layer across the foraminous surface of the separating wall.

2,748,430
TEXTILE MACHINE CONTROL DEVICE
Robert W. McCullough, Pendleton, S. C., assignor to Deering Milliken Research Corporation, Pendleton, S. C., a corporation of Delaware
Application January 29, 1953, Serial No. 333,956
9 Claims. (Cl. 19—165)



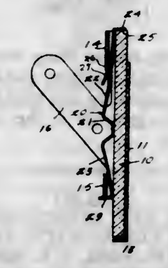
1. A control for a textile machine for processing sliver, roving and the like which comprises a rigid surface over which said sliver is adapted to be passed, a pair of movable sliver engaging members spaced along the path of said sliver and adapted to contact said sliver as it passes over said surface and move in response to variations in diameter of said sliver, means associated with said members which is sensitive to relative movement of at least a predetermined amount between said members and means responsive to said sensitive means for controlling said machine.

2,748,431
DEVICES FOR MOUNTING WINDOWS
Sven Axel Eriksson, Helsingfors, Finland
Application January 17, 1952, Serial No. 266,984
Claims priority, application Sweden January 19, 1951
2 Claims. (Cl. 20—56.4)



1. A device for mounting a window including a resilient mounting strip provided with a longitudinal groove adapted to receive the edge of a mounting panel surrounding a window opening and a pair of longitudinal grooves diametrically opposed to the first mentioned mounting groove and adapted to receive a pair of window panels, said first mentioned groove being adapted to receive the edge of a panel at the base of the groove and having a cross-sectional shape which first widens inwardly and thereafter narrows to an innermost width corresponding to the thickness of the mounting panel, and a pair of wedging strips adapted to be inserted into said first mentioned groove on opposite sides of a mounting panel therein, said wedging strips each being formed to engage the sides of a mounting panel adjacent thereto in said groove and to effect deformation of the mounting strip such that the walls of the window receiving grooves are caused to tightly grip adjacent window panels therein, said mounting strip being formed with the top edges of the outer walls of the window panel receiving grooves being at approximately the same level as the lower edges of the inner walls of the grooves before the insertion of wedging strips in the mounting panel receiving groove.

2,748,432
JALOUSIE CLIP
Ernest J. Eaddy, Sr., Spartanburg, S. C.
Application August 3, 1953, Serial No. 371,842
1 Claim. (Cl. 20—62)

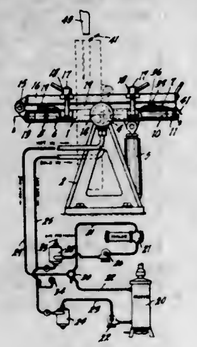


A jalousie clip for a louver comprising an elongated front plate, a right angularly disposed end plate integral with an outer edge of said front plate, a right angular bottom wall integral with said front plate, a pair of spaced apart rear plates extending right angularly from said end plate, a supporting lever arm extending obliquely from said end plate, one of said rear plates having a notch in the inner end thereof, the other said rear plates having a notch in the outer end thereof, and a releasable clamping member engageable between said pair of plates and the adjacent face of the louver, said clamping member comprising a resilient strip formed with an inwardly offset intermediate portion, an outer right angular extension at one end of said strip engaging over an edge of the jalousie louver opposite from said bottom wall, a locking flange carried by the opposite end of said strip engaging in said outer notch, and a locking tongue carried by said strip engaging in said inner notch.

2,748,433
METHOD AND APPARATUS FOR CASTING PRINTING PLATES
Benjamin R. Preston and Donald A. Richmond, Kalamazoo, Mich.
Application September 25, 1952, Serial No. 311,406
3 Claims. (Cl. 22—58)

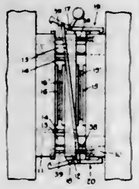
3. Type plate casting apparatus comprising, a mold box bed adapted to receive a type shell, a cover closable in spaced relationship over said bed, said bed having a forced cooling chamber formed therein substantially covering the shell receiving area thereof, a heat insulating surface on the face of said cover opposed to said bed, said cover being uncooled except by natural radiation from its exposed surfaces, a support for said bed and cover adapted to hold the same in alternate horizontal and vertical positions, means adapted to close the space between said bed and cover along the bottom and sides thereof relative to the vertical position of the bed, a fluid heater, a fluid cooler, a fluid conduit connecting the output side of said heater and the input side of said cooler

to the upper portion of said chamber, a second conduit connected to the lower end of said chamber and having branches connected to said heater and cooler, means for circulating fluid through said chamber, means for selectively directing the circulated fluid to said cooler and



heater, a recirculating system being formed by said conduits, heater, cooler and chamber, and a body of fluid in said system characterized by the property of remaining liquid at atmospheric pressure in the temperature range of 150° F. to 500° F.

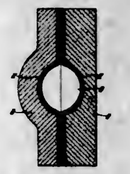
2,748,434
MECHANISM FOR REPLACING DIES OF EJECTION MOULDING MACHINES
Ivan J. Amo, North Plainfield, N. J., assignor to M and W Company, Inc., Rahway, N. J., a corporation of New Jersey
Application October 4, 1954, Serial No. 459,889
6 Claims. (Cl. 22—149)



5. In moulding machines employing a floating die holder movable between a stationary and a movable die holder, the floating die holder supporting parts of two different dies, means for coupling the floating die holder with either of said other die holders in wide spreading of said stationary and moving die holders with respect to the floating die holder in acquiring access to the dies of said holders for replacement, means comprising guide posts on the stationary die holder for supporting the floating die holder in connection with the stationary die holder, when coupled together, and means comprising supporting pins on the floating die holder operatively engaging the moving die holder in support of the floating die holder, when coupled with said moving die holder.

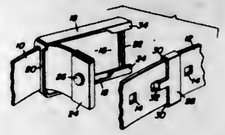
2,748,435
PROCESS FOR REINFORCING SHELL MOLDS
William S. Hackett, Royal Oak, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 14, 1951, Serial No. 256,309
2 Claims. (Cl. 22—193)

1. A process for forming a reinforced shell mold assembly for casting metal, said process comprising placing a mixture of a major proportion of sand and a minor proportion of thermosetting resin in contact with a hot metallic pattern for a period of time sufficient to melt the resin and to bond a substantial portion of the sand particles together, removing any excess sand and resin, subsequently curing the formed mold shell by baking for a short period of time while in contact with the pattern, stripping the mold shell from the pattern, applying to the



back surface of said mold shell a moist layer of a mixture comprising 0.9% to 13% by weight of water, 0.07% to 7% by weight of sodium silicate and the balance substantially all sand, and thereafter baking the formed reinforced shell mold assembly for at least two minutes at a temperature between 300° F. and 700° F.

2,748,436
BUCKLE
Charles P. Hoffman, Kokomo, Ind.
Application March 23, 1953, Serial No. 344,139
1 Claim. (Cl. 24—77)

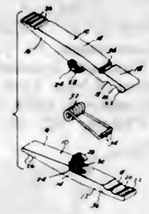


In a belt construction, an elongated flexible strap having a free end provided with longitudinally spaced openings therein, an elongated plate having one end connected to the other end of said strap, and coacting means on the free end of the strap and the other end of said plate for connecting said free end to said plate comprising an elongated securing element extending transversely of said free end with reversely bent end portions slidably securing said securing element on said free end and an offset hooked lug on one end of said securing element selectively engageable in said openings by sliding of said securing element, a pair of longitudinal edge flanges on said plate between which said securing element is slidable toward the other end of the plate, a transverse flange on said other end of the plate engaging and limiting sliding of said securing element toward said other end of the plate, and a pair of inturned edge ears on said longitudinal flanges opposite and overlying said transverse flange and said securing element when said securing element is engaged with said transverse flange and being spaced from said transverse flange to accommodate the free end of the strap between said pair of ears and said transverse flange.

2,748,437
CLOTHESPIN
Louis R. Dold, Albany, Calif.
Application May 29, 1953, Serial No. 358,387
3 Claims. (Cl. 24—137)

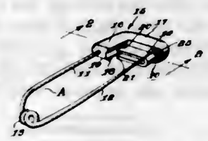
1. A clothespin comprising identically formed, oppositely arranged members each including a handle portion at one end, an intermediate portion, and a jaw portion at the other end, said intermediate portions being respectively formed with hooks curving about a common axis extending transversely of the members, and with grooves also curving about said axis and spaced inwardly from the sides of the members, said hooks being engaged in said grooves for rotatable movement in opposite directions,

for relative pivotal movement of the members about said axis; and a torsion spring including an intermediate, coiled portion extending through the hooks in coaxial alignment with the pivot axis of the members, said spring



being formed with end portions in engagement with the respective members and being tensioned to resiliently, yieldably bias the members in a direction to shift the jaw portions toward each other.

2,748,438
TWIN-WAY PIN SAFEHEAD
Charles M. Clark, Clearwater, Fla.
Application June 16, 1955, Serial No. 515,962
2 Claims. (Cl. 24—156)



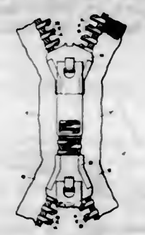
1. A safety pin having a U-shaped pin loop with a blunt end and a pointed end and a guard molded from solid stock comprising an L-shaped body, one leg of the body being parallel with and secured to said blunt end of the pin loop and the second leg of the body extending over and shielding the pointed end of the pin loop, said second leg being provided on its inner face with a U-shaped housing opening toward the inner face of said first leg, and ends of the opposed walls of said housing being spaced from the inner wall of said first leg, to thereby provide entry slots for movement of said pointed end into said housing from positions on the outer surface of either wall thereof.

2,748,439
ARTICULATED FASTENER
George T. Owen, Reno, Nev.
Application June 18, 1952, Serial No. 294,159
5 Claims. (Cl. 24—205.13)



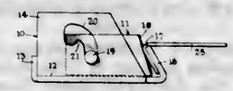
1. In an articulated slide fastener assembly, each of the fastener elements including in combination, a cylindrical socket portion, a stem extending outwardly from the end wall of said socket portion in axial alignment with the cylindrical axis of said socket portion, and a ball portion secured to the end of said stem with its diametrical axis in alignment with the cylindrical axis of said socket portion, said ball portion having a diameter slightly less than the inner diameter of said socket portion, said socket portion having an inner depth slightly more than the radius of said ball portion.

2,748,440
SLIDE FASTENERS
Frederick Ulrich, Jersey City, N. J., assignor to Conmar Products Corporation, Newark, N. J., a corporation of New Jersey
Application June 24, 1950, Serial No. 170,110
9 Claims. (Cl. 24—205.13)



1. A double-acting slide fastener comprising a pair of stringers having fastener elements secured therealong, each fastener element having a head with an interlocking side and an opposite non-interlocking side, the interlocking sides of the elements on the two stringers being of identical construction and facing each other for interlocking engagement, the opposite or non-interlocking sides each being provided with a longitudinally extending projecting portion having an outer face which is parallel to both the length and the width of a fastener element, said projecting portions bearing against one another to hold the interlocking sides of adjacent elements in engagement, said elements being relieved at the edge portions of said non-interlocking sides in order to facilitate flexing of the fastener upon itself.

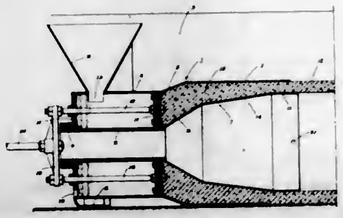
2,748,441
QUICK ACTION CLAMP DEVICE
William G. Smith, Tarentum, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania
Application August 15, 1952, Serial No. 304,465
3 Claims. (Cl. 24—263)



1. A quick action clamp device for holding sheet material, said clamp comprising in combination, an elongated frame element having a base and having a longitudinal sheet metal flange projecting upward from and at an acute angle to said base and having an upwardly projecting flange at each end of the base, a bar element positioned between said end flanges of said base and having a bottom surface, and having a longitudinal surface opposing the longitudinal flange, said longitudinal surface of said bar element being at an acute angle to the adjoining bottom surface larger than the acute angle of the longitudinal flange to the base of the frame element, and a stud projecting from each end of said bar, said end flanges of said base having arcuate slots therein and each slot having an end section closest to the longitudinal flange and extending downwardly substantially normal to said base, said slot extending upwardly from said substantially normal end section and outwardly away from the longitudinal flange, and then downwardly and away from the longitudinal flange to receive said studs and position said bar in said frame element, at least the portion of the bottom surface of the bar element adjacent the longitudinal surface of the bar element being parallel to the base

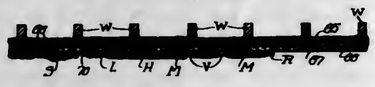
of the frame element with the bar element in the clamped position, the studs being in the end sections of the slots closest to the longitudinal flange of the frame element with the bar element in the clamped position, and the longitudinal surface of the bar element extending beyond the end of the longitudinal flange of the frame element with the bar element in the clamped position.

2,748,442
PIPE FORMING MACHINE
Albert Floyd Butcher, Modesto, Calif.
Application March 15, 1954, Serial No. 416,134
3 Claims. (Cl. 25—32)



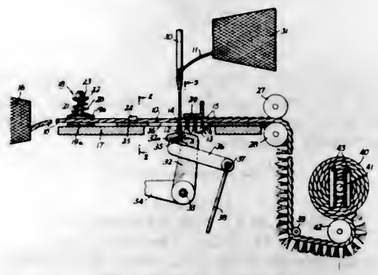
1. A pipe forming and laying machine comprising an elongated barrel adapted to be disposed lengthwise in and to rest on the bottom of a trench in which the pipe is to be laid, the barrel being open at one end, a core in the barrel symmetrical to the peripheral contour thereof at said one end and spaced from said end to leave a space about the periphery of the barrel inwardly thereof whose width determines the thickness of the pipe to be laid, means to feed concrete into the barrel adjacent its other end, means mounted in connection with the barrel to advance concrete along the barrel from the point of feed to cause such concrete to be extruded from said one end of the barrel and into the trench in pipe form, and means provided with the barrel to form lateral shoulders on the pipe as it is extruded into the trench; said shoulders engaging the sides of the trench and extending upwardly a predetermined distance from the upper end of the lower curved portion of the trench.

2,748,443
METHOD OF APPLYING A BUILDING WALL FACING
Harry M. Dufford, Chicago, Ill.
Original application January 4, 1950, Serial No. 136,690, now Patent No. 2,616,145, dated November 4, 1952. Divided and this application May 8, 1952, Serial No. 286,797
2 Claims. (Cl. 25—154)



1. The method of applying a variable texture finish in a desired pattern to the surface of a wall whereon is a foundation suitable for its reception, which comprises positioning against the foundation a frame having partitions defining a plurality of openings arranged in accordance with a predetermined pattern, in applying a mortar mix through the stencil openings over the entire areas thereof and against the wall foundation for bonding thereto to form a layer of the mortar mix having a thickness greater than the thickness of the stencil, in then removing the stencil frame by a movement outwardly from the wall to leave intact, as grooves therein, joint impressions in the applied mortar layer formed by the frame and its partitions during the mortar-applying operation, and then working over the surface of said layer of mortar mix in each of the groove-enclosed areas individually to form the same into a desired texture.

2,748,444
CHENILLE YARNS AND THEIR MANUFACTURE
Walter A. Rice, Amsterdam, N. Y., assignor, by mesne assignments, to Mohasco Industries, Inc., Amsterdam, N. Y., a corporation of New York
Application November 6, 1953, Serial No. 390,593
8 Claims. (Cl. 28—72)



1. A chenille yarn, which comprises a base yarn and lengths of pile yarn mounted on the base yarn in a row lengthwise of the latter, each length of pile yarn having an intermediate portion lying against the side of the base yarn and end sections extending through the base yarn and projecting beyond the opposite side thereof to provide tuft legs.

2,748,445
SPLICED WOVEN FABRICS AND METHOD OF SPLICING THE SAME
John D. Skeer, Albany, N. Y., and Kirke H. Dunlap, Arnprior, Ontario, Canada, assignors to F. C. Huyck & Sons, Rensselaer, N. Y., a corporation of New York
Application December 24, 1952, Serial No. 327,732
11 Claims. (Cl. 28—72)



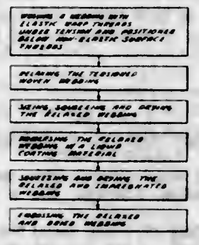
1. In the splicing of woven fabrics made substantially entirely of synthetic resin fibers having fringes of warp yarns on the edges to be joined and having the ends of corresponding yarns from the respective fringes united preparatory for splicing, the steps comprising engaging a warp yarn at a point within the woven fabric on which one of said edges occurs, withdrawing said warp yarn inwardly from said edge at said point thereby drawing the corresponding warp yarn united therewith into said woven fabric to emerge with said first-named warp yarn at said point, separating the ends of said united warp yarns, looping the respective ends of said yarns around each other at said point, and weaving the respective ends of said looped yarns into said fabric in opposite directions extending away from said point.

2,748,446
TUFTED RUG AND METHOD OF MAKING SAME
Fred H. Mason, Natick, Mass., assignor to General Latex & Chemical Corporation, Cambridge, Mass., a corporation of Massachusetts
Application November 25, 1952, Serial No. 322,446
4 Claims. (Cl. 28—74)



1. The method of making a rug of the class described, which comprises applying to the undersurface of a fabric backing having closely spaced tufts producing a tufted outer surface, a coating of a fluid composition consisting essentially of a dispersion of resilient granular particles having a size between approximately 5 and 40 mesh and an aqueous elastomeric latex, the ratio of granular particles to latex solids being between approximately 0.5:1 and 4:1, and thereafter drying said coating to produce a non-cellular matrix which adheres to said fabric so as to anchor said tufts and provide a reinforcement for said fabric, said granular particles producing a relatively rough, resilient surface, the dry weight of said matrix and granular particles being between approximately 16 and 48 ounces per square yard.

2,748,447
PROCESS OF MAKING A PERMANENTLY EMBOSSED ELASTIC WEBBING
John V. Moore, Pawtucket, R. I., assignor, by mesne assignments, to Moore Fabrics, Inc., Pawtucket, R. I., a corporation of Rhode Island
Application February 25, 1953, Serial No. 338,922
1 Claim. (Cl. 28—74)



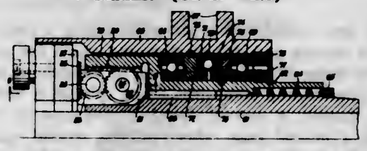
The process of making an embossed elastic webbing which comprises the following successive steps: weaving an elastic fabric with elastic warp threads held under tension and positioned below non-elastic surface threads, allowing the tensioned elastic warp threads to contract and produce an elastic webbing having looped and relaxed surface threads, sizing, squeezing and thoroughly drying the elastic webbing while thus contracted and with its surface threads relaxed, immersing the elastic webbing in a special liquid coating material while still in contracted and relaxed condition, again squeezing and thoroughly drying the contracted and relaxed elastic webbing, and finally embossing the impregnated, coated, dried and relaxed elastic webbing to produce an elastic webbing having a relaxed non-elastic surface which has a permanent configuration, and said special liquid coating material containing a resinous component which when dried has substantial strength and notable water-proofing qualities.

2,748,448
RESILIENT SHEET MATERIAL
Stewart D. Menzies, Manhattan Beach, and Raymond S. Nogler, Pasadena, Calif.
Application February 24, 1953, Serial No. 338,188
2 Claims. (Cl. 28—78)



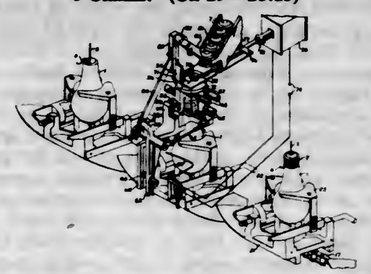
1. As an article of commerce, a floor rug comprising: a series of connected adjacent lays of a continuous strip, said strip being composed of a plurality of braided elements, each element consisting of a cylindrical, resilient and flexible core having a cellular spongy and resilient interior and a knitted tubular fibrous stock as an external covering on such core.

2,748,449
CARTRIDGE FINISHING MACHINES
Isaj Gutman, Harrow, England
Application September 17, 1952, Serial No. 310,009
Claims priority, application Great Britain September 20, 1951
7 Claims. (Cl. 29—1.3)



3. In a cartridge finishing machine, a tool head comprising a rotary body portion having at least one guideway extending radially with respect to the axis of rotation thereof, a tool carrier element slidable in said guideway, rack means associated with said carrier element, a first freely rotatable gear wheel associated with said body portion and meshing with said rack means, a second freely rotatable gear wheel associated with said body portion and meshing with said first gear wheel, a sleeve like member movable axially relatively to said body portion while being rotatable therewith and rack means associated with said sleeve like member and adapted to engage said second gear wheel, the arrangement being such that relative axial movement between the sleeve like member and said body portion will result in rotation of said gear wheels and consequent radial movement of the tool carrier element.

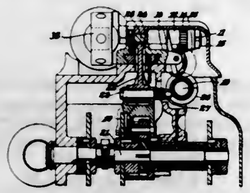
2,748,450
AUTOMATIC LAMP BASE THREADING MACHINE
John Flaws, Jr., East Cleveland, Kenneth Walter Reynolds, Mayfield Heights, and Carl Richard Meckstroth, East Cleveland, Ohio, assignors to General Electric Company, a corporation of New York
Application June 30, 1951, Serial No. 234,593
6 Claims. (Cl. 29—25.13)



1. An automatic base threading mechanism for incandescent lamp bulbs, comprising means for holding a

bulb in upstanding position with its top lead-in wire substantially vertical, a vertical threading tube for locating a base approximately in cooperating alignment over said bulb, means receiving a base open end down and releasing it into said tube, and means for blowing air into said tube thereby to agitate said base in order to provide repeated opportunities for said lead-in wire to enter the threading hole in the upper surface of said base.

2,748,451
GEAR TRANSMISSIONS
William Elias Reginald Pulman, Hove, England, assignor to C. V. A. Jigs, Moulds & Tools Limited, Hove, England, a British company
Application May 5, 1952, Serial No. 286,053
2 Claims. (Cl. 29—46)



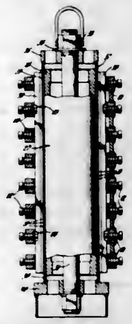
1. A gear transmission for transmitting a rotary drive between driving and driven elements which are relatively movable along the axis of rotation of the driving element, which transmission comprises a first spindle, a first pinion affixed thereto, a second spindle transverse to the first spindle, a helical gear wheel on the second spindle in mesh with the first pinion, bearings for said first spindle and second spindle fixed to a first mounting, a third spindle, a second pinion fixed thereto, which second pinion is provided with parallel axially extending teeth engageable with the helical gear, a bearing for the third spindle fixed to a second mounting, guide means associated with the two mountings permitting relative movement between the first and third spindles along the axis of the third spindle and means for imparting said relative movement.

2,748,452
METHODS AND BLANKS FOR MAKING CONNECTORS
Frank L. Pierce, Natick, Mass., assignor to Aircraft-Marine Products, Inc., Harrisburg, Pa., a corporation of New Jersey
Application May 7, 1953, Serial No. 353,518
4 Claims. (Cl. 29—155.55)



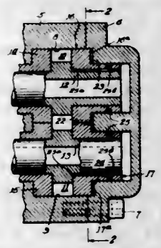
1. A process for forming solderless terminations on electrical wires for connecting the wires to other conductors of electricity comprising the steps of forming a continuous long, flat strip of metal into a plurality of joined electrical terminals, each terminal having a flat portion adapted to be used for making connection with another conductor of electricity and having at least a pair of side portions adapted to be bent upwardly approximately perpendicularly to the plane of said flat portion and adapted to be curled around, swaging a generally V-shaped notch transversely to the flat surface of said strip near each of said flat portions, said notch being in the junction between each of said terminals, feeding said strip of terminals along a path past a transverse plane of demarcation between a zone of support and a free zone, arresting said strip with one of said notches lying in said plane of demarcation and with at least a part of one of said flat portions in said free zone, striking said one flat portion over an area adjacent to and extending parallel to said notch by a force directed substantially parallel to said plane of demarcation and substantially perpendicular to said flat portion to drive said one flat portion substantially parallel to said plane of demarcation to break off one of said terminals along the line of said notch, and curling at least one of said side portions around.

2,748,453
METHOD OF MAKING PISTON RINGS
John M. Haldeman, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 25, 1951, Serial No. 228,207
12 Claims. (Cl. 29—156.6)



1. A method of making piston rings which comprises bending a metallic strip to form a ring, placing the ring on a mandrel having an exterior surface substantially identical to the form of the inner surface of said ring, applying radially inwardly directed forces substantially throughout the entire length of said ring and to the exterior surface of said ring to secure said ring rigidly to the exterior surface of said mandrel, and thereafter heating said ring while so held against said mandrel to relieve the internal stresses in said ring caused by the bending of said strip.

2,748,454
METHOD OF ASSEMBLING PRESSURE LOADED GEAR PUMPS
James A. Compton, South Euclid, Ohio, assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application July 19, 1950, Serial No. 174,606
2 Claims. (Cl. 29—156.8)



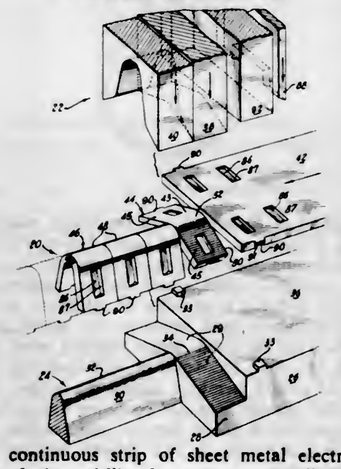
1. The method of assembling a pressure loaded type, intermeshing gear pump having at least one set of pressure loadable bushings adapted to engage the gear side faces in sealing relation which comprises the steps of assembling the pressure loadable bushings in their housing section, displacing the bushings toward the inlet side of the housing section by inserting shims between the bushings and the housing section on the side thereof adjacent the discharge side of the pump, assembling the housing section and bushing with the shims in position with the remaining elements of the pump in such a manner that the bushings properly align the remaining elements of the pump, forming a dowel hole extending through the housing sections, disassembling the pump to remove the shims, reassembling the pump, inserting a dowel pin in the dowel hole to establish the relative position of the housing sections, and then securing the sections together to complete the assembly of the pump.

2,748,455
METHOD OF FORMING A BEND IN DUCTILE METAL TUBING
Frederick Cecil Draper and John Frederick Hobson, Edgware, England, and William Sang, Toronto, Ontario, Canada, assignors to Boosey & Hawkes Limited, Edgware, England, a British company
Application January 2, 1952, Serial No. 264,418
Claims priority, application Great Britain January 5, 1951
6 Claims. (Cl. 29—157.6)



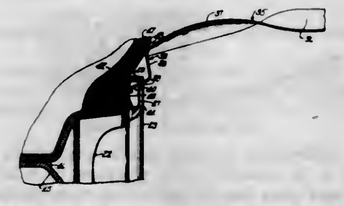
1. A method of forming a bend in a length of tubing of ductible metal comprising the steps of supporting one side of said tubing and compressing its opposite side laterally so as to cause the parts of the wall of said tubing which are to constitute the inner and outer surfaces of the bend respectively to approach one another toward the inner side of said tubing, whereby the cross-section thereof becomes concave towards the side which is to constitute the outside of the bend, bending said tubing progressively along its axis around a concave former to the desired curvature, said bending being carried out by rolling pressure on said concave outer side so as to minimize causing compressive stresses in the metal of said tubing, and expanding the concave side of said tubing outwardly to the desired final shape.

2,748,456
ELECTRICAL CONNECTOR AND METHOD OF MANUFACTURE
Quentin Berg, New Cumberland, Pa., assignor to Aircraft-Marine Products Inc., Harrisburg, Pa.
Application October 20, 1950, Serial No. 191,156
5 Claims. (Cl. 29—193.5)



1. A continuous strip of sheet metal electrical connectors of channel-like form, transverse slits extending inwardly from the opposed side edges of the strip to define adjacent and abutting end edges of a pair of individual connectors of said strip and further to define between the inward limits thereof a short intermediate connecting portion joining the adjacent connectors, said slits extending completely through the walls from surface to surface of said channel and being repeated at regular intervals along the length of said strip, each said connecting portion being partially severed inwardly from the opposed surfaces of said strip in continuity with said slits to leave a connecting area of metal significantly less in thickness than the thickness of the sheet metal, said connecting area being approximately centrally located within the sheet metal thickness so as to be offset relative to both the inside and outside surfaces of the channel to render the individual connectors easily severable from the strip without disturbance to the working surfaces of the connector.

2,748,457
PRY-OFF TOOL
George Albert Lyon, Detroit, Mich.
Original application December 28, 1949, Serial No. 135,469, now Patent No. 2,683,628, dated July 13, 1954. Divided and this application September 10, 1951, Serial No. 245,938
2 Claims. (Cl. 29—245)



1. A wheel cover pry-off tool of generally wedge shaped configuration having a handle and a stepped flanged portion defining a pry-off head, said pry-off head including a depending inturned angular flange connected at one end to said handle and defining with said handle an inner fulcrum, a depending intermediate flange having one end connected to the other end of said angular flange of sufficient length to extend behind a wheel cover, and a depending flange connected to the other end of said intermediate flange and defining with said intermediate flange an outer fulcrum, said last mentioned flange terminating at the other end in a cover pry-off edge, said pry-off edge being of a generally arcuate configuration generally in the longitudinal plane of the tool conforming generally to the curvature of the surface to be engaged by said edge to aid in the pry-off of a wheel cover.

2,748,458
IMPACT SLEEVE PULLERS
Raymond G. Knudsen and Henry P. Last, Kenosha, Wis., assignors to Snap-On Tools Corporation, Kenosha, Wis., a corporation of Delaware
Application January 2, 1953, Serial No. 329,201
3 Claims. (Cl. 29—280)

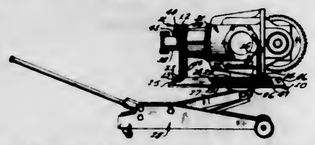
1. In a sleeve valve puller and the like, an elongated handle member including an enlarged end gripper, a valve sleeve engaging member, an end jointed member movably connected between the free end of said handle member and said sleeve engaging member, a joint sleeve slidably mounted over said elongated handle member, valve sleeve engaging member and end jointed member to preclude yielding therebetween in an operative pulling position and permit yielding in an inoperative inserting position, a ring slidable on said elongated handle member to contact an engine block in its operative position, and spring means enveloping said elongated handle member

between said enlarged end gripper and said slidable ring to normally urge said handle member away from the



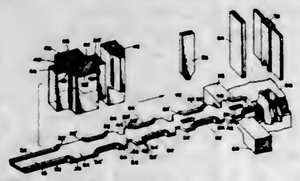
valve sleeve to be pulled, whereby an impacting movement may be imparted to said valve sleeve member.

2,748,459
DIFFERENTIAL HOUSING CRADLE
Rufus M. Orr, Oklahoma City, Okla.
Application August 17, 1954, Serial No. 450,483
3 Claims. (Cl. 29—284)



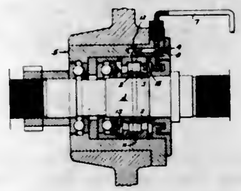
1. A differential housing cradle comprising a plate adapted to be secured to the platform of a lift arm of a jack, said plate having spaced openings positioned on a line extended longitudinally thereof and located midway between the edges, parallel slots also extended longitudinally of the plate and spaced from the edges thereof and a transversely disposed slot extended from one end, a pinion flange fork including a lower section with upwardly extended diverging arms having elongated slots therein positioned perpendicular to said base plate, a base for the pinion flange fork adjustably attached to the lower portion of said fork, means for securing the base of the pinion flange fork to the base plate, a cradle bar having a concave upper edge and also positioned perpendicular to the face of the base plate, said cradle bar having horizontally disposed flanges at the ends through which the cradle bar is bolted to the base plate, lugs removably attached to the cradle bar, and upright adjustable folding bars bolted to the ends of said cradle bar.

2,748,460
METHOD OF MANUFACTURING SLIDERS FOR SLIDE FASTENERS
Frederick Ulrich, Jersey City, N. J., assignor to Conmar Products Corporation, Newark, N. J., a corporation of New Jersey
Application January 18, 1951, Serial No. 206,580
8 Claims. (Cl. 29—410)



1. In the manufacture of sliders for slide fasteners from a continuous strip having continuous, parallel flanges along the longitudinal edges thereof, the distance between said flanges being equal to the width of the closing end of the slider channel in the finished slider, the method which includes forming flat areas by eliminating said flanges at spaced intervals, severing the thus formed strip across the flanges into blanks, and bending each of said blanks intermediate its ends at the flat portion to form a pair of spaced, parallel wings each provided with inturned flanges.

2,748,461
METHOD FOR ADJUSTING THE CLEARANCE IN BEARINGS
Sven Erik Willner Ohlsson, Goteborg, Sweden, assignor to Aktiebolaget Svenska Kullagerfabriken, Goteborg, Sweden, a corporation of Sweden
Application May 8, 1953, Serial No. 353,764
Claims priority, application Sweden May 13, 1952
4 Claims. (Cl. 29—421)



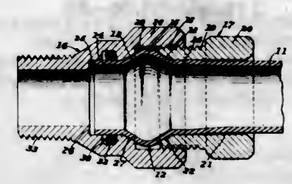
1. The method of adjusting the clearance in accurately running bearings for machine tools and the like in which one of the bearing elements comprises an annular member such as the race ring of a rolling bearing by altering the diameter of the ring by means of a fluid pressure medium forced between the ring and its seat under a pressure corresponding to the required change in diameter and subsequent solidification of said fluid medium.

2,748,462
METHOD OF MAKING TIRE TREADING MOLDS
Raymond P. Hawkinson, Minneapolis, Minn., assignor to Paul E. Hawkinson Company, Minneapolis, Minn., a corporation of Minnesota
Application December 1, 1954, Serial No. 472,300
1 Claim. (Cl. 29—505)



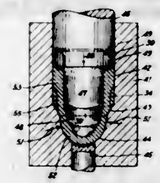
The method of forming a tire retreading mold which comprises, forming an annular jacket having radially inwardly projecting tread material confining flanges adjacent its marginal edges which define therebetween a mold cavity, forming a plurality of relatively thin short flat matrix members from bendable cast metal, said matrix members having tread design forming relief thereon of a depth less than the depth of said confining flanges, bending said matrix members against the interior surface of said jacket intermediate said confining flanges to cause same to conform in shape thereto, and securing a plurality of said segments to said interior surface in end to end relationship.

2,748,463
METHOD OF COUPLING PIPES
Frank H. Mueller, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a corporation of Illinois
Original application September 22, 1949, Serial No. 117,147, now Patent No. 2,685,461, dated August 3, 1954. Divided and this application January 13, 1953, Serial No. 331,064
4 Claims. (Cl. 29—523)



1. A method of making a coupling to a smooth walled tube comprising the steps of inserting an end of said tube into a pair of threadably engaged coupling fittings, said fittings comprising spaced, opposed, outwardly flaring surfaces together defining a bead forming cavity about said tube, expanding said tube by interior fluid pressure opposite said cavity and for a short distance on each side thereof, whereby said tube is expanded into said cavity into interfitting relationship with said surfaces and into close fitting relationship with said fittings outwardly of said surfaces, and rotating one of said fittings relative to the other to compress the beaded tube portion thereby formed and effect a fluid-tight, vibration-proof coupling thereon.

2,748,464
METHOD OF COLD FORMING STEEL PRESSURE CYLINDERS
Ben Kaul, Warren, Ohio, assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation, New York, N. Y., a corporation of Delaware
Application September 1, 1949, Serial No. 113,536
10 Claims. (Cl. 29—535)



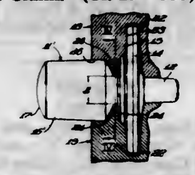
1. In a method of cold working a solid steel blank to form a closed-bottom tubular article, the steps of laterally confining the blank and applying axial compression thereto to squeeze metal in the lower portion thereof laterally inward and to downwardly displace metal in the upper central portion thereof, then laterally confining the lower portion of the blank and applying further axial compression flatwise to the top of the blank to further displace the metal from the upper central portion thereof to the lower portion of the blank while flowing intervening metal around the downwardly displaced metal in the opposite direction to form a flat-bottomed cup, and then working the metal in the flat bottom wall of the cup by pushing the lower flat bottom end of the cup into a smaller-diameter cavity by pressure applied to the top of the cup side walls to squeeze its flat bottom wall laterally inward.

2,748,465
PROCESS FOR THE MANUFACTURE, BY SPINNING, OF HOLLOW OR SOLID PARTS, MORE PARTICULARLY OF FERROUS ALLOY
Gaston Bodinaux, Liege, Belgium, assignor to Societe Anonyme les Forges de Zeebrugge, Herstal, Belgium
Application September 30, 1952, Serial No. 312,367
Claims priority, application Belgium December 4, 1951
6 Claims. (Cl. 29—535)



1. A method of making hollow articles, particularly articles of ferrous alloys, said method comprising the steps of spinning a blank having side wall portions with excess of material proportional to the desired increase in mechanical resistance of said portions in the finished article and subjecting said blank to pressure of a matrix having the form of the outer surfaces of the finished article and of a punch having the form of the inner surfaces of the finished article while preventing the flow of said excess material, whereby side wall portions of the desired thickness of the finished article are formed by molecular copenetration of the material, said side wall portions having greater mechanical resistance than other portions of the finished article.

2,748,466
METHOD OF MAKING ENGINE HUB AND SHAFT UNIT
Victor Brown, Elmhurst, Ill., assignor to Kropp Forge Company, Chicago, Ill., a corporation of Illinois
Application February 8, 1952, Serial No. 270,703
1 Claim. (Cl. 29—553)



A process of forging a steel engine shaft having an integral hub and shaft nub at one end of the shaft, which comprises upset drop-forging a suitably cylindrical steel stock piece to accomplish simultaneously a 2–3 to 1 reduction in diameter of the piece to form the shaft nub and a 2–3 to 1 expansion in diameter of the piece adjacent the nub to form the hub, trimming the forging, then necking down the forging to shaft size to accomplish a 10 to 3–6 reduction immediately adjacent the hub, and forging by hammering down the forging to shaft size inwardly of the necking.

2,748,467
SAFETY RAZOR
Meyer J. Shnitzler, Brookline, and Frank Ferrara, Medford, Mass., assignors to The Gillette Company, Boston, Mass., a corporation of Delaware
Application April 24, 1952, Serial No. 284,114
10 Claims. (Cl. 30—60.5)



6. A safety razor comprising a blade-seat member of sheet metal having down-turned finger grips of substan-

tial area at both ends, a spider movable with respect to said member, and cap sections pivotally connected to, and outwardly of, the spider and positioned within said finger grips and confined against outward displacement by movable contact with said finger grips.

2,748,468
SAFETY RAZOR
Nicholas Testi, New York, N. Y., assignor to The Gillette Company, a corporation of Delaware
Original application March 19, 1949, Serial No. 82,309, now Patent No. 2,676,396, dated April 27, 1954. Divided and this application January 24, 1952, Serial No. 267,975
6 Claims. (Cl. 30—65)



6. A safety razor head comprising a blade-supporting member having a blade seat on its upper face and a longitudinal flange projecting downwardly and centrally from its lower face, the blade seat being centrally apertured and the flange having a longitudinal channel extending from end to end of said member beneath the blade seat, a cooperating cap having a recessed tang passing down through the aperture of the blade seat into said channel, a spring housed in the channel and passing through the recessed tang of the cap, and a handle connected to the razor head through the medium of said flange.

2,748,469
RAZORS
Clarence A. Pinkham, Douglaston, and Bartholomew A. Holohan, Kew Gardens, N. Y., assignors to Nelpin Manufacturing Company, Inc., Long Island City, N. Y., a corporation of New York
Application July 7, 1953, Serial No. 366,474
10 Claims. (Cl. 30—68)



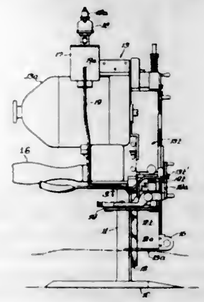
1. In a safety razor, the combination comprising a casing having an inner wall, an outer wall, and side and end walls interconnecting said inner and outer walls, said casing being shaped to be grasped by the user's hand; the inner wall of the casing being formed with a recess extending longitudinally of its outer surface and having a substantially centrally disposed opening therethrough into the casing; said recess having transversely spaced angularly related and substantially flat razor blade engaging surfaces; a guard having a post extending therefrom for insertion through said opening, a central longitudinal rib engageable with the blade to deform the latter into said recess to lie against said blade engaging surfaces, and blade engaging portions spaced on either side of said rib and positioned to clamp the blade against said blade engaging surfaces; latch means on the free end of said post; and a releasable latching element movably mounted in said casing and engageable with said latch means when said guard is pressed into said recess to deform a blade into said recess.

2,748,470
MEANS FOR CONNECTING A SAFETY RAZOR HEAD AND HANDLE
Philip H. Borden, Orange, Conn., assignor to Central Industrial Corporation, Memphis, Tenn., a corporation of Tennessee
Application June 21, 1951, Serial No. 232,770, now Patent No. 2,710,447, dated June 14, 1955, which is a division of application Serial No. 144,278, February 15, 1950. Divided and this application September 8, 1952, Serial No. 308,330
3 Claims. (Cl. 30—89)



3. In a safety razor including a blade supporting head, a neck connected in perpendicular relation to said head, a handle, means pivotally connecting said handle to said neck for relative rocking movement, an arcuate extremity on the lower portion of said neck, the edges of said neck being substantially parallel and extending substantially tangentially away from said extremity, a ball in said handle and a spring carried by said handle urging said ball into engagement with said neck extremity, a pair of concavities formed in said extremity positioned at opposite angles of inclination from the midline of said neck perpendicular to said head, said concavities respectively receiving said ball on opposite rocking to index said neck in angular position relative to said handle, said neck being oppositely rockable beyond said indexed angular positions to storage positions in which said neck is substantially perpendicular to said handle, said ball brakingly engaging against said neck in said storage positions to impede return rocking of said head and neck from said storage positions.

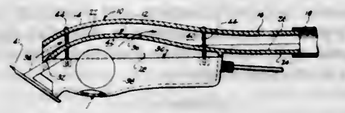
2,748,471
FABRIC CUTTING MACHINE WITH MEANS TO LUBRICATE THE CUTTER
Benjamin Lev, Chicago, Ill.
Application January 3, 1955, Serial No. 479,282
1 Claim. (Cl. 30—123)



A fabric cutting machine having a vertically reciprocable knife, means for operating the knife including a motor provided with a casing, knife sharpening means spaced below the motor, a cutting lubricant receptacle mounted on the motor and substantially filled with wick material, lubricant supply means mounted on the reservoir and having an adjustable discharge means adapted to allow dripping of lubricant therefrom into the receptacle, and a plurality of ducts each communicating with the wick material in the reservoir and extending to points

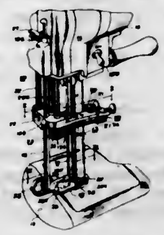
adjacent the knife below the motor and above the sharpening means, said ducts having wick material contained therein throughout the entire length thereof and extending outwardly from the duct ends adjacent the knife and in contact with the knife, thereby to draw cutting lubricant from the reservoir through the ducts and on the knife primarily by capillary action.

2,748,472
VACUUM OPERATED HAIR REMOVING ATTACHMENT FOR HAIR CLIPPERS
Orin W. Sheley and Orin J. Sheley, Sterling, Ill.
Application February 15, 1955, Serial No. 488,204
2 Claims. (Cl. 30—133)



1. The combination, with the lower part of the casing of a hair clip of the type having its casing formed in two parts, of a hair removing device of the suction type formed to constitute the upper part of said casing in substitution of the part initially provided on the casing, said device comprising: a tubular assembly forming an air passage and having an inlet at one end for hair cut by said clippers and an outlet at its other end adapted for connection to a source of suction, said assembly including interfitting top and bottom sections forming the upper and lower portions, respectively, of said passage, the bottom section including depending side walls outside the passage extending in longitudinal contact with said lower part of the clipper casing; and fastening elements extending through both sections and engaging in said lower casing part to hold the sections assembled with one another and with the lower casing part.

2,748,473
TEXTILE CUTTING APPARATUS
Tracy T. Carapucci, Aldan, Pa.
Application September 23, 1955, Serial No. 536,094
5 Claims. (Cl. 30—139)



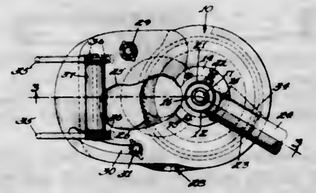
1. In a cutting machine having a vertically disposed standard, a knife guided by said standard for vertical reciprocating movement, grinding means for sharpening said knife, a carriage for supporting said grinding means, and means including a vertical shaft for guiding said carriage in vertical direction during sharpening; a presser foot attached to the lower end of said shaft, said presser foot being bifurcated and having a pair of arms extending past said knife and disposed on opposite sides of said standard, said standard having a pair of oppositely disposed shoulders extending vertically, and said arms having a pair of tabs disposed in opposed relation to each other and in slidable abutment with said shoulders; whereby when said knife is sharpened, said presser foot serves to restrain said carriage against lateral movement.

2,748,474
COMBINED SCRIBING AND EYE-PROTECTING OPTICAL SYSTEM
Harry C. Brown, San Antonio, Tex.
Application August 27, 1954, Serial No. 452,740
4 Claims. (Cl. 30—164.9)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. An engraving instrument for engraving single line map details in a transparent colored surface composed of a synthetic plastic material, which comprises, in combination, a base, a handle element on the base adapted to be grasped manually by an engraving-operator, a magnifying lens mounted on the base at a selected distance above a work-surface being engraved, the lens extending forwardly from the base and affording an unobstructed view of the work-surface, an engraving tool assembly mounted in the lens and including an engraving stylus having an engraving point adapted to engage with the work-surface, the said lens providing an enlarged image of the stylus point and adjacent areas of the work-surface to an operator viewing the stylus and work-surface through the lens, and a protective substantially planar transparent eye-shield juxtaposed above the lens and in axial alignment therewith, the said shield having an area at least approximately equal to that of the lens, whereby the lens and its enlarged image are viewed through the shield by an engraving-operator.

2,748,475
DEHORNING DEVICE
Lawrence L. Gray, Franklin, Nebr.
Application December 23, 1954, Serial No. 477,365
6 Claims. (Cl. 30—167)



6. In a cattle dehorning device, a base provided with a slot, a casing extending upwardly from said base and secured thereto, a shaft extending through said casing and adapted to be connected to a source of supply of power, a circular blade connected to said shaft, and a plate pivotally connected to said base and provided with an opening for registering with the slot in said base, and handle members connected to said plate and casing said blade capable of being moved so that it overlaps the registering opening and slot whereby the blade can cut a horn extending through said opening and slot.

2,748,476
PORTABLE DEVICE FOR TRIMMING TREES
Woodrow J. Cooper, Minneapolis, Minn.
Application October 29, 1954, Serial No. 465,461
1 Claim. (Cl. 30—167)

In a device for trimming trees, a harness including spaced apart, vertical straps to be supported upon the right and left shoulders, respectively, of a person, a horizontal member between said straps, bearings rotatably supporting opposite ends, respectively, of said horizontal member in lower end portions of said straps, an upright post rigid with an intermediate portion of said horizon-

tal member, an upright pole assembly having a lower end portion thereof snugly rotatable and longitudinally slidable upon said upright post, a frame upon an upper portion of said pole assembly, a saw blade supported by said frame, said pole assembly being swingable upon said



bearings together with said upright post and horizontal member as a unit forwardly and rearwardly of said vertical straps, and a hand grip rigid with said lower end portion of said pole assembly manually manipulatable to accomplish rotary and longitudinal sliding movement of said pole assembly upon said upright post.

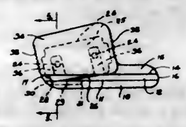
2,748,477
HEDGE TRIMMER
Elwood E. Smith, Chicago, Ill., assignor to Rovtar Tool & Die Manufacturing Co., Chicago, Ill., a corporation of Illinois
Application June 20, 1955, Serial No. 516,509
3 Claims. (Cl. 30—208)



1. A manually-operated hedge trimmer comprising a fixed blade having multiple, spaced teeth and provided at one end of the blade with an extension having a clamp at its outer end adapted to support the forearm of the operator and a handle intermediate said clamp and blade to be grasped by the hand of said forearm, a movable blade provided with multiple, spaced teeth, means for mounting said movable blade for longitudinal sliding movement on the fixed blade for cutting branches and portions of said hedge between adjacent teeth on the fixed and movable blades, an offset bracket on said fixed blade, a lever arm pivotally mounted on said bracket and a handle on said lever arm to be grasped by the other hand for effecting longitudinal sliding movement of the movable blade over said fixed blade.

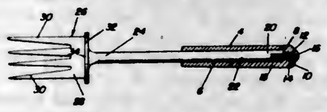
2,748,478
ENVELOPE OPENER
Malcolm C. Shelton, Kansas City, Mo.
Application March 26, 1952, Serial No. 278,562
2 Claims. (Cl. 30—289)

1. In an envelope opener, a body portion having a flat blade engaging surface, means for mounting a blade in said body portion comprising blade mounting projections on said body portion, a blade clamping member slidably engaging said body portion, and a blade mounted on said projections, said body portion and said clamping member having slidably interengaging flanges thereon at the ends thereof extending transversely to the longitudinal axis of said body portion, the flanges on said body portion and blade clamping member having complemental oppositely inclined wedging surfaces thereon extending longitudinally of said flanges and slidably engaging upon



one another to clamp said clamping member with respect to said body portion and clamp said blade in fixed position between said body portion and clamping member, said body portion having a guideway extending lengthwise thereof and said blade having a cutting edge extending obliquely across said guideway.

2,748,479
SPAGHETTI FORK
Herman Levine, Easton, Pa.
Application July 13, 1953, Serial No. 367,593
4 Claims. (Cl. 30—323)



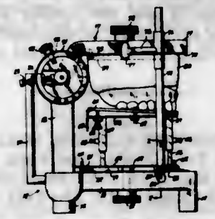
1. A spaghetti fork for one-handed use comprising an elongate handle substantially cylindrical in cross-section and having an axial bore opening through the one end and defining a socket, said socket terminating short of the other end of the handle and the latter end being substantially closed, a linearly straight cylindrical shank appreciably longer than said handle, one-half portion of said shank fitting telescopically and rotatably in said socket with one end abutting said substantially closed end, a readily attachable and detachable fastener separably and swivelly joining said one end to said handle by way of said substantially closed end, the other one half-portion of said shank projecting well beyond said one end of the handle, being stout in cross-section and thus handily adapted to be grasped twirled relative to said handle by the thumb and index finger, and the extreme outward end of said shank having a flat head embodying spaced tines, the latter being linearly straight and all in the same plane.

2,748,480
ARTIFICIAL DENTURE
Bernard Weissman, Brooklyn, N. Y.
Application March 29, 1955, Serial No. 497,488
5 Claims. (Cl. 32—5)



1. A removable dental prosthesis adapted to replace missing natural teeth comprising a saddle imitating the gum formation and shaped to fit snugly over the user's gums including a false tooth projecting integrally from the saddle, said tooth including a resilient detent projecting outwardly from the tooth and adapted to engage coacting portions of an adjacent natural tooth to anchor the false tooth to the natural tooth, in further combination with an arm connected to the saddle and adapted to grasp the said adjacent natural tooth on a side remote from the false tooth.

2,748,481
DENTURE ARTICULATORS
Eugene Glueck, Bronx, N. Y.
Application August 12, 1954, Serial No. 449,405
16 Claims. (Cl. 32—32)



1. An articulator for producing a prosthetic denture comprising a support, a pair of opposed mounting means thereon, one of said mounting means being adapted to carry a denture model having teeth extending therefrom, and an attachment for providing a predetermined occlusal plane in the denture, said attachment comprising a plate rigidly secured to the other of said mounting means, a second plate spaced from said first plate for engagement with said teeth, and means including internally threaded members on said first plate and complementary, externally threaded members pivotally connected to said second plate for adjustably connecting said second plate to said first plate at a predetermined angle equal to said occlusal plane, whereby said teeth when disposed against said second plate are adapted to be set at said predetermined occlusal plane.

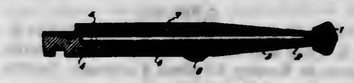
2,748,482
DENTAL APPLIANCE
Charles Roland McCully, Chicago, Ill., and Edward S. De Marsh, Seattle, Wash.
Application October 20, 1954, Serial No. 463,530
7 Claims. (Cl. 32—40)



1. A pressure applicator comprising a housing, means in said housing providing a reservoir for a hydraulic fluid, means in said housing providing a cylinder in fluid communication with said reservoir, a check valve disposed between said reservoir and said cylinder permitting flow of fluid from said reservoir to said cylinder, a piston reciprocable in said cylinder, a pressure chamber communicating with said cylinder, a check valve between said pressure chamber and said cylinder permitting flow of fluid from said cylinder to said pressure chamber zone, and a flexible membrane associated with said pressure chamber and operable in response to fluid pressure in said pressure chamber to expand and apply pressure against a stationary portion of said housing.

2,748,483
DRILLING OR GRINDING TOOLS, MORE PARTICULARLY FOR DENTAL PURPOSES
Erich Hoffmeister, Biberach-Riss, Germany
Application June 30, 1954, Serial No. 440,401
Claims priority, application Germany July 3, 1953
1 Claim. (Cl. 32—48)

A tool unit for drilling or grinding, more particularly for dental purposes, comprising an elongated bearing bush for insertion into a hand piece and having an outer diameter corresponding to that of a normal tool arbor, to enable it to be inserted in the hand piece in lieu of said tool arbor, said bearing bush having a lug on the external periphery thereof for engagement in a groove



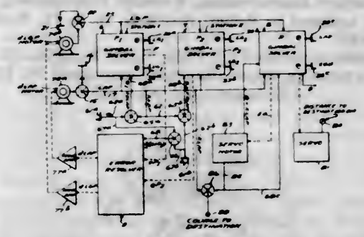
in the hand piece to prevent rotation of the bush in the hand piece, a thin spindle rotatable in said bearing bush and projecting at both ends therefrom, a cutting head having a short shank fixed on one of said projecting ends of the thin spindle and a drive element on the opposite end of said spindle.

2,748,484
TOOL FOR HOLDING DENTAL FACINGS
Wilmer C. Larsen, Fairmont, Minn.
Application January 27, 1954, Serial No. 406,417
1 Claim. (Cl. 32—68)



A tool for holding a dental facing of the type having an elongated mounting recess with an enlarged interior portion and one open end, said tool comprising an elongated handle, and a rigid interconnecting web having one of its longitudinal edges affixed to said handle, a resiliently yieldable and frusto-conically tapered head extending longitudinally of said web and affixed thereto, said web and bead being adapted to be inserted into such a mounting recess of a dental facing.

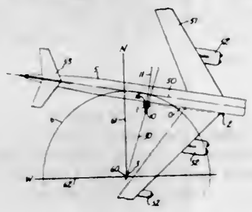
2,748,485
NAVIGATION COURSE COMPUTER
William H. Newell, Mount Vernon, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware
Application October 12, 1953, Serial No. 385,661
14 Claims. (Cl. 33—1)



1. A navigational computer for determining the coordinates of present position comprising a gimbal assembly which includes means for representing an assumed latitude of present position, means for representing the difference between the longitude of a known point on the earth's surface and an assumed longitude of present position, means representing a course to the known point from an assumed position, means for introducing into said gimbal assembly a course to the known point from the actual present position, a potentiometer adapted to produce a voltage output which is a function of the error or angular discrepancy between the said courses, an error reducer in connection with the potentiometer for converting the error signal into correction factors for the assumed coordinates of present position, means for introducing the angle bi-

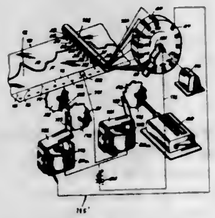
sector of the said courses into the error reducer, and means for combining the correction factors with the assumed coordinates of position.

2,748,486
COMPASS-SWINGING APPARATUS
Dwight S. Lord and Harold A. Morrison, Seattle, Wash., assignors to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application March 2, 1953, Serial No. 339,519
3 Claims. (Cl. 33—46)



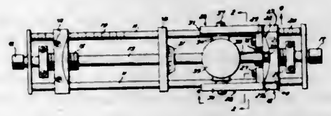
1. In combination with an airplane formed with an exterior side mount oriented in known relation to the airplane's longitudinal center line, a mounting bracket formed to mate with said mount and means to secure the same upon said mount, to orient said mounting bracket in turn in known relation to such center line, a sector scale supported on said mounting bracket and oriented, by the latter's securement on the mount, in fixed relation to the airplane's longitudinal center line, said sector scale being thereby disposed in a generally horizontal plane, projecting from the airplane, and concave away from the same, with its zero substantially at its midpoint, nearest the mounting bracket, an arm supported from and projecting outwardly from said mounting bracket, and a cross-hair carried on said arm to lie in the axis of the sector scale, and positioned by its support upon said arm, and the latter upon the mounting bracket, in a line through the scale's zero point which is perpendicular to the airplane's longitudinal center line.

2,748,487
PLANIMETER
Hans-Gerhard Zimmermann, Korntal, Wurttemberg, Germany, assignor to Robert Bosch G. m. b. H., Stuttgart, Germany
Application April 25, 1952, Serial No. 284,473
Claims priority, application Germany April 30, 1951
13 Claims. (Cl. 33—123)



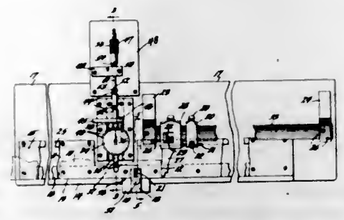
11. A method for summing the instantaneous values of a variable physical quantity, comprising in combination, the steps of moving in one direction an electrically conductive band-shaped area provided with an insulating line extending in said direction and defining in said conductive area two elongated electrically conductive surface portions which are insulated from each other by said insulating line, said insulating line being a curve whose longitudinal extension corresponds to time and whose transverse variations with respect to one of said surface portions correspond to the instantaneous values of a physical quantity; scanning along transverse unit areas said band-shaped area parallel to the longitudinal extension of said insulating line by electrical impulses whose number corresponds to transverse unit areas of said surface portions; and summing the impulses in said one surface portion so as to obtain the sum of said instantaneous values during a time period corresponding to the longitudinal extension of the scanned area.

2,748,488
INSTRUMENT FOR SETTING DIAL GAUGES
John J. Twardowski, New York, N. Y.
Application March 24, 1955, Serial No. 496,455
5 Claims. (Cl. 33—147)



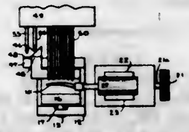
1. In an instrument of the character described, in combination, a pair of relatively movable measuring blocks, each of said measuring blocks having an arcuate projection, the arcuate projection of one of said blocks having a slotted opening therein, a dial gauge attached to the block having the projection with a slotted opening therein, a spring-biased pin operably connected to said dial gauge and residing in said slotted opening, and means connected to said block to which the dial gauge is attached for setting the dial gauge to a zero reading.

2,748,489
VERNIER GAUGE FOR MEASURING TEMPLATES USED ON POTENTIOMETER CARDS
Emil Ernest Meilstrup, Winston-Salem, N. C., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application November 8, 1952, Serial No. 319,502
7 Claims. (Cl. 33—174)



1. An apparatus for gauging templates having an irregular side comprising a support, a vernier gauge secured to said support, said vernier gauge having a gauging leg for measuring predetermined distances from an end of the template, clamping means for securing the template in a predetermined position on the support adjacent to the gauging leg, a micrometer having a gauging end secured to the support, a slide movably mounted on the support, a gauge bar abutting the gauging end of the micrometer and slidable within the slide, a locking lever pivotally mounted to the slide to secure the slide to the gauge bar, a dial gauge secured to the slide, and a plunger for actuating the dial gauge, said micrometer, slide, gauge bar, and locking lever to place the tip of the plunger a known distance from the support and said plunger abutting the irregular side of the template to measure and determine the locations of points on said irregular side at said predetermined distances from the end of the template.

2,748,490
REFERENCING DEVICE FOR GAUGING TURBINE BLADES AND THE LIKE
William S. Tandler, New York, N. Y., assignor, by mesne assignments, to The Warner & Swasey Research Corporation, Cleveland, Ohio, a corporation of Ohio
Application April 9, 1951, Serial No. 219,973
7 Claims. (Cl. 33—174)



1. In gauging apparatus, the combination of stationary stop means, a holder for a piece to be gauged mounted for movement in a plane towards and away from said stop means, means urging said holder towards said stop means, a first member carried by said holder and having a surface inclined at an acute angle to the plane of movement thereof, a second member carried by said holder and having a surface disposed parallel to the plane of movement thereof, first and second probe means mounted for movement as a unit towards the surfaces of said first and second members, respectively, a record strip, first and second recording means movable as a unit relatively to said record strip in accordance with the movement of said first and second probe means, and circuit means for causing said first and second recording means to record on the record strip when said first and second probe means engage the surfaces of said first and second members, respectively.

2,748,491
CENTER PUNCH AND GAUGE
Robert Tauber, Chicago, Ill.
Application June 30, 1955, Serial No. 519,105
14 Claims. (Cl. 33—191)



1. A center finder comprising a sleeve externally and internally threaded at one end and tapered at its other end, a punch longitudinally movable in said sleeve and extending beyond the tapered end, a nipple threaded into the sleeve, a strike pin longitudinally movable in said nipple, a head on the strike pin preventing its withdrawal through the nipple, a spring within said sleeve to normally hold the punch retarded and in contact with the strike pin, an external circumferential plate segment on said sleeve, a collar rotatable on the sleeve, caliper arms one pivotally mounted between its ends on said plate and the other on said collar, a conical nut threaded over said sleeve to coact with the arms for retracting the working ends thereof, and a spring means to urge the arms into contact with said nut.

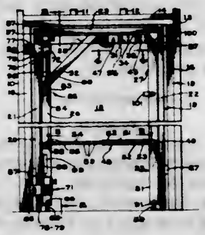
2,748,492
COMBINATION HOLE CENTER FINDER AND CENTER PUNCH
Edward L. Lockhart, Covington, Va.
Application May 17, 1955, Serial No. 509,004
6 Claims. (Cl. 33—191)

1. A tool of the class and for the purpose described, comprising an elongated normally vertical threaded stem having a handle portion on the upper end thereof and having the lower extremity thereof tapered substantially to a point, a collar slidably mounted on said stem, a plurality of circumferentially equidistant radial projections on said collar, a like plurality of elongated legs having their upper ends pivotally connected to said projections on axes tangential to a common imaginary circle



coaxial with the stem, a nut threaded on said stem below said collar and having the same plurality of radial projections circumferentially equidistant from each other, each of said last-named projections being vertically bifurcated to provide slots therein, each of said legs registering slidably in one of said slots, and a nut threaded on said stem above said collar.

2,748,493
JIG MECHANISM FOR INSTALLING DOORS AND DOOR FRAMES
George R. Williams, Hayward, Calif.
Application August 12, 1952, Serial No. 303,857
6 Claims. (Cl. 33—194)

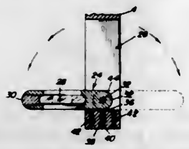


1. A jig for facilitating installation of door frames and doors therefor in a wall opening, including a pair of vertically extending parallel spaced members, a horizontal header member traversing said vertical members and secured to the upper ends thereof, means for adjustably positioning the vertical position of said vertical members, means mounted on one of said vertical members and having a portion extending outwardly therefrom for engagement with an outer surface of said wall whereby said portion and said vertical member may be releasably secured to said wall, and means on one of said vertical members for releasably holding a door in predetermined relationship to such members.

2,748,494
LEVEL
Charles W. Raney, North Little Rock, Ark.
Application June 2, 1953, Serial No. 359,096
1 Claim. (Cl. 33—213)

A carpenter's level comprising an elongate stock rectangular in cross-section and having broad side faces which are flat, and relatively narrow flat faces, the respective faces being provided with fixedly mounted horizontal and vertical spirit levels, said stock being provided adjacent to one transverse end with an opening and, adjacent to said opening with a fixed readily viewable

spirit level, an auxiliary spirit level comprising a frame having one end hingedly mounted in a corresponding end portion of said opening, said frame being swingable into the opening and normally into an out-of-the-way position which is inset from and parallel with the broad faces of the stock, said frame being also swingable either to and beyond the left-hand broad face or, alternatively, beyond the right-hand broad face and to assume, in either position, a position which is at right angles to the lengthwise axis of the stock, at least one corner portion between one broad face and the cooperating narrow face being rabbeted and defining an open ended groove, said groove, in turn, providing readily accessible right angularly disposed work abutting surfaces, said work abutting surfaces being simultaneously engageable with right angularly



disposed surfaces embodied in a work piece such as a stud, whereby said level may be firmly held in position and said extra level set in the most advantageous position to assist the observer in checking and arriving at the desired verticality of the stud and without having to bodily shift the level from one face to the other of the stud which is ordinarily required, a spring pressed ball detent mounted in said stock, the hinged end of said frame having a recess providing a keeper seat and said detent being projectible into said keeper seat, and a pair of selectively usable adjusting screws mounted in said stock to the left and right of and paralleling the position of the ball detent and cooperable with the hinged end of the frame to assist in rendering it plumb so that it will be at strict right angles to the axis of the stock in either of its left or right positions.

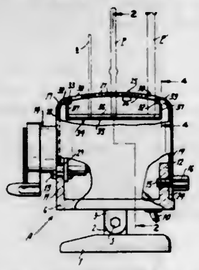
2,748,495

MEANS FOR DRYING MICROSCOPE SLIDES, PIPETTES, AND SIMILAR TYPES OF LABORATORY INSTRUMENTS

Donald B. Murray, Hollywood, Calif., assignor to Burton Manufacturing Company, Los Angeles, Calif., a corporation of Illinois

Application June 25, 1953, Serial No. 364,127

6 Claims. (Cl. 34—107)



1. In a microscope illuminator, a lamp housing having marginally abutting top, bottom, and side walls arranged to form a complete enclosure, a light source mounted within the enclosure and being adapted to generate substantial heat when it is lighted, said bottom wall being provided with ventilation openings for causing a current of air to pass through the housing and in so doing flow around the light source, in heat-exchange relationship therewith, the top wall being provided with a plurality of apertures in an area located generally above the light source so that the air flowing through the housing will exit upwardly through such apertures after it has become heated from the light source, said apertures being variously shaped for supporting a plurality of microscope slides, pipettes and the like, and a baffle-forming tray positioned in the path of the current of air after it has flowed around the light source whereby the current of air is caused to flow around and dry the supported microscope slides, pipettes and the like.

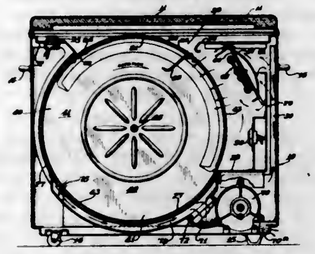
2,748,496

CLOTHES DRYER

John T. Hellyer, Batavia, Ill., assignor to Thor Corporation, Chicago, Ill., a corporation of Illinois

Application October 24, 1952, Serial No. 316,674

5 Claims. (Cl. 34—133)



1. In a clothes dryer, an outer casing, an inner casing having a main wall portion of arcuate contour, a clothes receiving drum rotatably mounted on a horizontal axis in said inner casing and having a perforated peripheral wall positioned in close spaced relation to said arcuate wall portion, a portion of the wall of the inner casing, constituting a continuation of said arcuate wall portion, being disposed adjacent an end wall of the outer casing to form a vertical air passageway opening at its upper end into the said inner casing, a heater positioned between the outlet end of the passageway and said drum, an exhaust blower, an air outlet duct interconnecting said blower with the bottom portion of the inner casing for exhausting air from said inner casing and drum, a motor for driving said blower, and a fan driven by said motor for directing air over and around said motor and up through said passageway over and around said heater into said drum, said air being preheated by the motor and further heated in passing over and around said heater.

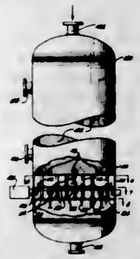
2,748,497

HANDLING OF GRANULAR SOLIDS

Clyde H. O. Berg, Long Beach, and Charles J. Welsh, Orange, Calif., assignors to Union Oil Company of California, Los Angeles, Calif., a corporation of California

Application September 20, 1952, Serial No. 310,694

11 Claims. (Cl. 34—168)



1. An apparatus for metering the volumetric flow of granular solids through a system which comprises a chamber through which uniform solids flow is desired, an upper

stationary tray peripherally supported from the inner walls of said chamber, a plurality of feeder conduits arranged with their inlets opening through and dependent from said upper stationary tray in a regular geometric pattern comprising a plurality of concentric circular rows of said feeder conduits, a lower stationary tray peripherally supported at the walls of said chamber in a position below and parallel to said upper stationary tray and provided with a plurality of discharge openings for solids flow therethrough distributed thereon in a regular geometric pattern comprising a plurality of concentric circular rows of said discharge openings, an intermediate rotatable tray supported between said upper and lower stationary trays and parallel thereto and having a diameter less than that of said chamber providing a free annular opening around the periphery of said rotatable tray, a plurality of charge conduits opening through and dependent from said rotatable tray and arranged thereon in a regular geometric pattern comprising a plurality of concentric circular rows of said charge conduits, each of the circular concentric rows of feeder conduits having a diameter relative to that of the other rows of said feeder conduits so as to drain an area through which solids flow downwardly above the upper stationary tray which is proportional to the number of times that the charge tubes in said row fill and empty per revolution of said intermediate rotatable tray, and motive means for rotating said rotatable tray to bring each charge conduit in a given circular row thereof successively first into alignment with a feeder conduit of the corresponding circular row thereof to receive a charge of solids therefrom and subsequently into alignment with a discharge opening in the corresponding circular row thereof to discharge said charge of solids therethrough.

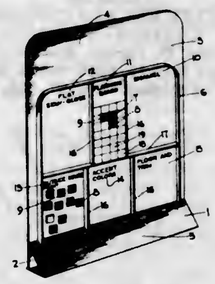
2,748,498

PAINT DISPLAY DEVICE

Spencer R. Stuart, Evanston, and Albert R. Raymond, Chicago, Ill., assignors to The Martin-Senour Company, Chicago, Ill., a corporation of Ohio

Application November 10, 1951, Serial No. 255,840

2 Claims. (Cl. 35—28.3)



1. In a display device of the character described, the combination of an easel, a vertical self-supporting sheet member forming a part of said easel, said vertical member containing within a substantial portion of its area a magnetically responsive substance as an element thereof, the area backed by said magnetic substance subdivided into a plurality of classified areas, one of said areas set off from the others of said areas by a difference in planar elevation, said set-off area, in turn, subdivided into a plurality of polygonal zones and a series of corresponding polygonal color chips of substantially the same dimension as the said zones of various hue, value, chroma and quality, adapted to magnetic attachment to and detachment from any of the aforementioned areas and zones and a flat-bottomed, non-magnetic storage area for additional ones of said color chips of triangular cross-section in the base of said easel.

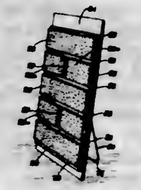
2,748,499

BRICK SAMPLE CARRYING AND DISPLAY CASE

Carlton M. Shafer, New Philadelphia, Ohio, assignor to The Stone Creek Brick Company, Stone Creek, Ohio, a corporation of Ohio

Application October 15, 1952, Serial No. 314,850

3 Claims. (Cl. 35—53)



1. A brick display device comprising a panel, horizontal and vertical sponge rubber strips of rectangular cross-sectional shape permanently attached to the front surface of the panel with adhesive to simulate mortar joints, and brick slabs adapted to be frictionally inserted between said sponge rubber strips to simulate a portion of a brick wall, said sponge rubber strips being compressed by the insertion of the brick slabs therebetween and entirely filling the spaces between opposed edges of adjacent brick slabs.

2,748,500

EDUCATIONAL APPLIANCE

Clara H. Cormack, Lake Park, Fla.

Application July 6, 1951, Serial No. 235,490

1 Claim. (Cl. 35—70)



A card for use in teaching addition and subtraction to children comprising three panels of the same dimensions connected along fold lines, the central panel having pictorial matter thereon depicting at least two particular numbers, one of the end panels having at least one numeral thereon corresponding to the pictorial matter illustrating one of the numbers, the other end panel having at least one numeral thereon corresponding to the pictorial matter illustrating the other number, and a flap on the central panel movable to conceal one of the numbers illustrated by the pictorial matter.

2,748,501

CHILD'S BOOTIE CONSTRUCTION

Mildred C. Martin, Atherton, and Helen Price Sheaffer, Menlo Park, Calif., assignors to Kidlets, Inc., a corporation of California

Application December 18, 1953, Serial No. 399,068

6 Claims. (Cl. 36—11)



1. A blank of flexible material for a child's bootie, said blank comprising a sole piece, a pair of side portions formed integral with the sole piece, a toe portion formed

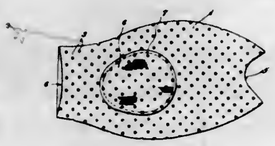
integral with said side portions and said sole piece, a pair of top portions formed integral with said side portions, portions of the outer edges of said top portions extending substantially parallel to the longitudinal axis of said sole piece, and other portions of the outer side edges of said top portion extending at obtuse angles with respect to said first named portions of the outer side edges, the forward edges of said top portions being curved and substantially in line with the forward edge of said toe portions, a pair of rear side portions formed integral with said sole piece and said side portions, curved cut lines separating said rear side portions from said top portions, the rear edges of said rear side portions extending at an angle of substantially 45° with respect to the longitudinal axis of said sole piece, a heel portion integrally attached to said sole piece, the side edges of said heel portion extending substantially parallel to the longitudinal axis of said sole piece, and a plurality of slits in said rear side portions and said top portions.

2,748,502
WIDE ARCH INSOLE
William M. Scholl, Chicago, Ill.
Application June 13, 1952, Serial No. 293,371
1 Claim. (Cl. 36—44)



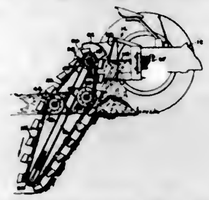
A cushion type insole comprising a flat one-piece sheet of soft resilient cushioning material of uniform thickness throughout, said sheet having a relatively wide intermediate transverse portion with opposite upwardly extending lateral margins, said outer lateral margin extending approximately from the ball line to the heel breast line, and said inner lateral margin extending approximately into the toe area and in to the heel area of the insole, whereby greater comfort and support is imparted to the user along the inner and outer longitudinal arches of the foot.

2,748,503
FOOT CUSHION
William M. Scholl, Chicago, Ill.
Application May 6, 1955, Serial No. 506,574
2 Claims. (Cl. 36—71)



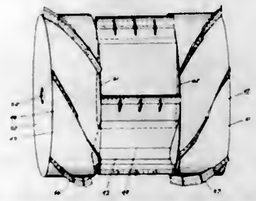
1. In a laminated cushion for the forepart of the plantar region of the foot, a sheet of foam latex contoured to underlie that part of the foot extending forward from the region of the longitudinal arch, a smooth covering over said sheet and of the same area, said cushion having a curvate notch cut out of the forward end thereof to provide additional toe room when the device is in an article of footwear, and a generally ovate piece of the same laminated cushion material secured to the underside of said cushion with the covering downward to provide a support for the metatarsal arch of the foot.

2,748,504
TRENCH DIGGING MACHINE
Glenn W. McInnich, Omaha, Nebr., assignor to Auburn Machine Works, Inc., Auburn, Nebr., a corporation of Nebraska
Application March 28, 1952, Serial No. 279,015
2 Claims. (Cl. 37—86)



1. In a trencher for mounting on the rear end of a tractor or the like, the combination comprising a mounting frame, a beam pivoted at its upper end on the frame for swinging movement in a vertical plane into an operative position with the beam extending rearwardly and downwardly into the earth, an endless loop of cutter chain running around the beam in a vertical plane and trained about the ends thereof, means for driving the chain in a direction to effect upward movement of the front flight thereof, a generally horizontal baffle on said frame, said horizontal baffle having its rear edge closely adjacent the front flight of the chain near the upper end of said beam for intercepting and scattering a portion of the earth propelled upwardly by the chain, an arcuate generally drum-shaped shield mounted on the beam and enclosing the chain at the upper end of the beam and adjacent said horizontal baffle for intercepting earth carried to the rear of said horizontal baffle by said chain, and an additional baffle on said frame extending upwardly from the rear edge of said horizontal baffle adjacent said chain and immediately forward of said arcuate shield for intercepting earth passing between said horizontal baffle and said shield.

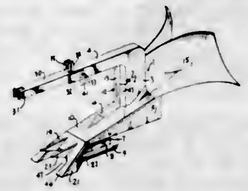
2,748,505
ROTARY TYPE EXCAVATING DEVICE FOR LOADING MACHINE
Herbert H. Turner, Boscobel, Wis.
Application July 31, 1952, Serial No. 301,931
2 Claims. (Cl. 37—96)



1. In a device of the class described, a running gear including side frames and endless tracks, a rotary digger mounted on said frames on a transverse axis in advance of said running gear, means for rotating said digger about the transverse axis thereof, said rotary digger comprising a drum having a narrow central section and end sections, said central section of said drum having a plurality of openings in the surface thereof each having a leading and trailing edge with respect to the direction of rotation of said drum, a plurality of bent wall members each having opposed wall portions mounted in said drum, each of said members being positioned beneath each of said openings in said central section, said wall portions each having terminal edges secured respectively to the leading and trailing edges of the openings in said central section of said drum associated therewith, a cutting blade secured

to each leading edge of said openings in said drum and extending along and outwardly of said drum, an endless conveyor coextensive in width with said central section and having a front end positioned beneath said central section to receive material from the shovel-shaped pockets of said drum, said conveyor extending upwardly and rearwardly of said front end, means for driving said conveyor, said end sections of the drum having spiral blades extending outwardly therefrom and adapted to feed material towards the openings in said central section, and a blade mounted on said side frames adjacent the front end of said conveyor, said blade being coextensive in width with at least said conveyor and said central section of said drum and positioned beneath said central section, said blade being adapted to direct material deposited thereon by said central section to a point where rotary digger engages the material to be dug.

2,748,506
STRIPPING PLOW FOR UNCOVERING PIPE LINES OR THE LIKE
Ralph D. Stosberg, Jr., Houston, Tex.
Application February 13, 1953, Serial No. 336,786
3 Claims. (Cl. 37—98)

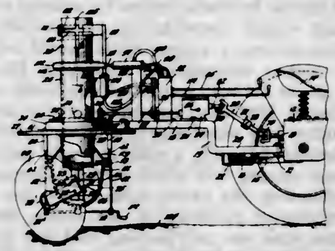


1. A plow for stripping overburden from a buried pipe line, including a U-shaped frame set vertically on its side with its upper forwardly extending leg constituting a draw bar to which a pulling force is to be applied and its lower forwardly extending leg having a forwardly and downwardly inclined upper edge, a plate trussed by said lower leg and set by said inclined edge at a slow elevating angle for raising the overburden, a longitudinally extending semicylindrical pipe line engaging guide saddle below said lower leg and in partially overlapping relation to its forward nose portion and in forwardly projecting relation thereto, of an over-all length greater than the diameter of said pipe line to effectively co-operate with the opposite sides of the pipe line in resisting skewing of the plow relative to the pipe line axis, a front plate secured to the front of said saddle in a plane traverse thereto and extended upwardly and rearwardly to the forward edge of and at a faster inclination than the first mentioned plate and to make an obtuse angle with the first mentioned plate, said front plate having a saddle aligned opening and being of a width which increases downwardly in inverted wedge fashion to resist upward plow displacement.

2,748,507
REVERSIBLE TERRACING MACHINE
Paul W. Appleton, Pampa, Tex.
Application December 8, 1950, Serial No. 199,851
13 Claims. (Cl. 37—99)

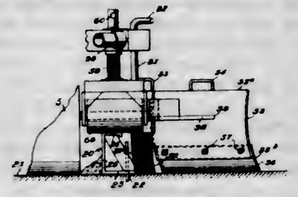
1. In a terracing machine having a main frame arranged to be connected at one end to a tractor and having an opening at its opposite end, a tubular housing extending through said opening and fixed to said frame, a turntable below the frame and revolubly connected to the housing, a revoluble operating shaft extending through said housing and said turntable and spaced at its lower end from the ground, a disc plow pivotally connected to the lower end of said shaft, means for rotating the operating shaft and the disc plow, a trough, means connecting the trough to the turntable so as to be movable

therewith whereby the trough may be oriented to various angular positions relative to the longitudinal axis of the main frame, means for vertically displacing the ends of the trough relative to the frame, said trough having its



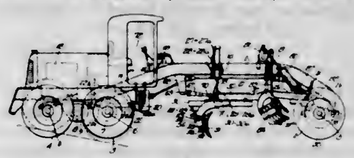
inner end postioned to receive the earth as it is cut and elevated by the disc plow, and means for conveying the earth deposited in one end of the trough to the opposite end thereof.

2,748,508
ATTACHMENT FOR ROADGRADER GAUGES
Vincent Schiavi, Wilmington, Del., assignor to Roadgrader Gauge Corporation, Wilmington, Del., a corporation of Delaware
Application March 20, 1952, Serial No. 277,571
1 Claim. (Cl. 37—108)



An attachment for the gauge of a road grader, said gauge having a frame and a roller for riding on a road form, comprising a plurality of brackets secured to said frame and extending laterally thereof, one of said brackets having a plurality of adjacent sleeves affixed thereto, each of said sleeves having a wire cable sweeper member fastened therein and projecting in pendant position therefrom in laterally spaced relation to said road form, the other of said brackets carrying a concave dirt-clearer blade in angular and laterally spaced relationship to said cable sweeper members, the latter sweeping dirt into the path of travel of the blade in operative condition of the attachment.

2,748,509
SIX WHEEL DRIVE AND STEER ROAD MACHINE
Edwin C. Brown and James D. Benbow, Aurora, Ill., assignors, by mesne assignments, to Baldwin-Lima-Hamilton Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application May 27, 1950, Serial No. 164,636
9 Claims. (Cl. 37—156)

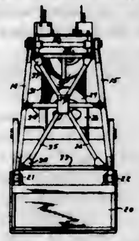


1. In a self-propelled road grader of the class described, the combination of a vehicle frame, a single power plant on said frame, a front axle pivotally connected with said frame to permit relative transverse rocking movement be-

tween said front axle and frame, a pair of steerable, power-driven front wheels having steering knuckle mounting at the outer ends of said front axle, means for transmitting a power drive from said single power plant to said front wheels, hydraulic means for steering said front wheels, said vehicle frame having an upwardly arched intermediate portion, a scraper blade carried below said upwardly arched intermediate portion, a fifth wheel mounting under the rear portion of said frame comprising a stationary fifth wheel segment secured to said frame and a rotative fifth wheel segment having rotative bearing engagement therewith, a main rear axle housing carried by said rotative fifth wheel segment to rotate horizontally therewith but fixedly held against any vertical rocking movement relatively to said frame, main rear axles in said main rear axle housing, said rear axle housing comprising a gear housing substantially at its center, double reduction gearing in said gear housing comprising a relatively large spur gear connected with said main rear axles, a spur pinion on a countershaft axis in said gear housing and meshing with said large spur gear, a bevel gear on said countershaft axis connected with said spur pinion, a bevel pinion in said gear housing meshing with said bevel gear, a propeller shaft connected with said bevel pinion and extending forwardly from said gear housing in a generally horizontal direction, means for transmitting power from said same single power plant to the front end of said propeller shaft, said propeller shaft comprising articulated drive connections including universal joints permitting steering movement of said rear axle housing and gear housing in said fifth wheel mounting, tandem axle housings mounted at the outer ends of said main rear axle housing on each side of said frame, tandem rear axles mounted at the front and rear ends of said tandem axle housings, tandem pairs of rear wheels mounted on said tandem rear axles at each side of said frame, chain drive transmission mechanisms in each of said tandem housings for transmitting power from each of said main rear axles to its respective pair of tandem rear axles, said tandem axle housings having vertically rockable mounting at the ends of said main axle housing at points intermediate said tandem rear axles so as to permit alternate rise and fall of the front and rear tandem wheels relatively to said frame, while maintaining a positively supported unsprung relation between said tandem wheels and said frame for preventing simultaneous rise and fall of both tandem wheels relatively to said frame, so as to practically eliminate vertical movement of said scraper blade in passing over a vertical obstruction, thereby maintaining a more nearly level road in grading, and hydraulic mechanism operatively connected between said vehicle frame and said rotative fifth wheel segment for swiveling said rear axle housing, gear housing, tandem axle housings and tandem rear wheels to right or left as a unit relatively to said vehicle frame.

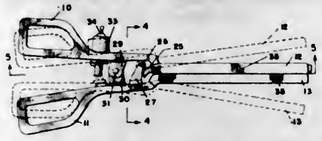
2,748,510
GRAB BUCKET
George F. Thompson, Cleveland Heights, Ohio, assignor to The Wellman Engineering Company, Cleveland, Ohio, a corporation of Ohio
Application July 3, 1952, Serial No. 296,993
5 Claims. (Cl. 37—186)

1. A grab bucket comprising a head block, a pair of elongated corner bars pivoted to said block for swinging movement about a common axis, a second pair of similar corner bars pivoted to said head block for swinging movement about a common axis parallel with and spaced from said first-mentioned axis, a pair of cooperating scoop or half bucket members, means swingingly connecting one of said scoop or half bucket members to each pair of said corner bars, means connected to said scoop or half bucket members to control movement of the latter to and from closed position, a reinforcing member extending between the two corner bars of each pair thereof, and means pivotally connecting said reinforcing members to said



bars for relative movement about axes generally parallel to the length of said corner bars.

2,748,511
GARMENT PRESSER
Mariana Pezza, Baltimore, Md.
Application April 23, 1954, Serial No. 425,109
6 Claims. (Cl. 38—71)



1. A garment presser for forming creases in and smoothing surfaces of articles of clothing; said presser comprising a pair of jaws, each jaw including a blade having a compartment therein and a handle extending from an end of the blade in parallelism with the handle of the other jaw; a pivot member connecting said handles together; resilient means acting on said handles to urge the jaws to move to swing the blades toward each other; heating means comprising conducting elements arranged one in said compartment of each blade; one of said blades being adapted to overlie the other and having a second compartment arranged to underlie the first mentioned compartment in said blade and having an opening in one edge wall of the blade; a pair of flat panel elements confronting each other, one of said panel elements having therein a set of perforations spaced apart all over said panel according to a predetermined pattern, said one panel forming a wall portion of the second compartment of said one blade, the other panel element forming a wall portion of the compartment in the other of said blades; a container for liquids having a wall slidably contacting the perforated panel and having a set of perforations registerable with the perforations of the first mentioned set, said container having a filling neck, provided with a movable closure, and projecting through the opening in said one edge of said one blade; a spring reacting against said one edge to slide the container to bring the perforations therein out of register with the perforations of the first mentioned set; a plunger projecting through a wall of the second compartment of said one blade into engagement with said container; and means operable by movement of the handles to move the plunger and cause the perforations in the container to register with the perforations of the first set.

2,748,512
IRONING TABLE
Frederick W. Kulicke, Jr., Mount Airy, Pa., assignor to Proctor Electric Company, Philadelphia, Pa., a corporation of Pennsylvania
Application January 2, 1953, Serial No. 329,200
10 Claims. (Cl. 38—121)

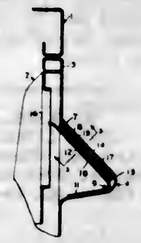
9. In an adjustable and collapsible ironing table, a table top, a pair of pivotally interconnected crossed legs

providing an adjustable and collapsible support structure for said top, a fixed pivot connection between said top and the upper end of a first leg of said pair, means providing slidable and pivotal interconnection between said top and the upper end of the second leg of said pair to enable adjustment and collapse of the ironing table, and friction latch means connected to said top and to the upper end of said second leg for retaining said support structure in any position of adjustment and for permitting collapse thereof, said latch means comprising a smooth-surfaced elongate first member extending longitudinally of said top and a second member tiltable about an axis transverse to said first member and engageable with the first member in



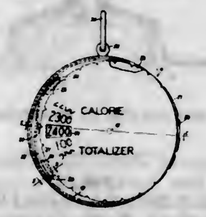
frictionally latched relationship thereto, one of said members being fixed longitudinally of said top and the other being connected to and movable with the upper end of said second leg, and means pivotally mounting said second member for tilting movement to and from said frictionally latched relationship under the force of gravity, the center of gravity of said second member being disposed on the side of a vertical line drawn through its pivotal mounting in a direction to urge it into latching position when said table is in horizontal operative position, and on the opposite side of a vertical line drawn through said mounting to urge it away from said latching position as said table is tilted upwardly from said horizontal operative position about an axis extending transversely of said table.

2,748,513
LABEL HOLDER FOR FILING CABINET DRAWERS
Thomas Brady, Speedway City, Ind.
Application January 19, 1954, Serial No. 404,907
2 Claims. (Cl. 40—8)



1. In combination with a drawer having a front panel provided with an opening having upper and lower edges, a frame comprising an upper declining panel having an upper edge portion supportably engaging the upper edge of said opening, said frame having a horizontal lower panel having a rear edge portion supportably engaged with the lower edge of said opening, said declining upper frame panel having a viewing opening, a label holder positioned within said frame and between said upper and lower panels of the frame, said label holder comprising an upper declining panel extending along and spaced parallel beneath the upper frame panel, said upper holder panel having side edge portions secured to the upper frame panel, said holder further comprising a horizontal lower panel bearing upon the lower frame panel, said holder upper panel having upper and lower ends, and a label engaging tab on end projecting upwardly from said holder panel near the lower end of the holder upper panel.

2,748,514
INDICATOR
Joseph F. Sulger, Hollis, N. Y.
Application March 28, 1952, Serial No. 279,112
1 Claim. (Cl. 40—70)



A device of the class described, comprising a hollow circular case having front and rear walls, said walls having arcuate inter-engaging flanges extending partially around their periphery and providing a lateral opening in said case, one of said walls having a window therethrough, centrally located studs extending inwardly from each wall, the ends of said studs being in juxtaposition, an indicia bearing circular disc freely revolvably mounted on said studs and having a series of notches in its periphery, the disc extending beyond said case through said lateral opening, two pairs of lugs extending inwardly from each wall and disposed adjacent the circumference of said wall, the ends of said lugs being in juxtaposition, an arcuate spring member having an inwardly extending V-shaped portion biased to engage the notches in said disc as it is rotated and the two circumferentially extending arms each being provided with an inwardly bent end, said arcuate spring being disposed within said case so that said bent ends engage an end of each lug, and said arms, near their end portions, are held between said lugs and the flange of the rear wall, whereby said arcuate spring is maintained in place and prevented from rotating.

2,748,515
DESK CALENDAR
Julius J. Kaiserman, Paris, Ill., assignor to U. O. Colson Company
Application April 7, 1955, Serial No. 499,805
7 Claims. (Cl. 40—120)

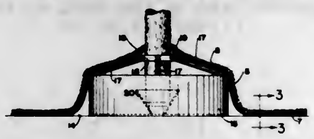


1. A desk calendar comprising, in combination; a first part of plastic having a supporting portion formed to permit rocking of the calendar, and a calendar supporting portion extending upwardly therefrom, a second part of plastic secured to said first part, means for securing said two parts together, and a metal balancing rod, said first and second parts having means integral therewith for receiving and securing said metal rod therebetween in position to balance the calendar in a substantially upright position.

2,748,516
CHRISTMAS TREE MAT
Frank McClusky, Cuyahoga Falls, Ohio
Application July 19, 1954, Serial No. 444,290
3 Claims. (Cl. 41—15)

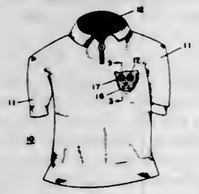
1. In combination, a natural Christmas tree bearing needles and severed from its roots, a standard which supports the tree, and a mat covering the standard and

extending outwardly from the trunk of the tree which mat has a shaggy surface of pieces of raffia attached to



a fabric base and capable of entrapping needles shed by the tree.

2,748,517
REMOVABLE DECORATIONS FOR CLOTHING
Harriett L. Berkis, Baltimore, Md.
Application September 3, 1953, Serial No. 378,289
2 Claims. (Cl. 41—34)



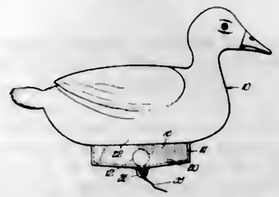
1. In combination with an article of outer clothing, an appliqué made of flexible material and adapted to be worn on, and outwardly of, the article of clothing, said appliqué comprising an arbitrary design including the reproduction of a face having eyes areas, buttons located in said areas and conspicuously projecting outwardly of said areas to simulate eyes, said buttons being of predetermined shape and color to enhance their appearance, said buttons also having flexible projections extending through the appliqué, and flanged studs extending through the article of clothing and received and detachably locked in the aforesaid flexible projections, whereby said appliqué may be quickly removed when the article of clothing is to be laundered or the appliqué design changed by snapping the buttons away from the studs.

2,748,518
GRENADE LAUNCHER
Robert W. Moran, Springfield, Mass., assignor to the United States of America as represented by the Secretary of the Army
Application February 4, 1953, Serial No. 335,175
2 Claims. (Cl. 42—1)
(Granted under Title 35, U. S. Code (1952), sec. 266)



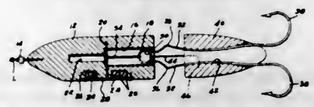
2. In a grenade launcher for a gas operated firearm having a barrel and a forwardly opening gas cylinder secured to the underside of the barrel, the combination of a grenade mount having a tubular portion fitting over the muzzle end of the barrel and an offset bracket portion extending rearwardly beneath the gas cylinder for slidable resilient engagement therewith, valve means in the gas cylinder for normally blocking the escape of discharge gases through the front end thereof, a recoil pad at the junction of said tubular and offset portions of said grenade mount coaxial with the opening in the front end of the gas cylinder and of sufficient area to completely block the opening at the conclusion of the recoil movement imparted to said mount in response to the launching of a grenade therefrom, a stud projecting rearwardly from the center of said recoil pad to extend into the open front end of the gas cylinder and open said valve means during the recoil movement of said grenade mount, said recoil pad having a plurality of relief channels formed into the front face thereof about the base of said stud and extending out to the exterior periphery of said pad to provide the sole escape passage for the flow of the discharge gases past said valve means during the interval in which said recoil pad blocks the open front end of the gas cylinder.

2,748,519
DUCK DECOY
Earl Dennison and Jack E. Wells, Newbern, Tenn., assignors to Wells-Dennison Co., Newbern, Tenn., a partnership
Application May 28, 1953, Serial No. 358,126
1 Claim. (Cl. 43—3)



A decoy duck for bobbing naturally in the water enhancing the illusion of a live duck comprising, a buoyant body hull having a bottom, a housing disposed longitudinally along the central portion of said bottom, a rollable weighted ball in said housing, said housing comprising a bottom wall providing a supporting surface for said ball and including two segments which meet at an obtuse angle with respect to one another, side walls providing a guide for said ball, and end walls providing a stop for said ball, said side walls and said end walls being disposed in upright position with respect to said bottom wall and being affixed to the bottom of said body portion, said supporting surface being adapted to roll said ball toward the central portion after tilting by surface waves have rolled said ball toward an end portion thereof, and an anchor line affixed to the bottom of said housing at the center thereof.

2,748,520
FISH LURE
Edwin E. Anderson, Minneapolis, Minn.
Application March 5, 1954, Serial No. 414,393
1 Claim. (Cl. 43—35)



A fish lure comprising a body simulating the head and body portions of a bait fish; means on the head portion for attaching a fishing line thereto, the body portion having a longitudinal bore opening at one end upon one end of the body portion; a spring mounted in the bore for bodily movement longitudinally thereof between an inner position adjacent the other end of the bore and an outer position adjacent said one end of the bore; means in the bore for limiting the spring's movement in opposite directions beyond said positions; spring legs integrally connected at one end with the spring and extending longitudinally of the bore, said spring being under tension effective to bias the legs outwardly from one another, the wall of the bore engaging the legs in the inner position of the springs to prevent movement of the legs outwardly from one another, said legs projecting out of the bore for substantially their full lengths in the outer position of the spring so as to be freed of engagement by said wall; a tail portion formed separately from and shaped as an extension of the body, said tail portion having a longitudinal bore opening at opposite ends of the tail portion, said legs extending through the tail portion bore; hooks formed on the other ends of the legs; and means connecting the tail to the spring for movement conjointly therewith between said inner and outer positions, the wall of the tail portion bore limiting the legs in the outer position of the spring and tail portion against movement outwardly from one another beyond a predetermined extent, to correspondingly predetermine the maximum distance the hooks are spaced apart when the legs are spring biased outwardly.

2,748,521
INTERCHANGEABLE, COMBINATION LURE AND HOOKS
Ernest R. Schaefer, Silver Spring, Md.
Application February 23, 1954, Serial No. 412,141
3 Claims. (Cl. 43—35)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A fish lure comprising a pair of hooks, a pivot pin on which said hooks are pivotally mounted, a rounded head on one end of the pin, a bunch of hairs or the like, and a socket member on said hairs snapped onto said head.

2,748,522
ARTIFICIAL BAIT
John F. Mulcahey, East Gary, Ind.
Application August 22, 1955, Serial No. 529,746
7 Claims. (Cl. 43—42.06)



6. In an artificial bait having an elongated hollow body closed at one end and open at its other end, a longitudinal partition dividing the interior of said body into two chambers and having a bearing member fixed to the outer end thereof, the walls of the body being provided with openings adjacent to the closed end of the body and forming an outlet for each of the chambers, a headpiece rotatably mounted on the outer end of said partition and comprising a base portion covering the open end of the body and resting on said bearing member, an annular flange depending from said base portion and surrounding the open end of the body, said base portion having a central aperture therethrough, a rod fixed to said bearing member and extending through said central aperture, a second bearing member secured to the opposite end of said rod and spaced from said base portion, said base portion having a second aperture formed therethrough and spaced between said central aperture and the periphery of said base portion and adapted to register with each of said chambers when the headpiece is rotated, and blades angularly disposed on said base portion for rotating the headpiece when the bait is drawn through the water whereby to permit water to pass through said second aperture into one chamber and thence through said second aperture into the other chamber as the headpiece rotates.

2,748,523
NON-SPINNING LURE
Willis W. McNabb, Brookings, Oreg.
Application October 21, 1952, Serial No. 315,863
1 Claim. (Cl. 43—42.5)



A lure of elongated oval outline having a large trailing end and a smaller leading end, said lure having a transverse concavo-convex configuration along the major portion of its length extending from the larger trailing end to a short distance from its leading smaller end, said leading end being flat and said concavo-convex portion having side rims in a common plane with said flat end and extending along the major portion of the length of the lure, the small flat end having a bump formed along its median line at its junction with the concave portion, the convex side of the lure being straight longitudinally of the lure from the bottom of said bump to a point near the trailing end of the lure, the rearward portion of the lure rim curving gradually upward to form with the bottom a deep recess at the trailing end of the lure, the rear side of said recess forming an acute angle with relation to the adjacent rim portion, the opposite ends of said lure having holes formed therein for the attachment of a hook and leader, said lure being imperforate except for said hook and leader attachment holes, the leading edge of said bump intersecting said flat end slightly to the rear of said leader hole and the trailing edge of said bump intersecting said concave portion.

2,748,524
FISHING LINE COUPLER
Robert L. Schinzel, Spokane, Wash.
Application November 14, 1952, Serial No. 320,413
2 Claims. (Cl. 43—44.83)



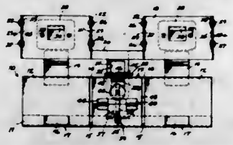
1. A fishing line coupler comprising an elongated channel member having a back wall and spaced parallel upstanding side walls, a disc-shaped head at one end of the channel member and extending from the back wall thereof in a plane parallel to the longitudinal axis of said channel member, said head having an eye for securing the channel to a line, a tongue spaced from the back wall of the channel, said tongue and back wall defining a pocket therebetween, a needle removably nested in said channel, a point on one end of the needle, a head on the opposed end of the needle, said head having an eye for securing a leader, and a helical expansion spring encircling said channel and needle and biased against said head and toward said tongue for releasably securing said needle and channel together with the head confined in said pocket.

2,748,525
FLOATING FISHLINE
Carl William Volz, Scarsdale, N. Y.
Application August 1, 1951, Serial No. 239,757
7 Claims. (Cl. 43—44.98)



1. A composite fishing line comprising a core of a predetermined diameter, said core being a fishing line, and a covering for said core of flexible elastically stretchable water impervious material and of tube form having an internal diameter slightly greater than the diameter of the core, said tube being coextensive in length with the length of said line and secured to said line at the ends thereof, said tube also having its internal surface in non-adhering relation to the outer surface of the line throughout substantially its entire length to provide an air space between said surfaces and permit relative longitudinal movement between the core and covering, said core in the unstretched condition of said tubular covering extending along the length of said tube at all points in the length of said core and being normally in relaxed condition as to tension to provide for elastically stretching said tube upon initial application of tensile stress to said composite line, said core thereupon becoming stressed, said core and tube in the stretched condition of said tube jointly taking the tensile stress applied to said composite line.

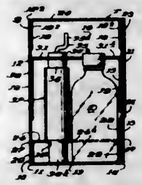
2,748,526
ANIMAL TRAP
Frank Rouman, Bridgeport, Conn.
Application June 21, 1955, Serial No. 516,847
8 Claims. (Cl. 43—60)



1. An animal trap comprising a longitudinal tunnel-like housing having a pair of longitudinally spaced blade receiving slots spaced from the ends of said housing, blade supporting means movably mounted at the upper side of said housing for movement between an open set position and a closed actuated position, blade attaching means carried by said supporting means substantially aligned with said slots and with the ends of said housing, means for setting said supporting means in open set position including releasable retaining means engageable with said supporting means, and movable catch means engageable with said releasable means and including an animal engaging part within said housing adapted upon being engaged by the animal to move said catch means to release said releasable means, means loading said supporting means to move it to closed position upon release by said releasable means, and blade means adapted to be removably secured selectively to said blade attaching means in line with said slots or to said blade attaching means in line with the ends of said housing, said blade means adapted in the open position of said supporting means to be clear of the passage through said housing and adapted in the closed position to be engaged across said passage at a point intermediate said slots.

2,748,527
COMBINATION SALES PROMOTIONAL PACKAGE
Marguerite M. Seals, Long Beach, Calif.
Application October 29, 1952, Serial No. 317,542
3 Claims. (Cl. 46—11)

3. A combination sales promotional package for children's products which includes: a substantially rectangular box that comprises a bottom from which four semi-rigid walls extend upwardly, with one of said walls having an opening formed therein; a top hinged to the upper edge of one of said walls; means to maintain said top in a box closing position; a first substantially rectangular member disposed within the confines of said box and positioned parallel to and vertically spaced above said bottom, with the edges of said member in contact with said walls; a second substantially rectangular member disposed within the confines of said box parallel to said first member, the edges of said second member in contact with the interior surfaces of said walls, and said first and



second members cooperating to prevent appreciable lateral and longitudinal distortion of said walls; a plurality of containers, with each of said containers removably disposed in pairs of vertically aligned openings formed in said first and second members; two longitudinally spaced vertical rollers rotatably supported by said first and second members and disposed on opposite sides of said wall opening; crank means mounted on said rollers and disposed within the confines of said box; and a strip of flexible material extending between said rollers on which a sequence of longitudinally spaced pictorial representations are reproduced that move past said wall opening for viewing purposes when said crank means is actuated.

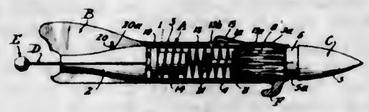
2,748,528
NOVELTY EYEGLASSES
Bern Wolf, Los Angeles, Calif., assignor to Eldon Manufacturing Co., Los Angeles, Calif., a corporation of California
Application December 10, 1954, Serial No. 474,421
2 Claims. (Cl. 46—44)



1. Novelty eyeglasses of the class described, comprising in combination: a frame adapted to be positioned in front of the eyes of a wearer, two movable ball elements each simulating the iris and pupil of an eye, stationary means on the frame defining transparently covered laterally spaced torus ring cavities each receiving one of the ball elements, pneumatic means on the frame for causing circular movement of said ball elements around their respective torus ring cavities, said pneumatic means including air passages on the frame each communicating with one of said torus ring cavities, and a mouthpiece communicating with said air passages, the mouthpiece being positioned to be received between the lips of the wearer.

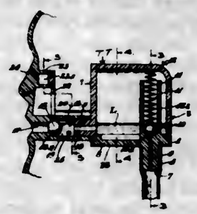
2,748,529
TOY ROCKET AND PARACHUTE
Charles R. Swan, Tarzana, Calif.
Application July 6, 1953, Serial No. 366,090
9 Claims. (Cl. 46—86)

1. A toy to be impelled into the air comprising: a cylindrically-shaped body; a folded parachute disposed in said body near one end thereof; a cylinder in said body and a piston adapted to move therein, the cylinder having a closed end and an open end disposed adjacent said one end of the body; a spring to urge the piston toward and then out of said open end while the toy is in flight, the piston being adapted to eject the parachute from the body



when the piston has moved out of and away from said open end; and means including a restricted air passage in communication with the closed end to control the air pressure in the cylinder while the piston moves toward said open end so that the rate of movement of the piston while in the cylinder is substantially less than when the piston is out of the cylinder.

2,748,530
WEEPING DOLL
Fred Stecker, Richmond Hill, N. Y., assignor to Ideal Toy Corporation, Hollis, N. Y., a corporation of New York
Application December 14, 1954, Serial No. 475,038
5 Claims. (Cl. 46—135)



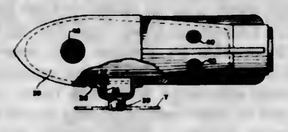
4. A hollow doll-head which has a wall which has tear-emitting openings and a liquid-inlet opening, said doll-head having an internal hollow casing around said tear-emitting openings, said tear-emitting openings being the outlet ports for said casing, a reservoir housing located in said head and fixed to said head, said reservoir housing having an outlet pipe connected to said casing, said reservoir housing having an inlet pipe connected to said liquid-inlet opening, said reservoir housing also having an air-inlet opening and a one-way valve located at said air-inlet opening, said one-way valve being biased to closing position.

2,748,531
EYE ASSEMBLY FOR USE IN A DOLL'S HEAD
Nathaniel Olney, New York, N. Y., assignor to Margon Corporation, Bayonne, N. J., a corporation of New Jersey
Application November 26, 1951, Serial No. 258,112
2 Claims. (Cl. 46—169)



1. A doll's eye assembly comprising an eye provided with a weight and a housing formed of two members of a plastic material and of identical construction, said members being assembled to enclose said eye and weight and having an opening to expose a part of the eye, the parting line between said housing members extending longitudinally of the assembly, said eye and housing having mating bearings and trunnions on opposite sides of the eye, the division of said housing into separate housing members being on a plane so oriented in relation to the trunnions and bearings that when the housing members are brought together with the eye therebetween and exposed through the opening the trunnions are received in the bearings, each of said housing members having its edges so stepped and dimensioned along at least a portion of said parting line that said housing members matingly engage each other with an overlapping frictional press-fit when assembled.

2,748,532
SIMULATED MOTOR-SOUND PRODUCER
Frank A. Gergovich and Stanley S. Lenski, La Salle, Ill.
Application April 27, 1954, Serial No. 425,864
16 Claims. (Cl. 46—175)



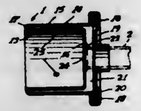
1. A simulated-motor-sound producer comprising in combination a frame having a member mounted therein for relative rotation about a fixed axis, said member having a plurality of individual contacting elements spaced angularly about said axis, a hollow body having an elastic nipple-like portion of reduced size projecting therefrom, a mounting means on said frame for holding said body adjacent said rotary member with the nipple-like portion extending toward said rotary member for engagement with successive ones of said contacting elements, and means for causing relative movement of said frame and said rotary member about said fixed axis.

2,748,533
HOOP ROLLING DEVICE
Michael A. Cipolla, Cranford, N. J.
Application May 28, 1954, Serial No. 433,149
1 Claim. (Cl. 46—220)



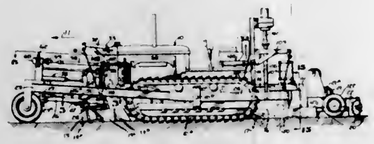
A foldable hoop trundle comprising a main staff, said main staff consisting of a lower section and an upper section detachably secured together in alignment, a transversely extending elongated open loop at the end of said lower section adapted to engage a hoop, an auxiliary staff element pivotally connected to the upper end of said lower section, means for clamping said auxiliary staff element to said lower section so that said auxiliary staff element extends at an angle with respect to said lower section, means for changing said angle, and a further transversely extending elongated open loop on the end of said auxiliary staff element adapted to engage the hoop at a substantial distance from the first-named loop, said open loops having a flattened oval configuration, whereby said loops may be so spaced from each other that the hoop cannot become disengaged therefrom in use, and whereby said trundle is adjustable for different sizes of hoops and for different heights of the users thereof.

2,748,534
SPRAY APPARATUS FOR TOBACCO PLANTS
Roy H. Richmond, Sr., Wellsburg, W. Va., assignor to Eagle Manufacturing Company, Wellsburg, W. Va., a corporation of West Virginia
Application September 11, 1953, Serial No. 379,530
5 Claims. (Cl. 47—1)



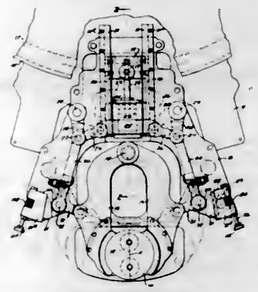
2. In a spraying device for handling measured quantities of fluid to stalks of a tobacco plant, a nozzle comprising an inner cylinder open at one end and having a closure at its other end, an outer cylinder concentric with and spaced from said inner cylinder and cooperating therewith to provide an annular fluid reservoir chamber about said inner cylinder, said outer cylinder having one end integrally connected with said inner cylinder at its open end and its other end extending beyond said closure, a cap closure having a fluid sealing connection with said other end of said outer cylinder and having a central opening therein, and a supply tube connected through said central opening for delivering measured quantities of fluid to said reservoir chamber, said inner cylinder having orifice openings respectively at points centrally of its ends through which fluid may be projected under pressure from said annular reservoir chamber in a radial direction into the interior of said inner cylinder.

2,748,535
TRASH MULCH SEED BED MACHINE
Arnold B. Skromme, Ottumwa, Iowa, Eugene G. McKibben, Auburn, Ala., and Elwood R. Craddock, Waipio, Territory of Hawaii, assignors to Pineapple Research Institute of Hawaii, Honolulu, Territory of Hawaii, an association of the Territory of Hawaii
Application October 25, 1951, Serial No. 253,152
12 Claims. (Cl. 47—9)



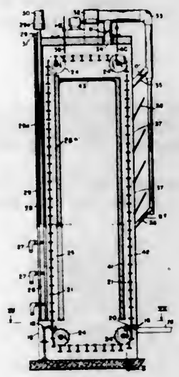
1. A machine of the character described comprising a vehicle, said vehicle having a pair of crop residue moving means mounted on its forward end functioning to part and to move crop residue laterally to opposite sides of said vehicle in its forward movement, means mounted on said vehicle driving said moving means in opposite directions, a rotary tiller mounted centrally and rearwardly of said vehicle and functioning to work the soil cleared of crop residue by said moving means, soil fumigant tubes mounted on said vehicle and extending down into the soil rearwardly of said rotary tiller, fertilizer tubes mounted on said vehicle and extending rearwardly of said rotary tiller and of said fumigant tubes, said fertilizer tubes extending a shorter distance into the ground than said fumigant tubes, paper dispensing mechanism mounted on said vehicle rearwardly of said rotary tiller, and a pair of soil diverting means mounted on opposite sides of the vehicle and functioning to dispose crop residue and soil on opposite edges of the paper laid on the ground by said paper dispensing mechanism.

2,748,536
MOLD CLOSING MECHANISM
Russell G. Allen, Godfrey, Ill., assignor to Owens-Illinois Glass Company, a corporation of Ohio
Application September 24, 1954, Serial No. 458,113
8 Claims. (Cl. 49—41)



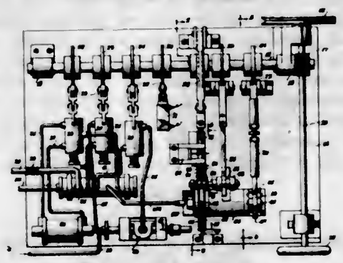
2. The combination of a mold carrier frame, a mold comprising partible mold sections, mold carrying arms in which the said sections are mounted, a pivot by which said arms are pivotally connected to the mold carrier frame and about which said arms swing for opening and closing the mold, a slide member mounted for sliding movement on the mold carrier frame toward and from the mold, operating connections between said slide member and the mold carrying arms including toggle links, pressure rolls connected to said links, means providing backing surfaces on the mold carrier frame in position to engage said pressure rolls with the rolls between said surfaces and the mold sections when the mold arms are in mold closing position, and means for applying a yielding pressure to said links while said pressure rolls are in contact with the said backing surfaces and thereby applying a holding pressure to the mold sections.

2,748,537
VERTICAL ANNEALING LEHR
Felice George Pasotti, Muncie, Ind., assignor to Ball Brothers Company, Incorporated, Muncie, Ind., a corporation of Indiana
Application April 20, 1953, Serial No. 349,887
4 Claims. (Cl. 49—47)



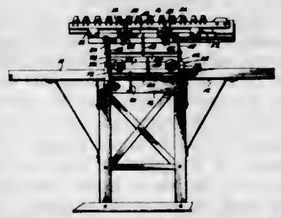
1. A vertical lehr having an article-receiving portal in one wall thereof adjacent the bottom of said lehr and an article-delivery port in an opposite wall of the lehr adjacent the bottom thereof; a vertically extending heating passage communicating with said portal and extending upwardly to a point adjacent the top of the lehr; a vertically extending cooling passage communicating with said port and extending upwardly to a point adjacent the top of the lehr; a communicating passage extending across the upper portion of said lehr and communicating with each of said vertically extending passages; and endless conveyor for conveying articles to be annealed upwardly through said heating passage, through said communicating passage and downwardly through said cooling passage; means for delivering heat to said heating passage throughout substantially its entire length; means for causing a flow of air upwardly through said heating passage and into said communicating passage; adjustable means for opening the cooling passage to the external atmosphere at points along the length thereof; and means for delivering regulable amounts of air issuing from said heating passage to said cooling passage at selected points along the length thereof.

2,748,538
HYPODERMIC NEEDLE AND CANNULA CLEANING APPARATUS
Henry G. Molinari, Rutherford, N. J., assignor to Becton, Dickinson and Company, Rutherford, N. J., a corporation of New Jersey
Application April 1, 1954, Serial No. 420,423
15 Claims. (Cl. 51—15)



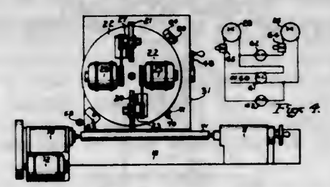
1. A hypodermic needle cleaning apparatus including in combination means to receive and retain a cannula, automatic means to feed said cannula into said retaining means, means for conducting an abrasive blast through and beyond the cannula bore and means for automatically shifting said retaining means with respect to said blast-conducting means.

2,748,539
SICKLE SHARPENER
Lester Murray, Dallas, Tex.
Application September 5, 1952, Serial No. 307,991
2 Claims. (Cl. 51—92)



1. In a sickle sharpener, a platform, an abrasive wheel mounted on said platform to rotate about a horizontal axis, a trackway mounted on said platform in spaced parallel relation to the horizontal axis, a carriage mounted on said platform to rotate about a horizontal parallel to the horizontal axis, guide rollers carried by the carriage and engaging the trackway for holding the carriage in place thereon, upwardly extending spaced arms carried by the carriage for movement toward and away from the horizontal axis of the wheel about a common axis which lies parallel with the horizontal axis of the wheel, a bridge plate interconnecting said spaced arms, spaced elongated rock arms carried intermediate their ends by the arms remote from the common axis of the upwardly extending arms to rock about an axis which lies parallel to the common axis of the upwardly extending arms, a sickle support carried by the rock arms adjacent the ends thereof nearest the horizontal axis of the wheel, a tie bar interconnecting the rock arms adjacent the ends thereof remote from the sickle support, a spring interconnecting the sickle support and the bridge plate to yieldingly advance the sickle support toward the horizontal axis of the wheel, and a hook carried by the track way and adapted to engage the tie bar to hold the sickle support against movement under the influence of the spring.

2,748,540
MULTIPLE WHEEL GRINDING MACHINE
Alfred J. St. George, Manchaug, Mass.
Application March 31, 1954, Serial No. 419,973
1 Claim. (Cl. 51—95)

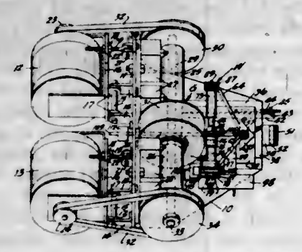


A grinding machine comprising a base having longitudinal slideways, a work table slidably mounted thereon, said base having transverse slideways, a wheel slide mounted on the transverse ways for movement towards and from the work table, precision mechanism for moving the wheel slide on its ways, a revolvable turret on the slide, said turret and wheel slide having horizontal interfitting arcuate slideways for revolution of the turret about a vertical axis, means including a vertical center pin which locates the turret and releasably secures it rigidly on the slide, a plurality of rotatable grinding wheels, means including horizontal spindles for the wheels which locate the wheels in a definite radial angular displacement on the turret for alternatively grinding a work piece in the same position on the work table, locking means including a positioning member on the turret associated with each wheel and a single lock on the slide for locking the turret against revolution on the slide and positioning any selected wheel only in the same exact angular position relative to the work table, a separate electric motor connected to each axle for driving the associated wheel, a power circuit, and means including switches positioned on the slide in a definite relationship to the wheels and a single actuator therefor located on and moved by the turret for selectively interconnecting the power circuit only with the motor which is connected to rotate the wheel opposed to the work table.

2,748,541
EDGE GRINDING OPTICAL LENSES
Wade Hampton Connell, Duluth, Minn.
Application February 5, 1953, Serial No. 335,318
9 Claims. (Cl. 51—101)

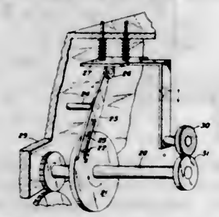
1. A method for simultaneously forming forward and rearward edge bevels on an optical lens which consists in revolving, each on its own axis, a pair of circular abrasive discs in partially overlapping close clearance, and revolving an optical lens with the peripheral edge thereof in simultaneous pressing contact with small areas respectively on the circular edges of both of said discs where said circular edges in their overlapping relation converge and with an arcuate increment of the peripheral edge of said lens, which is in the immediate vicinity of its con-

tact with said discs, being disposed substantially normal to a line through the centers of pressure area between



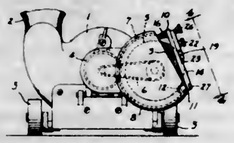
each of the respective discs and its contact with the lens edge.

2,748,542
MEANS FOR GENERATING HIGH SPEED CAMS
Helmuth W. Engelman, Madison, Wis.
Application May 23, 1952, Serial No. 289,706
3 Claims. (Cl. 51—101)
(Granted under Title 35, U. S. Code (1952), sec. 266)



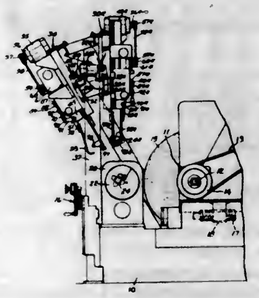
1. A master cam generator having a variable angular velocity comprising a rotatable member fitted with a drive pin projecting from one side thereof parallel to the axis of rotation, a base rotatably supporting said rotatable member, an arm pivotally mounted on said base adjacent to said rotatable member for rotation about an axis parallel to and spaced from the axis of rotation of said rotatable member, said arm having a longitudinally extending opening onto one end thereof, said pin being received in said slot and adapted to impart swinging movement to the arm, said arm having a bearing surface on the end removed from said slot, a follower bearing against said bearing surface, grinding means, and means connecting said grinding means to said follower to receive motion therefrom, a work holder positioned to support work in engagement with said grinding means, and means to rotate said work holder in timed relation to the reciprocating motion of said grinding means.

2,748,543
ADJUSTABLE BLADE POSITIONING AND GUIDING ATTACHMENT FOR GRINDING WHEELS
Lloyd W. Pardee, Lakewood, Ohio, assignor to The Scott & Fetzer Company, Cleveland, Ohio, a corporation of Ohio
Application December 24, 1952, Serial No. 327,785
10 Claims. (Cl. 51—102)



7. In combination with a grinding wheel mounted for rotation about its axis in a housing having a peripheral wall encircling the major portion of the wheel and a peripheral opening exposing a portion of the periphery of the wheel, a blade sharpening attachment mounted on said housing for pivotal movement about an axis parallel to and spaced from the axis of the wheel, said attachment comprising a bed having a flat blade supporting surface parallel to and facing away from said axis, an opening through said surface receiving an exposed portion of said wheel, stop means for positioning said bed and limiting the distance said wheel projects through said opening, a blade guide mounted for translation along said blade supporting surface and transversely with respect to said axis, said blade guide having a blade engaging surface extending parallel to said axis and transversely to and closely adjacent said blade supporting surface, and means for securing said blade guide in selected positions of adjustment with said blade engaging surface facing away from the midpoint of the periphery of that portion of said wheel projecting through said opening.

2,748,544
GRINDING MACHINE
Joseph W. Narel and Glover C. Joyce, Worcester, Mass., assignors to Norton Company, Worcester, Mass., a corporation of Massachusetts
Application November 29, 1954, Serial No. 471,738
7 Claims. (Cl. 51—105)



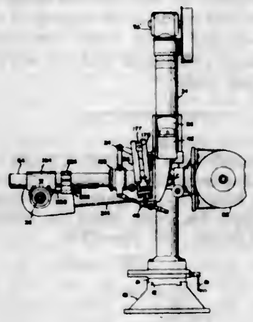
1. In a grinding machine having a loading station, a grinding station, an unloading station, a pair of spaced axially aligned rotatable work supporting chucks on said grinding station, a transversely movable rotatable grinding wheel on said grinding station, a feeding mechanism to move said grinding wheel toward and from said chucks, a work loading and transferring mechanism including a pair of spaced parallel horizontal slideways, a set of spaced longitudinally movable work loader units on each of said slideways, means including a motor operatively connected simultaneously to traverse said sets of loader units in opposite directions, means to reverse said motor, a pair of spaced movable work engaging hooks on each of said units, means including a reversible motor on each of said units operatively connected to move said hooks through a substantially U-shaped path in either direction, means actuated by and in timed relation with the rearward movement of the grinding wheel to start said reversible motors on one set of loader units so as to cause a downward cycle of the work engaging hooks to pick up work pieces at the loading and grinding stations and to raise the work pieces to a transfer position, means actuated by the upward movement of said loader hooks to start said reversible motors of the other set of loader units so as to initiate a downward cycle of the loader hooks to deposit work pieces in the grinding station and the unloading station, and means actuated by and in timed relation with movement of said latter hooks to actuate said reverse means so as to cause a simultaneous longitudinal movement of the sets of work loader units in opposite directions.

2,748,545
HYDRAULIC ROLL GRINDER
Bert A. Wilson, Pittsburgh, Pa., assignor, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa., a corporation of Delaware
Original application February 15, 1949, Serial No. 76,436. Divided and this application November 4, 1952, Serial No. 318,768
2 Claims. (Cl. 51—166)



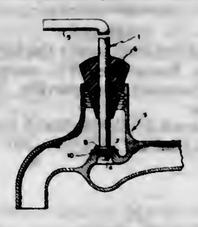
1. A grinder wheel head comprising a wheel slide having a pair of axially spaced sleeves, a grinding wheel spindle journaled in said sleeves by juxtaposed ball bearings at one end and a plurality of staggered roller bearings at the other, said spindle having a shoulder abutting the ball bearing races and having a tapered portion for mounting the roller races, a spacer sleeve disposed on said spindle abutting the inner roller race, a ring nut on a thread portion of the spindle for displacing the spacer sleeve to press the roller races on the tapered portion of the spindle, a nut for securing the ball bearing races on the shaft to lock the spindle against axial displacement, and a second sleeve on said shaft adapted to engage the ball bearing races and said ring nut for pressing the ball bearing races from the shaft by rotation of the nut.

2,748,546
MACHINE FOR GRINDING, POLISHING, BUFFING OR THE LIKE
Harold A. Lane, Birmingham, Mich., assignor to Midwest Supply and Manufacturing Company, Ferndale, Mich., a corporation of Michigan
Application February 23, 1954, Serial No. 411,640
16 Claims. (Cl. 51—166)



1. A machine of the class described comprising a frame, a support arm, a universal pivot connection between said arm and frame, a motion limiting device between said frame and arm effective to limit motion of said arm to a plane passing through the pivot center of said universal pivot connection, means for adjusting said device about the longitudinal axis of said arm passing through said pivot center, a tool spindle on said arm, said motion limiting device comprising a first link pivoted to said arm, a second link pivoted to said first link, and a support adjustably secured to said frame, said second link being connected to said support.

2,748,547
CONDITIONING DEVICE FOR FAUCETS
Bedford D. Davies and Eugene B. Walker, Mineola, N. Y.
Application April 15, 1955, Serial No. 501,531
3 Claims. (Cl. 51—197)



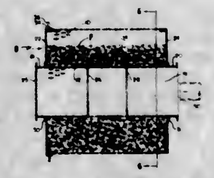
1. A faucet or valve seat conditioning device comprising a rod member preferably of metal and having a tip section of reduced diameter with a threaded borehole therein; an apertured conical centering element slidably and rotatably disposed on said rod; resilient apertured abrasive means adapted to be mounted upon said tip section with screw means for removably securing said resilient abrasive means to said tip section, the tip section being of a lesser length than the total thickness of said abrasive assembly and whereby the said screw means securely engages the said other members without engaging or contacting the outer end of the said tip section.

2,748,548
PITCH BLOCK
Arthur R. Hilsinger, Mount Tabor, N. J., assignor to Sadler Bros., Inc., a corporation of Massachusetts
Application April 6, 1954, Serial No. 421,378
4 Claims. (Cl. 51—216)



1. A pitch block for a lens comprising a body with gauging notches in its edge and an integral ridge along the marginal edge of each notch to direct the pitch away from the notch.

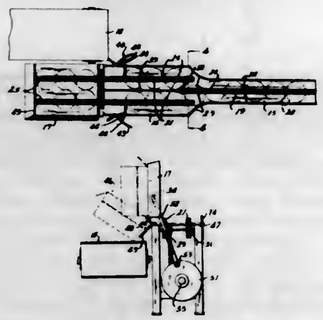
2,748,549
METHOD OF COATING RELATIVELY SMALL METALLIC PARTS
James N. Tuttle, Newtonville, Mass., assignor to J. N. Tuttle, Inc., Newtonville, Mass., a corporation of Massachusetts
Application June 17, 1953, Serial No. 362,366
2 Claims. (Cl. 51—282)



1. In the method of treating a mass of relatively small metallic parts to produce a corrosion-resistant chemical coating, the steps which comprise disposing said parts in an annular chamber of a drum defined by concentric inner and outer foraminous walls, the parts being packed so that they have a slight degree of freedom of movement, but insufficient to undergo tumbling action, thereby insuring a balanced load, immersing said drum and

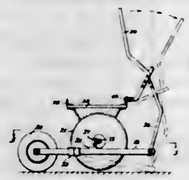
parts into a chemical treating solution reactive with said parts to produce a corrosion-resistant coating, and rotating said drum so as to cause said treating solution to migrate through said foraminous walls and uniformly react with said parts.

2,748,550
CONTAINER COUNTING AND CASING MACHINE
Harley W. Soldner, Reeseville, Wis., assignor to Brownsville Canning Company, Brownsville, Wis., a corporation of Wisconsin
Application April 27, 1950, Serial No. 158,399
15 Claims. (Cl. 53—59)



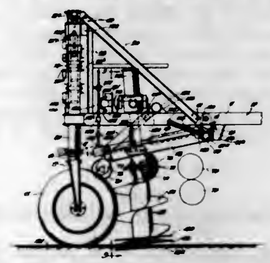
2. In a container casing machine the combination with a container feeding conveyor and a case removing conveyor, of a container receiving and casing platform intermediate said conveyors and upon which inverted cases are placed over groups of containers, said platform being aligned with said container feeding conveyor whereby to receive containers on an extension of their path of movement on said container feeding conveyor, said platform having a mounting, a pivot on the mounting to which the platform is hinged, and means for pivoting the platform upon the pivot hinge in a cycle to invert and transfer containers fed to said platform from one conveyor to the other.

2,748,551
DISK TRANSPORT
Bernard A. Humlicek, Linwood, Nebr.
Application July 31, 1953, Serial No. 371,502
1 Claim. (Cl. 55—73)



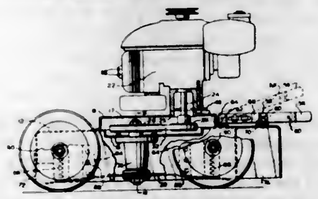
A transport device for a disc harrow having a transversely extending disc-supporting shaft and a frame structure connected to and extending above the shaft, comprising: a frame bar extending in a fore-and-aft direction transversely of and below the shaft in supporting relation thereto, a ground wheel on the rear end of said bar, an abutment mounted on the frame bar between the ends of the frame bar and adapted for engaging the supported harrow shaft against movement in at least one direction longitudinally of the frame bar, handle lever support means detachably connectable to the harrow frame structure, a handle lever fulcrumed upon said means, and a link pivotally connected to the handle lever at a point spaced from the fulcrum of said handle lever and the front end of the frame bar, rocking of the handle lever in one direction shifting the link upwardly to swing the frame bar in an upward direction about the axis of said wheel thereby to elevate the harrow, rocking of the lever in an opposite direction swinging the frame bar downwardly out of supporting relation to the harrow shaft, the handle lever having an offset portion extending at an angle to the portion connected to the fulcrum when swung in said first direction thereof shifting into a subsantially horizontal position overlying said frame structure in contact with the frame structure at a location spaced from said means, portions of the handle lever and link extending parallel to and adjacent each other in said handle lever position, said portions being adapted to be fixedly connected in their parallel and adjacent relation to lock the link and handle lever against relative movement in said position of the handle lever, thereby to fixedly engage the harrow shaft and frame structure between said frame bar and handle lever on elevation of the frame structure.

2,748,552
ROTARY CUTTING ASSEMBLY WITH TORQUE CONTROL FOR DRIVING AND POSITIONING CUTTING ASSEMBLY
Stuart D. Pool and Elof K. Karlsson, East Moline, Ill., assignors to International Harvester Company, a corporation of New Jersey
Application November 2, 1951, Serial No. 254,604
15 Claims. (Cl. 56—15)



1. A butt cutter for cutting stalks close to the ground, comprising a substantially vertically disposed shaft having cutting means adjacent its lower end, said shaft having a threaded portion above said cutting means, a power driven nut engaging said threaded portion for causing rotation of said shaft, the pitch of said threads being sufficient to cause driving of said cutter in the cutting of stalks but insufficient to drive said cutter when encountering the ground, and continued rotation of said nut will cause lifting of said shaft and cutter.

2,748,553
LAWN MOWER CONSTRUCTION
Truman B. Funk, Jackson, Mich., assignor to Yard-Man, Inc., Jackson, Mich., a corporation of Michigan
Application April 26, 1950, Serial No. 158,243
3 Claims. (Cl. 56—25.4)



1. In a rotary lawn mower of the type in which the cutting blade is rotated about an axis normal to the ground, a main frame structure in the form of a sheet material shroud for housing the blade and protecting the operator, said shroud having a peripheral depending flange, said flange being interrupted to provide a discharge opening for the cut material of said shroud, ground wheel supporting structure attached to said flange, a central portion of said shroud inwardly of said flange being disposed parallel to the ground with the mower in its operating position, a cutting blade shaft journaled in said central portion and having a blade on one end thereof disposed within said shroud, a pulley on the opposite end of said shaft and located at the opposite side of said central portion from said cutting blade, an inverted dish-shaped housing disposed over said pulley and disposed upon said central portion of said shroud in sliding engagement with the side of said central portion upon which said pulley is located, a motor carried upon said housing and having a driving pulley located within said housing, a belt extending between said first and second pulleys to drive said blade from said motor, means connected to said shroud and engaging with said housing for holding said housing in positions of sliding adjustment upon said central portion to vary the tensioning of said belt between said pulleys.

2,748,554
TRIMMER WITH OSCILLATING SHEARS
Edward Wallace, Lonemeadow, Mass.
Application December 3, 1953, Serial No. 395,945
3 Claims. (Cl. 56—241)



1. Remotely operated shears for grass and the like comprising in combination, upper and lower horizontal blades having inner coacting shearing edges, pivotal connections between rear end portions of said blades for relative swinging thereof in horizontal planes between open and closed positions, a bracket integral with the rear end of said lower blade and an elongated hollow staff extending substantially vertically upwardly from said bracket, an actuating member pivotally connected to said bracket swingable between open and closed positions of said blades, a substantially rigid push rod pivotally connected at opposite ends to a rear portion of said upper blade and to said actuating member, a handle fixed to the upper end of said staff, an operating lever pivotally connected to said handle for swinging towards and away from said handle, an elongated pull rod extending through said staff having a lower end connected to said actuating member and an upper end pivotally connected to said operating lever the pivotal connection of said push rod and actuating member and the pivotal connection of said pull rod and actuating member being relatively spaced on opposite sides of the pivotal connection of said actuating member and bracket whereby said upper blade is pushed to closed position by said push rod as said lever pulls said pull rod.

2,748,555
FRUIT PICKING DEVICE
Gaston C. Le Cocq, New Orleans, La.
Application March 11, 1954, Serial No. 415,603
9 Claims. (Cl. 56—338)

1. A fruit harvesting device comprising an elongated hollow body substantially rectangular in cross section and open at both ends and having top, bottom and side walls, said top and side walls being imperforate and the bottom wall having an aperture adjacent the outer end thereof, an elongated tubular handle secured to the opposite end of said body, a hollow plunger slidably disposed in said body and comprising side, end and bottom walls, said plunger being open at the top, the bottom wall of said plunger having an aperture adjacent the outer end thereof, an actuating rod secured to the opposite end



of said plunger and extending through said tubular handle, a cross bar on the free end of said actuating rod, tabs on said body and a receptacle detachably supported on said tabs below the aperture in said body whereby fruit may be disposed in said plunger through the open top thereof, and upon retraction of said plunger the edge of the outer end wall of said plunger will cooperate with an edge of said body to sever the stem of said fruit to permit the same to pass through said apertures into said receptacle.

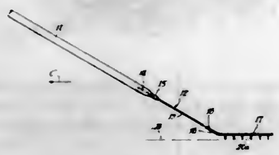
2,748,556
REEL STRUCTURE FOR AGRICULTURAL HARVESTER
Neil W. Summers and Arnold B. Skromme, Ottumwa, Iowa, assignors to Deere Manufacturing Co., Dubuque, Iowa, a corporation of Iowa
Application November 24, 1953, Serial No. 394,013
3 Claims. (Cl. 56—400)



1. An agricultural crop-handling element of the character described, comprising: an elongated carrier member of generally tubular section having first and second parallel lengthwise edges and formed from a sheet of rigid material folded substantially in half to provide a lengthwise fold establishing the first edge of the carrier member, and to provide further a pair of walls integral with and extending in closely spaced apart relationship from the fold respectively at opposite sides of the longitudinal median plane of the fold and marginal portions along the second edge of the carrier member, one of said walls adjacent its marginal portion being formed with an offset portion extending across the median plane and adjoining said marginal portion in a lengthwise fillet at the same side of the median plane as the other marginal portion, said marginal portions overlapping each other to form a double-thickness along said second edge of the carrier member; said fold having a plurality of pairs of apertures therethrough spaced lengthwise of the carrier member and opening into the space between the walls; said offset wall portion likewise having a similar plurality of apertures therethrough spaced lengthwise of the carrier member on the order of and respectively alined with the fold apertures to provide a plurality of sets of apertures adjacent to the aforesaid fillet, each set including a pair of fold apertures and an alined pair of offset portion apertures; a plurality of U-shaped tine members, one for each set of apertures, having their legs passed respectively through said sets from the second edge of the carrier member, with their bights lying lengthwise along and nested in said fillet and with their legs projecting through the fold

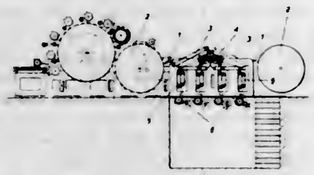
apertures and beyond the first edge of the carrier member; and a plurality of securing members, respectively engaging the bights of the tine members and the marginal portions establishing the aforesaid double thickness and securing said bights and marginal portions together.

2,748,557
LAWN CONDITIONER RAKE
Andrew H. Eadie, Homewood, Ill.
Application November 24, 1954, Serial No. 471,013
3 Claims. (Cl. 56—400.16)



1. A lawn conditioner rake comprising a transversely elongated mat of elastomer material having depending integral relatively short tines arranged in multiple rows on its lower face, said mat having a pair of shorter edges and a pair of longer edges, a backing sheet of somewhat rigid material on the upper face of said mat and secured thereto, a somewhat triangular web member of resilient flexible material attached to said backing sheet along one of the longer edges of the mat and being adjacent its shorter edges, said web member extending obliquely upwardly from said sheet and having its sides converging adjacent a line centrally transverse of the longer edges of the mat, a baffle-like guard plate extending along the longer edge of the mat to which the web member is adjacent and secured between the sides of the web member, said guard plate providing an obliquely upwardly extending continuation of the sheet, and a handle attached to the web member in the region of said line of convergence of its sides.

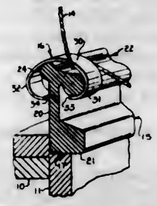
2,748,558
MANUFACTURE OF TEXTILE YARNS OR THREADS
Carl Otto Müllenschläder, Oberwiehl, Bezirk Koln, Rhineland, Germany
Application November 21, 1951, Serial No. 257,450
Claims priority, application Germany November 29, 1950
9 Claims. (Cl. 57—34)



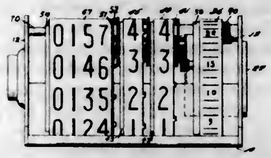
1. A method of manufacturing spun textile fibre including the steps of doffing a carded web from a carding engine, moving the said web in substantially downward direction, dividing said web during its downward movement, guiding all the web bands so formed through sliver forming devices while moving vertically downwards, and guiding the slivers to spinning devices arranged below the sliver forming devices.

2,748,559
RING TRAVELER
Arthur Dewey Carter, Gastonia, N. C.
Application July 7, 1952, Serial No. 297,555
4 Claims. (Cl. 57—119)

2. A combination ring and ring traveler, said ring having a vertically disposed annular web and an annular top flange provided with an inwardly extending inner portion and an outwardly extending outer portion, said inner and outer portions extending at a common angle relative to the web, said inner portion being disposed at a lower level than the outer portion, the inner portion being provided with an inner circumference which is substantially semi-circular in cross-section, said traveler comprising a relatively narrow band of rigid material elliptical in cross-section with the lower portion thereof cut away to form curved inner and outer legs whose proximal ends straddle the web, the curvature of the traveler at the medial portion thereof being of substantially greater radius than the inner and outer legs thereof, the curvature of the inner surface of the inner leg of the traveler being the same as the curvature of said inner circumference of the inner portion of the flange, and the distance from the inner surface of the inner portion of the flange to the web being greater than the distance from that surface of the inner leg engaging the innermost portion of the flange to the end of said inner leg so as to permit movement of the inner curved leg about the axis of the inner circumference of the inner portion of the flange without the end of the inner leg of the traveler engaging the web of the ring.

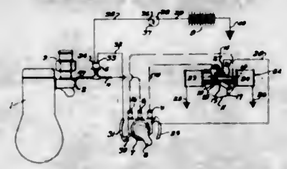


2,748,560
TWENTY-FOUR HOUR CLOCK WITH EXPOSED NUMERALS FOR TIME DIVISIONS
Joseph C. Clark, Merchantville, N. J., assignor to Atlas Instrument Company, Haddonfield, N. J., a partnership
Application February 18, 1953, Serial No. 337,633
20 Claims. (Cl. 58—125)



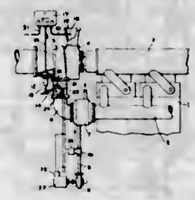
16. In clocks, a units minutes ring, a tens minute ring, and an hour ring, means journalling said rings for angular motion about a common axis, said rings each calibrated into digital units, each ring having a plurality of axially projected peripherally spaced hooks, in a general plane perpendicular to said common axis, means defining sight windows for digits on said respective rings, a time controlled continuously driven organization comprising rotating axially spaced units, tens and hours fingers normally respectively juxtaposed to but rotating clear of said respective planes of the hooks of the respective rings on an axis eccentric to the axis of angular motion of said rings and on a shorter radius than the radii of the respective rings, and time controlled means for intermittently moving selected fingers across said planes of the hooks of selected rings and coupling said organization to the selected ring by engagement of an instantaneously aligned finger and hook on such ring to progress said ring in orderly progression of time divisions.

2,748,561
VACUUM MOTOR ELECTRIC BOOSTER
Laurence M. Goodridge, Brentwood, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a corporation of Delaware
Application August 23, 1951, Serial No. 243,298
11 Claims. (Cl. 60—6)



7. A motor accessory drive system for a power driven device on a motor vehicle, comprising first and second power sources on the vehicle, a motor for driving the device powered from said sources of power, independent power connections between said sources of power and said motor, control means for said connections including a manual selector for both of said power connections having a variable speed regulator for said motor in one of said power connections, and power sensing means in the same independent power connection for selectively supplying power to said motor through one or both of said power connections during operation of said motor whereby said regulator is an effective speed control for said motor when operated through one or both of said power connections.

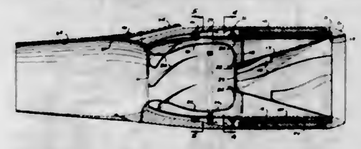
2,748,562
AFTERCOOLER WATER CONTROL FOR INTERNAL COMBUSTION ENGINES
William M. Kauffmann, Hamburg, N. Y., assignor to Worthington Corporation, Harrison, N. J., a corporation of Delaware
Application October 30, 1953, Serial No. 389,320
6 Claims. (Cl. 60—13)



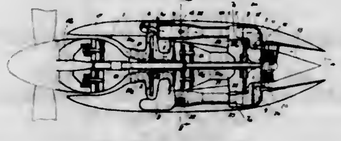
1. In combination with a turbocharged internal combustion engine including an inlet air manifold and an exhaust manifold and a turbo-compressor, an air conduit connecting the turbo-compressor and inlet manifold, an air valve in said conduit for controlling delivery of air to the engine, an aftercooler in said conduit, means for delivering cooling water to the aftercooler, means operated by predetermined operating conditions of the engine for operating said air control valve, and means operated by predetermined positioning of the air-controlling valve for controlling delivery of cooling water to said aftercooler.

2,748,563
SINGLE BURNER TURBOJET ENGINE
Dominik Wiktor, Newark, N. J.
Application August 21, 1953, Serial No. 375,627
4 Claims. (Cl. 60—35.6)

1. A turbojet engine comprising an elongated cylindrical housing having open front and rear ends, a hollow cylindrical barrel disposed in said housing and extending from the front end to a location intermediate the length of the housing, the portion of said housing disposed rearwardly of said barrel constituting the gas discharge stack of the engine, antifriction bearing means supporting front and rear portions of said barrel in said housing for free rotation of the barrel in the housing, a rearwardly tapered air inlet funnel coaxially disposed in said barrel and extending from the front end of the barrel to a location intermediate the length thereof, air induction vanes disposed in said funnel and extending spirally around the inner surface of the funnel, barrel rotating vanes disposed in said barrel rearwardly of said funnel and extending spirally around the inner surface of said barrel, fuel supply means extending through the wall of said housing and forwardly from the rear end of said barrel and including fuel discharge nozzles disposed adjacent the rear end of said funnel, and fuel igniting means extending through the wall of said barrel intermediate the length of the barrel.



2,748,564
INTERMITTENT COMBUSTION GAS TURBINE ENGINE
Raymond H. Marchal, Paris, François G. Paris, Chaville, Jean Bertin, Neuilly-sur-Seine, and Louis A. J. Benger, Vanves, France, assignors to Societe Nationale d'Etude et de Construction de Moteurs d'Aviation, Paris, France, a company of France
Application March 7, 1952, Serial No. 275,312
Claims priority, application France March 16, 1951
7 Claims. (Cl. 60—35.6)

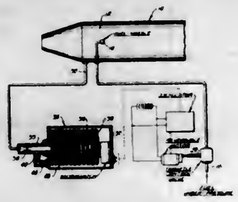


1. A gas-turbine engine comprising in succession and in series flow arrangement, an air compressor, a compressed air manifold into which said compressor discharges, the pressure obtaining in said manifold being substantially constant, a pulse jet unit sucking air from said manifold, a velocity-absorbing turbine operated essentially by the kinetic energy of gas pulses issuing from said pulse jet unit, a gas exhaust manifold for collecting the exhaust gas of said turbine, the pressure obtaining in said exhaust manifold being substantially constant, and a power producing device designed for expanding the gas supplied thereto by said exhaust manifold.

2,748,565
OSCILLATING FUEL CONTROL FOR RAMJETS AND METHOD OF OPERATING SAME
Louis S. Billman, Portland, and Arthur C. Angelos, Glastonbury, Conn., assignors to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application July 19, 1952, Serial No. 299,798
7 Claims. (Cl. 60—39.03)

7. In a method for maintaining the thrust and burner pressure of a ramjet unit at a maximum the steps comprising, regulating the flow of fuel to the burner in accordance with a fuel increasing and decreasing curve and at a predetermined frequency to induce fluctuation of fuel-air ratio in the burner, measuring changes in pressure in said burner, and unidirectionally increasing the fuel flow variation along the positive slope of the curve when

a drop in burner pressure is due to a lean fuel-air ratio and unidirectionally increasing fuel flow variation along



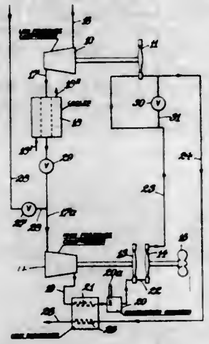
the negative slope of the curve when a drop in burner pressure is due to a rich fuel-air ratio.

2,748,566

COMPOUND GAS-TURBINE ENGINE WITH LOW-PRESSURE COMPRESSOR AND TURBINE BY-PASS

Arthur Holmes Fletcher, Derby, England, assignor to Rolls-Royce Limited, Derby, England, a British company

Application June 25, 1953, Serial No. 364,096
Claims priority, application Great Britain July 2, 1952
8 Claims. (Cl. 60—39.16)



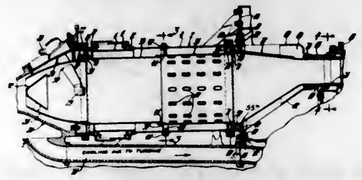
1. A gas-turbine engine comprising a working fluid duct having therein a low-pressure compressor, a high-pressure compressor, combustion equipment, a high-pressure turbine, a power turbine, and a low-pressure turbine respectively in flow series, said high-pressure turbine being drivingly connected to said high-pressure compressor, means for absorbing power drivingly connected to said power turbine, and said low-pressure turbine being drivingly connected to said low-pressure compressor, and said turbines being rotatable independently of one another, a first by-pass duct connected to the working fluid duct between the low-pressure compressor and the high-pressure compressor and adapted to by-pass the low-pressure compressor, first valve means in said first by-pass duct, a second by-pass duct connected to the working fluid duct between the power turbine and the low-pressure turbine and adapted to by-pass the low-pressure turbine, second valve means in said second by-pass duct, and means operable under low-power running conditions to open said first and second valve means, thereby to cut out the low-pressure compressor from the flow path of at least a major part of the working fluid entering the high-pressure compressor and to cut out the low-pressure turbine from the flow path of at least a major part of the working fluid exhausting from the power turbine, while retaining the power turbine in the flow path of the working fluid to be driven thereby.

2,748,567

GAS TURBINE COMBUSTION CHAMBER WITH TELESCOPING CASING AND LINER SECTIONS

Floyd G. Dougherty, Indianapolis, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application October 13, 1949, Serial No. 121,105
8 Claims. (Cl. 60—39.32)



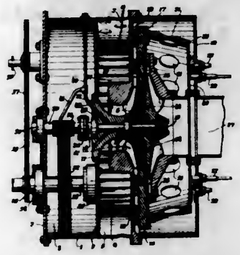
1. A gas turbine combustion apparatus comprising, in combination, outer and inner shells, each shell comprising fixed entrance and exit portions and a removable intermediate portion connecting the entrance and exit portions of the same shell, the inner shell being contained in the outer shell and the two intermediate portions terminating approximately in the same planes, each intermediate portion comprising two relatively slidable parts adapted to be telescoped together to shorten the intermediate portions for removal from the entrance and exit portions.

2,748,568

FUEL INJECTION ARRANGEMENT IN VORTEX AIR STREAM IN AN ANNULAR COMBUSTION CHAMBER SURROUNDING A GAS TURBINE

David Dutton Badworth, Great Horkesley, near Colchester, England

Application February 8, 1952, Serial No. 270,705
9 Claims. (Cl. 60—39.36)



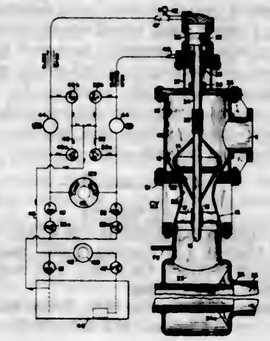
1. In a gas turbine, in combination, a turbine rotor; a stationary annular casing forming an annular combustion chamber arranged coaxial with said turbine rotor, said annular casing including two opposite annular lateral walls arranged spaced from each other in axial direction of said turbine rotor, and outer and inner annular peripheral walls extending between said annular lateral walls; air inlet means for introducing compressed air into said combustion chamber located in the region of the edge formed by one of said lateral walls and said outer peripheral wall for directing a stream of compressed air along the latter, said stream of compressed air forming in said combustion chamber a vortex forcing air toward said inner peripheral wall; fuel supply means for introducing fuel into said combustion chamber located nearer to said inner peripheral wall than to said outer peripheral wall so that the fuel is injected in said whirling air stream at a point of high velocity thereof whereby high velocity fuel-air mixture will burn in the region adjacent said inner peripheral wall of said combustion chamber; and guide blade means passing inwardly to said turbine rotor through the wall of the annular casing and connecting the combustion chamber with said turbine rotor and guiding the combustion gases to said rotor.

2,748,569

CONTROLLING DELIVERY OF AIR TO INDUCTION AND BLOW DOWN TYPE WIND TUNNELS

James O. Jackson, Crafton, Pa., assignor to Pittsburgh-Des Moines Steel Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application November 14, 1950, Serial No. 195,531
8 Claims. (Cl. 60—52)



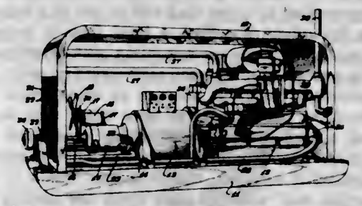
1. A hydraulic system responsive to the pressure at which fluid is delivered from a control valve for selectively moving a hydraulic motor in valve opening and valve closing directions to determine the pressure delivered from the control valve which system comprises, a pair of piping legs, a pair of normally closed shut-off valves, one of said shut-off valves being connected in one of said piping legs, the other one of said shut-off valves being connected in the other of said piping legs, a pair of pipe branches, one of said pipe branches having its ends connected to one of said piping legs on opposite sides of its said shut-off valve, the other of said pipe branches having its ends connected to the remaining one of said piping legs on opposite sides of its said shut-off valve, a source of fluid connected to a point intermediate the ends of each of said pipe branches, a first pair of check valves, each of said first pair of check valves being connected in one of said pipe branches on opposite sides of the connection to said source of fluid, a second pair of check valves, each of said second pair of check valves being connected in the remaining pipe branch on opposite sides of the connection to said source of fluid, said first and second pairs of check valves being connected to check the flow of fluid from said pair of piping legs toward said source, a first pump operatively connected between said source and said pair of pipe branches to maintain fluid in the system, a first relief valve operatively connected to the discharge side of said first pump and vented to said source of fluid to determine the fluid pressure delivered from said pump, a second pump, said second pump being reversible and having its opposite sides connected between said pair of piping legs on a common side of said shut-off valves to selectively supply positive fluid pressure to said legs, means to open said pair of shut-off valves when said second pump is operating, a pair of second relief valves, each one of which is operatively connected to one of said pair of piping legs and effectively connected to one end of said second pump, said second relief valves having pressure settings lower than positive pressure supplied by said second pump, an excess fluid return line connected to the opposite side of said second relief valves and said source to return excess fluid to said source, a pair of third check valves connected between said second relief valves and said excess fluid return line to check a back fluid-flow from said excess fluid return line to said second relief valves and allow fluid flow to said excess fluid return line, and pressure responsive control means operatively connected to control the operation of said second pump.

2,748,570

COMBUSTION ENGINE DRIVEN HYDRODYNAMIC BRAKE FLUID HEATER

James H. Booth, Venice Township, Shiawassee County, Mich., assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio

Application July 13, 1951, Serial No. 236,613
12 Claims. (Cl. 60—97)



5. A heater assembly comprising an internal combustion engine, a hydrodynamic brake driven by said engine, a closed brake fluid circuit for said brake, a pump driven by said engine for circulating fluid to be heated into heat exchange relation with the engine and with the brake fluid, a second internal combustion engine having a crankcase and a jacketed battery, and means for circulating heated fluid from said first mentioned engine through the crankcase of said second engine and through the jacketed battery for maintaining said second engine at an operating temperature.

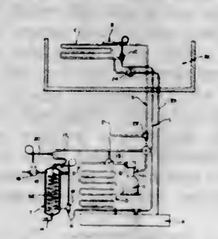
12. The method of heating a liquid which comprises driving a fluid friction brake with a heat engine, circulating brake fluid in a closed recycling circuit through the brake to be heated by fluid friction therein, and circulating the liquid to be heated in physically isolated heat exchange relation with the engine and the brake fluid.

2,748,571

DEFROSTING SYSTEM FOR REFRIGERATION EVAPORATORS

Ray M. Henderson, Bellaire, Tex.

Application April 3, 1952, Serial No. 280,263
10 Claims. (Cl. 62—3)



6. A hot gas defrosting system for refrigeration apparatus comprising, a secondary evaporator separate from the refrigeration system which functions during the refrigeration cycle, means for supplying heat to be absorbed by the secondary evaporator, a conduit between the secondary evaporator and the receiver of the refrigeration apparatus for supplying liquid refrigerant from the receiver to the evaporator, a conduit between the secondary evaporator and the low side of a compressor whose high side is connected to the evaporator to be defrosted, and means controlling flow of refrigerant through the secondary evaporator.

2,748,572

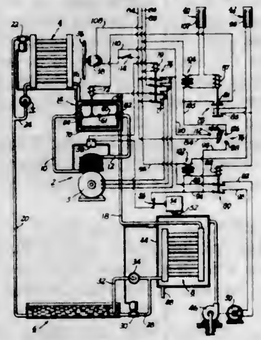
AIR CONDITIONING SYSTEM

Michael Parcaro, Arlington, N. J.

Application December 6, 1952, Serial No. 324,558
3 Claims. (Cl. 62—4)

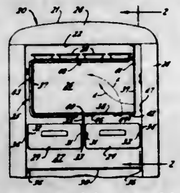
1. In an air conditioning system of the character described which includes a refrigeration system having a

compressor and main motor therefor and a cooling or heating coil through which air is directed to subject the air to a desirable heat transfer operation and which includes a heat absorbing or dissipating unit through which a stream of water passes so as to provide a source of heat or so as to carry away heat as desired, a pump and driving motor to supply said stream of water, a reversing valve which has two positions in one of which a fluid flow is provided to cause said coil to act as a heating coil and in the other of which a fluid flow is provided to cause said coil to act as a cooling coil, a solenoid unit which is energized to operate said reversing valve, a heating thermostat which is adapted to close when there is a demand for heating and to open when said demand is satisfied, a cooling thermostat which is adapted to close when there is a demand for cooling and to open when the demand is satisfied, circuit means which is adapted to energize said solenoid unit upon the closing of one



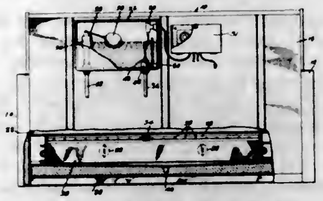
of said thermostats, a normally open relay switch in parallel with said cooling thermostat, solenoid means to close said relay switch when said heating thermostat closes. circuit means which energizes said motor for said pump upon the closing of said cooling thermostat or said relay switch, a circulating fan for circulating air over said cooling or heating coil, a fan motor for driving said fan, circuit means including a main motor relay having a plurality of switches and a solenoid which is energized to close said switches, said circuit means connecting said main motor to power lines upon the closing of said switches and simultaneously starting said fan motor, an auxiliary switch which is closed to operate said fan motor independently of said motor relay, and circuit means for said motor relay including a pressure switch which is closed by the pumping of water under pressure by said pump and safety switches in series therewith which are opened by improper operating conditions of said compressor.

2,748,573
REFRIGERATOR HAVING AN ADJUSTABLE EVAPORATOR CONSTRUCTION
Lloyd A. Staebler, Oreland, and Robert G. Kurtz, Philadelphia, Pa., assignors to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application January 21, 1953, Serial No. 332,416
13 Claims. (Cl. 62—89)



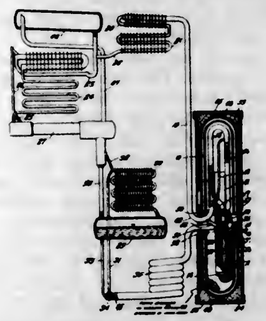
1. A refrigerator comprising a cabinet, a generally rectangular evaporator shell defining a freezing compartment occupying a predetermined portion of the space within said cabinet, the space to one side of said shell providing a non-freezing compartment within said cabinet, two adjacent side wall portions of said shell being movably mounted on and supported by other wall portions of said shell, said adjacent side wall portions being disposable in a position to cooperate with the remaining wall portions of said shell including said other wall portions to define the aforesaid freezing compartment, said two adjacent side wall portions of said shell also being disposable in another position to provide said non-freezing compartment with added space which is normally occupied by said freezing compartment, and means provided on one of the two mentioned adjacent side wall portions to support food-supporting means within the spaced added to the non-freezing compartment when said adjacent side wall portions are disposed in said other position.

2,748,574
WATER DEFROST REFRIGERATED SHOWCASE
Donald H. Gaston, Los Angeles, Calif., assignor to Weber Showcase & Fixture Co., Inc., Los Angeles, Calif., a corporation of California
Application March 24, 1952, Serial No. 278,246
5 Claims. (Cl. 62—89.5)



1. A water defrost refrigerated showcase comprising: an open display bin, air circulating passages at the front and rear of said display bin, an air circulating passage beneath said display bin, a blower, refrigerating coils in said last mentioned passage through which coils refrigerant is circulated, and means in said last mentioned passage for spraying water over said refrigerating coils to defrost said coils, a tank for storing water for said spraying means, a ball valve controlling flow from said tank, and a float valve controlling flow into said tank.

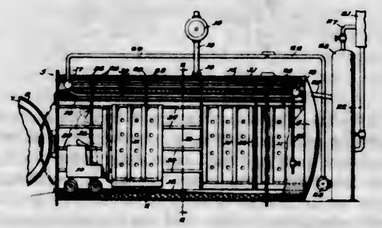
2,748,575
ABSORPTION REFRIGERATION
Sigurd Mattias Backstrom, Stockholm, Sweden, assignor to Aktiebolaget Elektrolux, Stockholm, Sweden, a corporation of Sweden
Application December 2, 1952, Serial No. 323,600
Claims priority, application Sweden December 6, 1951
11 Claims. (Cl. 62—119.5)



1. In an absorption refrigeration system having a vapor supply line, a circuit for circulation of absorption liquid

comprising an absorber and a vertically extending generator and liquid heat exchanger therebetween having passages for flowing in thermal relation absorption liquid rich and weak, respectively, in refrigerant, a plurality of upright pipes in the immediate vicinity of one another, one of said pipes forming a heating tube, said generator comprising several of said pipes which are connected in said circuit and at least two of which contain absorption liquid arranged to receive heat from said heating tube, said two pipes respectively forming a boiler which communicates with the vapor supply line and a vapor-liquid lift tube, and means for thermally insulating said generator and said heating tube from the surroundings comprising a multi-section insulating structure, at least one of said sections constituting a double-walled vessel, having a vacuum between the inside and outside walls thereof, which envelops one end of said generator and extends in a vertical direction toward the opposite end thereof, another section of said insulating structure being connected to the open end of said double-walled vessel, a plurality of conduits, said other section being apertured for said conduits to pass therethrough, said conduits conveying refrigerant vapor from said boiler to said vapor supply line and also rich and weak absorption liquid from and to said absorber, respectively.

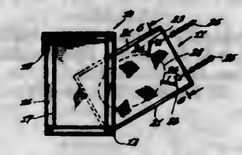
2,748,576
FRUIT AND VEGETABLE COOLER
Theodore J. Peukert, Sr., and Frank John Hibbs, Sr., Los Angeles, Calif.
Application October 28, 1952, Serial No. 317,236
8 Claims. (Cl. 62—169)



1. In an apparatus of the class described, the combination of a casing in which to place produce to be cooled, said casing having a door at least at one end thereof and sealing means for the door, refrigeration coils within said casing at and along the entire top thereof to condense the water vapor evaporated from the produce, means for exhausting air from said casing and a vacuum pump in communication with said air exhausting means, means for circulating a refrigerant through said coils, a pan mounted below said coils in relatively close relation thereto to prevent dripping of moisture from the coils onto the produce to be cooled, said pan being so arranged and disposed with respect to said coils and casing and terminating at its opposite side edges in spaced relation to the walls of the casing as to give a maximum space on both sides of said pan along the entire length of the casing for the passage of water vapor in its path of travel from the produce to be cooled to said refrigeration coils where said water vapor is condensed, and a drain line extending from said pan.

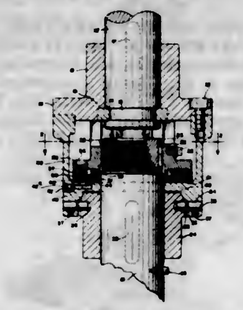
2,748,577
SCAPULAR HAVING COVER MEMBERS FOR THE CLOTH PIECES
Donald M. O'Callaghan, New York, N. Y.
Application February 1, 1954, Serial No. 407,212
1 Claim. (Cl. 63—2)

A scapular comprising a pair of individual chains disposed in parallel relationship, a rectangular frame piece secured to each end of the parallel chains, said frame piece having walls along three edges thereof defining a rectangular recess open to the edge on the fourth edge, a centrally disposed ovaloid aperture in said frame piece, a pair of recessed rivet receiving apertures in the corners adjacent the said fourth edge of said frame piece, said recesses of said rivet receiving apertures being of a depth to receive a rivet head in planar relationship to the frame piece surface, said chain ends extending into said recess through said fourth edge and overlying said rivet receiving apertures, rivets fixedly securing said chains to said frame piece, cloth member mounted in



said rectangular recess and overlying said chain ends, a pair of rectangular plate pieces disposed on each of the sides of each of said frame pieces, a narrow bridge piece integral with said plate pieces and securing a pair of said plate pieces at one corner thereof and adjacent one of the edges of said frame piece that is adjacent said fourth edge, and a pivot pin journaled through a pair of said plate pieces in diagonal relationship to said bridge piece and also through a corner of said frame piece whereby the normally frictionally held frame piece may be rotated outwardly from its locked position to expose said frame piece.

2,748,578
ADJUSTABLE SHEAR TYPE COUPLING
Ernest H. Potts, Portland, Oreg., assignor to Guy F. Atkinson Company, South San Francisco, Calif., a corporation of Nevada
Application January 18, 1954, Serial No. 404,597
9 Claims. (Cl. 64—28)



3. A shear type vertical shaft coupling for suspending a driven shaft from a drive shaft, comprising a thrust abutment on said drive shaft, a collar keyed to said drive shaft and supported on said thrust abutment, a sleeve on said collar, a thrust bearing on said sleeve, an adjustable nut on said driven shaft having a thrust bearing supported on said sleeve thrust bearing, means for locking said nut in adjusted position on said driven shaft, a collar keyed on said driven shaft, and shear pins interconnecting said sleeve and driven shaft collar.

2,748,579
KNITTING METHOD
Henri Sornin de Leynt, Dieppe (Seine Inferieure), France
Application August 19, 1950, Serial No. 180,410
Claims priority, application France March 25, 1950
1 Claim. (Cl. 66—1)

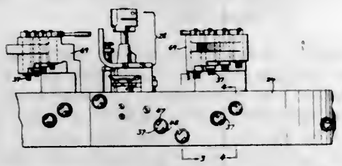
In a knitting process, the steps of forming a row of loops about a knitting needle having a weft thread ex-

tending along the length of the needle and being looped back along the length of the needle so that the row of loops is formed about a double portion of the weft thread;



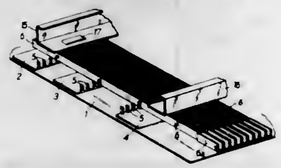
and holding the weft thread in said row of loops while removing the needle from the row of loops so as to leave a looped end of the weft thread located beyond the row of loops.

2,748,580
CAM SETTING MECHANISM
Rudolph E. Zernseith, Philadelphia, Pa.
Application April 6, 1954, Serial No. 421,354
17 Claims. (Cl. 66—20)



1. In a knitting machine having a housing and a movable cam, means adapted to move said cam comprising a cylindrically shaped member rotatably journalled in said housing for actuating said cam, said member having an eccentric pin extending longitudinally from one end and a pair of spaced eccentric pins extending longitudinally from the opposite end thereof, said pair of pins being spaced equidistantly to either side of the longitudinal axis of said member and being closer to a diametric plane of said member passing through said single pin than to a second diametric plane normal to said first plane.

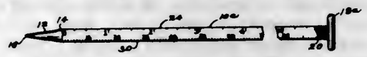
2,748,581
NEEDLE BED FOR NEEDLES SERVING FOR THE MANUFACTURE OF KNITTED FABRICS
Ernst Luchsinger, Kusnacht, Zurich, Switzerland, assignor to Fibra A. G., Glarus, Switzerland
Application January 27, 1954, Serial No. 406,465
Claims priority, application Switzerland August 20, 1953
6 Claims. (Cl. 66—115)



1. A needle bed for working needles serving for the manufacture of knitted fabrics comprising a flat base plate, oblong toothed holding means situated on said base plate, profiled rails transversely arranged on said holding means in tooth engaging relation therewith, said holding means being adapted to determine the relative position of said profiled rails in transverse direction on said base plate and said profiled rails forming channels having walls of uniform thickness and serving to guide said working needles.

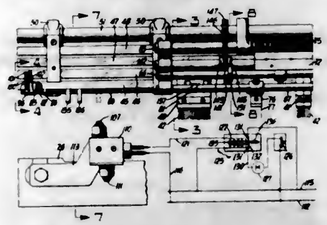
2,748,582
CALIBRATED KNITTING NEEDLE
Thomas F. Hadler, New York, N. Y.
Application March 17, 1953, Serial No. 342,949
1 Claim. (Cl. 66—117)

A knitting needle consisting of a knitting needle body, cylindrical in contour and substantial in length along its axis, an end portion of said body being continuously smoothly reduced conically to form a needle point, a head releasably carried by said needle body at its opposite end, and subdivision scale means forming an integral part of said needle body apart from said pointed end and head, and bearing a plurality of scales of subdivided lines progressing along said needle body from their com-



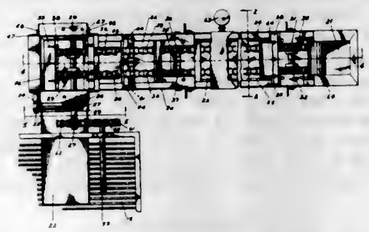
mon zero location at the base of said conical end of said needle point and increasing serially in a direction toward said head, at least one of said scales being subdivided into inches, half inches and quarter inches, and at least one other of said scales being subdivided serially numerically in terms of numbers of consecutive knitted stitches per row of stitching.

2,748,583
SAFETY MECHANISM FOR KNITTING MACHINES
Robert P. Loeper, West Reading, and Werner F. K. Mueller, Reading, Pa., assignors to Textile Machine Works, Wyomissing, Pa., a corporation of Pennsylvania
Application July 21, 1953, Serial No. 369,426
14 Claims. (Cl. 66—157)



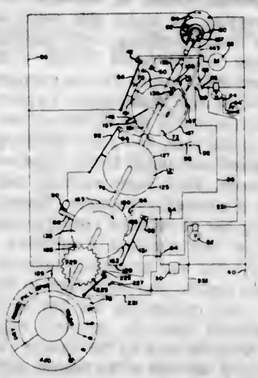
1. In a knitting machine having a lace point, means for supporting said lace point, a narrowing point comb, and means for moving said narrowing point comb toward said lace point supporting means, the combination with safety means for preventing movement of the point comb into engagement with said lace point supporting means.

2,748,584
MEANS FOR PREPARING AND PROPORTIONALLY ADDING NEW WASTE TO RECLAIMED JOURNAL BOX WASTE
Thomas W. Potter, Chicago, Ill., assignor to Journal Box Servicing Corporation, Indianapolis, Ind., a corporation of Indiana
Application December 13, 1951, Serial No. 261,541
2 Claims. (Cl. 68—1)



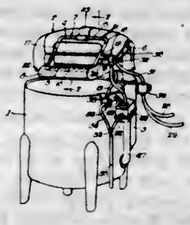
1. Apparatus for producing journal box packing out of journal box used and new waste which comprises the combination with mechanism for automatically moving the used journal box waste through a wash bath of hot lubricating oil into and out of a bath of hot lubricating oil for waste reoiling, of a device for receiving new waste; a hot oil tank; conveying means for moving the new waste from said device through the hot oil tank and discharging the new waste from the hot oil tank into said reoiling bath; and means driving said conveyor in relation to the time of said mechanism carrying said used waste through said reoiling bath, whereby a definite percentage of new to used waste is maintained.

2,748,585
DOMESTIC APPLIANCE
Kenneth O. Sisson, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 14, 1952, Serial No. 320,598
7 Claims. (Cl. 68—12)



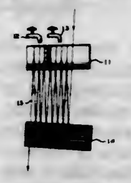
1. A washing machine including a clothes washing receptacle, a hot water supply and a cold water supply for said receptacle, an electrically operated agitating means for agitating the contents of said receptacle, means for causing the discharge of the liquid contents of said receptacle, electrically operated controls for individually controlling said hot and cold water supply, a timer having means for controlling said agitating means and said discharge means and the filling of said receptacle, said timer including a single cam and cam follower means for alternately opening said hot and cold water supply during each filling period of the receptacle, and means for rendering said single cam and cam follower means ineffective and for causing an entire fill period to be provided only by opening only one of said water supplies.

2,748,586
CLOTHES RINSING MEANS FOR WRINGERS
Orin N. Cooper, Garwin, Iowa
Application December 4, 1951, Serial No. 259,741
11 Claims. (Cl. 68—22)



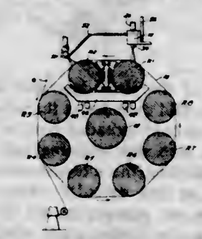
8. In a washing machine having a wash water tub, wringer rolls disposed above said tub, a rinse water unit carried adjacent said wringer rolls and arranged to direct rinse water against the clothing entering said rolls, and a rinse water feed line connected to supply rinse water to said rinse water unit, the improvement which consists of a rinse water collecting and disposing means comprising a rinse water collecting pan supported beneath said wringer rolls, drain means connected with said pan to carry collected rinse water out of said pan, and clothes guiding means on said pan disposed forwardly and rearwardly with respect to said wringer rolls and in predetermined elevations with respect to said pan bottom and said wringer roll contact point to aid in directing clothes through said wringer rolls and to keep said clothes out of the pan and expended rinse water in said pan.

2,748,587
DEVICE FOR THE WET TREATMENT OF ARTIFICIAL THREADS
Kurd Jürgen Schulze, Oberbruch, Germany, assignor, by mesne assignments, to American Enka Corporation, Enka, N. C., a corporation of Delaware
Application April 13, 1951, Serial No. 220,769
Claims priority, application Germany April 17, 1950
2 Claims. (Cl. 68—205)



1. A device for treatment of artificial threads with liquids which prevent the artificial threads from sticking to each other during after treatment, comprising a pair of cooperating upper and lower rolls having their axes inclined to each other for advancing a thread thereover in a spiral path, the lower of said rolls having a surface of two sections each section consisting of contiguous longitudinal flutings extending radially outwardly, the surface of the flutings converging at an acute angle at the outer extremity thereof, the flutings in one section being offset to a position between the flutings of the other section in a circumferential direction, the flutings having tooth-like portions on the ends thereof which define a zigzag channel extending circumferentially around said lower roll, and means for introducing liquids to said upper roll.

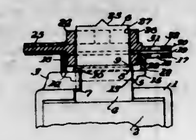
2,748,588
REEL FOR THE FLUID TREATMENT OF THREAD
Harry A. Kuljian, Merion, Pa.
Application March 2, 1954, Serial No. 413,493
1 Claim. (Cl. 68—205)



A thread storing and advancing reel including a number of elongated rotary rolls arranged in a circle about a central horizontal axis and adapted to receive a thread to be treated in the form of a helix, the convolutions of which encompass all of said rolls, means for rotating said rolls about their individual axes, the two uppermost of said rolls being horizontally spaced from each other and having their axes in the same horizontal plane, a first means for delivering treating liquid to the first of said uppermost rolls, whereby liquid is carried by said thread convolutions from said first to said second roll, a first scraper frictionally engaging said first roll for removing

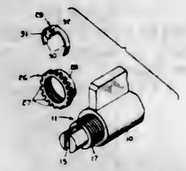
some of the liquid therefrom, a second scraper frictionally engaging the second of said uppermost rolls, and means for supplying liquid directly to said second roll to lubricate the same in the absence of movement of thread from said first to said second roll.

2,748,589
VALVE LOCK
William L. Huislander, Osborne, Pa., assignor to Homestead Valve Manufacturing Company, Coraopolis, Pa., a corporation of Pennsylvania
Application October 27, 1952, Serial No. 317,001
4 Claims. (Cl. 70—180)



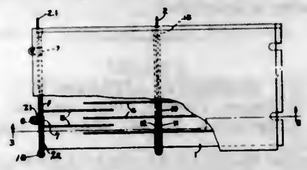
1. A lock for a stem type valve member in a valve housing comprising an outwardly extending annular surface on said valve member, a lock plate having a bore to snugly fit said annular surface and interlock with said valve housing to prevent rotation of said lock plate on said annular surface, a keeper removably attached to said annular surface above and directly engaging said lock plate to retain said lock plate in interlocked position on said valve housing, a cap plate independent of said keeper covering said keeper and mounted on said valve stem to turn therewith, and registry means in both of said plates in the on and off and intermediate positions of said valve to permit locking and sealing of said plates together for locking said valve at a selected position.

2,748,590
ADJUSTABLE KEY PLUG RETAINER
Paul P. Kubik, Bronx, N. Y., and Raymond W. Schmid, Stamford, Conn., assignors to The Yale & Towne Manufacturing Company, Stamford, Conn., a corporation of Connecticut
Application January 17, 1952, Serial No. 266,949
3 Claims. (Cl. 70—367)



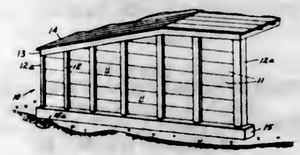
1. In a lock of the class described, a cylinder, a key plug rotatable in said cylinder, a threaded portion on said key plug, a nut on said threaded portion having a circular outer periphery, said nut retaining said key plug in said cylinder and adjusting the endwise clearance of the key plug relatively to the cylinder when rotated on said threaded portion, an opening in the threaded portion of said key plug, a clip having parts extending in opposed directions on the circular periphery of said nut to hold the clip on the nut, the circular periphery of the nut having grooves extending longitudinally thereon, an arm on said clip positioned in at least one of said grooves and extending into the opening in the threaded portion of the key plug whereby to lock the nut to the key plug for rotation therewith, said clip yielding for removal of said arm from the groove in which it is positioned, and said longitudinally extending grooves formed in closely spaced relation to one another around the circular periphery of the nut to enable the clip to lock the nut when the nut is adjusted through small angles relatively to the key plug.

2,748,591
WALL PANELS
Arthur H. Brown, Montrose, Mich.
Application July 22, 1952, Serial No. 300,317
2 Claims. (Cl. 72—16)



1. An improved article of manufacture adapted for use in constructing the inside side walls and ceilings of the rooms of frame buildings and consisting of a comparatively light weight panel having a firm thin base member of non-inflammable fibrous composition approximately one-fourth inch in thickness, an intermediate layer of plaster approximately five-eighths of an inch in thickness bonded to the base, and a thin finishing surface layer of plaster applied and united to the intermediate layer and having a smooth, hard outer surface, said intermediate layer having a centrally positioned transversely extending reinforcing bar of inverted U-shape cross-section, embedded therein and carrying a plurality of wire rods mounted in the bar and extending laterally from the bar at right angles thereto and embedded in the intermediate plaster layer, said reinforcing bar having integral flanges extending laterally from the terminal edges of the bar, said flanges being secured to the base, a substantially flat sleeve embracing one end of the flanges of the central bar, a section of said sleeve extending beyond an edge of the panel, said section being adapted to receive a fastener for securing the panel to a studding or joist, and additional transverse supporting bars mounted at each end of the base with wire rods united thereto and extending laterally inwardly at right angles thereto and embedded in said intermediate layer overlapping and spaced in alternation with the wire rods first mentioned.

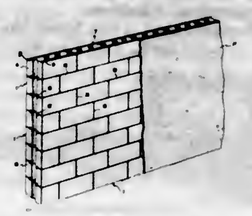
2,748,592
BUILDING CONSTRUCTION
William Kelly, Grand Island, Nebr.
Application October 19, 1951, Serial No. 252,159
1 Claim. (Cl. 72—16)



In a structure of the kind described comprising preformed concrete posts inserted into spaced holes in a ground surface, and concrete grout surrounding said posts in said holes, and maintaining said posts in upright position, the improvement comprising each post having at least one deep groove formed in one side thereof and having at least one shallower groove formed in another side thereof, said posts being so arranged that the shallower groove in each post faces the deep groove of the adjacent post, concrete boards inserted in said grooves and spanning the distance between posts, an expansion joint comprising mineral wool arranged in the space between said boards and said deep grooves in said posts, cement between the ends of said boards and said shallower grooves, said boards having a groove in the bottom surface thereof and a tongue on the upper surface thereof and cement between adjacent boards, said boards having spaced holes therein, bolts extending through said

boards, insulating material on one side of said boards, strips extending between said posts on said one side of said boards and lying against said insulating material, strips for supporting shingles extending on the other side of said boards and lying thereagainst, said bolts securing said strips and insulating material to said boards and a beam formed along the upper end of said posts and the upper board members and being integral therewith.

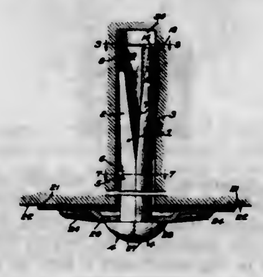
2,748,593
MASONRY BUILDING WALL
Grant Stetter, Falls Church, Va., assignor to Coverbond Corporation, Washington, D. C., a corporation of Delaware
Application November 19, 1953, Serial No. 393,113
4 Claims. (Cl. 72—32)



1. A building wall comprising a plurality of blocks each having a pair of accurately parallel top and bottom planar seating surfaces and having front and back faces, each of said top and bottom seating surfaces having a continuous substantially smooth surfaced longitudinal slot of rectangular cross section extending the full length of the block adjacent to but spaced inwardly from each of said front and back faces and being parallel to and spaced from each other, said blocks being disposed in superposed horizontal courses with the slots of endwise adjacent blocks of each course horizontally aligned and communicating with the top and bottom slots of vertically juxtaposed blocks of adjacent courses in vertical register, separator strips of rigid material of cruciform cross section disposed in said aligned and registering slots, each strip having upper and lower continuous vertical flanges of respectively the same thickness as the transverse width of the lower and upper block surface slots and seated in the respective slots and each strip having also two opposed longitudinally extending lateral flanges each having a planar top surface and a planar bottom surface seated respectively on said bottom and top seating surfaces of vertically juxtaposed blocks so as to separate the blocks of adjacent horizontal courses in vertical spaced relationship, said strips being separate and unconnected with each other and each extending continuously along a plurality of blocks forming a pair of adjacent horizontal courses and bridging a plurality of vertical joints and mortar filling the areas of said inter-block spaces between the front face of each block and the adjacent strip and between the back face of each block and the adjacent strip.

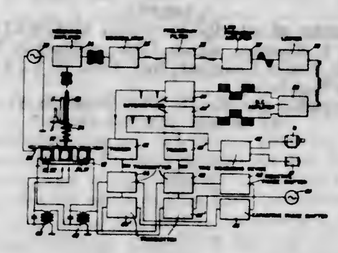
2,748,594
ROOF BOLT
Lewis W. Edwards, Coatesville, Pa., assignor to Lukens Steel Company, Coatesville, Pa., a corporation of Pennsylvania
Application November 4, 1952, Serial No. 318,610
4 Claims. (Cl. 72—105)

1. An anchor bolt consisting of an elongated shank part and a cooperating complementary elongated locking part, said parts having a head at a corresponding end thereof, each of said parts being semi-circular in cross section from the headed end to a point along the length thereof spaced from the headed end and each of said parts having cooperating flat faces, the flat face on the shank part tapering in width from said point to the end remote from said head and the thickness of said shank between the flat face and the diametrically opposite surface progressively increasing from said point to said remote end, the remote end of said shank part thus being



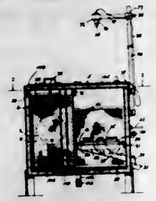
substantially of truncated sector shape in cross section, said locking part being of substantially uniform cross sectional shape from the headed end to a point adjacent to but spaced from the remote end, the section of said locking part from said point thereon to the remote end having a semi-circular recess in the flat face thereof, said recess receiving a portion of the tapering flat face of said shank part.

2,748,595
APPARATUS FOR DERIVING AN ELECTRICAL QUANTITY IN DEPENDENCE ON THE MOMENTARY POSITION OF THE REGULATING DEVICE OF A CLOCKWORK
Max Hetzel, Bienne, Switzerland, assignor to Bulova Watch Company Inc. New York, Bienne Branch, Bienne, Switzerland, a joint-stock company of Switzerland
Application March 13, 1953, Serial No. 342,107
Claims priority, application Switzerland April 9, 1952
9 Claims. (Cl. 73—6)



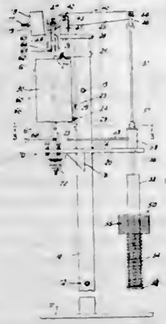
1. A device for deriving an electrical magnitude in dependence on the momentary position of a freely vibrating regulating device of a clockwork, said regulating device being suspended from the hair spring thereof in order to calibrate its frequency, comprising in combination, an electrical conductor arranged outside said hair spring, means for generating an electric alternating field between said electrical conductor and said hair spring of said regulating device, said alternating field having a frequency exceeding the frequency of the vibrations of said regulating device said electrical field extending through said hair spring to the inside thereof so as to have a continuation inside said hair spring, a electrical probe arranged inside said hair spring so as to be imparted an electric potential by said continuation of said electric field, and means for deriving an electrical quantity from said potential of said probe.

2,748,596
RUPTURE TESTER
Clinton W. Tasker, Nether Providence Township, Delaware County, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application November 19, 1951, Serial No. 257,010
10 Claims. (Cl. 73—12)



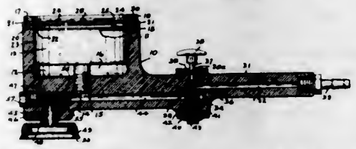
1. Testing apparatus for sheet material comprising an unattached clamp assembly, a hollow container which is substantially closed from the atmosphere, an impact element, means for supporting the impact element above the container in alignment with a path of free fall into the container, the container having a normally closed opening along said path adapted to be opened for admitting the impact element during its free fall, and means for circulating a gaseous medium within the container; said clamp assembly having members for engaging opposite sides of a sample of the sheet material whereby the sample is held in a plane, the assembly having an aperture for exposing both sides of a central section of the sample; partition means mounted in the container for dividing it into a plurality of compartments, the partition means permitting the gaseous medium discharged by the circulating means to pass progressively through said compartments; and means in one of the compartments for supporting a refrigerant; and means in another of the compartments for positioning said clamp assembly under said opening with its aperture approximately centered with respect to the path; another of said compartments serving as a depository for storing a plurality of other clamp assemblies, the circulating means being mounted in one of said plurality of compartments.

2,748,597
CREEP RUPTURE TESTING APPARATUS
Lambert F. Kooistra, Akron, Ohio, assignor to The Babcock & Wilcox Company, New York, N. Y., a corporation of New Jersey
Application October 11, 1952, Serial No. 314,294
13 Claims. (Cl. 73—15.6)



1. In test apparatus for applying tension forces to an elongated test specimen, including a supporting frame, a pair of grips movably mounted relative to the frame and respectively securable to opposite ends of the test specimen, and means operable to apply a predeterminable load on one of said grips in longitudinal alignment with the test specimen, mechanism operable to adjust the other grip longitudinally in longitudinal alignment with the test specimen, said mechanism comprising a reference member fixed relative to the frame; a load member secured to said other grip; a self-centering assembly arranged to apply force to said load member only along a pair of lines perpendicularly oriented in parallel planes which are perpendicular to the longitudinal center-line of the test specimen, the lines intersecting in such center line of the specimen; and load applying means interposed between said reference member and said assembly and adjustable longitudinally relative to the test specimen to apply forces to said assembly only in a direction parallel to the longitudinal center-line of the test specimen.

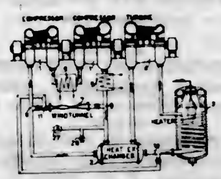
2,748,598
PORTABLE LEAK TESTER
Lorance E. Sterns, Indianapolis, Ind., assignor to Whittington Pump & Engineering Corporation, Indianapolis, Ind., a corporation of Indiana
Application July 1, 1954, Serial No. 440,739
1 Claim. (Cl. 73—40)



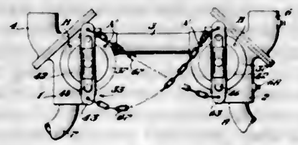
A manufacture consisting of a portable hand carried structure for testing location and degree of leaks in castings and the like, comprising a head having a cylindrical well; an elongated handle extended to an outer free end for connection with a source of sub-atmospheric vacuum, said handle extending from said head diametrically of and from the underside of said well, said handle having a passageway extending longitudinally from end to end thereof, said passageway continuing from said handle through said head under said well and opening from the head on the opposite side from said handle; a vacuum indicating gauge carried in said well in communication through the bottom thereof with said passageway thereunder; said head having a transverse vertically disposed passageway leading downwardly from said longitudinal passageway intermediate said opposite side opening and said gauge communication thereof; a screen positioned in said longitudinal passageway across said transverse passageway; means seating said screen in the longitudinal passageway and sealing off the outer end thereof; a test seating head projecting from the underside of said first head and having an opening therethrough from said transverse passageway; an elastic seating member carried around the periphery of and extending from the under face of said test head maintaining said face spaced at all times from the surface of the casting being tested; a thumb operable cut-off valve in said handle intercepting said longitudinal passageway; a cover over said head well independent of said gauge; a pressure range marker; said marker being secured to said cover; and means revolubly mounting and retaining said cover on said head providing for circumferential shifting of the marker.

2,748,599
METHOD AND INSTALLATION FOR OPERATING A WIND TUNNEL, MORE ESPECIALLY FOR HIGH MACH NUMBERS
Curt Keller, Kusnacht, Switzerland, assignor to Aktiengesellschaft fuer Technische Studien, Zurich, Switzerland, a corporation of Switzerland
Application November 14, 1952, Serial No. 320,491
Claims priority, application Switzerland November 30, 1951
12 Claims. (Cl. 73—147)

5. The combination of a wind tunnel; a thermal power plant in which a gaseous working medium describes a closed circuit comprising compressing means consisting of at least one compression stage, in which the working medium is compressed from a pressure above atmospheric to an even higher pressure, at least one heater in which heat is supplied from outside to the so-compressed working medium, at least one turbine in which the heated working medium is allowed to expand, at least one cooler in which heat is withdrawn from the so-expanded working medium, and connections whereby said turbine drives said compressing means; pipe means connecting the inlet of said wind tunnel with a point of the circuit situated between the exit of the first compression stage and the inlet of the turbine; and pipe means connecting the outlet of the wind tunnel with a point of the circuit in which a lower pressure prevails than that prevailing at said point of the circuit situated between the exit of the first compression stage and the inlet of the turbine, a part of the working medium thus being allowed to circulate through the wind tunnel.



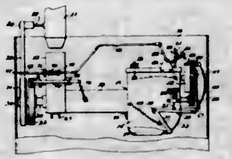
2,748,600
DUAL PROTECTION GAS METER BY-PASS
Albert J. Allen, Garden City, N. Y., assignor to Anchor Manufacturing Company, Boston, Mass., a corporation of Massachusetts
Application May 28, 1953, Serial No. 358,061
6 Claims. (Cl. 73—201)



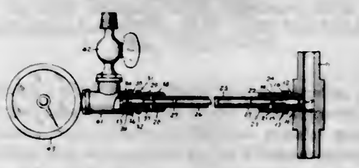
1. A gas meter connection comprising an inlet for supplying gas to the meter, an outlet for delivering gas from the meter, a by-pass having one end connected to the inlet and the other end connected to the outlet, at said ends separately operable valves having normal positions in which gas can flow through the meter but not through the by-pass and by-pass positions in which gas can flow through the by-pass but not through the meter, keys for separately operating said valves, and means interconnecting the keys when the keys are operatively connected to the valves to prevent one valve from being placed in one of said positions while the other valve is in the other position, whereby gas can always flow from the inlet to the outlet through the meter or through the by-pass.

2,748,601
GRAIN MEASURING DEVICE FOR COMBINE
Glenn W. Clinard, Great Falls, Mont.
Application June 9, 1953, Serial No. 360,521
5 Claims. (Cl. 73—223)

1. A grain measuring mechanism comprising a grain receiver adapted to be disposed under the discharge end of a combine elevator to receive grain therefrom, a hopper having a discharge opening, a duct connecting said receiver to said hopper, a tubular auger extending from said receiver through said duct into said hopper, a shaft extending through said auger, means driving said shaft and said auger, a gate mounted on said hopper for movement into and out of closing relationship with said discharge opening, a pressure plate mounted in said hopper and movable in response to the pressure of grain forced into said hopper by said auger, means driven by said shaft and including a one-rotation clutch mechanism effective to open and close said gate, means actuated by said pressure plate when subjected to a predetermined pressure of the grain in said hopper to disconnect said driving means from said auger and to trip said clutch means and to reconnect said driving means to said auger upon the completion of a single rotation by said clutch means, and counter means responsive to the opening and closing of said gate indicating a total of the number of discharges of grain from said hopper.



2,748,602
PRESSURE GAGE
Harold Weber, Bloomfield, N. J., assignor to Celanese Corporation of America, New York, N. Y., a corporation of Delaware
Application July 3, 1952, Serial No. 297,038
2 Claims. (Cl. 73—395)

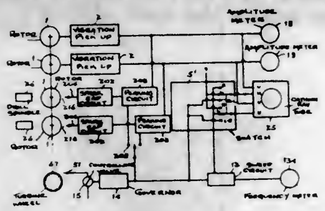


1. In an apparatus for measuring the pressure of a fluid, a cylinder having a closely fitting piston positioned therein, said piston having its end exposed to the fluid whereby the pressure of the fluid will develop a force tending to move said piston in said cylinder, a second cylinder having a closely fitting piston positioned therein, a rod bearing against the pistons operatively connecting the piston in the first cylinder to the piston in the second cylinder whereby the force on the first piston will be transmitted to the second piston, a sleeve having an internal diameter greater than the diameter of the rod encircling the rod, collars encircling said rod and contacting the sleeve to support the rod slidably in said sleeve, and means operatively connected to said second piston for measuring the force transmitted thereto, said force measuring means comprising a liquid in an enclosed chamber exposed to the end of the second piston whereby the force on said second piston will develop a pressure on the liquid, and means for measuring the pressure developed in the liquid.

2,748,603
BALANCING MACHINE
Roy Milton Wilcox, Grand Rapids, Mich.
Application May 31, 1950, Serial No. 166,901
13 Claims. (Cl. 73—465)

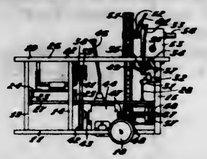
1. In a balancing machine, in combination, a pair of signal generating vibration pick-ups generating signals responsive to vibrations of a rotor to be balanced, a pair of pulse generating spark gap circuits each including a spark gap discharge path to said rotor and an electrode forming part of said path to release on discharge colouring matter to mark said rotor, a pair of peaking circuits connected with said vibration pick-ups and peaking signals

therefrom and connected with said pulse generating spark gap circuits to trigger same for pulse discharge across said spark gap discharge paths coincident with signal peaks from said vibration pick-ups, a cathode ray tube, and cir-



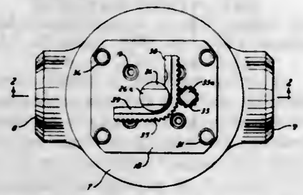
cuits applying signals from said vibration pick-ups to one set of cathode ray tube beam control means and pulses from said peaking circuits to another set of cathode ray tube beam control means.

2,748,604
UNIVERSAL POWER SUPPLY
Emil Nemec, Ely, Iowa
Application October 29, 1952, Serial No. 317,442
4 Claims. (Cl. 74—16)



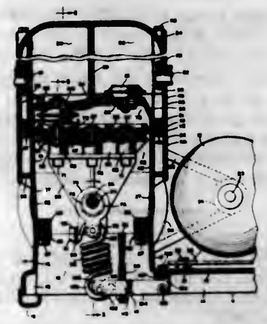
1. A universal power supply comprising a frame member, a driving means mounted on said frame member and adjustable relative thereto, an output shaft connected to said driving means, a pulley mounted on said output shaft, a transmission mounted on said frame member, an input shaft connected to said transmission, a second pulley attached to the input shaft of said transmission, a flexible belt passing over the first and second pulleys, an output shaft extending from said transmission, a torque limiting clutch attached to the output shaft of said transmission, a first sprocket mounted on the output shaft of the transmission, a gear box mounted on said frame member, an input shaft mounted in said gear box, a second sprocket mounted on the input shaft of said gear box, a chain connecting the first and second sprockets, a pair of output shafts extending from said gear box and means for moving said driving means relative to said frame member.

2,748,605
MECHANICAL MOVEMENT FOR CONVERTING ROTARY MOVEMENT TO LINEAR, THEN ROTARY, THEN REVERSE LINEAR MOVEMENT
Herbert Allen and Madden T. Works, Houston, Tex., assignors to Cameron Iron Works, Inc., Houston, Tex., a corporation of Texas
Application May 1, 1950, Serial No. 159,202
21 Claims. (Cl. 74—22)



1. An actuator mechanism for a valve of the type having a plug valve member mounted in a valve body for rotation and limited endwise movement on a common axis, comprising, a stem, a rack and pinion drive means, and drive parts between the stem and rack for actuating the stem upon rotation of the pinion to impart to the stem both rotation and straight line movement, said drive parts including oppositely inclined cams on the rack which first impart straight line movement to the stem in one direction and then in the opposite direction upon continued rotation of the pinion in one direction.

2,748,606
MECHANICAL MOVEMENT
Nelson F. Cornelius, Anoka, Minn., assignor to The Cornellus Company, Minneapolis, Minn., a corporation of Minnesota
Application November 30, 1951, Serial No. 259,217
6 Claims. (Cl. 74—49)



1. In combination, a supporting structure, a reciprocable member mounted for reciprocation therein, a connecting rod, connecting means connecting said member to said connecting rod and causing said member and connecting rod to travel in unison, a connecting rod bearing in the outer end of said connecting rod, a crank shaft bearing in said supporting structure, crank means including a crank shaft journalled for rotation in said crank shaft bearing, said crank means having a crank member eccentric with the axis of said crank shaft and journalled in said connecting rod bearing, said connecting rod bearing having a thrust portion by means of which the thrust created by the crank member is transmitted to the connecting rod, said crank member when moving on one side of the axis of the crank shaft engaging said thrust portion of the connecting rod bearing and giving to the reciprocable member an advancing stroke and when moving on the other side of said axis giving to said member a return stroke, and a spring connected to said connecting rod at the locality of the bearing therein and to said supporting structure at a locality to urge the thrust portion of the connecting rod bearing into engagement with the crank member on the return stroke to maintain said portion of said bearing in engagement with the crank member throughout the movement of the crank member to eliminate pounding between the connecting rod bearing and crank member upon reversal of the stroke of said reciprocable member.

2,748,607
VIBRATOR
Karl Axel Sam Karlström, Gavle, Sweden
Application February 19, 1953, Serial No. 337,848
Claims priority, application Sweden March 4, 1952
9 Claims. (Cl. 74—61)

1. A vibrator comprising, in combination, a vibratory body, a cantilever rod carried at one end in said vibratory body and having a bearing head at its opposite end, a sleeve-shaped rotary member surrounding said rod and ar-

ranged to swing as a conical pendulum about the longitudinal axis of said rod while being supported by said bearing head as a swinging center, a roll race firmly connected with the vibratory body, said rotary member in-



cluding a sleeve-shaped roll body arranged to roll on said roll race while undergoing a planetary motion about the axis of the cantilever rod, and a shaft coupling provided on the rotary member near the swinging center thereof.

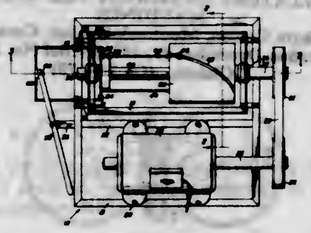
2,748,608
MECHANISM FOR THE OPERATION OF FREELY MOVABLE VIBRATING SCREENS
Walter J. Riley, Kenmore, N. Y., assignor, by mesne assignments, to S. Howes Co., Inc., Silver Creek, N. Y., a corporation of New York
Application July 15, 1954, Serial No. 443,514
7 Claims. (Cl. 74—61)



1. A mechanism operative upon the rotary kinetic imbalance principle for effecting the operation of freely movable vibrating screens which comprises, in combination: a single integral supporting element having a body portion of plate-like form, a single pedestal co-planar with, projecting from and integral with the body portion, the pedestal having an attachment base, a gear casing integral with the body portion and having walls located at opposite sides of the body portion in parallel planes which are also parallel to the plane of the body portion and transverse walls connecting the parallel walls to the body portion, the parallel and transverse walls defining a gear chamber, each of the parallel walls being formed with a laterally outwardly projecting open ended cylindrical extension, the extensions being in mutually offset relation, a shaft arranged within each extension and having a portion projecting beyond it, the shafts having their axes in parallel relation and the extensions being each concentric to the associated shaft, a spur gear carried by each shaft, the spur gears being positioned in meshing relation in the gear chamber, bearings for the shafts fitted in and supported by the respective extensions, and two weight elements positioned at opposite sides of the supporting element, and respectively mounted on the shafts for rotation therewith, one of the shafts being power driven and serving through the spur gears to drive the other, the supporting element being positioned between the weight elements and the weight elements each having its center of mass in a plane which passes between the transverse limits of the bearings for the associated shaft.

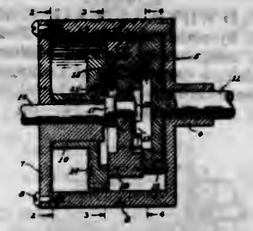
2,748,609
VARIABLE VIBRATOR
Otmer L. Olson, Jackson, Minn.
Application November 29, 1954, Serial No. 471,613
5 Claims. (Cl. 74—61)

1. A variable vibrator comprising a mounting frame, a vibrating frame resiliently suspended from said mounting frame, a shaft journaled in said vibrating frame, drive means for driving said shaft carried by said mounting frame, a drum mounted on said shaft for rotary movement relative thereto, a first weight secured in said drum eccentrically disposed relative to the axis of rotation of said drum, a second weight secured to said shaft eccentrically disposed relative to the axis of rotation of said shaft, and adjusting means for rotating said drum rela-



tive to said shaft and to hold said drum in an adjusted position carried by said mounting frame and engaging said drum, said means including spiral bars secured to the outer face of said drum, fingers engaging said bars, a slidable collar slidably mounted on said shaft, arms carried by said collar, said fingers being secured to said arms.

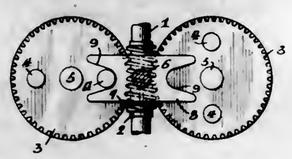
2,748,610
SPEED-DOUBLING POWER TRANSMITTING DEVICES
De Wolf Schatzel, North Baltimore, Ohio
Application January 26, 1953, Serial No. 333,217
2 Claims. (Cl. 74—69)



1. A power transmitting device comprising a rotatably mounted driving shaft; a driving rotor rigidly mounted on said driving shaft; an auxiliary rotor rotatably mounted with its axis parallel to but displaced from the axis of said driving rotor; a driven shaft rotatably mounted with its axis parallel to, in the same plane as, and midway between the axes of said driving rotor and said auxiliary rotor; a crank pin rigidly mounted on said driven shaft with its axis parallel to the axis of said driven shaft but displaced therefrom by a distance equal to one-half the distance between the axes of said driving rotor and said auxiliary rotor; a coupling rotor situated between said driving rotor and said auxiliary rotor and journaled on said crank pin; a first pair of integral, radially extending, diametrically opposed guide ribs projecting from the face of said driving rotor adjacent to said coupling rotor; a second pair of integral, radially extending, diametrically opposed guide ribs projecting from the face of said auxiliary rotor adjacent to said coupling rotor; a first pair of radially extending, diametrically opposed guide grooves situated in the face of said coupling rotor adjacent to said driving rotor and slidably engaging said first pair of guide ribs; and a second pair of radially extending, diametrically opposed guide grooves situated in the face of said coupling rotor adjacent to said auxiliary rotor and slidably engaging said second pair of guide ribs, said second pair of guide grooves being located in quadrature with respect to said first pair of guide grooves; said rotors thereby cooperat-

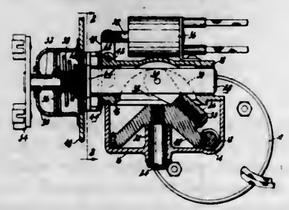
ing to impart to said driven shaft an angular velocity twice that of said driving shaft when said driving shaft is caused to rotate by external means.

2,748,611
OSCILLATING MOVEMENT FOR WASHING MACHINES
Pierre Casson, Montreal, Quebec, Canada
Application December 19, 1952, Serial No. 326,813
2 Claims. (Cl. 74—70)



1. An oscillating mechanical movement comprising a shaft, a worm thereon, a pair of gears meshing with said worm at opposite sides whereof and in one plane, a pair of pins on corresponding surfaces of said gears and alined diametrically on each surface at opposite sides of the center thereof, a shaft adjacent to the meshing area of said worm and perpendicular to said surfaces, and an arm on said last named shaft, extending over said surfaces and being V-forked at both ends for receiving said pins individually on rotation of said gears, whereby said arm and its shaft are oscillated.

2,748,612
WINDSHIELD WIPER ACTUATING MECHANISM
John B. Dyer, Syracuse, and Walter D. Harrison, Rochester, N. Y., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application February 19, 1953, Serial No. 337,862
17 Claims. (Cl. 74—70)



1. Windshield wiper actuating mechanism including in combination, a rotatable driving member, a driven member, means interconnecting said driving and driven members constructed and arranged to impart oscillation to said driven member upon rotation of said driving member, an oscillatable driven element, and means interconnecting the oscillatable driven member and the oscillatable driven element constructed and arranged to effect variation in the amplitude of the oscillatory movement of said driven element.

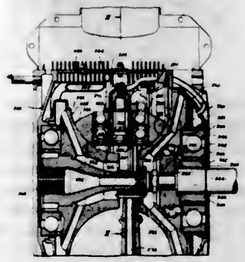
2,748,613
LEVER AND SLIDE MOTION CONVERTING MEANS WITH SLIDABLE CONNECTION
Lucien Guay, Lauzon, Levis, Quebec, Canada
Application November 8, 1951, Serial No. 255,396
1 Claim. (Cl. 74—104)

In a device of the character described, a pair of pressure liquid actuated double acting power motors disposed in spaced alignment, two axially aligned piston rods projecting from said motors towards each other, said piston rods being threaded at their outer adjacent ends, a common block of rectangular shape threadedly connected to the outer end of said piston rods, said block having a bore, a bolt rotatable within said bore and projecting therefrom at both ends, two guiding elements in the form of channel members threadedly connected to the projecting ends of said bolt, a pivotally mounted member to be oscillated, two vertically superposed arms secured to said last named member and slidably inserted in said guiding



elements for actuation thereby, a channel bolted to said common block, a stationary guide member secured to said power motors and extending parallel to said piston rods, said channel slidably engaging said guide member, and retaining plates bolted to said guiding elements over said arms to prevent disengagement of said arms from said guiding elements.

2,748,614
VARIABLE SPEED TRANSMISSION
Zenas V. Weisel, Los Angeles, Calif.
Application June 23, 1953, Serial No. 363,606
11 Claims. (Cl. 74—200)

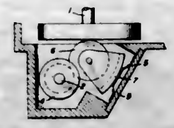


1. In a transmission, having a frame that rotatably mounts a pair of opposed axially-spaced coaxial driving and driven disc members: a conically profiled roller bridging said disc members; a thrust cup forming the shaft of said roller and having its open end facing radially outwardly; a thrust member connected at an end to said frame and having its radially inner end disposed within said cup; a bearing encircling said cup, the outer portion of said roller rotating about said bearing; a control arm rigidly secured to the upper portion of said cup for effecting tilting thereof; an axially extending bore formed through said thrust member; a groove formed in the outer portion of said cup and extending axially therealong; means for conducting a cooling fluid to the radially outer portion of the bore formed in said thrust member; and, a passage formed through said arm and connected to said groove whereby a cooling fluid may be forced through said bore, groove and passage without contacting said members.

2,748,615
TRANSMISSIONS OF MOTION BETWEEN DRIVING AND DRIVEN SHAFTS IN CINEMATIC DEVICES
Umberto Nistri, Rome, Italy
Application November 1, 1950, Serial No. 193,443
Claims priority, application Italy November 3, 1949
1 Claim. (Cl. 74—209)

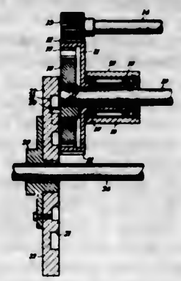
A kinematic transmission between a driving shaft and a driven shaft both of which have discs thereon, said transmission comprising a satellite disc having a traction periphery engaging the disc on the driven shaft and the disc on the driving shaft, a support rotatably mounting

said satellite disc, a housing for the satellite disc and support, said housing including a pair of walls having spaced parallel inner surfaces lying in planes perpendicular to the axis of rotation of the satellite disc, said support having opposite side surfaces thereof slidably engaging said inner wall surfaces to mount said support for two-dimensional freedom of movement in said housing



in a plane perpendicular to the axis of rotation of the satellite disc, a member bridging the space between the two parallel spaced inner surfaces, and means to urge said support toward the discs on said driving and driven shafts, said means comprising a spring under compression between said member and the support whereby by removing said member the support and the satellite disc can be removed for replacement.

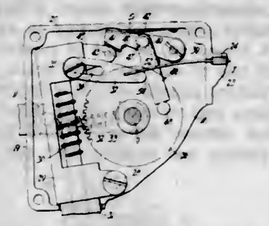
2,748,616
DRIVE MECHANISM FOR TEXTILE COMBING MACHINES
John Raymond Foster, Accrington, and Ronald Stuart Cartwright, Oldham, England, assignors to T. M. M. (Research) Limited, Rossendale, England
Application March 4, 1953, Serial No. 340,308
Claims priority, application Great Britain March 12, 1952
9 Claims. (Cl. 74—394)



1. In a textile combing machine of the type in which the detaching rollers are driven alternately in opposite directions of rotation, in combination, a detaching roller drive shaft, driving mechanism for the said detaching roller drive shaft comprising an input shaft mounted independently of the detaching roller drive shaft, a freely rotatable internally toothed annulus, gearing connecting said annulus to drive said detaching roller drive shaft, a bearing member fixed on but eccentric to the input shaft, a planet wheel freely rotatable on said eccentric bearing member, so that on rotation of the input shaft, the planet wheel rolls around the interior of the annulus, and cam means having a cam surface which is out of phase relationship with the said eccentric bearing member and engaged with said planet wheel to impart to the planet wheel a periodic oscillatory component of motion about its own axis, sufficient in magnitude to vary periodically the speed and direction of rotation of the detaching roller drive shaft.

2,748,617
WINDSHIELD CLEANER DRIVE
Raymond Deibel, East Aurora, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y.
Application January 19, 1951, Serial No. 206,900
12 Claims. (Cl. 74—405)

1. In a windshield cleaner including an oscillatable wiper and a rotary drive therefor, transmission means for operatively connecting said wiper to its drive and including meshing gears, a movable support for one of said gears enabling displacement of one gear from the



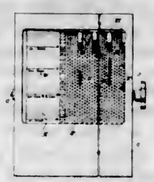
other, and preset parking means operable by the driven one of said gears for moving said support to arrest the wiper in a predetermined position.

2,748,618
SECTIONAL GEARS
Henry Y. Lee, Honolulu, Territory of Hawaii
Application April 9, 1953, Serial No. 347,711
4 Claims. (Cl. 74—439)



1. A sectional gear comprising a pair of similar and cooperative centrally apertured gear elements assembled about a rotatable shaft with the adjacent ends of their respective teeth aligned and in close contact with each other; the outer faces of said gear elements having centrally disposed recesses; and means seating in said recesses for clamping said gear elements to each other and to said shaft, each of said gear elements being peripherally undivided.

2,748,619
PERFORATED DRUM CONTROL FOR AUTOMATIC WASHING MACHINES
William C. Glover, Jr., Wildwood Lakes, Lee's Summit, and William O. Manley, North Kansas City, Mo., assignors to Bill Glover, Incorporated, Kansas City, Mo., a corporation of Missouri
Application November 24, 1952, Serial No. 322,284
10 Claims. (Cl. 74—568)

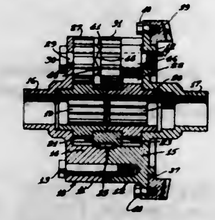


1. In a timer, a rotatable drum; a control element having a movable arm normally resting on the drum; a spring; and means at opposite extremities of the spring attaching the latter to said drum for engaging the arm to move the same away from the drum as the latter rotates.

2,748,620
DIFFERENTIAL
Otto R. Schoenrock, Oak Park, Ill.
Application February 27, 1953, Serial No. 339,292
3 Claims. (Cl. 74—711)

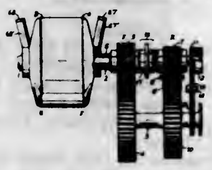
1. In a differential of the torque proportioning type, a casing journalled for rotation about a fixed axis, means

rotatably driving said casing, two aligned axle drive gears journalled coaxial with the axis of rotation of said casing for independent rotation with respect to each other, a plurality of circumferentially spaced differential pinions freely journalled within said casing in radially spaced relation with respect to the axis of rotation thereof and meshing with one of said axle drive gears, a plurality of differential pinions aligned with said first mentioned differential pinions and rotatably driven thereby, a plurality of differential pinions driven by said last mentioned differential pinions and meshing with the other of said



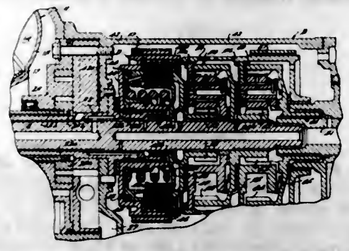
axle drive gears, said casing having opposite abutment faces facing each set of aligned differential pinions and jaw clutch means connecting the aligned of said differential pinions to rotate together, said jaw clutch means having engaging inclined clutch teeth, the faces of which are inclined at such angles as to form cams to axially move said aligned pinions with respect to each other into engagement with said abutment faces of said casing, when the torque on one axle gear is different from that on the other, and to increase the torque to the axle drive gear operating under high torque resistance.

2,748,621
POWER TRANSMISSION MECHANISMS
Harold Sinclair, Windsor, England
Application August 24, 1954, Serial No. 451,861
Claims priority, application Great Britain August 31, 1953
2 Claims. (Cl. 74—720)



1. A power transmission mechanism comprising a driven member, at least one first coupling the slip of which is controllable while the coupling is operating, said first coupling having its input element drivably connected to a driving member and its output element connected to said driven member via a first forward power transmission path, a further coupling having its input element drivably connected to a driving member, a second forward power transmission path, a reverse power transmission path, clutch means operable to couple the output element of said further coupling to said driven member selectively via said second forward path or said reverse path, said reverse path including a rotatable member which when said further coupling is coupled to said driven member via said forward path rotates in the opposite direction to the output element of said further coupling, and which requires to be clutched to said output shaft in order to connect said further coupling drivably to said driven member via said reverse path, characterized by means operable to enable angular movement of said driven member in the forward direction to effect angular movement of the output element of said further coupling in the same direction as said rotatable member to facilitate said clutching operation.

2,748,622
PLANETARY TRANSMISSION
Augustin J. Syrovy and William T. Dunn, Detroit, Mich., assignors to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application July 26, 1951, Serial No. 238,646
4 Claims. (Cl. 74—763)

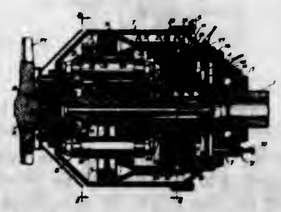


1. A power transmission unit comprising a housing rotatably mounting aligned input and output shafts, a clutch means mounted concentrically about said input shaft comprising a first clutch member having one end journaled on said gear box housing, a second clutch member drivingly connected to said input shaft and having portions thereof selectively engageable with said first clutch member for the transmission of drive therebetween, means to effect engagement of said first and second clutch members, first and second series arranged planetary gear trains mounted concentrically about said input shaft in axially spaced relationship, said first gear train comprising a first sun gear surrounding said input shaft and mounted on and drivingly connected to the other end of the first housing supported clutch member, an axially extending drum-like planet pinion carrier concentrically surrounding said input shaft and said first sun gear, said carrier having a first inwardly directed, radially extending wall portion journaled on said other end of the first housing supported clutch member and rotatably supporting a first set of planet pinion gearing that meshingly engages with said first sun gear, a first annulus gear arranged concentrically within said carrier and meshingly engaged with said first set of planet pinion gearing, said first annulus gear having a first portion drivingly connected to said input shaft and a second portion providing a second sun gear that surrounds said input shaft at a location spaced axially of the input shaft from said first sun gear, a second inwardly directed, radially extending wall portion of said drum-like planet pinion carrier rotatably supporting a second net of planet pinion gearing that meshingly engages said second sun gear, a second annulus gear arranged concentrically within said carrier and surrounding and meshingly engaging said second set of planet pinion gearing and having portions thereof drivingly connected to said output shaft, a third inwardly directed, radially extending wall portion of said drum-like planet pinion carrier rotatably mounted on said gear box housing, a first brake means selectively engageable with said housing supported first sun gear and a second brake means selectively engageable with said housing supported planet pinion carrier case.

2,748,623
ORBIT GEAR CONTROLLED REVERSIBLE PLANETARY TRANSMISSIONS
Henry C. Hill, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application February 5, 1952, Serial No. 270,008
11 Claims. (Cl. 74—768)

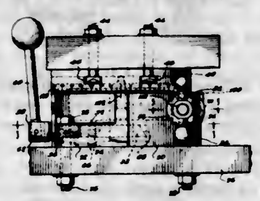
1. Transmission mechanism comprising an output shaft, an input shaft, a drive gear carried by said input shaft, a plurality of large satellite gears larger than said drive gear, carried by said output shaft and meshing

therewith, a small satellite gear smaller than, integral with and driven by each of said large satellite gears, a small controlled internal gear meshing directly with said small satellite gears, idler gears meshing directly with said small satellite gears, a large controlled internal gear larger than said small controlled internal gear and meshing with said idler gears, and control means operable to hold said small controlled gear against rotation while



said large controlled gear is free to be rotated by said small satellite gears and said idler gears, to coordinate rotation of said output shaft and said input shaft in the same direction, and alternatively operable to hold said large control gear against rotation while said small control gear is rotated by said small satellite gears, to coordinate rotation of said input shaft and said output shaft in relatively opposite directions.

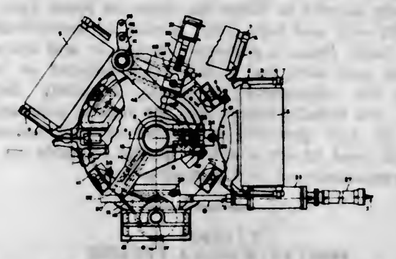
2,748,624
ROTARY TABLE
Otto A. Costello, South Bend, Ind., assignor to South Bend Lathe Works, South Bend, Ind., a corporation of Indiana
Application May 29, 1951, Serial No. 228,859
10 Claims. (Cl. 74—813)



1. In a rotary table for supporting a work piece, a hollow cylindrical base, an annular, upwardly facing, internal flange formed on the base, said flange being bounded by an upper wall and a thicker lower wall, said lower wall having radial bores, a table nested within said hollow cylindrical base between said walls, clamping shoes inserted in said radial bores in said lower wall, means to force said clamping shoes into frictional engagement with said table, and means to rotate said table.

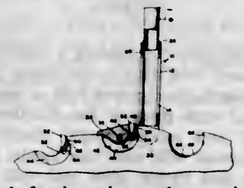
2,748,625
TURNTABLE MECHANISM
Robert W. Elms, Lakewood, Ohio, assignor to The Osborn Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application February 23, 1952, Serial No. 273,093
7 Claims. (Cl. 74—817)

1. In turntable mechanism comprising a turntable, a separate driving member mounted for oscillation about the same axis as said turntable, and means operative to oscillate said driving member; a plurality of evenly circumferentially spaced projections on said turntable, a radial guideway on said driving member, a slide reciprocable in said guideway radially outwardly into latching engagement with an adjacent said projection and radially inwardly out of engagement therewith, whereby said driving member and turntable may be turned together, lock means mounted on a fixed support for movement generally radially inwardly of said turntable to engage an adjacent said projection and outwardly to disengage the same, being thereby adapted to lock said turntable against rotation, an arcuate cam track generally centered on the axis of said turntable and adapted to engage said



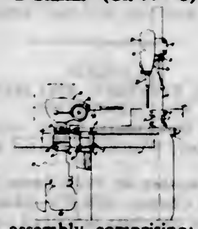
slide during oscillation of said driving member, and means operative to shift said arcuate cam track generally radially inwardly and outwardly to disengage and engage said slide with an adjacent projection in timed relation to locking and unlocking movement of said lock means.

2,748,626
SAW TOOTH WRENCH
Lavern V. Daugherty, Orofino, Idaho
Application June 8, 1955, Serial No. 513,937
5 Claims. (Cl. 76—80)



1. A wrench for inserting and removing semi-circular teeth in saws which comprises a handle having a head at one end thereof, said head being provided with a channel on the underside thereof, a lateral opening intersecting said channel, a pin movable into and out of said lateral opening, and means connecting said pin to said head both when it is inserted in said opening and when it is removed therefrom, said means comprising a guide pin laterally spaced from first pin and connected thereto by a spacing member, said guide pin being slidably positioned in a second opening in said head.

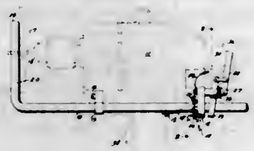
2,748,627
DRILL PRESS ASSEMBLY
Hans Goldschmidt, Atherton, Calif., assignor to Magna Engineering Corporation, San Francisco, Calif., a corporation of California
Application November 21, 1952, Serial No. 321,779
1 Claim. (Cl. 77—5)



A drill press assembly comprising: a work supporting table having parallel upper and lower faces and provided with holes extending through said faces, a base block having right angularly disposed flat surfaces, each of said surfaces having holes therein arranged to match with selected holes in said table faces and having a bore parallel to one of said surfaces and perpendicular to the

other, said base block being secured to said table with one of said surfaces abutting one of said table faces with said holes in matched relation, and means cooperating with said matched holes removably securing said block to said table whereby said block may be selectively secured to either the upper or lower face of said table with said bore either parallel or perpendicular to said table faces, a column mounted in and extending from said bore, and a drill head mounted on said column for adjustment therealong, angularly therearound, and radially thereto and for angular adjustment about an axis generally transverse to said column, said drill head having a rotary spindle rotatable on an axis perpendicular to said transverse axis.

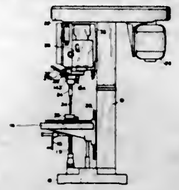
2,748,628
PORTABLE DRILL FEEDER
William C. Mason, Slingerlands, N. Y.
Application April 12, 1952, Serial No. 281,949
6 Claims. (Cl. 77—7)



1. A device adapted for feeding a motor driven drill into a work piece; said device comprising an elongated rod having an angularly disposed foot at one end thereof for engaging said work piece on the side thereof opposite said drill; first and second single clutch rings only, adapted to cooperate with said rod; means for attaching said device to said motor with said rod substantially parallel to the axis of said drill, including a separate front guide bearing and a rear guide bearing frame, respectively attachable, individually and in spaced relation, to the front and rear of said motor, in which said rod is axially slidable to move said foot towards and away from said drill; resilient means, including a fulcrum element and spring member mounted on said bearing frame on opposite sides of said rod, cooperatively connected with the first of said single rings and normally automatically holding it in a position to prevent relative movement of said foot and drill away from each other while allowing relative movement thereof towards each other; a second fulcrum element mounted on the other side of said frame; and a manually-actuated lever pivotally mounted on the end of said second fulcrum element, and cooperating with the second of said single rings by means of a link pivotally connecting said lever and second single ring for moving it into clutching relation with said rod to move said foot and drill towards each other.

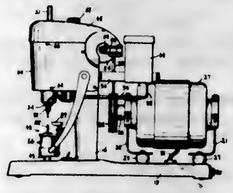
2,748,629
HYDRAULIC CONTROL MECHANISM FOR MACHINE TOOLS
Eric J. Hirvonen, Shrewsbury, Mass., assignor to Leland-Gifford Company, Worcester, Mass., a corporation of Massachusetts
Application October 30, 1950, Serial No. 192,864
22 Claims. (Cl. 77—32.4)

1. Apparatus of the class described comprising a tool head, means to reciprocate the same including a cylinder and piston, hydraulic means to operate the piston, a main control valve therefor, means to move the valve through a cycle including a valve actuator, hydraulically responsive means to move the valve actuator to move the valve to reverse upon predetermined increase in hydraulic pressure demand to feed the piston, mechanical means associated with the valve actuator to move the latter and valve to slow feed position, and slip block means on the head to move the mechanical and the hydraulic means to an advance position of the valve, said mechanical means comprising a movable control block, a cam guide



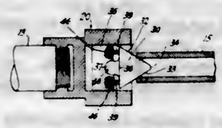
surface on the control block, an arm movable by said surface according to movement of the control block under influence of the slip block, the arm being connected to the valve actuator, said slip block moving the control block in the same direction at each reciprocation of the head.

2,748,630
DRILLING MACHINE
Oscar W. Dillon, Sturbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Application December 31, 1952, Serial No. 329,009
13 Claims. (Cl. 77—63)



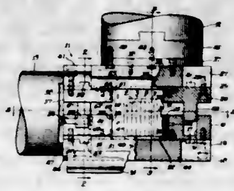
1. A lens drilling machine comprising the combination of a base having a drill support and a work support thereon, one of which supports is mounted for movement along a predetermined axis toward and away from the other support, said work support comprising a chuck-receiving portion and an anvil, a separate removable chuck adapted to support a lens to be drilled and having attachment means on one side thereof shaped to fit with means located in predetermined position on said chuck-receiving portion and having similar attachment means on its opposite side shaped to fit with said means so as to be located in said predetermined relation on said chuck-receiving portion for presenting the opposed side surface of the lens to said drill support, said chuck having lens gripping and locating elements for retaining a lens in such a position that when said chuck is mounted on said work support the intermedial plane of the lens adjacent the side to be drilled will be located substantially normal to the predetermined axis of movement of said movable support, said chuck-receiving portion being normally held under spring tension whereby a lens will normally be spaced from said anvil and being movable under pressure whereby said lens will be brought into engagement with said anvil, said anvil being substantially in axial alignment with the said drill support for engagement with and for supporting the portion of the lens in which the hole is to be formed, said chuck further being provided with stop means adapted to be engaged by the edge of said lens, said stop means being adjustable longitudinally of said chuck to a selective spaced relation to said anvil for controlling the distance from the edge of the lens at which the hole is to be drilled, and operating means connected with said movable support for moving same toward the other of said supports whereby a drill carried by said drill support will form a hole in said lens.

2,748,631
TUBE END SHAPING APPARATUS
Oliver A. Neale, Beaver Falls, Pa., assignor to The Babcock & Wilcox Company, Jersey City, N. J., a corporation of New Jersey
Application February 11, 1952, Serial No. 270,930
3 Claims. (Cl. 77—73)



1. Tube end shaping apparatus comprising, in combination, a rotatable chuck constructed and arranged to be secured to driving means and having a slot therein in an axial plane; a substantially rectangular plate-like tool holder having a snug fit in said slot; a substantially triangular plate-like inside diameter chamfering tool having its base portion extending partially into said slot and having cutting edges on the sides of the triangle and a trunnion projecting from the triangle base and pivotally engaged in said tool holder, the triangle being substantially coplanar with said tool holder and rockable in an axial plane; and a pair of resilient means disposed between the outer edge of the tool holder and the triangle base on either side of the trunnion biasing said inside diameter chamfering tool to a position centered on the spindle axis; said tool having a thickness slightly less than the distance between the longer sides of the slot to provide play for the tool axially of the trunnion.

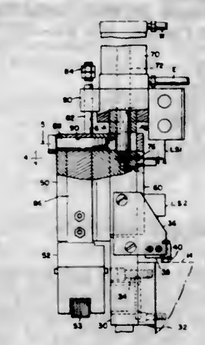
2,748,632
DIE FOR COMPRESSING A METAL BAND ABOUT A GROUP OF LEAF SPRINGS
Richard De Groot, Highland, Ind., and Tony J. Kratochvil, Calumet City, Ill., assignors to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application May 9, 1951, Serial No. 225,424
5 Claims. (Cl. 78—78)



1. In a die for compressing a solid rectangular metal band around a group of leaf springs, means including a pair of carriages to engage and apply compressive forces against the end walls of the band, and a plurality of formers to engage and apply compressive forces against the side walls of the band, said formers being arranged in pairs, one pair of formers being mounted for relative reciprocative movement, and the other pair of formers being mounted for relative reciprocative movement in one plane and common reciprocative movement in another plane.

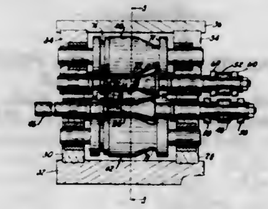
2,748,633
THREAD ROLLING ATTACHMENT
Leo W. Bedker, East Detroit, Mich., assignor of one-half to Emma G. Bedker, East Detroit, Mich.
Application November 27, 1950, Serial No. 197,735
1 Claim. (Cl. 80—6)

A thread rolling attachment for a machine tool having a movable tool support comprising a support body adapted to be bolted to one surface of said tool support, spaced brackets extending from said support body overlying a second surface of said tool support, a member spanning said brackets, and an adjustable brace carried by said



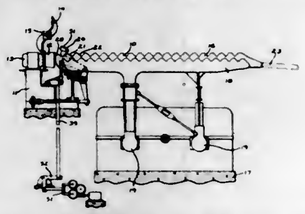
member and engageable with said second surface of said tool support, a slide on said support body, means on said slide for mounting a thread rolling fixture, and hydraulic means on said support for reciprocating said slide thereon.

2,748,634
APPARATUS FOR CONTOUR ROLLING
Roland P. Koehring and Carl E. Wilkens, Dayton, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 10, 1952, Serial No. 281,554
1 Claim. (Cl. 80—23)



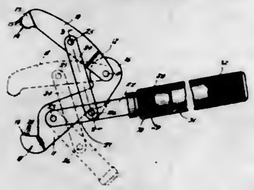
Apparatus for contour rolling cold porous metal articles of the approximate size and shape to the exact size and shape desired, comprising in combination; three rotatable contour rolls, two of said rolls being permanently mounted against any displacement and a third roll mounted for vertical displacement with respect to the other two rolls, gearing associating all three rolls for concomitant rotation, said gearing including a pair of gears movable during vertical displacement of said third roll for keeping all three rolls in geared relation at all times, three backup rolls, one being provided for each of said contour rolls and disposed on a line drawn through the axis of each of said contour rolls and the axis of the part to be contoured, a flange at one end of the displaceable roll adapted to continuously engage an abutting flange on the backup roll therefor for preventing lateral displacement of said displaceable roll, a second flange on the opposite end of said displaceable contour roll continuously engaging the groove in the backup roll therefor for aiding in preventing lateral displacement thereof and flanges in each of said permanently mounted contour rolls continuously riding in grooves in their respective backup rolls whereby the contour rolls are held against lateral displacement and in proper vertical alignment at all times.

2,748,635
COOLING BED
Myles Morgan, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a corporation of Massachusetts
Application March 29, 1952, Serial No. 279,312
10 Claims. (Cl. 80—42)



1. A mechanism for use in packing bars, comprising: a packing arm having a bar-contacting member at one end thereof, a first link, a rotatable shaft to which one end of the link is keyed, the end of the packing arm opposite the bar-contacting member being pivotally mounted on the end of the link opposite the shaft, a second link one end of which is keyed to the said shaft, a block in which the other end of the second link is mounted for relative rotation about an axis longitudinal of the said second link, a clevis in which the said block is pivotally mounted for rotation on an axis which is displaced from the said axis of rotation of the second link and which is so related to the said axis of rotation of the second link that the projection of one axis onto a plane in which the other axis lies is at a right angle to the said other axis, a second shaft capable of longitudinal motion relative to the packing arm, the said clevis being pivotally connected to said shaft, the longitudinal motion of the second shaft causing a transverse movement of the pivotal axis of the packing arm.

2,748,636
GRIPPING DEVICE HAVING A PIVOTED ACTUATING HANDLE
Lewis L. Busby, Bremerton, Wash.
Application July 20, 1953, Serial No. 368,948
1 Claim. (Cl. 81—3)



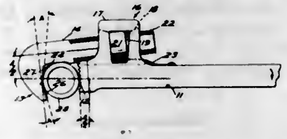
A device of the character described comprising a pair of coplanar and opposed elongated jaws pivotally secured to each other at their rear ends for movement of their outer ends toward and away from each other about a pivot axis and in paths containing a common plane, longitudinal axes of said jaws intersecting at said pivot axis; gripping faces on the outer ends of said jaws; the gripping face of one jaw having laterally extending teeth arranged in a convex substantially 180° arc having its chord extending parallel to the longitudinai axis of said one jaw; the gripping face of the other jaw being disposed on a plane perpendicular to said common plane and intersecting the longitudinal axis of said other jaw at a substantially 45° exterior angle; a handle pivotally connected at one end to said other jaw for swinging movement in a path containing said common plane and about an axis located closer to said planar gripping face than to said pivot axis; and a link pivotally connected at one end to the handle on an axis perpendicular to said common plane and located between said one end of the handle and a free end of the handle, said link being pivotally connected at its other end to said one jaw on an axis perpendicular to said common plane and located intermediate the length of said one jaw.

2,748,637
POWER HAMMER ACTUATED SHEET METAL RESHAPING TOOL
Robert N. Ferguson, Flint, Mich., assignor to H. K. Porter, Inc., Somerville, Mass., a corporation of Massachusetts
Application January 28, 1954, Serial No. 406,779
2 Claims. (Cl. 81—15)



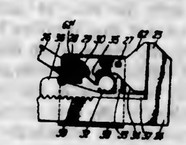
1. A tool for reshaping deformed portions of metal panels adapted for assembly with a power hammer to be manhandled therewith as a portable unit and comprising solely a base having means for assembling it with such a hammer, an elongate tube substantially rigid under manually applied stress extending from the base, being free from any peripheral obstructions and comprising a proximal portion which merges smoothly into an arcuate, laterally deflected distal portion and a rod received loosely within the bore of the tube and following the contour of the same, the rod having a proximal portion to extend therefrom as an anvil to be presented to the reciprocating hammer element proper and a distal end to project beyond the distal end of the tube and providing a peen movable under the hammer strokes in a path transverse to the axis of the shank portion.

2,748,638
ROCKABLE OUTER-JAW WRENCH HAVING ANGULARLY RELATED PIPE-GRIPPING SURFACES
Willard H. Walker, Newark, Calif.
Application November 8, 1952, Serial No. 319,514
3 Claims. (Cl. 81—101)



2. An improved pipe wrench comprising a flat stationary jaw having transverse serrations therein, a main shank connected to and extending from said stationary jaw, said jaw forming an acute angle with a line perpendicular to a longitudinal axis of said shank, a movable jaw disposed opposite said stationary jaw and including a shank, said movable jaw including a pair of transversely serrated surfaces disposed at equal acute angles to a line perpendicular to a longitudinal axis of said movable shank to include an obtuse angle therebetween, said movable shank being mounted upon said main shank for movement therealong to vary the separation of said jaws and for rocking movement through an angle equal to the acute angle between said movable jaw line and either of said serrated surfaces from a first limiting position disposing said movable jaw line parallel to said stationary jaw to a second limiting position disposing that movable jaw serrated surface which is located furthest from said movable shank parallel to said stationary jaw.

2,748,639
RACK-AND-CAM OPERATED LOCKING MEANS FOR THE SLIDABLE JAW OF A SLIDABLE INNER JAW WRENCH
Alfred Hufschmid, Zurich, Switzerland
Application June 29, 1954, Serial No. 440,204
4 Claims. (Cl. 81—143)



1. A slidable inner jaw wrench comprising a combined handle and fixed jaw support, the handle having a rack bar along a portion of its inner edge; a slidable unit including a sleeve, a confronting slidable jaw, a toothed slidable rack catch, a pivoted lever and a spring-bias means for the rack catch; the slidable jaw having an axially aligned supporting stem portion in overlying relation to the rack catch; the stem portion having an arcuate cavity in which is seated a partially rotatable cam member; the pivoted and proximate end of the lever being provided with a mating but off-center cam surface, whereby swinging movement of the lever toward the handle will cause the engaged cam surfaces to disengage the rack catch from the rack bar and simultaneously tend to wedge the slidable jaw into firm engagement with the workpiece placed between the jaws.

2,748,640
DEVICE FOR OPERATING VALVES
John M. Alexander, Hamden, Conn.
Application May 12, 1954, Serial No. 429,325
2 Claims. (Cl. 81—175)



1. A wrench designed for actuating the valve of an oxygen tank comprising a sector-shaped plate having a hollow handle portion extended rearwardly therefrom, the major cross-sectional area of said handle portion lying below the plane of said plate; an angularly offset flange portion on said plate provided with a configuration for nesting against a corresponding configuration of the hand wheel of the valve, an adjustable screw clamp mounted in the hollow handle portion, in opposition to the flange portion of the plate, whereby the spacing between the flange portion of the plate and the face portion of the screw clamp may be adjusted to actuate valves having variable size hand wheels.

2,748,641
HOLDING MEANS FOR THE REMOVABLE JAW OF A SLIDABLE OUTER JAW WRENCH
Mario Calello, Dedham, Mass., assignor to St. Pierre Chain Corporation, Worcester, Mass., a corporation of Massachusetts
Application November 4, 1954, Serial No. 466,710
5 Claims. (Cl. 81—180)



5. A connection construction for securing a recessed part to a part having a central extending portion to seat in the recess comprising a threaded aperture at each side of the recess, a threaded fastener in each aperture, an inwardly extending end on each fastener, the said central portion having a hole therethrough, said fastener ends entering the hole at the ends of the latter, said hole and apertures being mis-aligned in seated condition of the parts, the extending fastener ends forcing the parts together in tight relation.

2,748,642
DEVICE FOR RETOUCHING PROFILED PULLEYS
Ignaz Pirkner, Graz-Andritz, Austria, assignor to Maschinenfabrik Andritz Actiengesellschaft, Graz-Andritz, Austria
Application January 4, 1951, Serial No. 204,305
Claims priority, application Austria January 7, 1950
7 Claims. (Cl. 82—7)

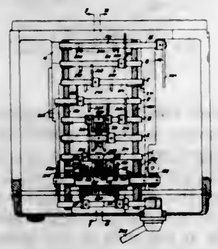


1. Means for re-machining the rope groove of profiled pulleys comprising a base disposable adjacent a rotatable pulley the rope groove of which is to be remachined, crossed slides supported on said base, a tracer means carried by one of the slides and including angularly related contact surfaces contactable with the pulley groove at symmetrically related regions on opposite sides of the apex of the groove, means for moving the slides toward and maintaining the tracer means in contact with the pulley groove including separate means applying force to the tracer means in at least two directions so that the tracer means follows the contour of the pulley groove regardless of radial or lateral deformations, a tool means, tool carrying saddle means mounted on said crossed slides for any movement in a plane parallel to the plane of movement of the tracer means, said tool means being directed toward the periphery of the pulley and separate means for moving the tool respectively toward and transversely of the rope groove, independent of the movement of said crossed slides.

2,748,643
SPEED CHANGE TRANSMISSION, ESPECIALLY FOR TOOL MACHINES AND MORE PARTICULARLY A FEED TRANSMISSION OF A LATHE
Josef Irtenkauf, Goppingen, Wurttemberg, Germany, assignor to Gebr. Boehringer G. m. b. H., Goppingen, Wurttemberg, Germany, a limited liability company of Germany
Application May 1, 1951, Serial No. 223,882
9 Claims. (Cl. 82—21)

3. In a speed change transmission including a plurality of members individually shiftable along parallel axes, the

combination comprising a rotary drum mounted to be rotatable about an axis parallel to said axes and composed of a non-shiftable part and of two axially shiftable parts connected with said non-shiftable part for common rotation, a plurality of shiftable rods extending parallel to said drum and distributed thereabout, each of said rods being co-ordinated to one of said members and connected therewith for common shifting motion, means fixed to



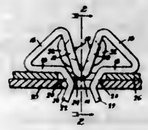
said non-shiftable part of said drum and adapted, depending on the angular position of same, to engage or disengage said rods, projections on said shiftable parts of said drum adapted to selectively engage such rods as are released for shifting motion, and means co-ordinated to said shiftable parts of said drum and co-operatively connected therewith for shifting same to thereby shift said released rods.

2,748,644
STRINGED MUSICAL INSTRUMENT
John W. McBride, Burbank, Calif., assignor to Bantar, Incorporated, Burbank, Calif., a corporation of California
Application February 15, 1952, Serial No. 271,737
7 Claims. (Cl. 84—315)



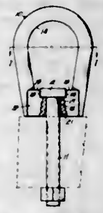
1. In a stringed musical instrument: a body having an elongate slot; a tensioned string mounted along said body and extending parallel to said slot; a roller structure between said string and said body and movable in a direction longitudinally of said string; a member extending longitudinally of at least a portion of said string, said member being secured to said roller structure; means mounting said member for longitudinal movement for selectively positioning said roller structure with respect to said string; said mounting means including a pair of elements about which said member extends, one of said elements being rotatable; an operating arm manually manipulatable by the user and pivotally mounted on the body, said arm extending above the body and along the slot, the free end of said arm extending within the body and being angularly movable within the slot; stop means engageable with the arm to limit outward movement of the arm from the body, said arm when engaging the stop means having a substantial portion of its length inclined upwardly away from the body; a connection between said arm and said rotatable element for moving said roller structure longitudinally of said string in accordance with the position of said arm, comprising a flexible element having one end secured to said arm, and having the other end secured to said rotatable element at a place displaced from the axis of movement of said rotatable element; and resilient means urging the arm in a direction to engage said stop means.

2,748,645
BENDABLE SHEET METAL WEDGING FASTENER
Roy E. Peckham, Detroit, and Edwin F. Elms, Roseville, Mich., assignors to Robert L. Brown, Ferndale, Mich.
Application January 4, 1955, Serial No. 479,773
1 Claim. (Cl. 85—6)



A malleable sheet metal fastener for insertion into a hole through a panel, said fastener being a single strip of sheet betal bent along a transverse line at its mid-portion forming a V section, the outer ends of the legs of the V being bent outwardly and downwardly, inwardly extending base portions integrally with said outwardly and downwardly extending portions and substantially in a common plane with the base of said V section, the adjacent free ends of said base portions being bent downwardly and convergently toward each other and then outwardly in divergent relation, the convergent and divergent portions being freely insertable in the hole of the panel, and depressed portions in the legs of the V portion extending outwardly toward the outwardly and downwardly extending portions.

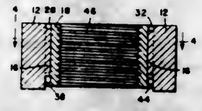
2,748,646
SEPARABLE EYE FOR A BOLT
William Harold and William Bilyk, St. Louis, Mo.
Application September 13, 1952, Serial No. 309,428
1 Claim. (Cl. 85—9)



A material handling eye-bolt comprising a relatively thick base provided with a vertical bolt receiving bore and a bail-shaped yoke having its ends integral with said base at diametrically opposite sides of said bore, said base having a flat upper surface provided between the ends of said yoke with a bolt head receiving channel extending at right angles to the plane of the yoke and affording a pair of spaced parallel vertical shoulders adapted to engage diametrically opposite sides of a bolt head, the wall of said bore having diametrically opposite portions at the respective upper and lower regions of the bore provided with outwardly inclined surfaces substantially parallel with each other and disposed in a plane at right angles to the axis of said yoke, each of said inclined surfaces spanning substantially half the circumference of the bore and extending substantially half the thickness of said base, whereby to afford clearance for insertion and removal of a bolt in said bore while maintaining the bolt in supportable engagement with the straight wall portions of the bore when the bolt is installed.

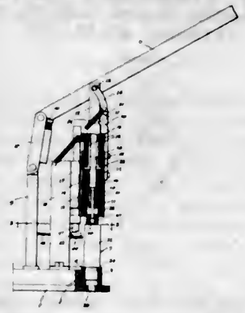
2,748,647
SECTIONAL QUICK RELEASE NUT AND RETAINER THEREFOR
Albert Charles Notturno, Hewlett, N. Y.
Application August 12, 1952, Serial No. 303,967
3 Claims. (Cl. 85—33)

1. A nut comprising an outer core retainer member adapted to be rotated by a suitable tool, an internally threaded inner core member comprising a plurality of partly cylindrical portions each having complementary internal threads, said outer core retainer member having a plurality of internal keys extending parallel to its longitudinal axis, each key stopping short of the top and bottom of the core retainer, each inner core portion having an externally flanged rim at one axial end thereof, an axially extending abutment depending from one end of said rim, a notch in said rim adjacent said abutment, a recess in the other end of said rim through which a core retainer key may pass to below the rim, and an externally projecting flange at the other axial end thereof, whereby said core portions



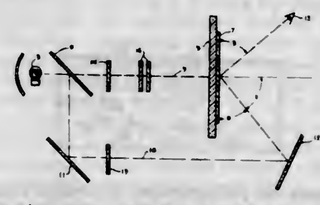
may be placed about a threaded member and the core retainer may be placed about said core portions by passing said core retainer keys through said rim recesses, then rotating said core retainer to bring its keys into abutting relation with said abutment to then rotate the core portions on the threaded member and tighten the nut thereon, the core retainer extending axially at least slightly beyond the end of the last mentioned core member projecting flange whereby said core retainer first engages the workpiece to be fastened by the nut so that continued rotation of the nut on a threaded fastener results in the keys being drawn upwardly into interlocking engagement with the rim notches.

2,748,648
SIZING AND PRIMING DEVICE FOR SHOTGUN SHELLS
Willis C. Miller, Sacramento, Calif.
Application May 11, 1953, Serial No. 353,998
5 Claims. (Cl. 86—36)



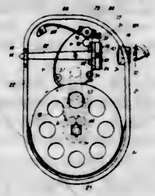
1. A primer push-out and repriming device for used shotgun shells comprising a base, a standard on the base, a normally raised vertically reciprocable plunger unit mounted in connection with the standard, means to reciprocate the unit, a pair of separate anvils, one having an upwardly opening bore therein and the other being arranged to support a new primer, means mounting the anvils for horizontal shifting movement to alternately dispose the same under the plunger unit, said unit including an outer plunger and an inner plunger, there being clearance between said plungers from the lower end upwardly a distance sufficient for the reception of a shotgun shell therebetween in fitting relation and with its primer-containing end lowermost and initially below the plunger unit; a primer push-out pin depending from the inner plunger and arranged so that upon a partial downward stroke of the plunger unit when the one anvil is alined therewith the shell is moved into contact with said one anvil and the used primer is pushed out of the shell and into the bore of the anvil; the other anvil being of lesser height than said one anvil whereby when the other anvil is alined with the plunger unit a further downward stroke thereof beyond said partial stroke is required to move the shell into engagement with said other anvil; the outer plunger and pin being secured together as a unit, and the inner plunger being downwardly slidable relative thereto from an initially raised position; releasable latch means securing the outer plunger and pin unit, and the inner plunger, for simultaneous downward motion to the extent of said partial downward stroke, means operative to stop downward movement of the outer plunger and pin unit at the end of said partial stroke, and means arranged to simultaneously release said latch means to permit said further downward stroke of the inner plunger so that the latter engages the shell at its lower end and pushes the same down onto a new primer supported on said other anvil.

2,748,649
METHOD AND MEANS FOR EVALUATING DENSITY CHARACTERISTICS OF PHOTOGRAPHIC NEGATIVES
Carl Orlando, Long Branch, N. J., assignor to the United States of America as represented by the Secretary of the Army
Application December 6, 1954, Serial No. 473,493
7 Claims. (Cl. 88—14)
(Granted under Title 35, U. S. Code (1952), sec. 266)



5. A densitometer comprising a light source, means to provide two separate beams from said light source, means to direct the light from one beam thru a member to be evaluated, means to direct the light from the other beam upon the face of said member opposite to that receiving light from said other beam, filters in each beam passing colored light components which when combined in specific quantities will create a substantially pure hue of a color different from the colors passed by said filters, and means to adjust the relative intensity of light in each beam whereby when a pure hue composed of transmitted light from said first beam and reflected light from said second beam is observed the adjustment of said light adjusting means will indicate the density value of the observed area.

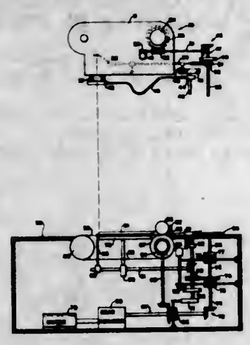
2,748,650
MOVIE FILM VIEWING APPARATUS
Charles C. Melton, Reno, Nev.
Application February 26, 1951, Serial No. 212,708
5 Claims. (Cl. 88—18)



4. In a hand-supported, manually-operable device for viewing movie films having perforations along one edge

the combination of means for guiding a film along a pre-selected path, a fixed stop having an edge shaped to fit in one of said perforations and hold the film against movement in one direction and to permit movement of the film in the reverse direction, resiliently mounted means adjacent the stop normally urging the film into engagement with the stop, a film displacer between said stop and said last mentioned means and means for mounting said displacer for movement between a position in which it is free of the film to permit engagement of the stop with the film and a position in which the displacer engages the film and disengages it from the stop in response to a pre-selected force applied to the film.

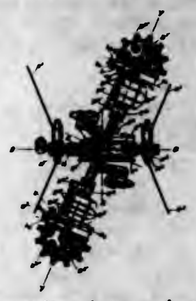
2,748,651
MICROFILM CAMERA
Luther G. Simjian, Greenwich, Conn., assignor to The Reflectone Corporation, Stamford, Conn., a corporation of Connecticut
Application April 27, 1953, Serial No. 351,183
7 Claims. (Cl. 88—24)



1. A camera for photographing documents comprising; a lens positioned between an object plane and an image plane; conveyor means for moving a document into the object plane; a friction roller for moving unexposed film into the image plane; a sensing mechanism at the conveyor for measuring the length of the document, and coupling means between the sensing mechanism and the friction roller which moves the film along the image plane a distance which is equal to the length of the document times the ratio of the image distance to the object distance plus a margin distance; mechanical means coupled to the film moving means which moves the lens half the distance of the film motion; a shield adjacent to the image plane which is moved prior to each exposure to uncover the film which has been moved into the image plane and to cover the remaining film; and means for exposing the film when both the film and the document are at rest.

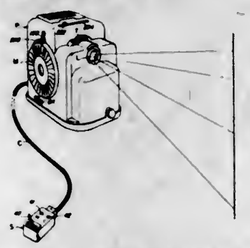
2,748,652
PLANETARIUM PROJECTION DEVICE FOR REPRESENTING THE INDIVIDUAL TRAVEL OF FIXED STARS UPON A SCREEN
Walther Bauersfeld, Heidenheim (Brenz), Helmut Werner, Oberkochen, and Albin Vieweg, Heidenheim (Brenz), Germany, assignors to Carl Zeiss, Heidenheim (Brenz), Germany
Application June 29, 1953, Serial No. 364,626
Claims priority, application Germany July 2, 1952
4 Claims. (Cl. 88—24)

1. Planetarium projection device for projecting images of the stars, including the fixed stars, comprising a carrying appliance, a plurality of groups of projecting apparatus and a projection viewing surface, two hollow bodies; one group of the said projection apparatus being disposed at the one, and the other group being disposed at the other of these two hollow bodies, each hollow body containing a source of light, common to all projection apparatus appertaining to this body, the said two hollow bodies being rigidly connected together and rotatably supported on the said carrying appliance and means for rotating the said two hollow bodies; at least one of the said hollow bodies being combined with an annular base plate connected with the rotatable supporting means connecting said hollow bodies, said annular base plate carrying pro-



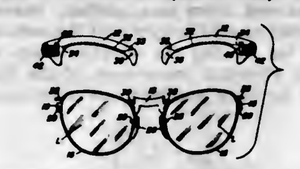
jection apparatus adapted to project the images of a number of fixed stars, the individual movements of which are to be represented, a control ring carried by said base plate rotatable at least approximately concentrically with the axis of the ecliptic of the device and coupled with said projection apparatus carried by said annular base plate, and that coupled by levers adapted to rotate and displace optical elements of said projecting apparatus, means adapted to give a rotation in either direction to said control ring.

2,748,653
REMOTE CONTROL SLIDE PROJECTOR
David Pollan, Jackson Heights, John Halahan and Floyd A. Lyon, Brookville, and Theodore F. Aronson, Valley Stream, N. Y., assignors to Viewlex, Inc., Queens County, N. Y., a corporation of New York
Application May 29, 1952, Serial No. 290,756
11 Claims. (Cl. 88—27)



1. In a slide projector in combination, a projection system including a light source and lens disposed on an axis, a slide magazine positioned for rotation in a vertical plane parallel to and to one side of said axis, said magazine being in the form of a drum having radially disposed slide-receiving slots, a shell enclosing the face of the drum toward said axis and its periphery and rotatably secured to said drum, means preventing withdrawal of the slides through the other face of the drum, said shell having a slot with which the slots in the drum may be aligned as it rotates, means for positioning a slide on said axis for projection, means for retaining said shell with its slot in alignment with said slide positioning means, and reciprocating slide transfer means including a pusher and a slider for moving a slide between its slot in said drum and said slide positioning means, said pusher being movable relative to said slider so that it may be moved out of the path of said magazine to permit insertion and removal of the magazine in the projector and thereafter returned to a position to engage a slide supported in a slot therein.

2,748,654
SPECTACLE FRAME
John J. Rohrbach and Francis B. Neary, Rochester, N. Y., assignors to Sharon Optical Company, Inc., Geneva, N. Y., a corporation of New York
Application September 24, 1952, Serial No. 311,245
10 Claims. (Cl. 88—41)



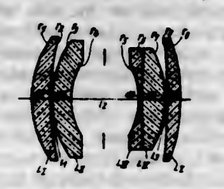
4. A spectacle mounting comprising a metallic chassis including a pair of metalic lens holders for holding the lenses of a spectacle, and a metallic bridge rigidly secured to said lens holders at the nasal sides thereof, a pair of spaced non-metallic semi-rim members, each semi-rim member partially encircling one of the lens holders, means detachably securing the nasal end of each semi-rim member to said chassis, a hinge member secured to the temporal end of each semi-rim member to hingedly connect a temple thereto, and means for detachably connecting the temporal sides of the chassis to each semi-rim member comprising pins carried by the chassis at its temporal sides, and a latch movably mounted on each hinge member to be engaged with one of said pins.

2,748,655
SPECTACLE FRAMES
John J. Rohrbach, Rochester, N. Y., assignor to Sharon Optical Company, Inc., Geneva, N. Y., a corporation of New York
Application April 12, 1952, Serial No. 282,059
3 Claims. (Cl. 88—41)



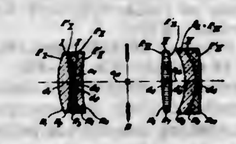
1. A spectacle frame of the type having a metallic lens-retaining unit and a pair of plastic top arms removably secured thereto, said unit including a metallic bridge, a pair of metallic eyewires fixedly joined to said bridge at either side and adapted to surround a pair of lenses, and clamping means at the temporal ends of said eyewires for securing said eyewires around the lenses, and said top arms each having a central groove along the lower edge thereof for receiving and concealing the upper portions of the eyewires and the clamping means, characterized by said metallic unit having a hook adjacent each side of the bridge projecting above the adjacent eyewire and having an apertured lug adjacent each of said clamping means, said hooks and said lugs being adapted to be concealed in said top arm grooves, each top arm having a slot at its nasal end to straddle the adjacent portion of the bridge and having a pin extending across said slot for engaging the adjacent hook, each top arm having a temple hinge plate secured at its rear side to its temporal end which has a portion overlying said groove, a temple pivotally connected to each hinge plate, each of said hinge plates having a hole through the overlying portion which is in alignment with the aperture of the adjacent lug when the top arm is mounted on the metallic unit, and a removable fastening screw located in each aligned hole and aperture and threadedly engaging one of them to secure the adjacent lug to and against the adjacent hinge plate, whereby said top arms are demountably secured to said metallic unit and each top arm is separately removable therefrom in a single assembly with its associated temple by removing the associated fastening screw and rocking the associated pin out of engagement with the associated hook.

2,748,656
FOUR COMPONENT GAUSS TYPE PHOTOGRAPHIC OBJECTIVE
Johannes Berger, Heidenheim (Brenz), and Günther Lange, Königsbronn, Germany, assignors to Carl Zeiss, Heidenheim (Brenz), Germany
Application January 24, 1955, Serial No. 483,682
Claims priority, application Germany February 12, 1954
7 Claims. (Cl. 88—57)



1. Photographic objective, containing four components the two outer being collective meniscus components, and the two inner being dispersive meniscus components, all components turning their concave sides towards the diaphragm enclosed by said two dispersive components, the radii of curvature of the concave surfaces of said dispersive components in absolute amount lying within the limits of $0.1 \cdot f$ and $0.4 \cdot f$, f being the focal length of the objective, and the two concave surfaces of said dispersive meniscus components showing the strongest collective power of all surfaces of the objective, the vertex distance between said two last named collective surfaces being greater than the arithmetic mean of the absolute amounts of their radii, the radius of the dispersive surface bordering on air of said object side collective meniscus component being smaller than the absolute amount of the radius of the dispersive surface bordering on air of said image side collective meniscus component, said absolute amount for its part being smaller than the fourfold amount of the focal length, the axial thickess of said object side dispersive meniscus component being smaller than 85% but greater than 35% of the axial thickness of said image side dispersive meniscus component, and the sum of said two axial thicknesses being greater than $0.10 \cdot f$ but smaller than $0.30 \cdot f$, and the vertex distance between the two concave surfaces adjacent to the diaphragm being greater than 0.75 times but smaller than 1.60 times the arithmetic mean of the absolute amounts of the radii of said last-named two surfaces.

2,748,657
TELE-ANASTIGMATIC OBJECTIVES OF HIGH LIGHT TRANSMITTING CAPACITY
Albrecht Wilhelm Tronnier, Gottingen, Germany, assignor to Voigtländer, A. G., Braunschweig, Germany, a corporation of Germany
Application August 5, 1954, Serial No. 447,971
Claims priority, application Germany September 18, 1953
5 Claims. (Cl. 88—57)



1. Tele-anastigmatic objective of high light transmitting capacity, comprising a composite collecting front system and a composite diverging rear system, which are separate by a large air space, in which the diaphragm is inserted; said front system turned to the major con-

jugate, as well as said rear system, having the design of the Fraunhofer objective type and thus consist of a biconvex collecting lens and a subsequent diverging lens of unequal curvature, the most strongly curved outer surface of which is a diverging concave surface turned to the major conjugate; the thickness of the large air space, measured along the optical axis, between the rear surface of the last lens of the collecting front half and the front vertex of the biconvex lens-element in the rear half, which is directed toward the diaphragm and precedes the diverging element of the rear half, being larger than ⅓ of the equivalent focal length of the total objective; the last member of the total objective in the meaning of the photographic use, positioned on the side of the minor conjugate, having a strong negative refractive power and its characteristic, most strongly diverging outer surface turned to the preceding biconvex member of the rear half, as a concave surface, the radius of curvature of which is distinctly larger than 18% of the equivalent focal length, but does not exceed 36% of the latter and the vertex of which is spaced from the vertex of the last surface of the front half on the side of the major conjugate, at a distance, measured along the optical axis, which is larger than 40% of the equivalent focal length of the total objective and is smaller than 70% of the equivalent focal length of the total objective.

2,748,658

TELE-OBJECTIVE OF THE CATADIOPTRIC TYPE

Albert Bouwers, The Hague, Netherlands, assignor to N. V. Optische Industrie "De Oude Delft," Delft, Netherlands

Application December 15, 1952, Serial No. 325,913
Claims priority, application Netherlands December 29, 1951
6 Claims. (Cl. 88—57)



1. A tele-objective comprising a positive lens system as a front element, said system having a dioptric power amounting to at least 50% of the power of the tele-objective as a whole, a first mirror mounted in the path of the rays behind said front element at a distance from said front element which is at least one fifth of and at most half of the focal distance of said front element, a second mirror located near said front element, in the path of the rays reflected from said first mirror, both of said mirrors being located on the same axis as said front element and both of said mirrors being plane, and an image plane disposed to receive the rays reflected from said second mirror.

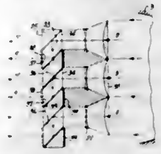
2,748,659

LIGHT SOURCE, SEARCHLIGHT OR THE LIKE FOR POLARIZED LIGHT

Walter Geffcken and Hubert Schröder, Landshut, Germany, assignors to Jenaer Glaswerk Schott & Gen., Landshut, Germany, a firm

Application February 26, 1951, Serial No. 212,725
16 Claims. (Cl. 88—65)

1. A light polarizer comprising a light transmitting body having parallel incident and emergent surfaces, a system of beam splitting interference polarizers between opposed interfaces in said body and traversing as a whole the area of said body, said system being composed of a plurality of individual polarizers, each inclined at a predetermined angle to said parallel incident and emergent surfaces and so positioned with relation to adjacent, individual polarizers that projections of such individual polarizers perpendicularly on a common plane parallel to said incident and emergent surfaces will join one another without gaps, means partially blocking the light entrance area to said system so that the entrance area for the unpolarized radiation is restricted to band-shaped surfaces separated from one another, phase retarder means provided on said body within the area defined by said system for rotating the vibration plane of one of the two split vibration components of the light beams into that of the other and being so constructed and ar-



ranged with relation to said individual polarizers that a perpendicular projection of said phase retarder means on said common plane superimposes on projections of individual polarizers on said system, and reflecting means provided on said body within the area defined by said system for reflecting the deflected separated components into the original direction of the impinging light beams and being so constructed and arranged with relation to said individual polarizers that a perpendicular projection of the said reflecting means on said common plane superimposes on projections of individual polarizers in said system.

2,748,660

CONTROL APPARATUS FOR CABLE SUSPENDED WELL TOOLS

Lloyd Spencer, Los Angeles, Calif., assignor of thirty-three and one-third per cent to Thomas C. Bannon, Altadena, and thirty-three and one-third per cent to John D. Chesnut, Newport Beach, Calif.

Application November 9, 1951, Serial No. 255,611
12 Claims. (Cl. 89—1)



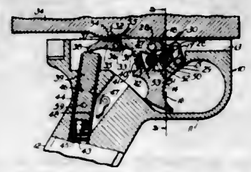
1. A control apparatus for well tools, comprising: a sealed body structure; a pair of axially movable rods sealed in and extending through a wall of said body structure, their outer ends being exposed to well pressures tending to force said rods into said body structure; a lever having a pair of opposed arms connecting said rods to effect outward movement of one rod upon inward movement of the other, the relative areas of said rods and the relative lengths of said rods being such that hydrostatic pressure against the exposed end of each rod is opposed equally by the hydrostatic pressure against the other whereby said rods are in hydrostatic balance; and a firing mechanism within said body structure responsive to movement of said rods.

2,748,661

FIRING RATE REDUCER FOR AUTOMATIC FIREARMS

Clarence E. Simpson, Wilbraham, Mass., assignor to the United States of America as represented by the Secretary of the Army

Application December 10, 1952, Serial No. 325,239
6 Claims. (Cl. 89—130)
(Granted under Title 35, U. S. Code (1952), sec. 266)



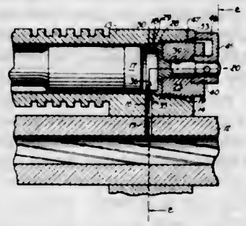
2. In an automatic firearm having a receiver, a trigger housing depending therefrom, and a longitudinally reciprocal bolt slidable between a battery and a retracted position, the combination of a pivotal sear for holding the bolt in the retracted position, a trigger pivotally mounted at a point forwardly of and below the pivot point of said sear, a cylindrical member transversely mounted for slidable movement on said trigger and in contact with the underside of said sear whereby actuation of said trigger lifts said cylindrical member to pivot said sear out of engagement with the bolt, a spring intermediate said trigger and said sear rearwardly of the respective pivot points thereof for urging said sear into engagement with the bolt and simultaneously urging said trigger to the released position, said cylindrical member having an end portion of reduced diameter, cam means in the trigger housing for imparting a transverse movement to said cylindrical member after release of said sear from the bolt but during the continued actuation of said trigger whereby said reduced diameter portion of said cylindrical member is vertically aligned with the front end of said sear to permit a return thereof into engagement with the bolt under the bias of said sear spring, a toggle pivotally secured to the rear end of said sear, a spring-biased actuator slidably mounted in the trigger housing for substantially vertical movement from and toward contact with the underside of said toggle, and an inclined cam surface on the underside of the bolt for actuating said toggle to depress said actuator whereby the upward recovery movement thereof pivots said toggle to simultaneously pivot said sear out of engagement with the bolt whereby the interval of engagement between said sear and the bolt serves to retard each cycle of automatic fire.

2,748,662

GAS REGULATING DEVICE FOR A FIREARM

Clarence E. Simpson, Wilbraham, Mass., assignor to the United States of America as represented by the Secretary of the Army

Application November 7, 1952, Serial No. 319,445
2 Claims. (Cl. 89—193)
(Granted under Title 35, U. S. Code (1952), sec. 266)



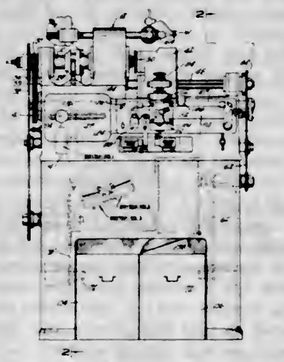
2. In a gas operated firearm having a barrel, a gas tube fixedly secured to the barrel, and a gas passage between the tube and the barrel, the combination of a regulator having an enlarged cylindrical head portion at one end thereof rotatably insertable in the gas tube, said head portion having a cavity therein and a plurality of circumferentially disposed radial gas ports communicating with said cavity, an annular shoulder in the gas tube disposed forwardly of the gas passage therein, an annular flange on the exterior periphery of said head portion forwardly of said gas ports therein and engageable with said annular shoulder to position said regulator with said gas ports in the vertical plane of the gas passage in the gas tube, the front end of the gas tube having a threaded section terminating forwardly of said annular shoulder therein, a hollow locking member engageable in said threaded section of the gas tube and rotatable into contact with said head portion of said regulator to hold said annular flange thereon against said annular shoulder in the gas tube, a stem portion extending forwardly from said regulator head portion to project through said locking member, an indexing member fixedly secured to the projecting end of said stem portion, means associated with said indexing member for selectively aligning each of said gas ports in said head portion of said regulator with the gas passage in the gas tube, and means on said indexing member for transmitting the unlocking movement of said locking member to said regulator, said cavity in said regulator head portion and said annular flange thereon cooperating to prevent passage of discharge gases into contact with said threaded section in the gas tube and thereby eliminate the cause of deleterious carbon accumulation between the threads on said locking member and in the gas tube.

2,748,663

SCREW THREADING MACHINES

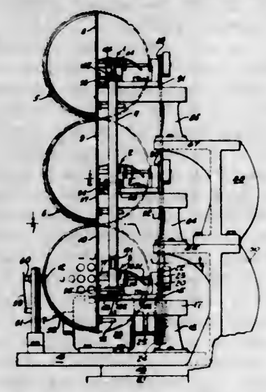
George W. Kean, Granby, Conn.

Application December 4, 1950, Serial No. 199,126
4 Claims. (Cl. 90—11.54)



1. A wood screw threading and pointing machine comprising a base, a work supporting and rotating spindle, a cutter head, operating mechanism for moving said cutter head along said base and for moving said cutter head toward and from said spindle, said mechanism comprising a vertically movable horizontally disposed bar on said base movable to predetermined vertical positions, a member slidable on said bar with movement of said cutter head along said base, supplemental means mounted on said member and relatively movable with respect thereto for creating a movement obliquely thereof, adjustable means connected to said head, means connecting said supplemental means to said adjustable means, whereby said head moves said supplemental means and member along said bar, and means to stop said member on said bar at a predetermined point along said bar, whereby the movement of said member is stopped and said supplemental means is caused to move with respect thereto.

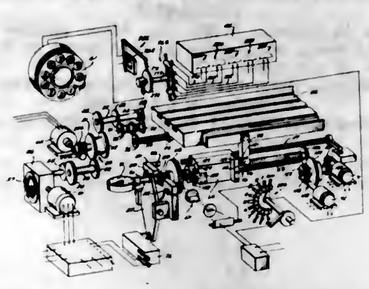
2,748,664
MOLD CUTTING MACHINE
Felix Colombo, St. Albans, N. Y., assignor to Atti Engineering Corp., Union City, N. J., a corporation of New Jersey
Application December 4, 1952, Serial No. 324,080
13 Claims. (Cl. 90—13.3)



1. In a machine for cutting a design in the semispherical concave surface of a work piece, the combination of a base, a stylus mounted on said base, a design master having a convex design conforming surface engaged by said stylus to guide said design master, a bracket, a support extending upwardly from said base and pivotally supporting said bracket to rotate about a vertical axis, said bracket in turn pivotally supporting said design master to rotate about a horizontal axis, a work holder secured to and inside of said design master and supporting the work piece having the concave surface to be cut concentric to the convex surface of said design master with the poles of said concave and convex surfaces on the same horizontal axis, a second support mounted on said base, a short driven shaft journalled in said second support, a cutting tool mounted on said driven shaft to rotate with said driven shaft about an axis that intersects both the vertical and horizontal axes of said design master with the cutting tool and driven shaft clear of the path of movement of said design master when swung into position for a cutting operation adjacent the outer edge of the concave surface, a driving mechanism operatively mounted on said second support and having a drive shaft parallel to said driven shaft and operatively connected to said driven shaft and spaced a sufficient distance from said driven shaft to clear the path of movement of said design master when swung into position for a cutting operation adjacent the outer edge of the concave surface, said driven shaft being slidably mounted on said second support, a bell crank pivotally mounted on said second support, means effecting a slidable engagement between said bell crank and said slidable shaft determining the position of said slidable shaft relative to the work piece, and a set screw on said second support in engagement with said bell crank in turn determining the position of said bell crank.

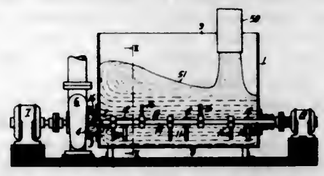
2,748,665
MACHINE TOOL POSITIONING MECHANISM
Jurg A. Senn, Milwaukee, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis., a corporation of Wisconsin
Application March 17, 1949, Serial No. 81,992
16 Claims. (Cl. 90—21)

4. In a positioning apparatus for a machine tool, a screw adapted to effect precise movements of a machine element when turned in engagement with said element, an indicating dial fixed on said screw and presenting equally spaced angularly disposed indicia, a photoelectric cell disposed to scan said dial indicia as said screw is turned in moving said machine element, and an electronic



counting device operatively connected to said photoelectric cell and serving to count said indicia as said screw is turned.

2,748,666
METHOD FOR HANDLING HIGH CONSISTENCY PAPER PULP
Frank R. Forrest, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Continuation of abandoned application Serial No. 680,460, June 29, 1946. This application October 7, 1953, Serial No. 384,713
2 Claims. (Cl. 92—20)

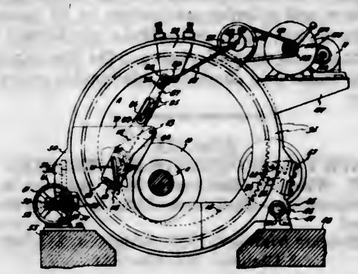


1. A method of withdrawing pulp from a mass of pulp having a free surface exposed to the atmosphere comprising the steps of impelling beneath the free surface of the pulp a columnar stream of pulp in a horizontal direction, receiving the columnar stream of pulp in a conduit having an inlet positioned beneath the free surface of the pulp in coaxial alignment with the columnar stream, maintaining a suction pressure in the conduit, and continuously agitating the mass of pulp to effect gravity feeding of pulp into the columnar stream between the ends of the columnar stream and the removal of pockets of air accumulated in the mass of pulp vertically through the free surface of the pulp.

2,748,667
APPARATUS FOR GRINDING AND REFINING MATERIAL
John J. Grieb and Napoleon Rigabar, Carthage, and Roswell F. Taylor, Watertown, N. Y., assignors, by mesne assignments, to Roswell F. Taylor, Watertown, N. Y.
Application July 16, 1953, Serial No. 368,388
3 Claims. (Cl. 92—26)

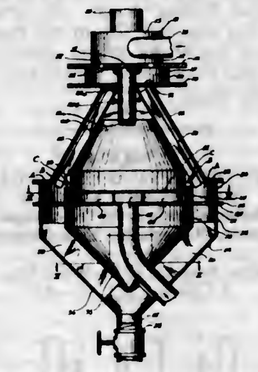
1. In a machine of the character described, a rotatable cylinder having an inner grinding surface, side plates at the ends of the cylinder, a grinding roller rotatably mounted in said cylinder and forming with the inner surface of the cylinder, a nip to receive material to be refined, an adjustable reciprocable plate mounted between the side plates and above the upper portion of the roller and having a lower arcuate end curved in the general direction of the opposed faces of the cylinder and roller and extending downwardly into the nip space between the coacting grinding surfaces for regulating the area of contact between the material being ground and the grinding roller, the adjustment for the reciprocable plate including an arm pivoted to each side plate and having two slots

therein, a guide pin carried by each side of the reciprocating plate freely extending into one guide slot of the adjacent arm and an anchor stud carried by each side plate



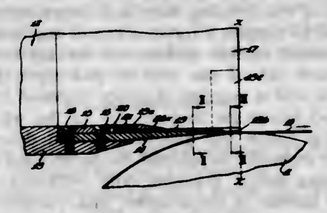
and extending through the other slot of the adjacent arm for securing the arm in adjusted position with respect to the adjacent side plate.

2,748,668
SEPARATOR-PUMPING OPERATION FOR PAPER STOCK
Lloyd Hornbostel, Beloit, Wis., assignor to Beloit Iron Works, a corporation of Wisconsin
Application July 11, 1952, Serial No. 298,332
3 Claims. (Cl. 92—28)



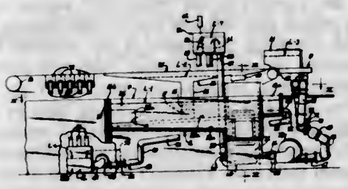
1. A fluid pump and centrifuge for separating heavier impurities from a fluid and simultaneously pumping said fluid, comprising a stationary frusto-conical casing having a substantially vertical axis and having an inlet at the smaller upper end thereof and two annular outlets at the other, lower end thereof, a substantially vertical shaft extending into said casing, a frusto-conical rotor having the smaller end thereof registering with the inlet end of the casing and mounted on said shaft in said casing, said casing and rotor coacting to define an annular frusto-conical pumping chamber therebetween, blades mounted on said rotor and extending into said pumping chamber to move the fluid therein to centrifugally force the heavier impurities in the fluid toward the radially outermost casing wall and to centrifugally pump the fluid from the inlet toward the outlets, one of said outlets being substantially axially aligned with the radially outermost casing wall at the outlet end to receive fluid containing the centrifugally outwardly forced impurities, the other outlet being positioned radially inwardly of said one outlet to receive the lighter impurity free fluid from the pumping chamber, a draw-off chamber below and in communication with said one outlet and inclined downwardly below the said one outlet to accommodate gravity flow of the impurities thereinto and gravitational settling of the impurities therein to a point at the bottom thereof, means in said draw-off chamber for retarding fluid movement therein to provide a substantially static fluid in the draw-off chamber, means providing a fluid connection between said outlets at a point in the radially inward face of said one inlet to permit fluid to pass from said draw-off chamber to the other outlet after the impurities have been removed by gravitation to the bottom of said draw-off chamber, and means for selectively opening and closing said draw-off chamber at the bottom thereof to selectively permit and prevent flow of fluid therethrough to rinse out accumulated impurities therein.

2,748,669
REMOVABLE APRON CLOTH AND HEAD BOX THEREFOR
Casper E. Youngchild, Appleton, Wis., assignor to Beloit Iron Works, Beloit, Wis., a corporation of Wisconsin
Application March 1, 1952, Serial No. 274,405
2 Claims. (Cl. 92—44)



2. In a paper machine head box, an apron board and cheeking therefor on opposite sides thereof, an apron cloth clamp mounted between the cheeking on each side of the board, said board and said clamp defining therebetween a dove-tail groove extending the full width of the head box, closely adjacent portions of said board and said clamp defining a restricted passageway between said groove and the interior of the head box also extending the full width of the head box, an aperture in the cheeking aligned with said groove and said passageway, a rod slidably received by and substantially filling said groove and said aperture, and extending the full length of said groove, an apron cloth anchored to said rod along one edge thereof substantially filling said passageway and extending forwardly therefrom over the apron board.

2,748,670
STOCK FLOW
Edward D. Beachler, Beloit, Wis., assignor to Beloit Iron Works, a corporation of Wisconsin
Application July 18, 1952, Serial No. 299,692
11 Claims. (Cl. 92—44)



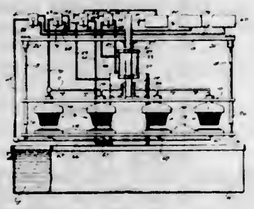
8. A paper machine cross-flow stock distributor comprising a pair of open-topped flow conduits adapted to receive oppositely flowing stock streams therein, means establishing stock flow from said conduits through the open tops thereof to a paper machine inlet box, and stock flow passages having lateral reaches for introducing stock flow into said conduits, all lateral reaches of said passages having roof portions which are inclined upwardly along the direction of travel of stock therethrough for preventing the separation of entrained air from stock flowing through said passages.

2,748,671
PAPER-MAKING MACHINES
Ralph Chalmor Heys, Sheffield, England, assignor to Beloit Iron Works, Beloit, Wis., a corporation of Wisconsin
Application January 12, 1953, Serial No. 330,831
Claims priority, application Great Britain January 25, 1952
4 Claims. (Cl. 92—44)



4. A paper making machine of the Fourdrinier type comprising a looped forming wire, a couch roll within the loop of the forming wire, a forward roll also within the loop of the forming wire and cooperating with the couch roll to support a forward run of the forming wire, a felt covered suction pickup roll making contact with the forward run of the wire to pick up a paper web therefrom, and a vacuum chamber disposed transversely across and below the forward run of the wire between the suction couch roll and the forward drive roll and extending from the couch roll to the forward drive roll, with sealing means engaging both rolls and defining a complete bottom of the chamber and end plates in sealing engagement with the peripheries of the rolls and the underside of the wire defining the side walls of the chamber.

2,748,672
APPARATUS FOR MOLDING PULP
Harry Kollmann, Waubeka, Wis., assignor to Formart Containers, Incorporated, Cedarburg, Wis., a corporation of Wisconsin
Application May 14, 1952, Serial No. 287,780
1 Claim. (Cl. 92—54)



In an apparatus for forming a papier-mâché article of unitary structure from two separate molds, a vat for receiving the paper pulp of which the article is to be formed, a piston and cylinder mechanism having a connecting rod extending therefrom, a first support fixed to said connecting rod for movement therewith above said vat, a mold shaped to form one portion of the article mounted on said first support so that it may be moved with the support into and out of said vat, a second piston and cylinder mechanism mounted on said connecting rod for movement therewith, a bracket connected to be moved by said second piston and cylinder mechanism relative to said first support, a plurality of rods secured to said bracket, a second support attached to said rods for movement with said bracket, a second mold shaped to form the other portion of the article and carried by said second support in alignment with the first mold so that it may be moved by said second piston and cylinder mechanism into combined relationship with the first mold for forming the completed article, and a sleeve placed about each of said rods and secured to said first support for guiding the movement of said rods and thereby the movement of said second support relative to said first support for retaining the two molds in proper alignment, whereby the first piston and cylinder mechanism serves to move both of said supports and their associated molds unitarily into and out of the vat by reason of the mounting of the second piston and cylinder mechanism on its connecting rod, and the second piston and cylinder mechanism serves to move the second support relative to the first support for moving the molds into combined relationship or for separating them.

2,748,673
LINER FOR COMPOSITE CONTAINERS
Thomas W. Winstead, Baltimore, Md., assignor to Hedwin Corporation, Baltimore, Md., a corporation of Maryland
Application March 9, 1951, Serial No. 214,709
5 Claims. (Cl. 93—35)



1. The method of making a removable liner of flexible impervious synthetic polymer film for a composite shipping container, the steps comprising: uniformly expanding a tubular section of the film inwardly of one end thereof to effect uniform inturning of the unexpanded portions of the section adjacent said end to form an inwardly directed endless flange; disposing a separate sheet of the film over one side of the flange to form a closure for said end of the tubular section; and bonding said sheet to said flange along their engaging surfaces to form an endless seam.

2,748,674
DEVICE FOR SETTING-UP COLLAPSIBLE CELLULAR CARTONS
Howard E. Dalley, Newark, N. Y., assignor to Bloomer Bros. Company, Newark, N. Y., a corporation of New York
Application June 23, 1953, Serial No. 363,486
3 Claims. (Cl. 93—37)



1. A device for setting up collapsible cellular cartons of the type having front, bottom, and rear walls, a central longitudinal partition and two series of transverse partitions hingedly connected to the tops of said front and rear walls and adapted to be swung in opposite directions, respectively, from horizontal to erected vertical position, said longitudinal partition having hooks formed therein for engagement with certain ones of said transverse partitions for holding the same in erected position, said device comprising a base having thereon a group of two or more upwardly projecting, spaced blades adapted to engage the partitions of one of said series, said base having one or more upwardly projecting, spaced, resilient fingers extending transversely thereof, a part movable on said base and having thereon a group of two or more upwardly projecting, spaced blades adapted to engage the partitions of the other of said series, said part having one or more upwardly projecting, spaced, resilient fingers extending transversely thereof, said blades being adapted to have an inverted, partially erected carton pressed thereagainst and to engage and partially erect said transverse partitions, and means for moving said part on said base to affect relative movement of said

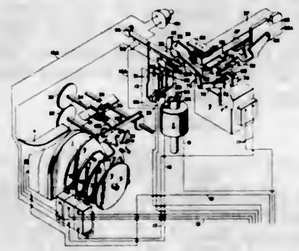
series of partitions in opposite directions and complete the erection of said partitions, said fingers being lower than said blades and being positioned to engage certain ones of the transverse partitions for guiding the same between said hooks and the bottom wall of the carton during erection thereof to insure proper positioning of said partitions when the carton is fully erected.

2,748,675
ENVELOPE MAKING MACHINE
Harry F. Affelder, Cleveland Heights, Ohio, assignor to The Wolf Envelope Company, Cleveland, Ohio, a corporation of Ohio
Application October 6, 1951, Serial No. 250,177
6 Claims. (Cl. 93—62)



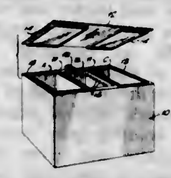
1. In an envelope making machine including means to form envelopes from blanks and move the formed envelopes substantially horizontally with their flaps in trailing relationship with respect to the bodies thereof and with the inner surfaces of said flaps uppermost, the combination therewith of a top flap folding mechanism comprising means adapted to divert the body of an envelope downwardly relative to its top flap while so moving, means to arrest movement of said diverted body while continuing forward movement of the top flap of the envelope thereby causing buckling of the material of the envelope intermediate the body and the top flap thereof, means adapted to divert the body of an envelope upwardly from its substantially horizontal path of travel, means to arrest movement of said upwardly diverted body while continuing the forward movement of the top flap of the envelope thereby causing a buckling of the material of the envelope intermediate the body and the top flap thereof, means to selectively render one or the other of said diverting and associated arresting means inoperative, and means to grip the portion of the envelope buckled as the result of the said diversion of the body either upwardly or downwardly and impart a forward feeding movement therethrough to both said body and flap thereby selectively folding said flap upon either the front or the back of the body of the envelope in accordance with that one of said diverting means which is operative.

2,748,676
TAPE FEEDING, PRINTING, AND TAG ATTACHING AND SEVERING MACHINE
Philip N. Braun, Syracuse, N. Y.
Application August 3, 1950, Serial No. 177,448
8 Claims. (Cl. 93—58)



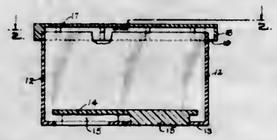
1. A machine of the class described comprising a frame, tape printing, feeding and tag stapling and severing mechanism carried by the frame, and actuating and timing mechanisms therefor comprising a timer shaft and means operated by said shaft to operate the printing, tape feeding and the tag stapling and severing mechanisms consecutively, the actuating mechanism comprising a master rotary motor to which the timer shaft is connected to be actuated thereby, and second and third motors for actuating the printing and the tag stapling and severing mechanisms respectively, a starting circuit for the master motor having a manually closeable switch therein, a sustaining circuit for the master motor in multiple with the starting circuit, separate circuits for the second and third motors, the timer comprising cams, one operating to close and hold closed a switch in the sustaining circuit, and a second cam operating to close and open a switch in the circuit of the second motor, and a third cam to momentarily close and open a switch in the circuit for the third motor successive to the opening and closing of the switch in the circuit for the second motor, the timer also having means for actuating the tape feeding mechanism successively to the operation of the printing mechanism by the second motor.

2,748,677
CONTAINER FOR DEVELOPING TANKS
Sigmund Berlant, Caldwell, N. J.
Application November 5, 1952, Serial No. 318,872
1 Claim. (Cl. 95—89)



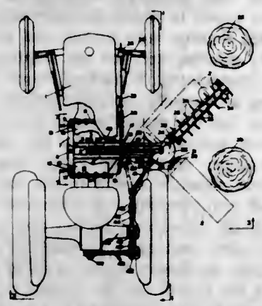
A developing device comprising a vessel having transverse partitions dividing it into two end sections and a middle section, grooves on the upper edge of said vessel surrounding said end sections having lateral openings into said middle section, a cover having a flange adapted to extend into said groove to a point below said lateral opening, said middle section having a perforated false bottom and a water supply below said bottom and having a water outlet above the level of said lateral openings whereby said grooves are automatically kept filled with water.

2,748,678
DEVELOPING TANK
Sigmund Berlant, Caldwell, N. J.
Application February 25, 1953, Serial No. 338,783
1 Claim. (Cl. 95—90.5)



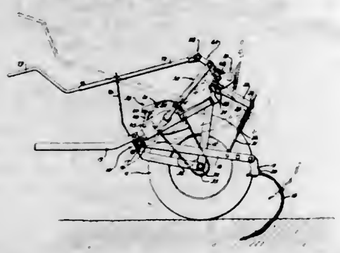
A developing tank having imperforate side and end walls, and a bottom having an opening there-through spaced from the sidewalls thereof, a table of smaller size than the interior of said tank supported from the bottom thereof over said opening whereby there is provided a light-trapped opening into said tank, a cover for said tank having a downwardly extending flange of greater interior size than the top of said tank, and lugs to support said cover spaced from and surrounding the top of the tank.

2,748,679
ROTARY VINEYARD HOES
Roy C. Rogers, Ridgefield, Wash.
Application November 25, 1953, Serial No. 394,357
1 Claim. (Cl. 97—37)



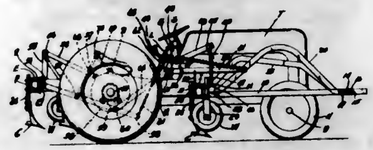
A rotary hoe comprising a substantially U-shaped bracket having the arms thereof fixedly pivotally mounted on a tractor body and having the bight portion thereof normally horizontally disposed, a frame structure comprising a pair of spaced hollow tubular members fixedly secured together in a side-by-side relation, means pivotally connecting one pair of adjacent ends of said tubular members to said bight whereby said frame may be selectively moved horizontally on said bight, manually operated lever means mounted on said tractor and connected with said frame structure for pivoting said bracket and said frame structure vertically, an elongated rod telescopically mounted in each of said tubular members, a gear box housing mounted on the outer ends of said rods, a pair of driven shafts mounted in said housing, a drive shaft mounted in said housing, gear means connecting said driven and drive shafts, said driven shafts each having a flange on their respective outer ends and said driven shafts being disposed at an angle to each other, an elongated rotary hoe having a flange at one end thereof for selective connection with one of said pair of flanges, hydraulic means mounted on said frame structure and connected with said housing whereby said housing may be moved toward or away from said frame structure, and driving means connected with said drive shaft.

2,748,680
POWER LIFTS
Homer B. Aber, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a corporation of Wisconsin
Application March 28, 1951, Serial No. 218,021
6 Claims. (Cl. 97—46.11)



1. In a power lift for an implement having a rockshaft, an actuating arm secured to the rockshaft to rock therewith a nut floatingly mounted on the arm spaced from the rockshaft, a range adjusting screw engaged with the nut and projecting transversely from said arm, a thrust block journaled on the screw spaced from the nut and constrained against movement axially on the screw, a pitman pivoted to said thrust block, a link pivoted to said arm adjacent said rockshaft and pivotally connected to said thrust block adjacent said pitman so as to guide it to move in an arcuate path about said rockshaft when said screw is adjusted, so as to alter the range through which said rockshaft will be rocked upon predetermined movement of said pitman, the force exerted by said pitman tending to rock said rockshaft being directed through said screw, earth working rigs adapted to be raised and lowered in response to rocking of said rockshaft, means for actuating said pitman through said predetermined movement, and means for adjusting said screw.

2,748,681
ALTERNATE CONTROL FOR PLURAL LATERAL AND REAR CULTIVATOR ATTACHMENTS
Joseph S. Stodard, Port Austin, Mich.
Application December 8, 1950, Serial No. 199,790
3 Claims. (Cl. 97—46.45)

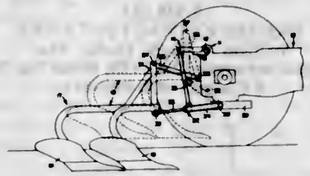


1. In combination, a tractor, a transversely disposed attaching bar supported adjacent the front end thereof, separate draft units pivotally connected to said attaching bar to selectively swing in a longitudinal plane extending rearwardly along the sides of said tractor, a transversely disposed side implement beam mounted on each draft unit, cultivator implements depending from said side beams engagable with the ground when said draft units and side beams are permitted to swing downwardly, transversely disposed support means rearwardly of and above said side beams, a pair of transversely disposed, axially aligned shafts rotatably supported thereon, said support means including upper beams a spaced distance above said shafts, an arm rigid on each shaft extending forwardly from each shaft, rod means connecting each arm to one of said side beams, a plate member rigid on each of said shafts extending rearwardly therefrom, lateral projections on said upper beams above said plate members, a transversely disposed, rear implement beam spanning the rear end of said tractor pivotally supported thereon to swing in a longitudinal plane, cultivator implements depending from said rear beam engagable with the ground when said rear implement beam is swung downwardly, forwardly extending levers connected to said rear implement beam pivotally sutpported interadjacent their ends on said tractor, flexible connectors connecting the front ends of said levers and said plate members, means for raising said rear implement beam and pivoting the levers connected thereto to pivot said shafts and raise said side beams simultaneously, and independent latch bars pivotally mounted on both of said plate members and swingable upwardly to bear on the rear face of said upper beams and engage under said lateral projections to prevent rotation of one or both of said shafts and maintain one or both of the side beams in raised position when the rear implement beam is swung downwardly to ground-engaging position.

2,748,682
HITCH DEVICE
Charles N. Stone, Moline, Ill., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Application June 17, 1952, Serial No. 293,956
5 Claims. (Cl. 97—47.52)

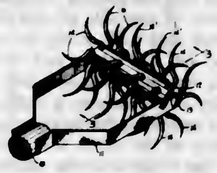
1. A hitch device for connecting an earth-working implement to a tractor, comprising a vertically extending

hitch structure on the forward portion of said implement, draft-transmitting means including lower link means and an upper link means, means for swingably connecting said link means for generally vertical swinging movement with the upper and lower portions of said vertically extending structure and the tractor, said lower link means including a pair of laterally spaced apart link members and each of said members comprises two tele-



scopically associated parts, one part being connected with the implement and the other part being connected with the tractor, means connected with the tractor-connected link parts for raising and lowering the implement, and means limiting the extending movement of said link parts, said parts being retractable when the implement is raised, whereby raising of the implement serves to move the implement closer to the tractor.

2,748,683
ROTATING HAND CULTIVATOR FOR LOOSENING SOIL
Milan Baird, Cleveland Heights, Ohio
Application September 27, 1952, Serial No. 311,891
1 Claim. (Cl. 97—52)



A rotating cultivator for loosening soil, comprising in combination, a frame including a handle, a cylindrical axle journaled in said frame and adapted to serve as a supporting and running wheel for the cultivator, and a plurality of curved and tapered pointed teeth arranged in spaced rows around the circumference of said axle and curved toward the rear relative to the direction of rotation each of said teeth being circular in cross-section; each of the said teeth having a shank portion normal to the surface of said axle and a curved and tapered body portion arcuately swept back at an angle to the shank portion, the length of the arc of curvature of the body portion being one-fourth the circumference of the circle whose radius is that of the arc, the angle between the center line of the shank and a radial line drawn through the center of the axle and lying tangent to the curved and tapered body portion being 33¾°, the point of the tooth being offset 22½° from the center line of the shank and spaced a distance from the surface of the axle equal to twice the radius of the said circle, and the distance between the points of opposed teeth being five times the said radius.

2,748,684
SWEEP ATTACHMENT FOR A CULTIVATOR
Elza H. Kirby, Mount Pulaski, Ill.
Application April 30, 1954, Serial No. 426,718
2 Claims. (Cl. 97—205)

1. A sweep attachment for a cultivator beam comprising: a post adapted to depend from and be secured to said beam; an arm projecting forwardly from the post; a main blade lying in a vertical plane and pivotally connected to the front end of the arm for swingable adjustment about a horizontal axis to selected positions in said plane; a substantially flat side wing rigid with and projecting laterally from the main blade in a plane substantially normal to that of the main blade at a location spaced from the pivot axis of the main blade, thus to be



tilted transversely into a selected inclined plane on swingable adjustment of the main blade; and a tail wing lying in a vertical plane and pivotally connected to said arm for swinging adjustment about a vertical axis rearwardly of the main blade, whereby to be adjusted into a selected angular relationship to the planes of each of the main blade and side wing.

2,748,685
LAWN AND WALK EDGER
Harry Sogar, Ludlow, Ky.
Application October 14, 1952, Serial No. 314,589
1 Claim. (Cl. 97—227)



In combination in a lawn edger, a coupling member provided with means for attachment to a push handle, a flat sidewalk guide bar, a rolling support mounted on the guide bar, a plow share having a concave sharpened edge extending down substantially below the guide bar having one side extending down at substantially a right angle to form a sidewalk edge guide and the other side extending up and contoured so as to discharge the earth from the furrow as it is cut over the guide bar onto the walk, said plow share having a boss and an axle member mounted in the boss, a rotary grass cutting disc mounted on the axle which is inclined from a vertical direction so that the cutting disc inclines inwardly toward the cutting tip of the plow share and at an acute angle to the right angle side of the plow share, said rolling support extending on one side beyond the side edge of the guide bar and on the other beyond the cutting disc.

2,748,686
ROW MARKER IMPLEMENT
Noral A. Nelson and Ulric Landenberger, Detroit, Mich., assignors to Harry Ferguson, Inc., Detroit, Mich., a corporation of Delaware
Application September 9, 1950, Serial No. 184,618
4 Claims. (Cl. 97—230)

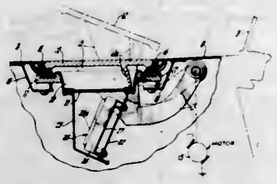
1. In combination, a tractor having a power operated hitch linkage including a lower link and an upper link, each of said links having connecting elements on the trailing end portions thereof, and an implement comprising a frame including a transverse member and a generally upright strut plate rigid with and adjacent the center of said transverse member, said frame having coupling means thereon coupled to respective ones of said connecting elements for supporting said implement, a ground-engaging element including an elongated marker

arm, means including a pair of fore and aft spaced legs at the inner end portion of said arm pivotally connecting said arm to one end portion of said transverse member for pivotal movement between raised and lowered positions, a cross member between said spaced legs and positioned outwardly of said pivotal connecting means, said cross member having a laterally extending rigid strut projecting therefrom in a generally upward direction, a spring biased latch member fixed to said transverse member adjacent said pivotal connecting means for releasably engaging said cross member when said arm is in raised position, a pair of tensile members extending inwardly from adjacent the inner end portion of said arm toward said upright strut plate, the first one of said tensile members having its outer end portion connected to said latch member, the second one of said tensile members being flexible and having its outer end portion connected to the projecting end portion of said lateral strut, a pair of levers extending adjacent said upright strut plate in a generally fore and aft direction, the first of said levers being pivotally connected inter-



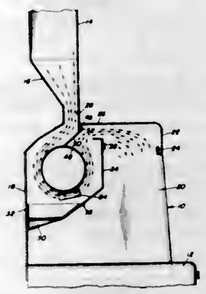
mediate its end portions to said strut plate for transverse swing and having its forward end portion projecting forwardly toward said tractor and having its trailing end portion connected to the inner end portion of the first one of said pair of tensile members for manually releasing said latch member, the second of said levers being pivotally connected intermediate its end portions to said strut plate for vertical swing, said second lever having its trailing end portion connected to the inner end portion of said second tensile member and having a transverse abutment piece on its forward end portion positioned for abutting engagement with said upper link of said hitch linkage so that said upper link will engage and relatively depress said abutment piece upon lifting said implement, and a pulley mounted on said frame adjacent the center thereof for engaging an intermediate portion of said second tensile member to guide the inner end portion thereof toward said second lever so that said second tensile member is moved axially upon relative downward movement of said abutment piece for raising said marker arm.

2,748,687
MOISTURE RESPONSIVE CONTROL MEANS
Robert L. Ballard, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application September 1, 1951, Serial No. 244,823
10 Claims. (Cl. 98—2)



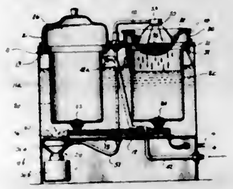
1. Apparatus of the character described, including: an automobile having an opening therein; a movable closure member for said opening; motor means for moving said member between open and closed positions; a circuit for actuating said motor means; a moisture responsive switch mounted within said body and connected to said circuit for controlling the operation of said motor means and a wetting agent on said switch, said wetting agent having the property of reducing the surface tension of water so that the water spreads across said switch.

2,748,688
GREASE EXTRACTING VENT
William A. Smith, Dallas, Tex.
Application September 24, 1953, Serial No. 382,153
4 Claims. (Cl. 98—115)



1. A grease extracting vent comprising an enlarged generally rectangular canopy for collecting grease-laden fumes, a discharge conduit extending from the upper end of the canopy for venting the canopy to the amosphere, a plate extending into the interior of the canopy and forming a continuation of one side of said discharge conduit, a bracket on each side wall of the canopy, a cylindrical drum supported on said plate and said brackets, said drum and plate extending horizontally and completely across the interior of the canopy, a baffle extending across said canopy and extending to the rear wall of the canopy in spaced relation to the drum and plate and being disposed between the drum and the source of fumes, said baffle terminating in spaced relation to the top of the canopy and above the lower periphery of the drum, said discharge conduit being disposed on the opposite side of the drum from the baffle whereby grease-laden fumes must pass over the upper end of the baffle and downwardly around the drum and upwardly through the discharge conduit for extracting grease from the fumes by centrifugal force as they pass around the lower periphery of the drum.

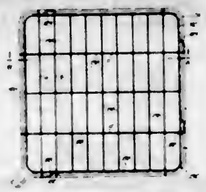
2,748,689
COFFEE URN
Allen M. Rotman, Seattle, Wash., assignor, by direct and mesne assignments, to Mello-Cup Coffee Company Inc., Seattle, Wash.
Application August 18, 1952, Serial No. 304,984
1 Claim. (Cl. 99—315)



In a coffee making device having a jacket providing a water storage and heating compartment and a second compartment directly below the heating compartment and separated therefrom by a horizontal plate defining the bottom of said water storage and heating compartment,

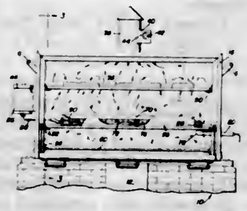
a coffee making receptacle disposed within said water storage compartment, means in said water storage compartment for heating the contents thereof, a pump mounted in said second compartment in vertical depending relation to said horizontal plate, means for driving said pump, said pump including an impeller housing having an open top secured directly to the under surface of said horizontal plate so that the plate constitutes a cover for the impeller housing, an impeller disposed within said impeller housing and mounted for rotation about an axis perpendicular to said plate, said plate having an opening therein in register with the axis of said impeller so that water is fed into the pump directly from the water storage compartment through the plate opening, said impeller housing having a tangential discharge conduit extending therefrom and terminating in a spray head disposed above said coffee making receptacle for discharging water from the storage compartment thereinto.

2,748,690
COOKING DEVICE
Maurice L. Lipsich and Fred C. Schwaneke, Chicago, Ill., assignors to Dormeyer Corporation, Chicago, Ill., a corporation of Illinois
Original application April 7, 1951, Serial No. 219,796, now Patent No. 2,710,906, dated June 14, 1955. Divided and this application November 1, 1952, Serial No. 318,467
7 Claims. (Cl. 99—340)



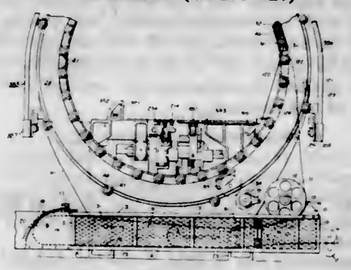
1. In a device of the class described a removable rack for broiling meats under a raisable cover having a sheet metal edge and comprising a frame, cross members secured to said frame, and secondary members secured to the frame and cross members, two of said cross members and two of said secondary members being identical members having upwardly arched end portions disposed beyond the boundary of said frame, one of said end portions extending much higher than the other and having a valley in the upper portion for receiving therein in resting relationship the sheet metal edge parallel with one side of said frame in vertical alignment therewith, said higher end portions serving as handles for lifting the rack, and means on said rack serving as legs when the rack is set up on a flat surface.

2,748,691
BARBECUE MACHINE
Bennie T. Johnson, Eastman, Ga.
Application June 9, 1952, Serial No. 292,512
6 Claims. (Cl. 99—444)



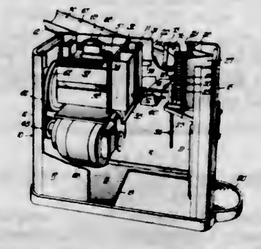
1. A cooker comprising a fire box having an open top, an open bottom heating chamber supported over the open top of the fire box and having a closure, a meat rack supported within the heating chamber, a reservoir supported in the heating chamber under the meat rack, said reservoir having water therein and constituting a steaming device for meat on the rack, and overflow outlet means for said reservoir, and a filter screen supported horizontally within the chamber below the reservoir and protecting meat on the rack from ashes.

2,748,692
AUTOMATIC WIRE STRAPPING MACHINE
Charles F. Osgood, Jr., Ridgewood, N. J., William M. Grosvenor, Jr., Pelham, N. Y., and James I. McMartin, West Hartford, and Frank Schirmer, Newington, Conn., assignors to General Strapping Corporation, New York, N. Y., a corporation of New York
Application March 24, 1953, Serial No. 344,288
27 Claims. (Cl. 100—27)



5. In an automatic wire strapping machine designed and adapted to draw wire from a source of supply, wrap the wire around an article such as a package or the like, tension the wrapped wire, sever the wire to form a strap, and unite the ends of the strap by welding, which machine comprises, a rotary wrapping ring, means for withdrawing wire from a supply, means on the ring for carrying with it withdrawn wire as the ring wraps the wire around the article, means for rotating the wrapping ring, means for accumulating a supply of wire on the ring, which accumulating means includes a series of wire receiving rolls carried by the ring, and a pair of trough forming annular side plates mounted at their inner circumferences on the rolls.

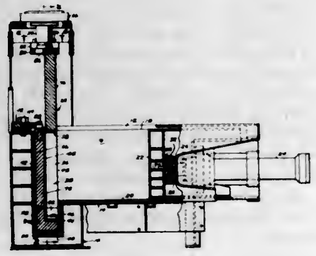
2,748,693
FRUIT JUICE EXTRACTOR
Herbert D. Drain, Chicago, and Winfield S. Griffiths, River Forest, Ill.; said Drain assignor to said Griffiths
Application February 2, 1951, Serial No. 209,044
5 Claims. (Cl. 100—98)



5. An apparatus for extracting juice from fruit, comprising a supporting frame, a pair of vertically positioned plate-like presser members, means for removably mounting one of said presser members in a relatively fixed vertical position in said frame and a reciprocable carriage in said frame mounting the other of said presser members for movement horizontally toward and from said fixed presser member, one of said presser members having a

vertically extending central ridge formation provided with a knife edge thereon and the other of said presser members having a groove formation arranged for cooperation with said ridge formation, laterally spaced fruit supporting rods extending horizontally in the path of movement of said carriage with the free ends thereof terminating short of said fixed presser member, a fruit supporting cradle pivotally mounted on a cross support and having a lateral extension thereon, said cradle being adapted to be pivoted to a position between said presser members in cooperating relation with said fruit supporting rods and with the lateral etxension thereof in a generally horizontal position adjacent said rods to receive and guide fruit onto said rods, means for pivoting said cradle in timed relation to the movement of said carriage to move the cradle out of its fruit supporting position whereby successive pieces of fruit may be positioned on said rods between said presser members when they are in separated relation and thereafter the fruit will be cut into halves by said knife edge and crushed between said presser members upon forward movement of said carriage, and said cradle will be moved out of its fruit supporting position to permit gravity discharge of the crushed fruit upon retraction of said carriage.

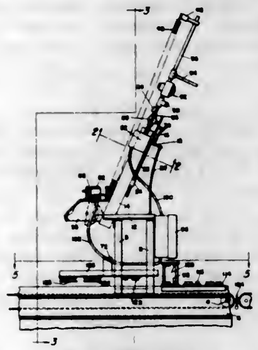
2,748,694
BALING PRESS
Wallace M. Thompson, Cordele, Ga., assignor to Harris Foundry & Machine Company, Cordele, Ga., a corporation of Georgia
Application July 9, 1954, Serial No. 442,234
8 Claims. (Cl. 100—232)



1. In a baling press the combination comprising: means defining a press box having opposed walls; and a ram forming one of said walls and movable inwardly of said box, said ram being split in the direction of its movement into at least two detachably-connected parts, whereby when said parts are connected a bale can be made having the same transverse dimensions as those of said box, and when said parts are disconnected and one part is disposed in said box in engagement with the other of said walls, a bale can be made having the same transverse dimensions as the other part.

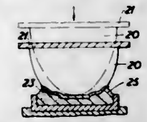
2,748,695
DEVICE FOR APPLYING PRINTED MATTER TO OBJECTS
Alten E. Whitecar, Westville, N. J., assignor to Smith, Kline & French Laboratories, Philadelphia, Pa., a corporation of Pennsylvania
Application November 7, 1951, Serial No. 255,291
8 Claims. (Cl. 101—35)

1. An article conveyor adapted to operate continuously, a rotatable printer, a hydraulic ram supporting said printer, a source of fluid under pressure, means including a valve connecting said source of fluid under pressure to said ram, means to open said valve in timed relation with the advancement of an article on said conveyor to effect a lowering of the ram to bring and hold the printer in



contact with said article and means to raise said ram after a predetermined amount of rotation of the printer.

2,748,696
PRINTING OR DECORATION OF CERAMIC OR OTHER WARE
Guy Leslie Murray, Cheltenham, England; Lilian Murray and Basil Guy Murray, executors of the estate of said Guy Leslie Murray, deceased
Application June 10, 1952, Serial No. 292,689
Claims priority, application Great Britain June 13, 1951
6 Claims. (Cl. 101—41)

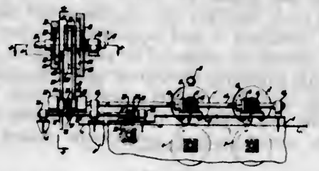


1. A process for the decoration of ceramic articles and other ware having a surface to be decorated which is curved and contoured, which comprises pressing a substantially solid resilient pad having a smooth convex operative surface the radius of curvature of which is less than that of the article to be decorated against an engraved surface of a plate while allowing radial spread of the convex surface of the pad over the engraved surface of said plate to extract the design therefrom and then pressing said resilient pad against an article of ware to be decorated while allowing radial spread of the pad over said curved and contoured surface of the article to print the design thereon during which printing process said pad, owing to its resilience, undergoes whatever deformation is necessary to conform to the curvature and contour of said surface of the article.

2,748,697
WEB FEED CONTROL FOR PRINTING AND DIE-CUTTING PRESS
Charles E. Smith, Monrovia, Calif., assignor to Avery Adhesive Label Corporation, Monrovia, Calif., a corporation of California
Application January 4, 1954, Serial No. 402,091
10 Claims. (Cl. 101—227)

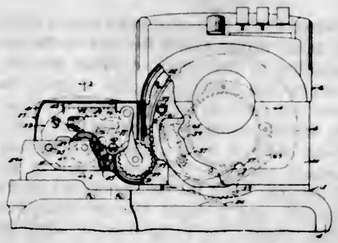
1. An intermittent feed mechanism for a rotary printing and die-cutting press comprising a power shaft, a cylinder actuating shaft geared to the printing and die-cutting cylinders, a pair of drive gears upon the actuating shaft, over-running clutch means for transmitting power from each gear to the actuating shaft, a crank plate upon the power shaft, a second crank plate journalled in axial alignment with the power shaft in spaced relation to the first crank plate, crank pins radially adjustable upon the crank plates in angularly spaced relation to each other,

racks meshing with the gears and reciprocated by the crank pins, and a connecting plate positioned between the crank plates in engagement with the crank pins and



actuated by one crank plate to transmit power to the other, the racks being actuated alternately to drive the gears and cylinder actuating shaft through successive operating cycles and reset cycles.

2,748,698
INKING DEVICE
Walter J. Hanson, Port Chester, N. Y., and Raymond H. Van Wagener, Stamford, Conn., assignors to Pitney-Bowes, Inc., Stamford, Conn., a corporation of Delaware
Application February 5, 1952, Serial No. 270,012
13 Claims. (Cl. 101—350)



2. The method of inking a printing die which comprises relatively moving the die and a resilient inking roller to bring the latter into rolling contact with the surface of the die; continuously sensing the effective radius of the surface of the inking roller which contacts the die as the surface wears; unyieldingly spacing the inking roller axis at a distance from the surface occupied by the printing die during inking such that predetermined inking pressure between the resilient roller and the die will be obtained during inking; initiating rotation of said roller about its axis before making surface contact with the die at a surface speed substantially that of said relative motion; and continuously changing said unyielding spacing in accordance with the sensed changes of said radius.

11. An inking device comprising a reservoir; an inking roller; means to transfer ink from said reservoir to said inking roller comprising an ink metering cylinder mounted for rotation so that its lower portion dips into the ink in said reservoir; a pair of sleeves mounted on said cylinder for relative axial sliding motion and formed at their opposed ends with cooperating profiles forming a groove which narrows and widens with relative axial movement of said sleeves; means to adjust one sleeve axially with respect to the other to control the width of said groove; and a wiper resting against said sleeves for removing the ink other than that picked up by said grooves.

2,748,699
BLOCK-CARRYING DEVICES FOR SHEET OR WEB FED ROTARY PRINTING MACHINES
Joseph Otto Bobst, Lausanne, Switzerland
Application February 24, 1953, Serial No. 338,436
Claims priority, application Switzerland March 29, 1952
5 Claims. (Cl. 101—378)

1. A block carrying device for sheet or web fed rotary printing machines comprising a cylinder having a longitudinal channel therein, a complementary part adapted to fit into said channel to complete said cylinder, means removably attaching said complementary part to said cylinder, a hollow rigid two-part sleeve having an interior diameter equal to the diameter of said cylinder, means independent of said cylinder for fastening the blocks



quickly and securely to the outer surface of said two-part sleeve, means removably fastening the first part of said sleeve to the cylinder, and means removably fastening the second part of said sleeve to the complementary part of said cylinder, said first part of the sleeve extending over more than half of the circumference of the cylinder.

2,748,700
EXPLOSIVE ASSEMBLY
Cyril J. Breza, Mickleton, and Charles H. Norea, Woodbury, N. J., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application November 30, 1953, Serial No. 395,075
6 Claims. (Cl. 102—24)



1. An explosive assembly comprising in column form a plurality of explosive cartridges in end to end relationship wherein the connecting means for at least two of said cartridges comprises a bail of a flexible material adhesively bonded to one end of each of said cartridges, and a wire connector having an open loop at each end of a straight portion, each loop containing one of said bails.

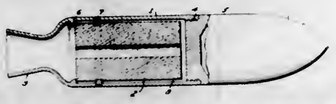
2,748,701
ELECTRICALLY CONDUCTIVE COATING
Wendell P. Barrows, Washington, D. C.
Application August 28, 1951, Serial No. 244,085
9 Claims. (Cl. 102—43)
(Granted under Title 35, U. S. Code (1952), sec. 266)



8. An electrically conductive corrosion resistant coating comprising a layer of non-conducting vehicle applied to a metal surface, and a number of conductive particles having a predetermined size greater than the thickness of said nonconducting layer and being randomly distributed and spaced apart from each other to form minute pro-

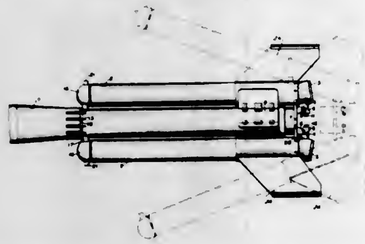
jections extending from the metal surface through the layer to a point above the surface of the layer of non-conducting vehicle.

2,748,702
ROCKET
Winslow A. Sawyer, East Braintree, Mass., assignor to the United States of America as represented by the Secretary of the Army
Application July 2, 1952, Serial No. 296,791
3 Claims. (Cl. 102—49)



1. In a rocket projectile having a combustion chamber, a propellent grain in said chamber disposed in concentric relation therewith, and a split ring embracing said propellent grain near one end thereof and seated in a groove in the wall of said chamber to maintain the other end of said grain in spaced relation with the said combustion chamber in all dimensions.

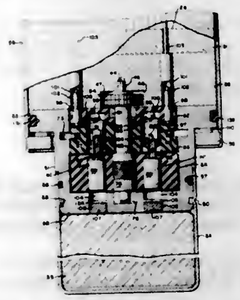
2,748,703
ROCKET TYPE LAUNCHING CARRIAGE FOR ORDNANCE MISSILE
Wilbur H. Goss and David A. Washburn, Silver Spring, Md., assignors to the United States of America as represented by the Secretary of the Navy
Application April 27, 1948, Serial No. 23,477
10 Claims. (Cl. 102—49)



10. An auxiliary thrust providing arrangement for a missile including a casing, said arrangement comprising a plurality of rockets, a base for engaging the rear end of said casing and being releasable from the latter by rearward motion of said base relative to said casing, pivot means for attaching each rocket adjacent its rear end to said base to allow the forward ends of said rockets to swing out away from said casing when released from the latter, and means for holding the forward portions of said rockets to the outside of said casing and being releasable by motion of said rockets rearwardly relative to said casing, whereby the thrust of said rockets will hold said arrangement in operative position until such time as the air resistance imposed against said rockets exceeds the thrust of the latter, whereupon said rockets move rearwardly and thus become disengaged with said base from the missile casing and are left behind.

2,748,704
ARMING DEVICE FOR TORPEDO EXPLODERS
Theodore E. Dinsmoor, Spencerville, Md.
Application November 29, 1951, Serial No. 258,974
7 Claims. (Cl. 102—70.2)
(Granted under Title 35, U. S. Code (1952), sec. 266)

7. An arming switch mechanism for a torpedo exploder comprising, in combination, a hollow cylindrical casing having a closed end and an open end, an insulating supporting member fixedly supported in said casing, shorting contact members mounted on said supporting member, circuit closing members mounted on said supporting member and spaced 90° from said shorting contact members, a rotor mounted for rotation within said casing and in face adjacency to said supporting member, electro-responsive detonators mounted in said rotor and having contact prongs extending therefrom, said detonator prongs engaging the shorting contacts when said rotor is in the safe position and engaging the circuit closing contacts when in the armed position, said circuit closing contacts



being connected in the detonator firing circuit of the torpedo, electric motor driven means for moving the rotor from the safe position to the armed position thereof, switch means driven by said motor means for stopping the motor means when the rotor is in the armed position, tetryl lead-ins set in said casing in the closed end thereof, said tetryl lead-ins being in axial alignment with said circuit closing contacts whereby the lead-ins are in alignment with the detonators when the detonators are in the armed position thereof, and a cased booster charge mounted adjacent said lead-ins for firing thereby when the detonators are fixed by said firing circuit.

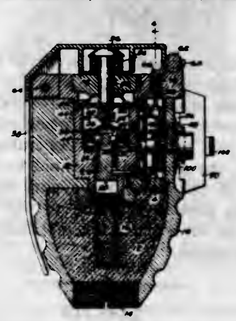
2,748,705
INERTIA AND POINT DETONATION IMPACT FUZE
Frank B. Hale, Bel Air, Md., assignor to the United States of America as represented by the Secretary of the Army
Application October 28, 1952, Serial No. 317,373
1 Claim. (Cl. 102—73)
(Granted under Title 35, U. S. Code (1952), sec. 266)



A fuze comprising a fuze body having a nose end and an inner end, a non-uniform bore forming an axial passageway through said fuze body from said nose end to said inner end, an annular shoulder in said passageway facing said nose end; a thin metal disk positioned against said shoulder, a threaded sleeve holding said disk in position against said shoulder, a firing pin secured to said disk and coaxial with said passageway, said disk and firing pin closing said passageway and being spaced from the nose end a distance so that said disk and firing pin form with the walls of said threaded sleeve a cavity open to the exterior; a primer carrier slidably mounted in said passageway, a detonator in said passageway adjacent the inner end of said carrier, a bore in said primer carrier coaxial with said passageway, a primer mounted in said carrier bore adjacent the nose end thereof, a delay mounted in said carrier bore inwardly of said primer, and a

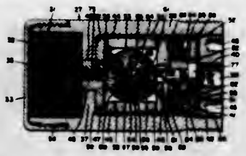
relay charge in said carrier bore adjacent the inner end of said carrier, spring means normally holding said carrier away from said firing pin; said passageway, firing pin and primer carrier being so constructed that on impact with a substantially hard object said carrier has a range of movement against the action of the spring greater than the normal distance between said firing pin and said primer and on impact with a yieldable object said firing pin has a like range of movement upon rupture of said disk.

2,748,706
MECHANICAL FUSE FOR GRENADES
Arthur P. Field, Union, N. J., assignor to the United States of America as represented by the Secretary of the Army
Application October 31, 1951, Serial No. 254,181
8 Claims. (Cl. 102—76)
(Granted under Title 35, U. S. Code (1952), sec. 266)



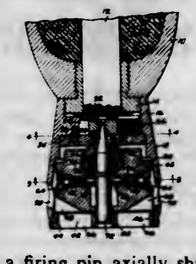
1. In a grenade comprising a body having a chamber therein and a safety lever removably secured thereto, an explosive charge, a primer positioned to detonate said charge, a firing pin normally in spaced relation to said primer, a spring urging said firing pin toward said primer, detent balls cooperating to retain said firing pin in said normal position and retained in part at least within cavities in said firing pin, a first disc disposed in a plane perpendicular to the firing pin axis and receiving one end of the said firing pin, a second disc parallel to and normally spaced from the said first disc, a separator between the two said discs, said separator terminating in a point nested in the said first disc, spring means urging the said respective discs toward each other, a peg normally held in separator piercing relationship by the said safety lever, a member normally interfering with said firing pin, and a time delay mechanism disposed to hold said member in firing pin interfering relationship for a predetermined time after release of the said safety lever.

2,748,707
AUXILIARY DETONATOR FUZE FOR ANTI-AIRCRAFT PROJECTILE
Raymond L. Graumann, Alexandria, Va.
Application June 23, 1945, Serial No. 601,285
3 Claims. (Cl. 102—79)
(Granted under Title 35, U. S. Code (1952), sec. 266)



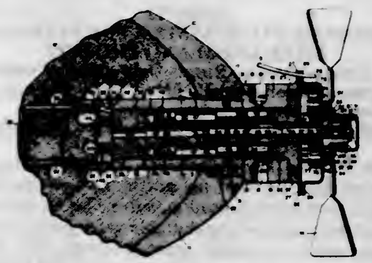
1. An auxiliary fuze for a high-explosive projectile comprising a casing, a disk arranged within one end of said casing and having a lead-in charge arranged therein, a block member arranged within the other end of said casing, a firing pin releasably locked within said block member and adapted to have sliding movement therein when released, means for actuating the firing pin, means controlled by centrifugal force for releasing said firing pin, a rotor block disposed between said disk and block member and having a recess therein, retaining means provided on each end of said casing in engagement with the disk and block member respectively for clamping said disk, block member and rotor block in fixed position within said casing, a rotor releasably maintained within said recess in a safe position and adapted to have rotative movement therein when released, means controlled by centrifugal force for releasing said rotor, means responsive to centrifugal force for moving said rotor to an armed position after the rotor is released, and a detonator arranged within said rotor and adapted to fire said lead-in charge while the rotor is in said armed position as the detonator is fired by the actuation of said firing pin.

2,748,708
BOMB FUZE, CENTRIFUGAL-INERTIA TYPE
Emil P. Bertram, Wilmington, Ohio, assignor to the United States of America as represented by the Secretary of the Army
Application November 2, 1951, Serial No. 254,622
7 Claims. (Cl. 102—79)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In a fuze, a firing pin axially shifting from a safe to an armed position, a primer-carrying rotor having a recess formed therein, said firing pin engaging said recess to lock the rotor when said pin is in the safe position, a vaned impeller, journaled coaxially of and about said pin, a spring axially urging said pin to the armed position, and centrifugally releasable latch means carried by the impeller and directly engaging and holding said pin against the action of said spring.

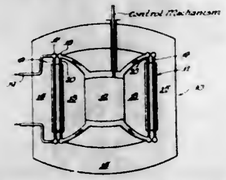
2,748,709
BOMB FUZE
Robert O. Wynn, Houston, Tex.
Application September 13, 1946, Serial No. 696,969
8 Claims. (Cl. 102—81.2)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A fuze for a bomb adapted to be fired by impact with a target, said fuze comprising a casing supported by the bomb and extending a predetermined distance therein, an explosive charge arranged within said casing, a releasable arming member rotatably supported within the

casting in an initial safe position and having a pair of diametrically disposed bores arranged therein, a pair of firing devices slideably supported within said casing and disposed within said bores respectively for releasably locking the arming member in said initial safe position and adapted to release the arming member when the firing devices have been moved a predetermined amount sufficient to be disengaged from said bores, a carriage slideably arranged within said casing and supporting said firing devices for moving said firing devices said predetermined amount, means including a sleeve rotatably supported within said carriage and in threaded engagement with said casing for imparting sliding movement to said carriage as the sleeve rotates, complementary means on said arming member, a shaft rotatably supported within said sleeve in engagement with said complementary means for rotating the arming member from the initial safe position to an armed position as the firing devices are disengaged from said bores, and means for locking said arming member in said armed position.

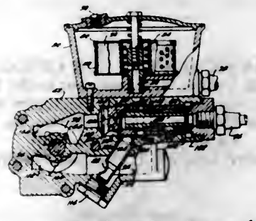
2,748,710
HEAT-EXCHANGER PUMP
Leonard B. Vandenberg, Sharon Springs, N. Y., assignor, by mesne assignments, to the United States of America as represented by the United States Atomic Energy Commission
Application April 26, 1955, Serial No. 504,125
5 Claims. (Cl. 103—1)



1. A combined heat exchanger and thermoelectrically energized pump comprising a first and a second group of tubes, thermocouple elements on opposite sides of the tubes of one of said groups, an electrically conducting fluid in the tubes provided with thermocouple elements, said first and second groups of tubes being arranged in heat exchange relationship to provide hot and cold junctions for said thermocouple elements whereby a thermoelectric current is generated across the tubes containing the electrically conducting fluid, means magnetized by said current and arranged in proximity to the tubes containing the electrically conducting fluid, said means providing a magnetic field transversely of the current whereby a pumping force is produced longitudinally of the tubes containing the electrically conducting fluid.

2,748,711
PRESSURE FLUID SYSTEM FOR STEERING MECHANISM AND THE LIKE
John Arthur Drude, Royal Oak, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application November 24, 1951, Serial No. 258,076
17 Claims. (Cl. 103—42)

1. In a pump having pressure and suction ports and communication between the ports: a valve chamber included in said communication, valve biasing means, said valve chamber containing shiftable valve parts one within another with an annular space between and receiving said valve biasing means, at least one of said valve parts having ends of unequal diameter so as to afford end surfaces of unequal effective area when acted upon by pressure fluid, orifice means carried by one of said valve parts in a manner such as to be movable therewith and interposed in the path of fluid flow in said communication, the outer valve part having a valve surface portion slidable with respect to a companion valve surface portion on each of said inner valve part and said valve chamber, and an opening in the side of said outer valve part connected by said communication to said pump suction port, the respective valve surface portions incorporated between said valve chamber and said outer valve part establishing cooperation upon relative shift between the same to pass fluid to said pump suction port in response to the force



unbalance produced in the valve due to the action of the pressure of fluid on the unequal effective end areas of the said valve part ends, the respective valve surface portions incorporated between said inner valve part and said outer valve part establishing cooperation upon relative shift between the same to pass fluid to the said opening in the side of the outer valve part connected to said pump suction port in response to the force unbalance produced in the valve due to unequal fluid pressures caused by the orifice means.

2,748,712
HYDRAULIC PUMP
Edward J. Sargent, Los Angeles, Calif., assignor to Sargent Rodless Pump Company, a corporation of California
Application August 23, 1947, Serial No. 770,280
2 Claims. (Cl. 103—46)

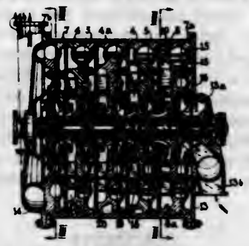


1. In a fluid motor assembly insertable into a well as a unit with a reciprocating pump driven thereby, the improvement comprising, in combination: a fluid pressure supply pipe extending into the well, a stationary plunger carried on the lower end of the supply pipe, a tubular barrel enclosing the plunger and adapted to reciprocate thereon, means including valve means on said stationary plunger for directing the flow of motive fluid from said supply pipe alternately above and below the plunger to reciprocate said barrel, a pump having a stationary piston connected to said plunger, the pump also having a travelling barrel enclosing the pump piston and adapted to reciprocate thereon, the pump having valve means for admitting well fluid alternately above and below the pump piston, and means connecting said barrels for movement in unison.

2,748,713
MULTI-STAGE CENTRIFUGAL PUMP OR BLOWER
Alfred Buchi, Winterthur, Switzerland
Application March 17, 1953, Serial No. 342,830
Claims priority, application Switzerland March 21, 1952
13 Claims. (Cl. 103—108)

1. A multi-stage centrifugal pump or blower comprising a common shaft, a plurality of rotors fixed to said shaft, two separate housing parts surrounding each rotor for one pressure stage, one for the front or inlet side of the rotor and the other for the back side of the rotor, the inside surfaces of said two housing parts being set contiguously beside one another along a normal division

plane, the inside of both housing parts together forming a stationary guide device having a plurality of separate peripheral guide ducts receiving the pressure medium from the rotor, the discharge end of said guide ducts being deflected axially towards the following higher pressure stage, an equal number of secondary guide ducts on the axially outer side of said back side housing part, each of the secondary guide ducts being in registering connection with said discharge end of the peripheral guide ducts and being curved radially inwardly to thereby reverse the flow of the pressure medium in the peripheral guide ducts and to direct the pressure medium into the rotor inlet of the next following higher stage, said secondary or reversing guide ducts forming open channels in said



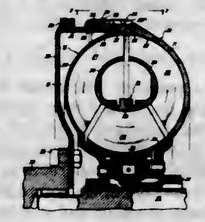
back side housing part mainly in the direction towards the rotor inlet of the next following higher pressure stage, said channels being defined circumferentially by axially extending division walls, an annular body pressed against the free ends of said division walls, shoulder means on the axially outside surface of the housing part of the next following pressure stage bordering said annular body, the free ends of said division walls lying at least in the radially outer portions of said secondary guide ducts in a plane normal to the rotor axis, said annular body being constructed as an annular substantially flat plate surrounding the inlet to the rotor of the next following higher pressure stage, and said shoulder means being disposed to substantially border the inner and outer perimeter of said front side housing part of the following pressure stage.

2,748,714
THRUST BEARING
Fred W. Henry, Wellsville, Ohio
Application October 17, 1952, Serial No. 315,324
2 Claims. (Cl. 103—112)



1. A thrust bearing for a central shaft of a fluid pump having impellers on said shaft, comprising, an end cap for said pump, a cylinder in said end cap, a piston rotatable and longitudinally reciprocably mounted in said cylinder, a resilient rubber like pad in said cylinder, said piston and pad, together with the side walls of said cylinder, defining an expansible chamber, said piston secured to said shaft in fixed relationship with respect to said shaft, an exhaust port opening from the side of said cylinder, said pad having a plurality of radially extending surface grooves, one of which is registered with said exhaust port, said piston and cylinder being longitudinally reciprocable between a first relative position wherein said port is covered by said piston and a second relative position wherein said port is at least partially uncovered, and a fluid line interconnecting the high pressure exit from said pump and the chamber defined by the piston and cylinder, said exhaust port located a distance from the surface of said pad thereby assuring the spacing of the piston from the pad to prevent any physical contact therebetween during operation of the central shaft.

2,748,715
HYDRODYNAMIC COUPLING
Anthony C. Mamo, Detroit, Mich., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application December 20, 1952, Serial No. 327,101
5 Claims. (Cl. 103—115)

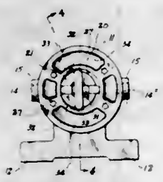


1. In a hydrodynamic coupling element, a dished member having its outer periphery defined by an axially extending annular portion terminating in a radially offset and axially extending first flange provided with circumferentially spaced lugs, an annular groove in the radially inner surface of said first flange, and a notch in the edge of said first flange between said lugs and interrupting said groove; a vaned annular shell having an outer peripheral axially extending second flange in telescoping relation to said first flange, said second flange being provided with a rib extending radially outwardly therefrom, said rib having circumferentially spaced openings therein receiving said lugs on said member whereby relative rotation of said shell and member is prevented, means on said second flange defining a groove in opposed relation to the groove in said member when said shell and member are in telescoped relation and means on the radially outer surface of said rib defining an axially extending slot; a sealing gasket compressed between said annular portion of said member and the end of said second flange of said shell; and a split locking ring disposed within the opposed grooves of said shell and member preventing relative translational movement therebetween and having one end thereof extending through said notch in said first flange of said member and received within said slot in the rib of said shell.

2,748,716
REVERSIBLE ROTARY PUMP
Anton J. Janik, Elyria, Ohio, assignor to The Ridge Tool Company, Elyria, Ohio
Application January 30, 1952, Serial No. 269,022
8 Claims. (Cl. 103—138)

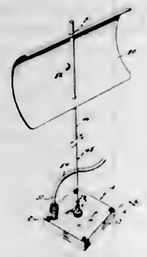
1. A reversible rotary pump comprising a housing having a pump chamber formed therein, a rotor eccentrically mounted for rotational movement in said pump chamber to provide for pressurizing and distributing fluid throughout said pump, said housing having a pair of chambers formed therein substantially opposite to each other and adjacent said pump chamber, and connected to said pump chamber by port members, a cap member closing one end of said housing and having chambers formed therein oppositely to each other and angularly

displaced from said chambers in said housing, a valve plate interposed between and separating said housing from said cap member, and having valve members carried therein arranged to selectively connect said chambers in said housing to said chambers in said cap member, second port members in said housing to provide for admittance and escapement of said fluid to and from said rotary pump and interconnected to the chambers in said cap member by third port members formed in said valve plate to provide for passage of said fluid to said chambers in said cap member, said rotor being selectively rotatable in one of several directions to draw fluid into one of said chambers in said cap member in a predetermined direction of flow depending upon the rotation of said rotor, said rotor being



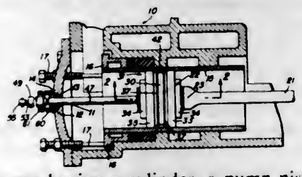
operable to cause a pressure differential to exist between said cap chamber and one of said housing chambers whereby one of said valve members is opened interconnecting said chambers to allow fluid to enter into said housing chamber, said rotor then being operable to draw said fluid through one of said port members connecting said housing chamber to said pump chamber and into said pump chamber wherein it is forced into the opposite housing chamber whereby the pressure thereof is of sufficient magnitude to open a second valve member in said valve plate to enable said fluid to flow into the opposite chamber in said cap member and then through one of said third port members into and through one of said second port members and thence to the exterior of said rotary pump.

2,748,717
FLUID PUMPING DEVICE
Aaron Davis, Harwichport, Mass.
Application January 22, 1953, Serial No. 332,723
4 Claims. (Cl. 103—152)



1. A pumping device for anchored small craft and the like, which is adapted to operate upon the natural fluctuating pulsations of the wind, comprising: a housing having uppermost, central and lowermost portions, said housing portions being sealed together to define a pumping chamber, and intake and exhaust ports therefor; a diaphragm held adjacent the lower face of the uppermost housing portion; lever means attached to the diaphragm to deform same, said lever means impinging upon the lower face of the uppermost housing portion and extending upwardly through the uppermost portion of the housing; adjustable restraining means exteriorly connecting the lever means and outer face of the uppermost portion of the housing; and oscillatory wind gathering means rotatably joined to the lever means.

2,748,718
PUMP AND PISTON COMBINATION
John W. MacClatchie, Saugus, Calif.
Application February 6, 1952, Serial No. 270,251
5 Claims. (Cl. 103—202)



1. In a pump having a cylinder, a pump piston operative in said cylinder, having a resilient packing means and a peripheral recess intermediate the ends of said pump piston, means defining a passageway extending through said piston and connecting said peripheral recess with the exterior of the pump so that fluid which leaks past an end of said piston into said peripheral recess will be conducted through said passageway to the exterior of said pump to indicate the failure of said packing means, and spring urged means connected to said passageway for resisting flow of leakage fluid therethrough.

2,748,719
GAS SEPARATORS FOR WELL PUMPS
Norman C. Wells, Long Beach, Calif., assignor to Agate Corporation, Los Angeles, Calif., a corporation of California
Application October 7, 1953, Serial No. 384,729
13 Claims. (Cl. 103—203)

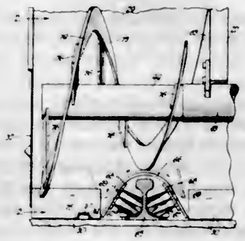


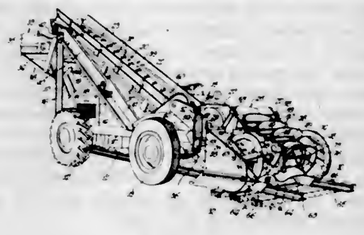
1. A gas separator comprising a body adapted to be carried beneath a well pump, said body forming a chamber through which well liquid is directed in passing to said pump and acting to accumulate and contain an enclosed column of gases separated from the well liquid, fluid directing means for directing partially liquid and partially gaseous well fluid from the outside of said body into the gas column in said chamber to flow through said gas column so that the liquid and gaseous components of the well fluid are separated by contact with said gases of the column, check valve means adapted to vent gases from said gas column to the exterior of said body separately from the liquid, but preventing reverse fluid flow into the body through said check valve means, and liquid outlet means for separately discharging the liquid to said pump.

2,748,720
TRACK CLEANER
Robert W. Kling, Chicago, Ill., assignor to Athey Products Corporation, Chicago, Ill., a corporation of Illinois
Application December 6, 1952, Serial No. 324,503
6 Claims. (Cl. 104—279)

1. A power operated track cleaner for gathering and loading material from along and between the rails of a

railway track and comprising, in combination, a wheeled vehicle having an elevating conveyor structure extending longitudinally thereof from front to rear, a backing plate provided at its bottom with a cutting edge and mounted at the front end of the elevating conveyor structure so that the cutting edge extends laterally of the elevating conveyor, said backing plate having an opening in the mid-portion thereof which is aligned with the elevating conveyor for the passage of material to the elevating conveyor, said backing plate also having portions cut away at the cutting edge on opposite sides of said opening to provide passages of a size and spacing to straddle the rails of a railway track, curved plate members secured to the backing plate and extending through said passages in substantially parallel relationship to provide tunnels ex-

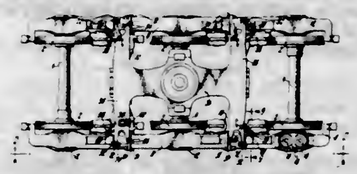




tending forwardly and rearwardly from the backing plate for overlying substantial longitudinal portions of the railway rails, a feeding conveyor extending through the opening in the backing plate from a position ahead of the backing plate and between the tunnels for moving material onto the elevating conveyor, auger type conveyors on opposite sides of the forward end of the feeding conveyor and extending along opposite side portions of the backing plate and across the forward ends of the tunnels for moving material inwardly along opposite ends of the backing plate toward the feeding conveyor, said auger type conveyors having a developed outer curvature of varying radius such that during rotational movement portions thereof pass closely adjacent the surfaces of the upper portions of the forward ends of the tunnels to move material thereover.

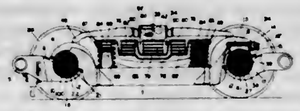
2,748,721
LOCOMOTIVE TRUCK
William F. Holin, Riverside, Ill., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 27, 1952, Serial No. 306,615
9 Claims. (Cl. 105—193)

1. A locomotive truck comprising a plurality of axles including wheels thereon, a frame composed of rigidly connected longitudinal side members and transverse transom members resiliently supported on said axles, a bolster adapted to support the locomotive and having longitudinally spaced laterally extending arms resiliently supported directly on the side members of said frame for lateral swinging movement relative thereto, and longitudinally acting spring-loaded friction means interposed between said bolster and said frame to damp lateral



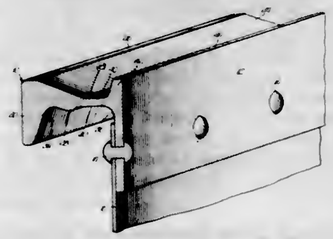
and vertical oscillations of said bolster with respect to said frame.

2,748,722
DIAGONALLY EQUALIZED RAIL TRUCK
Alfred O. Williams, Battle Creek, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a corporation of Michigan
Original application February 27, 1948, Serial No. 11,411, now Patent No. 2,561,541, dated July 24, 1951. Divided and this application September 22, 1948, Serial No. 50,575
4 Claims. (Cl. 105—194)



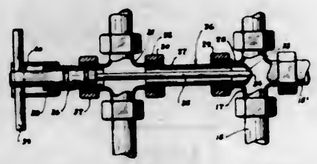
3. A rail car truck including a pair of axles, a substantially rectangular main frame having a pair of longitudinally extending side frame members, a pair of short projecting arms, said axles at their one diagonal pair of ends being journaled in one diagonal pair of ends of said side frame members and at their other diagonal pair of ends in said short projecting arms, and the other diagonal pair of ends of said side frame members being pivotally mounted to said short projecting arms about axes spaced from the axes of said axles.

2,748,723
ROLLED METAL SECTION
James S. Swann, Homewood, Ill., assignor to Standard Railway Equipment Manufacturing Company, Chicago, Ill., a corporation of Delaware
Application August 14, 1952, Serial No. 304,257
5 Claims. (Cl. 105—406)



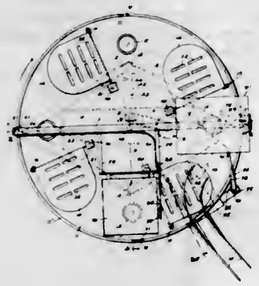
1. A top chord for a railway gondola car and the like comprising a rolled metal bulb angle including a side plate flange, and a head flange extending from the side plate flange, the outer margin of the head flange depending in a massive bulb portion, said head flange having an inner margin of least cross section for a short distance from said side plate flange, and then increasing in cross sectional extent to said bulb portion, the top surface of said head flange being inclined upwardly from said inner margin outwardly to the top of said bulb portion.

2,748,724
FLAVOR INJECTION VALVE FOR ICE CREAM
Edwin C. Lehner and John A. Brendle, Chicago, Ill., assignors to Swift & Company, Chicago, Ill., a corporation of Illinois
Application July 25, 1950, Serial No. 175,779
3 Claims. (Cl. 107—1)



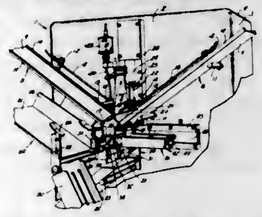
1. A sanitary flavor-injecting valve in association with continuous freezing apparatus and a flavor material feed line, which comprises a tubular valve discharge nozzle having an outer end which converges inwardly toward the axis of the nozzle to form an internal valve seat and a discharge opening of lesser diameter than the nozzle proper, a valve body which coacts with the said nozzle and connects said nozzle with the flavor-material feed line, said valve nozzle and valve body having the inner and outer ends thereof respectively provided with flanges which closely engage to form a readily separable sanitary seal facilitating the cleaning of the valve members, a valve stem extending axially through said valve body and coacting with the said valve seat, and means on said valve stem to regulate the flow of material through said nozzle, said discharge nozzle valve seat extending into the mix feed line of the freezing apparatus to about the center thereof.

2,748,725
SEMI-AUTOMATIC PIE MACHINE
Glenn R. Patterson, Biltmore, and John R. Matthews, Asheville, N. C.
Application January 14, 1953, Serial No. 331,252
4 Claims. (Cl. 107—1)



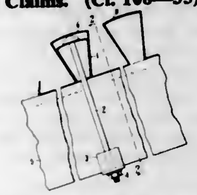
1. In a device of the class described, a frame, a table mounted for rotation in a horizontal plane on said frame, a plurality of holders on said table in which pie pans are positioned and on which sheets of pie dough are manually placed, for receiving pie filling, a normally horizontal platform pivotally mounted adjacent to each holder, on which a sheet of dough is positioned, said platforms adapted to swing vertically to horizontal positions directly over the pie pans delivering the upper sheet of pie dough positioned thereon, onto said pie pans, and mechanism for normally returning said platforms to horizontal positions laterally of said pan holders.

2,748,726
SANDWICH MAKING MACHINE
Swan F. Anderson, Rockford, Ill., assignor of one-half to Swan F. Anderson and one-half to Ralph F. Anderson, Rockford, Ill.
Application December 10, 1952, Serial No. 325,190
14 Claims. (Cl. 107—1)



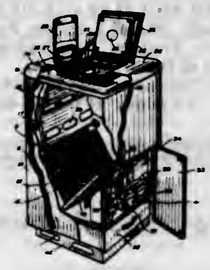
1. In a sandwich forming machine having a nozzle with a downwardly opening mouth shaped to discharge a continuous ribbon-like web of plastic comestible supplied thereto under pressure and means for simultaneously feeding wafers down along opposite sides of the nozzle and the advancing web to spaced positions at opposite sides of the nozzle below the nozzle mouth for the reception of the advancing web therebetween to form a sandwich, the improvement which comprises the combination of a support disposed below the nozzle positioned for engagement by the wafers to support the sandwich below the nozzle mouth in upright position and extending over to one side of the nozzle mouth, means for moving the formed sandwich transversely of the nozzle mouth to sever the formed sandwich from the web and to position the severed sandwich on said support at said one side of the nozzle mouth in an upright position, and means movable transversely of the direction in which the formed sandwich is thus moved and operative at said one side of the nozzle mouth in timed relation with the severing of the formed sandwich for moving said sandwich from the support in an upright position and for inserting said sandwich in a wrapper.

2,748,727
ARRANGEMENT FOR FIXING CORRUGATED SHEETS IN POSITION
Herbert Leonard Plummer and Davis Lambert Irwin, London, England
Application May 12, 1952, Serial No. 287,326
Claims priority, application Great Britain May 18, 1951
3 Claims. (Cl. 108—33)



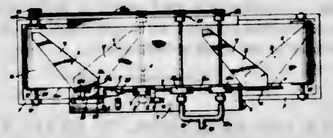
1. An arrangement for fixing an undercut corrugated sheet in position comprising an undercut corrugated sheet, a clip inserted in an undercut corrugation thereof and a bolt attaching the clip to purlins or like support in which the clip comprises a member which is bent or curved with its convex side facing inwardly of the corrugation so that pressure on its generally convex side will tend to increase the distance between its ends so that the clip acts as an expanding member against the sides of the corrugation so as to grip the same in surface contact, the clip further comprising limb members extending on the generally concave side of said member from the ends thereof inclined towards one another on that side, the bolt being passed through a centrally disposed aperture in the first-mentioned member with its head on the generally covex side thereof.

2,748,728
DOMESTIC INCINERATOR
Kenneth F. Triggs, Huntington, Ind., assignor to The Majestic Company, Inc., Huntington, Ind., a corporation
Application June 15, 1953, Serial No. 361,589
3 Claims. (Cl. 110—18)



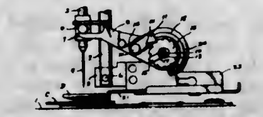
3. An incinerator for burning refuse comprising a combustion chamber housed by an inner drum having a charging opening in the top thereof, a casing mounted about said drum in spaced relation thereto open to the atmosphere and said drum charging opening for providing a down draft therethrough, a fixed grate secured within said drum below said charging openings extending from one wall toward the center of the combustion chamber, a second grate mounted adjacent the opposite wall of said drum and extending to meet said first-mentioned grate for receiving and supporting the refuse from said dump opening, means for dumping one of said grates, an apertured baffle plate extending upwardly from one of said grates toward the top of said drum in spaced relation to the adjacent wall thereof, and a flue extending upwardly from the top of said drum intermediate said baffle plate and the adjacent wall thereof.

2,748,729
HEMMING NECKTIES
Herman Davidowitz, New York, N. Y.
Application January 21, 1954, Serial No. 405,451
5 Claims. (Cl. 112—2)



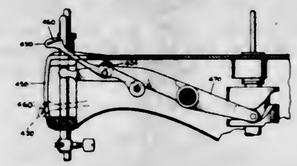
3. A machine for hemming the flat edge-portion of a necktie blank, comprising a longitudinal conveyor which has a longitudinal axis, said conveyor being adapted to support said blank, a fixed hemmer which has a longitudinal axis, said conveyor being located in front of said hemmer, means for moving said conveyor forwardly in the direction of said axis to feed a necktie blank which is supported on said conveyor forwardly towards said hemmer, a fixed guide parallel to said axis, said guide being offset laterally from a longitudinal edge of said conveyor to support a guide on the edge-portion of said blank which extends laterally beyond said longitudinal edge of said conveyor, said hemmer being spaced laterally from said longitudinal edge in the same lateral direction as said guide, feed means and feed-ironing means which are disposed in longitudinal succession behind said hemmer, mechanism for operating said feed means and said feed-ironing means at the same longitudinal rate of feed, and means for applying a supplemental foldable strip to said edge-portion at the anterior end of said hemmer through said hemmer and through said feed means and feed-ironing means so that the pull of said strip pulls said blank through said hemmer and through said feed-ironing means, said conveyor extending from in front of said guide to behind said feed-ironing means.

2,748,730
APPARATUS FOR SEWING BUTTONS
Cornelius A. Rolfson, Portland, Oreg., assignor of one-fourth to George W. Taylor and one-fourth to Richard C. Stratford, both of Portland, Oreg.
Application July 30, 1951, Serial No. 239,298
6 Claims. (Cl. 112—115)



6. In a sewing machine having a work supporting surface, a laterally fixed and vertically reciprocable needle bar carrying a needle, a forked button carrier having a relatively smooth plane upper surface adapted loosely to support but not to physically grip a button, said button carrier being spaced vertically above said work supporting surface and mounted for reciprocal movement in a horizontal operative plane intermediate said supporting surface and needle bar, and operating means for correlating the vertical movements of said needle bar to the reciprocal movements of said button carrier.

2,748,731
SEWING MACHINE
Sidney R. Bell, Stamford, Conn., assignor to Irving J. Moritt, Brooklyn, N. Y.
Application July 17, 1952, Serial No. 299,394
2 Claims. (Cl. 112—241)



1. In a sewing machine, an enclosed sewing machine head having a vertical slot at the forward end, said slot extending upward through the top of said head, a thread take-up arm the end of which projects forwardly through said slot, means for oscillating said arm in said slot over a pre-determined angle of movement between lowermost and uppermost positions, the end of said arm being reversely bifurcated by means of a sloping slit which is open rearwardly for receiving the thread, the open rear end of said slit being normally disposed within said slot in order to prevent escape of the thread from the arm, the free end of said arm when moved by said means to its uppermost position being moved to a point above the slot and the top of the head to expose the end of the arm including the open rear end of the slit for the insertion or removal of thread.

2,748,732
METHOD FOR MANUFACTURING SLEEVE SHAPED DETAILS AND AN APPARATUS FOR PERFORMING THE METHOD
Erik Karl Leonart Bergström, Stockholm, Sweden, assignor to Allmanna Brandredskapsfabren Aktiebolag, Stockholm, Sweden, a corporation of Sweden
Application April 21, 1954, Serial No. 424,734
9 Claims. (Cl. 113—1)

1. A method for manufacturing sleeve-shaped details having internal radii of curvature in two different planes, comprising the steps of: inserting two pressing

punches from opposite sides into the ends of a sleeve cut from a drawn seamless tube, the inserted portion of each of said punches having a substantially semi-cylindrical part and a plate-shaped part joined to the non-cylindrical portion of said semi-cylindrical part, pressing



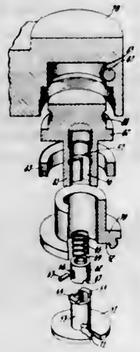
said sleeve by means of the plate-shaped parts of said punches into a recessed bedding of a die, and causing a pressing member to press the portions of the sleeve wall situated around the outside of the semi-cylindrical part of said pressing punches, whereby to make said sleeve conform with the shape of the punches.

2,748,733

SEAMING HEAD

William Pechy, Belmar, N. J., assignor to American Can Company, New York, N. Y., a corporation of New Jersey

Application February 5, 1953, Serial No. 335,306
7 Claims. (Cl. 113—19)



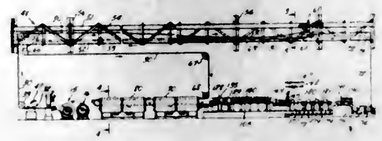
1. In a seaming head for uniting can ends to cans, the combination of a head housing, a hollow trunnion depending from said housing, a seaming roller mounted on said trunnion for free rotation thereon, a locking disc disposed adjacent the end of said trunnion for supporting said roller against displacement from said trunnion, a hollow stem on said locking disc extending up into said hollow trunnion, a projection on said stem overhanging the outer face of said stem, a bayonet joint comprising a keyway extending along said trunnion in the inner face thereof and a connecting annular groove for receiving and holding said projection for securing said stem and said locking disc in place, a locking sleeve disposed within said hollow trunnion above said annular groove, said sleeve being slideable within said trunnion and having adjacent said annular groove a locking notch disposed out of alignment with said bayonet joint keyway for engagement over said projection, pressure means exerting a yieldable force against said sleeve in the direction of said annular groove to keep said notch engaged over said projection, means connecting said sleeve with said trunnion to hold said sleeve against rotation without interfering with its sliding movement for locking said projection and its attached stem against movement relative to said trunnion to insure against loosening of said disc and displacement of said roller during operation of said head, and means on said sleeve engageable by an instrumentality inserted through said hollow stem for releasing said sleeve from said projection to release said locking disc for removal with said roller from said trunnion for replacement of said roller.

2,748,734

CONTINUOUS TUBE WELDING APPARATUS WITH MULTI-STAGE HEATING

Frank J. Kennedy, Mount Lebanon, Pa., assignor to National Electric Products Corporation, Pittsburgh, Pa., a corporation of Delaware

Application November 9, 1950, Serial No. 194,901
8 Claims. (Cl. 113—33)



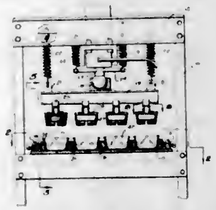
1. A continuous tube welding mill for making butt weld tubing, said mill comprising a furnace through which a flat skelp travels, forming apparatus at the outlet end of the furnace, means for directing the skelp in a downward direction as it is pulled from the furnace, said means comprising a pair of inclined plates located upon opposite sides of said skelp and adapted to restrain the pulling thereof, a single roll stand located immediately beyond said means in which the skelp is formed into a tube blank having a seam cleft at the top of said blank, one of said plates having a nose portion about which said skelp is preformed as it is directed into said roll stand, guide means immediately beyond the forming roll stand in position to bow the tube blank downwardly away from the seam to stretch the seam edges and remove waves that are sometimes produced by the forming operation because of variations in thickness and heat abosrption, other guide means through which the tube blank passes, air fuel gas heating burners located along a substantial run of the seam cleft beyond the forming roll stand for concentrating heat in the region of the seam, and welding apparatus immediately beyond the heating burners including a torch that directs high intensity oxy-fuel gas flames against the seam edges to raise said edges to a welding temperature, and welding rolls that bring the seam edges into contact with one another to make a butt weld while at welding temperature.

2,748,735

DEVICE FOR RESTORING TO SHAPE THE WALLS AND BOTTOMS OF DEFORMED SHEET METAL BREAD PANS

William F. H. Slaten, Van Nuys, Calif.

Application December 23, 1954, Serial No. 477,279
2 Claims. (Cl. 113—48)



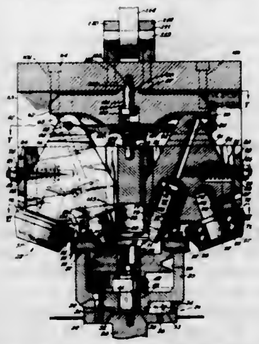
1. A device for restoring to shape deformed sheet metal bread pans comprising a standard, a base supported on said standard, an overhead support carried by said standard, a horizontally disposed frame having a pair of side pieces and end pieces connecting the adjacent ends of the side pieces fixed on said base, a plurality of side reshaping blocks positioned within said frame between and in parallel spaced relation with respect to said end pieces of said frame, an end reshaping block extending transversely between adjacent side reshaping blocks near each one of adjacent ends of the side reshaping blocks, the adjacent side blocks and the associated end blocks forming a plurality of female dies, means carried by the frame side pieces and engageable with the end reshaping blocks for holding the latter in assembled position, means carried by the frame end pieces and engageable with the adjacent side reshaping blocks for holding the latter in assembled position, means carried by the frame end pieces engageable simultaneously with the end reshaping blocks and the side reshaping blocks for releasably locking said blocks to said base, a hanger member positioned below and spaced from said support and connected to said support for vertical up and down movement with respect to said base, means for effecting the up and down movement of said hanger member, and a plurality of male dies dependingly carried by said hanger member and arranged to register with the female dies in said frame.

2,748,736

APPARATUS FOR SECURING COVERS ON VISCOUS VIBRATION DAMPER UNITS OR THE LIKE

Alfred E. Grzenkowski, Niagara Falls, and Raymond W. Rademaker, Buffalo, N. Y., assignors to Houdaille Industries, Inc., Detroit, Mich., a corporation of Michigan

Application November 14, 1950, Serial No. 195,682
6 Claims. (Cl. 113—52)



1. In combination in a machine for spinning inner and outer cover-retaining flanges of an annular metal casing onto the margins of an annular closure plate on the casing, means for supporting the casing rotatably about the axis of the annular closure plate, a spinning head assembly mounted for movement into and out of spinning relation to the casing on said supporting means, and at least two sets of spinning rollers, each set of rollers comprising an inner and an outer flange spinning roller mounted on a member which is in turn pivotally carried by a common equalizing yoke which is pivotally secured to and supports each of said members and which is in turn rockably secured to said head, means limiting said members to movement in respective planes extending substantially radially of said head whereby said members rotate with said head, all of said rollers being operable simultaneously to spin the inner and outer retaining flange of the casing onto the margin of the cover plate while the casing is rotated by said supporting means.

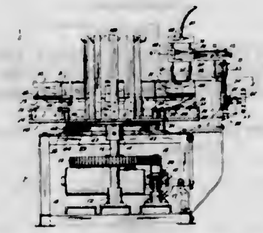
2,748,737

MACHINE FOR MANUFACTURING STORAGE BATTERIES

Alfred R. Willard, East Cleveland, Fred C. Haak, Euclid, and Henry W. Lormor, Shaker Heights, Ohio, assignors to The Electric Storage Battery Company, a corporation of New Jersey

Application January 6, 1950, Serial No. 137,214
14 Claims. (Cl. 113—59)

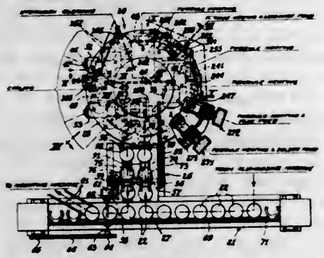
1. An apparatus for burning plate connecting straps to assembled battery elements comprising a frame, conveyor means on said frame movable in a closed path, a plurality of battery element holders mounted on said conveyor means for holding a battery element in position thereon and carried thereby through successive stations including an element holder loading station and a plate connecting strap burning station, said holders each comprising a substantially horizontal means connected to said conveyor and defining a substantially horizontal base, a first abutment means defining a wall extending perpendicularly from said conveyor means and rigidly connected to said conveyor means, a second abutment means defining a wall parallel to and opposed in clamping relationship to the wall defined by the first abutment means, means supporting said second abutment means on said conveyor means for limited movement toward and from the first abutment means, and means connected to said second abutment means for yieldably urging said second abutment means toward said first abutment means whereby an unburned assembled battery element may be placed in an upright position between the first and second abutment means with the latter engaging the faces of the end plates of the element to yieldably clamp the plates and separators together, burning means supported on said frame at an elevation above said holders and comprising said burning station for burning together the plate connecting straps and the plate lugs as the element holders are carried successively through said burning station by said conveyor means, means including cam means on said frame operative to move said second abutment means away from the other to permit insertion and removal of an assembled battery element, said cam means being on said frame relative to said burning means in a position such that the said second abutment means of each holder is permitted to move to its element clamping position as the respective holders approach said burning station and the said second abutment means of each holder is moved by said cam means away from said first abutment means to release the battery element therebetween as the respective holders pass said burning station and move through said loading station.



4. A burning iron or baffle device for protecting the plates and separators of an assembled lead-acid type battery element during the burning of plate connector straps to vertically extending plate connector lugs on the plates comprising frame means adapted to be lowered on to the assembled element having an enclosed opening adjacent one end thereof to receive the vertically extending plate connector lugs of a plurality of battery plates of an assembled battery element and a plate connecting strap, said plate connector lugs being positioned transversely of said frame means in spaced side-by-side relationship and said opening having a side adjacent to and extending along said one end adapted to substantially abut the outer edges of plate connector lugs positioned in the opening, means for closing the bottom of said opening comprising a thin comb plate extending transversely of said frame means, means slidably supporting said comb plate adjacent to the underside of said frame means for sliding movement from a position adjacent to the side of said opening remote from said one end to a position substantially closing said opening, said comb plate having prongs extending

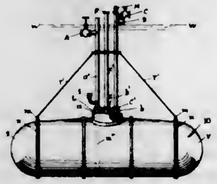
from one edge thereof toward said one end adapted to register with the spaces between the connector lugs and spaced apart a distance equal to the thickness of a plate connector lug so as to pass between plate connector lugs positioned in said opening and closely fit the adjacent plate connector lugs to close the space therebetween, and means for moving said comb plate between its positions.

2,748,738
MACHINE FOR PROCESSING THE REFLECTORS OF SEALED BEAM LAMPS
Michael E. McGowan and Henry P. Hasell, Bloomfield, N. J., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application February 20, 1951, Serial No. 211,956
8 Claims. (Cl. 113—59)



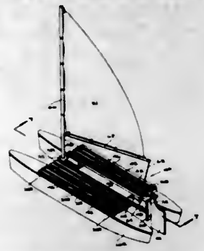
1. In a brazing machine, a plurality of heads for holding reflectors of sealed beam lamps, each head carrying a plurality of reflector-clamping cams pivoted about horizontal axes, and keepers associated with each cam for either holding it in unlocked position or releasing it to hold a reflector in place, means for lifting a reflector to locking position while simultaneously releasing said keepers to allow the cams to drop to locking position with respect to said reflector, and means at another station for unlocking said clamping cams and withdrawing the reflector held thereby.

2,748,739
UNDERWATER STORAGE VESSEL FOR FLUID EXPLOSIVES AND COMBUSTIBLES
Enzo Monti, Bologna, and Luigi Gallingani, Lavagna, Italy
Application October 12, 1951, Serial No. 250,994
3 Claims. (Cl. 114—.5)



1. In an underwater storage vessel, for use in storing liquids having a specific gravity smaller than that of water and being substantially immiscible with water, in combination, an enclosure structure made of concrete sealed against the entry of water, and being operable to float and, respectively, to be submerged at rest below the water level and including ground engaging means for support at rest on the bottom of the body of water, conduit means connected to said structure and extending from the interior to the outside thereof and including valve means operable for the passage of fluids including pressurized air and said liquid and water, operable to control and to vary the ratio of water, liquid and air, and the pressure, on the interior of said structure and whereby said liquid and water may be filled into said structure and be stored in superposed direct contact therein and be discharged therefrom, said structure being elongated horizontally and comprising a roof section tapered downwardly conically from a central top portion including an apertured raised part above said top portion, said conduit means including hollow tubular elements extending upwardly from said structure beyond the level of the body of water surrounding said structure and operable to pass water, liquid, and air, said valve means comprising some elements for passage of air and of said liquid disposed above said level and respectively, other elements for water passage below said level, vertical perforated partitions disposed on the interior of said structure defining a series of intercommunicating storage chambers for water and liquid above the water and operable to restrain agitation of the water and liquid in said structure.

2,748,740
CATAMARAN
Manuel P. Villar, Coral Gables, Fla.
Application September 24, 1954, Serial No. 458,108
3 Claims. (Cl. 114—39)



2. In a catamaran, a pair of similar longitudinally elongated pontoons in laterally spaced relation, said pontoons having tops, a forward cross member, a middle cross member, and a rear cross member, each of said cross members consisting of a plank having opposite ends resting directly upon the pontoon tops at spaced intervals along the pontoons, and means removably securing the plank ends to the pontoon tops, longitudinal decks overlying and secured to said planks, said decks having lateral inward edges in spaced relation to each other, a longitudinal center plank secured to the planks between the laterally inward edges of the decks and located in the space between the pontoons, said center plank having forward and rear ends, a vertical rudder post plate fixed intermediate its ends on the rear end of the center plank, said rudder post plate having a rear side, and a rudder pivoted on the rear side of said post and having a forwardly projecting tiller handle, a mast socket in the forward end of the center plank, and a sail mast having a lower end removably engaged in said socket.

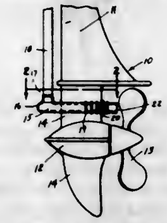
2,748,741
ANCHOR HAVING A SLIDABLE STOCK
William T. Abbott, Massapequa, N. Y.
Application March 30, 1955, Serial No. 497,997
3 Claims. (Cl. 114—207)



1. A self-rotating boat anchor comprising a shank having a U-configuration cross-section and having a 90 degree

uniformly disposed twist therein, a crown having opposed flukes secured fixedly to said shank, a longitudinal stock having a substantially U-shaped aperture therein mounted slidingly upon said U-shaped shank, a plug fitted in said U-channel of said shank and having a centrally disposed tubular opening disposed centrally in said U-channel of said shank, a collar guide having a pilot plate disposed in said U-channel of said shank disposed about said shank, a strap secured to said stock and said collar guide, and a cable disposed slidingly through said tubular opening and secured to said stock.

2,748,742
BOAT BAILER
Jean W. Morris, Muncie, Ind.
Application November 29, 1954, Serial No. 471,712
5 Claims. (Cl. 115—17)



3. In a boat including an outboard motor having a skeg and a propeller, a boat bailing attachment comprising a substantially V-shaped flexible tubing having arms embracing said skeg with the free ends of the arms disposed adjacent the path of rotation of said propeller, said tubing having a tubular extension leading to the bottom of said boat from adjacent the vertex of the V, said tubing having a plurality of opposed anchoring means formed in its arms, and means associated with said anchoring means for clamping said arms about said skeg.

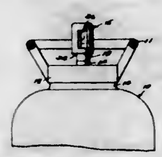
2,748,743
OUTBOARD MOTOR REPOSITIONING MEANS
Arnold Shogran, Chicago, Ill.
Application March 27, 1953, Serial No. 345,137
18 Claims. (Cl. 115—18)



12. In combination, an outboard motor having a driven propeller, said motor being pivotally mounted on a boat for swinging movement of said propeller between a forward and rearward position for varying the thrust angle of said propeller relative to said boat, spring means between said boat and said motor tending to force said propeller toward said rearward position, said spring means being operative upon reduction of thrust of said propeller, while said boat is being driven, to effect a movement of said propeller to said rearward position, and latch means between said boat and said motor for automatically holding said propeller in said rearward position when said propeller reaches said rearward position due to said movement.

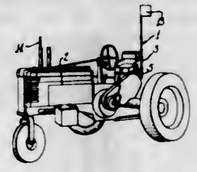
2,748,744
INDICATOR FOR FIRE EXTINGUISHER
Fred Vernon Trulove, Greensboro, N. C.
Application July 9, 1953, Serial No. 366,961
3 Claims. (Cl. 116—114)

1. A fire extinguisher bottle having a neck at one end containing fire extinguisher fluid in said bottle and a slidable shaft in said neck for actuating a pressure actuating means within said bottle discharging said fire extinguisher fluid from said bottle comprising a hollow shell open at the lower end thereof slidably engaging said neck and engaging an end of said shaft outwardly of said neck, said shell having circumferentially spaced apart windows in the side walls thereof, a cylindrical drum rotatable in said shell open at the bottom thereof and rotatable on said neck, outwardly extending cam pins carried by said neck, a plurality of openings on said drum, a circumferentially inclined cam edge on the lower edge of one of said openings, a longitudinally extending



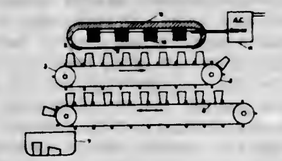
straight edge in said opening opposite from said inclined cam edge, said cam pins being engageable with said cam edges of said drum for rotating said drum upon downward movement of said shaft for actuating said pressure actuating means and with said straight edges upon free sliding movement of said drum outwardly of said neck with said shaft after actuation of said pressure actuating means, spring means urging said drum and said shell outwardly of said neck, and indicating means on said drum viewable through one of said openings in said shell indicating the relative relation of said drum and said pressure actuating means.

2,748,745
SAFETY MEANS FOR VEHICLES
Clifford L. Pobanz and Wilbur T. Pobanz, Galva, Ill.
Application September 23, 1954, Serial No. 457,952
2 Claims. (Cl. 116—173)



1. A safety flag assembly comprising a socket, a centrally flanged plug either end of which intimately seats in said socket, a telescopic rod on one end of said plug, a signal flag on the free end of said rod, and said socket being of uniform cross-sectional area and of sufficient length to receive said rod in retracted position with the flag wrapped therearound.

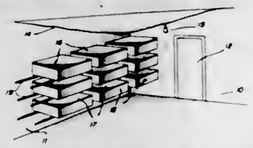
2,748,746
APPARATUS FOR DRAINING OFF EXCESS LIQUID FROM COATED ARTICLES
Fritz Wommelsdorf, Hamburg-Rissen, Germany
Application March 10, 1953, Serial No. 341,455
2 Claims. (Cl. 118—57)



1. In an arrangement for impregnating paper containers or the like, a draining conveyor on which impregnated and still wet containers are placed, acoustic vibrating

means above said conveyor being effective in setting the air column beneath and therewith said containers in vibratory motion to thereby accelerate the draining-off process.

2,748,747
METHOD AND APPARATUS FOR PRODUCING FISH BAIT
Henry J. Crull, Andrews, Ind.
Application February 23, 1952, Serial No. 273,117
9 Claims. (Cl. 119—1)



1. Apparatus for breeding, feeding and packaging fish bait comprising a container for feeding and breeding worms, a source of light supported externally of said container to repel worms from the exterior space around said container, a loosely fitting cover on said container for admitting air and excluding light therefrom to provide a natural habitat for said worms in the form of a dark space, a plurality of slotted packages supported at an angle to the vertical on the interior vertical walls of said container for providing worm-receiving apertures and a package cover between each package and the adjacent walls for providing a surface to which said worms may attach their cocoons and which is removable from said walls.

2,748,748
RETRACTABLE BALL PEN
Charles K. Lovejoy, Atlanta, Ga., assignor to Scripto, Inc., a corporation of Georgia
Application May 25, 1953, Serial No. 357,183
5 Claims. (Cl. 120—42.03)



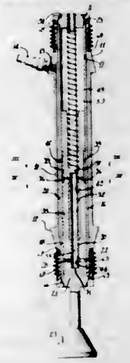
1. A retractable ball pen comprising a barrel portion having a main bore and a terminal bore of reduced diameter with an inwardly facing annular shoulder at the juncture of said bores, a plunger member having a main body portion slidably disposed in said main bore and a tip portion of reduced diameter slidably extending through said terminal bore with a shoulder step between said plunger portions engaging said annular barrel shoulder upon retraction, a separate spring latching lever anchored at one end on the main body portion of said plunger member at a position spaced substantially from said shoulder step and arranged with the other end thereof extending beyond said shoulder step to a position intermediate the length of the tip portion of said plunger member, said spring latching lever being biased for shifting of said other end thereof laterally outward from said plunger member within said main barrel bore, and said plunger member being recessed to receive said spring latching lever in nested relation for sliding movement with the tip portion thereof within said terminal bore, and said other end of the spring latching lever engaging said annular barrel shoulder upon projection.

2,748,749
CHECK VALVE-PINS FOR FOUNTAIN PENS
Valentine Palsic, New York, N. Y.
Application October 29, 1952, Serial No. 317,453
2 Claims. (Cl. 120—48)



1. A fountain pen check valve construction comprising a feed bar holder having an ink passage through it, a feed bar having a flat end removably held in one end of the ink passage of the feed bar holder, a valve stem with a disc at one end of a diameter to slidably fit in the ink passage, a spacer extending from the disc and having a diameter less than the disc, said stem and disc and spacer being one unit adapted to be disposed in the ink passage of the feed bar holder with the spacer abutting the end of the feed bar retained in the ink passage in writing position, a stem guide and disc retainer member removably held in the ink passage of the feed bar holder and spaced from the feed bar to permit the valve stem to have a limited distance of travel as the feed bar holder is moved from a carrying position to a writing position and from a writing position back to a carrying position, said disc having a port opening and said spacer having a slot opening across it in vertical alignment with the feed bar passage, said feed bar having a longitudinal ink groove along one side of it, guide means on the disc and corresponding mating guide means inside the ink passage to align the cross slot opening in the spacer with the ink groove in the feed bar and to prevent turning of the disc in its travel.

2,748,750
VIBRATIONLESS PNEUMATIC IMPACT TOOL
Samuel Altschuler, Chicago, Ill., assignor to Armour Research Foundation of Illinois Institute of Technology, Chicago, Ill., a corporation of Illinois
Application January 13, 1953, Serial No. 330,971
11 Claims. (Cl. 121—25)



1. A vibrationless pneumatic impact tool comprising an impact member, a reactive mass coaxially aligned with said impact member, a handle member coaxial with said impact member and said reactive mass, said handle having means mounting said mass and said impact member for guided freely slidable movement with respect to each other and said handle and resilient means biasing said mass and impact member against movement away from each other, said last named means being independent of said handle whereby vibrations imposed by said mass and said member are not imposed on said handle.

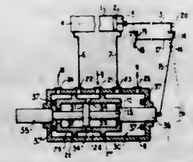
2,748,751
FLUID ACTUATED POWER HAMMERS
Norman S. Johnson, New York, N. Y., assignor to Raymond Concrete Pile Company, New York, N. Y., a corporation of New Jersey
Application October 16, 1953, Serial No. 386,646
6 Claims. (Cl. 121—25)



1. In a differential piston fluid actuated power hammer, the combination of upper and lower pistons contained respectively in relatively large and smaller cylinders, said pistons being interconnected by a rod fluid pressure inlet means for continuously supplying fluid pressure to a space between said pistons, passage means in said upper piston communicating with the cylinder exhaust, hollow tubular valve means extending through the upper piston in slidable relation therewith and provided with ports near the upper and lower ends thereof, friction means normally holding the valve means stationary relative to the piston, said valve means projecting beyond the upper and lower surfaces of said piston, whereby contact between said valve means and the cylinder occurs near the limits of the upward and downward strokes of the upper piston thereby causing relative sliding between said valve means and the valve means being positioned relative to the upper piston during the latter part of the upstroke and the greater part of the downstroke of the piston assembly with said ports being disposed in the spaces, respectively, between the pistons and the upper piston, thereby permitting communication of fluid pressure from the former space through the hollow valve means to the latter space, and being positioned during the remainder of the operative cycle with the port near its lower end enclosed within the upper piston, thereby blocking off communication between the spaces between pistons and the space above the upper piston, said port in this position being in communication with said passage means in the upper piston, thereby providing communication of fluid pressure from the space above the upper piston through the hollow valve means and the passage means in the exhaust.

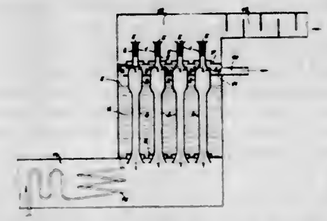
2,748,752
AUTOMATICALLY REVERSING VALVES
Ludovicus Hendrikus Baghuis, Best, Netherlands
Application April 11, 1952, Serial No. 281,769
4 Claims. (Cl. 121—157)

1. A valve device for automatically reversing the supply and exhaust of fluid to the ends of a cylinder containing a double-acting reciprocating piston comprising, a housing having ports therein for the admission and exhaust of working fluid to and from said housing, a valve body displaceably contained in said housing and cooperating with the ports to open and close the same, said valve body being arranged for displacement between two limiting positions within said housing by the action of said fluid, a moveable control member disposed within said valve body and defining two chambers therein, which are respectively increased and decreased in size by relative movement of said moveable member and said valve body, port means for said chambers, said port means cooperating with said moveable member for alter-



nately and selectively connecting said chambers to the fluid admission and fluid exhaust ports of the housing, means for moving said moveable member relative to said housing and said valve body for selectively connecting one of the chambers with a fluid admission port and the other with a fluid exhaust port for increasing the size of the one chamber by the admission of working fluid and reducing the size of the other chamber by exhaust of fluid therefrom, for displacing said valve body within said housing and relative and in a direction opposite to said moveable member by the inflow of fluid increasing the size of the selected chamber, whereby the displacement of the valve body within said housing controls the admission and exhaust of the working fluid to and from said housing.

2,748,753
BOILERS
Paul Sarrazin, Paris, François G. Paris, Chaville, and Jean Bertin, Neuilly-sur-Seine, France, assignors to Societe Nationale d'Etude et de Construction de Moteurs d'Aviation, Paris, France, a French company
Application July 30, 1951, Serial No. 239,268
Claims priority, application France August 8, 1950
3 Claims. (Cl. 122—24)



1. A boiler for generating and superheating steam comprising: an enclosure having a watertight bottom and a steam-tight top, said enclosure being designed for containing water up to a level located at a substantial distance from said top, a plurality of heating ducts of the pulsatory combustion type, adjacent to but spaced from each other, each of said ducts comprising a resonant-firing combustion chamber, the major portion of which extends between the top of said enclosure and the level of the water, and a gas exhaust pipe, the major portion of which is bathed by said water, said combustion chamber and gas exhaust pipe extending in succession and substantially vertically through said enclosure, said gas exhaust pipes extending through the bottom of said enclosure and discharging outside the same, an air intake device for each resonant-firing combustion chamber, ex-

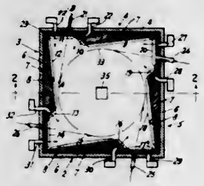
tending through the top of said enclosure and having an inlet opening outside the same, said air intake devices being of the statical, aerodynamically operating type allowing substantially free flow of air towards the combustion chamber while hindering back-flow of combustion gas therefrom, a common air intake manifold above the top of said enclosure, in communication with the inlets of said air intake devices, a common gas exhaust manifold, below the bottom of said enclosure, in communication with said gas exhaust pipes, means adjacent the top of said enclosure for leading off superheated steam generated therein, and piping means leading into said enclosure for supplying water thereto.

2,748,754

FLUID HEAT EXCHANGE UNIT WITH A FURNACE HAVING GAS DEFLECTING INNER WALL SURFACES

Otto Lotz, Oberhausen, Germany, assignor to The Babcock & Wilcox Company, New York, N. Y., a corporation of New Jersey

Application November 6, 1952, Serial No. 319,079
4 Claims. (Cl. 122—235)



1. In a vapor generating unit, a furnace, similarly directed fuel burning means disposed at successive positions angularly or circumferentially spaced perimetrically of the furnace, said fuel burning means so directing fuel and air streams substantially tangentially into the furnace that the furnace gases have a substantially circular path within the furnace, interior wall portions of the furnace including vapor generating tubes and forming a fuel and air mixing chamber or a fuel burning pocket at each of said positions disposed exteriorly of the maximum circular path of the furnace gases within the furnace, the fuel burning means including fuel and air jet tubes supplying fuel and air to each pocket, the jet tubes terminating within the pocket, said wall portions including a plurality of gas deflecting walls each preceding a pocket in the direction of rotation of the gases within the furnace and angled inwardly away from that pocket to deflect the rotating gases away from the pocket and toward the furnace center, tubes of each deflecting wall constituting a surface of a pocket, each of said deflecting walls angled toward the deflecting wall for the next succeeding pocket to direct the gases and suspended combustion elements toward the deflecting wall for the next succeeding pocket, at least one of said jet tubes for each pocket directed obliquely toward the deflecting wall of the same pocket.

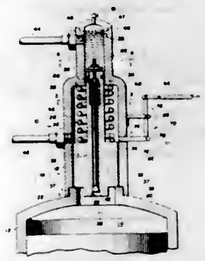
2,748,755

HUMIDIFYING APPARATUS FOR INTERNAL COMBUSTION ENGINES

Doyle A. McCutcheon, Watsonville, Calif.

Application September 23, 1953, Serial No. 381,855
5 Claims. (Cl. 123—25)

1. An apparatus for injecting water into the cylinder of an internal combustion engine comprising a casing adapted for mounting on a cylinder head of an engine, the end of said casing adjacent said cylinder head being open to communicate with an opening in said cylinder head, the interior of said casing being hollow and comprising a first chamber at the end of said casing adjacent said cylinder head and a second chamber of smaller diameter than said first chamber and forming a continuation of said first chamber at the opposite end of said casing, a piston member movable in said casing, said piston member comprising a first piston portion movable in said first chamber and a second piston portion of smaller diameter than said first piston portion and extending from said first chamber into said second chamber, said second chamber normally containing a supply



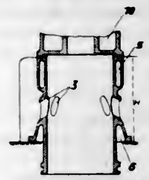
of water and also an air pocket at the top thereof providing flexibility of action of the piston, a passage extending through said first and second piston portions, a valve means controlling flow of water through said passage, said valve means opening upon movement of said second piston portion into said second chamber, whereby water contained in said second chamber is ejected through said passage into said combustion space.

2,748,756

FLUID-COOLED TWO-STROKE CYCLE INTERNAL COMBUSTION ENGINE WITH CYLINDERS MOUNTED INDIVIDUALLY ON THE ENGINE BLOCK

Johann Kremser, Hannover, Germany

Application July 31, 1953, Serial No. 371,517
Claims priority, application Germany February 17, 1953
9 Claims. (Cl. 123—41.78)



1. A port-controlled, fluid-cooled two-stroke cycle internal combustion engine comprising an engine block, individual cylinder units disposed independently from each other, said cylinder units being provided with air inlet and outlet ports and the major portion of said cylinder units being mounted outside of and secured to said engine block, a cylinder head for each of said cylinder units, and anchor bolts for fastening said cylinder head to said engine block thereby clamping said cylinder units between their corresponding cylinder head and said engine block.

2,748,757

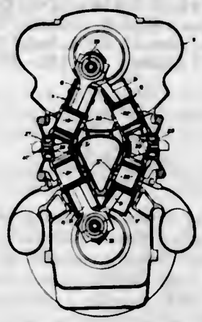
INTERNAL COMBUSTION ENGINE COMBUSTION CHAMBER

Donald W. Morris, Berkeley, Calif., assignor to Morris Development Company, Los Angeles, Calif., a copartnership

Application June 23, 1952, Serial No. 295,018
4 Claims. (Cl. 123—53)

1. In an internal combustion engine, a cylinder head, and a pair of opposed pistons adapted to move in unison toward and away from the cylinder head on opposite sides thereof, said cylinder head having an inwardly extending annular shoulder facing each piston,

each piston having a reduced upper end to pass into the opening defined by the associated annular shoulder on the cylinder head of a size to be substantially in sliding engagement wtih said shoulders, the reduced upper end of each piston being surrounded by an annular shelf complemental in formation to the opposed annular shoulder on the cylinder head, said reduced upper ends of said pistons being angularly truncated whereby air trapped between said annular shoulders and said annular shelves when the high side of said reduced



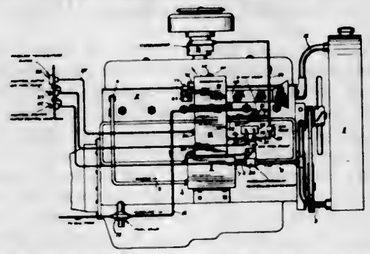
upper ends of the pistons enter the openings defined by said annular shelves is forced out tangentially around said reduced upper ends of the pistons and creates a double vortex within the combustion chamber adjacent the low side of the reduced upper end of each of said pistons, the high side of each of said opposed pistons being disposed toward the same side of the engine and a fuel injector in said cylinder head adjacent the high sides of said pistons adapted to inject a fuel spray substantially diametrically across the tops of said piston heads at right angles to the axes of said vortices.

2,748,758

FUEL SYSTEM FOR INTERNAL COMBUSTION ENGINES

Eugene A. Fairbanks, Little Falls, Minn.

Application August 23, 1954, Serial No. 451,407
13 Claims. (Cl. 123—122)



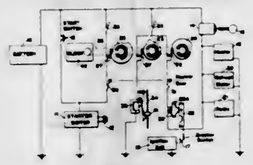
1. The combination with an internal combustion engine including a carburetor and a fuel supply tube for conducting liquid fuel to the carburetor, of means interposed in said tube for preheating and expanding the liquid fuel flowing therethrough to the carburetor, means comprising a closed fuel heating chamber which is in communication with the fuel supply tube, means for heating the liquid fuel delivered into said chamber, means for conducting heated fuel from the heating chamber to the engine carburetor, condenser means in communication with said chamber for condensing the vapors rising from the heated fuel, a cooling chamber connected to the heating chamber by a plurality of laterally spaced vapor circulating tubes, and a fresh air duct for directing a flow of cold air against the walls of said vapor circulating condenser tubes, thereby to quickly condense the vapors passing therethrough.

2,748,759

AUTOMATIC STARTING DEVICE

Henry C. Schiffer, Meriden, Conn.

Application November 23, 1953, Serial No. 393,739
5 Claims. (Cl. 123—179)



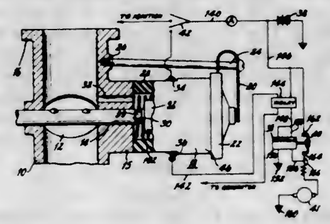
1 An automatic engine starting control device for starting an internal combustion engine which includes a battery, a starter motor, and an electrical ignition system comprising; a presettable mechanical clock mechanism which rotates a primary shaft on which is secured a primary cam arranged to close a switch in series with the ignition system and to start a secondary rotatable shaft coupled to three secondary cams, each of which operates an electrical switch; a first of said secondary cams arranged for closing a switch which connects the battery to the starter motor for rotating the engine crank shaft; a second of said secondary cams for closing a switch in series with the ignition system; a third of said secondary cams for closing a switch in series with the winding of an electromagnet which controls the throttle of the engine; and a friction clutch coupled between a means of rotation and said secondary shaft with manual means of disconnecting the clutch at the end of a starting operation; said primary cam also arranged to open said switch in series with the ignition system to stop the engine after an extended time interval.

2,748,760

ENGINE STARTER CONTROL APPARATUS

Donald D. Stoltman, Conesus, N. Y., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application June 22, 1953, Serial No. 363,325
13 Claims. (Cl. 123—179)



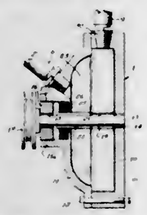
1. In a starting apparatus for internal combustion engines having a starting motor, a current source, a circuit for connecting said motor and current source, a control switch for controlling said circuit having a plurality of contacts adapted to be electrically connected to close said circuit, a member rotatably movable to connect said contacts and axially movable by engine suction to a position to prevent closing of the switch during engine operation, and means opposing a predetermined resistance to movement of said suction operated member to switch closing position, operating means for moving said rotatable member to switch closing position, a resilient operating connection between said means and the rotatable member, said resilient operating connection being effective to exert sufficient force to overcome the means opposing movement of said rotatable member only after a predetermined movement of said operating means.

2,748,761
GRINDING WHEEL TOOLS
Hubbard H. Winegar, Ormond Beach, Fla.
Application April 1, 1952, Serial No. 279,865
7 Claims. (Cl. 125—11)



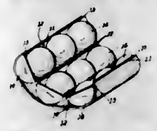
1. In combination, a grinding wheel having two flat sides and a peripheral surface all of which may be used for grinding; a work rest having an angular shape with two vertical edges at right angles to each other and with flat upper horizontal surfaces; means for securing said work rest immovably adjacent said grinding wheel with one of said vertical edges parallel to a tangent to the periphery of the grinding wheel and with the other vertical edge parallel to one of the flat sides of the grinding wheel; a block resting on and slidable over the flat upper surfaces of said work rest and having two parallel, transverse horizontal passages, one in the middle thereof and the other near one end of said block; an abutment adjustably supported on but spaced from said block and having a flat vertical surface which is in slidable contact with either vertical edge of said work rest; a cutting tool supported on and projecting from said block, said cutting tool having a slidable fit in a selected one of said passages and having its cutting end in substantial contact with the grinding wheel, the other end of said cutting tool having a handle extending outwardly beyond the block and parallel to or in the plane of the grinding wheel when the vertical edge which is parallel to said tangent is contacted by said abutment, said handle extending at right angles to the plane of the grinding wheel when the vertical edge which is parallel to one of the flat sides of the grinding wheel is contacted by said abutment, and a second handle fixed to the end of the block opposite to the end which is near said transverse passage and extending outwardly from the block to cooperate with the first named handle in manual sliding of said block over the flat upper surfaces of said work rest while the selected surface of the grinding wheel is being dressed by the cutting tool; means to secure the cutting tool immovably on the block; and means to secure the abutment immovably in adjusted position, said abutment being adjusted to determine the position of the block and of the cutting tool carried by the block relative to the surface of the grinding wheel which is to be dressed.

2,748,762
MECHANICAL HEATER AND PUMP
James H. Booth, Venice Township, Shiawassee County, Mich., assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application January 29, 1953, Serial No. 333,991
8 Claims. (Cl. 126—247)



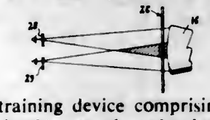
8. A combined fluid heater and circulating pump comprising a housing having a fluid circulating impeller element mounted for rotation therein, and mechanical fluid friction means cooperatively associated with said circulating impeller element and in adjacent coaxial rotational alignment therewith for rotation about an axis common to the axis of said impeller element or for selective fixation relative to said housing to supply heat by friction to said fluid as said fluid is circulated by said circulating impeller element when said friction means is stationary.

2,748,763
PORTABLE MASSAGING DEVICE
Samuel Kosloff, Jamaica, N. Y.
Application June 12, 1953, Serial No. 361,359
2 Claims. (Cl. 128—57)



1. A massaging device comprising an elongated semicircular outer shell, a plurality of rows of curved troughs supported on and partially enclosed by said shell, each trough having a body slightly greater than a semicircle in cross-section so as to provide a restricted opening therealong, a plurality of compressible massaging balls freely mounted in said troughs, the edge walls of said restricted opening preventing displacement of said balls radially, end abutment walls on the troughs for preventing displacement of the balls longitudinally of the troughs, and a handle on said shell, the balls being arranged so as to provide a trough-shaped massaging surface transversely of the device.

2,748,764
VISUAL TRAINING DEVICES
Walter Raymond Boyd, East Woodstock, Conn., and Salvi S. Grupposo, Natick, Mass., assignors to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Application January 2, 1953, Serial No. 329,216
14 Claims. (Cl. 128—76.5)



1. A visual training device comprising viewing means embodying a pair of lenses adapted to be positioned before the eyes of an individual and through which a visual field is adapted to be viewed, said lenses each embodying different light-altering characteristics, and light-altering means interposed between said viewing means and said visual field comprising a pair of portions having different light-altering characteristics for co-operation with the respective lenses of said viewing means to render selected areas of said visual field visible to the respective eyes, and a transparent member superimposed upon a portion of said light-altering means, and having means for effectively modifying the light-altering characteristics of the portion of the light-altering means over which it is superimposed to render visible through each lens the portion of the visual field positioned therebehind whereby binocular fusion is stimulated when the individual views said visual field through said transparent member and portion of the light-altering means covered thereby.

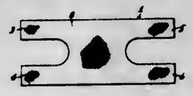
2,748,765
SURGICAL PAD AND THE LIKE
William M. Scholl, Chicago, Ill.
Application December 21, 1950, Serial No. 202,034
8 Claims. (Cl. 128—153)

1. In a surgical pad, a body portion of soft resilient cushioning material, and an adhesive undersurface of less area than said body portion thereon leaving a clean



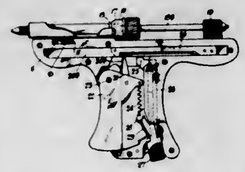
bounding margin of the body portion exposed around said adhesive undersurface.

2,748,766
BANDAGE FOR JOINT AREAS
John M. Coates, Los Angeles, Calif., assignor to Medical Fabrics Co., Inc., Paterson, N. J., a corporation of New Jersey
Application December 23, 1953, Serial No. 399,869
2 Claims. (Cl. 128—156)



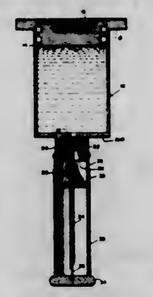
1. An adhesive bandage for joints comprising an elastic strip adhesively coated on one side, a pad centrally positioned on the coated side of the strip and retarding the elasticity of that portion to maintain the pad substantially stationary when applied to a wound, and substantially U-shaped notches in the end portions of said strip forming parallel end leg portions with the inner and outer edges of said leg portions being substantially parallel and having a high degree of elasticity and maneuverability to form elastic anchors when engaged against the skin adjacent a joint to secure the pad in stationary position without disturbing the smoothness of the strip engagement and permitting free movement of the skin between the anchoring leg portions.

2,748,767
DISPENSER FOR LIQUIDS
Ernest Charles Wright, New Haw, Weybridge, England
Application January 9, 1953, Serial No. 330,411
2 Claims. (Cl. 128—218)



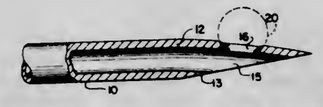
1. A dispenser for the hypodermic injection of liquids comprising, the combination of, a pistol-like body, a cartridge-holding device mounted on the top of said body and having two spaced tubular supports arranged and positioned to hold a cylindrical cartridge for liquids therebetween, one of said supports being fixed to said body and the other support being slidably mounted on said body, a rack slidably mounted in a slot in said body, a piston fixed to said rack and positioned to slide inside one end of a cartridge when held between said supports and upon movement of said rack, a pawl mounted on said body and positioned to engage and advance said rack, a spring-loaded trigger mounted on said body and pivoted to said pawl and a collet chuck on said slidable support for holding a hypodermic needle through which liquid will be ejected from said cartridge upon movement of said piston.

2,748,768
DISPOSABLE CARTRIDGE SYRINGE UNIT
Michael Liparl, Oneonta, N. Y., assignor to Gioacchino Liparl, East Meadow, N. Y.
Application March 19, 1953, Serial No. 343,323
3 Claims. (Cl. 128—218)



1. A disposable cartridge-syringe unit comprising, in combination, a barrel open at one end and having an outlet opening centered in its other end, an axially extending teat projecting outwardly from about said outlet opening, a sealing stopper in the teat and closing said opening, a tubular needle shield having one end open and removably engaged with said teat, a double pointed needle within said shield and having one pointed end normally embedded in said stopper, a plunger-stopper closing the said open end of the barrel and adapted to be forcibly moved inwardly to eject the content of the barrel outwardly of said outlet opening, means for coupling the said open end of the shield with the said plunger-stopper for employment of the shield as an actuating stem therefor after the removal of the shield from the teat and cooperative means carried by said needle and the shield whereby the said one pointed end is forced through said stopper by axial movement of the shield on the teat toward the barrel to establish communication between the bore of the needle and the interior of the barrel.

2,748,769
HYPODERMIC NEEDLE
Ralph L. Huber, Seattle, Wash.; Jennie Huber, administratrix of Ralph L. Huber, deceased
Application February 24, 1953, Serial No. 338,197
3 Claims. (Cl. 128—221)



1. A hypodermic needle comprising a channelled cannula, with its end portion bent laterally and formed with an end surface that is beveled relative to the axial line of the laterally bent portion and providing the needle with a piercing point and a laterally facing outlet from the cannula channel, there being an auxiliary outlet from the channel formed through the cannula wall that is opposite the channel outlet and said auxiliary outlet being disposed in transverse alignment with the channel outlet.

2,748,770
DOUCHE SYRINGE
Adam Moeck, Turin, Alberta, Canada
Application August 18, 1954, Serial No. 450,675
2 Claims. (Cl. 128—251)

1. In a vaginal douche syringe having a vaginal nozzle adapted for entry into the human vaginal canal, a seal cooperating with the said vaginal nozzle to prevent

drainage of the said vaginal canal when the said nozzle is inserted within the said vaginal canal and an inflated collapsible bulb capable of holding a quantity of douching fluid when inflated and discharging said fluid when compressed, the combination of a check valve casing composed of hard rubber and formed with an annular shoulder at one end of its interior surface, said check valve casing communicating between said nozzle and the interior of the said bulb, a cylindrical check valve composed of soft rubber, said check valve cooperating with the said annular shoulder so as to rest upon the said annular shoulder and close the said check valve casing when pressure from the interior of the said nozzle is exerted upon one end of the said check valve and to move away from the said shoulder when pressure from the interior of the said bulb is exerted upon the other end of the said check valve, a metal pin disposed in a position transverse to the longitudinal axis of the said casing and affixed to the interior surfaces thereof, said pin cooperating with the said check valve casing to block the escape of the said check valve from the said casing, said check valve cooperating with the said bulb to allow the flow of fluid substances through the said vaginal nozzle from the said bulb when the latter is compressed and to prevent the flow of fluid substances in a direction from the said nozzle into the said bulb when the said bulb is expanded, said check valve also cooperating with the said bulb to allow the passage of air from the said bulb through the said nozzle when the latter is withdrawn from the said vaginal canal, a cylindrical rubber suction tube terminating in a perforated nozzle and cooperating with the said bulb to facilitate the entry of



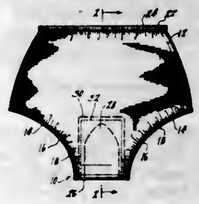
substantial quantities of fluid substances into the said suction tube when the said perforated nozzle thereof is located within an external source of said fluid substances upon a decrease in pressure within the said bulb, a similar check valve casing, check valve and pin, the latter said check valve casing communicating between the interior of the said bulb and the interior of the said suction tube, the latter said check valve cooperating with the annular shoulder of the latter said check valve casing so as to rest upon the said annular shoulder and close the said check valve casing when pressure from the interior of the said bulb is exerted upon one end of the latter said check valve and to move away from the said shoulder when pressure from the interior of the said suction tube is exerted upon the other end of the latter said check valve, said check valve cooperating with the said bulb to allow the flow of fluid substances from a source external to the said vaginal douche syringe through the said suction tube and into the said bulb when the latter is inflated after being in a compressed position and to prevent the flow of air and fluid substances in a direction from the said bulb into the said suction tube when the said bulb is thereafter compressed, the latter said check valve also cooperating with the said bulb to allow the passage of air from the atmosphere into the said suction tube and from the said suction tube into the said bulb after removal of the said suction tube from the said external source of fluid substances and while the said vaginal nozzle is being withdrawn from the said vaginal canal.

2,748,771
LACTEAL FLUID RECEPTOR AND PAD THEREFOR
Frances P. Richards, Glendale, Calif.
Application November 5, 1951, Serial No. 254,891
4 Claims. (Cl. 128—280)



1. A lacteal fluid receptor comprising a first member formed of thin, flexible, moisture proof material shaped to conform to the inner face of the cup portion of a brassiere, a second member formed of thin, flexible, moisture proof material disposed on the side of said first member opposite the cup engaging side thereof; the curved lower edge of said first member being of greater length than the lower edge of said second member and both of said edges being gathered to form edge portions of substantially identical lengths which are less than the ungathered length of said lower edge of said second member, and said edges being connected together with resultant formation of a pad receiving pocket, and means operable to effect detachable connection of said receptor with a brassiere at a point above the cup portion thereof.

2,748,772
DISPOSABLE COMBINED PANTIE AND SANITARY NAPKIN
Georgette Titone, Astoria, and Jeanne Letroux, Sunnyside, N. Y.
Application November 1, 1954, Serial No. 465,774
3 Claims. (Cl. 128—288)

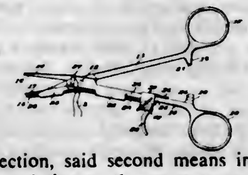


1. A combination article of the class described comprising a body portion formed as a pantie and having a waist opening and leg openings, said leg openings defining a crotch part therebetween, a sanitary napkin supported upon said crotch part, and an inner wall overlying the napkin and secured to the crotch part, said inner wall cooperating with the crotch part to define a pocket in which the napkin is wholly contained, said body portion being formed throughout from a disposable fabric material, the inner wall being formed from a disposable material similar to that of which the body portion is constructed, said inner wall having an elongated, rectangular outer configuration with the edge of the inner wall being disposed beyond that of the napkin, said edge of the inner wall being stitched throughout the periphery of the inner wall to the crotch part, the stitching connecting the inner wall to the crotch part being disposed outwardly from the periphery of the napkin, said article further including a member impervious to the passage of liquid interposed between the napkin and crotch part.

2,748,773
LIGATING HEMOSTAT
Edward Vacheresse, Jr., Fairmont, W. Va.
Application June 24, 1954, Serial No. 438,905
7 Claims. (Cl. 128—326)

1. A surgical instrument including a pair of intersecting pivotally connected cross arms terminatng in gripping

jaws, means on one of said cross arms for supporting a suture with the mid-portion thereof disposed clear of the jaws and inwardly of the jaw ends, a second means supported on said cross arms on opposite sides of said

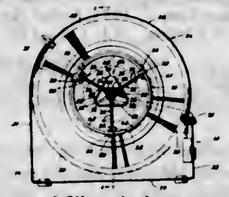


pivotal connection, said second means including a portion movable relative to the cross arms for positioning the mid-portion of a suture in a desired operative position beyond the ends of the jaws when the jaws are in closed gripping position.

2,748,774
COLLAGEN STRANDS AND METHOD OF TREATING
Leo J. Novak, Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
No Drawing. Application December 17, 1953, Serial No. 398,883
10 Claims. (Cl. 128—335.5)

2. A multi-component collagenous surgical suture impregnated with dextran which bonds the components of the suture together.

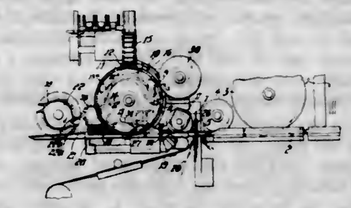
2,748,775
ROTOR FOR ROTARY CARD-FILING DEVICES
Hildaur L. Neilsen, Metuchen, N. J., assignor to Zephyr American Corporation, New York, N. Y., a corporation of New York
Application October 23, 1953, Serial No. 387,970
4 Claims. (Cl. 129—16)



1. In a rotary card-filing device, rotary card-carrying means, supporting means coacting with said card-carrying means to support the latter for rotation about an axis of the latter, said card-carrying means comprising associated plural segments each having axially and radially extending wing portions which are relatively flat at a marginal portion at one end thereof and in intimate face-to-face association with similar marginal portions of another of said segments, and a cleat coaxially disposed at one end of the axis of such an association of said segments, said cleat having plural, angularly spaced slots each embracing therewithin a different pair of such face-to-face marginal portions to hold said segments rigidly together.

2,748,776
METHOD OF AND APPARATUS FOR MAKING MOUTHPIECE CIGARETTES OF OVAL CROSS-SECTION
Desmond Walter Molins, London, England, assignor to Molins Machine Company Limited, London, England, a British company
Application November 30, 1951, Serial No. 259,029
Claims priority, application Great Britain December 12, 1950
4 Claims. (Cl. 131—61)

1. Apparatus for making mouthpiece cigarettes of oval cross-section, comprising means to feed an unwrapped stream of tobacco forwardly, means to sever the stream so as periodically to separate therefrom a leading length thereof, means to form spaces between successive lengths of tobacco, means to feed round stubs from a supply toward said spaces and to deform them to a desired oval cross-section while they are being so fed, means to in-



sert said deformed stubs into said spaces so as to form a continuous composite filler of tobacco lengths and stubs in alternation, means to form said tobacco lengths in said filler to the same oval cross-section and means to fold and secure a paper web about the composite filler so as to form a composite rod of oval cross-section.

2,748,777
CIGARETTE HOLDERS
Jose Mazar Barnett, Buenos Aires, Argentina
Application August 18, 1953, Serial No. 374,898
4 Claims. (Cl. 131—207)



1. A cigar or cigarette-holder comprising an elongated tube having at one extremity an entrance opening for a cigar or cigarette and at the opposite extremity a reduced smoke outlet opening, a body of granular filtering material substantially completely filling the tube and in contact with the tube and a funnel-shaped hollow cap disposed in the entrance opening extremity of the tube inwardly of the extreme end thereof with its smaller end in axial alignment with the outlet opening and surrounded by filtering material and its larger end held in position by the tube and being of substantially the same size as the inside tube diameter, the granular filtering material being held in confined condition by said funnel-shaped hollow cap and forming a long filtering path for smoke.

2,748,778
CIGAR AND CIGARETTE SNUFFER FOR ASH TRAYS
Benjamin E. Olson, Independence, Mo.
Application September 10, 1953, Serial No. 379,370
1 Claim. (Cl. 131—235)



A snuffer adapted to extinguish rolls of smoking tobacco of various diameters, said snuffer comprising an elongated tubular body having an outwardly flared, continuous circular lip arcuate in longitudinal cross section presenting an open uppermost end for receiving the roll of tobacco to be extinguished, and an open lowermost end adapted to pass ashes therethrough, the innermost surface of said body being transversely circular and the inside diameter of the body progressively decreasing from said uppermost end toward said lowermost end, whereby the open lowermost end is restricted to reduce to a minimum the amount of air available for combustion to thereby induce rapid extinguishment, and whereby the body supports the roll against passage therethrough, said body being otherwise imperforate to confine the ashes

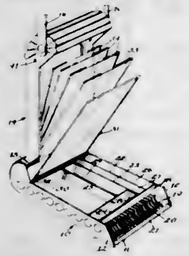
while hot and later to gravitate through the said open lowermost end, and being of non-ignitable, heat conductible material to further assure rapid extinguishing, said body including an uppermost frusto-conical portion for receiving large rolls wedged thereinto and a lowermost frusto-conical portion integral with the uppermost portion for receiving smaller rolls wedged thereinto, the lowermost end of said tube being of smaller diameter than the lowermost end of said first conical portion; a perforated laterally extending integral flange on said lip having a perforated mounting plate extending horizontally therefrom in one direction; a plurality of reinforcing webs underlying the plate and joining the same integrally with the outermost face of said uppermost portion of the body; and means cooperable with the perforated portion of the plate for securing the plate to an open top ash tray with the lowermost end of the body overlying the bottom of the ash tray whereby the latter adapted to collect said ashes emanating from the body.

2,748,779
HAIR CURLING APPARATUS
William J. Crothers, Chicago, Ill.
Application November 7, 1951, Serial No. 255,214
4 Claims. (Cl. 132—33)



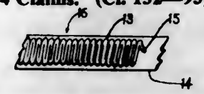
1. Hair curling apparatus comprising a pair of hollow cores around which a lock of hair may be wrapped, a slotted tubular retainer surrounding said cores and serving to maintain said cores in position after wrapping, an operator having a shank member removably engaging at least one of said cores whereby the end of a hair lock may be grasped between said cores and said cores rotated to wrap the hair lock around said cores to form a curl, said tubular retainer cooperating with said cores so that said hair lock may be wedged between said cores and said retainer to facilitate setting thereof, and an auxiliary retainer having resilient arms received within said hollow core to maintain said cores in clamped position, thereby permitting removal of said tubular retainer after said hair lock has taken a set, said auxiliary retainer being provided with a projection to engage said lock of hair which is wrapped around said cores to prevent the assembly comprising said auxiliary retainer and said cores from becoming unwrapped after said tubular retainer has been removed.

2,748,780
CARRYING CASE
Austin McCray, Los Angeles, Calif.
Application April 23, 1954, Serial No. 425,201
2 Claims. (Cl. 132—83)



1. A lady's carrying case comprising a base including a bottom wall and spaced parallel side walls extending from said bottom wall and secured thereto, a cover hingedly connected to said base, a carrying strap connected to said cover, a latch for preventing accidental opening of said cover, a plurality of clips secured to said cover, a battery supported by said clips, a light bulb mounted in said cover and connected to said battery, a first partition extending transversely between said side walls and defining a compartment, a plurality of spaced parallel support members positioned in said compartment for holding coins therebetween, a plurality of wall members positioned in said base and defining compartments therebetween, a lid hingedly connected to said base and mounted for movement into and out of closing relation with respect to said compartments, a mirror hingedly connected to said cover, and a plurality of albums hingedly mounted in said cover.

2,748,781
MEANS FOR DENTAL HYGIENE
Edgar Collat, Milwaukee, Wis.
Application August 24, 1953, Serial No. 376,127
4 Claims. (Cl. 132—93)



1. In a device of the class described an assembly comprising suitable fibers impregnated with a non-toxic adhesive holding said fibers in desired contour, binding the formed fibers securely to a flexible backing strip and retaining a coating of powdered commercial dentifrice, said assembly wound into a compact roll and successive convolutions of said flexible backing strip protecting and temporarily sealing the coated fibers against contamination.

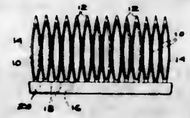
2,748,782
MERCURY SWITCH-INDUCTOR THERMOSTAT CONTROLLED ELECTRIC HAIR TREATING IMPLEMENT
Solomon Harper, New York, N. Y.
Application June 2, 1951, Serial No. 229,583
9 Claims. (Cl. 132—118)



1. In an electrical hair treating implement, an inner tubular part having electrical heating means and an outer tubular part constituting a pair of parts, said pair of tubular parts having different coefficients of expansion, said inner tubular part being movable longitudinally in said outer tubular part, a pair of longitudinally movable and heat expandable grooved parts connected to said inner tubular part, electric switch contacting means connected to and positioned between said grooved parts, said grooved and tubular parts adapted to be operable when said electric heating means are connected to a source of electric energy, means for connecting said heating means of said inner tubular part to and from a source of electric energy, a pointed separating means disposed between said grooved parts, means for hingedly connecting said grooved parts to said inner tubular part temperature adjustable indicating means connected to said tubular parts, and means for adjusting the longitudinal movement of said inner tubular and grooved parts with respect to said separating means, said parts adapted to cool contact and cause said electric contacting means to close electric points.

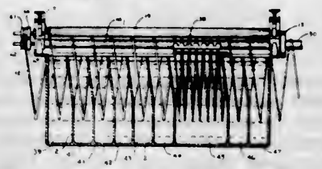
2,748,783
SPRING TOOTH COMBS
Ernest J. Lachance, Leominster, Mass.
Application May 8, 1953, Serial No. 353,835
4 Claims. (Cl. 132—155)

1. A spring tooth comb comprising a resilient blank, spaced teeth thereon extending from an edge thereof, said blank having recesses in the toothed edge thereof between the teeth, a rigid curved comb back to receive and hold the blank in curved and more rigid condition, said back



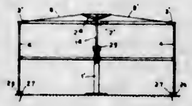
and said blank being of different curvature so that the blank assumes the shape of the back and the teeth are constrained to touch.

2,748,784
BATH STRUCTURE FOR TREATING WIRE IN THE FORM OF A HELICAL COIL
Herbert Kenmore and Walter J. Manson, Jersey City, N. J., assignors, by mesne assignments, to National-Standard Company, Niles, Mich., a corporation of Delaware
Application October 29, 1952, Serial No. 317,416
2 Claims. (Cl. 134—64)



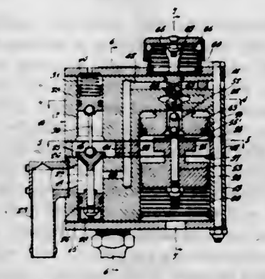
1. In an apparatus for treating heavy gauge wire which includes means for suspending and rotating a horizontally extending helix comprising a plurality of coils of wire to continuously move the said helix horizontally, the improvement which comprises a plurality of horizontally arranged juxtapositioned treating baths adapted to surround the suspended portions of a series of the coils of said helix, said juxtapositioned baths having bottom and side walls and being separated from each other by end walls, corresponding sides of said baths being in alignment and opposite sides thereof being substantially parallel, said end walls being secured to the side walls and the bottoms of said baths, each of said end walls having a first side region adjacent the top thereof which is obliquely positioned with respect to at least one of the bottom and the side walls of said baths towards one end of the side walls and each of said end walls having a second side region opposite said first side region which is similarly obliquely positioned in a direction opposite to that of the first side region, said end walls being of substantially uniform thickness throughout and corresponding parts of each of said end walls being substantially parallel.

2,748,785
FRAMEWORK FOR A TENT OR LIKE STRUCTURE
Aafko O. Maring, Hilversum, Netherlands, assignor to N. V. Lemet Industrie, Hilversum, Netherlands, a company of the Netherlands
Application November 12, 1952, Serial No. 319,984
Claims priority, application Netherlands November 21, 1951
1 Claim. (Cl. 135—3)



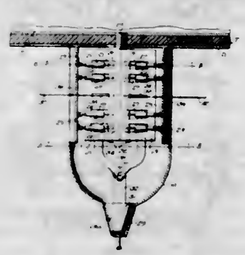
A tent having a framework comprising a central column adapted to be supported on the ground, a hub secured at the upper end of said column, a circular continuous stiff rim, posts for supporting said rim, means for anchoring said posts to the ground, spokes of wire extending between said hub and said rim and connected thereto, a roof covering supported on said spokes, and said central column including means for adjusting said hub in vertical direction for tensioning said spokes.

2,748,786
PRESSURE-CONTROL APPARATUS FOR ANTI-G SUITS
Jack Isreeli, New York, N. Y., and George T. Allen, Wolverhampton, England
Application July 14, 1950, Serial No. 173,816
13 Claims. (Cl. 137—38)



1. Pressure-control apparatus for an anti-g suit, comprising a member responsive to change in velocity along a given axis, a pilot valve actuated by said member responsive to change in velocity, a chamber having an opening for communication with the suit, an outlet opening for placing said chamber in communication with the atmosphere, a slave valve controlling said outlet opening, an inlet opening in said chamber for placing it in communication with a source of pressure fluid, a second slave valve controlling said inlet opening, and means under the control of said pilot valve for actuating said first and second slave valves.

2,748,787
NON-EXPLODABLE GASOLINE TANK AND OUTLET
Harold S. Woodward, Los Angeles, Calif.
Application September 15, 1952, Serial No. 309,585
6 Claims. (Cl. 137—39)



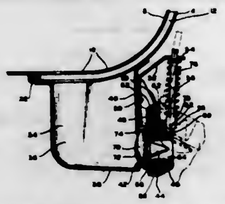
1. In a device of the kind described, a tank, a delivery pipe extending from said tank and having an open outlet end, a pair of normally spread jaws between which said pipe extends, said jaws being pivotally supported to clasp around the pipe and close its open end when subject to shock from accidents, a housing carried by said tank and enclosing said pipe and jaws, said housing being provided with a pipe connection having a valve seat, a normally open valve member coacting with said seat, and linkage connecting said valve member and jaws and acting to close the valve upon grasping movement of said jaws.

2,748,788

CENTRIFUGALLY OPERATED VALVE

William F. Duckstein, Newton, Iowa, assignor to The Maytag Company, Newton, Iowa, a corporation of Delaware

Application April 28, 1951, Serial No. 223,598
5 Claims. (Cl. 137—53)



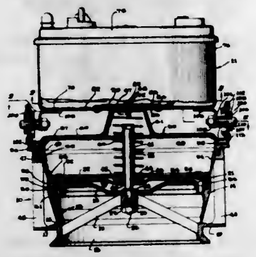
1. A centrifugally operated valve for sealing an opening in a rotatable wall, comprising a stationary pivot pin secured to said wall adjacent said opening, a suspended weighted body member mounted on said pivot pin for arcuate movement toward and away from said opening, a sealing element carried on said body member for closing said opening, said body member and said sealing element having a combined mass center disposed adjacent said opening and responsive to centrifugal force to move said body member and said sealing element away from said wall to uncover said opening upon rotation of said wall about an axis substantially parallel to said wall, a second pivot pin carried by said body member laterally of said stationary pivot pin and movable thereabout from said lateral position when said opening is closed to a position above said stationary pivot when said opening is uncovered by said sealing element, and spring means disposed to apply a closing force to said body member transversely through said second pivot pin, said second pivot pin being movable in a direction to compress said spring means and to reduce the torque arm between said pivots to compensate for the increased spring compression as said centrifugally operated body member and said sealing element move away from said opening when said wall is rotated above a predetermined speed.

2,748,789

VALVE ASSEMBLY WITH VIBRATION ABSORBING MECHANISM

Richard C. Nelson, Los Angeles, Calif., assignor to The Garrett Corporation, Los Angeles, Calif., a corporation of California

Application May 2, 1952, Serial No. 285,759
7 Claims. (Cl. 137—80)



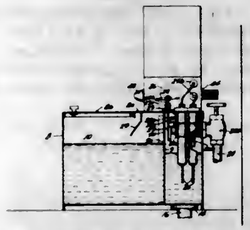
6. In apparatus of the class described: regulator mechanism including wall means defining a control pressure chamber; valve mechanism including walls definng a pressure chamber; a flexible planar element connected to the wall means of the respective chambers and having an opening therein providing fluid communication between said chamber, said flexible element being adapted to have greater lateral flexibility than flexibility in the plane thereof; and a plurality of resilient mounting means connecting the mechanisms together and having greater flexibility in a direction generally parallel to the plane of said flexible element and having more limited flexibility in a direction normal to said plane.

2,748,790

ELECTRONICALLY CONTROLLED FLOW DIVERTING APPARATUS FOR MAINTAINING A PREDETERMINED SOLUTION CONCENTRATION

John Graham Hodgens, Jr., Chippewa Falls, Wis., assignor to The Diversey Corporation, a corporation of Illinois

Continuation of abandoned application Serial No. 277,318, March 18, 1952. This application January 21, 1955, Serial No. 483,212
13 Claims. (Cl. 137—93)



1. Electrically controlled apparatus for maintaining a predetermined concentration in an electrically conductive solution, said apparatus comprising a concentrate tank adapted to contain a concentrated liquid solution, a liquid supply line directed to discharge a stream of liquid under pressure directly into said tank with the discharge end thereof spaced from said tank and disposed above the liquid level therein, a shiftable deflector element normally opposed to the discharge end of said supply line, yieldable means normally holding said deflector element in deflecting position to normally prevent the discharge therefrom from flowing into said tank, a control system including a detector responsive to the concentration of a liquid solution and adapted to be actuated only when the solution varies from a predetermined concentration, an electroresponsive actuating member electrically connected with said control system for actuation thereby and mechanically connected with said deflector element to shift the same out of deflecting position when actuated by the control system to permit the stream of liquid under pressure to be discharged directly into the tank to overflow the same, and means affording overflow communication between the tank and the solution being controlled.

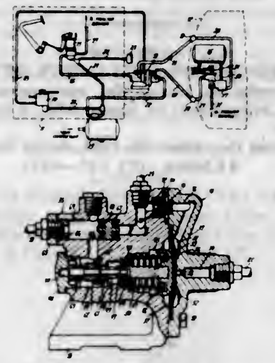
2,748,791

EMERGENCY BREAK-AWAY VALVE

Walter R. Freeman, University City, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a corporation of Delaware

Application May 5, 1952, Serial No. 286,218
18 Claims. (Cl. 137—111)

1. In an emergency break-away valve, the combination of a housing containing a first valve chamber; an inlet into said chamber and an outlet therefrom; valve means for controlling the flow of fluid from said valve chamber including a pressure responsive member, said valve means being movable between an open and a closed position; a passage providing full communication between said chamber and one side of the pressure responsive member when said valve means is in the open position; a second valve chamber in the housing containing second valve means therein for controlling the flow of fluid therethrough and movable between an open and a closed position, said second valve means being responsive to the movement of the pressure responsive member; means yieldably biasing the first and second valve means toward the closed position; an inlet port in the housing; a passageway from the inlet port to said one side of the pressure responsive member; and a check valve in said passageway permitting the flow of fluid from said inlet port to said one side of the pressure responsive member but preventing the reverse flow thereof.



18. In an emergency break-away valve, the combination of a housing containing a first valve chamber; an inlet into said chamber and an outlet therefrom; valve means for controlling the flow of fluid from said valve chamber including a pressure responsive member, said valve means being movable between an open and a closed position; a passage providing full communication between said chamber and one side of the pressure responsive member when said valve means is in the open position; a second valve chamber in the housing containing second valve means therein for controlling the flow of fluid therethrough and movable between an open and a closed position, said second valve means being responsive to the movement of the pressure responsive member; means yieldably biasing the first and second valve means toward the closed position; an auxiliary chamber in the housing containing opposed valve seats having openings associated therewith; a passageway from the second valve chamber to one of said openings; an inlet port in communication with the other opening; an outlet port in communication with the auxiliary chamber; valve means in the auxiliary chamber movable between the opposed valve seats for closing off from communication with the outlet port, either the inlet port or the passageway to the second valve chamber; a passageway between the auxiliary chamber and said one side of the pressure responsive member; and a check valve in said passageway permitting the flow of fluid from the auxiliary chamber to said one side of the pressure responsive member but preventing the reverse flow thereof.

2,748,792

FLUID LIFT APPARATUS

Roy C. Davis, Dallas, Tex., assignor to The Guiberson Corporation, Dallas, Tex., a corporation of Delaware

Application March 31, 1951, Serial No. 218,625
9 Claims. (Cl. 137—155)

1. In a device of the character described, a pressure chamber; a bellows casing; a partition arranged between the chamber and the casing; a passage provided through the partition; a bellows suspended from the partition within the casing and being closed at its free end, the interior of the bellows being in communication with the pressure chamber through the passage; a core arranged in the bellows and attached to the free end of the bellows; a rod attached to the core and having a free end movably extending through the passage into the pressure chamber, such rod being smaller in diameter than the passage; means carried by the core engageable with the lower side of the partition to limit the contraction of the bellows and close the passage; means carried by the free end of the rod and engageable with the upper side of the partition to limit the movement of the core upon extension of the bellows; and disengageable fastening means connecting the chamber and the casing to permit the removal of the casing and allow inspection of the bellows while pressure charged.

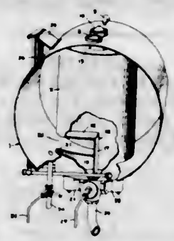


2,748,793

TRUCK MIXER WATER TANK

Louis G. Hilkemeier, Plainfield, N. J., assignor to Worthington Corporation, Harrison, N. J., a corporation of Delaware

Application January 7, 1954, Serial No. 402,779
3 Claims. (Cl. 137—264)



1. A water tank for a transit type mixer including, means forming a mixing water compartment having its axis disposed horizontally, an independent auxiliary tank forming a flushing water compartment, said auxiliary tank disposed within the mixing water compartment and having its axis extending transversely of the axis of said water compartment and extending below the lowermost portion of said means forming the mixing water compartment, inlet means for delivering water to said mixing water compartment and said flushing water compartment, means on said auxiliary tank forming an outlet chamber for collecting fluid from said mixing water compartment, said outlet chamber and said flushing water compartment having independent outlet means connected to a common discharge, and valve means for controlling the flow of water from said outlet chamber and said flushing water compartment to said common discharge.

2,748,794

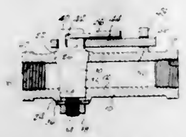
LOCKABLE VALVE

John W. Dodds, Rubedoux, Calif.

Application April 29, 1955, Serial No. 504,840
1 Claim. (Cl. 137—385)

A valve construction adapted for locking in open and closed positions by a padlock, comprising: an elongated

casing having an axial flow passage; a plug mounted in said passage for rotation about an axis normal to the length of the passage and including a flat, wide projection extending outwardly from the casing and lying in a plane common to the axis of rotation of the plug; a second flat, wide projection rigid with the casing and spaced longitudinally of the casing from the first projection, said second projection lying in a plane normal to the axis of the casing and extending outwardly from the casing a distance substantially equal to that which the first projection extends therefrom; an elongated locking plate of a length greater than the distance between said projections, said plate at one end having a flat wide portion one end of which has a cruciform opening shaped



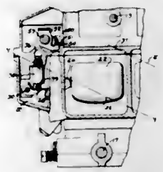
to receive the first projection, in each of open and closed positions of the plug angularly spaced 90 degrees apart about the axis of rotation of the plug, said locking plate in each of said plug positions extending longitudinally of the casing, the first projection having an opening, a padlock having a hasp received in the opening of said first projection, the other end of said portion of the lock plate forming a flat, wide surface in a plane normal to that of the first projection on which said padlock may rest, said second projection having an opening extending longitudinally of the casing and opening upon opposite faces of the second projection, said plate including an elongated extension reduced in width in respect to said portion and extending perpendicularly to the plane of the second projection through the opening thereof.

2,748,795
AUTOMATIC WATERING DEVICE FOR POULTRY
Reed S. Kofford, Van Nuys, Calif.
Application June 9, 1954, Serial No. 435,509
3 Claims. (Cl. 137—408)



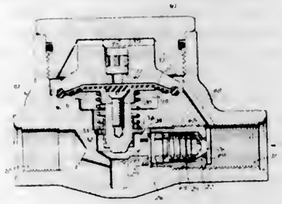
1. An automatic watering device comprising a water inlet pipe connected to a source of high pressure water supply, a water outlet pipe, said pipes being connected to a fitting, a plug mounted in said inlet pipe, an elongated member extending upwardly from said plug, a passage extending through said upright member and plug to permit the flow of water therethrough, a control member pivotally mounted adjacent one end of said fitting and extending closely adjacent to the upper end of said passage, a coil spring surrounding said elongated member and extending between the top of said plug and the bottom of said control member, a tube connected to said control member, a water reservoir connected to the opposite end of said tube, said tube adapted to carry water from said inlet pipe to said water reservoir and from said reservoir to said water outlet pipe, sealing means carried by said control member and adapted to seal off the end of said passage to prevent the flow of water therethrough when said control member is pivoted downwardly by the weight of water contained in said reservoir, said control member adapted to be moved upwardly by the pressure of said coil spring when a lesser quantity of water is held in said reservoir to open said passage and permit water to flow therethrough.

2,748,796
CARBURETOR ANTI-SURGE DEVICE
Joseph Schweiss, St. Louis, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a corporation of Delaware
Application December 28, 1951, Serial No. 263,879
4 Claims. (Cl. 137—411)



1. In a carburetor for an internal combustion engine, a fuel reservoir, an inlet therefor, a pair of oppositely seating valves in said inlet, a float in said chamber, and an operative connection between said float and said valves acting in response to operation of said float for selectively closing one of said valves when said float is positioned at normal fuel level, for opening said one valve when said float drops slightly below said position, and for closing the other valve when said float drops excessively.

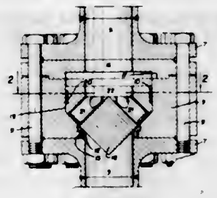
2,748,797
PNEUMATIC TIME-DELAY FUSE
Edward J. Heizer, Mountain Lakes, and Wallis C. Axt, Upper Montclair, N. J., assignors to Specialties Development Corporation, Belleville, N. J., a corporation of New Jersey
Application November 8, 1951, Serial No. 255,484
3 Claims. (Cl. 137—510)



1. A pneumatic time delay fuse comprising a casing including a body formed with an inlet, an outlet, a main valve seat provided with a port between said inlet and said outlet, a stepped bore providing a shoulder and a chamber closed at one end and in fluid flow communication with said port at the other end thereof, and passageway means establishing fluid flow communication between said inlet and said chamber adjacent its closed end; partition means in said chamber on said shoulder having a bore therethrough; a flow restricting element in said last mentioned bore; a main valve member slideably supported in said chamber for engaging said main valve seat; a spring for normally urging said valve member off its seat; a diaphragm in said chamber between said partition means and said main valve member having its peripheral zone secured on said shoulder by said partition means and being arranged for effecting seating of said main valve member; and a poppet valve between said inlet and said main valve seat, said poppet valve including a seat facing downstream of said inlet, a poppet valve member for said poppet valve seat, spring means for urging said

poppet valve member on its seat and adapted to yield in response to pressure of fluid entering said inlet at a predetermined rate, and means constituting contacting portions of said poppet valve member and its seat including a groove in one of said portions for permitting the flow of fluid from said inlet to said outlet at a much lower rate than the rate of flow to which said spring means will yield, the area of the diaphragm exposed to inlet pressure when the main valve is open being such that pressure acting thereon during leakage through said groove or during short surges of pressure in the inlet will be insufficient to overcome the main valve spring.

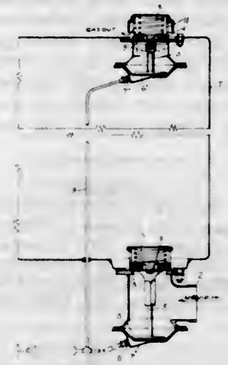
2,748,798
HIGH PRESSURE CHECK VALVES
Ralph A. Withrow, Denver, Colo.
Application January 7, 1952, Serial No. 265,257
2 Claims. (Cl. 137—533.17)



1. A check valve for use in high pressure fluid conduits, comprising a body member having a cylindrical opening terminating at one end in a frusto-conical valve seat, a cover for the opening, the cover having an opening concentric with the opening in the body member, a solid metal valve member positioned in the opening in the body member, said valve member having a cylindrical portion fitting the corresponding wall surface of the body member with an easy sliding fit, and a conical surface tapered to engage the valve seat in the body member, the valve member having a central flat bottomed cup-like depression in its upper surface and a plurality of holes from the conical surface to the interior of the depression, the holes terminating in the surface of the bottom of the depression, the axes of the holes intersecting at a point and above the upper surface of the bottom, the combined cross sectional areas of the holes being at least as great as that of the cup-like depression and at least as great as that of the opening in the cover, said holes communicating with the outlet side of the valve through said depression, the cylindrical portion of the valve member being sufficiently shorter than the corresponding cylindrical portion of the opening in the body member to permit the frusto-conical and conical valve surfaces to separate sufficiently to provide a passage whose cross sectional area is at least as great as the combining cross sectional areas of said holes whereby wiredrawing and cavitation will be prevented when fluid passes through the valve.

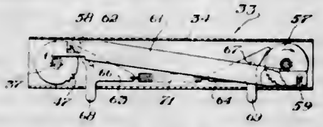
2,748,799
SIMULTANEOUSLY-OPERATED LIQUID AND GAS VENT VALVES
Michael B. Rath, Lorain, Ohio, assignor to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio
Application November 15, 1952, Serial No. 320,691
4 Claims. (Cl. 137—587)

3. In a tank, the combination of a connection and an inwardly unseating valve for liquid at the bottom, a stem extending from said valve, a diaphragm under said stem, an outwardly unseating combined vent valve and safety valve for gas at the top of the tank, a stem extending from such combined valve, a diaphragm on which the lower end of the combined valve stem normally rests, the combined valve being movable outwardly independently of its diaphragm in response to excessive pressure within



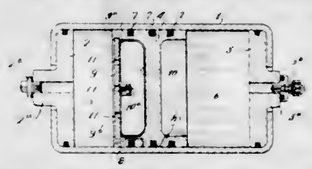
the tank, and a connection for applying pressure fluid to the diaphragms of both valves.

2,748,800
GAS METER BY-PASS OPERATOR
Albert J. Allen, Garden City, N. Y., assignor to Anchor Manufacturing Company, Boston, Mass., a corporation of Massachusetts
Application January 27, 1954, Serial No. 406,563
6 Claims. (Cl. 137—637.1)



1. Fluid-flow apparatus comprising a pair of fittings each having inlet, outlet and by-pass openings, a conduit interconnecting the by-pass openings, a valve at each end of said conduit, inlet and outlet keys for moving said valves respectively from normal position in which gas can flow through the inlet and outlet openings but not through the by-pass openings to by-pass position in which gas can flow from one fitting to the other only through the by-pass conduit, means interconnecting the keys for actuating them conjointly, springs tending to return the valves to normal position, means for latching the keys in by-pass position, and means for moving the inlet key from by-pass position while the outlet key is still latched in by-pass position.

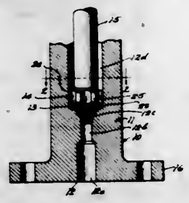
2,748,801
ACCUMULATORS
Tommy J. McCuistion, Euclid, Ohio
Application October 22, 1953, Serial No. 387,651
6 Claims. (Cl. 138—31)



1. An accumulator comprising a cylinder, a piston reciprocatable longitudinally within said cylinder and dividing the interior thereof into separate chambers for a liquid and a gaseous body, respectively, said chambers having inlet and outlet openings through the wall of

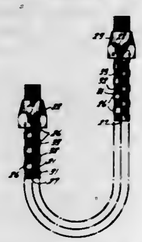
said cylinder for the liquid and gaseous body, respectively, said piston having transversely disposed walls spaced from each other so as to provide a space therebetween of substantial extent lengthwise of the cylinder, and a flexible completely closed gas-filled envelope enclosed within said space in the piston, and the said wall of the piston adjacent the liquid-containing chamber being provided with means for transmission of the liquid pressure therethrough to said envelope.

2,748,802
VALVE CONSTRUCTION
Rodney L. Hanson and Horace L. Mitten, Jr., Fort Atkinson, Wis., assignors to The Creamery Package Mfg. Company, Chicago, Ill., a corporation of Illinois
Application July 24, 1953, Serial No. 369,988
3 Claims. (Cl. 138—42)



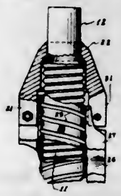
1. In a homogenizing apparatus for a dairy product, or the like, the combination of a valve member composed of a strand of resilient material convolved to produce a homogeneous mass of a substantially trumpet-shaped configuration and having a plurality of interconnected minute passages formed therein through which such a product flows under pressure and is homogenized with but a minimum of protein destabilization of such product, and a retainer of substantially the same trumpet-shaped configuration as said valve member and in which said valve member is forcibly seated, said retainer having the smaller end thereof terminating in a passageway through which such product passes in one direction prior to contacting said valve member; said valve member having a nose portion at the smaller end thereof projecting into said passageway and yieldably engaging the interior surface thereof, whereby substantially the whole cross-sectional area of the protruding nose portion of said valve member is penetrated by the product flowing through said passageway.

2,748,803
REINFORCED HOSE
Stephen Guarnaschelli, Garden City, N. Y., assignor to Titeflex, Inc., Newark, N. J., a corporation of Massachusetts
Application August 10, 1953, Serial No. 373,206
10 Claims. (Cl. 138—50)



1. A hose reinforced against longitudinal extension and radial expansion comprising, in combination, a length of flexible hose, end fittings attached to the ends of the hose, a relatively inextensible reinforcing member coextensive with the hose and secured at its ends to the end fittings to restrain the hose against longitudinal extension, the reinforcing member comprising a flat strip of metal which is relatively inflexible in the longitudinal plane through the major transverse axis of the strip and which is disposed edgewise alongside the hose with the said plane of the strip passing through the longitudinal axis of the hose, and a plurality of bands spaced along the hose between the end fittings, said bands engaging the hose to restrain the hose against radial expansion and being connected to the strip to restrain the hose against separation from the edge of the strip, substantially to limit flexure of the hose to the longitudinal plane perpendicular to the aforesaid plane of the strip.

2,748,804
REINFORCED HOSE
Stephen Guarnaschelli, Garden City, N. Y., assignor to Titeflex, Inc., Newark, N. J., a corporation of Massachusetts
Application December 31, 1954, Serial No. 478,977
7 Claims. (Cl. 138—60)



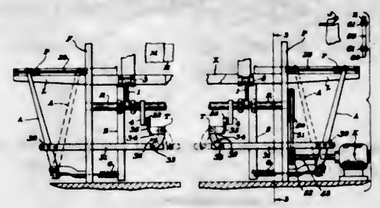
1. A hose reinforced against longitudinal extension and radial expansion comprising, in combination, a length of flexible hose, end fittings attached to the ends of the hose, a relatively inextensible reinforcement coextensive with the hose and secured at its ends against movement longitudinally of the hose to restrain the hose against longitudinal extension, the reinforcement comprising two similar elongated ribbon-like members, each having substantially coplanar longitudinally extending edge portions connected by crossbands uniformly spaced from each other along the edge portions and bowed outwardly in a common direction from the plane of the edge portions substantially to semicylindrical contour, the said two elongated members being assembled on the hose to encircle the hose with the crossbands proximate to the hose, and means securing adjacent edge portions of the two elongated members together so that the bands will restrain the hose against radial expansion.

2,748,805
REINFORCED SPIRAL PLASTIC PIPE
Thomas W. Winstead, Baltimore, Md., assignor to Hedwin Corporation, Baltimore, Md., a corporation of Maryland
Application March 2, 1953, Serial No. 339,825
8 Claims. (Cl. 138—76)



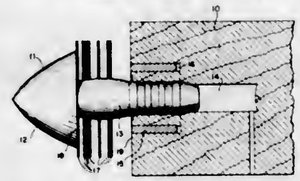
8. Tubing comprising a spirally wound rectangular shaped flat strip of thermoplastic material, edge portions of adjacent windings of the strip being overlapped, reinforcing material interposed between the overlapped edge portions of the strip, said reinforcing material exposing portions of the overlapped edges, said exposed portions being fused to integrate the tubing, said tubing being continuous and having substantially flat parallel inner and outer walls.

2,748,806
SINGLE SHAFT LOOM
Joseph Stuer, Lawrence, Mass.
Application November 29, 1952, Serial No. 323,233
10 Claims. (Cl. 139—146)



1. The combination with a weaving loom having a frame, a head motion and a pattern chain, a breast beam, a reciprocating lay carried by swords and having a shuttle race and a picker stick and picker at the right and another picker stick and picker at the left, there being a lug strap and a sweep stick to operate each picker stick; of a single drive shaft revoluble in bearings near the top of the loom, said shaft having two cranks each connected to the lay by a connecting rod; shaft driving means including a V type sheave at one end of the drive shaft, a driving motor with a shaft which carries another V shaped sheave with an endless V belt between the two sheaves; two picking roller arms, each fixed to and powered by said single drive shaft, and each having a picking roller near its end to engage a picking shoe; two picking shafts, each extending from front to back and turnable in a bearing near the front and in a bearing near the back of the loom, two picking shoes, each extending radially from a picker shaft toward the adjacent side of the loom and having a cam surface in position to be engaged by a picking roller on a picking roller arm, and a sweep arm carried by each picking shaft and projecting downward therefrom, each sweep arm being pivoted to a sweep stick for moving a picker stick.

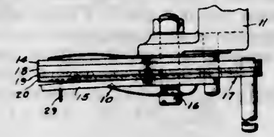
2,748,807
SHUTTLE TIPS
John J. Kaufmann, Jr., Greenville, S. C., assignor to Steel Heddle Manufacturing Company, Philadelphia, Pa., a corporation of Pennsylvania
Application June 27, 1952, Serial No. 295,911
4 Claims. (Cl. 139—196)



1. A shuttle tip construction comprising a shuttle body, a tip member mounted on the end thereof, said tip member having a pointed nose portion and a shank portion extending into a hole in the end of the shuttle body, and a multiplicity of separate paper thin washers surrounding the shank portion of the tip member between the base of the nose portion of the tip member and the end face of the shuttle body, said washers each being unbroken.

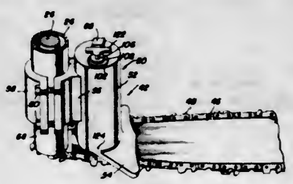
2,748,808
FILLING KNIFE LOOM-STOP ATTACHMENT
Hobert C. Lovely, Atlanta, Ga.
Application March 25, 1954, Serial No. 418,489
1 Claim. (Cl. 139—336.4)

In a loom-stop circuit for stopping a power-driven loom upon the failure of the filling knife thereof to properly function, the improvement comprising circuit making and breaking means associated with said filling knife and responsive to the functioning thereof, said means being operable to complete said circuit at the filling knife in the absence of a thread between the gripping members thereof when said knife is closed, and operable to break said circuit upon the presence of a thread therebetween, a second circuit making and breaking means in said circuit, and



means responsive to the advancing of said knife toward the shuttle for catching and gripping a thread to break said circuit at said second means, and responsive to the retarding of said knife from such position to make said circuit at said second means, whereby the loom operates during normal functioning of the filling knife and is stopped upon the absence of a thread in said knife or upon the opening of said knife in its retarded position.

2,748,809
CHAIN SAW ATTACHMENT WITH LUBRICATING MEANS
Sidney E. Sargi, Webb City, Mo.
Application November 20, 1952, Serial No. 321,617
4 Claims. (Cl. 143—32)

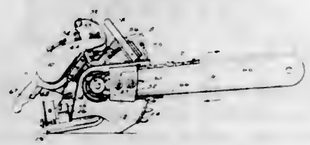


1. A chain saw attachment for portable rotary tools including a vertical spindle having a drive shaft rotatably mounted therein, said attachment comprising a blade support, an endless chain blade mounted on said blade support for guided movement, means for securing said blade support to the spindle, drive means for said chain blade, means for securing said drive means to the drive shaft, said first mentioned means including a rigid support member having clamp means adjustably clamping the spindle, said support member being tubular and having a closed bottom end and adapted to contain lubricant, means for distributing the lubricant to said chain blade, said means comprising a bore in said bottom end of said tubular member communicating with the interior of said member and the upper surface of said blade support, a valve seat disposed in the end of said bore communicating with the interior of said tubular member, and a valve control rod disposed in said tubular member and engaging the valve seat for regulating the flow of lubricant to said bore.

2,748,810
CHAIN SAW GUIDE BAR WITH LUBRICATING MEANS
Leonard M. Strunk, Coatesville, Pa.
Application February 21, 1955, Serial No. 489,634
2 Claims. (Cl. 143—32)

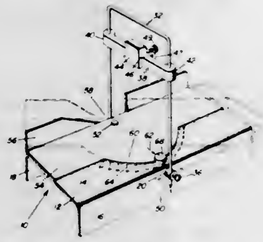
1. A portable power chain saw comprising a motor drive unit including a frame member, an elongated substantially flat saw bar adjustably mounted at one end

upon said frame member and extending freely therefrom and terminating in a free front end, said saw bar having a peripheral channel, an endless saw chain positioned around the periphery of said bar and guided in said channel and driven by said drive unit, and a chain lubricating system including a lubricant reservoir carried by said member and located higher than said bar in the normal operating position of the saw, a conduit formed interiorly of said bar and extending longitudinally thereof from a point adjacent said one end to a point adjacent said free end, said conduit terminating at said first mentioned point in a port opening laterally through a side wall of said



bar, and terminating at said second mentioned point in a port communicating with said channel, and means for conducting lubricant from said reservoir to said conduit through said side wall port, said lubricant conducting means including a portion passing through said frame member and terminating in a frame member port in registry with said side wall port, one of said last two mentioned ports being in the form of an elongated slot extending in a direction lengthwise of said bar, thereby to maintain registry between said side wall and frame member ports upon lengthwise adjustment of said bar relative to said frame member.

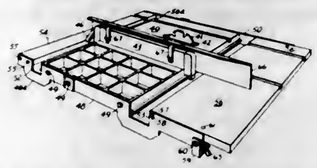
2,748,811
MITER BOX
Joseph S. Chilton, Lamar, Colo.
Application June 22, 1953, Serial No. 363,178
3 Claims. (Cl. 143—90)



1. A miter box comprising a base, an adjusting shaft rotatably mounted in said base, a substantially U-shaped saw guide secured to said shaft, and a work piece guide rotatably mounted on said base, said base having an aperture therethrough, a locking member extending through said aperture, said shaft extending through said locking member, and a fastener threadedly secured in said locking member engageable with said shaft to lockingly hold said shaft in a selected position, said locking member having a slot therein, said work piece guide having an arcuate projection engaged in said slot.

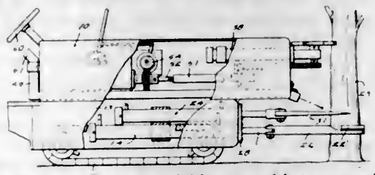
2,748,812
SAW-TABLE EXTENSION
Nordahl O. Nelson, Westby, Wis.
Application July 27, 1954, Serial No. 446,093
4 Claims. (Cl. 143—132)

1. A circular saw machine table, horizontal bars secured to the sides of and extending beyond one end of the machine table, an extension table pivotally secured to said bars, on an axis parallel to said end and extending between said bars, and means adjustably mounted on said extension table and engaging said bars to support said



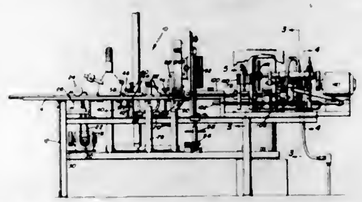
extension table in pivotally adjusted position with respect to said main table.

2,748,813
GRIPPING, CUTTING AND PUSHING TREE FELLING MACHINE
David O. Ford, San Antonio, Tex.
Application November 23, 1953, Serial No. 393,725
6 Claims. (Cl. 144—34)



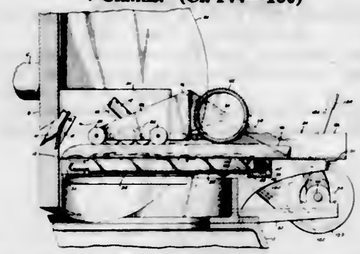
1. A tree cutting and felling machine comprising a mobile tractor, a pair of tree embracing and gripping hooks, hydraulic means carried by said tractor connected with said hooks whereby said tractor may be drawn to said tree and held against movement relative to said tree, a second horizontally disposed hydraulic means carried by said tractor, a longitudinally movable tree cutting knife blade carried by said second hydraulic means, and horizontally movable means carried by the tractor engageable with the tree above said blade for effecting felling of the tree in a selected predetermined direction.

2,748,814
SHAPING AND TRIMMING MACHINE
Barney P. Nunn, Marietta, Ga.
Application December 11, 1953, Serial No. 397,549
9 Claims. (Cl. 144—39)



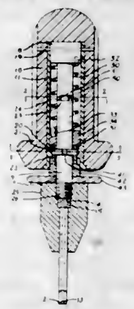
1. A glue block shaping and trimming machine comprising a framework, at least one mounting shaft slidably supported by said framework, resilient means terminally connected to the framework and the shaft for urging the shaft to an initial position, a mandrel housing rotatably supported by said framework, a mandrel rotatable and slidable in said housing, drive means for rotating said mandrel operatively connected thereto, a saw blade mounted on said mandrel, a slide mounted on said shaft, a first valve on said slide, clamping means carried by said framework, pneumatic means operatively connected to said mandrel housing and said clamping means for tilting said mandrel housing when said first valve is engaged by a work piece, a second valve mounted in the path of said mandrel housing controlling the operation of said pneumatic means to actuate said clamping means after a partial movement of said mandrel housing.

2,748,815
CONTROLLED SPEED FEED SPOUT
James R. Clark, Watertown, N. Y., assignor to Carthage Machine Company, Carthage, N. Y., a corporation of New York
Application June 8, 1953, Serial No. 360,227
7 Claims. (Cl. 144—180)



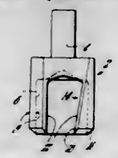
1. Feeding means for a wood chipper comprising, a horizontal feed trough having a material guiding side wall, a plurality of parallel aligning and feeding rolls rotatably mounted in the bottom of said trough with their axes substantially parallel to said side wall and extending in the desired direction of feed, a helical rib on each of said rolls, driving means for simultaneously rotating said rolls in such direction about their axes that work pieces resting thereon are urged against said side wall and forwardly by said ribs, a heavy serrated feed roll arranged with its axis transverse to the axes of said aligning and feeding rolls, means mounting said feed roll above said aligning and feeding rolls for free vertical movement, under the influence of gravity toward said aligning and feeding rolls, and means for simultaneously driving said feed roll and said aligning and feeding rolls in timed relation and at a uniform rate, the means mounting said feed roll comprising a pair of arms extending upwardly and forwardly on opposite sides of said trough, said feed roll being journalled in the upper ends of said arms, the lower ends of said arms being pivoted about a common fixed axis substantially parallel to the axis of said feed roll, and drive means for said feed roll including a driving member mounted for rotation about said common fixed axis.

2,748,816
SCREW HOLDING SCREW DRIVER
James M. Neil, Oakland, Calif.
Application January 9, 1953, Serial No. 330,475
5 Claims. (Cl. 145—50)



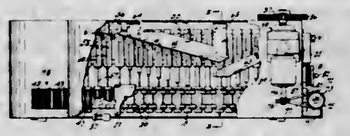
1. A screw driver having a handle, a bit, means for mounting said bit in said handle, said mounting means permitting rotation of said bit relative to said handle and preventing axial displacement of said bit relative to said handle, an element within said bit adapted to cooperate therewith for gripping a screw, means for rigidly securing said element to said handle, a torsion spring for rotating said bit relative to said handle in one direction, a one-way clutch between said bit and said handle for preventing said bit from rotating relative to said handle in said one direction and for permitting said handle to rotate relative to said bit in said one direction to enable force applied by the operator to said handle when a screw is tightened to be utilized for reenergizing said spring.

2,748,817
PLUG CUTTER
Walter I. Stearns, Arlington, Vt.
Application October 19, 1953, Serial No. 386,694
1 Claim. (Cl. 145—120)



A rotatable tool for cutting plugs from wood comprising in combination, an elongated cylindrical body provided with a shank integral therewith extending upwardly from the upper end thereof and having a bore extending upwardly therein from the lower end thereof and terminating downwardly from the upper end thereof providing an upper wall and a vertical elongated annular side wall having an annular lower edge, said body provided with a vertical elongated slot through said annular side wall having circumferentially spaced straight forward and rear longitudinal edges extending upwardly from said lower edge, said forward edge declining rearwardly from lower to upper end relative to the direction of rotation of said tool and a vertical plane extending through the axis of rotation of said tool, and the opposite edge being substantially parallel to the axis of said tool, the said lower annular edge of the side wall extending outwardly and upwardly from the inner side thereof and cooperating with the forward edge of the slot at its lower edge to provide a cutting edge, and outer sides of said annular wall being slightly diverging upwardly from said lower edge.

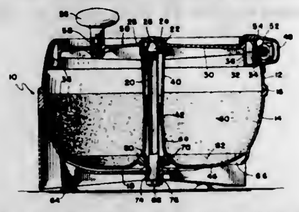
2,748,818
FRUIT PITTER HAVING TWO COOPERATING ENDLESS FRUIT CARRIERS AND AN ENDLESS PLUNGER CARRIER
Wirt D. Peel, Oakland, Calif.
Application April 8, 1955, Serial No. 500,236
20 Claims. (Cl. 146—17)



1. A fruit pitting machine comprising an upper and a lower chain having a feed end and a discharge end and each operating over sprockets at the respective ends, and driving means for driving said sprockets for the respective upper and lower chains in opposite directions in unison for cooperation between the respective lower and upper strands of said chains, fruit nests each including a body and a cap with the nest bodies carried by said lower chain and the nest caps carried by said upper chain, and guiding means cooperative with said respective lower and upper strands for aligning and engaging said caps with said bodies for holding single fruits for pitting, a pitting chain operating over sprockets and driven in unison with said lower chain and spaced therefrom, plungers carried by said pitting chain in axial relation to said nests, and cams cooperative with said plungers for advancing said

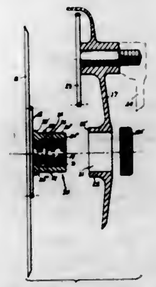
plungers in follow relation for projection through the fruits for ejecting the pits, and for retracting the plungers following ejection of the pits.

2,748,819
POTATO PEELER
Robert Mayer, New York, N. Y., assignor to Herman H. Fox, New York, N. Y.
Application January 28, 1953, Serial No. 333,699
2 Claims. (Cl. 146—49)



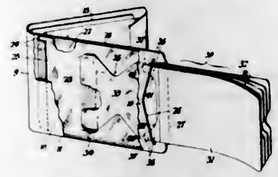
1. A vegetable peeling and washing machine comprising a bowl-shaped housing formed of an upper and a lower section, each of said sections having an inner and outer surface, said housing open at its top and having a bottom with an orifice and a central opening therein, a wall having an upper edge surrounding said central opening in said bottom, said upper and lower sections cemented together providing a smooth continuous inner surface for said bowl-shaped housing, said upper section having a downwardly directed top flange, a central upstanding tubular supporting member attached to said bottom and extending from the center of said bottom upwardly within said housing along the vertical medial line of said housing, said tubular supporting member having an upper and a lower end and having a male bearing member at its said upper end and an annular shoulder at its lower end, said annular shoulder adapted to rest upon said upper edge of said wall surrounding said central opening in said bottom, a power wheel comprising a cross bar, a downwardly extending tubular shank and an outer ring, said outer ring having a circumferential outwardly extending flange, radially projecting uniformly spaced cupped vanes extending outwardly from said outer ring and said extending flange, said vanes and flange spaced slightly from said upper section, said cross bar of said power wheel having a central cup-shaped female bearing member for seating upon said male bearing member of said supporting member, a hub cap covering said female bearing member, said downwardly directed top flange of said upper section overlapping said outer ring, a spinner plate having an inner and outer surface and an upwardly extending central tubular shank, spaced splines at the lower end of said upwardly extending central tubular shank, an annular bearing member having spaced grooves seated upon said upwardly extending central tubular shank and upon said annular shoulder, said spaced grooves of said annular bearing member engaging said spaced splines of said upwardly extending central tubular shank of said spinner plate, said last named tubular shank of said spinner plate attached to said downwardly extending tubular shank of said power wheel, said spinner plate rotatable with said power wheel and spaced slightly inwardly from said bottom of said housing, said splined bearing maintaining said spinner plate in alignment about said central supporting member, said inner surface of said lower section and said inner surface of said spinner plate coated with an abrasive material, a nozzle and water inlet positioned tangentially in said upper section and aligned with said cupped vanes for directing water against said vanes to rotate said power wheel and spinner plate, and a rotatable handle upon said cross bar of said power wheel to permit manual rotation of said power wheel.

2,748,820
DETACHABLY-MOUNTED DISC BLADE FOR FOOD SLICING MACHINES
Xan B. K. Green, New Paltz, and Harry Preble, Jr., Cross River, N. Y., assignors to General Slicing Machine Co., Inc., Walden, N. Y., a corporation of New York
Application June 18, 1953, Serial No. 362,564
7 Claims. (Cl. 146—102)



1. In a food slicing machine, a frame having a bore therethrough, a bushing having an outward flange at one end, positioned through said bore whereby said flange is in contact with one surface of the frame, means accessibly positioned at the other surface of the frame, releasably holding the bushing in said position within the bore, a shaft member lying longitudinally in the bushing, held against longitudinal movement therein and journalled in said bushing for axial rotation in relation to said bushing; said shaft extending from the flanged end of the bushing, means on the shaft and bushing holding said shaft and bushing in assembly, a disc cutting blade and a means whereby said shaft member can be driven, both securely carried on the said extending portion of the shaft member: the last mentioned means being intermediate the flange and said blade; said bushing, shaft, blade and blade driving means constituting a unitary structure whereupon when said bushing is released from said holding means, said bushing being capable of being manually slid out of said bore and thereby remove said unitary structure from the frame.

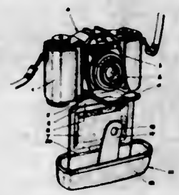
2,748,821
PASS CASE WALLET
Herman R. Hutchinson, Wyncote, Pa., assignor to C. F. Rumpp & Sons, Philadelphia, Pa., a corporation of Pennsylvania
Application March 7, 1955, Serial No. 492,337
3 Claims. (Cl. 150—39)



1. A wallet comprising generally rectangular inner and outer walls which are foldable to form a pair of contiguous wallet portions, a pass case, means in one of said wallet portions comprising a pocket forming wall attached to said outer wall forming a pocket for the pass case, said outer wall having an opening adjacent its end providing access of said pass case to said pass case pocket, a collapsible connecting piece of flexible inelastic material fixed to said pass case and to said pocket forming wall and anchoring said pass case with respect to said wallet, said collapsible connecting piece being gradually narrowed between its ends forming a narrowed neck portion, and guide extensions carried by said pass case and

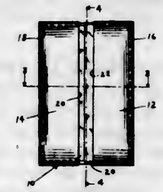
extending into said pocket when said pass case is withdrawn from said wallet and said connecting piece is extended to the limit, thereby guiding the pass case for subsequent reinsertion into said pocket.

2,748,822
CASE, PARTICULARLY AN EVER-READY CASE FOR PHOTO CAMERAS
Carl Hepting, Stuttgart-Feuerbach, Germany, assignor to Firma Carl Hepting & Co., Lederwaren- und Gürtelfabrik G. m. b. H.
Application April 14, 1954, Serial No. 423,172
Claims priority, application Germany April 18, 1953
6 Claims. (Cl. 150—52)



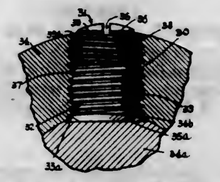
1. A case, particularly an ever ready case for photo cameras, comprising a flat shell-like case body having an approximately rectangular cross section with semi-circular ends and two opposite side portions, one side of said body having an opening therein through which parts of the photo camera may project when the camera is in position for use, said case body having a bottom portion, a wall section bulging outwardly adapted to cover said opening and connected for relative hinging movement to the case body at the bottom portion thereof, a cap for the case body to fit over the edges of the side portions and the semi-circular ends and opposite to the bottom portion, said cap having a top wall and being flexibly connected to the bulging out wall section, an integral rim provided around the top wall and approximately perpendicular thereto, a strap secured to the cap at a part of the rim opposite to the flexible connection of the cap to the wall section, means on the strap and the case body for retaining the cap in its closed position, a channel-like oval metallic frame gripping over an edge of the rim of the cap and forced by pressure on the edge and provided with enlarged channel wall sections on its sides opposite to one another, and means provided on the wall sections of the metallic frame for connecting the strap to the rim of the cap and the wall section to the rim of the cap.

2,748,823
DISPENSING RECEPTACLE FOR FACIAL TISSUES OR THE LIKE
Joseph Halpern, New York, N. Y.
Application February 25, 1954, Serial No. 412,418
3 Claims. (Cl. 150—52)



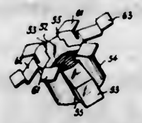
1. A dispensing container for facial tissues or the like, of the character described, comprising a tubular body of a pliably flexible sheet material, said tubular body having each of its end sections externally reentrantly folded over its central section with the end edges of the folded over sections spaced from one another, to provide spaced pockets facing one another, each adapted to receive a portion of a common tissue.

2,748,824
THREADED MEMBERS CARRYING RESILIENT DEFORMABLE LOCKING INSERTS THEREON
John K. Brill, Jamestown, N. Y.; Adelaide E. Brill, administratrix of said John K. Brill, deceased
Application February 3, 1953, Serial No. 334,942
1 Claim. (Cl. 151—7)



A self-locking threaded member comprising a body having right hand threads on a portion of its outer surface screwed into a threaded hole, in a second member a portion of reduced diameter removed from the end of the member first to enter the hole, such portion of reduced diameter having left hand threads and extending without enlargement to the other end of the member, an insert of average outside diameter less than the outside thread diameter and greater than the average of the inside and outside thread diameter of the right hand threads on said member, said insert having internal left hand threads and being screwed on to the left hand threads of said member and being formed of displaceable resilient material screwed into and jammed in the hole for locking said member and means accessible from the reduced diameter end of said first member for driving engagement by a driving element.

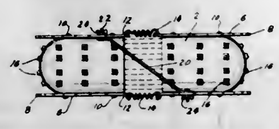
2,748,825
QUARTER TURN DOWEL NUT FOR CAISSONS
Pierre Launay, Toulouse, Haute-Garonne, France
Application April 4, 1952, Serial No. 280,449
Claims priority, application France April 5, 1951
3 Claims. (Cl. 151—41.75)



1. A nut to be secured on a plate having a circular aperture provided with two diametrically opposed radially extending notches, said nut comprising an internally threaded cylindrical body portion of a diameter to fill said circular aperture with relatively small clearance, a pair of plate-like wing portions extending radially from said body portion, on opposite sides thereof substantially throughout the length of the body, said wings being located in a common plane containing the axis of said nut body, the thickness of said wing portions normal to said common plane being relatively narrow with respect to the diameter of said body portion, and the narrow faces along one edge of said wings forming shoulders for engaging one face of said apertured plate, circular flange means arranged adjacent one end of said nut body and spaced from the plane of said shoulders by a distance at least equal to the thickness of said apertured plate and forming an abutment for engaging the other face of said apertured plate, means connecting said flange means with said nut body to turn in fixed relation with said body, said circular flange means embodying a pair of resilient fingers extending radially outward beyond said nut body in opposite directions

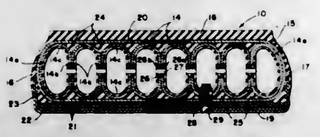
and at right angles to said wing portions, each of said resilient fingers having locking portions extending out of the plane of said circular flange means and towards the plane of said shoulders and having a width less than the width of said notches, said wing portions having a size permitting them to be passed through said notches and rotated out of the plane of said notches and into a position where said locking portions of said resilient fingers enter said notches and lock said nut body against rotation about its axis in either direction.

2,748,826
SKID PREVENTING DEVICES FOR AUTOMOTIVE VEHICLES
Evelyn Dore, New York, N. Y.
Application July 15, 1955, Serial No. 522,296
2 Claims. (Cl. 152—179)



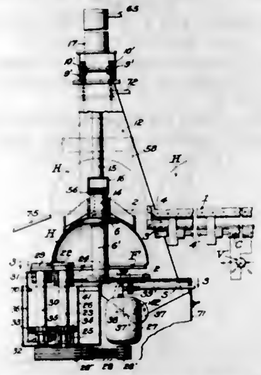
1. A skid preventing device for automotive vehicles comprising a pair of resilient, substantially semi-circular members adapted for encompassing sections of the outer portion of a tire, resilient means engaging the ends of said members tending to force said members toward each other, a plurality of protruding elements provided at the outer side of each of said members, semi-circular plates having serrated edge portions being secured laterally to said members, and toothed bars diagonally extending over the end portions of said members having their ends detachably secured to diagonally opposite end portions of said semi-circular plates.

2,748,827
PNEUMATIC TIRE
Henry H. Kerr, Detroit, and Arthur E. Benson, Grosse Pointe Farms, Mich., Stewart P. Bower, Wheaton, Md., and Leo E. Siess, Huntington Woods, Mich., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application March 10, 1953, Serial No. 341,472
4 Claims. (Cl. 152—341)



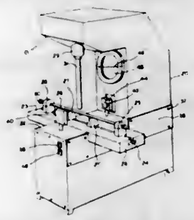
1. A pneumatic tire comprising, a plurality of longitudinally extending, extensible, endless, flexible tubes bonded together in side-by-side parallel relationship, the height of each tube in cross section being substantially greater than the width thereof but substantially less than the overall width of the tire to thereby provide a tire having substantially greater overall width than height, substantially inextensible reinforcing elements surrounding the tubes as a group to restrain the tubes against transverse expansion, a rubber cover providing tread, sidewall, and base portions bonded to and surrounding said tubes and reinforcing elements, substantially inextensible reinforcing elements in said base portion, rubber grommets bonded to and extending between at least two adjacent tubes, said grommets providing interconnecting passageways between said adjacent tubes whereby said adjacent tubes may be inflated by introduction of fluid into one of said adjacent tubes, and means for introducing fluid under pressure into said tubes.

2,748,828
HEAD JOGGLING MACHINE
Russell A. West, Coatesville, Pa., assignor to Lukens Steel Company, Coatesville, Pa., a corporation of Pennsylvania
Application December 10, 1952, Serial No. 325,165
17 Claims. (Cl. 153—29)



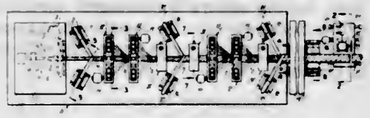
1. In a head joggling machine, a pair of forming rolls, drive means for said rolls, one of said rolls being movable toward and from the other, head positioning means, clamping means operably associated with said positioning means for clamping a head in forming position, drive means on said clamping means, said forming rolls rotating said head and said second mentioned drive means, cam means including a rotatable cam for moving said movable roll toward the other during the forming operation, means operatively connected to said cam for causing the rolls to grip the head to rotate said head and said clamping means connections between said second mentioned drive means and said cam, whereby rotation of said head causes rotation of said cam, said cam being shaped to release said movable pressure roll after a predetermined rotation, thus removing pressure thereof from said head and disconnecting the cam drive by stopping drive of the head.

2,748,829
STRAIGHTENING DEVICE EQUIPPED WITH AN OPTICAL PROJECTION TYPE COMPARATOR
Anthony J. Korenak, Waukesha, Wis.
Application January 5, 1955, Serial No. 479,898
7 Claims. (Cl. 153—52)



1. In a straightening device an upright hollow frame including a base, a surface plate on said base, workpiece supports adjustable along said surface plate, a light source having a lens disposed on said base forwardly of said surface plate for directing the light ray across a workpiece while the latter is held by said workpiece support, reflector means in said hollow frame, and an upright projection screen mounted on the front wall of said frame rearwardly of said surface plate, said reflector means being disposed to direct a light ray from said light source upon said screen, means for adjusting the light source and the reflecting means vertically relative to said surface plate, and a vertically disposed ram mounted on said frame above said surface plate adapted to engage the workpiece when the latter is held by said workpiece supports, and means for actuating said ram.

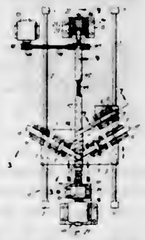
2,748,830
METHOD AND APPARATUS FOR MAKING SPIRAL WOUND SYNTHETIC PIPING AND TUBING
John J. Nash, Normandy, Mo., and George A. Stein, Cleveland, Ohio, assignors, by mesne assignments, to American Fixture, Inc., a corporation of Missouri
Application January 14, 1953, Serial No. 331,213
12 Claims. (Cl. 154—1.8)



1. The method of forming pipe which comprises forming a spirally wound cardboard tube upon a mandrel, feeding the cardboard tube progressively along the mandrel in the direction of the longitudinal axis of the mandrel, continuously applying a spiral winding of parting material around the outside of the tube so that the winding will move with the tubing, applying a spiral winding of textile-type fiber glass roving upon the external face of the parting material, applying a film of unpolymerized polyester resin to said last named winding, applying a spiral winding of flat fiber glass tape externally upon the layer formed by the spirally wound roving, applying a film of unpolymerized polyester resin to said last named winding, heat curing the resin to form a resin bonded cylindrical section of pipe, and thereafter removing the internal winding of parting material.

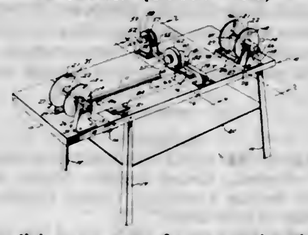
10. Apparatus for the manufacture of pipe which comprises a tunnel-type oven, a mandrel extending lengthwise through the oven and projecting outwardly therefrom at opposite ends, means operatively located adjacent one projecting end of the mandrel for forming a spirally wound tube upon the mandrel, means for covering the tube with a layer of parting material, means for rotatively and translatively moving the tube along the mandrel and through the oven, means for forming successive layers of spirally wound strands of textile-type roving upon the tube, each such means comprising an annular collar having a plurality of radial spools, means associated with each spool for feeding a strand from such spool to the mandrel and spirally winding such strand thereon and means for applying a non-polymerized liquid resin to said successive layers.

2,748,831
MACHINE FOR FORMING HIGH-PRESSURE NON-METALLIC TUBING
John J. Nash, Normandy, Mo., assignor, by mesne assignments, to American Fixture, Inc., a corporation of Missouri
Application May 19, 1952, Serial No. 288,649
1 Claim. (Cl. 154—1.8)



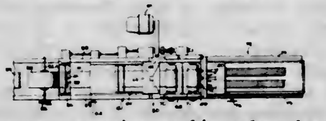
A machine for forming non-metallic piping and tubing which comprises an elongated mandrel operatively mounted for rotation about its longitudinal axis, a slide mounted adjacent to the mandrel for movement along a path parallel to the longitudinal axis of the mandrel, means for moving the slide along said path in timed relation to the rate of rotation of the mandrel, a plurality of roll-stands mounted on the slide for supporting rolls of tape, said roll-stands being positioned in respect to the mandrel in such a manner as to feed tape upon the mandrel along a line angularly disposed with respect to the longitudinal axis of the mandrel, whereby to simultaneously form a series of overlying spiral windings upon the mandrel.

2,748,832
TAPE SPLICING APPARATUS
Gerald C. Low, Watertown, Conn.
Application September 30, 1953, Serial No. 383,261
11 Claims. (Cl. 154—42.3)



4. In a splicing apparatus for connecting the abutting ends of a pair of paper tapes, a manually depressible flat plate carried on the lower end of an upstanding plunger mounted in an overhanging supporting bracket, and means for feeding the end of a roll of pressure sensitive tape into alignment with and under the joint between said paper tapes and at right angles to said tapes comprising a pair of pressure wheels vertically positioned above and below said pressure sensitive tape.

2,748,833
CARTON CONVERTING MACHINE
Charles Z. Monroe and Norton G. Raymond, Detroit, Mich., assignors to Ex-Cell-O Corporation, Detroit, Mich., a corporation of Michigan
Original application April 15, 1948, Serial No. 21,296, now Patent No. 2,682,208, dated June 29, 1954. Divided and this application November 16, 1953, Serial No. 392,325
4 Claims. (Cl. 154—42.3)

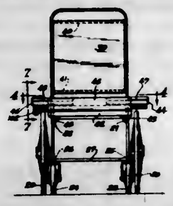


1. In a carton converting machine adapted to receive a continuously moving web of flexible material and to produce therefrom a series of completely severed carton blanks, the combination of means for supplying a web under tension to said machine, a splice detector for automatically determining the presence of a manufacturer's splice in the web, a vertically disposed splice bed for facilitating resplicing of the web upon the detection of a splice therein, and a walkway immediately adjacent said splice bed rendering the same readily accessible to an operator regardless of the width of the web thereon.

2,748,834
WHEEL CHAIR FOR PARAPLEGICS
Frank W. Schwinn, Chicago, Ill.
Application January 3, 1955, Serial No. 479,525
13 Claims. (Cl. 155—30)

1. A chair for paraplegics or the like, said chair comprising a box frame including a substantially rectangular

top section and depending wheel supports, the back and center of the frame being substantially free of obstructions, a seat mounted on the top section of the frame, said seat comprising a pair of separable platforms, means for supporting the platforms for movement in opposite directions, and means for simultaneously biasing the plat-



forms to move in opposite directions, said biasing means developing less force than the resistance to movement of said platforms when they are supporting the weight of an occupant on the chair and thus being rendered ineffective to move the platforms by pressure exerted downwardly thereon.

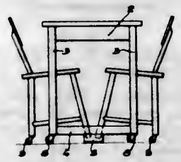
2,748,835
CHAIR WITH SEAT TILT ADJUSTMENT
Chester J. Barecki, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a corporation of New Jersey
Application February 7, 1955, Serial No. 486,466
6 Claims. (Cl. 155—120)



1. In a chair: a supporting frame having spaced cylindrical seat-supporting crossbars at its front and rear; a chair seat pivotally mounted at its front underside on the front crossbar for swinging movement thereabout; a keeper rack depending from the seat's rear underside forwardly of the rear crossbar; a sleeve turnably mounted on the rear crossbar; a latch extending radially from the sleeve and movable therewith to an extreme forwardly extending position of engagement beneath a selected tooth of the keeper rack said latch being also movable with the sleeve to an extreme forwardly-upwardly extending position out of the path of the rack's teeth in the latter's swinging movement with the seat; and means limiting the turning movement of the sleeve to positions in which the latch occupies one or the other of the aforesaid extreme positions.

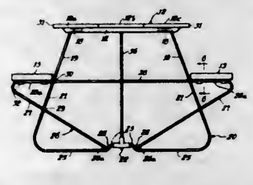
2,748,836
SIMULTANEOUSLY MOVABLE TABLE AND CHAIR
Gösta Olsson, Kristinehamn, Sweden
Application August 20, 1954, Serial No. 451,155
Claims priority, application Sweden August 31, 1953
1 Claim. (Cl. 155—124)

In combination a legged table having a caster on each leg thereof and a legged chair having front and rear legs, said chair being adapted to be shoved at least partly beneath the table and to be mechanically connected thereto so as to be displaced simultaneously with movement of the table, the improvement which comprises a longitudinal rib extending along the lower portion of the table near the floor, said rib having therein recesses slightly larger than the front legs of the chair and extending in such angular directions that said front legs are easily insertable therein, so as mechanically to connect the table and the chair upon insertion of said legs into said recesses, the rear legs



of the chair having casters thereon and remaining supported by the floor, whereby the weight lifted in connecting the chair to the table is small compared with the total weight of the chair.

2,748,837
FOLDING TABLE AND SEAT STRUCTURE FOR PICNIC TABLES AND THE LIKE
Ray M. Beller, Aurora, Ill., assignor to Belson Manufacturing Company, North Aurora, Ill., a partnership consisting of Harry W. Beller and Frank W. Beller
Application May 23, 1955, Serial No. 510,368
12 Claims. (Cl. 155—124)



1. In a folding structure of the class described, a table member, a pair of generally U-shape leg members of metallic bar stock, each leg member having its bight portion somewhat widened and flattened, a pair of seat members, an inverted generally triangular member also of bar stock carried by each of said leg members and having its sides secured to the bight portion of the leg member and having its inverted base portion widened intermedially of the height of the leg member to extend laterally beyond the leg member for providing horizontal support for the seats, a brace rod extending from the bight of a leg member to the table, the brace rod being hingedly connected to the leg member between the ends of the seat support member, and releasable means connecting each brace rod to the table.

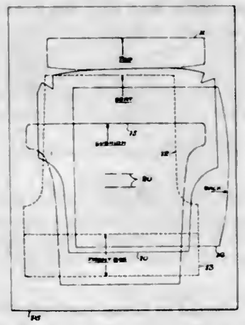
2,748,838
FOOT REST CUSHION
William M. Scholl, Chicago, Ill.
Application April 21, 1953, Serial No. 350,027
2 Claims. (Cl. 155—169)



1. A foot rest cushion for supporting the foot of a user in a sitting position in a generally upwardly inclined position from the heel, which comprises a body of soft resilient material, said body being wedge-shaped and having a horizontal bottom face for engaging a supporting surface and an upper inclined face forming an

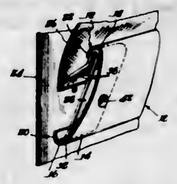
angle less than 45° at one end with said bottom face thereby providing an upper and lower end, allochiral formations in said upper face, each formation including a first cavity for the heel of the foot adjacent the lower end of said upper face, a second cavity for the ball of the foot spaced from said first cavity and adjacent the other end of said upper face, and a convex arch supporting section connecting said cavities and projecting above the very bottoms thereof.

2,748,839
METHOD OF MAKING CHAIR COVERS
Tillie Mednick, Philadelphia, Pa.
Application February 18, 1954, Serial No. 411,169
1 Claim. (Cl. 155—182)



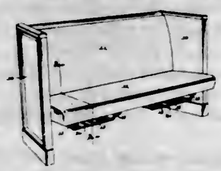
A method for making a slip cover for a chair comprising the steps of successively draping a sheet of suitable material over definitive portions of a chair, drawing the outline of said portions on said sheet to provide a contour sheet carrying distinguishable patterns of said definitive portions, arranging in superposed relation the contour sheet, a carbon tracing sheet and a piece of fabric from which the chair cover is to be made, tracing the patterns on said contour sheet and thereby transferring them individually to said piece of fabric, cutting the fabric into portions defined by said transferred pattern lines and uniting said portions to form the finished slip cover.

2,748,840
SHEET MATERIAL CLIP
Ougljesa Jules Poupitch, Itasca, Ill., assignor to Illinois Tool Works, Chicago, Ill., a corporation of Illinois
Application February 15, 1955, Serial No. 488,207
8 Claims. (Cl. 155—184)



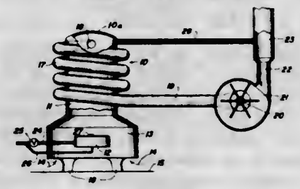
1. A sheet material clip of the type described comprising a body portion for traversing a generally channel-shaped molding strip, a resilient finger portion connected with and flaring from said body portion for projecting from said molding strip, and means on a free end of said resilient finger portion for engaging and holding a fabric panel overlying a work structure so that upon application of the clip to the work structure said resilient finger portion is flexed toward said body portion to place said fabric panel under tension.

2,748,841
UNDERSEAT BOOKRACK
Bernard E. Rimkus, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a corporation of New Jersey
Application February 17, 1955, Serial No. 488,845
2 Claims. (Cl. 155—188)



1. In combination with a seat having a rigid frame comprising bars extending across the underside of the seat at its front and rear, a bookrack comprising: laterally spaced parallel rods of springable rod stock having hooks at their rearward ends engaging the top of the rear frame bar, said rods extending from said rear hooks downwardly and thence forwardly to form book-supporting body portions, and thence upwardly, rearwardly, again upwardly and then forwardly to form front hooks engaging the top and the bottom of the front frame bar; and laterally extending cross-rods connecting the body portions of said laterally spaced parallel rods.

2,748,842
REVERTIBLE DRAFT FLUID-FUEL-BURNING HEATER WITH SAFETY PILOT DRAFT
James O. Ivie and Moyer D. Thomas, Salt Lake City, Utah
Application March 22, 1952, Serial No. 278,016
2 Claims. (Cl. 158—1)

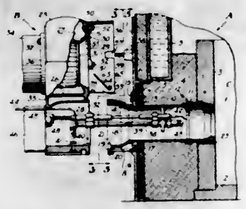


1. A revertible draft, fluid-fuel-burning heater with safety pilot draft, comprising a main burner; a pilot burner in co-operative conjunction with the main burner; combustion chamber means enclosing the two said burners and having a closed dome; forced revertible draft means having an intake below the dome for combustion gases; a waste flue leading from the revertible draft means remote from said dome; and an independent by-pass conduit having an intake below said dome and an outlet in the waste flue, the passage through the by-pass conduit being small with respect to the passage through the revertible draft means and the passage through the waste flue, and the intake of the by-pass conduit being spaced apart from the intake of the forced revertible draft means.

2,748,843
AIR INDUCTION AND TUBE SYSTEM FOR FLUID FUEL BURNER
Reginald W. Beckett, Elyria, Ohio
Application October 31, 1951, Serial No. 254,025
9 Claims. (Cl. 158—4)

2. A heater-burner combination comprising heater structure including a supporting wall formed with an opening, a burner component mounted on the wall in spaced confronting relation to the opening, and an air tube extending through the wall opening, said air tube comprising an annular end portion disposed against the burner component and located in the space between the burner component and the wall of the heater structure

and formed with circumferentially spaced ribs, said ribs being notched to provide locating surfaces received with-



in the opening in the wall to center the tube in the opening and shoulders received against the wall to locate the tube longitudinally with respect to the wall.

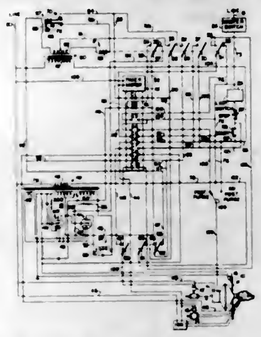
2,748,844
BURNER AIR REGISTER AND FUEL CONTROL SYSTEM
Alan Gilchrist, New York, N. Y., assignor to Peabody Engineering Corporation, New York, N. Y., a corporation of New York
Application July 20, 1953, Serial No. 368,960
8 Claims. (Cl. 158—11)



4. In a fuel burner, an air register having a set of adjustable air doors to control the flow of air for combustion, adjusting means connected to adjust the position of said set of doors, reversible drive means connected to actuate said adjusting means, control means to control the operation of said drive means for adjusting said doors, said control means including a plurality of stop means operable to stop said drive means at different selected door positions, stop selecting means settable in accordance with different combustion air requirements selectively rendering said stop means operative to limit the opening of said doors in accordance with the different quantities of air required for combustion, means including a plurality of fuel valves each controlling the supply of a type of fuel for combustion to said burner, individual relay means to open said valves, fuel selector means to select one of said relay means according to the type of fuel to be burned, and means actuating said stop selecting means and said fuel selector means in unison whereby the door opening is made to correspond to the fuel requirements.

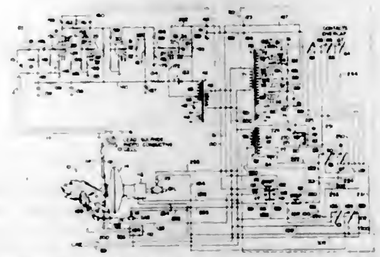
2,748,845
BURNER CONTROL APPARATUS
William E. Marshall, Minneapolis, and William J. Robinson, Richfield, Minn., assignors to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application April 23, 1953, Serial No. 350,602
12 Claims. (Cl. 158—28)

1. A program type burner control for use with a fuel burner comprising: an electrically energizable timer having an actuator and a plurality of switches controlled thereby in a predetermined sequence of operation from a start position; an electrically energizable flame detector, a flame relay including an actuator controlled by said flame detector and switching means operated by said actuator, said flame relay having an energized position indicative of the presence of flame and a deenergized position indicative of the absence of flame; a burner control relay having an actuator and switching means controlled thereby, said burner control relay having an energized position indicative of the need for operation of the fuel burner and a deenergized position indicative of no need for operation of the fuel burner; first circuit means controlled by said burner control relay switching means in said deenergized position connecting said flame detector to simulate the presence of flame and cause said flame relay to move to said energized position; second circuit means controlled by said flame relay switching means in said energized position and by a first of said switches of said timer in



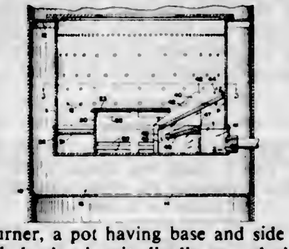
start position adapted to energize said burner control relay actuator upon a need for operation of the fuel burner, said burner control relay being energized upon such need to discontinue the simulation of flame in said flame detector, said flame detector thereafter detecting the absence of flame to cause said flame relay to move to said deenergized position; third circuit means including said flame relay switching means in said deenergized position and said burner control relay switching means in said energized position to energize said timer actuator; and fourth circuit means controlled by said burner control relay switching means in said energized position to maintain said burner control relay actuator energized independent of said first switch of said timer as long as there is a continued need for operation of the fuel burner.

2,748,846
COMBUSTION SAFEGUARD APPARATUS
James W. Smith, Minneapolis, and Frederick C. Wagner, Minnetonka Township, Hennepin County, Minn., assignors to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application January 25, 1952, Serial No. 268,182
5 Claims. (Cl. 158—28)



5. A combustion safeguard for use with a fuel burner having a pilot burner located in igniting relation thereto, comprising, a flame detector amplifier having input terminals and an output circuit including a burner control means rendered operable when a direct current signal is supplied to said input terminals; means sensitive to the rectifying properties of a flame to produce a direct current signal, said last named means being adapted to be associated with one of the burners; means sensitive to the electromagnetic wave energy radiated by a flame to produce an alternating current signal in accordance with the characteristic fluctuation in intensity of said wave energy, said last named means being adapted to be associated with the other of the burners; a frequency selective adaptor amplifier having feedback means connected to render said adaptor amplifier sensitive only to the characteristic fluctuation in intensity of the wave energy radiated by a flame, said adaptor amplifier also having input and output terminals and arranged to supply a direct current signal to said output terminals when an alternating current signal characteristic of said fluctuation of the wave energy emitted by a flame is supplied to said input terminals; means connecting said means sensitive to the electromagnetic wave energy of a flame to the input terminals of said adaptor amplifier, and switching means arranged to selectively connect said means sensitive to the rectifying properties of a flame and the output terminals of said adaptor amplifier to the input terminals of said flame detector.

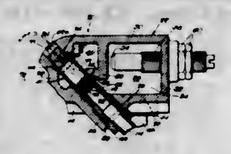
2,748,847
RECIRCULATING PILOT AND BURNER
William H. Gilmore, Columbus, and Clement R. Gilmore, Shaker Heights, Ohio, assignors, by direct and mesne assignments, to East 134 Company, Cleveland, Ohio, a corporation of Ohio
Application May 6, 1952, Serial No. 286,302
9 Claims. (Cl. 158—91)



1. In a burner, a pot having base and side walls, said pot side walls having longitudinally spaced air-admitting ports, a hood comprising hood side walls disposed in the base portion of said pot and a cojoining wall between said hood side walls and spaced from said base wall of said pot by said hood side walls to form a pilot chamber having an outlet facing toward the central base portion of said pot and opening into the pot proper, fluid fuel feed means having a discharge end communicating with the interior of said pilot chamber, the radially outward edges of said hood side walls and said cojoining wall lying along said side walls of said pot a longitudinal distance such that some of said longitudinally spaced air-admitting ports open into said pilot chamber, a notch in said radially outward edge of said cojoining wall of said hood to form an alternate path of communication between said pilot chamber and said pot proper adjacent said pot side wall, a ring segment extending within said pilot chamber between said hood side walls and having a radially outward lip which depends longitudinally toward said base wall of said pot, a ring segment extending without said pilot chamber from one to the other of said hood side walls, both said segments being centered approximately on the axis of said pot.

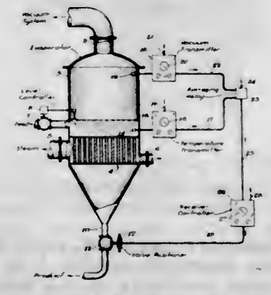
2,748,848
MULTI-FLAME GAS BURNERS
John H. Flynn, New Rochelle, N. Y.
Application January 29, 1952, Serial No. 268,759
13 Claims. (Cl. 158—115)

10. A self-igniting dual-pressure gas burner, comprising a casing having wall means defining separate first and second chambers for high-pressure and low-pressure gas, respectively, said wall means including a partition wall between the chambers and having formed therein a first set of axially aligned holes, one of the holes of said set extending through said partition wall and another through an exterior wall of said casing, whereby said holes provide communication between said chambers and between one of them and the outside of said casing; said wall means also having formed therein a second set of axially aligned holes adjacent said first set and parallel thereto, the holes of said second set extending through said partition wall and through oppositely disposed exterior walls of said chambers to provide communication between said chambers and between each of them and the exterior of the casing; a first utility burner tip mounted in said first set of holes, said burner tip having a flame end disposed



in the hole opening on the exterior of said casing and separate first and second gas passages leading to said flame end and communicating with said first and second chambers, respectively; another utility burner tip identical with said first tip and mounted in said second set of holes; and a sleeve-type adapter extending in said second set of holes through said chambers, said adapter being snugly received by the peripheries of said holes in gas-tight engagement therewith, said adapter internally receiving said other burner tip with the flame end thereof exposed to the outside of said casing in igniting proximity to the flame end of said first burner tip, said adapter having a gas passage out of communication with said chambers and in and out of communication with said first and second gas passages, respectively, of said other burner tip, wherefore said other utility burner tip serves as a single gas pressure type pilot burner tip.

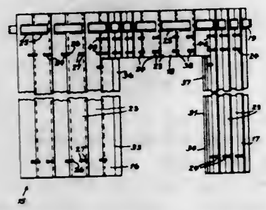
2,748,849
AUTOMATIC CONTROL OF CONCENTRATING EVAPORATORS
Porter Hart, Lake Jackson, Tex., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
Application November 18, 1953, Serial No. 392,953
1 Claim. (Cl. 159—44)



In combination with a continuous-flow vacuum concentrating evaporator having an outlet valve adjustable to control the rate of withdrawal of evaporator product, a product concentration control system comprising a pneumatic temperature transmitter connected to produce an output air pressure proportional to the temperature of the boiling liquid in the evaporator, a pneumatic vacuum transmitter connected to produce an output air pressure proportional to the degree of vacuum in the vapor space

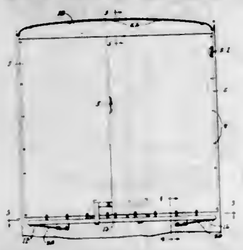
of the evaporator, an averaging relay responsive to the two transmitter output pressures and producing a relay output pressure proportional to the average of the two transmitter output pressure, a pneumatic receiver controller for indicating the value of the relay output pressure and providing a controller output varying with changes in the relay output pressure, and a valve positioner operated by the controller output pressure connected to adjust the evaporator outlet valve in the direction to maintain the averaging relay output pressure at a predetermined value.

2,748,850
WINDOW BLIND STRUCTURE
Charles A. Chenier, Ottawa, Ontario, Canada
Application May 8, 1953, Serial No. 353,734
4 Claims. (Cl. 160—118)



1. In window blind structure extendable over windows or openings, a series of vertically supportable horizontally movable relatively long slat members arranged in window blind forming sections, a series of relatively short slat members connected intermediate the relatively long slat members to form a valance between the blind forming sections, means for connecting the window blind forming sections and the valance forming sections to one another in overlapped relationship comprising a series of spaced loop members connecting the edges of one slat member to intermediate body portions of the next succeeding slat member for foldably and expandably connecting the blind forming sections and the valance forming sections to one another.

2,748,851
REFRIGERATOR CURTAINS
John Arthur Bussard, Rock Island, Ill.
Application October 19, 1953, Serial No. 386,788
4 Claims. (Cl. 160—126)



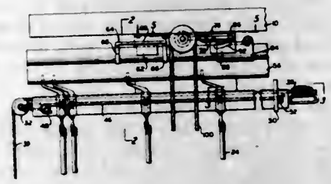
1. In a refrigerating compartment, a curtain suspended therein, resilient means for holding down the lower edge of the curtain including a crossbar mounted below the lower end of the curtain, a cable with one end rigidly attached to the crossbar and passing along the upper side of the bar and over a pulley at the opposite end of the bar and with its free end attached to a tension spring mounted upon the under side of the bar, a plurality of yokes having hooks adapted to engage eyelets formed in the lower edge of the curtain and carrying small pulley wheels adapted to engage the cable and travel along the under side thereof above the crossbar.

2,748,852
VENETIAN BLINDS
Börje Åkerström, Nasbypark, Sweden, assignor to Aktiebolaget Atvidabergs Butiksinredningar, Stockholm, Sweden, a joint-stock company of Sweden
Application December 9, 1953, Serial No. 397,074
Claims priority, application Sweden January 26, 1953
1 Claim. (Cl. 160—168)



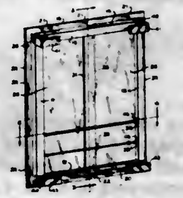
In a Venetian blind having a top crossbar and a bottom crossbar connected by ladder tapes and cords for adjusting the blind to different levels which cords are fixed to the lower crossbar and extend through holes in the upper crossbar and over pulleys adjacent the ends of that bar, in combination, a sheave through which the adjusting cords pass, means uniting said cords beyond said sheave, the single resulting cord then extending into a position to be manually operated, a pair of cords for tipping the blind slats, each said cord being fixed to a corresponding end of one of the ladder tapes at the top thereof, both cords of said pair being fixed to said sheave, and means for guiding said adjusting and tipping cords to exert tension on said sheave to cause movement thereof in opposite directions longitudinally of the upper crossbar, whereby initial movement of said single adjusting cord in a direction to raise said blind causes movement of said sheave to adjust the slats and movement of said single cord after the slats have become parallel to the crossbars causes movement of the two ends of said single cord through said sheave to raise the blind.

2,748,853
VERTICAL SLAT VENETIAN DRAW DRAPES
Carl E. Beck, San Mateo, Calif.
Application September 13, 1954, Serial No. 455,690
3 Claims. (Cl. 160—172)



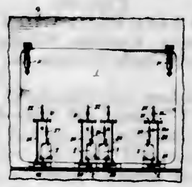
1. Apparatus of the type described comprising horizontally disposed rail means and bracket means supporting the same, a plurality of vertically disposed blind slats slidably and pivotally mounted on said rail means in depending relation thereto, control means interconnecting said slats for conjoint sliding movement with respect to said rail means whereby said slats may be moved from a drape open to a drape closed position and returned to a drape opened position, pivotally mounted crank levers fixedly connected to said slats extending above said rail means, a control rail having a channel formed in the underside thereof, means for both rockably and slidably supporting said control rail above said rail means with said channel of the control rail in receiving relation with said crank levers, and means in control relation with said rail adapted to impart rocking movement to said rail to pivot said crank levers to effect blind opening and closing of said slats and conjointly with such rocking movement to impart longitudinal sliding movement to said rail to prevent binding between said rail and crank levers while said levers are being pivoted.

2,748,854
DOG DOOR
Harold D. Lynch, Evansville, Ind.
Application June 23, 1950, Serial No. 169,926
2 Claims. (Cl. 160—179)



1. A door for the passage of animals therethrough comprising a door frame having outwardly extending flanges by means of which the frame may be mounted, said frame having opposed grooves in the inner surfaces of its sides, resilient flexible sheet members mounted in and filling said frame and having overlapping edges susceptible of displacement to permit the body of an animal to pass therethrough and to return to its initial position thereafter, dowels secured in said grooves, and having the remote edges of said flexible sheets around the same and readily removable and replaceable bar means for limiting the size of the door opening and consequently the size of the animal which can pass therethrough, said door frame having at one side an opening to receive said bar means and having an opening in the opposite door frame also to receive said bar means, said second opening being of a depth to permit a bar to be inserted into the same and the opposite end of the bar insertable into the first opening and retractible until the bar is seated against the bottom of the first opening, said door frame being provided with upper and lower openings above and below said second opening with said upper and lower openings of less depth than that of said second opening and with the bottoms of said upper and lower openings spaced from the bottom of the first opening, whereby a bar of a length substantially equal to the distance between the bottom of the first opening and that of said upper and lower openings may be inserted into the second opening with its opposite end clearing the door frame and insertable into the first opening whereupon the first inserted end of the bar may gravitate into one of said upper and lower openings whichever is in lowermost position and be fixed against axial movement regardless of which end of the frame is in uppermost position.

2,748,855
BLOW-OUT SAFE AIRCRAFT DOORS
Robert J. Siems, Seattle, and Alston B. Voorhees, Jr., Bellevue, Wash., assignors to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application February 21, 1955, Serial No. 489,712
7 Claims. (Cl. 160—210)



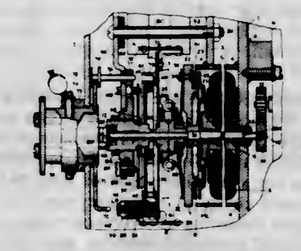
1. In an aircraft, in combination with structure defining an enclosed pressurized cabin space, having a doorway to the exterior, a door mounted upon said structure for movement between a position wherein it closes the doorway and retains the cabin pressure, and an open position, locking means interrengageable between the door and the structure, including a member movable between locking and released positions, a port of small size as compared to the doorway, affording communication between the cabin space and the exterior, a cover mounted for movement relative to said port between closed and open positions, means to retain said cover in closed position, including a releasing element, and means interrengageable between the cover-retaining means and the door-locking means to prevent movement of said movable member to released position, and consequent opening of the door, until the cover-retaining means has been moved to its released position and the cover has been moved to open position, to equalize exterior and cabin pressures through said port.

2,748,856
FOLDABLE VEHICLE DOOR CONSTRUCTION
John W. Tatter, Akron, Ohio
Application February 20, 1953, Serial No. 337,925
7 Claims. (Cl. 160—210)



1. An automotive vehicle door comprising a forward and rear section adapted to be normally positioned in a common plane, means hinging said door to a vehicle body, hinging said door sections to permit said door to jack-knife to move said sections out of said normal common plane, and means to lock said door sections against movement out of their normal common plane position, a door latch for securing the door in closed position with respect to the vehicle body, a door handle for actuating said door latch, and means connecting said door section locking means to said door latch actuating means whereby to permit actuation of said handle for selectively actuating both said door latch and said door section locking means.

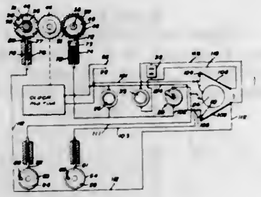
2,748,857
TIME ELEMENT RELAY
Oscar S. Field, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.
Application November 16, 1951, Serial No. 256,635
2 Claims. (Cl. 161—1)



1. In a contact making timing device, a shaft, a constant speed motor operatively connected through reduction gearing to said shaft for at times rotating it at a relatively slow rate, a contact carrying member freely rotatable on said shaft and operable from a fixed normal position to an operated position, fixed contact members located in said normal and said operated positions and rendered effective to close circuits when said contact carrying member is in a corresponding position, a torsional spring for biasing said rotatable contact carrying member to a normal position in a direction opposite to the direction of rotation of said shaft, means for at times causing said contact carrying member to be operated against the bias of said spring and comprising a hub member on said shaft freely rotatable with respect thereto, said hub member also having said contact carrying

member attached thereto, said hub member having a groove around its outer periphery, a collar member surrounding said hub member and having a plurality of radial holes in said collar with their axes passing through the axial center of said collar and hub members, a plurality of plungers one for each hole in said collar and each having a projection to be received by said groove in said hub member, a coil spring extending around the periphery of said collar for forcing said plungers within the respective holes of said collar and against said hub member with a predetermined force, and an electromagnetic clutch comprising a disc of nonmagnetic material attached to said shaft, an armature mounted on said shaft but rotatable with respect thereto, supporting springs for said armature connected to said collar member effective to bias said armature toward said collar away from said disc and also effective to cause said collar to be rotatably fixed with respect to said armature, said armature being constructed to have sufficient moment of inertia that its angular momentum when rotating to its fixed normal position under influence of said torsional spring causes it to continue rotating for a time against the frictional braking effect of said plungers after said contact carrying member has been restored to said fixed normal position, said electromagnetic clutch when energized causing said armature to frictionally engage said disc and be rotated thereby with such action increasing the tension on said springs between said collar and said armature but with said collar being prevented from lateral movement by said projections on said plungers being engaged by the groove in said hub member.

2,748,858
CLOCK CONTROLLED SWITCHING DEVICE
Crawford S. Askew, Miami, Fla.
Application August 16, 1951, Serial No. 242,128
10 Claims. (Cl. 161—1.5)



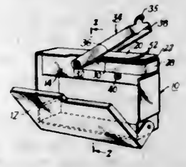
1. In a combined time setting and switching device for making and breaking a load circuit at definite preset times, a first rotatable contact device for producing a short timed contact, a further rotatable contact device for maintaining a connection for a definite period of time and for interrupting a closed circuit at a predetermined instant, both contact devices consisting of two cooperating, contiguous rotatable disks of insulating material, each provided with a contact having a contact surface arranged in the plane of rotation of the said disks on the side facing the other disk, said contact surfaces being arranged at such distances from the axis of rotation that the contact surfaces of the two disks come into contact with each other during rotation of the disks, a clock mechanism rotating one of the said insulating disks of each contact device with uniform angular velocity, means for manually rotating the other insulating disk of each contact device to move its contact to a predetermined point for each desired operation, a relay switch with a relay winding of predetermined resistance and with relay switch contacts, controlling said load circuit, an energizing circuit for said relay switch, controlled by the first rotatable contact device, and a holding circuit for said relay switch controlled by the relay switch contacts and by the further rotatable contact device.

2,748,859
POWER GROOVER
James A. Myklebust and Harry A. Hanly, Longview, Wash.
Application April 15, 1953, Serial No. 348,933
2 Claims. (Cl. 164—10.2)



1. A tire tie bar maker comprising a handle, means for pivotally securing one end of said handle to a fixed support whereby said handle is manually movable toward and from the circumference of a tire, a knife mounted on said handle, a lever pivotally secured to said handle between said knife and the pivotally secured end of said handle, an axle journaled in the free end of said lever and having a wheel mounted thereon and adapted to ride on the circumference of a tire, a cam on said axle and turnable thereby, a cam follower for said cam, a second lever carrying said cam follower, and means carried by said handle for adjusting said second lever in relation to said handle whereby the rotation of the cam raises and lowers the handle and knife in relation to said tire.

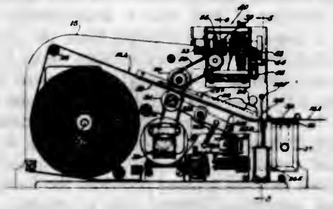
2,748,860
SHAPING DEVICE FOR NAIL-COATING ELEMENTS
Boris Bogoslowsky, Jackson Heights, N. Y.; Elizabeth Bogoslowsky, executrix of Boris Bogoslowsky, deceased
Application July 5, 1952, Serial No. 297,366
7 Claims. (Cl. 164—41)



1. Apparatus for shaping a nail-coating blank comprising, in combination, a support having a gauging slot formed therein adapted to receive a nail-coating blank for shaping, said slot being essentially defined by a fixed abutment, an adjustable abutment and a shaping edge having a configuration substantially conforming with one side and adjacent half of the curve of the cuticle of a human nail, and a shearing member pivotally secured to said support, said shearing member having a cutting edge positioned to cooperate with the shaping edge of said slot upon pivotal movement of said shearing member to cut off excess portions of a nail-coating blank that has been positioned in said slot against said two abutments.

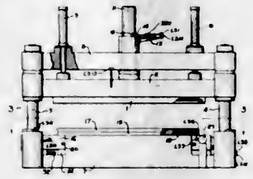
2,748,861
MEASURING TAPE FEED AND TAPE CUT-OFF
Walter Von Stoeser, Venetian Village, Lake Villa, Ill., assignor to Lectromatic Devices, Inc., a corporation of Illinois
Application June 16, 1950, Serial No. 168,565
18 Claims. (Cl. 164—49)

1. In a measuring type tape feed of the class including tape feeding means and a driving motor therefor, with electromagnetically actuated shear to cut off fed lengths of tape, improvements in a control circuit comprising, to wit: a starting switch and relay means controlled thereby for starting said motor to effect a feeding of tape, and a manually settable measuring switch including adjustable contact means and rotary contact means displaced dependently upon feeding action of said feeding means, and actuating circuit means cooperative with said relay means for stopping said motor upon feeding of a length of tape determined by the manual setting of said measuring switch, together with supervisory contact means actuated



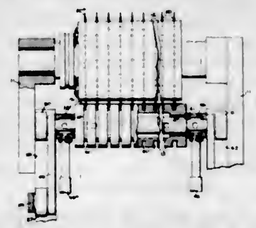
automatically in cooperation with said measuring switch for actuating said shear following stoppage of the motor as aforesaid.

2,748,862
HYDRAULICALLY OPERATED APPARATUS FOR OPERATING ON THE WALLS OF A PAN-SHAPED OBJECT
Samuel W. Alspaugh, Tipp City, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application January 26, 1952, Serial No. 268,425
8 Claims. (Cl. 164—56)



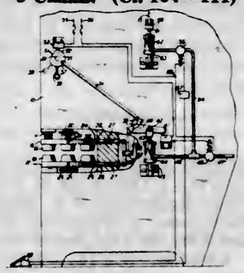
1. In combination, holding die means, cutting die means, first fluid pressure means operating in a first direction of movement for moving one of said die means relative to the other die means in said first direction of movement, first limit control means responsive to the relative movement of said die means to a predetermined position along said first direction of movement for reversing said first fluid pressure means to reverse the relative movement of said die means in said first direction, and second limit control means responsive to the relative movement of said die means in said reverse direction to a second predetermined position for stopping the action of said first fluid pressure means.

2,748,863
PERFORATING MACHINE FOR THERMOPLASTIC FILMS
Harold Z. Benton, Woodstock, Ill.
Application March 2, 1953, Serial No. 339,838
2 Claims. (Cl. 164—99)



1. A perforating device for thermoplastic films comprising, in combination, a perforating cylinder having a plurality of closely spaced tapered pins arranged in annular rows and extending radially therefrom, an anvil roller for cooperating with said perforating cylinder, said anvil roller having a plurality of annular ridges defining grooves which are in register with the rows of pins on said perforating cylinder, means for guiding a film of thermoplastic material between said perforating cylinder and anvil roller, means for raising the temperature of the perforating cylinder and the pins thereon up to the point which will cause plastic flow of a thermoplastic film material which is in contact with said pins, and means for maintaining said anvil roller artificially cool, the ridges on said anvil roller being closely spaced to provide minimum clearance for said pins and presenting an extensive cylindrical surface to support the body of said film and to maintain it at a low temperature thereby to localize the heating effect of said pins.

2,748,864
CONTROL FOR PUNCH PRESS
Waldemar C. Ewaldson, Millington, and Alfred A. Williams, Plainfield, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application September 4, 1953, Serial No. 378,478
5 Claims. (Cl. 164—111)

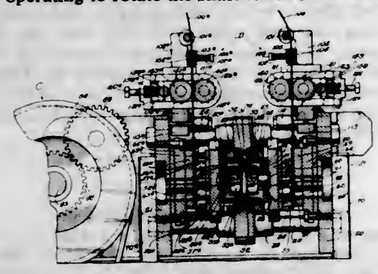


1. A control for a press having a crank shaft adapted for connection to a driving means through a normally disengaged one revolution clutch when a rod is actuated to engage the clutch, turrets for sets of punches and dies movable relative to an operating position to selectively locate sets of the punches and dies singly therein where a ram reciprocated by the crank shaft will move the selected punch through an operating cycle, and tapered latch pins receivable in similarly tapered recesses of the turrets and movable into and out of latching positions by an actuable mechanism, the control comprising a unit operable to actuate the clutch rod, auxiliary means operable to cause the mechanism to force the pins into the recesses, means actuable by the mechanism to cause operation of the auxiliary means after said mechanism causes the pins to enter the recesses and actuable means rendered effective after the auxiliary means has been operated to operate the unit.

2,748,865
PUNCH PRESS AND FEED MECHANISM THEREFOR
George H. Kuhl, Glen Ellyn, Ill.
Application February 27, 1951, Serial No. 212,975
1 Claim. (Cl. 164—117)

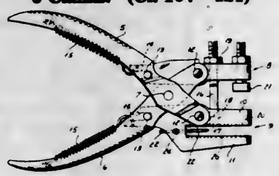
In combination with a reciprocatory punch press having a frame and power drive means for reciprocating the ram of the press, feed means for feeding a continuous strip of material to the press comprising means defining a pair of parallel spaced guideways on the frame, a block slidably received in each guideway, a first feed roll shaft, means on each block for rotatably supporting the ends of the feed roll shaft, a second feed roll shaft rotatably mounted in the frame and positioned parallel to and adjacent the first feed roll shaft, a feed roll on each shaft, an actuating shaft rotatably supported in the frame and provided with a flattened portion contacting each block,

resilient means urging the blocks toward movement in one direction, a cam mounted on the second shaft, a cam follower riding on the cam, a lever arm adjustably secured to the cam follower and fixed to the actuating shaft, means for adjusting the cam follower relative to the lever arm to vary the period that the nip is closed, said lever arm operating to rotate the shaft to slide the blocks in the



other direction each time the cam is rotated whereby to open and close the nip between said feed rolls, means for rotatably adjusting the cam relative to the second shaft to determine the point in the cycle of press operation at which said nip is closed, means for feeding a strip of the material into said nip, and means connecting the second shaft to the drive means.

2,748,866
TOOL FOR FORMING DETENTS IN CONNECTED CONVOLUTIONS OF SLATS
Frank J. Zarnowski, Rutherford, N. J., assignor to Orchard Brothers Incorporated, a corporation of New Jersey
Application April 29, 1954, Serial No. 426,374
6 Claims. (Cl. 164—121)



6. In a tool construction, a pair of relatively movable members with one of said members being provided with a pair of spaced sections for accommodating therebetween oppositely disposed spaced pairs of portions of connected convolutions of a pair of slats, one of said sections being formed with a slot, a punch connected to the other of said members and operable through said slot for deforming the pair of said portions adjacent said slot to form detents in said last mentioned portions, and supporting means spaced from said sections in the zone between said sections and extending generally parallel to the adjacent faces of said sections so as to be disposed within the confines of said convolutions, said supporting means being disposed out of the path of said punch but with a portion thereof close to and facing said path for supporting said last mentioned portions and coacting with said punch to effect forming of said detents in said last mentioned portions.

2,748,867
PROCESS FOR REACTIVATION OF FLOWING WELLS
Kenneth J. Lissant, Kirkwood, Mo., assignor to Petrolite Corporation, Wilmington, Del., a corporation of Delaware
No Drawing. Application August 5, 1953, Serial No. 372,591
5 Claims. (Cl. 166—45)

1. In the process of reactivation of a temporarily non-active well; said well being of the normally self-flowing type; non-activity of said well being due to the fact that the normal flow was interrupted by the hydrostatic pressure in the well piping being momentarily greater than bottom hole pressure; the step of introducing in the bottom of said well a disintegrable capsule containing a metal hydride selected from the class consisting of alkali metal and alkaline earth metal hydrides; permitting said capsule to disintegrate followed by reaction between water and said metallic hydride; the amount of metallic hydride in said capsule being sufficient to release enough hydrogen gas in the well piping to reduce the apparent density of the well fluid responsible for the hydrostatic head to a point less than the bottom hole pressure and permitting normal flow to resume.

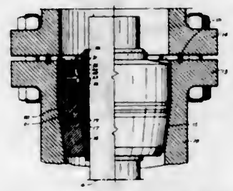
2,748,868
WELL HEATER
Clayton A. Carpenter, La Habra, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California
Application July 19, 1954, Serial No. 444,297
14 Claims. (Cl. 166—60)



1. A well heater for use in combination with a well tubing which is adapted to conduct oil from oil-bearing formations penetrated by the well bore to the earth's surface, comprising, in combination, a first electrical resistance heating element adapted to transfer heat to the oil passing through said tubing, a second electrical resistance heating element adapted to transfer heat to oil-bearing formations penetrated by the well bore and electrically connected in parallel with said first heating element, electrically conductive means for supplying electric current to said heating elements from sources of alternating and direct current located at the earth's surface, and switching means for electrically connecting either or both of said sources to said conductive means; one of said electrical resistance heating elements being electrically inductive so as to present substantial impedance to the flow of alternating current therethrough and the other of said heating elements being substantially non-inductive, the direct current resistance of the inductive heating element being substantially less than the sum of the direct current resistance of the substantially non-inductive heating element and the direct current resistance of said conductive means, and the inductive reactance of the inductive heating element at the frequency of the said alternating current source being substantially greater than the sum of the direct current resistance of the substantially non-inductive heating element and the direct current resistance of said conductive means.

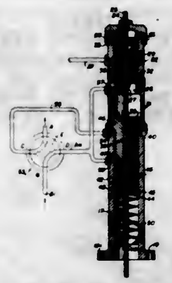
2,748,869
SEALING AND PRESSURING APPARATUS
Richard E. Hager, Houston, Tex., assignor to Cameron Iron Works, Inc., Houston, Tex., a corporation of Texas
Application July 23, 1953, Serial No. 369,913
13 Claims. (Cl. 166—75)

1. In a fluid actuated sealing arrangement, a body having a groove, a packing in the groove and in initial sealing engagement with the opposite sides of the groove, the groove being deep enough to provide space behind said packing, said body also having a branched passageway therein, one branch of said passageway conducting pres-



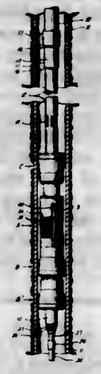
sure to said space behind the packing to urge it outwardly of said groove and another branch conducting pressure to a point on the outer surface of the body outside said groove, and a restriction in the last named branch.

2,748,870
LINE INSERTING DEVICE
Raymond B. Basham and Walter J. Parrish, Fort Worth, Tex.
Application November 29, 1954, Serial No. 471,736
5 Claims. (Cl. 166—77)



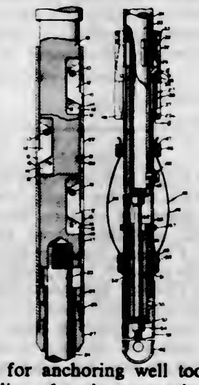
1. A line stuffing device for mounting on the head of a well having gas pressure therein, said device comprising a tubular vertical cylinder having a cap on the upper end thereof, said cap including a central opening therein for receiving the line to be stuffed by said device, said line extending through and beyond both ends of said cylinder, the end of said cylinder opposite said cap being in open communication with the pressure of said well, said cylinder including an enlarged inside diameter intermediate the ends thereof, a shouldered piston in said cylinder, the larger diameter of which is slidably mounted in the referred to enlarged diameter of said cylinder and the smaller diameter of which is downwardly directed and spaced from the lower inside diameter of said cylinder, a cylindrical compressible body secured to the lower end of said piston, a cylindrical holding plate on the end of said compressible body opposite said piston, said cylindrical holding plate being in sliding contact with the inside diameter of said cylinder, said piston, compressible body and holding plate having axial openings therethrough receiving said line, a spring in said cylinder arranged to move said piston toward said capped end thereof, an upper port in said cylinder located at the upper end of said enlarged inside diameter and in communication therewith, an intermediate port in said cylinder beneath said enlarged inside diameter and in communication with the space between the inside diameter of said cylinder and the smaller diameter of said piston, a lower port in said cylinder below the lower end of said piston when the latter is in its down position and above the lower end of said compressible body when the latter is in its up position, and means alternately supplying fluid pressure first to the upper and lower of said ports and subsequently to said intermediate port.

2,748,871
WELL PACKERS
Cleere C. Brown, Houston, Tex.
Application February 28, 1950, Serial No. 145,253
1 Claim. (Cl. 166—129)



A well packer adapted to be lowered within a well casing and including, a tubular support, an anchoring assembly mounted on the support and detachably connected therewith, sealing means attached to the anchoring assembly for sealing the annular space between the support and the well casing into which the packer is lowered, and an inner circulating conductor disposed axially within the tubular support and having its upper end secured to the support with its lower end projecting a substantial distance below the lower end of the support, whereby fluid may be circulated downwardly below the well packer when the same is in position within a well casing, the sealing means encircling the support in constant sealing engagement therewith and being located above and below the anchoring assembly and an enlarged diameter portion on said tubular support adapted to enter the bore of said sealing means located above said anchoring assembly to expand same and to impose the weight of the support on the assembly for maintaining said assembly in an anchoring position with the casing.

2,748,872
WELL TOOL ANCHORING DEVICE
Mordica O. Johnston, Glendale, Calif., assignor of one-fourth to Madge Johnston, one-twelfth to Edgar C. Johnston, Jr., one-twelfth to Gordon C. Johnston, and one-twelfth to Joseph Glenn Johnston, all of Longview, Tex., and one-eighth to Mordica O. Johnston, Jr., La Jolla, and one-eighth to Warren C. Johnston, Glendale, Calif.
Application October 4, 1954, Serial No. 460,118
6 Claims. (Cl. 166—206)



3. In a device for anchoring well tools comprising a mandrel, a plurality of main supporting dogs pivotally

mounted on the mandrel, a sleeve slidably mounted on said mandrel and adapted to move said dogs from an inactive to an active position, and a wall engaging drag assembly on said sleeve adapted to frictionally engage the wall of the well bore, the improvement comprising a plurality of auxiliary wall engaging dogs pivotally mounted on said sleeve to pivot from a retracted position to a wall engaging position, spring means biasing said auxiliary dogs toward their active position, stop means on said auxiliary dogs adapted to abut said mandrel to prevent outward pivotal movement of said auxiliary dogs, an annular groove in said mandrel, the bottom of said groove being adjacent to and above said stop means, whereby initial downward movement of said mandrel will bring said groove into register with said stop means to permit said auxiliary dogs to pivot outwardly and bite into the bore wall and aid the drag assembly in holding said sleeve while said mandrel is moved relative thereto to set said main supporting dogs.

2,748,873

BACK PRESSURE VALVE APPARATUS FOR AUTOMATICALLY FILLING WELL CONDUIT STRINGS

John R. Baker, Pasadena, and John F. Muse, Montebello, Calif., assignors to Baker Oil Tools, Inc., Los Angeles, Calif., a corporation of California

Application April 27, 1953, Serial No. 351,393
13 Claims. (Cl. 166—225)



1. In well apparatus: a tubular member having means thereon for securing said member to a conduit string to be lowered in a well bore; a first valve member in said tubular member; a second valve member in said tubular member and having a passage therethrough; spring means engaging and urging said second valve member downwardly into engagement with said first valve member to prevent fluid flow therebetween from a point below said first valve member into said passage; said second valve member being movable upwardly away from said first valve member to permit upward flow of fluid into said passage; and means releasably and rigidly attaching said first valve member to said tubular member to prevent downward movement of said first valve member within said tubular member, said releasable means being releasable to allow downward movement of said first valve member away from said second valve member to allow fluid flow therebetween.

2,748,874

GODEVIL FOR CABLE SUSPENDED WELL TOOLS

Lloyd Spencer, Los Angeles, Calif., assignor of thirty-three and one-third per cent to Thomas C. Bannon, Altadena, Calif., and thirty-three and one-third per cent to John D. Chesnut, Newport Beach, Calif.

Application November 9, 1951, Serial No. 255,612
13 Claims. (Cl. 166—243)

1. A godevil adapted to travel freely within a well casing through which extends a cable, comprising: an elongated body structure adapted to be received in a casing alongside of a cable suspended therein; and yieldable arms connected to said body structure and adapted to bear against the side of said casing structure and tending to maintain said body structure in the center thereof, said godevil body structure being displaceable by said



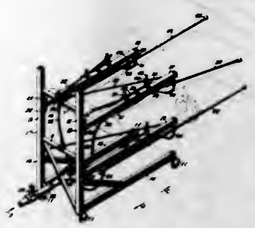
cable to a position entirely to one side of the center of the casing while remaining slidable in the casing along side of said cable.

2,748,875

FIRE EXTINGUISHING APPARATUS

Joseph B. Trinity, Los Angeles, and Richard E. Bates, Santa Monica, Calif.

Application October 23, 1953, Serial No. 387,872
7 Claims. (Cl. 169—2)



1. A fire extinguishing apparatus, comprising: a wheeled frame adapted to be moved into close proximity to an aircraft to be protected against loss by fire; a plurality of elongated conduits adjustably mounted on said frame; a plurality of nozzles on each of said conduits adapted to dispense fluid therefrom; first means for supplying fluid under pressure to said conduits; and second means to control the flow of fluid from said first means to said nozzles, said conduits supported by said frame in such spaced relationship that they are adapted to extend in selected adjusted close proximity to the adjacent surfaces of the aircraft, whereby it may be completely enveloped by fluid fog dispensed by said nozzles when a fire breaks out.

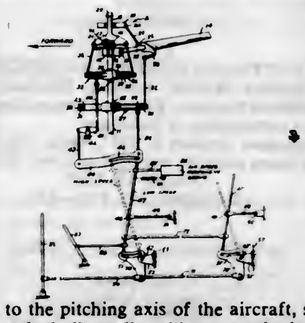
2,748,876

MEANS FOR CONTROLLING TIP-PATH OF ROTORS

Elliot Daland, Wallingford, and Donald N. Meyers, Philadelphia, Pa., assignors to Vertol Aircraft Corporation, a corporation of Pennsylvania

Application January 12, 1951, Serial No. 205,779
6 Claims. (Cl. 170—135.24)

4. A control apparatus in combination with blade pitch changing mechanism of a rotary wing aircraft having two rotors arranged in tandem wherein changes in attitude of the aircraft about its pitch axis are brought about by changes in differential collective pitch, said control apparatus comprising manual control means, connecting linkage operatively connected to said pitch changing mechanism to vary the tip path of said rotors, an automatic control means, said manual control means and said automatic control means being connected to said connecting linkage to control the tip path planes of the rotors about



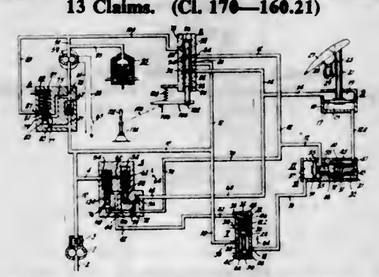
axes parallel to the pitching axis of the aircraft, said connecting linkage including adjustable proportioning means, said adjustable proportioning means acting to change the proportion of the total amount of the blade pitch control that is applied by either of said manual means or said automatic means.

2,748,877

PROPELLER CONTROL WITH PITCH LOCK

Dale W. Miller, Brookville, Calvin C. Covert and Darrell E. Royer, Vandalia, and Michael Demido, Troy, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application March 15, 1952, Serial No. 276,836
13 Claims. (Cl. 170—160.21)



1. In a control system for a variable pitch propeller, the combination including, a fluid motor for adjusting propeller pitch, a fluid pressure system for actuating said motor, said system comprising, a system source of fluid pressure, an auxiliary source of fluid pressure connectable to said system source, a valve connected to said system source and said motor for controlling fluid flow to and from said motor, and means controlling operation of said auxiliary source, pitch lock means operatively connected with said motor for maintaining a fixed propeller pitch upon failure of said system source by trapping fluid within said motor, and means including a centrifugally responsive device in said fluid pressure system and operatively connected with the pitch lock means for rendering said pitch locking means ineffective when said auxiliary source is operative and the propeller is stationary.

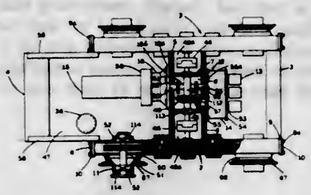
2,748,878

WHEELED TRACTOR

Robert G. Le Tourneau, Longview, Tex., assignor to R. G. Le Tourneau, Inc., Peoria, Ill., a corporation of California

Original application June 4, 1949, Serial No. 97,121, now Patent No. 2,683,318, dated July 13, 1954. Divided and this application March 16, 1953, Serial No. 342,392
3 Claims. (Cl. 180—6.2)

1. A tractor comprising a main frame including upstanding wheel drive gear cases laterally spaced on opposite sides of the frame, transverse walls connected between the gear cases and forming a cross shaft housing, a drive shaft in said housing, an engine on the frame, an in-line generator connected to and between the engine and one of the transverse walls, a unitary transmission



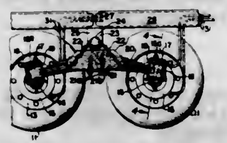
fastened to the far side of said other transverse wall, an extension shaft projecting through the cross shaft housing and connecting the generator shaft with the transmission input shaft, an output shaft projecting from the transmission into said housing and operative to rotate said drive shaft.

2,748,879

FULLY OSCILLATING VEHICULAR SUSPENSION AND/OR DRIVE

David Robert Gordon Bailey, Bellingen, New South Wales, Australia, assignor to Fenton Max MacMillan, Arcadia, Calif.

Application September 8, 1953, Serial No. 378,914
5 Claims. (Cl. 180—24)



1. In a multi-wheeled self propelled road vehicle having a frame, a wheel mounting arrangement comprising: a pair of leaf springs each having a plurality of leaves therein; means pivotally supporting a longitudinal central portion of said springs on a transverse axis relative to said frame; end castings mounted on the forward and rearward ends of said springs; internal stepped openings in said casting receiving a portion of the leaves of said springs; a plurality of housings each having outer ends; a bore in each of said housings; said castings being received in said bores and said housings being pivotally mounted thereon; means for retaining said housings on said castings; axle shafts carried by said housings and extending laterally therefrom, said wheels being mounted on said shafts; oscillation-limit plates mounted on said housings and surrounding said spring leaves adjacent the forward and rearward ends thereof; and a pair of lugs carried by each of said plates, said lugs being engageable with said leaves of said springs for limiting oscillation of said housings and said wheels about said castings and said springs.

2,748,880

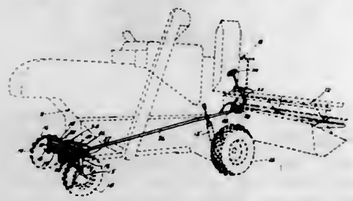
COMBINED MANUAL AND HYDRAULIC POWER STEERING MECHANISM FOR VEHICLES

Manley R. Sackett, Spokane, Wash.

Application June 15, 1953, Serial No. 361,588
1 Claim. (Cl. 180—79.2)

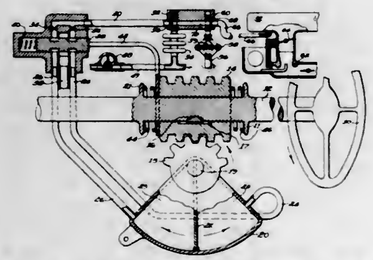
The combination with steering mechanism having upper and lower spaced parallel axle bars pivotally mounted midway their lengths on vertically spaced parallel axes for coplanar vertical tilting movement; bearing housings pivotally carried by the free ends of said bars on vertically spaced axes parallel with said first named axes; substantially axially vertical king pins journaled in said bearing housings and having spindles extending hori-

zontally therefrom to receive and rotatably carry steering wheels; and steering arms extending laterally from each king pin and united by a tie bar whereby the king pins are connected for commensurate axial rotation; of the improvement comprising a fluid pressure motor having means at one end pivotally connecting said motor to said axle bars, and the oposed end of said motor being pivotally united to one said steering arm at a point removed from its king pin; said means comprising vertically extending bars disposed one at each side of said axle



bars; said vertical bars being pivotally united with said axle bars on axes parallel with said first named axles and offset from the median line of said axle bars a distance commensurate with the horizontal offset from the axis of one said king pin to the axes of its companion bearing housing pivots; universal connecting means uniting the motor and the vertical bars adjacent to their upper end portions at a point spaced from the axes of the vertical bars a distance substantially the same as the distance from the axes of said bearing housing pivots to the opposed motor connecting means.

2,748,881
VACUUM TYPE POWER STEERING WITH CONTROL MEANS RESPONSIVE TO ENGINE AND VEHICLE SPEEDS
George M. Holley, Jr., Grosse Pointe Park, Mich., assignor to Holley Carburetor Company, Detroit, Mich., a corporation of Michigan
Application August 14, 1952, Serial No. 304,364
2 Claims. (Cl. 180—79.2)



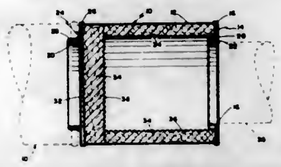
1. Means for assisting a car operator in steering when parking a car having a throttle controlled engine comprising a steering wheel, a steering post, a worm mounted on said post, a driven gear engaging said worm and driven thereby, a steering shaft driven by said driven gear, a booster cylinder, a piston therein connected to said driven gear, an engine generated source of vacuum, two restricted pipes leading from said vacuum source to said cylinder, one on each side of said piston, a servo-valve, connected to said worm, located between the source of vacuum and the cylinder and connected to said pipes, yieldable means interposed between the steering post and the worm and adapted when resistance is encountered to permit said worm to move so as to move said servo-valve so as to apply engine suction to one side or the other of said piston and thus help the car operator steer as the car is parked, and in which there are two valves located between the engine source of suction and said servo-valve, an engine driven speed responsive means operatively connected to one of said two valves, a car speed responsive means operatively connected to the other of said two valves, so that at both high car speed and at high engine speed the booster cylinder becomes relatively ineffective.

2,748,882
ELECTRO-ACOUSTIC TRANSDUCERS
Dennis Edward Skelton, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application October 8, 1951, Serial No. 250,217
Claims priority, application Great Britain October 11, 1950
2 Claims. (Cl. 181—31)



1. An electro-acoustic transducer having a diaphragm, a moisture proof damping membrane of a material which is inherently slow to recover its shape relative to said diaphragm after being deformed in response to the vibrations of said diaphragm, which membrane is mounted in front of said diaphragm and tightly coupled thereto acoustically and mechanically, and an apertured plate covering the diaphragm and the membrane, said plate having a dished central portion making contact with the center of the membrane.

2,748,883
MUFFLER UNIT
Millard J. Ralph, Chula Vista, Calif.
Application December 3, 1952, Serial No. 323,890
7 Claims. (Cl. 181—50)

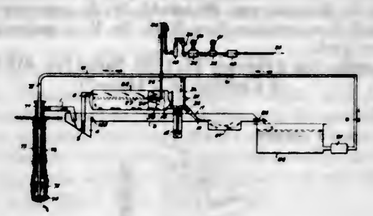


1. A muffler unit comprising a substantially cylindrical canister having a male end provided with a plug portion and an opening therein, a female end provided with an opening of a diameter substantially equal to the diameter of said plug portion, two perforated discs in spaced relationship within said canister adjacent said male end and covering said opening, a layer of absorbent material between said perforated discs, a perforated cylindrical cage within said canister, and a layer of absorbent material between said perforated cylindrical cage and the curved wall portion of said canister.

2,748,884
APPARATUS FOR TREATING DRILLING MUD
Ransome W. Erwin, Fort Worth, Tex., assignor to Salt Water Control, Inc., Fort Worth, Tex., a corporation of Texas
Application June 30, 1952, Serial No. 296,396
7 Claims. (Cl. 183—2.5)

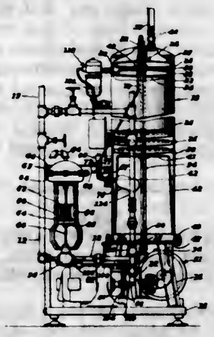
1. An apparatus for continuously degassing mud, comprising a closed mud degassing vacuum tank having an inlet conduit for gas-laden mud, an outlet conduit for degasified mud leading from the tank, and means for causing the flow of mud into, through and out of said mud

degassing tank, said means comprising a jet nozzle for discharging mud into the outlet conduit beyond the de-



gassing tank, and means for supplying degassed mud under pressure to said jet nozzle.

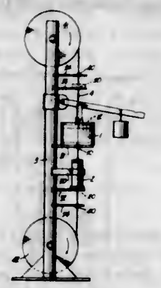
2,748,885
LIQUID DEAERATOR
Carl L. Day and Ransom C. Albrecht, Baltimore, Md., assignors to Crown Cork & Seal Company, Inc., Baltimore, Md., a corporation of New York
Application September 17, 1953, Serial No. 380,794
14 Claims. (Cl. 183—2.5)



1. In an apparatus of the type described for deaerating a raw liquid, an enclosed tank having an inlet for delivery of raw liquid thereto and an outlet for discharge of deaerated liquid therefrom, means connected to said tank for creating a vacuum therein at a predetermined value, valve means operatively associated with said inlet to control flow of the raw liquid into said tank, said valve means being operable by vacuum established in said tank only when the vacuum is at the predetermined value, and means operatively associated with said valve means and said tank and responsive to the level of liquid in said tank to permit vacuum established in said tank to operate said valve means.

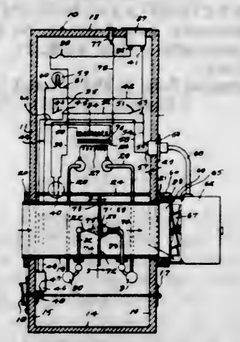
2,748,886
DEAERATORS
Charles W. Wildebour, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application February 1, 1954, Serial No. 407,429
7 Claims. (Cl. 183—2.5)

4. A method of deaerating a tacky liquid such as is capable of forming a film of given minimal thickness, capable of adhering to a clean surface, which thickness is less than the diameter of the smallest air bubble capable of existing in such liquid, which method comprises passing a clean-surfaced wire through a reservoir containing such liquid to entrain a shroud of the liquid, of indeterminate thickness such as will include air bubbles which may be present in such liquid, and through an extrusion die which is enough larger than the diameter of the wire to pass an adhering film of such liquid, but small enough, with relation to the tackiness of the liquid, to pass a



film of only the given minimal thickness, hence devoid of any air bubbles.

2,748,887
ELECTRIC DUST PRECIPITATOR
John J. Osmar, West Palm Beach, Fla.
Application August 4, 1952, Serial No. 302,536
6 Claims. (Cl. 183—7)

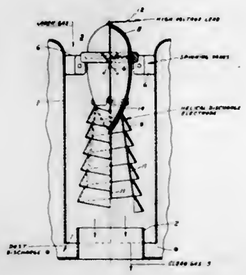


5. A dust collector or precipitator comprising a tubular duct open at each end, a pair of axially aligned electrodes disposed in said duct in spaced apart relation, one of said electrodes being imperforate and of frusto-conical configuration with the large end facing the other of said electrodes, a guide member supported on said duct and extending therein, means slidably mounting said one electrode on said guide member, said electrodes each having dimensions smaller than the diameter of said duct, means connecting said electrodes in an electric circuit, said duct having transversely aligned slots, a collector sheet extending through said slots in contact with said frusto-conical electrode, and means on said guide member biasing said one electrode for movement toward said collector sheet.

2,748,888
VORTEX-ELECTROSTATIC GAS CLEANER
Peter Hodson, Wellsville, N. Y., assignor, by mesne assignments, to Apra Precipitator Corporation, New York, N. Y., a corporation of Delaware
Application March 27, 1952, Serial No. 278,924
3 Claims. (Cl. 183—7)

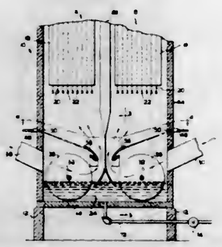
1. Apparatus for separating suspended particles from a gas stream comprising; a housing having an inlet and a plurality of concentric outlets, said inlet being adapted to receive gas carrying suspended dust particles while one of said outlets is adapted to discharge clean gas and another is adapted to discharge collected dust particles therefrom; means fixed to said housing and imposed in the gas inlet for imparting a whirling motion to the gas stream;

a discharge electrode depending from said means and insulated therefrom, said discharge electrode comprising a helical conductor whose adjacent coils form louvers permitting



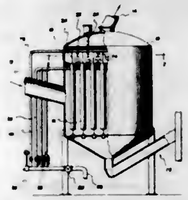
clean gas to pass radially inward through spaces between coils of said helical conductor to the clean gas outlet in opposition to normal outward movement of the suspended dust particles.

2,748,889
ELECTROSTATIC PRECIPITATOR
Roger A. Renwanz, Bound Brook, N. J., assignor to Research Corporation, New York, N. Y., a corporation of New York
Application June 8, 1955, Serial No. 513,984
2 Claims. (Cl. 183—7)



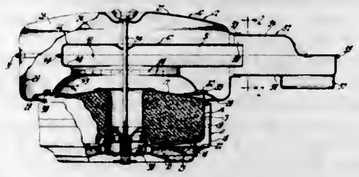
2. An electrostatic precipitator comprising a casing, complementary collecting and high-tension discharge electrodes in said casing, sump means adapted to contain a pool of liquid positioned beneath the complementary electrodes, a plurality of vertically disposed disc members rotatably mounted in said sump means, means for rotating said disc members to bring successive surface elements thereof into and out of the pool of liquid in said sump means, means directing a stream of gas to be cleaned into contact with the exposed surfaces of the disc members and then between the complementary electrodes said means including a dirty gas inlet in said casing positioned between the surface of the liquid in the sump means and the complementary electrodes, liquid inlet means including a plurality of spray means positioned in said casing between the complementary electrodes and said dirty gas inlet adapted to provide a curtain of liquid extending over said disc members, and a baffle extending parallel to a side wall of the casing in the spray path of said spray means, trough means provided at the lower end of said baffle for conducting the liquid from said spray means into the pool of liquid contained in the sump means, said baffle member positioned in spaced relation to said side wall to provide a passage for gases to be cleaned from beneath the curtain of liquid to the complementary electrodes and means for conducting liquid from said sump.

2,748,890
LIQUID CONTROL DEVICE FOR FLUSH TYPE PRECIPITATORS
Harry F. Ramsberger, Plainfield, N. J., assignor to Research Corporation, New York, N. Y., a corporation of New York
Application February 17, 1954, Serial No. 410,802
4 Claims. (Cl. 183—7)



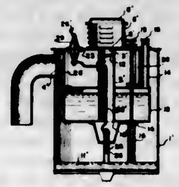
1. In a liquid flush type electrical precipitator including a plurality of vertical collecting electrodes, wall means cooperating with said electrodes to provide a plurality of ponds at their upper ends, and a liquid supply duct for each of said ponds, liquid control means for said liquid supply ducts comprising a liquid supply manifold connected to a source of flushing liquid under pressure, separate conduit means connecting said supply ducts with said manifold, valves in each of said conduit means, by-pass conduits about each of said valves, and non-rotatable plate means having an orifice therethrough across each of said by-pass conduit means to control the flow of flushing liquid around each of said valves, the orifices in each of said plate means being so selected that an optimum amount of flushing liquid is directed to each of said ponds.

2,748,891
CLEANER SILENCER ASSEMBLY
Norman J. Amlott, Grand Blanc, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 16, 1953, Serial No. 392,321
3 Claims. (Cl. 183—15)



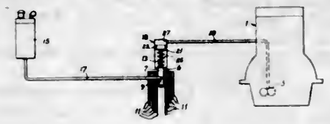
3. A cleaner silencer assembly comprising a cleaner element having greater width than depth and a silencer element having greater width than depth, said elements being adapted to be assembled with the depth of one element in alignment with the depth of the other, said silencer element being formed by an upper wall and a lower wall, said upper and lower walls each being formed to provide an inwardly directed peripheral flange forming a continuous side wall for said casing with the adjacent edges of said flanges being formed to provide a bead securing said walls together, said lower wall of said casing being formed to provide a dividing wall constituting an upper wall of said silencer element, said dividing wall being formed with an upwardly re-entrant portion and projecting inwardly within said silencer element to provide a dome for collecting the air received from said cleaner element, said dome wall being formed to provide a substantially reduced and elongated cleaner outlet extending laterally therefrom and toward said side wall of said silencer casing, a cleaner silencer outlet projecting laterally from said side wall of said casing and being formed to provide an upper wall and a lower wall, said cleaner outlet walls also being flanged inwardly at the edges thereof to provide a cleaner outlet side wall, said flanges of said outlet upper and lower walls being formed to provide a bead at the adjacent edges thereof for securing said outlet walls together, said casing side wall being formed to provide an opening for receiving said outlet walls in alignment with said cleaner outlet, said cleaner outlet being adapted to project within said cleaner silencer outlet in relatively uniformly spaced relation thereto, said cleaner silencer outlet being formed to provide an opening in said lower wall thereof for connecting said cleaner silencer assembly to air induction means.

2,748,892
APPARATUS FOR IMPROVING FUEL FOR INTERNAL COMBUSTION ENGINES
Oscar Armando Sanchez Aguilera, Mexico City, Mexico
Application November 9, 1951, Serial No. 255,702
3 Claims. (Cl. 183—19)



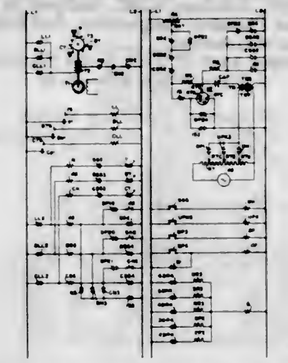
3. In an apparatus for feeding enriched air to the carburetor of an internal combustion engine the combination of an air treatment chamber comprising a closed container having a removable cover; an inlet for introducing a stream of air into said container including an air tube fastened to and depending from said cover into the chamber, the air tube being open to atmosphere through slots provided in said cover; a filter disposed in said inlet; means for humidifying the air at substantially atmospheric temperature including a water bath in the container at the base thereof, a water reservoir comprising a receptacle disposed in the container above the water bath, a feed line from the reservoir to the bath, a valve in said feed line for regulating the flow of water from said reservoir to the bath thereby to provide means for maintaining the water level of the bath constant; an electrical ozone generator comprising a high voltage electrode carried in said container and electrically insulated therefrom, a conductor for connecting said electrode to a high voltage source, said conductor passing through an insulator mounted in the cover of said container, said container being grounded; and an outlet pipe from said container for feeding the treated air to the air intake conduit leading from the carburetor.

2,748,893
LUBRICATION SYSTEMS
Carl H. Mueller, St. Louis, and Rudy F. Schneller, O'Fallon, Mo., assignors to Lincoln Engineering Company, St. Louis, Mo.
Application March 30, 1953, Serial No. 345,304
12 Claims. (Cl. 184—7)



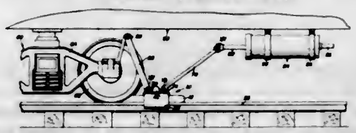
4. A lubrication system for an engine-driven device, said device including an oil pump driven by the engine for lubricating the engine, said system comprising said oil pump, a lubricant injector comprising a cylinder having a lateral inlet port and a plurality of axially spaced lateral outlet ports, a plunger movable in the cylinder from a retracted position through a working stroke to force individual measured charges of lubricant successively through the outlet ports, a source of lubricant connected to the injector inlet port, means biasing the plunger in one direction, a fluid-pressure-operated expansible-chamber type motor for driving the plunger in the other direction against the bias, and means connecting the oil pump and the motor for supplying pressure to the motor upon operation of the pump.

2,748,894
ELEVATOR SYSTEMS
John Suozzo, Paramus, N. J., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application March 29, 1955, Serial No. 497,486
11 Claims. (Cl. 187—29)



1. In an elevator system for a structure having a plurality of floors, a plurality of elevator cars, motive means for moving each of the elevator cars relative to the structure to provide elevator service for the floors, and control means for moving the elevator cars and stopping the elevator cars at desired floors of the structure, said control means being effective for stopping the elevator cars at a predetermined one of said floors and for starting only one of the elevator cars from such predetermined floor, said control means including selective means operable into at least a first condition to control the elevator cars for a first mode of operation, said selective means being operable into a second condition to control the elevator cars for a second mode of operation, timing means requiring lapse of a first predetermined minimum time between the startings of successive elevator cars from the predetermined floor when the elevator cars are conditioned for said first mode of operation, said selective means being effective in said second condition to adjust the timing means to permit the startings of successive elevator cars from the predetermined floor upon lapse of a second time which is less than said predetermined minimum time.

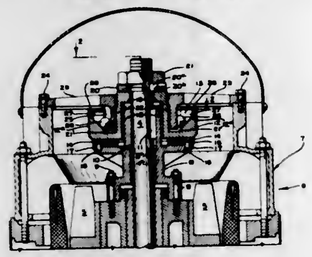
2,748,895
EMERGENCY RAILROAD BRAKE
Anthony Lucchetti, Point Pleasant, N. J.
Application November 4, 1952, Serial No. 318,686
4 Claims. (Cl. 188—36)



1. In an emergency brake for railway vehicles, a brake assembly comprising a housing having an elongated rail

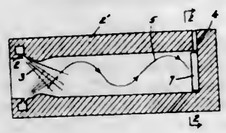
engageable portion adapted to overlie and frictionally engage a rail, jaw members pivotally carried by said housing for clampingly engaging a web of a rail, actuating means carried by said housing urging said jaw members into a rail clamping position, said actuating means including a supporting shaft for the brake assembly, and a piston connected to said jaw members and connected to said supporting shaft for actuation thereby, said housing being provided with a wheel engaging portion, said wheel engaging portion forming a friction brake for a wheel and limiting movement of said housing with said supporting shaft to insure movement of said piston relative to said housing to actuate said jaw members.

2,748,896
MECHANISM FOR CONTROLLING THE ROTATION OF A PUMP SHAFT
Dan R. Rankin, Altadena, Calif., assignor to Food Machinery and Chemical Corporation, San Jose, Calif., a corporation of Delaware
Application April 17, 1952, Serial No. 282,879
7 Claims. (Cl. 188—82.5)



1. Arrangement for controlling the rotation of the shaft of a deep-well turbine pump or the like comprising a brake mechanism including an element rotatable in only one direction, means supporting the pump shaft in frictional connection with said element for rotation in said one direction therewith and for restrained rotation in the opposite direction relative to said element upon the application of a predetermined amount of torque to said pump shaft in said opposite direction, said means including a first friction member operatively connected to the pump shaft for rotation therewith and supporting said element from below, and a second friction member and secured to the pump shaft and arranged to frictionally engage the top of said element to support the pump shaft thereon.

2,748,897
DASHPOT WITH AIR SEPARATOR
Colin C. Mitchell, Edinburgh, Scotland
Application February 26, 1953, Serial No. 338,963
Claims priority, application Great Britain February 28, 1952
4 Claims. (Cl. 188—87)



1. A dashpot including a cylinder open at one end and closed at its other end, said cylinder being adapted to receive a plunger whose movement is to be retarded, said cylinder having a vent opening at its closed end and at least one tangential, liquid-injecting nozzle at its open end, whereby liquid introduced into the cylinder is caused to move spirally adjacent the cylinder wall towards the closed end thereof, and baffling means at the closed end of the cylinder for impeding the circumferential movement of the liquid at that end of the cylinder.

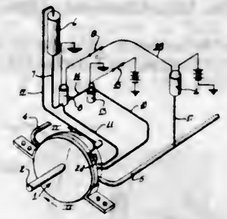
2,748,898
SHOCK ABSORBER WITH CANTILEVER DISC SPRING VALVES
Christian Marie Lucien Louis Bourcier de Carbon, Paris, France
Application June 11, 1951, Serial No. 230,944
Claims priority, application France June 13, 1950
3 Claims. (Cl. 188—88)



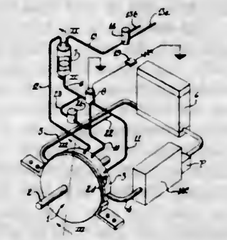
1. In a double acting shock absorber of the class described, a cylinder containing a working fluid, a piston contained therein and adapted to reciprocate within said cylinder and to have its movements damped by means of said fluid, and a piston rod fixed to said piston and extending through an opening in one end of the cylinder; said piston provided with passageways therethrough through which fluid may pass from one side of the piston to the other during working movement of the piston, certain of said passageways serving to transmit fluid in one direction through the piston and other of said passageways serving to transmit fluid in the opposite direction, and valve means controlling the selective flow of fluid in said respective passageways; said passageways being arranged so that the first named passageways for flow in said one direction are circumferentially spaced from the second named passageways for flow in the opposite direction, said valves comprising at least one flat resilient leaf element secured to the intermediate portion of one face of the piston and at least one flat resilient leaf element secured to the intermediate portion of the opposite face of the piston, said leaf elements adapted in repose to fit snugly over and seal the respective openings of the respective passageways which they control and to be spaced from the openings of the other passageways, the construction and arrangement being such that the leaf elements are stressed and resiliently bent only in a simple substantially cylindrical configuration by fluid issuing under pressure from the openings which they cover; there being four passageways through the piston, two diametrically opposite ones for flow in one direction and two diametrically opposite ones in a plane spaced about 90° from the plane of the first pair of passageways for flow in the opposite direction; and the resilient leaf elements being narrowed somewhat transversely of the face of the piston so that they avoid the openings into the pair of passageways they are not intended to control, and cover the openings of the pair that they are intended to control.

2,748,899
FLUID CONTROL SYSTEM FOR TORQUE ABSORBING AND TRANSMITTING COUPLING
James H. Booth, Corunna, and Edward J. Herbenar, Detroit, Mich., assignors to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application September 18, 1952, Serial No. 310,261
6 Claims. (Cl. 188—90)

1. In combination in a heat exchange apparatus, fluid brake means operable as a heat generator when filled with operating fluid, first means for supplying said fluid to said brake means, second means for emptying the operating fluid from said brake means, circulating cooling fluid for said brake means, fluid confining means for directing said circulating cooling fluid in cooling relation with said brake means, and means associated with said fluid confining means and responsive to a reduction in the circulating pressure of the cooling fluid to automatically disconnect said first means and connect said second means.

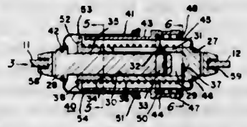


2,748,900
FLUID CONTROL SYSTEM FOR TORQUE ABSORBING AND TRANSMITTING COUPLING
James H. Booth, Corunna, and Edward J. Herbenar, Detroit, Mich., assignors to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application September 18, 1952, Serial No. 310,262
9 Claims. (Cl. 188—90)



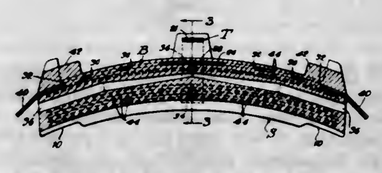
1. In combination in a heat exchange apparatus, a fluid brake for generating heat, a source of fluid under atmospheric pressure for energizing said brake, a source of vacuum, a first conduit means for connecting said source of vacuum to said brake and second conduit means for connecting said source of fluid to said brake whereby said brake may be filled with said fluid upon opening of said first and second conduit means, said second conduit means being controlled by first valve means whereby when said first valve means is in open position, fluid will pass through said second conduit means to said brake from said source, and by-pass means responsive to pressure in said brake means to by-pass said first valve means whereby fluid will be transferred from said brake to said source at pressures above a predetermined maximum allowable brake pressure even though said first valve is closed.

2,748,901
AUTOMATIC SLACK ADJUSTOR FOR BRAKES
Frank W. Brooks, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application July 29, 1953, Serial No. 371,032
4 Claims. (Cl. 188—196)



1. A slack adjustor for a brake, comprising, two members one supporting the other to provide for relative longitudinal movement without rotative movement with one of the said members having one end adapted to be attached to a brake shoe and including ratchet teeth disposed at its other end, the other of said members having one end adapted to be attached to an adjacent brake shoe and including a screw supporting a rotative member thereon, said rotative member having ratchet teeth normally engaging the ratchet teeth on the said one member whereby rotation therebetween is prevented, torsion means having one end anchored to said one member and the other end to said rotative member to rotate said rotative member on said other member upon longitudinal movement between the said two members sufficient to separate the ratchet teeth, a multiple part telescoping housing with the parts thereof axially movable relatively and enclosing said two members with the ends of said two members each connected to one of the housing parts and projecting from opposite ends of said housing for attachment to adjacent ends of brake shoes, and means between said housing and said members to effect axial change in total length of said two members by rotation of said housing.

2,748,902
BRAKE SHOE
Robert W. Foster, Sullivan, Ind.
Application August 25, 1952, Serial No. 306,104
4 Claims. (Cl. 188—258)



1. In a brake shoe structure, a brake shoe body, a supporting means therefor comprising a generally U-shaped bracket with a pair of depending legs mounted intermediate the ends of said body, a supporting plate within and extending the full length of the brake shoe body and adjacent the upper edge so as to pass between the legs of the bracket, said plate being provided with a pair of notches intermediate its ends between the legs of the bracket, each notch having approximately the same dimensions as a cross section of a bracket leg so that the legs of the bracket pass through and snugly fit in the notches in the plate, and reinforcing means extending the full length of the brake shoe body between the backing plate and the active surface of the brake shoe body so as to pass between and be wholly confined by the legs of the bracket, said reinforcing means including a plurality of horizontally disposed wire meshes, each of the legs of the bracket being provided with at least one aperture below the backing plate so that during the casting of the shoe the material of the body will flow through the apertures in the legs and in and around the wire mesh.

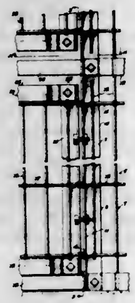
2,748,903
BRAKE SHOE WITH VENTURI COOLING PASSAGES
Robert W. Foster, Sullivan, Ind.
Application January 14, 1952, Serial No. 266,257
6 Claims. (Cl. 188—261)



1. A brake shoe for use with railway wheels and the like comprising an elongated generally arcuate brake shoe body adapted to conform generally to the contour of the wheel with a wheel engaging and confronting surface and

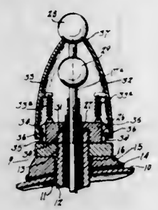
a plurality of longitudinally extending grooves formed in the wheel confronting surface thereof, the inner arcuate wall of each groove being uninterrupted so that each groove will form a closed passage with the wheel when the brake shoe is in engagement with it, the passage being open only at it ends, each groove having a venturi therein.

2,748,904
CORN CRIB
Raymond Arndt, Columbus, Nebr.
Application September 25, 1951, Serial No. 248,230
15 Claims. (Cl. 189—3)



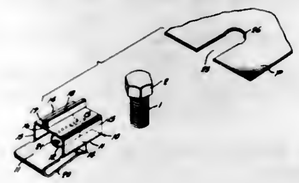
1. A corn crib comprising a plurality of support members arranged in pairs, means for anchoring said support members to a base, a mesh sheet supported on each of said pairs, each of said sheets having a portion projecting through the support members of the associated pair, means connecting said support members of each pair to support members of adjoining pairs and clamping said projecting portions in bearing engagement therebetween, and roof means connected to said support members and mesh and supported on said support members.

2,748,905
ANTENNA PROTECTOR
Julius Avruch, Long Island City, N. Y.
Application August 12, 1953, Serial No. 373,931
4 Claims. (Cl. 189—26)



1. In a telescopic antenna mounted on a supporting pedestal having a central opening, a tubular base member extending through the opening in said pedestal, a cylindrical member supported on the upper end of the base member, a double ball end at the top of the antenna, a protective housing comprising a pair of hinged parts hingedly secured to opposite sides of the cylindrical member, the upper ends of said parts being swingable into engagement with the antenna intermediate the balls at said top end, said parts being hinged to the cylindrical member at their bottom ends, means for locking the upper ends of said parts about said antenna intermediate the balls on the top end of the antenna, and spring means for preventing fluttering of said hinged parts when in the unlocked position.

2,748,906
FASTENING DEVICE
Laurence H. Flora, Cleveland, Ohio, assignor to Tinnerman Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application November 5, 1951, Serial No. 254,925
3 Claims. (Cl. 189—35)



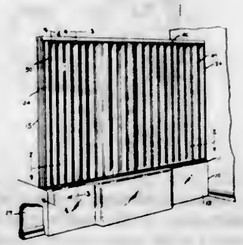
3. A fastening device comprising a bolt having a head provided with opposite side faces and a bolt holder comprising a sheet metal body providing a base and a pair of arms extending outwardly from the sides of said base and defining opposite side flanges, the ends of said arms extending toward each other in position to overlie the top of said bolt head and one of said arms terminating in a fold and the other arm terminating in a tongue secured in said fold, one end of said base between said side flanges having a slot leading to an opening receiving the shank of said bolt with the head of said bolt bearing on said base and with said opposite side faces of said bolt head in nonrotatable abutting relation to said side flanges, an attaching arm extending from the other end of said base and projecting from the underside of said base, said underside of said base being adapted to seat on one surface of a part over a bolt hole therein with the shank of said bolt projecting through said bolt hole in fastening position, and said attaching arm being adapted to cooperate with said underside of said base in engaging opposite surfaces of said part to retain the bolt holder in said fastening position of the bolt.

2,748,907
POSITIONING MEANS FOR FOOD-CARRYING PLATFORM OF SLICING MACHINES
Xan B. K. Green, New Paltz, and Harry Preble, Jr., Cross River, N. Y., assignors to General Slicing Machine Co., Inc., Walden, N. Y., a corporation of New York
Application July 7, 1953, Serial No. 366,440
7 Claims. (Cl. 189—36)



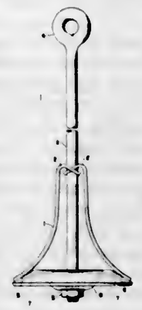
1. In combination, two nested channels; each channel having two opposite walls respectively; each of the two opposite walls of one of the channels having a lengthwise slot; said slots being opposite each other; each of the two opposite walls of the other channel having a slot; said last mentioned slots being opposite one another; the slots of one channel being in angular relation to the slots in the other channel, a shaft positioned through all said four slots and capable of lateral sliding movement therein and a cam secured on the shaft between the walls of the inner channel, adapted to releasably engage the inner channel and thereby secure the channels together

2,748,908
SLIDABLE ENCLOSURES FOR BATH TUBS AND THE LIKE
Gustaf Ludwig Jacobson, Jamestown, and John C. Oberg, Lakewood, N. Y., assignors to Steel Partitions, Inc., Falconer, N. Y., a corporation of New York
Application April 22, 1953, Serial No. 350,404
8 Claims. (Cl. 189—46)



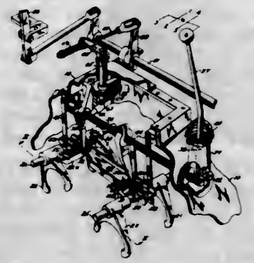
1. A rigid curtain-like enclosure for one side of a bath tub and the like consisting of a panel having alternating full length inner and outer vertical ribs, the ribs on one face of said panel being recessed to provide hook-like portions adjacent their upper ends engageable with a suitable overhead track, and downwardly opening arches intermediate said ribs adapted to interfit a suitable guide beneath said panel.

2,748,909
GROUND ANCHOR
William O. Schultz, Marshfield, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application March 20, 1950, Serial No. 150,605
2 Claims. (Cl. 189—92)



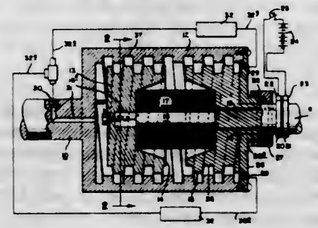
1. A ground anchor assembly comprising in combination a blade member, a spreading member having a generally truncated conical surface positively coacting with said blade member, and an anchor rod projecting from said spreading member, said blade member slidably fastened at one end to said rod and slidable radially outwardly relative to said conical surface of said spreading member responsive to tamping forces applied to the fastened end thereof; releasable restraining means holding said blade member and said spreading member in assembled relation prior to tamping, and comprising a tongue-like projection laterally extending from one of said members, the other of said members having a projection-receiving aperture therethrough, said projection extending in a plane substantially normal to the longitudinal axis of said rod in said aperture and frictionally engaging the defining marginal surface thereof.

2,748,910
LOCKING GATE FOR SHIFTING MECHANISM OF A SIX-SPEED TRANSMISSION
Joseph G. Klecker, Peoria, Ill., assignor to Caterpillar Tractor Co., Peoria, Ill., a corporation of California
Application February 24, 1955, Serial No. 490,193
4 Claims. (Cl. 192—3.5)



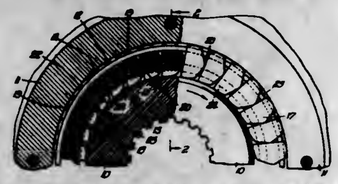
1. In a transmission having two spaced groups of shifting forks, a notched part on each fork, all of the notches being arranged for alignment, a shifting finger for each group of forks, a common shaft supporting both shifting fingers, and control means to move the shaft axially to cause registry of either shifting finger with the notch of any fork in its group and to rock the shaft to effect shifting by the selected fork, a common locking mechanism extending between both groups of forks and connected with both fingers to prevent shifting of any but the single fork selected.

2,748,911
MAGNETIC FLUID CLUTCH
William F. Stahl, Upper Darby, Pa., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application October 9, 1951, Serial No. 250,535
3 Claims. (Cl. 192—21.5)



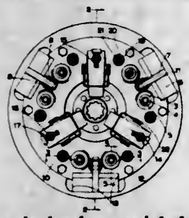
1. A magnetic coupling comprising a housing having side and opposed end walls, an inner member mounted for relative rotation with and axially aligned within the housing to provide a longitudinal space therewith, said inner member having one end wall positioned inwardly of one opposed end wall of the housing forming a transverse space in communication with said longitudinal space and providing therewith a fluid path, the other opposed end wall of the inner member abutting the other end wall of the housing and preventing circulation of the fluid within the housing, inlet means in said one opposed end wall of the housing for supplying magnetizable fluid to the fluid path, outlet means in the other opposed end wall of the housing in communication with the fluid path, a magnet carried by the inner member for magnetizing the fluid, groovular means disposed in said longitudinal space for directing the fluid between said inlet and outlet during relative rotation between the housing and the inner member and conduit means between the inlet and outlet and exteriorly of the housing for effecting circulation of the fluid during relative rotation of the housing and inner member.

2,748,912
SPRAG MECHANISMS
Oscar H. Banker, Evanston, Ill., assignor to New Products Corporation, Chicago, Ill., a corporation of Delaware
Application May 12, 1951, Serial No. 226,075
24 Claims. (Cl. 192—45.1)



1. In a one-way clutch including coaxial radially spaced annular raceways; a series of sprags for insertion between said raceways in cooperative relation thereto, each sprag having a channel extending to a substantial depth in a raceway engaging portion thereof and in a plane perpendicular to the axis of said raceways, and a ring having outer and inner continuous circular peripheral contours, said ring fitting within said channel and forming a mounting for all of a full complement of the sprags with only working clearance therebetween and, which independent of said raceways will hold the axes of the individual sprags parallel to each other.

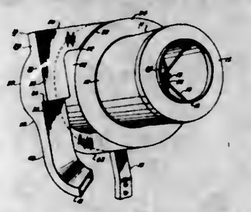
2,748,913
FRICTION CLUTCHES
Richard Binder and Adolf Ludwig, Schweinfurt (Main), Germany, assignors to Fichtel & Sachs A. G., Schweinfurt (Main), Germany, a German company
Application August 13, 1952, Serial No. 304,088
Claims priority, application Germany October 3, 1951
3 Claims. (Cl. 192—105)



1. In a centrifugal clutch, coaxial driving and driven members, a housing secured to said driving member, an axially movable pressure plate mounted within said housing to rotate therewith, a friction disc connected to said driven member and positioned between said driving member and said pressure plate, means resiliently retracting said pressure plate from said friction disc, groups of compression springs engaging the pressure plate to urge said plate in the direction to engage the friction disc between the driving member and said pressure plate, cups enclosing the free ends of the springs, a cross-piece extending between and interconnecting the cups corresponding to each group of springs and being provided with a knife edge, and weighted centrifugal force-responsive levers pivotally mounted on said housing and each engaging the knife edge of one of the cross-pieces thereby to compress the springs in opposition to said retracting means and so move said pressure plate to engage the friction disc between the driving member and said plate upon the development of a predetermined centrifugal force in said levers.

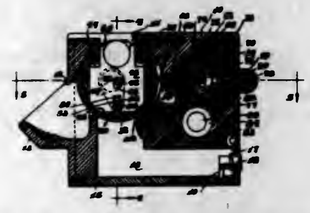
2,748,914
ARTICLE ORIENTING MEANS
Stewart T. Day, Azle, Tex., assignor of fifty-one per cent to William E. Shields, Jr., Azle, Tex.
Application January 14, 1954, Serial No. 403,972
17 Claims. (Cl. 193—43)

1. Means for orienting relatively flat articles having axial flanges including walls defining a passage for flanged articles in seriatim, coacting means mounted in spaced relation on the walls in the passage for inverting misoriented articles and bypassing correctly oriented articles, the first of the coacting means momentarily supporting a correctly oriented article to permit pivoting of such article and its clearance of the second coacting means, said



first coacting means confining a misoriented article in engagement with one of the walls and directing such article into contact with said second coacting means, the latter being stationary and momentarily supporting such article by its axial flange to permit reverse pivoting thereof and its clearance of said first means whereby the misoriented article is correctly oriented.

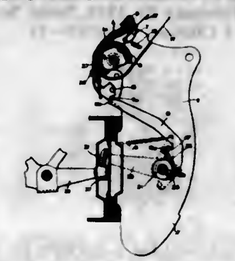
2,748,915
COIN CONTROLLED LOCK MECHANISM
James C. Byrnes, Jr., Washington, D. C.
Application July 6, 1954, Serial No. 441,614
21 Claims. (Cl. 194—70)



1. A coin controlled lock device comprising a case having a coin opening therein, a cradle rotatably mounted inside said case adjacent said coin opening, means in said cradle for translating coins relative thereto, means for receiving and supporting a plurality of coins in said cradle, a cylinder including a plurality of extrudable tumblers rotatably mounted adjacent said cradle on an axis parallel to the axis of said cradle, means preventing rotation of said cylinder when any of said tumblers is extruded therefrom, a bolt, means for effecting movement of said bolt in accordance with rotation of said cylinder, an actuating shaft extending into said case, and means engaging said actuating shaft with said cradle, said coin translating means and said cylinder whereby rotation of said actuating shaft sequentially effects rotation of said cradle to displace coins therein away from initial position facing the coin opening of said case and into alignment with the tumblers of said cylinder, translates said coins toward said cylinder, whereby coins of proper size in said cradle individually effect displacement of said tumblers to nonextruded position relative to said cylinder, and then rotates the cylinder to move said bolt.

2,748,916
PAPER GUIDE FOR LISTING CALCULATORS
Harvie J. Duke, Butler, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a corporation of Delaware
Application January 27, 1953, Serial No. 333,563
4 Claims. (Cl. 197—127)

1. In a listing calculator, the combination with a platen; of a movable paper guide automatically adjustable forwardly from a position adjacent said platen in response to removal of a work sheet from the machine, spring means for urging said guide toward its position adjacent



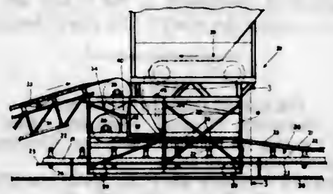
said platen, a latch for holding said guide against the urge of said spring means upon movement to its forward position, and means operable upon operation of the machine for releasing said latch.

2,748,917
STAGGERED SHEET FEEDER
Martin Rawe, Tecklenburg, Germany
Application October 1, 1954, Serial No. 459,597
Claims priority, application Germany May 26, 1954
12 Claims. (Cl. 198—35)



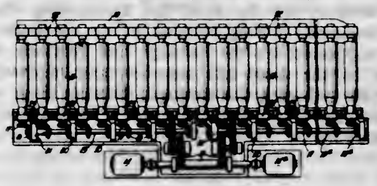
1. In a device for feeding piles of sheets or blanks in staggered or scalloped fashion to the feeder table of a paper working machine, the combination with the feeder table and the piles of blanks already accumulated thereon in staggered or scalloped fashion, of reciprocable conveying means for the support and conveyance of the new pile of blanks to be added to those already accumulated on the feeder table; guiding means on which said conveying means are movably mounted and adapted to guide said conveying means in straight-lined direction to and away from said feeder table; lifting means rotatably secured to the forward end of the conveying means facing the feeder table and adapted to engage during the forward movement of the conveying means beneath the rear end of the last pile on the feeder table and to lift said rear end above the plane of the upper surface of the new pile to be added; and controlling means adapted to rotate said rotatable lifting means during the forward and backward movement of said conveying means automatically into or out of lifting position according to requirements.

2,748,918
BELT CONVEYER SYSTEM WITH MULTIPLE RELATIVELY MOVABLE LOADING DEVICES
Stanley M. Mercier, Bexley, Ohio, assignor to The Jeffrey Manufacturing Company, a corporation of Ohio
Application April 3, 1952, Serial No. 280,246
9 Claims. (Cl. 198—58)



1. In a conveyor system, the combination with an elongated conveyer including an elongated frame carrying idlers adapted normally to support a belt, an elongated endless belt normally carried by said idlers and adapted to be loaded by a plurality of devices spaced along its working run, at least one of said loading devices other than the first one including a frame, means mounting said conveyer frame and said loading device frame for relative movement along the axis of the former whereby the belt may be loaded at different positions along the conveyer frame, said one loading device also including a belt tripper carried by said loading device frame, cushion idler means carried by said loading device frame and positioned above the conveyer frame and normal belt carrying idlers and operative to lift the working run of the belt off said normal belt carrying idlers while said working run is traveling over said loading device frame, said cushion idlers following said belt tripper, feeder skirts on said loading device frame having their bottom edges closely adjacent said working run of said belt as it travels over said cushion idlers, and means for pouring additional material into that pouring over said tripper thereby mixing said materials as they are delivered to the working run of said belt above said cushion idler means.

2,748,919
LINE-SHAFT ROLLER CONVEYOR WITH SHIFTABLE BEARINGS
Roscoe C. Britton and Henry Haltof, Gary, Ind.
Application August 6, 1953, Serial No. 372,711
14 Claims. (Cl. 198—127)

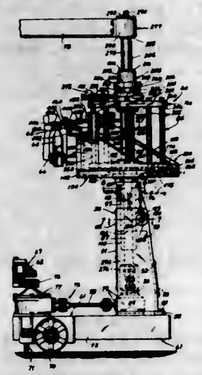


1. A roller conveyor comprising a bedplate, a plurality of parallel rolls and a line shaft rotatably mounted on said bedplate, said line shaft extending at right angles to the axes of said rolls adjacent one end thereof, gears on said line shaft and said rolls adapted to furnish a driving connection therebetween, said rolls being individually axially shiftable, and having a position in which the gears thereon mesh with those on said line shaft and another position in which said gears are disengaged, and means fixing said rolls in either of said positions enabling said rolls to be driven from said line shaft or to operate as idlers.

2,748,920
GLASSWARE TAKE-OUT MECHANISM
William R. Morgan, Canton, Ohio
Application October 10, 1952, Serial No. 314,023
17 Claims. (Cl. 198—210)

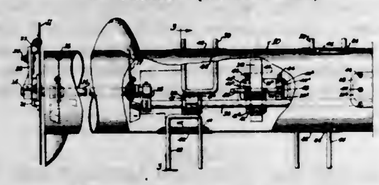
7. In a machine of the kind described, an upstanding support, a hollow screw-like member mounted for vertical movement in the support, a rotatable shaft in fixed vertical relation to the support and extending through the screw-like member, a lateral support for the shaft in fixed relation to the support and engaging the shaft substantially above the screw-like member, a carriage rotatably supported by the screw-like member and in slidable interlocking engagement with the shaft, take-out heads mounted for vertical movement on the carriage, cam track means mounted on the screw-like member, cam track follower means mounted on each take-out head and in following engagement with the cam track means for effecting movement of the take-out heads during rotation of the carriage, fluid pressure-operated ware holding means on each take-out head, a valve for each ware holding means mounted on the carriage, fluid passages be-

tween the respective valves and the ware holding means, said passages including slidable connections between the carriage and the take-out heads, fluid distribution passages within the carriage communicating the several valves with a common fluid distribution chamber also within the carriage, a fluid supply passage in the shaft, a slidable connection within the carriage communicating the fluid supply passage with the fluid distribution chamber, cam means supported on the carriage so as to be non-rotatable there-



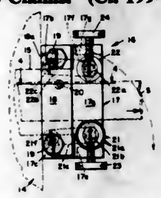
with and in non-interlocking engagement with the shaft, a slidable connection between the cam means and the lateral support for the shaft for maintaining the cam means stationary during rotation of the carriage, brake means supported on the carriage and retained against rotation by the screw-like member, and means in the support for adjusting the carriage, the cam track means, the cam means, and the brake means vertically relative to the support.

2,748,921
RETRACTABLE FINGER MECHANISM FOR CYLINDRICAL FEEDERS FOR COMBINES
Allen A. White, Peabody, Kans., assignor to Hesston Manufacturing Company, Inc., Hesston, Kans., a corporation of Kansas
Application September 29, 1954, Serial No. 459,116
14 Claims. (Cl. 198—211)



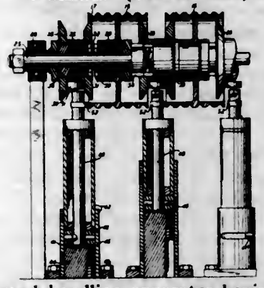
1. Crop feeding apparatus for grain harvesting implements, such as combines, comprising a rotatable hollow cylinder having in its wall a plurality of pairs of holes spaced axially of the cylinder and disposed on opposite sides of the cylinder; crop-moving finger units, longer than the diameter of the cylinder, mounted within the cylinder and each unit including two pairs of fingers spaced axially of the cylinder that extend, transversely to the axis of the cylinder, slidably through corresponding pairs of holes in opposite sides of the cylinder, together with a central member within the cylinder to which the two pairs of fingers are affixed in axially offset relation to each other and each said member containing an elongated slot disposed at right angles to and extending transversely to the axis of the cylinder in opposite directions from the longitudinal axes of the fingers; and stationary means within the cylinder extending into said slots to cause said units to reciprocate during the rotation of the cylinder.

2,748,922
ATTACHMENT FOR THE PRODUCTION OF PRINTERS' RULES
Virgil C. Shidler, Glendale, Calif.
Application February 23, 1954, Serial No. 411,665
5 Claims. (Cl. 199—1)



1. A mold attachment for a machine for making printers' rules wherein rule bar stock is advanced through an element subject to use for forming a rule design on the stock, comprising: a frame having a side plate, end members extending laterally from one side of said plate and a bar mounted on said end members in opposition to said side of said plate; said frame adapted to embrace said element; arms pivoted on the other side of said plate, screws on said plate adjustable axially to engage and move said arms toward one another; rollers on said one side of said plate arranged to contact opposite longitudinal portions of said stock; one of said rollers having means thereon for forming a rule design on said stock, said plate having slots therein; and means mounted on said arms adjustable in said slots and supporting said rollers.

2,748,923
MULTIPLE UNIT CAPSTAN
Charles A. Windsor, Buffalo, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application July 18, 1952, Serial No. 299,704
6 Claims. (Cl. 203—320)

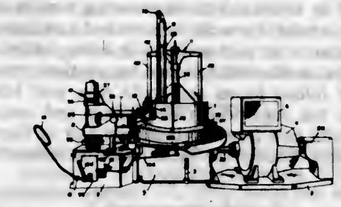


1. In a strand handling apparatus having a rotatably supported idler element with annular grooves in the periphery thereof, a drive shaft, means to rotatably support the drive shaft, a drive element with annular grooves in the periphery thereof rotatably mounted on the shaft and when driven cooperating with the idler element to advance a strand longitudinally in the form of a series of loops in the grooves about the elements, bearing means interposed between the shaft and the drive element to exert a small turning moment on the drive capstan to start longitudinal movement of the strand and a clutch actuable to connect the shaft to the drive element.

2,748,924
DRAW BLOCK MECHANISM
Edwin J. McIlvried, Granger Township, Ohio, assignor to The Vaughn Machinery Company, Cuyahoga Falls, Ohio, a corporation of Ohio
Application February 28, 1952, Serial No. 273,966
20 Claims. (Cl. 205—3)

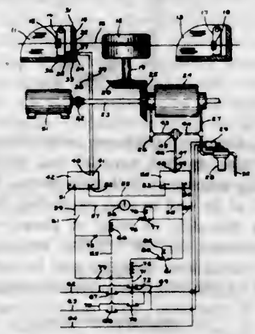
1. The method of drawing elongated work which comprises threading the end thereof through a die, securing

such end for winding on a rotatable drum to draw such work through such die, rotating such drum to wind such work thereon, shifting such die relative to the longitudinal extent of such drum to wind such work toward one end



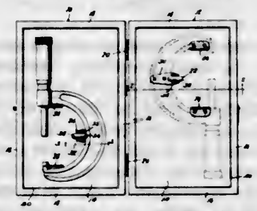
of such drum, stopping such shifting movement of such die, and thereafter shifting all the accumulated turns of work, including such end of the work, bodily along such drum in the axial direction opposite to that in which such die was shifted while continuing to wind work thereon.

2,748,925
WIRE DRAWING MACHINE
Norman A. Wilson, Westboro, Mass., assignor to Morgan Construction Company, Worcester, Mass., a corporation of Massachusetts
Application August 1, 1952, Serial No. 302,179
7 Claims. (Cl. 205—14)



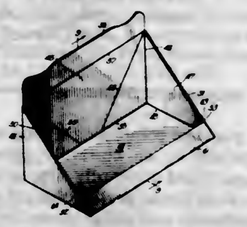
1. Apparatus for use with a wire drawing machine having a die and a block, the said block being driven by a variable-torque actuating means, comprising means for obtaining a signal proportional to the torque transmitted to the block by the actuating means, means for obtaining a signal proportional to die reaction, means for adjusting the torque transmitted to the block by the actuating means, means for initially balancing the two signals, and means responsive to unbalance of the signals to actuate the said adjusting means.

2,748,926
MICROMETER SUPPORT
Matthew T. Leahy, Detroit, Mich.
Application March 17, 1952, Serial No. 276,908
1 Claim. (Cl. 206—16)



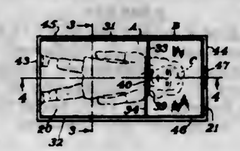
A micrometer and a support therefor comprising a base formed of a bottom wall, opposite side and end walls, a cover, means hinging said cover to said base, a pair of hooks, means securing said hooks to said bottom wall in spaced apart relation, said hooks extending perpendicularly from said base and facing in the same direction, and a wheel resiliently mounted on the bottom wall disposed between said hooks and positioned laterally and rearwardly of the closed sides of said hooks, the spindle and stationary anvil of the micrometer engaging in the open sides of said hooks, said wheel engaging in the concave inner side of the curved micrometer arm.

2,748,927
COLLAPSIBLE DISPLAY CONTAINERS
William B. Crane, Jr., Los Angeles, Calif.
Application January 29, 1952, Serial No. 268,886
13 Claims. (Cl. 206—44)



1. A collapsible display container comprising a vertical back wall, a horizontal bottom wall and end walls, said end walls being formed by a double thickness of material, which end wall material is folded upon itself about a diagonal fold line and connected at its opposite ends along transverse hinge lines to the back wall and bottom wall, respectively, and an article supporting flap integrally connected along the bottom edge of said back wall and extending forwardly thereof between said end walls and above said bottom wall said article supporting flap having its ends free for movement relative to said end walls.

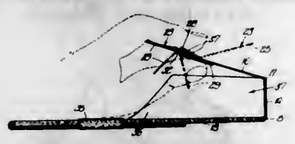
2,748,928
PAPERBOARD DOLL CONTAINER
Joseph J. Stavis, Roxbury, and Bernard H. Stavis, Newton, Mass.
Application March 15, 1954, Serial No. 416,218
1 Claim. (Cl. 206—45.14)



A doll carton of paperboard comprising a set up box having a rectangular bottom wall, two opposite end walls and two opposite rectangular side walls and a separate doll positioning insert member of paperboard, said insert member having a bottom panel identical in area to, and supported flatwise against the bottom wall of said box; an end panel identical in area to, and supported flatwise, against one of the end walls of said box, said end panel being hingedly connected to said bottom panel; a pair of identical side panels, each of less length than, and hingedly connected to an opposite side edge of, the bottom panel of said insert, each said side panel being of less height than, and supported flatwise against, the adjacent side wall of said box and a pair of oppositely disposed identical cross partition flaps, each hingedly connected to, and infolded at right angles from, one of the side panels of said insert, each said cross partition flap having a terminal tongue in the upper portion thereof slidably engaging and overlapping an identical tongue on the other flap and each

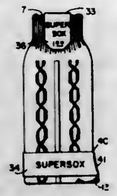
having a cut out portion in the lower portion thereof, below said tongue, mutually defining a neck opening of inverted U shape for a doll at the longitudinal centre line of the set up box, said opening extending from the level of said bottom panel upwardly into the upper halves of said cross partition flaps.

2,748,929
COMBINATION COLLAR PROTECTOR AND SHIRTBOARD
Arden L. Iverson, Lincolnwood, Ill., assignor to Para-Lux Products Company, Chicago, Ill., a corporation of Illinois
Application November 2, 1953, Serial No. 389,645
11 Claims. (Cl. 206—46)



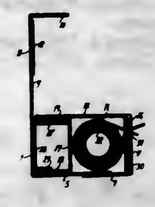
4. A shirt package comprising a man's collar-attached shirt characterized by an upwardly opening collar and neckband thereof and forwardly divergent lapels on the collar at a forward throat portion thereof, and a one-piece combined shirtboard and collar protector unit applied to this shirt, comprising a backing panel about which the shirt is folded, a rear wall panel forwardly engageable with the outer rear of said shirt collar, a top panel integrally hinged to said rear wall panel and disposed in overlying relation to the collar and extending forwardly over the same, a locking and bracing member having an integral hinge connection to a forward part of said top panel and folded reversely beneath the same, said locking member being bent in rearwardly concave curved outline and in contacting engagement with and behind the inner surface of said neckband adjacent said collar throat portion, and a locking tongue excised from said top panel rearwardly of said integral hinge connection and bent forwardly above the top panel, said tongue having restraining engagement between said lapels and neckband, said top panel being provided with a forwardly projecting fulcrum lug about which said tongue is flexed to localize the bending of the latter.

2,748,930
DISPLAY PACKAGE FOR STRETCH SOCKS
James A. Power and Jay S. Hallowell, Martinsburg, W. Va., assignors to Interwoven Stocking Company, New Brunswick, N. J., a corporation of New Jersey
Application February 16, 1955, Serial No. 488,494
9 Claims. (Cl. 206—46)



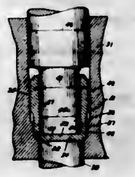
1. A display package for a pair of stretch socks comprising a pair of forms formed of stiff, foldable sheet material, each of said forms comprising a leg portion of approximately uniform width, a top portion of reduced width, and a foot portion constituting a downward extension of the leg and being approximately the same width as the leg, said foot portion ending in a rounded toe portion, said form having a single transverse fold line between the leg and foot portions, said forms having a length and width materially greater than the length and width of said socks in unstretched condition, a sock stretched widthwise and lengthwise on each of said forms with the top portion of the sock engaging said reduced top portion of the form to assist in retaining the sock in lengthwise stretched condition on the form, said forms being sufficiently stiff to withstand the contracting tension of said socks and to hold the socks in stretched condition, each of said forms with said sock on it being folded about said fold line so that the foot and leg portions are superposed, said folded forms and socks of a pair being assembled in flat superposed relationship and means cooperating with said forms to hold said pair of forms and socks together throughout their length in assembled relationship.

2,748,931
DISPENSING CONTAINERS FOR PRESSURE-SENSITIVE TAPE
James Taylor, East St. Louis, Ill., assignor to Midwest Art Publishers, Inc., St. Louis, Mo., a corporation of Missouri
Application November 9, 1953, Serial No. 391,109
3 Claims. (Cl. 206—52)



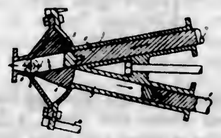
1. A tape dispenser package comprising a rectangular container having spaced parallel end walls and a front wall extending transversely therebetween, a tubular member mounted at its end in and extending between the end walls, and a plurality of rolls of pressure-sensitive tape rotatably mounted on the tubular member arranged in side-by-side contiguous relation and in such manner that the direction of winding is opposite in adjacent rolls.

2,748,932
PROCESS AND APPARATUS FOR COLD SHAPING STEEL
Ben Kaul, Warren, Ohio, assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation, New York, N. Y., a corporation of Delaware
Application May 13, 1950, Serial No. 161,760
13 Claims. (Cl. 207—6)



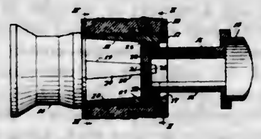
1. In the method of cold working a solid steel blank of bar stock, the steps comprising confining the bottom and lower side walls of a blank against outward flow, applying a punching force to the top of the blank over a central area of smaller extent than the top surface thereof to indent the blank and cause upward and side flow of the metal in the upper portion of the blank, confining said side flow of the metal to a diameter larger than the diameter of the original blank, continuing said punching force into the zone of lower side wall confinement, whereby as said punching force pierces or moves into said zone of confinement, the confined metal therein is placed under pressure and allowed to extrude upwardly as a hollow extruded section, and stopping said punching force at a point spaced from the bottom of said blank a distance sufficient to form a cup having an intermediate extruded side wall section and a top section of larger thickness joined to the intermediate section and forming an outer shoulder therewith.

2,748,933
AUTOMATIC EXTRUSION PRESSES
Alexander T. Deutsch, Cincinnati, Ohio
Application January 27, 1955, Serial No. 484,512
5 Claims. (Cl. 207—9)



1. In a continuous extrusion apparatus having a frame, a plurality of extrusion-containers and an extrusion-die mounted on said frame, walls forming a valve-controlled extrusion-chamber adjacent the mouth of the die, a movably mounted valve-means operatively mounted between said extrusion-chamber and said containers, said valve means comprising a pivotally mounted member having at least one cylindrical bore therethrough, said bore having substantially the same diameter as the said containers, said member pivotally shiftable in order to selectively and axially align said bore with said extrusion-containers, respectively to selectively present a continuous smooth and straight passageway between the said extrusion-chamber and each of the said containers.

2,748,934
EXTRUSION APPARATUS
Jesse H. Wheeler, Dayton, Ind., assignor to Aluminum Company of America, Pittsburgh, Pa., a corporation of Pennsylvania
Application October 4, 1952, Serial No. 313,126
6 Claims. (Cl. 207—18)

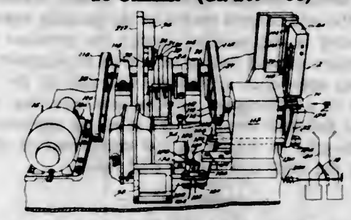


1. An indirect extrusion apparatus for producing tubular extrusions of varying lineal cross-section, said apparatus comprising a container for confining material to be extruded and a segmental die sealed and slidable on the interior surface of the container, an axially tapered wall surface in said container, a complementary axially tapered guide member in fixed relation within and in respect to the container in engagement with at least one die segment otherwise sealed and slidable in respect to the axially tapered wall surface of the container, a mandrel secured in said container and extending through the die, and means for obtaining relative movement between said die segments as a unit and said container axially in respect to said guide member and mandrel, said relative movement effecting separation of the die segments and a die orifice formed therebetweeen in direct relation to the axial taper of the container surface and guide member.

2,748,935
PROCESS FOR SEPARATING TALC AND ASBESTOS
Karl Rescheneder, Vocklabruck, Austria, assignor to Eternit-Werke Ludwig Hatschek, Vocklabruck, Austria, a corporation of Austria
No Drawing. Application September 17, 1951, Serial No. 247,026
Claims priority, application Austria September 29, 1950
4 Claims. (Cl. 209—5)

1. A process for separating talc from asbestos fibres having small amounts of talc admixed therewith comprising treating said asbestos with a non-acidic colloidal solution of a surface active substance selected from the group capable of forming hydrophilic precipitates on the boundary surfaces thereby rendering the talc capable of being wetted.

2,748,936
GAUGING MEANS
Max M. Arlin, Detroit, Mich., assignor to Arlin Products, Incorporated, Detroit, Mich., a corporation of Michigan
Application February 23, 1951, Serial No. 212,246
16 Claims. (Cl. 209—88)

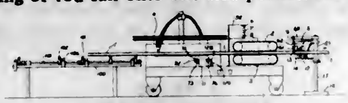


8. In a gauging apparatus, a pair of relatively movable workpiece engaging elements, a workpiece supporting member adapted to support a workpiece between said elements, means for moving said member relative to said elements whereby an extended portion of a workpiece carried thereby passes between said elements, a first pair of contacts fixed with relation to each other and simultaneously movable by one of said elements upon relative movement of said elements, a reciprocal member, a second pair of contacts carried by said reciprocal member and cooperable with said first pair of contacts to control a pair of circuits, said second pair of contacts being normally spaced relative to said first pair of contacts such that at one relative position of said reciprocal member and of said workpiece engaging elements each of said first pair of contacts is out of electrical contact with each of said second pair of contacts, said pairs of contacts being arranged such that relative movement of said elements in one direction will cause engagement of first contacts of each of said pairs of contacts to control a first of said pair of circuits and relative movement of said elements in a second direction will cause engagement of second contacts of each of said pairs of contacts to control a second of said pair of circuits, switch means actuated by said member moving means for maintaining both said circuits ineffective to respond to said pairs of contacts, said switch means being effective solely subsequent to the insertion of a workpiece between said elements to render said circuits effective to respond to said pairs of contacts, and a rejection circuit controlled by both said pairs of circuits and including timing means responsive to engagement of both said first contacts and said second contacts of said pairs of contacts within a predetermined time.

2,748,937
TUBE AND ROD GAUGING APPARATUS
Adrien F. Casler, Chardon, and Bernard A. Zimmerman, Cleveland, Ohio, assignors to General Electric Company, a corporation of New York
Application March 3, 1952, Serial No. 274,622
10 Claims. (Cl. 209—88)

1. In combination, apparatus for gauging tubing or rod comprising separable rolls engaging opposite sides of said

tubing or rod and control means adapted to be actuated upon separation of the rolls either a greater or lesser amount than a predetermined acceptable range due to the presence of off-size portions of the tubing or rod between said rolls, selecting apparatus located at a position below and further along the path of movement of the tubing or rod and comprising rails extending to opposite sides and sloping downward from a position below said path, and a movable deflector having downward sloping side portions and mounted for lateral movement to positions over the juncture of said rails whereby lengths of the tubing or rod fall onto one side portion and roll onto



the rails at one side thereof at one position and whereby said lengths fall onto the other side portion and roll onto the rails at the other side thereof at another position, and a memory device comprising memory means, means controlled by the said control means of the gauging apparatus for registering in the memory device the presence of an off-size portion of said tubing or rod in engagement with said gauging apparatus, and means actuated by the memory means at a subsequent interval and effecting movement of the deflector means of the selecting apparatus for directing lengths of tubing or rod comprised of off-size portions to the same one side of said rails.

2,748,938
FLOTATION OF SPODUMENE
Fred H. Bunge, La Grange, Ill., assignor to Armour and Company, Chicago, Ill., a corporation of Illinois
No Drawing. Application June 23, 1952, Serial No. 295,123
6 Claims. (Cl. 209—166)

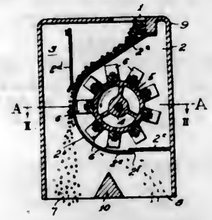
1. In a process for the concentration of a spodumene-bearing ore without chemical treatment to prepare the surface thereof, the step of subjecting said chemically untreated ore to froth flotation in the presence of a sulfonated oil to cause selective flotation of spodumene.

2,748,939
PHOSPHATE RECOVERY IN REVERSE FLOTATION USING A FLUOSILICATE TO DEACTIVATE THE REAGENTS
William A. Hodges, Plant City, and Joseph E. Floyd, Fort Meade, Fla., assignors to Swift & Company, Chicago, Ill., a corporation of Illinois
No Drawing. Application January 24, 1955, Serial No. 483,828
15 Claims. (Cl. 209—166)

1. In a process for concentrating phosphate values from phosphate ore by a reverse flotation process wherein a negative-ion reagent is used to separate a rougher concentrate rich in phosphate and lean in silicious impurities, the negative-ion reagent deactivated and a positive-ion reagent used to separate the silicious impurities from the phosphate, the improvement which comprises treating the rougher concentrate with a water-soluble fluosilicate to deactivate said negative-ion reagent prior to separating the silicious impurities with the positive-ion reagents.

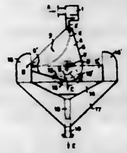
2,748,940
MAGNETIC SEPARATOR
Erwin Roth, Flawil, Switzerland
Application September 17, 1954, Serial No. 456,737
Claims priority, application Switzerland September 18, 1953
3 Claims. (Cl. 209—219)

1. A device for separating magnetizable foreign bodies from bulk material to be ground or crushed, comprising a rotor fixed to a horizontal shaft, a plurality of magnet bodies mounted at uniform distances around the circumference of said rotor, and a dust-tight housing enclosing the rotor and said magnet bodies, said housing comprising a jacket made of non-magnetizable material and serving as a sliding track for the bulk material, said jacket comprising a portion disposed on one side of the rotor on both sides of its horizontal median plane in a circular arc concentric with the rotor shaft and at short distance from



the magnet bodies, a straight chute portion proper in one quadrant situated above said plane, a lower horizontal portion in a quadrant below said plane, such latter portion being separated from the rotor shaft and the magnet bodies at a gradually increasing rate and including an upwardly disposed step portion tending to cause magnetizable material moved on the lower horizontal portion to separate therefrom as the magnet bodies rotate away from said step portion.

2,748,941
SCREEN
Freerk J. Fontein and Albert T. Basten, Heerlen, Netherlands, assignors to Stamicarbon N. V., Heerlen, Netherlands
Application December 14, 1954, Serial No. 475,249
Claims priority, application Netherlands July 15, 1954
7 Claims. (Cl. 209—251)



1. Apparatus for wet screening comprising a non-continuous cylindrically curved screening deck, means for feeding liquid and a mixture of particles to be separated along a tangential path to the concave side of said screening deck, means disposed on the convex side of said screening deck for collecting an undersize fraction of said particles, and means for collecting an oversize fraction issuing tangentially from the discharge end of said screening deck, said screening deck being mounted for movement between a first position wherein one end thereof serves as a feed end and a second position wherein the opposite end serves as a feed end, said overflow fraction collecting means including portions spaced on opposite sides of the plane of path of tangential feed to the screening deck, each of said portions being arranged to receive the overflow fraction issuing from said screening deck in one of said positions.

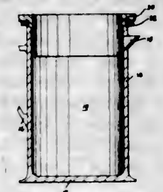
2,748,942
VIBRATORY SCREENING APPARATUS
Sam C. Aker, Fort Worth, Tex.
Application April 20, 1950, Serial No. 157,102
4 Claims. (Cl. 209—315)

1. A screening and separating unit for separating short and long discrete materials in apparatus through which such materials are conveyed, said unit comprising: an elongated main frame supported for vibratory movement; an upper deck supported on the frame for vibratory movement therewith comprising in longitudinal series a material receiving floor portion, and a separator portion; the separator portion comprising longitudinally spaced parallel transverse elements having upwardly convex rounded surfaces, the transverse elements being spaced in the direction materials are conveyed through the apparatus and being disposed generally transverse to such



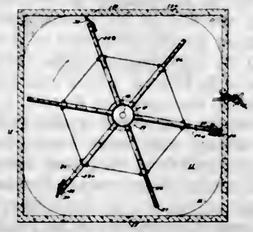
direction; longitudinal walls supported by the transverse elements, said walls extending in the general direction of conveyance and being transversely spaced and terminating upwardly at upper longitudinal edges above the transverse elements; the floor portion being substantially at the level of the upper surfaces of the transverse elements and the upper edges of the walls at one end continuing over the floor portion and inclined downwardly to the floor portion.

2,748,943
LIQUID DENSITY SEPARATOR
Arnold J. Walker, Queens, N. Y.
Application April 20, 1953, Serial No. 349,743
2 Claims. (Cl. 210—51)



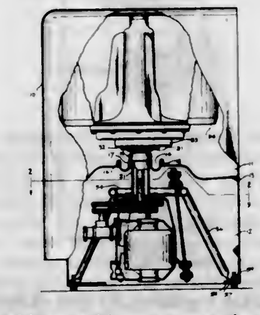
1. A liquid density separator including a base member, a first body member of pre-determined internal diameter extending upwardly from said base member, a handle and a spout secured to said first body member, and a cap member, said cap member including a second body member having an exterior diameter substantially equal to the diameter of said first body member, and a top member, said top member forming a closure for substantially half of said cap member, said second body member extending within said first body member and closing said spout.

2,748,944
CORNER SWEEPING MEANS FOR CLARIFICATION BASINS
Anton A. Kalinske, Tucson, Ariz., assignor to Infilco Incorporated, Tucson, Ariz., a corporation of Delaware
Application May 3, 1954, Serial No. 427,170
7 Claims. (Cl. 210—55)



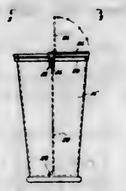
1. In a basin of the type described, a conduit rotatable about the axis of said basin and having an inlet for liquid at its inner end, a discharge port at the outer end of said conduit, an arm pivotally supported from said conduit, a valve mounted on said arm in such manner as to close said port in one position of said arm, a member rotatably carried by said arm for rolling engagement of a basin wall while the conduit travels with its outer end in proximity to said basin wall, said member, when engaging said basin wall, holding said arm in valve closed position, and a spring operatively connected to said arm and urging said arm to swing about its pivot to valve open position.

2,748,945
SUSPENSION AND MOUNTING FOR WASHING MACHINES
Alvin Lodge, Erie, Pa., assignor to Blackstone Corporation, Jamestown, N. Y., a corporation of New York
Application September 11, 1952, Serial No. 309,080
2 Claims. (Cl. 210—72)



1. In a washing machine, a receptacle rotatable about a vertical axis, a tubular support and drive shaft depending from said receptacle, a cage comprising a set of three straps equidistant from the vertical axis of said receptacle, the upper ends of said straps being joined to the lower end of said tubular support, the lower ends of said straps providing a seat and laterally off-center mounting for a motor adapted to rotate said receptacle, a water pump between two of said straps and located off center in the opposite direction from said motor, reduction drive means operatively connecting said motor with said pump and said drive shaft, said motor, pump and means being disposed to balance on center with the axis of said receptacle, a rigid collar extending around and out of contact with said support, and yieldable means depending from said collar joined to said straps adjacent their lower ends.

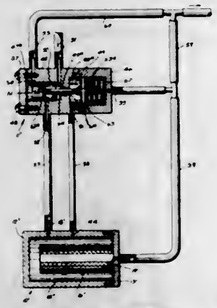
2,748,946
STRAINER ATTACHMENT FOR RECEPTACLES
Clifford W. Smith, Los Angeles, Calif.
Application February 20, 1953, Serial No. 337,947
1 Claim. (Cl. 210—163)



In combination with a drinking glass having an upwardly and outwardly tapering wall, a vertically extending perforated partition member for centrally dividing the interior of said glass into an ice and liquid containing chamber and a liquid containing chamber, a transverse head affixed to the upper end of said partition member,

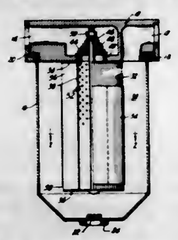
a normally closed semi-circular cover for said ice and liquid chamber spring-hinged to said head, a band closely encircling said glass adjacent the upper end thereof, a pair of knobs affixed in diametrically opposed relation upon said band, and a dependent ear having an inverted key slot affixed to each end of said head, said key slots each adapted to receive one of said knobs, said partition member having a curved lower end adapted to abut the bottom of the glass.

2,748,947
FILTER BY-PASS CONTROL
Kenneth William Jay, Weston, Ontario, Canada, assignor to A. V. Roe Canada Limited, Malton, Ontario, Canada, a corporation
Application November 10, 1951, Serial No. 255,770
14 Claims. (Cl. 210—166)



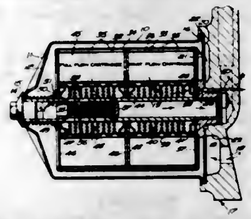
1. A control for regulating the flow of fluid to a filter and a by-pass, the control comprising a first hollow cylinder and a second hollow cylinder sealed from the first, a piston in the first cylinder, filter connection means communicationg with the first cylinder on one side of the piston, the piston thereby being movable in response to fluid pressure in the filter connection means, an inlet for admitting fluid to the second cylinder, the filter connection means normally communicating with the second cylinder whereby fluid is delivered to the filter, by-pass connection means in the walls of the second cylinder, and a valve in the second cylinder normally obstructing the by-pass connection means from communication with the second cylinder, the valve being movable with the piston to open the by-pass connection means to communication with the second cylinder and obstruct the filter connection means from communication with the second cylinder.

2,748,948
FILTERING DEVICE
Guy C. Fricke and Walter Kasten, Detroit, Mich., assignors to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application August 15, 1950, Serial No. 179,482
6 Claims. (Cl. 210—169)



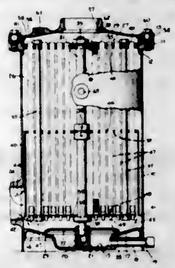
1. A filter element comprising a cylindrically-shaped perforated core, filter material around said core pleated in a direction longitudinal with the axis thereof, plates closing the ends of said pleats, and an impervious shell around said pleated material in close proximity thereto positioned between and spaced axially from opposed inner surfaces of said plates and covering a major portion of the outside surface of said pleated material.

2,748,949
COMBINED FULL-FLOW AND PART-FLOW OIL FILTER
William S. James, Birmingham, Mich., assignor to Fram Corporation, Providence, R. I., a corporation of Rhode Island
Application September 28, 1954, Serial No. 458,873
6 Claims. (Cl. 210—183)



1. In oil filtering equipment of the type described, a replaceable cartridge housing constructed so that oil can freely enter the same and adapted to be inserted in and removed from an oil filter shell, and having permanently secured therein a full-flow cartridge and a part-flow cartridge disposed in axial alignment with each other and each having two end walls and a central tube-receiving space, and the part-flow cartridge having a central tube receiving opening in its end walls and having in its outside end wall a second opening spaced laterally from its center opening and through which oil that has been filtered by this cartridge can escape from this cartridge.

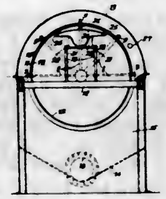
2,748,950
FLUID FILTER
Charles M. Turaky, Neshanic, N. J.
Application September 13, 1951, Serial No. 246,355
5 Claims. (Cl. 210—184)



1. A liquid filter of the character described, comprising an elongated casing, an inwardly set bottom wall secured to and closing one end of the casing, said bottom wall having a sediment pit, the other end of the casing being open, means at the lower portion of the casing forming an inlet for liquid to be filtered, a filter unit detachable from the casing through the open end thereof, a cover closing the open end of the casing and retaining the unit in position in said casing, said cover having means for discharging filtered liquid from the casing, said unit comprising upper and lower plates, means for supporting said plates in spaced relationship to each other, a plurality of tubular filter elements supported in said plates and extending therebetween, said detachable cover forming, above the upper plate of said unit, a chamber communicating with the discharge of said cover, all of said tubular filter

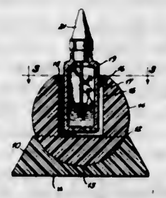
elements opening into said chamber, means within the casing and fixed on said plate spacing means intermediate the top and bottom plates of said unit for positioning said tubular filter elements intermediate said plates, and said last named means including a skirt extending to a position adjacent said lower plate.

2,748,951
DEVICE FOR SEPARATING SOLID PARTICLES FROM LIQUIDS
Max Dubach, Attisholz, Switzerland
Application May 1, 1952, Serial No. 285,357
Claims priority, application Switzerland May 4, 1951
1 Claim. (Cl. 210—199)



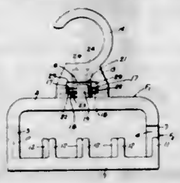
In an apparatus for separating solid particles from suspensions containing them, comprising a casing, a horizontal rotary filter drum mounted in said casing, means for rotating said drum, said drum being provided with passage openings adjusted to the particle size of the retained material, the combination of a distributor extending lengthwise in the upper third of said drum, slotted nozzle means on said distributor disposed closely adjacent the inner surface of said drum and adjacent the highest point of said drum for discharging the suspension to be filtered in a downwardly inclined continuous veil to strike against the inner surface of the drum at an angle closely approximating the tangent to such striking point so as to impinge upon a clean area and over at least three quarters of the breadth of the upper third of the inner surface of said drum, means for discharging the suspension under pressure through said nozzle means whereby the suspension flows downwardly along at least the lower two-thirds of the inner surface of the drum previous to the retained solid particles being evacuated from the bottom of the drum.

2,748,952
BOTTLE SUPPORT
Martin Fleit, Washington, D. C., and Robert L. Ginesi, Chevy Chase, Md.
Application December 23, 1952, Serial No. 327,536
3 Claims. (Cl. 211—74)



1. The combination comprising a support for holding containers of the type including a cap having mounted therein one end of an applicator the other end of which extends into the container and terminates at a point spaced from the bottom thereof, said support comprising a base member defining a recess of spherical configuration and a ball-like member defining a bore extending into said ball-like member for a distance greater than half the diameter of said ball-like member, said bore having a substantially uniform cross-sectional area over a major portion of its length, and a container of the type described received in said bore, said ball-like member being received in the recess of spherical configuration defined by said base and in frictional engagement therewith with said bore opening upwardly whereby said ball-like member with said container received in said bore can be tilted relative to said base member and remain in its tilted position until further moved.

2,748,953
NECKTIE SUPPORTING RACK
Knut G. Behlefeldt, Los Angeles, Calif.
Application June 22, 1953, Serial No. 363,096
1 Claim. (Cl. 211—113)

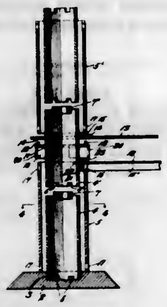


A necktie supporting rack comprising: first and second rigid frames each having flat front and rear faces extending in substantially parallel closely spaced planes and each comprising elongated lower arm extending substantially horizontally for supporting a plurality of neckties, an elongated upper arm spaced above said lower arm, and an end member integral with said arms and extending upwardly from said lower arm to said upper arm at one end of the frame; each frame being formed to provide a vertically extending gap between the lower and upper arms thereof at the other end of the frame; said first frame further comprising a hanger portion extending upward from the central portion of its upper arm and provided at its upper end with a hook for suspending the rack; and hinge means pivotally mounting the second frame on the first frame at a position adjacent the central portions of the upper arms of both frames, for pivotal movement about a horizontal axis substantially parallel to said front and rear faces of both frames; said second frame being biased by gravity to swing downward about said axis to a folded position in which its lower arm is closely adjacent the lower arm of the first frame, and being free to swing upward about said axis to an extended position in which its lower arm is spaced a substantial distance from the lower arm of the first frame; and said hinge means comprising a pair of oppositely disposed hinge pins on the second frame extending longitudinally of said axis, a pair of bearing members formed integrally with the first frame providing two concave hinge sockets positioned to receive the respective hinge pins, said first frame being formed to provide for movement of said hinge pins into engagement with said sockets and for disengagement of said hinge pins from said sockets to detach the second frame from the first frame, and a resilient bearing member on the first frame, positioned to engage a member on the second frame between said hinge pins to retain said hinge pins in said sockets, and resiliently deformable to permit forcible disengagement of said hinge pins from said sockets.

2,748,954
SHELVING
John E. Murren, West Belmar, N. J.
Application March 28, 1955, Serial No. 497,220
9 Claims. (Cl. 211—148)

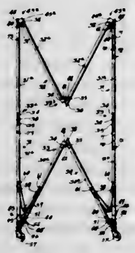
1. In a shelving structure, the combination comprising a plurality of horizontally spaced hollow upright outer members, upright lower inner members telescoped therein, upper inner members above the lower inner

members and in abutting relationship therewith, said inner members having notches at the ends thereof, crossed interlocking members seated within the notches at the abutting ends of said inner members and holding said inner members in interlocked relationship, caps fitting



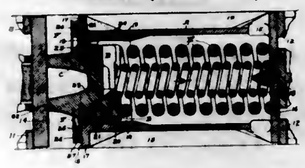
the upper end of said outer members, said caps having an opening through which said upper inner members extend, a shelf positioned on said caps and having openings through which said upper inner members extend, said shelf and said caps having means thereon for securing them in interlocking engagement.

2,748,955
COLLAPSIBLE RACK
Charles Anselmo, Bellaire, N. Y.
Application August 2, 1951, Serial No. 239,868
1 Claim. (Cl. 211—178)



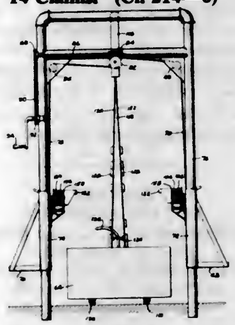
In a collapsible rack having spaced parallel vertical tubular bars and spaced parallel horizontal tubular bars, each bar being divided into sections, connectors for pivotally joining the sections of the horizontal tubular bar sections, each connector including aligned cylindrical parts, studs extending from the remote ends of said parts into the adjacent bar sections, said studs having arcuate-shaped peripheral slots, screws carried on the bar sections extending into said slots for locking said sections in position for use, a triangular-shaped tongue on the adjacent end of one of said cylindrical parts, a laterally extending ear on said tongue, the adjacent end of the other cylindrical part being formed with a triangular-shaped slot for movably receiving said triangular-shaped tongue, a perforated ear on said latter cylindrical part adjacent its slot aligned with said laterally extending ear, a pivot pin extending through the perforations in said ears, said pin having its axis extended at right angles to the length of the bar sections, whereby the meeting ends of the bar sections may be pivoted in one direction, the inner hypotenuse side of the triangular shaped tongue being disposed in the path of the base of said slot whereby pivoting of the bar sections in the opposite direction is prevented.

2,748,956
COMBINED RUBBER AND FRICTION SHOCK ABSORBING MECHANISM
Vernon S. Danielson, Chicago, and William D. Wallace, Park Forest, Ill., assignors to W. H. Miner, Inc., Chicago, Ill., a corporation of Delaware
Application May 27, 1952, Serial No. 290,262
2 Claims. (Cl. 213—34)



1. In a combined rubber and friction shock absorbing mechanism, the combination with a friction shock absorber, including a friction casing open at one end, friction shoes slidingly telescoped within the open end of the casing, a wedge in wedging engagement with the shoes, and yielding means within the casing opposing inward movement of said shoes; of laterally, oppositely projecting flanges at the front end of the casing; a front follower movable toward and away from said casing, said follower being engaged with said wedge to actuate the same; a metal plate disposed upon each of said flanges; welds fixing said plates on the flanges; a rubber pad bonded to said plate; a second metal plate parallel to the first plate and bonded to said rubber pad, said follower engaging said second plate after a predetermined compression of the mechanism to compress the rubber pads in parallel with the friction shock absorber during further movement of the follower toward said casing.

2,748,957
SYSTEM OF HANDLING BRICK AND SIMILAR ARTICLES
Asa B. Segur, Oak Park, Ill.
Application November 4, 1952, Serial No. 318,554
14 Claims. (Cl. 214—6)



1. In a system of the class described, a loading station having a frame for spanning a vehicle to be loaded, a center means carried by said frame for guiding the formation of different layers loaded on said vehicle, platforms carried by said frame on opposite sides of said vehicle, means for moving said platforms vertically on said frame, article-supplying conveyors attached to said platforms and movable therewith, side guiding means attached to said platforms for movement therewith, and means for selectively advancing elements of said side guiding means.

2,748,958
DEFLECTOR MEANS FOR HARVESTER DELIVERY CHUTE
Anthony Moser, Hales Corners, Wis.
Application September 21, 1953, Serial No. 381,188
18 Claims. (Cl. 214—42)

1. In combination, a harvesting machine including draft means and crop gathering means carried by said draft

means in pivotable relation about an axis thereof, said crop gathering means having a delivery chute at one end of said harvester, said draft means having a tractor hitch at the end of said harvester opposite said delivery chute, baffle means for deflecting material discharged from said chute and control linkage including a cable connected to said baffle means and extending to said opposite end



of said harvester with the intermediate portion of said cable being passed substantially to said axis to prevent movement of said crop gathering means relative to said draft means from causing said cable to move said deflector plates, said control linkage including harvester operated and carried means moving said cable to cyclically move said baffle means spreading material discharged from said chute.

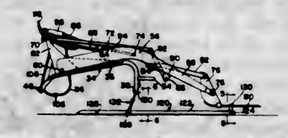
2,748,959
MEANS FOR ACCELERATING THE EVACUATION OF HOPPER TYPE RAILWAY CARS
Leland G. Plant, Edenton, N. C.
Application October 15, 1951, Serial No. 251,437
4 Claims. (Cl. 214—64.2)



1. A hopper car evacuator comprising a main frame having an upper hook portion adapted for attachment to the top of one side of the hopper car to support the evacuator therefrom, a rotor-carrying sub-frame pivoted to the main frame at a point substantially below the hook portion and adapted to be swung about said pivot to a generally upright inoperative position to reduce the combined horizontal width of the two frames, and adapted to be swung outwardly to a generally horizontal operative position when the evacuator is suspended from the side of the car, said pivoted sub-frame having an extremity adapted to engage the side of the car at substantially its underframe or floor level when the sub-frame is in operative position, and an unbalanced rotor mounted in the sub-frame adjacent the opposite end of the sub-frame from the car engaging extremity.

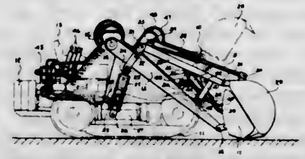
2,748,960
PARKING STAND FOR TRACTOR-IMPLEMENT COMBINATION
Harold M. Stueland, East Moline, Ill., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Application October 7, 1953, Serial No. 384,584
6 Claims. (Cl. 214—131)

1. A parking stand for use with a tractor-implement unit of the type in which an implement frame having front and rear portions is disconnectibly sustained by the tractor at an operating level above the ground and wherein the frame carries an implement part projecting ahead of the frame front portion and adjustable about a transverse axis adjacent to the rear frame portion for movement between ground-proximate and raised positions by selectively lockable adjusting means operative between the implement part and the frame, said stand comprising: a base having front and rear ends and adapted to rest on the ground to be approached from the rear by the forwardly driven tractor; first means on the base adjacent to the front end of the base and facing rearwardly to releasably receive and engage the ground-proximate implement part; and second means on the



base spaced rearwardly of the first means and including an upper portion positioned substantially at the operating level of the frame to receive the frame front portion and to sustain said portion at said level upon disconnection of the frame portions from the tractor so that when the tractor is backed away from the stand-supported frame the rear portion of the frame projects as a cantilever from the front portion of the frame as fulcrumed on the second means, with said first means serving as an anchor for holding the frame and implement part against rearward and downward tilting about the second means when the adjusting means is locked.

2,748,961
MATERIAL HANDLING APPARATUS
John S. Pilch, Ware, Mass.
Application October 29, 1951, Serial No. 253,708
2 Claims. (Cl. 214—147)

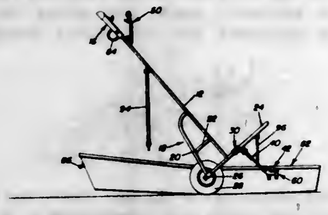


1. A tractor mounted gathering and loading device comprising a pair of primary support means rigidly secured to opposite sides of a tractor to provide an elevated mounting on each support, a push arm pivotally mounted on each said mounting and extending forwardly thereof to a point forward of the tractor, hydraulic cylinder means to pivot said push arms from a lower position with the forward ends adjacent the ground level to an upper position substantially above said elevated mountings, a material gathering means rockably connected to said push arms, a secondary support rigidly secured to and extending upward from each said push arm, hydraulic cylinder means to rock said gathering means on said push arms from a forward position to a rearward scooping position, a clamp member pivoted to the forward end of each said secondary supports, hydraulic cylinder means to pivot said clamp member forward to overlie said gathering means during lifting and to pivot said clamp means upwardly and rearwardly during scooping operations.

2,748,962
BOAT TRAILER
Oscar H. Murray, Tampa, Fla., assignor to said Oscar H. Murray, William H. Murray, and Raymond E. Murray, Tampa, Fla., jointly
Application July 17, 1953, Serial No. 368,588
1 Claim. (Cl. 214—373)

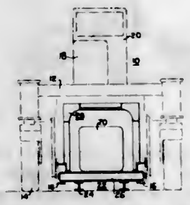
In a boat trailer, a wheeled frame including a pair of spaced side members adapted to straddle the sides of a

boat and having front hitch ends connected together, an arch member connecting said side members together at rear ends thereof and adapted to extend across a boat, said arch member having vertical side sections rising from said side members, a pair of spring arms extending rearwardly from said vertical side sections above said side members and having front and rear ends.



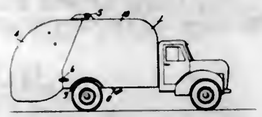
sleeves on the front ends of said spring arms vertically slidably adjustable on said vertical side sections to adjust said spring arms vertically, and means for attaching said spring arms to a boat comprising a pair of rectangular frames attachable to opposite sides of a boat, and a pair of forwardly inclined hooks on the rear ends of said spring arms fitting upwardly in said frames and interlocking therewith.

2,748,963
APPARATUS FOR CONVEYING HOT METAL
Miller W. Torrence, Tarentum, Pa., assignor, by mesne assignments, to Clark Equipment Company, a corporation of Michigan
Application September 15, 1955, Serial No. 534,506
6 Claims. (Cl. 214—392)



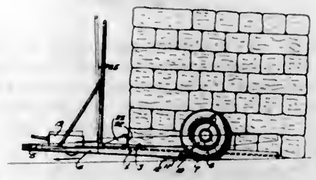
1. In apparatus for conveying hot metal in the form of ingot and intermediate steel mill product and comprising a straddle truck supported for movement on spaced rubber tired wheels and having a pair of spaced inwardly extending lifting shoes disposed to be actuated inwardly and upwardly thereof, the combination therewith of, a metallic pallet for receiving and supporting the hot metal thereon, the pallet having a width greater than that of the hot metal but less than that of the space between the lifting shoes whereby the pallet may be engaged, lifted and supported by the lifting shoes when the truck is positioned to straddle the pallet, and a heat insulating hood of substantially inverted U shape in cross section having outwardly extending lifting lugs adjacent the lower edges thereof disposed to be engaged and supported by the lifting shoes when the truck is positioned to straddle the hood, the hood being disposed to be conveyed by the truck to seat in assembled relation on the pallet to cover the hot metal supported thereon, the hood being of a length sufficient to extend lengthwise of the straddle truck when seated over the hot metal on the pallet to provide a heat insulating barrier between the hot metal and the rubber tired wheels of the truck when the pallet, hot metal and hood assembly is carried by the lifting shoes of the truck.

2,748,964
REFUSE TRUCK PACKER LOADER
George W. Murphy, Strafford, Pa.
Application April 13, 1953, Serial No. 348,393
9 Claims. (Cl. 214—503)



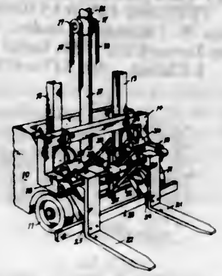
1. In a refuse truck, a body providing a receptacle for the refuse, loading means at the rear of said body, said means comprising a pivotally supported member movable about its pivot between a pendent position, wherein it constitutes a closure for said receptacle, and a rearwardly elevated position affording access to the receptacle for loading, and comprising also a hopper supported for movement between a refuse-receiving position and a relatively elevated terminal position from which the said refuse may be discharged into the receptacle, the bottom of said hopper conforming in shape approximately to the segment of a cylinder and occupying a generally co-axial position with respect to the pivotal axis of said member when the hopper occupies the said terminal position so that the member may operate effectively to sweep the interior of the hopper, a common actuator for the member and the hopper, and transmission means operative by a continuous movement of the actuator in one direction to elevate the member and simultaneously to move the hopper to said terminal position, and operative by a reverse movement of the actuator to move the member downwardly independently of the hopper so as to sweep the contents of the latter into the receptacle and to close the latter.

2,748,965
SELF-UNLOADING WAGON
Gordon E. Grey, Lancaster, Calif.
Application October 2, 1953, Serial No. 383,838
3 Claims. (Cl. 214—505)



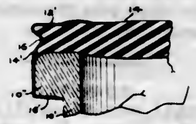
1. A self-unloading hay wagon, comprising: a flat bed structure adapted to receive a load of baled hay, said bed structure being tapered at its rear end and adapted to occupy a lower position with said tapered end resting on the ground; a pair of lever arms pivotally connected to said bed structure and movable between an upwardly directed position and a substantially horizontal position; a frame longitudinally slidable in said frame structure including laterally directed attachment extremities at the sides of said frame structure spaced from said lever arms; flexible tension means extending between said attachment extremities and said lever arms operable on longitudinal movement of said frame to pivot said lever arms; means for sliding said frame structure to effect pivotal movement of said lever arms relative to said frame structure and said wheels to effect raising and lowering of said frame structure; a load-discharging means including a flexible member having an upper reach and a lower reach disposed within the upper and lower boundaries of said bed structure and sheaved at the rear extremity thereof; a push plate structure slidably mounted on said bed structure and attached to said flexible member, and means for operating said flexible member to move said push plate structure longitudinally of said bed structure to shove a load of hay therefrom when said bed structure is in its lower position; and means for simultaneously withdrawing said bed structure from under said load of hay whereby the load is deposited intact on the ground.

2,748,966
LATERALLY ADJUSTABLE TINES FOR A LIFT TRUCK
Raymond W. Gohrke, Dallas, Oreg., assignor to Gerlinger Carrier Co., Dallas, Oreg., a corporation of Oregon
Application August 3, 1953, Serial No. 371,885
4 Claims. (Cl. 214—731)



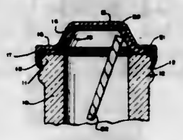
1. In an industrial truck of the character described, the combination of a vertically extending boom, a load elevating frame mounted for vertical movement along said boom, a horizontally disposed fork supporting slideway carried by said load elevating frame, a pair of spaced fork forming tines mounted upon said slideway with independent freedom of movement along said slideway, a tine spacing controlling member also movable along said slideway for varying the spacing of said fork tines upon said slideway, a beam pivotally mounted intermediate its end upon said tine spacing controlling member for pivotal movement in a vertical plane, a link connecting the upper end of said beam with one of said tines, a second link connecting the other end of said beam to the other of said tines, hydraulic means for rocking said beam about its pivoting axis to vary the spacing of said fork tines with respect to each other upon said trackway, and a second hydraulic means for controlling the position of said tine spacing control member along said slideway, whereby the position of said tines may be changed with respect to the center line of the truck without disturbing the spacing thereof as determined by said tine spacing control member.

2,748,967
BOTTLE CLOSURE
William B. Roach, Elkton, Md.
Application March 19, 1952, Serial No. 277,369
1 Claim. (Cl. 215—38)



In combination, a bottle having a neck portion and an opening extending therethrough including a circumferential lip of substantial thickness and height extending about its outer edge, the upper surface of the lip being flat and merging in a downwardly curved upper outer edge, a closure for said opening comprising a hollow cover of cylindrical form having a closed end and a smooth tubular side wall skirt of such length as to extend downwardly over the lip and inwardly under the lower surface of the lip to a point adjacent the bottle neck, a single continuous pliable inner seal member having a diameter equal to the outer periphery of said lip and having its under surface resting on the flat surface of the lip, the seal member being made of soft pliable impervious material adapted to be punctured by a hypodermic needle or the like for withdrawing the contents of the bottle, the single seal member extending over the entire top of the bottle and having a pre-formed annular groove about the outer peripheral edge thereof and located substantially centrally of the outer edge of the seal, an inwardly extended bead extending about the periphery of the side wall of the cover adjacent the closed end, the bead being located outwardly from the closed end of the cover a distance equal to substantially one half the thickness of the pliable seal member and receiving the groove of said bead, a portion of the seal between said bead and the lip in operative position being forced downwardly over the curved upper edge of the lip thereby forming a tight seal.

2,748,968
CONTAINER TOP WITH ROOM FOR STRAW
Anthony R. Attler, Yonkers, N. Y.
Application June 2, 1955, Serial No. 512,625
1 Claim. (Cl. 215—39)



A container top with room for straw comprising a substantially frusto-conical hollow portion having a top wall integral therewith at the smaller upper end, an outwardly extending, substantially circular flange integrally formed at the lower end of said frusto-conical portion and adapted to close the upper end of the container, said frusto-conical portion providing room therewithin for the upper end of the straw contained within the container and extending upwardly thereabove from the open upper end, said flange around its periphery being integrally formed with a depending skirt having inwardly extending lower portion, said skirt and inwardly extending lower portion being crimped onto the open upper end of the bottle having a corresponding annular groove, and a cork lining intermediate the top and the upper open end of the bottle, said cork lining having a frusto-conical portion received within said top frusto-conical portion, a top wall disposed below said container top wall, and a circular flange extending outwardly intermediate the top flange and the upper end of the bottle and terminating within said depending skirt.

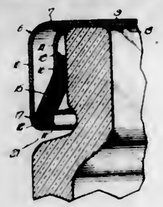
2,748,969
BOTTLE CLOSURE
William W. Leary, East Lampeter Township, Lancaster County, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a corporation of Pennsylvania
Application June 9, 1954, Serial No. 435,496
2 Claims. (Cl. 215—40)



1. A bottle closure comprising: a molded body having a head portion, a side wall portion projecting from the periphery of the head portion, a screw-thread projection on the inner surface of the side wall portion, an applicator well projecting from the center of the head portion within the confines of said side wall portion, a tapered outer sur-

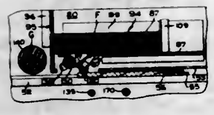
face on said well leading from the outer edge thereof to a generally annular liner-retaining projection of generally semicylindrical shape projecting radially from said well toward said side wall portion and spaced above said head portion and over which an annular sealing liner may be pressed axially of said well, and a ring type sealing liner of solid polyethylene snap-fitted within said closure over and held in position against dislodgment by said liner-retaining projection, the outer diameter of said ring sealing liner being less than the minimum diameter of said side wall portion at said screw-threaded projection and the inner diameter of said ring sealing liner being less than the maximum outer diameter of said liner-retaining projection and greater than the minimum outer diameter of said tapered outer surface of said well portion.

2,748,970
CLOSURE CAP
George F. Chaplin, Elmwood Park, Ill., assignor to White Cap Company, Chicago, Ill., a corporation of Delaware
Application May 20, 1953, Serial No. 356,134
3 Claims. (Cl. 215—40)



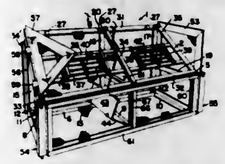
1. A closure cap comprising, in combination, an outer shell having a top panel portion, a depending skirt portion and an inturned flange on the bottom edge of said depending skirt portion, an inner shell centered and nested within the outer shell and having a top panel portion and a depending skirt portion characterized by an upper waist section annularly spaced within and from said skirt portion of said outer shell and a lower frusto-conical section which increases in diameter from that of said waist section to that of the interior of said skirt portion of said outer shell, the only contact between said skirt portions of said inner and outer shells being that of the bottom edge of said lower frusto-conical section of the inner shell skirt portion with said outer shell skirt portion adjacent said inwardly turned flange, and an annular sleeve gasket of elastically deformable sealing material nested within said frusto-conical section of said inner shell skirt portion with the lower edge of said gasket secured against the bottom of said frusto-conical section by said inturned flange portion and with the upper edge of said gasket disposed within said waist section, said top panel portion of said inner shell being held in flatwise abutment with the top panel portion of said outer shell.

2,748,971
BOX HEAD LABELER
Melvin W. Flynn, San Jose, Calif., assignor to Food Machinery and Chemical Corporation, San Jose, Calif., a corporation of Delaware
Application October 15, 1951, Serial No. 251,442
4 Claims. (Cl. 216—55)



1. In a box head labeling machine having means for conveying a box head along a predetermined path, means for supporting a supply of labels adjacent said path, means for flexing a portion of a label of said supply toward said path, a roll mounted adjacent said label supporting means for movement toward said path, timed actuating means mounted to move the roll into pressing contact with said label portion and with a predetermined portion of a box head conveyed along said path, and coordinated drive means mounted to rotate the roll at a peripheral speed corresponding to the surface speed of a box head conveyed along said path to withdraw the label from the label supporting means and to apply it to the box head.

2,748,972
POULTRY CRATE FOR USE IN POULTRY TESTING OPERATIONS
John W. Cummins, London, Ohio
Application January 24, 1951, Serial No. 207,581
2 Claims. (Cl. 217—47)

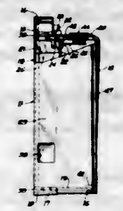


1. A poultry crate for holding poultry for testing, said crate comprising top, bottom, front and back side walls, and end walls, said front and back side walls consisting of frame members having a mesh covering, said back side wall being hingedly secured to said bottom wall, said top wall extending transversely of said side walls and having one longitudinal edge thereof hingedly secured to the top of said back side wall and having the opposing longitudinal edge supported freely on the top edge of said front side wall, said front side wall being divided longitudinally into an upper and lower section which sections are hinged together whereby said upper section can be swung outwardly and downwardly so as to overlie said lower front side wall section, said top wall being pivotable downwardly to position the free extending edge thereof on said lower section, said lower section of said front side wall being hingedly secured to said bottom wall, said end walls being slidably retained in channel members secured to the opposite ends of said front and back side walls, said top wall having an opening therethrough to the interior of the crate for the removal of poultry for testing, one of said ends walls being adapted for positioning against a poultry house to provide for entrance of poultry to the crate, said last-mentioned end wall comprising upper and lower portions hingedly connected together for movement of the upper portion with respect to the lower portion inwardly and outwardly with respect to the crate, said hinged upper portion of the end wall being triangular shaped to form a closure wall for the crate and being swingable about its hinges to permit a test operator to climb over the lower hinged end wall portion of the crate.

2,748,973
WALL BOX STRUCTURE
David C. Rockola, Chicago, Ill., assignor to Rock-Ola Manufacturing Corporation, Chicago, Ill., a corporation of Delaware
Application March 17, 1951, Serial No. 216,152
3 Claims. (Cl. 220—18)

1. A wall box structure, comprising a backing member adapted to be mounted on a supporting device and having marginal flanges comprising laterally opposed undercut portions at its upper end and forwardly extending lugs at its lower corners offset laterally therefrom with downwardly extending recesses at their rear ends, a

cover member attachable to said backing member having marginal flanges for slidably engaging the outer surfaces of said flanges of the backing member, including depending portions engageable with said lugs and in said recesses to prevent downward and forward movement of the lower portion of the cover member relative to the backing member, and inwardly extending lugs engage-



able with said undercut portions to prevent upward movement of the cover member relative to the backing member, and a key-operable lock mounted on the upper portion of said cover member and engageable with said backing member to prevent forward movement of the upper portion of the cover member relative to the backing member.

2,748,974
CONTAINER CLOSURES
Bernard Nicolas Lafarge, Sevres, France
Application December 18, 1951, Serial No. 262,203
Claims priority, application France December 22, 1950
5 Claims. (Cl. 220—43)



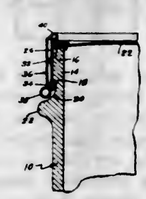
2. An article of manufacture comprising: a container including a bottom wall, a circular side wall, a resilient depending portion surrounding the upper part of said side wall substantially concentric to said side wall spaced therefrom, and an intermediate arcuate portion connecting the top of said depending portion with the top of said side wall; a closure adapted to fit onto said container; said closure including a top wall, a downwardly and outwardly curved portion depending from said top wall and adapted to fit closely onto said arcuate portion, and a lateral wall prolonging said curved portion downwardly; said lateral wall comprising an upper cylindrical portion the internal diameter of which is such that said cylindrical portion fits onto and around said resilient depending portion with a slight and resilient deformation of said depending portion, the lateral height of said cylindrical portion being greater than the lateral height of said depending portion, said cylindrical portion extending a substantial distance below the bottom edge of said depending portion when said arcuate portion and said curved portion are applied onto each other; said lateral wall comprising further a lower resilient lever portion prolonging said upper cylindrical portion downward and forming a substantially frusto-conical circular portion flaring outwardly and downward; whereby upon the application onto said lower lever portion of an external bilateral pressure directed inwardly and along a first diametral plane, said upper portion engages the lower edge of said depending portion at two points located in said first diametral plane, thereby locking said closure on said container, said upper portion being then sufficiently disengaged from said depending portion along a second diametral plane perpendicular to said first diametral plane to permit separation of said closure from said container upon application onto said lower lever portion of a second inwardly directed bilateral pressure along said second diametral plane.

2,748,975
PRESSURE COOKERS
Felix Carl Jacobson, Duffield, England, assignor to Platers & Stampers Limited, London, England
Application July 17, 1952, Serial No. 299,490
2 Claims. (Cl. 220—46)



1. A pressure cooker comprising a vessel provided at its top with a removable lid, said lid comprising a flat heat-resistant glass disc dimensioned so as to have the necessary strength for withstanding the steam pressure generated in the vessel under working conditions and so as to afford a window of sufficient area to permit easy inspection of substantially the whole of the bottom of the vessel, a peripheral vessel-engaging metal cover member surrounding said disc, and of generally cylindrical shape to give a lid of substantial depth, a rubber or like gasket arranged between an overhanging inturned flange at the top of the peripheral cover member and a shallow shoulder beneath said flange, said gasket having a groove to hold the edge of the disc, and said peripheral member carrying a gasket in a groove adjacent its bottom edge for sealing against a surface around the top of the vessel.

2,748,976
CLOSURES
Charles D. Magnesen, Oak Park, Ill., assignor to Magnaseal Company, Chicago, Ill., a corporation of Illinois
Application September 25, 1953, Serial No. 382,340
3 Claims. (Cl. 220—60)



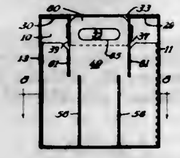
1. The combination of a container and closure, said container having a cylindrical open end, a groove about the neck of said container spaced away from the open end thereof and a closure member adapted to fit over the open end of said top in a sealing condition, said closure member having a circular shoulder with a groove therein into which the open end of said container is positioned, a compressible gasket in said groove, a plurality of downwardly depending fingers extending below the edge of said open end of said container, said fingers having curled-over edges, and a removable and replaceable retainer ring which when positioned over said cover fastens the curled-over edges of said fingers into said groove to seal said cover on said container, the upper end of said retainer ring terminating in an inwardly curled bead, the lower edge of said bead effecting line contact on top of the shoulder of the closure member and the lower edge of said retainer ring having an outwardly curled bead, the inner edge of said bead being of a smaller diameter than the diameter of said retainer ring, whereby the closure is lock sealed in closing position and on initial opening the curled-over edges of said fingers are deformed to permit removal of said retainer ring but upon replacing the closure and retainer ring the closure will again be fastened by the retainer ring in a sealing condition.

2,748,977
PAINT BRUSH HOLDER AND SCRAPER
Richard J. Sarchet, East Chicago, Ind.
Application February 10, 1954, Serial No. 409,292
14 Claims. (Cl. 220—90)



1. A combined paint brush holder and scraper adapted to be suspended from an open can, comprising a plate adapted to seat upon the top of the open can, said plate having a downwardly directed flange adapted to enter the opening in the top of the can; an open-ended pocket integral with said plate having an inner wall adapted to engage the side of the can, and having a parallel outer wall spaced from the inner wall, and having an end wall, and having a bottom wall sloping downwardly from the open end of the pocket to the said end wall adapted to receive a paint brush disposed edgewise therein.

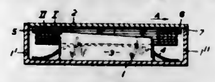
2,748,978
BOTTLE CARRIERS
Russell J. Hennessey and Robert M. Dunning, St. Paul, Minn., assignors to Waldorf Paper Products Company, St. Paul, Minn., a corporation of Minnesota
Application February 21, 1951, Serial No. 212,180
11 Claims. (Cl. 220—105)



1. A bottle carrier with its top in closed condition including a carton having rectangularly arranged side walls and top and bottom closures, the top closure including a pair of closure flaps connected to two opposed side walls and folded inwardly in coplanar relation, a pair of downwardly extending extension flaps on the inner edges of said closure flaps, a handle including a panel parallel to, and intermediate between, the remaining two opposed side walls, said handle panel including a central portion extending substantially the full height of the carton, said handle panel having slots therein extending vertically on opposite sides of said central portion to accommodate said extension flaps on said closure coplanar flaps when said handle panel is raised, the side portions of said handle panel on opposite sides of said central portion being of lesser height than said central portion to permit vertical movement of the handle panel, and reinforcing flanges secured throughout the integral length of the ends of said panel and extending at right angles to the panel along two opposed walls of said carton, whereby upon lifting said carton by said handle, the handle panel thereof and reinforcing flanges support said carton without bending the handle panel or said coplanar flaps.

2,748,979
RAZOR BLADE MAGAZINES
George Szekely, Tel Aviv, Israel
Application December 27, 1951, Serial No. 263,543
4 Claims. (Cl. 221—229)

1. In a magazine for dispensing razor blades having blade locating edges, said magazine comprising bottom, front, rear and side wall portions to define a compartment, a top closure for said compartment, means within said compartment for locating and maintaining a stack of blades therein in substantially vertical registration with the shaving edges thereof parallel to and spaced from the adjacent side wall portions, and including yieldable means beneath the stack for elevating it to engage the topmost blade of the stack with the inner face of the top closure, said front wall portion having a blade discharging passageway aligned substantially with the topmost blade of the elevated stack and of a height about that of the blade thickness, the combination having at the rear of said



top closure on its inner face engaging means for the rear end portion of the topmost blade comprising depending wedge shaped studs having oblique wedge faces each forming an obtuse angle to the inner face of the closure turned toward the blade discharging passageway to project said oblique wedge faces in the leading position in engagement with the topmost blade, said studs having the peak portion thereof extending for a distance greater than the thickness of a blade for advancing the topmost blade through the passageway, the wall defining said passageway faced toward the leading edges of said studs being rounded.

2,748,980
RAZOR BLADE HOLDER
Paul Müller, Solingen, Germany
Application November 3, 1950, Serial No. 193,780
Claims priority, application Germany November 26, 1949
8 Claims. (Cl. 221—232)



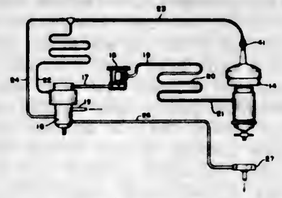
1. In a dispensing magazine for substantially rectangular razor blades each having at least one aperture, at least one sharpened longitudinal edge, and blunt front and rear edges, the improvement comprising in combination a casing adapted to receive a stack of blades and having in its front wall opposing the front edges of the blades a blade exit opening adjacent to the top of the casing; a slide mounted in the top of the casing about said stack for reciprocable displacement in longitudinal direction of the blades between a rear initial position and a forward end position; stationary locating means for the stack of blades projecting from the bottom of the casing toward the top thereof and leaving a passageway for the uppermost blade to slide therethrough in the direction towards said blade exit opening; said locating means slidably engaging the apertures in the stacked blades and having at least at its rear end a forwardly inclined guide face to hold said blades in such echeloned formation that the front edge of each blade overreaches the front edge of the underlying blade and the rear edges of the stacked blades form steps leading from the uppermost blade to the lowermost blade; elastic means mounted in the casing for urging the stack of blades towards the top of the casing; and a shoulder upon said slide extending into the casing by not more than the thickness of a blade and having a frontal driving edge adapted to engage the rear edge of the uppermost blade and a base face adapted to depress the underlying stacked blades; said shoulder being located upon said slide to enter the step behind the rear edge of the uppermost blade when said slide is in its rear initial position so that said shoulder when said slide is being advanced from its rear initial position into its forward end position separates the uppermost blade from the stack piled upon the said locating means and pushes said blade towards and through said blade exit opening while the underlying stacked blades are being held down in continued engagement with the said locating means by said base face moving on top thereof.

2,748,981
COLLAPSIBLE TUBE DISPENSER
John Enoch Bean, Attleboro, Mass.
Application October 10, 1952, Serial No. 314,110
4 Claims. (Cl. 222—97)



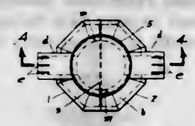
1. A paste dispenser comprising a housing, a circular contractable casing of telescopic sections secured on one end to said housing, a dispensing head provided with a nozzle secured to the other end of said contractable casing, a wiper yieldingly mounted in said nozzle, a threaded area in said nozzle adapted to receive the threaded neck of a collapsible tube with the tube arranged in an inverted position within said contractable casing, slots in said housing, a U-shaped bracket secured in said slots by means of its base being secured to said housing, a pair of bearings in said U-shaped bracket, one bearing being C-shaped, a shaft provided with a slot and a knob fixed thereto, rotatably mounted in said pair of bearings, a pair of squeeze bars mounted in said U-shaped bracket and arranged to receive the tube therebetween, the end of said tube secured in said slot whereby said tube may be wound around said shaft, expelling the contents of said tube through said nozzle and retracting said cup and contractable casing.

2,748,982
BEVERAGE DISPENSING APPARATUS
Bruce G. Copping, Akron, Ohio
Application August 23, 1951, Serial No. 243,265
4 Claims. (Cl. 222—108)



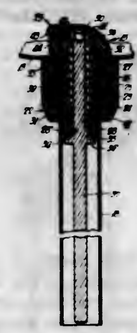
1. A beverage dispensing system comprising a source of water under pressure, a source of flavoring concentrate under atmospheric pressure, means for periodically applying pressure to a predetermined quantity of the concentrate to be dispensed, means including a pressure-regulating conduit disposed between the water flow control means and the means for applying pressure to the concentrate for causing water pressure to be applied to the last-named means only when the water flow control means is opened, whereby to cause water and concentrate to be dispensed as a uniform mixture at the dispensing nozzle, and means including a conduit connected to the first-named conduit and provided with a valve means controlled simultaneously with the water flow control means for relieving the water pressure on the means for applying pressure to the concentrate after the dispensing operation is completed.

2,748,983
DUAL CHANNEL SALT AND PEPPER SHAKER
Speros G. Zervos and Peter G. Makris, Detroit, Mich.
Application April 7, 1954, Serial No. 421,544
5 Claims. (Cl. 222—142.4)



1. A dual channel ingredient dispenser adapted for regulated discharge of selected ingredients, and used therewith, comprising a dual chambered casing formed with a central neck opening common to both chambers, a seal cap fixedly mounted over said casing neck opening, separating and sealing said dual chambers from each other, a discharge channel rib projected from opposite outside casing walls, each positioned centrally with the respective dual chambers and opening therein, and predetermined outlet discharge ports formed through said channel rib upper ends, opening therein, for dispensing the respective chambered ingredient therethrough when said casing is inverted.

2,748,984
HERMETICALLY SEALED SPRAY PACKAGES AND NEEDLE VALVES THEREFOR
Edward H. Seymour, Sycamore, Ill.
Application March 6, 1953, Serial No. 340,726
10 Claims. (Cl. 222—148)

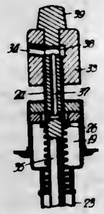


1. In combination with a hermetically sealed container for dispensing liquid suspensions of finely divided solid material, a self-cleaning valve comprising a valve body having a valve bore through which material is dispensed, a valve seat at the inlet end of said valve bore, a valve stem having a valve seating surface arranged to seat on said valve seat to close said valve, a discharge tube extending downwardly from the inlet end of said valve bore in a direction toward the base of said container, and a discharge tube cleaning member extending from immediately below said valve seating surface into and down through said discharge tube and arranged to move any accumulation of solid material within the tube to loosen said material and permit flow therethrough when the valve is opened, said discharge tube below said valve seating surface being completely free of any obstruction to flow therethrough except for said valve cleaning member.

2,748,985
SPRAY PACKAGE EQUIPPED WITH A SELF-CLEANING VALVE
Edward H. Seymour, Sycamore, Ill.
Application July 3, 1953, Serial No. 365,950
4 Claims. (Cl. 222—148)

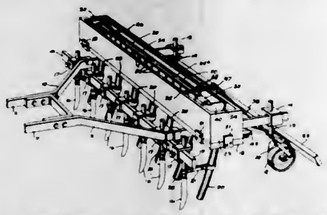
1. In a hermetically sealed container for dispensing paints and other suspensions of solid material which tend

to form dense suspensions, in combination, a valve comprising a seating surface disposed at the top of the container, a valve member having a bore and a flared valve seating member arranged to seat on said valve seating surface to close said valve, said valve member being arranged to be moved to open said valve, a discharge tube extending downwardly from said valve bore in a direction



towards the base of said container, and a cleaning member having one end positioned in said discharge tube and the other end disposed in said valve bore and arranged to be moved when said valve bore is moved to effect loosening of the dense suspension of solid material within the tube and thus permit flow therethrough when the valve is opened.

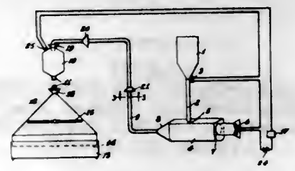
2,748,986
MULTIPLE ROW SEEDER AND FERTILIZER SIDE DRESSER
Harold J. Steel, Islington, Ontario, Canada
Application June 18, 1952, Serial No. 294,187
4 Claims. (Cl. 222—177)



1. For a garden type tractor, a seeding attachment comprising a base attachable to the frame of the tractor and having a plurality of uniformly spaced outlets located on the longitudinal centre line thereof, a seed box removably mountable on said base and having seed outlets corresponding in number to and registering with the outlets in said base, a first U-shaped trough mounted in said box and having seed outlets registering with the outlets in the seed box, a second longitudinally adjustable U-shaped trough within the first trough and having seed outlets therein positioned to be moved into registration with the seed outlets in the first trough, means for horizontally adjusting the second trough relative to the first mentioned trough to provide a seed outlet of a predetermined size, an agitator mounted horizontally in said second trough and having agitating members extending downwardly into close proximity to the bottom of the trough and means reciprocating said agitator in a horizontal plane to and fro over said openings.

2,748,987
LIVE STOCK FEEDING APPARATUS
John E. Murren, Neptune, N. J.
Application March 19, 1952, Serial No. 277,516
1 Claim. (Cl. 222—189)

In a pneumatic conveying system for livestock, a feeder member comprising a conduit having an inlet passage and an outlet passage, said outlet passage being larger than said inlet passage, air outlet means connected to and communicating with said inlet passage, said air outlet means being pervious to the passage of air and impervious to the passage of solid particles, a slot through the wall of said feeder member between said inlet and outlet



passages, and a movable plate cooperative with said slot for opening and closing said feeder conduit.

2,748,988
SOAP DISPENSER
Bertram W. Fromson, Weybridge, England
Application December 15, 1952, Serial No. 325,919
3 Claims. (Cl. 222—207)

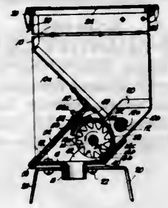


1. A dispensing container for liquid or paste materials, comprising a main container body of resilient material having a confining wall including opposed spaced apart end faces interconnected by a side face, said faces bounding an enclosure forming a hollow material storage chamber, a centrally arranged first tubular wall connected to one of said end faces and extending through said chamber part way to the other end face, a second centrally arranged tubular wall connected to the said other end face and extending inwardly into said chamber in co-axial alignment with said first wall, the inner ends of the said walls being normally spaced apart when the container end faces are relaxed but adapted to be seated one on the other when the opposed container end faces are pressed towards one another, said aligned tubular walls defining a material measuring and delivery passage, with said first tubular wall being shaped at one end to provide an enlargement to said passage adjacent one of said end faces, a closure cap mounted in said material passage enlargement and in sealing contact with said one end face, said second tubular wall being shaped to provide an enlargement to said passage adjacent to said other end face, a valve stem having one end centrally and threadably connected with said closure cap and having the other end provided with a valve head adapted to seat in the said passage enlargement adjacent said other end face, said valve stem extending through said material passage leaving a clearance between the stem and said tubular walls thereby to allow material to pass through said passage, said first tubular wall being provided with at least one opening leading to said storage chamber, the said valve head being adapted to close the other end of said material passage when said end faces are in relaxed condition and adapted to allow material to pass from said passage to the exterior of said container when the said opposed end faces are pressed towards one another.

2,748,989
FERTILIZER DISTRIBUTOR
Matthew J. Russel, Lincoln, Nebr.
Application July 10, 1952, Serial No. 298,031
5 Claims. (Cl. 222—238)

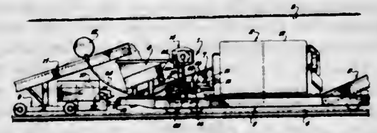
1. In a material distributing machine of the character described, a receptacle having a generally V-shaped bottom and adapted to be filled with material, one wall of said bottom having a centrally disposed discharge opening therein, a rotatable auger shaft within said receptacle

aligned with and spaced slightly above the bottom thereof having on its exterior oppositely spiraled threads terminating at said discharge openings, means for rotating shaft in a direction whereby the threads tend to compress material inwardly from the ends of said receptacle and between the auger shaft and said bottom and force same laterally through said discharge opening, and means



for taking material from said discharge opening at an even rate including a rotary distributor wheel positioned outside said receptacle and having a plurality of circumferentially spaced pockets around its periphery, the periphery of said wheel being positioned closely adjacent said discharge opening and the pockets being adapted to successively register with said discharge opening as said wheel is rotated.

2,748,990
APPARATUS FOR CONTROLLING THE FEED OF LIQUID TO CONCRETE MIXERS
Maxwell Fisher Kemper, Los Angeles, Calif.
Application August 25, 1952, Serial No. 306,226
11 Claims. (Cl. 222—373)



1. Apparatus for discharging metered amounts of liquid comprising: a closed tank, conduit means for discharging liquid from said tank, a valve for controlling the flow of liquid through said conduit means, means operable responsive to actuation of said valve for introducing into the tank a gaseous fluid under pressure for expelling liquid under pressure from said tank through said conduit means, said last named means including a pipe line leading into said tank, and float valve means operable in said pipe line to limit flow of liquid from said tank through said pipe line, said float valve means responding to pressure of said gaseous fluid whereby said gaseous fluid will force liquid from said pipe line back into said tank, a metering pipe in said tank connected with said conduit means and having an opening for admitting liquid from the tank into said conduit means, and means for moving the metering pipe to dispose said opening at different levels in said tank.

2,748,991
PASTE DISPENSER
Robert L. McCarthy, Worcester, Mass.
Application June 3, 1953, Serial No. 359,277
3 Claims. (Cl. 222—387)

1. A paste dispenser comprising a cylinder having a closed and an open end and an outlet at the closed end thereof, a swinging closure for selectively covering or exposing said outlet, a removable cylindrical cap selectively closing or opening the open end of the cylinder, a hollow rotatable interiorly threaded member located and held in said cylindrical cap against axial motion, a handle for rotating said threaded member in the cap, a hollow internally and externally screw-threaded element threaded into said member by the exterior threads thereof, a second hollow screw-threaded telescoping element engaged in



said first-named element, said handle being effective to extend the elements to their full extent from said first-named member, and said elements being substantially wholly received and housed in the cap in fully retracted condition, said cap being removable from the cylinder for filling the latter.

2,748,992
SPRAYING DEVICE
August H. Pinke, Kenneth H. Meeker, and John E. Oys, Hastings, Minn., and Robert C. Hudson, Glencoe, Ill., assignors to H. D. Hudson Manufacturing Company, Chicago, Ill., a corporation of Minnesota
Application July 5, 1952, Serial No. 297,332
14 Claims. (Cl. 222—402)



1. A spraying device comprising a tank having an enlarged upper end provided with an access opening for a spraying solution, a pump having a cylinder adapted to be removably mounted in the opening, sealing means carried by the upper end of the cylinder and a seat provided in the tank about the access opening, a closure seating on the upper end of the cylinder, camming arms carried by the closure having inclined camming surfaces on the outer ends of these arms, and spaced inturned and arcuate flanges on the enlarged upper end of the tank each provided with an inclined camming surface whereby rotation of said arms and closure in one direction causes the inclined camming surfaces on the arms to engage the inclined camming surfaces on the arcuate flanges of the tank forcing the closure against the upper end of the pump cylinder to compress the sealing means and seal the interior of the tank against the escape of pressure or spraying solution, said cylinder below its upper end being constricted whereby as the closure and camming arms are rotated in the opposite direction toward release position and these arms and the closure travel upwardly with the inclined camming surfaces on the upper end of the tank, the upper end of the cylinder is raised, the sealing means is withdrawn from the seat, and air within the tank is rapidly released about the constriction.

2,748,993
CONVEYOR MECHANISM FOR REMOVING PULVERIZED MATERIAL FROM STORAGE BINS AND THE LIKE
Victor E. Forrest, Minneapolis, Minn.
Application April 25, 1952, Serial No. 284,367
2 Claims. (Cl. 222—415)



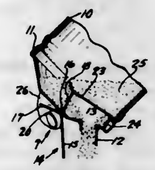
2. A conveyor mechanism for delivering a measured flow of finely divided material from a storage bin or the like, said conveyor mechanism comprising a pair of spaced substantially horizontal top and bottom platforms adapted to underlie the discharge opening of a material storage bin, the top platform having a plurality of openings therethrough to form a material distributing platform, the lower platform being imperforate and forming a material carrying deck and having a discharge end, endless moving conveyor means having an upper and a lower run with the upper run thereof travelling across the upper platform and the lower run thereof travelling across the lower material carrying deck, a plurality of conveyor slats carried by said endless conveyor and disposed normally to the direction of travel of said conveyor to positively scrape material from the bottom of the storage bin and discharge the same through said openings in the upper platform onto the lower material carrying deck, a plurality of spaced fixed cross baffles having the lower edge portions thereof spaced above the lower material carrying deck, the lower run of said conveyor means carrying material from one end of said deck to the discharge end thereof, said baffles causing said conveyor plates to be fully loaded with a predetermined volume of material at the discharge end of said deck so that the rate of discharge therefrom may be accurately controlled by the speed at which said conveyor means is driven.

2,748,994
HOLY WATER FOUNT
Jerome A. Scharenbroich, St. Cloud, Minn.
Application March 22, 1954, Serial No. 417,770
2 Claims. (Cl. 222—448)



1. A fount particularly adapted for dispensing small quantities of holy water comprising an upright container body having a filling opening at the upper end thereof, a closure for sealing off said filling opening, a small open well at the lower end of said reservoir having a concavely upwardly, sharply rounded interior surface for concentrating small quantities of holy water into an area of small compass to thereby minimize the evaporation of the holy water, a short passage communicating between the interior of said body and said well, a small valve mounted in said passage and normally resiliently urged to closed position and having an outwardly projecting valve stem, said valve substantially filling said passage to minimize the quantity of water standing therein which is exposed to the air, and a valve actuating member mounted for shifting movement and normally engaged against the extremities of said valve stem with a portion disposed in said well, whereby when said portion is urged or pressed inwardly, the valve will be opened to permit a flow of holy water into said well.

2,748,995
MEASURED QUANTITY GRANULATED MATERIAL DISPENSING CAPS
Roy M. Hightower, Grand Junction, and Robert F. Hightower, Denver, Colo.
Application February 15, 1954, Serial No. 410,244
2 Claims. (Cl. 222—449)



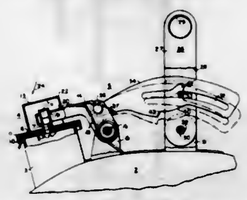
1. A measuring device adapted to form a closure for an open top vessel, comprising, a lid having a cylindrical flange for telescoping over the open end of a vessel, the top of the lid having a measuring compartment of which the top forms the outer wall, said compartment having an open end adjacent the center of the lid, that portion of the lid forming the outer wall of the compartment having an outwardly projecting discharge spout, a valve member having two angularly related arms one of which projects through an opening in the lid, the other arm being positioned on the outside of the lid and movable into position to close the discharge spout, the two arms being so related to the inner wall of the measuring compartment and to the spout that when the spout is covered the entrance into the measuring compartment will be open admitting material thereinto and when the spout is opened to permit the discharge of material the entrance into the compartment will be closed.

2,748,996
FERTILIZER AND SEED DISTRIBUTOR
Casper G. Fritschl, Jr., Milwaukee, Wis.
Application July 12, 1954, Serial No. 442,713
3 Claims. (Cl. 222—465)



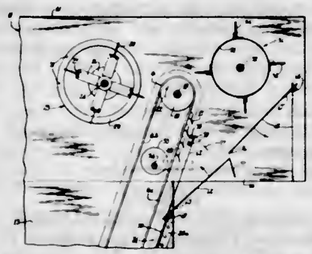
1. A hand implement for distributing fertilizer, seeds and the like over a garden bed of the type having an elongated cylindrical shell, a removable cap carried by the upper end of the shell, releasable means holding the cap on the shell against accidental movement, an upwardly extending handle on the cap and a manipulating hand grip secured to the handle, comprising a removable bottom cap connected with the shell including a bottom plate having a plurality of outlet openings therein, said shell having a struck out bead therein above the cap, and a funnel having a rim sprung in the bead, said funnel having its outlet arranged in slightly spaced relation to the cap.

2,748,997
SPOUT CLOSURE CAP AND OPERATING MECHANISM FOR SAFETY GASOLINE CANS
Roy H. Richmond, Sr., Wellsburg, W. Va., assignor to Eagle Manufacturing Company, Wellsburg, W. Va., a corporation of West Virginia
Original application June 23, 1951, Serial No. 233,185, now Patent No. 2,678,758, dated May 18, 1954. Divided and this application December 24, 1953, Serial No. 400,215
9 Claims. (Cl. 222—469)



1. Mechanism for seating and unseating a cap over the spout of a container comprising a cap, a sealing washer on the bottom face of said cap adapted to seat on the end of the spout, said cap being of larger diameter than the spout and having a radial overhang thereabout, a lever pivotally mounted on said container adjacent said spout, a pin secured to said cap and loosely secured to the free end of said lever to afford limited movement of said cap for proper seating over said spout, a carrying bail, link means for connecting said carrying bail to said lever to actuate said lever to and from positions seating and unseating said cap on the spout, and a substantially cylindrical section secured to said cap and projecting upwardly therefrom about the free end of said lever, said section being of a diameter and of a height to engage a surface on which said container may be upset and over which the container may be tumbling or rolling and prevent contact of the radially overhanging portion of said cap with said surface.

2,748,998
DISCHARGE DOOR CONSTRUCTION FOR A FIBER CONDITIONING APPARATUS
Francis A. Busald, Lebanon, Ind., assignor to Indiana Commercial Filters Corporation, a corporation of Indiana
Application May 1, 1952, Serial No. 285,475
8 Claims. (Cl. 222—503)



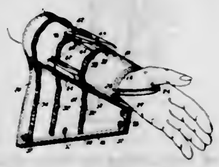
1. In a fiber feeding machine having a discharge opening, the improvement of a two piece valve controlling the flow of fibers through the discharge opening, one piece of said valve comprising a plate pivotally hinged on one margin at one pivot axis and movable upwardly from a substantially vertical open position to an inclined closed position, the other piece of said valve comprising a second plate pivotally hinged at one margin at a second pivot axis below said first axis and movable from an open displaced position downwardly to a closed position in general co-planar relation with said one piece of said valve, said two valve pieces forming together with one another a complete closure for said opening and forming in closed position a continuous planar surface providing an inclined ramp to direct fibers away from said opening.

2,748,999
GARMENT FORM
Israel L. Freedman, Lansdowne, Pa.
Application August 20, 1952, Serial No. 305,381
2 Claims. (Cl. 223—68)



1. A garment form insertable into the interior of a garment, comprising a sheet member having a surface configuration corresponding to the front of the torso for supporting that portion of the garment which covers the front of the torso and side portions curved to correspond with the sides of the body for supporting the side covering portions of the garment and having two spaced, rearwardly curved, downwardly and outwardly sloping top edge portions corresponding to the shoulders and supporting the shoulder covering portions of the garment while forming hooks engageable with the downwardly and outwardly sloping side portions of a clothes hanger for supporting the form and a garment on a hanger.

2,749,000
CLOTHES PIN HOLDER
John A. McKittrick, Burlington, Iowa
Application February 11, 1953, Serial No. 336,258
4 Claims. (Cl. 224—28)



1. In a clothes pin carrier comprising a base formed of a readily deformable material, a strap attached to one edge of said base and forming a loop extending outwardly therefrom, said base having lateral edges adapted to be brought in opposing relationship, said lateral edges tapering from one end of said base to the opposite end fastening means attached to said lateral edges and adapted to fasten one lateral edge in parallel relationship with the other lateral edge, tape like strips of a deformable material extending across said base and each being fastened to said base at spaced points along the length thereof, each strip forming loop portions extending upwardly from said base intermediate said points of attachment of sufficient size to accommodate one leg of a clothes pin between each of said looped portions and said base.

2,749,001
FILLING DEVICES FOR MONEY COUNTING MACHINES
Eugen Reis, Bruchsal, Germany
Application February 7, 1952, Serial No. 270,457
Claims priority, application Germany April 27, 1951
2 Claims. (Cl. 226—19)

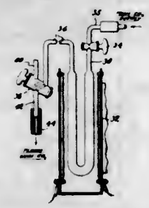
1. A filling device for money counting machines, comprising in combination an inclined coin plate, an outlet funnel arranged at the bottom of the inclined plate, a ver-

tical front plate arranged below said funnel, a sliding member guided on said front plate below said funnel, spring actuated means connected to said sliding member, a toothed rack fixed on said sliding member, an angle bar on said sliding member for the reception of discharge



tubes spaced at intervals equal to those between the teeth of said rack and adapted to be moved one after the other below said funnel, a shaft journaled on said front plate with locking and releasing means for said toothed rack on said sliding member, and an actuating means connected to said shaft.

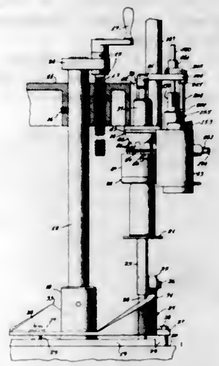
2,749,002
METHOD AND APPARATUS FOR EXHAUSTING INCANDESCENT LAMPS
Blanchard A. Perry, Port Murray, and Albert A. Schramm, Springfield, N. J., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application January 28, 1954, Serial No. 406,678
4 Claims. (Cl. 226—20.1)



1. A method of exhausting an incandescent lamp comprising baking, flushing and filling an exhaust manifold with a gas having a very low vapor pressure in the order of about .0003 micron at a temperature of about —190° C., immersing said manifold in a liquid coolant having a temperature of about —190° C. to reduce the vapor pressure in said manifold to less than one micron, simultaneously baking, flushing and filling said lamp with said gas, connecting said gas filled lamp to said exhaust manifold to reduce the pressure of said lamp and said exhaust manifold to less than one micron and tipping-off said lamp from said exhaust manifold.

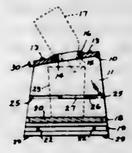
2,749,003
CONTAINER CLOSING DEVICE
Willy E. Zimmermann, Chicago, Ill.
Application June 2, 1951, Serial No. 229,596
18 Claims. (Cl. 53—130)

1. In a container capping device, a traveling capping head including separate disk and protective cap holding magazines, a disk capper unit, a protective capper unit coaxial with said disk capper unit, separate means associated with each capper unit and operated by traveling movement of said capping head for alternately feeding disk caps and protective caps in centered relation with respect to said disk and protective capper unit, and means operated by traveling movement of said capping head for alternately elevating the container first into engagement with a disk cap and then into engagement with



a protective cap for successively applying disk and protective caps thereto.

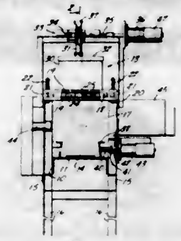
2,749,004
REFRESHMENT DISPENSER
William T. Hilts, Portland, and Joseph D. Meier, Beaverton, Oreg.
Application November 17, 1952, Serial No. 320,936
7 Claims. (Cl. 226—94)



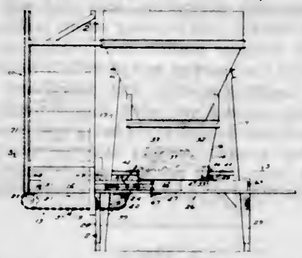
1. A dispenser for transferring liquid from a neck-type bottle to an open mouth container, comprising a top plate member, an opening in the top member adapted to receive therethrough the neck only of an inverted bottle whereby to support the bottle upon the top member, a base piate member disposed below the top member and adapted to support an open mouth container thereon, open sided guide means disposed below the opening in the top member in cooperative relation thereto and adapted to receive an open mouth container laterally through the open side thereof for positioning the container in cooperative relation with said top opening, and support means supporting the top and base members in vertical spaced relation a distance such that the inverted bottle is supported in a position inclined downwardly toward the side of the underlying open mouth container with the open end of the bottle terminating below the upper edge of the open mouth container.

2,749,005
MOLD FILLING MECHANISM
Louis Plusquellic, Pittsburgh, Pa., assignor to National Dairy Research Laboratories, Inc., Oakdale, N. Y., a corporation of Delaware
Application February 3, 1953, Serial No. 334,787
7 Claims. (Cl. 226—95)

1. Mold filling mechanism comprising a supporting surface, a continuously moving conveyor on the surface, stop means to position a mold over the supporting surface, stop means to prevent subsequent molds on the conveyor from approaching the supporting surface, liquid supply means, multiple valves positioned above the supporting surface and communicating with the liquid supply means, a photoelectric cell and light source mounted adjacent the conveyor, a first relay and circuit energized by the photoelectric cell, a second relay actuated by the first relay, a power supply circuit closed by the second relay, a switch in the power circuit, time delay actuating means for opening the last named switch, and means actuated by the first relay to close the circuit of the time delay actuating means.



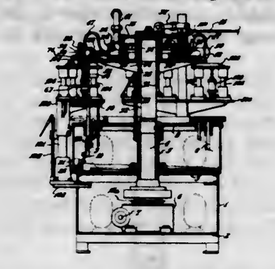
2,749,006
METHOD AND APPARATUS FOR FILLING RECEPTACLES WITH PULVERULENT MATERIAL OR THE LIKE
Robert Narso, San Leandro, Calif.
Application March 16, 1954, Serial No. 416,575
8 Claims. (Cl. 226—95)



1. Apparatus for filling open top receptacles with pulverulent material comprising: a substantially vertically disposed hopper having a lower discharge opening therein, horizontally disposed conveyor means mounted subjacent said hopper and aligned with said opening arranged to support receptacles thereon for movement past said opening, a scraper blade positioned adjacent said opening and over said conveyor means and having its outermost edge lying below the plane of said opening, means for pivotally supporting said blade about an axis traversing said conveyor means for rocking movement thereabout, and means resiliently urging said edge portion downwardly and toward said conveyor.

2,749,007
ROTARY FILLING MACHINE
Paul R. Fechheimer, Edward F. Rowekamp, and Alfred J. Swing, Cincinnati, Ohio, assignors to The Karl Kiefer Machine Company, Cincinnati, Ohio, a corporation of Ohio
Application November 6, 1952, Serial No. 319,126
21 Claims. (Cl. 226—97)

1. In a filling machine, a filling head comprising a stationary head element and a rotary head element in face-to-face contacting relation, filling spouts connected to said rotary filling head element for rotation therewith, container moving means moving synchronously with said filling spouts, a plurality of outlet ports in said stationary head element each connected by a conduit to a separate source of supply, inlet ports in said rotary head element for connecting said filling spouts serially to said outlet ports, the size of said inlet ports relative to said outlet ports being such that adjacent inlet ports will be jointly connected to a single outlet port during a substantial portion of the time each of the inlet ports is in communication with a given outlet port, valve means in each of said filling spouts for controlling the delivery of filling material therethrough, valve actuating means for opening and closing said filling spouts during the connection of said outlet ports to said inlet ports, said valve actuating means acting to open said filling spouts and meter therethrough predetermined increments of filling material, said container moving means including lifting platforms for juxtaposing containers to said filling spouts, each of said filling spouts carrying a member adapted to be contacted and moved upwardly by a container brought into contact therewith, a rod carried by said member and slidable relative to said filling spout, said filling spout including means actuated by said rod for effecting an operative connection between said valve means and said valve actuating means.



2,749,008
LADDER PLATFORM
Harry A. Wilson, Charlton City, Mass.
Application March 4, 1955, Serial No. 492,221
2 Claims. (Cl. 228—17)



1. A foldable ladder support comprising a pair of side bars, spaced rungs secured between said side bars, a platform element secured to the top ends of said side bars, a swingable platform hinged to the top portions of said side bars and being swingable to an outwardly extending position flush with said platform element, a detachable strut member connecting said swingable platform to said side bars in said outwardly extending position, said swingable platform having transversely aligned notched end portions, a transversely extending crossbar engaged in said notched end portions, said crossbar projecting outwardly a substantial distance from each side of said swingable platform, and respective retaining members pivoted to said notched end portions adjacent said crossbar and being movable into retaining positions transversely overlying said crossbar.

2,749,009
FOLDING LADDER
Lewis T. Price, Tulsa, Okla.
Application July 14, 1954, Serial No. 443,230
6 Claims. (Cl. 228—19.2)

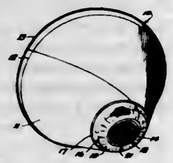
1. A folding ladder comprising a pair of stiles interconnected by a plurality of longitudinally spaced rungs, each of said stiles formed of a plurality of terminally hingedly connected sections, a side member positioned

alongside each of said stiles, each of said side members formed of a plurality of terminally hingedly connected sections of substantially the same length as the stile sections, the central portions of the side member sections and the adjacent stile sections being pivotally secured together thereby forming a lazy tong structure, and means for locking the lazy tong structure in extended position, said sections being provided with a centrally positioned pivotal and slidable connection wherein the stiles and side members are longitudinally movable in relation to



each other, and said locking means including a projection on one section, and a bayonet slot on the other sections wherein the projection will be engaged with the entrance of the slot when the sections are moved alongside each other and locked in the slot when the sections are moved longitudinaly of each other, said projection and slot being spaced from the pivotal and slidable connection between adjacent side-by-side sections thereby locking said sections in side-by-side relation wherein the side members and stile are locked in extended position.

2,749,010
TRUNCATED CONICAL PAPER CUP
Walter E. Amberg and Stephen W. Amberg, Chicago, Ill., assignors to Lily-Tulip Cup Corporation, a corporation of Delaware
Original application February 9, 1950, Serial No. 143,292. Divided and this application June 5, 1953, Serial No. 359,742
1 Claim. (Cl. 229—1.5)



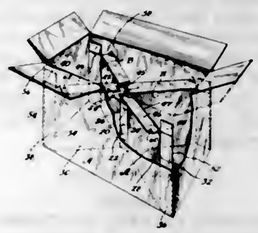
A truncated conical single piece paper cup of less than sixty degree cone angle comprising a substantially smooth frusto-conical side wall having a cone angle of less than sixty degrees, and a substantially transverse spoon serviceable pleated bottom merging with the smaller diameter end of the side wall, said spoon serviceable bottom having an outer annular portion, which merges with the side wall, provided with substantially radially disposed pleats and a central circular portion, which merges with the annular portion, provided with substantially circumferentially disposed pleats.

2,749,011
VENTILATED COMPARTMENTED BOX
Irwin Lee Lebow, Coral Gables, Fla., assignor to National Container Corporation, New York, N. Y., a corporation of Delaware
Application December 12, 1951, Serial No. 261,203
4 Claims. (Cl. 229—6)



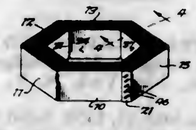
1. A ventilated partition for a box, said partition comprising separated lateral wall portions, flaps along the upper edges of said lateral wall portions bent toward one another substantially at right angles to said lateral wall portions so as to form a separating top wall between said spaced lateral walls, and a narrow bridging portion between and joining said flaps along foldlines at both sides of said bridging portion and having a central fold line parallel to said flaps, said bridging portion being adapted to be bent up along said side foldlines so as to define an upwardly projecting vane, said side foldlines abutting one another, and securing means holding the sections of said bridging portion bent around said central foldline against one another and thereby maintaining said partition in erected condition, said lateral and top walls defining an air passage extending longitudinally through said partition, said lateral walls being apertured, and at least one flap at each end of said partition, foldably secured to a lateral wall portion, and defining means by which said partition is adapted to be secured to said box.

2,749,012
FURNITURE SADDLE SUPPORT
Wallace W. Beach, Kenosha, Wis., assignor to Guardian Container Company, Sturtevant, Wis., a copartnership
Application March 18, 1953, Serial No. 343,149
4 Claims. (Cl. 229—14)



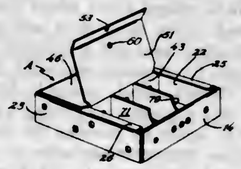
1. For use in packaging an article of furniture of the type having a plurality of corner legs depending from a main frame, the combination with a four-sided container of a saddle support, comprising upstanding panel members arranged generally in X-shape, flaps integral with said panel members adapted to be folded at substantially right angles thereto, extensions at each end of and integral with said panel members, said extensions extending into each of the corners of said container to bolster the same and being positioned in a plane parallel to opposed sides of said container to space said panel members from the corners of said container, said panels and said flaps providing a relatively wide support area for said main frame to support said main frame at a position removed from the legs thereof.

2,749,013
INTERNAL SUPPORT FOR PACKING BOXES
Robert L. Wilkinson, Norwalk, Calif., assignor to International Paper Company, New York, N. Y., a corporation of New York
Application April 14, 1954, Serial No. 423,119
3 Claims. (Cl. 229—14)



1. A self-supporting packing box protective and supporting pad formed from a single blank of corrugated paperboard or the like comprising a substantially rigid polygonal structure formed from a plurality of outside panel walls folded at the junctures with each other and connected at the ends, and a plurality of integral inner walls joined to each of said outer walls and alternately reverse folded in juxtaposition therewith, the width of each said inner wall panels being sufficiently great that its lateral edges are in frictional engagement with the lateral edges of each next adjacent inner wall whereby to maintain all of said inner walls in their folded positions relative to the outer wall panels and to maintain the said polygonal structure in a self-supporting condition.

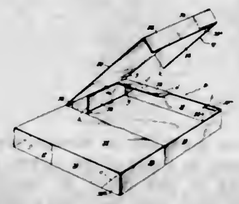
2,749,014
CELLULAR CONTAINERS
Henry Richard Russell, Thomas G. Mairs, and Russell J. Hennessey, St. Paul, Minn., assignors to Waldorf Paper Products Company, St. Paul, Minn., a corporation of Minnesota
Application May 7, 1952, Serial No. 286,486
5 Claims. (Cl. 229—27)



1. A cellular container including a body portion including a bottom panel, side and end wall panels foldably connected to said bottom panel, and lining panels hingedly connected to two opposed wall panels provided with partition strip slots and foldable to lie inwardly of their respective panels, a partition unit including a container cover and a pair of foldably connected partition walls extending between the other wall panels and said container cover consisting of panels pivotally connected to said partition walls, and partition strips intersecting said partition walls and interlocked therewith, and anchoring flaps on said partition strips which are anchored in said partition strip slots with said flaps held between said lining panels and the wall panels to which they are hinged and interlocked therewith.

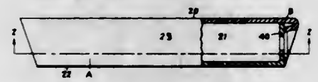
2,749,015
FOLDING CARTONS
Lewis C. Pennebaker, Chattanooga, Tenn., assignor to Container Corporation of America, Chicago, Ill., a corporation of Delaware
Application July 21, 1953, Serial No. 369,331
1 Claim. (Cl. 229—33)

A folding carton comprising a body portion and a cover portion; said body portion including a bottom, side walls hingedly connected to opposite margins of said bottom, a front wall and a rear wall hingedly connected to opposite margins of said bottom, means hingedly joining said front and side walls, reinforcing strips hingedly connected to said side walls along the rear edges thereof, and a bracing strip hingedly connected to the upper edge of each side wall; said side walls each having a diagonal fold line extending thereacross from the juncture point of said bottom, side wall and reinforcing strip to the upper edge of said side wall, thus defining a triangular piece capable of assuming an intermediate position between the side wall and reinforcing strip when the side wall is folded inwardly upon the bottom; said reinforcing strips being adhesively secured to said rear wall and having a length substantially greater than the height of said rear wall but less than one half the width of said rear wall and a height slightly less than the height of said rear wall, and having their upper edges located below the upper edge of said rear wall by an amount substantially equal to the thickness of the folding carton material; said bracing strips each extending forwardly from the rear edge of the side wall upon which



it is hinged across the juncture of said diagonal fold line with the upper edge of the side wall and having a fold line thereacross in alignment with said diagonal fold line, whereby said carton may be collapsed when said bracing strip is in the same plane as said side wall, and each bracing strip also having its rear edge at right angles to the upper edge of said side wall, whereby said rear edge will rest upon the upper edge of said reinforcing strip when said bracing strip is extending inwardly at right angles to said side wall to limit the downward movement of said bracing strip and effectively prevent collapse of said carton; and said cover portion including a top hingedly connected to the upper edge of said rear wall and inwardly foldable front and side flanges hingedly connected to said top, each of said side flanges having a length substantially equal to the sum of the length of said top plus the height of said rear wall less the length of the adjacent one of said reinforcing strips.

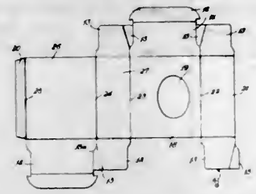
2,749,016
RE-USABLE COLLAPSIBLE CARTON
Onil O. Cote, Manchester, N. H.
Application December 30, 1952, Serial No. 328,741
5 Claims. (Cl. 229—39)



1. A one piece, collapsible, tubular carton of rectangular cross section for use in carrying baked goods, and capable of being stacked, said carton having an elongated, flat, rectangular top wall; an elongated flat, rectangular bottom wall equal in width to said top wall but of less length than said top wall, a pair of elongated, flat, isosceles trapezoidal side walls and a pair of flat, rectangular end closure walls, said elongated top, bottom and side walls being hinged to each other along longitudinally extending lines of fold to form a tube when erected from flat collapsed condition, said rectangular end closure walls being each hingedly connected, along single lateral fold lines to an opposite end of said bottom wall and adapted to sustain said carton in tubular condition when upfolded

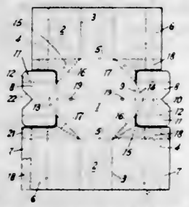
to a position normal to said bottom wall and said bottom wall being centrally disposed lengthwise and parallel to said top wall to form a pair of handle means of hooded configuration at each opposite end of said carton when erected, each said handle means comprising the portions of the adjacent flat top wall and flat, isoceles, trapezoidal side walls projecting beyond said bottom wall.

2,749,017
CARTONS
Bernard H. Kravitz, Chicago, Ill., assignor to Cooper Carton Corporation, Chicago, Ill., a corporation of Illinois
Application July 17, 1953, Serial No. 368,738
5 Claims. (Cl. 229—39)



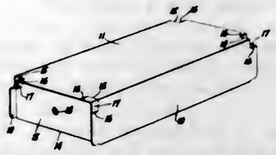
1. In a carton providing a storage space accessible through an opening in a side of the carton, a pair of flaps foldably attached to the edges of opposite sidewalls bordering the opening, said flaps being folded to extend into the storage space of said carton, at least one of said flaps having an ear projecting outwardly from the flap in a direction towards said opening and away from the main portion of the storage space and means for closing said opening including an element foldably attached to a sidewall bordering said opening intermediate said opposite sidewalls, said ear normally extending beyond the plane of the intermediate sidewall when the carton is squared preliminary to closing said opening and said element being folded over said flaps and engaging said outwardly-projecting ear adjacent said intermediate sidewall to hold the inner end of said one of the flaps within said storage space at a distance spaced from said element with said means in position closing said opening, and means securing said element in said closed position.

2,749,018
COLLAPSIBLE TRAYS
Aaron Berke, New York, N. Y.
Application August 16, 1952, Serial No. 304,794
2 Claims. (Cl. 229—41)



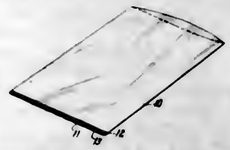
1. A tray having a polygonal bottom, upstanding portions hinge-connected adjacent their midpoints to two opposite edges of the bottom, said portions being longer than said edges and united end to end and comprising sections forming the sides of the box, retaining members adjacent said ends hinge-connected adjacent their midpoints to other opposite edges of said bottom, said members being longer than said last-named edges, and folded webs flanking said members and hinge-connected to said portions and still other edges of the bottom between said members and adjacent sides, said members being within the tray adjacent the united ends of said sections said bottom having a central score line on its inner face extending between said members, and said members each having a central score line registering with said score line in the bottom, said members also having diagonal score lines joining the central score lines in said members to the extremities of said other opposite edges of the bottom.

2,749,019
BREAD TRAY CARTON AND THE LIKE
Wilfred Ohlund, Arlington, Mass., assignor to Robert Gair Company, Inc., New York, N. Y., a corporation of Delaware
Application May 19, 1954, Serial No. 430,847
3 Claims. (Cl. 229—45)



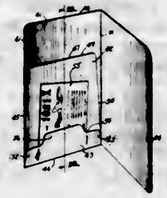
1. A paperboard box having two pairs of opposed wall panels and a closure panel at an end of the box, said closure panel extending from one of said wall panels and adjoining the latter along a transverse fold line, a cut line extending transversely across the longitudinal fold line between two adjoining wall panels near said end of the box at the side which is opposite said transverse fold line, said cut line extending for a short distance into each of said adjoining wall panels, longitudinal fold lines extending from the ends of said cut line to the ends of the respective adjoining wall panels, said cut line and the fold lines extending from its ends defining an articulated corner strap, said box being formed of stiff fibreboard, box board, corrugated board or like heavy stock, and said fold lines being formed by scoring said stock to provide flexible hinged joints where the stiff sections of the articulated corner strap meet said respective wall panels and each other, said stiff articulated sections forming a toggle latch for repeated operation in locking and unlocking the closure panel, operable by pressing the latch inwardly into a position overlying a corner of said closure panel and again by pressing the latch outwardly from said position, the combined stiffness of said articulated sections and flexibility of said hinged joints enabling the toggle latch to repeatedly flex the adjoining wall panels outwardly until the articulated sections are approximately in line to pass a dead center position and be snapped into its locked (or unlocked) position upon return of said adjoining wall panels to their normal unflexed position.

2,749,020
BAG
Thomas R. Baxter, Mount Vernon, Ohio, assignor, by mesne assignments, to Continental Can Company, Inc., New York, N. Y., a corporation of New York
Application July 19, 1950, Serial No. 174,604
8 Claims. (Cl. 229—53)



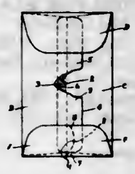
1. A bag formed of relatively flexible sheet material having heat sealing characteristics which comprises a tubular body portion and a double seam end closure consisting of a ribbon-like transversely extending flat seam and an adjoining bead seam formation extending along the marginal edge only of the flat seam.

2,749,021
ENVELOPE COMPARTMENTS
Walter Lee Hiersteiner, Kansas City, Mo., assignor to Tension Envelope Corporation, Kansas City, Mo., a corporation of Delaware
Application October 29, 1953, Serial No. 389,036
1 Claim. (Cl. 229—72)



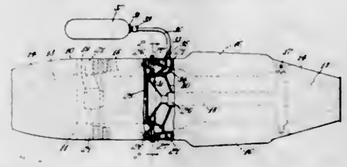
A wallet type envelope including, two elongated and generally rectangular panels of substantially like size and having interconnection along one of their longer sides by a fold on which one panel is adapted to swing to and from covering relation with a face side of the other panel, a side flap forming a main pocket on said face side of the said other panel and having a bottom edge registering with the bottom edge of the said other panel and having a side edge connected by a fold with the edge of the said other panel opposite the fold which connects said panels, a bottom flap on the bottom edge of the said other panel and overlying the bottom edge of the side flap, said bottom flap having ends connected with the side flap by means of an adhesive to retain the side flap in contact with the said one face side to close the bottom of said main pocket and to form a transverse supplementary pocket on the side flap, the upper edge of the side flap and the side edge along said fold being free to provide a corner insert opening for the main pocket, said bottom flap being of less height than the side flap and the side flap being of less height than the said other panel, to leave an upper portion of the side flap and an upper portion of the said other panel for cooperating with the said one panel in engaging portions of inserts placed in said pockets when said one panel is closed upon said other panel to close the portion of the corner insert that extends along the fold which connects said panels.

2,749,022
DISPENSING ENVELOPE
Neville H. Ehmann, Havertown, Pa.
Application July 15, 1953, Serial No. 368,123
2 Claims. (Cl. 229—85)



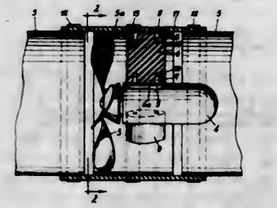
1. In an envelope for the purpose described, a rear wall composed of two parts having overlapping edges united along a seam line which extends substantially from end to end of the overlapped edges, said seam line adjacent the lower end of the outermost of the lapped edges of said back parts being inset in respect to the edge whereby a length of the edge is free to provide an unsecured free back flap element, a closure for the upper end of the envelope, a flap closure at the bottom end of the envelope and normally overlying both parts of the envelope rear wall, a scored line extending across said bottom closure flap and dividing it intermediate its ends into two tabs, said scored line extending across the envelope bottom closure flap in a plane overlying the outer face of the unsecured free back flap element, adhesive means securing one only of said tabs to the envelope back to close the lower end thereof, the other flap being tearable along said scored line, and the scored end of said tab being insertable beneath the free back flap element and extending thereunder to a point closely adjacent the seam line for removably securing said tab in overlapped relationship to the envelope back.

2,749,023
GAS TURBINE ENGINES
Gordon Manns Lewis, Bristol, England, assignor to The Bristol Aeroplane Company Limited, Bristol, England, a British company
Application February 9, 1953, Serial No. 335,634
Claims priority, application Great Britain February 18, 1952
13 Claims. (Cl. 230—116)



1. In a rotary compressor gas turbine plant comprising a fixed structure, a compressor and a turbine through both of which a working medium passes in succession, the working medium compressed in said compressor being subsequently expanded through said turbine, said compressor and said turbine each having a blade carrying rotor member and said rotor members being drivingly coupled together so that during normal operation of said plant said turbine drives said compressor rotor, a ring of starting blades directly attached to said compressor rotor member co-axially therewith, a nozzle on said fixed structure and arranged to direct air upon said starting blades, whereby to rotate said compressor rotor member and start the plant, and means adapted to conduct air from a source of air under pressure to said nozzle comprising a coupling member adapted to be connected to the source of air, said starting blades being positioned out of the path of movement of the working medium.

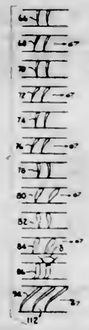
2,749,024
ARRANGEMENT OF A BLOWER IN A PIPE LINE
Karl Wilfert, Stuttgart-Degerloch, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Untertürkheim, Germany
Application November 14, 1951, Serial No. 256,320
8 Claims. (Cl. 230—117)



1. In a ventilating conduit having opposed end portions for motor vehicles, a metal housing section inserted intermediate said opposed end portions of said conduit, an elastic hose connection surrounding said section and overlapping said opposed portions, means for clamping said hose to said end portions of the conduit, an impeller, drive means for said impeller, means for axially mounting said impeller and said drive means in said housing section including radially extending, prestressed resilient noise

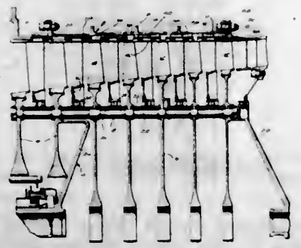
and shock absorbing supporting arms abutting directly with the inner surfaces thereof against said drive means and with the outer surfaces thereof against said housing section, and means for securing said arms to said housing section and to said drive means against lateral displacement.

2,749,025
COMPRESSORS
Edward A. Stalker, Bay City, Mich.
Original application December 26, 1947, Serial No. 794,018. Divided and this application June 2, 1952, Serial No. 291,252
3 Claims. (Cl. 230—122)



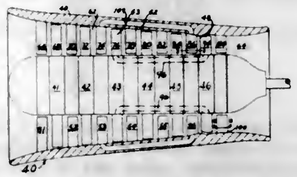
1. In combination in an axial flow compressor, a case, a plurality of stages of rotor and stator blades, and means mounting said stages of stator blades in said case, means mounting said rotor stages for rotation about an axis for pumping fluid, the blades of said stages each being defined by blade sections each having a relatively sharp trailing end and a circular arc nose defined by a selected radius, said rotor and stator stages being alternated in succession along the axis of rotation, the blades of a downstream said stage each having blade sections of larger nose radii than the blades of a stage on the upstream side thereof, said downstream stage having a plurality of stages on the upstream side thereof to increase the fluid temperature and therewith the velocity of sound in said fluid adapting said blades of said downstream stage to operate efficiently.

2,749,026
STATOR CONSTRUCTION FOR COMPRESSORS
Augustus Hasbrouck, Middletown, and Byron H. Shinn, Rockville, Conn., assignors to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application February 27, 1951, Serial No. 212,974
9 Claims. (Cl. 230—122)



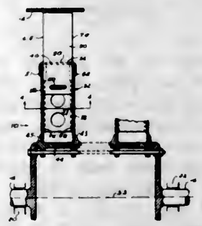
1. In a stator construction for a compressor, a row of radially extending stator vanes, and a ring segment engaging with and supporting the outer ends of said vanes, said ring segment including spaced apart substantially concentric sleeve segments and means by which said segments are secured together, said sleeve segments having aligned openings therein in which the vane ends are located, the openings exactly fitting the shape of the vane therein, said vanes being retained in the ring segments solely by the fit between the vanes and the openings in the ring segments.

2,749,027
COMPRESSOR
Edward A. Stalker, Bay City, Mich.
Application December 26, 1947, Serial No. 794,018
8 Claims. (Cl. 230—122)



1. In combination in a compressor adapted to have a flow of fluid of supersonic velocity relative to compressor blades thereof, a wall defining a case, a hub including a hub peripheral wall mounted in said case for rotation about an axis, a plurality of axial flow blades mounted on said hub wall and spaced peripherally thereabout to define a plurality of rotor passages, each said blade having a fore portion directed at a substantial angle to said axis of rotation and toward the direction of said rotation, said blades having their aft portions curved to be more nearly parallel to said axis than to the said direction of said fore portion, each said blade having a tapered blade section with its maximum thickness positioned between its leading and trailing ends giving to each said rotor passage a reduced peripheral width positioned between blade leading and trailing edges, said case and hub walls bounding said passages on the peripheral sides thereof, said case and hub walls departing from each other along said axis in the downstream direction at a rate to exclude reduced cross sectional areas between said leading edges and the position of said maximum thickness, the cross sectional areas of said passages defined by said walls and said aft portions of said blades decreasing rearward therealong, the configuration of said rotor passages adapting said rotor for rotation at supersonic velocity relative to said case for the efficient compression of said fluid.

2,749,028
BLADED ROTORS FOR ELASTIC FLUID MACHINES
Edward A. Stalker, Bay City, Mich., assignor to The Stalker Development Company, Bay City, Mich., a corporation of Michigan
Application September 10, 1952, Serial No. 308,861
10 Claims. (Cl. 230—134)



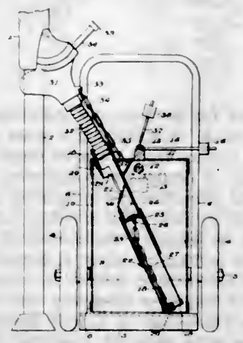
1. In combination in an axial flow compressor rotor, a hub structure comprising axially spaced sheet metal side plates, a plurality of axial flow blades supported on said structure peripherally spaced thereabout and extending radially thereinto and between said plates, and a rim means comprising a plurality of peripherally spaced sheet metal rim segments each positioned between adjacent said blades, each said segment having an element extending radially inward and faying with the adjacent blade surface, each said blade being bonded to the adjacent said element, each said element having peripherally extensive flanges bonded to said side plates.

2,749,029
COMPRESSOR BLADE
Claus G. Goetzel, Yonkers, and John L. Ellis, New York, N. Y., assignors to Sintercast Corporation of America, New York, N. Y., a corporation of New York
Application November 26, 1948, Serial No. 62,126
7 Claims. (Cl. 230—134)



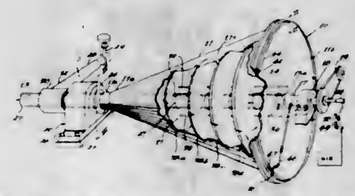
1. A compressor blade having an airfoil section and a foot section joined and intimately bonded thereto, the airfoil section comprising a preshaped wrought steel member containing an alloying constituent of an atomic interchange bond-promoting element at least adjacent the surface thereof, the foot section comprising a sintered metal skeleton body having interconnecting pores distributed therethrough which contain an infiltrant metal having as an alloying constituent said atomic interchange bond-promoting element, the intimate bond comprising the wrought airfoil section on one side and the sintered skeleton body of the foot section and its contained infiltrant metal on the other side.

2,749,030
REMOVAL RECEPTACLE FOR THE CONTENTS OF COIN BOXES
Whitney W. Jones, Philadelphia, Pa.
Application December 16, 1952, Serial No. 326,262
1 Claim. (Cl. 232—16)



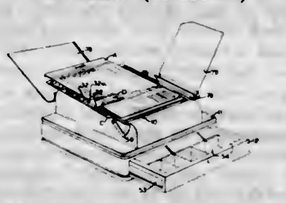
A receptacle for transporting coins, comprising a substantially closed hollow container, a tubular housing within and extending from a lower portion of said container upwardly and opening through an upper portion thereof, said housing having an opening communicating with the upper portion of the interior of said container, a tube closed at its lower end and slidable within said housing, whereby said tube may be telescoped within and adjacent to the bottom of said housing or partially withdrawn so as to extend freely therefrom, the lower portion of said tube being provided with an opening adapted to register with the opening in said housing while in an extended position, said tube being secured to and removable only with said lid, a gravity-actuated sleeve surrounding said housing normally below said first opening and operative upon inverting said receptacle to shift into a position closing said first opening, to prevent coins within said container outside of said housing falling reversely through said openings when in registry and from said receptacle, means to limit the outward movement of said tube with respect to said housing, and a hollow head secured to the upper end of said tube and operative when attached to a coin-controlled device to receive and convey coins from such device to the interior of said tube and thence to said housing and said container.

2,749,031
SEPARATOR-PUMPING
Lloyd Hornbostel, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a corporation of Wisconsin
Application June 22, 1953, Serial No. 363,249
8 Claims. (Cl. 233—20)



1. A fluid pump and centrifuge comprising a generally conically shaped casing, means defining a fluid inlet near the casing apex, a hollow shaft defining an axial fluid outlet near the casing base, means defining a second fluid outlet at the periphery of the casing base, means rotatable relative to said shaft within the casing imparting centrifugal force to fluid in the casing to urge the fluid toward the outlets, and baffle means in said casing interposed between the inlet and said outlets for causing fluid flow therein along the casing walls and substantially preventing axially aligned fluid flow toward the casing base.

2,749,032
BOOKKEEPING DEVICE WITH CASH DRAWER
Teddy F. Smuzz, Athens, Ohio, assignor, by mesne assignments, to Royal McBee Corporation, a corporation of New York
Application December 4, 1953, Serial No. 396,139
3 Claims. (Cl. 235—5)



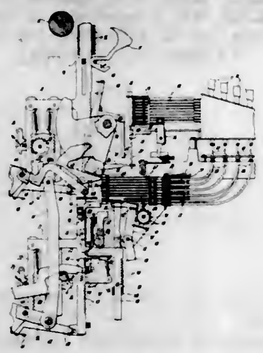
2. In combination a housing, a collating device, mounted on the top of said housing, comprising a writing board adapted to collate in proper register a plurality of sheets on the upper surface thereof, a sheet lifting member mounted on the board adjacent one side margin thereof for swinging movement from a horizontal to an inclined position to lift the top sheet and enable a second sheet to be inserted between the first sheet and the writing board, means for raising said sheet lifting member, an upper cover shield hinged to the top of the collating board covering the upper portion of the sheet, a lower cover shield hinged to the same edge of the board as said lifting member whereby only the central portion of said sheet is exposed, and a cash drawer mounted for sliding movement into and out of the lower portion of said housing, spring means normally tending to move said drawer toward its outer position, latch means retaining said drawer in closed

position, and means in the upper portion of said housing comprising an actuating lever outside of the housing for either releasing said latch means or for raising said lower cover shield to permit removal or insertion of ledger sheets on said collating board.

2,749,033
MECHANISM FOR REINDEXING A TOTAL IN AN ACCOUNTING MACHINE

Pieter Latour, Amsterdam, Netherlands, assignor to Underwood Corporation, New York, N. Y., a corporation of Delaware

Application August 11, 1953, Serial No. 373,630
11 Claims. (Cl. 235—60.31)



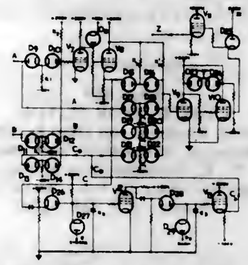
5. An accounting machine of the class described comprising printing members, cycling means to advance said printing members to printing positions and restore them to a home position, index members settable to limit advance movement of said printing members, a plurality of digit keys to set said index members to represent an amount to be printed, a register engageable with said printing members to receive amounts therefrom and to limit advance of said printing members in total printing operations, a plurality of settable slides, each slide engageable by a printing member to be moved into an amount representing position and yieldingly restored by said printing member, a holding member engageable with said settable slides during selected total printing cycles to retain said slides in amount representing positions during restoration of said printing members, an actuating member on each settable slide, operating members common to all said actuating members and each connected to one of said digit keys, said actuating members being normally aligned with one of said operating members and moved by said settable slides into alignment with the operating member for the digit key corresponding to the digit printed by the printing member connected with said slide, power means operating said actuating members seriatim from the highest to the lowest denominational order, and a control linkage operated by said cycling means at the end of a cycle thereof to initiate an operation of said power means.

2,749,034
ELECTRONIC CIRCUIT FOR ADDING BINARY NUMBERS

Frederic C. Williams, Timpereley, and Tom Kilburn, Davyhulme, Manchester, England, assignors to National Research Development Corporation, London, England, a corporation of Great Britain

Application July 18, 1949, Serial No. 105,352
Claims priority, application Great Britain July 26, 1948
20 Claims. (Cl. 235—61)

6. In a device for adding binary numbers, a first addition circuit, a second addition circuit similar to the first, a carry digit circuit for feeding a carry digit from the first circuit to the second circuit, said carry digit circuit including delay means for delaying the carry digit, input terminals for receiving digital information in the form of trains of pulses for application to both of said addi-

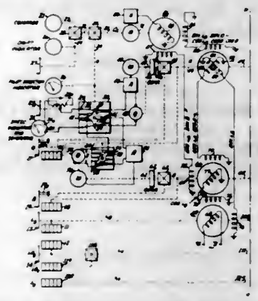


tion circuits, and common means for controlling the repetition rate of the pulses of said trains and for controlling the delay period of said delay means to effect a period of delay by the latter equal to the shortest period between pulses of said trains.

2,749,035
HOMING NAVIGATOR

John W. Gray, White Plains, N. Y., assignor to General Precision Laboratory Incorporated, a corporation of New York

Application August 15, 1950, Serial No. 179,452
13 Claims. (Cl. 235—61)

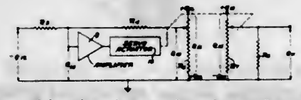


1. A navigator for continuously indicating the proper heading of a vehicle in traversing a great circle course over the earth's surface from a known point of departure to a known point of destination comprising, speed entering means, a first integrator for integrating a function of the speed entered by said speed entering means, distance entering means for entering the calculated great circle distance between said known point of departure and said known point of destination, subtractive means operative by the output of said first integrator and said distance entering means producing an output indicative of distance remaining to be traveled, a second integrator for integrating a function of said distance remaining to be traveled, course angle entering means for entering the calculated initial course angle at the point of destination, summation means operated by said course angle entering means and the output of said second integrator producing an output indicative of the course angle at the point of destination based on present vehicle position, latitude of destination entering means, trigonometric calculating means operative by said latitude of destination entering means, said distance remaining to be traveled output and said course angle based on present vehicle position output to produce a calculated output representative of course angle at present vehicle position, compass heading entering means, drift entering means, algebraic summation means operated by said compass heading entering means, said drift entering means and the output of said trigonometric calculating means, an indicator actuated by the output of said algebraic summation means, and means for deriving trigonometric functions of said algebraic summation means inserted between the output thereof and the inputs of said first and second integrators.

2,749,036
MEANS FOR PREVENTING COMPUTING ERRORS IN A MULTIPLE POTENTIOMETER COMPUTING ELEMENT

Richard E. Langworthy, Cuyahoga Falls, Ohio, assignor to Goodyear Aircraft Corporation, Akron, Ohio, a corporation of Delaware

Application October 7, 1950, Serial No. 188,987
7 Claims. (Cl. 235—61)

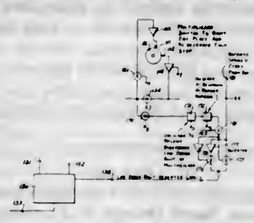


3. The combination in an electric analog computer of a pair of mechanically ganged potentiometers, a voltage source applied across the ends of one potentiometer, a high gain D. C. amplifier, a first resistance connecting the wiper of said one potentiometer to the input of the amplifier, a second resistance, a second input voltage connected through said second resistance to the input of the amplifier, a servo means operated by the output of the amplifier for moving the wipers of the potentiometers, a fixed voltage across the ends of the second potentiometer, and an output impedance connecting the wiper and one end of said second potentiometer.

2,749,037
ELECTRONIC COMPUTER FOR MULTIPLICATION

George R. Stibitz, Burlington, Vt.

Application April 21, 1950, Serial No. 157,369
14 Claims. (Cl. 235—61)

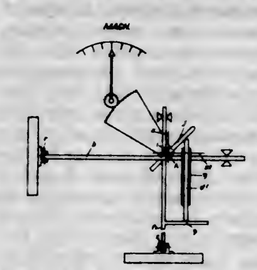


2. In a computer of the digital type in which the two binary digits are represented by plus-minus and minus-plus voltage couples respectively and in which computation takes place in a series of steps each characterized by the flowing of a binary number digit by digit from one storage device to another, the combination comprising means for dividing a binary number into a retained portion and a discarded low order digit, a first two-condition device of the type in which the output voltage comes into correspondence with the input voltage and remains stably in such condition upon momentary unlocking of the same, means for applying said binary number to the input of said two-condition device, means for momentarily unlocking said two-condition device in synchronism with the arrival of said discarded digit and at an instant during the digit interval when the voltage is maximum so that the two-condition device assumes a first stable condition when the discarded binary digit is a binary 1 and a second condition when the discarded digit is a binary 0, means including a second two-condition device which assumes a first stable condition whenever the retained portion of said binary number is to be utilized in the ensuing step of computation, and a concurrence device coupled to said two-condition devices, said concurrence device having means for adding a binary 1 to said retained portion whenever said two-condition devices both occupy their first stable condition.

2,749,038
APPARATUS FOR COMPUTING THE PRODUCT OR RATIO OF TWO VARIABLES

William F. F. Martin-Hurst, Cefn Coed, near Merthyr Tydfil, Wales, assignor to Teddington Aircraft Controls Limited, Cefn Coed, near Merthyr Tydfil, South Wales

Application May 9, 1952, Serial No. 286,964
Claims priority, application Great Britain May 11, 1951
2 Claims. (Cl. 235—61)

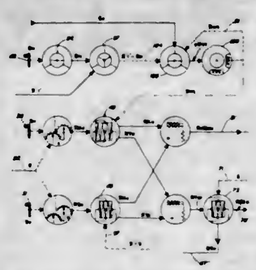


1. A Machmeter for computing the ratio of the air speed of an aircraft in flight to the speed of sound, comprising two pressure sensitive devices responsive respectively to the pressure developed by the air speed of the aircraft minus the static air pressure and to the static air pressure, a pair of rods guided for movement longitudinally only and in relatively angular paths and connected to and movable linearly by the respective pressure sensitive devices and carrying arms extending laterally from the respective rods, one of said arms being slidable transversely of the respective rod and arranged to abut at one end the other arm at a predetermined angle and said arms being movable linearly by the respective rods to maintain said arms throughout their movements in parallelism with the axes of a basic graph, an oscillatable shaft disposed at a point corresponding to the point of origin of such graph axes, a follower arm carried by said shaft and arranged to abut at a point spaced from said shaft the other end of said slidable arm, and an indicating instrument having means for transmitting thereto movements of said shaft.

2,749,039
WIND RESOLUTION APPARATUS

Carlton W. Miller, Rochester, N. Y., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy

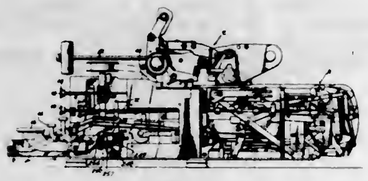
Application April 26, 1949, Serial No. 89,599
7 Claims. (Cl. 235—61.5)



3. In wind resolution apparatus of the character disclosed for directing an own ship gun to a target, in

combination, first means for obtaining a voltage corresponding to the true wind direction, B*w*, second means for obtaining a voltage corresponding to the director train, B'*r*', third means operatively connected to said first and second means and having both said voltages applied thereto, said third means producing a shaft rotation corresponding to the difference quantity, *B'r'—Bw*, control transformer means having said shaft rotation applied thereto, means for supplying a voltage signal proportional to own ship course signal, C*o*, to the control transformer, a second means supplying a shaft rotation to the control transformer, which rotation is proportional to the line of sight-true wind angle, B*ws*, said control transformer producing a voltage proportional to instantaneous errors, *e*, in said angle B*ws* which is fed back into said second means to produce a rotation of said shaft which reduces *e*B*ws* to zero, means producing a voltage signal proportional to the product, RS*w*, of range of target, R, and true wind speed, S*w*, means receiving the shaft rotation proportional to said B*ws* from the said second means and the voltage signal proportional to said product RS*w* to produce output signals proportional, respectively, to the product RX*w* of range R and cross wind X*w* and the product RY*w* of range R and range component of true wind, means for producing signals proportional, respectively, to the product RX*o* of range R and cross component of own ship velocity, and the product, RY*o*, of range R and range component of own ship velocity, Y*o*, means to which said RX*w* and RX*o* are fed to produce a signal proportional to linear traverse rate correction due to cross wind, R*d*B*ws*, means to which said RY*w* and RY*o* are fed to produce an output signal proportional to the product, RY*wr*, of range R and relative range wind Y*wr*, a shaft rotation proportional to target elevation, E, means receiving said signal RY*wr* and the shaft rotation E to produce output signals proportional to range rate correction due to line of sight wind, *dRw*, and linear elevation rate correction due to elevation wind, R*d*E*w*, said quantities R*d*B*ws*, R*d*E*w* and *dRw* being proportional to the corrections required to correct the gun for the effect of wind on the firing.

2,749,040
MOTOR BAR INTERLOCK
Charles A. Parker, Chicago, Ill., and Clifton K. Rainey, Knoxville, Tenn., assignors, by mesne assignments, to Burroughs Corporation, a corporation of Michigan
Original application June 14, 1949, Serial No. 99,081, now Patent No. 2,696,945, dated December 14, 1954. Divided and this application February 23, 1952, Serial No. 272,976
11 Claims. (Cl. 235—130)



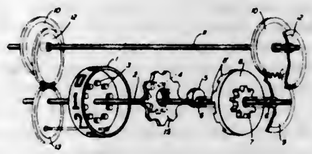
8. In an accounting machine having manually operable keys movable from and to a normal position in their function of operation, calculating mechanism, motor means, means to enable said motor means to drive the calculating mechanism in a cycle of operation, and a manipulative, cycle initiating, motor bar movable from a normal position to a cycle initiating position, and means operative by the motor bar upon movement of the latter to cycle initiating position to restore to normal position any of said manually operated keys out of normal position, and thereupon render said enabling means effective.

2,749,041
COUNTING AND CONTROL DEVICE
Adolph E. Gersch, Chicago, Ill., assignor to Geo. Stevens Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application November 15, 1954, Serial No. 468,679
10 Claims. (Cl. 235—132)



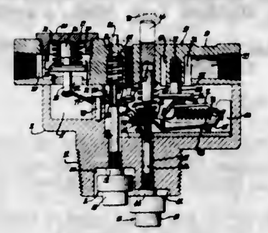
3. A combination counter and control device comprising a first counter dial and pointer and a second counter dial and pointer, an input drive shaft, drive means interconnecting said drive shaft and said dials and pointers to cause relative rotation between said dials and pointers, said first dial and pointer recording units of revolution of said drive shaft and said second dial and pointer indicating multiple units of rotation of said drive shaft, a first group of control switches associated with said first dial and pointer and a second group of control switches associated with said second dial and pointer, actuating means interconnecting said drive means and said control switches to cause actuation of each control switch of said first group at a predetermined position of said first pointer with respect to said first dial and to cause actuation of each control switch of the second group at a predetermined position of said second dial with respect to said second pointer the order and the point of actuation of said switches being adjustable, and circuit means interconnecting said switches so that said switches control an associated electrical circuit in sequence, the first switch in said first group controlling the associated electrical circuit until actuated whereupon the next control switch controls the associated circuit, each control switch controlling the associated circuit in turn until all of the control switches are actuated.

2,749,042
REGISTERING MECHANISM
George C. Chase, South Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a corporation of Delaware
Application October 13, 1951, Serial No. 251,174
2 Claims. (Cl. 235—136)



1. In a register, numeral wheels, differential drive gearing for each of said wheels operable to merge digital and tens transfer values, a digital input gear for driving each differential gearing, an eccentric hub for driving each differential gearing, a drive train for each eccentric hub including a pair of continuously engaged elliptic gears, and a fixed driving attachment between one each of said gears and the next lower order numeral wheel.

2,749,043
THERMOSTAT AND OVER-TEMPERATURE GAS SHUT-OFF VALVE
Samuel G. Eskin, Chicago, Ill., assignor to The Dole Valve Company, Chicago, Ill., a corporation of Illinois
Application August 3, 1953, Serial No. 371,874
7 Claims. (Cl. 236—21)



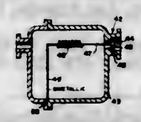
2. In a thermostat and over temperature gas shut off valve, a valve body having a valve chamber therein, an inlet into said chamber, an outlet from said chamber, separate valves controlling the passage of gas from said inlet to said chamber and from said chamber through said outlet, said valve body having a boss for threading within the wall of a hot water heater into contact with the water therein, two thermostatic elements threaded within said boss and contained within the extremities thereof, each having a casing on the outside of said boss and containing a thermal responsive material and positioned for intimate association with a medium being heated, and having a cylinder extending therefrom and a piston extensible within said valve body, for effecting the closing of an associated valve at the temperature for which said thermostatic element is set, one of said thermostatic elements being set for a predetermined desired water temperature, and the other of said thermostatic elements being set to operate at a higher temperature to shut off its associated valve as the temperature of the water approaches its boiling point, and means individual to each thermostatic element for selectively adjusting the temperature of operation thereof.

2,749,044
AUTOMATIC THERMOSTATIC REGISTER
Thomas B. Chace, Chicago, Ill., assignor to The Dole Valve Company, Chicago, Ill., a corporation of Illinois
Application October 31, 1951, Serial No. 254,107
6 Claims. (Cl. 236—49)



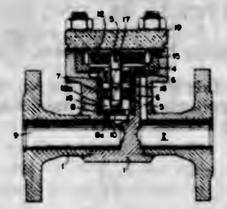
1. In an air flow controller for controlling the flow of air from a duct, a housing having an air passage, a shutter in said passage, a tube open at one end in said housing with the closed end of said tube in said duct and the open end communicating with the atmosphere outside of said duct, said tube having a pair of different sized openings aligned on a common axis extending in the general direction of air flow from said duct, the smallest of said openings communicating directly with said duct and the largest of said openings communicating directly with the atmosphere outside of the duct, a thermostat in said tube, and a driving connection between said shutter and said thermostat extending through the end of said tube, whereby said thermostat controls said shutter in response to variations in temperature of the atmospheric air aspirated through said open end of said tube.

2,749,045
PRESSURE AND TEMPERATURE OPERATED STEAM TRAP
Hans-Martin Pape, Bremen, Germany, assignor to Gustav F. Gerdts, Bremen, Germany
Application May 5, 1951, Serial No. 224,852
1 Claim. (Cl. 236—59)



A steam trap, comprising a casing having an inlet and an outlet located opposite said inlet and in alignment therewith, whereby steam and hot water may flow through said casing from said inlet to said outlet, a helical spring located within said casing and having inner and outer ends and a longitudinal axis substantially in alignment with said inlet and outlet, whereby variation in pressure of the medium flowing through and around said helical spring causes a variation of the operative length thereof by contracting or expanding the helical spring, said outlet having a valve seat located outside said casing, a valve body located outside said casing and movable toward and away from said casing to engage and disengage said valve seat, a rod extending through said outlet and having one end connected with said valve body and the other end connected with the outer end of said helical spring, and a bi-metallic thermostat located within said casing substantially in the flow of said medium and directly engaged by said medium, said thermostat extending substantially transversely to said rod and spring and having one end connected with the inner end of said helical spring and another end attached to an inner wall of said casing.

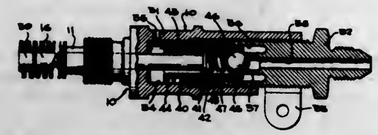
2,749,046
CONDENSATE REMOVER
Friedrich Schmitz, Koln-Sulz, Germany
Application January 21, 1953, Serial No. 332,487
Claims priority, application Germany January 21, 1952
6 Claims. (Cl. 236—59)



1. In a condensate remover wherein during normal operation there is a constantly open discharge opening functioning as a throttle for the passage of steam, and wherein said opening may be enlarged in the presence of excess condensate, said remover comprising a valve-like casing having an inlet at one side and an outlet at its other side, a housing rising from the casing between the inlet and outlet and in communication with said casing and having a chamber at its upper end, centrally apertured plates mounted in said housing and centrally apertured spacer plates between the aforesaid plates, a rotary bolt member freely extending through the plate apertures with its upper end disposed in said chamber, a bimetallic strip anchored at one end to the upper end of said rotary member and the other end of the strip variably anchored to the casing for initially varying the tension on said strip, the apertures in some of said plates being diametrically enlarged and said rotary member having diametrically flattened side portions adapted upon operation of the bimetallic strip to be moved into regis-

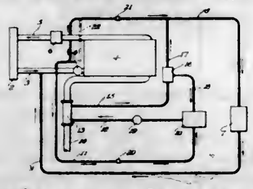
tration with said enlarged plate openings to increase the area of passage around the rotary member to the outlet of the casing.

2,749,047
THERMOSTATIC VALVE
Donald A. Dotson, Los Angeles, Calif., assignor to The Garrett Corporation, Los Angeles, Calif., a corporation of California
Application April 25, 1952, Serial No. 284,389
6 Claims. (Cl. 236—102)



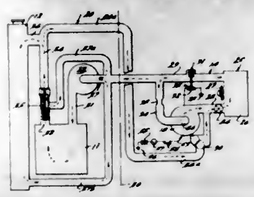
1. Valve apparatus, comprising: a hollow housing having an elongate tubular wall portion closed at one end and connected at its other end with an enlarged head wall portion defining a chamber; a core member positioned in the tubular portion and having one end extending into said chamber, said core member and tubular wall portion of the housing having different coefficients of thermal expansion; tubular means having one end surrounding the end of the core which is positioned in said chamber; a spring having end connections respectively with said tubular means and said housing, and acting to normally bias said tubing means and core member axially in a direction toward the closed end of the tubular wall portion; a valve in said chamber carried by said tubular means, said valve member being further supported for independent limited movement in a seating direction; and a tubular connector supported in the head wall portion for endwise adjustable movement, one end of said connector being positioned within said chamber and defining a seat for said valve member, and the other end of said connector being positioned exteriorly of said head wall portion and adapted for connection with a conduit.

2,749,048
MOTOR VEHICLE HEATING SYSTEM
Stanley H. Edge, Lincoln, England, assignor to Clayton Dewandre Company Limited, Lincoln, England, a British company
Application July 27, 1954, Serial No. 445,971
Claims priority, application Great Britain August 11, 1953
6 Claims. (Cl. 237—8)



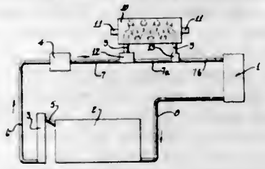
1. In a heating apparatus for a motor vehicle having an internal combustion engine and a cooling system and exhaust conduit therefor, the combination of a main heating system having fluid flow connections with the engine cooling system and including a heat exchanger, a booster system comprising an exhaust heater on the engine exhaust conduit, means including a pump having connections with the inflow of the exhaust heater and the inflow to the main heating system for circulation of liquid through the exhaust heater into the main heating system, and a thermostatic valve interposed between the exhaust heater and the inflow to the main heating system and responsive to a temperature below a predetermined value in liquid in the outflow of the exhaust heater to close communication between the exhaust heater and the main heating system, and responsive to said predetermined temperature in said liquid to establish communication between the exhaust heater and the main heating system.

2,749,049
AUTOMOTIVE HEATER BOOSTER
Robert H. Smith, Birmingham, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application June 28, 1952, Serial No. 296,193
13 Claims. (Cl. 237—8)



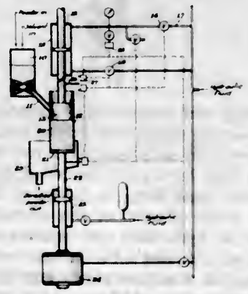
2. A circulating fluid heating system for a compartment of a motor vehicle that includes a liquid cooled engine having a radiator and a first liquid circulating pump operably connected thereto by conduit means providing a first liquid circulating system that permits the circulation of the engine cooling liquid from the engine through the radiator and back to the engine, a bypass conduit connecting the engine with the pump intake providing a first closed circuit to circulate the engine cooling liquid through said engine without passing through said radiator, and a first thermostatically operated valve connected to said first system between the by-pass conduit and the radiator to selectively control the passage of the engine cooling liquid through said first system and through said first closed circuit, said heating system comprising a heater core having inlet and outlet conduits connected to said first system, said inlet conduit being connected to said first system on the discharge side of said pump between said first valve and said radiator whereby fluid flow from said first system to said heater core is also controlled by said first valve, said outlet conduit being connected to said first system on the intake side of said pump, conduit means connecting the inlet and outlet conduits of said heater core to provide a second liquid circulating system that permits circulation of liquid through said heater without circulation through said first system, a heater booster connected to the heater core inlet conduit in said second system to warm the liquid passing therethrough, a second liquid circulating pump connected to said second system operable to circulate liquid therethrough, and thermostatically operated controls located in said second system to automatically control operation of said heater booster.

2,749,050
HEATING SYSTEM FOR AUTOMOTIVE VEHICLES
James H. Booth, Venice Township, Shiawassee County, Mich., assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application September 18, 1952, Serial No. 310,263
5 Claims. (Cl. 237—12.3)



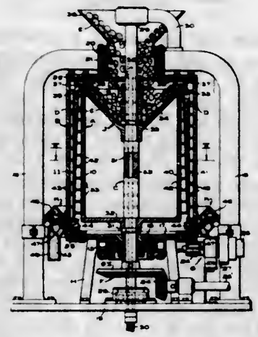
1. In a heating apparatus for use with mechanisms having a water cooled engine, a first exhaust gas-to-water heat exchanger and a second water-to-air heat exchanger, a conduit system for said heat exchangers comprising a first two-way valve, and a second one-way valve, said two-way valve selectively passing water under pressure from the cooling system of the engine to said first heat exchanger or by a by-pass conduit leading directly to said second heat exchanger, and said second valve comprising a check valve allowing passage of fluid under pressure from said first heat exchanger to said second heat-exchanger but which prevents flow of fluid therefrom back into said first heat exchanger.

2,749,051
METHOD OF COMPACTING LIGHT POWDERS
Louis O. Simenson, Berkeley, Calif., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
Application February 26, 1953, Serial No. 338,941
4 Claims. (Cl. 241—3)



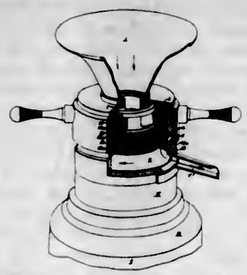
1. The method which comprises mixing a finely divided fluffy powder of an alkali metal alkyl xanthate having a bulk density near 15 to 20 pounds per cubic foot with a liquid capable of softening the powder, in amount sufficient to effect only superficial softening, partially compacting the mixture under a pressure of the order of 300 to 1000 pounds per square inch, letting the partially compacted mixture stand at constant pressure in said range for from 1 to 5 seconds, further compacting the mixture under a higher pressure of the order of 500 to 1500 pounds per square inch to form a coherent mass, and comminuting the said mass, thereby to form a powder of considerably higher density than that of the initial powder.

2,749,052
CENTRIFUGAL TYPE ORE PULVERIZER WITH EXPLOSION PREVENTION MEANS
Manuel Romero, San Francisco, Calif.
Application May 11, 1953, Serial No. 353,973
5 Claims. (Cl. 241—31)



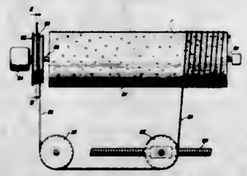
4. In an ore pulverizer: inner and outer drums mounted one within the other for rotation about a vertical axis; these drums having confronting walls spaced from each other and defining a passageway therebetween through which ore may be fed in a descending curtain; blades secured to each of these walls and being inclined to project into the passageway; the inner drum having a plurality of openings therein positioned behind the blades carried by that drum; and means for feeding an non-combustible gas to the interior of the inner drum for delivery through the openings and into said passageway to preclude an explosion therein during the reduction of the ore.

2,749,053
MULTIPLE STAGE COLLOID MILL WITH APERTURED ROTOR-TOP FEED MEANS
Walter Rieth, Braunlage (Harz), Germany, assignor, by mesne assignments, to Probst & Class, Rastatt, Baden, Germany, a corporation of Germany
Application April 15, 1953, Serial No. 349,049
Claims priority, application Germany April 21, 1952
10 Claims. (Cl. 241—162)



1. Colloid mill comprising a mill housing, a hollow rotor mounted within said housing for rotation about a substantially vertical axis, said rotor being substantially open at the top and closed at the lower portion, a material inlet defined at the upper portion of said housing positioned for the passage of material into the hollow interior of said rotor, aperture windows defined through said rotor for the passage of material from the interior to the exterior thereof by centrifugal force upon rotation of the rotor, oblique toothing defined on the exterior of said rotor, opposed oblique toothing defined on the inner wall of said housing spaced from the toothing of said rotor to define a comminution gap therebetween, said toothing being subdivided horizontally into at least two portions with coarse toothing defined on the upper portion changing to finer toothing on the lower portion, a material discharge defined at the lower portion of said housing and means for rotating said rotor.

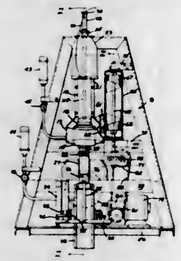
2,749,054
APPARATUS FOR LOW POWER TENSIONED WINDING OF CONCRETE ARTICLES
John M. Crom, Jr., Falls Church, Va.
Application May 21, 1952, Serial No. 289,063
4 Claims. (Cl. 242—11)



1. Apparatus for continuously prestressing a concrete pipe comprising support means to hold a concrete pipe for rotation, a shaft, a drum rotatably mounted on said shaft, drive means connected to drive said shaft and said

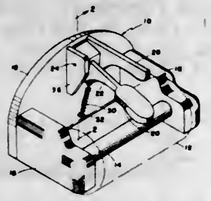
support means to rotate the concrete pipe, a source of wire, said wire leading from said source, being wrapped several turns around said drum and then being anchored to the concrete pipe, said drum having a diameter less than the diameter of the concrete pipe so that the wire is payed-out from said drum at a rate less than the rate of wire take-up by the concrete pipe such that the wire tends to be excessively overstressed, and a slipping clutch located within the drum and drivingly connecting said shaft and said drum to enable said drum to slip relative to said shaft to reduce the stress of the wire to a predetermined value.

2,749,055
PORTABLE CAP SPINNING UNIT WITH HYDRAULIC TRAVERSE
Ernest K. Bauer, Meadville, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application October 22, 1952, Serial No. 316,245
16 Claims. (Cl. 242—43.4)



1. A traverse assembly for winding machines comprising a filament guiding member, a filament receiving member said members being mounted reciprocably and rotatably with respect to each other, a shaft mounted in spaced relation to the axis of rotation of one of said members and fixed against axial movement in a direction parallel thereto, means for turning said shaft at a predetermined relative constant speed with respect to the rotation and reciprocation of said members, a pair of oppositely facing cam surfaces carried by said shaft, electrical contact responsive means on the reciprocable member for contacting each of said cam surfaces during reciprocation, and means responsive to activation of said electrical contact means for reversing the direction of travel of the reciprocable member.

2,749,056
TOILET PAPER DISPENSER
Horace D. Jenkins, San Diego, Calif.
Application August 13, 1952, Serial No. 304,093
3 Claims. (Cl. 242—55.2)



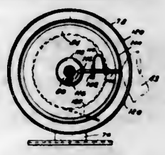
1. A dispenser for paper rolls and the like, comprising a back plate for securement to a fixed support such as a wall, opposed arms fixed to said back plate, a roller removably supported on and between said arms, an arm pivoted on said back plate and extending in the same general direction as said arms, said arm having a pad portion exteriorly engageable with a roll of material on said roller, and means to bias said arm toward said roller so that said pad functions as a brake against unwinding of the roll, and an element fixed to and extending outwardly from said back plate adjacent to said arm, said element being positioned and dimensioned so that different digits of one hand can simultaneously engage said arm and element to improve the purchase power of the hand and to steady the hand during operation of the dispenser.

2,749,057
FISH LINE REEL
Robert H. Jenkins and Albert H. Jenkins, Portland, Oreg.
Application April 15, 1953, Serial No. 348,858
2 Claims. (Cl. 242—84.5)



1. A fishing reel construction comprising a mounting base for mounting a reel on a fishing rod, a reel carrying frame supported by said base and a reel mounted on said frame, said base having a king pin projecting from the surface thereof, said king pin having a U-shaped groove around the major portion of the circumference thereof intermediate its ends, said reel carrying frame including a mounting plate having a bore therein rotatably journaling said king pin, a transverse passsage through said plate chordally intersecting said bore and in registry with said king pin groove, a cross-pin in said passage and seating in said groove holding said frame on said king pin and restricting relative free rotation between said king pin and said frame to 180°, and means interlockingly engaging said reel frame and said base in a selected position to nonrotatably maintain said frame and said base against movement relative to one another.

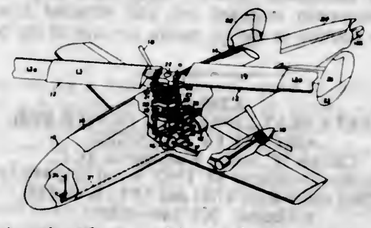
2,749,058
SPINNING REEL
Carson E. Hill, Greenville, Mich.
Application August 22, 1952, Serial No. 305,734
4 Claims. (Cl. 242—84.5)



1. A spinning reel comprising a generally cylindrical housing, means on said housing for mounting the housing on the handle of a fishing rod such that the axis of the housing extends transversely of the axis of the rod, a line spool within said housing and coaxial therewith, an end wall of said housing having an opening at the axial center thereof through which the line from said spool is arranged to pass, a rotatable disk supported coaxially relative to the spool and positioned between said spool and said opening, said disk having a circumferential axially extending flange over which the line slithers as it unwinds from said spool, a radially shiftable pin on said disk movable to and from a position projecting radially outwardly through said flange, said pin when in said projected position engaging the line to wind the line on the spool when the disk is rotated, said housing having an opening in the circumferential wall thereof which is aligned generally

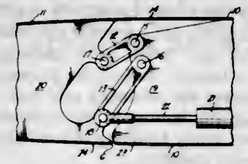
axially with said pin and said circumferential wall of said disk, said opening being positioned within the reach of the thumb of the hand in which the rod handle is gripped so that said pin may be actuated from without said housing through said opening, means normally biasing said pin in said radially outwardly projected position, means arranged to interengage said pin in response to movement of the pin radially inwardly to a depressed position out of engagement with the line and hold said pin in said depressed position and means for releasing said last mentioned means from interengagement with said pin.

2,749,059
AIRCRAFT WITH RETRACTABLE VARIABLE RADIUS ROTARY WING
Donald N. Meyers, Philadelphia, and Zbyslaw M. Ciolkosz, Glenolden, Pa., assignors to Vertol Aircraft Corporation, a corporation of Pennsylvania
Application October 22, 1952, Serial No. 316,228
7 Claims. (Cl. 244—7)



3. An aircraft comprising a fuselage, a fixed wing, forward propulsive means, a lift sustaining rotor including a hub, means for rotating said hub, a radially extensible blade mounted on said hub, means for restraining the rate of extension of said rotor blade operatively connected to said hub, said fuselage, and said blade, said blade when moving radially outwardly under the influence of centrifugal forces actuating said rate restraining means to apply a rotational torque to said hub in its normal direction of rotation.

2,749,060
AIRPLANE WING
Keith G. Brady and Holden W. Withington, Seattle, Wash., assignors to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application July 1, 1952, Serial No. 296,678
1 Claim. (Cl. 244—44)



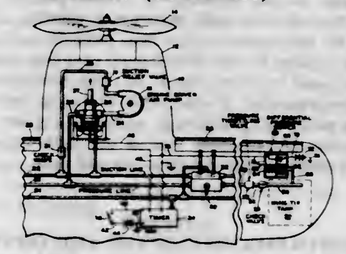
An adjustable camber wing comprising a rigid body portion, a rigid nose portion, a flexible continuous skin forming one surface of both said portions and attaching them together, links interconnecting the body portion and the nose portion and spaced apart along the length of the wing, said links including short links pivotally attached to the body portion adjacent the flexible skin and to the nose portion more remotely from said skin, and long links pivotally attached to the body portion more remotely from said skin than said short links and to the nose portion more remotely from said skin than said short links, an actuator mounted in said body portion and attached to said nose portion to move said nose portion with respect to said body portion, said links being proportioned and arranged to guide the nose portion in a path which results in bending of the flexible skin without substantial compression or extension of the neutral axis of said skin.

2,749,061
AIRPLANE WING STRESS COMPENSATING STRUCTURE ASSEMBLY
Wesley A. Franz, Fredericksburg, Tex.
Application June 18, 1954, Serial No. 437,717
7 Claims. (Cl. 244—123)



1. In an airplane wing, a stress compensating structure including a structural skeleton, a wing covering carried by said skeleton, said structural skeleton comprising a plurality of spaced transverse spars having aligned openings therethrough and structural beams extending through the aligned openings in said spars; annular insulators seated upon said beams and operatively connected to said spars to provide a flexible connection therebetween at the intersection thereof, one of said insulators disposed within each of said openings in said spars, said spars being of corrugated sheet material and said beams being of hollow tubular form tapering from one end thereof to the other end adjacent the outer tip of said wing, each of said insulators defining the flexible connection between said beams and the endmost one of said spars remote from the wing tip including an upstanding annular lip at one end thereof, a pair of corrugated bearing plates mounted on each of said insulators, said plates being secured to said spar with one plate disposed at opposite sides thereof, a split collar carried by each of the insulators at opposite sides of said spar and concentric with the opening therethrough, means for tightening said collars about said insulator to maintain it seated upon said beam, one of said collars extending between said lip and the adjoining bearing plate for retaining the collar against longitudinal movement.

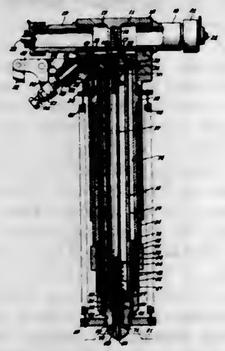
2,749,062
PRESSURE CONTROL SYSTEM FOR AN AIRCRAFT FUEL TANK
Charles H. MacIntyre, Hasbrouck Heights, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application June 27, 1952, Serial No. 296,055
2 Claims. (Cl. 244—135)



1. For use with pressure operated devices on an aircraft; the combination comprising a source of fluid pressure medium, a fluid pressure manifold to operate the devices, a solenoid operated valve controlling delivery of said fluid pressure medium from said source to the fluid pressure manifold, a fuel tank, a fluid pressure throttling valve connected to said manifold and controlling the delivery of the fluid pressure medium from said manifold to said tank, a check valve between said throttling valve

and tank to prevent reverse flow of fluid medium under pressure from the tank to the manifold, and differential pressure responsive means sensitive to the difference between ambient atmospheric pressure and the fluid pressure medium at said tank, means operatively connecting said differential pressure responsive means to said solenoid operated valve for controlling the solenoid operated valve so as to cause delivery of the fluid pressure medium from said source to said manifold and through said throttling and check valves to said tank upon the differential pressure decreasing below a predetermined minimum.

2,749,063
EJECTOR MECHANISM
Richard Low, Los Angeles, Calif., assignor to Pastushin Aviation Corporation, Los Angeles, Calif., a corporation
Application September 23, 1954, Serial No. 457,823
9 Claims. (Cl. 244—137)



1. An apparatus for jettisoning a store mounted exteriorly of an aircraft by remotely operable latch means, comprising: a body member to be mounted to an aircraft and having a combustion chamber formed interiorly thereof; a cylinder communicating with said combustion chamber; a piston operating in said cylinder and movable therein for a limited distance in response to a steep-pressure rise produced by an explosive burning in said combustion chamber to exert thrust against said store; means defining a passageway longitudinally extending interiorly of said piston and flow-connecting said combustion chamber to the ambient atmosphere; valve means carried at the outer end of said piston including a pair of relatively movable members; resilient means normally urging one of said members to a limit position on said piston; the other of said members presenting a surface subject to said pressure rise and held in valve-closing position relative to said first named member against the action of said resilient means to close said passageway by a store mounted by said latch means to the aircraft, whereby said other member is moved to a valve opening position by said pressure rise as the latter moves said piston to apply an ejective thrust to said store.

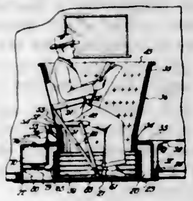
2,749,064
AERODYNAMIC DEFLECTOR AND DIFFUSER
William H. Kuhlman, Jr., Van Nuys, Calif., assignor to the United States of America as represented by the Secretary of the Air Force
Application November 19, 1952, Serial No. 321,530
5 Claims. (Cl. 244—137)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. In an aircraft having a bomb bay and bomb bay doors adapted when open to expose the bomb bay to the relatively moving air stream, a retractible and extensible flap pivotally mounted adjacent its leading edge on the aircraft immediately forward of the bomb bay, said flap when extended being inclined at a positive angle of attack with respect to the relatively moving air stream and deflecting a major portion of the air stream away from the open bomb bay, a slot adjacent the leading edge of the flap for admission of a minor portion of the air stream therethrough to diffuse in the space above the flap, a flow resisting grid pivotally connected at its lower end to the trailing edge of the flap and extending to the forward end



of the bomb bay for further reducing the velocity and increasing the static pressure of the air flowing into the open bomb bay, a power actuated extensible and retractible jack mechanism mounted in the aircraft and an operative connection between the upper end of said grid and said jack mechanism whereby said flap and grid may be simultaneously extended into and retracted from an operative position in the air stream forward of the bomb bay.

2,749,065
SAFETY SEAT LOWERING DEVICE FOR AIRCRAFT PASSENGER
Charles W. Soule, Washington, D. C.
Application December 30, 1953, Serial No. 406,172
(Filed under Rule 47(b) and 35 U. S. C. 118)
6 Claims. (Cl. 244—141)



1. In an airplane, a seat, a passenger confining compartment having side walls and surrounding the seat, a hinged bottom wall for said compartment, said bottom wall tending normally to swing to position to open the bottom of the passenger confining compartment to project a passenger therethrough, releasable means for holding the bottom wall of the passenger confining compartment in closed position, a collapsible passenger receiving bag-like member releasably carried by the side walls of the passenger confining compartment and readily removable therefrom by the weight of a passenger projected through the open bottom wall of the passenger confining compartment, means for releasing said seat to project a passenger through the bottom of the passenger confining compartment, and safety lowering means attached to said passenger receiving member.

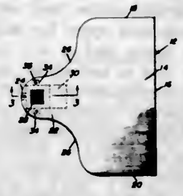
2,749,066
AID TO PACKING, DEPLOYMENT, AND INITIAL INFLATION OF PARACHUTES
Richard W. Barnes, Xenia, and George A. Zelinskas, Dayton, Ohio
Application January 26, 1954, Serial No. 406,374
13 Claims. (Cl. 244—148)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. Means for restraining the skirt portion of a parachute having a canopy and shroud lines, said means

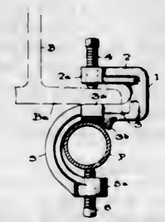
comprising an enclosure independent of said canopy for receiving the skirt and lower portion only of a parachute canopy, retaining means for releasably maintaining said enclosure in position to shield the skirt and lower portion of the canopy, and means responsive to full extension of said shroud lines for releasing said retaining means.

2,749,067
SUPPORT FOR FISHING ROD
Wilfred J. Gorenflo, Biloxi, Miss.
Application July 29, 1952, Serial No. 301,537
1 Claim. (Cl. 248—42)



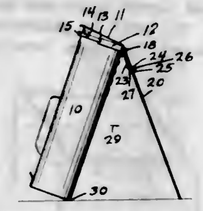
For use by a fisherman handicapped by having but a single arm available for handling his fishing equipment, an essentially imperforate seat board of an area to permit a user to sit comfortably thereon and having substantially flat top and bottom surfaces, said top surface being wholly free of obstructions and said bottom surface being adapted to be positioned, when in use, on a relatively stationary boat seat or the like, and wherein the board then provides a portable seat on which the user may sit in a manner to utilize his own weight as the sole means of holding the board in a given position on the boat seat, the forward marginal edge of said seat board being provided with a centrally arranged forwardly projecting relatively narrow extension which is adapted to be straddled by the user's legs, said extension having an opening therein, and a socket member attached to and depending below the bottom side of said extension and aligned with said opening, said socket member being essentially closed at its bottom and inclining rearwardly beneath the extension and being non-circular in cross-section to accommodate the insertable and removable non-circular end portion of a fishing rod.

2,749,068
HANGER CLAMPS
Albert J. Wayman, East Palestine, Ohio
Application February 12, 1953, Serial No. 336,487
3 Claims. (Cl. 248—72)



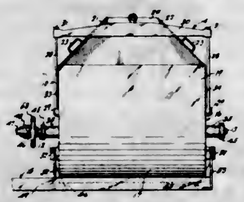
1. A hanger comprising a C-clamp formed of a loop section comprising a yoke portion and two arms extending from said yoke portion in parallel relation, and a jaw section comprising parallel arm-extensions projecting from the ends of said arms at right angles to the plane of said loop section, a clamping screw threaded through the end of one of said arm-extensions and directed towards the end of the other arm-extension, and a hanger ring carried by the loop section of said C-clamp.

2,749,069
GOLF BAG STAND
Nils G. Sandstrom, Sioux City, Iowa
Application August 20, 1953, Serial No. 375,484
1 Claim. (Cl. 248—96)



A golf bag stand comprising a band for attachment to a golf bag, ears attached to said band and extending angularly therefrom, legs pivotally attached to said ears, said legs including upper portions bent at right angles to said legs and received through said ears, whereby outward movement of said legs away from said bag will cause lateral spreading of the lower portions of said legs, coiled springs receiving said upper portions, said coiled springs having extensions abutting against said legs for forcing the same inwardly, whereby said legs will be substantially parallel and against said golf bag when not in operative position, a synchronizing handle member including a lateral bar having angularly inclined end portions having longitudinal slots therein, said slots receiving said legs, collars attached to said legs positioned beneath said slots, outward movement of said synchronizing handle member away from said golf bag causing said legs to correspondingly spread uniformly when moving through said slots.

2,749,070
FOOD MIXERS
Lowell J. Collins, Oakland, Calif.
Application December 21, 1953, Serial No. 399,210
3 Claims. (Cl. 248—146)

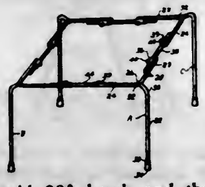


1. Self centering supporting means for a food mixer having a bowl having end walls comprising, a tongue projecting from each end wall and rectangular in form and vertically positioned, and a base having spaced brackets having each a vertical slot to receive the tongues for support of the mixer against tipping or transverse movement, and having wedges projecting inwardly from said brackets for axially centering said bowl between said brackets for positioning said bowl relative to driving means for the mixer.

2,749,071
STANDS
William Remstein, Syracuse, N. Y., assignor to I. J. Elman, Syracuse, N. Y.
Application June 12, 1953, Serial No. 361,288
4 Claims. (Cl. 248—172)

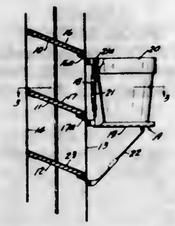
1. A stand comprising a horizontally disposed substantially rectangular frame, said frame being composed of a plurality of corner constructions comprising a bar having a curved 90° corner bend intermediate its ends, with portions extending from said bend at right angles

to each other and adapted to lie in a horizontal plane, a leg bar having a lower straight substantially vertical portion and an inwardly curved upper end portion terminating in a horizontally extending end projecting to and integrally secured to said frame bar bend in the plane of the frame bar, said curved upper end portion extending in a direction at the point of attachment to said bar along a line bisecting the angle between the portions



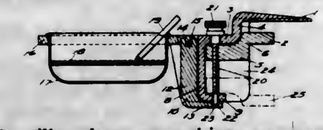
extending from said 90° bend, and the lower straight portion extending along a line beyond the apex of said angle one of said portions extending from said 90° bend having a cylindrical socket disposed inwardly of said portion, the axis of said socket extending parallel with the axis of said portion, and being located slightly therebelow, and being adapted to slidingly receive a horizontal bar carried by an adjoining corner construction, said leg bars and frame bars being free of bracing.

2,749,072
ATTACHMENT BRACKET FOR SUPPORTING DECORATIVE ARTICLES FROM A VENETIAN BLIND
James J. Long, St. Paul, Minn.
Application May 7, 1952, Serial No. 286,498
7 Claims. (Cl. 248—214)



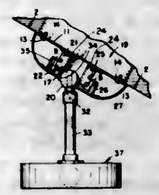
1. A bracket particularly constructed for attaching articles to a Venetian blind comprising at least a pair of spaced slat attachment elements constructed for rigid connection with a pair of vertically spaced Venetian blind slats, each of said attachment elements having a front end, an interconnection member having vertically spaced portions pivotally interconnecting the front ends of said elements, and attachment means for stably mounting an article on said interconnection member whereby said article will remain in the same relative oriented position regardless of the tilted relation of the Venetian blind slats.

2,749,073
UTILITY CLAMP AND HOLDER
Burton W. Guyst, San Francisco, and Sanford Wixson, Oakland, Calif.
Application June 24, 1952, Serial No. 295,196
8 Claims. (Cl. 248—226)



8. A utility clamp comprising; an upper jaw and a lower jaw respectively having end portions disposed one above the other, an angular extension rigid with the end portion on said upper jaw extending downwardly past the end portion on the lower jaw, a projection on the lower end of said extension extending below said last mentioned end portion, a holder adjacent to said extension extending vertically alongside the latter and having a part at its lower end extending below said projection, said end portions and said projection and said part being formed with vertically aligned openings, a screw extending through said openings, the openings in the end portion on said upper jaw and in said projection and said part being interthreaded for free rotation and axial movement of said screw therein and threads on the end portion that is on said lower jaw in threaded engagement with the threads on said screw, and cooperating means respectively rigid with said upper jaw adjacent to its end portion and on the upper end of said holder releasably securing said upper end to said upper jaw, and a lateral extension on said holder at its upper end projecting away from said upper jaw for carrying a load, said lateral extension on said holder being substantially annular, an ash tray removably supported in said extension having a screen spaced above the bottom of said tray for supporting the burning end of a cigarette thereon.

2,749,074
ALIGNER HEAD AND CANOPY ASSEMBLY FOR A PENDANT LIGHT FIXTURE
Marcus Bodian, Los Angeles, Calif., assignor to Sunbeam Lighting Company, Los Angeles, Calif., a firm
Application May 5, 1953, Serial No. 353,053
3 Claims. (Cl. 248—344)



1. An aligner head for a pendant light fixture comprising a base plate adapted to be attached to a ceiling outlet box, said plate having a centrally disposed opening therethrough adapted to receive a winged swivel housing; a winged swivel housing having a retainer flange supporting said swivel housing on said base plate, said swivel housing consisting of two half stampings juxtaposed to form a cylinder having wings, said cylinder having an out-turned retainer flange on one end for attachment to said plate and an in-turned rim on the opposite end, said rim being adapted to retain a ball in said cylinder, the said wings being radial and diametrically opposed, the wings of the two halves being juxtaposed and riveted to hold said half stampings together, said wings having notches adapted to engage helical segments of a canopy; and a ball in said swivel housing, said ball having a rod coupling member extending outwardly from said swivel housing.

2,749,075
CLOTHES POLE AND LINE CONNECTOR
Mary E. Altergott, Chicago, Ill.
Application June 11, 1952, Serial No. 292,887
2 Claims. (Cl. 248—353)

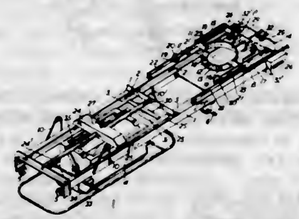
1. In a pole and line connector, a back plate carrying a pole receiving socket, a line receiving channel in said back plate with the underside thereof providing a ledge for contact with the top of the pole, a series of indentations in the upper channel wall, a groove formation above said channel, a locking plate pivoted to said back plate and movable to locking position with the upper margin

thereof received in said groove formation, means to limit the pivotal movement of said locking plate, and a series



of indentations in the margin of said locking plate opposite said channel.

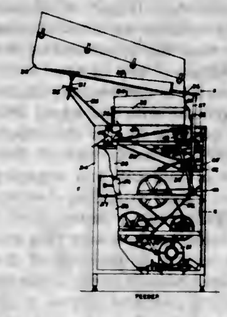
2,749,076
MEASURING AND DELIVERING APPARATUS AND SILOS AND OTHER CONTAINERS INCORPORATING SUCH APPARATUS
Donald Welton Shepherd, York, England, assignor to Portasilo Limited, York, Yorkshire, England, a company of Great Britain
Application July 2, 1954, Serial No. 440,976
Claims priority, application Great Britain July 6, 1953
13 Claims. (Cl. 249—2)



1. Apparatus for receiving a pre-determined amount of powdery material such as cement from a receiving zone and enabling such material to be conveyed for discharge at a delivery zone, said apparatus comprising a main frame, means mounting said frame intermediate its ends for pivotal movement about a horizontal axis, said frame extending from said receiving zone to said delivery zone, a hopper mounted on said frame for movement back and forth along the same between said receiving zone and said delivery zone, counter-weight means on said frame at the side of said pivot axis in the direction of said delivery zone for counterbalancing the weight of said hopper when at said receiving zone so that said main frame is tilted in a direction urging said hopper upwardly when said hopper is empty, the weight of said hopper when charged with a pre-determined amount of the material effecting tilting of said frame in the opposite direction, a valve at said receiving zone for controlling flow of material into said hopper, means biasing said valve towards a closed position, means actuated by said hopper upon movement thereof to said receiving zone for opening said valve, a trip mechanism holding said valve open when moved to its open position against said biasing means, and means carried by said main frame and actuated by pivotal movement of said frame when said hopper is charged with the predetermined amount of material for releasing said trip mechanism thereby allowing said valve to reclose.

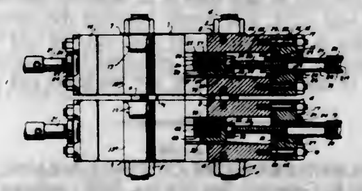
2,749,077
MATERIAL HANDLING MACHINE
Daniel E. Woodman, Avondale Estates, Ga.
Application December 17, 1948, Serial No. 65,775
17 Claims. (Cl. 249—52)

14. In a machine of the class described, a scale beam, a scape hopper mounted upon one end of said scale beam, and fluid jet means responsive to movement of said scale



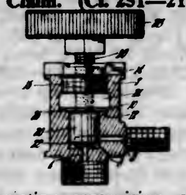
beam and directed to remove batches of weighted material from said scale hopper.

2,749,078
WELL BLOWOUT PREVENTER
Thomas B. Losey, Dallas, Tex., assignor to The Guiberson Corporation, Dallas, Tex., a corporation of Delaware
Application June 26, 1951, Serial No. 233,589
9 Claims. (Cl. 251—1)



1. In a well blowout preventer a hollow valve body including a substantially flat top spaced apart from a substantially like bottom by two substantially rectangular side walls and closed at each end with an end plate; a passage arranged centrally of the top of the body and a like passage so arranged in the bottom thereof, the openings being in vertical alignment; a pair of opposed slideable rams carried within the valve body; valve stem means loosely attached to each such ram and extending through an end plate to be operable from without the body to advance and retract a ram; a circular groove provided in the upper face of the body to surround the passage therein; a circular groove provided in the lower face of the body to surround the passage therein; each such groove being adapted to receive a sealing ring and hold apart a pair of valve bodies when such ring extends into a groove in the top face of one body and the bottom face of another; and a plurality of stud receiving passages arranged through the body outside of the hollow portion thereof, such passages being arranged in a square pattern about the central passages.

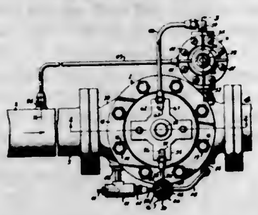
2,749,079
VALVE
Arthur Desjarlais, Springfield, Mass., assignor of one-half to Frederick E. Desjarlais, Agawam, Mass.
Application April 26, 1954, Serial No. 425,635
1 Claim. (Cl. 251—214)



A valve construction comprising, a body having an axially aligned and interconnected inlet and lower bore

and upper chamber, an outlet extending transversely outwardly from the lower side of the lower bore, the upper chamber being relatively larger in diameter than the lower bore and providing an annular shoulder in the upper chamber around the upper end of the lower bore, an inlet seat in the lower end of the lower bore around the inlet, a cap having a downwardly depending portion in threaded engagement with the upper chamber, a unitary compressible packing ring in the upper chamber between the shoulder and lower end of the downwardly depending portion of said cap and engaging the wall of the upper chamber, a stem extending downwardly through said cap and packing ring, a piston fixed to the lower end of said stem below said packing ring and being rotatable and slidable relative to the wall of the lower bore, a washer loosely held on said stem, in the upper chamber between said packing ring and piston, a closure disc on the lower end of said piston for seating on the inlet seat in the lower bore and closing said inlet, and said stem being threaded in said cap and tightly threaded in said packing ring, all adapted and arranged whereby, on rotation of said stem in one direction for closing said valve, said stem compresses said ring against the wall of the upper chamber and against said washer to urge said washer onto the shoulder, said piston is moved over the outlet and said closure disc is engaged with the inlet seat, and, on rotation of said stem in an opposite direction for opening said valve, said piston uncovers the outlet, said closure disc is moved from the inlet seat and said washer is engaged by said piston to compress said ring against the wall of the upper chamber and the lower end of said cap.

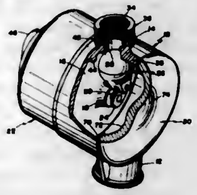
2,749,080
SURGE PRESSURE CONTROL MEANS
David E. Griswold, San Marino, Calif., assignor to Donald G. Griswold, Alhambra, Calif.
Application April 20, 1953, Serial No. 349,789
6 Claims. (Cl. 251—28)



1. Surge pressure control means, comprising: a fluid pressure operable main valve; control means connected with said main valve and normally operable to control the supply and exhaust of operating fluid to and from said main valve to control the closing and opening of said main valve; and means connected with said main valve and responsive to pressure conditions on the upstream side of said main valve operable to exhaust operating fluid from said main valve to control closing of said main valve independently of said first-mentioned control means.

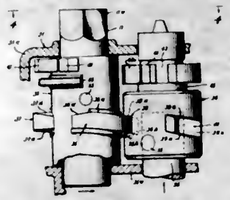
2,749,081
VALVE FOR USE WITH A TIMING MECHANISM
Harold Lloyd, National City, Calif.
Application March 18, 1954, Serial No. 417,206
6 Claims. (Cl. 251—157)

1. A fluid flow valve comprising a valve body having an inlet and an outlet, a shaft rotatably mounted in said body for connection with a timing mechanism, a valve stem extending radially from said shaft and having a portion connected to said shaft, a valve element pivotally attached to said valve stem for pivotal movement on an axis generally parallel to said shaft, whereby said valve element and said valve stem together constitute a knee jointed element, and a valve seat in said outlet, said



valve element seating on said seat when said shaft is in one position.

2,749,082
VALVE MECHANISM
Herbert Allen, Houston, Tex., assignor to Cameron Iron Works, Inc., Houston, Tex., a corporation of Texas
Application December 31, 1954, Serial No. 479,113
19 Claims. (Cl. 251—162)



1. An actuator mechanism for causing rotational and limited endwise movement of a stem and valve member comprising, in combination with said stem, a shaft rotatable on an axis substantially parallel to the rotational axis of said stem, connection means between the shaft and stem for imparting forces to the stem, upon rotation of the shaft, both in a direction along the rotational axis of the stem and in a plane normal to but at a locus displaced from the rotational axis of the stem, said means having coacting surfaces respectively carried by the stem and shaft for producing the force along said stem's rotational axis with at least one such surface having portions oppositely inclined with respect to a plane normal to said stem's rotational axis whereby rotation of the shaft in a single direction will cause the stem to move endwise first in one direction and then in an opposite direction.

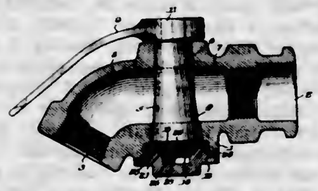
2,749,083
COUNTERBALANCE SPRING UNIT FOR CONDUIT GATE VALVES
Richard Fennema, Chicago, Andrew E. Anderson, Berwyn, and Walter L. Krueger, Chicago, Ill., assignors to Crane Co., Chicago, Ill., a corporation of Illinois
Application September 27, 1951, Serial No. 248,554
5 Claims. (Cl. 251—167)



1. In a conduit type of valve comprising a closure member consisting of a pair of discs, the said discs being

placed in back-to-back relation, one of the said discs being the actuating portion of the said closure member, the other of said discs being a floating disc and being carried by the said actuating portion, each of the said discs having therebetween converging inclined surfaces serving as the wedging means upon relative movement therebetween to cause the said discs to be transversely spread apart upon predetermined axial movement of the said closure member in either direction, stop means for at least one of the said discs for limiting the travel of said closure member, means for effecting the collapse of the said discs during the course of such movement, the said latter means comprising an angular lever of L-form pivotally mounted between the discs, one of the said discs carrying a pin and an arm support for said pivotal mounting of the said angular lever, the other of said discs having a recess open to receive an end portion of the said angular lever and having an upper transverse surface defining one limit of the said recess, extendible means within the said recess adjustably positioned on the end portion of said angular lever, the said extendible means having an end limit normally abutting against the said transverse surface defining the upper limit of the said recess, means carried by said lever for fixing the degree of extension of the said extendible means, resilient means interposed between a lower depending end portion of the said angular lever and a transverse inner surface of the said actuating portion of the closure member, the said resilient means being deflectable under load applied by weight of the floating disc whereby to allow the said converging inclined surfaces to be in substantial contact when said closure member is in the collapsed position during the course of valve opening or closing movement.

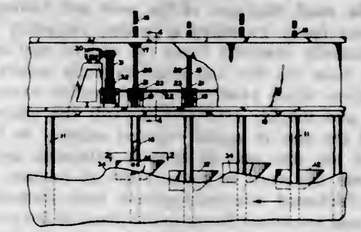
2,749,084
AIR BRAKE TRAIN LINE COCKS
Albert J. Townsend, Wilmette, Ill., assignor to Crane Co., Chicago, Ill., a corporation of Illinois
Application February 6, 1953, Serial No. 335,577
5 Claims. (Cl. 251—183)



1. The combination of a plug valve, a casing therefor, a rotary plug valve closure member of frusto-conical shape within said casing, the said casing having a central valve chamber, a hollow cap for the said chamber at the large end of said closure member, a deformable resilient material member within a lower portion of the said chamber substantially filling the same and having an outer annular portion serving as a fluid seal respectively between the plug, the casing and the cap, the said cap having a recessed portion defined in part by an annular tapering surface for bearing against and supporting a lower annularly folded peripheral corner portion of said resilient material member against said annular tapering surface.

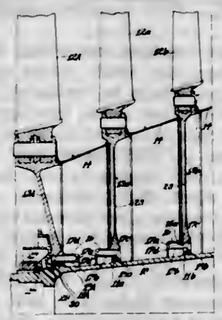
2,749,085
OCEAN WAVE MOTORS
Seral W. Searcy, Portland, Oreg.
Application January 19, 1955, Serial No. 482,697
4 Claims. (Cl. 253—10)

1. A power generating device comprising a platform fixedly supported in elevated position above a body of water having a vertically reciprocating movement relative thereto, said platform being secured to one end of spaced piling having their other respective ends embedded in the bed of said body of water, a shaft, bearing means mounted on a support and rotatably supporting said shaft on said platform, gearing including an over-riding clutch therefor mounted on said shaft, a gear rack extending through and on opposite sides of said platform, said gear rack comprising an I-beam having gear teeth projecting from an edge thereof with said teeth meshing with said gearing, a roller mounted on said support and engaging



the other edge of said I-beam to hold said gear rack teeth in mesh with said gearing, rollers engaging opposite sides of the web of said I-beam to prevent lateral movement thereof, a float disposed in said water and reciprocating therewith, said rack having the depending end thereof fixedly secured to said float for reciprocation therewith, said clutch being out upon upward movement of said float and in upon downward movement thereof to impart rotary movement to said shaft, and a power take-off device secured to said shaft for rotation therewith.

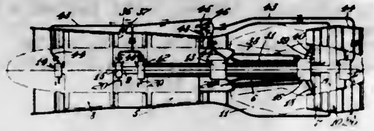
2,749,086
ROTOR CONSTRUCTIONS FOR TURBO MACHINES
Adrian Albert Lombard, Allestree, Derby, England, assignor to Rolls-Royce Limited, Derby, England, a British company
Application July 30, 1952, Serial No. 301,700
Claims priority, application Great Britain August 23, 1951
1 Claim. (Cl. 253—39)



In a rotor for a multi-stage axial-flow compressor or turbine comprising a central shaft, abutment means carried on said shaft, a plurality of annular axially-spaced discs, each disc having a periphery, and an inner diameter thereby to have a central bore, the central shaft extending through the bores in the discs and one end disc abutting said abutment means, rotor blading carried at the peripheries of the discs, spacer means between said discs adjacent their peripheries, said spacer means being in contact with adjacent discs to space the discs apart, and tensioning means co-operating with the other end disc and with the shaft to place said shaft in tension and thereby to place said discs in compression through said spacer means, concentricity-maintaining means for maintaining at least a number of said discs concentric with said shaft during operation, each of said number of discs having a thin plane web, said concentricity-

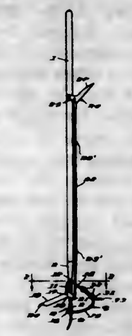
maintaining means forming the only connection between said number of discs and the shaft and comprising a plurality of axially-spaced sets of splines on said shaft, the spacing of said sets of splines being such that there is a set of splines at the location of the plane of the web of each of said number of discs, and each of said number of discs having at its inner diameter and in one piece therewith a thin axially-extending tubular extension encircling the shaft in radially-spaced relation thereto, said extension having an axial length considerably greater than the axial thickness of the web and having a thin re-entrant flange including a portion extending substantially radially inwardly from the end of said extension remote from the disc and a substantially axially-extending portion which axially-extending portion extends back within said tubular extension towards the plane of the web of the disc in radially-spaced relation to both the bore of the disc and its tubular extension and which surrounds the shaft in radially-spaced relation thereto, and a thickened internally-splined bead formed at the end of said re-entrant flange in the plane of the web of the disc, the splines on said bead being of such dimensions as to have on assembly an interference fit with the corresponding set of splines on the shaft, whereby in operation the discs remain centred on and torsionally engaged with the shaft.

2,749,087
ROTARY MACHINES
Stuart Bertram Blackman, Westbury-on-Trym, near Bristol, and Ernest Briggs, Filton Park, Bristol, England, assignors to The Bristol Aeroplane Company Limited, Bristol, England, a British company
Application April 12, 1952, Serial No. 282,067
Claims priority, application Great Britain April 18, 1951
7 Claims. (Cl. 253—39.1)



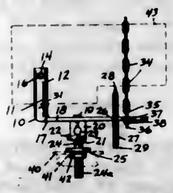
1. In a rotary machine comprising fluid-compressor means, a working part which during operation of the rotary machine requires to be ventilated, and a duct connected to said compressor means for conveying fluid compressed in said compressor means to said working part to ventilate same; the combination with said compressor means of a first fluid tapping in said compressor means at a location at which, during operation of said compressor means, there exists a pressure higher than the inlet pressure of said fluid-compressor means, a second fluid tapping in said fluid-compressor means at a location at which, during operation of said fluid-compressor means, there exists a pressure higher than said pressure at said first tapping, a first fluid connection connecting said first fluid tapping with said duct, a second fluid connection connecting said second fluid tapping with said duct, a non-return valve in said first fluid connection, said non-return valve permitting flow of fluid from said fluid-compressor means through said first connection into said duct, valve means in said second fluid connection, said valve means comprising a fixed element having a port communicating said second tapping with said second fluid connection, a movable element movable from a closed position in which it closes said port to an open position in which said port is open and allows fluid to pass from said second tapping through said second fluid connection into said duct, and actuating means responsive to the pressure in said duct connected to said movable element to move said movable element towards its closed position when the pressure in said duct rises above a predetermined value and vice versa.

2,749,088
WEEDER
Arthur E. Jeancon, Whittier, Calif.
Application October 5, 1953, Serial No. 384,067
8 Claims. (Cl. 254—132)



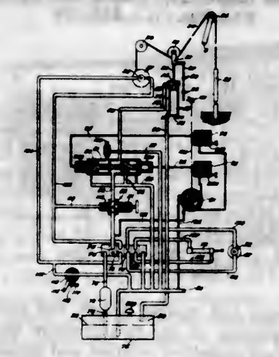
1. In a weeding implement, an elongated handle, a ground penetrating element mounted at one end of said handle and disposed in generally axially aligned relation beyond said one end of said handle and including a shank portion and a forwardly curved ground penetrating distal end portion terminating in a sharpened, V-shaped edge; the combined length of said handle and element being such that with said distal end of said element resting on the ground, said handle may be readily grasped at spaced points along its length by the hands of a user while standing substantially erect, a frame member held in fixed relation to said handle by said shank portion of said ground penetrating element and including a curved surface in the rear of said element disposed to contact the surface of the ground when said element is inserted in the ground and to serve as a rolling fulcrum incident to rocking of said implement thereon in loosening a weed in the ground; said curved surface being so shaped as to impart a substantially vertical movement to said distal end portion of said element incident to such rocking movement with resultant minimum disturbance of the ground surface, a clamping jaw hingedly mounted on said implement, means normally holding said jaw in inoperative position, a manually operable lever on said handle disposed in the region thereof grasped by the user, and means connecting said lever to said jaw effective to move said jaw toward said distal end portion of said element rigidly fixed to and disposed beyond the said one end of said handle for clamping a previously loosened weed or the like therebetween for lifting the same from the ground.

2,749,089
TRANSMISSION CRADLE
James A. Feay, John H. Feay, and Alex N. Feay, Sioux Falls, S. Dak.
Application January 13, 1954, Serial No. 403,810
2 Claims. (Cl. 254—134)



1. A transmission cradle comprising a longitudinally positioned bar, a transverse bar attached to said longitudinally positioned bar having vertically positioned portions, studs threadably engaged with said vertically positioned portions, said studs having pointed ends for bearing against a transmission, said longitudinally positioned bar including a further vertically positioned stud threadably engaged therewith, said further stud including an upper point for abutment with said transmission, a chain member detachably connected to one side of said longitudinally positioned bar for passing around said transmission and to securely retain the same, a securing member attached to said longitudinally positioned bar, means for firmly attaching said securing member to a standard lifting jack, including a substantially vertically positioned bolt member having a lower threaded end, said bolt member being received in the platform opening of said standard jack to be thereby attached thereto, a nut engaging said threaded bolt end for providing said attachment, whereby said cradle will be securely attached to said jack.

2,749,090
CABLE TOOL DRILL
Tom N. Hudson, Lynchburg, Ohio
Application October 16, 1951, Serial No. 251,499
18 Claims. (Cl. 255—10)



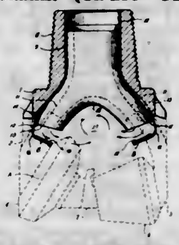
1. In a cable-tool drill having a cable engaging spudding means adapted to impart vertical reciprocating motion to a percussion drill-bit suspended by a cable, the combination of: a fluid pressure actuated single-acting cylinder piston assembly; a sump; a pressure source for the fluid; a conduit connecting the pressure source to the sump, whereby the pressure source can draw hydraulic fluid from the sump; means connecting the cylinder piston assembly to the cable engaging means to raise the drill-bit; a pressure conduit leading from the pressure source; at least one exhaust conduit leading to the sump; a conduit leading to the actuating side of the cylinder piston assembly; a reversing valve connecting the pressure, exhaust, and cylinder-piston conduits, and having two positions, namely (1) connecting the pressure conduit to the cylinder piston conduit, and (2) connecting the pressure conduit and the cylinder piston conduit each to an exhaust conduit; pilot means; operating connection means between the pilot means and the reversing valve, to set the reversing valve responsive to the setting of the pilot means; actuating connection means between the cylinder piston assembly and the pilot means, whereby the cylinder piston assembly near the end of the fall of the drill-bit sets the pilot means to set the reversing valve in its first-mentioned position, and whereby the cylinder piston assembly near the end of the rise of the drill-bit sets the pilot means to set the reversing valve in its second-mentioned position, and delayed-action means interposed in said operating connection means to control the rate of response of the reversing valve to at least one of the settings of said pilot means.

2,749,091
SAFETY BACK-OFF TOOL FOR REMOVING PUMP RODS IN OIL WELLS
Curtis Wall, Winnsboro, Tex.
Application August 9, 1954, Serial No. 448,567
4 Claims. (Cl. 255—35)



1. A tool for unscrewing sections of a sectionalized sucker rod comprising a well structure, a rotary drum adapted to be supported in vertical position over the well structure concentrically around the vertically extending sectionalized sucker rod projecting from the well structure, a pair of arms projecting vertically from the upper end of said drum, a rod wheel having radially extending spokes, said rod wheel being clamped to a section of the sucker rod extending vertically above the well structure, said spokes being engageable by said arms whereby a rotary torque applied to said drum is imparted to said means and said spokes to the clamped section of the sucker rod for imparting a turning torque thereto for unscrewing the successive sections of the sucker rod, and a guide holder mounted beneath said drum, said guide holder having a guide adjusting shaft therein disposed in a position external to said drum and a line guide supported on said guide adjusting shaft and embracing the external surface of said drum whereby a cable wrapped over the external surface of said drum has the turns thereof separated into sections, one section of which extends to a force-applying means and the other section of which extends to a tail line.

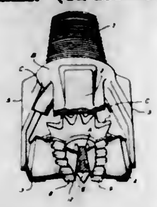
2,749,092
DRILL BIT
Robert G. Peter, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a corporation of Texas
Application August 1, 1952, Serial No. 302,211
3 Claims. (Cl. 255—315)



1. A cross roller bit having a head, cross rollers and side rollers mounted in the lower portion of said head, a drilling fluid nozzle mounted in said head above said cross and side rollers and having its lower discharge end disposed adjacent to said rollers, and a fluid diverter having a hard metal plate spaced from said discharge end and including means resiliently securing said plate

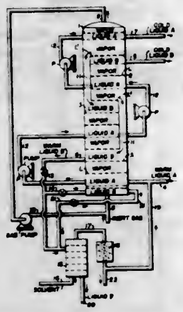
to the lower end of said fluid nozzle to cause said plate, when fluid issuing from said nozzle is discharged thereagainst, to divert fluid against said rollers should the velocity or pressure of said fluid be relatively low, and to divert fluid to the bottom of the hole being drilled by said bit should the velocity or pressure of said fluid be relatively high.

2,749,093
DRILL BIT
Robert G. Peter, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a corporation of Texas
Application September 12, 1952, Serial No. 309,258
2 Claims. (Cl. 255—350)



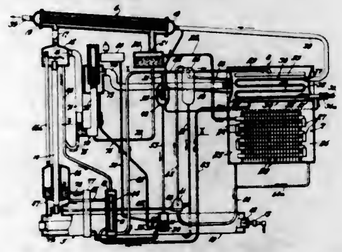
1. A cross roller drill bit having a head; said head having two oppositely disposed cross roller bearing extensions and two oppositely disposed side roller bearing extensions; frusto-conical cross rollers rotatably mounted on the lower portions of said cross roller bearing extensions, the axis of each roller extending substantially radially outwardly of the bit axis; side rollers rotatably mounted on the lower portions of said side roller bearing extensions; said head having a drilling fluid passageway therethrough; each of said cross rollers having formation engaging elements contained in a single spiral passing around the axis of the roller only a single time and on the surface of each cross roller, each element adapted to engage only one area on the bottom of a bore hole at a time, each of said spirals having a pitch substantially equal to its cross roller surface length.

2,749,094
METHOD OF HEAT EXCHANGE BETWEEN LIQUIDS
Warren K. Lewis, Newton, and Edwin R. Gilliland, Arlington, Mass., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application December 1, 1953, Serial No. 395,422
13 Claims. (Cl. 257—1)



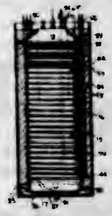
3. A process for effecting heat exchange between two liquids containing a common volatile component which comprises, introducing cold liquid B at a temperature below —35° C. into a pool of liquid B maintained in an uppermost stage of a staged elongated contacting zone, introducing warm liquid A into a pool of liquid A maintained in a lowermost stage of said zone, maintaining alternate pools of liquids A and B in said zone in indirect contact with each other, and separated from each other by a vapor phase of an inert gas and said volatile component, passing an inert gas through said lowermost pool of liquid A thereby removing vapors of said volatile component from liquid A and with it forming a vapor phase above liquid A, passing said vapor phase upwardly through liquid B in the stage immediately above it and recondensing a portion of said volatile component in colder liquid B repeating the passage of said vapor phase successively upwardly through liquids A and B, passing liquid B progressively downward and liquid A progressively upward in said zone whereby liquid B becomes progressively warmer and liquid A becomes progressively colder, removing warm liquid B from a lower end of said zone, and cold liquid A from an upper end of said zone, and removing a stream of cold inert gas from an upper end of said zone.

2,749,095
AIR CONDITIONING
Philip P. Anderson, Jr., and Edward M. Stubblefield, Evansville, Ind., assignors to Servel, Inc., New York, N. Y., a corporation of Delaware
Application August 25, 1952, Serial No. 306,243
9 Claims. (Cl. 257—9)



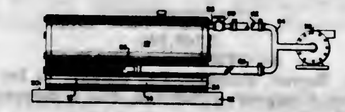
1. In a heating and cooling system, and absorption refrigeration apparatus of the two pressure type charged with a refrigerant-absorbent solution and including a generator, a condenser, an evaporator which functions as a heater on heating cycles and as a cooler on cooling cycles, an absorber and conduits interconnecting said elements to provide circuits for flow of refrigerant medium and absorption solution and for regulating flow of such fluids therethrough, and means for varying the concentration of the refrigerant-absorbent solution, said means including a first vessel for holding fluid out of circulation during cooling cycle operation and between cooling cycle operations and for returning such fluid to circulation at the beginning of a heating cycle operation, and a second vessel for variously holding liquid refrigerant out of circulation and returning such liquid refrigerant to circulation during cooling cycle operation.

2,749,096
BEVERAGE DISPENSING APPARATUS
Albert Cole, Miami Beach, Fla.
Application February 25, 1953, Serial No. 338,784
3 Claims. (Cl. 257—241)



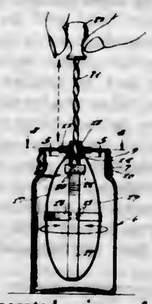
1. In combination, a beverage dispenser comprising a dispensing system having a drinking water tank, a semi-conically shaped cap for said tank having formed therein a central opening, a carbonated water tank carried in said opening of said cap and submerged in the drinking water contained in said drinking water tank, said cap and said tank forming a seal between that portion of the drinking water tank supporting said carbonated water tank and said latter tank, an enclosure for said drinking water tank, and an insulation within said enclosure and embracing said drinking water tank, an insulating disc frictionally arranged at the upper end portion of the shell and embracing the upper end portion of said drinking water tank at its junction with said cap, a sealing material placed on said disc and covering the semi-conically shaped walls of said cap to its point of connection with said carbonated water tank to seal said drinking water tank within said shell, and means for delivering water from the top of said drinking water tank to the top of said carbonated water tank.

2,749,097
VIBRATOR
Karl P. Billner, Philadelphia, Pa., assignor to Vacuum Concrete, Inc., a corporation of Pennsylvania
Application December 7, 1953, Serial No. 396,581
5 Claims. (Cl. 259—1)



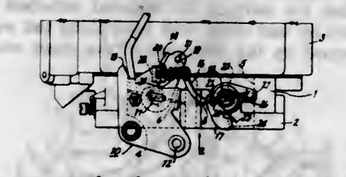
1. A vibrator comprising a frame, an unbalanced rotor journaled in said frame, said frame providing a recessed surface defining a chamber open at one end, a deformable sealing gasket coextensive with said end and extending therebeyond, a fluid motor mounted on said frame connected in driving relationship with said rotor, and fluid ports connecting said motor and chamber with a source of subatmospheric pressure for securing rigid engagement between said frame and another surface and imparting vibration thereto.

2,749,098
MIXER
Albert H. Johnson, Glens Falls, N. Y.
Application July 21, 1955, Serial No. 523,485
4 Claims. (Cl. 259—117)



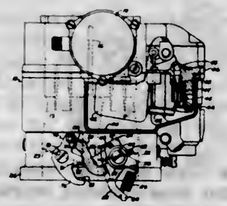
1. A manually operated mixer of the character described, including an upwardly open container having a wide screw neck, a cap for the container having a depending flange with screw convolutions fitting the screw neck of said container, the cap having a central opening, a sleeve extending rotatably down through the opening in the cap and having a flange thereon resting movably upon said cap and having a rectangular slit through the bottom thereof, means preventing accidentally pulling the sleeve upwardly out of said cap, a screw member extending down through said rectangular slit in said sleeve, and beater means rotatable by said sleeve within said container.

2,749,099
THROTTLE OPERATING MECHANISM
Elmer Olson, Rochester, N. Y., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 25, 1952, Serial No. 295,412
3 Claims. (Cl. 261—23)



3. In a compound carburetor having primary and secondary mixture passages to which fuel and air are adapted to be supplied to form a combustible mixture therein, primary and secondary throttle means controlling the quantity of mixture supplied by said primary and secondary mixture passages respectively, an operating arm positively connected to the secondary throttling means and movable by the primary throttling means after a predetermined opening movement of the latter, an adjustable idle stop movable with the primary throttling means and variably determining the normal idle position of said primary throttling means, and an arm extending from said first-mentioned arm and movable by the idle stop to fully close the secondary throttling means as the primary throttling means is moved to idle position.

2,749,100
THROTTLE CONTROL FOR TWO-STAGE CARBURETOR
Harold A. Carlson, Brentwood, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a corporation of Delaware
Application April 27, 1953, Serial No. 351,421
7 Claims. (Cl. 261—23)

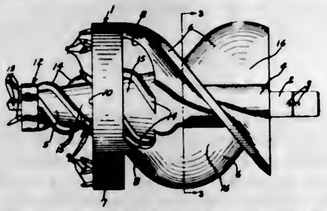


1. In a multi-stage carburetor having primary and secondary mixture conduits and primary and secondary throttles for said mixture conduits, the combination of a connection for manual operation of said primary throttle, mechanism for fully opening said secondary throttle during the final range of opening movement of said primary throttle, and means between said throttles including a driving part movable with said primary throttle and a driven part connected to said secondary throttle engaged by said driving part to partially open said secondary throttle prior to operation of said mechanism.

2,749,101
MINING AUGER DRILL HEAD
Ross H. Goodrich, Claremont, N. H., and Walter L. Shoulders, Cleveland Heights, Ohio, assignors to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application February 5, 1953, Serial No. 335,234
7 Claims. (Cl. 262—7)

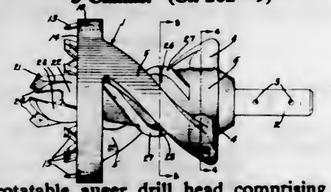
1. A rotatable auger drill head adapted for attachment to and rotation by a helical conveyor line, said auger drill head including at the forward end thereof a

ring, material attacking elements carried by said ring for forming an annular groove in which said ring is receivable, a hub extending rearwardly behind said ring and adapted for connection to a helical conveyor line, drilling and breaking means coaxial with said ring and carried by and at the forward end of said hub, and means extending between said ring and the helical conveyor line for moving the material detached and disintegrated by said auger drill head along the wall of the hole formed by the extension of the outer wall of the



annular groove including a plurality of helically disposed wings carried by said hub and having their inner edges connected to said hub throughout the major portions of their respective lengths and having their forward faces, in terms of direction of rotation, acting as pushers for disintegrated material, and wings at their outer foreward portions connected to said ring and constituting the supporting means for the latter and having their forward faces cut back inwardly to form an annular space surrounding said hub, and said breaking means extending rearwardly of said head into said annular space.

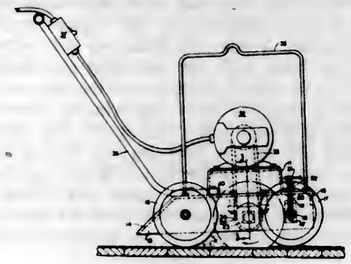
2,749,102
AUGER DRILL HEAD
Ross H. Goodrich, Claremont, N. H., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application October 14, 1952, Serial No. 314,591
5 Claims. (Cl. 262—9)



1. A rotatable auger drill head comprising a hub, a plurality of radial arms extending outwardly from said hub, a plurality of helically disposed arms one carried by each of said radial arms and extending forwardly therefrom, a ring carried solely by and connecting the forward ends of said helically disposed arms, mineral attacking means carried by said ring for cutting an annular groove, said ring receivable in such groove and said helically disposed arms having their outer surfaces spaced from the axis of rotation of said auger drill head a radial distance less than one-half the outside diameter of such groove but lying throughout their lengths close to the surface of a bore of the peripheral wall of which the outer wall of said annular groove constitutes an extension, and means at the forward end of said hub for forming a central opening coaxial with said groove and breaking the material between said opening and groove.

2,749,103
ENCLOSED ADJUSTABLE IMPACT ROOF SCRAPING MACHINE
Dominick Clemenzi, Danvers, Mass.
Application April 21, 1955, Serial No. 502,887
3 Claims. (Cl. 262—13)

1. A roof scraping machine having a chassis of sheet metal forming an enclosure with apertured side walls, a yoke adjustably mounted within the enclosure and having spindles projecting out through the apertures of the side walls, wheels rotatable on the spindles on bearings located outside the enclosure of the chassis, a motor mounted on the exterior of the chassis, a transverse shaft



journaled within the enclosure and driven by said motor having belt connections therewith, and a series of scraping blocks suspended from the shaft and operative on the rotation of the shaft to remove tar and gravel from the surface of a roof in a shower which is confined by the enclosure of the chassis.

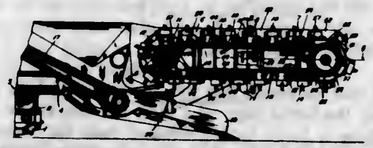
2,749,104
AUGER DRILL HEAD
Arthur L. Barrett, Franklin, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application January 26, 1952, Serial No. 268,387
14 Claims. (Cl. 262—26)



1. A rotatable auger drill head comprising a plurality of circumferentially spaced helically extending arms carrying at their forward ends mineral-attacking elements, more than one of said plurality of arms being disposed in the space between a pair of coaxial cylindrical surfaces whose axes lie in the same straight line with the axis of rotation of the auger head and the remainder of said plurality of arms being disposed in the space between two other cylindrical surfaces coaxial with the first mentioned cylindrical surfaces and of smaller diameter than the smaller of the latter, and means for supporting said several arms in fixed relation to each other and rotating them together including a hub and arms one individual to each of said previously mentioned arms extending outwardly from said hub in common transverse zone and each carrying one of said previously mentioned arms, said previously mentioned arms having their forward ends in advance, in terms of their rotation during drilling, of their rearward ends.

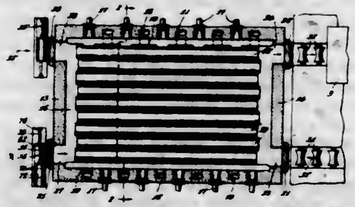
2,749,105
DUST ALLAYING MEANS FOR CONTINUOUS MINING APPARATUS
John R. Sibley, Franklin, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Original application July 5, 1949, Serial No. 102,996. Divided and this application March 14, 1951, Serial No. 215,563
10 Claims. (Cl. 262—29)

1. In a continuous miner comprising a swingable vein-attacking and disintegrating mechanism and having an outer end portion and an idler roll rotatably supported by the outer end portion, a plurality of spaced apart parallel disintegrator chains arranged to move in orbital paths including arcuate movement about the outer end portion in guided relation to the idler roll, the improvement comprising conduit means for a dust allaying agent connected to the end portion, a fluid receiving chamber in the end portion inwardly of the idler roll and in communication with said conduit means, a plurality of spray jet nozzles in the end portion in the spaces between the chains, and means arranged externally of the idler roll forming a



series of fluid passages in the end portion in parallel relation between the chains at spaced points along the length of the idler roll and with which said nozzles communicate, said passages connecting the nozzles with said receiving chamber, said passages having outer portions extending arcuately near the periphery of the roll and extending outwardly along the outer side of the roll, said arcuate portions of said passages having the same curvature as the roll periphery, said nozzles discharging a dust allaying spray outwardly between the chains.

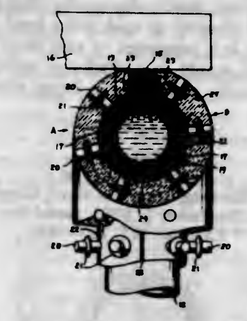
2,749,106
PROTECTION OF HOT METALLIC BODIES AGAINST OXIDATION
Harold J. Ness, Montclair, N. J., assignor to Metallurgical Processes Co., Newark, N. J., a corporation of New Jersey
Original application November 28, 1950, Serial No. 197,939. Divided and this application June 2, 1952, Serial No. 291,136
4 Claims. (Cl. 263—2)



1. The combination with a combustion furnace of the continuous type through which is continuously passed having a work receiving position, a work discharging position and an opening through a wall thereof adjacent said work receiving position, of an injector mechanism disposed externally of said furnace and having a discharge nozzle disposed in alignment with said opening and said work receiving position, said nozzle being directed towards said work receiving position, means for supplying a substantially unaerated hydrocarbon fuel to said nozzle under pressure, valve means for controlling the flow of said fuel to said nozzle, means for operating said valve mechanism to cause said fuel to be discharged from said nozzle into contact with work disposed in said work receiving position and means for simultaneously supplying a powdered compound to the fuel so discharged.

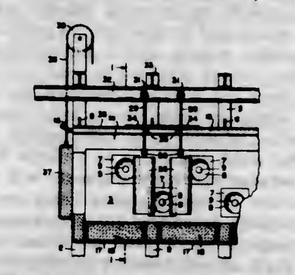
2,749,107
INSULATED WATER-COOLED FURNACE MEMBERS
John Wilson Corriston, Springfield, Pa.
Application April 24, 1952, Serial No. 284,079
14 Claims. (Cl. 263—6)

1. In a heating furnace, a water-cooled tubular work support, an intermediate multi-stud unit applied to said work support, and, a plastic refractory lining applied over said multi-stud unit, said unit lying in direct contact with



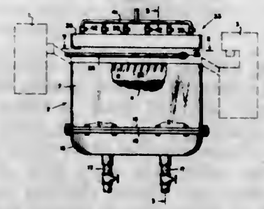
said work support to effect a transfer of heat away from the refractory to prolong the life thereof.

2,749,108
BILLET HEATING FURNACE
Frederic O. Hess, Philadelphia, Pa., assignor to Selas Corporation of America, Philadelphia, Pa., a corporation of Pennsylvania
Application August 20, 1952, Serial No. 305,458
5 Claims. (Cl. 263—6)



2. In a furnace system, the combination of structure forming an elongated chamber having side walls and a roof, said roof being provided with a slot extending centrally thereof from one end to the other, a plurality of burners located in said side walls to supply heat to said chamber, a floor for said chamber being formed of a plurality of doors extending between the lower edges of said side walls, means to mount said doors for pivotal movement around an axis below and parallel to one of said side walls, and latch means operative to hold said doors in closed position extending between said side walls.

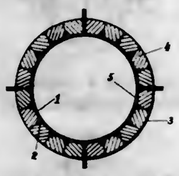
2,749,109
HEATING APPARATUS
Fred Maud, Philadelphia, Pa., assignor to Selas Corporation of America, Philadelphia, Pa., a corporation of Pennsylvania
Application July 24, 1952, Serial No. 300,661
14 Claims. (Cl. 263—6)



1. The method of heating a spherical object which comprises producing a vertically directed high tempera-

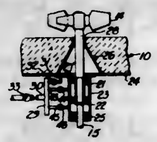
ture, blast of gases of a velocity sufficient to support the object at a given level, the blast being of a size to completely envelope the object, placing the object in the blast to be supported thereby at said given level and moving the object while it is supported at said level by the blast from a point of supply to a discharge point, the object being heated by the gases as it is being moved between said two points.

2,749,110
RECUPERATOR
Walter Hartwig, Oker am Harz, Germany
Application December 2, 1952, Serial No. 323,564
7 Claims. (Cl. 263—20)



1. A heat exchange apparatus comprising, in combination, an inner tubular wall member having axially extending longitudinal rib portions circumferentially spaced on its outer surface; an outer tubular wall member surrounding said inner wall member and radially spaced therefrom to provide an elongated annular space therebetween into which said longitudinal rib portions of said inner wall member project; and an intermediate tubular insulating lining means arranged in said annular space between said inner and outer wall members, the inner surface of said insulating lining means being spaced from the outer surface of said inner wall member by a gap having a radial width amounting to a minor fraction of the distance between said inner and outer wall members, said inner surface of said insulating lining means being formed with axially extending grooves respectively receiving said longitudinal rib portions of said inner wall member, the depth of each axially extending groove being substantially equal to the radial width of the longitudinal rib portion projecting therein minus the radial width of said gap, whereby a fluid medium to be heated is forced to pass at relatively high speed through said gap for absorbing heat from a fluid medium passing through said inner wall member.

2,749,111
VACUUM SEAL FOR FAN SHAFT OF HEAT TREATING FURNACE
John W. Carter, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a corporation of Ohio
Application August 24, 1951, Serial No. 243,382
6 Claims. (Cl. 266—5)



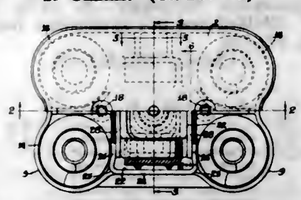
2. In a heat treating furnace, in combination, wall means forming a chamber for heat treating work, a shaft extending through said wall means, a casing about said shaft having substantially closed ends along said shaft and forming a plenum chamber about said shaft, and exhaust means for exhausting gases from said plenum chamber to without said plenum chamber and said wall means whereby to induce flow of furnace gases into said plenum chamber from within said wall means along said shaft.

2,749,112
BLAST FURNACES PROVIDED WITH TUYERES HAVING BAFFLES
Francis J. Zippler, Pittsburgh, Pa., assignor of one-half to Henry G. Bolster, Pittsburgh, Pa.
Application August 24, 1953, Serial No. 375,994
4 Claims. (Cl. 266—30)



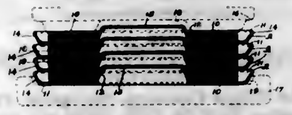
4. A unit for connection into the conduit which carries air from the bustle pipe of a blast furnace to the tuyere comprising a body having flanged ends for connection into the conduit, said body having a portion intermediate said ends of radially increased diameter providing a radially enlarged expansion chamber in the body between its two ends, and a baffle in said chamber crosswise of its longitudinal axis, the area of the baffle being less than the full transverse area of the chamber whereby there is a free air passage through the chamber, the area of the free air passage past the baffle being substantially equal to the cross-sectional area of the conduit into which said flanged ends of the body are designed to be connected.

2,749,113
SNUBBED SPRING GROUP
John J. Kowalik, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application May 10, 1952, Serial No. 287,095
19 Claims. (Cl. 267—9)



2. In a spring group, spaced top and bottom plates, coiled springs disposed at the four corners of said plates therebetween, friction surfaces upstanding from one of said plates, wedge means comprising at least one wedge wall integral with said other plate and in angular relation to said friction surfaces, wedge surfaces on opposite sides of said wedge wall in vertical spaced relation to each other, a pair of friction shoes wedged downwardly and upwardly, respectively, with said wedge surfaces and the related friction surface, and spring means acting on both of said shoes and operative to urge said shoes to engage said surfaces.

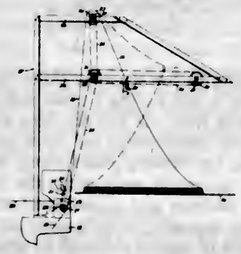
2,749,114
RUBBER CUSHIONING MEANS FOR SHOCK ABSORBERS
William E. Withall, Hinsdale, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a corporation of Delaware
Application March 13, 1952, Serial No. 276,429
1 Claim. (Cl. 267—63)



In a cushioning unit for a shock absorbing mechanism, the combination with a series of rubber mats each having a central opening therethrough; of a series of spacing

plates alternated with said mats; flanges on said plates extending obliquely outwardly from the edges thereof and disposed outwardly from the edges of said mats to provide spaces into which the mats are displaced as the unit is compressed; and a hollow, tapered centering projection on each plate fitting in and extending through the opening in the corresponding mat to hold the mat centered with respect to the plate, the centering projection on each plate projecting into the hollow portion of the centering projection of the adjacent plate in the series and the flanges on each plate projecting over the flanges on the adjacent plate in the series as the unit is compressed thereby to maintain the unit in alignment.

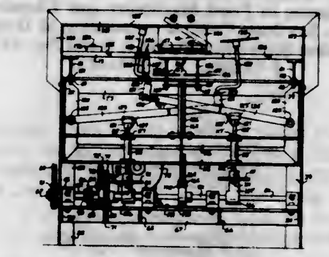
2,749,115
FOLDING APPARATUS FOR TRAVELLING WEB MATERIAL
Samuel Cohn, Eugene Cohn, and Jules G. Walter, New York, N. Y., assignors to Samcoe Holding Corporation, Woodside, N. Y., a corporation of New York
Application December 13, 1952, Serial No. 325,752
1 Claim. (Cl. 270—79)



Folding apparatus for travelling web material comprising a frame, an overhead web-feeding roll supported by said frame and extending transversely thereof, means for driving said web-feeding roll, said overhead web-feeding roll being adapted to feed the web downwardly to a supporting surface, a pair of endless chains supported on opposite sides of said frame beneath said web-feeding roll and extending longitudinally of the frame, means for driving said chains, means interconnecting said feeding roll driving means and said chain-driving means whereby one is operated in synchronism with the other, and a single guide bar supported by and between said endless chains and extending transversely of the frame, said guide bar being thereby movable back and forth lengthwise of the frame and being adapted to engage during at least a portion of its travel a web fed downwardly by the web-feeding means, one pair of adjacent ends of the endless chains lying substantially directly beneath the feeding roll whereby the guide bar is moved outwardly substantially from the vertical plane of the feeding roll and then inwardly thereto and said endless chain being so located with respect to the feeding roll and the supporting surface that the unsupported length of web below the guide bar is always longer than the length of web extending from the feeding roll to the guide bar.

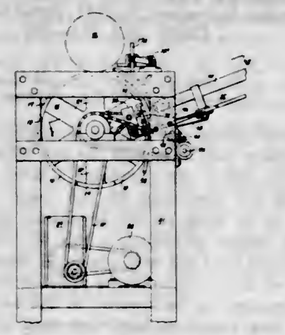
2,749,116
SHEET FOLDING APPARATUS
Martin W. Hayden, Leaksville, N. C., assignor, by mesne assignments, to Fieldcrest Mills, Inc., a corporation of Delaware
Application February 24, 1953, Serial No. 338,421
12 Claims. (Cl. 270—84)

1. Apparatus for folding opposite end portions of substantially rectangular, pliable articles in overlapping relation to each other and in overlapping relation to the central portions thereof, said articles having been previously folded along lines disposed transversely of their path of travel into a plurality of superposed layers, comprising a platform on which successive previously folded articles are adapted to be placed, means for moving each successive article in a given direction along said platform, first and second normally substantially horizontally disposed folding plates spaced laterally from each other relative to the direction of travel of each successive article and over which the end portions of each successive article are moved, means operable automatically upon the end portions of each successive article moving to a position above the folding plates for arrest-



ing movement of the corresponding article, and means automatically operable upon the end portions of each successive article moving to a position above said folding plates for moving each of the folding plates in phased vertical reciprocating motion with an upward velocity sufficient to impart an impulse of motion to each of said end portions to cause them to be thrown upwardly and inwardly in overlapping relation to the central portion of the article and in overlapping relation to each other, said motion of the folding plates being restricted to a part only of the path executed by the end portions.

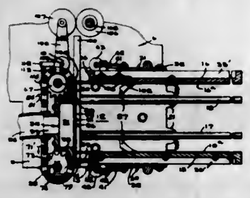
2,749,117
MACHINE FOR HANDLING CARDS AND THE LIKE
Albert C. Chew, New York, N. Y., assignor to Hobson-Miller Machinery, Inc., New York, N. Y., a corporation of New York
Application March 27, 1953, Serial No. 345,199
17 Claims. (Cl. 271—11)



1. In a mechanism for transferring cards from a stack serially to the segments of a segmented rotating roller, a hopper for feeding a stack of cards serially to the roller, projections on the trailing edge of each segment for engaging the trailing edge of the leading card of the stack to carry that card in rotation with the roller, rotary separator discs for separating the leading card from those following, suction devices reciprocatable into the gaps between segments of the roller for pulling the corners of the leading card toward the roller for engagement by the separator discs, a drag suction device for damping the motion of the card as it is engaged by the projection to prevent its bouncing upon impact with the projection, and a means synchronizing the operation of

the roller, discs, and reciprocatable suction devices, such that the reciprocatable suction devices advance through the gaps in the roller to draw card corners into the path of the separator discs and withdraw out of the path of the advancing segments, and the discs separate the leading card from the stack in time to be picked up by the advancing projections.

2,749,118
CARTON FEEDING DEVICE
Charles E. Kerr and Robert K. Galloway, Hoopeston, Ill., assignors to Food Machinery and Chemical Corporation, San Jose, Calif., a corporation of Delaware
Application September 10, 1951, Serial No. 245,778
9 Claims. (Cl. 271—12)



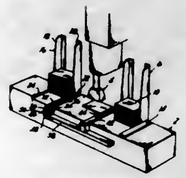
1. A carton feeding device comprising a framework, a carton magazine on said framework, a drive shaft journalled in said framework, a swing frame journalled on said drive shaft, a grid on said swing frame registering with said magazine, a countershaft journalled in said swing frame, sprockets on said drive shaft and said countershaft, conveyor chains on said sprockets extending alongside said grid, guiding means spaced laterally from said magazine, and stop means holding said swing frame in predetermined position of rotational adjustment about said drive shaft, said stop means being adjustable to align said conveyor chains with respect to said guiding means.

2,749,119
PNEUMATIC SHEET-TAKING APPARATUS
Alfred Piersene Battey, Barwick-in-Elmet, England, assignor to R. Hoe & Co. Inc., New York, N. Y., a corporation of New York
Application September 22, 1951, Serial No. 247,791
1 Claim. (Cl. 271—26)



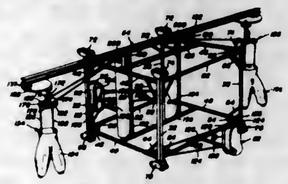
In a sheet feeder for a printing machine, a pile support, a presser foot to engage the top sheet of a pile on the support, means for advancing a sheet from the pile and means for separating the top sheet of the pile to enable it to be taken by the advancing means, the said separating means comprising a pair of cylinders located over positions near the rear edge and inward from each side edge of the pile and having rams carrying pneumatic suckers arranged to be lowered to the top sheet of the pile and then raised to bend the sheet and separate it from the pile, and in combination, means for pendently supporting the cylinders of the separating means for swinging movement of the suckers and means for swinging the suckers inwardly toward the center of the pile when lifting and bending a sheet, and forwardly when the sheet is being advanced by the said advancing means, a pair of brackets fixed on the machine, an annular part ball member secured to each bracket and formed with a periphery having a spherical curvature, a lug on the upper part of each cylinder having a transverse bore formed to cooperate with the periphery of the part ball member, first stops on the brackets to limit the range of swinging movement of the cylinders outwardly and backwardly, spring means to hold the cylinders resiliently against the stops in a datum position determined by the stops, second stops on the bracket to limit the extent of swinging movement inwardly and forwardly, and a pair of restraining weights supported over points nearer the rear corners of the pile than the points engaged by the suckers, each weight having a guide restricting it to motion in a vertical direction when it is engaged by a sheet being lifted by the suckers and thereby reducing the height to which the corners of the sheet are raised.

2,749,120
APPARATUS FOR STACKING PLATES
John W. Mallory, West Hartford, Conn., assignor to The Parker Stamp Works, Inc., Hartford, Conn., a corporation of Connecticut
Application February 1, 1955, Serial No. 485,565
3 Claims. (Cl. 271—87)



1. In an apparatus for stacking plates successively one below the other, a bed having a plate supporting surface, a magazine rising from the bed and into which the plates are adapted to be successively fed along said bed, a slide having a pusher for moving plates along the bed into the magazine and reciprocal relative to the bed between a plate-receiving position and a plate-delivering position, a roller journaled beneath the magazine having projecting teeth arranged to be moved successively into a zenith position to engage the bottom plate in the magazine and support said bottom plate with the trailing edge thereof above said bed, and means associated with the slide arranged to successively rotate the roller to position successive teeth thereof in the zenith position upon movement of the slide to its plate-receiving position.

2,749,121
FOOTBALL PRACTICE DEVICE
John R. Myers, Sioux Falls, S. Dak.
Application March 20, 1952, Serial No. 277,601
7 Claims. (Cl. 273—55)



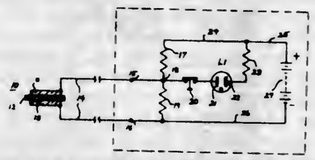
4. A football practice device comprising a movable frame, a mounting bracket carried by said frame, a tackling dummy suspended from said mounting bracket, cable guide means carried by said mounting bracket, a flexible cable-like member secured to said tackling dummy and engaged over said cable guide means, a counterbalancing device, the other end of said flexible member being connected to said counterbalancing device, said mounting bracket including a plate rotatably secured to said frame at one point on said plate, said cable guide means including a guide supporting bracket secured to said plate at a point remote from said one point for rotation with respect thereto, a straight trackway, said frame being mounted for guided movement on said trackway, a guide rail fixedly mounted adjacent said trackway, guide rollers carried by said guide supporting bracket, said guide rollers engaging said guide rail for moving said guide supporting bracket and said tackling dummy transversely of the frame in response to movement of said guide rollers along said guide rail, said guide rail being sinusoidal in outline.

2,749,122
SIMULATED BASEBALL GAME
Harold G. Barrett, Evanston, Ill., assignor of one-half to Nanko C. Bos, River Forest, Ill.
Application March 17, 1953, Serial No. 342,889
1 Claim. (Cl. 273—89)



In a simulated baseball game, a panel having a baseball diamond including a home plate depicted thereon, a batting device comprising an upright post pivotally mounted on said panel adjacent home plate, said post being provided with an aperture adjacent its upper end, a horizontally disposed bat extending through said aperture and having a downwardly extending ball striking surface, said bat being movable transversely relative to said post, spring pressed means in said post engaging said handle to limit the transverse movement thereof, the extent of said transverse movement being approximately equal to the width of said home plate.

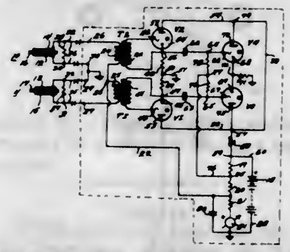
2,749,123
TARGET HIT INDICATOR
Donald F. Ream, Washington, D. C.
Application August 26, 1953, Serial No. 376,717
12 Claims. (Cl. 273—102.2)



1. A target shooting apparatus comprising a target, said target having a plurality of electrically conductive plates spaced apart and insulated from each other, a voltage divider network, said plates being connected across a part of said voltage divider network, means for connecting a power supply to said voltage divider network for charging said plates, said plates being adapted to be discharged by passage of a projectile through said target and an indicating means connected across another part of said voltage divider network and actuated by redistribution of voltage on said network caused by recharging of said plates following passage of a projectile therethrough.

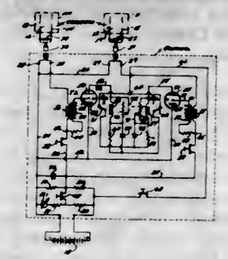
2,749,124
DUELING TARGET INDICATOR
Donald F. Ream, Washington, D. C.
Application April 6, 1953, Serial No. 346,944
18 Claims. (Cl. 273—102.2)

1. A target shooting apparatus comprising, a plurality of targets, a plurality of indicator circuits of the same number as there are targets, there being an indicator circuit associated with each target, said indicator circuits being adapted to be connected to a source of electrical power for generating a signal when a target is struck by a projectile, each of said indicator circuits having a first stage responsive to the signal generated when its associated target is struck for indicating when said target has been struck, each of said indicator circuits having a second stage responsive to actuation of the associated first stage for indicating when its respective target has been struck first, and means interconnecting the plurality of indicating circuits whereby the response of the second



stage of any given circuit when its target has been hit first causes the second stages of the other circuits to become ineffective to indicate a first hit, the first stage associated with each of said targets remaining actuable in response to a signal generated by a hit on its respective target after another target has been struck first.

2,749,125
TARGET INDICATING APPARATUS
Donald F. Ream, Washington, D. C.
Application October 27, 1952, Serial No. 316,965
15 Claims. (Cl. 273—102.2)

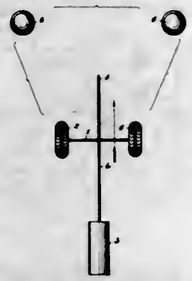


1. In a target shooting apparatus, a plurality of targets, each of said targets comprising a plurality of electrically conductive plates spaced apart and insulated from each other; means for connecting each of said targets to a power supply source for charging the plates of each of said targets to establish a potential difference therebetween, said plates being adapted to be discharged by passage of a projectile through the target; and an indicator circuit associated with each of said targets and responsive to the charging current of its associated target for indicating when said associated target has been struck first, and means linking the indicator circuit of each target with the indicator circuits of the other targets for signaling to the circuits of the other targets when the respective target has been struck first.

2,749,126
SURFACE PROJECTILE GAME
Heinrich Schneider, Ulm (Danube), Wurttemberg, Germany
Application March 5, 1951, Serial No. 213,852
2 Claims. (Cl. 273—108)

1. A toy comprising a rolling body including a thin spring axle of relatively great length so as to be highly resilient, and two resilient rubber wheels mounted at opposite ends of said axle, and a spring wire having a handle at one end and being curved slightly upwardly toward the other end, said spring wire being engageable with said spring axle for first bending said axle and compressing said wheels upon the ground when a pres-

sure is exerted by said handle and through said wire upon said axle in a direction substantially vertically to the ground so as to build up a potential energy in said body and, when the pressure on said handle is increased, for bending said spring wire intermediate said handle



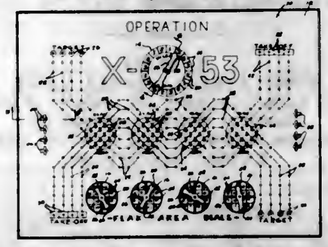
and said axle and for thus increasing the curvature of said wire, whereby the direction of pressure upon said axle is changed to an oblique angle relative to the ground and said potential energy is converted into a rotary motion so as to propel said body suddenly in a forward direction.

2,749,127
FORTUNE-TELLING BOARD OR MAGNETIC GAME
Richard R. Kittel, Chicago, Ill.
Application June 5, 1953, Serial No. 359,833
2 Claims. (Cl. 273—109)



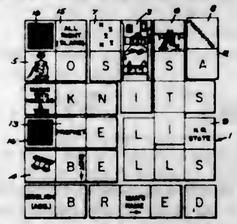
1. A magnetic game comprising a frame having spaced panels the upper of which is provided with a playing surface and game board having multiple outlines bearing numbers and multiple stations from which a player begins play, there being a station for each player spaced about the playing surface, a relatively small magnetizable object for each player adapted to be initially placed on a designated station and provided with a pointer to point to any one of said multiple outlines as it is moved in any direction upon the player tilting the frame, the lower panel being disposed beneath and in spaced relation with said upper panel and playing surface to provide a substantially unobstructed but enclosed and concealed space between said panels, a single, relatively heavily weighted, magnetic device concealed within the frame and adapted to slide upon the lower panel in proximity to the upper panel and to magnetically couple and move the object on the upper panel therewith when the frame is tilted to cause the magnetic device to move beneath and exert its magnetic influence upon the object, after which continued tilting of the frame carries along the object to a position away from its original station and adjacent one of the outlines bearing a number, and beads freely distributed over the upper surface of the lower panel upon which said magnetic device is free to slide upon tilting of the frame.

2,749,128
SPINNER CONTROLLED GAME APPARATUS
Dayle F. Arnold, Longview, Wash.
Application August 27, 1954, Serial No. 452,543
1 Claim. (Cl. 273—134)



A game comprising a game board having longitudinally spaced transverse rows of openings extending therethrough and zig-zag rows of openings extending therethrough between and joining the transverse rows of openings, said zig-zag rows of openings intersecting in a group of spaced areas, the openings in the rows within the areas in which the rows intersect lying coincident, game pieces adapted to be introduced into successive openings as they progress along the rows of openings in the rows of openings, a spinner carried by the game board for directing the progress of the game pieces along their respective rows of openings, and other spinners carried by the game board for use solely in indicating the arrest of selected game pieces along their respective rows of openings while they are in the areas in which the rows of openings intersect.

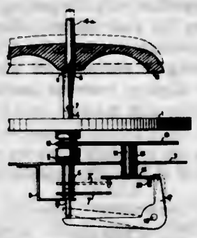
2,749,129
PUZZLE
Samuel N. Vose, Brookline, Mass.
Application April 8, 1954, Serial No. 421,766
1 Claim. (Cl. 273—157)



A puzzle comprising a set of flat puzzle pieces of varied shapes and dimensions and adapted to be assembled together in the manner of a jig-saw puzzle to form a complete panel, each piece having thereon variegated block-outlined indicia comprising a portion of a completed cross-word puzzle, certain of the blocks on each said piece including a portion of a word, and certain of the remaining blocks comprising an intelligible clue to the word in its vertical or horizontal crossword line, the shape of said pieces, in conjunction with said indicia thereon and the shape and indicia on each mating piece, cooperatively facilitating proper matching and assembly of said pieces to produce an assembled panel constituting a completed crossword puzzle.

2,749,130
AUTOMATIC RECORD CHANGERS
Eric Bacher, Yverdon, Switzerland, assignor to Paillard S. A., Sainte-Croix, Switzerland, a company of Switzerland
Application November 7, 1951, Serial No. 255,166
Claims priority, application Switzerland December 22, 1950
2 Claims. (Cl. 274—10)

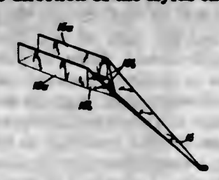
1. In a talking machine having an automatic record changer and a stack of reserve records thereon, the combination, comprising, a frame including a baseplate, a record turntable rotatably mounted on said baseplate, said reserve record stack being positioned above said turntable, means for mounting said turntable on said baseplate, said means being positioned between said turntable and said baseplate and being fixedly attached to said turntable, said turntable having a bore therethrough in the central portion thereof, said baseplate having a bore therethrough coincidingly positioned with respect to said bore in said turntable, a rod movably positioned in said mounting means and extending through said turntable bore, said baseplate bore, and said reserve record stack, said rod including at its top portion a shoulder means for supporting the said reserve record stack at the lowermost record thereof, said rod being hollow for at least a portion of its length, a pawl means for shifting the said lowermost record laterally from said shoulder means onto said turntable, said pawl means being pivotally mounted on said rod at a point thereon between said turntable and said shoulder means and having its free end slightly above said shoulder means, a stop member axially secured to and positioned about said rod at its lower portion beneath said baseplate, a first means for causing said pawl means to swing about its pivot, said first means being slidably positioned in the hollow por-



tion of said rod, a record balancing plate means for maintaining said reserve record stack substantially horizontally with respect to the vertical axis of said rod and for holding said pawl means in locked position after the lateral shifting of the last lowermost record of said reserve stack from said shoulder means onto said turntable, said balancing plate means being slidably positioned about said rod above said shoulder means, and a second means for causing said first means to slide in said rod during the maintaining by said record balancing plate means of said reserve record stack substantially horizontally with respect to the vertical axis of said rod and for causing the simultaneous movement of the first means and the rod, during the holding of the said pawl means in locked position by said record balancing plate means after the lateral shifting of the last lowermost record of said reserve stack from said shoulder means onto said turntable, through said baseplate bore, through said turntable mounting means, and through said turntable bore, said stop member moving with said rod said second means being operatively connected to said turntable and to said baseplate, whereby the record balancing plate means locks the pawl after the dropping of the last record from said shoulder means so that further movement of said first means will cause movement of said rod and said stop member, thereby stopping the talking machine.

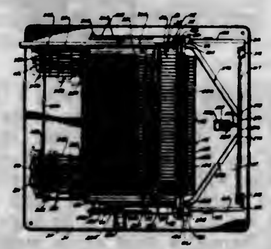
2,749,131
MECHANICAL COUPLING DEVICES
Stanley Kelly, Enfield, England, assignor to Cosmocord Limited, Enfield, England, a British company
Application October 2, 1951, Serial No. 249,247
1 Claim. (Cl. 274—37)

For use in an electromechanical gramophone pick-up device a cantilever arm adapted to have a stylus attached to one end thereof and to be attached at the other end to a transducer element, said arm having a V-shape in cross-section, said arm being gradually reduced in cross-section and in mass in the direction of the stylus end and said arm



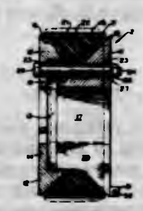
being comprised of a plurality of longitudinal layers of material separated by a material having a high frictional loss characteristic.

2,749,132
TYPE SETTING MACHINES
Blackwell K. Murchison, Brooklyn, N. Y.; Bessie F. Murchison, executrix of said Blackwell K. Murchison, deceased
Application February 21, 1951, Serial No. 212,054
54 Claims. (Cl. 276—10)



1. In a type setting machine, a plurality of type support rings, each provided with slots oriented to accommodate a plurality of type and type wedges flat on their sides and normal to the plane of the ring, means for rotatively supporting said rings in adjacent positions on a horizontal axis, a horizontal type carrier bar positioned across one of the sides of said rings, means for rotating each of said rings, means for stopping each of said rings in a selected position in relation to said bar in order that any piece of type and type wedge carried by each of said rings may be stopped at said bar, means for engaging the type and wedges stopped at said bar on to said bar, means for righting said type and type wedges, means for movably supporting said type and wedges on said bar in order that said type and wedges may be moved together into printing position, means for moving said type and wedges together to a predetermined width, and means for expanding said wedges in order to wedge said type in said predetermined space in order to make said type ready for printing in a justified condition.

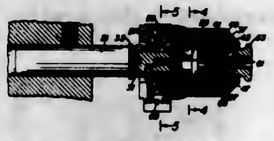
2,749,133
CORE CHUCK
James C. Rich, Portland, Oreg.
Application August 16, 1954, Serial No. 450,031
9 Claims. (Cl. 279—2)



1. A core chuck comprising a pair of rings adapted to fit about a shaft, one of said rings having a hub portion piloted for axial slidable movement in a recess in the other

of said rings, a circular band of elastic material between said rings supported by said hub portion all around the same, the inner side of each of said rings being of frusto-conical shape and the sides of said band being of complementary frusto-conical shape to provide cooperating tapered surfaces to facilitate outward radial expansion all around said band when said rings are moved axially relative to each other to clamp and compress said band, said rings having non-circular openings to fit without turning of said rings on a complementary cross-sectional shape of said shaft, and means enabling said axial movement of said rings.

2,749,134
TOOL-HOLDING DEVICE
Stephen L. Penaseck, Albion, N. Y., assignor to Carlton G. Lindsay, Perinton, N. Y.
Application March 2, 1953, Serial No. 339,629
4 Claims. (Cl. 279—16)



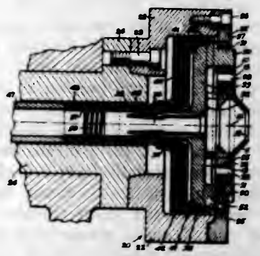
1. A tool-holding device comprising a clutch member having a clutch surface extending at an angle to the longitudinal axis thereof, a second clutch member mounted on said first member for movement longitudinally therealong while being held against rotational movement relative thereto, said second clutch member having a clutch surface extending at an angle to the longitudinal axis thereof, a third clutch member extending between said first two clutch members and having a pair of clutches faces for engaging the respective clutch faces on said first and second clutch members, releasable means for securing a tool to said third clutch member and preventing relative movement therebetween, resilient means engaging said first and second clutch members for moving said members relative to each other for bringing the clutch surfaces thereon into frictional engagement with the respective clutch surfaces on said third clutch member, and manually operable means for adjusting the tension of said resilient means for adjusting the frictional interengagement between said mating pairs of clutch surfaces for holding said third clutch members and tool against rotation relative to said first and second clutch members under normal load while allowing relative rotation between said first and second clutch members and said third clutch member when the tool is subjected to heavier than normal torque loads.

2,749,135
FEED COLLET
Henry Little, Hatboro, Pa., assignor to Standard Pressed Steel Co., Jenkintown, Pa., a corporation of Pennsylvania
Application September 16, 1953, Serial No. 380,507
1 Claim. (Cl. 279—41)



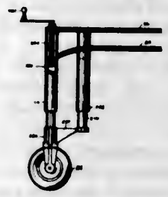
In a feed collet for polygonal stock, a tubular body having longitudinal slits at one end defining a plurality of resilient terminal stock-gripping fingers, said fingers having their inner faces longitudinally recessed to afford a plurality of uniform contiguous grooves each having an included angle corresponding to the angle between the adjoining faces at the respective corners of the polygonal stock and having twice the number of said corners.

2,749,136
CHUCKS FOR ALIGNING AND CLAMPING PARTS THEREON
Frank W. Smerz, Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application April 17, 1953, Serial No. 349,434
6 Claims. (Cl. 279—50)



1. A chuck for aligning and supporting a part having gaging surfaces thereon comprising an aligning member connectible to a spindle for rotation therewith and having relatively fixed gaging surfaces extending in an axial direction and engageable with the gaging surfaces on said part for supporting the part on said aligning member in a predetermined position transversely of the axis of rotation, a collet having a plurality of jaws mounted for rotation with said aligning member and for radial movement into engagement with the part, and a floating element mounted for axial and transverse movement for actuating said collet to move the jaws into gripping engagement with the part to hold it in said predetermined position.

2,749,137
VARIABLE HEIGHT VEHICLE
Jens H. Thomsen and Ted N. Granger, North Bend, Nebr.
Application August 24, 1950, Serial No. 181,144
1 Claim. (Cl. 280—6)



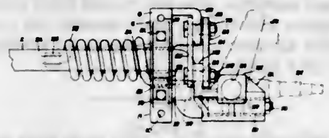
In a variable height vehicle: a frame, two rearward and at least one forward spaced apart tubular members secured to said frame, said tubular members having vertical openings therein, elongated wheel carrying members disposed in said annular members respectively and being vertically slidable with respect thereto, wheels secured to the bottom of said wheel carrying members, means for raising and lowering said wheel carrying members independently of each other, and means for turning said forward wheel for steering the spaces between said wheels being substantially open up to at least the height of said wheels, and means for preventing pivoting of said rearward wheels and for maintaining said rearward wheels in parallelism comprising arms attached to said rearward wheel holding members and extending outwardly therefrom and transversely thereto, and two sets of two vertically telescoping members, each set being disposed above one of said arms respectively, one telescoping member of each set being attached to a respective arm and extending upwardly therefrom and the other telescoping member of each set being rigidly secured at its upper end to said frame.

2,749,138
PUSH SLED
Hugh M. Wilson, Nanaimo, British Columbia, Canada
Application May 15, 1952, Serial No. 287,848
3 Claims. (Cl. 280—8)



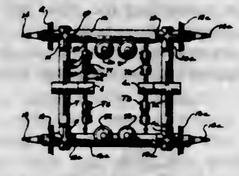
3. A sled comprising a pair of spaced-apart parallel runners having their forward ends turning upwardly, means rigidly connecting the runners adjacent their forward ends so that they are maintained mutually parallel and leaving a clear space between the runners rearwardly from said ends and opening out from the back of the sled, a supporting frame extending upwardly from each runner and extending throughout most of the length of the latter, said frames having portions substantially parallel with the runners, means rigidly connecting the frames adjacent their forward ends, said supporting frames being located on opposite sides of the clear space between the runners, whereby said space extends upwardly without obstructions between the frames, a swivel castor removably mounted on the means connecting the forward end of the runners and extending below the latter, and a wheel removably mounted on each runner and projecting therebelow adjacent the back end thereof.

2,749,139
SPRING MOUNTING ASSEMBLY FOR STEERABLE WHEELS
John A. Bavelot, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application February 12, 1953, Serial No. 336,494
3 Claims. (Cl. 280—96.2)



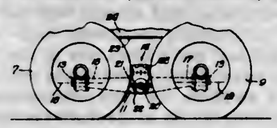
1. In a trail type axle assembly for resiliently supporting a highway vehicle, a main shaft, a bearing bracket journally receiving said main shaft, a coil spring sleeved over the shaft inboardly of the bracket and having its opposite ends secured to the shaft and bracket respectively, a crank on one end of the main shaft integrally formed therewith outboardly of the bracket and disposed to extend transversely of said main shaft, another shaft integrally formed with said crank on the end thereof remote from the main shaft, said other shaft being disposed to parallel the main shaft, a cast member having a bore therein receiving said other shaft whereby the member is journally mounted on said other shaft, another bore in said cast member in perpendicular relation to the first mentioned bore and disposed on one side thereof as seen in the plan view, an arm on the cast member extending upwardly therefrom and inboardly thereof, a lug on the bracket located above and to one side of the journal connection between the bracket and the main shaft, a link having its opposite ends pivotally connected to the lug and the arm respectively, a spindle member having angularly related segments, one of said segments being pivotally disposed in said other bore, and the other of said segments being arranged to rotatably mount an associated wheel, and steering means associated with the spindle member.

2,749,140
TANDEM AXLE FOR TRAILERS
Luther J. Hughes, Reading, Pa.
Application January 18, 1954, Serial No. 404,523
5 Claims. (Cl. 280—104.5)



1. A tandem axle construction for trailers, comprising a pair of walking beams pivotally mounted substantially centrally thereof on axes extending transversely of the trailer to enable pivotal movement of said beams in vertical longitudinal planes, two pairs of members, each pair swivelly mounted on opposite end portions of said walking beams and longitudinally slidable on said end portions, wheel-carrying axle portions rigidly secured to said last mentioned members, transversely extending, relatively slidable elements integrally secured to each of said members for joining both transversely disposed pairs of members for forming the front and rear axles, respectively, for maintaining said axles at right angles to said walking beams at all times, and for increasing the distance between the transversely disposed elements as the wheel axle tilts in a transverse vertical plane to compensate for road irregularities by insuring riding of all wheels on an irregular surfaced roadway at all times, and a plurality of adjusting means, each having an end mounted on one of said elements for relative rotative movement about the longitudinal axes of the adjusting means for adjustably varying the distance between said transversely extending walking beam axis and the axes of said elements to compensate for non-alignment or lack of parallelism of said axles.

2,749,141
TANDEM AXLE CONSTRUCTION
William E. Martin, Kewanee, Ill.
Application January 18, 1952, Serial No. 267,136
12 Claims. (Cl. 280—104.5)

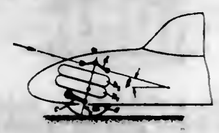


1. A tandem axle framework comprising a pair of axles, walking beams connected with said axles at points disposed in a common plane, said axles having wheel spindles disposed in predetermined positions with respect to said common plane, said walking beams each being bodily offset in a vertical direction with respect to said common plane and intermediate their lengths, and said beams being bodily invertible about their axle connections to dispose the offset beam portions in another elevational offset position with respect to said common plane and in respect to the positions of said spindles.

2,749,142
WHEEL SUSPENSION OF THE SWINGING-ARM TYPE WITH FAVORABLE SPATIAL ARRANGEMENTS, ESPECIALLY FOR MOTOR VEHICLES
Béla Barényi, Stuttgart-Rohr, Germany
Application July 6, 1951, Serial No. 235,486
In Germany January 22, 1949
Public Law 619, August 23, 1954
Patent expires January 22, 1969
5 Claims. (Cl. 280—124)

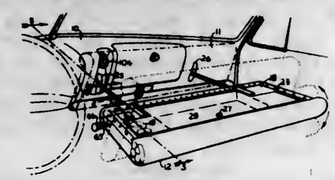
1. In a wheel suspension system for a vehicle of the swinging arm type in combination a wheel knuckle, two

control members disposed one above and the other below said wheel knuckle, wheel knuckle supports suspended on said two control members, means for connecting one of said control members for swinging movement about an axis extending substantially lengthwise relative to the vehicle and for connecting the other one of said control members for swinging movement about an axis extending substantially transversely relative to the vehicle, and means for swingingly connecting said wheel knuckle sup-



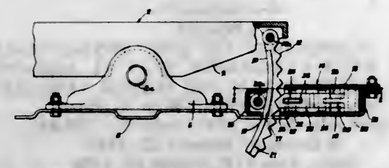
ports to said control members, the upper one of said control members being mounted above the wheel axis and the lower one of said control members below the wheel axis, said upper and lower control members being spaced at a distance larger than twice the width of the vehicle wheel, the distance between the upper control member and the wheel axis being substantially larger than the distance between the lower control member and the wheel axis.

2,749,143
PASSENGER SAFETY DEVICE FOR VEHICLES
John J. Chika, Bloomfield Hills, Mich.
Application August 8, 1951, Serial No. 240,883
27 Claims. (Cl. 280—150)



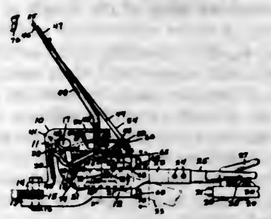
1. In a safety device for protecting an occupant of a vehicle seat, a protective element having a relatively narrow surface portion and a relatively wider surface portion, means including a supporting structure in proximity to the seat for positioning said element with said wider surface portion substantially horizontal and extending in proximity to the seat and transversely to and higher than the seat, and means tiltably connecting said element to the supporting structure for tilting movement about an axis transverse with respect to the seat whereby said wider surface portion may be turned from said horizontal position to a position wherein it presents said wider surface portion toward an occupant of the seat.

2,749,144
FIFTH WHEEL STABILIZER
Frank H. Kayler, Alliance, Ohio, assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application July 19, 1952, Serial No. 299,873
10 Claims. (Cl. 280—438)



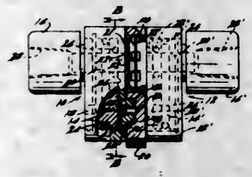
6. In a fifth wheel arrangement, a frame member, a wheel plate member tiltably carried thereby, a stabilizer interconnecting said members and comprising a vertically disposed toothed rack pivotally carried by one of said members, a locking device carried by the other of said members and embracing said rack, said device comprising a housing and a locking element guided for reciprocative movement therein into and out of engagement with said rack, a toggle mechanism directly and operatively interconnecting said housing to said element, spring means on said housing to urge the toggle to collapse in one direction whereby the locking element is urged to engage the rack, and resilient compressible means in said housing engageable with said mechanism upon a predetermined collapse thereof in said one direction whereby disengagement of said locking element and said rack is resiliently resisted.

2,749,145
CONNECTION FACILITATING TRACTOR HITCH
Edward M. O'Donnell, Galva, Iowa
Application February 11, 1953, Serial No. 336,229
4 Claims. (Cl. 280—478)



1. A tractor hitch comprising a hitch member, said hitch member including means for attaching the same to a tractor draw-bar, said hitch member having a lengthened slot therein including a vertical portion and a horizontal portion, a further hitch member, means for attaching said further hitch member to a drawn vehicle, said further hitch member including a carriage portion, said carriage portion including rollers journalled thereon, said lengthened slot receiving said rollers whereby said rollers will roll therein, spring urged members attached to said hitch member and bearing against said further hitch member for urging said further hitch member toward a horizontal position in said horizontal slot portion.

2,749,146
COUPLING WITH ROTARY SLIDING SEAL
Charles W. Gumbert, Jackson, and John C. Abbey, Parma, Mich., assignors to Aeroquip Corporation, Jackson, Mich., a corporation of Michigan
Application April 2, 1953, Serial No. 346,408
3 Claims. (Cl. 284—4)



1. A coupling comprising a pair of coupling parts each having an inner annular plate with an end face and a fluid opening defined in said face and a fluid connector having a bore aligned with said opening and projecting from the opposite side of said face, an annular outer member embraced by each of said plates and rotatably supported thereon, each of said outer members having an end face thereof contiguous with the said end face of each of said annular plates and having an opening defined therein, the openings defined in said faces being eccentrically arranged with respect to the axis of rotation of said outer members on said plates but registering with the openings of said plates in one position of rela-

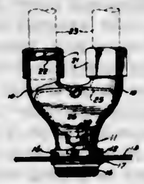
tive rotation, opposed portions of said outer members having axial and radially extending portions, an actuator disposed between said outer members with said parts coupled and embracing said radial projecting portions of said outer members and rotatably supported thereon, said actuator having abutment structure axially displaced with reference to said radially projecting portions with said parts coupled and adapted to be displaced upon relative rotation of one extent into axial opposed relation to said radially projecting portions to couple said outer members together and against axial separation while permitting axial separation of said outer members and said parts upon relative rotation of said actuator of another extent taking said abutment structure out of axial opposed relation with said radially projecting portions, an opening defined in said actuator in axial alignment with said openings in said outer members, means upon said outer members to lock the same together for unitary rotary movement with said parts coupled, means locking said actuator to said parts and against relative rotation with said openings in register with said parts coupled, said outer members and said actuator being rotatable as a unit about the axis of rotation of said plates into a closed position to shift said openings out of register to close said openings of said inner plates to fluid flow by said contiguous faces of said outer members, means upon said contiguous faces for shifting said locking means to render the same inoperative upon relative rotation between said faces to release said actuator for rotation relative to said outer members with the same in said closed position to permit axial separation of said coupling parts.

2,749,147
COLLAPSIBLE STANDS
William Herrschaft, New York, N. Y., assignor to Herrschaft Products, Inc., New York, N. Y., a corporation of New York
Application January 13, 1953, Serial No. 330,981
3 Claims. (Cl. 248—164)



1. In a collapsible stand and the like, the combination of a plurality of crossed legs formed from rod-shaped material, a substantially tubular resilient bushing frictionally encircling said legs at their point of crossing and urging the same together, and a substantially tubular reinforcing sleeve frictionally mounted on the outer surface of said bushing, end portions of said bushing projecting beyond the ends of said sleeve, whereby the end portions of the bushing are subject to limited lateral deflection by said legs.

2,749,148
ELECTRICAL CONDUIT FITTING WITH ACCESS OPENING AND CLOSURE THEREFOR
Joseph Schneiderman, Chicago, Ill.
Application April 2, 1953, Serial No. 346,324
1 Claim. (Cl. 285—6.5)



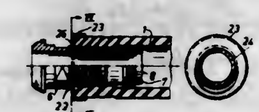
A conduit fitting for thin wall electrical conduit comprising a tubular trunk having thread and nut means at one end for connection of the fitting to a junction box or the like and a plurality of tubular branches connected thereto and providing common communication therewith, the several axes of said trunk and branches being in a common plane, the unconnected terminations of said branches each being provided with nut and split ring locking means for receiving a conduit end and for clamping the same to the fitting, the zone of junction of said trunk and branches having an access opening on a face thereof substantially parallel to said plane for threading the conductors from a branch and through said trunk, a cover for said opening and screw means common to said zone and cover for detachably securing said cover over said opening, said screw means being positioned in close proximity to the saddle-like zone defined by the junction of the branches with the trunk.

2,749,149
HINGE TYPE COUPLING FLANGE
Robert H. Carpenter, Dearborn, Mich., assignor to Meridan Corporation, Detroit, Mich., a corporation of Rhode Island
Application June 15, 1951, Serial No. 231,868
6 Claims. (Cl. 285—30)



1. In combination, a member having a mounting face with an opening therein, a tubular element having an enlarged end portion with a bore aligned with the opening in said mounting face, said enlarged tubular end portion having an end face disposed against said mounting face and having an oppositely directed shoulder spaced from said end face, a coupling device securing said tubular element to said mounting face and comprising a pair of coupling arms having overlapping end portions and together encircling said element, said arms having internal shoulders engaging the shoulder of the enlarged tubular end portion and having flange portions extending in telescoping relation to said enlarged tubular end portion, but of axial extent less than the axial extent of said enlarged tubular end portion to terminate in spaced relation to said mounting face, and fastening means holding the overlapping end portions of the coupling arms together and drawing the coupling device toward said mounting face, said spaced relation assuring unhampered thrust of said coupling device against said end portion shoulder for tightly clamping the enlarged tubular end portion to said mounting face.

2,749,150
HOSE END FITTING WITH SELF SEALING NIPPLE
Rudolf Kaiser, Ettlingen, Baden, Germany, assignor to Aeroquip Corporation, Jackson County, Mich., a corporation of Michigan
Application November 21, 1952, Serial No. 321,776
Claims priority, application Germany November 26, 1951
1 Claim. (Cl. 285—77)



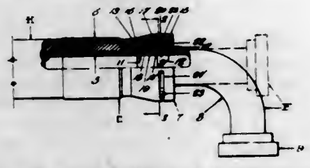
In a hose end fitting, a nipple having an irregular outer surface defined by various radii for tight insertion in the hose bore axially from one end thereof, and a

flanged end cup, said end cup having an enlarged end opening and a cylindrical flange extending over said one end, the internal diameter of said flange being substantially equal to the outer diameter of said hose a minor portion of the edge of said end opening being arcuate and concentric with said flange and having a first radius of curvature, a major portion of the edge of said end opening being arcuate and eccentric with said flange and having a second radius of curvature, said second radius of curvature being substantially greater than said first radius of curvature so that said nipple may be initially inserted in said end opening concentric with said major portion of the edge thereof and thereafter moved laterally relative to said end cup to a position concentric with said minor portion of the edge of said end opening to permit the end cup to be mounted upon the nipple with the peripheral cup flange engaged with the outer surface of the hose end and said minor portion held secured by the nipple against relative axial movement, the greatest radius of that portion of the nipple inserted in said end cup being intermediate said first and second radii of curvature whereby said hose end maintains said cup flange in said second concentric position with respect to said nipple.

2,749,151
SWIVEL COUPLING WITH REMOVABLE WIRE LOCKING MEANS

Richard E. Lyons, Libertyville, Ill., assignor to Charles L. Conroy, Waukegan, and Walter Fritsch, Libertyville, Ill.

Application April 1, 1954, Serial No. 420,371
1 Claim. (Cl. 285—97.3)



A swivel coupling comprising, a female member, a male member journaled in said female member, said male and female members having co-axial mating bores, and opposed complementary annular grooves in their journaled surfaces forming a passageway, said female member having an elongated transverse slot formed in its peripheral wall and communicating with its annular groove throughout the length of said slot to provide an opening between said passageway and the exterior of said female member, a flexible locking wire positioned in said passageway, said wire being of greater length than said passageway and of substantially the same cross sectional area as said passageway to lock said male and female members against relative axial movement, the inner end portion of said wire being located in said passageway within the area of said slot, and the outer end portion of said wire overlapping said inner end portion and being supported upon the same to normally entirely confine said overlapped end portions within said elongated slot and for bending said outer end portion out of said elongated slot whereby said wire may be withdrawn from said passageway, and a pressure seal interposed between said male and female members between their meeting bores and said passageway.

2,749,152
SHORT TUBE COUPLING WITH DEFORMABLE EDGES

Louis B. Courtot, Cleveland, Ohio, assignor to The Weatherhead Company, Cleveland, Ohio, a corporation of Ohio

Application November 13, 1952, Serial No. 320,215
3 Claims. (Cl. 285—120)

1. In a coupling, a body member having a fluid conducting bore, a tube-end abutment surface formed on said one end of the body member, a V-shaped annular groove in the end of said body outwardly of said abutment surface providing an inclined surface, a first sleeve having a portion for gripping a tube, a second sleeve having a forward end portion including a deformable lip adapted to engage said inclined surface and be inwardly displaced thereby, said sleeves being axially movable relative to said tube, the other end of said second sleeve having a flaring surface overlying the tube-gripping portion of said first sleeve, a clamp member adjustably connected to said body member for engaging the other end portion of said first sleeve to force the forward end thereof against the flaring surface of the second sleeve and to force the lip of the second sleeve against the radially outer surface of the groove in said body member to resist splitting of the second sleeve from the reaction of the first sleeve against said flaring surface and to deform and radially displace said lip into sealing engagement with the body, the radial displacement of the lip causing relative motion between the lip and body after engagement to provide a surface seal therebetween.



2,749,153
SPRING DETENT COUPLING FOR TELESCOPED PARTS

John Gordon Baker, Evansville, Wis., assignor to Baker Manufacturing Company, Evansville, Wis., a corporation of Wisconsin

Application March 16, 1953, Serial No. 342,625
5 Claims. (Cl. 285—169)

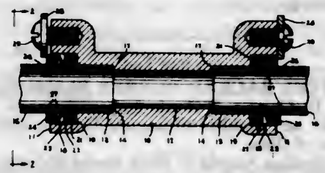


1. In an extendible structure, the combination of, an outer cylindrical tube, an inner tube telescoped within an end portion of said outer tube and shiftable outwardly to an extended position, diametrically disposed holes extending through said end portion and spaced from the end of said portion so as to be uncovered by the inner end of said inner tube in the outward movement of the same to said extended position, two members, one disposed adjacent each of said holes and each having a lateral projection extending into its respective hole, and a generally U-shaped bail straddling said outer tube and having inturned ends engaging said members and urging said projections inwardly so as to enter behind the end of said inner tube as the latter moves outwardly to said extended position, said members having arcuate inner surfaces normally lying snugly against the outer surface of said outer tube and positively restrained in place thereagainst by said bail while serving, when the members are turned about the axes of said projections by a force sufficient to overcome said restraint, as cams to retract said projections out from behind the inner end of said inner tube.

2,749,154
TUBE LOCKING AND SEALING CONSTRUCTION

Thomas R. Smith, Newton, Iowa, assignor to The Maytag Company, Newton, Iowa, a corporation of Delaware

Application February 23, 1952, Serial No. 273,085
4 Claims. (Cl. 285—173)



1. In a fluid conducting tube connector, the combination of a body member having a passage therethrough and an end wall with an enlarged recess surrounding said passage at said end wall, a fluid conducting tube extending through said recess and aligned with said passage, an annular resilient sealing element carried in said recess to contact and seal said tubing, a tiltable clinching washer having an opening providing corners closely surrounding said tube within said recess, clamping means carried on the outer portion of said end wall for holding one edge of said clinching washer substantially flush with said end wall, and a spring washer disposed in said recess between said clinching washer and said resilient sealing element for applying an axial sealing force to said sealing element and a tilting movement to said clinching washer at said clamping means and about the tube axis to cause the corners at the opening of said clinching washer to engage said tube to grip the same and oppose separation of said tube and body member.

2,749,155
RESILIENT PIPE JOINT WITH SHEET METAL CLAMP MEMBER

Charles M. Kingborn, Rye, N. Y., and John S. Rhoades, Bethesda, Md., assignors to Kaiser Aluminum & Chemical Corporation, Oakland, Calif., a corporation of Delaware

Application November 10, 1952, Serial No. 319,748
3 Claims. (Cl. 285—194)

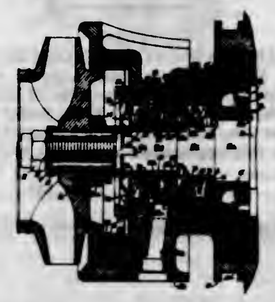


1. A joint for aligned hollow tubular members including a quick disconnect member, said disconnect member comprising a sheet metal sleeve having a longitudinally extending split portion, said sleeve overlapping and surrounding a portion of a pair of axially aligned tubular members to be coupled together, said sleeve member including a fastening means disposed radially outwardly of said sleeve and extending along the respective marginal edges defined by the split portion, said fastening means comprising an integrally formed and resiliently deformable V-shaped plug on one of said marginal edges having its apex disposed in a direction facing the opposite marginal edge, said plug including a portion radially offset outwardly from the axis of said tubular members, said offset portion terminating in a curved portion defining a fixed angle and a wall portion, said offset portion, said curved portion and said wall portion defining the integrally formed, resilient metal V-shaped plug, said wall portion including a further portion bent inwardly toward the axis of said tubular members defining a flat surface, said opposite marginal edge including a complementary, integrally formed V-shaped receptacle defined by a pair of generally divergent wall portions opening in the direction of said plug, the angle of divergency of said wall portions being less than the fixed angle formed by the elements of said V-shaped plug, one of said divergent wall portions including a reversely curved portion defining an edge engageable with said flat surface on said plug, said plug and said receptacle being coextensive in length with respect to each other and said sleeve, said receptacle including an outwardly and generally radially extending manually actuated handle means on the outermost wall of said divergent wall portions for deforming said outermost divergent wall portion to facilitate engagement and release of said plug with respect to said receptacle and thus installation and removal of said coupling with respect to said axially aligned tubular members.

2,749,156
SEAL

Robert Cliborn, Euclid, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio

Application April 18, 1952, Serial No. 283,098
5 Claims. (Cl. 286—11)



3. A sealing arrangement for a high speed shaft comprising a housing, a shaft extending outwardly of the housing, a seal ring in said housing rotatably mounted on said shaft and having opposed radial seal faces, a double seal barrier comprising a pair of flexible sleeve-like diaphragms in said housing on opposite sides of said seal ring, a stationary seal ring carried by one end of each of said diaphragms and arranged to engage said opposed seal faces on said seal ring, resilient means for loading each of said diaphragms and the stationary seal rings carried thereby into engagement with said rotatable seal ring, a ring snap mounted in an annular groove in said housing and resiliently backing one of said resilient means to bias the same in loading direction, spacer means between and engaging the other ends of said diaphragms and a press ring member adjacent the other end of one of said diaphragms and loaded by said ring snap to effect sealing engagement of the other ends of both said diaphragms with said housing while compensating for shrinkage and swelling of said diaphragms.

2,749,157
PULLEY HUB

Clifford A. Dennison, Itasca, Ill., assignor to Chain Belt Company, Milwaukee, Wis., a corporation of Wisconsin

Application July 23, 1952, Serial No. 300,450
2 Claims. (Cl. 287—52.06)



2. In a pulley assembly, a drum provided at each end with a radially inwardly extending web, means firmly securing one of said webs to a shaft and means demountably coupling the other web to the shaft without creating excessive stresses in either of the webs, said last named

means comprising a circular opening in said other web to receive a hub, a split hub having an axial bore for receiving the shaft, said hub also having an annular flange adjacent one end abutting said other web and a tapered peripheral surface converging inwardly from one face of the flange toward the other end of the hub, interfitting portions on said hub and said flange for locating the hub on the web, a sleeve mounted on said hub having an inner tapered bore conforming with the outer taper on said hub and a radial flange axially alined with the flange on said hub, circumferentially spaced openings in the flanges of said hub and sleeve alined with similar openings in said web, bolts mounted in said web extending through said openings, and nuts engaging said bolts arranged when tightened to bear against the flange on said sleeve to draw the sleeve axially toward the web and to cause the hub to contract radially on the shaft without producing axial movement of the hub even though the other web is rigidly connected to the shaft.

2,749,158

ADJUSTABLE ARM FOR WINDSHIELD WIPER

Theodore J. Smulski, Gary, Ind., assignor to Productive Inventions, Inc., a corporation of Indiana

Original application January 5, 1946, Serial No. 639,384, now Patent No. 2,550,095, dated April 24, 1951. Divided and this application April 29, 1950, Serial No. 158,989

2 Claims. (Cl. 287—58)



1. A movement modifying arm for a windshield wiper arm and blade assembly, said movement modifying arm comprising a channel, an extension having an inner portion secured to one extremity of the channel and an outer portion provided with means adapted for operative connection with the wiper arm and blade assembly, said channel having a pair of inturned serrated portions spaced apart to define a longitudinal slot extending substantially the full length of the channel, an elongated member slidably mounted in the other extremity of the channel with the serrated portions overlying the elongated member, the outer end of the said member being provided with means for connecting said end to a support, a clamping member disposed exteriorly of the channel and provided with serrations, a threaded element connected to said slidable member and extending outwardly through the slot in the channel and through the clamping member, and a nut engaging the threaded element for interlocking the serrations on the clamping member in intimate engagement with the serrations on the inturned portions of the channel, the arrangement being such that the slidable member may be extended and locked in any one of a plurality of positions permitted by the serrations.

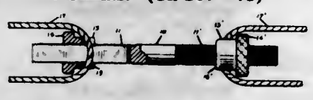
2,749,159

POSITIVE-LOCK TAKE-UP STUD

John C. Kane, Atlanta, Ga.

Application November 29, 1951, Serial No. 258,951

4 Claims. (Cl. 287—75)



1. A take-up device comprising a shaft having end portions provided with axial slots in said end portions, nuts having transverse notches disposed at the end of each nut farthest from the ends of the shaft to provide closed apertures in conjunction with the slots in said shaft, said nuts being adjustable on said shaft and rotatably engageable with said shaft to respectively encompass a portion of said slots, connecting members passing respectively through said slots and adapted to engage and be held in the notches of said nuts to prevent rotation thereof with respect to said shaft when tension is applied outwardly on said members.

2,749,160

STEEL BACKED RUBBER BUSHINGS

Raymond H. Cowles, Wabash, Ind., assignor to The General Tire and Rubber Company, Akron, Ohio, a corporation of Ohio

Application August 9, 1949, Serial No. 109,268

3 Claims. (Cl. 287—85)



1. A rubber articulated joint comprising an outer rigid tubular member having a generally cylindrical inner surface portion, an inner rigid tubular member having a generally cylindrical outer surface portion generally concentric with said inner surface portion, a separately molded and vulcanized rubber annulus between said members, the end portions of said rubber annulus in its molded state having relatively thin walls compared to the wall thickness of said annulus in the central region thereof, said joint being further characterized by having the end portions of the inner surface of said outer member outwardly flared to provide a generally frusto-conical surface, by having the end portions of the inner tubular member outwardly flared to provide a generally frusto-conical surface spaced from said frusto-conical surface of said outer member, and by having end portions of said rubber annulus outwardly flared and separating said outwardly flared portions of said rigid members, the generally cylindrical area of said inner and outer rigid members being relatively large compared with the frusto-conical surfaces thereof and the central portion of said annulus bearing against said generally cylindrical area being under relatively high axial elongation and radial compression.

2,749,161

BALL AND SOCKET JOINT

Josef Latzen, Dusseldorf-Oberkassel, Germany, assignor to the firm A. Ehrenreich & Cie., Dusseldorf-Oberkassel, Germany

Application August 15, 1950, Serial No. 179,529

5 Claims. (Cl. 287—90)



3. A ball and socket joint adapted particularly for guide and steering bars comprising a housing defining an open ended cylindrical chamber, a closure cap secured to said housing to close one end of said chamber, a rod projecting freely within the other end of said chamber for angular movement therein and provided with a ball end enclosed by said housing, an inturned flange provided on said housing within said chamber at said other end thereof, a cylindrical bushing constituting a wear lining disposed adjacent the walls of said chamber, bearing means comprising a unitary split spring shell ring extending substantially around the center portion of the periphery of said ball end and having an inner surface of spherical conformation in engagement with said ball end and an outer surface of cylindrical conformation in engagement with said bushing, and spring means arranged within said chamber and extending between said closure cap and an edge of said bearing means for biasing said bearing means against said inturned flange, said spring means retaining said bearing means against said flange.

2,749,162

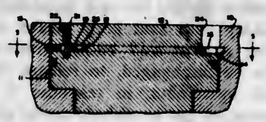
NON-ROTATABLE RETAINING RING

Samuel A. Humphrey, Silver Spring, Md., assignor to the United States of America as represented by the Secretary of the Navy

Application November 24, 1952, Serial No. 322,368

4 Claims. (Cl. 287—119)

(Granted under Title 35, U. S. Code (1952), sec. 266)



1. Apparatus for facilitating the installation and removal of a cylindrical member retained in the bore of a casing member, said cylindrical member and said bore having formed therein circumferential grooves individual thereto and in mutual registration and comprising in combination, a split retaining ring having spaced perforate ends, said ring being received by said grooves, a lug formed on said ring and having a radially elongated slot formed therein, a pin freely received in said elongated slot and fixed against movement relative to one of said members, said one of said members having a slot communicating from the groove thereof to the exterior for the insertion of a tool for moving the ring out of one of the grooves thereby to free the cylindrical member for removal from the bore, said pin preventing movement of said perforate ends out of registry with said last-named slot.

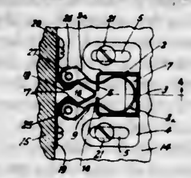
2,749,163

LATCHING DEVICE

Morris Loeb, New York, N. Y.

Application April 28, 1952, Serial No. 284,756

1 Claim. (Cl. 292—17)



A latching device comprising a casing having a closed top, sides and back, but open at the bottom and at its front end, a projection on each side at the front end, said projections extending toward each other, a resilient U-shaped one-piece gripping member having arms united at one end with an opening in each, said projections being loosely received in said openings, the junction of said arms being rounded, and disposed in the casing free to move laterally with respect to said casing, said arms having diverging end portions projecting from the front end of the casing, and curved portions connecting the end portions to the junction, said curved portions bearing said openings, the sides having outward projecting extensions at the lower edges and the back having an inside ledge under said member parallel to said top and substantially in the plane of said extensions, said top, sides, back and ledge forming a pocket in which the rounded junction of said arms is disposed, said arms each having a pair of projections on the edges of the diverging portions, the pairs extending towards each other, a pin mounted in each pair, and a yielding roller on each of said pins between said last-named projections.

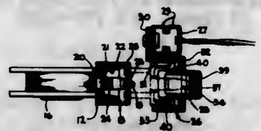
2,749,164

TAMPERPROOF GATE KEEPER

Edward H. Kitzelman, Chicago, Ill., assignor to Acorn Iron and Wire Works, Chicago, Ill., a corporation of Illinois

Application April 2, 1954, Serial No. 420,487

3 Claims. (Cl. 292—121)



1. In a tamperproof keeper structure adapted for cooperation with a latch casing and a vertically movable latch bolt on a cooperating support therefor, a keeper body having parallel spaced side walls open toward the support and latch bolt, a back wall connecting said side walls together and having an inwardly extending wall defining a recessed portion for receiving the latch bolt, said recessed portion in said back wall having parallel spaced inner side walls extending outwardly from said back wall in the space between the side walls of said body and spaced inwardly therefrom to receive the latch casing in the space therebetween, and a keeper surface in the space between said inner side walls, and spaced outwardly from said back wall and having an outer strike surface and an inner transverse keeper surface recessed within the side walls of said keeper body and spaced sufficiently in advance of said back wall to accommodate the latch casing to have engagement therewith when the latch bolt engages the keeper surface.

2,749,165

HOOD LATCH ADAPTER

Albert L. Coulter, Chicago, Ill.

Application May 10, 1954, Serial No. 428,433

2 Claims. (Cl. 292—171)



1. In a latching arrangement for automobile hoods having a safety catch for holding the hood from fully opening upon release of the primary latch therefrom, an adapter latch for adapting the hood to be released from the inside of the car comprising a casing for mounting on the stationary plate of the hood body, said casing having a lower casing plate flat for a greater portion of the area thereof and having an elongated thin latch bolt guided for rectilinear movement therealong and having an upper casing plate secured thereto and forming a guide for the latch bolt, said casing plates having registering apertured portions intersected by the latch bolt, to accommodate a keeper to pass therethrough and retractably move the latch bolt in position to lockingly engage the keeper upon hood closing movement, said latch bolt having an upright flange at the rear end thereof, a spring within said casing abutting said flange and biasing said latch bolt in a projected direction, said upper casing plate having a slot extending longitudinally therealong and said latch bolt having a longitudinally extending slot register-

ing with and extending in advance of said slot in said upper casing plate, a collar guided in said slot of said upper casing plate and extending within said slot of said latch bolt, an operating wire operable from the dashboard of the car, extending through said spring and flange and secured to said collar for retractably moving said latch bolt, said slot in said latch bolt accommodating retractable movement of the latch bolt by the keeper without affecting said collar and operating member.

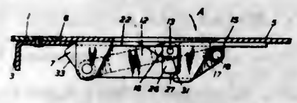
2,749,166
LATCH FOR AUTOMOBILE DECK CLOSURE
Adam C. Lindner, Chicago, Ill., assignor to Chicago Forging and Manufacturing Company, Chicago, Ill., a corporation of Delaware
Application December 22, 1952, Serial No. 327,356
2 Claims. (Cl. 292—216)



1. In a latch assembly for relatively movable members in which a normally fixed keeper is mounted on one such member and a latch element is movably mounted on the other, a generally U-shaped plate mounted on one such member and forming therewith a housing, a latch element pivotally mounted in said housing and having a projection extending outwardly from said housing and adapted to engage the keeper on the other member in response to relative movement of the members, the latch element being movable about its pivot to locking position, a latch control member mounted in said housing for movement toward and away from said latching member, yielding means associated with said latch control member and with said latch element and adapted to urge said member and element toward each other, and manually operable means for separating said latch control member from said latch element, said last-named means including a rotatable camming member positioned adjacent said latch control member for actuating contact therewith upon rotation, and a separate housing, said camming member housing including a wall of said first-named housing, and a second wall secured to said first-named wall and spaced therefrom a distance sufficient to receive said camming member, said camming member including a cam element on and rotatable with a shaft, said shaft being rotatably mounted on said first-named wall and said second-named wall, said shaft having an end portion extending outwardly beyond the wall of said first named housing from said second wall and a spring surrounding said shaft, said spring having one end secured to said shaft and the other end in contact with the outer surface of said wall of said first named housing.

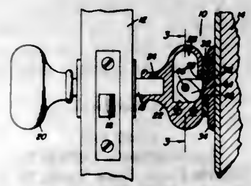
2,749,167
LATCH FOR COVER PANELS
John Love, Lanerside, Glasgow, Scotland, assignor to K. A. C. Limited, Glasgow, Scotland, a British company
Application October 11, 1952, Serial No. 314,295
Claims priority, application Great Britain October 12, 1951
5 Claims. (Cl. 292—226)

1. A cover panel for an inspection opening in a surrounding structure, such panel being provided with a hand-hole to facilitate its manipulation; a hand-hole cover for said hand-hole; latch means on said cover panel and for engagement with the said structure to retain the said cover panel in position; a locking lever pivotally connected to the inner surface of said cover panel and also pivotally connected to said hand-hole cover and adapted to operate said latch means for releasing operation on rotation of the said locking lever due to bodily inward movement of said hand-hole cover; a link connected to said cover panel so as to be free to pivot about an axis parallel to said locking lever pivot axis, said hand-hole cover being fulcrumed on said link so that the hand-hole cover may pivot, relatively to the cover panel, about this fulcrum axis which is located between the axes of



pivotal connection of the locking lever to the cover panel and hand-hole cover respectively; keep means on the cover panel; catch means on said hand-hole cover normally interlocking with said keep means to secure the hand-hole cover against said bodily inward movement, but adapted to be disengaged, to release the hand-hole cover for such movement, in response to preliminary pivotal movement of the hand-hole cover about the said fulcrum axis on the application of inwards pressure to such cover at the location of the pivotal connection of the hand-hole cover to the locking lever; and means for yieldingly returning the said hand-hole cover to its normal position after manipulation.

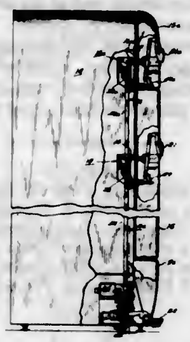
2,749,168
DOOR LATCH
Asa J. Harris, Harbor Island, N. C.
Application July 26, 1955, Serial No. 524,420
1 Claim. (Cl. 292—230)



A door latch for retaining a door in an open position adjacent a supporting structure comprising a hollow door knob adapted to be mounted on the door for turning in opposite directions, said knob having an opening in the outer face thereof, a transverse horizontal bottom in said hollow knob spaced below the lower edge of said opening, a projecting member mounted on the supporting structure and adapted to be closely received through said opening in the knob, and a pivotal latch member mounted on said projecting member, said latch member being normally retained in depending relation by gravity, the free end of the latch member being moved rearwardly to a position within the confines of the projecting member by the edge of the opening when the projecting member passes through the opening, the free end of said latch member then falling downwardly and engaging the juncture between the horizontal bottom of the knob and the lower edge of said opening in an inclined position with the free end of the latch member disposed adjacent the opening and the free end of the projecting member being remote from the opening thereby preventing withdrawal of the projecting member from the opening, said hollow knob being sufficiently large whereby said latch member may be disengaged from the bottom of the knob when the knob is turned in either direction for permitting the latch member to fall freely

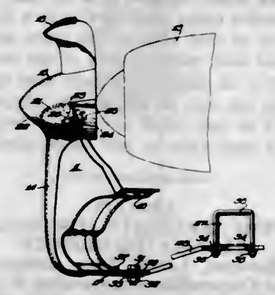
to a depending position whereby the edges of the opening will move the free end of the latch member forwardly to a position coextensive with the projecting member when the projecting member is withdrawn through the opening, said opening and projecting member being cylindrical with the projecting member having a slot in the outer end for pivotally receiving said latch member, said latch member having rounded ends with the inner end being constantly within the confines of the projecting member.

2,749,169
LATCH MECHANISM
Robert E. Johnson, Marne, Mich., assignor to Jervis Corporation, a corporation of Michigan
Application February 12, 1952, Serial No. 271,239
13 Claims. (Cl. 292—332)



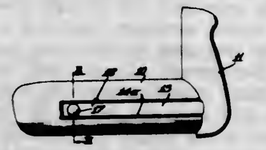
12. In a latch mechanism for releasably holding a door member in closed position with respect to a cabinet member, said latch mechanism being mounted on one of said members, and the other of said members including a keeper for cooperating with said latch mechanism; said latch mechanism including a frame rigidly secured to said one member, a latch bolt mounted on said frame and movable with respect thereto between a keeper-engaging position and a released position, a spring-biased bolt actuator movable between a normal position and an energized position, cam means interconnecting said latch bolt and said bolt actuator, said spring-biased bolt actuator when in said energized position acting through said cam means to retain said latch bolt in said released position, said bolt actuator when in said normal position and when lying intermediate said normal position and said energized position acting through said cam means to urge said latch bolt toward said keeper-engaging position, a solenoid for moving said bolt actuator from substantially said normal position to said energized position, and a tripper element mounted on said latch bolt and movable with respect thereto between a neutral position and an active position, said tripper element when in said active position being strikable by said keeper when said door member approaches closed position to move said latch bolt away from said released position and thereby to trip said latch mechanism and permit said bolt actuator to force said latch bolt to said keeper-engaging position, said tripper element also being engageable with a fixed portion of said latch mechanism whereby as said latch bolt moves from said released position to said keeper-engaging position under the influence of said bolt actuator said tripper element is moved laterally to one side of the path of relative movement of said keeper to said neutral position, said tripper element being maintained in said neutral position by said keeper when said bolt actuator is moved to said energized position and said bolt member moves to said released position, and being returnable to said active position only after said door member has been opened to move said keeper out of contact with said tripper element.

2,749,170
AUTOMOBILE BUMPER ATTACHMENT
Herbert S. Jandus, Detroit, Mich., assignor to Houdaille Industries, Inc., a corporation of Michigan
Application December 12, 1950, Serial No. 200,439
6 Claims. (Cl. 293—64)



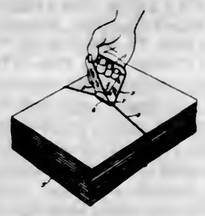
1. An attachment for an automobile having a bumper provided with a guard projecting upwardly therefrom, a vertically elongated body member of generally channel shape for engaging the front of the guard, a generally cupped portion at the upper end of said body member, and a cap member secured within said cupped portion for snugly engaging the top and front of the crown of the guard.

2,749,171
AUXILIARY BUMPER
Arthur Pierce Ferguson, Huntington Woods, Mich., assignor to Houdaille Industries, Inc., a corporation of Michigan
Application October 25, 1950, Serial No. 192,112
8 Claims. (Cl. 293—71)



1. In a bumper assembly, a sheet metal bumper having a recessed area in the vital contact areas thereof, a buffer member in said recessed area and extending outward of the normal contour of said bumper for absorbing impact, a resilient member positioned in said recessed area between said buffer member and said bumper for cushioning said buffer member to cushion impact, and means securing said buffer member and said resilient member to said bumper member in the recessed area.

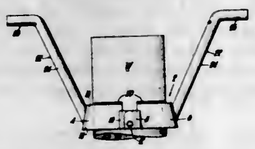
2,749,172
BUNDLE THROWING HANDLE DEVICE
George B. Jacobs, Jacksonville, Fla.
Application August 18, 1954, Serial No. 450,590
2 Claims. (Cl. 294—26)



1. A quick-releasable handle device comprising a generally equilaterally triangular structure, and said structure comprising an elongated handle portion as the base

leg of said triangular structure, two side legs extending from respective ends of said handle portion meeting in a web portion at the apex of said triangular structure, a lip extending from said apex at an angle of between about 45 degrees and 20 degrees to said web and forming a cord receiving notch between said lip and web, said lip having a rounded upper edge curving in a continuous arc from one end of said edge to the other end and at its respective said ends meeting each of the respective ends of said notch at an angle not greater than approximately 60 degrees to the axis of said notch, whereby a bundle cord engaged in said notch is released over said lip in response to a rapid twist of said handle device.

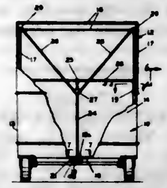
2,749,173
GRIPPING APPARATUS FOR HANDLING ELONGATED OBJECTS
Alden W. Peterson, Lorain, Ohio, assignor to United States Steel Corporation, a corporation of New Jersey
Application June 6, 1952, Serial No. 292,135
4 Claims. (Cl. 294—113)



2. Apparatus for handling a cylindrical elongated object comprising a pair of first and second tapered split rings, means pivotally connecting said rings together at their ends to form a pivotal sleeve clamp, the taper of said rings forming a relatively greater diameter opening at the lower end of said clamp and a relatively smaller opening at the upper end, said pivotally connecting means including a bracket having an inner wall at each end of said first split ring, said brackets each having a transverse hole therethrough adjacent said larger diameter opening, a tongue projecting angularly from each end of said second split ring and having an upper shoulder thereon, each of said tongues being slidingly fitted into one of said brackets, each of said tongues having a transverse hole therethrough communicating with the holes in said brackets, a pin rotatably fitted through the bracket and tongue at each end of said split rings to thereby pivotally connect the same together, the upper shoulder of each of said tongues cooperating with the inner wall of its respective bracket to prevent the upper end of said clamp from closing substantially beyond the diameter of said elongated object so as to facilitate lowering of the clamp onto the elongated object and to prevent excessive indentation of the elongated object by the clamp, and a rigid handle attached to the outer surface of each split ring for pivoting the same.

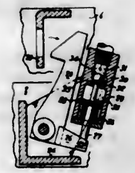
2,749,174
TRAILER HOUSE WITH TELESCOPED ELEVATABLE TOP PORTION
Hoyle Dillord Medford, Phoenix, Oreg.
Application May 27, 1954, Serial No. 432,861
3 Claims. (Cl. 296—27)

1. An extensible trailer body comprising a frame, a floor secured to said frame, opposed side walls secured to said floor, a pair of spaced parallel end walls connecting said side walls at the front end thereof and a second pair of spaced parallel end walls connecting said side walls at the rear end thereof, said floor, said side walls and said spaced parallel end walls forming an open top lower body, an upright tubular guide carried by each corner of said lower body between said parallel walls of said front and said rear end walls, an upper framework, depending posts secured to each corner of said upper framework, said posts telescopically engaging in said respective tubular guides, means for moving said upper framework including a pair of vertically movable elements disposed at opposite ends of said lower body, a V-shaped support secured at its upper divergent ends to one end



of said upper framework and at its lower end to one of said movable elements, a second V-shaped support secured to said framework and said movable element at the end opposite said first V-shaped support and an upper body member suspended from said framework and telescoping over said lower body.

2,749,175
LATCH CONTROL FOR DUMP TRUCKS
Kenneth J. King and Philip S. Hartman, Gallon, Ohio, assignors to Hercules Steel Products Corporation, Gallon, Ohio, a corporation of Ohio
Application July 12, 1952, Serial No. 298,562
2 Claims. (Cl. 298—22)



2. In a dump truck having a hoist body pivotally mounted for vertical tilting movements, fluid pressure actuated means operable to tilt said body, a latch normally holding said body against tilting from reclining position, fluid operated means for releasing said latch, and a fluid line from said source having connection with both said body tilting means and said latch releasing means, said latch releasing means including a cylinder, a plunger operating in said cylinder and connected to said latch to impart releasing movement thereto from movement in one direction of the plunger when a predetermined pressure is present in said line, the improvement comprising spring means resisting movement of the plunger in latch releasing direction, a valve in said fluid pressure line held open by said plunger when the latter is in normal position and seating to close said line to the cylinder when a pressure sufficient to overcome said spring pressure, and which is less than that required to operate the hoist mechanism, is present in said line.

2,749,176
ELECTRO METAL SPRAYING PISTOL
Friedrich Wilhelm Martin Steyer, Hamburg, Germany, assignor, by mesne assignments, to Arnold Otto Meyer, Hamburg, Germany, a corporation of Germany
Application September 18, 1952, Serial No. 310,319
17 Claims. (Cl. 299—28.5)

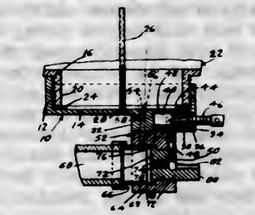
1. An electro metal spraying pistol for melting the ends of two metal wires in a short circuit arc and spraying the molten metal onto the surface to be treated by means of a compressed air jet, comprising a nozzle head having a discharge mouth at its front end, a conduit for supplying a flow of compressed air to the discharge mouth,

feeding and guiding means for continually feeding and guiding the wires through said nozzle head and the discharge mouth, said feeding means including a multiple feeding roller gear arranged at the rear side of said



nozzle head, a valve in said conduit, switch means for controlling the flow of current to the pistol, and means for preventing said switch means from switching on the short circuit as long as said valve is closed.

2,749,177
SPRAYING DEVICE
John A. Dean, Portland, Oreg.
Application October 12, 1954, Serial No. 461,843
3 Claims. (Cl. 299—84)



1. A spray device for liquid plant food comprising an elongated substantially cylindrical container having an open end, a substantially cylindrical closure member for said container, said cylindrical closure member including an end wall, an elongated substantially centrally positioned tubular member having an end connected with said end wall and extending transversely therethrough, the other end of said tubular member terminating adjacent the closed end of said container, said end wall having an exteriorly positioned enlarged and substantially rectangular boss integrally formed therewith, a substantially enlarged rectangular nozzle support member detachably secured to said boss, a nozzle releasably secured within said nozzle support, means for connecting a source of water under pressure with inlet side of said nozzle, a conduit extending through said end wall and said boss adjacent the other end of said nozzle support for discharging said liquid plant food into the stream of water discharged from said nozzle, and means for controlling the flow of said liquid plant food through said conduit.

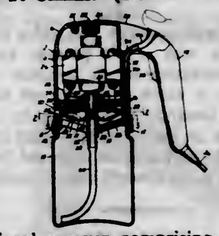
2,749,178
LIQUID SPRAY DEVICE
Joseph P. Larson, Redwood City, Calif.
Application November 30, 1953, Serial No. 395,148
9 Claims. (Cl. 299—86)

1. A liquid spray device comprising; an elongated body having a first compartment in one end thereof for gas under pressure and a second compartment in the other end for liquid, a pair of ducts communicating at one of their ends with said first and said second compartments respectively, means for atomizing said liquid and for discharging the liquid so atomized from said body comprising a fluid actuated ejector in said body at a point between said first compartment and said second compartment, and the other ends of said ducts communicating with said ejector for actuating the latter to induce a flow of said liquid through said ejector for discharge therefrom with said fluid upon passage of fluid under pressure through said ejector, a partition between said first compartment and said second compartment sealing one



from the other against passage of gas and liquid from one to the other.

2,749,179
PAINT SPRAYER
Nils T. Almquist, New Britain, Conn.
Application June 18, 1954, Serial No. 437,792
10 Claims. (Cl. 299—97)



1. A centrifugal sprayer comprising a container for holding liquid to be sprayed, a removable housing mounted on the top of the container, an electric motor in the housing having a downwardly extending drive shaft, a pair of vertically spaced apart discs mounted on the drive shaft within the lower end of the housing having outwardly radiating vanes therebetween, said housing having a discharge slot registering with a portion of the periphery of the discs, liquid inlet means forming a downwardly opening passageway to the central area between the discs, and a supply tube depending from the housing for immersion in the liquid in the container having its upper end in communication with said liquid inlet means.

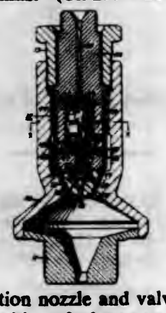
2,749,180
SPRINKLING DEVICE
Alvadore M. Andrews, Portland, Oreg.
Application October 31, 1952, Serial No. 318,065
4 Claims. (Cl. 299—104)



4. A sprinkling hose comprising a single, elongate, rectangular sheet of thin, limp, flexible plastic material, the opposite longitudinal side portions of said sheet each having a medial part reversely curving inwardly toward the center of the sheet in overlapping relation to the central portion of the sheet, each of said side portions having a marginal edge part reversely curving outwardly away from the center of the sheet and between the corresponding medial part and the central portion of the sheet, each of

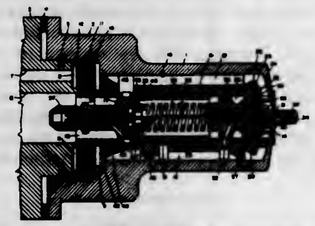
said marginal edge parts being secured in fluid tight engagement to said central portion along a line closely adjacent the longitudinal center line of the sheet but displaced toward the corresponding side of the sheet to form a pair of elongate fluid conduits, said sheet having a plurality of longitudinally spaced perforations in each of said medial parts.

2,749,181
FUEL INJECTION NOZZLE AND VALVE ASSEMBLY
Carl R. Maxwell, Washington, and Stanley J. Kranc, Morton, Ill., assignors to Caterpillar Tractor Co., Peoria, Ill., a corporation of California
Application April 1, 1954, Serial No. 420,319
5 Claims. (Cl. 299—107.6)



1. In a fuel injection nozzle and valve assembly which comprises a body with a fuel passage extending therethrough and terminating in an injection orifice at one end of the body, a valve seat adjacent the orifice end, a valve movable inwardly of the body to close said seat, an elongated stem on the valve extending inwardly of the body, and a permanent magnet disposed inwardly of the stem to urge the valve toward closed position.

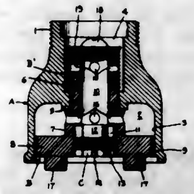
2,749,182
NOZZLE CONSTRUCTION
John F. Campbell, Euclid, Ohio
Application January 27, 1953, Serial No. 333,569
19 Claims. (Cl. 299—107.6)



18. In a nozzle having a sliding valve member shiftable in direct response to fluid intake pressure thereagainst, a restricted by-pass leading from the intake end of said nozzle into the sliding fit of said valve member, filter means for said by-pass effective to filter that portion of the fluid flow passing therethrough, the area of said valve member subject to direct pressure from the unfiltered fluid being larger than any area opposed thereto subject to pressure by such filtered fluid.

2,749,183
SHOWERHEAD FOR SHOWER BATH USE
James Fraser, Wilmington, Del., assignor to Speakman Company, Wilmington, Del., a corporation of Delaware
Application June 21, 1954, Serial No. 437,990
4 Claims. (Cl. 299—141)

1. In a showerhead operative to receive water under pressure at one end and to discharge water at its opposite end, the combination of a hollow body formed intermediate its ends with an internally threaded portion, an element telescopically mounted in said body and having a central passage and an externally threaded portion intermediate its ends and in threaded engagement with said internally threaded portion, whereby said element may be axially adjusted by rotation relative to said body, said element having at its end adjacent the showerhead outlet a radial disc portion with its peripheral edge extending into close proximity with the surrounding peripheral portion of said body, said body and element being relatively shaped and proportioned to form an annular chamber for water



discharged from said chamber through the space between the peripheral edge of said element and the adjacent wall portion of said body, said element having outlet means for the passage of water into said annular chamber from said central passage, and the hollow interior of said element being adapted to receive water adjacent its upper end from said inlet and to pass the water so received into said annular chamber through said central passage and outlet means, and means mounted in said element for adjustment axially of said element to variably throttle the outflow of water into said annular chamber through said outlet means.

2,749,184
WHEEL TRIM AND FASTENING MEANS
Edward L. Wood, Detroit, Mich., assignor, by direct and mesne assignments, to Gar Wood Industries, Inc., a corporation of Michigan
Application March 23, 1953, Serial No. 343,852
11 Claims. (Cl. 301—37)



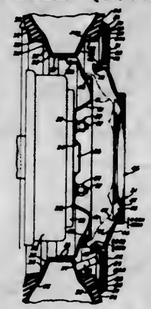
1. A wheel and wheel trim organization, an annular flange on the wheel, a trim member having a second annular flange thereon of different size than said wheel flange and coaxial therewith, a plurality of radially extending spring clips distributed in balanced relation around said wheel flange and having one end of each connected thereto, said clips being longer than the shortest distance between said flanges, each clip being bowed in compression against its own springiness into engagement with said trim flange, said clips being bowed outwardly with respect to the outer face of the wheel of application and being hidden by said trim member, said trim flange being positioned inwardly toward the wheel from the plane of the wheel flange when the trim member is in normal assembled position against the wheel, said clips having means for holding said trim member in spaced axial relation to said wheel.

2,749,185
WHEEL TRIM CUSHIONING MEANS
Edward L. Wood, Detroit, Mich., assignor, by direct and mesne assignments, to Gar Wood Industries, Inc., a corporation of Michigan
Application September 13, 1954, Serial No. 455,679
11 Claims. (Cl. 301—37)



1. A spring clip employable in securing wheel trim to a vehicle wheel, said clip being formed from strip spring steel reversedly bent and looped at one end to form a head having an inner reversedly bent nose portion and outer free leg for engaging the top and bottom of the lip of the rim of the vehicle wheel respectively when sprung thereon, said clip having a hook at the other end thereof for engagement with the wheel trim inwardly from the periphery thereof, said spring clip adapted to bias said wheel trim toward said wheel, and nonmetallic resilient means mounted on said spring clip for holding said wheel trim out of engagement with the wheel and said clip.

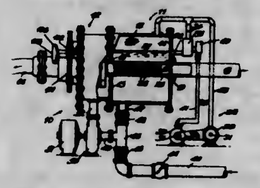
2,749,186
WHEEL TRIM, INCLUDING SELF-CENTERING AND CUSHIONING MEANS
Edward L. Wood, Detroit, Mich., assignor, by direct and mesne assignments, to Gar Wood Industries, Inc., a corporation of Michigan
Application November 1, 1954, Serial No. 465,841
5 Claims. (Cl. 301—37)



1. In combination with a wheel, wheel trim having an annular axially projecting wall at the rear thereof, spring clips carried by said wheel engaging said wheel trim adapted to bias said wheel trim toward said wheel, and resilient blocks fixed on said spring clips and engageable by said wall of said wheel trim for cushioning and centering said wheel trim in respect to said wheel.

2,749,187
PUMP
Victor A. Strom, Alameda, and Charles G. Dickinson, Oakland, Calif.
Application November 3, 1951, Serial No. 254,714
6 Claims. (Cl. 302—14)

1. Pumping apparatus of the character described comprising a jet pump including a conduit for passage of the fluid to be pumped and jet means for introducing a jet into said conduit to pump fluid therethrough, a priming chamber, an inlet conduit disposed in said priming chamber, communicating with said jet pump conduit and also communicating with said priming chamber, a mechanical pump, means connecting the outlet of said me-



chanical pump to said jet means to deliver fluid under pressure thereto, inlet means for supplying liquid under low pressure to said mechanical pump, a valve for said inlet means, by-pass means connecting said priming chamber with the inlet of the said mechanical pump and a valve for said by-pass means.

2,749,188
UTILITY POLE SERVICE EQUIPMENT
Maurice Eugene Mitchell, Muncie, Ind., assignor to Mitchell Maintenance Company, Inc., Muncie, Ind., a corporation of Indiana
Application June 23, 1952, Serial No. 295,099
2 Claims. (Cl. 304—9)



1. Apparatus for expediting the painting of poles such as utility poles, comprising a vehicle movable from pole to pole, a vertical platform support carried at the side of the vehicle, a platform swiveled adjacent its end on said support and having a first walkway extending generally radially of the swivel axis and a second walkway extending generally tangentially with respect to said axis and at an acute angle to the first walkway, said platform being movable about the swivel axis between a position overlying the vehicle and a position which disposes said second walkway parallel with the vehicle and spaced from the side thereof, whereby the vehicle can be moved to a position alongside a pole and the platform swung about its swivel axis to position the said second walkway on the opposite side of a pole from the vehicle.

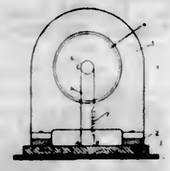
2,749,189
WRAPPING WEB TREAD FOR AUTOMOTIVE VEHICLE
Edward L. France and Emmett Devine, Logan, Utah
Application February 24, 1951, Serial No. 212,650
2 Claims. (Cl. 305—10)



1. A friction drive wrapping web tread for automotive vehicles equipped with pneumatic tires and adapted for travel over low pressure bearing areas comprising a pair of flat flexible endless webs, said endless webs being laterally spaced apart to accommodate the tread of a pneumatic tire therebetween, each of said webs having a width

greater than the spacing between the pair of webs, a plurality of grousers secured to the endless webs in longitudinally spaced apart relationship, each of said grousers including a single elongated ground-engaging shoe, each of said shoes being secured to the outer surface of each of the spaced apart endless webs normal to the longitudinal extension of the webs, and inwardly projecting trough-defining portions having laterally extending arms secured to the inner surface of said webs in superposed relationship to each of the shoes through which the endless webs are frictionally driven by the pneumatic tire, the trough-defining inwardly projecting portions being substantially rectilinear and of such length to frictionally engage the side wall of a pneumatic tire substantially tangentially of the curvature thereof to provide recesses at opposite sides of the tire adjacent the treads thereof and having a width substantially equal to the width of the grouser shoes and substantially less than said spacing between the pair of webs.

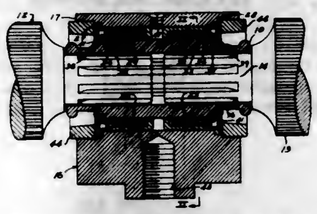
2,749,190
TRANSPORTING OF ROTARY MACHINES
Eric H. Ball, Rugby, England, assignor to The British Thomson-Houston Company Limited, a British company
Application June 28, 1955, Serial No. 518,589
5 Claims. (Cl. 308—1)



1. An arrangement for use during transit of machinery having a rotary member mounted in bearings, said member having a coaxial, generally cylindrical surface thereon, which arrangement comprises, in combination, a flexible drive member such as a belt, tape, rope, cord, wire and so on, anchored adjacent its opposite ends and passing in frictional engagement at least partly round said surface on the rotary member, spring tensioning means for the flexible member acting thereon at a location between the anchorage for one end and the position of engagement with said surface, and a resiliently mounted mass, which may be the machinery itself, co-acting with the portion of the flexible member between its other end and said surface to alternately increase and decrease the effective distance between said other end and said surface in response to oscillatory displacement of said mass due to vibration, the spring means being effective to take up the slack tending to result in the flexible member on reduction of said distance whereby during subsequent increase thereof the portion of the flexible member then spanning the distance produces at said surface by virtue of the frictional engagement a force tending to rotate the rotary member.

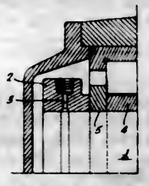
2,749,191
LOWER LINE COUPLING FOR FIBER ATTENUATING APPARATUS
Burrel C. Cole and Edwin P. Waite, Columbus, Ga., assignors to Cole Engineering Corporation, a corporation of Georgia
Application June 21, 1954, Serial No. 437,965
1 Claim. (Cl. 308—178)

In a coupling for sections of a driven line of rolls for fiber attenuating apparatus, a housing having a cylindrical bore therethrough, a sleeve in said bore, bearing races pressed into opposite ends of said bore and surrounding said sleeve, inturned annular flanges at the inner ends of said races, outturned annular flanges at the outer ends of said races engaging said housing whereby inward movement of said races is limited, free rollers between said bearing races and said sleeve, annular retaining washers surrounding said sleeve and pressed into



the bearing races outwardly of said rollers, shoulders on the inner surface of said bearing races limiting inward movement of said retaining washers, and means bearing against the outer surface of the retaining washers limiting outward movement thereof.

2,749,192
METHOD AND MEANS FOR AXIALLY FIXING ROLLING BEARINGS
Fritz Kort, Schweinfurt, Germany, assignor, by mesne assignments, to SKF Industries, Inc., Philadelphia, Pa., a corporation of Delaware
Application January 21, 1953, Serial No. 332,490
Claims priority, application Germany January 25, 1952
4 Claims. (Cl. 308—236)



1. The method of axially fixing rolling bearings on a shaft by means of a shrink-ring which comprises expanding the ring by heat, applying the expanded ring to the shaft, shrinking the ring by cooling, introducing a fluid pressure medium between the ring and the shaft to form a film of said medium between the confronting surfaces of said ring and shaft, and forcibly adjusting the ring axially on said film into bearing fixing position.

2,749,193
BACK UP WASHER
Henry A. Traub, Santa Monica, Calif., assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif.
Application April 24, 1952, Serial No. 284,010
6 Claims. (Cl. 309—23)



1. A packing arrangement for mating members comprising a first member having a cylindrical mating surface; a second member movable concentrically with respect to said first member and having a surface mating with the cylindrical mating surface of said first member; an annular groove formed in the mating surface of one of said members; an elastomeric O ring disposed in said groove and in sealing engagement with the mating surface of the other member; and a helical back-up ring

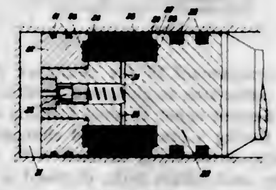
composed of polytetrafluoroethylene disposed in said groove axially adjacent said O ring and extending radially beyond said groove toward the mating surface of said other member, said helical back-up ring having at least one and one-half washer-like, adjacent coils.

2,749,194
PISTON RING
Samuel H. Norton, University Heights, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application April 10, 1953, Serial No. 347,867
3 Claims. (Cl. 309—29)



1. A piston ring comprising a slotted web having parallel spaced annular flanges extending radially outwardly from opposite sides thereof, a plurality of circumferentially spaced slits extending radially of said flanges and separating the same into a plurality of cylinder wiping elements, opposite ends of said elements having alternately arranged notches formed therein on opposite sides thereof, the notches on one end of one element being arranged oppositely from the notches on the adjacent end of the next adjacent element, and a gap between opposite notches on one end of one element accommodating interengagement of the adjacent notched end of the other next adjacent element therewith.

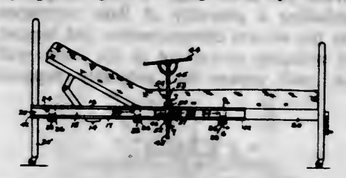
2,749,195
PISTON-RING PACKINGS, MORE PARTICULARLY FOR HIGH PRESSURE
Joachim Krüger, Lubeck-Schlutup, Germany, assignor to Lübecker Kaltemaschinen—G. m. b. H., Lubeck-Schlutup, Germany
Application December 7, 1953, Serial No. 396,523
Claims priority, application Germany December 6, 1952
5 Claims. (Cl. 309—31)



1. A piston comprising a piston body and a piston ring groove, a plurality of split annular rings laminated in said body, said rings having flat smooth sides and being radially movable with respect to each other to make contact with a cylinder wall, duct means for transmitting only the highest cylinder pressure to beneath said rings for urging said rings radially outward, and hard cast iron piston ring means between said plurality of rings and the piston head for reducing the cylinder pressure between the ring means and the plurality of rings to a value below the pressure applied beneath said plurality of rings.

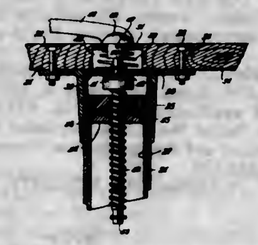
2,749,196
TRACK AND BED TABLE CARRIAGE SUPPORTED FROM BED RAIL
Joseph A. Wolfe, Seattle, Wash.
Application October 23, 1953, Serial No. 387,923
3 Claims. (Cl. 311—27)

1. In adjustable table supporting means, a track bar having a plane flat back portion and having two spaced apart parallel track flanges extending outwardly from said back portion, said track flanges having opposed track grooves therein and having a longitudinal slot therebetween extending along the outer side of the track bar; a carriage plate operable longitudinally of the slot be-



tween said track flanges; wheels on said carriage plate operable in said track grooves; and a locking screw threaded through said carriage plate and having an inner end portion positioned for selective engagement with or disengagement from said back portion of said track bar by rotation of said screw.

2,749,197
HOSPITAL BED TABLE
Lee Smith, Ludington, Mich., assignor to Carrom Industries, Inc., Ludington, Mich., a corporation of Michigan
Original application June 21, 1952, Serial No. 294,070. Divided and this application July 17, 1953, Serial No. 368,648
3 Claims. (Cl. 311—40)



1. In a hospital bed accessory, the combination of a mobile pedestal having at one end thereof an upstanding beam, a nut having a threaded opening carried at the upper end of the beam, a tube received in telescoping relationship over said beam including a plate closing the upper end of the tube and having an opening therethrough in axial alignment with the threaded opening, spider means carried by said tube, a table top supported on said spider and having an opening therethrough above said plate, a threaded shaft received in said beam through said nut and having an end extending above said plate, a crank received on the upper end of the shaft and having a downwardly facing shoulder at the level of the top of the table top, escutcheon means engaging said shoulder and terminating marginally flush with the upper edges of said opening in the table top, means intermediate said plate and escutcheon means for urging the latter against said shoulder, and means for maintaining said beam and tube against relative rotation.

2,749,198
COMPARTMENT CONTAINER FOR GARMENT LABELS
Harry Berber, Brooklyn, N. Y.
Application February 17, 1954, Serial No. 410,928
5 Claims. (Cl. 312—252)

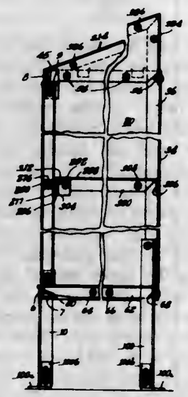
1. A rotary holder for garment labels adapted for mounting on a spindle of a sewing machine, comprising a receptacle, means defining a series of label compartments therein, means on the receptacle for rotatably mounting the same upon a sewing machine spindle, and individual cover means for the several compartments,

said compartment-defining means including a circumferential series of radial partitions in the receptacle, a peripheral, upstanding flange on the receptacle, and an inner wall concentric with said flange, the partitions extending from the inner wall to said flange, said cover means including a plurality of flaps corresponding in number to the several compartments and hinged for up-and-down swinging movement at the inner wall of the receptacle, said means for rotatably supporting the



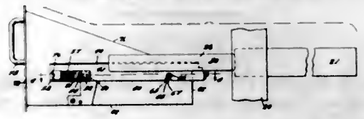
receptacle comprising an upstanding center post axially bored to receive the spindle and rigid with the receptacle at the center thereof, the holder further including means to support the flaps in raised positions, comprising an annular body surrounding the center post and depending fingers on the body occurring at the meeting points of adjacent flaps and formed with latching recesses in which said flaps are engageable in selected, raised positions thereof.

2,749,199
LOCKER CONSTRUCTION
John B. O'Connor, Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a corporation of Illinois
Application May 29, 1948, Serial No. 30,054, now Patent No. 2,651,559, dated September 8, 1953, which is a division of application Serial No. 673,566, May 31, 1946, now Patent No. 2,568,592, dated September 18, 1951. Divided and this application November 18, 1952, Serial No. 321,175
6 Claims. (Cl. 312—257)



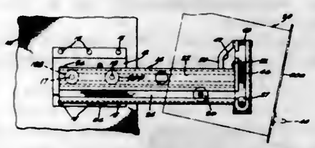
6. A sheet metal slanting top for a rectangular cabinet comprising a substantially rectangularly shaped top member having a slanting top wall and a rear wall extending at an acute angle to said top wall, said slanting top wall having opposed laterally depending flanges, said rear wall having opposed flanges disposed at an acute angle to the flanges of the top wall, and a pair of triangular side closing walls at said top portion, means for securing said triangular side closing walls to the opposed flanges of the rear wall and to said opposed depending flanges of said slanting top wall, said triangular side closing walls having freely extending tabs disposed in spaced apart relation along the free edges of said triangular shaped side closing walls.

2,749,200
TRUNNION MOUNTING FOR CHASSIS AND THE LIKE
Ferdinand Kuss, Philadelphia, Pa.
Application August 6, 1954, Serial No. 448,312
2 Claims. (Cl. 312—323)



1. In a mounting for a chassis or the like, a pair of spaced parallel slides, mounting plates on the adjoining sides of the slides, there being a longitudinal slot in each slide, guide means in the slots, a pivot mounting connected to the guide means in each slot, pivot means interconnecting each pivot mounting and the adjoining mounting plate, spring means biasing each pivot mounting rearward with respect to the slide, first latch means consisting of a slot extending from one edge of each slide and a cooperating pin in each mounting plate, biased by the spring means, latching the slides and the mounting plates together in longitudinal position and second latch means consisting of a slot at the forward end of each slide, there being a cross arm on each mounting plate, and a cooperating pin in each cross arm, biased by the spring means, latching the slides and the mounting plates together in transverse position.

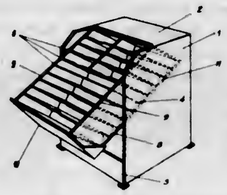
2,749,201
SLIDE STRUCTURE
Philip Koury, Los Angeles, and Richard J. Wills, Burbank, Calif., assignors to Brubaker Manufacturing Company, Inc., Los Angeles, Calif., a corporation of California
Application July 20, 1953, Serial No. 369,032
5 Claims. (Cl. 312—323)



5. In an arrangement of the character described, a slide element comprising an elongated member, said member having a flanged upper channel forming a trackway, said member having a lower flanged channel forming a lower trackway, a mounting element with rollers supported thereon, said rollers being disposed in said upper trackway, a component with rollers thereon, said component rollers being disposed in said lower trackway, said lower trackway being in communication with a vertically extending trackway unitarily formed with said member, a removable stop member on the upper end of said vertically extending trackway, said lower trackway and said vertically extending trackway being adapted to receive said component rollers, and said stop member when removed, allowing said component to be withdrawn from engagement with said member.

2,749,202
FILING CABINETS
Wilhelm Ritzerfeld, Berlin-Dahlem, and Gerhard Ritzerfeld, Berlin-Grunewald, Germany
Application April 30, 1952, Serial No. 285,162
10 Claims. (Cl. 312—327)

1. A filing cabinet comprising, in combination, a casing having a front opening; and file holding means arranged in closed position of said filing cabinet substantially within said casing, said file holding means including a front wall closing said front opening and parallel wall means extending from the rear face of said front wall rearwardly and upwardly for retaining files located between said wall means, said file holding means being mounted in said casing turnable about a horizontal turning axis extending in a plane parallel to said parallel wall means so that upon moving of the top end of said front wall forwardly and downwardly, said file holding means move to an operative position in which said front wall



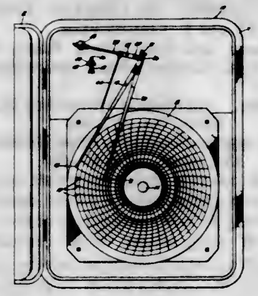
is forwardly and downwardly inclined with said rear face facing upwardly, and said wall means are forwardly and upwardly inclined said wall means being upwardly inclined during the entire turning movement of said file holding means, said horizontal axis being located intermediate the top and bottom ends of said front wall in the region of the center of gravity of said file holding means so that in said operative position the top end of said front wall projects out of said casing, and the bottom end of said front wall is located within said casing.

2,749,203
MANUFACTURE OF DECORATIVE LAMPS
Robert F. Hardwick, Euclid, Ohio, assignor to General Electric Company, a corporation of New York; patent dedicated to the Public insofar as it relates to lamps and lamp parts to the extent stated in document recorded in the United States Patent Office, January 4, 1954, Liber U–238, page 394
Application June 30, 1951, Serial No. 234,625
3 Claims. (Cl. 316—18)



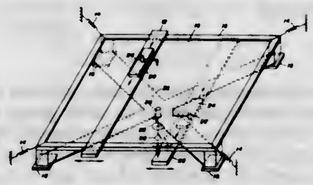
1. The method of fabricating a decorative electric lamp of complex shape which comprises forming a preliminary complete tubulated lamp bulb assembly of a glass bulb having a simple shape of a body of revolution with a filament sealed therein and an exhaust tube projecting from a single opening therein and communicating with the interior of the bulb, and then, while supporting the said assembly by the exhaust tube only, heating substantially the entire surface of the bulb other than the seal thereof to a plastic condition and molding it to a complex decorative shape materially different from its initial shape by the introduction of fluid pressure into the bulb through said exhaust tube to expand the plastic portion of the bulb into a surrounding mold, and finally, while supporting the reshaped assembly by the said exhaust tube, evacuating the bulb through said exhaust tube and sealing and severing the exhaust tube at an area adjacent the bulb.

2,749,204
DUAL RANGE RECORDING INSTRUMENT
Leroy A. Stanfield, Los Angeles, Calif.
Application April 6, 1953, Serial No. 346,995
8 Claims. (Cl. 346—35)



1. In a recording instrument having a chart, the combination of: a plurality of pen arms of equal length mounted for pivotal movement about a common axis, each arm having a tip adapted to contact the chart, means for simultaneously moving the arms at different rates of angular movement to swing the tips thereof along the same arcuate path of travel, and means acting automatically to change the rate of angular movement of one of the arms when the tip thereof approaches the tip of another arm, to avoid interfering contact.

2,749,205
TRACE RECORDING WITH IDENTIFICATION MARKING ON THE TRACE
Otto H. Schmitt, Port Washington, N. Y., assignor to the United States of America as represented by the Secretary of the Navy
Application August 25, 1944, Serial No. 551,242
3 Claims. (Cl. 346—62)



1. The combination with a trace making implement of means for moving said implement freely and unrestrictedly in an operating plane and in generally all directions within that plane to form a primary trace on a recording surface, a recording surface on which said implement is adapted to form traces, means for supporting the recording surface at a normally stationary point and in a normally stationary condition and in contacting relationship with the implement so that the primary trace is formed by motion of the implement on the recording surface, and means operatively connected with the recording surface for temporarily moving said surface in an excursion at any angle to the primary trace in the plane of said primary trace without at the same time moving said trace making implement thereby making a secondary indication on said recording surface.

2,749,206
PROCESS FOR DYEING OR PRINTING CELLULOSE-CONTAINING MATERIALS AND COMPOSITIONS SUITABLE THEREFOR

Jacques Wegmann and Karl Menzi, Basel, Switzerland, assignors to Ciba Limited, Basel, Switzerland, a Swiss firm

No Drawing. Application November 25, 1952, Serial No. 322,548
Claims priority, application Switzerland December 7, 1951
13 Claims. (Cl. 8—42)

1. Process for coloring textile materials containing cellulosic fibers with metalliferous direct dyestuffs, which comprises applying to said materials a neutral to alkaline aqueous dyestuff composition which contains a direct dyestuff in which a metal having an atomic number from 27 to 29 is bound in complex union to at least one ortho-hydroxy-ortho'-carboxy-azo-grouping, a water-soluble aliphatic α-amino-carboxylic acid, and an alkali metal salt of a phosphoric acid of the constitution

$$H_{m+2}P_mO_{3m+1}$$

in which m represents a whole number greater than 1.

2,749,207
PROCESS FOR DYEING OR PRINTING CELLULOSE-CONTAINING MATERIALS AND DYESTUFF PREPARATIONS THEREFOR

Karl Menzi and Jacques Wermann, Basel, Switzerland, assignors to Ciba Limited, Basel, Switzerland, a Swiss firm

No Drawing. Application November 10, 1952, Serial No. 319,773
Claims priority, application Switzerland November 16, 1951
18 Claims. (Cl. 8—42)

1. Process for coloring cellulosic textile materials with metalliferous azo-dyestuffs sparingly soluble in water, which comprises applying to said materials a neutral to alkaline aqueous dyestuff composition which contains a dyestuff containing at least two azo linkages and being capable of forming metal compounds sparingly soluble in water, an aliphatic amine corresponding to the formula

$$C_nH_{2n}=(-NH-\underset{R_3}{\overset{R_1}{C}}-CH_2-OH)_2$$

in which R_1 represents a member selected from the group consisting of a hydrogen atom, an alkyl group having at most three carbon atoms, and a hydroxymethyl group, R_2 represents a member selected from the group consisting of a hydrogen atom and a methyl group, and n represents a whole number of at the most 4, and anions of a phosphoric acid containing at least two phosphorus atoms in the acid molecule, said composition containing in combined form a metal having an atomic number from 27 to 29, said metal being present in alkali-resistant combination.

2,749,208
PROCESS OF SHRINKING POLYVINYL ALCOHOL FIBERS AND ACETYLIZING WITH MIXTURE OF MONO- AND DI-ALDEHYDES AND PRODUCT THEREOF

Edward T. Cline, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

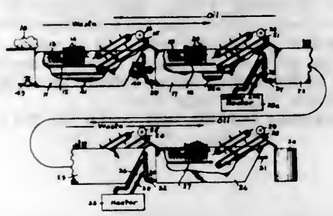
No Drawing. Application September 18, 1952, Serial No. 310,360
6 Claims. (Cl. 8—115.5)

1. In a process for the preparation of oriented polyvinyl alcohol fibers of desirable water resistance, the steps which comprise (*a*) shrinking the oriented unrelaxed fiber by contact with a homogeneous aqueous bath having no solvent action and no appreciable softening action on the fiber and having at least 30% water content at a temperature within the range 0°–50° C. and for a time within the range from three seconds to twenty minutes until the filament shrinks between 25 and 50% of its original oriented length and (*b*) thereafter reacting the fiber at a temperature within the range from 50° C. to just below the decomposition temperature of the reactants, with a mixture of a cyclic monoaldehyde containing only hydrogen, oxygen, and up to twenty carbon atoms and having the aldehyde group directly attached to annular carbon of a ring of at least five atoms with from 3 to 20%, by weight of said monoaldehyde, of a dialdehyde containing only hydrogen, carbonyl oxygen, and three to ten carbon atoms with at least one carbon atom between the aldehyde groups until at least 25% of the hydroxyl groups of the fiber are acetalized, the reaction of said aldehyde mixture with the fiber being conducted in a carbonyl-free liquid organic solvent for the aldehyde mixture which is a nonsolvent for the fiber and contains not more than 10% water.

2,749,209
PROCESS OF RENOVATING USED JOURNAL BOX WASTE

Leo C. McNamara, Indianapolis, Ind.

Application August 4, 1953, Serial No. 372,322
2 Claims. (Cl. 8—141)



1. A continuous process of renovating used journal box waste having an oil and a water content including both water absorbed within and free water outside of waste, which process comprises steps in sequence of initially immersing said used waste at one end portion of and over a screen in a bath of lubricating oil maintained at a temperature between below the boiling point of water and approximately 200 degrees F. until the free water separates from the waste and drops through said screen; gently separating the waste fibers in said oil bath allowing said free water to gravitate through the screen; moving the waste gradually from said one end of said oil bath to its opposite end; removing the waste from said bath and pressing a substantial amount of oil from the waste; immersing the waste in one end of a second lubricating oil bath over a screen therein; maintaining the temperature of the oil in said second bath above the boiling point of water and within the range of 260 to 280 degrees F. until substantially all of the absorbed water is removed from the waste; gently stirring, pulling apart, and slowly moving the waste along said second screen from its said one end to its opposite end; removing the waste from said second oil bath; pressing a substantial amount of oil from the waste; and resaturating the waste in a third bath of clean lubricating oil at substantially room temperature.

2,749,210
ANTITARNISH WRAPPERS

Daniel Gray, Sherrill, N. Y., assignor to Oneida Ltd., Oneida, N. Y., a corporation of New York

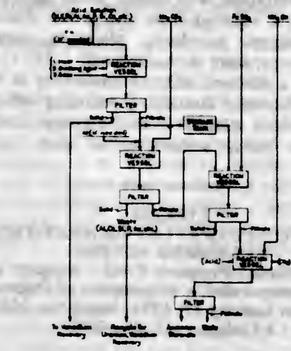
No Drawing. Application December 4, 1951, Serial No. 259,907
14 Claims. (Cl. 21—2.5)

1. An article of manufacture for protecting silverware from tarnish comprising a fabric impregnated with a salt of zinc, the anion of which is a member of the group consisting of a carbonate and a borate and containing sodium acetate, said impregnated fabric when moistened having a pH from 7.0 to 10.0.

2,749,211
RECOVERY OF URANIUM AND VANADIUM COMPOUNDS FROM ACID SOLUTION

Adolph Q. Lundquist, Grand Junction, Colo., assignor to Union Carbide and Carbon Corporation, a corporation of New York

Application November 19, 1952, Serial No. 321,309
3 Claims. (Cl. 23—14.5)

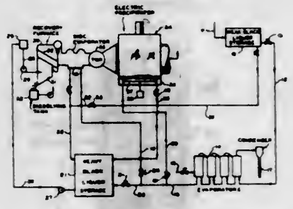


1. A method of recovering separately vanadium compounds and uranium compounds from acid solution containing, in addition to vanadium and uranium compounds, impurities including iron, aluminum, phosphorus and arsenic, which method comprises providing in such solution sufficient ferric iron to combine with all of the vanadium in such solution, heating the solution to a temperature not above its boiling point and adding an oxidizing agent to cause all of the vanadium to be present as pentoxide; adding an alkaline reagent to the solution to adjust its pH to 2.2 to 3.5, thereby causing ferric vanadate to be precipitated while said uranium compounds and impurities are retained in solution; separating ferric vanadate from the remaining solution; dividing the remaining solution into two portions; providing in one portion of said solution aluminum in an amount substantially in excess of that theoretically required to react with said impurities; adding said solution to a hot, concentrated solution of sodium carbonate until the resulting mixture is substantially neutral to phenolphthalein and thereby precipitating compounds of said aluminum and said impurities while retaining uranium compounds in solution; separating the precipitate from said solution; combining the solution with a portion of solution remaining after separation of ferric vanadate therefrom to lower the excess bicarbonate concentration of the resulting mixture to 0.5% to 2% calculated as CO_2; adding ferrous iron to said mixture of solutions and thereby precipitating therefrom, together with residual impurities, any retained vanadium as ferrous vanadate while retaining uranium compounds in solution; separating the precipitate from the solution; acidifying said solution to release carbon dioxide therefrom; and adding to said solution an alkaline reagent thus precipitating a diuranate therefrom.

2,749,212
PROCESS FOR RECOVERING SULFATE ASH FROM THE FURNACE GASES RESULTING FROM BURNING OF BLACK LIQUOR

Alexander N. Crowder, Bound Brook, N. J., assignor to Research Corporation, New York, N. Y., a corporation of New York

Application September 15, 1950, Serial No. 185,028
1 Claim. (Cl. 23—48)



A process for recovering sulfate ash from the furnace gases resulting from the burning of black liquor which comprises subjecting a stream of such furnace gases to electrical precipitation conditions in an elongated zone through which the gases flow in a substantially horizontal direction, passing a stream of weak black liquor in parallel concurrent flow to the stream of furnace gases in a zone contiguous and subjacent to the precipitation zone, transferring the precipitated ash in a dry state directly from the precipitation zone to the stream of black liquor along parallel paths substantially at right angles to the direction of flow of said streams, dissolving the ash so transferred in the stream of black liquor and maintaining the concentration of the liquor in the dissolving zone above the concentration at which substantial foaming occurs by the admixture with the weak liquor at the inlet to the dissolving zone of black liquor of substantially greater concentration than said weak liquor.

2,749,213
STANNOUS FLUORO COMPLEX SALTS

William F. Bruce, Havertown, Pa., assignor, by mesne assignments, to American Home Products Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application July 3, 1952, Serial No. 297,184
5 Claims. (Cl. 23—50)

5. A stannous fluoro complex salt represented by the empirical formula

$$Sn(RNH_3)_mF_nX\cdot pH_2O$$

where R is a member selected from the group consisting of H, lower alkyl, aralkyl and phenyl groups, where X is selected from the group consisting of Cl and Br, where m is 2, n is 3 and p is 1 when R represents H and where m is 1, n is 2 and p is 3 when R is other than H.

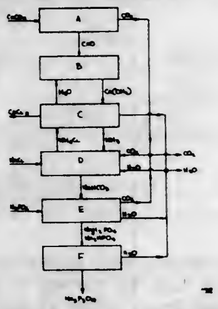
2,749,214
PREPARATION OF CHROMIC COMPOUNDS

Arnold J. Eickhoff, Ridgewood, N. J., and Leonard M. Kebrich, Brooklyn, N. Y., assignors to National Lead Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application April 29, 1953, Serial No. 352,038
8 Claims. (Cl. 23—51)

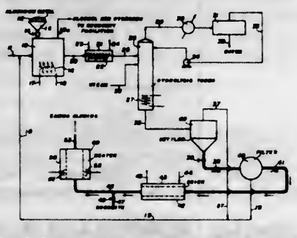
1. A process for the manufacture of insoluble chromic compounds which comprises adding an aqueous solution of alkali sulfites and alkali bisulfites to a mixture containing an alkali bichromate and an acid selected from the group consisting of phosphoric, phosphorous and arsenic acids, while maintaining the hydrogen ion concentration of the reaction mixture between a pH of about 1.0 and 4.5.

2,749,215
PROCESS FOR MANUFACTURE OF SODIUM POLYPHOSPHATES
Clayton F. Callis, Dayton, Ohio, assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
Application March 18, 1953, Serial No. 343,085
2 Claims. (Cl. 23—107)



1. In a process for making a sodium polyphosphate salt from sodium chloride and phosphoric acid, the steps comprising: (*a*) contacting sodium chloride, ammonia and carbon dioxide in aqueous solution under such conditions as to form an aqueous solution of ammonium chloride and a solid precipitate of sodium bicarbonate; (*b*) reacting said sodium bicarbonate with sufficient phosphoric acid to produce carbon dioxide and to form a sodium phosphate composition having the same ratio of sodium to phosphorus as the aforesaid polyphosphate to be produced, and then heating said sodium phosphate composition at a temperature sufficient to drive off water and form the desired polyphosphate; (*c*) contacting said ammonium chloride solution with calcium hydroxide under conditions such as to precipitate a solid calcium chloride and release ammonia; and (*d*) recirculating said ammonia and said carbon dioxide to react with additional sodium chloride in aqueous solution to form additional ammonium chloride and sodium bicarbonate.

2,749,216
PRODUCTION OF GAMMA ALUMINA
James A. Dinwiddie, Baytown, Winfred O. Milligan, Houston, and Max A. Mosesman, Baytown, Tex., assignors, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware
Application November 1, 1952, Serial No. 318,212
8 Claims. (Cl. 23—143)

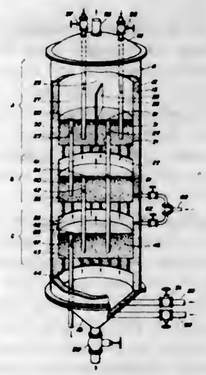


1. A method for producing gamma alumina monohydrate which comprises reacting aluminum metal with an aliphatic alcohol having from 5 to 8 carbon atoms in the molecule under conditions to form aluminum alcoholate, hydrolyzing said aluminum alcoholate by contacting same with water at a temperature from about the boiling point of water to about 300° F. in a hydrolysis-distillation zone to hydrolyze said alcoholate to gamma alumina monohydrate and to release alcohol, rapidly removing from said hydrolysis-distillation zone excess water and said alcohol such that the water is in contact with said alcoholate undergoing hydrolysis and the gamma monohydrate thus formed for a time not in excess of 45 minutes, separating water from the removed alcohol in a separation zone exteriorly of said hydrolysis-distillation zone, and recycling said separated alcohol to said hydrolysis-distillation zone.

2,749,217
PRODUCTION OF HYDROXYLAMINE AND SEMICARBAZIDE SALTS
Archie J. Deutschman, Jr., Columbus, Kans., assignor to Spencer Chemical Company, Kansas City, Mo., a corporation of Missouri
Application October 12, 1953, Serial No. 385,326
21 Claims. (Cl. 23—190)

1. A process for the catalytic reduction of nitrourea which comprises, reacting solubilized nitrourea with hydrogen present in excess of the stoichiometric amount in the presence of an acidifying agent selected from the group consisting of sulfuric, orthophosphoric, hydrochloric, sulfamic, p-toluene sulfonic, formic, oxalic, hydrobromic, hydroiodic and acetic acids and a hydrogenation catalyst selected from the group consisting of activated rhodium, paladium, platinum, and alloys thereof at a temperature in the order of —25° C. to 100° C. to produce a reaction mixture containing at least one highly active nitrogen containing reducing substance in the form of its salt selected from the group consisting of hydroxylamine salts, semicarbazide salts and their mixtures.

2,749,218
PROCESS AND APPARATUS FOR HEAT-TREATING FLUIDIZED SOLIDS
Thomas D. Heath, Westport, Conn., assignor to Dorr-Oliver Incorporated, a corporation of Delaware
Application January 19, 1951, Serial No. 206,879
3 Claims. (Cl. 23—200)



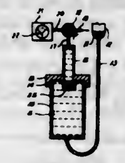
1. The process for continuously treating finely divided solids in a reactor having a plurality of superposed fluidized beds, comprising the steps of establishing and maintaining in a vertical cylindrical vessel at least three superposed beds of finely-divided solids of which in the lower bed reaction conditions are maintained while in an intermediate bed fuel combustion conditions are maintained and in an upper bed solids preheating conditions are maintained; rendering the solids of each of these beds into turbulently mobilized fluidized beds by passing successively therethrough at fluidizing velocities an uprising stream of gas, the gas passed through the lower and into the intermediate beds comprising a combustible treatment gas treating the solids in the lower bed by exposing them therein to the uprising stream of the combustible treatment gas, discharging treated solids from the latter bed, liberating heat in the intermediate bed by combusting

treatment gas therein, preheating the solids in the upper bed to a temperature below that required for treatment in the lower bed by exposing all solids of this bed to the sensible heat of uprising products of combustion from the intermediate bed, discharging a portion of such preheated solids from the upper bed to the intermediate bed and further heating them in that bed to a temperature in excess of that required in the lower bed by exposing them predominantly to liberated heat of combustion then discharging these heated solids from the intermediate bed to the lower bed, discharging the remaining preheated solids from the upper bed directly to the lower bed to commingle therein with the excessively heated solids, and controlling the temperature in the lower bed by regulating the quantity of solids in each of the portions commingled therein.

2,749,219
PREPARATION OF CALCIUM CARBIDE
Sieds Koopal, Sittard, and Jeannes H. C. Meissen, Staspelveld, Netherlands, assignors to Stamicarbon N. V., Heerlen, Netherlands
No Drawing. Application December 28, 1953, Serial No. 400,770
Claims priority, application Netherlands December 30, 1952
2 Claims. (Cl. 23—208)

1. A process for producing a calcium carbide containing slag which comprises charging a shaft furnace with a mixture of solid carbonaceous fuel and calcareous material containing 6 to 8 parts by weight of calcareous material per 100 parts fuel, contacting said mixture with an oxygen-containing blast consisting essentially of 55% steam and 45% oxygen, by volume, at a temperature of 1800–2000° C., permitting gas formed thereby to escape from the top of said furnace and withdrawing liquid slag from the bottom thereof, thereafter increasing the content of calcareous material in the mixture charged to said furnace so that said mixture comprises 35 to 50 parts calcareous compound per 100 parts fuel, then increasing the oxygen content of said blast to 55–75% by volume, and continuing the escape of gas and withdrawal of slag containing calcium carbide of increasing content from said furnace.

2,749,220
METHOD FOR MEASURING GAS IN CORES
Robert W. Rochow, San Antonio, Tex., assignor to Monarch Logging Company, Inc., San Antonio, Tex., a corporation of Texas
Application September 21, 1953, Serial No. 381,223
2 Claims. (Cl. 23—230)



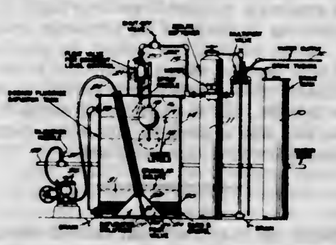
1. The method of determining the hydrocarbon gas content of a solid earth formation core, comprising, introducing the core into a chamber containing a body of liquid mercury, completely displacing extraneous air from the chamber with the mercury, thereafter sealing the chamber, then lowering the mercury level whereby to create in the chamber a vacuum sufficient to withdraw the gas from the core into the chamber, introducing air from outside the chamber into the evacuated chamber to form with the extracted gas therein an air-gas mixture of known volume, elevating the mercury level in the chamber to thereby displace the mixture from the chamber, and determining the proportion of hydrocarbon gas in said mixture.

2,749,221
APPARATUS FOR THE CONTINUOUS QUANTITATIVE DETERMINATION OF GASES
Roger Gilmont and Morris J. Schwartz, Brooklyn, N. Y., assignors to Benjamin Cooper, Brooklyn, N. Y.
Original application March 15, 1951, Serial No. 215,848. Divided and this application November 22, 1952, Serial No. 322,062
7 Claims. (Cl. 23—255)



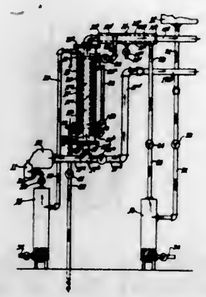
1. In a gas analyzer, the combination comprising a cylindrical metal block, electrical means circumjacently disposed around the outer periphery of said block and adapted to heat said block, tubing adapted to receive gas to be tested comprising a plurality of continuous turns of metallic tubing integrally imbedded within said block and helically disposed about its axis and said tubing having the inlet end thereof disposed externally of said block, a longitudinal central opening in said block communicating with the top thereof, a gas sensitive reaction cell unit adapted to be mounted in within said opening in equally spaced relation to the internal periphery of the block, and means interconnecting the outlet end of said metallic tubing with the inlet end of said unit to permit gas to pass from said tubing to said unit, and outlet means on said unit extending externally of the block.

2,749,222
APPARATUS AND METHOD FOR PROVIDING A FLUORIDE SOLUTION
Henry F. Munroe, Cranston, R. I., assignor to Proportioneers, Inc., a corporation of Rhode Island
Application August 30, 1951, Serial No. 244,347
1 Claim. (Cl. 23—272)



In an apparatus for providing a solution of a fluoride ion, a tank, a conical chamber within the tank below the upper end thereof with the base of the cone adjacent the lower end of the tank and having an inlet communication at its base from the tank and an outlet extending upwardly through the upper end of the tank and isolated from the remainder of the contents of the tank above it, a barrier for holding the solid solute from passing through the inlet to the chamber but permitting the solvent to pass therethrough, means to maintain the level of the solution above the solid solute within a predetermined range, and means to withdraw the solution from the chamber at a rate to control the contact time of the solvent with the solid solute.

2,749,223
APPARATUS FOR OPERATING INTERNAL COMBUSTION ENGINES
James R. Harrington, Waurika, Okla., assignor of thirty-five one-hundredths to Frank J. Schraeder, Jr., Wichita, Kans.
Application June 18, 1952, Serial No. 294,281
7 Claims. (Cl. 48—107)



1. In apparatus for operating an internal combustion engine with a carbureted mixture comprising combustible vapor derived from crude petroleum by heat emitted from the engine exhaust gas: the improvement which consists of a crude petroleum vaporizer comprising a tank containing a body of pieces of surface-extending material of irregular structure, said tank being disposed in a position conducive to gravitational flow of the petroleum therethrough, a heat-emitting conduit extending through said tank and said body of surface-extending material and having an inlet at one end thereof communicating with said exhaust gas outlet to thereby heat said surface-extending material, a casing having an elongated petroleum preheating chamber, the opposite end of said heat-emitting conduit extending exteriorly of said vaporizing tank through said petroleum preheating chamber, a petroleum feeding conduit communicating with a source of crude petroleum adapted for uniformly feeding the crude petroleum into said preheating chamber, a discharge conduit for said chamber adapted to discharge the preheated petroleum into said tank for continuous gravity flow through the heated body of said surface-extending material to thereby produce a fraction of gasoline vapor therefrom, means permitting discharge of the petroleum residue from said tank, means adapted for feeding the gasoline vapor from said tank together with an admixture of air into the intake manifold of said engine responsively to suction in the engine cylinder, and valve-regulated means for admitting air into said tank to partially relieve the suction of the engine projected into the vaporizing tank.

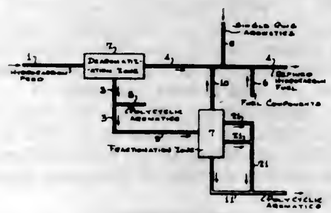
2,749,224
METHOD OF MAKING GRINDING WHEELS
Aleck Block, Culver City, Calif., assignor to Merit Products, Inc., Culver City, Calif., a corporation of California
Application December 15, 1954, Serial No. 475,512
5 Claims. (Cl. 51—293)

3. The method of forming an abrasive grinding wheel comprising combining a plurality of leaves to form a circular wheel, at least some of said leaves having an abrasive surface thereon, applying an electrically heated circular electrode to each of the side edges of said wheel, the application of said electrode completely burning portions of said leaves to form a pair of grooves in the sides of said wheel, said electrode partially burning the portions of said leaves adjacent to said grooves to destroy a substantial amount of the fibres thereof in the area directly adjacent to said grooves and a substantially progressively lesser amount of the fibres in the areas farther away from said grooves, filling said grooves with liquid adhesive, said adhesive penetrating into the partially



burned areas of said leaves adjacent said grooves to provide an effective intermingling of the remaining fibres of said leaves with said glue, and mounting a circular ring within each of said grooves, said rings and leaves being bonded together by said adhesive.

2,749,225
PROCESS FOR PRODUCING A HYDROCARBON FUEL
Robert E. Barnum, Roselle, George N. Jenkins, Elizabeth, and Theodore B. Wasserbach, Cranford, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application April 29, 1952, Serial No. 285,012
9 Claims. (Cl. 52—.5)



1. Process for refining a hydrocarbon fuel containing monocyclic and polycyclic aromatics and boiling between about 100° F. and 600° F. which comprises dearomatizing said fuel to remove polycyclic aromatic hydrocarbons, blending the dearomatized fuel with sufficient single ring aromatic hydrocarbons including alkylated single ring aromatics containing from 8 to 9 carbon atoms to produce a refined fuel containing less than 5 per cent by volume of polycyclic aromatics at least 0.5 volume percent of an alkylated C_8–C_9 aromatic hydrocarbon and a total of from 0.5 to 25 per cent by volume of single ring aromatic hydrocarbons.

2,749,226
DELAY COMPOSITION FOR DELAY ELECTRIC DETONATORS
Idwal O. Lewis, Ardrossan, Scotland, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain
No Drawing. Application April 7, 1952, Serial No. 281,029
Claims priority, application Great Britain June 20, 1951
2 Claims. (Cl. 52—2)

1. A delay composition for a delay element, said composition consisting essentially of a mixture of 91% to 95% by weight of red lead and 9% to 5% by weight of silicon, not less than 90% by weight of said silicon being of particle size less than 5 microns and all of it of size less than 20 microns.

2,749,227
METHOD OF DEFOLIATING WITH SODIUM CHLORATE AND SODIUM METABORATE
Irvin W. Bales, Westfield, N. J., assignor to Chipman Chemical Company, Inc., Bound Brook, N. J., a corporation of New York
No Drawing. Application July 28, 1953, Serial No. 370,895
6 Claims. (Cl. 71—2.2)

1. The method of defoliating cotton and other plants which comprises applying thereto in an amount to effect defoliation a mixture of sodium chlorate and sodium metaborate in the proportions of 25 to 60% of the chlorate and 75 to 40% the metaborate.

2,749,228
DEFOLIATION
Waldo B. Ligett, Pontiac, and Calvin N. Wolf, Ferndale, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware
No Drawing. Application October 20, 1951, Serial No. 252,409
5 Claims. (Cl. 71—2.3)

1. A composition effective in defoliating agricultural crops consisting of at least 0.1 part by weight of an N-arylthioamide and up to 100 parts of a hydrocarbon oil and a surface active agent, suitable for use in water and oil emulsion, the concentration of N-arylthioamide being sufficient to cause defoliation.

2,749,229
PLANT GROWTH REGULATION WITH CHLOROPHENYL CYANOACRYLIC ACIDS AND DERIVATIVES
Waldo B. Ligett, Pontiac, and Calvin N. Wolf, Detroit, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware
No Drawing. Application May 6, 1952, Serial No. 286,433
8 Claims. (Cl. 71—2.4)

1. A method for regulating the growth processes of plants which comprises applying thereto a plant response composition containing as active ingredient in amount sufficient to provide a positive plant response a material selected from the group consisting of monomeric α-cyano-β-(m-chlorophenyl)acrylic acid, monomeric α-cyano-β-(p-chlorophenyl)acrylic acid, and carboxylic derivatives thereof, and a substantially inert carrier as a dispersant therefor.

2,749,230
PLANT GROWTH STIMULANTS CONTAINING WATER INSOLUBLE SALTS OF PENICILLIN
Murray Arthur Kaplan, Syracuse, N. Y., assignor to Bristol Laboratories Inc., Syracuse, N. Y., a corporation of New York
No Drawing. Application April 7, 1953, Serial No. 347,407
5 Claims. (Cl. 71—2.4)

1. A composition to stimulate the growth of plants comprising a water-insoluble salt of penicillin G and utilizable nitrogen, phosphorus and essential minerals.

2,749,231
BROMOPHENYL CYANOACRYLIC ACIDS AND DERIVATIVES
Waldo B. Ligett, Pontiac, and Calvin N. Wolf, Detroit, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware
No Drawing. Application May 6, 1952, Serial No. 286,434
15 Claims. (Cl. 71—2.6)

1. A new composition of matter selected from the group consisting of α-cyano-β-bromophenyl acrylic acid and carboxylic derivatives thereof.

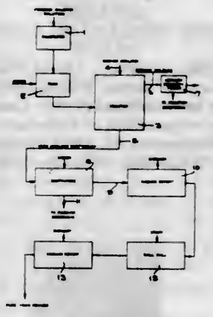
2,749,232
CHLOROPHENYL CYANOACRYLIC ACIDS AND DERIVATIVES
Waldo B. Ligett, Pontiac, and Calvin N. Wolf, Detroit, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware
No Drawing. Application May 6, 1952, Serial No. 286,432
19 Claims. (Cl. 71—2.6)

1. A new composition of matter selected from the group consisting of α-cyano-β-(polychlorophenyl) acrylic acid and carboxylic derivatives thereof.

2,749,233
WATER-SOLUBLE, NITROGEN-PHOSPHORUS-CONTAINING PRODUCT AND PROCESS OF MAKING SAME
John E. Malowan, Dayton, Ohio, assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
No Drawing. Application January 27, 1953, Serial No. 333,602
6 Claims. (Cl. 71—42)

1. The process for preparing a water-soluble nitrogen-phosphorus-containing product from the water-insoluble high molecular weight reaction product of phosphorus oxychloride and anhydrous ammonia obtained at a temperature in the range of from 155° C. to 250° C., which comprises hydrolyzing the said reaction product by contacting the same with from 10% to 35% by weight of water at a temperature in the range of from 80° C. to 150° C. in a closed vessel.

2,749,234
METHOD OF PRODUCING METAL POWDERS
Morris Eisenberg, Richmond, Calif.
Application August 13, 1953, Serial No. 374,084
4 Claims. (Cl. 75—.5)



1. The method of producing a ferrous metal powder which comprises subjecting a purified solution of a salt of the metal, to be presented in powder form, in a confined space alternately to a vacuum and inert gas to remove oxygen dissolved in the solution, contacting the oxygen-free solution countercurrently with an oxygen-free alkali metal amalgam in an inert atmosphere, concentrating the resultant metal amalgam mechanically in an inert atmosphere, and distilling the resultant concentrate under agitation at a temperature below the sintering point of the metal to remove the mercury.

2,749,235
METHOD OF REDUCING COBALTIC AMMINE SALT
Tuhin Kumar Roy, Elizabeth, N. J., assignor to Chemical Construction Corporation, New York, N. Y., a corporation of Delaware
No Drawing. Application September 25, 1953, Serial No. 382,467
3 Claims. (Cl. 75—119)

1. A process for producing elemental cobalt metal from cobaltic hexammine sulfate which comprises, heat-

ing cobaltic hexammine sulfate to a temperature of from about 275° to about 950° F., forming an aqueous ammoniacal liquor of the decomposition product in which at least a part thereof is in solution, and subjecting said liquor to the action of a reducing gas at above about 300° F. and an overpressure of reducing gas greater than about 50 p. s. i. g.

2,749,236
DUCTILE IRON

Arthur A. Avedisian, Windsor, Conn., assignor to The Taylor & Fenn Co., Hartford, Conn., a corporation of Connecticut

No Drawing. Application June 22, 1953, Serial No. 363,380
4 Claims. (Cl. 75—123)

1. A method of forming castings of thin section free from surface pinholing from ductile iron comprising forming a ductile iron melt and adding thereto a small quantity of tellurium in the proportion of approximately one to eight grams per hundred pounds of melt, and then pouring the melt into molds.

2,749,237
METHOD OF ADDING MAGNESIUM TO MOLTEN IRON

James Fernando Jordan, Huntington Park, Calif., assignor of one-third to the estate of James Jordan, deceased

No Drawing. Application February 12, 1951, Serial No. 210,623
3 Claims. (Cl. 75—130)

1. The method of alloying magnesium with molten cast iron which comprises reacting magnesium nitride with said molten cast iron until said alloy is formed and casting the resulting molten cast iron.

2,749,238
METHOD FOR PRODUCING CAST FERROUS ALLOY

Keith Dwight Millis, Rahway, Albert Paul Gagnebin, Red Bank, and Norman Boden Pilling, Westfield, N. J., assignors to The International Nickel Company, Inc., New York, N. Y., a corporation of Delaware

Application September 10, 1949, Serial No. 115,088
23 Claims. (Cl. 75—130)



1. The method for producing a ductile cast iron having a microstructure containing in the as-cast condition uncombined carbon in a spheroidal form and characterized by a high combination of properties which comprises establishing a molten ferrous bath containing about 2% to about 4.5% carbon, about 0.5% to about 3.5% silicon, with the sum of the percentage of carbon plus one-third the percentage of silicon being not more than about 5, and the balance a gray cast iron composition when cast in an inoculated condition and having iron in the alpha form at atmospheric temperatures, introducing into said ferrous bath magnesium in an amount to provide about 0.06% to about 0.15% magnesium in castings made from said bath, thereafter inoculating the magnesium-containing bath with about 0.3% to about 2.5% silicon as a silicon-containing agent and casting the metal from said inoculated bath in an inoculted condition to produce a ferrous alloy casting containing the aforesaid amounts of retained magnesium to cause the occurrence of uncombined carbon in a spheroidal form in the as-cast condition and devoid of subversive amounts of elements materially interfering with the effect of magnesium in causing the occurrence of uncombined carbon in said spheroidal form.

2,749,239
ALUMINUM BASE ALLOY

Walter E. Sicha, Shaker Heights, and Harold Y. Hunsicker and Robert C. Lemon, Cleveland, Ohio, assignors to Aluminum Company of America, Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application March 14, 1955, Serial No. 494,264
6 Claims. (Cl. 75—142)

1. An aluminum base alloy casting composed essentially of aluminum, 6 to 18% copper, 4 to 8% magnesium, 0.1 to 2% manganese and 0.1 to 2% nickel, the amount of copper not being less than the amount of magnesium, said alloy being characterized in the as-cast condition by a tensile strength at 600° F. of not less than 15,000 p. s. i.

2,749,240
PRODUCTION OF CELLULOSE PULP

James Hamilton Ross, Montreal, Quebec, Canada, assignor to Pulp and Paper Research Institute of Canada, Montreal, Quebec, Canada

No Drawing. Application January 19, 1953, Serial No. 332,079
13 Claims. (Cl. 92—7)

1. In the production of cellulosic pulp the process of impregnating a finely divided cellulosic material with an aqueous cooking liquor comprising placing said cellulosic material in a pressure vessel, introducing steam to said pressure vessel to establish an atmosphere of steam and air in direct contact with said cellulosic material at a super-atmospheric pressure of at least about two atmospheres before the introduction of cooking liquor to said cellulosic material, and thereafter forcing an aqueous cooking liquor into said pressure vessel to submerge said cellulosic material while maintaining said cellulosic material and the liquor in which it is being submerged under a pressure at least as great as said super-atmospheric pressure.

2,749,241
PROCESS FOR PRODUCING SEMI-CHEMICAL PULP

Paolo Marpillero, Milan, Italy, assignor to Development Tecnique de la Pate A Papier Anonyme Suisse (denommee ci-apres Detepa), Bale (Basel), Switzerland, a corporation of Switzerland

No Drawing. Application March 8, 1952, Serial No. 275,671
Claims priority, application Italy May 29, 1950
4 Claims. (Cl. 92—6)

1. A process for the production of a semi-chemical pulp from comminuted cellulosic raw material in the form of wood chips and small pieces of plants, comprising digesting said raw material in an acid bisulfite liquor having an initial pH of 2.2 to 5.0 and containing per ton of dry raw material an amount of SO_2 between about 60 to 120 kg. per ton of dry raw material which is insufficient to remove all of the lignin in the raw material, said digesting taking place at cooking temperatures not substantially exceeding 137° C. and until at least a major part of the weight but not all of the lignin is removed, said liquor containing about 3.5 to 11 times as much liquid by weight as dry raw material, and mechanically defibrating the digested raw material to form said pulp.

2,749,242
CONVERSION OF LACTOSE TO GLUCOSE, GALACTOSE AND OTHER SUGARS IN THE PRESENCE OF LACTASE ACTIVATORS

Edwin G. Stimpson, Sayville, N. Y., and Olof E. Stamberg, Danville, Ill., assignors to National Dairy Research Laboratories, Inc., Oakdale, N. Y., a corporation of Delaware

No Drawing. Application December 24, 1952, Serial No. 327,912
18 Claims. (Cl. 99—55)

1. A process of hydrolyzing lactose contained in a liquid milk product to lactose hydrolytic sugars including glucose and galactose which comprises adding thereto an enzyme preparation in which the enzyme consists essentially of lactase enzyme and a supplemental lactase activator containing in the molecule an active sulfur atom associated in a group selected from the class consisting of sulfide, hydrosulfide, sulfite, bisulfite, metabisulfite, hyposulfite, thiosulfate, mercapto, and sulfur dioxide, and holding the product in the presence of the lactase activator under conditions favoring lactase hydrolysis of lactose to lactase hydrolytic sugars including glucose and galactose until there is obtained a product containing such hydrolytic sugars formed by lactase hydrolysis of the lactose, the remaining sugar content other than such hydrolytic sugars being unhydrolyzed lactose.

2,749,243
METHOD OF MAKING A FOOD PRODUCT

Herbert Thal Leo and Clarence C. Taylor, Anaheim, Calif.

No Drawing. Application November 24, 1953, Serial No. 394,211
7 Claims. (Cl. 99—132)

1. The method of making a food product, which comprises incorporating pectin and an edible alkali metal salt of an organic oxy acid into a fruit-sugar mass under such conditions that the resulting mass has a pH not less than 3.5 and a total soluble solids content of between 55 and 65% by weight, whereby water will not freeze out of the mass at 0° F., heating said mass sufficiently if necessary to put all the sugar present into solution, thereafter adjusting the pH of said mass to between 2.90 and 3.25 to set said mass and refrigerating the same.

2,749,244
METHOD OF MAKING NON-LUMPING STARCH MIXTURE AND THE RESULTING COMPOSITION

Bernard M. Wimer, Whiting, Ind., assignor to American Maize-Products Company, a corporation of Maine

No Drawing. Application June 10, 1953, Serial No. 360,847
9 Claims. (Cl. 99—139)

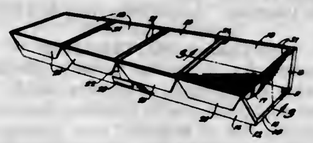
1. The method of making an improved powdered starch material which comprises mixing the material with a minor proportion of a reagent having molecules with both hydrophilic and lipophilic characteristics in which the hydrophilic characteristics are at least equal to the lipophilic, said reagent being selected from the group consisting of polyoxyethylene glycol monolaurate, polyoxyethylene glycol mono-oleate, polyoxyethylene glycol monopalmitate and polyoxyethylene glycol monostearate, the resulting material being characterized by the fact that the particles of powdered starch may be homogeneously dispersed in a liquid in about 30 seconds to form a smooth pudding like paste or stiff mass.

2,749,245
SOFT PLASTIC FOOD PACKAGE

Leo Peters, Evanston, Ill.

Application July 10, 1950, Serial No. 172,996
4 Claims. (Cl. 99—171)

1. A soft plastic food package, comprising a support formed from resilient sheet material, said support providing a bottom wall and side walls extending upwardly therefrom at obtuse angles with folds between the side walls and the bottom wall providing spring hinges resiliently urging the side walls outwardly, a film extending between the upper end portions of said side walls and

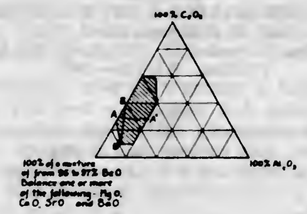


held yieldably taut by the action of said spring hinges on said side walls, said film providing at least one depending cup formed therein and spaced from the walls of said support, and a soft plastic food at least partially filling said cup.

2,749,246
SPARK PLUG INSULATOR CONTAINING CERIC OXIDE

Harry G. Schurecht, Detroit, Mich., assignor to Champion Spark Plug Company, Toledo, Ohio, a corporation of Delaware

Application October 26, 1951, Serial No. 253,390
3 Claims. (Cl. 106—63)



3. A ceramic spark plug insulator produced by sintering a substantially silica-free blend of refractory materials consisting essentially of from 10 per cent to 80 per cent of an oxide of cerium, from 20 per cent to 90 per cent of BeO, and from a trace to 20 per cent of alumina, and wherein an oxide of cerium constitutes at least 20 per cent of every blend containing not more than 80 per cent of BeO.

2,749,247
PROCESS OF MAKING WRINKLE VARNISHES

Jotl Sarup Aggarwal and Penumarti Gopal Sharma, Poona, India, assignors to The Council of Scientific and Industrial Research, New Delhi, India

No Drawing. Application December 6, 1951, Serial No. 260,316
4 Claims. (Cl. 106—222)

1. In the manufacture of wrinkle varnishes, the process which consists substantially in mixing from about 1.5 to 2 parts by weight of a wrinkling oil, whose fatty acid components contain conjugated double bonds and selected from a class consisting of kamala oil, tung oil, oiticica oil, *Trichosanthes anguina* seed oil and *Momordica charantia* seed oil, with about 1 part by weight of estergum, heating the mixture in the absence of a catalyst at a temperature ranging from about 175° to 280° until a drop of the cooled mixture gives a thread of from about 6 to 10 inches, thinning the resulting varnish base with an organic solvent having a boiling point of from about 40° to 125° C., adding a surface drier.

2,749,248

ORGANOPHILIC TITANIA POWDERS CONTAINING A POLYMERIZABLE ETHYLENIC MONOMER BOUND TO FRACTURED SURFACES THEREOF AND THEIR PREPARATION

Richard E. Benson, Claymont, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 9, 1952, Serial No. 287,047
15 Claims. (Cl. 106—300)

1. A method for preparing a finely divided titania powder having organophilic properties which comprises grinding and fracturing coarse granular titanium dioxide having a particle size of at least 1 mm. average diameter in contact with a polymerizable ethylenic monomer containing from one to two ethylenic double bonds as the sole aliphatic carbon-to-carbon unsaturation, and at a temperature below that at which polymerization of said monomer occurs, thereby providing freshly fractured titanium dioxide surfaces reactive with said monomer, continuing said grinding and fracturing of the coarse granular titanium dioxide in contact with said monomer until the titanium dioxide particles are ground to a fine powder having a surface area of at least 0.1 $m.^2/g.$ and said monomer becomes bonded to active fractured surfaces thereof, and separating as the resulting product a finely divided titania powder containing said monomer bonded to the fractured surfaces thereof and having organophilic properties.

2,749,249

METHOD FOR MAKING A DRY PAINT MIXTURE

Nick G. Cadegans, Beloit, Wis.

Application November 24, 1952, Serial No. 322,363
1 Claim. (Cl. 106—309)

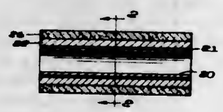
In a method of making a dry paint composition from clay, comprising, first, subjecting a loose clay to a temperature of substantially 500° F. for substantially three quarter hour, next washing and mixing the clay with water until a liquid batter is formed, next, draining the batter into a vertically elongated settling tank, next, allowing the batter to rest and cream to rise on the surface, next, draining the cream into a vertically elongated cream tank, next, allowing the cream in the cream tank to rest and the coarser material to settle, next, draining the cream into a cream pan, next, subjecting the cream in the pan to a temperature below the boiling point of water until dehydrated, next, grinding the dehydrated cream and forcing it through a screen of substantially 220 mesh.

2,749,250

PROCESS OF COATING A METALLIC STRUCTURAL ARTICLE AND A MARINE ORGANISM RESISTANT COMPOSITION THEREFOR

John Christian Christensen, Westfield, and William F. Fair, Jr., Cranford, N. J., assignors to Koppers Company, Inc., a corporation of Delaware

Application April 5, 1954, Serial No. 420,872
12 Claims. (Cl. 117—26)



10. A process of coating a metallic structural article comprising applying a primer coat to a metallic structural article of a bituminous priming composition containing from about 55 to about 65 parts by weight of coal-digestion pitch and from about 30 to 45 parts by weight of aromatic low-boiling solvent boiling in the range of approximately 80–200° C., permitting said primer coat to dry; applying over said primer coat at a temperature ranging from approximately 450°–490° F. a first coating of a plasticized coal-tar enamel containing from about 65 to about 80% by weight of a coal-digestion pitch and from about 20 to about 35% by weight of talc; permitting said first coating to partially cool; applying a stratum of inert, coarse, solid, discrete, water-insoluble, hard particles having a Moh's test hardness of from 5 to 10 to the partially-cooled plasticized coal-tar enamel; and thereafter applying at a temperature ranging from approximately 450°–490° F. an external coating of plasticized coal-tar enamel containing from about 65 to about 80% by weight of coal-digestion pitch and from about 20 to about 35% by weight of talc over said stratum of particles.

2,749,251

SOURCE OF LUMINOSITY

Edward Shapiro, Newton Highlands, Mass., assignor to Tracerlab, Inc., Boston, Mass., a corporation of Massachusetts

No Drawing. Application October 29, 1953, Serial No. 389,155
3 Claims. (Cl. 117—33.5)

1. A source of luminosity comprising a member having a light reflecting surface having deposited on said surface a thin layer of inorganic phosphor particles in the range of 1 to 7 microns intimately coated with a tritiated compound selected from the group consisting of alcohols and paraffinic acids having chain lengths of 12 to 20 carbon atoms and are wax-like in texture in the solid state, the thickness of said layer being in the range of 2 to 3 milligrams per square centimeter and the thickness of the coating of the tritiated compound on the individual phosphor particles being in the range of approximately .0004 millimeter to approximately .0008 millimeter.

2,749,252

METHOD OF APPLYING AN ORGANIC FILM TO A PHOSPHOR LAYER

Miriam G. Groner, Doylestown, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania

No Drawing. Application October 31, 1951, Serial No. 254,195
11 Claims. (Cl. 117—33.5)

1. In the manufacture of an aluminum film-backed luminescent phosphor screen of a cathode ray tube wherein phosphor particles are deposited as a layer onto the glass substrate from an aqueous suspension thereof, an organic film applied to the phosphor layer and an aluminum film deposited on said organic film, the improved method of applying an organic film to the phosphor layer which comprises applying, to the surface of the aqueous phosphor-suspending medium on the glass substrate in the cathode ray tube bulb, a composition comprising between 3.5 and about 5%, by weight, of nitrocellulose, a water-insoluble plasticizer therefor and octyl acetate dissolved in a mixture comprising a water-soluble alcohol selected from the group consisting of a propyl alcohol and a butyl alcohol and a volatile ester selected from the group consisting of a propyl acetate and a butyl acetate, the said volatile ester being the major constituent in said composition; after the phosphor layer has been deposited onto the glass substrate, removing the aqueous phosphor-suspending medium from between the phosphor layer and nitrocellulose film whereby the nitrocellulose film settles and rests upon the phosphor layer, and drying the resulting assembly.

2,749,253

METHOD OF MAKING A COPY SHEET AND RESULTANT ARTICLE

Clarence J. Shoemaker, Franklin Park, and Edward J. Igler, Chicago, Ill., assignors to A. B. Dick Company, Niles, Ill., a corporation of Illinois

No Drawing. Application May 20, 1952, Serial No. 288,965
12 Claims. (Cl. 117—36)

1. A copy sheet of the type described comprising a paper base sheet containing a sensitizing composition which produces a visible color change at elevated temperature and a polysiloxane distributed throughout the sheet.

2,749,254

PROTECTIVE COATING METHOD

John A. Slyh, James F. Lynch, and Roger J. Runck, Columbus, Ohio, assignors, by mesne assignments, to Battelle Development Corporation, Columbus, Ohio, a corporation of Delaware

No Drawing. Application April 22, 1952, Serial No. 283,756
2 Claims. (Cl. 117—46)

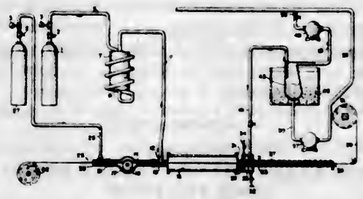
1. The process of forming a protective coating on a graphite surface comprising the addition to an aqueous solution of a water-soluble organic compound selected from the group consisting of a phenolic resin and methyl cellulose, of molybdenum disilicide powder, applying the resultant dispersion to said graphite surface, and thereafter heating in an oxygen-free atmosphere to a temperature of from 3900 to 4100° F.

2,749,255

METHOD OF PRODUCING METALIZED GLASS FIBER ROVINGS

Herman R. Nack, Troy, and Howard J. Homer, Dayton, Ohio, assignors to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio

Application May 24, 1952, Serial No. 289,828
11 Claims. (Cl. 117—54)



1. A process of plating a glass fiber roving consisting of a plurality of untwisted strands comprising a multiplicity of filaments with metal comprising the steps of heating the roving to the decomposition temperature of a heat decomposable gaseous metal bearing compound, and contacting the roving with said gaseous compound while vibrating the roving at a rate sufficient to expose the individual strands to the gaseous compound whereby metal is deposited on said roving uniformly.

2,749,256

PROCESS OF IMPREGNATING CELLULOSIC MATERIALS WITH COPPER IN CHEMICALLY BOUND RELATION WITH THE CELLULOSE

Robert Roger Bottoms, Crestwood, Ky., assignor to National Cylinder Gas Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application February 16, 1954, Serial No. 410,719
30 Claims. (Cl. 117—59)

1. A process for increasing the immunity of cellulosic materials to organic agents of decay by provision therein of copper in chemically bound relation with cellulose molecules of said materials which comprises incorporating cupric formate in cellulosic material, decomposing said cupric formate and effecting chemical combination between said cellulose molecules and a substantial portion of the copper thus incorporated in said materials by heating the cellulosic material containing said incorporated cupric formate to a temperature above about 100° C. but below temperatures that are capable of deleteriously affecting the cellulosic material.

2,749,257

PROCESS FOR THE FIXATION OF MECHANICALLY PRODUCED EFFECTS ON TEXTILE MATERIAL, AND MATERIAL

Emil Knup, Arlesheim, and Rudolf Aenishaenslin and Gustav Widmer, Basel, Switzerland, assignors to Ciba Limited, Basel, Switzerland, a Swiss firm

No Drawing. Application February 23, 1954, Serial No. 412,082
Claims priority, application Switzerland February 24, 1953
20 Claims. (Cl. 117—65)

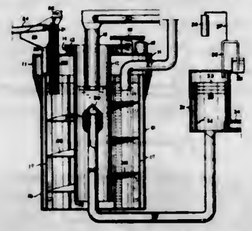
1. In the process for the wash-resisting fixation of effects on cellulose-containing textile material by subjecting the textile material impregnated with an aqueous solution of a hardenable urea-formaldehyde condensation product to a treatment in a mechanical finishing machine and thereafter heat hardening the condensation product, the improvement that the urea-formaldehyde condensation product is a water-soluble alkyl ether of such a urea-formaldehyde condensation product as contains, per mol urea, more than 2 mols formaldehyde essentially in the form of methylol groups.

2,749,258

SUGAR DIFFUSING APPARATUS

Joseph P. Ruth, Denver, Colo.

Application August 1, 1952, Serial No. 302,151
8 Claims. (Cl. 127—7)



1. Sugar diffusing apparatus comprising a tank adapted to contain liquid, an open-ended, tubular well rotatable about its vertically-disposed axis interiorly of said tank in a spacing of its lower end above the tank floor and an upward extension beyond the tank, means for rotating said well, means for the continuous infeed of sugar-bearing material through the upper end and to the interior of said well, a continuous spiral flight exteriorly about and rotatable with said well for the elevation of infed material from the foot of said well through the tank area exterior to the well, means for the continuous removal of elevated material from upper regions of the tank area exterior to said well, means for the continuous supply of water to upper regions of the tank area exterior to said well, an outflow line for continuously withdrawing solution from an upper zone of the well interior, and a trap in said line exteriorly of the tank and across the normal tank liquid level plane, whereby to determine the tank liquid level.

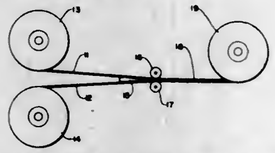
2,749,259
STABILIZED STARCH SLURRIES
James W. Evans and Glen E. Nelson, Highland, Ind., assignors to American Maize-Products Company, a corporation of Maine
No Drawing. Application October 4, 1952, Serial No. 313,195
3 Claims. (Cl. 127—32)

1. A starch slurry adapted to be shipped in tank cars, tank trucks and the like which contains about 42 to 45% total starch solids comprising a mixture of raw uncooked starch granules suspended in water containing a dispersion of cooked starch in the proportion of about 1% to 10% by weight of total starch solids, said slurry having a viscosity not over 17,560 centipoises at 82° F. so that it may be pumped at ordinary atmospheric temperatures and said slurry being characterized by the fact that it is substantially stable so that the raw starch granules remain in suspension over a prolonged period of time.

2,749,260
FABRICATION OF RHENIUM
Chester T. Sims, Worthington, Ohio, assignor, by mesne assignments, to The Battelle Development Corporation, Columbus, Ohio, a corporation of Delaware
No Drawing. Application April 28, 1954, Serial No. 426,291
10 Claims. (Cl. 148—11.5)

1. A method of fabricating rhenium metal comprising the steps of subjecting the rhenium to a series of cold-work reductions mild enough to effect refinement of only the surface grain structure and thereby provide a crack-resistant outer skin of refined metal, annealing the metal following each such cold-work reduction, and then subjecting the metal to more severe cold-work reductions with intermediate anneals until the desired fabrication is achieved.

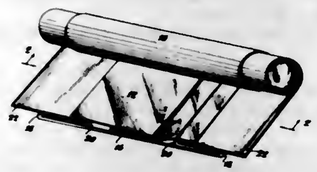
2,749,261
MULTICONDUCTOR CABLE
Wilbur T. Hardison, Riverside, Calif., assignor to Marian E. Bourns
Application March 30, 1953, Serial No. 345,467
1 Claim. (Cl. 154—2.24)



The method of making a multiconductor cable comprising the steps of starting with two separate wires having thermoplastic coverings provided thereon, said wires and coverings being of substantially circular cross section, bringing said wires together in side-by-side relationship, locally heating narrow strips along adjacent sides of said coverings to the fusion temperature of the thermoplastic insulation material, said strips being appreciably narrower in width than the diameter of said coverings, and pressing said wires together so as to fuse said coverings together along the area of said narrow strips, said fused area forming a line of reduced strength down the center of said joined wires, whereby said wires can subsequently be pulled apart without damaging said coverings.

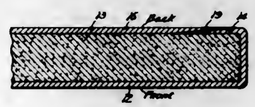
2,749,262
HEAT INSULATION BLANKETS
Henry J. Wiser, Toronto, Ontario, Canada, assignor to Jeremiah D. Giles, Litchfield, Conn.
Application April 6, 1954, Serial No. 421,278
4 Claims. (Cl. 154—45)

1. A thermal insulation material of extended length adapted to be shipped in rolled form from which an appropriate length of material may be cut as desired, comprising a base sheet having a pair of zigzag folds each of which is symmetrically arranged adjacent a side of the sheet with the paper in said zigzag folds being folded inwardly over against the body of the base sheet and then folded again outwardly over against the infolded portion with the top layer of paper being attached to the middle layer along a line spaced inwardly from the fold lines at either side of the zigzag fold to hold the connected portions of the top and middle layers in face to face relationship and thereby to form stiffened support members, said line of attachment being arranged to leave portions of paper in both the middle and top layers of the zigzag fold free and unattached from each other which unattached portions are free to separate and bend relative to the stiffened support members, said unattached portion of paper in the middle layer forming



a lever arm that connects the base of the stiffened support members with the body of the base sheet, said unattached portions of paper in the top layer forming panel sections adjacent the side edges of the top layer of paper in the zigzag fold for nailing the structure to the respective faces of adjacent studs in a building, a heat reflective sheet attached near its edges to the respective stiffened support members to form a substantially flat and flexible heat insulating structure with zigzag folds of paper symmetrically arranged therein so that the structure may be rolled up into a tight symmetrical roll for shipment and whereby when a length of the structure is cut from the roll and the unattached edges of the sheet are pulled apart the pull will cause the unattached portions of paper in the middle layers of the zigzag folds to act as lever arms to force the stiffened supports and heat reflective sheet to separate from the base sheet and be lifted up to form a dead air space in the structure.

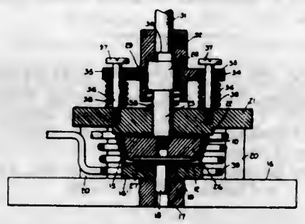
2,749,263
GYPSUM BOARDS HAVING CRACK RESISTANT EDGE PORTIONS
Oliver E. Gibson, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a corporation of Illinois
Application July 21, 1953, Serial No. 369,443
2 Claims. (Cl. 154—45.9)



1. A wallboard comprising a cementitious inflexible core of substantially uniform thickness and having a pair of planar substantially parallel opposite sides, said core being enclosed in fibrous cover sheets, the latter including a first sheet subtending one planar side and two opposite edges of said core, said first sheet having an edge portion thereof folded back into overlying relation with a marginal portion of the second planar side of the core, and a second sheet overlying said second planar side of the core

and the folded edge portion of said first sheet, the folded back edge portion of said first sheet and the overlying portion of said second sheet being congruently tapered and adheasively secured to each other; the thickness of said core adjacent the adhesively secured tapered sheet portions being substantially the same as the thickness of the remainder of said core.

2,749,264
METHOD OF BONDING FRICTION FACINGS TO CONICAL CUPS
Melvin H. Emrick, Manhasset, N. Y.
Application November 9, 1953, Serial No. 391,052
2 Claims. (Cl. 154—81)



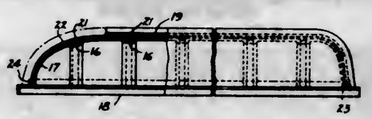
1. The method of producing friction facings on conical cups of the character defined, which comprises applying an adhesive to the inner surface of the cup, applying an adhesive to one surface of a ring of friction material, then arranging said ring with its adhesive surface engaging the adhesive surface of the cup to form a ring on the inner surface of said cup, then subjecting the ring and cup to induction heat and pressure for a predetermined period of time to secure the ring to the cup, then removing the heat, while continuing to hold the ring and cup under pressure for a predetermined cooling period, and then shaping the ring secured to the cup to predetermined contour.

2,749,265
METHOD OF MAKING PLEATED PAPER FILTER ELEMENTS
Guy C. Fricke and Charles P. Hansen, Detroit, Mich., assignors to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application November 5, 1953, Serial No. 390,350
4 Claims. (Cl. 154—83)



1. A method of making pleated paper filter elements having endcaps, a cylindrical core, and a perforated paper outer wrapper, comprising forming a flat sheet of resinous impregnated filter material into uniform pleats, bonding said pleated material to a flat rectangular perforated piece of core material, the pleats being thus secured in a uniform spacing relationship, forming a cylindrical core by bending the ends of said core material together and securing said ends with a lap strip thus causing said pleated material to assume a cylindrical shape, bonding the end folds of said pleated material together, bonding endcaps to each end of said pleated material, and securing said perforated outer wrapper to the outside pleats of said pleated member.

2,749,266
METHOD OF MAKING REINFORCED GLASS FIBER ARTICLES
Dewitt Eldred, Peru, Ind., assignor to The General Tire and Rubber Company, Akron, Ohio, a corporation of Ohio
Application May 21, 1953, Serial No. 356,459
4 Claims. (Cl. 154—90)



1. A process of molding articles provided with ribs integral with the surface thereof to provide reinforcement therefor comprising the steps of impregnating a fiber material in a resin, wrapping a plurality of turns of said resin dipped, fiber material while in substantial tension about a form to build up a band element, cutting said band element into reinforcing ribs, placing the ribs while in an uncured state in rib-receiving grooves in a mold, and curing resin-impregnated fiber material in contact with said built-up rib to form an integral, reinforced article.

2,749,267
METHOD OF COVERING THE JOINT BETWEEN WALLBOARD AND THE RESULTANT PRODUCT
Joseph W. Gill, Elmhurst, and Charles Russel Southwick, Chicago, Ill., assignors to United States Gypsum Company, Chicago, Ill., a corporation of Illinois
Continuation of application Serial No. 152,792, March 28, 1950. This application April 7, 1953, Serial No. 347,204
5 Claims. (Cl. 154—116)



2. The method of covering the joint between adjacent wallboards which comprises adhesively securing over said joint a strong thin cellulosic strip provided with substantially uniformly arranged perforations having clean, smooth edges and diameters from about 0.02 inch to 0.002 inch to permit the escape of air entrapped beneath said strip during its application to said joint while substantially preventing the escape therethrough of adhesive employed to secure the strip in place.

2,749,268
FUNGICIDAL COMPOSITIONS AND THEIR USE
Jack S. Newcomer, Grand Island, N. Y., assignor, by mesne assignments, to The Pennsylvania Salt Manufacturing Company, Philadelphia, Pa., a corporation of Pennsylvania
No Drawing. Application May 21, 1951, Serial No. 227,521
12 Claims. (Cl. 167—30)

1. A composition prepared for use in combating fungi comprising a surface active agent, and a compound having the formula

$$Ar_1-\overset{O}{\overset{\|}{C}}-\overset{OR}{\overset{|}{C}}=CH-\overset{O}{\overset{\|}{C}}-Ar_2$$

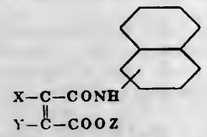
wherein each of Ar_1 and Ar_2 represent an aryl radical selected from the group consisting of phenyl, biphenylyl, terphenylyl and naphthyl radicals, said aryl radicals having from 0 to 3 substituents selected from the group consisting of halogen and alkyl radicals having from 1 to 5 carbon atoms; and wherein R represents an alkyl radical selected from the group consisting of primary and secondary alkyl radicals, having from 1 to 5 carbon atoms, said composition forming an emulsion with water upon agitation therewith.

2,749,269
FUNGICIDAL COMPOSITIONS COMPRISING ESTERS OF N-NAPHTHYL HALO-MALEAMIC ACIDS AND METHODS OF APPLYING

Waldo B. Ligett, Pontiac, Mich., Calvin N. Wolf, New York, N. Y., and Rex D. Closson, Detroit, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware

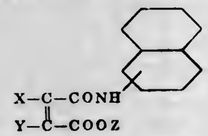
No Drawing. Application December 17, 1953, Serial No. 398,879
5 Claims. (Cl. 167—30)

1. Fungicidal compositions comprising a relatively inert fungicidal adjuvant as a carrier and as a principal active ingredient a halogenated compound of the formula



wherein X and Y are selected from the group consisting of hydrogen and halogen and at least one of X and Y is halogen, and wherein Z is selected from the class consisting of hydrogen and lower alkyl radicals.

4. A method of combating fungi which comprises treating materials susceptible to attack by fungus organisms with a halogenated compound of the formula



wherein X and Y are selected from the group consisting of hydrogen and halogen and at least one of X and Y is halogen, and wherein Z is selected from the class consisting of hydrogen and lower alkyl radicals.

2,749,270
ALKYLATED VANILLIN SEMICARBAZONES AND PROCESSES FOR PREPARING AND USING THE SAME

John D. Garber, Cranford, N. J., assignor to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey

No Drawing. Application March 15, 1954, Serial No. 416,429
5 Claims. (Cl. 167—30)

1. A compound from the group consisting of the semicarbazone of 5-n-propyl-vanillin allyl ether and the semicarbazone of 5-allyl vanillin allyl ether.

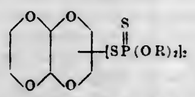
4. A fungicidal composition containing as an active ingredient a semicarbazone from the group consisting of the semicarbazone of 5-n-propyl vanillin allyl ether and the semicarbazone of 5-allyl vanillin allyl ether, and a carrier therefor.

2,749,271
1,4,5,8 - TETRAOXAOCTAHYDRONAPHTHALENE-DITHIOL S,S-BIS(O,O-DIALKYL PHOSPHORODITHIOATES) AND INSECTICIDAL COMPOSITIONS CONTAINING THE SAME

George Allen Buntin, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 30, 1954, Serial No. 478,892
10 Claims. (Cl. 167—33)

1. As a new composition of matter a compound of the formula



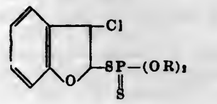
in which each R represents a radical selected from the group consisting of lower alkyl and chloro lower alkyl.

2,749,272
3-CHLORO-2,3-DIHYDROBENZOFURAN-2-THIOL-S-(O,O-DIALKYL PHOSPHORODITHIOATE)

George Allen Buntin, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 30, 1954, Serial No. 478,891
11 Claims. (Cl. 167—33)

1. As a new composition of matter a compound of the formula

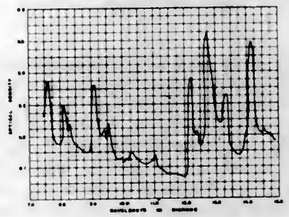


in which each R represents an alkyl radical having 1–4 carbon atoms.

2,749,273
THIOAURIN, ITS PRODUCTION AND RECOVERY

William Eisenman, New York, and Pasquale Paul Minieri, Brooklyn, N. Y., assignors, by mesne assignments, to American Cyanamid Company, New York, N. Y., a corporation of Maine

Application September 17, 1952, Serial No. 310,018
4 Claims. (Cl. 167—65)



1. An antibacterial and antifungal substance effective in inhibiting the growth of Gram positive and Gram negative bacteria and fungi, the substance containing the elements carbon, hydrogen, nitrogen, oxygen, and sulfur, the substance having the calculated empirical formula of $C_7H_6N_2O_2S_2$ the crystals of the substance having refractive indices of

Alpha=1.595±0.005
Beta=1.725±0.005
Gamma=71.80

a suspension of the crystals of the substance in neutral mineral oil exhibiting characteristic absorption bands in the infrared region of the spectrum, the peaks of the absorption bands being as follows expressed in microns: 7.62, 8.10, 8.30, 9.08, 9.40, 9.52, 10.00, 10.10, 10.26, 11.02, 12.18, 12.36, 12.78, 13.24, 14.10, 14.54, crystals of the substance in methanol exhibiting ultra violet absorption bands at 368 millimicrons and 232 millimicrons with extinction coefficients of 52.0 and 19.9 respectively, the substance being relatively insoluble in water with only about 0.25 mol. being dissolved per milliliter at 28° C., fairly soluble in methanol, only slightly soluble in ethyl acetate and having a solubility in chloroform of less than 1 mol./ml.

2,749,274
STABLE AQUEOUS PROCAINE PENICILLIN SUSPENSION

Frank H. Buckwalter, Dewitt, N. Y., assignor to Bristol Laboratories Inc., Syracuse, N. Y., a corporation of New York

No Drawing. Application May 6, 1952, Serial No. 286,445
7 Claims. (Cl. 167—65)

1. A sterile, aqueous suspension of procaine penicillin which is stable over long periods of time at room temperature and which is productive of highly effective blood levels upon administration, including procaine penicillin, a suspending agent, and a member selected from the group consisting of procaine base and water-soluble, ionized, injectable salts of procaine other than procaine penicillin.

2,749,275
THERAPEUTIC COMPOSITION OF 3,4 DIHYDROXY PHENYL ETHYLAMINE AND METHYLATING AGENT AND METHOD OF APPLYING

Mannie E. Borsook, Pasadena, Calif., assignor to Clinical Research Foundation, Los Angeles, Calif., a corporation of California

No Drawing. Application January 26, 1952, Serial No. 268,465
8 Claims. (Cl. 167—65)

1. A therapeutic composition comprising a salt of beta 3,4-dihydroxy phenyl ethyl amine and at least an equal molar quantity, per mole of said salt, of a methylating agent selected from the group consisting of betaine, betaine hydrate, betaine hydrochloride, glycine, choline, methionine, serine, and dimethylthetin.

2,749,276
DEXTRAN COMPOUND FATTY ACID ESTER LIPSTICK

Leo J. Novak and Joseph T. Tyree, Dayton, Ohio, assignors to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio

No Drawing. Application August 12, 1953, Serial No. 373,924
7 Claims. (Cl. 167—85)

4. A lipstick comprising coloring matter and a base comprising an ester of a dextran with a saturated fatty acid of from 8 to 18 carbon atoms, said ester containing an average of less than 1.0 up to 3.0 of the fatty acid radicals per anhydroglucopyranosidic unit.

2,749,277
DEXTRAN COMPOUND COATED BODY POWDER

Harry A. Toulmin, Jr., Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio

No Drawing. Application May 29, 1953, Serial No. 358,552
6 Claims. (Cl. 167—92)

1. A cosmetic preparation comprising finely divided discrete particles of body powder having a surface film of a water-soluble substance selected from the group consisting of dextran, methyl dextran, ethyl dextran, carboxymethyl dextran and hydroxyethyl dextran.

2,749,278
FLUORINATED DIALKALI-ALKALINE EARTH PYROPHOSPHATES AND METHOD OF PRODUCING SAME

Henry V. Moss, Anniston, Ala., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application October 23, 1952, Serial No. 316,550
21 Claims. (Cl. 167—93)

20. A dentifrice containing about 40% to about 60% by weight of a fluorinated dialkali-alkaline earth metal pyrophosphate containing about 1% to about 5% by weight of chemically combined fluorine.

2,749,279
ENZYMATIC PRODUCTION OF L-GLUTAMIC ACID

Carl V. Smythe, Moorestown, N. J., and Hsing T. Huang, Elkins Park, Pa., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

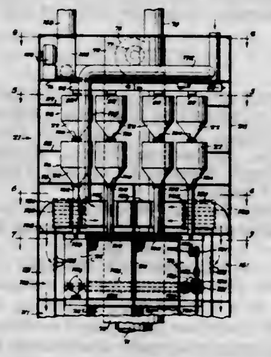
No Drawing. Application May 27, 1954, Serial No. 432,906
7 Claims. (Cl. 195—30)

1. A process for preparing L-glutamic acid which comprises treating between 20° and 45° C. an aqueous solution having a pH of 6.0 to 8.5, containing alpha-ketoglutarate ions and ammonium ions with a biological catalytic system selected from at least one member of the group consisting of extracts from heart, liver, and kidney, bacteria of the genus Xanthomonas, bacteria of the genus Pseudomonas, lysed fungi of *Aspergillus niger*, *Aspergillus aureus* and *Aspergillus wentii*, of *Neurospora crassa*, and of *Botrytis cinerea*, of *Penicillium glaucum*, lysed yeasts of *Torula cremoris*, of *Torulopsis utilis*, of *Saccharomyces fragilis* and *Saccharomyces cerevisiae* and with a water-soluble hydrogen-donating reactant selected from at least one member of the group consisting of citric acid, malic acid, and glucose-6-phosphate and a dehydrogenase system specific for said reactant, said biological catalytic system containing a reversibly oxidizable and reducible nicotinic acid-containing coenzyme, and said biological catalytic system being identified by its capacity to oxidize L-glutamic acid to alphaiminoglutaric acid in the presence of the oxidized coenzyme and by its capacity to reduce methylene blue using glutamic acid as substrate, and the specific dehydrogenase system being defined by its ability to oxidize its reactant using the coenzyme as hydrogen acceptor and by its capacity to reduce methylene blue using the specific hydrogen-donating reactant as substrate, whereby L-glutamate ions are formed in the solution.

2,749,280
MALTING APPARATUS

Edward E. Frauenheim, Jr., Eggertsville, N. Y., assignor to George J. Meyer Malt & Grain Corporation, Buffalo, N. Y., a corporation of New York

Application March 2, 1955, Serial No. 491,746
18 Claims. (Cl. 195—128)

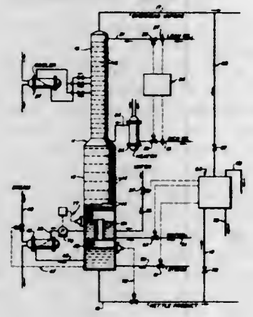


1. Apparatus for malting grain comprising a germinating chamber in which grain is germinated, a drying bin in which grain is dried after germination, said germinating chamber being arranged vertically above said drying bin, and means for connecting said germinating chamber with said drying bin whereby grain may be discharged by gravity from said germinating chamber into said drying bin.

2,749,281
CONTROLLING RICH OIL WITH CONSTANT KETTLE TEMPERATURE BY VARYING THE WATER CONTENT OF THE KETTLE SECTION

Bernardo J. Ferro, Jr., Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application August 25, 1952, Serial No. 306,240
13 Claims. (Cl. 196—8)



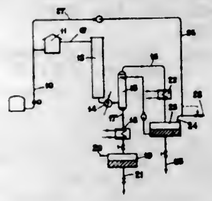
1. A method for fractionating a rich hydrocarbon absorption oil containing a plurality of constituents of unlike volatilities comprising introducing said rich absorption oil into a fractionating zone provided with vapor-liquid contacting elements, removing vaporous overhead and liquid kettle products therefrom as products of the process, introducing lean absorption oil into said zone at a level near the vaporous overhead product outlet and above the level of introduction of said rich absorption oil, introducing water into said zone, maintaining the contents of the kettle section of said zone at a predetermined constant distillation temperature, separating liquid from the lowest vapor-liquid contacting element of said zone into an oil phase and a water phase, heating the oil phase and at least a portion of the water phase to such a temperature as to maintain said constant distillation temperature in the kettle section and to dissolve said portion of the water phase in the oil phase thereby producing a single liquid phase, introducing this heated single liquid phase into the kettle section of said zone, controlling the fractionation operation by increasing and decreasing the concentration of the dissolved water in said single liquid phase at said constant temperature and removing at least one constituent of low volatility as overhead product and absorption oil lean in said one constituent as kettle product.

2,749,282
CATALYTIC DESULPHURISATION OF PETROLEUM HYDROCARBONS

Frederick William Bertram Porter and Alexander Hodge Richardson, Sunbury-on-Thames, England, assignors to The British Petroleum Company Limited, a British joint-stock corporation

Application January 16, 1952, Serial No. 266,616
Claims priority, application Great Britain January 24, 1951
5 Claims. (Cl. 196—28)

1. A vapor phase process for the hydrocatalytic desulphurisation of a cracked naphtha boiling in the gasoline range, which comprises passing said naphtha to a reaction zone in admixture solely with a petroleum fraction which contains naphthenic constituents capable of providing hydrogen by dehydrogenation and which has a boiling range sufficiently above the cracked naphtha such that the naphtha may be removed by distillation from the treated mixture in the vapor phase, said petroleum fraction selected from the group consisting of kerosene and heavy naphtha having a boiling point above 200° C., wherein the mixture is contacted with hydrogen derived solely from the mixture and with a sulphur-resistant dehydrogenation-hydrogenation catalyst at a temperature of about 750°–800° F. and at a pressure of 50–200 p. s. i. ga., said temperature and pressure correlated with one another, such that an amount of hydrogen is obtained by dehydrogenation of said naphthenic constituents not substantially in excess of that required to convert organically-combined sulphur contained in the cracked naphtha and in the petroleum fraction in admixture therewith into hydrogen sulphide and to maintain the necessary partial



pressure of hydrogen in the reaction zone without the need of hydrogen from an extraneous source, removing the naphtha from the treated mixture by distillation and recovering the petroleum fraction, reduced as to sulphur and naphthene content as a product, separating a hydrogen-rich gas mixture and hydrogen sulphide from the treated naphtha, recycling said hydrogen-rich gas mixture to the reaction zone to constitute the whole of the hydrogen supplied to said zone, and recovering a cracked naphtha of reduced sulphur content from the product of said separating operation.

2,749,283
HYDRO-DESULPHURISATION OF CRACKED PETROLEUM NAPHTHA AND STRAIGHT RUN NAPHTHA

Frederick William Bertram Porter, Sunbury-on-Thames, England, assignor to The British Petroleum Company Limited, a British joint-stock corporation

No Drawing. Application November 21, 1952, Serial No. 321,950
Claims priority, application Great Britain December 7, 1951
3 Claims. (Cl. 196—28)

1. A process for the hydrocatalytic desulphurization of cracked naphthas having a final boiling point of up to 200° C. ASTM which comprises mixing a cracked naphtha high in naphthene content and boiling in the gasoline boiling range with a determined proportion of straight-run naphtha of substantially the same boiling range; passing the mixture at a space velocity of 0.5 to 3.0 v./v./hr. of liquid feedstock to a reaction zone and contacting the mixture therein with a sulphur-resistant dehydrogenation-hydrogenation catalyst at a temperature within the range 750–830° F., and at a superatmospheric pressure not exceeding 150 p. s. i. g. a., said temperature and pressure being correlated to produce an amount of hydrogen by dehydrogenation of naphthenes contained in the mixture not substantially in excess of that required to convert organically combined sulphur contained in the mixture into hydrogen sulphide and to maintain a circulation of hydrogen sufficient to keep the mixture in the vapor phase without the need for hydrogen from an extraneous source, and said straight-run naphtha being present in said mixture in an amount to satisfy the naphthene requirements for the production of said amount of hydrogen under said controlled conditions of temperature and pressure; separating a hydrogen-rich gas from the treated mixture; recycling said hydrogen-rich gas to said reaction zone; and, recovering a treated mixture of reduced sulphur content as the desired product.

2,749,284
TREATMENT OF SULPHUR-CONTAINING MINERAL OILS WITH KEROSENE PEROXIDES

Dennis Alexander John Noble, Sunbury-on-Thames, England, assignor to The British Petroleum Company Limited, a British joint-stock corporation

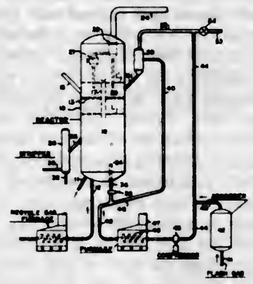
No Drawing. Application November 14, 1951, Serial No. 256,390
Claims priority, application Great Britain November 15, 1950
6 Claims. (Cl. 196—29)

1. A process for treating a mineral oil fraction containing sulphur compounds, said fraction selected from the group consisting of a kerosene cut and a gas oil cut, which comprises reacting said fraction with an organic peroxide-containing product at a temperature within the range of about 50° to 180° C. whereby oxidation products of the sulphur compounds are formed, said peroxide-containing product obtained by the partial aerial oxidation of a substantially sulphur-free and aromatic-free, paraffinic kerosene fraction of petroleum at a temperature of about 100° to 150° C. and for a period of time sufficient to produce a total peroxide content of about 5 to 15% by weight, thereafter removing the oxidation products from the products so obtained.

2,749,285
FLUID HYDROFORMING PROCESS

Robert J. Fritz, Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application January 2, 1953, Serial No. 329,179
3 Claims. (Cl. 196—50)

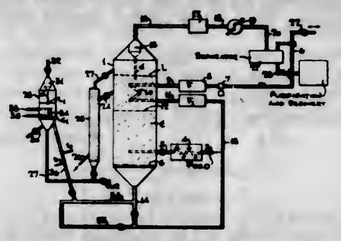


1. The process for reforming hydrocarbons boiling within the motor fuel range in contact with finely divided reforming catalyst particles which comprises passing vaporous hydrocarbon feed and hydrogen-rich diluent gas through two dense, fluidized, liquid-simulating beds of finely divided reforming catalyst particles in series maintained at a pressure of from about 50 to 750 lbs. per sq. inch, the first bed having an average temperature of 850 to 900° F. and the second bed having an average temperature of about 900 to 950° F., continuously discharging a stream of catalyst from the second bed into the first bed, continuously withdrawnig a stream of catalyst particles from said first bed, mixing the withdrawn reactor catalyst particles with a non-oxidizing heat exchange gas at a temperature of about 1200° F. in sufficient amount to raise the temperature of the catalyst at least 25° F. higher than the average catalyst temperature in said second bed, separating the heated catalyst particles from the heat exchange gas, recycling the hot catalyst particles to the said second bed of the series, recompressing the heat exchange gas sufficiently for recycling through the catalyst heating system, reheating the recompressed heat exchange gas and recycling the reheated heat exchange gas through the catalyst heating system.

2,749,286
INVERSE GRADIENT FLUID HYDROFORMING REACTOR

Charles E. Hemminger, Westfield, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application August 10, 1951, Serial No. 241,237
13 Claims. (Cl. 196—50)



2. The method of increasing the aromaticity of naphtha containing alkyl cyclopentanes which comprises providing a fluidized bed of powdered hydroforming catalyst, feeding a preheated oil containing naphthenes to said fluidized bed of catalyst, feeding a heated hydrogen-containing gas to an upper portion of said fluidized bed in heat exchange relationship with said bed to impart heat to said upper portion of said bed, withdrawing the hydrogen-containing gas, reheating the hydrogen-containing gas, feeding the reheated hydrogen-containing gas to a lower portion of said bed in direct contact therewith, maintaining the said upper portion of the said bed at a higher temperature than the said lower portion thereof and restricting back-mixing of the said upper portion of said bed with the lower portion thereof by baffle means disposed at an intermediate point in said bed permitting the said preheated oil, the said hydrogen gas and the catalyst to remain in contact with each other for a sufficient period of time to effect the desired conversion and recovering from the said fluidized bed of catalyst, a hydroformed product.

7. In the catalytic hydroforming of naphthas containing cyclo-hexanes and alkyl cyclo-pentanes wherein the naphthas in vapor form are contacted with a fluidized bed of hydroforming catalyst in the hydroforming zone under hydroforming conditions of temperature and pressure, the improvement which comprises supplying at least a portion of the heat necessary to support the reaction by first passing in heat exchange relationship with an upper portion of said bed of catalyst, a preheated hydrogen-containing gas in an amount of from about 1500–3000 cubic feet per each barrel of oil fed to the reaction zone, withdrawing the hydrogen-containing gas from the upper portion of said fluidized bed, reheating it and feeding it into contact with a lower portion of a fluidized bed of catalyst, the upper portion of the bed being heated to a higher temperature than the lower portion of said bed and restricting back-mixing of the upper portion of the fluidized bed of catalyst with the lower portion thereof by disposing at an intermediate point of said bed, flow restricting means, permitting the reactants to remain in contact with the fluidized bed of catalyst for a sufficient period of time to effect the desired conversion and recovering from the said fluidized bed of catalyst, a hydroformed product.

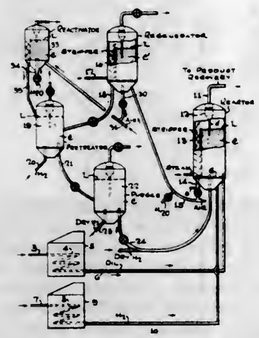
2,749,287
REACTIVATION OF HYDROFORMING CATALYSTS USING DRY AIR

Isidor Kirshenbaum, Union, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application October 3, 1952, Serial No. 313,017
7 Claims. (Cl. 196—50)

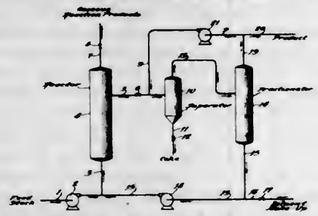
1. In the method of upgrading naphthas in the matter of octane rating, comprising subjecting the naphtha to the

influence of a group VI metal oxide catalyst in a reaction zone at elevated temperatures and pressures for a sufficient period of time to effect the desired conversion in an operation in which operation carbonaceous deposits are formed on the catalyst, and which catalyst is withdrawn from the reaction zone and subjected to regeneration by treatment with an oxygen-containing gas to remove the said carbonaceous deposits, the improvement which comprises restoring the activity of the catalyst when its ac-



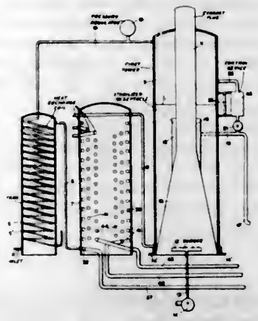
tivity is not resterable by conventional oxidative regeneration by first treating the catalyst substantially free of carbonaceous deposits with an oxygen-containing gas also containing water, thereafter treating the substantially coke free catalyst with a dry oxygen-containing gas, thereafter treating the catalyst with a hydrogen-containing gas to effect a partial reduction of said catalyst, purging the catalyst with a gas to free it from water and thereafter returning the reactivated catalyst to the reaction zone.

2,749,288
METHOD OF PROCESSING HYDROCARBONS WITH A MOLTEN MEDIUM
Charles H. Watkins, Western Springs, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware
Application July 24, 1952, Serial No. 300,611
5 Claims. (Cl. 196—52)



5. In the process of cracking a high boiling hydrocarbon to a lower boiling hydrocarbon by contacting said high boiling hydrocarbon with a molten salt catalyst at a temperature of from about 500° F. to about 1500° F. and a pressure of from atmospheric to about 2000 p. s. i., the improvement which comprises introducing into the reaction zone with said high boiling hydrocarbon a sufficient amount of a condensed ring aromatic compound to dissolve asphaltic material formed by the cracking, passing the combined stream of reaction products and said aromatic compound from the reaction zone to a separating zone, introducing a naphtha stream into the latter zone and commingling it with said combined stream and effecting the precipitation of solid carbonaceous material, discharging the resulting precipitated solid carbonaceous material from the lower portion of said separating zone, passing a liquid stream from the upper portion of said separating zone, fractionally distilling a product-containing fraction from said liquid stream, passing at least a portion of said product-containing fraction into said separating zone while passing another portion thereof to storage, separating the condensed ring aromatic compound from said liquid stream and recycling the same to said reaction zone.

2,749,289
APPARATUS FOR TREATING PETROLEUM
Kearney F. Mitchell, Jennings, La.
Application June 5, 1953, Serial No. 359,820
1 Claim. (Cl. 196—106)

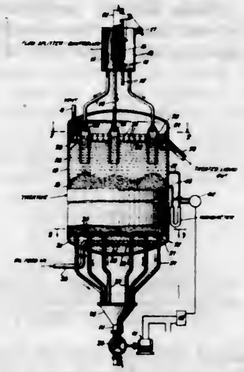


Apparatus for treating petroleum consisting of a series of distillation towers, a stack attached to the bottom of each of said towers and extending up through the center thereof, a burner in the bottom of each stack, a tank, a heat exchanger coil in said tank, a pipe for delivering oil into the bottom of said tank around said coil, a pipe connecting the top of the first tower with the top of said coil, a second tank, several heat exchanger coils in said second tank, a pipe connecting the top of the first tank to the bottom of said second tank in which oil rises around said heat exchanger coils, a pipe connecting the top of said second tank with the bottom of the first tower, a stabilizer receptacle around an intermediate portion of each of said stacks, chambers positioned in succession between said distillation towers, a heat exchanger coil in each of said chambers, pipes in succession connecting the stabilizer receptacles with the bottoms of said chambers, pipes in succession connecting the tops of said distillation towers with the tops of the coils in said chambers, pipes in succession connecting the bottoms of said coils individually with the bottoms of the several coils in the second tank, and means for maintaining the level of oil in said towers.

2,749,290
METHOD AND APPARATUS FOR CONTINUOUS PERCOLATION OF LIQUID HYDROCARBONS
Joe E. Penick, Woodbury, and Ernest A. Bodkin, Pitman, N. J., assignors to Socony Mobil Oil Company, Inc., a corporation of New York
Application July 17, 1951, Serial No. 237,268
22 Claims. (Cl. 196—147)

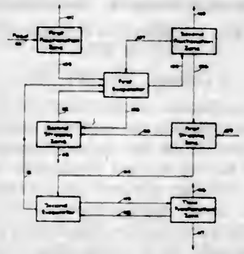
1. A method for countercurrently contacting a liquid hydrocarbon feed which remains in the liquid phase during the contacting with a downwardly moving column of adsorbent which comprises, maintaining a column of adsorbent of palpable particle form along an intermediate portion of a confined, elongated contacting zone, maintaining a body of liquid hydrocarbon feed in a lower portion of said treating zone immediately below said column of adsorbent and in liquid flow communication with the bottom of said column, substantially excluding the particles of adsorbent from said body of liquid, maintaining a body of contacted liquid in an upper portion of said treating zone immediately above and open to the surface of said column, withdrawing used adsorbent from the

lower section of said column while maintaining said body of feed liquid free of said particles, replenishing said column at its upper end with feed adsorbent while substantially excluding the feed adsorbent from at least the upper portion of said body of contacted liquid hydrocar-



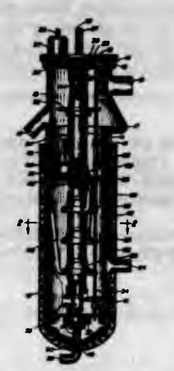
bon, introducing liquid hydrocarbon feed into the body of feed liquid so as to force the liquid to flow upwardly into and through said column of adsorbent, and withdrawing contacted liquid from the upper portion of said body of contacted liquid hydrocarbon.

2,749,291
PURIFICATION OF HYDROGEN PEROXIDE
Gino J. Pierotti, El Cerrito, William R. Keeler and Roy J. Evans, Berkeley, and Robert E. Vincent, Atherton, Calif., assignors to Shell Development Company, New York, N. Y., a corporation of Delaware
Application January 29, 1954, Serial No. 407,086
17 Claims. (Cl. 202—39)



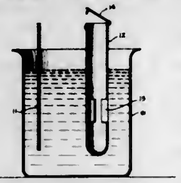
1. A process for purifying aqueous hydrogen peroxide solution containing lower aliphatic alcohol, lower aliphatic carbonyl compound corresponding to the alcohol, and organic impurities comprising other oxygenated organic compounds than the alcohol and carbonyl compound and including organic peroxidic materials of divergent volatilities and stabilities, comprising fractionally distilling said solution in a first fractionation zone to yield as overhead product an aqueous mixture of lower aliphatic alcohol and corresponding carbonyl compound and as bottoms product an aqueous solution of hydrogen peroxide comprising residual organics, in a separate evaporation zone partially evaporating said bottoms product to yield a vaporous mixture comprising hydrogen peroxide, water, and relatively volatile organics and a liquid residue comprising water, hydrogen peroxide, and residual organics, in a second fractionating zone rectifying said vaporous mixture to yield aqueous overhead fraction comprising relatively volatile organics and as liquid bottoms fraction an aqueous hydrogen peroxide solution comprising residual relatively volatile organics, in a first stripping zone conveying said liquid bottoms fraction countercurrently to a stream of steam introduced thereinto so as to volatilize organic impurities without substantial volatilization of hydrogen peroxide, introducing the vaporous effluent from said first stripping zone into a second stripping zone and therein passing it countercurrently to liquid residue conveyed from the said evaporation zone to said second stripping zone to yield as overhead product a mixture of water, hydrogen peroxide and volatile organics and as liquid bottoms an aqueous solution of less volatile organics, introducing the overhead fraction from said second stripping zone into said evaporation zone, and withdrawing purified aqueous hydrogen peroxide solution as bottoms product of said first stripping zone.

2,749,292
VACUUM DISTILLATION APPARATUS
Edmond S. Perry and Dean S. Cox, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application August 6, 1952, Serial No. 302,874
3 Claims. (Cl. 202—205)



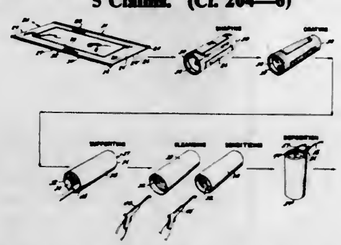
1. High vacuum fractional distillation apparatus comprising in combination a stationary substantially vertical vaporizing member of generally tubular cross-section, a stationary generally tubular condensing member disposed within said vaporizing member in generally concentric relation therewith, said condensing member extending throughout a major portion of the length of said vaporizing member, said vaporizing member and said condensing member defining therebetween a confined generally unobstructed channel for the passage of vapors, means for evacuating said confined channel between said members, means for heating said vaporizing surface, means for cooling said condensing surface, a plurality of annular collecting troughs encircling said condensing member at spaced apart positions along said condensing member, each said trough being arranged for collecting a condensate fraction from a localized zone of said condensing surface immediately above said trough and extending to the next higher collecting trough, means on said condensing member arranged for channeling condensate from each said zone on said condensing member into the collecting trough at the lower end of the zone, tube means communicating with each said trough and arranged to convey condensate from each said trough to said vaporizing surface, each of said tube means extending from a trough upwardly to a height substantially above the next higher collecting trough, and means for rotating said collecting troughs and tube means to centrifugally discharge condensate from said troughs through said tube means onto said vaporizing surface at a zone on said vaporizing surface substantially higher than the zone on said condensing surface from which the condensate was collected.

2,749,293
ELECTROLYTIC HYDROGENATION PROCESS
Hugo B. Wahlin, Madison, Wis., assignor to Wisconsin Alumni Research Foundation, Madison, Wis., a corporation of Wisconsin
Application November 26, 1952, Serial No. 322,639
8 Claims. (Cl. 204—73)



1. A method of electrolytically hydrogenating a hydrogenatable organic material which comprises reacting the material with cathodically-evolved hydrogen within a chamber in an electrolytic cell, said chamber being maintained as the cathode in said cell and the electrolyte being maintained in said cell exteriorly of the chamber, said hydrogen being thereby evolved at the outer surface of said chamber, said chamber being composed of a metal selected from the group consisting of palladium, iron and aluminum, said selected metal being capable of diffusing the evolved hydrogen to the inner surface of said chamber.

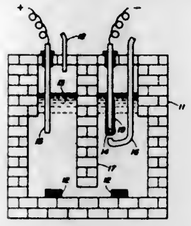
2,749,294
METHOD OF MAKING MOLDS FOR THERMOPLASTICS
Thomas W. Winstead, Baltimore, Md., assignor to Hedwin Corporation, Baltimore, Md., a corporation of Maryland
Application February 19, 1952, Serial No. 272,469
5 Claims. (Cl. 204—6)



1. In the art of molding sheet-like thermoplastic replicas of relief surfaces of flat flexible elements, the method of making molds which includes providing a flat flexible design original having predetermined relief characteristics, forming said design original to a continuous woven tubular web with said relief characteristics inside the tube, cementing the tube externally to a surrounding support, cleansing the interior of the tube, treating the inner surface of the tube to render it electrically conductive, immersing the tube in an electrolytic bath with the inside of the tube exposed to the electrolyte, electrodepositing on all said inner surface a continuous intimate coating of hard metal, dissolving the cement, separating the tube from said support, and vapor blasting the external surface of the tube entirely to remove the continuous woven web having the relief characteristics to expose the electro-deposit.

2,749,295
ELECTROLYTIC PRODUCTION OF TITANIUM
Kjell A. Svanstrom, Metuchen, and William R. Opie, Fords, N. J., assignors to National Lead Company, New York, N. Y., a corporation of New Jersey
Application October 18, 1951, Serial No. 251,901
4 Claims. (Cl. 204—64)

1. The method for producing titanium metal by electrolysis of titanium tetrachloride in an electrolytic cell having a cathode, an insoluble anode and a fused bath consisting essentially of salt selected from the group consisting ol alkali metal halides, alkaline earth metal halides and mixtures thereof, comprising the steps of: introducing titanium tetrachloride into said cell below the surface of said electrolyte in juxtaposition to said cathode to contact the surfaces thereof; simultaneously, with the introduction of said titanium tetrachloride, passing electric current between said anode and said cathode at a



rate synchronized with the titanium tetrachloride addition so that the amount of current is at all times sufficient to reduce the titanium tetrachloride being added to metal; depositing the titanium values of the titanium tetrachloride as a tenaciously adhering coarse crystalline deposit of titanium metal on the cathodic surface; and maintaining the electrolyte in a condition substantially free from dissolved titanium values except in the immediate vicinity of the cathode.

2,749,296
PROCESS FOR THE RECOVERY OF BERYLLIUM OXIDE
Tarapada Banerjee and Phani Bhusan Chakravarty, Jamshedpur, India, assignors to The Council of Scientific and Industrial Research, New Delhi, India
No Drawing. Application February 19, 1952, Serial No. 272,514
6 Claims. (Cl. 204—96)

1. In the manufacture of beryllium oxide, the process which comprises placing an aqueous solution of beryllium-sodium fluoride in the cathode compartment of a diaphragm cell having an inert diaphragm, an inert anode and an inert cathode, placing an aqueous electrolytic solution in the anode compartment, passing an electric current from the anode to the cathode at a current density of from about 0.94 to 6.3 amp./dcm.^{2} and recovering beryllium oxide from the slurry thereby formed in the cathode compartment.

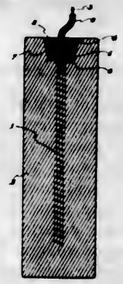
2,749,297
PREPARATION OF AROMATIC AMINES
Charles L. Thomas, Swarthmore, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
No Drawing. Original application November 5, 1953, Serial No. 390,409. Divided and this application January 13, 1955, Serial No. 481,707
5 Claims. (Cl. 204—162)

1. Process for the preparation of aromatic amino hydrocarbons which comprises forming a vapor phase mixture of an aromatic hydrocarbon having a replaceable hydrogen atom attached to the aromatic nucleus with ammonia, the mole ratio of said aromatic hydrocarbon to ammonia being from 0.1:1 to 20:1, passing the mixture through ultraviolet irradiation, and recovering an aromatic amino hydrocarbon from the reaction mixture.

2,749,298
PREPARATION OF AROMATIC AMINES
Charles L. Thomas, Swarthmore, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
No Drawing. Application November 5, 1953, Serial No. 390,409
3 Claims. (Cl. 204—168)

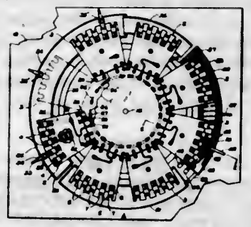
1. A process for the preparation of aromatic amino hydrocarbons which comprises forming a liquid phase mixture of an aromatic hydrocarbon having a replaceable hydrogen atom attached to the aromatic nucleus with ammonia, the mole ratio of said aromatic hydrocarbon to ammonia being from 0.1:1 to 20:1, passing the mixture through a non-disruptive electric glow discharge, and recovering an aromatic amino hydrocarbon from the reaction mixture.

2,749,299
ANODE CORE
Roger M. Wheeler, Tulsa, Okla.
Application October 23, 1952, Serial No. 316,443
2 Claims. (Cl. 204—197)



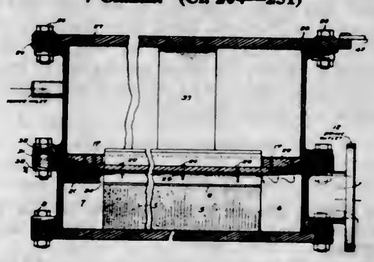
1. An anode comprising a body formed of metal, said body having an axial cavity in one end, a core disposed axially within the body and consisting of a length of wire of circular cross-section spirally embedded in the body and having an outer end defined by tightly engaged convolutions to form a socket of constant cross-sectional area, said socket being concentrically disposed within the cavity, a lead wire having an uninsulated end axially fitted in the socket and fixed therein by solder and a plastic filler closing said cavity and entirely surrounding the socket.

2,749,300
APPARATUS FOR ELECTROLYTICALLY CLEANING LAMP STEM LEAD WIRES
Cyril R. Thomas, Cleveland Heights, Ohio, assignor to General Electric Company, a corporation of New York
Application April 15, 1952, Serial No. 282,345
1 Claim. (Cl. 204—200)



Apparatus for electrolytically cleaning the exposed lower end portions of a pair of lead wires projecting from the end of a glass lamp stem having a flared upper end with the upper ends of said lead wires projecting upwardly beyond said stem and being composed of magnetizable metal, comprising a horizontal turret mounted for rotation in a horizontal plane, a plurality of radially extending segments independently hinged peripherally of said turret for tilting in a vertical direction, the outer periphery of each of said segments being slotted for receiving and supporting a plurality of stems in a generally vertical position to be moved by said turret through a fixed path, magnetic contact means comprising a plurality of permanent magnets mounted on said segments, one said permanent magnet being located adjacent each of said slots in position to attract thereto the upper ends of the lead wires of a stem in the associated slot, a tank for a bath of electrolyte located below and extending along a portion of the path of movement of the peripheries of said segments and the stems therein, jet means located below and extending along another portion of the path of movement of said segments and stems and arranged to direct streams of wash water at the lower ends of said stems, means operable upon rotation of the turret to successively effect tilting of said segments downwardly toward said tank and toward said jets to first immerse the lower ends of the lead wires on the stems carried thereby into the electrolyte and to then expose the said wires to the streams from said jets, means connecting said electrolyte to one polarity of a source of electrical energy, and means for connecting the several magnetic contact means on each segment to the opposite polarity of said source of electrical energy during the period each said segment is located over said tank.

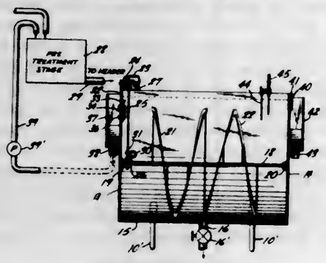
2,749,301
MERCURY TYPE, CAUSTIC, CHLORINE CELL
William J. Rosenbloom, Milliken, Ontario, Canada, assignor to Chemical Construction Corporation, New York, N. Y., a corporation of Delaware
Application November 19, 1952, Serial No. 321,300
7 Claims. (Cl. 204—251)



1. A mercury caustic chlorine cell for conducting the electrolysis of a concentrated aqueous solution of sodium chloride which comprises, a body portion provided with side walls, a top and a bottom, a diaphragm dividing the body portion into upper and lower compartments, a grid support for the diaphragm, a brine inlet port in one side of the lower compartment, a combined spent brine and chlorine outlet port in the opposite side of the lower compartment, a plurality of clamping strips for securing the diaphragm to the underside of the grid, said clamping strips extending across the compartment from the inlet port side to the outlet port side, a centrally positioned graphite anode in the lower compartment, a liquid distributing header along the inlet port side of the lower compartment and means for directing liquid therefrom to the top of said anode, a liquid collecting header along the outlet port side of said lower compartment, grooves in the top surface of the anode for receiving the clamping strips, said top surface being disposed closely adjacent the under side of the diaphragm but sufficiently spaced therefrom for passage of a thin stream of brine to flow there between, mercury on top of the diaphragm forming the cathode electrode, activated graphite conductors dipping into the mercury, electrically conducting means secured to the top of the body portion for sup-

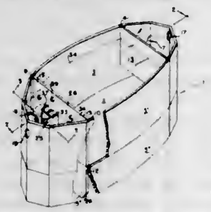
porting the graphite conductors in suspension in the mercury, a water inlet port in one side of the upper compartment, a caustic outlet port in the opposite side of the upper compartment, means for removing hydrogen from said compartment and means for electrically connecting the anode and cathode to a source of electricity.

2,749,302
COMBINATION SETTLING, FLOW DIVISION AND WEIR TANK FOR WASTE DISPOSAL SYSTEMS
Henning A. Trebler, Oakdale, and John P. Horton, Sayville, N. Y., assignors to National Dairy Research Laboratories, Inc., Oakdale, Islip, N. Y., a corporation of Delaware
Application July 31, 1953, Serial No. 371,683
3 Claims. (Cl. 210—3)



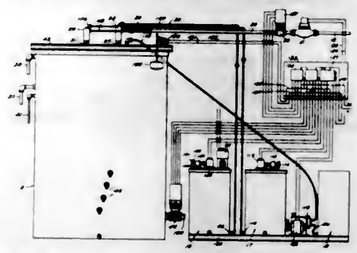
1. In a system for the treatment of waste liquids containing suspended solids, a settling tank, outlet means adjacent the bottom of the tank to receive sedimentary solids and means to urge the solids toward said outlet, inflow means to introduce into the tank liquids containing suspended solids, a V-shaped weir at one end of the tank, a rectangular weir at the other end of the tank, said weirs being disposed to discharge liquid simultaneously over a range of common liquid levels in the tank, and recirculating means to receive the liquid passing out of the tank via the rectangular weir and to discharge said liquid back into the tank in a recirculating cycle.

2,749,303
SEPTIC TANK
Philip N. Sitton, Dayton, Ohio, assignor to The Philip Sitton Septic Tank Company, Dayton, Ohio, a corporation of Ohio
Application September 2, 1952, Serial No. 307,426
2 Claims. (Cl. 210—6)



1. A septic tank comprising an inlet and outlet disposed near the top of the tank and at opposite ends, a substantially vertical wall dividing the tank into a settling chamber and an outlet compartment, said vertical wall having an opening in the upper portion thereof, a loop-shaped conduit communicating with said wall opening, said conduit having a partitioning wall therein dividing the conduit into an inlet and outlet chamber, said inlet chamber communicating with said wall opening near the bottom of said conduit inlet chamber, said outlet chamber communicating with the outlet compartment of said tank, the top of said conduit partitioning wall being disposed above said wall opening whereby liquid flowing through said wall opening and into said conduit inlet chamber rises to the height of said partitioning wall of the conduit before coursing downwardly into the outlet chamber of the conduit and into the outlet compartment of said tank, and vertically disposed baffle means arranged in said outlet compartment for hindering the movement of slurry into said last-mentioned outlet.

2,749,304
WATER TREATMENT APPARATUS OF THE LIME SODA TYPE
Fred W. Whitlock, Rockford, Ill., assignor to Aquamatic Inc., a corporation of Illinois
Application November 30, 1950, Serial No. 198,334
15 Claims. (Cl. 210—22)



1. In a water treatment system, a reaction tank for removing objectionable ingredients from water by precipitation having discharge passage means for the withdrawal of treated water, a raw water supply pipe for supplying water to be treated to said reaction tank, an ejector in said raw water supply pipe, a meter for determining measured units of raw water entering said reaction tank, a dosing tank for a reagent solution for said reaction tank, a drop pipe in said dosing tank having connections with the suction of said ejector, a pulse switch operated by said meter for each predetermined unit of raw water being admitted to said reaction tank, a motor controlling the movement of said drop pipe, and a timing motor started by the pulse from said meter switch and operating for a predetermined adjustable interval, to effect energization of said first-mentioned motor for the lowering of said drop pipe.

2,749,305
REDUCTION OF SCALE IN STEAM BOILERS
Myron J. Jursich, Chicago, Ill., assignor to National Aluminate Corporation, Chicago, Ill., a corporation of Delaware
No Drawing. Application October 2, 1951, Serial No. 249,407
17 Claims. (Cl. 210—23)

1. A method of reducing scale in boilers in the generation of steam from water which tends to form a scale which comprises incorporating with said water from which the steam is generated a quantity of an orthonitrophenol polymer effective to reduce scale formation, said polymer having recurring phenyl nuclei each containing a hydroxyl group and a nitro group in positions ortho to each other and said polymer being soluble in alkaline aqueous solutions having a pH within the range of 9 to 11, and boiling said water.

2,749,306
METHOD FOR TREATING CATION EXCHANGE MATERIAL AND CATION EXCHANGE MATERIAL RESULTING THEREFROM
William B. Coleman, Crete, Ill., assignor to Victor Chemical Works, a corporation of Illinois
No Drawing. Application May 3, 1952, Serial No. 286,017
6 Claims. (Cl. 210—24)

1. The method of treating a water softening ion exchange material to remove iron salts deposits thereon

which comprises contacting the material with an essentially brine-free water solution of a phosphate salt, wherein the phosphate salt is a member of the class consisting of alkali metal pyrophosphates, alkali metal polyphosphates, alkali metal metaphosphates, acid phosphates and mixtures thereof, whose metal ion is to be substituted in the exchange material, the phosphate being capable of sequestering ferric ions and having a pH of about 4.0 to about 10.5.

2,749,307
DEIONIZING DEVICE
Hal J. Ellison, Chicago, Ill.
Application April 23, 1954, Serial No. 425,118
2 Claims. (Cl. 210—24)



1. A water treating device consisting of a relatively flat, flexible, light-transmitting, foraminous, hand-sized bag constructed of a water resistant synthetic fiber which transmits light and which is relatively loosely woven to provide a fabric that is permeable by water, non-swelling, and non-shrinking, said bag containing mobile discrete solid particles of a resin mixture consisting of a cation exchange resin and an anion exchange resin, said particles being sufficiently large to be retained by the perforations in said bag, and at least one of said ion exchange substances containing a dye which provides a colorimetric observation of the exhaustion of at least one of said ion exchange substances and is visible through the walls of said bag.

2,749,308
MATERIAL FOR TREATING OIL WELL DRILLING FLUIDS
William G. Van Beckum, Longview, Wash., assignor to Weyerhaeuser Timber Company, Tacoma, Wash., a corporation of Washington
No Drawing. Application June 21, 1952, Serial No. 294,912
3 Claims. (Cl. 252—8.5)

1. A product for treating oil well drilling fluids comprising a mixture of wood fiber and the comminuted cork component of the bark of trees, said cork being of plus 65-mesh size, the product being capable of forming a barrier for preventing loss of well drilling fluid to cracks, crevices, fissures and the like encountered by the drill, the product being compressed to a density of from 10 pounds to about 30 pounds per cubic foot, the cork component being present in an amount sufficient to substantially reduce felting of the compressed fiber and to enhance the dispersion of the fiber in the mud.

2,749,309
WELL DRILLING FLUIDS
Clark C. Heritage, Tacoma, Wash., assignor to Weyerhaeuser Timber Company, Tacoma, Wash., a corporation of Washington
No Drawing. Application August 16, 1951, Serial No. 242,180
8 Claims. (Cl. 252—8.5)

1. An aqueous drilling mud made up of a major proportion of a suspension of water insoluble clayey material in water and an amount of a mixture of an alkali metal hydroxide and a separated component of the bark of a coniferous tree of the pine, tsuga, pseudotsuga and fir families selected from the group consisting of sclerenchyma tissue, parenchyma tissue, cork and admixtures thereof, the bark component being present in the range of from 0.35 pound to about 10 pounds per barrel of fluid.

2,749,310
LUBRICATING COMPOSITIONS
Paul H. Williams, Orinda, and Lawrence B. Scott, Lafayette, Calif., assignors to Shell Development Company, New York, N. Y., a corporation of Delaware
No Drawing. Application September 3, 1954, Serial No. 454,229
10 Claims. (Cl. 252—18)

1. A clear lubricating oil composition stable against phase separation comprising a major amount of a mineral lubricating oil and from about 0.1% to about 2% by weight each of boric acid, lecithin and an oil-soluble 2-alkyl oxazoline compound containing in the 4-position a polar radical selected from the group consisting of a hydroxyl radical and a hydroxyalkyl radical.

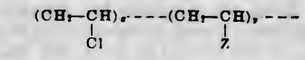
2,749,311
CORROSION INHIBITORS AND COMPOSITIONS CONTAINING THE SAME
Albert R. Sabol, Munster, Ind., Ellis K. Fields, Chicago, Ill., and Robert E. Karll, Hammond, Ind., assignors to Standard Oil Company, Chicago, Ill., a corporation of Indiana
No Drawing. Application December 4, 1952, Serial No. 324,144
14 Claims. (Cl. 252—32.7)

1. A new composition of matter, the oil-soluble reaction product of a mercaptan, formic acid and 2,5-dimercapto-1,3,4-thiadiazole, said reactants being reacted in the molar ratio of from about 1:1:1, respectively to about $3^{+}x:1^{+}x:x$, where x is an integer from 1 to about 10, inclusive, respectively, at a temperature of from about 30° F. to about 250° F. said mercaptan having the general formula RSH in which R is an aliphatic hydrocarbon radical having from about 6 to about 30 carbon atoms.

10. A composition comprising a major proportion of an oil, from about 0.001% to about 10%, of a sulfur-containing organic compound normally corrosive to silver, and from about 0.02% to about 10% of the oil-soluble reaction product of a mercaptan, formic acid, and 2,5-dimercapto-1,3,4-thiadiazole, said reactants being reacted in the molar ratio of from about 1:1:1, respectively, to about $3^{+}x:1^{+}x:x$, where x is an integer from 1 to about 10, inclusive, respectively, at a temperature of from about 30° F. to about 250° F. said mercaptan having the general formula RSH in which R is an aliphatic hydrocarbon radical having from about 6 to about 30 carbon atoms.

2,749,312
MODIFIED POLYMERIC POUR POINT DEPRESSANTS
William C. Hollyday, Jr., Fanwood, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application May 23, 1952, Serial No. 289,680
9 Claims. (Cl. 252—50)

5. A lubricating composition which comprises a lubricating oil base stock containing combined therein a minor but pour point depressing proportion of the reaction product of an aliphatic monoamine having from 6 to 20 carbon atoms per molecule selected from the class consisting of primary monoamines, secondary monoamines and mixtures thereof with a material having the general formula



wherein Z is selected from the class consisting of chlorine and



and wherein x and y are whole numbers, wherein said reaction product contains vinyl amine units having the structure



and HCl is formed as a byproduct, said reaction product having a molecular weight within a range of 3,000 to 100,000.

2,749,313

METHOD OF CLEANING POLYMERIZATION REACTORS

Harry Leverne Williams and Melvin John George Davidson, Sarnia, Ontario, Canada, assignors to Polymer Corporation Limited, Sarnia, Ontario, Canada, a corporation of Canada

No Drawing. Application June 30, 1952, Serial No. 296,482

Claims priority, application Canada April 21, 1952

11 Claims. (Cl. 252—104)

1. A method of removing from process equipment polymers comprising butadiene-1,3 which are so highly cross-linked that the major proportion of said polymer is insoluble in substances which are solvents for said polymer when said polymer is not cross-linked, which comprises agitating in such equipment a composition comprising a large proportion of a solvent for butadiene-1,3 comprising polymers and a small proportion of an organic hydroperoxide, until the major proportion of the polymer is degraded and is dissolved or suspended in the composition.

2,749,314

ANTISEPTIC SOAP COMPOSITION

David J. Beaver, Richmond Heights, Roland S. Shumard, Brentwood, and Paul J. Stoffel, Florissant, Mo., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application October 1, 1952, Serial No. 312,667

6 Claims. (Cl. 252—107)

5. An antiseptic detergent composition comprising the combination of a detergent soap and 1 to 3% by weight based upon the detergent soap of 4-chloro-a,a'-bis(2-hydroxy-3-chloro-5-methylphenyl)-2,6-xylenol.

2,749,315

TOILET DETERGENT BAR AND PROCESS OF PREPARING SAME

Robert Gerald Faier, Omaha, Nebr., assignor to Colgate-Palmolive Company, a corporation of Delaware

No Drawing. Application April 28, 1951, Serial No. 223,645

10 Claims. (Cl. 252—117)

1. An improved milled toilet detergent in the form of bars or cakes consisting essentially of at least about 50% of anhydrous water-soluble higher fatty acid soaps, and a minor amount of mixed water-soluble synthetic detergents comprising a mixture of higher fatty acid monoglyceride monosulphates and higher fatty acid amide of aminomethane sulphonates in an amount from about 10 to about 45% by weight uniformly dispersed throughout said soap and effective to substantially prevent lime soap precipitation during use as a toilet bar, the ratio of said sulphate to aminosulphonate detergent being from about 4:1 to about 1:4, and about 5 to about 15% moisture.

2,749,316

STABILISED SODIUM ALUMINATE

Kenneth Bernard Coates, South Kensington, London, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application May 5, 1952, Serial No. 286,207

Claims priority, application Great Britain August 17, 1951

4 Claims. (Cl. 252—182)

1. As a new composition of matter, substantially anhydrous sodium aluminate containing about 1.3 moles of Na_2O per mole of Al_2O_3, a trace of iron oxide as impurity and from ¼ to 2½% by weight, based on the iron-oxide containing aluminate, of a stabiliser which prevents precipitation of the iron oxide impurity on dissolution of said composition in water, said stabiliser being selected from the group consisting of mannitol and sorbitol.

2,749,317

OXIDIZING AGENT

Manuel A. Pino, Richmond, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware

No Drawing. Application December 10, 1952. Serial No. 325,214

5 Claims. (Cl. 252—186)

1. An oxidizing agent consisting essentially of a blend of (*a*) a major proportion of nitric acid containing at least 95% by weight of HNO_3 and (*b*) a minor proportion not exceeding about 30% by volume of an alkane sulfonic acid containing 1 to 5 carbon atoms.

2,749,318

HIGH MOLECULAR WEIGHT SOLID POLYMETHYLENE AND METHOD FOR PREPARING THE SAME

Robert C. Osthoff and Simon W. Kantor, Schenectady, N. Y., assignors to General Electric Company, a corporation of New York

No Drawing. Application March 20, 1953, Serial No. 343,812

2 Claims. (Cl. 260—2)

1. The process for preparing solid polymethylene having a molecular weight above 500,000 as determined by the Harris equation which comprises contacting at about —15° C. to 5° C. an ether solution of about 1–20% diazomethane, based on weight of total solution, with about 0.01–0.1% of an etherate of boron trifluoride, based on weight of diazomethane.

2,749,319

CELLULOSE ACETATE SORBATE AND COMPOSITIONS THEREOF

William B. Hewson, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application October 2, 1952, Serial No. 312,857

19 Claims. (Cl. 260—17)

1. The method of insolubilizing cellulose acetate sorbate having a sorboyl D. S. within the range of 0.02 to about 0.35 and a total D. S. in the range of 2.2 to 3.0 which comprises heating cellulose acetate sorbate at a temperature above about 50° C. and below its decomposition point with a dienophile having at least two centers of unsaturation, each capable of undergoing the Diels-Alder reaction.

2,749,320

SHORT OIL STYRENATED ALKYD AND METHOD

Norman Spellberg, Chicago, Ill., assignor to The Sherwin-Williams Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application January 8, 1952, Serial No. 265,525

11 Claims. (Cl. 260—22)

1. A process for the manufacture of a clear homogeneous polymer comprising a non-conjugated non-bodied, unoxidized oil-aromatic vinyl modified alkyd wherein the oil has an iodine value of from about 120 to 205 and constitutes at least 33% to about 52% of the oil-modified alkyd resin therein consisting essentially of adding to the total quantity of alcoholized non-conjugated drying oil component from one third to two thirds of the total aromatic dicarboxylic acid employed, holding the alcoholized oil and the dicarboxylic acid at esterifying temperatures until the mass reaches an approximately neutral acid value, reducing the temperature to the range from 325 to 375 degrees F., adding to the hot mass in increments over a time interval from 100 percent to 300 percent by weight, based upon the dibasic acid component of an aromatic vinyl compound containing a single vinyl group as the sole center of reaction and in the presence of an organic peroxide polymerization catalyst, maintaining the temperature within the last stated range for approximately one hour after the addition of the last increment addition of said vinyl compound, adding the remainder of the aromatic dicarboxylic acid component, and again increasing the temperature of the resin-forming reactants to said esterification range and holding the temperature within said range until the acid value is reduced to a value at least below 50 but arresting the reaction before gelation.

2,749,321

SOLUTIONS OF ACRYLONITRILE VINYL CHLORIDE COPOLYMER MIXED WITH POLYMERS OF MULTINUCLEAR AROMATIC MONOMERS

George E. Ham, Dayton, Ohio, assignor, by mesne assignments, to The Chemstrand Corporation, a corporation of Delaware

No Drawing. Application October 26, 1951, Serial No. 253,460

12 Claims. (Cl. 260—32.6)

1. A new composition of matter, capable of being formed into heat-stable fibers and filaments, which comprises a blend of from two to 35 parts by weight of (A) a polymer of the group consisting of poly-N-vinylcarbazole, polyvinylanthracene, polyvinylnaphthalene, polyvinylpyrene, polyvinylfluorene, polyvinylphenoxthine, polyacenaphthylene, polyvinylbiphenyl, polyisopropenylbiphenyl, and polyvinylacenaphthene, and from 65 to 98 parts of (B) a copolymer of from 35 to 70 percent by weight of vinyl chloride and at least 30 percent by weight of acrylonitrile dissolved in an organic solvent selected from the group consisting of N,N-dimethylformamide and N,N-dimethylactamide.

2,749,322

RESINOUS COATING

Kenneth J. Lissant, Kirkwood, Mo., assignor to Petrolite Corporation, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 24, 1952, Serial No. 289,899

18 Claims. (Cl. 260—32.8)

1. A method of producing a solution of a polyfuran resin comprising diluting a mixture of furfural and furfuryl alcohol containing from about 20% to 70% by weight of furfural with from about 15% to 25% by weight of a ketonic solvent based on the weight of the furfural and furfuryl alcohol, polymerizing the ingredients in the presence of a proton donor catalyst while holding the mixture between about 55° C. and 90° C. until the mixture approaches incipient gelation, and then quenching the reaction by the addition of from about 60% to 120% by weight of additional ketonic solvent based on the weight of the furfural and furfuryl alcohol.

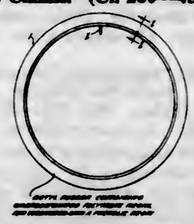
2,749,323

ACCELERATION OF THE VULCANIZATION OF BUTYL RUBBER WITH DIMETHYLOL PHENOLS AND PRODUCT OBTAINED THEREBY

William E. Schaefer, Harvey J. Batts, and Donald A. Brafford, Indianapolis, Ind., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey

Application January 26, 1953, Serial No. 333,052

6 Claims. (Cl. 260—43)



1. A method of vulcanizing a synthetic rubbery copolymer of an iso-mono-olefin having from 4 to 7 carbon atoms with from 0.5 to 10 percent of an aliphatic conjugated diolefin having from 4 to 6 carbon atoms comprising the step of heating 100 parts of the said rubber in admixture with from 0.2 to 20 parts of a 2,6-dimethylol-4-hydrocarbon phenol as the curing agent, and from 1 to 10 parts of chlorosulfonated polyethylene as accelerator, at a temperature of 200°–400° F. for from 5 minutes to 3 hours.

2,749,324

PYRIMIDINE-ALDEHYDE RESINS

Henry A. Walter, Longmeadow, Mass., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application April 12, 1952, Serial No. 282,077

7 Claims. (Cl. 260—45.1)

1. A thermosetting resin comprising the heat reaction product of 1 to 6 molar portions of an aldehyde with 1 molar portion of a pyrimidine taken from the group consisting of 2,4,5-triamino-6-alkoxy pyrimidines, 2,4,5-triamino-6-allyloxy pyrimidine and 2,4,5-triamino-6-cyclohexoxy pyrimidine.

2,749,325

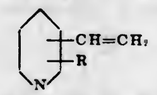
ACRYLONITRILE POLYMER BLENDS AND PROCESS OF PRODUCING THEM

Alfred B. Craig, Dayton, Ohio, assignor, by mesne assignments, to The Chemstrand Corporation, a corporation of Delaware

No Drawing. Application July 28, 1951, Serial No. 239,199

12 Claims. (Cl. 260—45.5)

1. A method of preparing a fiber-forming acrylonitrile polymer blend which comprises contacting a monomeric composition comprising at least 85 percent of acrylonitrile and up to 15 percent of another mono-olefinic monomer copolymerizable therewith with an aqueous emulsion of a copolymer of from 20 to 80 percent by weight of a compound having the formula:



wherein R is selected from the group consisting of hydrogen and an alkyl radical containing from one to 4 carbon atoms, and from 80 to 20 percent by weight of a polymerizable mono-olefinic monomer selected from the group

consisting of alkyl acrylates, alkyl methacrylates, vinyl carboxylates, vinyl and isopropenyl aromatic hydrocarbons, vinylidene chloride, methacrylonitrile and acrylonitrile, in the presence of a water-soluble peroxy compound, interrupting the emulsion addition before 75 percent of the acrylonitrile has been polymerized, and separating the reacted copolymer which has been further polymerized with the acrylonitrile copolymer, said blend being so prepared as to provide from 2 to 10 percent of the compound in polymeric form in the blended polymer.

2,749,326

PHENYL ETHYL SILOXANE COMPOSITION AND METHOD OF PREPARING SAME

Alfred Hirsch, Painesville, Ohio, assignor to Diamond Alkali Company, Cleveland, Ohio, a corporation of Delaware

No Drawing. Application November 1, 1951, Serial No. 254,431
7 Claims. (Cl. 260—46.5)

1. A moldable, siloxane-containing composition of superior heat resistance and of extended transient thermoplastic range containing as the siloxane portion thereof a partially condensed cohydrolyzate of a mixture of a phenyl silicon trihalide with an ethyl silicon trihalide, said ethyl silicon trihalide being present in an amount between 10 mol per cent and 30 mol per cent of the total of said silicon halides, said cohydrolyzate being characterized by the property, when cured, of possessing a much greater heat stability than that of a hydrolyzate of ethyl silicon trihalide alone and an appreciably greater heat stability than that of phenyl silicon trihalide alone when all three are prepared in an otherwise identical manner and when all three are subjected to a temperature of 425° C. for 2 hours.

2,749,327

REACTION PRODUCT OF DIHYDRIC ALIPHATIC ALCOHOLS AND POLYMETHYLOL BENZENES

Robert W. Martin, Lafayette, Calif., assignor to General Electric Company, a corporation of New York

No Drawing. Application October 9, 1952, Serial No. 313,980
2 Claims. (Cl. 260—52)

1. A rubbery, polymeric, organic solvent-resistant composition of matter consisting of the product of reaction of (1) 1 mol of an unsubstituted dihydric aliphatic alcohol and (2) 1 to 1.5 mols of 2,6-dimethylol-4-methyl anisole, said reaction taking place at a temperature of from about 125° to 200° C. and in the presence of an acidic catalyst.

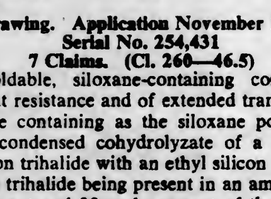
2,749,328

HYDROXY-OCTAHYDRO ALDEHYDE FROM DICYCLOPENTENYL ALCOHOL

Edward T. Cline, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application June 25, 1952, Serial No. 295,567
10 Claims. (Cl. 260—73)

8. A filament consisting essentially of polyvinyl alcohol having 30 to 50% of its hydroxyls acetalized by reaction with the mixture essentially comprising a hydroxyoctahydro-4,7-methanoindenecarboxaldehyde of the formula



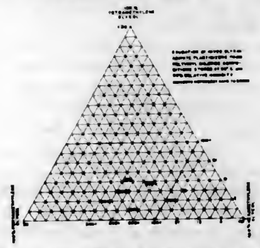
and the polymeric self hemi-acetal thereof, said mixture being obtained by reacting, at elevated temperature and at elevated pressures of carbon monoxide and hydrogen in the presence of an oxo process catalyst, the dicyclopentenyl alcohol which is the acid catalyzed hydration product of dicyclopentadiene.

2,749,329

COMPOSITIONS COMPRISING POLYESTER PLASTICIZERS

John L. Ludlow, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

Application March 30, 1951, Serial No. 218,471
1 Claim. (Cl. 260—75)



A plasticizer composition comprising a polyester of adipic acid, said polyester having combined therein the relative weight quantities of hexamethylene glycol, pentamethylene glycol, and tetramethylene glycol defined by the area within the broken lines in the accompanying trilinear diagram, said polyester having an acid number not exceeding 21 and an inherent viscosity, measured on an acetone solution of 1% concentration of from 0.030 to 0.131, the hydroxyl number being not greater than 15 when the inherent viscosity is below 0.087.

2,749,330

HYDROLYZED ACRYLONITRILE-ISOBUTYLENE COPOLYMERS

Fred W. Banes, Westfield, and John D. Garber, Cranford, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application December 6, 1952, Serial No. 324,602
2 Claims. (Cl. 260—85.5)

1. A hydrolyzed copolymer of about 62 to 85% by weight of an acrylic-nitrile monomer having the formula $CH_2=CY—CN$ where Y is the member of the group consisting of hydrogen, methyl, ethyl, and chlorine, and correspondingly 38 to 15% by weight of a compound having 2 to 8 carbon atoms selected from the group consisting of aliphatic and cyclic olefins and chlor-substituted olefins, said copolymer having an intrinsic viscosity between 0.1 and 1, and wherein said copolymer contains between 5–80% of the theoretical amount of carboxyl groups.

2,749,331

SYNTHETIC LINEAR POLYAMIDES OBTAINED BY THE BASE-CATALYZED POLYMERIZATION OF UNSATURATED AMIDES

David S. Breslow, New Castle County, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application July 5, 1952, Serial No. 297,387
12 Claims. (Cl. 260—89.7)

1. The process of preparing a synthetic linear polyamide which comprises contacting under substantially anhydrous conditions an amide, containing as its only olefinic unsaturation an ethylene double bond in the alpha position to the amide carbonyl radical and also containing active hydrogen, at least one of which is attached to the amido nitrogen, with a strongly basic catalyst selected from the group consisting of alkali metals, alkali metal hydroxides, quaternary ammonium hydroxides, alkali metal alkoxides, alkali metal amides, alkali metal hydrides, and alkali metal aralkyls, said basic catalyst being the sole polymerization catalyst present and said amide being the sole polymerizable material present.

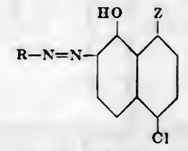
2,749,332

METALLIFEROUS AZO-DYESTUFFS

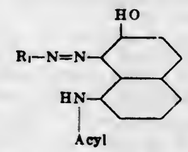
Arthur Buehler, Rheinfelden, and Christian Zickendraht, Binningen, Switzerland, assignors to Ciba Limited, Basel, Switzerland, a Swiss firm

No Drawing. Application August 15, 1952, Serial No. 304,630
Claims priority, application Switzerland August 17, 1951
13 Claims. (Cl. 260—145)

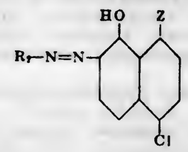
1. A metalliferous compound containing two monoazo-dyestuffs so bound in complex union with a metal selected from the group consisting of cobalt and chromium that the proportion of the number of metal atoms in complex union to the number of monoazo-dyestuff molecules is substantially 1:2, in which metalliferous compound one of the monoazo-dyestuffs present corresponds to the formula



wherein R represents a 1-hydroxybenzene radical bound to the azo linkage in 2-position, free from sulfonic and carboxylic acid groups and containing a sulfonic acid amide group in one of the positions 5 and 6, and Z represents a member selected from the group consisting of a hydrogen and a chlorine atom, the other monoazo-dyestuff present in the metalliferous compound being a member selected from the group consisting of a monoazo-dyestuff of the aforesaid formula, a monoazo-dyestuff of the formula



and a monoazo-dyestuff of the formula



wherein R_1 and R_2 each represents a benzene radical free from sulfonic and carboxylic acid groups and containing a hydroxyl group in ortho-position relatively to the azo linkage, and Z represents a member selected from the group consisting of a hydrogen and a chlorine atom.

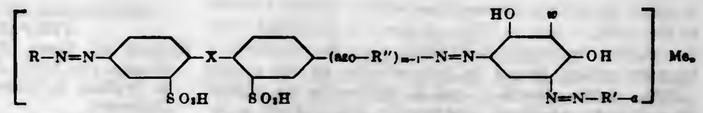
2,749,333

METAL-CONTAINING POLYAZO DYESTUFFS

Markus Kappeler and August Schweizer, Basel, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application December 18, 1953, Serial No. 399,156
Claims priority, application Switzerland December 24, 1952
6 Claims. (Cl. 260—145)

1. A polyazo dyestuff which corresponds to the formula



wherein *w* stands for a member selected from the group consisting of a hydrogen atom and a —N=N— mononuclear aryl radical, *x* stands for a bridge selected from the group consisting of —CH=CH— and

—CH_2—CH_2—

R stands for a member selected from the group consisting of a mononuclear and a binuclear radical of the benzene series and a radical of the naphthalene series, R'' stands for a member selected from the group consisting of a mononuclear and a binuclear radical of the benzene series and a radical of the naphthalene series, and -azo- being located in one of the positions meta and para to the respective —N=N— group, R'—*a* stands for a radical of the benzene series, in which *a* is a substituent selected from the group consisting of hydroxy, methoxy and carboxy and is present in ortho-position to the respective —N=N— group, Me stands for a metal atom selected from the group consisting of a chromium, cobalt, nickel and copper atom, and wherein *m* and *n* each is one of the numerals 1 and 2.

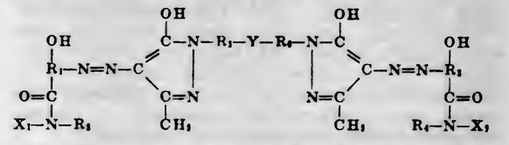
2,749,334

DISAZO DYESTUFFS AND COMPLEX COPPER COMPOUNDS THEREOF

Karl Meuzi, Basel, Switzerland, assignor to Ciba Limited, Basel, Switzerland, a Swiss firm

No Drawing. Application October 22, 1951, Serial No. 252,579
Claims priority, application Switzerland November 6, 1950
13 Claims. (Cl. 260—147)

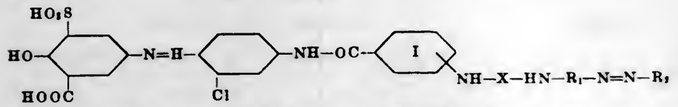
1. A member selected from the group of disazo dyestuffs and their complex copper compounds which disazo dyestuffs correspond to the formula



in which R_1 and R_2 each represent a benzene radical bound to the azo group in ortho-position relatively to the hydroxyl group, R_3 and R_4 each represent a benzene radical, X_1 and X_2 each represent a member of the group consisting of a hydrogen atom and a lower alkyl radical, R_5 and R_6 each represent a benzene radical and Y represents a member selected from the group consisting of a direct bond and the radicals —CO—NH—, —NH—CO—HN— and —CH=CH—, and in which at least one of the radicals —R_1—$CONX_1$—R_3 and —R_2—$CONX_2$—R_4 contains a sulfonic acid group.

2,749,335
DISAZO-DYESTUFFS
Hans Llechti, Richen, Switzerland, assignor to Ciba Limited, Basel, Switzerland, a Swiss firm
No Drawing. Application May 15, 1952, Serial No. 288,051
Claims priority, application Switzerland June 11, 1951
13 Claims. (Cl. 260—153)

1. A disazo-dyestuff which contains at least two and at most three sulfonic acid groups and corresponds to the formula



in which the carbon atoms of the benzene nucleus I bound to the —OC— and —NH— groups are separated from one another by at least one carbon atom, R_1 represents a benzene radical bound in para-position to the groups —HN— and —N=N—, and R_2 represents the radical of a 1-hydroxybenzene-2-carboxylic acid bound in 4-position to the azo linkage, one of the radicals R_1 and R_2 containing a sulfonic acid group, and X represents a member selected from the group consisting of a —CO— radical and a triazine radical.

2,749,336
PROCESS FOR PRODUCING CELLULOSE DERIVATIVES
Floyd L. Boddicker, Petersburg, and Paul E. Graybeal, Mansion Hills, Va., assignors to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application April 2, 1952, Serial No. 280,168
13 Claims. (Cl. 260—231)

1. In the preparation of a cellulose ether in a reaction mixture comprising cellulose, alkali, etherifying agent and slurrying medium, the improvement which comprises regulating the viscosity of the cellulose ether by introducing into the reaction mixture an oxidizing agent selected from the group consisting of hypohalites, peroxides and periodates prior to the introduction to the reaction mixture of said slurrying medium.

2,749,337
PROCESS FOR PREPARING 7-11-DIKETO STEROIDS
John M. Chemerda, Metuchen, N. J., assignor to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey
No Drawing. Application August 3, 1951, Serial No. 240,281
4 Claims. (Cl. 260—239.55)

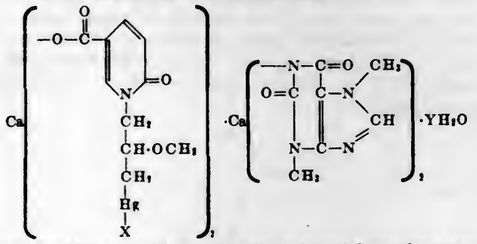
4. The process which comprises heating together at an elevated temperature an alcoholic solution of an alkali metal hydroxide and a $\Delta^{8(9)}$-7-keto-cyclopentanopolyhydrophenanthrene compound, selected from the group which consists of $\Delta^{8(9),22}$-3,11-dihydroxy-7-keto-ergostadiene, $^{8(9)}$-7-keto-11-hydroxy-dehydrotigogenin, $\Delta^{8(9)}$-3,11-dihydroxy-7-keto-cholenic acid, and lower alkanoyl esters thereof, thereby forming the corresponding 7,11-diketo-cyclopentanopolyhydrophenanthrene compound.

2,749,338
ISOALLOSPIROSTANES
Ralph F. Hirschmann, Westfield, and Norman L. Wendler, Summit, N. J., assignors to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey
No Drawing. Application January 22, 1953, Serial No. 332,764
16 Claims. (Cl. 260—239.55)

1. The process which comprises reacting a compound from the group consisting of $\Delta^{9(11)}$-3-hydroxy-22-isoallospirostene and lower aliphatic acid esters thereof with osmium tetroxide, and decomposing the resulting osmate ester by reaction with a reducing agent to produce the corresponding 9,11-glycol.

2,749,339
MERCURIAL DIURETICS AND METHOD OF PREPARATION THEREOF
Richard H. Barry, Bloomfield, Su Ming Wang, East Orange, and Lewis A. Walter, Madison, N. J., assignors to Wallace & Tiernan Incorporated, a corporation of Delaware
No Drawing. Application June 8, 1953, Serial No. 360,387
7 Claims. (Cl. 260—242)

5. A compound having the formula:

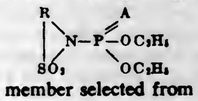


wherein X is a xanthine derivative selected from the group consisting of theobromine and theophylline and Y is 12 and 14 when X is theobromine and theophylline respectively.

7. The method of preparing a diuretic salt, containing calcium, mercury, theophylline and theobromine in the mol proportion of 1:1:1:1 respectively, comprising the steps of suspending in one liter of water 15 grams of calcium oxide, adding thereto 118 grams of N-(β-methoxy-γ - theophylline - mercuripropyl) - 2-pyridone - 5 - carboxylic acid, heating the mixture to 80° C. while stirring the mixture, and then filtering it to remove insolubles and to prepare a first filtrate, separately preparing a solution of calcium theobromine by dissolving 36 grams of theobromine in a suspension of 15 grams of calcium oxide in 500 ml. of water at 80° C. and filtering out any insoluble material to prepare a second filtrate, adding together said first and said second filtrates, cooling the mixed filtrates to crystallize out said diuretic salt as a hydrate, and washing the crystallized salt in water, the weights and volumes given indicating proportions of the stated materials.

2,749,340
SULTAME-N-PHOSPHORIC ACID DIESTERS
Hans Feichtinger, Duisburg-Beeck, and Hans Tummes, Duisburg-Meiderich, Germany, assignors to Ruhrchemie Aktiengesellschaft, Oberhausen-Holten, Germany
No Drawing. Application June 21, 1954, Serial No. 438,307
Claims priority, application Germany June 22, 1953
5 Claims. (Cl. 260—243)

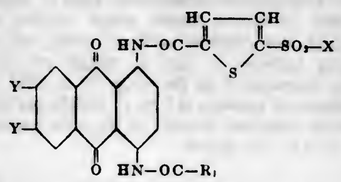
1. As a new chemical compound a sultame-N-phosphoric acid diethylester having the general formula:



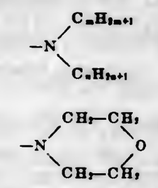
in which A is a member selected from the group consisting of oxygen and sulfur and R is a divalent saturated hydrocarbon radical having 4 carbon atoms, at least 3 carbon atoms of which are in the sultame ring.

2,749,341
NEW ANTHRAQUINONE VAT DYESTUFFS
Max Staeuble, Basel, Switzerland, assignor to Ciba Limited, Basel, Switzerland, a Swiss firm
No Drawing. Application July 13, 1953, Serial No. 367,719
Claims priority, application Switzerland July 23, 1952
7 Claims. (Cl. 260—247.1)

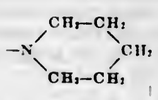
1. An anthraquinone vat dyestuff of the formula



in which R_1 stands for an aromatic radical selected from the group consisting of the benzene and chlorobenzene radicals, X stands for a member selected from the group consisting of the radicals



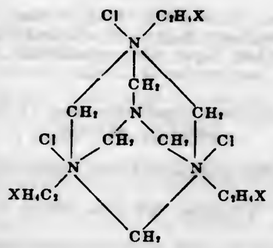
and



wherein *m* and *n* each represent a whole number of at the most 3, and Y stands for a member selected from the group consisting of Cl and Br.

2,749,342
HETEROCYCLIC N-ADDUCTS
Reginald Auchincloss, New York, N. Y.
No Drawing. Application January 21, 1955, Serial No. 483,431
7 Claims. (Cl. 260—248.5)

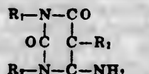
1. Heterocyclic compounds having the following general formula:



wherein X represents a radical taken from the class consisting of acetoxy and amino.

2,749,343
1,3,5-TRI LOWER ALKYL-4-AMINO URACILS
Willy Stoll, Basel, Switzerland, assignor to J. R. Geigy A. G., Basel, Switzerland, a Swiss firm
No Drawing. Application January 29, 1954, Serial No. 407,145
Claims priority, application Switzerland February 6, 1953
4 Claims. (Cl. 260—256.4)

1. Nuclear substituted 4-amino-uracils of the general formula:



wherein R_1, R_2 and R_3 each represent a member selected from the group consisting of ethyl and n-propyl radicals.

2,749,344
PYRIMIDINE COMPOUNDS
George H. Hitchings, Tuckahoe, and Roland K. Robins, Yonkers, N. Y., assignors to Burroughs Wellcome & Co. (U. S. A.) Inc., Tuckahoe, N. Y., a corporation of New York
No Drawing. Application January 2, 1953, Serial No. 329,476
8 Claims. (Cl. 260—256.4)

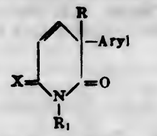
1. A method of preparing pyrido (2,3-d) pyrimidines which consists in the condensation of a 4-aminopyrimidine with a compound selected from the class consisting of a β-carbonyl aldehyde and a β-carbonyl ketone as set forth in claim 8 in an acidic medium.

2,749,345
PYRIMIDINE COMPOUNDS
George H. Hitchings, Tuckahoe, and Roland K. Robins, Yonkers, N. Y., assignors to Burroughs Wellcome & Co. (U. S. A.) Inc., Tuckahoe, N. Y., a corporation of New York
No Drawing. Application January 2, 1953, Serial No. 329,474
4 Claims. (Cl. 260—256.4)

2. A method of preparing a 4-aminopyrido (2,3-d) pyrimidine which comprises reacting an α-aminonicotinic acid with formamide substantially in excess of the stoichiometric amount at a temperature in excess of 120° to form a 4-hydroxypyrido (2,3-d) pyrimidine, reacting this compound with phosphoryl oxychloride, and heating the resulting derivative with an aminating reagent selected from the class consisting of ammonium hydroxide, aniline, hydrazine hydrate, and diethylamine to produce the 4-aminopyrido (2,3-d) pyrimidine.

2,749,346
TETRAHYDROPYRIDINE COMPOUNDS, THEIR SALTS AND QUATERNARY COMPOUNDS
Karl Hoffmann, Binningen, Eugen Tagmann, Basel, and Ernst Urech, Binningen, Switzerland, assignors to Ciba Pharmaceutical Products, Inc., Summit, N. J.
No Drawing. Application April 21, 1952, Serial No. 283,494
Claims priority, application Switzerland April 28, 1951
6 Claims. (Cl. 260—281)

1. A tetrahydro-pyridine compound selected from the group consisting of compounds of the formula



and their addition salts, in which formula Aryl is a phenyl group, X is a member selected from the group consisting of oxygen and sulphur, R is a member selected from the group consisting of phenyl, lower alkyl, di-lower

alkyl-aminoalkyl and lower alkylene-aminoalkyl groups, and R_1 stands for a member selected from the group consisting of hydrogen and lower alkyl.

2,749,347

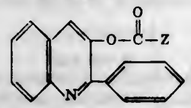
2-PHENYLQUINOLINE-3-ARYL CARBAMATES

Frank J. Kreysa, Richmond Hill, N. Y., assignor to Chemo Puro Manufacturing Corporation, Long Island City, N. Y., a corporation of New York

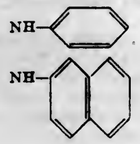
No Drawing. Original application October 30, 1952, Serial No. 317,820. Divided and this application December 16, 1953, Serial No. 405,233

4 Claims. (Cl. 260—287)

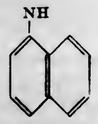
1. An antidiuretic having the structural formula:



wherein Z is selected from the group consisting of:



and



2,749,348

MAKING SUBSTITUTED PYRIDINES

John E. Mahan and Charles E. Stoops, Bartlesville, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application January 3, 1952, Serial No. 264,838

14 Claims. (Cl. 260—290)

1. The process for preparing alkyl substituted pyridines which comprises contacting a carbonyl compound of 1 to 6 carbon atoms per molecule selected from the group consisting of aldehydes and ketones with ammonia at a temperature in the range of 300° to 600° F. and at a pressure sufficient to maintain the reaction mixture in liquid phase, in a reaction mixture to which has been added a catalyst comprising sulfonic acids containing not more than 10 carbon atoms per molecule and being selected from the group consisting of alkane, cycloalkane, aromatic, alkylaromatic, arylalkane and pyridine sulfonic acids and salts thereof with nitrogen containing bases.

2,749,349

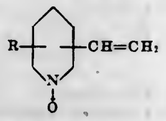
VINYLPYRIDINE-N-OXIDES AND PROCESS OF MAKING THEM

Francis E. Cislak, Indianapolis, Ind., assignor to Reilly Tar & Chemical Corporation, Indianapolis, Ind., a corporation of Indiana

No Drawing. Application February 2, 1956, Serial No. 562,929

8 Claims. (Cl. 260—290)

1. Vinylpyridine-N-oxides having the following general formula:



where R is a member of the group consisting of hydrogen and lower alkyl.

2,749,350

SELECTIVE OXIDATION OF NITROGEN-CONTAINING HETEROCYCLIC COMPOUNDS

Gene Nowlin, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application March 30, 1953, Serial No. 345,694

7 Claims. (Cl. 260—295)

1. A process for producing aliphatic hydrocarbon substituted heterocyclic monocarboxylic acids from aliphatic hydrocarbon substituted pyridines having a plurality of aliphatic hydrocarbon substituents, none of which contain more than 10 carbon atoms, which consists essentially of reacting said pyridine with an excess of nitric acid containing between 55 and 65 weight per cent HNO_3 at reflux temperature in the range 70 to 200° C. and in the presence of between 0.5 to 15 weight per cent of the pyridine of selenium dioxide as the sole reactants for a period of 5 to 150 hours.

2,749,351

PROCESS FOR THE PRODUCTION OF PYRIDINE ALDEHYDES AND PYRIDOINES

Wilhelm Mathes and Walter Sauermilch, Ludwigshafen (Rhine), Germany, assignors to Dr. F. Raschig G. m. b. H., Ludwigshafen (Rhine), Germany

No Drawing. Application September 4, 1953, Serial No. 378,677

6 Claims. (Cl. 260—297)

1. A process for producing at least one compound selected from the group consisting of pyridine aldehydes and their dimerization products which comprises passing methyl pyridine in admixture with steam and an oxygen containing gas in the vapor phase through a reaction space containing an oxidation catalyst comprising at least one metal oxide selected from the group consisting of oxides of metals of subgroup A of groups V, VI and VII of the periodic system at a temperature between 250° C. and 450° C., the quantity of oxygen in such gas mixture being at most equal to X moles per mol of methyl pyridine where $X=(4.06-2.02\cdot\log.p)\cdot(S+1.4)$ in which p is the per cent by weight, expressed as a whole number of methyl pyridine in the admixture of methyl pyridine and steam and S is the space velocity divided by 10,000 and recovering such compound from the reaction mixture leaving the reaction space.

2,749,352

VAT DYESTUFFS

Heinz Werner Schwechten, Rutger Neeff, and Josef Singer, Leverkusen-Bayerwerk, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application May 13, 1954, Serial No. 429,684

Claims priority, application Great Britain May 29, 1953

6 Claims. (Cl. 260—307.5)

1. As a new dyestuff, a di-(1'-amino-anthraquinonyl-2')-2,5-oxdiazole-1,3,4, having a chlorine atom substituted on at least one of the β-positions of the non-animated nucleus of the anthraquinone system.

2,749,353

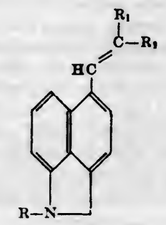
SUBSTITUTED BENZ [CD] INDOLINES

Edmund C. Kornfeld and Eugene J. Fornefeld, Indianapolis, Ind., assignors to Eli Lilly and Company, Indianapolis, Ind., a corporation of Indiana

No Drawing. Application August 1, 1952, Serial No. 302,235

7 Claims. (Cl. 260—319)

1. A compound represented by the formula



wherein R represents a member of the group consisting of lower alkanoyl and monocarbocyclic aroyl radicals, and R_1 represents a member of the group consisting of cyano, carboxy, lower carboxyalkyl and N-methylthioamido radicals, R_2 represents a cyano radical when R_1 represents a member of the group consisting of cyano, lower carboxyalkyl and N-methylthioamido radicals, and R_2 represents a member of the group consisting of hydrogen and a cyano radical when R_1 represents a carboxy radical.

2,749,354

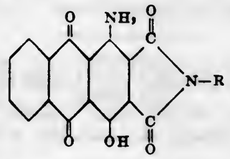
ANTHRAQUINONE DYES AND INTERMEDIATES

Donald R. Baer, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 27, 1953, Serial No. 394,889

2 Claims. (Cl. 260—326)

1. Bluish-gray to reddish-blue dyes of the general formula:



in which R stands for an alkoxyalkyl radical of the class 3-methoxypropyl, 3-ethoxypropyl, 2-methoxyethyl, and 2-ethoxyethyl.

2,749,355

ACRYLAMIDES

Wilford Donald Jones, Summit, N. J., assignor to Celanese Corporation of America, New York, N. Y., a corporation of Delaware

No Drawing. Application October 16, 1952, Serial No. 315,200

1 Claim. (Cl. 260—326.3)

Process for the production of N-acrylylpyrrolidine which comprises dehydrating N-hydracrylylpyrrolidine by passing vapors of said N-hydracrylylpyrrolidine over a catalyst consisting essentially of granules of activated alumina impregnated with thoria, said catalyst being at a temperature of about 275 to 325° C., the space velocity of said vapors with respect to the catalyst being 5 to 500 per hour.

2,749,356

METHOD OF ISOLATING AND PURIFYING KETO STEROIDS AND NEW KETO STEROID COMPOUNDS

Leon Velluz, Paris, France, assignor to Les Laboratoires Francais de Chimiotherapie, Paris, France, a French body corporate

No Drawing. Application February 12, 1953, Serial No. 336,630

10 Claims. (Cl. 260—397.4)

1. In a method of purifying and selectively isolating estrone from a mixture containing estrone and equiline and equilenine, the steps comprising dissolving said mixture in methanol containing acetic acid, adding thereto the hydrazide of benzilic acid, boiling said reaction mixture under reflux to condense said hydrazide with the keto steroids present in said mixture, cooling said reaction mixture, separating the selectively precipitated benzilic acid hydrazone of estrone, heating said hydrazone in solution in an organic solvent with hydrochloric acid to split up said hydrazone, cooling the cleavage solution, and separating the pure estrone regenerated thereby.

2,749,357

PROCESS FOR DERESINATING CANDELILLA WAX

Abram Zlodnik, Mexico City, Mexico

No Drawing. Application March 4, 1953, Serial No. 340,412

10 Claims. (Cl. 260—428.5)

1. A process for deresinating candelilla wax comprising dividing the wax into particles having a maximum thickness of about 4 millimeters, then washing the wax flakes at temperatures not in excess of 25° C. in a solvent mixture of a minimum of 50% of an alcohol selected from the group consisting of methyl, ethyl, and isopropyl alcohol, and an aliphatic hydrocarbon selected from the group consisting of dichloropropane, trichloroethylene and chloroform, to dissolve the resins from the flakes without affecting the wax.

2,749,358

PREPARATION OF OXIMES

Edward L. Reilly, Woodbury, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 18, 1955, Serial No. 489,270

8 Claims. (Cl. 260—465)

1. A process for the preparation of oximes which comprises reacting nitric oxide and a compound containing an active methylene group at temperatures of 50 to 150° C. and pressures of 100 to 400 lb./sq. in. ga. in the presence of a variable-valence-metal salt catalyst.

2,749,359

HYDROGENATION OF DICYANOBUTENE IN THE PRESENCE OF A NEUTRALIZED PALLADIUM CATALYST

William H. Calkins and Donald E. Welton, Victoria, Tex., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application January 6, 1953, Serial No. 329,932

5 Claims. (Cl. 260—465.8)

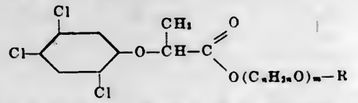
1. The process of producing adiponitrile in a gas-phase, catalytic hydrogenation reaction which comprises forming a gaseous mixture of 1,4-dicyanobutene and from 10 to 100 mols of hydrogen per mol of 1,4-dicyanobutene; and passing said mixture, at a pressure of 0.5 to 5.0 atmospheres and at a temperature of 200° C. to 350° C., in contact with a palladium-on-coconut-charcoal catalyst prepared by depositing palladium on the surface of alkaline coconut charcoal particles, treating the palladium-coated catalyst by washing with formic acid followed by washing with water, drying the catalyst, and reducing the dried catalyst with hydrogen.

2,749,360
ESTERS OF α-2,4,5-TRICHLOROPHENOXYPROPIONIC ACID

Bill M. Williams, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application June 2, 1952, Serial No. 291,329
10 Claims. (Cl. 260—473)

1. The esters of α - 2,4,5 - trichlorophenoxypropionic acid having the formula



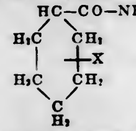
wherein *n* is an integer from 2 to 3, inclusive, *m* is an integer from 1 to 3, inclusive, and R represents an alkyl radical containing from 1 to 4 carbon atoms, inclusive.

2,749,361
CYCLOHEXANECARBOXAMIDES

Harry L. Yale, New Brunswick, N. J., assignor to Olin Mathieson Chemical Corporation, New York, N. Y., a corporation of Virginia

No Drawing. Application August 29, 1951, Serial No. 244,253
2 Claims. (Cl. 260—503)

1. Compounds of the general formula



wherein R''' is a lower alkenyl group containing at least three carbon atoms, X is a member of the class consisting of —COOH, —CH_2COOH, —OCH_2COOH and —SO_3H groups.

2,749,362
PROCESS FOR THE DECOLORIZATION AND PURIFICATION OF p-HYDROXYBENZOIC ACID

Rene P. Berni, Union City, N. J., assignor to Heyden Chemical Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application June 18, 1952, Serial No. 294,275
5 Claims. (Cl. 260—521)

1. In a process for preparing substantially pure and color-free p-hydroxybenzoic acid by reacting carbon dioxide and hot, dry potassium phenate to produce the potassium salt of p-hydroxybenzoic acid, the improvement which comprises acidifying an aqueous solution of the potassium salt of p-hydroxybenzoic acid thus obtained to a pH of 5 to 6. filtering to remove the precipitated tarry materials therefrom. treating the filtrate at a temperature ranging between 15°–45° C. with a mixture containing a water soluble alkali metal bisulfite, zinc dust and carbon, filtering the resulting mixture and acidifying the filtrate to obtain the desired product.

2,749,363
PURIFICATION OF AROMATIC ACIDS

George T. Williamson, Oakland, and Orris L. Davis, Berkeley, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application November 23, 1951, Serial No. 257,968
6 Claims. (Cl. 260—525)

1. The process for separating a tert.-alkyl-substituted benzene monocarboxylic acid in a high state of purity from the oxidation reaction mixture obtained by the catalytic oxidation of the corresponding tert.-alkyl-substituted toluene in the presence of an organic salt of a polyvalent metal, said mixture containing said tert.-alkyl-substituted benezene monocarboxylic acid in admixture with unconverted tert.-alkyl-substituted toluene and entrained organic salt of a polyvalent metal, which comprises extracting said oxidation reaction mixture in the liquid state with a solvent consisting of water at a temperature in the range of from about 50 to about 125° C. at which at least the greater part of said oxidation reaction mixture is in the liquid state and while said oxidation reaction mixture is at a hydrogen ion concentration in the range of from about 2 to about 4 in terms of pH values as a result of the presence therein of acidic organic oxidation products formed during the production of said oxidation reaction mixture during said catalytic oxidation, thereby forming a raffinate phase comprising tert.-alkyl-substituted toluene and tert.-alkyl-substituted benzene monocarboxylic acid which is substantially free from said organic salt of a polyvalent metal, and separating said tert.-alkyl-substituted benzene monocarboxylic acid in a high state of purity substantially free of organic salt of polyvalent metal from said raffinate phase.

2,749,364
SEPARATION OF ACIDS

Harry Greenberg, Cincinnati, Ohio, assignor to National Distillers Products Corporation, New York, N. Y., a corporation of Virginia

Application February 16, 1954, Serial No. 410,697
9 Claims. (Cl. 260—537)

1. A process for separation and purification of acidic compounds from an aqueous mixture containing alkali metal salts of monobasic and dibasic acids including substantial amounts of such salts of sebacic acid and other isomeric C–10 acids obtained by hydrogenation of a mixture resulting from carbonation of dialkali metal octadienes which includes the steps of diluting said aqueous mixture with an inert aromatic hydrocarbon liquid. adding mineral acid to convert substantially all of the sebacic acid to the monosodium salt, saturating said mixture with sodium chloride, filtering said mixture, recovering substantially pure sebacic acid from the resulting filter cake, separating the resulting filtrate into an aqueous layer and an aromatic hydrocarbon liquid layer, recovering monobasic acids from said hydrocarbon layer, and recovering a mixture of C–10 isomeric dibasic acids other than sebacic acid from said aqueous layer.

2,749,365
PREVENTING COLOR FORMATION IN SULFONYL HALIDES

Joachim Dazzi, Dayton, Ohio, assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application January 19, 1953, Serial No. 332,117
14 Claims. (Cl. 260—543)

1. A method for stabilizing saturated aliphatic and alicyclic sulfonyl halides prepared by the Reed reaction with sulfur dioxide and halogen which comprises treating same before color formation occurs with an alkaline material in the presence of water at non-hydrolyzing conditions to inhibit color formation in said sulfonyl halide.

2,749,366
PREPARATION OF AROMATIC CARBOXYLIC ACID CHLORIDES FROM AROMATIC COMPOUNDS

Robert E. Foster, New Castle, and Benjamin W. Howk, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application September 10, 1952, Serial No. 308,936
16 Claims. (Cl. 260—544)

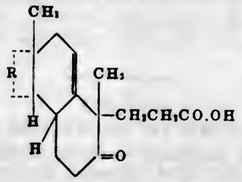
1. A process for preparing aromatic carboxylic acid chlorides which comprises heating and reacting, at a temperature in the range of 100° to 375° C., carbon tetrachloride, a carbocyclic aromatic compound, free of carboxyl groups, containing from 1 to 2 six-membered carbocyclic nuclei and having at least one hydrogen on the aromatic nucleus, and a carboxylic acid selected from the class consisting of aliphatic monocarboxylic acids and carbocyclic aromatic carboxylic acids of 1 to 2 carboxyl groups, in contact with a catalyst selected from the class consisting of reduced tungstic oxide, nickel molybdite and copper tungstite.

2,749,367
METHOD FOR REMOVAL OF A SIDE CHAIN

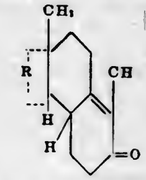
Lloyd B. Barkley, Brentwood, Mo., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application November 15, 1954, Serial No. 468,990
6 Claims. (Cl. 260—586)

1. The process of removing a β-carboxyethyl side chain from a keto-acid of the structure



where R is a 4-carbon atom chain which forms a 6-membered fused ring as described, which comprises continuously adding the keto-acid to a melt of an alkali metal salt of a hydrocarbon monocarboxylic acid at approximately the rate at which the keto-acid's side chain is pyrolyzed and recovering a 1,8a - dimethyl - $\Delta^{10a(1)}$ - polyhydrophenanthren - 2 - one of the structure



where R has the significance aforedescribed, by distillation from the molten mass as it forms, the pressure during the pyrolysis being below atmospheric.

2,749,368
PRODUCTION OF ARALKYL HYDROPEROXIDES

Jan Pieter Fortuin, Amsterdam, and Hein Israel Waterman, Delft, Netherlands, assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application July 20, 1953, Serial No. 369,212
Claims priority, application Netherlands September 15, 1952
7 Claims. (Cl. 260—610)

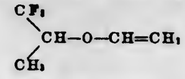
1. In a process for converting a hydrocarbon of the group consisting of alkyl-substituted benzene wherein the carbon atom in the alpha position with respect to the aromatic ring is a secondary carbon atom and tetrahydronapthalene to the corresponding hydroperoxide wherein the hydroperoxy group is attached directly to the carbon atom linked directly to the aromatic ring by the reaction of said hydrocarbon with an oxygen-containing gas, the improvement which comprises effecting said reaction in the liquid phase at a temperature in the range of from about 50° C. to the boiling temperature of said hydrocarbon in the presence of metallic copper.

2,749,369
FLUORINATED ETHER AND METHOD OF PRODUCTION

Ashton M. Lyon, Summit, and Julius G. Shukys, Chatham Township, Morris County, N. J., assignors to Air Reduction Company, Incorporated, New York, N. Y., a corporation of New York

No Drawing. Application May 28, 1952, Serial No. 290,583
5 Claims. (Cl. 260—614)

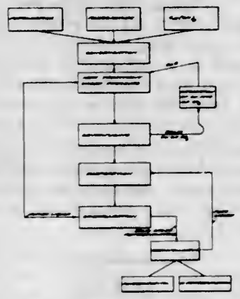
1. Trifluoroisopropyl vinyl ether having the formula,



2,749,370
PROCESS FOR THE RECOVERY OF PENTAERYTHRITOLS

Heinrich Brendlein, Wolfgang, near Hanau, and Walter Pohl, Frankfurt am Main, Germany, assignors to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfurt am Main, Germany, a corporation of Germany

Application February 27, 1952, Serial No. 273,736
Claims priority, application Germany February 28, 1951
13 Claims. (Cl. 260—615)



1. In a process for the recovery of pentaerythritols from an aqueous solution obtained in the condensation of formaldehyde and acetaldehyde containing pentaerythritols and the syrupy products obtained in such condensation the steps which comprise seating such aqueous solution to a temperature between 150° C. and 300° C. under a pressure from 15 to 200 atmospheres, separating the solid reaction products formed during the heat treatment under pressure and then recovering pentaerythritols from such solution.

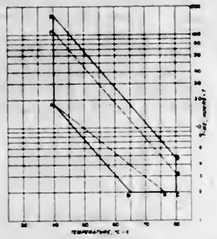
2,749,371
HYDROGENATION OF MONOSACCHARIDES

Leo Kasehagen, West Chester, Pa., assignor to Atlas Powder Company, Wilmington, Del., a corporation of Delaware

Application April 3, 1952, Serial No. 280,442
6 Claims. (Cl. 260—635)

1. The process of preparing a non-gelling, non-crystallizing high viscosity polyol composition which comprises introducing a monosaccharide containing from 5 to 6 carbon atoms and a hydroxide selected from the group consisting of alkali metal and alkaline earth metal hydroxides into water to form a mixture containing from 40 to 70% by weight of monosaccharide and from 0.15 to 0.4 hydroxyl equivalents of said hydroxide per liter; heating the resulting mixture to a temperature of from 40° C. to 80° C.; maintaining the mixture at the said temperature for a time corresponding to a time-tempera-

ture point within the polygon ABCDE of the drawing; adjusting the pH of the resulting solution to a value of from 7 to 5.0; and hydrogenating the resulting solution



in the presence of a hydrogenation catalyst, at a temperature of from 120° to 170° C. and at a pressure above 500 pounds per square inch.

2,749,372

TRICHLORODINITROBENZENES

Harry R. Dittmar, Royal Oak, Mich., assignor to Ethyl Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application July 15, 1952, Serial No. 299,015
3 Claims. (Cl. 260—646)

3. A one step process for the preparation of trichlorodinitrobenzene comprising reacting trichlorobenzene with a nitrating agent at a temperature between about 100° and 150° C., said nitrating agent comprising nitric and sulfuric acids admixed with up to about 4.2 per cent water, said nitric acid being present in an amount between about 100 and 150 per cent of the stoichiometric quantity, conducting said reaction for a period sufficient to provide a spent nitrating agent containing from about 6 to about 7.5 per cent water and a sulfuric acid to water ratio of between about 12:1 to 15.5:1.

2,749,373

ISOMERIZATION OF HEXACHLORO-CYCLOHEXANE

Robert H. Meyer, Concord, Calif., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application May 25, 1953, Serial No. 357,343
5 Claims. (Cl. 260—648)

1. The method which comprises heating benzene hexachloride with from 1 to 10 per cent of its weight of anhydrous aluminum chloride at a temperature in the range from 130° to 200° C. in a sealed vessel for a period of time which does not exceed one hour, thereby to alter materially the isomer ratio in the benzene hexachloride without substantial conversion of benzene hexachloride to trichlorobenzenes.

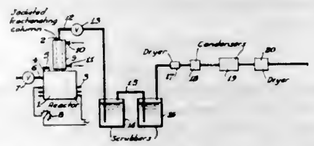
2,749,374

PRODUCTION OF METHYLENE FLUORIDE

Robert P. Ruh and Ralph A. Davis, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

Application February 24, 1950, Serial No. 146,141
7 Claims. (Cl. 260—653)

1. An improved method of producing methylene fluoride that comprises heating together in a closed zone at a temperature maintained between 110° and 175° C. under autogeneous pressure a mixture essentially comprising a methylene halide having a molecular weight between 84 and 174 and a fluorine-containing antimony halide of which at least 5 per cent of the antimony is in the pentavalent form and providing from 2 to 3 atoms of fluorine per molecule of the methylene halide, passing vapors from the zone into a superposed openly-communicating reflux fractionating zone cooled by indirect heat transfer to a temperature t (in degrees centigrade) between 15° and 45° C. into countercurrent contact with condensate forming therein and refluxing to the heating zone,



bleeding uncondensed vapor from the top of the fractionating zone at a rate such as to maintain the autogeneous pressure p (in pounds per square inch gauge) in the heating zone at a value sufficiently high to maintain methylene halide therein in the liquid phase and to satisfy the relation $\log t < 0.54 \log p + 0.215$, and recovering methylene fluoride from the vapor thus bled from the system.

2,749,375

FLUORINATION OF METHYLENE HALIDES

Robert P. Ruh and Ralph A. Davis, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application February 24, 1950, Serial No. 146,142
4 Claims. (Cl. 260—653)

1. An improved method of producing methylene fluoride that comprises heating together in a closed zone at a temperature maintained between 110° and 175° C. under autogenous pressure a mixture essentially comprising one molar proportion of a methylene halide having a molecular weight between 84 and 174, from two to three molar proportions of hydrogen fluoride, and a fluorine-containing antimony halide of which at least 5 per cent of the antimony is in the pentavalent form and at least 80 per cent of the halogen atoms of which are fluorine, passing vapors from the zone into a superposed openly-communicating reflux fractionating zone cooled by indirect heat transfer to a temperature t (in degrees centigrade) between 15° and 45° C. into countercurrent contact with condensate forming therein and refluxing to the heating zone, bleeding uncondensed vapor from the top of the fractionating zone at a rate such as to maintain the autogeneous pressure p (in pounds per square inch gauge) in the heating zone at a value sufficiently high to maintain methylene halide therein in the liquid phase and to satisfy the relation $\log t < 0.54 \log p + 0.215$, and recovering methylene fluoride from the vapor thus bled from the system.

2,749,376

SYNTHESIS OF 1,1-DIFLUORINATED HYDROCARBONS

Paul Tarrant and Marvin R. Lilyquist, Alachua County, Fla., assignors to the United States of America as represented by the Secretary of the Army

No Drawing. Application August 17, 1954, Serial No. 450,565
18 Claims. (Cl. 260—653)

1. The process of converting a compound having the general formula $Cl_3C.CHY^1.CBrY^2.CH_2Cl$ wherein Y^1 and Y^2 are members of the group consisting of hydrogen and methyl, into a compound having the general formula $FXC:CY^1.CY^2:CH_2$ wherein X is a member of the group consisting of chlorine and fluorine and wherein Y^1 and Y^2 have the same meanings as aforesaid, comprising reacting said first-named compound with a fluoro compound of antimony, whereby an intermediate compound

$$FXClC.CHY^1.CBrY^2.CH_2Cl$$

is obtained, wherein X, Y^1 and Y^2 have the same meanings as aforesaid, and debromochlorinating and dehydrochlorinating said intermediate compound.

17. 1-chloro-1-fluoro-butadiene.

18. A vulcanizable elastomeric polymer of 1-chloro-1-fluoro-butadiene.

2,749,377

3-CHLORO-1-IODO-PROPYNE-1

Howard Johnston, Concord, Calif., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application June 7, 1954, Serial No. 435,079
1 Claim. (Cl. 260—654)

3-chloro-1-iodo-propyne-1.

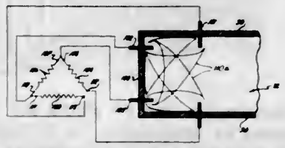
ELECTRICAL

2,749,378

METHOD AND APPARATUS FOR GLASS PRODUCTION

Harvey L. Peaberthy, Seattle, Wash.

Application January 8, 1954, Serial No. 402,873
27 Claims. (Cl. 13—6)



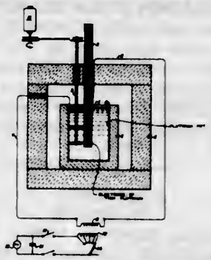
1. A method of manufacturing glass in a furnace which comprises heating the glass bath by heat from combustion and simultaneously heating the glass bath by Joule effect electric currents passing through said glass bath between electrodes within said furnace and near the walls thereof in such a manner as to liberate over one half of said Joule effect heat in a zone near the side and back walls of said furnace.

2,749,379

MEANS AND METHOD FOR THE ELECTRIC MELTING OF GLASS

Walter Geffcken, Landshut, and Carsten Eden, Mainz, Germany, assignors to Jenaer Glaswerk Schott & Gen., Mainz, Rheinland-Pfalz, Germany

Application June 3, 1953, Serial No. 359,447
Claims priority, application Germany June 6, 1952
12 Claims. (Cl. 13—34)



1. In the method for the melting of glass in an electrode furnace having electrodes in contact with a glass charge, by passing a heating current to the electrodes through the glass charge, the improvement which comprises applying an alternating heating current, having a frequency of at least 2,000 cycles per second across the electrodes.

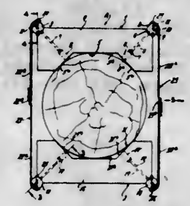
2,749,380

POLE GUARDS

Edward M. Harrington and Edward N. Anderson, St. Louis, Mo., assignors to James R. Kearney Corporation, St. Louis, Mo., a corporation of Missouri

Application August 31, 1951, Serial No. 244,632
2 Claims. (Cl. 174—5)

1. An insulating line pole guard comprising a pair of units including each a pair of vertically disposed sticks, a plurality of pole-engaging members secured to said pair of sticks, and a plurality of tensioning members arranged at two opposite sides only of the guard, each tensioning member comprising a pair of flexible elements, one flexible element of each tensioning member being secured at an end thereof to a vertical stick of one of said units and the other flexible element of said tensioning member being secured at an end thereof to a vertical stick of the other of said units, and fastening devices forming parts



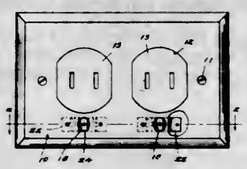
of said tensioning members and adapted to attach together the flexible elements thereof, said guard being capable of being opened at either of two opposed sides thereof for application to or removal from a pole without disturbing the tensioning member at the side of the guard opposite to the side at which the guard is opened by unfastening the flexible elements of the tensioning member at such side and without unfastening the flexible elements of the tensioning member at the opposite side of the guard.

2,749,381

SAFETY PROTECTIVE DEVICE

Robert E. Farish, Jr., Columbus, Ga.

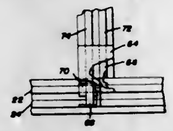
Application June 26, 1952, Serial No. 295,678
1 Claim. (Cl. 174—51)



In combination, an electrically conductive substantially quadrilateral outlet box having an open side, at least one electric outlet socket substantially centrally positioned within said outlet box, means electrically grounding said outlet box, and a cover plate for said open side of said outlet box, said cover plate having a substantially rectangular configuration and having a centrally positioned opening, said cover plate having a second opening formed therein, said second opening being of reduced dimensions with respect to said first opening and being positioned intermediate said first opening and an edge of said cover plate, a substantially U-shaped electrically conductive supporting bracket having the outer ends of the arms thereof electrically connected with a side of said cover

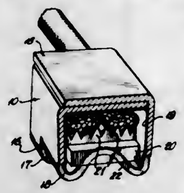
plate on opposite sides of said second opening, said bracket projecting laterally away therefrom with the bight portion of said bracket confronting said second opening in spaced confronting relation, a substantially U-shaped metallic second socket having outwardly convergent resilient arms, means electrically connecting the bight portion of said second socket with the bight of said bracket and the arm portions of said second socket disposed intermediate the arm portions of said bracket and being in spaced parallel relation relative thereto, electrically conductive means extending through said cover plate for securing said cover plate to said outlet box across said open side thereof with said first opening in registry with said first socket and said bracket projecting into said outlet box adjacent a side of said first socket, an elongated externally threaded plug having an enlarged substantially spherical head at an end thereof, said plug being insertable through said second opening with said head releasably secured between said arm portions of said second socket, said plug having a portion thereof projecting externally away from the other side of said plate, and an internally threaded cap threadedly mounted on the projecting portion of said plug.

2,749,382
FOIL STRIP WIRING SYSTEM
Ronald C. Lockard, Freeport, Pa.
Application September 8, 1952, Serial No. 308,461
1 Claim. (Cl. 174—71)



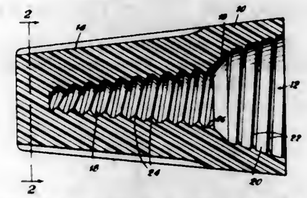
A connection for a wiring system comprising a sheet of insulating material, a pair of spaced apart parallel conductive foil strips secured on said sheet of insulating material, a short conductive foil strip extending into contact with the nearest foil strip of said pair of foil strips, an insulator placed over an adjoining portion of said nearest foil strip, another conductive foil strip extending over said insulator and contacting the remote foil strip of said pair of foil strips, and another sheet of insulating material overlying all of said foil strips.

2,749,383
ELECTRICAL CONNECTOR
Samuel S. Pigman and George J. Thompson, New York, N. Y.
Application July 2, 1952, Serial No. 296,978
8 Claims. (Cl. 174—84)
(Granted under Title 35, U. S. Code (1952), sec. 266)



2. An electrical connector comprising a metal housing formed as a cylindrical shell with an opening through each of its ends and with two adjacent transverse coextensive slots extending part way around said housing intermediate the ends thereof, the portion of said housing included between the slots being continuous and integral at its ends with the remainder of said housing, an electrically conductive bridging bar formed with a portion on one side thereof for biting into conductors, said bridging bar being positioned in said housing with its side opposite to its one side disposed contiguous with the portion of said housing between the slots whereby when a pair of wire conductors is in said housing, the portion of said housing between the slots may be deformed inwardly into V-shape to force said bridging bar into biting contact with the wire conductors.

2,749,384
PLASTIC CONNECTORS
William J. Scott, Sycamore, Ill., assignor to Ideal Industries, Inc., Sycamore, Ill., a corporation of Delaware
Application November 26, 1954, Serial No. 471,217
2 Claims. (Cl. 174—87)



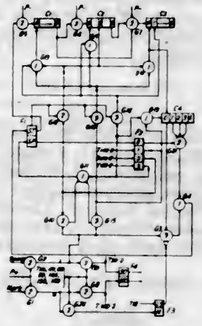
1. An insulating molded all plastic cap for covering and connecting by compression the stripped ends of a plurality of insulated electrical conductors or the like, comprising a shell of rigid insulating material formed with a generally conical exterior surface and a generally conical bore closed at its small end by an end wall and open at its large end to accept the stripped ends of the conductors, and a wire engaging surface in the bore of said shell integral with the shell and including an elongated threaded section with threads having predetermined, well rounded crowns so that they will smoothly groove and displace the metal of the conductors thereby forming interlocking threads in the wires without abrasion, the crowns of the threads having a predetermined radius between .002"–.005" and functioning as a non-abrasive metal working surface, the well rounded crown of each thread being spaced a sufficient distance from its adjacent crowns, the elongated threaded section having a pitch relative to and many times greater than the crown diameter, and the thread depth of the threaded section being a number of times greater than the crown diameter, such that a wide root cavity between adjacent threads is provided to receive and form an interlock with metal worked from the conductors by the pressure of rotating the cap as transmitted to the conductors through the well rounded crowns, the material of the cap including the integral wire engaging surface being an amino thermosetting plastic.

2,749,385
BUSDUCT
Frederick B. Adam, Huntleigh Village, Mo., assignor to Frank Adam Electric Company, St. Louis, Mo., a corporation of Missouri
Application January 5, 1951, Serial No. 204,556
2 Claims. (Cl. 174—99)



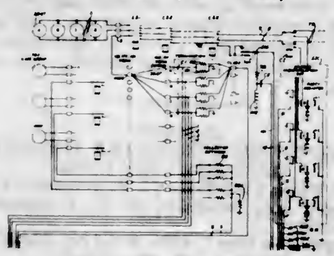
1. In busduct of the type wherein bus bars are embraced and thereby supported at spaced points along their length by insulators; the improvement which comprises said insulators being of generally rectangular outline, a pair of opposed channel members forming a closed loop which collectively encircles and marginally envelopes each of said insulators, a pair of telescoping duct sections with marginally overlapped side portions forming a confining enclosure for said loop, each of said channel members terminating at the sides of said enclosure and having a tongue at one end and a fastener connection at the other end, and screw fasteners extending through said overlapped side portions of said duct into engagement with the fastener connections of said channel members, said tongues being received within the channels of said channel members.

2,749,386
TELEGRAPH REPEATERS
Esmond Philip Goodwin Wright, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application January 23, 1953, Serial No. 332,817
Claims priority, application Great Britain February 8, 1952
8 Claims. (Cl. 178—70)



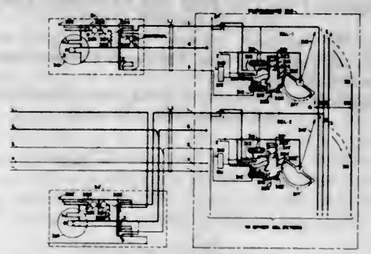
1. An electronic regenerative repeater for start-stop printing telegraph signal combinations transmitted at regular intervals comprising means for examining the elements of a received signal combination, a non-continuously running time base for determining the times at which said examination takes place, means for starting said time base into operation on receipt of each successive start element and means operative when a start element arrives at any other than its expected time for automatically adjusting the time base so as to determine the correct examination times for the remaining elements of the combination following the mis-timed start element.

2,749,387
TRANSLATING SYSTEM
Dick S. Barlow, Redondo Beach, Calif., and George B. Crofutt, Jr., Verona, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application July 9, 1952, Serial No. 297,888
14 Claims. (Cl. 179—18)



1. In a telephone system comprising subscriber stations and lines, automatic switches for establishing talking connections between calling and called subscriber lines and stations, each subscriber station being assigned a different multidigit directory number, means for identifying the directory number of any calling subscriber station, said means comprising a plurality of passive electrical elements each individual to a different one of said stations and each being connected to a conductor individual to the line serving said one of said stations, a network of conductors, each conductor of said network identifying a part of said directory numbers, each said element connected to a conductor of said network which identifies a part of the directory number of the station to which said element is individual, a grounded tone source, means for connecting said source to said conductor individual to the line serving any calling station, thereby to cause a signal potential to be applied to the particular conductor of said network which identifies a part of the directory number of said calling station, means for determining said particular conductor of said network to which said signal potential has been applied, and means for connecting ground potential to other conductors of said network to prevent false operation of said determining means.

2,749,388
AUTOMATIC INTERCOMMUNICATION TELEPHONE SYSTEM
Joseph F. Houdek, Jr., Elmhurst, Ill., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application April 12, 1952, Serial No. 281,997
8 Claims. (Cl. 179—20)

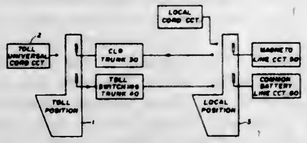


1. In an automatic intercommunicating telephone system, lines and switching devices individual thereto, respectively, means for operating any switching device over its individual line to extend a local connection to any desired called line, testing means operable in circuit with the local connection for determining and indicating that the local connection is extended to a busy called line, connecting means and means for operating it over the calling line either before or after said local connection is extended to the called line to connect the calling line to the local connection and to disable the testing means, means rendering the said operation of the connecting means dependent upon failure of the testing means to have indicated that the local connection has been extended to a busy called line, and means responsive to the operation of the said switching device to restore the said connecting means, if operated, whereby the calling line is disconnected from the local connection and the said disability of the testing means is terminated.

2,749,389
MANUAL TELEPHONE SYSTEM
Leon H. Reagan, Richland, Wash., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application December 30, 1952, Serial No. 328,707
7 Claims. (Cl. 179—41)

3. In a telephone system, a first operator's position having universal cord circuits which function with common battery and magneto line circuits, a second operator's position, a plurality of common battery and magneto

line circuits terminating at said second operator's position, each of said line circuits having talking and control conductors, the control conductors of said line circuits having characteristic electrical marking, a trunk circuit for interconnecting said first operator's position and a selected one of said line circuits by way of said second operator's position, said trunk circuit having incoming line and control conductors adapted to be connected to any one of said universal cord circuits at the first op-



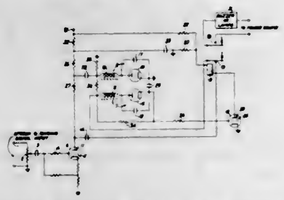
erator's position and outgoing talking and control conductors adapted to be connected to any selected one of said line circuits at the second operator's position, means in said trunk circuit providing a direct electrical connection between each of the incoming and outgoing talking conductors, and means in said trunk circuit for repeating the characterizing electrical marking of the selected line circuit from said outgoing control conductor to said incoming control conductor.

2,749,390

RINGING CIRCUIT FOR TELEPHONE LINE AND RADIO ORDER WIRE

Sidney W. Lewinter, Verona, N. J., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland

Application December 2, 1952, Serial No. 323,558
10 Claims. (Cl. 179—84)



1. A ringing circuit to which both speech and ringing signals are applied comprising control means having non-concurrent ringing and non-ringing conditions, frequency sensitive means responsive to speech signals to develop a first voltage, means coupling said first voltage to said control means to maintain said control means in said non-ringing condition during occurrence of speech signals, and frequency sensitive means responsive to ringing signals to develop a second voltage, means coupling said second voltage to said control means to change said control means from said non-ringing condition to said ringing condition, said control means including means operable in said ringing condition to interrupt the operation of said means responsive to speech signals.

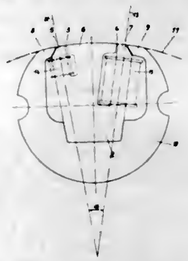
2,749,391

DEVICE FOR THE PURPOSE OF CLAMPING A FOIL, INSERTED INTO THE GAP FORMED BY BOTH OF THE POLE ENDS OF A SOUND TOP FOR MAGNETIC SOUND IMPLEMENTS

Paul Gumbert, Pforzheim, Wurttemberg-Baden, Germany, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware

Application May 22, 1952, Serial No. 289,415
Claims priority, application Germany May 23, 1951
4 Claims. (Cl. 179—100.2)

1. A magnetic recording head comprising a magnetic core having at least two leg portions separated by a gap, a foil mounted in said gap, means for clamping said foil firmly in said gap comprising a bifurcated resilient clamp member, the end portions of said clamp member pressing against the two legs of said core, and portions of said



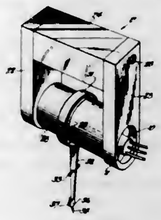
clamp member adjacent said leg portions defining a circular running surface for a recording medium, the running surfaces of said core and said clamp having a common center of rotation.

2,749,392

DEVICE FOR CONVERTING MOTION INTO ELECTRICAL ENERGY

Albert E. Shaw and Robert J. Moon, Chicago, Ill., assignors, by mesne assignments, to Louis Bernat, doing business as Physics Research Associates

Original application August 16, 1946, Serial No. 690,992. Divided and this application September 22, 1952, Serial No. 312,754
8 Claims. (Cl. 179—100.41)



1. A device for converting mechanical motion into electrical energy comprising a magnet including a substantially U-shaped yoke and a hollow cylindrical pole piece attached to the legs of said yoke and intermediate thereof, said piece having a peripheral groove substantially midway of its length, a diode supported within said piece and positioned with the central transverse plane of the cathode and anode substantially in alignment with said recess, means for causing electron flow between said cathode and anode, a magnetically permeable annular member surrounding said recess, means interconnecting said member with the source of motion whereby said motion will actuate said member axially of said piece, an electrical circuit for supplying input current to said diode, and an electrically responsive circuit for receiving the output of said diode.

2,749,393

MOLDED SOUND REPRODUCER AND METHOD OF MAKING THE SAME

Harold O. Fuchs, Carle Place, N. Y., assignor to Pickering Associates, Inc., Oceanside, N. Y., a corporation of New York

Application May 1, 1951, Serial No. 224,029
6 Claims. (Cl. 179—100.41)

1. A method of forming a unitary sound reproducer cartridge having parts for sound reproduction including moving parts comprising the steps of mounting the sound reproducing parts in a mold, inserting a hollow shaft of said mold within the coil of said sound reproducing parts,

immersing at least part of the moving parts of said sound reproducer in a core of a grease substance having a Saybolt viscosity of 100 or more, casting a resin in said mold at a temperature below 150° F. substantially completely enclosing said reproducer parts and said core in said



one piece resin casting and removing said casting and said enclosed core and parts from said mold and removing said hollow shaft from said coil and said one piece resin casting to provide a small access passage from said reproducer parts through said casting.

2,749,394

DEVICE FOR AMPLIFICATION OF BOTH VOICE AND SIGNALLING VOLTAGES

Lars Bernhard Person and Carl Henric Von Sivers, Stockholm, and Kurt Reid Wadö and Klas Rudolf Wickman, Högersten, Sweden, assignors to Telefonaktiebolaget L M Ericsson, Stockholm, Sweden, a company of Sweden

Application April 11, 1952, Serial No. 281,931
Claims priority, application Sweden April 24, 1951
4 Claims. (Cl. 179—171)



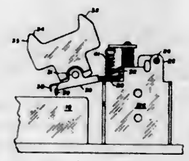
1. In a device for the amplification of voltages above a given frequency, an eelctron tube, a cathode in said tube, a feedback network having a high impedance for voice voltages and a low impedance for voltages of a lower frequency connected at one end to said cathode, a source of high negative voltage, a circuit connecting said source to the other end of said network, a resistance in said circuit having a value so great that the direct current of the tube is held approximately constant, a condenser having an impedance which is low for voice voltages but high for signalling voltages connected to the said other end of said network and to ground, a biasing voltage source, a diode connected directly between the biasing voltage source and the said other end of said network.

2,749,395

TELEPHONE SUBSET

Louis W. Droel and Thaddeus W. Kucharski, Rochester, N. Y., assignors, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware

Application April 23, 1952, Serial No. 283,941
12 Claims. (Cl. 179—178)



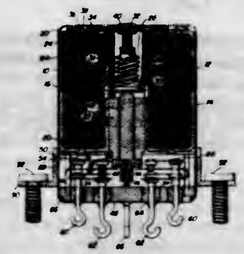
1. In a telephone subset, a base, a support carried by said base, a set of contact springs carried by said support, a plunger member for effecting the operation of said springs, means for pivotally carrying said plunger member from said support, a dial assembly, and means utilizing said pivotal means for also pivotally supporting said dial assembly.

2,749,396

CONTACT STRUCTURE FOR RELAYS AND THE LIKE

John H. Horman, Tuckahoe, and Edward C. Hoell, New York, N. Y., assignors to Allied Control Co., Inc., New York, N. Y., a corporation of New York

Original application February 28, 1952, Serial No. 273,692. Divided and this application January 2, 1953, Serial No. 329,284
4 Claims. (Cl. 200—1)



1. A terminal header and contact assembly for an electromagnetically operated switch comprising, a disc, contact terminals secured in and extending through said disc and insulated from one another, said terminals being arranged on spaced concentric circles, the number of terminals in the outer circle being double the number in the inner circle, groups of contact members mounted on said terminals, each of which groups consists of a U-shaped movable contact member secured at one end to a terminal on the inner circle and extending therefrom outwardly toward the edge of the disc and thence back toward the central portion of the disc, and two contact members supported on adjacent terminals on the outer circle and converging toward one another and extending on opposite sides of the movable contact member of the group.

2,749,397

WEAR-SAVING CONTACT STRUCTURE FOR ROTORS OF COUNTING DEVICES AND THE LIKE

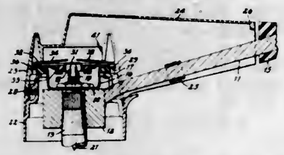
Ralph E. Brown, Los Angeles, Calif., assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif.

Application November 21, 1952, Serial No. 321,800
9 Claims. (Cl. 200—26)



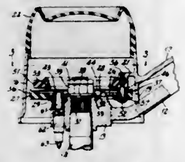
1. In a computing device of the character described having a rotor, a stator surrounding the rotor, fixed contact means on said stator and contact means on said rotor to cooperate with the fixed contact means, the combination therewith of: a leaf spring anchored to said rotor and having a radially movable portion supporting said rotor contact means, said radially movable portion being biased to urge said rotor contact means outward against said fixed contact means; and centrifugal weight means spacedly connected with said leaf spring to draw said biased portion inward in response to rotation of the rotor, thereby to lessen the pressural engagement of said rotor contact means with said fixed contact means.

2,749,398
STEERING WHEEL SWITCH
Frederick W. Sampson, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application September 13, 1954, Serial No. 455,525
2 Claims. (Cl. 200—61.56)



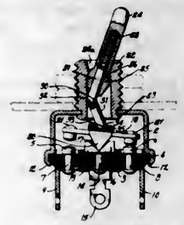
1. In combination, a steering column of an automobile including a hollow shaft therein, a steering wheel having a hub portion fitting over the upper end of said shaft, a switch supporting cup member also fitting over the upper end of the shaft of said column, means for locking said steering wheel and said cup member to the upper end of said shaft for rotation therewith, a spring pressed terminal above the hub of said wheel within said cup member and having an electrical connection through said hollow shaft with a horn, a horn sounding ring having an integral hollow cap-shaped hub portion above said column and closing the upper end thereof, a switch within the hollow cap-shaped hub portion of said ring above said cup member, said switch including a stationary contact and a snap acting spring contact, said stationary contact being supported upon said cup member and engaging said terminal, said spring contact being insulated from said stationary contact and disposed between the same and a part of the cap-shaped hub portion of said ring, means for securing the hub portion of said ring to said column, said last named means being detachable from said column to permit said ring to be removed therefrom without unlocking said steering wheel from said shaft, said spring contact being snapped into engagement with said stationary contact upon depressing said cap-shaped hub portion of said ring to complete an electric circuit to the horn, and means for retaining both of said contacts within the hollow cap-shaped hub portion of said ring upon removal of the ring from said column to separate said switch as a unit from said terminal.

2,749,399
STEERING WHEEL SWITCH
Frederick W. Sampson, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application September 13, 1954, Serial No. 455,526
3 Claims. (Cl. 200—61.56)



1. In combination, a steering column of an automobile, a steering wheel having a hub mounted on the steering shaft of said column, a movable horn blowing ring having an integral hollow hub portion on said steering column, a switch actuated by said ring, a terminal carried by the hub of said steering wheel and associated with said switch, said terminal having an electrical connection with a horn, said switch comprising a stationary contact mounted upon said steering wheel hub and a snap acting spring contact associated with said stationary contact and engaging said terminal, means for mounting said spring contact within the hollow hub portion of said ring, said means including a rigid insulating member stationarily secured to the peripheral edge of said stationary contact and provided with a raised peripheral shoulder, said means also including another rigid insulating member stationarily secured to the integral hollow hub portion of said ring, said spring contact being disposed between said insulating members and having its peripheral edge supported on the raised shoulder of said stationary insulating member, said another insulating member being movable relative to said stationary insulating member to engage said spring contact inwardly of its supported peripheral edge to cause same to snap into engagement with said stationary contact and complete an electric circuit to the horn, and said another insulating member being moved in response to a force applied to said ring.

2,749,400
TOGGLE SWITCH
Kenneth J. Chichester, Stamford, Conn., assignor to Talon, Inc., a corporation of Pennsylvania
Application December 29, 1953, Serial No. 401,018
5 Claims. (Cl. 200—67)

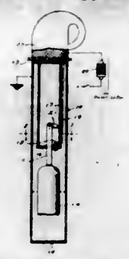


1. In a switch of the class described, a casing, a base attached to said casing having at least a pair of fixed contacts with one arranged at opposite ends thereof, a tiltable contact member arranged in said casing engageable alternately with said fixed contacts, current carrying fulcrum means tiltably supporting said contact member centrally thereof, comprising a member carried by said base having a pair of spaced apart flange portions carried thereby with each of said flange portions having substantially a V-shaped notch arranged therein, said contact member having a pair of spaced apart substantially V-shaped projections carried thereby spaced apart substantially the same distance as said flange portions and which are positioned in the V-shaped notches of said flange portions, actuating means for tilting said contact member consisting of a manually operated lever having a plunger slidably arranged therewith, a pin member arranged and extending between the outer end of said plunger and the center of said contact member, said pin member having an engaging portion at one end thereof which engages with the end of said plunger and an arcuate end portion on the opposite end which engages with a concavity arranged centrally of said contact member, and spring means urging said plunger in engagement with said pin member which in turn urges said pin member in engagement with said contact member.

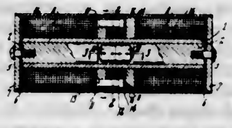
2,749,401
OIL SAFETY MEASURING ROD
Frank G. Castner, Bridgeport, Ohio, assignor to Tirips Corporation, Steubenville, Ohio, a corporation of Ohio
Application July 27, 1953, Serial No. 370,348
2 Claims. (Cl. 200—84)

1. A ullage rod of the type for measuring the oil depth in the crankcase of an internal combustion engine comprising an elongated tubular member adapted to be immersed in the oil to be measured, said member having indicia formed on the outer surface thereof to indicate the depth of the oil in which the member is immersed, a handle detachably secured to one end of said member, said

member having the opposite end thereof open, an electric contact, means fixedly supporting said contact in said member above the open end thereof, a float, an elongated stem fixed to said float and projecting upwardly therefrom, means on said contact supporting means for supporting and guiding said stem for vertical reciprocation therein, and a movable contact carried by the upper end of said stem, said movable contact being engageable with said fixed contact upon movement of said float toward the open end of said member.

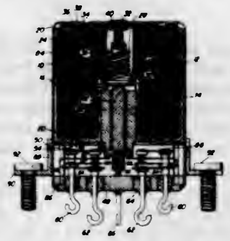


2,749,402
RELAY
William L. Tancred, Hartford, Conn., assignor to The W. N. Borg Corporation, Hartford, Conn., a corporation of Connecticut
Application November 9, 1951, Serial No. 255,721
8 Claims. (Cl. 200—98)



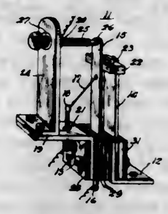
1. A relay comprising a tube of non-conducting material, a pair of magnetizable cores arranged in coaxial relation within said tube and spaced apart a predetermined distance, a pair of magnetizable armature elements magnetizable upon energization of said cores and slidably guided within said tube and together of insufficient length to bridge the space between said cores, means biasing said armatures toward one another and out of contact with at least one of said cores when said cores are unenergized, and axially spaced solenoids surrounding said cores and when energized causing said armatures to be separated from each other and each to contact with its respective core.

2,749,403
ELECTROMAGNETIC RELAY
John H. Horman, Tuckahoe, and Edward C. Hoell, New York, N. Y., assignors to Allied Control Co., Inc., New York, N. Y., a corporation of New York
Application February 28, 1952, Serial No. 273,962
6 Claims. (Cl. 200—104)



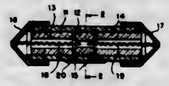
1. In an electromagnetic switch of the type having a hollow magnetizing coil with a fixed core occupying part of the space within said coil, armature means adapted to coact with said core when said coil is energized, said means comprising a hollow cup-shaped armature positioned in the remaining space within said coil with its closed end toward said core, a tension spring positioned within said armature and having one end attached to said armature adjacent its closed end, said armature having a thin side wall which is deformed inwardly to engage the end portion of said spring which is attached to said armature, and fixed anchoring means for the other end of said spring extending across the open end of said armature whereby said armature is held away from said core in its deenergized condition.

2,749,404
ELECTRICAL TIMING APPARATUS
Charles H. Flubacker, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a corporation of Illinois
Application August 8, 1952, Serial No. 303,297
4 Claims. (Cl. 200—113)



1. In electrical timing apparatus, an elongated longitudinally deformable resilient member fixed at one end, the free end having an actuated position and a normal unactuated position, an electrical contact mounted in spaced relation to the free end of said resilient member to be engaged thereby, magnetic means disposed adjacent said free end to maintain said resilient member in the unactuated position, and a flexible conductor having a substantial thermal expansion and having one end thereof secured to a point on said resilient member intermediate said fixed end and said free end and the other end fixed in spaced relationship to said resilient member, said flexible conductor being normally tensioned to maintain said resilient member in the actuated position under longitudinal tension whereby the thermal expansion of said conductor will cause said resilient member to move to the unactuated position to be maintained there by said magnetic means.

2,749,405
ELECTRIC FUSES
Richard Kellendorfer, Munich, Germany, assignor of one-third to Siegfried Skambraks and one-third to Erik Strasser, both of Munich, Germany
Application April 27, 1954, Serial No. 425,951
8 Claims. (Cl. 200—113)



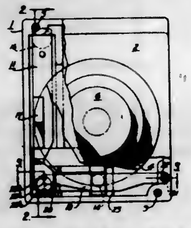
7. An electric fuse comprising in combination a closed casing; in said casing a member made of an electrically insulating material and including a capillary adapted to receive and to hold by capillary action a filament of an electrically conductive liquid medium; said capillary having at either end continuing widened portions open at their outer ends; two electrodes reaching into the middle portion of said capillary from opposing ends thereof; and electric leads to said electrodes.

2,749,406
THERMAL WATTAGE CONTROLLER

Daniel E. Clapp, Philadelphia, Pa., assignor to Proctor Electric Company, Philadelphia, Pa., a corporation of Pennsylvania

Original application September 11, 1951, Serial No. 246,098, now Patent No. 2,673,444, dated March 30, 1954. Divided and this application July 8, 1953, Serial No. 371,350

4 Claims. (Cl. 200—113)



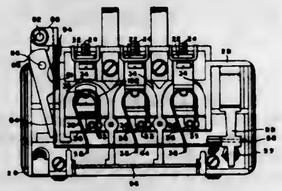
1. In a wattage input controller operable over a range of inputs, a manually adjustable cam for selecting a wattage input within said range, an adjustable member fulcrumed on said cam, thermomotive means adapted to be prestressed by said member so as to provide a predetermined wattage input, said thermomotive means including a current conducting element, current-controlling contacts controlled by said thermomotive means and serving to control flow of current to said element, an ambient compensating member adapted to bear against said adjustable member to vary its position in accordance with ambient temperature changes, and means for varying the point of contact of said compensating member with said adjusting member to correct for errors in range of input as controlled by said cam.

2,749,407
SINGLE PHASING PREVENTOR

James Rignell Walton, Harpenden, James Neil Burke, Barnet, and Arnold Walton Cure, St. Albans, England, assignors to The Electrical Apparatus Company, Limited, St. Albans, England, a company of Great Britain

Application October 15, 1953, Serial No. 386,352

8 Claims. (Cl. 200—116)



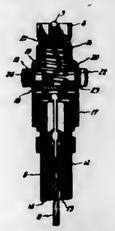
1. In a protective device for electric circuits, operating mechanism for said device including a circuit controlling switch, a plurality of thermally responsive elements and means for operating said switch in response to the condition of said elements; heaters for said elements, respectively, energized by the currents in said circuits, respectively, and means for removably mounting said heaters in said device independently of said operating mechanism, whereby said heaters are replaceable without interference with said operating mechanism, said thermally responsive elements being flexible bimetal members, and said heaters each being mounted in spaced thermal relation with an associated bimetal member and independently thereof, said bimetal members each having a loop defined therein and each heater being mounted within the loop of its associated bimetal member.

2,749,408
FUSEHOLDER HAVING A SPRING LOADED CAP

Harvey S. Billings, Jr., Dalton, Mass., assignor to General Electric Company, a corporation of New York

Application February 25, 1954, Serial No. 412,428

3 Claims. (Cl. 200—127)



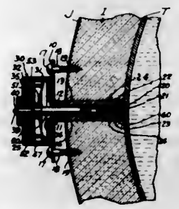
1. An expulsion fuse comprising a tubular member open at one end thereof and closed at another end thereof by a combination current carrying contact and latching mechanism cap, said cap comprising another tubular member centrally traversed interiorly thereof by a stop wall, said another tubular member fixed at one end thereof to said closed end, and a movable dome-shaped member movably connected to another end of said another tubular member for telescopic lost motion movement therein, a compressed spring disposed between said stop wall and said dome-shaped member continuously biasing said dome-shaped member for outward telescopic movement away from said stop wall, an endmost portion of said another tubular member another end having an inturned flange thereon cooperative with an outturned flange formed on an endmost portion of said dome-shaped member to limit said outward movement, said tubular member having expulsive current interrupting means therein electrically connected to said another tubular member, said endmost portion of said dome-shaped member cooperative with said stop wall to limit inward telescopic movement of said dome-shaped member towards said stop wall.

2,749,409
OVERHEAT CONTROL DEVICE

Oscar J. Kay, Glendale, Calif.

Application May 27, 1955, Serial No. 511,629

9 Claims. (Cl. 200—142)



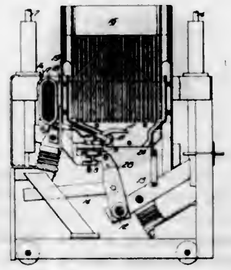
1. An overheat control device for liquid heating apparatus having a tank in which liquid is heated comprising: an element composed of a material fusible at a predetermined temperature; means mounting said element for movement; means co-acting with said mounting means to urge same to move in a direction to maintain said element directly in physical pressing engagement solely with the exterior surface of a wall of the tank so as to leave the wall structurally intact subject the element to heat conducted by the wall from liquid in the tank; means for activating an instrumentality; and means operatively connected to said mounting means to effect activation of said instrumentality when said mounting means is moved by said urging means upon fusing of said element.

2,749,410
ARC CHUTE WITH PERFORATED BARRIER PLATES HAVING STAGGERED SLOTS

Donald E. Weston, Brookline, Mass., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.

Application August 12, 1952, Serial No. 303,988

7 Claims. (Cl. 200—144)



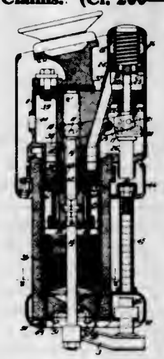
1. An electric circuit interrupter comprising relatively movable contacts, means for drawing an arc between said contacts, and an arc chute for receiving and extinguishing the arc, said chute comprising a plurality of groups of notched spaced insulating plates arranged to extend longitudinally of the axis of said chute with the notches in the edges of said plates arranged adjacent the zone of arc initiation to form an arc passage, at least one of said groups comprising a first plate having the apex of said notch arranged near the longitudinal axis of said plate and providing a plurality of spaced apertures arranged adjacent the apex of said notch and extending toward the exhaust end of said chute, and second and third plates having said notches arranged in staggered relation to each other and with respect to the longitudinal axes of said second and third plates for causing the arc to elongate as it moves through said chute.

2,749,411
CIRCUIT BREAKER WITH ELECTRODE DISPOSED BETWEEN AN INTERRUPTING DEVICE AND A CONTACT OPENING

Arthur C. Kelle, Stoughton, Mass., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.

Application April 27, 1953, Serial No. 351,406

6 Claims. (Cl. 200—150)



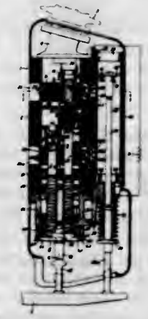
1. An electric circuit breaker comprising an insulating arc extinguishing liquid, an arc interrupting blast chamber immersed in said liquid, cooperating fixed and movable contacts comprising arcing surfaces separable in said chamber to interrupt the circuit, said chamber comprising a nozzle shaped opening for said movable contact, an arcing electrode arranged within said chamber and comprising a plurality of finger like probes extending toward the axis of said chamber, a resistor associated with said chamber and electrically connected between said fixed contact and said electrode, and means for separating said contacts so that the circuit through said contacts is interrupted while said movable contact is moved through said opening, said movable contact's arcing surface passing said arcing electrode before passing through said opening, said resistor being arranged to shunt said contacts upon current flow between said arcing electrode and the body of said movable contact whereby said resistor is inserted in the circuit to be interrupted.

2,749,412
ELECTRIC CIRCUIT INTERRUPTER

George C. McBride, Drexel Hill, and Harold N. Schneider, Springfield, Pa., assignors to General Electric Company, a corporation of New York

Application September 17, 1953, Serial No. 380,716

8 Claims. (Cl. 200—150)



1. In an electric circuit interrupter comprising casing means enclosing a plurality of pairs of relatively movable contacts, a reciprocable crosshead supporting one contact of each of said pairs of contacts in spaced-apart substantially parallel relationship, a pair of isolating contacts electrically connected in series with said plurality of pairs of contacts, one of said isolating contacts being supported by said crosshead, guide rod structure cooperating with said casing means for assuring straight line motion of said crosshead, said guide rod structure being supported by said crosshead and extending in substantially parallel relationship to the contacts carried by said crosshead, abutment structure mounted on said guide rod structure, and a yieldable buffer interposed between said casing means and said abutment structure so as to limit separation of said relatively movable contacts.

2,749,413
ELECTRIC SWITCH

Lee T. Bordner, Los Angeles, Calif.

Application October 6, 1952, Serial No. 313,322

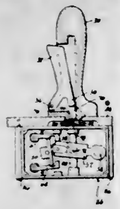
6 Claims. (Cl. 200—152)



1. In an electric switch, a mercury button, a recessed switch housing having two spaced coaxial recesses for

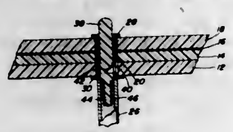
reception of the button, and also having two spaced side embossments with cylindrical forward ends coaxial with and diametrically opposite the recesses, an operating handle oscillatable with the mercury button, and means for holding the handle in constant engagement with the cylindrical ends of the two embossments, and for holding the button in light engagement with the two recesses.

2,749,414
CLUTCH RELEASE CONTROL FOR CLICKING MACHINE
Edgar Haas, New York, N. Y., assignor to Herman Schwabe, Inc., New York, N. Y., a corporation of New York
Application August 12, 1952, Serial No. 303,903
8 Claims. (Cl. 200—157)



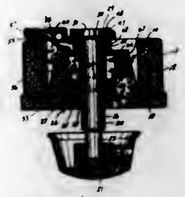
1. A clutch release control for the swinging cutting beam of a clicking machine, said control comprising an upwardly projecting generally upright handle which is round in horizontal section and comparable to conventional clicking machine handles in being openly accessible from above to receive a full-hand grip, said handle having a generally upright clutch control lever projecting radially therefrom and movable into or out of the body of the handle, said lever being pivoted at its lower end near the rim of the handle and functioning as an angle lever to provide a vertical movement axially of the handle beneath the handle, and an electrical switch disposed beneath the handle for operation by the resulting vertical movement.

2,749,415
SWITCH OPERATING MECHANISM
James E. Davis, Arcata, Calif.
Application December 4, 1952, Serial No. 324,156
3 Claims. (Cl. 200—167)
(Granted under Title 35, U. S. Code (1952), sec. 266)



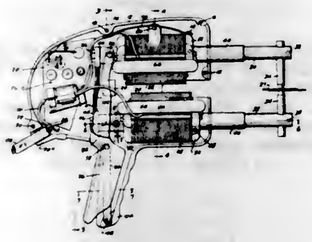
1. In a lighting facsimile map control panel system, a light transmissive control panel having a plurality of openings spaced at random therethrough; a tubular casing having a window in the wall thereof positioned transversely to said panel in each of said openings with said casing window opposite to and included by the wall of the panel opening; a switch slidably mounted in each casing comprising electrical contact elements, a push rod operatively connected to said elements for opening and closing the same, and a light conductive and un-shielded push-button connected to said rod and projecting externally from said panel and provided with a deflecting surface for transmitting light received through said window to the entire external and exposed area of said push-button; and single means for transmitting light through said panel only to the entire external area of each casing inside the panel opening as defined by a circumferential band including said window when said switch is closed.

2,749,416
RHEOSTAT
Horace McKay Steele, Huntington, Ind., assignor to Model Engineering & Manufacturing, Inc., Huntington, Ind., a corporation
Application March 2, 1953, Serial No. 339,667
6 Claims. (Cl. 201—48)



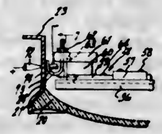
1. In a rheostat having a base member for supporting an annular resistance coil, a brush control assembly adapted to be rotatably mounted in said base comprising a shaft, a square hub mounted on said shaft and including a head having an internal rectangular recess therein, a rectangular driving plate fixed to the end of said shaft and engaging the walls of said rectangular recess with positive pressure for providing positive engagement between said shaft and said hub, a brush holder mounted on said hub and including a rectangular aperture for receiving the square portion of said hub, said holder including an ear engaging said head and oppositely disposed ear portions bent to exert pressure on said hub to provide positive engagement between said hub and said holder.

2,749,417
PORTABLE ELECTRIC SPOT WELDER
Philip R. Griskell, Oak Lawn, Ill.
Application December 26, 1952, Serial No. 328,083
5 Claims. (Cl. 219—4)



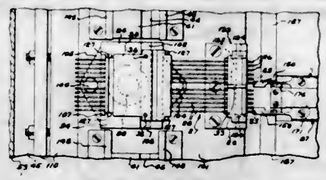
1. A manually operable portable electric spot welder comprising a housing consisting of two similar halves bolted together, said housing having a pistol grip extending downwardly therefrom a stationary transformer having an electrode mounted in the lower part of said housing and a pivoted transformer having an electrode mounted thereabove in the upper part of said housing, a leaf spring normally holding said upper electrode in inoperative position, each of said transformers having a copper electrode holder extending axially therethrough, the back ends of said electrode holders having a conduit connecting the same together, the other ends of said electrode holders extending forward through openings in the front of said housing, a welding electrode mounted transversely in the forward end of each of said holders, and a lever pivotally connected to the upper electrode holder and to the bottom of the pistol grip on said housing, said lever normally held in open position by said leaf spring.

2,749,418
APPARATUS FOR POSITIONING AND WELDING SUPPORTS IN A CYLINDRICAL STRUCTURE
Clarence H. Mattson, Paradise, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Application September 14, 1954, Serial No. 455,965
14 Claims. (Cl. 219—4)



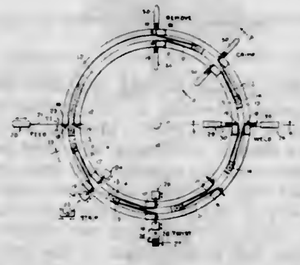
1. Apparatus for mounting in a predetermined plane shadow mask supports on the inner wall of a cylindrical member of a spherically contoured face plate assembly of a color cathode-ray tube for supporting a spherically contoured shadow mask a predetermined uniform distance from said face plate, said apparatus comprising a structure including a movable disc, holders mounted on one face of said disc and adjacent to the periphery thereof, and adapted to hold said supports, engaging means fixed to and extending from the opposite face of said disc and adapted to engage the inner face of said face plate when said disc is extended into said member in coaxial relation therewith and with said opposite face of the disc adjacent to said face plate, said engaging means and said holders having a dimension normal to said disc equal to the spacing between said plane and said face plate, whereby said holders are disposed in said predetermined plane when said engaging means engages said face plate, said holders being movable radially and away from the center of said disc to cause said supports to engage said inner wall in said predetermined plane, and means fixing said supports to said inner wall in said predetermined plane.

2,749,419
MACHINE FOR WELDING CONTACTS ONTO SWITCH PARTS
Einer W. Larsen, Elmhurst, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application April 7, 1953, Serial No. 347,335
14 Claims. (Cl. 219—4)



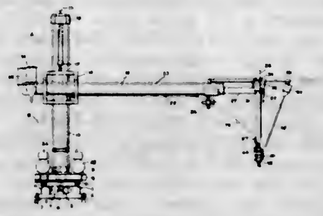
1. In an apparatus for welding contacts onto a plurality of wires of a switch part, the combination of a welding head having means for supporting a contact for movement therewith, means for feeding contacts to said welding head, a holder for supporting said switch part in a predetermined position with one of said wires in the path of movement of said welding head, means operable in timed relation to said contact feeding means for intermittently advancing said holder to align successive wires of said switch part with said welding head, means for electrically connecting said welding head and successive ones of said wires to a source of current, and means operable in timed relation to said contact feeding means for successively propelling the welding head through a predetermined path to thrust successive contacts therein against the wires aligned therewith to complete welding circuits for percussively welding the contacts onto said wires.

2,749,420
METHOD OF AND APPARATUS FOR ATTACHING TERMINALS TO THE ENDS OF WIRES
Albert F. Pityo, Cedar Grove, N. J.
Application April 6, 1954, Serial No. 421,263
12 Claims. (Cl. 219—4)



1. The method of securing terminals to the ends of a section of insulated wire, comprising holding the wire near one end, drawing the wire while holding the same near its end and looping the wire upon itself, holding the wire at a second point, severing the wire at a point near and spaced from the second point, removing the insulating material from the end portions of the wire to form uncovered metallic portions, twisting the uncovered end portions, inserting the uncovered twisted end portions into tubular terminals, and welding the twisted end portions to the inner portions of the tubular terminals.

2,749,421
WELDING HEAD POSITIONER
John Mikulak, Chatham, and Hughe Wotitzky, North Arlington, N. J., assignors to Worthington Corporation, Harrison, N. J., a corporation of Delaware
Application June 17, 1954, Serial No. 437,452
5 Claims. (Cl. 219—8)



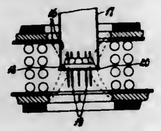
1. In an automatic welding head positioner including a carriage, a turntable rotatably mounted on said carriage, a vertical column supported by said turntable, a transverse member mounted on said vertical column having horizontal and vertical movement relative to said column, and means for adjusting and holding the position of said transverse member on said column, the combination with said transverse member of a motor operated welding stick movably mounted thereon, a welding head, a suspension assembly hingedly connected to said welding stick, means for mounting said welding head on said suspension assembly, including a mounting plate having loops thereon, a shaft extending thru said loops, a bracket assembly slidably mounted in said suspension assembly, said shaft loosely carried by said bracket assembly to permit said mounting plate to swing therein, limit switches actuated by the movement of said welding head energizing said motor operated welding stick for raising and lowering.

2,749,422
METHOD OF ASSEMBLING SHEET METAL ELEMENTS BY WELDING
Leon Saives, Billancourt, France, assignor to Regie Nationale des Usines Renault, Billancourt, France
Application July 17, 1953, Serial No. 368,754
Claims priority, application France July 31, 1952
4 Claims. (Cl. 219—10)



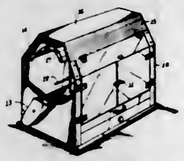
3. A method of butt welding two sheet metal parts which comprises providing a heat-conductive support having a shallow channel therein, placing a wire of fusible metal in said channel positioning said sheet metal parts on said support with the edges of said sheet metal parts overlying said wire, clamping said sheet metal parts between said support and two heat-conductive clamp members which overlie said parts and said support, and applying welding heat to said edges to fuse said edges together and to fuse said wire whereby by the capillarity action of the molten metal said wire is united with said edges to form a head extending along the weld line.

2,749,423
DEVICE FOR HIGH-FREQUENCY HEATING
Karl August Bisterfeld, Hamburg-Volksdorf A, Germany, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application May 16, 1952, Serial No. 288,286
Claims priority, application Germany August 1, 1951
5 Claims. (Cl. 219—10.43)



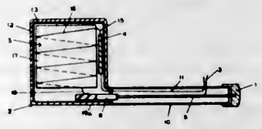
2. A high-frequency heating device for heating selected areas of a workpiece comprising a hollow induction coil having a central axis and including a coil turn at one end thereof defining a flat given plane extending at right angles to said axis, and an annular disc-shaped ferromagnetic body having a slit extending completely therethrough and an electrical resistance to high-frequency currents in excess of 10^5 ohm-cm. for concentrating the magnetic flux produced when high-frequency currents traverse said coil, said ferrogmagnetic body being mounted in a plane parallel to and axially spaced from said given plane at said one end wholly outside said coil from an axial direction, the interior of said coil being free of material to enable said workpiece to be positioned therewithin.

2,749,424
ELECTRICAL HEATING APPARATUS
Francis L. Dieterich, Culver City, Calif.
Application March 5, 1954, Serial No. 414,466
16 Claims. (Cl. 219—35)



6. In a barbecue rotisserie including an insulated housing having spit means mounted within the housing, an electrical heating apparatus for concentrating heat radiation substantially in the area of said spit, comprising: an elongated substantially semi-cylindrically shaped integral block made up of elements of heat producing semi-conductive material, and alternate members of insulative non-heat-producing material, each of said elements having cup-like depressions in each end thereof; a metallic coating on the surface of each of said depressions bonded to said elements and in electrical contact therewith; an electrical contact member for each of said depressions, each of said contact members having a portion corresponding in shape to the shape of said depressions and receivable within said depressions to make electrical contact with said coatings; and a flat supporting spring for each of said contact members, one end of said spring being secured to said contact member, and the other end of said spring being secured to said housing, said springs normally urging said contact members into pressure engagement with said coatings and serving also to support said block within said housing.

2,749,425
IMMERSION HEATER
Jessie L. Steiger, Chicago, Ill.; now by change of name Jessie L. Sherwood
Application January 8, 1953, Serial No. 330,330
6 Claims. (Cl. 219—41)



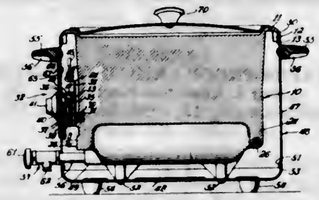
3. In an electric immersion heater, a differentially heat conducting metallic casing comprising an inner layer and an outer layer, said inner layer consisting of copper and said outer layer consisting of a lower heat conducting material, a resistance element enveloped by said metallic casing, and heat responsive means positioned adjacent to said inner layer and electrically connected to said resistance element.

2,749,426
COOKING VESSEL
Fred C. Schwaneke, Chicago, Ill., assignor to Dormeyer Corporation, Chicago, Ill., a corporation of Illinois
Application December 14, 1953, Serial No. 397,918
6 Claims. (Cl. 219—43)



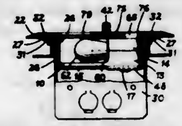
2. In a self-contained portable cooking vessel, a shell having an open top, a heating and support element mounted within said shell for limited longitudinal movement relative thereto, said heating element having a flat annular surface facing the open top of the shell, means for urging said element toward the open top of said shell, a pot receivable in said shell through the open top thereof and movable downwardly therethrough into abutting relationship with the upper surface of said heating and support element and into heat-exchange engagement with said element, said pot having an integrally formed flat annular ring dimensioned to correspond to the configuration of said heating element whereby efficient and effective heat exchange between said pot and said element is assured when in abutting relationship, means for releasably confining said pot within said shell, a switch mounted in said shell, and a thermostat disposed in resilient engagement with said pot and arranged in series circuit with said switch, whereby the circuit is opened when the pot is removed from said shell or when the temperature of said pot reaches a predetermined level.

2,749,427
COOKING UTENSIL
Nickolas Malz, Chicago, Ill., assignor to Dormeyer Corporation, Chicago, Ill., a corporation of Illinois
Application September 23, 1952, Serial No. 311,104
3 Claims. (Cl. 219—44)



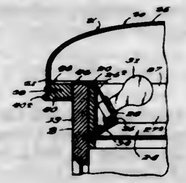
1. An electric deep fat fryer comprising a vessel for cooking oil formed of a metal of high heat conductivity and having four vertical side walls of cast thickness defining a deep cooking space within, an electric heater embedded in the walls adjacent their lower edge and extending with continuity around a major portion of the perimeter of said well to leave the center of the well heater-free, a cross wall dividing the vessel into two wells, a thermostat for controlling the operation of said heater in relationship to the melting point of the cooking oil and mounted on a wall having a heater therein at the end of said cross wall in heat-exchange relationship therewith, a boss on said vessel at one end of each well in close proximity to said heater to derive heat therefrom quickly, said bosses having drain openings, and valve means connected to said drain openings by a heat conducting element for draining said vessel at the melting point of the cooking oil.

2,749,428
NIGHT LAMP WITH RECEPTACLE
Anthony A. McCarthy, Dayton, Ohio
Application September 20, 1954, Serial No. 457,141
3 Claims. (Cl. 240—2)



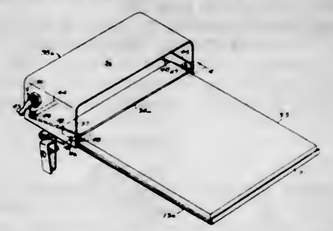
3. In an electrical device adapted to be received within a standard receptacle box the combination of a base having such predetermined outer dimensions as to be received within a standard receptacle box and including a boss divided into complementary upper and lower portions, a socket in said boss opening on a side face thereof for receiving an electric light bulb and supporting the bulb within the receptacle box, a strap for supporting said base within the box, means interconnecting said strap and said boss portions, a switch in said boss including an operating member projecting from said upper portion thereof, a pair of contacts on said base for connection to an electrical power supply source, means connecting said contacts to said socket through said switch to provide for controlled lighting of the bulb, said boss also including an electric plug receptacle having a face portion raised above said upper boss portion, means connecting said receptacle to said contacts, a plate for covering said base and the surrounding receptacle box, said plate having a series of slits therein for registry with the portion of the receptacle box adjacent said socket to transmit substantially all of the light from the bulb to the exterior of the box, said plate also having a first aperture therethrough for passage of said operating member outwardly of said plate and a second aperture therethrough for receiving said upstanding receptacle face portion in substantially flush relationship with said plate, and means engageable with said interconnecting means for removably securing said plate to said base.

2,749,429
ILLUMINATED ROOF FOR OUTDOOR PHONE BOOTHS
Clifford E. Wavell, Long Beach, Calif.
Application July 31, 1953, Serial No. 371,465
6 Claims. (Cl. 240—2)



6. A roof structure that may be illuminated to indicate the position of the outdoor telephone booth on which it is mounted which includes: a rigid rectangular frame formed of four members securely joined together at their ends, with each member being formed with a longitudinally extending lip on the outwardly disposed vertical face thereof; a dome formed of a colored translucent water-proof sheet material having four substantially vertical side walls which snugly engage said outwardly disposed vertical faces of said members, with the lower edges of said side walls abutting against said lips; means engaging said members and dome side walls to hold said dome and frame together as an integral unit; means for mounting said unit on the upper open end of an outdoor telephone booth; electrically operated illuminating means that cause said dome to glow with a colored light to indicate the location of said booth; an electrical circuit for supplying power to said illuminating means; and means to maintain said circuit in a completed condition only during such period of time as the illumination of said dome is necessary to indicate the position of said booth.

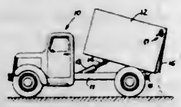
2,749,430
ILLUMINATED AUTOMOBILE SECRETARY
Mayer L. Cohn, Los Angeles, Calif., assignor to Joseph Marco, Los Angeles, Calif.
Application June 23, 1952, Serial No. 295,039
4 Claims. (Cl. 240—2)



1. In an automobile secretary: a panel for supporting a work sheet; a light reflector hood having a light bulb mounted therein disposed transversely over one end of said panel, said hood having a top wall, rear wall and lateral walls, being open at the bottom and having an open front to emit light rays upon said work sheet when said hood is in a lowered position relative to said panel, said top wall being parallel to said panel in said lowered

position; pivot means disposed on an axis adjacent and parallel to said end and connecting said hood to said panel so that said open front may be lifted upwardly; a hold-down yoke of spring wire having a pair of side arms pivotally attached to said pivot means, and having a hold-down bar joined to said side arms and extending transversely between them in a position to bear downwardly upon said end of the work sheet, said side arms each having an extension projecting upwardly and positioned to be engaged by said rear wall of the hood as the latter is moved downwardly to said lowered position, and thereby loaded in a manner to transmit through said side arms to said hold-down bar, downward pressure against said work sheet, said downward pressure being relieved when said hood is lifted, and means for latching said hood in said lower position, said extension being biased to urge the hood to a raised position when the hood is unlatched.

2,749,431
TILTABLE TAIL LIGHT
Herbert R. Dover, Chicago, Ill.
Application December 15, 1952, Serial No. 326,045
8 Claims. (Cl. 240—8.3)



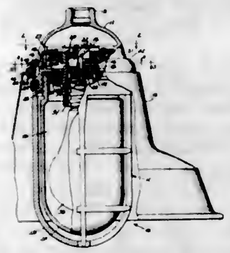
1. A mounting unit for supporting a tail light on a truck body comprising a bracket to be secured to a side of the truck body and provided with a socket, a rod having one end secured in the socket, a plate pivotally supported on said rod and secured to a tail light, an arm secured to the plate and having a hole through which the rod fits, means retaining the arm pivotally on the rod, said arm and said bracket having adjacent lugs, one of said lugs having an arcuate slot therein centered on the rod and the other lug having a tapped bore therein facing the slot, and locking means threaded into the tapped bore to selectively lock the arm against pivotal movement relative to the bracket and to unlock the arm and permit such movement.

2,749,432
INCANDESCENT LAMP AND ATTACHMENTS THEREFOR
Robert T. Dorsey, South Euclid, Ohio, assignor to General Electric Company, a corporation of New York; patent dedicated to the Public insofar as it relates to lamps and lamp parts to the extent stated in document recorded in the United States Patent Office, January 4, 1954, Liber U–238, page 394
Application December 26, 1952, Serial No. 328,078
8 Claims. (Cl. 240—10)



1. An illuminated unit comprising in combination, an incandescent lamp having a glass bulb of substantially ovoidal shape and a base secured to the larger end of said bulb, a body of light transmitting material shaped to receive the lamp bulb and a collar supporting said body around said lamp bulb, the wall of the larger end portion of said bulb being irregular, the irregular portion of said wall extending circumferentially of the bulb at a region closely adjacent the said base thereon and comprising a recess which is annularly discontinuous around the bulb to provide transversely facing locking shoulders thereon, said irregular wall portion providing a seat for said collar around the said end portion of the bulb, said collar having spaced spring fingers extending inwardly from a solid ring and engaging the irregular wall portion of the bulb and within the said recess thereof to lock the collar in place on the bulb against both rotative and axial movement relative thereto, said body being attached to the solid ring part of said collar whereby said light transmitting body is supported by said lamp bulb.

2,749,433
VAPOR-PROOF LIGHTING FIXTURE
Arthur I. Appleton, Northbrook, Ill.
Application July 22, 1950, Serial No. 175,420
6 Claims. (Cl. 240—11.2)



1. A lighting fixture comprising the combination of a supporting canopy and peripheral abutment means thereon, a globe assembly also having peripheral abutment means thereon but spaced apart from the abutment means of said canopy, said globe assembly being detachably connectable to said canopy, a reflector disposable in surrounding relation with said globe assembly, a resilient collar adapted for attachment to said reflector, said collar being of a size rendering the same susceptible of rigid clamping between the respective abutment means of said canopy and said globe assembly, interfitting groove and flange means on said collar and said canopy for maintaining said collar in assembled relation with said canopy upon removal of said globe assembly, and interfitting groove and flange means on said reflector and said resilient collar for permitting removal of said reflector without detachment of said globe assembly from said canopy.

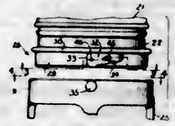
2,749,434
VEHICLE LAMP
Robert N. Falge, Anderson, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 30, 1952, Serial No. 317,711
6 Claims. (Cl. 240—41)



1. In a lamp of the type having a metal reflector member serving as a part of the lamp electrical grounding circuit, said member being coated with a non-conductive material, the combination of a metal housing in contact with said member, a lug having an edge portion formed

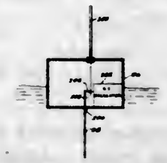
integral with said member and extending outwardly therefrom, and a metal wire spring pressed between said member and said housing, said spring being urged by its own resilience into contact with said edge portion to thereby extend through the non-conductive coating thereon and make electrical contact wtih said member.

2,749,435
LAMP GUARD MOUNTING
Arthur I. Appleton, Northbrook, Ill.
Application August 4, 1950, Serial No. 177,753
7 Claims. (Cl. 240—102)



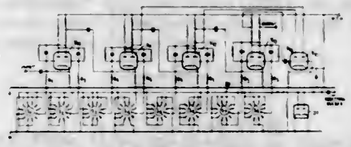
7. A lamp guard mounting comprising the combination of a first collar adapted for fixed attachment upon a lamp fixture, a second collar fixed to a lamp guard and having a telescoping fit with said first collar, one of said collars having a generally L-shaped recess therein extending axially and circumferentially thereof, said recess having a safety notch of radial depth in the axially extending portion of said recess and a latching notch of radial depth in the circumferentially extending portion of said recess and spaced circumferentially from said safety notch, and a radially extending spring loaded detent carried by the other of said collars, said detent being engageable with the safety notch when said collars are initially brought together, said detent also being engageable with the latching notch after said collars have been brought together and moved circumferentially relative to each other.

2,749,436
SONOBUOY
Robert H. Rines, Newton, Mass., and Isaac S. Blonder, Mount Vernon, N. Y.
Original application July 17, 1948, Serial No. 39,286, now Patent No. 2,539,594, dated January 30, 1951. Divided and this application January 23, 1951, Serial No. 207,294
13 Claims. (Cl. 250—17)



11. A radio system having, in combination, a buoy for floating upon the surface of a body of water, an antenna carried by the buoy in the air above the surface of the water for transmitting or receiving radio waves, a transmission line connected to the antenna, a sound-vibratory member carried by the buoy below the surface of the water, a switching device protected from the air and water and cooperative with and responsive to the vibrations of the sound-vibratory member, and means for disposing the switching device in vibratory relation to the transmission line at a point therealong displaced from the antenna in order that the switching device may make-and-break contact with the transmission line remote from the antenna in accordance with the vibrations of the sound-vibratory member, thereby correspondingly to effect modulation of the radio waves transmitted or received thereby in accordance with the vibrations of the sound-vibratory member while maintaining the Q and the radiation pattern of the antenna substantially unchanged.

2,749,437
TRIGGER CIRCUIT
William G. Parr, Cambridge, England, assignor to Pye Limited, St. Andrews, England, a British company
Application March 17, 1952, Serial No. 276,983
Claims priority, application Great Britain January 7, 1952
13 Claims. (Cl. 250—27)



1. Apparatus comprising a plurality of electronic valves interconnected as a trigger circuit having a plurality of stable states, each valve having an anode, a cathode and a control electrode, a first resistor connected between the control electrode of one of the valves and a point of earth potential, a rectifier having one electrode connected to said point of earth potential, a second resistor connected between the control electrode of another of the valves and the other electrode of said rectifier, an output circuit connected to the anode of at least one valve, an input circuit connected to the cathodes of at least another of the valves, and means for applying pulses at the junction of said second resistor and said rectifier.

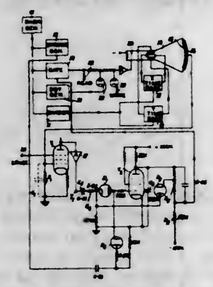
2,749,438
RESONATOR STRUCTURE
Anatole M. Gurewitsch and Philip C. Noble, Schenectady, N. Y., assignors to General Electric Company, a corporation of New York
Application August 21, 1952, Serial No. 305,632
10 Claims. (Cl. 250—27)

1. In apparatus for the acceleration of charged particles along a path which is enclosed by an envelope of dielectric material; a resonator forming a section of the envelope comprising an inner conductor which includes a conductive layer supported upon the inner surface of said section, and an outer conductor which includes a conductive layer supported upon the outer surface of said section and being discontinuous around at least a portion of the periphery of said section which discontinuous portion extends in spaced relation around a portion of the inner conductor; and an inductive member for tuning said resonator including a conductive layer connected across the discontinuous portion of said outer conductor, said last-mentioned conductive layer having a length greater than the length of the discontinuous portion of said outer conductor.

2,749,439
ELECTRONIC INFORMATION STORAGE DEVICES
Frederic Calland Williams, Timperley, Tom Kilburn, Davyhulme, Manchester, and Geoffrey Colin Tootill, Hollinwood, England, assignors to National Research Development Corporation, London, England
Application November 3, 1950, Serial No. 193,772
Claims priority, application Great Britain November 14, 1949
6 Claims. (Cl. 250—27)

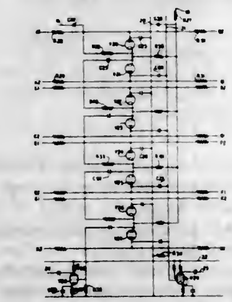
2. An electronic storage device comprising a cathode ray tube, an electric charge-retaining screen, a pick-up plate associated with said screen, means to direct the cathode ray beam of said tube recurrently upon an area

of said screen, means to switch said beam on to generate a charge on said area and subsequently to switch said beam off, control means to selectively switch said beam on a second time, a circuit coupled to said pick-up plate for effecting an approximate integration of signals in said



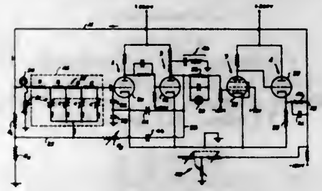
plate, said circuit having a time constant longer than the time interval between the first-named switching on and off, and means for selecting a predetermined portion of the approximately-integrated output from said circuit after said switching off of said beam and before said second switching-on thereof to generate an output signal.

2,749,440
THERMIONIC VALVE CIRCUITS
John Robert Cartwright, Letchworth, England, assignor to The British Tabulating Machine Company Limited, London, England, a British company
Application August 4, 1950, Serial No. 177,755
Claims priority, application Great Britain May 17, 1950
12 Claims. (Cl. 250—27)



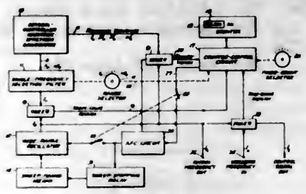
1. A comparison circuit comprising two data sources having two possible comparison states, means for generating a controlling voltage having a first magnitude on the existence of a first comparison state of said data sources and a second magnitude on the existence of a second comparison state of said data sources, a diode, connecting means for applying said controlling voltage to one of the electrodes of said diode, a source of voltage, means for connecting said voltage source to the other of said electrodes, the voltage of said voltage source rendering said diode conductive on the application of said controlling voltage of said first magnitude and non-conductive on the application of said controlling voltage of said second magnitude, an input circuit, an output circuit connected to said input circuit and a low impedance shunt path through said diode when conducting, also connected to said input circuit, an operating pulse applied to said input circuit being transmitted substantially unattenuated to said output circuit on the existence of said second comparison state and on the said diode being non-conductive but being attenunated on reaching said output circuit when the said first comparison state exists and said diode is rendered conductive.

2,749,441
PHASE SHIFT OSCILLATOR
Dunford A. Kelly, Los Angeles, Calif.
Application August 28, 1952, Serial No. 306,914
16 Claims. (Cl. 250—36)



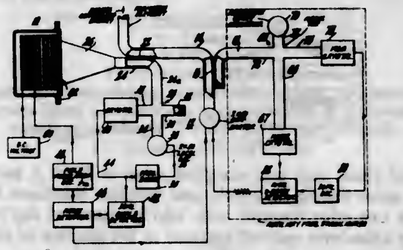
1. In a resistance-reactance phase shift oscillator, the combination of: a multistage phase inverting amplifier having input and output circuits, circuit means forming a signal voltage feedback path from said output circuit to said input circuit, a phase shift tuner comprising a ladder network of resistances and reactances forming a plurality of series connected L-sections in said feedback path adapted to invert the phase of the feedback signal voltage at the operating frequency determined by the tuner and thereby impress a regenerative feedback signal voltage on said input circuit, and circuit means forming a degenerative signal voltage feedback path from said output circuit to said input circuit.

2,749,442
CONTROLLED OSCILLATOR
Paul G. Hansel, Greenvale, N. Y., assignor to Servo Corporation of America, New Hyde Park, N. Y., a corporation of New York
Original application December 9, 1950, Serial No. 200,060. Divided and this application April 23, 1952, Serial No. 283,922
6 Claims. (Cl. 250—36)



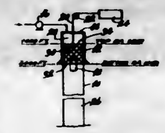
1. A secondary-standard-frequency source, comprising a reference oscillator having a known base frequency, frequency-dividing means connected to said oscillator for deriving a submultiple of said base frequency, harmonic-generating means controlled by said dividing means for deriving a spectrum rich in harmonics of said submultiple frequency, a single-frequency selection filter connected to said generating means for passing a single one of said harmonics, a second oscillator tunable over a range of frequencies including said one harmonic, counter means connected to said filter and to said second oscillator and to said generating means and responsive to frequency coincidences between the second-oscillator output and said one harmonic and other harmonics in said spectrum, said counter means including selector means for selecting a given count of said counter means, said given count being identified with a desired secondary-standard frequency to be generated, and automatic-frequency-control means connected to said counter means and to said second oscillator and effective upon attainment of said given count to hold said second oscillator tuned to that spectrum harmonic which was responsible for producing said given count.

2,749,443
MOLECULAR RESONANCE SYSTEM
Robert H. Dicke and George S. Newell, Jr., Princeton, N. J.
Application August 22, 1951, Serial No. 243,082
21 Claims. (Cl. 250—36)



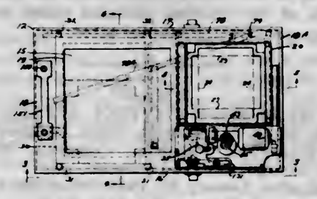
16. A frequency stabilization system comprising a microwave generator the frequency of generation of which is to be stabilized, a gas cell, a gas within said cell at a low pressure exhibiting microwave resonance at a frequency fe, means comprising a first oscillator to establish in said gas a wave moving at a velocity v_m and said oscillator having oscillations of a frequency f_m, means to select a single sideband of said modulated energy and to direct said single sideband energy as incident microwave energy into said cell, and a receiver connected to receive microwave energy re-radiated by the gas molecules in said cell, the wavelength of said field wave and the wavelength of said selected single sideband microwave energy being related by the generalized Bragg condition, thereby providing a velocity selection of constructively re-radiating molecules, the frequency of said incident microwave energy being that required to resonate the gas molecules moving at the said wave velocity, said receiver comprising means to employ said re-radiated energy which exhibits a reflection line as single sideband energy, means to detect said single sideband energy by supplying carrier frequency energy from said second oscillator and means to detect the resultant detected energy comprising a phase detector connected to said first oscillator to derive therefrom reference frequency energy, the output of said phase detector being connected to said generator to stabilize the frequency of generation.

2,749,444
METHOD OF LOCATING A ZONE OF LOST CIRCULATION
Joseph L. Shea, New Orleans, La., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Application April 20, 1953, Serial No. 349,705
1 Claim. (Cl. 250—43.5)



The method of locating a zone or formation where drilling fluid has been lost in the drilling of a bore hole which comprises forcing downwardly in the hole on top of the non-radioactive well liquid normally present in the bore hole a column of a liquid containing a radioactive tracer material followed by a non-radioactive liquid, said column of tracer-containing liquid being longer vertically than the vertical thickness of the formation to be located, locating and following by radioactivity measurement the downward progress of the interface between the radioactive liquid and the non-radioactive liquid below the radioactive liquid, and noting the depth in the hole at which said interface ceases to fall, said noted depth defining the lower boundary of the zone of lost circulation, following the downward movement of the upper interface between the radioactive liquid and the non-radioactive liquid thereabove after the lower interface has ceased falling, and noting the depth at which said upper interface ceases falling, the said noted depth of the upper interface defining the upper boundary of the zone of lost circulation.

2,749,445
X-RAY APPARATUS
Robert J. Stava, University Heights, and Edgar J. Bastin, Cleveland, Ohio, assignors to Picker X-Ray Corporation, Waite Manufacturing Division, Cleveland, Ohio, a corporation of Ohio
Application May 11, 1951, Serial No. 225,777
13 Claims. (Cl. 250—66)

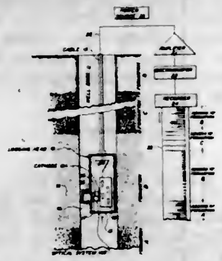


1. In X-ray apparatus, a frame having a fluoroscopic screen carried thereby, and having a cassette receiving space disposed alongside the screen, an X-ray tube positioned to direct a primary beam substantially at the center of the screen, said frame having a trackway extending longitudinally thereof, a carriage movable along the trackway to a position beneath the screen and retractable from said position to provide a working cycle, said carriage having a trackway extending transversely of the frame, a cassette receiving tray movable along said last mentioned trackway, an electric motor, a rotatable member driven by the motor, a clutch operated by said rotatable member, driven units adapted to be actuated by the clutch means, one of said units being operatively connected to the carriage for moving it along its trackway, the other of said units being operatively connected to the cassette receiving tray for moving it along its trackway in the carriage, a cassette having a sensitized member therein, a manually operable member carried by the frame and selectively settable with respect thereto, and means actuated by the settable member for automatically controlling the extent of movement of the carriage driving unit, and other means controllable by said settable member for automatically controlling the extent of movement of the tray driving unit, said controlling means being correlated with each other to position the cassette with respect to the carriage and to position the carriage with respect to the frame so as automatically to align the centers of successively presented portions of a sensitized member within the cassette with the axis of the primary beam on successive working cycles.

2,749,446
PROSPECTING
Gerhard Herzog, Houston, Tex., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Application July 23, 1951, Serial No. 238,038
10 Claims. (Cl. 250—71)

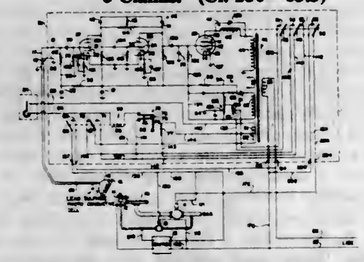
1. In apparatus for investigating gamma spectra of formations penetrated by a well bore, the combination which comprises a logging head adapted to be drawn along a well bore, a photomultiplier tube provided with a cathode mounted in the logging head, a body which upon bombardment with gamma rays produces electrons

which move through the body and cause it to emit photons, said body being translucent to its own luminescent photons and so large that the electrons dissipate substantially all of their energy therein and being disposed in



the logging head in a position such that the photons impinge upon the cathode, and means for indicating the amplitude of the resulting electrical pulses produced at the output of the photomultiplier tube.

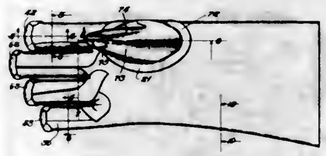
2,749,447
FUEL BURNER CONTROL APPARATUS
Myron R. Smith, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application January 25, 1952, Serial No. 268,270
6 Claims. (Cl. 250—83.3)



6. A flame detector for use with a fuel burner which supports a flame when fuel is supplied thereto, comprising, flame sensing means sensitive to fluctuation in the intensity of electromagnetic wave energy emitted by a flame to supply a fluctuating control signal indicative of the presence of flame, amplifier means having an input and an output and having a reference potential, bridge T filter means associated with said amplifier means to render said amplifier means frequency selective to only that range of frequencies including said fluctuation in wave energy emitted by a flame, said filter means having a first capacitive leg directly connected to the output of said amplifier means and a second capacitive leg directly connected in an alternating current sense to the input of said amplifier means, a third resistive leg connected to said reference potential, and resistor bridging said first and second legs, means connecting said photoelectric flame sensing means in controlling relation to the input to said amplifier, and means rendered operative upon a control signal within said range of frequencies being supplied to the input of said amplifier means and adapted to control burner control means.

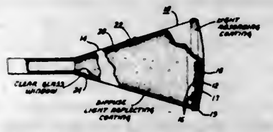
2,749,448
GLOVE CONSTRUCTION
Sol Appelbaum and Woodrow A. Begos, Chicago, Ill., assignors to Midwest Glove Company, Inc., a corporation of Illinois
Application July 30, 1952, Serial No. 301,759
4 Claims. (Cl. 250—108)

1. A protective glove construction comprising an integral one piece two ply trank of material opaque to X rays having opposed margins, said trank being folded upon itself with one marginal edge of the trank overlying the portion of the trank adjacent but spaced from the other marginal edge of the trank and with said other marginal edge overlying the portion of the trank adjacent but



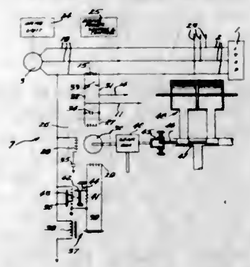
spaced from said one marginal edge to form a portion of a glove having an overlapped multiple thickness seam along one edge thereof, with said portions of the trank being adhesively secured together in the absence of stitching.

2,749,449
PHOTOCELL INDEXING SYSTEM
William E. Bradley, New Hope, and David E. Sunstein, Cynwyd, Pa., assignors to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application September 28, 1953, Serial No. 382,628
4 Claims. (Cl. 250—217)



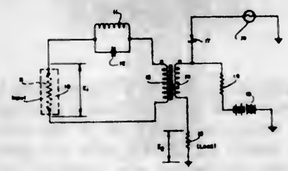
1. A high-definition photo-electric indexing system for color television systems and the like comprising, in combination, a cathode-ray tube having a generally funnel-shaped envelope and having at the major opening thereof a screen comprising both forwardly and rearwardly-presented light-generating phosphor elements separated by a thin electron-transparent light-opaque layer, a photo-electric cell positioned to receive light emitted by said rearwardly-presented elements, and a light-reflecting-and-diffusing area coextensive with a substantial portion of the inner surface of said envelope between the major and minor openings thereof and serving to collect light from said rearwardly-presented elements and to transmit said light to said photo-electric cell, thereby greatly to increase the light from said rearwardly-presented elements impingent on said photo-electric cell.

2,749,450
SERVO-MOTOR LOAD DIVISION CONTROL SYSTEM
Joseph C. Wellington, Jr., South Euclid, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application August 25, 1953, Serial No. 376,498
16 Claims. (Cl. 290—4)



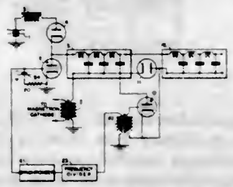
1. In a load division control system operable to effect load division between paralleled alternators, in combination, a position controlled servo-motor mechanism, and power input drive and control means for an alternator coupled to said position controlled servo-motor mechanism for actuation by variation in the angular position of said servo-motor.

2,749,451
FLIP-FLOP CIRCUIT
Robert P. Talambiras, Cambridge, Mass., assignor to Sperry Rand Corporation, a corporation of Delaware
Application March 7, 1955, Serial No. 492,626
11 Claims. (Cl. 307—88)



11. A system having two stable states comprising a transformer having first and second windings, said transformer having a core capable of being driven to saturation, a source of high frequency alternating current, a rectifier, a load, a circuit connecting the source, the rectifier, the first winding and the load in series with each other so that pulses of one polarity may flow from the source through the series circuit, a closed circuit including the second winding, the closed circuit including an input and also including in series therewith a parallel resonant circuit tuned to the frequency of said source, said parallel resonant circuit having an inductor and a condenser in parallel with each other, means in the closed circuit for passing a steady direct current through the second winding tending to partially revert the core during the spaces between said pulses of said one polarity, the components of the above recited system having such relative values that when the input potential is increased to a predetermined value the device will flip from a first stable state where the core was operated mainly on an unsaturated portion thereof to a second stable state where the pulses of said source drive the core to saturation whereby they may readily flow through the first winding to the load giving a large output and when the input potential is decreased the device will not flip back to its first stable state until the input potential drops to a second predetermined value substantially below the first predetermined value.

2,749,452
PULSE GENERATING CIRCUIT
Martin Katzin, Washington, D. C.
Application August 25, 1950, Serial No. 181,536
4 Claims. (Cl. 307—106)
(Granted under Title 35, U. S. Code (1952), sec. 266)



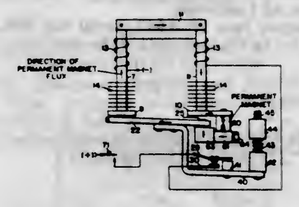
4. A voltage pulse generating circuit for generating variable time duration pulses across a load impedance comprising a plurality of artificial transmission lines, means for charging said plurality of artificial transmission lines, means for recurrently discharging a first of said transmission lines to produce voltage pulses of a first duration and means for selectively connecting further of said charged transmission lines in parallel with said first charged transmission line in order that the plurality of interconnected transmission lines will discharge simultaneously to produce voltage pulses of a second duration greater than said first duration.

2,749,453
ELECTRIC BELL MOTOR
Joseph L. Cassell, New York, and Howard L. Caretto, Brooklyn, N. Y., assignors to The Reeve Electrical Co., Inc., New York, N. Y., a corporation of New York
Application April 30, 1952, Serial No. 285,116
1 Claim. (Cl. 310—30)



An alternating current reciprocating motor unit comprising an alternating current solenoid and a permanent magnet freely reciprocable therein and having an applied, smooth, friction reducing protection thereon and reciprocating therewith, a hammer head of non-ferrous material on one end of said permanent magnet and said applied protection extending over and securing said hammer head to said permanent magnet.

2,749,454
ELECTROMAGNETIC FLASHING RELAY
Robert J. Little, Gates, and Joseph E. Willing, Rochester, N. Y., assignors to General Railway Signal Company, Rochester, N. Y.
Application August 28, 1953, Serial No. 377,034
5 Claims. (Cl. 310—32)

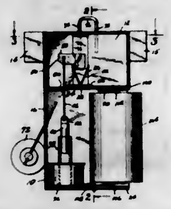


1. In a flashing relay structure of the type described, a U-shaped core structure having mounted thereon energizing windings and a plurality of copper washers, an armature pivotally mounted to cooperate with said core structure, a permanent magnet providing magnetic flux through said core structure and a back stop member for holding said armature in a released position, a coil spring for biasing said armature against said back stop, adjusting means for adjusting the tension on said coil spring, contacts operably connected to said armature, and circuit means including a source of energy, said windings, and said contacts for causing the energization of said windings only until said armature is at least partially actuated to an operated position, whereby said armature operates intermittently between said pole pieces and said back stop, such intermittent operation being at a substantially uniform rate.

2,749,455
ELECTRIC RECIPROCATING MOTOR FOR ANIMATED DISPLAYS AND THE LIKE
Jules W. Glaser, Yonkers, N. Y.
Application April 6, 1953, Serial No. 347,028
4 Claims. (Cl. 310—34)

1. An electric reciprocating motor for animated displays and the like, comprising a coil, a magnetic plunger

mounted for movement into and out of said coil, a rotatably mounted shaft, a pendulum at one end of said shaft, a display actuating arm at the opposite end of the shaft, a contact member mounted adjacent said shaft, an arm on said shaft which is engageable with said contact member, a second arm on said shaft which is linked to said magnetic plunger, a source of electric current, and conductors connecting said source of electric



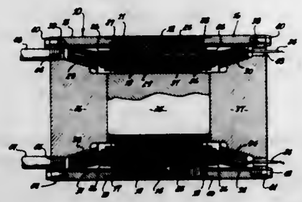
current to said coil and said contact member and additional conductors connecting said coil and said shaft, said contact member constituting a V-shaped element which receives the first arm on said shaft between its own two arms, insulation being provided between the first shaft arm and one of the arms of the V-shaped element to prevent electrical contact therebetween, said first shaft arm being engageable with the second arm of the V-shaped element for electrical contact therewith.

2,749,456

WATERPROOF STATOR CONSTRUCTION FOR SUBMERSIBLE DYNAMO-ELECTRIC MACHINE

Frederick O. Luenberger, Los Angeles, Calif., assignor to U. S. Electrical Motors, Inc., Los Angeles, Calif., a corporation of California

Application June 23, 1952, Serial No. 295,020
11 Claims. (Cl. 310—43)



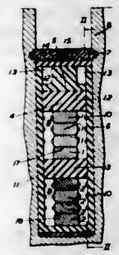
1. In a submersible structure: an annular core member having a plurality of slots extending longitudinally therethrough; a housing for the core member and extending beyond the ends of the core member; plastic liners for the slots respectively and having ends extending beyond the longitudinal ends of the slots; plastic elements for each end of the core member and having apertures through which the ends of the liners extend; a pair of outer plastic envelope forming members received in the housing at opposite ends and respectively contiguous with said elements at a place spaced from the apertures of the elements; a pair of inner envelope forming members for the ends of said windings respectively, and forming with said outer envelope forming members, end opening annular spaces aligned with the slots; windings in the liners for said slots, said windings having an insulation coating, the ends of said windings terminating within said annular spaces and combined by said inner and outer envelope forming members; and a plastic material encasing said windings and extending in said liners and filling said annular spaces.

2,749,457

CONSTRUCTION OF DYNAMO ELECTRIC MACHINES

William Norman Kilner, Hale, England, assignor to Metropolitan-Vickers Electrical Company Limited, London, England, a British company

Application January 14, 1953, Serial No. 331,208
3 Claims. (Cl. 310—64)



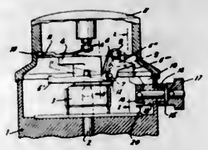
1. A high speed turbo alternator comprising a stator and a rotor, the stator including a core having slots therein and a winding arranged in the slots in the core, said winding comprising superimposed metal straps forming top and bottom conductor bars, insulation extending across the slot between the top and bottom bars, said conductor bars being spaced on each side from the slot sides so as to define top and bottom ducts for cooling gas extending longitudinally to the slots on each side of the conductor bars, and adjacent thereto distance pieces comprising axially spaced insulating blocks inserted between the conductor bars and slot sides on both sides of the slots, said distance pieces extending radially of the machine and across the sides of all the straps of each bar so as to locate all the straps against displacement due to torque and said distance pieces having passages therethrough interconnecting the spaces at each end thereof axially, and said insulation having ports therethrough providing communication between the top and bottom ducts, means for feeding cooling gas into said slot ducts at each end of the machine, and discharge passages from the top ducts to the stator exterior.

2,749,458

SAFETY APPARATUS FOR MAGNETOS

Albin Buchmann, Soleure, Switzerland, assignor to Scintilla Ltd., Soleure, Switzerland

Application June 3, 1953, Serial No. 359,353
Claims priority, application Switzerland June 4, 1952
10 Claims. (Cl. 310—70)



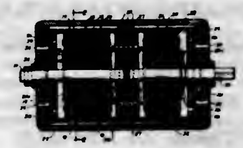
1. In a magneto having a primary coil, in combination, a housing; a distributor arm turnably mounted in said housing; centrifugal control means for automatically grounding said distributor arm when the speed of rotation thereof reaches a predetermined value; and short circuiting means mounted on said housing for short circuiting the primary coil of the magneto, said short circuiting means being located adjacent said centrifugal control means to be actuated thereby for short circuiting the primary coil when said control means grounds said distributor arm.

2,749,459

PLURAL UNIT INDUCTION MOTOR

Jacob V. Williford, Jr., Downey, Calif., assignor, by mesne assignments, to Lido Land Co., Los Angeles, Calif., a copartnership

Application July 16, 1953, Serial No. 368,387
1 Claim. (Cl. 310—122)



A plural element power source comprising in combination, a supporting frame, a central shaft non-rotatably secured to one end of the frame, a coaxial shaft passing freely through the other end of the frame, a shell rotatable on two bearings, one carried by each of the two shafts near the proximate end of the frame, two coaxial induction motors with primary and secondary elements, one element of each carried by the shell and the other element being carried by one of the two shafts, a central annular block rotating with said shell, having a bearing on the central shaft proximate the inner end of the shaft and having a spaced companion proximate bearing supporting the inner end of said coaxial shaft, a conical projection extending from the shell coaxial with the two shafts, a circular series of inclined rollers engaging the conical projection and the supporting frame, and a second series of roller bearings oppositely inclined at the central shaft end of the frame, said two roller bearings supporting the shell both axially and radially, each of the series of inclined rollers being of a greater over-all diameter than the proximate shell-shaft bearing.

2,749,460

MEANS FOR REINFORCING RANDOM WOUND COILS

Jack C. Acton and Albert B. Zeissler, Schenectady, N. Y., assignors to General Electric Company, a corporation of New York

Application February 15, 1955, Serial No. 488,262
6 Claims. (Cl. 310—260)



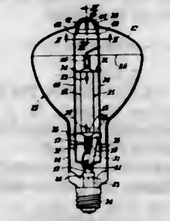
1. A dynamoelectric machine comprising a stator having winding slots therein for receiving electrical coils for producing a magnetic flux in said stator, random wound coils comprising a plurality of turns of magnet wire having coil side portions selectively placed in layers in said slots and end turn portions projecting axially from the ends of said slots, a plurality of sheets of initially flexible glass cloth impregnated with a thermosetting resinous material placed between adjacent layers of said end turn portions and being arranged in a manner to contact a substantial length of said end turn portions and one another, and cured after assembly to provide rigid reinforcing means for restraining said end turns against movement.

2,749,461

LAMP UNIT AND INNER MEMBER SUPPORT

Frank J. Hierholzer, Jr., Bloomfield, N. J., and Karl H. Neulinger, Kingston, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application April 30, 1953, Serial No. 352,138
3 Claims. (Cl. 313—25)



1. A lamp unit comprising, in combination, an electric discharge device, an envelope enclosing said device and comprising dome and neck portions, an inwardly opening central pocket in said dome portion, a flare tube closing said neck portion, a frame holding said device in said envelope, the neck end of said frame being connected to said flare tube, transversely extending spring elements centering said frame in said neck portion, means comprising an annular portion connected to the dome end of said frame, and a plurality of fingers extending from said annular portion, into and engaging the inner surface of said pocket, for centering purposes, and said fingers being placed under compression upon insertion of said discharge device in said outer envelope so as to enable longitudinal movement of said discharge device during operation due to expansion and contraction of said frame without deviation of said discharge device from its longitudinal axis in said outer envelope.

2,749,462

HIGH PRESSURE MERCURY VAPOR LAMP WITH ZIRCONIUM GETTER

Carl Kenty, Cleveland Heights, and Daniel A. Larson, Euclid, Ohio, assignors to General Electric Company, a corporation of New York

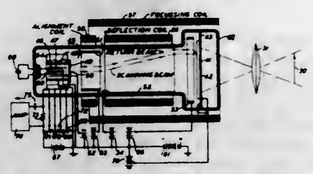
Application May 31, 1952, Serial No. 290,896
4 Claims. (Cl. 313—25)



1. A high pressure mercury vapor discharge lamp comprising a quartz arc tube envelope exhibiting some perviousness to hydrogen at elevated temperatures and defining a discharge space containing an ionizable medium including mercury and having sealed therein a pair of discharge supporting electrodes, a sealed glass outer jacket enclosing the arc tube, means supporting the arc tube within the jacket and providing electrical connections to said electrodes, said lamp being subject to gradual liberation of hydrogen in the inter-envelope space in amounts sufficient to build up a pressure at least of the

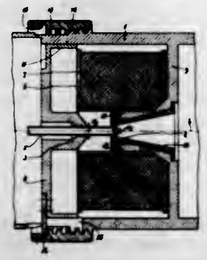
order of a millimeter after several thousand hours operation and being deleteriously affected by diffusion of such hydrogen into the arc tube from the inter-envelope space, and a getter consisting of zirconium metal mounted in the inter-envelope space and in heat receiving relationship to said arc tube to absorb hydrogen evolved in the inter-envelope space prior to diffusion into the arc tube and thereby maintain the discharge space within the arc tube substantially free of hydrogen.

2,749,463
SOLID STATE TELEVISION PICK-UP TUBE
John R. Pierce, Berkeley Heights, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application October 24, 1951, Serial No. 252,839
2 Claims. (Cl. 313—65)



1. An electronic camera tube comprising an electron source, a target for electrons consisting solely of a continuous thin wafer of a semiconductor material selected from the group consisting of silicon and germanium and having the property that a light image incident thereon produces at the surface thereof locally trapped hole-electron pairs for developing a surface contact potential in said semiconductor representative of said incident light image, means for developing an output signal current proportional to the local intensity of the light in the light image incident upon said target comprising means for scanning said target with electrons from said electron source and means at the electron source end of said tube for collecting a return beam of electrons containing intensity variations proportional to said surface contact potential, and means for developing therefrom an output signal.

2,749,464
ADJUSTABLE MAGNETIC ELECTRONIC LENS
Jan Bart Le Poole, Delft, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application August 4, 1953, Serial No. 372,239
Claims priority, application Netherlands September 13, 1952
6 Claims. (Cl. 313—84)



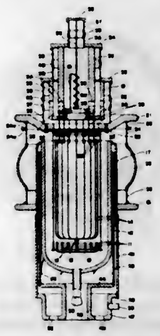
1. A magnetic electronic lens system comprising an elongated tube of low magnetic permeability defining an evacuated space and a discharge path therein, a magnetic lens including a pair of soft ferromagnetic spaced pole-pieces each having a central bore axially aligned and magnetically associated with the space within the tube, one of said pole-pieces being fixed and being vacuum-tight coupled to said tube, the other of said pole-pieces being movable and surrounding said tube which passes through the bore thereof, and means external to the tube for axially-displacing and subsequently fixing the movable pole-piece relative to the fixed pole-piece in order to change the spacing therebetween and vary the magnification of the lens.

2,749,465
VISUAL INDICATING DEVICE FOR ELECTRIC VOLTAGES
Friedrich K. Malsch, Esslingen-Waldenbrunn, Germany, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application February 2, 1951, Serial No. 209,146
Claims priority, application Germany February 28, 1950
3 Claims. (Cl. 313—107.5)



1. An indicator tube comprising an elongated cathode, a fluorescent screen at least partially surrounding said cathode and adapted to be illuminated by electron bombardment therefrom, an electron deflection electrode mounted on one side of said cathode intermediate the cathode and the screen, a pair of elongated counterelectrodes extending parallel to said cathode adjacent thereto, said counterelectrodes and cathode lying in a plane substantially normal to the plane through said deflection electrode and cathode, said counterelectrodes being plates whose width extends at an angle to the plane through said counterelectrodes and cathode.

2,749,466
ELECTRON TUBE GETTERING MEANS
George J. Agule, Stamford, Conn., assignor to Machlett Laboratories, Incorporated, Springdale, Conn., a corporation of Connecticut
Application December 18, 1951, Serial No. 262,275
2 Claims. (Cl. 313—180)



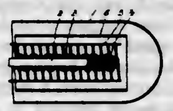
1. An electron discharge device comprising an evacuated envelope containing a filament, an anode and a gettering substance, a heater element for the gettering substance, a plurality of coaxial terminals which have contact surfaces outside the vacuum envelope, a tubular member projecting into the vacuum envelope and surrounding the heater and the gettering substance except for openings which provide access to the getter, leads connecting the heater between the two innermost terminals and a heat shield located between the filament and the getter and closing the inner end of the tubular member.

2,749,467
ELECTRODE CONSTRUCTION
Sydney A. R. Rigden, Camberwell, London, England, assignor to General Electric Company, a corporation of New York
Application April 30, 1952, Serial No. 285,142
Claims priority, application Great Britain May 17, 1951
3 Claims. (Cl. 313—184)



1. In a gaseous electric discharge lamp comprising a sealed envelope containing an ionizable gaseous atmosphere at such high pressure during normal operation of the lamp that the discharge therein is in the form of a constricted arc, a pair of main electrodes spaced apart within said envelope for a discharge therebetween, at least one of said electrodes being composed of a solid massive body of metal of the group consisting of tungsten and molybdenum and having its arc-supporting terminal surface provided with a plurality of intersecting slots extending entirely thereacross, and a filling in said slots and exposed at said surface and consisting of a sintered mixture of powders of a refractory metal of the group consisting of tungsten and molybdenum and an activating material consisting primarily of thoria.

2,749,468
HIGH-VACUUM DISCHARGE TUBE
Nicolaas Warmoltz, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application March 27, 1953, Serial No. 345,117
Claims priority, application Netherlands April 9, 1952
3 Claims. (Cl. 313—233)



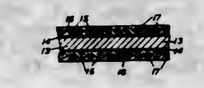
1. A high-vacuum discharge tube comprising an insulator, an anode disposed on and contacting one side of said insulator, a cold cathode disposed on and contacting the opposite side of said insulator and a smaller surface of the insulator than the anode, at least one surface portion of said cathode defining with said insulator a boundary line, said boundary line facing the anode and the latter extending beyond the line, an auxiliary electrode disposed a given distance from the cathode, and a control-grid disposed between the cathode and the auxiliary electrode, said control grid and cathode defining a space therebetween free of other conductive members.

2,749,469
ELECTRON DISCHARGE DEVICE
Merrald Buren Shrader, Mount Joy, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Application January 15, 1952, Serial No. 266,589
3 Claims. (Cl. 313—299)

1. An electron discharge device including a cathode and anode and a pair of electrically independent grid electrode structures, each having a circular cross sectional configuration and all in concentric and coaxial array, said grid electrode structures each including a circular array of side support rods and a helical grid winding for each of said arrays of support rods, each winding comprising conducting elements extending transversely of and attached to its support rod array, the winding of the inner grid structure being attached to the outer surface of its support rod array and the winding of the outer grid structure being attached to the inner surface of its support rod array, said windings being close spaced one from another with the spacing between the grids being at least as small as the cross sectional thickness of said support rods radially of said device, the windings and corresponding support rods of each of said pair of grid structures being in register with each other.

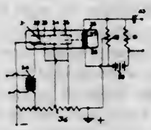


2,749,470
INDIRECTLY HEATED CATHODES
William Alfred Billings, Walter William Wright, and Albert Trevor Watts, London, England, assignors to International Standard Electric Corporation, New York, N. Y.
Application May 13, 1953, Serial No. 354,674
Claims priority, application Great Britain June 11, 1952
2 Claims. (Cl. 313—340)



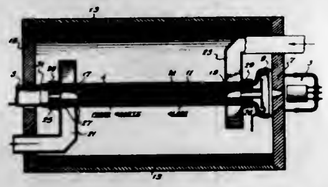
1. An indirectly heated thermionic cathode comprising a helix of wire forming a heater element adapted to be heated by passage of electric current therethrough, the turns of said helix being spaced apart, a refractory insulating coating on said heater element, a metallic elongated conductor wound in between the turns of the said helix in good thermal contact over the said insulating coating, and a thermionically electron emissive coating covering said conductor.

2,749,471
ELECTRON DEVICE WITH SEMI-CONDUCTIVE TARGET
Edmund S. Rittner, White Plains, N. Y., assignor, by mesne assignments, to North American Philips Company, Inc., New York, N. Y., a corporation of Delaware
Original application March 29, 1948, Serial No. 17,636, now Patent No. 2,540,490, dated February 6, 1951. Divided and this application August 14, 1950, Serial No. 179,411
7 Claims. (Cl. 315—3)



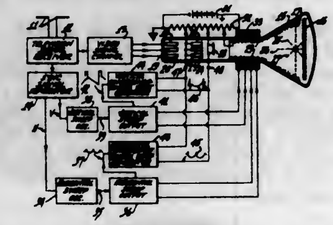
1. An electron discharge tube comprising an electron emissive cathode and a target electrode including an active element spaced from the cathode electrode and positioned for electron bombardment of the active element by electrons emitted from said cathode, said target electrode comprising a pair of spaced electrically insulated terminal electrodes with the active element therebetween, said active element being constituted by a photoconductive semi-conductive metal sulfide.

2,749,472
TRAVELLING WAVE TUBES
Lester M. Field, Palo Alto, Calif., assignor to The Board of Trustees of the Leland Stanford Junior University, Stanford University, Calif., a legal entity of California having corporate powers
Application January 2, 1952, Serial No. 264,494
5 Claims. (Cl. 315—3.5)



2. A travelling wave tube including a helix of conductive wire, an electron gun assembly adjacent one end of said helix, said electron gun assembly including a magnetic pole piece of a material readily sealable to glass, a collector electrode adjacent the other end of said helix, a tubular glass envelope sealed at one end to said pole piece and sealed at the other end to said collector, and a tubular quartz sleeve lining said glass envelope and closely surrounding said helix.

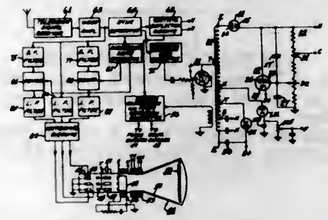
2,749,473
BEAM CONVERGENCE SYSTEM FOR TRI-COLOR KINESCOPE
Morris D. Nelson, New York, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application November 20, 1953, Serial No. 393,327
8 Claims. (Cl. 315—13)



1. Apparatus for energizing an electron-optical system of a cathode ray device for effecting convergence of a plurality of electron beam components, said energizing apparatus comprising, a source of a substantially sawtooth wave at vertical deflection frequency, wave shaping means coupled to said sawtooth wave source to convert said sawtooth wave to a substantially parabolic wave, wave combining means coupling said sawtooth wave source to said wave shaping means to combine said sawtooth and parabolic waves for the development of a vertical frequency convergence wave, means coupling said wave combining means to said electron-optical system, a source of a substantially parabolic wave at horizontal deflection frequency, wave developing means coupled to said parabolic wave source for adding a sinusoidal wave to said parabolic wave to produce a horizontal frequency convergence wave, and means coupling said wave developing means to said electron-optical system.

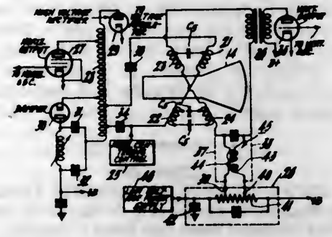
2,749,474
REGULATED HIGH VOLTAGE SUPPLIES
Joseph O. Preisig, Trenton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application June 29, 1954, Serial No. 440,067
8 Claims. (Cl. 315—14)

1. In a color television receiver including a color kinescope comprising an ultor electrode, a high voltage supply comprising in combination a rectifier having an output circuit, means for coupling said ultor electrode to said output circuit, an electron discharge device having



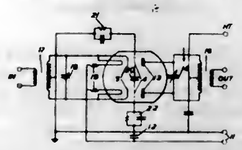
a space discharge path and including a control grid, said space discharge path effectively shunting said output circuit, and means for capacitively coupling said ultor electrode to said control grid.

2,749,475
TV VERTICAL DEFLECTION CIRCUIT
Bernard V. Vonderschmitt, Merchantville, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application November 2, 1953, Serial No. 389,575
9 Claims. (Cl. 315—24)



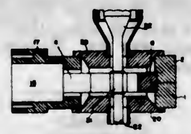
1. A cathode ray deflection system comprising in combination, first means for deflecting said cathode ray electromagnetically in a first direction, second means for deflecting said cathode ray electromagnetically in a second direction, said first and second deflecting means being adapted to be energized by currents having an A.-C. component, each of said currents having frequencies considerably different from one another, a source of D.-C., and at least one inductive means coupled to said source for applying said D.-C. to at least one of said deflecting means, said inductive means being adapted to prevent interaction of the currents in said first and second deflecting means.

2,749,476
ELECTRON DISCHARGE DEVICES
Douglas Cecil Rogers, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application January 25, 1952, Serial No. 268,263
Claims priority, application Great Britain
February 2, 1951
2 Claims. (Cl. 315—38)



1. A grounded-grid type electron discharge device comprising within an evacuated envelope provided with circuit connecting means solely through lead-outs connected to base pins and top caps: a pair of triode electrode assemblies of substantially the same electrical characteristics, means for maintaining the grids of said triodes at the same H. F. potential including a capacitor mounted within said envelope for coupling said two grids, separate connections from the respective cathodes to two lead-outs in said envelope, separate connections from the respective anodes to two other lead-outs in said envelope, a pair of sheets of insulating material between which said triode assemblies are mounted, grid and cathode support rods extending through the lower sheet of said pair of sheets, a metallic shield mounted beneath the lower of said pair of sheets of insulating material, said shield comprising a disc having a central slot with up-turned walls on either side of the grid and cathode support rods, the shield being secured to one of the said grid support rods and being thereby in metallic contact with one of the grids, and the said capacitor coupling the two said grids comprising a first metallic sheet clamped with interleaved dielectric sheets between the said shield and a further metal sheet bonded to the shield, the said first metal sheet being in metallic contact with the other one of said grids.

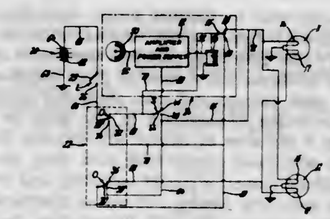
2,749,477
CAVITY-RESONATOR MAGNETRON
Jan Verweel, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application March 18, 1952, Serial No. 277,215
Claims priority, application Netherlands April 5, 1951
2 Claims. (Cl. 315—39)



1. A magnetron of the resonant cavity type comprising a pair of terminal plates each having a first cylindrical recess of given diameter and a second cylindrical recess having a larger diameter than said given diameter and concentric with the first cylindrical recess and two aligned communicating grooves opening into said cylindrical recesses, an anode block enclosed completely between said terminal plates comprising a main body portion having a shape which fits within said second cylindrical recesses of the terminal plates so that the opposing surfaces of the plates are in engagement with one another and a central bore extending through said body portion, a cathode member disposed within said bore, said anode block also defining a plurality of resonant cavities and having a projecting portion fitting within a portion of said aligned grooves and defining a groove extending therethrough which connects with one of said cavities, the groove in said projecting portion and the unoccupied portion of the aligned grooves in said terminal plates cooperating to form an H-shaped channel for transferring the energy generated within the resonant cavities.

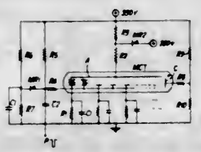
2,749,478
AUTOMATIC HEADLIGHT CONTROL SYSTEM
Howard K. Gandelot, Grosse Pointe Woods, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 31, 1952, Serial No. 290,855
4 Claims. (Cl. 315—83)

1. In a multi-filament headlight illumination system including a source of power; upper beam and lower beam lighting circuits; manual beam selector switching means connected in said circuits and operable between a high beam selector contact and a low beam selector contact to selectively connect said lighting circuits for energization from said power source; automatic dimming means energized from said power source and comprising light sensitive means and relay means including first and second contacts and having an armature connected to said high beam selector contact, said armature being movable in accordance with the intensity of illumination impinging on said light sensitive means to engage said first contact to normally complete said upper beam lighting circuit through said upper beam selector contact to said power source, and to engage said second contact to disable said upper beam lighting circuit and connect said lower beam lighting circuit for actuation through said upper beam selector contact to said power source; and separate manually operated override switching means including a switch arm connected to said second contact and movable between two contact points, said override



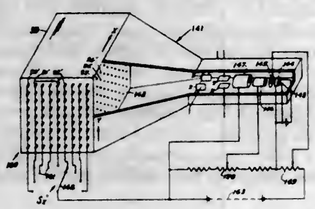
switching means normally contacting one of said two contact points and completing said lower beam lighting circuit from said power source through said beam selector switching means, said armature, said switch arm, and said one of said two contact points, to said power source, and movable to the other of said two contact points to disable said lower beam lighting circuit and complete said upper beam lighting circuit from said power source through said beam selector switching means, said armature, said switch arm, and said other of said two contact points to said power source; said beam selector switching means and said override switching means having a common actuator characterized by at least two independent modes of actuation, whereby either of said switching means may be actuated without affecting the other.

2,749,479
ELECTRICAL CIRCUITS USING MULTI-GAP COLD CATHODE GAS FILLED TUBES
Thomas Melrion Jackson and Ian Hugh Fraser, London, England, assignors to International Standard Electric Corporation, New York, N. Y.
Application October 20, 1954, Serial No. 463,450
Claims priority, application Great Britain
November 12, 1953
5 Claims. (Cl. 315—84.6)



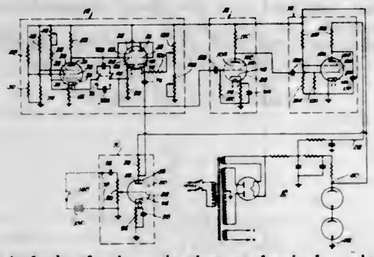
1. An electrical circuit which comprises a multi-gap cold-cathode gas-filled discharge tube of the type having storage gaps and transfer gaps, a source of current associated with all of said gaps which is substantially non-effective when a storage gap alone is discharging, and circuit means responsive to the initiation of a discharge in a transfer gap to render said current source effective, whereby current flows from said current source as well as from the anode-cathode supply circuit when a transfer gap is discharging.

2,749,480
APPARATUS FOR PRODUCING THREE-DIMENSIONAL VISUAL PATTERNS
Martin Ruderfer, Kew Garden Hills, Flushing, N. Y.
Application November 24, 1952, Serial No. 322,326
18 Claims. (Cl. 315—169)



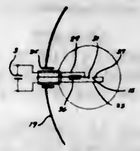
1. An apparatus to produce visual three-dimensional representations within a given volume which is divided into zones whose respective positions therein are definable in a single mathematical system of three coordinates determining such volume and such apparatus operating to provide successive illumination in one zone at a time, comprising a plurality of electrically-operable illuminating means positioned one in each such zone, three electrical switching means, a circuit including said illuminating means, switching means, a source of electrical energy suitable for operating the said illuminating means and electrically conductive path means in electrical connection with said illuminating means, affording each of the switching means the selection of an illuminating means in any zone with respect to one of said coordinates respectively for operation, so that only the illuminating means having the coordinates selected by all three switching means simultaneously, is connected to the electrical energy source and operated thereby and three means, each operating one of the switch means respectively to determine the electrically conductive means to the illuminating means which is to be chosen for operation; at least that part of the electrically conductive means which is within said volume, being in the nature of wires.

2,749,481
STROBOSCOPE
Rudolph J. Klein, Jr., Oak Ridge, Tenn., assignor to Phillips Control Corporation, a corporation of Illinois
Application September 9, 1954, Serial No. 454,953
8 Claims. (Cl. 315—205)



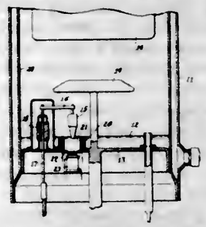
1. A device for investigating mechanical motions comprising means to generate an electrical pulse at a given point of each cycle of the mechanical motion under study, a flash circuit having a flash tube electrically connected to the pulse generating means for producing a light flash responsive to each pulse of the pulse generating means, and means to delay the pulse generated by the generating means for a period of time comprising a first vacuum tube having a plate, screen grid, control grid, and plate return electrode, a source of power having a positive terminal connected to the plate of the vacuum tube through a plate resistor and a negative terminal connected to the plate return electrode of the tube through a resistor, the screen grid of said tube being electrically connected to the positive terminal of the source of power through a potential dropping means, current by-passing means electrically connected between the plate and the negative terminal of the power source, said means also being electrically connected to the means for generating electric pulses and the magnitude of the current flowing through said circuit being diminished by a pulse from the pulse generating means and by a decrease in the potential between the plate of the vacuum tube and the negative terminal of the power source, a condenser electrically connected between the plate and control grid of the tube, and a resistor electrically connected between the grid and positive terminal of the power source.

2,749,482
ELECTRIC IMPULSE LAMP AS TRANSMITTER FOR LIGHT-FLASH SIGNALING SYSTEM
Frank Fruengel, Hamburg-Rissen, Germany
Application December 12, 1952, Serial No. 325,512
Claims priority, application Germany January 2, 1952
5 Claims. (Cl. 315—241)



1. In an electric impulse lamp for light flash signaling the combination, with an incandescent lamp, of a pair of electrodes forming a spark gap, a filament, an envelope enclosing said spark gap and filament, and a gaseous filling within said envelope.

2,749,483
IGNITRON
William W. Rigrod, Bloomfield, N. J., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application August 29, 1951, Serial No. 244,231
4 Claims. (Cl. 315—261)

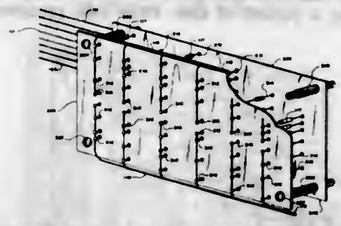


1. An ignitron having a pool cathode and an ignitor, said ignitor being partially immersed in said pool cathode, means restricting a portion of the cathode pool to the vicinity of said ignitor, said restricting means extending from the bottom of said cathode pool substantially to and underlying the top surface of said cathode pool, said restricting means being coaxial to said ignitor, and means coaxial to and effective in said restricted portion of the cathode pool, said means being creative of a modified surface condition of said restricted portion of said pool.

2,749,484
FUNCTION TABLE
Semond Levitt, Philadelphia, Pa., assignor to Sperry Rand Corporation, a corporation of Delaware
Application March 31, 1952, Serial No. 279,715
7 Claims. (Cl. 317—99)

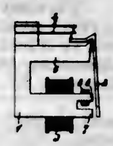
1. An article of manufacture comprising, a first plurality of conductors, a second plurality of conductors

mounted in the same plane as, but opposite to said first plurality of conductors, a third plurality of conductors spaced from said first and second pluralities of conductors and presenting intersecting arrays in projection on said first and second pluralities of conductors, a plurality of flat apertured insulating members interposed between said first and second pluralities of conductors and said



third plurality of conductors and disposed in spaced, substantially parallel planes, and coupling elements positioned between said insulating members and interconnecting selected conductors in said first and second pluralities of conductors with selected conductors in said third plurality of conductors through the apertures in said insulating members.

2,749,485
ALTERNATING-CURRENT RELAY
Willy Ober and Koenraad Droogleever Fortuyn, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application September 5, 1951, Serial No. 245,198
Claims priority, application Netherlands September 28, 1950
5 Claims. (Cl. 317—184)



2. An alternating-current relay comprising a core one end of which is split into two portions, a short-circuit winding embracing only one of said two portions, and a pivotably mounted armature adapted to be moved toward said one end of said core when the latter is magnetized, said armature comprising a ferromagnetic metal plate including a first portion disposed opposite said one portion of said one end of said core and exhibiting a relatively low electrical resistance to the flow of eddy currents therein, said armature including a second portion laminated in a direction of length of the armature to exhibit a relatively high resistance to the flow of eddy currents therein and disposed opposite the other portion of said one end of said core.

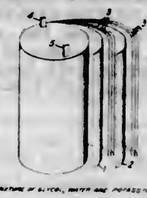
2,749,486
FOCUSSING MAGNET SYSTEMS FOR CATHODE RAY TUBES
John Edward Gould, Sheffield, England
Application September 9, 1954, Serial No. 454,985
Claims priority, application Great Britain September 21, 1953
6 Claims. (Cl. 317—200)

1. A focussing magnet system for cathode ray tubes, comprising a central ring pole of magnetically permeable material, a number of permanent magnet blocks mounted on the central ring pole each with its direction of polarisation extending radially outwardly from the outer periphery of the ring pole, and a further pole consisting of a magnetically permeable plate parallel to the plane of the ring pole and spaced from the ring pole to form a gap, with a central hole coaxial with the ring pole, and with its periphery bent over to contact the radially outer



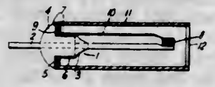
ends of the magnet blocks, like poles of the magnets respectively contacting the ring pole and the further pole.

2,749,487
TANTALUM ELECTROLYTIC CAPACITOR
Alfred L. Jenny and Donald H. Stephenson, Glens Falls, N. Y., assignors to General Electric Company, a corporation of New York
Application May 11, 1953, Serial No. 354,643
4 Claims. (Cl. 317—230)



1. An electrolytic capacitor comprising tantalum electrodes and an electrolyte consisting essentially, by weight, of from 28 to 35 per cent distilled water and 30 to 43 per cent ethylene glycol, balance potassium nitrite.

2,749,488
LIGHT CELLS OR RECTIFIERS
Simon Ernst Mayer, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application August 18, 1954, Serial No. 450,713
Claims priority, application Great Britain August 28, 1953
3 Claims. (Cl. 317—234)

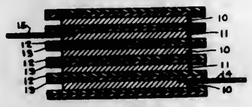


1. A semi-conductor junction-type cell comprising a container having an inert atmosphere, an insulating seal at one end of the container, a pair of leads sealed to said insulating seal and extending within said container, a junction-type semi-conductor die mounted between the two leads inside the container, and a transparent window in said container at a point spaced from said insulating seal in a position to permit external light to fall upon the die.

2,749,489
DRY CONTACT RECTIFIERS
Simon Ernst Mayer and Ronald Alfred Hill, London, England, assignors to International Standard Electric Corporation, New York, N. Y.
No Drawing. Application December 4, 1950, Serial No. 199,138
20 Claims. (Cl. 317—238)

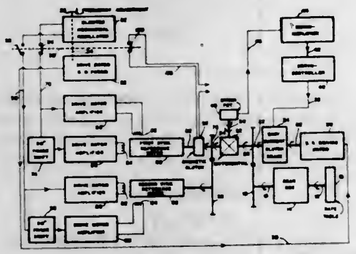
1. A dry contact rectifier consisting solely of two layers: a base plate consisting of a consolidated powder of one or more semi-conducting metallic oxides, and a layer of one or more conducting metallic oxides in intimate mechanical and electrical contact with one surface of said plate.

2,749,490
ELECTRICAL CONDENSERS
Preston Robinson and David B. Peck, Williamstown, Mass., assignors to Sprague Electric Company, North Adams, Mass., a corporation of Massachusetts
Application October 22, 1952, Serial No. 316,232
2 Claims. (Cl. 317—258)



1. An electrical capacitor comprising convolutely wound electrode elements separated by a composite dielectric spacing material, said material consisting of at least one continuous film of disoriented polystyrene and at least one predominantly oriented film of polyethylene terephthalate acid.

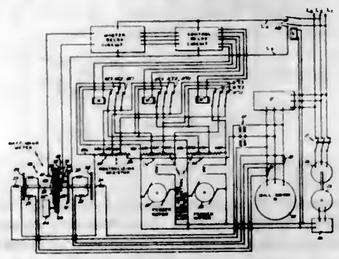
2,749,491
VARIABLE FREQUENCY GENERATING MEANS AND MOTOR CONTROL
Henry J. Stinger, Wilmington, Del., assignor to General Mills, Inc., a corporation of Delaware
Application April 26, 1952, Serial No. 284,623
20 Claims. (Cl. 318—11)



16. A variable speed motor control system comprising a variable speed driving motor having a motor shaft, a reference shaft, means driving the reference shaft at a selected constant reference speed, manual speed control means operatively controlling the reference shaft speed for selection of other constant reference speeds, interconnecting means between said manual speed control means and variable speed driving motor automatically adjusting the motor speed in a limited range above the reference shaft speed established by the speed control means at any given setting, an eddy-current clutch and eddy-current brake combination having an input connected to the driving motor and an output shaft for connection to a desired load, detector means responsive to differences in speed of the output and reference shafts and means adjusting the relative energization of said clutch and brake in response to operation of the detector means and thereby maintaining the output shaft speed in synchronism with each selected reference shaft speed.

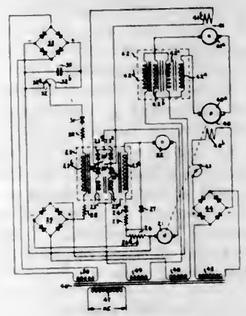
2,749,492
ELECTRICAL CONTROL APPARATUS
Frank Acuña Littlewood, Cananea, Mexico
Application May 25, 1951, Serial No. 228,181
12 Claims. (Cl. 318—39)

1. The combination with a source of electric power, a mill motor having a power input connectable to said source and a feeder motor, of apparatus for controlling the operation of said feeder motor in accordance with the rate of power consumption of said mill motor, comprising a power measuring instrument connected to said power input of the mill motor and having a shaft rotatable at a speed determined by the rate of power consumption of the mill motor, a first contact element mounted on said shaft for rotation in an orbit about the shaft axis, a second contact element rotatable in the same orbit, means for rotating said second contact element at a predetermined constant speed, whereby said contacts close whenever the speed of rotation of said shaft differs over a period of time from said predetermined



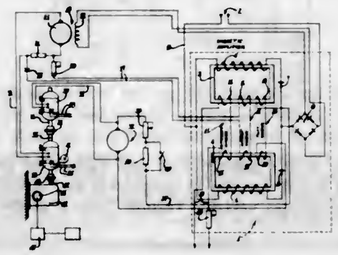
speed, electrical control means connected in circuit with said contacts and said power source, so as to be actuated upon closure of said contacts, and a feeder motor control device operable in response to actuation of said control means and connected in circuit with said feeder motor, whereby a change in the rate of power consumption of said mill motor which causes said instrument shaft to rotate at a speed other than said predetermined speed results in actuating the control means and thereby in controlling the operation of the feeder motor.

2,749,493
SPEED REGULATING AND CURRENT LIMIT MOTOR CONTROL SYSTEM
Paul M. Fischer, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application August 26, 1953, Serial No. 376,589
10 Claims. (Cl. 318—142)



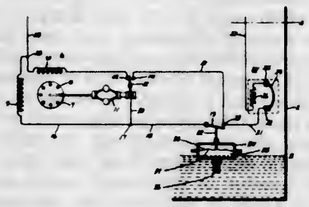
1. In a control system for an electric motor whose armature is supplied with voltage by means adjustable to vary the magnitude of such voltage, the combination with an amplifying regulator having its output in circuit with said means to afford adjustment of the latter, and having a control winding, of a source of reference voltage, a generator driven by said motor, and a circuit inclusive of said source, said generator and said control winding for subjecting the latter to the voltage difference between said source and said generator, and further including an element rendered conductive upon attainment of a given voltage difference to shunt flow of a greater portion of the circuit current around said control winding.

2,749,494
ELECTRIC MOTOR CONTROL AND COUNTER-WEIGHT COMPENSATOR
Charles G. Bosco, Sterling, Ill., assignor to Northwestern Steel & Wire Company, Sterling, Ill., a corporation of Illinois
Application July 7, 1953, Serial No. 366,595
8 Claims. (Cl. 318—143)



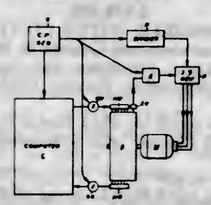
8. In an electric drive control system wherein the input to a generator is controlled by a multiple control winding magnetic amplifier to control operation of the motor energized from said generator and wherein a control winding of said magnetic amplifier receives its signal from said generator and another control winding receives its signal from a reference source, the improvement comprising a second motor coupled to the first motor for corotation therewith, a second generator for energizing said second motor, and means coupling said second generator to still another control winding on said magnetic amplifier, all of said control windings being additive during control of the first mentioned motor, and certain of said windings being subtractive when the motor is driven in a reverse direction by a load thereon.

2,749,495
CONTROL CIRCUIT FOR PUMP MOTOR
James A. Walley, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application February 28, 1955, Serial No. 491,009
9 Claims. (Cl. 318—221)



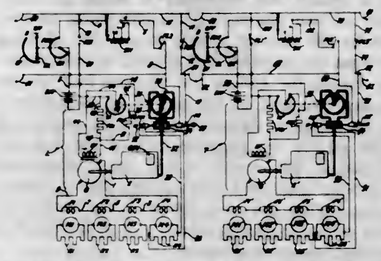
1. In a pump-motor assembly, a single phase alternating current motor having a running winding and a starting winding connected in parallel, switch means arranged to disconnect said starting winding at a predetermined speed, means responsive to the pressure of the liquid to be pumped adapted to close the connections to said windings at a predetermined pressure, a shunt circuit arranged in parallel with said pressure responsive means, said switch means being arranged to connect said running winding through said shunt circuit at said predetermined speed thereby to cause operation of said motor independently of said pressure responsive means, and heat sensitive means in series with said windings and adapted to be positioned to be cooled by the liquid to be pumped, said heat sensitive means being operative to disconnect said windings at a predetermined temperature.

2,749,496
ELECTRICAL CONTROL SYSTEMS
Edward Arthur Newman, Teddington, and David Oswald Clayden, Heston, England, assignors to National Research Development Corporation, London, England, a corporation of Great Britain
Application June 27, 1955, Serial No. 518,266
Claims priority, application Great Britain July 2, 1954
17 Claims. (Cl. 318—314)



1. An electrical control system for controlling the speed of rotation of an electric motor by timing pulses having a given repetition rate and comprising means for producing a predetermined number of synchronizing pulses during each revolution of the motor, motor driving circuits for driving the motor by an alternating current at an average speed at which synchronizing pulses are produced at the same average repetition rate as timing pulses, a sawtooth waveform generator for producing a sawtooth waveform voltage from either one of the sets of synchronizing pulses or the timing pulses, a clamping circuit to which the saw tooth waveform voltage and the other set of pulses are applied and which produces an output voltage at the time of occurrence of each pulse in the applied set, a storage circuit to which the said output voltage is applied and which stores the present output voltage level until the next output voltage supersedes it, and means for applying the stored output voltage from the storage circuit to the said motor driving circuits as an error correcting signal whereby the speed of rotation of the electric motor is rendered more stable with respect to the repetition rate of the timing pulses.

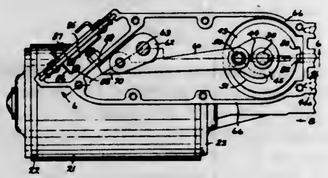
2,749,497
DYNAMIC BRAKING CONTROL SYSTEM
Billy E. Frier, Naperville, Ill., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 21, 1952, Serial No. 294,862
3 Claims. (Cl. 318—367)



1. Apparatus for dynamic braking systems on electrically driven vehicles comprising a generator having a main field to provide excitation therefor, a traction motor connected to operate as a generator and in electrical circuit with a resistance and excited by said generator, means sensitive to the current in said resistance and operatively connected to valve means located in a communicating passage between a hydraulic pressure source and a hydraulically operated vane motor, a vane for said vane motor operatively connected to electrical means to vary the field excitation of said generator and said traction motor and thereby limit the current in said resistance, said valve means acting to control the action of said hydraulic pressure upon said vane, and control

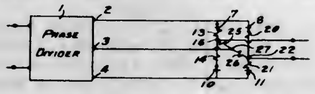
means including a manually operated braking resistor and electrical means connected to said valve means to bias said valve means in opposition to said current sensitive means, the setting of said braking resistor determining the magnitude to which said current is to be limited in said resistance.

2,749,498
WINDSHIELD WIPER CONTROL
Argyle G. Lautzenhiser and George B. Shaw, Anderson, and John W. Dyer, Pendleton, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 14, 1951, Serial No. 221,048
12 Claims. (Cl. 318—466)



1. Windshield wiper actuating mechanism including, a unidirectional rotatable driving member, a driven element rotatably journaled on and yieldably coupled to said driving member, a wiper actuating driven member, means interconnecting said driving and driven members including a linkage of variable length, and means whereby stopping rotation of said yieldably coupled driven element varies the length of said linkage.

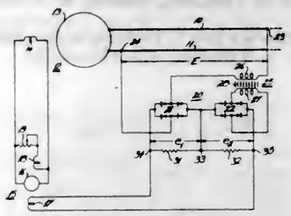
2,749,499
SYMMETRICAL FREQUENCY DOUBLER
Harold E. Hosticka, Denver, and Lewis R. Beckett, Evergreen, Colo.
Application June 14, 1951, Serial No. 231,642
6 Claims. (Cl. 321—4)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In a system for obtaining a signal of twice the frequency of two alternating current phase components substantially 90 degrees apart, means for dividing the positive from the negative half of each of said phase components, means for adding the positive half of the first and the negative half of the second of said phase components to obtain a distorted alternating current signal, means for adding the negative half of the first and the positive half of the second of said phase components to obtain another distorted alternating current signal, and means for adding the two distorted alternating current signals in opposite senses whereby a symmetrical alternating current signal is obtained.

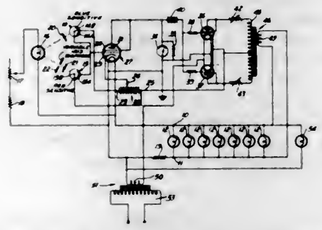
2,749,500
VOLTAGE DEVIATION DETECTOR
William F. Eagan, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application March 3, 1955, Serial No. 491,819
9 Claims. (Cl. 322—28)

1. A voltage deviation detector for a source of variable voltage comprising: a saturable transformer having a primary winding and a secondary winding isolated from each other and having said primary winding energized by said source, a first element connected to be traversed by the current traversing said primary winding for producing a signal in said first element, a second element connected to be traversed by the current induced in said secondary winding by the current traversing said primary winding for producing a signal in said second element, and means



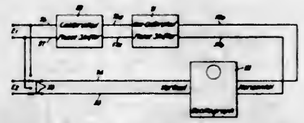
responsive to the difference of said signals for producing a control signal varying in magnitude and direction with deviations of said variable voltage from a predetermined value.

2,749,501
PHOTOELECTRIC VOLTAGE REGULATOR
Harold W. Bartlett, Berkeley, Calif., assignor to California Packing Corporation, San Francisco, Calif., a corporation of New York
Application October 6, 1950, Serial No. 188,769
6 Claims. (Cl. 323—21)



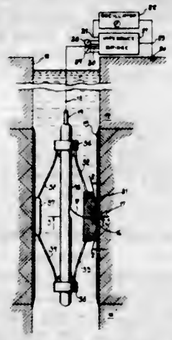
1. In a voltage regulating system of the character described for maintaining a voltage substantially constant across a utilization device, a first unregulated voltage source connected to said utilization device, an incandescent lamp connected to said first voltage source for developing light which varies in color with change in voltage of said source, a pair of photo tubes each more sensitive to different spectral distributions of light energy emitted from said lamp and energized thereby, each of said photo tubes having an anode and a cathode, a second direct current source, said photo tubes being serially connected with said second source with the anode of one tube connected at a junction point to the cathode of the other tube, and with the positive terminal of said direct current source connected to the anode of said other tube, the negative terminal of said direct current source being connected to the cathode of said one tube, a regulating resistance, said regulating resistance and utilization device being serially connected with said unregulated voltage source, an auxiliary load circuit, said load circuit and regulating resistance being serially connected with said unregulated voltage source, an electron tube having an anode and a control grid connected to said junction point of said serially connected photo tubes with the cathode of said electron tube being connected to a point on said second source, said electron tube having a continuously variable plate to cathode conductance with said conductance changing in accordance with minute changes of voltage of said first voltage source, and means coupled to the anode of said tube and controlling said load circuit in accordance with voltage variations on said control grid to maintain the voltage across said utilization device substantially constant.

2,749,502
PRECISION CALIBRATED PHASE SHIFTER
John R. Ragazzini and Lofti A. Zadeh, New York, N. Y.
Original application June 12, 1950, Serial No. 167,550. Divided and this application February 9, 1954, Serial No. 412,194
15 Claims. (Cl. 323—111)



1. A phase shifter having first and second input terminals and first and second output terminals, a first resistor in shunt to said input terminals, a second resistor in shunt to said output terminals, a conductor connecting said second input terminal directly to said second output terminal, an amplifier having a first input connection to said first input terminal, a second input connection to said conductor, and an output connection to said conductor, a third resistor having one end connected to said conductor and the other end connected to the output of said amplifier remote from said conductor, a first adder connection from a point on said third resistor remote from said conductor to said first output terminal, a first phase control impedance element in said first input connection, a feedback connection including a second phase control impedance element connecting the end of said first phase control impedance element remote from said first input terminal to the output of said amplifier remote from said conductor, and a second adder connection from a point on said first resistor remote from said conductor to said first output terminal, each of said adder connections including a resistor, one of said phase control impedance elements being a variable resistor and the other a capacitor.

2,749,503
ELECTRICAL LOGGING IN NON-CONDUCTIVE DRILLING LIQUIDS
Henri-Georges Doll, Ridgefield, Conn., assignor to Schlumberger Well Surveying Corporation, Houston, Tex., a corporation of Delaware
Application November 28, 1951, Serial No. 258,616
14 Claims. (Cl. 324—1)



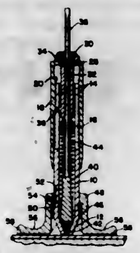
1. A method of logging a borehole containing substantially non-conductive liquid in which finely divided solids are suspended, the filtrate from said liquid tending to invade permeable formations traversed by the borehole and leave a highly resistive mud cake on the wall thereof, comprising the steps of sliding an electrode along the wall of the borehole in engagement therewith and over any mud cake that may be present, and detecting the mud cake in terms of the capacitive reactance between the electrode and the formation behind the same.

2,749,504
INSTRUMENT FOR DETERMINING MAGNETIC PERMEABILITY
Clarence A. Anderson, San Diego, Calif.
Application December 27, 1951, Serial No. 263,617
6 Claims. (Cl. 324—34)



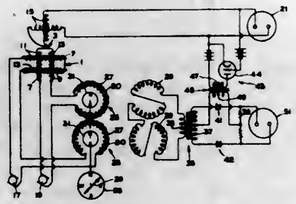
3. A manually portable instrument for testing the permeability of a body comprising, in combination: a base composed of nonmagnetic material having a vertical hole therethrough; a solid core of magnetic material passing through and filling said hole, the lower end of said core being flush with the lower face of said base; a spool containing many turns of wire surrounding said core; means securing said spool to said base; a second core of magnetic material; a second spool containing many turns of wire surrounding said second core; means supporting said second spool with its axis normal to the axis of the first spool and in a horizontal plane through the center of the first spool; a long hollow cover of nonmagnetic material mounted above said base and enclosing said coils and cores; means securing said cover to said base; a pair of flexible leads passing through said cover and connected to supply the wire on said first spool with alternating current; and a pair of flexible leads passing through said cover and connected to the terminals of the wire on said second spool, said cover forming a handle adapted to be grasped by the operator's hand for moving said base along the body to be explored.

2,749,505
APPARATUS FOR GAGING
Forrest Cline McNary, Springfield, Ohio
Application November 22, 1952, Serial No. 322,087
3 Claims. (Cl. 324—34)



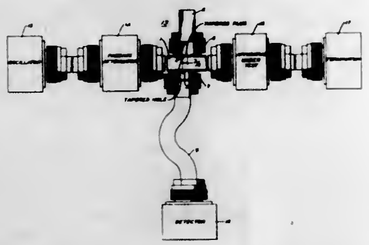
1. In an instrument for measuring coating thicknesses: a hollow cylindrical barrel having a straight end portion and a tapering inwardly end portion, a thimble threaded to the straight end portion of the barrel, a guide rotatably carried by the thimble and extending into the barrel, a rod extending through the guide and reciprocable therein and carrying a magnet on the end within the barrel, said magnet being shaped to fit within said tapered end portion of the barrel so the end of the magnet is at least flush with said end of the barrel, a tension spring connected between the rod and the guide to urge the rod away from said tapered end of the barrel, and a hold-down foot loosely mounted on the tapered end of the barrel for limited movement relative thereto, said hold-down foot comprising laterally extending finger pieces and the underneath surfaces of said finger pieces being adapted for being brought into co-planar relation with the said one end of said barrel, said hold-down foot being spring urged on said barrel so that said tapered end of the barrel normally projects beyond the plane of the said underneath surfaces of said finger pieces.

2,749,506
MAGNETOMETER
John F. Emerson, Hasbrouck Heights, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application August 21, 1950, Serial No. 180,572
26 Claims. (Cl. 324—43)



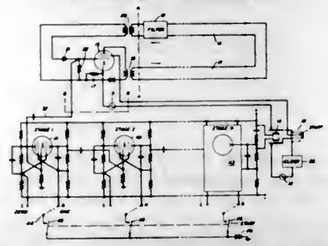
1. In a device of the kind described, a pickup having elements of magnetic material inclined to one another, windings associated with said elements and arranged so that upon energization thereof by varying current means, voltages corresponding to the components of an external unidirectional magnetic field parallel to the associated elements are induced therein, means to combine the voltages induced in said windings to procure a voltage corresponding in phase and amplitude to the vector sum of the magnetic field components, and means responsive to said latter voltage to indicate the strength of the magnetic field.

2,749,507
MEASURING APPARATUS FOR WAVE GUIDES
William H. Hewitt, Jr., Mendham, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application March 27, 1951, Serial No. 217,723
1 Claim. (Cl. 324—58)



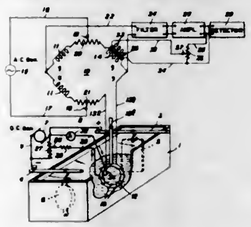
A standing wave measuring system for use with hollow-pipe wave guide, comprising a source of electromagnetic waves, a hollow-pipe wave guide coupling section connected at one end to said source and adapted for connection at the other end to the input side of apparatus to be tested, said coupling section having two coupling apertures therein; a detector, a wave guide connected at one end to the detector and adapted to be removably coupled at the other end to said coupling section through one of said coupling apertures, a removable plug in the other of said coupling apertures, said plug having a conductive face that is flush with the inner surface of the wave guide when the plug is firmly seated, and a variable position short circuiting device connected to the output side of the apparatus to be tested, whereby the position of a maximum or minimum portion of a standing wave pattern in the system may be moved longitudinally of the system and adjusted to coincide with the location of a selected one of said coupling apertures while substantially avoiding both reflection and radiation at the plugged aperture.

2,749,508
MEASUREMENT OF TRANSMISSION TIME
Harry Nyquist, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application July 26, 1952, Serial No. 301,127
4 Claims. (Cl. 324—58)



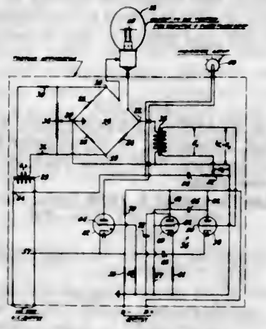
1. In a system for the measurement of the transmission time of a circuit or path, a wave source, switching means responsive to the presence of a wave train at one end of the said circuit serving as the receiving end to hold the wave source disconnected from the other or transmitting end as long as a wave train is present at the receiving end and responsive to the absence of a wave train at the receiving end to hold the wave source connected to the transmitting end as long as no wave train is present at the receiving end, whereby spaced wave trains are generated at a time rate determined by the transmission time of the circuit, timing means, starting means for initially connecting the wave source to the said switching means and for simultaneously starting the timing means, counting means actuated by said switching means to count individual wave trains at the receiving end of the circuit to be measured, and means to stop the timing means upon completion of a predetermined count by said counting means.

2,749,509
MEANS FOR MEASURING THE DENSITY OF DIRECT CURRENT
Lewis A. Medlar, Oreland, Pa., assignor to Fox Products Company, Philadelphia, Pa., a corporation of Pennsylvania
Application December 11, 1951, Serial No. 260,975
2 Claims. (Cl. 324—59)



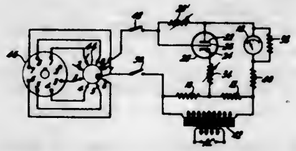
1. Apparatus for comparing the reactance of a variable inductance with that of a standard inductance comprising a bridge circuit having the inductances in different arms thereof, a source of periodic current connected across the input of said bridge, indicating means connected across the output of said bridge, a coil wound in inductive relation with the standard inductance, and means connecting said coil and said indicating means to provide voltage across the coil proportional to the voltage supplied the indicating means, said coil and standard inductance being relatively so wound and the voltages across the coil and standard inductance being of such relative phases that the voltage induced in the standard inductance by reason of current flowing through the coil aids the voltage across the standard inductance caused by current flowing from said source of periodic current.

2,749,510
RAPIDLY INDICATING BRIDGE
Clair M. Rively, Rockaway, N. J., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application January 18, 1952, Serial No. 267,152
7 Claims. (Cl. 324—62)



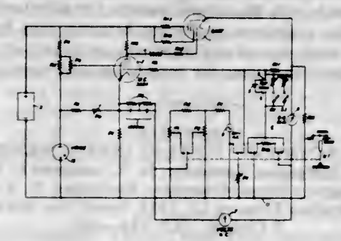
1. A testing circuit to determine when the resistance of an element is within predetermined limits comprising a Wheatstone bridge having said element connected into one leg thereof, the magnitude and phase of the output of said Wheatstone bridge depending upon the resistance of said element, phase indicating means comprising a thyratron having pulses applied to its grid and a reference voltage applied to its plate, said indicating means being capable of determining when the phase of said pulse with respect to said reference voltage is shifted a predetermined amount, a controllable pulsing network to provide said pulses, the output pulses of said network being synchronized with a point on an input voltage wave to said pulsing network, means supplying an input voltage wave to said pulsing network which causes said pulses to occur at the peak of the positive wave of said reference voltage, means to shift the phase of said reference voltage, said bridge being connected to said pulsing network through a voltage adding means to add the output of said bridge to said phase shifted reference voltage so that the output signal from said bridge varies the magnitude and phase of said input wave thereby causing the phase of the output pulses with respect to said reference voltage to shift in an amount dependent upon the phase and magnitude of the output signal from said bridge, the phase of said pulses being shifted in one direction when the resistance of said element is high and in the other direction when the resistance of said element is low.

2,749,511
ELECTRICAL TESTER
James H. Canning, Williamsport, Pa., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts
Application November 14, 1950, Serial No. 195,659
7 Claims. (Cl. 324—62)



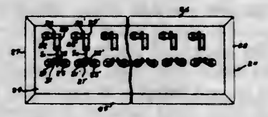
1. An impedance testing circuit including an electrical translator having two current-translating terminals and a current-control terminal, a voltage divider having energizing terminals and an intermediate tap, a circuit terminating at the ends of said voltage divider and having a reference impedance in series with means for connections to an impedance to be tested, means connecting one current-translating terminal of said translator to said intermediate tap, means connecting the other current-translating terminal of said translator to the junction of said reference impedance and said voltage divider, the control terminal of said translator being connected to the junction of said reference impedance and said impedance connecting means, and current measuring means in one of said connecting means.

2,749,512
OHMMETER
Royer R. Blair, Berkeley Heights, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application August 23, 1952, Serial No. 306,023
11 Claims. (Cl. 324—64)



1. Apparatus for measuring the alternating-current resistance of a non-linear resistor under uniform direct-current conditions comprising an automatic voltage regulator circuit of the type having a series regulator tube and a control amplifier, a space current path and a control electrode for said regulator tube, a load circuit including a pair of test terminals for said resistor, a source of direct current and a circuit connecting said source in series with the space current path and load circuit, an input circuit and an output circuit for said control amplifier, a circuit connecting said output circuit to said control electrode and another circuit connecting said load circuit to said input circuit whereby a direct voltage in said load circuit is maintained substantially constant, a source of alternating current coupled to said input circuit whereby an alternating current flows in said load circuit, and a meter connected to said load circuit for measuring the alternating-voltage drop across a portion thereof as a measure of the alternating-current resistance of said resistor.

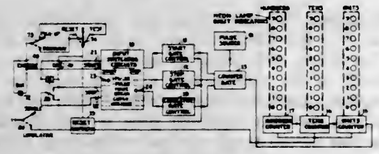
2,749,513
DIELECTRIC TEST BOX AND AUXILIARY SWITCH BOX
Harry G. Lake, Newark, N. J., assignor to the United States of America as represented by the Secretary of the Air Force
Application March 10, 1955, Serial No. 493,582
3 Claims. (Cl. 324—65)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. Apparatus for measuring surface and volume resistivity of dielectrics comprising, a dielectric test box adapted to be placed in a chamber having controlled temperature and humidity, said box having at least one metallic wall which serves as a terminal and mounting panel for a plurality of samples of dielectric, a group of three terminals for each said sample, said terminals being insulated from and extending through said wall, the terminals of

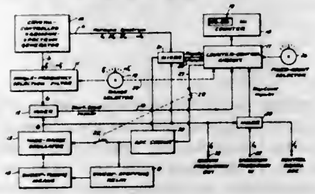
each group being placed at the corners of a right triangle on said wall, the first terminal of each said group of terminals having an insulating support arm and a first spring contact arm connected to the end of the terminal within said box, the second and third terminals of each said group of terminals each having a single spring contact arm connected to the end of the terminal within said box, said support arm and said first spring contact arm, and said second and third spring contact arms being arranged in opposed relation to hold a flat slab sample of dielectric between them so that electrical contact is made by said first and second contact arms at first and second points on one side of said sample and by said third contact arm at a third point on the other side of said sample, said third point being directly opposite said second point on said sample; the first, second, and third contact points on each sample being connected through said contact arms and their respective terminals to remote means for selectively connecting the resistance appearing between said first and second or said second and third contact points of any selected sample to means for measuring said resistance.

2,749,514
ELECTRONIC TESTING INSTRUMENT
Frank P. Zaffarano, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.
Application January 12, 1951, Serial No. 205,656
3 Claims. (Cl. 324—68)



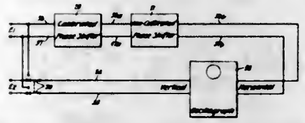
1. In an interval timing organization, means for producing a succession of pulses of a predetermined frequency, a counter for counting said pulses, a normally nonconductive start control gas discharge tube being effective when made conductive to cause said pulses to be applied to said counter, a normally nonconductive stop control gas discharge tube being effective when made conductive to prevent said pulses from being applied to said counter, separate control circuit means associated with each of said gas discharge tubes and each comprising, an electron tube having control grid and cathode and plate electrodes, a cathode circuit for said tube including a cathode resistor and means for applying a positive voltage to said cathode, first input circuit means for each electron tube including a first coupling capacitor for applying an external circuit condition to said cathode resistor, second input circuit means associated with each electron tube including a second coupling capacitor for applying an external circuit condition to said control grid, switching circuit means associated with each control circuit means for adapting said control circuit means to be responsive to different external circuit conditions applied to respective input terminals, said switching circuit means in one position being effective to cause an external positive electrical pulse to be applied to said control grid of the associated electron tube and in its second position being effective to cause an external negative pulse to be applied to said cathode of said tube, said switching circuit means in its third position being effective to connect said control grid through its associated coupling capacitor to a source of positive potential and connecting said second input circuit means to said input terminals to thereby condition said control circuit means to be responsive to the breaking of an external circuit, said switching circuit means in its fourth position being effective to connect said cathode through its associated coupling capacitor to a source of positive potential and connecting said first input circuit means to the associated input terminals to thereby condition said control circuit means to be responsive to the closure of an external circuit, each external circuit condition being effective to cause a momentary increase in plate current of said associated electron tube, and means responsive to the increased plate current of said electron tube to make the associated gas tube conductive, whereby said pulses are applied to said counter only during the interval initiated by the application of distinctive start and stop inputs to the respecive input terminals.

2,749,515
DIRECT-READING FREQUENCY METER
Paul G. Hansel, Greenvale, N. Y., assignor to Servo Corporation of America, New Hyde Park, N. Y., a corporation of New York
Application December 9, 1950, Serial No. 200,060
7 Claims. (Cl. 324—79)



1. In a frequency-measuring device of the character indicated, a spectrum generator of harmonics of a reference frequency, frequency-responsive spectrum-probing means tunable over a band including a plurality of harmonics in the output of said generator, frequency-coincidence responsive means connected to said probing means and to said generator and generating an output signal for each frequency coincidence, counter means connected to said last-defined means and responsive to frequency coincidences between the output of said generator and of said probing means to count the number of such coincidences in a given tuning sweep of said probing means, and second frequency-coincidence responsive means connected to said probing means and including an input connection for application of a source of unknown frequency, said counter means being also connected to said second coincidence-responsive means and being further responsive to a frequency coincidence between a given unknown frequency and the output of said probing means to stop count registration upon such latter coincidence, whereby when said counter has been stopped it may preserve a response indicative of the particular harmonic frequency swept just before attainment of the unknown frequency.

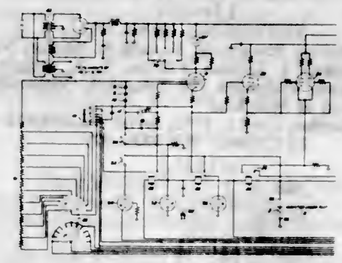
2,749,516
PHASE METER
John R. Ragazzini and Lofti A. Zadeh, New York, N. Y.
Application June 12, 1950, Serial No. 167,550
10 Claims. (Cl. 324—88)

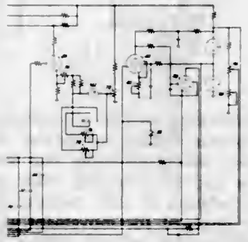


1. A phase meter comprising means to indicate a predetermined phase difference between two waves of voltage, a separate path to said indicating means for each of said waves; a calibrated phase shifter having the same calibration for a plurality of substantially different frequencies, said phase shifter comprising means in one of said paths for deriving from the voltage applied thereto two voltages accurately 90° out of phase with each other

at any of said frequencies, calibrated adjusting means for selecting any desired fraction of one of said two voltages from zero to a maximum value of said fraction and means for adding said selected fraction of said one voltage to the other of said two voltages and for transmitting the resultant of said added voltages to said indicating means over the path which includes said voltage deriving means; and adjustable phase shifting means in one of said paths for adjusting the difference between the phase shifts of said two paths to said predetermined phase difference when said calibrated phase shifter has a predetermined initial reading, whereby said calibrated phase shifter is enabled to maintain its calibration over said frequency range, said calibrated phase shifter being adjustable to produce said predetermined phase difference at said indicating means when said two waves of voltages are applied to said two paths, respectively.

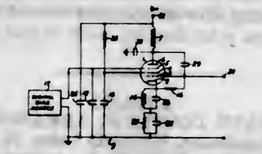
2,749,517
APPARATUS FOR TESTING NONLINEAR RESISTORS
Royer R. Blair, Berkeley Heights, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application November 5, 1954, Serial No. 466,997
5 Claims. (Cl. 324—158)





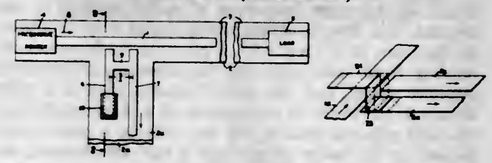
1. Apparatus for measuring the inverse peak voltage of a nonlinear resistor which comprises a current generator serially connected to said resistor, means for controlling said generator to produce a steadily increasing output therefrom, an amplifier including input and output terminals, a condenser serially connected to an asymmetrically conductive device, a recording device, means for applying the steadily increasing inverse voltage developed across said resistor to the input terminals of said amplifier, means for connecting the output terminals of said amplifier to said condenser to charge said condenser through said asymmetrically conductive device to a value corresponding to the inverse voltage developed across said resistor, means responsive to the change in potential at the junction of said condenser and said asymmetrically conductive device, when the inverse voltage developed across said resistor decreases from its peak value, for disconnecting said condenser from said amplifier and said resistor from said generator, means comprising said recording device connected to said condenser for measuring the charge thereon.

2,749,518
FREQUENCY MODULATED OSCILLATOR SYSTEM
Albert Shadowitz, Nutley, N. J., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application June 27, 1951, Serial No. 233,721
11 Claims. (Cl. 332—28)



1. A system for producing frequency modulated waves comprising an electron discharge device having a cathode, anode and a plurality of grids, circuit means coupling two of said grids, said anode and said cathode to produce oscillations, said circuit means including a series circuit resonant at the mean operating frequency of said system and having inductance and capacitance in series, said anode being coupled to the junction of said inductance and capacitance, and means for applying a control voltage to one of said grids to control the frequency of the cyclic operation of said device.

2,749,519
DIRECTIONAL COUPLERS FOR MICROWAVE TRANSMISSION SYSTEMS
John A. Kostriza, New Dorp, and Paul Terranova, Brooklyn, N. Y., assignors to International Telephone and Telegraph Corporation, a corporation of Maryland
Application March 5, 1952, Serial No. 274,932
10 Claims. (Cl. 333—10)



1. A coupling device comprising a microwave transmission line having first and second conductors spaced close together in substantially parallel relation, third and fourth conductors disposed in parallel relation to each other substantially one quarter of a wavelength apart, means disposing said third and fourth conductors substantially in a given plane containing said first conductor with said third and fourth conductors at an angle to but in spaced relation with said first conductor, and said second conductor having portions disposed laterally in substantially a second plane parallel to said given plane with said portions in close spaced relation to said third and fourth conductors, at least one of said third and fourth conductors including a portion extending out of said given plane to partially encircle said first conductor.

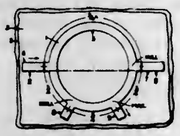
2,749,520
DIRECTIONAL COUPLING MEANS FOR TRANSMISSION LINES
Burt J. Bittner, Sandia Base, N. Mex., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application November 4, 1952, Serial No. 318,702
3 Claims. (Cl. 333—10)



1. Directional coupling means of the character described comprising the combination of a pair of adja-

cent generally tubular conducting means separated by a common conducting wall member, said common wall member having therethrough and disposed along the longitudinal axes of the tubular means a plurality of spaced apart slots with each slot having its longitudinal axis disposed generally laterally with respect to said longitudinal axes of the tubular means, and conducting probes extending through the slots of said wall member having portions extending into each of said pair of tubular means.

2,749,521
MICROWAVE COUPLING ARRANGEMENTS
Herbert F. Engelmann, Mountain Lakes, N. J., and John A. Kostriza, New Dorp, N. Y., assignors to International Telephone and Telegraph Corporation, a corporation of Maryland
Application March 5, 1952, Serial No. 274,855
1 Claim. (Cl. 333—11)



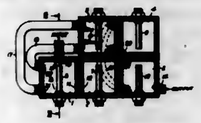
A microwave coupler comprising first and second conductors only, a planar dielectric sheet supporting said first conductor on one surface thereof and said second conductor on the opposite surface thereof, the spacing between said conductors being a minor fraction of a wavelength at the mean frequency of waves applied to said coupler, said first conductor being a flat strip conductor in the form of a loop with a plurality of branches extending from said loop, two branches at diametrically opposite points, and two other branches each at a point distant in the order of one-quarter of a wavelength from the next adjacent branch, the loop having a mid-circumference in the order of one and a half wavelengths, the loop and its branches lying substantially in a given plane on said dielectric sheet, said second conductor being a planar sheet underlying the entire loop and at least a portion of each of said branches adjacent said loop.

2,749,522
CIRCULAR LINE STRETCHER
Ming S. Wong, Dayton, Ohio
Application March 24, 1952, Serial No. 278,286
7 Claims. (Cl. 333—31)
(Granted under Title 35, U. S. Code (1952), sec. 266)



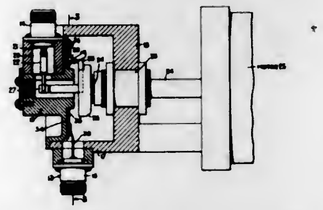
7. A multiple line stretcher device equivalent to a plurality of variable length transmission lines, comprising an outer conductor consisting of an electrically conductive hollow cylindrical shell, and a plurality of inner conductors consisting of a plurality of interconnected circumferentially adjustable collar arrays in mutually overlapping wiping contacting electrically conductive engagement in pairs and positioned within to be substantially concentric with and substantially uniformly spaced from and at all adjusted positions in insulated relation with the cylindrical shell.

2,749,523
BAND PASS FILTERS
Milton Dishal, Nutley, N. J., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application December 1, 1951, Serial No. 259,382
19 Claims. (Cl. 333—73)



1. A band pass filter comprising a plurality of cavity resonators numbering at least three, means coupling said resonators in series, input terminal means to introduce energy into the series of resonators, output terminal means to remove energy from said series of resonators, said series of resonators including two groups, one of said groups consisting of the odd ones of said series of resonators and the other of said groups consisting of the even ones of said series of resonators, and aperiodic means coupling the members of one of said groups in tandem.

2,749,524
SWITCHING DEVICES
Louis A. Derosa, Bloomfield, Francis X. Bucher, Nutley, and Theodore J. Goldan, Clifton, N. J., assignors to International Telephone and Telegraph Corporation, a corporation of Maryland
Application April 1, 1952, Serial No. 279,872
15 Claims. (Cl. 333—97)

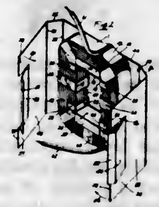


15. In a microwave switch, a conductor body having an extended planar surface, a plurality of flat strip-like terminal sectors, means disposing said sectors in spaced series relation and in overlying close spaced substantially parallel relation to said surface, an electric coupling element disposed for movement along said series of sectors, the spacing of said sectors with respect to said surface being a small fraction of a quarter wavelength to insure confinement of the electric field to substantially the region underlying each of said sectors, and the spacing between adjacent edges of said sectors also being a small fraction of a quarter wavelength for mechanical minimum transfer time between adjacent sectors, the spacing between adjacent sectors being greater than the spacing between said sectors and said surface to minimize intercoupling between adjacent sectors.

2,749,525
TRANSFORMER COIL AND INSULATION FOR THE SAME
Wayne L. Henderson, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application November 18, 1952, Serial No. 321,100
2 Claims. (Cl. 336—209)

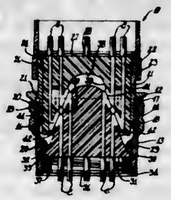
1. In combination with a transformer coil having a substantially rectangular core window, a coil insulator formed of a substantially rectangular blank of sheet insulating material, said blank having a longitudinal slit

formed in its center portion with its ends respectively terminating in a pair of parallel transverse slits thereby defining a pair of center tabs respectively foldable in a direction parallel to the longitudinal dimension of said blank, said center portion of said blank being arranged abutting one face of said coil with said center tabs being respectively folded into said core window and respectively abutting the two sides thereof parallel with said longitudinal dimension of said blank, each transverse edge of said blank having a pair of spaced apart slits extending



longitudinally inwardly therefrom defining an end tab foldable in a direction parallel to said transverse edge. one end of said blank being folded over and abutting the other face of said coil with its end tab being folded into said core window and abutting the side thereof adjacent the fold of said one end of said blank, the other end of said blank being folded over and abutting said other side of said coil and said one end of said blank with its end tab being folded into said core window and abutting the other side thereof adjacent the fold of said other end of said blank.

2,749,526
MULTI-CONTACT CONNECTOR
Clifford C. Petersen, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a corporation of New Jersey
Application February 19, 1953, Serial No. 337,714
12 Claims. (Cl. 339—61)



1. A connector comprising elastic plug and socket members having relatively telescoping confronting surfaces intersected by a plurality of pairs of telescopically cooperating contact terminals elastically supported by said members and being yieldable radially and longitudinally into full contact engagement with one another, said contact terminals having engagement surfaces of a configuration to mate each respective cooperating pair of contact terminals on the respective plug and socket members.

2,749,527
ELECTRIC LIGHT BULB HAVING INSULATION PIERCING CONTACTS
Adolph W. Gast, Evanston, Ill.
Application September 21, 1953, Serial No. 381,321
3 Claims. (Cl. 339—99)

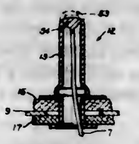
1. An electric lamp of the incandescent filament type adapted for attachment to a pair of parallel insulated wires, including a lamp bulb with a glass envelope having a filament therein, with terminal wires sealed in the envelope and extending to the outside, an insulated lamp base permanently secured to the bulb and having open-

ings through which the terminal wires extend, pointed metal prods in the openings in contact with the terminal wires and extending beyond the end of the base, each including a metal spike fitted in a metal sleeve, the wires being compressed between the outside of the sleeves and the walls of the openings, the spikes projecting beyond the end surface of the base, a cap positionable on the end of the base and having a groove disposed transversely



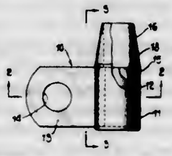
through it on the side adjacent the base for receiving the pair of parallel insulated electric wires, the spikes projecting into the groove in the cap when it is mounted on the end surface of the base, and means on the base and cap for removably snapping the cap on the end of the base, including a bead around the base adjacent its end surface, and a U-shaped spring mounted in a U-shaped groove around the cap, the spring having ends projecting beyond the upper surface of the cap and formed to snap over the bead on the base.

2,749,528
WELDED FLUORESCENT LAMP BASE PINS
Warren F. Albrecht, Euclid, Ohio, assignor to General Electric Company, a corporation of New York
Application July 1, 1953, Serial No. 365,429
4 Claims. (Cl. 339—145)



1. An electric device including a lead wire and having a base including an elongated tubular contact pin, said lead wire being threaded through the bore of said pin and being welded into the end of said pin in a weld junction forming an end wall completely closing the end of said pin and consisting solely of intermingled metals of the lead wire and of the end of said pin and resulting from the foreshortening of said pin, the major part of the fused metal in said weld junction consisting of metal from said pin.

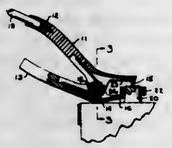
2,749,529
INSULATED FLAG-TYPE TERMINAL
Lawrence M. Curtiss, Mountainside, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a corporation of New Jersey
Application March 27, 1953, Serial No. 344,926
5 Claims. (Cl. 339—223)



1. A terminal fitting including a preformed molded shield of insulating material having an axially extending bore and forming at one end a tubular portion fashioned

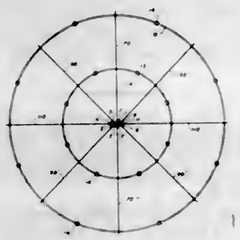
to receive the metal barrel of a connector, said tubular portion provided along one side thereof with an axially extending opening through which the metal barrel may be inserted sidewise, the bore at its other end being twice reduced to form an inner sleeve spaced from both ends of the shield, and an outer sleeve defining a cable inlet for the shield, and the inner sleeve at its end nearest the outer sleeve being beveled to form a funnel-like entrance opening from the portion of the bore encircled by the outer sleeve into the portion of the bore encircled by the inner sleeve.

2,749,530
BATTERY CONTACT CLAMPS
Gilbert Skurow, Cincinnati, Ohio
Application May 12, 1953, Serial No. 354,594
1 Claim. (Cl. 339—228)



A battery contact clamp for use in charging storage batteries within an automobile comprising a pair of members pivoted together, hand gripping means on one end of said members, one of said members provided with a downwardly extending chisel edge for contact with the upper face of a battery post, the other member provided with a flat serrated surface and a curved serrated forward edge of less length than the member with the chisel edge, a spring about said pivot for urging said members together, whereby the short member can be positioned below a battery clamp and the chisel edge firmly engaged with the top surface of the battery post, and an electrical connection to said member having the chisel edge.

2,749,531
METHOD OF AND APPARATUS FOR DETECTION
Robert H. Rines, Newton, Mass.
Application March 9, 1951, Serial No. 214,805
29 Claims. (Cl. 340—6)



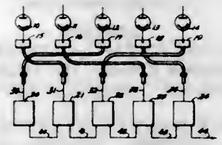
1. A method of extending the range of sound-wave detection of an underwater object from a reference location that comprises receiving sound waves from the object at a point in the water remote and spaced a considerable distance outward away from the reference location and a considerable distance closer to the underwater object than the reference location, and conducting the sound waves received from the object at the remote point along a medium other than the water to the reference location.

2,749,532
HYDROPHONE
Wilbur T. Harris, Southbury, Conn., assignor to The Harris Transducer Corporation, Woodbury, Conn., a corporation of Connecticut
Application June 4, 1952, Serial No. 291,706
8 Claims. (Cl. 340—11)



1. In a transducer of the character indicated, an elongated cylindrical radially strictive member, means electrically responsive to radial deformations of said member, a cylindrical metal supporting core within said member, a pressure-release layer continuously surrounding said core for substantially the longitudinal extent of said strictive member, and a potting of hard sound-transmitting material intimately encasing and contacting said strictive member and the full outer surface of said pressure-release layer.

2,749,533
SEQUENCE DISCRIMINATOR SYSTEM FOR LOCATING INFORMATION
Howard L. Daniels, St. Paul, Minn., assignor, by mesne assignments, to Sperry Rand Corporation, New York, N. Y., a corporation of New York
Application May 23, 1950, Serial No. 163,724
8 Claims. (Cl. 340—147)

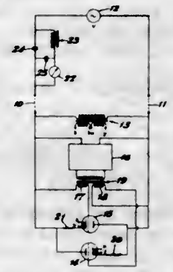


1. A selection system for use with a film bearing a pattern of code marks, comprising a plurality of light sensitive units arranged to scan non-collinear parallel paths, respectively, along the length of the film, a chain of pulse forming circuits, each circuit being arranged to produce a pulse of predetermined duration, each of the circuits except the first requiring the simultaneous existence of a primary and secondary input signal to produce an output pulse, the first circuit requiring only a primary input signal to produce an output pulse, the output of each of the circuits but the last in the chain being connected to serve as the secondary input to the next later circuit in the chain, the ouput of the last circuit being adapted for connection to a load, the circuits of the chain being adapted for connection to the light sensitive units in a predetermined order to correspond with a predetermined pattern of code marks of which selection is desired, whereby the light sensitive units will provide primary input signals to the circuits in a predetermined sequence which will permit an output pulse to be obtained from the last of the circuits in the chain.

2,749,534
TELEMETERING
Philip Threadgold, Nottingham, England, assignor to The British Petroleum Company Limited
Application December 24, 1953, Serial No. 400,273
Claims priority, application Great Britain January 9, 1953
3 Claims. (Cl. 340—177)

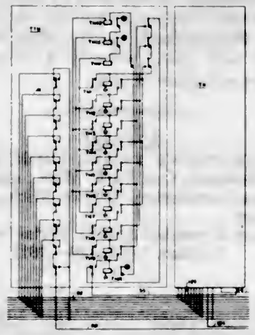
1. A telemetering system for measuring the output signal of an A. C. energised electrical measuring network, comprising a line, consisting of a pair of conductors,

between the measuring network and the point where it is desired to receive the signal, the line being supplied with a substantially constant alternating voltage which provides the supply to the measuring network, a pair of valves connected in parallel across the line, anode to cathode, at the same end as the measuring network, a transformer fed by the output signal of the measuring network and having two equal secondary windings which are connected between the grids and cathodes of the



two valves, one to each, the connections being so arranged that the grid signals of the two valves are in phase with each other whereby the grid of one valve is positive going during its conducting half cycle and the grid of the other valve is negative going during its conducting half cycle, whereby there is produced in the line a flow of direct current which is proportional to the signal to be measured, and means for measuring the direct current at the receiving end of the line.

2,749,535
TELEMETERING SYSTEMS
William F. Creese, Pittsburgh, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application November 23, 1951, Serial No. 257,813
17 Claims. (Cl. 340—183)



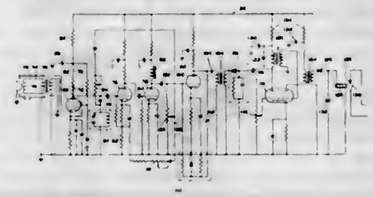
1. In counting apparatus, means producing pulses at a rate dependent on a quantity to be metered, counting means, circuit means normally connecting the pulse means and the counting means to operate the counting means for counting the total number of pulses over a long period of time, sending means operable to produce signals, normally inoperative counting means, circuit means connecting the normally inoperative counting means to the normally operable counting means, stop means, and control means connected to start the sending means and set up circuit means including the counting means for effecting operation of the stop means to stop the sending means when the normally inoperative counting means reaches a count equal to that of the normally operable counting means.

2,749,536
ELECTRICALLY OPERATED LEAK DETECTOR
Gustav Sperling, Los Angeles, Calif.
Application September 16, 1953, Serial No. 380,394
8 Claims. (Cl. 340—242)



5. A leak detector for indicating the presence of leaks in conduits under pressure and vacuum, said detector comprising a portable casing, a pressure-responsive sensing device movably mounted in said casing and having a normal equilibrium position, a hollow, flexible probe tube connected at one of its ends to said casing and operatively communicating with said device, the free end of said probe tube being open for probing the conduit being tested, said sensing device being adapted to move in one direction by reason of leaks in conduits under preasure and in a second direction by reason of leaks in conduits under vacuum, first and second normally inactive signalling devices mounted in said casing, and means including said pressure-responsive device for activating either of said signalling devices depending on the direction of movement of said pressure-responsive device.

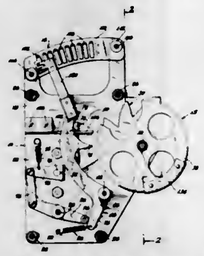
2,749,537
DEVICE FOR DETECTING MOTION IN A CONFINED SPACE
Clifford Lee Loudon, La Jolla, Calif., and William E. Riker, Cold Spring Harbor, N. Y., assignors to Holmes Electric Protective Company, New York, N. Y., a corporation of New York
Application March 21, 1955, Serial No. 495,484
13 Claims. (Cl. 340—258)



1. A receiver unit for a space type burglar alarm system in which the waves in an ultrasonic standing wave pattern are both frequency modulated and amplitude modulated by the movement of an intruder in the protected enclosure, which receiver unit comprises a first means for converting the ultrasonic wave energy into electrical energy, a second means for converting said frequency modulated signal to an amplitude modulated signal and for combining the last mentioned amplitude modulated signal with the first mentioned amplitude modulated signal, third means for detecting the combined amplitude modulated signals, fourth means for rectifying the de-

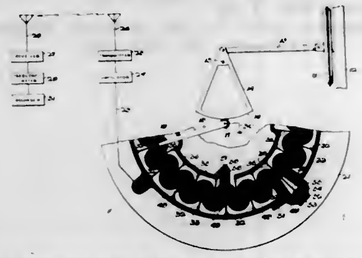
tected signal and an alarm relay connected to be actuated by said rectified signal thereby indicating the presence of an intruder.

2,749,538
DIGITAL CONVERTER
Benjamin Cooper, Brooklyn, N. Y., Albert F. Hohmann, Teaneck, N. J., and Joseph S. Wapner, Brooklyn, N. Y.; said Hohmann and said Wapner assignors to said Cooper
Application December 16, 1952, Serial No. 326,306
15 Claims. (Cl. 340—345)



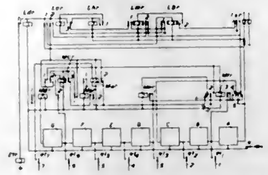
1. In a device of the class described, revoluble means adapted to be rotated by instrument means, a pair of stepped wheels affixed to and rotatable with said revoluble means, and having the peripherial steps of each of said pair of stepped wheels being radially offset one from the other, means to arrest the rotation of said revoluble means, means to sense the angular position of each of the arrested stepped wheels, circuit selecting means actuatable by each stepped wheel sensing means, means for deactuating one of said circuit selecting means, and means rotatable with said revoluble means and adapted to control said deactuating means to deactuate one of said circuit selecting means when said revoluble means is arrested in a predetermined angular zone.

2,749,539
METHOD AND APPARATUS FOR DETECTING CHANGES IN A CONDITION
Elwood L. Wheeler, Owings Mills, Md., assignor to Bendix Aviation Corporation, Baltimore, Md., a corporation of Delaware
Application April 15, 1953, Serial No. 349,063
22 Claims. (Cl. 340—345)



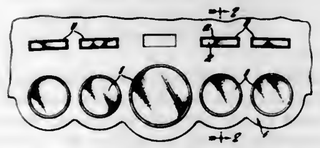
1. In a system responding to a continuous unidirectional change in the magnitude of a condition, the combination of: means to sequentially develop a series of substantially identical first predetermined electrical signals corresponding to a series of predetermined magnitudes of said condition, means to intersperse a second predetermined electrical signal between first preselected pairs of said first signals, said signals being different in magnitude from said first signals, means to intersperse a third predetermined electrical signal between second preselected pairs of said first signals, said third signals being different in magnitude from said first and second signals, said second and third signals being arranged sequentially in a predetermined coded manner.

2,749,540
IMPULSE REGISTER-TRANSLATOR ARRANGEMENT
Willy Pouliart, Antwerp, Belgium, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application January 17, 1952, Serial No. 266,832
Claims priority, application Netherlands February 20, 1951
4 Claims. (Cl. 340—347)



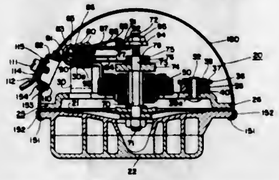
1. An electric device for recording, in a binary scale of notation, a number represented in another scale of notation by a plurality of digits, comprising in combination a line over which said number is delivered to said device in the form of a plurality of series of current impulses, each series corresponding to one of said digits, a plurality of electric units, each arranged as a repetition-rate halver and comprising a first relay having an operating winding, a second relay having an operating winding and a holding winding, an input lead, and output lead, means for connecting the operating windings of both relays and a break contact of said second relay in series with said input lead, means including a make contact of said first relay for connecting said operating windings of both said relays in series with said holding winding of said second relay, means including a make contact of said second relay for connecting the operating winding of said second relay in series with said input lead, and means including a make contact of said first relay for completing the circuit of said output lead, said units being assembled in a chain with the output lead of one unit connected to the input lead of the succeeding unit, and means connected to said line for transmitting the impulses of each of said series, except the series corresponding to the digit of lowest denomination, simultaneously to the input leads of more than one of said units, whereby a binary number is recorded upon said chain of units.

2,749,541
INSTRUMENT PANEL INDICATOR
Curtis C. Whittlesey, Oak Park, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 5, 1951, Serial No. 259,990
1 Claim. (Cl. 340—381)



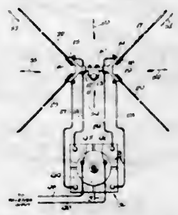
In an automotive vehicle instrument panel, a plurality of indicating meters, a member adjacent said meters having a metallic finish and having a plurality of telltale signal lamps mounted therein, each of said telltale signal lamps comprising a housing, a signal light in said housing, an opening in the front of said housing, a transparent mirror lens in said opening and symbol-bearing means in said housing between said transparent mirror lens and said signal light, said lens having a raised portion fitting into an aperture in said member and having a metallic finish blending with the finish of said member, said telltale signal lamps thereby being unobvious to the vehicle operator until operative to give a signal.

2,749,542
HORN HAVING A DIAPHRAGM VIBRATED BY AN ELECTROMAGNETIC MOTOR
Joe White and William F. Brundage, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Original application March 11, 1949, Serial No. 80,854, now Patent No. 2,677,875, dated May 11, 1954. Divided and this application June 29, 1955, Serial No. 521,217
2 Claims. (Cl. 340—403)



1. In an electromagnetic horn, a circuit breaker and terminal assembly comprising a metal frame and a stack of parts mounted thereon, rivets securing the parts to the frame said parts including horn magnet coil terminal plates, circuit breaker members insulated from each other and carrying engageable contacts, one of said members contacting one of the coil terminal plates and the other member contacting the rivets, and including a horn terminal plate engaging the other of the coil terminal plates and insulated from the support and from the first mentioned coil terminal plate, a cover attached to the frame and having an opening adjacent the stack, a nonconducting grommet lining the opening, said horn terminal plate having an extension which projects through said opening and provides for the attachment of a conductor thereto.

2,749,543
DIRECTIONAL ANTENNA SYSTEMS
Marvin P. Middlemark, Woodside, N. Y.
Application August 15, 1951, Serial No. 241,959
4 Claims. (Cl. 343—724)



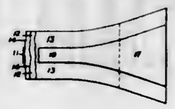
1. A television antenna system comprising a pair of dipoles crossed perpendicularly and each comprising two dipole rods so that four inner terminal ends are provided, wires extending from the four inner terminal ends, a switch to which said wires are connected, said switch comprising four flat, metallic sections insulated from each other and angularly spaced 90° apart, a manually rotatable selector dial on said switch, a single pair of centrally offset, spaced output terminals on said selector dial, said output terminals being disposed so as to effect wiping contact with any two of said flat sections as said selector dial is rotated whereby the remaining two flat sections are electrically isolated from the output terminals of the selector dial.

2,749,544
OMNIDIRECTIONAL ANTENNA
Alfred S. Pike, Rochester, N. Y., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application May 29, 1953, Serial No. 358,311
2 Claims. (Cl. 343—742)



1. In a substantially horizontally polarized omnidirectional antenna, the combination of a pair of square loop antennas of the type comprising a pair of substantially Z-shaped elements superimposed in a square configuration, with the corresponding ends of said elements adjacent each other at diagonal corners of said square configuration and with a center feed point for each said element, one of said square loops being placed directly above the other and oriented substantially at a 90° angle in the horizontal plane with respect to the other of said loops, said loops being fed in parallel at said center feed points of said elements.

2,749,545
ELECTROMAGNETIC HORN
John A. Kostriza, New Dorp, N. Y., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application August 1, 1951, Serial No. 239,738
20 Claims. (Cl. 343—776)

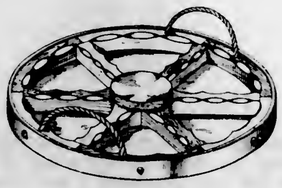


17. In an electromagnetic radiation system, a transmission line comprising first and second elongated conductors and a layer of dielectric material disposing said conductors in substantially parallel spaced relation, said second conductor being wider than said first conductor to present to said first conductor a planar conducting surface whereby the electric field of radio frequency energy propagated along said conductors is concentrated therebetween similarly to the field distribution of the TEM mode and said first conductor having a first portion along its length of uniform width and a second portion flared outwardly in a plane parallel to said second conductor toward the output end of said conductors to provide in conjunction with said second conductor an impedance transition between the transmission path provided by said conductors and free space.

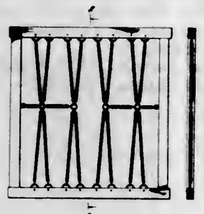
DESIGNS

JUNE 5, 1956

177,891
COMPARTMENTED TRAY
Dexter Benner, Jacksonville, Fla.
Application February 28, 1955, Serial No. 34,744
Term of patent 14 years
(Cl. D44—10)



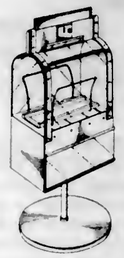
177,892
TENSION SPRING SEAT SUPPORT
Folke Engel Brandt, Frieth, Henley-on-Thames, Oxon, England
Application October 16, 1953, Serial No. 27,194
Term of patent 7 years
(Cl. D15—8)



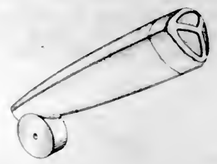
177,893
COMBINATION GAS LIGHTER AND FILLER SET
Charles T. Breitenstein, Chicago, Ill., assignor to Raymond T. Maloney, Chicago, Ill.
Application March 21, 1955, Serial No. 35,116
Term of patent 14 years
(Cl. D48—27)



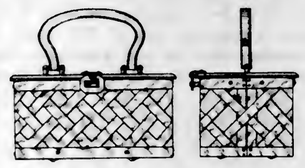
177,894
COMBINED NEWSPAPER AND MAGAZINE DISPENSER
Bonnie J. Brown and Kenneth L. Brown, Long Beach, Calif.
Application October 3, 1955, Serial No. 38,192
Term of patent 7 years
(Cl. D52—3)



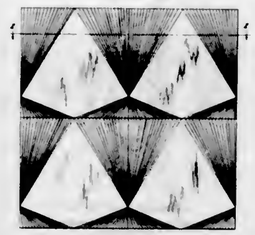
177,895
MICROPHONE
Louis R. Burroughs, Buchanan, Mich., assignor to Electro-Voice, Incorporated, Buchanan, Mich.
Application March 3, 1955, Serial No. 34,865
Term of patent 14 years
(Cl. D26—14)



177,896
HANDBAG
Frank Capraro, Yonkers, and Frederick Houssong, New York, N. Y.
Application November 25, 1955, Serial No. 39,034
Term of patent 3½ years
(Cl. D87—3)



177,897
WALL PANEL
Philip Carver, Bayside, N. Y.
Application November 24, 1954, Serial No. 33,221
Term of patent 7 years
(Cl. D13—2)



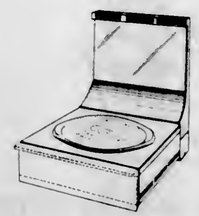
177,898
DISPLAY DEVICE FOR A LOCK OF HAIR
Ruth M. Cathcart, Grundy Center, Iowa
Application February 3, 1955, Serial No. 34,352
Term of patent 14 years
(Cl. D29—20)



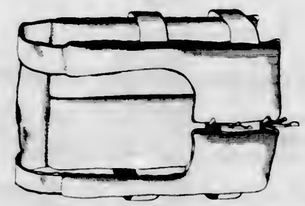
177,899
ARTICLE DISPENSING RECEPTACLE
Andrew Chappory, Brooklyn, N. Y., assignor to National Biscuit Company, New York, N. Y., a corporation of New Jersey
Application August 31, 1955, Serial No. 37,737
Term of patent 14 years
(Cl. D52—2)



177,900
ELECTRIC HEATER UNIT
Roger L. Crispell, Birmingham, Mich., assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application February 10, 1955, Serial No. 34,457
Term of patent 7 years
(Cl. D81—10)



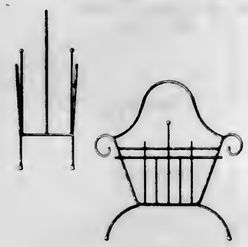
177,901
LIFE JACKET
Willard E. Crotty, Quincy, Mich., assignor to Crotty Corporation
Application May 11, 1955, Serial No. 35,942
Term of patent 14 years
(Cl. D71—1)



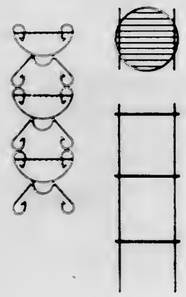
177,902
TELEVISION LAMP
Sam Derico, Cleveland, Ohio
Application August 23, 1955, Serial No. 37,633
Term of patent 7 years
(Cl. D48—20)



177,903
MAGAZINE RACK
Maurice Duchin, New York, N. Y.
Application March 16, 1955, Serial No. 35,063
Term of patent 7 years
(Cl. D33—2)



177,904
RACK
Maurice Duchin, New York, N. Y.
Application March 16, 1955, Serial No. 35,065
Term of patent 7 years
(Cl. D33—3)



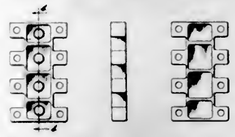
177,905
RACK
Maurice Duchin, New York, N. Y.
Application March 16, 1955, Serial No. 35,066
Term of patent 7 years
(Cl. D33—2)



177,906
RACK
Maurice Duchin, New York, N. Y.
Application March 16, 1955, Serial No. 35,068
Term of patent 7 years
(Cl. D33—2)



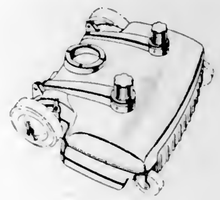
177,907
TOY BUILDING BLOCK
Vincent J. Esposito, Jr., Wayne Township, Passaic County, N. J.
Application December 1, 1954, Serial No. 33,352
Term of patent 14 years
(Cl. D34—15)



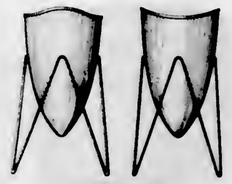
177,908
COSMETIC KIT
Annette Grosso, East Orange, N. J.
Application June 2, 1955, Serial No. 36,341
Term of patent 14 years
(Cl. D86—10)



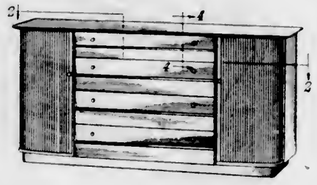
177,909
POWER LAWN MOWER HOUSING
Austin Gudmundsen, Inglewood, and Ellsworth D. Wilkin, Los Angeles, Calif.
Application March 22, 1955, Serial No. 35,158
Term of patent 3½ years
(Cl. D40—1)



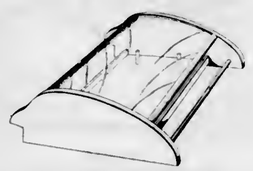
177,910
WASTE BASKET OR SIMILAR ARTICLE
Jon W. Hauser, St. Charles, Ill., assignor to Hawley Products Company, St. Charles, Ill., a corporation of Delaware
Application March 7, 1955, Serial No. 34,883
Term of patent 14 years
(Cl. D58—4)



177,911
BUFFET OR THE LIKE
Ernest Herrmann, Hillsdale, N. J., assignor to Heywood-Wakefield Company, Gardner, Mass., a corporation of Massachusetts
Application March 14, 1955, Serial No. 35,037
Term of patent 7 years
(Cl. D33—13)



177,912
BIRD FEEDER
Donald B. Hyde, Jr., Wayland, Mass.
Application November 10, 1955, Serial No. 38,830
Term of patent 14 years
(Cl. D31—2)



177,913
COIN HOLDER
Michael Jankura, Stratford, Conn.
Application November 12, 1954, Serial No. 33,080
Term of patent 7 years
(Cl. D52—4)



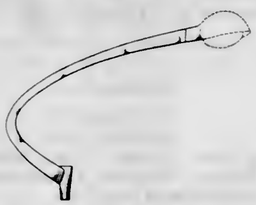
177,914
CHAIR
James E. Jones, Toledo, Ohio, assignor to The Hettrick Manufacturing Company, Toledo, Ohio, a corporation of Ohio
Application May 18, 1955, Serial No. 36,063
Term of patent 14 years
(Cl. D15—1)



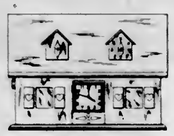
177,915
BICYCLE OR SIMILAR ARTICLE
Henry Worthington Kalt, Valley Stream, N. Y., assignor to Kalt, Breeding & Hadden, Inc., a corporation of New York
Application June 14, 1954, Serial No. 30,988
Term of patent 7 years
(Cl. D90—8)



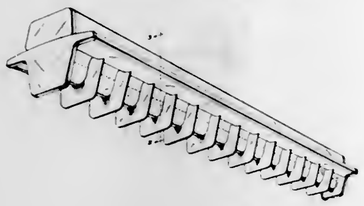
177,916
COMBINED LUMINAIRE AND BRACKET THEREFOR
Merle E. Keck, Bay Village, Ohio, and Edmund L. Izzi, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application October 26, 1955, Serial No. 38,578
Term of patent 14 years
(Cl. D48—31)



177,917
COMBINED JEWEL BOX, CLOCK, AND RADIO
Karl Luft, St. Louis, Mo.
Application October 31, 1955, Serial No. 38,643
Term of patent 14 years
(Cl. D86—9)



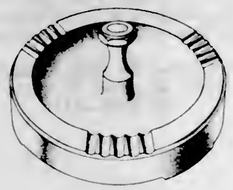
177,918
FLUORESCENT LIGHTING FIXTURE
Carl X. Meyer, St. Louis County, Mo., assignor to Day-Brite Lighting, Inc., St. Louis, Mo., a corporation of Missouri
Application November 7, 1955, Serial No. 38,763
Term of patent 14 years
(Cl. D48—23)



177,919
CHAIR
Rose Mints, Palm Springs, Calif.
Application September 20, 1954, Serial No. 32,358
Term of patent 14 years
(Cl. D15—11)



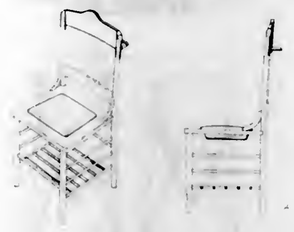
177,920
COMBINED ASH TRAY AND BUBBLE LEVEL OR SIMILAR ARTICLE
David Murdock, Cincinnati, Ohio
Application June 23, 1954, Serial No. 31,128
Term of patent 7 years
(Cl. D85—2)



177,921
TYPEWRITER
Eliot Noyes, New Canaan, Conn., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application July 5, 1955, Serial No. 36,827
Term of patent 14 years
(Cl. D64—11)



177,922
COMBINED CHAIR AND WARDROBE
John S. Orsborn, Chicago, Ill.
Application March 14, 1955, Serial No. 35,020
Term of patent 14 years
(Cl. D15—1)



177,923
TYPEWRITER
Carl Otto, New York, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application July 5, 1955, Serial No. 36,828
Term of patent 14 years
(Cl. D64—11)



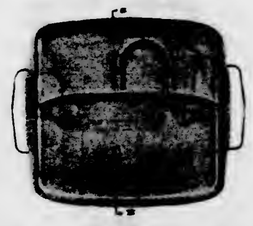
177,924
SPECTACLE FRONT
Robert Passet, Vincennes, France, assignor to Societe Industrielle de Lunetterie, Paris, France, a French company
Application April 19, 1955, Serial No. 35,576
Term of patent 14 years
(Cl. D57—1)



177,925
EVAPORATOR WICK
Milton A. Powers and Robert C. Champlin, Detroit, Mich., assignors to Skuttle Manufacturing Company, Milford, Mich., a corporation of Michigan
Application June 17, 1954, Serial No. 31,033
Term of patent 14 years
(Cl. D16—2)



177,926
HOSTESS TRAY OR SIMILAR ARTICLE
Norman C. Powers, Cortez, Colo.
Application May 16, 1955, Serial No. 36,003
Term of patent 14 years
(Cl. D44—10)



177,927
HOSTESS TRAY OR SIMILAR ARTICLE
Norman C. Powers, Cortez, Colo.
Application May 16, 1955, Serial No. 36,004
Term of patent 14 years
(Cl. D44—10)



177,928
BUILDING
William Riseman, Wrentham, Mass., assignor to Richard's Drive-In Restaurants, Inc., Boston, Mass., a corporation of Delaware
Application December 2, 1955, Serial No. 39,141
Term of patent 14 years
(Cl. D13—1)



177,929
EXPANSIBLE LINK CHAIN FOR A BRACELET OR THE LIKE
Emil Rodriguez, New York, N. Y., assignor to Jacoby-Bender, Inc., Woodside, N. Y., a corporation of New York
Application November 2, 1954, Serial No. 32,913
Term of patent 7 years
(Cl. D45—4)



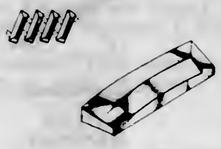
177,930
EXPANSIBLE LINK CHAIN FOR A BRACELET OR THE LIKE
Emil Rodriguez, New York, N. Y., assignor to Jacoby-Bender, Inc., Woodside, N. Y., a corporation of New York
Application November 2, 1954, Serial No. 32,914
Term of patent 7 years
(Cl. D45—4)



177,931
EXPANSIBLE LINK CHAIN FOR A BRACELET OR THE LIKE
Emil Rodriguez, New York, N. Y., assignor to Jacoby-Bender, Inc., Woodside, N. Y., a corporation of New York
Application November 2, 1954, Serial No. 32,921
Term of patent 7 years
(Cl. D45—4)



177,932
EXPANSIBLE LINK CHAIN FOR A BRACELET OR THE LIKE
Emil Rodriguez, New York, N. Y., assignor to Jacoby-Bender, Inc., Woodside, N. Y., a corporation of New York
Application November 2, 1954, Serial No. 32,922
Term of patent 7 years
(Cl. D45—4)



177,933
EXPANSIBLE LINK CHAIN FOR A BRACELET OR THE LIKE
Emil Rodriguez, New York, N. Y., assignor to Jacoby-Bender, Inc., Woodside, N. Y., a corporation of New York
Application November 2, 1954, Serial No. 32,923
Term of patent 7 years
(Cl. D45—4)



177,934
END LINK FOR A WRIST WATCH BRACELET OR THE LIKE
Emil Rodriguez, New York, N. Y., assignor to Jacoby-Bender, Inc., Woodside, N. Y., a corporation of New York
Application November 2, 1954, Serial No. 32,925
Term of patent 7 years
(Cl. D45—4)



177,935
EXPANSIBLE LINK CHAIN FOR A BRACELET OR THE LIKE
Emil Rodriguez, New York, N. Y., assignor to Jacoby-Bender, Inc., Woodside, N. Y., a corporation of New York
Application March 9, 1955, Serial No. 34,956
Term of patent 7 years
(Cl. D45—4)



177,936
EXPANSIBLE LINK CHAIN FOR A BRACELET OR THE LIKE
Emil Rodriguez, New York, N. Y., assignor to Jacoby-Bender, Inc., Woodside, N. Y., a corporation of New York
Application March 9, 1955, Serial No. 34,960
Term of patent 7 years
(Cl. D45—4)



177,937
COLLAPSIBLE ASH TRAY OR SIMILAR ARTICLE
Menefee Roots, Arlington, Tex.
Application May 10, 1955, Serial No. 35,905
Term of patent 14 years
(Cl. D85—2)



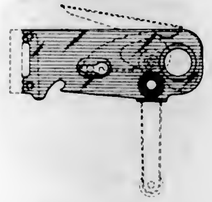
177,938
HANDBAG
Theodore Rosenberg, New Rochelle, N. Y.
Application November 14, 1955, Serial No. 38,877
Term of patent 3½ years
(Cl. D87—3)



177,939
HANDBAG
Theodore Rosenberg, New Rochelle, N. Y.
Application November 14, 1955, Serial No. 38,878
Term of patent 3½ years
(Cl. D87—3)



177,940
CAN OPENER
Frank B. Roth, Clayton, Mo., assignor to Swing-A-Way Manufacturing Company, St. Louis, Mo., a corporation of Missouri
Application January 17, 1955, Serial No. 34,015
Term of patent 14 years
(Cl. D22—2)



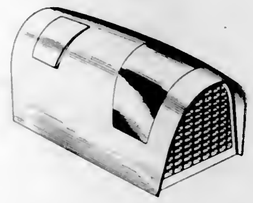
177,941
TOY SPACE SHIP
Ralph G. Rowland, New York, N. Y., Howard Carroll, Ridgefield, N. J., and Edwin H. Wegman, Freeport, N. Y., assignors to The S. J. Wegman Company, Lynbrook, N. Y., a copartnership
Application October 17, 1955, Serial No. 38,423
Term of patent 7 years
(Cl. D34—15)



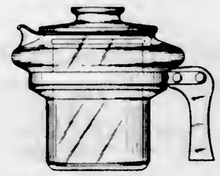
177,942
PORTABLE BEVERAGE DISPENSER
Earl F. Rutan, Pound Ridge, N. Y., assignor to The Coca-Cola Company, New York, N. Y., a corporation of Delaware
Application June 21, 1955, Serial No. 36,620
Term of patent 14 years
(Cl. D2—3)



177,943
CUTLERY AND SCISSORS SHARPENER
Sheldon M. Rutter, Lake Forest, Ill., assignor to John C. Hockery, Kansas City, Mo., as trustee
Application August 30, 1955, Serial No. 37,711
Term of patent 14 years
(Cl. D37—1)



177,944
TEAPOT
Peter Schlumbohm, New York, N. Y.
Application June 29, 1955, Serial No. 36,757
Term of patent 14 years
(Cl. D44—26)



177,945
SLED
Frederic N. Seaver, Long Island City, N. Y.
Application September 13, 1954, Serial No. 32,264
Term of patent 14 years
(Cl. D14—24)



177,946
TELEPHONE BOOTH
Percival H. Sherron, Jamaica, N. Y.
Application November 19, 1953, Serial No. 27,678
Term of patent 14 years
(Cl. D13—1)



177,947
DICTATION MASK
Henry A. Sherwood, Woodbridge, Conn., assignor to The Sound Scriber Corporation, New Haven, Conn., a corporation of Connecticut
Application August 4, 1954, Serial No. 31,734
Term of patent 14 years
(Cl. D83—1)



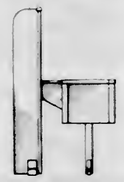
177,948
HOBBYHORSE
Theodore J. Smith, Burbank, Calif.
Application April 6, 1955, Serial No. 35,387
Term of patent 3½ years
(Cl. D34—15)



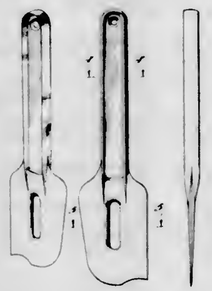
177,949
FOOD MIXER MOTOR UNIT
Walter A. Spear, Cincinnati, Ohio, assignor to Nu Tone, Inc., Cincinnati, Ohio, a corporation of New York
Application January 3, 1956, Serial No. 39,581
Term of patent 14 years
(Cl. D89—1)



177,950
CABINET FOR AMUSEMENT APPARATUS
Charles G. Troeller, Chicago, and Donald E. Hooker, Wilmette, Ill., assignors to Raymond T. Moloney, Chicago, Ill.
Application November 7, 1955, Serial No. 38,766
Term of patent 14 years
(Cl. D34—5)



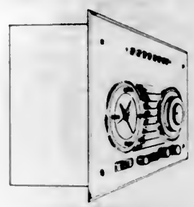
177,951
MIXING TOOL
Earl S. Tupper, Upton, Mass.
Application January 24, 1955, Serial No. 34,175
Term of patent 14 years
(Cl. D44—1)



177,952
RESERVOIR TYPE SMOKING PIPE
Wenzan Wang, Setagaya-ku, Tokyo, Japan
Application February 24, 1956, Serial No. 40,309
Term of patent 14 years
(Cl. D85—8)



177,953
COMBINED RADIO AND INTERCOMMUNICATION UNIT
John R. Young, Dallas, Tex.
Application June 17, 1955, Serial No. 36,571
Term of patent 14 years
(Cl. D26—14)



LIST OF REISSUE PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 5TH DAY OF JUNE, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Duncan, George R., to Zero Mfg. Co. Vacuum container milking system and apparatus therefor. Re. 24,162, 6–5–56, Cl. 119—14.09.

La Nationale S. A.: *See*—
Zellweger, Conrad. Re. 24,163.

Roehm, William A.: *See*—
Rogge, Edmund A., and Roehm. Re. 24,161.

Rogge, Edmund A., and W. A. Roehm. Doctor blade and mounting for rotogravure printing machines. Re. 24,161, 6–5–56, Cl. 101—157.

Zellweger, Conrad, to La Nationale S. A. Valves for filling pyrophoric lighters for liquified gas. Re. 24,163, 6–5–56, Cl. 62—1.

Zero Mfg. Co.: *See*—
Duncan, George R. Re. 24,162.

LIST OF PLANT PATENTEES

Singleton, Willard R., to the United States of America as represented by the United States Atomic Energy Commission. Carnation plant. 1,481, 6–5–56, Cl. 47—60.

United States Atomic Energy Commission, United States of America as represented by the: *See*—
Singleton, Willard R. 1,481.

LIST OF DESIGN PATENTEES

Benner, Dexter. Compartmented tray. 177,891, 6–5–56, Cl. D44—10.

Brandt, Folke E. Tension spring seat support. 177,892, 6–5–56, Cl. D15—8.

Breitenstein, Charles T., to R. T. Moloney. Combination gas lighter and filler set. 177,893, 6–5–56, Cl. D48—27.

Brown, Bonnie J. and K. L. Combined newspaper and magazine dispenser. 177,894, 6–5–56, Cl. D52—3.

Brown, Kenneth L.: *See*—
Brown, Bonnie J. and K. L. 177,894.

Burroughs, Louis R., to Electro-Voice, Inc. Microphone. 177,895, 6–5–56, Cl. D26—14.

Capraro, Frank, and F. Houssong. Handbag. 177,896, 6–5–56, Cl. D87—3.

Carroll, Howard: *See*—
Rowland, Ralph G., Carroll, and Wegman. 177,941.

Carver, Philip. Wall panel. 177,897, 6–5–56, Cl. D13—2.

Cathcart, Ruth M. Display device for a lock of hair. 177,898, 6–5–56, Cl. D29—20.

Champlin, Robert C.: *See*—
Powers, Milton A., and Champlin. 177,925.

Chappory, Andrew, to National Biscuit Co. Article dispensing receptacle. 177,899, 6–5–56, Cl. D52—2.

Coca-Cola Co., The: *See*—
Rutan, Earl F. 177,942.

Crispell, Roger L., to General Motors Corp. Electric heater unit. 177,900, 6–5–56, Cl. D81—10.

Crotty Corp.: *See*—
Crotty, Willard E. 177,901.

Crotty, Willard E., to Crotty Corp. Life jacket. 177,901, 6–5–56, Cl. D71—1.

Day-Brite Lighting, Inc.: *See*—
Meyer, Carl X. 177,918.

Derico, Sam. Television lamp. 177,902, 6–5–56, Cl. D48—20.

Duchin, Maurice. Magazine rack. 177,903, 6–5–56, Cl. D33—2.

Duchin, Maurice. Rack. 177,904, 6–5–56, Cl. D33—3.

Duchin, Maurice. Rack. 177,905, 6–5–56, Cl. D33—2.

Duchin, Maurice. Rack. 177,906, 6–5–56, Cl. D33—2.

Electro-Voice, Inc.: *See*—
Burroughs, Louis R. 177,895.

Esposito, Vincent J., Jr. Toy building block. 177,907, 6–5–56, Cl. D34—15.

General Motors Corp.: *See*—
Crispell, Roger L. 177,900.

Grosso, Annette. Cosmetic kit. 177,908, 6–5–56, Cl. D86—10.

Gudmundsen, Austin, and E. D. Wilkin. Power lawn mower housing. 177,909, 6–5–56, Cl. D40—1.

Hauser, Jon W., to Hawley Products Co. Waste basket or similar article. 177,910, 6–5–56, Cl. D58—4.

Hawley Products Co.: *See*—
Hauser, Jon W. 177,910.

Herrmann, Ernest, to Heywood-Wakefield Co. Buffet or the like. 177,911, 6–5–56, Cl. D33—13.

Hettrick Mfg. Co., The: *See*—
Jones, James E. 177,914.

Heywood-Wakefield Co.: *See*—
Herrmann, Ernest. 177,911.

Hockery, John C.: *See*—
Rutter, Sheldon M. 177,943.

Hooker, Donald E.: *See*—
Troeller, Charles G., and Hooker. 177,950.

Houssong, Frederick: *See*—
Capraro, Frank, and Houssong. 177,896.

Hyde, Donald B., Jr. Bird feeder. 177,912, 6–5–56, Cl. D31—2.

International Business Machines Corp.: *See*—
Noyes, Eliot. 177,921.
Otto, Carl. 177,923.

Izzi, Edmund L.: *See*—
Keck, Merle E., and Izzi. 177,916.

Jacoby-Bender, Inc.: *See*—
Rodriguez, Emil. 177,929–177,936.

Jankura, Michael. Coin holder. 177,913, 6–5–56, Cl. D52—4.

Jones, James E., to The Hettrick Mfg. Co. Chair. 177,914, 6–5–56, Cl. D15—1.

Kalt, Breeding & Hadden, Inc.: *See*—
Kalt, Henry W. 177,915.

Kalt, Henry W., to Kalt, Breeding & Hadden, Inc. Bicycle or similar article. 177,915, 6–5–56, Cl. D90—8.

Keck, Merle E., and E. L. Izzi, to Westinghouse Electric Corp. Combined luminaire and bracket therefor. 177,916, 6–5–56, Cl. D48—31.

Luft, Karl. Combined jewel box, clock, and radio. 177,917, 6–5–56, Cl. D86—9.

Meyer, Carl X., to Day-Brite Lighting, Inc. Fluorescent lighting fixture. 177,918, 6–5–56, Cl. D48—23.

Mints, Rose. Chair. 177,919, 6–5–56, Cl. D15—11.

Moloney, Raymond T.: *See*—
Breitenstein, Charles T. 177,893.
Troeller, Charles G., and Hooker. 177,950.

Murdock, David. Combined ash tray and bubble level or similar article. 177,920, 6–5–56, Cl. D85—2.

National Biscuit Co.: *See*—
Chappory, Andrew. 177,899.

Noyes, Eliot, to International Business Machines Corp. Typewriter. 177,921, 6–5–56, Cl. D64—11.

Nu Tone, Inc.: *See*—
Spear, Walter A. 177,949.

Orsborn, John S. Combined chair and wardrobe. 177,922, 6–5–56, Cl. D15—1.

Otto, Carl, to International Business Machines Corp. Typewriter. 177,923, 6–5–56, Cl. D64—11.

Passet, Robert, to Societe Industrielle de Lunetterie. Spectacle front. 177,924, 6–5–56, Cl. D57—1.

Powers, Milton A., and R. C. Champlin, to Skuttle Mfg. Co. Evaporator wick. 177,925, 6–5–56, Cl. D16—2.

Powers, Norman C. Hostess tray or similar article. 177,926, 6–5–56, Cl. D44—10.

Powers, Norman C. Hostess tray or similar article. 177,927, 6–5–56, Cl. D44—10.

Richard's Drive-In Restaurants Inc.: *See*—
Riseman, William. 177,928.

Riseman, William, to Richard's Drive-In Restaurants Inc. Building. 177,928, 6–5–56, Cl. D13—1.

Rodriguez, Emil, to Jacoby-Bender, Inc. Expansible link chain for a bracelet or the like. 177,929, 6–5–56, Cl. D45—4.

Rodriguez, Emil, to Jacoby-Bender, Inc. Expansible link chain for a bracelet or the like. 177,930, 6–5–56, Cl. D45—4.

Rodriguez, Emil, to Jacoby-Bender, Inc. Expansible link chain for a bracelet or the like. 177,931, 6–5–56, Cl. D45—4.

Rodriguez, Emil, to Jacoby-Bender, Inc. Expansible link chain for a bracelet or the like. 177,932, 6–5–56, Cl. D45—4.

Rodriguez, Emil, to Jacoby-Bender, Inc. Expansible link chain for a bracelet or the like. 177,933, 6–5–56, Cl. D45—4.

Rodriguez, Emil, to Jacoby-Bender, Inc. End link for a wrist watch bracelet or the like. 177,934, 6–5–56, Cl. D45—4.

Rodriguez, Emil, to Jacoby-Bender, Inc. Expansible link chain for a bracelet or the like. 177,935, 6–5–56, Cl. D45—4.

Rodriguez, Emil, to Jacoby-Bender, Inc. Expansible link chain for a bracelet or the like. 177,936, 6–5–56, Cl. D45—4.

Roots, Menefee. Collapsible ash tray or similar article. 177,937, 6–5–56, Cl. D85—2.
Rosenberg, Theodore. Handbag. 177,938, 6–5–56, Cl. D87—3.
Rosenberg, Theodore. Handbag. 177,939, 6–5–56, Cl. D87—3.
Roth, Frank B., to Swing-A-Way Mfg. Co. Can opener. 177,940, 6–5–56, Cl. D22—2.
Rowland, Ralph G., H. Carroll, and E. H. Wegman, to The S. J. Wegman Co. Toy space ship. 177,941, 6–5–56, Cl. D34—15.
Rutan, Earl F., to The Coca-Cola Co. Portable beverage dispenser. 177,942, 6–5–56, Cl. D2—3.
Rutter, Sheldon M., to J. C. Hockery, as trustee. Cutlery and sciasors sharpener. 177,943, 6–5–56, Cl. D37—1.
Schlumbohn, Peter. Teapot. 177,944, 6–5–56, Cl. D44—26.
Seaver, Frederic N. Sled. 177,945, 6–5–56, Cl. D14—24.
Sherron, Percival H. Telephone booth. 177,946, 6–5–56, Cl. D13—1.
Sherwood, Henry A., to The Sound Scriber Corp. Dictation mask. 177,947, 6–5–56, Cl. D83—1.
Skuttle Mfg. Co.: *See*—
Powers, Milton A., and Champlin. 177,925.
Smith, Theodore J. Hobbyhorse. 177,948, 6–5–56, Cl. D34—15.
Societe Industrielle de Lunetterie: *See*—
Passet, Robert. 177,924.
Sound Scriber Corp., The: *See*—
Sherwood, Henry A. 177,947.
Spear, Walter A., to Nu Tone, Inc. Food mixer motor unit. 177,949, 6–5–56, Cl. D89—1.
Swing-A-Way Mfg. Co.: *See*—
Roth, Frank B. 177,940.
Troeller, Charles G., and D. E. Hooker, to R. T. Moloney. Cabinet for amusement apparatus. 177,950, 6–5–56, Cl. D34—5.
Tupper, Earl S. Mixing tool. 177,951, 6–5–56, Cl. D44—1.
Wang, Wensan. Reservoir type smoking pipe. 177,952, 6–5–56, Cl. D85—8.
Wegman, Edwin H.: *See*—
Rowland, Ralph G., Carroll, and Wegman. 177,941.
Wegman, S. J., Co., The: *See*—
Rowland, Ralph G., Carroll, and Wegman. 177,941.
Westinghouse Electric Corp.: *See*—
Keck, Merle E., and Izzi. 177,916.
Wilkin, Ellsworth D.: *See*—
Gudmundsen, Austin, and Wilkin. 177,909.
Young, John R. Combined radio and intercommunication unit. 177,953, 6–5–56, Cl. D26—14.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 5TH DAY OF JUNE, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Abbey, John C.: *See*—
Gumbert, Charles W., and Abbey. 2,749,146.
Abbott, William T. Anchor having a slidable stock. 2,748,741, 6–5–56, Cl. 114—207.
Aber, Homer B., to J. I. Case Co. Power lifts. 2,748,680, 6–5–56, Cl. 97—46.11.
Acorn Iron and Wire Works: *See*—
Kitzelman, Edward H. 2,749,164.
Acton, Jack C., and A. B. Zeissler, to General Electric Co. Means for reinforcing random wound coils. 2,749,460, 6–5–56, Cl. 310—260.
Adam, Frank, Electric Co.: *See*—
Adam, Frederick B. 2,749,385.
Adam, Frederick B., to Frank Adam Electric Co. Busduct. 2,749,385, 6–5–56, Cl. 174—99.
Aenishaenslin, Rudolf: *See*—
Knup, Emil, Aenishaenslin, and Widmer. 2,749,257.
Aeroquip Corp.: *See*—
Gumbert, Charles W., and Abbey. 2,749,146.
Kaiser, Rudolf. 2,749,150.
Affelder, Harry F., to The Wolf Envelope Co. Envelope making machine. 2,748,675, 6–5–56, Cl. 93—62.
Agate Corp.: *See*—
Wells, Norman C. 2,748,719.
Aggarwal, Joti S., and P. G. Sharma, to The Council of Scientific and Industrial Research. Process of making wrinkle varnishes. 2,749,247, 6–5–56, Cl. 106—222.
Aguilera, Oscar A. S. Apparatus for improving fuel for internal combustion engines. 2,748,892, 6–5–56, Cl. 183—19.
Agule, George J., to Machlett Laboratories, Inc. Electron tube gettering means. 2,749,466, 6–5–56, Cl. 313—180.
Aircraft-Marine Products Inc.: *See*—
Berg, Quentin. 2,748,456.
Pierce, Frank L. 2,748,452.
Air Force, United States of America as represented by the Secretary of the: *See*—
Kuhlman, William H., Jr. 2,749,064.
Lake, Harry G. 2,749,513.
Air Reduction Co., Inc.: *See*—
Lyon, Ashton M., and Shykys. 2,749,369.
Aker, Sam C. Vibratory screening apparatus. 2,748,942, 6–5–56, Cl. 209—315.
Åkerström, Börje, to Aktiebolaget Atvidabergs Butiksinredningar. Venetian blinds. 2,748,852, 6–5–56, Cl. 160—168.
Aktiebolaget Atvidabergs Butiksinredningar: *See*—
Åkerström, Börje. 2,748,852.
Aktiebolaget Elektrolux: *See*—
Backstrom, Sigurd M. 2,748,575.
Aktiebolaget Svenska Kullagerfabriken: *See*—
Ohlsson, Sven E. W. 2,748,461.
Aktiengesellschaft fuer Technische Studien: *See*—
Keller, Curt. 2,748,599.
Albrecht, Ransom C.: *See*—
Day, Carl L., and Albrecht. 2,748,885.
Albrecht, Warren F., to General Electric Co. Welded fluorescent lamp base pins. 2,749,528, 6–5–56, Cl. 339—145.
Alexander, John M. Device for operating valves. 2,748,640, 6–5–56, Cl. 81—175.
Allen, Albert J., to Anchor Mfg. Co. Dual protection gas meter by-pass. 2,748,600, 6–5–56, Cl. 73—201.
Allen, Albert J., to Anchor Mfg. Co. Gas meter by-pass operator. 2,748,800, 6–5–56, Cl. 137—637.1.
Allen, George T.: *See*—
Isreell, Jack, and Allen. 2,748,786.
Allen, Herbert, and M. T. Works, to Cameron Iron Works, Inc. Mechanical movement for converting rotary movement to linear, then rotary, then reverse linear movement. 2,748,605, 6–5–56, Cl. 74—22.
Allen, Herbert, to Cameron Iron Works, Inc. Valve mechanism. 2,749,082, 6–5–56, Cl. 251—162.
Allen, Russell G., to Owens-Illinois Glass Co. Mold closing mechanism. 2,748,536, 6–5–56, Cl. 49—41.
Allied Control Co., Inc.: *See*—
Horman, John H., and Hoell. 2,749,396.
Horman, John H., and Hoell. 2,749,403.
Allis-Chalmers Mfg. Co.: *See*—
Eagan, William F. 2,749,500.
Forrest, Frank R. 2,748,666.
Kelle, Arthur C. 2,749,411.
Weston, Donald E. 2,749,410.
Allmanna Brandredskapsaffaren Aktiebolag: *See*—
Bergström, Erik K. L. 2,748,732.
Almquist, Nils T. Paint sprayer. 2,749,179, 6–5–56, Cl. 299—97.
Alspaugh, Samuel W., to General Motors Corp. Hydraulically operated apparatus for operating on the walls of a pan-shaped object. 2,748,862, 6–5–56, Cl. 164—36.
Altergott, Mary E. Clothes pole and line connector. 2,749,075, 6–5–56, Cl. 248—353.
Altschuler, Samuel, to Armour Research Foundation of Illinois Institute of Technology. Vibrationless pneumatic impact tool. 2,748,750, 6–5–56, Cl. 121—25.
Aluminum Co. of America: *See*—
Sicha, Walter E., Hunsicker, and Lemon. 2,749,239.
Wheeler, Jesse H. 2,748,934.
Amberg, Stephen W.: *See*—
Amberg, Walter E. and S. W. 2,749,010.
Amberg, Walter E. and S. W., to Lily-Tulip Cup Corp. Truncated conical paper cup. 2,749,010, 6–5–56, Cl. 229—1.5.
American Can Co.: *See*—
Pechy, William. 2,748,733.
American Cyanamid Co.: *See*—
Eisenman, William, and Minieri. 2,749,273.
American Enka Corp.: *See*—
Schulze, Kurd J. 2,748,587.
American Fixture, Inc.: *See*—
Nash, John J. 2,748,831.
Nash, John J., and Stein. 2,748,830.
American Home Products Corp.: *See*—
Bruce, William F. 2,749,213.
American Maize-Products Co.: *See*—
Evans, James W., and Nelson. 2,749,259.
Winner, Bernard M. 2,749,244.
American Optical Co.: *See*—
Boyd, Walter R., and Grupposo. 2,748,764.
Dillon, Oscar W. 2,748,630.
American Radiator & Standard Sanitary Corp.: *See*—
Kaul, Ben. 2,748,464.
Kaul, Ben. 2,748,932.
American Seating Co.: *See*—
Barecki, Chester J. 2,748,835.
Rimkus, Bernard E. 2,748,841.
American Steel Foundries: *See*—
Buvelot, John A. 2,749,139.
De Groot, Richard, and Kratochvil. 2,748,632.
Kayler, Frank H. 2,749,144.
Kowalik, John J. 2,749,113.
American Viscose Corp.: *See*—
Bauer, Ernest K. 2,749,055.
Tasker, Clinton W. 2,748,596.
Amlott, Norman J., to General Motors Corp. Cleaner silencer assembly. 2,748,891, 6–5–56, Cl. 183—15.
Amo, Ivan J., to M and W Co., Inc. Mechanism for replacing dies of ejection moulding machines. 2,748,434, 6–5–56 Cl. 22—149.
Anchor Mfg. Co.: *See*—
Allen, Albert J. 2,748,600.
Allen, Albert J. 2,748,800.
Anderson, Andrew E.: *See*—
Fennema, Richard, Anderson, and Krueger. 2,749,083.
Anderson, Clarence A. Instrument for determining magnetic permeability. 2,749,504, 6–5–56, Cl. 324—34.
Anderson, Edward N.: *See*—
Harrington, Edward M., and Anderson. 2,749,380.
Anderson, Edwin E. Fish lure. 2,748,520, 6–5–56, Cl. 43—35.
Anderson, Philip J., Jr., and E. M. Stubblefield, to Servel, Inc. Air conditioning. 2,749,095, 6–5–56, Cl. 257—9.
Anderson, Ralph F.: *See*—
Anderson, Swan F. 2,748,726.
Anderson, Swan F., ½ to S. F. Anderson and ½ to R. F. Anderson. Sandwich making machine. 2,748,726, 6–5–56, Cl. 107—1.
Andrews, Alvadore M. Sprinkling device. 2,749,180, 6–5–56, Cl. 299—104.
Andrews, Fred W., to International Latex Corp. Shape-retaining reinforcement of deposited rubber undergarment. 2,748,393, 6–5–56, Cl. 2—36.
Angelos, Arthur C.: *See*—
Billman, Louis S., and Angelos. 2,748,565.
Anselmo, Charles. Collapsible rack. 2,748,955, 6–5–56, Cl. 211—178.
Appelbaum, Sol and W. A. Begos, to Midwest Glove Co., Inc. Glove construction. 2,749,448, 6–5–56, Cl. 250—108.
Appleton, Arthur I. Vapor-proof lighting fixture. 2,749,433, 6–5–56, Cl. 240—11.2.
Appleton, Arthur I. Lamp guard mounting. 2,749,435, 6–5–56, Cl. 240—102.
Appleton, Paul W. Reversible terracing machine. 2,748,507, 6–5–56, Cl. 37—99.
Apra Precipitator Corp.: *See*—
Hodson, Peter. 2,748,888.
Arlin, Max M., to Arlin Products, Inc. Gauging means. 2,748,936, 6–5–56, Cl. 209—88.
Arlin Products, Inc.: *See*—
Arlin, Max M. 2,748,936.
Armour and Co.: *See*—
Bunge, Fred H. 2,748,938.
Hedstrom, Otto. 2,748,421.
Armour, John. Non-binding caster. 2,748,418, 6–5–56, Cl. 16—18.
Armour Research Foundation of Illinois Institute of Technology: *See*—
Altschuler, Samuel. 2,748,750.
Armstrong Cork Co.: *See*—
Leary, William W. 2,748,969.

Army, United States of America as represented by the Secretary of the: *See*—
Bertram, Emil P. 2,748,708.
Field, Arthur P. 2,748,706.
Hale Frank B. 2,748,705.
Moran, Robert W. 2,748,518.
Orlando, Carl. 2,748,649.
Sawyer, Winslow A. 2,748,702.
Simpson, Clarence E. 2,748,661.
Simpson, Clarence E. 2,748,662.
Terrant, Paul and Lillyquist. 2,749,376.

Arndt, Raymond. Corn crib. 2,748,904, 6–5–56, Cl. 189—3.

Arnold, Dayle F. Spinner controlled game apparatus. 2,749,128, 6–5–56, Cl. 273—134.

Aronson, Theodore F.: *See*—
Follan, David, Halahan, Lyon and Aronson. 2,748 653.

Askew, Crawford S. Clock controlled switching device. 2,748,858, 6–5–56, Cl. 161—1.5.

Athey Products Corp.: *See*—
Kling, Robert W. 2,748,720.

Atkinson, Guy F., Co.: *See*—
Potts, Ernest H. 2,748,578.

Atlas Instrument Co.: *See*—
Clark Joseph C. 2,748,560.

Atlas Powder Co.: *See*—
Kasehagen, Leo. 2,749,371.

Atti Engineering Corp.: *See*—
Colombo, Felix. 2,748,664.

Attler, Anthony R. Container top with room for straw. 2,748,968, 6–5–56, Cl. 215—39.

Auburn Machine Works, Inc.: *See*—
McIninch Glenn W. 2,748,504.

Auchincloss, Reginald. Heterocyclic m-addnets. 2,749,342, 6–5–56, Cl. 260—248.5.

Automatic Pump & Softener Corp.: *See*—
Whitlock, Fred W. 2,749,304.

Avedisian, Arthur A., to The Taylor & Fenn Co. Ductile iron. 2,749,236, 6–5–56, Cl. 75—123.

Avery Adhesive Label Corp.: *See*—
Smith, Charles E. 2,748,697.

Avruch, Julius. Antenna protector. 2,748,905, 6–5–56, Cl. 189—26.

Axt, Wallis C.: *See*—
Heizer, Edward J., and Axt. 2,748,797.

Babcock & Wilcox Co.: The: *See*—
Kooistra, Lambert F. 2,748,597.
Lotz, Otto. 2,748,754.
Neale, Oliver A. 2 748,631.

Bacher, Eric, to Paillard S. A. Automatic record changers. 2,749,130, 6–5–56, Cl. 274—10.

Backstrom, Sigurd M., to Aktiebolaget Elektrolux. Absorption refrigeration. 2,748,575, 6–5–56, Cl. 62—119.5.

Baer, Donald R., to E. I. du Pont de Nemours and Co. Anthraquinone dyes and intermediates. 2,749,354, 6–5–56, Cl. 260—326.

Baghuis, Ludovicus H. Automatically reversing valves. 2,748,752, 6–5–56, Cl. 121—157.

Bailey, David R. G., to F. M. MacMillan. Fully oscillating vehicular suspension and/or drive. 2,748,879, 6–5–56, Cl. 180—24.

Baird, Milan. Rotating hand cultivator for loosening soil. 2,748,683, 6–5–56, Cl. 97—52.

Baker, John G., to Baker Mfg. Co. Spring detent coupling for telescoped parts. 2,749,153, 6–5–56, Cl. 285—169.

Baker, John R., and J. F. Muse, to Baker Oil Tools, Inc. Back pressure valve apparatus for automatically filling well conduit strings. 2,748,873, 6–5–56, Cl. 166—225.

Baker Mfg. Co.: *See*—
Baker, John G. 2,749,153.

Baker Oil Tools, Inc.: *See*—
Baker, John R., and Muse. 2,748,873.

Baldwin-Lima-Hamilton Corp.: *See*—
Brown, Edwin C., and Benbow. 2,748,509.

Bales, Irvin W., to Chipman Chemical Co., Inc. Method of defollating with sodium chlorate and sodium metaborate. 2,749,227, 6–5–56, Cl. 71—2.2.

Ball Brothers Co., Inc.: *See*—
Pasotti, Felice G. 2,748,537.

Ball, Eric H., to the British Thomson-Huston Co. Ltd. Transporting of rotary machines. 2,749,190, 6–5–56, Cl. 308—1.

Ballard, Robert L., to General Motors Corp. Moisture responsive control means. 2,748,687, 6–5–56, Cl. 98—2.

Banerjee, Tarapada, and P. B. Chakravarty, to The Council of Scientific and Industrial Research. Process for the recovery of beryllium oxide. 2,749,296, 6–5–56, Cl. 204—96.

Banes, Fred W., and J. D. Garber, to Esso Research and Engineering Co. Hydrolyzed acrylonitrile-isobutylene copolymers. 2,749,330, 6–5–56, Cl. 260—85.5.

Banker, Oscar H., to New Products Corp. Sprag mechanisms. 2,748,912, 6–5–56, Cl. 192—45.1.

Bannon, Thomas C.: *See*—
Spencer, Lloyd. 2,748,660.
Spencer, Lloyd. 2,748,874.

Bantar, Inc.: *See*—
McBride, John W. 2,748,644.

Barecki, Chester J., to American Seating Co. Chair with seat tilt adjustment. 2,748,835, 6–5–56, Cl. 155—120.

Barényi, Béla. Wheel suspension of the swinging-arm type with favorable spatial arrangements especially for motor vehicles. 2,749,142, 6–5–56, Cl. 280—124.

Barkley, Lloyd B., to Monsanto Chemical Co. Method for removal of a side chain. 2,749,367, 6–5–56, Cl. 260—586.

Barlow, Dick S., and G. B. Crofutt, Jr., to Bell Telephone Laboratories, Inc. Translating system. 2,749,387, 6–5–56, Cl. 179—18.

Barnes, Richard W., and G. A. Zellnskas. Aid to packing, deployment, and initial inflation of parachutes. 2,749,066, 6–5–56, Cl. 244—148.

Barnum, Robert E., G. N. Jenkins, and T. B. Wasserbach, to Esso Research and Engineering Co. Process for producing a hydrocarbon fuel. 2,749,225, 6–5–56, Cl. 52—0.5.

Barrett, Arthur L., to Joy Mfg. Co. Auger drill head. 2,749,104, 6–5–56, Cl. 262—26.

Barrett, Harold G., ½ to Nanko C. Bos. Simulated baseball game. 2,749,122, 6–5–56, Cl. 273—89.

Barrows, Wendell P. Electrically conductive coating. 2,748,701, 6–5–56, Cl. 102—43.

Barry, Richard H., S. M. Wang, and L. A. Walter, to Wallace & Tiernan Inc. Mercurial diuretics and method of preparation thereof. 2,749,339, 6–5–56, Cl. 260—242.

Bartlett, Harold W., to California Packing Corp. Photoelectric voltage regulator. 2,749,501, 6–5–56, Cl. 323—21.

Basham, Raymond B., and W. J. Parrish. Line inserting device. 2,748,870, 6–5–56, Cl. 166—77.

Bassick Co., The: *See*—
Kramesak, Michael, Jr. 2,748,419.

Basten, Albert T.: *See*—
Fonteln, Freerk J., and Basten. 2,748,941.

Bastin, Edgar J.: *See*—
Stava, Robert J., and Bastin. 2,749,445.

Bates, Richard E.: *See*—
Trinity, Joseph B., and Bates. 2,748,875.

Battelle Development Corp., The: *See*—
Slyh, John A., Lynch, and Runck. 2,749,254.
Sims, Chester T. 2,749,260.

Battey, Alfred P., to R. Hoe & Co., Inc. Pneumatic sheet-taking apparatus. 2,749,119, 6–5–56, Cl. 271—26.

Batts, Harvey J.: *See*—
Schaefer, William E., Batts, and Brafford. 2,749,323.

Bauer, Ernest K., to American Viscose Corp. Portable cap spinning unit with hydraulic traverse. 2,749,055, 6–5–56, Cl. 242—43.4.

Bauersfeld, Walther, H. Werner, and A. Vieweg, to C. Zeiss. Planetarium projection device for representing the individual travel of fixed stars upon a screen. 2,748,652, 6–5–56, Cl. 88—24.

Bauger, Louis A. J.: *See*—
Marchal, Raymond H., Paris, Bertin, and Bauger. 2,748,564.

Baxter, Thomas R., to Continental Can Co., Inc. Bag. 2,749,020, 6–5–56, Cl. 229—53.

Beach, Wallace W., to Guardian Container Co. Furniture saddle support. 2,749,012, 6–5–56, Cl. 229—14.

Beachler, Edward D., to Beloit Iron Works. Stock flow. 2,748,670, 6–5–56, Cl. 92—44.

Bean, John E. Collapsible tube dispenser. 2,748,981, 6–5–56, Cl. 222—97.

Beaver, David J., R. S. Shumard, and P. J. Stoffel, to Monsanto Chemical Co. Antiseptic soap composition. 2,749,314, 6–5–56, Cl. 252—107.

Beck, Carl E. Vertical slat Venetian draw drapes. 2,748,853, 6–5–56, Cl. 160—172.

Beckett, Lewis R.: *See*—
Hosticka, Harold E., and Beckett. 2,749,499.

Beckett, Reginald W. Air induction and tube system for fluid fuel burner. 2,748,843, 6–5–56, Cl. 158—4.

Becton, Dickinson, and Co.: *See*—
Molinari, Henry G. 2,748,538.

Bedker, Emma G.: *See*—
Bedker, Leo W. 2,748,633.

Bedker, Leo W., ½ to E. G. Bedker. Thread rolling attachment. 2,748,633, 6–5–56, Cl. 80—6.

Begos, Woodrow A.: *See*—
Appelbaum, Sol, and Begos. 2,749,448.

Behlefeldt, Knut G. Necktie supporting rack. 2,748,953, 6–5–56, Cl. 211—113.

Bell, Sidney R., to I. J. Morlit. Sewing machine. 2,748,731, 6–5–56, Cl. 112—241.

Bell Telephone Laboratories, Inc.: *See*—
Barlow, Dick S., and Crofutt. 2,749,387.
Blair, Royer R. 2,749,512.
Blair, Royer R. 2,749,517.
Hewitt, William H., Jr. 2,749,507.
Nyquist, Harry. 2,749,508.
Pierce, John R. 2,749,463.

Beller, Ray M., to Belson Mfg. Co. Folding table and seat structure for picnic tables and the like. 2,748,837, 6–5–56, Cl. 155—124.

Beloit Iron Works: *See*—
Benchler, Edward D. 2,748,670.
Heys, Ralph C. 2,748,671.
Hornbostel, Lloyd. 2,748,068.
Hornbostel, Lloyd. 2,749,031.
Youngchild, Casper E. 2,748,669.

Belson Mfg. Co.: *See*—
Beller, Ray M. 2,748,837.

Benbow, James D.: *See*—
Brown, Edwin C., and Benbow. 2,748,509.

Bendix Aviation Corp.: *See*—
Emerson, John F. 2,749,506.
Fricke, Guy C., and Hansen. 2,749,265.
Fricke, Guy C., and Kasten. 2,748,948.
MacIntyre, Charles H. 2,749,062.
Wheeler, Elwood L. 2,749,539.

Benoit, Joseph A. Windshield wiper with compressed air nozzle. 2,748,416, 6–5–56, Cl. 15—250.4.

Benson, Arthur E.: *See*—
Kerr, Henry H., Benson, Bower, and Sless. 2,748,827.

Benson, Richard E., to E. I. du Pont de Nemours and Co. Organophilic titania powders containing a polymerizable ethylenic monomer bound to fractured surfaces thereof and their preparation. 2,749,248, 6–5–56, Cl. 106—300.

Benton, Harold Z. Perforating machine for thermoplastic films. 2,748,863, 6–5–56, Cl. 164—99.

Berber, Harry. Compartment container for garment labels. 2,749,198, 6–5–56, Cl. 312—252.

Berg, Clyde H. O., and C. J. Welsh, to Union Oil Co. of California. Handling of granular solids. 2,748,497, 6–5–56, Cl. 34—168.

Berg, Quentin, to Aircraft-Marine Products Inc. Electrical connector and method of manufacture. 2,748,436, 6–5–56, Cl. 29—193.5.

Berger, Johannes, and G. Lange, to C. Zeiss. Four component Gauss type photographic objective. 2,748,656, 6–5–56, Cl. 88—57.

Bergström, Erik K. L., to Allmanna Brandredskapsaffaren Aktiebolag. Method for manufacturing sleeve shaped details and an apparatus for performing the method. 2,748,732, 6–5–56, Cl. 113—1.

Berke, Aaron. Collapsible trays. 2,749,018, 6–5–56, Cl. 229—41.

Berkis, Harriett L. Removable decorations for clothing. 2,748,517, 6–5–56, Cl. 41—34.

Berlant, Sigmund. Container for developing tanks. 2,748,677, 6–5–56, Cl. 95—89.

Berlant, Sigmund. Developing tank. 2,748,678, 6–5–56, Cl. 95—90.5.

Bernat, Louis: *See*—
Shaw, Albert E., and Moon. 2,749,392.

Berni, Rene P., to Heyden Chemical Corp. Process for the decolorization and purification of p-hydroxybensoic acid. 2,749,362, 6–5–56, Cl. 260—521.

Bertin, Jean: *See*—
Marchal, Raymond H., Paris, Bertin, and Bauger. 2,748,564.
Sarrazin, Paul, Paris, and Bertin. 2,748,753.

Bertram, Emil P., to the United States of America as represented by the Secretary of the Army. Bomb fuze, centrifugal-inertia type. 2,748,708, 6–5–56, Cl. 102—79.

Bethlehem Steel Co.: *See*—
Copp, John I. 2,748,407.

Billings, Harvey S., Jr., to General Electric Co. Fuseholder having a spring loaded cap. 2,749,408, 6–5–56, Cl. 200—127.

Billings, William A., W. W. Wright, and A. T. Watts, to International Standard Electric Corp. Indirectly heated cathodes. 2,749,470, 6–5–56, Cl. 313—340.

Billman, Louis S., and A. C. Angelos, to United Aircraft Corp. Oscillating fuel control for ramjets and method of operating same. 2,748,565, 6–5–56, Cl. 60—39.03.

Billner, Karl P., to Vacuum Concrete, Inc. Vibrator. 2,749,097, 6–5–56, Cl. 259—1.

Bilyk, William: *See*—
Harold, William, and Bilyk. 2,748,646.

Binder, Richard, and A. Ludwig, to Fichtel & Sachs A. G. Friction clutches. 2,748,913, 6–5–56, Cl. 192—105.

Blsterfeld, Karl A., to Hartford National Bank and Trust Co., as trustee. Device for high-frequency heating. 2,749,423, 6–5–56, Cl. 219—10.43.

Bittner, Burt J., to the United States of America as represented by the United States Atomic Energy Commission. Directional coupling means for transmission lines. 2,749,520, 6–5–56, Cl. 333—10.

Blackman, Stuart B., and E. Briggs, to The Bristol Aeroplane Co. Ltd. Rotary machines. 2,749,087, 6–5–56, Cl. 253—39.1.

Blackstone Corp.: *See*—
Lodge, Alvin. 2,748 945.

Blair, Royer R., to Bell Telephone Laboratories, Inc. Ohmmeter. 2,749 512, 6–5–56, Cl. 324—64.

Blair, Royer R., to Bell Telephone Laboratories, Inc. Apparatus for testing nonlinear resistors. 2,749,517, 6–5–56, Cl. 324—158.

Blaw-Knox Co.: *See*—
Wilson, Bert A. 2,748.545.

Block, Aleck, to Merit Products, Inc. Method of making grinding wheels. 2,749,224, 6–5–56, Cl. 51—293.

Blonder, Isaac S.: *See*—
Rines, Robert H., and Blonder. 2,749,436.

Bloomer Bros. Co.: *See*—
Dailey, Howard E. 2,748,674.

Bobst, Joseph O. Block-carrying devices for sheet or web fed rotary printing machines. 2,748,699, 6–5–56, Cl. 101—378.

Boddicker, Floyd L., and P. E. Graybeal, to Hercules Powder Co. Process for producing cellulose derivatives. 2,749,336, 6–5–56, Cl. 260—231.

Bodian, Marcus, to Sunbeam Lighting Co. Aligner head and canopy assembly for a pendant light fixture. 2,749,074, 6–5–56, Cl. 248—344.

Bodinaux, Gaston, to Societe Anonyme les Forges de Zeebrugge. Process for the manufacture, by spinning, of hollow or solid parts, more particularly of ferrous alloy. 2,748,465, 6–5–56, Cl. 29—535.

Bodkin, Ernest A.: *See*—
Penick, Joe E., and Bodkin. 2,749,290.

Boeing Airplane Co.: *See*—
Brady, Keith G., and Withington. 2,749,060.
Hill, Henry C. 2,748 623.
Lord, Dwight S., and Morrison. 2,748,486.
Siems, Robert J. and Voorhees. 2,748,855.
Wildebour, Charles W. 2,748,886.

Bogoslowsky Boris, deceased, by E. Bogoslowsky, executrix. Shaping device for nail-coating elements. 2,748,860, 6–5–56, Cl. 164—41.

Bogoslowsky, Elizabeth: *See*—
Bogoslowsky, Boris. 2,748,860.

Bolster, Henry G.: *See*—
Zippler, Francis J. 2,749,112.

Boosey & Hawkes Ltd.: *See*—
Draper, Frederick C., Hobson, and Sang. 2,748.455.

Booth, James H., to Thompson Products Inc. Combustion engine driven hydrodynamic brake fluid heater. 2,748,570, 6–5–56, Cl. 60—97.

Booth, James H., to Thompson Products, Inc. Mechanical heater and pump. 2,748,762, 6–5–56, Cl. 126—247.

Booth, James H., to Thompson Products, Inc. Heating system for automotive vehicles. 2,749,050, 6–5–56, Cl. 237—12.3.

Booth, James H., and E. J. Herbenar, to Thompson Products, Inc. Fluid control system for torque absorbing and transmitting coupling. 2,748,899, 6–5–56, Cl. 188—90.

Booth, James H., and E. J. Herbenar, to Thompson Products, Inc. Fluid control system for torque absorbing and transmitting coupling. 2,748,900, 6–5–56, Cl. 188—90.

Borden, Philip H., to Central Industrial Corp. Means for connecting a safety razor head and handle. 2,748,470, 6–5–56, Cl. 30—89.

Bordner, Lee T. Electric switch. 2,749,413, 6–5–56, Cl. 200—152.

Borg, W. N., Corp., The: *See*—
Tancred, William L. 2,749,402.

Borg-Warner Corp.: *See*—
Compton, James A. 2,748,454.
Mamo, Anthony C. 2,748,715.

Borsook, Mannie E., to Clinical Research Foundation. Therapeutic composition of 3,4 dihydroxy phenyl ethylamine and methylating agent and method of applying. 2,749,275, 6–5–56, Cl. 167—65.

Bos, Nanko C.: *See*—
Barrett, Harold G. 2,749,122.

Bosch, Robert, G. m. b. H.: *See*—
Zimmermann, Hans-Gerhard. 2,748,487.

Bosco, Charles G., to Northwestern Steel & Wire Co. Electric motor control and counterweight compensator. 2,749,494, 6–5–56, Cl. 318—143.

Bottoms, Robert R., to National Cylinder Gas Co. Process of impregnating cellulosic materials with copper in chemically bound relation with the cellulose. 2,749,256, 6–5–56, Cl. 117—59.

Bourcier de Carbon, Christian M. L. L. Shock absorber with cantilever disc spring valves. 2,748,898, 6–5–56, Cl. 188—88.

Bourns, Marian E.: *See*—
Hardison, Wilbur T. 2,749,261.

Bouwers, Albert, to N. V. Optische Industrie "De Oude Delft." Tele-objective of the catadioptric type. 2,748,658, 6–5–56, Cl. 88—57.

Bower, Stewart P.: *See*—
Kerr, Henry H., Benson, Bower, and Sless. 2,748,827.

Boyd, Walter R., and S. S. Grupposo, to American Optical Co. Visual training devices. 2,748,764, 6–5–56, Cl. 128—76.5.

Bradley, William E., and D. E. Sunstein, to Philco Corp. Photocell indexing system. 2,749,449, 6–5–56, Cl. 250—217.

Brady, Keith G., and H. W. Withington, to Boeing Airplane Co. Airplane wings. 2,749,060, 6–5–56, Cl. 244—44.

Brady, Thomas. Label holder for filing cabinet drawers. 2,748,513, 6–5–56, Cl. 40—8.

Brafford, Donald A.: *See*—
Schaefer, William E., Batts, and Brafford. 2,749,323.

Braun, Philip N. Tape feeding, printing, and tag attaching and severing machine. 2,748,676, 6–5–56, Cl. 93—88.

Brendle, John A.: *See*—
Lehner, Edwin C., and Brendle. 2,748,724.

Brendlein, Heinrich, and W. Pohl, to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler. Process for the recovery of pentaerythritols. 2,749,370, 6–5–56, Cl. 260—615.

Breslow, David S., to Hercules Powder Co. Synthetic linear polyamides obtained by the base-catalysed polymerization of unsaturated amides. 2,749,331, 6–5–56, Cl. 260—89.7.

Bresa, Cyril J., and C. H. Noren, to E. I. du Pont de Nemours and Co. Explosive assembly. 2,748,700, 6–5–56, Cl. 102—24.

Briggs, Ernest: *See*—
Blackman, Stuart B., and Briggs. 2,749,087.

Brill, Adelaide E.: *See*—
Brill, John K. 2,748,824.

Brill, John K., deceased, by A. E. Brill, administratrix. Threaded members carrying resilient deformable locking inserts thereon. 2,748,824, 6–5–56, Cl. 151—7.

Bristol Aeroplane Co. Ltd., The: *See*—
Blackman, Stuart B., and Briggs. 2,749,087.
Lewis, Gordon M. 2,749,023.

Bristol Laboratories Inc.: *See*—
Buckwalter, Frank H. 2,749,274.
Kaplan, Murray A. 2,749,230.

British Petroleum Co. Ltd., The: *See*—
Noble, Dennis A. J. 2,749,284.
Porter, Frederick W. B. 2,749,283.
Porter, Frederick W. B., and Richardson. 2,749,282.
Threadgold, Philip. 2,749,534.

British Tabulating Machine Co. Ltd., The: *See*—
Cartwright, John R. 2,749,440.

British Thomson-Huston Co. Ltd.: *See*—
Ball, Eric H. 2,749,190.

Britton, Roscoe C., and H. Haltof. Line-shaft roller conveyor with shiftable bearings. 2,748,919, 6–5–56, Cl. 198—127.

Brooks, Frank W., to General Motors Corp. Automatic slack adjustor for brakes. 2,748,901, 6–5–56, Cl. 188—196.

Brown, Arthur H. Wall panels. 2,748,591, 6–5–56, Cl. 72—16.

Brown, Cicero C. Well packers. 2,748,871, 6–5–56, Cl. 166—129.

Brown, Edwin C., and J. D. Benbow, to Baldwin-Lima-Hamilton Corp. Six wheel drive and steer road machine. 2,748,509, 6–5–56, Cl. 37—156.

Brown, Grant S., to Western Electric Co., Inc. Apparatus for advancing and working plastic compounds. 2,748,422, 6–5–56, Cl. 18—12.

Brown, Harry C. Combined scribing and eye-protecting optical system. 2 748,474, 6–5–56, Cl. 30—164.9.

Brown, Ralph E., to Douglas Aircraft Co., Inc. Wear-saving contact structure for rotors of counting devices and the like. 2,749,397, 6–5–56, Cl. 200—26.

Brown, Robert L.: *See*—
Peckham, Roy E., and Elms. 2,748,645.
Brown, Victor, to Kropp Forge Co. Method of making engine hub and shaft unit. 2,748,466, 6–5–56, Cl. 29—553.
Brownsville Canning Co.: *See*—
Soldner, Harley W. 2,748,550.
Brubaker Mfg. Co., Inc.: *See*—
Koury, Philip, and Wills. 2,749,201.
Bruce, William F., to American Home Products Corp. Stannous fluoro complex salts. 2,749,213, 6–5–56, Cl. 23—50.
Brundage, William F.: *See*—
White, Joe, and Brundage. 2,749,542.
Bucher, Francis X.: *See*—
Derosa, Louis A., Bucher, and Goldan. 2,749,524.
Buchi, Alfred. Multi-atage centrifugal pump or blower. 2,748,713, 6–5–56, Cl. 103—108.
Buchmann, Albin, to Scintilla Ltd. Safety apparatus for magnetos. 2,749,458, 6–5–56, Cl. 310—70.
Buchy, Edmund K. Stapler for sausage package. 2,748,389, 6–5–56, Cl. 1—187.
Buckwalter, Frank H., to Bristol Laboratories, Inc. Stable aqueous procaine penicillin suspension. 2,749,274, 6–5–56, Cl. 167—65.
Budworth, David D. Fuel injection arrangement in vortex air stream in an annular combustion chamber surrounding a gas turbine. 2,748,568, 6–5–56, Cl. 60—39.36.
Buehler, Arthur, and C. Zickendraht, to Ciba Ltd. Metalliferous azo-dyestuffs. 2,749,332, 6–5–56, Cl. 260—145.
Bulova Watch Co. Inc.: *See*—
Hetzel, Max. 2,748,595.
Bunge, Fred H., to Armour and Co. Flotation of spodumene. 2,748,938, 6–5–56, Cl. 209—166.
Buntin, George A., to Hercules Powder Co. 1,4,5,8-Tetraoxaoctahydronaphthalenedithiol s,s-bis (o,o-dialkyl phosphorodithioates) and insecticidal compositions containing the same. 2,749,271, 6–5–56, Cl. 167—33.
Buntin, George A., to Hercules Powder Co. 3-Chloro-2,3-dihydrobenzofuran-2-thiol-s-(o, o-dialkyl phosphorodithioate). 2,749,272, 6–5–56, Cl. 167—33.
Burke, James N.: *See*—
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Burrougha Corp.: *See*—
Parker, Charles A., and Rainey. 2,749,040.
Burroughs Wellcome & Co. (U. S. A.) Inc.: *See*—
Hitchings, George H., and Robins. 2,749,344.
Hitchings, George H., and Robins. 2,749,345.
Burton Mfg. Co.: *See*—
Murray, Donald B. 2,748,495.
Busald, Francis A., to Indiana Commercial Filters Corp. Discharge door construction for a fiber conditioning apparatus. 2,748,998, 6–5–56, Cl. 222—503.
Busby, Lewis L. Gripping device having a pivoted actuating handle. 2,748,636, 6–5–56, Cl. 81—3.
Bussard, John A. Refrigerator curtains. 2,748,851, 6–5–56, Cl. 160—126.
Butcher, Albert F. Pipe forming machine. 2,748,442, 6–5–56, Cl. 25—32.
Byrnes, James C., Jr. Coin controlled lock mechanism. 2,748,915, 6–5–56, Cl. 194—70.
Buvelot, John A., to American Steel Foundries. Spring mounting assembly for steerable wheels. 2,749,139, 6–5–56, Cl. 280—96.2.
C. V. A. Jigs, Moulds & Tools Ltd.: *See*—
Pulman, William E. R. 2,748,451.
Cadegans, Nick G. Method for making a dry paint mixture. 2,749,249, 6–5–56, Cl. 106—309.
Calello, Mario, to St. Pierre Chain Corp. Holding means for the removable jaw of a slidable outer jaw wrench. 2,748,641, 6–5–56, Cl. 81—180.
California Packing Corp.: *See*—
Bartlett, Harold W. 2,749,501.
California Research Corp.: *See*—
Pino, Manuel A. 2,749,317.
Calkins, William H., and D. E. Welton, to E. I. du Pont de Nemours and Co. Hydrogenation of dicyanobutene in the presence of a neutralized palladium catalyst. 2,749,359, 6–5–56, Cl. 260—465.8.
Callis, Clayton F., to Monsanto Chemical Co. Process for manufacture of sodium polyphosphates. 2,749,215, 6–5–56, Cl. 23—107.
Cameron Iron Works, Inc. *See*—
Allen, Herbert. 2,749,082.
Allen, Herbert, and Works. 2,748,605.
Hager, Richard E. 2,748,869.
Campbell, John F. Nozzle construction. 2,749,182, 6–5–56, Cl. 299—107.6.
Canning, James H., to Sylvania Electric Products Inc. Electrical tester. 2,749,511, 6–5–56, Cl. 324—62.
Carapucci, Tracy T. Textile cutting apparatus. 2,748,473, 6–5–56, Cl. 30—139.
Cardani, Charles P., to United Shoe Machinery Corp. Component inserting machines. 2,748,388, 6–5–56, Cl. 1—2.
Caretto, Howard L.: *See*—
Cassell, Joseph L., and Caretto. 2,749,453.
Carlson, Andrew C. Gun sling retainer. 2,748,390, 6–5–56, Cl. 2—2.
Carlson, Harold A., to Carter Carburetor Corp. Throttle control for two-atage carburetor. 2,749,100, 6–5–56, Cl. 261—23.
Carpenter, Clayton A., to Union Oil Co. of California. Well heater. 2,748,868, 6–5–56, Cl. 166—60.
Carpenter, Robert H., to Meridan Corp. Hinge type coupling flange. 2,749,149, 6–5–56, Cl. 285—30.
Carrom Industries, Inc.: *See*—
Smith, Lee. 2,749,197.
Carter, Arthur D. Ring traveler. 2,748,559, 6–5–56, Cl 57—119.
Carter Carburetor Corp.: *See*—
Carlson, Harold A. 2,749,100.
Coffey, Irven E. 2,748,425.
Goodridge, Laurence M. 2,748,561.
Schweiss, Joseph. 2,748,796.
Carter, John W., to Surface Combustion Corp. Vacuum seal for fan shaft of heat treating furnace. 2,749,111, 6–5–56, Cl. 266—5.
Carthage Machine Co.: *See*—
Clark, James R. 2,748,815.
Cartwright, John R., to The British Tabulating Machine Co. Ltd. Thermionic valve circuits. 2,749,440, 6–5–56, Cl 250—27.
Cartwright, Ronald S.: *See*—
Foster, John R., and Cartwright. 2,748,616.
Case, J. I., Co.: *See*—
Aber, Homer B. 2,748,680.
Casler, Adrien F., and B. A. Zimmerman, to General Electric Co. Tube and rod gauging apparatus. 2,748,937, 6–5–56, Cl. 209—88.
Cassell, Joseph L., and H. L. Caretto, to The Reeve Electrical Co., Inc. Electric bell motor. 2,749,453, 6–5–56, Cl. 310—30.
Castner, Frank G., to Tirips Corp. Oil safety measuring rod. 2,740,401, 6–5–56, Cl. 200—84.
Caterpillar Tractor Co.: *See*—
Klecker, Joseph G. 2,748,910.
Maxwell, Carl R., and Kranc. 2,749,181.
Celanese Corp. of America: *See*—
Jones, Wilford D. 2,749,355.
Weber, Harold. 2,748,602.
Central Industrial Corp.: *See*—
Borden, Philip H. 2,748,470.
Chace, Thomas B., to The Dole Valve Co. Automatic thermostatic register. 2,749,044, 6–5–56, Cl. 236—49.
Chain Belt Co.: *See*—
Dennison, Clifford A. 2,749,157.
Chakravarty, Phani B.: *See*—
Banerjee, Tarapada, and Chakravarty. 2,749,296.
Champion Spark Plug Co.: *See*—
Schurecht, Harry G. 2,749,246.
Chaplin, George F., to White Cap Co. Closure cap. 2,748,970, 6–5–56, Cl. 215—40.
Chapman, Linwood R. Device for cleaning grease fittings. 2,748,410, 6–5–56, Cl. 15—105.
Chase, George C., to Monroe Calculating Machine Co. Registering mechanism. 2,749,042, 6–5–56, Cl. 235—136.
Chemerda, John M., to Merck & Co., Inc. Process for preparing 7-11-diketo steroids. 2,749,337, 6–5–56, Cl. 260—239.55.
Chemical Construction Corp.: *See*—
Rosenbloom, William J. 2,749,301.
Roy, Tuhin K. 2,749,235.
Chemo Puro Mfg. Corp.: *See*—
Krysa, Frank J. 2,749,347.
Chemstrand Corp, The: *See*—
Craig, Alfred B. 2,749,325.
Ham, George E. 2,749,321.
Chenier, Charles A. Window blind structure. 2,748,850, 6–5–56, Cl. 160—118.
Chesnut, John D.: *See*—
Spencer, Lloyd. 2,748,660.
Spencer, Lloyd. 2,748,874.
Chew, Albert C., to Hobson-Miller Machinery, Inc. Machine for handling cards and the like. 2,749,117, 6–5–56, Cl. 271—11.
Chicago Forging and Mfg. Co.: *See*—
Lindner, Adam C. 2,749,166.
Chichester, Kenneth J., to Talon, Inc. Toggle switch. 2,749,400, 6–5–56, Cl. 200—67.
Chika, John J. Passenger safety device for vehicles. 2,749,143, 6–5–56, Cl. 280—150.
Chilton, Joseph S. Miter box. 2,748,811, 6–5–56, Cl. 143—90.
Chipman Chemical Co., Inc.: *See*—
Bales, Irvin W. 2,749,227.
Christensen, John C., and W. F. Fair, Jr., to Koppers Co., Inc. Process of coating a metallic structural article and a marine organism resistant composition therefor. 2,749,250, 6–5–56, Cl. 117—26.
Christensen, Louis R. Viewer device or the like. 2,748,392, 6–5–56, Cl. 2—8.
Chrysler Corp.: *See*—
Drude, John A. 2,748,711.
Smith, Robert H. 2,749,049.
Syrovy, Augustin J., and Dunn. 2,748,622.
Ciba Ltd.: *See*—
Buehler, Arthur, and Zickendraht. 2,749,332.
Knup, Emil, Aenishaenslin, and Widmer. 2,749,257.
Liechti, Hans. 2,749,335.
Menzi, Karl. 2,749,334.
Menzi, Karl, and Wegmann. 2,749,207.
Staeuble, Max. 2,749,341.
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Ciba Pharmaceutical Products, Inc.: *See*—
Hoffmann, Karl, Tagmann, and Urech. 2,749,346.
Ciolkosz, Zbyslaw M.: *See*—
Meyers, Donald N., and Ciolkosz. 2,749,059.
Cipolla, Michael A. Hoop rolling device. 2,748,533, 6–5–56, Cl. 46—220.
Cislak, Francis E., to Reilly Tar & Chemical Corp. Vinylpyridine-n-oxides and process of making them. 2,749,349, 6–5–56, Cl. 260—290.
Clapp, Daniel E., to Proctor Electric Co. Thermal wattage controller. 2,749,406, 6–5–56, Cl. 200—113.
Clark, Alfred S., to United Shoe Machinery Corp. Methods of making slip-lasted shoes. 2,748,405, 6–5–56, Cl. 12—142.
Clark, Charles M. Twin-way pin safehead. 2,748,438, 6–5–56, Cl. 24—156.

Clark Equipment Co.: *See*—
Torrence, Miller W. 2,748,963.
Williams, Alfred O. 2,748,722.
Clark, James D'A., to A. B. Dick Co. Apparatus for forming fibrous structures. 2,748,429, 6–5–56, Cl. 19—156.
Clark, James R., to Carthage Machine Co. Controlled speed feed spout. 2,748,815, 6–5–56, Cl. 144—180.
Clark, Joseph C., to Atlas Instrument Co. Twenty-four hour clock with exposed numerals for time divisions. 2,748,560, 6–5–56, Cl. 58—125.
Clayden, David O.: *See*—
Newman, Edward A., and Clayden. 2,749,496.
Clayton Dewandre Co. Ltd.: *See*—
Edge, Stanley H. 2,749,048.
Clemenzi, Dominick. Enclosed adjustable impact roof scraping machine. 2,749,103, 6–5–56, Cl. 262—13.
Cliborn, Robert, to Thompson Products, Inc. Seal. 2,749,156, 6–5–56, Cl. 286—11.
Clinard, Glenn W. Grain measuring device for combine. 2,748,601, 6–5–56, Cl. 73—223.
Cline, Edward T., to E. I. du Pont de Nemours and Co. Process of shrinking polyvinyl alcohol fibers and acetylizing with mixture of mono- and dialdehydes and product thereof. 2,749,208, 6–5–56, Cl. 8—115.5.
Cline, Edward T., to E. I. du Pont de Nemours and Co. Hydroxy-octahydro aldehyde from dicyclopentenyl alcohol. 2,749,328, 6–5–56, Cl. 260—73.
Clinical Research Foundation: *See*—
Borsook, Mannie E. 2,749,275.
Closson, Rex D.: *See*—
Ligett, Waldo B., Wolf, and Closson. 2,749,269.
Clover, Leonard W. Reversible hinge. 2,748,420, 6–5–56, Cl. 16—170.
Coates, John M., to Medical Fabrics Co., Inc. Bandage for joint areas. 2,748,766, 6–5–56, Cl. 128—156.
Coates, Kenneth B., to Imperial Chemical Industries Ltd. Stabilised sodium aluminate. 2,749,316, 6–5–56, Cl. 252—182.
Coffey, Irven E., to Carter Carburetor Corp. Method for forming check valves and the like. 2,748,425, 6–5–56, Cl. 18—55.
Cohn, Eugene: *See*—
Cohn, Samuel and E., and Walter. 2,749,115.
Cohn, Mayer L., to J. Marco. Illuminated automobile secretary. 2,749,430, 6–5–56, Cl. 240—2.
Cohn, Samuel and E., and J. G. Walter, to Samcoe Holding Corp. Folding apparatus for travelling web material. 2,749,115, 6–5–56, Cl. 270—79.
Cole, Albert. Beverage dispensing apparatus. 2,749,096, 6–5–56, Cl. 257—241.
Cole, Burrel C., and E. P. Waite, to Cole Engineering Corp. Lower line coupling for fiber attenuating apparatus. 2,749,191, 6–5–56, Cl. 308—178.
Cole Engineering Corp.: *See*—
Cole, Burrel C., and Waite. 2,749,191.
Coleman, William B., to Victor Chemical Works. Method for treating cation exchange material and cation exchange material resulting therefrom. 2,749,306, 6–5–56, Cl. 210—24.
Colgate-Palmolive Co.: *See*—
Faier, Robert G. 2,749 315.
Collat, Edgar. Means for dental hygiene. 2,748,781, 6–5–56, Cl. 132—93.
Collins, Lowell J. Food mixers. 2,749,070, 6–5–56, Cl. 248—146.
Colombo, Felix, to Atti Engineering Corp. Mold cutting machine. 2,748,664, 6–5–56, Cl. 90—13.3.
Colson, U. O., Co.: *See*—
Kaiserman, Julius J. 2,748.515.
Commonwealth Engineering Co. of Ohio, The: *See*—
Nack, Herman R., and Homer. 2,749,255.
Novak, Leo J. 2,748,774.
Novak, Leo J., and Tyree. 2,749,276.
Toulmin, Harry A., Jr. 2,749,277.
Compton, James A., to Borg-Warner Corp. Method of assembling pressure loaded gear pumps. 2,748,454, 6–5–56, Cl. 29—156.8.
Conmar Products Corp.: *See*—
Ulrich, Frederick. 2,748,440.
Ulrich, Frederick. 2,748,460.
Connell, Wade H. Edge grinding optical lenses. 2,748,541, 6–5–56, Cl. 51—101.
Conroy, Charles L.: *See*—
Lyons, Richard E. 2,749,151.
Container Corp. of America: *See*—
Pennebaker, Lewis C. 2,749,015.
Continental Can Co., Inc.: *See*—
Baxter, Thomas R. 2,749,020.
Cook Electric Co.: *See*—
Flubacker, Charles H. 2,749,404.
Cooper, Benjamin: *See*—
Gilmont, Roger, and Schwartz. 2,749,221.
Cooper, Benjamin, A. F. Hohmann, and J. S. Wapner; said Hohmann and said Wapner assors. to said Cooper. Digital converter. 2 749 538, 6–5–56, Cl. 340—345.
Cooper Carton Corp.: *See*—
Kravitz, Bernard H. 2,749,017.
Cooper, Orin N. Clothes rinsing means for wringers. 2,748,586, 6–5–56, Cl. 68—22.
Cooper, Woodrow J. Portable device for trimming trees. 2,748 476, 6–5–56, Cl. 30—167.
Copp, John I., to Bethlehem Steel Co. Wedge fillers for suspension bridge cables. 2,748,407, 6–5–56, Cl. 14—22.
Copping, Bruce G. Beverage dispensing apparatus. 2,748,982, 6–5–56, Cl. 222—108.
Cormack, Clara H. Educational appliance. 2,748,500, 6–5–56, Cl. 35—70.
Cornelius Co., The: *See*—
Cornelius, Nelson F. 2,748,606.
Cornelius, Nelson F., to The Cornelius Co. Mechanical movement. 2,748,606, 6–5–56, Cl. 74—49.
Corriston, John W. Insulated water-cooled furnace members. 2,749,107, 6–5–56, Cl. 263—6.
Cosmocord Ltd.: *See*—
Kelly, Stanley. 2,749,131.
Costello, Otto A., to South Bend Lathe Works. Rotary table. 2,748,624, 6–5–56, Cl. 74—813.
Cote, Onil O. Re-usable collapsible carton. 2,749,016, 6–5–56, Cl. 229—39.
Coulter, Albert L. Hood latch adapter. 2,749,165, 6–5–56, Cl. 292—171.
Council of Scientific and Industrial Research, The: *See*—
Aggarwal, Joti S., and Sharma. 2,749,247.
Banerjee, Tarapada, and Chakravarty. 2,749,296.
Courtot, Louis B., to The Weatherhead Co. Short tube coupling with deformable edges. 2,749,152, 6–5–56, Cl. 285—120.
Coverbond Corp.: *See*—
Stetter, Grant. 2,748,593.
Covert, Calvin C.: *See*—
Miller, Dale W., Covert, Royer, and Demido. 2,748,877.
Cowles, Raymond H., to The General Tire and Rubber Co. Steel backed rubber bushings. 2,749,160, 6–5–56, Cl. 287—85.
Cox, Dean S.: *See*—
Perry, Edmond S., and Cox. 2,749,292.
Craddock, Elwood R.: *See*—
Skromme, Arnold B., McKibben, and Craddock. 2,748,535.
Craig, Alfred B., to The Chemstrand Corp. Acrylonitrile polymer blends and process of producing them. 2,749,325, 6–5–56, Cl. 260—45.5.
Crane Co.: *See*—
Fennema, Richard, Anderson, and Krueger. 2,749,083.
Townsend, Albert J. 2,749,084.
Crane, William B., Jr. Collapsible display containers. 2,748,927, 6–5–56, Cl. 206—44.
Creamery Package Mfg. Co., The: *See*—
Hanson, Rodney L., and Mitten. 2,748,802.
Crofutt, George B., Jr.: *See*—
Barlow, Dick S., and Crofutt. 2,749,387.
Crom, John M., Jr. Apparatus for low power tensioned winding of concrete articles. 2,749,054, 6–5–56, Cl. 242—11.
Crothers, William J. Hair curling apparatus. 2,748,779, 6–5–56, Cl. 132—33.
Crowder, Alexander N., to Research Corp. Process for recovering sulfate ash from the furnace gases resulting from burning of black liquor. 2,749,212, 6–5–56, Cl. 23—48.
Crown Cork & Seal Co., Inc.: *See*—
Day, Carl L., and Albrecht. 2,748,885.
Cruess, William F., to Westinghouse Electric Corp. Telemetering systems. 2,749,535, 6–5–56, Cl. 340—183.
Crull, Henry J. Method and apparatus for producing fish bait. 2,748,747, 6–5–56, Cl. 119—1.
Cummins, John W. Poultry crate for use in poultry testing operations. 2,748,972, 6–5–56, Cl. 217—47.
Cure, Arnold W.: *See*—
Walton, James R., Burke, and Cure. 2,749,407.
Curtiss, Lawrence M., to The Thomas & Betts Co. Insulated flag-type terminal. 2,749,529, 6–5–56, Cl. 339—223.
Cusson, Pierre. Oscillating movement for washing machines. 2,748,611, 6–5–56, Cl. 74—70.
Cutler-Hammer, Inc.: *See*—
Fischer, Paul M. 2,749,493.
Dailey, Howard E., to Bloomer Bros. Co. Device for setting-up collapsible cellular cartons. 2,748,674, 6–5–56, Cl. 93—37.
Daimler-Benz Aktiengesellschaft: *See*—
Wilfert, Karl. 2,749,024.
Daland, Elliot, and D. N. Meyers, to Vertol Aircraft Corp. Means for controlling tip-path of rotors. 2,748,876, 6–5–56, Cl. 170—135.24.
Daniels, Howard L., to Sperry Rand Corp. Sequence discriminator system for locating information. 2,749,533, 6–5–56, Cl. 340—147.
Danielson, Vernon S., and W. D. Wallace, to W. H. Miner, Inc. Combined rubber and friction shock absorbing mechanism. 2,748,956, 6–5–56, Cl. 213—34.
Daugherty, Lavern V. Saw tooth wrench. 2,748,626, 6–5–56, Cl. 76—80.
Davidowitz, Herman. Hemming neckties. 2,748,729, 6–5–56, Cl. 112—2.
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Davies, Bedford D., and E. B. Walker. Conditioning device for faucets. 2,748,547, 6–5–56, Cl. 51—197.
Davis, Aaron. Fluid pumping device. 2,748,717, 6–5–56, Cl. 103—152.
Davis, James E. Switch operating mechanism. 2,749,415, 6–5–56, Cl. 200—167.
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Ruh, Robert P., and Davis. 2,749,375.
Davis, Roy C., to The Guiberson Corp. Fluid lift apparatus. 2,748,792, 6–5–56, Cl. 137—155.
Day, Carl L., and R. C. Albrecht, to Crown Cork & Seal Co., Inc. Liquid deaerator. 2,748,885, 6–5–56, Cl. 183—2.5.
Day, Stewart T., 51% to W. E. Shields, Jr. Article orienting means. 2,748,914, 6–5–56, Cl. 193—43.
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Stueland, Harold M. 2,748,960.
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De Groot, Richard, and T. J. Kratochvil, to American Steel Foundries. Die for compressing a metal band about a group of leaf springs. 2,748,632, 6–5–56, Cl. 78—78.
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Dennison, Earl, and J. E. Wells, to Wells-Dennison Co. Duck decoy. 2,748,519, 6–5–56, Cl. 43—3.
Derosa, Louis A., F. X. Bucher, and T. J. Goldan, to International Telephone and Telegraph Corp. Switching devices. 2,749,524, 6–5–56, Cl. 333—97.
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Doll, Henri-Georges, to Schlumberger Well Surveying Corp. Electrical logging in non-conductive drilling liquids. 2,749,503, 6–5–56, Cl. 324—1.
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Dubach, Max. Device for separating solid particles from liquids. 2,748,951, 6–5–56, Cl. 210—199.
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Engelmann, Herbert F., and J. A. Kostriza, to International Telephone and Telegraph Corp. Microwave coupling arrangements. 2,749,521, 6–5–56, Cl. 333—11.
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Erwin, Ransome W., to Salt Water Control, Inc. Apparatus for treating drilling mud. 2,748,884, 6–5–56, Cl. 183—2.5.
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Fennema, Richard, A. E. Anderson, and W. L. Krueger, to Crane Co. Counterbalance spring unit for conduit gate valves. 2,749,083, 6–5–56, Cl. 251—167.
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Field, Lester M., to The Board of Trustees of the Leland Stanford Junior University. Travelling wave tubes. 2,749,472, 6–5–56, Cl. 315—3.5.
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Fleit, Martin, and R. L. Ginesi. Bottle support. 2,748,952, 6–5–56, Cl. 211—74.
Fletcher, Arthur H., to Rolls-Royce Ltd. Compound gas-turbine engine with low-pressure compressor and turbine by-pass. 2,748,566, 6–5–56, Cl. 60—39.16.
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France, Edward L., and E. Devine. Wrapping web tread for automotive vehicle. 2,749,189, 6–5–56, Cl. 305—10.
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Fraser, James, to Speakman Co. Showerhead for shower bath use. 2,749,183, 6–5–56, Cl. 299—141.
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Fricke, Guy C., and W. Kasten, to Bendix Aviation Corp. Filtering device. 2,748,948, 6–5–56, Cl. 210—169.
Fricke, Guy C., and C. P. Hansen, to Bendix Aviation Corp. Method of making pleated paper filter elements. 2,749,265, 6–5–56, Cl. 154—83.
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Fritz, Robert J., to Esso Research and Engineering Co. Fluid hydroforming process. 2,749,285, 6–5–56, Cl. 196—50.
Fromson, Bertram W. Soap dispenser 2,748,988, 6–5–56, Cl. 222—207.
Fruengel, Frank. Electric impulse lamp as transmitter for light-flash signaling system. 2,749,482, 6–5–56, Cl. 315—241.
Fuchs, Harold O., to Pickering Associates, Inc. Molded sound reproducer and method of making the same. 2,749,393, 6–5–56, Cl. 179—100.41.
Funk, Truman B., to Yard-Man, Inc. Lawn mower construction. 2,748,553, 6–5–56, Cl. 56—25.4.
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Gast, Adolph W. Electric light bulb having insulation piercing contacts. 2,749,527, 6–5–56, Cl. 339—99.
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Geffcken, Walter, and C. Eden, to Jenaer Glaswerk Schott & Gen. Means and method for the electric melting of glass. 2,749,379, 6–5–56, Cl. 13—34.
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Reagan, Leon H. 2,749,389.
General Electric Co.: *See*—
Acton, Jack C., and Zeissler. 2,749,460.
Albrecht, Warren F. 2,749,528.
Billings Harvey S., Jr. 2,749,408.
Casler, Adrien F., and Zimmerman. 2,748,937.
Dorsey, Robert T. 2,749,432.
Flaws, John, Jr., Reynolds and Meckstroth. 2,748,450.
Gurewitsch, Anatole M., and Noble. 2,749,438.
Hardwick, Robert F. 2,749,203.
Henderson, Wayne L. 2,749,525.
Jenny, Alfred L., and Stephenson. 2,749,487.
Kenty, Carl, and Larson. 2,749,462.
Martin, Robert. 2,749,327.
McBride, George C., and Schneider. 2,749,412.
Osthoff, Robert C., and Kantor. 2,749,318.
Rigden, Sydney A. R. 2,749,467.
Thomas, Cyril R. 2,749,300.
Walley, James A. 2,749,495.
General Latex & Chemical Corp.: *See*—
Mason, Fred H. 2,748,446.
General Mills, Inc.: *See*—
Stinger, Henry J. 2,749,491.
General Motors Corp.: *See*—
Alspaugh, Samuel W. 2,748,862.
Amlott, Norman J. 2,748,891.
Ballard, Robert L. 2,748,687.
Brooks, Frank W. 2,748,901.
Dougherty, Floyd G. 2,748,567.
Dyer, John B., and Harrison. 2,748,612.
Falge, Robert N. 2,749,434.
Frier, Billy E. 2,749,497.
Gandelot, Howard K. 2,749,478.
Hackett, William S. 2,748,435.
Haldeman, John M. 2,748,453.
Holin, William F. 2,748,721.
Koehring, Roland P., and Wilkens. 2,748,634.
Lautzenhiser, Argyle G., Shaw, and Dyer. 2,749,498.
Miller, Dale W., Covert, Royer, and Demido. 2,748,877.
Olson, Elmer. 2,749,099.
Sampson, Frederick W. 2,749,398.
Sampson, Frederick W. 2,749,399.
Sisson, Kenneth O. 2,748,585.
Stoltman, Donald D. 2,748 760.
White, Joe and Brundage. 2,749,542.
Whittlesey, Curtis C. 2,749,541.
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Gray, John W. 2,749,035.
General Railway Signal Co.: *See*—
Field, Oscar S. 2,748,857.
Little, Robert J., and Willing. 2,749,454.
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General Slicing Machine Co., Inc.: *See*—
Green, Xan B. K., and Preble. 2,748,820.
Green, Xan B. K., and Preble. 2,748,907.
General Strapping Corp.: *See*—
Osgood, Charles F., Jr., Grosvenor, McMartin, and Schirmer. 2,748,692.
General Tire and Rubber Co., The: *See*—
Cowles, Raymond H. 2 749,160.
Eldred, Dewitt. 2,749,266.
Gerdts, Gustav F.: *See*—
Pape, Hans-Martin. 2,749,045.
Gergovich, Frank A., and S. S. Lenski. Simulated motor-sound producer. 2,748,532, 6–5–56, Cl. 46—175.
Gerlinger Carrier Co.: *See*—
Gohrke, Raymond W. 2 748,966.
Gersch, Adolph E., to Geo. Stevens Mfg. Co. Counting and control device. 2,749,041, 6–5–56, Cl. 235—132.
Gibson, Oliver E., to United States Gypsum Co. Gypsum boards having crack resistant edge portions. 2,749,263, 6–5–56, Cl. 154—45.9.
Gilchrist, Alan, to Peabody Engineering Corp. Burner air register and fuel control system. 2,748,844, 6–5–56, Cl. 158—11.
Giles, Jeremiah D.: *See*—
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Gill, Joseph W., and C. R. Southwick, to United States Gypsum Co. Method of covering the joint between wallboard and the resultant product. 2,749,267, 6–5–56, Cl. 154—116.
Gillette Co., The: *See*—
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Testi, Nicholas. 2,748,468.
Gilliland, Edwin R.: *See*—
Lewis, Warren K., and Gilliland. 2,749,094.
Gilmont, Roger, and M. J. Schwartz, to Benjamin Cooper. Apparatus for the continuous quantitative determination of gases. 2,749,221, 6–5–56, Cl. 23—255.
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Gilmore, William H. and C. R. 2,748,847.
Gilmore, William H. and C. R., to East 134 Co. Recirculating pilot and burner. 2,748,847, 6–5–56, Cl. 158—91.
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Fleit, Martin, and Ginesi. 2,748,952.
Glaser, Jules W. Electric reciprocating motor for animated displays and the like. 2,749,455, 6–5–56, Cl. 310—34.
Glover, Bill, Inc.: *See*—
Glover, William C., Jr., and Manley. 2,748,619.
Glover, William C., Jr., and W. O. Manley, to Bill Glover, Inc. Perforated drum control for automatic washing machines. 2,748,619, 6–5–56, Cl. 74—568.
Glueck, Eugene. Denture articulators. 2,748,481, 6–5–56, Cl. 32—32.
Glunt, John L. Sanitary neck duster. 2,748,414, 6–5–56, Cl. 15—226.
Goetzel, Claus G., and J. L. Ellis, to Sintercast Corp. of America. Compressor blade. 2,749,029, 6–5–56, Cl. 230—134.
Gohrke, Raymond W., to Gerlinger Carrier Co. Laterally adjustable tines for a lift truck. 2,748,966, 6–5–56, Cl. 214—730.1.
Goldan, Theodore J.: *See*—
Derosa, Louis A., Bucher, and Goldan. 2,749,524.
Goldschmidt, Hans, to Magna Engineering Corp. Drill press assembly. 2,748,627, 6–5–56, Cl. 77—5.
Goodrich, Ross H., and W. L. Shoulders, to Joy Mfg. Co. Mining auger drill head. 2,749,101, 6–5–56, Cl. 262—7.
Goodrich, Ross H., to Joy Mfg. Co. Auger drill head. 2,749,102, 6–5–56, Cl. 262—9.
Goodridge, Laurence M., to Carter Carburetor Corp. Vacuum motor electric booster. 2,748,561, 6–5–56, Cl. 60—6.
Goodyear Aircraft Corp.: *See*—
Langworthy, Richard E. 2,749,036.
Gorenflo, Wilfred J. Support for fishing rod. 2,749,067, 6–5–56, Cl. 248—42.
Goss, Wilbur H., and D. A. Washburn, to the United States of America as represented by the Secretary of the Navy. Rocket type launching carriage for ordnance missile. 2,748,703, 6–5–56, Cl. 102—49.
Gould, John E. Focussing magnet systems for cathode ray tubes. 2,749,486, 6–5–56, Cl. 317—200.
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Gray, Daniel, to Oneida Ltd. Antitarnish wrappers. 2,749,210, 6–5–56, Cl. 21—2.5.
Gray, John W., to General Precision Laboratory Inc. Homing navigator. 2,749,035, 6–5–56, Cl. 235—61.
Gray, Lawrence L. Dehorning device. 2,748,475, 6–5–56, Cl. 30—167.
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Boddicker, Floyd L., and Graybeal. 2,749,336.
Green, Xan B. K., and H. Preble, Jr., to General Slicing Machine Co., Inc. Detachably-mounted disc blade for food slicing machines. 2,748,820, 6–5–56, Cl. 146—102.
Green, Xan B. K., and H. Preble, Jr., to General Slicing Machine Co., Inc. Positioning means for food-carrying platform of slicing machines. 2,748,907, 6–5–56, Cl. 189—36.
Greenberg, Harry, to National Distillers Products Corp. Separation of acids. 2,749,364, 6–5–56, Cl. 260—537.
Grey, Gordon E. Self-unloading wagon. 2,748,965, 6–5–56, Cl. 214—505.
Grieb, John J., N. Rigabar, and R. F. Taylor, to R. F. Taylor. Apparatus for grinding and refining material. 2,748,667, 6–5–56, Cl. 92—26.
Griffiths, Winfield S.: *See*—
Drain, Gerbert D., and Griffiths. 2,748,693.
Griskell, Philip R. Portable electric spot welder. 2,749,417, 6–5–56, Cl. 219—4.
Griswold, David E., to D. G. Griswold. Surge pressure control means. 2,749,080, 6–5–56, Cl. 251—28.
Griswold, David G.: *See*—
Griswold, David E. 2,749,080.
Groner, Miriam G., to Philco Corp. Method of applying an organic film to a phosphor layer. 2,749,252, 6–5–56, Cl. 117—33.5.
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Osgood, Charles F., Jr., Grosvenor, McMartin, and Schirmer. 2,748,692.
Grupposo, Salvi S.: *See*—
Boyd, Walter R., and Grupposo. 2,748,764.
Grzenkowski, Alfred E., and R. W. Rademaker, to Houdaille Industries, Inc. Apparatus for securing covers on viscous vibration damper units or the like. 2,748,736, 6–5–56, Cl. 113—52.
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Beach, Wallace W. 2,749,012.
Guarnaschelli, Stephen, to Titeflex, Inc. Reinforced hose. 2,748,803, 6–5–56, Cl. 138—50.
Guarnaschelli, Stephen, to Titeflex, Inc. Reinforced hose. 2,748,804, 6–5–56, Cl. 138—60.
Guay, Lucien. Lever and slide motion converting means with slidable connection. 2,748,613, 6–5–56, Cl. 74—104.
Gulberson Corp., The: *See*—
Davis, Roy C. 2,748,792.
Losey, Thomas B. 2,749,078.
Gumbert, Charles W., and J. C. Abbey, to Aeroquip Corp. Coupling with rotary sliding seal. 2,749,146, 6–5–56, Cl. 284—4.
Gumbert, Paul, to International Standard Electric Corp. Device for the purpose of clamping a foil, inserted into the gap formed by both of the pole ends of a sound top for magnetic sound implements. 2,749,391, 6–5–56, Cl. 179—100.2.
Gurewitsch, Anatole M., and P. C. Noble, to General Electric Co. Resonator structure. 2,749,438, 6–5–56, Cl. 250—27.
Gutman, Isaj. Cartridge finishing machines. 2,748,449, 6–5–56, Cl. 29—1.3.
Guyal, Burton W., and S. Wixson. Utility clamp and holder. 2,749 073, 6–5–56, Cl. 248—226.
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Haas, Edgar, to Herman Schwabe, Inc. Clutch release control for clicking machine. 2,749 414, 6–5–56, Cl. 200—157.
Hackett, William S., to General Motors Corp. Process for reinforcing shell molds. 2,748,435, 6–5–56, Cl. 22—193.
Hadler, Thomas F. Calibrated knitting needle. 2 748,582, 6–5–56, Cl. 66—117.
Hager, Richard E., to Cameron Iron Works, Inc. Sealing and pressuring apparatus. 2,748,869, 6–5–56, Cl. 166—75.
Halahan, John: *See*—
Pollan, David, Halahan, Lyon, and Aronson. 2,748,653.

Haldeman, John M., to General Motors Corp. Method of making piston rings. 2,748,453, 6–5–56, Cl. 29—156.6.
Hale, Frank B., to the United States of America as represented by the Secretary of the Army. Inertia and point detonation impact fuse. 2,748,705, 6–5–56, Cl. 102—78.
Hallowell, Jay S.: *See*—
Power, James A., and Hallowell. 2,748,930.
Halpern, Joseph. Dispensing receptacle for facial tissues or the like. 2,748,823, 6–5–56, Cl. 150—52.
Haltof, Henry: *See*—
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Ham, George E., to The Chemstrand Corp. Solutions of acrylonitrile vinyl chloride copolymer mixed with polymers of multinuclear aromatic monomers. 2,749,321, 6–5–56, Cl. 260—32.6.
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Mykiebust, James A., and Hanly. 2,748,859.
Hansel, Paul G., to Servo Corp. of America. Controlled oscillator. 2,749,442, 6–5–56, Cl. 250—36.
Hansel, Paul G., to Servo Corp. of America. Direct-reading frequency meter. 2,749,515, 6–5–56, Cl. 324—79.
Hansen, Charles P.: *See*—
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Hanson, Rodney L., and H. L. Mitten, Jr., to The Creamery Package Mfg. Co. Valve construction. 2,748,802, 6–5–56, Cl. 138—42.
Hanson, Walter J., and R. H. Van Wagener, to Pitney-Bowes, Inc. Inking device. 2,748,698, 6–5–56, Cl. 101—350.
Hardison, Wilbur T., to M. E. Bourns. Multiconductor cable. 2,749,261, 6–5–56, Cl. 154—2.24.
Hardwick, Robert F., to General Electric Co. Manufacture of decorative lamps. 2,749,203, 6–5–56, Cl. 316—18.
Harold, William, and W. Bilyk. Separable eye for a bolt. 2,748,646, 6–5–56, Cl. 85—9.
Harper, Solomon. Mercury switch-inductor thermostat controlled electric hair treating implement. 2,748,782, 6–5–56, Cl. 132—118.
Harrington, Edward M., and E. N. Anderson, to James R. Kearney Corp. Pole guards. 2,749,380, 6–5–56, Cl. 174—5.
Harrington, James R., 3/100 to F. J. Schraeder, Jr. Apparatus for operating internal combustion engines. 2,749,223, 6–5–56, Cl. 48—107.
Harris, Asa J. Door latch. 2,749,168, 6–5–56, Cl. 292—230.
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Harris Transducer Corp., The: *See*—
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Harris, Wilbur T., to The Harris Transducer Corp. Hydrophone. 2,749,532, 6–5–56, Cl. 340—11.
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Hart, Porter, to The Dow Chemical Co. Automatic control of concentrating evaporators. 2,748,849, 6–5–56, Cl. 159—44.
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Bisterfeld, Karl A. 2,749,423.
Le Poole, Jan B. 2,749,464.
Ober, Willy, and Fortuyn. 2,749,485.
Verweel, Jan. 2,749,477.
Warmolts, Nicolaas. 2,749,468.
Hartman, Philip S.: *See*—
King, Kenneth J., and Hartman. 2,749,175.
Hartwig, Walter. Recuperator. 2,749,110, 6–5–56, Cl. 263—20.
Hasbrouck, Augustus, and B. H. Shinn, to United Aircraft Corp. Stator construction for compressors. 2,749,026, 6–5–56, Cl. 230—122.
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Hawkinson, Paul E., Co.: *See*—
Hawkinson, Earle W. 2,748,423.
Hawkinson, Raymond P. 2,748,462.
Hawkinson, Raymond P., to Paul E. Hawkinson Co. Method of making tire treading molds. 2,748,462, 6–5–56, Cl. 29—505.
Hayden, Martin W., to Fieldcrest Mills, Inc. Sheet folding apparatus. 2,749,116, 6–5–56, Cl. 270—84.
Heath, Thomas D., to Dorr-Oliver Inc. Process and apparatus for heat-treating fluidized solids. 2,749,218, 6–5–56, Cl. 23—200.
Hedstrom, Otto, to Armour and Co. Hog head coating apparatus. 2,748,421, 6–5–56, Cl. 17—1.
Hedwin Corp.: *See*—
Winstead, Thomas W. 2,748,401.
Winstead, Thomas W. 2,748,673.
Winstead, Thomas W. 2,748,805.
Winstead, Thomas W. 2,749,294.
Helm, Irwin. Machine for assembling lantern slides and the like. 2,748,417, 6–5–56, Cl. 15—308.
Heiser, Edward J., and W. C. Axt, to Specialties Development Corp. Pneumatic time-delay fuse. 2,748,797, 6–5–56, Cl. 137—510.
Hellyer, John T., to Thor Corp. Clothes dryer. 2,748,496, 6–5–56, Cl. 34—133.
Hemminger, Charles E., to Esso Research and Engineering Co. Inverse gradient fluid hydroforming reactor. 2,749,286, 6–5–56, Cl. 196—50.
Henderson, Ray M. Defrosting system for refrigeration evaporators. 2,748,571, 6–5–56, Cl. 62—3.
Henderson, Wayne L., to General Electric Co. Transformer coil and insulation for the same. 2,749,525, 6–5–56, Cl. 336—209.
Hennessey, Russell J., and R. M. Dunning, to Waldorf Paper Products Co. Bottle carriers. 2,748,978, 6–5–56, Cl. 220—105.
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Henry Fred W. Thrust bearing. 2,748,714, 6–5–56, Cl. 103—112.
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Booth, James H., and Herbenar. 2,748,900.
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Herrschaft, William, to Herrschaft Products, Inc. Collapsible stands. 2,749,147, 6–5–56, Cl. 248—164.
Herzog, Gerhard, to The Texas Co. Prospecting. 2,749,446, 6–5–56, Cl. 250—71.
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Hewitt, William H., Jr., to Bell Telephone Laboratories, Inc. Measuring apparatus for wave guides. 2,749,507, 6–5–56, Cl. 324—58.
Hewson, William B., to Hercules Powder Co. Cellulose acetate sorbate and compositions thereof. 2,749,319, 6–5–56, Cl. 260—17.
Heyden Chemical Corp.: *See*—
Berni, Rene P. 2,749,362.
Heys, Ralph C., to Beloit Iron Works. Paper-making machines. 2,748,671, 6–5–56, Cl. 92—44.
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Hierateiner, Walter L., to Tension Envelope Corp. Envelope compartments. 2,749,021, 6–5–56, Cl. 229—72.
Hightower, Robert F.: *See*—
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Hightower, Roy M. and R. F. Measured quantity granulated material dispensing caps. 2,748,995, 6–5–56, Cl. 222—449.
Hilkemeier, Louis G., to Worthington Corp. Truck mixer water tank. 2,748,793, 6–5–56, Cl. 137—264.
Hill, Carson E. Spinning reel. 2,749,038, 6–5–56, Cl. 242—84.5.
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Hirschmann, Ralph F., and N. L. Wendler, to Merck & Co., Inc. Isoallospirostanes. 2,749,338, 6–5–56, Cl. 260—239.55.
Hirvonen, Eric J., to Leland-Gifford Co Hydraulic control mechanism for machine tools. 2,748,629, 6–5–56, Cl. 77—32.4.
Hitchings, George H., and R. K. Robins, to Burroughs Wellcome & Co. (U. S. A.), Inc. Pyrimidine compounds. 2,749,344, 6–5–56, Cl. 260—256.4.
Hitchings, George H., and R. K. Robins, to Burroughs Wellcome & Co. (U. S. A.), Inc. Pyrimidine compounds. 2,749,345, 6–5–56, Cl. 260—256.4.
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Hodgens, John G., Jr., to The Diversey Corp. Electronically controlled flow diverting apparatus for maintaining a predetermined solution concentration. 2,748,790, 6–5–56, Cl. 137—93.
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Hodson, Peter, to Apra Precipitator Corp. Vortex-electrostatic gas cleaner. 2,748,888, 6–5–56, Cl. 183—7.
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Horman, John H., and Hoell. 2,749,403.
Hoffman, Charles P. Buckle. 2,748,436, 6–5–56, Cl. 24—77.
Hoffmann, Karl, E. Tagmann, and E. Urech, to Ciba Pharmaceutical Products, Inc. Tetrahydropyridine compounds, their salts and quaternary compounds. 2,749,346, 6–5–56, Cl. 260—281.
Hoffmeister, Erich. Drilling or grinding tools, more particularly for dental purposes. 2,748,483, 6–5–56, Cl. 32—48.
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Cooper, Benjamin, Hohmann, and Wapner. 2,749,536.

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Holley, George M., Jr., to Holley Carburetor Co. Vacuum type power steering with control means responsive to engine and vehicle speeds. 2,748,881, 6–5–56, Cl. 180—79.2.

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Homer, Howard J.: *See*—
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Horman, John H., and E. C. Hoell, to Allied Control Co., Inc. Contact structure for relays and the like. 2,749,396, 6–5–56, Cl. 200—1.

Horman, John H., and E. C. Hoell, to Allied Control Co., Inc. Electromagnetic relay. 2,749,403, 6–5–56, Cl. 200—104.

Hornbostel, Lloyd, to Beloit Iron Works. Separator-pumping operation for paper stock. 2,748,668, 6–5–56, Cl. 92—28.

Hornbostel, Lloyd, to Beloit Iron Works. Separator-pumping. 2,749,031, 6–5–56, Cl. 233—20.

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Grzenkowski, Alfred E., and Rademaker. 2,748,736.
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Houdek, Joseph F., Jr., to International Telephone and Telegraph Corp. Automatic intercommunication telephone system. 2,749,388, 6–5–56, Cl. 179—20.

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Foster, Robert E., and Howk. 2,749,366.

Huang, Hsing T.: *See*—
Smythe, Carl V., and Huang. 2,749,279.

Huber, Jennie: *See*—
Huber, Ralph L. 2,748,769.

Huber, Ralph L., deceased; J. Huber, administratrix. Hypodermic needle. 2,748,769, 6–5–56, Cl. 128—221.

Hudson, H. D., Mfg. Co.: *See*—
Pinke, August H., Meeker, Oys, and Hudson. 2,748,992.

Hudson, Robert C.: *See*—
Pinke, August H., Meeker, Oys, and Hudson. 2,748,992.

Hudson, Tom N. Cable tool drill. 2,749,090, 6–5–56, Cl. 255—10.

Hufschmid, Alfred. Rack-and-cam operated locking means for the slidable jaw of a slidable inner jaw wrench. 2,748,639, 6–5–56, Cl. 81—143.

Hughes, Luther J. Tandem axle for trailers. 2,749,140, 6–5–56, Cl. 280—104.5.

Hulslander, William L., to Homstead Valve Mfg. Co. Valve lock. 2,748,589, 6–5–56, Cl. 70—180.

Humlicek, Bernard A. Disk transport. 2,748,551, 6–5–56, Cl. 55—73.

Humphrey, Samuel A., to the United States of America as represented by the Secretary of the Navy. Non-rotatable retaining ring. 2,749,162, 6–5–56, Cl. 287—119.

Hunsicker, Harold Y.: *See*—
Sicha, Walter E., Hunsicker, and Lemon. 2,749,239.

Hutchinson, Herman R., to C. F. Rumpp & Sons. Pass case wallet. 2,748,821, 6–5–56, Cl. 150—39.

Huyck, F. C., & Sons: *See*—
Skeer, John D., and Dunlap. 2,748,445.

Ideal Industries, Inc.: *See*—
Scott, William J. 2,749,384.

Ideal Toy Corp.: *See*—
Stecker, Fred. 2,748,530.

Igler, Edward J.: *See*—
Shoemaker, Clarence J., and Igler. 2,749,253.

Illinois Tool Work: *See*—
Poupitch, Ougljesa J. 2,748,840.

Imperial Chemical Industries Ltd.: *See*—
Coates, Kenneth B. 2,749,316.
Lewis, Idwal O. 2,749,226.
Stewart, Ian F., and Seed. 2,748,427.

Indiana Commercial Filters Corp.: *See*—
Busaid, Francis A. 2,748,998.

Inflco Inc.: *See*—
Kalinske, Anton A. 2,748,944.

International Harvester Co.: *See*—
Pool, Stuart D., and Karlsson. 2,748,552.

International Latex Corp.: *See*—
Andrews, Fred W. 2,748,393.

International Nickel Co., Inc., The: *See*—
Millis, Keith D., Gagnebin, and Pilling. 2,749,238.

International Paper Co.: *See*—
Wilkinson, Robert L. 2,749,013.

International Standard Electric Corp.: *See*—
Billings, William A., Wright, and Watts. 2,749,470.
Gumbert, Paul. 2,749,391.
Jackson, Thomas M., and Fraser. 2,749,479.
Malsch, Friedrich K. 2,749,465.
Mayer, Simon E. 2,749,488.
Mayer, Simon E., and Hill. 2,749,489.
Pouliart, Willy. 2,749,540.
Rogers, Douglas C. 2,749,476.
Skelton, Dennis E. 2,748,882.
Wright, Esmond P. G. 2,749,386.

International Telephone and Telegraph Corp.: *See*—
Derosa, Louis A., Bucher, and Goldan. 2,749,524.
Dishal, Milton. 2,749,523.
Engelmann, Herbert F., and Kostriza. 2,749,521.
Houdek, Joseph F., Jr. 2,749,388.
Kostriza, John A. 2,749,545.
Kostriza, John A., and Terranova. 2,749,519.
Lewinter, Sidney W. 2,749,390.
Shadowitz, Albert. 2,749,518.

Interwoven Stocking Co.: *See*—
Power, James A., and Hallowell. 2,748,930.

Irtenkauf, Josef, to Gebr. Boehringer G. m. b. H. Speed change transmission, especially for tool machines and more particularly a feed transmission of a lathe. 2,748,643, 6–5–56, Cl. 82—21.

Irwin, Davis L.: *See*—
Plummer, Herbert L., and Irwin. 2,748,727.

Isreeli, Jack, and G. T. Allen. Pressure-control apparatus for anti-G suits. 2,748,786, 6–5–56, Cl. 137—38.

Iverson, Arden L., to Para-Lux Products Co. Combination collar protector and shirtboard. 2,748,929, 6–5–56, Cl. 206—46.

Ivie, James O., and M. D. Thomas. Revertible draft fluid-fuel-burning heater with safety pilot draft. 2,748,842, 6–5–56, Cl. 158—1.

Jackson, James O., to Pittsburgh-Des Moines Steel Co. Controlling delivery of air to induction and blow down type wind tunnels. 2,748,569, 6–5–56, Cl. 60—52.

Jackson, Thomas M., and I. H. Fraser, to International Standard Electric Corp. Electrical circuits using multi-gap cold cathode gas filled tubes. 2,749,479, 6–5–56, Cl. 315—84.6.

Jacobs, George B. Bundle throwing handle device. 2,749,172, 6–5–56, Cl. 294—26.

Jacobson, Felix C., to Platers & Stampers Ltd. Pressure cookers. 2,748,975, 6–5–56, Cl. 220—46.

Jacobson, Gustaf L., and J. C. Oberg, to Steel Partitions, Inc. Slidable enclosures for bath tubs and the like. 2,748,908, 6–5–56, Cl. 189—46.

James, William S., to Fram Corp. Combined full-flow and part-flow oil filter. 2,748,949, 6–5–56, Cl. 210—183.

Jandus, Herbert S., to Houdaille Industries, Inc. Automobile bumper attachment. 2,749,170, 6–5–56, Cl. 293—64.

Janik, Anton J., to The Ridge Tool Co. Reversible rotary pump. 2,748,716, 6–5–56, Cl. 103—138.

Jay, Kenneth W., to A. V. Roe Canada Ltd. Filter by-pass control. 2,748,947, 6–5–56, Cl. 210—166.

Jeffrey Mfg. Co., The: *See*—
Mercier, Stanley M. 2,748,918.

Jenaer Glaswerk Schott & Gen.: *See*—
Geffcken, Walter, and Eden. 2,749,379.
Geffcken, Walter, and Schröder. 2,748,659.

Jenkins, Albert H.: *See*—
Jenkins, Robert H. and A. H. 2,749,057.

Jenkins, George N.: *See*—
Barnum, Robert E., Jenkins, and Wasserbach. 2,749,225.

Jenkins, Horace D. Toilet paper dispenser. 2,749,056, 6–5–56, Cl. 242—55.2.

Jenkins, Robert H. and A. H. Fish line reel. 2,749,057, 6–5–56, Cl. 242—84.5.

Jennens, Arthur E. Weeder. 2,749,088, 6–5–56, Cl. 254—132.

Jenny, Alfred L., and D. H. Stephenson, to General Electric Co. Tantalum electrolytic capacitor. 2,749,487, 6–5–56, Cl. 317—230.

Jervis Corp.: *See*—
Johnson, Robert E. 2,749,169.

Johnson, Albert H. Mixer. 2,749,098, 6–5–56, Cl. 259—117.

Johnson, Bennie T. Barbecue machine. 2,748,691, 6–5–56, Cl. 99—444.

Johnson, Norman S., to Raymond Concrete Pile Co. Fluid actuated power hammers. 2,748,751, 6–5–56, Cl. 121—25.

Johnson, Robert E., to Jervis Corp. Latch mechanism. 2,749,169, 6–5–56, Cl. 292—332.

Johnston, Edgar C., Jr.: *See*—
Johnston, Mordica O. 2,748,872.

Johnston, Gordon C.: *See*—
Johnston, Mordica O. 2,748,872.

Johnston, Howard, to The Dow Chemical Co. 3-chloro-1-iodo-propyne-1. 2,749,377, 6–5–56, Cl. 260—654.

Johnston, Joseph G.: *See*—
Johnston, Mordica O. 2,748,872.

Johnston, Madge: *See*—
Johnston, Mordica O. 2,748,872.

Johnston, Mordica O., ¼ to M. Johnston, ½ to E. C. Johnston, Jr., ½ to G. C. Johnston, ½ to J. G. Johnston, ⅛ to M. O. Johnston, Jr., and ⅛ to W. C. Johnston. Well tool anchoring device. 2,748,872, 6–5–56, Cl. 166—206.

Johnston, Mordica O., Jr.: *See*—
Johnston, Mordica O. 2,748,872.

Johnston, Warren C.: *See*—
Johnston, Mordica O. 2,748,872.

Jones, Whitney W. Removal receptacle for the contents of coin boxes. 2,749,030, 6–5–56, Cl. 232—16.

Jones, Wilford D., to Celanese Corp. of America. Acrylamides. 2,749,355, 6–5–56, Cl. 260—326.3.

Jordan, James. F., ½ to the estate of J. Jordan, deceased. Method of adding magnesium to molten iron. 2,749,237, 6–5–56, Cl. 75—130.

Jordan, James, the estate: *See*—
Jordan, James F. 2,749,237.

Journal Box Servicing Corp.: *See*—
Potter, Thomas W. 2,748,584.

Joy Mfg. Co.: *See*—
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Goodrich, Ross H. 2,749,102.
Goodrich, Ross H., and Shoulders. 2,749,101.
Sibley, John R. 2,749,105.

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Narel, Joseph W., and Joyce. 2,748,544.

Jursich, Myron J., to National Aluminate Corp. Reduction of scale in steam boilers. 2,749,305, 6–5–56, Cl. 210—23

K. A. C. Ltd.: *See*—
Love, John. 2,749,167.

Kaiser Aluminum & Chemical Corp.: *See*—
Kinghorn, Charles M., and Rhoades. 2,749,155.

Kaiser, Rudolf, to Aeroquip Corp. Hose end fitting with self sealing nipple. 2,749,150, 6–5–56, Cl. 285—77.

Kaiserman, Julius J., to U. O. Colson Co. Desk calendar. 2,748,515, 6–5–56, Cl. 40—120.

Kalinske, Anton A., to Indico Inc. Corner sweeping means for clarification basins. 2,748,944, 6–5–56, Cl. 210—55.

Kane, John C. Positive-lock take-up stud. 2,749,159, 6–5–56, Cl. 287—75.

Kantor, Simon W.: *See*—
Oathoff, Robert C., and Kantor. 2,749,318.

Kaplan, Murray A., to Bristol Laboratories Inc. Plant growth stimulants containing water insoluble salts of penicillin. 2,749,230, 6–5–56, Cl. 71—2.4.

Kappeler, Markus, and A. Schweizer, to Sandos A. G. Metal-containing polyazo dyestuffs. 2,749,333, 6–5–56, Cl. 260—145.

Karll, Robert E.: *See*—
Sabol, Albert R., Fields, and Karll. 2,749,311.

Karlsson, Elof K.: *See*—
Pool, Stuart D., and Karlsson. 2,748,552.

Karlström, Karl A. S. Vibrator. 2,748,607, 6–5–56, Cl. 74—61.

Kasehagen, Leo, to Atlas Powder Co. Hydrogenation of monosaccharides. 2,749,371, 6–5–56, Cl. 260—635.

Kasten, Walter: *See*—
Fricke, Guy C., and Kasten. 2,748,948.

Katsin, Martin. Pulse generating circuit. 2,749,452, 6–5–56, Cl. 307—106.

Kauffmann, William M., to Worthington Corp. Aftercooler water control for internal combustion engines. 2,748,562, 6–5–56, Cl. 60—13.

Kaufmann, John J., Jr., to Steel Heddle Mfg. Co. Shuttle tips. 2,748,807, 6–5–56, Cl. 139—196.

Kaul, Ben, to American Radiator & Standard Sanitary Corp. Method of cold forming steel pressure cylinders. 2,748,464, 6–5–56, Cl. 29—535.

Kaul, Ben, to American Radiator & Standard Sanitary Corp. Process and apparatus for cold shaping steel. 2,748,932, 6–5–56, Cl. 207—6.

Kay, Oscar J. Overheat control device. 2,749,409, 6–5–56, Cl. 200—142.

Kayler, Frank H., to American Steel Foundries. Fifth wheel stabilizer. 2,749,144, 6–5–56, Cl. 280—438.

Kean, George W. Screw threading machines. 2,748,663, 6–5–56, Cl. 90—11.54.

Kearney, James R., Corp.: *See*—
Harrington, Edward M., and Anderson. 2,749,380.

Kearney & Trecker Corp.: *See*—
Senn, Jurg A. 2,748,665.

Kebrich, Leonard M.: *See*—
Eickhoff, Arnold J., and Kebrich. 2,749,214.

Keeler, William R.: *See*—
Pierotti, Gino J., Keeler, Evans, and Vincent. 2,749,291.

Kelle, Arthur C., to Allis-Chalmers Mfg. Co. Circuit breaker with electrode disposed between an interrupting device and a contact opening. 2,749,411, 6–5–56, Cl. 200—150.

Kellendorfer, Richard, ⅛ to S. Skambraks, and ⅛ to E. Strasser. Electric fuses. 2,749,405, 6–5–56, Cl. 200—113.

Keller, Curt, to Aktiengesellschaft fuer Technische Studien. Method and installation for operating a wind tunnel, more especially for high Mach numbers. 2,748,599, 6–5–56, Cl. 73—147.

Kelly, Dunford A. Phase shift oscillator. 2,749,441, 6–5–56, Cl. 250—36.

Kelly, Stanley, to Cosmocord Ltd. Mechanical coupling devices. 2,749,131, 6–5–56, Cl. 274—37.

Kelly, William. Building construction. 2,748,592, 6–5–56, Cl. 72—16.

Kemper, Maxwell F. Apparatus for controlling the feed of liquid to concrete mixers. 2,748,990, 6–5–56, Cl. 222—373.

Kenmore, Herbert, and W. J. Manson, to National-Standard Co. Bath structure for treating wire in the form of a helical coil. 2,748,784, 6–5–56, Cl. 134—64.

Kennedy, Frank J., to National Electric Products Corp. Continuous tube welding apparatus with multi-stage heating. 2,748,734, 6–5–56, Cl. 113—33.

Kenty, Carl, and D. A. Larson, to General Electric Co. High pressure mercury vapor lamp with zirconium getter. 2,749,462, 6–5–56, Cl. 313—25.

Kerr, Charles E., and R. K. Galloway, to Food Machinery and Chemical Corp. Carton feeding device. 2,749,118, 6–5–56, Cl. 271—12.

Kerr, Henry H., A. E. Benson, S. P. Bower, and L. E. Siess, to United States Rubber Co. Pneumatic tire. 2,748,827, 6–5–56, Cl. 152—341.

Kidlets, Inc.: *See*—
Martin, Mildred C., and Sheaffer. 2,748,501.

Kiefer, Karl, Machine Co., The: *See*—
Fechheimer, Paul R., Rowekamp, and Swing. 2,749,007.

Kilburn, Tom: *See*—
Williams, Frederic C., and Kilburn. 2,749,034.
Williams, Frederic C., Kilburn, and Tootill. 2,749,439.

Kilner, William N., to Metropolitan-Vickers Electrical Co. Ltd. Construction of dynamo electric machines. 2,749,457, 6–5–56, Cl. 310—64.

King, Kenneth J., and P. S. Hartman, to Hercules Steel Products Corp. Latch control for dump trucks. 2,749,175, 6–5–56, Cl. 298—22.

Kinghorn, Charles M., and J. S. Rhoades, to Kaiser Aluminum & Chemical Corp. Resilient pipe joint with sheet metal clamp member. 2,749,155, 6–5–56, Cl. 285—194.

Kirby, Elza H. Sweep attachment for a cultivator. 2,748,684, 6–5–56, Cl. 97—205.

Kirshenbaum, Isidor, to Esso Research and Engineering Co. Reactivation of hydroforming catalysts using dry air. 2,749,287, 6–5–56, Cl. 196—50.

Kittel, Richard E. Fortune-telling board or magnetic game. 2,749,127, 6–5–56, Cl. 273—109.

Kitselman, Edward H., to Acorn Iron and Wire Works. Tamperproof gate keeper. 2,749,164, 6–5–56, Cl. 292—121.

Klecker, Joseph G., to Caterpillar Tractor Co. Locking gate for shifting mechanism of a six-speed transmission. 2,748,910, 6–5–56, Cl. 192—3.5.

Klein, Rudolph J., Jr., to Phillips Control Corp. Stroboscope. 2,749,481, 6–5–56, Cl. 315—205.

Kling, Robert W., to Athey Products Corp. Track cleaner. 2,748,720, 6–5–56, Cl. 104—279.

Knudsen, Raymond G., and H. P. Last, to Snap-on Tools Corp. Impact sleeve pullers. 2,748,458, 6–5–56, Cl. 29—280.

Knup, Emil, R. Aenishaenslin, and G. Widmer, to Ciba Ltd. Process for the fixation of mechanically produced effects on textile material, and material. 2,749,257, 6–5–56, Cl. 117—65.

Koehring, Roland P., and C. E. Wilkens, to General Motors Corp. Apparatus for contour rolling. 2,748,634, 6–5–56, Cl. 80—23.

Kofford, Reed S. Automatic watering device for poultry. 2,748,795, 6–5–56, Cl. 137—408.

Kollmann, Harry, to Formart Containers, Inc. Apparatus for molding pulp. 2,748,672, 6–5–56, Cl. 92—54.

Kooistra, Lambert F., to The Babcock & Wilcox Co. Creep rupture testing apparatus. 2,748,597, 6–5–56, Cl. 73—15.6.

Koopal, Sieda, and J. H. C. Moison, to Stamicarbon N. V. Preparation of calcium carbide. 2,749,219, 6–5–56, Cl. 23—206.

Koppers Co., Inc.: *See*—
Christensen, John C., and Fair. 2,749,250.

Korenak, Anthony J. Straightening device equipped with an optical projection type comparator. 2,748,829, 6–5–56, Cl. 153—52.

Kornfeld, Edmund C., and E. J. Fornefeld, to Eli Lilly and Co. Substituted bens[CD]indolines. 2,749,353, 6–5–56, Cl. 260—319.

Kort, Frits, to SKF Industries, Inc. Method and means for axially fixing rolling bearings. 2,749,192, 6–5–56, Cl. 308—236.

Kosloff, Samuel. Portable massaging device. 2,748,763, 6–5–56, Cl. 128—57.

Kostriza, John A.: *See*—
Engelmann, Herbert F., and Kostriza. 2,749,521.

Kostriza, John A., and P. Terranova, to International Telephone and Telegraph Corp. Directional couplers for microwave transmission systems. 2,749,519, 6–5–56, Cl. 333—10.

Kostriza, John A., to International Telephone and Telegraph Corp. Electromagnetic horn. 2,749,545, 6–5–56, Cl. 343—776.

Koury, Philip, and R. J. Wills, to Brubaker Mfg. Co., Inc. Slide structure. 2,749,201, 6–5–56, Cl. 312—323.

Kowalik, John J., to American Steel Foundries. Snubbed spring group. 2,749,113, 6–5–56, Cl. 267—9.

Kramcsak, Michael, Jr., to The Bassick Co. Caster glide. 2,748,419, 6–5–56, Cl. 16—38.

Kranc, Stanley J.: *See*—
Maxwell, Carl R., and Kranc. 2,749,181.

Kratochvil, Tony J.: *See*—
De Groot, Richard, and Kratochvil. 2,748,632.

Kravitz, Bernard H., to Cooper Carton Corp. Cartons. 2,749,017, 6–5–56, Cl. 229—39.

Kregall, Casimir J. Hydrofoil aquatic device. 2,748,400, 6–5–56, Cl. 9—18.

Kremser, Johann. Fluid-cooled two-stroke cycle internal combustion engine with cylinders mounted individually on the engine block. 2,748,756, 6–5–56, Cl. 123—41.78.

Kreysa, Frank J., to Chemo Puro Mfg. Corp. 2-phenylquinoline-3-aryl carbamates. 2,749,347, 6–5–56, Cl. 260—287.

Kropp Forge Co.: *See*—
Brown, Victor. 2,748,466.

Krueger, Walter L.: *See*—
Fennema, Richard, Anderson, and Krueger. 2,749,083.

Krüger, Joachim, to Lübecker Kaltemaschinen-G. m. b. H. Piston-ring packings, more particularly for high pressure. 2,749,195, 6–5–56, Cl. 309—31.

Kubik, Paul P., and R. W. Schmid, to The Yale & Towne Mfg. Co. Adjustable key plug retainer. 2,748,590, 6–5–56, Cl. 70—367.

Kucharski, Thaddeus W.: *See*—
Droel, Louis W., and Kucharski. 2,749,395.

Kuhl, George H. Punch press and feed mechanism therefor. 2,748,865, 6–5–56, Cl. 164—117.

Kuhlman, William H., Jr., to the United States of America as represented by the Secretary of the Air Force. Aerodynamic deflector and diffuser. 2,749,064, 6–5–56, Cl. 244—137.

Kulicke, Frederick W., Jr., to Proctor Electric Co. Ironing table. 2,748,512, 6–5–56, Cl. 38—121.

Kuljian, Harry A. Reel for the fluid treatment of thread. 2,748,588, 6–5–56, Cl. 68—205.

Kurtz, Robert G.: *See*—
Staebler, Lloyd A., and Kurtz. 2,748,573.

Kuss, Ferdinand. Trunnion mounting for chassis and the like. 2,749,200, 6–5–56, Cl. 312—323.

Lachance, Ernest J. Spring tooth combs. 2,748,783, 6–5–56, Cl. 132—155.

Lafarge, Bernard N. Container closures. 2,748,974, 6–5–56, Cl. 220—43.

Lake, Harry G., to the United States of America as represented by the Secretary of the Air Force. Dielectric test box and auxiliary switch box. 2,749,513, 6–5–56, Cl. 324—65.

Landenberger, Ulric: *See*—
Nelson, Noral A., and Landenberger. 2,748,686.

Lane, Harold A., to Midwest Supply and Mfg. Co. Machine for grinding, polishing, buffing or the like. 2,748,546, 6–5–56, Cl. 51—166.

Lange, Günther: *See*—
Berger, Johannes, and Lange. 2,748,656.

Langworthy, Richard E., to Goodyear Aircraft Corp. Means for preventing computing errors in a multiple potentiometer computing element. 2,749,036, 6–5–56, Cl. 235—61.

Lappin, Robert I.: *See*—
Zaiger, Louis, and Lappin. 2,748,408.

Larsen, Einer W., to Western Electric Co., Inc. Machine for welding contacts onto switch parts. 2,749,419, 6–5–56, Cl. 219—4.

Larsen, Wilmer C. Tool for holding dental facings. 2,748,484, 6–5–56, Cl. 32—68.

Larson, Daniel A.: *See*—
Kenty, Carl, and Larson. 2,749,462.

Larson, Joseph P. Liquid spray device. 2,749,178, 6–5–56, Cl. 299—86.

Last, Henry P.: *See*—
Knudsen, Raymond G., and Last. 2,748,458.

Latour, Pieter, to Underwood Corp. Mechanism for reindexing a total in an accounting machine. 2,749,033, 6–5–56, Cl. 235—60.31.

Latzen, Josef, to the firm A. Ehrenreich & Cie. Ball and socket joint. 2,749,161, 6–5–56, Cl. 287—90.

Launay, Pierre. Quarter turn dowel nut for caissons. 2,748,825, 6–5–56, Cl. 151—41.75.

Lautzenhiser, Argyle G., G. B. Shaw, and J. W. Dyer, to General Motors Corp. Windshield wiper control. 2,749,498, 6–5–56, Cl. 318—466.

Leahy, Matthew T. Micrometer support. 2,748,926, 6–5–56, Cl. 206—16.

Leary, William W., to Armstrong Cork Co. Bottle closure. 2,748,969, 6–5–56, Cl. 215—40.

Lebow, Irwin L., to National Container Corp. Ventilated compartmented box. 2,749,011, 6–5–56, Cl. 229—6.

Le Cocq, Gaston C. Fruit picking device. 2,748,555, 6–5–56, Cl. 56—338.

Lectromatic Devices, Inc.: *See*—
Von Stoeser, Walter. 2,748,861.

Lee, Henry Y. Sectional gears. 2,748,618, 6–5–56, Cl. 74—439.

Lehner, Edwin C., and J. A. Brendle, to Swift & Co. Flavor injection valve for ice cream. 2,748,724, 6–5–56, Cl. 107—1.

Leland-Gifford Co.: *See*—
Hirvonen, Eric J. 2,748,629.

Leland Stanford Junior University, The Board of Trustees of the: *See*—
Field, Lester M. 2,749,472.

Lemon, Robert C.: *See*—
Sicha, Walter E., Hunsicker, and Lemon. 2,749,239.

Lenski, Stanley S.: *See*—
Gergovich, Frank A., and Lenski. 2,748,532.

Leo, Herbert T., and C. C. Taylor. Method of making a food product. 2,749,243, 6–5–56, Cl. 99—132.

Le Poole, Jan B., to Hartford National Bank and Trust Co., as trustee. Adjustable magnetic electronic lens. 2,749,464, 6–5–56, Cl. 313—84.

Les Laboratoires, Francais de Chimiotherapie: *See*
Vellus, Leon. 2,749,356.

Le Tourneau, R. G., Inc.: *See*—
Le Tourneau, Robert G. 2,748,878.

Le Tourneau, Robert G., to R. G. Le Tourneau, Inc. Wheeled tractor. 2,748,878, 6–5–56, Cl. 180—6.2.

Letroux, Jeanne: *See*—
Titone, Georgette, and Letroux. 2,748,772.

Lev, Benjamin. Fabric cutting machine with means to lubricate the cutter. 2,748,471, 6–5–56, Cl. 30—123.

Levine, Herman. Spaghetti fork. 2,748,479, 6–5–56, Cl. 30—323.

Levitt, Semond, to Sperry Rand Corp. Function table. 2,749,484, 6–5–56, Cl. 317—99.

Lewinter, Sidney W., to International Telephone and Telegraph Corp. Ringing circuit for telephone line and radio order wire. 2,749,990, 6–5–56, Cl. 179—84.

Lewis, Frederick J., Jr., and J. F. Quinlan, to the United States of America as represented by the Secretary of the Navy. Missile-resistant garment. 2,748,391, 6–5–56, Cl. 2—2.5.

Lewis, Gordon M., to The Bristol Aeroplane Co. Ltd. Gas turbine engines. 2,749,023, 6–5–56, Cl. 230—116.

Lewis, Idwal O., to Imperial Chemical Industries Ltd. Delay composition for delay electric detonators. 2,749,226, 6–5–56, Cl. 52—2.

Lewis, Warren K., and E. R. Gilliland, to Esso Research and Engineering Co. Method of heat exchange between liquids. 2,749,094, 6–5–56, Cl. 257—1.

Lido Land Co.: *See*—
Williford, Jacob V., Jr. 2,749,459.

Liechti, Hans, to Ciba Ltd. Disazo-dyestuffs. 2,749,335, 6–5–56, Cl. 260—153.

Ligett, Waldo B., and C. N. Wolf, to Ethyl Corp. Defoliation. 2,749,228, 6–5–56, Cl. 71—2.3.

Ligett, Waldo B., and C. N. Wolf, to Ethyl Corp. Plant growth regulation with chlorophenyl cyanoacrylic acids and derivatives. 2,749,229, 6–5–56, Cl. 71—2.4.

Ligett, Waldo B., and C. N. Wolf, to Ethyl Corp. Bromophenyl cyanoacrylic acids and derivatives. 2,749,231, 6–5–56, Cl. 71—2.6.

Ligett, Waldo B., and C. N. Wolf, to Ethyl Corp. Chlorophenyl cyanoacrylic acids and derivatives. 2,749,232, 6–5–56, Cl. 71—2.6.

Ligett, Waldo B., C. N. Wolf, and R. D. Closson, to Ethyl Corp. Fungicidal compositions comprising esters of n-naphthyl halo-maleamic acids and methods of applying. 2,749,269, 6–5–56, Cl. 167—30.

Lilly, Eli, and Co.: *See*—
Kornfeld, Edmund C., and Fornefeld. 2,749,353.

Lilyquist, Marvin R.: *See*—
Tarrant, Paul, and Lilyquist. 2,749,376.

Lily-Tulip Cup Corp.: *See*—
Amberg, Walter E., and S. W. 2,749,010.

Lincoln Engineering Co.: *See*—
Mueller, Carl H., and Schneller. 2,748,893.

Lindner, Adam C., to Chicago Forging and Mfg. Co. Latch for automobile deck closure. 2,749,166, 6–5–56, Cl. 292—216.

Lindsay, Carlton G.: *See*—
Penasack, Stephen L. 2,749,134.

Lipari, Gioacchino: *See*—
Lipari, Michael. 2,748,768.

Lipari, Michael, to Gioacchino Lipari. Disposable cartridge syringe unit. 2,748,768, 6–5–56, Cl. 128—218.

Lipschutz, Frank K., and S. Rosenberg. Reinforced cap. 2,748,396, 6–5–56, Cl. 2—195.

Lipsich, Maurice L., and F. C. Schwaneke, to Dormeyer Corp. Cooking device. 2,748,690, 6–5–56, Cl. 99—340.

Lissant, Kenneth J., to Petrolite Corp. Process for reactivation of flowing wells. 2,748,867, 6–5–56, Cl. 166—45.

Lissant, Kenneth J., to Petrolite Corp. Resinous coating. 2,749,322, 6–5–56, Cl. 260—32.8.

Little, Henry, to Standard Pressed Steel Co. Feed collet. 2,749,185, 6–5–56, Cl. 279—41.

Little, Robert J., and J. E. Willing, to General Railway Signal Co. Electromagnetic flashing relay. 2,749,454, 6–5–56, Cl. 310—32.

Littlewood, Frank A. Electrical control apparatus. 2,749,492, 6–5–56, Cl. 318—39.

Lloyd, Harold. Valve for use with a timing mechanism. 2,749,081, 6–5–56, Cl. 251—157.

Lockard, Ronald C. Foil strip wiring system. 2,749,382, 6–5–56, Cl. 174—71.

Lockhart, Edward L. Combination hole center finder and center punch. 2,748,492, 6–5–56, Cl. 33—191.

Lodge, Alvin, to Blackstone Corp. Suspension and mounting for washing machines. 2,748,945, 6–5–56, Cl. 210—72.

Loeb, Morris. Latching device. 2,749,163, 6–5–56, Cl. 292—17.

Loeper, Robert P., and W. F. K. Mueller, to Textile Machine Works. Safety mechanism for knitting machines. 2,748,583, 6–5–56 Cl. 66—157

Lombard, Adrian A., to Rolls-Royce Ltd. Rotor constructions for turbo machines. 2,749,086, 6–5–56, Cl. 253—39.

Long, James J. Attachment bracket for supporting decorative articles from a Venetian blind. 2,749,072, 6–5–56, Cl. 248—214.

Lord, Dwight S., and H. A. Morrison, to Boeing Airplane Co. Compass-swinging apparatus. 2,748,486, 6–5–56, Cl. 33—46.

Lormor, Henry W.: *See*—
Willard, Alfred R., Haak, and Lormor. 2,748,737.

Losey, Thomas B., to The Guiberson Corp. Well blowout preventer. 2,749,078, 6–5–56 Cl. 251—1.

Lotz, Otto, to The Babcock & Wilcox Co. Fluid heat exchange unit with a furnace having gas deflecting inner wall surfaces. 2,748,754, 6–5–56, Cl. 122—235.

Loudon, Clifford L. and W. E. Riker to Holmes Electric Protective Co. Device for detecting motion in a confined space. 2,749,537, 6–5–56, Cl. 340—258.

Love, John, to K. A. C. Ltd. Latch for cover panels. 2,749,167, 6–5–56 Cl. 292—226.

Lovejoy, Charles K., to Scripto, Inc. Retractable ball pen. 2,748,748, 6–5–56, Cl. 120—42.03.

Lovely, Hobart C. Filling knife loom-stop attachment. 2,748,808, 6–5–56, Cl. 139—336.4.

Low, Gerald C. Tape splicing apparatus. 2,748,832, 6–5–56, Cl. 154—42.3.

Low Richard, to Pastushin Aviation Corp. Ejector mechanism. 2,749,063, 6–5–56, Cl. 244—137.

Lübecker, Kaltemaschinen-G. m. b. H.: *See*—
Krüger, Joachim. 2,749,195.

Lucchetti, Anthony. Emergency railroad brake. 2,748,895, 6–5–56, Cl. 188—36.

Luchsinger, Ernst, to Fibra A. G. Needle bed for needles serving for the manufacture of knitted fabrics. 2,748,581, 6–5–56, Cl. 66—115.

Ludlow, John L., to E. I. du Pont de Nemours and Co. Compositions comprising polyester plasticizers. 2,749,329, 6–5–56, Cl. 260—75.

Ludwig Adolf: *See*—
Binder, Richard and Ludwig. 2,748,913.

Luenberger, Frederick O., to U. S. Electrical Motors, Inc. Waterproof stator construction for submersible dynamoelectric machine. 2,749,456, 6–5–56, Cl. 310—43.

Lukens Steel Co.: *See*—
Edwards, Lewis W. 2,748,594.
Wert, Russell A. 2,748,828.

Lundquist, Adolph Q., to Union Carbide and Carbon Corp. Recovery of uranium and vanadium compounds from acid solution. 2,749,211, 6–5–56, Cl. 23—14.5.

Lyman, Homer F. Drinking utensil cleaning apparatus. 2,748,409 6–5–56 Cl. 15—75.

Lynch, Harold D. Dog door. 2,748,854, 6–5–56, Cl. 160—179.

Lynch, James F.: *See*—
Slyh, John A., Lynch, and Runch. 2,749,254.

Lyon, Ashton M., and J. G. Shukys, to Air Reduction Co., Inc. Fluorinated ether and method of production. 2,749,369, 6–5–56, Cl. 260—614.

Lyon, Floyd A.: *See*—
Polian, David, Halahan, Lyon, and Aronson. 2,748,653.

Lyon, George A. Pry-off tool. 2,748,457, 6–5–56, Cl. 29—245.

Lyon Metal Products, Inc.: *See*—
O'Connor, John B. 2,749,199.

Lyons, Richard E., to C. L. Conroy, and W. Fritsch. Swivel coupling with removable wire locking means. 2,749,151, 6–5–56, Cl. 285—97.3.

M and W Co., Inc.: *See*—
Amo, Ivan J. 2,748,434.

MacClatchie, John W. Pump and piston combination. 2,748,718, 6–5–56, Cl. 103—202.

Machlett Laboratories, Inc.: *See*—
Agule, George J. 2,749,466.

MacIntyre, Charles H., to Bendix Aviation Corp. Pressure control system for an aircraft fuel tank. 2,749,062, 6–5–56, Cl. 244—135.

MacMillan, Fenton M.: *See*—
Bailey, David R. G. 2,748,879.

Magna Engineering Corp.: *See*—
Goldschmidt, Hans. 2,748,627.

Magneseal Co.: *See*—
Magnesen, Charles D. 2,748,976.

Magnesen, Charles D., to Magneseal Co. Closures. 2,748,976, 6–5–56, Cl. 220—60.

Mahan, John E., and C. E. Stoops, to Phillips Petroleum Co. Making substituted pyridines. 2,749,348, 6–5–56, Cl. 260—290.

Mairs, Thomas G.: *See*—
Russell, Henry R., Mairs, and Hennessey. 2,749,014.

Majestic Co., Inc., The: *See*—
Triggs, Kenneth F. 2,748,728.

Makris, Peter G.: *See*—
Zervos, Speros G., and Makris. 2,748,983.

Mallory, John W., to The Parker Stamp Works, Inc. Apparatus for stacking plates. 2,749,120 6–5–56, Cl. 271—87.

Malowan, John E., to Monsanto Chemical Co. Water-soluble, nitrogen-phosphorus-containing product and process of making same. 2,749,233, 6–5–56, Cl. 71—42.

Malsch, Friedrich K., to International Standard Electric Corp. Visual indicating device for electric voltages. 2,749,465, 6–5–56, Cl. 313—107.5.

Malz, Nickolas, to Dormeyer Corp. Cooking utensil. 2,749,427, 6–5–56, Cl. 219—44.

Mamo, Anthony C., to Borg-Warner Corp. Hydrodynamic coupling. 2,748,715, 6–5–56, Cl. 103—115.

Manley, William O.: *See*—
Glover, William C., Jr., and Manley. 2,748,619.

Manson, Walter J.: *See*—
Kenmore, Herbert, and Manson. 2,748,784.

Marchal Raymond H., F. G. Paris, J. Bertin, and L. A. J. Bauger, to Societe Nationale d'Etude et de Construction de Moteurs d'Aviation. Intermittent combustion gas turbine engine. 2,748,564, 6–5–56, Cl. 60—35.6.

Marco, Joseph: *See*—
Cohn, Mayer L. 2,749,430.

Margon Corp.: *See*—
Olney, Nathaniel. 2,748,531.

Maring, Aafko O., to N. V. Lemet Industrie. Framework for a tent or like structure. 2,748,785, 6–5–56, Cl. 135—3.

Marpillero, Paolo, to Development Tecnique de la Pate a Papier Anonyme Suisse (denommee ci-apres Detepa). Process for producing semi-chemical pulp. 2,749,241, 6–5–56, Cl. 92—6.

Marshall, William E., and W. J. Robinson, to Minneapolis-Honeywell Regulator Co. Burner control apparatus. 2,748,845, 6–5–56, Cl. 158—28.

Martin-Hurst, William F. F., to Teddington Aircraft Controls Ltd. Apparatus for computing the product or ratio of two variables. 2,749,038, 6–5–56, Cl. 235—61.

Martin, Mildred C., and H. P. Schaeffer, to Kidlets, Inc. Child's bootie construction. 2,748,501, 6–5–56, Cl. 36—11.

Martin, Robert W., to General Electric Co. Reaction product of dihydric aliphatic alcohols and polymethylol benzenes. 2,749,327, 6–5–56, Cl. 260—52.

Martin-Senour Co., The: *See*—
Stuart, Spencer, and Raymond. 2,748,498.

Martin, William E. Tandem axle construction. 2,749,141, 6–5–56, Cl. 280—104.5.

Maschinenfabrik Andritz Actiengesellschaft: *See*—
Pirkner, Ignaz. 2,748,642.

Mason, Fred H., to General Latex & Chemical Corp. Tufted rug and method of making same. 2,748,446, 6–5–56, Cl. 28—74.

Mason, William C. Portable drill feeder. 2,748,628, 6–5–56, Cl. 77—7.

Mathes, Wilhelm, and W. Sauermilch, to D. F. Raschig G. m. b. H. Process for the production of pyridine aldehydes and pyridoines. 2,749,351, 6–5–56, Cl. 260—297.

Matthews, John R.: *See*—
Patterson, Glenn R., and Matthews. 2,748,725.

Mattson, Clarence H., to Radio Corp. of America. Apparatus for positioning and welding supports in a cylindrical structure. 2,749,418, 6–5–56, Cl. 219—4.

Maud, Fred, to Selas Corp. of America. Heating apparatus. 2,749,109, 6–5–56, Cl. 263—6.

Maxwell, Carl R., and S. J. Kranc, to Caterpillar Tractor Co. Fuel injection nozzle and valve assembly. 2,749,181, 6–5–56, Cl. 299—107.6.

Mayer, Robert, to H. H. Fox. Potato peeler. 2,748,819, 6–5–56, Cl. 146—49.

Mayer, Simon E., to International Standard Electric Corp. Light cells or rectifiers. 2,749,458, 6–5–56, Cl. 317—234.

Mayer, Simon E., and R. A. Hill, to International Standard Electric Corp. Dry contact rectifiers. 2,749,489, 6–5–56, Cl. 317—238.

Maytag Co., The: *See*—
Ducksten, William F. 2,748,788.
Smith, Thomas R. 2,749,154.

Masar Barnett, Jose. Cigarette holders. 2,748,777, 6–5–56, Cl. 131—207.

McBride, George C., and H. N. Schneider, to General Electric Co. Electric circuit interrupter. 2,749,412, 6–5–56, Cl. 200—150.

McBride, John W., to Bantar, Inc. Stringed musical instrument. 2,748,644, 6–5–56, Cl. 84—315.

McCarthy, Anthony A. Night lamp with receptacle. 2,749,428, 6–5–56, Cl. 240—2.

McCarthy, Robert L. Paste dispenser. 2,748,991, 6–5–56, Cl. 222—387.

McClusky, Frank. Christmas tree mat. 2,748,516, 6–5–56, Cl. 47—15.

McCray, Austin. Carrying case. 2,748,780, 6–5–56, Cl. 132—83.

McCuistion, Tommy J. Accumulators. 2,748,801, 6–5–56, Cl. 138—31.

McCullough, Robert W., to Deering Milliken Research Corp. Textile machine control device. 2,748,430, 6–5–56, Cl. 19—165.

McCully, Charles R., and E. S. De Marsh. Dental appliance. 2,748,482, 6–5–56, Cl. 32—40.

McCutcheon, Doyle A. Humidifying apparatus for internal combustion engines. 2,748,755, 6–5–56, Cl. 123—25.

McGowan, Michael E., and H. P. Hasell, to Westinghouse Electric Corp. Machine for processing the reflectors of sealed beam lamps. 2,748,738, 6–5–56, Cl. 113—59.

McGraw Electric Co.: *See*—
Schultz, William O. 2,748,909.

McIlvried, Edwin J., to The Vaughn Machinery Co. Draw block mechanism. 2,748,924, 6–5–56, Cl. 205—3.

McInnich, Glenn W., to Auburn Machine Works, Inc. Trench digging machine. 2,748,504, 6–5–56, Cl. 37—86.

McKibben, Eugene G.: *See*—
Skromme, Arnold B., McKibben, and Craddock. 2,748,535.

McKittrick, John A. Clothes pin holder. 2,749,000, 6–5–56, Cl. 224—28.

McMartin, James I.: *See*—
Osgood, Charles F., Jr., Grosvenor, McMartin, and Schirmer. 2,748,692.

McNabb, Willis W. Non-spinning lure. 2,748,523, 6–5–56, Cl. 43—42.5.

McNamara, Leo C. Process of renovating used journal box waste. 2,749,209, 6–5–56, Cl. 8—141.

McNary, Forrest C., to The Miami Deposit Bank. Apparatus for gaging. 2,749,505, 6–5–56, Cl. 324—34.

Meckstroth, Carl R.: *See*—
Flaws, John, Jr., Reynolds, and Meckstroth. 2,748,450.

Medford, Hoyle D. Trailer house with telescoped elevatable top portion. 2,749,174, 6–5–56, Cl. 296—27.

Medical Fabrics Co., Inc.: *See*—
Coates, John M. 2,748,766.

Medlar, Lewis A., to Fox Products Co. Means for measuring the density of direct current. 2,749,509, 6–5–56, Cl. 324—59.

Mednick, Tillie. Method of making chair covers. 2,748,839, 6–5–56, Cl. 155—182.

Meeker, Kenneth H.: *See*—
Pinke, August H., Meeker, Oys, and Hudson. 2,748,992.

Meier, Joseph D.: *See*—
Hilts, William T., and Meier. 2,749,004.

Mellstrup, Emil E., to Western Electric Co., Inc. Vernier gauge for measuring templates used on potentiometer cards. 2,748,489, 6–5–56, Cl. 33—174.

Mello-Cup Coffee Co., Inc.: *See*—
Rotman, Allen M. 2,748,689.

Melton, Charles C. Movie film viewing apparatus. 2,748,650, 6–5–56, Cl. 88—18.

Mensi, Karl: *See*—
Wegmann, Jacques, and Mensi. 2,749,206.

Mensi, Karl, and J. Wegmann, to Ciba Ltd. Process for dyeing or printing cellulose-containing materials and dyestuff preparations therefor. 2,749,207, 6–5–56, Cl. 8—42.

Mensi, Karl, to Ciba Ltd. Disazo dyestuffs and complex copper compounds thereof. 2,749,334, 6–5–56, Cl. 260—147.

Mensies, Stewart D., and R. S. Nogler. Resilient sheet material. 2,748,448, 6–5–56, Cl. 28—78.

Mercier, Stanley M., to The Jeffrey Mfg. Co. Belt conveyer system with multiple relatively movable loading devices. 2,748,918, 6–5–56, Cl. 198—58.

Merck & Co., Inc.: *See*—
Chemerda, John M. 2,749,337.
Garber, John D. 2,749,270.
Hirschmann, Ralph F., and Wendler. 2,749,338.

Meridan Corp.: *See*—
Carpenter, Robert H. 2,749,149.

Merit Products, Inc.: *See*—
Block, Aleck. 2,749,224.

Merrow Machine Co., The: *See*—
Stolzenberg, Herman F. 2,748,307.

Metallurgical Processes Co.: *See*—
Ness, Harold J. 2,749,106.

Metropolitan-Vickers Electrical Co. Ltd.: *See*—
Kilner, William N. 2,749,457.

Meyer, Arnold O.: *See*—
Steyer, Friedrich W. M. 2,749,176.

Meyers, Donald N.: *See*—
Daland, Elliot, and Meyers. 2,748,876.

Meyers, Donald N., and Z. M. Ciolkosz, to Vertol Aircraft Corp. Aircraft with retractable variable radius rotary wing. 2,749,059, 6–5–56, Cl. 244—7.

Meyer, George J., Malt & Grain Corp.: *See*—
Frauenheim, Edward E., Jr. 2,749,280.

Meyer, Robert H., to The Dow Chemical Co. Isomerization of hexachlorocyclohexane. 2,749,373, 6–5–56, Cl. 260—648.

Miami Deposit Bank, The: *See*—
McNary, Forrest C. 2,749,505.

Middlemark, Marvin P. Directional antenna systems. 2,749,543, 6–5–56, Cl. 343—724.

Midwest Glove Co., Inc.: *See*—
Appelbaum, Sol, and Begso. 2,749,448.

Midwest Supply and Mfg. Co.: *See*—
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Mikulak, John, and H. Wotitzky, to Worthington Corp. Welding head positioner. 2,749,421, 6–5–56, Cl. 219—8.

Miller, Carlton W., to the United States of America as represented by the Secretary of the Navy. Wind resolution apparatus. 2,749,039, 6–5–56, Cl. 235—61.5.

Miller, Dale W. C. C. Covert, D. E. Royer, and M. Demido, to General Motors Corp. Propeller control with pitch lock. 2,748,877, 6–5–56, Cl. 170—160.21.

Miller, Willis C. Sizing and priming device for shotgun shells. 2,748,648, 6–5–56, Cl. 86—36.

Milligan, Winfred O.: *See*—
Dinwiddie, James A., Milligan, and Moseman. 2,749,216.

Millis, Keith D., A. P. Gagnebin, and N. B. Pilling, to The International Nickel Co., Inc. Method for producing cast ferrous alloy. 2,749,238, 6–5–56, Cl. 75—130.

Miner, W. H., Inc.: *See*—
Danielson, Vernon S., and Wallace. 2,748,956.
Withall, William E. 2,749,114.

Minieri, Pasquale P.: *See*—
Eisenman, William, and Minieri. 2,749,273.

Minneapolis-Honeywell Regulator Co.: *See*—
Marshall, William E., and Robinson. 2,748,845.
Smith, James W., and Wagner. 2,748,846.
Smith, Myron R. 2,749,447.

Mitchell, Colin C. Dashpot with air separator. 2,748,897, 6–5–56, Cl. 188—97.

Mitchell, Kearney F. Apparatus for treating petroleum. 2,749,289, 6–5–56, Cl. 196—106.

Mitchell Maintenance Co., Inc.: *See*—
Mitchell, Maurice E.

Mitchell, Maurice E., to Mitchell Maintenance Co., Inc. Utility pole service equipment. 2,749,188, 6–5–56, Cl. 304—9.

Mitten, Horace L., Jr.: *See*—
Hanson, Rodney L., and Mitten. 2,748,802.

Model Engineering & Mfg., Inc.: *See*—
Steele, Horace M. 2,749,416.

Moeck, Adam. Douche syringe. 2,748,770, 6–5–56, Cl. 128—251.

Mohasco Industries, Inc.: *See*—
Rice, Walter A. 2,748,444.

Molson, Joannes H. C.: *See*—
Koopal, Sleds, and Molson. 2,749,219.

Molinari, Henry G., to Becton, Dickinson and Co. Hypodermic needle and cannula cleaning apparatus. 2,748,538, 6–5–56, Cl. 51—15.

Molins, Desmond W., to Molins Machine Co. Ltd. Method of and apparatus for making mouthpiece cigarettes of oval cross-section. 2,748,776, 6–5–56, Cl. 131—61.

Molins Machine Co. Ltd.: *See*—
Molins, Desmond W. 2,748,776.

Monarch Logging Co., Inc.: *See*—
Rochon, Robert W. 2,749,220.

Monroe Calculating Machine Co.: *See*—
Chase, George C. 2,749,042.
Duke, Harvie J. 2,748,916.

Monroe, Charles Z., and N. G. Raymond, to Ex-Cell-O Corp. Carton converting machine. 2,748,833, 6–5–56, Cl. 154—42.3.

Monsanto Chemical Co.: *See*—
Barkley, Lloyd B. 2,749,367.
Beaver, David J., Shumard, and Stoffel. 2,749,314.
Callis, Clayton F. 2,749,215.
Dassi, Joachim. 2,749,365.
Malowan, John E. 2,749,233.
Moss, Henry V. 2,749,278.
Walter, Henry A. 2,749,324.

Monti, Enso, and L. Gallingani. Underwater storage vessel for fluid explosives and combustibles. 2,748,739, 6–5–56, Cl. 114—.5.

Moon, Robert J.: *See*—
Shaw, Albert E., and Moon. 2,749,392.

Moore Fabrics, Inc.: *See*—
Moore, John V. 2,748,447.

Moore, John V., to Moore Fabrics, Inc. Process of making a permanently embossed elastic webbing. 2,748,447, 6–5–56, Cl. 28—74.

Moran, Robert W., to the United States of America as represented by the Secretary of the Army. Grenade launcher. 2,748,518, 6–5–56, Cl. 42—1.

Morgan Construction Co.: *See*—
Morgan, Myles. 2,748,635.
Wilson, Norman A. 2,748,925.

Morgan, Myles, to Morgan Construction Co. Cooling bed. 2,748,635, 6–5–56, Cl. 80—42.

Morgan, William R. Glassware take-out mechanism. 2,748,920, 6–5–56 Cl. 198—210.

Moritt, Irving J.: *See*—
Bell, Sidney R. 2,748,731.

Morris Development Co.: *See*—
Morris, Donald W. 2,748,757.

Morris, Donald W., to Morris Development Co. Internal combustion engine combustion chamber. 2,748,757, 6–5–56, Cl. 123—53.

Morris, Jean W. Boat bailer. 2,748,742, 6–5–56, Cl. 115—17.

Morrison, Harold A.: *See*—
Lord, Dwight S., and Morrison. 2,748,486.

Morrow, Sam C. Razor blade drying holder. 2,748,413, 6–5–56, Cl. 15—218.

Moser, Anthony. Deflector means for harvester delivery chute. 2,748,958, 6–5–56, Cl. 214—42.

Moseman, Max A.: *See*—
Dinwiddie, James A., Milligan, and Moseman. 2,749,216.

Moss, Henry V., to Monsanto Chemical Co. Fluorinated dialkali-alkaline earth pyrophosphates and method of producing same. 2,749,278, 6–5–56, Cl. 167—93.

Mueller, Carl H., and R. F. Schneller, to Lincoln Engineering Co. Lubrication systems. 2,748,893, 6–5–56, Cl. 184—7.

Mueller Co.: *See*—
Mueller, Frank H. 2,748,463.

Mueller, Frank H., to Mueller Co. Method of coupling pipes. 2,748,463, 6–5–56, Cl. 29—523.

Mueller, Werner F. K.: *See*—
Loeper, Robert P., and Mueller. 2,748,583.

Mulcahey, John F. Artificial bait. 2,748,522, 6–5–56, Cl. 43—42.06.

Müllenschläder, Carl O. Manufacture of textile yarns of threads. 2,748,558, 6–5–56, Cl. 57—34.

Müller, Paul. Razor blade holder. 2,748,980, 6–5–56, Cl. 221—232.

Munroe, Henry F., to Proportioneers, Inc. Apparatus and method for providing a fluoride solution. 2,749,222, 6–5–56, Cl. 23—272.

Murchison, Bessie F.: *See*—
Murchison, Blackwell K.

Murchison, Blackwell K., deceased; B. F. Murchison, executrix. Type setting machines. 2,749,132, 6–5–56, Cl. 276—10.

Murphy, George W. Refuse truck packer loader. 2,748,964, 6–5–56, Cl. 214—503.

Murray, Basil G.: *See*—
Murray, Guy L. 2,748,696.

Murray, Donald B., to Burton Mfg. Co. Means for drying microscope slides, pipettes, and similar types of laboratory instruments. 2,748,495, 6–5–56, Cl. 34—107.

Murray, Guy L., deceased; L. and B. G. Murray, executors. Printing or decoration of ceramic or other ware. 2,748,696, 6–5–56, Cl. 101—41.

Murray, Lester. Sickle sharpener. 2,748,539, 6–5–56, Cl. 51—92.

Murray, Lilian: *See*—
Murray, Guy L. 2,748,696.

Murray, Oscar H., to said O. H., W. H., and R. E. Murray. Boat trailer. 2,748,962, 6–5–56, Cl. 214—373.

Murray, Raymond E.: *See*—
Murray, Oscar H. 2,748,962.

Murray, William H.: *See*—
Murray, Oscar H. 2,748,962.

Murren, John E. Shelving. 2,748,954, 6–5–56, Cl. 211—148.

Murren, John E. Live stock feeding apparatus. 2,748,987, 6–5–56, Cl. 222—189.

Muse, John F.: *See*—
Baker, John R., and Muse. 2,748,873.

Myers, John R. Football practice device. 2,749,121, 6–5–56, Cl. 273—55.

Myklebust, James A., and H. A. Hanly. Power groover. 2,748,859, 6–5–56, Cl. 164—10.2.

N. V. Lemet Industrie: *See*—
Maring, Aafko O. 2,748,785.

N. V. Optische Industrie "De Oude Delft": *See*—
Bouwers, Albert. 2,748,658.

Nack, Herman R., and H. J. Homer, to The Commonwealth Engineering Co. of Ohio. Method of producing metalized glass fiber rovings. 2,749,255, 6–5–56, Cl. 117—54.

Narel, Joseph W., and G. C. Joyce, to Norton Co. Grinding machine. 2,748,544, 6–5–56, Cl. 51—105.

Naruo, Robert. Method and apparatus for filling receptacles with pulverulent material or the like. 2,749,006, 6–5–56, Cl. 226—95.

Nash, John J., and G. A. Stein, to American Fixture, Inc. Method and apparatus for making spiral wound synthetic piping and tubing. 2,748,830, 6–5–56, Cl. 154—1.8.

Nash, John J., to American Fixture, Inc. Machine for forming high-pressure non-metallic tubing. 2,748,831, 6–5–56, Cl. 154—1.8.

National Aluminate Corp.: *See*—
Jursich, Myron J. 2,749,305.

National Container Corp.: *See*—
Lebow, Irwin L. 2,749,011.

National Cylinder Gas Co.: *See*—
Bottoms, Robert R. 2,749,256.

National Dairy Research Laboratories, Inc.: *See*—
Plusquellic, Louis. 2,749,005.
Stimpson, Edwin G., and Stamberg. 2,749,242.
Trebler, Henning A., and Horton. 2,749,302.

National Distillers Products Corp.: *See*—
Greenberg, Harry. 2,749,364.

National Electric Products Corp.: *See*—
Kennedy, Frank J. 2,748,734.

National Lead Co.: *See*—
Eickhoff, Arnold J., and Kebrich. 2,749,214.
Svanstrom, Kjell A., and Opie. 2,749,295.

National Research Development Corp.: *See*—
Newman, Edward A., and Clayden. 2,749,496.
Williams, Frederic C., and Kilburn. 2,749,034.
Williams, Frederic C., Kilburn, and Tootill. 2,749,439.

National-Standard Co.: *See*—
Kenmore, Herbert, and Manson. 2,748,784.

Navy, United States of American as represented by the Secretary of the: *See*—
Goss, Wilbur H., and Washburn. 2,748,703.
Humphrey, Samuel A. 2,749,162.
Lewis, Frederick J., Jr., and Quinlan. 2,748,391.
Miller, Carlton W. 2,749,039.
Schmitt, Otto H. 2,749,205.
Stahl, William F. 2,748,911.

Neale, Oliver A., to The Babcock & Wilcox Co. Tube end shaping apparatus. 2,748,831, 6–5–56, Cl. 77—73.

Neary, Francis B.: *See*—
Rohrbach, John J., and Neary. 2,748,654.

Neeff, Rutger: *See*—
Schwechten, Heinz W., Neeff, and Singer. 2,749,352.

Nell, James M. Screw holding screw driver. 2,748,816, 6–5–56, Cl. 145—50.

Nellsen, Hildaur L., to Zephyr American Corp. Rotor for rotary card-filing devices. 2,748,775, 6–5–56, Cl. 129—16.

Nelpin Mfg. Co., Inc.: *See*—
Pinkham, Clarence A., and Holohan. 2,748,469.

Nelson, Glen E.: *See*—
Evans, James W., and Nelson. 2,749,259.

Nelson, Morris D., to Radio Corp. of America. Beam convergence system for tri-color kinescope. 2,749,473, 6–5–56, Cl. 315—13.

Nelson, Noral A., and U. Landenberger, to Harry Ferguson, Inc. Row marker implement. 2,748,686, 6–5–56, Cl. 97—230.

Nelson, Nordahl O. Saw-table extension. 2,748,812, 6–5–56, Cl. 143—132.

Nelson, Richard C., to The Garrett Corp. Valve assembly with vibration absorbing mechanism. 2,748,789, 6–5–56, Cl. 137—80.

Nemec, Emil. Universal power supply. 2,748,604, 6–5–56, Cl. 74—16.

Ness, Harold J., to Metallurgical Processes Co. Protection of hot metallic bodies against oxidation. 2,749,106, 6–5–56, Cl. 263—2.

Neulinger, Karl H.: *See*—
Hierholzer, Frank J., Jr., and Neulinger. 2,749,461.

New Products Corp.: *See*—
Banker, Oscar H. 2,748,912.

Newcomer, Jack S., to The Pennsylvania Salt Mfg. Co. Fungicidal compositions and their use. 2,749,268, 6–5–56, Cl. 167—30.

Newell, George S., Jr.: *See*—
Dicke, Robert H., and Newell. 2,749,443.

Newell, William H., to Sperry Rand Corp. Navigation course computer. 2,748,485, 6–5–56, Cl. 33—1.

Newman, Edward A., and D. O. Clayden, to National Research Development Corp. Electrical control systems. 2,749,496, 6–5–56, Cl. 318—314.

Nistri, Umberto. Transmissions of motion between driving and driven shafts in cinematic devices. 2,748,615, 6–5–56, Cl. 74—209.

Noble, Dennis A. J., to The British Petroleum Co. Ltd. Treatment of sulphur-containing mineral oils with kerosene peroxides. 2,749,284, 6–5–56, Cl. 196—29.

Noble, Philip C.: *See*—
Gurewitsch, Anatole M., and Noble. 2,749,438.

Nogler, Raymond S.: *See*—
Menzies, Stewart D., and Nogler. 2,748,448.

Noren, Charles H.: *See*—
Bresa, Cyril J., and Noren. 2,748,700.

North American Philips Co., Inc.: *See*—
Bittner, Edmund S. 2,749,471.

Northwestern Steel & Wire Co.: *See*—
Bosco, Charles G. 2,749,494.

Norton Co.: *See*—
Narel, Joseph W., and Joyce. 2,748,544.

Norton, Samuel H., to Thompson Products, Inc. Piston ring. 2,749,194, 6–5–56, Cl. 309—29.

Notturno, Albert C. Sectional quick release nut and retainer therefor. 2,748,647, 6–5–56, Cl. 85—33.

Novak, Leo J., to The Commonwealth Engineering Co. of Ohio. Collagen strands and method of treating. 2,748,774, 6–5–56, Cl. 128—335.5.

Novak, Leo J., and J. T. Tyree, to The Commonwealth Engineering Co. of Ohio. Dextran compound fatty acid ester lipstick. 2,749,276, 6–5–56, Cl. 167—85.

Nowlin, Gene, to Phillips Petroleum Co. Selective oxidation of nitrogen-containing heterocyclic compounds. 2,749,350, 6–5–56, Cl. 260—295.

Nunn, Barney P. Shaping and trimming machine. 2,748,814, 6–5–56, Cl. 144—39.

Nyquist, Harry, to Bell Telephone Laboratories, Inc. Measurement of transmission time. 2,749,508, 6–5–56, Cl. 324—58.

Ober, Willy, and K. D. Fortuyn, to Hartford National Bank and Trust Co., as trustee. Alternating-current relay. 2,749,485, 6–5–56, Cl. 317—184.

Oberg, John C.: *See*—
Jacobson, Gustaf L., and Oberg. 2,748,908.

O'Brien, Vincent R., to Fastee Products, Inc. Spray guard. 2,748,411, 6–5–56, Cl. 15—129.

O'Callaghan, Donald M. Scapular having cover members for the cloth pieces. 2,748,577, 6–5–56, Cl. 63—2.

O'Connor, John B., to Lyon Metal Products, Inc. Locker construction. 2,749,199, 6–5–56, Cl. 312—257.

O'Donnell, Edward M. Connection facilitating tractor hitch. 2,749,145, 6–5–56, Cl. 280—478.

Ohlsson, Sven E. W., to Aktiebolaget Svenska Kullagerfabriken. Method for adjusting the clearance in bearings. 2,748,461, 6–5–56, Cl. 29—421.

Ohlund, Wilfred, to Robert Gair Co., Inc. Bread tray carton and the like. 2,749,019, 6–5–56, Cl. 229—45.

Olin Mathieson Chemical Corp.: *See*—
Yale, Harry L. 2,749,361.

Olney, Nathaniel, to Margon Corp. Eye assembly for use in a doll's head. 2,748,531, 6–5–56, Cl. 46—169.

Olson, Benjamin E. Cigar and cigarette snuffer for ash trays. 2,748,778, 6–5–56, Cl. 131—235.

Olson, Elmer, to General Motors Corp. Throttle operating mechanism. 2,749,099, 6–5–56, Cl. 261—23.

Olson, Otmer L. Variable vibrator. 2,748,609, 6–5–56, Cl. 74—61.

Olsson, Göste. Simultaneously movable table and chair. 2,748,836, 6–5–56, Cl. 155—124.

Oneida Ltd.: *See*—
Gray, Daniel. 2,749,210.

Opie, William R.: *See*—
Svanstrom, Kjell A., and Opie. 2,749,295.

Orchard Brothers Inc.: *See*—
Zarnowski, Frank J. 2,748,866.

Orlando, Carl, to the United States of America as represented by the Secretary of the Army. Method and means for evaluating density characteristics of photographic negatives. 2,748,649, 6–5–56, Cl. 88—14.

Orr, Rufus M. Differential housing cradle. 2,748,459, 6–5–56, Cl. 29—284.

Osborn Mfg. Co., The: *See*—
Elms, Robert W. 2,748,625.
Peterson, Ruben O. 2,748,412.

Osgood, Charles F., Jr., W. M. Grosvenor, Jr., J. I. McMartin, and F. Schirmer, to General Strapping Corp. Automatic wire strapping machine. 2,748,692, 6–5–56, Cl. 100—27.

Osmar, John J. Electric dust precipitator. 2,748,887, 6–5–56, Cl. 183—7.

Osthoff, Robert C., and S. W. Kantor, to General Electric Co. High molecular weight solid polymethylene and method for preparing the same. 2,749,318, 6–5–56, Cl. 260—2.

Owen, George T. Articulated fastener. 2,748,439, 6–5–56, Cl. 24—205.13.

Owens-Illinois Glass Co.: *See*—
Allen, Russell G. 2,748,536.

Oys, John E.: *See*—
Pinke, August H., Meeker, Oys, and Hudson. 2,748,992.

Paillard S. A.: *See*—
Bacher, Eric. 2,749,130.

Palsic, Valentine. Check valve-pins for fountain pens. 2,748,749, 6–5–56, Cl. 120—48.

Pape, Hans-Martin, to G. F. Gerdts. Pressure and temperature operated steam strap. 2,749,045, 6–5–56, Cl. 236—59.

Para-Lux Products Co.: *See*—
Iverson, Arden L. 2,748,929.

Parcaro, Michael. Air conditioning system. 2,748,572, 6–5–56, Cl. 62—4.

Pardee, Lloyd W., to The Scott & Fetzer Co. Adjustable blade positioning and guiding attachment for grinding wheels. 2,748,543, 6–5–56, Cl. 51—102.

Paris, François G.: *See*—
Marchal, Raymond H., Paris, Bertin, and Bauger. 2,748,564.
Sarrasin, Paul, Paris, and Bertin. 2,748,753.

Parker, Charles A., and C. K. Rainey, to Burroughs Corp. Motor bar interlock. 2,749,040, 6–5–56, Cl. 235—130.

Parker Stamp Works, Inc., The: *See*—
Mallory, John W. 2,749,120.

Parr, William G., to Pye Ltd. Trigger circuit. 2,749,437, 6–5–56, Cl. 250—27.

Parrish, Walter J.: *See*—
Basham, Raymond B., and Parrish. 2,748,870.

Pasotti, Felice G., to Ball Brothers Co., Inc. Vertical annealing lehr. 2,748,537, 6–5–56, Cl. 49—47.

Pastushin Aviation Corp.: *See*—
Low, Richard. 2,749,063.

Patterson, Glenn R., and J. R. Matthews. Semi-automatic pie machine. 2,748,725, 6–5–56, Cl. 107—1.

Peabody Engineering Corp.: *See*—
Gilchrist, Alan. 2,748,844.

Pechin, Rene G., Jr. Condenser aprons for carding machines. 2,748,428, 6–5–56, Cl. 19—153.

Pechy, William, to American Can Co. Seaming head. 2,748,733, 6–5–56, Cl. 113—19.

Peck, David B.: *See*—
Robinson, Preston, and Peck. 2,749,490.

Peckham, Roy E., and E. F. Elms, to R. L. Brown. Bendable sheet metal wedging fastener. 2,748,645, 6–5–56, Cl. 85—6.

Peel, Wirt D. Fruit pitter having two cooperating endless fruit carriers and an endless plunger carrier. 2,748,818, 6–5–56, Cl. 146—17.

Pehrson, Manfred E., to Prime Mfg. Co. Machine for applying ribs to shoe soles. 2,748,404, 6–5–56, Cl. 12—20.

Peltzer & Ehlers K. G.: *See*—
Weigand, Heinz. 2,748,402.

Penasack, Stephen L., to C. G. Lindsay. Tool-holding device. 2,749,134, 6–5–56, Cl. 279—16.

Penberthy, Harvey L. Method and apparatus for glass production. 2,749,378, 6–5–56, Cl. 13—6.

Penick, Joe E., and E. A. Bodkin, to Socony Mobil Oil Co., Inc. Method and apparatus for continuous percolation of liquid hydrocarbons. 2,749,290, 6–5–56, Cl. 196—147.

Pennebaker, Lewis C., to Container Corp. of America. Folding cartons. 2,749,015, 6–5–56, Cl. 229—33.

Pennsylvania Salt Mfg. Co., The: *See*—
Newcomer, Jack S. 2,749,268.

Perry, Blanchard A., and A. A. Schramm, to Westinghouse Electric Corp. Method and apparatus for exhausting incandescent lamps. 2,749,002, 6–5–56, Cl. 226—20.1.

Perry, Edmond S., and D. S. Cox, to Eastman Kodak Co. Vacuum distillation apparatus. 2,749,292, 6–5–56, Cl. 202—205.

Person, Lars B., C. H. Von Sivers, K. R. Wadö, and K. R. Wickman, to Telefonaktiebolaget L M Ericsson. Device for amplification of both voice and signalling voltages. 2,749,394, 6–5–56, Cl. 179—171.

Peter, Robert G., to Reed Roller Bit Co. Drill bit. 2,749,092, 6–5–56, Cl. 255—315.

Peter, Robert G., to Reed Roller Bit Co. Drill bit. 2,749,093, 6–5–56, Cl. 255—350.

Peters, Leo. Soft plastic food package. 2,749,245, 6–5–56, Cl. 99—171.

Peterson, Clifford C., to The Pyle-National Co. Multi-contact connector. 2,749,526, 6–5–56, Cl. 339—61.

Peterson, Alden W., to United States Steel Corp. Gripping apparatus for handling elongated objects. 2,749,173, 6–5–56, Cl. 294—113.

Peterson, Ruben O., to The Osborn Mfg. Co. Brush construction. 2,748,412, 6–5–56, Cl. 15—129.

Petrolite Corp.: *See*—
Lissant, Kenneth J. 2,748,867.
Lissant, Kenneth J. 2,749,322.

Peukert, Theodore J., Sr., and F. J. Hibbs, Sr. Fruit and vegetable cooler. 2,748,576, 6–5–56, Cl. 62—169.

Pezza, Mariana. Garment presser. 2,748,511, 6–5–56, Cl. 38—71.

Philco Corp.: *See*—
Bradley, William E., and Sunstein. 2,749,449.
Groner, Miriam G. 2,749,252.
Staebler, Lloyd A., and Kurtz. 2,748,573.

Phillips Control Corp.: *See*—
Klein, Rudolph J., Jr. 2,749,481.

Phillips Petroleum Co.: *See*—
Ferro, Bernardo J., Jr. 2,749,281.
Mahan, John E., and Stoops. 2,749,348.
Nowlin, Gene. 2,749,350.

Physics Research Associates: *See*—
Shaw, Albert E., and Moon. 2,749,392.

Picker X-ray Corp., Waite Mfg. Division: *See*—
Stava, Robert J., and Bastin. 2,749,445.

Pickering Associates, Inc.: *See*—
Fuchs, Harold O. 2,749,393.

Pierce, Frank L., to Aircraft-Marine Products, Inc. Methods and blanks for making connectors. 2,748,452, 6–5–56, Cl. 29—155.55.

Pierce, John R., to Bell Telephone Laboratories, Inc. Solid state television pick-up tube. 2,749,463, 6–5–56, Cl. 313—65.

Pierotti, Gino J., W. R. Keeler, R. J. Evans, and R. E. Vincent, to Shell Development Co. Purification of hydrogen peroxide. 2,749,291, 6–5–56, Cl. 202—39.

Pigman, Samuel S., and G. J. Thompson. Electrical connector. 2,749,383, 6–5–56, Cl. 174—84.

Pike, Alfred S., to General Dynamics Corp. Omnidirectional antenna. 2,749,544, 6–5–56, Cl. 343—742.

Pilch, John S. Material handling apparatus. 2,748,961, 6–5–56, Cl. 214—147.

Pilling, Norman B.: *See*—
Millis, Keith D., Gagnebin, and Pilling. 2,749,238.

Pino, Manuel A., to California Research Corp. Oxidizing agent. 2,749,317, 6–5–56, Cl. 252—186.

Pineapple Research Institute of Hawaii: *See*—
Skromme, Arnold B., McKibben, and Craddock. 2,748,535.

Pinke, August H., K. H. Meeker, J. E. Oys, and R. C. Hudson, to H. D. Hudson Mfg. Co. Spraying device. 2,748,992, 6–5–56, Cl. 222—402.

Pinkham, Clarence A., and B. A. Holohan, to Nelpin Mfg. Co., Inc. Razors. 2,748,469, 6–5–56, Cl. 30—68.

Pirkner, Ignaz, to Maschinenfabrik Andritz Actiengesellschaft. Device for retouching profiled pulleys. 2,748,642, 6–5–56, Cl. 82—7.

Pitney-Bowes, Inc.: *See*—
Hanson, Walter J., and Van Wagener. 2,748,698.

Pittsburgh-Des Moines Steel Co.: *See*—
Jackson, James O. 2,748,569.

Pittsburgh Plate Glass Co.: *See*—
Smith, William G. 2,748,441.

Pityo, Albert F. Method of and apparatus for attaching terminals to the ends of wires. 2,749,420, 6–5–56, Cl. 219—4.

Plant, Leland G. Means for accelerating the evacuation of hopper type railway cars. 2,748,959, 6–5–56, Cl. 214—64.2.

Platers & Stampers Ltd.: *See*—
Jacobson, Felix C. 2,748,975.

Plummer, Herbert L., and D. L. Irwin. Arrangement for fixing corrugated sheets in position. 2,748,727, 6–5–56, Cl. 108—33.

Plusquellic, Louis, to National Dairy Research Laboratories, Inc. Mold filling mechanism. 2,749,005, 6–5–56, Cl. 226—95.

Pobanz, Clifford L. and W. T. Safety means for vehicles. 2,748,745, 6–5–56, Cl. 116—173.

Pobanz, Wilbur T.: *See*—
Pobanz, Clifford L. and W. T. 2,748,745.

Pohl, Walter: *See*—
Brendlein, Heinrich, and Pohl. 2,749,370.

Pollan, David, J. Halahan, and F. A. Lyon, and T. F. Aronson, to Viewlex, Inc. Remote control slide projector. 2,748,653, 6–5–56, Cl. 88—27.

Polymer Corp. Ltd: *See*—
Williams, Harry L., and Davidson. 2,749,313.

Pool, Stuart D., and E. K. Karlsson, to International Harvester Co. Rotary cutting assembly with torque control for driving and positioning cutting assembly. 2,748,552, 6–5–56, Cl. 56—15.

Portasilo Ltd.: *See*—
Shepherd, Donald W. 2,749,076.

Porter, Frederick W. B., and A. H. Richardson, to The British Petroleum Co., Ltd. Catalytic desulphurisation of petroleum hydrocarbons. 2,749,282, 6–5–56, Cl. 196—28.

Porter, Frederick W. B., to The British Petroleum Co. Ltd. Hydro-desulphurisation of cracked petroleum naphtha and straight run naphtha. 2,749,283, 6–5–56, Cl. 196—28.

Porter, H. K., Inc.: *See*—
Ferguson, Robert N. 2,748,637.

Potter, Thomas W., to Journal Box Servicing Corp. Means for preparing and proportionally adding new waste to reclaimed journal box waste. 2,748,584, 6–5–56, Cl. 68—1.

Potts, Ernest H., to Guy F. Atkinson Co. Adjustable shear type coupling. 2,748,578, 6–5–56, Cl. 64—28.

Pouliart, Willy, to International Standard Electric Corp. Impulse register-translator arrangement. 2,749,540, 6–5–56, Cl. 340—347.

Poupitch, Ougljesa J., to Illinois Tool Works. Sheet material clip. 2,748,840, 6–5–56, Cl. 155—184.

Power, James A., and J. S. Hallowell, to Interwoven Stocking Co. Display package for stretch socks. 2,748,930, 6–5–56, Cl. 206—46.

Preble, Harry, Jr.: *See*—
Green, Xan B. K., and Preble. 2,748,820.
Green, Xan B. K., and Preble. 2,748,907.

Preisig, Joseph O., to Radio Corp. of America. Regulated high voltage supplies. 2,749,474, 6–5–56, Cl. 315—14.

Preston, Benjamin R., and D. A. Richmond. Method and apparatus for casting printing plates. 2,748,433, 6–5–56, Cl. 22—58.

Price, Lewis T. Folding ladder. 2,749,009, 6–5–56, Cl. 228—19.2.

Prime Mfg. Co.: *See*—
Pehrson, Manfred E. 2,748,404.

Probst & Class: *See*—
Reith, Walter. 2,749,053.

Proctor Electric Co.: *See*—
Clapp, Daniel E. 2,749,406.
Kulicke, Frederick W., Jr. 2,748,512.

Productive Inventions, Inc.: *See*—
Smulski, Theodore J. 2,749,158.

Proportioneers, Inc.: *See*—
Munroe, Henry F. 2,749,222.

Pulman, William E. R., to C. V. A. Jigs, Moulds & Tools Ltd. Gear transmissions. 2,748,451, 6–5–56, Cl. 29—46.

Pulp and Paper Research Institute of Canada: *See*—
Ross, James H. 2,749,240.

Pye Ltd.: *See*—
Parr, William G. 2,749,437.

Pyle-National Co., The: *See*—
Petersen, Clifford C. 2,749,526.

Quinlan, John F.: *See*—
Lewis, Frederick J., Jr., and Quinlan. 2,748,391.

Rademaker, Raymond W.: *See*—
Grsenkowski, Alfred E., and Rademaker. 2,748,736.

Radio Corp. of America: *See*—
Mattson, Clarence H. 2,749,418.
Nelson, Morris D. 2,749,473.
Preisig, Joseph O. 2,749,474.
Shrader, Merrald B. 2,749,469.
Vonderschmitt, Bernard V. 2,749,475.

Ragazzini, John R., and L. A. Zadeh. Precision calibrated phase shifter. 2,749,502, 6–5–56, Cl. 323—111.

Ragazzini, John R., and L. A. Zadeh. Phase meter. 2,749,516, 6–5–56, Cl. 324—88.

Rainey, Clifton K.: *See*—
Parker, Charles A., and Rainey. 2,749,040.

Ralph, Millard J. Muffler unit. 2,748,883, 6–5–56, Cl. 181—50.

Ramsberger, Harry F., to Research Corp. Liquid control device for flush type precipitators. 2,748,890, 6–5–56, Cl. 183—7.

Raney, Charles W. Level. 2,748,494, 6–5–56, Cl. 33—213.

Rankin, Dan R., to Food Machinery and Chemical Corp. Mechanism for controlling the rotation of a pump shaft. 2,748,896, 6–5–56, Cl. 188—82.5.

Raschig, Dr. F., G. m. b. H.: *See*—
Mathes, Wilhelm, and Sauermilch. 2,749,351.

Rath, Michael B., to The Standard Oil Co. Simultaneously-operated liquid and gas vent valves. 2,748,799, 6–5–56, Cl. 137—587.

Rawe, Martin. Staggered sheet feeder. 2,748,917, 6–5–56, Cl. 198—35.

Raymond, Albert R.: *See*—
Stuart, Spencer R., and Raymond. 2,748,498.

Raymond Concrete Pile Co.: *See*—
Johnson, Norman S. 2,748,751.

Raymond, Norton G.: *See*—
Monroe, Charles Z., and Raymond. 2,748,833.

Reagan, Leon H., to General Dynamics Corp. Manual telephone system. 2,749,389, 6–5–56, Cl. 179—41.

Ream, Donald F. Target hit indicator. 2,749,123, 6–5–56, Cl. 273—102.2.

Ream, Donald F. Dueling target indicator. 2,749,124, 6–5–56, Cl. 273—102.2.

Ream, Donald F. Target indicating apparatus. 2,749,125, 6–5–56, Cl. 273—102.2.

Reed Roller Bit Co.: *See*—
Peter, Robert G. 2,749,092.
Peter, Robert G. 2,749,093.

Reeve Electrical Co., Inc., The: *See*—
Cassell, Joseph L., and Caretto. 2,749,453.

Reflectone Corp., The: *See*—
Simjian, Luther G. 2,748,651.

Regie Nationale des Usines Renault: *See*—
Salves, Leon. 2,749,422.

Reilly, Edward L., to E. I. du Pont de Nemours and Co. Preparation of oximes. 2,749,358, 6–5–56, Cl. 260—465.

Reilly Tar & Chemical Corp.: *See*—
Cislak, Francis E. 2,749,349.

Reis, Eugen. Filling devices for money counting machines. 2,749,001, 6–5–56, Cl. 226—19.

Rematein, William, to I. J. Elman. Stands. 2,749,071, 6–5–56, Cl. 248—172.

Renwanz, Roger A., to Research Corp. Electrostatic precipitator. 2,748,889, 6–5–56, Cl. 183—7.

Rescheneder, Karl, to Eternit-Werke Ludwig Hatschek. Process for separating talc and asbestos. 2,748,935, 6–5–56, Cl. 209—5.

Research Corp.: *See*—
Crowder, Alexander N. 2,749,212.
Ramsberger, Harry F. 2,748,890.
Renwanz, Roger A. 2,748,889.

Reynolds, Kenneth W.: *See*—
Flaws, John, Jr., Reynolds, and Meckstroth. 2,748,450.

Rhoades, John S.: *See*—
Kinghorn, Charles M., and Rhoades. 2,749,155.

Rice, Walter A., to Mohasco Industries, Inc. Chenille yarns and their manufacture. 2,748,444, 6–5–56, Cl. 28—72.

Rich, James C. Core chuck. 2,749,133, 6–5–56, Cl. 279—2.

Richards, Frances P. Lacteal fluid receptor and pad therefor. 2,748,771, 6–5–56, Cl. 128—280.

Richardson, Alexander H.: *See*—
Porter, Frederick W. B., and Richardson. 2,749,282.

Richmond, Donald A.: *See*—
Preston, Benjamin R., and Richmond. 2,748,433.

Richmond, Roy H., Sr., to Eagle Mfg. Co. Spray apparatus for tobacco plants. 2,748,534, 6–5–56, Cl. 47—1.

Richmond, Roy H., Sr., to Eagle Mfg. Co. Spout closure cap and operating mechanism for safety gasoline cans. 2,748,997, 6–5–56, Cl. 222—469.

Ridge Tool Co., The: *See*—
Janik, Anton J. 2,748,716.

Rieth, Walter, to Probst & Class. Multiple stage colloid mill with apertured rotor-top feed means. 2,749,053, 6–5–56, Cl. 241—162.

Rigabar, Napoleon: *See*—
Grieb, John J., Rigabar, and Taylor. 2,748,667.

Rigden, Sydney A. E., to General Electric Co. Electrode construction. 2,749,467, 6–5–56, Cl. 313—184.

Rigrod, William W., to Westinghouse Electric Corp. Ignitron. 2,749,483, 6–5–56, Cl. 315—261.

Riker, William E.: *See*—
Loudon, Clifford L., and Riker. 2,749,537.

Riley, Walter J., to S. Howes Co., Inc. Mechanism for the operation of freely movable vibrating screens. 2,748,608, 6–5–56, Cl. 74—61.

Rimkus, Bernard E., to American Seating Co. Underseat bookrack. 2,748,841, 6–5–56, Cl. 155—188.

Rines, Robert H. Method of and apparatus for detection. 2,749,531, 6–5–56, Cl. 340—6.

Rines, Robert H., and I. S. Blonder. Sonobuoy. 2,749,436, 6–5–56, Cl. 250—17.

Rittner, Edmund S., to North American Philips Co., Inc. Electron device with semi-conductive target. 2,749,471, 6–5–56, Cl. 315—3.

Ritzerfeld, Gerhard: *See*—
Ritzerfeld, Wilhelm and G. 2,749,202.

Ritzerfeld, Wilhelm and G. Filing cabinets. 2,749,202, 6–5–56, Cl. 312—327.

Rively, Clair M., to Westinghouse Electric Corp. Rapidly indicating bridge. 2,749,510, 6–5–56, Cl. 324—62.

Roach, William B. Bottle closure. 2,748,967, 6–5–56, Cl. 215—38.

Roadgrader Gauge Corp.: *See*—
Schiavi, Vincent. 2,748,508.

Robins, Roland K.: *See*—
Hitchings, George H., and Robins. 2,749,344.
Hitchings, George H., and Robins. 2,749,345.

Robinson, Preston, and D. B. Peck, to Sprague Electric Co. Electrical condensers. 2,749,490, 6–5–56, Cl. 317—258.

Robinson, William J.: *See*—
Marshall, William E., and Robinson. 2,748,845.

Rochon, Robert W., to Monarch Logging Co., Inc. Method for measuring gas in cores. 2,749,220, 6–5–56, Cl. 23—230.

Rockoff, Joseph, to The Dayton Rubber Co. Light-weight foam rubber cushioning structure. 2,748,399, 6–5–56, Cl. 5—348.

Rockola, David C., to Rock-Ola Mfg. Corp. Wall box structure. 2,748,973, 6–5–56, Cl. 220—18.

Rock-Ola Mfg. Corp.: *See*—
Rockola, David C. 2,748,973.

Roe, A. V., Canada Ltd.: *See*—
Jay, Kenneth W. 2,748,947.

Rogers, Douglas C., to International Standard Electric Corp. Electron discharge devices. 2,749,476, 6–5–56, Cl. 315—38.

Rogers, Roy C. Rotary vineyard hoes. 2,748,679, 6–5–56, Cl. 97—37.

Rohm & Haas Co.: *See*—
Smythe, Carl V., and Huang. 2,749,279.

Rohrbach, John J., and F. B. Neary, to Shuron Optical Co., Inc. Spectacle frame. 2,748,654, 6–5–56, Cl. 88—41.

Rohrbach, John J., to Shuron Optical Co., Inc. Spectacle frames. 2,748,655, 6–5–56, Cl. 88—41.

Rolfson, Cornelius A., ¼ to G. W. Taylor and ¼ to R. C. Stratford. Apparatus for sewing buttons. 2,748,730, 6–5–56, Cl. 112—115.

Rolls-Royce Ltd.: *See*—
Fletcher, Arthur H. 2,748,566.
Lombard, Adrian A. 2,749,086.

Roman, Frank. Animal trap. 2,748,526, 6–5–56, Cl. 43—60.

Romera, Manuel. Centrifugal type ore pulverizer with explosion prevention means. 2,749,052, 6–5–56, Cl. 241—31.

Rosenberg, Samuel: *See*—
Lloschutz, Frank K., and Rosenberg. 2,748,396.

Rosenbloom, William J., to Chemical Construction Corp. Mercury type, caustic, chlorine cell. 2,749,301, 6–5–56, Cl. 204—251.

Ross, James H., to Pulp and Paper Research Institute of Canada. Production of cellulose pulp. 2,749,240, 6–5–56, Cl. 92—7.

Roth, Erwin. Magnetic separator. 2,748,940, 6–5–56, Cl. 209—219.

Rotman, Allen M., to Mello-Cup Coffee Co. Inc. Coffee urn. 2,748,689, 6–5–56, Cl. 99—315.

Rovtar Tool & Die Mfg. Co.: *See*—
Smith, Elwood E. 2,748,477.

Rowekamp, Edward F.: *See*—
Fechheimer, Paul R., Rowekamp, and Swing. 2,749,007.

Roy, Tuhin K., to Chemical Construction Corp. Method of reducing cobaltic amine salt. 2,749,235, 6–5–56, Cl. 75—119.

Royal McBee Corp.: *See*—
Smuss, Teddy F. 2,749,032.

Royer, Darrell E.: *See*—
Miller, Dale W., Covert, Royer, and Demido. 2,748,877.

Ruderfer, Martin. Apparatus for producing three-dimensional visual patterns. 2,749,480, 6–5–56, Cl. 315—169.

Ruh, Robert P., and R. A. Davis, to The Dow Chemical Co. Production of methylene fluoride. 2,749,374, 6–5–56, Cl. 260—653.

Ruh, Robert P., and R. A. Davis, to The Dow Chemical Co. Fluorination of methylene halides. 2,749,375, 6–5–56, Cl. 260—653.

Ruhrchemie Aktiengesellschaft: *See*—
Feichtinger, Hans, and Tummes. 2,749,340.

Rumpp, C. F., & Sons: *See*—
Hutchinson, Herman R. 2,748,821.

Runck, Roger J.: *See*—
Sluyk, John A., Lynch, and Runck. 2,749,254.

Rushing, George, Jr. Device for attachment with a handle. 2,748,415, 6–5–56, Cl. 15—236.

Russel, Matthew J. Fertilizer distributor. 2,748,989, 6–5–56, Cl. 222—238.

Russell, Henry R., T. G. Mairs, and R. J. Hennessey, to Waldorf Paper Products Co. Cellular containers. 2,749,014, 6–5–56, Cl. 229—27.

Ruth, Joseph P. Sugar diffusing apparatus. 2,749,258, 6–5–56, Cl. 127—7.

SKF Industries, Inc.: *See*—
Kort, Fritz. 2,749,192.

Sabol, Albert R., E. K. Fields, and R. E. Karll, to Standard Oil Co. Corrosion inhibitors and compositions containing the same. 2,749,311, 6–5–56, Cl. 252—32.7.

Sackett, Manley R. Combined manual and hydraulic power steering mechanism for vehicles. 2,748,880, 6–5–56, Cl. 180—79.2.

Sadler Bros., Inc.: *See*—
Hilsinger, Arthur R. 2,748,548.

St. George, Alfred J. Multiple wheel grinding machine. 2,748,540, 6–5–56, Cl. 51—95.

St. Pierre Chain Corp.: *See*—
Calello, Mario. 2,748,641.

Salves, Leon, to Regie Nationale des Usines Renault. Method of assembling sheet metal elements by welding. 2,749,422, 6–5–56, Cl. 219—10.

Salt Water Control, Inc.: *See*—
Erwin, Ransome W. 2,748,884.

Samcoe Holding Corp.: *See*—
Cohn, Samuel and E., and Walter. 2,749,115.

Sandstrom, Nils G. Golf bag stand. 2,749,069, 6–5–56, Cl. 248—96.

Sang, William: *See*—
Draper, Frederick C., Hobson, and Sang. 2,748,455.

Sampson, Frederick W., to General Motors Corp. Steering wheel switch. 2,749,398, 6–5–56, Cl. 200—61.56.

Sampson, Frederick W., to General Motors Corp. Steering wheel switch. 2,749,399, 6–5–56, Cl. 200—61.56.

Sandoz A. G.: *See*—
Kappeler, Markus, and Schweizer. 2,749,333.

Sarchet, Richard J. Paint brush holder and scraper. 2,748,977, 6–5–56, Cl. 220—90.

Sargent, Edward J., to Sargent Rodless Pump Co. Hydraulic pump. 2,748,712, 6–5–56, Cl. 103—46.

Sargent Rodless Pump Co.: *See*—
Sargent, Edward J. 2,748,712.

Sarrazin, Paul, F. G. Paris, and J. Bertin, to Societe Nationale d'Etude et de Construction de Moteurs d'Aviation. Boilers. 2,748,753, 6–5–56, Cl. 122—24.

Sauermilch, Walter: *See*—
Mathes, Wilhelm, and Sauermilch. 2,749,351.

Sawyer, Winslow A., to the United States of America as represented by the Secretary of the Army. Rocket. 2,748,702, 6–5–56, Cl. 102—49.

Schaefer, Ernest R. Interchangeable, combination lure and hooks. 2,748,521, 6–5–56, Cl. 43—35.

Schaefer, William E., H. J. Batts, and D. A. Brafford, to United States Rubber Co. Acceleration of the vulcanization of butyl rubber with dimethylol phenols and product obtained thereby. 2,749,323, 6–5–56, Cl. 260—43.

Scharenbroich, Jerome A. Holy water fount. 2,748,994, 6–5–56, Cl. 222—448.

Schatzel, De Wolf. Speed-doubling power transmitting devices. 2,748,610, 6–5–56, Cl. 74—69.

Schiavi, Vincent, to Roadgrader Gauge Corp. Attachment for roadgrader gauges. 2,748,508, 6–5–56, Cl. 37—108.

Schiffer, Henry C. Automatic starting device. 2,748,759, 6–5–56, Cl. 123—179.

Schinzel, Robert L. Fishing line coupler. 2,748,524, 6–5–56, Cl. 43—44.83.

Schirmer, Frank: *See*—
Osgood, Charles F., Jr., Grosvenor, McMartin, and Schirmer. 2,748,692.

Schlumberger Well Surveying Corp.: *See*—
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Schmid, Raymond W.: *See*—
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Schmitt, Otto H., to the United States of America as represented by the Secretary of the Navy. Trace recording with identification marking on the trace. 2,749,205, 6–5–56, Cl. 346—62.

Schmitz, Friedrich. Condensate remover. 2,749,046, 6–5–56, Cl. 236—59.

Schneider, Harold N.: *See*—
McBride, George C., and Schneider. 2,749,412.

Schneider, Heinrich. Surface projectile game. 2,749,126, 6–5–56, Cl. 273—108.

Schneiderman, Joseph. Electrical conduit fitting with access opening and closure therefor. 2,749,148, 6–5–56, Cl. 285—6.5.

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Mueller, Carl H., and Schneller. 2,748,893.

Schoenrock, Otto R. Differential. 2,748,620, 6–5–56, Cl. 74—711.

Scholl, William M. Wide arch insole. 2,748,502, 6–5–56, Cl. 36—44.

Scholl, William M. Foot cushion. 2,748,503, 6–5–56, Cl. 36—71.

Scholl, William M. Surgical pad and the like. 2,748,765, 6–5–56, Cl. 128—153.

Scholl, William M. Foot rest cushion. 2,748,838, 6–5–56, Cl. 155—169.

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Perry, Blanchard A., and Schramm. 2,749,002.

Schröder, Hubert: *See*—
Geffcken, Walter, and Schröder. 2,748,659.

Schultz, William O., to McGraw Electric Co. Ground anchor. 2,748,909, 6–5–56, Cl. 189—92.

Schulze, Kurd J., to American Enka Corp. Device for the wet treatment of artificial threads. 2,748,587, 6–5–56, Cl. 68—205.

Schurecht, Harry G., to Champion Spark Plug Co. Spark plug insulator containing ceric oxide. 2,749,246, 6–5–56, Cl. 106—63.

Schwabe, Herman, Inc.: *See*—
Haas, Edgar. 2,749,414.

Schwaneke, Fred C.: *See*—
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Schwechten, Heinz W., K. Neeff, and J. Singer, to Farbenfabriken Bayer Aktiengesellschaft. Vat dyestuffs. 2,749,332, 6–5–56, Cl. 260—307.5.

Schweiss, Joseph, to Carter Carburetor Corp. Carburetor anti-surge device. 2,748,796, 6–5–56, Cl. 137—411.

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Scott & Fetzer Co., The: *See*—
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Seals, Marguerite M. Combination sales promotional package. 2,748,527, 6–5–56, Cl. 46—11.

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Servo Corp. of America: *See*—
Hansel, Paul G. 2,749,442.
Hansel, Paul G. 2,749,515.

Seymour, Edward H. Hermetically sealed spray packages and needle valves therefor. 2,748,984, 6–5–56, Cl. 222—148.

Seymour, Edward H. Spray package equipped with a self-cleaning valve. 2,748,985, 6–5–56, Cl. 222—148.

Shadowitz, Albert, to International Telephone and Telegraph Corp. Frequency modulated oscillator system. 2,749,518, 6–5–56, Cl. 332—28.

Shafer, Carlton M., to The Stone Creek Brick Co. Brick sample carrying and display case. 2,748,499, 6–5–56, Cl. 35—53.

Shapiro, Edward, to Tracerlab, Inc. Source of luminosity. 2,749,251, 6–5–56, Cl. 117—33.5.

Sharma, Penumarti Gopal: *See*—
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Shaw, Albert E., and R. J. Moon, to L. Bernat, doing business as Physics Research Associates. Device for converting motion into electrical energy. 2,749,392, 6–5–56, Cl. 179—100.41.

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Sheley, Orin W. and O. J. 2,748,472.

Sheley, Orin W. and O. J. Vacuum operated hair removing attachment for hair clippers. 2,748,472, 6–5–56, Cl. 30—133.

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Shelton, Malcolm C. Envelope opener. 2,748,478, 6–5–56, Cl. 30—289.

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Shidler, Virgil C. Attachment for the production of printers' rules. 2,748,922, 6–5–56, Cl. 199—1.

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Shoemaker, Clarence J., and E. J. Igler, to A. B. Dick Co. Method of making a copy sheet and resultant article. 2,749,253, 6–5–56, Cl. 117—36.

Shnitzler, Meyer J., and F. Ferrara, to The Gillette Co. Safety razor. 2,748,467, 6–5–56, Cl. 30—60.5.

Shogran, Arnold. Outboard motor repositioning means. 2,748,743, 6–5–56, Cl. 115—18.

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Shrader, Merrald B., to Radio Corp. of America. Electron discharge device. 2,749,469, 6–5–56, Cl. 313—299.

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Lyon, Ashton M., and Shukys. 2,749,369.

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Rohrbach, John J., and Neary. 2,748,654.

Sibley, John R., to Joy Mfg. Co. Dust allaying means for continuous mining apparatus. 2,749,105, 6–5–56, Cl. 262—29.

Sicha, Walter E., H. Y. Hunsicker, and R. C. Lemon, to Aluminum Co. of America. Aluminum base alloy. 2,749,239, 6–5–56, Cl. 75—142.

Siems, Robert J., and A. B. Voorhees, Jr., to Boeing Airplane Co. Blow-out safe aircraft doors. 2,748,855, 6–5–56, Cl. 160—210.

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Simenson, Louis O., to The Dow Chemical Co. Method of compacting light powders. 2,749,051, 6–5–56, Cl. 241—3.

Simjian, Luther G., to The Reflectone Corp. Microfilm camera. 2,748,651, 6–5–56, Cl. 88—24.

Simpson, Clarence E., to the United States of America as represented by the Secretary of the Army. Firing rate reducer for automatic firearms. 2,748,661, 6–5–56, Cl. 89—130.

Simpson, Clarence E., to the United States of America as represented by the Secretary of the Army. Gas regulating device for a firearm. 2,748,662, 6–5–56, Cl. 89—193.

Sims, Chester T., to The Battelle Development Corp. Fabrication of rhenium. 2,749,260, 6–5–56, Cl. 148—11.5.

Sinclair, Harold. Power transmission mechanisms. 2,748,621, 6–5–56, Cl. 74—720.

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Skromme, Arnold B., E. G. McKibben, and E. R. Craddock, to Pineapple Research Institute of Hawaii. Trash mulch seed bed machine. 2,748,535, 6–5–56, Cl. 47—9.

Skurow, Gilbert. Battery contact clamps. 2,749,530, 6–5–56, Cl. 339—228.

Slaten, William F. H. Device for restoring to shape the walls and bottoms of deformed sheet metal bread pans. 2,748,735, 6–5–56, Cl. 113—48.

Slyh, John A., J. F. Lynch, and R. J. Runck, to Battelle Development Corp. Protective coating method. 2,749,254, 6–5–56, Cl. 117—46.

Smers, Frank W., to Western Electric Co., Inc. Chucks for aligning and clamping parts thereon. 2,749,136, 6–5–56, Cl. 279—50.

Smith, Charles E., to Avery Adhesive Label Corp. Web feed control for printing and die-cutting press. 2,748,697, 6–5–56, Cl. 101—227.

Smith, Clifford W. Strainer attachment for receptacles. 2,748,946, 6–5–56, Cl. 210—163.

Smith, Elwood E., to Rovtar Tool & Die Mfg. Co. Hedge trimmer. 2,748,477, 6–5–56, Cl. 30—208.

Smith, James W., and F. C. Wagner, to Minneapolis-Honeywell Regulator Co. Combustion safeguard apparatus. 2,748,846, 6–5–56, Cl. 158—28.

Smith, Kline & French Laboratories: *See*—
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Smith, Lee, to Carrom Industries, Inc. Hospital bed table. 2,749,197, 6–5–56, Cl. 311—40.

Smith, Myron R., to Minneapolis-Honeywell Regulator Co. Fuel burner control apparatus. 2,749,447, 6–5–56, Cl. 250—83.3.

Smith, Robert H., to Chrysler Corp. Automotive heater booster. 2,749,049, 6–5–56, Cl. 237—8.

Smith, Thomas R., to The Maytag Co. Tube locking and sealing construction. 2,749,154, 6–5–56, Cl. 285—173.

Smith, William A. Grease extracting vent. 2,748,688, 6–5–56, Cl. 98—115.

Smith, William G., to Pittsburgh Plate Glass Co. Quick action clamp device. 2,748,441, 6–5–56, Cl. 24—263.

Smulski, Theodore J., to Productive Inventions, Inc. Adjustable arm for windshield wiper. 2,749,158, 6–5–56, Cl. 287—58.

Smuss, Teddy F., to Royal McBee Corp. Bookkeeping device with cash drawer. 2,749,032, 6–5–56, Cl. 235—5.

Smythe, Carl V., and H. T. Huang, to Rohm & Haas Co. Enzymatic production of 1-glutamic acid. 2,749,279, 6–5–56, Cl. 195—30.

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Societe Anonyme les Forges de Zeebrugge: *See*—
Bodiaux, Gaston. 2,748,465.

Societe Nationale d'Etude et de Construction de Moteurs d'Aviation: *See*—
Marchal, Raymond H., Paris, Bertin, and Bauger. 2,748,564.
Sarrasin, Paul, Paris, and Bertin. 2,748,753.

Socony Mobil Oil Co., Inc.: *See*—
Penick, Joe E., and Bodkin. 2,749,290.

Sogar, Harry. Lawn and walk edger. 2,748,685, 6–5–56, Cl. 97—227.

Soldner, Harley W., to Brownsville Canning Co. Container counting and casing machine. 2,748,550, 6–5–56, Cl. 53—59.

Solomon, Charles. Shirt. 2,748,394, 6–5–56, Cl. 2—115.

Sornin de Leysat, Henri. Knitting method. 2,748,579, 6–5–56, Cl. 66—1.

Soule, Charles W. Safety seat lowering device for aircraft passenger. 2,749,065, 6–5–56, Cl. 244—141.

South Bend Lathe Works: *See*—
Costello, Otto A. 2,748,624.

Southwick, Charles R.: *See*—
Gill, Joseph W., and Southwick. 2,749,267.

Speakman Co.: *See*—
Fraser, James. 2,749,183.

Specialties Development Corp.: *See*—
Heizer, Edward J., and Axt. 2,748,797.

Spellberg, Norman, to The Sherwin-Williams Co. Short oil styrenated alkyd and method. 2,749,320, 6–5–56, Cl. 260—22.

Spencer Chemical Co.: *See*—
Deutschman, Archie J., Jr. 2,749,217.

Spencer, Lloyd, 33⅓% to T. C. Bannon, and 33⅓% to J. D. Chesnut. Control apparatus for cable suspended well tools. 2,748,660, 6–5–56, Cl. 89—1.

Spencer, Lloyd, 33⅓% to T. C. Bannon, and 33⅓% to J. D. Chesnut. Godevil for cable suspended well tools. 2,748,874, 6–5–56, Cl. 166—243.

Sperling, Gustav. Electrically operated leak detector. 2,749,536, 6–5–56, Cl. 340—242.

Sperry Rand Corp.: *See*—
Daniels, Howard L. 2,749,533.
Levitt, Semond. 2,749,484.
Newell, William H. 2,748,485.
Talambiras, Robert P. 2,749,451.

Sprague Electric Co.: *See*—
Robinson, Preston, and Peck. 2,749,490.

Staebler, Lloyd A., and R. G. Kurtz, to Philco Corp. Refrigerator having an adjustable evaporator construction. 2,748,573, 6–5–56, Cl. 62—89.

Staeuble, Max, to Ciba Ltd. New anthraquinone vat dyestuffs. 2,749,341, 6–5–56, Cl. 260—247.1.

Stahl, William F., to the United States of America as represented by the Secretary of the Navy. Magnetic fluid clutch. 2,748,911, 6–5–56, Cl. 192—21.5.

Stalker Development Co., The: *See*—
Stalker Edward A. 2,749,028.

Stalker, Edward A. Compressors. 2,749,025, 6–5–56, Cl. 230—122.

Stalker, Edward A. Compressor. 2,749,027, 6–5–56, Cl. 230—122.

Stalker, Edward A., to The Stalker Development Co. Bladed rotors for elastic fluid machines. 2,749,028, 6–5–56, Cl. 230—134.

Stamberg, Olof E.: *See*—
Stimpson, Edwin G., and Stamberg. 2,749,242.

Stamicarbon N. V.: *See*—
Fontein, Freerk J., and Basten. 2,748,941.
Koopal, Sieds, and Moison. 2,749,219.

Standard Oil Co., The: *See*—
Rath, Michael B. 2,748,799.
Sabol, Albert R., Fields, and Karll. 2,749,311.

Standard Pressed Steel Co.: *See*—
Little, Henry. 2,749,135.

Standard Railway Equipment Mfg. Co.: *See*—
Swann, James S. 2,748,723.

Stanfield, Leroy A. Dual range recording instrument. 2,749,204, 6–5–56, Cl. 346—35.

Stava, Robert J., and E. J. Bastin, to Picker X-ray Corp., Waite Mfg. Division. X-ray apparatus. 2,749,445, 6–5–56, Cl. 250—66.

Stavis, Bernard H.: *See*—
Stavis, Joseph J. and B. H. 2,748,928.

Stavis, Joseph J. and B. H. Paperboard doll container. 2,749,928, 6–5–56, Cl. 206—45.14.

Stearns, Walter I. Plug cutter. 2,748,817, 6–5–56, Cl. 145—120.

Stecker, Fred, to Ideal Toy Corp. Weeping doll. 2,748,530, 6–5–56, Cl. 46—135.

Steel, Harold J. Multiple row seeder and fertilizer side dresser. 2,748,986, 6–5–56, Cl. 222—177.

Steel Heddle Mfg. Co.: *See*—
Kaufmann, John J., Jr. 2,748,807.

Steel Partitions, Inc.: *See*—
Jacobson, Gustaf L., and Oberg. 2,748,908.

Steele, Horace M., to Model Engineering & Mfg., Inc. Rheostat. 2,749,416, 6–5–56, Cl. 201—48.

Steiger, Jessie L., now by change of name Jessie L. Sherwood. Immersion heater. 2,749,425, 6–5–56, Cl. 219—41.

Stein, George A.: *See*—
Nash, John J., and Stein. 2,748,830.

Stephenson, Donald H.: *See*—
Jenny, Alfred L., and Stephenson. 2,749,487.

Sterns, Lorance E., to Whittington Pump & Engineering Corp. Portable leak tester. 2,748,598, 6–5–56, Cl. 73—40.

Stetter, Grant, to Coverbond Corp. Masonry building wall. 2,748,593, 6–5–56, Cl. 72—32.

Stevens, Geo., Mfg. Co.: *See*—
Gersch, Adolph E. 2,749,041.

Stewart, Ian F., and J. B. Seed, to Imperial Chemical Industries Ltd. Process and device for converting a continuous tow of artificial filaments into a sliver comprising staple lengths. 2,748,427, 6–5–56, Cl. 19—.48.

Steyer, Friedrich W. M., to A. O. Meyer. Electro metal spraying pistol. 2,749,176, 6–5–56, Cl. 299—28.8.

Stibitz, George R. Electronic computer for multiplication. 2,749,037, 6–5–56, Cl. 235—61.

Stimpson, Edwin G., and O. E. Stamberg, to National Dairy Research Laboratories, Inc. Conversion of lactose to glucose, galactose and other sugars in the presence of lactase activators. 2,749,242, 6–5–56, Cl. 99—55.

Stinger, Henry J., to General Mills, Inc. Variable frequency generating means and motor control. 2,749,491, 6–5–56, Cl. 318—11.

Stodard, Joseph S. Alternate control for plural lateral and rear cultivator attachments. 2,748,681, 6–5–56, Cl. 97—46.45.

Stoffel, Paul J.: *See*—
Beaver, David J., Shumard, and Stoffel. 2,749,314.

Stoll, Willy, to J. R. Geigy A. G. 1,3,5-Tri lower alkyl-4-amino uracils. 2,749,343, 6–5–56, Cl. 260—256.4.

Stoltman, Donald D., to General Motors Corp. Engine starter control apparatus. 2,748,760, 6–5–56, Cl. 123—179.

Stolsenberg, Herman F., to The Merrow Machine Co. Stocking with garter. 2,748,397, 6–5–56, Cl. 2—240.

Stone, Charles N., to Deere & Co. Hitch device. 2,748,682, 6–5–56, Cl. 97—47.52.

Stone Creek Brick Co., The: *See*—
Shafer, Carlton M. 2,748,499.

Stoops, Charles E.: *See*—
Mahan, John E., and Stoops. 2,749,348.

Stosberg, Ralph D., Jr. Stripping plow for uncovering pipe lines or the like. 2,748,506, 6–5–56, Cl. 37—98.

Strasser, Erik: *See*—
Kellendorfer, Richard. 2,749,405.

Stratford, Richard C.: *See*—
Rolfson, Cornelius A. 2,748,730.

Stritter, Karl A., to United Shoe Machinery Corp. Methods of making prewelt shoes. 2,748,406, 6–5–56, Cl. 12—142.

Strom, Victor A., and C. G. Dickinson. Pump. 2,749,187, 6–5–56, Cl. 302—14.

Strunk, Leonard M. Chain saw guide bar with lubricating means. 2,748,810, 6–5–56, Cl. 143—32.

Stuart, Spencer R., and A. R. Raymond, to The Martin-Senour Co. Paint display device. 2,748,498, 6–5–56, Cl. 35—28.3.

Stubblefield, Edward M.: *See*—
Anderson, Philip P., Jr., and Stubblefield. 2,749,095.

Stueland, Harold M., to Deere & Co. Parking stand for tractor-implement combination. 2,748,960, 6–5–56, Cl. 214—131.

Stuer, Joseph. Single shaft loom. 2,748,806, 6–5–56, Cl. 139—146.

Sulger, Joseph F. Indicator. 2,748,514, 6–5–56, Cl. 40—70.

Summers, Neil W., and A. B. Skromme, to Deere Mfg. Co. Reel structure for agricultural harvester. 2,748,556, 6–5–56, Cl. 56—400.

Sun Oil Co.: *See*—
Thomas, Charles L. 2,749,297.
Thomas, Charles L. 2,749,298.

Sunbeam Lighting Co.: *See*—
Bodian, Marcus. 2,749,074.

Sunstein, David E.: *See*—
Bradley, William E., and Sunstein. 2,749,449.

Suozzo, John, to Westinghouse Electric Corp. Elevator systems. 2,748,894, 6–5–56, Cl. 187—29.

Surface Combustion Corp.: *See*—
Carter, John W. 2,749,111.

Surgi, Sidney E. Chain saw attachment with lubricating means. 2,748,809, 6–5–56, Cl. 143—32.

Svanstrom, Kjell A., and W. R. Ople, to National Lead Co. Electrolytic production of titanium. 2,749,295, 6–5–56, Cl. 204—64.

Swan, Charles R. Toy rocket and parachute. 2,748,529, 6–5–56, Cl. 46—86.

Swann, James S., to Standard Railway Equipment Mfg. Co. Rolled metal section. 2,748,723, 6–5–56, Cl. 105—406.

Swift & Co.: *See*—
Hodges, William A., and Floyd. 2,748,930.
Lehner, Edwin C., and Brendle. 2,748,724.

Swing, Alfred J.: *See*—
Fechheimer, Paul R., Bowekamp, and Swing. 2,749,007.

Sylvania Electric Products Inc.: *See*—
Canning, James H. 2,749,511.

Syrovy, Augustin J., and W. T. Dunn, to Chrysler Corp. Planetary transmission. 2,748,622, 6–5–56, Cl. 74—763.

Szekely, George. Razor blade magazines. 2,748,979, 6–5–56, Cl. 221—229.

T. M. M. (Research) Ltd.: *See*—
Foster, John R., and Cartwright. 2,748,616.

Tagmann, Eugen: *See*—
Hoffmann, Karl, Tagmann, and Urech. 2,749,346.

Talambiras, Robert P., to Sperry Rand Corp. Flip-flop circuit. 2,749,451, 6–5–56, Cl. 307—88.

Talon, Inc.: *See*—
Chichester, Kenneth J. 2,749,400.

Tancred, William L., to The W. N. Borg Corp. Relay. 2,749,402, 6–5–56, Cl. 200—98.

Tandler, William S., to The Warner & Swasey Research Corp. Referencing device for gauging turbine blades and the like. 2,748,490, 6–5–56, Cl. 33—174.

Tarrant, Paul, and M. R. Lilyquist, to the United States of America as represented by the Secretary of the Army. Synthesis of 1,1-difluorinated hydrocarbons. 2,749,376, 6–5–56, Cl. 260—653.

Tasker, Clinton W., to American Viscose Corp. Rupture tester. 2,748,596, 6–5–56, Cl. 73—12.

Tatter, John W. Foldable vehicle door construction. 2,748,856, 6–5–56, Cl. 160—210.

Tauber, Robert. Center punch and gauge. 2,748,491, 6–5–56, Cl. 33—191.

Taylor, Clarence C.: *See*—
Leo, Herbert T., and Taylor. 2,749,243.

Taylor & Fenn Co., The: *See*—
Avedisian, Arthur A. 2,749,236.

Taylor, George W.: *See*—
Rolfson, Cornelius A. 2,748,730.

Taylor, James, to Midwest Art Publishers, Inc. Dispensing containers for pressure-sensitive tape. 2,748,931, 6–5–56, Cl. 206—52.

Taylor, Roswell F.: *See*—
Grieb, John J., Rigabar, and Taylor. 2,748,667.

Teddington Aircraft Controls Ltd.: *See*—
Martin-Hurst, William F. F. 2,749,038.

Telefonaktiebolaget L M Ericsson: *See*—
Person, Lars B., Von Sivers, Wadö, and Wickman. 2,749,394.

Tension Envelope Corp.: *See*—
Hiersteiner, Walter L. 2,749,021.

Terranova, Paul: *See*—
Kostrisa, John A., and Terranova. 2,749,519.

Testi, Nicholas, to The Gillette Co. Safety razor. 2,748,468, 6–5–56, Cl. 30—45.

Texas Co., The: *See*—
Hersog, Gerhard. 2,749,446.
Shea, Joseph L. 2,749,444.

Textile Machine Works: *See*—
Loeper, Robert P., and Mueller. 2,748,583.

Thomas & Betts Co., The: *See*—
Curtiss, Lawrence M. 2,749,529.

Thomas, Charles L., to Sun Oil Co. Preparation of aromatic amines. 2,749,297, 6–5–56, Cl. 204—162.

Thomas, Charles L., to Sun Oil Co. Preparation of aromatic amines. 2,749,298, 6–5–56, Cl. 204—168.

Thomas, Cyril R., to General Electric Co. Apparatus for electrolytically cleaning lamp stem lead wires. 2,749,300, 6–5–56, Cl. 204—200.

Thomas, Joseph R. Convertible seat bed with forwardly overturning seat. 2,748,398, 6–5–56, Cl. 5—13.

Thomas, Moyer D.: *See*—
Ivie, James O., and Thomas. 2,748,842.

Thompson, George F., to The Wellman Engineering Co. Grab bucket. 2,748,510, 6–5–56, Cl. 37—186.

Thompson, George J.: *See*—
Pigman, Samuel S., and Thompson. 2,749,383.

Thompson Products, Inc.: *See*—
Booth, James H. 2,748,570.
Booth, James H. 2,748,762.
Booth, James H. 2,749,050.
Booth, James H., and Herbenar. 2,748,899.
Booth, James H., and Herbenar. 2,748,900.
Cliborn, Robert. 2,749,156.
Norton, Samuel H. 2,749,194.
Wellington, Joseph C., Jr. 2,749,450.

Thompson, Wallace M., to Harris Foundry & Machine Co. Baling press. 2,748,694, 6–5–56, Cl. 100—232.

Thomsen, Jens H., and T. N. Granger. Variable height vehicle. 2,749,137, 6–5–56, Cl. 280—6.

Thor Corp.: *See*—
Hellyer, John T. 2,748,496.

Threadgold, Philip, to The British Petroleum Co. Ltd. Telemetering. 2,749,534, 6–5–56, Cl. 340—177.

Tinnerman Products, Inc.: *See*—
Flora, Laurence H. 2,748,906.

Tiripa Corp.: *See*—
Castner, Frank G. 2,749,401.

Titefex, Inc.: *See*—
Guarnaschelli, Stephen. 2,748,803.
Guarnaschelli, Stephen. 2,748,804.

Titone, Georgette, and J. Letroux. Disposable combined pantie and sanitary napkin. 2,748,772, 6–5–56, Cl. 128—288.

Tootill, Geoffrey C.: *See*—
Williams, Frederic C., Kilburn, and Tootill. 2,749,439.

Torrence, Miller W., to Clark Equipment Co. Apparatus for conveying hot metal. 2,748,963, 6–5–56, Cl. 214—392.

Toulmin, Harry A., Jr., to The Commonwealth Engineering Co. of Ohio. Dextran compound coated body powder. 2,749,277, 6–5–56, Cl. 167—92.

Townsend, Albert J., to Crane Co. Air brake train line cocks. 2,749,084, 6–5–56, Cl. 251—183.

Tracerlab, Inc.: *See*—
Shapiro, Edward. 2,749,251.

Traub, Henry A., to Douglas Aircraft Co., Inc. Back up washer. 2,749,193, 6–5–56, Cl. 309—23.

Trebler, Henning A., and J. P. Horton, to National Dairy Research Laboratories, Inc. Combination settling, flow division and weir tank for waste disposal systems. 2,749,302, 6–5–56, Cl. 210—3.

Trico Products Corp.: *See*—
Delbel, Raymond. 2,748,617.

Triggs, Kenneth F., to The Majestic Co., Inc. Domestic incinerator. 2,748,728, 6–5–56, Cl. 110—18.

Trinity, Joseph B., and R. E. Bates. Fire extinguishing apparatus. 2,748,875, 6–5–56, Cl. 169—2.

Tromnier, Albrecht W., to Voigtlander, A. G. Tele-anastigmatic objectives of high light transmitting capacity. 2,748,657, 6–5–56, Cl. 88—57.

Trulove, Fred V. Indicator for fire extinguisher. 2,748,144, 6–5–56, Cl. 116—114.

Tummes, Hans: *See*—
Feichtinger, Hans, and Tummes. 2,749,340.

Turbo Machine Co.: *See*—
Wyatt, William K. 2,748,426.

Turner, Herbert H. Rotary type excavating device for loading machine. 2,748,505, 6–5–56, Cl. 37—96.

Tursky, Charles M. Fluid filter. 2,748,950, 6–5–56, Cl. 210—184.

Tuttle, J. N., Inc.: *See*—
Tuttle, James N. 2,748,549.

Tuttle, James N., to J. N. Tuttle, Inc. Method of coating relatively small metallic parts. 2,748,549, 6–5–56, Cl. 51—282.

Twardowski, John J. Instrument for setting dial gauges. 2,748,488, 6–5–56, Cl. 33—147.

Tyree, Joseph T.: *See*—
Novak, Leo J., and Tyree. 2,749,276.

Ulrich, Frederick, to Conmar Products Corp. Slide fasteners. 2,748,440, 6–5–56, Cl. 24—205.13.

Ulrich, Frederick, to Conmar Products Corp. Method of manufacturing sliders for slide fasteners. 2,748,460, 6–5–56, Cl. 29—410.

Underwood Corp.: *See*—
Latour, Pieter. 2,749,033.

Union Carbide and Carbon Corp.: *See*—
Lundquist, Adolph Q. 2,749,211.

Union Oil Co. of California: *See*—
Berg, Clyde H. O., and Welsh. 2,748,497.
Carpenter, Clayton A. 2,748,868.

United Aircraft Corp.: *See*—
Billman, Louis S., and Angelos. 2,748,563.
Hasbrouck, Augustus, and Shinn. 2,749,026.

United Shoe Machinery Corp.: *See*—
Cardani, Charles P. 2,748,388.
Clark, Alfred S. 2,748,405.
Finn, Sidney J. 2,748,403.
Stritter, Karl A. 2,748,406.

United States Atomic Energy Commission, United States of America as represented by the: *See*—
Bittner, Burt J. 2,749,520.
Vandenberg, Leonard B. 2,748,710.

U. S. Electrical Motors, Inc.: *See*—
Luenberger, Frederick O. 2,749,456.

United States Gypsum Co.: *See*—
Gibson, Oliver E. 2,749,263.
Gill, Joseph W., and Southwick. 2,749,267.

United States Rubber Co.: *See*—
Kerr, Henry H., Benson, Bower, and Siess. 2,748,827.
Schaefer, William E., Batts, and Brafford. 2,749,323.

United States Steel Corp.: *See*—
Peterson, Alden W. 2,749,173.

Universal Oil Products Co.: *See*—
Watkins, Charles H. 2,749,288.

Urech, Ernst: *See*—
Hoffmann, Karl, Tagmann, and Urech. 2,749,346.

Vacheresse, Edward, Jr. Ligating hemostat. 2,748,773, 6–5–56, Cl. 128—326.

Vacuum Concrete, Inc.: *See*—
Billner, Karl P. 2,749,097.

Van Beckum, William G., to Weyerhaeuser Timber Co. Material for treating oil well drilling fluids. 2,749,308, 6–5–56, Cl. 252—8.5.

Van Wagener, Raymond H.: *See*—
Hanson, Walter J., and Van Wagener. 2,748,698.

Vandenberg, Leonard B., to the United States of America as represented by the United States Atomic Energy Commission. Heat-exchanger pump. 2,748,710, 6–5–56, Cl. 103—1.

Vaughan Machinery Co., The: *See*—
McIlvried, Edwin J. 2,748,924.

Vellus, Leon, to Les Laboratoires, Francais de Chimiotherapie. Method of isolating and purifying keto steroids and new keto steroid compounds. 2,749,356, 6–5–56, Cl. 260—397.4.

Vertol Aircraft Corp.: *See*—
Daland, Elliot, and Meyers. 2,748,876.
Meyers, Donald N., and Ciolkosz. 2,749,059.

Verweel, Jan, to Hartford National Bank and Trust Co., as trustee. Cavity-resonator magnetron. 2,749,477, 6–5–56, Cl. 315—39.

Victor Chemical Works: *See*—
Coleman, William B. 2,749,306.

Vieweg, Albin: *See*—
Bauersfeld, Walther, Werner, and Vieweg. 2,748,652.

Viewlex, Inc.: *See*—
Polian, David, Halahan, Lyon, and Aronson. 2,748,653.

Villar, Manuel P. Catamaran. 2,748,740, 6–5–56, Cl. 114—39.

Vincent, Robert E.: *See*—
Pierotti, Gino J., Keeler, Evans, and Vincent. 2,749,291.

Voigtlander, A. G.: *See*—
Tronnier, Albrecht W. 2,748,657.

Volz, Carl W. Floating fishline. 2,748,525, 6–5–56, Cl. 43—44.98.

Von Stoeser, Walter, to Lectromatic Devices, Inc. Measuring tape feed and tape cut-off. 2,748,861, 6–5–56, Cl. 164—49.

Vonderschmitt, Bernard V., to Radio Corp. of America. TV vertical deflection circuit. 2,749,475, 6–5–56, Cl. 315—24.

Von Sivers, Carl H.: *See*—
Person, Lars B., Von Sivers, Wadö, and Wickman. 2,749,394.

Voorhees, Alston B., Jr.: *See*—
Siems, Robert J., and Voorhees. 2,748,855.

Vose, Samuel N. Puzzle. 2,749,129, 6–5–56, Cl. 273—157.

Wadö, Kurt R.: *See*—
Person, Lars B., Von Sivers, Wadö, and Wickman. 2,749,394.

Wagner Electric Corp.: *See*—
Freeman, Walter R. 2,748,791.

Wagner, Frederick C.: *See*—
Smith, James W., and Wagner. 2,748,846.

Wahlin, Hugo B., to Wisconsin Alumni Research Foundation. Electrolytic hydrogenation process. 2,749,293, 6–5–56, Cl. 204—73.

Waite, Edwin P.: *See*—
Cole, Burrel C., and Waite. 2,749,191.

Waldorf Paper Products Co.: *See*—
Hennessey, Russell J., and Dunning. 2,748,978.
Russell, Henry R., Mairs, and Hennessey. 2,749,014.

Walker, Arnold J. Liquid density separator. 2,748,943, 6–5–56, Cl. 210—51.

Walker, Eugene B.: *See*—
Davies, Bedford D., and Walker. 2,748,547.

Walker, Willard H. Rockable outer-jaw wrench having angularly related pipe-gripping surfaces. 2,748,638, 6–5–56, Cl. 81—101.

Wall, Curtis. Safety back-off tool for removing pump rods in oil wells. 2,749,091, 6–5–56, Cl. 255—35.

Wallace, Edward. Trimmer with oscillating shears. 2,748,554, 6–5–56, Cl. 56—241.

Wallace & Tiernan Inc.: *See*—
Barry, Richard H., Wang, and Walter. 2,749,339.

Wallace, William D.: *See*—
Danielson, Vernon S., and Wallace. 2,748,956.

Walley, James A., to General Electric Co. Control circuit for pump motor. 2,749,495, 6–5–56, Cl. 318—221.

Walter, Henry A., to Monsanto Chemical Co. Pyrimidine-aldehyde resins. 2,749,324, 6–5–56, Cl. 260—45.1.

Walter, Jules G.: *See*—
Cohn, Samuel E., and Walter. 2,749,115.

Walter, Lewis A.: *See*—
Barry, Richard H., Wang, and Walter. 2,749,339.

Walton, James R., J. N. Burke, and A. W. Cure, to The Electrical Apparatus Co., Ltd. Single phasing preventor. 2,749,407, 6–5–56, Cl. 200—116.

Wang, Su M.: *See*—
Barry, Richard H., Wang, and Walter. 2,749,339.

Wapner, Joseph S.: *See*—
Cooper, Benjamin, Hohmann, and Wapner. 2,749,538.

Warmoltz, Nicolaas, to Hartford National Bank and Trust Co., as trustee. High-vacuum discharge tube. 2,749,468, 6–5–56, Cl. 313—233.

Warner & Swasey Research Corp., The: *See*—
Tandler, William S. 2,748,490.

Washburn, David A.: *See*—
Goss, Wilbur H., and Washburn. 2,748,703.

Wasserbach, Theodore B.: *See*—
Barnum, Robert E., Jenkins, and Wasserbach. 2,749,225.

Waterman, Hein I.: *See*—
Fortuin, Jan P., and Waterman. 2,749,368.

Watkins, Charles H., to Universal Oil Products Co. Method of processing hydrocarbons with a molten medium. 2,749,288, 6–5–56, Cl. 196—52.

Watts, Albert T.: *See*—
Billings, William A., Wright, and Watts. 2,749,470.

Wavell, Clifford E. Illuminated roof for outdoor phone booths. 2,749,429, 6–5–56, Cl. 240—2.

Wayman, Albert J. Hanger clamps. 2,749,068, 6–5–56, Cl. 248—72.

Weatherhead Company, The: *See*—
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143: 2,749,494
221: 2,749,495
314: 2,749,496
367: 2,749,497
466: 2,749,498
321— 4: 2,749,499
322— 28: 2,749,500
323— 21: 2,749,501
111: 2,749,502
324— 1: 2,749,503
34: 2,749,504
2,749,505
43: 2,749,506
58: 2,749,507
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59: 2,749,509
62: 2,749,510
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64: 2,749,512
65: 2,749,513
68: 2,749,514
79: 2,749,515
88: 2,749,516
158: 2,749,517
332— 28: 2,749,518
333— 10: 2,749,519
2,749,520
11: 2,749,521
31: 2,749,522
73: 2,749,523
97: 2,749,524
326— 209: 2,749,525
330— 61: 2,749,526
99: 2,749,527
145: 2,749,528
223: 2,749,529
228: 2,749,530

340— 6: 2,749,531
11: 2,749,532
147: 2,749,533
340— 177: 2,749,534
183: 2,749,535
242: 2,749,536
340— 258: 2,749,537
345: 2,749,538
2,749,539
340— 347: 2,749,540
381: 2,749,541
408: 2,749,542
343— 724: 2,749,543
742: 2,749,544
776: 2,749,545
346— 35: 2,748,204
62: 2,749,205

CLASSIFICATION OF DESIGNS

D 2— 3: Des. 177,942
D13— 1: Des. 177,897
Des. 177,938
Des. 177,946
D14—24: Des. 177,945
D15— 1: Des. 177,914
Des. 177,922
8: Des. 177,892
11: Des. 177,919
D16— 2: Des. 177,925
D22— 2: Des. 177,940

D26—14: Des. 177,895
Des. 177,953
D29—20: Des. 177,898
D31— 2: Des. 177,912
D33— 2: Des. 177,908
Des. 177,905
Des. 177,906
3: Des. 177,904
13: Des. 177,911
D34— 5: Des. 177,940
15: Des. 177,907

D34—15: Des. 177,941
Des. 177,948
D37— 1: Des. 177,943
D40— 1: Des. 177,909
D44— 1: Des. 177,951
10: Des. 177,891
Des. 177,926
Des. 177,927
26: Des. 177,944
D45— 4: Des. 177,939
Des. 177,930

D45— 4: Des. 177,931
Des. 177,932
Des. 177,933
Des. 177,934
Des. 177,935
Des. 177,936
D48—20: Des. 177,902
23: Des. 177,918
27: Des. 177,938
31: Des. 177,916

D52— 2: Des. 177,899
3: Des. 177,894
4: Des. 177,913
D57— 1: Des. 177,924
D58— 4: Des. 177,910
D64—11: Des. 177,921
Des. 177,923
D71— 1: Des. 177,901
D81—10: Des. 177,900
D83— 1: Des. 177,947

D85— 2: Des. 177,920
Des. 177,937
8: Des. 177,952
D86— 9: Des. 177,917
10: Des. 177,936
D87— 3: Des. 177,896
Des. 177,935
Des. 177,939
D89— 1: Des. 177,949
D90— 8: Des. 177,915

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
June 5, 1956 Volume 707 Number 1

TRADEMARKS

NOTICES

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 20,035 ("The Singer Manufacturing Company" and design), The Singer Manufacturing Company, Sewing machines, attachments, and parts thereof; **TM 577,125** (Singer), same, Renting of sewing machines to the public, etc.; Management engineering, etc.; Service maintenance, and repair of home appliances, etc.; Fashion services, etc.; **TM 582,237**, same, Thermoplastic material in the form of sheets and strips, etc., filed May 2, 1956, D. C., S. D. N. Y., Doc. 109/192, *The Singer Mfg. Co. et al.* v. *Appliance Buyers Corp. et al.*

TM 137,160 (Coro), Cohn & Rosenberger, Inc., Pocketbooks, bill-cases, traveling-bags and purses; **TM 141,689**, same, Articles of jewelry; **TM 289,406** ("Paddock by Coro" and design), same, Jewelry and precious-metal ware; **TM 289,906** ("Hi-Jinks by Coro" and design), same; **TM 290,278** ("Sterling Craft Hand-Made by Coro" and design), same; **TM 402,894** ("Rapture by Coro" and design), same; **TM 427,417** ("Coro" and design), Coro, Inc., same; **TM 531,268** (Coro), same; **TM 289,684** ("Moonbeam by Coro" and design), Cohn & Rosenberger, Inc., Republished by Coro, Inc., same, filed Oct. 1, 1954, D. C., S. D. Miss. (Biloxi), Doc. 1485, *Coro, Inc.* v. *Caro Jewelry Co. and Caro*. Decree enjoining defendants from further infringement and use of names "Coro," "Caro," "Caro Jewelry Company" Apr. 30, 1956.

TM 141,689. (See TM 137,160.)

TM 289,406. (See TM 137,160.)

TM 289,906. (See TM 137,160.)

TM 296,269 ("Dreamies" and design), Sondra Undergarments, Inc., Ladies' underwear, nightgowns, and pajamas, filed Mar. 22, 1956, D. C., S. D. N. Y., Doc. 108/94, *Sondra Undergarments Co. Inc.* v. *Dream Wear Lingerie Inc.* Order and judgment dismissing complaint (notice May 1, 1956).

TM 289,684. (See TM 137,160.)

TM 290,278. (See TM 137,160.)

TM 402,894. (See TM 137,160.)

TM 427,417. (See TM 137,160.)

TM 500,057 (Nair), Carter Products, Inc., Depilatory, filed May 2, 1956, D. C., S. D. N. Y., Doc. 109/193, *Carter Products Inc.* v. *Bymart-Tintair Inc.*

TM 531,268. (See TM 137,160.)

TM 562,711 (Quik Pac), Quik Pac Division of H. Wesley Hutchins Company, Guiding trough for use in filling bags and like receptacles; **2,640,638**, C. T. Nichols, Apparatus for packaging commodities with trough member supported between plates, filed May 8, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c847, *Quik-Pac, Inc.* v. *Lincoln Bag Co., Inc. et al.*

TM 577,125. (See TM 20,035.)

TM 582,237. (See TM 20,035.)

TM 602,421 (Lanolized), W. F. Doyle, Hosiery for men, women, and children; **TM 609,983**, same, Lanolized, Incorporated, Hosiery, underwear, etc. for men, women, and children, filed May 2, 1956, D. C., S. D. N. Y., Doc. 109/191, *Richard Hudnut* v. *Lanolized, Inc.*

TM 609,983. (See TM 602,421.)

CONDITION OF TRADEMARK APPLICATIONS AS OF MAY 11, 1956

Total number of applications awaiting action [excluding renewals and Sec. 12 (c)]	8,197
Date of oldest new application	Oct. 24, 1955
Date of oldest amended application	Nov. 21, 1955

MERCHANT, JOHN, Director, Trademark Examining Operation TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application	
	New	Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 33, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	12-13-55	11-21-55
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	10-24-55	1-26-56
III. WENDT, C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	11-1-55	12-19-55
Renewals (All Classes)	2-23-56	3-6-56
Sec. 12 (c) Publications (All Classes)	1-16-56	4-26-56

Applications Filed During Week Ending May 11, 1956—488

Registrations Issued	432—No. 628,039 to No. 628,470
Renewals Issued	65

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.

As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 685,818. Harris Granite Quarries Company, Salisbury, N. C. Filed May 6, 1954. Sec. 2(f).

CAROLINA PINK

The word "Pink" is disclaimed apart from the mark as shown.

For Granite.

First use Jan. 10, 1925.

SN 681,590. Ginden Enterprises, Inc., d. b. a. Ginden Nursery Company, San Bruno, Calif. Filed Feb. 14, 1955.

RED ROBIN

For Rose Plants.

First use Oct. 1, 1954.

SN 687,246. Amherst Coal Company, Charleston, W. Va. Filed May 11, 1955.

DANA

Owner of Reg. No. 526,517.

For Coal.

First use June 2, 1954; first use as to "Dana" in 1888.

SN 687,686. Eiffel Corporation, Culver City, Calif. Filed May 17, 1955.

CHAR-QUIK

For Automatic Instant Lighting Charcoal.

First use Mar. 20, 1955.

SN 687,903. Superior Hatchery, Inc., Windsor, Mo. Filed May 19, 1955.

SILVER-LINKS

For Baby Chicks.

First use Jan. 15, 1953.

SN 688,710. The Consolidated Paper Company, Monroe, Mich. Filed June 2, 1955.

PR

For Sheet, Diced, Molded and Moldable Compositions Containing Cellulose Fibers and Resinous Material Including Phenolic Resins.

First use Sept. 7, 1954.

SN 689,549. Frank Cancellieri & Sons, Inc., Passaic, N. J. Filed June 15, 1955.



For Leather Goods Used by the Shoe Repair Industry as Sole Leather, or Bottom Leather, in the Making of Full or Half Soles for Men's and Women's Shoes, or in the Making of Leather Strips or Bands.

First use Aug. 29, 1949.

SN 689,550. Frank Cancellieri & Sons, Inc., Passaic, N. J. Filed June 15, 1955.



For Leather Goods Used by the Shoe Repair Industry as Sole Leather, or Bottom Leather, in the Making of Full or Half Soles for Men's and Women's Shoes, or in the Making of Leather Strips or Bands.

First use Aug. 29, 1949.

SN 691,350. Atlantic Sponge & Chamois Corp., New York, N. Y. Filed July 15, 1955.

ATLANTIC HYDE

Owner of Reg. No. 371,157.

For Chamois.

First use May 9, 1955.

SN 692,155. Newton Paper Company, Holyoke, Mass. Filed July 29, 1955.



For Latex-Impregnated Paper Board Used for Backing for Leather Products.

First use May 11, 1955.

CLASS 2

SN 679,551. Arthur A. Birney, Washington, D. C. Filed Jan. 7, 1955.



The drawing is lined for the color green, but no claim is made for color.

For Pre-Fabricated Fiberglass Garden Pool, Used Merely as a Decorative Feature in a Garden or as a Fish Pond.

First use Dec. 15, 1954.

SN 684,541. The Dobeckmun Company, Cleveland, Ohio. Filed Mar. 30, 1955.

PRODUCE PRICER

For Containers—Namely, Bags of Printed and Unprinted Transparent and Translucent Films for Foodstuffs Such as Fruits, Vegetables, and the Like.

First use Jan. 20, 1955.

SN 686,528. Continental Can Company, Inc., New York, N. Y. Filed Apr. 29, 1955.

Puretaste

For Paper Cups for Beverages.

First use Nov. 5, 1954.

SN 688,209. William A. Bertram, d. b. a. Bertram Manufacturing Co., Chicago, Ill. Filed May 25, 1955.

RO-TA-TOR

For Channeled Tray for Guiding and for Holding Containers and/or Bottles in a Refrigerator.

First use on or about Feb. 1, 1955.

SN 689,262. Atlas Plywood Corporation, Boston, Mass. Filed June 10, 1955.

ATLAS

Owner of Reg. No. 209,886.

For Packing Cases, Shipping Cases, Shooks, Knock-Down Boxes, Furniture Boxes, and Butter Tubs.

First use July 22, 1914.

SN 690,073. Delta Tank Manufacturing Company, Inc., Baton Rouge, La. Filed June 23, 1955.



For Refinery Vessels, Liquid Gas Tanks and Vessels, Low Pressure Gas Tanks and Vessels, Liquid Gas Cylinders, Storage Tanks, Welded Steel Tanks, Separator Tanks and Vessels, Gas and Oil Processing, Handling, Storage and Shipping Tanks, Pressure Treater Tanks and Vessels, and Shipping Tanks and Vessels.

First use January 1938.

SN 698,348. Foster-Stephens Inc., Chicago, Ill. Filed Nov. 16, 1955.

FILL A BOX

For Boxes for the Storage of Clothing.

First use June 7, 1955.

SN 699,885. J. H. Burroughs Sheet Metal Works, Indianapolis, Ind. Filed Dec. 13, 1955.

"PANTI" "CAN"

For Insulating Bottle Holder.

First use Nov. 28, 1955.

SN 2,313. Seal Sac Inc., New York, N. Y. Filed Feb. 8, 1956.

FUTURAMA PARA-SLIDE

For Garment Bags.

First use Dec. 22, 1955.

SN 2,663. Standard Packaging Corporation, Chicago, Ill. Filed Feb. 14, 1956.

DRIFTWOOD

For Paper Plates.

First use Feb. 1, 1956.

CLASS 3

SN 699,302. Gettler-Montanye, Inc., Glyndon, Md. Filed Dec. 13, 1955.

MONTELON

For Pocketbooks, Wallets, Pocket Secretaries Consisting of a Wallet or Pocket Case Carrying a Paper Pad and a Pencil, Underarm or Brief Cases for Carrying Papers and Documents, Pocket Cases for Carrying Nail Files and Pocket Cases for Carrying Keys.

First use January 1954.

SN 700,884. Countess Mara, Incorporated, New York, N. Y. Filed Dec. 30, 1955.



The drawing is lined for brown. Owner of Reg. No. 598,931.
For Necktie Travel Cases.
First use Oct. 1, 1955.

CLASS 6

SN 667,059. Solvic Société Anonyme, Brussels, Belgium. Filed May 25, 1954.

SOLVIC

Owner of Belgian Reg. No. 64,884, dated Sept. 23, 1948.
For Plastics; Synthetic Resins and Chemical Substances Used in the Manufacture of Plastics.

SN 671,667. The Pennsylvania Salt Manufacturing Company, Philadelphia, Pa. Filed Aug. 13, 1954.

Erusto-Max

Owner of Reg. Nos. 344,659, 437,668, and others.
For Laundry Sour.
First use June 26, 1951.

SN 671,669. The Pennsylvania Salt Manufacturing Company, Philadelphia, Pa. Filed Aug. 13, 1954.

Erusto-Ray

Owner of Reg. Nos. 344,659, 437,668, and others.
For Laundry Sour.
First use Feb. 22, 1951.

SN 677,775. Fleet-Crane, Inc., St. Louis, Mo. Filed Dec. 6, 1954.

R:Zyme

For Chemical Composition Used as a Sewage Liquidizer and a Chemical Preparation for Use in Liquefying Solids in Grease Traps.
First use Nov. 19, 1954.

SN 683,263. Anderson Chemical Company, Macon, Ga. Filed Mar. 11, 1955.

ANCO

For Chemical Preparations and Compounds for Treating Water and Cooling Water, Algaecides, and Sodium Dichromate.
First use June 1946.

SN 685,334. Atlas Powder Company, Wilmington, Del. Filed Apr. 12, 1955.

ARLATEX

For Surface Active Agents for Use on Textiles.
First use Apr. 6, 1955.

SN 685,744. Phillips Chemical Company, Bartlesville, Okla. Filed Apr. 18, 1955.

PHIL A BLACK

Owner of Reg. No. 556,373.
For Carbon Compounding Material Used Principally as a Filler in Rubber or in Synthetic Rubber.
First use on or about Mar. 9, 1955.

SN 685,745. Phillips Chemical Company, Bartlesville, Okla. Filed Apr. 18, 1955.

PHIL E BLACK

Owner of Reg. No. 556,373.
For Carbon Compounding Material Used Principally as a Filler in Rubber or in Synthetic Rubber.
First use on or about Mar. 7, 1955.

SN 685,746. Phillips Chemical Company, Bartlesville, Okla. Filed Apr. 18, 1955.



Owner of Reg. Nos. 440,043, 536,896, and 562,121.
For Carbon Compounding Material Used Principally as a Filler in Rubber or in Synthetic Rubber.
First use on or about Nov. 6, 1944.

SN 687,521. American Cyanamid Company, New York, N. Y. Filed May 16, 1955.

ACRO-SPRAY

For Chemical Preparation To Be Used as a Spray on Freshly Caught Fish for the Prevention of Spoilage.
First use May 3, 1955.

SN 687,563. Gulf Oil Corporation, Pittsburgh, Pa. Filed May 16, 1955.



The drawing is lined for the colors orange and blue. Owner of Reg. Nos. 624,273 and 624,274.
For Anti-Freeze Solution.
First use Aug. 9, 1939.

SN 689,455. Armour and Company, Chicago, Ill. Filed June 14, 1955.

DUOMAC

For Fatty Acid Amine Derivatives.
First use Mar. 16, 1954.

SN 689,824. Emery Theodore Erickson, d. b. a. Erickson Chemical Company, Chicago, Ill. Filed June 20, 1955. Sec. 2(f).

ERICKSON

Owner of Reg. No. 533,629.
For Chemicals Used in the Industrial Treatment of Water To Prevent Scaling, Corrosion, and Other Detrimental Effects.
First use on or about Apr. 14, 1948.

SN 691,498. Minnesota Mining and Manufacturing Company, St. Paul, Minn. Filed July 18, 1955.

SCOTCH

Owner of Reg. Nos. 551,728, 417,265, and others.
For Liquid Polymeric Coating Composition for Application to a Printed Surface To Render Printing Thereon More Securely Adherent to Said Surface.
First use at least as early as June 13, 1955.

SN 692,602. Hiram M. Holmes, d. b. a. H. M. H. Industries, Whittier, Calif. Filed Aug. 8, 1955.

PROPELLON

For Liquefied Gas in a Container Having a Valve Which When Opened Releases Gas Therefrom Under Pressure.
First use May 20, 1955.

SN 692,814. Hermann C. Starck Aktiengesellschaft, Berlin-Lichterfelde, Germany. Filed Aug. 10, 1955.



Owner of German Reg. No. 638,415, dated May 19, 1953.
For Chemical Products for Commercial Purposes, in Particular Metal Carbides, Borides; Metal Salts and Metal Compositions of Non-Precious Metals; High Temperature Resistant Products for Industrial Applications—Namely, Metal Oxides, Metal Carbides and Silicides; and Materials for the Abrasive Industry—Namely, Corundum in All Colors and Granulations.

SN 693,003. Borax Consolidated, Limited, d. b. a. Pacific Coast Borax Co., Division of Borax Consolidated, Limited, Los Angeles, Calif. Filed Aug. 15, 1955.

Monobor-Chlorate

Owner of Reg. Nos. 547,789 and 563,920.
For Weed and Grass Killer.
First use May 1954.

SN 693,088. The Rapp-Ramsey Company, Shenandoah, Iowa. Filed Aug. 15, 1955.

Stay Soft

For Chemical Preparation To Leave Fabrics Soft After Washing.
First use Oct. 29, 1954.

SN 693,536. Dri-Wear, Inc., New York, N. Y. Filed Aug. 23, 1955. Sec. 2(f).

DRI-WEAR

Owner of Reg. No. 348,846.
For Compositions for Treating Cotton, Wool, Silk, Linen, and Artificial Fabrics, Textiles, Threads and Yarns, Cellulose, Paper and Other Fibrous Materials, and Furs, To Render Same Water Repellent.
First use Jan. 16, 1936.

SN 693,981. Ferro Chemical Corporation, Bedford, Ohio. Filed Aug. 31, 1955.

CALIMAR

For Photosensitive Synthetic Resin Plastics, Photosensitive Synthetic Resins and Chemical Substances Used in Making Photosensitive Synthetic Resin Plastics and Photosensitive Synthetic Resins.
First use Sept. 4, 1953.

SN 695,577. Specialty Resins Company, Lynwood, Calif. Filed Sept. 29, 1955.



Owner of Reg. No. 560,854.
For Softening Agent To Be Added to Plastics.
First use on or about July 25, 1955.

SN 695,578. Specialty Resins Company, Lynwood, Calif. Filed Sept. 29, 1955.

OUROVAC SRC

Owner of Reg. No. 560,854.
For Polyvinyl Emulsions.
First use on or about July 25, 1955.

SN 695,579. Specialty Resins Company, Lynwood, Calif. Filed Sept. 29, 1955.

OUROSYN SRC

Owner of Reg. No. 560,854.
For Synthetic Resins.
First use on or about July 25, 1955.

SN 695,580. Specialty Resins Company, Lynwood, Calif. Filed Sept. 29, 1955.

OUROPOL SRC

Owner of Reg. No. 560,854.
For Polyester Resins.
First use on or about July 25, 1955.

SN 695,615. Walter David, London, England. Filed Sept. 30, 1955.

ISOLAMENT

Owner of British Reg. No. 672,346, dated Sept. 3, 1948.
For Admixture or a Surface Treatment for the Improvement of the Quality of Concretes.

CLASS 7

SN 697,227. Kane Import Corporation, New York, N. Y. Filed Oct. 27, 1955.

GIANT-GRIP

For Baler and Binder Twines.
First use January 1952.

SN 698,976. Hallmark Cards Incorporated, Kansas City, Mo. Filed Nov. 28, 1955.

Hall Sheen

For Ribbon Made of Silk, Satin, Rayon, and Cotton for Gift-Tying Purposes.
First use January 1955.

CLASS 9

SN 684,787. Aerojet-General Corporation, Azusa, Calif. Filed Apr. 4, 1955.

AEROMARKER

For Smoke Producing Aerial Missiles and Devices.
First use on about November 1954.

SN 690,121. Atlas Powder Company, Wilmington, Del. Filed June 24, 1955.

CHEMICALS ATLAS EXPLOSIVES

The words "Chemicals" and "Explosives" are disclaimed apart from the mark appearing as a whole.
For Blasting Accessories and Supplies—Namely, Blasting Cap Crimpers, Lead Wire, Connecting Wire, Blasting Caps, Boosters, Blasting Machines, Galvanometers and Rheostats for Testing Blasting Circuits and Machines, and the Like.
First use on or about Jan. 1, 1914.

SN 690,122. Atlas Powder Company, Wilmington, Del. Filed June 24, 1955.

ATLAS

For Blasting Accessories and Supplies—Namely, Blasting Cap Crimpers, Lead Wire, Connecting Wire, Blasting Caps, Boosters, Blasting Machines, Galvanometers and Rheostats for Testing Blasting Circuits and Machines, and the Like.
First use on or about Jan. 1, 1914.

SN 693,166. Max McGraw, d. b. a. Fin 'N Feather Club, Dundee, Ill. Filed Aug. 16, 1955.

FIN 'N FEATHER CLUB

Owner of Reg. Nos. 437,932 and 440,922.
For Guns—Namely, Shot Guns, Rifles, and Revolvers.
First use July 6, 1955.

CLASS 10

SN 683,513. International Minerals & Chemical Corporation, Chicago, Ill. Filed Mar. 15, 1955.

GOLD SEAL

For Fertilizers.
First use Jan. 18, 1949.

SN 687,526. Baugh & Sons Company, Philadelphia, Pa. Filed May 16, 1955.

Village Green

For Fertilizer, Made Specifically for Lawns, Gardens, Shrubs, and Trees.
First use Apr. 28, 1955.

SN 693,959. Allied Chemical & Dye Corporation, New York, N. Y. Filed Aug. 31, 1955.

U-A-S

For Fertilizer Solution Suitable for Direct Application and for Ammoniating Fertilizers.
First use July 10, 1955.

CLASS 11

SN 698,504. Cushman and Denison Mfg. Co., Inc., New York, N. Y. Filed Nov. 18, 1955.

CADO

For Inks and Solvents and Thinners Therefor.
First use about 1940.

CLASS 12

SN 660,643. Ditta Fratelli Capoferri, Bergamo, Italy. Filed Feb. 5, 1954.

MOSAICO FULGET

The English translation of "Mosaico Fulget" is "glittering mosaic." These words are disclaimed apart from the mark. Owner of Italian Reg. No. 69,657, dated Dec. 5, 1945.
For Mosaic Works, Plaster Works and Coverings for Walls, Ceilings and the Like and Particularly Coatings Made of Washed Granulated Matter Consisting of Marble and Cement, Metal and Cement Coatings, Floors Made Up From Marble and Cement Pieces and Floors Made Up From Marble, Metal, Cement, and the Like.

SN 679,735. The Logan-Long Company, Chicago, Ill. Filed Jan. 11, 1955. Sec. 2(f).

LONG-LIFE

For Roll Roofing, Strip Shingles, Roofing Felt, Asphalt Saturated Siding, Asbestos Fiber Roof Coating.
First use on or about Mar. 15, 1929.

SN 686,744. Hubbs Corporation, Long Island City, N. Y. Filed May 3, 1955.

DRI-KON-*20

For Glass Reinforced Waterproof Builders' Paper.
First use Sept. 21, 1953.

SN 686,745. Hubbs Corporation, Long Island City, N. Y. Filed May 3, 1955.

DRI-KON-*10

For Glass Reinforced Waterproof Builders' Paper.
First use Sept. 21, 1953.

SN 688,681. Angelo Tomasso, Inc., New Britain, Conn. Filed June 1, 1955.

Britainite

For Asphalt Paving Material.
First use Apr. 1, 1939.

SN 688,682. Angelo Tomasso, Inc., New Britain, Conn. Filed June 1, 1955.

Dix-seal

For Asphalt Paving Material.
First use Apr. 1, 1954.

SN 689,330. Fabrow Manufacturing, Inc., Toledo, Ohio. Filed June 9, 1955.

fabrow WINDOW WALL frame

The descriptive words "Window Wall" and "Frame" and the representation of the window frame are disclaimed apart from the mark as shown.
For Prefabricated Window Framing and Glazed Sash Constructions.
First use Sept. 5, 1952.

SN 689,870. Rock-Tred Corporation, Skokie, Ill. Filed June 20, 1955.

MONOTRED

For Non-Bituminous Plastic Floor Covering and Patching Compound.
First use Apr. 21, 1955.

SN 694,995. Globe Roofing Products Co., Inc., Whiting, Ind. Filed Sept. 20, 1955.

PORCE-ALUME

For Metal Surfaced Roofing.
First use Sept. 2, 1955.

SN 698,265. Beetlie Manufacturing Company, Ontario, Calif. Filed Nov. 15, 1955.



Owner of Reg. Nos. 509,057 and 440,100.
For Individual Plastic Coated Aluminum Wall Tiles.
First use Sept. 1, 1947.

SN 698,398. Armstrong Cork Company, Lancaster, Pa. Filed Nov. 17, 1955.

CRESTONE

For Acoustical Tile.
First use Oct. 28, 1955.

SN 32. Congoleum-Nairn Inc., Kearny, N. J. Filed Jan. 3, 1956.

SEQUIN

For Composition Floor and Wall Covering in Tile Form.
First use July 12, 1955.

CLASS 13

SN 663,680. Roberts Manufacturing Co., Los Angeles, Calif. Filed Mar. 31, 1954. Sec. 2(f).

"TACKLESS"

For Carpet Anchoring Strips for Holding Carpet in Position on Floors.
First use 1938.

SN 690,849. Vibrex Fastener Corporation, Wilmington, Del. Filed July 6, 1955.

VIBREX

Owner of Reg. No. 588,777.
For Fasteners for Releasably Fastening Panels, Chassis, Closure Members or Parts of Devices and Machines to a Supporting Structure, and Components of Said Fasteners.
First use Jan. 2, 1955.

SN 693,107. Georg Fischer Aktiengesellschaft, Schaffhausen, Switzerland. Filed July 28, 1955.

+GF+

Priority claimed under Sec. 44(d) on Swiss Reg. No. 155,687, dated Mar. 28, 1955. Owner of Reg. Nos. 102,007, 331,888, and 563,056.
For Connectors, Unions, Elbows, Fittings, Made From Metal and/or Plastic Materials for Use With Pipings in Gas-, Water-, and Steam Installations.

SN 693,554. Chas. O. Larson Co., Sterling, Ill. Filed Aug. 23, 1955. Sec. 2(f).

LARSON

For Display Hooks; Flat Display Irons; Corner Display Braces; Tool Holders; Curtain Rod Hooks; Price Tag Holders; Corner or Shelf Braces; Hardware Assortments Including Turnbuckles, Bolts, Hooks, Eyes, Braces, Hangers, Handles or Turn Buttons With Metal Background Plate and Wall Bracket Display or With Revolving Display Stand; Gate Hooks and Eyes; Screw Hooks; Screw Eyes; Cup Hooks; Eye Bolts; Pipe Hooks; Clothes Line Hooks; Safety Hooks and Staples; Hooks and Staples; Garden Tool Stands; Hammock Hooks; Bird Cage or Plant Hooks; Clothes Rod Brackets; Wardrobe Hooks; Coat and Hat Hooks; Garment Hooks; Utility Hooks; Corner Braces; Picture Hangers; Chair and Table Glides; Corrugated Fasteners; Sash Hangers; Turn Buttons; Push Clips; Screen and Drawer Handles; Pin and Angle Fasteners; Door Braces; S Hooks; Shoulder Hooks; Cornice Hooks; Fruit Tree Screw Eyes; Hand Rail Stays; Dowel Screws; Clothes Line Hook Bolts; Clothes Line Eyebolt and Turnbuckle Assemblies; Turnbuckles; U Bolts; Porch Swing Hooks; Double Convex Hooks With or Without Eyes; Staples; Sash Operators; Guy Wire Eye Bolts; Guy Wire Screw Eyes; U Bolts With Clamps; C Clamps; Tool Racks; Eye Bolts and Wing Nuts; S Hook Assortments; Hardware for Making Saw Horses, Flat Top Saw Horses, Folding Saw Horses, Tilt Top Picnic Benches, Carpenter Saw Horses, Step Stools, Lawn Benches, Power Tool Benches, Folding Work Benches, Teeter-Totters, Tables With Folding Legs, Tables With Rigid Legs, Over-the-Door Hangers, 3-Row Tool Holders, Garden Tool Stands, Broom and Tool Racks, Ladder Gyms, Two-Swing Gyms, Single Swing Gyms, Clothesline Supports, Quick Shelf Links, Picnic Tables and Benches, Pipe Hooks, Hall Trees, Wood Slat Awnings, Lawn Tables, Wrought Iron Folding Leg Tables, Fabric Folding Tables, Fabric Folding Chairs, Fabric Folding Lawn Benches, Peg Board Hangers, Peg Board Plate Hooks, Heavy Steel Hooks and Quick Frames or Corner Clamps, Sold in Individual Sets and in Assortments Including Counter Models.
First use 1925.

SN 699,494. Gardner-Denver Company, Grand Haven, Mich. Filed Dec. 6, 1955. Sec. 2(f) as to "Gardner-Denver."



Owner of Reg. No. 240,974.
For Air Valves.
First use Apr. 26, 1955.

CLASS 15

SN 684,352. Standard Oil Company of California, Wilmington, Del. Filed Mar. 28, 1955. Sec. 2(f).

PRESSURE PRIMER

For Chemical Compounds of High Volatility, Useful for Facilitating the Starting of Internal Combustion Engines at Low Temperatures.
First use June 23, 1949.

SN 686,862. Specialty Products Company, Jersey City, N. J. Filed May 4, 1955.

MOLAC

For Swabbing Compound Intended for Use as a Lubricant for the Molds of Glassware-Making Machines and Consisting Essentially of Graphited Liquid Polymer.
First use 1947.

SN 696,940. Boyer Chemical Company, Chicago, Ill. Filed Oct. 24, 1955. Sec. 2(f).

SOOT-GO

For Fuel Oil Additive—Namely, a Compound for Eliminating Moisture in Fuel Tank and Thereby Reducing Formation of Soot, Carbon or Sludge by a Fuel Burner.
First use Jan. 1, 1945.

SN 698,812. The Texas Company, New York, N. Y. Filed Nov. 23, 1955.

GEARTAC

For Lubricating Greases.
First use on or about Jan. 21, 1955.

SN 699,432. Solar-Therm Corporation of America, Chicago, Ill. Filed Dec. 5, 1955.



For Additives for Fuel Oils.
First use Jan. 21, 1955.

SN 699,863. Union Oil Company of California, Los Angeles, Calif., to Westway Petroleum Co., Los Angeles, Calif. Filed Dec. 12, 1955.

WESTWAY

For Lubricating Oils.
First use Aug. 15, 1955.

SN 699,864. Union Oil Company of California, Los Angeles, Calif., to Westway Petroleum Co., Los Angeles, Calif. Filed Dec. 12, 1955.

AURORA

For Lubricating Oils.
First use January 1934.

SN 100. Skelly Oil Company, Tulsa, Okla. Filed Jan. 3, 1956.

KEOTANE

For Additive for Gasoline and Other Motor Fuel; Additive for Liquid Fuel; Liquid Fuel; and Liquid Fuel, Gasoline and Other Motor Fuel Having Such Additive Therein.
First use Dec. 9, 1955.

CLASS 16

SN 674,368. Raymond Cecil Bender, West Palm Beach, Fla. Filed Oct. 6, 1954.

LIFE TIME

For Paint Supplement, Which May Be Added to Varnish, Oil or Plastic Paint To Extend the Life of Paint Already Applied to Woodwork, Furniture, and Floors.
First use Sept. 29, 1954.

SN 680,304. Puritan Furniture Mfrs., Melrose, Mass. Filed Jan. 21, 1955.

PURI-GRAIN

For Finish Applied as a Component to Bedroom Furniture—Namely, Beds, Chests, Dressers, and Tables.
First use Aug. 2, 1954.

SN 682,580. The Modene Paint Company, Inc., Chelsea, Mass. Filed Mar. 1, 1955. Sec. 2(f).

SPAR-O

For Varnish.
First use May 14, 1923.

SN 690,576. Phelan-Faust Paint Mfg. Co., St. Louis, Mo. Filed June 30, 1955. Sec. 2(f) as to "Phelan's."

Phelan's

SAFE-T-SPRAY

The drawing is lined for red, but no claim is made to color.
Owner of Reg. Nos. 154,364 and 613,788.
For Spray Application to Metal, Wood, Composition or Masonry Surfaces.
First use May 1, 1953; and in August 1919 as to "Phelan's."

SN 690,960. The Modene Paint Company, Inc., Chelsea, Mass. Filed July 8, 1955.

modene

OVALINE

Owner of Reg. No. 252,395.
For Paint Thinner.
First use Sept. 10, 1925.

SN 691,256. S. C. Johnson & Son, Inc., Racine, Wis. Filed July 29, 1955.

SKAR

For Touching-Up Composition for Household Appliances.
First use May 27, 1955.

SN 693,101. The Valspar Corporation, Ardmore, Pa. Filed Aug. 15, 1955. Sec. 2(f) as to "Valentine's."

Valentine's

Owner of Reg. Nos. 296,887, 520,667, and 56,427.
For Paint.
First use Mar. 1, 1955.

SN 693,568. Rilsan Corporation, Boston, Mass., to Organico, S. A., Paris, France. Filed Aug. 23, 1955.

Rilsan

The drawing is lined for the color green.
For Powder Which Can Be Melted and Applied With a Brush, or Other Well Known Methods, to Metallic or Other Surfaces To Form a Protective Coating Which Is Highly Resistant to Chemical and Abrasive Action.
First use June 8, 1955.

CLASS 17

SN 697,128. Stephano Brothers, Philadelphia, Pa. Filed Oct. 25, 1955.

KNOCKOUT

For Cigarettes.
First use Oct. 13, 1955.

SN 700,787. H. Fendrich, Inc., Evansville, Ind. Filed Dec. 29, 1955.

CHARLES DENBY



Owner of Reg. No. 362,781.
For Cigars.
First use July 25, 1893.

CLASS 18

SN 681,767. Geigy Chemical Corporation, New York, N. Y. Filed Feb. 16, 1955.

DUSOFELEN

For Mixed Sulfonamides for Medicinal Uses.
First use Jan. 27, 1955.

SN 683,411. Madison Pharmaceutical Laboratories, Inc., New York, N. Y. Filed Mar. 14, 1955.

TEMPOTAB

For Preparation for Relief From Respiratory Complaints.
First use Feb. 25, 1955.

SN 683,412. Madison Pharmaceutical Laboratories, Inc., New York, N. Y. Filed Mar. 14, 1955.

TEMPOCAP

For Preparation for Relief From Cardiovascular Complaints.
First use Feb. 25, 1955.

SN 688,878. X-D-M Company, Inc., Forrest City, Ark. Filed June 3, 1955.

X-D-M

For Medicinal Preparation for Internal Use and Intended for the Relief of Arthritis, Neuritis, and Bursitis.
First use Nov. 5, 1954.

SN 691,252. Yorktown Products Corporation, New York, N. Y. Filed July 13, 1955.

EXUL

For Vitamin Food Supplement Used in the Treatment of Internal Ulcers.
First use Feb. 18, 1954.

SN 693,241. Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. Filed Aug. 17, 1955.

SOMPALIN

Owner of German Reg. No. 649,939, dated Dec. 12, 1953.
For Treatment of Avitaminosis and Hypovitaminosis of the B-Group.

SN 693,242. Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. Filed Aug. 17, 1955.

INCIDAL

Owner of German Reg. No. 608,732, dated July 5, 1951.
For Antihistamine.

SN 693,968. George A. Breon & Company, New York, N. Y. Filed Aug. 31, 1955.

MAXUKAL

For Injectable Calcium Preparation for Use in the Treatment of Low Calcium Tetany Regardless of Etiology, of Intestinal, Ureteral and Gallbladder Colic, and of Many Allergic Manifestations.
First use Aug. 8, 1955.

SN 694,254. Pharmasale, Incorporated, Lexington, Ky. Filed Sept. 6, 1955.

DURASULES

For Delayed Action, Timed Disintegrating Capsules Containing Dextro Amphetamine Sulfate.
First use Nov. 8, 1954.

SN 694,366. Humphreys Medicine Company, Incorporated, New York, N. Y. Filed Sept. 8, 1955.

MYRATROL

For Poison Ivy Lotion.
First use Aug. 9, 1955.

SN 695,348. Rolophene Inc., Kansas City, Mo. Filed Sept. 26, 1955.

ROLO-X-

For Preparation for Relief of Pains of Arthritis and Rheumatism.
First use Aug. 1, 1955.

SN 695,991. Lydia E. Pinkham Medicine Company, Lynn, Mass. Filed Oct. 6, 1955.



Owner of Reg. Nos. 45,450, 382,382, and others.
For Preparations Having Alterative, Antiseptic, Cleansing, Deodorising, Diuretic, Laxative, Tonic, and Sedative Properties, and Indicated in and for the Treatment of Chlorosis, Constipation, Functional Disorders and Irregularities of the Menses, Liver Complaints, and Other Physical Disorders and Pathological Conditions.
First use in the year 1881.

SN 697,273. Chicago Pharmacal Company, Chicago, Ill. Filed Oct. 28, 1955.

Peausan

For Medicinal Preparation in Liquid Form, Used as a Local External Application in the Treatment of Ecsematous Condition, Skin Disorders, Sun Burn, Chapped Hands, and Dry Scaling and Rough Skin.
First use July 6, 1954.

SN 697,294. Gray Pharmaceutical Co., Inc., Newton, Mass. Filed Oct. 28, 1955.

UNGUENTUM F-FORTE

For Dermatological Ointment.
First use May 18, 1955.

SN 697,442. Eunice B. Borel, d. b. a. Mrs. John Borel, St. Martinville, La. Filed Nov. 1, 1955. Sec. 2(f).

BOREL'S

For Preparation for Cuts, Burns, Stings or Bites of Non-Poisonous Insects, Skin Irritation, Summer Heat, Blistering, Eruption, Athlete's Foot, Ring Worm, Rashes, Boils, Corns, Pimples, Black Heads.
First use July 1945.

SN 697,632. Eli Lilly and Company, Indianapolis, Ind. Filed Nov. 3, 1955.

V-CILLIN

For Medicinal Preparation of Phenoxymethyl Penicillin.
First use Sept. 12, 1955.

SN 697,663. Bator Drug Corp., Chicago, Ill. Filed Nov. 4, 1955.

BATH RITIS

For Medicinal Preparation Adapted for Use in Treatment of Muscular Aches and Pains and Adapted To Be Applied as a Rub or Added to Bath Water.
First use Dec. 14, 1940.

SN 697,677. Cutter Laboratories, Berkeley, Calif. Filed Nov. 4, 1955.

NUTRONE

For Preparation for the Treatment of Calf Scours.
First use Mar. 8, 1955.

SN 697,766. Dawe's Laboratories, Inc., Chicago, Ill. Filed Nov. 7, 1955.

Vitamelk

For Concentrated Feed Supplement and Fortifier Containing Vitamins and Other Ingredients and Used for Poultry and Animal Feeds.
First use Jan. 14, 1929.

SN 697,816. R. J. Moran Co., Boston, Mass. Filed Nov. 7, 1955.

QUARTAL

For Remedy To Aid in the Relief of Insomnia.
First use on or about Oct. 14, 1954.

SN 697,817. R. J. Moran Co., Boston, Mass. Filed Nov. 7, 1955.

PLAZMACON

For Medicinal Preparation Containing Vitamins and Minerals.
First use on or about Oct. 16, 1953.

SN 697,826. Parke, Davis & Company, Detroit, Mich. Filed Nov. 7, 1955.

POQUIL

For Anthelmintic Preparation.
First use Aug. 5, 1955.

SN 697,894. American Lecithin Company, Inc., Woodside, N. Y. Filed Nov. 8, 1955.

PEPIPET

For Dietary Supplement for Dogs and Other Animals.
First use Oct. 15, 1954.

CLASS 19

SN 680,770. Markol Metal Products, Inc., Rochester, N. Y. Filed Jan. 31, 1955.

Mailmobile

For Hand Carts or Trucks Carrying Removable Trays Intended for Use as Mail Containers.
First use Dec. 20, 1954.

SN 692,041. Bath Iron Works Corporation, Bath, Maine. Filed July 28, 1955.

BIW

For Fabricated Metal Products—Namely, Ships and Parts Thereof.
First use 1928.

SN 698,758. The American Automobile Association (Incorporated), Washington, D. C. Filed Nov. 23, 1955.

AAA

For Automobile Dual Control Apparatus.
First use 1938.

SN 2,171. National Pneumatic Co., Inc., Boston, Mass. Filed Feb. 6, 1956.

NATIONAL PNEUMATIC NP

Owner of Reg. No. 203,898.
For Apparatus for Operating Doors for Vehicles.
First use Dec. 15, 1955.

SN 2,347.. F. M. Engineering Company, Phoenix, Ariz.. Filed Feb. 9, 1956.

Lo-Ball

For Stabilizer for Automotive Front Suspension Systems.
First use Dec. 1, 1955.

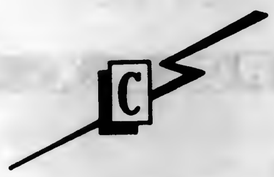
CLASS 21

SN 678,745. Planet Manufacturing Corporation, Bloomfield, N. J. Filed Dec. 21, 1954.

PLANET

For Electrical Capacitors.
First use Sept. 1, 1949.

SN 680,936. Cherry Electrical Products Corporation, Highland Park, Ill. Filed Feb. 2, 1955.



For Snap-Action Switches and Parts Therefor.
First use Sept. 15, 1953.

SN 684,958. James E. Myers, Jr., Hammonton, N. J. Filed Apr. 5, 1955.

TRADEMARK
"PURED" INSULATORS

No claim is made to the word "Insulators" apart from the mark.
For Antenna Insulators.
First use Nov. 10, 1954.

SN 686,607. Browning Research Corporation, Toledo, Ohio. Filed May 2, 1955.

"Topsy-Turvie"

For Magazines, Cartridges, and Reels for Magnetic Tape for Sound Recording and Reproduction.
First use Jan. 18, 1955.

SN 687,410. Premium Goods Manufacturing Company, Philadelphia, Pa. Filed May 12, 1955.



No claim is made to the words "Genuine" or "China" apart from the mark as shown.
For Combination Electric Clocks and Lamps, and Electric Lamps, Substantial Portions of Which Are Made of Chinaware.
First use Apr. 30, 1954.

SN 689,767. Sonotone Corporation, Elmsford, N. Y. Filed June 17, 1955.

SONOTONE

Owner of Reg. Nos. 399,904 and 441,454.
For Electric Storage Cells and Batteries.
First use April 1951.

SN 689,768. Sonotone Corporation, Elmsford, N. Y. Filed June 17, 1955.

SONOTONE

Owner of Reg. Nos. 399,904 and 441,454.
For Mechano-Electric Energy Transducers—Namely, Phonograph Pick-Ups and Parts Thereof.
First use Mar. 2, 1950.

SN 692,617. Lienau & Patterson, New York, N. Y. Filed Aug. 8, 1955.

TELEGUARD

For Systems for Signalling Trespasses by Persons on the Deck or in the Water of Unattended Swimming Pools or the Continued Presence of a Body Submerged in a Pool for More Than a Predetermined Period.
First use December 1952.

SN 692,882. The Western Union Telegraph Company, New York, N. Y. Filed Aug. 11, 1955.



For Telegraphic Land Line, Submarine Cable and Radio Apparatus and Systems for Providing Public and Private Communication Service.
First use December 1951.

SN 693,271. The Quaker Oats Company, Chicago, Ill. Filed Aug. 17, 1955.



For Electric Griddles.
First use Apr. 27, 1955.

SN 693,428. Atlas Sewing Centers, Inc., Miami, Fla. Filed Aug. 22, 1955.

ATLAS

The word "Deluxe" is disclaimed apart from the mark as shown. Owner of Reg. No. 542,148.
For Vacuum Cleaners and Parts and Supplies Therefor.
First use July 2, 1955.

SN 694,982. Felt and Tarrant Manufacturing Company, Chicago, Ill. Filed Sept. 20, 1955.

ERASE-O-MATIC

For Magnetic Recording Belts for Use With Dictation Machines.
First use February 1954.

SN 695,091. Hexacon Electric Company, Roselle Park, N. J. Filed Sept. 21, 1955.

HEXCLAD

Owner of Reg. No. 386,555.
For Soldering Iron Tips.
First use Nov. 1, 1948.

SN 695,661. Technology Instrument Corporation, Acton, Mass. Filed Sept. 30, 1955.



Owner of Reg. No. 529,494.
For Variable Resistors.
First use Nov. 25, 1946.

SN 698,757. Amerac Incorporated, Wenham, Mass. Filed Nov. 23, 1955.

Amerac

For Microwave Apparatus, Including Microwave Transmitters and Parts Thereof, Microwave Receivers and Parts Thereof, and Microwave Transmission Lines and Parts Thereof.
First use January 1950.

SN 699,073. Heenan & Froude Limited, Worcester, England. Filed Nov. 29, 1955.

HEENATRON

Owner of British Reg. Nos. 746,631 and 746,632, both dated Oct. 4, 1955.
For Electric Motors With Electronic Control Gear for Providing Variable Speed.

SN 699,460. The Acme Wire Company, Hamden, Conn. Filed Dec. 6, 1955.

ACME-STICK

For Varnished Electrical Insulations Coated on One Side With an Adhesive, Including Varnished Papers, Fabrics, Cloths, Glass Cloths, and Similar Materials.
First use May 31, 1955.

SN 699,523. The Reflectone Corporation, Stamford, Conn. Filed Dec. 6, 1955.

REFLECTONE

Owner of Reg. No. 598,726.
For Electrical Transformers.
First use March 1955.

SN 700,309. Franklin Electric Co., Inc., Bluffton, Ind. Filed Dec. 20, 1955.



For Electric Motors.
First use Jan. 1, 1946.

CLASS 22

SN 658,222. American Metal Specialties Corporation, Hatboro, Pa. Filed Dec. 23, 1953.

Doll-E-Housekeeper



Owner of Reg. Nos. 539,036, 539,703, and others.
For Toy Utility Cabinet Containing the Following Toys: Sweeper, Linoleum Rug, Broom, Wax Applicator, Bucket, Mop, Wet Mop, Scrub Brush, Dust Pan, Dust Brush, Sponge, Polishing Cloth, Furniture Polish, Floor Wax, Cleanser, Steel Wool, Detergent, Apron.
First use Feb. 23, 1953.

SN 668,269. Nissen Trampoline Company, Cedar Rapids, Iowa. Filed June 15, 1954.

AQUA-TRAMPOLINE

Owner of Reg. No. 402,868.
For Tumbling Device Consisting of a Fabric Sheet Stretched by Resilient Members in a Framework.
First use May 24, 1954.

SN 682,040. National Fireworks Ordnance Corporation, West Hanover, Mass. Filed Feb. 21, 1955.

Seafoam

For Practice Golf Balls and Toys—Namely, Dolls, Tugboats, Building Blocks, and Sponge Rubber Toys.
First use Apr. 21, 1952.

SN 682,321. Walter L. Blaul, d. b. a. Automatic Golf Pro, Wilmette, Ill. Filed Feb. 25, 1955.



For Device for Developing the Proper Swing in Golfing.
First use June 18, 1954.

SN 684,427. Higbie Manufacturing Company, Rochester, Mich. Filed Mar. 29, 1955.

Bronson FLIPPER

For Fishing Reels.
First use Oct. 18, 1954; first used as to "Bronson" during the year 1924.

SN 684,946. Martin E. Kearns, d. b. a. Beaver Game Co., Seattle, Wash. Filed Apr. 5, 1955.

BEAVER

For Game Using Rotatable Dials on a Board for Amusement of Automobile Passengers.
First use on or about Jan. 12, 1954.

SN 685,135. Edward H. Smith, Saginaw, Mich. Filed Apr. 7, 1955.

Cougar

For Arrowheads for Huntsmen's Arrows.
First use Nov. 9, 1953.

SN 685,136. Edward H. Smith, Saginaw, Mich. Filed Apr. 7, 1955.

Panther

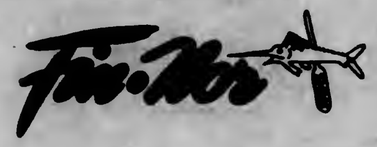
For Arrowheads for Huntsmen's Arrows.
First use Dec. 12, 1953.

SN 685,733. Monark Silver King, Inc., Chicago, Ill. Filed Apr. 18, 1955.

ROCKET

Owner of Reg. No. 518,046.
For Velocipedes, Tricycles, and Sidewalk Bicycles.
First use August 1948.

SN 688,472. Southern Tackle Distributors, Inc., Miami, Fla. Filed May 27, 1955.



For Fishing Reels, Rods, Rod Roller Tops, Rod Guides, Fishing Rod Reel Seats and Ferrules, Fishing Rod Butts, Fishing Rod Gimbals, Fishing Rod Caps, Fishing Chair Gimbals, Fishing Rod Holders, Fishing Gimbal Belts, Fishing Lines, and Fishing Gaffs.
First use Nov. 8, 1954.

SN 689,507. Francis Morse, d. b. a. Morse Manufacturing Company, Dalton, Mass. Filed June 14, 1955.

ROTOBANK

For Toy Bank.
First use Apr. 21, 1955.

SN 695,163. The Kingfisher-Bristol Company, Rockville, Conn. Filed Sept. 22, 1955.

INFALLIBLE

For Fishing Line.
First use on or about Feb. 27, 1953.

SN 695,164. The Kingfisher-Bristol Company, Rockville, Conn. Filed Sept. 22, 1955.

INFALLIBLE

For Fishing Line.
First use on or about Nov. 23, 1954.

SN 695,329. Carl J. Mitchell, Seattle, Wash. Filed Sept. 26, 1955.

DUBLETS

For Game Boards Including Playing Pieces.
First use Sept. 13, 1955.

SN 695,336. Marie Richard Caspal, Sun Valley, Calif. Filed Sept. 27, 1955.

CRICK-A-LURE

For Artificial Fish Lure.
First use June 24, 1955.

CLASS 23

SN 663,106. Imperial Knife Company, Inc., Providence, R. I. Filed Mar. 23, 1954.

EVERLASTING STAINLESS

For Stainless Steel Tableware—Namely, Knives, Forks, and Spoons.
First use Feb. 26, 1954.

SN 663,845. Textile Engineering Corporation, Whitman, Mass. Filed Apr. 2, 1954.

LUBRICOVER

For Textile Spinning Machinery.
First use Sept. 28, 1953.

SN 681,555. Thorens Company, New Hyde Park, N. Y. Filed Feb. 11, 1955.

THORENS

For Spring Wound Dry Shaver.
First use May 24, 1954.

SN 682,663. John Oster Manufacturing Company, Milwaukee, Wis. Filed Mar. 2, 1955.



For Hand Operated Hair Clippers.
First use Aug. 31, 1933.

SN 683,151. Wm. K. Stamets Company, Pittsburgh, Pa. Filed Mar. 9, 1955. Sec. 2(f).



Applicant disclaims all wording on the drawing except "Stamets."
For Lathes, Drilling Machines, Milling Machines, Centering Machines, Planers, Shapers, Hoisting Apparatus, Screw Machines, Power Hammers, Hydraulic Presses, Power Punches, Power Shears, Power Bending Rolls, Pipe Threading Machines, Shell Lathes, Coupling Tapping Machines, Coupling Boring Machines, Die Finishing Machines, and Disc Cut-Off Machines.
First use July 8, 1919.

SN 683,152. Wm. K. Stamets Company, Pittsburgh, Pa. Filed Mar. 9, 1955. Sec. 2(f).

STAMETS

For Lathes, Drilling Machines, Milling Machines, Centering Machines, Planers, Shapers, Hoisting Apparatus, Screw Machines, Power Hammers, Hydraulic Presses, Power Punches, Power Shears, Power Bending Rolls, Pipe Threading Machines, Shell Lathes, Coupling Tapping Machines, Coupling Boring Machines, Die Finishing Machines, and Disc Cut-Off Machines.
First use on or about July 8, 1919.

SN 683,346. Josef Bohle, Solingen-Ohligs, Germany. Filed Mar. 14, 1955.

DIAMANTOR

Owner of German Reg. No. 623,705, dated Dec. 27, 1950.
For Glass Cutters and Glass Drills.

SN 684,111. Cardinal Carryor Co., Louisville, Ky. Filed Mar. 24, 1955.



Cardinal Carryor

For Fork Trucks and Wheeled Vehicles for Transferring Plant Machinery From One Location to Another.
First use Jan. 7, 1955.

SN 684,186. Bendix-Westinghouse Automotive Air Brake Company, Elyria, Ohio. Filed Mar. 25, 1955.

STARTAIRE

For Fluid Actuated Cranking Motor for Internal Combustion Engines.
First use February 1955.

SN 684,545. Electromold Corp., Trenton, N. J. Filed Mar. 30, 1955.

NICOFORM

For Electroformed Articles and Particularly Dies, Cavities, Molds, Shells, and Metal Parts Thereof.
First use Dec. 17, 1954.

SN 684,906. The Woodman Company, Inc., Decatur, Ga. Filed Apr. 4, 1955.

VIBRA—TROF

For Beltless, Vibrating Type Conveyors.
First use on or about Mar. 11, 1950.

SN 685,689. The Federal Foundry Supply Co., Cleveland, Ohio. Filed Apr. 18, 1955. Sec. 2(f).

WHIRLMIX

For Machines for Mixing Sand in Foundry Operations.
First use Aug. 24, 1950.

SN 686,150. Chicago Pneumatic Tool Company, New York, N. Y. Filed Apr. 25, 1955. Sec. 2(f) as to "Power Vane."



The drawing is lined for orange and black.
For Rotary Type Air Compressors.
First use September 1954.

SN 686,151. Chicago Pneumatic Tool Company, New York, N. Y. Filed Apr. 25, 1955. Sec. 2(f).

POWER-VANE

For Motors of the Fluid Pressure Type and Power Tools Operated by Such Motors for Drilling, Reaming, Tapping, Flue Rolling and Grinding, Also Power Wrenches for Setting Up Threaded Securing Members, Also Pumps and Parts Thereof, Also Chain Hoists, and Concrete Vibrators, and Rotary Type Air Compressors.
First use August 1929.

SN 687,396. National Shoe Products Corporation, Boston, Mass. Filed May 12, 1955.

RED DOG

For Knives Used in Shoe Making.
First use Jan. 26, 1955.

SN 687,540. Herman E. Clauss, Affton, Mo. Filed May 16, 1955.

CLAMP-O-VISE

For Work Bench Vises.
First use May 16, 1954.

SN 687,890. Wilhelm Putzer, d. b. a. Deutsche Hebezeugfabrik Putzer-Defries, Dusseldorf, Germany. Filed May 19, 1955.



Owner of German Reg. No. 612,392, dated May 26, 1950.
For Ball Bearing Pulley Blocks.

SN 689,271. Eclipse Fuel Engineering Co., Rockford, Ill. Filed June 10, 1955.



The drawing is lined for red, but no claim is made to any particular color.
For Accessories for Vaporizers, Boilers, and Liquid Heaters—Namely, Hand-Operated Charging Pumps and Automatic Feed Pumps.
First use on or about Apr. 15, 1912.

SN 689,900. Victaulic Company of America, Union, N. J. Filed June 20, 1955.

WHEEL-EZY

For Pipe Grooving Tools.
First use May 13, 1955.

SN 690,026. P & W Tool and Die Company, d. b. a. Winkle Manufacturing Company, Cincinnati, Ohio. Filed June 22, 1955.

Mechanic Maker

For Hobbyists' Machine Tools—Namely, Miniature Lathes With Self-Contained Electric Motor.
First use February 1955.

SN 690,305. Robert C. Morris, Trappe, Md. Filed June 27, 1955.

TRAYDEX

For Egg Transfer Mechanism.
First use May 31, 1955.

SN 690,950. Jarke Manufacturing Company, Chicago, Ill. Filed July 8, 1955.

LEVELIFT

For Materials Handling Equipment Including Crane Grabs and Similar Structures Intended for Use With Lifting Elements and Parts Therefor.
First use on or about June 1, 1955.

SN 691,334. Aaron Fogel, d. b. a. T. T. Products Company, Long Island City, N. Y. Filed July 14, 1955.

Tension-Grip

For Screw Drivers and Nut Holding Socket Wrenches.
First use Apr. 26, 1954.

SN 691,621. Gits Molding Corporation, Chicago, Ill. Filed July 20, 1955.



Owner of Reg. Nos. 434,102, 545,789, and others.
For Cookie Cutters, Salad Servers in the Form of Spoons and Forks, and Stirring Sticks, All Made of Plastic.
First use Mar. 22, 1951, on salad servers.

SN 691,717. Specialty Manufacturing Company, Inc., Houston, Tex. Filed July 21, 1955.

Terrain King

For Power Driven Rotary Cutters for Vegetation Such as Grass, Brush, and Weeds and the Like Including Wheeled Carriage Mounts To Be Drawn by a Separate Vehicle and Including Means for Transmitting Rotational Power to Said Rotary Cutters From Said Separate Vehicle.
First use May 27, 1955.

SN 692,110. Bell & Gossett Company, Morton Grove, Ill. Filed July 29, 1955. Sec. 2(f).

Hydro-Flo

Owner of Reg. Nos. 542,172, 554,429, and 555,376.
For Booster Pumps, Centrifugal Pumps, Air Compressors, and Spray Guns.
First use Oct. 26, 1948, on booster pumps.

SN 692,241. F. Jos. Lamb Company, Detroit, Mich. Filed Aug. 1, 1955.

STOR-MATIC

For Apparatus for Automatically Receiving, Storing, and Discharging Materials and Machine Parts.
First use Jan. 13, 1955.

SN 692,800. NSU-Werke Aktiengesellschaft, Neckarsulm, Wurttemberg, Germany. Filed Aug. 10, 1955.



Priority claimed under Sec. 44(d) on German application filed Feb. 10, 1955; Reg. No. 678,250, dated June 29, 1955.
For Internal Combustion Engines, Clutches, Gears, Oil Pumps, and Air Pumps.

SN 693,795. American Steel Foundries, Chicago, Ill. Filed Aug. 29, 1955.

WP

For Cast Steel Teeth, Blades, Hammers, Plates, Rings, Bin Liners, and Other Elements for Ore and Stone Excavating and Crushing Equipment.
First use July 14, 1954.

SN 694,111. John C. Williams, Oakland, Calif. Filed Sept. 1, 1955.

CENTRA-X

For Bushings and Bearings.
First use Sept. 28, 1949.

SN 696,035. Huber-Warco Company, Marion, Ohio. Filed Oct. 7, 1955.



The drawing is shaded to indicate the yellow background but no claim is made to such color separate and apart from the mark as shown. Owner of Reg. No. 530,312.
For Road Machinery—Namely, Graders, Rollers, Tractors, Wheel Scoops, Snow Plows, Scarifiers and Parts Thereof.
First use Feb. 1, 1955.

SN 696,403. Automation-Engineering Corporation, Los Angeles, Calif. Filed Oct. 14, 1955.

Grav-o-matic

For Automatic Casting Machines.
First use Aug. 19, 1955.

SN 698,698. General Motors Corporation, Detroit, Mich. Filed Nov. 22, 1955.

GM

Owner of Reg. Nos. 271,167, 314,825, and others.
For Pumps and Pumping Apparatus for Supplying Water Under Pressure in Residential and Farm Water Supply Systems and Parts Thereof.
First use in or before May 1940.

SN 699,646. Logansport Machine Co., Inc., Logansport, Ind. Filed Dec. 8, 1955.

ULTRAMATION

For Air and Hydraulic Components Such as Valves, Cylinders, and Related Units.
First use Nov. 7, 1955.

SN 699,898. Foreign Trade Development Corporation, New York, N. Y. Filed Dec. 13, 1955.

INSTANT-GRIP

For Wrenches.
First use July 1955.

SN 329. Glue-Fast Equipment Co., Inc., New York, N. Y. Filed Jan. 9, 1956.

Glue ⊕ Fast

For Moisteners and Gluing Machines.
First use Sept. 29, 1939.

SN 378. Silabert Corporation, Charlotte, N. C. Filed Jan. 9, 1956.

PLICKIT

For Automatic Stapler Machines.
First use Dec. 15, 1955.

SN 839. Steuby Manufacturing Company, St. Louis, Mo. Filed Jan. 16, 1956.

GEN-A-CAM

For Cam Generators.
First use Dec. 8, 1955.

SN 1,055. Camillus Cutlery Company, Camillus, N. Y. Filed Jan. 19, 1956.

TRAILBLAZER

For Pocket, Hunting, and Camping Knives.
First use Jan. 5, 1956.

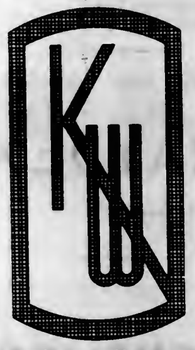
CLASS 26

SN 681,521. Kingston Electronic Corporation, Cambridge, Mass. Filed Feb. 11, 1955.

KINGSTON

For Absorption Analyzers.
First use Aug. 17, 1954.

SN 687,073. Karol-Warner, Highland Park, N. J. Filed May 9, 1955.



For Soil Testing Equipment—Namely, Machines for Determining the Physical Properties of Soils, Soil Shear Strength Testing Machines, Soil Consolidation Testing Machines, Dial Indicators, and Pressure Gauges.
First use June 8, 1954.

SN 690,642. Projection Optics Company, Inc., Rochester, N. Y. Filed July 1, 1955.

BIOX
264

Owner of Reg. No. 599,317.
For Projection Lenses, Lens Assemblies, and Projection Screens.
First use June 4, 1955.

SN 690,798. Bourns Laboratories, Inc., Riverside, Calif. Filed July 6, 1955.

ALL-O-POT

For Potentiometers.
First use Jan. 18, 1955.

SN 691,569. W. & L. E. Gurley, Troy, N. Y. Filed July 19, 1955. Sec. 2(f).

GURLEY

For Engineering Instruments and Surveying Instruments, Including Theodolites, Transits, Levels, Compasses, Alidades, Plane Tables, Leveling Rods, Stadia Rods; Hydraulic Engineering Instruments, Including Water Level Recorders, Current Meters, and Hook Gages; Testing Instruments for Papers and Textiles; Standard Weights and Measures; Meteorological Instruments; Bore Inspection Telescopes; Reticles; and Optical Instruments.
First use in the year 1923 on engineering instruments.

SN 691,570. W. & L. E. Gurley, Troy, N. Y. Filed July 19, 1955. Sec. 2(f).



For Engineering Instruments and Surveying Instruments, Including Theodolites, Transits, Levels, Compasses, Alidades, Plane Tables, Leveling Rods, Stadia Rods; Hydraulic Engineering Instruments, Including Water Level Recorders, Current Meters, and Hook Gages; Testing Instruments for Papers and Textiles; Standard Weights and Measures; Meteorological Instruments; Bore Inspection Telescopes; Reticles; and Optical Instruments.
First use in the year 1920 on engineering instruments.

SN 696,565. McCall Corporation, New York, N. Y. Filed Oct. 17, 1955. Sec. 2(f) as to "McCall's."

McCall's

The drawing is lined to indicate the color yellow. Owner of Reg. Nos. 226,481, 555,927, and 569,596.
For Patterns on Which Have Been Imprinted a Ruler or Measuring Device for Length Adjustments Consisting of a Tiny Ruler Printed on Printed and Transfer Patterns for Garments, Needlework, and Novelties.
First use Apr. 20, 1954.

SN 699,214. Fisher Scientific Company, Pittsburgh, Pa. Filed Dec. 1, 1955.

FISHER RECORDALL

For Laboratory Instrument—Namely, an Instrument for Recording Data Obtained by Electrical and Analytical Measuring Instruments.
First use May 19, 1954.

SN 699,232. Houston Technical Laboratories, Houston, Tex. Filed Dec. 1, 1955.

Seismation

For Seismic Instrumentation Equipment Used in the Semi-Automatic and Automatic Electronic Processing of Seismic Information, Including but not Limited to Such Items of the Magnequipment Family as Magnediac, Magnestacker, Magnetime Delay Unit, Magnepicker, Time Domain Filter, Time Delay Filter, and Time-Depth Recording Oscillograph.
First use Sept. 29, 1955.

SN 699,268. The Warner & Swasey Research Corporation, Cleveland, Ohio. Filed Dec. 1, 1955.

PROBOMAT

Owner of Reg. No. 533,917.
For Apparatus Which Gauges the Dimensions of Mechanical Parts.
First use Aug. 25, 1955.

SN 699,341. Taylor, Taylor & Hobson Limited, Leicester, England. Filed Dec. 2, 1955.

PELOTAL

Owner of British Reg. No. 556,370, dated Dec. 13, 1934.
For Lenses.

SN 699,375. Dinsmore Instrument Company, Flint, Mich. Filed Dec. 5, 1955.

Guideway

For Magnetic Compasses.
First use Oct. 19, 1955.

SN 699,376. Dinsmore Instrument Company, Flint, Mich. Filed Dec. 5, 1955.

Travelite

For Magnetic Compasses.
First use Oct. 19, 1955.

SN 699,377. Dinsmore Instrument Company, Flint, Mich. Filed Dec. 5, 1955.

SIMPLI-MATIC

For Compensators Used in Magnetic Compasses.
First use Oct. 19, 1955.

SN 699,387. Farrell Engineering Corporation, Los Angeles, Calif. Filed Dec. 5, 1955.

TRANSOLATOR

For Telemetry Equipment Consisting of a Transducer and an Oscillator, the Transducer Being One Capable of Measuring Pressure, Angle, Linear Movement, or Acceleration, Etc.
First use Nov. 17, 1955.

SN 699,390. Friden Calculating Machine Co., Inc., San Leandro, Calif. Filed Dec. 5, 1955.

COMPU PUNCH

Owner of Reg. No. 619,898.
For Electrical or Electromechanical Calculating and Recording Apparatus, and Parts and Components Thereof.
First use Oct. 5, 1955.

SN 699,412. Miller Outcalt Company, Hollywood, Calif. Filed Dec. 5, 1955.

Milo

For Binoculars, Cameras, Gadget Bags, Lens Brushes, Tripods, Tripod Heads, Tripod Reducer Bushings, and Flash Guns.
First use March 1942 on lens brushes.

SN 699,492. Gardner-Denver Company, Grand Haven, Mich. Filed Dec. 6, 1955. Sec. 2(f) as to "Gardner-Denver."

GARDNER-DENVER Since 1859

Owner of Reg. No. 240,974.
For Balancers and Thread Gauging Tools.
First use Apr. 26, 1955.

SN 2,285. Dexter Folder Company, Pearl River, N. Y. Filed Feb. 8, 1956.

EXECUTIVE

For Apparatus for Viewing and/or Reading Photographic Negative Film.
First use Aug. 26, 1955.

CLASS 28

SN 690,036. Rawl Engineering & Mfg. Co., Inc., Providence, R. I. Filed June 22, 1955.

Polly Ann

For Jewelry Novelties Made in Whole of, in Part of, or Plated With, Precious Metals—Namely, Key Chains and Silent Butlers.
First use May 1954.

SN 698,463. Sweet Manufacturing Company, Attleboro, Mass. Filed Nov. 17, 1955.



The representation of the goods is disclaimed apart from the mark as shown.
For Jewelry Chains.
First use on or about 1950 in the present form; 1900 as to the portions of the mark.

SN 3,135. The Alvin Corporation, Providence, R. I. Filed Feb. 23, 1956.

SPRING BUD

For Sterling Silver Flatware and Table Cutlery.
First use Feb. 9, 1956.

CLASS 30

SN 696,360. Gladding, McBean & Company, Los Angeles, Calif. Filed Oct. 13, 1955.

CONTOURS

For Artware, Dinnerware, and Dinnerware Accessories of Fine China Including Vases, Center Pieces, Bowls, Jars, Trays, Cover Dishes, Compote, Pitchers, Bottles, and the Like.
First use August 1955.

SN 699,086. Manchester Sterling Company, Honolulu, Territory of Hawaii. Filed Nov. 29, 1955. Sec. 2(f).

MANCHESTER

For China Dinnerware.
First use October 1950.

CLASS 31

SN 651,472. Sparkler Mfg. Co., Mundelein, Ill. Filed Aug. 6, 1953.

SPARKLER FILTERS

Owner of Reg. No. 406,976.
For Domestic and Industrial Filters for Liquids and Parts Thereof.
First use June 15, 1953.

SN 651,527. Norris Dispensers, Inc., Minneapolis, Minn. Filed Aug. 7, 1953. Sec. 2(f).

Norris

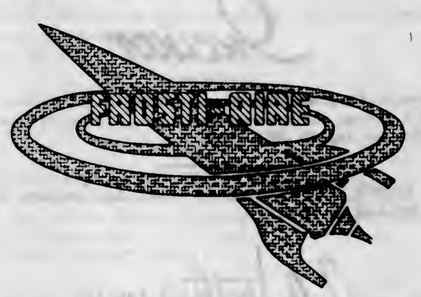
For Refrigerated Milk Dispensing Containers Manually Operated and With Weight-Responsive, Automatic Shutoff.
First use June 1949.

SN 670,596. Mercury Electric Corporation, Kansas City, Mo. Filed July 26, 1954.

MERCURY Kar-Kool

For Portable Air-Conditioning Apparatus.
First use May 1, 1954.

SN 681,125. A A A Sales Company, Philadelphia, Pa. Filed Feb. 7, 1955.



The drawing is lined for green and gold but no claim is made to color except in the association shown.
For Refrigerators.
First use Apr. 2, 1954.

SN 681,650. Tar-Gon Products, Inc., Chicago, Ill., to Kleinway, Incorporated, Chicago, Ill. Filed Feb. 14, 1955.

ICE-PAK

For Refrigerant in a Hermetically Sealed Container for Chilling Purposes.
First use Jan. 3, 1955.

SN 686,487. Soft Water Service Company, Inc., Westfield, N. J. Filed Apr. 28, 1955.

For Water Conditioning Equipment.
First use April 1949.

SN 695,266. Bally Case and Cooler Company, Bally, Pa. Filed Sept. 26, 1955.

Bally

For Refrigerated Display Cases.
First use Jan. 1, 1934.

SN 696,909. Salyer Refining Company, Inc., Oklahoma City, Okla. Filed Oct. 21, 1955.

STAY-READY

For Oil Filters for Automobile Motors.
First use prior to Jan. 1, 1952.

SN 698,066. George M. Munson, d. b. a. Automatic Lindsay Softwater, Villa Park, Ill. Filed Nov. 10, 1955.

ATLAS

For Water Softeners and Water Filters and Equipment Accessory Thereto.
First use on or about Apr. 21, 1952.

CLASS 32

SN 675,323. Spring-A-Way Displays, Inc., Santa Ana, Calif. Filed Oct. 22, 1954.

SPRING-AWAY-DISPLAYS

For Display Racks for the Display and Self-Help Marketing of Bottled and Canned Goods.
First use Mar. 1, 1954.

SN 677,383. The Billings and Spencer Company, Hartford, Conn. Filed Nov. 29, 1954.

Tool-Panel maker

For Floor-to-Ceiling Fixture for Displaying Tools During the Merchandising Thereof.
First use Oct. 5, 1954.

SN 681,727. Transorient Inc., New York, N. Y. Filed Feb. 15, 1955.

DYNASTY

For Case Goods—Namely, Cabinets, Cupboards and Chests, Tables, Desks, Chairs, Screens, and Stools Manufactured of Hardwood.
First use Jan. 15, 1953.

SN 685,908. Illinois Fibre Specialty Company, Chicago, Ill. Filed Apr. 20, 1955.

POST PAD

For Fibre Padding Comprising Layers of Glass, Cotton, Cane, Cellulose, Jute, Paper, Rubber, Hair, and the Like, Shaped and Cut to Size, for Chair Backs and Seats and Upholstered Furniture.
First use on or about Sept. 1, 1954.

SN 694,897. Meilink Steel Safe Co., Toledo, Ohio. Filed Sept. 19, 1955.

HERCULES

For Office Furniture—Namely, Shelves, Trays, File Boxes, Cases, Cabinets, Desks, Tables, Stands, Seats, Stools, Chairs, and Parts Thereof.
First use 1925.

SN 698,033. Heywood-Wakefield Company, Gardner, Mass. Filed Nov. 10, 1955.

HeyWoodite

For Plastic School Furniture—Namely, Chair Seats, Chair Backs, Desk Tops, and Tablet Arms.
First use Nov. 1, 1955.

SN 698,669. Whirlpool-Seeger Corporation, Wilmington, Del. Filed Nov. 21, 1955.

Whirlpool

Owner of Reg. No. 581,480.
For Kitchen Cabinets.
First use Aug. 25, 1955.

SN 700,501. Chicago Spring Products Co., Chicago, Ill. Filed Dec. 23, 1955.

COIL-O-PEDIC

For Upholstery, Pillow, and Mattress Springs, and Spring Units.
First use Dec. 16, 1955.

CLASS 33

SN 672,295. Jenaer Glaswerk Schott & Gen., Mainz, Germany. Filed Aug. 26, 1954.

The mark consists of a thin line extending axially along a surface of the glass tubes or rods.
For Glass Tubes and Glass Rods.
First use 1898; in commerce in 1902.
Subj. to Intf. with Reg. No. 426,076.

SN 688,711. Cory Corporation, Chicago, Ill. Filed June 2, 1955.

CORVette

Owner of Reg. No. 310,260.
For Carafes.
First use Apr. 20, 1955.

CLASS 34

SN 688,527. Gnetz Aktiengesellschaft, Altena, Westphalia, Germany. Filed May 31, 1955.

ORIGINAL Petroman

Priority under Sec. 44(d). German application filed Dec. 8, 1954; Reg. No. 669,851, dated Jan. 17, 1955. Owner of U. S. Reg. No. 101,142.
For Illuminating-, Heating-, Cooking- and Cooling-Apparatus and Implements—Namely, Safety-Lamps, Hurricane-Lamps, Strong-Light-Lamps, Cookers for Liquid Fuels, Appliances and Spare Parts for Lamps and Cookers—Namely, Incandescent Light Burners, Blowpipe Heads, Reflectors, Incandescent Light Bodies.

SN 693,803. Bowser, Inc., Fort Wayne, Ind. Filed Aug. 29, 1955.

Incinor

Owner of Reg. Nos. 251,932 and 219,786.
For Garbage and Refuse Incinerators.
First use Aug. 15, 1955.

SN 693,873. Utility Appliance Corp., Los Angeles, Calif. Filed Aug. 29, 1955.

Weatheramic

For Gas-Fired Heaters, Air Conditioners, and Combination Units Comprising Heaters and Refrigerator Type Air Conditioners.
First use July 21, 1955, on combination units comprising heaters and refrigerator type air conditioners.

SN 694,341. The Turner Brass Works, Sycamore, Ill. Filed Sept. 7, 1955. Sec. 2(f).

TURNER

Owner of Reg. No. 77,497.
For Fuel Burning Blow Torches and Flame Producers and Fire Pots for Use Therewith, Lanterns, Camp Stoves, and Parts of Said Devices—Namely, Fuel Containers and Supports Therefor, Valves, Piping, Burner Heads, Tips, Mantles, and Globes.
First use January 1890 on blow torches and fire pots.

SN 696,686. Allied Stores Corporation, New York, N. Y. Filed Oct. 19, 1955.

Ambassador

Owner of Reg. No. 423,606.
For Room Air Conditioners.
First use July 28, 1952.

SN 697,926. George L. Ohrstrom, d. b. a. G. L. Ohrstrom Associates, Redwood City, Calif.; Ricard Riggs Ohrstrom and Elizabeth J. Ohratrom, executors of the estate of said George L. Ohrstrom, deceased, to Dura-Vent Corporation, Wilmington, Del., and Redwood City, Calif. Filed Nov. 8, 1955.

DURA-VENT

For Vent Pipes and Fittings for Vent Pipes.
First use Oct. 3, 1955.

SN 698,612. George Henry Company, Morton Grove, Ill. Filed Nov. 21, 1955.

COVERED WAGON

For Portable Outdoor Barbecue and Food Dispensing Apparatus.
First use November 1955.

SN 698,682. B Y S Company, Inc., Hartford, Conn. Filed Nov. 22, 1955.

BlueJet

For Oil Stoves, Oil Stove Generators, Starting Torches, Burners, and Parts of Oil Stoves.
First use July 21, 1955.

SN 698,699. General Motors Corporation, Detroit, Mich. Filed Nov. 22, 1955.

GM

Owner of Reg. Nos. 271,167, 314,825, and others.
For Complete Residential Oil and Gas Heating Units, Oil and Gas Burners, Boilers, Furnaces, Service Water Heaters, Air Conditioners, and Parts Thereof.
First use in or before 1939.

SN 699,495. Gardner-Denver Company, Grand Haven, Mich. Filed Dec. 6, 1955. Sec. 2(f).

GARDNER-DENVER Since 1859

Owner of Reg. No. 240,974.
For Drill Steel Forges and Fans.
First use Apr. 26, 1955.

SN 700,650. Pioneer Manufacturing Co., Los Angeles, Calif. Filed Dec. 27, 1955.

LIFETIME

For Water Heaters.
First use Dec. 12, 1955.

CLASS 35

SN 2,151. J. Walter Martin, d. b. a. Martin Tire & Supply Company, Wichita, Kans. Filed Feb. 6, 1956. Sec. 2(f).

MARTIN

For Vehicle Tires.
First use 1949.

CLASS 36

SN 689,635. M. A. Miller Manufacturing Co., Libertyville, Ill. Filed June 16, 1955. Sec. 2(f).

Miller

Owner of Reg. No. 548,888.
For Phonograph Needles.
First use May 1949.

SN 695,287. Dane Manufacturing Company, Union, N. J., to Bruce W. Dane, Cranford, N. J. Filed Sept. 26, 1955.

Great Dane

For Drum Beaters and Mallets for Percussion Musical Instruments.
First use May 24, 1955.

CLASS 37

SN 697,083. Brightwater Paper Company, Adams, Mass. Filed Oct. 25, 1955. Sec. 2(f).

EATONIAN

Owner of Reg. Nos. 362,661, 362,662, and 533,807.
For Writing Paper (Bond, Vellum, and Ledger).
First use in or about February 1931.

SN 697,228. S. S. Kresge Company, Detroit, Mich. Filed Oct. 27, 1955.

DUVAN

For Writing Paper and Envelopes.
First use June 1931.

SN 697,470. Butler Paper Corporations, Chicago, Ill. Filed Nov. 1, 1955.

FIBERSPUN BOND

For Writing, Printing, and Typewriting Papers, Non-Carbonized Paper for Manifolding Works, and Paper for Order Books.
First use 1913.

SN 697,964. The Cleveland Liner & Manufacturing Company, Cleveland, Ohio. Filed Nov. 9, 1955.

LINERETTE

For Paper Impregnated or Coated With Materials of Non-sticking Qualities for Handling Uncured Rubber.
First use Mar. 1, 1925.

SN 698,291. Listo Pencil Corporation, Alameda, Calif. Filed Nov. 15, 1955.

CHEC-KING

For Mechanical Pencil.
First use Sept. 20, 1955.

SN 698,427. Golden Fleece Tissue Mills, Inc., New York, N. Y. Filed Nov. 17, 1955.

GENIE

For Facial Tissues.
First use Nov. 1, 1955.

CLASS 38

SN 679,446. H. and R. Anspach Travel Bureau, Highland Park, Ill. Filed Jan. 5, 1955.



-A LA CARTE-

For Bulletins, Pamphlets or Leaflets.
First use on or about Dec. 21, 1954.

SN 682,499. Lawrence Solin, d. b. a. The Program Aids Company, New York, N. Y. Filed Feb. 28, 1955.

ERASO

For Posters, Charts, Program Aids, Printed Sales Promotion Charts, Printed Cards, Printed Industrial Production Control Charts.
First use Oct. 14, 1954.

SN 682,514. The Washington Post Company, Washington, D. C. Filed Feb. 28, 1955.

The Show's the Thing

For Column in a Newspaper.
First use Apr. 5, 1953.

SN 682,517. The Washington Post Company, Washington, D. C. Filed Feb. 28, 1955.

Pinfeathers From Pegasus

For Column in a Newspaper.
First use Sept. 12, 1954.

SN 682,532. Avery Adhesive Label Corporation, Monrovia, Calif. Filed Mar. 1, 1955.

Perma-grip

For Printed Labels.
First use on or about May 24, 1954.

SN 692,333. Mary Violet Jackson, d. b. a. Rev. M. V. Jackson, Wichita, Kans. Filed Aug. 2, 1955.



For Publications of a Religious Nature, Such Publications Being a Series of Books Which Are Being Published All the Time.
First use April 1945.

SN 693,446. Delma Studios, Inc., New York, N. Y. Filed Aug. 22, 1955.

Delma Studios

The word "Studios" is disclaimed except in combination with the remainder of the mark as shown.
For Photographs.
First use on or about Jan. 1, 1943.

SN 697,850. James F. Rowan, Washington, D. C. Filed Nov. 7, 1955.

IN THE VAN

For Periodical Publication.
First use Aug. 30, 1937.

SN 699,549. Cowles Magazines, Inc., Des Moines, Iowa. Filed Dec. 7, 1955.



The drawing is lined for black and grey. Owner of Reg. No. 349,191.
For Magazine Published Every Two Weeks.
First use Mar. 30, 1955.

CLASS 39

SN 671,967. Sun International Corporation, New York, N. Y. Filed Aug. 19, 1954.

Lady Miller

For Ladies' Hosiery.
First use on or about Feb. 16, 1954.

SN 675,735. Trikotfabriken J. Schiesser A. G., Baden-Wurttemberg, Germany. Filed Oct. 29, 1954.



Knotted Mesh

The wording "Knotted Mesh" is disclaimed apart from the mark as shown.
For Underwear for Men, Women, and Children.
First use June 27, 1905; in commerce Mar. 22, 1949.

SN 675,736. Trikotfabriken J. Schiesser A. G., Baden-Wurttemberg, Germany. Filed Oct. 29, 1954. Sec. 2(f).

Schiesser

For Underwear for Men, Women, and Children.
First use Sept. 28, 1936; in commerce Mar. 22, 1949.

SN 678,715. Endicott Johnson Corporation, Endicott, N. Y. Filed Dec. 21, 1954.

PERMA

Owner of Reg. No. 556,737.
For Shoe Heel Supporters.
First use on or about Nov. 16, 1954.

SN 683,021. Columbia Coat Company, Boston, Mass. Filed Mar. 8, 1955.

St. Vincent Velair

For Men's Overcoats and Topcoats.
First use Jan. 1, 1948.

SN 683,043. Hudson Hosiery Company, Charlotte, N. C. Filed Mar. 8, 1955. Sec. 2(f).

Hudson
S-T-R-E-T-C-H ON

Owner of Reg. Nos. 502,811, 409,416, and 609,936.
For Ladies' Hosiery.
First use Jan. 27, 1955; Dec. 30, 1902, as to "Hudson."

SN 683,509. Hudson Hosiery Company, Charlotte, N. C. Filed Mar. 15, 1955.

Lady Shelby
COMFY STRETCH

For Ladies' Hosiery.
First use Mar. 7, 1955.

SN 684,651. Footwear, Inc., Erin, Tenn. Filed Mar. 31, 1955.

Famous
-FIVES-

For Youths' Shoes, Misses' Shoes, House Shoes and Slippers, Sandals, Boys' Shoes, and Infants' Shoes.
First use on or about Oct. 25, 1954.

SN 686,328. Charles E. Pang, Baltimore, Md. Filed Apr. 26, 1955.

MIKADO

For Shirts.
First use Apr. 9, 1955.

SN 686,382. Morgan & Lindsey, Inc., Jasper, Tex. Filed Apr. 27, 1955.

Morning Bride

For Women's Hosiery and Underwear.
First use 1934 on hosiery.

SN 686,483. Sears, Roebuck and Co., Chicago, Ill. Filed Apr. 28, 1955.

Fieldmaster

For Men's and Boys' Jackets and Trousers.
First use on or about May 7, 1930.

SN 688,879. D. Zimet Inc., d. b. a. Zim-Stra, New York, N. Y. Filed June 3, 1955.

"SUBURBANITE"

For Women's and Misses' Coats and Suits.
First use May 1951.

SN 689,520. Sears, Roebuck and Co., Chicago, Ill. Filed June 14, 1955.

KERRY-TEEN

For Girls' and Misses' Clothing—Namely, Dresses, Suits, Skirts, Blouses, Rompers, Jackets, Vests, Slacks, Shorts, Overalls, Playsuits, Robes, Jodhpurs, Sweaters, Pajamas, Swimwear (Bathing Suits, Caps, Halters), Underwear (Vests, Panties, Union Suits), Slips, Raincoats, Belts, Gloves, Mittens, Scarves, Hats, Riding Pants, Snow Suits.
First use on or about Feb. 14, 1955.

SN 694,603. Simpson & Godlee Limited, Manchester, England. Filed Sept. 13, 1955.



Owner of British Reg. No. 721,597, dated Sept. 7, 1953; and U. S. Reg. Nos. 327,020 and 347,253.
For Women's and Children's Blouses, Bonnets, Dresses, Dressing Gowns, Jumpers, Nightdresses, Pajamas, and Scarves; Women's Ensemble Suits, Outer Skirts, Dressing Jackets, Dressing Wraps, Outer Shirts, Pinafores, Aprons, Overalls, and Underwear; Boys' Outer Shirts and Underwear;

and Men's Dressing Gowns, Dressing Jackets, Nightshirts, Pajamas, Scarves, Aprons, Overalls, Dress, Negligee and Work Shirts and Underwear, and Girls' Outer Skirts and Underwear.

SN 695,394. David Crystal, Inc., New York, N. Y. Filed Sept. 27, 1955.

ROS COMAIN

For Ladies' and Misses' Dresses, Blouses, Skirts, and Suits.
First use Sept. 9, 1955.

SN 696,827. R-Gee Originals, Philadelphia, Pa. Filed Oct. 20, 1955.

R-GEE ORIGINALS

For Boys' Clothing—Namely, Topper Sets, Bobby Suits, Toddler Suits, Suits, Jodhpurs, Slacks, Shorts, Sport Shirts, Sport Jackets, Sleepers, Pajamas.
First use Aug. 10, 1955.

SN 697,381. La Cubanita, Inc., Caguas, Puerto Rico. Filed Oct. 31, 1955.

La Cubanita

The translation of the words "La Cubanita" is "the little Cuban girl."
For Men's Jackets and Sportshirts.
First use Jan. 22, 1951.

SN 698,363. Fred Maccarone, Brooklyn, N. Y. Filed Nov. 16, 1955.

Macomfort

For Sock Linings.
First use Apr. 22, 1955.

SN 698,583. Cluett, Peabody & Co., Inc., Troy, N. Y. Filed Nov. 21, 1955.

WEE ARROW

Owner of Reg. Nos. 75,369, 107,962, and 340,809.
For Shirts.
First use Oct. 6, 1955.

SN 698,860. Globe Novelty House, Inc., New York, N. Y. Filed Nov. 25, 1955.

ROYAL London

Owner of Reg. Nos. 400,230, 402,862, and others.
For Men's Garters, Suspenders, and Belts in the Nature of Garment Supporters.
First use Jan. 2, 1940.

SN 698,889. Kalamazoo Pant Company, Kalamazoo, Mich. Filed Nov. 25, 1955.

SHEEN-O

For Slacks for Men and Boys.
First use Oct. 12, 1954.

SN 699,026. Valmeline Imports, Ltd., New York, N. Y. Filed Nov. 28, 1955.

Valmeline

For Raincoats and Ski Blouses.
First use March 1953 on raincoats.

SN 699,101. Saks & Company, New York, N. Y. Filed Nov. 29, 1955.

Convertible FLYER

For Men's Coats.
First use July 1, 1948.

SN 699,172. Superba Cravats, Inc., Rochester, N. Y. Filed Nov. 30, 1955.

"VISCOUNT"

For Neckties.
First use Nov. 25, 1955.

SN 699,295. Joseph H. Cohen & Sons, Inc., New York, N. Y. Filed Dec. 2, 1955.

FEATHER TWIST

For Men's and Boys' Outer Garments—Namely, Coats, Suits, Jackets, Top Coats, Overcoats, Slacks, Trousers, and Vests.
First use Mar. 22, 1954.

SN 699,352. Bachrach Company, New York, N. Y. Filed Dec. 5, 1955.

FANTASTIQUE

For Cravats.
First use Sept. 19, 1955.

SN 699,355. Burma-Bibas, Inc., New York, N. Y. Filed Dec. 5, 1955.

BOSOM

For Neckties.
First use July 20, 1955.

SN 699,704. H. H. Cutler Company, Grand Rapids, Mich. Filed Dec. 9, 1955.

Lanokins

For Baby Pants and Bibs Made of Plastic or Fabric Materials.
First use [illegible], 1954.

SN 699,764. The Birnie Company, Inc., Atlanta, Ga. Filed Dec. 12, 1955.



The word "Duds" is disclaimed apart from the mark as shown.
For Children's Play Wear, Including Nurse and Doctor Uniforms, Cowboy Suits, Indian Suits, Air Force and Air Line Hostess Suits, Policeman Suits, Railroad Suits, Northwest Mounties Garb, Baseball and Other Athletic Uniforms and Other Costume Clothing—Namely, Ballet Costumes, Masquerade Costumes, Circus Costumes, and Patriotic Costumes.
First use Dec. 1, 1955.

SN 699,912. Lane Bryant Inc., New York, N. Y. Filed Dec. 13, 1955.

Lane Bryant

For Women's, Nurses', and Children's Clothes and Accessories—Namely, Suits, Dresses, Waists, and Skirts for Outer and Under Wear; Sweaters; Hats, Hosiery; Shoes; Belts, Neckties, Scarfs, Shawls, Fur Coats, Fur Collars, Fur Muffs, Gloves; Corsets and Brassieres; Infants' Wear and Accessories; Layettes, Diapers, Dresses, Coats, Shoes, Hats, Socks, Underwear, Nightwear, Gloves, Kimonos, Robes, Buntings, Shirts, and Sweaters.
First use Jan. 1, 1911.

SN 700,150. Miller-Jones Company, Columbus, Ohio. Filed Nov. 25, 1955.

WALKIES

Owner of Reg. No. 315,254.
For Shoes Constructed of Leather.
First use Dec. 13, 1932.

SN 26. Chipman Knitting Mills, Easton, Pa. Filed Jan. 3, 1956.

two-by-two

For Women's and Girls' Hosiery.
First use Dec. 3, 1955.

SN 90. J. C. Penney Company, New York, N. Y. Filed Jan. 3, 1956.

Gaymode

Owner of Reg. No. 286,853.
For Men's, Women's, and Children's Hosiery.
First use Apr. 13, 1931.

CLASS 40

SN 700,885. Countess Mara, Incorporated, New York, N. Y. Filed Dec. 30, 1955.



The drawing is lined for brown.
For Necktie Presses.
First use Oct. 1, 1955.

CLASS 42

SN 682,318. Walter A. Akard, d. b. a. Akard & Company, Dallas, Tex.; Mrs. Donna M. Akard, executrix of said Walter A. Akard, to J. B. Donovan, Dallas, Tex. Filed Feb. 25, 1955.

Don-LIN

For Rayon and Acetate Linen Weave Fabric.
First use January 1950.

SN 687,332. Alice Werder, d. b. a. Florentine Fabrics, Chagrin Falls, Ohio. Filed May 11, 1955.

AEGEAN

For Fabrics—Namely, Textile Piece Goods of Cotton, Linen, and Synthetic Fibres, Bearing Artistically Created Designs.
First use on or about Feb. 5, 1954.

SN 691,260. Amerotron Corporation, New York, N. Y. Filed July 14, 1955.

Pinehurst

For Hand-Woven, All-Wool Tweed Suiting Fabrics.
First use Mar. 14, 1955.

SN 699,117. Toscony Fabrics, Inc., New York, N. Y. Filed Nov. 29, 1955.

RAIFILM

For Plastic Film in Rolls for Use as a Fabric Substitute.
First use Jan. 7, 1947.

SN 699,151. A. D. Juilliard & Co., Inc., New York, N. Y. Filed Nov. 30, 1955.

FASTEEN

For Piece Goods of Velveteen Cottons.
First use on or about Nov. 11, 1955.

SN 699,988. Stein-Tex, Inc., New York, N. Y. Filed Dec. 14, 1955.

SEPARATON

For Cotton Piece Goods.
First use Nov. 30, 1955.

SN 700,644. North Bergen Quilting Co., North Bergen, N. J. Filed Dec. 27, 1955.

DREAMABLE

For Blankets, Coverlets, Pillow Cases, Quilts, Quilted Pads, Comforters.
First use Dec. 6, 1955.

SN 700,690. Tessiture Seriche Bonazzi S. P. A., Milan, Italy. Filed Dec. 27, 1955.

VIA VENETO

For Piece Goods Made of Silk.
First use Jan. 4, 1955.

CLASS 43

SN 699,672. Societe Europeenne de Fils Elastiques, Paris, France. Filed Dec. 8, 1955.



The English translation of the words "Fils Elastiques Guipes" is "covered elastic yarns." The abbreviation "M. D." stands for "Marque Déposée," and the English translation of these words is "registered mark." No claim is made to the words "Fils Elastiques Guipes" or to the abbreviation "M. D." apart from the mark as shown. Priority claimed under Sec. 44(d) on French Reg. No. 451,699, dated June 28, 1965 (Seine); Natl. Inst. No. 58,913.

For Yarns and Threads All Made of a Mixture of Cotton and India-Rubber the Cotton Predominating.

SN 699,673. Societe Europeenne de Fils Elastiques, Paris, France. Filed Dec. 8, 1955.



The English translation of the words "Fils Elastiques Ronds" is "round elastic threads." The abbreviation "M. D." stands for "Marque Déposée," and the English translation of these words is "registered mark." No claim is made to the words "Fils Elastiques Ronds" or to the abbreviation "M. D." apart from the mark as shown. Priority claimed under Sec. 44(d) on French Reg. No. 451,700, dated June 28, 1955 (Seine); Natl. Inst. No. 58,914.

For Yarns and Threads All Made Wholly or Principally of India-Rubber.

SN 699,674. Societe Europeenne de Fils Elastiques, Paris, France. Filed Dec. 8, 1955.



The English translation of the words "Fils Elastiques Carres" is "square cut elastic threads." The abbreviation "M. D." stands for "Marque Déposée," and the English translation of these words is "registered mark." No claim is made to the words "Fils Elastiques Carres" or to the abbreviation "M. D." apart from the mark shown. Priority claimed under Sec. 44(d) on French Reg. No. 451,698, dated June 28, 1955 (Seine); Natl. Inst. No. 58,912.

For Yarns and Threads All Made Wholly or Principally of India-Rubber.

SN 159. Pirelli Lastex Societa Italo Americana Filo Elastico S. P. A., Milan, Italy. Filed Jan. 4, 1956.

Pirellast

Priority claimed under Sec. 44(d) on Italian application filed Oct. 28, 1955; Reg. No. 126,474, dated Jan. 21, 1956.

For Bare Elastic Threads, Elastic Threads covered With Natural, Artificial, or Synthetic Textile Material.

CLASS 44

SN 678,606. Dalmas Limited, Leicester, England. Filed Dec. 20, 1954.

DALMAPLAST

Claims priority under Sec. 44(d) on British Reg. No. 733,562, dated Aug. 31, 1954.

For Medical and Surgical Plasters and Spread Tapes.

SN 687,069. Hychex Products, Chicago, Ill. Filed May 9, 1955.

Valv

For Pessaries.
First use on or about June 1, 1939.

SN 698,154. Fllickiger et Huguenin, La Chaux-de-Fonds, Switzerland. Filed Nov. 14, 1955.

ANCROMOBILE

Owner of Swiss Reg. No. 143,754, dated Sept. 24, 1952.
For Articles for Dental Prosthesis.

SN 698,235. Telex, Inc., St. Paul, Minn. Filed Nov. 14, 1955.

TELECOMB

For Hearing Aid Accessory in the Form of a Ladies' Comb Having Sound Conducting Tubes Associated Therewith.
First use July 12, 1947.

SN 698,762. The American Automobile Association (Incorporated), Washington, D. C. Filed Nov. 23, 1955.



For First Aid Kits Comprising Bandages, Adhesive Tape and "Mercurochrome," Assembled as a Unit in a Container.
First use Mar. 1, 1940.

CLASS 45

SN 698,089. Theonett & Co., Chicago, Ill. Filed Nov. 10, 1955.

Hi-Lo

Owner of Reg. No. 218,821.
For Flavoring and Syrups for Making Soft Drinks.
First use May 1, 1925.

SN 698,716. Thomas J. Moore, d. b. a. Thomas Moore & Co., Minneapolis, Minn. Filed Nov. 22, 1955.



Applicant makes no claim to exclusive use of the words "Fine Beverages" except in the manner shown in the specimens.

For Soft Drinks.
First use Apr. 20, 1954.

SN 699,247. Realemon-Puritan Co., Chicago, Ill. Filed Dec. 1, 1955.

REGENCY

Owner of Reg. No. 519,479.
For Frozen Concentrate for Making Lemonade and Limeade.
First use Feb. 10, 1954.

CLASS 46

SN 655,937. The Taylor Provision Co., Trenton, N. J. Filed Nov. 5, 1953. Sec. 2(f) as to "Taylor."



Applicant disclaims the words "Pork Roll" and "Genuine," and the representation of the slice of pork roll apart from the mark as shown. The drawing is lined for red. Owner of Reg. Nos. 61,356, 113,172, 443,997, and 533,600.

For Pork Roll.
First use June 30, 1953.

SN 664,483. Swift & Company, d. b. a. Armstrong Packing Company, Chicago, Ill. Filed Apr. 13, 1954.

Bird-brand

No rights in the word "Brand" are claimed apart from the mark shown. Owner of Reg. Nos. 118,485 and 117,732.

For Carcasses and Portions of Carcasses of Beef, Lamb, and Veal; Ham, Picnics, Bacon, Frozen Hamburger Patties, Frozen Beef Sandwich Steaks, Shortening Made of Vegetable Oils or Animal Fats or Combinations Thereof, Salad and Cooking Oil, Sliced Dried Beef, Cooked Beef, Smoked Beef Tongue, Chili Con Carne, Pork Sausage, Frankfurts, Olive Loaf, Liver Loaf, Macaroni and Cheese Loaf, Pepper Loaf, Barbecue Loaf, Braunschweiger Liver Sausage, Polish Sausage, Souse, Bologna, Salami, Canned Ham, Canned Chopped Pressed Pork, Canned Luncheon Meat, Canned Pickled Pork Feet.

First use in about 1889.

SN 665,600. Irish Associated Canners, Dublin, Ireland. Filed May 3, 1954.

LIMERICK

For Irish Braised Beef Stew.
First use Nov. 30, 1952.

SN 668,187. Dr. August Oetker, Bielefeld, Germany. Filed June 14, 1954. Sec. 2(f).

Dr. Oetker

Owner of German Reg. No. 546,322, dated June 11, 1942; and U. S. Reg. Nos. 335,000 and 336,156.

For Colors for Foodstuffs; Meat, Fish, Fruit and Vegetable Preserves; Sugared Fruits; Jams; Jellies of Meat, Fish and Vegetables; Thickened Whey, and Cheese Preserves; Coffee, Tea, Tea Preserves; Honey, Artificial Honey; Flour; Vinegar; Mustard; Salt; Sugar Caramel, Sugar Glazine, Milk Sugar; Cocoa; Macaroons for Soup; Yeast, Baking Powder, Pudding Powder, Baking Flour; Pectin; Gelatine Dessert Powder; Fruit Jellies; Powdered Corn Starch for Food Purposes; Sauces, Both Sweet Milk Sauces and Fruit Sauces; Vanilla in Bars, Powder, and Vanilla Extract (Each for Food Purposes); Sugar With Added Food-Color for Fruit Conservation; Self-Rising Flour and Cake Mixes; and Food Flavorings, in Solution, in Extract, or in Powder.

First use July 9, 1936; in commerce July 24, 1939.

SN 668,896. Dawn Donut Co., Inc., Jackson, Mich. Filed June 25, 1954.

THE PRINCESS

For Donut Mix.
First use 1934.

SN 685,083. American Bakers Cooperative, Inc., Ithaca, N. Y. Filed Apr. 7, 1955. COLLECTIVE MARK.

BUNNY

Owner of Reg. No. 575,545.

For Bread, Rolls, Sweet Buns, Doughnuts, Cake, Cookies, and Pies.

First use on or about Sept. 8, 1948.

SN 685,360. Evans Honey Co., Los Angeles, Calif. Filed Apr. 12, 1955.



For Honey.
First use Aug. 17, 1952.

SN 688,985. White Laboratories, Inc., Kenilworth, N. J. Filed June 6, 1955.

LIPONETTE

For Dressed Poultry.
First use May 17, 1955.

SN 690,831. Manley, Inc., Kansas City, Mo. Filed July 6, 1955. Sec. 2(f).

Manley's

Owner of Reg. No. 581,743.
For Popped and Unpopped Popcorn and Coconut Oil for Use as Popcorn Seasoning.
First use Sept. 18, 1940.

SN 690,889. Manley, Inc., Kansas City, Mo. Filed July 7, 1955.

POPCOBETTER

For Coconut Oil for Use as Popcorn Seasoning.
First use during February 1942.

SN 690,890. Manley, Inc., Kansas City, Mo. Filed July 7, 1955. Sec. 2(f).

Manley

Owner of Reg. No. 581,743.
For Popped Popcorn and Popcorn Salt.
First use Sept. 18, 1940.

SN 691,721. Société Anonyme Belge du Froid Industriel, Ostende, Belgium. Filed July 21, 1955.

VITAFROST

Priority claimed under Sec. 44(d) on Belgian Reg. No. 525, dated Apr. 2, 1955.
For Deep-Frozen Fish.

SN 692,012. Plee-Zing, Inc., Evanston, Ill. Filed July 27, 1955.

PLEE-ZING

Owner of Reg. Nos. 145,348, 399,825, and others.
For Honey, Evaporated Milk, Olives, Canned Apples, Apple Butter, Maraschino Cherries, Shredded Cocoanut, Canned Hominy, Macaroni, Mincemeat, Molasses, Canned Pork and Beans, Canned Salmon, Canned Sardines, Canned Shrimp, Spaghetti, Cane and Maple Syrup, Canned Tongue, Vinegar, Candy, and Vegetable Shortening.
First use September 1919 on candy.

SN 693,540. Fine Products Corporation, d. b. a. Nunnally's, Augusta, Ga. Filed Aug. 23, 1955. Sec. 2(f).

THE CANDY OF THE SOUTH

Owner of Reg. No. 125,086.
For Candy.
First use Feb. 8, 1921.

SN 693,544. The Griffith Laboratories, Inc., Chicago, Ill. Filed Aug. 23, 1955.

FOS-3

For Compound for Curing Meat Products, Consisting of Sodium Tripolyphosphate, Tetra Sodium Pyrophosphate, and Sodium Acid Pyrophosphate.
First use July 18, 1955, and Aug. 11, 1954, as to "FOS."

SN 694,217. Evirpure Processors Corp., New York, N. Y. Filed Sept. 6, 1955.

Evirpure

For Canned Chocolate Flavored Milk.
First use Aug. 18, 1955.

SN 694,599. Safeway Stores, Incorporated, Baltimore, Md. Filed Sept. 13, 1955.

EBONY

For Olives.
First use February 1940.

SN 694,665. Philadelphia Chewing Gum Corporation, Havertown, Pa. Filed Sept. 14, 1955. Sec. 2(f).

EL BUBBLE

For Chewing Gum.
First use during May 1949.

SN 694,986. Flag Pet Food Corp., Brooklyn, N. Y. Filed Sept. 20, 1955. Sec. 2(f).

DOG-GONE Good

Applicant disclaims the word "Good" separately from the mark.
For Dog Food.
First use July 22, 1940.

SN 695,035. Sessions Company, Inc., Enterprise, Ala. Filed Sept. 20, 1955.

SCHOOL DAY

For Peanut Butter.
First use 1932.

SN 695,541. Evirpure Processors Corp., New York, N. Y. Filed Sept. 29, 1955.

PurEveR

For Canned Chocolate Flavored Milk.
First use Sept. 13, 1955.

SN 695,722. General Mills, Inc., Wilmington, Del. Filed Oct. 3, 1955.



Owner of Reg. Nos. 536,524, 367,953, and 66,614.
For Wheat Flour, Cake Flour, Cake Mixes, Biscuit Mix, Pie Crust Mix, Icing Mixes, Cooky Mixes, Breakfast Cereals, and Pancake and Waffle Mix.
First use Mar. 23, 1954, on cake mix.

SN 696,173. Kenneth C. Price, d. b. a. Price's Golden Guernsey Dairy, as Price's Guernsey Dairy, and as Price's, Port Orchard, Wash. Filed Oct. 10, 1955.



For Dairy Products—Namely, Whole Fluid Milk, Skim Fluid Milk, Non-Fat Fluid Milk; Vitamin D Fluid Milk, Chocolate Fluid Milk, Fluid Cream, Whipping Cream, and Ice Cream.
First use Oct. 1, 1952.

SN 696,427. Food Specialties, Inc., Indianapolis, Ind. Filed Oct. 14, 1955. Sec. 2(f).

TASTY RICH

Owner of Reg. No. 533,499.
For Peanut Butter, Salad Dressings, Prepared Mustard, and Olives.
First use Nov. 10, 1945, on peanut butter.

SN 696,478. Wass Food Products Co., Chicago, Ill. Filed Oct. 14, 1955.

KITCHEN BARBECUE

No claim is made to the exclusive use of the word "Barbecue" apart from the mark shown.
For Barbecue Sauce.
First use Oct. 5, 1955.

CLASS 47

SN 698,689. Chr. Adt. Kupferberg & Co. Kommanditgesellschaft auf Aktien, Mainz, Germany. Filed Nov. 22, 1955.

KUPFERBERG GOLD

For Sparkling Wines.
First use Aug. 24, 1899.

SN 699,034. Western Winery, Fort Smith, Ark. Filed Nov. 28, 1955.

OZARK GIRL

For Wines.
First use Jan. 8, 1940.

SN 699,421. Old Monastery Wine Co., Inc., New Haven, Conn. Filed Dec. 5, 1955.

MOUNT SINAI

For Wines.
First use Nov. 25, 1955, and on Oct. 9, 1934, as to "Mt. Sinai."

CLASS 48

SN 698,972. The Globe Brewing Co., d. b. a. Hals Brewing Co., Baltimore, Md. Filed Nov. 28, 1955.



The portrait is that of Franz Hals, famous Dutch painter.
Owner of Reg. No. 620,986.
For Beer.
First use May 19, 1952.

SN 700,805. Marshfield Brewing Company, Marshfield, Wis. Filed Dec. 29, 1955.



No claim is made to the word "Beer."
For Beer.
First use 1946.

CLASS 49

SN 675,897. Leroux and Company, Inc., Philadelphia, Pa. Filed Nov. 2, 1954.



No claim is made to the word "Vodka" apart from the mark as shown.
For Vodka.
First use in or about February 1941.

SN 699,694. The Bankers Bond Co., Inc., Louisville, Ky. Filed Dec. 9, 1955.



For Kentucky Straight Bourbon Whiskey.
First use Nov. 24, 1948.

CLASS 50

SN 686,865. Upressit Metal Cap Corporation, Danbury, Conn. Filed May 4, 1955.

POLY-PRESS

For Closures and Parts Thereof, for Metal Drums, Cans, and the Like.
First use Mar. 17, 1955.

SN 697,266. The Angel Plaques Company, Norfolk, Va. Filed Oct. 28, 1955.

Angel Plaques

The word "Plaques" is disclaimed apart from the mark as shown.
For Wall Plaques.
First use Sept. 1, 1955.

SN 697,506. Ruben S. Swarzman, d. b. a. R. S. Swarzman Company, Chicago, Ill. Filed Nov. 1, 1955.

TRI'CO

For Pallets for Supporting Stacks of Paper or Similar Merchandise.
First use July 15, 1955.

SN 698,013. T. E. Booher & Sons, Inc., Albany, Ind. Filed Nov. 10, 1955.

PIGGY BAR

For Feeder Devices for Little Pigs Consisting of a Shelter Embodying a Hopper With an Agitator Therein.
First use July 2, 1954.

SN 698,255. The Felters Company, Boston, Mass. Filed Nov. 14, 1955.

MIRAFELT

No claim is made to the word "Felt" except in connection with the mark as shown.
For Felt in the Piece.
First use Nov. 7, 1955.

CLASS 51

SN 670,926. General Beauty Products, Inc., New York, N. Y. Filed Aug. 2, 1954.

THE SECRET OF LILLY DACHÉ

The name "Lilly Daché" identifies a particular living individual, consent of record. Owner of Reg. Nos. 515,144 and 337,747.
For Permanent Wave Lotions.
First use July 23, 1954.

SN 680,411. Prince Matchabelli, Inc., New York, N. Y. Filed Jan. 24, 1955.

APASSIONATA

"Apassionata" is an Italian word, an English translation of which would be "a musical movement or piece performed in an emotional style."
For Perfume and Cologne.
First use Dec. 10, 1954.

SN 685,105. Givaudan-Delawanna, Inc., New York, N. Y. Filed Apr. 7, 1955.

VERSALIDE

For Substituted Tetrahydronaphthalene Musk Suitable as a Synthetic Musk in Perfumes and the Like.
First use Feb. 10, 1955.
Shaving Lotion, Personal Deodorant, and Hair Lotion.

SN 686,978. Houbigant, Inc., New York, N. Y. Filed May 6, 1955.

THUNDERBIRD

For Eau de Cologne, Talcum Powder, Shaving Cream, After
First use Apr. 27, 1955.

SN 690,295. Mine Safety Appliances Company, Pittsburgh, Pa. Filed June 27, 1955.

FEND-A

For Protective Hand Cream for Use in Industry, in the Household, and for the Purposes Where Such Protection Is Required.
First use at least as early as Oct. 25, 1943.

SN 690,296. Mine Safety Appliances Company, Pittsburgh, Pa. Filed June 27, 1955.

FEND-E

For Protective Hand Cream for Use in Industry, in the Household, and for the Purposes Where Such Protection Is Required.
First use at least as early as Oct. 25, 1943.

SN 690,297. Mine Safety Appliances Company, Pittsburgh, Pa. Filed June 27, 1955.

FEND-F

For Protective Hand Cream for Use in Industry, in the Household, and for the Purposes Where Such Protection Is Required.
First use at least as early as Aug. 1, 1944.

SN 690,298. Mine Safety Appliances Company, Pittsburgh, Pa. Filed June 27, 1955.

FEND-I

For Protective Hand Cream for Use in Industry, in the Household, and for the Purposes Where Such Protection Is Required.
First use at least as early as Oct. 25, 1943.

SN 690,299. Mine Safety Appliances Company, Pittsburgh, Pa. Filed June 27, 1955.

FEND-I
SPECIAL

The word "Special" is disclaimed apart from the mark shown.
For Protective Hand Cream for Use in Industry, in the Household, and for the Purposes Where Such Protection Is Required.
First use at least as early as Nov. 1, 1943.

SN 690,300. Mine Safety Appliances Company, Pittsburgh, Pa. Filed June 27, 1955.

FEND-L

For Protective Hand Cream for Use in Industry, in the Household, and for the Purposes Where Such Protection Is Required.
First use at least as early as Oct. 25, 1943.

SN 690,301. Mine Safety Appliances Company, Pittsburgh, Pa. Filed June 27, 1955.

FEND-O

For Protective Hand Cream for Use in Industry, in the Household, and for the Purposes Where Such Protection Is Required.
First use at least as early as Oct. 25, 1943.

SN 690,302. Mine Safety Appliances Company, Pittsburgh, Pa. Filed June 27, 1955.

FEND-U

For Protective Hand Cream for Use in Industry, in the Household, and for the Purposes Where Such Protection Is Required.
First use at least as early as Mar. 15, 1944.

SN 690,303. Mine Safety Appliances Company, Pittsburgh, Pa. Filed June 27, 1955.

FEND-X

For Protective Hand Cream for Use in Industry, in the Household, and for the Purposes Where Such Protection Is Required.
First use at least as early as Oct. 25, 1943.

SN 690,304. Mine Safety Appliances Company, Pittsburgh, Pa. Filed June 27, 1955.

FEND-PC

For Protective Hand Cream for Use in Industry, in the Household, and for the Purposes Where Such Protection Is Required.
First use at least as early as Mar. 15, 1944.

SN 692,764. Butterfly Products Corporation, New York, N. Y. Filed Aug. 10, 1955.

Paradise
Butterfly

For Nail Polish.
First use June 1, 1955.

SN 692,974. Victor S. R. L., Milan, Italy. Filed Aug. 12, 1955.

COLONIA SILVESTRE

"Colonia Silvestre" means "Sylvan Eau de Cologne" in English. Owner of Italian Reg. No. 117,492, dated May 6, 1954; and U. S. Reg. No. 525,492.
For Perfumes and Eau de Cologne.

SN 693,572. Helaine Seager, Inc., d. b. a. Helaine Seager, Newark, N. J. Filed Aug. 23, 1955.

DROPS OF GOLD

For Cosmetic Facial Oil.
First use Jan. 1, 1954.

SN 694,721. Eli S. Lefler, d. b. a. Lefler and Company, St. Louis, Mo. Filed Sept. 15, 1955.

SWEET MAMMA

For Cosmetics and Toiletries—Namely, Face Lotions, Cold Cream, Foundation Cream, Rose Water and Glycerine Compound Hand Lotion, After-Shave Lotion, Face Powder, Benzoin and Almond Compound Hand Lotion, Talcum Powder, Hair Dressings and Oils.
First use May 1, 1924.

SN 694,825. The Tri-Dermis Company, Akron, Ohio. Filed Sept. 16, 1955.

TRI-DERMIS

For Skin Cream for Protecting Against and Cleaning the Skin of Grease, Paints, Gasoline, Printers' Ink, Oils, Waxes, Dirt, Dust, Etc.
First use June 9, 1933.

SN 694,914. Ravel Perfume Corp., d. b. a. Ravel, New York, N. Y. Filed Sept. 19, 1955.

L'Amour en Rose

In English the mark means "The Love in Rose."
For Perfumery, Colognes, and Toilet Water.
First use Apr. 5, 1955.

SN 695,568. The Realistic Company, Cincinnati, Ohio. Filed Sept. 29, 1955.

TINT-PERM

For Hair Waving Lotion.
First use Aug. 22, 1955.

SN 695,678. Avon Products, Inc., New York, N. Y. Filed Oct. 3, 1955. Sec. 2(f).

AVON

Owner of Reg. Nos. 297,127 and 506,046.
For Cosmetics and Toiletries—Namely, Perfume, Toilet Water, Powder Compacts, Lipstick, Rouge, Liquid Rouge, Face Powder, Talcum Powder, Dusting Powder, Cologne, Sachet Powder, Body, Face and Hand Creams, Antiseptic Cream, Skin Lotions, Deodorants, Astringents, Skin Freshener and Tonic, After Shaving Lotion, Hair Lotion, Hair Cream, Wave Setting Lotion, Nail Polish, Nail Polish Remover, Cuticle Oil and Softener, Nail and Cuticle Cream, Tooth Powder, Tooth Paste, Mascara, Eyebrow Pencil, Eye Shadow, Cake Make-Up, Sun Tan Lotion, Bubbling Bath Preparation and Styptic Cream.
First use September 1929.

SN 695,925. Arnold L. Lewis, d. b. a. Regent-Artistic Co., Los Angeles, Calif. Filed Oct. 5, 1955.

PIN-MAGIC

Owner of Reg. No. 596,091.
For Lotion for Setting Hair in Pin Curls.
First use Aug. 8, 1955.

SN 697,432. House of Westmore, Inc., New York, N. Y. Filed Oct. 31, 1955.

OVERGLO

Owner of Reg. No. 399,428.
For Liquid Rouge, Lipstick, and Nail Polish.
First use Oct. 16, 1955.

SN 697,897. Boyle-Midway Inc., New York, N. Y. Filed Nov. 8, 1955.

Wizard

For Hair Set and Lotion.
First use Mar. 23, 1955.

CLASS 52

SN 667,396. The Harvey Company, Houston, Tex. Filed June 1, 1954.

HUTTO'S dip

The lining on the drawing represents the color red.
For Metal, Silver, and Jewelry Cleaner.
First use Jan. 4, 1954.

SERVICE MARKS

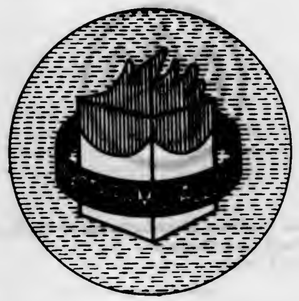
CLASS 100

SN 674,061. Enthone, Incorporated, New Haven, Conn. Filed Sept. 30, 1954.

Enthonics

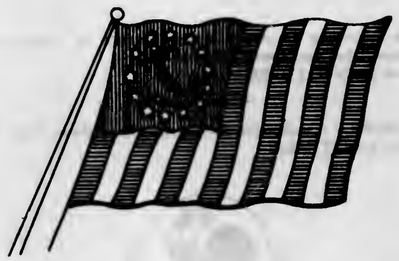
Owner of Reg. Nos. 587,854 and 601,173.
For Research Services for Others Related to the Processing of Metals and Metal Products.
First use Apr. 26, 1954.

SN 675,376. Exothermic Alloys Sales & Service, Inc., Michigan City, Ind. Filed Oct. 25, 1954.



The words "Exothermic Alloys" are disclaimed apart from the mark as shown. The drawing is lined for the colors red and gray, but color is not an essential of the mark.
For Rendering Research and Advisory Services to Members of the Steel and Foundry Industries on Metallurgical Matters, Relating to the Formation and Treatment of Alloy Steels.
First use July 1, 1954; and about July 1, 1948, as to the flaming block without the encircling band and legend thereon.

SN 678,562. United States Power Squadrons, Englewood, N. J. Filed Dec. 17, 1954. COLLECTIVE MARK.



For Services by the Members of the Organization for Encouraging the Study of the Science of Navigation; the Exercise of a High Standard of Skill in Handling Yachts as Well as Cooperation With the Agencies of the United States Government Charged With the Enforcement of the Laws and Regulations Pertaining to Navigation; and for Stimulating Interest in Activities Tending to the Upbuilding of the Navy, Coast Guard, and Merchant Marine.
First use during May 1915.

SN 692,514. Gets Exterminators, Inc., St. Louis, Mo. Filed Aug. 5, 1955.

Getz PRETREET

The word "Exterminators" is disclaimed apart from the mark as shown. Owner of Reg. Nos. 297,145 and 298,237.
For Exterminating Service.
First use March 1955; 1888 as to "Getz."

SN 692,523. Journeymen Barbers, Hairdressers and Cosmetologists' International Union of America, Indianapolis, Ind. Filed Aug. 5, 1955. COLLECTIVE MARK.

MEMBER EMPLOYER GUILD

Owner of Reg. Nos. 514,413, 543,809, and 551,369.
For Services in Barber Shops and Beauty Shops Rendered by the Proprietor.
First use May 19, 1955.

SN 698,226. Sheraton Corporation of America, Boston, Mass. Filed Nov. 14, 1955.



For Hotel and Restaurant Services.
First use November 1940.

CLASS 101

SN 682,748. National Community Television Association, Incorporated, Washington, D. C. Filed Mar. 3, 1955.



For Trade Association Services in the Community Antenna Television Industry—Namely, the Dissemination of News of Interest to Members of the Association, Providing General Legal Advice, Tax Accounting and Engineering Consultation Service, and Furnishing Public Relations Assistance and Materials to Operators of Community Antenna Television Service for the Purpose of Increasing the Business of Such Operators.
First use Nov. 23, 1954.

SN 682,749. National Community Television Association, Incorporated, Washington, D. C. Filed Mar. 3, 1955.

Abel Cable

For Trade Association Services in the Community Antenna Television Industry—Namely, the Dissemination of News of Interest to Members of the Association, Providing General Legal Advice, Tax Accounting and Engineering Consultation Service, and Furnishing Public Relations Assistance and Materials to Operators of Community Antenna Television Service for the Purpose of Increasing the Business of Such Operators.
First use Nov. 23, 1954.

SN 683,169. Richard V. Bibbero, d. b. a. Medical Management Control, San Francisco, Calif. Filed Mar. 10, 1955.



For Advice and Consultation in Connection With Bookkeeping and Accounting Practices and Other Office Management Procedures.
First use June 10, 1953.

CLASS 102

SN 673,197. The Public National Bank and Trust Company of New York, New York, N. Y. Filed Sept. 14, 1954.

Achievement Fund

For Financial and Investment Services With Respect to Savings Account Services.
First use June 21, 1954.

CLASS 103

SN 661,094. National Superior Fur Dressing & Dyeing Co., Chicago, Ill. Filed Feb. 15, 1954.

PROCESS K.T.-61

No claim is made to the exclusive use of the word "Process" apart from the mark shown.
For Cleaning of Furs, Fur Garments, and the Linings Thereof.
First use May 4, 1953.

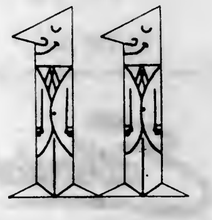
SN 688,129. Chemject Corporation, Chicago, Ill. Filed May 24, 1955.

chemject

For Prevention of Water Seepage Into Underground Structures by the Injection of Chemical Grouts Into the Ground.
First use April 1954.

CLASS 104

SN 696,328. Texas State Network, Inc., Fort Worth, Tex. Filed Oct. 12, 1955.



For Television Program Broadcasting.
First use Sept. 1, 1955.

CLASS 106

SN 668,510. Anson Mfg. Corporation, Erie, Pa. Filed June 21, 1954.



For Precision Contract Manufacturing of Tools, Dies, Jigs, Special Machinery, and Fixtures.
First use Oct. 2, 1953.

SN 668,511. Anson Tool & Gages, Inc., Erie, Pa. Filed June 21, 1954.



For Precision Contract Manufacturing of Tools, Gages, Fixtures, Dies, and Special Machinery.
First use Mar. 1, 1952.

SN 686,353. Chesapeake Industries, Inc., New York, N. Y. Filed Apr. 27, 1955.



Owner of Reg. Nos. 225,981 and 591,784.
For Processing Picture Films.
First use Apr. 29, 1952.

SN 689,894. United Merchants and Manufacturers, Inc., New York, N. Y. Filed June 20, 1955.



Owner of Reg. Nos. 345,553, 586,789, and others.
For Finishing of Fabrics of Others Which Fabrics Are Made of or Contain Synthetic Fibers To Impart Crease Resistance or the Like Thereto.
First use on or about May 1, 1955.

SN 697,924. Northern Dyeing Corporation, Washington, N. J. Filed Nov. 8, 1955.

REDI-SET

For Processing Fabrics To Impart Shrinkage and Crush-Resistance.
First use Mar. 29, 1955.

CLASS 107

SN 690,427. Patti A. Bergen, New York, N. Y. Filed June 29, 1955.

"HOLLYWOOD HIGHLIGHTS"

For Title of a Radio Program Which Consists of Moving Picture Reviews, Musical Selections and Interviews With Movie Stars.
First use Apr. 10, 1955.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

628,039. A-C. Allied Chemical & Dye Corporation. SN 649,681. Pub. 3–20–56. Filed 7–2–53.

628,040. CHEM-O-CEL. Carl J. Linenfelser, d. b. a. Brooklyn Products. SN 673,751. Pub. 3–20–56. Filed 9–24–54.

628,041. STEYERMARK. Julian A. Steyermark. SN 679,242. Pub. 3–20–56. Filed 12–31–54.

628,042. LAMITEX. Franklin Fibre-Lamitex Corp. SN 683,466. Pub. 3–20–56. Filed 3–22–55.

628,043. LYQUAFLOUR. Whitehead Brothers Company. SN 687,239. Pub. 3–20–56. Filed 5–10–55.

CLASS 2

628,044. TEL-U-TOP AND DESIGN. Revere Copper and Brass Incorporated. SN 680,976. Pub. 3–20–56. Filed 2–2–55.

628,045. POURITE. Crown Cork & Seal Company, Inc. SN 683,307. Pub. 3–20–56. Filed 3–14–55.

628,046. STRATO-WARE. Central Home Products, Inc. SN 685,002. Pub. 3–20–56. Filed 4–6–55.

628,047. BOLTABEST. The General Tire & Rubber Company. SN 690,448. Pub. 3–20–56. Filed 6–29–55.

628,048. BOLTABILT. The General Tire & Rubber Company. SN 690,450. Pub. 3–20–56. Filed 6–29–55.

628,049. BOLTA. The General Tire & Rubber Company. SN 690,455. Pub. 3–20–56. Filed 6–29–55.

628,050. FRONTIER. Columbian Enameling and Stamping Co., Inc. SN 694,859. Pub. 3–20–56. Filed 9–19–55.

628,051. PULPEX. The Diamond Match Company. SN 695,398. Pub. 3–20–56. Filed 9–27–55.

628,052. SUNBEAM. Sunbeam Corporation. SN 697,046. Pub. 3–20–56. Filed 10–24–55.

628,053. EARRING TENDA. Ti-Dee Creations Inc. SN 697,055. Pub. 3–20–56. Filed 10–24–55.

628,054. GLAMOR PAK. E. Walter Geckler. SN 697,159. Pub. 3–20–56. Filed 10–26–55.

628,055. KEG-IT. International Paper Company. SN 697,225. Pub. 3–20–56. Filed 10–27–55.

628,056. "PANTA-LOONY." Lull-A-Baby Products. SN 697,562. Pub. 3–20–56. Filed 11–2–55.

628,057. B-B AND DESIGN. The Bartgis Brothers Company. SN 700,160. Pub. 3–20–56. Filed 12–22–55.

CLASS 3

628,058. TRANS-WORLD CREATIONS AND DESIGN. Gould & Lending, Inc. SN 695,087. Pub. 3–20–56. Filed 9–21–55.

628,059. STRADDLE-BAG. MacArthur Products Inc. SN 695,985. Pub. 3–20–56. Filed 10–6–55.

CLASS 4

628,060. DURA-GLIT. Duraglit Limited. SN 668,443. Pub. 3–20–56. Filed 6–18–54.

628,061. PACIFLEX. Pacific Grinding Wheel Co. SN 679,234. Pub. 3–20–56. Filed 12–31–54.

628,062. RESINFORCED. Pacific Grinding Wheel Co. SN 679,235. Pub. 3–20–56. Filed 12–31–54.

628,063. DRY GLOSS. M. E. Blumenfeld, d. b. a. Dry Gloss Manufacturing Company. SN 680,715. Pub. 3–20–56. Filed 1–31–55.

628,064. FUL-GLEAM. The Fuller Brush Company. SN 686,045. Pub. 3–20–56. Filed 4–22–55.

628,065. LAYER BUILT. The Williams Company. SN 691,251. Pub. 3–20–56. Filed 7–13–55.

628,066. TUMBLEX. Norton Company. SN 692,011. Pub. 3–20–56. Filed 7–27–55.

628,067. DOUBLE XX AND DESIGN. Simonds Abrasive Company. SN 693,864. Pub. 3–20–56. Filed 8–29–55.

CLASS 5

628,068. GLUE FAST AND DESIGN. Glue-Fast Equipment Co., Inc. SN 666,355. Pub. 3–20–56. Filed 5–14–54.

628,069. NEOLAG. Main Products Corporation. SN 678,336. Pub. 3–20–56. Filed 12–14–54.

628,070. FERMOL. The Fordath Engineering Company Limited. SN 680,750. Pub. 3–20–56. Filed 1–31–55.

628,071. GLYSO-EXOL. The Fordath Engineering Company Limited. SN 680,751. Pub. 3–20–56. Filed 1–31–55.

628,072. "REDKAN." Palmer Asbestos & Rubber Corp., Inc. SN 684,872. Pub. 3–20–56. Filed 4–4–55.

628,073. AGS. Scheidemandel-Motard-Werke, A. G. SN 687,431. Pub. 3–20–56. Filed 3–22–55.

628,074. AGSOS. Scheidemandel-Motard-Werke, A. G. SN 687,433. Pub. 3–20–56. Filed 3–22–55.

628,075. BAYTEX. Union Bay State Chemical Co., Inc. SN 688,478. Pub. 3–20–56. Filed 5–27–55.

628,076. CELLUX AND DESIGN. Feldmuhle Ltd. SN 689,375. Pub. 3–20–56. Filed 6–13–55.

628,077. PROTECTO-MASK. Chicago Show Printing Company, d. b. a. Mystik Adhesive Products. SN 690,680. Pub. 3–20–56. Filed 7–5–55.

CLASS 6

628,078. NITRO X. Midwest Products Co. SN 680,212. Pub. 3–20–56. Filed 1–20–55.

628,079. POPPY. Pacific Guano Company. SN 686,218. Pub. 3–20–56. Filed 4–25–55.

628,080. VELVASIL. General Electric Company. SN 686,902. Pub. 3–20–56. Filed 5–5–55.

628,081. 105. Shell Chemical Corporation. SN 687,636. Pub. 3–20–56. Filed 5–16–55.

628,082. MERCULINE. Henry L. Woudhuysen, d. b. a. H. L. Woudhuysen & Associates. SN 687,741. Pub. 3–20–56. Filed 5–17–55.

628,083. HIK-RE LITE AND DESIGN. Power Petroleum Products. SN 688,076. Pub. 3–20–56. Filed 5–23–55.

628,084. SOHIO AND DESIGN. The Standard Oil Company. SN 688,784. Pub. 3–20–56. Filed 5–9–55.

628,085. DREWFLOC. E. F. Drew & Co., Inc. SN 691,557. Pub. 3–20–56. Filed 7–19–55.

CLASS 7

628,086. LUSTRE-CURL. Norcross, Inc. SN 677,274. Pub. 3–20–56. Filed 11–15–54.

628,087. POLY-ROPE. Industrial Products Company. SN 698,284. Pub. 3–20–56. Filed 11–15–55.

628,088. MORE ROPE AND DESIGN. John Flocker and Company. SN 700,496. Pub. 3–20–56. Filed 12–29–55.

CLASS 8

628,089. AQUAFILTER AND DESIGN. United States Filter Products Corp., to Aquafilter Corporation. SN 669,157. Pub. 3–20–56. Filed 6–29–54.

628,090. MILLECEL. Brown & Williamson Tobacco Corporation. SN 693,969. Pub. 3–20–56. Filed 8–31–55.

628,091. FAN-C-TRAY. Harold D. McColl. SN 695,099. Pub. 3–20–56. Filed 9–21–55.

628,092. GOLDEN THROAT. Rembrandt Tobacco Corporation (Overseas) Limited. SN 697,698. Pub. 3–20–56. Filed 11–4–55.

CLASS 10

628,093. ZIPP. Whitley Chemical Corporation. SN 670,641. Pub. 3–20–56. Filed 7–26–54.

628,094. REDOXIT. Lohmann & Co., K. G. SN 678,406. Pub. 3–20–56. Filed 12–15–54.

628,095. TUCO. The Upjohn Company. SN 680,329. Pub. 3–20–56. Filed 1–21–55.

628,096. UPCO. The Upjohn Company. SN 680,333. Pub. 3–20–56. Filed 1–21–55.

628,097. GLORIOUS. Soil Builders International Corp. SN 695,768. Pub. 3–20–56. Filed 10–3–55.

CLASS 12

628,098. CANDOR. Candor Engineering Company. SN 661,613. Pub. 3–20–56. Filed 2–25–54.

628,099. HOLDTITE. Harlan H. Edwards. SN 666,928. Pub. 3–20–56. Filed 5–24–54.

628,100. SPATTERFECT. National Gypsum Company. SN 694,903. Pub. 3–20–56. Filed 9–19–55.

CLASS 13

628,101. OB AND DESIGN. The Ohio Brass Company. SN 659,356. Pub. 3–20–56. Filed 1–12–54.

628,102. GALVA-LINE. Manufacturers Corporation of Mansfield, Ohio. SN 696,155. Pub. 3–20–56. Filed 10–10–55.

CLASS 14

628,103. DEPOLARIZED. The International Nickel Company, Inc. SN 672,081. Pub. 3–20–56. Filed 8–23–54.

628,104. AACC WITHIN A CIRCLE. Advance Aluminum Castings Corp. SN 698,821. Pub. 3–20–56. Filed 11–25–55.

628,105. GRAPH-AIR. The Timken Roller Bearing Company. SN 698,934. Pub. 3–20–56. Filed 11–25–55.

CLASS 15

628,106. PRESTO MOLY AND DESIGN. Presto-Moly Corporation. SN 644,255. Pub. 12–27–55. Filed 3–26–53.

628,107. AMF AND DESIGN. American Machine & Foundry Company. CONSOLIDATED CERTIFICATE. SN 676,294, pub. 5–31–55, filed 11–9–54, Cl. 15; SN 676,292, pub. 8–9–55, filed 11–9–54, Cl. 19; SN 676,293, pub. 2–21–56, filed 11–9–54, Cl. 22; SN 676,295, pub. 1–24–56, filed 11–9–54, Cl. 23; SN 676,291, pub. 7–12–55, filed 11–9–54, Cl. 34.

628,108. TRIPLE C. The Motch & Merryweather Machinery Company. SN 681,286. Pub. 3–20–56. Filed 2–8–55.

628,109. CCC. The Motch & Merryweather Machinery Company. SN 681,287. Pub. 3–20–56. Filed 2–8–55.

628,110. CANDLEGEM. Edward J. McKensie and Andrew A. Nowak, Jr. SN 681,931. Pub. 3–20–56. Filed 2–18–55.

628,111. PHILLIPS 66 AND DESIGN. Phillips Petroleum Company. SN 682,057. Pub. 3–20–56. Filed 2–21–55.

CLASS 16

628,112. STONEKOTE. Stonecoat. SN 681,371. Pub. 3–20–56. Filed 2–9–55.

628,113. HURRI-JOB PRIMER. Thomson-Porcelite Paint Co., d. b. a. Thomson-Porcelite Paint Company. SN 683,939. Pub. 3–20–56. Filed 3–21–55.

628,114. TEX-MIX. Western States Lacquer Corporation. SN 694,829. Pub. 3–20–56. Filed 9–16–55.

628,115. H BAR H. Hubbs and Howe Company. SN 697,097. Pub. 3–20–56. Filed 10–25–55.

628,116. CALIFORNIA COLORS. Sillers Paint & Varnish Co. SN 700,130. Pub. 3–20–56. Filed 12–16–55.

CLASS 17

628,117. KAREL I AND DESIGN. N. V. Karel I Sigarenfabrieken v/h H. J. van Abbe. SN 682,988. Pub. 3–20–56. Filed 3–7–55.

628,118. AYLON. British & Foreign Tobacco Company Limited. SN 695,276. Pub. 3–20–56. Filed 9–26–55.

628,119. SCOPE. H. J. Gorfinkel, d. b. a. General Products Company. SN 697,286. Pub. 3–20–56. Filed 10–28–55.

628,120. GOLDEN THROAT. Rembrandt Tobacco Corporation (Overseas) Limited. SN 697,699. Pub. 3–20–56. Filed 11–4–55.

CLASS 18

628,121. HELIOGEN AND DESIGN. Heliogen Products, Inc. SN 639,634. Pub. 3–20–56. Filed 12–17–52.

628,122. S. B. PENICK & COMPANY. S. B. Penick & Company. SN 668,190. Pub. 3–20–56. Filed 6–14–54.

628,123. VI-ARTHROL. Chas. Pfizer & Co., Inc. SN 677,597. Pub. 3–20–56. Filed 12–1–54.

628,124. VI-ARTHRONOL. Chas. Pfizer & Co., Inc. SN 677,598. Pub. 3–20–56. Filed 12–1–54.

628,125. SEBB. Max Factor & Co. SN 678,210. Pub. 3–20–56. Filed 12–13–54.

628,126. RA-MANA. Robert S. Martin, d. b. a. Ra-Mana Distributors. SN 678,649. Pub. 3–20–56. Filed 12–20–54.

628,127. MEPHENAMINE. N. V. Koninklijke Pharmaceutische Fabrieken v/h Brocades-Stheeman & Pharmacia. SN 679,394. Pub. 3–20–56. Filed 1–4–55.

628,128. TUCOMYCIN. The Upjohn Company. SN 680,325. Pub. 3–20–56. Filed 1–21–55.

628,129. HAMLINS. Hamlins Wizard Oil Co. SN 681,918. Pub. 3–20–56. Filed 2–18–55.

628,130. OFFEX AND DESIGN. Daval Co., Inc. SN 685,662. Pub. 3–20–56. Filed 4–18–55.

628,131. MD WITHIN A CIRCLE. Richard C. Brush, d. b. a. Physicians Modern Drug Company. SN 688,902. Pub. 3–20–56. Filed 6–6–55.

628,132. OP-HYDRIN. Broemmel Pharmaceuticals. SN 690,862. Pub. 3–20–56. Filed 7–7–55.

628,133. S-MEZA. Imperial Chemical Pharmaceuticals Limited. SN 691,371. Pub. 3–20–56. Filed 7–15–55.

628,134. MEVANIN-C. Beutlich, Inc. SN 691,423. Pub. 3–20–56. Filed 7–18–55.

628,135. INTRALUBE. Louis I. Weiner, d. b. a. Tablax Company. SN 691,595. Pub. 3–20–56. Filed 7–19–55.

628,136. MERMIX. Merck & Co., Inc. SN 691,868. Pub. 3–20–56. Filed 7–25–55.

628,137. PACI-DENT. Rogers Laboratories, Inc. SN 691,892. Pub. 3–20–56. Filed 7–25–55.

628,138. TROPEDYL. Schenley Laboratories, Inc. SN 691,895. Pub. 3–20–56. Filed 7–25–55.

628,139. A-TROL. Eugene G. Landberg, d. b. a. Henry G. Landberg Sales Co. SN 691,949. Pub. 3–20–56. Filed 7–26–55.

628,140. CEVICETYL. Chicago Pharmacal Company. SN 692,574. Pub. 3–20–56. Filed 8–8–55.

628,141. STAY LUST AND DESIGN. George A. Kastner, Sr., d. b. a. Stay Lust Food Company. SN 692,606. Pub. 3–20–56. Filed 8–8–55.

CLASS 19

628,107. CONSOLIDATED CERTIFICATE. See Class 15.

628,142. EVERGUARD. Nathaniel Seal, d. b. a. The Evergard Company. SN 675,920. Pub. 3–20–56. Filed 11–2–54.

628,143. MOBYSCOOTER. Ateliers de la Motobecane. SN 683,083. Pub. 3–20–56. Filed 12–6–54.

628,144. MOBYMATIC. Ateliers de la Motobecane. SN 683,084. Pub. 3–20–56. Filed 1–3–55.

628,145. KAP AND DESIGN. Kwikset Locks, Inc. SN 685,501. Pub. 3–20–56. Filed 4–14–55.

628,146. "MON-O-CRUISER." Mon-O-Coach, Inc. SN 685,844. Pub. 3–20–56. Filed 4–19–55.

628,147. WACO AND DESIGN. Washington Aluminum Company, Inc. SN 685,874. Pub. 3–20–56. Filed 4–19–55.

628,148. ROLARK. John A. Roehrig. SN 693,770. Pub. 3–20–56. Filed 8–26–55.

628,149. HY-POWER. The Midland Steel Products Company. SN 697,107. Pub. 3–20–56. Filed 10–25–55.

628,150. PS AND DESIGN. The Anderson Company. SN 697,262. Pub. 3–20–56. Filed 10–28–55.

628,151. FREE LOCK. Free-Lock Corporation. SN 697,283. Pub. 3–20–56. Filed 10–28–55.

628,152. RAPIER. Sunbeam-Talbot Limited. SN 697,337. Pub. 3–20–56. Filed 10–28–55.

628,153. CHAFFEE-SKI ETC. AND DESIGN. Floyd L. Chaffee. SN 697,358. Pub. 3–20–56. Filed 10–31–55.

CLASS 20

628,154. ROSSELLA. Dermide Limited. SN 683,184. Pub. 3–20–56. Filed 3–10–55.

CLASS 21

628,155. HATEMP. Continental Copper & Steel Industries, Inc. SN 663,635. Pub. 3–20–56. Filed 3–31–54.

628,156. PERMAPRENE. Continental Copper & Steel Industries, Inc. SN 663,636. Pub. 3–20–56. Filed 3–31–54.

628,157. HATSEAL. Continental Copper & Steel Industries, Inc. SN 663,638. Pub. 3–20–56. Filed 3–31–54.

628,158. 'AEROSONIC.' Realisations Ultrasoniques S. A. R. L. SN 674,844. Pub. 2–14–56. Filed 10–14–54.

628,159. RANSBURG. Ransburg Electro-Coating Corp. SN 680,797. Pub. 3–20–56. Filed 1–31–55.

628,160. CO-OP TRI-FIRE. National Cooperatives, Incorporated. SN 681,617. COLLECTIVE MARK. Pub. 3–20–56. Filed 2–14–55.

628,161. TRAV-LER. Trav-Ler Radio Corporation. SN 682,603. Pub. 3–20–56. Filed 3–1–55.

628,162. CARBOFILM. Aerovox Corporation. SN 683,255. Pub. 3–20–56. Filed 3–11–55.

628,163. MR AND DESIGN. Mole-Richardson Co. SN 683,615. Pub. 3–20–56. Filed 3–16–55.

628,164. MONO MOTORS. Redmond Company, Inc. SN 683,980. Pub. 3–20–56. Filed 3–22–55.

628,165. MICRO-LARM. The Protective Research Company, Inc. SN 690,035. Pub. 3–20–56. Filed 6–22–55.

628,166. THERMO-LOK. Cable Electric Products, Inc. SN 691,930. Pub. 3–20–56. Filed 7–26–55.

628,167. EMI AND DESIGN. Electric & Musical Industries Limited. SN 694,792. Pub. 12–20–55. Filed 9–16–55.

628,168. TERMALUM. Aircraft-Marine Products, Inc. SN 697,520. Pub. 3–13–56. Filed 11–2–55.

628,169. ISOBESTOS. Natvar Corporation. SN 698,074. Pub. 3–20–56. Filed 11–10–55.

628,170. ARROW-HART. The Arrow-Hart & Hegeman Electric Company. SN 698,120. Pub. 3–20–56. Filed 11–14–55.

628,171. A-H. The Arrow-Hart & Hegeman Electric Company. SN 698,121. Pub. 3–20–56. Filed 11–14–55.

628,172. ELECTRO-GRAND. Electro Hygiene, Inc. SN 698,148. Pub. 3–20–56. Filed 11–14–55.

628,173. SYNCRODYNE. U. S. Electrical Motors, Inc. SN 698,246. Pub. 3–20–56. Filed 11–14–55.

628,174. VARIDYNE. U. S. Electrical Motors, Inc. SN 698,247. Pub. 3–20–56. Filed 11–14–55.

628,175. FIXLIGHT. Aktiebolaget Fixfabriken. SN 698,256. Pub. 3–20–56. Filed 11–15–55.

628,176. DUR-ANO-FLEX. The Duriron Company, Inc. SN 698,271. Pub. 3–20–56. Filed 11–15–55.

628,177. POTPOT. Clarostat Mfg. Co., Inc. SN 698,341. Pub. 3–20–56. Filed 11–16–55.

CLASS 22

628,107. CONSOLIDATED CERTIFICATE. See Class 15.

628,178. NEWAYGO NEWT AND DESIGN (REPRESENTATION OF A HUMAN MALE). Newaygo Sportsmens Supply, Inc. SN 676,396. Pub. 3–20–56. Filed 11–10–54.

628,179. COVE BAY. Cove Bay Tackle Co. SN 678,311. Pub. 3–20–56. Filed 12–14–54.

628,180. PLAY N' PRAY TOYS AND DESIGN. Alice M. Rowe. SN 678,674. Pub. 3–20–56. Filed 12–20–54.

628,181. VICKI. Elite Creations, Inc. SN 679,278. Pub. 3–20–56. Filed 1–3–55.

628,182. LIL' DIVOT. Suburban Toy & Manufacturing Corp. SN 680,912. Pub. 3–20–56. Filed 2–1–55.

628,183. MATRIX AND DESIGN. Thomas J. King. SN 681,275. Pub. 3–20–56. Filed 2–8–55.

628,184. GRANDSTAND MANAGER. Frank E. Seale, d. b. a. The Galma Company. SN 682,596. Pub. 3–20–56. Filed 3–1–55.

628,185. HAWAIIAN SPEED SWIMMER. Hawaiian Speed Swimmers Inc. SN 682,730. Pub. 3–20–56. Filed 3–3–55.

628,186. SPACE DETECTIVE GAME AND DESIGN. Harold J. Barnes. SN 683,959. Pub. 3–20–56. Filed 3–22–55.

628,187. PUNCH-IN-VITE. Punch-In-Vite Enterprises. SN 686,089. Pub. 3–20–56. Filed 4–22–55.

628,188. GINNY. Vogue Dolls, Inc. SN 686,345. Pub. 3–20–56. Filed 4–26–55.

628,189. MONOFIL. Penn Fishing Tackle Mfg. Co. SN 691,635. Pub. 3–20–56. Filed 7–20–55.

628,190. BALLYHOO. Magnus Oceanic Corp. SN 691,702. Pub. 3–20–56. Filed 7–21–55.

CLASS 23

628,107. CONSOLIDATED CERTIFICATE. See Class 15.

628,191. INTERCONTINENTAL. Intercontinental Mfg. Company, Inc. SN 574,966. Pub. 12–18–51. Filed 3–5–49.

628,192. INTERCONTINENTAL 26 AND DESIGN. Intercontinental Mfg. Company, Inc. SN 574,967. Pub. 12–18–51. Filed 3–5–49.

628,193. ADAPTO-FEED. High Production Machine Company, Inc., to E. G. Staude Manufacturing Company, Inc. SN 653,685. Pub. 3–20–56. Filed 9–24–53.

628,194. STA-LEVEL. Price Industries Ltd. SN 663,392. Pub. 3–20–56. Filed 3–26–54.

628,195. DESIGN OF GEAR. Kurt Orban Company, Inc. SN 676,992. Pub. 3–20–56. Filed 11–19–54.

628,196. BORGI. Robert R. Borgfeldt, d. b. a. Borgfeldt Associates. SN 677,546. Pub. 3–20–56. Filed 12–1–54.

628,197. EVEREST. Serio S. P. A. Officine Meccaniche di Precisione. SN 679,496. Pub. 3–13–56. Filed 1–5–55.

628,198. AIRBOY. Airboats, Inc. SN 680,504. Pub. 7–19–55. Filed 1–26–55.

628,199. "HARNESSING HORSEPOWER." Murray Equipment Company, Inc. SN 682,453. Pub. 3–20–56. Filed 2–28–55.

628,200. "AIR TRAC." John W. Burress. SN 684,108. Pub. 3–20–56. Filed 3–24–55.

628,201. PLASTERTEX. Fred Christian. SN 690,683. Pub. 3–20–56. Filed 7–5–55.

628,202. TRU-GRIT. Wheel Trueing Tool Company. SN 690,985. Pub. 3–20–56. Filed 7–8–55.

628,203. ZIP GUN. Chicago Pneumatic Tool Company. SN 691,355. Pub. 3–20–56. Filed 7–15–55.

628,204. A DRIVE AND DESIGN. U. S. Industries, Inc. SN 691,591. Pub. 3–20–56. Filed 7–19–55.

628,205. SWINGLINE CUB. Speed Products Company, Inc. SN 691,968. Pub. 3–20–56. Filed 7–26–55.

628,206. ROL-R-LIFT. Arnolt Corporation. SN 694,624. Pub. 3–20–56. Filed 9–14–55.

628,207. KEY-LOK. Portable Electric Tools, Inc. SN 695,756. Pub. 3–20–56. Filed 10–3–55.

628,208. CP HANDRIL AND DESIGN. Chicago Pneumatic Tool Company. SN 695,802. Pub. 3–20–56. Filed 10–4–55.

628,209. DIPLOMAT. S. K. S. Machine Company. SN 696,176. Pub. 3–20–56. Filed 10–10–55.

628,210. HOMEMAKER. S. K. S. Machine Company. SN 696,177. Pub. 3–20–56. Filed 10–10–55.

628,211. FERCANA'S DUCK HEAD AND DESIGN. James E. Fercana. SN 696,644. Pub. 3–20–56. Filed 10–18–55.

628,212. COLÚRA. Dirilyte Company of America, Inc. SN 696,779. Pub. 3–20–56. Filed 10–20–55.

628,213. HUSH THE WORLD IS LISTENING AND DESIGN. Howard R. Johnson, d. b. a. Howard Johnson Transitions. SN 696,806. Pub. 3–20–56. Filed 10–20–55.

628,214. EDGE-O-MATIC AND DESIGN. Utility Tool Company, Inc. SN 696,851. Pub. 3–20–56. Filed 10–20–55.

628,215. NUPLA AND DESIGN. New Plastic Corporation. SN 697,312. Pub. 3–20–56. Filed 10–28–55.

628,216. TOM THUMB. D. B. Smith & Company, Inc. SN 697,420. Pub. 3–20–56. Filed 10–31–55.

628,217. MONOMAC. Imperial Knife Company, Inc. SN 697,480. Pub. 3–20–56. Filed 11–1–55.

628,218. DIAMOND DESIGN. Diamond Chain Company, Inc. SN 698,329. Pub. 3–20–56. Filed 11–30–55.

628,219. COBRA. Stephen Products, Inc. SN 698,930. Pub. 3–20–56. Filed 11–25–55.

628,220. REGINA. Anthony P. Giunta. SN 699,945. Pub. 3–27–56. Filed 12–29–55.

628,221. PICKWICK. Pickwick Company. SN 700,419. Pub. 3–20–56. Filed 12–23–55.

CLASS 26

628,222. MIXOMETER. Challenge Manufacturing Co. SN 678,595. Pub. 3–20–56. Filed 12–20–54.

628,223. SIL AND DESIGN. Société Industrielle de Lunetterie. SN 681,455. Pub. 3–20–56. Filed 2–10–55.

628,224. DATAMATIC. Scale Specialties & Systems Inc. SN 687,898. Pub. 3–20–56. Filed 5–19–55.

628,225. WESTRON. Isco Optische Werke G. m. b. H. SN 688,826. Pub. 3–20–56. Filed 6–3–55.

628,226. DUKANE. Dukane Corporation. SN 692,462. Pub. 3–20–56. Filed 8–4–55.

628,227. PREST-O-WELD AND DESIGN. Union Carbide and Carbon Corporation. SN 692,496. Pub. 3–20–56. Filed 8–4–55.

628,228. ROLLEI. Franke & Heidecke, Fabrik Photographischer Präsisions-Apparate. SN 693,908. Pub. 3–20–56. Filed 8–30–55.

628,229. METERAMIC. The Viking Tool & Machine Corporation. SN 694,172. Pub. 3–20–56. Filed 9–2–55.

628,230. SUPER–40. Eastman Kodak Company. SN 694,207. Pub. 3–20–56. Filed 9–6–55.

CLASS 27

628,231. PRIMOR. Stolz Freres, S. A. SN 694,134. Pub. 3–20–56. Filed 9–2–55.

CLASS 28

628,232. TRU LOCK. Feature Ring Co., Inc. SN 697,476. Pub. 3–20–56. Filed 11–1–55.

628,233. SPARKLE TOP. I. Roskin Company, Inc. SN 697,500. Pub. 3–20–56. Filed 11–1–55.

628,234. CHAREL. Charel Jewelry Co., Inc. SN 697,898. Pub. 3–20–56. Filed 11–8–55.

628,235. "SENTIMENT." Gemaco, Inc. SN 697,974. Pub. 3–20–56. Filed 11–9–55.

628,236. ADORN AND DESIGN. Abraham M. Dornfeld, d. b. a. A. M. Dornfeld. SN 698,021. Pub. 3–20–56. Filed 11–10–55.

628,237. HMH. The H. M. H. Co. SN 698,027. Pub. 3–20–56. Filed 11–10–55.

628,238. GOOD LUCK. Arthur G. Rider, d. b. a. A. G. Rider. SN 700,151. Pub. 3–20–56. Filed 12–6–55.

CLASS 29

628,239. KLOZ KLEEN. J. Stanley Levitt, d. b. a. Kloz Kleen. SN 693,158. Pub. 3–20–56. Filed 8–16–55.

628,240. UNILOCK. Elder & Jenks Inc. SN 694,554. Pub. 3–20–56. Filed 9–13–55.

CLASS 30

628,241. OCONALUFTEE VILLAGE CRAFTS AND DESIGN. The Cherokee Historical Association, Inc. SN 677,850. Pub. 3–20–56. Filed 11–29–54.

CLASS 31

628,242. "KWIK SHAKE" AND DESIGN (REPRESENTATION OF GROTESQUE HUMAN FEMALE). Kwik-Shake Dispenser Manufacturing Co., Inc. SN 655,585. Pub. 3–20–56. Filed 10–30–53.

CLASS 32

628,243. NIGHT LINE. A. J. Logan Company. SN 687,705. Pub. 3–20–56. Filed 5–17–55.

628,244. BARRY TOPPER. R. G. Barry Corporation. SN 696,763. Pub. 3–20–56. Filed 10–20–55.

628,245. TERRY KOVERON. R. G. Barry Corporation. SN 696,764. Pub. 3–20–56. Filed 10–20–55.

628,246. ZIP-FAST. Flex-O-Lators, Inc. SN 697,606. Pub. 3–20–56. Filed 10–19–55.

CLASS 34

628,107. CONSOLIDATED CERTIFICATE. See Class 15.

628,247. THERMIDAIRE AND DESIGN. E. K. Campbell Company. SN 694,473. Pub. 3–20–56. Filed 9–12–55.

628,248. ERIEFLEX. Erie Resistor Corporation. SN 694,980. Pub. 3–20–56. Filed 9–20–55.

628,249. IF. Iron Fireman Manufacturing Company. SN 697,443. Pub. 3–20–56. Filed 11–7–55.

CLASS 35

628,250. CHROME TYTE. Ramsey Corporation. SN 685,300. Pub. 3–20–56. Filed 4–11–55.

CLASS 36

628,251. REPRESENTATION OF OPEN BIBLE SUPERIMPOSED UPON A RECORD. Hadley Production, Incorporated. SN 660,492. Pub. 3–20–56. Filed 2–2–54.

628,252. ELECTROMONICA. Edward A. Zielinski. SN 679,879. Pub. 3–20–56. Filed 1–13–55.

628,253. 'HEP.' Frederick G. Newton, d. b. a. Montclair Records. SN 686,996. Pub. 3–20–56. Filed 5–6–55.

CLASS 37

628,254. STEEL STRONG. The C. L. Downey Company. SN 612,157. Pub. 3–20–56. Filed 4–3–51.

628,255. STONETONE. Timbertone Decorative Company, Inc. SN 658,868. Pub. 3–20–56. Filed 12–31–53.

628,256. TIMBERTONE. Timbertone Decorative Company, Inc. SN 658,869. Pub. 3–20–56. Filed 12–31–53.

628,257. 21 COMPANION. C. Howard Hunt Pen Co., to The Parker Pen Company. SN 660,806. Pub. 3–20–56. Filed 2–9–54.

628,258. KLING-SEAL. Milprint, Inc. SN 661,717. Pub. 3–20–56. Filed 2–26–54.

628,259. VOICE-LETTER-PAK. Travel Talk, Inc. SN 665,970. Pub. 3–20–56. Filed 5–7–54.

628,260. BIDCO. Consolidated Cover Co. SN 666,442. Pub. 3–20–56. Filed 5–17–54.

628,261. GENERAL GRANT AND PICTURE. The Triangle Paper Bag Manufacturing Company. SN 672,986. Pub. 3–20–56. Filed 9–9–54.

628,262. KITCH-N-EEDS (FANCIFUL). G. & C. Novelty Co. SN 673,439. Pub. 3–20–56. Filed 9–20–54.

628,263. NELCO TIME-SAVER. Robert E. Nelson. SN 674,834. Pub. 3–20–56. Filed 10–14–54.

628,264. BATH MAP. Royal Paper Products. SN 675,663. Pub. 3–20–56. Filed 10–28–54.

628,265. TRAVELORDER. Traveletter Corporation. SN 678,934. Pub. 3–20–56. Filed 12–24–54.

628,266. NO BUGS M'LADY. Paper Products, Incorporated. SN 679,318. Pub. 3–20–56. Filed 1–3–55.

628,267. RIPCOMASTER. Rhinelander Paper Company. SN 683,312. Pub. 3–20–56. Filed 3–11–55.

628,268. PARCHMASTER. Rhinelander Paper Company. SN 683,313. Pub. 3–20–56. Filed 3–11–55.

628,269. TUCKERSHARPE. Tuckersharpe Pen Company, Incorporated. SN 684,375. Pub. 3–20–56. Filed 3–18–55.

628,270. WUNDER PAD AND DESIGN. The General Cellulose Company, Inc. SN 685,573. Pub. 3–20–56. Filed 4–15–55.

628,271. BESTEST. Anchell Corporation. SN 686,263. Pub. 3–20–56. Filed 4–26–55.

628,272. CONTROLLED MICRO-SURFACE. Fox River Paper Corporation. SN 686,822. Pub. 3–20–56. Filed 5–4–55.

628,273. FLASH GLOSS. Consolidated Water Power & Paper Company. SN 687,053. Pub. 3–20–56. Filed 5–9–55.

628,274. KAR-TIDY. Marion E. Pierce and Arthur T. Ingram. SN 687,707. Pub. 3–20–56. Filed 5–17–55.

628,275. YULE LOG AND DESIGN. Bernard W. Ley. SN 687,954. Pub. 3–20–56. Filed 5–20–55.

628,276. MASTA-TRACE. Bienfang Products Corporation. SN 688,297. Pub. 3–20–56. Filed 5–26–55.

628,277. LITTERVELOPE. Cohoes Carrybag Company, Inc. SN 688,306. Pub. 3–20–56. Filed 5–26–55.

628,278. HERCULITE. Crocker, Burbank Papers Inc. SN 690,369. Pub. 3–20–56. Filed 6–28–55.

628,279. VU-AD. Artloom Carpet Company, Inc. SN 690,521. Pub. 3–20–56. Filed 6–30–55.

628,280. PAN ART. Artloom Carpet Company, Inc. SN 690,522. Pub. 3–20–56. Filed 6–30–55.

628,281. GOLDEN ARROW. The Parker Pen Company. SN 690,900. Pub. 3–20–56. Filed 7–7–55.

628,282. SILVER ARROW. The Parker Pen Company. SN 690,901. Pub. 3–20–56. Filed 7–7–55.

628,283. LIVE LINE. Zellerbach Paper Company. SN 690,925. Pub. 3–20–56. Filed 7–7–55.

628,284. SABLE SOFT. Thomson Paper Mills, Inc. SN 693,637. Pub. 3–27–56. Filed 8–24–55.

CLASS 38

628,285. MINKUS PUBLICATIONS AND DESIGN. Minkus Publications, Inc. SN 652,424. Pub. 3–20–56. Filed 8–27–53.

628,286. SUPAVAT. Recony Corporation. SN 673,049. Pub. 3–20–56. Filed 9–10–54.

628,287. COMMUNITY BIRTHDAY CALENDAR. Gordon Bernard Co., Inc. SN 680,448. Pub. 3–20–56. Filed 1–25–55.

628,288. THE RANGE METHOD. Paul H. Millikin. SN 681,284. Pub. 3–20–56. Filed 2–8–55.

628,289. DURA-BOND. American Tag Company of New Jersey. SN 685,467. Pub. 3–20–56. Filed 4–14–55.

628,290. TREASUREGRAM. General Features Corporation. SN 685,977. Pub. 3–20–56. Filed 4–21–55.

628,291. LAWYERS UNIVERSAL DIGEST AND REFERENCE SYSTEM ETC. AND DESIGN. Sandy Raymond King. SN 686,060. Pub. 3–20–56. Filed 4–22–55.

628,292. ST. NICHOLAS TWIN DIVIDEND AND DESIGN. St. Nicholas, Inc. SN 689,164. Pub. 3–20–56. Filed 6–8–55.

628,293. AMERICAN HERITAGE AND DESIGN. American Heritage Publishing Co., Inc. SN 689,539. Pub. 3–20–56. Filed 6–15–55.

628,294. BUTCH. Laurence Reynolds. SN 690,037. Pub. 3–20–56. Filed 6–22–55.

628,295. DI AND DESIGN. The Drive-In Magazine, Inc. SN 690,439. Pub. 3–20–56. Filed 6–29–55.

628,296. LIBERTY. Liberty of Canada Limited. SN 691,699. Pub. 3–20–56. Filed 7–21–55.

628,297. COMBO CARDS. Combo Inc. SN 695,211. Pub. 3–20–56. Filed 9–23–55.

628,298. BEDSIDE. Stravon Publishers. SN 695,857. Pub. 3–20–56. Filed 10–4–55.

628,299. VITAMINERALS. Vitaminerals, Inc. SN 695,860. Pub. 3–20–56. Filed 10–4–55.

628,300. CINEMIRACLE AND DESIGN. National Theatres, Inc. SN 696,253. Pub. 3–20–56. Filed 10–11–55.

628,301. SADDLE AND BRIDLE. Midwest Publishers, Inc., to Saddle and Bridle, Inc. SN 696,570. Pub. 3–13–56. Filed 10–17–55.

CLASS 39

628,302. CHANTICLEER SPORTSWEAR AND DESIGN. Marcus Breier Sons, Inc. SN 649,120. Pub. 3–20–56. Filed 6–22–53.

628,303. "TOUCH OF GOLD" "DOESKIN." Abraham Slutsky, d. b. a. Fit-Rite Pants Company. SN 663,217. Pub. 3–20–56. Filed 3–24–54.

628,304. SAFEGUARD—SHOES FOR INDUSTRY AND DESIGN. Miller Industrial Corporation. SN 664,171. Pub. 3–20–56. Filed 4–8–54.

628,305. ROYAL CHOICE AND CROWN DESIGN. The Olen Company. SN 668,114. Pub. 3–20–56. Filed 6–11–54.

628,306. SHORTIES. J. W. Landenberger & Co. SN 669,992. Pub. 3–20–56. Filed 7–14–54.

628,307. MAIS OUI. Hollywood-Maxwell Co. SN 670,579. Pub. 3–20–56. Filed 7–26–54.

628,308. SPROUTS BY SLEDGE AND DESIGN. Sledge Manufacturing Company. SN 673,203. Pub. 3–20–56. Filed 9–14–54.

628,309. STRONGOFLEX. James North & Sons Limited. SN 677,595. Pub. 3–20–56. Filed 12–1–54.

628,310. LINKMASTER. Brownstein-Louis Company, to Linkmaster, Inc. SN 678,594. Pub. 3–20–56. Filed 12–20–54.

628,311. BRIGITTE. Brigitte (Société à responsabilité limitée). SN 678,834. Pub. 3–20–56. Filed 12–2–54.

628,312. VISCOUNT. Hart Schaffner & Marx. SN 681,267. Pub. 3–20–56. Filed 2–8–55.

628,313. SANTA CRUZER. Santa Cruz Shirt Company. SN 681,302. Pub. 3–20–56. Filed 2–8–55.

628,314. GAMBITS. B G S Shoe Corporation. SN 683,267. Pub. 3–20–56. Filed 3–11–55.

628,315. SPREES. B G S Shoe Corporation. SN 683,268. Pub. 3–20–56. Filed 3–11–55.

628,316. COM-BOW. John H. Bradley, d. b. a. Com-Bow Tie Co. SN 683,349. Pub. 3–20–56. Filed 3–14–55.

628,317. WALK-RIGHT. Washington Manufacturing Co., Incorporated. SN 683,566. Pub. 3–20–56. Filed 3–15–55.

628,318. CLEVER-TOGS. J. J. Newberry Co. SN 684,458. Pub. 3–20–56. Filed 3–29–55.

628,319. REVERSO. Sol Sherman. SN 684,480. Pub. 3–20–56. Filed 3–29–55.

628,320. BOUTIQUE. Chadbourn Hosiery Mills, Incorporated, now by merger and change of name Chadbourn Gotham, Inc. SN 684,532. Pub. 3–20–56. Filed 3–30–55.

628,321. TWO-SOME. Desmond's, Inc. SN 685,665. Pub. 3–20–56. Filed 4–18–55.

628,322. COBBIE SUBURBANITES. The United States Shoe Corporation. SN 686,116. Pub. 2–14–56. Filed 4–22–55.

628,323. SANDBROOKE. Sandess Manufacturing Co. SN 686,853. Pub. 3–20–56. Filed 5–4–55.

628,324. BEEKMAN. J. Freeser & Son, Inc. SN 687,933. Pub. 3–20–56. Filed 5–20–55.

628,325. SKY-BRITE. The Lovable Brassiere Co. SN 690,011. Pub. 3–20–56. Filed 6–22–55.

628,326. "LESS WORK FOR MOTHER" BY LOVE AND DESIGN. Joseph Love, Inc. SN 690,284. Pub. 3–20–56. Filed 6–27–55.

628,327. DATERS BY COLLEGE HILL. Vocational Footwear, Inc. SN 690,512. Pub. 3–20–56. Filed 6–29–55.

628,328. SACKIES. Stayon Products, Inc. SN 691,796. Pub. 3–20–56. Filed 7–22–55.

628,329. CLEVER BOY. J. J. Newberry Co. SN 691,881. Pub. 3–20–56. Filed 7–25–55.

628,330. Q-T PANTS. Q-Tips, Inc. SN 692,352. Pub. 3–20–56. Filed 8–2–55.

628,331. LADY POWELL. Airmaid Hosiery Mills. SN 692,366. Pub. 3–20–56. Filed 8–3–55.

628,332. CASUALMAKER. Sy Frankl, Inc. SN 695,716. Pub. 3–20–56. Filed 10–3–55.

628,333. MISS HOLLYWOOD. Universal Brassiere & Justrite Corset Co., Inc. SN 695,787. Pub. 3–20–56. Filed 10–3–55.

628,334. DENNISON'S OF COURSE. The George D. Dennison Co. SN 695,804. Pub. 3–20–56. Filed 10–4–55.

628,335. CROSSED MAGIC. Kops Bros., Inc. SN 695,820. Pub. 3–20–56. Filed 10–4–55.

628,336. REGENCY. Penn State Mills, Inc. SN 695,839. Pub. 3–20–56. Filed 10–4–55.

628,337. BAIRN. Saks & Company. SN 695,849. Pub. 3–20–56. Filed 10–4–55.

628,338. BABEE-TENDA. Babee-Tenda License Corporation. SN 695,967. Pub. 3–20–56. Filed 10–6–55.

628,339. COTTON-TAIL. Heathcote Hosiery Company. SN 697,222. Pub. 3–20–56. Filed 10–27–55.

628,340. MOPSY. Heathcote Hosiery Company. SN 697,223. Pub. 3–20–56. Filed 10–27–55.

CLASS 40

628,341. "SURE HOLD." The Boye Needle Company. SN 689,982. Pub. 3–20–56. Filed 6–22–55.

628,342. "STARBRIGHT." Armand Schwab & Co., Inc. SN 692,741. Pub. 3–20–56. Filed 8–9–55.

CLASS 42

628,343. SYMBOL OF QUALITY FOR OVER 100 YEARS AND DESIGN. J. P. Stevens & Co. Inc. SN 643,984. Pub. 3–20–56. Filed 3–20–53.

628,344. VICUNAIRE. Einiger Mills, Inc. SN 661,991. Pub. 3–20–56. Filed 3–4–54.

628,345. SUPERFINE. John Emsley, Inc. SN 680,668. Pub. 3–20–56. Filed 1–28–55.

628,346. HANDLEY AND DESIGN. The W. A. Handley Manufacturing Company. SN 681,087. Pub. 3–20–56. Filed 2–4–55.

628,347. MAJIQUE. Einiger Mills, Inc. SN 681,758. Pub. 3–20–56. Filed 2–16–55.

628,348. BOLURA. Einiger Mills, Inc. SN 681,759. Pub. 3–20–56. Filed 2–16–55.

628,349. FONDERA. Einiger Mills, Inc. SN 681,760. Pub. 3–20–56. Filed 2–16–55.

628,350. DUCORA. Einiger Mills, Inc. SN 681,761. Pub. 3–20–56. Filed 2–16–55.

628,351. ZEPHAIRE BATISTE. The Barbison Corporation. SN 682,387. Pub. 3–20–56. Filed 2–28–55.

628,352. BARBIZON. The Barbison Corporation. SN 685,639. Pub. 3–20–56. Filed 4–18–55.

628,353. OLIUM. Herbert Glatt, d. b. a. Magla Products. SN 692,389. Pub. 3–20–56. Filed 8–3–55.

628,354. SAKS-FIFTH AVENUE. Saks & Company. SN 695,947. Pub. 3–20–56. Filed 10–5–55.

628,355. LOFTIES. Lofties Knitting Mills, Inc. SN 695,984. Pub. 3–20–56. Filed 10–6–55.

CLASS 43

628,356. IT'S ROUND! IT'S RIGHT! AND HAND DESIGN. Globe Manufacturing Company. SN 674,244. Pub. 3–20–56. Filed 10–4–54.

628,357. DU-STRETCH. The Duffy Silk Company. SN 696,130. Pub. 3–20–56. Filed 10–10–55.

628,358. CUPIONI. Beaunit Mills, Inc. SN 698,949. Pub. 3–20–56. Filed 11–28–55.

CLASS 44

628,359. "TINYKIT." George P. Kempel, d. b. a. Shush Manufacturing Company. SN 678,990. Pub. 3–20–56. Filed 12–27–54.

628,360. NEUROFLEX. James A. Verden. SN 679,806. Pub. 3–20–56. Filed 1–12–55.

628,361. MOL-AC. Reuben Reiter. SN 680,098. Pub. 3–20–56. Filed 1–18–55.

628,362. ROGER (O. K.). Roger Rubber Products, Inc. SN 691,084. Pub. 3–20–56. Filed 7–11–55.

628,363. DRAN'R AND DESIGN. Charles L. Rubinstein, d. b. a. Ruby Products Co. SN 691,510. Pub. 3–20–56. Filed 7–18–55.

628,364. "LAC-O-MIZER." John Fiore. SN 691,759. Pub. 3–20–56. Filed 7–22–55.

628,365. HOLIDAY. Helene Curtis Industries, Inc. SN 692,316. Pub. 3–20–56. Filed 8–2–55.

628,366. PRESTO-MIST. Irving W. Rice & Co., Inc. SN 692,739. Pub. 3–20–56. Filed 8–9–55.

628,367. FORSTER IDEAL AND DESIGN. Forster Mfg. Co., Inc. SN 694,221. Pub. 3–20–56. Filed 9–6–55.

CLASS 45

628,368. SAY-HEY. Quintin Schroeder, d. b. a. Schroeder Beverages. SN 696,000. Pub. 3–20–56. Filed 10–6–55.

628,369. DOG "N" SUDS AND DESIGN. Dog N Suds, Inc. SN 696,291. Pub. 3–20–56. Filed 10–12–55.

628,370. TWIN-KISS. Ephrata Wholesale Co. SN 696,354. Pub. 3–20–56. Filed 10–13–55.

CLASS 46

628,371. SNAPPY AND DESIGN (MISCELLANEOUS). Jack T. Baillie, d. b. a. Jack T. Baillie Co. SN 674,129. Pub. 3–20–56. Filed 10–1–54.

628,372. PANTRY MAGIC. Pantry Meals, Inc. SN 674,276. Pub. 3–20–56. Filed 10–4–54.

628,373. HONG KONG AND DESIGN. Warren Jay, d. b. a. The Kwong Wo Company. SN 679,292. Pub. 3–20–56. Filed 1–3–55.

628,374. JESSE JEWELL'S. J. D. Jewell, Inc. SN 682,934. Pub. 3–20–56. Filed 3–7–55.

628,375. EL MOLINO BEST AND DESIGN. El Molino Mills. SN 683,031. Pub. 3–20–56. Filed 3–8–55.

628,376. WATCH DOG. S. E. Mighton Company. SN 683,526. Pub. 3–20–56. Filed 3–15–55.

628,377. GOLD'N: WEDGE. Anderson, Clayton & Co. SN 684,379. Pub. 3–20–56. Filed 3–29–55.

628,378. PERFECTION. U. & J. Lenson Corporation. SN 684,441. Pub. 3–20–56. Filed 3–29–55.

628,379. MOTHER'S AND DESIGN. Mother's Food Products, Inc. SN 684,745. Pub. 3–20–56. Filed 4–1–55.

628,380. FRUIT-FREEZE. Merck & Co., Inc. SN 685,915. Pub. 3–20–56. Filed 4–20–55.

628,381. CLUSTER. Chase & Company. SN 685,959. Pub. 3–20–56. Filed 4–21–55.

628,382. SUZEE SEASON. Pearl M. Weil, d. b. a. Susee Seasonings. SN 686,248. Pub. 3–20–56. Filed 4–25–55.

628,383. PERCH-ETTES. Cape Ann Fisheries Inc. SN 687,349. Pub. 3–20–56. Filed 5–12–55.

628,384. WISE BUY. Alfred A. Rushton, d. b. a. Rushton & Co. SN 691,714. Pub. 3–20–56. Filed 7–21–55.

628,385. EPSI-PEPI. W. H. Pitser, d. b. a. Southern Sales Company. SN 691,777. Pub. 3–20–56. Filed 7–22–55.

628,386. BRAID. Norman M. Coffin. SN 692,312. Pub. 3–20–56. Filed 8–2–55.

628,387. JUCYPAK. Florida Citrus Exchange. SN 692,321. Pub. 3–20–56. Filed 8–2–55.

628,388. ICED HOUSE. Midwest Biscuit Company. SN 692,481. Pub. 3–20–56. Filed 8–4–55.

628,389. PHELAN-FINE. Phelan & Taylor Produce Co., Inc. SN 692,539. Pub. 3–20–56. Filed 8–5–55.

628,390. GLORIA. Loyal Packing Company. SN 692,619. Pub. 3–20–56. Filed 8–8–55.

628,391. CONDADO. Florida Citrus Exchange. SN 692,834. Pub. 3–20–56. Filed 8–11–55.

628,392. COFFEE CAN. Fin 'N Feather Farm, Inc. SN 693,137. Pub. 3–20–56. Filed 8–16–55.

628,393. SPICE OF LIFE. McLaughlin Gormley King Company. SN 693,475. Pub. 3–20–56. Filed 8–22–55.

628,394. R-OWN STAR AND DESIGN. Fred J. Borelli, d. b. a. Borelli Produce Distributors. SN 694,046. Pub. 3–20–56. Filed 9–1–55.

628,395. KISS-O'-FLAVOR. Continental Specialties Co., Inc. SN 694,052. Pub. 3–20–56. Filed 9–1–55.

CLASS 47

628,396. CHAMPAGNE POMMERY AND DESIGN. Societe Anonyme Champagne Pommery & Greno. SN 659,218. Pub. 3–20–56. Filed 1–8–54.

628,397. MORGADO. Morgado & Silva, Ltda. SN 662,807. Pub. 3–20–56. Filed 3–17–54.

628,398. VP POINT BRAND AND DESIGN. Vine Products, Limited. SN 696,338. Pub. 3–20–56. Filed 10–12–55.

628,399. GABBY'S. The Globe Distributing Company. SN 696,536. Pub. 3–20–56. Filed 10–17–55.

CLASS 50

628,400. SOFGRANE. The Jason Corporation. SN 667,313. Pub. 3–20–56. Filed 5–28–54.

628,401. E-ZDO. C. Howard Hunt Pen Co. SN 677,565. Pub. 3–20–56. Filed 12–1–54.

628,402. "FORMAQUINS." Gus H. Lang, d. b. a. Cordell Displays of California. SN 684,950. Pub. 3–20–56. Filed 4–5–55.

628,403. TRI-DI. John L. Woolven. SN 690,053. Pub. 3–20–56. Filed 6–22–55.

628,404. SLEE-FORM. Slee-Form, Inc. SN 695,118. Pub. 3–20–56. Filed 9–21–55.

628,405. SNO-FLOK. Maegus Enterprises, Inc. SN 699,976. Pub. 3–20–56. Filed 12–14–55.

CLASS 51

628,406. ISOPROPYLAN. Robinson-Wagner Co., Inc. SN 657,965. Pub. 3–20–56. Filed 12–14–53.

628,407. LIP BAR. Hal M. Gardner, d. b. a. H. M. Gardner & Associates. SN 662,627. Pub. 3–20–56. Filed 3–15–54.

628,408. BAN. Bristol-Myers Company. SN 667,008. Pub. 2–21–56. Filed 6–15–54.

628,409. ARCTIC SCENT. Arctic Scent. SN 670,020. Pub. 3–20–56. Filed 7–15–54.

628,410. TEASIE WEASIE. Raymond (Art de Beauté) Limited. SN 673,940. Pub. 3–20–56. Filed 11–22–54.

628,411. REGE-TRESS. Societe Monsavon-L'Oreal Societe Anonyme, d. b. a. L'Oreal-Paris. SN 677,611. Pub. 3–20–56. Filed 12–1–54.

628,412. BAL BLANC. Georg Jensen Inc. SN 679,784. Pub. 3–20–56. Filed 1–12–55.

628,413. ST. AUBREY. Nigel Aubrey-Jones. SN 680,624. Pub. 3–20–56. Filed 1–27–55.

628,414. TRAGABAUM. E. H. Ingles, d. b. a. E. H. Ingles Co. SN 682,264. Pub. 3–20–56. Filed 2–24–55.

628,415. EASYTINT. Sales Affiliates, Inc. SN 683,437. Pub. 3–20–56. Filed 3–14–55.

628,416. ORAMIST. The Rilling-Dermetics Company. SN 684,683. Pub. 3–20–56. Filed 3–31–55.

628,417. PM AND DESIGN. Hirestra Laboratories, Inc. SN 685,709. Pub. 3–20–56. Filed 4–18–55.

628,418. "LANALLURE." Ogilvie Sisters Laboratories, Inc., d. b. a. "Ogilvie Sisters." SN 689,960. Pub. 3–20–56. Filed 6–21–55.

628,419. LEMUR. The Nestle-Le Mur Company, d. b. a. Nestle-Le Mur. SN 690,568. Pub. 3–20–56. Filed 6–30–55.

628,420. ROI-EL-TAN AND DESIGN. Anchor Bay Products, Inc. SN 690,594. Pub. 3–20–56. Filed 7–1–55.

628,421. ODE. Guerlain, Inc. SN 691,034. Pub. 3–20–56. Filed 7–11–55.

628,422. MUSKETEER. Lentheric, Inc. SN 691,310. Pub. 3–20–56. Filed 7–14–55.

628,423. CHASE-IT. James Miller. SN 691,870. Pub. 3–20–56. Filed 7–25–55.

628,424. PRE-PERM. Ogilvie Sisters Laboratories, Inc., d. b. a. "Ogilvie Sisters." SN 692,074. Pub. 3–20–56. Filed 7–28–55.

628,425. BRONZE MAGIC. Zonite Products Corporation, now by change of name to Chemway Corporation. SN 692,189. Pub. 3–20–56. Filed 7–29–55.

CLASS 52

628,426. VT SOAP AND DESIGN. Voorhis-Tiebout Company, Inc. SN 677,686. Pub. 3–20–56. Filed 12–2–54.

628,427. PAN-PAN. E. F. Drew & Co., Inc. SN 682,249. Pub. 3–20–56. Filed 2–24–55.

628,428. AUSTIN'S LANAMONIA. James Austin Company. SN 683,956. Pub. 3–20–56. Filed 3–22–55.

628,429. ACE AND DESIGN. Atlantic Chemical & Equipment Co. SN 684,262. Pub. 1–10–56. Filed 3–28–55.

628,430. RSA AUTOCARE AND DESIGN. Ralph Shrader Associates. SN 686,699. Pub. 3–20–56. Filed 5–2–55.

628,431. PROCOMET. New Process Chemical Co., Inc. SN 689,857. Pub. 3–20–56. Filed 6–20–55.

628,432. NEOPONE LO. Ultra Chemical Works, Inc. SN 690,581. Pub. 3–20–56. Filed 6–30–55.

628,433. PYRONEG. The Diversey Corporation. SN 690,691. Pub. 3–20–56. Filed 7–5–55.

628,434. ALLURE. Beatrice Diskin, d. b. a. Harbee Products Mfg. Co. SN 695,080. Pub. 3–20–56. Filed 9–21–55.

Service Marks

CLASS 100

628,435. WONDER FIBER WOOL ETC. AND DESIGN. The Wool Bureau, Inc. SN 647,386. Pub. 3–20–56. Filed 5–20–53.

628,436. CASINO ROYAL. Casino Royal, Inc. SN 675,689. Pub. 3–20–56. Filed 10–29–54.

628,437. BJ SERVICE AND DESIGN. BJ Service, Inc. SN 679,973. Pub. 3–20–56. Filed 1–17–55.

CLASS 101

628,438. REMEMBRANCE ADVERTISING. Brown & Bigelow. SN 608,407. Pub. 3–20–56. Filed 1–5–51.

628,439. "JUMBO JACKPOT." Edward C. Sargent, d. b. a. Eddie Sargent Enterprises. SN 643,724. Pub. 3–20–56. Filed 3–16–53.

CLASS 103

628,440. SUPER CLEANIE THE JACKSON GENIE AND DESIGN. Arthur Jackson Personalized Cleaning Service, Inc. SN 683,399. Pub. 3–20–56. Filed 3–14–55.

CLASS 105

628,441. WESTERN AIRLINES CHARGE-A-FLIGHT AND DESIGN. Western Air Lines, Inc. SN 674,492. Pub. 3–20–56. Filed 10–8–54.

628,442. UNITED GAS SERVING THE GULF SOUTH AND DESIGN. United Gas Pipe Line Company. SN 676,427. Pub. 3–20–56. Filed 11–10–54.

628,443. HOLIDAY HOUSEPARTY. Joseph A. Marchini, d. b. a. "Holiday House Travel Service Everywhere." SN 684,321. Pub. 3–20–56. Filed 3–28–55.

628,444. STACK DESIGN. North Atlantic and Gulf Steamship Company, Incorporated. SN 687,488. Pub. 3–20–56. Filed 5–13–55.

CLASS 106

628,445. CENTRIFIX. Centrifix Corporation. SN 658,884. Pub. 3–20–56. Filed 1–4–54.

628,446. FLEXICO. Sendor Bindery, Inc. SN 663,062. Pub. 3–20–56. Filed 3–22–54.

628,447. BJ SERVICE AND DESIGN. BJ Service, Inc. SN 679,974. Pub. 3–20–56. Filed 1–17–55.

628,448. MEMBER OF NATIONAL SCREW MACHINE PRODUCTS ASSOCIATION ETC. AND DESIGN. National Screw Machine Products Association. SN 681,619. COLLECTIVE MARK. Pub. 3–20–56. Filed 2–14–55.

CLASS 107

628,449. WINKY AND DESIGN. Lesselli Marionettes. SN 653,696. Pub. 3–20–56. Filed 9–24–53.

628,450. BROADWAY TV THEATRE. General Teleradio, Inc. SN 664,073. Pub. 3–20–56. Filed 4–7–54.

628,451. JOYMAKERS. John E. Hull. SN 677,657. Pub. 3–20–56. Filed 12–2–54.

Certification Marks

CLASS A

628,452. SCR FURRING CLIP. Structural Clay Products Research Foundation. SN 680,911. Pub. 3–20–56. Filed 2–1–55.

628,453. AMERICAN WOOD FABRIC INSTITUTE AWFI AND DESIGN. American Wood Fabric Institute, Incorporated. SN 699,195. Pub. 3–20–56. Filed 12–1–55.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 2

628,454. Richard K. Steinman, Phoenix, Ariz. SN 686,863. Filed 5–4–55.

LitRxbox

For Reinforced Paper or Like Material Bag or Box for Hanging Within an Automobile for Waste Disposal.
First use Apr. 14, 1954.

CLASS 13

628,455. Leslie V. Anderson, Ted Targosh, and Edward Kolodziej, Hazel Park, Mich. SN 683,953. Filed P. R. 3–22–55. Am. S. R. 3–14–56.

Twin JeT

For Chemical Mixing Nozzle and Water Shut-Off Valve.
First use Feb. 9, 1955.

CLASS 21

628,456. Oliver T. Joy, d. b. a. Notifier Manufacturing Company, Lincoln, Nebr. SN 678,460. Filed P. R. 12–16–54. Am. S. R. 11–21–55.

KAR LARM

For Electrically Operated Anti-Theft Alarms for Vehicles.
First use Nov. 10, 1954.

628,457. Chambers Corporation, Shelbyville, Ind. SN 684,806. Filed P. R. 4–4–55. Am. S. R. 2–23–56.

COOK WITH THE ELECTRICITY TURNED off

For Electric Ovens.
First use on or about Dec. 28, 1954.

628,458. Fr. Sauter A. G. Fabrik Elektr. Apparate, Basel, Switzerland. SN 689,242. Filed P. R. 6–9–55. Am. S. R. 3–21–56.

SAUTER

Owner of Swiss Reg. No. 105,388, dated Sept. 28, 1943.
For Electrical Switches and Automatic Switching Devices, Electrical Boilers and Electric Heat Accumulators, as Well as Parts of These Apparatus.

628,459. Radex Corporation, Chicago, Ill. SN 692,491. Filed P. R. 8–4–55. Am. S. R. 3–15–56.

DUST KLEEN

For Portable Electrostatic Dust Collectors.
First use Apr. 23, 1947.

CLASS 22

628,460. South Bend Bait Company, South Bend, Ind. SN 659,505. Filed P. R. 1–14–54. Am. S. R. 12–10–54.

TWIST-FREE PAK

For Dispenser Container for Fishing Line Which Can Be Used as an Extra Reel Spoon Box.
First use June 1, 1953.

628,461. Vernon H. Grogan, Fulton, Mo. SN 664,530. Filed P. R. 4–14–54. Am. S. R. 11–14–55.

SPELLIT

For Spelling Game Played With Cards.
First use Apr. 6, 1954.

CLASS 23

628,462. The De Laval Separator Company, Poughkeepsie, N. Y. SN 686,891. Filed 5–5–55.

TRI-PROCESS AIR-TIGHT

For Centrifuges.
First use Mar. 27, 1953.

628,463. Williamson Adhesives, Inc., Skokie, Ill. SN 687,837. Filed P. R. 5–18–55. Am. S. R. 3–30–56.

Tapemaker

For Combined Applicator, Drier and Dispenser for Making and Dispensing Adhesive Tape.
First use Mar. 1, 1954.

CLASS 27

628,464. Montres Rolex S. A. (Rolex Uhren A. G.) (Rolex Watch Co.), Geneva, Switzerland. SN 698,191. Filed P. R. 11–14–55. Am. S. R. 3–22–56.

TIMEPIECE OF THE AMERICAS

Owner of Swiss Reg. No. 144,000, dated Oct. 10, 1952.
For Timepieces of All Kinds and Parts Thereof.

CLASS 28

628,465. Kramer Jewelry Creations, Inc., New York, N. Y. SN 679,469. Filed P. R. 1–5–55. Am. S. R. 12–14–55.

THE "Golden Look"

For Necklaces, Bracelets, Brooches, Earrings, Finger Rings, Pin-Clips.
First use Dec. 2, 1954.

CLASS 31

628,466. Eagle Roll Leaf Stamping Co., Brooklyn, N. Y. SN 681,499. Filed P. R. 2–11–55. Am. S. R. 3–8–56.

CUBE-ETTES

For Plastic Freezing Tray for Ice Cubes.
First use Dec. 1, 1954.

CLASS 34

628,467. Orr & Sembower, Inc., Reading, Pa. SN 679,794. Filed P. R. 1–12–55. Am. S. R. 3–26–56.

OHIO

For Boilers for Industrial and Commercial Use and Components of Such Boilers.
First use Dec. 21, 1954.

CLASS 46

628,468. The Nicosia Food Company, Rochester, N. Y. SN 667,890. Filed P. R. 6–8–54. Am. S. R. 2–2–56.

NICOSIA'S

The drawing is lined for red and blue.
For Spaghetti Sauce.
First use Oct. 30, 1952.

CLASS 51

628,469. Lady Hamilton Beauty Preparations Co. Ltd., Montreal, Quebec, Canada. SN 642,821. Filed P. R. 2–26–53. Am. S. R. 3–1–55.

Lady Hamilton

Owner of Canadian Reg. No. N. S. 36,683, dated May 18, 1950.
For Cosmetics—Namely, Cosmetic Skin Cream, Hair Removing Wax, Hair Solvent Lotions, and Depilatory Powders.

628,470. Connelly Containers, Inc., Philadelphia, Pa., by change of name from Haelan Laboratories, Inc. SN 665,199. Filed P. R. 4–26–54. Am. S. R. 12–29–55.

SQUEEZ-N-BRUSH

For Nail Polish.
First use Feb. 25, 1954.

TRADEMARK REGISTRATIONS RENEWED

107,427. CRESCENT BRAND AND DESIGN. Cl. 12. 11–23–15.
107,555. TIGER ETC. AND DESIGN. Cl. 12. 12–7–15.
108,514. OZO. Cl. 52. 2–15–16.
108,535. ODALISCA. Cl. 46. 2–15–16.
108,579. MANGANESE. Cl. 14. 2–15–16.
110,818. AUTO-LITE. Cl. 21. 6–13–16.
111,610. KEYSTONE AND DESIGN. Cl. 46. 7–25–16.
111,626. GOLDEN CRUMBLES. Cl. 46. 7–25–16.
111,740. UNION-ALL ME AND DAD AND DESIGN. Cl. 39. 8–1–16.
328,728. OLD RAMSHEAD AND DESIGN. Cl. 49. 10–1–35.
332,429. HYGICOL. Cl. 18. 2–11–36.
332,535. ASPIROFEINE. Cl. 18. 2–18–36.
332,537. MACARBO. Cl. 18. 2–18–36.
332,633. NITROCON. Cl. 18. 2–18–36.
332,801. VENCAL. Cl. 6. 2–25–36.
332,809. OLD STAND BY AND DESIGN. Cl. 16. 2–25–36.
333,001. STORZ ETC. AND DESIGN. Cl. 48. 3–10–36.
333,198. STETSON AND DESIGN. Cl. 39. 3–10–36.
333,199. THE ROYAL STETSON. Cl. 39. 3–10–36.
333,291. PUFF. Cl. 37. 3–17–36.
333,334. EGCO AND DESIGN. Cl. 33. 3–17–36.
333,756. ATTRACTION-ZONE. Cl. 21. 4–7–36.
333,761. R. C. CO. Cl. 28. 4–7–36.
333,921. FOSTORIA O. Cl. 23. 4–14–36.
333,978. SUCO AND DESIGN. Cl. 6. 4–14–36.
334,107. CAT'S PAW. Cl. 39. 4–21–36.
334,172. TRI-OGEN. Cl. 6. 4–21–36.
334,511. GARDETTE. Cl. 39. 5–5–36.
334,585. ENGLISHTOWN POLAIRSPUN. Cl. 39. 5–5–36.
334,897. LOOSITE. Cl. 52. 5–19–36.
334,952. BUCCANEER FLEECE. Cl. 39. 5–19–36.
335,015. CHARM. Cl. 46. 5–19–36.
335,299. STITCHCRAFT. Cl. 38. 6–2–36.
335,341. SKUFFIES. Cl. 39. 6–2–36.
335,578. CO-VAL-U AND COLORS RED ETC. Cl. 16. 6–9–36.
335,579. CO-VAL-U AND COLORS GREEN ETC. Cl. 16. 6–9–36.
335,581. ENFIELD CLUB. Cl. 46. 6–9–36.
335,600. HY-VALU AND COLORS YELLOW ETC. Cl. 16. 6–9–36.
335,601. HY-VALU AND COLORS GREEN ETC. Cl. 16. 6–9–36.
335,615. HY-VALU AND COLORS RED ETC. Cl. 16. 6–9–36.
335,687. WAVAL NUTRI-TONIC. Cl. 51. 6–9–36.
335,733. BLACK STREAK AND DESIGN. Cl. 37. 6–16–36.
335,777. YOLAI. Cl. 51. 6–16–36.
335,794. CO-VAL-U AND DESIGN. Cl. 16. 6–16–36.
335,798. DURHAM MAID. Cl. 46. 6–16–36.
335,857. ROLLO B/MANGA. Cl. 46. 6–16–36.
336,005. YOLAI. Cl. 51. 6–23–36.
336,057. B AND DESIGN. Cl. 28. 6–23–36.
336,449. KOLORFUL CITY PAINT CO. AND DESIGN. Cl. 16. 7–7–36.
336,539. MULL-SOY. Cl. 46. 7–7–36.
336,563. BALLANTINE'S. Cl. 48. 7–7–36.
336,646. KENMAR. Cl. 12. 7–14–36.

336,714. SPANIEL. Cl. 46. 7–14–36.
336,755. YANKEE CLIPPER. Cl. 22. 7–14–36.
336,863. MERCUROCROMO. Cl. 18. 7–21–36.
336,961. ASTHMANEFRIN. Cl. 18. 7–21–36.
337,040. AIRISTOCRAT. Cl. 21. 7–28–36.
337,106. R. W. L. Cl. 47. 7–28–36.
337,225. PEARLROCK. Cl. 40. 8–4–36.
337,240. STEP-ELATOR AND DESIGN. Cl. 39. 8–4–36.
337,300. SPEEDRITE. Cl. 28. 8–4–36.
337,364. MEYERS MAKE THE KENT. Cl. 39. 8–4–36.
337,365. MEYERS MAKE KENT BOWLER. Cl. 39. 8–4–36.
337,366. MEYERS MAKE THE YORK HOMBURG. Cl. 39. 8–4–36.
337,367. MEYERS MAKE SNAP-BRIM. Cl. 39. 8–4–36.

TRADEMARK REGISTRATIONS CANCELED

Section 7

554,761. RAYOPHANE. Cl. 1. 2–12–52.

Section 8

33,688. 4. Cl. 52. 11–7–99.
61,800. CETO. Cl. 34. 4–9–07.
61,801. BETO. Cl. 34. 4–9–07.
61,802. BRAY'S "SPECIAL". Cl. 34. 4–9–07.
61,804. VIKA. Cl. 34. 4–9–07.
61,805. OTA. Cl. 34. 4–9–07.
73,104. ANCHOR BRAND AND DESIGN. Cl. 46. 3–16–09.
87,724. LUTA. Cl. 34. 8–6–12.
186,280. NETO. Cl. 34. 7–8–24.
215,460. MYLES SALT DOMINO E-Z RUN AND DESIGN. Cl. 46. 7–20–26.
259,505. FAN-TAN. Cl. 39. 7–30–29.
262,191. ENDICOTT FARM RELIEF JOHNSON AMERICA'S STANDARD AND DESIGN. Cl. 39. 10–1–29.
265,733. "SCRIMMAGE" AND DESIGN. Cl. 39. 1–7–30.
265,735. AMERICAN HIKER AND DESIGN. Cl. 39. 1–7–30.
277,865. WARREN. Cl. 46. 12–2–30.
355,528. HYDRACTOR. Cl. 24. 3–22–38.
520,973. ERMETOGRAF. Cl. 27. 2–14–50.
520,974. LEADER. Cl. 29. 2–14–50.
520,975. PONY. Cl. 29. 2–14–50.
520,979. LILT. Cl. 51. 2–14–50.
520,981. MITCHELL'S. Cl. 18. 2–14–50.
520,982. AMSTERDAM TEXTILES OVALS-ROUNDS RECTANGULARS TEX-TRED RUGS AND DESIGN. Cl. 42. 2–14–50.
520,987. ENERGIZED. Cl. 42. 2–14–50.
520,994. EDNALITE. Cl. 26. 2–14–50.
520,997. FROSTLINE. Cl. 26. 2–14–50.
521,006. GREEK LETTERS. Cl. 28. 2–14–50.
521,007. CYMATIC. Cl. 27. 2–14–50.
521,008. NOXON AND DESIGN. Cl. 42. 2–14–50.
521,009. LIGHTNING. Cl. 11. 2–14–50.
521,022. ADVEL. Cl. 18. 2–14–50.
521,023. CYMIDON. Cl. 18. 2–14–50.
521,028. TWAIN-LOCK. Cl. 28. 2–14–50.
521,029. BADGER-LON. Cl. 29. 2–14–50.
521,034. SUN LUBEWAY. Cl. 6. 2–14–50.
521,038. STYLED BY LEMIEUX. Cl. 27. 2–14–50.
521,040. FADESCO FABRICS DESIGNS COMPANY AND DESIGN. Cl. 42. 2–14–50.
521,042. "CARABINA" ARMY TWILL AND REPRESENTATION OF A GUN. Cl. 42. 2–14–50.
521,050. SKIVERTEX. Cl. 42. 2–14–50.
521,051. WEARTONE. Cl. 42. 2–14–50.
521,053. SHAMBEE. Cl. 42. 2–14–50.
521,054. SEALPAX. Cl. 42. 2–14–50.
521,058. FIGURES REPRESENTATION OF DELTA SIGMA. Cl. 28. 2–14–50.
521,061. SAF TOY. Cl. 22. Supp. Reg. 2–14–50.
521,065. WAYNE MAID AND DESIGN OF SILHOUETTE. Cl. 37. 2–14–50.
521,068. MARTIN'S DIAGONAL STRIPE. Cl. 16. 2–14–50.
521,069. SLIPEZY. Cl. 37. 2–14–50.
521,071. FISH-O-ROMA. Cl. 6. 2–14–50.
521,072. THE BEST OIL IN ANY CASE AND DESIGN. Cl. 15. 2–14–50.
521,073. WET-PATCH. Cl. 12. 2–14–50.

Section 18

568,279. TASCO. Cl. 12. 12–23–52. Canc. 6208.
601,162. KWIK KLEEN AND DESIGN. Cl. 52. 1–18–55. Canc. 6584.

Inadvertently Issued—Restored as a Pending Application

597,539. NOVOL. Cl. 18. 11–2–54.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

221,381. NOVAFLEX. Cl. 26. 11–30–26. Gevaert Photo Producten Naamlooze Vennootschap, Oude-God, near Antwerp, Belgium. Amended: In the statement, line 12, "and cameras," is deleted.

329,663. VITOS. Cl. 23. 11–5–35. Vitos, Societe Anonyme, Etablissements Vitoux, Troyes, France. Corrected: In line 2 of the renewal certificate, "Vitroux" should be *Vitoux*.

397,888. FROU FROU ETC. Cl. 51. 9–29–42. Germaine Monteil Parfums, Inc., New York, N. Y. Amended: In the statement, column 2, lines 2 and 3, 'The name "Germaine Monteil" is disclaimed apart from the mark as shown.' is deleted, and the drawing is amended to appear:

FROU FROU

527,086. LOKWEAVE. Cl. 42. 7–4–50. Bigelow-Sanford Carpet Co., Inc. Bigelow-Sanford Carpet Company, Inc., Thompsonville, Conn. Amended to appear:

LOKWEAVE

530,315. PAN AMERICAN AND DESIGN. Cl. 6. 9–5–50. Pan American Refining Corporation. Pan American Chemicals Corporation, New York, N. Y. Amended to appear:

PAN AMERICAN CHEMICALS

622,398. SHASTA. Cl. 46. 2–28–56. Swift & Company, Chicago, Ill. Corrected: In column 2, line 6, of the printed copy of the registration, "45" should be *46*.

623,613. BATTLE CREEK TRIMCYCLE. Cl. 44. 3–20–56. Battle Creek Equipment Company, Battle Creek, Mich. Corrected: In column 1, line 8 of the printed copy of the registration, "or" should be *of*: column 2, line 4, "persisting" should be *resisting*: same column, line 9, "588,694" should be *588,948*.

624,165. FELTUK. Cl. 50. 3–27–56. W. L. Stensgaard and Associates, Inc., Chicago, Ill. Corrected: In column 2, line 2, of the printed copy of the registration, after "terial" *sold in rolls for use primarily in advertising displays* should be inserted.

624,661. KARD-A-FILM. Cl. 37. 4–3–56. Remington Rand, Inc., assignor to Sperry Rand Corporation, New York, N. Y. Corrected: In line 5 of the printed copy of the registration, "315 4th Ave." should be *30 Rockefeller Plaza*.

624,722. OFNA-PERL. Cl. 6. 4–10–56. Farbwerke Hoechst Aktiengesellschaft, vormals Meister Lucius und Bruning, Frankfurt am Main Hochst, Germany. Corrected: In the certificate, lines 2–3 and 14, Atiengesellschaft" should be *Aktiengesellschaft*.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 6

331,522. Jan. 14, 1936. Kinetic Chemicals, Inc., Wilmington, Del. Pub. by E. I. du Pont de Nemours and Company, Wilmington, Del.

FREON-114

For Dichlorotetrafluoroethane, Being Fluorinated Hydrocarbons Used as Refrigerants, Propellants, and Fire Extinguishing Preparations.

331,523. Jan. 14, 1936. Kinetic Chemicals, Inc., Wilmington, Del. Pub. by E. I. du Pont de Nemours and Company, Wilmington, Del.

FREON-113

For Trichlorotrifluoroethane, Being Fluorinated Hydrocarbons Used as Refrigerants, Propellants, and Fire Extinguishing Preparations.

331,524. Jan. 14, 1936. Kinetic Chemicals, Inc., Wilmington, Del. Pub. by E. I. du Pont de Nemours and Company, Wilmington, Del.

FREON-21

For Dichloromonofluoromethane, Being Fluorinated Hydrocarbons Used as Refrigerants, Propellants, and Fire Extinguishing Preparations.

CLASS 7

325,538. June 25, 1935. The Walser Manufacturing Company, Inc., Clifton, N. J. Pub. by Walsello Products, Inc., Paterson, N. J.

Walsello

For Ribbon Made of Cellulose Film.

CLASS 12

331,614. Jan. 14, 1936. Missouri Portland Cement Company, St. Louis, Mo. Pub. by registrant.



The lining for color indicates red. The words "24 Hour Cement" are disclaimed apart from the mark as shown.
For High Early Strength Portland Cement.

331,615. Jan. 14, 1936. Missouri Portland Cement Company, St. Louis, Mo. Pub. by registrant.

RED BALL

The lining for color indicates red.
For High Early Strength Portland Cement.

336,079. June 23, 1936. Globe Roofing Products Co., Inc., Whiting, Ind. Pub. by registrant.

KOLORGRAN

For Asphalt Composition Roofing and Building Papers.

CLASS 15

107,847. Dec. 28, 1915. E. F. Houghton & Co., Philadelphia, Pa. Pub. by registrant.

CYL-TAL

For Lubricant for Steam-Engine Cylinders.

CLASS 34

334,188. Apr. 21, 1936. Abe Corbman, d. b. a. Adelta Stove & Mfg. Co., Philadelphia, Pa. Pub. by Adelta Manufacturing Company, Inc., Philadelphia, Pa.

MAJOR

For Hot Air Furnaces, Hot Water Furnaces, and Other Furnaces Made of Cast Iron, Sheet Iron, and/or Other Metal Materials, Adapted for the Use of Liquid or Solid Fuels, Including Coal and Fuel Oil.

CLASS 37

333,012. Mar. 10, 1936. The D. M. Bare Paper Company, Roaring Spring, Pa. Pub. by registrant.

Twin Finish

The word "Finish" is disclaimed apart from the mark as shown.
For English Finish, Eggshell Text and Super Book Paper.

CLASS 39

333,096. Mar. 10, 1936. J. Schoeneman, Incorporated, Baltimore, Md. Pub. by registrant.

Sportsemble

For Coats, Vests, and Trousers for Men, Youths, and Boys.

CLASS 46

106,307. Oct. 19, 1915. Everett Packing Co., Everett, Wash. Pub. by Fishermen's Packing Corporation, Anacortes, Wash.

WATERFALL

For Canned Salmon.

107,321. Nov. 23, 1915. Everett Packing Co., Everett, Wash. Pub. by Fishermen's Packing Corporation, Anacortes, Wash.

GOLDEN GLOW

For Canned Salmon.

107,323. Nov. 23, 1915. Everett Packing Co., Everett, Wash. Pub. by Fishermen's Packing Corporation, Anacortes, Wash.

OCEAN SPRAY

For Canned Salmon.

333,817. Apr. 7, 1936. Fishermen's Packing Corporation, Anacortes, Wash. Pub. by registrant.

Green Breaker

For Canned Salmon.

LIST OF REGISTRANTS OF TRADEMARKS

Adelta Mfg. Co., Inc. : *See*—
Corbman, Abe.

Adelta Stove & Mfg. Co. : *See*—
Corbman, Abe.

Advance Aluminum Castings Corp., Chicago, Ill. 628,104, pub. 3–20–56. Cl. 14.

Aerovox Corp., New Bedford, Mass. 628,162, pub. 3–20–56. Cl. 21.

Airboats, Inc., St. Louis, Mo. 628,198, pub. 7–19–55. Cl. 23.

Aircraft-Marine Products, Inc., Harrisburg, Pa. 628,168, pub. 3–13–56. Cl. 21.

Airmaid Hosiery Mills, Dallas, Tex. 628,331, pub. 3–20–56. Cl. 39.

Aktiebolaget Fixfabriken, Goteborg, Sweden. 628,175, pub. 3–20–56. Cl. 21.

Allen, S. L., & Co., Inc., Philadelphia, Pa. 336,755, ren. 7–14–56. Cl. 22.

Allied Chemical & Dye Corp., New York, N. Y. 628,039, pub. 3–20–56. Cl. 1.

American Heritage Publishing Co., Inc., New York, N. Y. 628,293, pub. 3–20–56. Cl. 38.

American Machine & Foundry Co., New York, N. Y. 628,107. Pub. 5–31–55. Cl. 15 ; pub. 7–12–55, Cl. 34 ; pub. 8–9–55, Cl. 19 ; pub. 1–24–56, Cl. 23 ; pub. 2–21–56, Cl. 22. (Consolidated certificate, Classes 15, 19, 22, 23, and 34.)

American Machine and Metals, Inc. Sellersville, Pa. 520,997, canc. Cl. 26.

American Safety Razor Corp., Brooklyn, N. Y. 521,029, canc. Cl. 29.

American Tag Co. of New Jersey, Belleville, N. J. 628,289, pub. 3–20–56. Cl. 38.

American Wood Fabric Institute, Inc., Washington, D. C. 628,453, pub. 3–20–56. Cl. A.

Amsterdam Textiles, to Amsterdam Textiles, Inc., Amsterdam, N. Y. 520,982, canc. Cl. 42.

Amsterdam Textiles, Inc. : *See*—
Amsterdam Textiles.

Anchell Corp., St. Thomas, Virgin Islands. 628,271, pub. 3–20–56. Cl. 37.

Anchor Bay Products, Inc., Detroit, Mich. 628,420, pub. 3–20–56. Cl. 51.

Anderson, Clayton & Co., Sherman, Tex. 628,377, pub. 3–20–56. Cl. 46.

Anderson Co., The, Gary, Ind. 628,150, pub. 3–20–56. Cl. 19.

Andersen, Leslie V., Ted Targosh, and Edward Kolodziej, Hazel Park, Mich. 628,455. Cl. 13.

Anderson, Wm. G., Inc., Dallas, Tex. 601,162, canc. Cl. 52.

Aquafilter Corp. : *See*—
United States Filter Products Corp.

Arctic Scent, Seward, Alaska. 628 409, pub. 3–20–56. Cl. 51.

Armand Schwab & Co., Inc., New York, N. Y. 628,342, pub. 3–20–56. Cl. 40.

Arnolt Corp., Warsaw, Ind. 628,206, pub. 3–20–56. Cl. 23.

Arrow-Hart & Hegeman Electric Co., The, Hartford, Conn. 628,170–1, pub. 3–20–56. Cl. 21.

Artloom Carpet Co., Inc., Philadelphia, Pa. 628,279–80, pub. 3–20–56. Cl. 37.

AsthmaNefrin Co., Inc. : *See*—
Vaponefrin Co.

Ateliers de la Motobecane, Pantin, Seine, France. 628,143–4, pub. 3–20–56. Cl. 19.

Atlantic Chemical & Equipment Co., Atlanta, Ga. 628,429, pub. 1–10–56. Cl. 52.

Aubrey-Jones, Nigel, Montreal, Quebec, Canada. 628,413, pub. 3–20–56. Cl. 51.

Austin, James, Co., Mars, Pa. 628,428, pub. 3–20–56. Cl. 52.

Automatic Pearl Button Co., Muscatine, Iowa. 337,225, ren. 8–4–56. Cl. 40.

B G S Shoe Corp., Manchester, N. H. 628,314–15, pub. 3–20–56. Cl. 39.

BJ Service, Inc., Long Beach, Calif. 628,437, pub. 3–20–56. Cl. 100.

BJ Service, Inc., Long Beach, Calif. 628,447, pub. 3–20–56. Cl. 106.

B. V. D. Corp., The, New York, N. Y. 521,054, canc. Cl. 42.

Babee-Tenda License Corp., Cleveland, Ohio. 628,338, pub. 3–20–56. Cl. 39.

Baillie, Jack T., d. b. a. Jack T. Baillie Co., Salinas, Calif. 628,371, pub. 3–20–56. Cl. 46.

Baillie, Jack T., Co. : *See*—
Baillie, Jack T.

Balfour, L. G., Co., Attleboro, Mass. 336,057, ren. 6–23–56. Cl. 28.

Ballantine, P., and Sons, Newark, N. J. 336,563, ren. 7–7–56. Cl. 48.

Barbizon Corp., The, New York, N. Y. 628,351–2, pub. 3–20–56. Cl. 42.

Bare, D. M., Paper Co., The, Roaring Spring, Pa. 333,012, 12(c) pub. 6–5–56. Cl. 37.

Barnes, Harold J., New York, N. Y. 628,186, pub. 3–20–56. Cl. 22.

Barry, R. G., Corp., Columbus, Ohio. 628,244–5, pub. 3–20–56. Cl. 32.

Bartgis Brothers Co., The, Catonsville, Md. 628,057, pub. 3–20–56. Cl. 2.

Basic Refractories, Inc. : *See*—
Kelley Island Lime & Transport Co., The.

Basore, Helen, d. b. a. Fabrics Designs Co., Pasadena, Calif. 521,040, canc. Cl. 42.

Battle Creek Equipment Co., Battle Creek, Mich. 623,613, cor. Cl. 44.

Beaunit Mills, Inc., New York, N. Y. 628,358, pub. 3–20–56. Cl. 43.

Belch, Paul F., Co., Bloomington, Ill. 111,626, ren. 7–25–56. Cl. 46.

Beutlich, Inc., Chicago, Ill. 628,134, pub. 3–20–56. Cl. 18.

Bienfang Products Corp., Metuchen, N. J. 628,276, pub. 3–20–56. Cl. 37.

Bigelow-Sanford Carpet Co., Inc. Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. 527,086. Am. 7(d). Cl. 42.

Blackstone Mfg. Co., Inc., Jamestown, N. Y. 355,528, canc. Cl. 24.

Blumenfeld, M. E., d. b. a. Dry Gloss Mfg. Co., Savannah, Ga. 628,063, pub. 3–20–56. Cl. 4.

Borden Co., The : *See*—
Muller, Julius F.

Borelli, Fred J., d. b. a. Borelli Produce Distributors, Fresno, Calif. 628,394, pub. 3–20–56. Cl. 46.

Borelli Produce Distributors : *See*—
Borelli, Fred J.

Borgfeldt Associates : *See*—
Borgfeldt, Robert R.

Borgfeldt, Robert R., d. b. a. Borgfeldt Associates, Chicago, Ill. 628,196, pub. 3–20–56. Cl. 23.

Boye Needle Co., The, Chicago, Ill. 628,341, pub. 3–20–56. Cl. 40.

Bradas & Gheens, Louisville, Ky. 73,104, canc. Cl. 46.

Bradley, John H., d. b. a. Com-Bow Tie Co., New York, N. Y. 628,316, pub. 3–20–56. Cl. 39.

Bray, Geo., & Co., Ltd., Leeds, England. 61,800–2, canc. Cl. 34.

Bray, Geo., & Co., Ltd., Leeds, England. 61,804–5, canc. Cl. 34.

Bray, Geo., & Co. Ltd., Leeds, England. 87,724, canc. Cl. 34.

Bray, Geo., & Co., Ltd., Leeds, England. 186,280, canc. Cl. 34.

Breier, Marcus, Sons, Inc., Amsterdam, N. Y. 628,302, pub. 3–20–56. Cl. 39.

Brigitte (Société à Responsabilité Limitée), Cannes, Alpes Maritimes, France. 628,311, pub. 3–20–56. Cl. 39.

Bristol-Myers Co., New York, N. Y. 628,408, pub. 2–21–56. Cl. 51.

British & Foreign Tobacco Co., Ltd., Pall Mall, London, England. 628,118, pub. 3–20–56. Cl. 17.

Broemmel Pharmaceuticals, San Francisco, Calif. 628,132, pub. 3–20–56. Cl. 18.

Brooklyn Products : *See*—
Linenfelser, Carl J.

Brown & Ackerman, Inc., New York, N. Y. 521,042, canc. Cl. 42.

Brown & Bigelow, St. Paul, Minn. 628,438, pub. 3–20–56. Cl. 101.

Brown Shoe Co., Inc., St. Louis, Mo. 337,240, ren. 8–4–56. Cl. 39.

Brown & Williamson Tobacco Corp., Louisville, Ky. 628,090, pub. 3–20–56. Cl. 8.

Brownstein-Louis Co., to Linkmaster, Inc., Los Angeles, Calif. 628,310, pub. 3–20–56. Cl. 39.

Brush, Richard C., d. b. a. Physicians Modern Drug Co., Allison Park, Pa. 628,131, pub. 3–20–56. Cl. 18.

Burress, John W., Roanoke, Va. 628,200, pub. 3–20–56. Cl. 23.

Cable Electric Products, Inc., Providence, R. I. 628,166, pub. 3–20–56. Cl. 21.

Campbell, E. K., Co., Kansas City, Mo. 628,247, pub. 3–20–56. Cl. 34.

Candor Engineering Co., Upper Montclair, N. J. 628,098, pub. 3–20–56. Cl. 12.

Cape Ann Fisheries Inc., Gloucester, Mass. 628,383, pub. 3–20–56. Cl. 46.

Casino Royal, Inc., Washington, D. C. 628,436, pub. 3–20–56. Cl. 100.

Cat's Paw Rubber Co., Inc., Baltimore, Md. 334,107, ren. 4–21–56. Cl. 39.

Central Home Products, Inc., Syracuse, N. Y. 628,046, pub. 3–20–56. Cl. 2.

Centrifix Corp., Cleveland, Ohio. 628,445, pub. 3–20–56. Cl. 106.

Chadbourn Gotham, Inc. : *See*—
Chadbourn Hosiery Mills, Inc.

Chadbourn Hosiery Mills, Inc., Charlotte, N. C., now by merger and change of name Chadbourn Gotham, Inc. 628,320, pub. 3–20–56. Cl. 39.

Chaffee, Floyd L., San Diego, Calif. 628,153, pub. 3–20–56. Cl. 19.

Challenge Mfg. Co., Los Angeles, Calif. 628,222, pub. 3–20–56. Cl. 26.

Chambers Corp., Shelbyville, Ind. 628,457. Cl. 21.

Charel Jewelry Co., Inc., Brooklyn, N. Y. 628,234, pub. 3–20–56. Cl. 28.

Charmin Paper Mills, Inc. : *See*—
Hoberg Paper & Fibre Co.

Chase & Co., Sanford, Fla. 628,381, pub. 3–20–56. Cl. 46.

Chemway Corp. : *See*—
Zonite Products Corp.

Cherokee Historical Association, Inc., The, Cherokee, N. C. 628,241, pub. 3–20–56. Cl. 30.

Chicago Pharmacal Co., Chicago, Ill. 628,140, pub. 3–20–56. Cl. 18.

Chicago Pneumatic Tool Co., New York, N. Y. 628,203, pub. 3–20–56. Cl. 23.

Chicago Pneumatic Tool Co., New York, N. Y. 628,208, pub. 3–20–56. Cl. 23.
Chicago Show Printing Co., d. b. a. Mystik Adhesive Products, Chicago, Ill. 628,077, pub. 3–20–56. Cl. 5.
Christian, Fred, Fargo, N. Dak. 628,201, pub. 3–20–56. Cl. 23.
City Paint Co., St. Louis, Mo., to The Valspar Corp., Ardmore, Pa. 336,449, ren. 7–7–56. Cl. 16.
Claro-stat Mfg. Co., Inc., Dover, N. H. 628,177, pub. 3–20–56. Cl. 21.
Coffin, Norman M., Hollywood, Fla. 628,386, pub. 3–20–56. Cl. 46.
Cohoes Carrybag Co., Inc., Cohoes, N. Y. 628,277, pub. 3–20–56. Cl. 37.
Columbian Enameling and Stamping Co., Inc., Terre Haute, Ind. 628,050, pub. 3–20–56. Cl. 2.
Combo Inc., Seattle, Wash. 628,297, pub. 3–20–56. Cl. 38.
Com-Bow Tie Co.: *See*—
Bradley, John H.
Con-Ferro Paint and Varnish Co., The, St. Louis, Mo., to The Valspar Corp., Ardmore, Pa. 333,578–9, ren. 6–9–56. Cl. 16.
Con-Ferro Paint and Varnish Co., The, St. Louis, Mo., to The Valspar Corp., Ardmore, Pa. 335,600–1, ren. 6–9–56. Cl. 16.
Con-Ferro Paint and Varnish Co., The, St. Louis, Mo., to The Valspar Corp., Ardmore, Pa. 335,615, ren. 6–9–56. Cl. 16.
Con-Ferro Paint and Varnish Co., The, St. Louis, Mo., to The Valspar Corp., Ardmore, Pa. 335,794, ren. 6–16–56. Cl. 16.
Connelly Containers, Inc., Philadelphia, Pa., by change of name from Haelan Laboratories, Inc. 628,470. Cl. 51.
Consolidated Cover Co., San Francisco, Calif. 628,260, pub. 3–20–56. Cl. 37.
Consolidated Water Power & Paper Co., Wisconsin Rapids, Wis. 628,273, pub. 3–20–56. Cl. 37.
Continental Copper & Steel Industries, Inc., Hillside, N. J. 628,155–7, pub. 3–20–56. Cl. 21.
Continental Specialties Co., Inc., Cicero, Ill. 628,395, pub. 3–20–56. Cl. 46.
Corbman, Abe, d. b. a. Adelta Stove & Mfg. Co., by Adelta Mfg. Co., Inc., Philadelphia, Pa. 334,188, 12(c) pub. 6–5–56. Cl. 34.
Cordell Displays of California: *See*—
Lang, Gus H.
Cove Bay Tackle Co., Gary, S. Dak. 628,179, pub. 3–20–56. Cl. 22.
Crocker, Burbank Papers Inc., Fitchburg, Mass. 628,278, pub. 3–20–56. Cl. 37.
Crown Cork & Seal Co., Inc., Baltimore, Md. 628,045, pub. 3–20–56. Cl. 2.
Curtis, Helene, Industries, Inc., Chicago, Ill. 628,365, pub. 3–20–56. Cl. 44.
Curtis Lighting, Inc., Chicago, Ill. 333,756, ren. 4–7–56. Cl. 21.
Cyma Watch Co., Inc., New York, N. Y., to Tavannes Watch Co., S. A., Tavannes, Switzerland. 521,007, canc. Cl. 27.
Davadon Laboratories: *See*—
Silver, David F.
Daval Co., Inc., Los Angeles, Calif. 628,130, pub. 3–20–56. Cl. 18.
De Laval Separator Co., The, Poughkeepsie, N. Y. 628,462. Cl. 23.
Delta Sigma Fraternity, Chicago, Ill. 521,058, canc. Cl. 28.
Delta Sigma Gamma Sorority, Atlanta, Ga. 521,006, canc. Cl. 28.
Dennison, George D., Co., The, New York, N. Y. 628,334, pub. 3–20–56. Cl. 39.
Dermide Ltd., Leeds, England. 628,154, pub. 3–20–56. Cl. 20.
Desmond's, Inc., Los Angeles, Calif. 628,321, pub. 3–20–56. Cl. 39.
Diamond Chain Co., Inc., Indianapolis, Ind. 628,218, pub. 3–20–56. Cl. 23.
Diamond Match Co., The, New York, N. Y. 628,051, pub. 3–20–56. Cl. 2.
Dirilyte Co. of America, Inc., Kokomo, Ind. 628,212, pub. 3–20–56. Cl. 23.
Diskin, Beatrice, d. b. a. Harbee Products Mfg. Co., New York, N. Y. 628,434, pub. 3–20–56. Cl. 52.
Diversey Corp., The, Chicago, Ill. 628,433, pub. 3–20–56. Cl. 52.
Dog N' Suds, Inc., Champaign, Ill. 628,369, pub. 3–20–56. Cl. 45.
Dornfeld, A. M.: *See*—
Dornfeld, Abraham M.
Dornfeld, Abraham M., d. b. a. A. M. Dornfeld, New York, N. Y. 628,236, pub. 3–20–56. Cl. 28.
Downey, C. L., Co., The, Hannibal, Mo. 628,254, pub. 3–20–56. Cl. 37.
Drew, E. F., & Co., Inc., New York, N. Y. 628,085, pub. 3–20–56. Cl. 6.
Drew, E. F., & Co., Inc., New York, N. Y. 628,427, pub. 3–20–56. Cl. 52.
Drive-In Magazine, Inc., The, Pratt, Kans. 628,295, pub. 3–20–56. Cl. 38.
Dry Gloss Mfg. Co.: *See*—
Blumenfeld, M. E.
Duffy Silk Co., The, Buffalo, N. Y. 628,357, pub. 3–20–56. Cl. 43.
Dukane Corp., St. Charles, Ill. 628,226, pub. 3–20–56. Cl. 26.
Duplan Corp., The, New York, N. Y. 520,987, canc. Cl. 42.
Du Pont, E. I., de Nemours and Co.: *See*—
Kinetic Chemicals, Inc.
Duraglit Ltd., Manchester, England. 628,060, pub. 3–20–56. Cl. 4.
Duriron Co., Inc., The, Dayton, Ohio. 628,176, pub. 3–20–56. Cl. 21.
Eagle Roll Leaf Stamping Co., Brooklyn, N. Y. 628,466. Cl. 31.
Eastman Kodak Co., Rochester, N. Y. 628,230, pub. 3–20–56. Cl. 26.
Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens: *See*—
Mülhens, Paul P.
Ednalite Optical Co., Inc., The, New York, N. Y. 520,994, canc. Cl. 26.
Edwards, Harlan H., Seattle, Wash. 628,099, pub. 3–20–56. Cl. 12.
Ehniger Mills, Inc., New York, N. Y. 628,344, pub. 3–20–56. Cl. 42.
Ehniger Mills, Inc., New York, N. Y. 628,347–50, pub. 3–20–56. Cl. 42.
Elder & Jenks Inc., Philadelphia, Pa. 628,240, pub. 3–20–56. Cl. 29.
Electric Auto-Lite Co., The, Toledo, Ohio. 110,818, ren. 6–13–56. Cl. 21.
Electric & Musical Industries Ltd., Hayes, England. 628,167, pub. 12–20–55. Cl. 21.
Electro Hygiene, Inc., Dayton, Ohio. 628,172, pub. 3–20–56. Cl. 21.
Elite Creations, Inc., Long Island City, N. Y. 628,181, pub. 3–20–56. Cl. 22.
El Molino Mills, Alhambra, Calif. 628,375, pub. 3–20–56. Cl. 46.
Emsley, John, Inc., New York, N. Y. 628,345, pub. 3–20–56. Cl. 42.
Endicott Johnson Corp., Endicott, N. Y. 259,505, canc. Cl. 39.
Endicott Johnson Corp., Endicott, N. Y. 262,191, canc. Cl. 39.
Endicott Johnson Corp., Endicott, N. Y. 265,733, canc. Cl. 39.
Endicott Johnson Corp., Endicott, N. Y. 265,735, canc. Cl. 39.
Ephrata Wholesale Co., Ephrata, Pa. 628,370, pub. 3–20–56. Cl. 45.
Erie Resistor Corp., Erie, Pa. 628,248, pub. 3–20–56. Cl. 34.
Etablissements Vitoux: *See*—
Vitos, Societe Anonyme.
Everett Packing Co., Everett, by Fishermen's Packing Corp., Anacortes, Wash. 106 307, 12(c) pub. 6–5–56. Cl. 46.
Everett Packing Co., Everett, by Fishermen's Packing Corp., Anacortes, Wash. 107,321, 12(c) pub. 6–5–56. Cl. 46.
Everett Packing Co., Everett, by Fishermen's Packing Corp., Anacortes, Wash. 107,323, 12(c) pub. 6–5–56. Cl. 46.
Evergard Co., The: *See*—
Seal, Nathaniel.
Fr. Sauter A. G. Fabrik Elektr. Apparate, Basel, Switzerland. 628,458. Cl. 21.
Faber, Eberhard, Pencil Co., Brooklyn, N. Y. 335,733, ren. 6–16–56. Cl. 37.
Fabrics Designs Co.: *See*—
Basore, Helen.
Factor, Max, & Co., Los Angeles, Calif. 628,125, pub. 3–20–56. Cl. 18.
Farbwerke Hoechst Aktiengesellschaft, vormals Meister Lucius und Bruning, Bruningstr. 45, Frankfurt am Main Hochst, Germany. 624,722, cor. Cl. 6.
Feature Ring Co., Inc., New York, N. Y. 628,232, pub. 3–20–56. Cl. 28.
Feldmuhle Ltd., Rorschach, Switzerland. 628,076, pub. 3–20–56. Cl. 5.
Fercana, James E., North Jackson, Ohio. 628,211, pub. 3–20–56. Cl. 23.
Fin 'N Feather Farm, Inc., Dundee, Ill. 628,392, pub. 3–20–56. Cl. 46.
Flore, John, Pasadena, Calif. 628,364, pub. 3–20–56. Cl. 44.
Fishermen's Packing Corp.: *See*—
Everett Packing Co.
Fishermen's Packing Corp., Anacortes, Wash. 333,817, 12(c) pub. 6–5–56. Cl. 46.
Fit-Rite Pants Co.: *See*—
Slutsky, Abraham.
Fitzhugh, William W., Inc., Brooklyn, N. Y. 521,065, canc. Cl. 37.
Flex-O-Lators, Inc., Carthage, Mo. 628,246, pub. 3–20–56. Cl. 32.
Flocker, John, and Co., Pittsburgh, Pa. 628,088, pub. 3–20–56. Cl. 7.
Florida Citrus Exchange, Tampa, Fla. 628,387, pub. 3–20–56. Cl. 46.
Florida Citrus Exchange, Tampa, Fla. 628,391, pub. 3–20–56. Cl. 46.
Fordath Engineering Co. Ltd., The, West Bromwich, England. 628,070–1, pub. 3–20–56. Cl. 5.
Forster Mfg. Co., Inc., Farmington, Maine. 628,367, pub. 3–20–56. Cl. 44.
Fostoria Pressed Steel Corp., The, Fostoria, Ohio. 333,921, ren. 4–14–56. Cl. 23.
Fox River Paper Corp., Appleton, Wis. 628,272, pub. 3–20–56. Cl. 37.
Franke & Heidecke, Fabrik Photographischer Präzisions-Apparate, Braunschweig, Germany. 628,228, pub. 3–20–56. Cl. 26.
Frankl, Sy, Inc., New York, N. Y. 628,332, pub. 3–20–56. Cl. 39.
Franklin Fibre-Lamitex Corp., Wilmington, Del. 628,042, pub. 3–20–56. Cl. 1.
Franklin MacVeagh and Co., Chicago, Ill. 335,015, ren. 5–19–56. Cl. 46.
Free-Lock Corp., Denver, Colo. 628,151, pub. 3–20–56. Cl. 19.
Freezer, J., & Son, Inc., New York, N. Y. 628,324, pub. 3–20–56. Cl. 39.
Fuller Brush Co., The, Hartford, Conn. 628,064, pub. 3–20–56. Cl. 4.
G. & C. Novelty Co., Brookline, Mass. 628,262, pub. 3–20–56. Cl. 37.

Gaims Co., The: *See*—
Seale, Frank E.
Gardner, H. M., & Associates: *See*—
Gardner, Hal M.
Gardner, Hal M., d. b. a. H. M. Gardner & Associates, Los Angeles, Calif. 628,407, pub. 3–20–56. Cl. 51.
Geckler, E. Walter, Minneapolis, Minn. 628,054, pub. 3–20–56. Cl. 2.
Gemsco, Inc., New York, N. Y. 628,235, pub. 3–20–56. Cl. 28.
General Cellulose Co., Inc., The, Garwood, N. J. 628,270, pub. 3–20–56. Cl. 37.
General Electric Co., Schenectady, N. Y. 628,080, pub. 3–20–56. Cl. 6.
General Features Corp., New York, N. Y. 628,290, pub. 3–20–56. Cl. 38.
General Products Co.: *See*—
Gorfinkel, H. J.
General Teleradio, Inc., New York, N. Y. 628,450, pub. 3–20–56. Cl. 107.
General Tire & Rubber Co., The, Akron, Ohio. 628,047–9, pub. 3–20–56. Cl. 2.
Germaine Monteil Parfums, Inc., New York, N. Y. 397,888. Am. 7(d). Cl. 51.
Gevaert Photo Producten Naamloose Vennootschap, Oude-God, near Antwerp, Belgium. 221,381. Am. 7(d). Cl. 26.
Giunta, Anthony P., Philadelphia, Pa. 628,220, pub. 3–27–56. Cl. 23.
Glatt, Herbert, d. b. a. Magla Products, Newark, N. J. 628,353, pub. 3–20–56. Cl. 42.
Globe Distributing Co., The, Washington, D. C. 628,399, pub. 3–20–56. Cl. 47.
Globe Mfg. Co., Fall River, Mass. 628,356, pub. 3–20–56. Cl. 43.
Globe Roofing Products Co., Inc., Whiting, Ind. 336,079, 12(c) pub. 6–5–56. Cl. 12.
Glue-Fast Equipment Co., Inc., New York, N. Y. 628,068, pub. 3–20–56. Cl. 5.
Gordon Bernard Co., Inc., Cincinnati, Ohio. 628,287, pub. 3–20–56. Cl. 38.
Gorfinkel, H. J., d. b. a. General Products Co., Montreal, Quebec, Canada. 628,119, pub. 3–20–56. Cl. 17.
Grogan, Vernon H., Fulton, Mo. 628,461. Cl. 22.
Gould & Lending, Inc., Whittier, Calif. 628,058, pub. 3–20–56. Cl. 3.
Grand View Heights Citrus Association, Terra Bella, Calif. 336,714, ren. 7–14–56. Cl. 46.
Greiner, Emil, Co., The, New York, N. Y. 333,334, ren. 3–17–56. Cl. 33.
Guerlain, Inc., New York, N. Y. 628,421, pub. 3–20–56. Cl. 51.
H. M. H. Co., The, Pawtucket, R. I. 628,237, pub. 3–20–56. Cl. 28.
Hadley Production, Inc., Fort Wayne, Ind. 628,251, pub. 3–20–56. Cl. 36.
Haelan Laboratories, Inc.: *See*—
Connelly Containers, Inc.
Hall & Ruckel, Inc., New York, N. Y. 520,981, canc. Cl. 18.
Hall-Welter Co., Inc., Rochester, N. Y. 337,300, ren. 8–4–56. Cl. 23.
Hamlins Wizard Oil Co., Chicago, Ill. 628,129, pub. 3–20–56. Cl. 18.
Handley, W. A., Mfg. Co., The, Roanoke, Ala. 628,346, pub. 3–20–56. Cl. 42.
Harbee Products Mfg. Co.: *See*—
Diskin, Beatrice.
Hart Schaffner & Marx, Chicago, Ill. 628,312, pub. 3–20–56. Cl. 39.
Harvey, G. F., Co., The, Saratoga Springs, N. Y. 332,429, ren. 2–11–56. Cl. 18.
Hawaiian Speed Swimmers Inc., Madison, Wis. 628,185, pub. 3–20–56. Cl. 22.
Heathcote Hosiery Co., New York, N. Y. 628,339–40, pub. 3–20–56. Cl. 39.
Hellogen Products, Inc., Long Island City, N. Y. 628,121, pub. 3–20–56. Cl. 18.
Heller, B., & Co., to B. Heller & Co., Chicago, Ill. 108,514, ren. 2–15–56. Cl. 52.
High Production Machine Co., Inc., Philadelphia, Pa., to E. G. Staude Mfg. Co., Inc., St. Paul, Minn. 628,193, pub. 3–20–56. Cl. 23.
Hirestra Laboratories, Inc., New York, N. Y. 628,417, pub. 3–20–56. Cl. 51.
Hoberg Paper & Fibre Co., to Charmin Paper Mills, Inc., Green Bay, Wis. 333,291, ren. 3–17–56. Cl. 37.
"Holiday House Travel Service Everywhere": *See*—
Marchini, Joseph A.
Hollywood-Maxwell Co., Los Angeles, Calif. 628,307, pub. 3–20–56. Cl. 39.
Houghton, E. F., & Co., Philadelphia, Pa. 107,847, 12(c) pub. 6–5–56. Cl. 15.
Hubbs and Howe Co., Buffalo, N. Y. 628,115, pub. 3–20–56. Cl. 16.
Hull, John E., Alabama City, Ala. 628,451, pub. 3–20–56. Cl. 107.
Hunt, C. Howard, Pen Co., Camden, N. J., to The Parker Pen Co., Janesville, Wis. 628,257, pub. 3–20–56. Cl. 37.
Hunt, C. Howard, Pen Co., Camden, N. J. 628,401, pub. 3–20–56. Cl. 50.
Hynson, Westcott & Dunning, Inc., Baltimore, Md. 336,863, ren. 7–21–56. Cl. 18.
Imperial Chemical Pharmaceuticals Ltd., Millbank, London, England. 628,133, pub. 3–20–56. Cl. 18.
Imperial Knife Co., Inc., Providence, R. I. 628,217, pub. 3–20–56. Cl. 23.
Industrial Products Co., Philadelphia, Pa. 628,087, pub. 3–20–56. Cl. 7.
Ingles, E. H., d. b. a. E. H. Ingles Co., Arlington Heights, Ill. 628,414, pub. 3–20–56. Cl. 51.
Ingles, E. H., Co.: *See*—
Ingles, E. H.
Ingram, Arthur T.: *See*—
Pierce, Marion E., and Arthur T. Ingram.
Interchemical Corp., New York, N. Y. 521,009, canc. Cl. 11.
Intercontinental Mfg. Co., Inc., Dallas, Tex. 628,191–2, pub. 12–18–51. Cl. 28.
International Nickel Co., Inc., The, New York, N. Y. 628,103, pub. 3–20–56. Cl. 14.
International Paper Co., New York, N. Y. 628,055, pub. 3–20–56. Cl. 2.
International Silver Co., to The International Silver Co., Meriden, Conn. 333,761, ren. 4–7–56. Cl. 28.
International Silver Co., The: *See*—
International Silver Co.
Iowa Soap Co., Burlington, Iowa. 33,688, canc. Cl. 52.
Iron Fireman Mfg. Co., Portland, Oreg. 628,249, pub. 3–20–56. Cl. 34.
Isco Optische Werke G. m. b. H., Gottingen-Weende, Germany. 628,225, pub. 3–20–56. Cl. 26.
Jackson, Arthur, Personalized Cleaning Service, Inc., Bronxville, N. Y. 628,440, pub. 3–20–56. Cl. 103.
Jason Corp., The, Hoboken, N. J. 628,400, pub. 3–20–56. Cl. 50.
Jay, Warren, d. b. a. The Kwong Wo Co., San Francisco, Calif. 628,373, pub. 3–20–56. Cl. 46.
Jensen, Georg, Inc., New York, N. Y. 628,412, pub. 3–20–56. Cl. 51.
Jewell, J. D., Inc., Gainesville, Ga. 628,374, pub. 3–20–56. Cl. 46.
Johnson, Howard R., d. b. a. Howard Johnson Transitions, Camden, N. J. 628,213, pub. 3–20–56. Cl. 23.
Johnson, Howard, Transitions: *See*—
Johnson, Howard R.
Joy, Oliver T., d. b. a. Notifier Mfg. Co., Lincoln, Nebr. 628,456. Cl. 21.
Julian & Kokenge Co., The, Columbus, Ohio. 335,341, ren. 6–2–56. Cl. 39.
Kastner, George A., Sr., d. b. a. Stay Lust Food Co., Batavia, N. Y. 628,141, pub. 3–20–56. Cl. 18.
Kelley Island Co.: *See*—
Kelley Island Lime & Transport Co., The.
Kelley Island Lime & Transport Co., The, to Kelley Island Co., to Basic Refractories, Inc., Cleveland, Ohio. 107,427, ren. 11–23–55. Cl. 12.
Kelley Island Lime & Transport Co., The, to Kelley Island Co., to Basic Refractories, Inc., Cleveland, Ohio. 107,555, ren. 12–7–55. Cl. 12.
Kempel, George P., d. b. a. Shush Mfg. Co., Akron, Ohio. 628,359, pub. 3–20–56. Cl. 44.
Keystone Fruit Co.: *See*—
Shinn, H. J., & Co.
Kinetic Chemicals, Inc., by E. I. du Pont de Nemours and Co., Wilmington, Del. 331,522–4, 12(c) pub. 6–5–56. Cl. 6.
King, Sandy R., Durant, Miss. 628,291, pub. 3–20–56. Cl. 38.
King, Thomas J., New City, N. Y. 628,183, pub. 3–20–56. Cl. 22.
Klox Kleen: *See*—
Levitt, J. Stanley.
Kolodziej, Edward: *See*—
Anderson, Leslie V., Ted Targosh, and Edward Kolodziej.
Kops Bros., Inc., New York, N. Y. 628,335, pub. 3–20–56. Cl. 39.
Kramer Jewelry Creations, Inc., New York, N. Y. 628,465. Cl. 28.
Kwikset Locks, Inc., Anaheim, Calif. 628,145, pub. 3–20–56. Cl. 19.
Kwik-Shake Dispenser Mfg. Co., Inc., Chicago, Ill. 628,242, pub. 3–20–56. Cl. 31.
Kwong Wo Co., The: *See*—
Jay, Warren.
Lady Hamilton Beauty Preparations Co. Ltd., Montreal, Quebec, Canada. 628,469. Cl. 51.
Landberg, Eugene G., d. b. a. Henry G. Landberg Sales Co., Topeka, Kans. 628,139, pub. 3–20–56. Cl. 18.
Landberg, Henry G., Sales Co.: *See*—
Landberg, Eugene G.
Landenberger, J. W., & Co., Philadelphia, Pa. 628,306, pub. 3–20–56. Cl. 39.
Lang, Gus H., d. b. a. Cordell Displays of California, Los Angeles, Calif. 628,402, pub. 3–20–56. Cl. 50.
Lee, H. D., Co., Inc., The: *See*—
Lee, H. D., Mercantile Co., The.
Lee, H. D., Mercantile Co., The, Salina, Kans., to The H. D. Lee Co., Inc., Kansas City, Mo. 111,740, ren. 8–1–56. Cl. 39.
Lemieux, Armand J., Corp., New York, N. Y. 521,038, canc. Cl. 27.
Lenson, U. & J. Corp., Brooklyn, N. Y. 628,378, pub. 3–20–56. Cl. 46.
Lentheric, Inc., New York, N. Y. 628,422, pub. 3–20–56. Cl. 51.
Lesselli Marionettes, Sacramento, Calif. 628,449, pub. 3–20–56. Cl. 107.
Levitt, J. Stanley, d. b. a. Klox Kleen, Kansas City, Mo. 628 239, pub. 3–20–56. Cl. 29.
Levy Bros. & Adler Rochester, Inc., Rochester, N. Y., to M & S Co., Inc., Monroe, La. 334,952, ren. 5–19–56. Cl. 39.
Ley, Bernard W., Akron, Ohio. 628,275, pub. 3–20–56. Cl. 37.
Liberty of Canada Ltd., Toronto, Ontario, Canada. 628,296, pub. 3–20–56. Cl. 38.
Linenfelser, Carl J., d. b. a. Brooklyn Products, Brooklyn, Mich. 628 040, pub. 3–20–56. Cl. 1.
Linkmaster, Inc.: *See*—
Brownstein-Louis Co.
Loftlex Knitting Mills, Inc., Brooklyn, N. Y. 628,355, pub. 3–20–56. Cl. 42.
Logan, A. J., Co., Pittsburgh, Pa. 628,243, pub. 3–20–56. Cl. 32.

Lohmann & Co., K. G., Cuxhaven, Germany. 628,094, pub. 3–20–56. Cl. 10.
L'Oreal-Paris: *See*—
Societe Monsavon-L'Oreal Societe Anonyme.
Lovable Brassiere Co., The, Atlanta, Ga. 628,325, pub. 3–20–56. Cl. 39.
Love, Joseph, Inc., New York, N. Y. 628,326, pub. 3–20–56. Cl. 39.
Loyal Packing Co., Chicago, Ill. 628,390, pub. 3–20–56. Cl. 46.
Lull-A-Baby Products, New York, N. Y. 628,056, pub. 3–20–56. Cl. 2.
M & S Co., Inc.: *See*—
Levy Bros. & Adler Rochester, Inc.
MacArthur Products Inc., Indian Orchard, Mass. 628,059, pub. 3–20–56. Cl. 3.
Maegus Enterprises, Inc., Chicago, Ill. 628,405, pub. 3–20–56. Cl. 50.
Magia Products: *See*—
Glatt, Herbert.
Magnus Oceanic Corp., Livingston, N. J. 628,190, pub. 3–20–56. Cl. 22.
Main Products Corp., Wilmington, Del. 628,069, pub. 3–20–56. Cl. 5.
Manufacturers Corp. of Mansfield, Ohio, Mansfield, Ohio. 628,102, pub. 3–20–56. Cl. 13.
Marchini, Joseph A., d. b. a. "Holiday House Travel Service Everywhere," New York, N. Y. 628,443, pub. 3–20–56. Cl. 105.
Martin, Robert S., d. b. a. Ra-Mana Distributors, Los Angeles, Calif. 628,126, pub. 3–20–56. Cl. 18.
Martin Varnish Co., Chicago, Ill. 521,068, canc. Cl. 16.
McColl, Harold D., South Gate, Calif. 628,091, pub. 3–20–56. Cl. 8.
McKenzie, Edward J., and Andrew A. Nowak, Jr., New York, N. Y. 628 110, pub. 3–20–56. Cl. 15.
McLaughlin Gormley King Co., Minneapolis, Minn. 628,393, pub. 3–20–56. Cl. 46.
McNeil Laboratories, Inc., Philadelphia, Pa. 332,535, ren. 2–18–56. Cl. 18.
McNeil Laboratories, Inc., Philadelphia, Pa. 332,537, ren. 2–18–56. Cl. 18.
McNeil Laboratories, Inc., Philadelphia, Pa. 332,633, ren. 2–18–56. Cl. 18.
Merck & Co. Inc., Rahway, N. J. 628,136, pub. 3–20–56. Cl. 18.
Merck & Co. Inc., Rahway, N. J. 628,380, pub. 3–20–56. Cl. 46.
Meyers, Louis, & Son, Inc., New York, N. Y. 337,364–7, ren. 8–4–56. Cl. 39.
Midland Steel Products Co., The, Cleveland, Ohio. 628,149, pub. 3–20–56. Cl. 19.
Midwest Biscuit Co., Burlington, Iowa. 628,388, pub. 3–20–56. Cl. 46.
Midwest Products Co., Gary, Ind. 628,078, pub. 3–20–56. Cl. 6.
Midwest Publishers, Inc., to Saddle and Bridle, Inc., St. Louis, Mo. 628,301, pub. 3–13–56. Cl. 38.
Mighton, S. E., Co., Bedford, Ohio. 628,376, pub. 3–20–56. Cl. 46.
Miller Industrial Corp., Nashville, Tenn. 628,304, pub. 3–20–56. Cl. 39.
Miller, James, Brooklyn, N. Y. 628,423, pub. 3–20–56. Cl. 51.
Millikin, Paul H., Los Angeles, Calif. 628,288, pub. 3–20–56. Cl. 38.
Milprint, Inc., Milwaukee, Wis. 628,258, pub. 3–20–56. Cl. 37.
Minkus Publications, Inc., New York, N. Y. 628,285, pub. 3–20–56. Cl. 38.
Missouri Portland Cement Co., St. Louis, Mo. 331,614–15, 12(c) pub. 6–5–56. Cl. 12.
Mole-Richardson Co., Hollywood, Calif. 628,163, pub. 3–20–56. Cl. 21.
Monarch Chenilles, Inc., Dalton, Ga. 521,008, canc. Cl. 42.
Mon-O-Coach, Inc., Ironwood, Mich. 628,146, pub. 3–20–56. Cl. 19.
Montclair Records: *See*—
Newton, Frederick G.
Montres Rolex S. A. (Rolex Uhren A. G.) (Rolex Watch Co.), Geneva, Switzerland. 628,464. Cl. 27.
Morgado & Silva, Ltda., Villa Nova de Gaya, Oporto, Portugal. 628,397, pub. 3–20–56. Cl. 47.
Motch & Merryweather Machinery Co., The, Cleveland, Ohio. 628,108–9, pub. 3–20–56. Cl. 15.
Mother's Food Products, Inc., Newark, N. J. 628,379, pub. 3–20–56. Cl. 46.
Motor Fume Utilizer Corp., Long Island City, N. Y., to Petroleum Solvents Corp., Newark, N. J. 334,897, ren. 5–19–56. Cl. 52.
Movado Watch Agency, Inc., New York, N. Y. 520,973, canc. Cl. 27.
Mülhens, Ferdinand: *See*—
Mülhens, Paul P.
Mülhens, Paul P., d. b. a. Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens, to Ferdinand Mülhens, d. b. a. Eau de Cologne- & Parfümerie-Fabrik Glockengasse No. 4711 gegenuber der Pferdepost von Ferd. Mülhens, Cologne, Germany. 335,777, ren. 6–16–56. Cl. 51.
Mülhens, Paul P., d. b. a. Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens, to Ferdinand Mülhens, d. b. a. Eau de Cologne- & Parfümerie-Fabrik Glockengasse No. 4711 gegenuber der Pferdepost von Ferd. Mülhens, Cologne, Germany. 336,005, ren. 6–23–56. Cl. 51.
Muller, Julius F., d. b. a. The Muller Laboratories, Baltimore, Md., to The Borden Co., New York, N. Y. 336,539, ren. 7–7–56. Cl. 46.
Muller Laboratories, The: *See*—
Muller, Julius F.
Murray Equipment Co., Inc., Detroit, Mich. 628,199, pub. 3–20–56. Cl. 23.
Myles Salt Co., Ltd., New Orleans, La. 215,460, canc. Cl. 46.
Mystik Adhesive Products: *See*—
Chicago Show Printing Co.
N. V. Karel I Sigarenfabrieken v/h H. J. van Abbe, Eindhoven, Netherlands. 628,117, pub. 3–20–56. Cl. 17.
N. V. Koninklijke Pharmaceutische Fabrieken v/h Brocades-Stheeman & Pharmacia, Amsterdam, Netherlands. 628,127, pub. 3–20–56. Cl. 18.
National Cooperatives, Inc., Washington, D. C. 628,160, pub. 3–20–56. Cl. 21.
National Gypsum Co., Buffalo, N. Y. 628,100, pub. 3–20–56. Cl. 12.
National Screw Machine Products Association, Cleveland, Ohio. 628,448, pub. 3–20–56. Cl. 106.
National Theatres, Inc., Los Angeles, Calif. 628,300, pub. 3–20–56. Cl. 38.
Natvar Corp., Woodbridge, N. J. 628,169, pub. 3–20–56. Cl. 21.
Nelson, Robert E., Green Bay, Wis. 628,263, pub. 3–20–56. Cl. 37.
Nestle-Le Mur: *See*—
Nestle-Le Mur Co., The.
Nestle-Le Mur Co., The, d. b. a. Nestle-Le Mur, New York, N. Y. 628,419, pub. 3–20–56. Cl. 51.
Newark Glassine Bag Co., Newark, N. J. 521,069, canc. Cl. 37.
Newaygo Sportsmens Supply, Inc., Newaygo, Mich. 628,178, pub. 3–20–56. Cl. 22.
Newberry, J. J., Co., New York, N. Y. 628,318, pub. 3–20–56. Cl. 39.
Newberry, J. J., Co., New York, N. Y. 628,329, pub. 3–20–56. Cl. 39.
New Haven Copper Co., The, Seymour, Conn. 336,646, ren. 7–14–56. Cl. 12.
New Plastic Corp., Los Angeles, Calif. 628,215, pub. 3–20–56. Cl. 23.
New Process Chemical Co., Inc., San Francisco, Calif. 628,431, pub. 3–20–56. Cl. 52.
Newton, Frederick G., d. b. a. Montclair Records, Detroit, Mich. 628,253, pub. 3–20–56. Cl. 36.
Nicosia Food Co., The, Rochester, N. Y. 628,468. Cl. 46.
Norcross, Inc., New York, N. Y. 628,086, pub. 3–20–56. Cl. 7.
North Atlantic and Gulf Steamship Co., Inc., New York, N. Y. 628,444, pub. 3–20–56. Cl. 105.
North, James, & Sons Ltd., Hyde, England. 628,309, pub. 3–20–56. Cl. 39.
Norton Co., Worcester, Mass. 628,066, pub. 3–20–56. Cl. 4.
Notifier Mfg. Co.: *See*—
Joy, Oliver T.
Novocol Chemical Mfg. Co., Inc., Brooklyn, N. Y. 697,539, canc. Cl. 18.
Nowak, Andrew A., Jr.: *See*—
McKenzie, Edward J., and Andrew A. Nowak., Jr.
Ogilvie Sisters: *See*—
Ogilvie Sisters Laboratories, Inc.
Ogilvie Sisters Laboratories, Inc., d. b. a. Ogilvie Sisters, New York, N. Y. 628,418, pub. 3–20–56. Cl. 51.
Ogilvie Sisters Laboratories, Inc., d. b. a. Ogilvie Sisters, New York, N. Y. 628,424, pub. 3–20–56. Cl. 51.
Ohio Brass Co., The, Mansfield, Ohio. 628,101, pub. 3–20–56. Cl. 13.
Olen Co., The, Mobile, Ala. 628,305, pub. 3–20–56. Cl. 39.
Orban, Kurt, Co., Inc., New York, N. Y. 628,195, pub. 3–20–56. Cl. 23.
Orr & Sembower, Inc., Reading, Pa. 628,467. Cl. 34.
Otis, McAllister & Co.: *See*—
Steinwender, Stoffrengen & Co., Inc.
Pacific Grinding Wheel Co., Everett, Wash. 628,061–2, pub. 3–20–56. Cl. 4.
Pacific Guano Co., Berkeley, Calif. 628,079, pub. 3–20–56. Cl. 6.
Palmer Asbestos & Rubber Corp., Inc., Louisville, Ky. 628,072, pub. 3–20–56. Cl. 5.
Pan American Chemicals Corp.: *See*—
Pan American Refining Corp.
Pan American Refining Corp. Pan American Chemicals Corp., New York, N. Y. 530,315. Am. 7(d). Cl. 6.
Pantry Meals, Inc., Los Angeles, Calif. 628,372, pub. 3–20–56. Cl. 46.
Paper Products, Inc., Los Angeles, Calif. 628,266, pub. 3–20–56. Cl. 37.
Paraffine Companies, Inc., The, San Francisco, Calif. 521,073, canc. Cl. 12.
Parker Pen Co., The: *See*—
Hunt, C. Howard, Pen Co.
Parker Pen Co., The, Janesville, Wis. 628,281–2, pub. 3–20–56. Cl. 37.
Patons & Baldwins, Ltd., Darlington, England. 335,299, ren. 6–2–56. Cl. 38.
Penick, S. B., & Co., New York, N. Y. 628,122, pub. 3–20–56. Cl. 18.
Penn Fishing Tackle Mfg. Co., Philadelphia, Pa. 628,189, pub. 3–20–56. Cl. 22.
Penn State Mills, Inc., Allentown, Pa. 628,336, pub. 3–20–56. Cl. 39.
Petroleum Solvents Corp.: *See*—
Motor Fume Utilizer Corp.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 628,123–4, pub. 3–20–56. Cl. 18.
Phelan & Taylor Produce Co., Inc., Oceano, Calif. 628,389, pub. 3–20–56. Cl. 46.
Phillips Petroleum Co., Bartlesville, Okla. 628,111, pub. 3–20–56. Cl. 15.
Physicians Modern Drug Co.: *See*—
Brush, Richard C.
Pickwick Co., Cedar Rapids, Iowa. 628,221, pub. 3–20–56. Cl. 23.

Pierce, Marion E., and Arthur T. Ingram, Shelton, Wash. 628,274, pub. 3–20–56. Cl. 37.
Pitzer, W. H., d. b. a. Southern Sales Co., Los Angeles, Calif. 628,385, pub. 3–20–56. Cl. 46.
Portable Electric Tools, Inc., Chicago, Ill. 628,207, pub. 3–20–56. Cl. 23.
Power Petroleum Products, Dallas, Tex. 628,083, pub. 3–20–56. Cl. 6.
Presto-Moly Corp., Milford, Pa. 628,106, pub. 12–27–55. Cl. 15.
Price Industries Ltd., Akron, Ohio. 628,194, pub. 3–20–56. Cl. 23.
Procter & Gamble Co., The, Cincinnati, Ohio. 520,979, canc. Cl. 6.
Protective Research Co., Inc., The, Collinsville, Canton, Conn. 628,165, pub. 3–20–56. Cl. 21.
Punch-In-Vite Enterprises, Atlanta, Ga. 628,187, pub. 3–20–56. Cl. 22.
Q-Tips, Inc., Long Island City, N .Y. 628,330, pub. 3–20–56. Cl. 39.
Quaker State Oil Refining Corp., Oil City, Pa. 521,072, canc. Cl. 15.
RWL Wine & Liquor Co., Inc.: *See*—
Roma Wine & Liquor Co.
Radex Corp., Chicago, Ill. 628,459. Cl. 21.
Ra-Mana Distributors: *See*—
Martin, Robert S.
Ramsey Corp., St. Louis, Mo. 628,250, pub. 3–20–56. Cl. 35.
Ramshead Distributing Co., to Frank Silverman, Chicago, Ill. 328,728, ren. 10–1–55. Cl. 49.
Ransburg Electro-Coating Corp., Indianapolis, Ind. 628,159, pub. 3–20–56. Cl. 21.
Raymond (Art de Beauté) Ltd., London, England. 628,410, pub. 3–20–56. Cl. 51.
Rayonier Inc., New York, N. Y. 554,761, canc. Cl. 1.
Realisations Ultrasoniques S. A. R. L., St. Maur, Seine, France. 628,158, pub. 2–14–56. Cl. 21.
Recony Corp., New York, N. Y. 628,286, pub. 3–20–56. Cl. 38.
Redmond Co., Inc., Owosso, Mich. 628,164, pub. 3–20–56. Cl. 21.
Reiter, Reuben, Leonia, N. J. 628,361, pub. 3–20–56. Cl. 44.
Rembrandt Tobacco Corp. (Overseas) Ltd., Stellenbosch, Union of South Africa. 628,092, pub. 3–20–56. Cl. 8.
Rembrandt Tobacco Corp. (Overseas) Ltd., Stellenbosch, Union of South Africa. 628,120, pub. 3–20–56. Cl. 17.
Remington Rand, Inc., to Sperry Rand Corp., New York, N. Y. 624,861, cor. Cl. 37.
Revere Copper and Brass Inc., New York, N. Y. 628,044, pub. 3–20–56. Cl. 2.
Reynolds, Laurence, New Rochelle, N. Y. 628,294, pub. 3–20–56. Cl. 38.
Rhinelander Paper Co., Rhinelander, Wis. 628,267–8, pub. 3–20–56. Cl. 37.
Rice, Irving W., & Co., Inc., New York, N. Y. 628,366, pub. 3–20–56. Cl. 44.
Rider, A. G.: *See*—
Rider, Arthur G.
Rider, Arthur G., d. b. a. A. G. Rider, Binghamton, N. Y. 628,238, pub. 3–20–56. Cl. 28.
Rilling-Dermetics Co., The, New York, N. Y. 628,416, pub. 3–20–56. Cl. 51.
River Plate Dairy Co., Ltd., The, to River Plate Dairy Co., S. A. (Compania Rio de la Plata de la Industria Lechera S. A.), Buenos Aires, Argentina. 332,801, ren. 2–25–56. Cl. 6.
River Plate Dairy Co., S. A. (Compania Rio de la Plata de la Industria Lechera S. A.): *See*—
River Plate Dairy Co., Ltd., The.
Robinson-Wagner Co., Inc., New York, N. Y. 628,406, pub. 3–20–56. Cl. 51.
Roehrig, John A., Pittsburgh, Pa. 628,148, pub. 3–20–56. Cl. 19.
Roger Rubber Products, Inc., Los Angeles, Calif. 628,362, pub. 3–20–56. Cl. 44.
Rogers Laboratories, Inc., Truth or Consequences, N. Mex. 628,137, pub. 3–20–56. Cl. 18.
Roma Wine & Liquor Co., to RWL Wine & Liquor Co., Inc., Baltimore, Md. 337,106, ren. 7–28–56. Cl. 47.
Ronk, Samuel O., Los Angeles, Calif. 335,687, ren. 6–9–56. Cl. 51.
Rose Mfg. Co.: *See*—
Rosenbluth, Edwin M.
Rosenbluth, Edwin M., d. b. a. Rose Mfg. Co., Philadelphia, Pa., to Rose Mfg. Co., Beacon, N. Y. 334,172, ren. 4–21–56. Cl. 6.
Roskin, I., Co., Inc., New York, N. Y. 628,233, pub. 3–20–56. Cl. 28.
Rowe, Alice M., Akron, Ohio. 628,180, pub. 3–20–56. Cl. 22.
Royal Paper Products, Coatesville, Pa. 628,264, pub. 3–20–56. Cl. 37.
Rubinstein, Charles L., d. b. a. Ruby Products Co., Milwaukee, Wis. 628,363, pub. 3–20–56. Cl. 44.
Ruby Products Co.: *See*—
Rubinstein, Charles L.
Rushton, Alfred A., d. b. a. Rushton & Co., San Francisco, Calif. 628,384, pub. 3–20–56. Cl. 46.
Rushton & Co.: *See*—
Rushton, Alfred A.
Russo, A., & Co.: *See*—
Russo, Andrea.
Russo, Andrea, to A. Russo & Co., Chicago, Ill. 108,535, ren. 2–15–56. Cl. 46.
S. K. S. Machine Co., New York, N. Y. 628,209–10, pub. 3–20–56. Cl. 23.
Saddle and Bridle, Inc.: *See*—
Midwest Publishers, Inc.
Saftoy, Inc., Oak Lawn, Ill. 521,061, canc. Cl. 22.
Sagner, A., & Sons, Inc., to A. Sagner's Son, Baltimore, Md. 334,585, ren. 5–5–56. Cl. 39.
Sagner's, A., Son: *See*—
Sagner, A., & Sons, Inc.
St. Nicholas, Inc., Marietta, Ohio. 628,292, pub. 3–20–56. Cl. 38.
Saks & Co., New York, N. Y. 628,337, pub. 3–20–56. Cl. 39.
Saks & Co., New York, N. Y. 628,354, pub. 3–20–56. Cl. 42.
Sales Affiliates, Inc., New York, N. Y. 628,415, pub. 3–20–56. Cl. 51.
Sandess Mfg. Co., New York, N. Y. 628,323, pub. 3–20–56. Cl. 39.
Santa Cruz Shirt Co., Santa Cruz, Calif. 628,313, pub. 3–20–56. Cl. 39.
Sappanos, Louis, Co., to Louis Sappanos Co., Chicago, Ill. 332,809, ren. 2–25–56. Cl. 16.
Sargent, Eddie, Enterprises: *See*—
Sargent, Edward C.
Sargent, Edward C., d. b. a. Eddie Sargent Enterprises, Owen Sound, Ontario, Canada. 628,439, pub. 3–20–56. Cl. 101.
Scale Specialties & Systems Inc., Roseland, N. J. 628,224, pub. 3–20–56. Cl. 26.
Scheidemandel-Motard-Werke, A. G., Berlin-Spandau, Germany. 628,073–4, pub. 3–20–56. Cl. 5.
Schenley Laboratories, Inc., New York, N. Y. 628,138, pub. 3–20–56. Cl. 18.
Schneider, F. A., d. b. a. Warren Dried Fruit Co., San Jose, Calif. 277,865, canc. Cl. 46.
Schoeneman, J., Inc., Baltimore, Md. 333,096, 12(c) pub. 6–5–56. Cl. 39.
Schroeder Beverages: *See*—
Schroeder, Quintin.
Schroeder, Quintin, d. b. a. Schroeder Beverages, Waterloo, Ill. 628,368, pub. 3–20–56. Cl. 45.
Seal, Nathaniel, d. b. a. The Evergard Co., Newport Beach, Calif. 628,142, pub. 3–20–56. Cl. 19.
Seale, Frank E., d. b. a. The Gaims Co., Lexington, Ky. 628,184, pub. 3–20–56. Cl. 22.
Sendor Bindery, Inc., New York, N. Y. 628,446, pub. 3–20–56. Cl. 106.
Serio S. P. A. Officine Meccaniche di Precisione, Milan, Italy. 628,197, pub. 3–13–56. Cl. 23.
Shell Chemical Corp., New York, N. Y. 628,081, pub. 3–20–56. Cl. 6.
Sherman, Sol, New York, N. Y. 628,319, pub. 3–20–56. Cl. 39.
Shinn, H. J., & Co., Spokane, to Keystone Fruit Co., Entiat, Wash. 111,610, ren. 7–25–56. Cl. 46.
Shrader, Ralph, Associates, San Lorenzo, Calif. 628,430, pub. 3–20–56. Cl. 52.
Shush Mfg. Co.: *See*—
Kempel, George P.
Sickles, M., & Sons, Inc., Philadelphia, Pa. 521,028, canc. Cl. 28.
Sillers Paint & Varnish Co., Los Angeles, Calif. 628,116, pub. 3–20–56. Cl. 16.
Silver, David F., d. b. a. Davadon Laboratories, Peekskill, N. Y. 521,071, canc. Cl. 6.
Silverman, Frank: *See*—
Ramshead Distilling Co.
Simonds Abrasive Co., Philadelphia, Pa. 628,067, pub. 3–20–56. Cl. 4.
Singer & Neuburger, Inc., New York, N. Y. 521,053, canc. Cl. 42.
Sledge Mfg. Co., Tyler, Tex. 628,308, pub. 3–20–56. Cl. 39.
Slee-Form, Inc., Buffalo, N. Y. 628,404, pub. 3–20–56. Cl. 50.
Slutsky, Abraham, d. b. a. Fit-Rite Pants Co., New York, N. Y. 628,303, pub. 3–20–56. Cl. 39.
Smith, D. B., & Co., Inc., Utica, N. Y. 628,216, pub. 3–20–56. Cl. 23.
Societe Anonyme Champagne Pommery & Greno, Marne, France. 628,396, pub. 3–20–56. Cl. 47.
Société Industrielle de Lunetterie, Paris, France. 628,223, pub. 3–20–56. Cl. 26.
Societe Monsavon-L'Oreal Societe Anonyme, d. b. a. L'Oreal-Paris, Paris, France. 628,411, pub. 3–20–56. Cl. 51.
Soil Builders International Corp., New York, N. Y. 628,097, pub. 3–20–56. Cl. 10.
South Bend Bait Co., South Bend, Ind. 628,460. Cl. 22.
Southern Sales Co.: *See*—
Pitzer, W. H.
Speed Products Co., Inc., Long Island City, N. Y. 628,205, pub. 3–20–56. Cl. 23.
Sperry Rand Corp.: *See*—
Remington Rand, Inc.
Standard Oil Co., The, Cleveland, Ohio. 628,084, pub. 3–20–56. Cl. 6.
Standard Ultramarine Co., The, to Standard Ultramarine & Color Co., Huntington, W. Va. 333,978, ren. 4–14–56. Cl. 6.
Standard Ultramarine & Color Co.: *See*—
Standard Ultramarine Co., The.
Staude, E. G., Mfg. Co., Inc.: *See*—
High Production Machine Co., Inc.
Stay Lust Food Co.: *See*—
Kastner, George A., Sr.
Stayon Products, Inc., Chicago, Ill. 628,328, pub. 3–20–56. Cl. 39.
Steinman, Richard K., Phoenix, Ariz. 628,454. Cl. 2.
Steinwender, Stoffregen & Co., Inc., New York, N. Y., to Otis, McAllister & Co., San Francisco, Calif. 335,857, ren. 6–16–56. Cl. 46.
Stensgaard, W. L., and Associates, Inc., Chicago, Ill. 624,165, cor. Cl. 50.
Stephen Products, Inc., Crystal Lake, Ill. 628,219, pub. 3–20–56. Cl. 23.
Stetson, John B., Co., The, Philadelphia, Pa. 333,198–9, ren. 3–10–56. Cl. 39.
Stevens, J. P., & Co. Inc., New York, N. Y. 628,343, pub. 3–20–56. Cl. 42.

Steyermark, Julian A., Addison, Ill. 628,041, pub. 3–20–56. Cl. 1.
Stolz Freres, S. A., Le Locle, Switzerland. 628,231, pub. 3–20–56. Cl. 27.
Stonecoat, Milwaukee, Wis. 628,112, pub. 3–20–56. Cl. 16.
Storz Brewing Co., Omaha, Nebr. 333,001, ren. 3–10–56. Cl. 48.
Stravon Publishers, New York, N. Y. 628,298, pub. 3–20–56. Cl. 38.
Structural Clay Products Research Foundation, Chicago, Ill. 628,452, pub. 3–20–56. Cl. A.
Suburban Toy & Mfg. Corp., Pittsburgh, Pa. 628,182, pub. 3–20–56. Cl. 22.
Sunbeam Corp., Chicago, Ill. 628,052, pub. 3–20–56. Cl. 2.
Sunbeam-Talbot Ltd., Ryton-on-Dunsmore, near Coventry England. 628,152, pub. 3–20–56. Cl. 19.
Sun Oil Co., Philadelphia, Pa. 521,034, canc. Cl. 6.
Susquehanna Waist Co., Philadelphia, to Susquehanna Waist Co., Upland, Pa. 334,511, ren. 5–5–56. Cl. 39.
Susee Seasonings: *See*—
Weil, Pearl M.
Swift & Co., Chicago, Ill. 622,398, cor. Cl. 6.
Syracuse Smelting Works, Brooklyn, N. Y. 108,579, ren. 2–15–56. Cl. 14.
Tablax Co.: *See*—
Weiner, Louis I.
Targosh, Ted: *See*—
Anderson, Leslie V., Ted Targosh, and Edward Kolodziej.
Tasco International Corp., Dallas, Tex. 568,279, canc. Cl. 12.
Tavannes Watch Co., S. A.: *See*—
Cyma Watch Co., Inc.
Taylor, H. P., Jr., Inc., to Taylor & Sledd, Inc., Richmond, Va. 335,581, ren. 6–9–56. Cl. 46.
Taylor & Sledd, Inc.: *See*—
Taylor, H. P., Jr., Inc.
Taylor & Sledd, Inc., Richmond, Va. 335,798, ren. 6–16–56. Cl. 46.
Thomson Paper Mills, Inc., New York, N. Y. 628,284, pub. 3–27–56. Cl. 37.
Thomson-Porcelite Paint Co., d. b. a. Thomson-Porcelite Paint Co., Philadelphia, Pa. 628,113, pub. 3–20–56. Cl. 16.
Ti-Dee Creations Inc., New York, N. Y. 628,053, pub. 3–20–56. Cl. 2.
Timbertone Decorative Co., Inc., New York, N. Y. 628,255–6, pub. 3–20–56. Cl. 37.
Timken Roller Bearing Co., The, Canton, Ohio. 628,105, pub. 3–20–56. Cl. 14.
Torrington Mfg. Co., The, Torrington, Conn. 337,040, ren. 7–28–56. Cl. 21.
Travel Talk, Inc., Akron, Ohio. 628,259, pub. 3–20–56. Cl. 37.
Traveletter Corp., Greenwich, Conn. 628,265, pub. 3–20–56. Cl. 37.
Trav-Ler Radio Corp., Chicago, Ill. 628,161, pub. 3–20–56. Cl. 21.
Triangle Paper Bag Mfg. Co., The, Covington, Ky. 628,261, pub. 3–20–56. Cl. 37.
Tuckersharpe Pen Co., Inc., Richmond, Va. 628,269, pub. 3–20–56. Cl. 37.
Ultra Chemical Works, Inc., Paterson, N. J. 628,432, pub. 3–20–56. Cl. 52.
Union Bay State Chemical Co., Inc., Cambridge, Mass. 628,075, pub. 3–20–56. Cl. 5.
Union Carbide and Carbon Corp., New York, N. Y. 628,227, pub. 3–20–56. Cl. 26.
United Gas Pipe Line Co., Shreveport, La. 628,442, pub. 3–20–56. Cl. 105.
U. S. Electrical Motors, Inc., Los Angeles, Calif. 628,173–4, pub. 3–20–56. Cl. 21.
United States Filter Products Corp., Los Angeles, Calif., to Aquafilter Corp., New York, N. Y. 628,089, pub. 3–20–56. Cl. 8.
U. S. Industries, Inc., New York, N. Y. 628,204, pub. 3–20–56. Cl. 23.
United States Shoe Corp., The, Cincinnati, Ohio. 628,322, pub. 2–14–56. Cl. 39.
Universal Brassiere & Justrite Corset Co., Inc., New York, N. Y. 628,333, pub. 3–20–56. Cl. 39.
Upjohn Co., The, Kalamazoo, Mich. 628,095–6, pub. 3–20–56. Cl. 10.
Upjohn Co., The, Kalamazoo, Mich. 628,128, pub. 3–20–56. Cl. 18.
Utility Tool Co., Inc., Norfolk, Va. 628,214, pub. 3–20–56. Cl. 23.
Valspar Corp., The: *See*—
City Paint Co.
Con-Ferro Paint and Varnish Co., The.
Vaponefrin Co., Seattle, Wash., to AsthmaNefrin Co., Inc., Portland, Oreg. 336,961, ren. 7–21–56. Cl. 18.
Verden, James A., Chicago, Ill. 628,360, pub. 3–20–56. Cl. 44.
Viking Tool & Machine Corp., The, Belleville, N. J. 628,229, pub. 3–20–56. Cl. 26.
Vine Products, Ltd., Kingston-on-Thames, Surrey, England. 628,398, pub. 3–20–56. Cl. 47.
Vitaminerals, Inc., Glendale, Calif. 628,299, pub. 3–20–56. Cl. 38.
Vitamins Ltd., London, England. 521,022, canc. Cl. 18.
Vitos, Societe Anonyme. Etablissements Vitoux, Troyes, France. 329,663, cor. Cl. 23.
Vocational Footwear, Inc., Lutesville, Mo. 628,327, pub. 3–20–56. Cl. 39.
Vogue Dolls, Inc., Medford, Mass. 628,188, pub. 3–20–56. Cl. 22.
Voorhis-Tiebout Co., Inc., Red Hook, N. Y. 628,426, pub. 3–20–56. Cl. 52.
Walsello Products, Inc.: *See*—
Walser Mfg. Co., Inc., The.
Walser Mfg. Co., Inc., The, Clifton, by Walsello Products, Inc., Paterson, N. J. 325,538, 12(c) pub. 6–5–56. Cl. 7.
Warren Dried Fruit Co.: *See*—
Schneider, F. A.
Washington Aluminum Co., Inc., Baltimore, Md. 628,147, pub. 3–20–56. Cl. 19.
Washington Mfg. Co., Inc., Nashville, Tenn. 628,317, pub. 3–20–56. Cl. 39.
Wearever Shower Curtain Corp., Brooklyn, N. Y. 521,051, canc. Cl. 42.
Weil, Pearl M., d. b. a. Susee Seasonings, New York, N. Y. 628,382, pub. 3–20–56. Cl. 46.
Weiner, Louis I., d. b. a. Tablax Co., New York, N. Y. 628,135, pub. 3–20–56. Cl. 18.
Western Air Lines, Inc., Los Angeles, Calif. 628,441, pub. 3–20–56. Cl. 105.
Western States Lacquer Corp., Los Angeles, Calif. 628,114, pub. 3–20–56. Cl. 16.
Wheel Trueing Tool Co., Detroit, Mich. 628,202, pub. 3–20–56. Cl. 23.
Whitehead Brothers Co., New York, N. Y. 628,043, pub. 3–20–56. Cl. 1.
Whiting-Adams Co., Inc., Boston, Mass. 520,974–5, canc. Cl. 29.
Whitley Chemical Corp., Rock Island, Ill. 628,093, pub. 3–20–56. Cl. 10.
Whitman, Philip G., Inc., New York, N. Y. 521,050, canc. Cl. 42.
Williams Co., The, London, Ohio. 628,065, pub. 3–20–56. Cl. 4.
Williamson Adhesives, Inc., Skokie, Ill. 628,463. Cl. 23.
Winthrop-Stearns Inc., New York, N. Y. 521,023, canc. Cl. 18.
Wool Bureau, Inc., The, New York, N. Y. 628,435, pub. 3–20–56. Cl. 100.
Woolven, John L., Winnipeg, Manitoba, Canada. 628,403, pub. 3–20–56. Cl. 50.
Woudhuysen, H. L., & Associates: *See*—
Woudhuysen, Henry L.
Woudhuysen, Henry L., d. b. a. H. L. Woudhuysen & Associates, New York, N. Y. 628,082, pub. 3–20–56. Cl. 6.
Zellerbach Paper Co., San Francisco, Calif. 628,283, pub. 3–20–56. Cl. 37.
Zielinski, Edward A., Berwyn, Ill. 628,252, pub. 3–20–56. Cl. 36.
Zonite Products Corp., New Brunswick, N. J., now by change of name to Chemway Corp. 628,425, pub. 3–20–56. Cl. 51.

U. S. GOVERNMENT PRINTING OFFICE: 0——1956

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
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PATENTS

NOTICES

Registration to Practice

The following list contains the names of all applicants for registration to practice before the United States Patent Office who attained passing grades in the examination of February 20, 1956. Information tending to affect the eligibility of any of said applicants on moral or ethical grounds should be furnished the Commissioner of Patents on or before July 12, 1956.

THOMAS F. MURPHY,
May 21, 1956. *Vice-Chairman, Committee on Enrollment.*

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Henrickson, Marvin A., 725 N. Pine Ave., Arlington Heights, Ill.
Hoatson, James R., Jr., 40 Chestnut Ave., Clarendon Hills, Ill.
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Lungmus, John B., 1319 Oak Ave., Evanston, Ill.
MacLeod, Howard A., 1115 Olive Road, Homewood, Ill.
Manu, Basil P., 728 Irving Park Road, Chicago 13, Ill.
Montemayor, George H., 426 Surf St., Chicago 14, Ill.
Myers, Richard J., 5223 W. Byron St., Chicago 41, Ill.
Nist, Donald E., 320 Minocqua, Park Forest, Ill.
Picha, George M., 5332 Greenleaf St., Skokie, Ill.
Puerner, Paul R., 9111 La Crosse Ave., Skokie, Ill.
Shurtleff, John H., 6731 Stanley Ave., Berwyn, Ill.
Siegel, Albert, 1101 Columbia Ave., Chicago 26, Ill.
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Skrydlak, Stephen T., 41 N. Warwick Ave., Westmont, Ill.
Thomas, Mark O., 202 Albion Ave., Park Ridge, Ill.
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Iowa

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Maryland

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Kallimon, Metro, 110 Garrett Road, Glen Burnie, Md.
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Span, Patrick J., Brainter's Ridge, Fallston, Md.
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Michigan

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Hauke, Robert C., 4004 Coolidge, Royal Oak, Mich.
Murray, Allan J., 5920 Burger, Dearborn 6, Mich.

New Applications Received During April 1956

Patents	6,497
Designs	420
Plants	5
Reissues	19
Total	6,941

Issue

Patents	1,045—No. 2,749,546 to No.	2,750,590, incl.
Designs	80—No. 177,954 to No.	178,033, incl.
Plants	1—No. 1,482	
Reissues	3—No. 24,164 to No.	24,166, incl.
Total	1,129	

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Emhardt, Charles D., 6601 Williston Place, Falls Church, Va.
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Adverse Decisions in Interferences

In the designated interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed.

Pat. 2,520,299, W. D. Antrim, Safety control means with flash tubes for oven burners, decided Feb. 29, 1956, Interference No. 86,520, claims 1 and 2.

Pat. 2,617,079, J. W. McNall, Tunable magnetron, decided Feb. 29, 1956, Interference No. 86,633, claims 15, 22, 24, 30, and 31.

Pat. 2,632,104, L. L. Lakatos, Gating circuit, decided Feb. 27, 1956, Interference No. 86,601, claims 15, 16, and 17.

Pat. 2,671,768, P. Haibig, Solutions of acrylonitrile polymers in mixtures of aqueous nitric acid and nitromethane, decided May 1, 1956, Interference No. 87,216, claims 1, 2, and 3.

Pat. 2,684,601, B. Putterman, Automobile directional signal, decided Apr. 27, 1956, Interference No. 87,644, claims 1, 2, 3, 5, 6, and 7.

Pat. 2,685,107, F. A. Schultz, Method of molding plastic articles, decided Apr. 27, 1956, Interference No. 87,614, claim 2.

Disclaimers

2,670,599.—*Kenneth Roy Davies*, Ockbrook, and *Karl Herbstritt*, Chellaston, England. FUEL SYSTEM FOR GAS-TURBINE ENGINES. Patent dated Mar. 2, 1954. Disclaimer filed May 4, 1956, by the assignee, *Rolls-Royce Limited*.

Hereby enters this disclaimer to claim 20 of said patent.

2,692,839. — *Ernest Franklin*, West Malvern, England. GAMMA-RAY DETECTORS. Patent dated Oct. 19, 1954. Disclaimer filed May 3, 1956, by the assignee, *National Research Development Corporation*.

Hereby enters this disclaimer to claims 1 through 6 inclusive, and 12 through 22 inclusive of said patent.

Classification Order No. 193

The following class transfers, for concurrent reclassification and examination of applications pending therein, are directed to take effect on Monday, March 26, 1956.

From Division 5 to Classification Division IV
Class 55, Harrows and Diggers, Subclasses 9, 17, 50–66, 106–118, and 132–144.

From Division 26 to Classification Division II
Class 201, Resistances and Rheostats.

From Division 30 to Classification Division IV
Class 299, Fluid Sprinkling, Spraying and Diffusing.

From Division 67 to Classification Division I
Class 95, Photography, Subclasses 1.3, 2, 5–9, 81, 81.5, and 88.

M. C. ROSA,
Mar. 21, 1956. *Executive Examiner.*

Classification Order No. 194

The following transfer is hereby ordered to take effect on Monday, April 9, 1956.

From Division 3 to Division 30
Class 263, Heating.

M. C. ROSA,
Apr. 3, 1956. *Executive Examiner.*

Classification Order No. 195

The following transfers are hereby ordered to take effect on Monday, April 16, 1956:

From Division 46 to Division 3:
Class 75, Metallurgy, Subclass 84.4.

From Division 46 to Division 10:
Class 102, Ammunition and Explosive Devices, Subclasses 22–30, 95, 97, 98.

M. C. ROSA,
Apr. 10, 1956. *Executive Examiner.*

Patents Available for Licensing or Sale

2,731,842. Lifting Device (Jack). Firma Ferd. Braselmann, Ennepetal-Oberbauer, Germany. Correspondence to Michael S. Striker, 511 Fifth Ave., New York 17, N. Y.

2,742,839. Weed and Root Digger and Separator. Delbert T. Hicks, Box 821, Lake Providence, La.

2,746,021. Self-Locking and Self-Ejecting Electric Outlet and Plug. John M. Butkovich, 318 East Milwaukee St., Detroit 2, Mich.

General Electric Company is prepared to grant non-exclusive licenses upon reasonable terms to domestic manufacturers under the following 17 patents.

Applications for license under the following 5 patents may be addressed to: General Electric Company, Aircraft Products Department, 1 River Road, Schenectady 5, N. Y.

2,405,413. Aircraft Supercharger Arrangement.
2,425,607. Control System for Aircraft Turbosuperchargers.
2,728,233. Gyroscope.
2,730,574. Magnetic Amplifier.
2,732,019. Apparatus for Feathering Aircraft Propeller Blades.

Applications for licenses under the following 2 patents may be addressed to: General Electric Company, Patent Counsel, Chemical and Metallurgical Division, 1 River Road, Schenectady 5, N. Y.

2,546,036. Method of Preparation of Dimethyl Silicone Gums.
2,730,540. Preparation of Phenyl Alkylchlorosilanes.

Applications for licenses under the following 6 patents may be addressed to: Patent Counsel, Electronics Division, General Electric Company, Syracuse, N. Y.

2,721,808. Electroluminescent Cell.
2,721,950. Electroluminescent Cell.
2,725,531. Gas Discharge Coupling Device for Waveguides.
2,731,244. Fluid Cooled Anode.
2,732,511. Electrostatic Lens.
2,735,092. Wave Guide Coupling System and Method.

Applications for licenses under the following patent may be addressed to: General Electric Company, Component Products Division, 1635 Broadway, Fort Wayne, Ind., Attention Patent Counsel.

2,737,920. Drive for Depth Regulated Propeller Mounting.

Applications for licenses under the following 3 patents may be addressed to: General Electric Company, Aircraft Gas Turbine Division, Cincinnati 15, Ohio, Attention: Patent Counsel.

2,738,644. Surge Control for Axial Flow Compressors.
2,739,302. Ice Detector.
2,739,607. Fluid Pressure Regulating Device.

Patent Removed From Register

Pat. 2,570,248. Method of Metallizing and Bonding Non-metallic Bodies. This patent, which was listed by the General Electric Company in the OFFICIAL GAZETTE of June 17, 1952, as being available for licensing is hereby removed from the Register.

CONDITION OF PATENT APPLICATIONS AS OF APRIL 30, 1956

Total number of pending applications (excluding Designs)	219,129
Total number of pending Design applications	6,908
Total number of applications awaiting action (excluding Designs)	122,613
Total number of Design applications awaiting action	2,652
Date of oldest new application	Jan. 12, 1955
Date of oldest amended application	Nov. 30, 1953

ROSA, M. C., Director, Patent Examining Operation

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 60, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 44, 46, 48, 51, 54, 69, 70.
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 10, 18, 22, 28, 45, 47
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE.	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	4-7-55	6-30-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	8-1-55	2-1-55
3. (VII) LE ROY, C. A. (WINDHAM, R. K., acting), Metal Founding and Treatment; Metallurgy (Process and apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	8-9-55	3-29-54
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	7-8-55	10-8-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	7-18-55	1-14-55
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic Amides, Amines, General Organic Processes	5-18-55	8-9-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	8-10-55	3-29-54
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	3-7-55	6-9-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	6-23-55	7-12-54
10. (VI) BOYD, S., Firearms; Ordnance; Ammunition; Explosive Charge Making	3-4-55	5-5-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	8-8-55	9-2-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	4-4-55	1-8-54
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	4-6-55	2-23-54
14. (III) MANIAN, J. C., Metal Working (part), e. g. Sheet Metal, Wire Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	3-22-55	4-19-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	8-1-55	4-29-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	6-17-55	2-24-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	7-1-55	7-19-54
18. (VI) BLUM, A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	4-22-55	6-29-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	7-5-55	8-16-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	7-29-55	5-20-54
21. (III) MADER, R. C., Textiles	7-26-55	5-21-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	7-26-55	7-26-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	1-12-55	11-30-53
24. (III) DRACOPOULOS, P. T. (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	6-13-55	1-27-55
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	8-1-55	10-1-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	8-17-55	1-3-55
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	7-11-55	11-22-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	6-17-55	9-3-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	5-2-55	1-27-55
30. (VII) O'LEARY, R. A. (MICHAEL, E. J., acting), Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	10-18-55	6-24-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	4-21-55	11-4-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	7-20-55	2-1-55
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	8-1-55	4-6-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	7-11-55	4-6-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	7-18-55	11-2-54
36. (V) McFADYEN, A. D., Measuring and Testing	5-26-55	2-8-55
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	6-24-55	10-20-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g., Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	8-1-55	12-1-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	8-22-55	6-22-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	8-2-55	2-2-55
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	4-26-55	4-27-54
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	2-18-55	7-27-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	6-6-55	8-16-54
44. (II) EVANS, N. H., Antennas; Automatic Pilots; Directive Radio Systems; Mass Spectrometers; Nuclear Batteries; Nuclear Resonant Devices; Neutron Detecting and Measuring; Radar; Sonar; Torpedoes	1-26-55	3-26-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	6-28-55	1-10-55
46. (II) WILES, W. G., Actinide Series (e. g., fissionable) Compounds; Sintered Metal Stock; Explosives; Power Plants (part); Metallurgy (part); Surgery (part); Radioactive Medicines; Irradiation Chemistry; Carbon Chemistry (part)	4-11-55	8-20-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	8-12-55	1-7-55
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	5-6-55	6-4-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	5-17-55	10-26-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resin Compositions, Synthetic Rubber Compositions, Natural Rubber	6-24-55	4-19-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	8-1-55	4-16-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	5-31-55	7-28-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	9-3-55	2-1-55
54. (II) NILSON, R. G. (SAX, E. J., acting), Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	6-2-55	6-1-54
55. (VII) KLINE, J. R., Surgery; Dentistry; Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	3-29-55	5-6-54
56. (I) KEELY, J. E. (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	8-4-55	2-3-55
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	11-4-55	8-31-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	8-2-55	4-13-54
59. (I) HENKIN, B. (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	5-27-55	6-2-54
60. (I) MANGAN, P. E., Carbon Chemistry (part), e. g., Synthetic Resins, Synthetic Rubber	7-1-55	5-7-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	7-13-55	1-24-55
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	7-13-55	11-17-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	7-15-55	9-2-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	8-1-55	5-17-54
66. (V) LISANN, I. (BUCHLER, M., acting), Geometric Instruments; Automatic Weighing Scales; Acoustics	7-1-55	4-6-54
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	5-20-55	4-25-55
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	6-1-55	1-13-54
70. (II) BREWRINK, J. L., Security laws administration.		
CLASS. DIVS. I (VII) LANHAM, B. E., Paper Making; Photographic Processes and Products	5-10-55	1-11-55
CLASS. DIVS. II (II) LADY, J. E., Oscillators; Amplifiers; Resistances and Rheostats	8-1-55	2-24-55
CLASS. DIVS. III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	9-21-55	9-28-54
CLASS. DIVS. IV (VI) SMITH (Mrs.), M. P., Harrows and Diggers; Plows; Fluid Sprinkling, Spraying and Diffusing	8-1-55	12-27-54
CLASS. DIVS. V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	8-1-55	7-1-55
DESIGNS (III) A—BREHM, G. L., Industrial Arts	10-31-55	10-11-55
DESIGNS (III) B—GRAY, M. A., Household, Personal and Fine Arts	10-3-55	10-10-55

The following divisions have been abolished: 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during June 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1955*.

Patents	Numbers 2,160,805 to 2,164,301, inclusive
Plant Patents	Numbers 330 to 333, inclusive

DECISIONS IN PATENT AND TRADEMARK CASES

U. S. Court of Customs and Patent Appeals

BOCCIARELLI *v.* HUFFMAN

No. 6181. Decided April 18, 1956

[— F.2d — ; — USPQ —]

1. DISCLOSURE—SOLELY BY ORIGINAL CLAIM.

"It is well settled that the specification of an application may be corrected or implemented by matter contained in an original claim, and that such matter may form as much a part of the disclosure of an application as if it had appeared in the body of the specification. However, • • •, the teachings of an original claim in a case like this is confined to what it discloses rather than to what it covers."

2. CLAIMS—INTERPRETATION TO READ UPON SPECIFICATION AND DRAWINGS.

"• • •, it is not the normal function of a claim to disclose the invention, but to point out the features of novelty in the invention as disclosed in the specification and drawing of the application. Accordingly, if an original claim can be given a reasonable interpretation which will make it readable on what is disclosed in the specification or drawing, it is proper to adopt that interpretation rather than to seek to construe broad language in the claim as a disclosure of other embodiments.

3. DISCLOSURE—SOLELY BY ORIGINAL CLAIM—FAILURE TO ILLUSTRATE EMBODIMENT.

Where an original claim professedly was intended as a disclosure of an embodiment not illustrated, *Held* that, with it incumbent on the applicant, under Patent Office Rule 83, to provide additional illustration of that embodiment, the fact that he made no offer to do so, and that the Examiner failed to require the additional illustration specified by Rule 83, afford a clear indication that both of them construed the claim as readable on the illustrated embodiments, rather than as claiming matter not illustrated.

4. INTERFERENCE — PRIORITY OF INVENTION — ELECTRON-SENSITIVE TARGET FOR COLOR TELEVISION APPARATUS.

The decision of the Board of Patent Interferences awarding priority of invention of an interference count relating to an electron-sensitive target for color television apparatus to the senior party is reversed.

APPEAL from the Patent Office. Interference No. 85,571.

REVERSED.

Allen V. Hazeltine (*Thomas M. Ferrill, Jr., Fordyce A. Bothwell, Dexter N. Shaw*, and *William A. Smith, Jr.*, of counsel) for Bocciarelli.

Darby & Darby, and *Russell G. Pelton* (*Donald J. Overocker* of counsel) for Huffman.

Before O'CONNELL, *Acting Chief Judge*, and JOHNSON, WORLEY, COLE, and JACKSON (retired), *Associate Judges*

O'CONNELL, *Acting Chief Judge*, delivered the opinion of the court.

This is an appeal from the decision of the Board of Patent Interferences of the United States Patent Office awarding priority of invention of the subject matter defined by the single count in issue to the senior party Huffman, who is the appellee here. One member of the Board concurred specially in its decision, while another member dissented.

The interference involves appellant's application Serial No. 198,709 filed December 1, 1950, and appellee's application Serial No. 789,296 filed December 2, 1947. The Bocciarelli application is assigned to the Philco Corporation, and the Huffman application to the Du Mont Laboratories, Inc.

The count, originated by the Primary Examiner and suggested to the applicants for the purpose of interference, reads as follows:

An electron-sensitive target comprising *a supporting surface containing a light-emissive area and a plurality of discrete signal-generating indicia disposed in spaced-apart relationship on said surface* along a marginal edge of said light-emissive area, said light-emissive area comprising a plurality of parallelly disposed groups of phosphor lines, said lines individual to each group being constituted of phosphor materials capable of emitting light of a color component individual to that line, and said signal-generating indicia comprising a plurality of line-segments disposed in spaced apart register with selected ones of said phosphor lines. [Italics added.]

The invention in issue relates to color television apparatus of the type in which a target screen comprising parallel lines of light emissive phosphors of different colors is scanned by an electron beam, the intensity of which is modulated in accordance with intelligence derived from the object being televised and relating to the different colors corresponding to those which the respective phosphors are adapted to produce. The specific improvement here involved is designed to control the scanning to insure that when the beam is modulated by intelligence representative of a particular color, it will impinge upon a phosphor emissive of light of the same color.

The general characteristics of the invention, so far as pertinent, are thus set forth in appellee's brief:

The invention is for a system for controlling registration of scanning in a cathode ray tube in color television. The screen of the tube which presents the color picture comprises a plurality of lines or stripes of phosphors which, when excited by the electron beam, fluoresce in different respective colors. The novelty comprising the invention involves a control structure positioned adjacent a marginal edge of the phosphor screen, the control structure comprising a plurality of discrete signal generating indicia disposed in spaced apart relationship, and in spaced apart registry respectively with selected ones of the phosphor lines.

In practice the indicia are connected externally of the tube to suitable circuitry to control the position of the electron beam so as to maintain the beam in its correct scanning position to excite the proper color phosphor and thus produce a true color picture. This control structure prevents the beam from accidentally striking the incorrect color phosphor lines during scanning so as to produce what would thus be an incorrect color in the picture.[1]

During the interference proceeding in the Patent Office, the junior party Bocciarelli, in his preliminary statement, alleged no date of invention as early as the filing date of the senior party's application. Bocciarelli was accordingly placed under an order to show cause why judgment on the record should not be entered against him. His response to that order was a motion to dissolve the interference on the ground that the subject matter in issue was not disclosed in Huffman's application, which motion was denied by the Primary Examiner.

No testimony was taken by either party and the interference proceeded to final hearing before the Board on the sole issue as to whether the count of the interference is supported by the Huffman application. The majority of the Board agreed with the Primary Examiner that Huffman's application sufficiently discloses the subject matter of the count, and awarded priority to him. In reaching its conclusion the Board found it necessary in support of its position to resort to statements contained in original claims of that application.

[1] The circuitry for this control is the subject of an issued patent to Huffman, No. 2,530,431, the application for which was copending with the subject application now involved in this proceeding. Alternative structure or arrangements also disclosed in copending applications are the subject matter of issued Huffman Patents 2,589,386, 2,670,773, 2,684,454 and 2,673,929. The subject application was one of the same group but issuance of a patent has been delayed because of the subject interference proceeding.

Huffman's application here involved shows and describes two distinct embodiments of his invention. In the first of these, the light emissive area is provided by fluorescent material which is coated on a series of parallel conductors and the uncoated ends of the conductors, which extend in prolongation of the coated portions, provide the discrete signal-generating indicia referred to in the count. The conductors extend between and are apparently supported by two rods of insulating material which are shown and described as being located inside the cathode ray tube and along its face. That arrangement, it is apparent, does not provide a supporting surface containing a light-emissive area and signal-generating indicia disposed on said surface.

Huffman's second embodiment is illustrated in a somewhat diagrammatic manner and includes strips of different color emissive materials (phosphors) which, the specification states, may be applied directly on the face of the cathode ray tube. The conductors which form the signal-generating indicia are aligned with the color emissive strips. The drawing does not clearly show, nor does the specification describe, the manner in which these conductors are supported, but it would appear from the general similarity between the illustrations of the two embodiments, that the conductors are supported by an insulating rod which lies between them and the face of the tube.

It is not disputed by appellant that Huffman's application discloses everything set forth in the count except "a supporting surface containing a light-emissive area and a plurality of discrete signal-generating indicia disposed in spaced-apart relationship on said surface." In other words, the italicized portion of the count hereinbefore recited is the critical portion which is here in controversy, and the present appeal is confined to the question of the sufficiency of the disclosure of the Huffman application to include a third embodiment of his invention as defined by the count in issue. If that disclosure is sufficient to support the count, the decision appealed from must be affirmed; otherwise it must be reversed. It is to be noted that the quoted portion of the count, specifying a *supporting* surface, with a light-emissive area and signal-generating indicia disposed *on* said surface, clearly limits the count to a construction in which the latter elements are supported by the surface. In other words, the word "on" is used in the count in the sense of "supported on." That interpretation of the count has been uniformly followed throughout this proceeding and has not been questioned. Any other interpretation would render the word "supporting" as used in the count meaningless.

Certainly there is nothing in the drawing or specification of Huffman's application to suggest that the conductors are or may be supported on the surface of the tube. The specification states that the conductors may be in contact with or embedded in the fluorescent material, but this relates merely to the relationship between the ends of the conductors and the strips of fluorescent material, and does not suggest that the conductors are supported on the surface of the tube.

As we analyze the decision of the Board of Patent Interferences, the three members of that tribunal were in agreement that Huffman's drawing and his specification, apart from the original claims, do not contain a sufficient disclosure to support the count and, in holding that Huffman's application sufficiently supports the count, the majority of the Board, as hereinbefore noted, had recourse to and relied on original claim 6 of that application, which reads as follows:

A cathode-ray tube having a fluorescent screen and a structure of conducting material on the inside face thereof, said structure being located adjacent said screen and adapted to be operated upon by the beam of said cathode-ray tube.

[1] It is well settled that the specification of an application may be corrected or implemented by matter contained in an original claim, and that such matter may form as much a part of the disclosure of an application as if it had appeared in the body of the specification. However, as was pointed out in the case of *In re Ware*, 29 CCPA (Patents) 1106, 129 F.2d 552, 54 USPQ 200, the teachings of an original claim in a case like this is confined to what it discloses rather than to what it covers. Thus in the Ware case, it was held that an original claim calling for a body forming agent chemically reactive with a specified mixture did not provide a disclosure supporting a claim later presented and calling for a body forming agent reactive with that mixture to form a hard bonding heat resisting material, since the original claim did not state that the reaction was to be of such a nature as to produce the material specified by the later claim.

[2] Moreover, it is not the normal function of a claim to disclose the invention, but to point out the features of novelty in the invention as disclosed in the specification and drawing of the application. Accordingly, if an original claim can be given a reasonable interpretation which will make it readable on what is disclosed in the specification or drawing, it is proper to adopt that interpretation rather than to seek to construe broad language in the claim as a disclosure of other embodiments.

As above noted, the count is limited to a structure in which there is "a supporting surface containing a light-emissive area and a plurality of discrete signal-generating indicia disposed in spaced-apart relationship on said surface." The majority of the Board were apparently of the opinion that claim 6 states that the structure of conducting material (corresponding to the signal-generating indicia of the interference count) is "on the inside face" of the tube, and that such statement, when considered together with the specification of the Huffman application, amounts to a disclosure that the structure is supported by the said inside face.

While the primary meaning of "on" implies both contact and support, the word has various other meanings, one of which, according to Webster's New International Dictionary (1923) is "At—indicating simple position, *esp.* with *side, front, north*, and other words denoting a particular side or direction."

It is by no means clear that the word "on" is used in Huffman's original claim 6 to mean that the structure of conducting material is in contact with and supported by the inside face of the tube, rather than in the broader sense of meaning simply that the structure is located within the tube and adjacent a face thereof. It is the established practice to accord the claims of an application and the counts of an interference the broadest meaning which they will reason-

ably support, *Andrews, Etc.*, v. *Wickenden*, 39 CCPA (Patents) 860, 194 F.2d 729, 93 USPQ 27; *In re Craige, Jr.*, 38 CCPA (Patents) 1114, 189 F.2d 620, 90 USPQ 33, and no reason appears for making any exception in the present case.

Huffman, by his use of the word "on" in original claim 6 of his application, no doubt intended to cover all arrangements in which the structure of conducting material is located adjacent the inside face of the tube regardless of the manner in which it is supported. This conclusion is strengthened by the fact that, as above indicated, Huffman's specification and drawings disclose embodiments in which the said structure is located adjacent the inside face of the tube, but none in which it is supported thereon, and that the broad language of original claim 6, even if it could be held to contain as a latent suggestion the idea of supporting the structure of conducting material on the face of the tube, fails to point out any specific means for accomplishing that result. In the absence of any indication to the contrary, it is proper to conclude that original claim 6 was intended as a broad definition of the invention readable on at least one of the specifically disclosed embodiments, rather than as a disclosure of a different device which is nowise suggested anywhere else in the application.

[3] It is noted that Patent Office Rule 83 provides that the drawing of an application "must show every feature of the invention specified in the claims." Accordingly if, as is now contended by Huffman, his original claim 6 was intended as a disclosure of an embodiment not illustrated, it would have been incumbent upon him to provide additional illustration. The fact that he made no offer to do so, and that the Examiner failed to require the additional illustration specified by Rule 83, afford a clear indication that both of them construed claim 6, and the other similar original claims, as readable on the illustrated embodiments, rather than as disclosing and claiming matter not illustrated. In other words, the claims in question were regarded as broad claims, readable on what was illustrated and also covering other subject matter not specifically disclosed. Under these circumstances, and in view of the decision in *In re Ware*, supra, Huffman's original claims do not serve to add to his specification and drawings the specific disclosure necessary to support the count of the interference here involved.

Moreover, counsel for the party Bocciarelli properly calls attention to the fact that Huffman's original claim 10, which contains language identical with that of original claim 6 with respect to the positioning of the structure of conducting material on the inside face of the tube, was amended during the prosecution of the application to add a statement that such structure is in substantially the same plane with the fluorescent screen. If, as is now contended by Huffman, the original language of the claim meant that both the screen and the structure were supported by and in contact with the inside face of the tube, then they would necessarily be in the same plane, and the language added by amendment would be redundant. The fact that the amendment was made, indicates that Huffman did not consider the claim as originally drawn to be limited to a common supporting of the screen and structure on the inside face of the tube.

In the foregoing discussion, it has been accepted that Huffman's original claim 6 calls definitely for a tube having both a fluorescent screen and a structure of conducting material on the inside face of the tube. Actually, however, in the absence of punctuation, even that meaning is not certain. The language of the claim might be equally well construed to mean that only the structure of conducting material is on the inside face of the tube, or that the structure of conducting material is on the inside face of the fluorescent screen, without limitation as to how the screen and structure are positioned with respect to the tube. Neither of those alternative structures is shown or described by Huffman's drawing or specification.

We are of the opinion that while Huffman's original claim 6 is undoubtedly broad enough to cover the arrangement of supporting surface, light-emissive area and signal-generating indicia set forth in the interference count, it does not, either alone or in conjunction with the original specification and drawings of the application, disclose such an arrangement. As was said in *Brand* v. *Thomas*, 25 CCPA (Patents) 1053, 96 F.2d 301, 37 USPQ 505:

> Lack of clear disclosure is not supplied by a speculation as to what one skilled in the art might do or might not do if he followed the teaching of the inventor. The disclosure should be clearer than to suggest that one skilled in the art *might* construct the device in a particular manner.

The principles which we have above discussed regarding the incorporation of limitations of an original claim as part of the appellee's disclosure formed the basis of the opinion written by the dissenting member of the Board. Accordingly, we concur in those views and affirm the dissenting opinion.

[4] The decision of the Board of Patent Interferences is therefore reversed.

REVERSED.

JACKSON, *J.*, retired, recalled to participate.

U. S. Court of Customs and Patent Appeals

IN RE MARX

No. 6094. Decided April 18, 1956

[— F.2d —; — USPQ —]

PATENTABILITY—PARTICULAR SUBJECT MATTER—AUTOMATIC DISH WASHER.

A certain claim to an automatic dish washer *Held* properly rejected as unpatentable over a combination of prior art references.

APPEAL from the Patent Office. Serial No. 29,482.

AFFIRMED.

Arthur E. Fixel (*Joseph Charles Walter* of counsel) for Marx.

Clarence W. Moore (*H. S. Miller* of counsel) for the Commissioner of Patents.

Before JOHNSON, *Acting Chief Judge*, and WORLEY and JACKSON (retired), *Associate Judges*

JOHNSON, *Acting Chief Judge*, delivered the opinion of the court.

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the holding of the Primary Examiner rejecting as unpatentable over the prior art claim 3 of appellant's application for "Improvements in Dish Washers." Claims 4 and 5 were allowed.

The application discloses a dish washer of the automatic type having a housing which contains all of the components which are necessary for its operation. In the housing is mounted a cylindrical wire basket which

is rotatable about a vertical axis, and is adapted to hold the dishes which are to be washed. A trough having one high wall and one low wall is affixed to the bottom of the housing. An oscillatable impeller blade is affixed to the housing in proximity to said trough. In operation, the housing is filled to a predetermined level with water. The water level is below the wire basket and below the high end of the trough. However, the low end of the trough is submerged to allow water to enter the trough. Suitable motor means cause said blade to oscillate relative to said high wall of the trough, and as the blade approaches the high wall, it causes water to spray upwardly and impinge on the dishes in the basket. Because of the location of the trough and basket relative to each other, the spray causes the basket to rotate when the dishes are struck by the water. In this manner, all of the dishes are sprayed with water as the basket rotates. Located almost directly below the basket is an inclined plate having one end thereof affixed to the bottom of the housing. The inclined plate is for the most part submerged in the water in the bottom of the housing, but it has one end projecting above the water level. Because of this construction, the plate divides the water into two chambers. One chamber receives the dirty water which drains from the dishes. The spraying apparatus is located in the other chamber. An aperture is formed in the inclined plate, and this aperture is located approximately midway between the surface of the water and the bottom of the housing. During the washing operation, both fatty substances and sediment are separated from the dishes and fall into the chamber in which the spraying apparatus is not located. The fatty substances float on the water above the aperture. The sediment slides down the inclined plate to a position below the aperture. The water passing through the aperture is supplied to the spraying apparatus and is relatively clean because it is drawn from the zone intermediate the places where the fatty substances and the sediment are located. Because of the foregoing described arrangement, a predetermined small amount of water can be used for washing a batch of dirty dishes, thus obviating the necessity of supplying clean water to the dish washer during the washing operation.

Appealed claim 3 reads as follows:

> 3. A dish washing machine comprising a tank adapted to contain a body of water, an open mesh basket enclosed therein and mounted for free rotation about a vertical axis, said basket adapted to contain dishes to be washed and located above the normal water level, and means in said tank for intermittently propelling a jet of said water into said basket in a tangential direction, means for returning water drained from said basket to said body of water, and a partition dividing said body of water into two portions from one of which water is supplied to said jet propelling device and into the other of which water is returned, said partition being inclined and provided with an opening located below normal water level and above the bottom of said tank.

The references relied on are:

Guignard (French), 549,291, Nov. 15, 1922.
Lapicque (French), 558,533, May 28, 1923.

The Lapicque patent discloses a dish washer having a cylindrical dish-holding wire basket which is adapted to rotate about a vertical axis. Located below the basket and to the side of its axis of rotation is a small chamber containing water. A driven "paddle wheel" is partially submerged in the water. Upon rotation of the "paddle wheel," water is projected on the dishes in the basket for the purpose of cleaning the dishes and for the further purpose of causing the basket to rotate, thus exposing other dishes to the water spray. The dirty water which drains from the dishes returns to the water chamber.

The Guignard patent relates to dish washing apparatus. It consists of an inclined pan which is adapted to contain a predetermined amount of water. Dishes which are to be washed are placed into the high end of the pan. The low end of the pan serves as a sump, and has a partially submerged bowl or trough placed therein. Located within the trough is a "curved paddle in the form of a spoon" which is adapted to project water on the dishes. A crank is operatively associated with the paddle for motivating the latter. During the dish washing operation, water, after having been projected on the dishes, flows toward the trough located in the low end of the pan, and enters the trough through holes in the bottom thereof. These holes act as a filter. In the patent the following is stated: "The water flows toward the bowl *d* and enters there through the bottom but not the residual matter which the filter prevents from passing nor the fatty substances which, lighter than water, remain on the surface of the latter in the pan outside the bowl." It is to be noted that the dishes remain stationary during the washing operation.

The Primary Examiner rejected claim 3 as being unpatentable over Lapique in view of Guignard. In his rejection, the Examiner stated: "Lapicque discloses all the structure claimed except the separating means set forth in this claim. Guignard discloses 'means for preventing the return of sediment (grease etc.) and of floating material from drained water to a jet propelling means,' which separating means is considered the full patentable equivalent of applicant's separating means as set forth in this claim * * *. There would be no invention, broadly, in providing the means for returning water drained from the basket of Lapicque with separating means such as shown by Guignard at *d*."

The Board of Appeals affirmed the Examiner's rejection of claim 3, and stated in part:

> * * * The trough *d* of Guignard constitutes a separating means, in which the upper edges, extending above the liquid level, prevent the entrance of grease and floating matter, while the bottom of the trough, being spaced from the bottom of the tank and being provided with perforations or with a wire gauze, would effectively filter out solid residues. In our opinion there would be no invention involved, in following the teaching of Guignard, in providing a trough about the paddle wheel P of Lapicque, the bottom of the trough being perforated and spaced from the bottom of the hemispherical portion and the upper edges of the trough extending above the liquid level, which combination, we believe, would produce no new, unobvious, or unexpected result. *In re Bowen et al.*, 665 O. G. 984; 94 USPQ 172.

On appellant's request for reconsideration the Board adhered to its previous decision.

The question before us on appeal is whether claim 3 is unpatentable over the combination of references.

It is well settled that references may be combined to anticipate claims. *In re DeLancey*, 37 CCPA (Patents) 760, 177 F.2d 377, 83 USPQ 388; *In re Williams*, 42 CCPA (Patents) 988, 223 F.2d 291, 106 USPQ 192. Furthermore, claims may be properly rejected on a combination of several patents taking specific features from each. *In re Lindberg*, 39 CCPA (Patents) 866, 194 F.2d 732, 93 USPQ 23; *In re Kamlet*, 38 CCPA (Patents) 776, 185 F.2d 709, 88 USPQ 106. It is not necessary that a complete disclosure be contained in a single reference. *In re Streckert et al.*,

35 CCPA (Patents) 1148, 167 F.2d 1010, 77 USPQ 592; *In re Horney*, 34 CCPA (Patents) 968, 161 F.2d 271, 73 USPQ 298. However, when references are combined, it should be considered whether the references suggest doing the thing which an applicant has done. *In re Fridolph*, 30 CCPA (Patents) 989, 134 F.2d 414, 57 USPQ 122; *In re Williams*, supra.

In the light of the foregoing law, we will now proceed to analyze the combination of the references. Both of the references relate to dish washing apparatus of the type wherein water is projected from a sump on to dishes. The Lapicque patent teaches that a rotatable wire basket containing dishes may be rotated and the dishes washed by water which is projected at the dishes by a suitable blade immersed in a sump. The Guignard patent teaches that water which has been exposed to grease and sediment may be reused for washing dishes. More specifically, in Guignard an opening in a trough is located beneath the water level of a sump so that grease which floats on the water cannot enter the opening. Furthermore, the opening, which is spaced from the bottom of the pan, prevents sediment from entering into the trough. We are of the opinion that since both patents relate to the same art, it would readily have occurred to one having cognizance of the features of the references that it might be desirable to advantageously use the water trough of Guignard in the apparatus of Lapicque for the purpose of preventing grease and sediment from being thrown back on to the dishes from which these elements were washed. We therefore conclude that the references were properly combined.

An analysis of claim 3 indicates to us that it does not define over the prior art, and is, therefore, unpatentable. We are in full agreement with the Examiner that the trough of Guignard meets appellant's "partition for dividing said body of water into two portions * * *," as recited in the claim. Therefore, since the references have been properly combined, and since the references, as combined, meet the structure recited in the claim, it is our conclusion that claim 3 is unpatentable.

Appellant argues that in the Guignard patent a constant rain of water from the dishes plus other factors will keep the water in the sump in a turbulent condition, and thus cause a great part of the grease to be carried down to the filter in the trough and pass through it. In addition, it is argued that this turbulence will move sediment along the bottom of the Guignard apparatus and plug the filter. Appellant contends that the water in his own sump remains relatively quiescent, thus obviating the foregoing alleged shortcomings of the prior art. However, since the claim does not structurally define over the combined prior art the portion of appellant's structure which is capable of performing the allegedly superior function, we are not persuaded by appellant's argument.

We have carefully considered appellant's arguments presented in both the main and supplemental briefs. However, for the foregoing reasons, we are of the opinion that the decision appealed from is sound and should be affirmed.

AFFIRMED.

JACKSON, J., retired, recalled to participate.

O'CONNELL and COLE, JJ., because of illness, did not participate in the hearing or decision of this case.

U. S. Court of Customs and Patent Appeals

IN RE EDWARDS

No. 6147. Decided April 18, 1956

[— F.2d —; — USPQ —]

1. PATENTABILITY—COMBINATION OF REFERENCES.

"* * *, a claim may be sometimes properly rejected on a combination of references even though that combination does not show all the limitations in the claims, providing such limitations as are not shown are not inventive and patentable over the disclosures of the prior art."

2. SAME—UTILIZATION OF KNOWN ASPECTS OF AN OLD TECHNIQUE.

"The fluidising technique, as shown by the prior art, has certain known advantages, namely, that it allows the maintaining of different temperatures in different portions of the fluidising apparatus, and that it permits heat exchange to be accomplished. To utilise these conventional aspects of the fluidising technique to provide a final reaction and cooling zone is, in our opinion, not inventive since the fluidising technique readily lends itself to maintaining temperature gradients and heat exchange."

3. SAME—PARTICULAR SUBJECT MATTER—METHOD FOR PRODUCING ALUMINUM FLUORIDE.

Claims to a method for producing aluminum fluoride *Held* properly rejected as unpatentable over the cited prior art.

APPEAL from the Patent Office. Serial No. 135,858.

AFFIRMED.

Pennie, Edmonds, Morton, Barrows & Taylor (*C. M. Fisher* and *M. W. Sage* of counsel) for Edwards.

Clarence W. Moore (*S. W. Cochran* of counsel) for the Commissioner of Patents.

Before O'CONNELL, *Acting Chief Judge*, and JOHNSON, WORLEY, and COLE, *Associate Judges*

JOHNSON, *J.*, delivered the opinion of the court.

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the holding of the Primary Examiner rejecting as unpatentable claims 26 and 28 through 34, inclusive, the only remaining claims in appellant's application for a patent for "Production of Aluminium Fluoride." The appeal has been withdrawn with respect to all claims except claims 26, 30 and 34, which are the only claims before us.

The appealed claims pertain to a method for producing aluminum fluoride (AlF_3) by passing hydrogen fluoride gas through a chamber having three superposed separated beds or layers of solid particles of aluminous material, such as alumina or aluminous hydroxide. A fluidizing technique is employed. The fluidizing technique consists of passing the gas through each layer of particles at such a velocity which will cause it to be in a state of turbulent suspension resembling a boiling liquid thus insuring complete mixing between the gas and the particles. A countercurrent flow is employed in the process in the sense that the gas is introduced at the bottom of the chamber and is passed upwardly through each of the three layers in the chamber whereas the solid particles are fed downwardly from the uppermost layer to the central layer and then to the lowermost layer. The reaction between the gas and the particles is exothermic, and occurs primarily in the central layer. The particles which are fed into the fluidizing chamber from a suitable source are preheated and partially dehydrated in the uppermost layer by the hot gases coming from the central layer. In the lowermost layer, the heated particles which come from the central layer are finally reacted and cooled by the gases coming into the fluidizing chamber.

Claim 26 is representative of those appealed, and reads as follows:

26. A method of preparing aluminum fluoride which comprises passing hydrogen fluoride gas upwardly through three zones, which in inverse order to the direction of gas flow comprise an upper preheating and dehydrating zone, an intermediate main reaction zone, and a lower final reaction and cooling zone, each zone comprising at least one bed of solid particles of aluminous material selected from the group consisting of alumina and aluminum hydroxide, causing said gas to flow through said zones in such volume and at such velocity as to maintain the particles in each bed in a state of turbulent suspension resembling a boiling liquid whose surface level, though agitated, is fairly clearly defined, maintaining a free space above each bed to receive the gas after it has passed upwardly through the bed, causing the aluminous material to overflow from the preheating and dehydrating zone and to be delivered to the main reaction zone, causing the aluminous material to overflow from the main reaction zone and to be delivered to the final reaction and cooling zone, and maintaining the temperature in the main reaction zone between about 400° C. and 650° C. and higher than the temperature in the preheating and dehydrating zone and in the final reaction and cooling zone, the temperature differential between the main reaction zone and the final reaction and cooling zone being such as to cause appreciable cooling of material overflowing from the main reaction zone and delivered to the cooling zone, the temperature in the preheating and dehydrating zone being maintained above about 250° C. by heat exchange with gas passing therethrough from the main reaction zone.

The references relied on are:

Gitzen et al., 1,937,885, Dec. 5, 1933.
Osborne et al., 2,020,431, Nov. 12, 1935.
Murphree, 2,436,870, Mar. 2, 1948.
Hemminger, 2,444,990, July 13, 1948.
Murphree, 2,459,836, Jan. 25, 1949.
"Fluidization in Chem. Reactions," Kalbach, pages 105–108. Chem. Engineering, Jan. 1947.
"Fluid Solids," page 306, Journ. of Chem. Ed. (Ad. Sec.) vol. 24, No. 6, page 306, June 1947.

The Gitzen et al. patent teaches the method of making aluminum fluoride by passing hydrogen fluoride gas through a chamber containing particles of an aluminum compound capable of reacting with said gas. The patent teaches the use of a water jacket around the chamber and other cooling means for controlling the temperature of the reaction. The patent states:

While calcining all the aluminum hydrate is desirable, it is not necessary, and in order to initiate the reaction it is sufficient, where the reaction is carried out in vertical reaction vessels, to place in the bottom of the vessel a layer of calcined hydrate, the reaction between which and the incoming gas will be sufficient to produce an initiating heat to start the exothermic reaction which will then continue whether or not the remaining material entering the reaction zone be initially calcined.

The process is a continuous one in which raw material is fed to the chamber from a hopper, and the finished aluminum fluoride is discharged from the chamber by a suitable valve mechanism.

The Hemminger patent discloses fluidizing apparatus consisting of a chamber containing a plurality of superposed and separated layers of solid particles to be reacted with a gas. A countercurrent flow is employed in the apparatus whereby the particles flow downwardly from the uppermost layer to successively lower layers while the incoming gas flows upwardly from the bottom of the chamber, through the layers of particles, and out through the top of the chamber. The patent specifically states: "One of the important features of the invention is the counterflow heat exchange of gases and solids which may be employed for heating or cooling either." The patent further states: "By adding or removing heat in the heat transfer tubes, any temperature gradients in the tower may be maintained."

The *Journal of Chemical Education* sets forth in general terms the objectives and advantages of the fluidizing technique as follows:

In a fluidised system, a gas is passed upwards through a mass of powdered solid, so that the particles are "floated" and the mass somewhat resembles a boiling liquid in appearance. The objective may be to react the solid with the gas or to react the components of the gas under the influence of a solid catalyst. A portion of the particles may be quite coarse, but material of finer particle size should also be present, for otherwise the gas velocity which will float the particles is dangerously close to that which will blow them out of the reactor. The particles of solid, suspended in a gas, flow through pipes and other equipment much as would a liquid and can be easily moved from one operation to another. Continuous operation, often resulting in a more uniform product and lower operating costs, may be more easily achieved with this system than with conventional apparatus. By virtue of the rapid movement of the particles, the temperature of a fluidised bed may be maintained at an extraordinarily uniform level, often a vital factor in chemical synthesis.

The *Chemical Engineering* publication sets forth the advantages and applications of a fluidizing process as follows:

Advantages of Fluidization

1. Excellent temperature control—the body of solids serves as a thermal flywheel.
2. Excellent temperature uniformity—rapid mixing and frequent contact of the particles eliminate hot spots.
3. High heat transfer rates—of the order of those obtainable with boiling liquids.
4. High reaction rates—small particles mean increased surface for reaction which surface is kept relatively free of gas films by the sweeping action of the fluidising gas and by frequent collisions of particles.
5. Possibility of moving large quantities of solids cheaply—amply demonstrated by present "cat crackers"; these solids can be thermophores as well as not.
6. Maintenance of a deep bed at reaction conditions—compare a non-fluid bed of solids moving slowly in countercurrent relationship to a stream of gas; there will exist a high temperature zone preceded and succeeded by lower temperature zones where completion of the reaction may not be possible.

Applications

It may be said that these processes in which fluidization is most likely to be used to advantage are the ones in which the conspicuous improvement is possible by one or more of the following:

1. Improving temperature control, thereby (a) preventing undesirable side reactions, (b) preventing loss of raw materials as by sintering of residues and (c) improving quality or uniformity of product.
2. Improving heat transfer, thereby (a) increasing capacity and size of units, (b) reducing external temperature on vessel and (c) replacing external heating with thermophore.
3. Increasing reaction rates, thereby (a) increasing capacity of units and (b) lowering reaction temperatures.

The Murphree patent, number 2,436,870, insofar as pertinent here, relates to a fluidizing technique employed in the production of chlorine. Multi-bed fluidizing apparatus of the same character as described in the Hemminger patent is shown in Murphree. In the patent specification, it is stated:

In the various reaction zones, according to the invention, the gas-solid dispersions are maintained in relatively turbulent conditions. Thus, the solid reactants are assured of intimate contact with their respective reactant gases and the temperature in each reaction zone is substantially uniform throughout. The reaction zones may be fitted with special contacting devices resembling bubble trays. Furthermore, means are provided within or external to the reaction zones for cooling or supplying heat as required by the recirculation from other portions of the processing equipment or by recirculating of the fluidized solids through heat exchange devices.

The Murphree 2,459,836 and Osborne et al. patents were not considered by the Board as being particularly pertinent. We will accordingly not treat them in this opinion.

All of the claims were rejected by the Primary Examiner "as lacking invention over Gitzen et al. in view of the acknowledged or cited fluidizing techniques as taught, for example, in Hemminger, Osborne, and Murphree * * *." The publications were stated to be pertinent fluidizing art. The pertinent portions of the Examiner's rejection are as follows:

* * * It is obviously old as shown in the primary reference Gitzen et al. to prepare AlF_3 by the reacting of identical aluminum containing material, i. e. the oxide or hydrated oxide, with the same gaseous halogenating agent, hydrogen

fluoride gas, in a main reaction zone having a temperature of the order claimed. The HF gas according to the patent is also adapted, like applicant's process to pass upwardly through the gas adsorptive and reactive aluminous material. It is also plainly apparent from this patented disclosure that the upper portion in chamber 10 of the reference will inherently effect a preheating and dehydration of the aluminous material being introduced through 11 since the reaction in the central portion of chamber 10 between the aluminous material and HF would, of course, be intensely exothermic and hence liberating much heat. That the lower zone of the apparatus of Gitzen et al. is relatively cooler than the central or upper portions of the chamber is also evident since the formed AlF_3 as it passes downwardly through 13 would inherently become at least somewhat cooler since it would then be relatively free from the heat producing causes. Moreover, it is also indicated in the reference (see page 2, right) that if control of temperatures is necessary e. g. to prevent overheating, that external means may be easily provided and is also envisaged by the patentees as within the skill of one in the art. No limitation of patentable moment or inventive novelty is considered to be recited in the claims. * * * The crux of the contended invention insofar as the Examiner has been able to determine is in the substitution of the fluidising techniques employing a multiplicity of beds "in accordance with the established practice in the application of the fluidising technique to ether" of the chemical art (see spec. page 3). No patentable merit or inventive skill, however, would be involved over the prior art preparation of AlF_3 as done by Gitzen et al. by the adapting or substituting of the fluidized solids-gas system technique since the numerous advantages obtained by this countercurrent system technique with its attendant economies, rapidity of reaction and better control are now so well known as to have almost general application to chemical process involving a solid-gas contacting. Appellant himself acknowledges, starting with last full paragraph of specification page 3 and ending in middle of specification page 4, that he is employing fluidising apparatus of the general type already well known to be useful in other arts of the chemical field and which comprise a plurality of beds to operate broadly in the manner disclosed. Hemminger in particular shows the advantages of contacting solid reactive particles with gaseous fluids broadly, including halogenation of solids by chlorination, employing a multiplicity of beds and a similar countercurrent gas-solid fluidizing technique. * * *

The foregoing rejection of the claims was substantially adopted by the Board of Appeals. However, the Board gave more weight to the Hemminger patent than did the Examiner. In this respect, the Board stated:

> Hemminger refers, in the paragraph beginning at line 51 of column 7, to "the counterflow heat exchange of gases and solids which may be employed for heating or cooling either." Hemminger states that the physical manipulations disclosed by him may be employed in solid-gas reactions generally. (See column 8, first 10 lines.)
>
> It appears to us that the modification of the Gitzen et al. process by the use of physical manipulations and instrumentalities disclosed by Hemminger provides a substantial anticipation of claim 26 here on appeal, and that such modification is without inventive significance, and is to some extent suggested by the general statements of Hemminger (top of column 8) and the Kalbach and Journal citations.
>
> To recapitulate, Gitzen et al. provide the middle reaction zone and conditions required in claim 26, and also inherently provide preheating and dehydrating zone. This reference also provides a heat exchange between the incoming hydrogen fluoride gas and the reaction products, which to some extent at least provides a "final reaction and cooling zone" as required in the claim, although that zone is not distinctly separated from the reaction zone. In the use of the instrumentalities disclosed by Hemminger, no invention would be involved in taking advantage of Hemminger's feature of "countercurrent heat exchange," and the three distinct zones referred to in the claim will inevitably follow. It is noted that the cooling zone of claim 26 is also in part a reaction zone. In Gitzen et al., substantially the entire reaction zone is also used as a heat exchange or cooling zone. The substitution of Hemminger's countercurrent heat exchange is considered an obvious expedient.

The broad question before us on appeal is whether the improvements appellant has made in the process of Gitzen et al. involve patentable invention in view of the teachings of the prior art patents describing fluidizing techniques for reacting a solid with a gas. An ancillary question which we must also consider is whether the references were properly combined. This question is presented by appellant's statement, "If the Examiner and the Board had not been prompted and aided by the ex post facto wisdom of appellant's disclosure, they would never have combined the prior art disclosures into the method recited in the appealed claims."

It is well settled that prior patents may be combined to anticipate claims. *In re DeLancey*, 37 CCPA (Patents) 760, 177 F.2d 377, 83 USPQ 388. However, a question which should be considered when references are combined is whether these references suggest doing the thing which applicant has done. *In re Fridolph*, 30 CCPA (Patents) 939, 134 F.2d 414, 57 USPQ 122. It has also been stated that when references are combined to negate patentability, it should be considered whether one skilled in the art with the references before him could have made the combination of elements claimed without the exercise of invention. *In re Goepfrich*, 30 CCPA (Patents) 1181, 136 F.2d 918, 58 USPQ 324. [1] Furthermore, a claim may be sometimes properly rejected on a combination of references even though that combination does not show all the limitations in the claim, providing such limitations as are not shown are not inventive and patentable over the disclosures of the prior art. *In re Bisley*, 39 CCPA (Patents) 982, 197 F.2d 355, 94 USPQ 80; *In re Oakes*, 31 CCPA (Patents) 833, 140 F.2d 669, 60 USPQ 453.

The foregoing law is, in our opinion, determinative of the question of whether the references were properly combined. An analysis of the facts of the present case in the light of the above-cited law is therefore in order. Gitzen et al. disclose a process of producing aluminum fluoride by reacting an aluminous solid with hydrogen fluoride gas. There is no doubt that the secondary references suggest that it may be very desirable and technologically advantageous to employ a fluidizing process whenever a solid is to be reacted with a gas. We are therefore of the opinion that the secondary references would have readily *suggested* to one familiar with the Gitzen et al. process, which relates to a process of reacting a solid with a gas, that a fluidizing technique, such as shown by the secondary references, could advantageously be employed in conjunction with the Gitzen et al. process. Since it is our opinion that it would have occurred to one skilled in the art that the fluidizing technique could be advantageously applied to the Gitzen et al. process, it is therefore our conclusion that the references were properly combined.

Appellant contents that "No teaching or suggestion in the prior art would have prompted any skilled worker to provide *three separate and distinct fluidized beds* maintained at *different temperatures* for *different purposes*." The question therefore arises as to whether this is inventive. Gitzen et al. teach that, in addition to the actual production of aluminum fluoride, dehydrating of the solid material can be accomplished when it is placed in the reaction chamber. Thus, as held by both the Examiner and the Board, there are inherently two reaction zones in the Gitzen et al. process. Gitzen et al., however, do not clearly teach the use of a final reaction and cooling zone. The Hemminger patent teaches that temperature gradients may be maintained at different levels in a fluidizing process, and that countercurrent heat exchange of gases and solids may be employed in heating or cooling either. Notwithstanding that Gitzen et al. do not specifically teach a final reaction and cooling zone, we do not feel, and appellant has not shown, that this step is inventive as contrasted to being merely novel. It is our belief that when compounds are reacted, it is generally desirable to have a complete reaction. Furthermore, it seems to us that it would be generally desirable to cool a heated reaction product after the reaction has been completed. Since appellant has not pointed out how the step of completing the reaction and cooling is inventive in the present case, we must assume that this step is but a generally desirable incident of the process of making aluminum fluoride. [2] The fluidizing technique, as shown by the prior art, has certain known advantages, namely, that it allows the maintaining of different temperatures in different portions of the fluidizing apparatus, and that it permits heat exchange to be accomplished. To utilize these conventional aspects of the fluidizing technique to provide a final reaction and cooling zone is, in our opinion, not inventive since the fluidizing technique readily lends itself to maintaining temperature gradients and heat exchange. Since we are of the opinion that the final reaction and cooling step represents an unpatentable variation over the prior art, and since the other features of claim 26 are shown by the prior art, we conclude that the feature recited in the claim which is not shown in the prior art cannot render the claim patentable because it is not itself inventive. *In re Oakes*, supra; *In re Bisley*, supra.

It is to be noted that claim 30 is dependent on claim 26, and recites that "the gas velocity is decreased before emerging from the bed of the preheating and dehydrating zone in order to drop fines carried by the gas back into the bed of that zone." We are of the opinion that this limitation is not patentably significant, and we are in agreement with the Examiner's reasoning that this limitation relates to the mere working out of a technological detail which is within the normal routine or skill of a chemical engineer.

Claim 34 is similar in scope to the above-discussed claims, and is unpatentable, in our opinion, for the same reasons given above.

[3] The appeal as to claims 28, 29, 31, 32, and 33 is dismissed, and the decision of the Board of Appeals as to claims 26, 30, and 34 is affirmed.

AFFIRMED.

O'CONNELL, *J.*, was present at the argument of this case, but, by reason of illness, did not participate in the decision.

U. S. Court of Customs and Patent Appeals

THE QUAKER OATS CO.

v.

ST. JOE PROCESSING CO., INC.

No. 6204. Decided April 18, 1956

[— F.2d — ; — USPQ —]

1. TRADEMARKS — CONFUSING SIMILARITY — WEIGHT GIVEN OPINION TESTIMONY.
   Held that if witnesses' opinions that marks would be likely to cause confusion were adopted without considering other aspects of a case, the effect would be to substitute the opinions of the witnesses for the ultimate decision to be reached by the court and would therefore be improper.
2. SAME—SAME—APPEARANCE, SOUND AND MEANING CONSIDERED.
   Held that "in determining the likelihood of confusion between marks on identical goods, it is proper to consider their appearance, sound, and meaning."
3. SAME—SAME—"FUL-O-PEP" AND "VIT-A-PEP."
   Held that the concurrent use of the marks "Ful-O-Pep" and "Vit-A-Pep," both applied to animal feeds, would not be likely to cause confusion in the trade.

APPEAL from the Patent Office. Opposition No. 31,563.

AFFIRMED.

Woodson, Pattishall & Garner, William T. Woodson and *Beverly W. Pattishall* for St. Joe Processing Company, Inc.

No appearance or brief for The Quaker Oats Company.

Before JOHNSON, *Acting Chief Judge*, and WORLEY and JACKSON (retired), *Associate Judges*

JOHNSON, *Acting Chief Judge*, delivered the opinion of the court.

This is an appeal from the decision of the Commissioner of Patents, speaking through the Assistant Commissioner, 102 USPQ 451, sustaining the decision of the Examiner of Interferences which dismissed appellant's notice of opposition seeking to prevent registration of the mark "Vit-A-Pep" for feeds for poultry, turkeys, hogs, dairy cattle, and stock.

Appellant is the owner of the mark "Ful-O-Pep" for poultry feed, turkey feed, dog food, and stock feeds, and possesses the following registrations: No. 188,553 (August 26, 1924), No. 274,364 (August 26, 1930), No. 390,109 (September 9, 1941), No. 396,301 (July 7, 1941), No. 524,662 (May 2, 1950), and No. 524,663 (May 2, 1950).

In its notice of opposition appellant alleged, insofar as pertinent here, that appellee's mark "Vit-A-Pep" is confusingly similar to appellant's registered mark "Ful-O-Pep," and is likely to cause confusion and mistake in the mind of the public as to the origin of appellee's goods.

Appellant submitted deposition testimony of Colin S. Gordon, Vice President of the Quaker Oats Company. Mr. Gordon testified that the mark "Ful-O-Pep" was used continuously by The Quaker Oats Company since 1917 in a region east of the Rocky Mountains until 1940 when its use became national. It was further testified that appellant has sold five and one-half million tons of animal feeds under the mark "Ful-O-Pep." It was also stated in the testimony that appellant has widely advertised its "Ful-O-Pep" animal feeds by newspaper, trade-magazines, farm magazines, and radio; and has spent in excess of nine and one-half million dollars in advertising featuring its "Ful-O-Pep" trademark. Mr. Gordon also stated that appellant spent approximately $700,000 in advertising "Ful-O-Pep" during the year 1951, and that its advertising budget was in excess of the foregoing amount for the year 1953.

Appellant also introduced deposition testimony of numerous witnesses who were either farmers or feed dealers. Their testimony, insofar as pertinent here, was to the effect that they were familiar with the mark "Ful-O-Pep," having either sold or used feeds bearing that trademark. These witnesses also professed familiarity with advertising relating to the mark. It is also to be noted that the witnesses gave their opinions that customers would be confused by the marks "Ful-O-Pep" and "Vit-A-Pep" in the sense that these customers would believe that products appearing under the name "Vit-A-Pep" were manufactured by the company manufacturing "Ful-O-Pep" products.

Applicant-appellee, St. Joe Processing Company, Inc., filed no testimony, but filed a brief and was represented at the hearing before the Examiner of Inter-

ferences. However, appellee has neither filed a brief nor appeared for argument before our court.

The Examiner of Interferences was of the opinion that the marks "Vit-A-Pep" and "Ful-O-Pep" were not confusingly similar and dismissed the notice of opposition. In so doing, he stated:

> It is noted in the comparison of the notations "Vit-A-Pep" and "Ful-O-Pep" that they are alike primarily in that both are composed of three syllables, and that both end in the word "Pep." The initial portions of the marks consisting of the syllables "Vita-A" [sic] and "Ful-O" obviously contain nothing in common other than that they comprise the first two syllables of the marks as a whole. These differences in the initial portions of the marks, it is believed render the marks as a whole so totally different in appearance, sound, and meaning, as to enable their contemporaneous use for the goods here involved, which obviously are purchased with care and certain amount of discrimination, without any reasonable likelihood of confusion, or mistake, or deception of purchasers as to the origin thereof.

An appeal was taken to the Assistant Commissioner by the present appellant. Insofar as pertinent here, the Assistant Commissioner stated:

> The marks of the parties do not look alike, aside from the fact that they each comprise a succession of three letters, a hyphen, a capital letter, a hyphen, and the word "Pep." Purchasers do not, in my opinion, analyse trademarks to that extent. The marks do not sound alike; and their connotations are different. They create entirely different commercial impressions. It is not believed that confusion, mistake or deception is likely to result if applicant's mark is registered.

Appellant has appealed to us from the concurrent holdings of the tribunals below that the marks "Ful-O-Pep" and "Vit-A-Pep" would not be likely to cause confusion. There is no doubt that the goods of the parties are identical. Furthermore, with respect to priority of use of the respective marks, the record indicates that appellant was the prior user of its mark. In this respect, the statement of the Examiner of Interferences, "* * * [it] is conceded by the applicant [appellee], that the opposer [appellant] was first in the use of its mark, * * *" has not been controverted, and must therefore be accepted as being accurate.

The sole question before us on appeal is whether the marks "Ful-O-Pep" and "Vit-A-Pep," when applied to identical goods, are so similar as to be likely to cause confusion in the trade and mislead purchasers.

Before reaching the main issue in the present case, we deem it necessary to comment on the weight to be given the witnesses' opinions that the marks would be likely to cause confusion. In this respect it has been held that such testimony amounts to nothing more than an expression of opinion by the witness, which obviously is not binding upon either the tribunals of the Patent Office or the courts. *Ciba Pharmaceutical Products, Inc.* v. *Abbott Laboratories*, 28 CCPA (Patents) 1315, 121 F.2d 551, 50 USPQ 139; *Crown Fabrics Corp.* v. *American Viscose Corp.*, 32 CCPA (Patents) 701, 145 F.2d 246, 63 USPQ 149. [1] If such testimony were adopted without considering other aspects of the case, the effect would be to substitute the opinions of the witnesses for the ultimate decision to be reached by the court and would therefore be improper.

We now reach the question of whether the marks are so similar that they would be likely to cause confusion when applied to the identical goods of the parties. A part of the applicable law was stated in our recent case of *L. J. Mueller Furnace Co.* v. *United Conditioning Corp.*, 42 CCPA (Patents) 982, 222 F.2d 755, 106 USPQ 112. We therefore quote the following portion of that case:

> The test applied by this court in an opposition proceeding is the likelihood of confusion in the minds of the purchasing public as to the origin of the goods. *Nestle's Milk Products, Inc.* v. *Baker Importing Co., Inc.*, 37 CCPA (Patents) 1066, 182 F.2d 193, 86 USPQ 80; *Standard Laboratories, Inc.* v. *Proctor & Gamble Co.*, 35 CCPA (Patents) 1146, 167 F.2d 1022, 77 USPQ 617. This is a subjective test. Therefore prior decisions are of little value since each case must be decided on its own particular set of facts. *North Star Manufacturing Co.* v. *Wells Lamont Corp.*, 39 CCPA (Patents) 764, 193 F.2d 204, 92 USPQ 128.
>
> However, various rules have been developed for the purpose of aiding in the determination of the question of confusing similarity. It is well settled that the marks must be considered in their entireties, *Apollo Shirt Co.* v. *Enro Shirt Co., Inc.*, 35 CCPA (Patents) 849, 165 F.2d 469, 76 USPQ 320; *Velpo Co.* v. *Solis, Enriziso y. Companis.* 36 CCPA (Patents) 1160, 175 F.2d 457, 82 USPQ 182. But different features may be analyzed to determine whether the marks are confusingly similar, *Hoffman-La Roche, Inc.* v. *Roch D. Kawerk, Etc.*, 32 CCPA (Patents) 954, 148 F.2d 557, 65 USPQ 218, and similarities and dissimilarities should both be considered, *Youngbusband* v. *Kuriash Co., Inc.*, 25 CCPA (Patents) 886, 94 F.2d 230, 36 USPQ 323.
>
> It has also been held that the common portions of the marks cannot be disregarded. *Schering & Glatz, Inc.* v. *Sharp & Dohme, Inc.*, 32 CCPA (Patents) 827, 146 F.2d 1019, 64 USPQ 394, * * *

[2] Furthermore, in determining the likelihood of confusion between marks on identical goods, it is proper to consider their appearance, sound, and meaning. *Hancock* v. *The American Steel and Wire Co., Etc.*, 40 CCPA (Patents) 931, 208 F.2d 737, 97 USPQ 330; *Firestone Tire & Rubber Co.* v. *Montgomery Ward & Co.*, 32 CCPA (Patents) 1074, 150 F.2d 459, 66 USPQ 111.

We will now proceed to analyze the marks "Ful-O-Pep" and "Vit-A-Pep" in view of the foregoing applicable law. In considering the marks in their entireties, it can be readily seen that they both consist of three syllables separated by hyphens. In this respect, the marks would tend to look alike. Furthermore, the marks, when different features thereof are analyzed, both have the suffix "Pep" in common. The marks are dissimilar in that one has the words "Ful-O" and the other "Vit-A" as prefixes. [3] We are of the opinion that "Ful-O-Pep" and "Vit-A-Pep," when viewed in their entireties, are not confusingly similar. Even if they are not viewed in their entireties, but the similarities and dissimilarities are compared, we find that while the suffixes "Pep" are identical, the prefixes "Ful-O" and "Vit-A" do not look alike or sound alike. We feel that the dissimilarities by far outweigh the similarities, and thus cause the terms in their entireties to be more different than alike. Furthermore, we cannot see where the marks have the same meaning. It is therefore our opinion that the concurrent use of the marks "Vit-A-Pep" and "Ful-O-Pep" would not be likely to cause confusion in the trade.

We have carefully considered all of appellant's arguments, but we are of the opinion that the decision appealed from should be affirmed.

AFFIRMED.

JACKSON, *J.*, retired, recalled to participate.

WORLEY, *J.*, concurs in the conclusion.

O'CONNELL and COLE, *JJ.*, because of illness, did not participate in the hearing or decision of this case.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

2,233,946, R. M. Roberts, Carpet fastener, suit for Declaratory Judgment filed May 9, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19903–Y, *Edgemaster Corp.* v. *Roberts Mfg. Co.*

2,264,737, H. Bertsch, Wetting, detergent, and emulsifying agents, filed Jan. 10, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16168, *American Hyalsol Corp.* v. *Sun Chemical Co.* Case dismissed May 11, 1956.

2,341,197, **2,341,198**, E. C. Welskopf, Automatic immersion apparatus, filed May 15, 1956, D. C., S. D. N. Y., Doc. 109/318, *Technicon International, Ltd., et al.* v. *Fisher Scientific Co. et al.*

2,341,196. (See 2,341,197.)

2,372,716, G. T. Evans, Locating key, filed Dec. 20, 1954, D. C., E. D. Mich. (Detroit), Doc. 13997, *Vlier Engineering, Inc.* v. *Siewek Tool Co. et al.* Order of dismissal with prejudice (notice Jan. 9, 1956).

2,466,904, F. W. Roberts, Wood grinding machine, filed May 16, 1956, D. C., W. D. Wis. (Madison), Doc. 2808, *Charles B. Roberts* v. *Appleton Machine Co., Inc., et al.*

2,510,966, W. F. Flanagan, Method of giving nonwrinkling materials a wrinkle texture; **2,510,967**, same, Apparatus for producing wrinkle texture on nonwrinkling films; **2,536,648**, same, Producing a smooth-wrinkle patterned film; **2,511,624**, H. A. Toulmin, Jr., Method for producing ornamental wrinkle films; **2,676,337**, same, Composition for producing wrinkle-textured films; **2,671,063**, W. A. Waldie, Vinyl resin-alkyd wrinkle composition, filed May 10, 1956, D. C., E. D. Mich. (Detroit), Doc. 15699, *New Wrinkle, Inc.* v. *De Soto Motor Corp.*

2,510,967. (See 2,510,966.)

2,511,624. (See 2,510,966.)

2,536,648. (See 2,510,966.)

2,569,734, Mackie and Duluk, Convertible folding top with automatic seal at rear quarter, filed Apr. 27, 1956, D. C. Mass. (Boston), Doc. 56/357–A, *Convertible Top Replacement Co., Inc.* v. *Aro Mfg. Co., Inc., et al.*

2,666,552. (See 2,646,268.)

2,665,528, A. Lang, Botton holding structure for wire screens, filed May 8, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19897–T, *Rudiger-Lang Co.* v. *The Columbia Mills, Inc.*

2,622,803, **2,723,866**, J. Farber, Toy register bank, filed May 15, 1956, D. C., S. D. N. Y., Doc. 109/336, *J. Chein & Co.* v. *Jacob Farber.*

2,646,268, R. L. Jackson, Cottonseed delinting apparatus; **2,666,552**, L. H. Jackson, Apparatus for treating cottonseed and the like for planting purposes, filed Apr. 4, 1955, D. C., N. D. Tex. (Lubbock), Doc. 1812, *Jackson Delinting & Mfg. Co.* v. *Cottonseed Delinting Co. et al.* Patent No. 2,646,268 held invalid and not infringed; Patent No. 2,603,552 (granted to defendant Lloyd H. Jackson) held invalid; complaint dismissed May 10, 1956.

2,670,337. (See 2,510,966.)

2,671,063. (See 2,510,966.)

2,672,895, R. M. Ingham, Jr., Filling grate for looms, filed Dec. 19, 1955, D. C., W. D. S. C. (Greenville), Doc. 1895, *Deering Milliken Research Corp.* v. *The Henriette Mills, Inc.* Consent judgment; "(There was no trial of the merits and no adjudication of the issues)" May 16, 1956.

2,679,871, A. G. Goldberg, Automatic serving tray, filed Mar. 14, 1956, D. C. Mass. (Boston), Doc. 56/239–A, *Standard Box Co.* v. *Winchester Carton Corp.*

2,685,304, I. Rabinowits, Boneless ham pressure packer, filed Oct. 26, 1954, D. C., E. D. Pa. (Philadelphia), Doc. 17985, *Irving Machinery Co. Inc.* v. *Karl Seller & Sons, Inc., et al.* Consent decree favor plaintiff; injunction granted May 10, 1956.

2,693,426, Hoover and Anderson, Method of making stencil sheets and resultant article, filed May 15, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c887, *A. B. Dick Co.* v. *Remington Rand, Div. of Sperry Rand Corp.*

2,701,235, O. M. King, Operating system for swimming pool, filed May 10, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19908–Y, *Oswald M. King* v. *Landon Blue-Lake Swimming Pools et al.*

2,706,482, J. J. Griffitts, Medical lancet, filed May 8, 1956, Ct. Cls., Doc. 198/56, *Dade Reagents, Inc.* v. *The United States.*

2,707,366, Kontoff and Rubin, Adjustable spacer block for camera cases, filed May 16, 1955, D. C., S. D. N. Y., Doc. 100/339, *Saul Kontoff et al.* v. *Craftsmen Camera Cases et al.* Stipulation and order of discontinuance (notice May 15, 1956).

2,730,045, G. Miller, Transparency viewer combined ejector and light switch, filed May 11, 1956, D. C., E. D. Va. (Alexandria), Doc. 1294, *Gustave Miller* v. *Ludwig Camera Shops, Inc.* Patent held valid and infringed; defendant enjoined from further infringement (notice May 14, 1956).

2,733,803. (See 2,622,803.)

2,732,336, B. D. Ostrow, Electroplating composition for copper, filed Feb. 17, 1956, D. C., S. D. N. Y., Doc. 107/127, *Elechem Corp. et al.* v. *Jelco Finishing Equipment Corp.* Consent order of discontinuance May 16, 1956.

2,737,942, Horowits and Schneiderman, Toy guns, filed May 10, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16552, *Harry Horowits et al.* v. *Nathan Newman et al.*

Des. 174,386, R. Reachi, Lamp, filed Apr. 30, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19853–T, *Ramon Reachi* v. *General Wax and Candle Co. et al.*

Des. 177,334, **Des. 177,335**, A. Katz, Jewelry finding or similar article; **Des. 177,404**, same, Stone for costume jewelry or similar article, filed May 17, 1956, D. C. R. I. (Providence), Doc. 2016, *Coro, Inc.* v. *Mayco Plastics, Inc.*

Des. 177,335. (See Des. 177,334.)

Des. 177,404. (See Des. 177,334.)

REISSUES

JUNE 12, 1956

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

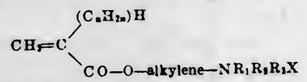
24,164
QUATERNARY AMMONIUM POLYMERS OF THE ACRYLIC TYPE

Arthur L. Barney, Deerhurst, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Original No. 2,677,679, dated May 4, 1954, Serial No. 216,839, March 21, 1951. Application for reissue October 10, 1955, Serial No. 539,710

7 Claims. (Cl. 260—85.5)

1. A process for the preparation of polymers wherein a monomer composition consisting of monomers having a non-aromatic carbon-carbon unsaturation and that ethylenic at least 0.1% of which is a monomer of the formula



wherein n is a cardinal number of 0 to 4, R_1, R_2, and R_3 are hydrocarbon, free from non-aromatic unsaturation and having a total of 3 to 12 carbons and X is a monovalent salt-forming anion, is brought into contact with a free radical type polymerization catalyst in uniform dispersion in a hydroxylated solvent for the quaternary ammonium monomer.

24,165
MANUFACTURE OF ELECTRIC CIRCUIT COMPONENTS

Paul Eisler, London, England, assignor to Hermoplast Limited, London, England, a corporation of Great Britain

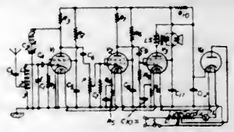
Original No. 2,587,568, dated February 26, 1952, Serial No. 11,798, February 27, 1948, which is a division of Serial No. 520,991, February 3, 1944. Application for reissue February 25, 1954, Serial No. 412,671. In Great Britain February 2, 1943

Section 1, Public Law 690, August 8, 1946

Patent expires February 2, 1963

17 Claims. (Cl. 41—43)

1. A method of manufacturing a component of an electric circuit involving a conductive pattern of such weak mechanical structure that it is incapable of self-maintaining its configuration, said component including at least one conductor linking at least two terminals of said electric circuit of different operating potentials and including metallic joints for at least one other electric device not contained within said component, which comprises providing a sheet of metal foil with an impervious insulating backing, printing a representation on the surface of the metal foil of the conductive pattern of the component, including junction points which register with



said metallic joints, in a medium adherent to said foil and protecting it from chemical attack on the areas of said pattern, subjecting the metal foil to a chemical action utilizing the differentiation resulting from the imprint to produce a differentiation of conductive and nonconductive parts of the metal foil, and making electric connections at said junctions.

24,166
SELF-CLOSING CONTAINER

Benjamin Stiller, Akron, Ohio

Original No. 2,667,906, dated February 2, 1954, Serial No. 251,477, October 16, 1951. Application for reissue February 1, 1956, Serial No. 562,918

8 Claims. (Cl. 150—37)



1. A quick-opening and self-closing container for articles comprising a unitary envelope of material having elastic properties similar to those of soft rubber, said envelope defining a substantially fully closed interior volume having a depth relatively small in comparison to dimensions transverse to its depth, and said envelope having a substantially transverse normally closed slit in one face extending from one periphery to an opposite periphery.

PLANT PATENTS

GRANTED JUNE 12, 1956

Owing to the fact that almost all of the illustrations of the plant patents are in colors, it is not practicable to print a cut of the drawing.

1,482
PLUM TREE

Herbert C. Swim, Ontario, Calif., assignor to Armstrong Nurseries, Inc., Ontario, Calif., a corporation of California

Application March 28, 1955, Serial No. 497,483

1 Claim. (Cl. 47—62)

A new and distinct variety of plum tree of the Japanese semi-freestone type, substantially as herein shown and described, characterized particularly as to novelty by its vigorous habit of growth, the roundness of its fruit, the attractive and distinctive color of the fruit skin, the firm, meaty, yellow flesh of the fruit, the delectable flavor and the good eating and keeping qualities of the fruit.

PATENTS

GRANTED JUNE 12, 1956

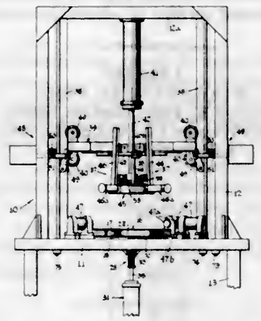
GENERAL AND MECHANICAL

2,749,546
STAPLING MACHINE

Martin M. Pascale, Norwalk, and George M. Rickus, Wilton, Conn., assignors to Hat Corporation of America, Norwalk, Conn., a corporation of Delaware

Application November 9, 1954, Serial No. 467,790

16 Claims. (Cl. 1—3)



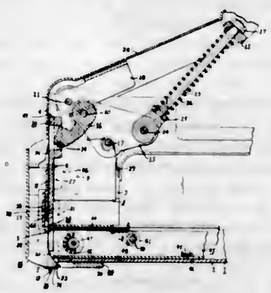
1. A machine for fastening together a flat sheet having an opening therein and saced ears around the opening to receive and engage a wide annular band disposed therein wherein said sheet lies intermediate the width of the band with the ears overlying portions of the band to form a hat ring for supporting a hat in a hat box comprising a frame, a base mounted on said frame to extend transversely thereof, supporting means on said base for receiving and supporting said band and its surrounding perpendicularly related flat sheet in unfastened assembled relationship, and fastening means movably mounted on said frame to be moved into fastening position for securing the ears of the flat sheet to the band.

2,749,547
FASTENER APPLYING DEVICE

Herman J. Spencer, Ingomar, Pa.

Application March 31, 1954, Serial No. 420,079

2 Claims. (Cl. 1—3)



1. Stapling mechanism comprising a frame, a driver reciprocable therein, a staple guide extending at an angle to the path of the driver and terminating adjacent thereto, and die plates on said frame adjacent said path, said plates having angled projections extending inwardly thereof and effective to bend inwardly and to twist the legs of a staple delivered along said guide and driven downwardly by said driver so as to turn the width of said legs towards a vertical plane to strengthen the latter against being unbent.

2,749,548
JARRING TOOLS

Ralph M. Turner, Rockville, Md.

Application November 16, 1954, Serial No. 469,229

5 Claims. (Cl. 1—47)



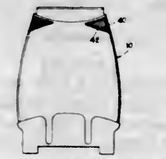
1. A jarring tool comprising in combination, an elongated housing adapted at one end thereof for attachment to an electric drill, a drill engaging adapter rotatably mounted in said housing, a cam member rotatable with and slidable relative to said adapter, a reciprocable plunger provided in said housing and connected to said cam member, a second cam member stationary in said housing and operatively engaged by the first mentioned cam member whereby to reciprocate said plunger, resilient means urging the first and second mentioned cam members together, a reciprocable extension unit provided in said housing, said extension unit having an outer work engaging end and an inner end operatively engaging said plunger, and a retractable work guide positioned slidably in and projecting outwardly from said housing in surrounding relation to the work engaging end of said extension.

2,749,549
DEPOSITED RUBBER UNDERGARMENT

Paul E. Ambrose, Dover, Del., assignor to International Latex Corporation, Dover, Del., a corporation of Delaware

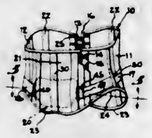
Application February 9, 1953, Serial No. 335,851

2 Claims. (Cl. 2—36)



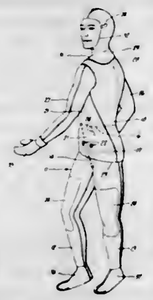
1. A deposited rubber latex foundation garment for use on the human body, comprising a pre-formed, readily collapsible, relatively thin elastic wall, provided with a waist opening having a peripheral edge, and shape-retaining areas stiffened against compression in a direction normal to the waist opening and positioned on the wall in areas corresponding to each of the hip regions of the wearer so as to resist rolling over of the garment in said hip regions, said shape-retaining areas extending less than the periphery of said edge with the adjacent lateral boundaries of said stiffened areas being spaced substantial distances apart from each other to minimize interference with the elastic stretch of the thin elastic walls at the waist opening, said shape-retaining areas being made of deposited latex, rib-like in cross section, the longitudinal axes of said ribs extending angularly away from the periphery of said edge.

2,749,550
ABDOMINAL SUPPORT
William A. Pease, Cincinnati, Ohio, assignor to Surgical Appliance Industries, Inc., Cincinnati, Ohio, a corporation of Ohio
Application October 28, 1954, Serial No. 465,319
3 Claims. (Cl. 2—41)



1. An abdominal support comprising a girdle having a pair of complementary sections adapted to encircle the body of the wearer, the opposite edges of said sections at the rearward side of the girdle being spaced apart from one another, a series of spaced eyelets in the said spaced edges of the girdle sections, lacing means slidably looped through the eyelets, the lacing means having respective free end portions passing through the eyelets of said spaced edges, the respective free end portions passing from the eyelets of one edge across the complementary girdle section, said lacing means providing a block and tackle action drawing the spaced edges of the girdle sections toward one another upon application of tension to the free end portions of the lacing means, respective pull straps connected to the free end portions of the lacing means, said pull straps extending from said free end portion around the respective complementary girdle sections toward the front of the girdle, an abdominal support pad residing beneath the girdle at the front thereof, said support pad comprising a plate formed of resilient spring metal having a generally oblong configuration extending transversely of the girdle, said plate being arcuate along its major axis which extends transversely of the girdle and having its convex surface facing inwardly from the front of the girdle adapted to engage the abdomen of the wearer, the girdle having respective openings formed therein adjacent the opposite ends of said plate, said pull straps passing through said openings and having their opposite end portions connected to the opposite ends of said plate at points along the major axis thereof, said pull straps adapted to contract the girdle and to draw said plate against the abdomen of the wearer and thereby to spring said arcuate plate to a flattened condition in response to the tension applied by the pull straps to provide a yieldable support and to impart yieldability to the girdle.

2,749,551
UNDERWATER SUIT
David W. Garbellano, Berkeley, Calif.
Application January 22, 1954, Serial No. 405,597
2 Claims. (Cl. 2—82)



2. In a form-fitting torso cover suitable for underwater wear, an over-head jacket adapted to fit closely to the body of its wearer and having shoulder, chest and hip covering portions and unitary sleeves formed therewith said sleeves having at their lower extremities restricted arm openings adapted to embrace closely the arms of the wearer, the shoulder portion being provided with a restricted opening adapted to embrace closely the neck of the wearer, the chest and hip covering portions and the arm enclosing portions being each circumferentially continuous throughout its length and having no mechanical closure element throughout said length, the hip covering portion having a suitably shaped dorsal appendage adapted to pass through the crotch of the wearer in close relationship therewith and be fastened to the lower frontal portion of said jacket; said torso cover being fabricated entirely, except for fastening means, from neoprene foam rubber having a substantially water impervious skin-like structure on the external surface only as distinguished from the skinless internal surface of unicellular foam rubber.

2,749,552
WOOD VENEER VEST
Stephen K. Feste, Buffalo, Minn.
Application February 14, 1955, Serial No. 488,082
6 Claims. (Cl. 2—92)



1. A body heat-retaining vest for use by a feverish person comprising an elongated strip of closed grain wood veneer having the grain thereof extending transversely of the strip and being adapted to encircle in close fitting relation the body of a person to cover his chest, a fabric covering extending the length of said strip and being secured to one surface thereof to be placed adjacent the person's body and means for securing the opposite ends of the strip together for holding the same on such a person's body.

2,749,553
NECKTIE HOLDING MEANS
Nathaniel Miller, Baltimore, Md., assignor to Samuel J. Miller & Co., Baltimore, Md., a partnership
Application April 9, 1954, Serial No. 422,093
1 Claim. (Cl. 2—145)



In a four-in-hand necktie having a wider end and a narrower end and a horizontal keeper loop on the back of the wider end to receive and hold the narrower end thereto, a vertical strip on the back of the narrower end, said vertical strip having at least two vertical rows of buttonholes in mutually adjacent relation, the buttonholes of one row being in staggered relation to the buttonholes in the other row.

2,749,554
TIE SHAPER
Clarence F. Hilgeford, Dayton, Ohio
Application June 14, 1954, Serial No. 436,596
1 Claim. (Cl. 2—153)

A tie shaper comprising a single length of spring steel wire angularly bent upon itself to form a point symmetrically spaced from the opposite ends of the wire for engaging the knot of a four-in-hand necktie, said point being formed by side members the outer ends of which are spaced from each other to form opposite sides of said point, the said side members being yieldingly biased outwardly from said point, a pair of legs formed integrally with said side members and extending at obtuse angles with respect thereto, said legs crossing each other at a point of intersection that advances toward said point as said side members are yieldingly squeezed between the



fingers for narrowing the space between said side members for facilitating entry of said insertable point into the knot of the necktie, said legs extending downwardly and outwardly away from said point of intersection for distances approximately 25% more than the length of said side members and being abruptly bent inwardly at their ends and then outwardly to form terminating tie engaging prongs, said legs and said terminating prongs all being substantially coplanar, the said legs and said side members being free of each other except at said point of intersection throughout their lengths.

2,749,555
DATE HAT
Edward T. Oliveira, Newport, R. I.
Application May 18, 1955, Serial No. 509,371
2 Claims. (Cl. 2—199)



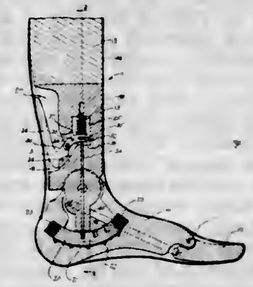
1. An indicator hat comprising a crown portion, said crown portion having a concave undersurface and being adapted to be placed and worn on a human head, an annular series of clockwise-arranged numerals on the outer periphery of said crown portion, said numerals indicating hours of the day, an annularly arranged series of indicia positioned radially inward of said numerals, said indicia denoting certain days of the week, a pivot means centrally positioned on the crown portion of said hat, and three indicating hands pivotally mounted on said pivot means, one of said hands being adapted to indicate minutes in reference to said numerals, another of said hands being adapted to indicate hours in reference to said numerals, and the third hand being adapted to indicate days in reference to said indicia.

2,749,556
ADJUSTABLE ELASTIC WAIST FOR TROUSERS AND OTHER GARMENTS
Paul Lampkowitz, New York, N. Y.
Application February 12, 1954, Serial No. 409,963
1 Claim. (Cl. 2—237)

A pair of trousers comprising a permanently closed continuous waistportion and a pair of legs, said legs each having a front crease therein extending from the bottom of the leg to a point near said waistportion, said waistportion being provided with a foldable fullness at its front constituting adjacent V-shaped and inverted V-shaped portions extending downwardly to the front creases when unfolded, slotted tabs secured at one end to the surfaces of said V-shaped portions adjacent their apex ends and adjacent the top ends thereof, a plurality of fastener elements on said waistportion adapted to detachably fasten the tabs when the V-shaped and inverted V-shaped portions are in overlapped relation, a fly front terminating at its top end beneath the upper extremity of the waistportion, and an adjustable elastic belt secured to the interior of the waistportion, said belt being fastened to the material of the waistportion by transverse rows of stitching at the rear, and side portions thereof and at the front adjacent the apex ends of the inverted V-shaped portions thereof when said portions are in unfolded condition and being unattached between said apex ends and the side portions of the waistportion, and adjusting buckles on the belt at opposite sides thereof.



2,749,557
ADJUSTABLE ANKLE JOINT FOR AN ARTIFICIAL LIMB
Grant C. Riddle, Penn, Pa.
Application April 15, 1955, Serial No. 501,577
3 Claims. (Cl. 3—33)

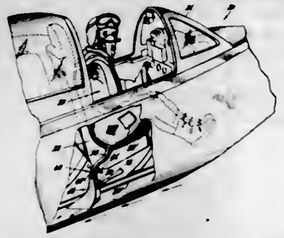


1. In an artificial limb comprising a leg portion, a foot portion hinged to said leg portion, and a toe portion hinged to said foot portion, means slidably mounted in said leg portion and being lockingly engageable with said foot portion to releasably secured said foot portion in an adjusted position, and means connecting said toe portion to said leg portion and being arranged to maintain a substantially constant angular relation of said toe portion to said leg portion.

2,749,558
DEFECATION RELIEF UNIT FOR AEROPLANE PERSONNEL AND SICK-BED
Constantin Paul Lent, Homer Kerns, and Alan Mehler, New York, N. Y.
Application December 11, 1951, Serial No. 261,065
15 Claims. (Cl. 4—10)

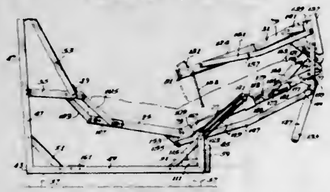
1. In a defecation means, a defecation relief seat included in combination with the lining of a conventional aviation suit, a defecation discharge tube means, said

defecation tube means leading from said defecation seat to a defecation discharge cabinet, and connecting means



for securing said discharge tube means to said defecation relief cabinet.

2,749,559
SOFA BED
John S. Petersen, Kenosha, Wis., assignor to Simmons Company, Kenosha, Wis., a corporation of Delaware
Application August 6, 1952, Serial No. 302,870
3 Claims. (Cl. 5—13)



3. A foldable bed bottom for sofa beds or the like including at least two hingedly connected sections which are relatively foldable to a position with one of said sections overlying the other of said sections, mounting means movably connected to said sections for shiftably supporting said sections on a sofa frame whereby said sections when folded are shiftable inwardly of said frame with said one section uppermost to form a sofa seat, and an operative connection between said mounting means and said sections whereby said inward movement of said sections is effective to draw said two sections together into fixedly folded relation, said operative connection including a link connected with said one section and having thereon a pin disposed within a longitudinal slot in said other section, said pin being movable rearwardly in said slot by the folding of said two sections into superposed relation, a latch member pivotally connected to said mounting means and having a hook portion disposed above and forwardly of said pin when said two sections are superposed and before said sections are shifted into said seat position, said latch member being shiftable rearwardly relative to said pin by the shifting of said sections into seat position, said latch member and said other section having interengaged pin-and-cam-slot guide means for moving said latch member downwardly as an incident to its rearward movement thereby to forcibly engage said hook portion with said link pin and to draw the same rearwardly in its slot.

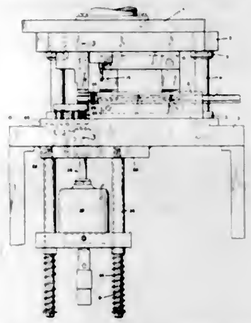
2,749,560
LIFE SAVING DEVICE
Amos L. Craft, St. Petersburg, Fla.
Application June 16, 1954, Serial No. 437,114
5 Claims. (Cl. 9—11)

1. A life saving device comprising, in combination, a main body section, a plurality of independent shell-like secondary body sections, a bottom body section, each of said sections being of substantially the same height and of similar shape, and said sections being adapted to telescope within the adjacent section whereby said device may be collapsed for storage and extended for use, means forming a hinged floor assembly in said bottom body section adapted to permit the entry of an occupant into the device through said floor assembly, and means form-



ing perforations in said floor assembly to permit the entrance of water into each of said secondary sections and said bottom section whereby each of said secondary sections is disposed below the water level when the device is in use to thereby stabilize the device.

2,749,561
APPARATUS WHEREIN A RECIPROCABLE CUT OFF DIE FEEDS A SEVERED ARTICLE ONTO A ROTATING TAP
John Thomas Rush, North York, Ontario, Canada, assignor to Associated Tool & Manufacturing Company Limited, Downsview, Ontario, Canada
Application December 5, 1955, Serial No. 551,157
14 Claims. (Cl. 10—72)

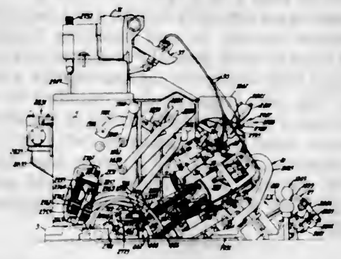


1. Means for simultaneously cutting off and tapping a pierced article from a length of stock comprising a platform having a stock receiving surface formed with an aperture adapted to register with the opening in a pierced piece of stock received on said surface and mounted to reciprocate perpendicular to said surface, a cut off punch reciprocally mounted to move from a position displaced from said platform towards said support surface and adapted to effect displacement of said support surface relative to a fixed stock support to cut off a piece of stock thereon and return, means for actuating said punch, a tapping device disposed on the opposite side of said support surface and mounted to reciprocate in a direction perpendicular to said support and having a reversible tapping element disposed in the path of said platform and adapted to operate through said aperture in the support surface, and means to synchronize the rate of displacement of said platform under operation of said punch to the rate of feed of said tapping element into and out of the opening in a pierced piece of stock on said platform.

2,749,562
MACHINES FOR SHAPING UPPERS OVER LASTS
Thomas Aubrey Kestell, Leicester, England, assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application December 24, 1954, Serial No. 477,561
91 Claims. (Cl. 12—10.4)

57. In a machine for shaping uppers over lasts, a support for a last with an upper assembled thereon, a pair

of grippers for seizing the upper on each of the opposite sides of the last and movable heightwise of the last to stretch the upper over the last, during a cycle of power operations of the machine, a fastener inserting nozzle associated with each of said grippers, a carrier for supporting each one of the pairs of grippers and the fastener inserting nozzles associated with said pair of grippers, said carriers being mounted for rectilinear movement toward and away from a last on the support and for pivotal movement about an axis extending generally heightwise of the last and substantially midway between the two grippers of the pair, each of said grippers having an outer jaw and an inner jaw and being so located, prior to the beginning of an operating cycle, that the outer jaw is spaced from the side of the last, each of said fastener inserting nozzles being mounted on its carrier for move-



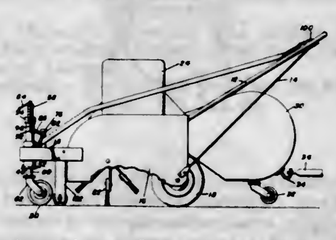
ment, relatively thereto, of a predetermined extent in a direction extending laterally of the last, from a fastener receiving position to a fastener inserting position, means operable at the beginning of each operating cycle, before the jaws of said grippers are closed to seize the upper and prior to movement of the fastener inserting nozzles to their fastener inserting positions, for effecting movements of said carriers first to carry the grippers to positions in which their outer jaws are in contact with the last on the opposite sides thereof, whereby the carriers are swung about their respective pivotal axes to angular positions determined by said grippers and the last, and thereafter to withdraw the grippers to positions in which their respective outer jaws are spaced predetermined distances from the sides of the last, and means operable thereafter and before the completion of the operating cycle to return said carriers to their initial angular positions.

2,749,563
ROTARY BRUSHING DEVICE FOR OPERATING UPON PRESS PLATENS OR THE LIKE
Joseph H. Resser, Sr., Neffsville, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a corporation of Pennsylvania
Application September 25, 1951, Serial No. 248,239
3 Claims. (Cl. 15—23)



2. A device of the class described for insertion between spaced press platens or the like comprising a housing, a spindle projecting through said housing, rotary brushes mounted on opposite ends of said spindle and having a yieldable surface projecting above the housing for engagement with a platen and constituting the sole means projecting above said housing for engagement with said platen during operation of said device, a driving shaft journaled in said housing, means connecting said shaft and spindle for rotation, a pair of runners for supporting said housing, platen engaging surfaces on said runners for engagement with a platen surface opposed to the platen surface engaged by said rotary brushes, means connected to one of said housing and said runners and slideable within the other providing for relative movement between said housing and runners in a direction toward and away from the platens and connecting said housing and runners for movement in unison in other directions, and yielding means interposed between said runners and housing for urging said rotary brushes and said runners into yielding engagement with their respective platen surfaces.

2,749,564
ATTACHMENT FOR SWEEPER
Carl E. Tally, Cleburne, Tex.
Application April 24, 1953, Serial No. 350,834
1 Claim. (Cl. 15—79)



A control attachment for a sweeper having a main frame with main wheels at one side of a rotary brush and an auxiliary wheel at the other side of said brush comprising a vertical guide bushing fixed in said frame, a vertical control bushing slidably received in said guide bushing and vertically adjustable therein, a threaded member on the upper end of said control bushing, an adjusting rod extending through said control bushing with a threaded shank on its upper end threaded through said member for screw feed adjustment of said rod in said control bushing, said auxiliary wheel being mounted on the lower end of said rod for raising and lowering relative to said control bushing by screw feed adjustment of said rod, a hand lever pivotally mounted on said frame, means operatively connecting said hand lever to said control bushing for vertically adjusting said control bushing to vertically adjust said wheel independently of adjustment by screw feed adjustment of said rod, and a spline forming connection between said guide and control bushings preventing rotation of said control bushing in said guide bushing.

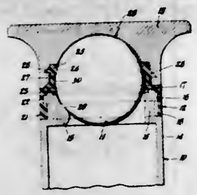
2,749,565
RIFLE BARREL CLEANING DEVICE
John G. Stamm, Jr., Ludlow, Pa.
Application October 12, 1951, Serial No. 251,055
2 Claims. (Cl. 15—104.165)



1. In a rifle cleaning device a resilient cleaning rod of variable length formed by an elongated, resilient spring steel strip having slightly curved cross section to increase the bending resistance of the spring steel strip and a width slightly less than the bore of rifles to be cleaned by the rifle cleaning device and a closed cylindrical container including in its peripheral wall a narrow slot fitting said spring steel strip, said spring steel strip readily shiftably extending through said slot with its one end in said container to be arranged therein in coiled condition, and a cylindrical coupling head swiveled to the freely exposed other end of the spring steel strip, said cylindrical

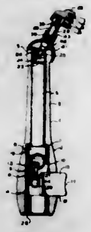
coupling head including guide ribs arranged to fit the grooves of a rifle to be cleaned to effect by shifting of the cleaning rod in the barrel of such rifle axial rotation of the coupling head.

2,749,566
DISPENSER
Ralph Henry Thomas, Rahway, N. J., assignor to Bristol-Myers Company, New York, N. Y., a corporation of Delaware
Application September 4, 1952, Serial No. 307,750
14 Claims. (Cl. 15—132.7)



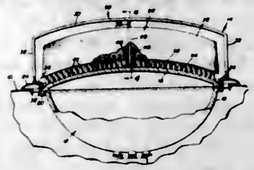
13. A dispensing device comprising a container having an open end, a generally spherical ball at said open end and having an inner portion thereof in contact with the contents of said container, means for rotatably supporting said ball at said open end comprising bearing surfaces carried by said open end of said container for contact with an inner minor portion of said ball, means for retaining said ball against movement outwardly from said open end comprising an annular member having a resilient annular bearing portion encompassing an outer minor portion of said ball, and a clamping portion firmly engaging said container adjacent said open end, said resilient bearing portion being adapted for radial inward deformation, and means for sealing said container comprising a cap for attachment to said container, said cap and said member being provided with co-operating surfaces arranged to impart a camming action to said bearing portion to effect said inward radial deformation thereof upon firm application of said cap.

2,749,567
ADJUSTABLE TOOTH BRUSH
Max Krueger, Newark, N. J.
Application August 7, 1951, Serial No. 240,623
13 Claims. (Cl. 15—172)



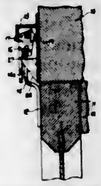
1. A tooth brush comprising an elongated casing, a rod within the casing adapted to reciprocate longitudinally therein, a stem extending through one end of the casing and movably attached to the rod to assume a variable angular position with respect thereto, a brush rigidly mounted on the outer end of the stem to assume a variable angular position with respect to said rod, a lever within the casing having a cam shaped end engaging against the rod to cause the rod to reciprocate, movement in one direction serving to force the stem against the casing to lock the stem and brush in a set position, and a button extending through the casing to the outside thereof and engaging internally of the casing against said lever for actuating the latter by straight line motion.

2,749,568
HEADLIGHT BRUSH
Arthur P. Bird, Stollings, and Harry B. Holston, McConnell, W. Va.
Application September 14, 1953, Serial No. 379,782
1 Claim. (Cl. 15—250)



For use with headlights of the type retained in place by a retaining ring, a headlight lens cleaning brush, said brush comprising a mounting bracket and a lens contacting brush element carried by said mounting bracket, said mounting bracket being generally U-shaped and including hook shaped clips selectively engageable with a headlight retaining ring, said brush element including an arcuate back including a concave edge adjacent an associated lens, said concave edge being concentric with the lens and having projecting bristles, said concave edge being provided with centrally located guide pins, said guide pins being engageable with the lens to limit deformation of said bristles.

2,749,569
HANGER FOR STORM SASH
Carl I. Sandberg, Madison, N. J.
Application July 3, 1953, Serial No. 365,824
11 Claims. (Cl. 16—177)



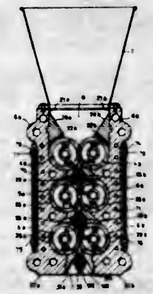
1. In a hanger for a storm sash, the combination of a supporting member adapted to be secured to a storm sash, a lever adapted to be pivotally mounted on a window frame, said lever being positioned for engagement with the supporting member on the storm sash and being movable between an open and a closed position by movement of the storm sash relative to the window frame, latch means adapted to be connected to the window frame and a floating cam carried by the lever and yieldably engaging with said latch means to hold the lever in either of said positions.

2,749,570
DUAL ACTION LIFT SPRING
Clayton W. Alder, Camas, Wash.
Application March 17, 1954, Serial No. 416,866
2 Claims. (Cl. 16—198)



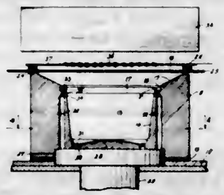
2. In an overhead door lifting mechanism having a shaft with a cable drum adapted to make a plurality of revolutions in a door lifting movement, a torsion spring encircling said shaft and having one end anchored thereto, a flexible split sleeve surrounding a portion of the length of said spring, and a pair of band clamps on said sleeve, said clamps being slidable toward and away from each other to vary the effective spring length and provide fine adjustment of the spring force at the end of the lifting movement of said shaft independent of the spring force at the beginning of the lifting movement, and said clamps being adjustable in diameter to vary the door position at which further expansion of the adjusted length of spring between said clamps is prevented in a lifting movement.

2,749,571
MACHINE FOR MIXING AND EXTRUDING
Carlo Pasquetti, Varese, Italy
Application January 18, 1952, Serial No. 267,133
Claims priority, application Italy June 23, 1951
3 Claims. (Cl. 18—12)



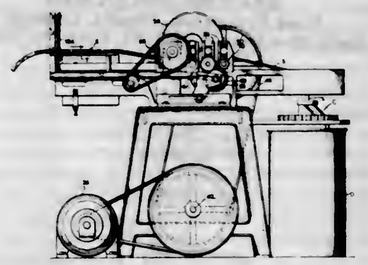
1. A machine for mixing and kneading material in a plastic condition either hot or cold and extruding the same under pressure, said machine comprising a casing having a feed inlet and a pressure extrusion outlet, a series of gear pumps within said casing, each of said gear pumps having an inlet and an outlet, conduit means connecting the inlet of the first gear pump of the series to the feed inlet of the casing, conduit means connecting the outlet of each gear pump except the last one to the inlet of the next succeeding gear pump, conduit means connecting the outlet of the last gear pump to the pressure extrusion outlet of the casing, a divider in the conduit means extending from the outlet of each gear pump, the divider following the last gear pump being provided with mounting means for selective adjustment of the divider to vary its restriction of the conduit means in which it is disposed, means to actuate said gear pumps concurrently, and means for selectively regulating the temperature of the material as it passes through the gear pumps.

2,749,572
METHOD OF SHAPING THERMOPLASTIC SHEETS
Roger L. Nowak, West Boylston, Mass., assignor to Van Brode Milling Co., Inc., Clinton, Mass., a corporation of Massachusetts
Application February 11, 1954, Serial No. 409,718
3 Claims. (Cl. 18—56)



1. The method of shaping a thermoplastic sheet into a deep-drawn container having an outwardly extending curled top edge, which consists in clamping said sheet across a top cavity which slopes toward and connects with a mold cavity and has formed therein an annular groove concentric with and around the mouth of said mold cavity, said annular groove being separated from said mold cavity by a rib the top of which is in alinement with the slope of said top cavity, subjecting said sheet to non-uniform heat to effect differential plasticity in said sheet, said heat being so controlled that the condition of greatest plasticity of said sheet is effected in those regions thereof which lie outside of the area of said mold cavity but include the area of said annular groove, and withdrawing air from both of said cavities whereby said sheet is made to assume the conformation of said cavities.

2,749,573
FEED CONTROL MEANS FOR DRAWING APPARATUS
Eli Hugh McAngus, Shawmut, Ala., assignor to West Point Manufacturing Company, West Point, Ga., a corporation of Alabama
Application May 9, 1952, Serial No. 286,879
2 Claims. (Cl. 19—70)



1. In a controlled drawing frame, a plurality of drawing rolls, means for driving said rolls at interrelated speeds, a feed roll for feeding material directly to said drawing rolls, means for driving said feed roll, means for measuring the amount of material passing the feed roll, said measuring means including a plurality of independently movable follower means positioned to ride against the feed roll for measuring the thickness of strands of material moving therebetween, pulleys mounted on the follower means and movable therewith in response to changes of thickness of the material, a member mounted upon the drawing frame and passing adjacent the position of said pulleys on said follower means, a plurality of pulleys on said member positioned between said pulleys on said follower means, and a cable loop having first and second ends joined to move in unison and trained alternately over said pulleys on said follower means and said pulleys on said member, means for regulating the speed of said feed roll driving means to maintain substantially constant the amount of material supplied from the feed roll to the drawing rolls, means connecting the ends of said cable loop with said speed regulating means to control the same, and non-linear corrective means including a follower surface curved to produce a substantially hyperbolic function interposed between said cable loop ends and said speed regulating means.

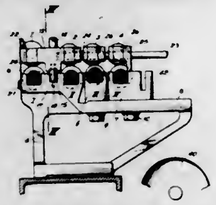
2,749,574
TEXTILE DRAWING ROLL
Lester W. Pray, Saco, Maine, assignor to Saco-Lowell Shops, Boston, Mass., a corporation of Maine
Application November 10, 1953, Serial No. 391,203
4 Claims. (Cl. 19—141)



1. In a textile drawing roll having a plurality of roll units adapted to be supported for rotational movement,

a roll unit adapted to be assembled in end-to-end relation with other such roll units to form said drawing roll and comprising a roll section and a coupling member, said roll section being united at a first end thereof to a first end of said coupling member to prevent relative movement therebetween in normal use, said coupling member including rolling bearing means and a shell disposed thereabout to exclude atmospheric-borne particles, and having at the second end thereof surfaces for contacting an end of a roll section of a second such roll unit and being detachably secured thereto in end-to-end relation, said surfaces communicating with the atmosphere at locations spaced a substantial distance axially away from said shell to permit products of fretting corrosion formed as a result of relative movement in said detachable connection to escape into the atmosphere at the said locations without contaminating said rolling bearing means.

2,749,575
DRAWING MECHANISM
Ernst Toennlessen, Munich, Germany
Application January 11, 1952, Serial No. 266,037
4 Claims. (Cl. 19—134)



1. A drawing mechanism in textile spinning frames, particularly for use in flyers, comprising in combination a plurality of pairs of top and bottom drawing rollers, a plurality of roller stands supporting the bottom rollers, removable top roller holders provided with vertical bearing slots for receiving the spindles of the top drawing rollers, each roller stand having associated one top roller holder located above the stand and at least one further top roller holder located between two neighboured roller stands in spaced relationship thereto, said roller stands having a vertical slot between the foremost and the next following roller provided for receiving a holder supporting bar extending parallel to the bottom rollers and having fixed thereto those top roller holders which are located between the roller stands without having a stand associated thereto, said vertical slots of the roller stands and said holder supporting bar inserted therein extending over the entire width of the roller stands, those top roller holders located above roller stands being fixed too to the holder supporting bar by means of screws each extending from above into the holder supporting bar and fitting with a smooth lower end into a smooth bore of the roller stand.

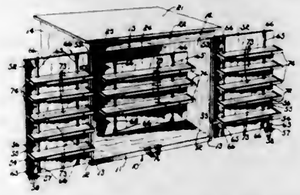
2,749,576
APPARATUS AND METHOD FOR DEPOSITING FIBROUS ELEMENTS IN THE MANUFACTURE OF FIBROUS STRUCTURES
James D'A. Clark, Longview, Wash., and Robert D. Lambert, Sandpoint, Idaho, assignors to Changewood Corporation, Chicago, Ill., a corporation of Illinois
Application October 22, 1954, Serial No. 464,102
14 Claims. (Cl. 19—156)

1. In the method for depositing fibers across the surface of a foraminous collecting member moving continually in one direction for the manufacture of endless webs, the steps of introducing the fibers at a uniform rate into the inlet end of a distributor duct, moving the outlet to the other end of the distributor duct continuously and successively into communication with the inlets of a plurality of separate conveyor ducts at a rate to deliver substantially equal amounts of fibers to each, said conveyor ducts having their outlets arranged across and spaced a short distance above the surface of the foraminous collecting member upon which the fibers are received to form the fibrous web on the surfaces thereof, introducing



air in large volumes with the fibers into the inlet end of the distributor duct whereby the fibers remain dispersed and are carried by the air stream through the distributor and conveyor duct members, and withdrawing a greater volume of air from the underside of the foraminous collecting member beneath the conveyor duct members than issues from the conveyor ducts.

2,749,577
COLLAPSIBLE BOOTH
George A. Zaninovich, Dinuba, Calif.
Application June 7, 1952, Serial No. 292,246
4 Claims. (Cl. 20—1.6)

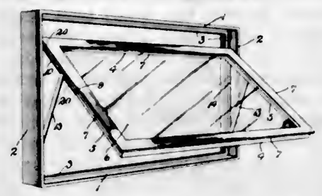


1. A collapsible booth comprising a substantially rectangular floor, a pair of end walls having edges rested on ends of the floor and opposite edges upwardly extended therefrom, a substantially rectangular side wall having an edge rested on a side of the floor and an opposite edge upwardly extended therefrom, the end walls and the side wall being in abutting engagement, a roof rested on the upwardly extended edges of the end walls and the side wall, means releasably interconnecting the walls and the floor and tensioning the walls downwardly against the floor, resilient means releasably interconnecting the walls and the roof and resiliently tensioning the roof downwardly against the upper edges of the walls, resilient means releasably interconnecting the side wall and the end walls and resiliently tensioning the walls into abutting engagement, a substantially rectangular partition having an edge rested on the floor and a right angularly related edge in abutting engagement with an end wall, and resilient means releasably tensioning the partition downwardly against the floor and endwardly against the end wall.

2,749,578
REMOVABLE SASH STRUCTURE
Albert F. Lickteig, Grand Rapids, Mich., assignor, by mesne assignments, to Durable Products Company, Grand Rapids, Mich., a corporation of Michigan
Application November 26, 1954, Serial No. 471,436
5 Claims. (Cl. 20—42)

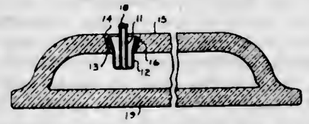
1. A window sash, a channel permanently secured at each end and at the upper portion of said sash, each

channel having a web secured to the sash and outwardly extending converging flanges at the longitudinal edges of said web, a flat bar located against each of said webs between the flanges associated therewith, means mounted on said bars releasably engaging with said flanges for



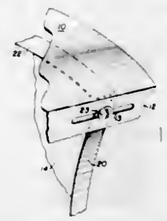
releasably securing the bars to said channels, a window sash frame and means connecting said bars to said frame for mounting the sash on the frame for movement from vertical closed position of said sash to open position thereof.

2,749,579
DOUBLE-GLAZED CELLS
Morton R. Shaw, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a corporation of New York
Application March 4, 1954, Serial No. 414,177
15 Claims. (Cl. 20—56.5)



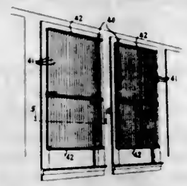
15. In a double glazed unit having a pore opening formed in a wall thereof, a closure structure for the opening comprising a reentrant, external glass capillary tube in the opening, one end of the tube being integrally connected to the walls of the pore opening and the other end of the tube being sealed.

2,749,580
AWNING
Earl C. Coburn, Dallas, Tex.
Application October 8, 1953, Serial No. 384,917
1 Claim. (Cl. 20—57.5)



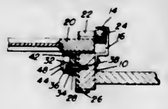
An awning comprising triangular end members having convex arcuate upper edges, said end members including vertical rear edges and angularly disposed forward edges, all of said end member edges having flanges along the lengths thereof, a bendable flat awning surface of resilient sheet material secured to said flanges of said arcuate edges of said end members, a depending flange along the forward edge of said awning surface, a longitudinal slot in each end of the last said flange, and screws positioned through said slots engaging said flanges of said forward edges of said end members.

2,749,581
LIGHT CONTROL MEANS
Charles W. McCormick, Meriden, Conn.
Application May 12, 1949, Serial No. 92,933
9 Claims. (Cl. 20—62)



1. A blind for controlling the light permitted to enter a room through a window, which comprises a plurality of slat-like louvers supported in parallelly-spaced, vertical arrangement across the face of said window, a frame for supporting said louvers, said frame comprising longitudinal members and transverse members connected together in alternation at their ends to form a parallelogram disposed in a horizontal plane substantially perpendicular to that of said window, said louvers being disposed between and in edgewise engagement with opposite longitudinal members of said frame, pairs of cooperating indentations along the adjacent inner edges of said longitudinal members, and indentations at opposite edges of each of said louvers, the indentations in said louvers being adapted and arranged for interlocking engagement with a pair of respectively cooperating indentations in said longitudinal members to support said louvers in depending vertical position in said frame.

2,749,582
SECTIONAL OVERHEAD DOOR SEAL
Frederick J. Beck, Gallitzin, Pa.
Application April 2, 1954, Serial No. 420,589
9 Claims. (Cl. 20—68)

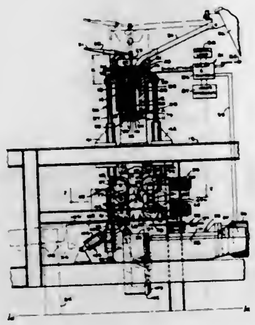


1. In combination with a frame and a closure member slidably mounted to cover and uncover the frame, flexible sealing strips secured to the sides of said frame in sealed relationship thereto, said sealing strips having a portion thereof overlying the side edges of said closure member, moldings movably mounted at the sides of said frame overlying said sealing strips and normally spaced from said closure member in the uncovering position of the closure member, means carried by said closure member for drawing said moldings towards said member to urge said sealing strips into sealed engagement therewith, and means for retracting said moldings from said member to free said sealing strips therefrom.

2,749,583
CONTINUOUS CASTING
Max Loewenstein, New York, N. Y., assignor to Loma Machine Manufacturing Co., Inc., New York, N. Y., a corporation of Delaware
Application April 16, 1952, Serial No. 282,580
5 Claims. (Cl. 22—57.2)

1. In a casting machine having a stationary mold forming a substantially vertical casting passage open on top and bottom and arranged to receive molten metal of varying level and means for intermittently actuating withdrawal of casting from the bottom opening, in com-

bination, means for delivering molten metal through said top opening into said passage, comprising a reservoir structure reciprocably disposed above said passage and arranged to hold and to discharge molten metal, a tubular extension projecting downwardly from said structure and intercommunicating interiorly with said reservoir



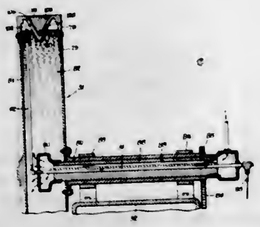
and extending into said passage for discharging from said reservoir molten metal into said passage, and means connected to said actuating means and to said reservoir structure forcibly lowering the latter during, and in synchronism with, the casting withdrawal and, respectively, raising the same during casting standstill.

2,749,584

CONTINUOUS CASTING APPARATUS

Mathias J. Fey and Howard M. Ray, Davenport, Iowa, assignors to Nichols Wire & Aluminum Co., Davenport, Iowa, a corporation of Missouri

Application January 22, 1952, Serial No. 267,638
2 Claims. (Cl. 22—57.4)



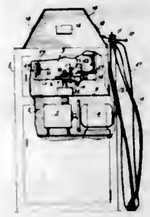
1. A rotatable casting drum for a machine for the continuous casting of molten metal into cast metal rod, said casting drum including in combination, a pair of disc-like side walls disposed in spaced parallel relation for rotation about a common horizontal axis and with one of said side walls having a central aperture therein, a circular casting rim of heat conductive material bridging respective peripheral portions of said side walls and affixed thereto to form a hollow enclosure adapted to contain a cooling liquid, said casting rim having an external casting groove formed therein, a rotatable axle sleeve affixed to said one of said side walls and surrounding said central aperture therein, said sleeve extending coaxially with said horizontal axis of rotation of said side walls, means for introducing a cooling liquid into said enclosure through said sleeve, and a drain pipe extending through said sleeve into said enclosure and having an end portion extending upwardly in said enclosure to a point adjacent the internal surface of said casting rim so that substantially the entire enclosed volume of the casting drum may be continuously filled with a large moving volume of cooling liquid.

2,749,585

CENTRIFUGAL CASTING MACHINE FOR MAKING DENTAL CASTINGS

Emil M. Prosen, Bala-Cynwyd, Pa., assignor to Nobilium Products, Inc., Philadelphia, Pa., a corporation of Pennsylvania

Application September 16, 1953, Serial No. 380,514
5 Claims. (Cl. 22—65.1)



1. In a centrifugal casting machine, the combination comprising a support for a mold to produce the desired casting, a crucible having a cavity adapted to receive a metal ingot to be melted and an outlet, means for mounting said crucible with said outlet communicating radially outwardly with said mold, a conductor projecting upwardly through said crucible into electrically conductive relationship with the normal position of an ingot supported therein and interconnecting the ingot-receiving cavity of said crucible to ground, an electrode movable into electric arc heating relationship with an ingot contained in the cavity of said crucible, connections from said electrode to a source of electrical energy to establish said heating arc between said electrode and said ingot, means surrounding said electrode and interconnected with a source of inert gas to project a blanket of said gas against and around said ingot to shield the same against oxidation during said electric arc heating, and means to rotate said crucible and mold to force into said mold metal melted in said crucible by said shielded electric arc heating.

2,749,586

PROCESS OF FORMING SHELL MOLD

Everard F. Kohl, Lakewood, and Zenon Kazenas, East Cleveland, Ohio; said Kazenas assignor to Mercast Corporation, a corporation of Delaware

Application August 14, 1952, Serial No. 304,310
19 Claims. (Cl. 22—194)



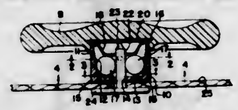
1. The method of preparing a shell mold of an object to be cast which comprises applying to a frozen mercury pattern of said object a slurry-like investment coating composition as coating strata in an amount sufficient to form a shell layer while the frozen mercury pattern and the slurry are at temperatures below the freezing temperature of mercury, said composition comprising a refractory material of fine particle size constituting a predominant amount of the solid composition ingredients which form the applied layer, an organic resinous binder for the refractory material that is adherent to the frozen mercury pattern at temperatures below said freezing temperature and which binder has the property of causing and is present in amount ranging from about .25% to 7% of the weight of the solid composition ingredients and sufficient to cause the refractory material to adhere to the frozen mercury pattern and to bind the refractory material together at temperatures ranging from below said freezing temperature up to a temperature ranging from above normal temperatures to approximately 150° to 600° C., and which becomes modified at higher temperatures to provide vapors, and an organic solvent for said organic binder which solvent is in the liquid state at temperatures below said freezing temperature and has a boiling point below 0° C. and which is present in an amount to provide with the solid ingredients of the composition a slurry of sufficiently low viscosity to enable the composition to be applied in the form of a shell layer to the frozen mercury pattern, drying the shell layer at temperatures below said freezing temperature and said boiling point, liquefying the mercury of the pattern, removing said liquefied mercury from the shell layer to provide a shell mold, impregnating the shell mold with a solution of a second inorganic binder that becomes effective at raised temperatures but below that at which the organic binder is modified which impregnation is carried on for a sufficient time as to leave at least in the outer and inner layers of said shell mold an amount of the inorganic binder ranging from 0.5 to 7% of said solid ingredients and sufficient to bind their refractory particles into a self supporting shell mold after evaporation of vaporizable substances contained in said shell mold, and then heating the shell mold to a temperature sufficient to cause said inorganic binder to become effective as a binder for the refractory material and to modify the organic resinous binder to provide vapors which exude through the shell mold and render it porous.

2,749,588

LOCK MOUNTING FOR ARTICLES WITH PINS

Karl B. Pliszczak and Bruno T. Plizak, Philadelphia, Pa.

Application March 16, 1953, Serial No. 342,620
2 Claims. (Cl. 24—104)



1. Mounting mechanism for an article comprising a casing having a side wall exteriorly disposed with respect to said article and having an end portion mounted in fixed relation in said article, said casing having a fixed outer end closure wall oppositely disposed with respect to said end portion and providing therewith an interior chamber, said end closure wall having a central opening, the interior of said side wall being of frusto-conical shape converging toward said end wall, a plurality of spherical balls in said chamber, a closure member at the end portion of said casing, said casing at its inner end being rigidly closed by said closure member and the article, a resilient member interposed between said closure member and said balls and engaging said closure member and said balls, said resilient member having a central opening aligned with said other central opening, and a pin having an enlarged head movable into clamping position with respect to the outer face of said end closure wall, said pin having a cylindrical shank extending through said central openings and between said balls and held by the engagement of said balls with said frusto-conical side wall and therewith against retraction, the side wall of said casing having an opening therethrough aligned with the place of engagement of said resilient member and said balls for releasing access to said resilient member.

2,749,587

METHOD OF PRODUCING GREY IRON CASTINGS IN PREHEATED REFRACTORY COATED MALE AND FEMALE DIES

James Aubrey Richards, Perthshire, and Robert Stewart Martin Jeffrey, Kirkintilloch, Scotland, assignors to Walter MacFarlane & Company Limited, Glasgow, North, Scotland

No Drawing. Application December 8, 1952, Serial No. 324,826
Claims priority, application Great Britain February 21, 1949
1 Claim. (Cl. 22—200)

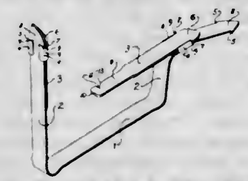
In the manufacture of grey cast iron castings free from chill without annealing from molten cast iron of the same composition as that normally producing white castings when cast by the conventional permanent mold process utilizing uncoated metal molds, the process which comprises coating the faces of male and female dies forming a mold with an inert refractory dressing capable of withstanding the temperature of molten cast iron, preheating the said dies to temperatures within the range of from 200° to 550° C., superimposing on the refractory dressing a heat insulating coating capable of maintaining its properties when in contact with molten cast iron, then pouring the molten cast iron into the preheated female die, promptly introducing the preheated male die into the molten metal contained in the female die, and shaping the metal therewith while it is in the entirely fluid state and at least 2° C. above its melting point and while it is sufficiently fluid to be shaped by that force only necessary to cause displacement of the molten metal and without imparting an impact blow thereto, allowing the shaped molten metal to solidify, then immediately removing the male die and removing the resulting shaped grey iron casting from the mold.

2,749,589

FASTENER

Charles MacArthur Carman, Jr., San Francisco, Calif.

Application July 14, 1952, Serial No. 298,749
18 Claims. (Cl. 24—153)



1. A fastener consisting of a base with two spaced bendable prongs and two keepers, each keeper being slidably attached to one of the prongs by means of a compressor, the compressor bearing integrally-formed shoes on its longitudinal edges, the shoes being formed slidably around the longitudinal edges of the prong and keeper, the compressor having at one end an extension formed to project out of the plane of the compressor and adapted to co-act with the shoes in bending the keeper at an angle to the plane of the compressor, each keeper being adapted to be disengageably clasped to the other keeper in a manner to resist longitudinal tension, and with stops for the compressor formed at the tips of both prong and keeper.

2,749,590

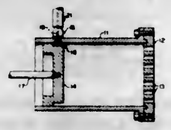
DEAIRING PEBBLE EXTRUSION CHAMBER

Myron O. Kilpatrick, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application September 21, 1950, Serial No. 186,097
9 Claims. (Cl. 25—15)

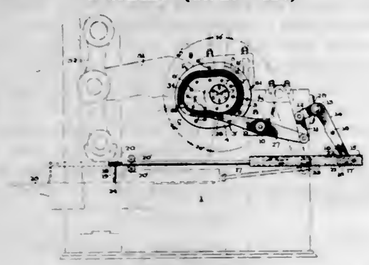
1. Apparatus for deairing and extruding an extrudable plastic mix which comprises in combination a hollow

cylinder having in the forward end a closure member in the form of a die having a plurality of perforations therein; a removable reciprocable close-fitting piston in said cylinder having a flat nose and a loose-fitting section on same forming a narrow space between the nose of the



piston and the cylinder of such thickness as to pass gas therethrough while withholding said mix; an exhaust line communicating with said narrow space from outside of said cylinder when said piston is in position for the extrusion stroke.

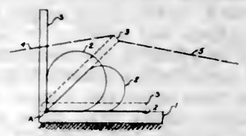
2,749,591
EJECTION APPARATUS
Norman J. Drossel, Baton Rouge, La., and Earl D. Wilkins, Los Altos, Calif., assignors to Kaiser Aluminum & Chemical Corporation, Oakland, Calif., a corporation of Delaware
Application January 29, 1952, Serial No. 268,740
2 Claims. (Cl. 25—120)



1. In an ejection device for ejecting a pliable molded article from a press, the combination of a pusher plate, a rotatable shaft, an adjustable, positive locking cam member attached to the shaft, including a plate rigidly mounted on the shaft, said plate having a series of indexing holes circumferentially located at equal radii from the center of the plate and adjacent the outer periphery thereof and spaced substantially 5° apart, a plurality of fastening means removably securing said cam member to said plate in adjustable locking relation with respect thereto, one of said fastening means comprising a bolt means engageable with a selected one of said series of indexing holes, said cam member being provided with an endless groove in the side wall thereof, a roller located within and movable along said groove during rotation of said shaft and said cam member, and linkage means connecting said roller to said pusher plate, said endless cam groove having a configuration such that rotation of said cam means will cause said pusher plate to successively accelerate and decelerate in a predetermined relation whereby the pliable, molded article will be moved out of the press slowly at first, then rapidly, and slowly again until forward motion of the pusher plate and the molded article ceases, and finally, said pusher plate will be rapidly returned to its position of rest.

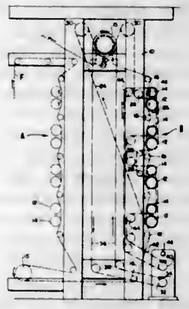
2,749,592
METHOD OF CONSTRUCTION UTILIZING INFLATABLE FLUID CONTAINERS
Karl O. Vartia, Austin, Tex.
Application June 26, 1952, Serial No. 295,702
6 Claims. (Cl. 25—155)

1. A method of construction which comprises forming a unit of a structure upon a substantially deflated fluid container, moving the unit to another position by inflating the fluid container, transferring the weight of



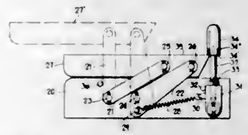
said unit to other supporting means, and then deflating and removing said fluid container.

2,749,593
FABRIC NAPPING MECHANISM
Wilfred N. Hadley, Springfield, Vt., assignor to Parks & Woolson Machine Co., Springfield, Vt., a corporation of Vermont
Application January 11, 1955, Serial No. 481,176
2 Claims. (Cl. 26—29)



1. Fabric napping mechanism comprising a plurality of banks of napping rolls, each bank comprising spaced and parallel napping rolls arranged in a plurality of pairs, each napping roll including a plurality of wire needles anchored thereto and extending outwardly thereof and having hook-like and fabric penetrating free ends pointing in the same direction circumferentially of the roll, said free ends on the rolls of each pair pointing respectively in opposite directions, means supporting the rolls for rotation on fixed axes, cooperating rolls disposed to support a fabric strip in arcuate contact with the pairs of rolls, a rotatably mounted drum at each bank disposed to receive the fabric strip and draw it over the rolls of its bank, means rotatably connecting one roll of each pair in each bank to its drum, power operated means for rotating the other rolls of the pairs in each bank, and means for varying the relative speeds of said one and other rolls in each bank.

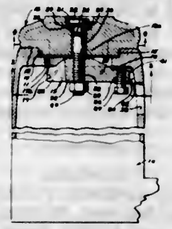
2,749,594
THREAD CLEANER
Paul Arthur Tanner and Walter Gegenschatz, Uster, Switzerland, assignors to Zellweger A. G. Apparate- und Maschinenfabriken Uster, Uster, Switzerland, a corporation of Switzerland
Application October 14, 1953, Serial No. 386,089
Claims priority, application Switzerland October 18, 1952
8 Claims. (Cl. 28—71)



1. A thread cleaner in which the threads to be cleaned are passed through at least one slot, comprising a pair

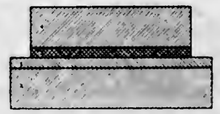
of elements swingable relatively to each other and individually having edges forming the slot, and locking means mounted on one of said elements and being swingable relatively thereto and being adapted to engage the other element for preventing swinging apart of said elements and affording instant swinging apart of said elements when said locking means is swung out of engagement with the other element.

2,749,595
TURRET LOCKING DEVICE
Wallace J. McNamee and Heinz E. Adelt, Racine, Wis., assignors to George Gorton Machine Co., Racine, Wis., a corporation of Wisconsin
Application April 11, 1955, Serial No. 500,626
3 Claims. (Cl. 29—1)



1. In combination with a machine column and a turret head, a locking device comprising a body member provided with spaced outwardly extending fingers, said body having a centrally disposed vertical opening, said column open at the top and provided with an inner circular flange adjacent said opening, said turret arranged to cover said opening, a stud mounted in said turret and extending through said column opening and the opening in said body and having a nut threadedly mounted on its free end for holding some of said fingers against said flange, one of said fingers provided with a threaded aperture for holding a stud, one end of said stud arranged to engage said flange.

2,749,596
METHOD OF MAKING TITANIUM DIOXIDE RECTIFIERS
Robert G. Breckenridge, Bethesda, Md., assignor to the United States of America as represented by the Secretary of Commerce
Application January 4, 1952, Serial No. 265,027
3 Claims. (Cl. 29—25.3)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. The method of producing a titanium dioxide rectifier comprising the steps of applying a surface of titanium on a base plate to act as the base electrode, heating the titanium in an atmosphere of live steam to form a layer of titanium dioxide, which contains trivalent titanium ions, on the titanium base electrode, and applying a counterelectrode to the oxide layer, said heating taking place within a range of times and temperatures from 1½ hours at 750 degrees C. to 4 hours at 550 degrees C.

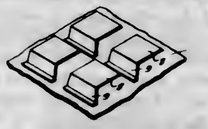
2,749,597
METHOD OF MOUNTING STONES IN JEWELRY
Walter Fus, Newark, N. J.
Application February 2, 1953, Serial No. 334,538
3 Claims. (Cl. 29—10)

1. A method of mounting stones in a ring comprising securing annular, resilient, channeled members together in parallelism with each other with the channels opposite each other, deforming the members, positioning a plurality of stones between the members with the opposite



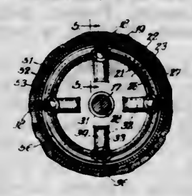
edges of the stones seated in the channels, attaching cross-members between the annular members in abutting relation to the stones whereby the said annular members are rigidly secured together.

2,749,598
METHOD OF PREPARING ELECTROSTATIC SHUTTER MOSAICS
Richard K. Orthuber, Fort Wayne, Ind., and John E. Clemens, Xenia, and Ben B. Johnstone, Dayton, Ohio, assignors to the United States of America as represented by the United States Air Force
Application February 1, 1952, Serial No. 269,569
6 Claims. (Cl. 29—25.17)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. The method of making an electrostatic shutter mosaic consisting of a multitude of flaps of elemental area each attached to a substrate along one edge, said method comprising the steps of covering said substrate with a uniform layer of a removable auxiliary mosaic material, covering said layer of auxiliary mosaic material with a layer of photosensitive varnish, optically projecting onto said varnish layer a multitude of elemental substantially rectangular areas of light arranged in orthogonal rows, dissolving the unexposed varnish with a selective solvent, removing the auxiliary mosaic material exposed by the dissolved varnish to form an auxiliary mosaic of minute rectangular mounds of auxiliary mosaic material, directing a vapor beam of permanent mosaic material toward said substrate and auxiliary mosaic in a direction parallel to one set of said orthogonal rows and inclined relative to said substrate in order to deposit permanent mosaic material on the top and one side of each of said mounds, and completely removing said auxiliary mosaic material.

2,749,599
PAINT ROLLER
Lawrence F. Kreger, Chicago, Ill.
Application January 30, 1953, Serial No. 334,315
8 Claims. (Cl. 29—116)



2. A rotatable core structure for mounting the outer tube of a paint roller or the like comprising a plurality of elongated supports for frictionally engaging the interior of a roller tube, the opposite end portions of said supports being bent radially inwardly, means secured to

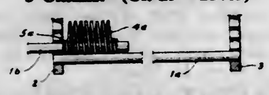
the opposite ends of said supports for rotatably mounting the core structure on an axle, said means comprising a pair of coacting cup-shaped elements in nested relation at each end of the structure and each element having an end wall and an axially-extending flange with the radially-extending ends of said supports being frictionally clamped between the end walls of said cup-shaped elements for holding the supports and the cup-shaped elements in rigid assembled relation, and means securing together the flanges of each pair of cup-shaped elements whereby to retain the latter in nested relation.

2,749,600

METHOD OF MAKING HEAT EXCHANGERS

Oscar Persson, Bromma, Stockholm, Sweden, assignor to Aktiebolaget Rosenblads Patenter, Stockholm, Sweden, a Swedish company

Application February 14, 1955, Serial No. 488,090
Claims priority, application Sweden February 18, 1954
3 Claims. (Cl. 29—157.3)



1. For constructing a bundle of heat exchanger tubes extending side by side between two tube plates, a method of providing such tubes with a metallic wire coil extending close around the tube along its entire length between the tube plates, comprising in combination the steps of winding the metallic wire into the shape of a cylindrical coil of considerably less length than the distance between the tube plates and of considerably larger inner diameter than the outer diameter of the tube to be fitted with the coil except at both ends of the coil where a few turns thereof are wound at a small pitch to an inner diameter approximately equal to the outer diameter of the tube, the length of said metal wire being such that on tensioning the large-diameter turns of said coil axially so that the length of the coil will correspond to the distance between the tube plates these turns will contract to an inner diameter approximately corresponding to the outer diameter of the tube, sliding said coil on to the tube between the tube plates as the tube is inserted in the tube plates, tensioning the coil on the tube so as to reach both tube plates, welding the ends of the coil wire to the respective tube plates but not to the tube, axially compressing the small-pitch end turns at least at one end of the coil, so as to aftertension the coil, if so required, so that it will surround the tube closely at all parts of the coil wire, equipping one only of two adjacent tubes with such a coil and fitting the tubes in the tube plates in such a sequential order that a tube to be equipped with a coil will be introduced as an outer tube in the bundle in relation to tubes previously fitted.

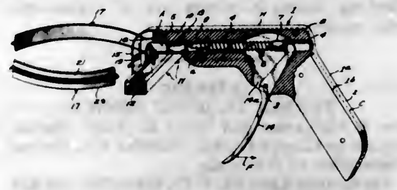
2,749,601

APPARATUS FOR MOUNTING TRAVELERS ON RING TWISTERS

Jean Rouillon, Gauchy, France, assignor to Societe Chimiotex, Brussels, Belgium, a corporation of Belgium

Application June 14, 1954, Serial No. 436,635
Claims priority, application France June 19, 1953
2 Claims. (Cl. 29—207)

1. Apparatus for mounting travelers having upper and lower hooks on the upper and lower rims of ring twister frames, comprising a barrel having a downward projection at its end having a groove therein to receive the upper rim of said ring, said barrel having a bore terminating in an elongated slot adapted to pass a traveler and communicating with said groove, a plunger slidable in said bore and adapted to eject said traveler through said slot and groove and over said upper rim to hang inside of said ring with its upper hook on said upper rim, and a magazine adapted to carry a stack of aligned travelers, means for mounting said magazine on said barrel with the stack of travelers extending transversely and with the forward traveler in said stack registering with said slot in advance of said plunger, and an arm in



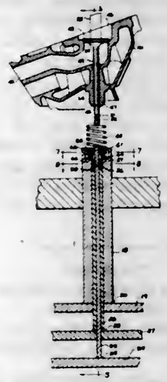
said downward projection to project downwardly on the inside of said ring in back of the hanging traveler, said arm being pivoted to said downward projection with its upper end being positioned to be actuated by said plunger and with its lower end positioned to press the lower hook of said traveler onto the lower rim of said ring, and a handle carried by said barrel to actuate said plunger.

2,749,602

VALVE ASSEMBLY MACHINE

Sidney Bakewell, Detroit, Mich.

Application June 4, 1952, Serial No. 291,711
6 Claims. (Cl. 29—208)



1. In a machine for assembling a valve within a cylinder head, a rotatable index table, a cartridge containing valve assembly parts in telescoped relation consisting of an upright hollow cylinder slidably mounted upon said table and carried thereby throughout rotary movements thereof, the upper end of which having a portion of increased internal diameter defining a support for a bottom sleeve, an intermediate spring retainer and a top coiled spring, a second hollow cylinder slidably mounted within said first cylinder providing a support below said sleeve for a top seal and a bottom split cylindrical locking key, and a shaft slidably mounted within said second cylinder adapted for axial alignment and movement into engagement with the stem of a valve loosely positioned within a cylinder head, means holding said valve against longitudinal displacement, and a plurality of rotatable cams respectively and separately engaging and supporting said cylinders and said shaft for effecting differential timed upward movements of said shaft and cylinders whereby said shaft is projected into engagement with the end of said stem, said sleeve and spring retainer are lifted compressing said spring relative to said cylinder head, said seal and locking key projected upwardly over the lower end of said valve stem and immovably secured thereon, and a subsequent downwardly withdrawal of said first cylinder

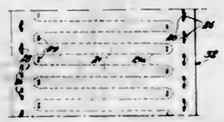
permitting said spring to expand moving said retainer and sleeve into cooperating retained engagement with said seal and locking key, after which said second cylinder and shaft are withdrawn.

2,749,603

MANUFACTURE OF MECHANICAL BINDINGS

Clarence D. Trussell, Turnwood, N. Y.

Original application March 17, 1950, Serial No. 150,219, now Patent No. 2,645,816, dated July 21, 1953. Divided and this application January 26, 1953, Serial No. 333,215
3 Claims. (Cl. 29—415)



1. The herein disclosed method of manufacturing mechanical bindings comprising forming rows of aligned slots of equal length and equally spaced along opposite edges of a ribbon of sheet material and with the slots along one edge portion offset in respect to the slots along the opposite edge portion, rolling the slotted edge portions of the sheet material into tubular rib formations and severing the web portion of the material between said tubular ribs transversely into finger portions alternately connected with the opposite ribs and in line to enter the slots in the ribs with which they are connected and at one stage imparting curvature to said finger forming portions of the material.

2,749,604

PRODUCTION OF METALLIC BODIES

Aubrey Latin, London, England, assignor to The Oksnite Company, Passaic, N. J., a corporation of New Jersey

No Drawing. Application April 22, 1952, Serial No. 283,751
2 Claims. (Cl. 29—420.5)

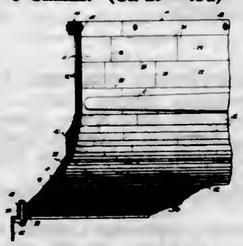
1. The method which comprises making a mixture comprising powdered aluminum and powdered lead in which the lead content may range from about 5% to about 50% by weight, compacting the mixture at a temperature of around 250° C., and then extruding at around 295° C. at an extrusion pressure of 20 tons per square inch, the extrusion ratio being about 30:1.

2,749,605

METHOD OF CONSTRUCTING LAMINATED FAN RING FOR COOLING TOWERS

Leon T. Mart, Mission Township, Johnson County, Kans., assignor to The Marley Company, a corporation of Delaware

Original application April 24, 1950, Serial No. 157,719. Divided and this application September 29, 1952, Serial No. 311,991
3 Claims. (Cl. 29—431)



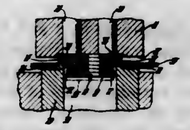
1. The method of making a cooling tower fan throat having a cylindrical, laminated uppermost portion and a circular, outwardly-flared, lowermost portion which comprises the steps of erecting a temporary framework having an annular series of forming fixtures, each provided with an upright forming member having an outermost edge provided with an uppermost vertical stretch and a lowermost concave stretch; attaching a plurality of annular rings to said vertical stretches in superimposed, abutting relationship, presenting an innermost layer circumscribing the forming members and forming a part of said uppermost portion of the fan throat; fastening a number of additional layers to said innermost layer, each consisting of a plurality of annular rings disposed in superimposed, abutting relationship to complete the uppermost portion; surrounding said concave stretches with a number of annular bands, progressively increasing in diameter as the lowermost ends of the forming members are approached while interconnecting said bands and joining the uppermost band with said uppermost portion, each band being laid in partial overlapping relationship to bands next adjacent thereto to form said lowermost portion; and detaching the framework from said innermost layer.

2,749,606

APPARATUS AND METHOD FOR SECURING A NUT TO A SHEET MEMBER

William A. Donahue, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application November 9, 1951, Serial No. 255,667
4 Claims. (Cl. 29—432)



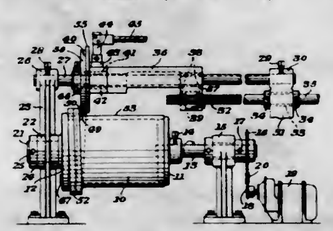
2. The method of attaching to a plate a nut having a head and a shank which includes placing said plate over a die having an opening the cross-sectional area of which is substantially larger than that of said shank and raised ledges disposed about said opening, perforating said plate with said shank such that part of said plate overlies said die opening and compressing said plate between said head and said ledges whereby said plate is displaced laterally against said shank, and simultaneously bending the edges of said plate forming said opening away from said head so as to lock said nut to said plate.

2,749,607

METHOD OF PRODUCING COMPOSITE CURVED METALLIC SHAPES

William J. McIlvane, Mount Lebanon Township, Allegheny County, Pa., assignor to Copperweld Steel Company, Glassport, Pa., a corporation of Pennsylvania

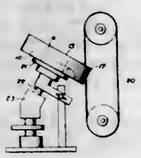
Application November 15, 1950, Serial No. 195,775
5 Claims. (Cl. 29—456)



1. In a method of producing a composite metallic cylinder having a cladding metal layer and a dissimilar metal layer in generally concentric bonded relation over the entire interface between the ends of said cladding layer,

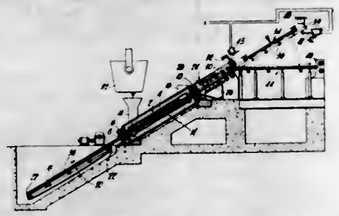
the steps comprising, providing a cylinder of base metal, bonding a flat member of cladding metal to a flat member of a metal at least compatible with such base metal over the entire interface zone between such flat members to provide a flat composite bimetallic member the respective upper and lower surfaces of which are of such respective cladding and compatible metals, bending said bimetallic member to conform with a peripheral surface of said cylinder with the compatible metal in said bimetallic member in juxtaposition to said surface of said cylinder, and welding said bimetallic member directly to said cylinder in such position over the entire contact area between said bimetallic member and said cylinder by heat generated at the contact surface area between said base and said compatible metal.

2,749,608
METHOD OF AND APPARATUS FOR MAKING HEAT AND COLD INSULATION PIPE COVERING
Edward L. Siemer, Vallejo, Calif.
Application March 3, 1952, Serial No. 274,624
6 Claims. (Cl. 29—463)



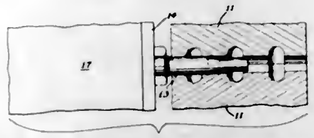
1. A process of applying heat and frost insulation covering on a pipe bend out of insulation material, including making a disk out of insulation material of a radius equal to the sum of the outside radius of the bend and the desired thickness of the insulation covering, cutting a circular groove in said disk, the central line of said circular groove being on a radius equal to that of the center line of the pipe bend, said circular groove being half-circular in cross-section and of a diameter slightly larger than the outside diameter of the pipe, cutting the material off said disk to form a wall of uniform thickness around said groove of desired length; cutting said disk into segments; applying one segment on one side of the bend and the other segment on the other side of the pipe, and binding said segments together.

2,749,609
METHOD OF FORMING HOLLOW METAL ARTICLES
Charles B. Francis, Pittsburgh, and Ralph B. Porter, Johnstown, Pa., assignors to Carnegie-Illinois Steel Corporation, a corporation of New Jersey
Application February 14, 1950, Serial No. 144,154
4 Claims. (Cl. 29—527)



1. The method of forming hollow metal articles which comprises inserting a relatively cold metal bar, the outside of which conforms in shape and dimensions to the inside of the article, in a bath of liquid metal, maintaining the main body of the bath temperature not below its liquidus point while the bar is in the bath, removing the bar from the top of said bath after a predetermined period of time whereby the desired thickness of metal solidifies on said bar, then immediately passing the bar with the solidified metal thereon through a stationary die which conforms in shape and dimensions to the outside of the article, cooling the metal collected on the bar, and thereafter removing the bar from the inside of said article.

2,749,610
METHOD AND MACHINE FOR MAKING SHACKLES
Frank John Welsch, Campbell, Calif.
Application September 20, 1952, Serial No. 310,645
7 Claims. (Cl. 29—545)



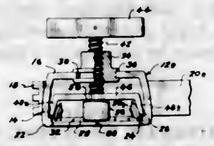
1. In a forging press having a pair of die blocks movable toward and away from each other and having a ram movable at right angles to the direction of die block movement; a plurality of aligned, lug receiving cavities in each die block, the cavities in one die block being complementary to those in the other, said cavities being formed and arranged to receive lugs on a shackle blank in either of two selected positions therein, said die blocks having an opening formed therein to extend through a first and a second of the aligned lug receiving cavities, and a piercing punch mounted on the ram to enter said opening, said punch being of a length to project, on an operative movement of the ram, through said first and second cavities, the portion of the punch passing through said second cavity being of a size to punch a hole of predetermined size in the lug of a shackle blank therein, and the portion of the punch passing through said first cavity being of a larger diameter than the portion passing through said second cavity.

2. The method of forming a shackle blank with holes of different diameter in the end lugs thereof, which comprises bending a straight length of bar stock to form a work piece of U-shape to have one leg thereof longer by a predetermined amount than the other leg, forming the end portions of the legs into lugs to bring the legs to equal length, thereby forming the lug on the longer leg of the work piece of a size larger than the lug on the shorter leg, forcing the small end of a punch having a smaller diameter punching portion and a larger diameter expanding portion through the smaller of said lugs to pierce it with a hole axially directed toward the center of the larger lug, moving the work piece closer to the punch and advancing the punch axially through the hole in the smaller lug to pass the larger diameter portion of the punch through the hole formed in the smaller lug to expand said smaller lug and to increase the diameter of the hole therein, the punch being advanced a sufficient distance to pass the small end of the punch through the larger lug to pierce it.

2,749,611
PRODUCTION OF WIRE ROD AND WIRE
Peter Bardenheuer, Altena, Gustav Wehner, Mainz-Gustavsburg, and Paul Klare, Frankfurt am Main, Germany, assignors to Vereinigte Deutsche Metallwerke Aktiengesellschaft, Frankfurt am Main, Germany, a corporation of Germany
No Drawing. Application February 20, 1952, Serial No. 272,696
Claims priority, application Germany March 7, 1951
6 Claims. (Cl. 29—547)

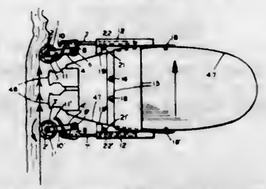
1. A process for the production of electrical conductor copper wire which comprises hot working a cast ingot consisting of copper to form a wire rod, the original cross-section of said cast ingot being selected at least 1260 times the cross-section of the wire rod produced therefrom, pickling said wire rod to remove any adherent scale, and cold drawing such rod to form wire.

2,749,612
CAN OPENERS
Sidney D. Blue, Larchmont, N. Y.
Application May 16, 1955, Serial No. 508,450
13 Claims. (Cl. 30—6.1)



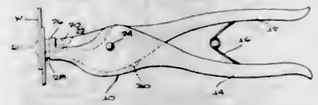
1. A can opener comprising a downwardly opening, diametrically split housing including two semi-cylindrical roofed portions hingedly connected at one side for swinging between an angularly spaced apart released position and a closed position, wherein said portions are abutting to embrace and extend over the top of a can to be opened, said housing further having an inwardly directed rim along its lower edge to engage under the rim at the top of a can embraced by said housing; and an assembly including an internally threaded hub adapted to be carried by said housing, a threaded shaft extending through said hub for movement axially toward and away from the top of a can embraced by said housing in response to rotation of said threaded shaft in opposite directions relative to said housing, at least one rotatable cutter wheel, and means mounting said cutter wheel on said shaft at a location spaced radially from the axis of the latter to roll along a circular path and progressively penetrate through the top of a can embraced by said housing as said threaded shaft is rotated in the direction advancing the latter axially toward the top of the can, said inwardly directed rim serving to support the rim of the can while the cutter wheel penetrates through the top of the can.

2,749,613
SKIN TENSIONER FOR SHAVERS
Raymond Vernon Miller, New York, N. Y.
Application October 31, 1952, Serial No. 317,944
18 Claims. (Cl. 30—34)



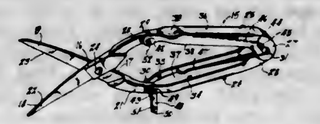
17. In a shaving device of the character described having a beard cutting means adapted to be moved in a stroke plane over the surface of the flesh bearing the hairs to be cut, a support secured to said device, a skin contacting element rotatably mounted on a movable member, means connecting said movable member to the support, said means permitting movement of said movable member and of said skin contacting element in a direction substantially perpendicular to the plane of the shaving stroke, a spring urging said movable member and said skin contacting element toward the flesh on the face of the user during the shaving operation, means for locking said skin contacting element against rotation when the shaving device is being traversed over the face of the user in a first direction, said last means allowing the skin contacting element to rotate freely when the shaving device is being traversed over the face of the user in a second direction opposite to said first direction.

2,749,614
RIVET SHEARING TOOL
Ellis W. Volkel, Perrysville, Ind.
Application April 29, 1955, Serial No. 504,842
4 Claims. (Cl. 30—250)



1. A pliers-type rivet cutting tool comprising a pair of pivotally connected handles; a nose on one handle having a bore; a shear head on the other handle having a bore registering with the first bore in one position of the handles to receive a rivet and shear the same between the head and nose on relative shifting of the handles about their pivot axis.

2,749,615
SCISSORS
Alfred L. Griffon, New York, N. Y.
Application January 7, 1955, Serial No. 480,330
4 Claims. (Cl. 30—262)



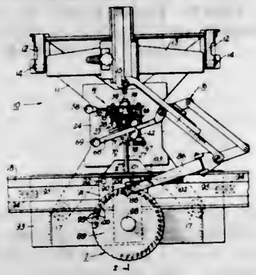
1. A pair of scissors comprising two blade members having blade ends and shank ends, a fulcrum pivot member pivotally connecting said blade members together between said ends, a pair of hand grip levers each having two ends, a pivot pin pivotally connecting the levers together at one end of each lever, hing pins pivotally connecting the other ends of the levers to the shank ends of the blade members, and resilient means at the pivotally connected ends of the levers to bias apart the other ends of said levers and the shank ends of the blade members connected thereto, said levers being U-shaped in cross section with opposed side edges, said resilient member being a spring with a coil about said pivot pin and spring arms extending along and in the channel of said U-shaped hand grip levers, said hand grip levers having back portions with finger-resting and gripping indentations therein, one of said levers having one of such finger resting and gripping indentations and the other lever having a plurality of such finger-resting and gripping indentations.

2,749,616
DENTAL MATRIX UNIT
John J. Curry, Philadelphia, Pa.
Application October 15, 1954, Serial No. 462,453
16 Claims. (Cl. 32—63)



1. A dental matrix device comprising a flexible band member for being received about a tooth, and a substantially V-shaped retaining element connected with said band member and being contractibly deformable for clamping said band member about said tooth.

2,749,617
ENGRAVING MACHINE ATTACHMENT
Gerhard G. Gruettner, New York, N. Y., assignor to New Hermes Ring Engraving Corp., New York, N. Y., a corporation of New York
Application November 13, 1952, Serial No. 320,270
1 Claim. (Cl. 33—25)



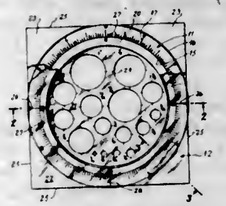
In an engraving machine or the like having a base, a workholder and a copyholder combined with a pantographic tracer arm and engraving tool assembly, said assembly comprising a parallelogram linkage of a pair of inner and outer end linkage arms, and a pair of inner and outer side linkage arms, each of which is of fixed length, with the alternate arms of each pair being joined pivotally to each other by pivot means and bearing means, respectively, to join the parallelogram linkage in a parallelogram of fixed length members, extensions on each of the end linkage arms, one of which carries an engraving tool, the other extension having pivot support means to one side of the parallelogram linkage, said last pivot supporting means including a fixed length tracer arm, a pantograph supporting extension arm movably connected to one of said side linkage arms at one end of said extension arm, and pivot means for the assembly at the other end of said extension arm, a mount for said pivot means, guide means for said mount and means for supporting the assembly and work for relative movement to and from each other to direct the engraving tool carried thereby to and from the work, said base comprising a web supporting table having work holding socket means centered on said base on a plane coincident with the central longitudinal axis of the guide means, said machine having in combination therewith a stem centered in said socket means, a ring-holding chuck mounted on said stem and rotatable about a second axis normal to the axis of said socket means, and means for indexing said ring-holding chuck about said second axis.

2,749,618
CHALK LINE BOX
Robert K. Landon, Costa Mesa, Calif., assignor to Strait-Line Products, Costa Mesa, Calif., a corporation of California
Application March 18, 1952, Serial No. 277,315
2 Claims. (Cl. 33—87)



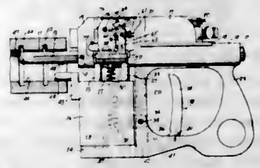
1. In a chalk-line box having a wide portion and a tapering portion adapted to be gripped by fingers and thumb when the wide portion is held in the palm of the hand and having a chamber in said tapering portion for holding marking material, the improvement which comprises: means defining an orifice in a wall of said tapering portion admitting to said chamber and elongated in the direction in which said box tapers and having a circular central enlargement; and a closure for said orifice having a flange adapted to overlay the outer surface of said wall marginal to said orifice, a depressed elongated central portion adapted to enter said orifice, a circular disk portion secured to said central portion and adapted to enter said enlargement as a locator, and tongue means secured to said disk portion adapted to underlie the inner surface of said wall marginal to said orifice for holding said closure in said orifice when rotated to a position transversely to said orifice and to release said wall when rotated to a position in the lengthwise direction of said elongated orifice, said depressed central portion providing a recessed finger grip and preventing accidental rotation of said closure by pressure of a finger placed therein.

2,749,619
AUTOMATIC DRAFTING SCALE
Eugene M. Todd, Buckingham Township, Bucks County, Pa.
Application March 6, 1953, Serial No. 340,940
3 Claims. (Cl. 33—141.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)



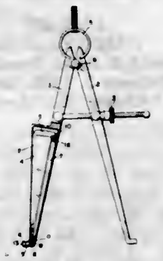
1. In a drafting instrument, a flat circular ring and a frame containing the ring, the ring comprising concentric inner and outer peripheries and a linear scale arranged circumferentially between the peripheries, the frame comprising a bearing for rotating the ring on one of its peripheries, a lining guide comprising a bore projecting through the thickness of the instrument for a line-drawing implement to project through and carry the instrument along while a line is being drawn, an indicator and a straight edge intersecting the outer periphery of the ring at a tangent thereof, the scale being calibrated to indicate length according to the outer periphery of the ring, and the indicator being positioned on a radius of the ring and in registry with the scale.

2,749,620
GROOVE GAGE
Frank Henry Czaplinski, Poughkeepsie, N. Y., assignor to Standard Gage Company, Inc., Poughkeepsie, N. Y., a corporation of New York
Application January 12, 1955, Serial No. 481,373
10 Claims. (Cl. 33—147)



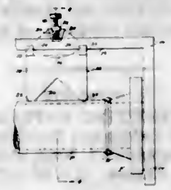
1. In a gage for determining the linear separation between circumferential grooves in a bore, in combination, a barrel, a tube in said barrel extending beyond one end thereof, said tube being adjustable longitudinally of said barrel, a groove engaging member fixed to the extending end of said tube, a second groove engaging member mounted on said tube for limited longitudinal reciprocation with respect thereto, a dial indicator mounted on said barrel with the measuring plunger thereof parallel to the barrel and tube axes, and means on said second groove engaging member for operating said dial indicator.

2,749,621
CALIPERS
Victor T. Wigglesworth, Portland, Oreg.
Application January 23, 1951, Serial No. 207,407
2 Claims. (Cl. 33—148)



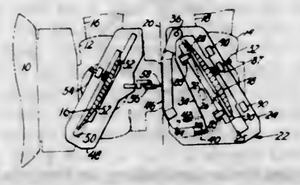
1. An article of manufacture including indicating calipers, an indicating arm associated with one leg of said calipers and mounted within said leg member, said arm being hinged to a contact shaft, bearings within the lower end of said leg, a fulcrum pin adjustable in relation to the hinged connection of the indicating arm and the contact shaft, said fulcrum pin movable toward and away from said hinged point within slots formed within the caliper leg member, locking means forming part of the fulcrum pin to lock said fulcrum pin within the slotway, and a flat spring member urging the indicating arm against the fulcrum pin above the hinge point and positioning the contact shaft end outward from the lower end of the leg member.

2,749,622
FRAMING SQUARE ATTACHMENT
Malcolm P. Rasco, Port Arthur, Tex.
Application June 9, 1953, Serial No. 360,436
1 Claim. (Cl. 33—180)



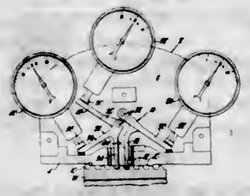
A quickly removable pipe squaring attachment for a framing square having angularly related, coplanar legs, comprising: a plate having a planiform shape for disposition thereof in the common plane of the legs, the plate having opposite edge portions at least two of which are parallel for extension thereof in longitudinally contacting relation to a work piece and to one edge of the one of the legs, respectively, whereby to dispose the work piece in parallel, transversely spaced relation to said one leg; a yoke rigidly connected to one face of the plate laterally of the plane of the plate, and including a return bend portion defining a channel extending in the plane of the plate and spaced from the plate to receive the opposite edge of said one leg; a clamping screw threadedly engaged in the return bend portion for movement within the channel into said plane of the plate, for engaging the other edge of said one leg; and lug means connected to the opposite face of the plate in position to define with the plate and yoke a second channel, the second channel extending in the plane of the plate and facing toward first channel for receiving one edge of said one leg.

2,749,623
PROPELLER PROTRACTOR
Floyd La Barre, Jr., Denville, Frank J. Churnell, Bloomfield, Wilson D. Nagle, Fair Lawn, and Anthony P. Pennock, Florham Park, N. J., assignors to Curtiss-Wright Corporation, a corporation of Delaware
Application November 3, 1953, Serial No. 390,042
8 Claims. (Cl. 33—180)



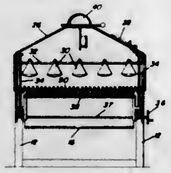
1. A protractor for determining the pitch angle of a propeller blade when rotatably installed on an aircraft, comprising a member clamped to the propeller blade, a second member pivoted to the first member, said two members having interrelated indicia thereon to indicate the relative angular relation therebetween, said second member having a planar reference portion, the second member being adjustable relative to the first member finally to disposed said planar reference portion in a reference plane parallel to the propeller plane of rotation, and an indicator device secured to the aircraft and having a point contactor part in said reference plane and engageable with consecutively with several points on said reference portion as said blade is rotated relative to said aircraft to gauge the alinement of said portion in said reference plane.

2,749,624
APPARATUS FOR DETERMINING THE PROFILE OF THREADS
Carroll W. McClure, McKeesport, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Application May 21, 1953, Serial No. 356,330
7 Claims. (Cl. 33—199)



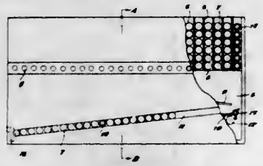
7. Apparatus for determining the profile of threads comprising a supporting frame, a relatively stationary leg carried by said frame extending downwardly into a thread groove and having a toe thereon adapted to contact a flank of said thread adjacent one end thereof, a second leg pivotally mounted on said frame extending into said groove, a toe on said leg adapted to contact said flank adjacent the other end thereof, a third leg pivotally mounted on said frame extending into another thread groove, a toe on said last named leg adapted to contact the opposite flank of said thread adjacent the bottom thereof, a fourth leg pivotally mounted on said frame and extending into said last named groove, a toe on said last named leg adapted to contact the last named flank adjacent the top thereof, means for positioning said toes with respect to the crests of said threads, and means for indicating the positions of said movable toes.

2,749,625
POWDER DRYER AND STERILIZER
Donald F. Clairmonte, Barbados, British West Indies, assignor, by direct and mesne assignments, of one-third to Baron B. Floyd, Caracas, Venezuela, and one-third to Herbert F. Cox, Jr., Syracuse, N. Y.
Application February 8, 1954, Serial No. 408,969
3 Claims. (Cl. 34—233)



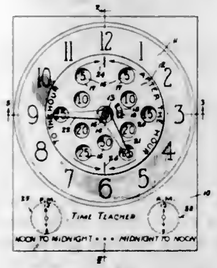
1. In a drying device comprising an elongated housing, a horizontal apron defining a bottom wall in said housing, an endless conveyor including an upper flight resting on and supported by said apron for carrying a layer of hydrated powdered material through said housing, drying means supported in said housing in overlying relationship along the longitudinal path of travel of said conveyor for dehydrating the powdered material passing thereunder; means frictionally engaging the upper surface of said conveyor and extending upwardly through the path of travel of the powdered material thereof for agitating the material being dried and stirring the same upwardly from the upper surface of said conveyor, said means including a plurality of flexible elements secured at opposite ends between opposite side wall portions of the housing, said flexible elements extending in longitudinal spaced relation along the path of travel of said conveyor and being in transverse frictional engagement thereon, said flexible elements including a pre-tensioned freely movable intermediate vibrating and oscillating portion frictionally activated into a continuous agitation movement by the endless conveyor.

2,749,626
WORD FORMING TOY
Riccardo Romani, Forli, Italy
Application January 11, 1955, Serial No. 481,160
4 Claims. (Cl. 35—35)



1. An apparatus for forming words and sentences comprising a front and a rear board secured together in spaced parallel relationship so as to define between them an upper cavity between an upper area of said boards, and a lower cavity between a lower area of said boards, the lower cavity being offset rearwardly of the upper cavity by the width of the upper cavity and said cavities overlapping and opening one into the other at their adjacent ends, said front board including a shoulder defining the bottom of the upper cavity, said front wall also including a viewing aperture opening into the lower cavity, a plurality of vertical partitions mounted in spaced relationship in the upper cavity to define disc-receiving compartments, a plurality of lettered discs for disposal in the compartments of the upper cavity with the lowermost disc supported on the shoulder, a plurality of push-buttons slidably mounted in the front board in a row adjacent the lower end of the upper cavity and extending at one end into said cavity to contact the lowermost disc in each of the compartments therein whereby inward movement of each said push-button may serve to cause said lowermost disc to be pushed rearwardly off the shoulder to drop down the lower cavity by gravity, an inclined collecting runway disposed in the lower cavity below the compartments and in alignment with the viewing aperture of the front board to receive discs displaced from the compartments in the order in which the push-buttons are operated, and stop means to temporarily retain the received discs on the runway to permit reading of the words and sentences formed.

2,749,627
TIME TEACHER
Donald B. Jones, Donora, Pa.
Application January 7, 1955, Serial No. 480,344
1 Claim. (Cl. 35—39)



A time teaching device comprising a baseboard having a clock dial thereon, a rotatable dial concentric and within said baseboard dial, means for rotatably mounting said revolving dial on said baseboard, indicia carried by said baseboard within said clock dial and aligned radially with the indicia of said clock dial, said revolving dial having a plurality of angularly and radially spaced openings adapted to expose all or simultaneously cover all of said aligned indicia, said aligned indicia being adapted to give by direct reading the minutes after the hour on one side and the minutes before the hour on the other side, means for limiting the movement of said revolving dial to an exposing or concealing position and an hour and minute hand rotatably mounted on said revolving dial concentric with the same, said hour and minute hand being transparent so as to permit readings of said aligned indicia therebelow.

2,749,628
ORTHOPEDIC APPLIANCE
John B. LaMorder, Brattleboro, Vt.
Application September 3, 1953, Serial No. 378,212
3 Claims. (Cl. 36—71)



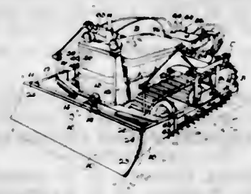
1. An orthopedic appliance comprising a sheet of resilient cushion material of substantially uniform thickness throughout the area thereof, said sheet having a peripheral shape and size to conform substantially to the contour of a foot from the heel end substantially to the metatarsal heads, and a pad separate from the sheet and secured to the bottom surface thereof and formed of resilient cushion material, said pad extending forwardly from a point adjacent the heel end of the sheet substantially to the metatarsal end of the sheet and laterally from the medial edge toward the lateral edge of the sheet, said pad having a thick portion substantially under the metatarsal shafts adjacent the inner edge of the pad and tapering downwardly therefrom to the surrounding margin of the pad, said sheet and pad having curved anterior edges substantially parallel with each other, and the sheet having the anterior end thereof tapered in thickness forming a continuation of the tapered edge of the pad.

2,749,629
MOLDED LACE SHOE
Joseph D. Scala, Bronx, N. Y.
Application March 22, 1955, Serial No. 495,909
1 Claim. (Cl. 36—58.5)



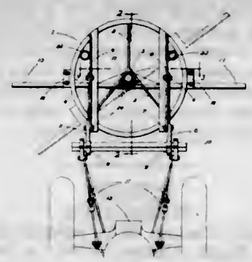
A shoe including a relatively inflexible quarter having an integral lace-receiving tubular compartment along its upper edge, a vamp secured to the quarter at the throat of the shoe, a shoelace loosely housed in said compartment, a pair of grommets extending into said compartment adjacent the forward ends thereof and adjacent the throat of the shoe, a pair of grommets extending through the vamp, each of said latter grommets being in substantial front-to-rear alignment with a first said grommet, and a third pair of grommets located between and to the rear of the second pair of grommets and forwardly and offset laterally from the first pair of grommets and extending through the vamp, the ends of the lace being passable through the second or third pair of grommets, the side portions of the quarter being in substantially front to rear alignment each with aligned grommets of the first and second pairs, whereby a rearward pull on the ends of the lace using the second pair of grommets as pulleys exerts substantially only a forward pull on the rear portion of the quarter against the wearer's heel whereas a similar pull on the ends of the lace using the third pair of grommets as pulleys also effects compression of the side portions of the quarter against the wearer's ankle.

2,749,630
BULLDOZER BLADE
Sherlock E. Nave, Townsend, Mont.
Application April 19, 1951, Serial No. 221,868
2 Claims. (Cl. 37—144)



1. A tractor having an earth moving blade, a U-shaped head pivoted to the rear axle of the tractor, said head curving around the front of the tractor, a plate slightly smaller than the earth moving blade, said plate having a central pivot connection with the center of said blade, curved slots formed through said plate adjacent each end of the blade, securing means in alignment with said slots and extending therefrom through the slots to the rear of the said plate, a first and second ram cylinder secured to the plate adjacent each end thereof in reversed position with respect to each other, a projecting reciprocating ram shaft connected to a piston in each ram cylinder, the reciprocating ram shaft of the first ram cylinder connecting with a blade fixed bolt means extending through a plate slot adjacent the top edge of the plate and blade and the ram shaft of the second ram cylinder connecting with a blade fixed bolt means extending through a plate slot adjacent the diagonally opposite bottom edge of the plate and blade, fluid conduits connecting with each end of each ram cylinder, valve means connected to said fluid conduits for selectively reversing the direction of fluid flow to opposite ends of said ram cylinders, a pump and a reservoir each connected through said valve and fluid conduits to said ram cylinders whereby flow of fluid at high pressure to the rams in one direction from the pressure side of said pump reversely actuates the respective ram shafts and pivots the earth moving blade vertically on said plate pivot connection to raise the left corner of the blade and lower the right corner, and whereby upon reverse movement of the valve means flow of fluid to the rams in the opposite direction oppositely reverses said respective ram shafts and pivots the said blade on said plate pivot connection to raise the right corner of the blade and lower the left corner, said plate being fixed to said U-shaped head, said head including a pair of parallel spaced pusher frame bars pivoted to the rear axle of the tractor on each side of the tractor, and a fluid actuated ram connected to each bar to raise and lower the frame, plate and blade in toto.

2,749,631
MULTIPLE, ADJUSTABLE BLADE SCRAPER
Ernest S. Thompson, Strathmore, Calif., assignor to himself and Ethel Thompson, jointly
Application January 2, 1953, Serial No. 329,429
2 Claims. (Cl. 37—156)

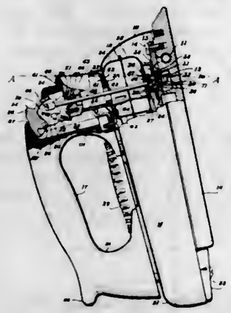


1. A scraper comprising a generally horizontal frame which includes a continuous circular member having an outwardly projecting flange extending thereabout, draft members connected to the frame above and clear of said flange, a blade unit beneath the circular member and comprising separate blades disposed in a common horizontal plane, means mounting the blades on the frame for separate adjustment about the axis of said circular member, and means for each blade to releasably clamp the same to the flange.

2,749,632
ELECTRIC IRON
George A. Brace, Highland Park, Ill., assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application August 27, 1952, Serial No. 306,627
9 Claims. (Cl. 38—77)

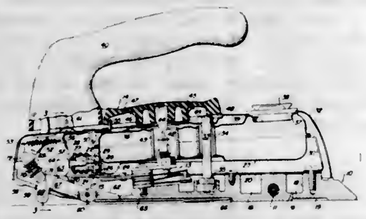
1. In combination, a steam iron comprising, a sole plate having a toe and a heel at the opposite ends thereof, a heating element embedded in said sole plate, a cover shell overlying said sole plate and enclosing a water reservoir, an operating handle having a hollow front supporting leg secured to the upper side of said cover shell, said water reservoir having aligned openings through the top and bottom walls thereof underlying said hollow front leg, a steam generating chamber in said sole plate underlying said aligned openings, a filling riser tube secured to the top opening in said reservoir and projecting upwardly into said hollow handle leg and having an open ended filling passage extending through the forward wall of said front leg and into said reservoir so that said reservoir can be

filled therethrough when said iron is upended onto its heel, a water control valve means having a control knob accessible at the top end of said hollow handle leg and having a valve seat in a fitting supported in the lowermost one of said aligned reservoir openings, the foremost end of said water reservoir projecting forwardly of said filling riser, and an air vent passage extending through the top wall of said reservoir forwardly of said aligned openings



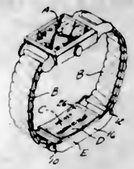
and opening into the filling passage in said riser tube, said air vent passage permitting the air in the reservoir to escape during the filling thereof and permitting the water level to rise to a point substantially above the valve seat of said water control means and substantially above the top edge of the discharge end of said filling passage where it enters said reservoir whereby the reservoir can be filled to capacity even through said riser tube is connected to the reservoir rearward of its forward end.

2,749,633
STEAM IRON
Werner G. Seck, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application January 26, 1955, Serial No. 484,170
13 Claims. (Cl. 38—77)



1. In a steam iron, a soleplate, a flash boiler formed therein for converting water into steam, a water reservoir overlying said soleplate, a valve for controlling the flow of water from said reservoir to said flash boiler, a support for supporting said soleplate in an inclined position with said soleplate free of the supporting surface, means for mounting said support on said iron, said support and mounting means being constructed to provide for movement of said support from a retracted nonsupporting position within the body of the iron to an extended position below the surface of said soleplate in which said soleplate is supported in an inclined position above the supporting surface and valve control means connected between said support and said valve and operative to close said valve when said support is moved to its extended position and to open said valve when said support is moved to its retracted position.

2,749,634
IDENTIFICATION BRACELET
Edward Billett, Davis Guss, Joseph Guss, and Nathan Horrow, Philadelphia, Pa.
Application February 28, 1952, Serial No. 273,976
2 Claims. (Cl. 40—10)



2. An identification device adapted to be worn as a bracelet including a frame having a window therein, a pair of spring fingers integrally formed in said frame, a removable transparent identification holder having a chamber therein to receive a written indicia for identification purposes wherein said indicia may be viewed from its front and its back, said holder including a parallelepiped base and a top overhanging the frame sides, and the base being adapted to be detachably grasped by said spring fingers.

2,749,635
INDICIA BEARING DEVICES FOR VERTICALLY SLIDABLE DOORS
Glenn G. Robbins, Larned, Kans.
Application December 21, 1953, Serial No. 399,232
8 Claims. (Cl. 40—125)



1. In a device of the kind described, the combination with a door adapted to slide vertically between a pair of laterally spaced vertically disposed jambs of the door opening into open position, of an indicia-bearing sign releasably supported on the jambs of the door opening when the door is in closed position, and means on said door adapted to engage and lift and carry said sign on said door during the upward movement of said door into open position.

2,749,636
SELF-LOCKING TUBULAR FRAME DISPLAY DEVICE
Michael J. Viglietta, Elmhurst, N. Y., assignor to Royal Mounters, Inc., Brooklyn, N. Y., a corporation of New York
Application September 2, 1953, Serial No. 378,077
4 Claims. Cl. 40—152)



3. A display device of the picture frame type comprising a display panel, a plurality of first tabs disposed along the edges of said panel and having one edge resiliently hinged to the panel to swing to one side of the panel, a plurality of second tabs disposed along the edges of said panel and having one edge resiliently hinged to the panel thereto to swing to the other side of the panel, the other edges of said tabs being reversibly directed toward the sides of the panel and forming a shoulder laterally spaced from said body, and a plurality of hollow tubes having longitudinal slits in them adapted to enclose the hingedly connected first and second tabs and a portion of all the edges of said display panel, so that when the edges and tabs are fully entered in the tubes, the tab will swing away from said panel.

2,749,637
ORNAMENTAL BELL CONSTRUCTION
Russell R. Bradshaw, Midland, Mich.
Application July 27, 1953, Serial No. 370,437
1 Claim. Cl. 41—10)



An ornamental bell construction composed of a two-part assembly comprising a bell shaped body having a top section formed of yieldable, resilient plastic material provided with a substantially centrally located slot and a clapper member formed of similar material having a stem which is bent intermediate its ends, one end of said stem extending through said slot and being shaped to correspond substantially to the shape of said slot, at least one dimension of said one end of said stem being greater than the corresponding dimension of said slot so that the presence of said one end of said stem in said slot causes the material bounding said slot to yield to accommodate said one end of said stem whereby the resilience of said material causes the edges of said corresponding dimension of said slot to grip said one end of said stem so as frictionally to retain said clapper member in assembled relation with said bell body, said stem having shoulders adjacent to said one end thereof engaging the top section of said bell body for limiting the extent said one end of said stem projects through said slot, the relative dimensions of said body and said clapper member being such that in assembled relation the end of said bent stem remote from said one end is located in engagement with said bell body.

2,749,638
CHRISTMAS TREE ACCESSORY
William F. Fiedler, Allentown, Pa.
Application June 7, 1954, Serial No. 434,890
2 Claims. (Cl. 41—12)



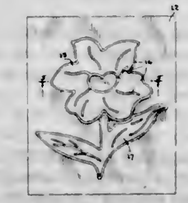
1. A tree limb attachment comprising an elongate rigid sheet material member embodying a channel which is open-ended and approximately V-shaped in cross-section, and which is provided along its crotch portion with a depending rib, said rib having a plurality of longitudinally spaced holes to accommodate suspension hooks, and the side walls of the channel being provided along their free edges with bendable tongues providing attaching hooks.

2,749,639
TREE CONSTRUCTION
Michele D'Agnillo, East Greenwich, R. I., assignor to California Artificial Flower Company, a corporation of Rhode Island
Application October 12, 1954, Serial No. 461,859
3 Claims. (Cl. 41—15)



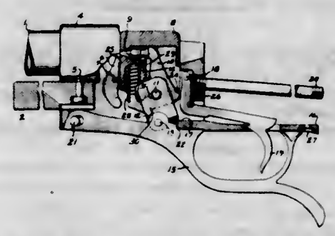
1. In an artificial tree, a trunk comprising a central core, a group of longitudinally extending sockets in spaced relationship around the core, a second group of longitudinally extending sockets in spaced relationship around the core in a different longitudinal position than the first group, the sockets of one group being located in axial alignment with the spaces of the other group and overlapping the sockets of the other group in axial extent.

2,749,640
THERMOPLASTIC DESIGN ARTICLE
Elmer P. Scott, New York, N. Y.
Application July 1, 1953, Serial No. 365,422
4 Claims. (Cl. 41—24)



1. A thermoplastic design article comprising a base sheet of a thermoplastic material, a design sheet of thermoplastic material on said base and fused thereto along the periphery only of said design sheet, said base extending beyond said design sheet, said design sheet being also fused to said base within said design along a plurality of disconnected lines.

2,749,641
FALLING BLOCK SINGLE SHOT BREECH ACTION
Wilbur J. Hauck, West Arlington, Vt.
Application August 14, 1951, Serial No. 241,827
2 Claims. (Cl. 42—23)



1. A falling block single shot breech action comprising a breech block, a sear, a cocking lever, a triangular shaped hammer with a forward dog leg projection, a mainspring into which said forward projection of the hammer engages, a lower tang member provided with a forward shoulder portion and provided with knob pro-

tuberances at said forward shoulder portion, and a link member connecting the cocking lever with the breech block and hammer, said link member having two parallel spaced upwardly extending arms of equal dimensions and a single, relatively short downwardly extending arm integral therewith, said hammer being pivotally attached between the upwardly extending arms of the link and the downwardly extending arm of the link being pivotally attached to the cocking lever, whereby on movement of the cocking lever up and down the rear lower portion of the link cooperates with the knob protuberances on the tang to (1) retract the hammer on the downward stroke of the lever, (2) lock the breech block in up position when the cocking lever has completed its stroke and (3) hold the hammer back until said hammer contacts the sear in the upward stroke of the lever, said cooperation between the link and knob protuberances being permitted by a pin and slot connection of the forward end of the cocking lever to the frame of the gun.

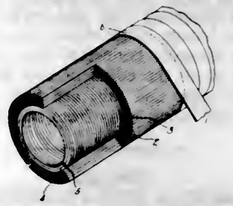
2,749,642
MACHINE PISTOLS
Erik Saetter-Lassen, Hellerup, Denmark
Application January 10, 1952, Serial No. 265,865
4 Claims. (Cl. 42—75)



1. In a machine pistol, a sliding breech block, a sheet metal receiver forming a sleeve bearing for said block and divided by a longitudinal vertical section into two longitudinally abutting halves hinged together at their rear ends, said halves at their front ends forming a forward protruding stub presenting a forwardly tapering conical external surface and having internal bearing surfaces, a barrel having a rear portion encircled and supported by said internal bearing surfaces of said stub, said barrel being provided with an externally threaded reinforcement over a portion of its outer cylindrical surface situated in front of said stub, and an internally threaded socket engaging the threads of said enforcement and including a non-threaded extension presenting an internal conical surface engaging the conical external surface of said forward protruding stub thus forcing said two halves of the receiver to be held pressed against each other, whereby upon advancing said socket forwardly of said stub by means of the threads the internal conical surface of said socket disengages the external conical surface of said stub to thereby permit said halves to be hingedly separated from each other thus affording access to said block.

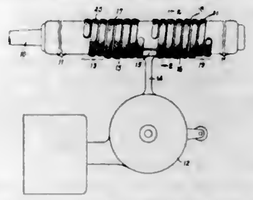
2,749,643
HOLLOW SHAFT FOR FISHING RODS
Arthur L. Scott, Columbia, S. C., assignor to Columbia Products Company, Columbia, S. C., a corporation of South Carolina
Application December 31, 1952, Serial No. 329,008
2 Claims. (Cl. 43—18)

2. A resilient flexible hollow shaft for fishing rods consisting of a substantially uniform outer layer of longitudinally-extending glass fibre members forming the outer surface of said shaft, and a substantially uniform inner layer consisting of spirally-wound contiguous glass fibre members, each of said glass fibre members being bonded to adjacent glass fibre members and maintained in position with a flexible plastic bonding agent, said outer longitudinally disposed glass fibre members comprising a substantial majority of the fibres of said shaft and defining means to resist tension and compression during bending of said shaft and to prevent separation of contiguous turns of said spirally wound glass fibre members



defining means to prevent separation of said longitudinally-extending fibre members and to maintain the longitudinally-extending glass fibre members in sheath-like form about said spirally-wound members.

2,749,644
FISHING REEL SECURING DEVICE
John K. Taggart, Indianapolis, Ind.
Application March 12, 1953, Serial No. 341,945
5 Claims. Cl. 43—22)



1. A hand grip for a fishing rod handle of the type having associated therewith a reel mount provided with projections on opposite sides of a reel leg, said grip comprising two spiral strips each having a smooth inner face and a roughened outer face, each of said strips comprising a sufficient number of coils to fit over said projections and grip the same to said rod handle and provide a number of coils outside of said projections to furnish finger grips, whereby two or more fingers of the fisherman are adapted to be held in contact with the roughened faces on opposite sides of the leg while maintaining the rod in grasped position, the inner diameter of the strip coils being slightly less than the diameter of the rod handle.

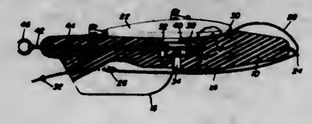
2,749,645
FISHING GEAR CONTAINER
Boyd W. McKern, Bonner County, Idaho
Application September 13, 1954, Serial No. 455,599
2 Claims. (Cl. 43—26)



2. A fishing gear container which is such in construction that a conventional sectional rod may be broken down

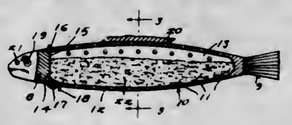
and the sections individually stored and handily carried comprising a plurality of interconnected co-planar parallel tubes closed at their respective lower ends and open at their respective upper ends, there being several tubes for the several complemental sections of the stated fishing rod, each tube being formed by a separate and distinct peripheral wall, each tube providing a compartment for the intended section removably stored therein, said tubes being progressively diminished in cross section and defining a first tube which is the largest in cross-section, a third tube which is the smallest in cross section and an intervening central tube which is of proportional cross-section, the upper end of the central tube having a pair of diametrically opposite line accommodating and clearance notches and the adjacent wall portions of the first and third tubes each having a single notch aligned with the adjacent single notch of said central tube, and a single closure cap mounted on the upper end portions of said tubes serving, when closed, to not only close the otherwise open upper ends of the tubes but all of said line clearance notches.

2,749,646
LURE CASTING DEVICE
Irvin B. Hall, Fayetteville, N. C.
Application May 21, 1954, Serial No. 431,329
6 Claims. (Cl. 43—42)



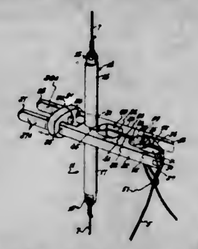
1. A fish lure casting device comprising an elongated body, said body having a recess adapted to receive a fish lure, a hook mounted in said body and adapted to engage and releasably retain a lure in said recess, resilient means biasing said hook to released position, means for attaching a fish line in operative relation to said hook whereby tension on said fish line moves said hook to lure engaging and retaining position, and means for attaching said lure to said body.

2,749,647
CHUM LURE
Richard H. Beloff, Rockport, Mass.
Application June 11, 1954, Serial No. 436,048
1 Claim. Cl. 43—42.06)



A chum lure for use as a lobster pot bait comprising an elongated lure body including a solid head portion, a solid tail portion shaped to simulate the tail of a fish and an elongated hollow body portion extending between the head portion and tail portion and defining a cavity having a rear end closed by the tail portion and an open forward end, said hollow body portion being provided with a plurality of perforations opening into said cavity and outwardly thereof, latch means retaining said head portion in a postition to close the open forward end of the cavity and releasable for movement of the head portion to a position for exposing said open end of the cavity, and a finely divided chum material contained within the cavity and applied thereto through the open forward end thereof, said chum material being dispensed through the perforations of the hollow body portion from said lure body for attracting lobsters to the lure by taste and smell, said head portion containing configurations simulating the eyes, nose and mouth of a natural bait fish, said body portion having an appendage simulating a fish fin, said lure body being colored to cooperate with the shape, configurations and appendage thereof to realistically simulate a natural bait fish for visually attracting lobsters and providing an enclosure by which lobsters are denied access to the chum material while contained in the cavity.

2,749,648
TROLLING DEVICE
John Schneider, Glendale, Calif., assignor to Helar Manufacturing Company, a corporation of California
Application August 4, 1954, Serial No. 447,770
13 Claims. (Cl. 43—42.72)



1. In a line holding device: pivoted jaw means; trigger means disposed between said jaw means, said trigger means being movable relative to said jaw means between an open position and a closed position and being adapted in said closed position for holding a portion of a line in a trolling position; and means for biasing said jaw means toward a closed position, said jaw means being movable toward an open position by action of said trigger means and in response to a predetermined tension on said line, thereby to release said portion of said line.

2,749,649
TROLLING BALLAST
Archie L. Fitzsimmons, Honolulu, Territory of Hawaii
Application December 30, 1952, Serial No. 328,602
1 Claim. (Cl. 43—43.1)



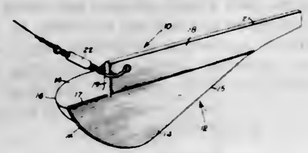
In a trolling ballast, an elongated weight having forward and rearward ends, means on the weight intermediate its ends for connection of the weight to a support line, and a releasable trolling line gripping means on and projecting from the rearward end of the weight, said gripping means comprising a support plate having a forward end and a rearward end, the forward end of the support plate being fixed to the rearward end of the weight with the plate extending longitudinally from the weight, a gripping plate extending along one side of the support plate and pivoted intermediate its ends to the support plate, said gripping plate having forward and rearward end portions at opposite sides of the pivotal axis of the gripping plate, a lip on the rearward end portion of the gripping plate for gripping a trolling line between said lip and the rearward end of the support plate, and spring means acting between the forward end of the support plate and the forward end portion of the gripping plate and yieldably urging the rearward end portion of the gripping plate toward the rear end of the support plate.

2,749,650
WEIGHT RELEASER FOR FISH LINES
Vivian S. Rees, North Sacramento, Calif.
Application May 20, 1955, Serial No. 509,818
2 Claims. (Cl. 43—43.12)



1. A weight releaser, for a fish line, comprising an extensible, elastic, tubular body adapted to be interposed in and connected at its ends to a fish line in a manner to allow of extension of the body when the line is placed under tension, a relatively small-diameter rod within and extending lengthwise of the body, means connecting the rod at one end to the body adjacent one end thereof, the other end of the rod being free, and a weight having an eye at the upper end through which the rod slidably projects; the body having an opening in the bottom located intermediate the ends of the rod when the body is in its normal non-extended form and through which opening the eye freely projects for engagement with the rod.

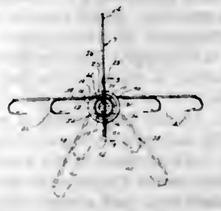
2,749,651
TROLLING DEVICE
Murray Saider, Pasadena, Calif.
Application September 28, 1953, Serial No. 382,614
1 Claim. (Cl. 43—43.13)



A trolling device comprising a body having two symmetrical body portions having rearwardly tapered straight side edges merging into broadly rounded leading edges, said body portions having planar top surfaces sloping upwardly and inwardly from the edges thereof and meeting at a dihedral angle edge defining the axis of symmetry of said body portions, said rounded leading edges meeting at said dihedral angle edge and defining a prow, an upstanding rib integral with said body portions and extending along said dihedral edge above said planar top surfaces and terminating rearwardly of said rounded leading edges in a plane front face, said plane front face lying perpendicular to said dihedral edge, said body portions having recess means in the lower surfaces thereof extending from the prow at said dihedral edge to the rear end of said body portions and defining a concave lower surface portion having its greatest concavity beneath said rib, said rib having a plane top surface and plane side surfaces lying parallel to said dihedral edge and extending beyond the rear end of said body portions, and line attaching means on said rib adjacent the plane front face thereof.

2,749,652
TROLLING DEVICE
Irvin Lee Slane, Chelsea, Mich.
Application December 23, 1952, Serial No. 327,508
2 Claims. (Cl. 43—44.82)

1. In a trolling device, a drum having opposed ends, a partition formed upon the periphery of the drum medially between the opposite ends thereof and extending in a plane normal to the axis of the drum, an annular flange surrounding said partition and fixed thereto, diametrically opposed portions of the edges of said flange at opposite sides of the partition having notches therein, each of said notches having opposed walls and serving as stops, torsion arms comprising resilient coils circumposed on the drum at opposite sides of said partition and arm portions projecting from the coils in position in said notches, the coils serving to normally and yieldably position said arm portions against one of said walls of the notches with said arm portions in longitudinal alignment with each other,



said arm portions being swingable from the position of normal engagement with said one wall to a position of engagement with the opposite one of the walls against the yielding action of said arm portions, fishhooks on said arm portions, and fishing line attaching means secured to the drum and projecting radially therefrom.

2,749,653
FISHHOOK REMOVER
Joseph Alexander Patrowsky and James Wilson, McKees Rocks, Pa., assignors to Thomas Edmund Nolfi and James Wilson, McKees Rocks, Pa.
Application August 31, 1954, Serial No. 453,259
4 Claims. (Cl. 43—53.5)



4. A fish hook remover comprising a pair of separate relatively slidable, longitudinally extending wire members, one of said wire members being bent so as to form two intermediate spaced loops to serve as guide elements for sliding movement of the other wire and having a hook portion at one end and being bent transversely at the other end so as to form a handle portion, the other wire member comprising two wire portions in side-by-side relationship throughout the major portion of its length which are slidably guided by said loops and terminate in a laterally extending handle portion at one end and a transversely extending loop portion at the other end through which said hook portion is movable, said handle portions being enclosed in plastic handle grips disposed in parallel relationship and extending at right angles to the direction of movement of said wire members, whereby when said handle grips are grasped and pulled together, said hook portion will move from one side of said loop portion, through the opening of the loop portion and to the other side thereof in such a manner that it may extract a lodged fishhook which is hooked by said hook portion as the loop portion holds the fish against movement.

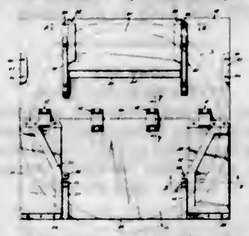
2,749,654
STAGING RACK
Charles L. Harris, Jefferson, Tex.
Application March 5, 1954, Serial No. 414,344
1 Claim. (Cl. 43—57.5)

A staging rack for fish hook staging lines comprising a relatively flat main body, said body having a plurality of spaced slots opening through one edge thereof, a bracket member having a plurality of spaced hook-receiving recesses therein extending longitudinally thereof and carried on one side of said body adjacent and parallel to the edge through which said slots open with each of said slots in alignment with one of said recesses, and a line riser carried on the other side of said body to



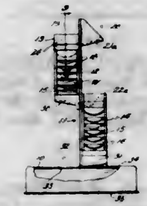
project laterally therefrom and extend thereacross in parallel relation to said member and disposed to the side of said member remote from said bracket member, said element having a flat line-engaging surface extending longitudinally thereof and in parallel relation to the other side of the body.

2,749,655
PORTABLE DESK
Earl D. Ashton, White Heath, Ill.
Application December 16, 1953, Serial No. 398,465
5 Claims. (Cl. 45—58)



3. A portable desk adapted to be mounted on a vehicle steering wheel comprising a pair of panels providing a writing surface, hinge means interconnecting the abutting edges of said panels so as to enable said panels to be folded together into a compact package for storage during non-use, said hinge means including a pair of hinge leaves secured respectively to said panels on the opposite face thereof from said writing surface at points inwardly removed from the junction of the abutting edges of said panels, an intermediate hinge leaf, spaced parallel pintle pins pivotally interconnecting the opposite ends of said intermediate leaf to the leaves secured to the respective panels, said pintle pins being disposed at points spaced from the junction of the abutting edges of said panels whereby said intermediate leaf bridges and lies beneath the junction to support and strengthen the joint between the panels against displacement of said panels beyond a fully opened coplanar relationship, parallel drawer guides secured to the underside of and spaced from the ends of one of said panels, said guides having a drawer slidably retained therein, a pair of brackets secured adjacent the opposite ends of the other panel on the underside thereof, each of said brackets having spaced drawer guides with a drawer retained in each of said brackets to be slidable in a plane parallel to said other panel, said drawer guides being positioned so as to nest intermediate the brackets on the other panel upon folding of the desk for storage during non-use with the guides, drawers and brackets housed between said panels and together with said brackets engage with the steering wheel rim in supporting the desk thereon, and a pair of hooks secured at laterally spaced locations on the opposite face of said panels from said writing surface and having outwardly curved free ends for engagement with a vehicle steering wheel to retain said desk positioned thereon, said hooks being housed between said panels when the desk is folded for storage during non-use.

2,749,656
MECHANICAL NOVELTY
Schuyler Reynolds, Columbus, Ohio
Application May 5, 1955, Serial No. 506,254
4 Claims. (Cl. 46—4)



4. A novelty coin bank comprising a supporting frame; a downwardly inclined rack carried by said frame and including a pair of transversely spaced, parallel, longitudinally extending side rails, said side rails being spaced transversely from one another a distance slightly less than the diameter of a coin of given denomination, and being formed along their upper edges with sets of opposed, transversely aligned, upstanding pointed projections, the sets of projections being spaced longitudinally of said side rails, and said side rails, between said sets of projections, being formed with opposed ledges; coin-guiding means supported by said frame and disposed in laterally offset relation to the upper ends of said side rails, said coin-guiding means including an inclined chute into which a coin of said given denomination may be placed and discharged by gravity onto the upper ends of said side rails; means provided at the upper ends of said side rails engageable with a coin of said denomination discharged from said coin-guiding means to cause the coin to fall by gravity face downwardly upon a set of said projections, said sets of projections and said ledges being arranged to cause a coin discharged on the upper end of said side rails to migrate in an end over end toppling movement downwardly of said side rails by gravity; and a coin receptacle carried by said frame and positioned adjacent the lower end of said side rails to receive coins therefrom.

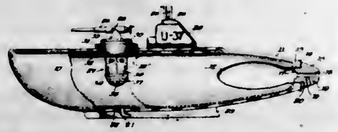
2,749,657
ANIMATED CARD
Howard E. Lohnes, Kansas City, Mo., assignor to Hallmark Cards, Incorporated, a corporation of Missouri
Application September 8, 1953, Serial No. 378,730
5 Claims. (Cl. 46—34)



1. In a greeting card having a vertical fold line at substantially the center thereof forming backs and having end portions folded inwardly forming front faces, the free edges of the card meeting at substantially the vertical fold line, a frame having a trackway secured to one of the backs, a gear rack slidable in said trackway, said frame having side portions provided with recesses and having nibs spaced from each other and from said trackway, disks having teeth rotatably mounted on said nibs, said teeth engaging the gear rack, the front face of the card lying over the rack having spaced openings therein, said disks having offset shoulders forming plane surfaces extending through said openings, movable members secured to said plane surfaces of the disks, and a pull tab having one end engaging said gear rack and its opposite end the

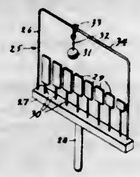
opposite face of the card, means on the inside of said front face to secure said frame to hold the pull tab, gear and rack gear in place whereby opening and closing of the card will rotate the movable members in opposite directions.

2,749,658
TOY SUBMARINE
Albert W. Neumann, Chicago, Ill.
Application November 2, 1951, Serial No. 254,525
16 Claims. (Cl. 46—92)



1. An aquatic toy comprising a hollow buoyant body, an inflatable rubber sack operatively mounted within the hollow buoyant body, an escape orifice operatively connected to said rubber sack and provided at the rear of the toy and adapted to be submerged in a body of water, whereby after inflation of the rubber sack through the orifice and the placement of the toy in the body of water, and deflation of the sack causing discharge of the air from the sack through said escape orifice, the toy is propelled forwardly, and another orifice located in the body of the toy below the water line and intermediate the ends thereof adapted for the entrance of water permitting water to flow into the hollow body in a predetermined amount, whereby the toy will have a combined forward and submerging movement as the air is discharged through the rear orifice.

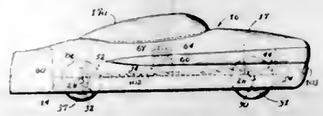
2,749,659
SOUNDING TOYS
Edward Elstein, Forest Hills, N. Y.
Application October 17, 1951, Serial No. 251,799
3 Claims. (Cl. 46—191)



1. A toy comprising a frame having a top wire portion and a bottom portion parallel thereto, a handle to manipulate the frame, a plurality of sound-producing devices within the enclosed space of the frame and secured to and rising from the bottom portion in spaced relation to each other, and a pendulous striker resiliently suspended from the top of the frame and slidable loosely along the frame top to normally clear the sound-producing devices, said resiliently suspended striker being responsive to centrifugal force during its rotation by appropriate manipulation of the handle, for extending the length of the radius arm of the pendulous element to enable said element to selectively strike one of the sound-producing devices.

2,749,660
TOY VEHICLE WITH MOTOR
Alfred Zimentstark, Chicago, Ill., assignor to Marvin I. Glass, doing business as Marvin Glass and Associates, Chicago, Ill.
Application March 12, 1953. Serial No. 341,960
1 Claim. (Cl. 46—206)

In a propelled toy vehicle adapted to be assembled and disassembled by the user, said vehicle comprising a rectangular shaped frame member, a pair of axles detachably secured thereto, each of said axles carrying a pair of wheels, one of said axles forming the driving axle and carrying a pinion secured thereto, said frame having a transverse member positioned adjacent said driving axle, a clutch member rotatably secured on said transverse member and supporting a driving gear, said clutch member having ribs and said driving gear having a slot, so constructed and arranged that when said clutch is in en-



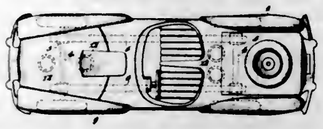
gagement with said driving gear said ribs will be in said slot to rotate said gear to drive said pinion and when said clutch is out of engagement with said driving gear said ribs will be overriding said slot, and tensioning means secured to said clutch for operating said clutch aforesaid, said frame member having an attaching surface, a body having an attaching surface adapted to be positioned adjacent said frame attaching surface, and detachable securing means engaging both said attaching surfaces to detachably secure said body to said frame.

2,749,661
TOY FREIGHT CAR
Max Weissbrodt, Coburg, Germany, assignor to O. & M. Hausser, Coburg, Germany, a German firm
Application December 4, 1952, Serial No. 323,955
Claims priority, application Germany December 24, 1951
1 Claim. (Cl. 46—214)



A toy freight car comprising a chassis, a car body mounted on and removable from said chassis, means for securing said body against displacement, said car body comprising a bottom plate, side walls and joints connecting said bottom plate and side walls so that the side walls may be tilted, and means provided on said chassis and said body and being adapted to engage each other, upon tilting of a side wall, said means forming a hinge so that the body may be tipped towards the tilted side wall, said joints each comprising at least two hinge eyes fastened to the bottom plate and a side wall respectively, and a pivot passing through said eyes, the eyes having radial slots of a size corresponding at least to the diameter of the pivot, and the slots of the eyes being provided in the bottom plate and angularly staggered relatively to the slots of the eyes fastened to the wall.

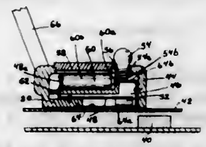
2,749,662
TOY WHEEL VEHICLE
Ray Bottleman, Fitchburg, Mass., assignor to Great American Plastics Company, Fitchburg, Mass., a corporation of Massachusetts
Application October 30, 1953, Serial No. 389,388
1 Claim. (Cl. 46—223)



A molded toy sport car comprising a unitary molded bottom half section, a unitary molded top half section having a plurality of depending reinforcing hollow pillars

adapted for engaging the said bottom section, a headed plug for each hollow pillar, said plug passing through the lower wall of the bottom half section and frictionally engaging the inner wall of an appropriate pillar, a front pair of upright spaced-apart axle confining abutments integrally molded to said bottom section, a rear pair of upright spaced-apart axle confining abutments integrally molded to said bottom section, a pair of leaf springs carried by the bottom section at the sides thereof, means securing intermediate areas of each spring to said bottom section and consisting of two rows of blocklike projections molded integrally with said bottom section and transversely slotted to receive said springs, a substantial front area and rear area of each spring being free and extending over the appropriate axle and exerting light pressure thereon, side walls of the bottom section having two pairs of vertical slots for receiving the axles and guiding the same independently of the said abutments.

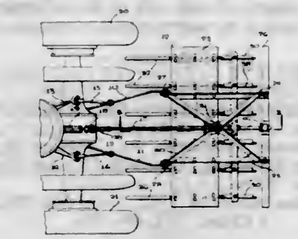
2,749,663
TOY MINE DETECTOR
Jerome H. Lemelson, Staten Island, N. Y.
Original application December 12, 1950, Serial No. 200,372. Divided and this application May 16, 1955, Serial No. 508,488
2 Claims. (Cl. 46—236)



1. A toy mine detector including a casing having a relatively thin, flat wall, a handle attached to said casing for moving said mine detector toy, a battery mounted in said casing, an electrical warning device external to said casing and operable by said battery, a switch having a movable switch-closing arm hidden from external view and in circuit with said battery and said electrical device, a magnet mounted within said casing and operatively connected to said arm, said magnet being adapted to move said arm to close said switch, said magnet being positioned adjacent to said wall of said casing, said casing completely enclosing the movable assembly of said arm and said magnet whereby there is no tell-tale evidence externally of said detector indicating the manner in which operation is initiated, said magnet being normally spaced from said wall and out of contact therewith, a simulated mine field including a surface over which said detection toy can be moved, and a body of paramagnetic material associated with said surface to attract said magnet when said wall is brought into juxtaposition with said surface.

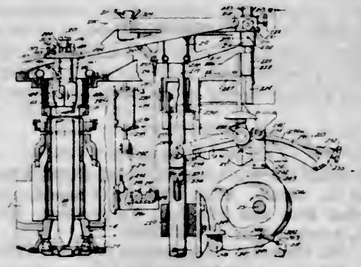
2,749,664
APPARATUS FOR EFFECTING THE FECUNDATION OF PLANTS
William S. Chepil, Manhattan, Kans.
Application September 4, 1953, Serial No. 378,594
6 Claims. (Cl. 47—1)

1. A machine for tripping blooms on growing plants comprising a frame adapted to be carried by an associated agricultural tractor, separator plates secured to and depending from said frame and disposed substantially in planes which are uniformly spaced apart and parallel to each other and perpendicular to the plane of said frame, each of said plates having a substantially vertically disposed rear edge, vanes hingedly connected at their front edges to the rear edges of said separator plates and extending rearwardly one from each separator plate, and power operated means mounted on said frame and drivingly connected to said vanes to impart to said vanes oscillating movements about the axes of the hinge con-



nections between said vanes and the corresponding separator plates.

2,749,665
MEANS FOR SUPPORTING AND OPERATING A GLASS FEEDER VERTICALLY RECIPROCABLE IMPLEMENT
Karl E. Peller, West Hartford, Conn., assignor to Emhart Manufacturing Company, a corporation of Delaware
Original application April 21, 1949, Serial No. 88,869, now Patent No. 2,654,184, dated October 6, 1953. Divided and this application December 24, 1951, Serial No. 263,075
2 Claims. (Cl. 49—55)



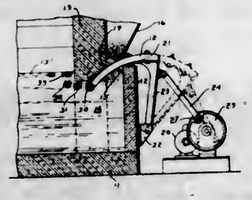
1. In glass feeding apparatus, a glass container having a discharge outlet in its bottom in position to be submerged by molten glass in the container, a vertical refractory implement depending in the glass in the container with its lower end in working relation to said outlet, supporting and operating means for the implement comprising a vertically movable arm carrying the implement, a rotating cam having an open peripheral cam track, a cam roll, and motion transmitting mechanism of a lever-and-linkage type positioning said cam roll on said peripheral cam track and operatively connecting the roll with the vertically movable implement-carrying arm, a vertical air cylinder mounted in a relatively fixed position adjacent to the vertically movable arm, said cylinder having an intake connection at its lower end for air under pressure and an air exhaust connection or vent at its upper end, a vertically reciprocable piston in said cylinder, said piston having a depending rod projecting below the cylinder, an idle sprocket mounted on the lower end of said rod to turn about a horizontal axis, a pair of horizontally spaced additional idle sprockets, each turnable about a horizontal axis, and each having a relatively fixed position located below the level of the idle sprocket on said rod and also below the level of said vertically movable arm, and a chain trained over the idle sprocket on said rod and then downwardly and underneath said additional idle sprockets and being attached at one end to a fixed support at a point located below the level of the idle sprocket on the rod and at its opposite end to said vertically movable arm, whereby a downward pull will be exerted from the piston rod through said chain to said vertically movable arm when air under pressure is supplied to the lower end of the cylinder and urges the piston therein upwardly in said cylinder, to main-

tain said cam roll continuously in steady contact with the peripheral cam track of the cam and aid each downward stroke under control of said cam of the refractory implement that is carried by said vertically movable arm.

2,749,666
METHOD OF FEEDING GLASS BATCH MATERIALS

Harold W. Baque, Pittsburgh, Pa., assignor to Corhart Refractories Company, Louisville, Ky., a corporation of Delaware

Application March 24, 1952, Serial No. 278,268
1 Claim. (Cl. 49—77)



The method of feeding glass batch materials into a pool of molten glass, which includes alternately accumulating charges of such materials on the surface of the pool and forcing such charges to a submerged position within the pool, progressively advancing each submerged charge a predetermined horizontal distance within the pool and positively maintaining each such submerged charge surrounded by molten glass and preventing it from rising to the pool surface during its advancement within the pool.

2,749,667
CASTING OF TITANIUM SLAG CONCENTRATE

Gerald G. Hatch, Sorel, Quebec, Canada, assignor to Quebec Iron and Titanium Corporation, Wilmington, Del., a corporation of Delaware

No Drawing. Application June 10, 1955, Serial No. 514,763
13 Claims. (Cl. 49—77.5)

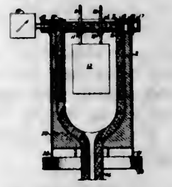
1. The method of casting a molten titanium slag concentrate obtained by thermal reduction of ilmenite and containing at least 60% titanium oxide calculated as TiO_2 and from about 2 to about 20% iron oxide calculated as Fe which comprises pouring the slag concentrate while in a fluid molten condition at an incandescent temperature of at least about 1500° C. into a mold of such size as to form a coherent mass of the slag concentrate weighting at least about one ton, cooling the at-least-one-ton mass of slag concentrate to a temperature at which it is completely solidified while maintaining at least a major portion of the surface of said mass out of contact with the ambient atmosphere, and maintaining the surface of the thus-solidified slag concentrate at a temperature not higher than about 300° C. for a period of time sufficient for the interior portions of the solidified slag concentrate to be cooled to a temperature at which the surfaces will remain at a temperature not higher than about 300° C. in the absence of externally applied cooling.

2,749,668
METHOD OF SEALING VACUUM-TIGHT ENVELOPES

Raymond Chaffotte and Pierre Nanchino, Paris, France, assignors to Compagnie Generale de Telegraphie Sans Fil, Paris, France

Application August 31, 1953, Serial No. 377,654
Claims priority, application France August 30, 1952
6 Claims. (Cl. 49—78)

3. Method of producing a vacuum tight seal between the parts of an evacuated envelope of an electron discharge tube, said parts being made of glass, at least one of said parts having an abutting edge coated with a layer of vitreous enamel which has a melting point at most equal to the respective melting points of said parts, said method comprising the steps of: assembling the parts of the envelope with the edges thereof to be sealed in contacting relationship with each other; simultaneously subjecting said edges to a thermal impulse at a peak temperature comprised between the melting point and the softening temperature of said vitreous material, for a time interval

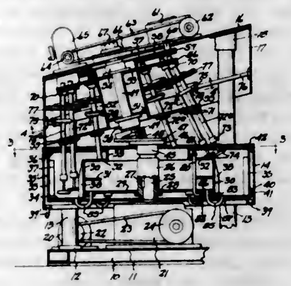


sufficient to render said vitreous material soft, and applying pressure to said edges in a direction to press them together thereby to impress said edges upon each other, and constitute a temporary vacuum tight seal; thereafter lowering said temperature to a value suitable for sealing said edges permanently by surface diffusion of the molecules thereof and for avoiding the deformation of said parts; and vacuum pumping and degassing said vacuum tight envelope.

2,749,669
FINISHING DEVICE

Murrel B. Sleeper, Sturgis, Mich., assignor to Mecha-Finish Corporation, Sturgis, Mich., a corporation of Michigan

Application March 12, 1953, Serial No. 341,862
13 Claims. (Cl. 51—7)



1. A surface finishing device comprising a rotatable container for abrasive fluid, a carrier rotatable above said container about an axis inclined relative to the axis of rotation of the container, a plurality of work holders inclined relative to the carrier axis and depending from said carrier into said container, and means for driving said carrier and container at different speeds.

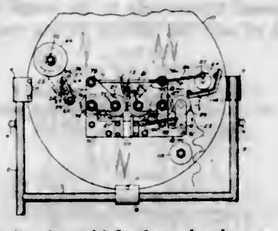
2,749,670
ABRASIVE FINISHING MACHINE

Arthur J. Lewis 3rd, New London, N. H., assignor to The Autoyre Company, Oakville, Conn., a corporation of Connecticut

Application March 31, 1953, Serial No. 345,839
19 Claims. (Cl. 51—62)

1. Mechanism for abrasively finishing the surface of a rod including a stationary support having an aperture adapted to receive a rod to be finished, a pair of abrasive tape actuating members movably mounted on the support and connected for simultaneous movement back and forth in opposite directions with respect to such rod, tape feed mechanism for continuously moving in the same direction, abrasive tape from a tape supply over one tape actuating

member, over the surface of the rod, and over the other of said members, a tape brake to retard the movement of tape over said one member, over the rod, and over

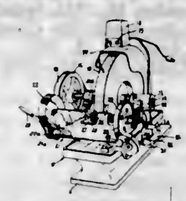


the other member by said feed mechanism and to tension a tape extending over such rod between said members, and power means for moving said members back and forth and for operating said feed mechanism.

2,749,671
EDGE GRINDING MACHINES

Oscar W. Dillon, Sturbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts

Application April 6, 1951, Serial No. 219,572
6 Claims. (Cl. 51—101)

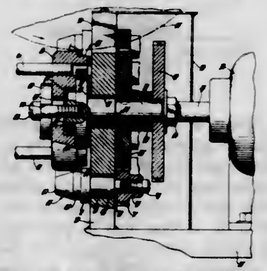


1. An edging machine adapted to accurately reproduce a desired shape on a lens comprising an axially rotatable abrading wheel, a rotatable work holder for supporting a lens in position to be edged by said abrading wheel, said work holder and abrading wheel being mounted on a support to permit one to move in a controlled path toward and away from the other, a pattern rotatable with said work holder, a contact positioned to be engaged by said pattern to control the relative spacing of the work holder to the abrading means, and means for imparting simultaneous rotary movement to said pattern and work holder embodying a motor of the type which will operate only on the application of alternating current and will immediately stop on the application of uni-directional current thereto, a circuit connecting said motor to a source of alternating current, a first electronic device in said circuit permitting current to flow therethrough in only one direction, a second electronic device connected to said circuit in parallel with said first electronic device and permitting current to flow therethrough only in the opposite direction, one of said electronic devices including a control portion whose electron potential may be varied to stop and start the flow of current through said electronic device, the electron potential of said control portion being obtained by a biasing network influenced by the making and breaking of engagement of the pattern with the contact, the electron potential of said control portion being such as to permit current to flow through said electronic device only when the pattern and contact are engaged whereby the motor will operate to rotate the work to a position presenting a fresh edge to be abraded, said rotation breaking the engagement of the pattern with the contact to change the potential on the control portion to a new value where the flow of electron current through said electronic device will stop whereby only current through one electronic device will flow to the motor which uni-directional current will function to immediately stop the motor and rotation of the work holder whereby the lens may be shaped to the accurate shape desired.

2,749,672
PROCESS AND APPARATUS FOR GRINDING PISTON AND OTHER RINGS

John M. Haldeman, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application April 10, 1951, Serial No. 220,167
21 Claims. (Cl. 51—103)

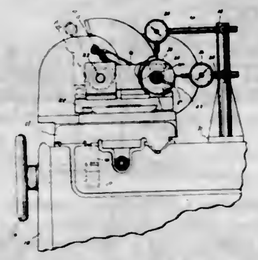


8. An apparatus for abrading split resilient rings which comprises ring contracting means, means engaging the said ring across the outer peripheral surface thereof for supporting said ring in the form established by said contracting means, means for rotating said supporting means for driving said ring in rotation about the axis of said ring by frictional engagement between the outer peripheral surfaces of said ring and said supporting means, and means rotatable on an axis at one side of said rotating means and in a plane parallel to said supporting means and intersecting said ring for abrading said surface of said ring while said ring is so rotated, contracted and supported.

2,749,673
GRINDING MACHINE SET-UP MEANS

Harold Edward Balsiger, Waynesboro, Pa., assignor to Landis Tool Company, Waynesboro, Pa.

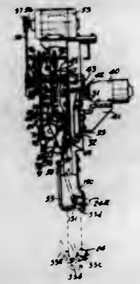
Application February 19, 1953, Serial No. 337,760
4 Claims. (Cl. 51—103)



1. In a grinding machine for grinding ringlike work pieces, a headstock having a spindle rotatably mounted therein, means on said spindle for driving a work piece, means for rotatably supporting a work piece in operative relation with said headstock comprising an arbor having an axis parallel with that of said headstock spindle and having peripherally spaced work engaging shoes thereon, means for adjusting the operative position of said arbor both vertically and horizontally, means for determining the extent of said adjustment relative to said headstock comprising means on said headstock having a peripheral surface of a given diameter concentric with the axis of said spindle, a ring removeably mounted on said arbor and having an outer diameter substantially identical with that of said peripheral surface, indicator means mounted to engage said peripheral surface in a

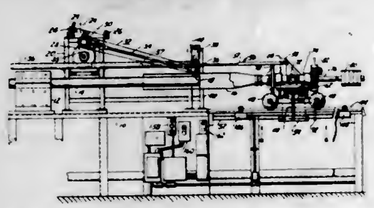
vertical plane and in a horizontal plane through the axis thereof as a reference surface whereby to indicate the position of said arbor relative to said spindle.

2,749,674
GRINDING MACHINE-WORK LOADER
Joseph W. Narel and Glover C. Joyce, Worcester, Mass., assignors to Norton Company, Worcester, Mass., a corporation of Massachusetts
Application November 8, 1954, Serial No. 467,306
15 Claims. (Cl. 51—105)



1. In a grinding machine having a longitudinally movable work loader unit, a transversely movable slide thereon, a work engaging hook pivotally mounted on said slide, a motor driven mechanism including an endless flexible driving member, operative connections between said member and slide to move the slide transversely, and adjustable connections between said operative connections and said hook simultaneously to swing said work engaging hook so as to move in a substantially U-shaped path to facilitate picking-up and depositing work pieces.

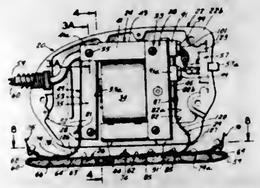
2,749,675
ABRASIVE GRINDING MACHINES
Wilbert W. Frank, Long Valley, and Cleaver C. Speer, Passaic, N. J., assignors to Curtiss-Wright Corporation, a corporation of Delaware
Application May 27, 1954, Serial No. 432,639
18 Claims. (Cl. 51—143)



4. In an abrasive belt grinding machine comprising a reciprocable work piece carriage adapted to hold a workpiece flexibly thereon, and a belt-carrying arm, said arm including pulleys and a belt running thereover the belt extending in the general direction of reciprocation of said carriage, one of said pulleys being adjustable in a path for engaging the belt running thereover with a work piece, and a support for the work piece lying on the opposite side of the work piece from said one pulley.

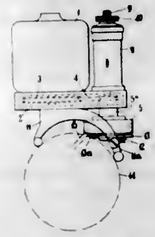
2,749,676
VIBRATORY TOOL
Nicholas Anton, Park Ridge, Ill.
Application November 25, 1953, Serial No. 394,334
10 Claims. (Cl. 51—170)

1. A vibratory tool comprising elongated plate means, an alternating electro-magnet including a core, and an armature pivotally mounted on said core for swinging movement toward and away from said core upon operation of said electro-magnet, and spring means supporting said plate means from said electro-magnet for movement by said armature upon said operation of said electro-magnet, said spring means comprising two elongated leaf springs disposed transversely to the length of said plate means, each of said leaf springs having one end portion



mounted on said plate means, one of said leaf springs having its other end portion mounted on said armature for movement therewith, and the other of said leaf springs having its other end portion mounted on said core, said other leaf spring having a double arcuate bend between said plate means and said core.

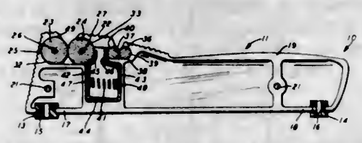
2,749,677
SHARPENER FOR PLANING MACHINE CUTTER-BLOCK BLADES
Donald Eric Burgess, New Southgate, London, England
Application November 18, 1952, Serial No. 321,196
Claims priority, application Great Britain November 22, 1951
1 Claim. (Cl. 51—173)



A portable device for grinding the straight edges of the cutter blades mounted upon the rotary cylindrical cutter block of a woodworking machine, said device comprising a frame adapted to rest upon the circumference of the cutter block and having two parallel, spaced-apart bars adapted to rest on the cutter block at opposite sides of a blade, whereby the frame is freely shiftable angularly about the circumference of the cutter block, a hinged connection between one of said bars and the frame to afford pivotal adjustment about an axis parallel with the bars to permit the device to be used upon cutter blocks of different diameters, a grinding wheel of the disc type having a radial operating face mounted upon the frame with said radial operating face disposed in a plane approximately tangential to the cutter block, an electric motor secured to the frame adjacent the grinding wheel and drivingly connected to the grinding wheel, a cylindrical support upon the frame, a shell slidable longitudinally within the cylindrical support, a shaft suspended by the shell and supporting the grinding wheel for rotation and projecting outwardly through the lower end of the cylindrical support, a screw affixed to the shell and projecting outwardly through the upper end of the cylindrical support, a nut threaded on the screw and abutting the upper end of the cylindrical support to afford micrometric adjustment of the operating face of the grinding wheel in a direction to and from a cutter blade, a slideway upon the frame, and a slidepiece mounted for slidable adjustment in the slideway, said slidepiece being disposed below and approximately parallel to the operating face of the grinding wheel and having one end engageable with the

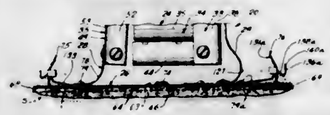
back edge of the blade in the cutter block for checking rotation of the frame around the cutter block in one direction whereby to hold the flat operating face of the grinding wheel in sharpening relation to the blade.

2,749,678
KNIFE SHARPENER
Charles R. Jahn, Chicago, Ill.
Application September 9, 1954, Serial No. 454,939
6 Claims. (Cl. 51—181)



1. A knife sharpener, comprising a body including a pair of half shells joined together, said body having one end portion formed into a handle, a pair of rubber-like feet mounted on said body adjacent its opposite ends for engaging a supporting surface, a pair of engageable generally cylindrical abrasive wheels, said half shells having generally cylindrically curved recesses receiving said wheels, said wheels having shafts extending therethrough, one of said half shells having a pair of apertures for supporting said shafts at one end thereof, at least one of said safts at one end thereof having a kerf formed therein for adjusting the angular positions of said wheels, and the other of said half shells having a pair of openings for supporting the opposite ends of said shafts, one of said apertures and one of said openings being elongated to provide for lateral movement of one of said wheels toward and away from the other of said wheels, a pair of engageable metallic honing balls, said half shells having spherically curved recesses receiving said balls, said body having a pair of notches formed therein for admitting a knife to the crotches between said wheels and said balls, said cylindrically curved and spherically curved recesses limiting spreading movement of said wheels and said balls to prevent a knife from passing fully therebetween, a generally U-shaped member having a first leg engaging one of said wheels and a second leg engaging one of said balls, and a helical compression spring disposed between said legs for biasing said one wheel and said one ball against said other wheel and said other ball.

2,749,679
SHOES FOR RUBBING DEVICES
Nicholas T. Anton, Park Ridge, Ill.
Original application November 25, 1953, Serial No. 394,334. Divided and this application August 16, 1954, Serial No. 450,021
9 Claims. (Cl. 51—189)



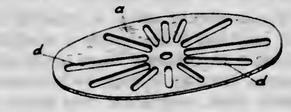
1. A clamp for use on a shoe for a sander, polisher or the like, comprising a clamping plate having a clamping edge, and a leaf spring having one end portion mounted on said plate, and another end portion adapted to be mounted on such a shoe for supporting said plate on the latter, said plate having an open position and an intermediate holding position wherein said edge projects in a general direction away from said other end portion of said leaf spring, said plate having a fully closed position wherein said edge projects in the general direction toward said other end portion, said spring being so engaged with said plate as to urge said plate toward said intermediate position when said plate is disposed in said open position, and to yieldingly retain said plate in said closed position when said plate is disposed in the latter position.

2,749,680
ABRADING TOOL
Zoltan O. St. Palley, Branford, Conn.
Application June 8, 1954, Serial No. 435,165
4 Claims. (Cl. 51—193)



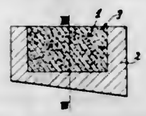
1. An abrading tool comprising, a spindle with a longitudinal slot; an abrading strip, having an end portion inserted into said slot, and the remaining portion rolled up upon said spindle, forming a roll the adjacent turns of which being and remaining slidable over each other, permitting the tightening of said roll; a drive-end co-axially attached to one end of said spindle; means for tightening said roll, consisting of a socket, rotatably and slidably mounted on said drive-end, and having a rim surrounding said roll adjacent to said socket, said rim being provided with internal thread, engaging said roll, and adapted to advance said roll into said cavity when said spindle and roll is rotated, in relation to said socket, in the same direction, as said spindle and roll rotate during the abrading operation.

2,749,681
GRINDING DISC
Fritz Reidenbach, Wenningsen on the Deister, Germany, assignor to A. Stephen u. Sohne, Hameln at the Weser, Germany
Application August 31, 1953, Serial No. 377,548
Claims priority, application Sweden December 31, 1952
8 Claims. (Cl. 51—195)



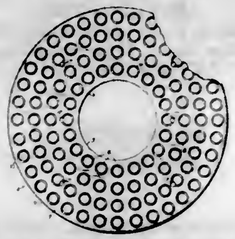
6. An abrasive disk comprising a thin supporting plate of steel coated with abrasive material and having sighting apertures extending through said disk said plate being beveled about said apertures.

2,749,682
ABRASIVE TOOL
Francesco Giorgio Patrito, Turin, Italy
Application August 23, 1954, Serial No. 451,326
2 Claims. (Cl. 51—204)



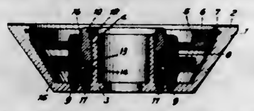
1. An encased abrasive tool comprising an abrasive stone and a casing enclosing the stone on all but its working surface, said casing being made of synthetic resin and a loading substance comprising abrasive material, whereby the resistance to abrasion and the tenacity of the casing are less than those of the encased stone.

2,749,683
LAPPING PLATE
George W. Soderman, Teaneck, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application October 5, 1954, Serial No. 460,351
5 Claims. (Cl. 51—209)



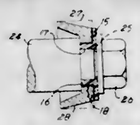
1. A lapping plate having a flat lapping surface with a plurality of deep non-intersecting annular grooves distributed uniformly thereover, the diameters of the grooves being small compared to the radius of the plate and said grooves being spaced apart to provide structural rigidity.

2,749,684
COMBINED GRINDING AND LAPPING DISC HAVING FLAT WORKING SURFACES
Julius August Georg Schuhmann, Schwabach, Germany, assignor to Joh. Urbanek & Co., Werk Nurnberg, Nurnberg, Germany
Application May 28, 1952, Serial No. 290,412
In Germany March 18, 1950
Public Law 619, August 23, 1954
Patent expires March 18, 1970
10 Claims. (Cl. 51—209)



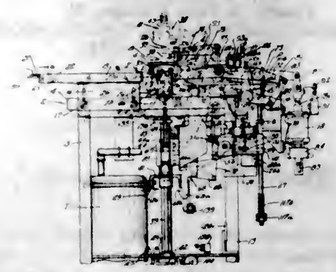
6. In a device of the class described, two concentric grinding rings for successive use in a grinding operation, the inner of the two rings being movable relatively to the outer ring, springs between said rings to normally hold the inner ring in a position with its face forward of the face of the outer ring, said inner ring being movable against spring pressure to a position with its face behind the face of the outer ring, and detent means to hold the inner ring in such position.

2,749,685
GRINDING WHEEL
George Baldwin, Dayton, Ky., assignor to The Cincinnati Milling Machine Co., Cincinnati, Ohio, a corporation of Ohio
Application June 30, 1955, Serial No. 519,282
7 Claims. (Cl. 51—209)



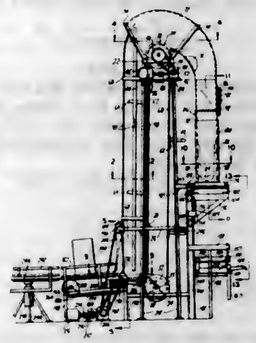
1. The process of producing a grinding wheel consisting in forming a ringlike abrasive blank having a basal face and a central bore, mounting a plastic bush within the bore having a basal flange overlying the basal face of the ring, securing the parts together, and shaping the abrasive portion of the wheel into frusto-conical form in concentric relation with the bushing and with its axis extending at right angles to the basal flange of said bushing.

2,749,686
VACUUM PACKAGING MACHINE
Edward H. Lorenz, Thomas Waugh, and Donald G. Merrill, West Hartford, Conn., assignors to Emhart Manufacturing Company, Hartford, Conn., a corporation of Delaware
Application September 26, 1951, Serial No. 248,412
17 Claims. (Cl. 53—22)



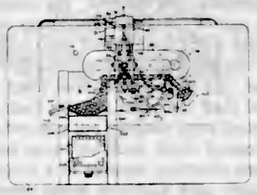
1. In a machine for evacuating air from a bag containing a product to be packaged therein and for sealing the mouth of said evacuated bag containing the product, the combination of a nozzle for removing air from said bag including an extension tongue retractable into the nozzle, means for spreading the edges of the mouth of the bag about the nozzle and tongue, clamping jaws having resilient portions for pressing portions of the bag mouth against the nozzle and the spreader means and for holding closed the remaining portions of the bag mouth, means for sealing closed a spread portion of said bag, means for moving said tongue from the bag portion to be sealed, means for holding said product spaced from said clamping jaws with the portion of the bag therebetween under tension, and means for relieving said tension following the evacuation of the bag and the movement of said tongue and immediately prior to sealing by said sealing means.

2,749,687
PACKAGING MACHINE
Joseph F. Imbs, Ladue, Mo.
Application May 14, 1953, Serial No. 355,109
14 Claims. (Cl. 53—59)



1. A packaging machine that can place a plurality of form-retaining articles in a single container at opposite sides of said container and that comprises a conveyor, a plurality of article-supporting platforms on said conveyor, a delivery chute for said conveyor that receives and delivers articles from said platforms of said conveyor, a discharge spout at the bottom of said chute, a deflector in said delivery chute that alternately directs articles to opposite sides of said discharge spout and thence into said opposite sides, and a movable delivery platform, said delivery platform being movable away from said discharge spout to permit a container to be telescoped over said discharge spout and being movable toward said discharge spout to hold said container telescoped over said discharge spout, said delivery platform being biased for movement toward said discharge spout, the bias on said delivery platform being adapted to resist the added weight of one of said articles but to be overcome by the added weight of a plurality of said articles, said conveyor being an endless belt elevator and being inclined to the vertical so articles carried on the said platforms thereof will be held against said belt and said platforms by gravitational forces, said conveyor having a guiding and confining frame to prevent accidental separation of articles on the said platforms of said conveyor from said platforms.

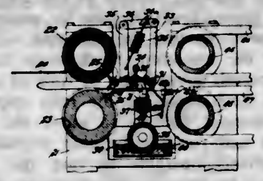
2,749,688
AUTOMATIC FILLING AND SEALING MACHINE FOR AMPULS OR OTHER SMALL CONTAINERS
Frank J. Cozzoli, Plainfield, N. J.
Application April 18, 1952, Serial No. 283,070
19 Claims. (Cl. 53—77)



1. In an ampul filling and sealing machine having ampul filling means at one station and ampul sealing means at another station a conveyor means operative to transport ampuls upstanding successively into filling relation with the filling means and thereafter into sealing relation with the sealing means comprising a chain mechanism having a series of closely spaced rollers carried thereby each two rollers forming between their peripheries an open sided ampul-receiving recess, a relatively stationary guide fence positioned opposite the recesses in the chain, said guide fence forming a third side to the ampul-receiving recesses effective to retain the ampuls in the recesses during their lateral movement incident to the operation of the conveyor, track means underlying the recesses in the conveyor on which the ampuls may stand during the filling and sealing thereof and during the movement thereof by the conveyor means stationed in the path of travel of the ampuls and beyond the filling and sealing means to displace the ampuls laterally from the recesses in upstanding position, and means for driving the conveyor intermittently whereby to bring the recesses successively to the filling station and to the sealing station with a dwell at each of said stations.

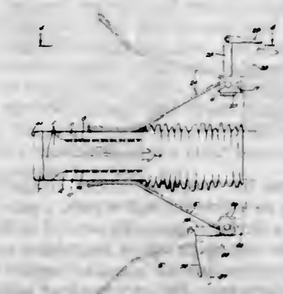
2,749,689
SEALING MACHINE
Joseph Frank Colley, Savannah, Ga., assignor to Union Bag & Paper Corporation, New York, N. Y., a corporation of New Jersey
Application July 1, 1953, Serial No. 365,483
14 Claims. (Cl. 53—124)

1. In a machine of the class described means for compressing and moving a filled envelope, pressure plates spaced to receive the compressed envelope therebetween as it moves from the compressing means, a pressure loaded deflector plate hingedly connected to the upper pressure plate and normally disposed at an angle thereto, said deflector plate applying pressure to the flap and face of the envelope, an applicator which applies liquid to the envelope for sealing the flap as the envelope passes between the pressure plate, a sealing plate adjacent the deflector plate comprising a vertical surface which maintains the flap in a downward position, a curved corner which starts the gradual sealing action and a horizontal surface angled upwardly which tightens the sealing as the



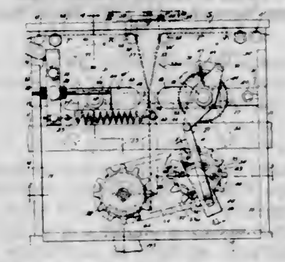
envelope passes over it, and means for pressing and moving the sealed envelope, said compressing means being spaced from the said pressing means so that the compressing means does not release the envelope until the pressing means has received it.

2,749,690
ATTACHMENT FOR MATTRESS-FILLING MACHINES
Alvah Q. Bridges and Joseph P. Bartiz, Jr., Los Angeles, Calif., assignors to C. B. Van Vorst Co., Los Angeles, Calif., a corporation of California
Application April 18, 1955, Serial No. 501,802
5 Claims. (Cl. 53—125)



1. In combination with a mattress-filling machine wherein there is a spout over which may be applied the ticking to be filled, means for advancing the filling through the spout into the ticking, a plurality of resilient fingers having their free ends unconnected and independently engageable with the ticking applied over the spout intermediate the side edges of the top and bottom panels of the ticking, and means for swinging said fingers into and out of engagement with the ticking.

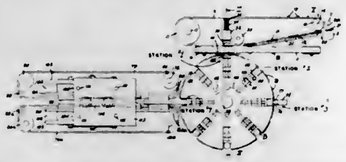
2,749,691
COMMODITY PACKAGING MACHINE
Harold P. Lewis, Newtown, Pa., assignor to Pak-Rapid Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application December 4, 1950, Serial No. 199,047
1 Claim. (Cl. 53—180)



In a package forming and sealing machine for heat sealing strips of packaging material, said machine having

rotary sealing rolls, each roll having axially spaced circular members for forming edge seals and a plurality of axially extending members for forming cross seals, the improvement comprising: a mounting mechanism for each roll disposed relative to one another to mount the rolls in spaced-apart relation for accommodating the feeding strips of material therebetween; adjustable means for shifting the mounting mechanisms relative to one another to permit substitution of rolls of different diameters; drive mechanism for the rolls imparting a step-by-step movement thereto to move the cross sealing members to seal forming position including adjustable means selectively operable to vary the extent of the steps in accordance with the minimum circumferential distance between the cross sealing members on the rolls being used; and means for operating the drive mechanism to provide an appreciable dwell at each cross sealing position.

2,749,692
ARTICLE-PACKAGING APPARATUS
John D. Conti, Elkins Park, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Original application October 16, 1951, Serial No. 251,511. Divided and this application November 8, 1951, Serial No. 255,485
6 Claims. (Cl. 53—234)



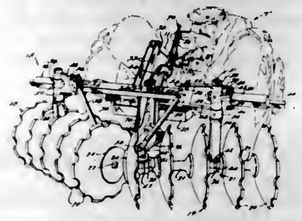
1. Apparatus for wrapping articles comprising means for conveying an article through a path, a pair of rods reciprocable in a direction generally parallel to the direction of travel of the conveying means for folding end portions of a wrapper surrounding the lateral surfaces of the article, means for reciprocating the rods, each of said rods having a lateral extension projecting toward that of the other and having a recess adapted to fit over an end corner of the article whereby to simultaneously fold an end portion of the wrapper against the end of the article and to transfer the article to the conveying means during the forward stroke of the reciprocation of the rods, said portions extending endwise from the article and transversely of the path, guide means along the path beyond the folding means having portions extending partially over the ends of the article for reducing the tendency of the folded ends to re-open, and means along the guide means for heating and pressing the folded ends to seal them.

2,749,693
LAWN TOOL
Victor L. Harsh, Canton, Ohio
Application November 12, 1952, Serial No. 319,863
2 Claims. (Cl. 55—24)



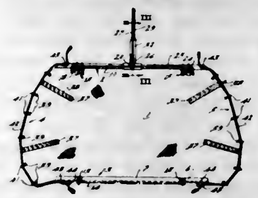
1. A portable hand cultivating tool comprising a generally U-shape frame, a handle connected to the frame, a rotary pulverizing member journalled in the frame, said rotary member having a plurality of radial blades coextensive therewith, the teeth on each blade being alternately bent on opposite sides of the plane of the blade, and a latch plate pivotally mounted upon the handle at the junction of the handle with the frame and adapted to be rotated into engagement with one of the blades for locking the rotary member against rotation.

2,749,694
REVERSIBLE HEAVY DUTY DISC HARROW
Herman G. Klemm, Birmingham, and Guy F. Gardner, Dearborn, Mich., assignors to Harry Ferguson, Inc., Detroit, Mich., a corporation of Delaware
Application January 2, 1952, Serial No. 264,402
6 Claims. (Cl. 55—81)



3. In a reversible disc harrow, the combination of a main frame, a pair of reversible disc gangs each adjustable laterally of said main frame and also adjustable angularly about an upright axis offset rearwardly from the common rotational axis of the individual discs in a gang, an angling control shaft journaled on said main frame, a pair of angling control arms slidably but non-rotatably fixed to said angling control shaft, each said arm being angularly advanced in one direction relative to a given diameter of said control shaft, each said arm being reversible relative to said control shaft so as to be advanced in the opposite direction relative to said given diameter, and a mechanical connection between the free end of each said arm and a corresponding one of said discs.

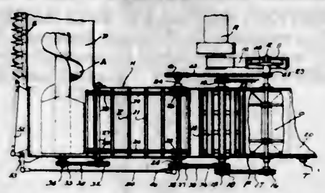
2,749,695
PICKUP CLOTH FOR LAWN DEBRIS
Revere G. Hoopingarner, Royal Oak, Mich.
Application June 19, 1953, Serial No. 362,913
16 Claims. (Cl. 56—1)



1. In a pickup cloth for lawn debris, means for rigidifying a front edge of the cloth to facilitate movement of debris thereover, means rigidifying a back edge of the cloth, a manual handle connected to the back edge of the cloth for manipulation, means for holding the back and front edges of the cloth together to form a pouch for the debris to be carried by said handle, and means for readily disengaging the front edge from the back edge when desired to perform a dumping operation.

2,749,696
HEADER AND FEEDER CONTROL FOR COMBINES
Willard J. Innes, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a corporation of Wisconsin
Application April 17, 1952, Serial No. 282,871
3 Claims. (Cl. 56—21)

1. In an implement having a main shaft, a cylinder, a feed rake having an upper and a lower shaft, an auger and a cutting means, in combination, a pulley fixed to said main shaft to be driven by a source of power, positive drive means from said main shaft to said cylinder, a clutch member associated with said pulley and drivingly engaging the latter at a definite rate of rotation of said cylinder, drive means from said clutch member to said



upper shaft, drive means from said lower shaft to said auger, a sprocket having a crank member and freely journaled on said upper shaft for independent rotation thereon, drive means from said cylinder to said crank member and a connecting member from said crank member to said cutting means to oscillate the latter.

2,749,697
PECAN PICKER
Lee Roy Poché, Port Arthur, Tex.
Application October 24, 1955, Serial No. 542,221
4 Claims. (Cl. 56—328)



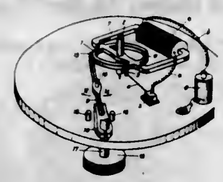
1. A pecan picker comprising a basket-like structure consisting of a helical coil of wire folded upon itself at a point substantially equally distant from its ends so that the end portions thereof are arranged side by side, the juxtaposed edge portions comprising one side of the coil being arranged in a substantially straight line and the opposite side of the coil being curved outwardly from the middle toward the ends thereof, the several loops comprising the coil being spaced closely together adjacent the juxtaposed edge portions comprising one side of the coil and being spaced apart adjacent their opposite sides, and an elongated handle connected at one end to the basket-like structure.

2,749,698
RING TRAVELER
Gustav Stähli, Winterthur, Switzerland, assignor to Actiengesellschaft Joh. Jacob Pieter & Cie., Winterthur, Switzerland, a corporation of Switzerland
Application April 29, 1952, Serial No. 284,873
Claims priority, application Switzerland May 29, 1951
9 Claims. (Cl. 57—125)



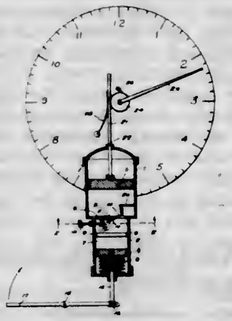
1. A ring traveler having two hook-shaped leg portions bent toward each other and an elastically deformable portion interconnecting said hook-shaped leg portions to afford springing apart of said leg portions when mounting the traveler on a ring, said leg portions being made of a thermosetting synthetic resin containing a filling substance increasing slidableness.

2,749,699
ELECTRIC CLOCK STARTER
Jean Georges Laviolette, Besançon, France, assignor to Lip S. A. d'Horlogerie, Besançon, France
Application June 8, 1953, Serial No. 359,985
Claims priority, application France June 7, 1952
1 Claim. (Cl. 58—28)



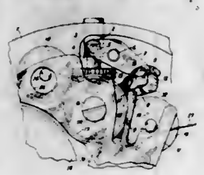
In an electric time-piece, the combination of a balance-wheel, an electro-magnet controlling the movements of said balance-wheel, a circuit feeding said electro-magnet and including a contact member, a first stud means on the balance-wheel adapted to engage periodically said contact member and to transiently close the said circuit over the electro-magnet, a second stud means on said wheel, a lever pivotally secured at a stationary point and adapted to be freely brought, when desired, into and out of the path of said second stud means to form a stop for the latter, said first and second stud means being so disposed relative to each other that said second stud means cooperates with said lever when said first stud means is remote from said contact member and said balance-wheel is remote from its rest position, and a time-setting knob on the outside of the time-piece, said lever being frictionally mounted on the axis of said knob in order to be shifted by the rotative movement of the latter between its operative and inoperative position.

2,749,700
HYDRAULIC CLOCK
Hans Seligman, Groton, N. Y.
Application November 4, 1953, Serial No. 390,221
3 Claims. (Cl. 58—42)



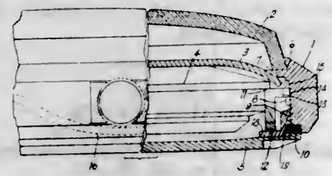
1. A clock having an indicating hand, comprising two adjacent cylinders and a communicating wall therebetween, means providing an adjustable timing orifice in said wall, a fluid-tight slidable piston in each of said cylinders, a fluid in the space between the pistons, a compression spring having one of its ends resting on a stationary abutment and its other end bearing against one of the pistons at the side opposite the orifice, spring energizing means including a rod connected to said last-mentioned piston for moving said piston to compress said spring, a rod attached to the other of said pistons, and a one-way driving means for driving said clock hand from the last-mentioned rod.

2,749,701
WINDING AND HAND-SETTING MECHANISM FOR TIMEPIECES
Heinrich Stamm, Grenchen, Switzerland, assignor to ETA Limited, Blanks Factory, Grenchen, Switzerland, a Swiss joint-stock company
Application May 6, 1952, Serial No. 286,244
Claims priority, application Switzerland May 10, 1951
3 Claims. (Cl. 58—71)



1. In a winding and hand-setting mechanism for timepieces the combination with a minute wheel, a minute setting wheel, a spring-actuated rocking bar and a lever for rocking said bar to assume the hand-setting position and operatively connecting said two wheels, of a member on said lever arranged to actuate said bar and to positively guide same during the beginning of the disengagement of said wheels.

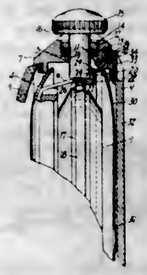
2,749,702
CUSHIONED MOVEMENT MOUNTING WATCH
Edgar K. Schwalbold, Ludington, Mich., assignor to Star Watch Case Co., Ludington, Mich.
Application July 8, 1954, Serial No. 442,004
4 Claims. (Cl. 58—88)



4. A watch comprising, a bezel having a crystal in the front thereof and a radially inwardly projecting portion behind the crystal, said bezel being recessed behind said projecting portion and threaded at the back of the bezel, a movement positioned in said bezel and spaced radially therefrom and supported against the rear of said projecting portion, said movement having a rearwardly facing shoulder, an annular movement supporting ring seated against said shoulder, said ring having angularly spaced rearwardly bowed portions formed therein and separated by lands at the front of the ring, radially outwardly projecting ears on said lands bearing against the side of the recess in said bezel, and a back adjustably engaged with said bezel and supportedly engaging the bowed portions of said ring.

2,749,703
SEALED CALENDAR WATCH
Edgar K. Schwalbold, Ludington, Mich., assignor to Star Watch Case Company, Ludington, Mich.
Application April 26, 1954, Serial No. 425,502
3 Claims. (Cl. 58—90)

1. A sealed calendar watch comprising, a movement having a stem adapted to adjust the date indicating portion of the movement by reciprocation of the stem, a bezel receiving said movement and having a crystal sealed in its front side, said bezel having a radial bore formed therein passing said stem, a stem sealing gasket retained around said stem, a movement ring seated against said movement, a springable ring retained within said movement ring, said stem having a radially inwardly facing shoulder thereon seated against the radially outer side of said springable



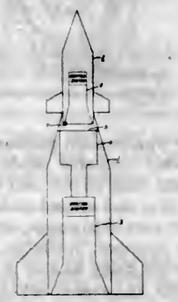
ring, and means retaining said movement and said movement ring in said bezel and sealing the back of said bezel.

2,749,704
ELECTRIC CLOCK TIME INDICATING DEVICE
Pentti Heikkila, New York, N. Y.
Application October 30, 1953, Serial No. 389,214
1 Claim. (Cl. 58—126)



In an electric clock including second, minute and hour gears, a circular ring of substantially U-shaped cross section, one leg of said U-shaped ring comprising a first stationary ring having a transparent disc secured thereto, the other legs of said U-shaped ring comprising a second stationary ring having a transparent disc carrying a dial secured thereto, a first rotatable ring having a transparent disc carrying a seconds indicator secured thereto, a second rotatable ring having a transparent disc carrying a minutes indicator secured thereto, a third rotatable ring having a transparent disc carrying an hours indicator secured thereto, said first and second and third rotatable rings being disposed respectively within said U-shaped ring between said first and second stationary rings, bearing means permitting independent movement of said first and said second and said third rotatable rings relative to each other and relative to said first and second stationary rings, said bearing means comprising a circular groove in each facing surface of said first stationary ring and said first rotatable ring aligned with each other and forming first circular bearing surfaces adapted to receive a plurality of ball elements therein, a circular groove in each facing surface of said first rotatable ring and said second rotatable ring aligned with each other and spaced radially inwardly from the periphery of each said ring and said first bearing surfaces and forming second circular bearing surfaces adapted to receive a plurality of ball elements therein, a circular groove in each facing surface of said second rotatable ring and said third rotatable ring forming third circular bearing surfaces in radial alignment with said first bearing surfaces and adapted to receive a plurality of ball elements therein, a circular groove in each facing surface of said third rotatable ring and said second stationary ring forming fourth circular bearing surfaces in radial alignment with said second bearing surfaces adapted to receive a plurality of ball elements therein, whereby each rotatable ring is supported at each side by a groove at each side, the groove on one side being spaced radially from the groove on the other side, the periphery of each said rotatable ring being provided with independent drive means.

2,749,705
FUSIBLE LINK JET MOTOR CONTROL
Robert P. Haviland, Scotia, N. Y., assignor to General Electric Company, a corporation of New York
Application January 3, 1951, Serial No. 204,101
4 Claims. (Cl. 60—35.6)



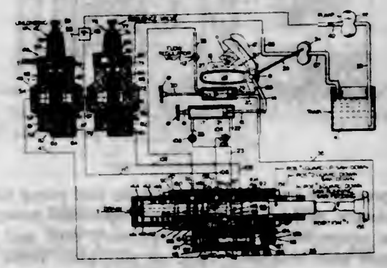
1. In a multi-stage, jet-propelled system having at least a first and second stage, an electrical control system for said first stage, said electrical control system having a circuit which must be closed in order for said first stage to operate, and means for stopping the operation of the first stage immediately upon the initiation of the second stage operation comprising heat-fusible element means disposed downstream from the second stage motor for interrupting the electrical circuit of the first control system.

2,749,706
MECHANISM FOR COOLING A COMBUSTION CHAMBER IN PROPULSION APPARATUS AND FOR FEEDING COMBUSTION LIQUIDS THERETO
Robert H. Goddard, deceased, late of Annapolis, Md., by Esther C. Goddard, executrix, Worcester, Mass., assignor of one-half to The Daniel and Florence Guggenheim Foundation, New York, N. Y., a corporation of New York
Application October 29, 1953, Serial No. 389,013
2 Claims. (Cl. 60—35.6)



1. In propulsion apparatus having a combustion chamber with a side wall, a closed end and an open discharge nozzle remote from said closed end, in combination, an inwardly-projecting end wall for said closed end, inner and outer casing members axially outside of said end wall and defining a jacket space and a spray-cooled space, means to deliver a liquid oxidizer to said jacket space, means to spray said liquid oxidizer into said spray-cooled space, spray means located in said closed end wall and effective to spray said oxidizer from said spray-cooled space radially outwardly and towards that portion of the combustion chamber side wall which is adjacent the closed end of said combustion chamber, and means to provide a cooling film of liquid fuel within said combustion chamber and adjacent that portion of said side wall thereof.

2,749,707
HYDRAULIC MOTOR CIRCUIT FOR CUT-OFF DEVICE OR THE LIKE
Joseph J. Slomer, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application April 22, 1952, Serial No. 283,529
6 Claims. (Cl. 60—52)

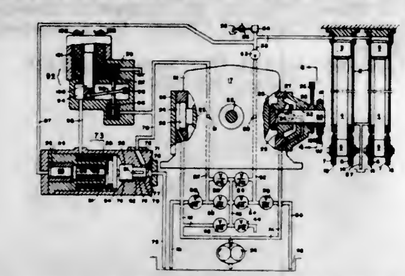


1. In a control system for fluid operated devices including a pump for supplying fluid under pressure, a first operable fluid motor, a second fluid motor which is operable after said first motor, a third fluid motor arranged to advance or retract said second fluid motor, a control valve connected in a fluid circuit to the output of said pump and in circuit with said motors to cause said first motor to operate to a first position in a first position of said control valve and to cause said first motor to move to a second position in a second position of said control valve, said control valve in the second position thereof causing said second motor to remain in its initial position, a fluid circuit including said control valve and said motors for maintaining the back pressure on said pump at a minimum, an unloading valve connected between said control valve and the output of said pump and movable to an unloading position during operation of said control valve to first and second positions so as to maintain the back pressure on said pump at a minimum, additional valve means operable upon movement of said control valve to a third position to supply fluid under pump pressure to said second fluid motor, and a fluid circuit operable upon movement of said control valve to a third position to cause said unloading valve to move to loading position to provide maximum differential pressure across said third motor, and a further fluid circuit for causing said additional valve means to be operable during the third position of said control valve to connect the output of said pump to said second motor.

2,749,708
HYDRAULIC DRIVE FOR ELEVATORS AND THE LIKE
James K. Douglas, Shorewood, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a corporation of Wisconsin
Application March 14, 1955, Serial No. 494,195
11 Claims. (Cl. 60—52)

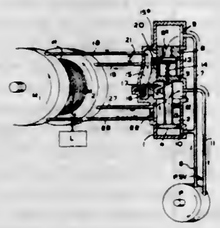
1. A hydraulic drive for moving in one direction a load which is urged in the opposite direction by an independent force, said drive comprising hydraulic motor means connected to said load, a valve casing having an inlet and an exhaust outlet, a resistance valve arranged in said casing and controlling communication between said inlet and said outlet, spring means urging said valve toward closed position to enable it to offer a low resistance to flow of liquid from said inlet to said outlet, a reversible pump having a high pressure port connected to said motor means and a low pressure port connected to said in-

let, an electric motor connected to said pump to drive the same, a control carried by said pump and adjustable either to cause said pump to deliver liquid to said motor means and thereby enable it to move said load in said one direction or to cause said pump to discharge liquid through said resistance valve and permit said load to drive said motor means and cause it to deliver liquid to said



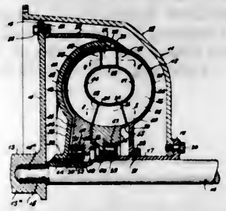
high pressure port and thereby enable said pump to drive said electric motor and cause it to regenerate power, and means connected to said high pressure port and exerting upon said resistance valve an additional force to increase the resistance thereof in response to the pressure created by said motor means exceeding a predetermined value.

2,749,709
DUAL MOTOR HYDRAULIC DRIVE AND CONTROL VALVE THEREFOR
Rasmús Vestre, Oslo, Norway, assignor to Hydraulik A/S, Brattvag, Norway
Original application January 8, 1947, Serial No. 720,885, now Patent No. 2,618,291, dated November 18, 1952. Divided and this application October 10, 1952, Serial No. 314,120
Claims priority, application Norway May 2, 1946
4 Claims. Cl. 60—53)



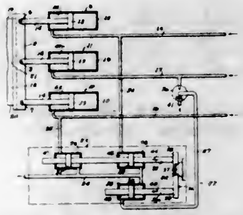
1. In an apparatus having a shaft, first and second hydraulic motors, both bidirectionally couped to said shaft, a first supply conduit for leading liquid to the first motor, a second supply conduit for leading liquid to the second motor, return conduits from said motors, and liquid control means to control the supply of liquid, said liquid control means comprising a housing provided with a valve chamber and having a first admission port for the admission of fluid from a pressure fluid source, two main delivery ports connected to said first and second supply conduits, all of said ports opening into the valve chamber, a valve member within the valve chamber, said valve member being adjustable to one position in which liquid is fed to the first supply conduit and to another position in which liquid is fed to both said supply conduits simultaneously, a duct between said supply conduits, and a one-way relief valve means normally closing said duct whereby, when the said first supply conduit alone is fed with liquid by said liquid control means, the relief valve means opens when the pressure exceeds a predetermined value to admit liquid from the said first supply conduit to the second supply conduit to drive both motors during periods of overload.

2,749,710
DUAL-TURBINE TORQUE CONVERTER
Robert C. Russell, South Euclid, Ohio, assignor to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application October 12, 1953, Serial No. 385,574
5 Claims. (Cl. 60—54)



1. In a power transmission mechanism; a group of cooperating relatively rotatable bladed annular members defining a toroidal fluid circuit and consisting only of a pump member, first and second turbine members and a reaction member; rotatable power input means connected with said pump member; rotatable output means; said first turbine member being located in said circuit between said pump member and said second turbine member, and said reaction member being located in said circuit between said second turbine member and said pump member; means establishing a direct-drive connection between said first turbine member and said output means; and connecting means connecting said second turbine member with said output means comprising clutch means effective to transmit torque in a forward driving direction to said output means.

2,749,711
HYDRAULIC PRESSURE-PROPORTIONING MEANS
Walter G. Wheeler, Los Angeles, and David C. Kramer, Redondo Beach, Calif., assignors to Richard Seifried, Playa Del Rey, Calif.
Application December 14, 1953, Serial No. 398,018
6 Claims. (Cl. 60—97)

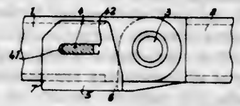


1. Hydraulic pressure-proportioning means comprising at least three hydraulic units, a separate conduit to conduct pressure fluid to each said unit, a pressure-settable pressure relief valve connected to one of said conduits to relieve the pressure therein, and means interconnecting the other two conduits and said relief valve to convert the sum of the pressures in said two conduits to a pressure on the relief valve to change the pressure-relieving setting thereof.

2,749,712
MINE SUPPORTING STRUCTURE FOR WORKING MINES
Karl Gerlach, Moers, Rhineland, Germany
Application November 21, 1950, Serial No. 196,758
Claims priority, application Germany November 25, 1949
5 Claims. (Cl. 61—45)

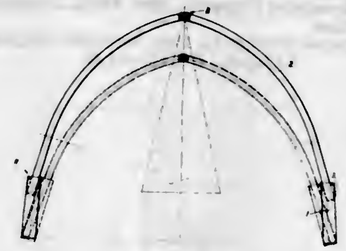
1. Mine supporting structure for working mines comprising a plurality of girders having interengaging ends, each girder having a bifurcated end presenting a pair of cheeks having aligned transverse apertures and a tongued

end presenting a tongue having a transverse aperture and a downwardly extending front surface and having a thickness less than the space between the cheeks of an adjacent bifurcated girder end and being received therebetween to form a joint therewith, said joint including a thrust bearing presenting a surface proximate the bottom



portion of said bifurcated end transversely of said cheeks for abutment with said front surface of said tongue, a transverse pivot member movable through said apertures in said cheeks and said tongue transversely with respect to the girder ends forming said joint and wedge means for moving said front surface of said tongue and said abutment into supporting engagement.

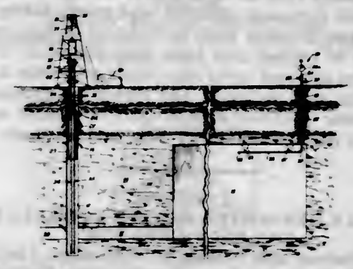
2,749,713
SUPPORTING FRAMES
Friedrich-Wilhelm Paurat, Duisburg, Germany
Application April 29, 1952, Serial No. 284,958
Claims priority, application Germany August 2, 1951
7 Claims. (Cl. 61—45)



1. An arched roof supporting structure for mines and other underground workings comprising two similarly curved beam members, a hollow base member receiving the lower end of one of said beam members, a brake shoe pivotally mounted to and inside of said base member and having a brake surface frictionally engaging one side of the beam member received in the base member, said base member having two opposite substantially vertical interior walls, and the lower ends of said beam members extending into said base members at an angle to said walls and being rounded, one of said walls being tangentially slidably and frictionally engaged by the rounded lower end of one of said beam members, and a wedging member made of a yielding material and placed inside of said base member and frictionally engaging the side of said beam member which side is opposite the side engaged by said brake shoe.

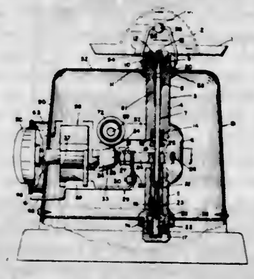
2,749,714
UNDERGROUND STORAGE SYSTEM
Loy R. Hunter, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application January 12, 1953, Serial No. 330,856
11 Claims. (Cl. 62—1)

11. In an underground storage system, in combination, an underground storage cavern, a shaft extending from the surface of the earth to a region adjacent said cavern, a tunnel connecting said shaft with the bottom region of said cavern, a liner anchored in said shaft, the upper end of said liner extending slightly above the top of said cavern, the region of said shaft above said liner being in unobstructed communication with the atmosphere, sealing means across said liner at a region slightly above the top of said cavern, and a casing extending from the surface of the earth through said shaft and said sealing means to



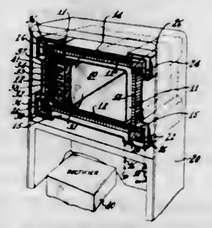
a position adjacent the level of the bottom region of said cavern so that fluid can be withdrawn from the cavern through said casing.

2,749,715
DRINKING GLASS CHILLER
Reuben S. Tice, Monterey, Calif.
Application June 23, 1955, Serial No. 517,466
9 Claims. (Cl. 62—1)



1. A device for chilling drinking glasses comprising: a body enclosing a pressure chamber for liquid CO_2 under pressure, a discharge aperture in one of the walls of said chamber, a platform around said aperture having a portion thereof engageable with the rim of a drinking glass, a valve for said aperture movable from a closed to an open position and vice versa, valve actuating means connected with said valve actuable for intermittently moving said valve from said closed to said open position and vice versa and for holding said valve in said open position for uniform periods of time, and means for so actuating said valve actuating means.

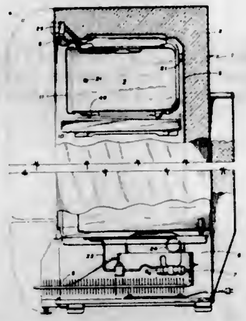
2,749,716
REFRIGERATION
Nils E. Lindenblad, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application November 19, 1954, Serial No. 469,967
6 Claims. (Cl. 62—1)



1. A refrigerator including thermocouple panels having cold junctions and hot junctions on opposite surfaces thereof, said panels being disposed to form the walls of an enclosure, a storage chamber disposed within said

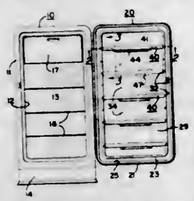
walls, said panels having their cold junctions disposed in heat exchange relationship with said storage chamber to absorb heat from said chamber, said panels having their hot junctions disposed upon the external surfaces of said enclosure to release heat from said enclosure, a fluid-tight casing disposed about said panels to provide a space surrounding said enclosure, and means for circulating a heat transfer fluid within said space to absorb and to carry said released heat away from said enclosure.

2,749,717
FLEXIBLE DEFROSTER-HEATER INSTALLATION FOR REFRIGERATOR
Dan B. Duncan and William R. Mittendorf, Cincinnati, Ohio, assignors to Avco Manufacturing Corporation, Cincinnati, Ohio, a corporation of Delaware
Application October 15, 1952, Serial No. 314,836
6 Claims. (Cl. 62—3)



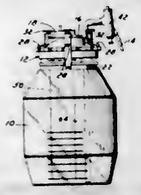
1. In combination in a refrigerator, a sheet metal evaporator having refrigerant tubing projecting from its exterior surfaces and including a transverse horizontal lower wall, a transverse horizontal insulating baffle disposed beneath the lower wall of said evaporator, a metallic sheathed flexible defroster-heater, resilient means for clamping said heater adjacent the tubing of said evaporator, horizontally extending bridge members secured to the lower wall of said evaporator parallel to said baffle, portions of said defroster-heater being supported by said bridge members in intimate heat transfer relationship with said baffle, an electrical circuit including time clock control means, and a source of energy for periodically energizing said heater through the time clock.

2,749,718
REFRIGERATOR HAVING ADJUSTABLE DOOR SHELVES
Orson V. Saunders, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 6, 1954, Serial No. 460,622
2 Claims. (Cl. 62—89)



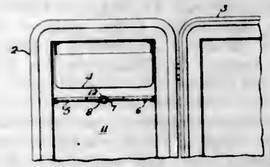
1. In a refrigerator cabinet of the type including a food storage chamber therein having a front access opening, a door pivotally supported on said cabinet for horizontal swinging movement relative thereto normally closing the chamber access opening and a refrigerating system associated with said cabinet including a refrigerant evaporator for cooling air in said chamber, said door including a one-piece molded plastic panel forming the inner face thereof, said panel having a depression therein providing a recess in the inner face of said door, said recess providing a food storage space in said door complemental to the storage chamber in said cabinet, the improvement comprising; forming a plurality of sets of shelf mounting means integrally on said door panel from the material thereof at different elevations along the depression therein, supporting a shelf in detachable interlocked relationship on a selected set of said mounting means within the recess of said door whereby articles placed on the shelf are exposed to and refrigerated by the air in said chamber cooled by said evaporator, said shelf being removable from said selected set of mounting means and shiftable relative thereto vertically along said door into supported engagement with another set of said shelf mounting means to change the height of the shelf on said door, and said sets of shelf mounting means being so constructed and arranged as to prevent a shelf supported thereon from moving horizontally relative to said door during opening and closing swinging movements thereof.

2,749,719
PORTABLE BEVERAGE CONDITIONING AND DISPENSING APPARATUS
Lloyd G. Copeman, Metamora, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a corporation of Michigan
Application October 17, 1952, Serial No. 315,249
8 Claims. (Cl. 62—91.5)



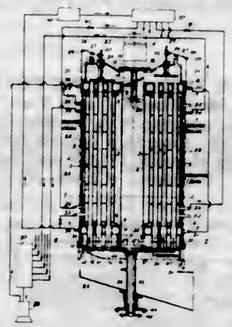
1. A dispensing, conditioning and cooling unit for beer and the like comprising a main container, a covering therefor, an inner container for a sublimating coolant, and unidirectional passages at the top of said coolant container for introducing gas from said inner container to the top of the main chamber formed by a cylindrical portion of said inner container apertured in an area between two narrowly spaced planes, and an elastic band overlying said apertures on said cylindrical portion.

2,749,720
DUAL PURPOSE LAMP FOR REFRIGERATOR
Si J. Williams, Jr., Evansville, Ind., assignor, by mesne assignments, to Whirlpool-Seeger Corporation, a corporation of Delaware
Application December 29, 1952, Serial No. 328,448
2 Claims. (Cl. 62—103)



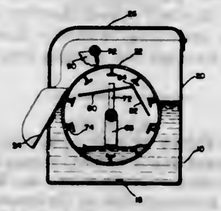
1. In a refrigerator having an evaporator, a drip tray positioned below said evaporator so that any frost melted from said evaporator drips into said drip tray, said drip tray formed to have inclined surfaces and a drain hole at the lowest point thereof so that any water dripping into said drip tray is caused to flow to said drain hole for disposal thereof, said drip tray further formed of a material having a good thermal conductivity and formed to have an upwardly projecting depression in the under-side thereof, an electric lamp socket and conductor means connected thereto disposed partially within one portion of said depression in good thermal contact with said drip tray, an electric lamp positioned within said socket and disposed in another portion of said depression in good thermal contact with said drip tray, retaining means for retaining said lamp and said socket in good thermal contact with said drip tray, whereby said electric lamp and socket are used to illuminate the interior of said refrigerator and to heat said drip tray when any frost is melted from said evaporator to prevent the formation of ice upon said drip tray.

2,749,721
ICE MACHINE
Georges Trépaud, Paris, France
Application May 13, 1952, Serial No. 287,483
Claims priority, application Netherlands May 23, 1951
5 Claims. (Cl. 62—106)



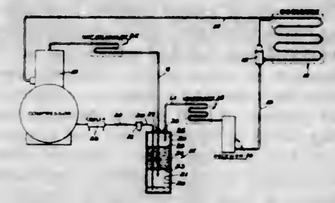
1. Tubular vertical ice-machine, including several identical groups of freezing pipes, an insulating casing arranged round each group, a cold producing source, a heat producing source, means to connect said sources with each of said casings, an upper compartment and a lower compartment into which open respectively the two ends of the freezing pipes, disc-valves in the upper compartment above each of said groups of freezing pipes respectively, the lower compartment including cells, the number of which is the same as the number of groups, a central and cylindrical return tube, connecting the upper compartment and the lower compartment, means to produce a forced circulation of the liquid to be congealed set on the axis of said return tube, a driving motor outside the ice-machine, a shaft connecting said means to said motor, a revolving distributor constituted by a table having bores in prolongation of the freezing pipes of a group, a cam adapted to actuate the means controlling the disc-valves, a central shaft bearing said plate, a cylindrical central socket provided with apertures, the number of which is equal, but one, to the number of the groups on the other face of the table, a cylindrical recess in the lower compartment in the prolongation of the central tube, an aperture for each cell in the wall of this recess, the socket of the distributor being set with an easy fit in said recess and their apertures being superposable, a pinion on the central shaft to impart to the distributor a discontinuous motion so that each group successively passes opposite the holes of the lower compartment.

2,749,722
APPARATUS FOR MAKING ICE IN SMALL PIECES
Frank W. Knowles, Seattle, Wash.
Application September 19, 1952, Serial No. 310,446
8 Claims. (Cl. 62—106)



1. In combination, ice-making apparatus, comprising: a tank to contain water to be frozen; a cylinder rotatably mounted in said tank with its axis horizontal and positioned in partial immersion in the water in the tank; means including a nozzle to deliver refrigerant to the upper inner central portion of said cylinder to form ice on its outer surface; means for rotating said cylinder in a continuous manner whereby ice formed on the outer cylinder surface is constantly being elevated to above the surface of water in the tank; means for continuously stripping ice from said cylinder adjacent the upper path of travel of its outer surface; said cylinder having on its inner surface a series of circumferentially spaced instanding and invertible liquid refrigerant carrier members extending between the ends of the cylinder to receive liquid refrigerant and carry the same within said cylinder in close proximity with the coating of ice on the cylinder as the same is being formed and elevated from the water in the tank; and a generally horizontally disposed non-movable baffle plate in the upper portion of said cylinder to receive refrigerant from said nozzle and elevators, said plate being of substantial width and having its edges located adjacent the ascending and descending walls of the cylinder to laterally distribute the refrigerant to the carriers and the cylinder walls.

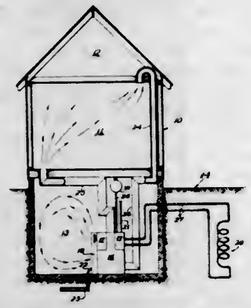
2,749,723
OIL SEPARATOR FOR REFRIGERATION SYSTEM
Robert C. Webber, Indianapolis, Ind.
Application October 15, 1953, Serial No. 386,307
2 Claims. (Cl. 62—117.75)



1. In a refrigeration system comprising a compressor having a crankcase, an inlet and a discharge, a condenser, conduit means for conducting compressed refrigerant from said compressor discharge to said condenser, an evaporator, conduit means for conducting condensed refrigerant from said condenser to said evaporator, and conduit means for conducting evaporated refrigerant from said evaporator to said compressor inlet, the invention of means for separating lubricant from the compressed refrigerant and for returning it to the compressor crankcase, such means comprising a body having a chamber therein, said first-named conduit means including a pipe

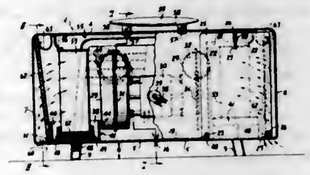
communicating with said compressor discharge and entering said chamber and terminating in an open end within said chamber, and another pipe communicating with said condenser and entering said chamber and terminating in an open end within said chamber, filter means disposed in said chamber and interposed between the open ends of said pipes, and a continuously-open tube having one end disposed in said chamber below both said open pipe ends, extending upwardly through said chamber, and having its other end opening into said compressor crankcase.

2,749,724
HEAT PUMP SYSTEM
William F. Borgerd and Mack M. Jones, Evansville, Ind., assignors, by mesne assignments, to Whirlpool-Seeger Corporation, a corporation of Delaware
Application April 20, 1953, Serial No. 349,594
19 Claims. (Cl. 62—129)



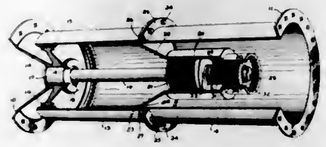
1. In combination with a building having two enclosed spaces, the first of said spaces having a substantially greater heating and cooling load than the second of said spaces, a heat pump mounted in said second space, said heat pump comprising two compartments, and air-refrigerant heat exchanger mounted within the first of said two compartments, means mounted within said first compartment for circulating air from said second space through said air-refrigerant heat exchanger, a duct system connecting the second of said two compartments to said first space, a second air-refrigerant heat exchanger mounted within said second compartment, means mounted within said second compartment for circulating air from said first space through said second air-refrigerant heat exchanger, said second air-refrigerant heat exchanger having a substantially greater capacity than said first air-refrigerant heat exchanger, tubing means connecting the refrigerant portions of said first and second air-refrigerant heat exchangers in series, means selectively operable to one position for supplying a gaseous refrigerant to said refrigerant portion of said second heat exchanger and for drawing liquid refrigerant from said refrigerant portion of said first heat exchanger, whereby said gaseous refrigerant supplied to said second heat exchanger is condensed therein to heat the air passing therethrough, and the condensed refrigerant then being supplied to said first heat exchanger wherein the liquid refrigerant is cooled to heat the air passing therethrough, said last mentioned means selectively operable to another position for supplying cooled liquid refrigerant to said refrigerant portion of said first heat exchanger and for drawing gaseous refrigerant from said refrigerant portion of said second heat exchanger, whereby said cooled liquid refrigerant supplied to said first heat exchanger is heated therein to cool the air passing therethrough and the liquid refrigerant then being supplied to said second heat exchanger wherein the liquid refrigerant is evaporated to cool the air passing therethrough.

2,749,725
PORTABLE AIR CONDITIONING APPARATUS
Eldon F. Essman and Lavern D. Kascel, Dubuque, Iowa, assignors to Eska Company, Dubuque, Iowa, a corporation of Iowa
Application December 6, 1955, Serial No. 551,439
16 Claims. (Cl. 62—131)



2. Air conditioning apparatus, comprising: a cabinet having spaced-apart air inlet openings for air to be conditioned, and having spaced-apart outlet openings for air that has been conditioned; a plurality of sealed refrigerant containers in said cabinet, each disposed in said cabinet between an inlet and an outlet opening; and a pair of blowers in said cabinet disposed between said refrigerant containers, each of said blowers having an inlet adjacent to but spaced from its associated refrigerant container and having an outlet in registration with an outlet opening of said cabinet.

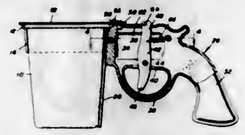
2,749,726
TORQUE TRANSMITTING COUPLING
Armour Lloyd McCullough, North York Township, Ontario, Canada, assignor to A. V. Roe Canada Limited, Malton, Ontario, Canada, a corporation
Application March 8, 1954, Serial No. 414,776
6 Claims. (Cl. 64—9)



1. A torque transmitting coupling for adjustably spaceable coaxial elements, comprising a hollow shaft fast on one element, means transmitting torque between the shaft and the other element whilst permitting relative axial movement of the shaft and the said other element, a tension rod extending from the said other element into the shaft, tension rod securing means axially fixed in the shaft, another tension rod securing means axially fixed to the other element, the tension rod and one of the securing means being axially fixed relative to each other, complementary screw threads on the tension rod and on the other securing means, the tension rod and the threaded securing means being rotatable relative to each other and consequently relative rotation of the tension rod and of the threaded securing means causing axial movement of the tension rod relative to the threaded securing means and hence of the elements relative to each other, longitudinal splines on the tension rod adjacent one end of the tension rod, an internally splined sleeve spaced from and encompassing the splined end of the tension rod, the said sleeve being fast on the securing means which is adjacent the splined end of the tension rod, and an axially slidable ring having internal splines complementary to the splines on the tension rod and external splines complementary to the splines on the sleeve, the ring when positioned in the space between the sleeve and the rod for mutual engagement of the two pairs of complementary splines locking the tension

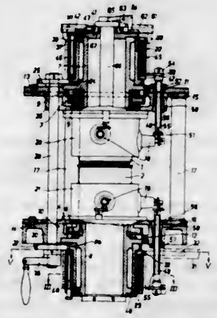
rod against rotation relative to the threaded securing means, and releasable means holding the ring so positioned.

2,749,727
HOLDER FOR TUMBLERS
Lester R. Fabro, Ashland, Wis.
Application April 26, 1954, Serial No. 425,681
2 Claims. (Cl. 65—13)



1. A holder for a tumbler comprising a resilient band adapted to grip the rim of a tumbler, a hollow pistol grip handle secured to said band, a generally circular lid overlying said band and pivoted at one edge on said handle for swinging edgewise to uncover a tumbler, a vertical trigger extending through said handle and pivoted therein with an upper end extending above the handle, a horizontal rod pivoted at one end to the upper end of the trigger with its other end pivoted to said lid eccentrically of the pivot of the lid, whereby operation of said trigger will swing said lid, and a spring inside said handle connected thereto and to said trigger to tension said trigger against operation.

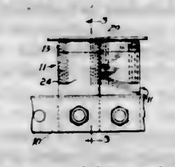
2,749,728
CIRCULAR KNITTING MACHINE
Otto Griesbach, Southofen, Allgau, Germany, assignor to Bayerische Berg-, Hütten- und Salzwerke A. G., Munich, Germany
Application July 24, 1952, Serial No. 300,583
Claims priority, application Germany November 30, 1951
17 Claims. (Cl. 66—14)



1. In a circular knitting machine including two coaxially arranged needle cylinders, in combination, supporting means including cylindrical supports for the needle cylinders; and two pattern drums rotatably mounted on said cylindrical support coaxial with the needle cylinders, each pattern drum associated with one of the needle cylinders and adapted to control a knitting operation.

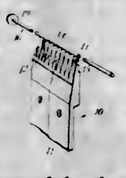
2,749,729
NEEDLE BED STRUCTURE FOR WARP KNITTING MACHINES
Harold C. Noe, Upper Montclair, N. J., assignor to Kidde Manufacturing Co., Inc., Bloomfield, N. J., a corporation of Delaware
Application November 25, 1952, Serial No. 322,434
5 Claims. (Cl. 66—86)

1. Needle bed structure for a warp knitting machine comprising a bar extending lengthwise of the machine, a plurality of trick blade blocks secured side by side to said bar each having a plurality of trick blades embedded therein providing open ended needle slots, said blades each having side edges and a stitch separating edge at the open end of the needle slots, and a member struc-



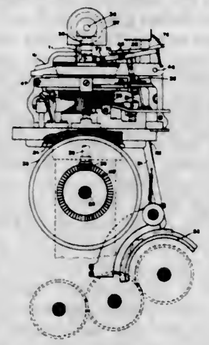
turally free and disconnected from said blades and blocks extending lengthwise of the machine and providing an exposed continuous knockover edge surface adjacent one of the side edges and the stitch separating edges of all of said blades.

2,749,730
NEEDLE BED STRUCTURE FOR WARP KNITTING MACHINES
Harold C. Noe, Upper Montclair, N. J., assignor to Kidde Manufacturing Co., Inc., Bloomfield, N. J., a corporation of Delaware
Application November 25, 1952, Serial No. 322,435
10 Claims. (Cl. 66—86)



1. Needle bed structure of the class described comprising a plurality of spaced blade means providing open ended needle slots and each having side edges and a stitch separating edge at the open end of the needle slots, and an element structurally free and disconnected from the needle bed structure and adjacent the stitch separating edges of said blade means and extending lengthwise along the needle bed structure to provide a continuous surface adjacent said edges over which the stitches are adapted to pass, said element being mounted for movement exteriorly of the said edges of said blade means in the functioning of the bed structure.

2,749,731
FLOATING YARN CUTTER MECHANISM
Arvel M. Moser, Mebane, N. C., assignor of one-fourth to Barnie P. Jones, Burlington, N. C.
Application September 30, 1953, Serial No. 383,196
10 Claims. (Cl. 66—147)



1. In a circular knitting machine of the type having a revolving needle cylinder arranged to generate a knitted

tube of fabric extending inward from the mouth of the needle cylinder, the knitted tube being generated from a plurality of yarns in a predetermined float pattern with floating yarns extending within the knitted tube and interconnecting various float pattern portions, a floating yarn cutter mechanism including in combination, a cutter head, means to rotatably support said cutter head in the mouth of the needle cylinder adjacent the area of formation of the knitted tube, means to rotate said cuttter head as said needle cylinder is revolved, cutting means carried by said cutter head in proximity to the floating yarns formed in the knitted tube, and means for actuating said cutting means whereby the floating yarns are severed as said cutter head is rotated.

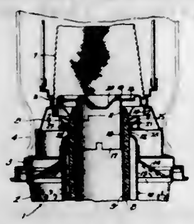
2,749,732

BAFFLE RING FOR KEROSENE BURNER

Carl Bramming, Nashville, Tenn., assignor to Aladdin Industries, Incorporated, Nashville, Tenn., a corporation of Illinois

Application February 4, 1954, Serial No. 408,209

3 Claims. (Cl. 67—38)



1. In a burner for a mantle lamp, the combination comprising an inner generally cylindrical wick tube, an outer wick tube concentric therewith and spaced outwardly from said inner wick tube, a generally cylindrical wick positioned between said wick tubes and movable upwardly into a raised position beyond the upper ends thereof, a shielding baffle ring generally of inverted L-shaped cross section and having a generally cylindrical flange portion and an inturned generally radial flange portion connecting with the upper end of said generally cylindrical flange portion, means mounting said ring on the upper end of said outer wick tube to shield the same from the heat of the flame above the wick, said means supporting said baffle ring with said cylindrical flange portion thereof surrounding but spaced outwardly from the upper end of said outer wick tube to define a generally annular opening therebetween for admitting air between the lower end of said cylindrical flange portion and said outer wick tube, said means supporting said baffle ring with said generally radial flange portion thereof spaced upwardly from the upper end of said outer wick tube in overlying relation thereto, said generally radial flange portion extending inwardly to a point closely spaced from the outer surface of said wick to define a narrow annular opening therebetween for directing an upward stream of air along the outer surface of said wick so as to cool said baffle ring and maintain the flame elevated above said wick, said generally radial flange portion of said baffle ring having a plurality of closely spaced apertures formed therein around its outer portion for directing air upwardly toward the outside of the flame and thereby further cooling said baffle ring while promoting combustion efficiency in the flame, said baffle ring constituting a hood over the upper end of said outer wick tube for shielding the same from the heat of the flame and thereby reducing the temperature of said outer wick tube.

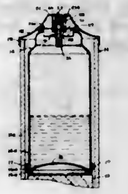
2,749,733

GAS CANDLE

Neville F. Smith and Virginia Smith, Chagrin Falls, Ohio

Application December 24, 1952, Serial No. 327,842

8 Claims. (Cl. 67—87)



1. A simulated candle comprising an upright shell; supporting means toward the lower end of the shell, said supporting means extending transversely of the vertical axis of the shell; a fuel reservoir carried by said transversely extending supporting means; a first fitting rigidly mounted on said fuel reservoir; a second fitting extending upward therefrom into proximity to the upper end of the shell; valve means incorporated in one of said fittings for operation by movement of the second fitting; and, closely encompassing the second fitting, a closure for the upper end of the shell.

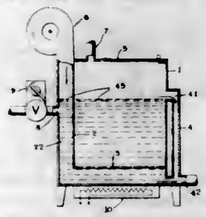
2,749,734

COMBINED LAUNDERING AND DRYING MACHINES

Russell V. Dye, Liberty, Mo., assignor of two-thirds to John G. Sheldon, Kansas City, Mo.

Application April 8, 1953, Serial No. 347,434

2 Claims. (Cl. 68—20)



1. A laundering machine adapted to automatically carry out a cycle of washing, rinsing and drying laundry in the same compartment, the machine comprising a tub having an internal subdividing wall extending from above the waterline to a point near its bottom and dividing the volume into a larger and smaller compartment, a false perforated bottom in the larger compartment forming a substantially continuous wall with the above vertical wall to complete the division of the tub into a large chamber and a smaller chamber laying partly beside and partly below said larger chamber; a water system connected to said tub comprising a plurality of drains one of which shall be mounted above the other, the upper of which shall have a larger capacity, a water supply connection having an inlet capacity larger than the lower drain and less than the combined capacity of the lower drain and other drains, said inlet water connection having a metered volume water valve feeding said inlet, a cover for the larger laundry chamber and vent thereto and air pump means to cause movement of air from the smaller subdivision through the false bottom and into the main chamber and a heat source mounted below the true bottom of said tub.

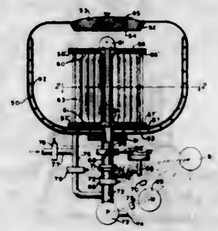
2,749,735

DOMESTIC APPLIANCE

Robert R. Candor, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Original application July 14, 1949, Serial No. 104,654. Divided and this application September 25, 1952, Serial No. 311,344

10 Claims. (Cl. 68—21)



9. In combination: a stationary tube adapted to contain a washing liquid and clothes to be washed; a hollow flexible resilient impervious expansible agitator in said tub; means to impart an agitating movement to said agitator relative to said tub; means to impart a pressure differential on said agitator to expand said agitator to wring clothes between said agitator and a wall of said tub.

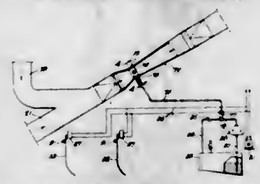
2,749,736

APPARATUS FOR APPLYING LIQUIDS AND TINTS TO TEXTILE FIBERS

John W. Powlechill, Cheltenham, and Edward M. Hyde, Lafayette Hill, Pa., assignors to Proctor & Schwartz, Inc., Philadelphia, Pa., a corporation of Pennsylvania

Application July 26, 1954, Serial No. 445,562

4 Claims. (Cl. 68—205)



1. A spray mechanism for textile fibers, comprising the combination of a duct, pneumatic means for feeding fibers through said duct, a conveyor for conducting the fibres to said pneumatic means, a spray head in said duct for discharging a liquid upon the passing fibers therein, a valve for controlling said head, means connecting said valve to a source of liquid under pressure, and means actuatable by the passage of fibres on said conveyor operable to maintain said valve open and discharge spray onto the fibres in said duct so long as the conveyor continues to conduct fibres to said pneumatic means.

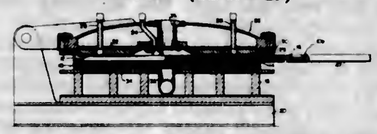
2,749,737

APPARATUS FOR TREATING PERMEABLE SHEETS WITH FLUIDS

Alexis E. Ushakoff, Beverly, Mass., assignor to Secotan, Inc., Somerville, Mass., a corporation of Massachusetts

Application October 14, 1954, Serial No. 462,345

18 Claims. (Cl. 69—29)



1. Apparatus for treating pervious sheets with fluids comprising a porous bed having a substantially flat and horizontal upper surface, a supporting member over said bed, an impervious membrane positioned below said supporting member over and normally spaced from the bed with the space between an edge of said membrane and the upper surface of the bed being open whereby a sheet may be inserted between the bed and membrane, means for applying a fluid under pressure to the top of the membrane to urge said membrane into contact with the bed, and a conduit for delivering a fluid between the bed and membrane.

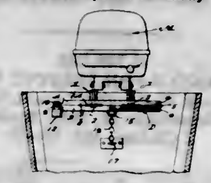
2,749,738

LOCKING DEVICE FOR OUTBOARD MOTORS

Frank E. Frost, Inglewood, Calif.

Application September 18, 1952, Serial No. 310,212

1 Claim. (Cl. 70—232)



A locking device for an outboard motor having a pair of spaced winged clamping screws, said device comprising two elongate members of U-channel cross-section having the ends of the channels closed, said members being juxtaposed with the open sides of the same opposed when the device is in use, a hinge coupling between two adjacent ends of the bars, flanges extending from the other two ends and having aligned apertures for the reception of a locking means, said members having the edges of the sides of the channels provided with matching transverse semi-circular recesses to receive the shanks of said screws between and extending entirely across the members, a staple carried by one of said members, a securing chain attached at one end to the staple, and an attaching plate secured to the other end of the chain and adapted to be secured to the wall of the boat on which the motor is mounted.

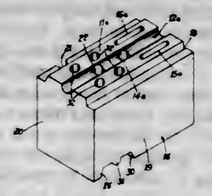
2,749,739

INTERLOCKING CORNER BLOCK

Harold F. Zagray, Canton, Ohio, assignor to Precision Building Systems, Inc., Canton, Ohio, a corporation of Ohio

Application June 6, 1951, Serial No. 230,195

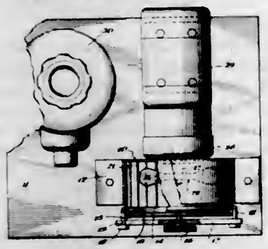
2 Claims. (Cl. 72—41)



1. A substantially rectangularly shaped masonry corner block, said block including a pair of opposite flat sides, top and bottom longitudinal faces and a pair of opposite transverse faces, a longitudinal rib formed on the top longitudinal face, said rib being of a width only slightly less than the width of the block and having a substantially flat top surface and downwardly inclined side surfaces, and a recess formed in the bottom longitudinal face, said recess generally corresponding in width and cross-sectional shape to said rib, there being a longitudinal centrally located groove in the rib and a correspondingly shaped central longitudinal groove in the recess, a central vertical groove formed in one transverse face and communicating at its ends with the longitudinal grooves, a central vertical opening extending through the block in substantially parallel relation with said opposite sides

and opposite transverse faces and communicating at its ends with the central portions of said longitudinal grooves, the other transverse face of the block being flat, transverse cut-out grooves in the bottom face of the block and communicating with opposite sides of said longitudinal recess near said other transverse face, said transverse cut-out grooves being shaped to conform to the transverse contour of said rib, a vertical opening extending through the block midway between said central vertical opening and said other transverse face and communicating at opposite ends with said longitudinal grooves, a centrally located half-round boss in the cut-out groove at one side of the block and a vertical groove in the other side face of the block and located in the same transverse plane as said second named vertical opening.

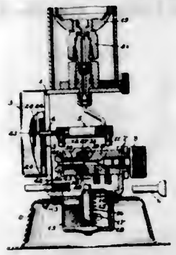
2,749,740
APPARATUS FOR TESTING FABRIC
Harold W. Stiegler, Lowell, Mass.
Application September 14, 1950, Serial No. 184,833
2 Claims. (Cl. 73—7)



1. A fabric testing apparatus for determining quality characteristics of fabrics and other flexible materials comprising, in combination a relatively small closed test chamber consisting of a generally cylindrical inner wall extending between a pair of spaced apart end walls with at least one of said walls moveable to afford access to said test chamber; an electric motor mounted adjacent said test chamber with a rotatable shaft driven by said motor extending through one of the aforementioned end walls into said test chamber, and means for driving a sample of material within said container in a random, zig-zag path of movement along a generally circular orbit and simultaneously causing it to repeatedly impinge the walls of said container and carom therefrom whereby said sample is subjected to both internal and external friction as it progresses; said means consisting of a rotary impeller having a hub portion centrally disposed on the axis of said container and at least one pair of flat paddles, each paddle extending from said hub to a point adjacent the cylindrical wall of the container and between the end walls thereof, the paddles of said pair being inclined to said hub and lying in substantially the same plane.

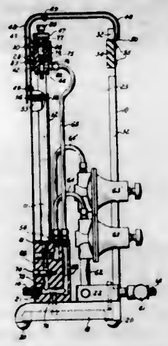
2,749,741
FREEZING POINT METER
Larry L. Gerwig, Elmira Heights, N. Y., assignor to Bendix Aviation Corporation, a corporation of Delaware
Application October 26, 1953, Serial No. 388,300
2 Claims. (Cl. 73—17)

1. In a freezing point tester for arctic coolants for internal combustion engines, a mechanical thermometer, and means responsive to hydraulic pressure for arresting the thermometer including a movable armature, a magnet for actuating the armature, a threaded nipple fixedly mounted in spaced relation to the armature having a central opening, an elastic diaphragm, a sealing and bearing member engaging the periphery of the diaphragm, a shaft slidably supported in the bearing member extending into proximity to the diaphragm, having said magnet fixedly mounted on its projecting end, a spring operative to urge the magnet away from the nipple toward said armature, and means including a combined keeper and clamping sleeve of magnetic material adjustably threaded on the nipple for clamping the sealing member and diaphragm against the end of the nipple and for normally holding the magnet in retracted position; in which the



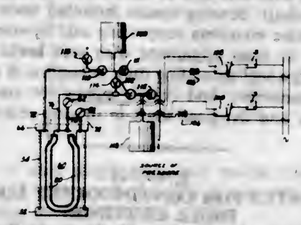
clamping member and the sealing member are provided with spaced shoulders, and including further an annular compression spring in said space effective to maintain sealing pressure on the sealing member irrespective of adjustment of the clamping and keeper member to vary its retaining effect on the magnet, and to maintain said adjustment.

2,749,742
PNEUMATIC GAUGING DEVICE
Willis Fay Aller, Dayton, Ohio, assignor to The Sheffield Corporation, Dayton, Ohio, a corporation of Ohio
Application February 11, 1953, Serial No. 336,346
18 Claims. (Cl. 73—37.9)



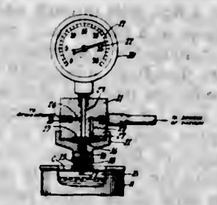
1. A gauging device comprising a vertically disposed transparent flow tube, a supporting means including a lower tube supporting component having seating means for the lower end of said tube, said supporting means having a bottom portion forming a base and providing the sole support for the gauging device, vertically disposed rigid sheet metal side panels, means detachably fixing said panels adjacent their lower ends to said lower tube supporting component with their lower edges engaging the upper surface of the base forming portion of the supporting means, an upper tube supporting component extending between and fixed to each of the side panels adjacent their upper ends and having a seating means for the upper end of the flow tube, said upper tube supporting component being supported entirely by said sheet metal side panels, passages in said lower and upper components communicating with the respective tube ends, means communicating with the lower component passage for connection to a source of fluid under pressure, means communicating with said upper component passage for connection to a controlled leakage means, said flow tube having means operable therein to indicate the rate of flow through the tube.

2,749,743
APPARATUS FOR TESTING HOLLOW OBJECTS
Hoyt K. Foster, Hollis, N. Y., assignor to S. W. Farber, Inc., New York, N. Y., a corporation of New York
Application July 29, 1952, Serial No. 301,551
3 Claims. (Cl. 73—49.3)



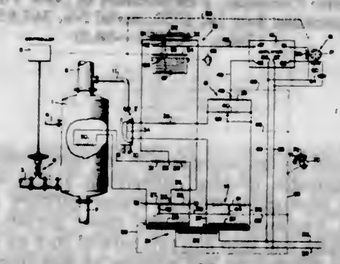
1. In an apparatus for testing a container for leakage, the combination of means for supplying air at a pre-determined pressure to the container, electrical signal means for indicating the presence of a leak in the container, pressure-responsive means for measuring the value of the pressure in the container, and a contact on the pressure-responsive means arranged to actuate the signal means upon a decrease in air pressure below the predetermined value said contact being engaged by the pressure-responsive means prior to reaching the predetermined value and disengaged upon a decrease in pressure to actuate the signal means.

2,749,744
DEVICE FOR TESTING PRESSURE IN CONTAINERS
John J. Dondero, Jr., Union, N. J., and Milton L. Seaman, Glen Ellyn, Ill., assignors to American Can Company, New York, N. Y., a corporation of New Jersey
Application January 29, 1952, Serial No. 268,756
8 Claims. (Cl. 73—52)



2. An apparatus for testing pressure in sealed containers, comprising in combination a body having a chamber formed therein, a flexible diaphragm in said chamber and dividing the chamber into a testing side and a pressure indicating side, a hollow piercing element on said body for perforating a container to be tested, the interior of said piercing element communicating with said testing side of the chamber for establishing therein the pressure condition within said perforated container the space in said hollow piercing element and in said chamber on the testing side of said diaphragm being restricted to a minimum so that the accuracy of the apparatus is not appreciably affected by air trapped in said space, pressure means including sources of two different pressures communicating with said chamber through openings in said pressure indicating side of the chamber for balancing the pressure on said testing side of the diaphragm, pressure indicating means on said body and communicating through an opening in said chamber with said pressure indicating side of the diaphragm for indicating said balanced pressure, said flexible diaphragm normally closing said chamber openings on its pressure indicating side for stopping communication between at least one of said pressure sources and said pressure indicating means, and said diaphragm being flexed from said closed position to open position establishing communication between both of said pressure sources and said indicating means when the pressure at a said opening sufficiently exceeds the pressure in the container being tested, whereby said diaphragm is vibrated between said closed and open positions and a substantially constant pressure balanced with that in the container is shown on said pressure indicating means.

2,749,745
MEASURING APPARATUS FOR THE DEGREE OF SUPERSATURATION OF SOLUTIONS
Thomas R. Harrison, Wyncote, Pa., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application November 12, 1954, Serial No. 468,242
11 Claims. (Cl. 73—53)



1. Apparatus for measuring the degree of saturation of a boiling solution, comprising a bridge circuit having a pair of input terminals, a pair of output terminals, and four bridge arms interconnecting said terminals, a first resistance thermometer element connected in one of said arms and adapted to be exposed to the temperature of the boiling solution, first, second, and third resistors respectively connected in each of the others of said arms, energizing conductors connected to said input terminals and adapted to connect the latter across a source of energizing voltage, a fourth resistor connected between said output terminals, a second resistance thermometer element adapted to be exposed to the temperature of the solvent of said solution boiling at substantially the same pressure as said solution, means connecting said second element and a fifth resistor in a series circuit between energizing ductors adapted to be connected across a source of energizing voltage, a sixth resistor connected in parallel with at least a portion of said resistor, a conductor connecting one end of said sixth resistor to a terminal adjustable on the latter, a seventh resistor connected between energizing conductors adapted to be connected across a source of energizing voltage, first and second terminals located in said series circuit and between which there is produced a first voltage, one of said first and second terminals being adjustable on said fifth resistor, third and fourth terminals located on said seventh resistor and between which there is produced a second voltage, one of said third and fourth terminals being adjustable on said seventh resistor, fifth and sixth terminals adjustable, respectively, on said first and fourth resistors and between which there is produced a third voltage, conductor means connecting said first, second, third, and fourth terminals and the portions of said fifth and seventh resistors between these terminals in a series circuit between said fifth and sixth terminals, a current detector connected in series in said conductor means, the polarities of said energizing conductors being so related that the algebraic sum of said first and second voltages is opposite in polarity to said third voltage in the last mentioned series circuit, whereby the algebraic sum of said first and second voltages is applied to said detector in series voltage opposition to said third voltage, means operable to effect the simultaneous adjustment of said adjustable terminals on said first, fifth, sixth, and seventh resistors for adjusting

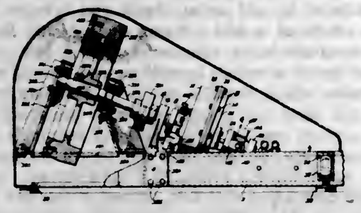
the apparatus in accordance with the purity of said solution, and means operable to adjust said sixth terminal on said fourth resistor and hence to adjust the magnitude of said third voltage as required to make the latter equal in magnitude but opposite in polarity with respect to said algebraic sum of said first and second voltages and thereby reduce the current flow through said detector substantially to zero, the adjusted position of said sixth terminal on said fourth resistor for substantially zero current flow through said detector being a measure of the degree of saturation of said solution.

2,749,746
MAGNETOSTRICTION STRAIN GAUGE
James H. Wright, Lynnfield, Mass., assignor to General Electric Company, a corporation of New York
Application July 14, 1953, Serial No. 367,959
1 Claim. (Cl. 73—88.5)



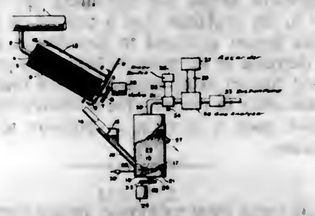
Apparatus for measuring tension and compression forces in a deformable member, comprising a thin and substantially rectangular strip of magnetostrictive material having a lengthwise slit in the center portion thereof which divides said strip into two parallel core leg portions connected together by end portions of said strip, means for mounting said end portions of said strip on said deformable member at spaced-apart positions on said member, said strip having thickness and width yielding a cross-sectional area substantially smaller than that of said deformable member whereby mounting of said strip has relatively little effect upon forces in said member, at least one of said end portions of said strip having at least one resilient transverse upwardly bent channel to prevent elastic limits of said magnetostrictive material from being exceeded by deformation of said member, electrical winding means surrounding at least one of said core leg portions of said strip, and means responsive to the inductive characteristics of said winding means and strip for measuring said tension and compression forces.

2,749,747
CHASSIS DYNAMOMETER CONSTRUCTION
Edwin L. Cline, Pasadena, Calif., assignor to Clayton Manufacturing Company, El Monte, Calif., a corporation of California
Application September 24, 1947, Serial No. 775,768
5 Claims. (Cl. 73—117)



1. In a chassis dynamometer, a generally rectangular horizontal frame comprising longitudinally extending side members and a plurality of transverse members interconnecting said side members; a pair of horizontal rolls adapted to be driven by a driven wheel of a vehicle; means rotatably supporting said rolls between a pair of adjacent transverse members with the lower periphery of said rolls disposed above the lower side of said frame; a brake unit of greater diameter than the height of said side members and including a brake shaft; bearing means independent of said roll supporting means mounted upon certain of said transverse members supporting said brake unit for rotation of said shaft about an axis inclined with respect to the axis of one of said rolls and with said brake unit extending only beyond one side of the horizontal plane of said side members; means drivingly interconnecting said brake shaft with one end of said one roll; a flywheel and a flywheel shaft; bearing means mounted upon certain of said transverse members supporting said flywheel shaft inclined and in axial alignment with said brake shaft and with said flywheel extending only beyond said one side of said side members; and clutch means for coupling said brake shaft and flywheel shaft in driving relation.

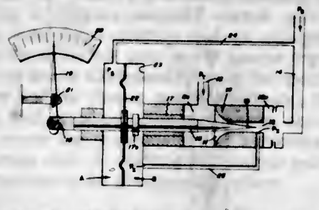
2,749,748
APPARATUS FOR CONTINUOUSLY LOGGING DRILL CUTTINGS
Robert L. Slobod and Sidney H. Davis, Dallas, Tex., assignors to The Atlantic Refining Company, Philadelphia, Pa., a corporation of Pennsylvania
Application July 16, 1951, Serial No. 237,034
4 Claims. (Cl. 73—153)



1. A comminuting chamber for continuously separating and collecting gas from a continuous stream of cuttings passed thereto after separation from drilling fluid as it reaches the surface of the earth after circulation through a well incident to drilling of the well by the rotary drilling method, including a closed chamber, said chamber having a first inlet through which cuttings may be passed thereinto in a substantially continuous stream, means in said chamber for comminuting said cuttings to release the gases therefrom substantially instantaneously upon their introduction into said chamber, a liquid inlet below said first inlet for supplying a liquid to said chamber, a liquid outlet above the level of said first inlet to permit the escape of liquid from said container, and means to maintain the liquid level in said chamber at a point above the level of the liquid outlet but below the level of the top of said chamber, whereby a gas collecting space is formed between the liquid level and the top of said chamber, the flow of liquid from said liquid inlet, through said container, and outwardly through said liquid outlet being sufficient to remove the cuttings from said chamber in a substantially continuous stream after comminution, and gas analyzing means communicating with said gas collecting space.

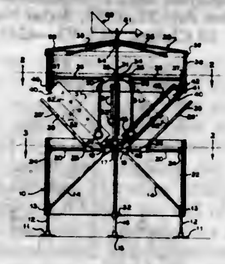
2,749,749
MACH METER
Louis S. Billman, Fort Worth, Tex., and Arthur C. Angelos, Glastonbury, Conn., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application March 30, 1954, Serial No. 419,938
8 Claims. (Cl. 73—182)

1. A direct reading meter for determining true Mach number comprising: a chamber, a nozzle communicating with said chamber, said nozzle having an inlet exposed to total pressure behind a normal shock and an outlet exposed to ambient static pressure, means movable relative to said nozzle to vary the effective throat area thereof and to control the position of a normal shock wave downstream of the nozzle throat, means including a diaphragm subjected on one side to said ambient static pressure and on the other side to the pressure within said nozzle downstream from the throat for varying the nozzle throat area in response to variations in pressure on oppo-



site sides of said diaphragm, and means for indicating movement of said nozzle varying means whereby a true Mach reading may be obtained.

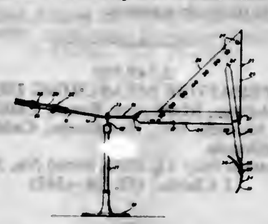
2,749,750
ANEMOMETER
Norman R. Hastings, Huron, S. Dak., assignor to Walk Time, Inc., Huron, S. Dak., a corporation of South Dakota
Application March 9, 1953, Serial No. 341,253
13 Claims. (Cl. 73—189)



3. An anemometer comprising a base, said base having a vertical sleeve, a shaft rotatably supported in said sleeve and extending substantially above its upper end, a plurality of oppositely disposed spokes extending laterally from said shaft, a housing around said spokes and connected to the outer ends thereof, a wind trough connected to the outer end of each spoke and extending downwardly and inwardly toward the shaft, means connecting the ends of the wind troughs adjacent to the shaft together, said means being mounted on the shaft, said troughs having their open sides facing transversely to the spokes and in the same direction of rotation, a plurality of arms, one for each spoke, means pivotally connecting an end of each arm to a spoke and adjacent to the shaft, said pivotal connecting means being offset from the vertical plane of the spoke, means attached to each arm and resisting outward movement thereof, the last said means for an oppositely disposed pair of arms being the same, and means connected to the base and extending substantially parallel to the troughs for indicating the inclination of the arms with respect to the vertical plane.

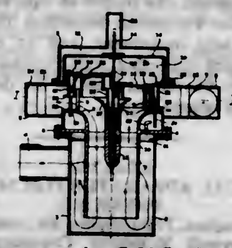
2,749,751
ANEMOMETER WIND VANE
Norman R. Hastings, Huron, S. Dak., assignor to Walk Time, Inc., Huron, S. Dak., a corporation of South Dakota
Application March 9, 1953, Serial No. 341,254
8 Claims. (Cl. 73—189)

1. An anemometer wind vane comprising a support, an arm rotatably mounted on the support, the arm having a substantially horizontal rearward portion and an upwardly inclined forward portion, the arm being formed of sheet material, the forward portion and a portion of the rearward portion having the flat of the sheet facing in a vertical plane, the remainder facing in a horizontal plane, a head at the front extremity of the arm, said head being substantially flat and having a reduced portion at its tip and lying substantially in the plane of the forward portion of the arm, a fin extending upwardly from the portion of the arm facing in a horizontal plane and substantially in the plane thereof, the fin being of substantially right triangular configuration and having one side along the arm, another side extending vertically upwardly from the rearmost extremity thereof, the sides being substantially equal, and a wind velocity indicator connected to the arm near the rear extremity of its rearward portion, said



indicator comprising a pair of spaced elongated flat sheet members, one on either side of the arm and pivotally connected thereto, the corresponding end of each member having pointing means, and a weighted wind deflector connected to the other ends of the sheet members, the deflector comprising a substantially rectangular sheet member curved about an axis which extends horizontally when the deflector is mounted on the flat sheet members, and when at rest with its concave side facing in the direction of the head, the fin carrying velocity indicia in a position where the pointing means of the indicator may register therewith.

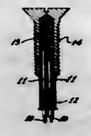
2,749,752
METER FOR MEASURING THE VOLUME OF FLUIDS FLOWING IN A PIPE LINE
Hans Gehre, Oberkassel (Rhine), Siegkreis, Germany, assignor to Elster & Co., Mainz, Germany, a corporation of Germany
Application August 1, 1951, Serial No. 239,648
Claims priority, application Germany August 9, 1950
19 Claims. (Cl. 73—230)



1. A meter for measuring fluid flowing through a pipe line comprising a meter housing, means defining a fluid entrance into said housing, means defining a substantially vertical fluid passage, centrally located within said housing and positioned for conducting fluid from said fluid entrance to the lower part of said housing and up through the central portion of said housing, a bell-shaped turbine rotor centrally positioned for rotation about a substantially vertical axis in the upper portion of said housing and freely axially displaceable between a position in substantially fluid-tight engagement with the upper portion of said means defining the fluid passage, and a position defining a maximum fluid-measuring passage with the upper portion of said means defining the fluid passage, means defining a fluid exit positioned for discharging fluid from said housing after passing through said measuring passage, at least one ring of turbine blades connected to said rotor and po-

sitioned at said measuring passage for rotating actuation by fluid passing through said measuring passage, at least one stationary ring of guide vanes positioned concentrically inside said ring of turbine blades for directing the flow of fluid therethrough, the vanes and blades of said rings of guide vanes and turbine blades having opposed pitches with at least one of said vanes and said blades being dimensioned with an increasing pitch along their length, whereby portions of said vanes and said blades with a decreasing angle therebetween become adjacently opposed as said rotor is axially displaced from said fluid-tight engagement, and means positioned for transmitting the rotation of said rotor to indicating means.

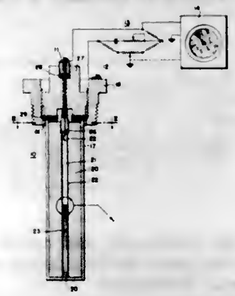
2,749,753
TEMPERATURE MEASURING DEVICE
William H. Adams, Manhattan Beach, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application May 11, 1953, Serial No. 354,243
1 Claim. (Cl. 73—362)



Electrically operated temperature measuring means of the kind described and comprising: a concentrated multilayer coil of wire; insulated leads connected to the ends of said coil on one of which leads the coil is wound and supported; an enclosing member of minimum thickness and of heat conductive material recessed to receive said coil and adapted to be secured at any point at which temperature readings are to be taken; a layer of electrical insulating medium of minimum thickness securing said coil in said member; a Wheatstone bridge-type circuit in which said coil is connected as one arm thereof; means for supplying high voltage to said circuit, means for adjusting the output of said circuit to zero at the lower limit of a range of temperature to which said coil is subjected, means for adjusting the output of said circuit to a predetermined value at the maximum temperature to which the coil is subjected, the output of said circuit being utilized to operate equipment recording the temperatures measured by said instrument; and an element the resistance of which decreases with increase of voltage arranged between the output leads of the device and a fuse arranged in one of said leads.

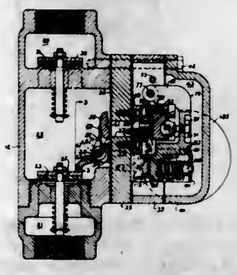
2,749,754
ELECTRICAL APPARATUS FOR MEASURING PRESSURE
Thomas C. Linahan, Philadelphia, Pa., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application January 9, 1953, Serial No. 330,545
3 Claims. (Cl. 73—398)

1. A pressure to electric transducer, comprising in combination, an elongated hollow elliptical tube which is sealed at both ends, a metallic element having a predetermined temperature coefficient of expansion extending along the length of the interior of said tube and having a hole running the length of said element, said hole being in communication with the interior of said tube and having a non-porous insulating coating thereon, said coating having a coefficient of expansion the same as said element, an electrically conductive coating having an appreciable resistance per unit area directly covering said insulating coating on the side of said hole, a first terminal engaging said coating, an electrically short circuiting liquid filling a portion of said tube and extending into said hole, a second terminal engaging said liquid, said liquid being arranged to variably short out said coating



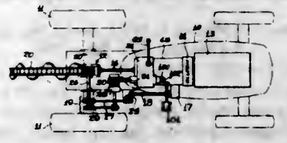
to vary the resistance between said terminals in accordance with variations in pressure applied to the outside of said tube.

2,749,755
SAMPLER MECHANISM
Ralph B. Pressler, Fort Wayne, Ind., assignor to Bowser, Inc., Fort Wayne, Ind., a corporation of Indiana
Application July 31, 1952, Serial No. 301,911
13 Claims. (Cl. 73—422)



1. In a sampling mechanism adapted to be driven by a meter disposed in a flow line for liquid, the combination of a stratification chamber communicating with said flow line, means defining an inlet and an outlet for the chamber and flow actuated check valves mounted in said inlet and outlet, means defining port means communicating with said chamber on one side thereof and communicating with said chamber substantially from the top to the bottom thereof, a valve for said port means, means mounting said valve for movement to open and close the port means, means for urging said valve to close said port means, means operable by the meter for periodically opening said valve, and means associated with said port means for trapping the effluent from the port means.

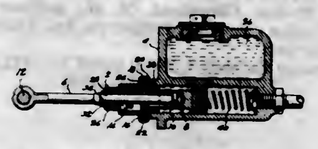
2,749,756
TRENCHER DRIVE MECHANISM
Warren E. George, Auburn, Nebr., assignor to Auburn Machine Works, Inc., Auburn, Nebr., a corporation of Nebraska
Application June 21, 1954, Serial No. 438,182
8 Claims. (Cl. 74—15.86)



1. In a tractor-type trenching device for use with a tractor having a transmission and a power take-off, the

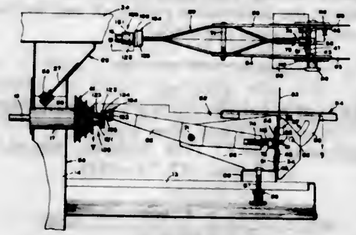
combination comprising an auxiliary speed-reducing mechanism powered by the power take-off, a drive unit mounted on the tractor transmission housing, said drive unit having a slidably mounted output gear movable between a disengaged position and an engaged position in mesh with an output gear in the tractor transmission, an unlocking device interposed between the speed-reducing mechanism and the output gear for releasing the torque exerted by said speed-reducing mechanism, and manually operated means for sequentially (*a*) unlocking said unlocking device and (*b*) shifting said output gear from its engaged position to its disengaged position.

2,749,757
SEALING BOOT
Joseph W. Adelt, Chicago, Ill., assignor to United Parts Mfg. Co., Chicago, Ill., a corporation of Illinois
Application July 14, 1954, Serial No. 443,266
3 Claims. (Cl. 74—18.2)



3. A boot of the class described, comprising a plurality of hollow resilient cylindrical sleeves of decreasing diameter, integrally connected to each other to form a single unitary resilient stepped member, said member having a central opening at its smallest end to receive an associated plunger; means for gripping said plunger, said means comprising flanges, extending axially of said opening; a second opening at the larger end of said member, said second opening being provided with a peripheral outturned flange, terminating in a reentrant flange, said flanges defining a recess to receive an associated casing flange.

2,749,758
TRANSLATING MECHANISM FOR CONVERTING ROTARY MOTION TO RECIPROCATING MOTION
Homer R. Emrick, Kalamazoo, Mich., assignor to Emrick Inc., Kalamazoo, Mich., a corporation of Michigan
Application October 30, 1953, Serial No. 389,247
9 Claims. (Cl. 74—45)



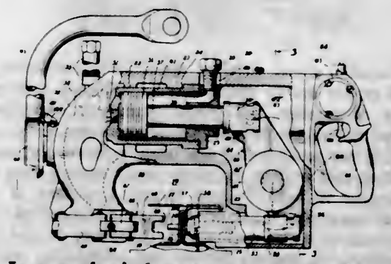
1. Translating mechanism for converting rotary motion of a lathe live spindle to reciprocating motion for a jig saw, said reciprocating motion being caused to occur at a point spaced from the source of rotary motion in a direction axially of said source, comprising in combination: a base; a lever pivotally mounted on said base for pivotal motion in a vertical plane and having a power receiving point and a power delivering point; a channel carried at the power receiving point, facing said source and arranged with its length perpendicular to the axis of said source and perpendicular to the direction of said reciprocating motion; a crank having its hub connected to said source and its pin within said channel; a pair of relatively slidable plates including means guiding same with respect to each other in the direction of said reciprocating motion, one of said plates being anchored to said base; means including an energy storing means connecting the power delivering point with the other of said plates.

2,749,759
ELASTICALLY YIELDING CONVEYING MEANS FOR TELESCOPIC ANTENNAE
Klaus Kleinhöfer, Niefern, Baden, Germany, assignor to Wilhelm Sihn, Jr. K.-G., Niefern, Baden, Germany, a firm
Application August 12, 1954, Serial No. 449,483
Claims priority, application Germany August 26, 1953
5 Claims. (Cl. 74—95)



1. In a device for the actuation of telescopic antennae used on motor vehicles and provided with a conveying means of elastically yielding material in rod-like formation fastened at one end to the antenna, a rotatable circumferentially grooved actuating wheel for said rod-like conveying means having its circumferential groove provided with undulating side-walls guiding means for guiding said rod-like conveying means into and out of said device and bending the same through a desired angle, and a plurality of radially spaced counter-pressure rolls arranged around that part of the outer circumference of said wheel which is in contact with said conveying means, said conveying means passing between said outer circumference of said wheel and said counter-pressure rolls.

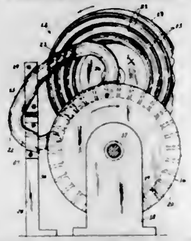
2,749,760
MECHANICAL MOVEMENT FOR SEAM CAP RIVETING AND THE LIKE
George T. Harcourt, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a corporation of New Jersey
Original application May 11, 1948, Serial No. 26,296. Divided and this application November 2, 1950, Serial No. 193,591
4 Claims. (Cl. 74—110)



1. In a mechanical movement, an actuating member having a bifurcated portion thereby forming a slot, a supporting member, a rocker pivoted upon the supporting member, said rocker having an arm with a curved projection adapted to cooperate with the bottom of the slot of the actuating member, said rocker having a second arm with a curved projection, an actuated member having a bifurcated portion with a slot therein, said curved projection of the rocker second arm being engageable with the bottom of the slot of the actuated member, whereby the pressure being applied by the actuating member and

to the actuated member is applied through the curved projections, and the bifurcated portions of the actuating and actuated members having respectively opposing vertically extending grooves, a pin in each arm of the rocker and extending into the grooves of the bifurcated portion of the associated member, said pins being of less diameter than the width of the vertically extending grooves.

2,749,761
REDUCING GEAR ASSEMBLY
Leo Mackta, Brooklyn, N. Y.
Application July 13, 1955, Serial No. 521,748
8 Claims. (Cl. 74—216.3)



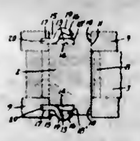
1. In a gear reducing assembly, a driving gear, means on the face of said driving gear defining a spiral groove, a driven gear mounted adjacent said driving gear and having a peripheral portion overlapping a portion of said spiral groove, means on said driven gear defining recesses arranged to register with said portion of the spiral groove, race means disposed between said gears and extending from the inner portion to the outer portion of the grooved face of the driving gear along the recessed portion of the driven gear, and ball members in said race means engaging simultaneously in said spiral groove and the recesses of the driven gear and drivingly coupling said driven gear to said driving gear.

2,749,762
VARIABLE SPEED PULLEY AND BELT DRIVING MECHANISM
Harry L. Lambert, West Hartford, Conn., assignor to Royal McBee Corporation, New York, N. Y., a corporation of New York
Application September 30, 1954, Serial No. 459,226
15 Claims. (Cl. 74—242.4)



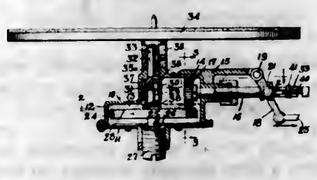
1. Variable speed driving mechanism comprising a stepped power driven pulley having adjacent concentric portions of smaller and larger diameters respectively; a stepped drivable pulley having adjacent concentric portions of larger and smaller diameters respectively; means journalling said pulleys to rotate about spaced axes with the portions of smaller and larger diameters of said power driven pulley substantially aligned respectively with the portions of larger and smaller diameters of said drivable pulleys; an endless flexible belt embracing and operatively connecting aligned portions of said pulleys; a first shifter having a part engageable with said belt and an operating part movable for operating said first shifter to cause shifting said belt from one of said pulley portions of one of said pulleys to the other of said pulley portions of said one of said pulleys; a second shifter having a part engageable with said belt and an operating part movable for operating said second shifter to cause shifting said belt from one of said pulley portions of the other of said pulleys to the other of said pulley portions of said other of said pulleys, the operating parts of said first and second shifters extending alongside of and overlapping each other; and equipment for operating said shifters including a rockable member, a pin on said rockable member extending between the overlapping operating parts of said first and second shifters and being movable in opposite directions in response to rocking of said rockable member in opposite directions for selectively moving said first shifter relatively positively for shifting said belt from the larger diameter portion of one of said pulleys to the smaller diameter portion thereof and for moving said second shifter relatively positively for shifting said belt from the larger diameter portion of the other of said pulleys to the smaller diameter portion thereof, and resilient means urging each of said shifters to move in the direction opposite to the direction in which it is movable relatively positively by said pin.

2,749,763
PIN LOCK FOR PIVOTED LINK CHAIN
Lester G. Rollins, Claremont, N. H., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application October 3, 1952, Serial No. 312,993
15 Claims. (Cl. 74—254)



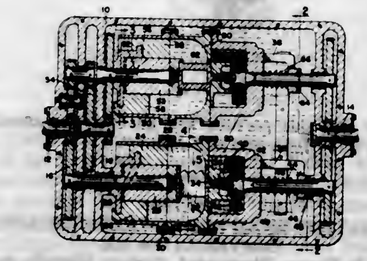
1. In a pivoted link chain, pivotally connected chain links and a hinge pin pivotally connecting said links together, one of said chain links having a transverse bore for receiving said hinge pin, and means for locking said hinge pin against axial displacement from said bore comprising a notch in said one of said chain links and opening into said bore and a registering notch in an end portion of said pin, said pin having an opening connecting said pin-notch out toward the end of the pin, and a deformable locking element having a portion insertible in said notch in said one of said chain links and a portion adapted to be hammered or pressed inwardly into straightened relation with respect to said first portion against the inner wall of said pin-opening to bring an opposite portion of said element into locking engagement with said pin-notch, said opening having outwardly diverging walls which serve to direct the deformable portion of said locking element inwardly into said pin-notch.

2,749,764
VARIABLE SPEED DRIVE MECHANISM
Wayne W. Chou, New York, N. Y.
Application May 17, 1955, Serial No. 509,054
12 Claims. (Cl. 74—352)



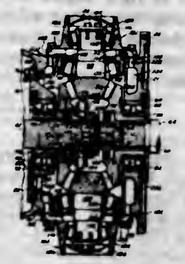
1. A variable speed drive mechanism adapted to drive a shaft connected to a load, comprising a hollow housing including a base, a relatively large wheel mounted on a substantially vertical axis in said housing having its upper surface magnetized with a given polarity at the periphery, means rotatably supporting said wheel above said base, a rotatable power shaft extending substantially horizontally and slidably through said housing and having a relatively small wheel thereon within the housing above said large wheel, said small wheel being spaced from said large wheel and being magnetized with a polarity at the periphery opposite said first-named polarity, said housing having therein a quantity of an emulsion containing magnetizable particles to a level at least covering said large wheel and partly covering the periphery of said small wheel.

2,749,765
DUAL HYDRAULIC CLUTCH
Urban A. Moores, Rutland Heights, Mass.
Application October 22, 1954, Serial No. 463,929
2 Claims. (Cl. 74—361)



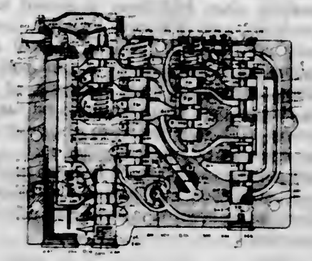
1. A dual variable hydraulic clutch comprising a drive shaft, a closed housing, a pair of members rotatable by the shaft in the housing, a plurality of pistons in each member, means on the shaft to reciprocate the pistons in unison, a fluid passage in each member connecting the pistons, fluid in the passages moved back and forth therein by the pistons, variable valve means to restrict each fluid passage to resist the reciprocation of the pistons and hence to cause the respective members to rotate variably according to the degree of actuation of the valve, and driven means connected to said members, said valves being rotary and gradually opening and closing the fluid passages at a point between the pistons, and means to rotate each valve comprising a U-shaped bracket, gearing located between the legs of the U-shaped bracket, means on each said leg operatively connected to the gearing to actuate the same upon rectilinear motion of the bracket, a hand lever to move each braket in one direction, and a spring to move each lever in the opposite direction.

2,749,766
REVERSE GEARING
Chester A. Blair, Oshkosh, Wis., assignor, by mesne assignments, to Rockwell Spring and Axle Company, Coraopolis, Pa., a corporation of Pennsylvania
Application July 25, 1951, Serial No. 238,450
1 Claim. (Cl. 74—379)



A unitary assembly providing selectively actuate torque reversing mechanism for operative interposition between a torque converter and a variable speed transmission, said assembly comprising a housing having spaced front and rear mounting flanges adapted for attachment respectively to a torque converter and a variable speed transmission housing, said torque reversing mechanism housing having aligned front and rear openings and aligned side openings, anti-friction bearings in said front and rear openings, coaxial bevel gears of the same size journalled in said housing by the anti-friction bearings in said front and rear openings, a pair of coaxial bevel pinions each meshed with both of said bevel gears and each having a shaft, anti-friction bearings in the side openings journalling said pinion shafts, bearing cages mounting said pinion shaft anti-friction bearings on said housing in the said side openings upon a common axis normal to the axis of said bevel gears, coaxial drive and driven shafts extending through bevel gears, means non-rotatably mounting one of said bevel gears on the one of said coaxial shafts that extends therethrough, the other of said bevel gears having an axial bore freely surrounding the other of said coaxial shafts, a clutch collar non-rotatably and slidably mounted on said other shaft in the space between said bevel gears, coacting clutch teeth on opposite sides of said collar and the adjacent sides of said bevel gears so that the collar may be shifted into toothed engagement with either of said bevel gears, a selectively actuate shifting fork mounted on said housing and operatively connected to said clutch collar to effect axial movement thereof, the axes of said shafts all lying substantially in a horizontal plane, open top pockets in the walls of said housing located at least as high as the level of the pinion shaft axes for receiving lubricant thrown up from the bottom of said housing by said bevel gears, and passages through said housing and said bearing cages extending between said pockets and said pinion shafts bearings for conducting lubricant to the latter.

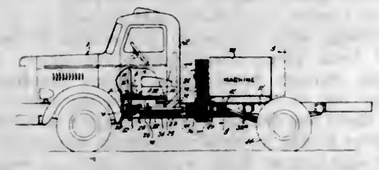
2,749,767
POWER TRANSMISSION
Richard Henry Ebsworth, Laguna Beach, Calif.
Application January 2, 1951, Serial No. 204,000
34 Claims. (Cl. 74—472)



1. In a power transmission in a motor vehicle, in combination; a drive shaft and a driven shaft; an engine-driven pump for a supply of fluid pressure; a planetary gear assembly serving to provide a gear reduction in the drive between said shafts; clutch means to connect said shafts for unitary rotation; hydraulic mechanism in association with said clutch; brake means serving to check the rotation of a gear member of said assembly; hydraulic mechanism in association with said brake; valve means serving to route pressure and drainage to the said hydraulic mechanisms in the operation of said clutch and said brake; a handle controlled by the operator and a connection from said handle serving to transmit rotary movement to an element of said valve means; and an accelerator pedal serving to transmit reciprocating movement to said element; wherein the first said valve means is divided into relatively movable sections, one of said sections receiving only rotary movement from said handle

while another said section receives rotary movement from said handle and reciprocating movement from said accelerator pedal.

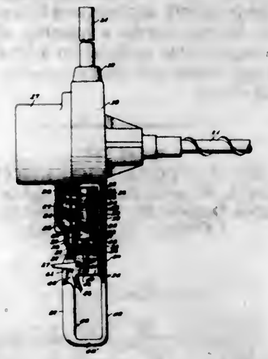
2,749,768
POWER TAKE OFF SHIFTING MEANS
Kibbey W. Coons, Newark, N. J.
Application April 9, 1952, Serial No. 281,289
1 Claim. (Cl. 74—491)



In a combination, a shift lever operable in one direction to one extreme position and operable in another direction to another extreme position, said lever having a normal or neutral position between its extreme positions, means biasing said shift lever to its neutral position, and actuating member operatively connected to said shift lever and movable therewith, an actuated member including a longitudinally movable and rotatable shaft having a coaxial disk thereon, said actuating member comprising a U-shaped part whose arms are disposed at opposite sides of and spaced from said disk when said actuating member is in its neutral position, one of said arms of said actuating member engaging said disk to actuate said actuated member in one direction when said lever is moved out of its neutral position to one of its said extreme positions and the other of said arms engaging said disk to actuate said actuated member in the other direction when said lever is moved from its neutral position to the other of its extreme positions, said actuated member being moved to a first control position when said lever is moved to one extreme position and said actuated member being moved to another control position when said lever is moved to its other extreme position, said actuating member comprising a rod pivotally connected at one end to said shift lever, a guide mounting the other end of said rod for longitudinal sliding movement upon swinging of said lever and said U-shaped part being mounted on said rod, said means biasing said shift lever to its neutral position comprising a compression spring at each of opposite sides of said guide and interposed between said guide and a collar on said rod, and means controlled by said actuated member in accordance with the position of said actuated member.

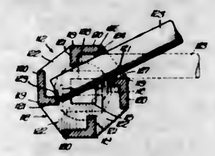
2,749,769
VALVE CONTROL MEANS
Joseph J. Slomer, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Original application January 17, 1950, Serial No. 139,092, now Patent No. 2,632,424, dated March 24, 1953. Divided and this application August 21, 1952, Serial No. 305,554
5 Claims. (Cl. 74—491)

1. Control means for actuating a valve, or the like, comprising a casing, a handle of open form secured to said casing, said casing having an opening and said handle comprising a base portion having an opening aligned with said casing opening and a side portion provided with a slot, a stem projecting through said openings into said handle, a two-arm trigger pivotally supported by the handle with one arm of said trigger extending through said slot and being accessible to the thumb of an operator having a hand engaged with said side portion, the other arm of said trigger being disposed within the open handle



adjacent said side portion, and an operative connection between said trigger and said stem.

2,749,770
OPERATING HEAD FOR ROTATING SHAFT OF HOPPER CLOSURE
George B. Dorey, Westmount, Quebec, Canada, assignor to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application September 18, 1952, Serial No. 310,202
4 Claims. (Cl. 74—545)



1. An operating head adapted to be non-rotatably mounted on one end of a shaft for rotating the same about its longitudinal axis by insertion of an operating bar to move a closure of a hopper car discharge opening or the like comprising, in combination, a shaft attaching portion and an operating bar receiving portion constituting an endwise extension of the former and rotatable therewith about said axis, said operating bar receiving portion including four L-shaped sections spaced uniformly from and about its axis of rotation and extending lengthwise parallel thereto with the long arm of each section generally perpendicular to the diameter of said operating bar receiving portion and the short arm of each section extending inwardly therefrom and leaving the central part of said operating bar receiving portion open along diameters at right angles to each other whereby when the operating bar is inserted radially between any two of said L-shaped sections it can have any of three operative positions with respect to said operating bar receiving portion.

2,749,771
PEDAL ELEVATORS
Daniel M. Pearl, Skokie, Ill., assignor to Darwin Products Inc., Chicago, Ill., a corporation of Illinois
Application August 16, 1954, Serial No. 450,007
4 Claims. (Cl. 74—594.4)

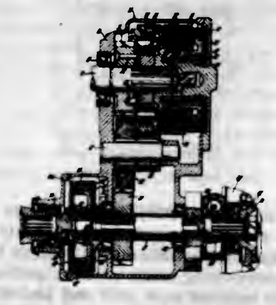
1. A crank shortening pedal adapter for the crankshaft structures of bicycles and the like, wherein the crank thereof extends normal or somewhat obtuse to the rotating axis of the crankshaft structure, wherein the free end of the crank has an outboard surface normal to the rotating axis of the crankshaft structure and wherein the free

end of the crank has a tapped hole whose axis is parallel to the rotating axis of the crankshaft structure and which normally receives the threaded end of the axle of a pedal, said crank shortening pedal adapter comprising, an elongated bracket arranged along the outboard side of the crank, said bracket being generally concavo-convex along its length with its concave side facing the crank and provided at one end with an inturned arm having a V-notch receiving and engaging the outboard side of the crank at two points and provided at its other end with an inclined



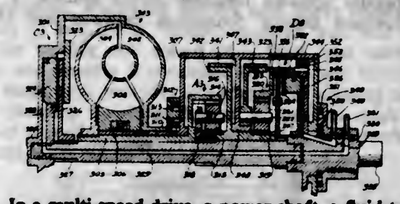
arm overlying the normal outboard surface on the free end of the crank and engaging said surface at a point beyond the tapped hole in the crank, said inclined arm being provided with an enlarged hole in alignment with the tapped hole in the crank, and a bolt extending through the enlarged hole in the inclined arm of the bracket and threaded into the tapped hole in the crank for stressing the bracket and rigidly clamping the bracket to the crank at said three points of engagement, and a hole in the bracket intermediate its ends for receiving the axle of the pedal.

2,749,772
TRANSMISSION AND CONTROLS
John James O'Malley, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application July 19, 1952, Serial No. 299,855
11 Claims. (Cl. 74—665)



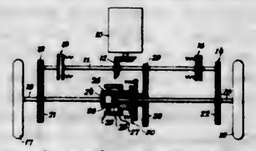
1. A torque transfer unit comprising a power input shaft, a first power output shaft, gearing connecting said shafts, a second output shaft, a clutch intermediate said first and second output shafts, a planetary gearing unit driven by said power input shaft for driving said gearing connecting said power input and said first power output shafts, a brake and clutch means operable to determine the drive condition of said planetary gearing unit, fluid pressure responsive servo members associated with said brake and each of said clutches, respectively, a fluid pressure source, a valve casing, a valve disposed in said casing for controlling said servo units, said valve means being effective to select neutral or no drive, direct drive through one of said output shafts, direct drive through both of said output shafts and reduction drive through both of said output shafts in the order named as said valve is moved in said casing.

2,749,773
HYDRODYNAMICALLY DRIVEN PLANETARY TRANSMISSION
Howard W. Simpson, Dearborn, Mich.
Application December 15, 1951, Serial No. 261,831
11 Claims. (Cl. 74—677)



1. In a multi-speed drive, a power shaft, a fluid turbine driven by the power shaft, a gear train comprising a plurality of planetary gear sets, each set having sun, ring and planet gears and a planet carrier, a driving connection between the output member of the fluid turbine and the ring gear of one of said planetary gear sets, clutch means between the power shaft and the carrier of the same gear set, a load shaft and clutch means between the load shaft and said carrier of the same set, a sun gear meshing with the planet gear of said carrier, said sun gear being drivingly connected to sun gear of a second gear set, the ring gear of the said second gear set being connected to the load shaft, and a brake for holding the carrier of said second set.

2,749,774
CONTROLLING SYSTEM FOR CLUTCH-OPERATED VEHICLE STEERING MECHANISM
Geoffrey Robert Greensmith Gates, Leamington Spa, England
Application June 27, 1952, Serial No. 295,923
Claims priority, application Great Britain July 4, 1951
13 Claims. (Cl. 74—710.5)

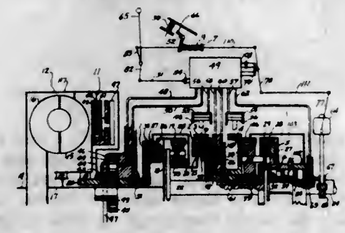


1. A driving and steering mechanism comprising a driven main shaft, two output shafts, two normally engaged main clutches connecting the main shaft with the respective output shafts, a differential gear unit having first, second and third elements, a pair of steering shaft sections connecting the output shafts to said first and second elements, respectively, a normally disengaged steering clutch connected to the third element of the differential gear unit, and a control system for simultaneously operating either main clutch and the steering clutch for bringing about differential rotation of the output shafts, said control system comprising spring means for holding each main clutch engaged, releasing means for each main clutch, a lever device connected to the releasing means of each main clutch and operatively connected to the engaging means of the steering clutch whereby movement of said lever causes spring force from either main clutch to be transferred through said lever to the steering clutch to bring about engagement thereof.

2,749,775
PLANETARY TRANSMISSION FOR SELF-PROPELLED VEHICLE
Howard W. Simpson, Dearborn, Mich.
Application December 27, 1951, Serial No. 263,631
12 Claims. (Cl. 74—731)

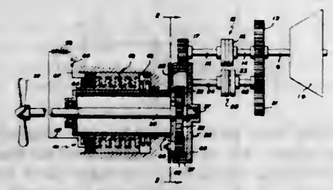
1. In a variable speed transmission for a self-propelled vehicle having an engine, a power input member, a load

member, a fluid coupling connected to step shift gearing for effecting a plurality of drive speed ratios between input and load members; a centrifugal clutch for by-passing said fluid coupling comprising a driving element rotating with the driving element of said fluid coupling, a centrifugally actuated rotatable driven element, a one-way forward driving connection between said clutch



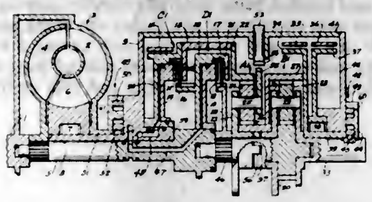
driven element and the driven element of said fluid coupling, said gearing including a friction lockup for establishing a one-to-one drive through the gearing, and a one-way forward driving connection between said gearing and the centrifugally actuated driven element of said clutch rendered effective upon engagement of said friction lockup.

2,749,776
REVERSING GEAR AND DRIVE CONTROL
Frederick K. Fischer, Lansdowne, Pa., and William H. Bartolett, Haddonfield, N. J., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application March 17, 1952, Serial No. 277,018
2 Claims. (Cl. 74—740)



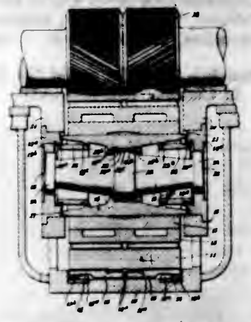
1. A marine propulsion unit for operating a propeller shaft from a power source which comprises a ring gear rotatably mounted on said shaft, a pair of independently operable clutches, driving connections between each clutch and said ring gear, a main drive shaft between one of said clutches and said power source for rotation of the ring gear in one direction, an auxiliary drive shaft for said other clutch and connections between said main and said auxiliary drive shafts for rotation of said ring gear in the other direction, a gear train between the propeller shaft and said ring gear for selectively rotating the propeller shaft in either of its directions of rotation, a brake drum rotatably mounted about the propeller shaft and having one end received by said gear train to be rotatably driven thereby, holding means for preventing rotation of said brake drum when the propeller shaft is driven in either direction by one of said independently operable clutches, releasing means for said holding means to permit rotation of the brake drum through said gear train, during the propeller shaft drive changeover of operation between the main and the auxiliary drive shafts, to absorb the energy of the momentum of the propeller shaft.

2,749,777
PLANETARY TRANSMISSION FOR SELF-PROPELLED VEHICLE
Howard W. Simpson, Dearborn, Mich.
Application December 15, 1951, Serial No. 261,820
15 Claims. (Cl. 74—761)



1. In a variable speed transmission comprising power input and output shafts, first and second planetary gear sets, each set comprising a ring gear, a sun gear, a planet gear carrier and at least one planet gear, the sun gear of the first set being connected to the ring gear of the second set, both planet carriers being connected to the output shaft, a first clutch means for connecting the input shaft to a member of the first gear set, a second clutch means for connecting the input shaft to a member of the second gear set whereby, when both clutch means are engaged, a direct drive is obtained in the transmission.

2,749,778
ARTICULATED PLANETARY GEARING
Walter Otto Kuhn, Clarence, N. Y., assignor to Farrel-Birmingham Company, Inc., Buffalo, N. Y., a corporation of Connecticut
Application March 11, 1952, Serial No. 275,869
6 Claims. (Cl. 74—801)



1. An articulated planetary gearing system comprising a sun gear, a planet cage carrying a plurality of pinions in meshing engagement with said sun gear, an independent elastic shaft supporting each of said pinions on said cage, a journal between each shaft and pinion and articulating sleeves for holding the journal against rotating relative to the planet cage under frictional load developed at the bearing surfaces between the journal and the pinion mounted thereon.

2,749,779
REVERSIBLE INPUT UNIDIRECTIONAL OUTPUT TRANSMISSION GEARING
Abel Godat, Bienne, Switzerland, assignor to Bulova Watch Company Inc., New York, Bienne Branch, Bienne, Switzerland, a joint-stock company of Switzerland
Application February 18, 1952, Serial No. 272,138
Claims priority, application Switzerland December 15, 1951
3 Claims. (Cl. 74—812)

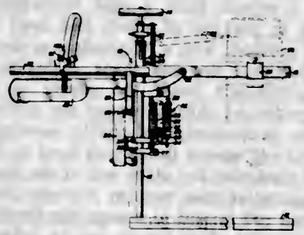
1. Reversible power transmission gearing for self-winding watches comprising in combination, a driving

pinion, two one-way couplings, one pinion of a one-way coupling meshing with said driving pinion and with a pinion of the other Breguet coupling, a winding wheel and a barrel arbor controlled by said winding wheel, the



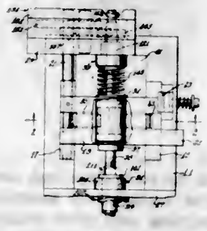
other pinion of each coupling meshing with said winding wheel, the two coupling pinions in engagement with each other being fixed on their axles, while the other pinions of said couplings are sliding pinions and a spring is arranged to keep the one-way couplings in engagement.

2,749,780
PORTABLE DRILL PRESS
Luther B. Jones, Columbia, S. C.
Application August 4, 1953, Serial No. 372,254
10 Claims. (Cl. 77—7)



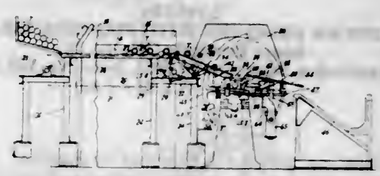
1. A portable drill comprising a standard carrying a work-engaging foot, a carriage slidably mounted on said standard, a drill carrying member on said carriage, a pair of rocker blocks mounted on said standard between the foot and the carriage, each rocker block having a raised block end and a raised slide end, an operating lever pivotally connected to said carriage and having a handle at one end thereof and a link pivotally connected at one end to said operating lever and at the other end to the raised lock end of said upper rocker block, the raised lock end of said lower rocker block being pivotally attached to said carriage whereby reciprocation of said operating handle effects movement of said carriage along said standard in the direction of said foot.

2,749,781
UNIVERSAL DRILLING JIG
George G. Herzl, Philadelphia, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Application June 1, 1955, Serial No. 512,537
9 Claims. (Cl. 77—62)



1. A universal drilling jig comprising a frame, a supporting block for a workpiece, means to provide for vertical adjustment of said block, laterally movable clamping members for securing said workpiece, said clamping members being rotatable with respect to said frame, a drill guide bushing, a member carrying said drill guide bushing, means pivotally supporting said member whereby said bushing is movable from an operative to an inoperative position, a sleeve supporting one of said clamping members, means for moving said sleeve axially with respect to said frame, means associated with said member for moving said sleeve away from said workpiece when said member is positioned to move said bushing to said inoperative position, and means for rotating one of said clamping members through a specified angle with respect to said frame whereby to rotate said workpiece through a corresponding angle.

2,749,782
AUTOMATIC APPARATUS FOR FEEDING STOCK TO POINT SWAGER OR THE LIKE
David A. Edgecombe, Sidley O. Evans, and Anthony T. Laposki, Beaver Falls, Pa., assignors, by mesne assignments, to The Babcock & Wilcox Company, Jersey City, N. J., a corporation of New Jersey
Application June 30, 1950, Serial No. 171,323
8 Claims. (Cl. 78—99)



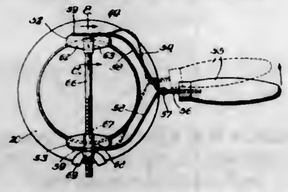
1. In combination with a machine for treating the ends of elongated metal articles, handling apparatus positioned and arranged to feed the articles to the machine for treatment and comprising grip means arranged to receive and grip an article and movable, in alignment with the article, toward and away from the machine; first operating means for advancing and retracting said grip means relative to the machine; second operating means for opening and closing said grip means on an article; a first control element operable by an article received in said grip means; a second control element operable by said grip means at the limit of retraction of the latter; said first and second control elements, when jointly operated, conjointly actuating said second operating means to close said grip means on an article and said first operating means to advance said grip means toward said machine; a third control element operable by said grip means at the limit of advance thereof to conjointly actuate said second operating means to open said grip means and said first operating means to retract said grip means from said machine; whereby, when an article is received in said grip means, the latter are cyclically closed and advanced and then opened and retracted to feed the article repetitively toward the machine; and a fourth control element located in the path of an article fed to the machine and operable by the article when a predetermined length of the end of the latter has been treated; said fourth control element, when operated by the article, actuating said second operating means to open said grip means; said third control element, when operated subsequent to operation of said fourth control element, conjointly actuating said second operating means to close said grip means and said first operating means to retract said grip means to withdraw the article from the machine; said second control element, when operated subsequent to operation of said fourth control element, actuating said second operating means to open said grip means and de-activating said first operating means.

2,749,783
VALVE CORE REMOVAL AND INSERTING TOOL
Archie I. Burgot, Florence Junction, Ariz., assignor of one-third to Larry J. Melcher, Mesa, Ariz.
Application February 1, 1954, Serial No. 407,538
1 Claim. (Cl. 81—3)



A valve core removal and inserting tool comprising a body portion having a conical formation at one end, a tubular stem having a transverse slot in its forward end extending outwardly of said conical formation, a recess in said conical formation communicating with said tubular stem, a coil spring positioned in said tubular stem with the inner end thereof positioned in the recess in said conical formation and the outer end thereof terminating slightly inwardly of the slot in said tubular stem, and an annular ridge in said tubular stem entering the coils of said spring to anchor the rear end thereof in the recess in said conical formation, said outer end of said spring being of outwardly diminishing tapered formation.

2,749,784
CLOSURE REMOVER WITH PIERCING MEANS
James Hrobicek, Chicago, Ill.
Application September 6, 1952, Serial No. 308,196
3 Claims. (Cl. 81—3.42)



1. A device for loosening closure caps from bottles, jars or the like, having a resilient gasket between the cap and bottle or jar, said device comprising a rod, an abutment secured to the rod, piercing means secured to the rod and disposed with the axis of said piercing means disposed substantially parallel with the axis of said cap and adjacent said gasket, said piercing means being adapted to project into the interior of the cap to displace the gasket and provide a vent by which pressure is equalized on the inside and outside of the cap, an abutment freely slidable on the rod, screw means for advancing the slidable abutment toward the first-mentioned abutment to clamp the cap between said abutments, a handle, and flexible means connecting each abutment to the handle.

2,749,785
CAN TOP REMOVER WITH WEDGE LIFTER
Lloyd T. Locke and Ray V. Shafer, Belmont, Calif.
Application July 27, 1953, Serial No. 370,324
5 Claims. (Cl. 81—3.46)



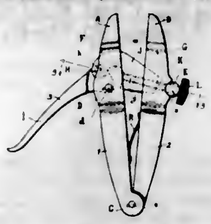
1. In a can top removing tool for use with cans of the type having detachable tops formed with depending telescoping annular flanges, a wedge member insertable between and engageable with the side of such a can and the depending telescoping flange of the can top, a handle, means connected to the handle for externally engaging the depending flange of the can top, and pivoted link means connecting the handle and the wedge member.

2,749,786
PREDETERMINED TORQUE RELEASE WRENCH
Paul Ollagnon, Saint-Etienne, France, assignor to Societe Anonyme des Forges Stephanoises, Saint-Etienne (Loire), France
Application October 8, 1952, Serial No. 313,645
Claims priority, application France October 26, 1951
3 Claims. (Cl. 81—52.5)



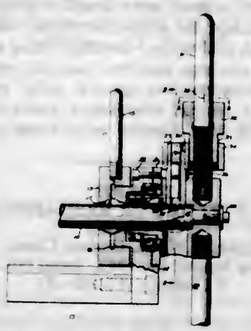
3. In a predetermined torque release wrench, the combination of a wrench head, a rigid substantially cylindrical shank to one end of which said head is rigidly secured and provided with a longitudinal groove of constant cross-sectional size and shape, a flexible rod extending longitudinally inside the groove in the rigid shank and projecting slightly beyond the outline of the shank, means permanently and rigidly securing the end of the flexible rod nearest the wrench head to the shank, a hand grip rigid with the other end of the flexible rod, an at least partly annular member slidingly fitted round the shank and rod system to engage the flexible rod at an adjsutable point of its length and to define thereby on said rod a portion lying between the securing means and the sliding member and held by the latter in contacting relationship with the groove in the rigid shank, whatever stress is imparted to the grip to urge the rod away from the shank and thereby move the wrench head in a corresponding direction, and an outer free portion extending between the sliding member and the grip and adapted to be bent away from the rigid shank upon actuation of the hand grip and means for clamping the sliding member in its selected adjusted position.

2,749,787
SELF-LOCKING CLAMPING DEVICE
Paul Ollagnon, Saint-Etienne, France, assignor to Societe Anonyme des Forges Stephanoises, Saint-Etienne (Loire), France
Application June 2, 1952, Serial No. 291,116
Claims priority, application France June 6, 1951
4 Claims. (Cl. 81—54)



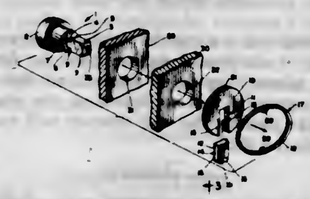
1. A clamp of the class described, comprising in combination: first and second lever members; a main pivot means interconnecting said lever members for relative angular movement about a main axis; a pair of cooperating work-gripping means equally spaced from said main axis and each carried by one of said lever members, said gripping means comprising gripping surfaces effective to grip a workpiece therebetween throughout an appreciably large range of relative angular positions of said lever members; an operating lever; a first pivot means carried by said first lever member intermediate said main pivot means and one of said gripping means and connecting said operating lever to said first lever member for movement about a first axis parallel to and spaced from said main axis; a link member; a second pivot means connecting one end of said link members to said second lever member for movement about a second axis parallel to said main axis and spaced from said main axis by substantially the same distance as said first axis, said link member having an off-center recess formed in that side thereof confronting said main axis and said first pivot means, said first pivot means being nestable in said recess to permit another end of said link member to extend around and beyond said first pivot means; a third pivot means interconnecting said operating lever and said link member at said another end of said link member and at a portion of said operating lever spaced from said first pivot means, said third pivot means permitting relative movement between said link member and said operating lever about a third axis parallel to said main axis, said operating lever being movable to a locked position wherein said first, second and third axes are substantially coplanar and wherein said gripping surfaces are positively forced by movement of said operating lever to have a minimum spacing from each other, said operating lever being further movable to an open position wherein said third axis becomes spaced from one side of a plane containing said first and second axes and wherein said main axis is spaced from an opposite side of said last mentioned plane, whereupon said gripping surfaces become spaced from each other by a spacing greater than said minimum spacing; and adjusting means included in said link member for varying the distance between said second and third axes for adjusting the magnitude of said minimum spacing between said gripping surfaces in accordance with the size of a workpiece to be gripped in said clamp.

2,749,788
PRE-GROOVING TOOL
James McMahon, Cleveland Heights, and John D. Baldwin, Jr., Highland Heights, Ohio, assignors to The Weatherhead Company, Cleveland, Ohio, a corporation of Ohio
Application September 10, 1952, Serial No. 308,824
1 Claim. (Cl. 82—1)



An apparatus for cutting grooves in the outer surface of tubes near the end thereof comprising a clamping means for securing said tube against movement, a rotating means arranged for rotation about the axis of said tube in a fixed space relationship with said clamping means, a locating stop mounted on said rotating means providing a locating surface for engaging the end of said tube, a cutting tool mounting means adapted for radial motion relative to said rotating means, an indexing knob formed with a bore threaded to said rotating means and an external surface threaded to said mounting means, said threads arranged to provide fine adjustment of said radial motion as said knob is rotated, a cutting tool secured in said mounting means for motion with said mounting means, said mounting means provided with a tube engaging surface to limit the motion of said tool toward said tube, said locating stop formed with an extension extending into the bore of said tube preventing the tube from collapsing as said cutting tool cuts said groove.

2,749,789
REMOVABLE, PERIPHERALLY MOUNTED RETAINER MEANS RESILIENTLY RETAINED ON THREADLESS BOLT
Sam W. Sass, Chicago, Ill.
Application November 25, 1955, Serial No. 549,004
The entire term of the patent has been dedicated to the public
4 Claims. (Cl. 85—8.8)

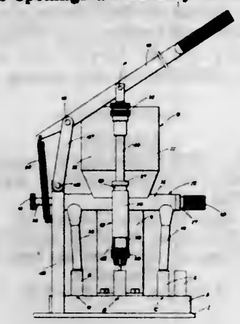


1. A mechanical fastener comprising an apertured washer having a radial slot with parallel side walls extending from the periphery of the washer to the opening therein, a radial segment of less length than said slot positioned in said slot, said radial segment being radially slidable inwardly and outwardly in said radial slot, means to retain axially of the fastener said radial segment in said slot and to limit movement of said radial segment in said slot, a retaining spring clip comprising arcuate portions and a pair of substantially diametrically opposed key portions extending radially inwardly from said arcuate portions, said spring clip resiliently engaging and pressing radially inwardly only said radial segment and a point on the rim of said washer substantially diametrically opposite from said radial segment, said radial segment having a recess in the peripheral end thereof, one of said opposed key portions of the spring clip being engaged in the recess in the radial segment, the arcuate sections of said spring clip being resilient whereby the spring clip may be flexed at right angles to the substantially diametrically opposed key portions to increase the minimum internal diameter of said spring clip to a larger dimension than the diameter of said washer whereby said spring clip may be moved axially away from engagement with said mechanical fastener.

2,749,790
LOADING AND WADDING DEVICE FOR SHOTGUN SHELLS
Willis C. Miller, Sacramento, Calif.
Application May 18, 1953, Serial No. 355,779
3 Claims. (Cl. 86—29)

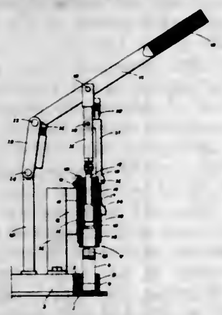
1. A wadding unit for shotgun shells, comprising a mount, means on the mount adapted to support an upwardly opening shotgun shell at a predetermined station, a standard on the mount, a vertical guide sleeve secured to the standard in vertical alinement with but above a shell at said station, an inner sleeve slidable downward a limited distance in the guide sleeve from a raised starting position, a plunger slidable in the inner sleeve for a downstroke from a raised starting position with the lower end of the plunger above the corresponding end of the inner sleeve to a lowered position with said end of the

plunger in the shell, there being sufficient frictional drag between the plunger and inner sleeve to slide the latter to its down position and to its raised starting position on the down-stroke and up-stroke, respectively, of the plunger, openings in the sleeves in register at the start and through which openings a wad may be deposited in the



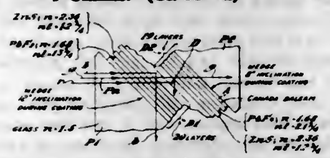
inner sleeve, and a circumferential row of spring fingers depending at an inward incline from the lower end of the inner sleeve adapted to receive and downwardly releasably support a wad so deposited, the plunger on its down-stroke pushing the wad through said row of spring fingers into the shell.

2,749,791
CRIMPING DEVICE FOR SHOTGUN SHELLS
Willis C. Miller, Sacramento, Calif.
Application May 26, 1953, Serial No. 357,418
7 Claims. (Cl. 86—40)



1. A crimping device, for shotgun shells, comprising a mount, means on the mount adapted to support an upwardly opening shotgun shell in a stationary position with its upper end portion exposed, a shell crimping plunger unit secured in connection with the mount in axial alinement with but initially spaced above the shell, said plunger unit being operative to stroke downward into crimping engagement with the shell, and means arranged to cause such stroke of the plunger unit; said plunger unit including an outer plunger having a downwardly opening bore adapted on an initial portion of said stroke to receive said upper portion of the shell therein, means in the outer plunger operative to impart an initial infolding of the outer end of the shell upon its reception in said bore, and an inner plunger in the outer plunger normally above said initial infolding means operative upon completion of the stroke to move downward into engagement with said initially infolded end of the shell and to complete the infolding thereof whereby to crimp the shell; and said stroke-causing means including a hand lever above the plunger unit, said hand lever being arranged in connection with the amount for downward swinging from an initially raised position, and instrumentalities associated with the hand lever and responsive to continuous downward swinging thereof operative to impart said initial portion of the stroke to both plungers, and said completion of the stroke solely to said inner plunger.

2,749,792
LIGHT DIVIDING SYSTEM
Donald H. Kelly, Los Angeles, Calif., assignor to Technicolor Motion Picture Corporation, Hollywood, Calif., a corporation of Maine
Application February 1, 1952, Serial No. 269,525
9 Claims. (Cl. 88—1)



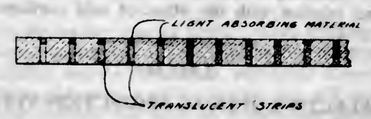
1. Optical apparatus for dividing or combining light beams of three substantially distinct colors with peaks of substantially distinct wave lengths, comprising optical means having an entrance aperture for transmitting a beam of light containing said colors; a light transmitting body having a surface obliquely arranged with respect to said entrance aperture and adapted to intersect said beam; on said surface a first optical interference coating having alternate layers of optical media of respectively high and low refractive indexes and of respective thicknesses for selectively transmitting light of one color of a peak wave length within a given intermediate spectral color range and for also selectively transmitting light of a second color of a peak wave length within a second spectral color range adjacent on one side of said intermediate spectral color range, and for selectively reflecting light of a third color of a peak wave length within a third spectral color range adjacent on the other side of said intermediate spectral color range; and on said surface, superimposed on said first optical interference coating, a second optical interference coating having alternate layers of optical media of respectively high and low refractive indexes and of respective thicknesses for selectively transmitting light of said first color of a peak wavelength within said given intermediate spectral color range and for also selectively transmitting light of said third color of a peak wave length within said third spectral color range, and for selectively reflecting light of said second color of a peak wave length within said second spectral color range; the transmitting and reflecting ranges of said first and said second coatings being superimposed such that said coatings together transmit one component beam of said intermediate spectral color range and together reflect a second component beam composed of said second and third spectral color ranges.

2,749,793
OPTICAL SYSTEM FOR RESHAPING BEAM OF LIGHT
John U. White, Darien, Conn.
Application August 29, 1952, Serial No. 306,999
3 Claims. (Cl. 88—1)



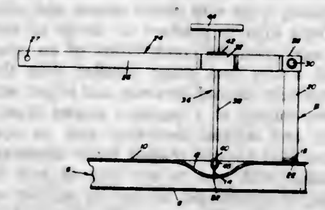
1. An optical system for reshaping a beam of light comprising a solid transparent structure arranged to intercept part of said beam and having four angularly-positioned reflecting surfaces arranged to reflect said part diagonally to a new path parallel with but offset laterally from the original path of said part of said beam, the first of said reflecting surfaces being set at an angle of incidence greater than 45 degrees from said original path, the second and third of said reflecting surfaces being at right angles to each other, and the fourth of said reflecting surfaces being set at an angle to the light falling on it equal to said angle of incidence, the refractive index of said structure being such that the length of the path of said intercepted part of said beam in said structure divided by said refractive index is equal to the length of the path of the non-intercepted part of said beam beside said structure.

2,749,794
ILLUMINATING GLASSWARE AND METHOD OF MAKING IT
Thomas G. O'Leary, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a corporation of New York
Application April 24, 1953, Serial No. 350,815
3 Claims. (Cl. 88—1)



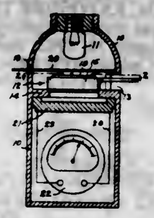
3. A louver device comprising a monolithic glass sheet having a plurality of sharply defined, parallel, translucent, linear portions containing light-diffusing crystallites and extending through the sheet to form a series of louvers, said portions being depressed in one surface of the sheet, said depressions containing a substantially opaque light-absorbing material dispersed in a solid carrier and capable of absorbing and reflecting a substantial proportion of the light traveling through said portion in a direction toward the side of said sheet having the depressions from a light source on the opposite side, whereby the eyes of a viewer on the side of the sheet having said depressions are substantially shielded by said opaque material against glare incident to the diffusion of light by said crystallites.

2,749,795
METAL PANEL REPAIR TOOL
Howard D. Boykin, Jr., Candor, N. Y.
Application October 27, 1953, Serial No. 388,638
2 Claims. (Cl. 81—15)



1. A metal panel repair tool of the class described comprising a manually actuable stress applying lever, a support for the distal end of said lever adapted too rest firmly on the work acted on, said distal end of the lever being pivotally mounted on said support, a dent pulling and deforming rod operatively mounted on an intermediate portion of said lever, a self-threading screw adapted to be threaded into a localizing and hold-down hole provided therefor in a dent, and means operatively joining said screw with said rod, said rod being slidably, rotatably and detachably mounted on said lever.

2,749,796
PROCESS OF DETERMINING DEGREE OF MILLING OF FLOUR AND APPARATUS FOR SAME
Edwin Bauer, Berlin, Germany
Application April 19, 1951, Serial No. 221,828
6 Claims. (Cl. 88—14)



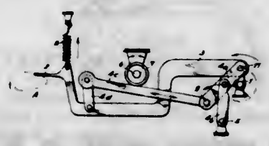
6. The process of determining the degree of milling of grain flour comprising treating the sample of grain flour with a stain of an aqueous solution of aniline acid salt in the form of a paste thereof, said aniline salt being selected from the group consisting of aniline sulphate and aniline hydrochloride; forming a calibrated layer of said stained sample of light passing thickness; determining the amount of light absorption; and correlating said light absorption with the amount of bran present in the sample.

2,749,797
SAMPLE HOLDER
Walter M. Harin, Fort Wayne, Ind., assignor to Bowser, Inc., Fort Wayne, Ind., a corporation of Indiana
Original application March 21, 1950, Serial No. 150,937, now Patent No. 2,677,303, dated May 4, 1954. Divided and this application July 10, 1952, Serial No. 298,101
6 Claims. (Cl. 88—14)



1. In a liquid testing means, a stick having a bore and a counterbore, a sample holder having a central sample cup and an overflow cup surrounding it, said overflow cup being of yieldable material and frictionally disposed in said counterbore and serving to locate said cup and sample in alignment with the bore.

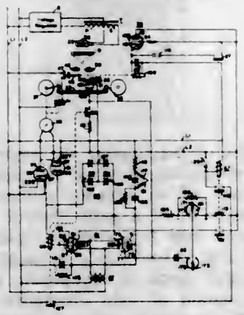
2,749,798
FILM FEEDING MECHANISM FOR CINEMATOGRAPH APPARATUS
Richard Rabaus, Berlin-Tempelhof, Germany
Application April 21, 1952, Serial No. 283,323
Claims priority, application Germany April 21, 1951
9 Claims. (Cl. 88—18.4)



1. Film feeding mechanism comprising a claw plate having a claw at one end thereof, a single uniformly rotatable crank pivotally connected with said claw plate, a first link pivotally connected at one end with said crank, and at the other end with one end of a second link and at a point intermediate its ends with an arm mounted on a fixed pivot, means for biasing said second link at a point intermediate its ends against a circular abutment mounted on a fixed axis and means connecting the free end of said second link with the claw plate for transmitting the motion of the such end of said second

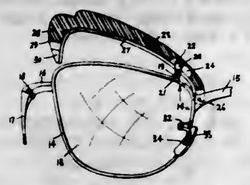
link so that the swinging movement imparted to said second link is transmitted to the claw plate whereby the claw is constrained to effect a predetermined motion.

2,749,799
PHOTOGRAPHIC EXPOSURE TIMING DEVICE
Thomas Strom, Pittsburgh, Pa.
Application August 13, 1953, Serial No. 373,994
4 Claims. (Cl. 88—24)



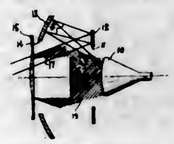
1. Photographic apparatus for reproducing a negative comprising a source including an incandescible filament for projecting light on said negative, a circuit, open in the quiescent condition of said apparatus, for heating said filament, a photographically sensitive medium disposed to receive on its sensitive surface the resulting light from said negative, photo-ensitive means responsive to the resulting light from said negative for timing the impressing of said last-named light on said medium, means for blocking the transmission of light from said negative to said medium, said blocking means being actuable to permit transmission of light to said medium, means connected to said circuit and actuable to close said circuit, and means responsive to said connected means, for actuating said blocking means to permit transmission of light from said negative to said medium a predetermined time interval after the closing of said circuit sufficient to enable said filament to reach its full emissivity.

2,749,800
OPHTHALMIC MOUNTINGS
Louis L. Gagnon, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Application August 29, 1952, Serial No. 307,028
2 Claims. (Cl. 88—47)



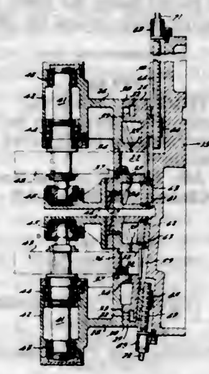
2. A lens supporting structure for an ophthalmic mounting comprising a pair of metallic lens rims joined on the nasal sides thereof by a bridge portion and having endpiece portions on the temporal sides thereof to which temples may be connected, the upper section of each of said lens rims intermediate the bridge portion and endpiece portions being divided adjacent one of said portions and each having a decorative trim formed with a longitudinal channel in the underside thereof and extending throughout the distance between said bridge portion and endpiece portions and adapted to receive said upper sections of said rims, each of said decorative trims having its end nearest the divided ends of the rims rotatably connected to the adjacent portion of the lens supporting structure to permit said decorative trim to be swung upwardly or downwardly with respect to said rim, said decorative trim, in the vicinity of said divided ends of the rim having a recess communicating with the channel in the underside thereof, a link member pivotally connected adjacent one end thereof to said trim within said recess and having its other end pivotally connected to the adjacent free one of said divided ends of the rim whereby upward and downward movement of the trim about its connection to said adjacent portion of the supporting structure will cause said divided ends to move toward and away from each other to permit the insertion or removal of a lens from said rim, and said trim, on the opposed end thereof, having a resilient latch portion adapted to be detachably latched with the other of said portions of said supporting structure to hold said trim in closed position, the length of said trim with respect to the distance between the end thereof connected with said adjacent portion of the lens supporting structure and its pivotal connection with the link being several times said distance whereby a long lever is provided for moving the divided ends of the rims towards each other and for rigidly clamping a lens in said rim when the trim is in latched relation with the other of said portions.

2,749,801
REFLECTIVE OPTICAL PROJECTION SYSTEMS
Gilbert Clotar, Stamford, Conn., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Application November 9, 1951, Serial No. 255,716
16 Claims. (Cl. 88—57)



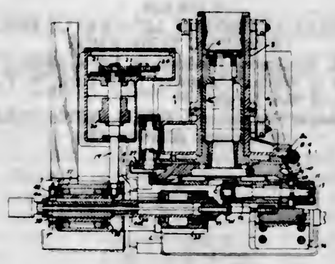
1. In an axially aligned reflective optical projection system embodying an object source of predetermined size and shape and reflecting means including a concave mirror coaxial therewith and effectively located to receive light rays emanating from said object source and reflect them to a receiving area to produce an image of said object source at said area, the combination of an opaque baffle disc of a size and shape smaller than the object source effectively located between said object source and the concave mirror at a position spaced from the object source and coaxial therewith, and an open-ended hollow truncated conical shaped baffle diaphragm positioned coaxial with and to one side of said disc, said conical shaped diaphragm having its smaller open end no greater than the diameter of the disc and its larger open end at least as great as the diameter of the object source whereby substantially all of the light rays emanating from said object source from any point thereon in a direction substantially parallel with the axis of the system will be intercepted, and said diaphragm being located outside the area where the path of the light rays directed to and reflected by the reflecting means cross and further having its conical shaped wall substantially parallel with the portion of the path of the light ray in which it lies whereby degradation of image in said system will be reduced.

2,749,802
SHAVING CUTTER FOR GEARS
William R. Carlson, Huntington Woods, Mich., assignor to Michigan Tool Company, Detroit, Mich., a corporation of Delaware
Application September 30, 1952, Serial No. 312,274
4 Claims. (Cl. 90—1.6)



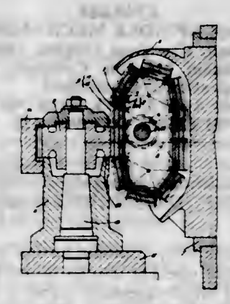
1. In a device for shaving gears, a work holding member adapted to support a gear, means for rotating said work holding member, a carriage adjustable toward and away from said gear, a slide mounted on said carriage, means for moving said slide in a direction parallel to the gear axis, a pair of shaving cutter heads on said slide, means on each of said heads for rotatably supporting a shaving cutter spindle, means for angularly adjusting each of said spindles with respect to the direction of movement of said slide, means for longitudinally adjusting one of said shaving cutter heads with respect to said slide, and means for adjusting said other shaving cutter head in a direction normal to the gear axis, said last-mentioned means including a track forming part of said slide and inclined with respect to the direction of movement of said slide, said other shaving cutter head being held by said inclined track.

2,749,803
GEAR CUTTING MACHINE
Edward Whitney Miller, Springfield, Vt., assignor to The Fellows Gear Shaper Company, Springfield, Vt., a corporation of Vermont
Application September 25, 1951, Serial No. 248,221
8 Claims. (Cl. 90—1.6)



1. In a machine of the character described, a base, a cutter slide moveable on said base, a bearing member mounted to rotate in said slide, a gear member rotatably journalled in to said bearing member, said gear member consisting of a gear having cylindrical gear characteristics, and a face gear fixed to said gear, a cutter carrying spindle mounted on said bearing member, a gear on said spindle meshing with said face gear, a work table on said base, a work spindle mounted to rotate in said work table, means to reciprocate said work table, gearing between said work spindle and said gear having cylindrical gear characteristics so constructed and arranged so as to rotate the cutter spindle and work spindle in timed relation, said gearing including a gear fixed to said work spindle and change gears between said last mentioned gear and said gear having cylindrical gear characteristics, a guide member fixed to said work spindle and spaced axially of said spindle from said gear on said spindle, and means coacting with said guide member to impart an incremental rotation to the work spindle.

2,749,804
DEVICE FOR CUTTING GEAR TEETH AND GROOVES OR SPLINES BY THE GENERATING PROCESS
Robert Nicolas Daudt, Meudon, France
Application June 20, 1952, Serial No. 294,595
Claims priority, application France June 22, 1951
4 Claims. (Cl. 90—3)

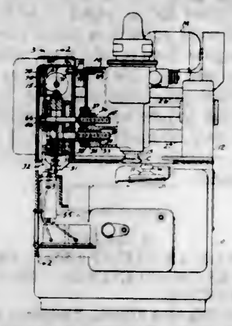


1. In a gear-cutting device comprising a continuous cutting chain adapted to have a continuous movement, the path thereof having at least one plane part, and cutting elements carried by said chain, said cutting elements comprising articulated units made up of side links and intervening base plate, an intermediate plate rotatably and slidably mounted on said base plate, means to adjust the position of said intermediate plate with reference to said base plate, parallel cutting blades having the form of a rack arranged adjacent to each other transversely to said path of the chain, means to bind together said cutting blades whereby forming a block of said blades, means to secure said block of blades to said intermediate plate, and means to secure said block of blades and said intermediate plate to said base plate, whereby allowing said blades to be aligned on said links at any suitable angle with reference to the longitudinal axis of said link and permitting of cutting gears with one or several threads.

2,749,805
SADDLE TRAVERSING MECHANISM FOR GEAR SHAPERS AND THE LIKE
Edward H. Kendall, North Springfield, Vt., assignor to The Fellows Gear Shaper Company, Springfield, Vt., a corporation of Vermont
Application January 21, 1955, Serial No. 483,393
10 Claims. (Cl. 90—7)

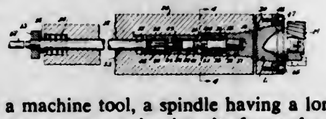
1. In a gear finishing machine having a work spindle, a cutter spindle, a saddle in which one of said spindles is mounted and ways slidably mounting said saddle so that a cutter on said cutter spindle may be fed into depth relative to a work piece on said work spindle, a saddle traversing means consisting of a depth feed cam, means to rotate said cam, a follower engaging said cam, a mounting for said follower movable in a direction at an angle to the axis of rotation of said cam, a second cam mem-

ber joined to said saddle, said second cam member having a contact portion extending in the direction of move-



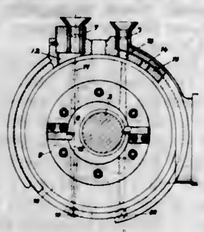
ment of said mounting, and a bearing member on said mounting adapted to contact said second cam member.

2,749,806
TOOL SPINDLE MECHANISM
Hallis N. Stephan, Cleveland Heights, Ohio, assignor to The New Britain Machine Company, New Britain, Conn., a corporation of Connecticut
Application April 3, 1953, Serial No. 346,651
11 Claims. (Cl. 90—11)



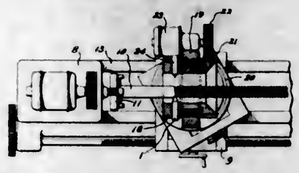
1. In a machine tool, a spindle having a longitudinally extending aperture opening into its forward end, the forward portion of which aperture forms a socket for the reception of a tool-holding device to be attached to the spindle, a member within said aperture and reciprocable axially of said spindle, means operatively connected to said member for selectively connecting and disconnecting said member to and from the tool-holding device upon reciprocation of said member away from and toward the forward end of said spindle respectively, spring means interposed between said spindle and said member continuously and yieldably urging said member to a rearward position away from the forward end of said spindle, said spring means operating to bias a tool holding device secured in said member into said socket, means for moving said member forward toward the forward end of said spindle, and releasable means for securing said member in a forward position against the action of said spring.

2,749,807
DEVICE FOR CUTTING LONG THREADS
Karl Heinrich Burgmuller, Krelensen am Harz, Niedersachsen, Germany, assignor to Gomerue Establishment, Vaduz, Liechtenstein
Application October 18, 1952, Serial No. 315,484
3 Claims. (Cl. 90—11.4)



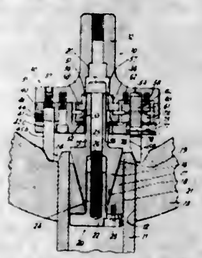
1. A device of the kind described for observation of a tool used primarily for cutting threads while said tool is stationary, or in motion, and as an aid to set up of a tool, comprising, in combination, coinciding bores disposed in a plane located substantially perpendicular to the axis of said cutting tool traversing through a tool holder ring and through a bearing housing, said housing bore having an optical means with interchangeable reticles showing correct thread profiles mounted in said bore and a light source placed below the lower portion of said bore effecting a stroboscopic means for observation.

2,749,808
THREAD CHASING
Karl Heinrich Burgmüller, Krelensen am Harz, Niedersachsen, Germany, assignor to Gomerue Establishment, Vaduz, Liechtenstein
Application July 13, 1951, Serial No. 236,609
1 Claim. (Cl. 90—11.64)



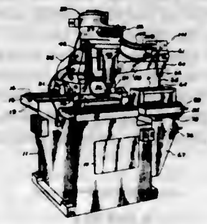
The method for cutting threads on a workpiece as herein described, comprising the steps of relatively slowly rotating said workpiece about its longitudinal axis, said rotation controlling the amount of feed for said thread cutting operation, and relatively rapidly rotating a tool holder ring with a cutting tool and a clearance cutting tool, eccentrically around said workpiece, said tools engaging said workpiece intermittently and alternately over a small portion only of said workpiece removing from said workpiece short chips of variable cross-section with each revolution of said tool holder ring, said tools circling around said workpiece and striking said workpiece each at a point on the circumference of said workpiece and continuing said respective cuts by the next strike to the respective adjacent points during the following revolutions around said workpiece, said clearance cutting tool precutting the groove of said thread being cut, thereby reducing the cross-section of said chips to be removed by said cutting tool, thus relieving strains and stresses on said cutting tool during its finishing operation, as the curvature of the circular path of said cutting tool conforms substantially to the circumference of said workpiece, practically no tool marks are made between the individual cuts therefore no further finishing is required.

2,749,809
METAL REMOVING APPARATUS FOR TRIMMING TUBE ENDS
Clarence E. Anderson, Wadsworth, Ohio, assignor to The Babcock & Wilcox Company, New York, N. Y., a corporation of New Jersey
Application November 7, 1952, Serial No. 319,367
6 Claims. (Cl. 90—12)



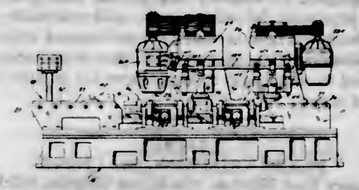
1. Metal removing apparatus for trimming tube ends comprising, in combination, a threaded shaft; clamping means operatively associated with said shaft and arranged to frictionally engage the inner surface of the tube and support said shaft in substantially axial alignment with the tube and projecting from the tube end; a tool carrier rotatably mounted on said shaft and movably axially thereof, and constructed and arranged to be rotated by driving means; metal cutting tools mounted in said carrier; a feed nut gear fixed axially of said carrier and threaded on said shaft; a dual speed differential gearing operatively interposed between said nut gear and said carrier and including a driving gear fixed axially of said carrier and movable axially of said shaft; a pair of clutch gears rotatable in said carrier on an axis eccentric to said shaft and each engaged with one of said first-named gears; the number of teeth on said clutch gears differing by one; means normally biasing said clutch gears into engagement for slow speed rotation of said feed nut gear upon rotation of said carrier; and means selectively operable to disengage said clutch gears for high speed rotation of said feed nut gear upon rotation of said carrier.

2,749,810
HYDRAULIC TRACER CONTROLLED ROUTING MACHINE
Manuel Turchan, Dearborn, Mich.
Application December 9, 1953, Serial No. 397,123
3 Claims. (Cl. 90—13.5)



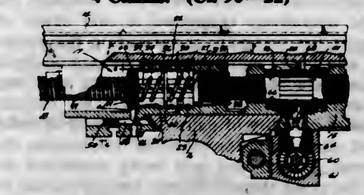
1. A hydraulic routing machine comprising a bed having a horizontally disposed sadde and a stationary table for supporting a workpiece; a horizontally reciprocal longitudinal slide on said saddle, a hydraulic cylinder joined to and extending through said slide and movable relative to said saddle, a horizontally reciprocal cross-slide movably mounted on said longitudinal slide, a horizontal cylinder joined to and positioned within said cross-slide and movable relatively to said longitudinal slide, a vertically reciprocal slide mounted on said cross-slide and adapted to carry a cutting tool engageable with said workpiece, an upright hydraulic cylinder secured within said cross-slide and having a reciprocal piston rod joined to said vertically reciprocal slide, an arm joined to said vertically movable slide and extending laterally thereof for movement in unison therewith, a hydraulic three dimensional tracer mounted upon and depending from said arm, a spindle universally mounted within said tracer and depending therefrom with its depending end adapted for operative engagement with a pattern on said bed, a pair of horizontally disposed right angularly arranged valves within said tracer engageable with said spindle and adapted to respectively control the flow of pressure fluid from a pressure fluid source to opposite ends of said longitudinal and cross-slide operating cylinders, a third vertically movable valve within said tracer axially of and engageable with said spindle and adapted to control the flow of pressure fluid from said source to the vertical slide operating cylinder, said spindle being manually movable over the surface of said pattern for effecting simultaneous corresponding movements of said cutter on said workpiece for duplicating therein the shape of said pattern, a knee at one end of said bed vertically adjustable thereon, a horizontally disposed cross-slide reciprocally mounted on said knee for movements in a horizontal plane, and a pattern mounting top slide on said cross slide movable in a horizontal plane at right angles to the direction of movement of said latter cross slide, whereby the pattern may be adjustable manually with respect to said spindle as said cutting tool is moved into cutting relation with said workpiece.

2,749,811
TRANSFER MACHINES
Orrin W. Barker, New Berlin, and Joseph J. Lenert, Milwaukee, Wis., assignors to Kearney & Trecker Corporation, West Allis, Wis., a corporation of Wisconsin
Application January 31, 1952, Serial No. 269,191
18 Claims. (Cl. 90—15)



1. In a machine tool having a base and a frame movably mounted on said base, a plurality of cutter carrying spindle head units fixedly mounted on said frame to move simultaneously for effecting a cutting operation, a plurality of work stations disposed on said base in operating relationship with said spindle head units, each of said work stations being arranged to present a workpiece for operation upon by one of said cutters, and a transfer pin mounted on each of said spindle head units for axial movement in position to engage one of said workpieces when moved so that the workpiece will be caused to move with the spindle head unit, whereby said transfer pins may be positioned to engage the workpieces after the spindle head units have completed a cutting movement so that the workpieces will move with the spindle head units while they are travelling in their return movement for transferring the workpieces from one of said work stations to the succeeding work station.

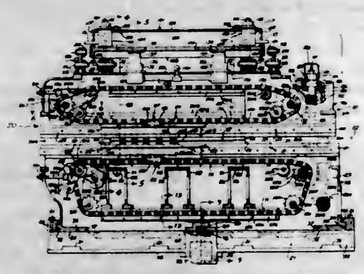
2,749,812
BALL BEARING NUT AND SCREW MECHANISM
Theodore A. Wetzel, Milwaukee, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis., a corporation of Wisconsin
Application July 21, 1952, Serial No. 300,080
4 Claims. (Cl. 90—22)



2. In an actuating mechanism for a machine tool, a stationary antifriction nut element of the recirculating ball type, a rotatable antifriction feed screw operatively engaged by said fixed nut element, said feed screw presenting a helically formed ball receiving groove of semicircular cross section and a plurality of extremely shallow longitudinally extending driving splines intersecting the crest constituted by the peripheral surface joining the opposite sides of the groove formed therein, a set of bearing balls constrained within said fixed nut element for rolling engagement with a portion of the helical groove presented by said screw, a rotatable antifriction nut element of the recirculating ball type threaded on said screw into endwise abutting engagement with said fixed nut

element, a second set of bearing balls constrained for recirculating movement in said rotatable nut element for rolling engagement with a spaced apart portion of the groove presented by said screw, locking means connected to adjust the degree of tightness between said nut elements to selectively preload the separate sets of bearing balls respectively interposed between the groove in said screw and said nut elements, said antifriction nut elements being adapted to eliminate axial lash between said screw and said nut elements, said screw being so formed that the helical groove presented thereby is relieved slightly toward the crest to prevent the splines presented thereby from interfering with the rolling movement of said sets of bearing balls, an internally splined rotatable driving sleeve adapted to slidably engage the axially extending splines presented by said screw, said rotatable driving sleeve being carried in axially fixed spaced relationship to said stationary nut element, and power operable means connected to rotate said driving sleeve for in turn rotating said feed screw.

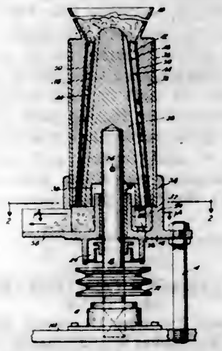
2,749,813
FLASH TRIMMING MACHINE
Henry Earl Morton, Muskegon Heights, Mich.
Application March 30, 1953, Serial No. 345,369
3 Claims. (Cl. 90—38)



1. In a flash trimming machine, a frame including an elongated base and an elongated head spaced vertically above said base, a horizontally-elongated lower cutting ram support mounted on said base, a horizontally-elongated upper cutting ram support mounted for vertical reciprocation on said frame, upper and lower work clamping members connected respectively to said upper and lower supports, flash cutting rams mounted for parallel horizontal reciprocation on said supports and having cutters thereon projecting toward one another, and hydraulic piston-and-cylinder mechanism mounted on said frame and operatively connected to said upper cutting ram support for vertically reciprocating the same relatively to said lower cutting ram support, said hydraulic mechanism including a plurality of pairs of lifting cylinder elements and lifting piston elements reciprocable therein and a plurality of pairs of clamping cylinder elements and clamping piston elements reciprocable therein, one element of each said pair being connected to said head and the other element thereof being conected to said upper cutting ram support, said hydraulic mechanism including means for applying hydraulic pressure fluid to said cylinder elements to forcibly reciprocate said lifting elements and clamping elements in opposite directions relatively to one another.

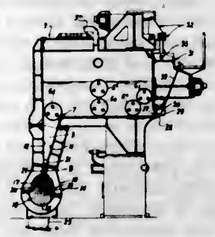
2,749,814
PROCESS AND APPARATUS FOR MECHANICALLY WORKING FIBROUS MATERIALS
Anton J. Haug, Nashua, N. H.
Application January 22, 1953, Serial No. 332,726
9 Claims. (Cl. 92—27)

1. A machine for processing a fluid mass of fibrous material comprising a pair of tubular fiber working members concentrically arranged in close proximity to one another but in such spaced-apart relation as to define a relatively narrow conduit through which fibrous material may pass, inlet port means for guiding fibrous material into the said conduit, means for producing rotative movement of at least one of said fiber working members, fiber engaging surfaces formed in said fiber working members, said surfaces being interrupted to form a plurality of spaced-apart crater-like openings which have curved



edges lying in the plane of said surfaces, said curved edges being adapted to cooperate with one another to roll without breaking the fibers into twisted formations, and one of said fiber engaging surfaces being provided with stepped portions which gradually approach and then abruptly depart from immediately adjacent portions of the other of said fiber engaging surfaces to provide spaces in which fibers rolled into twisted formations may seek to uncurl.

2,749,815
STOCK FEEDING MEANS
Alexander Eric Stewart, St. Lambert, Quebec, Canada, assignor to Dominion Engineering Works Limited, Montreal, Quebec, Canada
Application December 31, 1953, Serial No. 401,637
4 Claims. (Cl. 92—44)



1. Stock feeding means of the character described comprising a headbox having a rear bottom inlet opening through which stock is supplied to said headbox and a front slice orifice through which stock passes from the headbox onto the forming wire of a paper making machine, an upflow stock delivery passage through which stock is delivered to said inlet, said passage being bounded at the front and rear by inclined front and rear walls which diverge as they approach the upper end of the passage, a cross-flow distributor presenting a cross-flow passage open at both ends and a top upflow outlet through which stock is delivered from said cross flow passage to the lower end of said upflow delivery passage and elbows connected to opposite ends of said cross flow distributor in communication with said cross flow passage, said cross flow passage being substantially pear-shaped in cross section and each of said elbows having a cross section progressively changing from a circular section of suitable area at the intake end to a larger and substantially pear-shaped cross section at the outlet end and a warped longitudinal extending partition whose lower edge is in spiral contact with the lower half of the cross flow channel arranged in said cross flow passage to provide tapering flow channels at opposite sides of said partition, said channels being in communication with said top upflow outlet.

2,749,816
PAPER FASTENING DEVICE
Howard J. Jewell, Noranda, Quebec, Canada
Application March 15, 1954, Serial No. 416,341
Claims priority, application Canada January 26, 1954
1 Claim. (Cl. 93—1.1)

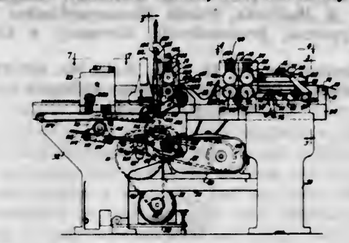


A device for attaching sheets of paper to one another comprising a frame member formed from a single strip of metal transversely bent through substantially 90 degrees at four points intermediate its ends so as to form a four-sided, generally rectangular member and an open ended recess having two parallel sides, the parallel sides of the recess being formed by the opposite end portions of said strip, the parallel sides of said recess being spaced apart sufficiently to permit the insertion therebetween of a folded-over corner portion of a plurality of sheets of paper; a pair of aligned holes of equal size in the parallel sides of said recess; and a hole in the side of said rectangular member opposite said parallel sided recess, the latter hole being aligned with, but smaller than, said pair of holes; a shearing punch reciprocably mounted in the three aligned holes, said punch having a shearing face which extends thereacross at a marked angle to the sides forming the open-ended recess, the side of the punch nearest the open end of the recess being the longest side of the punch, said punch being shouldered to prevent its withdrawal through the smaller of the three aligned holes; a head on said shearing punch at the end opposite the angularly disposed shearing face; and a compression spring mounted on said shearing punch and bearing against the upper side of said rectangular member and the under side of said head, said spring biasing said punch so as to normally occupy a position in which the shearing face is held clear of said recess and the shoulder on the punch bears against the side of said rectangular member opposite said parallel sided recess; the portion of said punch between said head and said shoulder being of a length which permits the angular shearing face to partially, but not completely, enter the outer member of the pair of aligned holes when the punch has been fully depressed by pressure applied against the head thereof.

2,749,817
BAG MAKING MACHINE
Thomas E. Piazze, Mount Vernon, and David C. McCluskey, Gambier, Ohio, assignors, by mesne assignments, to Continental Can Company, Inc., New York, N. Y., a corporation of New York
Application July 18, 1952, Serial No. 299,590
8 Claims. (Cl. 93—8)

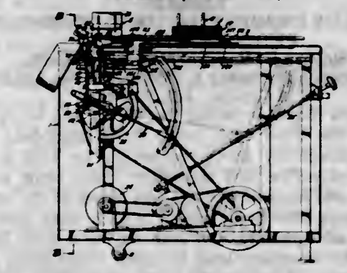
1. In a seam forming machine a supporting frame having means thereon for advancing two webs of heat sealable material in superimposed relation, a transverse seam forming mechanism, said seam forming mechanism comprising side supporting members mounted on said frame and heat sealing members mounted on said side supporting members on opposite sides of the path of movement of the webs, means for moving said heat sealing members toward and from each other to engage the webs therebetween, one of said heat sealing members comprising a transversely extending supporting member having a plurality of spaced pressing rollers on the face thereof which is adjacent the webs, said supporting member being mounted for movement transversely of the path of movement of the webs and power means to reciprocate said supporting member during the seam forming operation.

8. In a pouch fabricating machine, a main supporting frame, means on said main frame for intermittently advancing two webs of heat sealable material in superimposed relation, a transverse heat seal forming mechanism on said main frame having sealing elements operable intermittently to engage and transversely seal the webs, and a transverse seal cooling mechanism, said seal cooling mechanism comprising supporting side frame members mounted on said main frame, means for adjusting said



side frame members longitudinally of said main frame and toward and from said seal forming mechanism, cooling boxes having their ends movably mounted on said side frame members, said cooling boxes being arranged on opposite sides of the path of advancing movement of the webs and means for reciprocating one of said cooling boxes relative to the other and to said side frame members at regular intervals and in timed relation to the intermittent advancing movement of said webs to engage the transversely sealed areas in the webs between the same, a transverse web severing means, a supporting frame adjustably mounting said web severing means on said main frame, and cooperating drive means for operating said web advancing means, said heat seal mechanism, said cooling box reciprocating means and said web severing means in any position of adjustment of said seal cooling mechanism and said web severing means relative to said heat seal forming mechanism and said main supporting frame.

2,749,818
KNOCK-OUT FOR BOX MAKING MACHINE
Elbert Litton Bivans, Glendale, Calif., assignor to E. L. Bivans, Inc., Los Angeles, Calif., a corporation of California
Application March 23, 1953, Serial No. 343,837
6 Claims. (Cl. 93—53)



1. A box making machine comprising a supply station for a stack of flat folded boxes each having an end flap

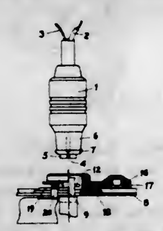
and side flaps, an operating station comprising means for erecting the box and means for tucking the end and side flaps of the erected box, a bed between said stations, a reciprocating fork movable along said bed for transferring a flat box from said supply station to said operating station, a reciprocating ejector movable along said bed for ejecting the open tucked box from said operating station, a spring urging said ejector above said bed, said fork being engageable with said ejector after said fork has been depressed by the oncoming box, to hold said ejector depressed below said bed on arrival of said fork at said operating station to prevent said fork from exerting pressure on said box.

2,749,819

COMBINED FLASHLIGHT CONNECTING SOCKET AND SYNCHRONIZER ADJUSTING MEANS FOR PHOTOGRAPHIC CAMERAS

Richard Weiss, Braunschweig, Germany, assignor to Franke & Heidecke, Fabrik Photographischer Präzisions-Apparate, Braunschweig, Germany, a German firm

Application January 31, 1955, Serial No. 485,157
Claims priority, application Germany February 6, 1954
7 Claims. (Cl. 95—11.5)



3. A separable connector for use on a photographic camera having a plurality of shutter blades movable between open and closed position, an electric switch and a selector member movable for adjusting said electric switch for operation in timed relation to movements of said blades, and an electrically operated photographic flashlight, said separable connector being adapted to operatively connect said switch electrically to said flashlight and including a plug having electrical contacts connected to said flashlight, a socket mounted on said camera in position in receive said plug and having electrical contacts connected to said switch and positioned to mate with said plug contacts when said plug is inserted in said socket. said plug and socket having cooperating locking means adapted to lock said plug in said socket, and movable means mounted on said socket and operatively connected to said locking means and said selector member, said movable means being adjustable to various positious to effect release of said cooperating locking means or movement of said selector member.

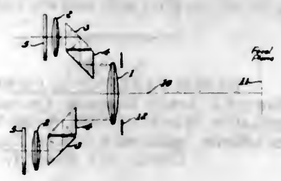
2,749,820

MEANS OF PRODUCING THREE DIMENSIONAL PHOTOGRAPHIC FILM

Stephen E. Garutso, Hollywood, Calif.

Application December 1, 1952, Serial No. 323,371
3 Claims. (Cl. 95—18)

1. A lens mount including five lenses, one an objective lens and the other four lenses being secondary lenses located respectively above, below and on both sides of the main objective, said secondary lenses being in pairs vertically and horizontally, the two lenses of the horizontal pair being offset with respect to each other, both horizontally and vertically, and each having a color filter in front of the secondary lens, the color filters being of different colors and each of the lenses of the horizontal pair having between them and the main objective reflecting means for reflecting light rays from the two secondary lenses of the horizontal pair through the main objective; the two secondary lenses of the vertical pair each having a color filter in front of the lens and reflecting means for reflecting light rays from the secondary lens through the main objective; the secondary lenses being spaced apart



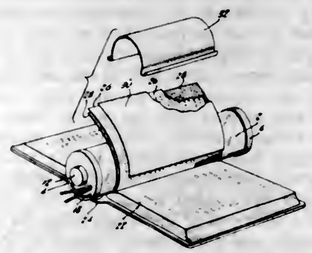
so that the light from the horizontal pair of secondary lenses will cover more than one half of the field in the objective focal plane on opposite sides of the objective axis and the vertical pair of secondary lenses are spaced so that at full aperture they pass light to cover slightly less than one half of the field on opposite sides of the objective axis.

2,749,821

PHOTOCOPYING APPARATUS

Jack M. Tien and Tsu Sheng Ma, New York, N. Y.

Application September 16, 1953, Serial No. 380,389
3 Claims. (Cl. 95—77.5)



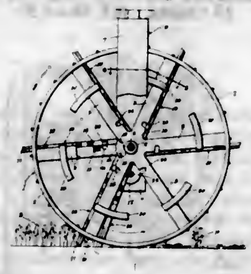
1. In photocopying apparatus, for use in copying a page from a volume in the form of a book, magazine, and the like including a generally tubular, light transmitting support provided with a longitudinal opening and adapted to support over its surface a page of the matter to be copied; two free edges of the support defining therebetween the said opening, being of length at least equal to the length of the material to be copied and being spaced apart at a distance adapting one of the said edges to fit into the groove at the backbone of an opened volume when the other of said edges rests upon a page of the volume opposite the page to be copied and at a substantial distance from the said groove; a source of photochemical light within the tubular member; and means for holding a sheet of copying paper in conforming relationship over the page to be copied, the improvement comprising a removable shape-retaining closing member of length and width at least equal approximately to the dimensions required for closing the said opening when the closing member is in place and end pieces closing the ends of the said generally tubular support, one of the end pieces being provided with a slot of size and shape to cause the closing member to be introducible therethrough and the other end piece being provided with an element to receive an end of the closing member, the said slot and element being located at positions in the respective end pieces so as to hold the closing member in place for closing the said opening.

2,749,822

PLANT THINNER

Albert J. Mattioli, Sacramento, Calif.

Application September 22, 1953, Serial No. 381,655
15 Claims. (Cl. 97—22)



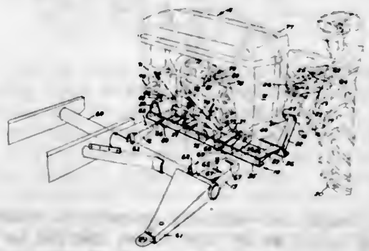
13. A plant thinner comprising a support adapted to be mounted for travel above and along a crop row, a wheel journaled on the support for ground engagement alongside said crop row, a plurality of thinning devices extending radially inward of the wheel from adjacent the periphery thereof in normally evenly spaced relation circumferentially of the wheel, means pivoting the devices at their inner end for separate relative swinging motion about axes parallel to that of the wheel, each device including a plant thinning element at its outer end to enter the crop row below ground level upon rotation of the wheel, means on the support to releasably engage each device in turn to prevent swinging thereof in the direction of rotation of the wheel, and means arranged to actuate said last named means upon the thinning element of each device reaching a dependent position in the crop row, and to release said last named means only after forward rotation of the wheel a predetermined amount less than the circumferential spacing of adjacent thinning elements.

2,749,823

TRANSPORTABLE ENGINE MOUNTING

Melville J. Mitchell, Birmingham, Mich., assignor to Harry Ferguson, Inc., Detroit, Mich., a corporation of Delaware

Application September 21, 1951, Serial No. 247,725
6 Claims. (Cl. 97—34)



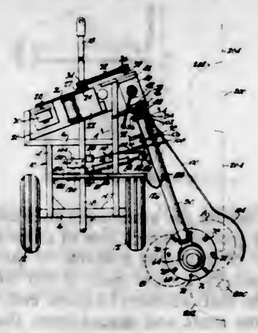
5. A mounting for detachably securing an engine to a supporting structure and to a tractor having an upper link and power operated horizontally spaced lower links comprising, in combination, a rigid frame, brackets on said frame for rigidly attaching the engine thereto, a plurality of spaced coupling members rigid with said frame, each of said members having elements for pivotal connection with one of the links of the tractor, connecting elements for detachably securing said frame to the supporting structure, and guide surfaces on said frame cooperative with adjacent surfaces of the supporting structure to position said frame upon the structure.

2,749,824

LATERALLY SHIFTABLE AND TILTABLE ROTARY HOE

David G. Friday, Hartford, Mich.

Application March 9, 1953, Serial No. 341,007
2 Claims. (Cl. 97—43)



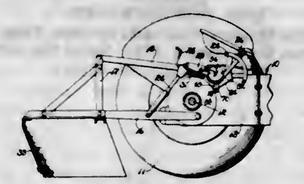
1. A cultivating device comprising a support, an elongated tubular member, a universal joint connecting the front end of said member to said support to extend rearwardly and downwardly alongside said support, a rotatable cultivator unit carried by the rear end of said member and having a vertically inclined axis substantially perpendicular to said member, said cultivator unit including a part substantially concentric with said axis and having a convex bottom soil-engaging surface and tooth members adjustably carried by said part eccentrically thereof and projecting below said surface, drive means partially housed in said tubular member for rotating said unit, power-actuated means on said support for swinging said member to shift said cultivator unit laterally, and loosely interfitting rigid members alongside said universal joint and carried respectively by said tubular member and said support for restraining said tubular member against rotation on its axis.

2,749,825

AUXILIARY MONITORING CONTROL ATTACHMENT FOR TRACTORS

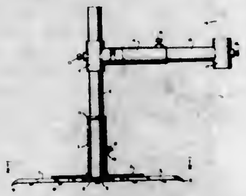
Henry K. Hirasuna, Fresno, Calif.

Application March 31, 1952, Serial No. 279,645
4 Claims. (Cl. 97—46.07)



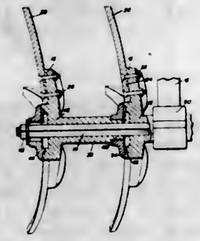
1. In a tractor having means mounted thereon for adjustable elevational movement adapted for attachment of an agricultural implement thereto, a power operated control unit connected to the attaching means adapted to raise and to lower the attaching means including a shaft rotated in response to raising and lowering movement of the attaching means relative to the tractor, and a control lever having controlling connection to the control unit; a friction clutch mounted on the shaft for unitary rotational movement therewith having an arm radially extended therefrom movable relative to the shaft by overcoming friction of the clutch, a push-pull rod interconnecting the arm and the control lever for corresponding movement, and a stop adjustably mounted on the friction clutch engageable with the arm to limit movement of the arm relative to the shaft.

2,749,826
ROTARY WEEDER
Alton H. Bullington, Anton, Tex.
Application December 16, 1952, Serial No. 326,305
1 Claim. (Cl. 97—52)



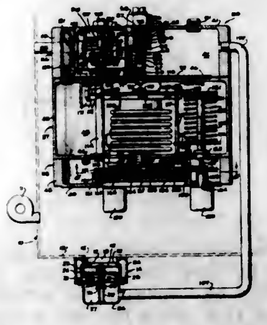
A rotary weeder for attachment to a cultivator vehicle for breaking ground along a row of crops and underneath the limbs or overhanging portions of the crop comprising a substantially upright shaft, a first collar detachably secured to the shaft adjacent its lower end, a second collar secured to the shaft and spaced from the first collar, a bearing sleeve rotatably mounted on the shaft between the collars, a flat disk attached to said bearing sleeve transversely to the end of the shaft adjacent to the first collar, a dust cap detachably fastened to the disk to completely enclose the lower end of the shaft and first collar, a plurality of slender elongated cultivating rods attached to the disk and projecting radially therefrom and lying substantially in the same plane as said disk, the outer ends of said rods being pointed, whereby said weeder may reach under the limbs of a plant to break the soil around the crop without injuring the plant, and means for attaching said weeder to a cultivator vehicle; said means comprising a first sleeve adapted to be secured at the desired elevation and angle on said vehicle, and a second sleeve attached to the shaft of the weeder, and fastening means for holding said second sleeve in adjusted position on the shaft, a bar and tubular member telescoped together, one of said bar and tubular members being fixed to said first sleeve and the other of said bar and tubular members having its outer end fixed to said second sleeve, means to fixedly secure said bar and tubular member in adjusted position whereby the disc and the cultivating rods thereon may be arranged in the most advantageous cultivating condition.

2,749,827
SOIL CONDITIONER
Arthur Harfert, Colorado Springs, Colo.
Application September 9, 1953, Serial No. 379,237
3 Claims. (Cl. 97—212)



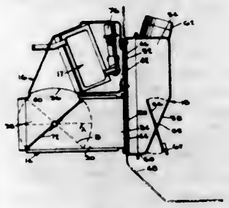
1. A soil conditioner comprising a central hub having a plurality of radially extending lugs, a soil piercing member secured to each of said lugs, said hub having an axle receiving bore and a projecting spacer element rigid therewith, and a cup engaging a recess in one face of said hub and adapted to abut a portion of the end of the spacer element of an adjacent hub, said hub and cup being provided with interengaging means to adjust the relative angular positions of adjacent hubs.

2,749,828
PRESSURE REGULATING MECHANISM
James M. Kemper, Hollywood, and Richard A. Fischer, Los Angeles, Calif., assignors to The Garrett Corporation, Los Angeles, Calif., a corporation of California
Application July 25, 1951, Serial No. 238,496
13 Claims. (Cl. 98—1.5)



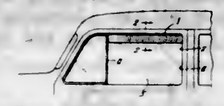
1. Pressure control mechanism: means defining a pair of pressure chambers having a restricted connection therebetween; and means for controlling the pressure in one of said chambers comprising, pilot valve means having a movable valve member and a pressure responsive element responsive to variations in the differential of pressures in said chambers for controlling said valve element, said valve member controlling the flow of fluid relative to said one chamber, pressure responsive means having one side exposed to pressure in said one chamber and the opposite side exposed to a variable reference pressure for controlling the pressure therein and pressure responsive means in the other chamber cooperable with the pressure responsive element for controlling said valve member.

2,749,829
VEHICLE HEATER-VENTILATOR APPARATUS
Homer C. Simons, South Euclid, Ohio, assignor to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application June 27, 1952, Serial No. 295,905
8 Claims. (Cl. 98—2)



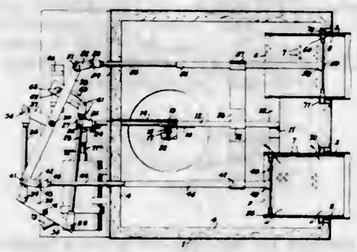
1. In a heating and ventilating apparatus for vehicles, air ducting having an air inlet at one end and an air outlet at its opposite end, a second air ducting having an air inlet and an air outlet, said air inlet of the second ducting having air communication with the first ducting intermediate the air inlet and air outlet ends of the first ducting, an air receiving housing having inlet opening in direct communication with the air outlets of both ductings and a plurality of air outlets, two of which are located side by side, in adjacent wall portions of said housing a three position valve in the first air ducting adjacent said intermediate opening for controlling flow of air through said ductings, a heat exchanger in the second ducting, and a valve in the housing for controlling the flow of air through said side by side air outlets of the housing.

2,749,830
VENTILATOR ATTACHMENT FOR AUTOMOBILES
Landon C. George, Chicago, Ill.
Application October 26, 1954, Serial No. 464,832
5 Claims. (Cl. 98—2)



4. In a ventilator structure, the combination of an elongated body structure having an opening therein and substantially parallel longitudinal edge portions, a plurality of generally U-shaped louvers which are positioned across said opening in substantially parallel planes extending outwardly and rearwardly with respect to the body structure, said louvers having oppositely disposed leg portions integrally connected at their inner ends to the body structure and at their outer ends by respective intermediate portions, the outer edges of the respective intermediate portions being substantially complementary to the inner edges of the intermediate portion of the next succeeding louver, and a front louver having an outer edge of substantially the same shape as the outer edges of the succeeding louvers and connected throughout its transverse width to the body structure.

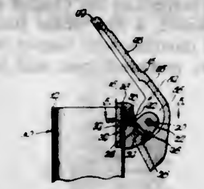
2,749,831
AIR OUTLETS AND MEANS FOR CONTROLLING THE FLOW AND TEMPERATURE OF THE AIR THEREFROM
Peter A. Argentieri, Harry Danishirsch, and Thomas L. Day, Danbury, Conn., assignors to Connor Engineering Corporation, Danbury, Conn., a corporation of New York
Application November 29, 1954, Serial No. 471,698
12 Claims. (Cl. 98—38)



1. An air outlet device for air ducts comprising, a housing, a pair of ducts leading into said housing, an outlet from said housing, a perforated cylinder in each duct and adjustable relatively thereto to project partially out of the duct and extend into the housing to a predetermined extent, means for coupling the cylinders together, means for simultaneously adjusting the cylinders with respect to the ducts, a damper of disk formation slidably adjustable in each cylinder, means for simultaneously adjusting the two dampers in opposite directions to a predetermined extent, and means movable for a uniform distance, for moving the disks for varying distances within the cylinders.

2,749,832
CLOSURE FOR EXHAUST PIPES
Cline Harry Harmon, Waterloo, Iowa, assignor to Waterloo Foundry Company, Waterloo, Iowa, a corporation of Iowa
Application April 19, 1954, Serial No. 423,919
9 Claims. (Cl. 98—59)

4. In a closure device of the character described adapted to be secured to the upper end of an upwardly extending exhaust pipe, a first frame member adapted to engage said exhaust pipe on the outer side thereof, a counterweighted closure flap pivotally mounted on said frame member, a second frame member carried by said first frame member and defining a clamping portion adapted to enter said exhaust pipe and engage the inside



thereof, and means including a bolt carried by one of said frame members and mounted for rotation therein and threaded to the other said frame member for urging said frame members toward each other to clampingly secure said frame members to said exhaust pipe.

2,749,833
AUTOMATICALLY CONTROLLED VENTILATION DEVICE
Johannes Petrus Hekelaar, The Hague, Netherlands, assignor to Eugene Josef Marie van de Pol, The Hague, Netherlands
Application April 13, 1953, Serial No. 348,237
Claims priority, application Netherlands April 21, 1952
8 Claims. (Cl. 98—95)

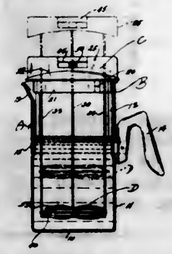


1. An automatically controlled ventilation device comprising a box-like casing having an air intake orifice and an air outlet orifice and having a passageway therethrough, the wall of said passageway being curved outwardly to define a pocket therein, said passageway connecting said inlet orifice with said outlet orifice, a damper plate in said passageway between said pocket and said air outlet orifice adapted to obstruct said passageway to a varying degree, guide means on said casing guiding movement of said damper plate in substantially its own plane, bias means to bias said damper plate towards its least obstructive position with a force which increases as said damper plate moves away from said least obstructive position, and means responsive to an air stream impact connected to the damper plate to actuate said damper plate comprising a vane positioned across said pocket substantially separating said pocket from said passageway and movable in said pocket towards the bottom thereof under the impact of the air stream through said passageway, connecting means connecting said vane to said damper plate, and vent means in said pocket to relieve counterpressure acting on the pocket side of said vane in opposition to the pressure acting on the passageway side of said vane caused by the impact of the air.

2,749,834
MEANS FOR BREWING POT COFFEE
Earle F. Hiscock, Chatham, Mass., assignor to Kip, Inc., Chatham, Mass., a corporation of Delaware
Application May 20, 1953, Serial No. 356,140
3 Claims. (Cl. 99—287)

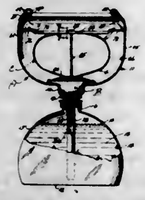
1. A beverage maker for the brewing of materials such as tea and coffee, comprising a receptacle for receiving a

liquid, a closure engaging the top of the receptacle and positioned against loose tilting, a handle having rod means slidably extended through said closure whereby the handle may be moved away from the closure, a packet clamping member carried by the rod means at the opposite side of the handle with respect to the closure and materially spaced from the handle, a rod means slidably mounted on said handle and movable with respect to said closure, a clamping member mounted upon said last mentioned



rod means in proximity to the first mentioned clamping member, a finger engaging piece fixed upon said rod means last mentioned above the handle, a spring connected to said finger engaging piece and to said handle normally contracted to hold the finger engaging piece close to the handle and thereby positioning the clamping member upon said last mentioned rod means for the releasable clamping of a packet of fusible material between the two clamping members.

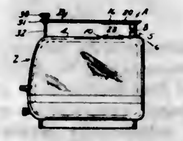
2,749,835
COFFEE MAKER AND COFFEE PACKET HOLDING ACCESSORY THEREFOR
Earle F. Hiscock, Washington, D. C., assignor to Kip, Inc., Washington, D. C., a corporation of Delaware
Application March 31, 1952, Serial No. 279,521
4 Claims. (Cl. 99—295)



1. In an attachment for coffee makers for the purpose of holding coffee packets in brewing position within vacuum type coffee makers the combination of a cross bar, coffee maker attaching clips detachably connected to the ends of said cross bar, a multi-perforated coffee packet hold-down member, a pin connected with the intermediate portion of the cross member and depending therefrom and having said hold-down member slidable thereupon, and spring means connected between said cross member and hold-down member and urging the latter downwardly upon said pin towards the lower end thereof.

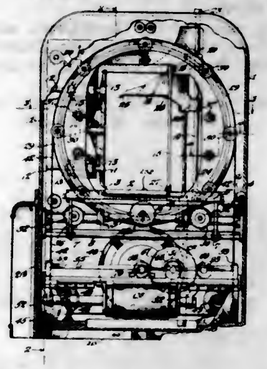
2,749,836
TOAST WARMING ATTACHMENTS FOR ELECTRIC TOASTERS
James W. Wedge, Phoenix, Ariz.
Application March 29, 1954, Serial No. 419,249
4 Claims. (Cl. 99—339)

1. A toast warming attachment for an electric toaster having a body enclosed by a case having a top with openings for the placement of bread slices and removal of toast over toasting compartments in said body, and a central top part between said openings, consisting of a pivotal bracket composed of a foot piece having an attaching plate secured to the central top part of said case, between said openings, a cylindrical, centrally bored and threaded, boss attached to the outer end of said attaching plate, a pivot screw threaded into said boss with its lower end bearing on a tensioning spring in the bottom of the bore in said boss, a horizontal toast warming plate having a centrally bored and threaded boss



attached to its under face in the middle of one of its end portions threaded onto the upper end of said pivot screw, a tensioning spring in said boss bore operating between the end of said bore and the top end of said pivot screw; said bosses and pivot screw being disposed on said toaster case and warming plate so that said plate can be swung from a position over said toasting compartments of said toaster to a position to one side of said toaster case.

2,749,837
BUNDLE PACKAGING AND WRAPPING MACHINE
John T. Hayford and Donald S. Hayford, Paterson, N. J.
Application September 26, 1950, Serial No. 186,714
20 Claims. (Cl. 100—28)

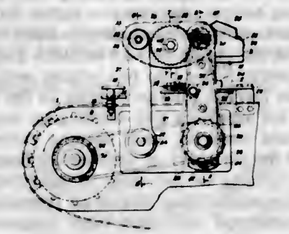


1. In a machine for winding wire about a bundle and tying said wire, in combination, a pair of rotatable shuttle rings disposed in side-by-side relatively closed spaced relationship for winding wire around said bundle, two sets of wire tying and cutting means disposed in the space between said pair of rotatable shuttle rings, one set being positioned adjacent one of said shuttle rings for movement toward and away from the shuttle ring adjacent which it is positioned and the other set adjacent the other of said shuttle rings for movement toward and away from the shuttle ring adjacent which it is positioned, and means for rotating said shuttle rings and actuating said wire tying and cutting means.

2,749,838
MARKING DEVICE FOR CONTAINERS, CLOSURES AND THE LIKE
Harry E. Stover, Lancaster, Ohio, assignor to Anchor Hocking Glass Corporation, Lancaster, Ohio, a corporation of Delaware
Application February 27, 1953, Serial No. 339,225
4 Claims. (Cl. 101—35)

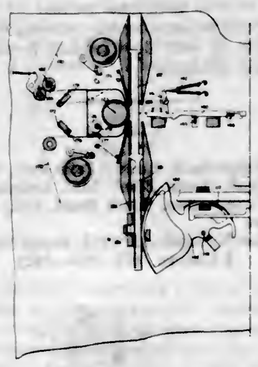
1. In a device for applying markings to closure caps of sealed containers moving on a substantially horizontal path; the combination of a mark applying means above

the path; a support means for said applying means comprising an upper mounting plate member carrying said applying means, a lower support plate member, a plurality of support arm members interconnecting said upper plate member and said lower support plate member, said support arm members being pivotally connected with said mounting plate member and said support plate member, the distances between said upper plate pivot connections



and said lower plate pivot connections on said arm members being equal, said arm members being parallel; a drive mechanism for said applying means comprising a first sprocket gear mounted concentrically with the lower pivot of one of said arm members, a second sprocket gear mounted concentrically with the upper pivot of the same arm member, and a chain coupling said sprocket gears whereby said arm members may be rotated about said pivot connections with said chain coupling in place.

2,749,839
RECORD CONTROLLED PRINTING MACHINE
Arnold B. Crowell, Paul J. Schlesiger, and Joseph C. Baker, Endicott, N. Y., assignors to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application May 22, 1951, Serial No. 227,672
21 Claims. (Cl. 101—93)



1. In a printing machine, a set of type carriers, a pair of positioning devices for said carriers, means for operating said positioning devices in alternate succession, a pair of record analyzing devices, each for controlling one of said positioning devices when connected therewith, means for feeding a record having designations therein past said analyzing devices in succession, and means controlled by said record for connecting a selected one of said analyzing devices to the related positioning device to control said device in accordance with designations in the record.

2,749,840
GUN PERFORATORS FOR WELLS
Earl Babcock, Houston, Tex., assignor, by mesne assignments, to Kane Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware
Application September 11, 1950, Serial No. 184,166
2 Claims. (Cl. 102—20)



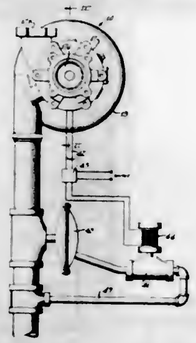
1. In a gun for perforating casing in oil wells or the like, in combination, a flexible elongated carriage small enough in diameter to be run into the well through tubing inside the casing to be perforated, said carriage including a flexible outer tubular container, a plurality of shaped charges of explosive transversely mounted in spaced relation in said container, a pressure resistant envelope enclosing and sealing each shaped charge and a body of unconsolidated filling material composed of solid granules in the container around the shaped charges, said outer tubular container being designed to be substantially destroyed by the explosion of said shaped charges.

2,749,841
HYDRAULIC ACTING JET GUN FOR PERFORATING WELL CASINGS
Edward N. Jones, Petlus, Tex.
Application August 31, 1950, Serial No. 182,515
7 Claims. (Cl. 102—21.8)



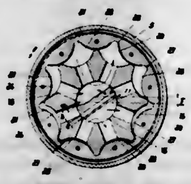
1. A hydraulic acting jet gun comprising a hollow member having a plurality of openings therein, a cartridge slidably received in each of said openings, means mounted in said member for filling the member with a gas to move the cartridges partially out of said member, movable means carried by said member for anchoring said member adjacent a target and actuating said first-mentioned means, means connected to said cartridges for setting off said cartridges while they are held exposed from said member, and a valve means carried by said member to permit the pressure within said member to equal the pressure of a fluid within a casing into which the member is lowered.

2,749,842
PUMP BEARING LUBRICATING AND SPEED CONTROL SYSTEM
Pierce T. Angell and Robert Cliborn, Euclid, Ohio, assignors to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application March 3, 1951, Serial No. 213,712
14 Claims. (Cl. 103—17)



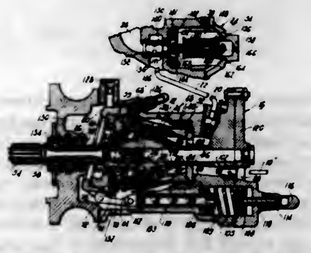
5. A turbine pump assembly comprising a hollow casing, a pair of spaced apart bearings in said casing, a shaft journaled in said bearings, a pump impeller at one end of said shaft, a turbine wheel at the other end of said shaft to drive said impeller, seal means closing each end of said casing, a charge of lubricant prepacked in said casing, spacer means between said bearings forming together with said shaft a restricted flow path between said bearings, the circulation flow of lubricant through and between said bearings being responsive to the driving speed of said turbine wheel, said spacer means having an enlarged medial recess and said shaft having a boss extending into said recess and rotatable therein, said boss operative to assist the circulation flow of lubricant toward said bearings, said boss constituting a paramagnetic material, magnetic field producing means adjacent said recess, conductor means to receive a signal upon rotation of said boss relative to said field producing means, and control means to regulate the speed of said driving means, said control means being adapted to be regulated in response to variations in the signal carried by said conductor means.

2,749,843
CONTROL VALVE FOR A HYDRAULIC APPARATUS
Otto Nübling, Weener (Ems), Landsburg, Germany
Application August 12, 1954, Serial No. 449,304
Claims priority, application Germany August 13, 1953
5 Claims. (Cl. 103—41)



1. In a hydraulic apparatus including a casing, a hollow inner member rotatably mounted in said casing and having teeth on its perimeter defining a plurality of depressed portions thereon, said hollow inner member having an inner chamber bounded by a cylindrical surface and being formed with a plurality of radially extending conduits connecting each of said depressed portions with said inner chamber in said hollow inner member and forming slots in said inner cylindrical surface, and an annular outer member rotatably mounted in said casing eccentrically with respect to said hollow inner member and surrounding the same, said outer annular member having a plurality of inner teeth defining depressed portions on its inner surface and meshing with said teeth on said hollow inner member whereby said depressed portions of said inner and outer members form chambers successively increasing in volume on one side of said hollow inner member and decreasing in volume on the other side of said hollow inner member during each revolution, in combination, a tubular control valve turnably mounted in said casing extending into said inner chamber in said hollow inner member tightly fitting therein, said tubular control valve including an inner transversal wall located in the region of said conduits and dividing said tubular control valve into two tubular sections, each tubular section formed with an opening in the region of said conduits for supplying and discharging, respectively, a liquid to said conduits, each opening extending for nearly half of the periphery of said tubular control valve opposite the opening in the other of said two tubular sections, said openings being located on opposite sides of said inner transversal wall, said inner transversal wall having diametrically arranged free edge portions extending substantially parallel to the axis of said tubular control valve and provided with diametrically located sealing faces flush with the outer surface of said tubular control valve, separating said openings in said two tubular sections and permanently abutting against said cylindrical inner surface of said hollow inner member in the region of said conduits, said sealing faces adapted to cover opposite conduits during rotation of said inner and outer members, said transversal wall being formed with an internal channel terminating in said sealing faces and adapted to establish communication between a contracting and an expanding chamber when said sealing faces cover the conduits associated with said last mentioned chambers, one of the said sealing faces being located during turning of said tubular control valve on the side of said hollow inner member on which chambers of increasing volume are formed, and the other of said sealing faces being located during turning of said tubular control valve on the side of said hollow inner member on which chambers of decreasing volume are formed, said one of said sealing faces having substantially the same width as said slots formed in said cylindrical surface by said conduits, and said other of said sealing faces having a width greater than the width of said slots formed in said cylindrical surface by said conduits.

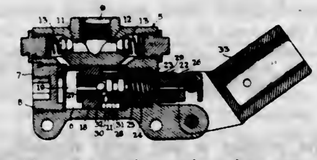
2,749,844
PUMP
Charles O. Weisenbach, Samuel John Pelz, Jr., and Ferdinand J. Cigal, South Bend, Ind., assignors to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application November 1, 1951, Serial No. 254,262
2 Claims. (Cl. 103—162)



1. In a pump, an inlet and an outlet port, a plurality of cylinders adapted to register with said ports, a piston in each of said cylinders, a thrust member formed to engage

said pistons, said member being centrally pivoted on a transverse axis thereof, resilient means connected to said member on one side of a plane through said axis for urging said member in one direction about said axis, said outlet port having one part disposed on said one side of said plane and having a second larger part disposed on the other side of said plane whereby a hydraulic reaction force is directed against a portion of said pistons to urge said member in a direction opposite to said one direction.

2,749,845
PUMP
Eugene Bobulsk, Parma Heights, Ohio, assignor to The New York Air Brake Company, a corporation of New Jersey
Application April 25, 1955, Serial No. 503,454
2 Claims. (Cl. 103—175)



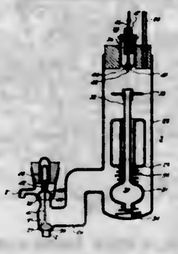
1. A double-acting reciprocating piston pump comprising a housing having a closed cylinder bore therein, said housing having an aperture through one end wall of said bore; a piston and piston stem assembly reciprocable in said bore and defining therein a first and second working space, said piston stem extending outward through said aperture; means affording a valve controlled inlet connected to both working spaces; means affording a valve-controlled discharge connection from each working space, said piston having an opening extending axially through said assembly; check valve means controlling flow through said opening and arranged to inhibit flow from the smaller to the larger working space; a motor carried by the assembly and biased to close said valve and urged by discharge pressure toward a position in which said valve may open to permit flow from the larger to the smaller working space.

2,749,846
PUMP MOUNT
Felix Karrer, Sacramento, Calif.
Application May 11, 1953, Serial No. 353,982
2 Claims. (Cl. 103—218)



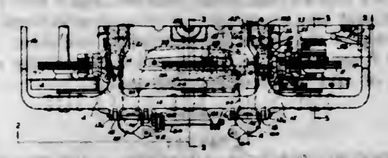
1. A pump assembly comprising a pair of spaced apart upstanding piles, a channel member mounted on said piles, the web of said channel member engaging the tops of said piles, brace means fixed to said piles and to said channel member, a second channel member fixed on said first mentioned channel member, a cylindrical base mounted in said second channel, brace members securing said base in said second channel, an upstanding shaft mounted in said base, a cylindrical head journaled on shaft, laterally extending spaced apart ears on said head, a pump mounting plate, hinge means securing said pump mounting plate to said ears, said hinge means including a tubular member adjacent one edge of said plate, said ears having aligned apertures therein, a hinge pin extending through said tubular member and said apertures.

2,749,847
APPARATUS FOR COATING TUBULAR FLUORESCENT LAMPS
Ernest George Bowles, London, and Edward Ernest Miles, Wembley, England, assignors to General Electric Company, a corporation of New York
Application May 1, 1952, Serial No. 285,406
Claims priority, application Great Britain May 3, 1951
1 Claim. (Cl. 103—236)



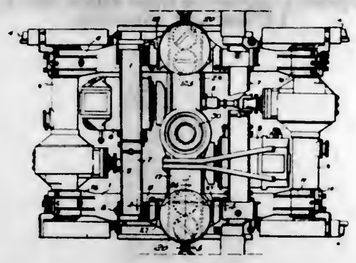
A vacuum-operated pump comprising a substantially cylindrical body having at its upper end a conduit for application of vacuum and a normally closed air inlet valve including a weighted closure member and vented to the atmosphere when in open position, an inlet adjacent the lower end of said body, an inlet conduit connected to said inlet through an inlet check valve, an outlet conduit connected to said inlet through an outlet check valve, and a compound float in said body comprising a first float having a body portion with a stem portion projecting upwardly therefrom and spaced below and in alignment with the closure member of said air inlet valve and a second float in the form of a hollow-walled cylinder loosely surrounding said stem portion of the first valve and being of shorter length than said stem portion, and stop means at the top of said stem portion engageable by said second float, the buoyancy of said floats and the weight of the closure member of said air inlet valve being so proportioned that upon rising of the first float due to entrance of liquid into said body, the first float engages the said closure member of the air inlet valve but has insufficient buoyancy to raise it to open position, the added buoyancy of the second float being sufficient to open said air inlet valve upon continued rise of the liquid with consequent lifting of said second float into engagement with said stop means.

2,749,848
RAILWAY TRUCK STRUCTURE
Edmund S. Beckette, East St. Louis, Ill., assignor to General Steel Castings Corporation, Granite City, Ill., a corporation of Delaware
Application November 28, 1951, Serial No. 258,593
19 Claims. (Cl. 105—188)



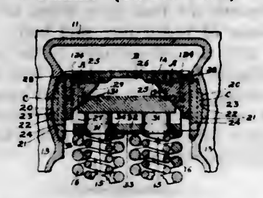
1. In a railway vehicle truck, three wheel and axle assemblies each having a braking disc, a truck frame supported from said assemblies and including a transverse transom positioned intermediate the middle assembly and an end assembly, and brake structure associated with each assembly and comprising friction shoes movable transversely of the truck to engage said discs, levers for operating said shoes, means for moving said levers, said brake structures being mounted on said transom exclusively.

2,749,849
STREET RAILWAY TRUCK
William T. Rossell, New York, N. Y., assignor to Transit Research Corporation, New York, N. Y., a corporation of New York
Application June 25, 1952, Serial No. 295,420
5 Claims. (Cl. 105—193)



1. In a rail truck, a truck frame comprising two main side members and axle housings acting as frame cross members, a swing bolster, and spring assemblies supporting each end of said bolster from said side members, said spring assemblies each comprising at least one spring having a spring cap at each end thereof, the caps of each said assembly having rockers on the surfaces thereof outwardly of their spring, at least one of said rockers of each assembly being angularly disposed with respect to the length of said side frames and with respect to the direction of swing of said bolster.

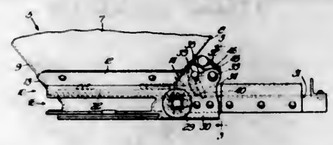
2,749,850
FRICTION SHOCK ABSORBING MECHANISMS FOR TRUCKS OF RAILWAY CARS
Eric G. Fornell, Kenmore, N. Y., assignor to W. H. Miner, Inc., Chicago, Ill., a corporation of Delaware
Application November 28, 1952, Serial No. 322,882
6 Claims. (Cl. 105—197)



1. In a railway car truck including a truck side frame having vertical bolster guides presenting friction surfaces thereon, the combination with a bolster vertically movable between said guides; of springs supporting said bolster on said truck side frame; friction shoes carried by said bolster; a wedge member within said bolster in wedging engagement with said shoes; a plurality of depending lugs on said wedge member, and a spring for each of said lugs extending therefrom to said truck side frame to urge the wedge member against said shoes, each of said latter springs being disposed concentrically within one of said bolster supporting springs.

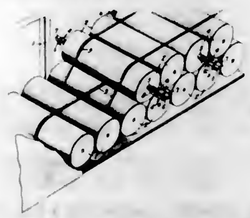
2,749,851
SEALING BOLT MECHANISM FOR A DISCHARGE OUTLET
George B. Dorey, Westmount, Quebec, Canada, assignor to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Continuation of abandoned application Serial No. 249,957, October 5, 1951. This application October 4, 1952, Serial No. 313,136
7 Claims. (Cl. 105—368)

1. In a discharge outlet structure having a discharge opening and a slidably mounted gate for closing said opening, said gate being insertable in and removable from said structure only at one end and having a portion projecting outwardly beyond said one end, a first wall projecting from said one end of said structure above said gate, an axially movable one piece sealing bolt rockably and axially slidably mounted in an aperture in said first wall with one end of said bolt being key shaped and the other end having a radially extending arm in fixed relation to said key shaped end and gravitating into the path of movement of said gate and engaging said projecting portion thereof in closed position and otherwise engaging said gate in any operative position between open and closed position, said aperture in said first wall being key shaped to receive said key shaped end of said sealing bolt and positioned to receive the same only when said gate is not



in operative position in said outlet structure, said first wall preventing the insertion of said key shaped end of said sealing bolt in said key shaped aperture when said arm is prevented by said gate from being placed in the position in which said key shaped end registers with said key shaped aperture, a second wall projecting from said one end of said outlet structure parallel to said first wall and having an aperture therein aligned with said bolt to receive said key shaped end thereof, and a dog pivotally mounted on said second wall and swingable to a latching position to hold said gate in closed position and having a key shaped aperture therein aligned with said bolt to receive said key shaped end of said sealing bolt therethrough when said dog is in latching position to hold the latter in latching position.

2,749,852
ROLL CHOCKING DEVICE
Julian E. Bulluck, Richmond, Va., assignor to The Albemarle Paper Manufacturing Company, Richmond, Va., a corporation of Virginia
Application May 1, 1953, Serial No. 352,381
2 Claims. (Cl. 105—369)



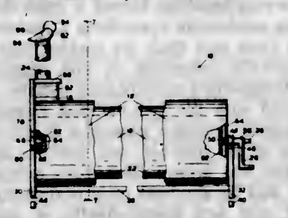
1. A chock for rolls having axially hollow cores to hold said rolls against end movement relative to the walls of a transporting vehicle comprising, a frusto-conical shank to seat in the end of the hollow core of said rolls, and a body portion in axial alignment with said core and divided along a longitudinal plane into a section fixed to said shank and a section longitudinally movable relative to said fixed section whereby the movable section may be moved into end abutment with a wall of said vehicle, means on the confronting surfaces of the sections to resist relative longitudinal movement of the sections when in surface contact, and means to bind the sections together when adjusted.

2,749,853
APPARATUS FOR MOLDING AND BAKING BATTER
Seymour C. Graham, Chicago, Ill., assignor to Illinois Baking Corporation, Chicago, Ill., a corporation of Illinois
Application September 22, 1950, Serial No. 186,227
1 Claim. (Cl. 107—56)



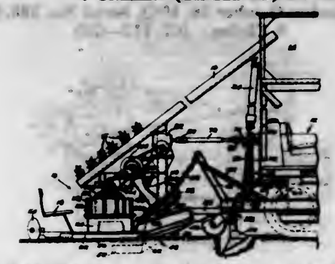
In a machine for baking batter having a high shortening content ranging from 10 to 50 percent by weight, the combination comprising male and female mold parts for defining a mold space movable along a predetermined path at substantially constant speed through a cycle of operation, means along said path for heating said mold parts, a roller connected to said male mold part, guide means operatively engaging said roller for controlling relative movement of said mold parts into and out of molding relation during the cycle of operation, said guide means including an initial guide section in the initial portion of the cycle for maintaining said male mold part separated sufficiently from said female mold part to enable batter to be introduced into said female mold part, said guide means also including a pair of spaced parallel guide rails following said initial guide section for confining said roller without substantial play, said rails being spaced a distance corresponding closely to the diameter of said roller, said rails having first inclined portions for moving said male mold part toward said female mold part, second elongated linear portions following said first portions for holding said male part without play from one-eighth to one-half inch short of full molding relation with said female mold part to permit release of moisture from the batter, third inclined portions following said second portions for shifting said male mold part into full molding relation with said female mold part, and fourth elongated linear portions following said third portions for holding said male mold part without play in full molding relation with said female mold part, said rails continuously engaging said roller and thereby positively preventing chattering of said male mold part relative to said female mold part.

2,749,854
INCINERATOR
Ray L. Peterson, Omaha, Nebr.
Application March 30, 1955, Serial No. 497,930
3 Claims. (Cl. 110—18)



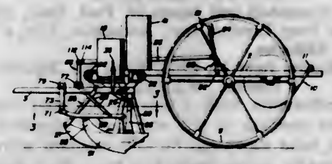
1. An incinerator comprising a horizontally disposed outer drum, said outer drum having an opening in the wall thereof and having a flue at one end, an inner drum positioned in the outer drum and mounted with the wall thereof spaced from the wall of the outer drum, said inner drum also having an opening in the wall thereof and also having a plurality of openings extended through the wall and positioned on the side of the drum opposite to that in which the former opening is positioned, said former opening of the inner drum being positioned to register with the opening of the outer drum, means for rotating said drums independently, and a stack positioned to register with the flue of the outer drum.

2,749,855
PLANTING DEVICE
Gustav Guigue, Honolulu, Territory of Hawaii, assignor to Hawaiian Pineapple Company, Limited, Honolulu, Territory of Hawaii, a corporation of the Territory of Hawaii
Application November 25, 1952, Serial No. 322,437
4 Claims. (Cl. 111—3)



3. A plant-setting machine or the like adapted to be advanced across the ground during operation, comprising a turret assembly mounted for rotation about a vertical axis, said turret assembly including at least one pair of opposing finger members adapted to receive a plant between them at a receiving station as they rotate with said assembly about a circular path, a trough member underlying the circular path at said receiving station adapted to slidably support a plant as its advances therealong between said finger members, means for closing said finger members to grip said plant between them as they advance over said trough member, means for lowering said finger members gripping said plant at a planting station after they pass the end of said trough member and for raising said finger members before they return to the receiving station, means for opening said finger members at the planting station in their lowered position to deposit the plant, and means for rotating the turret assembly about its axis at a speed synchronized with the speed of advance of the machine, the peripheral speed of rotation of the finger members being substantially equal to said speed of advance.

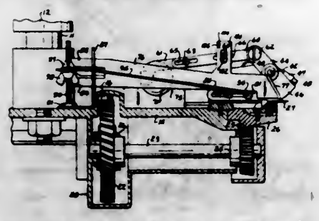
2,749,856
FERTILIZER DISTRIBUTING APPARATUS FOR CHECK-ROW CORN PLANTERS
Joseph Fleming, Shullsburg, Wis.
Application October 8, 1952, Serial No. 313,687
1 Claim. (Cl. 111—52)



In a planter having a mobile frame and a fertilizer hopper on said frame, and a pair of laterally spaced furrow opening and fertilizer distributing runners, a horizontal yoke having opposite sides carrying said runners in suspended position and spacing the same apart, a rock shaft on said frame, a pair of arms depending from and freely swingable vertically on said shaft and pivoted to

opposite sides of said yoke, and a coil spring coiled around and fixed at its center to said shaft with ends looped around said arms and operatively connecting said shaft to said arms to swing said arms vertically in unison in opposite directions upon rocking of said shaft in opposite directions whereby to swing said yoke in opposite directions to raise and lower said runners out of and into furrow opening positions, said spring bearing downwardly on said arms to yieldingly maintain said runners in furrows.

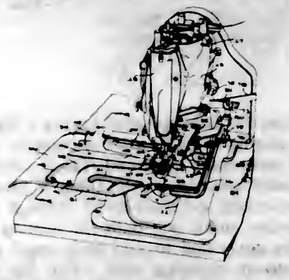
2,749,857
DOFFING ATTACHMENT FOR HOSIERY LOOPERS
George F. Starnes, Hickory, N. C., assignor of fifty per cent to Glenn A. Starnes and fifty per cent to Wynn E. Starnes, both of Hickory, N. C.
Application October 26, 1953, Serial No. 388,135
9 Claims. (Cl. 112—25)



1. In a looping machine having a rotary circular series of radially extending dial points movable about a substantially vertical axis and also having a sewing mechanism for forming a seam from a seaming thread looped through and over complementary loops of a hose impaled on said dial points, the combination of a doffing blade having a serrated edge disposed adjacent and above the level of a portion of said dial points subsequent to said sewing mechanism, means for imparting active and inactive strokes to said blade in a reciprocatory manner substantially parallel to the radially projecting dial points, means normally maintaining said doffing blade in predetermined spaced relationship to said dial points, less than the height of the upper portions of the seaming thread connecting adjacent complementary loops and greater than the height of said complementary loops in the course of each active stroke thereof whereby said edge of the doffing blade will engage and doff only hose which have been properly looped and any other successive hose will remain impaled on the dial points, means for raising said doffing blade away from said dial points upon each inactive stroke thereof to cause the blade to clear the upper portions of the seaming thread, and means for lowering said blade into said predetermined spaced relationship to the dial points as the doffing blade reaches the limit of each inactive stroke thereof.

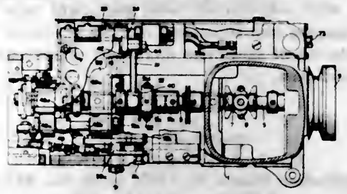
2,749,858
BELLOWS PLEAT FOLDER ATTACHMENT FOR SEWING MACHINE
Richard D. Campbell and James H. Teal, Troy, Ala., assignors to Troy Textiles, Inc., Andalusia, Ala., a corporation of Alabama
Application June 23, 1953, Serial No. 363,532
4 Claims. (Cl. 112—145)

1. In combination with a sewing machine having a base with an opening at one end and a standard at its other end, a head supported by said standard above said opening, a needle carrier extending from the bottom end of said head and carrying a needle movable through said opening, a work plate slidably mounted on said base in closing relationship to said opening, and means connected to said work plate reciprocably moving the latter toward and away from said standard and relative to said needle, of a pleat folder attachment comprising an attachment plate secured at one end to said work plate for movement therewith and extending laterally therefrom, a rib mounted at one edge on said attachment plate medially of the width of said plate and extending upwardly therefrom and longitudinally thereof substantially at right angles to the direction of movement of said work plate, longitudinally curved guides mounted at one end on and disposed above said attachment plate adjacent one end thereof remote from said work plate with a guide disposed at each side of said rib and convexly converging from locations spaced from said one end of said rib toward the end of said rib adjacent said work plate, a bar carried by and extending longitudinally of said rib above said guides



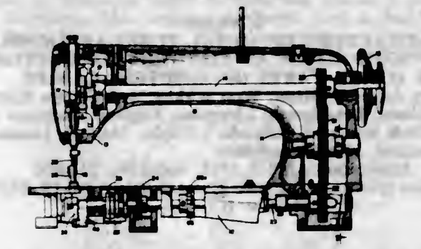
and substantially parallel to said attachment plate, said bar having a width equal to the desired width of the bellows pleat with its width disposed medially of said rib and having a tapered end portion at the end thereof remote from said work plate whereby pieces of material disposed over the tapered end portion of said bar and under the adjacent portions of said guides will be folded about said bar to form a bellows pleat as the piece of material is moved toward said work plate and one end of the pleat thus formed will be disposed above the work plate and moved past the needle to stitch the end of the pleat as the work plate is moved.

2,749,859
SEWING MACHINES
George Sauer, Berwyn, Ill., assignor to Union Special Machine Company, Chicago, Ill., a corporation of Illinois
Application April 18, 1951, Serial No. 221,562
6 Claims. (Cl. 112—210)



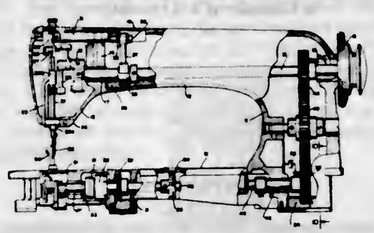
1. In a sewing machine having a main drive shaft, a work-feeding mechanism comprising a rockable member, connections from said shaft for rocking said member, a feed-bar pivotally connected to said member and arranged for longitudinal reciprocation thereby, an arm rigidly connected with the feed-bar and extending lengthwise in a general direction transverse to the direction of reciprocation of the feed-bar, said feed-bar and said arm having tongue and groove formations extending in the direction of said longitudinal reciprocation to enable adjustment of said arm longitudinally of said feed-bar, means for securing said arm in adjusted position on said feed-bar, connections from said shaft to said arm for causing pivotal movement of the bar in relation to said member, and a feed-dog connected with said arm, the connection between said feed-dog and said arm being arranged to enable tilting of the feed-dog in a plane perpendicular to the axis of the main shaft.

2,749,860
ADJUSTABLE ECCENTRIC FOR SEWING MACHINES
Elton S. Rockney, Floral Park, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a corporation of Illinois
Application November 1, 1954, Serial No. 465,823
11 Claims. (Cl. 112—210)



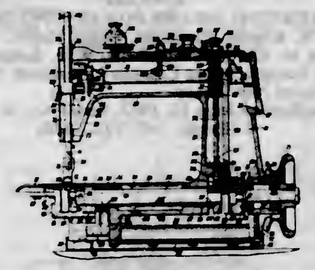
1. In a sewing machine having a frame and a rotary drive shaft journaled therein, work feeding mechanism carried by said frame, connections from said shaft for operating said work feeding mechanism, said connections comprising an adjustable eccentric unit driven by said shaft, said eccentric unit comprising a plurality of telescopically disposed eccentric elements arranged for relative angular adjustment to vary the throw of said unit, means for adjusting said eccentric elements angularly in relation to each other, adjustable stop means connected with one of said eccentric elements for rotation therewith, said stop means being adjustable to any desired extent within predetermined limits in relation to said one of said eccentric elements, means for securing said stop means in any selected position in relation to said one of said eccentric elements, and means on another of said eccentric elements arranged to cooperate with said stop means upon relative angular adjustment of said eccentric elements to predetermine a plurality of relative angular positions of said eccentric elements.

2,749,861
SEWING MACHINES
Oscar Quist, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a corporation of Illinois
Application February 8, 1954, Serial No. 408,865
8 Claims. (Cl. 112—213)



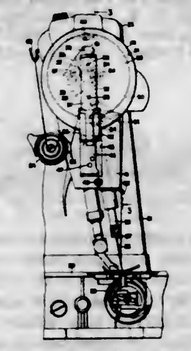
1. In a sewing machine having a frame provided with a work supporting base, a hollow standard, a hollow overhanging arm, and a needle head at the end of said arm, a partition wall at the end of said arm adjacent said needle head serving to provide separated enclosures for said head and arm, a rotary drive shaft extending longitudinally of said arm and through said wall into said needle head, a rock frame mounted in said needle head upon a fixed pivot, a needle bar mounted for reciprocation in said rock frame and carrying a needle at its lower end, connections in said needle head from said rotary shaft to said needle bar for reciprocating the latter, a short rock shaft journaled in said wall and extending through the same, connections with said hollow arm adjacent said wall from said rotary shaft to said rock shaft for rocking the latter, and connections within said needle head from said rock shaft to said rock frame for rocking the latter and thereby imparting a needle feed movement to said needle bar, said last mentioned connections comprising a bodily movable link disposed and movable in a vertical plane transverse to the axis of said rock shaft and substantially passing through the vertical center line of said rock frame.

2,749,862
SEWING MACHINES
Arthur N. Hale, Stratford, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application May 12, 1951, Serial No. 226,082
3 Claims. (Cl. 112—220)



1. A sewing machine having a frame including a bed and an overhanging bracket-arm, a rock-shaft journaled in said overhanging bracket-arm, a rock-arm mounted on said rock-shaft, an actuating shaft journaled in said bed and including axially aligned shaft-sections having their proximate ends releasably coupled together, said shaft-sections being coupled together by a crank-pin secured to one of said shaft-sections and operatively associated with said other shaft-section, a transverse link having one end rotatably mounted on said crank, a rock-arm mounted on said rock-shaft for engagement with the other end of said lever, means operatively connecting said other end of said transverse link on said rock-arm, and a flat seat parallel with said link provided on said machine frame longitudinally spaced from the rock-arm and said link being positioned between said flat seat and the rock-arm to retain said link operatively connected to said rock-arm.

2,749,863
TAKE-UP MECHANISMS FOR SEWING MACHINES
Ralph E. Johnson, Mountainside, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application November 13, 1953, Serial No. 392,003
15 Claims. (Cl. 112—248)



1. A rotary take-up mechanism for a sewing machine having a frame, a shaft journaled for rotation in said

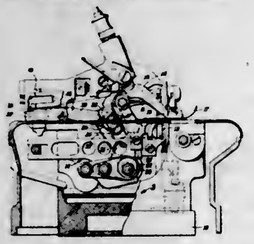
frame, and a crank mechanism including a crank-pin carried for rotation with said shaft, said take-up mechanism comprising a frame extension disposed axially opposite said crank mechanism, means rigidly securing said frame extension to said sewing machine frame, a take-up member disposed between said frame extension and said crank mechanism, a bearing carried by said take-up member and journaled on said crank-pin, a control link operatively connected to said take-up member, means pivotally securing said control link to said frame extension on an axis disposed within the path of motion described by said crank-pin, and a thread-engaging finger projecting from said take-up member in the direction of said frame extension.

2,749,864

OIL-DIVERTING MEANS FOR SEWING MACHINES

Charles A. Kessler, Plainfield, Franz Haller, Union, and August M. Gardner, Elizabeth, N. J., assignors to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey

Application June 12, 1953, Serial No. 361,246
4 Claims. (Cl. 112—256)



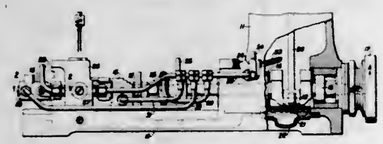
2. In a sewing machine, a frame, an elongated member, a thread-engaging arm having one end thereof secured to a first end of said member, means carried by said frame and connected with the second end portion of said member for oscillating the first end of said member and said arm back and forth, oil-conveying means disposed adjacent the second end of said member for lubricating the same, and an oil-diverting element comprising a substantially flat elongated finger having one end portion thereof interposed bodily between said member and said arm and being secured to said member with the body portion of said finger extending laterally from said member in substantial parallel alignment with the path of oscillation of the first end of said member.

2,749,865

SEWING MACHINE BED-SHAFT BEARING LUBRICATION

Charles A. Kessler, Plainfield, and Herman Ritter, Cranford, N. J., assignors to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey

Application June 1, 1953, Serial No. 358,916
4 Claims. (Cl. 112—256)



1. In a sewing machine having a frame and shaft bearings carried by said frame; a shaft rotatably journaled in said bearings and formed with a longitudinal bore; bearings carried by said shaft; said shaft being provided with a radial lubrication hole within one of said last mentioned bearings; an open-centered, stationary coil-spring extending into the bore in said shaft; means fixing said spring to said frame to maintain said spring fixed against rotation within said bore when the shaft is rotated; and means for supplying lubricant to said shaft bore at a location adjacent said spring; said coil-spring working in close proximity to the inner surface of said hollow shaft to cause lubricant supplied to the end of said shaft to travel along said bore.

2,749,866

MANUFACTURE OF METAL TUBES APPLICABLE IN SOME CASES AS ELECTRIC CONDUCTORS OR OTHER PARTS OF ELECTRIC CABLES

Henry Johnson Dixon, West Kirkby, and George Harry Webster, Broadgreen, Liverpool, England, assignors to British Insulated Callender's Cables Limited, London, England, a British company

Application April 2, 1951, Serial No. 218,806
Claims priority, application Great Britain April 18, 1950
4 Claims. (Cl. 113—33)



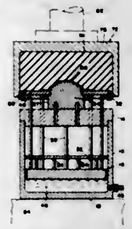
1. A process for the production by brazing or soldering of a continuous seam in the wall of a long length of tubing by locally heating each elemental length of tubing to the temperature required to effect the seaming operation, comprising twice heating elemental lengths of tubing to the seaming temperature by passing them through two heating zones in succession, each of which, when it has reached its normal operating temperature and the tubing is running at normal speed, is capable of locally heating the tubing to the seaming temperaure, and cooling the elemental lengths after passing them through each heating zone, and adjusting the time between the passage of elemental lengths through the two heating zones by spacing the two heating zones apart by a distance at least equal to the aggregate length of tubing leaving the first zone in an unseamed condition due to a stoppage and to a re-start and return to normal running speed following such stoppage.

2,749,867

CONTROLLED PRESSURE METAL FORMING APPARATUS

John H. Engel, Escondido, Calif.

Application December 3, 1952, Serial No. 323,778
4 Claims. (Cl. 113—44)



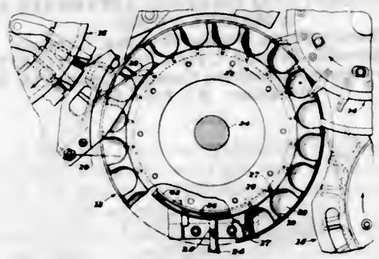
1. In a metal forming apparatus for use with a drop hammer or similar percussive machines, a cushion cylinder having one closed end, a guide block secured to the other end of said cylinder, a piston within said cylinder, means to admit fluid between said piston and said closed end, a variable restricted outlet for said fluid, a plurality of push rods slidably passing through holes in said guide block, the lower ends of said push rods resting on said piston, a platen secured to the upper ends of said push rods, a male die secured to said guide block, said platen having a clearance hole to fit around said male die, a platen cover having a clearance hole, an impact pressure head comprising a cylinder having one closed end, and a resilient pad within said cylinder; said male die having a stop portion incorporated therein to engage and arrest said platen cover before said pad reaches said cushion cylinder.

2,749,868

EJECTOR MECHANISM FOR CAP ASSEMBLY APPARATUS

Elbe A. Wilckens, Harry A. Rau, and Harold J. Seifert, Baltimore, Md., assignors to Crown Cork & Seal Company, Inc., Baltimore, Md., a corporation of New York

Application August 10, 1951, Serial No. 241,186
1 Claim. (Cl. 113—80)



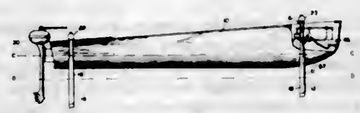
In a closure assembly apparatus, a rotatably mounted circular element including a horizontal circumferentially extending flange, said flange being provided with circumferentially spaced pockets opening to the upper surface and periphery thereof, said flange including a plurality of air passages extending between the inner portions of the respective pockets and an inner coaxial face of said element, said element including a second horizontal circumferentially extending flange substantially coextensive with and above said first flange, said second flange being provided with vertical apertures extending therethrough from its upper surface, a plurality of plungers vertically reciprocable in said element to have their lower faces move from a position above said second flange and through the corresponding aperture in the latter to assemble liners and shells, means to position cap shells in the pockets of said first flange, means to position cushion liners upon said second flange in alignment with the apertures thereof, and then, in order, means to move said plungers downwardly through the apertures in said second flange and then raise said plungers, means to then remove assembled shells and liners from the pockets of said first flange, wiper means bearing upon the upper surface of said second flange to wipe liner fragments therefrom and into its apertures and the pockets of said first flange, and relatively fixed means bearing on said inner coaxial face of said element to supply compressed air to the passages and pockets of said first flange to remove liners and liner fragments therefrom.

2,749,869

PRESSURE BULB CONTROL MECHANISM FOR HYDROFOIL CRAFT

Vannevar Bush, East Jaffrey, N. H., assignor to The Hydrofoil Corporation, Washington, D. C., a corporation of Delaware

Application July 27, 1951, Serial No. 238,945
14 Claims. (Cl. 114—66.5)



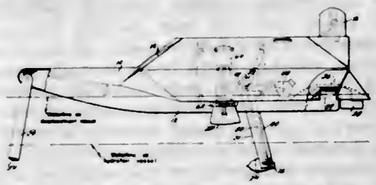
1. A marine craft of the type supportable on submerged hydrofoils comprising a hull, fore and aft hydrofoils, struts pivotally mounted on the hull for swinging movement about transverse axes above the displacement water line of the hull, means mounting the hydrofoils on the free ends of the struts, fluid actuated means for shifting the struts about said axes to vary the angle of attack of the hydrofoils, and flexible pressure deformable air-water interface sensing means in the lower portions of said struts for controlling the supply and discharge of fluid to said actuating means in dependence on the degree of deformation of said sensing means.

2,749,870

HYDROFOIL ATTACK CRAFT

Michael Hans Vavra, Glen Burnie, Md., assignor to The Hydrofoil Corporation, Washington, D. C., a corporation of Delaware

Application October 23, 1951, Serial No. 252,625
17 Claims. (Cl. 114—66.5)



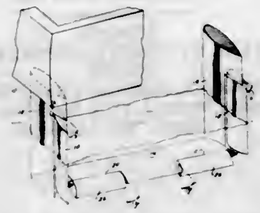
1. A hydrofoil craft comprising a hull, struts depending from said hull at a position rearwardly of the center of gravity of said craft, first hydrofoils carried by said struts, propulsion units carried by said struts, struts depending from said hull at a location adjacent the forward end thereof, surface-piercing hydrofoils carried by the last-named struts, and means for selectively retracting all of said hydrofoils and said propulsion units to positions within the general profile of said hull for operation of said craft as a displacement vessel or to extended position below said hull to operate as craft supporting hydrofoils.

2,749,871

FLAP DEPTH CONTROL FOR HYDROFOIL CRAFT

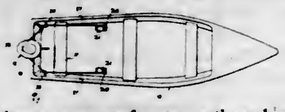
Paul A. Scherer, Bowie, and Rudolf X. Meyer, Arnold, Md., assignors to The Hydrofoil Corporation, Annapolis, Md., a corporation of Delaware

Application September 12, 1952, Serial No. 309,224
11 Claims. (Cl. 114—66.5)



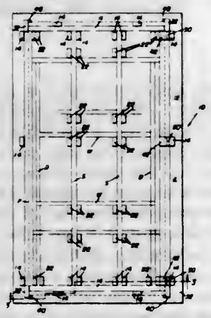
1. A hydrofoil craft comprising a hull, at least one hydrofoil connected thereto, an aileron adjustably mounted on said hydrofoil, a movably mounted hydrodynamic member carried by said craft in position to pierce the surface of the water during operation of the craft, said member having its chord line angularly deflected from the forward direction of said craft during operation at a predetermined design value of submergence and means interconnecting said hydrodynamic member and said aileron for adjusting the angle of attack of said aileron responsive to torque on and movement of said hydrodynamic member to control the submergence of said main hydrofoil.

2,749,872
FOOT STEERING APPARATUS FOR OUTBOARD MOTOR BOATS
Hubert R. Amick, West Columbia, S. C.
Application August 2, 1954, Serial No. 447,259
1 Claim. (Cl. 114—153)



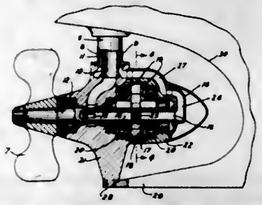
Foot steering apparatus for an outboard motor boat having an outboard motor mounted thereon to turn upon a vertical axis comprising a pair of mounting plates secured to the bottom of the boat in spaced apart relation a substantial distance forwardly of the outboard motor, a pair of spaced upstanding apertured extensions secured to each mounting plate, horizontal pintles engaging within the apertures of said extensions and spaced above said mounting plates, vertically swingable foot pedals having their rear ends pivotally mounted upon said pintles and extending forwardly of the pintles and extensions, said foot pedals being normally inclined upwardly from their rear ends forwardly and provided intermediate their ends and forwardly of the pintles with pairs of closely spaced openings, a torsional coil spring mounted upon each pintle between said upstanding extensions and having an end extension secured to one of said upstanding extensions, each spring provided at its other end with a forwardly extending arm underlying the foot pedal forwardly of the pintle, each arm terminating at its forward end in a hook, said hook of each arm engaging upwardly and downwardly through one pair of the openings in the foot pedals intermediate their ends, whereby only the top of each hook projects slightly above the upper face of each foot pedal, the springs being tensioned to normally urge the forward ends of the foot pedals downwardly, a pair of flexible elements having corresponding ends secured to the outboard motor on opposite sides of its vertical axis of rotation, each foot pedal provided near its forward end with an opening receiving the forward end portion of one of said flexible elements, adjustable means carried by the bottom of each foot pedal near the last-named openings for clampingly securing the forward ends of the flexible elements against the bottoms of the foot pedals, and a pair of guide elements engaging the flexible elements between the foot pedals and outboard motor for maintaining the flexible elements spaced apart and free from interference with the operator of the boat.

2,749,873
JIG FOR USE IN CONSTRUCTING BUILDING UNITS
Chester A. Huffman, Elkhart, Ind.
Application March 2, 1954, Serial No. 413,506
3 Claims. (Cl. 144—288)



1. A jig for use in constructing building units comprising a rectangular base plate having a plurality of upwardly extending supporting guides of channel shape, said guides having pairs of horizontally extending portions interconnected by vertically extending portions, said vertically extending portions forming stop guides for structural members, one of the horizontally extending portions of each of said pairs of horizontally extending portions engaging said base plate while the other of said horizontally extending portions forms a supporting platform.

2,749,874
PROPULSION AND STEERING APPARATUS FOR A MARINE VESSEL
Theodor Klatte, Bremen-Huchting, Germany
Application October 7, 1952, Serial No. 313,537
Claims priority, application Germany October 16, 1951
8 Claims. (Cl. 115—35)



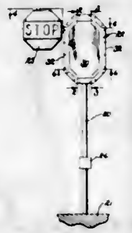
1. In a marine vessel, apparatus for propelling the vessel, comprising, in combination, driving means mounted in the vessel; a fluid pump operatively connected to said driving means to be driven thereby; a fluid motor located on the exterior of the vessel; a propeller connected to said fluid motor to be driven thereby and forming a unit therewith, said propeller being mounted on said fluid motor for rotation about a first axis; conduit means interconnecting said pump with said motor for conveying fluid between said pump and motor to operate the latter, said conduit means comprising a pair of concentric straight tubes spaced from each other, communicating with said motor, and located along a second axis extending from the vessel across said first axis, the inner one of said pair of said tubes conveying fluid in one direction with respect to said motor and the outer one of said pair of tubes cooperating with the said inner tube to form an elongated annular space for conveying fluid in an opposite direction with respect to said motor, and one of said tubes being fixedly connected to said motor; and support means mounting said one tube on the vessel for turning movement about said second axis so that when said tube turns about said second axis the direction in which said propeller drives the vessel changes.

2,749,875
CURB SIGNALLING DEVICE
David Frees, Sun Valley, and Edwin L. Schwartz, Los Angeles, Calif.
Application April 12, 1954, Serial No. 422,534
9 Claims. (Cl. 116—28)



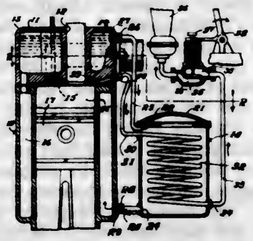
1. In a curb signalling device, the combination of: clamp means; a feeler support member pivoted to said clamp means; locking means connected to said clamp means, adapted to engage and retain said feeler support in a set pivoted position with respect to said clamp means; and manually operable means connected to said clamp means and said locking means for simultaneously actuating said locking means and said clamp means.

2,749,876
SIGNALING APPARATUS
William R. Patton and Charles E. Minnick, Fresno, Calif., assignors of one-half to James M. Patton, Fresno, Calif.
Application May 27, 1954, Serial No. 432,632
7 Claims. (Cl. 116—63)



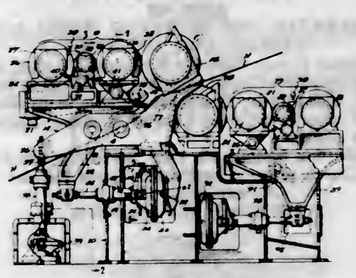
1. A signaling apparatus comprising a moveable signaling arm; a sign borne by the arm; means mounting the arm for pivotal movement between an operable sign displaying position and a retracted position, a counterbalance mounted on the arm; the counterbalance, arm, and sign having a combined center of balance displaced from the axis of pivotal movement of the arm tending to return the arm to sign displaying position when displaced therefrom; arm restraining means mounted for movement between a position in controlling association with the arm adapted to retain the arm in retracted position and a position displaced from the arm freeing the arm for return to sign displaying position and pendulous oscillation therein; resilient means connected to the restraining means resistively retaining said means alternately in its said controlling and displaced positions; and control means connected to the resilient means operable through said resilient means selectively to move the restraining means to and from its said positions.

2,749,877
GAS OPERATED ALARM ACTUABLE BY BACK-UP TRAVEL OF A TRACTOR
Charles D. Noel, The Dalles, Oreg., and Lyman J. Tucker, Redding, Calif.
Application June 4, 1954, Serial No. 434,394
1 Claim. (Cl. 116—138)



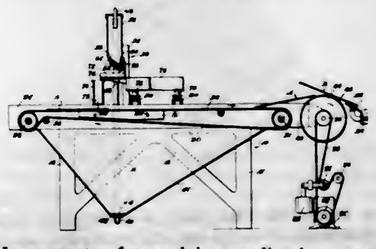
A back-up alarm for a tractor having an internal combustion engine including a water circulating jacket and a combustion chamber, a valve housing including two oppositely disposed chambers separated by a valve positioned exteriorly of said engine, a cooler connected in communication with said water jacket, an upstanding coil positioned within said cooler and having one end connected in communication with said combustion chamber and having the other end connected to one of said chambers, a gas operated signal horn connected in communication with the other of said chambers, said valve being spring biased and controlling the flow of cooled gas admitted to said one chamber out of the other of said chambers, and an actuating lever operatively connected to said valve.

2,749,878
PAPER COATING APPARATUS
Oscar E. Hagen, deceased, late of Neenah, Wis., by Frances M. Hagen, executrix, Neenah, Wis., assignor, by mesne assignments, to Kimberly-Clark Corporation, a corporation of Delaware
Application August 17, 1953, Serial No. 374,539
5 Claims. (Cl. 118—249)



4. In a paper coating machine, a frame pivoted on a horizontal axis, a roller-coating mechanism including a roll carried by said frame on an axis parallel to the frame axis and substantially spaced from said frame axis and so located relative to the frame axis that the center of gravity of said frame and parts carried thereby including said roll is located at a point not materially spaced from a vertical plane extending through the frame axis, and means for rocking said frame on its axis to move said roll into and out of operative position, which means includes a pair of fluid-pressure-actuated devices connected together to operate in series, one of said devices being of long stroke and the other of said members being of relatively short stroke, the actuation of the long-stroke device serving to rock the frame and move the roll when the latter is out of operative position and the short-stroke device being adapted to adjust the pressure on the roll when the roll is in operative position.

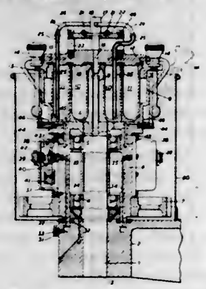
2,749,879
SPHERE DISPENSING APPARATUS
Rufus W. Wilson and Armand E. Kesley, Huntingdon, Pa., assignors to Wald Industries Inc., Huntingdon, Pa., a corporation of Pennsylvania
Application July 16, 1952, Serial No. 299,297
7 Claims. (Cl. 118—312)



1. In apparatus for applying small spheres on a continuously moving object, means for conveying said object to a dispensing station, means for dispensing said spheres on said object at said dispensing station, said dispensing means having a laterally extending opening formed therein for allowing said spheres to be dispensed on said object in a mono-layer, means for storing said spheres prior to the dispensing thereof, means for distributing said spheres from said storing means at a predetermined rate, said distributing means and said conveying means being synchronously driven to control the amount of spheres dispensed on said object, means for receiving said spheres from said storing means prior to the dispensing of said spheres on said object, and means

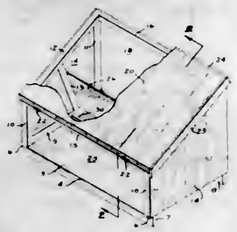
for vibrating said receiving means, thereby causing said spheres to be transferred from said receiving means into said dispensing means, whereby said dispensing means dispenses said spheres in a mono-layer onto said object at said dispensing station.

2,749,880
APPARATUS FOR MARKING WIRES AND CABLES AND THE LIKE
Arthur Bruce Fraser Gillespie Richardson, Leigh, Ronald Hinds, Stockton Heath, and Geoffrey Norton Ridings, Eccles, Manchester, England, assignors to British Insulated Callender's Cables Limited, London, England, a British company
Application January 11, 1955, Serial No. 481,216
Claims priority, application Great Britain January 20, 1954
12 Claims. (Cl. 118—411)



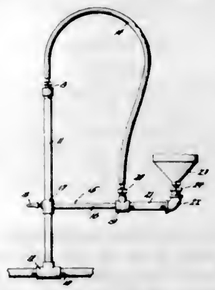
1. In a rotary marking head for applying at least one helical stripe of marking fluid to a cable passing through the head, the combination with at least one reservoir for marking fluid, of means comprising a centrifugally operated valve for controlling the flow of a gaseous fluid under superatmospheric pressure to a supply line to said reservoir.

2,749,881
FEEDER FOR LITTLE PIGS
Viron O. E. Gustafson, Sparland, Ill.
Application October 2, 1953, Serial No. 383,772
3 Claims. (Cl. 119—52)



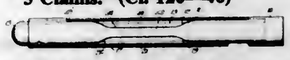
1. In a feeder for little pigs, a rectangular housing having a horizontal floor having a forward edge, a vertical rear wall rising above said floor and having an upper edge, vertical end walls extending forwardly from said rear wall along opposite ends of said floor, horizontal bars on top of said floor along the inner sides of said end walls, forwardly inclined intermediate bars rising from said horizontal bars along the inner sides of the end walls, said intermediate bars having rear sides and being spaced forwardly from said rear wall, and a removable feed gate comprising a vertical plate having a lower edge, said plate extending between said end walls and freely bearing against the rear sides of the intermediate bars with the lower edge of the plate supportably resting upon said horizontal bars, so as to define a feed passage between the lower edge of the plate and the floor.

2,749,882
ADJUSTABLE HEIGHT STOCK-WATERING APPARATUS
Fredrick G. Butker, Winchester, Va., assignor to William M. Robbins, Hyattsville, Md.
Application December 23, 1954, Serial No. 477,309
6 Claims. (Cl. 119—74)



1. In a stock-watering apparatus, in combination, a generally horizontal conduit, a generally vertical conduit supported on and connected to said horizontal conduit, a generally horizontal support member mounted at one end on said vertical conduit for vertical adjustment thereon, conduit means mounted on the other end of said support member, a flexible conduit connecting said vertical conduit and said conduit means, and a stock-watering device mounted on and connected to said conduit means.

2,749,883
FOUNTAIN PEN
Raymond L. Dostert, Chicago, Ill., assignor to Eversharp, Inc., Chicago, Ill., a corporation of Delaware
Application December 14, 1953, Serial No. 397,914
3 Claims. (Cl. 120—46)

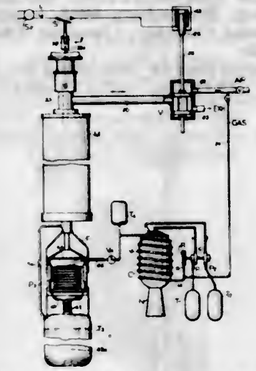


2. In a fountain pen of the type in which the supply of ink is held in a resiliently distensible sac which is adapted to be collapsed to draw in a new supply of ink, a tubular member surrounding the sac, and a pair of spring presser bars located at opposite sides of said member, said bars extending longitudinally of said member in openings in the sides of the latter, one end of one of said bars and the intermediate portion thereof being movable inwardly against one side of the sac and the other end of the other of said bars and the intermediate portion thereof being also movable inwardly against the other side of the sac, the intermediate portions of said bars providing opposed finger engaging portions which are adapted to be simultaneously engaged and squeezed between the fingers to collapse the sac, said bars being integrally connected with said member, with their free inwardly deflectable ends projecting in opposite directions.

2,749,884
PRESSURE-OPERATED FEEDING APPARATUS FOR COMBUSTION LIQUIDS IN AN INTERNAL COMBUSTION CHAMBER
Robert H. Goddard, deceased, late of Annapolis, Md., by Esther C. Goddard, executrix, Worcester, Mass., assignor of one-half to The Daniel and Florence Guggenheim Foundation, New York, N. Y., a corporation of New York
Application December 11, 1952, Serial No. 325,255
1 Claim. (Cl. 121—48)

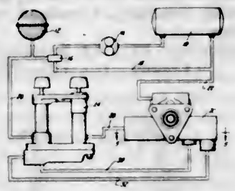
A fluid-operated motor comprising a closed casing, a bellows member therein, restricted means to supply liquid under relatively low pressure to the space within said

casing and exterior to said bellows member, and the lower end of said bellows member closing off said liquid supply when depressed, means to supply a gaseous fluid under relatively high pressure to the interior of said bellows member, a compression spring in said bellows member acting in opposition to the liquid pressure and in conjunction with the gaseous fluid pressure, a valve shiftable to alternately connect the interior of the bellows



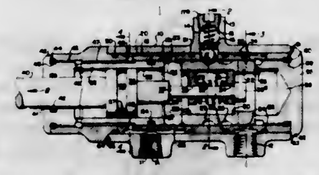
member to said gaseous fluid supply or to exhaust, and a device to shift said valve which is activated by said bellows member at the upper end of the working stroke of the motor, said working stroke being effected at relatively low and controlled speed entirely by restricted flow of liquid at relatively low pressure, and the idle or return stroke of said motor being effected at relatively high speed by conjoint gaseous and spring pressure which overcomes the liquid pressure and closes off the liquid supply.

2,749,885
CONTROL DEVICE FOR WINDSHIELD WIPER MECHANISM
Stanley I. MacDuff, South Bend, Ind., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application December 14, 1948, Serial No. 65,228
6 Claims. (Cl. 121—164)



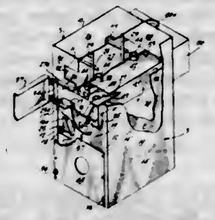
1. In a fluid pressure system the combination of a fluid motor mechanism including a housing with a piston therein dividing said housing into opposed chambers, valve means for controlling the flow of fluid to said opposed chambers, means for establishing communication between said valve means and one of said opposed chambers, said valve means having a first position in which fluid under pressure is admitted to one of the opposed chambers and exhausted from the other opposed chamber and a second position in which fluid under pressure is admitted to said other opposed chamber and exhausted from said one of the opposed chambers, said valve means being operatively connected to said piston to be moved to said one position upon completion of a piston stroke in one direction and moved to said second position upon completion of a piston stroke in the opposite direction, and a control device remotely located from the fluid motor mechanism and adapted to be connected to a fluid pressure source, fluid connections from said control device to said valve means, a fluid connection from said control device to the other of the opposed chambers, said control device including a valve for automatically maintaining the flow of fluid under pressure to said opposed chambers substantially constant with variations in load on said piston.

2,749,886
FLUID PRESSURE SELF-RECIPROCATING ACTUATOR
Richard M. Densmore, Los Angeles, Calif.
Application June 7, 1954, Serial No. 434,794
10 Claims. (Cl. 121—164)



1. In a fluid pressure self-reciprocating actuator, a piston, a housing in which said piston is reciprocally mounted, an alternating valve axially aligned with and operable by said piston when reciprocating, said housing having inlet and outlet ports for conducting motive fluid under pressure and arranged to communicate with opposite ends of said alternating valve and said piston internally of said housing, said piston having respectively greater and lesser effective areas on its opposite ends and passage means communicating with said inlet arranged to concurrently communicate with both ends of said piston when it is moving in one direction, said alternating valve having a passage axially therethrough to conduit fluid, exhausted from said greater effective area, to said outlet port.

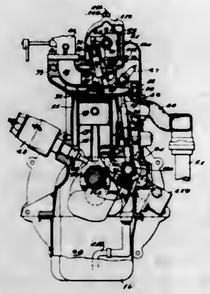
2,749,887
WELDED WATER WALL BOILER
Gustav E. Olsen, Arverne, N. Y.
Application March 28, 1955, Serial No. 497,191
14 Claims. (Cl. 122—73)



1. A boiler having a rectangular water leg which forms a rectangular fire box and having upwardly opening side portions which are higher than the front and rear portions, the latter portions being closed at their respective tops and bottoms, a fire box cover sheet connecting the side portions and above the front and rear portions to form front and rear openings; front, rear and top plates forming a water chamber above the cover sheet and in communication with the open water leg sides, a horizontal water tank spaced below the cover sheet to form an upper flue gas passage and spaced from the inner side walls of the side portions of the water leg to provide lateral flue gas passages, the tank extending through the rear opening and having horizontal fire tubes, means forming a water circulation passageway connecting the lower front portion of the tank with an adjacent portion of the water leg to permit flow of water into the tank, a return tube connecting the rear of the tank with the rear portion of the water leg, and means forming a water circulation

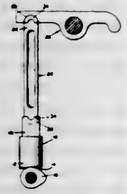
passageway from the upper portion of the tank to the water-containing space to facilitate flow of heated water from the tank.

2,749,888
INTERNAL COMBUSTION ENGINE
Delmar G. Roos, Toledo, Ohio, assignor, by mesne assignments, to Henry J. Kaiser Company, a corporation of Nevada
Original application February 15, 1951, Serial No. 211,093, now Patent No. 2,725,955, dated December 6, 1955. Divided and this application August 8, 1952, Serial No. 303,223
1 Claim. (Cl. 123—59)



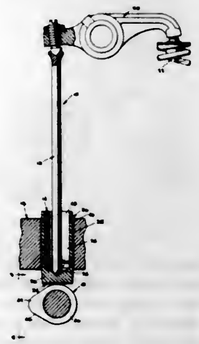
In an internal combustion engine of the class described having a plurality of cylinders in a single block, a plurality of exhaust passageways communicating with said cylinders, an upper head section secured to said cylinder block, an intake manifold integrally formed and disposed wholly within the upper head section and having an intake port at the upper surface of said upper head section and positioned on the opposite side of the cylinder head section from that side of the cylinder block having the exhaust passageways, said intake manifold establishing communication between said intake port and said cylinders, said intake manifold embodying in part a single downwardly extending passage with an elbow section intermediate its ends and extending from said intake port to an intake chamber extending horizontally and longitudinally within the upper head section and said intake chamber having a plurality of downwardly extending passages communicating with said cylinders, and a carburetor attached to said intake port whereby a fuel mixture is obtained and which travels in a downward direction to said cylinders.

2,749,889
VALVE GEAR MECHANISM
Sidney Oldberg, Birmingham, Mich., assignor to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application September 9, 1950, Serial No. 184,019
6 Claims. (Cl. 123—90)



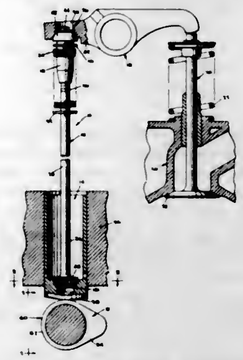
1. In a valve gear system for an internal combustion engine having valve actuating means comprising a valve actuating rocker arm pivotal about a fixed axis intermediate its ends, a cam actuated tappet plunger, said tappet plunger having an axis generally perpendicular to the axis of said pivot, a push rod having a first axial extremity thereof pivotally coupled, non-rotatably about its longitudinal axis, to one end of said rocker arm and the second end of said push rod being coupled non-rotatably about its longitudinal axis to said plunger.

2,749,890
MOTION TRANSMITTING MECHANISM
Sidney Oldberg, Birmingham, Mich., assignor to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application June 14, 1952, Serial No. 293,543
19 Claims. (Cl. 123—90)



1. Motion transmitting mechanism comprising a reciprocable member having a planar surface on one end thereof perpendicular to the axis of the member, a stationary guide member having a bore for reciprocation of the reciprocable member therein, said members having associated peripheral surfaces, one of which is convex axially of its length and the other of which is cylindrical, and a movable fixed axis member having a straight line surface engageable with the planar surface of the reciprocable member.

2,749,891
AUTOMATIC LENGTH ADJUSTING MECHANISM
Robert C. Russell, South Euclid, Ohio, assignor to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application July 19, 1952, Serial No. 299,790
10 Claims. (Cl. 123—90)



1. A valve operating mechanism comprising a threadingly engaged screw and nut member assembly, a spring normally biasing the screw and nut members apart, intermediate valve-actuating means engageable with an end of one of said members, a tappet secured to one of the members for rotation therewith allowing angular movement but preventing rotation between said one member and tappet, said tappet having a cam engaging surface, and a cam having a peripheral surface engageable with the surface on the tappet, said tappet and cam engageable surfaces being of such related configuration so as to provide for rotation of the tappet to shorten said member assembly as said tappet is raised and rotated by said cam under certain conditions of operation of the valve operating mechanism.

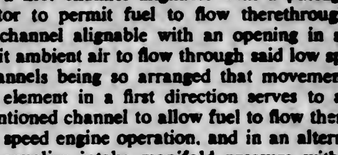
2,749,892
HYDRAULIC LIFTER
Gerald D. Line, Royal Oak, and Sidney L. Riley, Berkley, Mich., assignors to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application April 3, 1952, Serial No. 280,332
2 Claims. (Cl. 123—90)



1. A hydraulic tappet comprising a hollow cylinder having an open end and a closed end, a reciprocal plunger telescopically mounted within said cylinder and having a passageway therethrough communicating at one end thereof with a chamber defined by the inner end of said plunger and the closed end of said cylinder, a reservoir formed within said plunger, a one-way flat check valve on said plunger at the inner end of said passageway, said valve comprising a flat disk engageable with the inner end of said plunger and limited in axial movement relative to the plunger, a spring between the end of said cylinder and said plunger to urge said plunger outwardly of said cylinder, an imperforate cap member loosely mounted on the outer end of the plunger freely operably axially moveable relative thereto, said cap member having a flange portion engageable with the end of said plunger and a major body portion telescopically received within a portion of said plunger with annular clearance therebetween to provide for the passage of fluid from said reservoir toward said open end of said cylinder between said cap member and said plunger, said cylinder having a pair of spaced annular grooves in the inner wall thereof, said plunger having an annular groove in the outer wall thereof, said annular groove having an overlapping relation with one of the grooves in said cylinder and a port in the wall of each said cylinder and plunger, each port being in communication with the pair of overlapping grooves and said passageway to provide a continuous fluid channel.

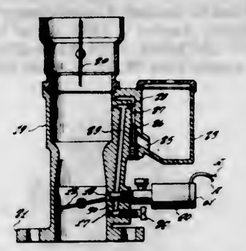
2,749,893
CAM SHAFT DRIVES FOR THE VALVE GEAR OF MULTIBANK INTERNAL COMBUSTION ENGINES
Ferdinand A. E. Porsche, Stuttgart, and Ernst Fuhrmann, Stuttgart-Weil im Dorf, Germany, assignors to Dr. Ing. h. c. F. Porsche K.-G., Stuttgart-Zuffenhausen, Germany
Application October 26, 1953, Serial No. 388,231
Claims priority, application Germany November 5, 1952
5 Claims. (Cl. 123—90)

4. In a multi-bank internal combustion engine of the type in which the cylinders of one bank are arranged in opposition to the cylinders of the other bank and each bank includes a plurality of parallel cylinders, a crankcasing located between the banks of cylinders, a crankshaft in the casing, and mechanism for operating the inlet and exhaust valves of the cylinders of the engine banks, the improvement comprising a king shaft for each engine bank located below and parallel to the axes of the cylinders of the bank and extending into the crankcasing below the crankshaft therein, means in the crankcase operatively associated with the crankshaft for driving the king shafts for the banks of engine cylinders, said mechanism



for operating the inlet and exhaust valves of each bank of cylinders including spaced parallel camshafts extending lengthwise of the bank of cylinders, means for directly driving one of said camshafts by the king shaft for said bank, and means for driving the other camshaft from the camshaft driven by the king shaft.

2,749,894
CARBURETOR GAS SAVER
Walter Sarid and George Miller, Scranton, Pa., assignors to Sarler Corporation, a corporation of Pennsylvania
Application November 12, 1952, Serial No. 319,967
1 Claim. (Cl. 123—97)

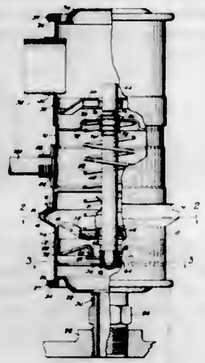


A carburetor gas saving attachment for use with a conventional carburetor having a low speed port, said attachment comprising a body having a neck engageable with said low speed port, a valving element disposed within said neck, said valving element being operated by an electrically energized solenoid; said valving element including a first channel alignable with a passage in said carburetor to permit fuel to flow therethrough, and a second channel alignable with an opening in said body to permit ambient air to flow through said low speed port; said channels being so arranged that movement of said valving element in a first direction serves to align said first-mentioned channel to allow fuel to flow therethrough for low speed engine operation. and in an alternate position to equalize intake manifold pressure with the ambient air.

2,749,895
VACUUM BREAKER
Charles R. Flint, La Porte, Ind., assignor to United Specialties Company, Chicago, Ill., a corporation of Delaware
Application October 29, 1952, Serial No. 317,407
3 Claims. (Cl. 123—97)

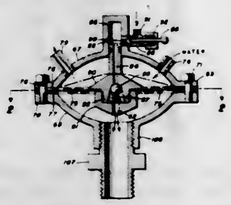
1. A vacuum breaker for use with an internal combustion engine comprising a low pressure chamber, a normal pressure chamber, and a valve structure between the chambers adapted to open and close so as to establish and extinguish communication between the chambers at predetermined pressures in the low pressure chamber including a valve seat, a valve plate mechanism adapted to engage the seat, yielding means biasing the plate toward

the seat, restricting means adapted to restrict the flow of the air through the valve structure during its open periods,



and damping means in engagement with the valve plate mechanism to regulate the movements of the same.

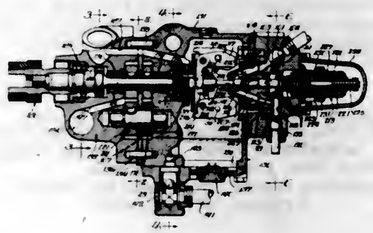
2,749,896
COMPRESSION OPERATED FUEL INJECTION PUMP
Paul A. Jarand, United States Navy
Application August 1, 1952, Serial No. 302,285
5 Claims. (Cl. 123—139)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A fuel injector comprising a body having a cylinder therein, a fuel supply connection extended from said cylinder, a piston in said cylinder having a base whose area is greater than that of the piston, said body being adapted for mounting on an internal combustion engine with said base positioned to be contacted by gases compressed in the combustion chamber of said engine, said piston having a passage extended longitudinally therethrough, a check valve in said piston positioned to prevent the passage of gases from the combustion chamber of the engine to the fuel supply connection, and a diaphragm mounted in said body and having a supporting connection with said piston base, and coolant connections adapted to supply coolant fluid above the diaphragm to cool said diaphragm and return said diaphragm and piston to a normal position upon release of pressure of the gases of combustion.

2,749,897
FUEL APPARATUS FOR AN INTERNAL COMBUSTION ENGINE
Neville M. Reiners, Columbus, Ind., assignor to Cummins Engine Company, Inc., Columbus, Ind., a corporation of Indiana
Application January 9, 1952, Serial No. 265,698
28 Claims. (Cl. 123—140)

1. Fuel supply apparatus for a multi-cylinder internal combustion engine, comprising an engine driven fuel pump, a pressure regulator for controlling the pressure of the fuel delivered by the pump, a supply rail connected to receive fuel from said pump, a return rail, a plurality of injectors, one for each cylinder and each having a permanently open passage therethrough connecting the two rails and also having means connected to said passage

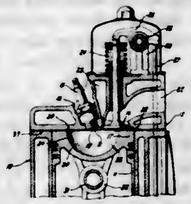


for injecting fuel into the associated cylinder, a throttle connected between said pump and said supply rail and controlling the flow of fuel from said pump to said supply rail, and means permitting a continuous but controlled flow of fuel through said return rail.

2,749,898
FUEL INJECTION CONTROL
Walter F. Isley, Grosse Pointe, Mich., assignor to Continental Motors Corporation, Detroit and Muskegon, Mich., a corporation of Virginia
Application July 27, 1953, Serial No. 370,593
3 Claims. (Cl. 123—140)

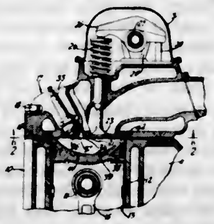
1. In an apparatus for supplying fuel to an internal combustion engine having an air intake system, a supercharger in said system, and a variable delivery engine driven fuel injection pump provided with a pressure compartment and with a pressure responsive control device in said compartment and operable to vary the fuel output of said injection pump, a control means for controlling the pressure in the pressure compartment of said pump, a conduit connected with said air intake upstream of said supercharger and another conduit connected with said air intake downstream of said supercharger, and with the pressure compartment of said pump ported means and a valve structure disposed between said conduits and comprising a valve casing, provided with a compartment and a flexible diaphragm dividing said valve compartment into upper and lower chambers, a valve carried by said diaphragm and actuated to control the ported means connecting said first conduit with said second conduit, said second mentioned conduit open to said upper chamber, said first mentioned conduit open to said lower chamber, adjustable spring means in the lower chamber urging the valve to closed position, a precalibrated restricted orifice in said second conduit intermediate the connection of the second conduit with the air intake system of the engine and the connection between said second conduit and the pressure compartment of said pump, said valve opening in response to pressure rise in said second conduit to reduce the pressure in said pressure compartment of the pump by reason of the drop in pressure produced across said precalibrated restricted orifice aforesaid.

2,749,899
COMBUSTION CHAMBER
Boris John Mitchell, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 16, 1952, Serial No. 282,508
3 Claims. (Cl. 123—191)



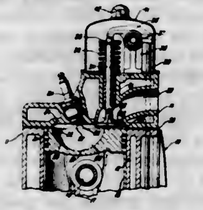
1. A large bore short stroke engine comprising a cylinder having an inner wall surface, a head and a piston with said piston being reciprocably mounted in said cylinder, said head having an inner wall formed to provide substantially a plane inner wall surface closing the end of said cylinder, said piston having an end wall formed to provide a concentrically disposed hemispherical wall surface extending therein and a concentrically disposed annular wall surface surrounding said hemispherical surface and terminating at the inner wall surface of said cylinder, said inner wall surfaces of said piston and said head and said cylinder forming a combustion chamber for said engine and including a firing chamber formed between said inner wall surface of said head and said hemispherical wall surface of said piston and communicating with the inner edge of a minimum mechanical clearance space formed between said inner wall surface of said head and said annular wall surface of said piston, a spark plug secured in said head and having the spark gap terminals thereof extending through said head and disposed substantially at the center of said hemispherical and annular surfaces forming said firing chamber and said minimum mechanical clearance space, a pair of inlet and exhaust valves disposed in said head and opening inwardly through said inner wall surface of said head and extending throughout the greater part of said inner wall surface between said spark plug and the inner wall surface of said cylinder on one side of said spark plug and having the inner surfaces thereof extending substantially in the plane of said inner wall surface of said head, said inlet and exhaust valves being positioned in said head to overlap said annular clearance space and said firing chamber.

2,749,900
COMBUSTION CHAMBER
Boris John Mitchell, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 16, 1952, Serial No. 282,509
3 Claims. (Cl. 123—191)



1. An engine comprising a cylinder having an inner wall surface, a head and a piston with said piston being reciprocably mounted in said cylinder, said head having an inner wall formed to provide substantially a continuous and plane inner wall surface closing the end of said cylinder, said piston having an end wall formed to provide a concentrically disposed and shallow and spherical wall surface forming a depression in the end of said piston and a concentrically disposed annular wall surface surrounding said spherical wall surface and terminating at the inner wall surface of said cylinder, the inner wall surfaces of said piston, and said head and said cylinder being formed to provide a combustion chamber for said engine and including a firing chamber formed between said inner wall surface of said head and said spherical wall surface of said piston and communicating with the inner edge of a minimum mechanical clearance space formed between said inner wall surface of said head and said narrow annular wall surface of said piston, a spark plug secured in said head and having the spark gap terminals thereof extending through said head and adjacent one side of said firing chamber, a pair of inlet and exhaust valves disposed in said head and having a line-of-centers eccentrically disposed with respect to the firing chamber and opening inwardly through said inner wall surface of said head and extending across substantially the entire area between said spark plug and the inner wall surface of said cylinder remote from said spark plug and having the inner surfaces thereof extending substantially in the plane of said inner wall surface of said head.

2,749,901
COMBUSTION CHAMBER
Boris John Mitchell, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 16, 1952, Serial No. 282,510
10 Claims. (Cl. 123—191)



1. An internal combustion engine comprising a cylinder having a cylinder head and a piston therein, said head and said piston being formed to provide plane surfaces uniformly spaced from one another to provide a minimum mechanical clearance space for operating said piston within said cylinder, inlet and exhaust valves in said head and at one side of said cylinder and opposed to said piston and having end surfaces forming substantially a continuation of the plane surface of said head, a spark plug within said head and between said valves and on the side of said cylinder opposed to said valves and having a spark gap between the terminals thereof and within said cylinder, and a firing chamber formed between said head and said piston and inwardly of and communicating with said clearance space, said firing chamber having a wall on one side of said spark gap and extending into said piston and having circular surface elements defined by planes normally intersecting the axis of said cylinder and said firing chamber wall, all points on each of said elements being disposed equidistantly from said spark gap.

2,749,902
REPEATING AIR GUN
Edwin E. Foster, Austin, Tex.
Application February 10, 1955, Serial No. 487,313
6 Claims. (Cl. 124—13)

1. A repeating air gun comprising an elongated tubular body, an elongated tubular barrel slidable into and out of the body and formed to hold a series of projectiles

in alignment in the barrel, check valve means in the inner end of the barrel and in the body to admit air into the body when the barrel is slid outward of the body and to trap air in the body and force it into the barrel



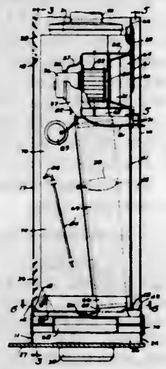
when the barrel is slid into the body, and an annular resilient restriction at the outer end of the barrel to seal against the outermost projectile of the series and yieldingly to resist discharge thereof from the barrel.

2,749,903
SAFETY LOCKING DEVICE FOR GAS AND ELECTRIC APPLIANCES
Louis Auster, New York, N. Y.
Application August 7, 1953, Serial No. 372,842
1 Claim. (Cl. 126—42)



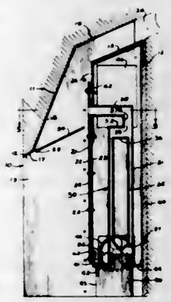
A stove operating knob locking device comprising a knob with a base portion and a handle portion, a stove panel having a threaded opening, said base portion of the knob having an opening disposed axially to align with the panel opening when the knob is in off position, an internally threaded sleeve extending through the knob opening and secured to the knob, a screw member for extension through the sleeve to engage the threaded panel opening when the knob is in off position, said screw member having a finger grip head portion disposed adjacent the handle portion of the knob and a threaded end portion, a locking recess in the threaded end portion of the screw member, a spring arm extension from said sleeve, and a recess seating end portion on said spring arm extension disposed to seat in said recess when the screw member threaded end portion has penetrated the panel opening and engaged the threads therein.

2,749,904
FORCED AIR FLOW AIR HEATING FURNACE
Don F. Jones and Kenneth S. Bassett, Lansing, Mich., assignors to Motor Wheel Corporation, Lansing, Mich., a corporation of Michigan
Application February 18, 1952, Serial No. 272,096
16 Claims. (Cl. 126—110)



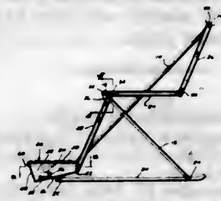
2. In a heater construction, the combination of a cabinet having side walls, a heating unit in said cabinet, a shield within said cabinet spaced inwardly of at least one of said side walls and cooperating therewith to form a duct therebetween which insulates said wall from the heat within said cabinet, a blower in said cabinet, said shield having an opening therein, said blower having an inlet connected with said opening, said duct having a second opening therein for admitting outside air to said duct, said cabinet having a heat chamber in which said heating unit is located, said blower inlet also communicating with said heat chamber, said blower having an outlet communicating with the exterior of said cabinet, said blower being arranged to draw air from said duct and chamber through said inlet and discharge said air exteriorly of said cabinet, and means adjacent said blower inlet for regulating the proportions of air drawn into said blower from said heat chamber and said duct.

2,749,905
FIREPLACE HOT AIR FURNACE
Andrew Lager Johnson, Douglas, Wyo.
Application October 14, 1952, Serial No. 314,649
2 Claims. (Cl. 126—121)



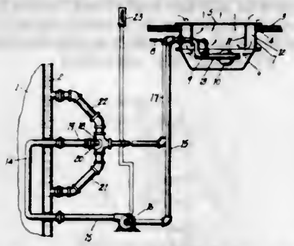
1. In combination, a fireplace having a flue at its upper end, a hot air furnace disposed in said fireplace, said furnace comprising an outer casing having a back wall, side walls, and a top wall sloping downwardly from the back wall and joined to the top edges of said side walls, and a front wall joined to the upper front edge portions of the side walls and terminating above the base of said fireplace to form with the side walls a fireplace opening, said front wall having above the opening a flat portion inclined inwardly and upwardly to a location above and spaced from the front edge of said top wall, a hood inclined upwardly and rearwardly from the upper edge of the inclined flat portion of said front wall to substantially said back wall and providing a passage for products of combustion, a partition wall dependingly carried by said top wall adjacent the front ends thereof and having its lower end spaced above the base of said fireplace, a combustion chamber positioned between said casing back wall and said partition wall, said combustion chamber including a space at the lower end and forming a firebox for the accommodation of a heating source therein, said firebox being in communication with the spaced lower end of the partition wall, the combustion chamber including an outer housing positioned above the firebox and an inner casing within said outer housing and spaced from the latter, the space between said inner casing and outer housing providing another passage having the lower end in communication with said firebox, an outlet duct in the upper end of said another passage and in communication with said first named passage above the fireplace opening, and ducts in the side walls of said outer casing for admitting air into said air heating passages.

2,749,906
HEATED CHAIR
Frank M. O'Connor, Austin, Minn.
Application February 8, 1955, Serial No. 486,784
3 Claims. (Cl. 126—204)



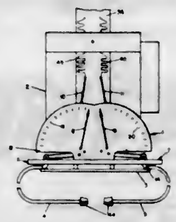
1. A heated chair comprising pairs of spaced legs pivotally connected together intermediate their ends for movement about a common substatnially horizontal axis, cross bars carried by the legs for movement in spaced arcuate paths concentric about the common axis, stretcher bars pivotally connected to one pair of legs adjacent the ends thereof remote from their respective cross bar, means detachably connecting the stretcher bars to the opposite pairs of legs adjacent the ends thereof remote from their respective cross bar, a hollow panel carried by the cross bar of one pair of legs and extending downwardly therefrom between the legs to define a combined chair back and stack, a second hollow panel carried by the first mentioned hollow panel and extending horizontally therefrom adjacent the lower end thereof to define a combined chair seat and heat duct, means carried by the second panel engaging the cross bar of the second pair of legs to hold the seat substantially horizontal, a third hollow panel carried by the horizontal hollow panel and extending downwardly therefrom remote from the first hollow panel to define a leg rest and heat duct, a combined combustion chamber and foot rest carried by the third hollow panel and extending substantially horizontally outwardly therefrom adjacent the end thereof remote from the second hollow panel, and the combustion chamber and the hollow panels communicating with one another to successively convey products of combustion and heat generated in the combustion chamber to atmosphere.

2,749,907
HUMIDIFYING APPARATUS
Adam E. Armstrong, Three Rivers, Mich., assignor to Armstrong Machine Works, Three Rivers, Mich.
Application March 19, 1951, Serial No. 216,427
6 Claims. (Cl. 126—344)



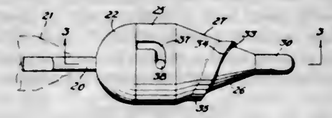
5. In combination with a hot water boiler having a combustion chamber, a heat exchange unit to be heated at higher temperature than the water in said boiler, a water heating unit positioned in said combustion chamber and having an inlet connection spaced vertically below an outlet connection, piping connecting said exchange unit to said water heating unit, a pump in the return line from said exchange unit and delivering to said inlet connection, means forming a gravity circulating passage between vertically spaced points in said boiler and located exteriorly of the boiler, the outlet passage from said water heating unit being directed transversely across said circulating passage and opening thereinto.

2,749,908
NASAL COMPARATOR
George S. Lee, St. Michaels, Md., and Charles F. Young, Philadelphia, Pa.
Application June 18, 1954, Serial No. 437,813
9 Claims. (Cl. 128—2)



1. A nasal comparator comprising, dual independent expansible chambers, independent coupled indicators and scribers connected to said chambers, flexible tubing from each of said chambers adapted to be held to a nostril outlet whereby to communicate operating pressure to said indicators and scribers through said chambers, comparative scales for said indicators, and a motor driven tape to record the comparative movements of said scribers, whereby the amount of air exhaled through each nostril may be compared and recorded.

2,749,909
BIOPSY KNIFE
John C. Ullery, Upper Darby, and Arthur R. Allard, Drexel Hill, Pa.
Application September 21, 1954, Serial No. 457,338
1 Claim. (Cl. 128—2)

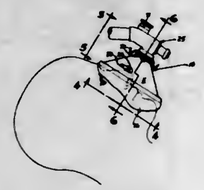


A biopsy knife comprising a shank, a body on the shank, a blade removably secured to the forward end of the body, a quick detachable connection between the body and the blade, the blade being hollow and having a conical forward surface coaxial with the shank, and a guiding nose on the forward end of the conical surface coaxial therewith and protruding forward of the conical surface, there being a slot extending spirally of the conical surface from a position adjoining the nose to a position adjoining the outer circumference, the conical surface at the rearward edge of the slot having a rim which is deformed outwardly from the slope of the conical surface, and the rim at the forward edge having a cutting edge located outward of the line of slope of the conical surface.

2,749,910
MASK
Albert Faulconer, Jr., Rochester, Minn., assignor to Research Corporation, New York, N. Y., a corporation of New York
Application March 9, 1953, Serial No. 341,277
9 Claims. (Cl. 128—29)

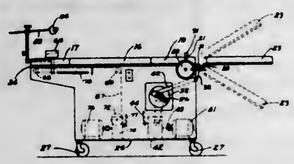
1. A hollow cup-like housing having an edge shaped so as generally to fit the contour of an anatomical body portion, said housing having at least an edge portion of hollow construction and made of flexible material con-

formable to said body portion, said edge portion of hollow construction being filled with a granular filling, said edge portion of hollow construction being provided with an outlet equipped with a screen through which the air within



said hollow construction may be evacuated without withdrawing the granular filling therefrom, said cup-like housing being provided with an outlet port from the interior thereof when the edge is in place against the anatomical body portion.

2,749,911
ORTHOPEDIC TABLE
Lelia Griffin, Tucson, Ariz.
Application July 8, 1952, Serial No. 297,700
14 Claims. (Cl. 128—70)



1. In an orthopedic table, a supporting frame, a top portion on said frame, a pair of extensions normally in the plane of said top portion, said extensions being individually supported on said frame for pivotal movement on a transverse axis with respect to said top portion; means on said frame for reciprocating said extensions rhythmically about said pivotal support on opposite sides of the said normal position thereof; and clutch means individual to each such extension for changing said normal position about which said extensions reciprocate.

2,749,912
SANITARY GARMENTS
Ruth J. Teitler, Philadelphia, Pa.
Application February 21, 1955, Serial No. 489,400
6 Claims. (Cl. 128—284)



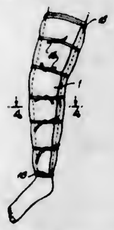
1. A sanitary pantie comprising a waistband, a pair of spaced front suspender straps depending from the central front portion of said waistband and terminating forwardly of the crotch region, a pair of spaced rear suspender straps depending from the central back portion of said waistband and terminating rearwardly of the crotch region, a pair of partial leg bands each adapted to extend about the outer portion of one leg of the wearer and terminating short of the adjacent front and rear suspender straps, an elongated crotch piece shaped to conformably engage the crotch of the wearer, and releasable securing means on said suspender straps and leg bands and on opposite ends of said crotch piece for detachably securing the latter in position, a sanitary napkin seated longitudinally on said crotch piece, a pair of loops on opposite ends of said napkin, and a securing strip extending through each of said loops, each of said securing strips being provided with means releasably interengageable with said securing means to detachably connect said strips to the adjacent pair of said suspender straps.

2,749,913
SURGICAL DRAIN
Frederick J. Wallace, New York, N. Y., assignor to American Cystoscope Makers, Inc., New York, N. Y., a corporation of New York
Application November 23, 1954, Serial No. 470,594
6 Claims. (Cl. 128—295)



1. In a surgical drain, a flexible tubular member having a first passage extending longitudinally therethrough, one end of the tubular member being adapted to be connected to a catheter with said first passage in communication with the discharge end of the catheter, the other end of the tubular member being adapted to be disposed in a liquid-receiving receptacle with said first passage communicating with the interior of the receptacle, said tubular member having a second longitudinal passage that is independent of said first passage, a first opening establishing communication between said first passage and said second passage, and a second opening placing said second passage in communication with the atmosphere.

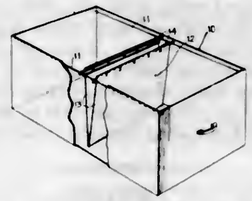
2,749,914
THERMAL PACK FOR BODY APPLICATION
Margaret T. Braley, Riverside, Conn.
Application September 17, 1952, Serial No. 310,076
3 Claims. (Cl. 128—402)



1. A therapeutic hot pack device which comprises a sheet of tough, flexible elastomeric plastic composition of width substantially greater than the girth of an affected limb whereby it is adapted to wrap around said limb with edge portions overlapped, a second sheet of plastic secured to the first along a central longitudinal line and transversely at its ends, forming pockets between said

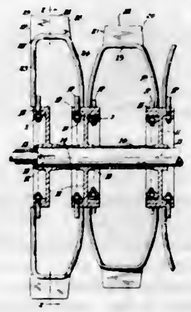
sheets, liquid cell units held in said pockets, each comprised of a pair of flexible sheets of tough elastomeric plastic sealed together at their edges to form a liquid-tight cell and a liquid therein of high specific heat, and flexible tie straps secured to the outside of said first-named sheet at spaced points along a centrally positioned longitudinal line, said straps being no longer than the width of the plastic sheet and extending transversely thereof.

2,749,915
FILE FOLDER SUPPORT
Sidney L. Hatch, Chicago, Ill.
Application April 23, 1954, Serial No. 425,168
1 Claim. (Cl. 129—16.7)



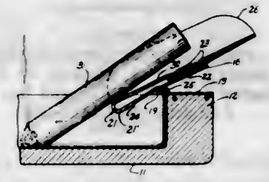
The combination with a file folder having spaced apart horizontal edge portions, tapered flaps struck from said folder adjacent said edge portions to provide openings therein with the flaps folded back around said folder in the direction of said edge portions, said openings having opposite corresponding edge portions correspondingly tapered upwardly and inwardly with respect to each other, a suspension bar extending along each of said horizontal edge portions and having tabs struck therefrom for projecting into said openings over said flaps, said tabs being tapered to correspond to said flaps and said openings for a wedging effect when said tabs are projecting into said openings over said flaps, said flaps bearing on sa d tabs in a lateral direction with respect to said folder when said tabs are projected in said openings over said flaps, said bar having its lower long edge curved in a corresponding lateral direction with respect to said flaps for bearing engagement with the adjacent surface of said folder to bear said folder against said tabs, the opposite end portions of said bar formed to provide open hooks extending in an opposite direction with respect to said tabs.

2,749,916
ROTORS FOR THRESHING MACHINES
Frederic Whigham McConnel, Pensax, England, assignor to McConnel Bomford Limited, Pensax, England, a British company
Application August 22, 1952, Serial No. 305,787
4 Claims. (Cl. 130—27)



1. A rotor for threshing grain comprising a rotatable hub, a number of sets of rods fixed to the hub, which sets are spaced axially apart along the length of the hub and each comprises a number of rods spaced around the circumference of the hub, the roots of which rods in each set are arranged on a circle spaced axially from a circle containing the roots of a neighboring set of rods, the rods in one set being staggered in a circumferential direction with respect to the rods in an adjacent set so that the rod in one set lies substantially midway between two rods of an adjacent set and each of which rods in a set diverges from a nearby rod in an adjacent set from their roots outward, so as to provide wedge-shaped spaces extending close to the hub into which the heads of grain may enter.

2,749,917
CIGARETTE DUMPING ASH TRAY
Wilson H. McIlroy, Savannah, Ga.
Application June 26, 1953, Serial No. 364,379
2 Claims. (Cl. 131—240)

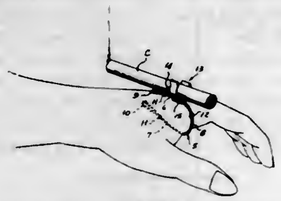


2. In an ash tray having a rim portion, a cigarette dumper including a hinge leaf fixedly supported upon said rim portion and having one end adjacent the inner edge of said rim portion, an upper hinge leaf arranged in superimposed relation with respect to said first-named hinge leaf, cooperating hinge loops on said one end of said fixed hinge leaf and the complemental end of said upper hinge leaf, a hinge pin extending through said cooperating loops and connecting said upper hinge leaf to said fixed hinge leaf for tilting movement of said upper hinge leaf with respect to said fixed hinge leaf, a U-shaped member having a bight portion fabricated of thermo-responsive material and arranged so that its legs lie in a generally vertical plane with the bight inwardly of and spaced from the inner edge of said tray rim portion, a trough member positioned above and longitudinally of the upper one of the legs of said U-shaped member, said trough member and a portion of the upper one of the legs of said U-shaped member adjacent the free end thereof being connected to said upper hinge leaf for movement with the latter, the portion of the lower one of the legs of said U-shaped member inwardly of the free end thereof passing over said hinge pin having a downwardly curved free end adapted to bear downwardly upon said fixed hinge leaf outwardly of said hinge pin providing a lever arm for tilting movement of said trough member and the upper hinge leaf about said hinge pin when the legs of said U-shaped member move away from each other under the influence of heat from the burning end of a cigarette upon said thermo-responsive member.

2,749,918
CIGARETTE HOLDERS
Sidney Wolf, Passaic, N. J.
Application June 14, 1955, Serial No. 515,430
3 Claims. (Cl. 131—257)

1. In a cigarette holder, a substantially elongated U-shaped hand clamp having an open end and adapted to transversely embrace the hand of a smoker, said clamp being formed with a pair of outer and inner spaced lengthwise extending elongated and substantially coincidently curved arms adapted to engage and transversely overlie and underlie the outside and inside of the hand, respectively, inwardly of the fingers of the hand, and a relatively

short arcuate end portion connecting coincident ends of the arms together for embracing the side of the hand inwardly of the adjacent finger, and a substantially U-shaped



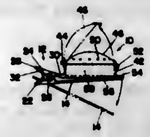
cigarette clip mounted on said outer arm and having a pair of cigarette holding fingers so arranged relative to said clamp to dispose the cigarette in substantially lengthwise relation with the longitudinality of said clamp.

2,749,919
CIGARETTE-CLIP HOLDER
Stuart J. Elswick, Anawalt, W. Va.
Application June 24, 1955, Serial No. 517,739
5 Claims. (Cl. 131—259)



4. A holder for a cigarette comprising an elongated stem providing a handle, said stem at one end including a relatively flat end portion and said end portion having a recess opening upon said end of the stem; a first arm extending substantially in parallelism with the longitudinal center line of the stem and fixedly secured to said widened end portion at one side of the recess, said first arm projecting beyond the open end of the recess; a second arm pivotally mounted within said recess and adapted to be swung about an axis extending transversely of the recess, said second arm projecting at one end out of the open end of the recess in laterally spaced relation to the first arm; spring means operatively connected to said second arm and one wall of the recess to normally bias the second arm about the pivot axis thereof in the direction of the first arm; first and second jaws each arcuately curved through substantially 90 degrees of a circle connected to the projecting ends of the respective arms and extending toward one another, adapted to grip a cigarette therebetween on movement of the second arm under the force of the spring means toward the first arm; means associated with the second arm adapted to swing the same in a direction away from the first arm against the restraint of said means under the control of a user; and lateral projections carried by the respective arms and extending toward one another within the space between the arms, said projections being spaced longitudinally of the arms from the jaws thereof, said projections having curved edges with the curved edge of each projection curving about a center common to that about which the jaw of the arm to which it is attached is curved, said edge of each projection being curved upon a radius equal to that of the jaw of the same arm, whereby to define a substantially circular opening of different segments, the edge of which is defined by the respective jaws and projections, for receiving a supported cigarette.

2,749,920
HAIR SETTING DEVICE
Sanford Steve Krieseman and William Elliott Rosen, Philadelphia, Pa., assignors of twelve and two-thirds per cent to Rudd Granoff, New York, N. Y.
Application June 10, 1953, Serial No. 360,632
6 Claims. (Cl. 132—31)



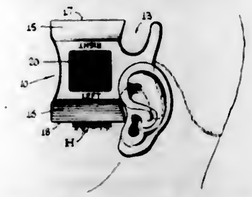
1. A hair setting device consisting of a clamp having a pair of pivoted spring-tensioned arms adapted to receive a tress of hair between their inner faces, a container mounted on the outer face of one of said arms having a perforated portion and a chemical in said container, said container being adapted to receive through its perforated portion an additional chemical in liquid form to react with said first-named chemical to generate heat.

2,749,921
HAIR CURLER
Simon L. Capezzuto, North Andover, Mass.
Application August 6, 1953, Serial No. 372,734
4 Claims. (Cl. 132—40)



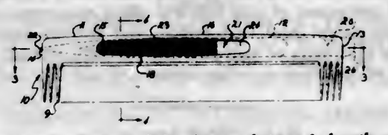
1. A hair curler comprising: a generally tubular body; a spring mounted near one end of said body; and a pair of oppositely disposed arms connected to said spring and normally maintained thereby in a position to lie along the sides of said body in its axial direction and urged inward toward said body, said arms being swingable in said direction against the force of the spring for retracting to a position extending away from said body within a projection of its interior surface, in which position said arms may be inserted into the body of a curler of similar construction.

2,749,922
GUIDE FOR TRIMMING SIDEBURNS OR THE LIKE
John M. Daniel, Bridgeport, and Eric A. Hultgren, Fairfield, Conn.
Application January 25, 1954, Serial No. 405,852
4 Claims. (Cl. 132—45)



1. A device for use in trimming both right and left sideburns and the like, comprising a plate having an outer surface and an inner head-engaging surface and having on opposite side edges of the plate ear-receiving notches and tapered portions in predetermined relation thereto, said portions tapering to the inner surface at the edge to provide guiding edges for guiding a cutting device, and a roughened portion on the outer surface and located between said tapered portions to provide a finger-engaging portion for holding the device in position with either notch extending around the ear and the guiding edge overlying the sideburn.

2,749,923
TOILET ARTICLE
Roy J. Lindgren, Marshall, Minn.
Application February 1, 1952, Serial No. 269,455
1 Claim. (Cl. 132—76.2)



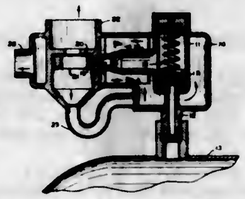
A hollow bodied comb having an internal sheath adapted to completely encompass a nail file having a pointed forward end and a filing area intermediate its ends, the body of said comb having an outer recessed area at one end thereof, and a restricted opening in the recessed area communicating with said sheath to permit short projection of the pointed forward end, said sheath terminating in a substantially unrestricted opening at the other end of the comb body, said body having formed medially of the ends thereof a transverse slotted opening communicating with said sheath, whereby said nail file will be resiliently and frictionally retainable completely within said sheath and will be shiftable forwardly to project to a limited degree and shielded within the recessed area, its forward point and retractable to bring said file fully within said sheath by manual contact through said transverse opening.

2,749,924
COMBINATION KNIFE
Jack Polincovsky, New York, N. Y.
Application August 12, 1953, Serial No. 373,800
4 Claims. (Cl. 132—76.2)



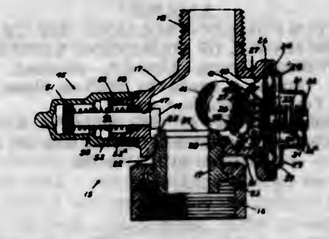
1. A combination knife compriaing: a handle element having a passage open at two ends; a projectible element slidably disposed in said passage and shiftable in two directions therealcng; a lever pivotally connected to said projectible element and adapted when moved to move said projectible element; said lever being detachably engageable with said handle element for securing said projectible element in adjusted positions thereof.

2,749,925
PRESSURE REGULATING DEVICE
Loren L. Long, Alvin, Tex., assignor to Phillips Petroleum Company, a corporation of Delaware
Application November 29, 1951, Serial No. 258,846
7 Claims. (Cl. 137—1)



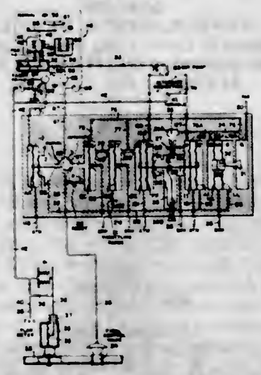
1. A method for heating a pressure regulating device wherein a gas at a high pressure is passed therethrough to a lower pressure which comprises passing at least a portion of the high pressure gas passing through said pressure regulating device into a separation zone; separating in said zone said portion of high pressure gas into a high temperature gas stream and a low temperature gas stream; and passing said high temperature gas stream in heat exchange relationship with said pressure regulating device.

2,749,926
MANUALLY RESETTABLE PRESSURE OPERATED VALVE
Earnest J. Dillman, Detroit, Mich., assignor to Detroit Controls Corporation, a corporation of Michigan
Application July 3, 1952, Serial No. 297,121
9 Claims. (Cl. 137—73)



1. A pressure operated safety valve comprising a valve casing having an inlet and an outlet, a valve seat in said casing, a spherical valve member in said casing normally positioned laterally from said valve seat in an open position, an abutment restraining said valve member from lateral movement toward closed position, a lever positioned for engagement with the lower surface of said valve member, and pressure responsive means operatively connected to said lever for moving the same, said pressure responsive means being operable at a predetermined pressure in said casing to move said lever to engage said valve member along the lower surface thereof to cause said valve member to pivot over said abutment into closed position against said valve seat.

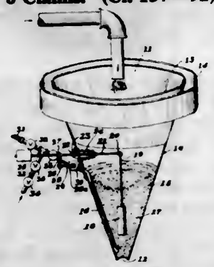
2,749,927
CONTROLLER
Edward C. Grogan, Philadelphia, Pa., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application December 28, 1950, Serial No. 203,146
10 Claims. (Cl. 137—86)



5. In an elastic-fluid-pressure-operated controller, a control-exercising valve operable in one sense in response to variations in a measured variable, a conduit having a small capacity for fluid, means controlled by the operation of said valve to admit or exhaust fluid to or from said conduit, a negative-feedback elastic-fluid-operated motor

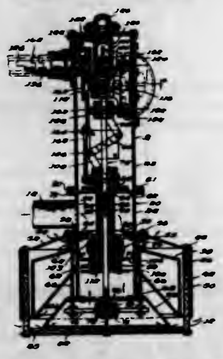
connected to said valve so as to operate it in the opposite sense that it is operated by said measured variable, a positive-feedback elastic-fluid-pressure-operated motor connected to said valve so as to operate it in the same sense as it is operated by said measured variable, a one-to-one relay having a motor chamber connected to said conduit and having an output chamber and having an inlet and an exhaust for elastic-fluid communicating with said output chamber, a conduit of greater cross-section than said inlet or said outlet connecting said output chamber and said positive-feedback motor, and a restriction in said conduit between said means and said motor chamber of said one-to-one relay, said restriction being manually adjustable to change the proportional band of said controller.

2,749,928
APPARATUS FOR CONTROLLING THE GRAVITY DISCHARGE OF DESLIMING CONES
Charles William George Dowsett, deceased, late of Toronto, Ontario, Canada, by William Dunn, administrator, Toronto, Ontario, Canada
Application February 19, 1953, Serial No. 337,834
Claims priority, application Canada June 20, 1952
8 Claims. (Cl. 137—92)



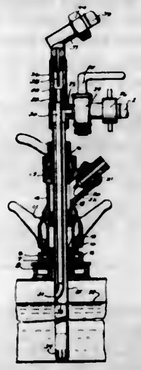
1. Apparatus for the automatic control of the gravity discharge of settled materials in desliming cones and the like comprising, an outlet orifice on said cone of insufficient diameter to pass the settled materials at the desired rate, a pipe extending into the cone and terminating adjacent said outlet orifice, means for supplying water through said pipe under a predetermined constant head of pressure and means for applying drag produced by downward movement of settled materials within said cone to reduce the volume of water delivered by said pipe when the drag increases and vice versa.

2,749,929
TANK BLEEDING DEVICE
Amos E. Crow, Long Beach, Calif.
Application September 29, 1952, Serial No. 312,055
14 Claims. (Cl. 137—172)



1. A tank bleeding device disposable within the confines of a liquid storage tank containing liquids of different specific gravities, comprising: a base; float means supported by said base for vertical movement relative thereto; an upwardly opening orifice plate mounted by said base, its orifice being connectible with a point exterior of said tank; a stopper movable vertically toward and away from said orifice, said stopper being supported by a sleeve coaxial with said orifice; a vertical rod rigidly connected to said float means and supported by said base, said rod being coaxially disposed within said sleeve; linkage interconnecting said rod and said sleeve whereby upward movement of said rod will effect movement of said stopper away from said orifice; and control means operable externally of said tank for effecting vertical movement of said stopper independently of said float means.

2,749,930
APPARATUS FOR DISPENSING BEER
Sumner T. Whitnall, Whitefish Bay, Wis.
Application November 12, 1952, Serial No. 319,942
1 Claim. (Cl. 137—212)



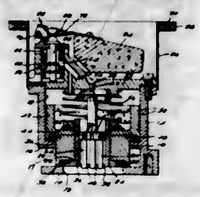
A device of the character described comprising the combination with a bushing and an elbowed sleeve in threaded connection therewith, of a tap coupling nut having a flange rotatably confined between the bushing and sleeve, a tap coupling threadedly engaged by said nut, a hose coupling equipped with a check valve and mounted in the elbow of said sleeve, a packing gland at the upper end of said sleeve, a tapping rod extending through the packing gland with clearance between it and the sleeve and between it and the bushing and provided with an inlet at its lower end, an elbowed valve-controlled beer discharge outlet at the upper end of the tapping rod, a tube extending through the elbow and downward through the tapping rod and provided with a lateral outlet through the side of the tapping rod, and a check valve controlled inlet coupling connected with said tube.

2,749,931
UNITARY TUBE VALVE AND CAP
Harold Taylor Battin, Ridgewood, N. J.
Application August 26, 1949, Serial No. 112,457
27 Claims. (Cl. 137—233)



19. In an auxiliary valve adapted for attachment to a main tube valve and when attached for rotation about the principal or vertical axis thereof, an outer operating shell structure, a clutch or wrench formation, and a mount for positioning said formation within said shell, outwardly extending motion-receiving connections upon said formation for operation by said shell structure when it is rotated and downwardly extending wrench formations accessible from the lower end of said shell, said end being open.

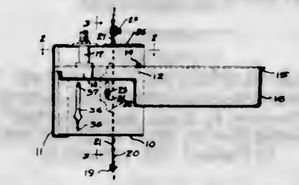
2,749,932
FLUID PRESSURE ACTUATED VALVE WITH MECHANICAL CLEANING ATTACHMENT
James K. Mosher, Pasadena, Calif., assignor to Schulz Tool and Manufacturing Co., San Gabriel, Calif., a corporation of California
Application June 27, 1951, Serial No. 233,745
1 Claim. (Cl. 137—244)



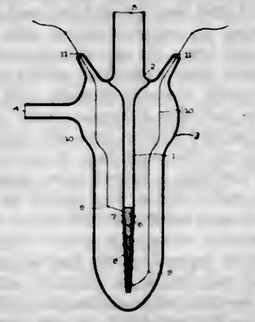
In a fluid pressure actuated valve, the combination comprising: a valve body; a cylindrical bore in said body and terminating short of one end of the body to provide an inwardly extending annular flange defining a circular opening in said one end; a valve seat spaced from said one end of the valve body and supported on the body to provide a laterally extending outlet passageway between the inner face of said seat and the outer face of said annular flange; a fluid inlet passageway through said seat and opening into said outlet passageway; a valve element seating against the seat around said inlet passageway and slidable in said circular opening; said valve element having piston means slidable in the bore; a head covering the outer end of the bore, said head and valve element defining end walls of a chamber in said bore; spring means in said chamber biasing said valve element toward its seat; conduit means permitting flow of fluid from said chamber; a pilot valve associated with said conduit means for controlling the flow of fluid from the chamber; an axially extending fluid passageway through said valve element providing for direct flow of fluid from the said inlet passageway to the said chamber; a plate across the inner end of the said axially extending passageway, said plate being fixed with respect to the valve element; a plurality of apertures in said plate; a shaft supported from said head and extending into said axially extending passageway; a disk on the end of said shaft and slidable with respect to said axially extending passageway, said disk being open to the passage of fluid therethrough; and a plurality of parallel pins mounted on said disk, each of said apertures having one of said pins extending through it, said apertures being larger than the cross-sectional area of their respective pins, whereby said chamber is open at all times to leakage of fluid from said inlet passageway and through said apertures.

2,749,933
HUMIDIFIERS HAVING SLOPING WALL ADJUSTMENT
Milton Periman, Detroit, Mich.
Original application April 21, 1951, Serial No. 222,240, now Patent No. 2,709,427, dated May 31, 1955. Divided and this application August 20, 1954, Serial No. 451,104
3 Claims. (Cl. 137—408)

1. In a humidifier, a support having an open rear end, means for mounting it horizontally part way through a wall comprising a U-shaped mounting plate extending along the bottom and sides of said support and pivotally mounting it therein with the free ends thereof extending above said support, a portion of said support having a plurality of longitudinally spaced detents formed therein along the top thereof, and an anchor plate disposable in selected detents at the top of said support including means for securing said anchor plate to said U-shaped mounting plate, a longitudinally extending open top reservoir, horizontally disposed in said support and having a forward end and a rearward end and pivotally supported and balanced between its ends in said support on a horizontal axis transverse to the longitudinal axis passing through its ends to pivot downwardly at its forward end when relatively empty and upwardly at its said forward end when filled, a nozzle disposed through the top of the forward end of said support over the forward end of said reservoir through which water under pressure is continuously available from a water supply to fill said reservoir, stopper means in said reservoir forward end for contacting said nozzle and shutting off water supplied to the reservoir therethrough responsive to the upward tilting of the forward end of said reservoir when said reservoir is filled.



2,749,934
VALVE FOR ACCURATELY CONTROLLING MINUTE FLUID FLOW AT LOW PRESSURES AND ITS PRODUCTION
Ralph G. Nester, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application July 7, 1953, Serial No. 366,600
5 Claims. (Cl. 137—1)

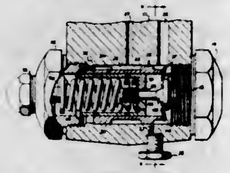


1. In a valve, a hollow tube having a tapered portion open at the end and consisting of a material having a relatively low coefficient of thermal expansion, a solid tapered plug extending within said tapered portion and normally spaced therefrom forming a path for the flow of fluid, said solid tapered plug being secured at a part of one side only adjacent its larger end to said hollow tube and consisting of a material having a relatively high coefficient of thermal expansion, and heating means adjacent said hollow tube whereby said solid tapered plug can be thermally and differentially expanded into contact with the tapered portion of said hollow tube and the flow of fluid therethrough accurately and minutely controlled.

5. A method for making a gas valve which comprises placing a copper wire inside a capillary glass tube, the

diameter of said copper wire being slightly less than the inside diameter of said capillary glass tube, heating said capillary glass tube containing the copper wire until the glass and copper are softened, drawing out the capillary glass tube to form a tapered glass tube with the copper wire being drawn at the same time to form a tapered copper wire plug having its surface in intimate contact with the inside surface of said tapered glass tube, fusing the thickest part of the copper wire at one spot to the capillary glass tube, then cooling said tapered glass tube and shrinking said copper wire plug therefrom to form a space for the flow of gas therethrough.

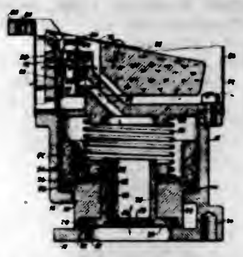
2,749,935
OIL BURNER BY-PASS VALVE
Charles B. Heard, Baltimore, Md., assignor of one-half to Woodrow H. Kratz, Baltimore, Md.
Application July 29, 1953, Serial No. 370,913
14 Claims. (Cl. 137—116)



14. A valve means comprising a casing, a bore in said casing, closure means at each end of said bore, an outlet orifice through one of said closure means, a fluid inlet means communicating with the end of said bore adjacent said outlet orifice, a by-pass outlet communicating with the opposite end of said bore, a fixed sleeve member in said bore, said sleeve member being spaced at each of its ends from said respective closure means, said sleeve being spaced radially from the interior surface of said bore, means interposed between said sleeve and said bore to prevent fluid communication between the ends of said bore along the outer surface of said sleeve, a piston slidably movable axially inside said sleeve, said piston having an operating end face disposed toward the fluid inlet end of said bore, said piston having a hollow interior in communication with the by-pass outlet end of said bore, the operating end of said piston having a by-pass port extending axially therethrough, a valve stem axially movable through said by-pass port, said valve stem carrying a by-pass valve member normally seatable on said by-pass port, the outer end of said valve stem adjacent the outer face of said operating end of said piston carrying a second valve member engageable with said outlet orifice, first spring means disposed between said by-pass valve and said piston and normally biasing said by-pass valve into seated engagement with said by-pass port, second spring means normally biasing said piston member in a direction to engage said second valve member with said outlet orifice, a detent means carried by the outer end of said valve stem, said detent means being engageable with an abutment means upon a predetermined movement of said piston whereby said by-pass valve is unseated from said by-pass port to permit fluid flow into the hollow interior of said piston and thence to said by-pass outlet.

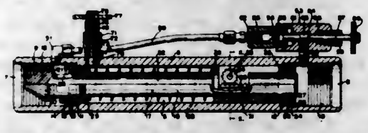
2,749,936
FLUID PRESSURE ACTUATED VALVE
James K. Mosher, Pasadena, Calif., assignor to Schulz Tool and Manufacturing Co., San Gabriel, Calif., a corporation of California
Application September 20, 1950, Serial No. 185,839
12 Claims. (Cl. 137—413)

1. A fluid pressure actuated valve of the character stated comprising a flat body forming a valve seat having a flow passage therethrough, a cylinder spaced from and connected with said body with one open end directed toward the body, an inwardly directed sealing flange in said cylinder end forming an opening coaxial with and of larger diameter than said flow passage, a head closing the other end of the cylinder, a cylindrical valve body disposed within said opening and having one end partially disposed within the cylinder, a radially outwardly extending flange encircling said one end of the valve body and positioned in the cylinder in overlapping relation to said sealing flange, a first annular packing carried by the valve body flange for contact with the sealing flange, a



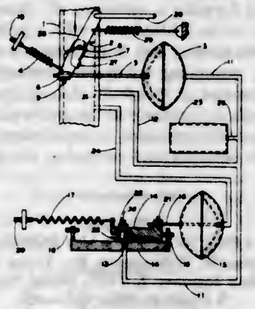
second annular sealing packing associated with the other end of the valve body for engaging said valve seat around the flow opening, a piston secured to the radially outwardly extending flanged end of the valve body and slidable in said cylinder, a spring within the cylinder between the piston and cylinder head, means forming a passageway providing communication thru said valve body to said cylinder, a discharge port leading from the cylinder through said head, a valve unit controlling fluid flow through the discharge port from the cylinder, and a pivoted float operatively coupled with said valve unit for effecting opening of the same upon movement of the float in one direction.

2,749,937
EXCESS FLOW VALVE
Harry B. Schramm, John V. Fredd, and Herbert C. Otis, Sr., Dallas, Tex., assignors to Otis Engineering Corporation, Dallas, Tex., a corporation of Texas
Application October 14, 1952, Serial No. 314,614
1 Claim. (Cl. 137—460)



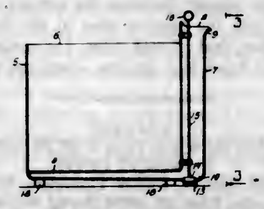
An excess flow valve which comprises, in combination, a valve body with a passage therethrough connecting axially disposed inlet and outlet flow openings of the body, a valve seat within the body passage, an elongate valve member having a seating portion being adapted to seat on the upstream side of said seat to block flow through the valve body and a tubular portion defining an annular space between the valve member and valve body passage, said tubular portion having an inlet thereto adjacent said seating portion so as to be upstream of the seat when the valve member is unseated, means in said annual space providing a sliding seal between the valve body and said valve member downstream of said inlet to the tubular portion thereof, opposing surfaces carried by the valve member so as to be exposed to fluid pressures upstream and downstream of said sliding seal means whereby the valve member is moved to seated position responsive to a predetermined differential between said fluid pressures, resilient means disposed in the annular space between the sliding seal means and inlet to the tubular portion urging said valve member to unseated position, a part disposed in such annular space and movable to vary the urging force of said resilient means on said valve member, a shaft extending through the valve body, and a rack and pinion connection between said shaft and movable part, said rack extending in the direction of movement of said part, whereby said part can be moved by the application of force to said shaft externally of the body to thereby vary the force exerted by said resilient means on said valve member.

2,749,938
LOAD AND SPEED GOVERNOR FOR INTERNAL COMBUSTION ENGINES
Harry Thomas, Detroit, Mich.
Application February 6, 1952, Serial No. 270,130
4 Claims. (Cl. 137—483)



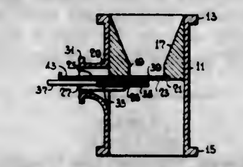
1. A governor for an internal combustion engine comprising a suction intake passage, a throttle valve movable in said passage to control the flow of a motivating fluid therethrough, a first servo-motor means operatively connected to said throttle valve for moving said valve between open and closed positions, a first fluid conduit connecting said first servo-motor means and said intake passage downstream of said throttle valve, a fluid bleed opening in said first conduit for varying the effective pressure acting upon said first servo-motor means, a valve controlling said fluid bleed opening, a second servo-motor means operatively connected to said bleed opening control valve to move said control valve between open and closed positions, a second fluid conduit connecting said second servo-motor means and said intake passage downstream of said throttle valve, said second servo-motor means thus being actuated by the pressure of the motivating fluid downstream of said throttle valve to move said bleed opening control valve toward its open position when said pressure decreases, thereby causing said first servo-motor means to move said throttle valve toward its closed position.

2,749,939
DIP-RINSING DEVICE
Frederic L. Bray, Westbury, N. Y.
Application June 11, 1953, Serial No. 360,905
3 Claims. (Cl. 137—592)



1. A dip-rinsing device adapted to be set in a household sink and comprising an open-top vessel having a length greater than its width and adapted to hold a body of rinse water, the vessel being provided with an overflow outlet near the top of at least one side wall of the vessel, a perforate false bottom positioned within the vessel, and an inlet conduit composed essentially of a channel member extending substantially the full height of the vessel with the face of the channel adjacent one wall of the vessel, the upper end of the channel member being open and the other end communicating with the vessel below the level of said false bottom, the upper end of the inlet conduit being adapted to receive fresh rinse water from a source thereof and to deliver said fresh rinse water to the lower portion of the vessel below said false bottom.

2,749,940
SLIDE VALVE
Stanley O. Bronson II, Mountainside, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application March 20, 1952, Serial No. 277,651
5 Claims. (Cl. 137—613)



1. A slide valve structure, comprising in combination with a valve body, a substantially annular shoulder disposed transversely within said body and extended radially inward thereof, said shoulder dividing the interior of said body into upstream and downstream portions and defining a port connecting said portions, said shoulder further exposing an annular valve seating surface into said downstream body portion, a first valve seat peripherally of said annular seating surface extended radially inward thereof into substantially radially spaced relation to said port, a second valve seat, recessed in said shoulder annular seating surface, extended radially outward thereof from the peripheral edge of said port to the inner edge of said first valve seat, a first valve member supported within said body downstream of said port, for reciprocal movement transversely thereof and of said body in slidable, seating surface contact with said first valve seat, a second valve member at least partially supported on said first valve member upstream thereof for reciprocal movement transversely of said body and said port, in slidable, seating surface contact with said first valve member and with said second valve seat, and means for independent reciprocal movement of each of said valve members transversely of said body and said port.

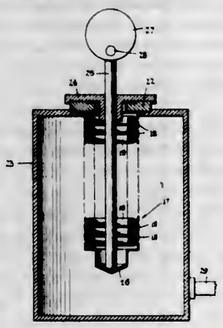
2,749,941
ROTARY FLUID CONTROL VALVE
Leon E. Gardiner, Los Angeles, Calif.; Evelyn M. Gardiner, administratrix of said Leon E. Gardiner, deceased
Application June 1, 1950, Serial No. 165,500
8 Claims. (Cl. 137—624)



1. In a fluid control valve, the combination of: a valve body having a cylindrical bore formed therein and having an inlet and an outlet port extended radially into said bore, said ports being spaced axially along said bore, said body having also formed therein a pair of radially extending cylinder ports, said cylinder ports being disposed axially between said inlet and outlet ports and spaced circumferentially of each other, and a rotary

member mounted for rotation in said bore, said member having a circumferential recess alignable with said inlet port, a pair of axially extending recesses communicating with said circumferential recess and being disposed on diametrically opposite sides of said rotary member, at least one of said axial recesses extending along the rotary member to a position alignable with the cylinder ports upon rotation of said rotary member, a second circumferential recess aligned with said outlet port, and a pair of axially extending recesses communicating with said second circumferential recess and disposed on diametrically opposite sides of said rotary member, at least one of said last named axial recesses including a portion alignable with said cylinder ports upon rotation of said rotary member, said rotary member having a pair of independent transverse fluid passages formed therethrough, each of said passages opening on said rotary member intermediate said axially extending recesses at diametrically opposed locations axially aligned with said cylinder ports and adapted to be exposed to said cylinder ports when the rotor is in a position spacing said axial recesses from said cylinder ports, whereby the rotor is balanced in the neutral or shut-off position from pressures existing in the cylinder ports.

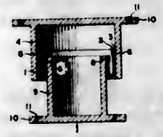
2,749,942
BELLOWS
Joseph W. Yowell, Westport, and Donald B. Miner, Orange, Conn.
Application December 26, 1952, Serial No. 327,988
6 Claims. (Cl. 137—796)



1. An external overpressure resistant bellows comprising a resilient, tubular one-piece body having walls provided with annularly-extending corrugations, said corrugated walls having outer portions comprising narrow, flat, juxtaposed, annular bands, each band constituting substantially a section of a cylinder and being aligned and coaxial with the other bands, and having other annular portions integral with, disposed inside of and connecting adjacent bands, said other portions having a cross section which is substantially circular and normally extends through an arc materially greater than 180 degrees.

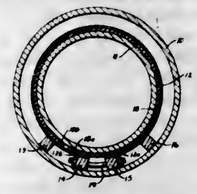
2,749,943
ARTICLE OF MANUFACTURE AND PROCESS OF MAKING SAME
John B. Nemeth, Meriden, Conn., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application April 1, 1955, Serial No. 498,600
6 Claims. (Cl. 138—55)

1. A seamless flexible tubular sleeve, adapted for forming a seal and a common air chamber between two cylinders when one cylinder extends into the other, comprising a nylon knitted tube impregnated with a primer comprising a synthetic elastomer and a polyisocyanate, said synthetic elastomer being selected from the group which consists of neoprene, a copolymer of butadiene and acrylonitrile, a copolymer of butadiene and styrene, and chlorosulfonated polyethylene, said impregnated nylon knitted tube having a surface covering on at least one side of a cured synthetic elastomeric compound comprising a synthetic elastomer selected from the group mentioned above.



5. The process of forming a seamless flexible sleeve for joining two cylinders when one cylinder extends into the other and forming a common air chamber, comprising treating a nylon knitted tube with a primer solution of a synthetic elastomer and a polyisocyanate, drying the treated tube, wrapping a curable synthetic elastomeric sheet stock around a mandrel, placing the primed tube thereover, applying pressure to the entire assembly, curing the assembly under pressure, at an elevated temperature, releasing said pressure and removing the assembly from the mandrel.

2,749,944
PIPE LINE SPACER AND INSULATOR
Truman D. Williamson, Jr., Tulsa, Okla.
Application January 2, 1953, Serial No. 329,409
3 Claims. (Cl. 138—65)



1. An electrically insulating apparatus for supporting a pipeline spaced from the inside of an outer conduit and facilitating skidding the pipeline into the conduit which comprises, in combination, a discontinuous detachable band of a length adapted to extend substantially around the circumference of said pipeline with opposite ends of said band adjacent one another and the band having inside and outside faces, flexible electrically insulating material disposed on the inside face of said band to electrically insulate the band from the pipeline on which it is to be disposed, a plurality of separate and individual elongate spacers having one of their sides attached to the outside face of said band, said spacers being disposed parallel to each other and in circumferentially spaced relation about the pipeline on which the apparatus is to be assembled, said band being of a width at least substantially equal to the length of said spacers and providing a bearing support for the spacers between the spacers and the pipeline to distribute the bearing load of the spacers over a larger area than that of said sides, and means for tightly clamping said band and spacers about the pipeline.

2,749,945
CAPPING DEVICE FOR USE IN TESTING CONDUIT LINES
Edward W. Kaiser, Glenview, Ill.
Application May 28, 1954, Serial No. 433,233
3 Claims. (Cl. 138—90)

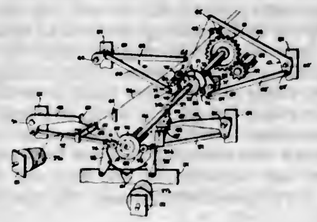
2. A pressure testing device for conduits, comprising a sleeve of cross-sectional shape substantially corresponding to that of an end portion of a conduit and of size

permitting its engagement over and about said end portion with its walls in substantially parallel relation to the outer sides thereof and its outer end portion extended outwardly from and beyond the conduit open end, means for connecting the sleeve to the conduit, the extended outer end portion of the sleeve having spaced openings therein, a cover plate of size greater than the conduit open end slidably received within the extended outer end portion of the sleeve with its inner face substantially



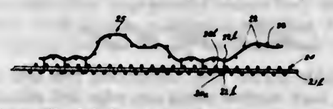
parallel to the conduit open end and its edges exposed through the spaced openings in the sleeve, a head plate permanently on the extended outer end of said sleeve and confining the cover plate within the sleeve, an outwardly extended nipple engaged with and through the cover plate and slidably engaged through and extended outwardly beyond said head plate, and means on the head plate operable to impart inward sliding movement to the cover plate whereby to seat and retain the same over the conduit open end.

2,749,946
WEFT THREAD CONTROL IN LOOMS FOR WEAVING
Erwin Pfarrwaller, Winterthur, Switzerland, assignor to Sulzer Freres, Société Anonyme, Winterthur, Switzerland, a corporation of Switzerland
Application June 16, 1954, Serial No. 437,149
Claims priority, application Switzerland April 23, 1954
9 Claims. (Cl. 139—126)



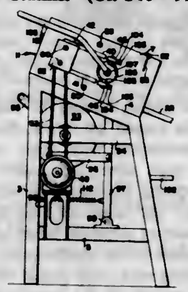
1. A loom for weaving comprising means for cyclically inserting at least two different weft threads which are pulled from spools arranged outside the shuttle, a thread tensioning and a thread braking device for each weft thread, a driving element common to said tensioning devices, a driving element common to said braking devices, each of said elements including a cam surface, an actuating means for each of said devices, each actuating means including a cam follower means, said cam follower means of the actuating means for said tensioning devices being placed around one of said elements and engaging the cam surface thereof, and said cam follower means of the actuating means for said braking devices being placed around another of said elements and engaging the cam surface thereof the actuating means of each tensioning device including an operating member adapted to impart the thread tensioning as well as the thread slackening stroke to the device, said operating members being positively driven by their respective driving element for imparting the thread tensioning as well as the thread slackening stroke.

2,749,947
DOUBLE LAYER FABRIC WITH PUCKERED UPPER LAYER AND METHOD OF MAKING SAME
George G. Slough, Bethlehem, Pa., assignor to Kenmak Textiles, Inc., New York, N. Y., a corporation of New York
Application October 21, 1952, Serial No. 315,968
25 Claims. (Cl. 139—423)



1. A textile fabric comprising an upper layer of cloth, said upper layer of cloth comprising an upper set of warp threads interwoven with an upper set of weft threads, and a lower layer of cloth, said lower layer of cloth comprising a lower set of warp threads interwoven with a lower set of weft threads, said lower weft threads being all elastic and being respectively adapted to be stretched from a condition of normal length to a stretched condition and to be maintained in said stretched condition while the fabric is being formed, certain selected remaining threads of either of said layers extending in either direction being respectively interwoven at selected points thereon with respective threads of the other layer extending in the other direction, said points being dispersed over the area of said upper layer whereby to produce a puckering of said upper layer upon permitting said stretched threads to return to their condition of normal length.

2,749,948
MACHINE FOR ASSEMBLING COIL SPRINGS
Joseph Gauci, Jersey City, N. J.
Application February 14, 1951, Serial No. 210,927
3 Claims. (Cl. 140—92.94)



1. In a machine for assembling coil springs, means to rotate and longitudinally feed simultaneously a pair of helical wires around overlapping portions of said springs, said means comprising a first set of three rollers for feeding the first helical wire, said set comprising a pair of parallel rollers on fixed axes, a roller disposed therebetween and mounted on a shaft, a movable bearing for said shaft, one of the rollers of the first set being formed with a helical groove, and the other two rollers having smooth surfaces a sprocket wheel rotatable with each of said rollers, a second set of rollers for rotating and feeding a second helical wire, comprising a second pair of rollers on fixed axes and spaced from the first pair of rollers, a roller disposed between the second pair of rollers, a shaft for the last roller of the second set, a movable bearing for said last shaft, a sprocket wheel movable with each of the rollers of the second set, a single sprocket chain on all said sprocket wheels, means for taking up the slack in said sprocket chain, means to guide helical wires between each set of three rollers, and means for feeding said sprocket chain to coact with the slack take up means to press the rollers on the shafts on the movable bearings into engagement with the helical wires.

2,749,949
FLEXIBLE SPIRAL TWISTED SAW
Raymond de la Tramerye, Paris, France, assignor to Societe Anonyme Tubest, Paris, France, a French company
Application June 22, 1953, Serial No. 363,002
Claims priority, application France June 28, 1952
7 Claims. (Cl. 143—133)



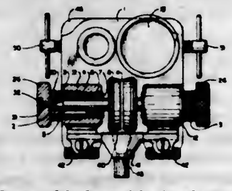
1. A flexible pocket saw, comprising two thin narrow steel strips, each toothed along one edge and substantially of the same length, thickness and width, said strips being twisted together with the untoothed edge of one strip lying against the toothed edge of the other strip in such a manner that the untoothed edge of one strip leaves exposed the points of the teeth of the other strip to laterally support only the root portions thereof, whereby, after twisting, the teeth are distributed over the circumference and substantially the entire length of the saw.

2,749,950
INSERT TOOTH FOR POWER SAW CHAIN
Jack B. Jamieson and John A. Long, Lebanon, Oreg., assignors to Jamieson Saw Chain, Inc., a corporation of Oregon
Application November 14, 1951, Serial No. 256,192
4 Claims. (Cl. 143—135)



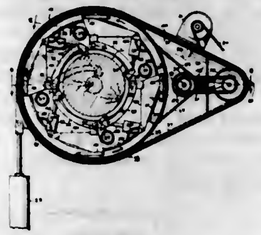
1. A power saw chain having in combination block links and side links joined by rivets, the ends of whose block links are concentric with their connecting rivets and spaced from each other, an insert tooth having a curved shank occupying the space between the ends of a pair of block links, the edges of said shank being concentric with the leading adjacent rivet, each insert tooth having a gauging shoe at its leading end and a cutter bit formed on its trailing end, said cutter bit having its cutting edge near the middle of the length of said insert and opposite said curved shank, said side links and insert tooth having pin holes formed therein registering when said insert is in a working position, and a rivet pin occupying said pin holes.

2,749,951
BAND SAW BLADE GUIDE
Gustav Tetzner, Coburg, Germany
Application April 1, 1953, Serial No. 346,182
Claims priority, application Germany April 17, 1952
9 Claims. (Cl. 143—167)



1. In a band saw blade guide having two coaxial lateral rollers defining a slot therebetween for the guiding reception of a band saw blade; the combination of a rotatable shaft for each roller and having the related roller secured to one end thereof, bearings having said shaft rotatably journalled therein, a bearing housing having a threaded bore extending therethrough, and an externally threaded sleeve screwed into said bore and having said bearings secured therein so that turning said sleeve effects axial movement of the latter and of the related roller and simultaneously changes the portions of said bearings receiving the shaft loads to reduce wear on the bearing.

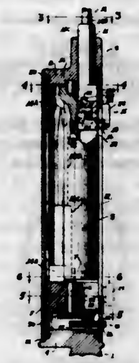
2,749,952
LOG DEBARKER HAVING REVOLVING KNIVES SIMULTANEOUSLY SWINGABLE BY DIFFERENTIAL-TYPE PLANETARY-GEAR-TRAIN
Maurice S. League, Seattle, Wash., assignor to Crown Zellerbach Corporation, San Francisco, Calif., a corporation of Nevada
Application August 31, 1954, Serial No. 453,330
5 Claims. (Cl. 144—208)



1. In a log-debarking machine of the character described, a rotatable assembly, means for rotating said assembly, a plurality of corresponding arms pivotally mounted in said assembly for pivotal movement towards and away from an axis of rotation of said assembly, bark-removing elements on said arms, a ring member rotatably carried by said assembly and rotatable with said assembly on said axis of rotation, means normally rotating said ring member in unison with said assembly, linkage connecting said arms to said ring member for positioning the bark-removing elements at desired radial distances from said axis of rotation, means in said ring-member-rotating means for momentarily causing said ring member to rotate at a different speed from said assembly, whereby said linkage will move said arms on their pivotal mountings and thereby change the radial distances of said bark-removing elements from said axis of rotation of said assembly and said ring, and means for moving a log longitudinally through said assembly.

2,749,953
APPARATUS FOR CARRYING AND SELECTIVELY RENDERING OPERABLE A PLURALITY OF TOOLS
George W. Rundle, Los Angeles, Calif.
Application June 17, 1954, Serial No. 437,514
2 Claims. (Cl. 145—63)

1. Apparatus carrying a plurality of tools and cooperable for selectively rendering operable any of said plurality of tools, comprising: actuating handle means; longitudinal turret means controllably rotatably mounted with respect to the actuating handle means around an imaginary longitudinal axis of rotation of said turret means; said turret means being provided with a plurality of longitudinal tool-engaging means virtually parallel with respect to the longitudinal axis of rotation of said turret means; a plurality of longitudinal tools longitudinally slidably and non-rotatably engaging the plurality of longitudinal tool-engaging means of the turret means for simultaneous rotation therewith around said longitudinal axis of rotation of said turret means and for selective slidable extending and retracting movement with respect to said turret means in a direction virtually parallel with respect to said longitudinal axis of rotation of said turret means, whereby said turret means can be selectively rotated with respect to said handle means into any desired position and whereby any selected one of said tools can be selectively extended with respect to said turret means and said handle means into operative position, each of said longitudinal tools having an operative end portion and a rear end portion provided with first arcuate engaging means on the rear end thereof; tool positioning means provided with second arcuate engaging means selectively fastenable in a longitudinally connected manner with respect to the first arcuate engaging means on the rear end of any selected longitudinal tool by relative rotary movement of the turret means and said tool with respect to said tool positioning means, said tool positioning means being rotatably immobile with respect to the longitudinal axis of rotation of the turret means but being controllably longitudinally movable between a retracted position and an extended position for controllably longitudinally positioning said tool in extended operative position with respect to said turret means and said handle means, said tool positioning means in-

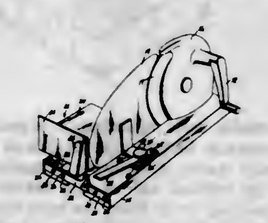


cluding controllably operable locking means engagable with the turret means when said tool positioning means is in extended position for positively locking a tool in extended non-rotatable operative position with respect to the turret means and the handle means; a longitudinal hollow housing carried by the handle means and encompassing the turret means and the plurality of tools exclusive of any tool in operative position, said housing being provided with egress means adjacent an operative end thereof positioned off-center and in substantial alignment with the handle means to allow egress of an operative portion of a tool which is in an extended operative position, and being further provided with longitudinal access slot means positioned to allow protrusion of the tool positioning means for access thereto and to allow longitudinal operative movement thereof between said retracted position and said extended position and to allow controllable operation of said locking means from the exterior of said housing; and controllably operable rotary actuating means effectively cooperable with respect to the turret means for controllably rotating said turret means, said rotary actuating means being accessible from the exterior of the housing.

2,749,954
BASE CONSTRUCTION FOR COMPACTLY FOLDING SLICING MACHINES AND THE LIKE
Xan B. K. Green, New Paltz, and Harry Preble, Jr., Cross River, N. Y., assignors to General Slicing Machine Co., Inc., Walden, N. Y., a corporation of New York
Application June 18, 1953, Serial No. 362,568
2 Claims. (Cl. 146—102)

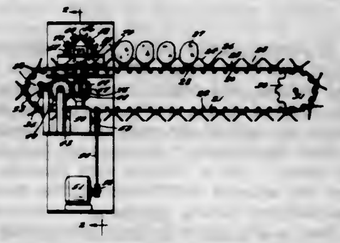
1. In an article of the character described, a base comprising a pair of elongated first and second base parts

arranged one alongside the other and adapted to rest on a common plane; the first base part having a track means therealong, a track-engagement means in engagement with and slidable along said track means; said track-engagement means being removable from the track means when slid past one end of the first base part; said track means having an entrance at said end of the first base part wherein said track engagement means may enter into or leave the track means, a hinge comprising a first hinge part mounted on and having limited movement on said



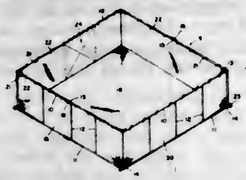
end of the first base part; the first hinge part closing said entrance and a second hinge part mounted on the second base part and pivotally connected with the first hinge part about an axis parallel to the length of the base parts whereby the first base part together with the first hinge part thereon, may be swung upwardly towards the second base part; said first base part and the first hinge part being relatively movable whereby the entrance to the track means is unobstructed by the first hinge part whereupon the track-engagement means is free for removal from the track means.

2,749,955
POTATO DICING MACHINE
Walter E. Baechele, Upper Darby, Pa., assignor to Brock & Company, Inc., a corporation of Pennsylvania
Application October 11, 1952, Serial No. 314,279
3 Claims. (Cl. 146—169)



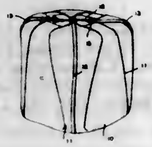
1. In a potato dicing machine, a generally horizontal conveyor having upwardly directed pockets with downwardly converging transversely extending sides narrower at the top and bottom than the average length of the potatoes and wider at the top but narrower at the bottom than the average width of the potatoes and open at the ends, means for intermittently advancing the conveyor to bring the successive pockets into line at a dicing position, a knife assembly in line at one side of the conveyor at the dicing position, a pusher in line normally located at the other side of the conveyor at the dicing position, the pusher having a range of movement from the side of the conveyor across the pocket in registry with the dicing position and into the knives, there being slots in the pusher which receive the knives, and means for pushing the pusher across the pocket which is at the dicing position and into the knives for forcing potatoes through the knives and for retracting the pusher to the side of the conveyor remote from the knives.

2,749,956
PORTABLE WATER TANK
Giles Arthur Eldred, Rock Island, Ill.
Application July 23, 1954, Serial No. 445,258
3 Claims. (Cl. 150—.5)



1. A portable tank including a supporting frame, a flexible receptacle having a vertical wall detachably secured to said frame, a spillway normally constituting a section of the vertical wall of said flexible receptacle for emptying residual water from the receptacle, the spillway including outwardly extending sides, a bottom joining the sides, said sides being folded on a diagonal across the spillway entrance upon moving the bottom from open to closed position, and securing means adapted to engage and secure said spillway sides and bottom to said frame to normally retain the spillway in closed position.

2,749,957
TOBACCO CARRIER
Leo D. Smith, Hookerton, N. C.
Application July 8, 1954, Serial No. 442,006
7 Claims. (Cl. 150—1)



1. A tobacco carrier comprising a substantially square sheet of relatively tough durable material having reinforced corners and edges, crossed diagonal reinforcing straps attached to the under side of said sheet, tapered fasteners at each of the ends of said crossed straps so that when the corners of the sheet are folded toward each other about a pile of tobacco such fasteners can be employed for securing such corners in the desired relation, a wear-resistant netting applied to the bottom surface of said sheet over a relatively large central area upon which tobacco is adapted to be received, said netting being composed of lengths of cord disposed in spaced substantially parallel relation and additional cord disposed in a similar manner at right angles to the first, said straps being composed of webbing stitched along its edges and central portion to said sheet and having its end portions folded reversely over the upper surface of the sheet providing loops for said tapered fastening means at each of the corners of the sheet.

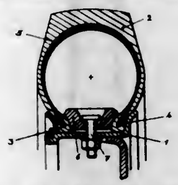
2,749,958
GOLF BAG HOOD
James Innes, Pelham, N. Y.
Application October 12, 1953, Serial No. 385,309
11 Claims. (Cl. 150—1.5)

2. A golf bag having an open end, a tubular member enclosed within said bag having its lower end fixedly attached to the inside surface of the bag and both the bag and the tubular member having upper openings at the same level and so disposed one to the other that a space occurs between the two, and a flexible extensible



hood telescopically disposed between said bag and said tubular member.

2,749,959
VEHICULAR TIRE
Heinrich Kunel, Rehau, near Hof, Upper Franconia, Germany
Application October 14, 1952, Serial No. 314,656
Claims priority, application Germany October 19, 1951
9 Claims. (Cl. 152—202)



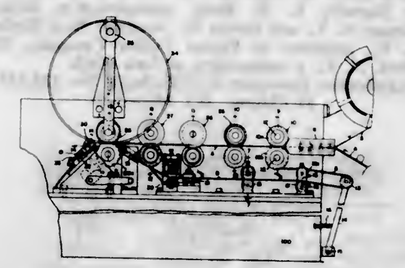
1. Vehicular tire of rubber or similar resilient materials, comprising at least a single insert of a metal wire grate, each of the wires of said grate being crimped to give a wavy appearance, the waves of the wires of the grate lying in the plane of the grate, and the wires of the grate being rigidly connected at the points of intersection.

2,749,960
COMPOSITE STRUCTURES
Harold G. Schwartz, Woodstown, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application September 18, 1953, Serial No. 381,143
11 Claims. (Cl. 152—330)



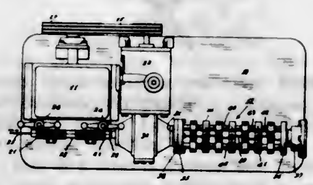
1. A composite elastic structure comprising a layer of a polyalkylene ether glycol-diisocyanate elastomer said glycol having a molecular weight of at least 750, a polychloroprene layer, and a layer of an elastomer selected from the group consisting of natural rubber, butadiene-styrene copolymers, butadiene polymers, butadiene-acrylonitrile copolymers, and polyacrylic acid ester polymers, the polychloroprene layer being in intimate adherent relationship with and interposed between the other two layers.

2,749,961
MACHINE FOR MAKING LABYRINTH SEALS
Stanley J. Czarnik, Lincoln Park, Mich., assignor, by mesne assignments, to Abdite Industries, Inc., Taylor Center, Mich., a corporation of Michigan
Application June 7, 1952, Serial No. 292,352
8 Claims. (Cl. 153—1)



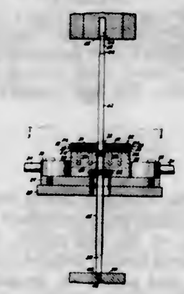
1. A machine for making a labyrinth seal element comprising means for feeding strip metal stock and a continuous wire to said machine, a first station comprising driven rolls constructed to flatten both said strip stock and said wire, a plurality of secondary forming rolls to shape said flat strip into an inverted J section, means guiding said flattened wire comprising rolls and a guide block, a final set of forming rolls receiving said inverted J section and said flattened wire, said guide block operable to guide said flattened wire into said J section and through said final set of forming rolls where said flattened wire is tightly secured in the groove of said J section, and means acting on said assembled wire and J section to spirally form said assembly into a coil with open groove of said J section facing radially outwardly, said coil assembly being subsequently cut into predetermined lengths to form a circular labyrinth seal element.

2,749,962
HELIX FORMER
Harry L. Kitselman, Muncie, Ind., assignor to Kitselman Brothers, Muncie, Ind., a corporation of Indiana
Application November 21, 1951, Serial No. 257,467
15 Claims. (Cl. 153—64)



1. In a machine for forming wire or the like into a helix, a wire-bending unit, means supporting said unit for rotation about an axis, means for feeding wire longitudinally of itself to said unit along a line coincident with such axis, said unit including a series of wire-engaging members spaced from each other axially of the unit, adjacent ones of said members being offset oppositely from each other transversely of the axis of unit rotation to cause progressive bending of the wire fed through the unit, said wire-engaging members being provided with wire-receiving grooves and being mounted in said supporting means for angular adjustment about axes radial with respect to the bending-unit axis and means for rotating said unit about its axis in timed relation to the rate at which the feeding means feeds the wire.

2,749,963
MANUFACTURE OF FLEXIBLE CORRUGATED SEAMLESS METAL TUBING
Ellsworth T. Candee, Watertown, Conn., assignor to Technicraft Laboratories, Inc., a corporation of Connecticut
Original application April 12, 1946, Serial No. 661,903, now Patent No. 2,563,578, dated August 7, 1951. Divided and this application November 16, 1950, Serial No. 196,049
12 Claims. (Cl. 153—73)



1. Apparatus for manufacturing seamless corrugated flexible metal tubing of rectangular or other polygonal cross section comprising a pair of die plates each formed with a tube-receiving channel in an edge thereof, the walls defining said channel being peripherally grooved, means for bringing said die plates into closed engagement with the channels in registry so as to form a polygonal die opening for receiving a rectangular or other polygonal seamless tube and with the peripheral grooves therein also in registry, a lower mandrel for insertion into a rectangular or other polygonal tube positioned in said die opening and having its upper end adjacent the lowermost internal groove, a deformable but substantially incompressible plug for insertion into said tube directly above said lower mandrel, an upper mandrel for insertion into said tube with its upper end overlying said plug, means for moving one mandrel toward the other to deform the plug and expand the tube into the peripheral groove, thereby forming a full depth outward bulge of substantially uniform wall thickness completely about the periphery of the rectangular tube, corrugation-forming means cooperating with said die plates for engaging the bulged tube on both sides of the bulge adjacent the base thereof, and means for applying pressure to said corrugation-forming means in such manner as to narrow and deepen the bulge into a corrugation of substantially uniform wall thickness.

2,749,964
HORTICULTURAL FABRICS
Fred W. Manning, Palo Alto, Calif.
Application April 26, 1954, Serial No. 425,374
15 Claims. (Cl. 154—1)



1. In a method for the promotion and protection of horticultural growth in a given area, the steps comprising: adherently contacting growth-promoting pellets to fibre-forming material; propelling the said pellets with adherent fractions of the said material by force of a fluid stream to produce a continuous succession of pellet-entrained filaments; and moving the said stream about the

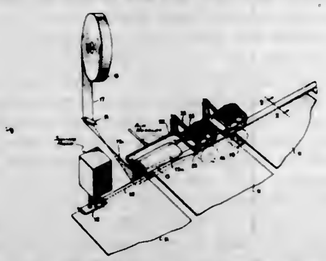
said area to distribute and deposit the pellet-entrained filaments in a continuous succession of overlaps to form a fabric covering for the area.

2,749,965
FILAMENTARY REINFORCEMENTS
Fred W. Manning, Palo Alto, Calif.
Application July 20, 1954, Serial No. 444,510
14 Claims. (Cl. 154—1)



6. In an apparatus having a casing and means within the casing for propelling pellet-entrained filaments therefrom by propulsion of the said pellets, the combination of: a propulsion barrel flexibly attached to the said casing through which the said pellets are propelled; and means for continuously flexing the said barrel during the said propulsion to distribute the said pellet-entrained filaments.

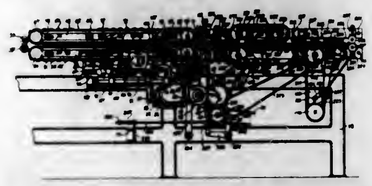
2,749,966
METHOD AND APPARATUS FOR HEAT SEALING CLOSURE TAPES TO CONTAINERS
Richard C. Roetger, Warrington, Fla., assignor to St. Regis Paper Company, New York, N. Y., a corporation of New York
Application November 12, 1954, Serial No. 468,383
8 Claims. (Cl. 154—1.6)



5. Method for sealing end closures of paper bags which comprises: continuously advancing a series of the bags with their ends which are to be closed in flattened condition and moving longitudinally of the end edges while exposing the sewn end surface areas thereof directly to heating means; continuously and simultaneously advancing tape along the bag ends, which tape has a polyethylene coating on a surface facing the bag ends; folding over said tape during its advance into position to be astride the bag ends and also exposing said coating directly to heating means; thereafter applying pressure to bring the folded-over sides of the heated tape respectively into firm bonding engagement with the opposite wall surfaces of the heated bag ends; and also subjecting the folded-over tape simultaneously to further heating while being thus subjected to pressure.

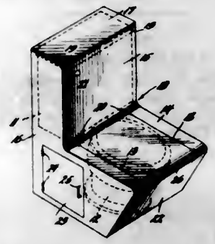
8. In apparatus for applying and sealing folded-over thermoplastic-bearing tape in position astride flattened bag ends, means for continuously conveying a series of the bags longitudinally of their end edges and at a speed of the order of several hundred inches per minute, tape folding means formed with elements which comprises electric resistance heaters for slidably engaging and preheating the tape before contact with the bag end surfaces, heating elements for preheating the bag end surfaces just before contact of the preheated tape therewith, and means for applying current to said heating elements sufficient to maintain same at temperatures of the order of several hundred degrees Fahrenheit.

2,749,967
BOOKCASE MAKING MACHINE
Emmon Bach, deceased, late of Briarcliff Manor, N. Y., by Dorothy E. H. Bach, administratrix, Briarcliff Manor, N. Y., and Edwin W. Goodwin, New Rochelle, N. Y., assignors to Dexter Folder Company, Pearl River, N. Y., a corporation of New York
Application December 6, 1952, Serial No. 324,588
32 Claims. (Cl. 154—1.8)



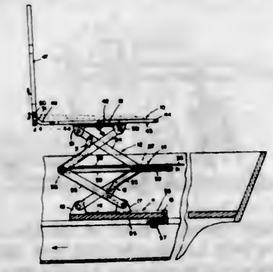
4. In apparatus of the character described, a continuously driven conveyor for advancing a book-case cover sheet in a unidirectional path, and folding mechanism along said path and having a rectilinear reciprocating movement in line with the direction of movement of the cover sheet and acting in unison with the movement of said cover sheet for folding an edge portion of the cover sheet over the body of said cover sheet.

2,749,968
OVERALL COVER FOR WATER CLOSETS AND FLUSH BOWLS
George E. Sauer, Baltimore, Md.
Application May 19, 1953, Serial No. 355,898
4 Claims. (Cl. 155—1)



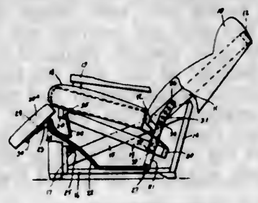
1. An overall cover for combined water closets and flush bowls comprising a substantially horizontal seat section, a substantially upright back section extending from and integral with the rear of said seat section, two substantially upright side sections integral with said seat and back sections, a front section depending from the forward portion of said seat section and integral with said seat and side sections, said side and front sections combining to support said seat and back sections to provide a bench-like structure, said seat and front sections coalescing through a rounded curvature with said front section receding rearwardly from said coalescence as it extends downwardly, said seat section having an opening therein to enable access to a flush bowl seat, and a lid hingedly secured to said cover to provide a closure for said opening and lying flush with said seat section when in closed position, said sections providing an integral unitary enclosure open in the rear and bottom areas so as to be readily positioned over an installed combined water closet and flush bowl, said cover thereby providing a bench and a unitary enclosure for combined water closet and flush bowl structures.

2,749,969
ADJUSTABLE SEATS HAVING LAZY TONG SUPPORTS
John W. Tatter, Akron, Ohio
Application February 16, 1953, Serial No. 337,169
7 Claims. (Cl. 155—91)



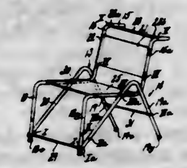
1. In an adjustable seat for a row boat and other similar conveyance, a base structure and a seat supporting structure, an adjustable connection between said structures comprising a lazy tong mechanism having links laterally spaced to provide for collapsing of all links to dispose same in substantially the same horizontal plane, equalizing links connecting a pivotal connection of some of said links to an intermediate portion of another link to confine the extending motion of said lazy tong mechanism to substantially a straight line normal to the aforesaid horizontal plane, a seat supported on said seat supporting structure, and means for locking said adjustable connection in any one of a plurality of selected extended positions, each of said structures having a pair of forward pivot supports and a pair of rear pivot supports laterally offset from said forward pivot supports, said lazy tong mechanism comprising a pair of hinged arms connecting said forward pivot supports and a second pair of hinged arms connecting said rear pivot supports, said first and second pairs of hinged arms being oppositely collapsed at their hinged joint, said equalizing links comprising one link connecting the hinged joint of the first pair of arms with an intermediate part of one of said second pair of arms and a second link connecting the hinged joint of said second pair of arms with an intermediate part of one of said first pair of arms, said pairs of arms located on opposite sides of said equalizing links and disposed in laterally spaced planes for operation without interference one with another.

2,749,970
RECLINING CHAIR
Howard M. Quakenbush, Evansville, Ind., assignor to National Furniture Manufacturing Company, Inc., Evansville, Ind., a corporation
Application June 17, 1953, Serial No. 362,268
9 Claims. (Cl. 155—106)



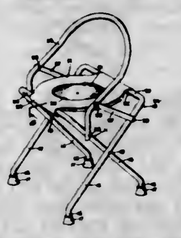
1. An article of reclining furniture comprising a rigid frame, a back rest pivotally connected to said frame and having depending elements, a seat frame including upstanding members pivotally connected to said elements, casters carried by said rigid frame adjacent the front end thereof, a foot rest including guide means, angular cams pivotally connected at one end to said seat frame and having their other ends slidably mounted in said guide means, and combined cam and track members pivotally connected at one end to said depending elements and at their other ends to said guide means, said last mentioned members bearing upon said casters and having their upper surfaces in engagement with said angular cams, whereby upon the back rest being moved rearwardly said seat frame and foot rest are moved forwardly and upwardly.

2,749,971
CHAIR HAVING A SEAT AND BACK ADJUSTABLE FROM UPRIGHT TO RECLINING POSITION
Ernest Ehrmann, New York, N. Y.
Application June 7, 1954, Serial No. 434,953
6 Claims. (Cl. 155—116)



1. A frame for a chair convertible from one shape to another shape; comprising a first pair of S-shaped members, a second pair of substantially V-shaped members, first means pivotally and permanently connecting one S-shaped member to an adjacent V-shaped member, second means pivotally and permanently connecting the other S-shaped member to the adjacent other V-shaped member, said S-shaped members and said V-shaped members being provided with a plurality of apertures, detachable third means connecting through some of said apertures said V-shaped members to said S-shaped members when the former are disposed in one position for attaining said one shape, said V-shaped members being adapted to be swung to another position upon detachment of said third means, and fourth means adapted to be disposed through others of said apertures to detachably connect said S-shaped and said V-shaped members in said another position to attain said other shape.

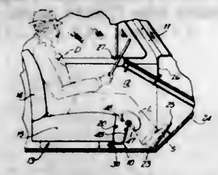
2,749,972
FOLDING CHAIR
Raymond F. Markkula, North Hollywood, Calif.
Application January 25, 1954, Serial No. 405,928
2 Claims. (Cl. 155—147)



1. A chair comprising a pair of inverted U-shaped frame members, the side arms of one member being pivotally connected to the side arms of the other intermediate the top and bottom thereof, the top of one inverted U-shaped frame member being arranged at the back of the chair and the top of the other inverted U-shaped frame member being arranged at the front of the chair, a collapsible seat connecting the tops of the inverted U-shaped frame members, a back rest pivotally connected to the top of that U-shaped frame member which is arranged at the front of the chair and extending upwardly and rearwardly therefrom over the top of the inverted U-shaped frame member arranged at the back of the chair, links

pivotally connected to the back rest and to the upper portion of the inverted U-shaped frame member that is arranged at the back of the chair, and the connections between the links and the back rest lying above and intermediate the pivotal connections of the other ends of the links and the pivotal connections between the backrest and the U-shaped frame member at the front of the chair.

2,749,973
VEHICLE LEG REST
Karl J. Lessy, Los Angeles, Calif.
Application December 23, 1954, Serial No. 477,179
2 Claims. (Cl. 155—172)



1. In combination: a vehicle seat having a generally horizontal cushion; a frame on said cushion; a front cushion panel on said frame; a laterally disposed elongated clamp; bolt means for compressively attaching said clamp to said seat frame along a lower edge of said front panel; a plate disposed from an upper portion of said clamp and extending beneath said seat for engagement with said seat thus to prevent pivotal movement of said clamp in a direction rearwardly beneath said seat; a generally L-shaped rest supporting arm; a bracket on said clamp, the lower end of said arm being freely disposed in and removable from said bracket; a curved leg engaging rest; a universal mounting on said rest, said mounting being carried by an upper end of said arm; said arm having a vertically telescoping portion in said arm; and set screw means for locking said telescoping portion in one or another position.

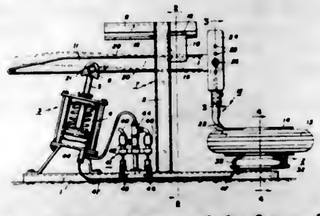
2,749,974
SPRING BACK CHAIR
Bernard Finer, Forest Hills, N. Y.
Application February 9, 1954, Serial No. 409,216
1 Claim. (Cl. 155—179)



In a reclining chair, a seat, a back rest consisting of two lateral rearwardly inclined and downwardly converging tubular supports attached at their lower ends to said seat, center rods in said tubular supports ending short of the upper ends of the same, a plurality of vertically and spacedly superposed horizontal bow-shaped springs having a sinuous configuration, entering said tubular supports with their ends embracing said center rods, said spring being enclosed by a tubular cover and a bow-shaped cross-rod connecting said tubular supports and being located underneath the lowest of said horizontal springs.

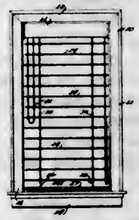
2,749,975
LEVER-ACTUATED TIRE BEAD BREAKER WITH SHIFTABLE FULCRUM MEANS
Joseph Curtis, Mechanicsburg, Pa.
Application October 12, 1954, Serial No. 461,758
7 Claims. (Cl. 157—1.26)

1. A machine for loosening a tire casing from a wheel rim comprising an elongated base, means at one end portion of the base for mounting a wheel having a tire casing thereon, a device at the other end portion of the base for exerting upward thrust, an upright frame mounted on the intermediate portion of the base, a fulcrum carried by the upper portion of the frame and adjustable thereon lengthwise with respect to the base above the level of



said means and device, a lever of the first order having at one end a tool engageable with the tire casing and having its other end engageable by said thrust device for upward movement thereby, and means pivotally connecting an intermediate portion of the lever with the fulcrum for varying the mechanical advantage of the lever responsive to adjustment of the fulcrum along the frame.

2,749,976
VENETIAN BLIND
Jesse Olen Lewis, Columbus, Ga.
Application September 11, 1953, Serial No. 379,686
5 Claims. (Cl. 160—168)



1. A Venetian blind comprising a horizontally disposed body member arranged adjacent the top of a window frame and provided with a longitudinally extending channel, a pair of rollers journaled in said channel, a plurality of spaced parallel slats arranged below said body member and mounted for movement toward and away from said body member, a horizontally disposed arm pivotally supported below said body member, there being registering openings in said arm, body member and slats, chains trained over said rollers and extending through said registering openings, a bar arranged below the lowermost of said slats, resilient means connecting said bar to said chains, a frame supported adjacent one end of said body member, an operating shaft rotatably supported by said frame, a pair of pulleys keyed to said shaft and having said chains trained thereover, a disk keyed to said shaft and provided with an annular flange, a pair of pawls pivotally connected to said disk, a latch block mounted on said shaft and provided with a notch for selective engagement by said pawls, a support member arranged adjacent the lower surface of each of said slats, chains connected to the ends of said support member and to the side edges of the arm, and manually operable means for tilting said slats.

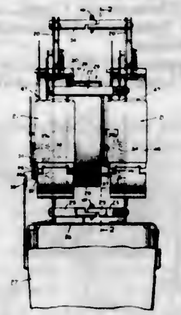
2,749,977
DRAPERY PLEATER
Louis Abrams, Springfield, Mass.
Application January 7, 1953, Serial No. 330,097
6 Claims. (Cl. 160—348)

1. A pleating clip for hanging draperies and the like comprising a base member with forwardly directed abutments at each end thereof and a pleat forming member comprising a band of resilient spring metal bent to form a plurality of closely spaced forwardly projecting generally U-shaped fingers, the opposite end portions of said forming member being divergently directed at the base of said fingers and at the base of said fingers being ten-



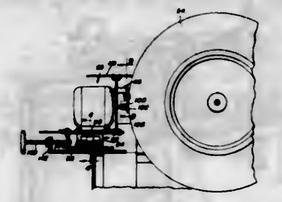
sioned against said abutments, each end portion being yieldable inwardly of its adjacent abutment to receive a folded section of fabric to be held therebetween, said base member having longitudinally slotted guideway portions with the free ends of said forming member having tip end sections slidably received in said slotted guideways for limited movement longitudinally of said base.

2,749,978
TWIN PARKING METER
James O. Eames, Washington, and Roy S. Sanford, Woodbury, Conn., assignors to The Michaels Art Bronze Company, Incorporated, Covington, Ky., a corporation of Kentucky
Application September 1, 1953, Serial No. 377,790
10 Claims. (Cl. 161—15)



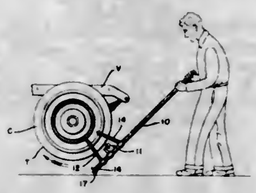
1. In a parking meter of a type suitable for controlling two adjacent parking spaces, a pair of chassis plates secured in spaced relation, substantially parallel to each other; each of said plates having an enlarged opening therein; a bearing member supported in spaced relation, substantially parallel to and adjacent the inner side of one of the chassis plates; a second bearing member supported in spaced relation, substantially parallel to and adjacent the outer side of the other chassis plate; said bearing members having portions overlying the enlarged openings in the respective chassis plates; a timing mechanism located between the chassis plates; an output shaft extending from the timing mechanism on both sides thereof; one end of the shaft extending through the opening in one of the chassis plates and being journalled in the bearing member on the outer side of said plate; the other end of the shaft being journalled in the bearing member on the inner side of the other chassis plate; and gears carried by said shaft adjacent its ends; the gear adjacent the end of the shaft extending through the opening in the chassis plate being located on the outer side of said chassis plate and the gear adjacent the other end of the shaft being located on the inner side of the other chassis plate; said gears being located at equal distances from their respective chassis plates.

2,749,979
TIRE TRUEING MACHINE
Verlyn M. Prewett, Cherokee, Okla.
Application April 17, 1953, Serial No. 349,406
4 Claims. (Cl. 164—10.2)



1. A tool support for use in a tire trueing machine comprising an elongated table, a carriage disposed on said table, means on said table for moving the carriage transversely thereof, a stand on said table for supporting a tool engageable with a tire mounted on said shaft, said stand including a channel member having upstanding, spaced arcuate leg members, a resilient blade member having its lower edge disposed between said legs, a pair of securing members extending through said legs and said blade, a plurality of fastening members extending through one leg and engaging at their free ends with said blade, and resilient means disposed between the said blade and the other of said legs.

2,749,980
ELONGATED LEVER MEMBERS FOR LACERATING TIRE TREAD
George V. Constantakis, Allen Park, Mich., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application December 4, 1953, Serial No. 396,297
7 Claims. (Cl. 164—10.2)

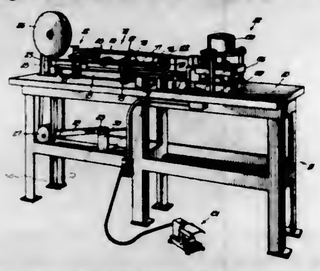


1. Apparatus for slitting or grooving the tread of a tire to increase the traction thereof comprising, an elongated lever member, a cutting element secured to and extending outwardly from said lever member intermediate the ends of said lever member, said lever member having a free end adapted to be manually grasped to apply a force thereto to pivot said lever member around the opposite end thereof to press said cutting element against the tread of a tire to thereby cut the tread, and means carried by said opposite end of said lever member permitting free transverse movement of said lever member in a direction substantially perpendicular to the direction of extension of said cutting element.

2,749,981
MACHINE FOR AUTOMATICALLY CUTTING OFF STRIPS OF UNIFORMLY INCREASING LENGTHS FROM STRIP STOCK OF INDEFINITE LENGTH
James S. MacKinnon, Detroit, and James E. Weidman, Royal Oak, Mich., assignors, by mesne assignments, to William H. Martin, Grosse Pointe, Mich.
Application July 16, 1954, Serial No. 443,856
19 Claims. (Cl. 164—12)

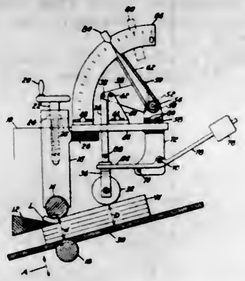
1. Mechanism for feeding metallic strip stock of indefinite length to a die punch for cutting off predetermined lengths of the strip comprising, in combination,

a stock pusher head adapted to grip the strip stock, means for moving said stock pusher head to and fro to feed the strip stock to the die punch, stroke gauge means cooperating with said stock pusher head to limit the



withdrawal thereof away from the die punch, and indexing means operated for each stroke of said stock pusher head for changing the distance said stock pusher head is withdrawn and correspondingly the length of the strip stock next fed to the die punch.

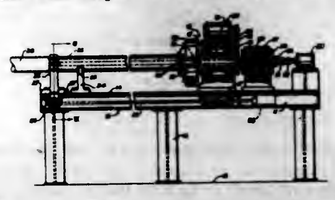
2,749,982
APPARATUS FOR DETERMINING PRESSURE IN SPLITTING RESILIENT MATERIALS
Rudolf Hardt, Eschweiler, Germany, assignor to Maschinenfabrik Turner Aktiengesellschaft, Oberursel (Taunus), Germany, a corporation of Germany
Application March 5, 1954, Serial No. 414,424
Claims priority, application Germany March 17, 1953
4 Claims. (Cl. 164—39)



1. A splitting machine having a splitting knife, a pair of cooperative rolls for feeding work pieces to said knife, said knife being located to cut the workpieces as they are fed by the rolls and while they are compressed therebetween, said rolls being relatively adjustable heightwise with respect to said knife, a work support adjacent the infeed side of one of said rolls and adjustable therewith, a feeler adjacent the other of said rolls and opposite said support, said feeler having a normal position with respect to its adjacent roll and also being displaceable with respect to said roll in response to the presence of a work piece between the feeler and the work support, said feeler being spaced from said other roll a distance sufficient for it to engage an uncompressed portion of a workpiece, and means for indicating the amount of displacement of said feeler whereby the magnitude of compression of a work piece being fed by said rolls will be readily discernible.

2,749,983
PIPE AND TUBE CUTTING APPARATUS
Russell Ford Rogers, Youngstown, Ohio
Application August 23, 1952, Serial No. 305,960
1 Claim. (Cl. 164—61)

In apparatus for severing tubular stock the combination of a base, a rotatable centrally apertured pipe supporting chuck, means mounting said chuck on said base for longitudinal movement therealong, an anchor block fixed on said base on one side of said chuck, a mandrel anchored in said block and extending through said chuck to the other side thereof, a plurality of internal cutters carried by said mandrel, an operating rod extending through said mandrel and adapted upon longitudinal movement with respect to said mandrel to move said



internal cutters radially inward or outward, power means on said base for effecting longitudinal movement of said operating rod, and external cutters mounted on said base opposite said internal cutters and movable toward and away from the same, the arrangement being such that a length of tubular stock gripped in said rotatable chuck may be severed into a plurality of elements upon longitudinal movement of the chuck along said base between severing operations.

2,749,984
SHEAR BLADE ALIGNMENT AND MISALIGNMENT MECHANISM FOR CUTTING SHEARS OF THE ROTARY TYPE
Karl W. Hallden, Thomaston, Conn., assignor to The Hallden Machine Company, Thomaston, Conn., a corporation of Connecticut
Application December 11, 1953, Serial No. 397,614
20 Claims. (Cl. 164—66)

1. In a rotary shear having two parallel rotary cutter shafts provided with longitudinal shear blades, the combination of a first helical gear on each cutter shaft; a train of intermediate helical gears drivingly connecting said first gears for turning said cutter shafts in opposite directions at relative speeds to bring said blades into periodic shearing relation with each other when said gears are driven, two successive ones of said intermediate gears being axially movable and rotatable as a unit and having teeth of opposite pitch angles, respectively, to cause relative angular adjustment of said cutter shafts for blade alignment and disalignment on axially shifting said gear unit in opposite directions, respectively; and means for axially shifting said gear unit.

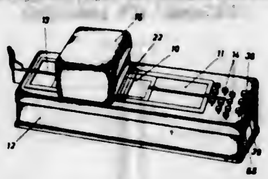
2,749,985
TYPEWRITING AND CODE PERFORATING MACHINE
Reynold B. Johnson, Binghamton, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application December 21, 1951, Serial No. 262,811
13 Claims. (Cl. 164—112)

1. In a typewriting machine, character printing mechanism having a series of type bars, each for printing a character, means for recording code representations adjacent each printed character, a storage device for controlling the operation of the recording means, means on said type bars for controlling the storage device in ac-



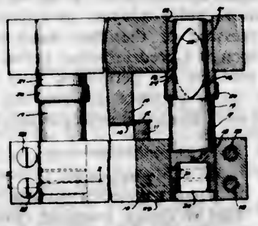
cordance with a character code when a character is printed, and means to operate the recording means in accordance with the code for one character when the next character is printed.

2,749,986
MACHINE FOR OPERATING UPON PERFORATED RECORD CARDS
Michael Maul, Schwabach, near Nurnberg, Germany
Application July 25, 1951, Serial No. 238,434
Claims priority, application Germany December 29, 1950
3 Claims. (Cl. 164—113)



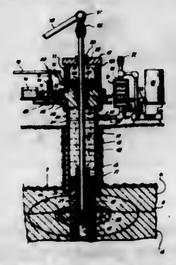
1. In a key actuated record card punching machine, the combination of a set of actuating keys, a single column of punches operable under the control of said keys, card feeding means for holding a card such that the column to be punched is free from visual obstruction by the punches and is in a predetermined sight position, and means operable upon depression of any one of said keys to actuate said card feeding means to feed a card a predetermined distance in relation to said punches to position the stated card column to be punched in alignment with the punches and then to feed the card backwardly by a predetermined shorter distance to place the next card column to be punched in the predetermined sight position.

2,749,987
DIE SET WITH A TAPERED BUSHING AND COMPLEMENTARY LEADER PIN
Kasimir Janiszewski, Hales Corners, Wis.
Application May 1, 1953, Serial No. 352,462
7 Claims. (Cl. 164—118)



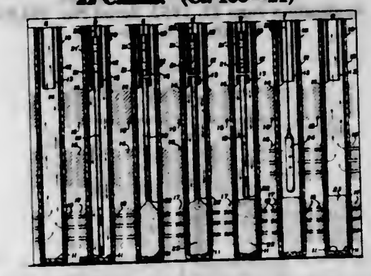
1. In a die set having relatively movable telescopically engaged leader pin and bushing, the combination of a pin and bushing having complementary tapering surfaces having substantial clearance at one extreme of their relative movement and negligible clearance at the other extreme of their relative movement, and means for introducing lubricant between said surfaces, said lubricant comprising resilient surface spacing means compressed as the leader pin and bushing approach the position of negligible clearance.

2,749,988
GRAVEL PACK WELL COMPLETION METHOD
Thomas S. West, San Antonio, Tex.
Application April 9, 1952, Serial No. 281,293
4 Claims. (Cl. 166—20)



1. The method of controlling coning of well fluids in which two separate fluid passages between the surface and the producing formation are provided, which comprises placing a filter pack to fill the well space adjacent the producing formation, injecting pressure fluid through one of said fluid passages for horizontal flow through the filter pack into the producing formation at one vertical interval and producing well fluids through the other fluid passage through the filter pack from a different vertical interval of the producing formation.

2,749,989
METHOD AND MEANS OF COMPLETING A WELL
Theodore A. Huber, Houston, Tex., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware
Application October 31, 1951, Serial No. 254,116
22 Claims. (Cl. 166—21)



1. A method of introducing cement into a cased and tubed well without altering the setting of the tubing with respect to the well head, said well having been previously completed so that the lower end of the tubing was positioned above the bottom of the well which comprises lowering a tubular member open at both ends through said tubing until the lower end of said tubular member is positioned below the lower end of the tubing while the upper end of said tubular member is positioned within said tubing; securing the upper end of said tubular member in said tubing and sealing the annular space between the tubular member and the tubing so that fluid is unable to flow past said tubular member through said annular space; introducing cement slurry through said tubing and said tubular member until the desired quantity of said slurry has been introduced

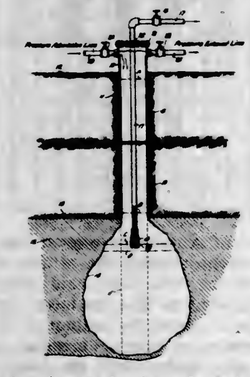
into the well; washing out excess cement slurry by circulating fluid downwardly through the annular space between the tubing and the casing and upwardly through said tubular member and said tubing; and withdrawing said tubular member from said tubing.

2,749,990
KICK-OFF FOR GAS-LIFT WELLS
Paul G. Carpenter, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application October 23, 1951, Serial No. 252,719
4 Claims. (Cl. 166—39)



1. A method for starting a natural gas-lift flow of oil and gas in a production conduit disposed in a dead gas-lift oil well comprising introducing a kickoff bomb of combustible material into said production conduit and positioning said bomb at a point within said conduit adjacent and below the point of entry of oil and natural gas into said conduit, initiating combustion of said combustible material in said bomb by submerging said bomb within the oil in said conduit whereby combustion gas is evolved wholly within said conduit and said combustion gas commingles with said oil and gas therein, flowing the commingled oil and gas up said conduit and removing the flowing oil and gas from the upper end portion of said conduit.

2,749,991
OIL PRODUCTION METHOD
Ralph Spearow, Paola, Kans.
Application June 12, 1952, Serial No. 293,056
1 Claim. (Cl. 166—42)



A process for the production of oil from a well producing water-contaminated fluid, said well having a casing cemented to the surrounding formations, a pressure-tight casing head and a tubing extending through the casing head and within the casing into the producing horizon with a check valve at the lower extremity of the tubing comprising the steps of opening the casing and tubing at the surface to cause the fluid to rise in the casing and tubing under the influence of the rock pressure in the producing formation and form a column in the casing rising to a height commensurate with the rock pressure, maintaining said column for a period sufficient to permit gravitational separation of the water and oil therein, then sealing the casing and tubing at the surface and imposing pressure on the column in the casing sufficient to drive the water back into the formation and lower the interface between the oil and water to a position below the check valve in the tubing, unsealing the tubing at the surface to flow oil from the tubing and maintaining the tubing unsealed until the interface rises almost level with the lower end of the tubing, then sealing the tubing and removing the applied pressure on the column in the casing for a period to cause fluid from the formation to rise in the casing and again form a column of water and oil rising to a height commensurate with the rock pressure, again maintaining the column for a period sufficient to cause separation of the oil and water, and repeating in order and at successive intervals the application of pressure, flowing of oil from the tubing and release of pressure in the casing thereby to establish a cyclic production operation.

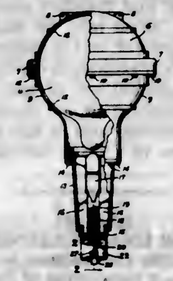
2,749,992
PUMPING APPARATUS
Robert H. Hill, Fort Wayne, Ind., assignor, by mesne assignments, to Perfect Circle Corporation, Hagerstown, Ind., a corporation of Indiana
Application September 20, 1951, Serial No. 247,437
5 Claims. (Cl. 166—106)



1. Pumping apparatus adapted to be inserted in the casing of an oil well for pumping oil out of the well and also for pumping fluid downwardly into the well under pressure, said apparatus comprising reversible pump means of the progressing cavity type having elongated helical rotor and stator members and adapted to extend downwardly in the well casing, and valve means connected to said pump means, said valve means including a check valve adapted to open to permit oil to be pumped upwardly out of the well but remaining closed when fluid is being pumped downwardly into the well, and a spring-pressed pressure valve adapted to remain closed under the static pressure of the fluid head thereabove and adapted to open at a predetermined excess pressure above said static pressure for permitting fluid to be pumped downwardly under pressure into the well but remaining closed when oil is being pumped upwardly out of the well.

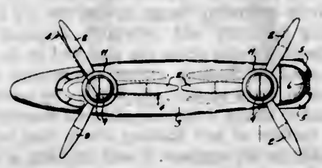
2,749,993
FIRE EXTINGUISHER
Earl M. Gregg, Portland, Oreg.
Application October 5, 1954, Serial No. 460,402
7 Claims. (Cl. 169—26)

1. A fire extinguisher, comprising a sealed frangible container of fire extinguishing fluid, projectile means mounted immediately adjacent said container and operable to shatter the container, firing pin means urged toward actuation of said projectile normally spaced therefrom by a dependently mounted fusible means, said de-



pendently mounted fusible means being pivotally joined to the remainder of said fire extinguisher and being responsive to a preselected maximum temperature to release said firing pin and thereby to allow the fusible means to fall away indicating that an actuation has been effected.

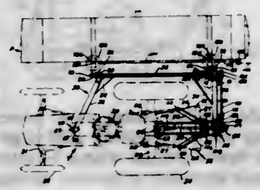
2,749,994
LIFT ROTOR CONSTRUCTION FOR TANDEM ROTOR HELICOPTERS
Stefan Apostolescu, New York, N. Y.
Application April 3, 1951, Serial No. 219,035
4 Claims. (Cl. 170—135.2)



2. In a helicopter having an elongated fuselage body, a rotor unit rotatably mounted on the body, at each end thereof, each rotor unit including a hollow drum having a bottom wall and a side wall, said side wall having a radially disposed opening and having an elongated arcuate shaped slotted portion on each side spaced from the radial opening, the bottom surface of each of said slotted portions having a curved groove formed therein, upright standards rotatably secured to the bottom wall of each drum and disposed circumferentially around its bottom wall opposite the opening and slotted portions, a rotor blade mounted in and extending through the radial opening of each drum and having its inner end secured to one of said standards, a rotor blade extending through the slotted portion of each side wall and having its inner end secured to one of said standards, each of said latter blades being normally disposed at an angle to said first mentioned blade and carrying a pin at its inner end adapted to ride in the groove in the bottom surface of the slotted portion through which the blade extends whereby the blade may be manually swung laterally on its standard and guided to retracted position alongside and parallel to said first mentioned blade.

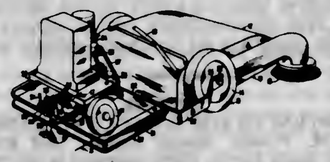
2,749,995
TRACTOR-IMPLEMENT HITCH MECHANISM WITH POWER TAKE-OFF AND BOOSTER
Herman G. Kleman and Melville J. Mitchell, Birmingham, Mich., assignors to Harry Ferguson, Inc., Detroit, Mich., a corporation of Delaware
Application April 7, 1951, Serial No. 219,798
9 Claims. (Cl. 180—14)

7. Hitch mechanism for connecting a tractor having a power take-off shaft to an implement having a power input shaft projecting transversely therefrom, said implement being mounted on an implement frame which has a rolling support on one side, said mechanism comprising the combination of a hitch frame having an intermediate portion and end portions angled transversely to the intermediate portion, means on said end portions adapting said hitch frame for removable connection to the tractor with said intermediate portion extending along one side of the tractor, first and second coupling elements spaced fore and aft on said intermediate member, third and fourth coupling elements correspondingly spaced fore and aft on the implement frame and located on the opposite side of the latter from said rolling support, said first and



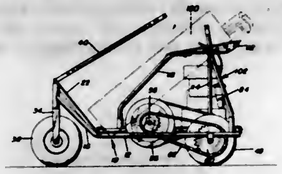
third and said second and fourth coupling elements having means for matingly engaging respectively as said hitch frame and implement are moved relatively in a fore and aft direction, means restraining the frame and the implement against relative pivotal movement, a drive shaft journaled on the rear end portion of said hitch frame and adapted for driving connection to the power take-off shaft of the tractor, a second drive shaft journaled on the frame adjacent the junction of the intermediate and rear end portions thereof, means adapting said second drive shaft for connection to the implement input shaft, and means drivingly connecting said first and second drive shafts.

2,749,996
SWEEPER DRIVE WHEEL RAISING MEANS
Richard W. Parker and Earl E. Stelzer, Springfield, Ohio, assignors to Parker Sweeper Company, Springfield, Ohio, a corporation of Ohio
Application February 7, 1952, Serial No. 270,323
4 Claims. (Cl. 180—19)



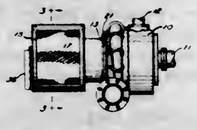
1. In a floor sweeper or the like, in combination, a frame with a rearward section thereof pivotally mounted to a forward section; wheels for the frame carried by the forward section; a handle carried by the frame for manipulating the machine; a power unit carried on the rearward frame section; driving wheels mounted on the rearward frame section and driven by the power unit; a castor slidable within certain limits in a mounting on the rearward frame section for raising and lowering said frame section; means constantly urging the castor toward the upper limit in said mounting; a lever pivotally mounted on the rearward frame section and engaging the castor for sliding same; a second lever pivotally mounted to the rearward frame section and engaging the first mentioned lever in a certain position for locking said levers; means constantly urging the second mentioned lever away from said locking position.

2,749,997
KNOCKDOWN, POWER-PROPELLED CADDY VEHICLE
Clifford E. Desilppe, Livonia, Mich., assignor of twenty-four and one-half per cent to Andrew R. Sinelli and twenty-four and one-half per cent to Dyer C. Baird, Detroit, Mich.
Application December 1, 1953, Serial No. 395,500
2 Claims. (Cl. 180—25)



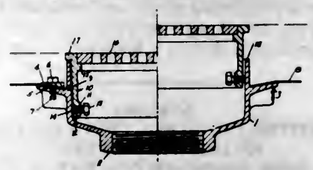
1. A portable readily disassembled power land vehicle for supporting and transporting golf bags and the like, comprising a first vehicular frame member including a steerable wheel rotatably supported at one end thereof and a drive wheel rotatably supported at the other end thereof, power transfer means rotatably supported on said frame member between said wheels, means operatively associated between said power transfer means and drive wheel for transferring power to said drive wheel, forward, rear and intermediate parallel brace and coupling elements longitudinally disposed in spaced transverse relationship on said frame member, vertically extending, transversely spaced connecting members for removably supporting an article support rack on said frame member, a lateral side car member detachably connected to said first frame member, said side car member including forward, rear and intermediate frame elements including free end portions detachably connected to the longitudinally disposed brace and coupling elements on the first frame member, said side car member rotatably supporting an outboard wheel, a power source carried by said side car member including a power outlet member detachably connected to the power transfer means on said first frame member, and a detachable operator seat removably supported by the first and side car members, the forward frame element of the side car member including a vertically extending support element intermediately disposed thereon, said side car member including a second vertical support element secured thereon, said first frame member including a third vertical support element thereon, said aforementioned vertical support elements removably supporting the detachable operator seat.

2,749,998
SILENCER FOR GASEOUS STREAMS
George M. Walton, Shaker Heights, and Richard E. Brown, South Euclid, Ohio, assignors to Air-Maze Corporation, Bedford Heights, Ohio, a corporation of Delaware
Original application February 13, 1948, Serial No. 8,088, now Patent No. 2,661,072, dated September 22, 1953. Divided and this application January 28, 1953, Serial No. 333,746
2 Claims. (Cl. 181—50)



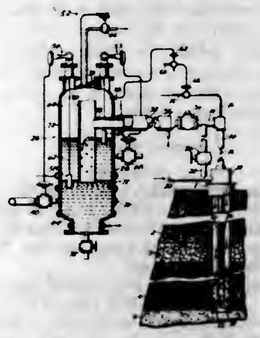
1. A silencer for a gaseous stream rushing to an inlet for a turbine or the like and consisting of only two substantially imperforate cylinders of different diameter and coaxial with said inlet enclosing an annular space between them, said annular space communicating with said inlet, linings of sound absorbing material on the outer face of the inner of said cylinders and on the inner face of the outer of said cylinders, a pad of sound absorbing material axially opposite said annular space and spaced from the end of the outer of said cylinders away from said inlet so as to provide a throat inlet for said stream between said pad and the outer of said cylinders, and said throat inlet having an area measured circumferentially between said pad and the adjacent end of said outer cylinder of the order of one hundred to one hundred and fifty per cent of the cross-sectional area of said annular space between said cylinders in a plane normal to the cylinder axis.

2,749,999
FLOOR DRAIN EXTENSION
John H. Schmid, Erie, Pa., assignor to J. A. Zurn Mfg. Co., Erie, Pa., a corporation of Pennsylvania
Application October 26, 1951, Serial No. 253,389
2 Claims. (Cl. 182—31)



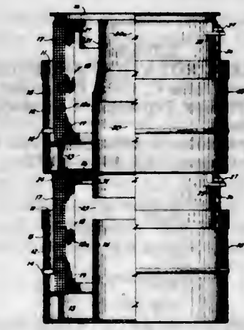
1. A surface drain comprising a drain cup of cylindrical shape having substantially vertical sides, a drain outlet, an outwardly extending flange having the top surface thereof sloping upwardly and outwardly disposed intermediate the height of said drain cup attached to the outer periphery thereof, a flashing clamp comprising a ring wedge shaped in cross section adapted to be secured to said flange and to clamp a flashing material therebetween with the top surface of said flashing clamp ring substantially flush with the top surface of said flashing, a hollow cylindrical lengthening member telescopically disposed in said drain cup, laterally extending screw bolts extending through threaded apertures in the sides of said lengthening member, said bolts frictionally engaging the inner surface of said drain cup for securing said lengthening member in different vertical positions relative to said drain cup, and means on the top of said lengthening member to support a strainer grate.

2,750,000
SULPHUR-WATER-AIR SEPARATOR
R. L. Williams, John E. Shaw, Jr., and Vas Hubert Brogdon, Jr., Port Sulphur, La., assignors to Freeport Sulphur Company, New York, N. Y., a corporation of Delaware
Application November 9, 1951, Serial No. 255,646
19 Claims. (Cl. 183—3)



1. In a process for continuously separating sulphur from a fluid stream containing molten sulphur, gas and sometimes water, the steps comprising continuously delivering the fluid stream into a columnar separation zone, maintaining the fluid in said zone at a temperature at which the sulphur is molten and under superatmospheric pressure sufficient to prevent boiling of the water content, continuously separating gas from the fluid in the columnar zone and discharging it upwardly therefrom, continuously separating sulphur from the fluid in the columnar zone and discharging it downwardly therefrom, and continuously conducting any water separated from the fluid in the columnar zone out of said zone.

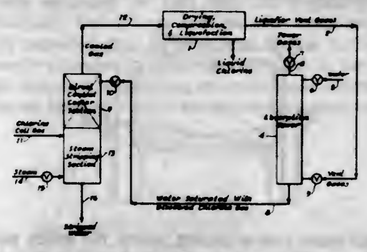
2,750,001
TANDEM OIL BATH FILTER
George M. Walton, Shaker Heights, Ohio, assignor to Air Maze Corporation, Cleveland, Ohio, a corporation of Delaware
Application August 25, 1953, Serial No. 376,447
7 Claims. (Cl. 183—15)



5. The combination of an upper filter unit and a lower filter unit positioned one upon the other aligned upon a vertical axis, said filters comprising generally cylindrical housings, said housings being connected together, each of said housings comprising a generally cylindrical cup-shape bowl opening upwardly and providing an oil reservoir, each of said housings having a downwardly extending annular skirt spaced radially inwardly from said bowl rim, each said skirt extending substantially to the level of the oil in its associated reservoir, said cylindrical cup-shape bowl combining with said skirt to provide an air inlet passageway therebetween, an annular filter element in each housing radially inwardly from said skirt, an annular baffle in said housings extending upwardly in said bowl to approximately the lower edge of said skirt and radially inwardly from said skirt, a top on said upper filter unit and a bottom on said lower filter unit providing opposed end walls, the downstream one of said end walls having a centrally located through discharge opening, a central hollow cylindrical tube positioned axially in each unit, said tube being spaced radially inwardly from its associated filter element to provide an annular passageway there, said central tube of the downstream unit communicating with said discharge opening, and there being central openings in each unit in communication with each other, the central tube of the upstream unit discharging its filtered air through said communicating central openings.

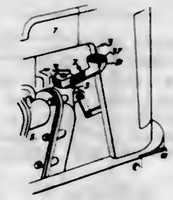
2,750,002
METHOD FOR CHLORINE RECOVERY
Thomas Hooker, Lewiston, and Robert H. Miller, Sanborn, N. Y., assignors to Hooker Electrochemical Company, Niagara Falls, N. Y., a corporation of New York
Application November 24, 1953, Serial No. 394,029
6 Claims. (Cl. 183—115)

1. A method for the recovery of chlorine gas from gaseous mixtures containing chlorine and carbon dioxide which comprises: passing such gaseous mixture into contact with water maintained at a temperature above 10 degrees and below 100 degrees centigrade in an absorption system; maintaining the partial pressure of the carbon dioxide in the absorption system below 1.5 atmospheres absolute; absorbing into water at a super-atmospheric



pressure between about 10 to about 150 p. s. i. g. total absorption pressure the chlorine gas contained in the gaseous mixture to form a chlorine-water solution; withdrawing from the absorption system the chlorine-water solution; desorbing the chlorine gas from the chlorine-water solution by reducing the pressure thereon; and recovering the chlorine therefrom.

2,750,003
ADJUSTABLE OIL FILLER SPOUT
Clarence R. Smith, Conrad, Nebr.
Application May 4, 1953, Serial No. 352,711
1 Claim. (Cl. 184—105)

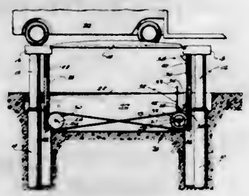


A filler spout and closure for an engine crankcase having an upstanding tubular filler neck with a centrally bored diametrical crosspiece therein, said spout comprising a horizontal downwardly opening discharge end provided with a flat top and a circular bottom of the same diameter as said neck adapting said discharge end to seat on the neck, a flattened throat portion of rectangular cross section inclining upwardly from one side of said discharge end and terminating in a horizontal circular and upwardly opening mouth portion of the same diameter as said neck and oblique to said throat and provided with a centrally bored diametrical cross bar therein, a thumb screw threaded centrally through the top of said discharge end and adapted to be threaded into the bore in the crosspiece to detachably attach said discharge end on said neck, and a flat bottom imperforate closure cap for said mouth portion and neck having a central stud threaded into the bore of the cross bar for detachably attaching said cap to said mouth portion, said stud being threadable into the bore of said crosspiece to attach said cap to said neck when said discharge end is detached from the neck.

2,750,004
COMBINED LOAD-EQUALIZING AND SAFETY DEVICE FOR LIFTS
John Bertram Harrison, Memphis, Tenn., assignor to Dover Corporation, a corporation of Delaware
Application April 9, 1952, Serial No. 281,436
7 Claims. (Cl. 187—8.5)

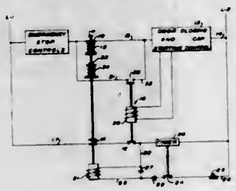
3. In a lift mechanism having a load support and means for raising and lowering it, the combination of

two pairs of sprocket wheels mounted for rotation at the opposite ends of the load support, the wheels of one pair being rigidly connected together, a pair of long chains to insure translational movement of said support; each chain having one end anchored above one pair of said wheels, passing around one of each pair of wheels, and



having its other end anchored below the other pair of wheels; a ratchet wheel rigidly connected to the rigidly connected pair of sprocket wheels, a pawl cooperable with the ratchet wheel to prevent rotation thereof in the direction it rotates as said load support is lowered, and manually operable means for effecting disengagement of the pawl from the ratchet wheel.

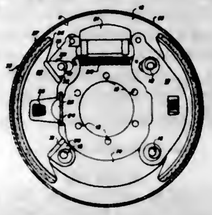
2,750,005
DOOR HOLD BUTTON CIRCUIT
Joseph H. Borden and Giles J. Mundy, Toledo, Ohio, assignors to Haughton Elevator Company, Toledo, Ohio, a corporation of Ohio
Application July 20, 1953, Serial No. 369,153
5 Claims. (Cl. 187—29)



1. In an automatic elevator control system in combination, a push button in the elevator car adapted to be operated by an occupant of the car, a contact that is opened by operation of the button and that is connected in series with the car operating controls to prevent when opened the closing of the elevator car doors and movement of the car, a second contact operated by the push button, an electromagnetic holding coil and armature for holding the push button in operated position, said holding coil being energized through the second contact, a relay operated by closing of the doors and starting of the car, contacts on the relay for shunting the first contact, other contacts on the relay in series with the second contact, an electrically operated timer that is energized through said second contact, and timer contacts that are opened by said timer after a time interval, said timer contacts being connected in series with said holding coil whereby said push button is released at the expiration of the time interval.

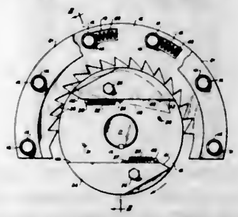
2,750,006
BRAKE
Ralph K. Super, Ashtabula, Ohio, assignor, by mesne assignments, to Rockwell Spring and Axle Company, Coraopolis, Pa., a corporation of Pennsylvania
Application July 3, 1950, Serial No. 171,792
4 Claims. (Cl. 188—78)

1. In a brake having a metal brake drum between 14 and 20 inches in diameter and adapted to rotate about an axis and having an internal smooth normally cylindrical braking surface, a brake shoe assembly comprising a pair of rigid brake shoes mounted for pivotal movement toward and from said braking surface, and a friction lining on each shoe having a Gogan hardness of approximately 11 to 17 and an external continuously curved surface



which at least adjacent both ends lies in a cylindrical envelope having a fixed radius of curvature between .025" and .050" less than the radius of curvature of the adjacent braking surface.

2,750,007
REVERSE ROTATION ARRESTOR
Will J. Turner and John C. Cole, Oklahoma City, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware
Application October 9, 1952, Serial No. 313,828
5 Claims. (Cl. 188—82.77)

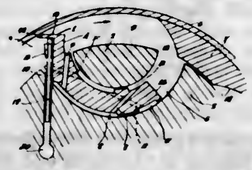


5. A reverse direction arrestor comprising a hub member adapted to be secured to a rotatable body, a pawl pivotally attached to the face of said hub member, said pawl being mounted at a pivot point forward of its center of gravity so that the rearward end thereof is rotated outwardly by centrifugal force when said hub member is rotated, a generally semi-circular stop plate having inwardly facing teeth disposed adjacent said hub member so that said pawl can engage said teeth, means attaching said plate resiliently to a body fixed with respect to said hub member to cushion the impact of said pawl against the teeth of said stop plate, a first stop member fixed with respect to said pawl to prevent outward rotation of the rearward end thereof into engagement with said teeth during forward rotation of said hub member, a second stop member fixed with respect to said pawl to align the forward end thereof in engagement with said teeth in the absence of forward rotation of said hub member, and tension means tending to retain said pawl in said last-mentioned position until overcome by said centrifugal force.

2,750,008
HYDRAULIC BRAKES
René Jean Louis Gasnot, Paris, France
Application December 11, 1953, Serial No. 397,585
Claims priority, application France December 17, 1952
8 Claims. (Cl. 188—90)

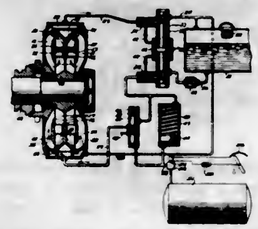
1. A hydraulic brake comprising a circular rotor, a circular stator arranged concentrically within the rotor and defining therewith a circular passage which is filled with hydraulic fluid, said stator having arcuate channels disposed in a radial plane and opening at both their ends into the passage between the stator and rotor, lugs secured internally on the rotor and extending completely

across said passage and forming a sliding seal with the stator, arcuate vane members slidably housed within the channels of the stator and movable between an inoperative position wherein they are entirely contained within the stator and an operative position wherein they extend partially out of the stator across the passage defined between the stator and rotor so as to tend to block flow of the hydraulic fluid, along the passage, caused by movement therein of the lugs as the rotor is rotated, said vane members being provided with cavities in each of their arcuate surfaces forming a sliding bearing against the



walls of the respective channel, said vane members also having passage means communicating between surfaces of the vane exposed in the passage to pressure of the driven hydraulic fluid and the cavities to equalize the forces acting in the radial plane of the cavities to press the vane against the walls of its channel in the stator, whereby to facilitate movement of the vanes, and hydraulically operable driver piston means arranged slidably in bores in the stator and coupled tangentially to the vanes for driving the vane into the passage, against the pressure of the hydraulic fluid therein acting against the end of the vane moved into the passage.

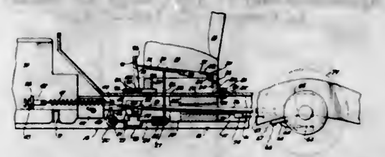
2,750,009
HYDRO-KINETIC BRAKING SYSTEMS
Walter M. Pohl, Chicago, Ill., assignor to Foote Bros. Gear and Machine Corporation, Chicago, Ill., a corporation of Illinois
Application November 17, 1951, Serial No. 256,910
16 Claims. (Cl. 188—90)



1. A hydro-kinetic braking system comprising a brake unit including a vaned casing and a vaned rotor in the casing, a liquid circuit including inlet and outlet connections to the casing through which liquid can flow into and out of the brake unit, flow control valves in the inlet and outlet connections, and control means jointly responsive to the flow through the inlet and outlet connections to control the control valves thereby to maintain the flows through the inlet and outlet connections equal.

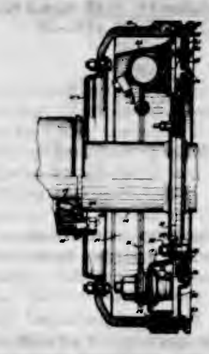
2,750,010
AUTOMATIC PARKING BRAKE FOR MOTOR VEHICLES
Doyle Day, New York, N. Y.
Application July 29, 1953, Serial No. 371,019
11 Claims. (Cl. 188—109)

1. In combination, a motor vehicle having rear brakes and a chassis having crossed members forming a cross part and provided forwardly of the cross part with transversely alined holes and at the cross part with a hole longitudinal to the vehicle and opening in the front and rear angles formed by said cross members; a seat mounted above the chassis for upward movement at its front part and having a lower recess in said front part; a rod transverse to the vehicle passed through and held in said alined holes and supported by said members forwardly of and below the forward part of the seat; a tubular rocker turnably mounted on said rod and engaging the rod substantially throughout and to said members; a rearwardly extended drag link mounted fast on the rocker; an upwardly extended pressure link pivoted to the free end of the drag link and having its upper end received in said recess; an upwardly extended peg fast on each end of the



rocker; strong contraction springs secured to the free end of the pegs, respectively, and extended forwardly and anchored to the forward part of the adjacent cross members; an upwardly extended stud mounted fast on the mid part of the rocker; a rearwardly extended flexible cable secured to the free end of the stud and extended and guided through said hole at the cross part; and flexible means for connecting the rear end of the cable to said brakes of the vehicle; said springs being forwardly diverged from each other to tend to balance the pressures on the rocker and to draw the rocker to the center of the rod to reduce pressure and wear of the rocker on said members.

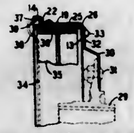
2,750,011
SEALED BRAKE
William L. Pringle, Detroit, Mich., assignor, by mesne assignments, to Rockwell Spring and Axle Company, Coraopolis, Pa., a corporation of Pennsylvania
Application August 7, 1951, Serial No. 240,685
6 Claims. (Cl. 188—218)



1. A sealed vehicle brake assembly comprising a relatively non-rotatable axle member, a brake drum, means at one end of said brake drum for closing that end and mounting said brake drum for rotation about said axle member, brake mechanism mounted on said axle member within said brake drum for coaction therewith and means at the opposite end of said brake drum for preventing entrance of foreign material into said brake drum interior comprising interfitting seal components mounted on the brake drum and the axle member respectively, one of said seal components comprising a radially projecting rigid annulus and the other of said seal components comprising means defining an annular chamber apertured along its inner periphery for receiving said projecting annulus, a body of viscous sealing material having lubricating properties in said chamber disposed about the

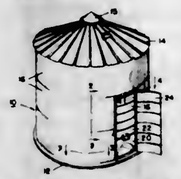
periphery of said annulus, the inner periphery of said chamber defining means comprising annular resilient members engaging opposite side surfaces of said annulus and springs backing said resilient members for maintaining them in contact with said annulus during all conditions of relative rotation of said brake drum and axle member.

2,750,012
BRAKE DRUM
Harry J. Horn, Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a corporation of Michigan
Application May 27, 1952, Serial No. 290,221
16 Claims. (Cl. 188—218)



1. A brake drum comprising an annular brake drum shell having a generally cylindrical braking flange, the free edge portion of said flange being offset radially outwardly from the plane of said flange, a ring member telescopically arranged within said cylindrical flange, said ring extending axially from the open end of said brake drum shell inwardly beyond said radially offset edge portion and cooperating with said radially offset edge portion to provide a circumferential groove around the free edge of said flange, and a cast metal liner overlying and fused to the inner face of said flange and said ring, said lining extending axially on said ring beyond the portion thereof telescopically engaged with said cylindrical flange.

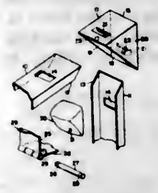
2,750,013
PREFABRICATED METALLIC BUILDING FOR STORAGE AND THE LIKE
Hugh B. Johnson, Falls Church, Va., Alexander Stanley McGaughan, Washington, D. C., and Paul Weidlinger, New York, N. Y.
Application November 21, 1949, Serial No. 128,616
1 Claim. (Cl. 189—3)



In a cylindrical building construction, a plurality of arcuate wall units each provided at its opposite ends with tensile stress transmitting connections, said wall units being connected to one another by said connections to form an assembly, and so dimensioned that the total arcuate length of the assembly is substantially less than a complete circle, door frame elements provided with tensile stress transmitting connections connected to the ends of said assembly, and a bunker board provided with tensile stress transmitting connections connected to said door frame members, all of said connections comprising overlapping dovetail portions adapted to engage with one another for free sliding movement of the engaged parts in the vertical direction.

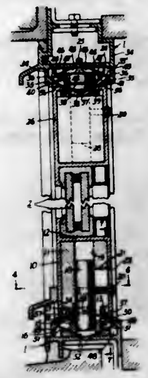
2,750,014
PNEUMATIC JOINT
James F. Gordon, Towson, Md.
Application January 17, 1951, Serial No. 206,483
7 Claims. (Cl. 189—36)

1. Means for joining the abutting ends of a pair of structural members extending in angular relationship, said means comprising a housing receiving and enclosing said ends, said housing being formed with surfaces conforming to and lying along said ends, a pair of loops attached to said housing, each of said loops extending through a hole formed in a respective one of said ends, a hinged element located between said ends and extending between



said loops, a hinge pin joining the relatively movable parts of said hinged element and having its ends in lateral bearing contact with said housing, and a resilient member compressed between said hinged element and said ends and forcing a portion of said hinged element between each of said loops and the one of said ends through which it extends.

2,750,015
REVERSIBLE WINDOW STRUCTURE
Theodore Hauck, Bellmore, N. Y., assignor to General Bronze Corporation, Garden City, N. Y.
Application August 29, 1951, Serial No. 244,201
15 Claims. (Cl. 189—69)



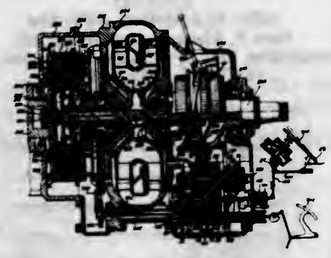
1. In a metallic window construction comprising a frame comprising header, sill and jamb members and a sash, having upper and lower horizontal rails and vertical side rails, and pivoted within said frame on vertical pivots arranged substantially midway between said side rails, the improvement which includes bearing members carried by the header and sill of said frame, complemental bearing members carried by both horizontal rails of said sash and aligned with said first mentioned bearing members, vertically movable pintles mounted in said upper and lower horizontal rails of said sash and extending into said bearing members in sash pivoting positions and vertically removable from said bearing members carried by said header and sill into sash releasing positions and securing devices for securing said pintles in both of said positions, said securing devices comprising a screw member for each pintle carried by the adjacent horizontal sash rail and engageable with said pintle to secure the pintle in both of its said positions, one of said screw members being vertically movable and extending through the adjacent sash rail for manual engagement and movement.

2,750,016
BUILDING WALL STRUCTURE
Joseph Bannoyer, Chicago, Ill.
Application June 18, 1952, Serial No. 294,124
3 Claims. (Cl. 189—88)



1. In a building wall structure, the combination comprising a column, including angular metal members providing a vertically-extending recess therebetween and having flanges extending laterally from said channel to form the inner face of said column, a section of metal wall sheeting lying against each of said flanges along the inner face of said column, each of said sections having an outwardly-turned portion extending into said channel and providing opposed, coplanar retaining flanges within said channel, an attachment strip extending into said channel and fastened therein against said retaining flanges to anchor said metal sheeting sections to said column, said attachment strip having a portion extending outwardly from the inner face of said column, and inner wall sheeting secured to the inwardly-extending portion of said attachment strip at a spaced distance from said outer wall sheeting.

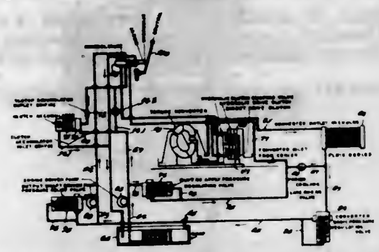
2,750,017
HYDRAULIC POWER TRANSMISSION
Karl G. Ahlén, Stockholm, Sweden, assignor, by mesne assignments, to Svenska Rotor Maskiner Aktiebolag, Nacka, Sweden, a corporation of Sweden
Application January 19, 1950, Serial No. 139,453
5 Claims. (Cl. 192—3.2)



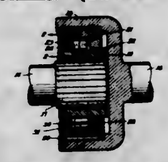
1. A power transmission for transmitting power through different paths of power flow from a driving member to a driven member, one of said paths including a variable speed hydraulic torque converter having an impeller member, a turbine member and a guide member, a first clutch for operatively connecting said driving member with said impeller member to transmit power through said one of said paths of power flow, a second clutch operable independently of said first clutch for operatively connecting said driving member with said driven member to transmit power through another of said paths of power flow, and a control system for said clutches selectively operable to simultaneously cause engagement of both of said clutches.

2,750,018
POWER TRANSMISSION
Marvin W. Dundore, Rockford, Ill., assignor to Twin Disc Clutch Company, Racine, Wis., a corporation of Wisconsin
Application September 12, 1951, Serial No. 246,307
3 Claims. (Cl. 192—3.2)

1. In a power transmission, the combination of a first hydraulic system comprising an hydraulic power circuit means having a torque multiplying range, an inlet line to the power circuit means including a first pressure regulating valve, an outlet line leading from the power circuit means and including in series flow relation a cooler and a second pressure regulating valve, a second hydraulic system including a pair of hydraulically actuated clutches respectively engageable to connect the power circuit means to the load and the load directly to a power source, a pump common to both systems for establishing pressure therein, the second valve being arranged in back pressuring relation to the first valve whereby a lower pressure is maintained in the first system than in the second system, and a pipe connecting the inlet line to the outlet line between the delivery side of the cooler and the second valve and conditioned for flow only towards the inlet line for bypassing thereto a part of the increased flow in the first system when the power circuit means is operating in torque multiplying range.



2,750,019
ONE-WAY ENGAGING DEVICE
Ernest A. Ferris, Oak Park, Ill., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application December 22, 1950, Serial No. 202,385
31 Claims. (Cl. 192—45.1)

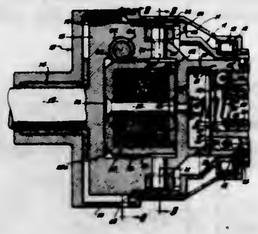


1. In a one-way engaging device, two opposed races, a series of wedge elements interposed between said races and adapted to wedge between the races, and a cage of resilient sheet material having means defining a series of openings therein for receiving said wedge elements, said opening defining means including means engaging said wedge elements, and resilient portions of the cage adjacent said wedge element engaging means being effective to bias said wedge elements into wedging engagement with said races.

2,750,020
ADJUSTABLE RELEASABLE TORQUE TRANSMITTING APPARATUS
Henry T. M. Rice, San Marino, and Robert T. Stevens, Altadena, Calif., assignors to Dillon Stevens, Los Angeles, Calif.
Application January 8, 1952, Serial No. 265,513
22 Claims. (Cl. 192—56)

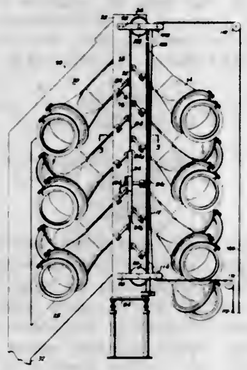
1. In releasable torque transmitting apparatus: driving and driven members; coengaging elements on said members for transmitting torque therebetween; a first element on one member engaging a working face on a second element of said other member; means exerting a force tending to hold said elements in engagement with each other, said elements being responsive to the torque transmitted between said first element and working face to effect disengagement between said elements against the force of said holding means; said working face having a

shape in which the slope of the tangent at the point of contact of said face with said first element changes as said first element is shifted relatively along said working face; and means for adjusting said first and second elements with respect to each other to vary the initial point



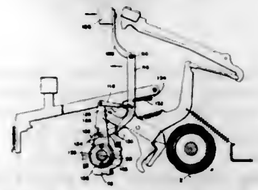
of contact between said first element and said working face through which the drive between said elements is normally transmitted in order to vary the predetermined torque that must be transmitted between said elements to effect automatic disengagement therebetween against the force of said holding means.

2,750,021
DISTRIBUTOR FOR GRAIN AND THE LIKE
Roy I. Patterson, Minneapolis, Minn.
Application November 13, 1953, Serial No. 391,936
14 Claims. (Cl. 193—29)



1. A grain distributor, comprising a pair of laterally spaced vertically extending frame members forming two opposite lateral sides of a vertical distributing tube into which material is introduced adjacent its upper limits, a material conveying spout formed with an open inner end mounted between similar lateral edges of said frame members for conveying material from the said tube, a plate between said frame members in front of the open inner end of the spout and forming a third side of the tube, and journaling means extending between said frame members and secured to said plate on the side opposite the spout and about the lower limits thereof and supporting the plate for inwardly swinging movement within the tube in such a manner that when in its inwardly swung position it constitutes a barrier across the interior of the tube forming an entry from the tube to the spout on the upper side of the plate and an overflow opening between the spout and the lower edge of the plate to permit bypassing of granular material about the lower edge of the plate when the spout is filled.

2,750,022
TYPE BAR IMPACT CONTROL
William J. Long, Poughkeepsie, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application October 20, 1954, Serial No. 463,432
7 Claims. (Cl. 197—17)



1. In a typewriter having a plurality of type bars each having a plurality of character positions, a plurality of rockable members selectively operable to drive an associated type bar to printing position, and a shift mechanism for selecting which character position on a type bar is to be printed, an impression control mechanism comprising a stop member having a plurality of rows of adjustable stops with one row being allocated for each character position on said type bars, means mounting said stop member in said typewriter for rocking movement to selectively position a predetermined row of stops in operating position for engagement with said rockable members thereby regulating the driving force imparted to a type bar by a rockable member, and link means interconnecting said stop member with said shift mechanism to position the allocated row of stops in said engaging position in response to the selective operation of said shift mechanism.

2,750,023
BED BLENDING SYSTEM
John F. Meissner, La Grange, Ill.
Application May 7, 1952, Serial No. 286,641
18 Claims. (Cl. 198—36)

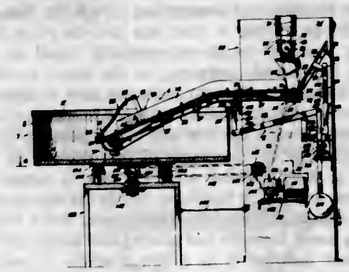


1. In a system for blending comminuted materials on a bedding floor of predetermined length and breadth providing oblong bed areas of predetermined length and breadth arranged in pairs for reception of individual layered beds of material, a reversible distributing and reclaiming conveyor between and spaced a material distance above each two adjacent pairs of bed areas, said conveyors being spaced apart the width of two bed areas, a tripper-stacker unit cooperating with the respective conveyors for layering unblended material in beds on the two bed areas adjacent said conveyor, and means for reclaiming material from either of said layered beds on said two adjacent bed areas and delivering it to said distributing and reclaiming conveyor.

2,750,024
BOTTLE HANDLING MACHINE
Samuel J. Gurewitz, Flushing, N. Y.
Application February 19, 1952, Serial No. 272,443
7 Claims. (Cl. 198—69)

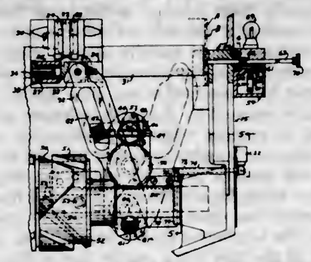
6. Bottle handling means comprising a plurality of horizontally spaced generally vertical endless chains, a plurality of generally U-shaped receptacles secured to said chains at right angles thereto at spaced intervals to receive bottles when adjacent the top of the endless chains

and to carry the bottles downwardly, a rotatable bottle-receiving drum adjacent a lower end of the endless chains, a conveyor extending from a position beneath the endless chains to a position overlying said bottle-receiving drum to carry the bottles from said receptacles to the bottle-receiving drum, projections secured to said conveyor at spaced intervals to maintain bottles thereon substantially at right angles to the path of the conveyor, a pivotal mounting for the end of the conveyor beneath the endless chains whereby the opposite end of the conveyor overlying the bottle-receiving drum is free to swing toward and



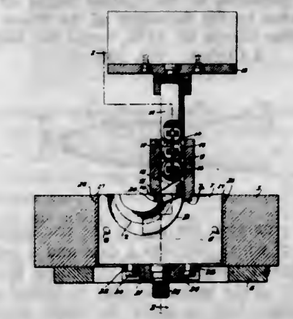
away from the drum in accordance with the number of bottles therein, a drive means operatively connected to said conveyor and to said endless chains to actuate them simultaneously with the speed of the conveyor set with respect to the speed of the endless chains so that said projections on the conveyor pass the bottom of the endless chains at least at the same rate as the U-shaped receptacles reach the bottom of the endless chains, and a bottle-supporting plate secured to said conveyor and projecting beyond the end thereof having an outermost bottle-guiding edge inclined transversely of the conveyor.

2,750,025
MACHINE TOOL
John J. Nichta, Parma, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a corporation of Ohio
Application October 22, 1953, Serial No. 387,563
17 Claims. (Cl. 203—85)



1. In a machine tool adapted to employ bar stock and having a reciprocating stock feeding means provided with stock engaging portions adapted to frictionally grip the stock in feeding the latter in the feeding direction of movement and to slip relative to the stock when the latter is held and the said means is moved in the return or non-feeding direction, the combination comprising a member alternately moved in opposite directions, an operative connection between said member and the stock feeding means to effect reciprocating movement of said means through a predetermined distance while the said stock engaging portions remain in engagement with the stock, means to produce movement of the stock feeding means relative to said member in said return or non-feeding direction when the said stock engaging portions slip off the end of a length of stock so that said feeding means is moved in excess of said predetermined distance in said return or non-feeding direction, an indicating means, and means responsive to said excess movement of said bar feeding means for actuating said indicating means.

2,750,026
APPARATUS FOR PRODUCING REDUCING ELBOWS
Charles L. Redmon and Earl T. Sexton, Jr., Louisville, Ky., assignors, by mesne assignments, to National Cylinder Gas Company, Chicago, Ill., a corporation of Delaware
Application May 29, 1950, Serial No. 164,952
1 Claim. (Cl. 205—4)



Equipment for forming reducing elbows from elbow-shaped blanks of uniform perimeter, comprising a die structure having a curved cavity therein of length considerably greater than that of the elbow to be produced, said cavity being curved on a radius approximating that of the central axis of the elbow to be produced and including two curved cavity portions in end-to-end relation, the first portion of the cavity being of substantially uniform perimeter conforming with that of the large end of the elbow to be produced and cross-sectionally adapted to receive and externally support the surface portions of a curved blank adjacent the second portion of the cavity, and the said second portion of the cavity having a perimeter at its entrance end conforming with that of the first portion of the cavity and said second portion of the cavity being of progressively diminishing perimeter toward its other end, and pusher mechanism having a leading head adapted to engage the trailing end of a blank placed in the first portion of the cavity and a force applicator adapted to conform with the curve of the first portion of the cavity, connected to said head and operable to force such blank into the second portion of the cavity.

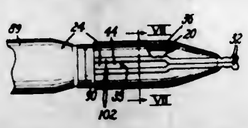
2,750,027
VISUAL INDICATING DEVICES FOR PRODUCING A COLOR SLICK OR PATCH AT SEA OR IN ANY WATERS
Samuel N. Cummings, Brooklyn, N. Y.; Molly Cummings, executrix of the estate of said Samuel N. Cummings, deceased
Application August 21, 1951, Serial No. 242,848
6 Claims. (Cl. 206—.5)



6. A visual indicating package for producing a color slick upon contact with water comprising a mixture of an organic dye and carbon dioxide-generating chemicals, said dye being a member chosen from the group consisting of Rhodamines and auromine, and said chemicals

being a member chosen from the group consisting of alkali and alkali earth carbonates and bicarbonates and a member chosen from the group consisting of aliphatic dibasic and tribasic acids, and a container for said mixture of dye and gas-generating chemicals, said container being formed of water non-soluble material and having one or more openings therethrough.

2,750,028
SEPARATORS FOR USE IN THE PACKAGING OF CARTRIDGES
Robert H. Bode, Wenham, Stanley M. Holliday, Jr., Beverly, and John A. Hawke, Saugus, Mass., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application March 25, 1953, Serial No. 344,524
2 Claims. (Cl. 206—3)



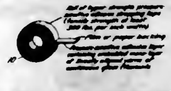
1. A pulp separator for use in the packaging of cartridges, each of which includes a case and a projectile, a centrally disposed longitudinally extending hinge about which one-half of the separator may be folded with relation to the other half to move the inner sides of said halves into opposed relation, the inner sides of said halves of the separator having longitudinally spaced projectile-shaped recesses each of which is transversely alined with a recess in an opposite half and comprises a converging portion and a cylindrical portion and a lengthwise dimension of each of which is disposed at right angles to said hinge, inner sides of the halves of the separator having formed on them around the converging portions of the associated recesses abutment faces which are adapted to engage each other when one of said halves of the separator is folded onto the other half, thereby limiting folding movement of one of the halves of the separator toward the other, said inner sides of the halves of the separator also having formed on them between said cylindrical portions of the recesses, substantially parallel ridges offset from the plane of said abutment faces and extending from the abutment faces of corresponding halves of the separator to transverse margins of said halves and which, when said abutment faces of the halves of the separator are in engagement, are spaced slightly from one another.

2,750,029
TAPE DISPENSER
Burton D. Morgan, Loudonville, N. Y., assignor to Johnson & Johnson, a corporation of New Jersey
Application March 28, 1951, Serial No. 218,038
2 Claims. (Cl. 206—52)



1. An adhesive tape unit comprising a roll of adhesive tape and a dispenser therefor including parallel spaced top and bottom members and a peripheral wall member connecting said members to form a container housing said roll, means in the container for supporting the roll for unwinding during a dispensing operation, an opening in the peripheral wall member through which the tape may be pulled during the dispensing operation, a transversely extending slot in the peripheral wall member adjacent one edge thereof and located on one side of said dispenser opening, a cover member for the dispensing opening attached at one end to the container housing and movable to open position to facilitate withdrawal of a desired length of tape through the dispensing opening and location of a portion of the withdrawn tape in a position overlying said slot, a transverse cutting head carried by the cover member at the end thereof opposite its attachment with the container housing and comprising a radially directed flange, said flange having at least one and no more than two severing teeth of length substantially equal to the depth of the flange and operating, as the cover member is moved to closed position, to enter the slot a distance sufficiently far to effect severance of the tape near an edge thereof, means between the slot and the dispensing opening giving access to the underside of that portion of the tape located in such position when the tape is caused to overlie the slot, and which facilitates lifting the tape preparatory to another tape dispensing operation, and a flange carried by the cover member and closing said access means when the cover member is in closed position to protect the tape in the vicinity thereof against contamination.

2,750,030
HYPER-STRENGTH PRESSURE-SENSITIVE ADHESIVE STRAPPING TAPE
Hubert J. Tierney, St. Paul, Minn., assignor, by mesne assignments, to Permacel Tape Corporation, New Brunswick, N. J., a corporation of New Jersey
Application December 15, 1949, Serial No. 133,175
5 Claims. (Cl. 206—59)



1. A hyper-strength pressure-sensitive adhesive strapping tape wound upon itself in roll form and adapted for strapping heavy and bulky objects such as bundles of steel rods and heavy shipping cartons, comprising a thin flexible backing sheet of the class consisting of films and unified papers, an aggressively tacky rubber-resin type pressure-sensitive adhesive layer bonded to the inner face of the backing and having a smooth flat outer surface, and a non-woven mono-layer of lineally aligned glass-filament yarns fully embedded in the adhesive layer, the yarns consisting of loose hair-like continuous glass filaments which are individually encased by the tacky adhesive and which are sufficient in number when in combination with the adhesive to impart a lengthwise tensile strength to the tape of at least 300 pounds per inch width, the filamentary adhesive layer being highly flexible to permit the tape to be folded lengthwise upon itself and tightly creased by finger action; the lengthwise tensile strength and crosswise tear strength of the tape being mainly due to the presence of said glass filaments, and the crosswise tensile strength and lengthwise tear strength of the tape being mainly due to the presence of said backing.

2,750,031
STAPLED GYPSUM PLASTERBOARD LATH BUNDLE
Kenneth R. Eckrote, Western Springs, Ill., and William W. Tolley, Port Edwards, Wis., assignors to United States Gypsum Company, Chicago, Ill., a corporation of Illinois
Application October 20, 1951, Serial No. 252,326
4 Claims. (Cl. 206—60)

1. A plasterboard bundle consisting of superimposed plasterboards stapled together directly through said plasterboards by thin wire staples the legs of which are

slightly longer than the thickness of the bundle and are bent over against the side of the bottom board thereof, the position of said staples being not less than about two



inches inwardly from the ends of the bundle and substantially along the central longitudinal axis of the plasterboards.

2,750,032
DOUBLE PACKAGING AND CUSHIONING STRIP
Ian A. Laird, Glasgow, Scotland, assignor to Vanant Products, Inc., Milwaukee, Wis., a corporation
Application December 31, 1952, Serial No. 328,947
2 Claims. (Cl. 206—62)



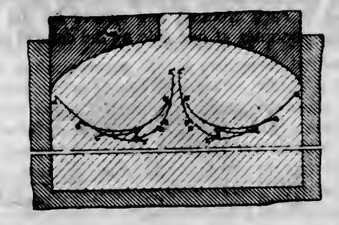
1. A packaging and cushioning member adapted to be placed about the edge of a sheet of glass comprising a longitudinally extending integral strip having inwardly projecting substantially V-shaped portions and folded back end cushion portions, said V-shaped portions being arranged in longitudinal alignment and being provided with longitudinally extending notches, said notches being also in longitudinal alignment for receiving the glass to be protected, the bent back end portions being provided with keeper openings, cushioning tongues struck out from the slots in the V-shaped portions, and certain of said tongues being received in the keeper openings, and tongues struck out from the keeper openings engaging the tongues inserted in said keeper openings.

2,750,033
NAPKIN PACKAGING
Joseph B. Pickens, Fallbrook, Calif.
Application October 7, 1952, Serial No. 313,513
1 Claim. (Cl. 206—63.2)



A package including a sanitary napkin and an envelope; said napkin having a body portion and a gauze tab at one end thereof; said envelope being elongated and having an extended tab-receiving portion at one end thereof; said portion being of reduced cross-sectional dimension; said napkin being in said envelope and said gauze tab being extended linearly of the body portion thereof and disposed within and substantially coextensive in length with said tab-receiving portion; parting means adjacent the free end of the tab-receiving portion to make this end removable, whereby the outer end of said gauze tab is exposed to facilitate withdrawal of the napkin from the envelope; said envelope having a longitudinally disposed pleat to facilitate expansion of the envelope; and said extended portion being slightly stiff material whereby it is adapted to be rolled on itself for re-sealing of the envelope.

2,750,034
METHOD AND APPARATUS FOR EXTRUSION OF PLASTIC MATERIALS
Harvey M. Gersman, New York, N. Y.; Chadot Byron Gersman, administratrix of said Harvey M. Gersman, deceased
Application June 15, 1951, Serial No. 231,754
12 Claims. (Cl. 207—17)



11. A tubular extrusion member for extruding plastic material having a predetermined minimum angle of internal flow and a predetermined angle of rupture, said member having an inner sidewall and a movable end wall and a concave feed surface which extends from said sidewall toward an orifice in said end wall, said feed surface having a shape in a section taken axially of said member conforming to the portion of an imaginary curve extending between said sidewall and said orifice, said curve extending from said sidewall to the center of said orifice and having one of the following formulas:

(1) $\text{gamma}=\text{phi}+(n_a-1)\ \text{beta}$

(2) $\text{delta}=\text{alpha}+(n-1)\ \text{beta}$

(3) $dy/dx=\tan\left[\text{alpha}+\frac{2}{3}(90°-\text{phi}-\text{alpha})X^3\right]$

wherein the y axis is parallel to the axis of said member and passes through the center of said orifice, gamma is the angular slope of said curve with respect to said y axis, phi is the angle at which said curve diverges from said sidewall and is substantially equal to said predetermined angle of rupture, n_a is the number of equal concentric volumes of the material between said sidewall and any point on said curve to be displaced during extrusion, n is the number of equal concentric volumes of the material between said y axis and any point on said curve to be displaced during extrusion, beta is the angular increment by which said slope is changed in passing from one said volume to the next and is determined from the following formula:

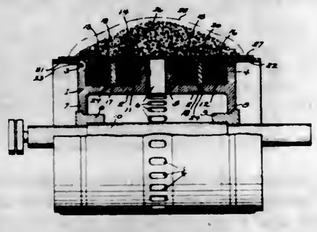
(4) $$\text{beta}=\frac{\pi/2-\text{alpha}-\text{phi}}{N-1}$$

the x axis is perpendicular to the y axis and intersects the y axis at the point of intersection of said curve with said y axis, delta is the angular slope of said curve at any point thereof with respect to a perpendicular to said axis, alpha is the angle at which said curve intersects said x axis and is substantially equal to said predetermined minimum angle of internal flow, X is the ratio of any abscissa to said curve to the distance between said y axis and said sidewall, and N is the total number of said equal concentric volumes.

2,750,035
MAGNETIC SEPARATOR PULLEY
Harold W. Buss, Hales Corners, Wis., assignor to Stearns Magnetic Inc., Milwaukee, Wis., a corporation of Wisconsin
Application October 19, 1954, Serial No. 463,184
4 Claims. (Cl. 209—219)

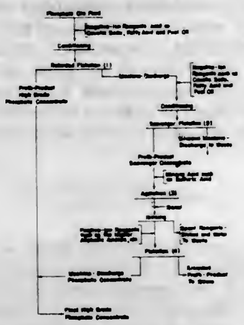
1. A magnetic separator pulley comprising a one piece tubular core portion having means for mounting it in concentrically spaced relation on a shaft, said core por-

tion having integral terminal polar flanges extending outwardly therefrom and an integral central polar flange on the core portion between the terminal polar flanges aforesaid, the pulley having channels between the central polar flange and the respective terminal polar flanges, annular partitions of heat conductive metal disposed in each of the channels, windings in sets of like polarity disposed in each channel and spaced by the said partitions, the windings at one side of the central polar flange



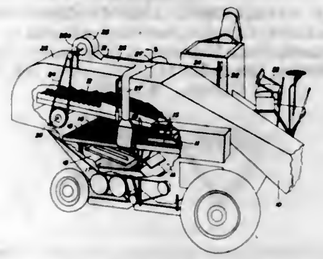
being of opposite polarity from the windings at the other side of the central polar flange, whereby the terminal polar flanges have polarity identical with each other and opposite to the polarity of the central polar flange, coil cover means closing the pulley between the several polar flanges over the several coils and in heat conductive engagement with said partitions, said core portion having mounting means extending inwardly from portions of the core near its respective ends to receive support from said shaft.

2,750,036
PROCESS FOR CONCENTRATING PHOSPHATE ORES
Joseph L. Hunter, Bartow, and Harvie W. Breathitt, Jr., Lakeland, Fla., assignors to Minerals & Chemicals Corporation of America, a corporation of Maryland
Application March 16, 1954, Serial No. 416,476
1 Claim. (Cl. 209—166)



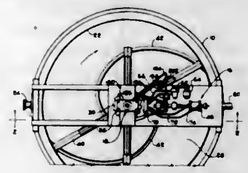
A method of concentrating phosphate minerals from their ores which comprise the following steps: (1) subjecting the ore, in an aqueous pulp, to retarded froth flotation treatment with negative-ion reagents thus producing a phosphate concentrate froth product and a machine-discharge composed mostly of siliceous gangue but containing a considerable quantity of phosphate; (2) subjecting the said machine-discharge in an aqueous pulp to scavenger flotation treatment to produce a low grade froth product and a siliceous tailing which can be discarded; (3) subjecting the scavenger froth product, in an aqueous pulp, to treatment with a mineral acid followed by rinsing with water, thereby effectively removing negative-ion reagents; (4) subjecting the acid-treated and rinsed material, in an aqueous pulp, to froth flotation treatment with positive-ion reagents, thereby producing a forth product composed mostly of siliceous gangue which can be discarded and a residue which is a high grade phosphate concentrate; and (5) subjecting the phosphate concentrate froth product from step (1) to cleaner flotation to produce, as part of the final product, a froth product having a low insoluble content, and a middling residue which is combined with the step (2) scavenger froth product prior to the acid treatment step (3).

2,750,037
GRAIN SAVING DEVICE FOR COMBINES
Wendell A. Taylor, Malad City, Idaho
Application November 8, 1952, Serial No. 319,476
10 Claims. (Cl. 209—261)



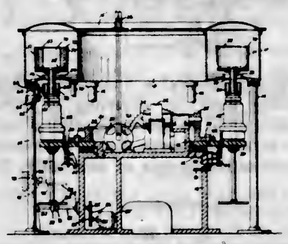
1. In combination with an agricultural combine equipped with reciprocating chaffer sieves having feed and discharge ends and with means disposed adjacent the feed end of said sieves for feeding mixed grain and chaff thereonto, a grain-saving device for hillside operation comprising a pair of nozzles disposed laterally of said sieves and spaced apart across the width thereof, said nozzles having respective elongate discharge orifices extending longitudinally with the longitudinal axis of said sieves and disposed wholly within the longitudinal extension of said sieves immediately adjacent said feed end thereof; means for forcing air into said nozzles and out the said discharge orifices thereof; and means for controlling passage of said air.

2,750,038
MATERIAL HANDLING MECHANISM
Harlowe Hardinge, York, Pa.
Application August 23, 1951, Serial No. 243,328
21 Claims. (Cl. 210—55)



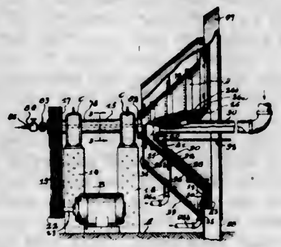
1. A material handling device including a tank and a material engaging means therein driven by a shaft subjected to substantial torque thereby, in combination with hydraulic cylinder and reciprocable piston means, said piston means being reciprocable in opposite directions, a ratchet wheel interconnected to said shaft, arms each movably interconnected at one end to said piston means and reciprocable thereby, said arms extending axially of said piston and cylinder means substantially tangentially to said ratchet wheel periphery, pawls directly carried by the other ends of said arms, means connected to said arms and operable to urge the pawl carrying ends of said arms toward the teeth of said ratchet wheel, and hydraulic pressure supplying means connected to said cylinder means and hydraulic control means interconnected therebetween, said control means being operable to change the direction of movement of said piston means to cause said arms and pawls to be reciprocated sequentially in driving direction, thereby to effect unidirectional rotation of said shaft and material engaging means.

2,750,039
APPARATUS FOR REMOVING LIQUIDS FROM ANNULAR WOUND PACKAGES
Frederick Farwell Long, Chester, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Original application August 3, 1949, Serial No. 108,364. Divided and this application May 14, 1953, Serial No. 355,135
11 Claims. (Cl. 210—71)



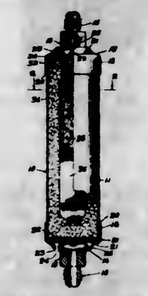
1. Apparatus for treating wound packages including a plurality of individual centrifugal buckets, package-supporting means associated with each of said buckets, means for moving said plurality of buckets in a circuitous path from a loading position to an unloading position, means for rotating each of said buckets concomitantly with their movement along said circuitous path, means for sequentially stopping rotation of each of said buckets as they approach said unloading position, means adjacent to said unloading position for elevating each of said package-supporting means as said buckets each move into said unloading position, and means for retracting each of said package-supporting means from its elevated position as said buckets each leave said loading position.

2,750,040
CENTRIFUGAL SEPARATION
Philippe P. Strich, Montreal, Quebec, Canada, assignor to The Western States Machine Company, Hamilton, Ohio, a corporation of Utah
Application December 22, 1951, Serial No. 262,993
6 Claims. (Cl. 210—73)



1. A centrifugal machine comprising a conical perforated basket adapted to be rotated continuously at a high speed, said basket having an annular skirt at its outer margin, a retaining cone within the basket for rotation coaxially therewith, said cone having an annular skirt at its outer marging overlapping the skirt of said basket and being fixedly connected thereagainst throughout a major area thereof, said basket and cone forming therebetween a main passage for material being centrifuged, a circular series of separate outlet passages between the skirt of the basket and the skirt of the cone, each of said passages having a relatively wide mouth connected with said main passage and converging to a relatively narrow outlet at the outer periphery of said skirts, said basket skirt having a recess therein at one side of each of said outlet passages, each of said recesses including a shallow apex portion opening at the periphery of said skirt and a deeper recessed portion terminating in an end wall near the inner end of the outlet passage, a valve flap articulated to the basket skirt in each deeper recess portion adjacent to its said end wall, said flap being seated on said apex portion in an open position and forming a side wall portion of the outlet passage that is swingable between said open position and a closed position in which it extends towards said cone skirt at an increased angle to the path of discharge of material in the outlet passage, the lateral component of the centrifugal force exerted on said flap by such material being substantially greater when the flap is in said closed position than when it is in said open position, a tube channel interconnecting said deeper portions of said recesses about the circumference of said basket, an expansible tube in said channel to urge all of said flaps towards said closed position, and a fluid supply tube connected with said expansible tube and extending from it away from the basket for conducting fluid under pressure into said tube to regulate the position of said valve flaps.

2,750,041
REFRIGERANT DRYING CARTRIDGE
Herman Meyer, Forest Hills, N. Y.
Application September 20, 1954, Serial No. 457,172
11 Claims. (Cl. 210—131)

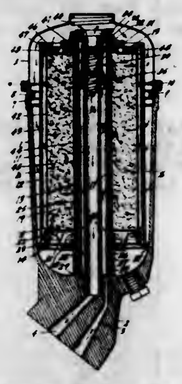


1. A dehydrating cartridge comprising a container and a reversibly acting physical adsorbent or moisture and an irreversible chemical absorbent for moisture in the container.

2,750,042
FILTERS
James W. Wilkinson, Hastings, Mich., assignor to Hastings Manufacturing Company, Hastings, Mich., a corporation of Michigan
Application March 1, 1954, Serial No. 413,353
17 Claims. (Cl. 210—131)

1. In a filter, the combination with a closed casing having cylindrical downwardly tapering side walls and a bottom provided with inlet and outlet passages, of an inlet tube mounted on said bottom in communication with said inlet passage and discharging at the upper end of the chamber defined by the casing, an outlet tube disposed concentrically within said inlet tube and mounted on said bottom in communication with said outlet passage, said outlet tube being provided with a pressure actuated return flow valve at its upper end, a filter cartridge surrounding said inlet tube with its bottom edge contacting said casing side wall and comprising radially spaced foraminate outer and inner walls, the inner wall being spaced from said inlet tube and coacting therewith to provide a discharge passage, said inlet and outlet tubes having openings therein adjacent the upper ends thereof through

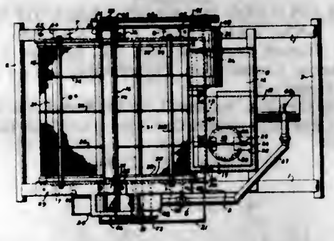
which said discharge passage communicates with the outlet tube, partitioning walls between said inlet and outlet tubes surrounding the said openings therein and providing a passageway from said discharge passage to the outlet tube through the inlet passage between the inlet and outlet tubes, said inlet tube discharging into said casing above said partitioning walls, a top and an outer bottom wall connecting said inner and outer cartridge walls, an inner bottom member having a downturned flange supported on said outer bottom wall and having openings therein, said inner cartridge wall having openings below said inner bottom member for passage of fluid from below said inner bottom member to said discharge passage, a filter medium lining for said outer cartridge wall, a vertically corrugated sleeve disposed within said lining and coacting therewith to provide a plurality of outer vertical passages closed at their upper ends by said top wall, said passages opening at their lower ends adjacent the openings in the downturned flange for passage of fluid through said openings to below the inner bottom member below said inner bottom wall mem-



ber, a foraminate filtering medium chamber wall disposed on the inner side of said sleeve and supported by the outwardly facing corrugations thereof against outward displacement and coacting with the inwardly facing corrugations thereof to provide a plurality of inner vertical distributing passages, a distributor plate mounted below and in spaced relation to the said top wall, the top wall having an opening therein above said distributor plate, the said foraminate filtering chamber wall projecting above and having an annular series of openings above said distributor plate discharging to said inner vertical distributing passages, and a filtering medium compacted in substantially uniform density between said inner cartridge wall and said filtering chamber wall, the flow resistance of such filtering medium being substantially greater than that of said filter lining to said outer cartridge wall whereby the flow of fluid through the filter lining is substantially greater than that through the filter medium, said filter lining constituting means to filter only relatively large particles from the fluid, said filtering medium constituting means to filter relatively small particles from the fluid.

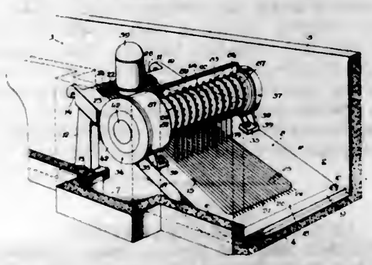
2,750,043
VIBRATOR SCREENS FOR SCREENING ROTARY DRILLING MUD
Lee Lavere Thompson, Iowa Park, Tex.
Application March 21, 1952, Serial No. 277,751
2 Claims. (Cl. 210—149)

1. In a vibrating sample screening device for removing certain insoluble solids from drilling mud, which sample screening device is adapted to attach to a drilling mud vibrator screening apparatus having a rectangular base, a resiliently mounted inclined screen covered frame mounted above said rectangular base, power means for vibrating said screen covered frame, said sample screening device having an inclined screen, which screen is operatively connected to the screen covered frame of said



drilling mud vibrator apparatus, a conduit leading from a source of drilling mud for diverting a proportionate amount of drilling mud to the upper end of said screen of said sample screening device, and a receptacle for receiving a representative sample of said solids from said drilling mud.

2,750,044
SCREENING AND COMMINUTING DEVICE
Carl H. Nordell, Palm Springs, Calif., assignor of fifteen per cent to Louise N. Millspaugh, Long Beach, and fifteen per cent to Anne N. Kaspor, Stafford Inn, Scotia, Calif.
Application December 17, 1951, Serial No. 261,973
14 Claims. (Cl. 210—152)

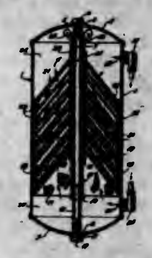


1. In an apparatus for screening solids from a liquid containing solids, a screen comprising a frame and a plurality of transversely spaced metal ribbons held tautly in said frame, a cylinder rotatably mounted in front of said screen about an axis extending transversely of said metal ribbons, and a plurality of tines projecting radially from said cylinder, a comb extending along the side of said cylinder adjacent its upper edge, said tines being passable between said spaced metal ribbons upon rotation of said cylinder to transfer solids intercepted by said screen from said screen to said comb, a plurality of cutting members projecting from said cylinder and engageable with said comb to comminute said solids, and means for retracting said tines within the cylinder as said tines are moved towards said comb by the rotation of said cylinder, the outer ends of said tines being within said cylinder as they pass by said comb.

2,750,045
FILTER
Melville C. Hoffmann and Harvey E. Kratz, St. Louis, Mo.
Application January 26, 1953, Serial No. 333,176
8 Claims. (Cl. 210—165)

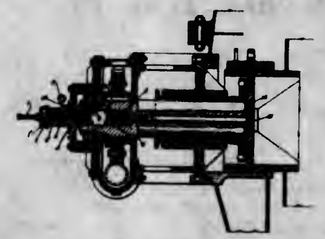
1. A filter device comprising a casing having inlet and outlet openings, a rod extending substantially from the top to the bottom of said casing, a plurality of wire mesh cones alternately mounted on said rod in nested relation with respect to a plurality of solid cones mounted

on said rod, each of said solid cones having an opening therein, the opening in one solid cone being out of alignment with the opening in the next succeeding solid cone,



said cones being maintained in spaced relation and having their peripheral edges in contacting relation with said casing, said nested cones being operatively positioned between said inlet and outlet openings.

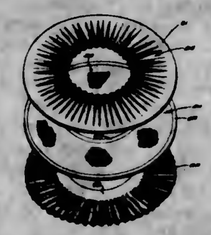
2,750,046
PRESSURE CONTROL FOR SLIDABLE HEAD IN A PROPANE FILTER DRUM
Ernest Hagood, Birmingham, Ala.
Application January 26, 1953, Serial No. 333,321
3 Claims. (Cl. 210—180)



1. A pressure control for a propane drum filter comprising, a set screw mounted in combination with a cap through which it is inserted, a cylinder, said cap attached on an end of the cylinder, a slidable head within the cylinder, the inner end of the set screw mounted revolvable in said slidable head, a coil spring mounted within said cylinder with one end of the spring in contact with said slidable head, a second slidable head mounted in the cylinder, the other end of the spring in contact with said second slidable head, a third slidable head mounted in said cylinder and positioned apart from said second head; oil in the space between the said second and third heads, a pressure gage, a pipe leading from the oil between the heads to said pressure gage, a rod attached by one end thereof in the end of the third slidable head opposite the oil space, the other end of the rod in contact with the slidable head of the propane drum for control of the extracting of wax mechanism in the drum.

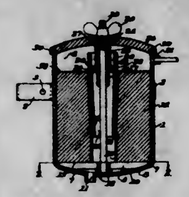
2,750,047
FILTER
Augustus Hasbrouck, Middletown, Conn., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application November 2, 1949, Serial No. 125,107
11 Claims. (Cl. 210—183)

1. An oil filter pack comprising a perforated central member, a plurality of annular filtering members, an annular fluted intercalary member located between each pair of adjacent filtering members and in face to face contact therewith, said central member extending through the central opening of said filtering and intercalary members, one of said intercalary members of an adjacent pair thereof having a plurality of upper and lower radial channels extending from the outer edge thereof to a place short of the inner edge thereof and the other intercalary



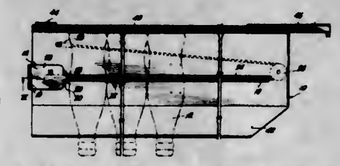
member of said pair having a plurality of upper and lower channels extending from the inner edge thereof to a place short of the outer edge thereof.

2,750,048
LUBRICANT FILTER
Joseph M. Hirsch, Ashville, N. Y.
Application April 16, 1953, Serial No. 349,190
3 Claims. (Cl. 210—183)



1. An oil filter comprising a cylindrical casing closed at one end and provided with an oil discharge, a tissue roll having a central opening, a seat on the inner surface of said closed casing end to receive and support one end of said tissue roll without blocking or interfering with the flow of oil axially between the leaves making up the tissue roll to said discharge, a cover closing the other end of said casing to seal the same, an oil inlet in said casing above said tissue roll, and a frusto conical pressure plug member closing and seated in one end of the central opening of said tissue roll, spring means seated on said frusto conical pressure member to constantly force the latter into the central opening and expand the tissue roll radially laterally against the inner surface of the casing to the extent of its insertion thereinto.

2,750,049
VENDING MACHINE SHELF HAVING BOTTLE FEEDING MECHANISM
Charley W. Hunter, Kansas City, Mo., assignor to Vendo Company, Kansas City, Mo., a corporation of Missouri
Application August 16, 1954, Serial No. 449,964
4 Claims. (Cl. 211—49)



1. In combination with an elongated vending machine shelf having a pair of ends, said shelf being provided with a longitudinally extending, relatively narrow slot therein and a notch having a shoulder near one of said ends, said notch extending laterally from the slot, said shelf being adapted to support a plurality of vendible articles thereon, the improvement which comprises a substantially L-shaped

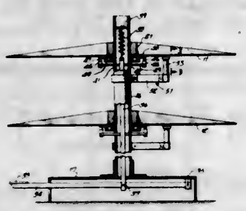
follower provided with an upright article pusher and an article-receiving leg slidably overlying the shelf; means on said leg extending through the slot and loosely engaging the shelf for restricting displacement of the leg relative to the shelf whereby the follower is reciprocable along said slot and limitedly tippable with respect to the shelf; means coupled with said leg for urging the follower toward the opposite end of the shelf; and latch means rigidly mounted on said leg, said latch means being engageable with said shoulder when the follower is near said one end and tipped with respect to the shelf to hold the follower in a locked position, whereby when an article is placed on the leg in said locked position the weight thereon tips the follower to release the latch means from engagement with said shoulder.

2,750,050
CARDBOARD DISPLAY UNIT FOR A MASS MERCHANDISE DISPLAY
Ludwig Ebert, New York, N. Y., assignor to Einson-Freeman Co., Inc., Long Island City, N. Y., a corporation of Delaware
Application February 9, 1953, Serial No. 335,676
5 Claims. (Cl. 211—49)



1. A knock-down cardboard display unit for a mass merchandise display involving a plurality of massed stacks of merchandise items, comprising a flat base of appreciable size adapted to underlie at least one of said stacks, and a backbone mounted upon and anchored to said base and adapted to extend vertically upward between said stacks, said backbone comprising radial ribs of flat character so arranged that a stack of merchandise items may be snugly accommodated in the angle between each pair of adjacent ribs, the base being provided with an upstanding section of two-ply thickness adapted to receive between its plies the lower end of at least one of said ribs, said upstanding section having a slot along its upper edge through which said lower rib end passes.

2,750,051
MULTIPLE ROTARY CARD FILE
Frank Lloyd Wassell, Westport, Conn., assignor to Georgene Parkin Wassell, Westport, Conn.
Application April 28, 1951, Serial No. 223,593
3 Claims. (Cl. 211—131)



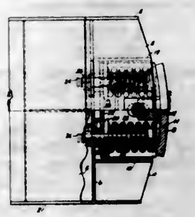
3. In a filing system wherein a plurality of overlapping horizontal platforms are supported in spaced relation one above the other by a common vertical column and are provided with mountings on said column permitting independent rotation of said platforms thereabout, at least one of said platforms having an opening therein through which a portion of the overlapped surface of a lower platform may be reached, the improvement which comprises the combination of a plurality of brak members respectively associated with said platforms and movable into engagement therewith to render said platforms in braked condition, common actuator means disposed radially inward of said platform mountings in connected relation with each of said brake members to simultaneously move said members into and out of engagement with said platforms, and a plurality of detent mechanisms of which each mechanism provides a detent engagement between two halves of the mechanism, each mechanism being secured by one half thereof to said column and by the other half thereof to a respective one of said platforms, said combination facilitating rotation of one selected platform at a time by virtue of the yieldable holding of the other platforms by said detent mechanisms when said brake members are disengaged from said platforms to release the same from the braked condition.

2,750,052
SLIDING SHELF ARRANGEMENTS FOR BOOK STACKS
Clifford S. Brown, Wauwatosa, and Charles S. O'Neil, Two Rivers, Wis., assignors to Hamilton Manufacturing Company, Two Rivers, Wis., a corporation of Wisconsin
Application December 6, 1952, Serial No. 324,532
7 Claims. (Cl. 211—143)



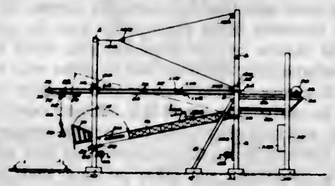
5. In a sliding shelf arrangement embodying a stationary element, an extension track movable on the stationary element, and a sliding shelf movable with respect to both the stationary element and the extension track and having a roller axled thereon that rides on the extension track, that improvement therein wherein there is a detent formation in said extension track intermediately of the length thereof, said detent formation being movable with the extension track and being engageable by the sliding shelf roller to cause movement together of the extension track and sliding shelf when the sliding shelf is pulled forwardly, said sliding shelf roller releasably riding over said detent formation to permit movement of the sliding shelf relatively to the extension track when a continued forwardly urging force is exerted on the sliding shelf.

2,750,053
SPRING BUMPER AND DRAFT GEAR
Fred J. Bogard, Huntington, W. Va., assignor to ACF Industries, Incorporated, a corporation of New Jersey
Application November 3, 1950, Serial No. 193,796
5 Claims. (Cl. 213—9)



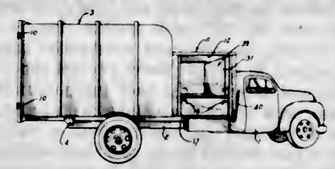
1. In a combined draft and buffing gear for cars, the combination with the car of a bumper head movable outwardly and inwardly relative to the car under draft and buffing forces respectively from a normal position, spaced apart pairs of coil springs interposed between the car structure and bumper head and each pair comprising concentrically arranged inner and outer coil springs with the outer ends of the outer coil springs bearing on the bumper head, means carried by the car structure and bearing against the outer ends of the inner springs of each pair, follower plates interposed between the inner ends of both the inner and outer coil springs of each pair and a portion of the bumper head, and stop means limiting the motion of said follower plates toward the car structure.

2,750,054
ARTICLE UNLOADING APPARATUS
Arthur B. McBride, Cheswick, Pa., assignor to Koppers Company, Inc., a corporation of Delaware
Application June 10, 1953, Serial No. 360,800
10 Claims. (Cl. 214—89)



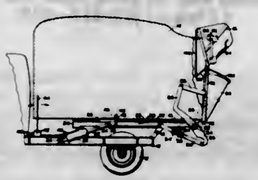
1. An article unloading apparatus comprising a plurality of sets of spaced uprights; a conveyor mounted between said sets of spaced uprights and adapted to be adjusted at an incline thereto; a track means mounted between said sets of spaced uprights over said conveyor and extending the length thereof, said track means being adjustable relative said conveyor and being movable between said uprights in a direction substantially normal to said uprights, said track means also being of greater length than the distance between adjacent sets of spaced uprights so as to have one end project in cantilever fashion from said spaced sets of uprights; a trolley means slideably positioned on said track means; said trolley means having an article handling hook suspended therefrom in moveable position above said conveyor; and power means connected to said trolley means, said power means being adapted to move said trolley means to the extended cantilever portion of said track means where the article handling hook may be loaded, then to move said trolley means above the conveyor for unloading of said article handling hook; and load releasing means associated with said conveyor whereby the hook may be automatically unloaded and returned to the loading position.

2,750,055
REFUSE COMPRESSOR MECHANISM FOR VEHICLES
James Donie Huffines, Wichita Falls, Tex.
Application December 24, 1953, Serial No. 400,236
10 Claims. (Cl. 214—501)



1. A mechanism for actuating a refuse compressor for use on a vehicle body comprising, a hydraulic fluid reservoir, a power driven hydraulic pump, said pump having an inlet line connected in fluid communication with said reservior, a valve mechanism, a conduit connecting said valve mechanism with said pump, a longitudinal slot formed in the lower portion of said vehicle body, a hydraulic cylinder mounted beneath said body in parallel alignment with said slot, a plunger operatively mounted in said hydraulic cylinder, an upstanding arm connected to said plunger and projecting through said slot, a transverse compressor blade mounted within said body and secured to said arm, a pair of conduits each having one end thereof connected with said valve mechanism, each opposite end of said conduits being connected to an end of said hydraulic cylinder, a discharge line leading from said valve mechanism to said reservoir, means connected to said valve mechanism to initiate a complete cycle of said plunger in said hydraulic cylinder, and said valve being held in one position for the length of travel of said compressor stroke, a compressed spring for switching said valve mechanism so as to reverse the flow of said hydraulic fluid to said cylinder, means for retaining said spring under compression, and a trip mechanism for releasing said compressed spring at the end of the compression stroke of said plunger.

2,750,056
REFUSE DISPOSAL AND GENERAL TRUCK BED
Ray Allen Dow, Fairview, Okla.
Application April 5, 1954, Serial No. 420,797
4 Claims. (Cl. 214—504)

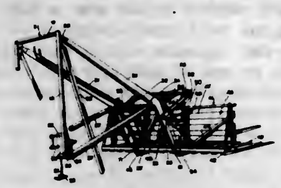


2. Self-loading and dumping apparatus for a vehicle having a body open in its rear end portion and tiltably mounted on a frame, which comprises, in combination: a bucket having tripable lid means and supported by boom means which is pivotally secured to said body in its rear portion thereof; a gate member pivotally secured to said boom means and removably hinged to said body in its rear portion thereof, said gate when removed from hinged mounting on said body being adapted to swing outwardly therefrom; linking means reciprocably mounted on said body; motor means attached to and adapted to reciprocate said linking means; lever means attached to said linking means, said boom means and said gate member, said lever means adapted upon movement of said linking means in one direction to raise said bucket to dump material therein into said body and to swing said gate member into closed position with said gate member disposed in a position to trip said lid means, and said lever means adapted upon movement of said linking means in the opposite direction to lower said bucket and swing said gate member into said body to crush and push material therein forward; means to lock said linking means against movement; and said body adapted to be tilted upon locking said linking means and exerting force thereon by said motor means to move same.

2,750,057
APPARATUS FOR LIFTING LOADS
Donald R. Stuart, Omaha, Nebr., assignor to American Road Equipment Co., Omaha, Nebr., a corporation of Delaware
Application March 6, 1952, Serial No. 275,090
5 Claims. (Cl. 214—510)

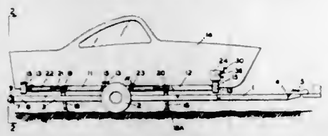
1. Stacker apparatus comprising a basket frame, forwardly extending teeth on the basket frame, rearwardly extending parallel booms pivoted to the basket frame, a rigid member between the booms and secured thereto, means connecting the basket frame and booms and limit-

ing free arcuate movement of the basket frame between first and second positions, a push-off device reciprocable along the teeth, a stop on the basket frame limiting rearward movement of the push-off device, means for reciprocating said device including a rock shaft journaled on the basket frame and an arm on the rock shaft, and



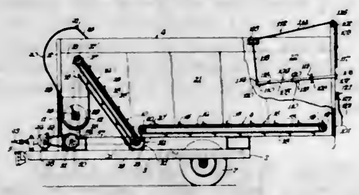
a double acting cylinder and piston assembly pivotally and directly connected to said member and to said arm for actuating said push-off device when the frame is in said first position, the said cylinder being the sole means for maintaining said basket frame in said second position opposing movement of the basket frame by gravity.

2,750,058
BOAT TRAILER
Oren P. Burch, Eugene, Oreg.
Application May 20, 1954, Serial No. 431,244
2 Claims. (Cl. 214—515)



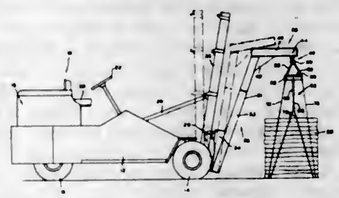
1. A boat trailer comprising a boat supporting subframe, a wheeled trailer removably supporting said subframe and power means contained within said subframe for lifting the subframe from the trailer, said power means including pivotally mounted legs, a plurality of cylinder and piston units, a plurality of lifting members, fluid interconnection between said units and lifting members operable at the beginning of the lifting movement and means for terminating said interconnection as said lifting members become effective.

2,750,059
TWO-WAY SELF-UNLOADING VEHICLE
Otto E. Hintz, Riverside, Edwin F. Huddle, Elmwood Park, and John H. Bing, Downers Grove, Ill., assignors to International Harvester Company, a corporation of New Jersey
Application December 15, 1953, Serial No. 398,368
9 Claims. (Cl. 214—519)



1. A vehicle including a wheeled frame, a body carried thereby including a bottom, spaced side walls and a front wall and having an open rear end and a discharge opening in one side wall adjacent to said front wall; conveyor means mounted in said body for selectively discharging a load through either said opening or said open rear end and comprising an endless bed coveyor extending over and under said bottom from intermediate the ends of said body to said rear thereof, a pair of shaft elements supporting and drivingly connected to opposite ends of said endless bed conveyor and mounted on said body, an endless elevator conveyor extending upwardly from intermediate the ends of said body to adjacent said forward wall, means including upper and lower shafts journalled from said side walls and supporting opposite ends of said elevator conveyor, means drivingly interconnecting said upper shaft with said elevator conveyor, a side delivery conveyor in said body disposed in receiving relationship to said elevator conveyor and discharging through said side opening; a power driven driving train having a first driving connection to said side delivery conveyor and said upper shaft and having a second driving connection to said lower shaft, a cam on said lower shaft, arms pivoted intermediate their ends on said shaft elements, means on said shaft elements selectively connectible with respective arms in driven relationship thereby for driving respective shaft elements, means drivingly interconnecting said arms, said selectively connectible means on one of said shaft elements being connectible and the selectively connectible means on the other of said shaft elements being simultaneously disconnected to drive said bed conveyor to discharge a load toward said elevator conveyor attendant to said elevator and side delivery conveyors being driven, and said selectively connectible means on said one shaft element being disconnected and said selectively connectible means on the other of said shaft elements being connected to drive said bed conveyor in a direction discharging a load through said rear end attendant to disconnecting said power train second connection to said elevator and side delivery conveyors.

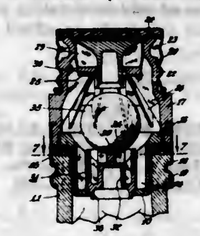
2,750,060
SLING ATTACHMENT FOR INDUSTRIAL LIFT TRUCKS
Fred Sherriff, Battle Creek, Mich., assignor to Clark Equipment Company, a corporation of Michigan
Application December 8, 1954, Serial No. 473,807
1 Claim. (Cl. 214—620)



For use with an industrial lift truck having an upwardly and downwardly movable load supporting carriage operating on a mast structure which is tiltable forwardly and rearwardly, the combination of vertically disposed frame means connected near the lower extremity thereof to the load supporting carriage and arranged in forwardly diverging relation with the lift truck mast, a horizontally disposed forwardly projecting boom portion secured to an upper part of the said frame means, a hook mechanism depending from the said boom portion near the forward extremity thereof, the said hook mechanism being pivotable with respect to the said boom portion about a transverse horizontal axis, the said hook mechanism including a dependent hook which is rotatable with respect to the remainder of the hook mechanism about a vertically disposed axis, a pair of stops on the said hook mechanism for limiting the rotation of said hook to approximately 90°, a horizontally disposed rectangular sling supporting member suspended from the said hook, four cables suspended at their upper ends from the said sling supporting member, a pair of hooks for securing the lower ends of two of the said cables respectively to the other two cables whereby load supporting sling means is defined, an hydraulic motor

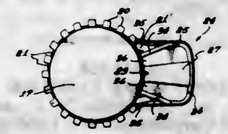
comprising a cylinder and piston suspended from the said sling supporting member, and an additional pair of cables connected from the said hydraulic motor respectively to the said pair of hooks for unhooking the said four cables so as to permit the said four cables to be withdrawn from under a load.

2,750,061
NON-REFILLABLE CLOSURES
Edgeworth Greene, Great Notch, N. J., assignor to Inter-Seal Corporation, Spring Lake, N. J., a corporation of Delaware
Application November 16, 1951, Serial No. 256,768
8 Claims. (Cl. 215—22)



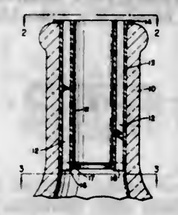
3. A nonrefillable fitment for a container comprising a housing, means for securing the housing to an open neck of the container, a valve assembly at least partially within the housing, said valve assembly including a valve seat member having an opening for the egress of liquid from the container and formed with a seating surface surrounding the opening, a valve member loosely mounted for free reciprocation relative to the seat member and cooperating therewith to control flow through the opening, said valve member having a surface adapted to engage the seating surface, means for automatically moving said valve member into engagement with said seat member when the valve assembly is in upright position, buoyant means for acting on the valve to move it to seating position when the valve assembly is inverted and flooded with liquid, the part of one of the members having said surface being of relatively easily deformable resilient material and having a passage formed in said surface of relatively small cross-sectional area and extending across the zone of contact of said members when engaged for the admission of air into the container, said zone of contact between said members, when said part is in normal undeformed condition, being relatively long with respect to said passage width crossing said zone of contact, said valve seat member and valve member telescoping one within the other and engaging with a wedging action and said valve member being deformable under pressure tending to force the valve member against the valve seat to constrict said passage.

2,750,062
MANUALLY REMOVABLE CROWN CAP
William Setz, Los Angeles, Calif.
Application April 19, 1954, Serial No. 424,137
4 Claims. (Cl. 215—46)



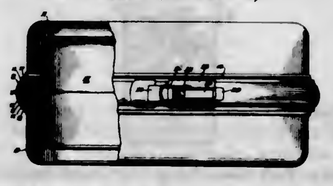
1. In a closure for a crown sealed container having a neck with a pouring opening therein, a rounded bead at the outer end of the neck forming an undercut and a rim surrounding the pouring opening, the combination of a crown cap comprising a central flat portion adapted to fit over said rim and having an inner sealing face, a crown at the rim of said flat portion of alternating outwardly extending substantially evenly spaced ridges and inwardly extending projections, said projections being adapted to engage beneath said bead, and a finger lift comprising a flap extending radially outwardly from one side of the crown and encompassing a plurality of said ridges, said flap having a longitudinal central rib spanning a distance of substantially two ridges at the base and expanding progressively toward the edge of the flap, means at the base of the ridge adapted to engage beneath said bead, said flap having an angularly downwardly extending position when in sealed position whereby to provide a finger hold for manually removing the crown cap.

2,750,063
NON-DRIP INSERT FOR BOTTLES
William Opaltalk, Youngstown, Ohio
Application July 14, 1955, Serial No. 521,964
2 Claims. (Cl. 215—73)



1. A non-drip insert for a liquid dispensing bottle comprising a cylindrical pouring spout, means for positioning the spout within the neck of the bottle in spaced relation with the inner wall thereof to provide longitudinal drip return passages exteriorly of the spout extending from the upper end to the lower end of the same and in communication with the space directly below the lower end of the pouring spout, said means including a plurality of circumferentially spaced longitudinally extending webs on the exterior of the pouring spout, said webs having lower end portions extending a short distance below the lower end of the pouring spout, and a valve of washer-like form having a central opening therein mounted for limited vertical sliding movement on said end portions of said webs, the valve being provided with a plurality of circumferentially spaced apertures outwardly of its central opening slidably engaging said end portions of said webs, said valve acting to close said longitudinal drip return passages at the lower end thereof when the bottle is moved to pouring position, the central opening of the valve being in communication with the interior of the pouring spout.

2,750,064
SEALED SEPARABLE FOOD CONTAINER
Houghton W. Clarke, Evanston, Ill., assignor to Mealpack Corporation, Evanston, Ill., a corporation of Illinois
Application April 25, 1952, Serial No. 284,368
10 Claims. (Cl. 220—4)



3. In a device of the character set forth, a pair of hollow body sections adapted to be secured together in sealed relation to form a heat-insulated food-receiving compartment, said sections having outer annular ribs

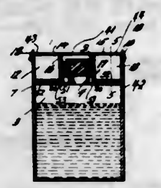
near their meeting surfaces, a resilient band enclosing said ribs, clamp members secured upon the ends of said band and engageable with each other to draw said band together with the ends thereof forming an airtight seal, at least one of said clamping members being provided with a bottom wall adapted to receive a disc thereon, a finger spaced slightly above and terminating adjacent the bottom wall for extending over and engaging said disc when said clamp members are in closed position and being carried by said band in substantially immovable relation with respect to said bottom wall, and a disc received within said clamping member and engaged by said finger for disfigurement thereof when said clamping member is moved to released position.

2,750,065
REFRIGERATOR CABINET CONSTRUCTION
Ralph E. Wallenbrock, Evansville, Ind., assignor, by mesne assignments, to Whirlpool-Seeger Corporation, a corporation of Delaware
Application April 7, 1953, Serial No. 347,216
5 Claims. (Cl. 220—15)



1. In a refrigerator cabinet, an outer shell, a liner positioned within said outer shell, insulation disposed between said liner and said outer shell, said outer shell having an inwardly opening U-shaped flange formed at the upper edge thereof, said liner having an outwardly opening U-shaped flange formed at the upper edge thereof, a breaker strip positioned within said flanges, said breaker strip being formed in two portions, the first of said portions having one longitudinal edge thereof positioned within the outer shell flange, the second of said portions having one longitudinal edge thereof positioned within the liner flange, the other longitudinal edge of said first portion being formed as an upwardly facing rabbet cut, the other longitudinal edge of said second portion being formed as a downwardly facing rabbet cut, whereby said other longitudinal edges of said first and second portions cooperate to form a rabbet joint, a plurality of fasteners mounted through said joint to maintain said first and second portions secured together, said lower portions of said flanges further formed to have a series of burrs projecting upward therefrom into said first and second portions, whereby said first and second portions are secured within said flanges.

2,750,066
POCKET FLASKS
Abraham J. Shekter, Coral Gables, Fla., assignor to Adela F. Shekter, Coral Gables, Fla.
Application July 10, 1953, Serial No. 367,143
1 Claim. (Cl. 220—23)



A pocket flask comprising a principal receptacle having a reduced neck and a pair of oppositely extending shoulders at the base of said neck, a removable closure closing said neck, a removable cover extending over said neck and shoulders, said cover embodying a top wall and side walls depending from the margin of said top wall, said top wall being spaced above said shoulders and the lower portions of said side walls embracingly engaging portions of the walls of said principal receptacle below said shoulders, a partition extending downwardly from said top wall intermediate one end of said cover and said neck, another partition extending inwardly from said side walls at said one end of said cover intermediate said top wall and the complemental shoulder, the inner ends of said partitions being joined together, said partitions forming with cooperating portions of said top wall and said side walls an auxiliary receptacle in said cover occupying a portion of the space between said top wall and said complemental shoulder, and an openable and closable door in one of said cooperating portions of said cover wall and said side walls to afford access to said auxiliary receptacle.

2,750,067
PONTOON TYPE FLOATING TANK ROOF
John H. Wiggins, Chicago, Ill.
Application June 5, 1953, Serial No. 359,913
4 Claims. (Cl. 220—26)



1. A floating roof for a liquid containing tank comprising, a center pontoon arranged to float on the liquid adjacent to the center of the tank, a peripheral pontoon arranged to float on the liquid adjacent to the wall of the tank, said peripheral pontoon being disposed concentrically about said center pontoon and in spaced apart relationship with respect thereto, an annular flexible diaphragm-like deck joining said pontoons and providing a liquid-tight cover therebetween, said diaphragm-like deck having inner and outer annular portions of substantially equal and opposite pitch, said outer deck portion being joined to said peripheral pontoon substantially at the liquid level in the tank and extending radially inwardly and downwardly therefrom and said inner deck portion being joined to said center pontoon substantially at the liquid level in the tank and extending radially outwardly and downwardly therefrom so that at least a major portion of said diaphragm-like deck is in direct buoyant contact with the liquid in the tank and disposed below the level thereof and so that said oppositely pitched inner and outer deck portions provide an annular gutter located substantially concentrically and midway with respect to said pontoons for the collection of rain and snow that may fall on said roof, an annular load member carried by said deck in the area of said gutter and disposed thereabove, said load member being of sufficient weight and so distributed substantially uniformly to retain the area of said gutter below the level of the liquid in the tank in order to maintain the pitch of said inner and outer deck portions and to prevent said diaphragm-like deck from being flexed materially upwardly by the force of the liquid in contact with the underside thereof, and means for draining the collected rain and snow from said gutter.

2,750,068
CONTAINER CLOSURE
Lester B. Platt, Jr., Livingston, N. J., assignor to The Sheffield Tube Corporation, New London, Conn., a corporation of Connecticut
Application March 29, 1955, Serial No. 497,516
3 Claims. (Cl. 220—27)

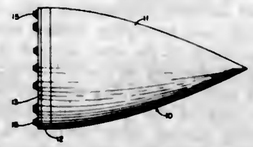
2. A container closure having a tubular section terminating in a portion of reduced diameter formed with a closed wall at a free end thereof, an annular external

bead adjacent said end wall, and said tubular section being formed with an internal, annular recess spaced down-



wardly from said portion for receiving said bead upon severing said portion from said tubular section.

2,750,069
SEALED JOINT
Bernard Gross, San Diego, Calif., assignor to Rohr Aircraft Corporation, Chula Vista, Calif., a corporation of California
Application August 10, 1953, Serial No. 373,303
1 Claim. (Cl. 220—46)



A hollow container terminating at one end in an inwardly extending rigid frame having a central opening of large area, the end face of said frame being substantially plane and having a continuous deep groove of substantial width surrounding said opening and said frame having a plurality of spaced apart threaded openings terminating in its end face and disposed outwardly of said groove; a rigid impervious cover having an inner face adapted to seat against the end face of said frame and cover said groove and central opening; a first ring of resilient material secured to and in contact with the inner marginal wall of said groove throughout the entire length of said marginal wall; a second ring of resilient material having a length substantially greater than the length of said first ring, said second ring being secured to and in contact with the outer marginal wall of said groove throughout the entire length of said outer wall, each of said rings being composed of material substantially softer than that composing said frame and cover and each having a curved end portion extending beyond the end face of said frame; a plurality of fasteners passing through said cover and having ends in threaded engagement with said threaded openings, the tightening of said fasteners drawing said cover against the end face of said frame and also the curved end portions of said rings to compress said curved portions into sealing contact with said cover while leaving said curved end portions spaced apart, said cover having extending therethrough a plurality of spaced apart threaded openings terminating between the curved ends of said rings; a continuous mass of plastic sealant filling the space between said rings, said cover and the bottom of said groove; and a plurality of screws threaded into said threaded openings in said cover, said screws being removable by an operator located outside the container.

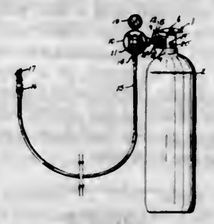
2,750,070
KEYS FOR CANNING TINS
Philip A. Foley, Kittery, Maine
Application October 26, 1954, Serial No. 464,810
10 Claims. (Cl. 220—52)

1. A key for removing a tear strip from a can comprising a strand of stiff wire bent on itself to form a handle at one end, and flattened at the other end; a flat bendable strip apposed to the flattened end of the key, whereby the ends of the strip can be bent up to define a tear-strip



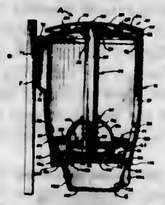
guide therebetween; and a tear-strip receiving slot in the flattened end of the key and the apposed guide strip.

2,750,071
PORTABLE TIRE INFLATING APPARATUS
David P. Ritchie, Prairie Village, Kans.
Application December 8, 1953, Serial No. 396,950
2 Claims. (Cl. 222—3)



1. A portable pressure tank capable of containing liquid carbon dioxide of approximately 20 pounds by liquid weight, said tank having a valve attached to one end including safety pop-off means, means for operating said valve, a pressure regulating valve, means connecting the pressure regulating valve to said first named valve, said means including an internally threaded connection slidably mounted on tubular connection to said pressure regulating valve and means on said tubular connection and said threaded connection for sealing said connections together, a gauge connected to said last named valve, and a hose having one end connected to said pressure regulating valve, said hose having means at its other end for connection to an air driven tool for operating the same.

2,750,072
DEVICES FOR CONTAINING AND DISPENSING GRANULAR, POWDERED OR CRYSTALLINE MATERIAL
Lee Norman Duncan, Oklahoma City, Okla.; Edith Baldwin Duncan, executrix of said Lee Norman Duncan, deceased; by decree of distribution to Edith Baldwin Duncan
Application January 25, 1951, Serial No. 207,710
14 Claims. (Cl. 222—42)



1. In a dispenser for material of the class described, a receptacle having a bottom wall provided with a discharge port, and a wall extending upwardly from the bottom wall; a false bottom within said receptacle, said false bottom having an area less than the area of said bottom wall, whereby a passageway is provided to said bottom wall; means securing said false bottom against rotation within said receptacle above said bottom wall and with

said false bottom directly over said port; pusher means below said false bottom to push material to said discharge port, including a plurality of spaced apart radially-extending pushers movable toward and away from said port and provided with downwardly-opening recesses, said false bottom including a downwardly-extending portion contacting one after another of said pushers as said pushers move under said downwardly extending portion; and operating means to cause operation of said pusher means.

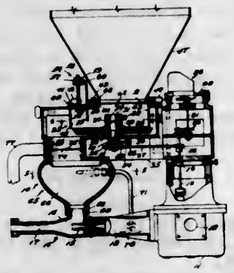
3. A dispenser according to claim 1 in which said operating means includes a rotatable disc provided with a plurality of equally spaced-apart finger tip-receiving openings, arranged in a circle about the peripheral portion of said disc, said openings being disposed directly over and spaced from the spaces between adjacent pushers and a removable indicia-bearing member below said rotatable element and normally closing said receptacle, and with said indicia-bearing member provided with spaced-apart units of indicia, arranged with a unit below each of said openings exclusive of an area below one opening, and a finger stop carried by said indicia-bearing member and disposed in the path of travel of a finger with the tip within any one of said openings and with said stop positioned closely outwardly of but closely adjacent said area, two of said pushers closing said discharge port when said one opening is above said area.

2,750,073

APPARATUS FOR PROPORTIONING DRY MATERIAL AND LIQUIDS

Paul A. Coffman, Jr., Warwick, R. I., assignor, by mesne assignments, to B-I-F Industries, Inc., a corporation of Rhode Island

Application September 17, 1952, Serial No. 310,101
7 Claims. (Cl. 222—57)



1. A machine for feeding a powder into a flow of liquid comprising a conduit for the liquid, a meter through which said flow of liquid passes for measuring the quantity of the said flow through said conduit, a powder feeding means for delivering powder therefrom, means for operatively connecting said powder feeding means and said meter for delivering the powder in a quantity proportional to the quantity of the flow of liquid, and means intersecting said conduit for receiving and conveying said powder into the said flow of liquid and means for reducing the pressure of the liquid at said intersection to draw said powder into the flow as delivered from said feeding means.

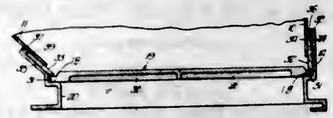
2,750,074

GUIDING MEANS FOR SLIDING CLOSURE OF HOPPER DISCHARGE OPENING

George B. Dorey, Westmount, Quebec, Canada, assignor to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois

Application December 26, 1952, Serial No. 328,027
2 Claims. (Cl. 222—80)

1. In a load containing hopper having a discharge opening and a sliding gate for closing the opening, the gate having guiding wall portions along its sides the upper surfaces of which are below the upper surface of said gate, a frame bordering the hopper having ledges at each side thereof for supporting the gate in its sliding movement and upstanding walls extending from said ledges and overlying the hopper walls, and means for restraining the gate against upward movement and facilitating opening thereof when the same is held against opening by compacted lading including chisel like guiding members sandwiched between the upstanding side walls of the frame



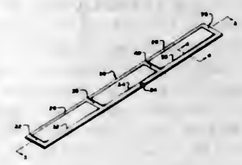
and the hopper walls overlaid by the upstanding walls, said chisel like guiding members being relatively narrow and interposed in and coextensive with the respective upstanding walls and overlying limited portions of said guiding wall portions of the gate when it is closed which constitute a small portion of the full length thereof and extending only over said guiding wall portions and below said upper surface of the gate, said chisel like guiding members having narrow edge portions to cut through compacted lading when the gate is moved to open position.

2,750,075

COLLAPSIBLE LIQUID-CARRYING CONTAINER

Edwin H. Land, Cambridge, and Otto E. Wolff, Sudbury, Mass., assignors to Polaroid Corporation, Cambridge, Mass., a corporation of Delaware

Application April 9, 1953, Serial No. 347,684
5 Claims. (Cl. 222—94)



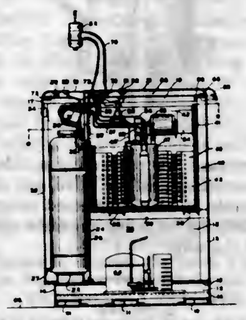
1. An elongated liquid-carrying container comprising a pair of opposed walls having an inner coating of a plastic and being closed at their ends and sides and sealed together at transverse intermediate regions to provide a plurality of separate liquid-containing chambers spaced lengthwise of said container, one of the side closures comprising opposed portions of the container walls which are bonded together in face-to-face relation by an adhesive material interlaid between the plastic-coated inner surfaces of said portions, said plastic having a greater affinity for itself than for said adhesive material, each end closure comprising a direct bond between the plastic-coated inner surfaces of said walls, each chamber being closed by part of the side closures of the container, at least said one side closure being weaker than the end closures whereby it is adapted to be opened by compression applied to the container to provide passages communicating with said chambers, the seals at said transverse intermediate regions extending between the inner edges of the side closures and being sufficiently narrow so that the liquid, when released from said chambers through said passages, is adapted to emerge in a thin continuous layer substantially over the overall length of said container.

2,750,076

BEVERAGE DISPENSING APPARATUS

Frank Welty and Raymond Welty, Youngstown, Ohio, assignors to Carbonic Dispenser, Inc., Canfield, Ohio, a corporation of Ohio

Application May 12, 1953, Serial No. 354,617
15 Claims. (Cl. 222—129.1)



1. In a self-contained beverage dispensing cabinet of the type having means to supply separate carbonated water and flavoring syrup components to a common dispensing valve the combination of a cabinet, a vertical dividing wall in said cabinet dividing the same into front and rear sections, means comprising a supporting platform in said front section, a retaining lip extending upwardly from said platform and defining with said dividing wall a container-receiving space, a plurality of generally flat-bottomed cylindrical containers for flavoring syrup positioned in side-by-side relation in said space, said lip being positioned forwardly of the front edge of said platform and defining therewith a recess for the reception of the forward edges of said containers upon tilting movement thereof, flexible conduit means connecting said containers and terminating on said vertical dividing wall, rigid conduit means positioned on said wall being available to connect said flexible conduit means to said valve, and flexible members connecting the upper portions of said flat-bottomed containers with said cabinet to limit the extent of outward movement of the upper portions of said flat-bottomed containers with respect to said cabinet, said retaining lip and dividing wall being adapted to substantially prevent movement of the lower portions of said flat-bottomed containers upon movement of the upper portions thereof outwardly of said cabinet, and said flat-bottomed containers sitting levelly on said platform above and in spaced relation to said recess whereby upon tilting movement said flat-bottomed containers are in a straight-line contact with said platform preventing rolling movement of said cylindrical containers.

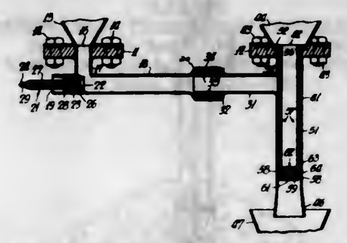
2,750,077

FILLING NOZZLE ATTACHMENT

Daniel Lurie, New York, N. Y., assignor to Joe Lowe Corporation, New York, N. Y., a corporation of Delaware

Application January 11, 1954, Serial No. 403,280
4 Claims. (Cl. 222—135)

1. A readily separable sanitary nozzle having a single open-top discharge tube for making variegated ice creams and the like which comprises means for attaching said nozzle to a source of supply for a basic substance and delivering said basic substance to a inlet intermediate the ends of said discharge tube, means mounted above said intermediate inlet for attaching said nozzle and discharge tube to a source of supply for a contrasting flavoring material, and a removable insert tube adapted to be mounted axially within the open-top of said discharge tube for receiving said flavoring material and conveying it to a discharge position beyond the inlet for said basic substance, said insert tube having a series of spaced radial openings whereby said flavoring material in said



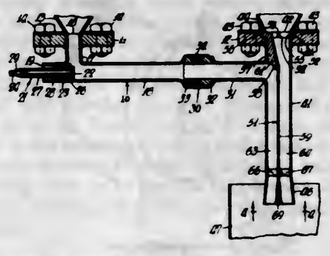
insert tube is distributed into the basic substance in said discharge tube in a series of streams of relatively small cross-sectional area as compared to the cross-sectional area of the composite stream.

2,750,078

FILLING NOZZLE HAVING REMOVABLE DIVIDER

Daniel Lurie, New York, N. Y., assignor to Joe Lowe Corporation, New York, N. Y., a corporation of Delaware

Application January 11, 1954, Serial No. 403,279
4 Claims. (Cl. 222—135)



4. A readily separable sanitary nozzle having a single open-top discharge tube for dispensing simultaneously under pressure contrasting ice creams and the like substances from different sources of supply into an individual cavity of a multi-cavity confectionery mold which comprises means for attaching said nozzle to a first source of supply and delivering the first substance to an inlet intermediate the ends of said discharge tube, means mounted above said intermediate inlet for attaching said nozzle and discharge tube to a second source of supply, and a ring mounted removably within the open-top of said discharge tube having means for preventing its rotation, said ring having a depending flange for closing off the open-top of said tube above the inlet for said first substance, said flange having a depending fin provided with a wedge shaped enlargement contiguous to its lower end for providing a restricted passageway at the exit end of said discharge tube.

2,750,079

DROP TUBE STRUCTURE

Ernest F. Trombley, Bridgeport, Conn.

Application May 10, 1955, Serial No. 507,329
8 Claims. (Cl. 222—148)

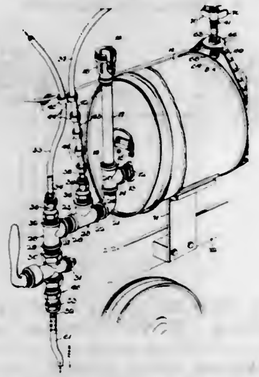
1. In a drop tube structure for the bulk loading of liquid under pressure, an elongated tubular member for vertical insertion in a truck or the like to be loaded having an upper inlet end and a lower outlet end, a deflector nozzle on said outlet end having laterally directed outlet openings, a downwardly directed annular valve seat above said openings, and a spring loaded valve member normally

pressed upwardly against said valve seat adapted to be moved downwardly through the force of pressure fed



liquid directed through said tube to a point below the upper ends of said openings.

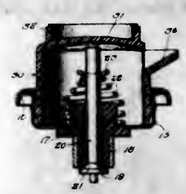
2,750,080
LIQUID DISCHARGE APPARATUS
James K. Blanchard and Joseph E. Wood, Wallace, N. C., assignors to Carter Insecticide & Chemical Co., Inc., Wallace, N. C., a corporation of North Carolina
Application January 8, 1954, Serial No. 402,915
6 Claims. (Cl. 222—155)



2. Apparatus for discharging liquid from a hermetically sealed tank at a constant rate of flow comprising a tubular conduit connected at one end to the tank in communication with the liquid contents thereof, a calibrated outlet orifice at the other end of the conduit, a stop cock in said conduit between the ends thereof, an air tube supported by the conduit exteriorly of the tank, said tube having one end thereof in a position above the top of the tank, and the other end communicating with the interior or said conduit at a point between the stop cock and the first-mentioned end of the conduit, and a vertical standpipe having one end connected to the conduit and the other end projecting to a point above the tank for refilling the tank with liquid, said standpipe having a removable closure cap on the top thereof.

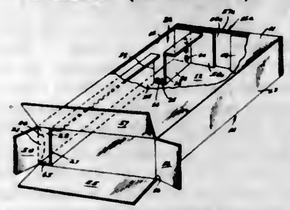
2,750,081
COVER MEMBER FOR DISPENSING VALVE STRUCTURE
Albert B. Campbell, Bensenville, Ill., assignor to Campbell Products Co., a corporation of Illinois
Application August 1, 1952, Serial No. 302,184
7 Claims. (Cl. 222—394)

2. A resilient removable cover for an aerosol container having a valve housing and a valve therein, said cover having a cylindrical skirt portion engageable with said housing and being readily detachable therefrom independently of said valve, said cover having a deformable closure membrane adjacent said valve when said cover is in position to actuate the valve when said closure membrane is depressed, and an upstanding wall standing above



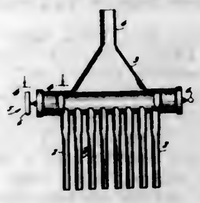
the closure membrane for preventing accidental depression of the membrane against the valve, said closure membrane being capable of being depressed independently of said wall but only by selective pressure applied within the boundary of the wall.

2,750,082
MEASURING AND DISPENSING CARTON
Michael H. Kowal, Clifton, N. J., assignor to Empire Box Corporation, Garfield, N. J., a corporation
Application September 24, 1951, Serial No. 247,944
3 Claims. (Cl. 222—455)



1. A blank for a dispensing carton comprising a plurality of wall panels hingedly joined, one such panel **14** being provided with a glue panel **65—66** hingedly connected thereto at a foldable edge **63**, which edge forms a corner of said carton when said carton is erected, a pair of baffle panels **25** and **30** each connected hingedly to said glue panel along staggered, parallel fold lines **67** and **33** so that said baffle panels are spaced from each other and in substantial parallelism when said carton is erected, said baffle panels being severed from each other and connected only to said last-mentioned glue panel when said carton is in non-erected condition, each of said baffle panels having respective glue flaps **72** and **76** foldably joined thereto, and engageable with a carton wall panel **11** adjacent said one panel **14** when said carton is erected.

2,750,083
MULTIPLE OUTLET ICE CREAM DISPENSER
Stanley Overland, Brooklyn, N. Y.
Application February 18, 1953, Serial No. 337,606
3 Claims. (Cl. 222—482)



1. A multi-outlet fluid dispenser adapted for use with a continuous freezer and for uniform flow of fluid in each outlet comprising a cylindrical header having an inlet

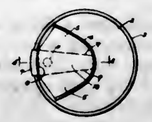
horn opening and a plurality of spaced-apart linearly disposed outlet openings opposed to said inlet opening, and a removably secured piston end closure comprising a compressible cylinder disposed between two fixed discs, a partially exteriorly threaded tube having an exterior smooth wall portion engaging said fixed discs and said compressible cylinder and being interiorly threaded throughout its tube length, a locking disc having a threaded aperture therethrough engaging the exterior threaded portion of said tube to compress said compressible cylinder to effect frictional locking engagement of said cylinder with the interior wall of said cylindrical header, and means having a piston disc secured thereto disposed in said header and movable over the opening of an adjacent exterior outlet opening in said header.

2,750,084
LIQUID AND SEMI-LIQUID DISPENSING CONTAINERS
James G. Moran, Burbank, Calif.
Application September 11, 1952, Serial No. 309,012
6 Claims. (Cl. 222—490)



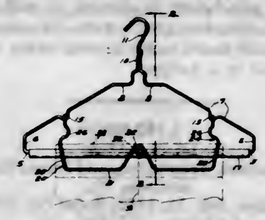
1. In a dispensing container for liquid and semi-liquid materials in which said container is provided with a threaded neck defining a port communicating with the contents of the container, a closure member comprising: a cap adapted to threadedly engage said neck; said cap having a chamber whose walls are common to the annular walls and head of said cap adapted to be placed in communication with said port when the cap is in one position; said cap positively closing off said port from the chamber when rotated on said neck to a second position; a portion of the walls of said chamber defining a dispensing orifice constructed to be normally closed and to open when subjected to pressure from within the chamber, the remaining portion of said walls of the chamber being formed to confine and shape the materials for easy egrees through said orifice.

2,750,085
CAN WITH POURING SPOUT
August R. Bode and Fred A. Tucker, Los Angeles, Calif.
Application January 7, 1952, Serial No. 265,282
9 Claims. (Cl. 222—528)



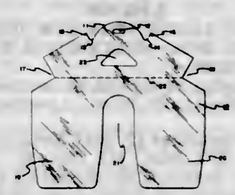
1. A can which comprises a substantially flat can top and a substantially flat flap attached to the top thereof, the periphery of said flap comprising an outer edge adjacent the periphery of the can top, and an inner edge adjacent the center of the can top, said outer edge of the flap having a straight central hinge line portion and a straight side portion on each side of the central hinge line portion, said flap being fastened to said can top only adjacent said straight central hinge line portion, and said flap being adapted to be lifted by its inner edge so as to fold along said central hinge line portion of its outer edge, and when so lifted, to be folded along straight lines extending from each end of said central hinge line portion of the outer edge to the inner edge of the flap, so as to form a pouring spout in which the entire side portions of the outer edge of said flap bear against the can top.

2,750,086
COMBINATION COAT AND PANTS HANGER
John Adolph Antal, Hollywood, Calif.
Application April 6, 1953, Serial No. 347,075
3 Claims. (Cl. 223—88)



1. A pants holding attachment adapted to be used with a clothes hanger of the type having a horizontal pants receiving run, a pair of diagonal arms, and suspending means disposed thereabove, said pants holding attachment comprising a member having a bottom edge and a pair of side edges extending upwardly at substantially a right angle from said bottom edge, the upper ends of said side edges being provided with means for pivotal attachment thereof to the diagonal arms of a hanger, the bottom edge of said member being provided with an upwardly extending notch portion between the ends thereof, said notch portion being adapted to accommodate the stitching of a pants cuff, the bottom edge of said member being of a width to fit within a pants cuff with the stitching of said cuff disposed within said notch, the sides of said member being of substantially the same length so as to dispose said bottom edge substantially parallel to the pants receiving run of a hanger when said attachment is secured to said hanger, the length of said sides being such as to dispose said bottom edge below said pants receiving run when said attachment it secured to a hanger.

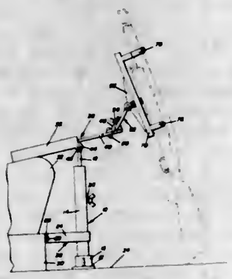
2,750,087
CLOTHES HANGER ATTACHMENT
John Adolph Antal, Los Angeles, Calif.
Continuation of application Serial No. 347,075, April 6, 1953. This application May 5, 1954, Serial No. 427,854
2 Claims. (Cl. 223—88)



1. A pants holding attachment adapted to be used with a clothes hanger of the type having a horizontal pants receiving run and suspending means disposed thereabove, said pants holding attachment comprising a member formed from a single piece of cardboard or the like, said member having a bottom edge and a pair of side edges extending upwardly at substantially a right angle from said bottom edge, said member having an upper portion and a lower portion, said portions being defined by a crease extending laterally across said member between said side edges and substantially parallel to said bottom edge, said upper portion having means for attachment thereof to a hanger, the bottom edge of said member being provided with an upwardly extending notch portion

between the ends thereof, said notch portion being adapted to accommodate the stitching of a pants cuff, the lower portion of said member adapted to be pivoted about said crease with respect to said upper portion, the bottom edge of said member being of a width to fit within a pants cuff with the stitching of said cuff disposed within said notch, the sides of said member being of substantially the same length so as to dispose said bottom edge substantially parallel to the pants receiving run of a hanger when said attachment is secured to said hanger, the length of said sides being such as to dispose said bottom edge below said pants receiving run when said attachment is secured to a hanger.

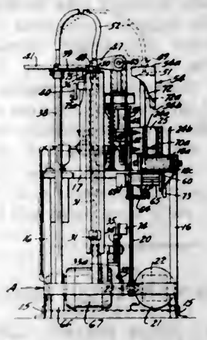
2,750,088
GUN RACK
Victor A. Agostini, Bennington, and James Ray Winters, Addison, Vt.
Application July 31, 1953, Serial No. 371,618
6 Claims. (Cl. 224—1)



1. A gun rack comprising a base adapted to be positioned on the floor of an automobile, a standard disposed on said base, said standard including an extensible upper section, a support member, said support member including a rear section adapted to rest upon an automobile and a forward section extensibly carried by said rear section and projecting from the forward end thereof, a pivot pin pivotally connecting the forward end of said support member to the upper free end of said extensible upper section, means on the latter section for supporting the upper portion of firearms.

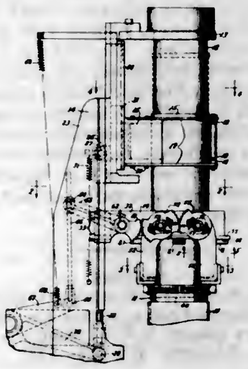
2,750,089
AUTOMATIC MACHINERY FOR DEPOSITING ARTICLES INTO SUCCESSIVELY MOVING CONTAINERS
Angelo A. Colantino, Springfield, Ill., assignor to Pillsbury Mills, Inc., Minneapolis, Minn., a corporation of Delaware
Application September 17, 1951, Serial No. 246,972
23 Claims. (Cl. 226—2)

3. Automatic apparatus for depositing an article into an open topped container, said apparatus being entirely responsive for completion of its operative cycle to two factors; first, the actual physical positioning of a container into article-receiving position, and second, the actual physical passage of an article into said container; said apparatus comprising means for moving a container into article-receiving position, stop means for holding said container in article-receiving position, a supply source of articles to be deposited in said packages, transfer mechanism for shifting an article from said supply source to deposit said article into a container in article-receiving position, a control system responsive for actuation to the actual physical positioning of a container in article-receiving position to actuate said transfer mechanism and carry an article from the supply source to the container and deposit said article therein, container ejecting mechanism for shifting the container out of article receiving position to permit the next successive container to move therein, and a control system for actuating said container eject-



ing mechanism with a sensing element entirely responsive to the actual physical passage of an article downwardly into the open top of said container in article receiving position.

2,750,090
CONTAINER TOP OPENING AND CLAMPING MECHANISM
Kenneth F. Newell, Longmeadow, Mass., assignor, by mesne assignments, to Continental Can Company, Inc., New York, N. Y., a corporation of New York
Application October 2, 1951, Serial No. 249,349
10 Claims. (Cl. 226—59)



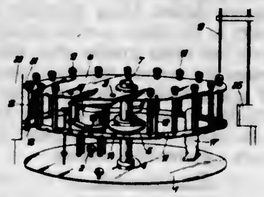
1. In a bag filling machine, a filling station, a conveyor having pockets for supporting a plurality of open bags therein, said conveyor being mounted for intermittent movement to position the bags successively at the filling station, a vertically reciprocable filling spout mounted at said station, a fixed support member extending horizontally into the path of movement of said filling spout and having an aperture therein for accommodating the filling spout, movable bag top expanding fingers mounted on said support member and extending radially into the aperture therein, said fingers being mounted for downward movement into a bag top positioned in a pocket of the conveyor when said pocket is positioned at said filling station to spread the mouth thereof upon movement of the lower end of the filling spout through said aperture in said support member, clamp members pivotally mounted on said support member and means operating said clamp members in timed relation to the movement of said filling spout to clamp therebetween the spread mouth of the bag.

2,750,091
RETRACTABLE FILLING VALVE OF THE LANCE TYPE
George E. Mattimoe, Burlingame, and Everett G. Stohn, San Francisco, Calif., assignors to T. R. Mantes, doing business as T. R. Mantes Company, San Francisco, Calif.
Application April 29, 1955, Serial No. 504,924
13 Claims. (Cl. 226—93)



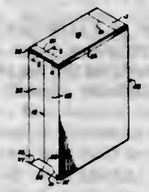
1. A filling valve for liquids, including in combination: a stationary housing having a vertical passage, with a closed upper end, said passage being divided into an upper air cylinder and a lower liquid compartment having a liquid inlet, said air cylinder having a pair of inlet-outlet means; a lance tube slidably mounted in said passage, said tube having liquid inlet means through an upper portion of its walls; a sleeve slidably mounted around said upper portion of said lance tube for opening and closing said inlet means; a closure valve adapted to open and close off the lower end of said lance tube; piston means rigidly secured to said closure valve and movable in said air cylinder and dividing said cylinder into first and second air chambers; and means normally urging the upper end of said sleeve away from said piston means and normally urging said lance tube away from said piston means.

2,750,092
APPARATUS FOR AUTOMATICALLY FILLING UNIFORM AND EXACT VOLUMES, IN PARTICULAR A FULLY AUTOMATIC COLLECTOR OF FRACTIONS
Wolfgang Grassmann, Regensburg, and Gottfried Deffner, Augsburg, Germany
Application May 25, 1953, Serial No. 357,768
Claims priority, application Germany May 27, 1952
15 Claims. (Cl. 226—96)



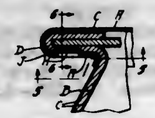
1. Apparatus for automatically filling equal volumes of liquid in a series of similar vessels which comprises a base, a carrier movably mounted on said base, means for supporting a series of said vessels spaced on said carrier, means for stepwise advancing said carrier, means for filling one of said vessels at a time with liquid, a photoelectric cell adjacent to one of said vessels, a switch operatively connected to said cell in a circuit including said advancing means, a light source adjacent to said one vessel and adapted to pass light therethrough, the cell, vessel and light source being so correlated that when the height of liquid in said one vessel reaches a predetermined point the light is bent by the surface of the liquid onto said cell, causing an electrical impulse through said switch to said advancing means, whereby said carrier is advanced sufficiently to locate another vessel in place of said one vessel.

2,750,093
DISPENSING CONTAINER
George Arlington Moore, New York, N. Y.
Application March 21, 1952, Serial No. 277,799
10 Claims. (Cl. 229—5.5)



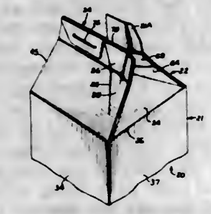
1. A container capable of holding liquids and being formed of cut and scored blanks of sheet materials of rigid and flexible characteristics, and said blanks being assembled together and folded on said score lines to provide four side walls arranged in opposing pairs and a closed end, said container comprising one pair of opposing rigid side walls being folded upwardly at right angles along two corner sides of an integral rigid end wall portion constituting an exterior wall portion of said closed end, the folded side walls each being provided with an upper extended foldable and rigid end closing panel, the other pair of opposing side walls being formed of longitudinal marginally opposed wall portions of the first folded pair of side walls, each of said marginal wall portions being rigid and provided with an upwardly extended foldable end margin thereof, and each of said wall portions being folded inwardly at right angles along the longitudinal corner edges of each corresponding first folded side wall so that the longitudinal end edges of each opposing pair of said other folded side wall portions meet in abutment substantially central of the wall formed that defines said other pair of opposing side walls, the interior surface of said integral end wall portion of the first folded pair of side walls being provided with a flatly disposed superimposed and adhered elongated aluminum flexible strip extending upwardly from two opposed end sides of the end wall to form an adhered interior lining over the entire surface of each of said other folded side walls and close said meeting longitudinal end edges in abutment, said end wall being also provided with a pair of opposed end side flanges being folded upwardly and inwardly and be disposed in adhered surface engagement with corresponding surface portions of said aluminum inner lining adjacent the end wall lined portion, each of the two opposed marginal ends of said aluminum flexible strip being non-adhered and extended upwardly of said upwardly extended margin of each said other rigid side wall that is lined by said strip so that the short rigid margin non-adhered may be folded inwardly together with the lower half of the aluminum flexible margin, and the upper half thereof be folded upwardly over the longitudinal end edge of the short folded margin, then outwardly and downwardly upon the upper face thereof, and thereby form a pair of inwardly opposed multiple layer closure wall seating ledges, each ledge having the aluminum upper layer reinforced by the interleaf rigid margin upon which to seat marginal sides of one upper extended rigid wall portion of the adjacent pair of side walls when being folded to close the open end of said container opposite to the aluminum inner lined end wall.

2,750,094
CONTAINER OVERCAP AND METHOD OF ATTACHING SAME WITHOUT ADHESIVE
Donald G. Magill, Great Neck, N. Y., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application July 3, 1951, Serial No. 234,939
7 Claims. (Cl. 229—5.6)



3. The combination of a container having adjacent its top end a laterally projecting ledge and an overcap of thin sheet material overlying the top end of the container, the marginal edge portions of said overcap extending downwardly over and around said container ledge and inwardly against the underside of said ledge, and a plurality of projections cut from said marginal edge portions of the overcap and embedded in the underside of said ledge, each of said projections having its inner end integral with the overcap and its outer embedded end extending toward the edge of said container ledge, whereby said overcap is locked in place on said container top end and is readily removed therefrom by pulling said overcap marginal edge and projections outwardly from said underside of the ledge.

2,750,095
DISPENSING CONTAINER WITH EXTENSIBLE POURING SPOUT
Carroll R. Alden, Detroit, Mich., assignor to Ex-Cell-O Corporation, Detroit, Mich., a corporation of Michigan
Application January 13, 1953, Serial No. 331,021
1 Claim. (Cl. 229—17)



A gable top container of paperboard or the like and comprising, in combination, a tubular body having a bottom closure thereon, a pair of opposed roof panels inclined toward each other and overlying said body, a pair of opposed triangular end panels in-folded between said roof panels from the opposite gable ends formed by the latter, two pairs of triangular fold-back panels each pair of which is integral with a respective one of said in-folded triangular end panels along fold lines which are substantially in contact with said roof panels, said fold-back panels being folded against the undersides of said roof panels, a plurality of inner and outer rib panels surmounting said roof panels and said triangular end and fold-back panels, said rib panels defining a central laminar top rib divided longitudinally into a fixed portion and a movable portion, a sanitarily protected extensible pouring spout housed in collapsed condition within said container and defined in part by one of said triangular end panels and an adjacent pair of said fold-back panels and an adjacent pair of said inner rib panels, said spout also being defined by adjacent portions of said roof panels and outer rib panels, said spout having a dead center position representing a transition between its collapsed condition and its extended condition, and means for positively snapping said pouring spout with a toggle-like action in either direction through said dead center position between its collapsed condition and its extended condition, said means comprising preformed angular score lines in said roof panels flanking said spout and extending from terminal points adjacent the lower outer edges of said roof panels to a common terminal point at the top center of said rib, said angular score lines being situated outwardly in spaced relation to said fold lines joining said adjacent pair of said fold-back panels and said one of said triangular end panels so as to lie in a common plane as said spout is opened and substantially as it passes through dead center, the common plane being situated substantially outboard from the plane initially occupied by said one triangular end panel, each said angular score line in said common plane defining a fulcrum disposed in pivotal engagement with an associated one of said fold-back panels of said spout.

2,750,096
PAPER CONTAINERS
Ethel A. Misch, Port Clinton, Ohio
Application May 20, 1954, Serial No. 431,085
2 Claims. (Cl. 229—17)



1. A leak-proof container constructed from a foldable blank, said blank comprising a sheet of paper divided into panels by scorings, said panels adapted to be folded into angular relationship to each other and adhesively secured into sealed tubular form, said tubular form including an elongated outer tear strip formed in and extending through a major portion of the vertical length of a side wall thereof, said outer tear strip being permanently connected to said wall along an uncut portion forming a hinge therefore, a separate insert sheet underlying said tear strip, said insert having an elongated aperture underlying and extending parallel to said tear strip through a major portion of its length, the elongated aperture in said insert being sealed with a transparent film interposed between said insert and the inner side of said wall, said underlying insert being of substantially greater area than both said tear strip and aperture and being adhesively secured to the inner wall surface of the tubular form continuously around the said tear strip and aperture, said insert provided with an incised access tab hingedly connected thereto along an uncut edge underlying and parallel to the hinge portion of said outer tear strip, said access tab being smaller than said outer tear strip and permanently secured thereto to permit opening and closing of said container, the outer tear strip being otherwise unattached to said insert and said aperture closing film, and the inner wall portions, said tubular form being coated with a plastic-like coating.

2,750,097
CONTAINERS AND METHOD OF MAKING SAME
George Arlington Moore, New York, N. Y.
Application July 16, 1952, Serial No. 299,140
11 Claims. (Cl. 229—23)

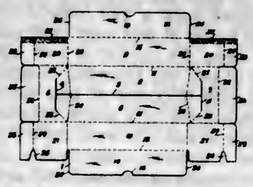
8. In a container of foldable paperboard sheet material having four side walls arranged in opposing pairs to provide a body portion of substantially horizontal rectangular cross section and a flat two-ply closed end, each ply being integral with each of two pair of alternate side walls, which walls are contiguously joined together at their vertical

edges by overlapping flanges, said closed end comprising the inner wall layer having an elongated U-shape semi-detachable section cut through said wall substantially central of parallel corner edges thereof, the outer wall layer of said end overlapping said inner wall layer in selective adhesive surface bonded engagements and having a pair of perforate lines spaced outwardly of the border lines of said semi-detachable cut section, which cut section is securely bonded with said overlapping wall to form a two-ply openable and recloasable end closure, said outer wall having two opposed integral side flanges transverse of said perforate lines and being folded downwardly transverse of the corner edges thereof and in adhesive contact with exterior surface portions of each wall of a pair of alternate side walls, one flange of said pair having a pair of substantially transverse continuous lines cut therein to define two opposed outer and upper end bonded



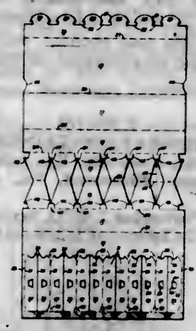
portions thereof including lower detachable corresponding portions adapted to be separated from said upper portions by said cut lines, which lines are each arranged with horizontal slit edges extended inwardly of the end side edges of the flange and being further extended upwardly and outwardly to join substantially with terminal ends of each of said perforated lines in said outer wall substantially at the folded corner end junction of said flange with said top layer, said outer opposed lower detachable portions of the flange being overlapped by yieldable inner opposed portions of a pair of overlapping flanges, said yieldable flange portions being adapted to prevent disengagements of said edges defining said upper and lower end portions of the flange having said lines cut therein except by manual manipulation of said flange to open the closure upon separating said cut lines and severing said perforated lines.

2,750,098
BOXES OR CARTONS
David Levkoff, Great Neck, N. Y., assignor of one-fourth to Evelyn S. Levkoff, one-fourth to Henry S. Levkoff, and one-fourth to Edith L. Sennet, Great Neck, N. Y.
Application August 12, 1953, Serial No. 373,776
2 Claims. (Cl. 229—27)



1. A carton of the character described comprising, a box body having a bottom, side walls, and inner and outer end walls, the bottom being composed of two separate sections each having a flap portion folded to cause it to be directed within the interior of the box body, said flap portions cooperating in the formation of a two-ply central, longitudinally-extending partition disposed within the box body, the outer end walls each consisting of lateral panel extensions of the sections of the bottom, said panel extensions for each outer end wall being overlapped and adhesively secured together, the inner end walls consisting of lateral extensions of the side walls, each inner wall having a downturned locking flap directed into the interior of the box body, the ends of the partition engaging respectively against the locking flaps to thereby hold said flaps in their downwardly-directed locking positions, the carton being collapsible to flattened condition by removal of the locking flaps from behind the ends of the partition, the flap portions forming said partition being foldable downwardly to thereby be flatly against the sections of the bottom when the carton is in a collapsed condition.

2,750,099
CELLULAR CARTON
Robert P. Bemiss, Burlingame, Calif., assignor of one-fourth each to Albert M. Austin, Wilton, and Walton D. Lynch, New Haven, Conn., and William E. Jones
Application April 5, 1951, Serial No. 219,424
8 Claims. (Cl. 229—28)



1. A cellular carton for a plurality of articles, particularly eggs, arranged in two rows, the carton consisting of foldable sheet material creased along fold lines setting apart the several constituent parts of the carton, the carton comprising, a pair of outer side wall panels; a pair of center panels lying back-to-back and forming a two-ply partition between the side wall panels; a pair of bottom panels articulated to said side wall panels and integral with said center panels along crease lines; and a cellular top structure dividing the space to either side of the center panels into individual article receiving cells, said top structure comprising webs articulated to said side wall panels and extending at substantially right angles to the side wall panels from one side wall panel to the other and transverse to, and across, said center panels, the endmost webs being of single ply thickness, the intermediate webs being of double ply thickness and forming an inverted V in cross section, said webs having internal apertures therein substantially in line with said two-ply partition, said two-ply partition having notches extending into it from its top edge through which notches the said intermediate webs extend, said notches terminating in protrusions extending into, and engaging, said apertures in the webs; and tabs on, and integral with, said bottom panels, said webs lying substantially in the same plane as the bottom panels and extending beyond the crease line between the bottom panels and the center panels, said tabs having side edges engaging in the set-up carton the surface of said intermediate webs in a sense to spread the intermediate webs apart.

2,750,100
CONTAINER
Bernard Greisman, New York, N. Y.
Application August 25, 1953, Serial No. 376,449
3 Claims. (Cl. 229—31)

1. Container construction comprising: a base; a front wall and a rear wall foldably connected to said base; an

end wall foldably connected to said base; said container having an opening between said base and said end wall; a pair of gusset portions interconnecting said end wall with said front and rear walls respectively; said container having a pair of elongated orifices disposed between front and rear walls and said gusset portions; a pair of locking tabs extending from said gusset portions; said



locking tabs each having a projection at a corner thereof, and a locking tip in spaced relationship with respect to said projection at a second corner thereof; said gusset portions being inwardly foldable toward said base to elevate said end wall; said locking tabs being downwardly foldable in lapped interrelation, the projections being insertible into said opening, and the locking tips being insertible into said elongated orifices.

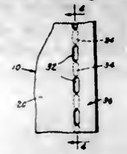
2,750,101
REWRAP CONTAINERS
Raymond E. Jacke, Louisville, Ky., assignor to Reynolds Metals Company, Richmond, Va., a corporation of Delaware
Application November 7, 1952, Serial No. 319,245
2 Claims. (Cl. 229—51)



2. A normally flat topped carton having a front face panel, a back face panel, and side panels, one of the said face panels carrying a side sealing lip, at least one of the said side panels carrying a foldable extension providing an inner closure, each of said face panels carrying a wedge-shaped closure folded down upon the inner closure and providing therewith a multi-ply top closure having a generally triangular weaker inner closure area at each side thereof, each of said side panels and extensions thereof being longitudinally scored along a central line, and each of said extensions having diagonal score lines thereon, to provide weakened inward action gusset folds, whereby pressure collapse of said gusset folds will project said wedge-shaped closures upwardly as a peak, said carton being provided with a continuous weakened tear-line extending laterally around the walls thereof below the said wedge-shaped closures, and said carton being further provided with two continuous weakened parallel collapse lines extending laterally around the walls thereof below said tear-line, each of said side panels having diagonal score lines extending between said collapse lines and meeting at a point on the uppermost collapse line, whereby said peak may be torn away at said tear-line, and said panels may then be brought together into a gable formation having two upwardly extending face-to-face sealing lips, for the purpose of re-sealing.

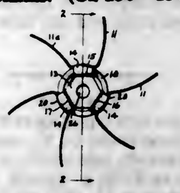
2,750,102
ENVELOPE
Truman D. Thurman, Memphis, Tenn.
Application December 4, 1953, Serial No. 396,202
1 Claim. (Cl. 229—85)

In an envelope, a front panel, a flap, and means to facilitate the opening of the envelope for the extraction of the contents thereof, comprising a row of indentations in the flap, said row extending in spaced parallel relation to one edge of the front panel and the indentations of the row being elongated in the direction of the length of the row, each indentation having an intermediate portion formed with straight sides parallel to one another and to the longitudinal center line of the indentation, each indentation having end portions progressively reduced in width in the direction of the extremities of the indentation, and a second row of indentations in the front panel adjacent said one edge thereof, the rows of indentations registering when the indented flap overlies the front panel, the indentations of the front panel being formed identi-



cally to those of the flap, adjacent ends of adjacent indentations of the front panel being spaced apart a distance slightly greater than the overall length of each indentation of the flap and the indentations of the flap and front panel being staggered longitudinally of the registering rows, each indentation of the flap lying wholly in the space between adjacent indentations of the front panel, said reduction in width of the indentations of the flap and front panel forming means guiding to the longitudinal center line of the rows a tear line following the registering rows, as said tear line arrives at the end of one indentation of one row and proceeds into the adjacent indentation of the other row.

2,750,103
BLOWER WHEEL
Harry D. Franke, Columbus, Ind., assignor to Vernco Corporation, Columbus, Ind., a corporation of Indiana
Application April 27, 1953, Serial No. 351,429
4 Claims. (Cl. 230—134)

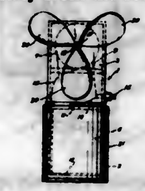


1. A blower wheel assembly comprising a tubular hub member open at each end; a pair of fan blades having inner, hub directed ends; a web integral with and interconnecting said blades at said inner ends and lying freely longitudinally along the outside of said hub member; a tab at each end of said web extending integrally therefrom across the end wall thickness of said hub member and back there within, lying by a length longitudinally along the inside surface of said hub wall; and a plug within said hub member of a diameter compressibly urging and retaining said tab lengths against said wall surface, one tab end opposing the other tab end, said tabs intervening throughout their lengths between said hub surface and said plug, and said plug being longitudinally retained in said plug member solely by said tab compressive engagement.

2,750,104
ELECTRIC BATTERY-OPERATED HAND FANS
Costas Scaroulis, New York, N. Y.
Application July 18, 1955, Serial No. 522,591
2 Claims. (Cl. 230—259)

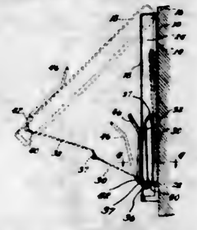
1. An electric battery operated hand fan comprising a housing having a reduced upper portion and an increased

main portion, a battery mounted within the main portion of said housing, an electric motor mounted within the upper portion of said housing, wires connecting the terminals of said battery to the terminals of said electric motor being located within said housing, means for temporarily disconnecting one of said wires from said motor being mounted on said housing, a shaft driven by said electric motor extending laterally from the reduced upper portion



of said housing, flexible fan blades radially mounted on said shaft, and a cover member fitting snugly over the main portion of said housing and being slid over the same during the operation of said electric motor, said cover member being constructed and arranged for being placed over the upper portion of said housing while the device is not in operation, thereby said flexible fan blades being bent so as to fit into a free space between said cover member and the upper portion of said housing.

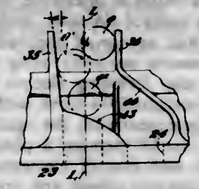
2,750,105
EXPANDIBLE MAIL RECEPTACLE
Roy R. Wixom, Glenview, Ill.
Application December 27, 1952, Serial No. 328,165
2 Claims. (Cl. 232—19)



1. A collapsible mail receptacle comprising a support, a cover hinged to said support for relative pivotal movement, a mail supporting extensible member hinged to said support and said cover and defining therewith an expandible mail receiving pocket, said extensible member comprising inner and outer members arranged, when said receptacle is in its collapsed condition, in overlapping relationship between said cover and said support, said inner and outer members being hinged together at their upper ends and being hinged at their lower ends to said support and said cover, respectively, and torsion spring means mounted at one of said hinges and urging said receptacle into its collapsed condition wherein said pocket is adapted to hold mail between said support and said inner member.

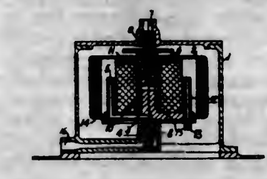
2,750,106
FARE COLLECTION APPARATUS
Alexander M. Gordon, Cranston, and Harry B. Miller, Warwick, R. I., assignors to Max L. Grant, Providence, R. I.
Application March 21, 1951, Serial No. 216,704
8 Claims. (Cl. 232—44)

1. In coin-diverting means of the class described, means defining a chamber having spaced, substantially vertical walls and having a floor provided with spaced discharge wells, both wells being at all times in free communication with said chamber to receive coins from the latter, guide means defining a downwardly inclined coin path, wider than the diameter of the coin, along which coins may slide downwardly into the upper part of said chamber, said coin path terminating adjacent to



one of said walls of the chamber, the center line of said path being in a plane intermediate the axes of the discharge wells but passing through one of said wells.

2,750,107
CENTRIFUGAL OIL CLEANER, INCLUDING A CYLINDRICAL FILTER
David More, Scotstoun, Glasgow, Scotland, assignor, by mesne assignments, to The Glacier Metal Company Limited, Alperton, Wembley, England, a corporation of Great Britain
Application March 4, 1953, Serial No. 340,252
Claims priority, application Great Britain October 2, 1952
4 Claims. (Cl. 233—2)

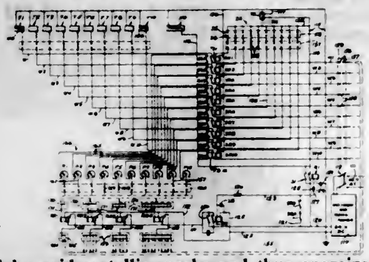


1. An oil cleaner comprising a rotatable drum, an upright spindle extending axially through the drum and to which the drum is fixed for rotation therewith on an upright axis, oil inlet pipes in the drum parallel to the spindle and radially spaced therefrom and from the periphery of the drum, an oil inlet passageway in the lower portion of the spindle communicating with said oil inlet pipes for the delivery of oil to be cleaned to the interior of said drum, said oil inlet pipes terminating with open ends in the upper portion of the drum, an outlet passageway for clean oil in the upper portion of said spindle and opening into the drum above the oil inlet passageway in the spindle, a cylindrical filtering element surrounding the spindle arranged to filter oil flowing to the opening of the outlet passageway for clean oil, and means for rotating said drum, whereby the oil to be cleaned and delivered through said pipes into the upper portion of the drum is subjected to the centrifugal action produced by the rotation of the drum for the separation of dirt, which accumulates on the inner periphery of the drum, and oil flowing to the opening from the drum to the outlet passageway in the upper portion of the spindle is passed through said cylindrical filtering element.

2,750,108
ELECTRICAL VOTE COUNTING MACHINE
Hiram R. Keith, Ventura, Calif.
Application October 12, 1953, Serial No. 385,561
18 Claims. (Cl. 235—56)

11. An electrical counting machine for counting the individual votes denoted by metallic marks placed upon the vote squares of a ballot by a voter and for rejecting all such marked votes cast in excess of a permissible maximum number for a particular office, comprising: a plurality of electrically actuable counter devices, each corresponding to a square of the ballot; an electrical counter circuit for each of said devices; a normally open

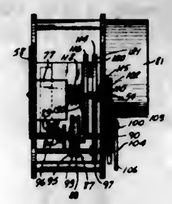
switch in each counter circuit, certain of said counter circuits being grouped at a point between a power source and said counter switches; a detector unit having a guideway into which a ballot is insertable, and a plurality of pairs of movable contact elements, each pair being registrable with a vote square of the ballot inserted into the unit, said elements normally being spaced from the ballot, said unit also including electric actuating means operative, when energized, to move each pair of contact elements into engagement with the squares of the ballot and the metallic marks thereon; a plurality of detector circuits in which said contact elements are connected; a relay in each detector circuit and operable, when activated, to close a said counter switch associated therewith; a power line to supply electric current to said detector circuits, to said detector actuating means and to all of said grouped counter circuits; a reject relay switch interposed in said power line and normally closed to allow current flow to the counter switches of all of said grouped counter circuits; a normally open main switch means in said power line, closing of said switch means allowing current flow to the above-referred to circuits, and through said contact elements, by way of said metallic marks, so as to activate each detector circuit so



closed by said metallic marks and thus energize the relays of said closed detector circuits to close the counter switches associated therewith; and control circuit means for controlling the opening and closing of said reject relay, said control circuit means including a plurality of control circuits, one for each detector circuit, each control circuit having a normally open control switch actuable by a said detector relay and having one side connected to said power line and the other side connected to an end of the winding of a potentiometer, the rotors of the potentiometers of the control circuits corresponding to the grouped counter circuits being connected to the winding of the reject relay controlling current flow through said grouped counter circuits, said potentiometers being operative in response to energization of a predetermined number of said detector relays to limit flow of electric current to said reject relay to a rate insufficient to actuate the same, thereby allowing current flow through the counter circuits corresponding to the marked vote squares, said potentiometers also being operative in response to energization of a number of said detector relays in excess of said predetermined number to allow flow of current of sufficient magnitude to actuate said reject relay so as to open all of said counter circuits of said group of counter circuits.

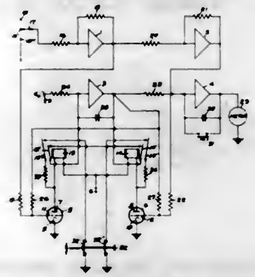
2,750,109
APPARATUS FOR INTEGRATING A VARIABLE AGAINST TIME
John O. Lewis, Woodside, N. Y., assignor, by direct and mesne assignments, to Flowflax Corporation, New York, N. Y., a corporation of New York
Application August 25, 1950, Serial No. 181,516
6 Claims. (Cl. 235—61)

1. A flow meter comprising a uinform speed motor that serves as a clock for the meter, a motion transmitting mechanism driven by the motor, a counter, intermittently operating elements in the motion transmitting connections for successively driving and operatively disconnecting the counter from the motion transmitting connections, two cam means driven by the motor including one cam means that makes the intermittently operating elements effective to transmit motion, and a second cam means that makes



the intermittently operated elements operatively disconnect the counter from said connections, at least part of one of the cam means being shiftable into different phase angle relations with respect to the other cam means, and means operated by a flow responsive element for maintaining the shiftable part of the cam means in a position which is dependent upon the existing rate of flow.

2,750,110
AUTOMATIC COMPUTER
Henry G. Och, Short Hills, N. J., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Army
Application July 16, 1952, Serial No. 299,078
7 Claims. (Cl. 235—61)

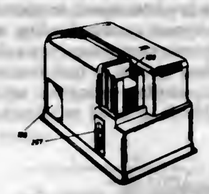


1. A computer circuit adapted to determine the root mean square deviation from a desired mean comprising first electronic integrating means, means to apply a constant voltage to the said first integrating means, second electronic integrating means connected to the output of said first integrating means, electronic isolating means connected to receive signals to be measured, electronic sign reversing means connected to the output of said isolating means, first electronic control means connected to receive the output of said isolating means, second electronic control means connected to receive the output of said sign reversing means, said first and said second control means connected to the said first integrating means to permit integration by said first integrating means and said second integrating means for a time proportional to the value of the said signal to be measured, said second integrating means adapted to accumulate successive squares of the said signals.

2,750,111
MULTIPLYING MACHINES
Michael Maul, Schwabach, near Nuruberg, Germany
Application February 20, 1953, Serial No. 338,070
Claims priority, application Germany March 4, 1952
21 Claims. (Cl. 235—61.6)

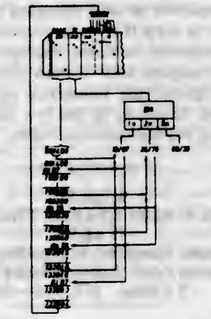
1. In a machine for multiplying two decimal digits, each of which is represented in the machine by retaining

means according to a predetermined code in combinational component values the total of which amounts to the value of each respective digit, in combination, a unitary sub-product device adapted to multiply any two components in said retaining means by each other to form an individual sub-product, means for controlling said



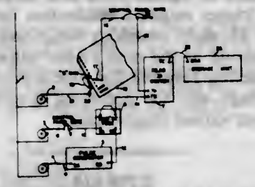
sub-product device for the successive individual multiplication of each component of the multiplier digit by all components of the multiplicand digit through said sub-product device by entering different components thereinto, and sub-product accumulating means in which said sub-products are entered successively as they are formed.

2,750,112
DIVIDING MACHINES
Max Pfeiffer, Nuraberg, Germany, assignor to Michael Maul, Schwabach, Bavaria, Germany
Application September 1, 1953, Serial No. 377,899
Claims priority, application Germany September 11, 1952
7 Claims. (Cl. 235—61.7)



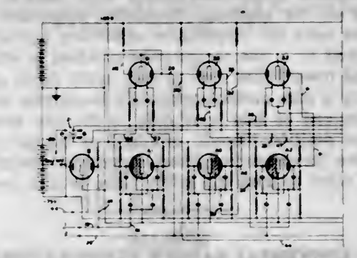
1. In a calculating machine, an accumulator settable to represent a dividend, a storing device settable to represent the single as well as multiples of the divisor, a device for comparing the setting of said divisor storing device with the setting of said dividend representing accumulator to determine the single or multiple of the divisor being below the setting of the dividend accumulator and being closest to this setting, said comparing device comparing all digits of the single of the divisor with the dividend and comparing the highest digits of the multiples of the divisor with the dividend, column shifting devices for shifting the columns of the divisor or its multiples respectively with regard to the dividend, means for subtracting the single of the divisor or a multiple of the latter from said accumulator, said comparing device controlling successively subtraction of the single of or multiples of the divisor coming closest to the dividend accumulator setting until the setting of the dividend accumulator has become lower than the divisor and causing column shifting as soon as said lowering has taken place, and a quotient receiving accumulator under the control of said comparing device adapted to indicate the number of subtractions of said divisor from said dividend.

2,750,113
READ-IN CIRCUIT
John F. Coleman, Poughkeepsie, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application April 6, 1953, Serial No. 346,976
14 Claims. (Cl. 235—61.11)



10. A read-in circuit for use with a record controlled accounting machine comprising: a pulse generator for delivering a plurality of timed bursts of pulses each burst containing a predetermined number of random pulses, and each burst being initiated at a predetermined machine time, said pulse generator including a first electronic trigger, a second electronic trigger, an electronic switch, a first counter, and a second counter, means coupling said first electronic trigger, said second electronic trigger, said electronic switch, said first counter and said second counter respectively in the afore-recited order, said second counter having an output terminal, means for coupling said output terminal to said second trigger, means for setting preselected different counts in said second counter at predetermined machine times, means for switching said first trigger to its "on" position and thereby initiating a burst of pulses; a master electronic trigger, means for controlling said master trigger, and a second electronic switch controlled by said master trigger; record reading means; sign storage means including a sign storage trigger, a third electronic switch and means coupling said third switch respectively to said master trigger, said sign storage trigger and said record reading means; additional electronic switch means jointly controlled by said second electronic switch and said record reading means; factor storage means coupled to said additional electronic switch means; and electronic reset means including a "positive or" switch, a power switch, a power unit, and means interconnecting said "positive or" switch with said master trigger and, respectively, with said power switch and said power unit.

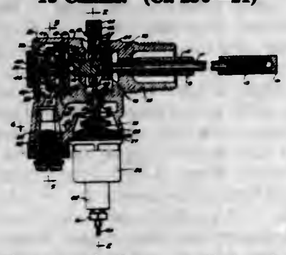
2,750,114
REVERSIBLE ACCUMULATOR
Loring P. Crosman, Darien, Conn., assignor to Sperry Rand Corporation, a corporation of Delaware
Application September 21, 1949, Serial No. 116,991
8 Claims. (Cl. 235—92)



3. A reversible accumulator for accumulating digit values by addition or subtraction comprising, a series of electronic trigger stages which are actuated to denote an assigned digit value each of said trigger stages having at least two stable states and having an output lead manifesting its state, a corresponding series of switching stages each containing an addition triode and a subtrac-

tion triode, the control electrodes of said triodes being operatively coupled with the output lead of the corresponding trigger stage, a control circuit including a direct current source of potential which biases the control electrodes of the switching stages and selectively conditions the switching stages to deliver an output signal in response to signals from said output leads of corresponding trigger stages, a connection between the addition anode of each switching stage and the actuating control electrode of the next higher valued trigger stage, and a connection between the subtraction anode of each switching stage and the actuating control electrode of the next lower valued trigger stage.

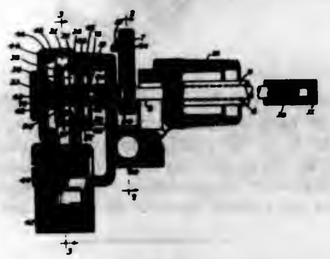
2,750,115
UNIVERSAL WATER HEATER CONTROL
George P. Greenmyer, Monrovia, Calif., assignor to General Controls Co., Glendale, Calif., a corporation of California
Application December 16, 1950, Serial No. 201,082
15 Claims. (Cl. 236—21)



2. In a thermostatically controlled valve associated with a main burner and a pilot burner and comprising a casing, a thermostat including threadedly adjustably connected parts the adjustment of which determines a selected temperature which the thermostat is to function to maintain, a thermostatic valve in said casing for controlling flow of fuel therethrough to the main burner and operatively connected with the thermostat to be opened and closed in response to temperature change, snap-action mechanism interposed between the thermostat and said thermostatic valve to open and close the valve abruptly upon a predetermined temperature change, said casing having a bypass passage leading to the pilot burner to supply fuel thereto continuously, a safety valve adapted to shut off the flow of fuel to both burners and having an operating stem, a closing spring for said safety valve, an armature movable in a fixed relationship to said safety valve, a magnet to attract said armature having thermo-electric means for energization thereof responsive to the heat of the flame of the pilot burner, and an elongated temperature setting lever fixed at one end to one of the aforesaid threadedly connected parts to turn the same for temperature adjustment and adapted to be turned to a low temperature position in which it is directed toward said stem of said safety valve, said lever carrying a part movable manually lengthwise relative to the free end of said lever only in the low temperature extreme position thereof, arranged to engage said stem and give corresponding lineal movement directly to the safety valve to open the safety valve in such movement.

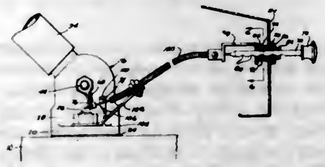
2,750,116
UNIVERSAL SAFETY TEMPERATURE CONTROL UNIT
George P. Greenmyer, Monrovia, Calif., assignor to General Controls Co., Glendale, Calif., a corporation of California
Application November 4, 1950, Serial No. 194,111
4 Claims. (Cl. 236—21)

1. In a thermostatically controlled valve associated with a main burner and a pilot burner and comprising a casing, a thermostat including a threaded temperature adjustment element, a thermostatic valve in said casing for controlling flow of fuel therethrough to the main burner and operatively connected with the thermostat to be opened and closed in response to temperature change, snap-action mechanism interposed between the thermostat and said thermostatic valve to open and close the valve abruptly upon a predetermined temperature change, said casing having a bypass passage leading to the pilot burner to supply fuel thereto continuously, a safety valve adapted to shut off the flow of fuel to both burners and having an operating stem, a closing spring for said safety valve, an armature movable in a fixed relationship to said safety



valve, a magnet to attract said armature having thermo-electric means for energization thereof responsive to the heat of the flame of the pilot burner, and a temperature setting lever which is swingable in a plane that includes the aforesaid stem, said lever swinging through an appreciable fraction of a turn in going from a high extreme temperature position to a low extreme temperature position and being connected to said threaded temperature adjustment element to turn it for temperature adjustment, said lever being disposed in close enough proximity to said valve stem to engage and depress the same to open the safety valve against the resistance of its closing spring when said lever is swung to the low temperature extreme position closing the thermostatic valve.

2,750,117
REMOTELY ADJUSTABLE THERMOSTATIC VALVE
Frank Pascolini, Wilkes-Barre, Pa.
Application April 2, 1954, Serial No. 420,571
1 Claim. (Cl. 236—34)



In a thermostat to be mounted in a liquid coolant flow passage of an internal combustion engine cooling system, a housing connected in said housing and adapted for the flow of coolant therethrough; a shaft journalled in the housing; thermally responsive valve means connected to the shaft for controlling the flow of coolant through the housing; and remotely controlled means for rotating the shaft and holding the same in selected positions to which it is rotated to adjustably preset the valve means, including a cable having at one end a motion translating connection to the shaft adapted to rotate the shaft on longitudinal movement of the cable, an operating handle on the other end of the cable, a sleeve having an axial bore in which said handle is longitudinally slidable, said sleeve having at one side thereof a transverse recess formed with a straight bottom surface extending chordally of the sleeve, said recess communicating with the bore of the sleeve, the sleeve having a circumferentially extending external groove the ends of which open into the respective ends of the recess, the cable having a longitudinal series of transverse notches selectively registrable with the recess on longitudinal movement of the handle within the sleeve, each notch having a straight bottom surface extending chordally of the handle, and a U-shaped spring clip having a straight bight extending within the registering notch and recess in engagement with the bottom surfaces thereof, to hold the sleeve and handle against relative longitudinal and relative rotary movement, said clip having curved legs tensioned to engage in diametrically opposite portions of said groove for releasably holding the bight in the registering notch and recess.

2,750,118
TRACK AND ROAD BED CONSTRUCTION
John A. Hastings, Great Neck, and Carl Weber, New York, N.Y., assignors, by mesne assignments, to The Transportation Development Corporation, New York, N. Y., a corporation of Delaware
Application February 10, 1953, Serial No. 336,142
4 Claims. (Cl. 238—25)



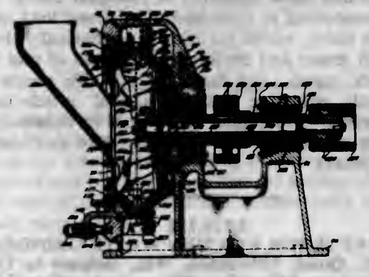
3. A railroad construction comprising a double row of spaced pier posts, a series of rigid track supporting sections each composed of two parallel concrete beams rigidly connected by transverse members, said sections each being supported at its corners by one of said pier posts jointly with a corner of an adjacent track section, said beams each being slightly spaced from adjacent beams and having metallic dowel means longitudinally thereof for engagement with dowel means of the adjacent beam, some of said dowel means being composed of relatively movable members to permit expansion and contraction of said beams, other dowels anchored in said pier posts and extending into the space between said beams in contact with the first named dowels, filler material protecting said dowels against exposure, rails laid on said beams, and means connecting said rails directly to said beams without the interposition of cross-ties.

2,750,119
RAIL ANCHORS
Charles Hayes Marvin, Lancaster, Calif., assignor, by mesne assignments, to Frank Freund, Long Beach, and Eugenie Marvin, Lancaster, Calif., jointly
Application January 8, 1951, Serial No. 204,972
23 Claims. (Cl. 238—327)



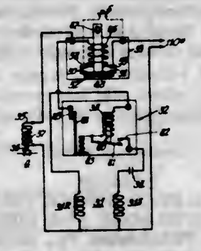
1. A rail anchor comprising a pair of members each formed at one end with spaced pairs of jaws, each pair of jaws of a member being formed to grippingly engage the upper and lower surfaces of one flange of a rail base at a location spaced in the direction of rail length from the other pair of jaws of the member, said members each having a portion extending beneath the rail, transversely thereof, in overlapping engagement with one another in planes substantially at right angles to the direction of rail length, the under rail portion of one of said members having an abutment against a tie and against the under-rail portion of the other member for transmission of thrust thereto, whereby upon thrusting against a tie the lower jaw of one pair of jaws and the upper jaw of the other pair of jaws at each end of the anchor are urged to closer gripping engagement with the rail base flanges.

2,750,120
IMPACT PROCESS AND APPARATUS FOR DISINTEGRATING MATERIALS
Ludwig Pallmann, Zweibruecken, Germany
Application March 2, 1953, Serial No. 339,565
22 Claims. (Cl. 241—27)



1. A device of the character described for dividing material into fine particles, comprising in combination: a pair of impact shells of concave facing configuration positioned face-to-face and coaxially mounted and forming an impact chamber of circular configuration, one of said shells having a central opening therein for feeding material into said chamber, said two shells having aligned rim portions forming converging wall means defining a circumferential discharge slot, said impact chamber having inner walls of broken configuration to provide numerous impact surfaces including impact surfaces near said slot; an impact rotor in said chamber comprising a plurality of radially extending blades having impact surfaces positioned adjacent said chamber impact surfaces to cause pieces of material to strike back and forth repeatedly between the rotor impact surfaces and the chamber impact surfaces; the blades of said impact rotor having tip portions providing clearance relative to said chamber restricted in the region of discharge slot to break the material into fine particles in said region; and power means to rotate at least one of said impact shells and said impact rotor for high speed relative rotation therebetween.

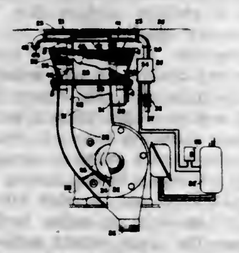
2,750,121
AUTOMATIC WASTE DISPOSAL APPARATUS
John H. Schmidt, Oak Park, Ill., assignor to General Electric Company, a corporation of New York
Application October 31, 1951, Serial No. 254,066
8 Claims. (Cl. 241—32.5)



7. In a waste disposal apparatus having a chamber for receiving a quantity of material to be comminuted, mechanical comminution means in said chamber, means for discharging comminuted material from said apparatus and an electric motor for driving said comminution and dis-

charge means: a control system comprising an electric circuit for energizing said motor, control switch means in said circuit, means biasing said switch means to open-circuit position, electromagnetic means for operating said control switch means to closed-circuit position, said electromagnetic means being disposed in said motor energizing circuit and drawing electrical energy therefrom in proportion to the current drawn by said motor, said electromagnetic means being effective at a level of electrical energy corresponding to a loaded condition of said motor to hold said switch means in closed-circuit condition and releasing said switch means for return to open-circuit position upon reduction in electrical energy to a level corresponding to a predetermined lesser load condition of the motor, means for initially mechanically closing said switch means and the energizing circuit of said electromagnetic means, and manually operable means for subsequently rendering said mechanical switch-closing means ineffective to retain said switch in closed-circuit position at the second said energy level of said electromagnetic means.

2,750,122
APPARATUS FOR KITCHEN WASTE GRINDERS
Gilbert W. Quast, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a corporation of Wisconsin
Application September 21, 1951, Serial No. 247,587
16 Claims. (Cl. 241—32.5)



5. In a waste disposal apparatus having a grinder; a chamber encasing said grinder, said chamber having a discharge portion connectible with a drain outlet and arranged to receive ground waste from said grinder; a hopper arranged to receive waste matter for disposal and pass the same to the grinder; a primary fluid supply circuit for supplying fluid to said hopper to facilitate grinding and the flushing of ground matter into said drain; means in said primary fluid supply circuit limiting to a predetermined maximum the fluid flow through said circuit, said maximum flow being in excess of the amount required for grinding; a branch fluid supply circuit connecting said chamber discharge portion and said primary fluid supply circuit; and fluid metering means operatively connected with said primary fluid supply circuit and said branch fluid supply circuit limiting to a predetermined maximum the quantity of fluid flowing into said hopper irrespective of the flow in the primary fluid supply circuit and by-passing excess fluid above said last mentioned maximum to the casing discharge portion through said branch fluid supply circuit.

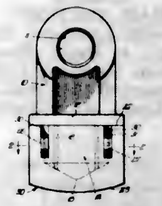
2,750,123
HAMMER MILL FEED DEVICE, INCLUDING A ROTARY SPREADER AND THROWER
Edwin H. Keiper, Philadelphia, Pa., assignor, by mesne assignments, to Bath Iron Works Corporation, Bath, Maine, a corporation of Maine
Application October 4, 1951, Serial No. 249,696
7 Claims. (Cl. 241—186)

2. The combination of a center feed hammermill having a rotor with hammers vertically fed at top center through a feed opening substantially narrower than the diameter of the hammercircle and a feed distributor located above said rotor hammers and delivering uniformly axially distributed material to the rotor hammers, means for delivering the free falling material at a predetermined velocity to said distributor, said distributor comprising a casing symmetrical about a plane through the center of rotation of said hammers and an impeller adapted to rotate at a rate having a peripheral speed of at least 700 feet per minute in said casing, said casing having an entrance opening above said impeller and a passage between said impeller and said feed opening, said impeller



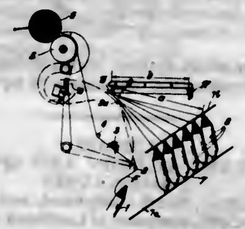
having blades extending generally radially a substantial portion of the distance outwardly to a diameter greater than the feed opening, impelling surfaces covering a substantially outwardly extending area on the side of said blades in the direction of rotation receiving axially bunched material passing through said entrance opening at a predetermined velocity and impelling it outwardly on the blades and downwardly in a continuous stream of uniformly axially spread material into said centered passage at a velocity higher than said predetermined velocity, said passage passing said material at increasing velocity under gravity substantially radially towards said hammers.

2,750,124
RENEWABLE HAMMER HEAD OF THE TWO-WAY REVERSIBLE TYPE
Henry Brown Reinhardt, Flossmoor, Ill., assignor to American Brake Shoe Company, New York, N. Y., a corporation of Delaware
Application May 6, 1953, Serial No. 353,311
4 Claims. (Cl. 241—197)



1. A rotary hammer of the character described comprising a shank having one end adapted to be pivotally mounted, the other end of the shank having a special shape for receiving a hammer head, said head having a cavity therein of a size and shape complementary to that of the shank end, said shank end having grooves formed in opposed walls thereof and said head having laterally extending openings therein communicating with the cavity and aligning with the grooves respectively in the shank end when the parts are in assembled relation, and a plurality of keys adapted for insertion in the aligned openings and grooves for releasably retaining the hammer head in assembled relation on said shank end.

2,750,125
SUCTION DEVICE FOR HOLDING THE THREAD ENDS OF FULL BOBBINS
Stefan Flirst, M. Gladbach, and Wilhelm Küpper, Kreis Erkelenz, Germany, assignors to Walter Reiners, M. Gladbach, Rhineland, Germany
Application August 16, 1954, Serial No. 449,864
Claims priority, application Germany August 14, 1953
9 Claims. (Cl. 242—35.6)



1. In an apparatus of the type described, in combination, magazine means for holding a plurality of full bobbins carrying thread; suction means located spaced from said magazine means for holding the thread ends of said full bobbins; means for consecutively moving said full bobbins from said magazine means to an unwinding position; cutting means for cutting the thread ends of bobbins in said unwinding position whereby the continuous formation of a matted rope-like body consisting of cut off thread ends is caused in said suction means; and a cutting device for repeatedly cutting said matted rope-like body so as to limit the length of said matted rope-like body to pieces of such length as to be adapted to be removed by the suction of said suction means.

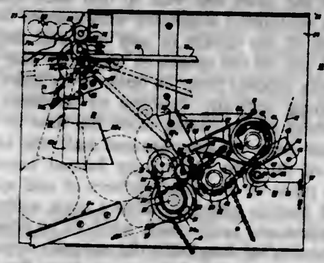
2,750,126
DEVICE FOR PULLING CELLOPHANE ADHESIVE TAPE
Morton M. Singer, New York, N. Y.
Application May 21, 1952, Serial No. 289,224
2 Claims. (Cl. 242—55.5)



1. A device for pulling cellophane adhesive tape mounted in a roll on a holder having a pair of spaced side walls between which the roll is mounted and a ledge at the front of and between said side walls to receive and hold the free end of said tape, said device comprising a flat plate which is made of material to which the adhesive side of the tape is removably attachable, said plate having a tongue which projects downwardly into the space between said side walls of the holder, said tongue being stepped along its side edges, the lower portion being relatively narrow and the upper portion being relatively wide to fit into the space between the side walls of holders of different sizes, and offset shoulders provided at each side edge of said stepped tongue to rest on the side walls of said holders of different sizes.

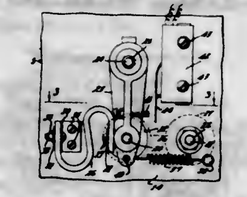
2,750,127
TOWEL WINDING MACHINE
Rudolph G. Birr, Lombard, Ill., assignor to American Linen Supply Co., Chicago, Ill., a corporation of Nevada
Application September 13, 1954, Serial No. 455,622
12 Claims. (Cl. 242—66)

1. In a winding machine, a continuously rotating winding roll, a mandrel supported for rotation on the surface of said winding roll, means automatically directing the leading edge of a web of textile material between said mandrel and said winding roll and around said mandrel to wind said material on said mandrel, means including said winding roll effective, jointly responsive to the building up of material wound on said mandrel and in response to reaching the end of a predetermined length of said material, for ejecting said mandrel and roll of web mate-



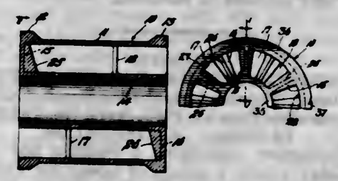
rial wound thereon from said machine, and means controlled by said roll of web material in response to said ejection for automatically placing another mandrel on the surface of said winding roll so that the leading edge of another web of said material will automatically be wound on said other mandrel.

2,750,128
MECHANICAL FILTER
Carl E. Hittle, North Hollywood, Calif., assignor to Radio Corporation of America, a corporation of Delaware
Application November 29, 1952, Serial No. 323,225
3 Claims. (Cl. 242—75)



3. A damping unit for a mechanical filter for a film advancing mechanism having a roller tensioned by a spring in a film loop comprising a free, flat, flexible, and relatively non-elastic strip, and supporting means for said roller, one end of said strip being attached to said supporting means and the other end of said strip being fixedly anchored, said strip having an S configuration with its damping action substantially in a direct line with the movement of said roller and positioned on the opposite side of said supporting means from said spring.

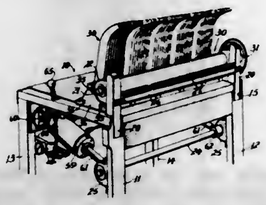
2,750,129
MOLDED PLASTIC SPOOL
Louis H. Morin, Bronx, N. Y., assignor to Coats & Clark, Inc., New York, N. Y., a corporation of Delaware
Application June 22, 1953, Serial No. 363,295
12 Claims. (Cl. 242—119)



11. A one-piece all-plastic thread spool comprising an inner tube, an outer thread-holding barrel having flanged ends, and a pair of end walls integrally formed with and connecting the tube and barrel together; each end wall comprising the annular end surface of the tube and

the annular end surface of the flanged barrel and also comprising intermediate said annular surfaces a group of radially arranged alternate spokes and spaces extending from the tube to the flanged end of the barrel, the spokes in one end wall being offset with respect to the spokes in the other end wall so that each spoke in one wall is in substantial alignment with a space in the other wall, each of the spokes in said one wall being unconnected to any of the spokes in the other end wall, each spoke being tapered from its outer to its inner end, each spoke having centrally disposed on its inner surface a strengthening rib extending from the tube to the barrel and spaced from the opposite end wall; the annular end surfaces of the tube and of the flanged barrel lying in the same plane as the outer surfaces of said spokes; each end wall having sufficient surface area sufficiently distributed thereover as to enable labels to be adhered thereto; a plurality of longitudinally spaced supporting ribs extending transversely of the spool from the inner tube to the outer barrel, said ribs being disposed intermediate, and spaced from, the end faces of the spool, said ribs being spaced circumferentially of the spool; and a non-chippable thread-holding nick in the periphery of one of said flanged ends.

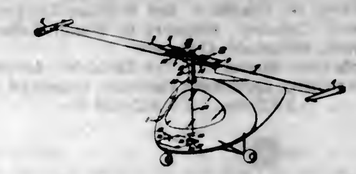
2,750,130
YARN TENSIONING DEVICE
Edward J. Heizer, Mountain Lakes, and Edward A. Wentz, Montclair, N. J., assignors to Specialties Development Corporation, Belleville, N. J., a corporation of New Jersey
Application October 4, 1952, Serial No. 313,164
2 Claims. (Cl. 242—149)



1. In a yarn tensioning device, a roll having a cylindrical surface adapted to rotate about its longitudinal axis, an arm having a yarn guide at one end, means for pivotally mounting said arm, said axis of said roll being in a plane spaced from and parallel to the axis of said mounting means, a shoe pivotally mounted on said arm having an arcuate recess provided with a surface conforming substantially to the contour of the surface of said roll and in registry therewith and having a toe section formed with a yarn guiding aperture extending through said toe section from one end of said shoe and terminating at said arcuate surface, and yieldable means for urging said arm in a direction to cause said shoe to engage said roll, whereby yarn passing between said shoe and said roll surfaces is tensioned.

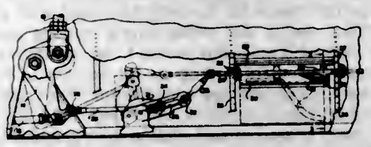
2,750,131
STEERING CONTROL FOR HELICOPTER
Alan C. Thomson, Manhattan Beach, Calif.
Application June 11, 1951, Serial No. 230,908
10 Claims. (Cl. 244—17.19)

9. A helicopter comprising a fuselage and rotatable wings having a hub, a source of power for driving said wings, an abutment in fixed relation to said fuselage, a torque arm acting on said abutment for applying a turning moment to said helicopter, means driven by said hub for deriving a reversible turning effort for said arm from rotation of said wings by said source of power, said means comprising a reversible power transmission between said hub and said arm for reversing the direction



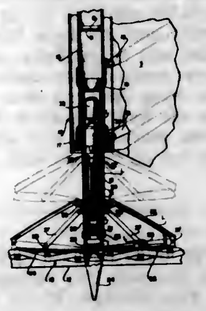
of said turning effort derived from rotation of said wings in the same direction by said source of power.

2,750,132
AIRPLANE AILERON AND SPOILER COMBINATION
Edward D. Palmer, North Hollywood, and James B. Pray, Van Nuys, Calif., assignors to Lockheed Aircraft Corporation, Burbank, Calif.
Application January 7, 1953, Serial No. 330,654
4 Claims. (Cl. 244—90)



1. In combination with an airplane wing, an aileron and aileron control mechanism, a spoiler hinged to the upper surface of the wing in advance of the aileron thereon, said spoiler lying flush with the wing surface in its retracted position, and operating means for pivoting said spoiler upwards as the aileron is moved upwardly, comprising a drum cam on the under side of the spoiler cylindrically curved about the hinge axis of the spoiler and having a spiral groove therein, a push-pull rod having a roller engaging in said cam groove, and movement multiplying means linking said push-pull rod to the aileron control mechanism for operation thereby.

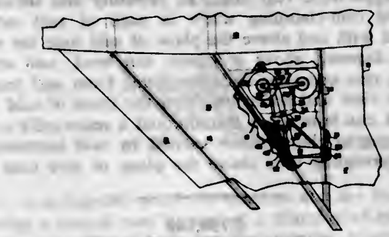
2,750,133
ALIGHTING GEAR FOR VERTICALLY ARISING AIRCRAFT
Jack W. Lebold, Los Angeles, Calif., assignor to Lockheed Aircraft Corporation, Burbank, Calif.
Application March 28, 1951, Serial No. 217,974
7 Claims. (Cl. 244—100)



1. In an aircraft having a fuselage and tail surfaces on the fuselage, the combination of a pod on each tail surface, a cylinder and piston shock absorbing device in each pod having a part movable fore and aft, a plurality of landing pads, a member movable axially in each part, means pivotally connecting the lower ends of the pads with the members, links connecting the pads with

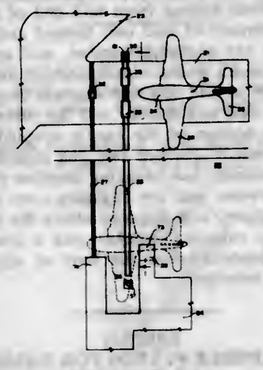
said parts, and means for moving said members to move the pads between retracted fore and aft positions and positions where they project laterally with respect to the fore and aft direction.

2,750,134
MULTIPLE WHEEL MAIN LANDING GEAR
Willis M. Hawkins, Jr., North Hollywood, and Philip E. Le Velle, Glendale, Calif., assignors to Lockheed Aircraft Corporation, Burbank, Calif.
Application April 17, 1952, Serial No. 282,798
11 Claims. (Cl. 244—102)



1. In an airplane having a main landing gear wheel well formed in the trailing edge of the wing thereof adjacent the wing root and to the rear of the main spar in said wing, the combination of a main landing gear structure the trunnion of which is pivotally supported to the rear of said main spar for retraction of said main landing gear into said wheel well, said main landing gear comprising a multiple wheel articulated bogie having two front wheels and a single rear wheel whereby to conform to the tapered shape of the section of trailing edge of the wing between the main spar and the auxiliary spar.

2,750,135
APPARATUS FOR FACILITATING THE LOADING AND UNLOADING OF AIRCRAFT PASSENGERS AND CARGO AT AIRPORTS
Herbert W. Anderson, Chicago, Ill., assignor to Whiting Corporation, a corporation of Illinois
Application June 4, 1954, Serial No. 434,399
10 Claims. (Cl. 244—114)



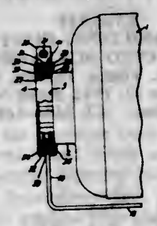
1. In apparatus for facilitating the loading and unloading of aircraft having landing wheels, a fuselage, laterally projecting wing and tail surfaces and an upright hatchway in the fuselage at an airport having a taxiway, the combination of a fixed track extending transversely from the taxiway, a car movable along the track into the taxiway and having an unobstructed upper surface in close proximity to the level of the taxiway for receiving and supporting aircraft landing wheels in such position as to dispose the major axis of the wing surfaces generally parallel to the track, a terminal building structure comprising a fixed pier projecting in the path of movement of an airplane carried by said car, said pier having a terminal width less than the length of fuselage between said wing and tail surfaces and including a fixed lengthwise wall generally parallel to the track and to an edge of the wing surface when the aircraft has been moved from the taxiway to loading position, and an elevated floor member located at the projecting end of the pier disposed and arranged substantially to abut the fuselage immediately below the hatchway, said floor member being operatively associated with the pier.

2,750,136
KITE
Gustav N. Stracke, Jr., Huntington Station, N. Y.
Application April 8, 1955, Serial No. 500,173
15 Claims. (Cl. 244—155)



10. In a device of the type described the combination of a kite having a kite attached thereto, an electric light and a battery secured to said kite and connected into a normally open electric circuit having a pair of spaced contacts the bridging of which would complete said circuit and illuminate said light, means effective to electrically bridge said contacts comprising a follower constructed and arranged to be propelled by wind force up the kite cord during flight of said kite.

2,750,137
MOTOR MOUNTING
Elden R. Cunningham, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application September 18, 1953, Serial No. 380,990
3 Claims. (Cl. 248—26)



1. In a resiliently mounted rotating machine comprising a casing having a hub, said hub having a shoulder formed thereon spaced from the end thereof defining an end portion, an annulus of resilient material, supporting structure for mounting and holding said annulus stationary relative to said hub comprising an annular sleeve member positioned on said hub end portion between said hub and said annulus with one edge engaging said shoulder, and having a radially outwardly extending flange formed on the edge thereof remote from said shoulder and engaging said annulus, said sleeve and said annulus having cooperating means to prevent rotation of said annulus relative to said sleeve member, a substantially semi-circular band arranged around the lower portion of said annulus and having flanges formed on both sides thereof extending radially inwardly along the sides of and engaging said annulus, a supporting member engaging said band, and means securing said band to said supporting member including a two-part clamping strap arranged around the remaining portion of said annulus, each part of said strap being secured adjacent one end to said supporting mem-

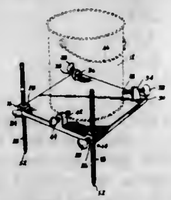
ber, said clamping strap having flanges formed on both edges thereof, said last named flanges extending radially inwardly along the sides of and engaging said annulus, whereby axial movement of said annulus is prevented by the engagement of the respective flanges on said annulus.

2,750,138
CHRISTMAS TREE MOUNTING MEANS
Milo Ward Morris, Seattle, Wash.
Application January 23, 1948, Serial No. 3,954
10 Claims. (Cl. 248—44)



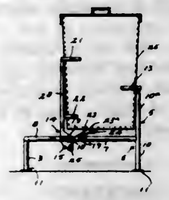
1. The combination of a Christmas tree and means for supporting the tree in erect position secured to the butt end portion thereof, comprising a Christmas tree having a trimmed butt end portion; and a container secured to said butt end portion, said container comprising top, bottom, and side walls adapted to confine therein moisture absorbing material, said bottom wall having fixed tree butt anchoring means interiorly thereof and engaging said butt end, and said top wall formed of resilient sheet material having cuts radiating from the center thereof providing yielding V-shaped sections, at least the inner end portions of said sections being bent downwardly and disposed along said butt portion by the insertion of the butt end through the top wall in self-centering relation with said container, the edge of the opening in the top wall and the bent sections thus formed being shaped and fitted over an extended peripheral surface of the individual inserted butt portion and in contact therewith to laterally brace the same and cooperating with the anchoring means to hold the Christmas tree erect.

2,750,139
SUPPORT FOR HOLDING CONTAINERS ON INCLINED SURFACES
George A. Young, Titonka, Iowa
Application June 21, 1952, Serial No. 294,775
2 Claims. (Cl. 248—148)



1. An attachable roof-supportable mount for variably sized and usually bail-incorporating and beaded bottomed cans or the like, such as workmen use in roof work for paint or other commodity supply, said mount comprising a relatively thin, light but rigid plate-form base which is oversized with respect to the diameters of cans to be supported thereby and provides a substantially plane can-supporting top surface to admit of ready adjustment of a can thereon, said base providing an elongated and substantially straight roof-supportable rear edge, laterally spaced and adjustable roof-supportable legs extending transversely through said base adjacent the forward edge of the latter to cooperate with said rear edge to support said base in substantially a horizontal plane, said legs having frictional roof-engaging lower ends, at least three can-intercepting bosses rising from the top surface of said base adjacent the forward edge of the latter, said bosses being spaced apart a distance less than the diameters of cans to be supported on said base, at least two of said can-intercepting bosses located adjacent opposite ends of said base and each providing with said base an elongated vertical bearing receiving one of said roof-supportable legs, boss-carried clamp means holding said legs in adjusted positions, an intermediate one of said can-intercepting bosses located approximately mid-way between the side edges of said base, functionally integral clamp screw mounts rising from said base top adjacent opposite ends of said roof-supportable rear edge, an inwardly and forwardly inclined cam-clamping screw in each of said mounts parallel with and above the plane of said base top so as to be disposed above a bottom can bead, said screws having rear operating ends projecting from said mounts and in view and accessible from the front of said base when a can is in place thereon, and a rearwardly acting can-engaging clamp screw carried by said intermediate can-intercepting boss above the plane of said base top.

2,750,140
CAN HOLDER AND RACK
Harry M. Smith, Clinton, Iowa
Application September 16, 1953, Serial No. 380,491
5 Claims. (Cl. 248—154)



1. A can rack and holder comprising a stand including an elongated elevated base, a stationary can engaging member, means supporting said can engaging member above one end of the base, said can engaging member and said means constituting parts of the stand, a movable can clamping unit, means pivotally connecting said unit to the stand base remote from said end of the base for swinging movement of said unit toward and away from the stationary can engaging member, said unit including can engaging arms, and a can supporting member forming a rigid part of said unit and disposed above the stand base between said end thereof and the pivot means and on which the bottom of the can is adapted to rest for rocking said unit to displace said can engaging arms toward said stationary can engaging member for clamping a can therebetween, said can engaging arms including an upper can engaging arm disposed above the level of said stationary can engaging member and a lower can engaging arm disposed below the level of said stationary can engaging member.

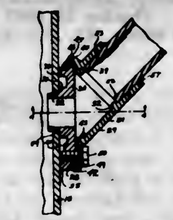
2,750,141
COLLAPSIBLE STANDS FOR CAMERAS AND THE LIKE
Herrmann B. Tobias, Washington, D. C.
Application November 3, 1952, Serial No. 318,538
3 Claims. (Cl. 248—161)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A collapsible stand for cameras and the like, comprising a central post and a plurality of foldable legs on the lower end thereof, said post including a plurality of telescopic sections, and means for securing said sections in various adjusted positions, said means including a plurality of interior longitudinal ribs formed in said sections and extending lengthwise thereof, arcuate wedges mounted on the exterior of certain of said sections for cooperation with said ribs, and a hand grip on the upper of said sections to facilitate the relative rotation of the sections to cause the wedges to tightly engage said ribs.



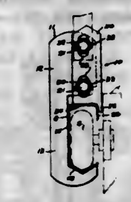
3. A collapsible stand for cameras and the like, comprising a central post formed of a plurality of telescopic sections, a collar slidably mounted thereon, a second collar fixed to the lower end of the post, a first pair of diametrically opposed legs having their uper ends pivoted to said slidable collar, a pair of links pivotally connected at one of their ends to said legs intermediate the ends thereof, the opposite ends of the links being pivotally connected to the fixed collar, a second pair of diametrically opposed legs pivoted to the fixed collar and equally spaced between said links, stabilizing plates fixed to the free ends of the second pair of legs, a second pair of links pivoted at one of their ends to said slidable collar and having their opposite ends pivoted to said second pair of legs intermediate their ends, a compression spring encircling the lower end of the post and having its upper end in engagement with said slidable collar and its lower end seated on the fixed collar for normally maintaining said legs in collapsed position, and means for locking said slidable collar either in position with said first pair of legs arranged at an acute angle to the central post and said second pair of legs arranged at substantially right angles to said post or with the legs in collapsed position.

2,750,142
FITTING OR COUPLING FOR BRACKET ARM
George K. McKee, Cincinnati, Ohio, assignor to The Ehreo Corporation, Cincinnati, Ohio, a corporation of Ohio
Application November 8, 1950, Serial No. 194,675
3 Claims. (Cl. 248—216)



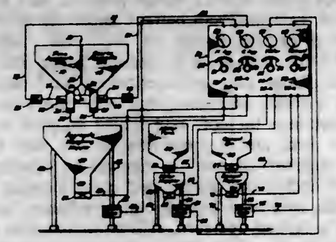
3. A fitting or coupling for securing a bracket arm to a cylindrical pole, or the like comprising an inner member having a plate of greater length than width and having a front face, a back face, an upper end and a lower end, the sides of said plate converging toward the upper end from transversely aligned points, said points being intermediate the upper and lower ends, but nearer the lower end, an outwardly projecting rim extending from the converging sides and upper end of said plate, said rim having a front face and a rear face, said rear face being inclined inwardly and rearwardly from its peripheral edge, a rib projecting rearwardly from the plate adjacent the outwardly projecting rim, said rib being concave laterally and adapted to seat on said pole, said rib adapted to be welded to said pole, an outer member having a plate of a configuration complementary to that of the inner member plate, said outer member plate having a rear face from which a flange projects, said flange being undercut, said undercut being complementary to the outwardly projecting flange on the inner member plate, whereby the outwardly projecting flange and the outer member flange may be interlocked, said outer member having a socket extending upwardly and angularly from the front face thereof, said socket adapted to receive a bracket arm, and a projection on the rear face of the inner member adapted to engage an aperture in said pole, to anchor and locate said inner member relative to said pole, said inner member plate adjacent its lower end having a tapped aperture, said outer member plate adjacent its lower end having an aperture adapted for axial alignment with the inner member plate tapped aperture, and a clamping bolt projecting through the outer member plate aperture into threaded engagement with the inner member plate tapped aperture for securing the inner and outer members to one another after the interlocking of the inner member outwardly projecting flange and the outer member flange.

2,750,143
HANGER FOR CONVEYOR TRACK
George W. Sjoboen, Birmingham, Mich., assignor to Steel Door Corporation, Pontiac, Mich., a corporation of Michigan
Application November 12, 1953, Serial No. 391,615
3 Claims. (Cl. 248—317)



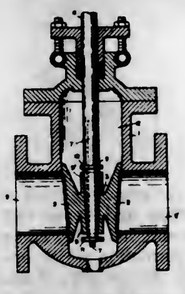
1. A hanger for conveyor track of channel form having a back portion and upper and lower flanges with its channel opening laterally comprising, a first plate having a hook formation which opens laterally through one substantially vertical edge thereof, said hook formation being in the lower portion of the plate and adapted to receive the track with the back portion of the channel thereof positioned next adjacent the back of the hook formation so that the hook formation and the channel both open laterally in the same direction, a second plate disposed in interfacial relationship with the upper portion of the first plate, the vertical dimension of the hook formation being greater than the vertical dimension of the track, the lower end portion of the second plate adapted to project downwardly into the upper portion of the hook formation and having a lower edge for engaging the upper flange of the track, the second plate having an edge extending generally in a vertical direction, said edge projecting laterally beyond the edge of the first plate through which the hook formation opens, said edge of the second plate having a finger depending therefrom adapted to overlap the edge of the upper flange of the track, and means for slidably connecting and for clamping the second plate to the first plate, whereby the second plate may be shifted to and clamped in track engaging position with its lower edge engaging and its finger overlapping the upper flange of the track.

2,750,144
METHODS AND APPARATUS FOR CONTROLLABLY DISPENSING MOISTURE BEARING INGREDIENTS
Richard C. Beckwith, Whittier, Calif.
Application June 22, 1953, Serial No. 363,118
6 Claims. (Cl. 249—14)



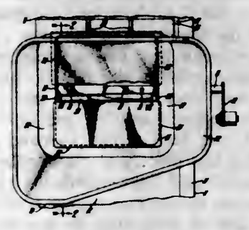
1. In a method of controlling the proportions of components of concrete mixes at batching plants wherein sand is periodically discharged from a source into a weighing device and thence into a receptacle, the steps of: constantly passing a flux of neutrons through a body of sand in said sand source, obtaining a response which is a function of the attenuation of said neutron flux resulting from the presence of hydrogen in said body of sand, and controlling the amount of sand discharged into the weighing device in accordance with said response.

2,750,145
GATE VALVE
Eric O. Thornros, Stockholm, Sweden
Application September 8, 1950, Serial No. 183,720
Claims priority, application Sweden February 14, 1950
3 Claims. (Cl. 251—197)



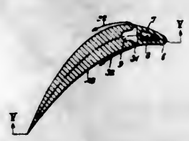
1. A gate valve for controlling the flow of hot and cold fluids through a pipe line, comprising a valve casing including a valve chamber formed with oppositely disposed gate seats, a pair of gate discs engageable with said gate seats, a generally rectangular plate member disposed within said valve chamber parallel with said gate discs and lengthwise relative thereto, the middle part of the sides of said plate member forming a central boss including a cone-shaped bore, the said plate member being joined to said gate discs by narrow bridges extending between the mid part of said boss and the mid parts of said gate discs, the said plate member having through its entire width a longitudinal inner slot and two longitudinal outer slots, the latter slots extending from the short edges of the plate member, two guide ribs on interior wall portions of the casing defining said chamber, each of said ribs slidably engaging one of said outer slots for guiding the gate discs into the gate opening and gate closing position respectively thereof, the said inner slot extending through the part of the plate member forming said boss and having an uninterrupted length at least equal to the diameter of said gate discs, the said narrow bridges and the said inner slot providing resiliency of the discs transversely and at an angle to the plane of displacement thereof, a valve stem slidably extended into said valve chamber and operatively coupled with said plate member for displacement of the gate discs, a conical member supported on the end of the valve stem and seated in said conical bore, the said conical member fitting the said bore tightly in one axial position relative to the bore thereby preventing a resilient displacement of the gate discs and providing clearance between the conical member and the bore in another axial position of the conical member thereby permitting the said resilient displacement of the gate discs.

2,750,146
FLUID CONTROL VALVES FOR HEATERS AND OTHER DEVICES
Harold J. Schoelles, Lockport, N. Y., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 22, 1950, Serial No. 196,999
3 Claims. (Cl. 251—306)



1. An air valve structure comprising a wall having an opening therein, with portions of said wall adjacent the edge of said opening being formed into aligned arcuate loops, a valve element for controlling said opening, said valve element being mounted on a shaft rotatably supported within said loops, resilient gasket means surrounding said opening and interposed between said valve element and said wall and located at the margin of said wall adjacent said opening, and said gasket means closing said loops to retain said shaft in position.

2,750,147
BLADING FOR TURBINES AND LIKE MACHINES
Austin Geoffrey Smith, Bisby, Leicester, England, assignor to Power Jets (Research and Development) Limited, London, England, a British company
Application October 5, 1948, Serial No. 52,813
Claims priority, application Great Britain October 28, 1947
4 Claims. (Cl. 253—39.15)



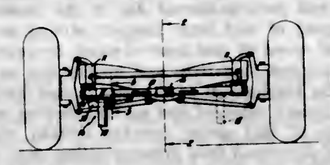
1. In a turbine, a blade mounted for operation in a high temperature gaseous zone of the turbine, said blade having root and tip ends and a portion thereof defining an internal cavity, an inlet to said cavity at the root end of said blade, said blade so defining said cavity that it communicates with said zone at the tip end of said blade, means connected to said inlet to deliver a coolant fluid thereto, and a fluid-permeable mass of metallic material within said cavity, said material being bonded to the cavity defining portion of the blade.

2,750,148
STAPLE EXTRACTOR
John E. Burbank, Stamford, Conn., assignor to Stamford Machine Company, Inc., Stamford, Conn., a corporation of Connecticut
Application August 10, 1953, Serial No. 373,270
3 Claims. (Cl. 254—28)



1. In a staple extractor of the class described, a base lever, a puller lever, means mounting said levers for pivotal movement relatively to one another, a spring pressing said levers on said pivotal mounting into a predetermined position, a bifurcated end portion on said base lever comprising a short central slot and a pair of legs adapted to abut a staple base, said puller lever having a thin sheet-like blade positioned and moving in a plane at right angles to the pivot about which said levers move, and in alignment with said slot, a hook on the end of said puller lever blade adapted to move in the slot between the legs of said bifurcated end portion as said levers pivot relatively to one another, said hook extending beyond the end of said bifurcated portion when said levers are in said predetermined position whereby the pivoting of said levers from said predetermined position moves the legs of said bifurcated portion against the base of a staple while said hook engages the center of the staple base to propel said staple over said legs while pulling said legs simultaneously under the staple base, said legs of said bifurcated end portion curving and tapering upwardly and outwardly from the ends thereof to cam the staple upwardly, and the hook end of said puller lever riding above the slot of said bifurcated portion whereby to move beyond the slot as said levers pivot relatively to one another.

2,750,149
AUTOMOBILE LIFTING DEVICE
Morris Mermelstein, Schodack Center, N. Y.
Application October 27, 1953, Serial No. 388,616
9 Claims. (Cl. 254—86)



1. An automobile vehicle lifting device to be connected to the side frame in spaced relation to the axles and springs, comprising an elongated bridging member of a length at least sufficient to span opposite sides of said frame across an end thereof; a bearing for each end of said member for securing the same to opposite side portions of said frame; and a jack slidably and pivotally mounted along and around the longitudinal axis of said member between said bearings said jack pivotally raised and secured into inoperative position and lowered into angular operative position adjacent opposite ends of said bridging member, whereby an end of said vehicle and frame can be elevated, and one vehicle wheel, when the jack is slidably moved adjacent said wheel, can be raised clear of said ground when said vehicle is moved against said lowered jack until the latter is substantially vertically disposed.

2,750,150
LIFTING JACK
Millard B. Lacker, St. Joseph, Mich., assignor to Auto Specialties Manufacturing Company, St. Joseph, Mich., a corporation of Michigan
Application January 25, 1954, Serial No. 405,881
7 Claims. (Cl. 254—103)



1. A hand operated automobile jack comprising base means, an elongated strut supported by said base means in an upstanding position, an elongated upstanding screw rod rotatably carried by said strut having an upper end portion projecting above said strut, a load lifting member threadedly engaging said screw rod, a sheet metal gear fixed on said upper end portion of said screw rod, said gear having a generally flat annular body portion and an upwardly and outwardly flared annular marginal portion, said gear having circumferentially spaced slots therein extending into said flared marginal portion and terminating short of the peripheral edge of the gear, a second sheet metal gear mounted for rotation about an axis beneath said first gear and extending laterally of said strut, said second gear having circumferentially spaced teeth flared outwardly and toward the strut and meshing with said slots, and handle means interconnected with said second gear for turning said gear and said screw rod to actuate said load lifting feed.

2,750,151
GUIDE FOR AN ELECTRICIAN'S SNAKE
Floyd F. Fowler and Charles H. Harrison, Bismarck, N. Dak., assignors of one-third to Max H. Morris, Bismarck, N. Dak.
Application May 21, 1954, Serial No. 431,552
4 Claims. (Cl. 254—134.3)



1. A guide for detachable connection to an electrician's snake comprising a body which tapers adjacent opposite ends and is constricted intermediate its ends to facilitate its passage through a bent conduit, antifriction elements carried by and extending outwardly from said body intermediate the ends thereof for engagement with the conduit during its passage therethrough, and means carried by the body adjacent one end thereof for detachably coupling an electrician's snake thereto.

2,750,152
INSULATED FISH TAPE
William G. Schimke, Sycamore, Ill., assignor to Ideal Industries, Inc., Sycamore, Ill., a corporation of Delaware
Continuation of abandoned application Serial No. 200,006, filed December 9, 1950. This application July 27, 1953, Serial No. 370,359
3 Claims. (Cl. 254—134.3)

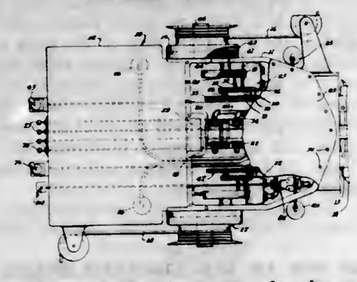
1. For use as an insulated fish tape or the like, a metallic cable, metallic connecting members secured one

at each end of the cable, said connecting members being provided with openings adapted to receive parts to be moved by said cable and being also provided with threaded parts whereby they can be connected to cooperating threaded connecting members, and electrically-insulating, flexible, tubular sheaths positioned about said cable and



extending substantially from one end to the other thereof, and electrically insulating covering members positioned over said connecting members, spaced away from parts of said connecting members, and extending substantially from end to end thereof, said covering members slightly overlapping the tubular sheath at each end adjacent said connecting members.

2,750,153
FLUID DRIVE AND RETARDING MEANS FOR KERF CUTTING MACHINES
Frank A. Lindgren, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application October 17, 1952, Serial No. 315,330
2 Claims. (Cl. 254—184)



1. A drive and retarding means for the purpose described comprising a pump, means for driving said pump, a fluid motor, a pressure line connecting said motor to said pump and a variable flow control valve in said pressure line, means for operating said valve to vary the flow to said motor and the speed thereof, a winding drum, a geared drive connection from said motor to said winding drum for driving said drum in an unwinding direction under the control of said valve, a check valve in said pressure line on the downstream side of said flow control valve and blocking the back flow of fluid to said valve, a pressure relief valve on the downstream side of said check valve, said winding drum being driven at times and driving said motor as a pump, and manually operable means for varying the pressures at which said valve relieves back pressure from said motor when driven as a pump and varying the resistance to said motor as a pump and the retarding effect of said winding drum.

2,750,154
DRILLING TOOL
Elvin G. Boice, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a corporation of Texas
Application June 2, 1952, Serial No. 291,182
1 Claim. (Cl. 255—4)

A well impact drilling tool comprising an upper connector having a passageway longitudinally thereof adapted to be attached to a downwardly depending drill stem, a hollow tubular cylindrical body extending downwardly from said upper connector and secured to and carrying at its lower portion a lower connector having a longitudinal passageway therethrough communicating with the bottom of a well bore and communicating with the longitudinal passageway in said upper connector, said lower connector being adapted to receive a well drill, the upper end wall portion of said lower connector constituting a cammed anvil surface, an inner element disposed within said cylindrical body and having a longitudinal passageway therethrough in communication with the passageways of said upper and lower connectors and adapted to rotate in and reciprocate longitudinally with respect to said hollow tubular body and above the anvil surface of said lower connector, a fluid actuated turbine supported by its stator by said upper connector and having an axially movable rotor detachably secured to the upper portion of said inner element whereby said inner element is rotated by said turbine rotor when fluid is introduced thereto through the passageway in said upper connector, the exhaust fluid from said turbine passing into the passageway of said inner element, the lower end wall portion of said inner element constituting a cammed hammer surface to match the cammed anvil surface of said lower connector, said inner element being provided with a transverse passageway intersecting the inner element longitudinal passageway in a region below said turbine and at a substantial distance above said cammed hammer surface, a slidable valve in said trans-

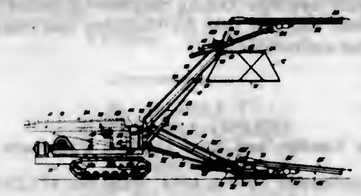


verse passageway having enlarged end portions one of which is heavier than the other and spaced from each other by a reduced central portion, the lighter of said enlarged end portions being secured to said inner element by a spring member to bias said valve so that the central portion thereof is in alignment with the longitudinal passageway in said inner element thereby permitting initially a large volume of fluid to pass through said turbine and to said well drill until said inner element is rotated by said turbine and gains rotational speed, said valve when moved by centrifugal force exerted upon the heavier end portion thereof due to the increased rotational speed of said inner element serving to limit the rotational speed of said inner element by restricting the flow of exhaust fluid from said turbine due to a restriction of the longitudinal passageway in said inner element by said lighter enlarged end portion moving against the resistance of said spring member thereby resulting in a greater downward fluid pressure acting upon said inner element whereby the hammer surface of said inner element will be caused to deliver greater impact forces to the anvil surface of said lower connector and to said well drill.

2,750,155
HYDRAULIC JIB ARM FOR DRILLING MACHINES
Virgil H. Nixon, Joplin, Mo., assignor to Rogers Iron Works Company, Joplin, Mo., a corporation of Missouri
Application February 18, 1952, Serial No. 272,151
4 Claims. (Cl. 255—51)

1. In apparatus of the kind described, a support; an elongated boom mounted at one end thereof on the support for swinging movement on a horizontal axis; an elongated cross-arm having a horizontal, longitudinal axis and mounted on the opposite end of the boom for

rotation on said axis; a tool mount secured directly to the cross arm for rotation therewith; and linkage pivotally joining the cross arm and the support for rotat-



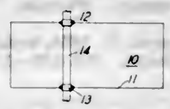
ing the cross arm and thereby maintaining the tool mount in a predetermined position relative to the horizontal as the boom is swung.

2,750,156
ROCK DRILLING TOOL
Robert E. Coates, Sherbrooke, Quebec, Canada, assignor to Ingersoll-Rand Company, New York, N. Y., a corporation of New Jersey
Application September 16, 1952, Serial No. 309,907
2 Claims. (Cl. 255—64)



1. A rock drilling tool of the impact type, comprising a member having threads for threaded connection to a drill rod, a body to seat upon an end of the member having a plurality of recesses therethrough at its peripheral portion and having a group of recesses therethrough arranged on a circle located between the axis of said body and the first mentioned recesses, cutting elements in the recesses and seated on said end of the member, and brazed connections for securing the cutting elements to the body and for securing the body to the member.

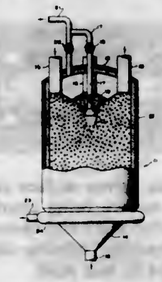
2,750,157
CATTLE GUARD
Jerold H. Van Alsburg, Santa Fe, N. Mex.
Application February 28, 1952, Serial No. 273,911
1 Claim. (Cl. 256—17)



A cattle guard for preventing the passage of cattle along a roadway, comprising: a plurality of rails formed of cast material, said rails having aligned abutments integral therewith at opposite sides thereof provided with narrowed top surfaces displaced from the plane of the top surfaces of said rails, and having a transverse hole through said abutments; tie bolt means adapted to traverse said holes and secure said rails together; and supporting beams for said rails, each including laterally-extended footing panels at the ends thereof adjacent the upper surface of said beams, said footing panels being substantially less in thickness than the depth dimension of said beams at said ends.

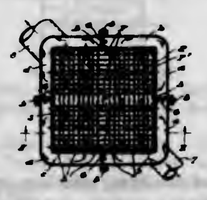
2,750,158
PEBBLE HEAT EXCHANGE CHAMBER
Curt E. Forkel, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application July 28, 1952, Serial No. 301,409
7 Claims. (Cl. 257—55)

1. An improved pebble heat exchange chamber comprising in combination a closed upright, elongated shell; pebble inlet conduit means extending into the upper end portion of said shell adjacent its periphery; pebble outlet means in the lower end of said shell; gaseous effluent outlet conduit means extending from the upper end of said



shell intermediate the axis and periphery thereof; and a central gaseous effluent conduit extending from a level, in the chamber formed by said shell, below the normal level of the pebble mass in the central portion of said chamber upwardly through the upper end of said shell.

2,750,159
METALLIC RECUPERATOR
Alfred J. Ebner, Pittsburgh, Pa.
Application August 21, 1952, Serial No. 305,547
4 Claims. (Cl. 257—171)



1. A recuperator for an industrial furnace comprising spaced inner and outer walls formed of sections of heat-resisting metal plate united at their edges, grooved joiner elements engaging the meeting edges of the sections of the inner wall in a slip-joint that provides for movement of the engaged edges as the recuperator structure expands and contracts under varying temperatures in service, the recuperator structure having partitions traversing the space between the walls to form at least two air chambers, an air inlet opening into one of said chambers and an air outlet opening from the other, said inner wall comprising a metal duct for the passage of hot waste gases of said furnace, and a multiplicity of metal tubes traversing the line of flow of the waste gases through said metal duct, with the bores of the tubes in open communication at one end with one of said air chambers and at opposite end with the other chamber.

2,750,160
ROTARY VIBRATOR WITH A ROLLING ECCENTRIC MASS
Nils Ingemar Englund and Sven-Ake Nordegren, Stockholm, Sweden, assignors to Vibro-Plus Corp., Woodside, N. Y., a corporation of Delaware
Application September 9, 1953, Serial No. 379,257
Claims priority, application Sweden September 11, 1952
9 Claims. (Cl. 259—1)

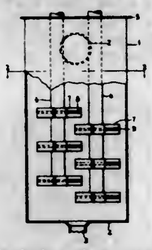
1. A rotary vibrator comprising a circular race, a roller body arranged to roll on said race, thereby generating vibrations, a shaft coaxial with said race, positive means including axially extending hub means coaxially mounted on the roller body for maintaining said roller body in contact with said race, and a transmission coupling between the shaft and the roller body to impart to

said roller a peripheral speed at the surface engaging the race which is different from the relative rotational speed of said race and said shaft, the transmission coupling including a rotating driving surface carried by said



shaft, and a rotating driven surface carried by said roller body, said driven surface being coaxial with the axis of rotation of said roller body and operatively connected to drive without substantial relative slippage the rotating drive surface carried by said shaft.

2,750,161
METHOD FOR STIRRING GLASS
Ralph W. Simmons, Ford City, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania
Application August 5, 1952, Serial No. 302,690
2 Claims. (Cl. 259—6)



1. The method of stirring glass comprising the steps of, continuously flowing molten glass by gravity through a container at a rate to maintain the container substantially filled, imparting a generally circular motion to the glass about the inner periphery of the container, establishing horizontally spaced vertical zones of rotary mechanical movement to the glass within the generally circular movement of the glass and repeatedly shearing the glass between the two spaced zones.

2,750,162
IMPELLER ASSEMBLY MOUNTING FOR MIXERS
Paul J. Kircher, Plainville, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a corporation of Connecticut
Application December 14, 1954, Serial No. 475,123
7 Claims. (Cl. 259—107)



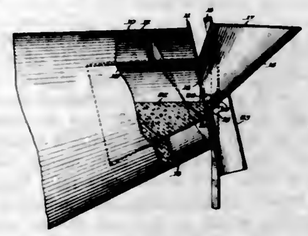
1. In a food and drink mixer, a container having an inwardly extending lip at the bottom thereof defining a central opening, a base on which the container is adapted to seat having a peripheral gasket engageable with said lip, an impeller shaft rotatably supported by the base and adapted to extend upwardly through said opening, a vertically movable compressor mounted on the base having a downwardly and inwardly inclined surface between which and said lip the gasket is adapted to be compressed, and a manually operable locking member connected to said compressor and said base for clamping said compressor and gasket against said lip.

2,750,163
MIXING APPARATUS
Wilhelm Loedige and Fritz Loedige, Paderborn, Westphalia, Germany
Application April 6, 1954, Serial No. 421,234
9 Claims. (Cl. 259—109)



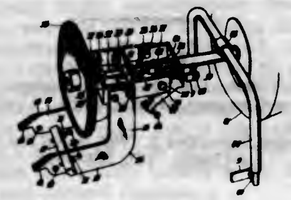
1. In a mixing apparatus, a vessel for containing material to be mixed and a shaft rotatably mounted in the said vessel, a plurality of arms extending radially from the said shaft, the said arms being axially and angularly spaced apart from each other, agitating and impelling means constituting mixing elements secured to said arms, and a plurality of friction sheets forming at least a portion of a ring-like member disposed parallel to and axially spaced apart from each other in a plane substantially perpendicular to the longitudinal axis of said shaft and secured adjacent the said mixing elements to the inner wall of the said vessel, and the said mixing elements forming side sheets disposed parallel to and adjacent the said friction sheets, in order to bring about cooperation between the said side sheets of the rotating mixing elements and the immovable corresponding friction sheets and to permit throwing of the material to be mixed within the said vessel to both sides of said friction sheets without interference of the latter.

2,750,164
CHARGING CHUTE FOR TRANSIT CONCRETE MIXERS
Paul M. MacKinney, Northlake, Ill., assignor to Oury Engineering Company, Wheaton, Ill., a copartnership
Application August 27, 1954, Serial No. 452,680
2 Claims. (Cl. 259—164)



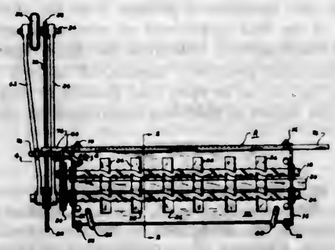
1. In combination with a transit concrete mixer, a rotatable open-ended mixing drum, a plurality of spirally arranged blades therein secured to the wall of the said drum, an open-ended charging member centrally mounted at the rear end of the drum, a charging chute extending into the said charging member and a flexible sealing member secured to the outer side of the wall of the charging chute and extending beyond the discharge end of the said chute into the charging member into engagement with the inner surface of the said charging member adjacent the receiving end thereof.

2,750,165
TRACTOR-MOUNTED CONCRETE MIXER
Geoffrey Wallace, via Wodonga, Victoria, Australia
Application September 23, 1954, Serial No. 457,842
Claims priority, application Australia October 13, 1953
4 Claims. (Cl. 259—177)



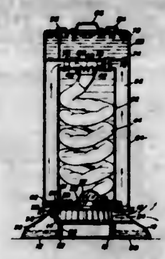
1. A concrete mixer for a tractor having a rearwardly positioned power take-off and a pair of rearwardly extended power-operated lifting links spaced apart in parallel relation and pivotally connected to the tractor frame, said concrete mixer comprising a transverse support positioned above the lifting links and having downward extensions jointedly connected to the ends of said links, a central support located above the lifting links and detachably fixed to the tractor frame, an angularly movable support pivotally mounted upon the central support, a bearing sleeve integral with the angularly movable support and pivotally connected with the transverse support, a driving shaft rotatably mounted in the central support and drive connected with the power take-off, a driven shaft rotatably mounted in the bearing sleeve, a universal connection drive connecting the driving shaft with the driven shaft, and a mixing bowl secured to the driven shaft.

2,750,166
MOTOR MIXER
Albert V. Polak, Atlanta, Ga.
Application October 22, 1953, Serial No. 387,639
15 Claims. (Cl. 259—179)



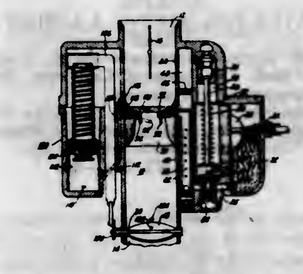
1. A batch mixing device comprising a receptacle, mixing means located in said receptacle, means for driving said mixing means, said driving means including a driven shaft, a driving shaft, said driving shaft being pivotally connected to said driven shaft, said shafts being supported in spaced relationship, means drivingly connecting said shafts, a driving wheel mounted on said driving shaft, said driving wheel being adapted to be drivingly engaged with the rear ground-engaging driven wheel means of a vehicle, adjustable means for urging the peripheries of said driving wheel and said rear wheel means in driving engagement and means for mounting said batch mixing device on said vehicle, whereby said driving wheel may be drivingly engaged and driven by said ground-engaging driven wheel means while said vehicle is moving over the ground or while said last-named means is in a stationary jacked-up position.

2,750,167
ROOM COOLER
Wallace Gregg, West Los Angeles, Calif.
Application October 5, 1953, Serial No. 383,991
10 Claims. (Cl. 261—24)



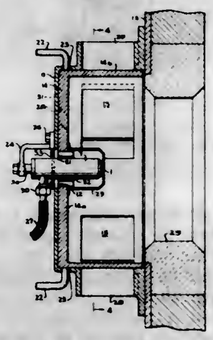
1. A portable air cooler comprising a base, a blower chamber in said base, an air outlet opening laterally from said blower chamber through said base, an upstanding axial air inlet on said base opening into said blower chamber, a porous water container mounted upon and rising from said base and surrounding said air inlet and having an air inlet aperture adjacent its upper end, a porous air conduit disposed in the container and having a lower end secured in communicating relation to said air inlet and having an upper end secured to and communicating with said aperture, means for directing a flow of air into said aperture and said air conduit.

2,750,168
CARBURETOR
Albert H. Winkler, Elmira, N. Y., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Original application December 30, 1947, Serial No. 794,560, now Patent No. 2,615,440, dated October 28, 1952. Divided and this application June 16, 1952, Serial No. 293,730
1 Claim. (Cl. 261—41)



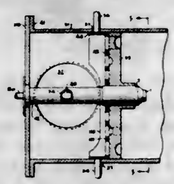
A carburetor comprising a body having straight walls, an induction passage in said body having an air inlet and a mixture outlet, a fuel well in said body having walls disposed in parallel relation with said passage, a conduit forming an extension of said well, a port in said body connecting said conduit with the inlet of said passage, a perforated tube secured at its upper end in said well and having a lower portion extending substantially to the bottom thereof, said tube being spaced in close proximity to the walls of said well throughout the entire length of said lower portion, a restriction in said conduit between said port and tube, a fuel bowl in said body, a passage connecting said bowl with said well near the bottom thereof, an opening in said tube located near the bottom thereof and being substantially larger than the perforations in said tube, and a conduit connecting the tube with the induction passage intermediate said inlet and said outlet.

2,750,169
VORTEX APPARATUS FOR LIQUID AND GAS
John Ruskin Joyce, Thornton-le-Moors, England, assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application November 10, 1953, Serial No. 391,156
Claims priority, application Great Britain November 27, 1952
8 Claims. (Cl. 261—49)



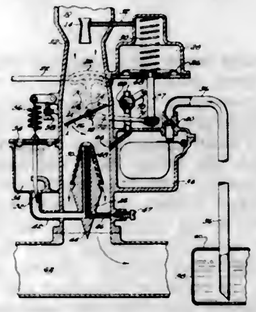
1. In a vortex device, the combination of a pair of hollow, concentric, contiguous, relatively rotatable walls defining therein a vortex chamber, the outer of said walls having a set of inlet bores substantially tangential to said chamber and the inner of said walls having a set of ports positioned to register respectively with said bores and to be moved progressively out of register with said bores upon relative rotation between said walls, at least the parts of the inner wall defining the ports being thin in relation to the widths of said ports measured circumferentially along said wall, whereby the direction of flow of fluid entering said chamber through said bores and ports varies with the extent to which the said ports are in register with said bores; and means for effecting relative rotation between said walls.

2,750,170
APPARATUS FOR MIXING A LIQUID AND A GAS
John Ruskin Joyce, Thornton-le-Moors, England, assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application November 10, 1953, Serial No. 391,155
Claims priority, application Great Britain November 13, 1952
9 Claims. (Cl. 261—50)



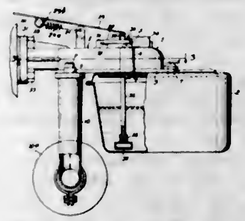
4. Apparatus for mixing a liquid and a gas by spraying the liquid into a gas in the general direction of gas flow, comprising a gas casing for the flow of said gas having an inlet for admitting a gas thereto; guide means in said casing for imparting to said gas a whirling motion about the axis of the casing; a liquid atomizer within said casing having means for admitting liquid thereto, a casing defining a vortex chamber and an outlet orifice situated substantially at the said axis of the casing and directed to discharge liquid into said gas downstream from said guide means along said axis in the general direction of flow of the gas; guide means for imparting to liquid entering said vortex chamber a whirling motion about the axis of said vortex chamber; and control means adjustable in accordance with the total rate of flow of at least one of said fluids and cooperating with the guide means therefor for increasing the said whirling motion of said one fluid upon an increase in the said total flow rate thereof and decreasing the said whirling motion thereof upon a decrease in the said total flow rate.

2,750,171
CARBURETOR
Stanley M. Udale, Detroit, Mich., assignor to Holley Carburetor Company, Detroit, Mich., a corporation of Michigan
Application November 2, 1953, Serial No. 389,647
4 Claims. (Cl. 261—59)



1. In an anterior throttle type carburetor an air entrance, a venturi therein, an air outlet, a suction opened positively closed permissive throttle therein located downstream of said venturi, a fuel nozzle downstream of said throttle, a venturi into which said nozzle discharges, a float chamber vented to the air pressure below the air throttle, a fuel passage leading to said nozzle from said float chamber, a throttle rod, a one-way connection therefor, a throttle lever incorporating the one-way connection and positively connected to said throttle so that the throttle is positively closed and is opened permissibly, a diaphragm, an air chamber, said diaphragm forming one wall of said chamber, a passage from the chamber to the throat of the first mentioned air venturi, a spring engaging the diaphragm, a link from the diaphragm, a second throttle lever positively connected to said throttle and to said link so as to open said throttle in response to suction in the throat of said first mentioned air venturi.

2,750,172
SUCTION TYPE CARBURETOR
Milford D. Burrows, Stanley Z. Siwek, and Harry Goldberg, Chicago, Ill., assignors to Pioneer Gen-E-Motor Corporation, Chicago, Ill., a corporation of Delaware
Application October 30, 1951, Serial No. 253,876
4 Claims. (Cl. 261—72)



1. A floatless suction type carburetor assembly wherein the fuel tank is below the induction passage, the induction passage being open at one end for communication with the intake port of an engine cylinder, and having an air inlet in communication with the outside air supply, said carburetor assembly including a housing portion defining a fuel and air mixing chamber adjacent said induction passage, a jet orifice opening from said fuel and air mixing chamber into said induction passage at a zone of reduced pressure, means for delivering fuel to said fuel and air mixing chamber including a depending fuel carrying conduit communicating through a restricted orifice with said fuel and air mixing chamber and extending downwardly into said fuel tank, and an air bleed passage extending from the outside air supply and through said housing portion and into said fuel and air mixing chamber, said air bleed passage being angularly arranged with respect to the axis of said restricted orifice to supply a stream of air to said chamber in a direction other than substantially parallel to the direction of entry of the fuel into said chamber.

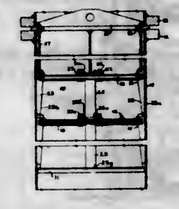
2,750,173
GAS-LIQUID CONTACT PROCESS AND APPARATUS
Leonhard T. Hartmann, New York, and Frans Wethly, Manhasset, N. Y., assignors to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York
Application November 9, 1953, Serial No. 391,007
3 Claims. (Cl. 261—111)



1. A contact chamber adapted for use in gas and liquid countercurrent contact apparatus comprising a substantially annular space for introduction of gas in the lower peripheral portions of the chamber, a grid tray directly above said annular space containing slots extending across the tray for passage of gas and liquid therethrough, said slots being provided in the central portions of the tray with members for substantially blocking flow of gas therethrough, a single spray device adapted to deliver a conical spray into the upper portion of the chamber from the center thereof of the walls of the chamber, and an open-ended, frusto-conical arrangement of stepped frusto-conical baffles extending from the central portion of said chamber to the walls thereof, said arrangement having its open upper end below said spray device and arranged to receive substantially the entire conical spray, said spray device, baffle arrangement and blocked, slotted tray defining between them the aforesaid contact chamber.

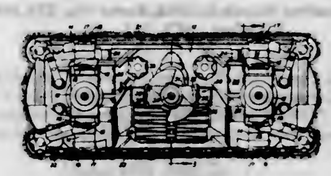
2,750,174
GRID TRAY CONTACT COLUMN
Myles H. R. Cogan, Houston, Tex., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application February 2, 1953, Serial No. 334,520
11 Claims. (Cl. 261—113)

1. In a contact column, the combination of an enclosing upright wall defining a contact tank and a plurality of contact tray assemblies at different levels within the tank, each said assembly comprising: a contact tray having openings for the passage of substances to be contacted and being situated in vertically spaced relation to the trays of adjoining assemblies; a tray rim near said enclosing wall supportingly secured to the tray; and a plurality of supporting posts separate from said tray rims having horizontal notches on the sides thereof away from said enclosing wall at a level intermediate the ends of the posts, said tray rims being in part positioned within said notches



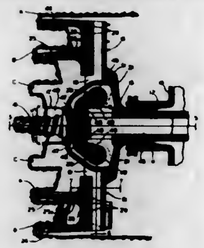
for support thereby, said posts extending both upwards and downwards from the respective tray rim to which they are secured and having at the top and bottom thereof upwardly and downwardly directed surfaces, respectively, each said post except the post of the lowermost assembly having the downwardly directed surface thereof resting directly on the upwardly directed surface of the post of an adjoining lower tray assembly, whereby the vertical spacing of said assemblies is determined only by the lengths of said posts.

2,750,175
BORING TYPE CONTINUOUS MINING MACHINE
Frank Cartlidge, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application October 7, 1954, Serial No. 460,932
5 Claims. (Cl. 262—7)



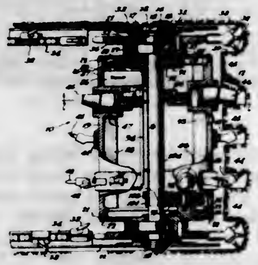
1. In a mining machine of the boring type having a frame, two laterally spaced boring heads rotatably supported on said frame, each having radial arms with forwardly projecting cutter supports thereon, said boring heads being of similar diameters and adapted to be advanced into a face of standing mineral to determine the horizontal and vertical dimensions of the pattern cut by the machine, upper and lower cutter bars mounted on said frame and extending horizontally between and generally tangential to the vertical diameters of said boring heads, a smaller boring head and means for rotatably supporting said smaller boring head on said frame intermediate said first named boring heads, said smaller boring head having radial cutter carrying arms with cutter supports extending in advance of said first named boring heads, for cutting a bore contiguous to the latter, and a longitudinally extending conveyor mounted on said frame with its front end disposed substantially along the horizontal level of the lower cutter bar, and spaced substantially below the path of rotation of the smaller boring head.

2,750,176
COLLAPSIBLE BORING HEAD FOR MINING MACHINES
Frank Cartlidge, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application May 21, 1954, Serial No. 431,454
10 Claims. (Cl. 262—7)



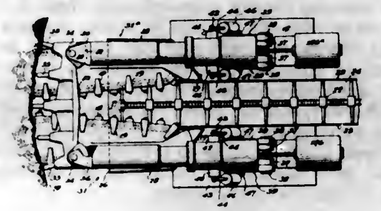
5. In a boring head for mining machines, a hub having two pairs of circumferentially spaced arms extending radially therefrom, each of said arms including cutter supports extending forwardly substantially at right angles therefrom to cut concentric kerfs in a working face, one of said pairs of arms being fixed on said hub in circumferentially spaced relation to the second pair of arms, the second pair of arms being normally substantially longer than the first named pair of arms and adjustable toward and away from said hub in paths spaced circumferentially from the cutter supports on the shorter arms.

2,750,177
DRUM CUTTER HEAD FOR CONTINUOUS MINER
Richard C. Lindberg, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application March 7, 1952, Serial No. 275,309
7 Claims. (Cl. 262—9)



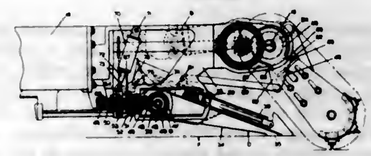
1. In a cutting head for a machine for mining coal or the like from a seam thereof, a frame defining a support for a shaft, a hollow rotating drum mounted upon said shaft, cutter bits mounted on the periphery of said drum for cutting spaced kerfs in said seam, breakers carried by said drum including fluid pressure motors for moving said breakers outwardly with respect to said drum for breaking the cores formed between said kerfs, a reservoir for fluid maintained within said drum, a pump supported within said drum and including means for driving said pump upon rotation of said drum for placing said fluid under pressure, and means for connecting said pump to a fluid pressure motor associated with each breaker for operating same.

2,750,178
PICKING TYPE MINING APPARATUS
Robert A. McCallum, Clarendon Hills, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application March 6, 1952, Serial No. 275,102
15 Claims. (Cl. 262—15)



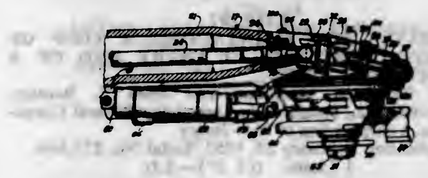
14. In a mining machine for fragmenting material from a solid seam thereof, a pair of ram assemblies spaced laterally of each other, a crosshead hingedly connected at its ends to said spaced ram assemblies, said crosshead having picking elements thereon adapted to contact said seam, a support for each of said ram assemblies, a substantially vertical pivot member connecting said support and said ram assembly so as to provide separate pivoting movement of said ram assembly in accordance with the skewing of said crosshead in encountering material of varying resistance throughout its length, and elastic means interposed between said support and said ram assembly for providing limited restraint to pivoting movement of said ram assembly.

2,750,179
MINING MACHINE HAVING VERTICALLY SWINGABLE CUTTER HEAD AND RECIPROCABLE GATHERING MECHANISM
Frank Cartlidge, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application March 27, 1953, Serial No. 345,006
4 Claims. (Cl. 262—26)



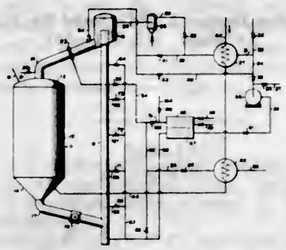
1. In a mining machine having a mobile base, a frame having a cutter head pivotally mounted thereon for up and down swinging movement about a transverse axis; cuttings gathering mechanism mounted for forward and backward reciprocable movement on said frame and having rearwardly movable gathering elements effective to convey cuttings to the rear thereof; a longitudinally disposed conveyor on said frame having at least its forward end connected to said gathering mechanism, in cuttings receiving relation with the rear end thereof, for forward and backward movement therewith; and connecting means between said cutter head and gathering mechanism for shifting the gathering mechanism and end of the conveyor forward responsive to upward swinging movement of the cutter head and for shifting the gathering mechanism and end of the conveyor backward responsive to downward swinging movement of the cutter head; so as to maintain a working clearance between said gathering mechanism and said cutter head in all relative positions thereof.

2,750,180
HORIZONTAL AND SHEARING KERF CUTTING MACHINE
Robert A. McCallum, Clarendon Hills, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application August 22, 1952, Serial No. 305,742
6 Claims. (Cl. 262—28)



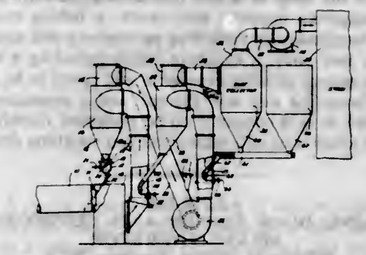
1. In a kerf cutting machine of the class described, an elongated truck mounted boom tiltable about an axis disposed adjacent its rear end, a cutter head supported at the forward end of said boom for tilting movement with respect thereto about an axis extending transversely thereof, a cutter bar projecting from said cutter head and having a cutter bit carrying cutter chain orbitally guided thereabout, a sprocket meshing with said cutter chain and a drive shaft therefor journaled in said cutter head for rotation about an axis transverse to the axis of tilting movement thereof, a bevel gear on said drive shaft adjacent the opposite end thereof from said sprocket and facing away from said sprocket, a bevel pinion meshing with said bevel gear and disposed forwardly of the axis of rotation of said drive shaft, the extended axis of said drive shaft being closely adjacent the tilting axis of said cutter head, and a universal coupling member intersected by the extended axis of said drive shaft and movable in an arcuate path along the tilting axis of said cutter head during tilting movement thereof, and having driving connection with said bevel pinion.

2,750,181
PEBBLE HEATER
Donald J. Quigg, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application January 3, 1952, Serial No. 264,809
26 Claims. (Cl. 263—19)



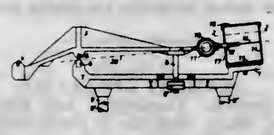
25. An improved pyrolysis system which comprises a closed, upright, elongated shell; a pebble inlet in the upper end of said shell; gaseous effluent means in the upper end of said shell; pebble outlet means in the lower end of said shell; gaseous material inlet means in the lower end portion of said shell; pebble feeder means intermediate the ends of said pebble outlet means; an upright gas-pebble conduit connected at its lower end portion to the lower end of said pebble outlet means and extending to a level above the top of said shell; a gas-pebble separator chamber connected to the upper end of said gas-pebble conduit; a first pebble conduit extending between said pebble inlet and the lower end portion of said separator chamber; a furnace outside of said gas-pebble conduit and outside of said shell for producing hot lift gas; a lift-gas feed line connecting said furnace with said gas-pebble conduit below the juncture of said pebble outlet means with said gas-pebble conduit; a plurality of lift-gas inlet conduits connected with said gas-pebble conduit at vertically spaced-apart points along its length and with a hot gas source; and a gas outlet means from an upper section of said separator chamber.

2,750,182
APPARATUS FOR FLASH HEATING OF PULVERULENT MATERIAL
Louis Peterson, Forest Hills, N. Y., assignor to F. L. Smidth & Co., New York, N. Y., a corporation of New Jersey
Application February 20, 1953, Serial No. 338,055
10 Claims. (Cl. 263—32)



1. In an apparatus for heating pulverulent material to be burned in an inclined rotary kiln by waste gases from the kiln, the combination of an end section mounted coaxially with the kiln at its upper end and containing lifters, a gas duct leading from the end section, a separator having an inlet and separate outlets for gases and solids, the duct leading to the inlet of the separator, a fan connected to the separator and causing a flow of gases through the duct and separator, means for introducing raw pulverulent material into the kiln end section to be lifted by said lifters and dropped, means for feeding material into the kiln, and means for conducting solids from the solids outlet of the separator to said feeding means.

2,750,183
ANALYTICAL BALANCE
Bojan Krizanic, Meilen (Zurich), Switzerland, assignor to Erhard Karl Mettler, Zurich, Switzerland
Application June 24, 1955, Serial No. 517,754
Claims priority, application Switzerland October 29, 1954
4 Claims. (Cl. 265—49)



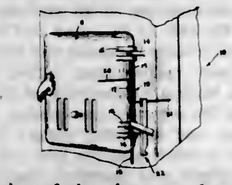
1. An analytical balance, comprising an unsymmetrical balance beam having an intermediate knife edge offset from its centre, an outer knife edge mounted on its shorter arm, and a counterweight mounted rigidly on its longer arm; a carrier having a pivot for supporting said intermediate knife edge of said balance beam, an air-damping cup mounted on said carrier and having a longitudinal slot, a holder fastened to the longer arm of said balance beam and projecting with clearance through said longitudinal slot, a damping disc fastened to said holder and disposed to be movable with clearance inside said air-damping cup, said air-damping cup being open on one side of said slot enabling a guiding-in of said damping disc, and a removable cover for closing said air-damping cup in order to produce a symmetrically acting damping of the pendulum movements of said unsymmetrical balance beam.

2,750,184
FISHING ROD HANDLE WITH SCALE AND MEASURING TAPE
Robert G. Warndahl, Minneapolis, Minn.
Application November 20, 1952, Serial No. 321,654
2 Claims. (Cl. 265—63)



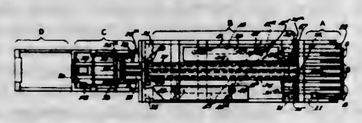
1. A fishing rod handle constituted as a solid body hollowed out to provide a passageway extending longitudinally through said body from end to end thereof, a cavity in said body at one side of and in parallel relation to said longitudinally extending passageway and a concavity in the body at a side of the longitudinally extending passageway opposite said cavity, a fishing rod fixed in said longitudinally extending passageway and extending through said body, a weighing device including a tubular element snugly, slidably situated in said cavity to be guided by the bounding side wall thereof, and a measuring tape supported in said concavity to be projected therefrom in parallel relation to said fishing rod and weighing device.

2,750,185
SPRING DOOR CLOSER AND TENSIONING MEANS THEREFOR
William H. Moore, Syracuse, N. Y.
Application September 15, 1953, Serial No. 380,310
2 Claims. (Cl. 267—1)



1. In a device of the character described, a torsion spring having elongated end portions extending tangentially from the body of the spring, a first V-shaped member adapted to receive said torsion spring between its side walls, said member being approximately equal in length to the length of the spring body, and a second V-shaped member fixedly mounted on one wall of said first member in obliquely disposed relation to the longitudinal axis thereof, said second member having an enclosed slot adjacent one of its ends and an open-ended slot adjacent its other end to releasably secure the elongated end portions of said spring in spring tensioning position.

2,750,186
FOLDING APPARATUS
Louis O. Bruneau, Cambridge, and Peter Boudreau, Arlington, Mass., assignors to Profit Machinery Company, Inc., South Boston, Mass., a corporation of Massachusetts
Application September 29, 1951, Serial No. 248,926
12 Claims. (Cl. 270—86)



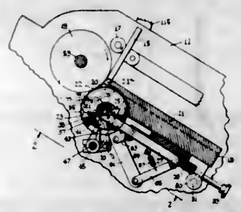
1. Apparatus for folding flexible sheet articles comprising an elongate frame having parallel horizontal slideways at the sides thereof, a riding plate element intermediate and below said ways; means for continuous advance of central article portions beneath said plate element and marginal article portions over said ways, parallel longitudinally extensive folding means positioned beneath said ways and movable in a rotary path overlapping said plate element only while generally parallel thereto, and means for actuating said folding means for movement in said rotary path and whereby to infold said marginal article portions and simultaneously to impel the articles in the direction of the continuous advance.

2,750,187
APPARATUS FOR MAINTAINING A LOOP OF CONTINUOUS STRIP AT ENTRY END OF A PROCESSING LINE
Bryant Bannister, Dormont, and John E. Bentley, Churchill, Pa., assignors to United States Steel Corporation, a corporation of New Jersey
Application February 28, 1952, Serial No. 273,844
1 Claim. (Cl. 271—2.1)



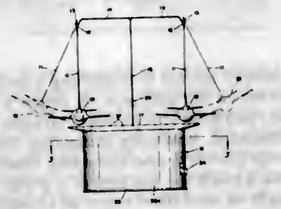
In apparatus for maintaining a loop of ferro-magnetic strip of variable length extending horizontally from the entrance end of a line of continuous processing apparatus, the combination with means for feeding out strip from a coil in a direction away from said processing apparatus above floor level and a plurality of spaced magnetic rollers positioned in a horizontal series long enough to accommodate the maximum length of loop, so as to be engaged at the bottom by said strip whereby said rollers suspend a portion of the strip forming the upper run of said loop, of means below said rollers disposed in a trench below floor level supporting a portion of the strip descending in a curved path from the level of said rollers and returning toward the processing apparatus as the lower run of said loop, an inclined conveyor ascending from said trench to said entrance end, means for pulling strip up said conveyor and a tensiometer responsive to the tension on the strip entering said processing apparatus controlling said pulling means.

2,750,188
WORKPIECE FEED CONTROL MECHANISM
Francis J. Rouan, Darien, Conn., assignor to Pitney-Bowes, Inc., Stamford, Conn., a corporation of Delaware
Application January 2, 1953, Serial No. 329,221
5 Claims. (Cl. 271—56)



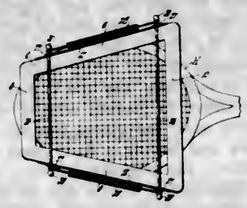
1. In a device for counting, printing or otherwise operating upon separate tickets, checks or other workpieces, an automatic feed mechanism for advancing the workpieces in succession past a sensing station to an operating station; a thickness sensing device at said sensing station for testing the thickness of the workpieces during feeding by said feed mechanism including a backing-up surface and a rotatable workpiece contacting drum having a normal rotary starting position, said drum being settable to a position with respect to said backing-up surface such that the drum will not be rotated by a passing single workpiece of normal thickness, but will be frictionally engaged and rotated by a folded workpiece or a plurality of superposed workpieces being advanced; means for stopping said feed mechanism; a striking surface on said drum; and trip means for operating said stopping mechanism having a part arranged in the path of said striking surface when the drum rotates but initially spaced from said striking surface a predetermined distance to provide a delay corresponding to a determine feed length of the workpiece prior to tripping action.

2,750,189
ARTICULATED TOY FOR AMUSEMENT
Wilbur M. Huth, Akron, Ohio
Application May 21, 1953, Serial No. 356,578
8 Claims. (Cl. 272—31)



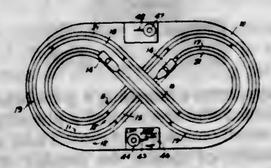
1. An animated toy comprising at least one object to be animated, a relatively fixed support having an upwardly presented member having a guide passage therethrough, a motor relatively fixed on said support and having a driven shaft extending in horizontal direction therefrom, a post received through said guide passage to rotate about a vertical axis thereof, said post having an enlargement non-rotatably affixed on its lower end and provided with a substantially flat, downwardly presented circular surface portion of substantial area concentric with the axis of said post, said driven shaft having an annular portion terminating radially outwardly of the center of said circular surface, said shaft through said annular portion thereby gravitationally supporting said post, said driven shaft through frictional engagement of said annular portion thereof with said circular surface of the enlargement being adapted to rotate said post about its axis, the circumference of said annular portion being substantially less than the circumference of said circular surface portion, said post having an extension upwardly of said member to be rotatable with the post, means on said post extension for supporting at least one said object to rotate with the post, the frictionally engaging surfaces of said annular portion and circular surface being such as to permit a certain degree of slippage, whereby said object is swung about said vertical axis with substantially unpredictable irregular movement.

2,750,190
TENNIS RACKET PRESS
William G. Curry, Agawam, Mass., assignor to Raymond S. Bourdon, doing business as Bourdon Mfg. Co., Suffield, Conn.
Application June 6, 1955, Serial No. 513,469
6 Claims. (Cl. 273—74)



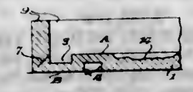
1. A press construction for a tennis racket comprising in combination, lower and upper press frames for receiving therebetween a racket head and each having opposite longitudinal sides, elongated plates having end portions secured to opposite sides of one of said frames and upper portions between which the other of said frames is slidable towards and away from said one frame, longitudinally spaced transversely extending pressure bars over the outer side of said other frame, said plates provided with slots in which opposite ends of said bars are slidably arranged for movement of said bars towards one another and against said other frame for applying pressure thereto, and means urging said bars towards one another.

2,750,191
RACING CAR GAME
Stephen A. Denman, Piqua, Ohio, assignor, by mesne assignments, to Herbert Kuppin, Piqua, Ohio
Application March 23, 1950, Serial No. 151,342
9 Claims. (Cl. 273—86)



5. A racing game in which each of two or more players attempts to move an object such as a toy automobile around a course with the greatest speed and facility, including a track for each player comprising a pair of electrical conductive rails each made up of a plurality of mechanically connected electrically insulated sections, an electric motor driven object mounted on said rails to be moved therealong in response to the energizing of parallel rail sections in contact with said object, first adjustable means to selectively energize individual sections of one rail and second adjustable means to selectively energize individual sections of the other rail, the energizing of parallel rail sections requiring coordinated setting of said adjustable means, and separate controls manipulative by a player for operating said first and second adjustable means.

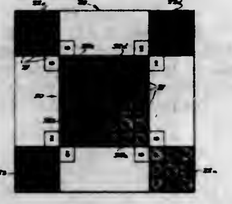
2,750,192
TABLE BALL GAME DEVICES
Elmer Haslett, Forest Hills, N. Y.
Application November 7, 1949, Serial No. 125,868
5 Claims. (Cl. 273—87.2)



1. A game device comprising a sheet of soft, resilient cellular latex with both faces exposed, rough and pitted, and the cells of the sheet opening through both faces, and said sheet having a border wall of the same material rising from one face of the sheet along substantially its entire periphery, with an open upwardly facing, channel in said one face immediately in front of said wall and substantially continuous along the wall, another open channel in the opposite face of said sheet generally parallel and close to said first mentioned channel but nearer the center of the sheet and also encompassing an interior area of said opposite face, whereby when said sheet is placed on an approximately flat surface with said opposite face downward, said border wall will upstand, and when placed on said flat surface with said one face downward, the marginal portion of the sheet outwardly beyond said another channel will flex along said another channel and form a rising wall, which is an inverted V-shape in transverse cross section, that encompasses said opposite face, each of said faces having delineated thereon a game pattern corresponding to a miniature golf course, said

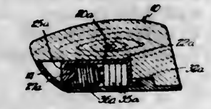
sheet having apertures that represent the green holes of the courses on both faces, each face having elevations and depressions representing obstructions on the fairways in the portion of the courses between the holes.

2,750,193
GAME APPARATUS
George F. Wales, Kenmore, N. Y.
Application November 14, 1952, Serial No. 320,496
7 Claims. (Cl. 273—134)



1. A game apparatus comprising a gameboard having a central area divided into spaces, and a plurality of corner areas disposed wholly outside said central area and divided into equal numbers of spaces, the number of spaces in said central area at least equaling the number of spaces in said plurality of corner areas, the spaces in said corner areas bearing indicia and being consecutively numbered, the spaces of each corner area bearing the same indicia but the spaces of different corner areas bearing different indicia, said central area being divided into a plurality of sections equal in number to the number of corner areas, the spaces of each section of the central area being consecutively numbered in correspondence to the numbering of the spaces of the corner areas, the spaces of the central area bearing indicia, the indicia borne by the spaces of the different sections of the central area being the same as, respectively, the indicia borne by the spaces of the different corner areas, and a plurality of gamepieces divided into sets, the number of gamepieces in a set equaling the number of spaces in a corner area, the gamepieces in each set being consecutively numbered in correspondence with the numbering of the spaces of the corner areas, all the gamepieces of a set bearing the same indicia but the gamepieces of different sets bearing different indicia the same, respectively, as the indicia borne by the different corner areas of the gameboard.

2,750,194
GOLF CLUB HEAD WITH WEIGHT ADJUSTMENT
Austin N. Clark, Winnetka, Ill.
Application January 24, 1955, Serial No. 483,598
7 Claims. (Cl. 273—171)



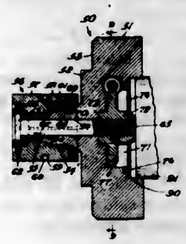
1. Means for regulating the weight of a golf club having a wooden head, comprising, a sole plate fastened to the underface of said head, a blind chamber opening inwardly from the rearward face of said head and extending toward the front face thereof, said sole plate closing over the bottom side of said chamber, a heel plate enclosing the open end of said chamber, a tray member connected at one end to said heel plate and inserted axially into said chamber, plural weight members carried in said tray member adjacent one end thereof, means removably interlocking said weight members, and spring means located between said weight members and the other end of said tray for resiliently biasing said weights tightly against one another.

2,750,195
PUTTER GUIDE
Harry Q. Y. Ching, Honolulu, Territory of Hawaii
Application November 27, 1953, Serial No. 394,716
2 Claims. (Cl. 273—183)



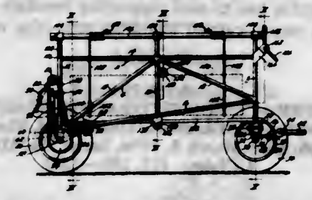
1. An implement for use in correcting a golfer's putting stroke comprising: a flat platform on which a golfer may take his stance, said platform having a straight front edge; a straight, elongated, upwardly projecting flange rigidly connected to the platform and extending along said front edge to provide a guide for the heel of a putter head shifted longitudinally of said front edge; an elongated, flat lip rigid with and projecting forwardly from the flange in the plane of the platform, said lip having its length in parallelism with the flange; and a series of guide lines on the lip extending perpendicularly to the length of the flange and spaced longitudinally of the lip to provide markings selectively registrable with the face of a putter head preliminary to movement of the putter head along the flange in a direction to stroke a ball supported in front of the flange.

2,750,196
INTERNAL GRIP COLLET
Stanley N. Peczynski, North Attleboro, Mass.
Application June 11, 1953, Serial No. 360,977
1 Claim. (Cl. 279—2)



An internal grip collet comprising a body portion having a bore therethrough and an external conical surface concentric with the axis of said bore, an outwardly extending head having its face nearest said surface at right angles to the axis of said bore, a sleeve comprising a plurality of jaws having their end surfaces distant from the head parallel to said face and together having a tapered bore to slide along said conical surface and progressively change the size of their outer diameter as relative axial movement occurs while maintaining its end surface parallel to said face, key and keyway in said conical surface and sleeve to prevent relative rotation while permitting relative axial movement thereof, a shaft slidable in said bore and having a fixed head engaging the jaws of said sleeve, the engaging surface of said shaft head being at right angles to the axis of said bore and parallel to the end surface of said jaws, and means extending radially of the axis of the bore and means engaging said radial means and accessible through the side of the body to draw said shaft through said bore to expand said sleeve.

2,750,197
TRAILER WITH ADJUSTABLE REAR WHEELS FOR TRANSVERSE POSITIONING THEREOF
Lue Tripp, Kansas City, Mo.
Application May 25, 1951, Serial No. 228,230
3 Claims. (Cl. 280—3)



1. A trailer hoist comprising a substantially rectangular frame having tubular upright members at the rearward corners thereof, a pair of steerable front wheels carried rotatably by said frame respectively at the forward corners thereof, a rod pivoted axially in each of said corner frame members, a horizontal stub axle fixed to each of said rods, a wheel carried rotatably on each of said stub axles, a sprocket carried rotatably on each of said axles and fixed to the associated wheel, a block mounted for pivotal movement about a vertical axis on each of said corner frame members and rigidly connected to the associated axle, a shaft carried rotatably in each of said blocks and disposed parallel to said axle, a pinion fixed on said shaft, means operatively interconnecting said pinion and said sprocket, and a crank for turning said shaft.

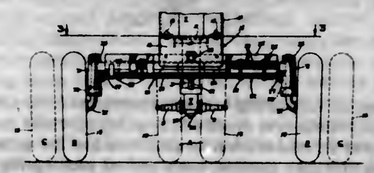
2,750,198
WAGON-SLED
Willard J. Moore and Ralph R. Moore, Clinton, Tenn.
Application March 11, 1954, Serial No. 415,494
5 Claims. (Cl. 280—7.14)



1. A combination wagon and sled comprising a flat body supporting portion, a pair of rear, laterally aligned depending brackets secured to the undersurface of said body portion, a substantially U-shaped intermediate bracket pivotally mounted at its central portion to the undersurface of said body portion, forwardly extending braces secured at their rear ends to said intermediate bracket, a substantially U-shaped front bracket secured to the front ends of said braces and having depending portions, a link pivotally mounted at its rear end to the undersurface of said body portion intermediate said intermediate and front brackets and extending forwardly of said body portion, a steering arm connected to the front end of said link, and means interconnecting said front bracket and link adapted to permit rotation of said intermediate bracket about its pivotal axis upon actuation of said steering arm, said rear, intermediate and front brackets being adapted to selectively mount a pair of snow runners or a plurality of wheels.

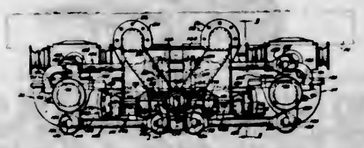
2,750,199
FRONT WHEEL MOUNTING FOR TRACTORS
Angus L. Hart, Grafton, N. Dak.
Application July 8, 1953, Serial No. 374,433
4 Claims. (Cl. 280—93)

4. A wide front axle mounting for converting a narrow gauge front wheel tractor into a wide front tractor wherein the front wheels are widely spaced apart, said mounting comprising a main bracket having means for fixedly securing it to a tractor frame, said bracket having its central portion provided with downwardly directed spaced wall portions adapted to receive therebetween a tubular axle member, a pivot pin for pivotally connecting the axle member to said spaced wall portions, stub shafts mounted in the ends of the tubular axle member and each having a spindle at its lower end, front wheels



mounted on said spindles, a pair of radius rods having their forward ends pivotally connected to the front axle member, means for pivotally connecting the rear ends of said radius rods to the tractor frame, and said main bracket having a rearwardly extending portion to which the rear ends of the radius rods are connected, and whereby the radius rods may be assembled in the axle mounting independently of the tractor frame.

2,750,200
TANDEM AXLE SUSPENSION
Walther F. Schoel, Detroit, Mich., assignor, by mesne assignments, to Rockwell Spring and Axle Company, Coraopolis, Pa., a corporation of Pennsylvania
Application February 4, 1952, Serial No. 269,734
12 Claims. (Cl. 280—104.5)

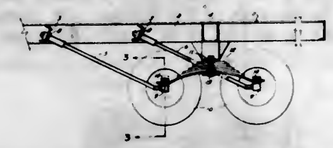


1. In a vehicle, a frame, a tandem axle assembly comprising a pair of closely spaced axles supported at their ends by ground engaging wheels, a spring suspension extending between said axles, a transverse member pivotally connected to said suspension intermediate said axles, a two-piece support bracket rigidly connected to the frame of the vehicle at each side, means for rigidly securing each of said two-piece brackets to said transverse member, means structurally independent of said suspension and coupled between said two-piece support brackets and each of said axles for transmitting brake and drive torque reactions to the frame and stabilizing said tandem axle assembly longitudinally of the vehicle frame, and lateral stabilizing means for each of said axles structurally independent of said suspension and said longitudinal stabilizing means and comprising an equalizing lever pivoted intermediately upon the side of the associated axle adjacent the other of said axles about an axis normal to the axis thereof and transversely extending rods universally connected at their inner ends to opposite ends of said equalizing lever and universally connected at their outer ends to the respective support brackets.

2,750,201
LOAD DISTRIBUTING WHEEL SUPPORTING UNDERCARRIAGE FOR VEHICLES
Paul Hagedorn, Yellowknife, Northwest Territories, Canada
Application November 27, 1953, Serial No. 394,815
4 Claims. (Cl. 280—104.5)

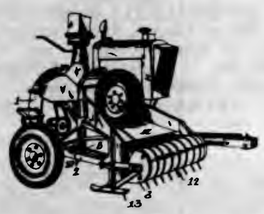
1. A vehicle undercarriage comprising: a frame having a pair of longitudinal members and a plurality of

transverse members fixed to said longitudinal members, a pair of wheel and axle sets, an arm fixed to the axle of each said set, a flexible joint connecting each said arm to a respective one of said transverse members for rotative and swinging movement with respect thereto, a



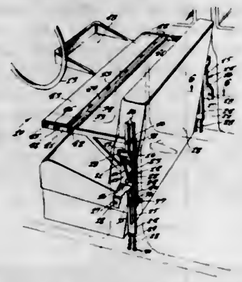
pair of spring supporting brackets suspended from another one of said transverse members, a spring pivotally mounted adjacent its mid-section in each bracket for generally horizontal rotative motion, each end of each spring having a slip joint connection with an axle of said wheel and axle sets.

2,750,202
TRACTOR HITCH HAVING A DETACHABLE IMPLEMENT CARRYING FRAME
Lucien Dion, Ste. Therese de Blainville, Quebec, Canada, assignor to Dion Freres Inc., Ste. Therese de Blainville, Quebec, Canada
Application October 12, 1953, Serial No. 385,618
6 Claims. (Cl. 280—106)



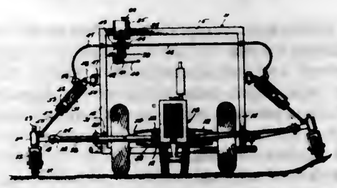
1. In a tractor hitch, a chassis having a pair of tubular longitudinal members, a detachable frame including a cross bar, a pair of locating plugs on said bar and detachably fitted in the front ends of said members, a pair of longitudinal members extending from said cross bar and lying over the first named members, and means for attaching the second named members to said chassis.

2,750,203
OCCUPANT PROTECTION BAR FOR AUTOMOBILE SEATS
Charles Biehler, Bronx, N. Y.
Application July 8, 1955, Serial No. 520,664
7 Claims. (Cl. 280—150)



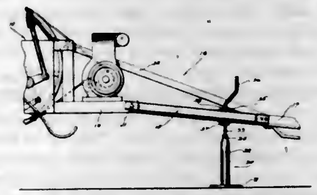
1. A safety device comprising a pair of mounting plates secured to the center posts of the vehicle or the like, each of said plates having a downwardly and rearwardly extending slot communicating with a vertical slot extending upwardly from the lower rear end thereof, a pair of guide bars, a stud carried by each of said guide bars and adapted to move within said downwardly and rearwardly inclined slot, each of said guide bars having a downwardly extending slot, a pair of supporting brackets, each of said supporting brackets having a plurality of vertically spaced studs adapted to ride within said guide bar slots, a separable bar, releasable means for connecting said separable bar to said supporting brackets and shock absorbing means carried along the rear edge of said bar.

2,750,204
SIDE BRACE FOR HYDRAULIC STACKERS
William R. Ohrmann, Drummond, Mont.
Application March 5, 1954, Serial No. 414,476
1 Claim. (Cl. 280—150)



Stabilizing means for stackers including a stacking machine, side stabilizing units mounted to the machine, each of said units including an arm having its inner end pivotally connected to the machine, a stabilizing wheel carried by the outer end of each arm and hydraulic means between the arms for permitting free action of the arms, or hydraulically locking the arms in fixed ground engaging position to prevent tilting of the machine when a load is being lifted, said hydraulic means between the arms consisting of a hydraulic cylinder for each of the arms, a hydraulic line extending from each of the cylinders, a valve cylinder to which the conduits connect, a valve element in the cylinder, manual means for operating the valve element, a fluid reservoir in communication with the valve cylinder, said valve being operative to close off the outlets and maintain the fluid in the conduits intact to prevent any action of the arms and stabilizing wheels.

2,750,205
RETRACTIBLE DRAWBAR SUPPORT
Stanley D. Russell, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a company of Wisconsin
Original application June 21, 1949, Serial No. 100,345, now Patent No. 2,696,391, dated December 7, 1954. Divided and this application October 28, 1954, Serial No. 465,339
3 Claims. (Cl. 280—150.5)



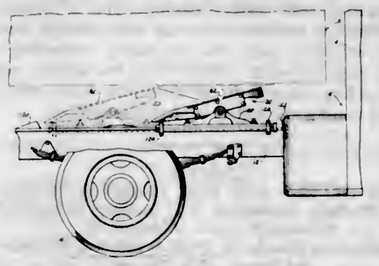
1. A drawbar for a baler, having a longitudinally extending baler chamber, constituting the main body of the baler, said drawbar comprising a pair of converging members extending forwardly from said bale chamber and comprising an A frame, one of said members having an inwardly extended flange, a stand for said drawbar including a lower ground engaging foot plate and an upstanding extensibly adjustable portion, and means for swingingly connecting said adjustable portion with said drawbar for swinging into substantially horizontal inoperative positions, said connecting means being disposed to swing said lower foot plate in a path such that it will interfere with said inwardly extending flange, and said connecting means being constituted to yield to provide for passing of said flange by said foot plate but to exert sufficient resistance to such yielding that said foot plate will be supported on said flange against inadvertent displacement until manually forcibly displaced.

2,750,206
BICYCLE TRAILER
Louis Sabato, Philadelphia, Pa.
Application October 27, 1953, Serial No. 388,644
1 Claim. (Cl. 280—204)



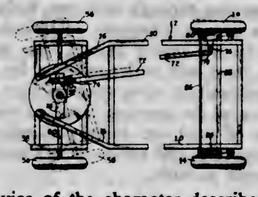
A trailer for a bicycle comprising a substantially U-shaped platform having a recess in the front portion thereof, said platform having a peripheral upwardly extending flange and a substantially U-shaped upwardly extending flange extending about the periphery of said recess, an inverted U-shaped harness secured against said U-shaped flange, said harness including a pair of spaced legs interconnected by an upper cross-member, said harness being in alignment with said recess, a strap attached to said upper cross-member for securing said trailer to the upper part of a frame of a bicycle, fasteners secured to said legs above and below said platform for securing said trailer to lower parts of the frame of a bicycle on each side of the rear wheel of the bicycle with the rear wheel extending into said recess, vertically extending wheel supports at the rear of said platform, wheels swivelly and rotatably carried by said wheel supports, a pair of L-shaped support brackets secured to the underside of said platform, each of said L-shaped support brackets having a downwardly depending portion fastened to said harness, slantingly extending braces secured under said L-shaped support brackets to said platform and to said wheel supports, and frontal rigidifying brackets having portions thereof underlying said slantingly extending braces and said L-shaped brackets and being secured to said platform, said frontal brackets being further secured to said upper cross-member of said harness.

2,750,207
LONGITUDINALLY ADJUSTABLE FIFTH WHEEL CONSTRUCTION FOR SEMITRAILERS
William T. Greenway, Borger, Tex.
Application June 8, 1954, Serial No. 435,184
5 Claims. (Cl. 280—407)



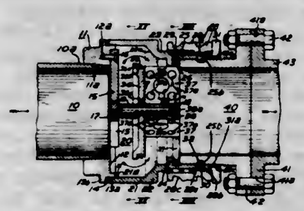
1. In a trailer truck having a frame extending over the rear wheels thereof, a fifth wheel structure mounted on the extending portion of said frame, said structure comprising a mounting plate fixedly carried by said frame across the top thereof, a supporting plate carrying a fifth wheel thereon superimposed upon said mounting plate and mounted on said mounting plate for sliding movement longitudinally thereof, said supporting plate having a plurality of longitudinally spaced openings therethrough located substantially along the longitudinal center line of said frame, a retaining bar having a plurality of longitudinally spaced openings therethrough secured on and extending longitudinally of said supporting plate with said openings therein in register with said openings in said supporting plate, locking means including a locking pin carried by said mounting plate and engageable with a selected one of the registering openings in said supporting plate and retaining bar for preventing sliding movement of said supporting plate, and means selectively operable for withdrawing said locking pin from engagement with said selected one of said registering openings to permit said supporting plate to slide longitudinally of said mounting plate.

2,750,208
TRAILER FIFTH WHEEL COUPLING AND STEERING MECHANISM
Cashly A. Henry, Dayton, Ohio
Application January 22, 1953, Serial No. 332,620
2 Claims. (Cl. 280—426)



1. In a device of the character described, a trailer, a tractor, a fifth wheel mounted on said tractor and connected to said trailer, a support on said trailer provided with a pin rotatably mounted in a roller bearing, said fifth wheel being provided with a radial slot terminating in a rectangular opening, said pin having a rectangular portion at one of its ends so as to engage said rectangular opening, means for releasably locking said rectangular portion in said rectangular opening, the other end of said pin being splined so as to receive a lever arm provided with a splined opening so as to rotate said lever arm with said pin, a clamp attached to the lever arm and adjustably movable along the length thereof, a connecting link pivotably secured to said clamp and to a stub axle for turning the wheel on said trailer when said fifth wheel is turned.

2,750,209
VALVE COUPLING
George C. Robb, Allegheny County, Pa., assignor to Robb Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application August 3, 1951, Serial No. 240,144
5 Claims. (Cl. 284—19)



1. A valved coupling construction comprising, a pair of body parts to be removably connected in telescopic

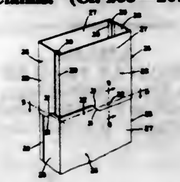
fluid-flow relationship with each other; one of said body parts having a back wall portion, an intermediate internal stop flange integral with said body part, and a front wall portion; the front face of said internal stop flange and said front wall portion defining an annular recessed portion, an annular gasket positioned in said recessed portion adjacent the front face of and projecting radially-inwardly along said stop flange, a spider mounted within said back wall portion having a guide stem attached thereto, said guide stem extending axially-forwardly in said back wall portion toward said stop flange, a unitary valve structure; said unitary valve structure having a disk-shaped back wall, a bearing hub extending axially-forwardly thereof, and equally-spaced guide wings extending radially-outwardly from said bearing hub; said bearing hub being mounted on said guide stem for movement thereon and in such a manner as to position said equally-spaced guide wings within said internal stop flange, said guide wings extending radially-outwardly into a slidably-guided relation within the inner diameter of said internal stop flange and for slidable dampening engagement with the annular seating gasket, means retaining said guide wings in the defined relation within said internal flange and with respect to said annular gasket during operative movement of said valve structure between open and closed positions, abutment means on the other of said body parts which engages said annular seating gasket and which moves said valve means axially to clear the opening through said one body part when the body parts are in telescopic relationship, said retaining means having means biasing said unitary valve structure away from said spider to force the disk-shaped back wall of said unitary valve structure into engagement with a back face of the internal flange of said one body part and close off said one body part when the body parts are disconnected, and means to lock said body parts in their telescopic position.

2,750,210
HOSE COUPLING WITH BRAIDED GRIPPING SLEEVE
Olin Troedon, Shaker Heights, Ohio, and Robert E. Herold, Meadville, Pa.
Application December 17, 1952, Serial No. 326,442
5 Claims. (Cl. 285—77)



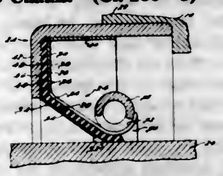
1. In combination with a hose, a reusable coupling for said hose, comprising a rigid fitting having an externally threaded part and an integral elongated nipple extending axially from the threaded part, the outer end of said nipple being axially spaced from said threaded part of said fitting, a nut threaded on said threaded part of said fitting, a braided expansible and contractible sleeve permanently secured to said nut, said sleeve extending concentrically of and axially beyond the outer end of the nipple and being radially spaced from said nipple a distance substantially equal to the thickness of the wall of the hose, an annular resilient sealing member supported on the outer end of the nipple and axially spaced inwardly from the outer end of said sleeve and having internal and external diameters at least as large as the internal and external diameters, respectively, of said nipple, said hose extending over said nipple and said sealing member and within said braided sleeve, said sealing member engaging the interior of the hose and sealing the nipple to the hose, said braided sleeve engaging and gripping the exterior of said hose for mechanically holding the hose on said fitting.

2,750,211
JOINT FOR SHEET METAL PIPE
Rowland G. Curtis, Dover, Ohio, assignor to Reeves Steel and Manufacturing Company, Dover, Ohio, a corporation of Ohio
Application April 3, 1953, Serial No. 346,749
6 Claims. (Cl. 285—201)



1. In a sheet metal duct of the type having a pair of tubular sections of substantially rectangular cross section, there being correspondingly positioned notches in opposite ends of each of the four side walls of each tubular section, the tubular sections being connected together end to end by engaging the notches in opposed ends of the two tubular sections and overlapping said opposed ends of the two tubular sections alternately inside and outside of each other around the entire perimeter of said tubular sections, the overlapping portions of said tubular sections at each corner of the duct being angular in cross section.

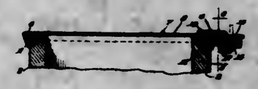
2,750,212
PLASTIC SEAL
Ralph L. Skinner, Detroit, Mich., assignor to Remiks Company, a partnership
Application October 9, 1952, Serial No. 313,947
5 Claims. (Cl. 286—5)



1. A seal assembly comprising an essentially thin sealing element of relatively inert plastic resin material provided with a conical portion having a sealing surface, retaining rings on opposite sides of said sealing element, said retaining rings having conical portions confining and intimately contacting the conical portion of said sealing element over substantially the entire surface thereof engaged by said rings, said retaining rings being inherently flexible and resilient and of heat-conducting material, both of said retaining rings extending to a point in proximity to the sealing surface of said sealing element so as to conduct heat created in use at said sealing surface, the portion of at least one of said retaining rings in proximity to the sealing surface of said sealing element being radially expansible and contractible, spring means coactive with said expansible and contractible portion of said one of said retaining rings holding the latter pressed lightly against said sealing element, and a retainer of heat-conducting material carrying said sealing element and said retaining rings and physically contacting said retaining rings at points remote from the sealing surface of said sealing element so as to absorb heat conducted from said sealing surface by said retaining rings.

2,750,213
DUST GUARD CAP FOR JOURNAL BOXES
William H. Sale, Richmond, Va., assignor of one-half to Edmund P. Kelly, Chicago, Ill.
Application March 15, 1952, Serial No. 276,840
4 Claims. (Cl. 286—6)

1. A dust-guard cap for journal boxes having overhanging lugs at opposite ends of a chamber in which a dust guard is positioned, said dust-guard cap comprising a top cover fitting above the chamber, a pair of side flanges engaging the side walls of the chamber, a pair of end flanges extending downwardly and inwardly from opposite ends of said top cover and fitting against the underside of said overhanging lugs, a bracket rigidly secured to said top cover adjacent one end thereof, said bracket having a leg extending downwardly in spaced



relationship to one of said end flanges, a bolt including a head and a shank threaded through an aperture in said downwardly extending leg and having its inner end extended into engagement with said one end flange to jamb it against the underside of the lug, and a separate locking member mounted on said bolt, said locking member having one portion deformable by bending for engaging the head of the bolt to prevent it from turning.

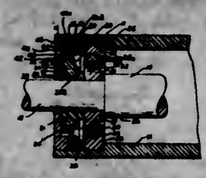
2,750,214
TWO-PIECE FLUID SEAL
Peter D. Bernsteinbaum, Suffield, Ohio
Application January 19, 1952, Serial No. 267,257
9 Claims. (Cl. 286—10)



1. A mechanical seal for establishing a fluid-tight connection between a rotatable member and a relatively stationary member operably aligned therewith, comprising; a first sealing plate, fixed with respect to one of said members and having one radial face thereof provided with an annular groove having a side wall: an annular rib on said first sealing plate, one side wall of which is common to said side wall of said groove: a second sealing plate, fixed with respect to the other of said members and having one radial face thereof provided with an annular groove having a side wall; said last-mentioned groove telescopically receiving therein said rib of said first sealing plate; a second annular rib on said second sealing plate, telescopically receivable within said groove of said first sealing plate and having a side wall that is common to said side wall of said groove in said second sealing plate; and radially extending projections provided on the free ends of said annular ribs, whereby the mouth openings of both grooves in both sealing plates are restricted; said projections being axially spaced when said sealing plates are telescoped, whereby an annular chamber is defined interiorly of said telescoped sealing plates by contact between said ribs; said projection of one of said ribs contacting a surface of the other of said ribs in each case.

2,750,215
MECHANICAL OIL SEAL
Peter D. Bernsteinbaum, Suffield, Ohio
Application November 21, 1951, Serial No. 257,493
8 Claims. (Cl. 286—11)

1. A mechanical seal, comprising; a first sealing element having a radial groove defining a side wall and a bottom wall; a flexible element positioned in said groove in abutment with said side wall and said bottom wall; a second sealing element relatively rotatable with respect to said first sealing element; and a plate positioned in sealing relationship between said sealing elements, and having a peripheral edge portion thereof engageable against said side wall at its point of contact with said flexible element, whereby said point of contact between said flexible



element and said side wall tensionally spaces said peripheral edge portion of said plate in radially shiftable relationship with respect to said bottom wall of said groove.

2,750,216
BOWL SLEEVE GASKET
Paul E. Thies, Columbus, Nebr.
Application December 3, 1953, Serial No. 395,890
2 Claims. (Cl. 288—20)



1. In a sealing gasket for a toilet bowl, the combination which comprises a ring of pliable material, said ring being rectangular-shaped in cross section and having an annular slot in the inner surface, a sleeve positioned with the upper part nested against the inner surface of the ring and having an inwardly offset lower part providing a skirt, the diameter of which is less than that of the upper part, and a flange extended from the upper end of the sleeve and positioned in the slot of the ring.

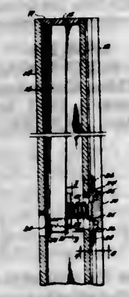
2,750,217
LATCH MECHANISM
Elmer C. Landholt, Overland, Mo., assignor to McDonnell Aircraft Corporation, St. Louis, Mo., a corporation of Maryland
Application April 27, 1953, Serial No. 351,115
15 Claims. (Cl. 292—97)



3. Latch mechanism for a closure for a wall opening and a keeper carried by the wall adjacent the opening, said latch mechanism including a latch pivotally carried by said closure and having a keeper gripping nose portion and an arm portion, a latch operating lever normally flush with the closure in keeper gripping position of said latch, said lever being pivotally mounted on said latch arm portion, a fixed element on said closure spaced from said latch, link means pivotally interconnected and also pivotally connected to and extending between said fixed element and the pivotal mounting of said lever on said latch arm portion, said lever having an operative connection with said link means and said link means being arranged to provide a toggle action locking force upon said latch through lever operation toward flush position in the keeper grip-

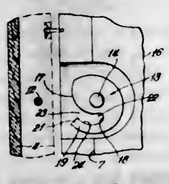
ping position thereof, and link operating means on said lever having a lost-motion connection with said link means for relative movement of said lever prior to operation of said link means, said lost motion connection preventing flush positioning of said lever for ineffective toggle locking force upon said latch and permitting lifting of said lever out of flush position.

2,750,218
FLUSH BOLT
Walter L. Clifton, Jr., Atlanta, Ga., assignor, by mesne assignments, to American Art Metals Company, Atlanta, Ga., a corporation of Delaware
Application June 19, 1953, Serial No. 362,773
7 Claims. (Cl. 292—140)



1. A flush bolt assembly comprising an elongated bolt, a rotatable spindle located adjacent one end of said bolt, a crank member pivotally connecting said bolt to said spindle to cause said bolt to move longitudinally in response to rotation of said spindle, a knob located at an end of said spindle opposite said crank member, a plate member located between said knob and said crank member, said plate having an opening extending therethrough and said spindle extending through said opening, and a resilient member extending between said crank member and said plate, said resilient member engaging said crank member and urging said crank member away from said plate to cause said knob to be pressed against said plate.

2,750,219
LATCH MECHANISM
Howard A. Bleam, Chicago, Ill., assignor to Admiral Corporation, Chicago, Ill., a corporation of Delaware
Application July 11, 1952, Serial No. 298,265
7 Claims. (Cl. 292—198)



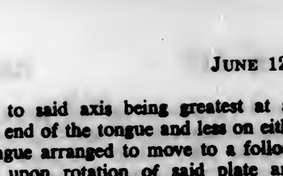
1. A door latch having a follower for the door and a latch for the door opening disposed opposite to the follower, said latch comprising a plate pivotally supported and freely revolvable about a fixed axis, a curved tongue on said plate providing a spiral-shaped channel between said tongue and said plate having an open throat at one end in spaced relation to said axis and extending spirally inward relative to said axis to a stop surface formed on the end of said channel opposite to said throat, said tongue being formed with a curved follower engaging surface which is curved about the pivot for the latch, said plate having a gravitational center spaced from said axis being operable to normally present said follower engaging surface to said follower, the radius of said follower engaging surface relative to said axis being greatest at a point spaced from the end of the tongue and less on either side thereof, said tongue arranged to move to a follower engaging position upon rotation of said plate and said curved follower surface arranged to engage and retain said follower upon movement of said plate to follower engaging position.

2,750,220
SEALS
Frank Keidel, Elmhurst, N. Y., assignor to International Seal & Knot Protector Co., New York, N. Y., a corporation of New York
Application June 19, 1953, Serial No. 362,910
6 Claims. (Cl. 292—323)



3. A seal for connecting together the ends of a cord, said seal including a pair of cup-shaped sections adapted to be telescoped to form a casing, one of said sections having a pair of holes for the ends of a cord and the other section having a hole through which one end of the cord may be pulled, means for locking said sections against separation after being telescoped, and a disc within said casing but unattached thereto, and around opposite edges of which the ends of the cord are extended.

2,750,221
LATCH STRIKER ASSEMBLY
Clarence P. McClelland, Royal Oak, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 12, 1955, Serial No. 481,300
8 Claims. (Cl. 292—341.18)



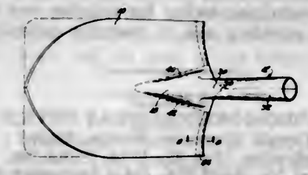
6. In combination, a striker support bracket of sheet metal having a mounting portion and a pair of spaced supporting members integrally connected with said mounting portion, one of said members being provided with integral self-locking screw thread engaging means, the other of said members defining an opening in alignment with said engaging members, and an adjustable striker including a threaded shank extending through said opening and said engaging means.

2,750,222
SUCTION CUP
John E. Borah, Mishawaka, Ind.
Application July 21, 1952, Serial No. 300,061
5 Claims. (Cl. 294—19)



1. A ball retriever for gripping a ball having a pebbled surface characterized by shallow spaced indentations, comprising a cup-shaped imperforate body of a diameter less than the diameter of said ball, said body being formed of resilient material having a durometer measurement in the range from 20 to 70, said body having a skirt portion and a substantially uniform, narrow, continuous, marginal ball-engaging flange formed integrally with and projecting inwardly from the mouth of said skirt portion, said skirt portion being of a depth to receive a portion of said ball within said cup-shaped body with clearance in an axial direction, said flange having inner and outer faces and tapering radially inwardly of said body at an angle in the range between 15° and 35° with respect to each other and being of a width between the outer periphery of the body and the inner edge of the flange not substantially greater than twice the thickness of the skirt portion from which it projects, whereby said flange terminates in a sharp inner edge and is thin and flexible to conform to the pebbled surface contour of a ball when pressed thereagainst substantially concentrically in a direction axially of said body and with sufficient pressure to circumferentially stretch said flange and partially expel air from the interior of said cup-shaped body.

2,750,223
SHOVEL CONSTRUCTION
Lorin R. Runkle, South Bend, Ind., assignor to Iwan Bros., Inc., South Bend, Ind., a corporation of Indiana
Application March 28, 1952, Serial No. 279,033
4 Claims. (Cl. 294—49)



1. In a shovel, a blade and ferrule formed integrally from sheet metal, said blade being bent to define an upwardly offset longitudinal rib extending for a portion of its length and merging with said ferrule, said ferrule being substantially straight and joined to said blade by a bent portion so shaped that the axis of said ferrule intersects said blade adjacent to the front of said rib, and a reinforcing member marginally secured to the surface of said blade around said rib and interfitting and cooperating with said bent portion and ferrule to define a continuous tubular portion from the open end of said ferrule to the front end of said rib, said tubular portion being of multiple thickness for at least part of its cross-sectional extent throughout the length of said bent portion and a part of said straight ferrule portion.

2,750,224
GAMBREL
Peter E. Matheny, Jacksonville, Oreg.
Application June 14, 1951, Serial No. 231,587
2 Claims. (Cl. 294—79)



1. The combination of a gambrel comprising a vertically elongated member adapted at its upper end to be suspended from a support, and a pair of arms having inner ends pivotally connected to the lower end of said member and extending to opposite sides thereof to afford free carcass engaging outer end portions, a pair of keeper limbs pivotally connected to an intermediate portion of said member and extending to opposite sides thereof, hooks provided at free end portions of said limbs to supportably engage intermediate portions of the respective arms, a pair of stop pins provided intermediate the ends of the respective arms to abut the respective hooks, and a carcass enclosure comprising an inverted bag enveloping the gambrel and extending downwardly therefrom, said bag having a top end provided with an eyelet slidable on the upper portion of said member, and the outer extremities of said arms engaging opposite sides of said bag to sustain the same against inward collapsing.

2,750,225
AUTOMOBILE TRANSPORTING VEHICLE
Donald Mettetal, Jr., Chicago, Ill., assignor, by mesne assignments, of one-half to Dealers Transit, Inc., Chicago, Ill., a corporation of Illinois, and one-half to Arco Auto Carriers, Inc., Chicago, Ill., a corporation of Illinois
Application July 6, 1950, Serial No. 172,226
8 Claims. (Cl. 296—1)



1. In a transporting vehicle for hauling other vehicles, a supporting frame structure including side frame members, supporting wheel structures at the front and rear ends of said vehicle, a driver's cab mounted on said supporting frame structure in vertically spaced relation above the front wheel structure, vehicle supporting track members forming a lower deck arranged between said front and back wheel structures, other vehicle supporting track members forming an upper deck supported on said side frame members in spaced relation above said first mentioned track members, the track members on said upper deck being mounted on pivotally related front and rear frames, one end of said front frame being pivotally connected to the side frame members adjacent the front wheel structure and in vertically spaced relation beneath the bottom of said cab structure, the other end of said front frame being supported on an intermediate portion of said vehicle side frame members and being adapted to swing in a vertical direction, said rear frame being provided with a cross bar at the forward portion thereof, a trackway on said vehicle side frame members adapted to receive said cross bar in generally horizontal sliding relation, extensible hydraulically operated arms pivotally connected to said side frame members and to said rear frame whereby said front and rear frames may be moved by operation of said hydraulic arms to an elevated position above the rear and intermediate portions of the lower deck to permit a vehicle to be positioned on the track members on the lower deck and said frames may be thereafter lowered into vehicle supporting relation on said side frame members to permit two vehicles to be loaded on the tracks thereon.

2,750,226
RAMP TRAILER
Charles S. Ash, Detroit, Mich.
Application June 15, 1953, Serial No. 361,636
4 Claims. (Cl. 296—61)

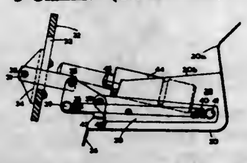
1. In a trailer comprising a frame structure and an open-ended body structure on said frame structure having a floor, a tail gate having a lower edge pivotally connected

to one of said structures and an upper edges, said tail gate being swingable selectively into a vertical position closing the open end of said body structure and into an inclined position with its upper edge engaging the ground and with its lower edge approximately at the level of said



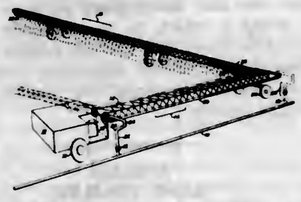
floor whereby said tail gate in its lowered position forms a loading ramp for said trailer, and a bumper on said tail gate near the lower edge thereof positioned to project rearwardly in the raised position of said tail gate and to project downwardly to the ground in the lowered position of said tail gate.

2,750,227
STOWING A DROP-HEAD OF A MOTOR CAR BODY
John Hewitt Orr, Coventry, England, assignor to Carbodies Limited, Coventry, England
Application August 6, 1953, Serial No. 372,660
3 Claims. (Cl. 296—65)



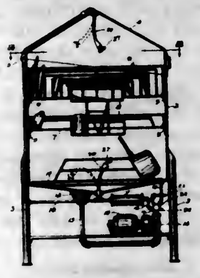
1. An automobile having a body, a seat-back hinged near the bottom to the body for forward tilting, a toggle at the back of the seat-back having one link hinged to the seat-back and the other to the body, abutment means including a stop on said other link cooperating with a fixed abutment for positively preventing the toggle from becoming fully straightened when the seat-back is tilted forwardly, and spring means connected to said other link and to a fixed part to bias said abutment means into the operative position when said seat-back is tilted forwardly, the spring being connected to the body link in a position such that movement of the seat-back from its forward to its rearward position causes the spring to pass through its dead-centre position whereby the initial thrust exerted in moving the seat from either position to the other position is opposed by the spring.

2,750,228
IRRIGATING MACHINE
Wendlin A. Engel, Ellis, Kans.
Application September 30, 1954, Serial No. 459,252
7 Claims. (Cl. 299—47)



1. A self-propelled sprinkling device for use with a supply pipe having outlets at spaced points including a power and transfer unit and a sprinkling unit, the transfer unit being provided with means for connection with the successive outlets in turn and adapted to travel along the length of the supply pipe, an elongated wheeled frame for the transfer unit, an elongated flexible hose, a flexible connection between one end of the hose and the connection to the supply pipe, a flexible connection between the other end of the hose and the sprinkling unit, a track extending along both sides and an end of the frame about which the hose may move, and materially longer than said hose, means for supporting and guiding said hose in its movement back and forth in said track, means for pulling said hose back and forth in said track, a source of power for advancing the transfer unit along the supply pipe, a source of power for the pulling means, a source of power for moving the sprinkling unit, means for transmitting the power from said last mentioned source to the sprinkling unit, steering means for the transfer unit; at least one section of sprinkling unit adapted to travel, extending substantially at right angles to the transfer unit, along the length thereof, each section having a frame, a sprinkling pipe, means for receiving power at the end nearest the transfer unit, a drive shaft connected thereto and extending the length of the frame section, a steering wheel traveling in advance of the frame section, a driving wheel, means operably connecting the drive shaft and the driving wheel, means for setting the direction of the steering wheel, releasable means for holding the driving wheel for driving the sprinking unit in a forward direction, which means when released permits the unit to be towed lengthwise of itself, and cooperating means for securing two or more sections of sprinkling unit in operative end-to-end relationship.

2,750,229
RANDOM-MOTION SPRAY DEVICE
Oswald Cammann, Weston, Mass.
Original application May 25, 1946, Serial No. 672,324, now Patent No. 2,622,926, dated December 23, 1952. Divided and this application November 29, 1952, Serial No. 323,317
2 Claims. (Cl. 299—65)



1. A spraying device for directing a concentrated jet of liquid in random fashion over a region to be treated by impact of the liquid jet, comprising a short flexible conduit, a fixed support for one end of the conduit adjacent the region to be treated by the jet, circular liquid-conveying means in communication with and carried by the free outer end of the flexible conduit, said liquid-conveying means having a circular passage within which liquid from the conduit is directed in a circular path about an axis corresponding to the axis of the free end of the flexible conduit, a nozzle having a discharge passage for discharging a liquid jet concentrated in a narrow angle, the nozzle being connected to the circular liquid-conveying means by a straight section aligned with the axis of nozzle discharge and substantially normal to the plane of rotation of the liquid within the liquid conveying means, the nozzle and said liquid-conveying means being supported by the flexible conduit for random swinging movement by reaction of the jet discharge and gyroscopic precessive force of the rotating liquid within the circular passage.

2,750,230
VALVING SPOUT HAVING A FOAMING ORIFICE
Jack W. Seffer, St. Louis, and Donald M. Kitterman, Kansas City, Mo., assignors to Development Research, Inc., St. Louis, Mo., a corporation of Missouri
Application August 19, 1953, Serial No. 375,200
5 Claims. (Cl. 299—83)



1. A rigid, molded tilt-opening valving spout for the foamed dispensing of gas-expanded fluid substances, comprising a dispensing stem having a tubular dispensing portion, a foaming orifice at its inner end, two legs of fan-shaped cross-section at the base of the tubular portion, the arcuate portions of the legs substantially coinciding with the outer wall of the tubular portion, the apexes of the legs being presented toward each other and spaced from the axis of the tubular dispensing portion a distance less than the inner radius thereof and a solid valve head at the bases of the legs, whereby lateral passages, converging to a constricted center and communicating with the foaming orifice, are formed between the fan-shaped legs, the valve head, and the base of the tubular dispensing portion.

2,750,231
MIXING AND SPRAYING DEVICE
Eddie L. Cox, Redondo Beach, Calif.
Application June 16, 1955, Serial No. 516,017
5 Claims. (Cl. 299—85)



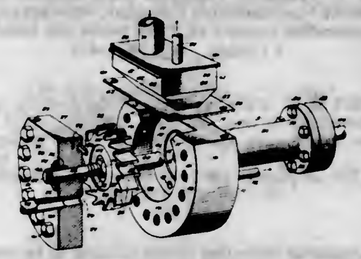
1. A device which mixes liquid containing a desired material and discharges same therefrom as a spray, including: an elongate cylindrical shell; a piston freely slidable within the confines of said shell, which piston effects a fluid-tight seal with the interior shell surface; an elongate tube disposed parallel to said shell; means to introduce said material into said tube; a first closure having a first passage extending therethrough to which a first hose can be connected when said closure is mounted in one end of said shell, which closure has a second passage formed therein connecting the interior end portion of said shell adjacent said first closure to the interior of said tube; a second closure mounted in the opposite end of said shell in which said first closure is mounted, which second closure has a third liquid passage formed therethrough; a valve body having a longitudinally extending annular opening formed therein that encloses said second closure, which valve body has a fourth liquid passage extending from said opening to the interior of said tube and fifth and sixth liquid passages that serve as a drain and connecting means for a second hose respectively; a manually rotatable valve member provided with seventh, eighth and ninth liquid passages that is mounted in said opening, which member when rotated to a first position so disposes said seventh passage as to effect communication with said fourth and sixth passages to permit said shell to be filled with said liquid and so disposes said ninth passage as to effect communication between said third and fifth passages, with said member when rotated to a second position establishing liquid communication between said third, sixth and eighth passages only, which member when rotated to a third position obstructs liquid flow through said fourth, fifth and sixth passages; and means to support said shell at an elevated position above the ground surface.

2,750,232
LAWN SOAKER
Elmer Szuntay, Chicago, and Gilbron M. Baccash, Evanston, Ill., assignors to Sandee Mfg. Co., a corporation of Illinois
Application September 25, 1953, Serial No. 382,248
6 Claims. (Cl. 299—104)



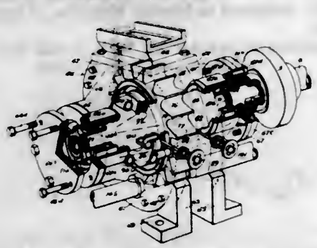
3. A lawn soaker comprising a single piece elongated, flexible and collapsible extrusion molded synthetic plastic member having a hollow tube portion which has a substantially uniform wall thickness, which is substantially cylindrical in configuration when extended by water pressure therein and which may be substantially collapsed when the water pressure therein is relieved for compacting the same for storage purposes and having on opposite sides of the tube portion longitudinally arranged fin portions of substantially uniform thickness extending outwardly and downwardly from the tube portion when the latter is extended by water pressure therein for positioning the extended tube portion in upright position on the lawn, the upper part of the tube portion above the fin portions being provided with a plurality of perforations therethrough for spraying water upwardly and outwardly from within the tube portion.

2,750,233
ROTARY SOLIDS TRANSFER PUMP
John I. Yellott, New York, N. Y., assignor to Bituminous Coal Research, Inc., Washington, D. C., a corporation of Delaware
Original application November 30, 1949, Serial No. 130,215, now Patent No. 2,652,687, dated September 22, 1953. Divided and this application June 23, 1953, Serial No. 363,524
10 Claims. (Cl. 302—49)



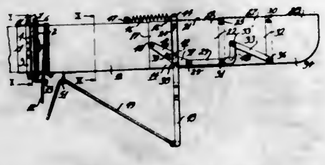
1. In a rotary solids transfer pump of the character described, the improvements comprising sealing means seated in annular grooves in the casing walls and apposable with the rotor to seal the gaps between the faces of the rotor and the casing walls, whereby entrance of solids into the spaces between the rotor faces and the casing walls is prevented, fluid pressure means coupled to the said casing wall grooves and operable to bias the sealing means into sealing position, and separate pneumatic fluid entrant means coupled to the pump casing radially inward of the sealing means, the rotor being axially apertured by a circular array of apertures severally extending through the rotor and circumjacent the rotor shaft.

2,750,234
IMPROVED ROTARY SOLIDS TRANSFER PUMP FOR HANDLING FLUIDIZED SOLIDS
John I. Yellott, New York, N. Y., assignor to Bituminous Coal Research, Inc., Washington, D. C., a corporation of Delaware
Original application November 17, 1950, Serial No. 196,288, now Patent No. 2,675,676, dated April 20, 1954. Divided and this application June 15, 1953, Serial No. 361,802
5 Claims. (Cl. 302—49)



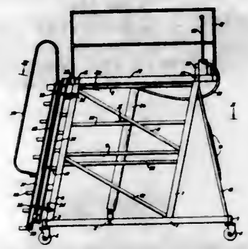
1. In a rotary solids transfer pump of the character described, wherein a peripherally pocketed rotary feeder wheel is mounted for rotation in an annular pump casing having a solids entrant and aligned conveying pressure air inlet and discharge openings in register with the pockets of the wheel, the feeder wheel having non-rubbing close clearance with the pump casing, and self-lubricating annular, self-seating sealing members are mounted in and between the faces of the body of the wheel and the apposed faces of the pump casing, the improvement comprising inboard and outboard bearings for the rotor shaft spacedly secured to the pump casing; means for pneumatically biasing the sealing members into self-seating, sealing engagement; means for supplying purging air to the pump casing radially inward of the annular sealing means, and at a pressure above the pressure of the conveying air, whereby a pressure differential is set up radially outward of the sealing members into the pump chamber; and bleeder air means in the pump casing circumjacent the rotor shaft, whereby pressure air is vented to the atmosphere and away from the shaft.

2,750,235
ARTICULATED DEFLECTOR FOR BLOWER
George V. Frushour, Anniston, Ala., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application January 18, 1955, Serial No. 482,510
9 Claims. (Cl. 302—61)



1. A material deflecting device adapted to be connected to a material blower discharge pipe and comprising a round to square conversion pipe section being provided at the round end thereof with a radially outward extending annular flange, said flange being adapted to be rotatably received between rollers carried on said discharge pipe, means for rotating said conversion pipe section relative to said discharge pipe from a remote point, a first generally trough shaped conduit section having one end telescopically mounted about the square end of said conversion pipe section, said first conduit section being pivotally attached adjacent its base wall portion to said conversion pipe section; a second generally trough shaped conduit section telescopically mounted about the discharge end of said first conduit section, said second conduit section being pivotally attached adjacent its base wall portion to said first conduit section adjacent said base wall portion of the latter, a third trough shaped conduit section telescopically mounted about the discharge end of said second conduit section, said third conduit section being pivotally attached adjacent its base wall portion to said second conduit section adjacent said base wall portion of the latter, an operating member attached to said first conduit section for pivotal movement therewith relative to said conversion pipe section, a double armed lever mounted on said second conduit section for pivotal movement relative thereto, a link pivotally connecting one end of said lever and said third conduit section, a plate pivotally mounted on said operating member and having one end thereof pivotally attached to the other end of said lever, a lock member attached to said conversion section and providing a pivotal connection with the other end of said plate, whereby a pull on said operating member causes said first, second and third conduit sections to pivot about their respective pivotal connections to provide a curved articulated trough extension of the blower discharge pipe, said lock member coacting with said plate for limiting the pivotal movement of said device.

2,750,236
ELEVATING PLATFORM STRUCTURE
Henry B. Middendorf, Pittsburgh, Pa., assignor to Scaffold Equipment Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application May 7, 1952, Serial No. 286,455
1 Claim. (Cl. 304—29)



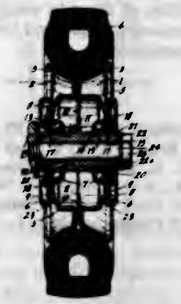
An elevating platform structure comprising an elongated rectangular base having front and rear ends, a pair of tubular legs rigidly mounted on the rear end of the base, another pair of legs rigidly mounted on the base at points spaced from the front end of the base, all of said legs being inclined forward and being parallel to one another, each of the legs being provided with a slot in the side facing the leg across the base from it and extending downward from the upper end of the leg, braces extending from the front end of the base upward to the upper portions of the front legs and attached thereto, braces rigidly connecting the back legs to the front legs, a sliding leg telescoped into each slotted leg and projecting from its upper end, a cross brace extending through the slots in said front legs and fastened to the sliding legs therein, a cross brace extending through the slots in said rear legs and fastened to the sliding legs therein, bracing rigidly connecting said cross braces, a platform mounted on the sliding legs, an inclined stationary ladder section rigidly connected to said rear legs and spaced therefrom, an inclined sliding ladder section rigidly connected to the rear of said platform and extending down between said stationary ladder section and the adjacent legs, means slidably connecting the lower end of the sliding ladder section to the stationary ladder section, and means for raising the platform, whereby said sliding legs will slide upward in the slotted legs and the sliding ladder section will slide up the stationary ladder section to form an inclined ladder from the base to the elevated platform.

2,750,237
BEARING MEANS FOR SPINNING AND DOUBLING SPINDLES
Heinrich Fink, Esslingen, and Joseph Steichele, Stuttgart-Weil im Dorf, Germany, assignors to SKF Kugellagerfabriken Gesellschaft mit beschränkter Haftung
Application January 8, 1953, Serial No. 330,222
Claims priority, application Germany November 15, 1951
9 Claims. (Cl. 308—154)



1. Support for spinning and doubling spindle, comprising bearing means including a footstep and a collar, the collar being separately formed from the footstep, a bearing sleeve supporting the footstep, a separate support for the collar, stationary centering means for the footstep, the footstep bearing against the centering means to be radially movable independently of the collar but to be prevented from turning, an oscillation absorber surrounding the bearing sleeve over most of its length, and a spindle housing accommodating the bearing sleeve, the collar support, the centering means, and the oscillation absorber.

2,750,238
WHEEL AND BEARING STRUCTURE AND SEAL THEREFOR
John W. Black, Jr., Kalamazoo, Mich., assignor to Pemco Wheel Company, Kalamazoo, Mich.
Application May 19, 1955, Serial No. 509,627
7 Claims. (Cl. 308—187.1)



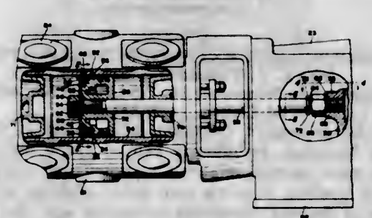
1. A wheel comprising metal discs secured back to back and having axially spaced hub portions, a hollow spindle disposed through said hub portions, fixed and rotating bearing members carried by said spindle and said discs at the ends of said hub portions and having rolling anti-friction elements disposed between the bearing members, the outer ends of the fixed bearing members being spaced axially inwardly of the outer ends of the rotating bearing members, flat annular flexible seals disposed around the ends of said spindle, and end caps fixedly mounted on the ends of said spindle outwardly from said seals, said end caps having axially inwardly offset annular beads pressing said seals against said fixed bearing members and deflecting the rims of the seals into sealing engagement with said rotating bearing members, said caps having radially inner edges seated in shouldered notches in the ends of said spindle and having radially outer rims turned axially over the rims of said fixed bearing members.

2,750,239
BEARING UNIT FOR SPINDLES OF SPINNING FRAMES AND TWISTING FRAMES
Ernst Rogner, Bad Cannstatt, and Joseph Steichele, Stuttgart-Weil im Dorf, Germany, assignors to SKF Kugellagerfabriken Gesellschaft mit beschränkter Haftung
Application February 9, 1952, Serial No. 270,823
Claims priority, application Germany February 22, 1951
4 Claims. (Cl. 308—228)



1. Bearing unit for spindles of spinning and doubling frames, comprising a spindle bolster provided with a flange to be secured in a bolster rail, a neck bearing for the spindle in the form of a roller bearing, the bolster extending upwardly at least indirectly to the neck bearing to rigidly support the latter, a footstep bearing for the foot end of the spindle, a centering sleeve arranged within the bolster for resiliency but not for longitudinal movements, said sleeve extending from below the rigid neck bearing downwardly and being rigidly held at its upper end and below the neck bearing at least indirectly by the bolster, a portion of the sleeve below the rigidly held upper end of the sleeve being provided with incisions to ensure said resiliency, the sleeve supporting at its lower or free end the footstep bearing, and mechanical means to damp vibrational energies, said means being accommodated between the spindle bolster and the centering sleeve to surround the entire height of the footstep bearing and to extend upwardly approximately to the lower end of said incised sleeve portion.

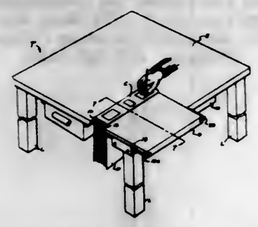
2,750,240
WEAR AND ADJUSTING DEVICE FOR PISTONS
Julius Naab, Easton, Pa., assignor to Ingersoll-Rand Company, New York, N. Y., a corporation of New Jersey
Application September 21, 1954, Serial No. 457,497
5 Claims. (Cl. 309—4)



1. In a wearing device, a body of high expansive material having an annular peripheral groove, wearing means in the groove consisting of a ring of a lower expansive material than the body material having a smaller inside diameter than the diameter of the groove and being split

to enable said ring to expand within the groove, said body including removable means forming therewith said groove and retaining the ring therein, and means for preventing rotative movement of the ring in the groove.

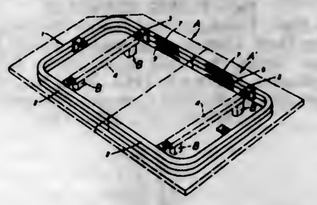
2,750,241
CLAMP FOR BOOKS AND LIKE ARTICLES
Frank S. Eden, Miami, Fla.
Application October 7, 1953, Serial No. 384,657
4 Claims. (Cl. 311—1)



1. A clamp for supporting a book in a vertical plane with the back of the book facing upwardly, said book having side covers joining said back along grooved hinge lines, the clamp comprising a substantially rectangular stationary member with an outwardly opening recess formed in the periphery thereof, said recess being defined by two inwardly extending edges formed at right angles to each other, one of said edges being undercut to provide a relatively thin protruding upper edge portion engageable in one of the grooved hinge lines of said book with the back of the book projecting slightly above said stationary member, the other of said edges having an elongated slot formed therein, a slide member, means to guide and support said slide member for movement within said recess toward and away from said one edge of the stationary member, comprising an extension member secured to the underside of said stationary member and extending across and under said recess, a guide strip carried on the unsupported end of said extension member, the outer edge of said slide member having an elongated slot adapted to receive said guide strip whereby the slide member is supported for movement relative to the stationary member, the inner edge of said slide member opposite said outer edge having an elongated longitudinal guide strip secured thereto and extending outwardly therefrom into and being slidable longitudinally within said slot in said other recess-defining edge of the stationary member, said slide member having an inner transverse edge extending substantially parallel to said one recess-defining edge of the stationary member and being similarly undercut providing a relatively thin protruding upper edge portion adapted to engage in the opposite hinge groove of said book, and means urging said slide member into said recess to grip and support a book disposed between the undercut edges of said stationary member and said slide member.

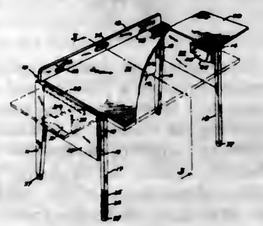
2,750,242
ADJUSTABLE EXTENSION TABLE APRON
John C. L. Viehmann, Manhasset, N. Y.
Application November 16, 1954, Serial No. 469,197
4 Claims. (Cl. 311—42)

1. An adjustable extension table apron of the character described, including a pair of apron tubes having their ends thereof relatively opposed and normally in closed position abutting each other, slidable telescoping links or floating extensions projecting into the opposed ends and interconnecting the apron tube on one side with the opposite apron tube upon the other side, one apron tube upon one side and the correspondingly opposite apron tube on the other side together with the slidable telescoping links or floating extensions inter-connecting the two apron tubes forming a substantially continuous unbroken but extensible unit, and means associated with the apron



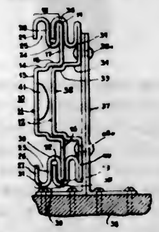
tubes for limiting the extension of the extensible unit to predetermined length for the unit as a whole.

2,750,243
FOLDABLE TABLE WITH HINGED TOP
William A. Zielfeldt, San Mateo, Calif.
Application July 6, 1954, Serial No. 441,321
2 Claims. (Cl. 311—62)



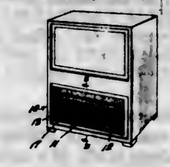
1. A foldable desk table comprising a back member having spaced supporting rear legs and a back panel therebetween, a side wing and front leg hingedly mounted to each rear leg for swinging from a folded position substantially parallel to the back member to an open position substantially perpendicular thereto, a planar table top member hingedly connectible at one end of its edges to the back member, the table top lying between the back member and the side wing members at the respective folded positions thereof, and means for releasably interlocking the forward free edge of the table top with the forward free portion of the side wings for supporting the table top at horizontal position and locking the side wings against hinged movement.

2,750,244
EXTENSION ARM FOR FURNITURE
Morris Manson, Brooklyn, N. Y., and Frederick Hafekost, Hopatcong, N. J., assignors to Steel Slides, Inc., New Rochelle, N. Y., a corporation of New York
Application April 11, 1955, Serial No. 500,566
9 Claims. (Cl. 311—71)



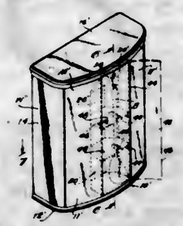
1. A slide element including a pair of outwardly directed primary flanges, a pair of exteriorly accessible subchannel portions positioned along respective of said flanges, and a pair of inwardly directed flanges respectively connected along their outer edges to respective of the aforementioned subchannel portions, each inwardly directed flange being spaced from its respective subchannel portion thereby to define a pair of interiorly accessible subchannel portions conformed to receive in longitudinal sliding engagement the respective primary flanges of another such slide element, a central channel portion, said outwardly directed primary flanges comprising opposite flanges of said central channel portion, the latter being interposed between opposite subchannel portions of each of the aforementioned pairs of such portions.

2,750,245
PANEL FOR RADIO OR TELEVISION CABINET
John A. Macintyre, Barrington, R. I., assignor to B & M Mills, Inc., a corporation of Rhode Island
Application February 8, 1954, Serial No. 408,770
2 Claims. (Cl. 312—7)



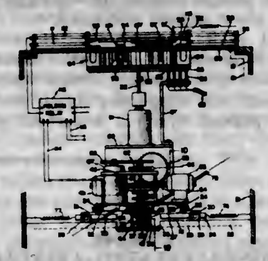
1. A cabinet having an opening extending through one side wall thereof, an open frame about said opening, said frame having a plurality of equally spaced grooves therein at opposite sides thereof, said grooves extending inwardly on a slant from one side of said frame, a plurality of louver boards extending across said frame with the ends of said louver boards being received in said grooves, a sounding board extending across the frame covering the open ends of said slots to secure the louver boards in said grooves, each of said louver boards being enclosed in a textile fabric covering.

2,750,246
CLOTHES HAMPERS
Carl Fuerst, Beechhurst, N. Y., assignor to Gleitsman's, Inc., Long Island City, N. Y., a corporation of New York
Application September 10, 1952, Serial No. 308,734
2 Claims. (Cl. 312—206)



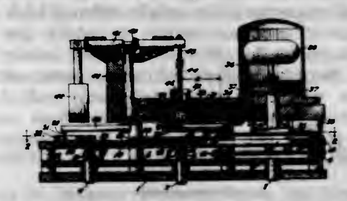
1. A hamper, comprising a receptacle having an open top, a bottom, and vertical walls including a front wall, said front wall having a portion thereof recessed towards the rear of the hamper and extending substantially vertically of the hamper centrally thereof for substantially the full length of said front wall, said recessed portion being open at the front of the hamper and having a closed top and bottom and at least one horizontally positioned shelf disposed intermediate said top and bottom of said recessed portion, the latter forming a compartment separated from said receptacle for the storage of articles and including a rearwardly disposed substantially vertically extending peripheral wall, and a top cover movable between open and closed positions, the latter position being effective to cover said receptacle and said closed top of said separate compartment, said closed top being downwardly inclined from said front wall to said peripheral wall and having a surface constituting directing means to facilitate and guide the entry of articles into said receptacle through the open top thereof.

2,750,247
POSITION RECORDER
Edwin E. Turner, Jr., West Roxbury, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Continuation of application Serial No. 571,865, January 8, 1945, which is a division of application Serial No. 490,930, June 15, 1943. This application March 29, 1951, Serial No. 218,151
17 Claims. (Cl. 346—8)



1. In a wave reflection object detection system located at a moving observing station and having a wave transmitter and a wave receiver at least one of which is directive and orientable to aim its directive characteristic as desired, and position recording mechanism; said recording mechanism comprising: a table having a marking surface thereon; a unitary frame smaller than said marking surface positioned over said marking surface; elongated means carried on said frame, said elongated means holding a plurality of mark producing means including means for producing a first mark corresponding to the position of said station in response to operation of said transmitter; and means for producing a second mark in response to operation of said receiver at a distance along said elongated means from said first mark corresponding to the distance from said station to a detected object; means for orienting said frame about an axis perpendicular to said table to direct said elongated means in synchronism with the directive member at said station; and means for moving said frame over said table in accordance with the course of said observing station, with said means for producing said first mark tracing a replica of said course over said table.

2,750,248
NAVIGATIONAL APPARATUS
Georges Pattantyus-Abraham, Lisbon, Portugal
Application September 14, 1953, Serial No. 379,884
Claims priority, application Germany September 15, 1952
4 Claims. (Cl. 346—8)



1. In apparatus for recording the path of travel of an associated vehicle with reference to a system of ordinates and coordinates on a flat plane; the combination of first and second discs adapted to be rotationally driven at speeds proportional to the speed of an associated vehicle, first and second friction rollers in contact with said first and second discs, respectively, and rotatable about axes extending radially from the axes of rotation of the related discs, the axes of rotation of said first and second friction rollers being normal to each other and said first and second friction rollers being movable axially toward and

away from the axes of rotation of the related discs, first and second longitudinally slotted members extending transversely with respect to the axes of rotation of said first and second friction rollers, respectively, said first and second longitudinally slotted members being connected to said first and second friction rollers, respectively, for movement with the latter in the directions of the axes of rotation of said first and second friction rollers, respectively, a pin extending slidably in said first and second longitudinally slotted members, means supporting said pin for swinging about an axis which is spaced radially from said pin and passes through the intersection of said normal axes of rotation of said first and second friction rollers, gyro-compass actuated means operative to angularly displace said supporting means and swing said pin from a position lying in a vertical plane passing through the axis of rotation of one of said first and second friction rollers in response to departure of the associated vehicle from a datum direction so that said first and second friction rollers are thereby displaced axially toward and away from the axes of rotation of the related discs and the rotational speeds of said first and second rollers correspond to the components of the travel of the associated vehicle in directions parallel and normal to said datum direction, and means acting in response to the inclination of the associated vehicle from the horizontal to modify the positions of said first and second friction rollers radially from the axes of rotation of the related discs so that the rotational speeds of said first and second friction rollers are proportional to the horizontal projections of the components of travel in said directions parallel and normal to the datum direction.

CHEMICAL

2,750,249
PHENYLAMINOALKYLATED CELLULOSIC TEXTILES AND PROCESS OF CHEMICALLY MODIFYING THEM

Wilson A. Reeves and John D. Guthrie, New Orleans, La., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application April 10, 1953, Serial No. 348,138
11 Claims. (Cl. 8—17)
(Granted under Title 35, U. S. Code (1952), sec. 266)

4. A process of coloring an amino lower-alkylated cellulosic textile, having residual free hydroxyl groups in the cellulose molecule, which comprises reacting said amino lower-alkylated cellulosic textile with a halogen- and nitro-substituted benzene hydrocarbon containing at least one nitro radical in a position from the group consisting of ortho and para with relation to the halogen atom, in the presence of dilute aqueous alkali, at a temperature from about 25° C. to about 100° C. thereby maintaining the reactants inert to said residual free hydroxyl groups, continuing the reaction until primary amino groups of the amino lower-alkylated cellulosic material have been converted to secondary amino groups attached to a nitrophenyl radical produced by removing the halogen atom from the halogen- and nitro-substituted benzene hydrocarbon in addition to the lower alkyl radical of the amino lower-alkylated cellulosic textile, reducing the nitro groups of the nitrophenyl-substituted amino lower-alkylated cellulosic textile to amino groups, diazotizing the reduced nitro groups, and coupling the diazo groups with a phenolic compound.

5. Phenylamino lower-alkylated cellulosic textile having physical properties not materially different from amino lower-alkylated cellulosic textiles in which the ether groups attached to the cellulose molecules consist essentially of N-(substituted-phenyl)amino lower-alkylated radicals in which the substituted-phenyl radical is a phenyl radical in which hydrogen atoms have been replaced by at least one radical of the group consisting of nitro, amino, and diazo radicals.

2,750,250
METHOD FOR DYEING POLYACRYLONITRILE FABRICS

Albert Frank Lindenstruth, Camden, S. C., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application March 13, 1952, Serial No. 276,470
3 Claims. (Cl. 8—55)

1. A process for dyeing a textile produced from polyacrylonitrile which comprises the steps of scouring the said textile in the presence of a detergent to remove foreign matter from its surface, immersing the said textile for at least about one hour in boiling water containing from about 0.1 to about 0.2% of a sulfate of an aliphatic alcohol containing from ten to eighteen carbon atoms and from about 1 to about 2% of a low molecular weight carboxylic acid, rinsing the said textile with water, drying the said textile, subjecting the said textile to a stress of at least about two pounds per square inch at a temperature within the range of from about 300° to about 500° F. and thereafter applying a dye.

2,750,251
PROCESS FOR PREPARING SUTURES AND LIGATURES

Alfred Bloch, Highland Park, N. J., and John F. Gettemans, Midlothian, Ill., assignors to Ethicon, Inc., a corporation of New Jersey

Application July 9, 1954, Serial No. 442,242
11 Claims. (Cl. 8—94.11)



1. A process for preparing collagen sutures and ligatures from the connective tissue of mammalian gut comprising the steps of: mechanically scraping and squeezing mammalian gut to remove a major amount of non-collagenous substance and provide connective tissue in association with a minor amount of fatty and non-collagenous proteinaceous materials, treating with a mild tanning agent, washing to remove the tanning agent, steeping in an aqueous solution containing 0.2 to 5.0 per cent by weight of a sodium salt of ethylenediamine polyacetic acid, whereby substantially all fatty and non-collagenous proteinaceous materials are removed, twisting the tissue to produce strands, and drying the strands.

2,750,252
METHOD OF APPLYING LINDANE

William N. Sullivan, Washington, D. C., and Frank H. Babers, Silver Spring, Md.; dedicated to the free use of the People in the territory of the United States

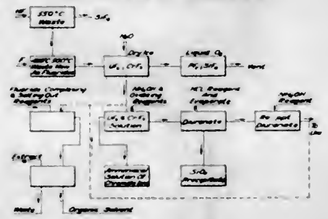
No Drawing. Application June 26, 1951, Serial No. 233,679
3 Claims. (Cl. 21—53)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A method of reducing insect life in a ventilated room suitable for occupancy by human beings, employing the slightly volatile pesticide, lindane, and without heating the latter, comprising propelling a stream of air at room temperature over a mass of crystals of lindane ranging from about 50 to 100 microns in diameter confined and supported in the path of the air stream, the crystals being spaced sufficiently apart to permit effective sublimation and to permit the stream of air to pass uniformly and freely over the crystals in said mass over the entire area thereof presented to the stream, the air being delivered through the mass at a rate of at least about 100 cubic feet per minute, the rate being correlated with the size of the room to obtain a rapid approach to saturation of the air with lindane vapor, which is about 0.00016 mg. per liter of air at 20° C.

2,750,253
RECOVERY OF URANIUM VALUES FROM WASTE

Fred Smith, Oak Ridge, Tenn.

Application May 28, 1945, Serial No. 596,226
10 Claims. (Cl. 23—14.5)



7. A process for the recovery of uranium values from waste materials containing silica and metal values, including uranium and chromium, which comprises hydrofluorinating the waste material at a temperature within the approximate range of 500° to 600° C. with hydrogen fluoride vapor whereupon volatile silicon tetrafluoride is formed and metal values, including uranium, are converted to non-volatile fluorides, removing the resultingly evolved silicon-tetrafluoride-containing vapors, then fluorinating the hydrofluorinated residue within the temperature range of about 400° to 500° C. with fluorine gas whereupon volatile fluorides of uranium, chromium and silicon are formed and evolved, recovering the fluorination-evolved vapors by condensation, dissolving the formed condensate to form an aqueous solution thereof, treating the formed solution so as to eliminate fluoride ions, oxidizing the chromium ions present in the solution to the chromate state, adding ammonium hydroxide to the oxidized solution to form a precipitate comprising ammonium diuranate while chromium remains behind in solution, separating the formed precipitate and dissolving it in aqueous hydrochloric acid, incompletely evaporating the formed aqueous hydrochloric acid solution to separate from the dissolved uranium values, by precipitation as silica, dissolved silicon which may have accompanied the uranium to this point in the process, and separating and recovering the supernatant, uranium-containing solution.

2,750,254
PROCESS OF RECOVERING URANIUM FROM ITS ORES

Robert A. Blake, Leadville, Colo., assignor to the United States of America as represented by the United States Atomic Energy Commission

No Drawing. Application November 16, 1949, Serial No. 127,790
6 Claims. (Cl. 23—14.5)

1. A process for extracting uranium from an ore thereof which comprises leaching said ore with an acid, precipitating the uranium dissolved by said acid with a sulfide selected from the group consisting of alkali metal sulfides, alkali metal hydrosulfides and hydrogen sulfide, and then separating the precipitated uranium from the rest of the ore by flotation.

2,750,255
PROCESS FOR RENDERING TITANIUM MINERALS AND ORES SOLUBLE IN ACIDS

Ellis E. Creitz, Tuscaloosa, Ala., and Henry G. Iverson, Minneapolis, Minn.

No Drawing. Application June 9, 1952, Serial No. 292,596
7 Claims. (Cl. 23—51)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A process for converting difficultly soluble titanium minerals to acid-soluble form comprising grinding the titanium minerals to pass a 200 mesh screen, mixing the finely divided titanium minerals with finely divided siderite to provide an admixture containing TiO_2 and Fe in a weight ratio within the range of from about one to about four, sintering the admixed materials at a temperature of from about 2100° F. to about 2500° F. for at least 10 minutes in a substantially non-oxidizing atmosphere containing carbon dioxide, and quenching the sintered material.

2,750,256
METHOD OF REMOVING A DISSOLVED IRON COMPOUND FROM AN AQUEOUS SOLUTION OF AN AMMONIO COMPLEX OF MANGANESE

Jay Y. Welsh, Brainerd, Minn., assignor to Manganese Chemicals Corporation, Minneapolis, Minn., a corporation of Minnesota

No Drawing. Application May 17, 1954, Serial No. 430,432
3 Claims. (Cl. 23—61)

1. Process of substantially completely removing a dissolved iron compound from an iron-contaminated solution of an ammonio complex of manganese, which comprises treating such ammoniacal solution with manganese sulphide by adding to and dispersing in such iron contaminated solution reactive manganese sulphide in an amount at least stoichiometrically equivalent to the amount of dissolved iron therein.

2,750,257
METHOD OF MAKING ALUMINUM HALIDES

Clare Peter Johnson, Jr., Tompkins Corners, N. Y.

No Drawing. Application August 15, 1952, Serial No. 304,657
7 Claims. (Cl. 23—93)

1. A method of producing aluminum chloride which comprises heating a substantially anhydrous and silica-free mixture of aluminum fluoride and an alkaline earth metal chloride selected from the group consisting of calcium and magnesium chlorides at a temperature above the vaporizing temperature of aluminum chloride to vaporize aluminum chloride from said mixture.

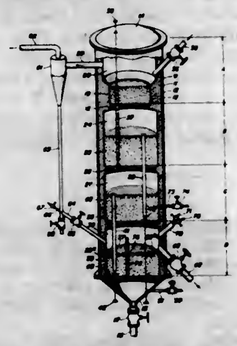
2,750,258
PROCESS FOR CALCINING FINELY-DIVIDED ALUMINA HYDRATE

Walfred W. Jukkola, Westport, Conn., and Ronald W. J. Lewis, Dorval, Quebec, Canada; said Jukkola assignor to Dorr-Oliver Incorporated, a corporation of Delaware, and said Lewis assignor to Aluminum Company of Canada, Limited, Montreal, Quebec, Canada

Application February 17, 1954, Serial No. 410,848
3 Claims. (Cl. 23—142)

1. In the continuous process for calcining finely-divided alumina hydrate solids to yield non-hygroscopic anhydrous alumina, which comprises the steps of establishing and maintaining in an enclosed chamber two superimposed beds of finely-divided alumina solids including an upper calcining bed maintained at temperatures sufficient

to convert alumina hydrate into substantially non-hygroscopic anhydrous alumina as well as a directly subjacent solids cooling bed maintained at temperatures lower than those required for yielding non-hygroscopic alumina in the calcining bed, successively passing a stream of gas upwardly through the beds at velocities sufficient to both fluidize the bed solids as turbulence suspension and to entrain a portion of such solids, supplying finely-divided alumina hydrate solids to the calcining bed, calcining a portion of such solids in the latter bed to yield substantially non-hygroscopic alumina while entraining another portion of the solids in the uprising gas stream before full conversion to the non-hygroscopic form is achieved, transferring calcined non-hygroscopic solids from the calcining bed to the subjacent cooling bed, discharging gas



with entrained incompletely-calcined dust from the calcining bed and from the chamber, intercepting said gas and separating dust therefrom, supplying such separated dust directly to the solids cooling bed to commingle therein with fully calcined solids, cooling the resultant mixture in the cooling bed by the upward passage of gases therethrough, and discharging the cooled mixed solids from the chamber; the improvement which consists of maintaining in the cooling bed two separate but adjacently communicating zones the first of which is maintained at a temperature lower than that of the calcining zone and the second of which is maintained at a temperature lower than that of said first zone, commingling said separated dust with said calcined solids in said first zone, and transferring the resulting mixture to said second zone for final cooling prior to discharge from the chamber.

2,750,259

METHOD OF PRODUCING TITANIUM MONOXIDE

Morris A. Steinberg, Shaker Heights, and Eugene Wainer, Cleveland Heights, Ohio, assignors, by mesne assignments, to Horizons Titanium Corporation, Princeton, N. J., a corporation of New Jersey

No Drawing. Application July 21, 1953, Serial No. 369,511
6 Claims. (Cl. 23—202)

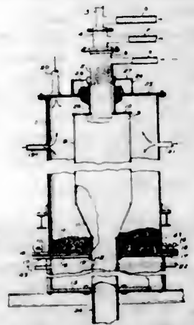
1. The method of producing titanium monoxide from titanium dioxide by reduction with elemental carbon which comprises forming an intimate mixture of titanium dioxide with at least one-half mol but not more than one mol of elemental carbon per mol of titanium dioxide, heating the mixture to a reaction temperature within the range of about 1100° to 1200° C., removing the evolved carbon monoxide from the reaction zone substantially as rapidly as it is formed whereby the partial pressure of carbon monoxide is maintained dynamically at less than one atmosphere, maintaining said reaction temperature and said reduced partial pressure of carbon monoxide until said evolution of carbon monoxide substantially ceases, whereby titanium sesquioxide is formed substantially free from other oxides of titanium, thereafter heating an intimate mixture of the resulting titanium sesquioxide with an equimolar quantity of elemental carbon to a reaction temperature within the range of about 1500° to 1800° C., removing evolved carbon monoxide from the reaction zone substantially as rapidly as it is formed whereby the partial pressure of carbon monoxide is maintained dynamically at less than one atmosphere, maintaining said reaction temperature and said reduced partial pressure of carbon monoxide until the evolution of carbon monoxide substantially ceases, and recovering the resulting titanium monoxide product.

2,750,260

COMBUSTION OF TITANIUM TETRACHLORIDE WITH OXYGEN

Earl W. Nelson and Guy C. Marcot, Lynchburg, Va., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

Application February 10, 1953, Serial No. 336,092
4 Claims. (Cl. 23—202)



1. A process for reducing the tendency of titanium dioxide pigment particles to "plate" in the manufacture of titanium dioxide by reaction of titanium tetrachloride with oxygen in a combustion chamber, which consists in continuously reacting titanium tetrachloride with oxygen at about 900° C. to 1600° C. to form titanium dioxide and chlorine in a combustion chamber having a reaction zone and a cooling zone, at least one of said zones being defined by a porous refractory material, and continuously passing a gas consisting only of carbon monoxide transversely through said porous refractory material into the zone defined by said material while the temperature of the titanium dioxide therein is in excess of about 600° C., the amount of said oxygen admitted with said titanium tetrachloride being slightly in excess of that required for complete combustion of said titanium tetrachloride and said carbon monoxide and any other metal chlorides; whereby any free oxygen adjacent to the inner surface of said porous refractory material is reduced to carbon dioxide with which titanium tetrachloride can not combine and thereby the surface of said refractory is maintained substantially free from titanium dioxide incrustations.

2,750,261

PRODUCTION OF HYDROGEN

Vladimir N. Ipatieff, Chicago, Ill., and George S. Monroe, deceased, late of Berwyn, Ill., by Noah J. Abram, administrator, Berwyn, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application November 21, 1951, Serial No. 257,638
5 Claims. (Cl. 23—212)

1. A process for producing hydrogen which comprises reacting an aliphatic hydrocarbon and steam at a reaction temperature below 700° C. in contact with a catalyst formed by reducing a composite of from about 5 to about 10% by weight of cupric oxide, from about 60 to 75% by weight of nickel oxide, and from about 20 to about 30% by weight of silica, said catalyst comprising essentially a major proportion of nickel, a minor proportion of silica and a still smaller proportion of copper, the bulk of the nickel and copper being in the metallic state and only small amounts thereof being present as oxides.

2,750,262

PROCESS FOR SEPARATING COMPONENTS OF A FUSIBLE MATERIAL

William G. Pfann, Basking Ridge, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application July 12, 1952, Serial No. 298,553
5 Claims. (Cl. 23—223.5)



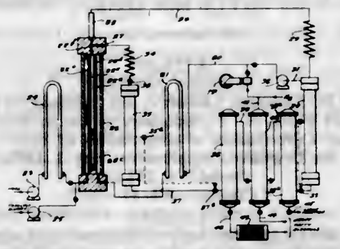
1. The process comprising inserting in at least one of a series of receptacles containing a solution comprising a major and a minor ingredient, a hollow carrier together with a solid body comprising the same ingredients, causing said solid body to melt within the receptacle, passing coolant through said carrier and thereby causing a portion of the molten material within the receptacle to freeze on said carrier and at least once advancing said carrier together with the solid body to another receptacle and repeating the aforesaid series of steps, withdrawing as product a portion of the material from within a receptacle, causing a flow of molten material from receptacle to receptacle in a direction opposite to that of solid transfer, withdrawing as waste a portion of molten material from the final receptacle of said molten flow and adding, as feed, material comprising said solution in an amount equal to that of product plus waste.

2,750,263

APPARATUS FOR THE REDUCTION OF ORGANIC COMPOUNDS BY HYDROGENATION

Vittorio de Nora and Ettore de Bartholomaeis, Milan, Italy, assignors, by direct and mesne assignments, to Oronzio de Nora Impianti Elettrochimici, Milan, Italy, an Italian company

Application October 5, 1951, Serial No. 249,878
6 Claims. (Cl. 23—260)



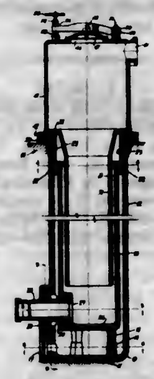
1. An apparatus for the hydrogenation, under high pressure and temperature, of organic raw materials under high pressure and temperature which produce mixed hydrogenation products of differing boiling points comprising, a reaction autoclave, a condensate autoclave for collecting the vaporized reaction products and a discharge autoclave for the liquid reaction products connected by a conduit to said reaction autoclave, an organic raw materials conduit having a heater therein connected to the said reaction autoclave for introducing organic raw materials into said reaction autoclave, a hydrogen conduit connecting said reaction autoclave with a source of hydrogen, a conduit connecting said reaction autoclave with said condensate autoclave and a return conduit connecting said condensate autoclave with said reaction autoclave forming a hydrogen circuit from said reaction autoclave to said condensate autoclave and back to said reaction autoclave and means in said circuit capable of circulating hydrogen in excess of the amount required for hydrogenation of said organic raw materials through said hydrogen circuit, a condensing means adjacent the reaction autoclave mounted in the conduit leading from said reaction autoclave to the condensate autoclave whereby the higher boiling hydrogenation products are condensed and separated from the hydrogen stream passing out of the reaction autoclave, a cooler in the conduit leading from said condensing means to the condensate autoclave whereby the lower boiling fractions left in said hydrogen stream are condensed and discharged into said condensate autoclave, a heater in the conduit from the condensate autoclave to the reaction autoclave to heat the hydrogen passing therethrough and means in said hydrogen circuit to maintain the hydrogen therein and said reaction autoclave and said condensate autoclave constantly at substantially the hydrogenation pressure.

2,750,264

CARBON BISULFIDE RETORT

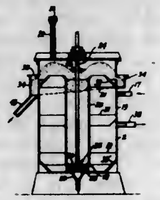
Iver C. Macdougall, Bronxville, N. Y., assignor to Stauffer Chemical Company, a corporation of California

Application August 21, 1952, Serial No. 305,655
11 Claims. (Cl. 23—277)



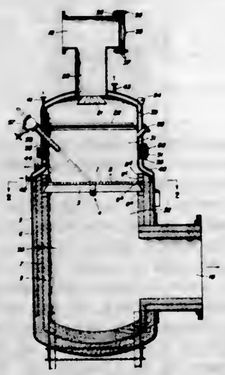
1. A carbon bisulfide retort comprising a furnace, an outer tubular vessel positioned vertically in said furnace for heating by the furnace, an inlet adjacent the bottom of said outer vessel for feeding sulfur to be heated in said outer vessel, an intermediate tubular vessel positioned vertically in and spaced from said outer vessel and open at its upper end to admit sulfur vapor passing upwardly in the space between said vessels to the interior of said intermediate vessel, an ash outlet adjacent the bottom of the intermediate vessel, an inner tubular shell supported adjacent the upper end of the outer tubular vessel and depending to adjacent the bottom of the intermediate vessel in a spaced wall relationship to said intermediate vessel, and a seal between said inner tubular shell and said outer tubular vessel.

2,750,265
CHLORINATION APPARATUS
Alvah D. Haskell, Auburn, Calif.
Original application May 15, 1950, Serial No. 162,081. Divided and this application March 19, 1951, Serial No. 216,452
2 Claims. (Cl. 23—285)



1. In a chlorinator of the character described, a cylindrical tank, a launder surrounding the tank near the upper end thereof and communicating therewith, an intake for sulfide pulp disposed below the launder, a central vertical tube in the tank having a lower end spaced from the tank floor and an upper end terminating above the launder floor but below the top of the tank, the tank having an inwardly directed, sloping annular barrier against the launder and positioned adjacent the upper opening of the central tube to form a restricted discharge passage therewith, means in the tank for circulating the pulp with a downward draft in the tube and an upward draft outside the tube, and means for feeding chlorine into the pulp whereby sulfur present in the pulp is liberated, the barrier causing the pulp to discharge into the upper end of the tube with a cascading effect to cause the liberated sulfur to rise above the tube in the form of a froth for discharge into the launder, and the tube having an annular lip at its upper end projecting toward the barrier to enhance the cascading effect, and the tank having centrifugal means above the tube for discharging the froth into the launder.

2,750,266
CATALYTIC REACTOR FOR HYDROCYANIC ACID PRODUCTION
Edward S. Roberts, New York, N. Y., Oscar F. Wiedeman, New Orleans, La., and Samuel Streinoff, New York, N. Y., assignors to Chemical Construction Corporation, New York, N. Y., a corporation of Delaware
Application June 25, 1954, Serial No. 439,192
2 Claims. (Cl. 23—288)



1. A catalytic reactor adapted for the production of hydrocyanic acid having in combination: a vertically-positioned, elongated, metal casing; a horizontal flat catalyst gauze dividing means whereby the space between the casing is vertically positioned into an upper gas chamber and a lower combustion chamber, said chamber consisting of refractory ceramic segments of suitable arc positioned symmetrically about the vertical axis of said casing; said catalyst gauze being mounted between said refractory ceramic segments at the circumference thereof; a support structure for said catalyst gauze, said structure comprising a plurality of parallel nickel-chromium-iron alloy strips and Carborundum bars of uniform cross-section wherein the catalyst, nickel-chromium-iron alloy strips and Carborundum bars repose on each other respectively, and wherein the Carborundum bars are further supported by a hollow, silica covered beam; means for cooling said beam; a single gas inlet port in said gas chamber, said port having a symmetrically enlarged opening at its uppermost gas chamber and means for cooling the gas chamber; a baffle positioned between the inlet gas port and the horizontal dividing means; a distributor plate positioned between the dividing means and said baffle, adapted to provide for parallel flow of gases; a refractory ceramic lining in said combustion chamber consisting of a plurality of superimposed refractory ceramic annuli; and a gas outlet in the combustion chamber most remote from said gas inlet port.

2,750,267
LEAD SCAVENGER COMPOSITIONS
Venard E. Yust, Alton, and John L. Bame, East Alton, Ill., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware
No Drawing. Application September 20, 1952, Serial No. 310,722
11 Claims. (Cl. 44—69)

1. A fuel composition for internal combustion engines consisting essentially of a stable gasoline, a minor effective anti-detonant amount of an tetra lower alkyl-lead anti-detonant, and a scavenger mixture for said anti-detonant consisting essentially of a halohydrocarbon scavenger and a compound selected from the group consisting of alkyl-substituted-phenyl derivatives of the hydrides, oxides and sulfides of an element of group V–B of the periodic table having an atomic number from 33 to 83 inclusive, each phenyl group bearing from 1 to 3 of said alkyl substituents having from 1 to 15 carbon atoms each, said halohydrocarbon scavenger and said group V–B compound being present in amounts such that, where (*a*) is the number of mols of said halohydrocarbon scavenger present multiplied by one-half the number of halogen atoms per molecule, for each gram atom of lead in the lead anti-detonant present, and (*b*) is the number of mols of said group V–B compound present multiplied by three-halves, for each gram atom of lead in the lead anti-detonant present, the total of (*a*) plus (*b*) is from about 0.4 to about 2.0, (*b*) is from about 0.01 to about 0.6, and the ratio of (*a*) to (*b*) is from about 3:2 to about 100:1.

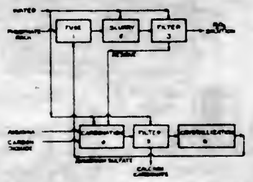
2,750,268
SILICON NITRIDE
Hendrik D. Erasmus, Lewiston, and William D. Forgeng, Niagara Falls, N. Y., assignors to Union Carbide and Carbon Corporation, a corporation of New York
No Drawing. Application May 1, 1952, Serial No. 285,561
9 Claims. (Cl. 51—307)

2. A compact bonded abrasive whetstone comprising nitrided silicon particles and containing minor amounts of silicon carbide, having surface layers of silicon nitride, silicon nitride predominating as the abrasive therein, the silicon of said silicon nitride constituting at least 50% by weight of the chemically combined silicon in said whetstone, and the ratio of silicon nitride to any silicon carbide present being at least about 2 to 1.

2,750,269
PROCESS OF MAKING AN ORGANIC COMPOST
George Klein, Menomonee Falls, Wis.
No Drawing. Application August 11, 1952, Serial No. 303,840
1 Claim. (Cl. 71—31)

The process of making an organic compost which consists in mixing a bedding composed of straw, wood shavings, corn cobs, alfalfa, rock phosphate and lime with cow manure and urine; second, piling the mixture in windrows in the open air; third, thoroughly agitating and mixing the materials in the windrows at predetermined intervals; fourth, adding ground corn cobs and alfalfa to the windrows during the turning and agitating thereof according to the moisture content of the windrows until decomposition takes place and finally, screening the decomposed material for uniformity.

2,750,270
PRODUCTION OF SOLUBLE PHOSPHATES
Marion D. Barnes, El Dorado, Ark., assignor, by mesne assignments, to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
Application April 27, 1953, Serial No. 351,246
14 Claims. (Cl. 71—34)



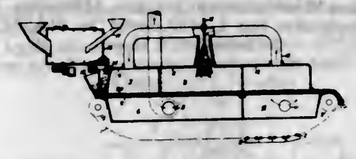
1. Process of preparing soluble phosphatic materials which comprises the steps of (1) fusing calcium-phosphorus containing material and a material consisting essentially of the residue from step five below, which is primarily ammonium sulfate, (2) separating the water-solubles from the resulting fusion material, leaving behind a water-insoluble residue, (3) reacting aqueous ammonium carbonate solution with said water-insoluble residue, (4) separating the resulting solution from the resulting insoluble material, (5) evaporating said resulting solution to obtain a substantially dry residue, and (6) recycling said dry residue to the fusion step.

2,750,271
PROCESS OF MAKING PULVERULENT METALLIC TITANIUM
Jean Cueilleron, Lyon, Charles Long, Saint-Genis-Laval, and Claude Pascaud, La Reole, France, assignors to Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieries Electriques d'Ugine, Paris, France
No Drawing. Application March 13, 1953, Serial No. 342,286
Claims priority, application France March 19, 1952
3 Claims. (Cl. 75—.5)

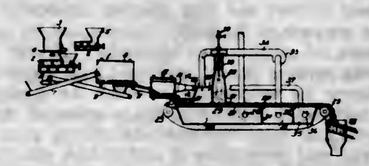
1. The process of making pulverulent metallic titanium, which comprises violently cooling a molten mass of alloy composed of 40–60% titanium and 35–60% aluminum, powdering the alloy and treating the alloy powder with an aqueous alkaline solution which attacks the aluminum but does not substantially attack the titanium for a period of time sufficient to dissolve substantially all of the aluminum.

2,750,272
PROCESS FOR PRODUCTION OF HARD BURNED AGGLOMERATES OF FINE MAGNETITE ORE
Otto G. Lellep, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application June 5, 1950, Serial No. 166,087
3 Claims. (Cl. 75—3)

1. A process for making hard, porous, unsintered, separate pellets of iron ore from finely divided oxidic iron ore, said process comprising the steps of making moist green pellets of iron ore from said finely divided ore, forming said green pellets into a uniformly thick, generally horizontal, gas-permeable layer of pellets on a support, establishing first, second and third gas confining zones, effecting a flow of moderately heated gases through said first zone, effecting a flow of highly heated strongly oxidizing gases through said second zone independently of the first said flow and effecting a flow of cooling gases through said third zone, translating said layer of pellets as a body generally horizontally successively through said zones in the order named to afford said gases a passage through said gas-permeable layer and its support in a direction generally normal to the direction of translation of said layer to effect a heat transfer between said gases and said layer, correlating the temperature of said oxidizing gases and the rate of pellet layer translation through said second zone to effect hardening of said pellets at a peak temperature of approximately 2250° F. but below the incipient melting temperature of said ore, and utilizing the heat exchanged between said layer and said cooling gases to precondition the gases flowing through said first and second zones.



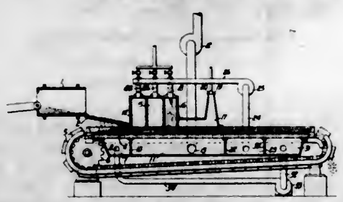
2,750,273
METHOD OF HEAT HARDENING IRON ORE PELLETS CONTAINING FUEL
Otto G. Lellep, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application July 2, 1953, Serial No. 365,752
6 Claims. (Cl. 75—3)



4. A process for producing an unsintered mass of separate, individual, shock-resistant, heat-hardened, iron ore pellets from green, water-bound, iron ore pellets of a size ranging substantially from one-quarter inch to three-quarter inch, said process comprising the steps of forming said green water-bound pellets from finely divided carbonaceous solid fuel and concentrated iron ore comprising finely divided particles of iron oxide, said green pellets containing said fuel in a quantity to provide fixed carbon in the amount of 0.9 to 2.4 percent of the dry weight of said ore; depositing said green pellets upon a moving gas-permeable support to form a generally horizontal gas-permeable layer in which substantially all of said green pellets range in size from one-quarter inch to three-quarter inch; moving said layer generally horizontally through an ignition chamber while directing a flame transversely into said layer to establish a burning zone in which the carbon contained in the pellets in the burning zone is ignited and the pellets in the burning zone are heated to a temperature between 2200° F. and 2450° F.; and moving said layer generally horizontally out of said ignition chamber while directing a flow of air transversely through said layer to maintain said burning zone in an oxidizing atmosphere and to move said burning zone transversely through said layer for successively heating

the remainder of the pellets in said layer to said temperature in said oxidizing atmosphere provided by said air as said burning zone traverses said layer to cause adherence of said finely divided particles in each pellet through diffusion and crystal growth and to cause each pellet to harden nonfused to adjacent pellets.

2,750,274
METHOD OF HEATING GAS PERMEABLE MATERIAL WITH A LEAN GAS MIXTURE
Otto G. Lellep, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application July 2, 1953, Serial No. 365,751
5 Claims. (Cl. 75—5)

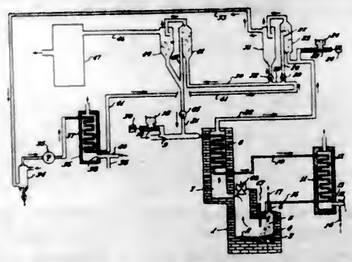


1. A method of successively heating all portions of a mass of granular material without admixed fuel to a predetermined high temperature, said material containing insufficient combustible components to sustain combustion without the application of external heat, said method comprising the steps of forming the material into a generally horizontal layer having gas interstitial permeability, causing a hot flame to penetrate a surface of said layer to establish in said layer a burning zone portion initially positioned adjacent said surface, said burning zone portion comprising said material heated to said high temperature, and subsequently passing a lean low temperature mixture of fuel and air under pressure, the combustion of said mixture being nonself-propagating at said low temperature, transversely into said portion for heating said mixture and then effecting combustion thereof in the presence of the heated material and for urging the products of combustion transversely through the remaining portions of said layer, said high temperature being above the temperature at which the combustion of said mixture is initiated in the presence of the heated material and below the incipient melting point of said material, said combustion of said mixture effecting movement of said burning zone portion progressively transversely through the entire layer from said surface thereof while maintaining the material in said burning zone portion at said high temperature and in an oxidizing atmosphere.

2,750,275
METHOD OF TREATING MATERIALS CONTAINING SULPHIDES
Orville John Parker, Kalgoorlie, Western Australia, Australia
No Drawing. Application March 24, 1952, Serial No. 278,303
4 Claims. (Cl. 75—9)

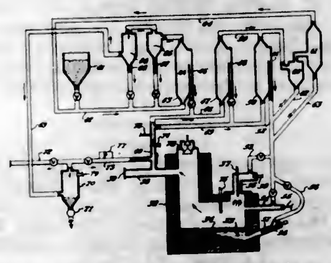
1. An improvement in processes for the treatment of material containing sulphides consisting in imparting a rapidly mixing movement to a bed of confined subdivided solids, passing into said bed with intimate contact therein the material to be treated in subdivided solid form, and an oxidizing gas at such relative rates that the oxygen supplied by the gas is equivalent to that which can be substantially completely absorbed under the conditions maintained above said bed by combination with the oxidizable components of the material other than its sulphur content, providing a space above said bed within which to complete the reaction with the gas of dust lifted from the bed thereby, maintaining above the bed a temperature sufficient to cause monosulphides, either originally present in the material or formed therefrom within the area of confinement by distillation of the labile sulphur, to reduce substantially completely to elemental sulphur sulphur dioxide formed by reaction of the material with the oxidizing gas but insufficient to fuse, slag, sinter or melt any of the products of reaction, removing the reacted subdivided solids from said bed, removing the gases from the upper part of the area of confinement, freeing the removed gases at a temperature above the condensation temperature of the sulphur therein of entrained solids, and thereafter condensing and collecting the sulphur from the gases.

2,750,276
METHOD AND APPARATUS FOR SMELTING FINE IRON ORE
William E. Marshall, Middletown, Ohio, assignor to Armco Steel Corporation, Middletown, Ohio, a corporation of Ohio
Application January 4, 1952, Serial No. 264,859
15 Claims. (Cl. 75—26)



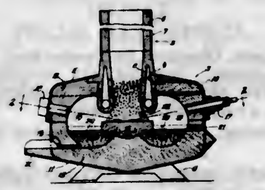
1. In a process of reducing and smelting iron ore including the steps of producing in a furnace with a mobile fuel a flame having a temperature of at least substantially 3000° F., the products of combustion of which are reducing to iron oxide, employing said reducing products of combustion in heated condition to reduce finely divided iron ore to iron, and melting said reduced iron by means of the heat of said flame, the further steps of cracking said mobile fuel prior to ignition thereof to produce said flame by the application of heat to said mobile fuel, and having present in said fuel at the time of cracking a finely divided material which is introduced into said furnace through said flame.

2,750,277
PROCESS AND APPARATUS FOR REDUCING AND SMELTING IRON
William E. Marshall, Middletown, Ohio, assignor to Armco Steel Corporation, Middletown, Ohio, a corporation of Ohio
Application May 14, 1951, Serial No. 226,231
13 Claims. (Cl. 75—38)



1. A process of reducing and smelting iron ore which comprises producing in a bath-type furnace with a mobile fuel a flame having a temperature of at least substantially 3000° F., the products of combustion of which are reducing to iron oxide, employing heat from said flame to maintain in molten condition a bath of iron in said furnace, employing said reducing products of combustion in heated condition outside said furnace to reduce divided iron ore to iron in particle form, and melting said reduced particle iron into said bath, said flame being caused to impinge on said bath and said reduced particle iron being introduced into said furnace below said flame so as to be blown into said bath thereby.

2,750,278
SMELTING PROCESS
Anton A. Morvay, Chicago, Ill., assignor to Anton A. Morvay, Frederick B. Hinrichs, and Cornelius A. Ross, Chicago, Ill., as trustees
Application May 9, 1952, Serial No. 286,969
5 Claims. (Cl. 75—40)



1. A smelting process which comprises maintaining a confined column of a substantially carbon-free mixture of relatively small particles of a metallic oxide ore and a fluxing agent, feeding said mixture downwardly into a confined zone, introducing a reducing gas into said zone and maintaining the same under superatmospheric pressure, and simultaneously heating the mixture fed into said zone whereby to effect substantially concurrent reduction of the metallic oxide and melting of the resultant metal, said mixture having a particle size sufficiently small so that said gas cannot pass upwardly through said column whereby reduction of said oxide is effected solely within said reaction zone and not within said column.

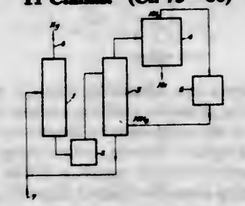
2,750,279
PROCESS OF TREATING CAST IRON WITH IRON-FLUORINE COMPOUNDS
William A. La Lande, Jr., Plymouth Meeting, and Isadore Mockrin, Philadelphia, Pa., assignors to The Pennsylvania Salt Manufacturing Company, Philadelphia, Pa., a corporation of Pennsylvania
No Drawing. Application May 24, 1952, Serial No. 289,902
14 Claims. (Cl. 75—53)

1. In the production of cast iron, the step comprising adding to the molten iron an iron-fluorine compound.

2,750,280
PROCESS FOR RAPIDLY DESULFURIZING STEEL
René Perrin and Jean Lamberton, Paris, France, assignors to Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieries Electriques d'Ugine, Paris, France, a corporation of France
No Drawing. Application January 15, 1952, Serial No. 266,596
Claims priority, application France February 1, 1951
6 Claims. (Cl. 75—55)

1. A process for desulphurizing steel practically instantaneously, which comprises adding to a steel bath a reducing agent of the group consisting of silicon and aluminum, pouring a stream of the molten steel into a ladle and adding particles of slag in a solid state to the stream during the pouring operation, said slag containing as principal constituents a previously reacted mixture of fluorspar and lime in the proportions by weight of 60–85% fluorspar and 15–40% lime, said slag containing not over 10% by weight of acidic constituents capable of combining with the lime in the slag, said particles of slag melting substantially completely when added to the pouring stream of steel.

2,750,281
METHOD FOR THE EXTRACTION OF ALKALI METALS FROM THEIR AMALGAMS
Lambert Vanharen and Pierre Octors, Brussels, Belgium, assignors to Solvay & Cie, Brussels, Belgium, a Belgian company
Application April 1, 1952, Serial No. 279,802
Claims priority, application Netherlands April 4, 1951
11 Claims. (Cl. 75—66)



1. A process for extracting alkali metals from their amalgams which comprises concentrating an alkali metal amalgam having a concentration of less than 10% by weight of the alkali metal by distilling mercury therefrom to increase the concentration of said alkali metal to a value of at least 10% by weight, bringing the concentrated amalgam thus obtained into contact with a solvent having a solvent action upon said alkali metal but being non-reactive with the mercury and the amalgam, thereby dissolving a portion of the alkali metal from the amalgam, separating the amalgam from the solution of alkali metal in the solvent by physical means, and recovering the alkali metal from the solvent.

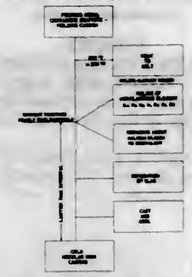
2,750,282
STAINLESS STEEL OF THE "20" TYPE
Norman S. Mott, Westfield, N. J., assignor to Cooper Alloy Corporation, Hillside, N. J., a corporation of New Jersey
No Drawing. Application April 11, 1955, Serial No. 500,693
14 Claims. (Cl. 75—125)

1. A heat hardenable high corrosion resistance alloy, said alloy consisting essentially of a chromium-nickel-copper-molybdenum stainless steel of the type known commercially as the #20 type (having an approximate analysis of 20% chromium, 28% nickel, 3.5% copper, and 3% molybdenum), said steel having added thereto columbium and nitrogen, the columbium ranging from 0.20 to 1.00%, and the nitrogen ranging from 0.06 to 0.25%.

2,750,283
STAINLESS STEELS CONTAINING BORON
Donald L. Loveless, Baltimore, Md., assignor to Armco Steel Corporation, a corporation of Ohio
No Drawing. Application May 27, 1953, Serial No. 357,890
17 Claims. (Cl. 75—124)

1. Alloy steel ingots of at least about 16" x 35" size and of improved hot-rolling characteristics containing chromium up to about 35%, nickel up to about 35%, up to about 20% manganese, up to about 5% silicon, up to about 50% cobalt, up to about 10% molybdenum, up to about 10% copper, up to about 5% aluminum, up to about 5% columbium, tantalum, vanadium, zirconium and titanium, the total alloy content being at least 45%, about 0.00005% to 0.008% boron, and remainder substantially all iron.

2,750,284
PROCESS FOR PRODUCING NODULAR GRAPHITE IRON
Harry K. Ihrig, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application December 22, 1951, Serial No. 262,957
8 Claims. (Cl. 75—130)



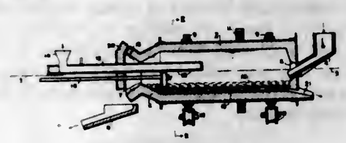
1. The process for obtaining from a molten ferrous metal containing graphite yielding carbon a ferrous metal characterized in the solid state by the presence of spherular granules of graphite therein, comprising: bringing together said molten ferrous metal, a halide of a spherular graphite inducing element selected from the group consisting of lithium, sodium, magnesium, strontium, barium, rubidium and cerium, and an agent capable of reducing said halide in said molten ferrous metal, said agent consisting essentially of an element selected from the group consisting of calcium, barium, and potassium; and solidifying said molten ferrous metal while said spherular graphite inducing element is effective in inducing the formation of spherular graphite.

2,750,285
PROCESS FOR EXTRACTING NICKEL FROM LOW GRADE ORES
Rene Perrin, Paris, France, assignor to Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieries Electriques d'Ugine, Paris, France
No Drawing. Application July 22, 1952, Serial No. 300,355
Claims priority, application France August 1, 1951
2 Claims. (Cl. 75—133)

1. A process of making ferro-nickel from low grade nickel ores containing not over 10% nickel oxide and also containing iron oxide, which comprises forming a molten bath of said ore, separately forming a molten bath of ferro-nickel containing a substantially higher nickel content than the nickel content of the ore, said ferro-nickel bath also containing a reducing agent for iron oxide, violently intermixing said baths of ore and ferro-nickel, the bath of molten ferro-nickel containing a substantially greater weight of iron than the weight of nickel in the ore, the amount of said reducing agent for iron oxide being such as to reduce iron from the ore in about the same proportion to the nickel reduced therefrom as the proportion of iron to nickel in the ferro-nickel, whereby the weight of ferro-nickel is increased while its percentage content of nickel is maintained substantially constant, withdrawing a portion of the ferro-nickel, and utilizing the remainder of the ferro-nickel for the treatment of a further quantity of said molten ore.

2,750,286
PRODUCTION OF IRON-NICKEL ALLOYS FROM LOW GRADE ORES
Rene Perrin, Paris, France, assignor to Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieries Electriques d'Ugine, Paris, France
Application June 9, 1953, Serial No. 360,580
Claims priority, application France June 21, 1952
12 Claims. (Cl. 75—133.5)

1. A process for extracting nickel from low grade nickel ores containing an oxidic compound of nickel, which comprises violently intermixing molten low grade nickel ore with a bath of ferro-nickel containing at least 25% by weight of nickel to reduce nickel oxide from the ore and introduce it into the metal of the bath, removing the denickelized ore from the bath, also withdrawing



a portion of the ferro-nickel from the bath, adding a reducing agent to the remainder of the metal bath, then intermixing the remainder of the metal bath with a further quantity of molten low grade nickel ore, and repeating the above described sequence of operations.

2,750,287
COPPER-LEAD ALLOYS
Hans Burkhardt, Oberursel im Taunus near Frankfurt am Main, Germany, assignor to Vereinigte Deutsche Metallwerke Aktiengesellschaft, Frankfurt am Main, Germany, a corporation of Germany
No Drawing. Application September 24, 1951, Serial No. 248,092
Claims priority, application Germany October 4, 1950
7 Claims. (Cl. 75—163)

1. An alloy consisting of 1.0% to 9.5% of lead, 0.3% to 8% of at least one alkaline earth metal and the remainder copper.

2,750,288
MAGNESIUM BASE ALLOYS
Alfred Claude Jessup, Clifton Junction, near Manchester, England; Alma Jose Maria de Navarro, Henry James Huzzey Saunders, and Edward Frederick Emley, executors of said Alfred Claude Jessup, deceased, assignors to Magnesium Elektron Limited, Clifton Junction, near Manchester, England, a British company
No Drawing. Application March 31, 1953, Serial No. 346,035
Claims priority, application Great Britain May 9, 1951
5 Claims. (Cl. 75—168)

1. An alloy consisting apart from impurities of the following:

	Per cent by weight
Zinc	5 to 6.5
Thorium	at least 0.5
Zirconium	0.5 to 0.9
Magnesium	Remainder.

at least 0.5 per cent zirconium being in solution in the alloy and the ratio of thorium to zinc being not greater than 3.5:10 and not less than 1:10.

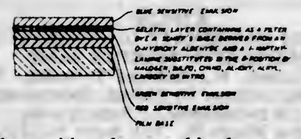
2,750,289
TITANIUM BASE ALLOYS
Robert I. Jaffee, Worthington, and Horace R. Ogden, Columbus, Ohio, assignors, by mesne assignments, to Rem-Cru Titanium, Inc., Midland, Pa., a corporation of Pennsylvania
No Drawing. Application March 23, 1953, Serial No. 344,187
4 Claims. (Cl. 75—175.5)

1. An alloy consisting essentially of: about 0.5 to 8% aluminum, about 0.5 to 15% lead, up to about 0.2% each of carbon, oxygen and nitrogen, balance titanium, characterized in having an ultimate strength at least 10% in excess of the unalloyed titanium base metal, and a minimum bend radius of not over 20T.

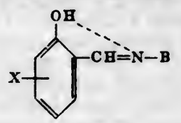
2,750,290
RECOVERY OF COOKING LIQUOR FROM SPENT SEMI-CHEMICAL PULPING LIQUORS
Eugene W. Schoeffel, Kronenwetter, Wis., assignor, by mesne assignments, to Sterling Drug Inc., New York, N. Y., a corporation of New York
No Drawing. Application February 21, 1952, Serial No. 272,719
5 Claims. (Cl. 92—2)

1. In a process for the recovery of sodium sulfite from spent semi-chemical pulp liquor, the steps comprising: pulping wood chips with a buffered solution of sodium sulfite; separating pulp and a spent semi-chemical pulp liquor; oxidizing substantially completely the organic and inorganic constituents of said liquor while maintained under the vapor pressure of the reaction mixture and substantially in the liquid phase in a reaction zone to obtain a sodium-containing concentrate; introducing sulfur dioxide and a solube calcium-containing material which will form insoluble calcium sulfate when contacted with an aqueous solution of sodium sulfate; separating calcium sulfate thus precipitated and treating the resulting filtrate with a calcium-containing material which will form sodium sulfite and calcium sulfite with said filtrate; separating the calcium sulfite so-formed and returning it to said sodium-containing concentrate; and returning the sodium sulfite so-formed to the pulping step.

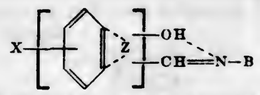
2,750,291
PHOTOGRAPHICALLY SENSITIVE ELEMENT CONTAINING YELLOW NON-FLUORESCING DYES
Vsevolod Tulagin, Binghamton, N. Y., assignor to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware
Application January 14, 1953, Serial No. 331,311
6 Claims. Cl. 95—8)



1. A light sensitive photographic element comprising a base and a light sensitive silver halide emulsion layer and including a water soluble colloid dyed with an irreversibly dischargeable Schiff's base substantially devoid of yellow fluorescence, said Schiff's base being selected from the class consisting of those of the following formulae:

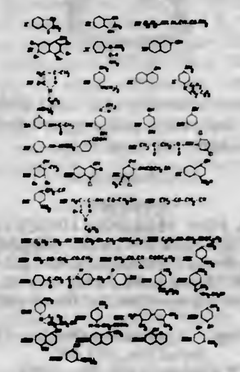


and



wherein the hydroxyl group is always ortho to the azomethine linkage, and in which X is a member selected from the class consisting of hydrogen, alkyl, hydroxyalkyl, aryl, alkylamino, acylamino, acyloxyalkyl, hydroxy, nitro, sulfo, carboxy and cyano, Z represents the atoms necessary to complete a 6-membered ring selected from the class consisting of aromatic rings and heterocyclic rings containing a conjugated unsaturated system, and B is a naphthyl radical, the carbon atom in the 1-position of which is joined to the nitrogen atom of the azomethine linkage, and the carbon atom in the 8-position of which is substituted by a radical selected from the class consisting of halogen, sulfo, cyano, alkoxy, alkyl, carboxy and nitro.

2,750,292
PROCESS FOR PRODUCING COLORED PHOTOGRAPHIC CONTRASTS
Cornelis Johannes Dippel and Hendrik Jonker, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application May 22, 1951, Serial No. 227,564
Claims priority, application Netherlands May 26, 1950
14 Claims. (Cl. 95—88)



1. A method of producing a color photographic contrast which comprises exposing portions of a layer containing a light sensitive compound selected from the group consisting of diazonium compounds, diazo compounds, ferric ammonium oxalate, ferric ammonium citrate and methylene blue, treating the exposed layer with moisture in the presence of a water soluble salt of a metal selected from the group consisting of mercury, silver, gold and platinum to produce a latent image of one of said metals, and applying to said latent metal image a developing solution containing a reducible salt of a metal selected from the group consisting of mercury, silver, gold and platinum and an organic reducing agent capable of reducing said salt to metal while forming an oxidation product which yields an insoluble organic dye contrast simultaneously in place with a metal contrast.

2,750,293
APPARATUS AND METHOD FOR WASHING EGGS
Carl Burmeister, Saline, Mich.
Application May 9, 1951, Serial No. 225,333
3 Claims. (Cl. 99—113)

1. A method of washing eggs in the bulk comprising the steps of submerging eggs in a washing liquid while supporting the eggs in bulk in a generally semi-circular form below the surface of the liquid, rotating said form of bulk eggs in one direction only with a step-by-step stop and go movement about a substantially horizontal axis to raise a portion of the bulk eggs toward the liquid surface with first an accelerating and then a decelerating movement in a repeated cycle to cause the uppermost of the bulk eggs rising toward the liquid surface upon acceleration to cascade away from the liquid surface upon deceleration across the remaining bulk eggs and in the direction of rotation.

2,750,294
PACKAGING AND DISPENSING OF SOFT PLASTIC FOODS
Leo Peters, Evanston, Ill.
Application June 2, 1953, Serial No. 359,151
8 Claims. (Cl. 99—171)

1. A soft plastic food package characterized by the combination of a relatively rigid support providing an open-topped cavity, a reversible pocket formed of thin,

flexible film carried by said support and extending downwardly into said cavity, and a soft plastic food body within said pocket, said pocket being freely separable



from said support, whereby said food body can be dispensed by first separating said support and then reversing said pocket about said food body.

2,750,295

PROCESS FOR MAKING UNICELLULAR DEHYDRATED POTATO GRANULES

Robert H. Treadway, Philadelphia, and Edward G. Heisler, Plymouth Meeting, Pa., assignors to United States of America as represented by the Secretary of Agriculture

No Drawing. Application October 11, 1954, Serial No. 461,692
2 Claims. (Cl. 99—207)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. The process for making dehydrated, substantially unicellular, potato granules comprising mixing about one part of ethanol with two parts of cooked, mashed potatoes thus to form a fluid slurry; distilling a mixture of ethanol and water from said slurry at a temperature of about 50 to 55° C. and under a reduced pressure such that the slurry boils at the operating temperature, ethanol being added during the distillation to replace the fluid removed by distillation, said distillation being continued until about 60 percent of the water in the original slurry has been distilled; then adding ethanol to the slurry until the liquid fraction of the slurry contains at least about 80 percent of ethanol; then filtering the slurry; then agitating the filter cake while permitting the ethanol therein to evaporate; and finally drying the potatoes to a moisture content of not more than about 7 percent at a temperature of about 60 to 80° C.

2,750,296

PRINTING INK

Joseph G. Curado, Rutherford, and Delbert H. Praeg, Bloomfield, N. J., assignors to Sun Chemical Corporation, Long Island City, N. Y., a corporation of Delaware

No Drawing. Application February 13, 1952, Serial No. 271,424
4 Claims. (Cl. 106—30)

1. A printing ink with inhibited misting tendencies consisting of coloring material dispersed in a vehicle, said vehicle consisting essentially of an oil-soluble resinous binder and a mineral oil as the solvent for said resinous binder, said mineral oil being substantially non-distillable at atmospheric pressures, and including from approximately 0.1% to approximately 3.0% by weight based on the weight of the ink of a long chain aliphatic amine bentonite containing 34 carbon atoms in the aliphatic chain.

2,750,297

COLD ASPHALTIC PAVING MIXTURE AND A PROCESS OF MAKING IT

Walter G. Doherty, Carmel, N. Y.

No Drawing. Application April 15, 1953, Serial No. 349,097
2 Claims. (Cl. 106—170)

1. A cold hardening asphaltic paving composition consisting of mineral aggregate, an asphaltic emulsion adapted to bind the aggregate, and a separate protective colloid producing water-soluble substance selected from the group consisting of methyl cellulose and ethyl cellulose.

2,750,298

SOLUTION OF RESIN IN BLOWN OIL TREATED WITH FRIEDEL-CRAFTS CATALYST TO PRODUCE VARNISH

Myron W. Kiebler, Jr., Cleveland, and Everett B. Euchner, Avon Lake, Ohio, assignors to The Glidden Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application April 10, 1952, Serial No. 281,672
10 Claims. (Cl. 106—222)

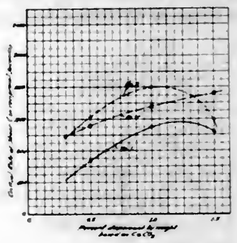
1. The process for preparing varnish which comprises: providing a component of blown oil selected from the class consisting of blown drying oils, blown semi-drying oils and mixtures thereof, the oil in said component having had oxygen added thereto by blowing at 180–250° F. in an amount substantially equivalent to that produced by blowing tung oil at the same temperatures to a viscosity of M on the Gardner-Holdt scale; preparing a substantially homogeneous liquid-phase mixture containing said blown oil component and resinous material which is soluble therein; treating said liquid-phase mixture at temperatures between room temperature and the decomposition temperature of any of the blown oil contained therein with a small effective amount to about 5% by weight on the resin of catalyst selected from the group consisting of the Friedel-Crafts catalysts, fluoboric acid and mixtures thereof, until the viscosity of said mixture has been increased as a result of the presence and activity of said catalyst; the quantity of resinous material in said mixture being sufficient to impart varnish characteristics to the treated product.

2,750,299

CALCIUM CARBONATE DISPERSIONS AND METHOD OF MAKING SAME

Gerald D. Hansen, Jr., Richland Township, Allegheny County, Pa., assignor to Calgon, Incorporated, Pittsburgh, Pa., a corporation of Pennsylvania

Application March 30, 1953, Serial No. 345,318
10 Claims. (Cl. 106—308)



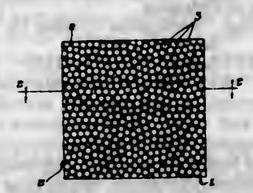
9. An aqueous slurry comprising calcium carbonate, water, and as a deflocculating agent, a fused, homogeneous mixture consisting of: (*a*) from about 81 percent to about 88 percent sodium phosphate glass having a molar ratio of $Na_2O:P_2O_5$ of from about 0.9:1 to about 1.5:1, (*b*) from about 10 percent to about 15 percent zinc oxide, (*c*) water soluble hydroxide of an alkali metal selected from the group consisting of potassium and lithium, the concentration of the deflocculating agent being from about 0.5 percent to about 2.0 percent based on the dry weight of calcium carbonate in the slurry.

2,750,300

GLITTER CLOTH

Arthur J. Kakoff, Brooklyn, N. Y.

Application January 20, 1954, Serial No. 405,145
4 Claims. (Cl. 117—28)



1. A glitter cloth comprising a piece of fabric having a plurality of glitter discs affixed directly thereto in a single layer many of said discs being in contact with one another.

2,750,301

METHOD OF TREATING METALLIC MATERIALS

Berthold Johannes Wenderott, Altena, Germany, assignor to Vereinigte Deutsche Metallwerke Aktiengesellschaft, Frankfurt am Main-Heddernheim, Germany, a corporation of Germany

No Drawing. Application January 22, 1953, Serial No. 332,781
Claims priority, application Germany February 4, 1952
13 Claims. (Cl. 117—50)

5. The method which comprises treating metallic material selected from the group consisting of alloys of metals of the iron group and alloys of copper with alloying elements capable of forming anions in an oxidizing fused salt bath, the major portion of which is an alkali metal hydroxide, treating the thus obtained metallic material with water to remove any adhering salt, then annealing the thus pretreated metallic material in a reducing atmosphere and cladding such annealed metallic material with a metal in the same heat.

2,750,302

METHOD OF PREPARING A NON-BLOOMING ASBESTOS CEMENT SHINGLE AND PRODUCT THEREOF

Frank V. Camarda, Bound Brook, Frank J. Gumbs, Butler, and Robert B. Lovell, Parsippany, N. J., assignors to The Patent Licensing Corporation, New York, N. Y., a corporation of Massachusetts

No Drawing. Application May 6, 1955, Serial No. 506,662
6 Claims. (Cl. 117—72)

6. A process for preparing a non-blooming asbestos-cement shingle comprising applying a thin film of wax emulsion prior to the curing of the shingle and after curing the shingle preheating the shingle to a temperature of 125° to 145° F. and applying thereto an emulsion containing about 4 parts of polyethylene resin, about 2 parts of sodium silicate and about 3 parts of acrylic resin and drying the shingle.

2,750,303

WATER-RESISTANT, POLYMERIC TITANIUM ESTER-IMPREGNATED WOOD AND METHOD OF MAKING SAME

Robert W. La Berge, Magnolia, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 7, 1953, Serial No. 353,675
13 Claims. (Cl. 117—72)

1. A method of retarding transmission of water and water vapor through porous wood normally pervious to water and water vapor which comprises impregnating pores of said wood by applying directly to at least one surface of said wood a primer composition comprising a volatile substantially anhydrous organic liquid and as the sole water vapor retardant an acyclic polymeric titanium mixed ester, said ester being a chain of alternating titanium and oxygen atoms with hydrophobic substituent A attached to titanium atoms in the proportion of at least .5 substituent A per titanium atom, where substituent A is a residual radical of an oxygenated organic compound of 8 to 24 carbon atoms selected from the class consisting of aliphatic monocarboxylic acids and aliphatic monohydric alcohols, minus hydrogen of the respective functional groups, the remaining titanium linkages being satisfied with —OR radicals, where R is a radical selected from the group consisting of hydrogen and hydrocarbon radicals, the hydrocarbon radical being selected from the group consisting of alkyl, cycloalkyl, aryl and aralkyl radicals having no more than 8 carbon atoms, the ratio of —OH radicals being not greater than about one per titanium atom, and applying at least one continuous coat of a water-insoluble film-forming material over the primed surface.

2,750,304

PRESSURE-SENSITIVE ADHESIVE TAPE AND METHOD OF MAKING

James O. Hendricks, White Bear Lake, William E. Lundquist, Savage, and Ambrose F. Schmeikle, St. Paul, Minn., assignors to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a corporation of Delaware

No Drawing. Application June 19, 1952, Serial No. 294,473
5 Claims. (Cl. 117—76)

2. A solvent-resistant and weather-resistant pressure-sensitive adhesive tape comprising a pressure-sensitive tape adhesive layer firmly adherently bonded to a fibrous backing impregnated and unified with the heat-cured polymeric reaction products of a combination of an amide-ester polymer and a small proportion of an aldehydic curing agent, said combination being capable of producing a heat-cured thin film having a modulus at 100% elongation of about 30–160 lbs./sq. in. and a tensile strength of at least about 70 lbs./sq. in. at an elongation of at least about 300%, said amide-ester polymer being a low-acid-number condensation product, soluble in isopropanol-xylol and having a molecular weight of about 1500–8000, formed by simultaneously heating together inter-reactive components consisting essentially of substantially equivalent molar quantities of an organic acid portion and an amine-alcohol portion; said acid portion consisting of at least about 80% of aliphatic dicarboxylic acid having at least four carbon atoms between carboxyl groups, any remainder consisting of unsaturated dicarboxylic acid from the class consisting of maleic, fumaric, itaconic and citraconic acids and adducts of maleic anhydride with conjugated dienes; said amine-alcohol portion consisting of components totaling 100% and selected from the following three groups: (1) up to 100% of a non-cyclizable monoalkanolamine having a primary amino group, and, where the amount is more than about 50%, at least that portion in excess of about 50% having a branched chain; (2) up to about 70% of non-cyclizable mono-N-substituted mono-alkanolamine having as the alkanol skeletal chain, connecting the nitrogen atom and the hydroxyl group, a plurality of carbon atoms other than four and five, and having directly bonded to the nitrogen atom a single non-tertiary hydrocarbon radical; and (3) up to about 10% of an unsymmetrical alkyl-substituted aliphatic non-tertiary diamine having a non-cyclizable molecule and selected from the class consisting of N-alkyl substituted diamines and diamines having the alkyl substituent on a carbon atom alpha to a nitrogen atom, at least about 5% of said diamine being included in the absence of said unsaturated dicarboxylic acid component; and said inter-reactive components being further so selected and proportioned as to provide one mono-N-substituted amide

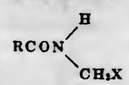
linkage, in which a single hydrogen atom is attached to the nitrogen, for about each 10–50 atoms in the skeletal chain of the polymer.

2,750,305
COMPOSITION AND METHOD FOR HYDROPHOBIZING OF TEXTILES
Dmitry Michael Gagarine and Henry Repoltis, Clemson, S. C., assignors to Deering Milliken Research Corporation, Pendleton, S. C., a corporation of Delaware
No Drawing. Application October 5, 1953, Serial No. 384,333
35 Claims. (Cl. 117—103)

26. A process for rendering a textile fabric water-repellent which comprises immersing the dry fabric in an ammoniacal aqueous emulsion containing from about 0.5% to about 2% by weight of an alkyl hydrogen polysiloxane silicone resin in which the alkyl groups are lower alkyl radicals and which is capable of further polymerization upon curing, from about 10% to 30% by weight of the silicone resin of an ammonium salt of a fatty acid having 12 to 18 carbon atoms, and from about 5% to 60% by weight of the silicone resin of stannous hydroxide, said stannous hydroxide constituting less than 1% by weight of the emulsion, removing excess liquid from the fabric so that the weight gain of the fabric is from about 50% to 100% of the dry weight and the silicone resin retained by the fabric is from about 0.3% to 1% of the dry weight of the fabric, and drying the fabric.

2,750,306
TREATMENT OF TEXTILE MATERIALS WITH QUATERNARY AMMONIUM COMPOUNDS
Raymond A. Pingree, Cranston, and Chester U. Stevens, Saylesville, R. I., assignors to Crown Chemical Corporation, Providence, R. I., a corporation of Rhode Island
No Drawing. Application June 24, 1954, Serial No. 439,128
8 Claims. (Cl. 117—121)

1. The process of treating textile materials to impart thereto permanent water-repellent properties, which comprises impregnating the same with an aqueous dispersion of a quaternary ammonium compound until the textile material is substantially thoroughly wetted, squeezing out excess liquid, then subjecting this squeezed material to heat treatment in the absence of added moisture and increasing the temperature after it is dry to between about 150° C. and 230° C., in which step the quaternary ammonium compound is decomposed and hydrochloric acid released and a water-repellent residue left on the textile material, the said water-dispersible quaternary ammonium compound being prepared by the steps which comprise reacting 1 mol equivalent of a chloromethyl acid amide of the general formula



wherein R designates a saturated aliphatic hydrocarbon radical of 9 to 21 carbon atoms inclusive and X stands for chlorine, with approximately 0.5–1.5 mols of a straight chain alkyl nitrile containing 10 to 22 carbon atoms inclusive, then reacting this intermediate product with approximately 0.5–1.5 mol equivalents of formaldehyde and approximately 0.5–1.5 mol equivalents of hydrogen chloride to form a second intermediate product, the temperature of reaction in forming these aforesaid intermediate products being substantially 60° to 75° C. inclusive, and thereafter reacting this latter product at temperatures 50° to 75° C. inclusive with 0.5–1.5 mol equivalents of a tertiary amine from the group consisting of pyridine and the C-alkyl substituted pyridines the alkyl group of which does not contain more than 3 carbon atoms.

2,750,307
INHIBITION OF MOISTURE TRANSMISSION THROUGH RIGID PERVIOUS MEDIA
Robert W. La Berge, Magnolia, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application October 12, 1953, Serial No. 385,713
15 Claims. (Cl. 117—123)

1. A method of retarding transmission of water and water vapor through porous masonry normally pervious to water and water vapor which comprises substantially impregnating exposed pores of said masonry without sealing them, with a liquid composition consisting essentially of an acyclic polymeric titanium mixed ester as the nonvolatile portion, said ester being a chain of alternating titanium and oxygen atoms with hydrophobic substituent A attached to titanium atoms in the proportion of at least .5 substituent A per titanium atom, where substituent A is a residual radical of an oxygenated organic compound of 8 to 24 carbon atoms selected from the class consisting of aliphatic monocarboxylic acids and aliphatic monohydric alcohols, minus hydrogen of the respective functional groups, the remaining titanium linkages being satisfied with —OR radicals, where R is a radical selected from the group consisting of hydrogen and hydrocarbon radicals, the hydrocarbon radical being selected from the group consisting of alkyl, cocyloalkyl, aryl and aralkyl radicals having no more than 8 carbon atoms, and the ratio of —OH radicals being not greater than about one per titanium atom, said liquid composition being adequately low in viscosity for penetration into said exposed pores of said masonry to deposit said polymeric titanium ester in said pores after volatilization of the solvent and diluents without any substantial quantity remaining on the surface.

2,750,308
PROCESS OF FILMING COMMUTATOR SEGMENTS AND COMPOSITIONS THEREFOR
Willard F. Burchfield, Maple Heights, Ohio, assignor to Jack & Heintz, Inc., Cleveland, Ohio, a corporation of Delaware
No Drawing. Application May 19, 1953, Serial No. 356,100
5 Claims. (Cl. 117—224)

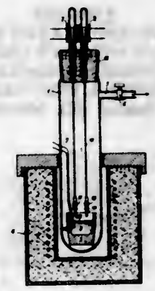
1. The method of providing a current conducting film on commutator segments, or slip rings, of a rotating electrical machine having brushes, which consists in the application of an aqueous mixture consisting of the following ingredients, in approximate proportions by weight, sodium acetate, $NaC_2H_3O_2$, 4.0 grams, barium nitrate, $Ba(NO_3)_2$, 3.0 grams, ammonium chloride, NH_4Cl, 4.0 grams, hydrogen peroxide, H_2O_2, 5.0 oz. of 6% solution, ammonium persulfate, $(NH_4)_2S_2O_8$, 6.0 grams, and distilled water (H_2O), 24.0 oz., directly onto said segments and rings and the running of said machine under operating conditions with the brushes of said machine in contact with said aqueous mixture on said segments, or rings, to provide a lubricant and current conducting film on said segments, or rings.

2,750,309
TREATMENT OF THE SURFACES OF ALUMINIUM OR ALUMINIUM ALLOYS
Alfred Norman Douglas Pullen, Grappenhall, near Warrington, and Ernest Derek Swann, York, England, assignors to The British Aluminium Company Limited, London, England, a British company
No Drawing. Application October 28, 1953, Serial No. 388,908
Claims priority, application Great Britain October 28, 1952
8 Claims. (Cl. 134—42)

1. A method of cleaning aluminium and aluminium alloy surfaces which comprises immersing said surfaces

for a short period of time in an aqueous alkaline solution which is held at a temperature in the range of 30° to 50° C. and contains an alkali-metal hydroxide in an amount of between 1.8% and 3.5% by weight, dissolved aluminium in an amount approximately half the weight of the alkali-metal hydroxide to ensure that a permanent deposit will appear in the solution, and the trans form of dinitrotetrammine cobaltic chloride in an amount in the range from about 0.01% to about 0.03% by weight.

2,750,310
MANUFACTURE PROCESS OF DOPED GERMANIUM CRYSTALS
Joachim I. Franke, Paris, France
Application July 7, 1955, Serial No. 520,571
Claims priority, application France July 17, 1954
4 Claims. (Cl. 148—1.5)

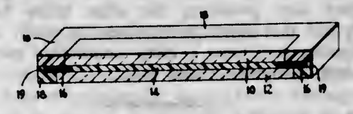


1. A process for manufacturing germanium crystals having zones or "layers" of semi-conductivity of opposite types, comprising the following steps: introducing, into a bath consisting of a molten semi-conductive body which has a melting point lower than that of germanium and crystallises in a cubic system and has a lattice distance of the order of 2.50 angstroms, a germanium crystal of a given type of conductivity, for a time that is sufficient for it to dissolve to saturation in the molten semi-conductive body and, when the saturation equilibrium has been reached, introducing into the same bath a germanium crystal of an opposite type of conductivity, the temperature being lowered so that the dissolved germanium is deposited on the secondly mentioned germanium crystal.

2,750,311
PROCESS FOR DRAWING AND HEAT TREATING MAGNESIUM WIRE
Clermont J. Snyder and Willis G. MacLelland, Hastings on Hudson, N. Y., assignors to Anaconda Wire & Cable Company, Hastings on Hudson, N. Y., a corporation of Delaware
No Drawing. Application April 15, 1952, Serial No. 282,482
9 Claims. (Cl. 148—4)

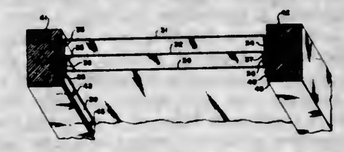
1. The method of heat treatment to increase the ductility of magnesium during the drawing of magnesium wire in a series of successive drawing reductions which comprises heating the wire to a temperature between 325° F. and 500° F., holding the wire substantially at such temperature while carrying out the initial reductions, thereafter heating the resulting initially reduced wire to a lower temperature between 275° F. and 100° F., and holding the wire substantially at such lower temperature while carrying out at least the final reduction, each of said heatings being of shorter duration than is required to effect substantial recrystallization of the metal at the heating temperature, whereby said heat treatment avoids causing any substantial degree of annealing of the metal.

2,750,312
METHOD OF FABRICATING LAMINATED STRUCTURES
James H. Bloom, Jr., and Wyman N. Connor, New Kensington, Pa., assignors to Pittsburgh Plate Glass Company
Application May 25, 1953, Serial No. 357,148
5 Claims. (Cl. 154—2.71)



1. A process for the fabrication of a laminated safety window comprising two glass sheets and a thermoplastic sheet bonded to the opposed surfaces of the glass sheets and extending beyond the periphery of each of the glass sheets, which comprises forming an assembly comprising a pair of glass sheets, a thermoplastic sheet therebetween and extending therebeyond, and a pair of rigid frame members, each frame member being in direct abutting relationship with the periphery of one of the glass sheets and with the entire opposing surface of the extension of the thermoplastic sheet and at least one of said frame members having a peripheral flange extending toward and contacting the opposed surface of the other frame member to provide a surface of at least one of said frame members fitting snugly against the entire periphery of the thermoplastic sheet, the frame members having sufficient thickness to provide with the glass sheets an assembly having smooth upper and lower surfaces, placing the assembly in a pressing bag, evacuating the bag, subjecting the assembly in the evacuated bag to an elevated temperature and pressure to bond the thermoplastic sheet to the glass sheets, removing the assembly from the bag, and removing the frame members from around the laminate of the thermoplastic sheet bonded to and extending beyond said glass sheets, each of the pair of frame members being constructed of a material that does not bond at said elevated temperature and pressure to the glass sheets, to the thermoplastic sheet or to the other frame member.

2,750,313
THERMAL INSULATION
Alexander Schwartz and Emile Fogelson, New York, N. Y., assignors to Leobarb Corporation, New York, N. Y., a corporation of New York
Application August 14, 1953, Serial No. 374,198
5 Claims. (Cl. 154—45)



1. An improved thermal insulation which comprises at least two insulating sheets of indefinite length and formed of thin flexible material including aluminum foil, two supporting edge strips of sheet material which are relatively narrow with respect to their length and with respect to the insulating sheets, said edge strips being relatively stiff compared to the insulating sheets, said insulating sheets having thin edge portions bent at right angles forming lateral edge panels which are attached to the edge strips, said edge strips forming means for holding the insulating sheets in spaced apart relation when the insulation is installed between framing structures, and one attaching panel formed lengthwise along the longitudinal edge of each edge strip providing means for attaching insulation to a framing structure with the remaining major portion of the edge strips unattached, said insulating sheets comprising a front sheet and a back

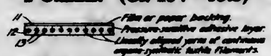
sheet, the spanning width of the front sheet between the edge strips being wider than the spanning width of the back sheet between the edge strips, whereby when the edge strips are placed in contact with the inner opposite parallel faces of two framing structures and the attaching panel of each edge strip is attached to a framing structure the edge strips hold the insulating sheets in stretched taut positions, the edge strips being sufficiently stiff that although they bend inwardly away from the framing structures at their unattached portions they hold both insulating sheets taut.

2,750,314
ADHESIVE TAPE
Cyrus W. Bemmels, New Brunswick, N. J., assignor to Permacel Tape Corporation, New Brunswick, N. J., a corporation of New Jersey
Application March 16, 1949, Serial No. 81,707
15 Claims. (Cl. 154—53.5)



1. A normally tacky and pressure-sensitive adhesive tape comprising a non-woven backing, a layer of soft, rubbery and cohesive bonding coat comprising a soft rubber thereon, a layer of parallel strands of strong, high tenacity rayon extending longitudinally of said tape on said bonding coat and spaced laterally from each other, and a continuous layer of a normally tacky and pressure-sensitive adhesive covering said layer of strands and said bonding coat, in which adhesive tape the spaces between the adjacent strands are substantially filled with pressure-sensitive adhesive and covered to the substantial exclusion of air, said strands being disconnected mechanically from each other and being retained in their individual positions solely by adhesive means.

2,750,315
PRESSURE-SENSITIVE ADHESIVE STRAPPING TAPE
Hubert J. Tierney, St. Paul, Minn., assignor, by mesne assignments, to Permacel Tape Corporation, New Brunswick, N. J., a corporation of New Jersey
Application April 29, 1949, Serial No. 90,318
2 Claims. (Cl. 154—53.5)



1. A normally tacky and pressure-sensitive adhesive tape comprising a non-woven backing, a layer of soft rubbery and cohesive bonding coat comprising a soft rubber thereon, a layer of parallel strands of strong, high tenacity nylon extending longitudinally of said tape on said bonding coat and spaced laterally from each other, and a continuous layer of a normally tacky and pressure-sensitive adhesive covering said layer of strands and said bonding coat, in which adhesive tape the spaces between the adjacent strands are substantially filled with pressure-sensitive adhesive and covered to the substantial exclusion of air, said strands being disconnected mechanically from each other and being retained in their individual positions solely by adhesive means.

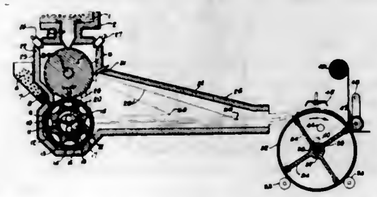
2,750,316
ADHESIVE TAPES
Cyrus W. Bemmels, New Brunswick, N. J., assignor to Permacel Tape Corporation, New Brunswick, N. J., a corporation of New Jersey
Application August 13, 1954, Serial No. 449,712
12 Claims. (Cl. 154—53.5)

12. A reinforced pressure-sensitive adhesive tape comprising an elongate flexible backing sheet, an adhesive coating on one surface of said sheet, said coating including an outer continuous surface of normally tacky and pressure-sensitive material, a bonding coating of elastic, yieldable, and cohesive material on the other surface of said sheet, and a plurality of relatively strong individual reinforcing strands extending longitudinally of said sheet and spaced laterally from each other, said strands being



secured in said bonding coating and disconnected mechanically from each other except for said bonding coating which serves as the sole means for retaining said strands in their individual positions, said bonding coating having a release coating applied thereto to control the adherence between said bonding coating and said adhesive coating.

2,750,317
METHOD AND APPARATUS FOR MAKING NON-WOVEN FABRIC
Fred W. Manning, Palo Alto, Calif.
Application October 8, 1953, Serial No. 384,882
13 Claims. (Cl. 154—101)



1. In a method for attenuating a fibre-forming material into filaments by the propulsion of discrete solid material adherent therewith, the steps comprising: dispering one of the said materials in a gaseous stream; directing the said stream against a supporting wall to deposit the sa d one material thereupon; moving the said wall through an endless circuit to bring the said materials into adherent contact in a predetermined relation; and propelling the said solid material from the said wall with an adherent portion of the said fibre-forming material to produce a continuous succession of discontinuous filaments.

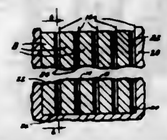
6. In a method for making a nonwoven fabric, the said steps of claim 1 for producing the filaments, and including the additional steps: depositing the said filaments upon a fibre-retaining wall; moving the fibre-retaining wall through an endless circuit and simultaneously and relatively reciprocating one of the said walls to cause the said filaments to intersect and extend beyond one another in a succession of overlaps.

2,750,318
DENTURE-CHARACTERIZING PROCESS
La Grande Oglesby, Edgewater, and Hobart H. Proctor, Denver, Colo.
Application March 27, 1952, Serial No. 278,796
5 Claims. (Cl. 154—110)



1. The denture-characterizing process which consists of developing a conventional denture matrix interrupted by the bases of the teeth to be carried by the ultimate denture, forming in said matrix a pattern of the denture base labial portion thereby defined, trimming from said pattern the material about and outwardly contiguous to the tooth sockets corresponding with the lighter-colored alveolar zone tissue of a natural gum, applying said trimmed pattern to the development of a second matrix, drawing from said second matrix a reproduction of the trimmed pattern in thermo-setting pliable dough material containing vein-simulating fiber filaments, investing said reproduction in registered relation with said conventional matrix, applying unfibered thermo-setting pliable dough material to and as the alveolar zone of said reproduction prior to closing of the conventional matrix, pressure-consolidating the associated fibered and unfibered materials while in pliable condition through closing of the conventional matrix, and heat-curing the so-consolidated materials under maintained pressure and into consequent secure mounting engagement with the matrix-interrupting tooth bases.

2,750,319
METHOD OF MAKING DECORATIVE PROTECTED PANEL
Milton A. Sanders, Elizabeth, N. J.
Application May 17, 1954, Serial No. 430,097
4 Claims. (Cl. 154—121)



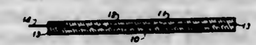
1. The method of making a board surfaced with a plastic material with a predetermined surface finish, comprising the steps of: coating the face of the board with a thin layer of thermosetting resin; placing a layer of decorative fabric over the resin to cover said face of the board, placing the board thus covered in a cell adapted to retain liquid and in spaced relation to a wall having predetermined surface finish; flowing a liquid, non-opaque, thermosetting resin into the cell to submerge the board and fill the space between said face of the board and said wall; and removing the board from the cell after the resin has solidified to provide a board with a decoration of the fabric and a surface complementary to that of the wall.

2,750,320
PROCESS FOR PREPARING CONTINUOUS PLASTIC SHEETS
Morton Elber Latham, Alhambra, Calif., assignor to Swedlow Plastics Company, Los Angeles County, Calif., a corporation of California
Application March 29, 1954, Serial No. 419,245
12 Claims. (Cl. 154—126)



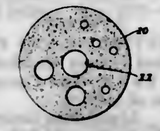
1. A process for preparing continuous plastic sheeting which comprises preparing a flowable, polymerizable system containing ethylenically unsaturated monomeric material, an acyloin of the formula R—CO—CHOH—R', wherein R and R' are monovalent hydrocarbon radicals, and an organic peroxide; continuously encasing said system within a continuous flexible, translucent web, and continuously passing said web and system encased therein through an area of ultra-violet irradiation to effect polymerization of the system.

2,750,321
ANTENNAS AND MATERIAL FOR FABRICATION THEREOF
Edward Koppelman, North Hollywood, Calif., assignor to Raymond De-Icer and Engineering Co., Inc., Los Angeles, Calif., a corporation of California
Application September 4, 1951, Serial No. 244,876
14 Claims. (Cl. 154—127)



1. A structure adapted to send and receive electrical waves: a sheet of nonmetallic woven fabric having metal deposited on its surface in quantity sufficient to render said sheet electrically conductive but insufficient to render said sheet impermeable to fluids, the metallized fabric encased between layers of a waterproof, solid, electrically nonconductive resin, said layers being bonded together through pores in said fabric and around the periphery of said sheet, and an electrical terminal electrically connected to said metallized fabric.

2,750,322
GASKET AND METHOD OF MAKING SAME
Giles B. Cooke and William C. Rainer, Baltimore, Md., assignors to Crown Cork & Seal Company, Inc., Baltimore, Md., a corporation of New York
Application March 20, 1951, Serial No. 216,488
11 Claims. (Cl. 154—139)



1. A gasket provided with a passage and having a relatively hard upper portion and a lower relatively softer portion, said portions each including essentially a rubbery polymeric compound, wax in a minor portion of the total composition and filler and being vulcanized together, the upper surface being smooth and abrasion resistant and the lower surface being soft and comformable.

11. The method of making a gasket provided with a passage and which comprises preparing layers each including essentially a rubbery polymeric compound, wax in a minor portion of the total composition and filler, and a plastic, the amount of plastic being greater in the upper portion than in the lower portion, superposing said layers in a mold with one of said layers which will produce a relatively hard composition upon vulcanization forming one surface, and another of said layers which upon vulcanization will produce a relatively softer conformable composition forming the other surface, curing said layers in the mold at a temperature of between about 280° F. and about 325° F. and a pressure of about 1000 pounds for from about twenty-five to thirty minutes, to thereby vulcanize the layers together into a unitary structure, removing the structure from the mold and immediately cooling the same, and forming a passage through the unitary structure.

2,750,323
PROCESS FOR PRODUCING SHAPED BODIES
Ernst Schmitz-Hillebrecht and Gerhard Techmer, Krefeld, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany
No Drawing. Application July 3, 1953,
Serial No. 368,200
10 Claims. (Cl. 154—140)

1. A process for producing shaped bodies by bonding porous construction elements together which comprises

coating the mating surfaces of said elements with a bonding composition consisting essentially of an aqueous adhesive solution; a water-insoluble protective material dispersed in the adhesive solution, said protective material being selected from the group consisting of fungicidal agents, insecticidal agents and mixtures thereof; and a coagulant for said adhesive solution, said coagulant displacing the dispersed protective material into the pores of the construction elements at elevated temperature and pressure; and pressing the coated elements together at an elevated temperature and at superatmospheric pressure.

2,750,324

METHOD OF KILLING ARTHROPOD PESTS AND COMPOSITION THEREFOR

Harry Bender, Torrance, Calif., assignor to Stauffer Chemical Company, a corporation of Delaware

No Drawing. Application June 19, 1952, Serial No. 294,490
12 Claims. (Cl. 167—30)

1. The method of killing arthropod pests comprising applying to a pest habitat a mixture containing a compound selected from group 1 and a compound selected from group 2 wherein group 1 consists of 4-chlorophenyl phenyl sulfone, 4-bromophenyl phenyl sulfone and mixtures thereof, and group 2 consists of diphenyl sulfone, bis(4-chlorophenyl) sulfone and mixtures thereof.

2,750,325

INJECTABLE ERYTHROMYCIN PREPARATIONS

Harold L. Market and Hubert W. Murphy, Indianapolis, Ind., assignors to Eli Lilly and Company, Indianapolis, Ind., a corporation of Indiana

No Drawing. Application September 3, 1954, Serial No. 454,228
6 Claims. (Cl. 167—65)

1. A therapeutic composition comprising a solution of erythromycin in a lower dialkyl carbonate, in which the alkyl groups have from 1 to 3 carbon atoms.

2,750,326

PROCESS AND COMPOSITION FOR DYEING HAIR

Wolfgang Max Joseph Eckardt, Bad Segeberg, Holstein, Germany, assignor to Lever Brothers Company, New York, N. Y., a corporation of Maine

No Drawing. Application January 24, 1952, Serial No. 268,125
Claims priority, application Germany February 7, 1951
3 Claims. (Cl. 167—88)

2. The method of dyeing hair attached to the skin which comprises treating the hair at a temperature between 20 and 30° C. with a composition consisting essentially of a nitro dye having the general formula $(NO_2)_mRX_n(NHR')_p$ where R is an aromatic radical, X is a radical selected from the group consisting of NH_2 and hydroxyl groups, R′ is an alkylol group having one to three carbon atoms and a single hydroxyl group, m is an integer of at least 1, p is an integer of at least 1, and the sum of n and p is an integer of at least 2.

2,750,327

PROCESS OF DYEING ANIMAL FIBERS AND DYES AND DYEING COMPOSITIONS THEREFOR

Wolfgang Max Joseph Eckardt, Bad Segeberg, Holstein, Germany, assignor to Lever Brothers Company, New York, N. Y., a corporation of Maine

No Drawing. Application May 28, 1954, Serial No. 433,269
Claims priority, application Great Britain June 1, 1953
9 Claims. (Cl. 167—88)

1. A process of dyeing animal fibers, in particular human hair, which comprises treating hair with an aqueous solution of at least one organic dye of the general formula:

$$(NO_2)_mR(NHR^1)_n(NR^2R^3)_p$$

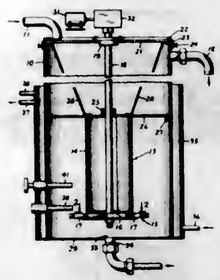
where R is a benzene ring, R^1, R^2 and R^3 are aliphatic radicals of 1–4 carbon atoms, inclusive, each containing at least one hydroxyl group and m, n and p are integers having a value of at least 1.

2,750,328

AERATING METHOD AND APPARATUS

Edwin G. Stimpson, Sayville, and Henning A. Trebler, Oakdale, N. Y., assignors to National Dairy Research Laboratories, Inc., Oakdale, N. Y., a corporation of Delaware

Application March 20, 1952, Serial No. 277,580
4 Claims. (Cl. 195—142)



2. A fermentor comprising a container of nutrient solution, an open-ended vertical tube centrally located in said container with its lower end adjacent the bottom of said container and its upper end below the top of said container, an air inlet in the bottom of said container opposite the lower end of said tube, a horizontal plate having a diameter greater than said tube between said air inlet and said tube to prevent escape of air through said tube, and rotatable impeller blades between said plate and said tube for drawing solution down said tube and dispersing air throughout the solution.

2,750,329

PLATINUM-CONTAINING REFORMING CATALYSTS

Wayne I. Barrett, Baltimore, Md., and Clifford S. Shipley, Aldan, Pa., assignors of one-half each to The Atlantic Refining Company, Philadelphia, Pa., a corporation of Pennsylvania, and W. R. Grace & Co., Norwalk, Conn., a corporation of Connecticut

No Drawing. Application May 5, 1953, Serial No. 353,228
11 Claims. (Cl. 196—50)

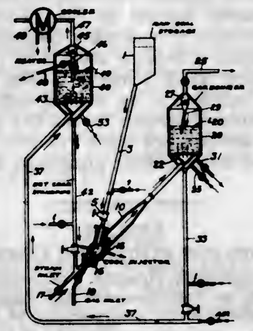
1. A process for preparing a catalyst for reforming a hydrocarbon fraction boiling within the gasoline-kerosine range which comprises contacting a cracking component consisting essentially of silica and at least one metal oxide from the group consisting of alumina, zirconia, magnesia, and thoria, with an aqueous solution of a compound of a metal from the group consisting of platinum and palladium, the cracking component being characterized by having a catalytic activity within the range between 10 and 50 as compared with a theoretical maximum catalytic activity of 100 and a practicable maximum catalytic activity of between 90 and 95 on a distillate-plus-loss scale for the measurement of the catalytic activity of a cracking catalyst, the compound of the metal in the aqueous solution being in an amount such that upon contact of the cracking component with the aqueous solution between 0.1 per cent and 2.5 per cent of the metal by weight of the cracking component will be deposited on the cracking component, subjecting the cracking component and aqueous solution while maintaining substantially constant moisture content to a temperature for a time sufficient to effect fixation on the cracking component of at least 50 per cent of the metal deposited on the cracking component, drying the cracking component with the compound of the metal deposited thereon, and reducing the metal compound to the metal.

2,750,330

PROCESS OF CARBONIZING COAL

Karl J. Nelson, Cranford, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application June 20, 1949, Serial No. 100,231
2 Claims. (Cl. 202—14)



1. The method of distilling agglomerative hydrocarbonaceous solids which comprises circulating a stream of gas through a confined mass of finely divided carbonaceous solids under fluidizing conditions, heating said mass to a temperature sufficiently high to effect distillation of said agglomerative solids, continuously withdrawing a portion of said confined mass to a position exterior thereof, injecting a gas-solids suspension consisting of finely divided fresh agglomerative hydrocarbonaceous solids suspended in a second stream of gas into said withdrawn portion at said exterior position, the velocity of said second stream of gas being adequate to create strong turbulence, circulating a cooling medium in heat exchange relation with said suspension of fresh solids to cool said suspension to a temperature below the agglomerating temperature of said solids until the point of injection is reached, returning the mixture so formed to the confined mass in the form of a gaseous suspension, and recovering the products of distillation.

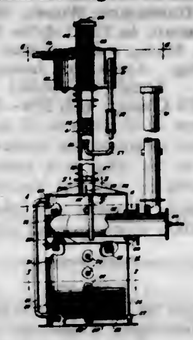
2,750,331

DESICCANT RECONCENTRATOR

Charles O. Meyers, Tulsa, Okla., assignor to National Tank Company, Tulsa, Okla., a corporation of Nevada

Application July 28, 1954, Serial No. 446,275
6 Claims. (Cl. 202—153)

1. In a liquid desiccant gas dehydrator, a desiccant reconcentrator including, a main vessel divided into superposed heating and surge chambers, heating means in the heating chamber, a stripping column having one end extending from said main vessel and communicating with the heating chamber, a skimming vessel mounted at the upper end of said column and in heat exchange relationship with the column, a dilute desiccant inlet to the skimming vessel, a liquid hydrocarbon outlet from the skimming vessel, a desiccant outlet from the skimming vessel, a vapor outlet from the column, a reconcentrated desiccant outlet from the surge chamber, and a desiccant



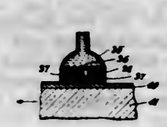
conductor for conveying reconcentrated desiccant from the heating chamber to the surge chamber.

2,750,332

METHOD AND APPARATUS FOR ELECTRO-DEPOSITION OF A LAYER OF UNIFORM THICKNESS ON A CONDUCTIVE SURFACE

Robert A. Miller, Tarentum, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania

Application June 4, 1952, Serial No. 291,609
6 Claims. (Cl. 204—15)



1. In apparatus for the electro-deposition of a metallic layer of constant thickness upon an electrically conductive surface having a conveyor adapted for supporting and conveying the said surface along a predetermined path and past an electro-depositing station for presenting sucessive areas of the conductive surface at said station, a supply tank containing an electrolytic bath, a positive electrode disposed in the supply tank and immersed in the bath, an applicator connected to said supply tank, a negative electrode connected to the electrically conductive surface and with the electrolyte on said surface, and means to connect a source of electricity to the positive and negative electrodes, said applicator comprising a nozzle for projecting said electrolyte onto the conductive surface at said station, and including depending means attached to the edges of said nozzle, said applicator being mounted at said station and relative to said conveyor so that said depending means substantially confines the electrolyte to said station without contacting said conductive surface.

2,750,333

ELECTRODEPOSITION OF ANTIMONY AND ANTIMONY ALLOYS

Clarence F. Smart, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

No Drawing. Application June 3, 1952, Serial No. 291,563
10 Claims. (Cl. 204—43)

3. An electroplating bath consisting essentially of an aqueous solution of ammonium citrate, antimony potassium tartrate, and a small but effective amount up to about 60 grams per liter of an alkali metal salt of ethylene diamine tetra acetic acid.

2,750,334
ELECTRODEPOSITION OF CHROMIUM
Henry Brown, Huntington Woods, Mich., assignor, by mesne assignments, to The Udylite Research Corporation, Detroit, Mich., a corporation of Michigan
No Drawing. Application January 29, 1953, Serial No. 334,081
18 Claims. (Cl. 204—51)

1. In a process of electrolysis of aqueous acidic hexavalent chromium solutions, the improvement which consists in adding to the solution a saturated fluorocarbon sulfonic compound in sufficient amount to substantially decrease formation of spray and mist, said compound having 4–18 carbon atoms to each sulfonic group.

2,750,335
CHROMIUM ELECTRODEPOSITION
Henry Brown, Huntington Woods, and Donald R. Millage, St. Clair Shores, Mich., assignors to The Udylite Research Corporation, Detroit, Mich., a corporation of Michigan
No Drawing. Application July 17, 1953, Serial No. 368,836
5 Claims. (Cl. 204—51)

1. A bath for the electrodeposition of chromium comprising an aqueous acidic hexavalent chromium solution containing a compound having the formula:



where n=2 to 6, R_1, R_2, and R_3 are selected from the group consisting of hydrogen and hydrocarbons, the sum of the carbon atoms of $R_1+R_2+R_3$ being not more than 6, and X is an anion, said compound being present in sufficient amount to substantially decrease formation of spray and mist.

2,750,336
CHROMIUM PLATING
Henry Brown, Huntington Woods, Mich., assignor to The Udylite Research Corporation, Detroit, Mich., a corporation of Michigan
No Drawing. Application August 31, 1953, Serial No. 377,691
10 Claims. (Cl. 204—51)

1. A bath for the electrodeposition of chromium comprising an aqueous acidic hexavalent chromium solution containing a compound having the formula:

$$H(CF_2 \cdot CF_2)_X(CH_2)_YZM$$

where Z is a radical selected from the group consisting of $-SO_2-$ and $-OSO_2-$, M is a cation, X is 2 to 10 and Y is 1 to 3, said compound being present in sufficient amount to substantially decrease the formation of spray and mist.

2,750,337
ELECTROPLATING OF CHROMIUM
Henry Brown, Huntington Woods, and Donald R. Millage, St. Clair Shores, Mich., assignors to The Udylite Research Corporation, Detroit, Mich., a corporation of Michigan
No Drawing. Application April 22, 1953, Serial No. 350,500
9 Claims. (Cl. 204—51)

1. In a process of electrodepositing chromium from aqueous acidic hexavalent chromium solutions, the improvement which consists in adding to the solution the combination of 5–60 grams/liter of a material selected from the group consisting of pyridine and picolines and mixtures thereof, and a small amount of a compound effective to substantially reduce the formation of spray during chromium electrodeposition having the formula R_FSO_3X where R_F represents a saturated fluorocarbon chain of 4 to 8 carbon atoms and X is a cation.

2,750,338
ELECTROLYTIC MANGANESE
Michael C. Carosella, Niagara Falls, N. Y., assignor to Union Carbide and Carbon Corporation, a corporation of New York
No Drawing. Application September 3, 1953, Serial No. 378,426
3 Claims. (Cl. 204—105)

1. In a process for the electrowinning of metallic manganese employing a diaphragm compartment cell and a catholyte comprising an aqueous manganese and ammonium sulphate solution containing an effective amount of sulphur dioxide, wherein the ratio of ammonium sulphate concentration to manganese concentration of said catholyte solution is between about 7 to 1 and 12 to 1, the improvement which comprises adding boric acid to the catholyte cell feed in an amount sufficient to result in a concentration of between 2.0 and 15.0 grams per liter boric acid in said catholyte which will result in the deposition of a more dense metallic manganese deposit free of nodules.

2,750,339
METHOD FOR INHIBITING CORROSION
Frederick P. Steinhauff, Houston, Tex., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware
No Drawing. Application April 3, 1953, Serial No. 346,779
14 Claims. (Cl. 252—8.55)

1. A method of reducing the corrosiveness to a corrodible ferrous metal of a corrosive fluid comprising water and an acidic component in contact with said ferrous metal which comprises, adding to said corrosive fluid, an inhibiting amount of the reaction product obtained by heating together at an amidification reaction temperature reactive amounts of an alkylene primary polyamine and the residue containing long-chained polycarboxylic acids having an acid number in the range between about 140 and about 180, having an iodine number between about 30 and about 80, and being the nonvolatile material remaining from distilling at a reduced pressure, the by-product acids obtained in the preparation of sebacic acid from castor oil by treatment with alkali.

2,750,340
COMBINATION ADDITIVE FOR PETROLEUM PRODUCTS
Philip B. Gerhardt, Elizabeth, John O. Smith, Jr., North Plainfield, and Allen R. Jones, Fanwood, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application August 31, 1953, Serial No. 377,696
6 Claims. (Cl. 252—33.3)

1. A liquid hydrocarbon material susceptible to oxidation containing a corrosion-inhibiting amount of zinc naphthenate and an oxidation-inhibiting amount in the range of about 0.01 to 5% by weight, based on the total composition, of a mixture of benzene sulfonyl lutidinium chloride and a secondary oxidation inhibitor selected from the group consisting of 2,6-di-tert.-butyl-4-methylphenol, phenyl alpha naphthylamine, 2-tert.-butyl-4-methoxyphenol, and bis (2-hydroxy-3-tert.-butyl-5-methylphenyl) methane, the ratio of said benzene sulfonyl lutidinium chloride to said secondary oxidation inhibitor being in the range of about 0.1 to 5 on a weight basis.

2,750,341
LUBRICATING GREASE COMPRISING A SYNTHETIC OIL AND A COMPLEX THICKENER
Arnold J. Morway, Clark Township, Union County, David W. Young and Paul V. Smith, Jr., Westfield, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application December 28, 1951, Serial No. 263,971
14 Claims. (Cl. 252—42)

1. A lubricating grease composition comprising a major proportion of a substantially completely esterified complex dibasic acid-dihydric alcohol-monovalent substituent aliphatic ester oil base of lubricating grade and viscosity, said dibasic acid being selected from the group consisting of sebacic and adipic acid, said dihydric alcohol being triethylene glycol and said monovalent substituent being selected from the group consisting of ethyl hexanoic acid, ethyl hexanol and a mixture of C_{16} to C_{18} alcohols having an average of 13.5 carbon atoms, and 5 to 25% by weight, based on the total composition, of a preformed complex soap thickener consisting essentially of alkali metal soap of fatty acid in the C_{16} to C_{22} range and alkali metal salt of a carboxylic acid having a molecular weight of below about 100, the molar ratio of said fatty acid soap to said carboxylic acid salt being in the range of about 0.5:1 to 2:1.

2,750,342
SYNTHETIC LUBRICANTS
Louis A. Mikeska and Paul V. Smith, Jr., Westfield, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Original application August 3, 1948, Serial No. 42,333. Divided and this application June 29, 1953, Serial No. 364,915
2 Claims. (Cl. 252—46.6)

2. A mineral lubricating oil containing dissolved therein about 6% by weight of the compound

$$OP(OCH_2CH_2SC_8H_{17})_3$$

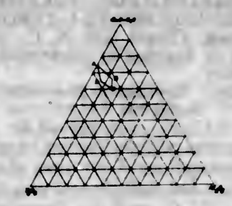
where the group $-C_8H_{17}$ is a tert.-octyl group.

2,750,343
PAINT BRUSH CLEANER
Adolph J. Beber, Copley, Ohio
No Drawing. Application April 12, 1952, Serial No. 282,081
9 Claims. (Cl. 252—153)

1. A paint brush cleaning composition the major portion of which consists of a free flowing mixture of an aromatic hydrocarbon solvent and a water soluble amine selected from the group consisting of cyclohexyl and aliphatic amines having aliphatic hydrocarbon groups connected to nitrogen of a total molecular weight of at least 70, and not substantially in excess of 150, said amine being 5 to 35 per cent of the volume of the mixture, and the aromatic solvent constituting the remainder of said mixture.

2,750,344
LUMINESCENT MATERIAL
Ferdinand Anne Kröger and Jan van den Boomgaard, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., trustee
Application November 23, 1951, Serial No. 257,745
Claims priority, application Netherlands, January 6, 1951
4 Claims. (Cl. 252—301.4)

1. A chemically stable luminescent material consisting essentially of a crystalline ternary composition having a homogeneous phase containing aluminum and represented by a point located within a quadrilateral ABCD in the ternary diagram of the system



$$(CaO+SrO)-P_2O_5-Al_2O_3$$

the mol ratios of the oxides (CaO+SrO), P_2O_5 and Al_2O_3 at the corners A, B, C, and D of the quadrilateral being, respectively:

A. 3:1:0
B. 40:13:7
C. 86:36:21
D. 96:42:10

said composition having the same crystal structure as β-calcium-ortho-phosphate, said composition being activated by cerium and manganese.

2,750,345
PROCESS FOR PRODUCING SOLS OF 5–8 MILLIMICRON SILICA PARTICLES, AND PRODUCT
Guy B. Alexander, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application February 25, 1954, Serial No. 412,627
7 Claims. (Cl. 252—313)

1. A water-clear, stable silica aquasol containing dense, discrete silica particles which are 5 to 8 millimicrons in diameter, said particle size corresponding to a specific surface area, A, of 350 to 600 square meters per gram, the sol having a silica concentration, as per cent SiO_2, of from

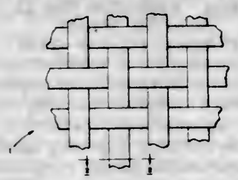
$$15 \text{ to } \frac{12{,}000}{A}$$

being alkali-stabilized with an amount of alkali sufficient to give an SiO_2:alkali oxide mol ratio of from

$$\frac{1.2\times10^4}{A} \text{ to } \frac{12\times10^4}{A}$$

and containing substantially no soluble salts.

2,750,346
CATALYTIC SCREEN
Bert J. Sherwood, Lakewood, Calif., assignor to North American Aviation, Inc.
Application February 24, 1953, Serial No. 338,246
4 Claims. (Cl. 252—438)



1. A catalytic screen comprising a grid of steel wire, said grid being electroplated with a thin layer of copper, said copper being electroplated with a layer of iron, and said iron being covered with a thin layer formed by dipping the iron-plated wire in a mixed silver nitrate and nitric acid solution for a short interval of time.

2,750,347

PHENOL-FORMALDEHYDE POLYMER OF N-p-TOLUENESULFONYL-L-TYROSINE

Joseph F. Bunnett, Chapel Hill, N. C., assignor to the United States of America as represented by the Secretary of the Navy

No Drawing. Application December 8, 1953, Serial No. 397,057
1 Claim. (Cl. 260—2.2)

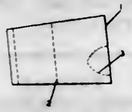
An optically active polymer formed by refluxing a mixture of N-p-toluenesulfonyl-L-tyrosine, phenol, formalin, glacial acetic acid, and sulfuric acid at a temperature of about 125° to 138° C. until the formation of a sticky white polymer, and thereafter further heating the mixture without refluxing at a temperature of about 132° to 140° C.

2,750,348

METHOD OF MAKING LOOM PICKER FROM POLYVINYL ALCOHOL AND PRODUCT

John W. Baymiller, Manheim Township, Lancaster County, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a corporation of Pennsylvania

Application September 9, 1950, Serial No. 184,023
3 Claims. (Cl. 260—23)



1. A loom picker made of material comprising polyvinyl alcohol molded from a composition containing polyvinyl alcohol and a metal stearate of the group consisting of alkaline earth metal stearates and zinc stearate which composition has been heated with mastication in air at a temperature between 280° F. and 340° F. prior to molding.

2,750,349

COMPOSITIONS, INCLUDING POLYSTYRENE AND TERPHENYL

David Hale O'Herren, Indianapolis, Ind., assignor to Radio Corporation of America, a corporation of Delaware

No Drawing. Application October 6, 1952, Serial No. 313,371
15 Claims. (Cl. 260—23.7)

4. A synthetic resinous molding composition comprising polystyrene 67.8 to 93%, a resinous copolymer of styrene and butadiene 1 to 25%, a metal soap 0.5 to 3%, and a material consisting of at least one substance selected from the group consisting of ortho-, meta-, and para-terphenyl 5 to 15%.

2,750,350

DISPERSION POLYMERIZATION PROCESS FOR TETRAFLUOROETHYLENE

Adam Edgar Kroll, Kennett Square, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 12, 1953, Serial No. 354,652
14 Claims. (Cl. 260—29.6)

1. In the polymerization of tetrafluoroethylene in an aqueous medium to obtain a colloidal dispersion of polymer, the step which comprises carrying out said polymerization in an aqueous acidic medium in the presence of a water-soluble ionizable dispersing agent, a catalytic amount of a water-soluble peroxy compound of a saturated aliphatic dibasic acid, said water-soluble peroxy compound having peroxidic oxygen in the form of a grouping of the formula



and a quantity of powdered iron not exceeding 10 parts per million by weight of the water present.

2,750,351

PLASTICIZED VINYL POLYMER COMPOSITIONS

Massimo Baer, Springfield, Mass., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application November 9, 1954, Serial No. 467,579
11 Claims. (Cl. 260—30.6)

1. A composition of matter comprising a polymer taken from the group consisting of thermoplastic polymers of vinyl chloride and vinylidene chloride which contain at least 50 weight percent of said chloride containing monomers, said thermoplastic polymer having homogeneously incorporated therein a plasticizing amount of the heat reaction product of (A) a trialkyl phosphite having alkyl radicals containing 1–12 carbon atoms with (B) an allyl chloride polymer taken from the group consisting of homopolymers of allyl chloride and copolymers of about 20–99 percent allyl chloride with, correspondingly, about 80–1 percent of an ethylenically unsaturated monomer copolymerizable therewith, said allyl chloride polymer having an average degree of polymerization of about 4–20 and said heat reaction product containing about 0.2–1 mol of combined phosphorous per mol of combined allyl chloride in the allyl chloride polymer.

2,750,352

POLYSULFONE STABILIZED WITH HYDROGEN SULFIDE - VINYLCYCLOHEXENE REACTION PRODUCT AND STABILIZED POLYSULFONE PRODUCT

Robert J. Fanning, Bartlesville, and Asa Clarence Dees, Cushing, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application December 9, 1952, Serial No. 325,034
10 Claims. (Cl. 260—45.5)

7. A stabilized polysulfone resin composition which comprises a polysulfone resin formed by reacting an unsaturated organic compound with sulfur dioxide which tends to decompose when heated and a reaction product obtained from a reaction between hydrogen sulfide and 4-vinyl-1-cyclohexene in the presence of a catalyst.

2,750,353

PETROLEUM RESINS BY AFTER-TREATMENT WITH DIOLEFINS

Stanley B. Mirviss, Roselle, and Fred W. Banes, Westfield, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application December 31, 1952, Serial No. 329,104
9 Claims. (Cl. 260—45.5)

1. A process for improving the quality and yield of unsaturated polymerized olefin-diolefin hydrocarbon resins which comprises treating a solution of previously polymerized unsaturated hydrocarbon resin before quenching and removal of catalyst residues with from 5% to 20% by weight, based on the final total amount of polymerization feed, of a hydrocarbon selected from the class consisting of C_5 to C_6 conjugated diolefins and cyclic diolefin.

2,750,354

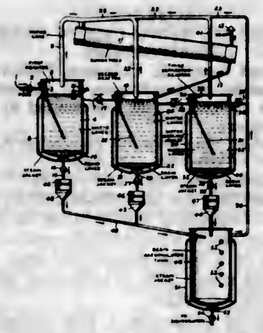
SELECTIVE PHENOL-ALDEHYDE RESINIFICATION

John H. Merriam, Cheltenham Township, Montgomery County, Pa., assignor to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

Application September 1, 1953, Serial No. 377,833
8 Claims. (Cl. 260—57)

1. A process for the selective condensation of a phenol and an aldehyde which comprises maintaining a liquid body of a phenol selected from the group consisting of

phenol, cresols, xylenols and tar acids and an aldehyde selected from the group consisting of formaldehyde, paraformaldehyde, acetaldehyde, and furfural and a resinification catalyst in a reaction vessel at an elevated temperature of at least 65° C. to condense the phenol and aldehyde to continuously form resin molecules of molecular weight and density greater than the reactants,



maintaining said body in a quiescent state to permit continuous settling of the more dense molecules as they are formed into a lower layer of resin in the bottom of the reaction vessel, and withdrawing said resin in the lower layer from the reaction vessel before substantial further reaction of said resin molecules to produce resin molecules of undesirable molecular weight occurs.

2,750,355

METHOD OF PREPARING MELAMINE-FORMALDEHYDE RESINS, INCLUDING VACUUM DEHYDRATION

Howard Patrick Ledden, Old Greenwich, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application May 2, 1951, Serial No. 224,249
8 Claims. (Cl. 260—67.6)

1. A process for preparing a fast curing thermosetting resin composition, capable of producing clear molded articles, comprising reacting melamine and formaldehyde in a mol ratio of 1:1.5 to 1:2.5, respectively, to form a condensation product, dehydrating the reaction product by heating under a vacuum of at least 52 centimeters until the resin temperature is between about 75–95° C. thereafter adding a mixture of an acid having a dissociation constant greater than 1.0×10^{-5} and a compound selected from the group consisting of alkyl alkylol tertiary amines and substituted alkyl alkylol tertiary amines wherein the substituted substituent is selected from the group consisting of chloro, bromo and nitro radicals having a molecular weight less than 140 and drying the mixture to molding plasticity wherein at least the final part of said drying is accomplished in a comminuted state, wherein the weight ratio of said resin to said acid-amine mixture is 1:0.001 to 1:0.05, respectively, and wherein the weight ratio of said acid to said amine is 1:0.5 to 1:20, respectively.

2,750,356

STABLE CONDENSATES OF UREA AND FORMALDEHYDE IN THE PRESENCE OF METHANOL

Melvin D. Hurwitz, Huntingdon Valley, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application June 10, 1952, Serial No. 292,713
7 Claims. (Cl. 260—70)

1. A process for preparing water-soluble, stable urea-formaldehyde condensates which comprises reacting urea and formaldehyde together in a mole ratio between 1:2.5 and 1:3 at a temperature between 60° and 80° C. and at a pH between 7.5 and about 9 in an aqueous solution containing less than about 30% of water, continuing the reaction in the presence of about 5% to 30% of water until at least 85% of the formaldehyde appears chemically bound, as determined by titration of alkalinity of a cold sodium sulfite solution of a sample of the reaction mixture, adjusting the pH of the reaction mixture to a value from 3.8 to 3, and with methanol present in a mole ratio to the urea taken of 2.5:1 to 4:1 heating the acidic reaction mixture under reflux for 5 to 60 minutes.

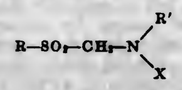
2,750,357

IMPROVEMENTS IN THE PRODUCTION OF POLYMERISATION PRODUCTS USING ACCELERATORS CONTAINING AT LEAST ONE AMINOMETHYL SULFONE GROUP

Hellmut Brederock and Erich Bäder, Stuttgart, Germany, assignors to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfurt am Main, Germany, a body corporate of Germany, and W. C. Heraeus G. m. b. H., Hanau (Main), Germany, a body corporate of Germany

No Drawing. Application July 17, 1951, Serial No. 237,307
Claims priority, application Germany July 17, 1950
16 Claims. (Cl. 260—77.5)

1. Process for the production of polymerization products from polymerizable organic compounds having a terminal methylene group linked to a carbon atom, including molded bodies, which comprises effecting the polymerization in the presence of a sulfone polymerization accelerator of the general formula



in which R is a member selected from the group consisting of alkyl, alkylaryl, and aryl radicals, R′ is a member selected from the group consisting of H, R and hydroxyalkyl radicals, and X is a member selected from the group consisting of H, alkyl radicals, and the group R—SO_2—CH_2—.

2,750,358

POLYVINYL SULFONAMIDES AND PROCESS FOR PREPARING THE SAME

Harold F. Park, East Longmeadow, Mass., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

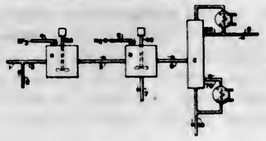
No Drawing. Application March 6, 1953, Serial No. 340,928
3 Claims. (Cl. 260—79.3)

1. A process for preparing polyvinyl sulfonamide which comprises first forming polyvinyl ammonium sulfonate by reacting polyvinyl chloride in suspension in a mixture of water and a swelling agent for the polyvinyl chloride with at least one mol of ammonium sulfite per mol of combined chlorine in the polyvinyl chloride and then dehydrating said polyvinyl ammonium sulfonate at a polyvinyl sulfonamide-forming temperature in the presence of a dehydration catalyst taken from the group consisting of phosphorous pentoxide, magnesium perchlorate, aluminum oxide, thorium oxide, chromic oxide and tungsten pentoxide while said polyvinyl ammonium sulfonate is in admixture with a minor amount of a compound taken from the group consisting of sulfur, mono- and dicyclic, mono- and polyhydroxy, unsubstituted, alkyl and halogen-substituted phenols.

2,750,359
RESINS FROM STEAMCRACKED C_5 DISTILLATE FRACTIONS
Glen P. Hammer and Thomas G. Jones, Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application April 13, 1953, Serial No. 348,588
3 Claims. (Cl. 260—82)

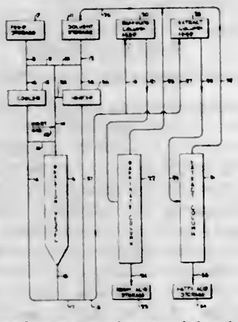
1. A process for preparing gel-free petroleum resins which comprises fractionating a steam cracked unsaturated petroleum stream to separate a C_5 fraction boiling from 50° to 120° F., subjecting said C_5 fraction to thermal treatment whereby the cyclopentadiene is converted to dimers, separating said dimers from the undimerized portion of the C_5 fraction, blending said undimerized portion with from 5 to 15 wt. percent of methylcyclopentadiene monomer, subjecting the resulting blend to polymerization at temperatures of from 0° to +80° F. in the presence of BF_3, and isolating the gel-free resin produced thereby.

2,750,360
DIOLEFIN ADDITION TO HYDROCARBON RESIN FEEDS
Charles B. Moore, Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application February 25, 1953, Serial No. 338,685
3 Claims. (Cl. 260—82)



1. An improved process for preparing hydrocarbon petroleum resins which comprises the steps of admixing a steam cracked petroleum stream boiling from 100° to 300° F., and containing from 51 to 62 wt. per cent olefins, from 10 to 15 wt. per cent diolefins, from 3 to 4 wt. per cent paraffins, and from 25 to 30 wt. per cent aromatics with from 5 to 20 wt. per cent of methylcyclopentadiene, polymerizing the resulting unsaturated mixture with BF_3 at a temperature of from −40 to +50° F., and isolating the resin produced thereby.

2,750,361
CYCLIC UREA-ADDUCT PROCESS
Manuel H. Gorin and Ludwig Rosenstein, San Francisco, Calif.
Application February 24, 1954, Serial No. 412,286
2 Claims. (Cl. 260—96.5)



1. In a process for recovering straight-chain-paraffinic hydrocarbons of at least seven carbon atoms from a hydrocarbon fraction, the steps of adding as the sole reagent to the hydrocarbon fraction at a temperature below about 70° C., expanded urea characterized by having a bulk-density not exceeding 0.50 gram per cubic centimeter, and being capable, when used as the sole reagent, of showing substantial adduct formation within one hour with linear, saturated fatty acids having at least twelve carbon atoms, to form adduct of said paraffinic hydrocarbons and urea, and separating the adduct from the unadducted hydrocarbons.

2,750,362
PEROXIDES OF LONG-CHAIN OLEFINIC COMPOUNDS
Daniel Swern and Joseph E. Coleman, Philadelphia, and Hogan B. Knight, Spring House, Pa., assignors to the United States of America as represented by the Secretary of Agriculture
No Drawing. Application December 5, 1952, Serial No. 324,426
15 Claims. (Cl. 260—96.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A process comprising autoxidizing an unsaturated fatty material containing a pro-oxidant metal contaminant in the presence of a metal deactivator until a peroxide content exceeding about 30% is produced, and isolating the thus-produced peroxides.

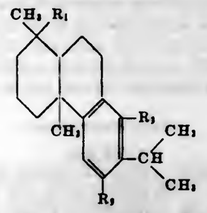
15. A process of producing a high concentration of a peroxide of an unsaturated fatty material containing a pro-oxidant metal contaminant which comprises autoxidizing the fatty material in the presence of a metal deactivator until a peroxide content of more than 30% is produced, then adding an excess of urea to the autoxidized mixture to precipitate most of the non-peroxidic material present, filtering the resulting mixture to remove the precipitate and to obtain a filtrate containing a high concentration of peroxide, and washing out the excess urea from the filtrate with water to isolate the peroxides in a concentration higher than 50%.

2,750,363
DEHYDROABIETYL ALCOHOL DERIVATIVE
Thomas F. Sanderson, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application December 13, 1952, Serial No. 325,902
5 Claims. (Cl. 260—97)

1. 9-hydroxydehydroabietyl alcohol.

2,750,364
COMPOUNDS DERIVABLE FROM DEHYDROABIETONITRILE
James Minn, Newark, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application April 6, 1955, Serial No. 499,745
5 Claims. (Cl. 260—97)

1. The compound of the formula



wherein R_1 is a radical selected from the group consisting of acetyl and hydroxyethyl; R_2 is a radical selected from the group consisting of acetyl, hydroxyethyl and hydrogen; and R_3 is a radical selected from the group consisting of acetyl, hydroxyethyl and hydrogen, one of R_2 and R_3 being hydroxyethyl and the other being hydrogen when R_1 is hydroxyethyl, and one of R_2 and R_3 being acetyl and the other being hydrogen when R_1 is acetyl.

2,750,365
1,2,3,4,4a,9,10,10a - OCTAHYDRO-9-HYDROXY-1-HYDROXYMETHYL-7-ISOPROPENYL-1,4a- DIMETHYLPHENANTHRENE
Lee A. Subluskey, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application May 5, 1955, Serial No. 506,376
3 Claims. (Cl. 260—97)

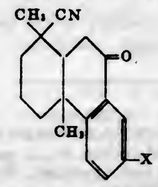
1. 1,2,3,4,4a,9,10,10a - octahydro - 9 - hydroxy - 1-hydroxymethyl - 7 - isopropenyl - 1,4a - dimethylphenanthrene.

2,750,366
MONO-ACYL DERIVATIVES OF ALKYLENE DIAMINES AND PROCESS FOR PREPARING SAME
Otto Turinsky, Western Springs, Ill., assignor to Armour and Company, Chicago, Ill., a corporation of Illinois
No Drawing. Application February 16, 1952, Serial No. 271,975
6 Claims. (Cl. 260—97.5)

1. A process for the preparation of amidoamine which comprises heating in a substantially sealed system at a temperature of at least 300° C. a mixture comprising a monocarboxylic acid selected from the group consisting of higher fatty acids having from 8 to 18 carbon atoms, rosin acids, and mixtures of rosin and higher fatty acids having from 8 to 18 carbon atoms, and an alkylene diamine having from 2 to 6 carbon atoms in the alkylene radical and having 2 primary amine groups, said diamine being present in a molar ratio of at least 3 to 1.

2,750,367
DERIVATIVES OF DEHYDROABIETONITRILE
Thomas F. Sanderson, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application March 25, 1955, Serial No. 496,913
6 Claims. (Cl. 260—99)

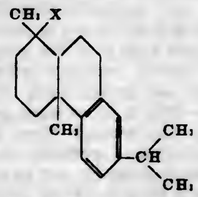
1. The compounds having the formula



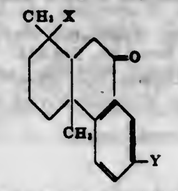
wherein X is a radical selected from the group consisting of acetyl, hydroxyl, isopropenyl, 2-hydroxyisopropyl and 2-acetoxyisopropyl.

2,750,368
CHROMIUM TRIOXIDE OXIDATION OF DEHYDROABIETIC ACID DERIVATIVES
Thomas F. Sanderson, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application March 25, 1955, Serial No. 496,914
6 Claims. (Cl. 260—99)

1. The process which comprises oxidizing a compound having the formula



wherein X is a radical selected from the group consisting of carboalkoxy, cyano, alkanoyl, alkanoyloxyalkyl, and benzoyloxyalkyl radicals by contacting said compound with chromium trioxide under anhydrous conditions to produce a compound having the formula



wherein X is the same as above and Y is a radical selected from the group consisting of acetyl and 2-hydroxyisopropyl.

2,750,369
OXIDATION OF ESTERS OF DEHYDROABIETIC ACID
Thomas F. Sanderson, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application October 13, 1951, Serial No. 251,250
6 Claims. (Cl. 260—99)

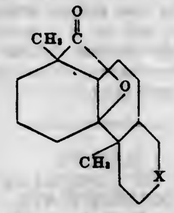
1. The process of preparing an alkyl ester of 9-oxodehydroabietic acid which comprises heating a solution of an alkyl ester of dehydroabietic acid and chromic acid in an inert organic solvent to a temperature of from about 25° C. to about 100° C.

2,750,370
9-OXODEHYDROABIETYL ALCOHOL AND PROCESS OF PREPARATION
Lee A. Subluskey, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application May 5, 1955, Serial No. 506,375
2 Claims. (Cl. 260—99)

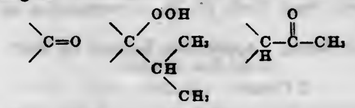
1. 9-oxodehydroabietyl alcohol.

2,750,371
PRODUCTS FROM THE OXIDATION OF THE LACTONE OF HYDROXYTETRAHYDROABIETIC ACID
Lee A. Subluskey, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application May 24, 1955, Serial No. 510,829
5 Claims. (Cl. 260—99)

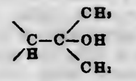
1. A compound having the formula



where X is a bivalent radical selected from the group consisting of



and



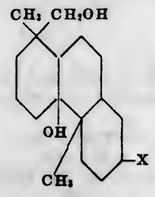
2,750,372

PHENANTHRENE DERIVATIVES

James Mills, Newark, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 24, 1955, Serial No. 510,833
8 Claims. (Cl. 260—99)

1. A composition of matter having the formula



wherein X is a radical selected from the group consisting of hydroxy, 1-hydroxyethyl and 1-hydroxyisopropyl radicals.

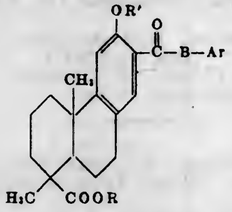
2,750,373

ARALKANOYL AND ARALKENOYL DERIVATIVES OF PODOCARPIC ACID ESTERS

Roy H. Bible, Jr., Morton Grove, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application October 4, 1954, Serial No. 460,263
10 Claims. (Cl. 260—103)

1. A compound having the structural formula



wherein B is a bivalent hydrocarbon radical containing from 2 to 6 carbon atoms and separating the



and —Ar groups by two carbon atoms, R and R' are lower alkyl radicals, and Ar is a member of the group consisting of aryl hydrocarbon radicals containing from 6 to 10 cyclic carbon atoms, (lower)alkoxy-substituted derivatives thereof, and furyl.

2,750,374

PRODUCTION OF CASEIN-LACTALBUMIN COPRECIPITATE

Hartley W. Howard, Hastings-on-Hudson, and Harold K. Salzberg, Bainbridge, N. Y., assignors to The Borden Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application January 28, 1952, Serial No. 268,680
2 Claims. (Cl. 260—120)

1. In coprecipitating casein and lactalbumin from milk, the process which comprises mixing the milk with a cationic surface active agent selected from the group consisting of tertiary amine salts and quaternary ammonium salts, the pH of the milk being substantially above the isoelectric point for the casein and at least as high as about 5.82 and the temperature being below that of heat coagulation of the lactalbumin, and maintaining the contact between the milk and said agent until the casein and lactalbumin are coprecipitated.

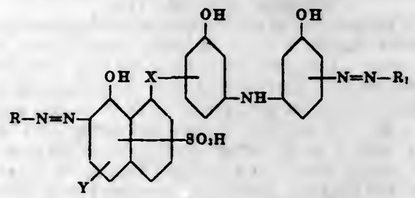
2,750,375

POLYAZO-DYESTUFFS

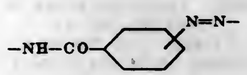
Arthur Siebert, Richard Haas, and Josef Weinert, Frankfurt am Main, Germany, assignors to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius und Bruning, Frankfurt am Main Hochst, Germany, a German company

No Drawing. Application December 16, 1952, Serial No. 326,342
Claims priority, application Germany December 24, 1951
7 Claims. (Cl. 260—166)

1. Poly-azo-dyestuffs corresponding to the following general formula



wherein R and R_1 represent aromatic radicals selected from the group consisting of radicals of the benzene, naphthalene and acenaphthene series, at least one of which contains one sulfonic acid group, X stands for one of the groups consisting of —N=N— and



and Y stands for a member of the group consisting of hydrogen and the sulfonic acid group.

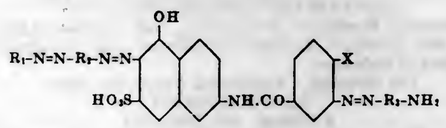
2,750,376

DEVELOPABLE TRISAZO DYES FOR COTTON

Orman B. Billings, Metuchen, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 25, 1953, Serial No. 338,900
6 Claims. (Cl. 260—173)

1. The acid form and water-soluble salts of an azo compound of the general formula



wherein R_1 is an aromatic sulfonic acid selected from the group consisting of benzene-monosulfonic acid, its methyl and chloro derivatives and naphthalene disulfonic acid; R_2 is a benzene radical of the group consisting of benzene and its methyl, methoxy, ethoxy and chloro derivatives, the two azo groups being attached to R_2 in para positions; R_3—NH_2 is an aromatic amine coupled in the para position and selected from the group consisting of aniline, its methyl, methoxy, ethoxy and chloro derivatives, alpha-naphthylamine and its monosulfo acids, while X stands for a member of the group consisting of hydrogen and methyl.

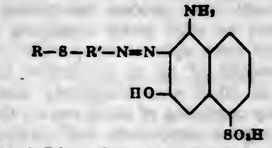
2,750,377

MONOAZO DYESTUFFS

Peter Hindermann, Batterie, Basel, and Jean-Pierre Jung, Riehen, near Basel, Switzerland, assignors to J. R. Geigy A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application April 28, 1952, Serial No. 284,818
Claims priority, application Switzerland May 15, 1951
7 Claims. (Cl. 260—198)

1. A monoazo dyestuff corresponding to the formula:



wherein R and R' each represent a mononuclear aryl radical and R' contains the azo group in the o-position to the sulphur atom forming the bridge.

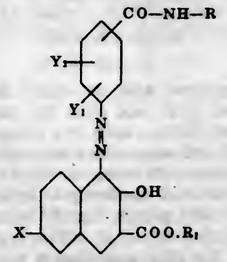
2,750,378

MONO-AZO-DYESTUFFS INSOLUBLE IN WATER

Ernst Fischer, Offenbach (Main), Germany, assignor to Farbwerke Hoechst A. G. vormals Meister Lucius und Bruning, Frankfurt am Main Hochst, Germany, a German company

No Drawing. Application June 27, 1952, Serial No. 296,067
Claims priority, application Germany June 30, 1951
8 Claims. (Cl. 260—202)

1. The mono-azo-dyestuffs insoluble in water corresponding to the following general formula



wherein the group —CO—NH—R stands in one of the positions meta and para to the azo group, X stands for one of the group consisting of hydrogen and bromine, Y_1 and Y_2 stand for members of the group consisting of hydrogen, methyl, lower alkoxy, chlorine and bromine, R stands for a member of the group consisting of hydrogen, lower alkyl, benzyl, aryl and cyclohexyl and R_1 represents a member of the group consisting of lower alkyl, benzyl, aryl and cyclohexyl.

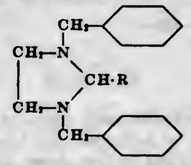
2,750,379

IMIDAZOLIDINE SALTS OF PENICILLIN

Roy S. Hanslick, Philadelphia, and William F. Bruce, Havertown, Pa., assignors, by mesne assignments, to American Home Products Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application October 6, 1952, Serial No. 313,374
2 Claims. (Cl. 260—239.1)

2. A penicillin salt of an imidazolidine base, the latter having the general formula



wherein R is selected from the group consisting of hydrogen and phenyl.

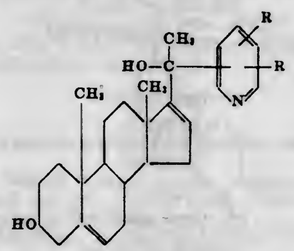
2,750,380

20-PYRIDYL-5,16-PREGNADIEN-3,20-DIOLS AND LOWER ALKYL DERIVATIVES THEREOF

Raymond M. Dodson, Park Ridge, and Clarence G. Bergstrom, Chicago, Ill., assignors, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application November 24, 1954, Serial No. 471,119
6 Claims. (Cl. 260—239.5)

1. A compound of the structural formula



wherein R and R' are members of the class consisting of hydrogen and lower alkyl radicals.

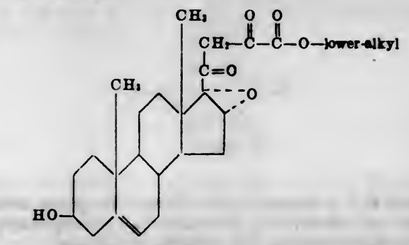
2,750,381

STEROID ALKALI-METAL ENOLATES

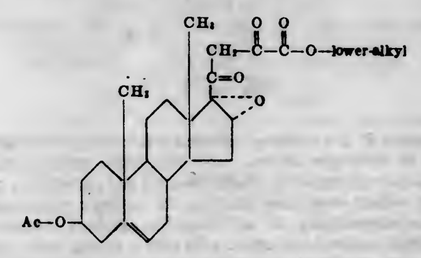
John A. Hogg, Kalamazoo Township, Kalamazoo County, and William P. Schneider, Kalamazoo, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application August 21, 1952, Serial No. 305,705
10 Claims. (Cl. 260—239.55)

1. A compound selected from the group consisting of (1) 21 - lower - alkoxyoxalyl - 3 - hydroxy - 16,17-oxido - 5 - pregnene - 20 - one, represented by the following formula:



(2) alkali-metal enolate thereof, (3) 21-lower-alkoxyoxalyl - 3 - acyloxy - 16,17 - oxido - 5 - pregnene - 20-one, represented by the following formula:



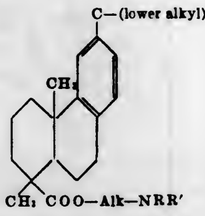
wherein Ac is the acyl radical of a hydrocarbon carboxylic acid containing from one to eight carbon atoms, inclusive, and (4) alkali-metal enolate thereof.

2,750,382
BASIC ESTERS OF 1,12-DIMETHYL-6-ALKOXY-1,2,3,4,9,10,11,12-OCTAHYDROPHENANTHRENE-1-CARBOXYLIC ACIDS

Roy H. Bible, Jr., Chicago, and Willard M. Hoehn, Wilmette, Ill., assignors, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application December 3, 1953, Serial No. 396,064
9 Claims. (Cl. 260—247.2)

1. A compound of the structural formula



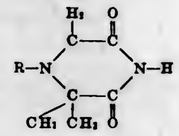
wherein Alk is a lower alkylene radical separating the adjoining oxygen and nitrogen atoms by at least two carbon atoms and NRR' is a member of the class consisting of di-(lower)alkylamino, pyrrolidino, piperidino and morpholino radicals.

2,750,383
ACYL DERIVATIVES OF 3,3-DIMETHYL PIPERAZINEDIONE

Sidney R. Sofir, River Edge, N. J., and Joseph J. Hlavka, Nanuet, N. Y., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

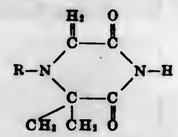
No Drawing. Application March 10, 1954, Serial No. 415,436
15 Claims. (Cl. 260—268)

1. Compounds having the general formula



wherein R is a member selected from the group consisting of carbobenzyloxy, phenoxyacetyl, beta-phenylpropionyl, dichloroacetyl and carbethoxy radicals.

7. A method for preparing compounds having the general formula:



wherein R is a member selected from the group consisting of hydrogen atoms, carbobenzyloxy, phenoxyacetyl, beta-phenylpropionyl, dichloroacetyl and carbethoxy radicals; which comprises reacting the isomeric monomethyl ester-monoamides of α-[(N-carbobenzyloxy-N-carboxymethyl)-amino]-isobutyric acid with a strong base, reducing the resultant 4-carbobenzyloxy-3,3-dimethyl-2,6-piperazinedione by treatment with hydrogen and palladium-charcoal catalyst, then acylating the 3,3-dimethyl-2,6-piperazinedione so obtained.

2,750,384
ALKYLATION REACTIONS

Rex D. Closson, Detroit, Alfred J. Kolka, Birmingham, and Waldo B. Ligett, Pontiac, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application May 23, 1952, Serial No. 289,662
4 Claims. (Cl. 260—290)

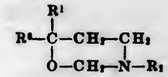
1. A process for preparing a pyridine with a saturated alkyl substituent, said process comprising reacting a pyridine having an alkyl group containing a hydrogen-bearing carbon atom alpha to the pyridine ring, with an acyclic monoolefin of up to 12 carbon atoms in the presence of an alkali metal-containing catalyst selected from the group consisting of alkali metals, their hydrides, amides, and organo compounds, said alkylation reaction being conducted at a temperature of 50 to 350° C. and a pressure of 10 to 2000 atmospheres to cause the olefin to add to said alkyl carbon atom.

2,750,385
PRODUCTION OF TETRAHYDRO-PYRIDINES FROM TETRAHYDRO-1,3-OXAZINES

Claude J. Schmidle, Moorestown, and Richard C. Mansfield, Haddonfield, N. J., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application May 21, 1954, Serial No. 431,587
7 Claims. (Cl. 260—290)

7. A process which comprises heating a tetrahydro-1,3-oxazine of the structure



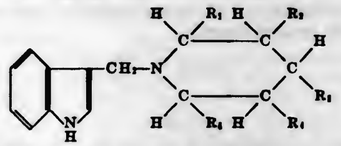
in an acidic mixture with an excess thereover of an aqueous solution of an acid from the class consisting of hydrochloric and sulfuric acids at a temperature between 75° and 150° C. and separating a tetrahydropyridine from the reaction mixture, R^1 being an alkyl group, R^0 being a member of the class consisting of hydrogen and alkyl and monocyclic aryl groups, and R^3 being a member of the class consisting of alkyl, alkenyl, cyclohexyl, and benzyl groups, the alkyl and alkenyl groups having not over 12 carbon atoms.

2,750,386
PROCESS FOR THE PREPARATION OF NEW OXYTOCICALLY ACTIVE COMPOUNDS AND PREPARATIONS

Haaye Veldstra and Antony Marie Akkerman, Amsterdam, Netherlands, assignors to N. V. Amsterdamsche Chininefabriek, Amsterdam, Netherlands, a corporation of the Netherlands

No Drawing. Application October 16, 1952, Serial No. 315,826
Claims priority, application Netherlands October 17, 1951
10 Claims. (Cl. 260—293)

1. As an oxytocically active substance a member of the group consisting of 3-(alkylpiperidyl-(N)-methyl)-indoles and their acid addition salts, said indoles having the formula:



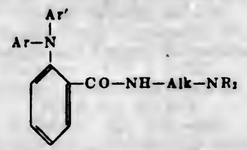
wherein R_1 to R_5 inclusive each represent a member of the group consisting of hydrogen and lower alkyls containing not more than five carbon atoms, and wherein not more than three of R_1 to R_5, inclusive, represent said lower alkyls.

2,750,387
BASICALLY SUBSTITUTED DERIVATIVES OF DIARYLAMINOBENZAMIDES

Carl Peter Krimmel, Mundelein, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application November 25, 1953, Serial No. 394,487
7 Claims. (Cl. 260—294)

1. A compound of the structural formula



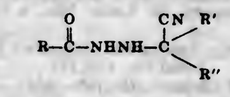
wherein Ar and Ar' are homocyclic mononuclear aryl hydrocarbon radicals containing 6 to 8 carbon atoms, Alk is a lower alkylene radical separating the two nitrogen atoms attached thereto by at least two carbon atoms, and NR_2 is a member of the class consisting of lower dialkylamino radicals and piperidino radicals.

2,750,388
DERIVATIVES OF ISONICOTINIC ACID HYDRAZIDE

Harry L. Yale, New Brunswick, N. J., assignor to Olin Mathieson Chemical Corporation, New York, N. Y., a corporation of Virginia

No Drawing. Application October 16, 1952, Serial No. 315,185
12 Claims. (Cl. 260—294.9)

1. Compounds having the general formula



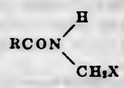
wherein R is a heterocyclic radical selected from the group consisting of pyridyl, furyl, thienyl, imidazolyl, and pyridyl-1-oxide, and each of R' and R'' is a member of the group consisting of hydrogen, alkyl, hydroxy-alkyl, halo-alkyl, monocyclic aryl, and together are part of a monocyclic carbocyclic nucleus.

2,750,389
QUATERNARY AMMONIUM COMPOUNDS AND PROCESS OF PREPARING THEM

Raymond A. Pingree, Cranston, and Chester U. Stevens, Saylesville, R. I., assignors to Crown Chemical Corporation, Providence, R. I., a corporation of Rhode Island

No Drawing. Application June 24, 1954, Serial No. 439,127
20 Claims. (Cl. 260—295)

1. The process of producing quaternary ammonium compounds, which are water-dispersible per se, which comprises reacting a chloromethyl acid amide of the general formula



wherein R designates a saturated aliphatic hydrocarbon radical of 9 to 21 carbon atoms inclusive and X stands for chlorine, with a straight chain alkyl nitrile containing 10 to 22 carbon atoms inclusive, reacting this intermediate product with formaldehyde and hydrogen chloride to form a second intermediate product, the temperature of reaction in forming these aforesaid intermediate products being substantially 60° to 75° C. inclusive, and thereafter reacting this latter product at temperatures of substantially 50° to 75° C. inclusive with a tertiary amine from the group consisting of pyridine and the C-alkyl substituted pyridines, the alkyl group of which does not contain more than 3 carbon atoms.

9. The product secured by the process set out in claim 1 supra.

2,750,390
NICOTINIC ACID ESTER

Theodore I. Faad, White Plains, and Robert H. Brohkahn, Hastings on Hudson, N. Y., assignors to Nepera Chemical Co., Inc., Yonkers, N. Y., a corporation of New York

No Drawing. Application March 14, 1955, Serial No. 494,258
5 Claims. (Cl. 260—295.5)

1. The ester 1-(2-hydroxy-3-toloxy) propyl nicotinate and the non-toxic acid salts thereof.

2,750,391
SEPARATION OF NICOTINAMIDE FROM ITS ISOMERS

Godfrey Wilbert, Carmel, N. Y., assignor to Nepera Chemical Co., Inc., Nepera Park, Yonkers, N. Y., a corporation of New York

No Drawing. Application February 19, 1953, Serial No. 337,879
10 Claims. (Cl. 260—295.5)

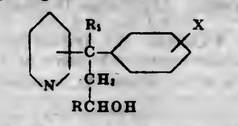
1. In a process for the separation of nicotinamide from a mixture of isomeric pyridine carboxylic acid amides, the steps which comprise converting said amides to the corresponding oxalate salts in an aqueous medium, separating nicotinamide oxalate from the remaining amide oxalates by fractionally precipitating said nicotinamide oxalate from an aqueous solution of said amide oxalates and regenerating free nicotinamide.

2,750,392
PHENYLPYRIDYLALKANOLS

Francis E. Cislak, Indianapolis, Ind., assignor to Reilly Tar & Chemical Corporation, Indianapolis, Ind., a corporation of Indiana

No Drawing. Application April 18, 1955, Serial No. 502,247
10 Claims. (Cl. 260—297)

1. The class of compounds consisting of phenylpyridylalkanols having the general formula



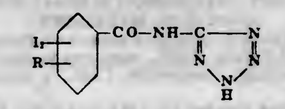
where R represents a member selected from the class of hydrogen and methyl, R_1 represents one of the class consisting of hydrogen, lower alkyl, phenyl, and benzyl, and X represents one of the class consisting of hydrogen and halogen.

2,750,393
IODINATED 5-BENZAMIDOTETRAZOLES AND PREPARATION THEREOF

Bill Elpern, Albany, N. Y., assignor to Sterling Drug Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application December 1, 1954, Serial No. 472,511
22 Claims. (Cl. 260—308)

1. A compound selected from the group consisting of compounds having the formula



wherein R is selected from the class consisting of hydrogen, iodine, hydroxy and lower-alkoxy groups; and alkali metal, ammonium and amine salts thereof.

2,750,394
MANUFACTURE OF 5-HYDROXYMETHYL 2-FURFURAL

Quintin P. Peniston, Seattle, Wash., assignor to Food Chemical and Research Laboratories, Inc., Seattle, Wash., a corporation of Washington

Application May 22, 1952, Serial No. 289,397
11 Claims. (Cl. 260—347.8)

1. In the method of producing 5-hydroxymethyl 2-furfural by heat-reacting under pressure in the presence of an acidic catalyst and between the temperature limits of about 130° C. and about 225° C. an aqueous solution of a keto-hexose sugar, said catalyst being stable at the temperature at which the sugar solution is reacted, the step of accelerating the rate of formation of the 5-hydroxymethyl 2-furfural relative to the rate of its decomposition by having present in said aqueous solution an unsubstituted, saturated aliphatic monohydric alcohol having from 1 to 5 carbon atoms in its molecule, the molar ratio of the alcohol to the water in said solution being between the limits of 0.1 and 0.4.

2,750,395
DIEPOXIDES

Benjamin Phillips and Paul S. Starcher, Charleston, W. Va., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application January 5, 1954, Serial No. 402,396
8 Claims. (Cl. 260—348)

6. The hydrocarbon dicarboxylic acid diesters of alcohols selected from the group consisting of 3,4-epoxycyclohexylmethanol and lower alkyl substituted 3,4-epoxycyclohexylmethanols in which the carboxyl groups of said dicarboxylic acid are esterified by said alcohols and wherein the dicarboxylic acid contains from 2 through 12 carbon atoms.

2,750,396
PRODUCTION OF CHLORINATED POLYCYCLIC ALCOHOLS

Henry G. Fechter, Morton Kleiman, and Arthur Goldman, Chicago, Ill., assignors to Velsicol Chemical Corporation, a corporation of Illinois

No Drawing. Application October 6, 1952, Serial No. 313,358
4 Claims. (Cl. 260—410)

1. The 1,2-chlorohydrin derivative of 4,5,6,7,8,8-hexachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene.

2,750,397
PRODUCTION OF HALOGENATED POLYCYCLIC ALCOHOLS

Arthur Goldman, Morton Kleiman, and Henry G. Fechter, Chicago, Ill., assignors to Velsicol Chemical Corporation, a corporation of Illinois

No Drawing. Application October 6, 1952, Serial No. 313,372
5 Claims. (Cl. 260—410)

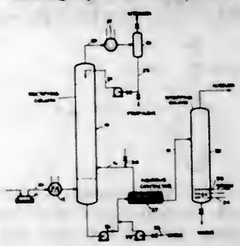
1. The 2,3-chlorohydrin derivative of 1-halo-4,5,6,7,8,8-hexachloro - 3a,4,7,7a - tetrahydro - 4,7 - methanoindene wherein the halogen atom in the 1 position is of the group consisting of fluorine, chlorine and bromine.

2,750,398
RESOLUTION OF CARBONYLICS-CONTAINING GASEOUS MIXTURES

Martin L. Courter, Walnut Creek, and Robert L. Magovern, El Cerrito, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

Application October 19, 1953, Serial No. 386,809
10 Claims. (Cl. 260—452)

1. The process for separating a carbonylic compound from a mixture containing said carbonylic compound in admixture with lower boiling hydrocarbons and nitrogen which comprises subjecting said mixture to rectification in a rectifying zone, introducing a stream of wet hydrocarbons into said rectifying zone at a point above the point of introduction of said carbonylic compound-containing mixture into said rectifying zone during said rectification, thereby separating a vapor fraction comprising nitrogen and said lower boiling hydrocarbons free of any substantial amount of carbonylics from a liquid fraction comprising said carbonylic compounds and lower boiling hydrocarbons in said rectifying zone, contacting said liquid fraction with water in a contacting zone thereby separating a hydrocarbon phase consisting essentially of said lower boiling hydrocarbons from an aqueous phase consisting essentially of said carbonylic compounds, and recovering carbonylic compounds from said aqueous phase.



2,750,399
PROCESS FOR ALKYL PHOSPHORYL DICHLORIDES

Harry R. Gamrath, St. Louis, Mo., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application December 27, 1949, Serial No. 135,311
9 Claims. (Cl. 260—461)

1. A process for the preparation of alkyl phosphoryl dichlorides having the formula

$$R-O-\overset{\overset{O}{\|}}{P}=Cl_2$$

wherein R represents an alkyl radical terminating with a CH_2 group and containing at least 6 and not more than 18 carbon atoms, consisting of effecting an essentially quantitative yield of alkyl phosphoryl dichloride by the addition of a 1 molecular proportion of a primary alkyl alcohol containing at least 6 and not more than 18 carbon atoms to a substantially 1 molecular proportion of phosphorus oxychloride while maintaining a reaction temperature between about +2° C. and about + 25° C., after the addition of the said alcohol to the phosphorus oxychloride is complete, continuing to maintain a reaction temperature between about +2° C. and about +25° C. while removing under reduced pressure the hydrogen chloride formed until the reaction between the selected alkyl alcohol and the phosphorus oxychloride is substantially complete, and thereafter substantially completing the removal of the hydrogen chloride formed under a reduced pressure and at a temperature not exceeding 50° C.

2,750,400
PREPARATION OF PHYTIC ACID FROM CALCIUM MAGNESIUM PHYTATES

John C. Cowan and Cyril D. Evans, Peoria, Ill., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application June 22, 1951, Serial No. 233,096
2 Claims. (Cl. 260—461)
(Granted under Title 35, U. S. Code (1952), sec. 266)

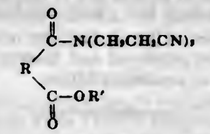
1. Method which comprises dissolving calcium magnesium phytate in dilute hydrochloric acid, said hydrochloric acid being in amount sufficient to liberate the phosphoric acid groups of the calcium magnesium phytate, contacting said acid solution with a cation exchange material thereby to remove calcium and magnesium ions from the solution and removing HCl from the solution by evaporation.

2,750,401
ESTER OF N,N-BIS(2-CYANOETHYL) CARBOXAMIC ACIDS

John Wendell Lynn, South Charleston, W. Va., assignor to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application April 22, 1953, Serial No. 350,513
5 Claims. (Cl. 260—464)

1. Esters of N,N-bis(2-cyanoethyl) carboxamic acids having the general formula:



wherein R represents a member selected from the group consisting of tetrahydrophenylene and Δ^8-1,4-endomethylene tetrahydrophenylene radicals and R′ represents an aliphatic hydrocarbon radical containing from 1 to 8 carbon atoms.

2,750,402
6,7-DIACETYL-1,2,3,4,4a,9,10,10a-OCTAHYDRO-1,4a-DIMETHYL-9-OXOPHENANTHRENE - 1 - CARBONITRILE

Thomas F. Sanderson, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 2, 1955, Serial No. 505,515
3 Claims. (Cl. 260—465)

1. 6,7-diacetyl-1,2,3,4,4a,9,10,10a-octahydro-1, 4a-dimethyl-9-oxophenanthrene-1-carbonitrile.

2,750,403
PROCESS FOR REMOVING FERROUS ION IMPURITY IN THE PREPARATION OF DICYANOBUTENE

William H. Calkins, Victoria, Tex., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 13, 1952, Serial No. 287,603
6 Claims. (Cl. 260—465.8)

6. A process for removing ferrous iron from a liquid aqueous copper-containing phase contaminated with ferrous iron produced in the manufacture of 1,4-dicyano-2-butene by reaction between dichlorobutene and hydrogen cyanide in a liquid aqueous acidic medium containing a dissolved cuprous compound as catalyst which comprises introducing ferric chloride into the said aqueous phase, maintaining the temperature of the resulting mixture at 25 to 60° C. and the pH at 4.0 to 6.5 whereby a precipitate containing ferrous iron is produced, thereafter separating the said precipitate from the resulting mixture, lowering the pH of the resulting aqueous phase to about 1.7 whereby a slurry of copper-containing compound is produced, concentrating the said slurry by removal of liquid component therefrom, dissolving the concentrated slurry in aqueous sodium cyanide and recycling the resulting liquid aqueous copper-containing solution to a reaction vessel wherein it is employed as aqueous catalyst-containing phase in the reaction between hydrogen cyanide and dichlorobutene to produce 1,4-dicyano-2-butene.

2,750,404
RESOLUTION OF RACEMIC PHENYLSERINE THROUGH ITS RACEMIC CYCLOHEXYL ESTER AND PRODUCTS OBTAINED

Alberto Vercellone and Carlo Giuseppe Alberti, Milan, Italy, assignors to Farmaceutici Italia S. A., a corporation of Italy

No Drawing. Application June 18, 1952, Serial No. 294,258
Claims priority, application Italy November 5, 1951
3 Claims. (Cl. 260—471)

1. Racemic threo-β-phenylserine cyclohexylester as a new product.

2,750,405
HYDROXYDEHYDROABIETIC ACID AND ESTERS THEREOF

Paul F. Ritchie, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application June 18, 1952, Serial No. 294,257
13 Claims. (Cl. 260—473)

1. A dehydroabietic acid derivative selected from the group consisting of 9-hydroxydehydroabietic acid and lower alkyl esters thereof.

2,750,406
1,2,3,4,4a,9,10,10a- OCTAHYDRO -7- HYDROXY-1,4a-DIMETHYL-9-OXO-1-PHENANTHRENECARBOXYLIC ACID AND ESTERS THEREOF

Paul F. Ritchie, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application March 24, 1953, Serial No. 344,471
8 Claims. (Cl. 260—473)

1. As a new composition of matter, a compound selected from the group consisting of 1,2,3,4,4a,9,10,10a-octahydro - 7 - hydroxy - 1,4a - dimethyl - 9 - oxo - 1 - phenanthrenecarboxylic acid and 1 - carboalkoxy - 1,2,3, - 4,4a,9,10,10a - octahydro - 7 - hydroxy - 1,4a - dimethyl - 9 - oxophenanthrenes.

5. The process of preparing alkyl esters of 1,2,3,4,4a,-9,10,10a - octahydro - 7 - hydroxy - 1,4a - dimethyl - 9 - oxo - 1 - phenanthrenecarboxylic acid which comprises contacting an alkyl ester of 14 - hydroperoxy - 9 - oxode - hydroabietic acid with a strongly acid catalyst at a temperature of from about 0 C. to about 100° C.

2,750,407
SUBSTITUTED PHENANTHRENECARBOXYLIC ACID AND ESTERS THEREOF

Paul F. Ritchie, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application July 31, 1953, Serial No. 371,719
9 Claims. (Cl. 260—473)

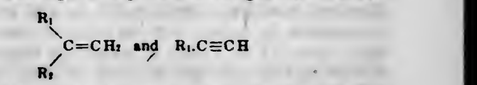
1. A dehydroabietic acid derivative selected from the group consisting of 14-hydroxy-9-oxodehydroabietic acid and 14-acyloxy-9-oxodehydroabietic acid and the lower alkyl esters thereof.

2,750,408
α,β-UNSATURATED KETONES AND THEIR PREPARATION

Felix Bergmann and Shalom Sar El, Jerusalem, Israel

No Drawing. Application August 26, 1952, Serial No. 307,398
15 Claims. (Cl. 260—476)

1. The process wherein an unsaturated compound of the group consisting of compounds of the general formulae



is condensed at elevated temperature in the liquid phase

in the absence of catalysts and with elimination of HCl, with an acyl halide of the general formula

$$Hal.CO.CH_2R_3$$

wherein R_1 and R_3 stand each for a radical selected from the group consisting of aryl and aralkyl radicals and one of them may be hydrogen; R_3 stands for an aryl radical, and Hal stands for a halogen atom of the group consisting of chlorine and bromine.

2,750,409

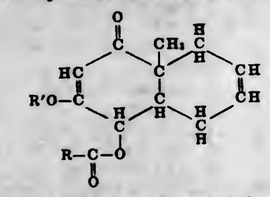
CARBOXYLIC ACID ESTERS OF HYDROXY SUBSTITUTED CARBOCYCLIC KETONES

Ferdinand C. Meyer and Angelo J. Speziale, Kirkwood, Mo., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application October 11, 1952, Serial No. 314,416

11 Claims. (Cl. 260—476)

1. As new compounds esters of the structural formula



where R is a member of the group consisting of hydrogen, alkyl, aralkyl, cycloalkyl, aryl and alkaryl radicals and where R′ is a short chain alkyl radical.

2,750,410

CATALYST AND PROCESS FOR MAKING VINYL ESTERS

Eugene W. Hanszen and Lawrence B. Trenholme, La Marque, Tex., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application November 22, 1952, Serial No. 322,169

4 Claims. (Cl. 260—498)

1. Process for making vinyl acetate which comprises reacting the vapors of acetylene and acetic acid at a temperature of 130° to 350° C. in the presence of a catalyst composed of zinc acetate supported on activated carbon containing a minute amount of copper and impregnated with a small amount of bismuth oxyiodide.

2,750,411

CONVERTING ALPHA-PINENE TO MIXTURES OF ACIDS

Gordon S. Fisher, Leo A. Goldblatt, and James S. Stinson, Lake City, Fla., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application November 14, 1951, Serial No. 256,357

4 Claims. (Cl. 260—514)

(Granted under Title 35, U. S. Code (1952), sec. 266)

3. A process of ozonizing alpha-pinene to produce pinene-derived acids, comprising mixing alpha-pinene and an unreactive liquid ozonolysis medium selected from the group consisting of alkanols, alkanoic acid, and nitroparaffins which are appreciably miscible with both alpha-pinene and the ozonide of alpha-pinene; contacting the mixture with an ozone-containing gas; and subjecting the dissolved ozonides so produced to an acid producing decomposition by mixing with the solution containing them about from 0.1 to 2 parts of water and about from 0.01 to 0.03 part of hydrogen peroxide at about from 20° to 125° C.

2,750,412

ALCOHOL RECOVERY OF ORGANIC ACIDS AND SALTS THEREOF

Lloyd T. Sandborn and William B. Stengle, Crossett, Ark., assignors to Crossett Lumber Company, Crossett, Ark., a corporation of Arkansas

No Drawing. Application November 3, 1952, Serial No. 318,532

11 Claims. (Cl. 260—527)

1. Process of separating from a concentrate of the liquor resulting from an alkaline cook of cellulosic material, formic, acetic, lactic and glycolic acids and the sodium salts of said acids, which comprises contacting the concentrate with a solvent for said salts, the solvent being selected from the group consisting of methanol, ethanol, and propanol, a mixture of methanol and ethanol, a mixture of at least one of propanol and butanol with methanol, and a mixture of at least one of propanol and butanol with ethanol; filtering the solvent, containing said salts, from the remainder of the concentrate; removing from the filtrate the solvent employed and thereby leaving a mixture of said salts in aqueous solution.

2,750,413

SOLVENT RECOVERY OF ORGANIC ACIDS AND SALTS THEREOF

Lloyd T. Sandborn and William B. Stengle, Crossett, Ark., assignors to The Crossett Lumber Company, Crossett, Ark., a corporation of Arkansas

No Drawing. Application November 3, 1952, Serial No. 318,531

13 Claims. (Cl. 260—527)

1. Process of separating from a concentrate of the liquor resulting from an alkaline cook of cellulosic material, formic, acetic, lactic and glycolic acids and the sodium salts of said acids, which comprises contacting the concentrate with methanol; filtering the methanol, having dissolved therein said salts, from the remainder of the concentrate; precipitating undesirable material from the methanol filtrate by contacting same with an additional organic solvent and thereby obtaining two liquid layers; separating the top layer from the bottom layer; removing the organic solvents from said top layer and thereby leaving a mixture of said salts in aqueous solution, said additional solvent being selected from the group consisting of monohydroxy liquid alcohols having 3 to 5 carbon atoms, ethyl acetate, benzene, dioxane and ether.

2,750,414

PRODUCTION OF ORGANIC ACIDS AND SALTS THEREOF FROM CELLULOSIC MATERIALS

Kenneth G. Chesley, Crossett, Ark., Charles W. Montgomery, Baton Rouge, La., and Lloyd T. Sandborn, Crossett, Ark., assignors to Crossett Lumber Company, Crossett, Ark., a corporation of Arkansas

No Drawing. Application November 3, 1952, Serial No. 318,533

17 Claims. (Cl. 260—528)

2. Process of producing saturated monocarboxylic acids having 1–3 carbon atoms in which one of the hydrogen atoms on the carbon atom adjacent the carboxyl group may be substituted by an hydroxyl group, which comprises subjecting a mixture of cellulosic material and an aqueous alkaline solution to a temperature of 250° C.–300° C. in a closed system, the ratio of water to alkali and the ratio of water to cellulosic material being at least 3.5 to 1 and at least 4 to 1 respectively, acidifying the reaction mixture and thereby obtaining a mixture of said acids in aqueous solution.

2,750,415

SEPARATION AND OXIDATION OF CYCLOHEXYL NITRATE AND RELATED COMPOUNDS

Clement H. Hamblet, Wilmington, and Doyce B. Hanson, Claymont, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application July 25, 1952, Serial No. 300,976

4 Claims. (Cl. 260—533)

2. A process for preparing adipic acid which comprises condensing cyclohexyl nitrate from the off-gas produced in nitric acid oxidation of liquid phase cyclohexane partial air oxidation products and thereafter oxidizing the said cyclohexyl nitrate with aqueous nitric acid of 40% to 70% concentration at temperatures within the range of 62° to 110° C. in the liquid phase, whereby adipic acid is produced, and separating adipic acid from the resulting mixture.

2,750,416

(TERT.-ALKYL) AMINOMETHYLPHENOLS AND METHOD FOR THEIR PREPARATION

Lawrence J. Exner and W E Craig, Philadelphia, Pa., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application December 21, 1950, Serial No. 202,136

16 Claims. (Cl. 260—570.9)

1. A process for preparing tert.-alkylaminomethyl substituted phenols which comprises mixing and reacting together at a reacting temperature not exceeding about 110° C. a tert.-alkylazomethine and a methylol-forming phenol which has available for substitution hydrogen in at least one of the positions ortho and para to the phenolic hydroxyl group, which is free of acidic substituents, and which contains but one phenolic hydroxyl group per aryl nucleus.

2,750,417

AMINE ALKYLATION

Rex D. Closson, Detroit, Alfred J. Kolka, Lathrup Village, Birmingham, and Waldo B. Ligett, Pontiac, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application April 14, 1953, Serial No. 348,816

17 Claims. (Cl. 260—577)

1. Process for the alkylation of an amine, comprising reacting said amine with a non-conjugated olefin in the presence of a preformed amide of a metal selected from the group consisting of alkali and alkaline earth metals, said process being carried out at elevated temperature, said amide catalyst being a derivative of an ammonia compound not more acidic than said amine.

2,750,418

PRODUCTION OF UNSATURATED 1,4-DICARBONYL COMPOUNDS

Niels Konrad Friedrich Wilhelm Clauson-Kaas, Klampenborg, Denmark, assignor to Kemisk Vaerk Koge A/S, Copenhagen, Denmark, a firm

No Drawing. Application February 26, 1951, Serial No. 212,828

Claims priority, application Sweden April 30, 1947

4 Claims. (Cl. 260—601)

1. The method of producing an unsaturated 1,4-dicarbonyl compound comprising the hydrolyzation of 2,5-diacyloxy-2,5-dihydrofuran in aqueous medium.

2,750,419

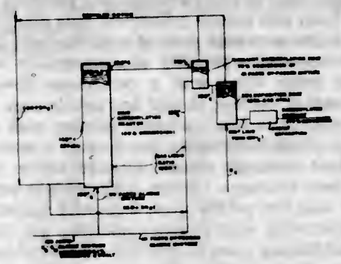
PRODUCTION OF OXYGEN-CONTAINING ORGANIC COMPOUNDS

Arthur William Charles Taylor and Sidney Arthur Lamb, Norton-on-Tees, England, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain

Application March 23, 1953, Serial No. 344,249

Claims priority, application Great Britain April 2, 1952

14 Claims. (Cl. 260—604)



1. In a continuous process for the carbonylation of olefinic compounds with a gas comprising carbon monoxide and hydrogen at elevated temperature and superatmospheric pressure in the presence of a dissolved cobalt catalyst in a carbonylation zone followed by the decomposition of cobalt compounds dissolved in the carbonylation product and precipitation of the cobalt as metal by treatment of the carbonylation product in a decomposition zone with hydrogen at elevated temperature and pressure, the improvement which comprises maintaining the temperature range in the decomposition zone within the optimum range desired there by providing between the outlet from the carbonylation main reaction zone and the inlet to the decomposition zone an auxiliary zone through which the carbonylation product is passed and arranging that further carbonylation to the extent of from 2 to 15% of the total carbonylation which occurs in the system occurs between the outlet from the carbonylation zone and the inlet to the decomposition zone whereby heat is evolved and controlling the amount of this further carbonylation to maintain the liquid at its entry to the decomposition zone at the desired temperature.

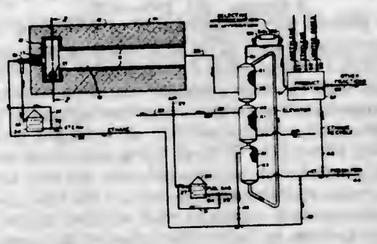
2,750,420

CONVERSION OF HYDROCARBONS

Harold J. Hepp, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application April 29, 1953, Serial No. 351,780

21 Claims. (Cl. 260—605)



12. A hydrocarbon pyrolysis process comprising passing a gaseous hydrocarbon stream axially into a first cylindrical zone, passing steam into said first cylindrical

zone annularly disposed about said gaseous hydrocarbon, tangentially introducing a combustible fuel gas mixture into said first cylindrical zone, burning said combustible gas in said first cylindrical zone, passing said hydrocarbon stream axially through said first cylindrical zone separated from hot combustion gas therein by an annulus of said steam, passing hydrocarbon, steam, and combustion gas from said first cylindrical zone into a second cylindrical zone having a smaller diameter than, coaxial with, and adjacent said first cylindrical zone, in said second cylindrical zone transferring heat from said combustion gas to said hydrocarbon to effect hydrocarbon pyrolysis, passing effluents from said second cylindrical zone directly into a first and topmost pebble zone of a pebble heat exchange system comprising a plurality of substantially vertically extending zones filled with a contiguous downwardly moving mass of pebbles, in said first pebble zone quenching said effluent in heat exchange relation with pebbles, passing an oxygen-containing gas through a second zone of said heat exchange system disposed below said first zone in heat exchange relation with pebbles previously heated in said first pebble zone, from said second pebble zone withdrawing said oxygen-containing gas thus preheated and passing same to said first cylindrical zone as a component of said combustible mixture, through a third zone of said pebble heat exchange system disposed below said second pebble zone passing a hydrocarbon stock in heat exchange relation with pebbles previously contacted with said oxygen-containing gas, from said third pebble zone withdrawing hydrocarbon stock thus preheated and axially introducing same as said gaseous hydrocarbon steam into said first cylindrical zone, and withdrawing quenched hydrocarbon pyrolysis effluent from said first pebble zone and separating same into selected product fractions.

21. In the pyrolysis of a hydrocarbon, wherein hydrocarbon feed is passed through a combustion zone in contact with hot combustion gas produced therein, as a pyrolysis heat source, and pyrolysis product is subsequently withdrawn from the pyrolysis system in admixture with said combustion gas, the improvement comprising introducing steam into said combustion zone as an annulus about said hydrocarbon feed and passing said hydrocarbon feed through said combustion zone separated from said combustion gas by said annulus of steam, withdrawing an admixture of steam, combustion gas and pyrolysis product from the pyrolysis system, and recovering pyrolysis product.

2,750,421

PROCESS FOR THE PRODUCTION OF CRYSTALLINE CYCLOHEXYL PEROXIDES

Paul Halbig, Fribourg, Switzerland, assignor to Lonza Electric and Chemical Works Ltd., Gampel, Wallis, Switzerland, a Swiss company

No Drawing. Application November 30, 1953, Serial No. 395,251

Claims priority, application Switzerland February 6, 1953

4 Claims. (Cl. 260—610)

4. A process for the production of crystalline cyclohexyl peroxides with a 12 to 18% active oxygen content and melting points of 60 to 83° C. from 1 mol of cyclohexanone and 1–2 mols hydrogen peroxide without the use of organic solvents which comprises adding the cyclohexanone to an aqueous solution of hydrogen peroxide containing about 2 to 20% of nitric acid based on the water content of such aqueous solution, the rate of such addition being such that only 1/20 to 1/5 of the total quantity of cyclohexanone is added to such solution before crystals begin to form in the reaction solution, the remainder of the cyclohexanone being added only after the formation of such crystals is initiated, and after completion of the reaction separating the resulting crystalline reaction product from the aqueous reaction solution.

2,750,422

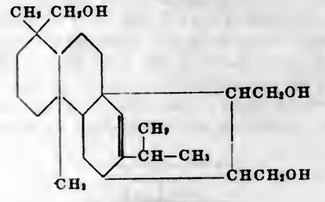
TRIOL OF LEVOPIMARIC ACID-MALEIC ANHYDRIDE ADDUCT

Thomas F. Sanderson, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application April 13, 1955, Serial No. 501,169

2 Claims. (Cl. 260—617)

1. The isomeric compounds of the formula



2,750,423

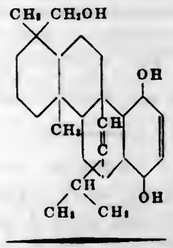
TRIOL OF LEVOPIMARIC ACID-QUINONE ADDUCT

George C. Harris, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application April 25, 1955, Serial No. 503,775

2 Claims. (Cl. 260—617)

1. A triol having the formula



2,750,424

MANUFACTURE OF CUMYLPHENOL

Godfrey Paul Armstrong, Epsom Downs, Thomas Bewley, Epsom, Geoffrey William Jackson, Southborough, Kent, Frederick James Bellringer, Wimbledon, London, Peter Lionel Bramwyche, London, and Frederick John Wilkins, Hull, England, assignors, by mesne assignments, to Hercules Powder Company, a corporation of Delaware

No Drawing. Application May 29, 1950, Serial No. 165,102

Claims priority, application Great Britain June 8, 1949

1 Claim. (Cl. 260—619)

In the process for the manufacture of phenol wherein isopropylbenzene is oxidized in liquid phase at elevated temperatures with molecular oxygen to an oxidate containing isopropylbenzene peroxides, and said peroxides are decomposed by means of acidic catalysts to give a reaction mixture containing acetone, isopropylbenzene, α-methylstyrene, phenol, acetophenone, and cumylphenol, and said reaction mixture is subjected to fractional distillation at a temperature below 200° C. to recover acetone, isopropylbenzene, α-methylstyrene, phenol, and acetophenone, leaving a residue containing cumylphenol, the improvement which comprises the step of subjecting said residue to fractional distillation under reduced pressure at a temperature below 200° C. to recover cumylphenol.

2,750,425

1,2,3,4,4a,9,10,10a-OCTAHYDRO-7,9-DIHYDROXY-1-HYDROXYMETHYL-1,4a,-DIMETHYLPHENANTHRENE AND PROCESS

Lee A. Subluskey, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application April 27, 1955, Serial No. 504,368

2 Claims. (Cl. 260—619)

1. 1,2,3,4,4a,9,10,10a - octahydro -7,9 - dihydroxy - 1 - hydroxymethyl-1,4a-dimethylphenanthrene.

2,750,426

MANUFACTURE OF CUMYLPHENOL

Godfrey Paul Armstrong, Kingswood, Frederick James Bellringer, Coulsdon, Thomas Bewley, Epsom, England, Peter Lionel Bramwyche, Penarth, Wales, Geoffrey William Jackson, Southborough, and Frederick John Wilkins, Cheam, England, assignors, by mesne assignments, to Hercules Powder Company, a corporation of Delaware

No Drawing. Application January 18, 1956, Serial No. 559,784

Claims priority, application Great Britain June 8, 1949

1 Claim. (Cl. 260—619)

In the process for the manufacture of phenol wherein isopropylbenzene is oxidized in liquid phase at elevated temperatures with molecular oxygen to an oxidate containing isopropylbenzene peroxides, and said peroxides are decomposed by means of acidic catalysts to give a reaction mixture containing acetone, isopropylbenzene, α-methylstyrene, phenol, acetophenone, and cumylphenol, and said reaction mixture is subjected to fractional distillation at a temperature below 200° C. to recover acetone, isopropylbenzene, α-methylstyrene, phenol, and acetophenone, leaving a residue containing cumylphenol, the improvement which comprises the step of subjecting said residue to extraction with alkali to recover cumylphenol.

2,750,427

HALOHYDROQUINONES AND PREPARATION THEREOF

Van R. Gaertner, Dayton, Ohio, assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application November 18, 1953, Serial No. 393,003

12 Claims. (Cl. 260—623)

11. 5,6,7,8-tetrahydro-1,4-naphthohydroquinones containing at least 1 nuclear halogen atom attached to the aromatic ring.

12. The method of preparing a 5,8-dihydro-1,4-naphthohydroquinone containing at least one nuclear halogen atom attached to the aromatic ring, which method comprises catalytically hydrogenating a 4a,5,8,8a-tetrahydro-1,4-naphthoquinone containing at least two halogen atoms on nuclear carbon atoms which are in alpha positions to a carbonyl group, at least one of said halogens being a vinyl halogen and at least one of said halogens being an angular substituent in cis-relationship with the other angular substituent.

2,750,428

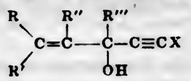
HYPNOTIC AGENTS

Abraham Bavley, Brooklyn, Morton Harfenist, Yonkers, and William M. McLamore, Flushing, N. Y., assignors to Chas. Pfizer & Co., Inc., Brooklyn, N. Y., a corporation of Delaware

No Drawing. Application December 31, 1952, Serial No. 329,088

9 Claims. (Cl. 260—633)

1. A compound having the following structure:



wherein R is chosen from the group which consists of hydrogen, methyl, and ethyl, R' is chosen from the group which consists of hydrogen, methyl and ethyl, R'' is chosen from the group which consists of hydrogen and methyl, R''' is an alkyl group of up to five carbon atoms, and X is a halogen atom.

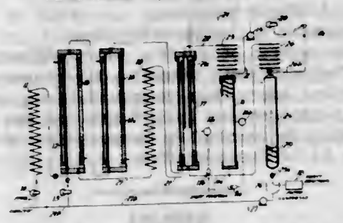
2,750,429

CONTINUOUS HYDROGENATION OF FATTY MATERIAL

Vittorio de Nora and Ettore de Bartholomaeis, Milan, Italy, assignors, by direct and mesne assignments, to Oronzio de Nora Impianti Elettrochimici, Milan, Italy, a company of Italy

Application April 9, 1952, Serial No. 281,368

12 Claims. (Cl. 260—638)



1. The method of high pressure hydrogenation which comprises flowing fatty material continuously through a reaction zone maintained at hydrogenation pressure and temperature, introducing a catalyst into the fatty material, flowing hydrogen in excess through the fatty material in said reaction zone at the pressure and temperature of the reaction zone at a speed greater than that of the fatty material, the volumetric rate of flow of the hydrogen being at least ten times the volumetric flow of the fatty material through the reaction zone, causing the fatty material in said zone to flow in a tortuous path while maintaining the hydrogenation pressure and temperature therein, separating the excess hydrogen and products which volatilize from the hydrogenated fatty material, continuously flowing the hydrogenated fatty material from the reaction zone while maintaining the pressure in the reaction zone, separating the volatilized products from the excess hydrogen and flowing the excess hydrogen back through the reaction zone while maintaining the hydrogenation pressure on the hydrogen and separately maintaining the flow of the fatty material through the reaction zone at a rate which accomplishes the desired degree of hydrogenation.

2,750,430

PRODUCTION OF SYNTHETIC ALIPHATIC ALCOHOLS

August Hagemann, Duisburg-Meiderich, and Karl Büchner, Duisburg-Hamborn, Germany, assignors to Ruhrchemie Aktiengesellschaft, Oberhausen-Holten, and Lurgi Gesellschaft für Warmetechnik, Frankfurt am Main, Hedderaheim, both corporations of Germany

No Drawing. Application January 17, 1951, Serial No. 206,514

Claims priority, application Germany February 3, 1950

7 Claims. (Cl. 260—638)

1. In the method for obtaining alcohols from catalytic carbon monoxide-hydrogen synthesis products containing olefins and more than 50% oxygen-containing organic compounds including alcohols in which the synthesis products are contacted with a carbon monoxide-hydrogen containing gas under the conditions of the oxosynthesis and the reaction product thereafter hydrogenated, the improvement which comprises effecting the contacting of such synthesis products with carbon monoxide and hydrogen in the presence of an aqueous cobalt salt solution having a pH of about 1–6 at increased pressure and a temperature of 120–220° C. to thereby convert the ole-

fins contained therein to oxygenated organic compounds, thereafter catalytically reducing these products with hydrogen, and recovering an increased yield of aliphatic alcohols.

2,750,431

1,1,3-TRIFLUOROBUTADIENE, ITS POLYMER, AND PROCESSES OF MAKING THEM AND OTHER 1,1-DIFLUORINATED DIENES AND THEIR POLYMERS

Paul Tarrant and Alan M. Lovelace, Alachua County, Fla., assignors to the United States of America as represented by the Secretary of the Army

No Drawing. Application May 18, 1953, Serial No. 355,848
14 Claims. (Cl. 260—653)

1. 1,1,3-trifluoro-butadiene.

2. Polymeric 1,1,3-trifluoro-butadiene.

3. The process of reacting dibromodifluoromethane with 2-fluoropropylene, whereby a 1,3-dibrominated 1,1-difluorinated intermediate compound having an unsubstituted methyl terminal group is obtained, and dehydrobrominating the intermediate compound thus obtained to produce 1,1,3-trifluoro-butadiene.

2,750,432

PRODUCTION OF NAPHTHALENE

Harry L. Coonradt, Woodbury, and Barton W. Rope, Mullica Hill, N. J., assignors to Socony Mobil Oil Company, Inc., a corporation of New York

Application September 16, 1952, Serial No. 309,928
9 Claims. (Cl. 260—672)

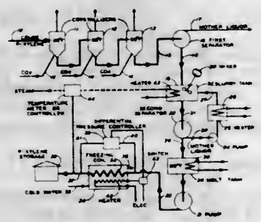
1. A process for the demethylation of methylnaphthalenes, which comprises contacting a methylnaphthalene with a silica-alumina cracking catalyst, containing between about 5 per cent and about 20 per cent, by weight, of alumina, at a temperature of between about 900° F. and about 1200° F., for a period of time of between about one second and about 60 seconds, and in the presence of hydrogen gas at substantially atmospheric pressure.

2,750,433

HYDROCARBON ANALYSIS AND CONTROL IN CRYSTALLIZATION PROCESSES

Robert L. Le Tourneau, Richmond, and Robert Matteson and Victor Waithman, Berkeley, Calif., assignors to California Research Corporation, San Francisco, Calif., a corporation of Delaware

Application March 20, 1951, Serial No. 216,628
1 Claim. (Cl. 260—674)



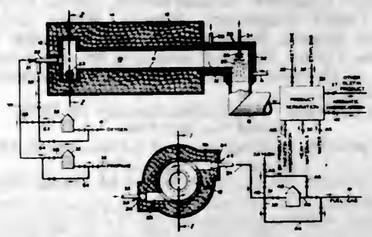
In a method of separating paraxylene from a mixture of it with ethyl benzene and ortho- and metaxylene including the steps of forming paraxylene crystals at low temperature, separating said crystals from uncrystallized liquid and reslurrying said crystals with liquid from a subsequent separation, the steps of liquefying paraxylene crystals from said last-named separation, passing said liquid at a constant flow rate in a confined path through a cooling zone, cyclically decreasing and increasing the temperature of said zone from just below to just above the freezing point of the liquid paraxylene in the confined path to deposit a layer of paraxylene therein and to melt said layer to keep the pressure differential along said zone within a predetermined range, determining the temperature of the liquid leaving said zone and increasing the temperature of said reslurrying step when said liquid temperature decreases.

2,750,434

CONVERSION OF HYDROCARBONS

Joseph C. Krejci, Phillips, Tex., assignor to Phillips Petroleum Company, a corporation of Delaware

Application June 11, 1953, Serial No. 360,956
19 Claims. (Cl. 260—679)



1. A process which comprises passing a hydrocarbon feed axially into a precombustion zone; passing a combustible mixture comprising a fuel and an oxidant tangentially into said precombustion zone; effecting combustion of said combustible mixture to form combustion gases to be contacted with said hydrocarbon feed; passing said hydrocarbon feed, initially surrounded by a helically moving annular blanket of said combustion gases, into a reaction zone; therein reacting said hydrocarbon feed, by virtue of heat imparted thereto by said combustion gases, to form, predominantly, unsaturated hydrocarbons; maintaining the reaction time at a value not substantially greater than that defined by the equation

$$\log\left(\frac{1}{t}\right)=4.84-\frac{12{,}650}{T}$$

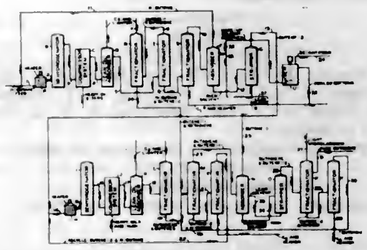
wherein t is the reaction time in seconds and T is the reaction temperature in degrees Rankine, said temperature being in the range of 1760 to 3960° R.; and recovering said unsaturated hydrocarbons.

2,750,435

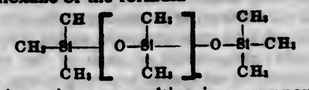
PROCESS FOR SEPARATION OF C_4 HYDROCARBONS AND SOLVENT THEREFOR

John Fetchin, Pasadena, Tex., assignor to Phillips Petroleum Company, a corporation of Delaware

Application December 17, 1954, Serial No. 476,090
29 Claims. (Cl. 260—680)



1. A process for the manufacture of olefins from normal butane which comprises, catalytically dehydrogenating normal butane to said olefins, subjecting the C_4 hydrocarbon content of the reaction effluent to fractional distillation so as to remove the butene-1 content thereof as an overhead product and produce a bottoms product containing principally the n-butane and butene-2 content thereof, subjecting the resulting mixture of n-butane and butene-2 to extractive distillation with a solvent comprising essentially a mixture of furfural, 1 to 60 weight per cent of C_8–C_{10} hydrocarbons formed in said process and comprising principally butadiene dimer, and liquid polydimethyl siloxane of the formula



wherein n is an integer resulting in a compound having a viscosity of at least 40 centistokes at 25° C. in a concentration effective in reducing the foam height of the furfural system so as to selectively dissolve butene-2, and stripping the dissolved butene-2 from the rich solvent.

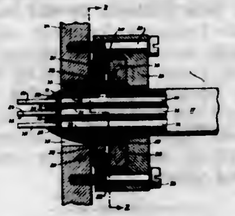
ELECTRICAL

2,750,436

FLUID TIGHT CABLE ENTRY

Hans Richter, West Dulwich, London, England, assignor to Eustace S. Dunn, Piedmont, Calif.

Application August 14, 1952, Serial No. 304,402
5 Claims. (Cl. 174—77)



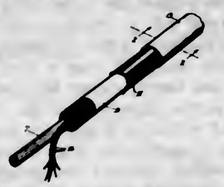
1. The construction of a fluid and pressure tight cable entry for leading an insulated cable into a housing through a hole in a housing wall, the cable including at least one conductor, an insulating sheath surrounding the conductor and an insulating jacket surrounding the sheath, the construction comprising a cable in which the conductor is bared of, and extends beyond, the sheath and in which the sheath is bared of, and extends beyond, the jacket; a front cap of resilient insulating material bonded to and extending over, said conductor, said sheath and said jacket, said conductor projecting from said cap; a substantially radially extending rigid flange surrounding, and bonded to, said cap; a gasket between said wall and said flange; and means for compressing said gasket between said wall and said flange, the force of the compressed gasket acting on said flange substantially parallel to the cable axis, whereby the jacket is free from radially extending sealing forces which would tend to displace the jacket at the entry.

2,750,437

EASILY STRIPPED INSULATED WIRE

Einar R. Olson and Robert H. Miller, Richmond, Ind., assignors to Belden Manufacturing Company, Chicago, Ill., a corporation of Illinois

Application December 26, 1950, Serial No. 202,712
6 Claims. (Cl. 174—110)



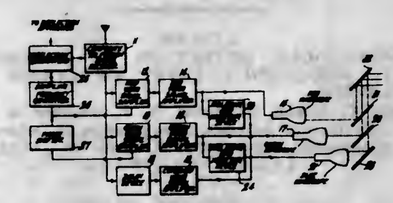
4. An insulated wire having easy-stripping characteristics, comprising an elongated, metallic conductor, a flexible jacket of insulating material disposed about, and in contact with, said conductor, and a plurality of threads disposed in side-by-side relationship within said jacket so as to extend longitudinally along, and in contact with, said conductor, said threads having a length approximately equal to the length of said conductor, being made of a material having a maximum extension at failure of less than about 13 per cent, being bonded to said jacket, and overlying less than about one-third and more than one-seventh of the peripheral area of said conductor.

2,750,438

COLOR TELEVISION RECEIVER

Allen A. Barco, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application October 11, 1950, Serial No. 189,506
12 Claims. (Cl. 178—5.4)



1. In a color television image-reproducing system, means for receiving a composite video signal wave having components representative respectively of a plurality of different colors of successive elemental areas of the image to be reproduced, all of said wave components having the same frequency and mutually distinct phases, means operating in a particular phase relationship to said received wave for extracting from said received wave video signals representative of at least one of said image colors, means for subtracting said extracted video signals from said received wave to produce other video signals representative of at least one other of said image colors, and image-reproducing apparatus responsive to said color representative video signals for reproducing said image substantially in its natural colors.

2,750,439

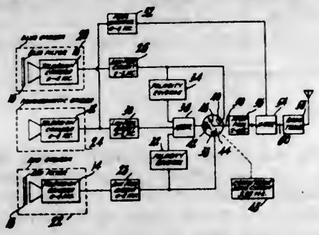
COLOR TELEVISION TRANSMITTER

Ray D. Kell, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application June 30, 1950, Serial No. 171,407
4 Claims. (Cl. 178—5.4)

1. In a color television system which develops a signal representative of the different component colors in a television scene, the combination of, a single scanning means for scanning said scene to develop a panchromatic signal train representing signal variations of substantially all component colors in the scene in full bandwidth, a plurality of other scanning means for scanning said scene, each of said other scanning means developing a color signal train substantially representing intensity

variations of a different single component color in the scene, combining means connected with all of said scanning means for subtractively combining the low frequency components of said panchromatic signal train with the low frequency components of each of the color signal trains developed by said other scanning means to produce a resultant signal train, sampling means coupled to said plurality of color signal train developing scanning means



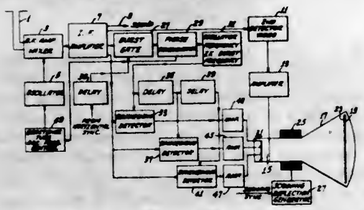
and to said combining means for consecutively and cyclically sampling said color signal trains and said resultant signal train at a frequency higher than said low frequency components to produce a color indicating signal having high frequency components, filter means for selecting the high frequency components of said color indicating signal to produce a color detail signal, and means for mixing the signal developed by said panchromatic scanning means with said color detail signal to produce a composite color signal.

2,750,440

SYNCHRONOUS DETECTION AT INTERMEDIATE FREQUENCY LEVEL OF COLOR SUBCARRIER

George C. Sziklai, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application August 29, 1951, Serial No. 244,225
4 Claims. (Cl. 178—5.4)



1. A color television receiver adapted to receive signals of the type wherein color information is transmitted in the form of a phase and amplitude modulated sub-carrier and wherein a burst of color synchronizing frequency signal is periodically transmitted, said receiver including a mixer, a heterodyning oscillator for said mixer, an intermediate frequency amplifier coupled to said mixer, color image reproducing means, a synchronous detecting means for each of a plurality of selected component colors, each of said synchronous detecting means connected to said intermediate frequency amplifier to receive signal energy therefrom, a sampling oscillator, the frequency of said sampling oscillator lying within the frequency to which said intermediate frequency amplifier is responsive, said sampling oscillator coupled to key said synchronous detectors in sequence and at a frequency equal to the intermediate frequency of said burst of color synchronizing signal.

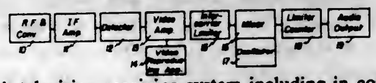
3. The invention as set forth in claim 1 and wherein there is included automatic frequency control means connected to said heterodyning oscillator for maintaining the phase and frequency of said sampling oscillator and the intermediate phase and frequency of said burst of color synchronizing signal equal to each other.

2,750,441

INTERCARRIER SOUND SYSTEM

Kurt Schlesinger, Maywood, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois

Application September 6, 1951, Serial No. 245,281
14 Claims. (Cl. 178—5.8)



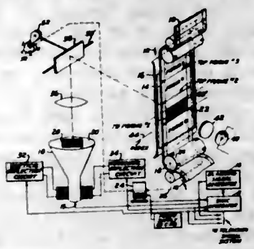
1. A television receiving system including in combination, means for deriving the video signal and an intercarrier sound wave having a frequency of approximately 4.5 megacycles frequency modulated by audio signals and amplitude modulated by low frequency pulse components of said video wave, limiter means for selecting said intercarrier wave and limiting the same to reduce amplitude modulation thereof, oscillator means for producing a wave of fixed frequency differing from said frequency of said intercarrier wave by the order of 300 to 600 kilocycles, mixer means coupled to said limiter means and said oscillator means for combining said limited wave and said wave produced by said oscillator means to produce a low frequency, frequency modulated wave, blocking oscillator means coupled to said mixer means providing output pulses of substantially constant wave form having a repetition rate following the frequency variations of said low frequency wave, filter means for deriving said audio modulating signals from said blocking oscillator pulses, and means for reproducing said audio modulating signals.

2,750,442

FILM SHRINKAGE COMPENSATORY SYSTEM

Alda V. Bedford, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application August 13, 1948, Serial No. 44,013
8 Claims. (Cl. 178—7.1)



3. In a television motion picture film scansion system wherein the film presentation rate is different from the television field scansion rate, such difference in rates of presentation being resolved by scanning alternate frames a different number of times from intervening frames and wherein an apparatus operating at a certain frequency is provided for sequential plural optical scansions of successive film frames, and having means for deriving from such film scansion a television signal train and means for blanking said signal for a predetermined period at the end of each field scansion, a film shrinkage compensatory driving mechanism energized from a source of the same said frequency, and having means for conditionally propelling motion picture film through the frame scansion apparatus of said system at a constant linear velocity, a mechanical control agency for establishing the intervals during which constant velocity film propulsion is to be provided, a synchronizing linkage between the said con-

6. In a television motion picture film scansion system of the non-intermittent variety wherein apparatus is provided for sequential plural scansions of successive film frames the combination of, scanning means for producing scanning raster fields, means for separating said fields

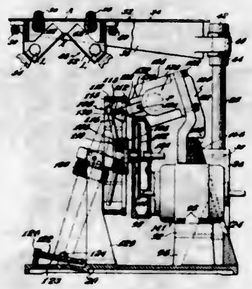
in time from one another by television blanking intervals and impressing the scanning raster fields on a scanning area, means energized from a source of electrical energy of a frequency equal to that of said scanning means for continuously propelling a motion picture film through said scanning area at a predetermined velocity, interrupting means connected with said propelling means for conditionally interrupting continuous film propulsion only during said blanking intervals, means responsive to the degree of shrinkage of film passing through said scanning area and coupled to said interrupting means for controlling the time durations of film interruptions in direct accordance with the degree of shrinkage manifested by the film.

2,750,443

MIRROR DRUM FACSIMILE SCANNER

Alexander Nyman, Dover, Mass., assignor to Alden Products Co., Brockton, Mass., a corporation of Massachusetts

Application June 18, 1951, Serial No. 232,221
3 Claims. (Cl. 178—7.1)



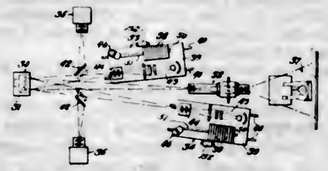
1. Apparatus for scanning a subject copy comprising means for guiding the copy along a predetermined path, a light sensitive device, an optical system for focusing light from the copy on the device along a light path, a rotor associated with said light path, a series of mirrors uniformly distributed about the axis of the rotor to cross said light path successively, the mirrors being positioned to scan the same transverse line of the copy when the copy is stationary, means for advancing the copy along said path in synchronism with said rotor so that successive mirrors scan successive juxtaposed transverse lines of the copy, and means having an aperture in front of said device in said light path, the parts being disposed so that the ratio of the minimum distance between the mirrors and the aperture to the distance between the aperture and the axis is substantially equal to the cosine of one-half the maximum scanning angle.

2,750,444

COMBINED SLIDE AND CARD PROJECTION APPARATUS FOR TELEVISION

Freeman H. Owens, New York, N. Y.

Application November 19, 1951, Serial No. 255,806
21 Claims. (Cl. 178—7.2)



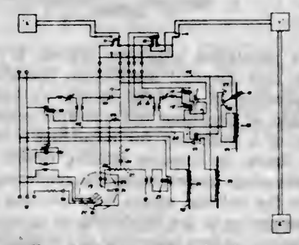
5. Apparatus for projecting a succession of selected subjects onto the mosaic of a television camera, comprising optical projecting means, means supporting said optical projecting means in projecting relation, holders for the subject matter to be projected, means for aligning said holders, one in front of the other, in a row at one side of said optical projecting means, means for shifting said holders, one at a time, laterally from said row into registry with said optical projecting means and then after projection, out of registry with said optical projecting means, to clear the same for the next holder, and means for advancing the row of holders step-by-step as individual holders are removed from the row of holders, there being two such apparatuses mounted on carriages and there being two tracks arranged to travel said apparatuses on convergent lines toward and away from the mosaic of the television camera and means adjustable on individual holders on the carriages for effecting adjustments of said carriages in accordance with subject matter of the individual holders.

2,750,445

RECORDING MECHANISM FOR TELEPHONE SYSTEMS

Lawrence Ernest Renton, Vancouver, British Columbia, Canada

Application July 14, 1950, Serial No. 173,909
7 Claims. (Cl. 178—23)



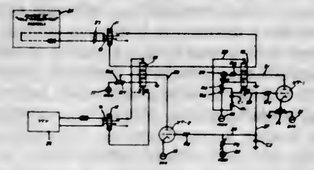
2. In a recording apparatus, a selective type carrier, electro-magnetic means for operating the type carrier actuated by direct current impulses, a traveling tape adapted to receive the imprint of the selected type, a second electro-magnetic means for moving the selected type into imprint engagement with said tape actuated by alternating current impulses, a third electro-magnetic means for moving said tape actuated by alternating current impulses, and means for sequentially supplying said alternating current impulses first to said electro-magnetic means to operate said hammer and then to said third electro-magnetic means to move said tape.

2,750,446

CODE TRANSLATING DEVICE

Wade B. Martin, Ramsey, N. J., assignor to American Telephone and Telegraph Company, a corporation of New York

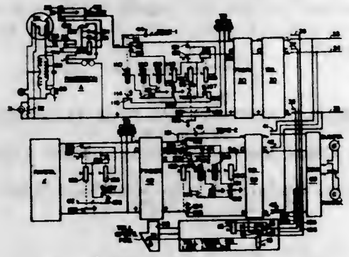
Application October 14, 1953, Serial No. 386,020
9 Claims. (Cl. 178—26)



1. In a telegraph repeater, a source of start-stop telegraph signals comprising a certain number of pulses, means for registering start-stop telegraph signals comprising a different number of pulses, means for repeating directly to said registering means certain of the pulses of a signal received from said source, timing means responsive to the start pulse of said signal for generating after a pre-

determined time interval a timed pulse, and means for utilizing said generated pulse to mark and nullify the remaining pulses of said signal for thereby qualifying said registering means to register an indication of the accuracy of said signal received from said source.

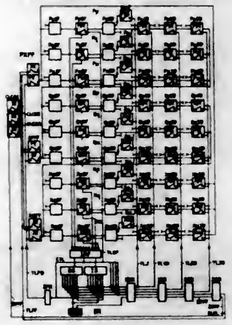
2,750,447
PAYSTATION TELEPHONE SYSTEM
Clarence E. Lomax, Chicago, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Application May 31, 1951, Serial No. 229,051
10 Claims. (Cl. 179—6.3)



1. In a paystation telephone system, a paystation including a coin disposal mechanism operable responsive to the operation of the hook-switch for collecting a deposited coin at one time and operable responsive to the operation of a push key for refunding a deposited coin at other times, an impulse sending device in said paystation, shunting means normally rendering said device ineffective for pulsing, means for removing said shunting means responsive to the depositing of an acceptable coin, connecting means for connecting said paystation to a called station, means responsive to the subsequent operation of the hook-switch for replacing said shunting means, blocking means in said connecting means for preventing the calling party at said paystation from momentarily operating said hook-switch to thereby release said connecting means but not to replace said shunting means in an attempt to establish a free call, and signalling means operable responsive to said last mentioned means for informing the calling party that said hook-switch must be operated an appreciable period before another outgoing call may be established, said period being sufficient to replace said shunting means thereby requiring the deposit of another acceptable coin before a subsequent call is permitted.

2,750,448
TELECOMMUNICATION SYSTEMS
Richard Mercer, Putney, London, England
Application May 14, 1951, Serial No. 226,131
Claims priority, application Great Britain May 31, 1950
13 Claims. (Cl. 179—18)

12. In a telecommunication exchange employing selector switching devices in trains for setting up desired connections each comprising a plurality of independently and instantly and exclusively operable operating members, each member having a distinctive numerical significance and when operated, connecting a common inlet to an outlet having a corresponding numerical significance and having first and second sets of leads of which the first set is divided into a plurality of groups, and wherein the sets are adapted for connection to each other, a plurality of selector switches assigned to each group of leads of the first set, the outlets of each selector having a different numerical significance for identifying a partial selection of the second set of leads, a plurality of connecting means, including additional selector switches, for connecting each of the first mentioned selector switches to leads of the second set, thereby to connect any of a group of leads of the first set to a lead of the second set through a selector switch, each outlet of said additional selector switches also having a different numerical significance for identifying other partial lead selections of the second set of leads, multiple connections between outlets of corresponding numerical significance of selector switches assigned respectively to several different groups of leads of said first set whereby connections from said different groups of the first set of leads are available over the same connecting means to a second set of leads and enable each group of leads of the said first set to have several different connecting means suitable for establishing connections to said second set of leads, registration means responsive to the numerical designation of one of said second set of leads and having separate means of access to each of the plurality of selector switching devices assigned to each group of leads of the first set

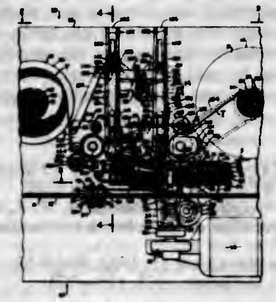


and to each of the selector switching devices of succeeding stages giving access to the numerically designated lead of the second set, a testing device, cyclic means by which the testing device is successively made instantaneously responsive to the idle or busy condition of the switching devices of each train including a selector switching device of the plurality assigned to one group of leads of the first set and a selector switching device of succeeding stages giving access to a numerically designated lead of the said set and is operated when a train is tested of which all the switching devices are idle, and operating means under control of said testing device to effect the simultaneous and instantaneous operation over said operating leads of the operating members of the switching devices of the train selected by said testing device to complete independently the connection between a selector switch of a given group of leads of the first set and the numerically designated line of the second set.

2,750,449
LONG PLAYING MAGNETIC TAPE RECORDER
Lincoln Thompson, Cheshire, Frank E. Runge, Branford, and William H. Lyon, Orange, Conn., assignors to The Soundscriber Corporation, New Haven, Conn., a corporation of Connecticut
Application November 7, 1951, Serial No. 255,184
22 Claims. (Cl. 179—100.2)

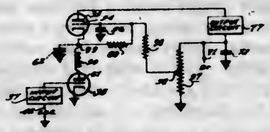
1. In a long playing magnetic tape recording and reproducing apparatus employing drive means for longitudinally advancing a relatively wide magnetic tape through the apparatus, a turntable having a plurality of electromagnetic transducer heads radially spaced apart located below the path of said tape, means responsive to said drive means for rotating said turntable in timed

relation with respect to the speed of said tape, and resilient means above said tape to press it down into



contact with said heads so as to trace a series of transverse parallel arcuate recorded tracks on said tape.

2,750,450
SERIES CONNECTED TOTEM-TRIODE AMPLIFIERS
John C. Achenbach, Haddonfield, N. J., and Simeon I. Tourshou, Philadelphia, Pa., assignors to Radio Corporation of America, a corporation of Delaware
Application April 20, 1951, Serial No. 222,132
1 Claim. (Cl. 179—171)



In a signal amplifying system, the combination comprising first and second electron tubes each having at least an anode, a cathode and a control grid, means connecting the cathode of said first tube to ground, an anode potential terminal connected with the anode of said second tube, means connecting the anode current paths of said tubes in series between ground and said anode potential terminal comprising a direct current circuit connected between the anode of the first tube and the cathode of the second tube, an automatic gain control voltage terminal connected to the control grid of the first of said tubes, a voltage divider network including a first and second resistors connected in series between ground and said anode potential terminal for supplying a biasing potential for the second tube at the junction of said first and second resistors, circuit means including a third resistor providing a direct current connection between the control grid of said second tube and the junction of said first and second resistors, and direct current conductive means for providing balanced tube impedances and a less remote cut-off characteristic for said signal amplifying system than otherwise would be present including a fourth resistor connected between the control grid of the second tube and the direct current circuit connected between the anode of said first tube and the cathode of said second tube.

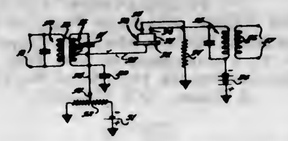
2,750,451
AUDIO SYSTEM
Robert P. Crow, Chicago, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Application March 13, 1951, Serial No. 215,355
7 Claims. (Cl. 179—171)

1. An audio amplifier system including in combination, an amplifying valve having at least one grid, means for applying an audio signal to a grid of said valve, a first diode coupled to the output of said amplifier system, means for providing a bias to said diode so that said diode conducts when the output of said amplifier system exceeds a predetermined value, a first network coupling said diode to at least one grid of said valve for providing a voltage thereto when said diode conducts, said network having a relatively long time constant so that the voltage applied therefrom to said valve produces a steady control of the gain thereof to hold the output of said amplifier below said predetermined level, a second diode coupled to the output of said amplifier system, means for biasing said second diode so that said second diode conducts when the output of said amplifier system exceeds



said predetermined value by a fixed amount, means connecting said second diode to said amplifier system so that the output thereof is clipped at the value at which said second diode conducts, and a second network connecting said second diode to at least one grid of said valve for providing a voltage thereto when said second valve conducts, said second network having a relatively short time constant so that the voltage applied therefrom to said valve produces an instantaneous control of the gain thereof, said second network being inoperative when said first network holds the output of said amplifier system at said predetermined level.

2,750,452
SELECTIVITY CONTROL CIRCUIT
Hunter C. Goodrich, Collingswood, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application March 21, 1951, Serial No. 216,765
10 Claims. (Cl. 179—171)

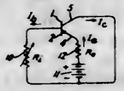


1. In combination, a resonant signal circuit, a semiconductor device having a semi-conducting body, a base electrode, an emitter electrode, and a collector electrode in contact with said body, means providing a source of control voltage connected in series with said resonant circuit, means connecting said resonant circuit and said last named means in series in the order named between said base electrode and a point of reference potential, means for varying said control voltage to vary the effective resistance between said emitter and base electrodes and the Q of said resonant circuit, means connecting said emitter electrode to said point of reference potential, and means providing a source of biasing potential connected between said collector electrode and said point of reference potential for applying biasing potentials to said collector electrode.

2,750,453
DIRECT CURRENT AMPLIFIER
Robert L. Pritchard, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application November 6, 1952, Serial No. 319,080
8 Claims. (Cl. 179—171)

7. An amplifier comprising a passive input device having a resistance value controlled by an external stimulus, a transistor having a current amplification factor less than

unity, a base, emitter, and collector elements, an output load device having a resistance which is low relative to that of the input device, and a single unidirectional voltage



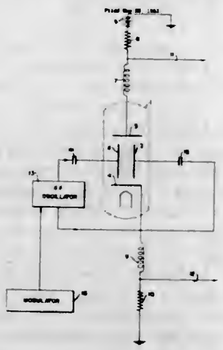
source, said input device being connected between said base and emitter elements through said voltage source and said load device being connected between said emitter and said collector through said voltage source.

2,750,454
ELECTRIC AMPLIFIER
William S. Melville, Rugby, England, assignor to The British Thomson-Houston Company Limited, a British company
Application December 17, 1952, Serial No. 326,389
Claims priority, application Great Britain December 20, 1951
8 Claims. (Cl. 179—171)



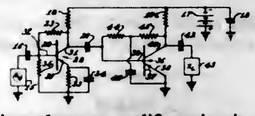
1. In combination, an electric load adapted to be connected to an alternating current source, an amplifier connected across said load comprising a capacitor network and a rectifier connected in parallel, said capacitor network comprising a saturable capacitor and a non-saturable capacitor connected in series, and conductors for applying a unidirectional signal voltage across the non-saturable capacitor.

2,750,455
RADIO FREQUENCY CONTROLLED PLASMATRON
Helmut John Geisler, Wappinger Falls, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application May 28, 1953, Serial No. 357,958
4 Claims. (Cl. 179—171)



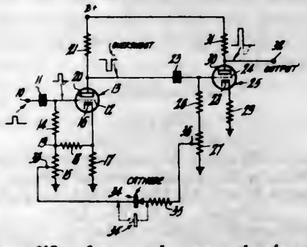
2. An amplifying system comprising a gaseous discharge device having a sealed envelope containing an ionizable medium and within which are mounted two pairs of spaced electrodes so positioned that at least a portion of the gap between the electrodes of each pair is common to both pairs, a source of direct current energy having a potential insufficient to produce ionization coupled to one of said pairs of electrodes through a choke coil filter, said one pair of electrodes comprising an anode and a thermionic cathode, a source of high frequency energy coupled to the other of said pairs of electrodes through a coupling capacitor filter, said other pair of electrodes being balanced to provide equal impedance to ground, a load circuit connected to said choke coil at a point remote from the associated electrode, and means including a modulator for varying the amplitude of the energy supplied by said high frequency source whereby said load circuit current is correspondingly modulated.

2,750,456
SEMI-CONDUCTOR DIRECT CURRENT STABILIZATION CIRCUIT
Frederick D. Waldhauer, Haddonfield, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application November 15, 1952, Serial No. 320,765
7 Claims. (Cl. 179—171)



3. A semi-conductor amplifier circuit comprising, in combination, a transistor including base, emitter, and collector electrodes, said transistor providing signal phase reversal between said collector and base electrodes, means connecting said emitter electrode to a point of fixed reference potential in said amplifier circuit, means for applying an input signal between said base and emitter electrodes, an output circuit coupled between said collector and emitter electrodes, means providing a source of direct energizing potential, direct current load resistance means connected in series relation with said energizing means between said collector electrode and said point of reference potential for providing a direct voltage on said collector electrode which is variable in response to variation in direct collector electrode current, and stabilizing means including a direct current conductive impedance element connected between said collector electrode and said base electrode, the magnitudes, nature, and relationships of the impedances of said load resistance means, said stabilizing means, and said transistor being selected so as to provide stabilization of the circuit operation of said amplifier circuit by providing for said base electrode a direct bias current which effectively is controlled by variation of the collector electrode voltage of said transistor, said direct bias current being effective to compensate for collector electrode voltage variation of said transistor to provide operating point stabilization of said transistor despite temperature changes, the interchange of transistors in said amplifier circuit, and the like.

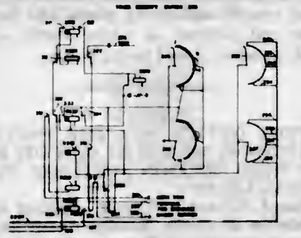
2,750,457
PULSE AMPLIFIER
Edward D. Padgett, Haddonfield, N. J., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Air Force
Application February 2, 1953, Serial No. 334,463
4 Claims. (Cl. 179—171)



4. An amplifier for a pulse wave having a very low repetition rate comprising, an input terminal, first and second vacuum tubes each having cathode, grid and anode

electrodes, a first coupling capacitor between said input terminal and the grid of said first tube, a second capacitor between the anode of said first tube and the grid of said second tube, said coupling capacitors having a high value of capacitance to pass the low repetition rate pulses and consequently introducing undesired overshoot immediately following each pulse and of opposite polarity to the respective pulse, first and second grid resistors connected from respective ones of said grids to points of reference potential, a diode and at least one resistor connected in series from an intermediate point on said second grid resistor to a point on said first grid resistor, said diode being poled to be non-conductive during said pulses but conductive during said overshoot following each input pulse, said resistors having values and said series circuit being connected to points on said grid resistors so selected that said pulses are substantially unaffected but the overshoot following each of said input pulses is substantially completely cancelled.

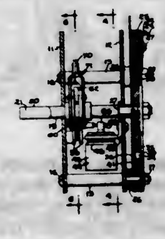
2,750,458
AUTOMATIC TRUNK ROUTINER
James S. Murray, Tampa, Fla., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Application August 6, 1953, Serial No. 372,743
18 Claims. (Cl. 179—175.2)



1. For use in an automatic unattended telephone exchange having a plurality of trunk lines terminating in a distant attended exchange and having a repeater associated with each of said trunk lines, each repeater having incoming conductors associated therewith, an automatic routine testing mechanism for automatically testing each repeater for seizure, satisfactory impulse repetition and current reversal in its incoming conductors, said mechanism comprising a start means, means controlled by said start means for seizing each idle repeater by way of its incoming conductors, means operated in response to the seizure of an idle repeater for sending a test number impulse series to the seized repeater, means in the repeater for repeating said impulse series over the trunk associated therewith, means in each repeater for reversing connections to its incoming conductors, means associated with each trunk and controlled only in accordance with a correctly repeated test number impulse series for instantaneously operating said last means to reverse connections to the incoming conductors of the repeater which repeated the impulse series, and test means for sounding an alarm at the attended exchange and for preventing further operation of the routiner upon failure of the routiner to seize an idle repeater and upon a failure of said fifth means to instantaneously reverse the connections to the incoming conductors.

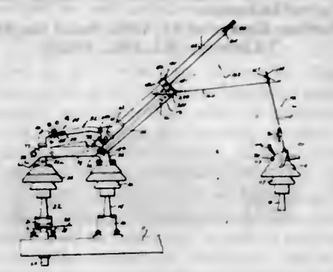
2,750,459
ELECTRICAL SELECTOR SWITCH
Everett E. Hosea, Kaukauna, and Adrian T. Godschalx, Appleton, Wis., assignors to Kaukauna Machine Corporation, Kaukauna, Wis., a corporation of Wisconsin
Application July 29, 1953, Serial No. 370,914
9 Claims. (Cl. 200—18)

1. An electric switch comprising, in combination, a selector switch mechanism including a movable contact and a series of stationary contacts arranged in sequence, an operator shaft adapted for reversible rotation for moving said movable contact into selective contact with said series of stationary contacts in forward and reverse sequence, means for indexing said movable contact into alined engagement with selected ones of said series of stationary contacts including a star wheel on said shaft and a resiliently biased follower, a reversing switch mechanism including a double throw switch unit having a two position operating lever, means for actuating said



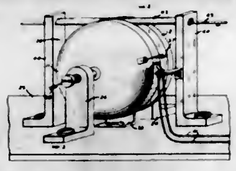
switch lever from one to the other of its two positions including a second follower for engagement with said star wheel, means for supporting said second follower to permit limited movement in unison with said star wheel upon reversal of rotation of said operator shaft and to permit disengagement of said follower after such limited movement, and means interconnecting said second follower and said two position operating lever of said double throw switch unit to actuate the latter during the limited unison movement of said follower with said star wheel.

2,750,460
QUICK BREAK ATTACHMENT FOR HIGH VOLTAGE DISCONNECTING SWITCHES
Samuel H. Kast, Greensburg, Pa., assignor, by mesne assignments, to I-T-E Circuit Breaker Co., Philadelphia, Pa., a corporation of Pennsylvania
Application December 12, 1952, Serial No. 325,640
10 Claims. (Cl. 200—48)



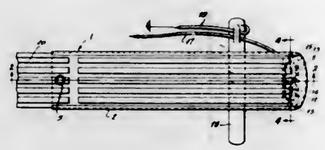
1. In a high voltage disconnect switch comprising a switch blade having rotational movement about its longitudinal axis and angular movement about its pivot; a jaw member and a hinged bearing; said hinged member carrying said switch blade; said hinged bearing having angular movement with said switch blade; said jaw member engaged by said movable switch blade when said disconnect switch is in closed position; a quick break attachment comprising a first and second arcing horn; said first and second arc horns being conducting resilient members; said first arc horn pivotally mounted on said jaw member; a bearing; said bearing loosely fitted on said switch blade; said second arcing horn pivotally mounted on said bearing; releasable interengaging means interconnecting said first and second arc horn.

2,750,461
APPARATUS FOR METERING CONDUCTIVE MATERIALS
Tillman T. Bunch, near Ashland, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application June 1, 1953, Serial No. 358,718
6 Claims. (Cl. 200—61.13)



1. Apparatus for metering electrically conductive materials, which comprises a pair of pole pieces having opposed, spaced, annular pole faces, means for rotatably supporting the pole pieces for rotation freely about a common axis concetnric with respect to the annular pole faces, a source of magnetomotive force for producing a magnetic flux within said pole pieces to create an annular magnetic field across the air gap between the pole faces, means for guiding a moving electrically conductive material along a fixed path between the pole faces substantially perpendicular to the magnetic field and at a fixed distance from the axis of rotation of the pole pieces, said magnetic field reacting with eddy currents induced in the moving electrically conductive material to cause angular displacement of the pole pieces about their axis of rotation, eddy current damping means tending to resist said angular displacement of the pole pieces, and means rotatable with one of the pole pieces for indicating the degree of angular displacement thereof.

2,750,462
UNIVERSAL ACCELERATOR AND PEDAL SWITCH
Arthur N. Milster, Richmond Heights, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a corporation of Delaware
Application December 18, 1952, Serial No. 326,736
7 Claims. (Cl. 200—61.89)



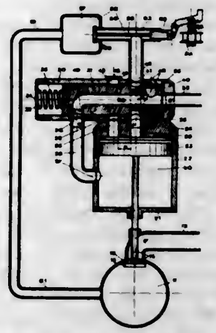
1. A switch for association with the accelerator pedal of an automotive vehicle comprising a base plate, an upper plate secured to said base plate, a tongue cut from said upper plate and pivoted to the upper plate at one end thereof and spaced from the base plate, a bridging member secured to said base plate opposite the pivoted end of the tongue, a resilient element having one end thereof supported in said bridging member, a contact fixed to the other end of said resilient element, a contact fixed to the base plate and in alignment with the contact on the resilient element and normally in engagement therewith; and a member mounted on said tongue for contacting the resilient element and separating the contacts when the tongue is pivoted relative to said upper plate.

2,750,463
ELECTRIC SWITCHES OF THE SNAP-ACTION TYPE
John O. Roeser, Chicago, Ill., assignor to Electro-Snap Switch & Mfg. Co., a corporation of Illinois
Application July 12, 1952, Serial No. 298,607
4 Claims. (Cl. 200—67)



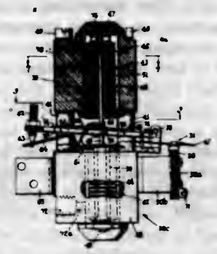
1. An electric switch providing at least two pairs of fixed contacts with one pair arranged in superimposed spaced relation with respect to the other pair of fixed contacts, spring plates interposed between the pairs of fixed contacts in superimposed relation with respect to each other and having contacts at opposite end portions with the contacts of corresponding end portions in engagement with respect to each other and adapted to have alternate engagement with respect to the adjacent fixed contacts, said spring plates having corresponding bight portions and spring tongues extending inwardly from the bight portions, a stem connecting the adjacent end portions of the tongues together, an actuating plunger connected to said stem, spring means acting on said stem to move said stem in one direction longitudinally with respect to its length, and a tie plate carried at opposite end portions of one of said spring plates and having curved fingers, the end portions of which overlie adjacent end portions of the other of said spring plates.

2,750,464
CONTROL DEVICE FOR THE PNEUMATIC SWITCHING MEANS OF CIRCUIT BREAKERS WITH SECTION SWITCHES IN ELECTRICAL LINES
Albert Viboud, Grenoble, France, assignor to Etablissements Merlin & Gerin, Société Anonyme, Grenoble, France, a corporation of France
Application March 18, 1952, Serial No. 277,326
Claims priority, application France April 4, 1951
8 Claims. (Cl. 200—82)



1. Control device for actuating in an electrical line by means of a pressure fluid the switching means of a circuit breaker for interrupting the current of the line and the switching means of a section switch for separating the line from the circuit breaker; said device including a source of pressure fluid, pressure fluid supply lines connecting said source of pressure fluid to said circuit breaker and to said switch section separately, a control valve disposed between said source of pressure fluid and the supply line to said circuit breaker and adapted to control the passage of the pressure fluid therebetween; said device further including control organs inserted between said source of pressure fluid and each of said supply lines, said control organs including a distributor valve inserted between said source of pressure fluid and said supply line to the section switch, said control organs further including timing means associated with said distributor valve and with said control valve, said timing means including mechanism for operating said control valve thereby; distributing channels being disposed in said distributor valve and passages for pressure fluid in said timing means and ducts interconnecting the same; thereby, on admittance of pressure fluid to said distributor valve, starting from the rest position thereof, to control automatically, in predetermined spaced timing, the opening of the control valve and thus the setting in of the opening cycle of the switching means of the circuit breaker; and, on displacement of the piston of said distributor valve, the connecting of said source to the supply line of the switching means of the section switch and thus the starting of its opening cycle; thereon, on further displacement of said piston of the distributor valve and indepedently of the opening cycle of the section switch, the closing of said control valve; and, when the release mechanism had been switched off, the disconnecting of said supply line of the section switch from said source.

2,750,465
FLUID PRESSURE OPERATED CONTROL
Joseph W. Yowell, Westport, and Donald B. Miner, Stratford, Conn.
Application February 20, 1951, Serial No. 211,936
18 Claims. (Cl. 200—83)



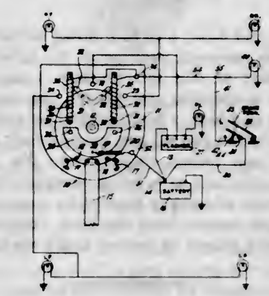
1. A control responsive to differences in fluid pressures, comprising a pair of translating devices having movable parts, for translating pressure differences into mechanical movements of said parts; control means having a movable member comprising two thin, superposed, engaging plates; two link means connected respectively with said movable parts and engaging said member on opposite sides of the plates at closely juxtaposed points, separated only by the thickness of the plates, for applying opposing forces from the parts to said member; and adjustment means for shifting the point of engagement of one of said link means with respect to the point of engagement of the other link means, thereby to adjust the response of the control.

2,750,466
MERCURY FLOAT RELAY
James R. Patterson, Shreveport, La.
Application May 12, 1953, Serial No. 354,456
1 Claim. (Cl. 200—112)



A mercury float relay comprising: a casing having a mercury reservoir and including a partition extending upwardly within the reservoir to divide the same into a pair of side by side mercury compartments communicating with one another above the partition; terminal means in the bottoms of the respective compartments; a rocker arm fulcrumed on the casing above and substantially midway between said compartments and including an armature spaced from its fulcrum point; a plunger depending from said arm in alignment with and arranged to shift into and out of one of said compartments responsive to rocking of the arm about its fulcrum, thus to displace a body of mercury in said one compartment to raise the level thereof above the partition and bring the same into communication with a body of mercury in the other compartment, thereby to provide a mercury-to-mercury bridge between the terminal means; and electromagnetic means located adjacent said armature and controlling movement of the plunger.

2,750,467
DIRECTION SIGNALLING SYSTEMS
Jesse R. Hollins, Brooklyn, N. Y.
Application June 29, 1953, Serial No. 364,815
4 Claims. (Cl. 200—116)

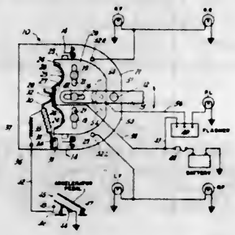


1. A selector switch for use in an automotive vehicle turn signaling arrangement, said switch comprising, in combination a base; a dielectric component oscillatably mounted on said base and movable from a neutral position to either of a pair of operated positions; means biasing said component to the neutral position; a conductive element mounted on said component and having a spaced pair of latching portions; a first terminal on said base connected to said conductive element; a pair of bimetallic latch arms on said base each releasably engageable with a latching portion in a different operated position of said component and operable, after a predetermined heating period, to disengage the latching portion to provide for said biasing means restoring said component to the neutral position; a pair of heating coils each mounted on a different arm and having an end connected to its associated arm; a second terminal on said base connected to the opposite ends of said coils; a pair of end contacts and an intermediate contact on said base; and a circuit closer on said component operable to connect said intermediate contact to a different end contact in each operated position of said component; whereby, when said component is moved to an operated position, one heating coil is connected between said terminals through its associated arm and said conductive element, and the corresponding circuit for the other coil remains open so that its associated latch arm remains in a potential latching position.

2,750,468
DIRECTION SIGNALLING SYSTEMS
Jesse R. Hollins, Brooklyn, N. Y.
Application June 29, 1953, Serial No. 364,801
3 Claims. (Cl. 200—116)

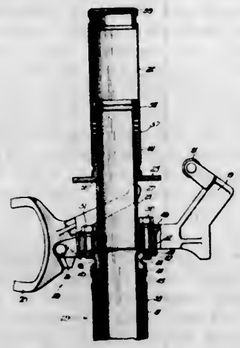
1. An automatically latched selector switch including a base; a slide movably mounted on said base and hav-

ing a pair of longitudinally spaced recesses in an edge thereof, said slide being movable from a neutral position to either of a pair of operated positions; means biasing said slide to the neutral position; a conductive strip having latch portions embraced in said recesses and a connecting portion extending along such edges; a dielectric strip overlying said connecting portion; a bi-metallic arm mounted on said base and having electrically conductive latch means on its free end normally pressed against said dielectric strip and engageable in either of said latch portions to releasably latch said slide in either operated position; an intermediate contact and a pair of end contacts



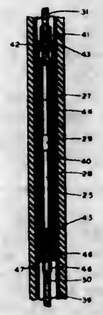
mounted on said base; a circuit closer on said slide operable, in either operated position of the latter, to connect an end contact to said intermediate contact; a heating coil for said bi-metallic arm having one end electrically connected to said arm; a first terminal on said switch connected to the other end of said heating coil; and a second terminal on said switch connected to the other end of said heating coil; said arm being operable, after a predetermined period of heating thereof by said coil, to disengage said latch means from the latch portion to provide for said biasing means to restore said slide to the neutral position.

2,750,469
CIRCUIT INTERRUPTER
Charles H. Baker, Maywood, Ill., assignor to S & C Electric Company, Chicago, Ill., a corporation of Delaware
Original application May 22, 1950, Serial No. 163,511, now Patent No. 2,651,695, dated September 8, 1953. Divided and this application July 13, 1953, Serial No. 367,590
8 Claims. (Cl. 200—116)



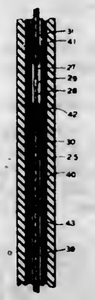
1. In a dropout fuse construction wherein a member is released for longitudinal movement under the influence of a spring to unlatch a fuse tube, in combination, a terminal fitting adapted to be detachably secured to one end of said fuse tube, a guide tube carried by said fitting through which said member is movable, an unlatching tube slidably mounted on said guide tube for unlatching said fuse tube, a coil compression spring reacting between said tubes and arranged to be compressed further when said member engages said unlatching tube, and stop means between said tubes limiting their relative movement when said member engages said unlatching tube and moves the same to prevent said spring from going solid.

2,750,470
ELECTRIC FUSE
Joseph Robert McBride, Hampton, Ga., assignor to Southern States Equipment Corporation, a corporation of Georgia
Application January 28, 1954, Serial No. 406,767
12 Claims. (Cl. 200—120)



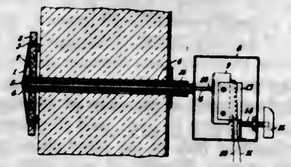
1. An electric fuse comprising a tubular element of insulating material, a fusible element disposed within said tubular element, a conductor extending out of at least one end of said tubular element and electrically connected with said fusible element, the outside of said conductor being substantially smaller than the inside of said tube to define a space therebetween and yieldable sealing means including a viscous fluid and a retaining element normally disposed in said space in proximity to said conductor for rendering said one end of said tubular element weathertight, said retaining element being effective normally to aid in holding said fluid within said tube and being releasable in coordination with the rupture of said fusible element.

2,750,471
ELECTRIC FUSE
Joseph R. McBride, Hampton, Ga., assignor to Southern States Equipment Corporation, a corporation of Georgia
Application December 23, 1953, Serial No. 399,945
8 Claims. (Cl. 200—120)



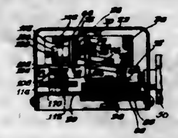
1. Sealing means for one end of a fuse tube in which a fusible element is mounted comprising a conductor connected with said fusible element and extending out of one end of said tube to form a terminal for said fusible element, a first sealing member mounted on said conductor, and a second sealing member releasably mounted on said tube and normally disposed in spaced relation to said first sealing member, said first sealing member being movable into engagement with said second sealing member to form therewith a seal for said one end of said tube in coordination with the establishment of an arc therein by said fusible element, said second sealing member being releasable from said tube in coordination with the establishment in said tube of a predetermined pressure condition.

2,750,472
AUTOMATIC THERMOSTAT DEVICES
Charles H. Strange, White Plains, N. Y., assignor to Elsa L. Strange, Jacksonville Beach, Fla.
Application March 20, 1953, Serial No. 343,731
6 Claims. (Cl. 200—137)



1. A thermostat for temperature control comprising a ceramic slab formed with a central opening therein, a ribbon having its ends secured to said slab, said ribbon being of high temperature resistant metal of a high coefficient of expansion, an electric switch, a rod slidable through said opening and having one end secured to the center of said ribbon at a right angle, and the other end actuating said switch.

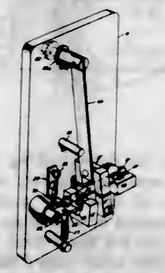
2,750,473
SENSITIVE SNAP-ACTING ROOM THERMOSTAT
Martin C. Kiley, Evanston, Ill.
Application May 17, 1954, Serial No. 430,089
7 Claims. (Cl. 200—138)



1. A room thermostat comprising a fixed contact, a movable contact, a spiral bimetal element, means fixing one end of said bimetal element, spring means secured to the free end of said bimetal element and to said movable contact, said spring means being more readily deformable than said bimetal element, a ball, means securing said ball rotatably to said bimetal element at the free end thereof for movement therewith, means forming a corrugated surface, means to support said corrugated surface in contact with said ball so that said ball rolls over the corrugations on said surface as the free end of said bimetal element moves, and the spacing between adjacent corrugations on said surface being greater than the spacing between said contacts after said bimetal element has moved said ball from one corrugation to the next corrugation in contact opening direction under conditions where such degree of movement is sufficient to separate said contacts.

2,750,474
MAGNETIC ACTUATING MECHANISM
Willard F. M. Gray, Pittsfield, Mass., assignor to General Electric Company, a corporation of New York
Application March 28, 1955, Serial No. 496,993
16 Claims. (Cl. 200—138)

1. An actuating mechanism, comprising, in combination, support means; a first magnet having a pole portion of given polarity and mounted on said support means for movement of said pole portion along a predetermined path between a first and a second position; a second magnet fixedly mounted on said support means and having a pole portion of polarity opposite said given polarity arranged adjacent said predetermined path so as to be opposite and spaced from the pole portion of said first magnet when the latter is in its first position; and a third magnet having a pole portion of polarity opposite said given polarity arranged adjacent said second magnet and displaced therefrom along said predetermined path, said third magnet being mounted on said support means for



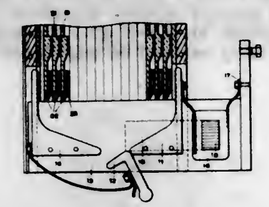
movement between a forward position with its pole portion adjacent said predetermined path so as to be spaced from and opposite the pole portion of said first magnet with the latter in its second position, and a rearward position slightly away from said predetermined path, said third magnet being constantly urged toward its rearward position and moving by the force of attraction exerted by said first magnet into its forward position in opposition to said constant rearward urging during movement of said first magnet from its first toward its second position, and being moved by said constant rearward urging into its rearward position during the return movement of said first magnet.

2,750,475
THERMOSTATIC SWITCH
Bertil H. Clason, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 10, 1951, Serial No. 205,367
9 Claims. (Cl. 200—138)



1. A thermally responsive switch for automotive vehicles comprising an adapter shell for securing said switch in the engine of a vehicle, a tubular member secured in said adapter shell, said tubular member having a bimetallic contact member axially secured therein, a terminal plate of insulating material secured in said shell, said terminal plate having a terminal contact member secured thereto and extending downwardly and angularly into said tubular member into juxtaposition with said bimetallic contact member and means adjustably secured in said terminal plate to directly engage and regulate the relative position of said terminal contact member relative to said bimetallic contact member.

2,750,476
METHOD AND DEVICE FOR EXTINGUISHING ELECTRICAL ARCS IN CIRCUIT BREAKERS
André Latour, Grenoble, France, assignor to Etablissements Merlin & Gerin, Grenoble, France
Application June 8, 1953, Serial No. 360,299
Claims priority, application France October 13, 1949
15 Claims. (Cl. 200—147)



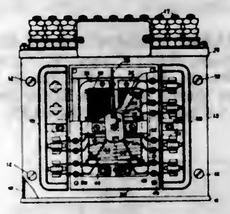
1. In a device for extinguishing an electric arc to be drawn between separable contact members, a set of at least two plates of insulating material disposed transversely of the direction of separation of said contact members, said plates having upon their faces conductive elements straddling the lower edges thereof, conductive elements on opposite faces of each plate and opposite elements in each space between juxtaposed consecutive plates of the set diverging in V-form relatively to each other, thereby to draw the arc into the spaces between said plates, turn it round into a position substantially parallel to said plates and cause the arc to form peripherally expanding loops in said spaces; said conductive elements being extended from said lower edge into said spaces terminating in the lower part thereof, the part of the spaces above said elements being so dimensioned that the imaginary radii from the geometric center of said part to the lateral tips of the diverging conductive elements form an angle less than π so that when the roots of the loops have travelled to said tips, the loops may develop within said spaces to a curve of an arcus greater than π.

2,750,477
SWITCH
William E. Brown and Kenneth E. Bondurant, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 24, 1952, Serial No. 295,186
2 Claims. (Cl. 200—153)



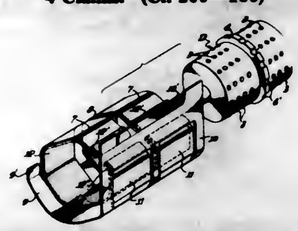
1. An electric switch comprising, a housing; an actuator slidable in the housing, said actuator having a transverse notch adjacent one end; stationary contacts supported by the housing; a movable contact on the actuator engageable with the stationary contacts; a lever pivotally attached to the actuator, said lever having cam means actuatable when the lever is rotated to cooperate with the housing to move the actuator within the housing; and means carried by the cam means for engagement with the notch to hold the cam crest in engagement with the housing to maintain the switch in selected circuit controlling position.

2,750,478
REPLACEABLE CONTACT ARMS FOR RELAYS
Oscar S. Field, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.
Original application October 20, 1949, Serial No. 122,475, now Patent No. 2,617,846, dated November 11, 1952. Divided and this application May 16, 1952, Serial No. 288,282
4 Claims. (Cl. 200—166)



1. In a relay structure of the type described, a hollow case of molded material, a plurality of rectangular slots around said case adjacent its edge, said slots being open at one side, a cylindrical hole in the same plane but slightly off center with respect to each of said slots, a plurality of contact fingers having rectangular cross-sections of a proper width and thickness to just fit into said slots by insertion through their open sides, and a tapered plug pressed into each of said cylindrical holes to hold said contact fingers in their respective slots.

2,750,479
PROTECTING AND CLEANING MEANS FOR MOVABLE ELECTRICAL CONTACT ELEMENTS
Edward H. Guboff, Los Angeles, Calif., assignor to Chicago City Bank and Trust Company, a corporation
Application November 10, 1952, Serial No. 319,703
4 Claims. (Cl. 200—166)

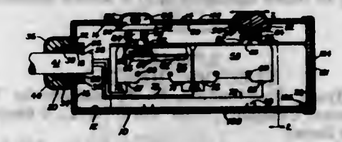


1. A contact element wiping unit for a drum tuning assembly of the type having a tuning assembly housing open along one side thereof and a drum rotatably supported within said housing having contact elements in the periphery thereof; comprising a cradle of yieldable sheet material adapted to removably encompass a major portion of the circumference of the drum periphery and terminating in lip portions spaced apart a distance less than the length of the diameter of the drum whereby said cradle may be snapped in resiliently retained encompassing relation over said drum periphery, an elongated fabric wiping strip secured solely at its longitudinal ends to said lip portions to depend therefrom in close proximity to the inner surfaces of said cradle and form a seat for said drum in wiping relation thereto as the drum is rotated, and means for restraining said cradle against rotation about the axis of said drum during rotation of the drum.

2,750,480
CIRCUIT CONTROL DEVICE
Charles B. Freeman, Ferndale, Mich.
Application January 29, 1953, Serial No. 334,064
10 Claims. (Cl. 200—168)

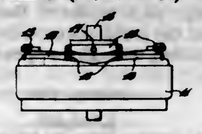
1. A circuit control device comprising; a tubular casing having a flat lengthwise wall portion provided with

an aperture; a switch means supporting bracket within said casing and carried thereby said bracket having a portion thereof paralleling said casing wall portion and including an opening; switch means mounted on said bracket and including an operating element positioned opposite said aperture and spaced from said wall portion; a movable push button independent of said ele-



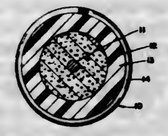
ment for actuating said element, said button including a head portion projecting outwardly through said aperture, a stop portion for limiting outward projection of said head portion and a shank portion in juxtaposition to said operating element and extending within said opening; and resilient means normally biasing said button with its said stop portion against said wall portion.

2,750,481
VARIABLE ELECTRICAL RESISTANCES AND POTENTIOMETERS
Paul X. Fox, Horsforth, near Leeds, England
Application October 11, 1954, Serial No. 461,591
10 Claims. (Cl. 201—48)



1. A variable electrical resistance or potentiometer, characterised by the provision of a cam track by means of which up and down movement is imparted to at least one leg carried off-centre by a centrally pivoted contact slipper, together with means for keeping said leg in contact with the cam track, the arrangement being such that the controlled pivotal movement of the slipper due to engagement of the leg with the cam track alters the contact point of the slipper with the winding, in addition to its normal adjustment due to the spindle drive, whereby the point of contact of the slipper with the winding gains or loses in relation to the normal linear increment of movement.

2,750,482
HIGH TEMPERATURE ALARM
Thomas F. Peterson, Shaker Heights, Ohio
Application January 10, 1955, Serial No. 480,973
2 Claims. (Cl. 201—63)



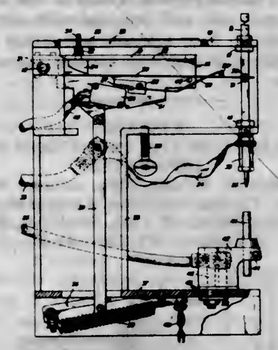
1. A high temperature responsive electric control actuating device of the fusible insulation type and comprising a cable having an inner conductor of metal; an amorphous substance of polyisobutylene combined with conducting particles for bringing said substance within the semi-conducting range; an insulating tube of a thermoplastic resin impermeable at room temperatures, said tube being arranged around said inner conductor and said amorphous substance being interposed between inner conductor and tube; and a metallic conductor arranged around the outside of the tube.

2,750,483
RESISTOR BULB
Henry Veerman, Jr., Livingston, N. J., assignor to Weston Electrical Instrument Corp., Newark, N. J., a corporation of New Jersey
Application October 26, 1953, Serial No. 388,098
9 Claims. (Cl. 201—63)



1. A resistor bulb for the electrical measurement of temperature comprising a mounting head having an axial bore therethrough, a metal cup seated within the outer portion of said bore and having its rim mechanically secured and sealed to the adjacent peripheral edge of said mounting head, a pair of contact pins extending through the bottom wall of said cup and insulated therefrom, a bushing of insulating material having a pair of wires extending therethrough, a metal tube secured to and axially of the inner end of said bushing, a winding of resistance wire on and insulated from said tube, and soldered connections between the ends of said pair of wires and respectively said contact pins and said resistance wire.

2,750,484
UNIFORM PRESSURE RESISTANCE WELDING APPARATUS
Lux H. Ewald, New York, N. Y.
Application March 7, 1955, Serial No. 492,563
10 Claims. (Cl. 219—4)



3. A spot-welding head comprising a frame, a welding arm mounted for reciprocation therein, a pressure arm pivotally supported on said frame, a leaf spring connected at one end with said pressure arm and having its other end connected to said welding arm, a fulcrum member carried by the pressure arm and adapted to bear against said spring in a predetermined position according to the welding pressure to be applied through said welding arm, a welding current control switch mounted on the pressure arm, a pivoted rocker carried by the pressure arm

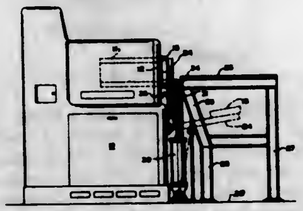
and adapted to actuate said switch, and a trip rod for rotating said rocker having an end arranged to be moved by the free end portion of said spring.

2,750,485
ELECTRODE HOLDER AND EYE SHIELD COMBINATION FOR ELECTRIC WELDING
Louis Kun, Jr., Louis Kun, Sr., and Zoltan Dan, Lorain, Ohio
Application March 11, 1952, Serial No. 275,902
3 Claims. (Cl. 219—8)



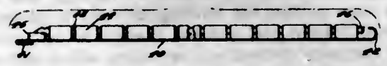
1. In a welding electrode holder, a conductive barrel having a side wall and having open forward and rear ends, an insulating plug closing said forward end, at least one hole in said side wall rearwardly of said forward end, a guide block in said barrel rearwardly of said hole, said guide block having an axial bore and at least one hole extending transversely therethrough and registrable with the barrel hole, a slide bar slidably engaged in the bore of the guide block, said slide bar having a forward end and a rear end, said slide bar having at least one hole adjacent to its forward end which is registrable with the hole of the barrel and guide block for receiving an end of an electrode, a stem having a forward end secured to the rear end of the slide bar and a rear end, a collar fixed in and located intermediate the ends of said barrel and slidably supporting said stem, a nut secured on the rear end of the stem rearwardly of said collar, a tubular bushing having a forward end secured axially to the rear end of said barrel, said nut being slidable in said bushing, a helical spring circumposed on said stem and compressed between said collar and said nut, said spring serving to retract said stem and slide bar rearwardly in said barrel, means connecting the rear end of the barrel and the forward end of the bushing, a hand lever pivoted intermediate its ends on said means, said lever having a first portion arranged to bear freely against said nut and a second portion outside of said bushing, said bushing having a side wall provided with opening means through which the lever extends, and spring means normally retracting said first lever portion rearwardly away from said nut.

2,750,486
DOOR MECHANISM FOR INDUCTION HEATING APPARATUS
Charles N. Howell, Poland, Ohio, assignor to Lombard Corporation, Youngstown, Ohio, a corporation of Ohio
Application March 10, 1953, Serial No. 341,486
12 Claims. (Cl. 219—10.67)



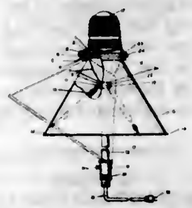
7. In an induction furnace of the type having induction coils and a work-retaining door adjacent said induction coils; the combination of door operating means comprising an arm for pivotally mounting said work retaining door at a point substantially removed therefrom, said arm being of relatively rigid construction and having a bearing surface, means comprising a roller and carrier means therefor for engaging said bearing surface, means to move said rollers along said bearing surface, and means to confine movement of said rollers to a predetermined path whereby said arm is caused to pivot about said mounting to move said door into a closed position.

2,750,487
ELECTRIC HEATER
Lee P. Hynes, Haddonfield, N. J., assignor to Turbine Equipment Company, New York, N. Y., a corporation of New Jersey
Application August 12, 1952, Serial No. 303,949
12 Claims. (Cl. 219—19)



1. In an electric heater, an elongated metallic strap, clips at intervals along the strap in pairs extending diagonally oppositely from the strap at the same side at various points along the strap, insulators arranged in line against that side of the strap and having in the opposite end surfaces of the insulators opposed recesses adjoining the strap which have opposite diagonally disposed surfaces engaged by the clips, there being at least one longitudinal opening through each insulator, the openings being in line throughout the group of insulators, and electric resistor means extending through the openings of a plurality of the insulators.

2,750,488
SWIVEL MARKER FOR ELEVATED RUNWAY FIXTURES
Harold A. Van Dusen, Jr., South Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application April 8, 1953, Serial No. 347,515
3 Claims. (Cl. 240—1.2)



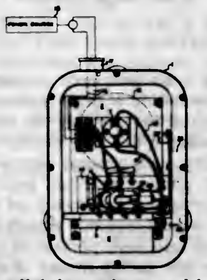
1. In an elevated airport runway lighting fixture including a light source, a convex housing supporting said light source and having an adapter socket at one end and a radially extending flange at an end remote therefrom, a rigid supporting column extending into said socket, in combination with a self aligning yieldable conical apron arranged to reflect light shed by said light source and having a base margin and a truncated margin, said truncated margin closely surrounding said housing and being normally in continuous bearing relation on said flange, a spring interposed in tension between said housing and the base margin of said apron and at an acute angle with respect to the axis of said column, said spring normally urging said apron against said flange concentrically with said housing, whereupon application of an external force will swivel said apron on a point of its truncated margin bearing on said flange and under lateral restraint by said housing and removal of said force will permit return of said apron to normal position as aforesaid under the action of said spring.

2,750,489
PHOTOGRAPHIC ILLUMINATING DEVICE
Horace N. Gibson, St. Paul, Minn.
Application December 18, 1952, Serial No. 326,637
20 Claims. (Cl. 240—1.3)



1. A photographer's light reflector for reducing a subject's shadow with respect to a camera lens including in combination a body of light reflective material having an opening near the center thereof, a light source positioned out of the path of light rays from said reflector, said reflector directing all of the light rays toward a common focal point, the sum of the distance from the focal point to any point on the reflector and from this point on the reflector to the center of the light source being a constant, and camera supporting means for supporting a camera lens directed through said opening.

2,750,490
EMERGENCY LIGHTING UNIT FOR SHIPS
Raymond J. McGoldrick, Auburndale, Mass.; Mary B. McGoldrick, administratrix of said Raymond J. McGoldrick, deceased
Application November 21, 1952, Serial No. 321,795
2 Claims. (Cl. 240—37.1)



1. An emergency lighting unit comprising, in combination, a relay including an armature and including an electromagnet connectable to a source of power, a battery, a lamp, switch means on said armature and movable in one direction of movement in response to de-energization of said electromagnet to connect said battery to said lamp in closed circuit relation, and movable in an opposite direction of movement in response to energization of said electromagnet to disconnect said battery from said lamp, an apertured latch member on said armature, a manually operable member movable to enter the aperture in said latch and to move said switch means a first predetermined amount in its opposite direction of movement while said electromagnet is de-energized to disconnect said battery from said lamp, and to subsequently move said switch means a predetermined amount in its one direction of movement to lockingly engage said manually operable member and retain said switch means in its disconnecting position, and means including said armature arranged operable in response to energization of said electromagnet to release said latch from engagement with said manually operable member.

2,750,491
SEALED BEAM LIGHT
Harold J. Anderson, Kansas City, Mo., assignor to Northeast Tool Die Works, Inc., Kansas City, Mo., a corporation of Missouri
Application February 8, 1955, Serial No. 486,781
4 Claims. (Cl. 240—41)

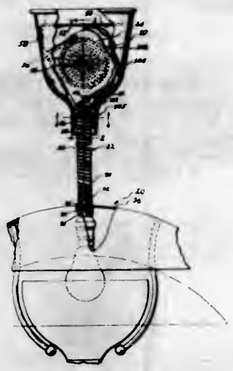


1. A sealed beam light comprising, a lens and a parabolic mirror permanently sealed together at the marginal portions thereof and enclosing an open space between them, the focal point of the parabolic mirror being within said open space, a tubular member extending axially from the parabolic mirror into said open space and terminating in an inwardly projecting flange defining an axial opening communicating with said open space, the portion of said tubular member adjacent the parabolic mirror being permanently sealed thereto, a lamp having a bulb with a filament therein and a shank extending therefrom with electrical terminals connected to the filament, an outwardly projecting flange on the lamp shank adjacent the bulb and slidable into the bore of said tubular member and engaging said inwardly projecting flange with the lamp bulb extending through the axial opening whereby the filament is positioned substantially at the focal point of the parabolic mirror, a plug member removably secured to the parabolic mirror and having a portion extending into the tubular member with a bore in said plug portion receiving the lamp shank, compressible means in the tubular member and between said plug portion and lamp flange and forming a tight seal between the tubular member and lamp shank when the plug is secured to the parabolic mirror, and contacts in the plug connectable with an electric circuit and having portions extending longitudinally of the bore in the plug and in circuit making engagement with the terminals of the lamp filament.

2,750,492
LIGHTING FIXTURES
Everett C. Young, Cleveland, Ohio
Application September 8, 1953, Serial No. 378,840
5 Claims. (Cl. 240—71)

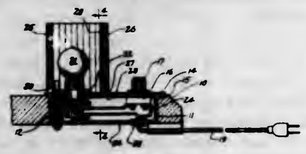
1. A vertically suspended lighting assembly comprising a housing, a wind-up mechanism in the housing, a flexible cable supported on the wind-up mechanism and having one end portion secured to the mechanism and the other end disposed outside said housing, a lighting fixture secured to said other end of the flexible cable and disposed below the housing, an electrical conducting wire having a permanently coiled intermediate portion of helical shape which is contractible and extensible as the lighting fixture is moved up and down relative to the housing, and a hollow post supported by and projecting downwardly from the housing, said post receiving and containing an intermediate portion of the flexible cable adjacent to the housing and being disposed within

the coiled portion of the wire whereby parts of the cable and the wire coil adjacent to the housing are maintained



in spaced relation to each other as the fixture is moved relative to the housing.

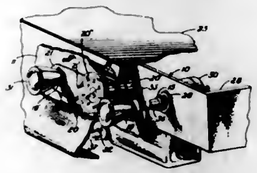
2,750,493
LAMP AND SHADE ASSEMBLY
John W. Nordstrom, Gallitzin, Pa.
Application May 14, 1954, Serial No. 429,801
3 Claims. (Cl. 240—81)



1. A lamp and shade assembly comprising a base having a circular opening therein, a housing rotatably disposed in said opening and being formed with a top plate overlying said base at the edge of the opening therein, an electric lamp socket disposed in said housing and extending upwardly through the top plate of said housing, said socket being adapted and arranged to support an electric lamp in its upper end, upstanding front and back panels secured by the lower edges to said plate in spaced face to face relation one each on the front and back sides of said socket, a reflector panel secured by its lower edge to said plate and disposed adjacent to said back panel on its confronting face, and side members disposed between said front panel and said reflecting panel on each of the other two sides of said socket, said side members being formed of a plurality of sheets each of substantially the same thickness as said front and back panels, the sheets of each side member being of the same size and abutting each other, said reflector panel and said side members and said plate forming an open-topped box enclosing said socket.

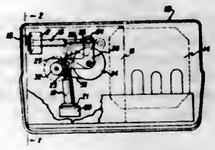
2,750,494
MOUNTING VEHICLE FOR RADIO RECEIVERS
Richard C. Marholz, Chicago, Ill., assignor to Raytheon Manufacturing Company, a corporation of Delaware
Application October 17, 1952, Serial No. 315,402
3 Claims. (Cl. 250—14)

1. In a vehicle radio receiver mounting assembly, a radio receiver, a vehicle supporting member for supporting said radio receiver and having apertures therein, detachable membes received by certain of said apertures and secured to said supporting member, an escutcheon plate positioned on one side of said supporting member and having a well therein, a dial indicator positioned in said well on said one side of said supporting member, a tubular elongated transparent member extending backward from said dial indicator through said supporting member and having one end secured to said dial indicator, means securing said escutcheon plate to said detachable



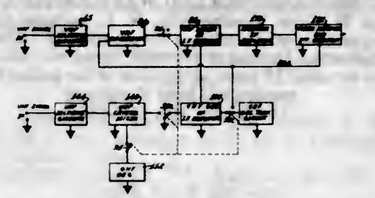
members, a case for said radio receiver having operative radio components therein and positioned on the other side of said supporting member, means securing the other end of said transparent member to said case, and means for securing said case to said detachable member enabling said supporting member to be positioned between said escutcheon plate and said dial indicator on said one side and said case on said other side.

2,750,495
RECEIVER WHICH TUNES BY ADJUSTING MAGNETIC CORE ANTENNA
Franklin C. Brewster, Franklin Park, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Application November 20, 1951, Serial No. 257,375
2 Claims. (Cl. 250—20)



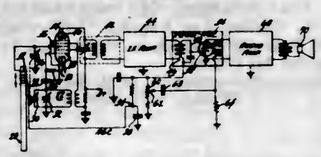
1. A tunable radio frequency antenna structure for a radio receiver including a single inductor for picking up received waves and for selecting the received waves, said inductor comprising a helically wound coil portion and a high permeability core portion mounted for movement within said coil portion, said coil portion and said core portion constituting the sole means of the radio receiver for picking up radio frequency signals from the air, said coil portion and said core portion of said inductor also constituting the sole tuning means of the antenna structure, said coil portion having first and second axially positioned winding sections connected in series, said core portion being movable from a first position wherein said core portion extends within said first and second winding sections for tuning said coil portion to a first frequency, to a second position in which said core portion extends only within said second winding section for thereby tuning said coil portion to a second frequency having a value at least twice that of said first frequency, with the positions of said core portion between said first and second positions thereof tuning said coil portion to frequencies within the range defined by said first and second frequencies, said core portion having a length greater than that required for tuning said coil portion to said first frequency so that increased pickup of radio frequency signals is provided thereby, said antenna structure including fixed means for supporting said coil portion and means for providing movement of said core portion within said coil portion.

2,750,496
V. H. F.-U. H. F. RECEIVER HAVING LOCAL OSCILLATOR CONVERTIBLE TO AN I. F. STAGE
Leopold A. Horowitz, Erlton, and Gilbert C. Hermeling, Jr., Collingswood, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application March 31, 1955, Serial No. 498,277
5 Claims. (Cl. 250—20)



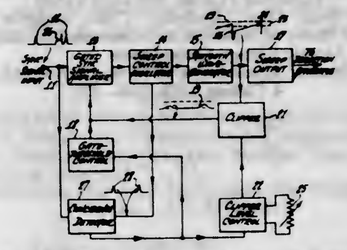
5. A V. H. F.-U. H. F. television tuning system comprising in combination, a radio frequency amplifier for received V. H. F. signals, a signal mixer stage having a tunable signal input circuit and a signal output circuit tuned to the television receiver intermediate frequency, means coupling said signal input circuit with said radio frequency amplifier, a dual purpose triode stage, first circuit means for connecting said dual purpose stage to operate as a V. H. F. local oscillator, second circuit means for connecting said dual purpose stage to operate as a grounded-grid intermediate frequency amplifier for signals to be derived from a preceding U. H. F. converter, said last named means including intermediate frequency signal input circuit means, switch means for selectively establishing said first or said second circuit means and simultaneously tuning said mixer signal input circuit to said intermediate frequency when said second circuit means is selected, and signal coupling means connected between said dual purpose and said mixer stages operative as an oscillation injection means with said dual purpose stage connected as a V. H. F. local oscillator or as a signal coupling means with said dual purpose stage connected to operate as an intermediate frequency amplifier.

2,750,497
RECEIVER WITH ADJUSTABLE FERROMAGNETIC ROD LOOP ANTENNA
Harold B. Stott, Glenolden, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Original application August 3, 1950, Serial No. 177,363, now Patent No. 2,641,704, dated June 9, 1953. Divided and this application March 28, 1952, Serial No. 279,071
7 Claims. (Cl. 250—20)



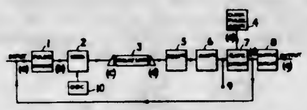
1. A high-inductance loop antenna system comprising in combination, an elongated ferromagnetic rod, a radio frequency signal pick-up circuit including an antenna coil coaxially extending along a short section of the length of the rod at substantially one end thereof, a tuning capacitor effectively connected across said coil for tuning over a predetermined frequency range, an oscillator circuit, a signal converter having two sets of input elements, an output utilization circuit for said converter, a circuit connecting said tuning capacitor to one set of input elements, a circuit connecting said oscillator circuit to the other set of input elements, tuning means in said oscillator circuit interconnected for unicontrol operation with the tuning capacitor, means in said oscillator circuit for adjusting tracking at the high frequency end of the tuning range, and means for moving said antenna coil a short distance along said rod at said one end, thereby to adjust tracking at the low frequency end of the tuning range without the addition of separate component parts.

2,750,498
SYNCHRONIZATION OF TELEVISION DEFLECTION SYSTEMS
Frederick M. Arbuckle, Merchantville, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application July 5, 1952, Serial No. 297,252
16 Claims. (Cl. 250—27)



1. In a synchronizing system for electron beam deflection apparatus, a deflection wave generator including an oscillator having an output circuit and a frequency control circuit, a source of periodic synchronizing pulses, electrical signal gating apparatus having an input circuit coupled to said synchronizing pulse source, and an output circuit coupled to said frequency control circuit, said gating apparatus also having a control circuit, means normally conditioning said gating apparatus during synchronous operating periods for non-conduction of said synchronizing pulses, in such a manner that said gating apparatus may be momentarily rendered operative to effect the impression of said synchronizing pulses upon the frequency control circuit of said oscillator, and means coupled to said conditioning means and operative during asynchronous operating periods to control said conditioning means in a manner to condition said gating apparatus continuously for conduction of said synchronizing pulses.

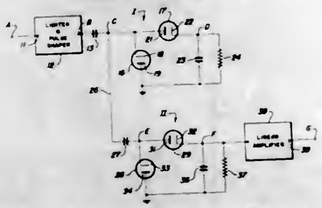
2,750,499
CIRCUITS FOR ULTRASONIC DELAY LINES
Edward Arthur Newman, Teddington, and David Oswald Clayden, Hanwell, London, England, assignors to National Research Development Corporation, London, England, a British corporation
Application January 8, 1951, Serial No. 205,005
Claims priority, application Great Britain January 14, 1950
3 Claims. (Cl. 250—27)



1. Apparatus for storing information, said information being represented by a series of electrical pulses, the times between successive pulses being whole number multiples of a basic pulse period that comprises a means to feed each of said pulses to a first trigger circuit having at least one stable state, biased to be triggered by the leading edge of a pulse, the time constant of said first trigger circuit being such as to produce a first trigger pulse having a pulse duration substantially equal to one-half said basic pulse period, means to feed said first trigger pulse to a second trigger circuit biased to be triggered by the trailing edge of said first trigger pulse, the time con-

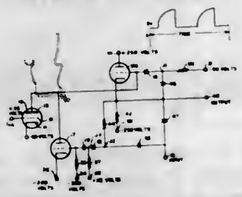
staint of said second trigger circuit being such as to produce a second trigger pulse similar in duration to said first trigger pulse, means to add said trigger pulses to produce a lengthened pulse of a duration substantially equal to said basic pulse period, a carrier-wave oscillator, means to supply said lengthened pulses to said oscillator to cause said oscillator to generate a carrier wave when triggered by the leading edge of said lengthened pulses and to stop so generating when stopped by the trailing edge of said lengthened pulses, means to feed the resultant carrier wave to a storage device for electrical energy.

2,750,500
LINEAR PULSE INTEGRATOR
William Ross Aiken, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application September 6, 1951, Serial No. 245,358
4 Claims. (Cl. 250—27)



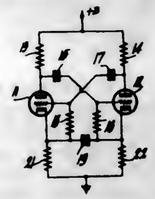
1. A linear pulse integrator comprising a first circuit including a first diode vacuum tube with a grounded anode, a second diode vacuum tube having its anode connected to the cathode of said first diode vacuum tube, and a parallel connected resistance-capacitance combination connected between the cathode of said second diode vacuum tube and ground; an input terminal; a first coupling capacitor connected between said input terminal and said first circuit at the common anode-cathode connection thereof; a second circuit identical with said first circuit; a second coupling capacitor connected between the common anode-cathode connections of said first and second circuit and applying to said second circuit the error signal of said first circuit; and an output terminal connected to the ungrounded side of the resistance-capacitance combination of said second circuit.

2,750,501
SECONDARY EMISSION TYPE TRIGGER CIRCUIT
John J. Lentz, Chappaqua, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application December 21, 1951, Serial No. 262,803
10 Claims. (Cl. 250—27)



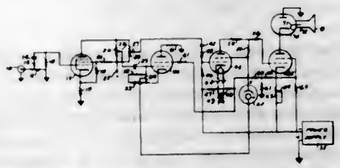
1. In a trigger circuit a secondary emission tube having at least a cathode, collector, and dynode for exhibiting two stable conditions represented respectively by high and low voltage at the dynode; a source of input pulses for switching the trigger circuit from either stable condition to the other; connections including first and second electrical paths between said secondary emission tube and said source of pulses; and circuit means including voltage responsive components in each of said paths; and voltage transferring means connecting said paths for rendering said paths alternately conductive in response to a pulse from said source to thereby switch said trigger circuit from either stable condition to the other.

2,750,502
CATHODE-CONTROLLED WAVE GENERATORS
George W. Gray, Lambertville, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application December 29, 1950, Serial No. 203,317
The terminal 15 years of the term of the patent to be granted has been disclaimed
12 Claims. (Cl. 250—36)



2. A multivibrator comprising, means defining two space discharge paths, each of which includes at least an anode, a cathode and a control grid, respective cross-couplings between each of said anodes and the opposite control grids, each of said grids being connected to its respective cathode, said couplings having relatively long time constants compared to the period of oscillation of said multivibrator, whereby said cross-couplings do not determine the oscillation frequency of said multivibrator and the regenerative action provided by said cross-couplings is insufficient in itself to cause oscillations to be produced by said multivibrator, external circuits coupled respectively to said anodes and cathodes, impedance devices connected respectively to said cathodes for traversal by currents flowing in said space discharge paths, the impedances of said devices being materially greater than the impedances of said anode circuits, and a capacitor connected between said cathode circuits for effecting alternate operation of said space discharge paths in a manner to develop at one of said anodes a square wave having substantially flat crests, whereby the difference in amplitude of the leading and trailing edges of the developed rectangular wave of said multivibrator is less than 5% of the amplitude of said wave as measured at the trailing edges of said wave.

2,750,503
MAGNETRON KEYING CIRCUIT
Thomas L. Gottier, Los Angeles, Calif., assignor to the United States of America as represented by the Secretary of the Air Force
Application November 14, 1952, Serial No. 320,509
9 Claims. (Cl. 250—36)



1. A circuit for pulse keying the output of a magnetron oscillator tube, comprising in combination a magnetron, a power supply, an operative first connection between said power supply and said magnetron including a grid controlled switching tube for conducting power to the magnetron during periods of time corresponding to the duration of keying pulses, a driving amplifier tube having as electrodes a plate, a cathode and a control grid, a

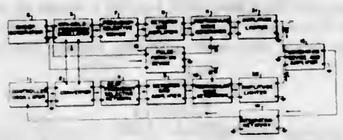
source of constant voltage for the plate circuit of said driver tube, a second operative connection between the control grid of said switching tube and the plate circuit of the driver tube such that the switching tube is rendered conducting when the driving tube is nonconducting, and means for applying negative keying pulses to the control grid of said driving amplifier tube to cause said driving amplifier tube to become nonconducting during the period of the keying pulses.

2,750,504
SIGNAL GENERATOR
Carl G. Sontheimer, Riverside, and Stanley I. Sachs, Stamford, Conn., assignors to C. G. S. Laboratories, Inc., Stamford, Conn.
Application June 21, 1951, Serial No. 232,752
8 Claims. (Cl. 250—36)



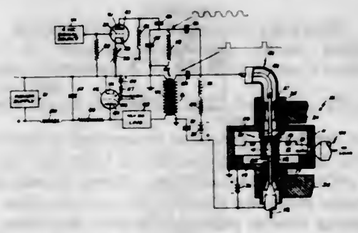
1. A high frequency tunable oscillator adapted to utilize a tube having a cathode, a control grid, and an anode comprising a first folded cavity type resonant circuit, means for conductively connecting said first cavity to the cathode of said tube, a second coaxial type cavity having an inner and outer conductor, means for coupling said second cavity to the anode of said tube, a first movable conductive capacitive tuning element mounted on one of said conductors, and a fixed capacitive element mounted on the other of said conductors, one of said capacitive elements having a recess therein adapted to receive a portion of the other capacitive element.

2,750,505
AUTOMATIC FREQUENCY CONTROL
Ernest M. Hickin, Wembley, England, assignor, by mesne assignments, to The General Electric Company Limited, London, England
Application July 28, 1951, Serial No. 239,147
Claims priority, application Great Britain August 11, 1950
7 Claims. (Cl. 250—36)



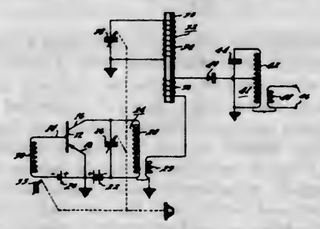
1. An automatic control system comprising: a source of a first signal including an oscillator and a sweep generator coupled thereto for periodically varying the frequency of said signal over a range of frequencies; a source of a second signal having a frequency which tends to vary and including a frequency-adjusting device; a first frequency-selective apparatus including in cascade a frequency-selective device, a differentiating circuit, and a first pulse generator responsive to said first signal for developing first substantially rectangular output pulses the leading edges of which are representative of the times when said first signal has a first predetermined frequency; a second frequency-selective apparatus coupled to said sources and including in cascade a frequency-selective device, a differentiating circuit, and a second pulse generator for developing second substantially rectangular output pulses having a sense opposite to that of said first output pulses and the leading edges of said second output pulses being representative of the times when the frequency of said second signal differs from that of said first signal by a second predetermined frequency; means coupled to said pulse generators and responsive to the output signal of said sweep generator for simultaneously establishing the trailing edges of said first and second output pulses; a signal-combining device coupled to said pulse generators for combining in said opposite senses individual ones of said output pulses and developing therefrom a control effect representative of the difference between the times said first signal has said first predetermined frequency and the times when the frequency of said second signal differs from that of said first signal by said second predetermined frequency; and a control circuit for applying said control effect to said frequency-adjusting device to control the frequency of said second signal.

2,750,506
HIGH-FREQUENCY MODULATION SYSTEMS
Dunne B. Haagensen, Wayland, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application March 26, 1953, Serial No. 344,852
7 Claims. (Cl. 250—36)



1. An electron discharge system comprising an electron-discharge tube having an electron source, a signal wave transmission network comprising a plurality of anode members spaced from said source, apparatus for directing electrons along paths adjacent said network, a control electrode structure positioned adjacent said network substantially outside said paths, and means for causing said electron discharge tube to generate simultaneously a plurality of output signals of discretely spaced frequencies in response to an input signal applied to said control electrode, the frequency of said signal being substantially equal to the desired frequency spacing between said discrete output signals.

2,750,507
TRANSISTOR OSCILLATOR CIRCUIT
Russell R. Law, Wenham, Mass., and Harwick Johnson, Princeton, Lawrence J. Giacoletto, Princeton Junction, and Loy E. Barton, Princeton, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application June 3, 1953, Serial No. 359,324
10 Claims. (Cl. 250—36)



1. In an oscillator circuit including a point of reference potential therein the combination comprising a semi-conductor device having a semi-conductive body, a base elec-

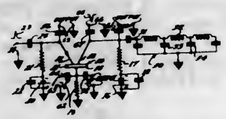
trode, a collector electrode, and an emitter electrode in contact therewith, said device being characterized by a current gain of less than unity and effective capacity coupling in said body between said electrodes, means for applying biasing potentials to said electrodes, means connecting said emitter electrode with said point of reference potential, a frequency determining circuit for said oscillator connected between said emitter and collector electrodes and tunable for response to an alternating current of predetermined frequency, and means for controlling in combination with said capacity coupling the alternating current flow between said base and emitter electrodes in adjusted phase relation with said first named current for sustained and stable oscillation including a reactive circuit element serially connected between said base and emitter electrodes.

2,750,508
TRANSISTOR OSCILLATOR CIRCUIT
Frederick D. Waldhauer, Haddonfield, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application March 17, 1954, Serial No. 416,845
10 Claims. (Cl. 250—36)



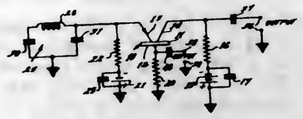
1. An oscillation generator comprising a semi-conductor device having a semi-conductive body and base, emitter and collector electrodes cooperatively associated therewith, means including a source of operating bias voltage for applying biasing potentials to said electrodes, a first reactive impedance element connected with said emitter electrode, a second reactive impedance element connected with said base electrode, a third reactive impedance element connected with said collector electrode, said second and third impedance elements having opposite reactive characteristics to the reactive characteristic of said first impedance element, and means connecting said impedance elements to a common point to form in combination a T-network providing regenerative feedback from said collector to said base electrode.

2,750,509
PULSE GENERATORS
Richard O. Endres, Moorestown, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application January 16, 1952, Serial No. 266,650
17 Claims. (Cl. 250—36)



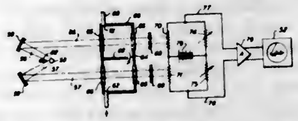
1. An astable pulse generator comprising a single transistor including a semi-conducting body, a base electrode, an emitter electrode and a collector electrode in contact with said body, said transistor being characterized by short-circuit collector current increments which are larger than corresponding emitter current increments within a predetermined range of operating potentials, meeans establishing said range of operating potentials including a first and a second source of voltage, said first source of voltage and a first resistor being connected serially between a common junction point and said collector electrode, said second source of voltage and a second resistor being connected serially between said junction point and said emitter electrode, a third resistor connected between said junction point and said base electrode, said first source of voltage being poled to apply a voltage in the reverse direction between said collector and base electrodes, said second source of voltage being poled to apply a voltage in the forward direction between said emitter and base electrodes, an open-circuited delay line coupled between said collector electrode and said junction point for propagating voltage waves corresponding to voltage variations on said collector electrode to the end of said delay line and for reflecting and applying said voltage waves to said collector electrode to vary the current conducting condition of said transistor, and means for deriving output pulses across one of said resistors at a repetition rate determined by said delay line.

2,750,510
FREE-RUNNING SQUARE WAVE GENERATOR
Raymond P. Moore, Jr., Haddonfield, and Richard O. Endres, Moorestown, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application January 16, 1952, Serial No. 266,649
7 Claims. (Cl. 250—36)



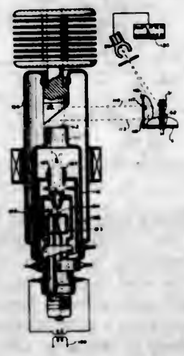
1. A free-running pulse generator having a predetermined repetition rate and comprising a transistor including a semi-conducting body, a base electrode, an emitter electrode and a collector electrode in contact with said body, means connected to said electrodes for applying a bias voltage in the reverse direction between said collector and base electrodes and for applying a bias voltage in the forward direction between said emitter and base electrodes, a first impedance element effectively coupling said emitter and base electrodes, a second impedance element connected in circuit with said emitter electrode, and an open-circuited delay line coupled to said emitter electrode for propagating voltage waves corresponding to emitter voltage variations to the open-circuited end thereof and for reflecting and applying said voltage waves to said emitter to vary the current conducting condition of said transistor for determining said repetition rate, said transistor having a range of operating voltages for which short-circuit collector current increments are larger than corresponding emitter current increments.

2,750,511
ANALYZER
Elmer C. Miller, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application December 5, 1952, Serial No. 324,298
12 Claims. (Cl. 250—43.5)



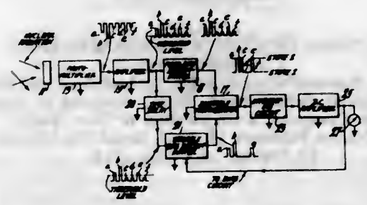
1. The method of detecting the presence of acetylenes which comprises establishing two beams of infrared radiation of predetermined intensity, directing both of said beams through a sample of material under analysis, further directing one of said beams through a filter constructed of spinel, and measuring the resulting intensities of the two beams whereby changes in the ratio of intensities is indicative of changes in concentration of acetylenes present in the material under analysis.

2,750,512
X-RAY SPECTROGRAPH
Thomas P. Meloy, Cambridge, Mass., assignor to Melpar, Inc., Alexandria, Va.
Original application November 15, 1949, Serial No. 127,323, now Patent No. 2,602,142, dated July 1, 1952. Divided and this application June 11, 1952, Serial No. 293,484
6 Claims. (Cl. 250—51)



1. A method of comparison X-ray spectroscopy of a pair of stationary specimens, which comprises, generating an X-ray beam, directing said beam in alternation toward each of said specimens, and measuring only the differences of diffracted energy from said pair of specimens.

2,750,513
NUCLEAR RADIATION MEASURING INSTRUMENT
Kenneth W. Robinson, Milton W. Green, and George A. Morton, Princeton, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application February 27, 1953, Serial No. 339,334
8 Claims. (Cl. 250—71)



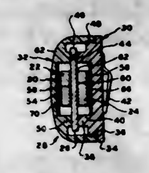
5. An instrument for measuring the average energy per particle of high energy nuclear radiations comprising, in combination, a scintillation material for producing photon energy proportional to the energy of nuclear emissions incident on said material, means for deriving electrical pulse signals having amplitudes proportional to said photon energy, a first signal conveying channel coupled to said pulse deriving means for passing all of said pulses derived in response to said nuclear emissions, a second signal conveying channel coupled to said pulse deriving means and having a variable threshold bias for passing pulse signals having amplitudes greater than said threshold bias, means for utilizing pulse signals conveyed through said first and second signal channels for producing a direct-current voltage having an amplitude proportional to the ratio of pulses conveyed through said channels, and feedback means for applying said direct-current voltage to said second signal channel for automatically controlling said bias such that the ratio of pulses conveyed through said first and second signal channels is constant.

2,750,514
CONTAINER FOR SCINTILLATION LUMINOPHOR
Fontaine C. Armistead, Marblehead, Mass., assignor to Texaco Development Corporation, New York, N. Y., a corporation of Delaware
Application June 17, 1952, Serial No. 294,000
4 Claims. (Cl. 250—71)



1. In a detector of penetrative radiation, the combination comprising a fluid luminophor, capable of converting said radiation into less penetrative radiation including light, confined within a container, a translucent compliant membrane forming at least a portion of the confining wall area of said container, photoelectric means responsive to said less penetrative radiation to produce an electrical effect, said photoelectric means having an optical input surface whose configuration is subject to variation from a predetermined standard, and said input surface being juxtaposed in physical contact to said membrane, said membrane providing an effective area of light transmission from the fluid to the photoelectric means.

2,750,515
RADIATION DETECTION DEVICES
William A. Shurcliff, Cambridge, Mass., assignor to Polaroid Corporation, Cambridge, Mass., a corporation of Delaware
Application February 12, 1952, Serial No. 271,264
14 Claims. (Cl. 250—83)

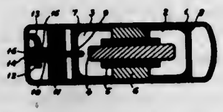


1. A dosimeter for determining the effective dose of penetrative radiation striking a body, said dosimeter comprising a first substantially planar detecting element having a pair of opposed faces, a second substantially planar detecting element having a pair of opposed faces, said detecting elements being similarly composed of a substance which undergoes a persisting change in predetermined properties when subjected to a quantity of penetrative radiation, said change being functionally related to said quantity, said detecting elements being in substantial parallelism, a substantially planar radiation-attenuating shield having a pair of opposed faces, said shield being disposed between said detecting elements with one of its faces in contiguity with one of the faces of said first detecting element and the other of its faces in contiguity with one of the faces of said second detecting element, a housing for said shield and said detecting elements, said housing being substantially transparent to said penetrative radiation, means for predeterminedly orienting said shield and said detecting elements with respect to said housing, and a fastener secured to said housing for predeterminedly crienting said housing with respect to said body.

2,750,516
APPARATUS FOR INTEGRATING MEASUREMENT OF X-RAYS OR RADIO-ACTIVE RAYS
Johan Peter Ambrosen, Gentofte, Denmark, assignor to Civilforsvarstyrelsen, Copenhagen, Denmark
Application June 30, 1952, Serial No. 296,363
Claims priority, application Denmark June 30, 1951
5 Claims. (Cl. 250—83.6)

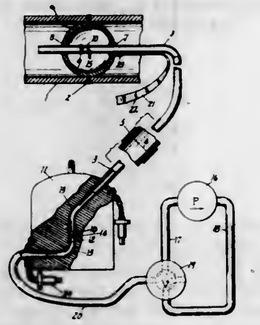
1. An apparatus for integrating measurement of X-rays or radioactive rays, especially hard gamma rays, particu-

larly a pocket apparatus for use in working within fields infected with radioactive material, comprising an ion chamber with at least two electrodes operating substantially at atmospheric pressure, two of said electrodes forming a condenser, an additional condenser connected to said condenser, the dielectric of said additional condenser comprising at least two superposed layers of insulating



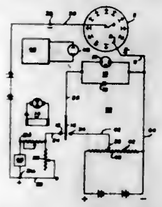
material of high specific resistance, said additional condenser thereby having a time constant exceeding considerably that of a similar condenser of the same capacitance but having only one layer of the same insulating material with the same total thickness as that of the superposed layers of insulating material in the additional condenser.

2,750,517
METHOD OF HANDLING RADIO-ACTIVE MATERIALS
Wilhelm M. Baum, South Haven, Mich.
Application December 21, 1953, Serial No. 399,305
10 Claims. (Cl. 250—108)



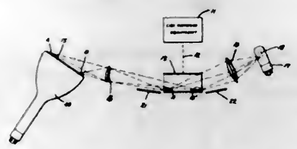
1. Apparatus for placing a source of radio active energy comprising, a ball enclosing a mass of radio active material and capable of emitting radio active rays, a coffin having a passage formed therethrough with at least two turns in the passage, a projection extending into said passage between said turns and supporting said ball within said passage, a first hose detachably connected to the end of said passage on the opposite side of said projection from said ball, a pump, a valve connected to selectively connect said first hose to the intake and outlet of said pump, a second hose detachably connected to the other end of said passage, said second hose being of flexible plastic material and having a smooth interior mating with said passage and adapted to rollingly receive said ball, a second deformable rubber ball detachably mounted near the other end of said second hose with the hose passing through the center of the second ball, a pin extending through said second hose to stop said first ball in the center of said second ball, said second hose having a port formed therethrough inwardly of the position of said first ball against said pin, an elongated longitudinally rigid transversely flexible member having length indicia thereon connected to said second ball, and plugs connected to said coffin and adapted to close the ends of said passages when said hoses are disconnected from the coffin.

2,750,518
REGENERATIVE PHOTOTUBE SIGNAL AMPLIFIER
Ted Fahrner, Whittier, Calif., and William W. Ramage, Verona, Pa., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application March 21, 1952, Serial No. 277,882
5 Claims. (Cl. 250—214)



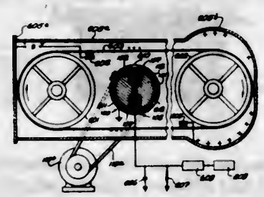
1. A light amplifying system adapted to provide a large signal output of a time duration proportional to the signal light intensity comprising, a branch circuit including a capacitor and a glow tube having a breakdown voltage in parallel relation with each other, a first circuit means for charging said capacitor to a predetermined voltage below the breakdown voltage of said glow tube, a second circuit including a light responsive element having an impedance value varying inversely with the light intensity of the signal for charging said capacitor through said light responsive element to the breakdown voltage of said glow tube at a rate determined by the impedance value of said light responsive element, said glow tube being adjacent said light responsive element to reduce the impedance thereof to maintain said glow tube conductive after ignition, a timing alternator interposed between said branch circuit and said first and second circuits for alternately connecting said first and second circuits with said branch circuits, and means connected to said second circuit for producing a signal output during conduction of said glow tube, whereby the timing alternator is operative to provide a time base for said signal output.

2,750,519
AUTOMATIC CONTAINER INSPECTION EQUIPMENT
Harry R. Summerhayes, Jr., Roy E. Anderson, and Ernest S. Sampson, Schenectady, N. Y., assignors to General Electric Company, a corporation of New York
Application February 11, 1953, Serial No. 336,368
13 Claims. (Cl. 250—214)



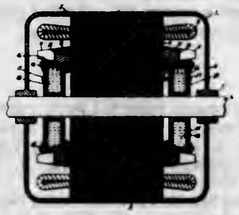
8. Apparatus for inspecting the interior surface of open-ended containers comprising means for rotating an open-ended container about an axis thereof extending through both of the open ends, radiant energy transmitting means located and arranged to project radiant energy through one of the open ends of and against the interior surface of a container being inspected, means utilizing such radiant energy to effect a point-by-point scanning examination of the interior surface of the container along a length thereof parallel to said axis, and transducing means utilizing radiant energy specularly reflected from the interior surface of and emanating from the other open end of a container being inspected for producing a signal indicative of the condition of the surface.

2,750,520
ELECTROSTATIC MEASURING DEVICE
Alexander S. Langsdorf, Jr., Roselle, Ill., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application March 8, 1955, Serial No. 493,075
9 Claims. (Cl. 310—6)



1. An electrostatic device for detecting charges comprising a cylindrical member of electrically conductive material, a pair of longitudinal slots disposed in opposed sides of the member and adapted to face at least two different charges, an electrode mounted within each slot and electrically insulated from the member, a cylindrical casing including an odd number of longitudinal openings therein encompassing said member, said openings being equally disposed about the periphery of the casing and adapted to expose the electrodes in alternate manner, and means for rotatively supporting said cylindrical casing in a concentric relationship to the member whereby the rotation of the casing will cause the slots therein to expose the electrodes alternately to the charges.

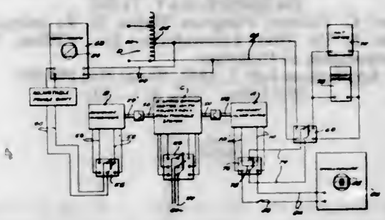
2,750,521
DYNAMOELECTRIC MACHINE ROTOR MEMBER
Lawrance W. Wightman, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application March 27, 1953, Serial No. 344,941
8 Claims. (Cl. 310—54)



1. In a dynamoelectric machine, a rotor member having a winding formed thereon, said winding having a portion extending beyond one end of said rotor member, and an enclosed annular chamber member positioned on the exterior of said rotor member within said winding extension portion and in contact therewith, said chamber member being adapted to contain a heat absorbing liquid thereby extracting heat from said winding extension portion.

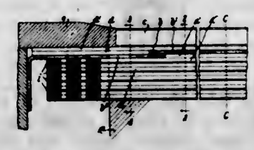
2,750,522
METHOD OF MAGNETIZING TWO-SECTION PERMANENT MAGNET ALTERNATORS
George Selden, Bronx, N. Y., assignor to Eastern Air Devices, Inc., Brooklyn, N. Y., a corporation of New York
Application December 9, 1953, Serial No. 397,225
23 Claims. (Cl. 310—152)

1. The method of magnetizing a two-section permanent magnet alternator having two sets of stator coils for producing, when energized, individual magnetic fields, and a permanent magnet rotor having separate sections cooperable respectively with each of said individual magnetic fields, said method comprising drivingly connecting the rotor of said primary alternator to be magnetized and the rotor of a reference alternator to a driving means, energizing said driving means and causing it to drive said rotors at a first speed such that the output of the first section of said reference alternator is at a predetermined frequency, determining the phase relationship between the voltage output of said first section of said reference alternator and a reference voltage, energizing the first set of stator coils of said primary alternator, corresponding to said first section of said reference alternator, so as to magnetize that section of the permanent magnet which cooperates therewith, energizing said driving means so as to rotate said rotors at a speed such that the voltage



output of the second section of said reference alternator is at a predetermined frequency, determining the phase relationship between the voltage output of said second section of said reference alternator and said reference voltage, shifting the driving connection between said rotors and said driving means until a phase relationship is obtained which compares in a desired manner with that obtained with said first section of said reference alternator, and then energizing the second set of stator coils of said primary alternator, corresponding to said second section of said reference alternators, so as to magnetize that section of the permanent magnet rotor which cooperates therewith.

2,750,523
GENERATOR ROTOR WITH A DAMPING WINDING
Eugen Wiedemann, Spreitenbach, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie, Baden, Switzerland, a joint-stock company
Application April 18, 1955, Serial No. 501,780
Claims priority, application Switzerland April 21, 1954
4 Claims. (Cl. 310—183)

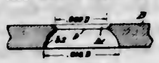


1. A generator rotor having slots for receiving field coils, a plurality of field coils having end turns and parallel sides, one side of several of said coils being arranged in stacked relation in said slots, at least one of said coil sides having a portion of reduced thickness within said slot, a damping winding, said damping winding having portions extending into the spaces in said slot created by said reduced thickness portions.

2,750,524
PERFORATE MASK FOR MULTICOLOR TELEVISION APPARATUS AND METHOD OF PRODUCING SAME
Frank G. Braham, Merrick, N. Y., assignor to Mergenthaler Linotype Company, a corporation of New York
Application November 15, 1951, Serial No. 256,523
4 Claims. (Cl. 313—86)

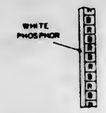
1. In or for a multicolor television apparatus, a sheet metal perforate mask wherein the individual apertures

are disposed in a plane immediately adjacent to and parallel with the outer face of the mask, said plane being located nearer to the outer face of the mask than to the



mid-plane thereof, and said apertures being formed at the bottom of exceptionally shallow semi-conical recesses produced in the outer side face of the mask.

2,750,525
CATHODE-RAY TUBE
Richard C. Palmer, Pompton Plains, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware
Application July 2, 1952, Serial No. 296,857
10 Claims. (Cl. 313—92)



1. In a cathode-ray tube, a glass envelope having a face plate of light-sensitive glass adapted to provide a plurality of color characteristics therein, said face plate being photographically fixed to provide a plurality of strips of different color filtering characteristics.

2,750,526
INDIRECTLY HEATED CATHODE
Kenneth J. Germeshausen, Newton Center, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Original application May 3, 1946, Serial No. 666,880, now Patent No. 2,678,403, dated May 11, 1954. Divided and this application April 16, 1952, Serial No. 282,619
1 Claim. (Cl. 313—337)



In an electron tube the combination of a cylindrical cathode sleeve having an electron emissive outer coating, a low voltage heater element within said sleeve and in close contact therewith, said heater element consisting of a metal ribbon helically wound with adjacent turns thereof in contact to form a substantially cylindrical heated cathode area.

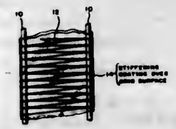
2,750,527
CATHODE FOR ELECTRICAL DISCHARGE DEVICE
Helmut Katz, Munich, Germany, assignor to Siemens & Halske Aktiengesellschaft, Munich, Germany, a corporation of Germany
Application November 19, 1952, Serial No. 321,467
Claims priority, application Germany November 19, 1951
6 Claims. (Cl. 313—346)

1. A dispenser type cathode for use in an electric discharge tube comprising a receptacle member, a porous diffusion member made of material which substantially retains its porosity at relatively high temperature to which it is heated in the operation of the corresponding discharge tube, said diffusion member forming with said receptacle member a chamber containing emissive material, and a thin metallic emission layer disposed on said diffusion member, said emission layer consisting of a material that may fuse at the relatively high temperature to which it is heated in the operation of said discharge tube and being



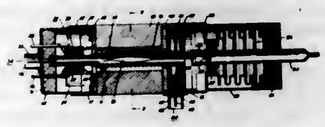
so thin that fusion thereof will not substantially impair the porosity of said diffusion member, whereby said emissive material is enabled to migrate through the pores of said diffusion member for emission from the surface of said emission layer.

2,750,528
ELECTRONIC TUBE ELEMENT PROTECTIVE COATING
Edward Teno, Emporium, Pa., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts
Application February 17, 1955, Serial No. 488,987
10 Claims. (Cl. 313—350)



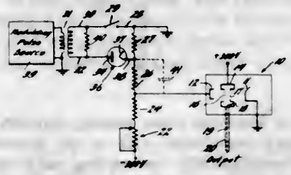
1. A grid assembly for an electron discharge device comprising a grid electrode having lateral wires supported by side rods, and a removable solidified protective coating covering said side rods and lateral wires.

2,750,529
ELECTRON DISCHARGE DEVICE
George H. Robertson, Summit, and Edward J. Walsh, Morristown, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application March 12, 1952, Serial No. 276,174
3 Claims. (Cl. 315—3.5)



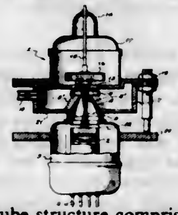
1. A traveling wave tube comprising an envelope, a helix positioned within said envelope, means at one end of said envelope for projecting a stream of electrons along said helix, means at the other end of said envelope for collecting said electrons, means for supporting said helix, said supporting means being distinct from said envelope over substantially its entire length between its end portions and including the external surface of at least one hollow tubular member, said member being supported at each end from said envelope, means for introducing a signal to said helix and means for defining an attenuation distribution along said helix, said last-mentioned means comprising a rod having a shaped lossy characteristic positioned within said hollow tubular member and coupled only electromagnetically to said helix.

2,750,530
RADIO FREQUENCY PULSER
Warren A. Welsh and Richard C. Tardiff, Winston-Salem, N. C., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application November 28, 1952, Serial No. 322,938
7 Claims. (Cl. 315—5)



6. In a microwave signal generator, an oscillator of the type having a cathode and an electrode the voltage of which determines the mode of operation of the oscillator, a voltage divider network having a plurality of resistors, a source of voltage which is negative with respect to the cathode applied across said network, said electrode connected to a junction of two of said plurality of resistors, a source of modulating pulses adapted to be connected across a third of said plurality of resistors, and means to shunt to ground with circuit elements of low impedance said third resistor, a portion of said means being adapted to cut off said source of modulating pulses from across said third resistor.

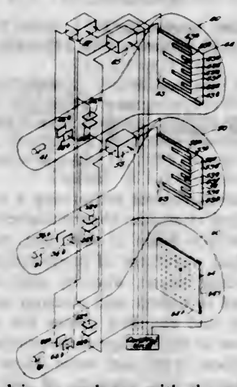
2,750,531
HIGH FREQUENCY TUBE STRUCTURE
Robert W. Sterling, Huntington, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware
Application February 28, 1951, Serial No. 213,274
6 Claims. (Cl. 315—5)



1. An electron tube structure comprising a cathode for producing an electron beam, a resonator having a reentrant portion for receiving the beam for passage through the resonator, the inner end of said reentrant portion and the opposite wall of said resonator being apertured to accommodate said beam, a reflector positioned beyond the resonator for reflecting the beam back thereinto, and an overhanging grid structure carried by the inner apertured end of said reentrant portion of said resonator, said grid structure having a central portion extending across the aperture of said reentrant portion and having a coplanar overhanging portion extending outwardly beyond the periphery of said reentrant portion within said resonator, the central portion of said overhanging grid structure cooperating with the beam during its initial passage through the resonator and the overhanging portion of said grid cooperating with the beam during its return into the resonator.

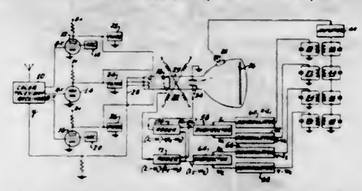
2,750,532
CATHODE-RAY DEVICES, PARTICULARLY FOR ELECTRONIC COMPUTERS
Arthur L. Samuel, Urbana, Ill., assignor, by direct and mesne assignments, to International Business Machines Corporation, New York, N. Y.
Application June 3, 1948, Serial No. 30,826
18 Claims. (Cl. 315—8.6)

1. Electronic apparatus of the character described, including: a plurality of cathode ray devices each having a plurality of operative target areas; a cathode ray device having a first control function; a cathode ray device having a second control function; and electronic apparatus



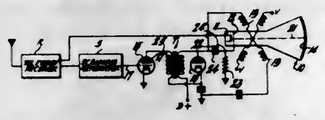
actuated by and in accordance with the positions of the ray beams in each of the control devices for precisely locating the ray beam in a stationary position on a desired target area in each of the operative devices.

2,750,533
COLOR TELEVISION IMAGE REPRODUCING SYSTEM
James W. Schwartz, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application July 28, 1954, Serial No. 446,243
14 Claims. (Cl. 315—10)



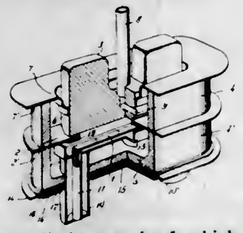
1. A system for controlling a plurality of cathode ray beams comprising a target electrode, said target electrode including a luminescent screen having a plurality of substantially parallel strips of material capable respectively of producing light of the different component colors in response to excitation by said cathode ray beams, said electrode further including rows of discrete areas of energy emissive material superimposed upon said parallel strips in such a manner that certain of said cathode ray beams may strike areas in a plurality of rows of said areas during a particular scanning line, means for modulating the energy emissions caused by each of a plurality of said cathode ray beams by a different modulating signal, means for converting said energy emissions into an electrical signal, means for separating said electrical signal into a plurality of electrical signals, said plurality of electrical signals constituting a first and a second modulated signal for each of said certain of said cathode ray beams, means for demodulating said first and said second modulated signals to form a plurality of first and second demodulated signals, each of said first and said second demodulated signals being indicative of the degree to which said certain of said cathode ray beams impinge upon said rows of energy emissive areas, means for comparing certain of said demodulated signals to form correction signals, each of said correction signals being such as to vary as the elemental deflection of each of said certain of said cathode ray beams, and cathode ray beam positioning means for varying the position of said cathode ray beams commensurate with the magnitude of said correction signals.

2,750,534
TELEVISION RECEIVER
Earl I. Anderson, Port Washington, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application August 16, 1952, Serial No. 304,767
15 Claims. (Cl. 315—22)



1. A television receiver comprising a cathode ray tube having a control electrode; electromagnetic means for deflecting an electron beam in said tube; means for applying an electrical waveform of predetermined wave shape to said deflecting means, whereby said deflecting means may be caused to deflect said electron beam at a predetermined rate; and coupling means for applying only a selected portion of the voltage corresponding to departures of said waveform from said wave shape to said control electrode, whereby the intensity of said electron beam may be varied in proportion to the voltage applied to said control electrode.

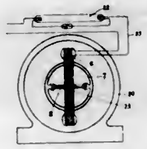
2,750,535
ELECTRON DISCHARGE TUBES
Howard D. Doolittle and Joseph W. Skehan, Stamford, Conn., assignors to Machlett Laboratories, Incorporated, Springdale, Conn., a corporation of Connecticut
Application September 15, 1950, Serial No. 184,958
6 Claims. (Cl. 315—32)



2. An electron discharge tube for high frequency use which comprises an evacuated envelope, a directly-heated cathode and control and anode electrodes mounted within said envelope, a pair of conductors for supplying heating current to said cathode and extending exteriorly of said envelope, a cathode terminal plate insulatedly mounted on said envelope, and a pair of conductive plates mounted on each side of said cathode terminal plate and connected to different conductors respectively, said conductive plates being separated from said cathode terminal plate by respective thin layers of dielectric to provide radio frequency coupling and direct current insulation therebetween.

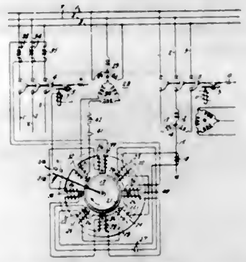
2,750,536
SYSTEM FOR ENERGIZING AN ELECTRIC DISCHARGE TUBE
Edouard Gomonet, Paris, France, assignor to Societe Anonyme pour les Applications de l'Electricite et des Gaz Rares-Etablissements Claude-Paz et Silva, Paris, France
Original application March 19, 1946, Serial No. 655,477. Divided and this application January 8, 1951, Serial No. 204,849
Claims priority, application France April 24, 1945
7 Claims. (Cl. 315—281)

1. In combination, a source of alternating current, a synchronous motor energized by said source of current, an electric discharge tube, means for connecting said tube to said source and for stabilizing the discharge in the tube, said means comprising a stationary member and a movable member in electromagnetic mutual relationship, said movable member being dissymmetric, at least in one respect controlling said electromagnetic mutual relation-



ship, about at least one plane passing through an instantaneous rotary movement axis of its movement, and means for mechanically connecting said synchronous motor to said movable member.

2,750,537
DIRECTIONAL GROUND RELAY WITH DUAL POLARIZATION MEANS
William C. Morris, Havertown, Pa., assignor to General Electric Company, a corporation of New York
Application May 13, 1952, Serial No. 287,546
3 Claims. (Cl. 317—36)

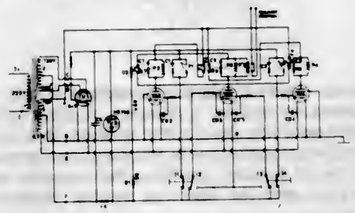


1. A ground directional relay for use in conjunction with a polyphase electric power system, said relay comprising a rotatable current induction member, electromagnetic means for selectively rotating said member in accordance with the magnitudes of and phase displacements between predetermined electrical quantities of the system, said electromagnetic means including a multipole magnetic member and a plurality of windings on said member. one of said windings having means for effecting energization thereof by a reference quantity dependent upon an electrical quantity of the system that varies as an inverse function of the local ground impedance, another of said windings having means for effecting energization thereof by another reference quantity dependent upon an electrical quantity of the system that varies as a direct function of the local ground impedance, and still another of said windings being arranged for energization by an electrical quantity of the system having a relationship to each of said reference quantities which is dependent upon the direction in which a ground fault in the system is located relative to the relay.

2,750,538
SAFETY DEVICE FOR HAND-CONTROLLED MACHINES
Leon Saives, Billancourt, France, assignor to Regie Nationale des Usines Renault, Billancourt, France
Application July 17, 1953, Serial No. 368,581
Claims priority, application France August 1, 1952
7 Claims. (Cl. 317—135)

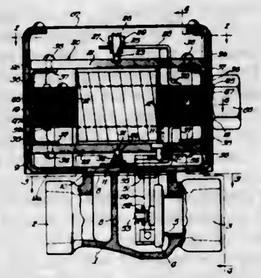
1. In a safety apparatus for hand controlled machines the operation of which is dangerous to an operator, a power supply means having voltage dividing means, at least two like electronic circuits each including a thyratron tube having at least one grid, a hand controlled

switch connected to said power supply means and said tube grid to provide grid control means, a relay having its winding in series with said tube, a time-delay branch circuit connected between the grid of said tube and said supply means, a pair of normally closed contacts in series with the tube and said relay winding, at least one other electronic circuit and said like electronic circuits all connected to said supply means, said other electronic circuit comprising a third thyratron tube having a pair of grids, two control switches each in series with one of said tube grids and connected to said supply means, said control



switches being interconnected with said hand-controlled switches so that simultaneous activation of both hand-controlled switches will cause said third tube to start discharging and the activation of only one hand-controlled switch will not, a differential relay having two parallel relay windings in series with said third tube, two pairs of contacts in series with said third tube, said pairs of contacts being normally closed and adapted to be opened by said relays connected in series with the other tubes, said differential relay being adapted to open the contacts in series with the other tubes and to place said machine in operative condition.

2,750,539
ELECTROMAGNETIC CONTROL DEVICE
Gifford I. Holmes, Orion, Ill., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis., a corporation of Wisconsin
Application August 18, 1952, Serial No. 305,009
16 Claims. (Cl. 317—168)



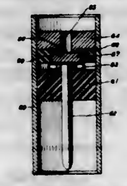
1. An electromagnetic operator comprising a first magnetic frame having an externally directed pole face, a second magnetic frame having a portion spaced externally from said pole face to form an air gap therebetween, a winding on said first magnetic frame which when energized is adapted to produce magnetic flux in said frame and across said air gap, and an armature of loop form encircling both said first magnetic frame and said winding and comprising torque arms mounted for turning movement about an axis and extending generally transversely with respect to said axis out beyond the outer periphery of said first magnetic frame and beyond said winding on said frame, said torque arms being provided at their outer ends with an armature arm operable in said air gap and externally of said pole face to impart turning movement to said armature in one direction by magnetic flux produced across said air gap by energization of said winding.

2,750,540
SELENIUM RECTIFIERS AND THEIR MANUFACTURE
Erich Gerhard Rudolf Waldkötter and Alfred Max Hase, Pretzfeld, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt and Erlangen, Germany, a German corporation
Application August 17, 1950, Serial No. 179,968
7 Claims. (Cl. 317—234)



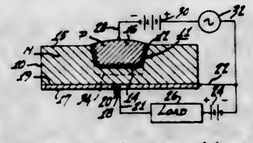
1. A dry rectifier unit, comprising a flexible base electrode of a maximum thickness of about 0.01 mm., a flexible counter electrode, and a flexible semi-conductive layer disposed between said two electrodes and firmly joined therewith, said electrodes and said layer forming together a flexible and independently operable rectifier unit.

2,750,541
SEMICONDUCTOR TRANSLATING DEVICE
Russell S. Ohl, Fair Haven, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application January 31, 1950, Serial No. 141,512
13 Claims. (Cl. 317—235)



3. An electrical translating device comprising a body of semiconductive material selected from the class consisting of silicon and germanium, an integral surface layer on said semiconductive body having electrical characteristics other than those of said body, produced by bombardment thereof with ions of significant impurities, an ohmic connection to said body on a portion spaced from said layer, and a large area contact engaging said layer.

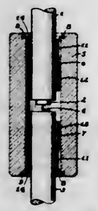
2,750,542
UNIPOLAR SEMICONDUCTOR DEVICES
Lorne D. Armstrong and Dietrich A. Jenny, Princeton, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application April 2, 1953, Serial No. 346,452
6 Claims. (Cl. 317—235)



1. A semiconductor device comprising a semiconductor body having zones of P-type and N-type conductivity sep-

arated by a rectifying barrier, at least one of said zones having a free planar surface, said barrier having a substantially planar surface disposed parallel to said free surface, an electric current path being defined by a portion of said one of said zones, the width of said path being defined by said barrier and said surface, a pair of ohmic contact electrodes connected to said free surface and defining the length of said current path, said electrodes being positioned with a minimum spacing between them, said electrodes being positioned intermediate the ends of said planar surface of said barrier.

2,750,543
CRYSTAL DIODE UNIT
Howard M. Wadsworth, Liverpool, N. Y.
Application April 3, 1952, Serial No. 280,410
5 Claims. (Cl. 317—236)



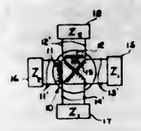
1. In a crystal diode assembly, a cylindrical electrode, a crystal plate fixed on one end thereof, a second electrode, a spring wire filament attached at one end thereto, a hollow cylindrical casing of dielectric material, and a pair of tubular thimbles of elastic metallic material extending into the ends of the casing, said thimbles having radial terminal flanges sealed to the ends of the casing, the bodies of the thimbles being formed with a plurality of axially extending lands between which the electrodes are firmly gripped, said land portions of the thimbles being equidistantly spaced about the bodies of the thimbles, and the portions of said bodies between the lands being smoothly curved and adapted to bear frictionally throughout their length on the interior of the cylindrical casing.

2,750,544
SILICON TRANSLATING DEVICES AND METHODS OF MANUFACTURE
William G. Pfann, Chatham, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application January 11, 1950, Serial No. 137,906
10 Claims. (Cl. 317—240)



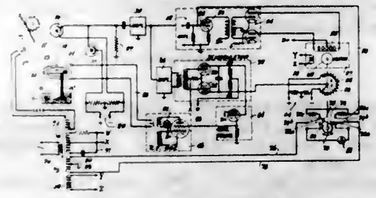
3. The method of manufacturing an electrical translating device which comprises sustaining a glow discharge at atmospheric pressure between a body of silicon and an electrode, interrupting said glow discharge, mounting a limited area contact on the portion of the body contacted by said glow discharge, and discharging a condenser biased beyond the peak voltage of the device across the contact and the silicon body.

2,750,545
ELECTRO-MECHANICAL COMPUTING CIRCUITS
Sidney Davis, Brooklyn, N. Y., assignor to American Bosch Arma Corporation, a corporation of New York
Application June 14, 1951, Serial No. 231,639
9 Claims. (Cl. 318—19)



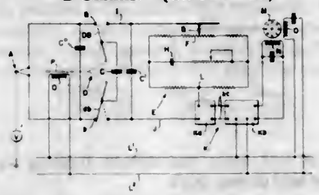
1. In an electro-mechanical computer circuit, a chain of resolvers comprising a plurality of electrically interconnected resolvers, the resolver windings in said chain of resolvers being terminated in iterative impedances whereby the use of booster amplifiers between the output of one resolver and the input to another resolver is not necessary.

2,750,546
LIMIT RESPONSIVE MEANS FOR MOTORS IN SERVO SYSTEMS AND THE LIKE
Earl L. Washburn, Arlington Heights, Ill., assignor to Wallace & Tiernan Incorporated, a corporation of Delaware
Application March 24, 1953, Serial No. 344,375
9 Claims. (Cl. 318—28)



5. In a dew-point hygrometer, in combination, a dew-forming element, light sensitive means inspecting the element for producing a signal in response to departure of the element from a predetermined dew condition, temperature changing means for the element comprising heating means and cooling means, rapidly responsive electrical servo means for adjusting one of said temperature changing means in response to a signal from the light sensitive means, to restore equilibrium of the dew condition of the element upon departure therefrom, a second servo means comprising a supplemental control device for the last-mentioned one of the temperature changing means, a reversible motor for adjusting said control device, and a signal circuit extending from said light sensitive means to said reversible motor for controlling the latter, to adjust the last-mentioned temperature changing means to restore the dew condition of the first-mentioned element to the predetermined condition upon continuing departure therefrom, said device being adjustable along a predetermined path by said motor, a supplemental electrical signal source separate from said signal circuit, and means associated with said device and including control means engageable at a predetermined terminal locality of the aforesaid path and responsive to drive of the device by the motor to said locality, for temporarily connecting said separate source with the signal circuit of the second servo means to inject therein a signal for causing the motor to drive the device in the reverse direction until the device is moved away from said locality.

2,750,547
ELECTRICAL MEASURING APPARATUS
William H. Wannamaker, Jr., and Robert L. Miller, Philadelphia, Pa., assignors to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application August 5, 1952, Serial No. 302,677
2 Claims. (Cl. 318—29)



2. An electrical measuring apparatus for a thermocouple output voltage comprising, a pair of terminals arranged for connection to a thermocouple, a first capacitor connected across said terminals, a potentiometric circuit, a second capacitor connected in series with said potentiometric circuit, a third capacitor, and vibratory switching means for alternately connecting said third capacitor between said first and second capacitors so that said second capacitor will assume a potential proportional to the potential on said first capacitor and said first and second capacitors will act to minimize the effects of stray electrical fields on said terminals and said potentiometric circuit, a second vibratory switching means connected to said measuring apparatus for changing the electrical character of the combined charge of said potentiometric circuit and said second capacitor, and motor means controlled by said measuring apparatus for adjusting said potentiometric circuit until the voltage thereof balances the charge of said second capacitor.

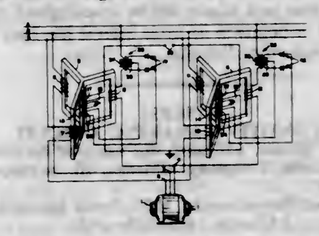
2,750,548
ELECTRONICALLY CONTROLLED SYNCHRONOUS ELECTROMOTOR
Christiaan Johannes Van Dalen, The Hague, Netherlands, assignor to Staatsbedrijf der Posterijen, Telegrafie en Telefonie, The Hague, Netherlands
Application March 2, 1953, Serial No. 339,721
Claims priority, application Netherlands, March 6, 1952
18 Claims. (Cl. 318—162)



1. A synchronous motor control system comprising: a motor having a stator with a plurality of electromagnets and a rotor with a plurality of elements cooperable one at a time with said electromagnets, an electronic switching means for starting the energization of said electromagnets, and an electronic distributor circuit including means for separately and successively energizing each of said electromagnets once in a cycle in response to the operation of said switching means, and means controlled by said circuit for stopping said circuit at the end of its cycle and resetting said switching means for restarting said circuit.

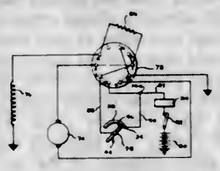
2,750,549
MOTOR CONTROL SYSTEM
Russell Sydnor Crenshaw, Jr., Claremont, Calif.
Application June 1, 1953, Serial No. 358,991
3 Claims. (Cl. 318—207)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. In a motor control system the combination of a three-phase induction motor having first, second and third stator terminals, a three-phase source of power, first and second three-phase saturable core reactors each having first, second, and third windings and a central core section which is part of the flux paths of said first, second and third windings, means for connecting one end of each first winding to different phases of said three-phase source, means for connecting the other end of each first winding to said first stator terminal, means for connecting one end of each second winding to different phases of said three-phase source such that the first and second windings of each reactors are also connected to different phases of said three-phase source, means for connecting the other end of each second wind-



ing to said second stator terminal, means for connecting one end of each third winding to the remaining phase of said source, means for connecting the other end of each third winding to the third stator terminal whereby said motor is coupled simultaneously to said supply source over two different phase sequences corresponding to different directions of motor rotation and means for increasing the direct magnetic polarization of the core member of said first three-phase reactor while simultaneously decreasing the direct magnetic polarization of the core member of said second three-phase whereby one of said phase sequences is effective to institute motor rotation.

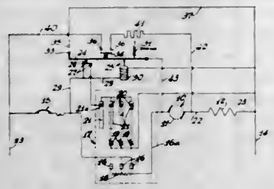
2,750,550
SWITCH CONSTRUCTION, AND MOTOR CONTROL SYSTEM INCORPORATING THE SAME
Edward Latta, Owosso, Mich., assignor to Redmond Company, Inc., Owosso, Mich., a corporation of Michigan
Application March 12, 1953, Serial No. 341,984
19 Claims. (Cl. 318—265)



18. A motor control arrangement comprising a reversible electric motor, a source of electrical power, and connections between said source and said motor including a reversing switch for controlling the direction of rotation of said motor and an auxiliary control circuit including a switch comprising a frame, a conductive segment thereon, a member movable with respect to said frame and having a conductive wiper arm engageable with and movable along said segment, separate electrical connections to said segment and said arm, a movable driving element, and a yieldable operative connection between said driving element and said member effective to cause said member to move with said element except when said member is held against movement, in which latter case said operative connection yields, and means operatively connected to said member for positively restraining it against rotation after it has engaged and moved along said segment to a predetermined degree, whereby electrical connection between said wiper arm and said segment is effectuated

and maintained when said element is rotated in one direction, rotation of said element in said other direction causing said wiper arm to move off said segment and thus break the electrical connection therebetween, said segment and said wiper arm being connected in series so as to constitute a circuit making or breaking instrumentality, said driving element being operatively connected to said motor so as to be reversibly moved thereby, said reversing switch rendering said auxiliary control circuit inoperative when said motor is caused to rotate in one direction and connecting said auxiliary control circuit in series between said motor and said source of power when said motor is caused to rotate in the other direction, thereby ensuring that said motor will be de-energized at a particular point or points in its cycle after it has been caused to rotate in said other direction.

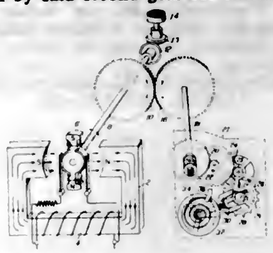
2,750,551
LOCOMOTIVE BRAKING CIRCUIT
William W. Sloane, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application November 14, 1951, Serial No. 256,181
3 Claims. (Cl. 318—368)



1. A safety circuit for mine locomotives including a motor having an armature and a field winding connected in series therewith, main line conductors connected with said armature and field winding, a controller in circuit with one of said main line conductors for starting the motor, a relay having at least two sets of contacts, one set being normally closed and the other set being normally open, said relay having an operating coil connected in circuit with said main line conductors and holding said normally closed contacts closed when energized, an auxiliary conductor leading from one of said main line conductors to said set of normally closed contacts of said relay and connecting said controller to said main line conductors to energize said motor when said controller is in an on position and said contacts are closed, another conductor connected from one side of said armature to said field winding through said normally open contacts of said relay, and means closing the normally open contacts of said relay upon deenergization of the coil thereof independently of the position of said controller, to connect said armature and field in a closed loop circuit through said last mentioned conductor and connect said armature to operate as a generator and dynamically brake the locomotive and prevent the locomotive from accelerating upon the tendency to reversely coast downgrade upon a failure of power in said auxiliary conductor, regardless of the position of said controller.

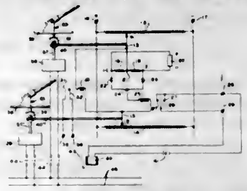
2,750,552
CONSTANT SPEED DRIVE
James J. Ryan, St. Paul, Minn.
Application July 31, 1953, Serial No. 371,675
5 Claims. (Cl. 318—302)

1. A constant speed drive for a recorder or the like, comprising a driven shaft connected to the recorder, a first gear carried by said shaft, a stalled motor for exerting a steady torque on said driven shaft and on said first gear, a second gear driven by said first gear, and a clock escapement mechanism, including a spring-controlled balance wheel, driven by said second gear for limiting the speed



of rotation of said gears and thereby limiting the speed of rotation of said driven shaft.

2,750,553
ELECTRIC CONTROL SYSTEM FOR SUPERVISING RELATIVELY MOVABLE MEMBERS
Karl Nial Andersson, Grondal, Sweden, assignor to Aktiebolaget Bofors, Bofors, Sweden, a corporation of Sweden
Application April 19, 1951, Serial No. 221,786
Claims priority, application Sweden April 28, 1950
7 Claims. (Cl. 318—468)

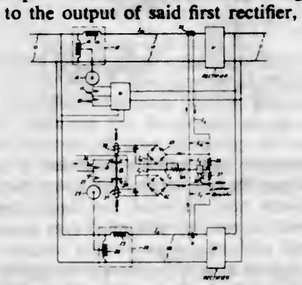


1. In an installation of the class comprising two elongated members each pivotally mounted for angular movements relative to a common reference plane and to each other, the said members being disposed in a spacial relationship in which the two members are capable of approaching each other beyond a predetermined limit of approach, the combination with a safety control system comprising two sources of a variable potential, each of said sources being connected with one of said members for control of the respective potential by the angular position of the respective member relative to the said reference plane, control circuit means including two series connected sources of a fixed potential and two uni-directionally conducting electric means series connected in opposition, one of said sources of a variable potential being connected to the connection point between the sources of a fixed potential of the control circuit means and the other of said sources of a variable potential being connected to a connection point between the two uni-directionally conducting electric means, the respective one of the said electric means becoming conductive in response to a flow of potential between the two variable sources of potential and through said control circuit means in one or the other direction, the direction of the said flow being controlled by the relative angular position of the two members, and electric controlled circuit means for controlling the relative movements of said members and controlled by the conducting one of the two uni-directionally conducting electric means.

2,750,554
ELECTRIC CIRCUIT
Lewis R. Runaldue, Dalton, Mass., assignor to General Electric Company, a corporation of New York
Application March 22, 1954, Serial No. 417,722
6 Claims. (Cl. 321—19)

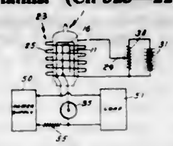
1. In an electric power system operable on a direct current load from an alternating current source, a master

voltage regulator including a control motor, a first rectifier connected to the output of said master regulator for converting the alternating current output of said master regulator to direct current, means for regulating the control motor of said master regulator in response to the direct current output, a follower voltage regulator including a control motor, said follower regulator being connected in parallel with said master regulator, a second rectifier connected to the output of said follower regulator, the output of said second rectifier being connected in parallel to the output of said first rectifier, and means



for maintaining a predetermined relation between the output of said follower regulator and the output of said master regulator, said means comprising a differential relay inductively coupled in a differential circuit to the output of both regulators, said relay having a first set of contacts which close to complete a circuit to the follower regulator rotor control motor to advance said regulator when its output lags behind the output of said master regulator and a second set of contacts which close to complete a circuit to the follower regulator control motor to retard said regulator when its output exceeds the output of said master regulator.

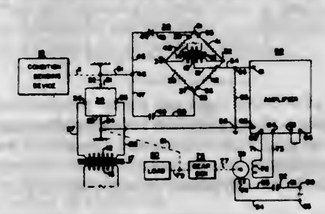
2,750,555
VOLTAGE REGULATING APPARATUS
Erich Nevin Kather and Thomas A. O. Gross, South Lincoln, Mass., assignors to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application March 29, 1952, Serial No. 279,476
5 Claims. (Cl. 323—22)



1. A voltage regulating apparatus comprising an electron evacuated discharge device including only an electron source comprising an electron emitting electrode and an electron collecting electrode, means associated with said device for producing an axial magnetic field, a resistor connected to one of said electrodes, a source of voltage applied between said electrodes in series with said resistor, the strength of said magnetic field being substantially equal to the cut-off value for the desired voltage to provide a substantially constant voltage between said electrodes over a wide range of current and voltage, and a load circuit across which said constant voltage is desired connected across said electrodes.

2,750,556
PHASE ADVANCING CONDITION SENSING APPARATUS
Philip M. La Hue, St. Paul, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application March 8, 1955, Serial No. 493,017
15 Claims. (Cl. 323—123)

1. Condition control apparatus comprising; means supplying an alternating signal of variable magnitude and reversible phase; output means operable in response to said signal for maintaining a desired operating condition; an alternating current phase shifting device acting upon said signal so as to provide a phase shift comprising, a pair of capacitors, four asymmetrical current conducting devices connected as to form a ring, resistance means connected in series with each of said asymmetrical current conducting devices, transformer means having a primary



and a center tapped secondary winding, said center tapped secondary winding being connected to diagonally opposite terminals of said ring, said capacitors being connected to said signal source and to the other diagonally opposite terminals of said ring, and a load resistor connected from said center tap on said secondary winding to a common lead; means connecting said alternating signal to said phase shifting device; and amplifier means connected to said phase shifting device and to said output means.

2,750,557
ELECTRICAL LOGGING OF SUBTERRANEAN FORMATIONS
Joseph M. Bricaud, Houston, Tex., assignor to Schlumberger Well Surveying Corporation, Houston, Tex., a corporation of Delaware
Application June 4, 1954, Serial No. 434,580
9 Claims. (Cl. 324—10)

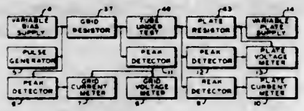


1. Well logging apparatus comprising a flexible insulating cushion member having an outer face conformable to the wall of a borehole, a first electrode of a generally elliptical configuration embedded in said outer face, and a second electrode embedded in said outer face on either side of said first electrode and disposed generally along the line of intersection between said outer face and a generally ellipsoidal equipotential surface confocal with said first electrode, said electrodes being exposed for conducting current into the wall of a borehole and with said outer face being elongated to extend longitudinally of a borehole.

2,750,558
PULSE TUBE TEST APPARATUS
Roger B. Woodbury, Boston, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application January 10, 1946, Serial No. 640,279
14 Claims. (Cl. 324—26)

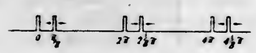
12. In apparatus for determining the characteristics of an electron tube having at least a control grid, a grid resistor having first and second terminals and having its first terminal connected to said control grid, means for impressing short duration voltage pulses at said second

terminal of said control grid to cause grid conduction of said tube through said grid resistor for the duration of each of said applied pulses, means coupled to said control grid for generating a first signal proportional to the peak amplitude of the voltage pulses at said control grid,



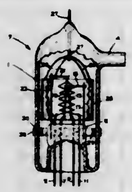
means for generating a second signal proportional to the peak amplitude of said applied voltage pulses, and means responsive to said first and second signals for indicating the peak amplitude of the control grid current and the peak amplitude of said pulses at said control grid.

2,750,559
AVAILABLE EMISSION TESTER
Wilson R. Smith, Reading, Mass., and Roger W. Slinkman, Emporium, Pa., assignors to Sylvania Electric Products Inc., a corporation of Massachusetts
Application June 29, 1953, Serial No. 364,786
8 Claims. (Cl. 324—27)



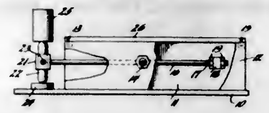
1. In an emission tester for electronic tubes of the type having at least one anode, a grid and a cathode, means for applying to the plate circuit of the tube under test a varying voltage, a resistor in the circuit from across which an indication of the wave form of the varying voltage may be obtained, switch means in the circuit in series with the tube to control initiation of current flow through the tube and through the resistor, and a current flow control means in a grid-cathode circuit of the tube to subsequently substantially cut off the current flow through the tube.

2,750,560
ELECTRON DISCHARGE TUBE
George S. Miles, Englewood, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application September 25, 1951, Serial No. 248,243
8 Claims. (Cl. 324—33)



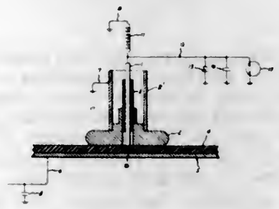
1. An electron discharge tube, comprising an envelope of insulating material, two electrodes located within the envelope, leads from said electrodes extending through the envelope at spaced points, said electrodes being normally maintained at a sufficiently high voltage difference to produce harmful leakage current by conduction in a path extending along the envelope between said points, and means for preventing such leakage by conducting the leakage current away from said envelope, including a leakage absorbing element of conducting metal extending across said path in conducting contact with the envelope, and a leakage current conducting circuit connected to said element.

2,750,561
INDICATOR FOR LOW PERMEABILITY MATERIALS
Martin R. Gross, Annapolis, Md., assignor to the United States of America as represented by the Secretary of the Navy
Application April 25, 1952, Serial No. 284,481
6 Claims. (Cl. 324—34)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In a magnetic permeability indicator, a supporting structure having thereon a pair of pivot bearings oppositely disposed and arranged for supporting a shaft rotatably about an axis, an elongated arm suspended for rotation about said axis, a permanent magnet mounted on one end of said arm with a major magnetic axis tangent to the arc of said rotation of said end of the arm and having regularly curved magnet ends of uniform radius of curvature, means balancing said arm whereby equal forces are required to move said magnet in either direction along said axis thereof; a pair of members made of magnetic material, one of said members comprising an anvil of known permeability fixedly supported on said supporting structure, the other member being of unknown permeability and movable relative to said supporting structure; one end of said magnet being adapted to contact said anvil, said member of unknown permeability being adapted to be moved into contact with the opposite end of said magnet and away therefrom, whereby the magnet will adhere to the member of greater permeability, thereby providing means for indicating which of the two magnetic members has the greater permeability.

2,750,562
INSULATION FAULT DETECTOR
Wendell T. Starr, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application September 16, 1952, Serial No. 309,886
4 Claims. (Cl. 324—54)



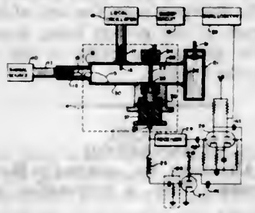
4. An insulation fault detector comprising the combination of a rod-shaped probe electrode, a surrounding shield electrode having the form of an annular disk with a rounded outer edge, said electrodes each having a substantially flat surface in a common plane, electrical insulation between said electrodes, a conducting cylinder mounted upon said shield electrode and surrounding said rod-shaped electrode in spaced relation, electric means connected to said probe electrode responsive to generate oscillations upon ionization in insulation under examination by said probe electrode, and means in circuit with said shield electrode for minimizing therein disturbing oscillations which would mask the sensitivity of said probe electrode.

2,750,563
TIME JITTER MEASURING SYSTEM
David F. Winter, Cambridge, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application November 29, 1945, Serial No. 631,752
2 Claims. (Cl. 324—68)



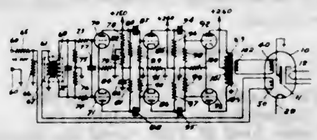
1. A system for measuring the variations in inter-pulse intervals of a series of voltage pulses comprising, a cathode ray tube display means, means responsive to said pulses for initiating the horizontal sweep of said tube at a fixed interval of time following the occurrence of each of said pulses, and means for applying said series of voltage pulses to the vertical deflecting electrodes of said tube.

2,750,564
FREQUENCY MONITORING CIRCUIT
Malcom W. P. Strandberg, Cambridge, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application February 1, 1946, Serial No. 644,978
6 Claims. (Cl. 324—79)



1. In combination, a local oscillator signal source, electrical sweep circuit means for periodically varying the frequency of oscillations of said local oscillator signal, a source of signal of frequency to be measured, a mixer assembly having output and input and connecting said signal sources, a resonant cavity, a reactance tuning element joining said mixer assembly and said resonant cavity, an indicator responsive to said mixer assembly output for indicating the instantaneous amplitude of the output of said mixer assembly, and said sweep circuit means being adapted to synchronize variations of said local oscillator signal source and the sweep of said indicator.

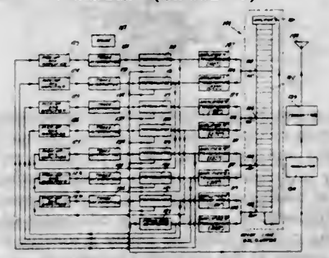
2,750,565
ALTIMETER MODULATORS
William R. Mercer, Belmont, Floyd T. Wimberly, Watertown, and Lloyd E. St. Jean, Arlington, Mass., assignors to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application September 13, 1952, Serial No. 309,444
7 Claims. (Cl. 332—5)



1. A frequency modulation circuit comprising an electron discharge device including a cathode, an anode, a means for producing a magnetic field and a reed positioned in said magnetic field, said reed being supported within said device and movable with respect to said anode for varying the frequency of operation of said device,

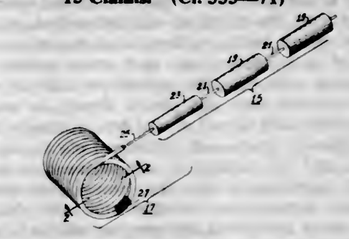
a first coil and a second coil each carried by said reed, an amplifier receptive of a modulating input voltage and having input and output circuits, said first coil being connected to said amplifier output circuit for producing an electromagnetic field in said first coil, said electromagnetic field interacting with said magnetic field to impart motion to said reed, said second coil being responsive to the motion of said reed for deriving a feedback voltage, said amplifier input circuit being energized by said feedback voltage and said modulating voltage.

2,750,566
TELEMETERING TRANSMISSION SYSTEMS
Vernon C. Westcott, Lincoln, and Leonhard Katz and George W. Schiff, Woburn, Mass., assignors to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application June 4, 1948, Serial No. 31,096
7 Claims. (Cl. 332—9)



1. A radio transmitter comprising: a first means, adapted to generate electrical oscillations of a relatively high frequency; a second means, adapted to generate electrical oscillations of a relatively low frequency; a third means, receptive of said last-named electrical oscillations, for deriving therefrom a plurality of signals of different relative phases; a fourth means, receptive of said last-named signals, for deriving therefrom a plurality of voltage pulses successively spaced from each other by predetermined time intervals; a fifth means, likewise receptive of said last-named signals, for deriving therefrom additional signals the amplitudes of which are characteristic, respectively, of externally generated intelligence; said additional signals being in phase quadrature, respectively, with said last-named signals, and being applied to said fourth means to vary the time intervals between said voltage pulses as a function of the magnitude of said externally generated intelligence; and a sixth means, receptive of said voltage pulses and coupled to said first means, for applying said voltage pulses to said first means and thereby modulate the latter.

2,750,567
MECHANICAL RESONATOR TERMINATION
Leslie L. Burns, Jr., and Walter van Braam Roberts, Princeton, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application March 15, 1952, Serial No. 276,892
15 Claims. (Cl. 333—71)



1. A damping termination for a mechanical filter having at least one mechanical resonator tuned to the

frequency of operation of said filter, comprising a lossy mechanical line mechanically coupled to said resonator, said line having a central portion of low vibratory loss and a coating of latex on said mechanical line, the combined thickness of said line and said coating being less than the thickness of said resonator, said lossy line being coiled in the form of a helix.

2,750,568

MEANS FOR THE SUPPRESSION OF PARASITIC OSCILLATIONS IN A TUNABLE CAVITY RESONATOR

Bernard C. Gardner, Los Altos, Calif., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware

Application July 31, 1951, Serial No. 239,425
2 Claims. (Cl. 333—82)



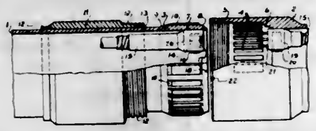
1. In a coaxial cavity resonator for use with a velocity modulation electron discharge device of the reflex type, means for adjusting said coaxial cavity to resonate at a plurality of frequencies, means for suppressing undesired modes of oscillation comprising a probe resonant at one of the frequencies of the undesired modes of oscillation projecting radially into the cavity resonator for dissipating the energy at the undesired frequencies as determined by the depth of penetration of the probe, and means under control of said frequency adjusting means to vary the coupling of said suppressing means to said resonant cavity, to maintain the effectiveness of said suppressing means over a certain range of frequencies and ineffective at another range of frequencies of oscillation by controlling the depth of penetration of said probe.

2,750,569

IRREVERSIBLE TOOL JOINT AND ELECTRICAL COUPLING FOR USE IN WELLS

James Moon, Corona del Mar, Calif., assignor to Signal Oil and Gas Company, Los Angeles, Calif., a corporation of Delaware

Application January 8, 1952, Serial No. 265,458
3 Claims. (Cl. 339—16)



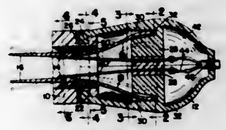
1. A combination tool joint and cable coupling, comprising a box, a thread in said box, splines on the interior of said box, one of said splines being different from the others of said splines, a pin, splines positioned in the exterior of said pin, one of said last-named splines being different from the others of said last-named splines, said different splines mating with each other and not with the others of said splines, and said other splines on said box mating with the other splines on said pin, a sleeve axially slidable over said pin, a thread on said sleeve matable with said thread in said box, a female plug connector element positioned within said pin on the interior wall of said pin, sockets in said element, a male plug element positioned in said box, prongs protruding from said male element and matable with said sockets, said prongs being positioned adjacent the splines in said box and radially displaced inwardly from said splines toward the center of said box, the angular position of said sockets of said female element bearing an angular relation to the different spline of said pin which is substantially the same as the angular relation of said prongs to the different spline of said box, whereby when the said different splines are mated the prongs enter said sockets.

2,750,570

LOCKING ELECTRIC PLUG

Norman H. Bates, Norwich, Conn.

Application March 31, 1954, Serial No. 420,040
3 Claims. (Cl. 339—74)



1. An electric plug comprising a housing, a pair of prongs swingably mounted thereon intermediate the ends of the prongs, extending ends on the prongs, a rotatable actuating member associated with the housing, a partition therein, a pair of cam surfaces in the partition extending on lines gradually diverging from the axis of the actuator, the extending ends of the prongs being located on the cam surfaces for motion therewith as the actuator is turned relative to the housing.

2,750,571

CONNECTOR

Jacob Schmier, Allentown, Pa., assignor to Rodale Manufacturing Company, Inc., a corporation of Pennsylvania

Application May 13, 1952, Serial No. 287,540
3 Claims. (Cl. 339—103)



1. An electrical quick detachable connector having a pair of contacts, an insulator body to which said contacts are affixed, and a strain reliever connected to said body, said strain reliever comprising a pair of clamps identically constructed, each clamp having a stem, a midportion and a wire embracing portion integrally formed together, said stem having sides from which ears laterally project adjacent the free ends of said sides, said midportion being wider than the distance between the sides of said stem, and a radially extending slit having side walls in said insulator body into which only said stem may pass and slide, said stem side walls and said slit side walls being adjacent one another.

2,750,572

MULTI-CONTACT CONNECTOR

Benjamin Fox, Philadelphia, Pa.

Application April 29, 1953, Serial No. 351,913
8 Claims. (Cl. 339—185)

8. An electrical coupling device comprising a pair of separable casing members having an opposed pair of complementary contact receiving cavities in the opposed surfaces thereof, the cavities in each of said casing members extending from end to end thereof, said cavities being mirror images of each other and having seats at one end of said casing members arranged to receive a flat contact member in a first plane with the contact end thereof within said cavities, and having seats at the other end of said casing members arranged to receive a cooperating flat contact member in a plane normal to said first plane



and also with the flat end thereof within said cavities whereby said contact members are adapted to be mated within said casing in crossed relation, and aligning seats for the contact end of said first flat contact member at the other end of said cavity..

2,750,573

SURE LOCK CONNECTORS

Stanley E. Mika, Berwyn, Ill.

Application December 8, 1953, Serial No. 396,821
1 Claim. (Cl. 339—250)



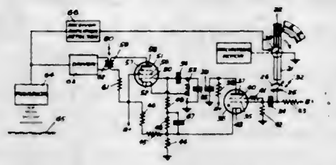
A spark plug comprising in combination a top terminal having a tapered end, a cable wire having wire strands fitted downwardly over the tapered end and along the side of the terminal, said spark plug adjacent said terminal having a substantially cylindrical portion of less diameter than the main body of said spark plug whereby to provide a shoulder, and a retaining connector comprising a substantially cylindrical member of flexible material having a central longitudinal bore therethrough adapted to be squeezed onto the adjacent ends of said cable wire and said spark plug cylindrical portion with one end thereof abutting said shoulder, said connector on the interior thereof having a plurality of axially spaced annular projections providing recesses therebetween, said annular projections extending throughout the full length of said bore and adapted to provide sealing engagement with the cable and spark plug whereby to hold the cable against axial displacement on the terminal.

2,750,574

ECHO-RANGING DEVICES

Robert A. Fryklund, Dedham, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware

Application April 15, 1953, Serial No. 348,865
6 Claims. (Cl. 340—3)



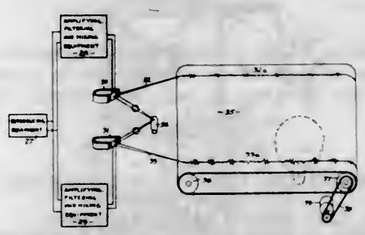
1. A pulse echo system comprising a source of energy to be transmitted, a keying system for said source comprising a mechanically variable condenser, and an indicator for said pulse echo system having a movable element mechanically ganged to said condenser, which indicator is adapted to indicate the presence of reflected energy caused by said transmitted energy.

2,750,575

METHODS OF AND APPARATUS FOR SEISMOGRAM ANALYSIS

William E. N. Doty and Bill D. West, Ponca City, Okla., assignors to Continental Oil Company, Ponca City, Okla., a corporation of Delaware

Application April 6, 1953, Serial No. 347,082
6 Claims. (Cl. 340—15)



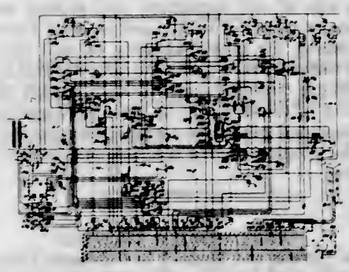
1. Apparatus of the character described comprising in combination means for generating an electrical signal which is a parameter of at least a portion of a seismogram, means for adjustably modifying said signal to provide at least two different modifications of said signal, means for instantaneously, simultaneously, and momentarily forming visual representations of the different modifications of said signal, and means for selectively forming a permanent record of one of such modifications of said signal.

2,750,576

VEHICLE ACTUATED TRAFFIC SIGNAL APPARATUS

William H. Beaubien, Lynn, Mass., assignor to General Electric Company, a corporation of New York

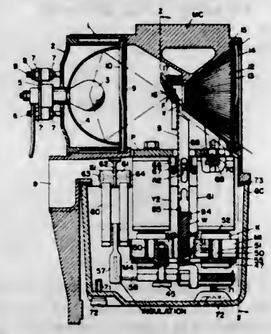
Application August 26, 1952, Serial No. 306,472
49 Claims. (Cl. 340—35)



1. In a vehicle actuated traffic signal control apparatus including a signal device providing stop and go indications for each of a plurality of intersecting traffic lanes, signal switching means connected to accord said go indication successively to said lanes, a vehicle actuated device on at least one of said lanes, means controlled by said vehicle actuated device when said lane has said stop indication for actuating said signal switching means to accord said go indication to said lane, timing means controlled by said vehicle actuated device when said lane previously had said stop indication for predetermining an initial go indication interval on said one lane, means responsive to each actuation of said vehicle actuated device when said one lane has said go indication for controlling said timing means to extend said go indication beyond said initial interval and until a predetermined time after said actuation, and separate timing means controlled by said switching means and operable after a limiting interval to render

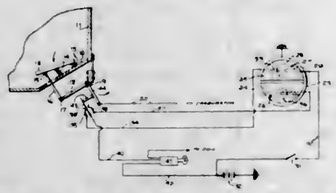
said first timing means ineffective to extend said go indication and to operate said signal switching means to remove said go indication from said one lane.

2,750,577
SEARCH LIGHT SIGNAL
Ralph W. Hewes, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.
Application March 2, 1954, Serial No. 413,527
12 Claims. (Cl. 340—50)



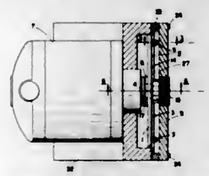
1. In a light signal of the search light type, two independently operable electroresponsive devices, each of said devices having an armature pivotally supported at one end, said armatures being independently operable; a spectacle arm, a first pin, said first pin operatively connecting said spectacle arm to one of said armatures and providing a support for said spectacle arm; a second pin having an eccentric structure, said second pin operatively connecting said spectacle arm to the other of said armatures and providing a support for said spectacle arm, said second pin being rotatable axially when adjusted by external means; locking means for preventing axial rotations of said second pin, and a journal bearing having an elongated opening, said locking means and said journal bearing being located one in said spectacle arm and the other in one of said armatures, said locking means securing one extremity of said second pin, said journal bearing journaling the other extremity of said second pin; whereby movements of said armatures are transmitted to said spectacle arm by said first and second pins, said pins acting to displace and to pivot said spectacle arm, and said second pin being capable when rotated of adjusting the position of said spectacle arm relative to said armatures.

2,750,578
AUTOMOBILE SIGNALS
Pasquale Petrella and Maurice B. Robinson, Chicago, Ill.
Application April 21, 1954, Serial No. 424,614
1 Claim. (Cl. 340—66)



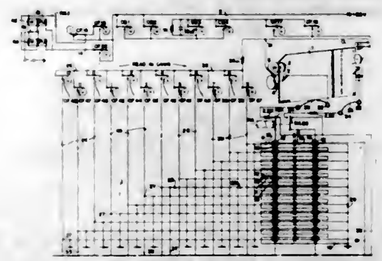
A signal device for automobiles comprising a two section tail light compartment with each section having a differently colored glass covering, electrically operated signal indicating device in each of said sections with one of said devices having a double electrically operated filament with each filament being of different intensity, a stop circuit for energizing the one filament having the greater intensity of said one device, a tail light circuit for energizing independently the other of said filaments of said one device, a go circuit for energizing the other of said devices for illuminating one of the differently colored glass covering, a flasher switch in said stop circuit for energizing said stop filament of said one device, switch means for alternately controlling energization of said stop and go circuits independently of the tail light circuit, an actuating plunger operatively connected to the foot accelerator pedal of said automobile and actuated to alternately actuate said switch means for energizing said circuits, and a master switch for conditioning said stop and go circuit for energization by said actuating plunger.

2,750,579
MAGNETIC DISC DATA STORAGE DEVICE
John P. Lekas, Hollywood, and Lester L. Kilpatrick, Downey, Calif., assignors to North American Aviation, Inc.
Application January 7, 1952, Serial No. 265,254
16 Claims. (Cl. 340—174)



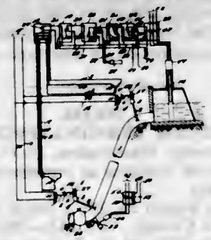
1. Means for recording data in magnetic form upon high remanence magnetic material comprising a shaft, a disc attached to said shaft, a prime mover connected to rotate said shaft, a coating of high remanence magnetic material on one surface of said disc, means for accurately aligning the plane of said disc perpendicular to the axis of rotation of said shaft, a plurality of magnetic heads, means for holding said magnetic heads in close proximity to said high remanence magnetic material, means for providing a common magnetic return path for said heads, said heads being bonded to said common magnetic return path means to concentrate magnetic flux at each of said heads, whereby said high remanence magnetic material is caused to become magnetized in response to electrical signals supplied to said heads and changing concentrations of magnetic field strength on said high remanence magnetic material is detected by said heads.

2,750,580
INTERMEDIATE MAGNETIC CORE STORAGE
Edward J. Rabenda and Gordon E. Whitney, Poughkeepsie, N. Y., assignors to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application January 2, 1953, Serial No. 329,432
14 Claims. (Cl. 340—174)



5. A machine for manifesting data recorded on a record sheet by columns of perforations which represent different characters, sensing means comprising a sensing device for each column, means for relatively moving the record sheet and sensing means at a uniform rate to cause said sensing means to sense the respective columns concurrently, a storage unit including a plurality of magnetic core elements having a substantially rectangular hysteresis characteristic, one element being provided for each character in each column, a first set of windings embracing each column of elements, a second set of windings embracing elements of each column representing like characters, third windings uniformly embracing all core elements of the storage unit, means connecting said first set of windings and corresponding column sensing means, means for periodically energizing said second set of windings at each character level concurrently with sensing of the like character level of the record, coincident energization of said first and second windings causing a change in the state of magnetization of core elements, means for energizing said third windings and initially magnetizing said cores to a uniform state and for thereafter biasing said cores to mantain said initial state, read out means coupled with said second set of windings for periodically energizing said windings in a direction contrary to read in, means coupled with said first set of windings for detecting a change in the state of magnetization of said cores and means controlled by said read out means for operating a recording device.

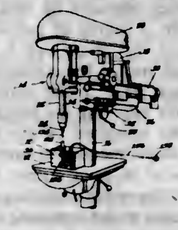
2,750,581
DIFFERENTIAL PROTECTION OF PENSTOCKS AND PIPE LINES
Ernest Darian, Philadelphia, Pa.
Application April 12, 1954, Serial No. 422,452
4 Claims. (Cl. 340—242)



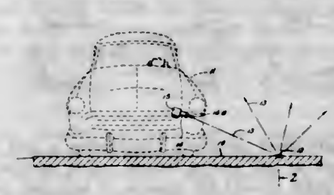
1. A device for indicating a leakage of fluid or gas in a flow line, comprising two flow indicators, one being located at the beginning and the other at the end of the flow line to define a protected area, a balance relay, transmitters connected with said flow indicators and actuating said balance relay by difference of velocity flow at the beginning and the end of the flow line, a time and auxiliary relay system actuated by said balance relay, and means controlled by said system upon leakage in said protected area.

2,750,582
TOOL FEED TIMER
John Wesley Anderson, Philadelphia, Pa., assignor to Teleflex Incorporated, North Wales, Pa., a corporation of Delaware
Application February 18, 1955, Serial No. 489,255
16 Claims. (Cl. 340—268)

1. A timing device for timing tool feed rate comprising a base, movable means on said base adapted to be engaged by a moving part on a machine for movement in accordance with the feed rate of said machine, said base being mounted on a fixed part of said machine, a timer carried by said base, means operatively interconnecting said movable means and said timer for starting operation of said timer upon a predetermined movement of said movable means, means associated with said timer providing a perceivable indication following a predetermined elapsed time, further indication providing means, and means operatively interconnecting said movable means and said further indication providing means for providing a further perceivable indication upon a predetermined movement of said movable means whereby movement of said movable means can be compared with elapsed time.

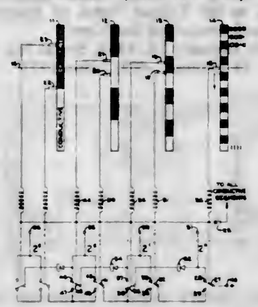


2,750,583
RADIOACTIVE GUIDING SYSTEM FOR MOBILE VEHICLES
Otis J. McCullough, Houston, Tex.
Application January 26, 1953, Serial No. 333,065
11 Claims. (Cl. 340—282)



1. A radioactive guide system for mobile vehicles, comprising, the combination with a radioactive guide line defining a travel path on a surface traversed by a vehicle, of a radiation detector means positioned on the vehicle and responsive to radiations from said guide line to thereby conetinuously indicate the position of said vehicle relative to said guide line.

2,750,584
ANALOG TO DIGITAL CONVERTER
Lester I. Goldfischer, Queens Village, N. Y., assignor to General Precision Laboratory Incorporated, a corporation of New York
Application March 29, 1954, Serial No. 419,347
4 Claims. (Cl. 340—347)



1. A system for translating the potential condition of all of the brushes of a multi-ring double brush binary converter to a potential condition of a plurality of output conductors equal in number to the number of rings so as to obtain a binary digital output comprising, a relay stage for each ring, the last stage including a single relay having a winding connected to the single brush and a

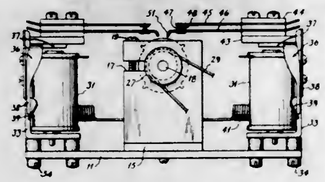
single pole double throw switch operated thereby, each remaining relay stage including first and second relays having windings connected to the leading and lagging brushes respectively and first and second single pole double throw switches operated by said first and second windings respectively, a source of potential connected to the armature of said last stage switch, an output conductor for each stage, means for connecting the normally open contacts of each stage to the corresponding output conductors, means for applying the potential of each output conductor to the armature of the second switch of the next preceding stage, means for preventing the application of the potential of each output conductor to the output conductor of the next succeeding stage and means for applying a potential to the armature of the first switch of each stage only when there is no potential on the output conductor of the next succeeding stage.

2,750,585
INSTRUMENT STRUCTURE
Herbert H. Andersen, Topsfield, and Maurice L. Allen, Swampscott, Mass., assignors to General Electric Company, a corporation of New York
Application April 27, 1955, Serial No. 504,231
8 Claims. (Cl. 340—378)



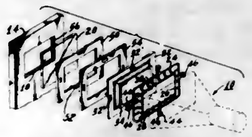
1. An instrument structure comprising a first casing member open at one end, a second casing member having an end plate shaped for closure of said one end and having a plurality of flexible leg members integral therewith, said leg members extending from said end plate about the periphery thereof, a mechanism support plate dimensioned to span and to be held by the free ends of said leg members, and an instrument mechanism mounted on said support plate, said second casing member being telescoped within said first casing member to close said one end and having said flexible leg members dimensioned to be flexed inward by said first casing member into firm holding engagement with said support plate when said casing members are telescoped together.

2,750,586
RANDOM BINARY PATTERN GENERATOR
Howard L. Daniels, St. Paul, Minn., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application January 19, 1954, Serial No. 405,055
12 Claims. (Cl. 340—357)



1. A random binary pattern generator comprising a support; control means including an actuatable portion and two conditions of operation; said control means being biased to one of its two conditions of operation; means attached to said support and attached to said control means for positioning said control means in either one of two positions relative to said support, second means, antifriction means supporting said second means on said support and adjacent said control means, said second means being adapted to be positioned in any one of a plurality of positions relative to said support adjacent said control means whereby in any one of the positions of said second means and for one of the positions of said control means, the clearance between said control means and said second means is one of two distances, third means mechanically coupled to said antifriction means for moving said second means randomly to any of its positions whereby said control means is actuated out of its biased condition to its second condition only when said second means is in a position corresponding to reduced clearance and said control means is moved by the said means attached thereto to its other position wherein it engages and is actuated by said second means.

2,750,587
KINESCOPE MASK AND DUST SEAL
James F. Nicholson, Millersville, and Donald J. Ransom, Lancaster, Pa., assignors to Radio Corporation of America, a corporation of Delaware
Application November 2, 1953, Serial No. 389,567
9 Claims. (Cl. 340—367)



1. A mask structure for use in conjunction with a cathode ray tube having a face plate, comprising a substantially continuous sheet member forming a generally cylindrical structure having inner and outer surfaces and capable of obscuring the peripheral portion of such face plate, said member being readily frangible when subjected to unequal air pressures on its inner and outer surfaces.

2,750,588
WAVE GUIDE TERMINATING DEVICE
Frank L. Hennessey, Washington, D. C., assignor to the United States of America as represented by the Secretary of the Navy
Application March 26, 1953, Serial No. 344,915
6 Claims. (Cl. 343—781)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In a vortex feed system for an antenna having a beam concentrating reflector and a section of tubular waveguide projecting through the vertex thereof to the focus thereof; a conductive member disposed at the end of said waveguide, said member having a concave surface facing the reflector, said surface being generated as a figure of revolution formed by revolving a semi-circle about an axis perpendicular to the diameter of said semi-circle and coaxial with the waveguide axis thereby to form an apex on said axis; and adjustable positioning means operable to position the apex of said surface along the axis of said waveguide at the focal end thereof with said apex pointing toward said beam concentrating reflector.

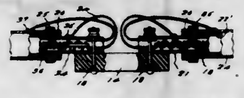
2,750,589
VERTICALLY POLARIZED HIGH FREQUENCY ANTENNA ARRAY
Edward F. Harris, Lincolnwood, Ill.
Application September 20, 1952, Serial No. 310,613
2 Claims. (Cl. 343—827)

1. A high frequency vertically polarized antenna for providing a substantially omnidirectional radiation pattern and mounting therefor comprising, a plurality of substantially collinear vertically arranged radiating dipole elements, half-wave phasing sections connected between dipole elements, all of said dipole elements and phasing sections being preformed as an integral unit, the bottom half of said unit comprising a coaxial cable having an outer conductor and an inner conductor and the cable being bent to the configuration of the dipole elements



and phasing sections of the lower half, the upper half of the antenna comprising an extension of the center conductor of the cable from the midpoint of the antenna upward, and the inner surface of the outer conductor as well as the inner conductor from the midpoint downward comprising a transmission line connected to the vertical electrical midpoint of said antenna, a single sealed housing of rigid resinous thermosetting plastic material of narrow elongate cylindrical configuration, said antenna being disposed on the interior in said housing, means rigidly retaining said antenna unit within the said housing with the end of the coaxial cable having a continuation extending from the bottom of the housing, there being a bottom dipole element of said antenna, and a quarter-wave isolating section mounted on said bottom dipole element to prevent radiation from the coaxial cable extending beyond the lower dipole element, and means for supporting said housing vertically comprising a rigid metal standard sealed with and secured coaxially to the bottom end of said housing.

2,750,590
DIPOLE ANTENNA
Henry V. Phelps, Nitta Yuma, Miss.
Application November 6, 1951, Serial No. 255,063
4 Claims. (Cl. 343—904)

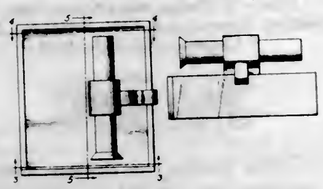


1. In a dipole antenna, an elongate tubular electric current conductor, an iron core extending therethrough, insulated primary and secondary transformer windings in said conductor and around said core, a second tubular conductor through which the first conductor extends, a dielectric sheath encasing the major portion of the first conductor and extending throughout the length of the inner surface of the second conductor to electrically separate said tubular conductors, an electrical coupling between the ends of the primary winding and the ends of the second tubular conductor, an electrical coupling between the ends of the secondary winding and the ends of the first tubular conductor, and means for attaching a lead-in conductor to the first current conductor.

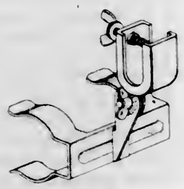
DESIGNS

JUNE 12, 1956

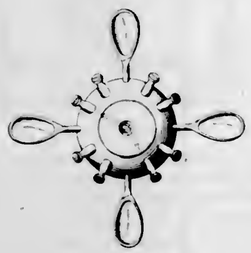
177,954
COMBINED ASH TRAY AND CIGARETTE EXTINGUISHER
Robert H. Adams, Sacramento, Calif.
Application October 27, 1955, Serial No. 38,592
Term of patent 14 years
(Cl. D85—2)



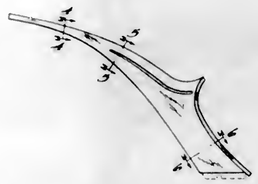
177,955
BRACKET FOR A FLASHLIGHT OR THE LIKE
Ray D. Arbogast, Freeport, Ill., assignor to Burgess Battery Company, Freeport, Ill., a corporation of Delaware
Application February 14, 1956, Serial No. 40,160
Term of patent 14 years
(Cl. D48—24)



177,956
CLOCK OR SIMILAR ARTICLE
Walter R. Avis, Rosemont, Pa.
Application September 21, 1955, Serial No. 38,009
Term of patent 14 years
(Cl. D42—7)



177,957
TRIM PIECE FOR AUTOMOBILES
Richard F. Baird, Royal Oak, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application May 11, 1955, Serial No. 35,919
Term of patent 7 years
(Cl. D14—27)



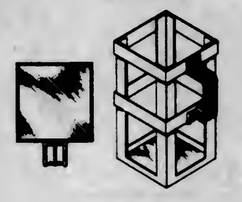
177,958
SHORTS OR THE LIKE
William Bender, New York, N. Y.
Application September 27, 1954, Serial No. 32,441
Term of patent 3½ years
(Cl. D3—17)



177,959
PHONOGRAPH CABINET
Melvin H. Boldt, Glenview, Ill.
Application August 16, 1955, Serial No. 37,478
Term of patent 14 years
(Cl. D56—4)



177,960
MILK CARTON HOLDER OR SIMILAR ARTICLE
Arthur L. Bowans, Denver, Colo.
Application September 12, 1955, Serial No. 37,875
Term of patent 3½ years
(Cl. D58—26)



177,961
POWER LAWN MOWER
Charles W. Butler, New York, N. Y., assignor to Toro Manufacturing Corporation of Minnesota, Minneapolis, Minn., a corporation of Minnesota
Application September 8, 1953, Serial No. 26,743
Term of patent 14 years
(Cl. D40—1)



177,962
HIGHWAY GUARD FOR WET TRAFFIC LINES
Robert Glenn Corbin, Huntingdon, Pa., assignor to Wald Industries, Inc., Huntingdon, Pa., a corporation of Pennsylvania
Application April 3, 1956, Serial No. 40,888
Term of patent 14 years
(Cl. D72—1)



177,963
GRILLE
Norman Cutler, Philadelphia, Pa., assignor to Royal Factories Corp., Philadelphia, Pa., a corporation of Pennsylvania
Application January 26, 1956, Serial No. 39,936
Term of patent 14 years
(Cl. D54—2)



177,964
LAMP POST
Howard A. Dunn, Pittsburgh, Pa.
Application August 17, 1954, Serial No. 31,896
Term of patent 14 years
(Cl. D48—31)



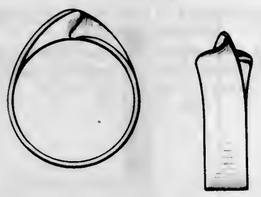
177,965
EXPOSED PIPING GAS OUTLET
William E. Doering, Chicago, Ill., assignor to National Cylinder Gas Company, Chicago, Ill., a corporation of Delaware
Application May 20, 1954, Serial No. 30,595
Term of patent 14 years
(Cl. D52—2)



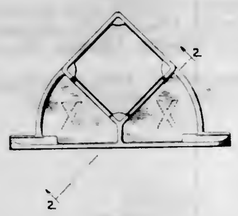
177,966
DECANTER
Ernest L. Du Pree, Weston, Conn., assignor to Schenley Industries, Inc., New York, N. Y., a corporation of Delaware
Application October 26, 1954, Serial No. 32,830
Term of patent 14 years
(Cl. D58—3)



177,967
FINGER RING OR SIMILAR ARTICLE
Ronald B. Edwards, Rochester, N. Y.
Application December 23, 1955, Serial No. 39,467
Term of patent 14 years
(Cl. D45—10)



177,968
VEHICLE BARRIER BRACKET
Fred Ex, Chicago, Ill., assignor to Fred Ex Enterprises, Inc., Chicago, Ill.
Application February 28, 1955, Serial No. 34,742
Term of patent 7 years
(Cl. D28—1)



177,969
JEWELRY CHARM
Louis Franklin, New York, N. Y., assignor to Louis Franklin Co., Inc., New York, N. Y., a corporation of New York
Application January 16, 1956, Serial No. 39,805
Term of patent 14 years
(Cl. D45—15)



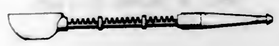
177,970
BUTTER DISH
Harold L. Fulton, Elyria, Ohio
Application July 18, 1955, Serial No. 37,000
Term of patent 3½ years
(Cl. D44—5)



177,971
LATCHING DEVICE FOR JEWEL BOXES AND LIKE RECEPTACLES
Charles S. Gehrie, Montclair, N. J., assignor to Presto Lock Company, Garfield, N. J., a partnership
Application September 27, 1954, Serial No. 32,437
Term of patent 14 years
(Cl. D50—7)



177,972
BOWL HOLDER AND SHANK FOR A SMOKER'S PIPES
Jerome Gevirman, Brooklyn, N. Y.
Application January 30, 1956, Serial No. 39,958
Term of patent 14 years
(Cl. D85—8)



177,973
SCISSORS OR SIMILAR ARTICLE
Stephen J. Gorel, Stratford, Conn.
Application May 16, 1955, Serial No. 35,997
Term of patent 7 years
(Cl. D22—5)



177,974
LIPSTICK CONTAINER
Lurelle Guild, New York, and Grace Gilbert Van Voorhis, Bronx, N. Y., assignors to Revlon, Inc., New York, N. Y., a corporation of Delaware
Application March 13, 1956, Serial No. 40,579
Term of patent 14 years
(Cl. D86—10)



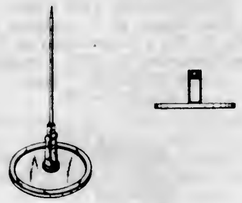
177,975
AEROSOL SPRAYER
William C. Harris, Racine, Wis., assignor to S. C. Johnson & Son, Inc.
Application April 26, 1955, Serial No. 35,684
Term of patent 14 years
(Cl. D62—2)



177,976
RUG CUSHION OR SIMILAR ARTICLE
Dixon R. Harwin and Alfred Stern, Los Angeles, and Virgil H. Bodle, Temple City, Calif., assignors to National Sponge Cushion Co., Inc., Los Angeles, Calif., a corporation of California
Application January 3, 1955, Serial No. 33,794
Term of patent 14 years
(Cl. D92—4)



177,977
COMBINED PAPER WEIGHT AND SPINDLE
Philip Hass, New York, N. Y.
Application October 11, 1955, Serial No. 38,321
Term of patent 14 years
(Cl. D74—2)



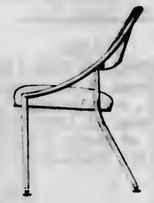
177,978
FIGURINE
Ronald H. Heldreich, Chino, Calif.
Application June 21, 1955, Serial No. 36,616
Term of patent 14 years
(Cl. D29—23)



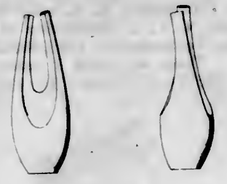
177,979
SIGNAL LAMP FOR AUTOMOTIVE VEHICLES
Jesse R. Hollins, Brooklyn, N. Y.
Application July 20, 1955, Serial No. 37,044
Term of patent 14 years
(Cl. D48—32)



177,980
CHAIR
Robert E. Kjer Jakobsen, Manhattan Beach, Calif., assignor to Virtue Bros. Mfg. Co., Los Angeles, Calif., a corporation of California
Application January 23, 1956, Serial No. 39,880
Term of patent 14 years
(Cl. D15—1)



177,981
VASE OR SIMILAR ARTICLE
George T. James, San Fernando, Calif., assignor to Gladding, McBean & Co., Los Angeles, Calif., a corporation of California
Application November 28, 1955, Serial No. 39,062
Term of patent 14 years
(Cl. D29—28)



177,982
FOUNDATION GARMENT
Mack Kahn, Cedarhurst, N. Y.
Application March 30, 1955, Serial No. 35,280
Term of patent 7 years
(Cl. D20—2)



177,983
JEWELRY FINDING OR SIMILAR ARTICLE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application October 25, 1955, Serial No. 38,548
Term of patent 7 years
(Cl. D45—1)



177,984
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 38,998
Term of patent 7 years
(Cl. D45—16)



177,985
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 38,999
Term of patent 7 years
(Cl. D45—9)



177,986
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 39,000
Term of patent 7 years
(Cl. D45—19)



177,987
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 39,001
Term of patent 7 years
(Cl. D45—16)



177,988
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 39,002
Term of patent 7 years
(Cl. D45—9)



177,989
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 39,005
Term of patent 7 years
(Cl. D45—19)



177,990
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 39,011
Term of patent 7 years
(Cl. D45—19)



177,991
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 39,012
Term of patent 7 years
(Cl. D45—19)



177,992
EYEGLASS FRAME
Alexander Kono, Woodside, N. Y., assignor to Kono Manufacturing Co., Inc., Woodside, N. Y., a corporation of New York
Application December 5, 1955, Serial No. 39,159
Term of patent 14 years
(Cl. D57—1)



177,993
CHRISTMAS CANDLE
Betty Jane Kranz, Youngstown, Ohio
Application September 24, 1953, Serial No. 26,938
Term of patent 3½ years
(Cl. D73—1)



177,994
SPOON
Carl J. Lind, Evanston, Ill.
Application November 25, 1952, Serial No. 22,437
Term of patent 14 years
(Cl. D54—12)



177,995
DEVICE FOR CONVERTING BOTTLES, JUGS, OR VASES INTO LAMPS
Alexis Nihon, Nassau Bahamas, British West Indies
Application January 9, 1956, Serial No. 39,649
Term of patent 14 years
(Cl. D48—20)



177,996
PAPER NAPKIN
Richard E. Machamer, Neenah, Wis., assignor to Marathon Corporation, Menasha, Wis., a corporation of Wisconsin
Application August 18, 1955, Serial No. 37,566
Term of patent 14 years
(Cl. D59—2)



177,997
LIPSTICK CONTAINER
Henrietta P. Manville, Woodbury, Conn., assignor to Revlon, Inc., New York, N. Y., a corporation of Delaware
Application February 28, 1956, Serial No. 40,387
Term of patent 14 years
(Cl. D86—10)

177,998
SPECTACLE FRAME OR THE LIKE
Joseph J. Margules, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Application October 31, 1955, Serial No. 38,660
Term of patent 14 years
(Cl. D57—1)



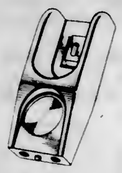
177,999
SPECTACLE FRAME OR THE LIKE
Joseph J. Margules, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Application October 31, 1955, Serial No. 38,662
Term of patent 14 years
(Cl. D57—1)



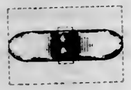
178,000
JEWELRY FINDING
Julio J. Marsella, Providence, R. I.
Application March 16, 1955, Serial No. 35,070
Term of patent 3½ years
(Cl. D45—1)



178,001
AMPLIFIED CHECK GAGE
Anthony J. Martin, Livonia, Mich., assignor to Charles J. Martin & Sons, a corporation of Michigan
Application September 7, 1954, Serial No. 32,173
Term of patent 14 years
(Cl. D52—1)

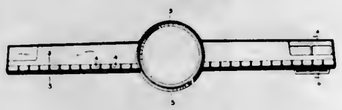


178,002
CUFF LINK
Frederick W. Moulson, Rehoboth, Mass., assignor to B. A. Ballou & Co. Incorporated, a corporation of Rhode Island
Application July 20, 1954, Serial No. 31,500
Term of patent 14 years
(Cl. D17—7)





178,003
PANEL FOR LAUNDRY APPLIANCES
Stuart G. Mundt, North Syracuse, N. Y.
Application December 1, 1955, Serial No. 39,126
Term of patent 14 years
(Cl. D49—1)



178,004
WASHING MACHINE
Russell J. Nadherny, Wilmette, Ill., assignor to American Machine and Metals, Inc., New York, N. Y., a corporation of Delaware
Application December 24, 1954, Serial No. 33,678
Term of patent 14 years
(Cl. D49—1)



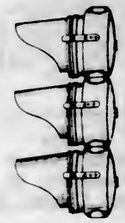
178,005
COMBINED BOTTLE AND CAP THEREFOR
Helen Neushaefer, New York, N. Y., assignor to Helen Neushaefer, Inc., College Point, N. Y., a corporation of New York
Application September 28, 1955, Serial No. 38,143
Term of patent 14 years
(Cl. D58—8)



178,006
WOOD PANEL OR SIMILAR WALL DECORATIVE ARTICLE
Robert Nilsen, Baldwin Park, Calif., assignor to Sierra Lumber Products, Pasadena, Calif., a corporation of California
Application April 27, 1954, Serial No. 30,221
Term of patent 14 years
(Cl. D13—1)



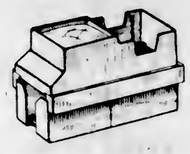
178,007
TRAFFIC SIGNAL
Myron F. Pettengill, Hendersonville, N. C., assignor to General Electric Company, a corporation of New York
Application December 22, 1955, Serial No. 39,447
Term of patent 14 years
(Cl. D72—1)



178,008
WATCH OR SIMILAR ARTICLE
Henry Pommier, New York, N. Y.
Application September 30, 1955, Serial No. 38,187
Term of patent 7 years
(Cl. D42—8)



178,009
SLIDE VIEWERS
Richard G. Rideout, Cambridge, and John F. Herrmann, Lynnfield, Mass.; said Herrmann assignor to said Rideout
Application August 25, 1955, Serial No. 37,665
Term of patent 14 years
(Cl. D61—1)



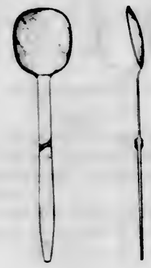
178,010
BURNER PILOT TORCH OR THE LIKE
William G. Rowell, Quincy, Mass., assignor to Scully Signal Company, Melrose, Mass., a corporation of Massachusetts
Application April 25, 1955, Serial No. 35,665
Term of patent 14 years
(Cl. D81—2)



178,011
SERVING FORK
Arthur Salm, Chicago, Ill., assignor to Arthur Salm Inc., Chicago, Ill., a corporation of Illinois
Application July 18, 1955, Serial No. 37,009
Term of patent 14 years
(Cl. D54—12)



178,012
SERVING SPOON
Arthur Salm, Chicago, Ill., assignor to Arthur Salm Inc., Chicago, Ill., a corporation of Illinois
Application July 18, 1955, Serial No. 37,010
Term of patent 14 years
(Cl. D54—12)



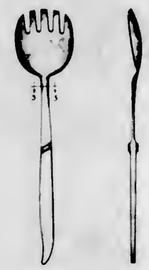
178,013
SERVING SPOON
Arthur Salm, Chicago, Ill., assignor to Arthur Salm Inc., Chicago, Ill., a corporation of Illinois
Application July 18, 1955, Serial No. 37,011
Term of patent 14 years
(Cl. D54—12)



178,014
SERVING FORK
Arthur Salm, Chicago, Ill., assignor to Arthur Salm Inc., Chicago, Ill., a corporation of Illinois
Application July 18, 1955, Serial No. 37,012
Term of patent 14 years
(Cl. D54—12)



178,015
SERVING FORK
Arthur Salm, Chicago, Ill., assignor to Arthur Salm Inc., Chicago, Ill., a corporation of Illinois
Application July 18, 1955, Serial No. 37,013
Term of patent 14 years
(Cl. D54—12)



178,016
SERVING SPOON
Arthur Salm, Chicago, Ill., assignor to Arthur Salm Inc., Chicago, Ill., a corporation of Illinois
Application July 18, 1955, Serial No. 37,014
Term of patent 14 years
(Cl. D54—12)



178,017
PICTURE RECEIVING BELT BUCKLE
Nicholas J. Savino, Jackson Heights, N. Y., assignor to Exclusive Belt Co., Inc., New York, N. Y., a corporation of New York
Application August 17, 1955, Serial No. 37,531
Term of patent 3½ years
(Cl. D17—1)



178,018
MICROPHONE
Burt E. Schell, Jr., Mundelein, Ill., assignor to Shure Brothers, Incorporated, Chicago, Ill., a corporation of Illinois
Application June 6, 1955, Serial No. 36,390
Term of patent 14 years
(Cl. D26—14)



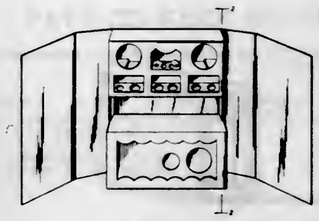
178,019
WHEEL COVER FOR AN AUTOMOBILE
George A. Schmidt, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application July 26, 1955, Serial No. 37,127
Term of patent 7 years
(Cl. D14—30)



178,020
TEXTILE FABRIC
Herman Schwartz, Long Beach, N. Y.
Application April 19, 1955, Serial No. 35,582
Term of patent 3½ years
(Cl. D92—1)



178,021
TOY CUPBOARD OR SIMILAR ARTICLE
Kay Stanley, Chicago, Ill.
Application August 1, 1955, Serial No. 37,251
Term of patent 7 years
(Cl. D34—15)



178,022
LIP ROUGE CONTAINER
Merton T. Strommen, Arcadia, Calif., assignor to Trulip, Inc., Arcadia, Calif., a corporation of California
Application February 24, 1956, Serial No. 40,310
Term of patent 14 years
(Cl. D86—10)



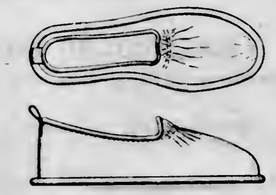
178,023
HEAD SCARF OR THE LIKE
Carol B. Sullivan, New York, N. Y.
Application March 30, 1955, Serial No. 35,287
Term of patent 7 years
(Cl. D3—13)



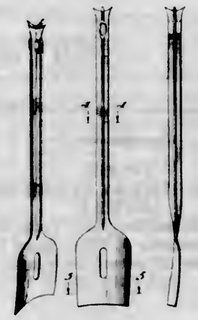
178,024
CONTAINER FOR TOYS OR SIMILAR ARTICLE
Erwin D. Swann, New York, N. Y.
Application March 17, 1955, Serial No. 35,090
Term of patent 14 years
(Cl. D29—1)



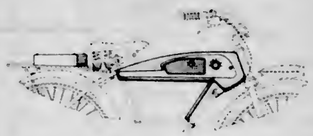
178,025
SLIPPER
Lawrence M. Thurlow, Portland, Oreg.
Application January 30, 1953, Serial No. 23,350
Term of patent 14 years
(Cl. D7—7)



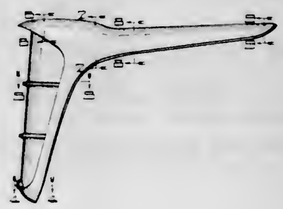
178,026
BOTTLE CLEANER OR THE LIKE
Earl S. Tupper, Upton, Mass.
Application January 12, 1955, Serial No. 33,941
Term of patent 14 years
(Cl. D44—29)



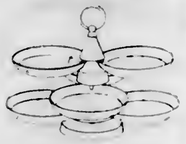
178,027
BICYCLE RADIO
Read Viemeister, Yellow Springs, Ohio, assignor to The Huffman Manufacturing Company, Dayton, Ohio, a corporation of Ohio
Application June 30, 1955, Serial No. 36,770
Term of patent 7 years
(Cl. D90—1)



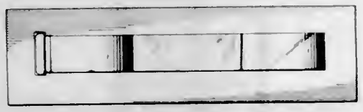
178,028
AUTOMOBILE TAIL LAMP ASSEMBLY
Clifford S. Voss, Clawson, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application July 26, 1955, Serial No. 37,128
Term of patent 7 years
(Cl. D48—32)



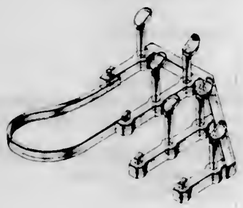
178,029
TOWERED SUSAN SERVER
William D. Warren, New York, N. Y.
Application December 1, 1955, Serial No. 39,120
Term of patent 14 years
(Cl. D44—10)



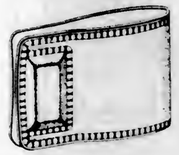
178,030
DISPLAY PACKAGE FOR A WATCH BAND OR THE LIKE
Max E. Westerman, New York, N. Y.
Application October 28, 1955, Serial No. 38,623
Term of patent 3½ years
(Cl. D80—5)



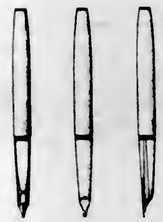
178,031
MERCHANDISE DISPLAY STAND OR SIMILAR ARTICLE
Fritz Westernacher, New York, N. Y.
Application November 3, 1954, Serial No. 32,955
Term of patent 14 years
(Cl. D80—9)



178,032
CLIP FOR PAPER MONEY AND THE LIKE
Carl C. Wilm, Denver, Colo., assignor to Magnex, Inc., Denver, Colo., a corporation of Colorado
Application December 16, 1955, Serial No. 39,354
Term of patent 14 years
(Cl. D17—3)



178,033
FOUNTAIN PEN
Donald H. Young, Southbury, Conn., and Robert G. Plantholt, Mount Clemens, and Frederick W. Hertzler, Detroit, Mich., assignors to Waterman Pen Company, Inc., New York, N. Y., a corporation of New York
Application September 17, 1954, Serial No. 32,324
Term of patent 14 years
(Cl. D74—17)



LIST OF REISSUE PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 12TH DAY OF JUNE, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Barney, Arthur L., to E. I. du Pont de Nemours and Co. Quaternary ammonium polymers of the acrylic type. Re. 24,164, 6–12–56, Cl. 260—85.5.

Du Pont, E. I., de Nemours and Co.: *See*—
Barney, Arthur L. Re. 24,164.

Eisler, Paul, to Hermoplast Ltd. Manufacture of electric circuit components. Re. 24,165, 6–12–56, Cl. 41—43.

Hermoplast Ltd.: *See*—
Eisler, Paul. Re. 24,165.

Stiller, Benjamin. Self-closing container. Re. 24,166, 6–12–56, Cl. 150—37.

LIST OF PLANT PATENTEES

Armstrong Nurseries, Inc.: *See*—
Swim, Herbert C. 1,482.

Swim, Herbert C., to Armstrong Nurseries, Inc. Plum tree. 1,482, 6–12–56, Cl. 47—62.

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Adams, Robert H. Combined ash tray and cigarette extinguisher. 177,954, 6–12–56, Cl. D85—2.

American Machine and Metals, Inc.: *See*—
Nadherny, Russell J. 178,004.

American Optical Co.: *See*—
Margules, Joseph J. 177,998.
Margules, Joseph J. 177,999.

Arbogast, Ray D., to Burgess Battery Co. Bracket for a flashlight or the like. 177,955, 6–12–56, Cl. D48—24.

Avis, Walter R. Clock or similar article. 177,956, 6–12–56, Cl. D42—7.

Baird, Richard F., to Chrysler Corp. Trim piece for automobiles. 177,957, 6–12–56, Cl. D14—27.

Ballou, B. A., & Co. Inc.: *See*—
Moulson, Frederick W. 178,002.

Bender, William. Shorts or the like. 177,958, 6–12–56, Cl. D3—17.

Bodle, Virgil H.: *See*—
Harwin, Dixon R., Stern, and Bodle. 177,976.

Boldt, Melvin H. Phonograph cabinet. 177,959, 6–12–56, Cl. D56—4.

Bowans, Arthur L. Milk carton holder or similar article. 177,960, 6–12–56, Cl. D58—26.

Burgess Battery Co.: *See*—
Arbogast, Ray D. 177,955.

Butler, Charles W., to Toro Mfg. Corp. of Minnesota. Power lawn mower. 177,961, 6–12–56, Cl. D40—1.

Chrysler Corp.: *See*—
Baird, Richard F. 177,957.
Schmidt, George A. 178,019.
Voss, Clifford S. 178,028.

Corbin, Robert G., to Wald Industries, Inc. Highway guard for wet traffic lines. 177,962, 6–12–56, Cl. D72—1.

Coro, Inc.: *See*—
Katz, Adolph. 177,983–991.

Cutler, Norman, to Royal Factories Corp. Grille. 177,963, 6–12–56, Cl. D54—2.

Daum, Howard A. Lamp post. 177,964, 6–12–56, Cl. D48—31.

Doering, William E., to National Cylinder Gas Co. Exposed piping gas outlet. 177,965, 6–12–56, Cl. D52—2.

Du Pree, Ernest L., to Schenley Industries, Inc. Decanter. 177,966, 6–12–56, Cl. D58—8.

Edwards, Ronald B. Finger ring or similar article. 177,967, 6–12–56, Cl. D45—10.

Ex, Fred, to Fred Ex Enterprises, Inc. Vehicle barrier bracket. 177,968, 6–12–56, Cl. D28—1.

Ex, Fred, Enterprises, Inc.: *See*—
Ex, Fred. 177,968.

Exclusive Belt Co., Inc.: *See*—
Savino, Nicholas J. 178,017.

Franklin, Louis, to Louis Franklin Co., Inc. Jewelry charm. 177,969, 6–12–56, Cl. D45—15.

Franklin, Louis, Co., Inc.: *See*—
Franklin, Louis. 177,969.

Fulton, Harold L. Butter dish. 177,970, 6–12–56, Cl. D44—5.

Gehrie, Charles S., to Presto Lock Co. Latching device for jewel boxes and like receptacles. 177,971, 6–12–56, Cl. D50—7.

General Electric Co.: *See*—
Pettengill, Myron F. 178,007.

Gevirman, Jerome. Bowl holder and shank for a smoker's pipes. 177,972, 6–12–56, Cl. D85—8.

Gladding, McBean & Co.: *See*—
James, George T. 177,981.

Gorel, Stephen J. Scissors or similar articles. 177,973, 6–12–56, Cl. D22—5.

Guild, Iurelle, and G. G. Van Voorhis, to Revlon, Inc. Lipstick container. 177,974, 6–12–56, Cl. D86—10.

Hurris, William C., to S. C. Johnson & Son, Inc. Aerosol sprayer. 177,975, 6–12–56, Cl. D62—2.

Harwin, Dixon R., A. Stern, and V. H. Bodle, to National Sponge Cushion Co., Inc. Rug cushion or similar article. 177,976, 6–12–56, Cl. D92—4.

Hass, Philip. Combined paper weight and spindle. 177,977, 6–12–56, Cl. D74—2.

Heldreich, Ronald H. Figurine. 177,978, 6–12–56, Cl. D29—23.

Herrmann, John F.: *See*—
Rideout, Richard G., and Herrmann. 178,009.

Hertzler, Frederick W.: *See*—
Young, Donald H., Plantholt, and Hertzler. 178,033.

Hollins, Jesse R. Signal lamp for automotive vehicles. 177,979, 6–12–56, Cl. D48—32.

Huffman Mfg. Co., The: *See*—
Viemeister, Read. 178,027.

Jakobsen, Robert E. K., to Virtue Bros. Mfg. Co. Chair. 177,980, 6–12–56, Cl. D15—1.

James, George T., to Gladding, McBean & Co. Vase or similar article. 177,981, 6–12–56, Cl. D29—28.

Johnson, S. C., & Son, Inc.: *See*—
Harris, William C. 177,975.

Kahn, Mack. Foundation garment. 177,982, 6–12–56, Cl. D20—2.

Katz, Adolph, to Coro, Inc. Jewelry finding or similar article. 177,983, 6–12–56, Cl. D45—1.

Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 177,984, 6–12–56, Cl. D45—16.

Katz, Adolph, to Coro, Inc. Earring or the like. 177,985, 6–12–56, Cl. D45—9.

Katz, Adolph, to Coro, Inc. Brooch or the like. 177,986, 6–12–56, Cl. D45—19.

Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 177,987, 6–12–56, Cl. D45—16.

Katz, Adolph, to Coro, Inc. Earring or the like. 177,988, 6–12–56, Cl. D45—9.

Katz, Adolph, to Coro, Inc. Brooch or the like. 177,989, 6–12–56, Cl. D45—19.

Katz, Adolph, to Coro, Inc. Brooch or the like. 177,990, 6–12–56, Cl. D45—19.

Katz, Adolph, to Coro, Inc. Brooch or the like. 177,991, 6–12–56, Cl. D45—19.

Kono, Alexander, to Kono Mfg. Co., Inc. Eyeglass frame. 177,992, 6–12–56, Cl. D57—1.

Kono Mfg. Co., Inc.: *See*—
Kono, Alexander. 177,992.

Kranz, Betty J. Christmas candle. 177,993, 6–12–56, Cl. D73—1.

Lind, Carl J. Spoon. 177,994, 6–12–56, Cl. D54—12.

Machamer, Richard E., to Marathon Corp. Paper napkin. 177,996, 6–12–56, Cl. D59—2.

Magnex, Inc.: *See*—
Wilm, Carl C. 178,032.

Manville, Henrietta P., to Revlon, Inc. Lipstick container. 177,997, 6–12–56, Cl. D86—10.

Marathon Corp.: *See*—
Machamer, Richard E. 177,996.

Margules, Joseph J., to American Optical Co. Spectacle frame or the like. 177,998, 6–12–56, Cl. D57—1.

Margules, Joseph J., to American Optical Co. Spectacle frame or the like. 177,999, 6–12–56, Cl. D57—1.

Marsella, Julio J. Jewelry finding. 178,000, 6–12–56, Cl. D45—1.

Martin, Anthony J., to Charles J. Martin & Sons. Amplified check gage. 178,001, 6–12–56, Cl. D52—1.

Martin, Charles J., & Sons: *See*—
Martin, Anthony J. 178,001.
Moulson, Frederick W., to B. A. Ballou & Co. Inc. Cuff link. 178,002, 6–12–56, Cl. D17—7.
Mundt, Stuart G. Panel for laundry appliances. 178,003, 6–12–56, Cl. D49—1.
Nadherny, Russell J., to American Machine and Metals, Inc. Washing machine. 178,004, 6–12–56, Cl. D49—1.
National Cylinder Gas Co.: *See*—
Doering, William E. 177,965.
National Sponge Cushion Co., Inc.: *See*—
Harwin, Dixon R., Stern, and Bodle. 177,976.
Neushaefer, Helen, to Helen Neuschaefer, Inc. Combined bottle and cap therefor. 178,005, 6–12–56, Cl. D58—8.
Neushaefer, Helen, Inc.: *See*—
Neushaefer, Helen. 178,005.
Nihon, Alexis. Device for converting bottles, jugs, or vases into lamps. 177 995. 6–12–56, Cl. D48—20.
Nilsen, Robert, to Sierra Lumber Products. Wood panel or similar wall decorative article. 178,006, 6–12–56, Cl. D13—1.
Pettengill, Myron F., to General Electric Co. Traffic signal. 178 007, 6–12–56, Cl. D72—1.
Plantholt, Robert G.: *See*—
Young, Donald H., Plantholt, and Hertzler. 178,033.
Pommier, Henry. Watch or similar article. 178,008, 6–12–56, Cl. D42—8.
Presto Lock Co.: *See*—
Gehrle, Charles S. 177,971.
Revlon, Inc.: *See*—
Guild, Lurelle, and Van Voorhis. 177,974.
Manville, Henrietta P. 177 997.
Rideout, Richard G., and J. F. Herrmann; said Herrmann assor to said Rideout. Slide viewers. 178,009, 6–12–56, Cl. D61—1.
Rowell, William G., to Scully Signal Co. Burner pilot torch or the like. 178 010 6–12–56, Cl. D81—2.
Royal Factories Corp.: *See*—
Cutler, Norman. 177 963.
Salm, Arthur, to Arthur Salm Inc. Serving fork. 178,011, 6–12–56, Cl. D54—12.
Salm, Arthur, to Arthur Salm, Inc. Serving spoon. 178,012, 6–12–56, Cl. D54—12.
Salm, Arthur, to Arthur Salm, Inc. Serving spoon. 178,013, 6–12–56 Cl. D54—12.
Salm, Arthur, to Arthur Salm Inc. Serving fork. 178,014, 6–12–56, Cl. D54—12.
Salm, Arthur, to Arthur Salm Inc. Serving fork. 178,015, 6–12–56 Cl. D54—12.
Salm, Arthur, to Arthur Salm Inc. Serving spoon. 178,016, 6–12–56 Cl. D54—12.
Salm, Arthur, Inc.: *See*—
Salm, Arthur. 178 011–16.
Savino, Nicholas J., to Exclusive Belt Co., Inc. Picture receiving belt buckle. 178,017, 6–12–56, Cl. D17—1.
Schell, Burt E., Jr., to Shure Brothers, Inc. Microphone. 178,018, 6–12–56, Cl. D26—14.
Schenley Industries, Inc.: *See*—
Du Pree, Ernest L. 177,966.
Schmidt, George A., to Chrysler Corp. Wheel cover for an automobile. 178,019, 6–12–56. Cl. D14—30.
Schwartz, Herman. Textile fabric. 178,020, 6–12–56, Cl. D92—1.
Scully Signal Co.: *See*—
Rowell, William G. 178,010.
Shure Brothers, Inc.: *See*—
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Sierra Lumber Products: *See*—
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Stanley, Kay. Toy cupboard or similar article. 178,021, 6–12–56. Cl. D34—15.
Stern, Alfred: *See*—
Harwin, Dixon R., Stern, and Bodle. 177,976.
Strommen, Merton T., to Trulip, Inc. Lip rouge container. 178,022, 6–12–56. Cl. D86—10.
Sullivan, Carol B. Head scarf or the like. 178,023, 6–12–56, Cl. D3—13.
Swann, Erwin D. Container for toys or similar article. 178 024, 6–12–56, Cl. D29—1.
Thurlow, Lawrence M. Slipper. 178,025, 6–12–56, Cl. D7—7.
Toro Mfg. Corp. of Minnesota: *See*—
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Trulip, Inc.: *See*—
Strommen, Merton T. 178 022.
Tupper, Earl S. Bottle cleaner or the like. 178,026, 6–12–56, Cl. D44—29.
Van Voorhis, Grace G.: *See*—
Guild, Lurelle, and Van Voorhis. 177 974.
Viemeister, Read, to The Huffman Mfg. Co. Bicycle radio. 178 027, 6–12–56. Cl. D90—1.
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Jakobsen, Robert E. K. 177,980.
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Wald Industries, Inc.: *See*—
Corbin, Robert G. 177,962.
Warren, William D. Towered susan server. 178,029, 6–12–56. Cl. D44—10.
Waterman Pen Co., Inc.: *See*—
Young, Donald H., Plantholt, and Hertzler. 178 033.
Westerman, Max E. Display package for a watch band or the like. 178 030. 6–12–56, Cl. D80—5.
Westernacher, Fritz. Merchandise display stand or similar article. 178,031. 6–12–56, Cl. D80—9.
Wilm, Carl C., to Magnex, Inc. Clip for paper money and the like. 178,032. 6–12–56, Cl. D17—3.
Young, Donald H., R. G. Plantholt, and F. W. Hertzler, to Waterman Pen Co., Inc. Fountain pen. 178,033, 6–12–56, Cl. D74—17.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 12TH DAY OF JUNE, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

ACF Industries, Inc.: *See*—
Bogard, Fred J. 2,750,053.
Abdite Industries, Inc.: *See*—
Csarnik, Stanley J. 2,749,961.
Abram, Noah J.: *See*—
Ipatieff, Vladimir N., and Monroe. 2,750,261.
Abrams, Louis. Drapery pleater. 2,749,977, 6–12–56, Cl. 160—348.
Achenbach, John C., and S. I. Tourshou, to Radio Corp. of America. Series connected totem-triode amplifiers. 2,750,450, 6–12–56, Cl. 179—171.
Actiengesellschaft Joh, Jacob Pieter & Cie.: *See*—
Stähli, Gustav. 2,749,698.
Adams, William H., to Northrop Aircraft, Inc. Temperature measuring device. 2,749,753, 6–12–56, Cl. 73—362.
Adelt, Heinz E.: *See*—
McNamee, Wallace J., and Adelt. 2,749,595.
Adelt, Joseph W., to United Parts Mfg. Co. Sealing boot. 2,749,757, 6–12–56, Cl. 74—18.2.
Admiral Corp.: *See*—
Bleam, Howard A. 2,750,219.
Agostini, Victor A., and J. R. Winters. Gun rack. 2,750,088, 6–12–56, Cl. 224—1.
Agriculture, United States of America as represented by the Secretary of: *See*—
Cowan, John C., and Evans. 2,750,400.
Fisher, Gordon S., Goldblatt, and Stinson. 2,750,411.
Reeves, Wilson A., and Guthrie. 2,750,249.
Swern, Daniel, Coleman, and Knight. 2,750,362.
Treadway, Robert H., and Heisler. 2,750,295.
Ahlén, Karl G., to Svenska Rotor Maskiner Aktiebolag. Hydraulic power transmission. 2,750,017, 6–12–56, Cl. 192—3.2.
Aiken, William R., to the United States of America as represented by the United States Atomic Energy Commission. Linear pulse integrator. 2,750,500, 6–21–56, Cl. 250—27.
Air Force, United States of America as represented by the Secretary of the: *See*—
Gottlier, Thomas L. 2,750,503.
Padgett, Edward D. 2,750,457.
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Alden, Carroll R., to Ex-Cell-O Corp. Dispensing container with extensible pouring spout. 2,750,095, 6–12–56, Cl. 229—17.
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Nyman, Alexander. 2,750,443.
Alder, Clayton W. Dual action lift spring. 2,749,570, 6–12–56, Cl. 16—198.
Alexander, Guy B., to E. I. du Pont de Nemours and Co. Process for producing sols of 5-8 millimicron silica particles and product. 2,750,345, 6–12–56, Cl. 252—313.
Allard, Arthur R.: *See*—
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Lellep, Otto G. 2,750,273.
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Jukkola, Walfred W., and Lewis. 2,750,258.
Ambrose, Paul E., to International Latex Corp. Deposited rubber undergarment. 2,749,549, 6–12–56, Cl. 2—36.
Ambrosen, Johan P., to Civilforsvarsstyrelsen. Apparatus for integrating measurement of X-rays or radio-active rays. 2,750,516, 6–12–56, Cl. 250—83.6.
American Art Metals Co.: *See*—
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American Optical Co.: *See*—
Clotar, Gilbert. 2,749,801.
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Gagon, Louis L. 2,749,800.
American Road Equipment Co.: *See*—
Stuart, Donald R. 2,750,057.
American Telephone and Telegraph Co.: *See*—
Martin, Wade B. 2,750,446.
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Conti, John D. 2,749,692.
Long, Frederick F. 2,750,039.
Amick, Hubert R. Foot steering apparatus for outboard motor boats. 2,749,872, 6–12–56, Cl. 114—153.
Anaconda Wire & Cable Co.: *See*—
Snyder, Clermont J., and MacLelland. 2,750,311.
Anchor Hocking Glass Corp.: *See*—
Stover, Harry E. 2,749,838.
Andersen, Herbert H., and M. L. Allen, to General Electric Co. Instrument structure. 2,750,585, 6–12–56, Cl. 340—378.
Anderson, Clarence E., to The Babcock & Wilcox Co. Metal removing apparatus for trimming tube ends. 2,749,809, 6–12–56 Cl. 90—12.
Anderson, Earl L., to Radio Corp. of America. Television receiver. 2,750,534, 6–12–56, Cl. 315—22.
Anderson, Harold J., to Northeast Tool Die Works, Inc. Sealed beam light. 2,750,491, 6–12–56, Cl. 240—41.
Anderson, Herbert W., to Whiting Corp. Apparatus for facilitating the loading and unloading of aircraft passengers and cargo at airports. 2,750,135, 6–12–56, Cl. 244—114.
Anderson, John W., to Teleflex Inc. Tool feed timer. 2,750,582, 6–12–56, Cl. 340—268.
Anderson, Roy E.: *See*—
Summerhayes, Harry R., Jr., Anderson, and Sampson. 2,750,519.
Andersson, Karl N., to Aktiebolaget Bofors. Electric control system for supervising relatively movable members. 2,750,553, 6–12–56, Cl. 318—468.
Angell, Pierce T., and R. Cliborn, to Thompson Products, Inc. Pump bearing lubricating and speed control system. 2,749,842, 6–12–56, Cl. 103—17.
Angelos, Arthur C.: *See*—
Billman, Louis S., and Angelos. 2,749,749.
Antal, John A. Combination coat and pants hanger. 2,750,086, 6–12–56, Cl. 223—88.
Antal, John A. Clothes hanger attachment. 2,750,087, 6–12–56, Cl. 223—88.
Anton, Nicholas. Vibratory tool. 2,749,676, 6–12–56, Cl. 51—170.
Anton, Nicholas T. Shoes for rubbing devices. 2,749,679, 6–12–56, Cl. 51—189.
Apostolescu, Stefan. Lift rotor construction for tandem rotor helicopters. 2,749,994, 6–12–56, Cl. 170—135.2.
Arbuckle, Frederick M., to Radio Corp. of America. Synchronization of television deflection systems. 2,750,498, 6–12–56, Cl. 250—27.
Arco Auto Carriers, Inc.: *See*—
Mettetal, Donald, Jr. 2,750,225.
Argentieri, Peter A., H. Daninhirsch, and T. L. Day, to Connor Engineering Corp. Air outlets and means for controlling the flow and temperature of the air therefrom. 2,749,831, 6–12–56, Cl. 98—38.
Armco Steel Corp.: *See*—
Loveless, Donald L. 2,750,283.
Marshall, William E. 2,750,276.
Marshall, William E. 2,750,277.
Armistead, Fontaine C., to Texaco Development Corp. Container for scintillation luminophor. 2,750,514, 6–12–56, Cl. 250—71.
Armour and Co.: *See*—
Turinsky, Otto. 2,750,366.
Armstrong, Adam E., to Armstrong Machine Works. Humidifying apparatus. 2,749,907, 6–12–56, Cl. 126—344.

Armstrong Cork Co.: *See*—
Baymiller, John W. 2,750,348.
Resser, Joseph H., Sr. 2,749,563.

Armstrong, Godfrey P., T. Bewley, G. W. Jackson, F. J. Bellringer, P. L. Bramwyche, and F. J. Wilkins, to Hercules Powder Co. Manufacture of cumylphenol. 2,750,424, 6–12–56, Cl. 260—619.

Armstrong, Godfrey P., F. J. Bellringer, T. Bewley, P. L. Bramwyche, G. W. Jackson, and F. J. Wilkins, to Hercules Powder Co. Manufacture of cumylphenol. 2,750,426, 6–12–56, Cl. 260—619.

Armstrong, Lorne D., and D. A. Jenny, to Radio Corp. of America. Unipolar semiconductor devices. 2,750,542, 6–12–56, Cl. 317—235.

Armstrong Machine Works: *See*—
Armstrong, Adam E. 2,749,907.

Army, United States of America as represented by the Secretary of the: *See*—
Och, Henry G. 2,750,110.
Tarrant, Paul, and Lovelace. 2,750,431.

Ash, Charles S. Ramp trailer. 2,750,226, 6–12–56, Cl. 296—61.

Ashton, Earl D. Portable desk. 2,749,655, 6–12–56, Cl. 45—58.

Associated Tool & Mfg. Co. Ltd.: *See*—
Rush, John T. 2,749,561.

Atlantic Refining Co., The: *See*—
Barrett, Wayne I., and Shipley. 2,750,329.
Slobod, Robert L., and Davis. 2,749,748.

Auburn Machine Works, Inc.: *See*—
George, Warren E. 2,749,756.

Auster, Louis. Safety locking device for gas and electric appliances. 2,749,903, 6–12–56, Cl. 126—42.

Austin, Albert M.: *See*—
Remiss, Robert P. 2,750,099.

Auto Specialties Mfg. Co.: *See*—
Lucker, Millard B. 2,750,150.

Automatic Electric Laboratories, Inc.: *See*—
Lomax, Clarence E. 2,750,447.
Murray, James S. 2,750,458.

Autoyre Co., The: *See*—
Lewis, Arthur J., 3rd. 2,749,670.

Avco Mfg. Corp.: *See*—
Duncan, Dan B., and Mittendorf. 2,749,717.

B-I-F Industries, Inc.: *See*—
Coffman, Paul A., Jr. 2,750,073.

B & M Mills, Inc.: *See*—
MacIntyre, John A. 2,750,245.

Babcock, Earl, to Esso Research and Engineering Co. Gun perforators for wells. 2,749,840, 6–12–56, Cl. 102—20.

Babcock & Wilcox Co., The: *See*—
Anderson, Clarence E. 2,749,809.
Edgecombe, David A., Evans, and Laposki. 2,749,782.

Babers, Frank H.: *See*—
Sullivan, William N., and Babers. 2,750,252.

Baccash, Gibron M.: *See*—
Santay, Elmer, and Baccash. 2,750,232.

Bach, Dorothy E. H.: *See*—
Bach, Emmon, and Goodwin. 2,749,967.

Bach, Emman, deceased, by D. E. H. Bach, administratrix, and E. W. Goodwin, to Dexter Folder Co. Bookcase making machine. 2,749,967, 6–12–56, Cl. 154—1.8.

Bäder, Erich: *See*—
Bredereck, Hellmut, and Bäder. 2,750,357.

Baer, Massimo, to Monsanto Chemical Co. Plasticized vinyl polymer compositions. 2,750,351, 6–12–56, Cl. 260—30.6.

Bahnluk, Eugene, to The New York Air Brake Co. Pump. 2,749,845, 6–12–56, Cl. 103—175.

Baird, Dyer C.: *See*—
Deslippe, Clifford E. 2,749,997.

Baker, Charles H., to S & C Electric Co. Circuit interrupter. 2,750,469, 6–12–56, Cl. 200—116.

Baker, Joseph C.: *See*—
Crowell, Arnold B., Schlessiger, and Baker. 2,749,839.

Bakewell, Sidney. Valve assembly machine. 2,749,602, 6–12–56, Cl. 29—208.

Baldwin, George, to The Cincinnati Milling Machine Co. Grinding wheel. 2,749,685, 6–12–56, Cl. 51—209.

Baldwin, John D., Jr.: *See*—
McMahon, James, and Baldwin. 2,749,788.

Balsiger, Harold E., to Landis Tool Co. Grinding machine set-up means. 2,749,673, 6–12–56, Cl. 51—103.

Bame, John L.: *See*—
Yust, Venard E., and Bame. 2,750,267.

Banes, Fred W.: *See*—
Mirviss, Stanley B., and Banes. 2,750,353.

Banneyer, Joseph. Building wall structure. 2,750,016, 6–12–56, Cl. 189—88.

Bannister, Bryant, and J. E. Bentley, to United States Steel Corp. Apparatus for maintaining a loop of continuous strip at entry end of a processing line. 2,750,187, 6–12–56, Cl. 271—2.1.

Baque, Harold W., to Corhart Refractories Co. Method of feeding glass batch materials. 2,749,666, 6–12–56, Cl. 49—77.

Barco, Allen A., to Radio Corp. of America. Color television receiver. 2,750,438, 6–12–56, Cl. 178—5.4.

Bardenheuer, Peter, G. Wehner, and P. Klare, to Vereinigte Deutsche Metallwerke Aktiengesellschaft. Production of wire rod and wire. 2,749,611, 6–12–56, Cl. 29—547.

Barker, Orrin W., and J. J. Lenert, to Kearney & Trecker Corp. Transfer machines. 2,749,811, 6–12–56, Cl. 90—15.

Barnes, Marion D., to Monsanto Chemical Co. Production of soluble phosphates. 2,750,270, 6–12–56, Cl. 71—34.

Barrett, Wayne I., and C. S. Shipley, ½ each to The Atlantic Refining Co., and W. R. Grace & Co. Platinum-containing reforming catalysts. 2,750,329, 6–12–56, Cl. 196—50.

Bartolett, William H.: *See*—
Fischer, Frederick K., and Bartolett. 2,749,776.

Barton, Loy E.: *See*—
Law, Russell R., Johnson, Giacoletto, and Barton. 2,750,507.

Bassett, Kenneth S.: *See*—
Jones, Don F., and Bassett. 2,749,904.

Bates, Norman H. Locking electric plug. 2,750,570, 6–12–56, Cl. 339—74.

Bath Iron Works Corp.: *See*—
Keiper, Edwin H. 2,750,123.

Battin, Harold T. Unitary tube valve and cap. 2,749,931, 6–12–56, Cl. 137—233.

Bauer, Edwin. Process of determining degree of milling of flour and apparatus for same. 2,749,796, 6–12–56, Cl. 88—14.

Baum, Wilhelm M. Method of handling radio-active materials. 2,750,517, 6–12–56, Cl. 250—108.

Bayley, Abraham, M. Harfenist, and W. M. McLamore, to Chas. Pfizer & Co., Inc. Hypnotic agents. 2,750,428, 6–12–56, Cl. 260—632.

Bayerische Berg-, Hütten-und Salzwerke A. G.: *See*—
Griesbach, Otto. 2,749,728.

Baymiller, John W., to Armstrong Cork Co. Method of making loom picker from polyvinyl alcohol and product. 2,750,348, 6–12–56, Cl. 260—23.

Beaubien, William H., to General Electric Co. Vehicle actuated traffic signal apparatus. 2,750,576, 6–12–56, Cl. 340—35.

Beber, Adolph J. Paint brush cleaner. 2,750,343, 6–12–56, Cl. 252—153.

Beck, Frederick J. Sectional overhead door seal. 2,749,582, 6–12–56, Cl. 20—68.

Beckette, Edmund S., to General Steel Castings Corp. Railway truck structure. 2,749,848, 6–12–56, Cl. 105—188.

Beckwith, Richard C. Methods and apparatus for controllably dispensing moisture bearing ingredients. 2,750,144, 6–12–56, Cl. 249—14.

Bedford, Alda V., to Radio Corp. of America. Film shrinkage compensatory system. 2,750,442, 6–12–56, Cl. 178—7.1.

Belden Mfg. Co.: *See*—
Olson, Einar R., and Miller. 2,750,437.

Bell Telephone Laboratories, Inc.: *See*—
Ohl, Russell S. 2,750,541.
Pfann, William G. 2,750,262.
Pfann, William G. 2,750,544.
Robertson, George H., and Walsh. 2,750,529.

Bellringer, Frederick J.: *See*—
Armstrong, Godfrey P., Bellringer, Bewley, Bramwyche, Jackson, and Wilkins. 2,750,426.
Armstrong, Godfrey P., Bewley, Jackson, Bellringer, Bramwyche, and Wilkins. 2,750,424.

Beloff, Richard H. Chum lure. 2,749,647, 6–12–56, Cl. 43—42.06.

Bemiss, Robert P., ¼ each to A. M. Austin, W. D. Lynch, and W. E. Jason. Cellular carton. 2,750,099, 6–12–56, Cl. 229—28.

Bemmels, Cyrus W., to Permacel Tape Corp. Adhesive tape. 2,750,314, 6–12–56, Cl. 154—53.5.

Bemmels, Cyrus W., to Permacel Tape Corp. Adhesive tapes. 2,750,316, 6–12–56, Cl. 154—53.5.

Bender, Harry, to Stauffer Chemical Co. Method of killing arthropod pests and composition therefor. 2,750,324, 6–12–56, Cl. 167—30.

Bendix Aviation Corp.: *See*—
Gerwig, Larry L. 2,749,741.
MacDuff, Stanley I. 2,749,885.
Miles, George S. 2,750,560.
Weisenbach, Charles O., Pels, and Cigal. 2,749,844.
Winkler, Albert H. 2,750,168.

Bentley, John E.: *See*—
Bannister, Bryant, and Bentley. 2,750,187.

Bergmann, Felix, and S. Sar El. α,β-unsaturated ketones and their preparation. 2,750,408, 6–12–56, Cl. 260—476.

Bergstrom, Clarence G.: *See*—
Dodson, Raymond M., and Bergstrom. 2,750,380.

Bermingham, Peter D. Two-piece fluid seal. 2,750,214, 6–12–56, Cl. 286—10.

Bermingham, Peter D. Mechanical oil seal. 2,750,215, 6–12–56, Cl. 286—11.

Bewley, Thomas: *See*—
Armstrong, Godfrey P., Bellringer, Bewley, Bramwyche, Jackson, and Wilkins. 2,750,426.
Armstrong, Godfrey P., Bewley, Jackson, Bellringer, Bramwyche, and Wilkins. 2,750,424.

Bible, Roy H., Jr., to G. D. Searle & Co. Aralkanoyl and aralkenoyl derivatives of podocarpic acid esters. 2,750,373, 6–12–56, Cl. 260—103.

Bible, Roy H., Jr., and W. M. Hoehn, to G. D. Searle & Co. Basic esters of 1,12-dimethyl-6-alkoxy-1,2,3,4,9,10,11,12-octahydronhenanthrene-1-carboxylic acids. 2,750,382, 6–12–56 Cl. 260—247.2.

Biehler, Charles. Occupant protection bar for automobile seats. 2,750,203, 6–12–56, Cl. 280—150.

Billett, Edward, D. and J. Guss, and N. Horrow. Identification bracelet. 2,749,634, 6–12–56, Cl. 40—10.

Billings, Orman B., to E. I. du Pont de Nemours and Co. Developable trisazo dyes for cotton. 2,750,376, 6–12–56, Cl. 260—173.

Billman, Louis S., and A. C. Angelos, to the United States of America as represented by the Secretary of the Navy. Mach meter. 2,749,749, 6–12–56, Cl. 73—182.

Bing, John H.: *See*—
Hintz, Otto E., Huddle, and Bing. 2,750,059.

Bird, Arthur P., and H. B. Holston. Headlight brush. 2,749,568, 6–12–56, Cl. 15—250.

Birr, Rudolph G., to American Linen Supply Co. Towel winding machine. 2,750,127, 6–12–56, Cl. 241—66.

Bituminous Coal Research Inc.: *See*—
Yellott, John I. 2,750,233.
Yellott, John I. 2,750,234.

Bivans, E. L., Inc.: *See*—
Bivans, Elbert L. 2,749,818.

Bivans, Elbert L., to E. L. Bivans, Inc. Knock-out for box making machine. 2,749,818, 6–12–56, Cl. 93—53.

Black, John W., Jr., to Pemco Wheel Co. Wheel and bearing structure and seal therefor. 2,750,238, 6–12–56, Cl. 308—187.1.

Blair, Chester A., to Rockwell Spring and Axle Co. Reverse gearing. 2,749,766, 6–12–56, Cl. 74—379.

Blake, Robert A., to the United States of America as represented by the United States Atomic Energy Commission. Process of recovering uranium from its ores. 2,750,254, 6–12–56, Cl. 23—14.5.

Blanchard, James K., and J. E. Wood, to Carter Insecticide & Chemical Co., Inc. Liquid discharge apparatus. 2,750,080, 6–12–56, Cl. 222—155.

Bleam, Howard A., to Admiral Corp. Latch mechanism. 2,750,219, 6–12–56, Cl. 292—198.

Block, Alfred, and J. F. Gettemans, to Ethicon, Inc. Process for preparing sutures and ligatures. 2,750,251, 6–12–56, Cl. 8—94.11.

Bloom, James H., Jr., and W. N. Connor, to Pittsburgh Plate Glass Co. Method of fabricating laminated structures. 2,750,312, 6–12–56, Cl. 154—2.71.

Blue, Sidney D. Can openers. 2,749,612, 6–12–56, Cl. 30—6.1.

Bode, August R., and F. A. Tucker. Can with pouring spout. 2,750,085, 6–12–56, Cl. 222—528.

Bode, Robert H., S. M. Holliday, Jr., and J. A. Hawke, to the United States of America as represented by the Secretary of the Navy. Separators for use in the packaging of cartridges. 2,750,028, 6–12–56, Cl. 206—3.

Bogard, Fred J., to ACF Industries, Inc. Spring bumper and draft gear. 2,750,053, 6–12–56, Cl. 213—9.

Boice, Elvin G., to Reed Roller Bit Co. Drilling tool. 2,750,154, 6–12–56, Cl. 255—4.

Bondurant, Kenneth E.: *See*—
Brown, William E., and Bondurant. 2,750,477.

Borah, John E. Suction cup. 2,750,222, 6–12–56, Cl. 294—19.

Borden Co., The: *See*—
Howard, Hartley W., and Salsberg. 2,750,374.

Borden, Joseph H., and G. J. Mundy, to Haughton Elevator Co. Door hold button circuit. 2,750,005, 6–12–56, Cl. 187—29.

Borgerd, William F., and M. M. Jones, to Whirlpool-Seeger Corp. Heat pump system. 2,749,724, 6–12–56, Cl. 62—129.

Borg-Warner Corp.: *See*—
Ferris, Ernest A. 2,750,019.

Bottleman, Ray, to Great American Plastics Co. Toy wheel vehicle. 2,749,662, 6–12–56, Cl. 46—223.

Bourdon Mfg. Co.: *See*—
Curry, William G. 2,750,190.

Bourdon, Ramond S.: *See*—
Curry, William G. 2,750,190.

Boudreau, Peter: *See*—
Bruneau, Louis O., and Boudreau. 2,750,186.

Bowles, Ernest G., and E. E. Miles, to General Electric Co. Apparatus for coating tubular fluorescent lamps. 2,749,847, 6–12–56, Cl. 103—236.

Bowser, Inc.: *See*—
Harks, Walter M. 2,749,797.
Pressler, Ralph B. 2,749,755.

Boykin, Howard D., Jr. Metal panel repair tool. 2,749,795, 6–12–56, Cl. 81—15.

Brace, George A., to The Hoover Co. Electric iron. 2,749,632, 6–12–56, Cl. 38—77.

Bradshaw, Russell R. Ornamental bell construction. 2,749,637, 6–12–56, Cl. 41—10.

Braham, Frank G., to Mergenthaler Linotype Co. Perforate mask for multicolor television apparatus and method of producing same. 2,750,524, 6–12–56, Cl. 313—86.

Braley, Margaret T. Thermal pack for body application. 2,749,914, 6–12–56, Cl. 128—402.

Bramming, Carl, to Aladdin Industries, Inc. Baffle ring for kerosene burner. 2,749,732, 6–12–56, Cl. 67—38.

Bramwyche, Peter L.: *See*—
Armstrong, Godfrey P., Bellringer, Bewley, Bramwyche, Jackson, and Wilkins. 2,750,426.
Armstrong, Godfrey P., Bewley, Jackson, Bellringer, Bramwyche, and Wilkins. 2,750,424.

Bray, Frederic L. Dip-rinsing device. 2,749,939, 6–12–56, Cl. 137—592.

Breathitt, Harvie W., Jr.: *See*—
Hunter, Joseph L., and Breathitt. 2,750,036.

Breckenridge, Robert G., to the United States of America as represented by the Secretary of Commerce. Method of making titanium dioxide rectifiers. 2,749,596, 6–12–56, Cl. 29—25.3.

Bredereck, Hellmut, and E. Bäder, to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, and W. C. Heraeus G. m. b. H. Improvements in the production of polymerisation products using accelerators containing at least one aminomethyl sulfone. 2,750,357, 6–12–56, Cl. 260—77.5.

Brewster, Franklin C., to Motorola, Inc. Receiver which tunes by adjusting magnetic core antenna. 2,750,495, 6–12–56, Cl. 250—20.

Bricaud, Joseph M., to Schlumberger Well Surveying Corp. Electrical logging of subterranean formations. 2,750,557, 6–12–56, Cl. 324—10.

Bridges, Alvah Q., and J. P. Burtis, Jr., to C. B. Van Vorst Co. Attachment for mattress-filling machines. 2,749,690, 6–12–56, Cl. 53—125.

Bristol-Myers Co.: *See*—
Thomas, Ralph H. 2,749,566.

British Aluminum Co. Ltd., The: *See*—
Pullen, Alfred N. D., and Swann. 2,750,309.

British Insulated Callender's Cables Ltd.: *See*—
Dixon, Henry J., and Webster. 2,749,866.
Richardson, Arthur B. F. G., Hinds, and Ridings. 4,749,880.

British Thomson-Houston Co. Ltd., The: *See*—
Melville, William S. 2,750,454.

Brock & Co., Inc.: *See*—
Buechele, Walter E. 2,749,955.

Brogdon, Vas Hubert, Jr.: *See*—
Williams, R. L., Shaw, and Brogdon. 2,750,000.

Broh-Kahn, Robert H.: *See*—
Fand, Theodore I., and Broh-Kahn. 2,750,390.

Bronson, Stanley O., II, to Esso Research and Engineering Co. Slide valve. 2,749,940, 6–12–56, Cl. 137—613.

Brown, Clifford S., and C. S. O'Neil, to Hamilton Mfg. Co. Sliding shelf arrangements for book stacks. 2,750,052, 6–12–56, Cl. 211—143.

Brown, Henry, to The Udylite Research Corp. Electrodeposition of chromium. 2,750,334, 6–12–56, Cl. 204—51.

Brown, Henry, and D. R. Millage, to The Udylite Research Corp. Chromium electrodeposition. 2,750,335, 6–12–56, Cl. 204—51.

Brown, Henry, to The Udylite Research Corp. Chromium plating. 2,750,336, 6–12–56, Cl. 204—51.

Brown, Henry, and D. R. Millage, to The Udylite Research Corp. Electroplating of chromium. 2,750,337, 6–12–56, Cl. 204—51.

Brown, Richard E.: *See*—
Walton, George M., and Brown. 2,749,998.

Brown, William E., and K. E. Bondurant, to General Motors Corp. Switch. 2,750,477, 6–12–56, Cl. 200—153.

Bruce, William F.: *See*—
Hanslick, Roy S., and Bruce. 2,750,379.

Bruneau, Louis O., and P. Boudreau, to Profit Machinery Co., Inc. Folding apparatus. 2,750,186, 6–12–56, Cl. 270—86.

Büchner, Karl: *See*—
Hagemann, August, and Büchner. 2,750,430.

Buechele, Walter E., to Brock & Co., Inc. Potato dicing machine. 2,749,955, 6–12–56, Cl. 146—169.

Bullington, Alton H. Rotary weeder. 2,749,826, 6–12–56, Cl. 97—32.

Bulluck, Julian E., to The Albemarle Paper Mfg. Co. Roll chocking device. 2,749,852, 6–12–56, Cl. 105—369.

Bulova Watch Co., Inc.: *See*—
Godat, Abel. 2,749,779.

Bunch, Tillman T., to Western Electric Co., Inc. Apparatus for metering conductive materials. 2,750,461, 6–12–56, Cl. 200—61.13.

Bunnett, Joseph F., to the United States of America as represented by the Secretary of the Navy. Phenol-formaldehyde polymer of N-p-toluenesulfonyl-L-tyrosine. 2,750,347, 6–12–56, Cl. 260—2.2.

Burbank, John E., to Stamford Machine Co., Inc. Staple extractor. 2,750,148, 6–12–56, Cl. 254—28.

Burch, Oren P. Boat trailer. 2,750,058, 6–12–56, Cl. 214—515.

Burchfield, Willard F., to Jack & Heintz, Inc. Process of filming commutator segments and compositions therefor. 2,750,308, 6–12–56, Cl. 117—224.

Burgess, Donald E. Sharpener for planing machine cutter-block blades. 2,749,677, 6–12–56, Cl. 51—173.

Burget, Archie I., ½ to L. J. Melcher. Valve core removal and inserting tool. 2,749,783, 6–12–56, Cl. 81—3.

Burgsmüller, Karl H., to Gomerue Establishment. Device for cutting long threads. 2,749,807, 6–12–56, Cl. 90—11.4.

Burgsmüller, Karl H., to Gomerue Establishment. Thread chasing. 2,749,808, 6–12–56, Cl. 90—11.64.

Burkhardt, Hans, to Vereinigte Deutsche Metallwerke Aktiengesellschaft. Copper-lead alloys. 2,750,287, 6–12–56, Cl. 75—163.

Burmeister, Carl. Apparatus and method for washing eggs. 2,750,293, 6–12–56, Cl. 99—113.

Burns, Leslie L., Jr., and W. V. B. Roberts, to Radio Corp. of America. Mechanical resonator termination. 2,750,567, 6–12–56, Cl. 333—71.

Burrows, Milford D., S. Z. Siwek, and H. Goldberg, to Pioneer Gen-E-Motor Corp. Suction type carburetor. 2,750,172, 6–12–56, Cl. 261—72.

Burtis, Joseph P., Jr.: *See*—
Bridges, Alvah Q., and Burtis. 2,749,690.

Bush, Vannevar, to The Hydrofoil Corp. Pressure bulb control mechanism for hydrofoil craft. 2,749,869, 6–12–56, Cl. 114—66.5.

Butker, Frederick G., to W. M. Robbins. Adjustable height stock-watering apparatus. 2,749,882, 6–12–56, Cl. 119—74.

Buus, Harold W., to Stearns Magnetic Inc. Magnetic separator pulley. 2,750,035, 6–12–56, Cl. 209—219.

C. G. S. Laboratories, Inc.: *See*—
Sontheimer, Carl G., and Sachs. 2,750,504.

Calgon, Inc.: *See*—
Hansen, Gerald D., Jr. 2,750,299.

California Artificial Flower Co.: *See*—
D'Agnilio, Michele. 2,749,639.

California Research Corp.: *See*—
Le Tourneau, Robert L., Matteson, and Waithman. 2,750,433.

Calkings, William H., to E. I. du Pont de Nemours and Co. Process for removing ferrous ion impurity in the preparation of dicyanobutene. 2,750,403, 6–12–56, Cl. 260—465.8.

Camarda, Frank V., F. J. Gumbs, and R. B. Lovell, to The Patent Licensing Corp. Method of preparing a non-blooming asbestos cement shingle and product thereof. 2,750,302, 6–12–56, Cl. 117—72.

Cammann, Oswald. Random-motion spray device. 2,750,229, 6–12–56, Cl. 299—65.

Campbell, Albert B., to Campbell Products Co. Cover member for dispensing valve structure. 2,750,081, 6–12–56, Cl. 222—394.

Campbell Products Co.: *See*—
Campbell, Albert B. 2,750,081.

Campbell, Richard D., and J. H. Teal, to Troy Textiles, Inc. Bellows pleat folder attachment for sewing machine. 2,749,858, 6–12–56, Cl. 112—145.

Candee, Ellsworth T., to Technicraft Laboratories, Inc. Manufacture of flexible corrugated seamless metal tubing. 2,749,963, 6–12–56, Cl. 153—73.

Candor, Robert R., to General Motors Corp. Domestic appliance. 2,749,735, 6–12–56, Cl. 68—21.

Caponette, Simon L. Hair curler. 2,749,921, 6–12–56, Cl. 132—40.

Carbodies Ltd.: *See*—
Orr, John H. 2,750,227.

Carbonic Dispenser, Inc.: *See*—
Welty, Frank and R. 2,750,076.

Carlsen, William R., to Michigan Tool Co. Shaving cutter for gears. 2,749,802, 6–12–56, Cl. 90—1.6.

Carman, Charles M., Jr. Fastener. 2,749,589, 6–12–56, Cl. 24—153.

Carnegie-Illinois Steel Corp.: *See*—
Francis, Charles B., and Porter. 2,749,609.

Carosella, Michael C., to Union Carbide and Carbon Corp. Electrolytic manganese. 2,750,338, 6–12–56, Cl. 204—105.

Carpenter, Paul G., to Phillips Petroleum Co. Kick-off for gas-lift wells. 2,749,990. 6–12–56, Cl. 166—39.

Cartlidge, Frank, to Goodman Mfg. Co. Boring type continuous mining machine. 2,750,175, 6–12–56, Cl. 262—7.

Cartlidge, Frank, to Goodman Mfg. Co. Collapsible boring head for mining machines. 2,750,176, 6–12–56, Cl. 262—7.

Cartlidge, Frank, to Goodman Mfg. Co. Mining machine having vertically swingable cutter head and reciprocable gathering mechanism. 2,750,179, 6–12–56, Cl. 262—26.

Case, J. I., Co.: *See*—
Innes, Willard J. 2,749,696.
Russell, Stanley D. 2,750,205.

Carter Insecticide & Chemical Co., Inc.: *See*—
Blanchard, James K., and Wood. 2,750,080.

Chain Belt Co.: *See*—
Quast, Gilbert W. 2,750,122.

Chaffotte, Raymond, and P. Nanchino, to Compagnie Generale de Telegraphie Sans Fil. Method of sealing vacuum-tight envelopes. 2,749,668, 6–12–56, Cl. 49—78.

Changewood Corp.: *See*—
Clark, James D., and Lambert. 2,749,576.

Chemical Construction Corp.: *See*—
Roberts, Edward S., Wiedeman, and Strelzoff. 2,750,266.

Chepil, William S. Apparatus for effecting the fecundation of plants. 2,749,664, 6–12–56, Cl. 47—1.

Chesley, Kenneth G., C. W. Montgomery, and L. T. Sandborn, to Crossett Lumber Co. Production of organic acids and salts thereof from cellulosic materials. 2,750,414, 6–12–56, Cl. 260—528.

Chicago City Bank and Trust Co.: *See*—
Guboff, Edward H. 2,750,479.

Chicago Pneumatic Tool Co.: *See*—
Harcourt, George T. 2,749,760.

Ching, Harry Q. Y. Putter guide. 2,750,195, 6–12–56, Cl. 273—183.

Chou, Wayne W. Variable speed drive mechanism. 2,749,764, 6–12–56, Cl. 74—352.

Churnell, Frank J.: *See*—
La Barre, Floyd, Jr., Churnell, Nagle, and Pennock. 2,749,623.

Cigal, Ferdinand J.: *See*—
Weisenbach, Charles O., Pels, and Cigal. 2,749,844.

Cincinnati Milling Machine Co., The: *See*—
Baldwin, George. 2,749,685.

Cislak, Francis E., to Reilly Tar & Chemical Corp. Phenylpyridylalkanols. 2,750,392, 6–12–56, Cl. 260—297.

Civilforvarsatyrelsen: *See*—
Ambrosen, Johan P. 2,750,516.

Clairmonte, Donald F., ⅛ to B. B. Floyd and ⅛ to H. F. Cox, Jr. Powder dryer and sterilizer. 2,749,625, 6–12–56, Cl. 34—233.

Clark, Austin N. Golf club head with weight adjustment. 2,750,194, 6–12–56, Cl. 273—171.

Clark Equipment Co.: *See*—
Sherriff, Fred. 2,750,060.

Clark, James D'A., and R. D. Lambert, to Changewood Corp. Apparatus and method for depositing fibrous elements in the manufacture of fibrous structures. 2,749,576, 6–12–56, Cl. 19—156.

Clarke, Houghton W., to Mealpack Corp. Sealed separable food container. 2,750,064, 6–12–56, Cl. 220—4.

Clason, Bertil H., to General Motors Corp. Thermostatic switch. 2,750,475. 6–12–56. Cl 200—138.

Clauson-Kaas, Niels K. F. W., to Kemisk Vaerk Koge A/S. Production of unsaturated 1,4-dicarbonyl compounds. 2,750,418. 6–12–56. Cl. 260—601.

Clayden, David O.: *See*—
Newman, Edward A., and Clayden. 2,750,499.

Clayton Mfg. Co.: *See*—
Cline, Edwin L. 2,749,747.

Clemens, John E.: *See*—
Orthuber, Richard K., Clemens, and Johnstone. 2,749,598.

Cliborn, Robert: *See*—
Angell, Pierce T., and Cliborn. 2,749,842.

Clifton, Walter L., Jr., to American Art Metals Co. Flush bolt. 2,750,218, 6–12–56, Cl. 292—140.

Cline, Edwin L., to Clayton Mfg. Co. Chassis dynamometer construction. 2,749,747, 6–12–56, Cl. 73—117.

Closson, Rex D., A. J. Kolka, and W. B. Ligett, to Ethyl Corp. Alkylation reactions. 2,750,384, 6–12–56, Cl. 260—290.

Closson, Rex D., A. J. Kolka, and W. B. Ligett, to Ethyl Corp. Amine alkylation. 2,750,417, 6–12–56, Cl. 260—577.

Clotar, Gilbert, to American Optical Co. Reflective optical projection systems. 2,749,801, 6–12–56, Cl. 88—57.

Coates, Robert E., to Ingersoll-Rand Co. Rock drilling tool. 2,750,156. 6–12–56. Cl. 255—64.

Coats & Clark, Inc.: *See*—
Morin, Louis H. 2,750,129.

Coburn, Earl C. Awning. 2,749,580, 6–12–56, Cl. 20—57.5.

Coffman, Paul A., Jr., to B-I-F Industries, Inc. Apparatus for proportioning dry material and liquids. 2,750,073, 6–12–56, Cl. 222—57.

Cogan, Myles H. B., to Shell Development Co. Grid tray contact column. 2,750,174, 6–12–56, Cl. 261—113.

Colantino, Angelo A., to Pillsbury Mills, Inc. Automatic machinery for depositing articles into successively moving containers. 2,750,089, 6–12–56, Cl. 226—2.

Cole, John C.: *See*—
Turner, Will J., and Cole. 2,750,007.

Coleman, John F., to International Business Machines Corp. Read-in circuit. 2,750,113, 6–12–56, Cl. 235—61.11.

Coleman, Joseph E.: *See*—
Swern, Daniel, Coleman, and Knight. 2,750,362.

Colley, Joseph F., to Union Bag & Paper Corp. Sealing machine. 2,749,689, 6–12–56, Cl. 53—124.

Columbia Products Co.: *See*—
Scott, Arthur L. 2,749,643.

Commerce, United States of America as represented by the Secretary of: *See*—
Breckenridge, Robert G. 2,749,596.

Compagnie Generale de Telegraphie Sans Fil: *See*—
Chaffotte, Raymond, and Nanchino. 2,749,668.

Connor Engineering Corp.: *See*—
Argentieri, Peter A., Daninhirsch, and Day. 2,749,831.

Connor, Wyman N.: *See*—
Bloom, James H., Jr., and Connor. 2,750,312.

Constantakis, George V., to United States Rubber Co. Elongated lever members for lacerating tire tread. 2,749,980, 6–12–56, Cl. 164—10.2.

Conti, John D., to American Viscose Corp. Article-packaging apparatus. 2,749,692, 6–12–56, Cl. 53—234.

Continental Can Co., Inc.: *See*—
Newell, Kenneth F. 2,750,090.
Piazze, Thomas E., and McCluskey. 2,749,817.

Continental Motors Corp.: *See*—
Isley, Walter F. 2,749,898.

Continental Oil Co.: *See*—
Doty, William E. N., and West. 2,750,575.

Cooke, Giles B., and W. C. Rainer, to Crown Cork & Seal Co., Inc. Gasket and method of making same. 2,750,322. 6–12–56, Cl. 154—139.

Coonradt, Harry L., and B. W. Rope, to Socony Mobil Oil Co., Inc. Production of naphthalene. 2,750,432, 6–12–56, Cl. 260—672.

Cooper Alloy Corp.: *See*—
Mott, Norman S. 2,750,282.

Copeman Laboratories Co.: *See*—
Copeman, Lloyd G. 2,749,719.

Copeman, Lloyd G., to Copeman Laboratories Co. Portable beverage conditioning and dispensing apparatus. 2,749,719. 6–12–56, Cl. 62—91.5.

Copperweld Steel Co.: *See*—
McIlvane, William J. 2,749,607.

Corhart Refractories Co.: *See*—
Baque, Harold W. 2,749,666.

Corning Glass Works: *See*—
O'Leary, Thomas G. 2,749,794.
Shaw, Morton R. 2,749,579.

Courter, Martin L., and R. L. Magovern, to Shell Development Co. Resolution of carbonylics-containing gaseous mixtures. 2,750,398, 6–12–56, Cl. 260—452.

Couse, Kibbey W. Power take off shifting means. 2,749,768, 6–12–56, Cl. 74—491.

Cowan, John C., and C. D. Evans, to the United States of America as represented by the Secretary of Agriculture. Preparation of phytic acid from calcium magnesium phytates. 2,750,400, 6–12–56, Cl. 260—461.

Cox, Eddie L. Mixing and spraying device. 2,750,231, 6–12–56, Cl. 299—85.

Cox, Herbert F., Jr.: *See*—
Clairmonte, Donald F. 2,749,625.

Cozzoli, Frank J. Automatic filling and sealing machine for ampuls or other small containers. 2,749,688, 6–12–56, Cl. 53—77.

Craft, Amos L. Life saving device. 2,749,560, 6–12–56, Cl. 9—11.

Craig, W E: *See*—
Exner, Lawrence J., and Craig. 2,750,416.

Creitz, Ellis E., and H. G. Iverson. Process for rendering titanium minerals and ores soluble in acids. 2,750,255, 6–12–56, Cl. 23—51.

Crenshaw, Russell S., Jr. Motor control system. 2,750,549, 6–12–56, Cl. 318—207.

Crosman, Loring P., to Sperry Rand Corp. Reversible accumulator. 2,750,114, 6–12–56, Cl. 235—92.

Crossett Lumber Co.: *See*—
Chesley, Kenneth G., Montgomery, and Sandborn. 2,750,414.
Sandborn, Lloyd T., and Stengle. 2,750,412.
Sandborn, Lloyd T., and Stengle. 2,750,413.

Crow, Amos E. Tank bleeding device. 2,749,929, 6–12–56, Cl. 137—172.

Crow, Robert P., to Motorola, Inc. Audio system. 2,750,451, 6–12–56, Cl. 179—171.

Crowell, Arnold B., P. J. Schlessiger, and J. C. Baker, to International Business Machines Corp. Record controlled printing machine. 2,749,839, 6–12–56, Cl. 101—93.

Crown Chemical Corp.: *See*—
Pingree, Raymond A., and Stevens. 2,750,306.
Pingree, Raymond A., and Stevens. 2,750,389.

Crown Cork & Seal Co., Inc.: *See*—
Cooke, Giles B., and Rainer. 2,750,322.
Wilckens, Elbe A., Rau, and Seifert. 2,749,868.

Crown Zellerbach Corp.: *See*—
League, Maurice S. 2,749,952.

Cueilleron, Jean, C. Long, and C. Pascaud, to Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieries Electriques d'Ugine. Process of making pulverulent metallic titanium. 2,750,271, 6–12–56, Cl. 75—0.5.

Cummings, Molly: *See*—
Cummings, Samuel N. 2,750,027.

Cummings, Samuel N., deceased; M. Cummings, executrix. Visual indicating devices for producing a color slick or patch at sea or in any watera. 2,750,027, 6–12–56, Cl. 206—0.5.

Cummins Engine Co., Inc.: *See*—
Reiners, Neville M. 2,749,897.

Cunningham, Eldon R., to General Electric Co. Motor mounting. 2,750,137, 6–12–56, Cl. 248—26.

Curado, Joseph G., and D. H. Praeg, to Sun Chemical Corp. Printing ink. 2,750,296, 6–12–56, Cl. 106—30.

Curry, John J. Dental matrix unit. 2,749,616, 6–12–56, Cl. 32—63.

Curry, William G., to R. S. Bourdon, d. b. a. Bourdon Mfg. Co. Tennis racket press. 2,750,190, 6–12–56, Cl. 273—74.

Curtis, Joseph. Lever-actuated tire bead breaker with shiftable fulcrum means. 2,749,975, 6–12–56, Cl. 157—1.26.

Curtis, Rowland G., to Reeves Steel and Mfg. Co. Joint for sheet metal pipe. 2,750,211, 6–12–56, Cl. 285—201.

Curtiss-Wright Corp.: *See*—
Frank, Wilbert W., and Speer. 2,749,675.
La Barre, Floyd, Jr., Churnell, Nagle, and Pennock. 2,749,623.

Czaplinski, Frank H., to Standard Gage Co., Inc. Groove gage. 2,749,620, 6–12–56, Cl. 33—147.

Czarnik, Stanley J., to Abdite Industries, Inc. Machine for making labyrinth seals. 2,749,961, 6–12–56, Cl. 153—1.

D'Agnillo, Michele, to California Artificial Flower Co. Tree construction. 2,749,639, 6–12–56, Cl. 41—15.

Dan, Zoltan: *See*—
Kun, Louis, Jr., and L. Kun, Sr., and Dan. 2,750,485.

Daniel, John M., and E. A. Hultgren. Guide for trimming sideburns or the like. 2,749,922, 6–12–56, Cl. 132—45.

Daniels, Howard L., to the United States of America as represented by the Secretary of the Navy. Random binary pattern generator. 2,750,586, 6–12–56, Cl. 340—357.

Daninhirsch, Harry: *See*—
Argentieri, Peter A., Daninhirsch, and Day. 2,749,831.

Daoût, Robert N. Device for cutting gear teeth and grooves or splines by the generating process. 2,749,804, 6–12–56, Cl. 90—3.

Darian, Ernest. Differential protection of penstocks and pipe lines. 2,750,581, 6–12–56, Cl. 340—242.

Darwin Products, Inc.: *See*—
Pearl, Daniel M. 2,749,771.

Davis, Sidney, to American Bosch Arma Corp. Electromechanical computing circuits. 2,750,545, 6–12–56, Cl. 318—19.

Davis, Sidney H.: *See*—
Slobod, Robert L., and Davis. 2,749,748.

Day, Doyle. Automatic parking brake for motor vehicles. 2,750,010, 6–12–56, Cl. 188—109.

Day, Thomas L.: *See*—
Argentieri, Peter A., Daninhirsch, and Day. 2,749,831.

Dealers Transit, Inc.: *See*—
Mettetal, Donald, Jr. 2,750,225.

De Bartholomaeis, Ettore: *See*—
De Nora, Vittorio, and de Bartholomaeis. 2,750,263.
De Nora, Vittorio, and de Bartholomaeis. 2,750,429.

Deering Milliken Research Corp.: *See*—
Gagarine, Dmitry M., and Repokis. 2,750,305.

Dees, Asa C.: *See*—
Fanning, Robert J., and Dees. 2,750,352.

Deffner, Gottfried: *See*—
Grassman, Wolfgang, and Deffner. 2,750,092.

De la Tramerye, Raymond, to Societe Anonyme Tubest. Flexible spiral twisted saw. 2,749,949, 6–12–56, Cl. 143—133.

De Navarro, Alma J. M.: *See*—
Jessup, Alfred C. 2,750,288.

Denman, Stephen A., to H. Kuppin. Racing car game. 2,750,191, 6–12–56, Cl. 273—86.

De Nora, Vittorio, and Ettore de Bartholomaeis, to Oronzio de Nora Impianti Elettrochimici. Apparatus for the reduction of organic compounds by hydrogenation. 2,750,263, 6–12–56, Cl. 23—260.

De Nora, Vittorio, and Ettore de Bartholomaeis, to Oronzio de Nora Impianti Elettrochimici. Continuous hydrogenation of fatty material. 2,750,429, 6–12–56, Cl. 260—638.

Densmore, Richard M. Fluid pressure self-reciprocating actuator. 2,749,886, 6–12–56, Cl. 121—164.

Deslippe, Clifford E., 24¼% to A. R. Sinelli and 24½% to D. C. Baird. Knockdown, power-propelled caddy vehicle. 2,749,997, 6–12–56, Cl. 180—25.

Detroit Controls Corp.: *See*—
Dillman, Earnest J. 2,749,926.

Deutsche Gold- und Silber-Scheideanstalt vormals Roessler: *See*—
Bredereck, Hellmut, and Bäder. 2,750,357.

Development Research, Inc.: *See*—
Soffer, Jack W., and Kitterman. 2,750,230.

Dexter Folder Co.: *See*—
Bach, Emmon, and Goodwin. 2,749,967.

Dillman, Earnest J., to Detroit Controls Corp. Manually resettable pressure operated valve. 2,749,926, 6–12–56, Cl. 137—73.

Dillon, Oscar W., to American Optical Co. Edge grinding machines. 2,749,671, 6–12–56, Cl. 51—101.

Dion Freres Inc.: *See*—
Dion, Lucien. 2,750,202.

Dion, Lucien, to Dion Freres Inc. Tractor hitch having a detachable implement carrying frame. 2,750,202, 6–12–56, Cl. 280—106.

Dippel, Cornelius J., and H. Jonker, to Hartford National Bank and Trust Co., trustee. Process for producing colored photographic contrasts. 2,750,292, 6–12–56, Cl. 95—88.

Dixon, Henry J., and G. H. Webster, to British Insulated Callender's Cables Ltd. Manufacture of metal tubes applicable in some cases as electric conductors or other parts of electric cables. 2,749,866, 6–12–56, Cl. 113—33.

Dodson, Raymond M., and C. G. Bergstrom, to G. D. Searle & Co. 20-pyridyl-5,16-pregnadien-3,20-diols and lower alkyl derivatives thereof. 2,750,380, 6–12–56, Cl. 260—239.5.

Doherty, Walter G. Cold asphaltic paving mixture and a process of making it. 2,750,297, 6–12–56, Cl. 106—170.

Dominion Engineering Works Ltd.: *See*—
Stewart, Alexander E. 2,749,815.

Donahue, William A., to General Motors Corp. Apparatus and method for securing a nut to a sheet member. 2,749,606, 6–12–56, Cl. 29—432.

Doolittle, Howard D., and J. W. Skehan, to Machlett Laboratories, Inc. Electron discharge tubes. 2,750,535, 6–12–56, Cl. 315—32.

Dorey, George B., to Enterprise Railway Equipment Co. Operating head for rotating shaft of hopper closure. 2,749,770, 6–12–56, Cl. 74—548.

Dorey, George B., to Enterprise Railway Equipment Co. Sealing bolt mechanism for a discharge outlet. 2,749,851, 6–12–56, Cl. 105—308.

Dorey, George B., to Enterprise Railway Equipment Co. Guiding means for sliding closure of hopper discharge opening. 2,750,074, 6–12–56, Cl. 222—80.

Dorr-Oliver Inc.: *See*—
Jukkola, Walfred W., and Lewis. 2,750,258.

Dostert, Raymond L., to Eversharp, Inc. Fountain pen. 2,749,883, 6–12–56, Cl. 120—46.

Doudera, John J., Jr., and M. L. Seaman, to American Can Co. Device for testing pressure in containers. 2,749,744, 6–12–56, Cl. 73—52.

Doty, William E. N., and B. D. West, to Continental Oil Co. Methods of and apparatus for seismogram analysis. 2,750,575, 6–12–56, Cl. 340—15.

Douglas, James K., to The Oilgear Co. Hydraulic drive for elevators and the like. 2,749,708, 6–12–56, Cl. 60—52.

Dover Corp.: *See*—
Harrison, John B. 2,750,004.

Dow, Ray A. Refuse disposal and general truck bed. 2,750,056, 6–12–56, Cl. 214—504.

Dowsett, Charles W. G. deceased, by W. Dunn, administrator. Apparatus for controlling the gravity discharge of desliming cones. 2,749,928, 6–12–56, Cl. 137—92.

Dr. Ing h. c. F. Porsche K.-G.: *See*—
Porsche, Ferdinand A. E., and Fuhrmann. 2,749,893.

Drossel, Norman J., and E. D. Wilkins, to Kaiser Aluminum & Chemical Corp. Ejection apparatus. 2,749,591, 6–12–56, Cl. 25—120.

Du Mont, Allen B., Laboratories, Inc.: *See*—
Palmer, Richard C. 2,750,525.

Duncan, Dan B., and W. R. Mittendorf, to Avco Mfg. Corp. Flexible defroster-heater installation for refrigerator. 2,749,717, 6–12–56, Cl. 62—3.

Duncan, Edith B.: *See*—
Duncan, Lee N. 2,750,072.

Duncan, Lee N., deceased; E. B. Duncan, executrix, by decree of distribution to E. B. Duncan. Devices for containing and dispensing granular, powdered or crystalline material. 2,750,072, 6–12–56, Cl. 222—42.

Dundore, Marvin W., to Twin Disc Clutch Co. Power transmission. 2,750,018, 6–12–56, Cl. 192—3.2.

Dunn, Eustace S.: *See*—
Richter, Hans. 2,750,436.

Dunn, William: *See*—
Dowsett, Charles W. G. 2,749,928.

Du Pont, E. I., de Nemours and Co.: *See*—
Alexander, Guy B. 2,750,345.
Billings, Orman B. 2,750,376.
Calkings, William H. 2,750,403.
Hamblet, Clement H., and Hanson. 2,750,415.
Kroll, Adam E. 2,750,350.
La Berge, Robert W. 2,750,303.
La Berge, Robert W. 2,750,307.
Lindenstruth, Albert F. 2,750,250.
Nemeth, John B. 2,749,943.
Nester, Ralph G. 2,749,934.
Schwartz, Harold G. 2,749,960.

Durable Products Co.: *See*—
Lickteig, Albert F. 2,749,578.

Dye, Russell V., ⅜ to J. G. Sheldon. Combined laundering and drying machines. 2,749,734, 6–12–56, Cl. 68—20.

E T A Ltd., Blanks Factory: *See*—
Stanim, Heinrich. 2,749,701.

Eames, James O., and R. S. Sanford, to The Michaels Art Bronze Co., Inc. Twin parking meter. 2,749,978, 6–12–56, Cl. 161—15.

Eastern Air Devices, Inc.: *See*—
Seiden, George. 2,750,522.

Eaton Mfg. Co.: *See*—
Line, Gerald D., and Riley. 2,749,892.
Oldberg, Sidney. 2,749,889.
Oldberg, Sidney. 2,749,890.
Russell, Robert C. 2,749,710.
Russell, Robert C. 2,749,891.
Simons, Homer C. 2,749,829.

Ebert, Ludwig, to Einson-Freeman Co., Inc. Cardboard display unit for a mass merchandise display. 2,750,050. 6–12–56, Cl. 211—49.

Ebner, Alfred J. Metallic recuperator. 2,750,159, 6–12–56, Cl. 257—171.

Ebsworth, Richard H. Power transmission. 2,749,767, 6–12–56, Cl. 74—472.

Eckardt, Wolfgang M. J., to Lever Brothers Co. Process and composition for dyeing hair. 2,750,326, 6–12–56, Cl. 167—88.

Eckardt, Wolfgang M. J., to Lever Brothers Co. Process of dyeing animal fibers and dyes and dyeing compositions therefor. 2,750,327, 6–12–56, Cl. 167—88.

Eekrote, Kenneth R., and W. W. Tolley, to United States Gypsum Co. Stapled gypsum plasterboard lath bundle. 2,750,031, 6–12–56, Cl. 206—60.

Eden, Frank S. Clamp for books and like articles. 2,750,241, 6–12–56, Cl. 311—1.

Edgecombe, David A., S. O. Evans, and A. T. Laposki, to The Babcock & Wilcox Co. Automatic apparatus for feeding stock to point swager or the like. 2,749,782, 6–12–56, Cl. 78—99.

Ehrman, Ernest. Chair having a seat and back adjustable from upright to reclining position. 2,749,971, 6–12–56, Cl. 155—116.

Einson-Freeman Co., Inc.: *See*—
Ebert, Ludwig. 2,750,050.

Eldred, Giles A. Portable water tank. 2,749,956, 6–12–56, Cl. 150—0.5.

Electro-Snap Switch & Mfg. Co.: *See*—
Roeser, John O. 2,750,463.

Elpern, Bill, to Sterling Drug Inc. Iodinated 5-bezamidotetrazoles and preparation thereof. 2,750,393, 6–12–56, Cl. 260—308.

Elreco Corp., The: *See*—
McKee, George K. 2,750,142.

Elstein, Edward. Sounding toys. 2,749,659, 6–12–56, Cl. 46—191.

Elster & Co.: *See*—
Gehre, Hans. 2,749,752.

Elswick, Stuart J. Cigarette-clip holder. 2,749,919, 6–12–56, Cl. 131—259.

Emhart Mfg. Co.: *See*—
Lorenz, Edward H., Waugh, and Merrill. 2,749,686.
Peiler, Karl E. 2,749,665.

Emley, Edward F.: *See*—
Jessup, Alfred C. 2,750,288.

Empire Box Corp.: *See*—
Kowal, Michael H. 2,750,082.

Emrick, Homer R., to Emrick Inc. Translating mechanism for converting rotary motion to reciprocating motion. 2,749,758, 6–12–56, Cl. 74—45.

Emrick Inc.: *See*—
Emrick, Homer R. 2,749,758.

Endres, Richard O.: *See*—
Moore, Raymond P., Jr., and Endres. 2,750,510.

Endres, Richard O., to Radio Corp. of America. Pulse generators. 2,750,509, 6–12–56, Cl. 250—36.

Engel, John H. Controlled pressure metal forming apparatus. 2,749,867, 6–12–56, Cl. 113—44.

Engel, Wendlin A. Irrigating machine. 2,750,228, 6–12–56, Cl. 299—47.

Enterprise Railway Equipment Co.: *See*—
Dorey, George B. 2,749,770.

Englund, Nils I., and S. Nordegren, to Vibro-Plus Corp. Rotary vibrator with a rolling eccentric mass. 2,750,160, 6–12–56, Cl. 259—1.

Enterprise Railway Equipment Co.: *See*—
Dorey, George B. 2,749,851.
Dorey, George B. 2,750,074.

Erasmus, Hendrik D., and W. D. Forgeng, to Union Carbide and Carbon Corp. Silicon nitride. 2,750,268, 6–12–56, Cl. 51—307.

Eska Co.: *See*—
Essman, Eldon F., and Kascel. 2,749,725.

Essman, Eldon F., and L. D. Kascel, to Eska Co. Portable air conditioning apparatus. 2,749,725, 6–12–56, Cl. 62—131.

Esso Research and Engineering Co.: *See*—
Babcock, Earl. 2,749,840.
Bronson, Stanley O., II. 2,749,940.
Gerhardt, Philip B., Smith, and Jones. 2,750,340.
Hammer, Glen P., and Jones. 2,750,359.
Huber, Theodore A. 2,749,989.
Mikeska, Louis A., and Smith. 2,750,342.
Mirviss, Stanley B., and Banes. 2,750,353.
Moore, Charles B. 2,750,360.
Morway, Arnold J., Young, and Smith. 2,750,341.
Nelson, Karl J. 2,750,330.
Stienhauff, Frederick P. 2,750,339.

Etablissements Merlin & Gerin: *See*—
Latour, André. 2,750,476.

Etablissements Merlin & Gerin, Société Anonyme: *See*—
Viboud, Albert. 2,750,464.

Ethicon, Inc.: *See*—
Block, Alfred, and Gettemans. 2,750,251.

Ethyl Corp.: *See*—
Closson, Rex D., Kolka, and Ligett. 2,750,384.
Closson, Rex D., Kolka, and Ligett. 2,750,417.

Euchner, Everett B.: *See*—
Klebler, Myron W., Jr., and Euchner. 2,750,298.

Evans, Cyril D.: *See*—
Cowan, John C., and Evans. 2,750,400.

Evans, Sidley O.: *See*—
Edgecombe, David A., Evans, and Laposki. 2,749,782.

Eversharp, Inc.: *See*—
Doetert, Raymond L. 2,749,883.

Ewald, Lux H. Uniform pressure resistance welding apparatus. 2,750,484, 6–12–56, Cl. 219—4.

Ex-Cell-O Corp.: *See*—
Alden, Carroll R. 2,750,095.

Exner, Lawrence J., and W E Craig, to Rohm & Haas Co. (Tert.-alkyl) aminomethylphenols and method for their preparation. 2,750,416, 6–12–56, Cl. 260—570.9.

Fahrner, Ted, and W. W. Ramage, to the United States of America as represented by the Secretary of the Navy. Regenerative phototube signal amplifier. 2,750,518, 6–12–56, Cl. 250—214.

Fand, Theodore I., and R. H. Broh-Kahn, to Nepera Chemical Co., Inc. Nicotinic acid ester. 2,750,390, 6–12–56, Cl. 260—295.5.

Fanning, Robert J., and A. C. Dees, to Phillips Petroleum Co. Polysulfone stabilized with hydrogen sulfidevinylcyclohexene reaction product and stabilized polysulfone product. 2,750,352, 6–12–56, Cl. 260—45.5.

Farbenfarbriken Bayer Aktiengesellschaft: *See*—
Schmitz-Hillebrecht, Ernst, and Technau. 2,750,323.

Farber, S. W., Inc.: *See*—
Foster, Hoyt K. 2,749,743.

Fabro, Lester R. Holder for tumblers. 2,749,727, 6–12–56, Cl. 65—13.

Farbwerke Hoechst A. G. vormals Meister Lucius und Bruning: *See*—
Fischer, Ernst. 2,750,378.

Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius und Bruning: *See*—
Siebert, Arthur, Huss, and Weissert. 2,750,375.

Farmaceutici Italia S. A.: *See*—
Vercellone, Alberto, and Alberti. 2,750,404.

Farrel-Birmingham Co., Inc.: *See*—
Kuhn, Walter O. 2,749,778.

Faulconer, Albert, Jr., to Research Corp. Mask. 2,749,910, 6–12–56, Cl. 128—29.

Fechter, Henry G.: *See*—
Goldman, Arthur, Kleiman, and Fechter. 2,750,397.

Fechter, Henry G., M. Kleiman, and A. Goldman, to Velsicol Chemical Corp. Production of chlorinated polycyclic alcohols. 2,750,396, 6–12–56, Cl. 260—410.

Fellows Gear Shaper Co., The: *See*—
Kendall, Edward H. 2,749,805.
Miller, Edward W. 2,749,803.

Ferguson, Harry, Inc.: *See*—
Klemm, Herman G., and Gardner. 2,749,694.
Klemm, Herman G., and Mitchell. 2,749,995.
Mitchell, Melville J. 2,749 823.

Ferris, Ernest A., to Borg-Warner Corp. One-way engaging device. 2,750,019, 6–12–56, Cl. 192—45.1.

Feste, Stephen K. Wood veneer vest. 2,749,552, 6–12–56, Cl. 2—92.

Fetchin, John, to Phillips Petroleum Co. Process for separation of C_4 hydrocarbons and solvent therefor. 2,750,435, 6–12–56, Cl. 260—680.

Fey, Mathias J., and H. M. Ray, to Nichols Wire & Aluminum Co. Continuous casting apparatus. 2,749,584, 6–12–56, Cl. 22—57.4.

Fiedler, William F. Christmas tree accessory. 2,749,638, 6–12–56, Cl. 41—12.

Field, Oscar S., to General Railway Signal Co. Replaceable contact arms for relays. 2,750,478, 6–12–56, Cl. 200—166.

Finer, Bernard. Spring back chair. 2,749,974, 6–12–56, Cl. 155—179.

Fink, Heinrich, and J. Steichele, to SKF Kugellagerfabriken Gesellschaft mit beschränkter Haftung. Bearing means for spinning and doubling spindles. 2,750,237, 6–12–56, Cl. 308—154.

Fischer, Ernst, to Farbwerke Hoechst A G. vormals Meister Lucius und Bruning. Mono-azo dyestuffs insoluble in water. 2,750,378, 6–12–56, Cl. 260—202.

Fischer, Frederick K., and W. H. Bartolett, to the United States of America as represented by the Secretary of the Navy. Reversing gear and drive control. 2,749,776, 6–12–56, Cl. 74—740.

Fischer, Richard A.: *See*—
Kemper, James M., and Fischer. 2,749,828.

Fisher, Gordon S., L. A. Goldblatt, and J. S. Stinson, to the United States of America as represented by the Secretary of Agriculture. Converting alpha-pinene to mixtures of acids. 2,750,411, 6–12–56, Cl. 260—514.

Fitzsimmons, Archie L. Trolling ballast. 2,749,649, 6–12–56, Cl. 43—43.1.

Fleming, Joseph. Fertilizer distributing apparatus for check-row corn planters. 2,749,856, 6–12–56, Cl. 111—52.

Flint, Charles R., to United Specialties Co. Vacuum breaker. 2,749,895, 6–12–56, Cl. 123—97.

Flowflax Corp.: *See*—
Lewis, John O. 2,750,109.

Floyd, Baron B.: *See*—
Clairmonte, Donald F. 2,749,625.

Fogelson, Emile: *See*—
Schwartz, Alexander, and Fogelson. 2,750,313.

Foley, Philip A. Keys for canning tins. 2,750,070, 6–12–56, Cl. 220—52.

Food Chemical and Research Laboratories, Inc.: *See*—
Peniston, Quintin P. 2,750,394.

Foote Bros. Gear and Machine Corp.: *See*—
Pohl, Walter M. 2,750,009.

Forgeng, William D.: *See*—
Eramus, Hendrik D., and Forgeng. 2,750,268.

Forkel, Curt E., to Phillips Petroleum Co. Pebble heat exchange chamber. 2,750,158, 6–12–56, Cl. 257—55.

Forssell, Eric G., to W. H. Miner, Inc. Friction shock absorbing mechanisms for trucks of railway cars. 2,749,850, 6–12–56 Cl. 105—197.

Foster, Edwin E. Repeating air gun. 2,749,902, 6–12–56, Cl. 124—13.

Foster, Hoyt K., to S. W. Farber, Inc. Apparatus for testing hollow objects. 2,749,743, 6–12–56, Cl. 73—49.3.

Fowler, Floyd F., and C. H. Harrison, ½ to M. H. Morris. Guide for an electrician's snake. 2,750,151, 6–12–56, Cl. 254—134.3.

Fox, Benjamin. Multi-contact connector. 2,750,572, 6–12–56, Cl. 339—185.

Fox, Paul X. Variable electrical resistances and potentiometers. 2,750,481, 6–12–56, Cl. 201—48.

Francis, Charles B., and R. B. Porter, to Carnegie-Illinois Steel Corp. Method of forming hollow metal articles. 2,749,609, 6–12–56, Cl. 29—527.

Frank, Wilbert W., and C. C. Speer, to Curtiss-Wright Corp. Abrasive grinding machines. 2,749,675, 6–12–56, Cl. 51—143.

Franke & Heidecke, Fabrik Photographischer Präzisions-Apparate: *See*—
Weiss, Richard. 2,749,819.

Franke, Harry D., to Verneo Corp. Blower wheel. 2,750,103, 6–12–56, Cl. 230—134.

Franke, Joachim I. Manufacture process of doped germanium crystals. 2,750,310, 6–12–56, Cl. 148—1.5.

Fredd, John V.: *See*—
Schramm, Harry B., Fredd, and Otis. 2,749,937.

Freeman, Charles B. Circuit control device. 2,750,480, 6–12–56, Cl. 200—168.

Freeport Sulphur Co.: *See*—
Williams, R. L., Shaw, and Brogdon. 2,750,000.

Frees, David, and E. L. Schwartz. Curb signalling device. 2,749 875, 6–12–56, Cl. 116—28.

Freund, Frank: *See*—
Marvin, Charles H. 2,750,119.

Friday, David G. Laterally shiftable and tiltable rotary hoe. 2,749,824, 6–12–56, Cl. 97—43.

Frost, Frank E. Locking device for outboard motors. 2,749,738, 6–12–56, Cl. 70—232.

Frushour, George V., to Allis-Chalmers Mfg. Co. Articulated deflector for blower. 2,750,235, 6–12–56, Cl. 302—61.

Fryklund, Robert A., to Raytheon Mfg. Co. Echo-ranging devices. 2,750,574, 6–12–56, Cl. 340—3.

Fuerst, Carl, to Gleitsman's, Inc. Clothes hampers. 2,750,246, 6–12–56, Cl. 312—206.

Fuhrmann, Ernst: *See*—
Porsche, Ferdinand A. E., and Fuhrmann. 2,749,893.

Furst, Stefan, and W. Küpper, to W. Reiners. Suction device for holding the thread ends of full bobbins. 2,750,125, 6–12–56, Cl. 242—35.6.

Fus, Walter. Method of mounting stones in jewelry. 2,749,597, 6–12–56, Cl. 29—10.

Gaertner, Van R., to Monsanto Chemical Co. Halohydroquinones and preparation thereof. 2,750,427, 6–12–56, Cl. 260—623.

Gagarine, Dmitry M., and H. Repokis, to Deering Milliken Research Corp. Composition and method for hydrophobising of textiles. 2,750,305, 6–12–56, Cl. 117—103.

Gagnon, Louis L., to American Optical Co. Ophthalmic mountings. 2,749,800, 6–12–56, Cl. 88—47.

Gamrath, Harry R., to Monsanto Chemical Co. Process for alkyl phosphoryl dichlorides. 2,750,399, 6–12–56, Cl. 260—461.

Garbellano, David W. Underwater suit. 2,749,551, 6–12–56, Cl. 2—82.

Gardner, August M.: *See*—
Kessler, Charles A., Haller, and Gardner. 2,749,864.

Gardner, Bernard C., to Raytheon Mfg. Co. Means for the suppression of parasitic oscillations in a tunable cavity resonator. 2,750,568, 6–12–56, Cl. 333—82.

Gardner, Evelyn M.: *See*—
Gardner, Leon E. 2,749,941.

Gardner, Guy F.: *See*—
Klemm, Herman G., and Gardner. 2,749,694.

Gardner, Leon E., deceased; E. M. Gardner, administratrix. Rotary fluid control valve. 2,749,941, 6–12–56, Cl. 137—624.

Garrett Corp., The: *See*—
Kemper, James M., and Fischer. 2,749,826.

Garutso, Stephen E. Means of producing three dimensional photographic film. 2,749,820, 6–12–56, Cl. 95—18.

Gassot, René J. L. Hydraulic brakes. 2,750,008, 6–12–56, Cl. 188—90.

Gates, Geoffrey R. G. Controlling system for clutch-operated vehicle steering mechanism. 2,749,774, 6–12–56, Cl. 74—710.5.

Gauci, Joseph. Machine for assembling coil springs. 2,749,948, 6–12–56, Cl. 140—92.94.

Gegenschatz, Walter: *See*—
Tanner, Paul A., and Gegenschatz. 2,749,594.

Gehre, Hans, to Elster & Co. Meter for measuring the volume of fluids flowing in a pipe line. 2,749,752, 6–12–56, Cl. 73—230.

Geigy, J. R., A. G.: *See*—
Hindermann, Peter, and Jung. 2,750,377.

Geisler, Helmut J., to International Business Machines Corp. Radio frequency controlled plasmatron. 2,750,455, 6–12–56, Cl. 179—171.

General Aniline & Film Corp.: *See*—
Tulagin, Vsevolod. 2,750,291.

General Bronze Corp.: *See*—
Huack, Theodore. 2,750,015.

General Controls Co.: *See*—
Greenamyer, George P. 2,750,115.
Greenamyer, George P. 2,750,116.

General Electric Co.: *See*—
Andersen, Herbert H., and Allen. 2,750,585.
Beaubien, William H. 2,750,576.
Bowles, Ernest G., and Miles. 2,749,847.
Cunningham, Eldon R. 2,750,137.
Gray, Willard F. M. 2,750,474.
Haviland, Robert P. 2,749,705.
Morris, William C. 2,750,537.
Pritchard, Robert L. 2,750,453.
Runaldue, Lewis R. 2,750,554.
Schmidt, John H. 2,750,121.
Starr, Wendell T. 2,750,562.
Summerhayes, Harry R., Jr., Anderson, and Sampson. 2,750,519.
Wightman, Lawrence W. 2,750,521.
Wright, James H. 2,749,746.

General Electric Co. Ltd., The: *See*—
Hickin, Ernest M. 2,750,505.

General Motors Corp.: *See*—
Brown, William E., and Bondurant. 2,750,477.
Candor, Robert R. 2,749,735.
Clason, Bertil H. 2,750,475.
Donahue, William A. 2,749,606.
Haldeman, John M. 2,749,672.
McClelland, Clarence P. 2,750,221.
Mitchell, Boris J. 2,749,899.
Mitchell, Boris J. 2,749,900.
Mitchell, Boris J. 2,749,901.
O'Malley, John J. 2,749,772.
Saunders, Orson V. 2,749,718.
Schoelles, Harold J. 2,750,146.
Smart, Clarence F. 2,750,333.

General Precision Laboratory Inc.: *See*—
Goldfischer, Lester L. 2,750,584.

General Railway Signal Co.: *See*—
Field, Oscar S. 2,750,478.
Hewes, Ralph W. 2,750,577.

General Slicing Machine Co., Inc.: *See*—
Green, Xan B. K., and Preble. 2,749,954.

General Steel Castings Corp.: *See*—
Beckette, Edmund S. 2,749,848.

George, Landon C. Ventilator attachment for automobiles. 2,749,830, 6–12–56, Cl. 98—2.

George, Warren E., to Auburn Machine Works, Inc. Trencher drive mechanism. 2,749,756, 6–12–56, Cl. 74—15.86.

Gerhardt, Philip B., J. O. Smith, Jr., and A. R. Jones, to Esso Research and Engineering Co. Combination additive for petroleum products. 2,750,340, 6–12–56, Cl. 252—33.3.

Gerlach, Karl. Mine supporting structure for working mines. 2,749,712, 6–12–56, Cl. 61—45.

Germeshausen, Kenneth J., to the United States of America as represented by the Secretary of the Navy. Indirectly heated cathode. 2,750,526, 6–12–56, Cl. 313—337.

Gersman, Chadot B.: *See*—
Gersman, Harvey M. 2,750,034.

Gersman, Harvey M., deceased, C. B. Gersman, administratrix. Method and apparatus for extrusion of plastic materials. 2,750,034, 6–12–56, Cl. 207—17.

Gerwig, Larry L., to Bendix Aviation Corp. Freezing point meter. 2,749,741, 6–12–56, Cl. 73—17.

Gettemans, John F.: *See*—
Block, Alfred, and Gettemans. 2,750,251.

Giacoletto, Lawrence J.: *See*—
Law, Russell R., Johnson, Giacoletto, and Barton. 2,750,507.

Gibson, Horace N. Photographic illuminating device. 2,750,489, 6–12–56, Cl. 240—1.3.

Glacier Metal Co. Ltd., The: *See*—
More, David. 2,750,107.

Glass, Marvin, and Associates: *See*—
Zimentstark, Alfred. 2,749,660.

Glass, Marvin I.: *See*—
Zimentstark, Alfred. 2,749,660.

Gleitsman's, Inc.: *See*—
Fuerst, Carl. 2,750,246.

Glidden Co., The: *See*—
Klebler, Myron W., Jr., and Euchner. 2,750,298.

Godat, Abel, to Bulova Watch Co. Inc. Reversible input unidirectional output transmission gearing. 2,749,779, 6–12–56, Cl. 74—812.

Goddard, Esther C.: *See*—
Goddard, Robert H. 2,749,706.
Goddard, Robert H. 2,749,884.

Goddard, Robert H., deceased, by E. C. Goddard, executrix, ¼ to The Daniel and Florence Guggenheim Fonndation. Mechanism for cooling a combustion chamber in propulsion apparatus and for feeding combustion liquids thereto. 2,749,706, 6–12–56, Cl. 60—35.6.

Goddard, Robert H., deceased, by E. C. Goddard, executrix, ¼ to The Daniel and Florence Guggenheim Foundation. Pressure-operated feeding apparatus for combustion liquids in an internal combustion chamber. 2,749,884, 6–12–56, Cl. 121—48.

Godschalx, Adrian T.: *See*—
Hosea, Everett E., and Godschalx. 2,750,459.

Goldberg, Harry: *See*—
Burrows, Milford D., Siwek, and Goldberg. 2,750,172.

Goldblatt, Leo A.: *See*—
Fisher, Gordon S., Goldblatt, and Stinson. 2,750,411.

Goldfischer, Lester L., to General Precision Laboratory Inc. Analog to digital converter. 2,750,584, 6–12–56, Cl. 340—347.

Goldman, Arthur: *See*—
Fechter, Henry G., Kleiman, and Goldman. 2,750,396.

Goldman, Arthur, M. Kleiman, and H. G. Fechter, to Velsicol Chemical Corp. Production of halogenated polycyclic alcohols. 2,750,397, 6–12–56, Cl. 260—410.

Gomerue Establishment: *See*—
Burgsmüller, Karl H. 2,749,807.
Burgsmüller, Karl H. 2,749,808.

Gomonet, Edouard, to Societe Anonyme pour les Applications de l'Electricite et des Gaz Rares-Etablissements Claude-Paz et Silva. System for energizing an electric discharge tube. 2,750,536, 6–12–56. Cl. 315—281.
Cartlidge, Frank. 2,750,175.
Cartlidge, Frank. 2,750,176.
Cartlidge, Frank. 2,750,179.
Lindgren, Frank A. 2,750,153.
Lindberg, Richard C. 2,750,177.
McCallum, Robert A. 2,750,178.
McCallum, Robert A. 2,750,180.
Sloane, William W. 2,750,551.
Slomer, Joseph J. 2,749,707.
Slomer, Joseph J. 2,749,769.

Goodrich, Hunter C., to Radio Corp. of America. Selectivity control circuit. 2,750,452, 6–12–56, Cl. 179—171.

Goodwin, Edwin W.: *See*—
Bach, Emmon, and Goodwin. 2,749,967.

Gordon, Alexander M., and H. B. Miller, to Max L. Grant. Fare collection apparatus. 2,750,106, 6–12–56, Cl. 232—44.

Gordon, James F. Pneumatic joint. 2,750,014, 6–12–56, Cl. 189—36.

Gorin, Manuel H., and L. Rosenstein. Cyclic urea-adduct process. 2,750,361, 6–12–56, Cl. 260—96.5.

Gorton, George, Machine Co.: *See*—
McNamee, Wallace J., and Adelt. 2,749,595.

Gottier, Thomas L., to the United States of America as represented by the Secretary of the Air Force. Magnetron keying circuit. 2,750,503, 6–12–56, Cl. 250—36.

Grace, W. R., & Co.: *See*—
Barrett, Wayne I., and Shipley. 2,750,329.

Graham, Seymour C., to Illinois Baking Corp. Apparatus for molding and baking batter. 2,749,853, 6–12–56, Cl. 107—58.

Granoff, Budd: *See*—
Kriesman, Sanford S., and Rosen. 2,749,920.

Grant, Max L.: *See*—
Gordon, Alexander M., and Miller. 2,750,106.

Grassmann, Wolfgang, and G. Deffner. Apparatus for automatically filling uniform and exact volumes, in particular a fully automatic collector of fractions. 2,750,092, 6–12–56, Cl. 226—96.

Gray, George W., to Radio Corp. of America. Cathode-controlled wave generators. 2,750,502, 6–12–56, Cl. 250—36.

Gray, Willard F. M., to General Electric Co. Magnetic actuating mechanism. 2,750,474, 6–12–56, Cl. 200—138.

Great American Plastics Co.: *See*—
Bottleman, Ray. 2,749,662.

Green, Milton W.: *See*—
Robinson, Kenneth W., Green, and Morton. 2,750,513.

Green, Xan B. K., and H. Preble, Jr., to General Slicing Machine Co., Inc. Base construction for compactly folding slicing machines and the like. 2,749,954, 6–12–56, Cl. 146—102.

Greenamyer, George P., to General Controls Co. Universal water heater control. 2,750,115, 6–12–56, Cl. 236—21.

Greenamyer, George P., to General Controls Co. Universal safety temperature control unit. 2,750,116, 6–12–56, Cl. 236—21.

Greene, Edgeworth, to Inter-Seal Corp. Non-refillable closures. 2,750,061, 6–12–56, Cl. 215—22.

Greenway, William T. Longitudinally adjustable fifth wheel construction for semitrailers. 2,750,207, 6–12–56, Cl. 280—407.

Gregg, Earl M. Fire extinguisher. 2,749,993, 6–12–56, Cl. 169—26.

Gregg, Wallace. Room cooler. 2,750,167, 6–12–56, Cl. 261—24.

Greisman, Bernard. Container. 2,750,100, 6–12–56, Cl. 229—31.

Griesbach, Otto, to Bayerische Berg-, Hütten- und Salzwerke A. G. Circular knitting machine. 2,749,728, 6–12–56, Cl. 66—14.

Griffin, Lelia. Orthopedic table. 2,749,911, 6–12–56, Cl. 128—70.

Griffon, Alfred L. Scissors. 2,749,615, 6–12–56, Cl. 30—262.

Grogan, Edward C., to Minneapolis-Honeywell Regulator Co. Controller. 2,749,927, 6–12–56, Cl. 137—86.

Gross, Bernard, to Rohr Aircraft Corp. Sealed joint. 2,750,069, 6–12–56, Cl. 220—46.

Gross, Martin R., to the United States of America as represented by the Secretary of the Navy. Indicator for low permeability materials. 2,750,561, 6–12–56, Cl. 324—34.

Gross, Thomas A. O.: *See*—
Kather, Erich N., and Gross. 2,750,555.

Gruettner, Gerhard G., to New Hermes Ring Engraving Corp. Engraving machine attachment. 2,749,617, 6–12–56, Cl. 33—25.

Guboff, Edward H., to Chicago City Bank and Trust Co. Protecting and cleaning means for movable electrical contact elements. 2,750,479, 6–12–56, Cl. 200—166.

Guggenheim, Daniel and Florence, Foundation, The: *See*—
Goddard, Robert H. 2,749,706.
Goddard, Robert H. 2,749,884.

Guigas, Gustav, to Hawaiian Pineapple Co. Ltd. Planting device. 2,749,855, 6–12–56, Cl. 111—3.

Gumbs, Frank J.: *See*—
Camarda, Frank V., Gumbs, and Lovell. 2,750,302.

Gurewitz, Samuel J. Bottle handling machine. 2,750,024, 6–12–56, Cl. 198—69.

Guss, David: *See*—
Billett, Edward, and D. and J. Guss, and Horrow. 2,749,634.

Guss, Joseph: *See*—
Billett, Edward, and D. and J. Guss, and Horrow. 2,749,634.

Gustafson, Viron O. E. Feeder for little pigs. 2,749,881, 6–12–56, Cl. 119—52.

Guthrie, John D.: *See*—
Reeves, Wilson A., and Guthrie. 2,750,249.

Haagensen, Duane B., to Raytheon Mfg. Co. High-frequency modulation systems. 2,750,506, 6–12–56, Cl. 250—36.

Hadley, Wilfred N., to Parks & Woolson Machine Co. Fabric napping mechanism. 2,749,593, 6–12–56, Cl. 26—29.

Hadsel, Alvah D. Chlorination apparatus. 2,750,265, 6–12–56, Cl. 23—285.

Hafekost, Frederick: *See*—
Manson, Morris, and Hafekost. 2,750,244.

Hagedorn, Paul. Load distributing wheel supporting undercarriage for vehicles. 2,750,201, 6–12–56, Cl. 280—104.5.

Hagemann, August, and K. Blichner, to Ruhrchemie Aktiengesellschaft, Oberhausen-Holten and Lurge Gesellschaft für Warmetechnik. Production of synthetic aliphatic alcohols. 2,750,430, 6–12–56, Cl. 260—638.

Hagen, Frances M.: *See*—
Hagen, Oscar E. 2,749,878.

Hagen, Oscar E., deceased, by F. M. Hagen, executrix, to Kimberly-Clark Corp. Paper coating apparatus. 2,749,878, 6–12–56, Cl. 118—249.

Hagood, Ernest. Pressure control for slidable head in a propane filter drum. 2,750,046, 6–12–56, Cl. 210—180.

Haibig, Paul, to Lonza Electric and Chemical Works Ltd. Process for the production of crystalline cyclohexyl peroxides. 2,750,421, 6–12–56, Cl. 260—610.

Haideman, John M., to General Motors Corp. Process and apparatus for grinding piston and other rings. 2,749,672, 6–12–56, Cl. 51—103.

Hale, Arthur N., to The Singer Mfg. Co. Sewing machines. 2,749,862, 6–12–56, Cl. 112—220.

Hall, Irvin B. Lure casting device. 2,749,646, 6–12–56, Cl. 43—42.

Hallden, Karl W., to The Hallden Machine Co. Shear blade alignment and misalignment mechanism for cutting shears of the rotary type. 2,749,984, 6–12–56, Cl. 164—66.

Hallden Machine Co., The: *See*—
Hallden, Karl W. 2,749,984.

Haller, Franz: *See*—
Kessler, Charles A., Haller, and Gardner. 2,749,864.

Hallmark Cards, Inc.: *See*—
Lohnes, Howard E. 2,749,657.

Hamblet, Clement H., and D. B. Hanson, to E. I. du Pont de Nemours & Co. Separation and oxidation of cyclohexyl nitrate and related compounds. 2,750,415, 6–12–56, Cl. 260—533.

Hamilton Mfg. Co.: *See*—
Brown, Clifford S., and O'Neil. 2,750,052.

Hamner, Glen P., and T. G. Jones, to Esso Research and Engineering Co. Resins from steamcracked C_5 distillate fractions. 2,750,359, 6–12–56, Cl. 260—82.

Hansen, Gerald D., Jr., to Calgon, Inc. Calcium carbonate dispersions and method of making same. 2,750,299, 6–12–56, Cl. 106—308.

Hanslick, Roy S., and W. F. Bruce, to American Home Products Corp. Imidazolidine salts of penicillin. 2,750,379, 6–12–56, Cl. 260—239.1.

Hanson, Doyce B.: *See*—
Hamblet, Clement H., and Hanson. 2,750,415.

Hanszen, Eugene W., and L. B. Trenholme, to Union Carbide and Carbon Corp. Catalyst and process for making vinyl esters. 2,750,410, 6–12–56, Cl. 260—498.

Harcourt, George T., to Chicago Pneumatic Tool Co. Mechanical movement for seam cap riveting and the like. 2,749,760, 6–12–56, Cl. 74—110.

Hardinge, Harlowe. Material handling mechanism. 2,750,038, 6–12–56, Cl. 210—55.

Hardt, Rudolf, to Maschinenfabrik Turner Aktiengesellschaft. Apparatus for determing pressure in splitting resilient materials. 2,749,982, 6–12–56, Cl. 164—39.

Harfenist, Morton: *See*—
Bayley, Abraham, Harfenist, and McLamore. 2,750,428.

Harfert, Arthur. Soil conditioner. 2,749,827, 6–12–56, Cl. 97—212.

Harks, Walter M., to Bowser, Inc. Sample holder. 2,749,797, 6–12–56, Cl. 88—14.

Harmon, Cline H., to Waterloo Foundry Co. Closure for exhaust pipes. 2,749,832, 6–12–56, Cl. 98—59.

Harris, Charles L. Staging rack. 2,749,634, 6–12–56, Cl. 43—57.5.

Harris, Edward F. Vertically polarized high frequency antenna array. 2,750,589, 6–12–56, Cl. 343—827.

Harris, George C., to Hercules Powder Co. Triol of levopimaric acid-quinone adduct. 2,750,423, 6–12–56, Cl. 260—617.

Harrison, Charles H.: *See*—
Fowler, Floyd F., and Harrison. 2,750,151.

Harrison, John B., to Dover Corp. Combined load-equalizing and safety device for lifts. 2,750,004, 6–12–56, Cl. 187—8.5.

Harrison, Thomas R., to Minneapolis-Honeywell Regulator Co. Measuring apparatus for the degree of supersaturation of solutions. 2,749,745, 6–12–56, Cl. 73—53.

Harsh, Victor L. Lawn tool. 2,749,693, 6–12–56, Cl. 55—24.

Hart, Angus L. Front wheel mounting for tractors. 2,750,199, 6–12–56, Cl. 280—93.

Hartford National Bank and Trust Co.: *See*—
Dippel, Cornelis J., and Jonker. 2,750,292.
Kröger, Ferdinand A., and Van Den Boomgaard. 2,750,344.

Hartmann, Leonhard T., and F. Wethly, to Allied Chemical & Dye Corp. Gas-liquid contact process and apparatus. 2,750,173, 6–12–56, Cl. 261—111.

Hasbrouck, Augustus, to United Aircraft Corp. Filter. 2,750,047, 6–12–56, Cl. 210—183.

Hase, Alfred M.: *See*—
Waldkötter, Erich G. R., and Hase. 2,750,540.

Haslett, Elmer. Table ball game devices. 2,750,192, 6–12–56, Cl. 273—87.2.

Hastings, John A., and C. Weber, to The Transportation Development Corp. Track and road bed construction. 2,750,118, 6–12–56, Cl. 238—25.

Hastings Mfg. Co.: *See*—
Wilkinson, James W. 2,750,042.

Hastings, Norman R., to Walk Time, Inc. Anemometer. 2,749,750, 6–12–56, Cl. 73—189.

Hastings, Norman R., to Walk Time, Inc. Anemometer wind vane. 2,749,751, 6–12–56, Cl. 73—189.

Hat Corp. of America: *See*—
Pascale, Martin M., and Rickus. 2,749,546.

Hatch, Gerald G., to Quebec Iron and Titanium Corp. Casting of titanium slag concentrate. 2,749,667, 6–12–56, Cl. 49—77.5.

Hatch, Sidney L. File folder support. 2,749,915, 6–12–56, Cl. 129—16.7.

Hauck, Theodore, to General Bronze Corp. Reversible window structure. 2,750,015, 6–12–56, Cl. 189—69.

Hauck, Wilbur J. Falling block single shot breech action. 2,749,641, 6–12–56, Cl. 42—23.

Haug, Anton J. Process and apparatus for mechanically working fibrous materials. 2,749,814, 6–12–56, Cl. 92—27.

Haughton Elevator Co.: *See*—
Borden, Joseph H., and Mundy. 2,750,005.

Hausser, O. & M.: *See*—
Weissbrodt, Max. 2,749,661.

Haviland, Robert P., to General Electric Co. Fusible link jet motor control. 2,749,705, 6–12–56, Cl. 60—35.6.

Hawaiian Pineapple Co. Ltd.: *See*—
Guigas, Gustav. 2,749,855.

Hawke, John A.: *See*—
Bode, Robert H., Holiday, and Hawke. 2,750,028.

Hawkins, Willis M., Jr., and P. E. Le Veille, to Lockheed Aircraft Corp. Multiple wheel main landing gear. 2,750,134, 6–12–56, Cl. 244—102.

Hayford, Donald S.: *See*—
Hayford, John T. and D. S. 2,749,837.

Hayford, John T. and D. S. Bundle packaging and wrapping machine. 2,749,837, 6–12–56, Cl. 100—28.

Heard, Charles B., ½ to W. H. Kratz. Oil burner by-pass valve. 2,749,935, 6–12–56, Cl. 137—116.

Hehr Mfg. Co.: *See*—
Schneider, John. 2,749,648.

Heikkila, Pentti. Electric clock time indicating device. 2,749,704, 6–12–56, Cl. 58—126.

Heisler, Edward G.: *See*—
Treadway, Robert H., and Heisler. 2,750,295.

Heiser, Edward J., and E. A. Wents, to Specialties Development Corp. Yarn tensioning device. 2,750,130, 6–12–56, Cl. 242—149.

Hekelaar, Johannes P., to E. J. M. van de Pol. Automatically controlled ventilation device. 2,749,833, 6–12–56, Cl. 98—95.

Hendricks, James O., W. E. Lundquist, and A. F. Schmeisle, to Minnesota Mining and Mfg. Co. Pressure-sensitive adhesive tape and method of making. 2,750,304, 6–12–56, Cl. 117—76.

Hennessey, Frank L., to the United States of America as represented by the Secretary of the Navy. Wave guide terminating device. 2,750,588, 6–12–56, Cl. 343—781.

Henry, Cashly A. Trailer fifth wheel coupling and steering mechanism. 2,750,208, 6–12–56, Cl. 280—426.

Hepp, Harold J., to Phillips Petroleum Co. Conversion of hydrocarbons. 2,750,420, 6–12–56, Cl. 260—605.

Heraeus, W. C., G. m. b. H.: *See*—
Bredereck, Hellmut, and Bäder. 2,750,357.

Hercules Powder Co.: *See*—
Armstrong, Godfrey P., Bellringer, Bewley, Bramwyche, Jackson, and Wilkins. 2,750,426.
Armstrong, Godfrey P., Bewley, Jackson, Bellringer, Bramwyche, and Wilkins. 2,750,424.
Harris, George C. 2,750,423.
Minn, James. 2,750,364.
Minn, James. 2,750,372.
Ritchie, Paul F. 2,750,405.
Ritchie, Paul F. 2,750,406.
Ritchie, Paul F. 2,750,407.
Sanderson, Thomas F. 2,750,363.
Sanderson, Thomas F. 2,750,367.
Sanderson, Thomas F. 2,750,368.
Sanderson, Thomas F. 2,760,369.
Sanderson, Thomas F. 2,750,402.
Sanderson, Thomas F. 2,750,422.
Subluskey, Lee A. 2,750,365.
Subluskey, Lee A. 2,750,370.
Subluskey, Lee A. 2,750,371.
Subluskey, Lee A. 2,750,425.

Hermeling, Gilbert C., Jr.: *See*—
Horowitz, Leopold A., and Hermeling. 2,750,496.

Herold, Robert E.: *See*—
Trogdon, Olin, and Herold. 2,750,210.

Hersl, George G., to Radio Corp. of America. Universal drilling jig. 2,749,781, 6–12–56, Cl. 77—62.

Hewes, Ralph W., to General Railway Signal Co. Search light signal. 2,750,577, 6–12–56, Cl. 340—50.

Hickin, Ernest M., to The General Electric Co. Ltd. Automatic frequency control. 2,750,505, 6–12–56, Cl. 250—36.

Hilbish, Joseph M. Lubricant filter. 2,750,048, 6–12–56, Cl. 210—183.

Hilgeford, Clarence F. Tie shaper. 2,749,554, 6–12–56, Cl. 2—153.

Hill, Robert H., to Perfect Circle Corp. Pumping apparatus. 2,749,992, 6–12–56, Cl. 166—106.

Hindermann, Peter, and J.-P. Jung, to J. R. Geigy A. G. Monoazo dyestuffs. 2,750,377, 6–12–56, Cl. 260—198.

Hinds Ronald: *See*—
Richardson, Arthur B. F. G., Hinds, and Ridings. 2,749,880.

Hinrichs, Frederick B.: *See*—
Morvay, Anton A. 2,750,278.

Hintz, Otto E., E. F. Huddle, and J. H. Bing, to International Harvester Co. Two-way self-unloading vehicle. 2,750,059, 6–12–56, Cl. 214—519.

Hirasuna, Henry K. Auxiliary monitoring control attachment for tractors. 2,749,825, 6–12–56, Cl. 97—46.07.

Hiscock, Earle F., to Kip, Inc. Means for brewing pot coffee. 2,749,834, 6–12–56, Cl. 99—287.

Hiscock, Earle F., to Kip, Inc. Coffee maker and coffee packet holding accessory therefor. 2,749,835, 6–12–56, Cl. 99—295.

Hittle, Carl E., to Radio Corp. of America. Mechanical filter. 2,750,128, 6–12–56, Cl. 242—75.

Hlavka, Joseph J.: *See*—
Safir, Sidney R., and Hlavka. 2,750,383.

Hoehn, Willard M.: *See*—
Bible, Roy H., Jr., and Hoehn. 2,750,382.

Hoffmann, Melville C., and H. E. Kratz. Filter. 2,750,045, 6–12–56, Cl. 210—165.

Hogg, John A., and W. P. Schneider, to The Upjohn Co. Steroid alkali-metal enolates. 2,750,381, 6–12–56, Cl. 260—239.55.

Holiday, Stanley M., Jr.: *See*—
Bode, Robert H., Holiday, and Hawke. 2,750,028.

Holley Carburetor Co.: *See*—
Udale, Stanley M. 2,750,171.

Hollins, Jesse R. Direction signalling systems. 2,750,467, 6–12–56, Cl. 200—116.

Hollins, Jesse R. Direction signalling systems. 2,750,468, 6–12–56, Cl. 200—116.

Holmes, Gifford I., to Milwaukee Gas Specialty Co. Electromagnetic control device. 2,750,539, 6–12–56, Cl. 317—168.

Holston, Harry B.: *See*—
Bird, Arthur P., and Holston. 2,749,568.

Hooker Electrochemical Co.: *See*—
Hooker, Thomas, and Miller. 2,750,002.

Hooker, Thomas, and R. H. Miller, to Hooker Electrochemical Co. Method for chlorine recovery. 2,750,002, 6–12–56, Cl. 183—115.

Hoopingarner, Revere G. Pickup cloth for lawn debris. 2,749,695, 6–12–56, Cl. 56—1.

Hoover Co., The: *See*—
Brace, George A. 2,749,632.
Seck, Werner G. 2,749,633.

Horizons Titanium Corp.: *See*—
Steinberg, Morris A., and Wainer. 2,750,259.

Horn, Harry J., to Motor Wheel Corp. Brake drum. 2,750,012, 6–12–56, Cl. 188—218.

Horrow, Nathan: *See*—
Billett, Edward, and D. and J. Guss, and Horrow. 2,749,634.

Horowitz, Leopold A., and G. C. Hermeling, Jr., to Radio Corp. of America. V. H. F.-U. H. F. receiver having local oscillator convertible to an I. F. stage. 2,750,496, 6–12–56, Cl. 250—20.

Hosea, Everett E., and A. T. Godschalx, to Kaukauna Machine Corp. Electrical selector switch. 2,750,459, 6–12–56, Cl. 200—18.

Howard, Hartley W., and H. K. Salsberg, to The Borden Co. Production of casein-lactalbumin coprecipitate. 2,750,374. 6–12–56, Cl. 260—120.

Howell, Charles N., to Lombard Corp. Door mechanism for induction heating apparatus. 2,750,486, 6–12–56, Cl. 219—10.67.

Hrebicek, James. Closure remover with piercing means. 2,749,784, 6–12–56, Cl. 81—3.42.

Huber, Theodore A., to Esso Research and Engineering Co. Method and means of completing a well. 2,749,989, 6–12–56, Cl. 166—21.

Huddle, Edwin F.: *See*—
Hintz, Otto E., Huddle, and Bing. 2,750,059.

Huffines, James D. Refuse compressor mechanism for vehicles. 2,750,055, 6–12–56, Cl. 214—501.

Huffman, Chester A. Jig for use in constructing building units. 2,749,873, 6–12–56, Cl. 144—288.

Hultgren, Eric A.: *See*—
Daniel, John M., and Hultgren. 2,749,922.

Hunter, Charley W., to Vendo Co. Vending machine shelf having bottle feeding mechanism. 2,750,049, 6–12–56, Cl. 211—49.

Hunter, Joseph L., and H. W. Breathitt, Jr., to Minerals & Chemicals Corp. of America. Process for concentrating phosphate ores. 2,750,036. 6–12–56, Cl. 209—166.

Hunter, Loy R., to Phillips Petroleum Co. Underground storage system. 2,749,714. 6–12–56, Cl. 62—1.

Hurwitz, Melvin D., to Rohm & Haas Co. Stable condensates of urea and formaldehyde in the presence of methanol. 2,750,356, 6–12–56, Cl. 260—70.

Huss, Richard: *See*—
Siebert, Arthur, Huss, and Weissert. 2,750,375.

Huth, Wilbur M. Articulated toy for amusement. 2,750,189, 6–12–56, Cl. 272—31.

Hyde, Edward M.: *See*—
Powischill, John W., and Hyde. 2,749,736.

Hydraulik A/S: *See*—
Vestre, Rasmus. 2,749,709.

Hydrofoil Corp., The: *See*—
Bush, Vannevar. 2,749,869.
Scherer, Paul A., and Meyer. 2,749,871.
Vavra, Michael H. 2,749,870.

Hynes, Lee P., to Turbine Equipment Co. Electric heater. 2,750,487, 6–12–56, Cl. 219—19.

I-T-E Circuit Breaker Co.: *See*—
Kast, Samuel H. 2,750,460.

Ideal Industries, Inc.: *See*—
Schinske, William G. 2,750,152.

Ihrig, Harry K., to Allis-Chalmers Mfg. Co. Process for producing nodular graphite iron. 2,750,284, 6–12–56, Cl. 75—130.

Illinois Baking Corp.: *See*—
Graham, Seymour C. 2,749,853.

Imbs, Joseph F. Packaging machine. 2,749,687, 6–12–56, Cl. 53—59.

Imperial Chemical Industries Ltd.: *See*—
Taylor, Arthur W. C., and Lamb. 2,750,419.

Ingersoll-Rand Co.: *See*—
Coates, Robert E. 2,750,156.
Naab, Julius. 2,750,240.

Innes, James. Golf bag hood. 2,749,958, 6–12–56, Cl. 150—1.5.

Innes, Willard J., to J. I. Case Co. Header and feeder control for combines. 2,749,606, 6–12–56, Cl. 56—21.

International Business Machines Corp.: *See*—
Coleman, John F. 2,750,113.
Crowell, Arnold B., Schlessiger, and Baker. 2,749,839.
Geisler, Heimut J. 2,750,455.
Johnson, Reynold B. 2,749,985.
Lents, John J. 2,750,501.
Long, William J. 2,750,022.
Rabenda, Edward J., and Whitney. 2,750,580.
Samuel, Arthur L. 2,750,532.

International Harvester Co.: *See*—
Hints, Otto E., Huddle, and Bing. 2,750,059.

International Latex Corp.: *See*—
Ambrose, Paul E. 2,749,549.

International Seal & Knot Protector Co.: *See*—
Keidel, Frank. 2,750,220.

Inter-Seal Corp.: *See*—
Greene, Edgeworth. 2,750,061.

Ipatieff, Vladimir N., and G. S. Monroe, deceased (N. J. Abram, administrator), to Universal Oil Products Co. Production of hydrogen. 2,750,261, 6–12–56, Cl. 23—212.

Isley, Walter F., to Continental Motors Corp. Fuel injection control. 2,749,898, 6–12–56, Cl. 123—140.

Iverson, Henry G.: *See*—
Creitz, Ellia E., and Iverson. 2,750,255.

Iwan Bros., Inc.: *See*—
Runkle, Lorin R. 2,750,223.

Jack & Heints, Inc.: *See*—
Burchfield, Williard F. 2,750,308.

Jacke, Raymond E., to Reynolds Metals Co. Rewrap containers. 2,750,101, 6–12–56, Cl. 229—51.

Jackson, Geoffrey W.: *See*—
Armstrong, Godfrey P., Bewley, Jackson, Bellringer, Bramwyche, and Wilkins. 2,750,424.
Armstrong, Godfrey P., Bellrinker, Bewley, Bramwyche, Jackson, and Wilkins. 2,750,426.

Jaffee, Robert I., and H. R. Ogden, to Rem-Cru Titanium, Inc. Titanium base alloys. 2,750,289, 6–12–56, Cl. 75—175.5.

Jahn, Charles R. Knife sharpener. 2,749,678, 6–12–56, Cl. 51—181.

Jamieson, Jack B., and J. A. Long, to Jamieson Saw Chain, Inc. Insert tooth for power saw chain. 2,749,950, 6–12–56, Cl. 143—135.

Jamieson Saw Chain, Inc.: *See*—
Jamieson, Jack B., and Long. 2,749,950.

Janiszewski, Kasimir. Die set with a tapered bushing and complementary leader pin. 2,749,987, 6–12–56, Cl. 164—118.

Jarand, Paul A. Compression operated fuel injection pump. 2,749,896, 6–12–56, Cl. 123—139.

Jason, William E.: *See*—
Bemiss, Robert P. 2,750,099.

Jeffrey, Robert S. M.: *See*—
Richards, James A., and Jeffrey. 2,749,587.

Jenny, Dietrich A.: *See*—
Armstrong, Lorne D., and Jenny. 2,750,542.

Jessup, Alfred C., deceased, A. J. Maria de Navarro, H. J. H. Saunders, and E. F. Emley, executors, to Magnesium Elektron Ltd. Magnesium base alloys. 2,750,288, 6–12–56, Cl. 75—168.

Jewell, Howard J. Paper fastening device. 2,749,816, 6–12–56, Cl. 93—1.1.

Johnson, Andrew L. Fireplace hot air furnace. 2,749,905, 6–12–56, Cl. 126—121.

Johnson, Clare P., Jr. Method of making aluminum halides. 2,750,257, 6–12–56, Cl. 23—93.

Johnson, Harwick: *See*—
Law, Russell R., Johnson, Giacoletto, and Barton. 2,750,507.

Johnson, Hugh B., A. S. McGaughan, and P. Weidlinger. Prefabricated metallic building for storage and the like. 2,750,013, 6–12–56, Cl. 189—3.

Johnson & Johnson: *See*—
Morgan, Burton D. 2,750,029.

Johnson, Ralph E., to The Singer Mfg. Co. Take-up mechanisms for sewing machines. 2,749,863, 6–12–56, Cl. 112—248.

Johnson, Reynold B., to International Business Machines Corp. Typewriting and code perforating machine. 2,749,985, 6–12–56, Cl. 164—112.

Johnstone, Ben B.: *See*—
Orthuber, Richard K., Clemens, and Johnstone. 2,749,598.

Jones, Allen R.: *See*—
Gerhardt, Philip B., Smith, and Jones. 2,750,340.

Jones, Barnie P.: *See*—
Moser, Arvel M. 2,749,731.

Jones, Don F., and K. S. Bassett, to Motor Wheel Corp. Forced air flow air heating furnace. 2,749,904, Cl. 126—110.

Jones, Donald B. Time teacher. 2,749,627, 6–12–56, Cl. 35—39.

Jones, Edward N. Hydraulic acting jet gun for perforating well casings. 2,749,841, 6–12–56, Cl. 102—21.8.

Jones, Luther B. Portable drill press. 2,749,780, 6–12–56, Cl. 77—7.

Jones, Mack M.: *See*—
Borgerd, William F., and Jones. 2,749,724.

Jones, Thomas G.: *See*—
Hammer, Glen P., and Jones. 2,750,359.

Jonker, Hendrik: *See*—
Dippel, Cornelis J., and Jonker. 2,750,292.

Joy Mfg. Co.: *See*—
Rollins, Lester G. 2,749,763.

Joyce, Glover C.: *See*—
Narel, Joseph W., and Joyce. 2,749,674.

Joyce, John R., to Shell Development Co. Vortex apparatus for liquid and gas. 2,750,169, 6–12–56, Cl. 261—49.

Joyce, John R., to Shell Development Co. Apparatus for mixing a liquid and a gas. 2,750,170, 6–12–56, Cl. 261—50.

Jukkola, Walfred W., and R. W. J. Lewis; said Jukkola assor. to Dorr-Oliver Inc., and said Lewis assor. to Aluminum Co. of Canada, Ltd. Process for calcining finely divided alumina hydrate. 2,750,258, 6–12–56, Cl. 23—142.

Jung, Jean-Pierre: *See*—
Hindermann, Peter, and Jung. 2,750,377.

Kaiser Aluminum & Chemical Corp.: *See*—
Drossel, Norman J., and Wilkins. 2,749,591.

Kaiser, Edward W. Capping device for use in testing conduit lines. 2,749,945, 6–12–56, Cl. 138—90.

Kaiser, Henry J., Co.: *See*—
Roos, Delmar G. 2,749,888.

Kanmak Textiles, Inc.: *See*—
Slough, George G. 2,749,947.

Karrer, Felix. Pump mount. 2,749,846, 6–12–56, Cl. 103—218.

Kascel, Lavern D.: *See*—
Essman, Eldon F., and Kascel. 2,749,725.

Kaspor, Anne N.: *See*—
Nordell, Carl H. 2,750,044.

Kast, Samuel H., to I-T-E Circuit Breaker Co. Quick break attachment for high voltage disconnecting switches. 2,750,460, 6–12–56, Cl. 200—48.

Kather, Erich N., and T. A. O. Gross, to Raytheon Mfg. Co. Voltage regulating apparatus. 2,750,555, 6–12–56, Cl. 323—22.

Katz, Helmut, to Siemens & Halske Aktiengesellschaft. Cathode for electrical discharge device. 2,750,527, 6–12–56, Cl. 313—346.

Katz, Leonhard: *See*—
Westcott, Vernon C., Katz, and Schiff. 2,750,566.

Kaukauna Machine Corp.: *See*—
Hosea, Everett E., and Godschalx. 2,750,459.

Kazenas, Zenon: *See*—
Kohl, Everard F., and Kazenas. 2,749,586.

Kearney & Trecker Corp.: *See*—
Barker, Orrin W., and Lenert. 2,749,811.
Wetzel, Theodore A. 2,749,812.

Keeley, Armand E.: *See*—
Wilson, Rufus W., and Keeley. 2,749,879.

Keidel, Frank, to International Seal & Knot Protector Co. Seals. 2,750,220, 6–12–56, Cl. 292—323.

Keiper, Edwin H., to Bath Iron Works Corp. Hammer mill feed device, including a rotary spreader and thrower. 2,750,123, 6–12–56, Cl. 241—186.

Keith, Hiram R. Electrical vote counting machine. 2,750,108, 6–12–56, Cl. 235—56.

Kell, Ray D., to Radio Corp. of America. Color television transmitter. 2,750,439, 6–12–56, Cl. 178—5.4.

Kelly, Donald H., to Technicolor Motion Picture Corp. Light dividing system. 2,749,792, 6–12–56, Cl. 88—1.

Kelly, Edmund P.: *See*—
Sale, William H. 2,750,213.

Kemisk Vaerk Koge A/S: *See*—
Clauson-Kaas, Niels K. F. W. 2,750,418.

Kemper, James M., and R. A. Fischer, to The Garrett Corp. Pressure regulating mechanism. 2,749,828, 6–12–56, Cl. 98—1.5.

Kendall, Edward H., to The Fellows Gear Shaper Co. Saddle traversing mechanism for gear shapers and the like. 2,749,805, 6–12–56, Cl. 90—7.

Kerns, Homer: *See*—
Lent, Constantin P., Kerns, and Mehler. 2,749,558.

Kessler, Charles A., F. Haller, and A. M. Gardner, to The Singer Mfg. Co. Oil-diverting means for sewing machines. 2,749,864, 6–12–56, Cl. 112—256.

Kessler, Charles A., and H. Ritter, to The Singer Mfg. Co. Sewing machine bed-shaft bearing lubrication. 2,749,865, 6–12–56, Cl. 112—256.

Kestell, Thomas A., to United Shoe Machinery Corp. Machines for shaping uppers over lasts. 2,749,562, 6–12–56, Cl. 12—10.4.

Kidde Mfg. Co., Inc.: *See*—
Noe, Harold C. 2,749,729.
Noe, Harold C. 2,749,730.

Kiebler, Myron W., Jr., and E. B. Euchner, to The Glidden Co. Solution of resin in blown oil treated with Friedel-Crafts catalyst to produce varnish. 2,750,298, 6–12–56, Cl. 106—222.

Kienhöfer, Klaus, to Wilhelm Sihn, Jr. K.-G. Elastically yielding conveying means for telescopic antennae. 2,749,759, 6–12–56, Cl. 74—95.

Kiley, Martin C. Sensitive snap-acting room thermostat. 2,750,473, 6–12–56, Cl. 200—138.

Kilpatrick, Lester L.: *See*—
Lekas, John P., and Kilpatrick. 2,750,579.

Kilpatrick, Myron O., to Phillips Petroleum Co. Desairing pebble extrusion chamber. 2,749,590, 6–12–56, Cl. 25—15.

Kimberly-Clark Corp.: *See*—
Hagen, Oscar E. 2,749,878.

Kip, Inc.: *See*—
Hiscock, Earle F. 2,749,834.
Hiscock, Earle F. 2,749,835.

Kircher, Paul J., to Landers, Frary & Clark. Impeller assembly mounting for mixers. 2,750,162, 6–12–56, Cl. 259—107.

Kitselman Brothers: *See*—
Kitselman, Harry L. 2,749,962.

Kitselman, Harry L., to Kitselman Brothers. Helix former. 2,749,962, 6–12–56, Cl. 153—64.

Kitterman, Donald M.: *See*—
Soffer, Jack W., and Kitterman. 2,750,230.

Klare, Paul: *See*—
Bardenheuer, Peter, Wehner, and Klare. 2,749,611.

Klatte, Theodor. Propulsion and steering apparatus for a marine vessel. 2,749,874, 6–12–56, Cl. 115—35.

Kleiman, Morton: *See*—
Fechter, Henry G., Kleiman, and Goldman. 2,750,396.
Goldman, Arthur, Kleiman, and Fechter. 2,750,397.

Klein, George. Process of making an organic compost. 2,750,269, 6–12–56, Cl. 71—21.

Klemm, Herman G., and G. F. Gardner, to Harry Ferguson, Inc. Reversible heavy duty disc harrow. 2,749,694, 6–12–56, Cl. 55—81.

Klemm, Herman G., and M. J. Mitchell, to Harry Ferguson, Inc. Tractor-implement hitch mechanism with power take-off and booster. 2,749,995, 6–12–56, Cl. 180—14.

Knight, Hogan B.: *See*—
Swern, Daniel, Coleman, and Knight. 2,750,362.

Knowles, Frank W. Apparatus for making ice in small pieces. 2,749,722, 6–12–56, Cl. 62—106.

Kohl, Everard F., and Z. Kazenas, said Kazenas to Mercast Corp. Process of forming shell mold. 2,749,586, 6–12–56, Cl. 22—194.

Kolka, Alfred J.: *See*—
Closson, Rex D., Kolka, and Ligett. 2,750,384.
Closson, Rex D., Kolka, and Ligett. 2,750,417.

Koppelman, Edward, to Raymond De-Icer and Engineering Co., Inc. Antennas and material for fabrication thereof. 2,750,321, 6–12–56, Cl. 154—127.

Koppers Co., Inc.: *See*—
McBride, Arthur B. 2,750,054.

Kowal, Michael H., to Empire Box Corp. Measuring and dispensing carton. 2,750,082, 6–12–56, Cl. 222—455.

Kramer, David C.: *See*—
Wheeler, Walter G., and Kramer. 2,749,711.

Kratz, Harvey E.: *See*—
Hoffmann, Melville C., and Kratz. 2,750,045.

Kratz, Woodrow H.: *See*—
Heard, Charles B. 2,749,935.

Kreger, Lawrence F. Paint roller. 2,749,599, 6–12–56, Cl. 29—116.

Krejci, Joseph C., to Phillips Petroleum Co. Conversion of hydrocarbons. 2,750,434, 6–12–56, Cl. 260—679.

Kriesman, Sanford S., and W. E. Rosen, 12½% to B. Granoff. Hair setting device. 2,749,920, 6–12–56, Cl. 132—31.

Krimmel, Carl P., to G. D. Searle & Co. Basically substituted derivatives of diarylaminobenzamides. 2,750,387, 6–12–56, Cl. 260—294.

Krsnic, Bojan, to E. K. Mettler. Analytical balance. 2,750,183, 6–12–56, Cl. 265—49.

Kröger, Ferdinand A., and J. van den Boomgaard, to Hartford National Bank and Trust Co., as trustee. Luminescent material. 2,750,344, 6–12–56, Cl. 252—301.4.

Kroll, Adam E., to E. I. du Pont de Nemours and Co. Dispersion polymerization process for tetrafluoroethylene. 2,750,350, 6–12–56, Cl. 260—29.6.

Krueger, Max. Adjustable tooth brush. 2,749,567, 6–12–56, Cl. 15—172.

Kuhn, Walter O., to Farrel-Birmingham Co., Inc. Articulated planetary gearing. 2,749,778, 6–12–56, Cl. 74—801.

Kukoff, Arthur J. Glitter cloth. 2,750,300, 6–12–56, Cl. 117—28.

Kun, Louis, Jr., and L., Sr., and Z. Dan. Electrode holder and eye shield combination for electric welding. 2,750,485, 6–12–56, Cl. 219—8.

Kun, Louis, Sr.: *See*—
Kun, Louis, Jr., and L., Sr., and Dan. 2,750,485.

Kunel, Heinrich. Vehicular tire. 2,749,959, 6–12–56, Cl. 152—202.

Küpper, Wilhelm: *See*—
Furst, Stefan, and Küpper. 2,750,125.

Kuppin, Herbert: *See*—
Denman, Stephen A. 2,750,191.

La Barre, Floyd, Jr., F. J. Churnell, W. D. Nagle, and A. P. Pennock, to Curtiss-Wright Corp. Propeller protractor. 2,749,623, 6–12–56, Cl. 33—180.

La Berge, Robert W., to E. I. du Pont de Nemours and Co. Water-resistant, polymeric titanium ester-impregnated wood and method of making same. 2,750,303, 6–12–56, Cl. 117—72.

La Berge, Robert W., to E. I. du Pont de Nemours and Co. Inhibition of moisture transmission through rigid pervious media. 2,750,307, 6–12–56, Cl. 117—123.

La Hue, Philip M., to Minneapolis-Honeywell Regulator Co. Phase advancing condition sensing apparatus. 2,750,556, 6–12–56, Cl. 323—123.

Laird, Ian A., to Vanant Products, Inc. Double packaging and cushioning strip. 2,750,032, 6–12–56, Cl. 206—62.

La Lande, William A., Jr., and J. Mockrin, to The Pennsylvania Salt Mfg. Co. Process of treating cast iron with iron-fluorine compounds. 2,750,279, 6–12–56, Cl. 75—53.

Lamb, Sidney A.: *See*—
Taylor, Arthur W. C., and Lamb. 2,750,419.

Lambert, Harry L., to Royal McBee Corp. Variable speed pulley and belt driving mechanism. 2,749,762, 6–12–56, Cl. 74—242.4.

Lambert, Robert D.: *See*—
Clark, James D'A., and Lambert. 2,749,576.

Lamberton, Jean: *See*—
Perrin, René, and Lamberton. 2,750,280.

LaMorder, John B. Orthopedic appliance. 2,749,628, 6–12–56, Cl. 36—71.

Lampkowitz, Paul. Adjustable elastic waist for trousers and other garments. 2,749,556, 6–12–56, Cl. 2—237.

Land, Edwin H., and O. E. Wolff, to Polaroid Corp. Collapsible liquid-carrying container. 2,750,075, 6–12–56, Cl. 222—94.

Landers, Frary & Clark: *See*—
Kircher, Paul J. 2,750,162.

Landholt, Elmer C., to McDonnell Aircraft Corp. Latch mechanism. 2,750,217, 6–12–56, Cl. 292—97.

Landis Tool Co.: *See*—
Balsiger, Harold E. 2,749,673.

Landon, Robert K., to Strait-Line Products. Chalk line box. 2,749,618, 6–12–56, Cl. 33—87.

Langsdorf, Alexander S., Jr., to the United States of America as represented by the United States Atomic Energy Commission. Electrostatic measuring device. 2,750,520, 6–12–56, Cl. 310—6.

Laposki, Anthony T.: *See*—
Edgecombe, David A., Evans, and Laposki. 2,749,782.

Latham, Morton E., to Swedlow Plastics Co. Process for preparing continuous plastic sheets. 2,750,320, 6–12–56, Cl. 154—126.

Latin, Aubrey, to The Okonite Co. Production of metallic bodies. 2,749,604, 6–12–56, Cl. 29—420.5.

Latour, André, to Etablissements Merlin & Gerin. Method and device for extinguishing electrical arcs in circuit breakers. 2,750,476, 6–12–56, Cl. 200—147.

Latta, Edward, to Redmond Co., Inc. Switch construction, and motor control system incorporating the same. 2,750,550, 6–12–56, Cl. 318—265.

Laviolette, Jean G., to Lip S. A. d'Horlogerie. Electric clock starter. 2,749,699, 6–12–56, Cl. 58—28.

Law, Russell R., H. Johnson, L. J. Giacoletto, and L. E. Barton, to Radio Corp. of America. Transistor oscillator circuit. 2,750,507, 6–12–56, Cl 250—36.

League, Maurice S., to Crown Zellerbach Corp. Log debarker having revolving knives simultaneously swingable by differential-type planetary-gear-train. 2,749,952, 6–12–56, Cl. 144—208.

Leasy, Karl J. Vehicle leg rest. 2,749,973, 6–12–56, Cl. 155—172.

Lebold, Jack W., to Lockheed Aircraft Corp. Alighting gear for vertically arising aircraft. 2,750,133, 6–12–56, Cl. 244—100.

Ledden, Howard P., to American Cyanamid Co. Method of preparing melamine-formaldehyde resins, including vacuum dehydration. 2,750,355, 6–12–56, Cl. 260—67.6.

Lekas, John P., and L. L. Klipatrick, to North American Aviation, Inc. Magnetic disc data storage device. 2,750,579, 6–12–56, Cl. 340—174.

Lee, George S., and C. F. Young. Nasal comparator. 2,749,908, 6–12–56, Cl. 128—2.

Lellep, Otto G., to Allis-Chalmers Mfg. Co. Process for production of hard burned agglomerates of fine magnetite ore. 2,750,272, 6–12–56, Cl. 75—3.

Lellep, Otto G., to Allis-Chalmers Mfg. Co. Method of heat hardening iron ore pellets containing fuel. 2,750,273, 6–12–56, Cl. 75—3.

Lellep, Otto G., to Allis-Chalmers Mfg. Co. Method of heating gas permeable material with a lean gas mixture. 2,750,274, 6–12–56, Cl. 75—5.

Lemelson, Jerome H. Toy mine detector. 2,749,663, 6–12–56, Cl. 46—236.

Lenert, Joseph J.: *See*—
Barker, Orrin W., and Lenert. 2,749,811.

Lent, Constantin P., H. Kerns, and A. Mehler. Defecation relief unit for aeroplane personnel and sick-bed. 2,749,558, 6–12–56, Cl. 4—10.

Lentz, John J., to International Business Machines Corp. Secondary emission type trigger circuit. 2,750,501, 6–12–56, Cl. 250—27.

Leobarb Corp.: *See*—
Schwartz, Alexander, and Fogelson. 2,750,313.

Le Tourneau, Robert L., R. Matteson, and V. Walthman, to California Research Corp. Hydrocarbon analysis and control in crystallization processes. 2,750,433, 6–12–56, Cl. 260—674.

Le Veille, Philip E: *See*—
Hawkins, Willis M., Jr., and Le Veille. 2,750,134.

Lever Brothers Co.: *See*—
Eckardt, Wolfgang M. J. 2,750,326.
Eckardt, Wolfgang M. J. 2,750,327.

Levkoff, David, ¼ to E. S. and ¼ to H. S. Levkoff, and ¼ to E. L. Sennet. Boxes or cartons. 2,750,098, 6–12–56, Cl. 229—27.

Levkoff, Evelyn: *See*—
Levkoff, David. 2,750,098.

Levkoff, Henry S.: *See*—
Levkoff, David. 2,750,098.

Lewis, Arthur J. 3rd, to The Autoyre Co. Abrasive finishing machine. 2,749,670, 6–12–56, Cl. 51—62.

Lewis, Harold P., to Pak-Rapid Inc. Commodity packaging machine. 2,749,691, 6–12–56, Cl. 53—180.

Lewis, Jesse O. Venetian blind. 2,749,976, 6–12–56, Cl. 160—168.

Lewis, John O., to Flowflax Corp. Apparatus for integrating a variable against time. 2,750,109, 6–12–56, Cl. 235—61.

Lewis, Ronald W. J.: *See*—
Jukkola, Walfred W., and Lewis. 2,750,258.

Lickteig, Albert F., to Durable Products Co. Removable sash structure. 2,749,578, 6–12–56, Cl. 20—42.

Ligett, Waldo B.: *See*—
Closson, Rex D., Kolka, and Ligett. 2,750,384.
Closson, Rex D., Kolka, and Ligett. 2,750,417.

Lilly, Eli, and Co.: *See*—
Market, Harold L., and Murphy. 2,750,325.

Linahan, Thomas C., to Minneapolis-Honeywell Regulator Co. Electrical apparatus for measuring pressure. 2,749,754, 6–12–56, Cl. 73—398.

Lindberg, Richard C., to Goodman Mfg. Co. Drum cutter head for continuous miner. 2,750,177, 6–12–56, Cl. 262—9.

Lindenblad, Nils E., to Radio Corp. of America. Refrigeration. 2,749,716, 6–12–56, Cl. 62—1.

Lindenstruth, Albert F., to E. I. du Pont de Nemours and Co. Method for dyeing polyacrylonitrile fabrics. 2,750,250, 6–12–56, Cl. 8—55.

Lindgren, Frank A., to Goodman Mfg. Co. Fluid drive and retarding means for kerf cutting machines. 2,750,153, 6–12–56, Cl. 254—184.

Lindgren, Roy J. Toilet article. 2,749,923, 6–12–56, Cl. 132—76.2.

Line, Gerald D., and S. L. Riley, to Eaton Mfg. Co. Hydraulic lifter. 2,749,892, 6–12–56, Cl. 123—90.

Lip S. A. d'Horlogerie: *See*—
Laviolette, Jean G. 2,749,699.

Locke, Lloyd T., and R. V. Shafer. Can top remover with wedge lifter. 2,749,785, 6–12–56, Cl. 81—3.46.

Lockheed Aircraft Corp.: *See*—
Hawkins, Willis M., Jr., and Le Veille. 2,750,134.
Lebold, Jack W. 2,750,133.
Palmer, Edward D., and Pray. 2,750,132.

Loedige, Fritz: *See*—
Loedige, Wilhelm and F. 2,750,163.

Loedige, Wilhelm and F. Mixing apparatus. 2,750,163, 6–12–56, Cl. 259—109.

Loewenstein, Max, to Loma Machine Mfg. Co., Inc. Continuous casting. 2,749,583, 6–12–56, Cl. 22—57.2.

Lohnes, Howard E., to Hallmark Cards, Inc. Animated card. 2,749,637, 6–12–56, Cl. 46—34.

Loma Machine Mfg. Co., Inc.: *See*—
Loewenstein, Max. 2,749,583.

Lomax, Clarence E., to Automatic Electric Laboratories, Inc. Paystation telephone system. 2,750,447, 6–12–56, Cl. 179—6.3.

Lombard Corp.: *See*—
Howell, Charles N. 2,750,486.

Long, Charles: *See*—
Cuellleron, Jean, Long, and Pascaud. 2,750,271.

Long, Frederick F., to American Viscose Corp. Apparatus for removing liquids from annular wound packages. 2,750,039, 6–12–56, Cl. 210—71.

Long, John A.: *See*—
Jamieson, Jack B., and Long. 2,749,950.

Long, Loren L., to Phillips Petroleum Co. Pressure regulating device. 2,749,925, 6–12–56, Cl. 137—1.

Long, William J., to International Business Machines Corp. Type bar impact control. 2,750,022, 6–12–56, Cl. 197—17.

Lonza Electric and Chemical Works Ltd.: *See*—
Halbig, Paul. 2,750,421.

Lorens, Edward H., T. Waugh, and D. G. Merrill, to Emhart Mfg. Co. Vacuum packaging machine. 2,749,686, 6–12–56, Cl. 53—22.

Lovelace, Alan M.: *See*—
Tarrant, Paul, and Lovelace. 2,750,431.

Loveless, Donald L., to Armco Steel Corp. Stainless steels containing boron. 2,750,283, 6–12–56, Cl. 75—124.

Lovell, Robert B.: *See*—
Camarda, Frank V., Gumbs, and Lovell. 2,750,302.

Lowe, Joe, Corp.: *See*—
Lurie, Daniel. 2,750,077.
Lurie, Daniel. 2,750,078.

Lucker, Millard B., to Auto Specialties Mfg. Co. Lifting jack. 2,750,150, 6–12–56, Cl. 254—103.

Lundquist, William E.: *See*—
Hendricks, James O., Lundquist, and Schmelzle. 2,750,304.

Lurge Gesellschaft für Warmetechnik: *See*—
Hagemann, August, and Buchner. 2,750,430.

Lurie, Daniel, to Joe Lowe Corp. Filling nozzle attachment. 2,750,077, 6–12–56, Cl. 222—135.

Lurie, Daniel, to Joe Lowe Corp. Filling nozzle having removable divider. 2,750,078, 6–12–56, Cl. 222—135.

Lynch, William D.: *See*—
Bemiss, Robert P. 2,750,099.

Lynn, John W., to Union Carbide and Carbon Corp. Ester of N,N-bis(2-cyanoethyl)carboxamic acids. 2,750,401, 6–12–56, Cl. 260—464.

Lyon, William H.: *See*—
Thompson, Lincoln, Runge, and Lyon. 2,750,449.

Ma, Tsu Sheng: *See*—
Tien, Jack M., and Ma. 2,749,821.

Macdougall Iver C., to Stauffer Chemical Co. Carbon bisulfide retort. 2,750,264, 6–12–56, Cl. 23—277.

MacDuff, Stanley I., to Bendix Aviation Corp. Control device for windshield wiper mechanism. 2,749,885, 6–12–56, Cl. 121—164.

MacFarlane, Walter, & Co., Ltd.: *See*—
Richards, James A., and Jeffrey. 2,749,587.

Machlett Laboratories, Inc.: *See*—
Doolittle, Howard D., and Skehan. 2,750,535.

MacIntyre, John A., to B & M Mills, Inc. Panel for radio or television cabinet. 2,750,245, 6–12–56, Cl. 312—7.

MacKinney, Paul M., to Oury Engineering Co. Charging chute for transit concrete mixers. 2,750,164, 6–12–56, Cl. 259—164.

MacKinnon, James S., and J. E. Weidman, to W. H. Martin. Machine for automatically cutting off strips of uniformly increasing lengths from strip stock of indefinite length. 2,749,981, 6–12–56, Cl. 164—12.

Mackta, Leo. Reducing gear assembly. 2,749,761, 6–12–56, Cl. 74—216.3.

MacLelland, Willis G.: *See*—
Snyder, Clermont J., and MacLelland. 2,750,311.

Magill, Donald G., to American Can Co. Container overcap and method of attaching same without adhesive. 2,750,094, 6–12–56, Cl. 229—5.6.

Magnesium Elektron Ltd.: *See*—
Jessup, Alfred C. 2,750,288.

Magovern, Robert L.: *See*—
Courter, Martin L., and Magovern. 2,750,398.

Manganese Chemicals Corp.: *See*—
Welsh, Jay Y. 2,750,256.

Manning, Fred W. Horticultural fabrics. 2,749,964, 6–12–56, Cl. 154—1.

Manning, Fred W. Filamentary reinforcements. 2,749,965, 6–12–56, Cl. 154—1.

Manning, Fred W. Method and apparatus for making nonwoven fabric. 2,750,317, 6–12–56, Cl. 154—101.

Mansfield, Richard C.: *See*—
Schmidle, Claude J., and Mansfield. 2,750,385.

Manson, Morris, and F. Hafekost, to Steel Slides, Inc. Extension arm for furniture. 2,750,244, 6–12–56, Cl. 311—71.

Mantes, T. R.: *See*—
Mattimoe, George E., and Stehn. 2,750,091.

Mantes, T. R., Co.: *See*—
Mattimoe, George E., and Stehn. 2,750,091.

Marcot, Guy C.: *See*—
Nelson, Earl W., and Marcot. 2,750,260.

Marhols, Richard C., to Raytheon Mfg. Co. Mounting vehicle for radio receivers. 2,750,494, 6–12–56, Cl. 250—14.

Market, Harold L., and H. W. Murphy, to Eli Lilly and Co. Injectable erythromycin preparations. 2,750,325, 6–12–56, Cl. 167—65.

Markkula, Raymond F. Folding chair. 2,749,972, 6–12–56, Cl. 155—147.

Marley Co., The: *See*—
Mart, Leon T. 2,749,605.

Marshall, William E., to Armco Steel Corp. Method and apparatus for smelting fine iron ore. 2,750,276, 6–12–56, Cl. 75—26.

Marshall, William E., to Armco Steel Corp. Process and apparatus for reducing and smelting iron. 2,750,277, 6–12–56, Cl. 75—38.

Mart, Leon T., to The Marley Co. Method of constructing laminated fan ring for cooling towers. 2,749,605, 6–12–56, Cl. 29—431.

Martin, Wade B., to American Telephone and Telegraph Co. Code translating device. 2,750,446, 6–12–56, Cl. 178—26.

Martin, William H.: *See*—
MacKinnon, James S., and Weidman. 2,749,981.

Marvin, Charles H., to F. Freund, and E. Marvin, jointly. Rail anchors. 2,750,119, 6–12–56, Cl. 238—327.

Marvin, Eugenie: *See*—
Marvin, Charles H. 2,750,119.

Maschinenfabrik Turner Aktiengesellschaft: *See*—
Hardt, Rudolf. 2,749,982.

Matheny, Peter E. Gambrel. 2,750,224, 6–12–56, Cl. 294—79.

Matteoli, Albert J. Plant thinner. 2,749,822, 6–12–56, Cl. 97—22.

Matteson, Robert: *See*—
Le Tourneau, Robert L., Matteson, and Waithman. 2,750,433.

Mattimoe, George E., and E. G. Stehn, to T. R. Mantes, d. b. a. T. R. Mantes Co. Retractable filling valve of the lance type. 2,750,091, 6–12–56, Cl. 226—93.

Maul, Michael: *See*—
Pfeiffer, Max. 2,750,112.

Maul, Michael. Machine for operating upon perforated record cards. 2,749,986, 6–12–56, Cl. 164—113.

Maul, Michael. Multiplying machines. 2,750,111, 6–12–56, Cl. 235—61.6.

McAngus, Ell H., to West Point Mfg. Co. Feed control means for drawing apparatus. 2,749,573, 6–12–56, Cl. 19—70.

McBride, Arthur B., to Koppers Co., Inc. Article unloading apparatus. 2,750,054, 6–12–56, Cl. 214—89.

McBride, Joseph R., to Southern States Equipment Corp. Electric fuse. 2,750,471, 6–12–56, Cl. 200—120.

McBride, Joseph R., to Southern States Equipment Corp. Electric fuse. 2,750,470, 6–12–56, Cl. 200—120.

McCallum, Robert A., to Goodman Mfg. Co. Picking type mining apparatus. 2,750,178, 6–12–56, Cl. 262—15.

McCallum, Robert A., to Goodman Mfg. Co. Horizontal and shearing kerf cutting machine. 2,750,180, 6–12–56, Cl. 262—28.

McClelland, Clarence P., to General Motors Corp. Latch striker assembly. 2,750,221, 6–12–56, Cl. 292—341.18.

McClure, Carroll W., to United State Steel Corp. Apparatus for determining the profile of threads. 2,749,624, 6–12–56, Cl. 33—199.

McCluskey, David C.: *See*—
Piazze, Thomas E., and McCluskey. 2,749,817.

McConnel Bomford Ltd.: *See*—
McConnel, Frederic W. 2,749,916.

McConnel, Frederic W., to McConnel Bomford Ltd. Rotors for threshing machines. 2,749,916, 6–12–56, Cl. 130—27.

McCormick, Charles W. Light control means. 2,749,581, 6–12–56, Cl. 20—62.

McCullough, Armour L., to A. V. Roe Canada Ltd. Torque transmitting coupling. 2,749,726, 6–12–56, Cl. 64—9.

McCullough, Otis J. Radioactive guiding system for mobile vehicles. 2,750,583, 6–12–56, Cl. 340—282.

McDonnell Aircraft Corp.: *See*—
Landholt, Elmer C. 2,750,217.

McGaughan, Alexander S.: *See*—
Johnson, Hugh B., McGaughan, and Weidlinger. 2,750,013.

McGoldrick, Mary B.: *See*—
McGoldrick, Raymond J. 2,750,490.

McGoldrick, Raymond J., deceased; Mary B. McGoldrick, administratrix. Emergency lighting unit for ships. 2,750,490, 6–12–56, Cl. 240—37.1.

McGraw Electric Co.: *See*—
Van Dusen, Harold A., Jr. 2,750,488.

McIlvane, William J., to Copperweld Steel Co. Method of producing composite curved metallic shapes. 2,749,607, 6–12–56, Cl. 29—456.

McInroy, Wilson H. Cigarette dumping ash tray. 2,749,917, 6–12–56, Cl. 131—240.

McKee, George K., to The Elreco Corp. Fitting or coupling for bracket arm. 2,750,142, 6–12–56, Cl. 248—216.

McKern, Boyd W. Fishing gear container. 2,749,645, 6–12–56, Cl. 43—26.

McLamore, William M.: *See*—
Bayley, Abraham, Harfenist, and McLamore. 2,750,428.

McMahon, James, and J. D. Baldwin, Jr., to The Weatherhead Co. Pre-grooving tool. 2,749,788, 6–12–56, Cl. 82—1.

McNamee, Wallace J., and H. E. Adelt, to George Gorton Machine Co. Turret locking device. 2,749,595, 6–12–56, Cl. 29—1.

Mealpack Corp.: *See*—
Clarke, Houghton W. 2,750,064.

Mecha Finish Corp.: *See*—
Sleeper, Murrel B. 2,749,669.

Mehler, Alan: *See*—
Lent, Constantin P., Kerns, and Mehler. 2,749,538.

Meissner, John F. Bed blending system. 2,750,023, 6–12–56, Cl. 198—36.

Melcher, Larry J.: *See*—
Burget, Archie I. 2,749,783.

Meloy, Thomas P., to Melpar, Inc. X-ray spectograph. 2,750,512, 6–12–56, Cl. 250—51.

Melpar, Inc.: *See*—
Meloy, Thomas P. 2,750,512.

Melville, William S., to The British Thomson-Houston Co. Ltd. Electric amplifier. 2,750,454, 6–12–56, Cl. 179—171.

Mercast Corp.: *See*—
Kohl, Everard F., and Kasenas. 2,749,586.

Mercer, Richard. Telecommunication systems. 2,750,448, 6–12–56, Cl. 179—18.

Mercer, William R., F. T. Wimberly, and L. E. St. Jean, to Raytheon Mfg. Co. Altimeter modulators. 2,750,565, 6–12–56, Cl. 332—5.

Mergenthaler Linotype Co.: *See*—
Braham, Frank G. 2,750,524.

Mermelstein, Morris. Automobile lifting device. 2,750,149, 6–12–56, Cl. 254—86.

Merriam, John H., to Allied Chemical & Dye Corp. Selective phenol-aldehyde resinification. 2,750,354, 6–12–56, Cl. 260—57.

Merrill, Donald G.: *See*—
Lorens, Edward H., Waugh, and Merrill. 2,749,686.

Mettetal, Donald, Jr., ½ to Dealers Transit, Inc., and ½ to Arco Auto Carriers, Inc. Automobile transporting vehicle. 2,750,225, 6–12–56, Cl. 296—1.

Mettler, Erhard K.: *See*—
Krisnic, Bojan. 2,750,183.

Meyer, Ferdinand C., and A. J. Speziale, to Monsanto Chemical Co. Carboxylic acid esters of hydroxy substituted carbocyclic ketones. 2,750,409, 6–12–56, Cl. 260—476.

Meyer, Herman. Refrigerant drying cartridge. 2,750,041, 6–12–56, Cl. 210—131.

Meyer, Rudolf X. *See*—
Scherer, Paul A., and Meyer. 2,749,871.

Meyers, Charles O., to National Tank Co. Desiccant reconcentrator. 2,750,331, 6–12–56, Cl. 202—153.

Michaels Art Bronze Co., Inc., The: *See*—
Eames, James O., and Sanford. 2,749,978.

Michigan Tool Co.: *See*—
Carlsen, William R. 2,749,802.

Middendorf, Henry B., to Scaffold Equipment Co. Elevating platform structure. 2,750,236, 6–12–56, Cl. 304—29.

Mika, Stanley E. Sure lock connectors. 2,750,573, 6–12–56, Cl. 339—250.

Mikeska, Louis A., and P. V. Smith, Jr., to Esso Research and Engineering Co. Synthetic lubricants. 2,750,342, 6–12–56, Cl. 252—46.6.

Miles, Edward E.: *See*—
Bowles, Ernest G., and Miles. 2,749,847.

Miles, George S., to Bendix Aviation Corp. Electron discharge tube. 2,750,560, 6–12–56, Cl. 324—33.

Millage, Donald R.: *See*—
Brown, Henry, and Millage. 2,750,335.
Brown, Henry, and Millage. 2,750,337.

Miller, Edward W., to The Fellows Gear Shaper Co. Gear cutting machine. 2,749,803, 6–12–56, Cl. 90—1.6.

Miller, Elmer C., to Phillips Petroleum Co. Analyzer. 2,750,511, 6–12–56, Cl. 250—43.5.

Miller, George: *See*—
Sariti, Walter, and Miller. 2,749,894.

Miller, Harry B.: *See*—
Gordon, Alexander M., and Miller. 2,750,106.

Miller, Nathaniel, to Samuel J. Miller & Co. Necktie holding means. 2,749,553, 6–12–56, Cl. 2—145.

Miller, Raymond V. Skin tensioner for shavers. 2,749,613, 6–12–56, Cl. 30—34.

Miller, Robert A., to Pittsburgh Plate Glass Co. Method and apparatus for electro-deposition of a layer of uniform thickness on a conductive surface. 2,750,332, 6–12–56, Cl. 204—15.

Miller, Robert H.: *See*—
Hooker, Thomas, and Miller. 2,750,002.
Olson, Einar R., and Miller. 2,750,437.

Miller, Robert L.: *See*—
Wannamaker, William H., Jr., and Miller. 2,750,547.

Miller, Samuel J., & Co.: *See*—
Miller, Nathaniel. 2,749,553.

Miller, Willis C. Loading and wadding device for shotgun shells. 2,749,790, 6–12–56, Cl. 86—29.

Miller, Willis C. Crimping device for shotgun shells. 2,749,791, 6–12–56, Cl. 86—40.

Millspaugh, Louise N.: *See*—
Nordell, Carl H. 2,750,044.

Milster, Arthur N., to Wagner Electric Corp. Universal accelerator and pedal switch. 2,750,462, 6–12–56, Cl. 200—61.89.

Milwaukee Gas Specialty Co.: *See*—
Holmes, Gifford I. 2,750,539.

Miner, Donald B.: *See*—
Yowell, Joseph W., and Miner. 2,749,942.
Yowell, Joseph W., and Miner. 2,750,465.

Miner, W. H., Inc.: *See*—
Forwell, Eric G. 2,749,850.

Minerals & Chemicals Corp. of America: *See*—
Hunter, Joseph L., and Breathitt. 2,750,036.

Minn, James, to Hercules Powder Co. Compounds derivable from dehydroabietonitrile. 2,750,364, 6–12–56, Cl. 260—97.

Minn, James, to Hercules Powder Co. Phenanthrene derivatives. 2,750,372, 6–12–56, Cl. 260—99.

Minneapolis-Honeywell Regulator Co.: *See*—
Grogan, Edward C. 2,749,927.
Harrison, Thomas R. 2,749,745.
La Hue, Philip M. 2,750,556.
Linahan, Thomas C. 2,749,754.
Wannamaker, William H., Jr., and Miller. 2,750,547.

Minnesota Mining and Mfg. Co.: *See*—
Hendricks, James O., Lundquist, and Schmelzle. 2,750,304.

Minnick, Charles E.: *See*—
Patton, William R., and Minnick. 2,749,676.

Mirviss, Stanley B., and F. W. Banes, to Esso Research and Engineering Co. Petroleum resins by after-treatment with diolefins. 2,750,353, 6–12–56, Cl. 260—45.5.

Misch, Ethel A. Paper containers. 2,750,096, 6–12–56, Cl. 229—17.

Mitchell, Boris J., to General Motors Corp. Combustion chamber. 2,749,899, 6–12–56, Cl. 123—191.

Mitchell, Boris J., to General Motors Corp. Combustion chamber. 2,749,900, 6–12–56, Cl. 123—191.

Mitchell, Boris J., to General Motors Corp. Combustion chamber. 2,749,901, 6–12–56, Cl. 123—191.

Mitchell, Melville J.: *See*—
Klemm, Herman G., and Mitchell. 2,749,995.

Mitchell, Melville J., to Harry Ferguson, Inc. Transportable engine mounting. 2,749,823, 6–12–56, Cl. 97—34.

Mittendorf, William R.: *See*—
Duncan, Dan B., and Mittendorf. 2,749,717.

Mockrin, Isadore: *See*—
La Lande, William A., Jr., and Mockrin. 2,750,279.

Monroe, George S.: *See*—
Ipatieff, Vladimir N., and Monroe. 2,750,261.

Monsanto Chemical Co.: *See*—
Baer, Massimo. 2,750,351.
Barnes, Marion D. 2,750,270.
Gaertner, Van R. 2,750,427.
Gamrath, Harry R. 2,750,399.
Meyer, Ferdinand C., and Speziale. 2,750,409.
Park, Harold F. 2,750,358.

Montgomery, Charles W.: *See*—
Chesley, Kenneth G., Montgomery, and Sandborn. 2,750,414.

Moon, James, to Signal Oil and Gas Co. Irreversible tool joint and electrical coupling for use in wells. 2,750,560, 6–12–56, Cl. 339—16.

Moore, Charles B., to Esso Research and Engineering Co. Diolefin addition to hydrocarbon resin feeds. 2,750,360, 6–12–56, Cl. 260—82.

Moore, George A. Dispensing container. 2,750,093, 6–12–56, Cl. 229—5.5.

Moore, George A. Containers and method of making same. 2,750,097, 6–12–56, Cl. 229—23.

Moore, Ralph R.: *See*—
Moore, Willard J. and R. R. 2,750,198.

Moore, Raymond P., Jr., and R. O. Endres, to Radio Corp. of America. Free-running square wave generator. 2,750,510, 6–12–56, Cl. 250—36.

Moore, Willard J. and R. R. Wagon-sled. 2,750,198, 6–12–56, Cl. 280—7.14.

Moore, William H. Spring door closer and tensioning means therefor. 2,750,185, 6–12–56, Cl. 267—1.

Moores, Urban A. Dual hydraulic clutch. 2,749,765, 6–12–56, Cl. 74—361.

Moran, James G. Liquid and semi-liquid dispensing containers. 2,750,064, 6–12–56, Cl. 222—490.

More, David, to The Glacier Metal Co. Ltd. Centrifugal oil cleaner, including a cylindrical filter. 2,750,107, 6–12–56, Cl. 233—2.

Morgan, Burton D., to Johnson & Johnson. Tape dispenser. 2,750,029, 6–12–56, Cl. 206—52.

Morin, Louis H., to Coats & Clark, Inc. Molded plastic spool. 2,750,129, 6–12–56, Cl. 242—119.

Morris, Max H.: *See*—
Fowler, Floyd F., and Harrison. 2,750,151.

Morris, Milo W. Christmas tree mounting means. 2,750,138, 6–12–56, Cl. 248—44.

Morris, William C., to General Electric Co. Directional ground relay with dual polarization means. 2,750,537, 6–12–56, Cl. 317—36.

Morton, George A.: *See*—
Robinson, Kenneth W., Green, and Morton. 2,750,513.

Morton, Henry E. Flash trimming machine. 2,749,813, 6–12–56, Cl. 90—38.

Morvay, Anton A., to A. A. Morvay, F. B. Hinrichs, and C. A. Ross. Smelting process. 2,750,278, 6–12–56, Cl. 75—40.

Morway, Arnold J., D. W. Young, and P. V. Smith, Jr., to Esso Research and Engineering Co. Lubricating grease comprising a synthetic oil and a complex thickener. 2,750,341, 6–12–56, Cl. 252—42.

Moser, Arvel M., ¼ to B. P. Jones. Floating yarn cutter mechanism. 2,749,731, 6–12–56, Cl. 66—147.

Mosher, James K., to Schuls Tool and Mfg. Co. Fluid pressure actuated valve with mechanical cleaning attachment. 2,749,932, 6–12–56, Cl. 137—244.

Mosher, James K., to Schuls Tool and Mfg. Co. Fluid pressure actuated valve. 2,749,936, 6–12–56, Cl. 137—413.

Motor Wheel Corp.: *See*—
Horn, Harry J. 2,750,012.
Jones, Don F., and Bassett. 2,749,904.

Motorola, Inc.: *See*—
Brewster, Franklin C. 2,750,495.
Crow, Robert P. 2,750,451.
Schlesinger, Kurt. 2,750,441.

Mott, Norman S., to Cooper Alloy Corp. Stainless steel of the "20" type. 2,750,282, 6–12–56, Cl. 75—125.

Mundy, Giles J.: *See*—
Borden, Joseph H., and Mundy. 2,750,005.

Murphy, Hubert W.: *See*—
Market, Harold L., and Murphy. 2,750,325.

Murray, James S., to Automatic Electric Laboratories, Inc. Automatic trunk routiner. 2,750,458, 6–12–56, Cl. 179—175.2.

N. V. Amsterdamsche Chininefabriek: *See*—
Veldstra, Haaye, and Akkerman.

Naab, Julius, to Ingersoll-Rand Co. Wear and adjusting device for pistons. 2,750,240, 6–12–56, Cl. 309—4.

Nagle, Wilson D.: *See*—
La Barre, Floyd, Jr., Churnell, Nagle, and Pennock.

Nanchino, Pierre: *See*—
Chaffotte, Raymond, and Nanchino.

Narel, Joseph W., and G. C. Joyce, to Norton Co. Grinding machine-work loader. 2,749,674, 6–12–56, Cl. 51—105.

National Cylinder Gas Co.: *See*—
Redmon, Charles L., and Sexton.

National Dairy Research Laboratories, Inc.: *See*—
Stimpson, Edwin G., and Trebler.

National Furniture Mfg. Co., Inc.: *See*—
Quakenbush, Howard M.

National Research Development Corp.: *See*—
Newman, Edward A., and Clayden.

National Tank Co.: *See*—
Meyers, Charles O.

Nave, Sherlock E. Bulldozer blade. 2,749,630, 6–12–56, Cl. 37—144.

Navy, United States of America as represented by the Secretary of the: *See*—
Billman, Louis S., and Angelos.
Rode, Robert H., Holliday, and Hawke.
Bunnett, Joseph F.
Daniels, Howard L.
Fahrner, Ted, and Ramage.
Fischer, Frederick K., and Bartolett.
Germeshausen, Kenneth J.
Gross, Martin R.
Hennessey, Frank L.
Strandberg, Malcom W. P.
Winter, David F.
Woodbury, Roger B.

Nelson, Earl W., and G. C. Marcot, to American Cyanamid Co. Combustion of titanium tetrachloride with oxygen. 2,750,260, 6–12–56, Cl. 23—202.

Nelson, Karl J., to Esso Research and Engineering Co. Process of carbonizing coal. 2,750,330, 6–12–56, Cl. 202—14.

Nemeth, John B., to E. I. du Pont de Nemours and Co. Article of manufacture and process of making same. 2,749,943, 6–12–56, Cl. 138—55.

Nepera Chemical Co., Inc.: *See*—
Fand, Theodore I., and Broh-Kahn.
Wilbert, Godfrey.

Nester, Ralph G., to E. I. du Pont de Nemours and Co. Valve for accurately controlling minute fluid flow at low pressures and its production. 2,749,934, 6–12–56, Cl. 137—1.

Neumann, Albert W. Toy submarine. 2,749,658, 6–12–56, Cl. 46—92.

New Britain Machine Co., The: *See*—
Stidham, Hallis N.

Newell, Kenneth F., to Continental Can Co. Inc. Container top opening and clamping mechanism. 2,750,090, 6–12–56, Cl. 226—59.

New Hermes Ring Engraving Corp.: *See*—
Gruettner, Gerhard G.

Newman, Edward A., and D. O. Clayden, to National Research Development Corp. Circuits for ultrasonic delay lines. 2,750,499, 6–12–56, Cl. 250—27.

New York Air Brake Co., The: *See*—
Bahniuk, Eugene.

Nichols Wire & Aluminum Co.: *See*—
Fey, Mathias J., and Ray.

Nicholson, James F., and D. J. Ransom, to Radio Corp. of America. Kinescope mask and dust seal. 2,750,587, 6–12–56, Cl. 340—367.

Nichts, John J., to The Warner & Swasey Co. Machine tool. 2,750,025, 6–12–56, Cl. 203—85.

Nixon, Virgil H., to Rogers Iron Works Co. Hydraulic jib arm for drilling machines. 2,750,155, 6–12–56, Cl. 255—51.

Nobilium Products, Inc.: *See*—
Prosen, Emil M.

Noe, Harold C., to Kidde Mfg. Co., Inc. Needle bed structure for warp knitting machines. 2,749,729, 6–12–56, Cl. 66—86.

Noe, Harold C., to Kidde Mfg. Co. Inc. Needle bed structure for warp knitting machines. 2,749,730, 6–12–56, Cl. 66—86.

Noel, Charles D., and L. J. Tucker. Gas operated alarm actuable by back-up travel of a tractor. 2,749,877, 6–12–56, Cl. 116—138.

Nolfi, Thomas E.: *See*—
Patrowsky, Joseph A., and Wilson.

Nordegren, Sven-Åke: *See*—
Englund, Nils I., and Nordegren.

Nordell, Carl H., 15% to L. N. Millspaugh and 15% to A. N. Kaspor. Screening and comminuting device. 2,750,044, 6–12–56, Cl. 210—152.

Nordstrom, John W. Lamp and shade assembly. 2,750,493, 6–12–56, Cl. 240—81.

North American Aviation, Inc.: *See*—
Lekas, John P., and Kilpatrick.
Sherwood, Bert J.

Northeast Tool Die Works, Inc.: *See*—
Anderson, Harold J.

Northrop Aircraft, Inc.: *See*—
Adams, William H.

Norton Co.: *See*—
Narel, Joseph W., and Joyce.

Nowak, Roger L., to Van Brode Milling Co., Inc. Method of shaping thermoplastic sheets. 2,479,572, 6–12–56, Cl. 18—56.

Nübling, Otto. Control valve for a hydraulic apparatus. 2,749,843, 6–12–56, Cl. 103—41.

Nyman, Alexander, to Alden Products Co. Mirror drum facsimile scanner. 2,750,443, 6–12–56, Cl. 178—7.1.

Och, Henry G., to the United States of America as represented by the Secretary of the Army. Automatic computer. 2,750,110, 6–12–56, Cl. 235—61.

O'Connor, Frank M. Heated chair. 2,749,906, 6–12–56, Cl. 126—204.

Octors, Pierre: *See*—
Vanharen, Lambert, and Octors.

Ogden, Horace R.: *See*—
Jaffee, Robert, and Ogden.

Oglesby, La Grande, and H. H. Proctor. Denture-characterising process. 2,750,318, 6–12–56, Cl. 154—110.

O'Herren, David H., to Radio Corp. of America. Compositions, including polyatyrene and terphenyl. 2,750,349, 6–12–56, Cl. 260—23.7.

Ohl, Russell S., to Bell Telephone Laboratories, Inc. Semiconductor translating device. 2,750,541, 6–12–56, Cl. 317—235.

Ohrmann, William R. Side brace for hydraulic stackers. 2,750,204, 6–12–56, Cl. 280—150.

Oilgear Co., The: *See*—
Douglas, James K.

Okonite Co., The: *See*—
Latin, Aubrey.

Oldberg, Sidney, to Eaton Mfg. Co. Valve gear mechanism. 2,749,889, 6–12–56, Cl. 123—90.

Oldberg, Sidney, to Eaton Mfg. Co. Motion transmitting mechanism. 2,749,890, 6–12–56, Cl. 123—90.

O'Leary, Thomas G., to Corning Glass Works. Illuminating glassware and method of making it. 2,749,794, 6–12–56, Cl. 88—1.

Olin Mathieson Chemical Corp.: *See*—
Yale, Harry L.

Oliveira, Edward T. Date hat. 2,749,555, 6–12–56, Cl. 2—199.

Ollagnon, Paul, to Societe Anonyme des Forges Stephanoises. Predetermined torque release wrench. 2,749,786, 6–12–56, Cl. 81—52.5.

Ollagnon, Paul, to Societe Anonyme des Forges Stephanoises. Self-locking clamping device. 2,749,787, 6–12–56, Cl. 81—84.

Olsen, Gustav E. Welded water wall boiler with internal heater. 2,749 887, 6–12–56, Cl. 122—73.

Olson, Einer R., and R. H. Miller, to Belden Mfg. Co. Easily stripped insulated wire. 2,750,437, 6–12–56, Cl. 174—110.

O'Malley, John J., to General Motors Corp. Transmission and controls. 2,749 772, 6–12–56, Cl. 74—665.

O'Neil, Charles S.: *See*—
Brown, Clifford S., and O'Neil.

Opsitnik, William. Non-drip insert for bottles. 2,750,063, 6–12–56, Cl. 215—73.

Oronzio de Nora Impianti Elettrochimici: *See*—
De Nora, Vittorio, and de Bartholomaeis.
De Nora, Vittorio, and de Bartholomaeis.

Orr, John H., to Carbodies Ltd. Stowing a drop-head of a motor car body. 2 750,227, 6–12–56, Cl. 296—65.

Orthuber, Richard K., J. E. Clemens, and B. B. Johnstone, to the United States of America as represented by the United States Air Force. Method of preparing electrostatic shutter mosaics. 2,749,598, 6–12–56, Cl. 29—25.17.

Otis Engineering Corp.: *See*—
Schramm, Harry B., Fredd, and Otis.
Otis, Herbert C., Sr.: *See*—
Schramm, Harry B., Fredd, and Otis.

Oury Engineering Co.: *See*—
MacKinney, Paul M.

Overland, Stanley. Multiple outlet ice cream dispenser. 2,750,083, 6–12–56, Cl. 222—482.

Owens, Freeman H. Combined slide and card projection apparatus for television. 2,750,444, 6–12–56, Cl. 178—7.2.

Padgett, Edward D., to the United States of America as represented by the Secretary of the Air Force. Pulse amplifier. 2,750,457, 6–12–56, Cl. 179—171.

Pak-Rapid Inc.: *See*—
Lewis, Harold P.

Pallmann, Ludwig. Impact process and apparatus for disintegrating materials. 2,750,120, 6–12–56, Cl. 241—27.

Palmer, Edward D., and J. B. Pray, to Lockheed Aircraft Corp. Airplane aileron and spoiler combination. 2,750,132, 6–12–56, Cl. 244—90.

Palmer, Richard C., to Allen B. Du Mont Laboratories, Inc. Cathode-ray tube. 2,750,525, 6–12–56, Cl. 313—92.

Park, Harold F., to Monsanto Chemical Co. Polyvinyl sulfonamides and process for preparing the same. 2,750,358, 6–12–56, Cl. 260—79.3.

Parker, Orville J. Method of treating materials containing sulphides. 2 750,275, 6–12–56 Cl. 75—9.

Parker, Richard W., and E. E. Stelzer, to Parker Sweeper Co. Sweeper drive wheel raising means. 2,749,996, 6–12–56, Cl. 180—19.

Parker Sweeper Co.: *See*—
Parker, Richard W., and Stelzer.

Parks & Woolson Machine Co.: *See*—
Hadley, Wilfred N.

Pascale, Martin M., and G. M. Rickus, to Hat Corp. of America. Stapling machine. 2,749,546, 6–12–56, Cl. 1—3.

Pascolini, Frank. Remotely adjustable thermostatic valve. 2,750,117, 6–12–56, Cl. 236—34.

Pascuad, Claude: *See*—
Cueilleron, Jean, Long, and Pascuad.

Pasquetti, Carlo. Machine for mixing and extruding. 2,749 571, 6–12–56, Cl. 18—12.

Patent Licensing Corp., The: *See*—
Camarda, Frank V., Gumbs, and Lovell.

Patrito, Francesco G. Abrasive tool. 2,749,682, 6–12–56, Cl. 51—204.

Patrowsky, Joseph A., and J. Wilson, to T. E. Nolfi and J. Wilson. Fishhook remover. 2,749,633, 6–12–56, Cl. 43—53.5.

Pattantyus-Abraham, Georges. Navigational apparatus. 2,750,248, 6–12–56, Cl. 346—8.

Patterson, James R. Mercury float relay. 2,750,466, 6–12–56, Cl. 200—112.

Patterson, Roy I. Distributor for grain and the like. 2,750,021, 6–12–56, Cl. 193—29.

Patton, James M.: *See*—
Patton, William R., and Minnick.

Patton, William R., and C. E. Minnick, ½ to J. M. Patton. Signaling apparatus. 2,749,876, 6–12–56, Cl. 116—63.

Paurat, Friedrich-Wilhelm. Supporting frames. 2,749,713, 6–12–56, Cl. 61—45.

Pearl, Daniel M., to Darwin Products, Inc. Pedal elevators. 2,749,771, 6–12–56, Cl. 74—594.4.

Pease, William A., to Surgical Appliance Industries, Inc. Abdominal support. 2,749,550, 6–12–56, Cl. 2—41.

Peczynski, Stanley N. Internal grip collet. 2,750,196, 6–12–56, Cl. 279—2.

Peller, Karl E., to Emhart Mfg. Co. Means for supporting and operating a glass feeder vertically reciprocable implement. 2,749,665, 6–12–56, Cl. 49—55.

Pelz, Samuel J., Jr.: *See*—
Weisenbach, Charles O., Pelz, and Cigal.

Pemco Wheel Co.: *See*—
Black, John W., Jr.

Peniston, Quintin P., to Food Chemical and Research Laboratories, Inc. Manufacture of 5-hydroxymethyl 2-furfural. 2,750,394, 6–12–56, Cl. 260—347.8.

Pennock, Anthony P.: *See*—
La Barre, Floyd, Jr., Churnell, Nagle, and Pennock.

Pennsylvania Salt Mfg. Co., The: *See*—
La Lande, William A., Jr., and Mockrin.

People in the Territory of the United States, dedicated to the free use of the: *See*—
Sullivan, William N., and Babers.

Perfect Circle Corp.: *See*—
Hill, Robert H.

Perlman, Milton. Humidifiers having sloping wall adjustment. 2,749,933, 6–12–56, Cl. 137—408.

Permacel Tape Corp.: *See*—
Bemmels, Cyrus W.
Bemmels, Cyrus W.
Tierney, Hubert J.
Tierney, Hubert J.

Perrin, Rene, and J. Lamberton, to Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieries Electriques d'Ugine. Process for rapidly desulfurising steel. 2,750,280, 6–12–56, Cl. 75—55.

Perrin, Rene, to Societe d'Electro-Chimie d'Electre-Metallurgie et des Acieries Electriques d'Ugine. Process for extracting nickel from low grade ores. 2,750 285, 6–12–56, Cl. 75—133.

Perrin, Rene, to Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieries Electriques d'Ugine. Production of iron-nickel alloys from low grade ores. 2,750,286, 6–12–56, Cl. 75—133.5.

Persson, Oscar, to Aktiebolaget Rosenblads Patenter. Method of making heat exchangers. 2,749,600, 6–12–56, Cl. 29—157.3.

Peters, Leo. Packaging and dispensing of soft plastic foods. 2,750,294, 6–12–56, Cl. 99—171.

Petersen, John S., to Simmons Co. Sofa bed. 2,749,559, 6–12–56, Cl. 5—13.

Petersen, Louis, to F. L. Smidth & Co. Apparatus for flash heating of pulverulent material. 2,750,182, 6–12–56, Cl. 263—32.

Peterson, Ray L. Incinerator. 2,749,854, 6–12–56, Cl. 110—18.

Peterson, Thomas F. High temperature alarm. 2,750,482, 6–12–56, Cl. 201—63.

Petrella, Pasquale, and M. B. Robinson. Automobile signals. 2,750,578, 6–12–56, Cl. 340—66.

Pfann, William G., to Bell Telephone Laboratories, Inc. Process for separating components of a fusible material. 2,750,262, 6–12–56, Cl. 23—223.5.

Pfann, William G., to Bell Telephone Laboratories, Inc. Silicon translating devices and methods of manufacture. 2,750,544, 6–12–56, Cl. 317—240.

Pfarrwaller, Erwin, to Sulzer Freres, Société Anonyme. Weft thread control in looms for weaving. 2,749,946, 6–12–56, Cl. 139—126.

Pfeiffer, Max, to M. Maul. Dividing machines. 2,750,112, 6–12–56, Cl. 235—61.7.

Pfizer, Chas., & Co., Inc.: *See*—
Bavley, Abraham, Harfenist, and McLamore.

Phelps, Henry V. Dipole antenna. 2,750,590, 6–12–56, Cl. 343—904.

Phillips, Benjamin, and P. S. Starcher, to Union Carbide and Carbon Corp. Diepoxides. 2,750,395, 6–12–56, Cl. 260—348.

Phillips Petroleum Co.: *See*—
Carpenter, Paul G.
Fanning, Robert J., and Dees.
Fetchin, John.
Forkel, Curt E.
Hepp, Harold J.
Hunter, Loy R.
Kilpatrick, Myron O.
Krejci, Joseph C.
Long, Loren L.
Miller, Elmer C.
Quigg, Donald J.
Turner, Will J., and Cole.

Piazze, Thomas E., and D. C. McCluskey, to Continental Can Co., Inc. Bag making machine. 2,749,817, 6–12–56, Cl. 93—8.

Pickens, Joseph B. Napkin packaging. 2,750,033, 6–12–56, Cl. 206—63.2.

Pillsbury Mills, Inc.: *See*—
Colantino, Angelo A.

Pingree, Raymond A., and C. U. Stevens, to Crown Chemical Corp. Treatment of textile materials with quaternary ammonium compounds. 2,750,306, 6–12–56, Cl. 117—121.

Pingree, Raymond A., and C. U. Stevens, to Crown Chemical Corp. Quaternary ammonium compounds and process of preparing them. 2,750,389, 6–12–56, Cl. 260—295.

Pioneer Gen-E-Motor Corp.: *See*—
Burrows, Milford D., Siwek, and Goldberg.

Pitney-Bowes, Inc.: *See*—
Rouan, Francis J.

Pittsburgh Plate Glass Co.: *See*—
Bloom, James H., Jr., and Connor.
Miller, Robert A.
Simmons, Ralph W.

Platt, Lester B., Jr., to The Sheffield Tube Corp. Container closure. 2,750,068, 6–12–56, Cl. 220—27.

Pliszczak, Karl B., and B. T. Plizak. Lock mounting for articles with pins. 2,749,588, 6–12–56, Cl. 24—104.

Plizak, Bruno T.: *See*—
Pliszczak, Karl B., and Plizak.

Poché, Le Roy. Pecan picker. 2,749,697, 6–12–56, Cl. 56—328.

Pohl, Walter M., to Foote Bros. Gear and Machine Corp. Hydro-kinetic braking systems. 2,750,009, 6–12–56, Cl. 188—90.

Polak, Albert V. Motor mixer. 2,750,166, 6–12–56, Cl. 259—179.

Polaroid Corp.: *See*—
Land, Edwin H., and Wolff.
Shureliff, William A.

Polincovsky, Jack. Combination knife. 2,749,924, 6–12–56, Cl. 132—76.2.

Porsche, Ferdinand A. E., and E. Fuhrmann, to Dr. Ing. h. c. F. Porsche K.-G. Cam shaft drives for the valve gear of multibank internal combustion engines. 2,749,893, 6–12–56, Cl. 123—90.

Porter, Ralph B.: *See*—
Francis, Charles B., and Porter.

Power Jets (Research and Development) Ltd.: *See*—
Smith, Austin G.

Powischill, John W., and E. M. Hyde, to Proctor & Schwartz, Inc. Apparatus for applying liquids and tints to textile fibers. 2,749,736, 6–12–56, Cl. 68—205.

Praeg, Delbert H.: *See*—
Curado, Joseph G., and Praeg.

Pray, James B.: *See*—
Palmer, Edward D., and Pray.

Pray, Lester W., to Saco-Lowell Shops. Textile drawing roll. 2,749,574, 6–12–56, Cl. 19—141.

Preble, Harry, Jr.: *See*—
Green, Xan B. K., and Preble.

Precision Building System, Inc.: *See*—
Zagray, Harold F.

Pressler, Ralph B., to Bowser, Inc. Sampler mechanism. 2,749,755, 6–12–56, Cl. 73—422.

Prewett, Verylyn M. Tire trueing machine. 2,749,979, 6–12–56, Cl. 164—10.2.

Pringle, William L., to Rockwell Spring and Axle Co. Sealed brake. 2,750,011, 6–12–56, Cl. 188—218.

Pritchard, Robert L., to General Electric Co. Direct current amplifier. 2,750,453, 6–12–56, Cl. 179—171.

Proctor, Hobart H.: *See*—
Oglesby, La Grande, and Proctor.

Proctor & Schwartz, Inc.: *See*—
Powischill, John W., and Hyde.

Profit Machinery Co., Inc.: *See*—
Bruneau, Louis O., and Boudreau.

Prosen, Emil M., to Nobilium Products, Inc. Centrifugal casting machine for making dental castings. 2,749,585, 6–12–56, Cl. 22—65.1.

Pullen, Alfred N. D., and E. D. Swann, to The British Aluminium Co. Ltd. Treatment of the surfaces of aluminium or aluminium alloys. 2,750,309, 6–12–56, Cl. 134—42.

Quakenbush, Howard M., to National Furniture Mfg. Co., Inc. Reclining chair. 2,749,970, 6–12–56, Cl. 155—106.

Quast, Gilbert W., to Chain Belt Co. Apparatus for kitchen waste grinders. 2,750,122, 6–12–56, Cl. 241—82.5.

Quebec Iron and Titanium Corp.: *See*—
Hatch, Gerald G.

Quigg, Donald J., to Phillips Petroleum Co. Pebble heater. 2,750,181, 6–12–56, Cl. 263—19.

Quist, Oscar, to Union Special Machine Co. Sewing machines. 2,749,861, 6–12–56, Cl. 112—218.

Rabenda, Edward J., and G. E. Whitney, to International Business Machines Corp. Intermediate magnetic core storage. 2,750,580, 6–12–56, Cl. 340—174.

Radio Corp. of America: *See*—
Achenbach, John C., and Tourshow.
Anderson, Earl I.
Arbuckle, Frederick M.
Armstrong, Lorne D., and Jenny.
Barco, Allen A.
Bedford, Aida Y.
Burns, Leslie L., Jr., and Roberts.
Endres, Richard O.
Goodrich, Hunter C.
Gray, George W.
Hersi, George G.
Hittle, Carl E.
Horowitz, Leopold A., and Hermeling.
Kell, Ray D.
Law, Russell R., Johnson, Giacoletto, and Barton.
Lindenblad, Nils E.
Moore, Raymond P., Jr., and Endres.

Radio Corp. of America: *See*—Continued.
Nicholson, James F., and Ransom. 2,750,587.
O'Herren, David H. 2,750,349.
Robinson, Kenneth W., Green, and Morton. 2,750,513.
Schwartz, James W. 2,750,533.
Stoett, Harold B. 2,750,497.
Sziklai, George C. 2,750,440.
Waldhauer, Frederick D. 2,750,456.
Waldhauer, Frederick D. 2,750,508.

Rainer, William C.: *See*—
Cooke, Giles B., and Rainer. 2,750,322.

Ramage, William W.: *See*—
Fahrner, Ted, and Ramage. 2,750,518.

Ransom, Donald J.: *See*—
Nicholson, James F., and Ransom. 2,750,587.

Rasco, Malcolm P. Framing square attachment. 2,749,622, 6–12–56, Cl. 33—180.

Rau, Harry A.: *See*—
Wilckens, Eibe A., Rau, and Seifert. 2,749,868.

Ray, Howard M.: *See*—
Fey, Mathias J., and Ray. 2,749,584.

Raymond De-Icer and Engineering Co., Inc.: *See*—
Koppelman, Edward. 2,750,321.

Raytheon Mfg. Co.: *See*—
Fryklund, Robert A. 2,750,574.
Gardner, Bernard C. 2,750,568.
Haagensen, Duane B. 2,750,506.
Kather, Erich N., and Gross. 2,750,555.
Marholz, Richard C. 2,750,494.
Mercer, William R., Wimberly, and St. Jean. 2,750,565.
Turner, Edwin E., Jr. 2,750,247.
Wescott, Vernon C., Katz, and Schiff. 2,750,566.

Redmon, Charles L., and E. T. Sexton, Jr., to National Cylinder Gas Co. Apparatus for producing reducing elbows. 2,750,026, 6–12–56, Cl. 205—4.

Redmond Co., Inc.: *See*—
Latta, Edward. 2,750,550.

Reed Roller Bit Co.: *See*—
Boice, Elvin G. 2,750,154.

Rees, Vivian S. Weight releaser for fish lines. 2,749,650, 6–12–56, Cl. 43—43.12.

Reeves Steel and Mfg. Co.: *See*—
Curtis, Rowland G. 2,750,211.

Reeves, Wilson A., and J. D. Guthrie, to the United States of America as represented by the Secretary of Agriculture. Phenylaminoalkylated cellulosic textiles and process of chemically modifying them. 2,750,249, 6–12–56, Cl. 8—17.

Regie Nationale des Usines Renault: *See*—
Salves, Leon. 2,750,538.

Reidenbach, Fritz., to A. Stephen u. Sohne. Grinding disc. 2,749,681, 6–12–56, Cl. 51—195.

Reilly Tar & Chemical Corp.: *See*—
Cislak, Francis E. 2,750,392.

Reiners, Neville M., to Cummins Engine Co., Inc. Fuel apparatus for an internal combustion engine. 2,749,897, 6–12–56, Cl. 123—140.

Reiners, Walter: *See*—
Furst, Stefan, and Küpper. 2,750,125.

Reinhardt, Henry B., to American Brake Shoe Co. Renewable hammer head of the two-way reversible type. 2,750,124, 6–12–56, Cl. 241—197.

Rem-Cru Titanium, Inc.: *See*—
Jaffee, Robert, and Ogden. 2,750,289.

Remnik Co.: *See*—
Skinner, Ralph L. 2,750,212.

Renton, Lawrence E. Recording mechanism for telephone systems. 2,750,445, 6–12–56, Cl. 178—23.

Repokis, Henry: *See*—
Gagarine, Dmitry M., and Repokis. 2,750,305.

Research Corp.: *See*—
Faulconer, Albert, Jr. 2,749,910.

Resser, Joseph H., Sr., to Armstrong Cork Co. Rotary brushing device for operating upon press platens or the like. 2,749,563, 6–12–56, Cl. 15—23.

Reynolds Metals Co.: *See*—
Jacke, Raymond E. 2,750,101.

Reynolds, Schuyler. Mechanical novelty. 2,749,656, 6–12–56, Cl. 46—4.

Rice, Henry T. M., and R. T. Stevens, to D. Stevens. Adjustable releasable torque transmitting apparatus. 2,750,020, 6–12–56, Cl. 192—36.

Richards, James A., and R. S. M. Jeffrey, to Walter MacFarlane & Co., Ltd. Method of producing grey iron castings in preheated refractory coated male and female dies. 2,749,587, 6–12–56, Cl. 22—200.

Richardson, Arthur B. F. G., R. Hinds, and G. N. Ridings, to British Insulated Callender's Cables Ltd. Apparatus for marking wires and cables and the like. 2,749,880, 6–12–56, Cl. 118—411.

Richter, Hans., to E. S. Dunn. Fluid tight cable entry. 2,750,436, 6–12–56, Cl. 174—77.

Rickus, George M.: *See*—
Pascale, Martin M., and Rickus. 2,749,546.

Riddle, Grant C. Adjustable ankle joint for an artificial limb. 2,749,557, 6–12–56, Cl. 3—33.

Ridings, Geoffrey N.: *See*—
Richardson, Arthur B. F. G., Hinds, and Ridings. 2,749,880.

Riley, Sidney L.: *See*—
Line, Gerald D., and Riley. 2,749,892.

Ritchie, Davis P. Portable tire inflating apparatus. 2,750,071, 6–12–56, Cl. 222—3.

Ritchie, Paul F., to Hercules Powder Co. Hydroxydehydroabietic acid and esters thereof. 2,750,405, 6–12–56, Cl. 260—473.

Ritchie, Paul F., to Hercules Powder Co. 1,2,3,4,4a,9,10,10a-octahydro-7-hydroxy-1,4a-dimethyl-9-oxo-1-phenanthrenecarboxylic acid and esters thereof. 2,750,406, 6–12–56, Cl. 260—473.

Ritchie, Paul F., to Hercules Powder Co. Substituted phenanthrenecarboxylic acid and esters thereof. 2,750,407, 6–12–56, Cl. 260—473.

Ritter, Herman: *See*—
Kessler, Charles A., and Ritter. 2,749,865.

Robb, George C., to Robb Mfg. Co. Valve coupling. 2,750,209. 6–12–56, Cl. 284—19.

Robb Mfg. Co.: *See*—
Robb, George C. 2,750,209.

Robbins, Glenn G. Indicia bearing devices for vertically slidable doors. 2,749,635, 6–12–56, Cl. 40—125.

Robbins, William M.: *See*—
Butker, Fredrick G. 2,749,882.

Roberts, Edward S., O. F. Wiedeman, and S. Streisoff, to Chemical Construction Corp. Catalytic reactor for hydrocyanic acid production. 2,750,266, 6–12–56, Cl. 23—288.

Roberts, Walter V. B.: *See*—
Burns, Leslie L., Jr., and Roberts. 2,750,567.

Robertson, George H., and E. J. Walsh, to Bell Telephone Laboratories, Inc. Electron discharge device. 2,750,529, 6–12–56, Cl. 315—3.5.

Robinson, Kenneth W., M. W. Green, and G. A. Morton, to Radio Corp. of America. Nuclear radiation measuring instrument. 2,750,513, 6–12–56, Cl. 250—71.

Robinson, Maurice B.: *See*—
Petrella, Pasquale, and Robinson. 2,750,578.

Rockney, Elton S., to Union Special Machine Co. Adjustable eccentric for sewing machines. 2,749,860, 6–12–56, Cl. 112—210.

Rockwell Spring and Axle Co.: *See*—
Blair, Chester A. 2,749,766.
Pringle, William L. 2,750,011.
Scheel, Walther F. 2,750,200.
Super, Ralph K. 2,750,006.

Rodale Mfg. Co., Inc.: *See*—
Schmler, Jacob. 2,750,571.

Roe, A. V., Canada Ltd.: *See*—
McCullough, Armour L. 2,749,726.

Roeser, John O., to Electro-Snap Switch & Mfg. Co. Electric switches of the snap-action type. 2,750,463, 6–12–56, Cl. 200—67.

Roetger, Richard C., to St. Regis Paper Co. Method and apparatus for heat sealing closure tapes to containers. 2,749,966, 6–12–56, Cl. 154—1.6.

Rogers Iron Works Co.: *See*—
Nixon, Virgil H. 2,750,155.

Rogers, Russell F. Pipe and tube cutting apparatus. 2,749,983, 6–12–56, Cl. 164—61.

Rogner, Ernst, and J. Steichele, to SKF Kugellagerfabriken Gesellschaft mit beschränkter Haftung. Bearing unit for spindles of spinning frames and twisting frames. 2,750,239, 6–12–56, Cl. 308—228.

Rohm & Haas Co.: *See*—
Exner, Lawrence J., and Craig. 2,750,416.
Hurwitz, Melvin D. 2,750,356.
Schmidle, Claude J., and Mansfield. 2,750,385.

Rohr Aircraft Corp.: *See*—
Gross, Bernard. 2,750,069.

Rollins, Lester G., to Joy Mfg. Co. Pin lock for pivoted link chain. 2,749,763, 6–12–56, Cl. 74—254.

Romani, Riccardo. Word forming toy. 2,749,626, 6–12–56, Cl. 35—35.

Rope, Barton W.: *See*—
Coonradt, Harry L., and Rope. 2,750,432.

Rosen, William E.: *See*—
Krieaman, Sanford S., and Rosen. 2,749,920.

Rosenstein, Ludwig: *See*—
Gorin, Manuel H., and Rosenstein. 2,750,361.

Ross, Cornelius A.: *See*—
Morvay, Anton A. 2,750,278.

Ross, Delmar G., to Henry J. Kaiser Co. Internal combustion engine. 2,749,888, 6–12–56, Cl. 123—59.

Rossell, William T., to Transit Research Corp. Street railway truck. 2,749,849, 6–12–56, Cl. 105—193.

Rouan, Francis J., to Pitney-Bowes, Inc. Workpiece feed control mechanism. 2,750,188, 6–12–56, Cl. 271—56.

Rouillon, Jean, to Societe Chimiotex. Apparatus for mounting travelers on ring twisters. 2,749,601, 6–12–56, Cl. 29—207.

Royal McBee Corp.: *See*—
Lambert, Harry L. 2,749,762.

Royal Mounters, Inc.: *See*—
Viglietta, Michael J. 2,749,636.

Ruhnau, Richard. Film feeding mechanism for cinematograph apparatus. 2,749,798, 6–12–56, Cl. 88—18.4.

Ruhrchemie Aktiengesellschaft: *See*—
Hagemann, August, and Buchner. 2,750,430.

Runaldue, Lewis R., to General Electric Co. Electric circuit. 2,750,554, 6–12–56, Cl. 321—19.

Rundle, George W. Apparatus for carrying and selectively rendering operable a plurality of tools. 2,749,953, 6–12–56, Cl. 145—63.

Runge, Frank E.: *See*—
Thompson, Lincoln, Runge, and Lyon. 2,750,449.

Runkle, Lorin R., to Iwan Bros., Inc. Shovel construction. 2,750,223, 6–12–56, Cl. 294—49.

Rush, John T., to Associated Tool & Mfg. Co. Ltd. Apparatus wherein a reciprocable cut off die feeds a severed article onto a rotating tap. 2,749,561, 6–12–56, Cl. 10—72.

Russell, Robert C., to Eaton Mfg. Co. Dual-turbine torque converter. 2,749,710, 6–12–56, Cl. 60—54.

Russell, Robert C., to Eaton Mfg. Co. Automatic length adjusting mechanism. 2,749,891, 6–12–56, Cl. 123—90.

Russell, Stanley D., to J. I. Case Co. Retractible drawbar support. 2,750,205, 6–12–56, Cl. 280—150.5.

Ryan, James J. Constant speed drive. 2,750,552, 6–12–56, Cl. 318—302.

S & C Electric Company: *See*—
Baker, Charles H. 2,750,469.

SKF Kugellagerfabriken Gesellschaft mit beschränkter Haftung: *See*—
Fink, Heinrich, and Steichele. 2,750,237.
Rogner, Ernst, and Steichele. 2,750,239.

Sabato, Louis. Bicycle trailer. 2,750,206, 6–12–56, Cl. 280—204.

Sachs, Stanley I.: *See*—
Sontheimer, Carl G., and Sachs. 2,750,504.

Saco-Lowell Shops: *See*—
Pray, Lester W. 2,749,574.

Saetter-Lassen, Erik. Machine pistols. 2,749,642, 6–12–56, Cl. 42—75.

Safir, Sidney R., and J. J. Hlavka, to American Cyanamid Co. Acyl derivatives of 3,3-dimethyl piperazinedione. 2,750,383, 6–12–56, Cl. 260—268.

St. Jean, Lloyd E.: *See*—
Mercer, William R., Wimberly, and St. Jean. 2,750,565.

St. Palley, Zoltan O. Abrading tool. 2,749,680, 6–12–56, Cl. 51—193.

St. Regis Paper Co.: *See*—
Roetger, Richard C. 2,749,966.

Saives, Leon, to Regie Nationale des Usines Renault. Safety device for hand-controlled machines. 2,750,538, 6–12–56, Cl. 317—135.

Sale, William H., ½ to E. P. Kelly. Dust guard cap for journal boxes. 2,750,213, 6–12–56, Cl. 286—6.

Salsberg, Harold K.: *See*—
Howard, Hartley W., and Salsberg. 2,750,374.

Sam, Sam W. Removable, peripherally mounted retainer means resiliently retained on threadless bolt. 2,749,789, 6–12–56, Cl. 85—8.8.

Sampson, Ernest: *See*—
Summerhayes, Harry R., Jr., Anderson, and Sampson. 2,750,519.

Samuel, Arthur L., to International Business Machines Corp. Cathode-ray devices, particularly for electronic computers. 2,750,532, 6–12–56, Cl. 315—8.6.

Sandberg, Carl I. Hanger for storm sash. 2,749,569, 6–12–56, Cl. 16—177.

Sandborn, Lloyd T.: *See*—
Chesley, Kenneth G., Montgomery, and Sandborn. 2,750,414.

Sandborn, Lloyd T., and W. B. Stengle, to Crossett Lumber Co. Alcohol recovery of organic acids and salts thereof. 2,750,412, 6–12–56, Cl. 260—527.

Sandborn, Lloyd T., and W. B. Stengle, to The Crossett Lumber Co. Solvent recovery of organic acids and salts thereof. 2,750,413, 6–12–56, Cl. 260—527.

Sandee Mfg. Co.: *See*—
Szantay, Elmer, and Baccash. 2,750,232.

Sanders, Milton A. Method of making decorative protected panel. 2,750,319, 6–12–56, Cl. 154—121.

Sanderson, Thomas F., to Hercules Powder Company. Dehydroabietyl alcohol derivative. 2,750,363, 6–12–56, Cl. 260—97.

Sanderson, Thomas F., to Hercules Powder Co. Derivatives of dehydroabietonitrile. 2,750,367, 6–12–56, Cl. 260—99.

Sanderson, Thomas F., to Hercules Powder Co. Chromium trioxide oxidation of dehydroabietic acid derivatives. 2,750,368, 6–12–56, Cl. 260—99.

Sanderson, Thomas F., to Hercules Powder Co. Oxidation of esters of dehydroabietic acid. 2,750,369, 6–12–56, Cl. 260—99.

Sanderson, Thomas F., to Hercules Powder Co. 6,7-diacetyl-1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl - 9 - oxophenanthrene-1-carbonitrile. 2,750,402, 6–12–56, Cl. 260—465.

Sanderson, Thomas F., to Hercules Powder Co. Triol of levopimaric acid-maleic anhydride adduct. 2,750,422, 6–12–56, Cl. 260—617.

Sanford, Roy S.: *See*—
Eames, James O., and Sanford. 2,749,978.

Sar El, Shalom: *See*—
Bergmann, Felix, and Sar El. 2,750,408.

Sariti, Walter, and G. Miller, to Sarler Corp. Carburetor gas saver. 2,749,894, 6–12–56, Cl. 123—97.

Sarler Corp.: *See*—
Sariti, Walter, and Miller. 2,749,894.

Satz, William. Manually removable crown cap. 2,750,062, 6–12–56, Cl. 215—46.

Sauer, George, to Union Special Machine Co. Sewing machines. 2,749,859, 6–12–56, Cl. 112—210.

Saunders, Henry J. H.: *See*—
Jessup, Alfred C. 2,750,288.

Saunders, Orson V., to General Motors Corp. Refrigerator having adjustable door shelves. 2,749,718, 6–12–56, Cl. 62—89.

Scaffold Equipment Co.: *See*—
Middendorf, Henry B. 2,750,236.

Scala, Joseph D. Molded lace shoe. 2,749,629, 6–12–56, Cl. 36—58.5.

Scaroulis, Costas. Electric battery-operated hand fans. 2,750,104, 6–12–56, Cl. 230—259.

Scheel, Walther F., to Rockwell Spring and Axle Co. Tandem axle suspension. 2,750,200, 6–12–56, Cl. 280—104.5.

Scherer, Paul A., and R. X. Meyer, to The Hydrofoil Corporation. Flap depth control for hydrofoil craft. 2,749,871, 6–12–56, Cl. 114—66.5.

Schiff, George W.: *See*—
Westcott, Vernon C., Katz, and Schiff. 2,750,566.

Schinske, William G., to Ideal Industries, Inc. Insulated fish tape. 2,750,152, 6–12–56, Cl. 254—134.3.

Schlesinger, Kurt, to Motorola, Inc. Intercarrier sound system. 2,750,441, 6–12–56, Cl. 178—5.8.

Schlessiger, Paul J.: *See*—
Crowell, Arnold B., Schlessiger, and Baker. 2,749,839.

Schlumberger Well Surveying Corp.: *See*—
Bricaud, Joseph M. 2,750,557.

Schmelzle, Ambrose F.: *See*—
Hendricks, James O., Lundquist, and Schmelzle. 2,750,304.

Schmid, John H., to J. A. Zurn Mfg. Co. Floor drain extension. 2,749,999, 6–12–56, Cl. 182—31.

Schmidle, Claude J., and R. C. Mansfield, to Rohm & Haas Co. Production of tetrahydro-pyridines from tetrahydro-1,3-oxasines. 2,750,385, 6–12–56, Cl. 260—290.

Schmidt, John H., to General Electric Co. Automatic waste disposal apparatus. 2,750,121, 6–12–56, Cl. 241—32.5.

Schmler, Jacob, to Rodale Mfg. Co., Inc. Connector. 2,750,571, 6–12–56, Cl. 339—103.

Schmitz-Hillebrecht, Ernst, and G. Technau, to Farbenfabriken Bayer Aktiengesellschaft. Process for producing shaped bodies. 2,750,323, 6–12–56, Cl. 154—140.

Schneider, John, to Helm Mfg. Co. Trolling device. 2,749,648, 6–12–56, Cl. 43—42.72.

Schneider, William P.: *See*—
Hogg, John A., and Schneider. 2,750,381.

Schoeffel, Eugene W., to Sterling Drug Inc. Recovery of cooking liquor from spent semi-chemical pulping liquors. 2,750,290, 6–12–56, Cl. 92—2.

Schoelles, Harold J., to General Motors Corp. Fluid control valves for heaters and other devices. 2,750,146, 6–12–56, Cl. 251—306.

Schramm, Harry B., J. V. Fredd, and H. C. Otis, Sr., to Otis Engineering Corp. Excess flow valve. 2,749,937, 6–12–56, Cl. 137—460.

Schuhmann, Julius A. G., to Joh. Urbanek & Co., Werk Nurnberg. Combined grinding and lapping disc having flat working surfaces. 2,749,684, 6–12–56, Cl. 51—209.

Schuls Tool and Mfg. Co.: *See*—
Mosher, James K. 2,749,932.
Mosher, James K. 2,749,936.

Schwalbold, Edgar K., to Star Watch Case Co. Cushioned movement mounting watch. 2,749,702, 6–12–56, Cl. 58—88.

Schwalbold, Edgar K., to Star Watch Case Co. Sealed calendar watch. 2,749,703, 6–12–56, Cl. 58—90.

Schwartz, Alexander, and E. Fogelson, to Leobarb Corp. Thermal insulation. 2,750,313, 6–12–56, Cl. 154—45.

Schwartz, Edwin L.: *See*—
Frees, David, and Schwartz. 2,749,875.

Schwartz, Harold G., to E. I. du Pont de Nemours and Co. Composite structures. 2,749,960, 6–12–56, Cl. 152—330.

Schwartz, James W., to Radio Corp. of America. Color television image reproducing system. 2,750,533, 6–12–56, Cl. 315—10.

Scott, Arthur L., to Columbia Products Co. Hollow shaft for fishing rods. 2,749,643, 6–12–56, Cl. 43—18.

Scott, Elmer P. Thermoplastic design article. 2,749,640, 6–12–56, Cl. 41—24.

Seaman, Milton L.: *See*—
Dondera, John J., Jr., and Seaman. 2,749,744.

Searle, G. D., & Co.: *See*—
Bible, Roy H., Jr. 2,750,373.
Bible, Roy H., Jr., and Hoehn. 2,750,382.
Dodson, Raymond M., and Bergstrom. 2,750,380.
Krimmel, Carl P. 2,750,387.

Seck, Werner G., to The Hoover Co. Steam iron. 2,749,633, 6–12–56, Cl. 38—77.

Secotan, Inc.: *See*—
Ushakoff, Alexis E. 2,749,737.

Seiden, George, to Eastern Air Devices, Inc. Method of magnetizing two-section permanent magnet alternators. 2,750,522, 6–12–56, Cl. 310—152.

Seifert, Harold J.: *See*—
Wilckens, Eibe A., Rau, and Seifert. 2,749,868.

Selfried, Richard: *See*—
Wheeler, Walter G., and Kramer. 2,749,711.

Seligman, Hans. Hydraulic clock. 2,749,700, 6–12–56, Cl. 58—42.

Sennett, Edith L.: *See*—
Levkoff, David. 2,750,098.

Sexton, Earl T., Jr.: *See*—
Redmon, Charles L., and Sexton. 2,750,026.

Shafer, Ray V.: *See*—
Locke, Lloyd T., and Shafer. 2,749,785.

Shaw, John E., Jr.: *See*—
Williams, R. L., Shaw, and Brogdon. 2,750,000.

Shaw, Morton R., to Corning Glass Works. Double-glazed cells. 2,749,579, 6–12–56, Cl. 20—56.5.

Sheffield Corp., The: *See*—
Aller, Willis F. 2,749,742.

Sheffield Tube Corp., The: *See*—
Platt, Lester B., Jr. 2,750,068.

Shekter, Abraham J., to A. F. Shekter. Pocket flasks. 2,750,066, 6–12–56, Cl. 220—23.

Shekter, Adelia F.: *See*—
Shekter, Abraham J. 2,750,066.

Sheldon, John G.: *See*—
Dye, Russell V. 2,749,734.

Shell Development Co.: *See*—
Cogan, Myles H. R. 2,750,174.
Courter, Martin L., and Magovern. 2,750,398.
Joyce, John R. 2,750,169.
Joyce, John R. 2,750 170.
Yust, Venard E., and Bame. 2,750,267.

Sherriff, Fred, to Clark Equipment Co. Sling attachment for industrial lift trucks. 2,750,060, 6–12–56, Cl. 214—620.

Sherwood, Bert J., to North American Aviation, Inc. Catalytic screen. 2,750,346, 6–12–56, Cl. 252—438.

Shipley, Clifford S.: *See*—
Barrett, Wayne I., and Shipley. 2,750,329.

Shurcliff, William A., to Polaroid Corp. Radiation detection devices. 2,750,515, 6–12–56, Cl. 250—83.

Siebert, Arthur, R. Huss, and J. Weissert, to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius und Bruning. Polyazo-dyestuffs. 2,750,375, 6–12–56, Cl. 260—166.

Siemens & Halske Aktiengesellschaft: *See*—
Katz, Helmut. 2,750,527.

Siemens-Schuckertwerke Aktiengesellschaft: *See*—
Waldkötter, Erich G. B., and Hase. 2,750,540.
Siemer, Edward L. Method of and apparatus for making heat and cold insulation pipe covering. 2,749,608, 6–12–56, Cl. 29—463.
Signal Oil and Gas Co.: *See*—
Moon, James. 2,750,569.
Sihn, Wilhelm, Jr., K.-G.: *See*—
Kienhöfer, Klaus. 2,749,759.
Simmons Co.: *See*—
Petersen, John S. 2,749,559.
Simmons, Ralph W., to Pittsburgh Plate Glass Co. Method for stirring glass. 2,750,161, 6–12–56, Cl. 259—6.
Simons, Homer C., to Eaton Mfg. Co. Vehicle heater-ventilator apparatus. 2,749 829, 6–12–56, Cl. 98—2.
Simpson, Howard W. Hydrodynamically driven planetary transmission. 2,749,773, 6–12–56, Cl. 74—677.
Simpson, Howard W. Planetary transmission for self-propelled vehicle. 2,749,775, 6–12–56, Cl. 74—731.
Simpson, Howard W. Planetary transmission for self-propelled vehicle. 2,749,777, 6–12–56, Cl. 74—761.
Sinelli, Andrew R.: *See*—
Deslippe, Clifford E. 2,749,997.
Singer Mfg. Co., The: *See*—
Hale, Arthur N. 2,749,862.
Johnson, Ralph E. 2,749,863.
Kessler, Charles A., Haller, and Gardner. 2,749,864.
Kessler, Charles A., and Ritter. 2,749,865.
Singer, Morton M. Device for pulling cellophane adhesive tape. 2 750,126, 6–12–56, Cl. 242—55.5.
Siwek, Stanley Z: *See*—
Burrows, Milford D., Siwek, and Goldberg. 2,750,172.
Sjoboen, George W., to Steel Door Corp. Hanger for conveyor track. 2,750,143, 6–12–56, Cl. 248—317.
Skehan, Joseph W.: *See*—
Doolittle, Howard D., and Skehan. 2,750,535.
Skinner, Ralph L., to Renniks Co. Plastic seal. 2,750,212, 6–12–56, Cl. 286—5.
Slane, Irvin L. Trolling device. 2,749,652, 6–12–56, Cl. 43—44.82.
Sleeper, Murrel B., to Mecha-Finish Corp. Finishing device. 2,749,669, 6–12–56, Cl. 51—7.
Slinkman, Roger W.: *See*—
Smith Wilson R., and Slinkman. 2,750,559.
Sloane, William W., to Goodman Mfg. Co. Locomotive braking circuit. 2,750,551, 6–12–56, Cl. 318—368.
Slobod, Robert L., and S. H. Davis, to The Atlantic Refining Co. Apparatus for continuously logging drill cuttings. 2,749,748, 6–12–56, Cl. 73—153.
Slomer, Joseph J., to Goodman Mfg. Co. Hydraulic motor circuit for cut-off device or the like. 2,749,707, 6–12–56, Cl. 60—52.
Slomer, Joseph J., to Goodman Mfg. Co. Valve control means. 2,749,769, 6–12–56, Cl. 74—491.
Slough, George G., to Kanmak Textiles, Inc. Double layer fabric with puckered upper layer and method of making same. 2,749,947, 6–12–56, Cl. 139—423.
Smart, Clarence F., to General Motors Corp. Electrodeposition of antimony and antimony alloys. 2,750,333, 6–12–56, Cl. 204—43.
Smidth, F. L., & Co.: *See*—
Petersen, Louis. 2,750,182.
Smith, Austin G., to Power Jets (Research and Development) Ltd. Blading for turbines and like machines. 2,750,147, 6–12–56, Cl. 253—39.15.
Smith, Clarence R. Adjustable oil filler spout. 2,750,003, 6–12–56, Cl. 184—105.
Smith, Fred. Recovery of uranium values from waste. 2,750 253, 6–12–56 Cl. 23—14.5.
Smith, Harry M. Can holder and rack. 2,750,140, 6–12–56, Cl. 248—154.
Smith, John O., Jr.: *See*—
Gerhardt, Philip B., Smith, and Jones. 2,750,340.
Smith, Leo D. Tobacco carrier. 2,749,957, 6–12–56, Cl. 150—1.
Smith, Neville F. and V. Gas candle. 2,749,733, 6–12–56, Cl. 67—87.
Smith, Paul V., Jr.: *See*—
Mikeska, Louis A., and Smith. 2,750,342.
Morway, Arnold J., Young, and Smith. 2,750,341.
Smith, Virginia: *See*—
Smith, Neville F. and V. 2,749,733.
Smith, Wilson R., and R. W. Slinkman, to Sylvania Electric Products Inc. Available emission tester. 2,750,559, 6–12–56 Cl. 324—27.
Snider, Murray. Trolling device. 2,749,651, 6–12–56, Cl. 43—43.13.
Snyder, Clermont J., and W. G. MacLelland, to Anaconda Wire & Cable Co. Process for drawing and heat treating magnesium wire. 2,750,311, 6–12–56, Cl. 148—4.
Societe Anonyme des Forges Stephanoises: *See*—
Ollagnon, Paul. 2,749,786.
Ollagnon, Paul. 2,749,787.
Societe Anonyme pour les Applications de l'Electricite et des Gaz Rares-Etablissements Claude-Paz et Silva: *See*—
Gomonet, Edouard. 2,750,536.
Societe Anonyme Tubest: *See*—
De la Tramerye, Raymond. 2,749,949.
Societe Chimiotex: *See*—
Roullon, Jean. 2,749,601.
Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieries Electriques d'Ugine: *See*—
Cuelleron, Jean, Long, and Pascaud. 2,750,271.
Perrin, Rene. 2,750,285.
Perrin, Rene. 2,750,286.
Perrin, René, and Lamberton. 2,750,280.
Socony Mobil Oil Co., Inc.: *See*—
Coonradt, Harry L., and Rope. 2,750,432.
Soderman, George W., to Western Electric Co., Inc. Lapping plate. 2,749,683, 6–12–56, Cl. 51—209.
Soffer, Jack W., and D. M. Kitterman, to Development Research, Inc. Valving spout having a foaming orifice. 2,750,230, 6–12–56, Cl. 299—83.
Solvay & Cie: *See*—
Vanharen, Lambert, and Octors. 2,750,281.
Sontheimer, Carl G., and S. I. Sachs, to C. G. S. Laboratories, Inc. Signal generator. 2,750,504, 6–12–56, Cl. 250—36.
Soundscriber Corp., The: *See*—
Thompson, Lincoln, Runge, and Lyon. 2,750,449.
Southern States Equipment Corp.: *See*—
McBride, Joseph R. 2,750,470.
McBride, Joseph R. 2,750,471.
Spearow, Ralph. Oil production method. 2,749,991, 6–12–56, Cl. 166—42.
Specialties Development Corp.: *See*—
Heiser, Edward J., and Wentz. 2,750,130.
Speer, Cleaver C.: *See*—
Frank, Wilbert W., and Speer. 2,749,675.
Spencer, Herman J. Fastener applying device. 2,749,547, 6–12–56, Cl. 1—3.
Sperry Rand Corp.: *See*—
Crosman, Loring P. 2,750,114.
Sterling, Robert W. 2,750,531.
Speziale, Angelo J.: *See*—
Meyer, Ferdinand C., and Speziale. 2,750,409.
Staatsbedrijf der Posterijen Telegrafie en Telefonie: *See*—
Van Dalen, Christiaan J. 2,750,548.
Stähli, Gustav, to Actiengesellschaft Joh. Jacob Pieter & Cie. Ring traveler. 2,749,698, 6–12–56, Cl. 57—125.
Stamford Machine Co., Inc.: *See*—
Burbank, John E. 2,750,148.
Stamm, Heinrich, to E T A Ltd., Blanks Factory. Winding and hand-setting mechanism for timepieces. 2,749,701, 6–12–56, Cl. 58—71.
Stamm, John G., Jr. Rifle barrel cleaning device. 2,749,565, 6–12–56, Cl. 15—104.165.
Standard Gage Co., Inc.: *See*—
Czaplinski, Frank H. 2,749,620.
Star Watch Case Co.: *See*—
Schwaibold, Edgar K. 2,749,702.
Schwaibold, Edgar K. 2,749,703.
Starcher, Paul S.: *See*—
Phillips, Benjamin, and Starcher. 2,750,395.
Starnes, George F., 50% to G. A. Starnes, and 50% to W. E. Starnes. Doffing attachment for hosiery loopers. 2,749,857, 6–12–56, Cl. 112—25.
Starnes, Glenn A.: *See*—
Starnes, George F. 2,749,857.
Starnes, Wynn E.: *See*—
Starnes, George F. 2,749,857.
Starr, Wendell T., to General Electric Co. Insulation fault detector. 2,750,562, 6–12–56, Cl. 324—54.
Stauffer Chemical Co.: *See*—
Bender, Harry. 2,750,324.
Macdougall, Iver C. 2,750,264.
Steel Door Corp.: *See*—
Sjoboen, George W. 2,750,143.
Steel Slides, Inc.: *See*—
Manson, Morris, and Hafekost. 2,750,244.
Stehn, Everett G.: *See*—
Mattimoe, George E., and Stehn. 2,750,091.
Steichele, Joseph: *See*—
Fink, Heinrich, and Steichele. 2,750,237.
Rogner, Ernst, and Steichele. 2,750,239.
Steinberg, Morris A., and E. Wainer, to Horizons Titanium Corp. Method of producing titanium monoxide. 2,750,259, 6–12–56, Cl. 23—202.
Stelzer, Earl E.: *See*—
Parker, Richard W., and Stelzer. 2,749,996.
Stengle, William B.: *See*—
Sandborn, Lloyd T., and Stengle. 2,750,412.
Sandborn, Lloyd T., and Stengle. 2,750,413.
Stephan, Hallis N., to The New Britain Machine Co. Tool spindle mechanism. 2,749,806, 6–12–56, Cl. 90—11.
Stephen, A., u. Sohne: *See*—
Reidenbach, Fritz. 2,749,681.
Sterling Drug Inc.: *See*—
Elpern, Bill. 2,750,393.
Schoeffel, Eugene W. 2,750,290.
Sterling, Robert W., to Sperry Rand Corp. High frequency tube structure. 2,750,531, 6–12–56, Cl. 315—5.
Sterns Magnetic Inc.: *See*—
Buus, Harold W. 2,750,035.
Stevens, Chester U.: *See*—
Pingree, Raymond A., and Stevens. 2,750,306.
Pingree, Raymond A., and Stevens. 2,750,389.
Stevens, Dillon: *See*—
Rice, Henry T. M., and Stevens. 2,750,020.
Stevens, Robert T.: *See*—
Rice, Henry T. M., and Stevens. 2,750,020.
Stewart, Alexander E., to Dominion Engineering Works Ltd. Stock feeding means. 2,749,815, 6–12–56, Cl. 92—44.
Stiegler, Harold W. Apparatus for testing fabric. 2,749,740, 6–12–56, Cl. 73—7.
Stienhauff, Frederick P., to Esso Research and Engineering Co. Method for inhibiting corrosion. 2,750,339, 6–12–56, Cl. 252—8.55.
Stimpson, Edwin G., and H. A. Trebler, to National Dairy Research Laboratories, Inc. Aerating method and apparatus. 2,750,328, 6–12–56, Cl. 195—142.
Stinson, James S.: *See*—
Fisher, Gordon S., Goldblatt, and Stinson. 2,750,411.
Stott, Harold B., to Radio Corp. of America. Receiver with adjustable ferromagnetic rod loop antenna. 2,750,497, 6–12–56, Cl. 250—20.
Stover, Harry E., to Anchor Hocking Glass Corp. Marking device for containers, closures and the like. 2,749,838, 6–12–56, Cl. 101—35.

Stracke, Gustav N., Jr. Kite. 2,750,136, 6–12–56, Cl. 244—155.
Strait-Line Products: *See*—
Landon, Robert K. 2,749,618.
Strandberg, Malcom W. P., to the United States of America as represented by the Secretary of the Navy. Frequency monitoring circuit. 2,750,564, 6–12–56, Cl. 324—79.
Strange, Charles H., to E. L. Strange. Automatic thermostat devices. 2,750,472, 6–12–56, Cl. 200—137.
Strange, Elsa L.: *See*—
Strange, Charles H. 2,750,472.
Strelsoff, Samuel: *See*—
Roberts, Edward S., Wiedeman, and Strelsoff. 2,750,266.
Strem, Thomas. Photographic exposure timing device. 2,749,799, 6–12–56, Cl. 88—24.
Strich, Philippe P., to The Western States Machine Co. Centrifugal separation. 2,750,040, 6–12–56, Cl. 210—73.
Stuart, Donald R., to American Road Equipment Co. Apparatus for lifting loads. 2,750,057, 6–12–56, Cl. 214—510.
Subluskey, Lee A., to Hercules Powder Co. 1,2,3,4,4a,9,10,10a-octahydro-9-hydroxy-1- hydroxymethyl - 7 - isopropenyl-1,4a-dimethylphenanthrene. 2,750,365, 6–12–56, Cl. 260—97.
Subluskey, Lee A., to Hercules Powder Co. 9-oxodehydroabietyl alcohol and process of preparation. 2,750,370, 6–12–56, Cl. 260—99.
Subluskey, Lee A., to Hercules Powder Co. Products from the oxidation of the lactone of hydroxytetrahydroabietic acid. 2,750,371, 6–12–56, Cl. 260—99.
Subluskey, Lee A., to Hercules Powder Co. 1,2,3,4,4a,9,10,10a-octahydro - 7,9 - dihydroxy-1- hydroxymethyl -1,4a -dimethylphenanthrene and process. 2,750,425, 6–12–56, Cl. 260—619.
Sullivan, William N., and F. H. Babers, dedicated to the free use of the people in the Territory of the United States. Method of applying lindane. 2,750,252, 6–12–56, Cl. 21—53.
Sulzer Frères, Société Anonyme: *See*—
Pfarrwaller, Erwin. 2,749,946.
Summerhayes, Harry R., Jr., R. E. Anderson, and E. S. Sampson, to General Electric Co. Automatic container inspection equipment. 2,750,519, 6–12–56, Cl. 250—214.
Sun Chemical Corp.: *See*—
Curado, Joseph G., and Praeg. 2,750,296.
Super, Ralph K., to Rockwell Spring and Axle Co. Brake. 2,750,006, 6–12–56, Cl. 188—78.
Suser, George E. Overall cover for water closets and flush bowls. 2,749,868, 6–12–56, Cl. 155—1.
Surgical Appliance Industries, Inc.: *See*—
Pease, William A. 2,749,550.
Svenska Rotor Maskiner Aktiebolag: *See*—
Åhlén, Karl G. 2,750,017.
Swann, Ernest D.: *See*—
Pullen, Alfred N. D., and Swann. 2,750,309.
Swedlow Plastics Co.: *See*—
Latham, Morton E. 2,750,320.
Swern, Daniel, J. E. Coleman, and H. B. Knight, to the United States of America as represented by the Secretary of Agriculture. Peroxides of long-chain olefinic compounds. 2,750,362, 6–12–56, Cl. 260—96.5.
Sylvania Electric Products Inc.: *See*—
Smith, Wilson R., and Slinkman. 2,750,559.
Teno, Edward. 2,750,528.
Szantay, Elmer, and G. M. Baccash, to Sandee Mfg. Co. Lawn soaker. 2,750,232, 6–12–56, Cl. 299—104.
Szikiai, George C., to Radio Corp. of America. Synchronous detection at intermediate frequency level of color subcarrier. 2,750,440, 6–12–56, Cl. 178—5.4.
Taggart, John K. Fishing reel securing device. 2,749,644, 6–12–56, Cl. 43—22.
Tally, Carl E. Attachment for sweeper. 2,749,564, 6–12–56, Cl. 15—79.
Tanner, Paul A., and W. Gegenschatz, to Zellweger A. G. Apparate- und Maschinenfabriken Uster. Thread cleaner. 2,749,594, 6–12–56, Cl. 28—71.
Tardiff, Richard C.: *See*—
Welsh, Warren A., and Tardiff. 2,750,530.
Tarrant, Paul, and A. M. Lovelace, to the United States of America as represented by the Secretary of the Army. 1,1,3-trifluorobutadiene, its polymer, and processes of making them and other 1,1-difluorinated dienes and their polymers. 2,750,431, 6–12–56, Cl. 260—653.
Tatter, John W. Adjustable seats having lazy tong supports. 2,749,969, 6–12–56, Cl. 155—91.
Taylor, Arthur W. C., and S. A. Lamb, to Imperial Chemical Industries Ltd. Production of oxygen-containing organic compounds. 2,750,419, 6–12–56, Cl. 260—604.
Taylor, Wendell A. Grain saving device for combines. 2,750,037, 6–12–56, Cl. 209—261.
Teal, James H.: *See*—
Campbell, Richard D., and Teal. 2,749,858.
Technau, Gerhard: *See*—
Schmitz-Hillebrecht, Ernst, and Technau. 2,750,323.
Technicolor Motion Picture Corp.: *See*—
Kelly, Donald H. 2,749,792.
Technicraft Laboratories, Inc.: *See*—
Candee, Ellsworth T. 2,749,963.
Teitler, Ruth J. Sanitary garments. 2,749,912, 6–12–56, Cl. 128—284.
Telefiex Inc.: *See*—
Anderson, John W. 2,750,582.
Teno, Edward, to Sylvania Electric Products Inc. Electronic tube element protective coating. 2,750,528, 6–12–56, Cl. 313—350.
Tetzner, Gustav. Band saw blade guide. 2,749,951, 6–12–56, Cl. 143—167.
Texaco Development Corp.: *See*—
Armistead, Fontaine C. 2,750,514.
Thies, Paul E. Bowl sleeve gasket. 2,750,216, 6–12–56, Cl. 288—20.
Thomas, Harry. Load and speed governor for internal combustion engines. 2,749,938, 6–12–56, Cl. 137—483.
Thomas, Ralph H., to Bristol-Myers Co. Dispenser. 2,749,566, 6–12–56, Cl. 15—132.7.
Thompson, Ernest S., to himself and E. Thompson, jointly. Multiple, adjustable blade scraper. 2,749,631, 6–12–56, Cl. 37—156.
Thompson, Ethel: *See*—
Thompson, Ernest S. 2,749,631.
Thompson, Lee L. Vibrator screens for screening rotary drilling mud. 2,750,043, 6–12–56, Cl. 210—149.
Thompson, Lincoln, F. E. Runge, and W. H. Lyon, to The Soundscriber Corp. Long playing magnetic tape recorder. 2,750,449, 6–12–56, Cl. 179—100.2.
Thompson Products, Inc.: *See*—
Angell, Pierce T., and Cliborn. 2,749,842.
Thomson, Alan C. Steering control for helicopter. 2,750,131, 6–12–56, Cl. 244—17.19.
Thornros, Eric O. Gate valve. 2,750,145, 6–12–56, Cl. 251—197.
Thurman, Truman D. Envelope. 2,750,102, 6–12–56, Cl. 229—85.
Tice, Reuben S. Drinking glass chiller. 2,749,715, 6–12–56, Cl. 62—1.
Tien, Jack M., and Tsu Sheng Ma. Photocopying apparatus. 2,749,821, 6–12–56, Cl. 95—77.5.
Tierney, Hubert J., to Permacel Tape Corp. Hyper-strength pressure-sensitive adhesive strapping tape. 2,750,030, 6–12–56, Cl. 206—59.
Tierney, Hubert J., to Permacel Tape Corp. Pressure-sensitive adhesive strapping tape. 2,750,315, 6–12–56, Cl. 154—53.5.
Tobias, Herrmann B. Collapsible stands for cameras and the like. 2,750,141, 6–12–56, Cl. 248—161.
Todd, Eugene M. Automatic drafting scale. 2,749,619, 6–12–56, Cl. 33—141.5.
Toennessen, Ernst. Drawing mechanism. 2,749,575, 6–12–56, Cl. 19—134.
Tolley, William W.: *See*—
Eckrote, Kenneth R., and Tolley. 2,750,031.
Tourshou, Simeon I.: *See*—
Achenbach, John C., and Tourshou. 2,750,450.
Transit Research Corp.: *See*—
Rossell, William T. 2,749,849.
Transportation Development Corp., The: *See*—
Hastings, John A., and Weber. 2,750,118.
Treadway, Robert H., and E. G. Heisler, to United States of America as represented by the Secretary of Agriculture. Process for making unicellular dehydrated potato granules. 2,750,295, 6–12–56, Cl. 99—207.
Trebler, Henning A.: *See*—
Stimpson, Edwin G., and Trebler. 2,750,328.
Trenholme, Lawrence B.: *See*—
Hansen, Eugene W., and Trenholme. 2,750,410.
Trépaud, Georges. Ice machine. 2,749,721, 6–12–56, Cl. 62—106.
Tripp, Lue. Trailer with adjustable rear wheels for transverse positioning thereof. 2,750,197, 6–12–56, Cl. 280—3.
Trogdon, Olin, and R. E. Herold. Hose coupling with braided gripping sleeve. 2,750,210, 6–12–56, Cl. 285—77.
Trombley, Ernest F. Drop tube structure. 2,750,079, 6–12–56, Cl. 222—148.
Troy Textiles, Inc.: *See*—
Campbell, Richard D., and Teal. 2,749,858.
Trussell, Carence D. Manufacture of mechanical bindings. 2,749,603, 6–12–56, Cl. 29—415.
Tucker, Fred A.: *See*—
Bode, August R., and Tucker. 2,750,085.
Tucker, Lyman J.: *See*—
Noel, Charles D., and Tucker 2,749,877.
Tulagin, Vsevolod, to General Aniline & Film Corp. Photographically sensitive element containing yellow non-fluorescing dyes. 2,750,291, 6–12–56, Cl. 95—8.
Turbine Equipment Co.: *See*—
Hynes, Lee P. 2,750,487.
Turchan, Manuel. Hydraulic tracer controlled routing machine. 2,749,810, 6–12–56, Cl. 90—13.5.
Turinsky, Otto, to Armour and Co. Mono-acyl derivatives of alkylene diamines and process for preparing same. 2,750,366, 6–12–56, Cl. 260—97.5.
Turner, Edwin E., Jr., to Raytheon Mfg. Co. Position recorder. 2,750,247, 6–12–56, Cl. 346—8.
Turner, Ralph M. Jarring tools. 2,749,548, 6–12–56, Cl. 1—47.
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66: 2,750,578
174: 2,750,579
2,750,580
242: 2,750,581
268: 2,750,582
282: 2,750,583
347: 2,750,584
357: 2,750,586
367: 2,750,587
378: 2,750,585
343— 781: 2,750,588
827: 2,750,589
904: 2,750,590
346— 8: 2,750,247
2,750,248

CLASSIFICATION OF DESIGNS

D 3—13: Des. 178,023
17: Des. 177,958
D 7— 7: Des. 178,025
D13— 1: Des. 178,006
D14—27: Des. 177,957
30: Des. 178,019
D15— 1: Des. 177,980
D17— 1: Des. 178,017
3: Des. 178,032
7: Des. 178,002
D20— 2: Des. 177,982
D22— 5: Des. 177,973
D26—14: Des. 178,018
D28— 1: Des. 177,968

D29— 1: Des. 178,024
23: Des. 177,978
28: Des. 177,981
D34—15: Des. 178,021
D40— 1: Des. 177,961
D42— 7: Des. 177,956
8: Des. 178,008
D44— 5: Des. 177,970
10: Des. 178,029
29: Des. 178,026
D45— 1: Des. 177,983
Des. 178,000
9: Des. 177,985
Des. 177,988

D45—10: Des. 177,967
15: Des. 177,969
16: Des. 177,984
Des. 177,987
19: Des. 177,986
Des. 177,989
Des. 177,990
Des. 177,991
D48—20: Des. 177,995
24: Des. 177,955
31: Des. 177,964
32: Des. 177,979
Des. 178,028

D49— 1: Des. 178,003
Des. 178,004
D50— 7: Des. 177,971
D52— 1: Des. 178,001
2: Des. 177,965
D54— 2: Des. 177,983
12: Des. 177,994
Des. 178,011
Des. 178,012
Des. 178,013
Des. 178,014
Des. 178,015
Des. 178,016

D56— 4: Des. 177,959
D57— 1: Des. 177,992
Des. 177,998
Des. 177,999
D58— 8: Des. 177,966
Des. 178,005
26: Des. 177,960
D59— 2: Des. 177,996
D61— 1: Des. 178,009
D62— 2: Des. 177,975
D72— 1: Des. 177,962
Des. 178,007
D73— 1: Des. 177,993

D74— 2: Des. 177,977
17: Des. 178,033
D80— 5: Des. 178,030
9: Des. 178,031
D81— 2: Des. 178,010
D85— 2: Des. 177,954
8: Des. 177,972
D86—10: Des. 177,974
Des. 177,997
Des. 178,022
D90— 1: Des. 178,027
D92— 1: Des. 178,020
4: Des. 177,976

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
June 12, 1956 Volume 707 Number 2

TRADEMARKS

NOTICES

Service by Publication

Boston Drug & Chemical Co., its assigns or legal representatives, take notice:

A petition, No. 6674, having been filed in this Office by Ferdinand Muihens to effect the cancellation of trademark registration of Boston Drug & Chemical Co., 36 Cummington Street, Boston, Massachusetts, No. 417,934, dated November 20, 1945, and this Office having been unable to obtain service of notice upon said registrant, notice is hereby given that unless said Boston Drug & Chemical Co., its assigns or legal representatives, shall enter an appearance within thirty days from the date of this publication, the cancellation will be proceeded with as in the case of default.

DAPHNE LEEDS,
Assistant Commissioner of Patents.

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 53,937, TM 128,764, TM 381,120 (Lysol), Lehn & Fink Products Corp., Disinfectants and antiseptics; **TM 219,630** (Lysol Disinfectant), same, filed Sept. 17, 1953, D. C., S. D. N. Y., Doc. 88/51, *Lehn & Fink Products Corp.* v. *Milner Products Co., Inc.* Stipulation and order of discontinuance May 7, 1956.

TM 128,764. (See TM 53,937.)

TM 146,608 (Singer), The Singer Mfg. Co., Electric motors and controllers therefor; **TM 164,387**, same, Electric fans; **TM 187,226**, same, Sewing-machine furniture in the form of covers of sewing-machine cabinets, tables, etc.; **TM 285,718**, same, Electric vacuum cleaners and dust-bags therefor; **TM 317,217**, same, Electric flat irons and cord-controls therefor; **TM 388,712**, same, Electric scissors and shears; **TM 441,609**, same, Electro-mechanical drives for sewing machines and the like, electric transmitters, etc.; **TM 577,125**, same, Renting of sewing machines to the public; management engineering; service maintenance; thermoplastic material; dust bags for vacuum cleaners, etc., filed Aug. 10, 1953, D. C., S. D. Calif. (Los Angeles), Doc. 15781-T, *The Singer Mfg. Co. et al.* v. *San Gabriel Television Center & Singer Television Mfg. Co. et al.* Trademark held valid; injunction restraining defendants from use of word "Singer," "except under certain conditions" (notice May 15, 1956).

TM 164,387. (See TM 146,608.)

TM 187,226. (See TM 146,608.)

TM 219,630. (See TM 53,937.)

TM 230,495 ("Champion" and design), Gould-National Batteries, Inc., Electric storage batteries, filed June 28, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 18359-C, *Gould-National Batteries, Inc.* v. *The Champion Co.* Default judgment; trademark held infringed; defendants restrained from use of words "Champion," "The Champion Co." and "Chamco" (notice May 10, 1956).

TM 285,718. (See TM 146,608.)

TM 317,217. (See TM 146,608.)

TM 381,120. (See TM 53,937.)

TM 388,712. (See TM 146,608.)

TM 441,609. (See TM 146,608.)

TM 510,217 (Start), Winkenweder & Ladd, Inc., Water solvent, dehydrating agent, rust inhibitor, corrosion inhibitor and antifreeze agent, filed May 8, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c846, *Gold Eagle Products Co.* v. *Clark Oil & Refining Corp.*

CONDITION OF TRADEMARK APPLICATIONS AS OF MAY 18, 1956

Total number of applications awaiting action [excluding renewals and Sec. 12 (c)] 8,584
Date of oldest new application ..... Nov. 7, 1955
Date of oldest amended application ..... Dec. 30, 1955

MERCHANT, JOHN, Director, Trademark Examining Operation

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application: New	Oldest Application: Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	12-22-55	1-11-56
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	11-7-55	2-2-56
III. WENDT, C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	11-10-55	12-30-55
Renewals (All Classes)	3-1-56	----
Sec. 12 (c) Publications (All Classes)	3-16-56	4-24-56

Applications Filed During Week Ending May 18, 1956—459

Registrations Issued ..... 389—No. 628,471 to No. 628,859
Renewals Issued 80

TM 577,125. (See TM 146,608.)

TM 594,957 (Ben Franklin), Butler Brothers, Services to retail variety store owners and prospective owners—namely, marketing research services, etc., filed May 7, 1956, D. C., E. D. Pa. (Philadelphia), Doc. 20679, *Butler Brothers et al. v. Robert Berlin, Inc., et al.*

TM 602,529 (Milky), Helene Curtis Industries, Inc., Shampoo, filed Dec. 28, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 19267–PH, *Helene Curtis Industries, Inc. v. General Beauty & Barber Supply.* Trademark held valid and infringed; defendant restrained from use of word "Milky" (notice May 10, 1956).

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.

As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 690,554. Houghton Laboratories, Inc., Olean, N. Y. Filed June 30, 1955.

HYSOL
Product of HOUGHTON LABORATORIES, Inc.

Houghton Laboratories, Inc. comprises applicant's trade name. Therefore, no registration rights are claimed in the expression "Product of Houghton Laboratories, Inc."

For Thermosetting Plastic Materials, e. g., in the Form of Sheets, Rods and Tubes, Powders and Liquids, and Epoxy Compounds for Potting or Protective Coating of Electrical Components.

First use July 19, 1950.

SN 695,720. A. F. Gallun & Sons Corporation, Milwaukee, Wis. Filed Oct. 3, 1955.

CASCADE CALF

The word "Calf" is disclaimed except in association with the other features of the mark.

For Leather.

First use Sept. 12, 1955.

SN 695,815. The Griess-Pfleger Tanning Co., Waukegan, Ill. Filed Oct. 4, 1955.

ANILTAN

Owner of Reg. No. 437,802.

For Leather.

First use Feb. 27, 1947.

SN 696,079. Albert Trostel & Sons Company, Milwaukee, Wis. Filed Oct. 7, 1955.

AIRBORNE

For Polyurethane Foams, Sold in Sheet Form, for Use as Insulation, Soundproofing, Upholstering and Cushions for Furniture, Insoles for Shoes, in Bodies for Auto Trucks, and for Under-Rugging.

First use Feb. 27, 1955.

SN 696,221. Dominion Minerals, Division of Riverton Lime and Stone Co. Inc., Piney River, Va. Filed Oct. 11, 1955.

DOMINION

For Crushed Granite Used as Poultry Grits.

First use Sept. 14, 1953.

SN 696,664. The Pantasote Co., Passaic, N. J. Filed Oct. 18, 1955.

POLY-PAN

For Calendered Polyethylene Films in Tubular and Sheet Form for Freezer Bags and for Food Packaging, for Adhesive Tape, for Banners, for Shoe or Clothing Storage Bags.

First use May 5, 1955.

SN 696,667. The Powellton Coal Company, Huntington, W. Va. Filed Oct. 18, 1955.

Jane Ann

For Coal.

First use Dec. 7, 1943.

SN 697,221. Germain's, Inc., Los Angeles, Calif. Filed Oct. 27, 1955.

Beautilawn

For Dichondra Seed.

First use on or about June 15, 1955.

CLASS 2

SN 687,193. Fount-Wip, Inc., Los Angeles, Calif. Filed May 10, 1955. Sec. 2(f).

Fount wip

Owner of Reg. No. 579,215.

For Empty Refillable Valved Pressure Containers for Food.

First use Apr. 27, 1950.

SN 688,369. Tupper Corporation, North Smithfield, R. I. Filed May 26, 1955.

TUPPERWARE

Owner of Reg. No. 600,830.

For Molded Plastic Tumblers, Canisters, Pitchers, Dispensers; Empty Condiment Holders—Namely, Salt, Pepper and Ketchup Shakers, Empty Compacts, Cream and Sugar

Containers and Dispensers; Empty Soap, Hair Massage and Tooth Brush Boxes; Massage Dispensers, Place Card Holders, Bowls, Cups and Saucers, Storage Containers, Vacuum Jars and Mixers, Cocktail and Beverage Shakers, Recipe Boxes, Bread Boxes and Trays, Cake Boxes and Trays, Butter Boxes and Trays, Refrigerator Boxes, Pie Holders To Contain Baked Pies, Lunch Boxes, Stationary and Revolving Trays, Capsules.
First use Mar. 3, 1950.

SN 689,721. The Hutchinson Bag Corporation, Hutchinson, Kans. Filed June 17, 1955.

..... WITH THE HUBCO "MAGIC MARK" .... HUBCO PROTEXO BAG ... TAG ....

For Oil Well Sand Sample Bags.
First use Jan. 20, 1955.

SN 689,722. The Hutchinson Bag Corporation, Hutchinson, Kans. Filed June 17, 1955.

HUBCO PROTEXO BAG

For Oil Well Sand Sample Bags.
First use Jan. 20, 1955.

SN 690,479. Melamine Plastics Corporation, Winona, Minn. Filed June 29, 1955.

PERMELITE

For Plastic Tableware Such as Cups, Bowls, Plates, and the Like.
First use Feb. 18, 1955.

SN 694,450. Protective Lining Corporation, Brooklyn, N. Y. Filed Sept. 9, 1955.

"POWER SEAL"

For Drum Liners, Bags and Carton Liners, Made of Polyethylene and Other Plastic Sheet Materials.
First use February 1950.

SN 694,451. Protective Lining Corporation, Brooklyn, N. Y. Filed Sept. 9, 1955.

"TWIN-SURE DOUBLE SEAL"

For Drum Liners, Bags and Carton Liners, Made of "Polyethylene" and Other Plastic Sheet Materials.
First use February 1950.

SN 699,081. Iver Johnson, d. b. a. Ezee-Reach Specialties Co., Chicago, Ill. Filed Nov. 29, 1955.

EZEE-REACH

For Separate Pocket Containing Devices Installable at a Variety of Locations To Receive and Hold a Variety of Individual Goods.
First use Sept. 16, 1955.

SN 699,661. S. & L. Metal Products Corporation, Brooklyn, N. Y. Filed Dec. 8, 1955.

penicylinder

For Assay Cups for Anti-Biotics, Made of Stainless Steel.
First use Apr. 26, 1945.

SN 700,769. Worcester Pressed Aluminum Corp., Worcester, Mass. Filed Dec. 28, 1955.

LI'L PAL Polka CANTEEN

Applicant disclaims the word "Canteen" apart from the mark as shown.
For Canteens.
First use Nov. 25, 1955.

CLASS 3

SN 683,716. Charles Schocket, d. b. a. North Bergen Leather Products Co., North Bergen, N. J. Filed Mar. 17, 1955.

COACHYDE

For Ladies' Hand Bags.
First use Dec. 12, 1954.

CLASS 4

SN 668,027. Fuld Brothers, Inc., d. b. a. Associated Just Distributors, Baltimore, Md. Filed June 10, 1954.

Just

Owner of Reg. No. 553,487.
For Self-Polishing Finishes for Wood, Composition, Asphalt, Rubber, Linoleum, and Terrazzo Floors.
First use May 10, 1954.

SN 679,652. Dan Cu Chemical Co., Oklahoma City, Okla. Filed Jan. 10, 1955.

Scintilex

For Composition That Is a Combined Cleaner and Polish and Which Provides a Protective Coating for Precious, Semi-Precious, and Artificial Stones in Jewelry.
First use Dec. 15, 1954.

SN 686,025. Stanley H. Brown, d. b. a. Brite-Glo Products, Newark, Ohio. Filed Apr. 22, 1955.

BRITE-GLO

The words "Brite-Glo" are disclaimed apart from the mark as shown.
For Combination Cleaner and Polisher for Metal and Glass Surfaces.
First use Apr. 5, 1955.

SN 691,838. The Der-Doh Co., New York, N. Y., to Der-Doh Corporation, New York, N. Y. Filed July 25, 1955.

DER-DOH

For Furniture Polish.
First use Nov. 11, 1954.

SN 695,093. Hollywood Shoe Polish, Inc., Richmond Hill, N. Y. Filed Sept. 21, 1955.

SANI-SKUF

Owner of Reg. Nos. 398,047, 527,738, and others.
For Shoe Polishes.
First use Dec. 5, 1954.

SN 695,841. Plastone Company, Inc., Chicago, Ill. Filed Oct. 4, 1955.

turtle wax "HARD SHELL FINISH" AUTO POLISH

The term "Auto Polish" is disclaimed apart from the mark as shown. The drawing is lined for red, green, and yellow.
For Automobile Polish.
First use Jan. 5, 1955; without the words "With Brillium" on Mar. 11, 1951.

SN 696,762. The Bardahl Oil Company, Inc., St. Louis, Mo. Filed Oct. 20, 1955.

INSUL EASE

For Liquid and Paste Cleaning and Polishing Materials for Auto Bodies.
First use May 18, 1955.

SN 697,991. Norton Pike Company, Troy, N. Y. Filed Nov. 9, 1955.

YANKEE CLIPPER

For Abrasives, Consisting of Abrasive Grains or Particles Such as Quartz, Sand, or Aluminous Oxide Held in Position by an Adhesive.
First use on or about May 21, 1930.

SN 698,236. Theodore Products Company, Seattle, Wash. Filed Nov. 14, 1955.

KOL-R-MATE

For Combined Cleaning and Polishing Preparations.
First use Nov. 8, 1955.

SN 699,067. Finishine Laboratories, Inc., Syracuse, N. Y. Filed Nov. 29, 1955.

ABRAZOMATIC

For Manually Operated Sanding Block Having a Self Contained Lubricant Reservoir Adapted To Feed Lubricant to the Abrasive Material Supported by the Block Upon the Application of Pressure Thereto.
First use Dec. 14, 1954.

SN 699,510. Knomark Manufacturing Co., Inc., Brooklyn, N. Y. Filed Dec. 6, 1955.



For Shoe Dressing.
First use Feb. 10, 1955.

CLASS 5

SN 687,045. Battenfeld Grease & Oil Corp., Kansas City, Mo. Filed May 9, 1955.

TRU-BOND

For Cement for Securing Floor and Wall Covering Tiles in Place.
First use Apr. 11, 1955.

SN 691,090. Gilmore T. Schjeldahl, d. b. a. G. T. Schjeldahl Company, Northfield, Minn. Filed July 11, 1955.

T-10

For Heat-Sealing Plastic Tape.
First use on or about May 26, 1955.

CLASS 6

SN 682,830. Shure Bond, Inc., St. Louis, Mo. Filed Mar. 4, 1955.



For Liquid Chemical Emulsion for Use as an Admixture With Cement, Plaster, and Masonry for Patching and Resurfacing.
First use Feb. 9, 1955.

SN 687,309. Mine Safety Appliances Company, Pittsburgh, Pa. Filed May 11, 1955.



The words "Safety Equipment Headquarters" are disclaimed apart from the mark shown. Owner of Reg. No. 403,728.
For Air Purifying Compositions, Catalytic Compositions for Gas and Vapor Detection, Petrolatum, Electrolyte for Batteries, Lens Treating Preparations.
First use at least as early as January 1953.

SN 688,888. Autolene Lubricants Company, Denver, Colo. Filed June 6, 1955. Sec. 2(f).

Protex

Owner of Reg. No. 524,554.
For Material (in Liquid or Paste Form) To Be Added to a Concrete Mix To Reduce the Bleeding; Improve Impermeability to Water; Increase Placability; Improve Finishability; Increase Plasticizing of the Mix and Expedite Curing.
First use June 1947.

SN 689,212. Dehydag Deutsche Hydrierwerke GMBH, Dusseldorf, Germany. Filed June 9, 1955.



Owner of German Reg. No. 383,159, dated Mar. 10, 1928.
For Organic Solvents and Plasticizers, Fat Derivatives, Fatty Acid Derivatives, Fatty Alcohol Sulphates, and Compositions Containing Such Chemicals.

SN 689,797. American Smelting and Refining Company, New York, N. Y. Filed June 20, 1955.

cadmax

For Brighteners for Cadmium Electroplating Baths.
First use Apr. 22, 1955.

SN 692,190. Alco Oil and Chemical Corp., Philadelphia, Pa. Filed Aug. 1, 1955.

ALCOFLEX

For Water-Soluble Urea Formaldehyde Compound for Use as a Textile Size on Cotton, Rayon, and Wool Fabrics Which Is Polymerized to a Resin in the Fibers To Impart Crush-Proof Properties and To Control Shrinkage.
First use Oct. 9, 1942.

SN 692,711. Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. Filed Aug. 9, 1955.

Gusathion

Priority claimed under Sec. 44(d) on German application filed Feb. 9, 1955; Reg. No. 676,041, dated May 13, 1955.
For Chemical Agents for Destroying Animals and Plants.

SN 693,212. Taylor and Art, Inc., Oakland, Calif. Filed Aug. 16, 1955.

Tap

For Epoxy Resin and Cold Dip Dyes.
First use early in November 1954.

SN 695,798. Atlantic Chemical Corporation, Passaic, N. J. Filed Oct. 4, 1955.

NEUTRAZOIC

For Dyestuffs.
First use Sept. 16, 1955.

SN 696,294. Farbwerke Hoechst Aktiengesellschaft, vormals Meister Lucius und Bruning, Frankfurt am Main Hochst, Germany. Filed Oct. 12, 1955.

HOSTALEN

Owner of German Reg. No. 660,431, dated July 22, 1954.
For Chemical Products Used in Industry—Namely, Synthetic Resins.

SN 696,454. The Murphy Chemical Company Ltd., Wheathampstead near St. Albans, Herts, England. Filed Oct. 14, 1955.

SYTAM

Owner of British Reg. No. 698,478, dated May 25, 1951.
For Insecticides for Use by Spraying.

SN 696,772. Chemical Specialties Company, Charlotte, N. C. Filed Oct. 20, 1955.

CHEM-SOFT

For Liquid Fabric Softener for Household Use.
First use Oct. 10, 1955.

SN 697,325. Sandoz Chemical Works, Inc., New York, N. Y. Filed Oct. 28, 1955.

SANDOLON

Owner of Reg. Nos. 300,570, 611,997, and others.
For Dyestuffs.
First use June 29, 1955.

CLASS 7

SN 1,665. The Cambridge Wire Cloth Company, Cambridge, Md. Filed Jan. 30, 1956.



For Cargo and Merchandise Carrying Wire Fabric Slings.
First use December 1955.

SN 2,621. Chicago Printed String Company, Chicago, Ill. Filed Feb. 14, 1956.

Res-i-Glas

For Tying Tape Containing Fiber Glass and Resin.
First use Oct. 12, 1955.

CLASS 8

SN 695,030. S. S. Sarna, Inc., New York, N. Y. Filed Sept. 20, 1955.

Sarnabrass

Owner of Reg. No. 598,088.
For Ashtrays and Cigarette Boxes.
First use Feb. 15, 1955.

CLASS 9

SN 688,255. Nosler Partition Bullet Company, Ashland, Oreg. Filed May 25, 1955. Sec. 2(f).

Nosler Partition Bullets

For Rifle Bullets.
First use 1949.

CLASS 10

SN 685,038. National Distributors, Inc., Springfield, Mass. Filed Apr. 6, 1955.



For Peat Moss and Peat Humus.
First use January 1953.

SN 687,314. New England Orex Corporation, Bethel, Maine. Filed May 11, 1955.

bactrels

For Bacterially Activated Trace Element Compound for Addition to the Soil.
First use Sept. 23, 1954.

SN 691,005. Chemische Fabrik Kalk G. m. b. H., Koln-Kalk, Germany. Filed July 11, 1955.

Kampka

Owner of German Reg. No. 643,894, dated Sept. 10, 1953.
For Fertilizers.

SN 693,746. Golden Earth, Inc., Encampment, Wyo. Filed Aug. 26, 1955.

GOLDEN EARTH

For Soil Conditioner and Plant Food.
First use on or about Mar. 20, 1954.

SN 695,370. Allied Chemical & Dye Corporation, New York, N. Y. Filed Sept. 27, 1955.

URADIAN

For Nitrogen-Containing Solution, Suitable for Use as Fertilizer, and for Ammoniating Fertilizers.
First use July 29, 1955.

SN 698,924. The Smith Agricultural Chemical Company, Columbus, Ohio. Filed Nov. 25, 1955.



The words "With 2,4-D" are disclaimed. Owner of Reg. No. 280,387.
For Plant Food and Fertilizer.
First use January 1930.

SN 699,029. Vita Lawn, Inc., Paterson, N. J. Filed Nov. 28, 1955.



The word "Lawn" is disclaimed apart from the mark as shown.
For Fertilizer.
First use February 1955.

CLASS 12

SN 689,667. Sivad Ceramic Corporation, Oak Hill, Ohio. Filed June 16, 1955.

Duquesne

For Refractory Castable Powderous Composition for Mixing With Water and Poured or Floated in Place Like Concrete in High Temperature Industrial Furnaces.
First use Nov. 15, 1954.

CLASS 13

SN 629,765. Beaver Industries, Chicago, Ill. Filed May 16, 1952. Sec. 2(f).

"Busy as a Beaver"

For Screw Machine Products—Namely, Screws, Studs, Nuts, Rivets, Bolts, Pipe Fittings and Bushings, Pins, and Space Washers.
First use Mar. 19, 1945.

SN 676,067. National Lock Company, Rockford, Ill. Filed Nov. 4, 1954. Sec. 2(f).

EASYDRIVE

Owner of Reg. No. 373,672.
For Screws.
First use on or about January 1936.

SN 690,348. Tyler Pipe and Foundry Company, Tyler, Tex. Filed June 27, 1955. Sec. 2(f) as to "Tyler."

TYLER MC

Owner of Reg. No. 524,093.
For Metal Pipe.
First use Mar. 10, 1955.

SN 698,423. Gerber Plumbing Fixtures Corp., Chicago, Ill. Filed Nov. 17, 1955. Sec. 2(f).

GERBER

Owner of Reg. No. 528,972.
For Plumbing Fixtures—Namely, Water Closets, Water Closet Tanks, Lavatories, Bathtubs, Urinals, Bidets Shower Stalls, Valves and Plumbing Brass Goods, Including Bath and Shower Fixtures, Bathtub Drains, Lavatory Fixtures, Laundry Tray Faucets, Closet Tank Trims, Kitchen Faucets, and Kitchen Sink Strainers.
First use Sept. 20, 1947.

SN 698,714. Meridan Corporation, Inkster, Mich. Filed Nov. 22, 1955.

COVRLOK

For Hose Couplings or Fittings.
First use Sept. 7, 1955.

SN 1,260. Miller and Poston Mfg. Co., Spokane, Wash. Filed Jan. 23, 1956. Sec. 2(f).

AUTO-LOK

For Tubular Pipes and Pipe Fittings To Form a Conduit for Irrigation Purposes.
First use Feb. 25, 1950.

SN 1,353. Frenchtown Porcelain Company, Trenton, N. J. Filed Jan. 24, 1956.

NICOTE

For Ceramic Spray Nozzles.
First use Aug. 12, 1955.

SN 1,417. Young Development Laboratories, Inc., Rocky Hill, N. J. Filed Jan. 24, 1956.

BONDSTRAND

For Pipe, Pipe Joints, and Fittings.
First use Nov. 18, 1955.

SN 1,565. Bellofram Corporation, Burlington, Mass. Filed Jan. 27, 1956.

GOVERNAIRE

For Valves for Controlling and Regulating the Pressure of Gases.
First use Jan. 20, 1956.

SN 1,736. Standard Screw Company, Bellwood, Ill. Filed Jan. 30, 1956.

HMS

For Nuts, Screws, and Taper and Dowel Pins.
First use July 11, 1955.

CLASS 14

SN 674,239. The Ferro Corporation, Cleveland, Ohio. Filed Oct. 4, 1954.

"FERRALOY"

For Finished and Partly Finished Shapes and Bodies Made of Powdered Metals According to the User's Specifications.
First use June 15, 1954.

SN 675,952. Aluminum Extrusions, Inc., Charlotte, Mich. Filed Nov. 3, 1954.

AE

The lining on the drawing represents the colors orange, black, and blue. However, color is not deemed to be an essential feature of the mark and is not claimed.
For Extruded Aluminum.
First use Dec. 11, 1953.

SN 684,449. Mercast Corporation, New York, N. Y. Filed Mar. 29, 1955.

MERCAST

For Cast Metal Parts Produced by a Frozen Mercury Process and Used for Machines and Other Appliances Requiring Precision Cast Metal Parts.
First use Dec. 17, 1947.

SN 684,573. Marshall Steel Company, McCook, Ill. Filed Mar. 30, 1955.

MARSHALLC RAT

For Ground Flat Steel.
First use Mar. 17, 1954.

SN 685,910. The International Nickel Company, Inc., New York, N. Y. Filed Apr. 20, 1955.

INCO NIONEL

Owner of Reg. Nos. 128,408, 610,249, and others.
For Nickel-Containing Alloys.
First use Mar. 24, 1955.

SN 687,100. Pacific Alloy Engineering Corporation, El Cajon, Calif. Filed May 9, 1955.

P

For High Alloy Castings.
First use Apr. 18, 1955.

SN 689,025. Croft Steel Products, Inc., Jamestown, N. Y. Filed June 7, 1955.

CROFT

For Aluminum, Magnesium, and Brass Extrusions.
First use May 30, 1955.

SN 689,843. The International Nickel Company, Inc., New York, N. Y. Filed June 20 1955.

SEAGOIN' METAL

No claim is made for the word "Metal" apart from the mark as shown. Owner of Reg. No. 396,605.
For Wrought and Cast Nickel Alloys.
First use Mar. 16, 1955.

SN 690,171. The International Nickel Company, Inc., New York, N. Y. Filed June 24, 1955.

INCO-ROD "A"

No claim is made to the word "Rod" apart from the mark as shown. Owner of Reg. Nos. 128,408, 384,857, and 427,119.
For Metal Welding Electrodes.
First use Apr. 8, 1955.

SN 691,798. Titan Metal Manufacturing Company, Bellefonte, Pa. Filed July 22, 1955. Sec. 2(f).

DOUBLY DEOXIDIZED

Owner of Reg. No. 386,615.
For Welding Rods.
First use December 1932.

SN 692,120. Cadmet Corporation, Warren Township, Mich. Filed July 29, 1955.

QUALITY CADMET INVESTMENT CASTINGS

The words "Quality Investment Castings" are disclaimed apart from the mark as shown.
For Investment Castings.
First use Dec. 18, 1946.

SN 694,300. Chas. D. Briddell, Inc., Crisfield, Md. Filed Sept. 7, 1955.

CARVALLOY

For Alloy of Stainless Steel Used in the Manufacture of Cutlery for Table Use.
First use Aug. 5, 1955.

SN 698,489. The American Welding and Manufacturing Company, Warren, Ohio. Filed Nov 18 1955.

AMWELD

For Industrial Tires and Tire Bases Including Steel Wheel Bands and Flat Belt Channel Bases.
First use Aug. 11, 1955.

SN 698,721. Penetred Corporation, Marshfield, Wis. Filed Nov. 22 1955.

Penetred

Owner of Reg. No. 518,803.
For Wire Skid-Control Coils for Use in the Tire Industry.
First use May 1949.

SN 700,848. Electro-Chemical Research Laboratories Limited, London, England. Filed Dec. 30, 1955.

TUCA

Owner of British Reg. Nos. 726,828 and 726,829, both dated Feb. 12, 1954.
For Tubular Welding Rods—Namely, Tubular Steel Rods Filled With Tungsten or Other Hard Metal Carbides; Non-Slip Devices for Horseshoes, Horseshoes, and Horseshoe Nails.

SN 111. Universal-Cyclops Steel Corporation, Bridgeville, Pa. Filed Jan. 3, 1956.

DUOMELT

For Ingots Ma by the Consumable Electrode Melting Process and for Products Formed From Such Ingots, Such as Blooms, Billets, Bars, Rods, Wire, Forgings, Plates, Sheets, Strip.
First use Nov. 15, 1955.

SN 426. Johnson Steel & Wire Company, Inc., Worcester, Mass. Filed Jan. 10, 1956.

EBON COTE

For Coated Wire.
First use on or about Nov. 13, 1954.

SN 427. Johnson Steel & Wire Company, Inc., Worcester, Mass. Filed Jan. 10, 1956.

EBON STITCH

For Stitching Wire.
First use on or about Mar. 18, 1955.

SN 502. The Lincoln Electric Company, Cleveland, Ohio. Filed Jan. 11, 1956.

SELFWELD

For Welding Electrodes.
First use Apr. 15, 1955.

SN 615. The New York Air Brake Company, New York, N. Y. Filed Jan. 12, 1956.



The mark comprises the letters "N" and "Y" written as a conventionalized monogram. Owner of Reg. No. 86,727.
For Metal Castings.
First use Aug. 17, 1955.

SN 2,205. Texas Electric Steel Casting Co., Houston, Tex. Filed Feb. 6, 1956.

TESCO

For Metal Castings and Forgings.
First use Feb. 24, 1936.

CLASS 15

SN 679,678. Petroleum Heat and Power Company, Chicago, Ill., to Solar-Therm Corporation of America, Chicago, Ill. Filed Jan. 10, 1955.

SOLAR-THERM

For Fuel Oils.
First use Oct. 1, 1954.

SN 680,821. Swift & Company, Chicago, Ill. Filed Jan. 31, 1955. Sec. 2(f).

Swift's

For Lard Oil (Grease Oil).
First use at least about 1919.

SN 690,224. Cities Service Oil Company, Bartlesville, Okla. Filed June 27, 1955.

5D

Owner of Reg. No. 596,623.
For Motor Lubricating Oil.
First use on or about April 1954.

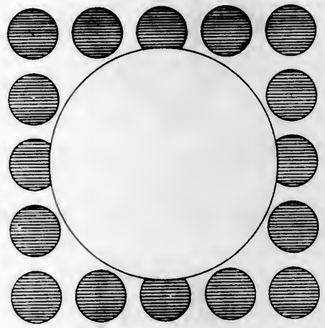
SN 694,927. Sterns, Inc., New York, N. Y. Filed Sept. 19, 1955.

RE-DI-PENN

For Lubricating Oils.
First use Feb. 15, 1937.

CLASS 16

SN 657,397. Kaiser Gypsum Company, Inc., Oakland, Calif. Filed Nov. 23, 1953.



The drawing is lined for blue.
For Texture Paint for Interior Surfaces—Namely, a Pigmented Casein-Bound or Cereal-Bound Paint Containing a Gypsum Limestone Filler Sold in Powder Form to Which Water Is Addded.
First use Oct. 21, 1952.

SN 682,104. The American Asbestos Products Company, Cleveland, Ohio. Filed Feb. 23, 1955.

MASONIZE

For Oil Base Sealer and Color Coat for Cinder and Cement Block and All Other Porous Masonry Surfaces.
First use May 1, 1953.

SN 684,919. Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany. Filed Apr. 5, 1955.



Owner of German Reg. No. 630,552, dated Nov. 26, 1952.
For Waxes Serving as Protective Coatings for Application to Building Material.

SN 689,500. M. M. A., Inc., Lancaster, Pa. Filed June 14, 1955.



The drawing is lined for red.
For Oil Base Paint.
First use on or about May 1951.

SN 690,242. Davis Paint Company, North Kansas City, Mo. Filed June 27, 1955.

DA-JEL

For Paint for Interior Use.
First use June 21, 1955.

SN 690,930. Anaconda Wire and Cable Company, New York, N. Y. Filed July 8, 1955. Sec. 2(f).

COLDCOTE

Owner of Reg. No. 330,581.
For Asphalt Compound in the Nature of a Paint.
First use Oct. 9, 1934.

SN 690,939. The Modene Paint Company, Inc., Chelsea, Mass. Filed July 8, 1955.

PORCLENE

For Refrigerator White Enamel.
First use Feb. 1, 1940.

SN 691,406. The Sherwin-Williams Company, Cleveland, Ohio. Filed Aug. 5, 1955.

KEMPRINT

Owner of Reg. Nos. 275,775, 606,039, and others.
For Paints, Colors, Pigments, and Dyes in Ready-Mixed, Paste Form or Dry Used for Printing, Stamping, and Dyeing Fabrics.
First use Dec. 30, 1954, on colors.

SN 692,726. The Martin-Senour Company, Chicago, Ill. Filed Aug. 9, 1955.

NEU-SAND

For Lacquer Primer Surfacer Which Eliminates the Mechanical Process of Sanding Surfaces Before Finishing.
First use Mar. 8, 1955.

SN 697,207. Alco Products, Incorporated, Dunkirk, N. Y. Filed Oct. 27, 1955.

ALCOPLATE

Owner of Reg. Nos. 308,766 and 523,575.
For High Nickel Low Phosphorous Metal Alloy Sold for Use as and in the Form of a Coating.
First use Nov. 15, 1954.

SN 698,694. Duron Paint Manufacturing Company, d. b. a. Duron Paint Manufacturing Co., Inc., Washington, D. C. Filed Nov. 22, 1955.

DURON Vinylastic

Owner of Reg. Nos. 392,676, 584,210, and others.
For Interior and Exterior Ready-Mixed Vinyl Base Paints.
First use Nov. 17, 1955.

SN 699,119. The Tremco Manufacturing Company, Cleveland, Ohio. Filed Nov. 29, 1955.

COROSOBAR

Owner of Reg. No. 435,594.
For Chemical and Moisture Resistant Liquid Coating Preparation.
First use Feb. 14, 1955.

SN 285. The Martin-Senour Company, Chicago, Ill. Filed Jan. 11, 1956.



For Paint Enamels.
First use on or about Aug. 12, 1926.

SN 500. W. W. Lawrence & Company, Pittsburgh, Pa. Filed Jan. 11, 1956.

DULFECT

For Varnishes and Flat Exterior Paints.
First use Jan. 2, 1914, on varnishes.

SN 664. Corro-Vent Inc., Cincinnati, Ohio. Filed Jan. 13, 1956.

CORRO-VENT

For All Purpose Quick Dry Paints for Brush, Spray, or Flow-Coat Application, Anti-Rust, Anti-Corrosive Paints.
First use Feb. 25, 1955.

SN 978. Walter M. Freeman, d. b. a. Plastivin International, Miami, Fla. Filed Jan 18 1956.

PLASTIVIN

For Paint (for Masonry and Wood).
First use Jan. 17, 1956.

SN 991. W. W. Lawrence & Company, Pittsburgh, Pa. Filed Jan. 18, 1956.

LA-KOTE

For Latex Pigmented Sealer.
First use Feb. 16, 1955.

SN 992. W. W. Lawrence & Company, Pittsburgh, Pa. Filed Jan. 18, 1956.

GLOSIFYER

For Additive for Flat Enamels.
First use Dec. 9, 1955.

SN 1,046. American Molding Powder and Chemical Corp., Brooklyn, N. Y. Filed Jan. 19, 1956.

MASTER COLOR

No claim is made to the word "Color" apart from the mark as shown.
For Plastic Color Concentrates.
First use Nov. 8, 1955.

SN 1,478. The Sherwin-Williams Company, Cleveland, Ohio. Filed Jan. 25, 1956.

SHERWILLAC

For Interior Deck Finishes.
First use Oct. 12, 1936.

SN 1,499. American-Marietta Company, Chicago, Ill. Filed Jan. 26, 1956.

AMEROC

For Varnishes, Particularly Adaptable for Finishes on Furniture.
First use in or about October 1949.

SN 1,520. Girard Paint & Varnish Mfg. Co., Philadelphia, Pa. Filed Jan. 26, 1956.

MIRATONE

For Flat Wall Paints, Exterior House Paints, Exterior House Paint Primers, Interior Primers and Sealers in the Nature of Paint, Enamels, Enamel Undercoaters, Varnishes, Shellac, and Paint Thinners and Reducers.
First use in or about the year 1937.

CLASS 17

SN 685,464. Riggio Tobacco Corporation, Brightwaters, N. Y. Filed Apr. 13, 1955. Sec. 2(f).

Cort

Owner of Reg. No. 385,714.
For Cigarettes.
First use on or about Nov. 28, 1939.

CLASS 18

SN 670,496. Nepera Chemical Co. Inc., Nepera Park, N. Y. Filed July 23, 1954.

THONZIDE

For Antibacterial and Antifungal Mucolytic Agent.
First use July 14, 1954.

SN 674,094. Ruson Laboratories, Incorporated, Portland, Oreg. Filed Sept. 30, 1954.

RUSON

For Germicidal Compositions.
First use Dec. 4, 1950.

SN 681,308. Seaboard Chemical Corporation, South Orange, N. J. Filed Feb. 8, 1955.

LIQUA-BAND

For Film Forming Liquids for Application to Cuts, Wounds, Scratches, and Abrasions of the Human Body to Protectively Cover and To Aid in Healing Them.
First use Sept. 4, 1954.

SN 682,960. Milex Products, Chicago, Ill. Filed Mar. 7, 1955.

TRICHO-SAN

For Therapeutic Vaginal Jelly.
First use on or about Jan. 1, 1947.

SN 684,211. Gane's Chemical Works, Inc., New York, N. Y. Filed Mar. 25 1955.

AMPHOGRAN

For Preparation Containing Aminophylline and Bisodium Phosphate in Tablet Form for Vascular Dilation.
First use Feb. 11, 1955.

SN 685,743. Pharmaceuticals, Inc., Newark, N. J. Filed Apr. 18, 1955.

NIRON

For Tonic Appetite Stimulant To Be Used With a Weight Gaining Diet.
First use Apr. 5, 1955.

SN 688,457. Pharmaceuticals, Inc., Newark, N. J. Filed May 27, 1955.

SOMINEX

For Medicinal Preparation for the Relief of Insomnia.
First use May 11, 1955.

SN 689,131. J. B. Foley, Chicago, Ill. Filed June 8, 1955.

HOME TESTED

For Cold Spray for Relief of Nasal Congestion in Colds.
First use Mar. 1, 1954.

SN 691,468. Gray Pharmaceutical Co., Inc., Newton, Mass. Filed July 18, 1955.

Pentrazol

For Ingredient—Namely, Pentylenetetrazol, in a Combination of Druga to Ameliorate Mood.
First use June 27, 1955.

SN 695,940. Poul-An Laboratories, Inc., Kansas City, Mo. Filed Oct. 5, 1955.

Ruf-Stil

For Feed Additive Containing Rumen Inoculum and/or Activators for Use in Feed Supplements for Beef Cattle.
First use Dec. 3, 1954.

SN 696,336. Vick Chemical Company, New York, N. Y. Filed Oct. 12, 1955.

LIQUIZETS

For Antibacterial Throat Lozenge.
First use Sept. 19, 1955.

SN 697,104. Merck & Co., Inc., Rahway, N. J. Filed Oct. 25, 1955.

ALBUMISOL

For Serum Albumin.
First use Aug. 15, 1955.

SN 697,703. Schenley Laboratories, Inc., New York, N. Y. Filed Nov. 4, 1955.

DIURGANE

For Antihistamine.
First use Oct. 19, 1955.

SN 697,997. Spicer-Gerhart Company, Sunland, Calif. Filed Nov. 9, 1955.

THYLATIN

For Vitamin B-15, a Dietary Supplement.
First use Oct. 17, 1955.

SN 698,047. Marklin Chemical Corporation, New York, N. Y. Filed Nov. 10, 1955.

MARKLIN

For Vitamin Capsules, Vitamin Tablets, Aluminum Hydroxide Gel Tablets, Brewers' Yeast Tablets, Calcium Gluconate Tablets, Dicalcium Phosphate Capsules, Digitoxin Tablets, Magnesium Trisilicate Tablets, Sodium Para Amino Salicylate Tablets, Sodium Salicylate Tablets, Phenobarbitol Tablets, A. P. C. Tablets (Containing Aspirin, Caffeine and Phenacetin), Vitamin Injectibles, Anti-Biotics, Penicillin Tablets, Penicillin G Procaine in Oil, Rauwolfia Serpentina Tablets, Liver Injection, Penicillin G Crystalline Potassium Ointment, Procaine Penicillin G in Aqueous Suspension, Procaine Penicillin G in Aqueous Solution, Penicillin G Crystalline and Procaine Penicillin, Penicillin Troches, Dihydrostreptomycin Sulphate.
First use January 1952.

SN 700,379. Lloyd Brothers, Inc., Cincinnati, Ohio. Filed Dec. 21, 1955.

DOXINATE

For Medicinal Preparations for Use in Treating Constipation and Produced in Fluid and Tablet Form.
First use Oct. 28, 1955.

CLASS 19

SN 692,877. Studebaker-Packard Corporation, Detroit, Mich. Filed Aug. 11, 1955.

ASK THE MAN WHO OWNED IT

Owner of Reg. Nos. 573,275, 195,900, and 525,141.
For Passenger Automobiles.
First use May 15, 1955.

SN 699,882. Carl F. W. Borgward G. m. b. H., Bremen-Sebaldsbrueck, Germany. Filed Dec. 13, 1955.

Isabella

Owner of German Reg. No. 663,352, dated Sept. 30, 1954.
For Automotive Vehicles—Namely, Passenger Vehicles, Trucks, Tricycles for Use by Adults, Truck Tractors and Structural Parts Thereof.
First use Aug. 6, 1954; and in commerce Aug. 6, 1954.

SN 700,030. International Harvester Company, Chicago, Ill. Filed Dec. 15, 1955.

PAYWAGON

For Wagons.
First use Sept. 28, 1955.

SN 700,031. International Harvester Company, Chicago, Ill. Filed Dec. 15, 1955.

PAYHAULER

For Motor Trucks and Parts Thereof.
First use Apr. 18, 1955.

CLASS 21

SN 671,071. Pierre Barthelemy Van Doren, Brussels, Belgium. Filed Aug. 3, 1954.



Owner of Belgian Reg. No. 72,752, dated Nov. 19, 1952.
For Electrically-Operated Domestic Appliances—Namely, Vacuum Cleaners, Floor-Polishing Machines, Combination Vacuum Cleaners and Floor Polishers, and Food and Beverage Mixers.

SN 685,095. Casco Products Corporation, Bridgeport, Conn. Filed Apr. 7, 1955.



For Electric Steam Irons.
First use Jan. 15, 1955.

SN 688,280. Thermel, Inc., Chicago, Ill. Filed May 25, 1955.

THERMATUBE

Owner of Reg. No. 591,607.
For Electric Heating Elements and Heating Units.
First use Dec. 30, 1949.

SN 690,129. Henry T. Brummett, d. b. a. Brummett Enterprises, Long Beach, Calif. Filed June 24, 1955.

Magna-Tool

For Magnetic Wall Stud Locator.
First use June 20, 1954.

SN 691,611. Entron, Inc., Bladensburg, Md. Filed July 20, 1955.

SHUVEE

For Coaxial Cable Connectors.
First use February 1954.

SN 695,905. Electric Regulator Corporation, Norwalk, Conn. Filed Oct. 5, 1955.

REGOHM

For Electrical Servo Control Instrumentalities.
First use Jan. 7, 1947.

SN 699,137. Crown Controls Company, Inc., New Bremen, Ohio. Filed Nov. 30, 1955.



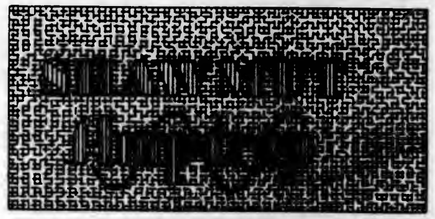
Owner of Reg. Nos. 435,848 and 533,198.
For Electrically Controlled Antenna Rotating Equipment and Parts Thereof.
First use October 1950.

SN 120. Jay V. Zimmerman Company, St. Louis, Mo. Filed Jan. 3, 1956.

"ZIMVAC"

For Electric Domestic Vacuum Cleaners.
First use August 1955.

SN 306. The Chase-Shawmut Company, Newburyport, Mass. Filed Jan. 9, 1956.



In the drawing color has been indicated by conventional linings, the dominant colors being yellow and red. Owner of Reg. No. 534,033.
For Current-Limiting Fuses.
First use July 1, 1948.

SN 1,243. Ingeniör Gunnar Schjelderup Industriovner, Oslo, Norway. Filed Jan. 23, 1956.

ELPIT

Owner of Norwegian Reg. No. 46,855, dated Sept. 12, 1955.
For Large Electric Furnaces, Kilns, and Ovens for Industrial Use.

SN 1,389. Resistor Wholesalers Corp., New York, N. Y. Filed Jan. 24, 1956.



For Resistor Kits.
First use Jan. 4, 1956.

CLASS 22

SN 695,306. Howard Manufacturing Co., Kent, Wash. Filed Sept. 26, 1955.



For Board, Ball, and Paddle Game.
First use Sept. 2, 1953.

SN 695,355. Saks & Company, New York, N. Y. Filed Sept. 26, 1955. Sec. 2(f).

Saks·Fifth Avenue

For All Kinds of Toys for Children and All Sorts of Games for Children and Adults, Tricycles, Scooter Carts, Sleds and Similar Type Toy Vehicles, Playing Cards, Card Games and Card Game Accessories, Party Favors, Dolls, Doll Clothes, Doll Furniture, Footballs, Baseballs and Bats, Golf Clubs, Golf Bags and Golf Balls, Tennis Racquets and Tennis Balls, Croquet Sets, and Fishing Tackle.
First use Sept. 15, 1924.

SN 695,481. The Linen Thread Co., Inc., New York, N. Y. Filed Sept. 28, 1955.

ARK

For Fish-Net Floats.
First use Sept. 15, 1955.

SN 695,529. Harold A. Carlson, Brentwood, Mo. Filed Sept. 29, 1955.

BLACK WIDOW

For Golf Clubs.
First use Sept. 8, 1955.

SN 695,566. Plastic Toy and Novelty Corp., New York, N. Y. Filed Sept. 29, 1955.



For Plastic Sand Set Combinations—Namely, Pails, Shovels, Tumblers and Blocks, Sand Molds, Sand Sieves, Nesting Sand and Sieve Sets; Educational Toys—Namely, Pyramiding Blocks, Blocks With Bells, Pyramiding Blocks in Schoolhouse With Bells, Cradle Bells, Nesting Barrels, Whistling Blocks, Alphabetical Blocks, Fairy Tale Blocks, Animal Blocks, Blocks With Printed Faces.
First use Jan. 5, 1950, on educational toys.

SN 695,623. Globe Rubber Products Corporation, Philadelphia, Pa. Filed Sept. 30, 1955.



Owner of Reg. No. 609,549.
For Swimming Fins.
First use Mar. 1, 1954.

SN 695,760. Radio Steel & Mfg. Co., Chicago, Ill. Filed Oct. 3, 1955.

DANIEL BOONE

For Coaster Wagons and Scooters.
First use Sept. 14, 1955.

SN 696,288. Arthur W. Cullins, Sterling, Ill. Filed Oct. 12, 1955.

Snuffle-Bingo

For Games of the Type That Comprises an Elongated Horizontally Extending Playing Board With Recesses at the Far End Thereof and Discs Which Are Adapted To Be Slid From the Near End of the Board Towards the Recesses.
First use July 4, 1955.

CLASS 23

SN 659,753. Charles Bond Company, Philadelphia, Pa. Filed Jan. 18, 1954.



The drawing is lined for red. Owner of Reg. No. 188,113.
For Check Straps, Lug Straps, Harness Straps, Bumper Straps, Hold-Up Straps, and Other Similar Straps as Portions of Textile Machinery.
First use Jan. 22, 1953.

SN 676,927. Aerojet-General Corporation, Azusa, Calif. Filed Nov. 19, 1954.

Aerojet-General

Owner of Reg. Nos. 409,006 and 426,781.
For Rockets, Rocket Motors, and Jet Assist Take-Off Units.
First use on or about April 1953.

SN 677,515. Mauser Kommandit-Gesellschaft, Koeln-Ehrenfeld, Germany. Filed Nov. 30, 1954. Sec. 2(f).

MAUSER

Owner of German Reg. No. 637,245, dated Apr. 22, 1953.
For Agricultural Machines, Devices and Implements—Namely, Steaming Apparatus for the Steaming of Fodder, Potatoes, Vegetables, Roots and Products Obtained in the Slaughtering of Animals; Pumps; Manually and Mechanically Operated Devices and Tools for the Tilling of Soil—Namely, Plows, Breakers, Hoes, Spades, and Rakes; Portable Sprayers; Movable Spraying Apparatus, Apparatus for Comminuting, Crushing and Squeezing Fodder; Agricultural Auxiliary Devices—Namely, Devices for Sowing and Harvesting, Sprinkling Devices; Work Benches.
First use January 1900.

SN 683,467. Aerojet-General Corporation, Azusa, Calif. Filed Mar. 15, 1955.

Aerojet

Owner of Reg. Nos. 409,006 and 426,781.
For Internal Combustion Engines, Marine Engines, Components Thereof and Components Associated Therewith.
First use on or about January 1954.

SN 684,063. Precision Manufacturing Corp., d. b. a. A. N. Nelson, Excelsior, Minn. Filed Mar. 23, 1955.

Nelson "TYR ROUNDER"

For Tire Rounding Machine for Rounding Out of Round Tires.
First use Oct. 19, 1954.

SN 685,653. Caldwell Company, Sioux City, Iowa. Filed Apr. 18, 1955.

MIDGET MASHER

The word "Masher" is hereby disclaimed apart from the mark as shown. The lining on the drawing designates the colors red and blue.
For Tine-Type Food Mashers for Mulching Baby Food.
First use Feb. 4, 1955.

SN 686,078. Park Tool Company, St. Cloud, Minn. Filed Apr. 22, 1955.

HYDRASPLIT

For Masonry Cutters, Splitters, and Jointers.
First use Jan. 13, 1954.

SN 686,433. Droft Manufacturing Corporation, Wausau, Wis. Filed Apr. 28, 1955.

HYDRO SPRING

For Coil-Spring Loaded Accumulator Cushioning Mechanism Used in Connection With Shovel Attachments, Bulldozer Attachments, Material Loading Attachments for Trucks and Tractors.
First use Nov. 1, 1946.

SN 686,660. Kiekhaefer Corporation, Cedarburg, Wis. Filed May 2, 1955.

AIRBOARD

For Outboard Motors and Parts Thereof.
First use Jan. 9, 1953.

SN 688,157. George M. Jones, d. b. a. Ace Products Company, Maple Glen, Pa. Filed May 24, 1955.

MELAWOOD

For Handles for Kitchen Tools and Kitchen Ware and Barbecue Tools and Barbecue Ware Such as Knives, Forks, Solid Turners, Slotted Turners, Drain Spoons, Solid Spoons, Tongs, Hot Dog Grills, Butter Brushes, Ladles, and Kebob Skewers, and Handles Therefor.
First use Apr. 21, 1955.

SN 688,331. Kearney & Trecker Corporation, West Allis, Wis. Filed May 26, 1955.

LIGHT-HEAVYWEIGHT

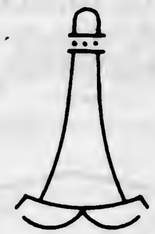
For Machine Tools—Namely, Drill Presses, Band Saws, Tilting Arbor Circular Saws, Radial Saws, Radial Drills, Bench and Pedestal Grinders, Radial Cut-Off Machines, Jig-Saws, Belt and Disc Abrading Machines, Flexible Shaft Driven Power Tools for Polishing, Grinding, Abrading, Drilling, Burring, Jointers, Lathes, Universal Air Feed, and Band Saw Blade Butt Welder Machines and Chop-Stroke Cut-Off Machines, and Structural Parts Thereof.
First use June 15, 1954.

SN 689,076. Porter-Cable Machine Company, Syracuse, N. Y. Filed June 7, 1955.

Yardmaster

For Power Operated Tools—Namely, Hedge Shears, Grass Trimmers, Power Operated Hand Manipulated Cultivator Devices, and Chain Saws.
First use June 7, 1954.

SN 689,389. Walter Hentzen & Co., Remscheid, Germany. Filed June 13, 1955.



Priority claimed under Sec. 44(d) on German application filed Jan. 19, 1955; Reg. No. 685,051, dated Dec. 2, 1955.
For Twist Drills, Reamers, Taps, and Milling Cutters.

SN 689,999. A. Friedr. Flender & Co., Bocholt, Germany. Filed June 22, 1955.

CAVEX

Owner of German Reg. No. 648,122, dated Nov. 16, 1953.
For Motors and Transmissions, Machine Housings and Machine Covers, Machine Supports, Machine Frames, Machine Beds, Machine Bodies, Vehicle Chains, Link Chains, Link Chains for Gradually Variable Transmissions, Worms, Worm Gears, Fly Wheels, Fly Wheel Discs, Belt Tighteners, Chain Tighteners, Friction Wheels, Ball Bearings, Shaft Couplings, Shafts, Stuffing Boxes, Gears, Gear Transmissions, Form Parts for V-Belt Links, Friction Blocks, Steam Engines, Steam Turbines, Diesel Engines, Gas Motors, Otto Combustion Motors, Airplane Motors, Motor Car Engines, Water Turbines, Cranes, Machine Tools and Automatic Machine Tools, Shiftable Couplings for Machines, Cams, Levers, Connecting Rods and Piston Rods, Cam Shafts, Cam Discs, Cranks, Crank Shafts, Rope Pulleys, Caps and Guards, All Being Parts of Machines, Mechanical Starters, Speed Governors, Variable Transmissions, V-Belt Pulleys, Bevel Gears, Couplings, Resilient Couplings, Coupling Linings, Coupling Levers, Friction Disc Couplings, Claw Couplings, Bearing Bushings, Bearing Brackets, Wheels, Friction Gears, Friction Clutches, Lubricating Systems, Roller Bearings, Lubricating Presses, Grease Presses, Valves for Steam Engines and Motors.

SN 690,781. Whirlpool Corporation, St. Joseph, Mich., to Whirlpool-Seeger Corporation, St. Joseph, Mich. Filed July 5, 1955.

Whirlpool

For Lawn Mowers.
First use May 2, 1955.

SN 691,316. Nordberg Manufacturing Company, Milwaukee, Wis. Filed July 14, 1955.

SYMONS V SCREEN

Owner of Reg. Nos. 397,143, 564,264, and 587,193.
For Screening and Separating Equipment—Namely, Vibratory and Gyratory, Dry and Wet Screens and Bar Grizzlies.
First use Apr. 11, 1955.

SN 693,004. Borg-Warner Corporation, Chicago, Ill. Filed Aug. 15, 1955.

MORLIFE

For Clutches, Clutch Assemblies, and Parts Thereof for Replacement and Repair.
First use on or about July 30, 1955.

SN 695,142. Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany. Filed Sept. 22, 1955.



Owner of German Reg. No. 304,346, dated July 24, 1923; and U. S. Reg. Nos. 93,081 and 278,454.
For Internal Combustion Engines and Parts Thereof.

SN 697,154. William H. Drake, d. b. a. Draco Products Co., Goleta, Calif. Filed Oct. 26, 1955.

LULLABY LINE

For Device for Storing and Unlocking Safety Pins.
First use Oct. 19, 1955.

SN 697,586. South Bend Lathe Works, South Bend, Ind. Filed Nov. 2, 1955. Sec. 2(f).

TRADE MARK SOUTH BEND TWINS ENGINE LATHES

Applicant disclaims the words "Trade Mark" and "Engine Lathes" apart from the mark as shown. Owner of Reg. Nos. 133,323, 528,563, and 530,097.
For Engine Lathes, Tool Room Lathes, Turret Lathes, Milling Machines, Shapers, Drill Presses, and Pedestal Grinders, Together With Attachments, Accessories, and Repair Parts Therefor.
First use Feb. 17, 1920, on lathes.

SN 698,987. Link Engineering Company, Detroit, Mich. Filed Nov. 28, 1955.

RING·SEAT

For Metal Cutting Drills.
First use Mar. 26, 1949.

SN 699,617. Robert Bosch Gesellschaft mit beschraenkter Haftung, Stuttgart, Germany. Filed Dec. 8, 1955.



Owner of German Reg. Nos. 231,561, dated May 5, 1919, 544,602, dated Apr. 23, 1942, and 636,389, dated Apr. 2, 1953.
For Lubricating Devices for All Kinds of Machines, Comprising Oil Pumps, Grease Pumps, Lubricant Distributors; Fuel Injection Equipment Used With Internal Combustion Engines Comprising Fuel Injection Pumps, Nozzles, Nozzle-Holders, Injection Timing Devices, Governors; Fuel Feed Pumps; Filters for Fuel and Oil; Flushing and Charging Blowers for Motors; Fluid Operated Equipment, Pressure and Vacuum Equipment, Servo Equipment, Said Equipments

Comprising Pumps, Motors, Actuating Cylinders, Valves, Control Apparatus, Pressure Accumulators; Coupling Devices, Connecting Parts, Switch Devices; Multi-Purpose Hand Motors, Drilling Machines and Supports for Drilling Machines, Drilling and Reaming Machines, Grinders, Nut Runners, Tappers, Sheet Metal Shears, Milling Machines, Polishers for Wet and Dry Polishing, Roll Pickers for Cleaning of Spinning Machines, Drill Hammers, Drilling Blowers, Boring Bars, Hard Metal Drilling Bits; Percussion Hammers, Plumber's Power Hammers, Builder's Power Hammers, Insert Tools, Such as Drills, Milling Cutter Files, Wood Working Tools (Rasps), Countersinking Tools, Filing Discs, Polishing Cups and Discs, Brushes, Grinding Discs, Shapers; Supports for Hand Motors; Motor Compressor Units; Vibrators; Electric Machines and Accessories (for Commercial Use) for Preparing Food Comprising Kneaders, Mixers, Liquidizers, Slicers, Shredders, Pommes-Frites (Potato Chip) Discs, Potato Peelers, Citrus Presses, Meat Mincers, Juice Extracting Attachments, Grating Attachments, Noodle-Making Attachments, Fritter-Making Attachments, Sausage Stuffers; Gear Coupling Devices; Motor Compressor Units; Devices for Moving Front Loaders, Stern Loaders, Mobile Cranes, Fork Trucks, Tractors or Trailers With Power Lifts or Tilters.

SN 700,538. Studebaker-Packard Corporation, Detroit, Mich. Filed Dec. 23, 1955.

TWIN-TRACTION

For Automotive Drive Components—Namely, Differentials and Parts Therefor.
First use Nov. 4, 1955.

SN 369. Rogers Iron Works Company, Joplin, Mo. Filed Jan. 9, 1956.

QUADROLL

For Rock and Ore Crushers.
First use November 1953.

SN 1,313. S. L. Allen & Co., Inc., Philadelphia, Pa. Filed Jan. 24, 1956.

PLANETILLER

Owner of Reg. Nos. 12,765, 530,926, and others.
For Motor Driven Ground-Working Agricultural Implements.
First use Aug. 30, 1955.

SN 1,314. S. L. Allen & Co., Inc., Philadelphia, Pa. Filed Jan. 24, 1956.

SUPERIDER

For Motor Driven Wheeled Tractors.
First use Jan. 3, 1956.

SN 2,500. Case Company, Pasadena, Calif. Filed Feb. 13, 1956.

ONE SHOT SHAVER

For Razors.
First use Nov. 16, 1955.

SN 2,533. Injecto-Pak Corporation, New York, N. Y. Filed Feb. 13, 1956.

VAC-ALL

For Packaging and Heat Sealing Machines.
First use Sept. 7, 1955.

SN 2,548. Metropolitan Vacuum Cleaner Co., Inc., New York, N. Y. Filed Feb. 13, 1956.

Stratford

For Sewing Machines and Parts.
First use June 1955.

SN 2,778. James B. Gibbens, Houston, Tex. Filed Feb. 16, 1956.

AIR-DRECO

For Hydraulic Power Units and Pneumatic and Hydraulic Cylinders.
First use Apr. 15, 1954.

SN 2,813. The Premier Autoware Company, Cleveland, Ohio. Filed Feb. 16, 1956.



For Automotive Parts and Supplies—Namely, Bearings, Sleeve, Ball and Roller; Carburetors and Parts Thereof; Clutch Assembly Parts; Camshaft Assembly Parts, Safety Expansion Plugs; Files, Wrenches and Hack Saw Blades; Fuel Pumps and Parts Thereof; Gear Shift Assembly Parts; Retainers for Valve Springs, Valve Guides, and Piston Pins; Transmission Assembly Parts; Universal Joint Assembly Parts; Valve Seats, Rocker Arms and Parts Thereof; Wheel Bearings and Cones; Water Pumps and Parts Thereof; Pulleys; Cylinder Head Assembly Parts; Differential Assembly Parts; Engine Mountings and Supports; Transmission Mountings and Supports; Manifold Assembly Parts; and Oil Pan Assembly Parts.
First use Sept. 1, 1951.

SN 2,872. Fotomatic Corporation, d. b. a. Scooper Co., Indianapolis, Ind. Filed Feb. 17, 1956.

SOOPER DOOPER POOPER SCOOPER

For Manually Operated Tong-Like Implements for Use in the Picking Up and Removal of Litter.
First use on or about Dec. 1, 1954.

SN 2,934. Vital Products Manufacturing Company, Cleveland, Ohio. Filed Feb. 17, 1956.

CHEK FLOW

For Caulking Guns.
First use August 1955.

SN 2,946. Browning Manufacturing Co., San Antonio, Tex. Filed Feb. 20, 1956.

BMCO

For Mobile Rock Crushing Machines, Sheeps-Foot Rollers, and Mobile Compactors.
First use 1946.

SN 3,163. Dreier Brothers, Inc., Chicago, Ill. Filed Feb. 23, 1956.

COMMANDO

For Hack Saws.
First use Feb. 6, 1956.

SN 3,273. The Capewell Manufacturing Company, Hartford, Conn. Filed Feb. 24, 1956.

SAFETECH

For Hand and Power Hack Saw Blades.
First use Jan. 10, 1951.

SN 3,285. Electrographic Corporation, d. b. a. Mid West Body & Mfg. Division Electrographic Corporation, New York, N. Y. Filed Feb. 24, 1956.

Jeffo-Lift

For Tail Gate Loaders.
First use Jan. 25, 1956.

SN 3,354. Cincinnati Lathe & Tool Co., Cincinnati, Ohio. Filed Feb. 27, 1956.

HARDCAD

For Machine Tools—Namely, for Lathes and Drilling Machines.
First use Aug. 29, 1955.

CLASS 24

SN 699,453. Sam Zuckerberg, d. b. a. The Zuckerberg Company, New York, N. Y. Filed Dec. 5, 1955.

2 IN 1

For Press Covers for Presses.
First use July 1948.

SN 699,870. Wichita Precision Tool Co., Inc., Wichita, Kans. Filed Dec. 12, 1955.

STA-VENT

For Fixture for Holding Together Coat Tails During Dry Cleaning.
First use Dec. 2, 1955.

SN 700,081. Butts Manufacturing Co., Burbank, Calif. Filed Dec. 19, 1955.

PARA-LINE

For Clothes Dryers.
First use June 21, 1954.

SN 700,377. Jasco, Miami, Fla. Filed Dec. 21, 1955.

CLOTHES-"A"-CLEAN

For Laundry Washing Machines.
First use Nov. 3, 1955.

SN 390. Wrought Iron Range Company, St. Louis, Mo. Filed Jan. 9, 1956.

HOME COMFORT · SINCE 1864 · ST. LOUIS, MO.

The words "Since 1864" and "St. Louis, Missouri" are disclaimed apart from the mark as shown. Owner of Reg. Nos. 61,357, 588,530, and others.
For Clothes Washers and Dryers and Ironers.
First use Oct. 1, 1951.

SN 1,957. Intercontinental Manufacturing Company, Inc., Garland, Tex. Filed Feb. 2, 1956.

Imco

For Dry Cleaning and Laundry Equipment.
First use Aug. 31, 1955.

SN 2,123. General Motors Corporation, Detroit, Mich. Filed Feb. 6, 1956.



For Laundry Equipment—Namely, Washing, Drying, and Ironing Machines, and Parts Thereof.
First use in or before December 1946.

SN 2,311. Ringlet Clothespin, Inc., West Boylston, Mass. Filed Feb. 8, 1956.

RINGLET

For Plastic Clothespins.
First use Feb. 1, 1954.

SN 2,584. The Speed Check Company, Inc., Atlanta, Ga. Filed Feb. 13, 1956.

SPEED CHECK

For Laundry Identification Devices Comprising Numbered Fabric Tags Having a Safety Pin Therein, Which Are Clipped to a Board in Regular Sequences.
First use August 1950.

SN 2,991. J F D Manufacturing Co., Inc., Brooklyn, N. Y. Filed Feb. 20, 1956.

V-LINE

For Clothes Dryer.
First use Feb. 7, 1956.

SN 3,597. Duplex Automatic Appliance Corp., Evanston, Ill. Filed Feb. 29, 1956.

DUPLEX

For Washing Machines and Parts Thereof.
First use Jan. 17, 1956.

CLASS 26

SN 635,988. Gerald C. Welch, d. b. a. Superior Indicator Company, Rochester, N. Y. Filed Sept. 30, 1952. Sec. 2(f).

SUPERIOR

For Dial Indicator Gages for Surface Testing and Parts Therefor.
First use Apr. 20, 1950.

SN 681,378. Weehawken Engineering & Mfg. Co., Weehawken, N. J. Filed Feb. 9, 1955.

WEMCo

For Battery Cell Testing Machines.
First use 1920.

SN 696,415. D. & E. Laboratories Supply Corp., Philadelphia, Pa. Filed Oct. 14, 1955.

BON FIDE

For Hospital and Laboratory Equipment—Namely, Pipettes, Microscope Slides, Thermometers, Microtome Knives, Laboratory Glassware, and Micro Cover Glasses.
First use September 1953.

SN 697,168. Kay Electric Company, Pine Brook, N. J. Filed Oct. 26, 1955.

ULTRA-PIX

For Apparatus for Use in Testing Television Sets and Being Capable of Converting a Low Frequency Video Signal to a High Frequency Signal in the Ultra High Frequency Range.
First use early in 1954.

SN 697,191. Serio S. P. A. Officine Meccaniche di Precisione, Milan, Italy. Filed Oct. 26, 1955.

Everest

Owner of Italian Reg. No. 107,655, dated Dec. 18, 1951.
For Adding, Calculating, and Account Machines and Parts Thereof.

SN 698,695. Mrs. Thomas P. Faulconer, d. b. a. Caliputer, also known as Barbara Dauchy Faulconer, Rancho Santa Fe, Calif. Filed Nov. 22, 1955.

Caliputer

For Combination Caliper and Slide Rule.
First use Mar. 31, 1955.

SN 699,696. Bausch & Lomb Optical Company, Rochester, N. Y. Filed Dec. 9, 1955.

Dynoptic

For Microscopes.
First use Aug. 17, 1954.

SN 699,785. Else, Inc., Cincinnati, Ohio. Filed Dec. 12, 1955.

FIT-MASTER

For Dress and Suit Patterns.
First use Nov. 15, 1955.

SN 699,873. R. C. Allen Business Machines, Inc., Grand Rapids, Mich. Filed Dec. 13, 1955.



Owner of Reg. Nos. 344,515, 376,211, and 376,212.
For Calculating Devices.
First use Aug. 8, 1955.

SN 699,930. Benjamin Shyer, d. b. a. Eastern States Optical Co., New York, N. Y. Filed Dec. 13, 1955.

Accurex

For Spectacle Lenses.
First use Oct. 1, 1955.

SN 700,024. General Motors Corporation, Detroit, Mich. Filed Dec. 15, 1955. Sec. 2(f).

HARRISON

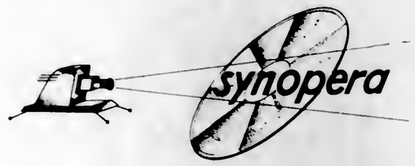
Owner of Reg. Nos. 194,357 and 338,106.
For Thermostats.
First use in or before 1932.

SN 700,248. Joseph Morreale, Harvard, Ill. Filed Dec. 19, 1955.

ROLLA MAP RULER

Applicant disclaims the term "Map Ruler" except as a part of the trademark "Rolla Map Ruler."
For Roller Mileage Calculators.
First use Nov. 29, 1955.

SN 700,499. David Bronstein, d. b. a. Synopera Corporation, Toronto, Ontario, Canada. Filed Dec. 23, 1955.



For Films, Film Strips, Grooved Phonograph Records, Electrical Signalling Devices, Projectors, All for Presenting Sound and Pictures of Operas by Projection and Sound Reproduction.
First use May 31, 1955.

SN 1,218. Denoyer-Geppert Company, Chicago, Ill. Filed Jan. 23, 1956.

BIOCRAFT

For Anatomical Models, Zoological Models, Anatomical Demonstration Specimens Preserved in Liquid in Transparent Containers, Botanical Charts, Zoological Charts and Skeletal Preparations, All of the Said Goods Being for Laboratory Demonstration or Scientific Study.
First use Jan. 10, 1956.

SN 2,532. Hyran, Inc., Los Angeles, Calif. Filed Feb. 13, 1956.

HYRAN

For Photographic Apparatus and Equipment, Particularly Photographic Printing, Developing, Washing, and Drying Machines.
First use July 2, 1955.

SN 2,625. Eastman Kodak Company, Rochester, N. Y. Filed Feb. 14, 1956.

REOMAR

For Photographic Lenses.
First use June 1952.

SN 2,682. Art Color Printing Company, New York, N. Y. Filed Feb. 15, 1956.

"HARD DOT"

For Positive Plates and Film for Use in Photogravure Printing.
First use Feb. 9, 1956.

SN 2,909. J. B. Perrin & Co., Inc., Culver City, Calif. Filed Feb. 17, 1956. Sec. 2(f) as to "Perrin."

Perrin Contur

For Camera Bags.
First use Oct. 1, 1955, and Apr. 7, 1947, as to "Perrin."

CLASS 27

SN 691,216. Arthur Imhof, d. b. a. Arthur Imhof, Manufacture de Pendulettes et Reveils, La Chaux-de-Fonds, Switzerland, to Manufacture de Pendulettes et Reveils Arthur Imhof, S. A., La Chaux-de-Fonds, Switzerland. Filed July 13, 1955.

IMHOF

Owner of Swiss Reg. No. 108,439, dated Sept. 28, 1944.
For Desk Clocks, Alarm Clocks, Travel Watches, Clocks, Watches for Vessels, Motor-Car Watches, and Watch Dials of All Kinds.

SN 691,744. Berco Inc., New York, N. Y. Filed July 22, 1955.

Bercona

For Watches.
First use June 14, 1955.

CLASS 28

SN 1,048. Axel Bros., Inc., Long Island City, N. Y. Filed Jan. 19, 1956. Sec. 2(f).

"TRU-FIT"

Owner of Reg. Nos. 558,565 and 617,825.
For Finger Rings and Components Thereof.
First use on or about Jan. 1, 1949.

SN 3,359. Coro, Inc., New York, N. Y. Filed Feb. 27, 1956.

Glitter Bobs

For Heavily Ornamented and Decorated Bobby-Pins.
First use Feb. 9, 1956.

SN 3,424. Joseph J. McDermott, New York, N. Y. Filed Feb. 27, 1956.

CALF-LINKS

For Leg Anklets, Bands, Chains, and Bracelets.
First use Feb. 7, 1956.

CLASS 29

SN 666,373. Morse-Starrett Products Company, Oakland, Calif. Filed May 14, 1954.

Magi-Klip

For Squeegees and Parts Thereof for Window Washers.
First use on or about Nov. 3, 1953.

SN 2,140. W. E. Kautenberg Co., Freeport, Ill. Filed Feb. 6, 1956.

QUICK-WAY

For Mops.
First use on or about Jan. 16, 1956.

SN 2,286. A. W. Faber-Castell Pencil Co., Inc., Newark, N. J. Filed Feb. 8, 1956.

ROCK-A-TYPE CLEANER

For Applicator for Plastic Type Cleaning Material, for Use in Typewriting.
First use Dec. 10, 1955.

SN 2,411. Gem, Incorporated, Byhalia, Miss. Filed Feb. 10, 1956.

KLEEN-O

For Brooms and Mops.
First use in 1916.

SN 2,412. Gem, Incorporated, Byhalia, Miss. Filed Feb. 10, 1956.

SPRUSUP

For Brooms and Mops.
First use Dec. 31, 1942.

CLASS 30

SN 700,161. Pickard, Incorporated, Antioch, Ill. Filed Dec. 22, 1955.

PICKARD CHINA

The word "China" per se is disclaimed.
For Pottery, Earthenware, China and Porcelain, Specifically, Large Cups, Saucers, Soups, Vegetable Dishes, Platters, Gravy Boats, Teapots, Sugars and Creamers, Candy Dishes, Coffee Pots, Mayonnaise Sets, Divided Relish Dishes, Cake Plates, and Vases.
First use 1938.

CLASS 31

SN 692,801. Wright E. Cowden, d. b. a. Perlite Industries, Terminal, Tex. Filed Aug. 10, 1955.

FLO-CLAR

For Filter Aid Material.
First use Jan. 13, 1955.

CLASS 32

SN 653,729. Nisse Strinning, Stockholm, Sweden. Filed Sept. 24, 1953.

Stiing

Priority claimed under Sec. 44(d) on Swedish application filed Mar. 25, 1953; Reg. No. 79,224, dated Nov. 11, 1955.
For Furniture—Namely, Tables, Table Leaves, Rolling Tables Such as Serving Tables and Tea-Carts; Writing Desks, Sofas, Sofa Beds; Chairs, Upholstered and Non-Upholstered, Rolling Chairs, Rocking Chairs; Bookcases, Magazine Racks, Wall Shelves, Corner Shelves; Chests of Drawers, Wall Cupboards, Under Window Cupboards, Wardrobes, Kitchen Racks and Shelves, Storage Cabinets; Beds, Bed Headboards With or Without Built in Cabinets, Bookcases, Shelves or the Like; Bed Footboards and Frames; Sectional Wall Furniture, Including Combinations of Shelving, Bookcases, Magazine Racks, Folding Tables, and Writing Desks.

SN 682,948. Magnetic Cards, Inc., Skokie, Ill. Filed Mar. 7, 1955.

MAGNE - DEX

For Index Card Files and Component Parts Thereof Including the Index Cards.
First use October 1949.

SN 686,909. Honorbilt Products, Inc., Philadelphia, Pa. Filed May 5, 1955.

HONOR-COTE

For Mattresses.
First use May 7, 1954.

SN 687,127. John B. Salterini Co., Inc., New York, N. Y. Filed May 9, 1955. Sec. 2(f).

NEVA-RUST

Owner of Reg. No. 363,026.
For Metal Tables, Chairs and Other Sitting Pieces for Porch and Lawn Use.
First use Jan. 11, 1937.

SN 687,816. Scope, Inc., Indianapolis, Ind. Filed May 18, 1955.

SCOPE

For Furniture—Namely, Sofas, Sofa Sleepers, Dinette Chairs and Tables, Occasional Chairs and Tables, Desks, Bar Stools, TV Stools, Buffets, and Outdoor Chairs.
First use June 1, 1953.

SN 687,853. Victor A. Chernivsky, d. b. a. Comfy-Babe Co., Downers Grove, Ill. Filed May 19, 1955.

Comfy-Babe

For Children's Furniture Such as Chairs, Crib-Beds and Clothes Stands, Costumers and Kiddie Valets.
First use on or about Jan. 1, 1955.

SN 690,580. Southern Tackle Distributors, Inc., Miami, Fla. Filed June 30, 1955.

Fin-Nor

For Portable Fishing Chairs.
First use Nov. 8, 1954.

SN 699,732. Harry E. Lucas, Grand Rapids, Mich. Filed Dec. 9, 1955.

KWIK-KOPY Indi-Kator

For Cabinet Having Special Filing Equipment.
First use January 1955.

SN 700,013. Ottis M. Carter, d. b. a. Spurlock & Carter Company, Nashville, Tenn. Filed Dec. 15, 1955.

SPURLOCK & CARTER Sunpruf CUSTOM VENETIAN

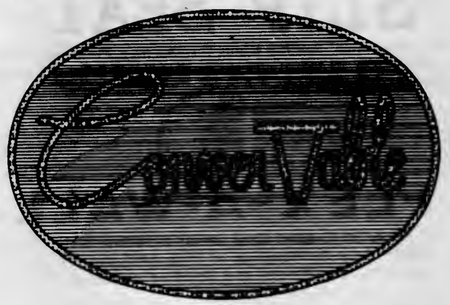
The expressions "Spurlock & Carter" and "Custom Venetian" are disclaimed apart from the mark shown.
For Venetian Blinds.
First use Jan. 1, 1950.

SN 700,417. The Hitchcock Chair Company, Riverton, Conn. Filed Dec. 16, 1955. Sec. 2(f).

L. HITCHCOCK-HITCHCOCKSVILLE-CONN.

Owner of Reg. Nos. 514,621 and 555,506.
For Dining, Lounge, and Occasional Chairs, Tables, and Headboards.
First use Dec. 14, 1948, on dining, lounge, and occasional chairs.

SN 364. Plyline Manufacturing Co., Los Angeles, Calif. Filed Jan. 9, 1956.



The drawing is lined for the colors blue and gold.
For Convertible Tables and Benches Therefor.
First use May 1954.

SN 2,318. Sperry Rand Corporation, New York, N. Y. Filed Feb. 8, 1956.

KARD-VEYER

For Card Filing Cabinets.
First use Aug. 29, 1955.

SN 2,585. Sperry Rand Corporation, New York, N. Y. Filed Feb. 13, 1956.

ROTO-KARD

For Card Index Files.
First use July 27, 1955.

SN 2,643. The May Department Stores Company, New York, N. Y. Filed Feb. 14, 1956.

SURETY

For Pillows.
First use 1947.

SN 2,913. Rochelle Furniture Mfg. Co., Montgomery, Pa. Filed Feb. 17, 1956.

"Babystep"

For Combination Baby Nursery Chair and Step Stool.
First use Feb. 1, 1955.

SN 3,140. Bebry Bedding Corporation, Bayonne, N. J. Filed Feb. 23, 1956.

Sofa-Pedic

For Convertible Innerspring Mattresses.
First use Jan. 25, 1956.

SN 3,220. Paramount Bedding Corporation, Norfolk, Va. Filed Feb. 23, 1956.

QUILT-O'-PEDIC

Owner of Reg. No. 420,403.
For Mattresses and Box Springs.
First use Jan. 3, 1956.

CLASS 33

SN 693,927. James I. North, Baltimore, Md. Filed Aug. 30, 1955.

SLIP NOT

For Glass Bottle.
First use Feb. 8, 1955.

CLASS 34

SN 659,835. United Sound & Signal Company, Inc., Columbia, Pa. Filed Jan. 20, 1954.

ORI-ETTE

For Electrically Operated Dehumidifiers.
First use Apr. 7, 1953.

SN 683,278. Construction Specialties, Inc., Newark, N. J. Filed Mar. 11, 1955.

C/S

For Ventilating Louvers for Use on Buildings.
First use Jan. 5, 1955.

SN 683,626. Sears, Roebuck and Co., Chicago, Ill. Filed Mar. 16, 1955. Sec. 2(f).

J C Higgins

For Camp Stoves and Gasoline Lanterns.
First use on or about Feb. 15, 1953.

SN 688,880. Acme Equipment Company, Muskogee, Okla. Filed June 6, 1955.

"FLO-MASTER"

For Automatic, Manual, and Motor Driven Ventilator Shutters, Wall and Ceiling Type.
First use Jan. 1, 1954.

SN 692,813. Standard Furnace Supply Co., Ltd., Omaha, Nebr. Filed Aug. 10, 1955.



No claim is made to the words "Standardized Products" apart from the mark shown.
For Furnace Pipe and Fittings.
First use May 28, 1952.

SN 68. Knapp-Monarch Company, St. Louis, Mo. Filed Jan. 3, 1956.

INSTA LITE

For Hydrocarbon Fuel Burning Torches, Lanterns, and Stoves.
First use Jan. 12, 1954.

SN 444. Prat-Daniel Corporation, South Norwalk, Conn. Filed Jan. 10, 1956.

PANELBLOC

For Radiant Heating Devices Operating on the Principle of Heating a Metal Panel Directly by Combustion of Gaseous or Liquid Fuel so That Heat Waves Produced on the Metal Panel Will Be Radiated to Areas or Objects To Be Heated.
First use Jan. 1, 1955.

SN 1,198. Bild-A-Vector Co. Inc., Wallingford, Conn. Filed Jan. 23, 1956.

BILD-A-VECTOR

For Radiator Pipe Fins.
First use Nov. 22, 1955.

SN 1,253. Luria Engineering Company, Division of Luria Steel & Trading Corporation, New York, N. Y. Filed Jan. 23, 1956.

FLAME SAW

For Acetylene-Oxygen Steel-Cutting Machine.
First use Dec. 30, 1955.

SN 1,561. American Optical Company, Southbridge, Mass. Filed Jan. 27, 1956.



For Lens Hardening and Heat Treating Furnaces.
First use Jan. 9, 1948.

SN 1,626. Radiant Heat and Cooling Corporation, Santa Clara, Calif. Filed Jan. 27, 1956.

RĀCON

For Radiant Heating Kits, Boilers, Manifolds, and Components of Wet Heating Systems.
First use on or about Apr. 15, 1955.

CLASS 35

SN 691,480. Johns-Manville Corporation, New York, N. Y. Filed July 18, 1955.

SLIP SEAL

For Mechanical Sealing Rings for Use as a Fluid Seal Operating Between Relatively Fixed and Movable Machine Parts.
First use May 25, 1955.

SN 699,285. The Bearfoot Sole Company, Inc., Wadsworth, Ohio. Filed Dec. 2, 1955.

FLEX-A-WALL

For White or Colored Ring About 3 Inches Wide of Rubber, Plastic or a Combination of Both Designed for Application Between Rim Flange and Bead of Pneumatic Tire To Provide a Color Contrast to Tires.
First use Nov. 11, 1955.

SN 2,734. Windsor-Lloyd Products, Inc., Philadelphia, Pa. Filed Feb. 15, 1956.

MOLDEX

For Brake Linings.
First use Mar. 28, 1935.

SN 2,754. Chicago Rawhide Manufacturing Company, Chicago, Ill. Filed Feb. 16, 1956.

conpor

For Specially Treated Leather for Use in Oil Seals and the Like.
First use July 6, 1955.

SN 2,792. Lee Rubber & Tire Corporation, d. b. a. Republic Rubber Division, Youngstown, Ohio. Filed Feb. 16, 1956.

CUSHER

Owner of Reg. No. 536,769.
For Fire Hose and Rotary Drilling Hose.
First use Feb. 15, 1917.

CLASS 36

SN 665,735. Sureo Industrias Musicales, S. R. L., New York, N. Y. Filed May 4, 1954.



For Mechanically Produced Grooved Phonograph Records.
First use July 1952.

SN 675,767. Charles Roy Cox, d. b. a. Kryslar Records, Columbus, Ohio. Filed Nov. 1, 1954.

"VOICES BACK TO BACK"
KRYSLAR RECORDS

For Grooved Phonograph Records.
First use Aug. 30, 1954.

SN 686,858. H. & A. Selmer Inc., Elkhart, Ind. Filed May 4, 1955. Sec. 2(f).

CHESTERFIELD



Owner of Reg. No. 416,583.
For Musical Instrument Cases.
First use Oct. 10, 1944.

SN 696,367. Joseph Koss, Hollywood, Calif. Filed Oct. 13, 1955.



The drawing is lined for green, red and black.
For Mechanically Grooved Phonograph Records.
First use Aug. 17, 1955.

SN 699,595. Richard Rahmey, d. b. a. Richcraft Recording Company, Brooklyn, N. Y. Filed Dec. 7, 1955.

RICHCRAFT

For Mechanically Grooved Phonograph Records.
First use Nov. 22, 1955.

SN 3,642. Verve Records, Inc., Beverly Hills, Calif. Filed Mar. 23, 1956.

Verve

For Grooved Phonograph Records and Jackets and Albums for Phonograph Records.
First use Jan. 20, 1956.

CLASS 37

SN 672,054. Consolidated Cover Co., San Francisco, Calif. Filed Aug. 23, 1954.

CONSECO

Owner of Reg. No. 367,881.
For Paper Products—Namely, Toilet Seat Covers, Paper Napkins, Paper Towels in Dispensing Containers and Sold as a Unit.
First use Jan. 12, 1939.

SN 679,951. Uhu-Werk H. u. M. Fischer, Buhl Baden, Germany. Filed Jan. 14, 1955.

UHU

Owner of German Reg. No. 615,651, dated Jan. 16, 1952.
For Pencils, Self-Feeding Pencils and Pressure-Feeding Pencils, Fountain Pens, Ball Point Pens.

SN 682,599. Strathmore Paper Company, West Springfield, Mass. Filed Mar. 1, 1955.

THISTLEBLOOM

Owner of Reg. No. 302,550.
For Writing and Printing Papers, and Paper Boards.
First use May 8, 1934.

SN 685,984. David Kahn, Inc., North Bergen, N. J. Filed Apr. 21, 1955.

LIQUAMATIC

For Pens and Pencils and Parts Thereof.
First use Apr. 7, 1955.

SN 689,353. Crocker, Burbank Papers Inc., Fitchburg, Mass. Filed June 13, 1955.

SAMSONITE

For Printing Paper.
First use January 1948.

SN 697,625. Joseph A. Gilosa, New York, N. Y. Filed Nov. 3, 1955.



For Paper Product Used To Prevent Baked Goods From Sticking to Pans.
First use Oct. 24, 1955.

SN 698,804. The Sorg Paper Company, Middletown, Ohio. Filed Nov. 23, 1955.

MASK-RITE

For Masking Paper.
First use Nov. 3, 1955.

SN 698,847. Crown Zellerbach Corporation, San Francisco, Calif. Filed Nov. 25, 1955.

CROWN POLY

Owner of Reg. Nos. 247,311, 602,383, and others.
For Polyethylene Coated Paper.
First use Aug. 17, 1955.

CLASS 38

SN 667,082. Brabender Corporation, Rochelle Park, N. J. Filed May 26, 1954.

AMYLOGRAM

For Chart Produced on a Recording Device Which Designates the Changing Viscosity of Gelatinizing Materials, Beginning at Approximately Room Temperature Until the Completion of the Test Which May Be After Gelatinization Is Completed or Continuing Through the Cooling Process.
First use in the year 1935.

SN 667,084. Brabender Corporation, Rochelle Park, N. J. Filed May 26, 1954.

FARINOGRAM

For Chart Produced on Recording Device, Which Records the Consistency or Viscosity of Flour Dough, Such as Its Absorption, Its Swelling or Development Time and Its Ability To Withstand Mechanical Abuse or Its Stability and Its Possible Breakdown Under Continued Mechanical Abuse.
First use in the year 1931.

SN 682,942. Little Bit of Ireland, Pittsburgh, Pa. Filed Mar. 7, 1955.

Little Bit of Ireland

For Greeting Cards.
First use Feb. 7, 1955.

SN 682,943. Little Bit of Ireland, Pittsburgh, Pa. Filed Mar. 7, 1955.



For Greeting Cards.
First use Feb. 7, 1955.

SN 684,836. H & K Sales Co., Kansas City, Mo. Filed Apr. 4, 1955.



For Road Maps.
First use Feb. 17, 1955.

SN 698,115. American Academy of Pediatrics, Evanston, Ill. Filed Nov. 14, 1955.



For Periodical Publications, Booklets, and Leaflets.
First use November 1940.

SN 698,372. Quigley Publishing Company, Inc., New York, N. Y. Filed Nov. 16, 1955. Sec. 2(f).

INTERNATIONAL MOTION PICTURE ALMANAC

Owner of Reg. No. 324,420.
For Annually Published Book in the Nature of an Almanac of the Motion Picture Industry.
First use July 11, 1936.

SN 699,517. Mowbray Engraving Co., Providence, R. I. Filed Dec. 6, 1955.

AUTO-ETCHED

For Screen Negatives Used in Printing.
First use Oct. 3, 1955.

SN 699,563. Hyde Manufacturing Company, Southbridge, Mass. Filed Dec. 7, 1955.

CARDOSELLS

For Printed Cards for Mounting Small Items for Sale.
First use Sept. 12, 1955.

SN 700,896. Printing News, Inc., New York, N. Y. Filed Dec. 30, 1955. Sec. 2(f).

Printing News

Owner of Reg. No. 547,360.
For Weekly Newspaper for the Graphic Arts.
First use 1928.

CLASS 39

SN 665,609. J. H. Kimball, Inc., New York, N. Y. Filed May 3, 1954.

lipstick wisper

Owner of Reg. Nos. 388,078 and 400,802.
For Handkerchiefs.
First use Oct. 18, 1951.

SN 674,494. Gerhard Bahner, d. b. a. Gerhard Bahner & Co. Strumpfwirkerei G. m. b. H., Lauingen-Donau, Germany, now by change of name to Gerhard Bahner Bi Strumpfwirkerei und Modische Strickerei Gesellschaft mit beschrankter Haftung. Filed Oct. 8, 1954.

Bi

Owner of German Reg. No. 636,534, dated Apr. 23, 1954.
For Hosiery for Use by Men, Women, Boys, and Girls.

SN 679,941. Lillian Russell Originals, Inc., Mobile, Ala. Filed Jan. 14, 1955.

Lillian Russell
Original

Applicant disclaims the use of the word "Original" apart from the mark as shown. "Lillian Russell" is a member of the board of directors of applicant, and consent is of record.
For Women's Dresses, Women's Coats, Women's Suits, and Women's Underwear.
First use Sept. 3, 1954.

SN 682,951. Maureen Manufacturing Co., Inc., Chicago, Ill. Filed Mar. 7, 1955.

Harry tarry tyon

For Women's Wraparound Robes.
First use Feb. 19, 1955.

SN 683,118. Huffman Full Fashioned Mills, Inc., Morganton, N. C. Filed Mar. 9, 1955.

TRUE SHAPE

For Ladies Hosiery.
First use Oct. 9, 1946.

SN 684,533. Chadbourn Hosiery Mills, Incorporated, Charlotte, N. C., now Chadbourn Gotham, Inc. Filed Mar. 30, 1955.

SHEER STREX

For Ladies' Hosiery.
First use March 1955.

SN 684,827. The Famise Corporation, Jackson, Mich. Filed Apr. 4, 1955.



For Foundation Garments—Namely, Corsets, Girdles, Brassieres, Supporting Belts, and Combinations of the Same.
First use on or about Nov. 13, 1930.

SN 689,192. Wolfson Manufacturing Company, Cincinnati, Ohio. Filed June 8, 1955. Sec. 2(f).

Short-Stuff

Owner of Reg. No. 525,170.
For Women's Clothing—Namely, Abbreviated Trousers or Trunks for Outer Wear, Bermudas, Bras, Caps, Grease Monkey Suits, Halters, Jackets, and Pedal Pushers.
First use on or about Nov. 4, 1948.

SN 695,471. L. B. Evans' Son Company, Wakefield, Mass. Filed Sept. 28, 1955. Sec. 2(f).



Owner of Reg. No. 505,235.
For Men's and Boys' Shoes and Slippers.
First use on or about Jan. 1, 1935.

SN 696,377. Refrigiwear Clothing Co., New York, N. Y. Filed Oct. 13, 1955.

CHILLBREAKER

For Insulated Clothing for Men and Women for Use at Low Temperatures, Including Liners for Use Under Outer Garments, Hoods, Hats, Jackets, Pants, One-Piece Suits, Two-Piece Suits, Mittens, Parkas, Vests, Socks, and Coats.
First use Mar. 15, 1955.

SN 696,378. Refrigiwear Clothing Co., New York, N. Y. Filed Oct. 13, 1955.

REFRIGIWEAR

For Insulated Clothing for Men and Women for Use at Low Temperatures, Including Liners for Use Under Outer Garments, Hoods, Hats, Jackets, Pants, One-Piece Suits, Two-Piece Suits, Mittens, Parkas, Vests, Socks, and Coats.
First use Oct. 13, 1954.

SN 696,689. Barclay Knitwear Co., Inc., New York, N. Y. Filed Oct. 19, 1955.

Amati

For Men's and Boys' Knitted Shirts, Sweaters, Jackets, Bathing Suits, Swimming Trunks, and Beach Robes.
First use Sept. 30, 1955.

SN 697,114. Peter Pan Foundations, Inc., New York, N. Y. Filed Oct. 25, 1955.

COMFY-CUFF

For Brassieres, Girdles, and Bathing Suits.
First use Aug. 25, 1955.

SN 158. Ornsteen Shoe Company, Inc., Haverhill, Mass. Filed Jan. 4, 1956.

CUSHIONED-FLOCKED

For Women's Shoes.
First use Sept. 20, 1955.

SN 463. Valsey-Bristol Shoe Company Incorporated, Monett, Mo. Filed Jan. 10, 1956.

JUMPING JILLS

Owner of Reg. Nos. 442,147, 529,925, and others.
For Shoes of Leather.
First use about May 23, 1955.

SN 471. The Associated Merchandising Corporation, New York, N. Y. Filed Jan. 11, 1956. Sec. 2(f).

Burke

For Men's Shoes Made of Leather, Rubber, and Fabric, and Combinations of These Materials.
First use Aug. 1, 1931.

SN 487. Danvers Hose Company, Inc., Manchester, N. H. Filed Jan. 11, 1956.

CHICO MOCS

Owner of Reg. No. 531,839.
For Men's, Women's, and Children's Shoes, Slippers, and Moccasins.
First use Aug. 30, 1949.

SN 577. Curtis, Eddy-Form Co., New York, N. Y. Filed Jan. 12, 1956.

Sea Star BY Curtis Eddy-form

For Slips, Nightgowns, Petticoats, Play Suits, and Bathing Suits for Ladies.
First use Dec. 1, 1955.

SN 756. Craddock-Terry Shoe Corporation, Lynchburg, Va. Filed Jan. 16, 1956.

GENT-L-ARCH

For Shoes Made of Leather, Fabric, or Combinations Thereof.
First use Jan. 6, 1956.

SN 770. Sybil Finks, Morton, Pa. Filed Jan. 16, 1956.

HANKY-DO

For Felt Pin-On Pockets.
First use Aug. 18, 1955.

SN 781. The H. C. Godman Company, Columbus, Ohio. Filed Jan. 16, 1956.

Tarsal Tred

Owner of Reg. No. 296,696.
For Shoes Constructed of Leather.
First use Dec. 3, 1931.

SN 817. Miller-Jones Company, Columbus, Ohio. Filed Jan. 16, 1956.



For Shoes Constructed of Leather.
First use Nov. 5, 1930.

SN 1,212. Charles F. Clark, Omaha, Nebr. Filed Jan. 23, 1956.

NON-TRACKER

For Flexible Sheets of Suitable Material Adapted To Be Folded Over and Around the Shoes of a User Prior to the Entrance of Said User Into a Dwelling or the Like for Preventing a Tracking of Mud and Debris Into Said Dwelling.
First use on or about Nov. 4, 1955.

SN 1,216. Darbury Fashions Co., New York, N. Y. Filed Jan. 23, 1956.

DARBURY

For Women's and Misses' Dresses.
First use Jan. 10, 1956.

SN 1,384. The Olympic Glove Company, Inc., New York, N. Y. Filed Jan. 24, 1956.

AL - COOL

For Industrial Gloves.
First use Oct. 6, 1955.

SN 1,393. Walda Scott Originals, Inc., d. b. a. Scott Enterprises, New York, N. Y. Filed Jan. 24, 1956.

BUNNIE-TWIST

For Ladies' Suits.
First use Jan. 13, 1956.

SN 1,515. Formaid Co., Boston, Mass. Filed Jan. 26, 1956.

MY BELOVED

For Brassieres.
First use Jan. 11, 1956.

SN 1,540. Peter Pan Foundations, Inc., New York, N. Y. Filed Jan. 26, 1956.

Bonus Bra

The word "Bra" is disclaimed apart from the mark as shown.
For Brassieres.
First use Dec. 28, 1955.

SN 1,590. I. C. Isaacs & Company, Inc., Baltimore, Md. Filed Jan. 27, 1956.

WHIPSAW

For Ladies' and Girls' Dungarees and Slacks.
First use Jan. 4, 1956.

SN 1,637. United Mills Corporation, Mount Gilead, N. C. Filed Jan. 27, 1956.

GILEAD

Owner of Reg. No. 548,420.
For Sleepwear and Lingerie—Namely, Nightgowns, Pajamas, Peignoirs, Bra-Slips, Slips, and Petticoats.
First use June 14, 1950.

SN 1,690. Hollywood-Maxwell Co., Los Angeles, Calif. Filed Jan. 30, 1956.

THE WIZARD OF BRAS

Owner of Reg. No. 603,353.
For Brassieres.
First use Jan. 4, 1956.

SN 1,731. Snug Fit Foundations Company, New York, N. Y. Filed Jan. 30, 1956.

Braggle Dazzle

For Corselettes, Brassieres, and Foundations.
First use Dec. 27, 1954.

SN 1,866. Gaylord Products, Incorporated, Chicago, Ill. Filed Feb. 1, 1956.

GAYLA

Owner of Reg. Nos. 427,943, 579,184, and others.
For Wave Nets and Bandeaus.
First use May 18, 1950.

SN 1,904. Rite Form Corset Co., Inc., New York, N. Y. Filed Feb. 1, 1956.

IM-PRESS

For Brassieres and Corsets.
First use Jan. 24, 1956.

SN 4,081. Old Hickory Company, Inc., Hickory, N. C. Filed Mar. 1, 1956.

OLD HICKORY

Owner of Reg. Nos. 370,066, 517,222, and others.
For Overalls, Overall Coats, Pants and Dungarees, Shirts, Hunting Coats and Pants, One-Piece Suits, and Children's Play Suits, Not Made of Hickory Fabrics.
First use March 1913.

SN 5,340. Cluett, Peabody & Co., Inc., Troy, N. Y. Filed Mar. 28, 1956.

FORMALLY YOURS

For Ensembles Comprising a Necktie, Handkerchief, and Boutonniere.
First use May 28, 1954.
Subj. to Intf. with SN 694,288.

CLASS 40

SN 1,961. Koh-I-Noor, Spojene Kovoprumyslove Zavody, Narodni Podnik also named Koh-I-Noor, United Metalware Factories, National Corporation, Prague, Czechoslovakia. Filed Feb. 2, 1956.



Owner of Czechoslovakian Reg. No. 93,083, dated Jan. 10, 1927.
For Closures and Fasteners Made From Non-Precious Metals for Wearing Apparel—Namely, Buttons, Snap Fasteners, Buckles, Hook and Eye Fasteners, Shoe Rings; Crochet Hooks and Crochet Needles; Hand Knitting and Netting Needles; Mending and Darning Needles; Needles for Hand-Sewing; Bodkins; Thimbles; Combs; Collar Studs; Pins and Clips Made From Non-Precious Metals—Namely, Safety Pins, Hair Pins, Scarf Pins, Bobby Pins, Barrettes, and Hair Grips.

CLASS 42

SN 675,114. Worumbo Manufacturing Company, Lisbon Falls, Maine. Filed Oct. 19, 1954. Sec. 2(f).

Wonderful Worumbo Woolen

Owner of Reg. Nos. 66,483, 266,287, and others.
For Piece Goods Made in Whole or Substantially in Part of Wool and/or Precious Wool Fibers—Namely, Cashmere, Camel Hair, Alpaca, Mohair, and Vicuna.
First use on or about July 15, 1949.

SN 689,195. Joseph Bancroft & Sons Co., Wilmington, Del. Filed June 22, 1955.

MINICARE

For Cellulosic Piece Goods.
First use on or about June 6, 1955.

SN 696,093. Hamilton Adams Imports Limited, New York, N. Y. Filed Oct. 10, 1955. Sec. 2(f).

FLAXTWEED

For Piece Goods Made of Linen.
First use Oct. 5, 1932.

SN 696,190. J. P. Stevens & Co. Inc., New York, N. Y. Filed Oct. 10, 1955.

RESILICON

For Piece Goods of Wool, Silk, Linen, Synthetic Fibres, and Combination Thereof.
First use Aug. 12, 1955.

SN 696,440. Harvey Mills, Inc., New York, N. Y. Filed Oct. 14, 1955.

Sari Toga

For Fabrics in the Piece, Made of Natural and Synthetic Yarns.
First use Aug. 18, 1955.

SN 699,602. United Merchants and Manufacturers, Inc., New York, N. Y. Filed Dec. 7, 1955.

TRI-SET

For Piece Goods of Cotton, Wool, Silk, Synthetic Fibers, and/or Combinations Thereof Adapted for Use as Upholstery and Drapery Fabrics.
First use on or about Oct. 7, 1955.

SN 226. Father George Mills, Inc., Sanford, N. C. Filed Jan. 25, 1956.



For Cotton Grey Fabrics.
First use November 1900.

SN 234. Burlington Industries, Inc., New York, N. Y. Filed Jan. 6, 1956.

SHAGBARK

For Combed Cotton Fabrics.
First use Jan. 12, 1953.

SN 239. Comptoir des Textiles Artificiels, Paris, France. Filed Jan. 6, 1956.

MERYL

Owner of French Reg. No. 398,190, dated Nov. 24, 1949 (Seine) ; Natl. Inst. No. 461,657.
For Rayon Fabrics, Household Linens Including Bed Sheets, Pillow Cases, Table Cloths and Napkins, Lace Piece Goods, Textile Ribbons.

SN 241. Comptoir des Textiles Artificiels, Viscose Francaise & Givetizieux, Societe en nom Collectif, Paris, France. Filed Jan. 6, 1956.

MERYLTEX

Owner of French Reg. No. 445,335, dated Aug. 5, 1954 (Seine) ; Natl. Inst. No. 41,306.
For Rayon Fabrics, Household Linens Including Bed Sheets, Pillow Cases, Table Cloths and Napkins, Lace Piece Goods, Textile Ribbons.

SN 346. The May Department Stores Company, New York, N. Y. Filed Jan. 9, 1956.

SURETY

Owner of Reg. No. 361,514.
For Towels, Bed Blankets, Bed Sheets and Pillowcases, Mattress Protectors, Pillow Protectors, Mattress Covers, and Table Linens.
First use 1926 on sheets, pillow cases, and table linens.

CLASS 43

SN 694,311. The Firestone Tire & Rubber Company, Akron, Ohio. Filed Sept. 7, 1955.

Firestone Coron

For Elastic Thread.
First use Apr. 22, 1955.

SN 240. Comptoir des Textiles Artificiels, Paris, France. Filed Jan. 6, 1956.

MERYL

Owner of French Reg. No. 398,190, dated Nov. 24, 1949 (Seine) ; Natl. Inst. No. 461,657.
For Rayon Yarn.

SN 242. Comptoir des Textiles Artificiels, Viscose Francaise & Givet-Izieux, Societe en nom Collectif, Paris, France. Filed Jan. 6, 1956.

MERYLTEX

Owner of French Reg. No. 445,335, dated Aug. 5, 1954 (Seine) ; Natl. Inst. No. 41,306.
For Rayon Yarn.

SN 1,791. Kaminow Bros., New York, N. Y. Filed Jan. 31, 1956.



No claim is made to the word "Crochet" apart from the mark shown.
For Crochet Yarn.
First use in June 1955.

CLASS 44

SN 681,306. Seaboard Chemical Corporation, South Orange, N. J. Filed Feb. 8, 1955.

BAND-ASEPTIC

For Film Forming Liquids for Application to Cuts, Wounds, Scratches, and Abrasions of the Human Body To Protectively Cover and To Aid in Healing Them.
First use Sept. 4, 1954.

SN 687,064. Georgette Company, Denver, Colo. Filed May 9, 1955.

Georgette's 7 POINT HELMET

The word "Helmet" is disclaimed apart from the rest of the mark.
For Hair Drying Helmets.
First use on or about Apr. 9, 1955.

SN 688,631. Dorko-Stahlwarenfabrik, Solingen-Merscheid, Germany. Filed June 1, 1955.



Owner of German Reg. No. 642,660, dated Aug. 14, 1953.
For Scissors, Cuticle Scissors, Nail Scissors, Hair Scissors, Nail Clippers, Nail Files, Manicure Implements.

SN 690,872. Ellis Research Laboratories, Inc., Chicago, Ill. Filed July 7, 1955.

Micro-Dynameter

For Apparatus for Diagnosis and Treatment in Medical and Chiropractic Practice.
First use 1932.

CLASS 45

SN 700,873. C. C. Lang & Son, Inc., Baltimore, Md. Filed Dec. 30, 1955.

REAL KOOL

For Concentrates Used in Making Soft Drinks.
First use Oct. 14, 1955.

SN 465. Waukesha Roxo Corporation, d. b. a. Waukesha Roxo Company, Waukesha, Wis. Filed Jan. 10, 1956.

Roxo

For Carbonated Water, Spring Water, Distilled Water, and Soft Drinks.
First use Apr. 1, 1907.

SN 540. Blue Seal Extract Co., Inc., Cambridge, Mass. Filed Jan. 12, 1956.

SUNNY BOY

Owner of Reg. No. 278,193.
For Non-Alcoholic, Maltless Beverages Sold as Fruit and Soft Drinks and Syrups and Extracts Therefor.
First use during 1939 on syrups.

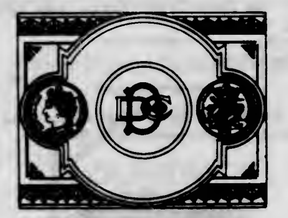
SN 730. Amos R. Beamon, d. b. a. Pop-Ete Co., Los Angeles, Calif. Filed Jan. 16, 1956.

POP-ETS

For Tablets for Making Soft Drinks.
First use Feb. 15, 1955.

CLASS 46

SN 660,339. McPhillips Packing Corporation, Bayou La Batre, Ala. Filed Jan. 29, 1954. Sec. 2(f).



Owner of Reg. Nos. 241,350 and 319,165.
For Canned Shrimp, Canned Oysters, and Canned Prawns.
First use 1878.

SN 660,373. American Food Laboratories, Inc., Brooklyn, N. Y. Filed Feb. 1, 1954.

VARI-TOP

For Berry, Butterscotch, Chocolate Fudge, and Chocolate Syrups Used as Sundae Toppings, Fountain Toppings and Variegating Syrups for Ice Cream Manufacturing.
First use on or about Sept. 1, 1953.

SN 668,470. Roberts Dairy Company, Omaha, Nebr. Filed June 18, 1954.

VADALL

For Dairy Spread Consisting of Cream, Dried Buttermilk, Non-Fat Dry Milk Solids, Salt, Etc.
First use May 6, 1954.

SN 671,277. San-A-Pure Dairy Company, Findlay, Ohio. Filed Aug. 6, 1954.

San-a-Pure

For Fluid Milk, Fluid Cream, Butter, Cheese, and Ice Cream.
First use Feb. 1, 1928.

SN 672,067. F & F Laboratories, Inc., Chicago, Ill. Filed Aug. 23, 1954.

COFFEE BREAK

For Hard Candy.
First use Aug. 14, 1954.

SN 672,973. The Page Dairy Company, Toledo, Ohio. Filed Sept. 9, 1954.

Henry A. Page
CREST QUALITY

The phrase "Spe Labor Levis" means "hope lightens labor."
Owner of Reg. No. 354,335.
For Fluid Milk.
First use Oct. 19, 1952.

SN 673,206. Staengel & Ziller Eszet Kakao- und Schokoladefabrik, Stuttgart-Untertuerkheim, Germany. Filed Sept. 14, 1954.

Eszet

For Cooking and Baking Chocolate, Cocoa, Candies, and Baked Goods—Namely, Biscuits, Cookies, Gingerbread, Wafers, Tarts, and Small Pies.
First use July 5, 1904.

SN 673,738. Grace Chemical Company, New York, N. Y., to W. R. Grace & Co., New York, N. Y. Filed Sept. 24, 1954.

A WORLD OF EXPERIENCE

For Urea Feed Compound Used as a Substitute for Protein in Ruminant Animal Feeds.
First use Aug. 31, 1954.

SN 675,514. Hart's Candies, Chicago, Ill. Filed Oct. 26, 1954.

HART'S CANDIES
ENJOY SOME EVERY DAY

The word "Candies" and the wording "Enjoy Some Every Day" are disclaimed apart from the mark shown.
For Candies.
First use on or about Oct. 1, 1950.

SN 678,244. Mayfield Milling Company, Incorporated, Mayfield, Ky. Filed Dec. 13, 1954.

DOUBLE MM
MORE VALUE MORE ECONOMY MORE GROWTH MORE PRODUCTION

For Livestock and Poultry Feeds.
First use Oct. 20, 1954.

SN 679,800. W. Sheinker & Son, Inc., d. b. a. Holland House Sales Co., Woodside, N. Y. Filed Jan. 12, 1955.

Holland House

For Maraschino Cherries and Pitted Olives Sold in Bottles.
First use Oct. 20, 1949.

SN 680,922. Ernst Wittkopf, West New York, N. J. Filed Feb. 1, 1955.

The Tropical
Fish Food King's
Special



The picture shown on the drawing is that of applicant. The expression "The Tropical Fish Food King's Special" is disclaimed apart from the mark shown.
For Fish Food.
First use Sept. 15, 1952.

SN 681,779. The Napoleon Creamery Company, Napoleon, Ohio. Filed Feb. 16, 1955. Sec. 2(f).

Napoleon

For Fresh Eggs.
First use 1920.

SN 681,792. Edwin M. Plitt Sons, Chicago, Ill. Filed Feb. 16, 1955.

Sailor Girl



For Canned Oysters.
First use Sept. 1, 1950.

SN 682,634. General Mills, Inc., d. b. a. Sperry Flour Co., Minneapolis, Minn. Filed Mar. 2, 1955. Sec. 2(f).

SPERRY'S
SUPERLATIVE

Owner of Reg. Nos. 134,294, 387,925, and 532,104.
For Wheat Flour.
First use 1930.

SN 683,796. Minute Maid Corporation, New York, N. Y. Filed Mar. 18, 1955. Sec. 2(f).

MINUTE MAID

Owner of Reg. No. 555,105.
For Frozen Strawberries and Frozen Lima Beans.
First use on or about Mar. 1, 1954, on frozen lima beans.

SN 684,975. Santiago Development Corporation, New York, N. Y. Filed Apr. 5, 1955.

MEGUSTO

The word "Megusto" is a translation of two Spanish words which in English would mean "I liked it."
For Powdered Milk.
First use Nov. 3, 1954.

SN 686,229. Santiago Development Corporation, New York, N. Y. Filed Apr. 25, 1955.

MAVIS

For Breakfast Cereals.
First use Nov. 15, 1954.

SN 686,245. Peter Vest Sales Corporation, Glen Head, N. Y. Filed Apr. 25, 1955.



Applicant disclaims the word "Popcorn" apart from the mark. The generally accepted translation of "Kiowa" is "principal people."
For Popcorn in the Raw State.
First use Apr. 19, 1955.

SN 686,826. Groeneveld Company, Inc., New York, N. Y. Filed May 4, 1955.

LA ISLA

For Smoked Pork Shoulder Picnics and Lard.
First use Mar. 4, 1955.

SN 687,014. Swift & Company, Chicago, Ill. Filed May 6, 1955.



No registration rights are claimed for the representation of the product, apart from the depiction of a fanciful smiling face thereon.
For Frozen Meat Pies and Frozen Poultry Pies.
First use Apr. 14, 1955.

SN 687,209. Kountry Kitchens Foods, Inc., Philadelphia, Pa. Filed May 10, 1955.

KOUNTRY KITCHENS

For Frozen Foods—Namely, Hungarian Style Goulash and Irish Brand Beef Stew.
First use Nov. 1, 1953.

SN 687,596. Interstate Bakeries Corporation, Kansas City, Mo. Filed May 16, 1955.

Dolly Madison



The drawing is lined for red, but color is not claimed.
Owner of Reg. No. 375,163.
For Cakes.
First use Feb. 23, 1955; and since 1912 as to "Dolly Madison."

SN 688,983. Mama Weiss Foods, Inc., Los Angeles, Calif. Filed June 6, 1955.



"Mama Weiss" is the name by which Fani Weiss is known in the field of culinary arts, television broadcasting, etc. The portrait is that of Fani Weiss, whose consent to the use and registration of her name and portrait is of record.
For Horseradish Sauce and Salad Dressings.
First use June 3, 1954.

SN 689,167. W. Sheinker & Son, Inc., d. b. a. Holland House Sales Co., Woodside, N. Y. Filed June 8, 1955.

Holland House
TAYSTEE CHAR

For Seasoning for Meats, Fish, and Fowl.
First use May 19, 1955.

SN 689,209. The Chief Dairy Products Company, Upper Sandusky, Ohio. Filed June 9, 1955.



The drawing is lined for blue and yellow.
For Poultry and Stock Food Comprising Condensed Whey.
First use Feb. 15, 1955.

SN 690,347. Taylor Food Hobbies, Los Angeles, Calif. Filed June 27, 1955.



Owner of Reg. No. 598,571.
For Dunking Sauce, the Principal Ingredients of Which Are: Catsup, Water, Tomato Paste, Distilled Vinegar, Worcestershire Sauce, Onion Powder, Sugar, and Spices.
First use July 27, 1954.

SN 690,409. St. Lawrence Sea Products Co., Quebec, Canada. Filed June 28, 1955.



Owner of Canadian Reg. Nos. N. S. 12,061, N. S. 12,062, and 100,368, dated Sept. 11, 1939, Sept. 11, 1939, and Mar. 25, 1955, respectively.
For Fresh Fish, Frozen Fish, Salted Fish, Pickled Fish, Canned Fish, and Canned Shellfish.

SN 690,410. St. Lawrence Sea Products Co., Quebec, Canada. Filed June 28, 1955.



The Italian word "Primo" is translated into English as "first." Owner of Canadian Reg. Nos. N. S. 11,995 and N. S. 12,063, dated May 1, 1934, and Sept. 11, 1939, respectively.
For Fresh Fish, Frozen Fish, Salted Fish, Pickled Fish, Canned Fish, and Canned Shellfish.

SN 692,824. R. Stenzel Foods, Inc., San Leandro, Calif. Filed Aug. 1, 1955.

TIM'S

Owner of Reg. Nos. 430,533, 556,145, and 564,606.
For Pickles; and Tomato Relish.
First use Nov. 11, 1952.

SN 694,291. North State Canning Company, Inc., Boone, N. C. Filed Aug. 18, 1955.

WATAUGA

Owner of Reg. No. 507,839.
For Canned Vegetables.
First use June 1, 1926.

SN 697,117. The Nestlé Company, Inc., White Plains, N. Y. Filed Oct. 25, 1955.

NESTLÉ'S
DECAF

Owner of Reg. Nos. 357,353, 605,903, and others.
For Decaffeinated Instant Coffee.
First use Sept. 8, 1955.

CLASS 49

SN 693,154. Kobrand Corporation, New York, N. Y., to James Burrough Limited, London, England. Filed Aug. 16, 1955.

BORZOI
WOLFHOUND

For Vodka.
First use July 6, 1955.

SN 695,176. J. & J. Pallas, Nerac, France. Filed Sept. 22, 1955.

San Gil

For Brandy.
First use 1946; in commerce 1949.

SN 697,455. The American Distilling Company, New York, N. Y. Filed Nov. 1, 1955.

PIPING ROCK

For Gin, Sloe Gin, Liqueur, Peppermint Schnapps, Rock and Rye, Brandy, Kummel, Anisette, Creme de Cacao, and Creme de Menthe.
First use Dec. 20, 1935.

SN 977. Joseph S. Finch and Company, New York, N. Y. Filed Jan. 18, 1956.

Greenbrier

For Whiskey.
First use Sept. 1, 1891.

CLASS 50

SN 686,821. Flex-O-Plate Corporation, Chicago, Ill. Filed May 4, 1955.

FLEX-O-BAK

For Pliable Mounting for Printing Die.
First use on or about Jan. 27, 1955.

SN 688,379. Addressograph-Multigraph Corporation, Cleveland, Ohio. Filed May 27, 1955.

ADDRESSOcolor

Owner of Reg. Nos. 399,318, 400,367, and others.
For Identification Printing Plates, Before and After Embossing Thereof.
First use May 12, 1955.

SN 691,051. Marshall N. Long, Manitowoc, Wis. Filed July 11, 1955.

Rugged Cross

For Electrified and Non-Electrified Crosses To Be Used for Display Purposes, Such as at Christmas Time.
First use June 10, 1955.

SN 696,873. Copper Cat, Inc., Attleboro, Mass. Filed Oct. 21, 1955.



For Supplies and Kits for Home Fabrication of Jewelry, Novelties, and Utilitarian Items, Said Supplies and Kits Consisting of Raw Materials, Tools, and Prefinished Elements.
First use Aug. 30, 1955.

SN 700,012. The Burns & Russell Company of Baltimore City, d. b. a. The Burns & Russell Company, Baltimore, Md. Filed Dec. 15, 1955.

SPECTRA-CAST

Owner of Reg. Nos. 615,720 and 584,145.
For Cast Display Sign Letters.
First use Nov. 29, 1955.

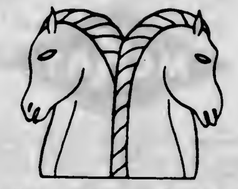
CLASS 51

SN 690,010. Long & Hickling Products, North Chicago, Ill. Filed June 22, 1955.

B-twix

For Personal Deodorant.
First use Apr. 12, 1955.
Subj. to Intf. with SN 691,636.

SN 695,315. Lee Limited, d. b. a. Courtley Co., Beverly Hills, Calif. Filed Sept. 26, 1955.



Owner of Reg. Nos. 441,731, 441,730, and 441,355.
For Deodorant Cologne, Talcum Powder, After Shave Preparation in Stick Form, After Shave Lotion, Cologne, Body Powder, Personal Deodorant, Hair Grooming Preparation, After Shave Cologne, Scented Preparation for the Bath.
First use September 1937 on after shave lotion.

SN 695,316. Lee Limited, d. b. a. Courtley Co., Beverly Hills, Calif. Filed Sept. 26, 1955.

Courtley

Owner of Reg. Nos. 336,823 and 441,731.
For Deodorant Cologne, Talcum Powder, After Shave Preparation in Stick Form, After Shave Lotion, Cologne, Body Powder, Personal Deodorant, Hair Grooming Preparation, After Shave Cologne, Scented Preparation for the Bath.
First use Feb. 3, 1936, on after shave lotion.

CLASS 52

SN 661,889. The Hewitt Soap Company, Inc., Dayton, Ohio. Filed Mar. 2, 1954. Sec. 2(f).

RADIANT

Owner of Reg. Nos. 98,803 and 510,540.
For Sudsing Cleaner, Cleanser, and Detergent.
First use Jan. 22, 1914.

SN 663,194. Industrial Soap Company, St. Louis, Mo. Filed Mar. 24, 1954.

ENCORE

For Toilet Soap and Detergent Preparations for Cleaning Glassware, China, Silverware, and the Like.
First use Jan. 18, 1954.

SN 675,843. George Stearns Chemical Corp., Madison, Wis. Filed Nov. 1, 1954.

STRIKE

For Compounds for Sequential Use in Washing and Disinfecting Glassware, Chinaware, Eating Utensils, and the Like.
First use May 11, 1954.

SN 682,841. Acme Chemical Company, Milwaukee, Wis. Filed Mar. 7, 1955.

SWYPE

Owner of Reg. No. 547,377.
For Cleaning Compound for Toilet Bowls, Flush Traps, and the Like.
First use Nov. 23, 1928.

SN 687,866. Edward M. King, d. b. a. McKay Mfg. Co., Los Angeles, Calif. Filed May 19, 1955. Sec. 2(f).

SINCE 1902 McKAY

For Soaps, Cleaners, Detergents, and Solvents Such as Floor Cleaner, Car Wash, Engine Cleaner, Metal Cleaner, Mechanic's Hand Soap, and the Like.
First use on or about Feb. 28, 1946.

SN 694,312. The Hewitt Soap Company, Inc., Dayton, Ohio. Filed Sept. 7, 1955.

Lana

For Toilet and Bath Soap.
First use Apr. 1, 1942.

SN 695,848. Saks & Company, New York, N. Y. Filed Oct. 4, 1955. Sec. 2(f).

SAKS-FIFTH AVENUE

For Toilet Soaps, Bath Soaps, and Shampoos.
First use Sept. 15, 1924.

SN 696,937. Boyer Chemical Company, Chicago, Ill. Filed Oct. 24, 1955. Sec. 2(f).

BOYER'S

For All Purpose Cleaner in Powder Form and for a Compound for Cleaning Glass Surfaces.
First use Jan. 1, 1940.

SN 697,814. Miller and Carrell Mfg. Co., Denver, Colo. Filed Nov. 7, 1955.

"SPEEDSTER"

Owner of Reg. No. 501,920.
For Cleaner for Deep Fat Fryers.
First use on or about July 19, 1954.

SN 698,183. Lazarus Laboratories, Inc., Division of West Disinfecting Company, Buffalo, N. Y. Filed Nov. 14, 1955.

KLEENOSAN N-8

Owner of Reg. No. 565,573.
For Liquid Cleaner Sanitizer for Farm and Dairy Use.
First use Sept. 23, 1955.

SN 243. Helene Curtis Industries, Inc., Chicago, Ill. Filed Jan. 6, 1956.

ENDEN

For Shampoo.
First use Oct. 28, 1955.

SERVICE MARKS

CLASS 101

SN 653,019. Fordyce Kimbell, d. b. a. Fordyce Kimbell Describer Patents, Coral Gables, Fla. Filed Sept. 10, 1953.

"THE DESCRIBER"

For Consultation and Advice Concerning the Installation of Visual Annunciating Equipment for Annunciating the Position of the Contestants at Various Stages of a Race at a Race Track and the Servicing and Operation Thereof.
First use in or about 1937.

CERTIFICATION MARKS

CLASS A

SN 2,059. United States Department of Agriculture, Washington, D. C. Filed Feb. 3, 1956.

USDA

The mark certifies that the goods comply with the quality standards set by applicant. Owner of Reg. Nos. 559,448 and 614,913.
For Butter, Dry Milk Solids, Shell Eggs, Poultry, Egg Products.
First use July 12, 1951, on butter.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

628,471. POLYFOAM. Whitehouse Distributors, Inc., to The General Tire & Rubber Company. SN 678,172. Pub. 3-27-56. Filed 12-10-54.

628,472. SHADOWLITE. Ampac Metal Die Company, Inc. SN 678,178. Pub. 3-27-56. Filed 12-13-54.

628,473. MODERN INDUSTRIES INC. MI. Modern Industries, Inc. SN 678,467. Pub. 3-27-56. Filed 12-16-54.

628,474. AERO SEALZ. United States Rubber Company. SN 679,247. Pub. 3-27-56. Filed 12-31-54.

628,475. CELOPAK. The Celotex Corporation. SN 679,717. Pub. 3-27-56. Filed 1-11-55.

628,476. MIN-A-PLEX ETC. Joseph T. Budd-Jack, d. b. a. Art Craft Sales Co. SN 680,721. Pub. 3-27-56. Filed 1-31-55.

628,477. WHITEX. U. S. Rubber Reclaiming Co., Inc. SN 682,770. Pub. 3-27-56. Filed 3-3-55.

628,478. "THE ROSARY." The Rosary Flower Company. SN 683,994. Pub. 3-27-56. Filed 3-22-55.

628,479. METCO. Metallizing Engineering Co. Inc. SN 687,962. Pub. 3-27-56. Filed 5-20-55.

628,480. FOREST PARK. Corneli Seed Company. SN 688,025. Pub. 3-27-56. Filed 5-23-55.

628,481. COSMIC CALF. B. D. Eisendrath Tanning Co. SN 688,513. Pub. 3-27-56. Filed 5-31-55.

628,482. SILVER MEDAL. W. Atlee Burpee Co. SN 689,460. Pub. 3-27-56. Filed 6-14-55.

628,483. KING KOB. William W. Ringheim, d. b. a. Iowa Corn By Products Co. SN 690,328. Pub. 3-27-56. Filed 6-27-55.

CLASS 2

628,484. JOY. Rex Cutlery Corporation. SN 665,724. Pub. 3-27-56. Filed 5-4-54.

628,485. USI AND DESIGN. U. S. Industries, Inc. SN 679,431. Pub. 3-27-56. Filed 1-4-55.

628,486. TRI-GRAVE. The Perfection Steel Body Company. SN 686,079. Pub. 3-27-56. Filed 4-22-55.

628,487. TRUMPET-WARE. Trump Plastics, Inc. SN 697,866. Pub. 3-27-56. Filed 11-7-55.

CLASS 3

628,488. DESIGN OF DIAMOND. Diamond Calk Horse Shoe Company. SN 692,458. Pub. 3-27-56. Filed 8-4-55.

628,489. SAKS-FIFTH AVENUE. Saks & Company. SN 694,671. Pub. 3-27-56. Filed 9-14-55.

628,490. CARRY-ME. H. Daust Mfg. Co. SN 694,780. Pub. 3-27-56. Filed 9-16-55.

CLASS 4

628,491. SIMONIZ. Simoniz Company. SN 667,750. Pub. 3-27-56. Filed 6-4-54.

628,492. FLOURISH. U. S. Sanitary Specialties Corporation. SN 692,101. Pub. 3-27-56. Filed 7-28-55.

628,493. SAPHIR. Societe Anonyme des Laboratoires Saphir Anciens Etablissements Destagnol Freres. SN 693,776. Pub. 3-27-56. Filed 8-26-55.

628,494. ACRACUT. Barrett Equipment Company. SN 693,965. Pub. 3-27-56. Filed 8-31-55.

628,495. MINUTE LUSTO. Ekco Products Company. SN 695,469. Pub. 3-27-56. Filed 9-28-55.

628,496. TACK-A-DISC. Alton E. Tobey, d. b. a. Tobey Rasp Service. SN 695,782. Pub. 3-27-56. Filed 10-3-55.

628,497. SCRUBBEE. Scrubbee Products Corp. SN 695,950. Pub. 3-27-56. Filed 10-5-55.

628,498. STANZOL. H. V. Smith Company. SN 696,202. Pub. 3-27-56. Filed 9-29-55.

628,499. DEEP GLOSS. S. C. Johnson & Son, Inc. SN 125. Pub. 3-27-56. Filed 1-26-56.

CLASS 5

628,500. TYLON. Emulsified Asphalts, Incorporated. SN 687,689. Pub. 11-22-55. Filed 5-17-55.

628,501. MACCO-LASTIC. The Macco Chemical Company. SN 695,828. Pub. 3-27-56. Filed 10-4-55.

CLASS 6

628,502. VITA-SAN. United Finish Company, to The Blumberg Company. SN 674,482. Pub. 3-27-56. Filed 10-7-54.

628,503. ACCO. American Cyanamid Company. SN 683,470. Pub. 3-27-56. Filed 3-15-55.

628,504. SOILDUSTO. Miller Products Company. SN 685,842. Pub. 3-27-56. Filed 4-19-55.

628,505. PROMULGEN. Robinson-Wagner Company, Inc. SN 685,997. Pub. 3-27-56. Filed 4-21-55.

628,506. RAID. S. C. Johnson & Son, Inc. SN 688,044. Pub. 3-27-56. Filed 5-23-55.

628,507. GENACRON. General Aniline & Film Corporation. SN 688,816. Pub. 3-27-56. Filed 6-3-55.

628,508. BLACK LEAF AND DESIGN. Diamond Black Leaf Company. SN 690,944. Pub. 3-27-56. Filed 7-8-55.

628,509. CATALIN. Catalin Corporation of America. SN 691,824. Pub. 3-27-56. Filed 7-25-55.

628,510. "DU-LITE" OXIBLAK. The Du-Lite Chemical Corporation. SN 691,840. Pub. 3-27-56. Filed 7-25-55.

628,511. DURA-WOOD. Darworth Incorporated. SN 691,934. Pub. 3-27-56. Filed 7-26-55.

628,512. NICE. A-M-R Chemical Co., Inc. SN 691,978. Pub. 3-27-56. Filed 7-27-55.

628,513. POLITOL. West Virginia Pulp and Paper Company. SN 692,032. Pub. 3-27-56. Filed 7-27-55.

628,514. HI-CHEM. Hidalgo Chemical Company. SN 692,140. Pub. 3-27-56. Filed 7-29-55.

628,515. HIDALGO HI-CHEM ETC. AND DESIGN. Hidalgo Chemical Company. SN 692,142. Pub. 3-27-56. Filed 7-29-55.

CLASS 7

628,516. BLUE RIBBON AND DESIGN. Clement L. Yancey, Jr., d. b. a. Greensboro Twine & Paper Company, and as Greensboro Twine Company. SN 681,383. Pub. 3-6-56. Filed 2-9-55.

CLASS 9

628,517. AGENT. Colt's Manufacturing Company. SN 688,907. Pub. 3-27-56. Filed 6-6-55.

CLASS 10

628,518. FERRO. The Ferro Corporation. SN 645,296. Pub. 3-27-56. Filed 4-15-53.

628,519. FERT-O-PELS. The Farm Bureau Cooperative Association, Inc. SN 696,226. Pub. 3-27-56. Filed 10-11-55.

628,520. TRIPLE TREAT. The Consumers Cooperative Association. SN 696,413. Pub. 3-27-56. Filed 10-14-55.

CLASS 12

628,521. "SLIKWAY." New Jersey Foundry & Machine Company. SN 697,181. Pub. 2-7-56. Filed 10-26-55.

CLASS 13

628,522. MANNESMANN. Mannesmann Aktiengesellschaft. SN 678,410. Pub. 3-27-56. Filed 12-15-54.

628,523. DESIGN OF ARM AND HAMMER. Armstrong Bros. Tool Co. SN 683,650. Pub. 3-27-56. Filed 3-17-55.

628,524. SIERRA SIZZLER. Wire Specialties Co. SN 685,798. Pub. 3-27-56. Filed 4-18-55.

628,525. SIERRA. Wire Specialties Co. SN 685,799. Pub. 3-27-56. Filed 4-18-55.

628,526. TOILAFLEX. The Stevens-Burt Company. SN 690,342. Pub. 3-27-56. Filed 6-27-55.

628,527. CIRCLE SEAL. James-Pond-Clark. SN 695,698. Pub. 3–27–56. Filed 10–3–55.

628,528. SECO AND DESIGN. Samuel Eastman Co., Inc. SN 695,708. Pub. 3–27–56. Filed 10–3–55.

628,529. SOLAR QUEEN. U. S. Industries, Inc. SN 696,082. Pub. 3–27–56. Filed 10–7–55.

628,530. ALLUME AND DESIGN. Irrigation Equipment Co., Inc. SN 696,148. Pub. 3–27–56. Filed 10–10–55.

628,531. MINE-LINE. Manufacturers Corporation of Mansfield, Ohio. SN 696,156. Pub. 3–27–56. Filed 10–10–55.

628,532. WEDGEGRIP. West Virginia Steel and Manufacturing Company. SN 696,198. Pub. 3–27–56. Filed 10–10–55.

628,533. W AND DESIGN. Western Pottery Company, Inc. SN 696,199. Pub. 3–27–56. Filed 10–10–55.

628,534. SAF-T-EST. Saftest Bracket Co. SN 696,380. Pub. 3–27–56. Filed 10–13–55.

628,535. PIPCO. Plastic Irrigation Products Co. SN 696,585. Pub. 3–27–56. Filed 10–17–55.

628,536. PALCO AND DESIGN. Worcester Pressed Aluminum Corp. SN 696,616. Pub. 3–27–56. Filed 10–17–55.

628,537. MICA-RAMIC. Spruce Pine Mica Company. SN 696,675. Pub. 3–27–56. Filed 10–18–55.

628,538. WEATHCO. The Weatherhead Company. SN 696,680. Pub. 3–27–56. Filed 10–18–55.

628,539. HUDSON. H. D. Hudson Manufacturing Company. SN 696,984. Pub. 3–27–56. Filed 10–24–55.

628,540. SAFOMATIC. A-1 Bit & Tool Company, Incorporated, to U. S. Industries, Inc. SN 697,073. Pub. 3–27–56. Filed 10–25–55.

628,541. FLUOSEAL. Dorr-Oliver Incorporated. SN 697,153. Pub. 3–27–56. Filed 10–26–55.

628,542. POLYQUIP. Hedeman Products, Incorporated. SN 697,162. Pub. 3–27–56. Filed 10–26–55.

628,543. "MH" WITHIN A CIRCLE. M & H Valve & Fittings Company. SN 697,175. Pub. 3–27–56. Filed 10–26–55.

CLASS 14

628,544. "67." The International Nickel Company, Inc. SN 699,236. Pub. 3–27–56. Filed 12–1–55.

628,545. WEAR O MATIC. Drawalloy Corporation. SN 700,021. Pub. 3–27–56. Filed 12–15–55.

CLASS 15

628,546. CACTUS CX–7. Southwestern Petroleum Company, Inc. SN 688,588. Pub. 3–27–56. Filed 5–31–55.

628,547. PENN-PORT AND DESIGN. Penn-Port Oil Company. SN 689,155. Pub. 3–27–56. Filed 6–8–55.

628,548. SULNAP. Continental Oil Company. SN 692,043. Pub. 3–27–56. Filed 7–28–55.

628,549. PINOL. Continental Oil Company. SN 692,044. Pub. 3–27–56. Filed 7–28–55.

628,550. SOHIOWAX. The Standard Oil Company. SN 692,168. Pub. 3–27–56. Filed 7–29–55.

628,551. CACTUS SILVER-SEAL. Southwestern Petroleum Company, Inc. SN 692,873. Pub. 3–27–56. Filed 8–11–55.

628,552. FEENOM. Stiglitz Sales Company, d. b. a. Feenom Laboratories. SN 692,875. Pub. 3–27–56. Filed 8–11–55.

628,553. REV-UP. Berkeley Models, Inc. SN 694,956. Pub. 3–27–56. Filed 9–20–55.

628,554. FREE SLIDE. Freit Laboratories, Inc. SN 695,151. Pub. 3–27–56. Filed 9–22–55.

628,555. POLYMOIL. Plas-Kem Corporation. SN 695,177. Pub. 3–27–56. Filed 9–22–55.

628,556. H AND DESIGN. Hangaterfer's Laboratories, Inc. SN 695,220. Pub. 3–27–56. Filed 9–23–55.

628,557. TURBANE. Gaseteria, Inc. SN 695,298. Pub. 3–27–56. Filed 9–26–55.

CLASS 18

628,558. THERAGRAN. Mathieson Chemical Corporation, now by merger and change of name Olin Mathieson Chemical Corporation. SN 662,877. Pub. 3–27–56. Filed 3–18–54.

628,559. CONSTITUTIONAL AND DESIGN. Xttrium Co. SN 687,022. Pub. 3–27–56. Filed 5–6–55.

628,560. A-P-N FOR PAIN. Miles Laboratories, Inc. SN 691,065. Pub. 3–13–56. Filed 7–11–55.

628,561. TEEBACONIN. Consolidated Midland Corporation. SN 691,666. Pub. 3–27–56. Filed 7–21–55.

628,562. SKINLIFE. Skinlife, Incorporated. SN 692,956. Pub. 3–27–56. Filed 8–12–55.

628,563. DEQUADIN. Allen & Hanburys, Limited. SN 692,995. Pub. 3–27–56. Filed 8–15–55.

628,564. TEOQUIL. Allen & Hanburys, Limited. SN 692,996. Pub. 3–27–56. Filed 8–15–55.

628,565. CARBROGESIC. The Bowman Brothers Drug Co. SN 693,005. Pub. 3–27–56. Filed 8–15–55.

628,566. HYDROBASE. Merck & Co., Inc. SN 693,168. Pub. 3–27–56. Filed 8–16–55.

628,567. HYDROPTIC. Merck & Co., Inc. SN 693,171. Pub. 3–27–56. Filed 8–16–55.

828,568. ROXINOID. Merck & Co., Inc. SN 693,326. Pub. 3–27–56. Filed 8–18–55.

628,569. TEMPOGEN. Merck & Co., Inc. SN 693,327. Pub. 3–27–56. Filed 8–18–55.

628,570. MI-PO AND DESIGN. Elbert M. Miller, d. b. a. E. M. Miller Mfg. Co. SN 693,558. Pub. 3–27–56. Filed 8–23–55.

628,571. ESKASERP. Smith Kline & French Laboratories. SN 698,556. Pub. 3–27–56. Filed 11–18–55.

CLASS 19

628,572. DUREX. Prazision-Werke Bruninghaus & Co. SN 642,160. Pub. 7–26–55. Filed 2–12–53.

628,573. WAECO. James A. Watson, Jr., d. b. a. Watson Automotive Equipment Company. SN 665,326. Pub. 3–27–56. Filed 4–27–54.

628,574. WAECO PATHFINDER. James A. Watson, Jr., d. b. a. Watson Automotive Equipment Company. SN 665,327. Pub. 3–27–56. Filed 4–27–54.

628,575. BADGER. Badger Tool & Mfg. Co. SN 686,135. Pub. 3–27–56. Filed 4–25–55.

628,576. FUZON. Brake Lining Supply Co., Inc. SN 691,273. Pub. 3–27–56. Filed 7–14–55.

628,577. SAFE-T-MATE. Jeffrey-Allan Industries, Inc. SN 697,482. Pub. 3–27–56. Filed 11–1–55.

CLASS 21

628,578. PARR ELECTRIC CO. WHEN TIME COUNTS COUNT ON PARR AND DESIGN. Parr Electric Co., Inc. SN 626,406. Pub. 3–27–56. Filed 3–13–52.

628,579. "THE HEART OF A GOOD TELEVISION RECEIVER" AND REPRESENTATION OF A HEART. DX Radio Products Co. SN 627,737. Pub. 3–27–56. Filed 4–8–52.

628,580. REPUBLIC ENAMELITE. Republic Steel Corporation. SN 664,356. Pub. 3–27–56. Filed 4–12–54.

628,581. ELTRONIK AND DESIGN (CIRCLES). Blaupunkt Elektronik G. m. b. H. SN 664,504. Pub. 3–27–56. Filed 4–14–54.

628,582. TRUVOX. Truvox Limited. SN 670,708. Pub. 3–27–56. Filed 7–27–54.

628,583. BICO AND DESIGN. Belock Instrument Corporation. SN 670,719. Pub. 3–27–56. Filed 7–28–54.

628,584. "SCIALYTIQUE." Anciens Etablissements Barbier-Benard & Turenne. SN 677,848. Pub. 3–27–56. Filed 10–13–54.

628,585. MARATHON. Marathon Battery Company. SN 679,402. Pub. 3–27–56. Filed 1–4–55.

628,586. K AND DESIGN. Killark Electric Manufacturing Company. SN 679,588. Pub. 5–10–55. Filed 1–7–55.

628,587. DECORÉ. S. Gluck & Co., Inc. SN 680,193. Pub. 3–27–56. Filed 1–20–55.

628,588. RANSBURG AND DESIGN. Ransburg Electro-Coating Corp. SN 680,798. Pub. 3–27–56. Filed 1–31–55.

628,589. DESIGN OF CIRCLE WITH 2 BARS. Accumulatoren-Fabrik Aktiengesellschaft. SN 684,258. Pub. 12–27–55. Filed 3–28–55.

628,590. TEMPROTEX. Daniel Woodhead Company. SN 684,904. Pub. 3–27–56. Filed 4–4–55.

628,591. RAYTHEON AND DESIGN. Raytheon Manufacturing Company. SN 686,850. Pub. 3–27–56. Filed 5–4–55.

628,592. MAGNA-PAK. Essex Wire Corporation. SN 688,517. Pub. 3–27–56. Filed 5–31–55.

628,593. CONRAD THE CONTROL AND REPRESENTATION OF A GROTESQUE FIGURE. Dixie Controller, Inc. SN 689,613. Pub. 3–27–56. Filed 6–16–55.

628,594. MUSIC-MAID. Guild Radio and Television Company. SN 691,855. Pub. 3–27–56. Filed 7–25–55.

628,595. REMCON. Pyramid Instrument Corp. SN 692,351. Pub. 3–27–56. Filed 8–2–55.

628,596. STROMBERG CARLSON SOUND AND DESIGN. General Dynamics Corporation. SN 692,594. Pub. 3–27–56. Filed 8–8–55.

628,597. TIME-O-SWITCH. Minneapolis-Honeywell Regulator Company. SN 693,070. Pub. 3–27–56. Filed 8–15–55.

628,598. TRU-RIP. The Whitney Blake Company. SN 698,686. Pub. 3–27–56. Filed 11–22–55.

CLASS 22

628,599. GOO-GOO. Wil-Lar, Inc., to William H. Larsen. SN 687,660. Pub. 3–27–56. Filed 5–16–55.

628,600. HANS BRINKER. Hans Brinker, Inc. SN 687,674. Pub. 3–27–56. Filed 5–17–55.

628,601. SPINFIN. James Heddon's Sons. SN 688,242. Pub. 3–27–56. Filed 5–25–55.

628,602. BALLOON FACE. Alfred S. Jonaitis, d. b. a. Mercury Products. SN 691,218. Pub. 3–27–56. Filed 7–13–55.

CLASS 23

628,603. FREE PUMP. Dresser Equipment Company, d. b. a. Kobe Inc. Division of Dresser Equipment Co., to Kobe, Inc. SN 657,899. Pub. 3–6–56. Filed 12–14–53.

628,604. K KELLER TOOLS AND DESIGN. Keller Tool Company, to Gardner-Denver Company. SN 660,732. Pub. 3–27–56. Filed 2–8–54.

628,605. NEWS VEND. United Sound & Signal Company, Inc. SN 663,973. Pub. 3–27–56. Filed 4–5–54.

628,606. PERFUME-A-SPRAY. Perfume-A-Spray Products Inc. SN 666,051. Pub. 3–27–56. Filed 5–10–54.

628,607. WHIPPET AND DESIGN (REPRESENTATION OF A DOG, ETC.). Sutton, Steele & Steele, Inc. SN 667,268. Pub. 3–27–56. Filed 5–27–54.

628,608. NONPAREIL AND DESIGN (REPRESENTATION OF AN ELEPHANT). W. Tyzack, Sons & Turner Limited. SN 668,488. Pub. 3–27–56. Filed 6–18–54.

628,609. SPEEDEMON. Strunk Chain Saws, Inc. SN 672,984. Pub. 5–24–55. Filed 9–9–54.

628,610. REPRESENTATION OF CALIPER GAUGE. Fortuna-Werke Spezialmaschinenfabrik Aktiengesellschaft. SN 679,765. Pub. 3–27–56. Filed 1–12–55.

628,611. BUFFLE. Ateliers & Chantiers de la Manche. SN 685,237. Pub. 3–27–56. Filed 4–11–55.

628,612. DEEP P FEEDER AND DESIGN. Pittsburgh Forgings Company. SN 685,850. Pub. 3–27–56. Filed 4–19–55.

628,613. VARI-SPIN. The Reliance Electric & Engineering Company, d. b. a. Reeves Pulley Company. SN 687,985. Pub. 3–27–56. Filed 5–20–55.

628,614. 25 CENTS SAVEMORE AND DESIGN. Savemore, Inc. SN 689,658. Pub. 2–14–56. Filed 6–16–55.

628,615. SMOOTHEDGE (FANCIFUL). Roberts Manufacturing Co. SN 691,712. Pub. 3–27–56. Filed 7–21–55.

628,616. THERMEX. Linotype G. m. b. H. SN 693,254. Pub. 3–27–56. Filed 8–17–55.

628,617. NIBBLER. The Auto-Soler Company. SN 696,206. Pub. 3–27–56. Filed 10–11–55.

628,618. A-F AND DESIGN. The Alvey-Ferguson Company. SN 696,397. Pub. 3–27–56. Filed 10–14–55.

628,619. GOLD TIP AND DESIGN. The Fletcher-Terry Company. SN 696,425. Pub. 3–27–56. Filed 10–14–55.

628,620. MEX-GRIND. Firth Sterling, Inc. SN 696,527. Pub. 3–27–56. Filed 10–17–55.

628,621. LANROLL. Landis Machine Company. SN 696,994. Pub. 3–27–56. Filed 10–24–55.

628,622. FINLANDIA. The International Silver Company. SN 697,296. Pub. 3–27–56. Filed 10–28–55.

628,623. FOCUS. The International Silver Company. SN 697,297. Pub. 3–27–56. Filed 10–28–55.

628,624. CAMPUS QUEEN. The International Silver Company. SN 697,298. Pub. 3–27–56. Filed 10–28–55.

628,625. AUTO-FLOAT. O. K. Ko-Op Rubber Welding System. SN 697,392. Pub. 3–27–56. Filed 10–31–55.

628,626. PETTER. Petters Limited. SN 697,397. Pub. 3–27–56. Filed 10–31–55.

628,627. AUTO-WIRE TWISTLOCK. C. Tennant, Sons & Co. of New York. SN 697,425. Pub. 3–27–56. Filed 10–31–55.

628,628. PACEMAKER. Universal Engineering Corporation. SN 697,511. Pub. 3–27–56. Filed 11–1–55.

628,629. GRAVELMASTER. Universal Engineering Corporation. SN 697,512. Pub. 3–27–56. Filed 11–1–55.

628,630. VAC-U-LIFT. Blakeslee Manufacturing Company. SN 697,527. Pub. 3–27–56. Filed 11–2–55.

628,631. DAVIDSON DUAL-LITH. Davidson Corporation. SN 697,537. Pub. 3–27–56. Filed 11–2–55.

628,632. CAMP MATE. Imperial Knife Company, Inc. SN 697,557. Pub. 3–27–56. Filed 11–2–55.

628,633. RELEASALLOY. Plastiplate Co., Inc. SN 697,581. Pub. 3–27–56. Filed 11–2–55.

628,634. SOUTH BEND. South Bend Lathe Works. SN 697,585. Pub. 3–27–56. Filed 11–2–55.

628,635. DYNA DRIVE. George Gorton Machine Co. SN 697,627. Pub. 3–27–56. Filed 11–3–55.

628,636. POWERNAILER. Powernail Company. SN 697,636. Pub. 3–27–56. Filed 11–3–55.

628,637. HI-VI. Eriez Manufacturing Co. SN 697,774. Pub. 3–27–56. Filed 11–7–55.

628,638. SAFFIRE. Saffire Saw & Manufacturing Co. SN 697,851. Pub. 3–27–56. Filed 11–7–55.

628,639. DITCH WITCH AND DESIGN. The Charles Machine Works. SN 697,900. Pub. 3–27–56. Filed 11–8–55.

628,640. KUE-KEN. Straub Mfg. Co., Inc. SN 697,941. Pub. 3–27–56. Filed 11–8–55.

628,641. SEA ISLE. The International Silver Company. SN 697,983. Pub. 3–27–56. Filed 11–9–55.

628,642. ROTO-MATIC. Roto-Finish Company. SN 697,996. Pub. 3–27–56. Filed 11–9–55.

628,643. TABLE MATE. Imperial Knife Company, Inc. SN 699,802. Pub. 3–27–56. Filed 12–12–55.

628,644. McCULLOCH AND DESIGN. McCulloch Motors Corporation. SN 699,814. Pub. 3–27–56. Filed 12–12–55.

628,645. ENERGY. G. J. Pasker, d. b. a. Energy Farm Equipment Co. SN 699,823. Pub. 3–27–56. Filed 12–12–55.

628,646. PERK-O-FRESH. United Coffee Corp. SN 699,871. Pub. 3–27–56. Filed 11–22–55.

628,647. M. Markem Machine Company. SN 699,918. Pub. 3–27–56. Filed 12–13–55.

628,648. STARRETT REDSTRIPE AND DESIGN. The L. S. Starrett Company. SN 699,985. Pub. 3–27–56. Filed 12–14–55.

628,649. STARRETT BLUESTRIPE AND DESIGN. The L. S. Starrett Company. SN 699,986. Pub. 3–27–56. Filed 12–14–55.

628,650. STARRETT GREENSTRIPE AND DESIGN. The L. S. Starrett Company. SN 699,987. Pub. 3–27–56. Filed 12–14–55.

628,651. KOLENE. Kolene Corporation. SN 700,037. Pub. 3–27–56. Filed 12–15–55.

628,652. INTEGRAL. The T. L. Smith Company. SN 700,672. Pub. 3–27–56. Filed 12–27–55.

628,653. CALKMASTER. Vital Products Manufacturing Company. SN 700,695. Pub. 3–27–56. Filed 12–27–55.

628,654. CHEKCALK. Vital Products Manufacturing Company. SN 700,696. Pub. 3–27–56. Filed 12–27–55.

628,655. VITAL CALKER. Vital Products Manufacturing Company. SN 700,697. Pub. 3–27–56. Filed 12–27–55.

628,656. FIBROLA. Les Ateliers de Construction Ventola, Societe Anonyme. SN 700,738. Pub. 3–27–56. Filed 12–28–55.

628,657. HYPREGUN. Rockwell Manufacturing Company. SN 700,815. Pub. 3–27–56. Filed 12–29–55.

628,658. WILPAINT. Mabel W. Travers. SN 700,827. Pub. 3–27–56. Filed 12–29–55.

628,659. ARTEX. Moreland Corporation. SN 700,878. Pub. 3–27–56. Filed 12–30–55.

628,690. EXTRON. Moreland Corporation. SN 700,879. Pub. 3–27–56. Filed 12–30–55.

628,691. SAV-A-CHAIN. The Patterson & Sons Welding & Machine Co. SN 700,894. Pub. 3–27–56. Filed 12–30–55.

CLASS 25

628,660. STOFFEL. Stoffel Seals Corporation. SN 685,411. Pub. 9–20–55. Filed 4–12–55.

CLASS 26

628,661. CINE-TEL. Elgeet Optical Company, Inc. SN 657,340. Pub. 5–10–55. Filed 12–3–53.

628,662. GRAVINER. Graviner Manufacturing Company Limited. SN 663,904. Pub. 3–27–56. Filed 4–5–54.

628,663. PHILAMON. Philamon Laboratories, Inc. SN 682,977. Pub. 3–27–56. Filed 3–7–55.

628,664. STRATA-LOG. Herschell R. Scivally. SN 691,236. Pub. 3–27–56. Filed 7–13–55.

628,665. TIME-RITE. Time-Rite Company. SN 694,169. Pub. 3–27–56. Filed 9–2–55.

628,666. PRECISA. Precisa A. G. SN 697,496. Pub. 3–27–56. Filed 11–1–55.

628,667. THERMOPOSITOR. Roy A. Martin, d. b. a. Roy A. Martin Company. SN 697,633. Pub. 3–27–56. Filed 11–3–55.

628,668. RITE-ON. Clay-Adams, Inc. SN 697,668. Pub. 3–27–56. Filed 11–4–55.

628,669. TRITAL. Taylor, Taylor & Hobson Limited. SN 697,740. Pub. 3–27–56. Filed 11–4–55.

CLASS 27

628,670. ROTOBLOC. Ervin Piquerez S. A. SN 695,445. Pub. 3–27–56. Filed 9–27–55.

CLASS 28

628,671. GALA. Gay Tool Co., Inc. SN 691,207. Pub. 1–17–56. Filed 7–13–55.

628,672. MODERN VICTORIAN. Rogers, Lunt & Bowlen Company, d. b. a. Lunt Silversmiths. SN 694,390. Pub. 3–27–56. Filed 9–8–55.

628,673. CONTEMPRA HOUSE. Towle Manufacturing Company. SN 698,091. Pub. 3–27–56. Filed 11–10–55.

628,674. TROPICAL SPLENDOR. R. Wallace & Sons Manufacturing Company. SN 698,251. Pub. 3–27–56. Filed 11–14–55.

628,675. LG. Lind-Gal, Inc. SN 698,289. Pub. 3–27–56. Filed 11–15–55.

628,676. LIND-GAL. Lind-Gal, Inc. SN 698,290. Pub. 3–27–56. Filed 11–15–55.

CLASS 31

628,677. COL-FLAKE. The Albright Company. SN 682,843. Pub. 3–27–56. Filed 3–7–55.

628,678. SHELL-ICE MAKER. Frick Company. SN 685,014. Pub. 3–27–56. Filed 4–6–55.

628,679. SAFE-GARD. Safeguard Corporation. SN 700,126. Pub. 3–27–56. Filed 12–16–55.

628,680. HANDY-SIX-PACK. International Harvester Company. SN 700,457. Pub. 3–27–56. Filed 12–22–55.

CLASS 32

628,681. INTERNATIONAL AND DESIGN. International Furniture Company, now by merger to Schnadig Corporation. SN 661,451. Pub. 8–2–55. Filed 2–23–54.

628,682. DURALITE. Duralite Company, Inc. SN 685,101. Pub. 3–27–56. Filed 4–7–55.

628,683. TOTE STOOL. Dixon Products Co. SN 687,549. Pub. 3–27–56. Filed 5–16–55.

628,684. TRUNDLE PAD. North Shore Manufacturing Company. SN 691,502. Pub. 3–27–56. Filed 7–18–55.

628,685. CASCADE OF COLOR. The Sherwin-Williams Company. SN 692,744. Pub. 1–31–56. Filed 8–9–55.

628,686. KLIP-BILT. The Frick-Gallagher Manufacturing Company. SN 693,036. Pub. 3–27–56. Filed 8–15–55.

628,687. UNI-FORM TOP. Palace Metal Products, Inc. SN 693,391. Pub. 3–27–56. Filed 8–19–55.

628,688. SAKS FIFTH AVENUE. Saks & Company. SN 696,836. Pub. 3–27–56. Filed 10–20–55.

628,689. OUTRIGGER. William H. Reinholz. SN 697,021. Pub. 3–27–56. Filed 10–24–55.

628,690. (See Class 23 for this trademark.)

628,691. (See Class 23 for this trademark.)

CLASS 34

628,692. AEROFUSE. Tuttle & Bailey, Incorporated, to Allied Thermal Corporation. SN 668,952. Pub. 3–27–56. Filed 6–25–54.

628,693. LUMINA. The Phoenix Glass Company. SN 682,468. Pub. 3–27–56. Filed 2–28–55.

628,694. CHAMPION. The Turner Brass Works. SN 694,342. Pub. 3–27–56. Filed 9–7–55.

628,695. TRIM BOY. The Coleman Company, Inc. SN 694,698. Pub. 3–27–56. Filed 9–15–55.

628,696. MUSTEE. Mustee Heater Company. SN 694,733. Pub. 3–27–56. Filed 9–15–55.

628,697. SARNABRASS. S. S. Sarna, Inc. SN 695,032. Pub. 3–27–56. Filed 9–20–55.

628,698. TRIPL-AIRE. Hart & Cooley Manufacturing Co. SN 695,156. Pub. 3–27–56. Filed 9–22–55.

628,699. DIFFUSAIRE. Hart & Cooley Manufacturing Co. SN 695,157. Pub. 3–27–56. Filed 9–22–55.

628,700. PORT-O-VENT. Reed Unit-Fans, Inc. SN 695,242. Pub. 3–27–56. Filed 9–23–55.

628,701. REED. Reed Unit-Fans, Inc. SN 695,243. Pub. 3–27–56. Filed 9–23–55.

628,702. SUBURBAN. Reed Unit-Fans, Inc. SN 695,244. Pub. 3–27–56. Filed 9–23–55.

628,703. MICRO-JET. Western Stove Company, Inc. SN 695,363. Pub. 3–27–56. Filed 9–26–55.

628,704. MATHES COOLER. The Mathes Company, Incorporated. SN 695,739. Pub. 3–27–56. Filed 10–3–55.

628,705. HY-WAY HOT OIL HEATER. Hy-Way Machinery, Incorporated. SN 695,918. Pub. 3–27–56. Filed 10–5–55.

628,706. POWERAM. Iron Fireman Manufacturing Company. SN 697,444. Pub. 3–27–56. Filed 11–7–55.

628,707. THE IRON FIREMAN AND DESIGN. Iron Fireman Manufacturing Company. SN 697,445. Pub. 3–27–56. Filed 11–7–55.

CLASS 35

628,708. RIB EXCAVATOR. The Firestone Tire & Rubber Company. SN 694,133. Pub. 3–27–56. Filed 9–2–55.

CLASS 36

628,709. MUSICART AND DESIGN. Grace P. Chew. SN 679,982. Pub. 3–27–56. Filed 1–17–55.

628,710. TIMELIGHT. Daniel Brador, d. b. a. Timelight Melodies. SN 692,504. Pub. 3–27–56. Filed 8–5–55.

628,711. BARKLEE. Universal Musical Instrument Co. SN 692,747. Pub. 3–27–56. Filed 8–9–55.

CLASS 37

628,712. ROSEWOOD. Gulf States Paper Corporation. SN 691,213. Pub. 3–27–56. Filed 7–13–55.

628,713. TRANS-LU-TINT. Bonnar-Vawter, Incorporated. SN 691,271. Pub. 3–27–56. Filed 7–14–55.

628,714. TEMPLAR. Reliance Pencil Corporation. SN 219. Pub. 3–27–56. Filed 1–5–56.

CLASS 38

628,715. FENT-O-SEAL. Fenton Label Co. SN 662,209. Pub. 3–27–56. Filed 3–8–54.

628,716. GENERAL SERVICE CONFERENCE AA AND DESIGN. Alcoholics Anonymous Publishing, Inc. SN 684,088. Pub. 3–27–56. Filed 3–24–55.

628,717. TOWN & COUNTRY FOUNDATION ETC. AND DESIGN. Margaret P. Lindsey, d. b. a. The Town and Country Foundation. SN 684,850. Pub. 3–27–56. Filed 4–4–55.

628,718. THE NEW AGE. The Supreme Council (Mother Council of the World) of The Inspectors General Knights Commanders of the House of The Temple of Solomon of The Thirty-Third Degree of The Ancient and Accepted Scottish Rite of Free Masonry of The Southern Jurisdiction of the United States of America. SN 691,101. Pub. 3–27–56. Filed 7–11–55.

628,719. INTERNATIONAL PETROLEUM REGISTER. Mona Palmer, executrix and sole trustee of the estate of Russell Palmer. SN 691,382. Pub. 3–27–56. Filed 7–15–55.

628,720. TRANSFLORA GAZETTE. Transflora, Inc. SN 691,727. Pub. 3–27–56. Filed 7–21–55.

628,721. DINNER-WINNER. The Crowell-Collier Publishing Company. SN 696,126. Pub. 3–27–56. Filed 10–10–55.

628,722. CHOOSING SIDES. The Conde Nast Publications Inc. SN 696,350. Pub. 3–27–56. Filed 10–13–55.

CLASS 39

628,723. OVER 5'–7" SHOP. Lane Bryant Inc. SN 670,146. Pub. 3–27–56. Filed 7–2–54.

628,724. VIRASIL. Hart Schaffner & Marx. SN 687,201. Pub. 3–27–56. Filed 5–10–55.

628,725. LITTLE SOFTIE. The Owenby Manufacturing Company. SN 688,569. Pub. 3–27–56. Filed 5–31–55.

628,726. NETTLETON ESPRESSO. A. E. Nettleton Company. SN 688,657. Pub. 3–27–56. Filed 6–1–55.

628,727. TROPICAL TRIO. J. Schoeneman, Inc., now by change of name Slade, Inc., to J. Schoeneman, Incorporated. SN 688,967. Pub. 3–27–56. Filed 6–6–55.

628,728. TEENFORM. Teenform Foundations, Inc. SN 689,317. Pub. 3–27–56. Filed 6–10–55.

628,729. PANTERIA. M. H. Goldsmith and Co., d. b. a. Milford Lingerie Co. SN 689,940. Pub. 3–27–56. Filed 6–21–55.

628,730. PANT-TREE. Sircom Knitting Co., Inc. SN 689,972. Pub. 3–27–56. Filed 6–21–55.

628,731. BETSY JAMES AND DESIGN. Betsy James, Ltd. SN 690,267. Pub. 3–27–56. Filed 6–27–55.

628,732. OOPSIES AND DESIGN. Olive M. Griffin. SN 690,549. Pub. 3–27–56. Filed 6–30–55.

628,733. THE HEREFORD. Texas Harvest Hat Company SN 691,722. Pub. 3–27–56. Filed 7–21–55.

628,734. THE CHISHOLM TRAIL. Texas Harvest Hat Company. SN 691,723. Pub. 3–27–56. Filed 7–21–55.

628,735. THE BRAHMA AND DESIGN. Texas Harvest Hat Company. SN 691,725. Pub. 3–27–56. Filed 7–21–55.

628,736. ZELINKA MATLICK CUSTOMETTE. Zelinka-Matlick. SN 691,731. Pub. 3–27–56. Filed 7–21–55.

628,737. SELFCAIRE. Haspel Brothers, Inc. SN 691,858. Pub. 3–27–56. Filed 7–25–55.

628,738. SARTOR. Sartor (Manchester) Limited. SN 692,087. Pub. 3–27–56. Filed 7–28–55.

628,739. THE RUNNING W. Texas Harvest Hat Company. SN 692,178. Pub. 3–27–56. Filed 7–29–55.

628,740. THE WESTERN KID. Texas Harvest Hat Company. SN 692,179. Pub. 3–27–56. Filed 7–29–55.

628,741. THE LAZY S. Texas Harvest Hat Company. SN 692,180. Pub. 3–27–56. Filed 7–29–55.

628,742. GOLD STRIKES. Farah Manufacturing Company, Inc. SN 692,463. Pub. 3–27–56. Filed 8–4–55.

628,743. VIPASHA. Hart Schaffner & Marx. SN 692,516. Pub. 3–27–56. Filed 8–5–55.

628,744. KULA. Michaels, Stern & Company, Incorporated. SN 692,728. Pub. 3–27–56. Filed 8–9–55.

628,745. PICCOLINO. David D. Doniger & Co. Inc. SN 692,771. Pub. 3–27–56. Filed 8–10–55.

628,746. ROBIN HOOD. Chicopee Mills, Inc. SN 693,592. Pub. 3–27–56. Filed 8–24–55.

628,747. IMPERIAL. Rainbow Shops, Inc. SN 695,491. Pub. 3–6–56. Filed 9–28–55.

628,748. DIMENSIONAL. Laros Textiles Company. SN 696,150. Pub. 3–27–56. Filed 10–10–55.

628,749. NO-RIDE. Laros Textiles Company. SN 696,151. Pub. 3–27–56. Filed 10–10–55.

628,750. DIANE. Diane Hair Net Co., to David Neumann and Norbert Neumann. SN 696,219. Pub. 3–27–56. Filed 10–11–55.

628,751. CRINET. Robert H. Einhorn, d. b. a. Crinet Company. SN 696,224. Pub. 3–27–56. Filed 10–11–55.

628,752. IDALEE Ida Lee O'Keeffe. SN 696,255. Pub. 3–27–56. Filed 10–11–55.

628,753. NATTYSPUN. Glen Raven Knitting Mills, Inc. SN 696,297. Pub. 3–27–56. Filed 10–12–55.

628,754. JAYNER. Jaywein & Ortner, Inc. SN 696,303. Pub. 3–27–56. Filed 10–12–55.

628,755. SOCKSMITH. Harry Smith Associates, Inc. SN 696,468. Pub. 3–27–56. Filed 10–14–55.

628,756. KAPRONETT. Film Container Company, Inc. SN 696,526. Pub. 3–27–56. Filed 10–17–55.

628,757. LO CONIA AND DESIGN. Lohn & Cohen. SN 696,554. Pub. 3–27–56. Filed 10–17–55.

628,758. TRI-LINE Maiden Form Brassiere Company, Inc. SN 696,558. Pub. 3–27–56. Filed 10–17–55.

628,759. SARI. Sarong, Inc. SN 696,671. Pub. 3–27–56. Filed 10–18–55.

628,760. HENRIETTA. Henrietta Shoppe, Inc. SN 696,710. Pub. 3–27–56. Filed 10–19–55.

628,761. LONDON. Globe Novelty House, Inc. SN 696,796. Pub. 3–27–56. Filed 10–20–55.

628,762. GARDNER NYLON AND DESIGN. The Gardner Corporation. SN 696,881. Pub. 3–27–56. Filed 10–21–55.

628,763. LINDA LO BY HYMAR. Hymar, Inc. SN 696,890. Pub. 3–27–56. Filed 10–21–55.

628,764. MEDI-DENT AND DESIGN. Maurice Baraky, d. b. a. Medi-Dent Professional Apparel Company. SN 696,932. Pub. 3–27–56. Filed 10–24–55.

628,765. BEAU BRUMMEL. S. H. Kress and Company. SN 697,098. Pub. 3–27–56. Filed 10–25–55.

628,766. UNDERLINE. Peter Pan Foundations, Inc. SN 697,115. Pub. 3–27–56. Filed 10–25–55.

628,767. SCHOOL BELLES. Belgrade Shoe Co. SN 697,352. Pub. 3–27–56. Filed 10–31–55.

CLASS 40

628,768. SAKS-FIFTH AVENUE. Saks & Company. SN 695,999. Pub. 3–27–56. Filed 10–6–55.

CLASS 42

628,769. DESIGN OF SHEEP AND FLOWER. St. Marys Woolen Manufacturing Company. SN 692,424. Pub. 3–27–56. Filed 8–3–55.

628,770. DESIGN OF SHEEP'S HEAD AND FLOWER. St. Marys Woolen Manufacturing Company. SN 692,425. Pub. 3–27–56. Filed 8–3–55.

628,771. WONDER QUEEN. J. P. Stevens & Co., Inc. SN 694,016. Pub. 3–27–56. Filed 8–31–55.

628,772. DRAMA-TIES. Crown Curtain Mills Inc. SN 696,127. Pub. 3–27–56. Filed 10–10–55.

628,773. LOON BRAND AND DESIGN. Sterling Net & Twine Co., Inc. SN 696,189. Pub. 3–27–56. Filed 10–10–55.

628,774. DUCKLYN. S. Augstein & Co., Inc. SN 696,205. Pub. 3–27–56. Filed 10–11–55.

628,775. CANDORA. D. B. Fuller & Co., Inc. SN 696,357. Pub. 3–27–56. Filed 10–13–55.

628,776. ERLOOM RIBBONS AND DESIGN. J. H. Erstein & Bro., Inc. SN 696,523. Pub. 3–27–56. Filed 10–17–55.

628,777. LANCER. Monarch Rug Mills. SN 696,574. Pub. 3–27–56. Filed 10–17–55.

628,778. PETTIPERM. D. Strauss Co., Inc. SN 696,599. Pub. 3–27–56. Filed 10–17–55.

CLASS 43

628,779. MARCY. Orchard Yarn and Thread Co. SN 680,294. Pub. 3–27–56. Filed 1–21–55.

CLASS 44

628,780. IDEAL. The Swartzbaugh Manufacturing Company. SN 639,908. Pub. 9–21–54. Filed 12–22–52.

CLASS 45

628,781. ALVA. Van Ameringen-Haebler, Inc. SN 690,917. Pub. 3–27–56. Filed 7–7–55.

628,782. PINK POODLE. Frank A. Scaff, d. b. a. Pink Poodle Beverage Co. SN 692,088. Pub. 3–27–56. Filed 7–28–55.

628,783. SAMBA. Realemon-Puritan Co. SN 692,270. Pub. 3–27–56. Filed 8–1–55.

628,784. SLENDERELLA. Slenderella Systems, Inc. SN 696,915. Pub. 3–27–56. Filed 10–21–55.

CLASS 46

628,785. DYCO. J. E. Dyer & Co. SN 625,722. Pub. 12–29–53. Filed 2–29–52.

628,786. E-Z POP. Top-Pop Products Company. SN 663,970. Pub. 3–20–56. Filed 4–5–54.

628,787. BILLY-BOBS. Beich Bros. Candy Co. SN 667,603. Pub. 10–18–55. Filed 6–3–54.

628,788. FROM THE TALL CORN COUNTRY. Dubuque Packing Company. SN 669,101. Pub. 8–2–55. Filed 6–29–54.

628,789. BOWMAN PARTY MOLD. Bowman Dairy Company. SN 674,557. Pub. 3–27–56. Filed 10–11–54.

628,790. EZY-POP. Suffolk Oil Mill, Inc. SN 674,712. Pub. 6–7–55. Filed 10–12–54.

628,791. GOLDEN LOAF ETC. AND DESIGN. Francis P. Scorsone, d. b. a. Scorsone Baking Company. SN 677,995. Pub. 3–27–56. Filed 12–8–54.

628,792. BRIGGS AND DESIGN. Briggs & Company. SN 680,250. Pub. 3–27–56. Filed 1–21–55.

628,793. MAC'S BEST. National Sea Products, Limited. SN 681,189. Pub. 3–27–56. Filed 2–7–55.

628,794. "PEPPY PEPPERS." Chicken Products Company. SN 682,705. Pub. 3–27–56. Filed 3–3–55.

628,795. HITEST MEAT SCRAP AND DESIGN. Herman Isaacs, Inc. SN 683,886. Pub. 3–27–56. Filed 3–21–55.

628,796. JIMINY QUICK. Shoreline Packing Corporation. SN 684,483. Pub. 3–27–56. Filed 3–29–55.

628,797. TOP SCORE. Bay State Milling Co. SN 684,799. Pub. 3–27–56. Filed 4–4–55.

628,798. SOPECO NUTS. Southern Pecan Co., Inc. SN 685,214. Pub. 3–27–56. Filed 4–8–55.

628,799. EAGLE BRAND AND DESIGN. Gebhardt Chili Powder Company. SN 685,267. Pub. 3–27–56. Filed 4–11–55.

628,800. FLAVOR-DATED AND DESIGN. R. E. Freeman. SN 685,364. Pub. 3–27–56. Filed 4–12–55.

628,801. RED DRAGON. Herbert S. Ray, d. b. a. Ray Brokerage Co. SN 685,399. Pub. 3–27–56. Filed 4–12–55.

628,802. SLEEK SUE. The Cream of Wheat Corporation. SN 685,565. Pub. 3–27–56. Filed 4–15–55.

628,803. JACK & JILL. Jill Bros. Inc., d. b. a. Jill Bros. Farms. SN 685,716. Pub. 3–27–56. Filed 4–18–55.

628,804. PETKELP AND DESIGN. Philip R. Park, Inc. SN 685,740. Pub. 3–27–56. Filed 4–18–55.

628,805. MORSE'S. Ferry-Morse Seed Company. SN 686,180. Pub. 3–27–56. Filed 4–25–55.

628,806. DOUBLE OO AND DESIGN. Westside Farms. SN 686,710. Pub. 3–27–56. Filed 5–2–55.

628,807. BORDEN'S. The Borden Company. SN 688,012. Pub. 3–27–56. Filed 5–23–55.

628,808. PINTO. Monterey Bay Packing Co. SN 692,411. Pub. 3–27–56. Filed 8–3–55.

628,809. OCOMA ETC. AND DESIGN. Omaha Cold Storage Company, d. b. a. Ocoma Foods Company, now by change of name Ocoma Foods Company. SN 692,417. Pub. 3–27–56. Filed 8–3–55.

628,810. STOWAWAY. Marine Products Company. SN 692,943. Pub. 3–27–56. Filed 8–12–55.

628,811. FROM THE LAND O' CORN. The Rath Packing Company. SN 692,993. Pub. 11–8–55. Filed 8–30–55.

628,812. PENNANT. Swift & Company, d. b. a. Armstrong Packing Company, et al. SN 693,502. Pub. 3–27–56. Filed 8–22–55.

628,813. J. NORTON B. McELROY AND DESIGN. Westside Farms. SN 693,513. Pub. 3–27–56. Filed 8–22–55.

628,814. G15. The Griffith Laboratories, Inc. SN 693,600. Pub. 3–27–56. Filed 8–24–55.

628,815. PACE SETTER. Westside Farms. SN 693,712. Pub. 3–27–56. Filed 8–25–55.

628,816. SUCARYL. Abbott Laboratories. SN 693,793. Pub. 3–27–56. Filed 8–29–55.

628,817. BLUE SMOKE. Robert E. Pinkerton. SN 693,844. Pub. 3–27–56. Filed 8–29–55.

628,818. XTR-AID. Southern States Cooperative, Incorporated. SN 694,164. Pub. 3–27–56. Filed 9–2–55.

CLASS 47

628,819. MEIER'S. Meier's Wine Cellars, Inc. SN 692,852. Pub. 3–27–56. Filed 8–11–55.

628,820. TANGOR. Weibel Champagne Vineyards. SN 697,062. Pub. 3–27–56. Filed 10–24–55.

CLASS 48

628,821. GUINNESS'S ALE ETC. AND DESIGN. Arthur Guinness Son & Co., Ltd. SN 686,970. Pub. 3–27–56. Filed 5–6–55.

628,822. GUINNESS'S LAGER BEER ETC. AND DESIGN. Arthur Guinness Son & Co., Ltd. SN 686,971. Pub. 3–27–56. Filed 5–6–55.

CLASS 50

628,823. WIDJITS. R. R. Olin Laboratories, Inc. SN 680,897. Pub. 3–27–56. Filed 2–1–55.

628,824. "IMPERVITE." Standard Packaging Corporation. SN 689,673. Pub. 3–27–56. Filed 6–16–55.

628,825. BOLTA. The General Tire & Rubber Company. SN 690,453. Pub. 3–27–56. Filed 6–29–55.

628,826. AD-ONS. W. L. Stensgaard and Associates, Inc. SN 692,281. Pub. 3–27–56. Filed 8–1–55.

628,827. HUM-PAL AND DESIGN. Monsanto Chemical Company. SN 692,948. Pub. 3–27–56. Filed 8–12–55.

628,828. VAC-O-LOC. Brockway Glass Company, Inc. SN 694,351. Pub. 3–27–56. Filed 9–8–55.

628,829. SUNSTORM. Mead Board Sales, Inc. SN 694,375. Pub. 3–27–56. Filed 9–8–55.

628,830. "SETTERSTIX." Setter Bros., Inc. SN 695,652. Pub. 3–27–56. Filed 9–30–55.

628,831. MOCO. Machinery Overhaul Company, Inc. SN 696,450. Pub. 3–27–56. Filed 10–14–55.

CLASS 51

628,832. ACTOGEN. Tecnique, Inc. SN 663,532. Pub. 3–27–56. Filed 3–29–54.

628,833. GOLDEN PETALS. The House of Stuart, Inc. SN 664,864. Pub. 3–27–56. Filed 4–20–54.

628,834. GOLDEN FEATHER. Nethercutt Laboratories. SN 665,513. Pub. 3–27–56. Filed 4–30–54.

628,835. GOLDTONE. Jose Ramon Valls Torres. SN 672,764. Pub. 3–27–56. Filed 9–3–54.

628,836. GO GO GO PINK. House of Westmore, Inc. SN 682,558. Pub. 3–27–56. Filed 3–1–55.

628,837. BR–85 WITHIN AN OVAL. Colgate-Palmolive Company. SN 689,609. Pub. 3–13–56. Filed 6–16–55.

628,838. DRYETTE. Dri-Lab Company. SN 689,820. Pub. 3–27–56. Filed 6–20–55.

628,839. COMPATIBLE. General Beauty Products, Inc. SN 692,465. Pub. 3–27–56. Filed 8–4–55.

628,840. COMFORTAN. Lucky Tiger Manufacturing Co. SN 692,620. Pub. 3–27–56. Filed 8–8–55.

628,841. ACAPULCO. Les Parfums de Dana, Inc. SN 692,789. Pub. 3–27–56. Filed 8–10–55.

628,842. WHO'S WHO. Les Parfums de Dana, Inc. SN 692,791. Pub. 3–27–56. Filed 8–10–55.

628,843. MAGIC SILK. Richard Hudnut. SN 692,845. Pub. 3–27–56. Filed 8–11–55.

CLASS 52

628,844. KITCHEN-EASE. Max A. Gurvich, d. b. a. Pacific Chemical Manufacturing Co. SN 630,267. Pub. 3–16–54. Filed 5–26–52.

628,845. WINK. Wink Soap Co., Inc. SN 651,306. Pub. 3–27–56. Filed 8–3–53.

628,846. REP. J. I. Holcomb Manufacturing Company, Inc. SN 691,296. Pub. 3–27–56. Filed 7–14–55.

Service Marks

CLASS 103

628,847. CROFT CATTLE CONTROL. James O. Croft. SN 684,402. Pub. 3–27–56. Filed 3–29–55.

CLASS 107

628,848. TINKER'S WORKSHOP AND DESIGN. Robert J. Keeshan. SN 683,780. Pub. 3–27–56. Filed 3–18–55.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

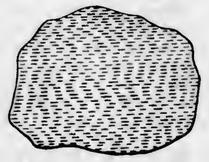
CLASS 1

628,849. A. K. Salz Company, Santa Cruz, Calif. SN 605,684. Filed P. R. 10–31–50. Am. S. R. 3–15–56.

SALZ
CALIFORNIA
SADDLE LEATHER

For Hides and Leather.
First use Sept. 22, 1950; and 1938 as to "California Saddle Leather."

628,850. The Hudson Coal Company, Scranton, Pa. SN 646,552. Filed P. R. 5–6–53. Am. S. R. 4–19–56.



The trademark consists of an iridescent aluminum colored coating applied to the coal in a manner to cover the surface of each lump of coal. The drawing is intended to show, by way of example, coal with the mark applied thereto. Applicant disclaims the representation of a lump of coal shown in the drawing.
For Coal.
First use Mar. 25, 1953.

CLASS 21

628,851. Appleton Electric Company, Chicago, Ill. SN 665,172. Filed P. R. 4–26–54. Am. S. R. 3–8–56.



For Electrical Products—Namely, Conduit Fittings, Gaskets, Splicing Covers, Cord Grips, Switch Covers, Switch Guards, Switch and Receptacle Boxes and Covers Therefor, Circuit Breakers, Switch Operators, Hoods, Connection Blocks, Conduit Clamps, Circuit Breaking Plug and Receptacle Equipment, Plug Adaptors, Extension Cable Connectors, Couplings, Conduit Expansion Joints, Stuffing Boxes, Bonding Jumpers, Flexible Couplings for Conduit, Unions for Conduit, Flexible Conduit Connectors, Close-Up Plugs, Dead End Receptacles and Plugs, Cord Connectors, Circuit Breaking Plugs and Receptacles, Interlocking Type Safety Switch and Plug Receptacles, Grounding Plugs and Receptacles, Entrance Fittings, Ground Fittings.
First use Feb. 10, 1954.

628,852. American Printed Circuits Company, Inc., Metuchen, N. J. SN 695,518. Filed P. R. 9–29–55. Am. S. R. 1–20–56.

AMERICAN PRINTED CIRCUITS CO. Printale

For Electrical Printed Circuits.
First use Sept. 1, 1954.

CLASS 23

628,853. Stop-Fire, Inc., Brooklyn, N. Y. SN 686,494. Filed P. R. 4–28–55. Am. S. R. 3–23–56.

Redi-Jet

For Fire-Extinguishers.
First use Feb. 28, 1955.

628,854. E. S. Gandrud Company, Owatonna, Minn. SN 688,322. Filed P. R. 5–26–55. Am. S. R. 4–9–56.

SPREADER-ETTE

For Fertilizer Spreaders, Seeders, and the Like.
First use Feb. 14, 1955.

CLASS 39

628,855. Eagle Clothes, Inc., Brooklyn, N. Y. SN 651,221. Filed P. R. 8–3–53. Am. S. R. 2–17–56.

HARWOOD

For Men's Clothing—Namely, Coats, Topcoats, and Suits.
First use July 15, 1953.

628,856. Converse Rubber Corporation, Malden, Mass. SN 668,644. Filed P. R. 6–22–54. Am. S. R. 12–13–55.



For Rubber Sole Canvas Shoes.
First use October 1951.

CLASS 46

628,857. The Arkansas Rice Growers Co-Operative Association, Stuttgart, Ark. SN 687,664. Filed P. R. 5–17–55. Am. S. R. 2–28–56.

RICE BITS

For Broken Rice Grains.
First use Feb. 18, 1955.

628,858. American Chicle Company, Long Island City, N. Y. SN 692,682. Filed 7–13–55.



The drawing is lined for red, black, green, and yellow. The words "Mint" and "Chewing Gum" are disclaimed apart from the mark as shown.
For Chewing Gum.
First use Jan. 27, 1954.

CLASS 52

628,859. Stratafoam Corp., Cedar Rapids, Iowa. SN 684,762. Filed P. R. 4–1–55. Am. S. R. 1–20–56.



For Liquid Toilet Soap.
First use Mar. 4, 1953.

TRADEMARK REGISTRATIONS RENEWED

108,693. F & W CO AND DESIGN. Cl. 38. 2–22–16.
108,708. MME IRENE. Cl. 39. 2–22–16.
108,792. ZANZIBAR AND DESIGN. Cl. 46. 2–29–16.
108,905. DESIGN OF MAN ON HORSE. Cl. 39. 3–7–16.
108,999. HART SCHAFFNER & MARX. Cl. 39. 3–14–16.
109,177. DESIGN OF MAN. Cl. 18. 3–28–16.
109,874. WAINWRIGHT. Cl. 1. 4–18–16.
109,938. ZANZIBAR AND DESIGN. Cl. 46. 4–25–16.
110,068. BUCO. Cl. 46. 5–2–16.
110,779. ROYAL AND DESIGN. Cl. 23. 6–13–16.
110,892. FRENCH AND DESIGN. Cl. 46. 6–13–16.
110,911. BRITE LITE. Cl. 46. 6–20–16.
111,086. EATMORE. Cl. 46. 6–27–16.
111,094. TRUMPETER. Cl. 39. 6–27–16.
111,301. GRISON A PARIS AND DESIGN. Cl. 1. 7–14–16.
111,546. DESIGN OF OVAL ETC. Cl. 1. 7–25–16.
111,727. $1000.00 GUARANTEED AND DESIGN. Cl. 6. 8–1–16.
111,874. THE ATLANTIC REFINING COMPANY AND DESIGN. Cl. 15. 8–8–16.
111,905. CASTLE BRAND AND DESIGN. Cl. 46. 8–8–16.
111,924. COCK OF THE WALK AND DESIGN. Cl. 46. 8–15–16.
329,921. "J. F." RARE OLD SCOTCH WHISKEY ESTABLISHED 1828 AND DESIGN. Cl. 49. 11–19–35.
330,046. CIRCE. Cl. 39. 11–19–35.
330,220. ROSSOTTI DUBL-VU AND DESIGN. Cl. 2. 11–26–35.
331,430. SYN-TUNG ENAMEL. Cl. 16. 1–7–36.
331,947. OLD ABBEY. Cl. 47. 1–28–36.
332,435. SMOOTHIE. Cl. 44. 2–11–36.
332,635. ROYAL ZEST. Cl. 46. 2–18–36.
332,727. SWA-BAC. Cl. 21. 2–25–36.
332,888. DESIGN OF DRAWING PEN WITH WHITE TIP. Cl. 26. 3–3–36.
332,948. QUEEN'S T AND DESIGN. Cl. 46. 3–3–36.
332,994. CELANESE. Cl. 42. 3–10–36.
333,013. CRYSTALSHEER. Cl. 42. 3–10–36.
333,031. TRICOCEL. Cl. 42. 3–10–36.
333,032. CELTRICO. Cl. 42. 3–10–36.
333,143. CELFIL. Cl. 43. 3–10–36.
333,161. WYTETIP. Cl. 26. 3–10–36.
333,312. COCKTAIL CUBES. Cl. 46. 3–17–36.
333,527. G-MEN. Cl. 46. 3–24–36.
333,563. SR AND DESIGN. Cl. 49. 3–24–36.
333,585. MAENSON. Cl. 39. 3–24–36.
333,831. THE GUARDS. Cl. 39. 4–7–36.
333,996. GUARDITE. Cl. 23. 4–14–36.
334,010. TRI ME AND DESIGN. Cl. 46. 4–14–36.
334,494. DESIGN OF HAND AND CIRCLE. Cl. 39. 5–5–36.
334,498. FILM FUNNIES. Cl. 46. 5–5–36.
334,691. ZANZIBAR CARBON AND DESIGN. Cl. 6. 5–12–36.
334,748. SIBONEY AND DESIGN. Cl. 49. 5–12–36.
335,010. TROPICAL. Cl. 46. 5–19–36.
335,437. WUL-TEX FACILE PRINCEPS AND DESIGN. Cl. 39. 6–2–36.
335,751. TRANSWRAP. Cl. 23. 6–16–36.
335,765. SURF CLUB. Cl. 49. 6–16–36.
335,820. RAREPACK. Cl. 39. 6–16–36.
335,822. LARIAT TWIST. Cl. 39. 6–16–36.
335,858. BING BANG. Cl. 3. 6–16–36.
335,952. LINTONE. Cl. 32. 6–16–36.
335,989. VALLEY FORGE. Cl. 46. 6–23–36.
336,044. PYREX. Cl. 23. 6–23–36.
336,207. DAINTY JEL. Cl. 46. 6–30–36.

336,305. RANCOSTAT. Cl. 26. 6–30–36.
336,515. STURDI-FLEX AND DESIGN. Cl. 39. 7–7–36.
336,536. PAGE EARLY MORN. Cl. 46. 7–7–36.
336,537. MADE BY HAND FOR MARTINIQUE AND DESIGN. Cl. 39. 7–7–36.
336,622. ANHEUSER-BUSCH A-B AND DESIGN. Cl. 46. 7–14–36.
336,647. AMOCO. Cl. 35. 7–14–36.
336,724. THE PHANTOM. Cl. 38. 7–14–36.
336,869. THINK. Cl. 38. 7–21–36.
336,882. CIRCULINE. Cl. 23. 7–21–36.
336,924. THREE SWALLOW AND DESIGN. Cl. 49. 7–21–36.
336,962. VAPONEFRIN. Cl. 18. 7–21–36.
337,050. DURA-ZINC-ALLOY. Cl. 2. 7–28–36.
337,051. DURA-ZINC. Cl. 2. 7–28–36.
337,163. GUARDIAN. Cl. 21. 7–28–36.
337,264. SYNTHITE. Cl. 21. 8–4–36.
337,282. 4 STAR AND DESIGN. Cl. 46. 8–4–36.
337,303. SUPLETEX. Cl. 39. 8–4–36.
337,397. VALKYRIE LAST. Cl. 39. 8–4–36.
337,436. SIGNET. Cl. 49. 8–4–36.
337,557. BILRON. Cl. 18. 8–11–36.
337,592. ROBIN'S BEST AND DESIGN. Cl. 46. 8–11–36.
337,595. LINDSAY RIPE OLIVE COMPANY AND DESIGN. Cl. 46. 8–11–36.

TRADEMARK REGISTRATIONS CANCELED

Section 8

439,521. DEVRON. Cl. 42. 7–6–48.
443,355. MILLION DOLLAR. Cl. 46. 9–6–49.
521,077. CAMEO. Cl. 46. 2–21–50.
521,079. FRESHY. Cl. 51. 2–21–50.
521,088. NUTRINE. Cl. 46. 2–21–50.
521,091. PLUM GOOD AND DESIGN. Cl. 39. 2–21–50.
521,093. PMCO AND DESIGN. Cl. 23. 2–21–50.
521,099. THE YES MAN AND DESIGN. Cl. 19. 2–21–50.
521,103. SCHNEIDER'S CHOYSTERS AND DESIGN. Cl. 46. 2–21–50.
521,111. HAYMASTER. Cl. 23. 2–21–50.
521,112. WOOD SPEEDMAT. Cl. 50. 2–21–50.
521,115. BLACK SAMBO. Cl. 46. 2–21–50.
521,119. ROCKET AND DESIGN. Cl. 23. 2–21–50.
521,133. BABCO. Cl. 23. 2–21–50.
521,136. TAYLOR. Cl. 19. 2–21–50.
521,140. SNOWBALL. Cl. 39. 2–21–50.
521,146. ENGLISH BLUEBELLS. Cl. 51. 2–21–50.
521,148. BROADWAY. Cl. 39. 2–21–50.
521,158. RESUSSIC. Cl. 18. 2–21–50.
521,162. FINK'S. Cl. 46. 2–21–50.
521,170. MOUSE-O-LEUM. Cl. 50. 2–21–50.
521,172. "BLOCK-MAN". Cl. 19. 2–21–50.
521,173. ESCOTE. Cl. 16. 2–21–50.
521,174. IXL. Cl. 16. 2–21–50.
521,182. LAPLANT CHOATE. Cl. 23. 2–21–50.
521,194. THE SLOGAN. Cl. 39. 2–21–50.
521,195. BRIDGE AND ROYAL COAT OF ARMS DESIGN. Cl. 23. 2–21–50.
521,198. CAMBRIDGE. Cl. 39. 2–21–50.
521,203. BOB CAT AND DESIGN. Cl. 23. 2–21–50.
521,206. SOUTHWARK. Cl. 23. 2–21–50.
521,210. GRAFTON. Cl. 39. 2–21–50.
521,212. PORT-O. Cl. 29. 2–21–50.
521,217. BERNCLAIRE. Cl. 39. 2–21–50.
521,221. ANNIS MANOR. Cl. 51. 2–21–50.
521,222. MODERNAIRE. Cl. 23. 2–21–50.
521,223. PRIMO. Cl. 4. 2–21–50.
521,224. CIRC-O-LATOR. Cl. 23. 2–21–50.
521,226. TELEVISO-CHAIR. Cl. 32. 2–21–50.
521,230. PLAY DRY. Cl. 39. 2–21–50.
521,232. WOOD AND DESIGN. Cl. 39. 2–21–50.
521,235. REPRESENTATION OF TWO CROSSING ARROWS. Cl. 50. 2–21–50.
521,243. BUTTERFLY. Cl. 23. 2–21–50.
521,244. PETER PEPPER. Cl. 39. 2–21–50.
521,245. LAUCO. Cl. 46. 2–21–50.
521,247. "SHEERSKIN". Cl. 50. 2–21–50.
521,248. LORD ENGLISH. Cl. 51. 2–21–50.
521,252. BOND-EDGE. Cl. 50. 2–21–50.
521,255. SHOWER-TIME. Cl. 39. 2–21–50.
521,258. OUR HERO. Cl. 39. 2–21–50.
521,260. SONAL. Cl. 23. 2–21–50.
521,262. SNAPSHOT AND DESIGN. Cl. 39. 2–21–50.
521,263. TEXLEE. Cl. 39. 2–21–50.
521,265. PENTUNG. Cl. 16. 2–21–50.
521,266. BABYTOWN. Cl. 39. 2–21–50.
521,267. EL PONCHITO. Cl. 39. 2–21–50.
521,271. CHEVRO-MATIC. Cl. 23. 2–21–50.
521,272. TELOWSCOPER. Cl. 23. 2–21–50.
521,273. KATER-KART. Cl. 19. 2–21–50.
521,278. MODERN MOTOR MAGIC AND DESIGN. Cl. 19. 2–21–50.
521,280. BILLY-DOO. Cl. 50. 2–21–50.
521,281. TORNADO. Cl. 4. 2–21–50.
521,287. GREEN CROWN. Cl. 46. 2–21–50.
521,289. ENTRO-G. Cl. 18. 2–21–50.
521,290. ANTIQUE BOX. Cl. 46. 2–21–50.
521,294. PEDRO. Cl. 17. 2–21–50.
521,301. PEAK-O-BEAUTY AND DESIGN. Cl. 39. 2–21–50.
521,304. MAGICREEPER AND DESIGN. Cl. 39. 2–21–50.
521,306. SANCAR. Cl. 39. 2–21–50.
521,310. LAKELINER IN DESIGN. Cl. 19. 2–21–50.
521,323. THE SCOOP. Cl. 39. 2–21–50.
521,324. CERTIFICATE BRAND. Cl. 49. 2–21–50.
521,326. HOSPITAL. Cl. 16. 2–21–50.
521,330. LUSTERTONE. Cl. 13. 2–21–50.
521,333. DART. O. LITE. Cl. 22. 2–21–50.
521,334. MRS. GRAHAM'S AND DESIGN. Cl. 46. 2–21–50.
521,335. INDIA HOUSE. Cl. 46. 2–21–50.
521,336. SUPERLINE. Cl. 29. 2–21–50.
521,337. THIS IS A SUPRE BEAVERTONE DYED LAMB AND DESIGN. Cl. 1. 2–21–50.
521,338. RUSSELURE. Cl. 22. 2–21–50.
521,341. VITAMINS HEALTH AND DESIGN. Cl. 46. 2–21–50.
521,344. ANTI-SEEP. Cl. 16. 2–21–50.
521,345. LACTO-ZYME. Cl. 46. 2–21–50.
521,353. SANI-CLEAN. Cl. 34. 2–21–50.
521,354. B F ROSSPUN AND DESIGN. Cl. 42. 2–21–50.
521,355. DISARTO. Cl. 39. 2–21–50.
521,356. HANDY HOLSTER. Cl. 37. 2–21–50.
521,358. SANGES GLOVES. Cl. 39. 2–21–50.
521,359. TEMPLETON AND DESIGN. Cl. 39. 2–21–50.
521,362. PAN-GARD. Cl. 13. 2–21–50.
521,365. HARD ROCK MAPLE AND DESIGN. Cl. 22. 2–21–50.
521,369. HOWELL. Cl. 42. 2–21–50.
521,370. DU BOVY CLOTHES. Cl. 39. 2–21–50.
521,371. SCHNEIDER'S FAMOUS KIDDIEWEAR. Cl. 39. 2–21–50.
521,372. "THE PAINT STORE ON PAINT STREET". Cl. 16. 2–21–50.
521,373. HOLLYWOOD MAGIC LANTERN. Cl. 22. 2–21–50.
521,374. THE CROWNING TOUCH OF EVERY GARMENT. Cl. 42. 2–21–50.
521,379. PENNINO. Cl. 27. 2–21–50.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

34,235. RECKITT'S PARIS BLUE AND DESIGN. Cl. 6. 2–27–1900. Reckitt & Sons, Limited. Reckitt & Colman Limited, Hull, England. Amended: In the statement, lines 10 and 11, "of which the following is a full, clear, and exact description" is deleted and *as shown in the accompanying drawing* is inserted in lieu thereof; the entire second paragraph of the statement is deleted; and the drawing is amended to appear:

RECKITT'S PARIS BLUE

TRADEMARK REGISTRATIONS—NEW CERTIFICATES

New Certificates issued under sections 7(c), 7(f), 7(g) of the Trademark Act of 1946 for the unexpired term of the original registrations.

618,821. PRECISION CASTPARTS CO. AND DESIGN. Cl. 106. Joseph B. Cox, doing business as Precision Castparts Co. 1–3–56. New Cert. Sec. 7(f), to Joseph B. Cox, doing business as Precision Castparts Co., assignee of Precision Castparts Corp., Portland, Oreg., 6–12–56.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 3

391,354. Nov. 4, 1941. Rubin E. Rappeport, Chicago, Ill. Pub. by R. E. Rappeport & Sons, Inc., Chicago, Ill.

STRATOSPHERE
RAPPEPORT·CHICAGO

The term "Chicago" is disclaimed.

For Luggage and Leather Goods—Namely, Overnight Cases, Hat Cases, Pullman Cases, Hat and Shoe Cases, Wardrobe Cases, Two-Suiters, Jacknife Wardrobes, Gladstone Bags, Traveling Bags, and Trunks.

CLASS 6

331,525. Jan. 14, 1936. Kinetic Chemicals, Inc., Wilmington, Del. Pub. by E. I. du Pont de Nemours and Company, Wilmington, Del.

FREON-12

For Dichlorodifluoromethane, Being Fluorinated Hydrocarbons Used as Refrigerants, Propellants, and Fire Extinguishing Preparations.

331,526. Jan. 14, 1936. Kinetic Chemicals, Inc., Wilmington, Del. Pub. by E. I. du Pont de Nemours and Company, Wilmington, Del.

FREON-11

For Trichloromonofluoromethane, Being Fluorinated Hydrocarbons Used as Refrigerants, Propellants, and Fire Extinguishing Preparations.

331,527. Jan. 14, 1936. Kinetic Chemicals, Inc., Wilmington, Del. Pub. by E. I. du Pont de Nemours and Company, Wilmington, Del.

F-114

For Dichlorotetrafluoroethane, Being Fluorinated Hydrocarbons Used as Refrigerants, Propellants, and Fire Extinguishing Preparations.

CLASS 16

443,422. Oct. 4, 1949. Harco Chemical Company, East Cranford, N. J. Pub. by registrant.

MASKIT

For Soap Compounds for Application to the Walls of Paint Spray Booths as a Protective Coating To Prevent Paint Material From Adhering Thereto and Which May Be Readily Removed by a Water Spray.

CLASS 19

406,254. Mar. 21, 1944. The Midland Steel Products Company, Cleveland Ohio. Pub. by registrant.



The words "Safety Power" are disclaimed apart from the mark as shown.

For Air and Vacuum Power Brake Equipment for Motor Vehicles, and Kits or Packages Containing Parts for the Repair of Such Equipment.

CLASS 26

441,274. Nov. 9, 1948. The Kono Manufacturing Company, Woodside, N. Y. Pub. by Kono Manufacturing Co. Inc., Woodside, N. Y.

STARDUST

For Eyeglass and Spectacle Frames and Parts Therefor.

CLASS 27

380,392. Aug. 20, 1940. The Lux Clock Manufacturing Company, Waterbury, Conn. Pub. by registrant.

TOWN HALL

For Clocks.

CLASS 37

330,193. Nov. 26, 1935. Harcraft Co., Torrance, Calif. Pub. by registrant.

Harcraft

For Paper Towels.

CLASS 39

111,093. June 27, 1916. Hart Schaffner & Marx, Chicago, Ill. Pub. by registrant.

VARSITY

For Coats, Vests, Trousers, Overcoats, and Raincoats.

CLASS 46

329,274. Oct. 22, 1935. Peter F. Aiello & Co., San Jose, Calif. Pub. by A. & R. Lettuce Company, Salinas, Calif.

King's Crown

For Fresh Vegetables.

LIST OF REGISTRANTS OF TRADEMARKS

A-M-R Chemical Co., Inc., Brooklyn, N. Y. 628,512, pub. 3–27–56. Cl. 6.
A-1 Bit & Tool Co., Inc., Houston, Tex., to U. S. Industries, Inc., New York, N. Y. 628,540, pub. 3–27–56. Cl. 13.
A. & R. Lettuce Co.: *See*—
Alelio, Peter F., & Co.
Abbott Laboratories, North Chicago, Ill. 628,816, pub. 3–27–56. Cl. 46.
Accumulatoren-Fabrik Aktiengesellschaft, Hagen, Westfalen, Germany. 628,589, pub. 12–27–55. Cl. 21.
Adorn, Frank, d. b. a. Little Princess Products, New York, N. Y. 521,248, canc. Cl. 51.
Alelio, Peter F., & Co., San Jose, by A. & R. Lettuce Co., Salinas, Calif. 329,274, 12(c) pub. 6–12–56. Cl. 46.
Albright Co., The, Chicago, Ill. 628,677, pub. 3–27–56. Cl. 31.
Alcoholics Anonymous Publishing, Inc., New York, N. Y. 628,716, pub. 3–27–56. Cl. 38.
Allen & Hanburys, Ltd., London, England. 628,563–4, pub. 3–27–56. Cl. 18.
Allied Thermal Corp.: *See*—
Tuttle & Bailey, Inc.
Allison, Vivian M.: *See*—
Wright, Corbyn G.
Alvey-Ferguson Co., The, Cincinnati, Ohio. 628,618, pub. 3–27–56. Cl. 23.
American Chicle Co., Long Island City, N. Y. 628,858. Cl. 46.
American Cyanamid Co., New York, N. Y. 628,503, pub. 3–27–56. Cl. 6.
American Hydraulics, Inc., Sheboygan, Wis. 521,272, canc. Cl. 23.
American Oil Co., The, New York, N. Y. 336,647, ren. 7–14–56. Cl. 35.
American Printed Circuits Co., Inc., Metuchen, N. J. 628,852. Cl. 21.
American Tobacco Co., The, New York, N .Y. 521,294, canc. Cl. 17.
Ampac Metal Die Co., Inc., La Mesa, Calif. 628,472, pub. 3–27–56. Cl. 1.
Anciens Etablissements Barbier-Benard & Turenne, Paris, France. 628,584, pub. 3–27–56. Cl. 21.
Anheuser-Busch, Inc., St. Louis, Mo. 336,622, ren. 7–14–56. Cl. 46.
Apartment Appliance Co., St. Louis, Mo. 521,273, canc. Cl. 19.
Appleton Electric Co., Chicago, Ill. 628,851. Cl. 21.
Arkansas Rice Growers Co-Operative Association, The, Stuttgart, Ark. 628,857. Cl. 46.
Armstrong Bros. Tool Co., Chicago, Ill. 628,523, pub. 3–27–56. Cl. 13.
Armstrong Packing Co. et al.: *See*—
Swift & Co.
Art Craft Sales Co.: *See*—
Budd-Jack, Joseph T.
AsthmaNefrin Co., Inc.: *See*—
Vaponefrin Co.
Ateliers & Chantiers de la Manche, Dieppe, France. 628,611, pub. 3–27–56. Cl. 23.
Athens Canning Co., Athens, Wis. 521 287, canc. Cl. 46.
Atlantic Refining Co., The, Philadelphia, Pa. 111,874, ren. 8–8–56. Cl. 15.
Augstein, S., & Co., Inc., College Point, N. C. 628,774, pub. 3–27–56. Cl. 42.
Automatic Reclosing Circuit Breaker Co., The, to Ranco Inc., Columbus, Ohio. 336,305 ren. 6–30–56. Cl. 26.
Auto-Soler Co., The, Atlanta, Ga. 628,617, pub. 3–27–56. Cl. 23.
Baby Town, Inc., St. Louis, Mo. 521 266, canc. Cl. 39.
Babson Bros. Co., Chicago, Ill. 521,133, canc. Cl. 23.
Badger Tool & Mfg. Co., Chicago, Ill. 628 575, pub. 3–27–56. Cl. 19.
Baldwin Locomotive Works, The, Philadelphia and Eddystone, Pa. 521 206 canc. Cl. 23.
Barbet Mills, Inc., Gastonia, N. C. 521 354, canc. Cl. 42.
Barclay Knitwear Co., Inc., Kingston and New York, N. Y. 521,194, canc. Cl. 39.
Barrett Equipment Co., St. Louis, Mo. 628 494, pub. 3–27–56. Cl. 4.
Barsky, Maurice, d. b. a. Medi-Dent Professional Apparel Co., New York, N. Y. 628,764, pub. 3–27–56. Cl. 39.
Bates, C. J. & Son: *See*—
Bates, Hamilton C.
Bates, Hamilton C., d. b. a. C. J. Bates & Son, to C. J. Bates & Son, Chester, Conn. 332,435, ren. 2–11–56. Cl. 44.
Bay State Milling Co., Winona, Minn. 110 911, ren. 6–20–56. Cl. 46.
Bay State Milling Co., Leavenworth, Kans. 628,797, pub. 3–27–56. Cl. 46.
Beavertone Fur Process Corp., New York, N. Y. 521 337, canc. Cl. 1.
Belch Bros. Candy Co., Chicago, Ill. 628,787, pub. 10–18–55. Cl. 46.
Belgrade Shoe Co., Auburn, Maine. 628,767, pub. 3–27–56. Cl. 39.
Belock Instrument Corp., College Point, N. Y. 628,583, pub. 3–27–56. Cl. 21.
Berke Brothers Distilleries Inc., Boston, Mass. 521,324, canc. Cl. 49.
Berkeley Models, Inc., Hempstead, N. Y. 628,553, pub. 3–27–56. Cl. 15.
Birenbaum, Abe, to Martinique Shoes, Inc., Philadelphia, Pa. 336,537, ren. 7–7–56. Cl. 39.
Blakeslee Mfg. Co., Salem, Ill. 628,630, pub. 3–27–56. Cl. 23.
Blaupunkt Elektronik G. m. b. H., Berlin-Wilmersdorf, Germany. 628,581, pub. 3–27–56. Cl. 21.
Bloch, Robert and Simone V. M., New York, N. Y. 521,235, canc. Cl. 50.
Bloch, Simone V. M.: *See*—
Bloch, Robert and Simone V. M.
Blumberg Co., The: *See*—
United Finish Co.
Bolen, James W., Alexandria, La. 109,177, ren. 3–28–56. Cl. 18.
Bonnar-Vawter, Inc., Cleveland, Ohio. 628,713, pub. 3–27–56. Cl. 37.
Bonne Bell, Inc., Lakewood, Ohio. 521,146, canc. Cl. 51.
Borden Co., The: *See*—
Phenix Cheese Co.
Borden Co., The, New York, N. Y. 628,807, pub. 3–27–56. Cl. 46.
Bowman Brothers Drug Co., The, Canton, Ohio. 628,565, pub. 3–27–56. Cl. 18.
Bowman Dairy Co., Chicago, Ill. 628,789, pub. 3–27–56. Cl. 46.
Bradbury Estate Co., Los Angeles, to Santiago Orange Growers Association, Orange, Calif. 111,924, ren. 8–15–56. Cl. 46.
Brador, Daniel, d. b. a. Timelight Melodies, Chicago, Ill. 628,710, pub. 3–27–56. Cl. 36.
Brake Lining Supply Co., Inc., Boston, Mass. 628,576, pub. 3–27–56. Cl. 19.
Breyer Electric Mfg. Co., Chicago, Ill. 521,281, canc. Cl. 4.
Briggs & Co., Washington, D. C. 628,792, pub. 3–27–56. Cl. 46.
Brinker, Hans, Inc., New York, N. Y. 628,600, pub. 3–27–56. Cl. 22.
Broadway Neckwear: *See*—
Broome, Samuel.
Brockway Glass Co., Inc., Brockway, Pa. 628,828, pub. 3–27–56. Cl. 50.
Broome, Samuel, d. b. a. Broadway Neckwear, New York, N. Y. 521,148, canc. Cl. 39.
Buckeye Cellulose Corp., The: *See*—
Buckeye Cotton Oil Co., The.
Buckeye Cotton Oil Co., The, to The Buckeye Cellulose Corp., Cincinnati, Ohio. 110,068, ren. 5–2–56. Cl. 46.
Budd-Jack, Joseph T., d. b. a. Art Craft Sales Co., Detroit, Mich. 628,476, pub. 3–27–56. Cl. 1.
Burpee, W. Atlee, Co., Philadelphia, Pa. 628,482, pub. 3–27–56. Cl. 1.
Cage Co., The, Waxahachie, Tex. 521,221, canc. Cl. 51.
California Fruit Products Co. Inc., New York, N. Y., to San Pedro Wine Co. Inc., Montgomery, Ala. 331,947, ren. 1–28–56. Cl. 47.
California and Hawaiian Sugar Refining Corp., Ltd., San Francisco, Calif. 333,312, ren. 3–17–56. Cl. 46.
Capital City Dairy Co., Columbus, to The Kroger Co., Cincinnati, Ohio. 111,086, ren. 6–27–56. Cl. 46.
Carleton, G. W., Van Nuys, Calif. 521,373, canc. Cl. 22.
Catalin Corp. of America, New York, N. Y. 628,509, pub. 3–27–56. Cl. 6.
Celanese Corp. of America, New York, N. Y. 332,994, ren. 3–10–56. Cl. 42.
Celanese Corp. of America, New York, N. Y. 333,013, ren. 3–10–56. Cl. 42.
Celanese Corp. of America, New York, N. Y. 333,031–2, ren. 3–10–56. Cl. 42.
Celanese Corp. of America, New York, N. Y. 333,143, ren. 3–10–56. Cl. 43.
Celotex Corp., The, Chicago, Ill. 628,475, pub. 3–27–56. Cl. 1.
Charles Machine Works, The, Perry, Okla. 628,639, pub. 3–27–56. Cl. 23.
Chase Candy Co., St. Louis, Mo., from Clinton Industries, Inc. 521,077, canc. Cl. 46.
Chevette, Inc., New York, N. Y. 330,046, ren. 11–19–55. Cl. 39.
Chew, Grace P., Philadelphia, Pa. 628,709, pub. 3–27–56. Cl. 36.
Chicken Products Co., Provo, Utah. 628,794, pub. 3–27–56. Cl. 46.
Chicopee Mills, Inc., New York, N. Y. 628,746, pub. 3–27–56. Cl. 39.
Clay-Adams, Inc., New York, N. Y. 628,668, pub. 3–27–56. Cl. 26.
Clinton Industries, Inc.: *See*—
Chase Candy Co.
Clopay Corp., Cincinnati, Ohio. 335,952, ren. 6–16–56. Cl. 32.
Cluett, Peabody & Co., Inc., Troy, N. Y. 333,831, ren. 4–7–56. Cl. 39.
Cohen, William H., d. b. a. Steel-Craft Letter Co., Boston, Mass. 521,252, canc. Cl. 50.
Coleman Co., Inc., The, Wichita, Kans. 628,695, pub. 3–27–56. Cl. 34.
Colgate-Palmolive Co., Jersey City, N. J. 628,837, pub. 3–13–56. Cl. 51.

Colonial Pump Co.: *See*—
Lilly, Howard C.
Colt's Mfg. Co., Hartford, Conn. 628,517, pub. 3–27–56. Cl. 9.
Conde Nast Publications Inc., The, New York, N. Y. 628,722, published 3–27–56. Cl. 38.
Connelly Containers, Inc.: *See*—
Gum, Inc.
Consolidated Midland Corp., Katonah, N. Y. 628,561, pub. 3–27–56. Cl. 18.
Consumers Cooperative Asociation, The, Kansas City, Mo. 628,520, pub. 3–27–56. Cl. 10.
Continental Oil Co., Ponca City, Okla. 628,548–9, pub. 3–27–56. Cl. 15.
Cornell Seed Co., St. Louis, Mo. 628,480, pub. 3–27–56. Cl. 1.
Corning Glass Works, Corning, N. Y. 336,044, ren. 6–23–56. Cl. 23.
Converse Rubber Corp., Malden, Mass. 628,856. Cl. 39.
Cox, Joseph B., d. b. a. Precision Castparts Co., to Joseph B. Cox, d. b. a. Precision Castparts Co., from Precision Castparts Corp., Portland, Oreg. 618,821, new cert. Cl. 106.
Cream of Wheat Corp., The, Minneapolis, Minn. 628,802, pub. 3–27–56. Cl. 46.
Crinet Co.: *See*—
Einhorn, Robert H.
Croft, James O., Java Village, N. Y. 628,847, pub. 3–27–56. Cl. 103.
Crowell-Collier Publishing Co., The, New York, N. Y. 628,721, pub. 3–27–56. Cl. 38.
Crown Curtain Mills, Inc., Philadelphia, Pa. 628,772, pub. 3–27–56. Cl. 42.
DX Radio Products Co., Chicago, Ill. 628,579, pub. 3–27–56. Cl. 21.
Darworth Inc., Simsbury, Conn. 628,511, pub. 3–27–56. Cl. 6.
Daust, H., Mfg. Co., St. Louis, Mo. 628,490, pub. 3–27–56. Cl. 3.
Davidson Corp., Brooklyn, N. Y. 628,631, pub. 3–27–56. Cl. 23.
Diamond Black Leaf Co., Cleveland, Ohio. 628,508, pub. 3–27–56. Cl. 6.
Diamond Calk Horse Shoe Co., Duluth, Minn. 628,488, pub. 3–27–56. Cl. 3.
Diane Hair Net Co., Brooklyn, N. Y., to David Neumann, West Englewood, N. J., and Norbert Neumann, New York, N. Y. 628,750, pub. 3–27–56. Cl. 39.
Disken, Bernard B., d. b. a. Bernard B. Disken Co., New Haven, Conn. 521,244, canc. Cl. 39.
Disken, Bernard B., Co.: *See*—
Disken, Bernard B.
Dixie Controller, Inc., North Birmingham, Ala. 628,593, pub. 3–27–56. Cl. 21.
Dixon Products Co., Detroit, Mich. 628,683, pub. 3–27–56. Cl. 32.
Dobson, Paul A., Exeter, Calif. 443,355, canc. Cl. 46.
Dolph, John C., Co., Newark, N. J. 337,264, ren. 8–4–56. Cl. 21.
Doniger, David D., & Co. Inc., New York, N. Y. 628,745, pub. 3–27–56. Cl. 39.
Doray Lamp Co., Inc., Chicago, Ill. 332,727, ren. 2–25–56. Cl. 21.
Dorr-Oliver Inc., Stamford, Conn. 628,541, pub. 3–27–56. Cl. 13.
Douglas of California, Inc., New York, N. Y. 521,140, canc. Cl. 39.
Drawalloy Corp., West York, Pa. 628,545, pub. 3–27–56. Cl. 14.
Dresser Equipment Co., d. b. a. Kobe Inc. Division of Dresser Equipment Co., to Kobe, Inc., Huntington Park, Calif. 628,603, pub. 3–6–56. Cl. 23.
Dri-Lab Co., Pittsburgh, Pa. 628,838, pub. 3–27–56. Cl. 51.
Dubin, Ruth G., Rockville Centre, N. Y. 521,267, canc. Cl. 39.
Dubovy, H., & Co., Inc., New York, N. Y. 521,370, canc. Cl. 39.
Dubuque Packing Co., Dubuque, Iowa. 628,788, pub. 8–2–55. Cl. 46.
Du-Lite Chemical Corp., The, Middletown, Conn. 628,510, pub. 3–27–56. Cl. 6.
Du Pont, E. I., de Nemours and Co.: *See*—
Kinetic Chemicals, Inc.
Duralite Co., Inc., New York, N. Y. 628,682, pub. 3–27–56. Cl. 32.
Dyer, J. E., & Co., Washington, D. C. 628,785, pub. 12–29–53. Cl. 46.
Eagle Clothes, Inc., Brooklyn, N. Y. 628,855. Cl. 39.
Eastman, Samuel, Co., Inc., Concord, N. H. 628,528, pub. 3–27–56. Cl. 13.
Einhorn, Robert H., d. b. a. Crinet Co., Brooklyn, N. Y. 628,751, pub. 3–27–56. Cl. 39.
Eisendrath, B. D., Tanning Co., Chicago, Ill. 628,481, pub. 3–27–56. Cl. 1.
Ekco Products Co., Chicago, Ill. 628,495, pub. 3–27–56. Cl. 4.
Elgeet Optical Co., Inc., Rochester, N. Y. 628,661, pub. 5–10–55. Cl. 26.
Elkay Mfg. Co., Cicero, Ill. 521,330, canc. Cl. 13.
Emgee Coal Co., The: *See*—
Midvale-Goshen Coal Co., The.
Emulsified Asphalts, Inc., Chicago, Ill. 628,500, pub. 11–22–55. Cl. 5.
Energy Farm Equipment Co.: *See*—
Pasker, G. J.
Erlez Mfg. Co., Erie, Pa. 628,637, pub. 3–27–56. Cl. 23.
Erstein, J. H., & Bro., Inc., New York, N. Y. 628,776, pub. 3–27–56. Cl. 42.
Essex Wire Corp., Detroit, Mich. 628,592, pub. 3–27–56. Cl. 21.
Evans, David G., Coffee Co., St. Louis, Mo. 521,335, canc. Cl. 46.
Farah Mfg. Co., Inc., El Paso, Tex. 628,742, pub. 3–27–56. Cl. 39.
Farbman & Wilson, Inc., Philadelphia, Pa. 521,359, canc. Cl. 39.
Farm Bureau Cooperative Association, Inc., The, Columbus, Ohio. 628,519, pub. 3–27–56. Cl. 10.
Feenom Laboratories: *See*—
Stiglitz Sales Co.
Fenton Label Co., Philadelphia, Pa. 628,715, pub. 3–27–56. Cl. 38.
Ferguson, James, & Sons (Glasgow), Ltd., Glasgow, Scotland. 329,921, ren. 11–19–55. Cl. 49.
Ferro Corp., The, Cleveland, Ohio. 628,518, pub. 3–27–56. Cl. 10.
Ferry-Morse Seed Co., San Juan Bautista, Calif. 628,805, pub. 3–27–56. Cl. 46.
Film Container Co., Inc., Chicago, Ill. 628,756, pub. 3–27–56. Cl. 39.
Fink, A., & Sons, Co., Inc., Newark, N. J. 521,162, canc. Cl. 46.
Firestone Tire & Rubber Co., The, Akron, Ohio. 628,708, pub. 3–27–56. Cl. 35.
First National Stores Inc.: *See*—
Millbrook Products Co.
Firth Sterling, Inc., Pittsburgh, Pa. 628,620, pub. 3–27–56. Cl. 23.
Fleming, Frank W., Long Beach, N. Y. 521,280, canc. Cl. 50.
Fletcher-Terry Co., The, Bristol, Conn. 628,619, pub. 3–27–56. Cl. 23.
Fortuna-Werke Spezialmaschinenfabrik Aktiengesellschaft, Stuttgart-Bad, Cannstatt, Germany. 628,610, pub. 3–27–56. Cl. 23.
Four Star Produce Co.: *See*—
Garin, H. P., Co.
Frank, H. G. J., d. b. a. Johnny Franks Auto Parts Co., Houston, Tex. 521,099, canc. Cl. 19.
Franks, Johnny, Auto Parts Co.: *See*—
Frank, H. G. J.
Freeman, R. E., Tampa, Fla. 628,800, pub. 3–27–56. Cl. 46.
Frelt Laboratories, Inc., Jacksonville, Fla. 628,554, pub. 3–27–56. Cl. 15.
Frick Co., Waynesboro, Pa. 628,678, pub. 3–27–56. Cl. 31.
Frick-Gallagher Mfg. Co., The, Wellston, Ohio. 628,686, pub. 3–27–56. Cl. 32.
Fritz, Alexander R., Inc., Providence, R. I. 335,765, ren. 6–16–56. Cl. 49.
Fuller, D. B. & Co., Inc., New York, N. Y. 628,775, pub. 3–27–56. Cl. 42.
Funk & Wagnalls Co., to Funk & Wagnalls Co., New York, N. Y. 108 693, ren. 2–22–56. Cl. 38.
Gandrud, E. S., Co., Owatonna, Minn. 628,854. Cl. 23.
Gardner Board and Carton Co., The: *See*—
Gardner-Richardson Co., The.
Gardner Corp., The, New York, N. Y. 628,762, pub. 3–27–56. Cl. 39.
Gardner-Denver Co.: *See*—
Keller Tool Co.
Gardner-Richardson Co., The, now by change of name The Gardner Board and Carton Co., Middletown, Ohio. 521,170, canc. Cl. 50.
Garin Co., The: *See*—
Garin, H. P., Co.
Garin, H. P.: *See*—
Garin, H. P., Co.
Garin, H. P., Co., d. b. a. Four Star Produce Co., by H. P. Garin, receiver of H. P. Garin Co., San Francisco, to The Garin Co., Salinas, Calif. 337,282, ren. 8–4–56. Cl. 46.
Gaseteria, Inc., Indianapolis, Ind. 628,557, pub. 3–27–56. Cl. 15.
Gay Tool Co., Inc., Providence, R. I. 628,671, pub. 1–17–56. Cl. 28.
Gebhardt Chili Powder Co., San Antonio, Tex. 628,799, pub. 3–27–56. Cl. 46.
General Aniline & Film Corp., New York, N. Y. 628,507, pub. 3–27–56. Cl. 6.
General Beauty Products, Inc., New York, N. Y. 628,839, pub. 3–27–56. Cl. 51.
General Cable Corp., Perth Amboy, N. J. 337,163, ren. 7–28–56. Cl. 21.
General Dynamics Corp., Rochester, N. Y. 628,596, pub. 3–27–56. Cl. 21.
General Tire & Rubber Co., The: *See*—
Whitehouse Distributors, Inc.
General Tire & Rubber Co., The, Akron, Ohio. 628,825, pub. 3–27–56. Cl. 50.
Glen Raven Knitting Mills, Inc., Glen Raven, N. C. 628,753, pub. 3–27–56. Cl. 39.
Glidden Co., The: *See*—
Mound City Paint & Color Co.
Globe Novelty House, Inc., New York, N. Y. 628,761, pub. 3–27–56. Cl. 39.
Gluck, S., & Co., Inc., Philadelphia, Pa. 628,587, pub. 3–27–56. Cl. 21.
Goldsmith, M. H., and Co., d. b. a. Milford Lingerie Co., New York, N. Y. 628,729, pub. 3–27–56. Cl. 39.
Gorton, George, Machine Co., Racine, Wis. 628,635, pub. 3–27–56. Cl. 23.
Graham Baking Co., Lakewood, Ohio. 521,334, canc. Cl. 46.
Graviner Mfg. Co. Ltd., London, England. 628,662, pub. 3–27–56. Cl. 26.
Gray, Clyde E., Port Arthur, Tex. 521,310, canc. Cl. 19.
Greensboro Twine Co.: *See*—
Yancey, Clement L., Jr.
Greensboro Twine & Paper Co.: *See*—
Yancey, Clement L., Jr.
Greenstein & Flaum, New York, N. Y. 521,217, canc. Cl. 39.
Griffin, Olive M., Findlay, Ohio. 628,732, pub. 3–27–56. Cl. 39.

Griffith Laboratories, Inc., The, Chicago, Ill. 628,814, pub. 3–27–56. Cl. 46.
Guardite Corp.: *See*—
Guardite Corp., The.
Guardite Corp., The, to Guardite Corp., Chicago, Ill. 333,996, ren. 4–14–56. Cl. 28.
Guild Radio and Television Co., Inglewood, Calif. 628,594, pub. 3–27–56. Cl. 21.
Guinness, Arthur, Son & Co., Ltd., London, England. 628,821–2, pub. 3–27–56. Cl. 48.
Gulf States Paper Corp., Tuscaloosa, Ala. 628,712, pub. 3–27–56. Cl. 37.
Gum, Inc., to Connelly Containers, Inc., Philadelphia, Pa. 333,527, ren. 3–24–56. Cl. 46.
Gum, Inc., to Connelly Containers, Inc., Philadelphia, Pa. 334 498, ren. 5–5–56. Cl. 46.
Gurvich, Max A., d. b. a. Pacific Chemical Mfg. Co., Seattle, Wash. 628,844, pub. 3–16–54. Cl. 52.
Hangsterfer's Laboratories, Inc., West Deptford, N. J. 628 556, pub. 3–27–56. Cl. 15.
Harco Chemical Co., East Cranford, N. J. 443,422, 12(c) pub. 6–12–56. Cl. 16.
Harcraft Co., Torrance, Calif. 330,193, 12(c) pub. 6–12–56. Cl. 37.
Hard Rock Maple Ten Pin Co., Chicago, Ill. 521,365, canc. Cl. 22.
Hart & Cooley Mfg. Co., Holland, Mich. 628,698–9, pub. 3–27–56. Cl. 34.
Hart Schaffner & Marx, Chicago, Ill. 108,905, ren. 3–7–56. Cl. 39.
Hart Schaffner & Marx, Chicago, Ill. 108,999, ren. 3–14–56. Cl. 39.
Hart Schaffner & Marx, Chicago, Ill. 111,093, 12(c) pub. 6–12–56. Cl. 39.
Hart Schaffner & Marx, Chicago, Ill. 111,094, ren. 6–27–56. Cl. 39.
Hart Schaffner & Marx, Chicago, Ill. 335,820, ren. 6–16–56. Cl. 39.
Hart Schaffner & Marx, Chicago, Ill. 335,822, ren. 6–16–56. Cl. 39.
Hart Schaffner & Marx, Chicago, Ill. 628,724, pub. 3–27–56. Cl. 39.
Hart Schaffner & Marx, Chicago, Ill. 628,743, pub. 3–27–56. Cl. 39.
Harvey Mfg. Corp., New York, N. Y. 521,243, canc. Cl. 23.
Haspel Brothers, Inc., New Orleans, La. 628,737, pub. 3–27–56. Cl. 39.
Hat Corp. of America, Norwalk, Conn. 337,303, ren. 8–4–56. Cl. 39.
Hat Research Foundation, Inc., New York, N. Y. 521,323, canc. Cl. 39.
Hearst Corp., The: *See*—
King Features Syndicate, Inc.
Heddon's, James, Sons, Dowagiac, Mich. 628,601, pub. 3–27–56. Cl. 22.
Hedeman Products, Inc., Great Neck, N. Y. 628,542, pub. 3–27–56. Cl. 13.
Heide Babe Products, Chicago, Ill. 521,255, canc. Cl. 39.
Heller, B., & Co., to B. Heller & Co., Chicago, Ill. 108,792, ren. 2–29–56. Cl. 46.
Heller, B., & Co., to B. Heller & Co., Chicago, Ill. 109,938, ren. 4–25–56. Cl. 46.
Heller, B., & Co., to B. Heller & Co., Chicago, Ill. 111,727, ren. 8–1–56. Cl. 6.
Heller, B., & Co., Chicago, Ill. 332,635, ren. 2–18–56. Cl. 46.
Heller, B., & Co., Chicago, Ill. 334,691, ren. 5–12–56. Cl. 6.
Henrietta Shoppe, Inc., New York, N. Y. 628,760, pub. 3–27–56. Cl. 39.
Hickey-Freeman Co., Rochester, N. Y. 334,494, ren. 5–5–56. Cl. 39.
Hidalgo Chemical Co., Tulsa, Okla. 628,514–15, pub. 3–27–56. Cl. 6.
Hinsdale Mfg. Co., Chicago, Ill. 521,203, canc. Cl. 23.
Holcomb, J. I., Mfg. Co., Inc., Indianapolis, Ind. 628,846, pub. 3–27–56. Cl. 52.
House of Stuart, Inc., The, Newark, N. Y. 628,833, pub. 3–27–56. Cl. 51.
House of Westmore, Inc., New York, N. Y. 628,836, pub. 3–27–56. Cl. 51.
Hudnut, Richard, New York, N. Y. 628,843, pub. 3–27–56. Cl. 51.
Hudson Coal Co., The, Scranton, Pa. 628,850. Cl. 1.
Hudson, H. D., Mfg. Co., Chicago, Ill. 628,539, pub. 3–27–56. Cl. 13.
Hymar, Inc., Philadelphia, Pa. 628,763, pub. 3–27–56. Cl. 39.
Hy-Way Machinery, Inc., Youngstown, Ohio. 628,705, pub. 3–27–56. Cl. 34.
Imperial Knife Co., Inc., Providence, R. I. 628,632, pub. 3–27–56. Cl. 23.
Imperial Knife Co., Inc., Providence, R. I. 628,643, pub. 3–27–56. Cl. 23.
International Business Machines Corp., New York, N. Y. 336,869, ren. 7–21–56. Cl. 38.
International Furniture Co., Chicago, Ill., now by merger to Schnadig Corp. 628,681, pub. 8–2–55. Cl. 32.
International Harvester Co., Chicago, Ill. 628,680, pub. 3–27–56. Cl. 31.
International Nickel Co., Inc., The, New York, N. Y. 628,544, pub. 3–27–56. Cl. 14.
International Silver Co., The, Meriden, Conn. 628,622–4, pub. 3–27–56. Cl. 23.
International Silver Co., The, Meriden, Conn. 628,641, pub. 3–27–56. Cl. 23.
Iowa Corn By Products Co.: *See*—
Ringheim, William W.
Iron Fireman Mfg. Co., Portland, Oreg. 628,706–7, pub. 3–27–56. Cl. 34.
Irrigation Equipment Co., Inc., Eugene, Oreg. 628,530, pub. 3–27–56. Cl. 13.
Isacs, Herman, Inc., Bridgeport, Conn. 628,795, pub. 3–27–56. Cl. 46.
James, Betsy, Ltd., New York, N. Y. 628,731, pub. 3–27–56. Cl. 39.
James-Pond-Clark, Pasadena, Calif. 628,527, pub. 3–27–56. Cl. 13.
Jaywein & Ortner, Inc., New York, N. Y. 628,754, pub. 3–27–56. Cl. 39.
Jeffrey-Allan Industries, Inc., Chicago, Ill. 628,577, pub. 3–27–56. Cl. 19.
Jensen, Poul V., Copenhagen, Denmark. 521,195, canc. Cl. 23.
Jill Bros. Farms: *See*—
Jill Bros. Inc.
Jill Bros. Inc., d. b. a. Jill Bros. Farms, Woodstown, N. J. 628,803, pub. 3–27–56. Cl. 46.
Johnson, S. C., & Son, Inc., Racine, Wis. 628,499, pub. 3–27–56. Cl. 4.
Johnson, S. C., & Son, Inc., Racine, Wis. 628,506, pub. 3–27–56. Cl. 6.
Jonaitis, Alfred S., d. b. a. Mercury Products, Brooklyn, N. Y. 628,602, pub. 3–27–56. Cl. 22.
Keeshan, Robert J., West Islip, N. Y. 628,848, pub. 3–27–56. Cl. 107.
Keller Tool Co., Grand Haven, Mich., to Gardner-Denver Co., Quincy, Ill. 628,604, pub. 3–27–56. Cl. 23.
Keuffel & Esser Co., Hoboken, N. J. 332,888, ren. 3–3–56. Cl. 26.
Keuffel & Esser Co., Hoboken, N. J. 333,161, ren. 3–10–56. Cl. 26.
Killark Electric Mfg. Co., St. Louis, Mo. 628,586, pub. 5–10–55. Cl. 21.
Kinetic Chemicals, Inc., by E. I. du Pont de Nemours and Co., Wilmington, Del. 331,525–7, 12(c) pub. 6–12–56. Cl. 6.
King Features Syndicate, Inc., to The Hearst Corp., New York, N. Y. 336,724, ren. 7–14–56. Cl. 38.
Kobe, Inc.: *See*—
Dresser Equipment Co.
Kobe Inc. Division of Dresser Equipment Co.: *See*—
Dresser Equipment Co.
Kolene Corp., Detroit, Mich. 628,651, pub. 3–27–56. Cl. 23.
Kono Mfg. Co. Inc.: *See*—
Kono Mfg. Co., The.
Kono Mfg. Co., The, by Kono Mfg. Co. Inc., Woodside, N. Y. 441,274, 12(c) pub. 6–12–56. Cl. 26.
Kress, S. H., and Co., New York, N. Y. 628,765, pub. 3–27–56. Cl. 39.
Kroger Co., The: *See*—
Capital City Dairy Co.
Kroger Grocery & Baking Co., The.
Kroger Grocery & Baking Co., The, to The Kroger Co., Cincinnati, Ohio. 110,892, ren. 6–13–56. Cl. 46.
Landis Machine Co., Waynesboro, Pa. 628,621, pub. 3–27–56. Cl. 23.
Lane Bryant Inc., New York, N. Y. 628,723, pub. 3–27–56. Cl. 39.
La Plant-Choate Mfg. Co. Inc., Cedar Rapids, Iowa. 521,182, canc. Cl. 23.
Laros Textiles Co., Bethlehem, Pa. 628,748–9, pub. 3–27–56. Cl. 39.
Larson, William H.: *See*—
Wil-Lar, Inc.
Lauritzen and Co., Inc., Chicago, Ill. 521,245, canc. Cl. 46.
Les Ateliers de Construction Ventola, Societe Anonyme, Ghent, Belgium. 628,656, pub. 3–27–56. Cl. 23.
Les Parfums de Dana, Inc., New York, N. Y. 628,841–2, pub. 3–27–56. Cl. 51.
Lilly, Eli, and Co., Indianapolis, Ind. 337,557, ren. 8–11–56. Cl. 18.
Lilly, Howard C., d. b. a. Colonial Pump Co., Stoughton, Mass. 521,224, canc. Cl. 23.
Lily of France, Inc.: *See*—
Madame Irene.
Lind-Gal, Inc., New York, N. Y. 628,675–6, pub. 3–27–56. Cl. 28.
Lindsay Ripe Olive Co., Lindsay, Calif. 337,595, ren. 8–11–56. Cl. 46.
Lindsey, Margaret P., d. b. a. The Town and Country Foundation, Atlanta, Ga. 628 717, pub. 3–27–56. Cl. 38.
Link-Belt Co., Chicago, Ill. 336,882, ren. 7–21–56. Cl. 23.
Linotype G. m. b. H., Frankfurt am Main, Germany. 628,616, pub. 3–27–56. Cl. 23.
Little Princess Products: *See*—
Adorn, Frank.
Lohn & Cohen, New York, N. Y. 628,757, pub. 3–27–56. Cl. 39.
Lucky Tiger Mfg. Co., Kansas City, Mo. 628,840, pub. 3–27–56. Cl. 51.
Lunt Silversmiths: *See*—
Rogers, Lunt & Bowlen Co.
Lux Clock Mfg. Co., The, Waterbury, Conn. 380,392, 12(c) pub. 6–12–56. Cl. 27.
M & H Valve & Fittings Co., Anniston, Ala. 628,543, pub. 3–27–56. Cl. 13.
Macco Chemical Co., The, Cleveland, Ohio. 628,501, pub. 3–27–56. Cl. 5.
Machinery Overhaul Co., Inc., Los Angeles, Calif. 628,831, pub. 3–27–56. Cl. 50.
Madame Irene, to Lily of France, Inc., New York, N. Y. 108 708 ren. 2–22–56. Cl. 39.
Maiden Form Brassiere Co., Inc., New York, N. Y. 628,758, pub. 3–27–56. Cl. 39.
Mannesmann Aktiengesellschaft, Dusseldorf, Germany. 628 522, pub. 3–27–56. Cl. 13.
Manufacturers Corp. of Mansfield, Ohio, Mansfield, Ohio. 628,531, pub. 3–27–56. Cl. 13.
Marathon Battery Co., Wausau, Wis. 628,585, pub. 3–27–56. Cl. 21.

Marine Products Co., San Diego, Calif. 628,810, pub. 3–27–56. Cl. 46.
Markem Machine Co., Keene, N. H. 628,647, pub. 3–27–56. Cl. 23.
Martin, Roy A., d. b. a. Roy A. Martin Co., Atlanta, Ga. 628,667, pub. 3–27–56. Cl. 26.
Martin, Roy A., Co.: *See*—
Martin Roy A.
Martinique Shoes, Inc.: *See*—
Birenbaum, Abe.
Mathes Co., Inc., The, Fort Worth, Tex. 628,704, pub. 3–27–56. Cl. 34.
Mathieson Chemical Corp., New York, N. Y., now by merger and change of name Olin Mathieson Chemical Corp. 628 558, pub. 3–27–56. Cl. 18.
May, Joseph, & Sons (Leeds) Ltd., Leeds, England. 333,585, ren. 3–24–56. Cl. 39.
Mayer, A. G., Inc., New York, N. Y. 521,356, canc. Cl. 37.
McCulloch Motors Corp., Los Angeles, Calif. 628,644, pub. 3–27–56. Cl. 23.
McGreevey, Werring & Howell, Inc., New York, N. Y. 521,369, canc. Cl. 42.
Mead Board Sales, Inc., Cincinnati, Ohio. 628,829, pub. 3–27–56. Cl. 50.
Medi-Dent Professional Apparel Co.: *See*—
Barsky, Maurice.
Meier's Wine Cellars, Inc., Silverton, Ohio. 628,819, pub. 3–27–56. Cl. 47.
Merck & Co., Inc., Rahway, N. J. 628,566–9, pub. 3–27–56. Cl. 18.
Mercury Products: *See*—
Jonaitis, Alfred S.
Metallizing Engineering Co. Inc., Westbury, N. Y. 628,479, pub. 3–27–56. Cl. 1.
Metzger, Theodore C., Lorain, Ohio. 521,333, canc. Cl. 22.
Michaels, Stern & Co., Inc., Rochester, N. Y. 628,744, pub. 3–27–56. Cl. 39.
Midland Steel Products Co., The, Cleveland, Ohio. 406,254, 12(c) pub. 6–12–56. Cl. 19.
Midvale-Goshen Coal Co., The, to The Emgee Coal Co., Cleveland Ohio. 109 874, ren. 4–18–56. Cl. 1.
Miles Laboratories, Inc., Elkhart, Ind. 628,560, pub. 3–13–56. Cl. 18.
Milford Lingerie Co.: *See*—
Goldsmith, M. H., and Co.
Millbrook Products Co., to First National Stores Inc., Somerville, Mass. 336,207, ren. 6–30–56. Cl. 46.
Miller Art Mfg. Co.: *See*—
Miller, Morris.
Miller, E. M., Mfg. Co.: *See*—
Miller Elbert M.
Miller, Elbert M., d. b. a. E. M. Miller Mfg. Co., Prairie Village, Kans. 628,570, pub. 3–27–56. Cl. 18.
Miller, Morris, d. b. a. Miller Art Mfg. Co., New York, N. Y. 521,304, canc. Cl. 39.
Miller Products Co., Portland, Oreg. 628,504, pub. 3–27–56. Cl. 6.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn. 628,597, pub. 3–27–56. Cl. 21.
Modern Carpet Sweeper Co., Inc., Brooklyn, N. Y. 521,222, canc. Cl. 23.
Modern Industries, Inc., Kansas City, Mo. 628,473, pub. 3–27–56. Cl. 1.
Monarch Rug Mills, Dalton, Ga. 628,777, pub. 3–27–56. Cl. 42.
Monsanto Chemical Co., St. Louis, Mo. 628,827, pub. 3–27–56. Cl. 50.
Monterey Bay Packing Co., Castroville, Calif. 628,808, pub. 3–27–56. Cl. 46.
Moore-Day Motors, Inc., Washington, D. C. 521,278, canc. Cl. 19.
Moreland Corp., Willow Grove, Pa. 628,659, pub. 3–27–56. Cl. 23.
Moreland Corp., Willow Grove, Pa. 628,690, pub. 3–27–56. Cl. 23.
Mound City Paint & Color Co., St. Louis, Mo., to The Glidden Co., Cleveland, Ohio. 331,430, ren. 1–7–56. Cl. 16.
Mustee Heater Co., Cleveland, Ohio. 628,696, pub. 3–27–56. Cl. 34.
National Sea Products, Ltd., Halifax, Nova Scotia, Canada. 628,793, pub. 3–27–56. Cl. 46.
Nethercutt Laboratories, Los Angeles, Calif. 628,834, pub. 3–27–56. Cl. 51.
Nettleton, A. E., Co., Syracuse, N. Y. 628,726, pub. 3–27–56. Cl. 39.
Neumann, David: *See*—
Diane Hair Net Co.
Neumann, Norbert: *See*—
Diane Hair Net Co.
New Jersey Foundry & Machine Co., Garwood, N. J. 628 521, pub. 2–7–56. Cl. 12.
New Method Equipment Co., Indianola, Iowa. 521,111, canc. Cl. 23.
Nobil Shoe Co., The, Akron, Ohio. 336,515, ren. 7–7–56. Cl. 39.
Norin, Jack, d. b. a. Jack Norin Co., Baltimore, Md. 521,326, canc. Cl. 16.
Norin, Jack, Co.: *See*—
Norin, Jack.
North Shore Mfg. Co., Duluth, Minn. 628,684, pub. 3–27–56. Cl. 32.
Nutrine Candy Co., Chicago, Ill. 521,088 canc. Cl. 46.
O. K. Ko-On Rubber Welding System, Littleton, Colo. 628 625, pub. 3–27–56. Cl. 23.
Ocoma Foods Co.: *See*—
Omaha Cold Storage Co.
O'Keeffe Ida L., West Newton, Mass. 628,752, pub. 3–27–56. Cl. 39.
Olin Mathieson Chemical Corp.: *See*—
Mathieson Chemical Corp.
Olin, R. R., Laboratories, Inc., Akron, Ohio. 628,823, pub. 3–27–56. Cl. 50.
Omaha Cold Storage Co., d. b. a. Ocoma Foods Co., Omaha, Nebr., now by change of name Ocoma Foods Co. 628 809, pub. 3–27–56. Cl. 46.
Orchard Yarn and Thread Co., New York, N. Y. 628,779, pub. 3–27–56. Cl. 43.
Owenby Mfg. Co., The, Marietta, Ga. 628,725, pub. 3–27–56. Cl. 39.
Pacific Chemical Mfg. Co.: *See*—
Gurvich, Max A.
Package Machinery Co.: *See*—
Transparent-Wrap Machine Corp.
Page Milling Co., The, Luray, Va. 336,536, ren. 7–7–56. Cl. 46.
Palace Metal Products, Inc., Brooklyn, N. Y. 628,687, pub. 3–27–56. Cl. 32.
Palmer, Mona, executrix and sole trustee of the estate of Russell Palmer, Los Angeles, Calif. 628,719, pub. 3–27–56. Cl. 38.
Palmer, Russell: *See*—
Palmer, Mona.
PanAmEx Corp., Beverly Hills, Calif. 521,260, canc. Cl. 23.
Park, Philip R., Inc., San Pedro, Calif. 628,804, pub. 3–27–56. Cl. 46.
Parr Electric Co., Inc., Newark, N. J. 628,578, pub. 3–27–56. Cl. 21.
Pasker, G. J., d. b. a. Energy Farm Equipment Co., Monticello, Iowa. 628,645, pub. 3–27–56. Cl. 23.
Patterson & Sons Welding & Machine Co., The, Ashland, Ohio. 628,691, pub. 3–27–56. Cl. 23.
Peerless Mills Co. of New York, Inc., New York, N. Y. 521,374, canc. Cl. 42.
Pennino Bros., Inc., New York, N. Y. 521,379, canc. Cl. 27.
Penn-Port Oil Co., Baltimore, Md. 628,547, pub. 3–27–56. Cl. 15.
Pennsylvania Alcohol Corp., Philadelphia, Pa., to Schenley Industries, Inc., New York, N. Y. 333,563, ren. 3–24–56. Cl. 49.
Pennsylvania Alcohol Corp., Philadelphia, Pa., to Schenley Industries, Inc., New York, N. Y. 334,748, ren. 5–12–56. Cl. 49.
Perfection Steel Body Co., The, Galion, Ohio. 628,486, pub. 3–27–56. Cl. 2.
Perfume-A-Spray Products Inc., Maple Shade, N. J. 628,606, pub. 3–27–56. Cl. 23.
Peter Pan Foundations, Inc., New York, N. Y. 628,766, pub. 3–27–56. Cl. 39.
Peters, F. C., Inc.: *See*—
Peters, Frederick C.
Peters, Frederick C., to F. C. Peters, Inc., to Tropical Agriculture Co-Operative Association, Goulds, Fla. 335,010, ren. 5–19–56. Cl. 46.
Petters Ltd., Staines, Middlesex, England. 628,626, pub. 3–27–56. Cl. 23.
Pettibone Mulliken Corp., Chicago, Ill. 521,093, canc. Cl. 23.
Pharmo-Craft Corp., The, New York, N. Y. 521,079, canc. Cl. 51.
Phelps, Phoebe, Caramel Co., Inc., Boston, Mass. 521,115, canc. Cl. 46.
Phenix Cheese Co., to The Borden Co., New York, N. Y. 111,905, ren. 8–8–56. Cl. 46.
Philamon Laboratories, Inc., Brooklyn, N. Y. 628,663, pub. 3–27–56. Cl. 26.
Phoenix Glass Co., The, Monaca, Pa. 628,693, pub. 3–27–56. Cl. 34.
Pink Poodle Beverage Co.: *See*—
Scaff, Frank A.
Pinkerton, Robert E., Reedley, Calif. 628,817, pub. 3–27–56. Cl. 46.
Piquerez, Ervin, S. A., Bassecourt, Bern, Switzerland. 628,670, pub. 3–27–56. Cl. 27.
Pittsburgh Forgings Co., Coraopolis, Pa. 628,612, pub. 3–27–56. Cl. 23.
Placier, Don H., d. b. a. Placier's, Chillicothe, Ohio. 521,372, canc. Cl. 16.
Placier's: *See*—
Placier, Don H.
Plas-Kem Corp., Burbank, Calif. 628,555, pub. 3–27–56. Cl. 15.
Plastic Irrigation Products Co., Santa Paula, Calif. 628,535, pub. 3–27–56. Cl. 13.
Plastiplate Co., Inc., South River, N. J. 628,633, pub. 3–27–56. Cl. 23.
Plymouth Rubber Co., Inc., Canton, Mass. 521,258, canc. Cl. 39.
Porto Co., The, Fort Worth, Tex. 521,212, canc. Cl. 29.
Post Baby Products, Los Angeles, Calif. 521,230, canc. Cl. 39.
Power, John, & Son Ltd., Dublin, Ireland. 336,924, ren. 7–21–56. Cl. 49.
Powernail Co., Chicago, Ill. 628,636, pub. 3–27–56. Cl. 23.
Prazision-Werke Bruninghaus & Co., Bielefeld, Germany. 628,572, pub. 7–26–55. Cl. 19.
Precisa A.-G., Zurich, Switzerland. 628,666, pub. 3–27–56. Cl. 26.
Precision Castparts Co.: *See*—
Cox, Joseph B.
Precision Castparts Corp.: *See*—
Cox, Joseph B.
Primo Polish Mfg. Co.: *See*—
Rutter, Elizabeth S.
Pyramid Instrument Corp., Lynbrook, N. Y. 628,595, pub. 3–27–56. Cl. 21.
Rainbow Shops, Inc., Brooklyn, N. Y. 628,747, pub. 3–6–56. Cl. 39.
Rainfair, Inc., Racine, Wis. 521,210, canc. Cl. 39.
Ranco Inc.: *See*—
Automatic Reclosing Circuit Breaker Co., The.

Ransburg Electro-Coating Corp., Indianapolis, Ind. 628,588, pub. 3–27–56. Cl. 21.
Rappeport, R. E., & Sons, Inc.: *See*—
Rappeport, Rubin E.
Rappeport, Rubin E., by R. E. Rappeport & Sons, Inc., Chicago, Ill. 391,354, 12(c) pub. 6–12–56. Cl. 3.
Rath Packing Co., The, Waterloo, Iowa. 628,811, pub. 11–8–55. Cl. 46.
Ray Brokerage Co.: *See*—
Ray, Herbert S.
Ray, Herbert S., d. b. a. Ray Brokerage Co., San Francisco, Calif. 628,801, pub. 3–27–56. Cl. 46.
Raytheon Mfg. Co., Waltham, Mass. 628,591, pub. 3–27–56. Cl. 21.
Realemon-Puritan Co., Chicago, Ill. 628,783, pub. 3–27–56. Cl. 45.
Reckitt & Colman Ltd.: *See*—
Reckitt & Sons, Ltd.
Reckitt & Sons, Ltd. Reckitt & Coleman Ltd., Hull, England. 34,235. Am. 7(d). Cl. 6.
Reed, R. S., Corp., Three Rivers, Mich. 521,172, canc. Cl. 19.
Reed Unit-Fans, Inc., New Orleans, La. 628,700–2, pub. 3–27–56. Cl. 34.
Reeves Pulley Co.: *See*—
Reliance Electric & Engineering Co., The.
Reinholz, William H., Pasadena, Calif. 628,689, pub. 3–27–56. Cl. 32.
Reliance Electric & Engineering Co., The, d. b. a. Reeves Pulley Co., Cleveland, Ohio. 628,613, pub. 3–27–56. Cl. 23.
Reliance Pencil Corp., Mount Vernon, N. Y. 628,714, pub. 3–27–56. Cl. 37.
Republic Steel Corp., Cleveland, Ohio. 628,580, pub. 3–27–56. Cl. 21.
Rex Cutlery Corp., New York, N. Y. 628,484, pub. 3–27–56. Cl. 2.
Rianda, S., d. b. a. S. Rianda Packing Co., Salinas, Calif. 521,341, canc. Cl. 46.
Rianda, S., Packing Co.: *See*—
Rianda, S.
Ringhelm, William W., d. b. a. Iowa Corn By Products Co., Nevada, Iowa. 628,483, pub. 3–27–56. Cl. 1.
Roberts Mfg. Co., Los Angeles, Calif. 628,615, pub. 3–27–56. Cl. 23.
Roberts Paint Corp., New York, N. Y. 521,256, canc. Cl. 16.
Robinson Milling Co., The, Salinas, Kans. 337,592, ren. 8–11–56. Cl. 46.
Robinson-Wagner Co., Inc., New York, N. Y. 628,505, pub. 3–27–56. Cl. 6.
Rocket Implement Co., Inc., Clearwater, Calif. 521,119, canc. Cl. 23.
Rockwell Mfg. Co., Pittsburgh, Pa. 628,657, pub. 3–27–56. Cl. 23.
Rogers, Lunt & Bowlen Co., d. b. a. Lunt Silversmiths, Greenfield, Mass. 628,672, pub. 3–27–56. Cl. 28.
Rosary Flower Co., The, New York, N. Y. 628,478, pub. 3–27–56. Cl. 1.
Rossmoyne Processing Corp., Rossmoyne, Pa. 521,345, canc. Cl. 46.
Rossotti Lithograph Corp.: *See*—
Rossotti Lithographing Co., Inc.
Rossotti Lithographing Co., Inc., New York, N. Y., to Rossotti Lithograph Corp., North Bergen, N. J. 330,220, ren. 11–26–55. Cl. 2.
Roto-Finish Co., Kalamazoo, Mich. 628,642, pub. 3–27–56. Cl. 23.
Royal McBee Corp.: *See*—
Royal Typewriter Co., Inc.
Royal Typewriter Co., Inc., to Royal McBee Corp., New York, N. Y. 110,779, ren. 6–13–56. Cl. 23.
Rubin, Isidore J., New York, N. Y. 521,198, canc. Cl. 39.
Russell, John K., d. b. a. Russell Lure Co., to Russelure Mfg. Co., Inc., Los Angeles, Calif. 521,338, canc. Cl. 22.
Russell Lure Co.: *See*—
Russell, John K.
Russelure Mfg. Co., Inc.: *See*—
Russell, John K.
Rutter, Elizabeth S., d. b. a. Primo Polish Mfg. Co., Westfield, Mass. 521,223, canc. Cl. 4.
Safeguard Corp., Lansdale, Pa. 628,679, pub. 3–27–56. Cl. 31.
Saffire Saw & Mfg. Co., San Francisco, Calif. 628,638, pub. 3–27–56. Cl. 23.
Saftest Bracket Co., Englewood, Colo. 628,534, pub. 3–27–56. Cl. 13.
St. Marys Woolen Mfg. Co., St. Marys, Ohio. 628,769–70, pub. 3–27–56. Cl. 42.
Saks & Co., New York, N. Y. 335 858, ren. 6–16–56. Cl. 3.
Saks & Co., New York, N. Y. 337,397, ren. 8–4–56. Cl. 39.
Saks & Co., New York, N. Y. 628,489, pub. 3–27–56. Cl. 3.
Saks & Co., New York, N. Y. 628,688, pub. 3–27–56. Cl. 32.
Saks & Co., New York, N. Y. 628,768, pub. 3–27–56. Cl. 40.
Salz, A. K., Co., Santa Cruz, Calif. 628,849. Cl. 1.
San Pedro Wine Co., Inc.: *See*—
California Fruit Products Co., Inc.
Sanges, Vincent, Inc., Gloversville, N. Y. 521,358, canc. Cl. 39.
Santiago Orange Growers Association: *See*—
Bradbury Estate Co.
Sarna, S. S., Inc., New York, N. Y. 628,697, pub. 3–27–56. Cl. 34.
Sarong, Inc., New Haven, Conn. 628,759, pub. 3–27–56. Cl. 39.
Sartor (Manchester) Ltd. Cheetham, Manchester, England. 628 738, pub. 3–27–56. Cl. 39.
Savemore Inc., Atlantic Highlands, N. J. 628,614, pub. 2–14–56. Cl. 23.
Scaff, Frank A., d. b. a. Pink Poodle Beverage Co., La Junta, Colo. 628,782, pub. 3–27–56. Cl. 45.
Schenley Industries, Inc.: *See*—
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Schnadig Corp.: *See*—
International Furniture Co.
Schneider, S., & Sons, New York, N. Y. 521 371, canc. Cl. 39.
Schneider's Oyster Co. Inc., Buffalo, N. Y. 521,103, canc. Cl. 46.
Schoeneman, J., Inc., now by change of name Slade, Inc., to J. Schoeneman, Inc., Baltimore, Md. 628,727, pub. 3–27–56. Cl. 39.
Schuylkill Valley Grocery Co., Inc., d. b. a. Socket Davis Co., Norristown, to Schuylkill Valley Grocery Co., Inc., Bridgeport, Pa. 335 989 ren. 6–23–56. Cl. 46.
Scivally, Herschell R., Shreveport, La. 628,664, pub. 3–27–56. Cl. 26.
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Scorsone, Francis P., d. b. a. Scorsone Baking Co., New York, N. Y. 628 791, pub. 3–27–56. Cl. 46.
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Setter Bros., Inc., Cattaraugus, N. Y. 628,830, pub. 3–27–56. Cl. 50.
Sewell Mfg. Co., Bremen, Ga. 521,262, canc. Cl. 39.
Sharp & Dohme, Inc., Philadelphia, Pa. 521,158, canc. Cl. 18.
Shepord, Maurice, New York, N. Y. 521,247, canc. Cl. 50.
Sherwin-Williams Co., The, Cleveland, Ohio. 628,685, pub. 1–31–56. Cl. 32.
Shoreline Packing Corp., Tampa, Fla. 628,796, pub. 3–27–56. Cl. 46.
Siegel-Land Mfg. Corp., Jersey City, N. J. 521,226, canc. Cl. 32.
Simoniz Co., Chicago, Ill. 628 491, pub. 3–27–56. Cl. 4.
Sircom Knitting Co., Inc., New York, N. Y. 628,730, pub. 3–27–56. Cl. 39.
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Skylon Corp., New York, N. Y. 521,306, canc. Cl. 39.
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Slenderella Systems, Inc., Darien, Conn. 628,784, pub. 3–27–56. Cl. 45.
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Smith, Edward, & Co., Inc., New York, N. Y. 521,173–4, canc. Cl. 16.
Smith, H. V., Co., St. Paul, Minn. 628,498, pub. 3–27–56. Cl. 4.
Smith, Harry, Associates, Inc., New York, N. Y. 628,755, pub. 3–27–56. Cl. 39.
Smith Kline & French Laboratories, Philadelphia, Pa. 628,571, pub. 3–27–56. Cl. 18.
Smith, T. L., Co., The, Milwaukee, Wis. 628,652, pub. 3–27–56. Cl. 23.
Societe Anonyme des Laboratoires Saphir Anciens Etablissements Destagnol Freres Faverges, Haute-Savoie, France. 628 493, pub. 3–27–56. Cl. 4.
Societe des Anciens Etablissements a Combe et Fils et Cie, Paris, France. 111 301, ren. 7–14–56. Cl. 1.
Societe des Anciens Etablissements a Combe et Fils et Cie, Paris, France. 111,546, ren. 7–25–56. Cl. 1.
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Schuylkill Valley Grocery Co., Inc.
South Bend Lathe Works, South Bend, Ind. 628,634, pub. 3–27–56. Cl. 23.
Southern Pecan Co., Inc., New Orleans, La. 628,798, pub. 3–27–56. Cl. 46.
Southern States Cooperative, Inc., Richmond, Va. 628,818, pub. 3–27–56. Cl. 46.
Southwestern Petroleum Co., Inc., Fort Worth, Tex. 628,546, pub. 3–27–56. Cl. 15.
Southwestern Petroleum Co., Inc., Fort Worth, Tex. 628,551, pub. 3–27–56. Cl. 15.
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Standard Oil Co. of Calif., Wilmington, Del., and San Francisco, Calif. 521,271, canc. Cl. 23.
Standard Packaging Corp., Chicago, Ill. 628,824, pub. 3–27–56. Cl. 50.
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Steel-Craft Letter Co.: *See*—
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Stensgaard, W. L., and Associates, Inc., Chicago, Ill. 628,826, pub. 3–27–56. Cl. 50.
Sterling Net & Twine Co., Inc., Belleville, N. J. 628,773, pub. 3–27–56. Cl. 42.
Stevens-Burt Co., The, New Brunswick, N. J. 628,526, pub. 3–27–56. Cl. 13.
Stevens, J. P., & Co., Inc., New York, N. Y. 628,771, pub. 3–27–56. Cl. 42.
Stiglitz Sales Co., d. b. a. Feenom Laboratories, Berkeley, Calif. 628,552, pub. 3–27–56. Cl. 15.
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Stop-Fire, Inc., Brooklyn, N. Y. 628,853. Cl. 23.
Stratafoam Corp., Cedar Rapids, Iowa. 628 859. Cl. 52.
Straub Mfg. Co., Inc., Oakland, Calif. 628,640, pub. 3–27–56. Cl. 23.
Strauss, D., Co., Inc., New York, N. Y. 628,778, pub. 3–27–56. Cl. 42.

Strunk Chain Saws, Inc., Coatesville, Pa. 628,609, pub. 5–24–55. Cl. 23.
Suffolk Oil Mill, Inc., Suffolk, Va. 628,790, pub. 6–7–55. Cl. 46.
Supreme Council (Mother Council of the World) of the Inspectors General Knights Commanders of the House of the Temple of Solomon of the Thirty-Third Degree of the Ancient and Accepted Scottish Rite of Free Masonry of the Southern Jurisdiction of the United States of America, The, Washington, D. C. 628,718, pub. 3–27–56. Cl. 38.
Sutton, Steele & Steele, Inc., Dallas, Tex. 628,607, pub. 3–27–56. Cl. 23.
Swartzbaugh Mfg. Co., The, Toledo, Ohio. 628,780, pub. 9–21–54. Cl. 44.
Swift & Co., d. b. a. Armstrong Packing Co. et al., Chicago, Ill. 628,812, pub. 3–27–56. Cl. 46.
Tappan Stove Co., The, Mansfield, Ohio. 521,353, canc. Cl. 34.
Taylor, Frank F., Co., The, Norwood, Ohio. 521,136, canc. Cl. 19.
Taylor, Taylor & Hobson Ltd., Leicester, England. 628,669, pub. 3–27–56. Cl. 26.
Taylor, W. A., New York, N. Y. 521,355, canc. Cl. 39.
Tecnique, Inc., Minneapolis, Minn. 628,832, pub. 3–27–56. Cl. 51.
Tennant, C., Sons & Co., of New York, New York, N. Y. 628,627, pub. 3–27–56. Cl. 23.
Teenform Foundations, Inc., New York, N. Y. 628,728, pub. 3–27–56. Cl. 39.
Tennessee Glove Co., Tullahoma, Tenn. 521,091, canc. Cl. 39.
Texas Harvest Hat Co., Laredo, Tex. 628,733–5, pub. 3–27–56. Cl. 39.
Texas Harvest Hat Co., Laredo, Tex. 628,739–41, pub. 3–27–56. Cl. 39.
Texlee Mills, Inc., Opa Locka, Fla. 521,263, canc. Cl. 39.
Timelight Melodies: *See*—
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Time-Rite Co., Omaha, Nebr. 628,665, pub. 3–27–56. Cl. 26.
Tissue Organics, Inc., New York, N. Y. 521,289, canc. Cl. 18.
Tobey, Alton E., d. b. a. Tobey Rasp Service, Santa Cruz, Calif. 628,496, pub. 3–27–56. Cl. 4.
Tobey Rasp Service: *See*—
Tobey, Alton E.
Top-Pop Products Co., Detroit, Mich. 628,786, pub. 3–20–56. Cl. 46.
Torres, Jose R. V., Vedado, Havana, Cuba. 628,835, pub. 3–27–56. Cl. 51.
Towle Mfg. Co., Newburyport, Mass. 628,673, pub. 3–27–56. Cl. 28.
Town and Country Foundation, The: *See*—
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Transflora, Inc., Staten Island, N. Y. 628,720, pub. 3–27–56. Cl. 38.
Transparent-Wrap Machine Corp., New York, N. Y., to Package Machinery Co., East Longmeadow, Mass. 335,751, ren. 6–16–56. Cl. 23.
Travers, Mabel W., New York, N. Y. 628,658, pub. 3–27–56. Cl. 23.
Tropical Agriculture Co-Operative Association: *See*—
Peters, Frederick C.
Trump Plastics, Inc., Cuyahoga Falls, Ohio. 628,487, pub. 3–27–56. Cl. 2.
Truvox Ltd., Wembley, Middlesex, England. 628,582, pub. 3–27–56. Cl. 21.
Turner Brass Works, The, Sycamore, Ill. 628,694, pub. 3–27–56. Cl. 34.
Tuttle & Bailey, Inc., to Allied Thermal Corp., New Britain, Conn. 628,692, pub. 3–27–56. Cl. 34.
Tyzack, W., Sons & Turner Ltd., Heeley, Sheffield, England. 628,608, pub. 3–27–56. Cl. 23.
United Coffee Corp., Chicago, Ill. 628,646, pub. 3–27–56. Cl. 23.
United Finish Co., to The Blumberg Co., Peabody, Mass. 628,502, pub. 3–27–56. Cl. 6.
United Sound & Signal Co., Inc., Columbia, Pa. 628,605, pub. 3–27–56. Cl. 23.
U. S. Industries, Inc.: *See*—
A-1 Bit & Tool Co., Inc.
U. S. Industries, Inc., Chicago, Ill. 628,485, pub. 3–27–56. Cl. 2.
U. S. Industries, Inc., New York, N. Y. 628,529, pub. 3–27–56. Cl. 13.
United States Rubber Co., New York, N. Y. 628,474, pub. 3–27–56. Cl. 1.
U. S. Rubber Reclaiming Co., Inc., Buffalo, N. Y. 628,477, pub. 3–27–56. Cl. 1.
U. S. Sanitary Specialties Corp., Chicago, Ill. 628,492, pub. 3–27–56. Cl. 4.
Universal Engineering Corp., Cedar Rapids, Iowa. 628,628–9, pub. 3–27–56. Cl. 23.
Universal Fountain Brush Co., St. Petersburg, Fla. 521,336, canc. Cl. 29.
Universal Musical Instrument Co., New York, N. Y. 628,711, pub. 3–27–56. Cl. 36.
Van Ameringen-Haebler, Inc., New York, N. Y. 628,781, pub. 3–27–56. Cl. 45.
Vaponefrin Co., Seattle, Wash., to AsthmaNefrin Co., Inc., d. b. a. Vaponefrin Co., Portland, Oreg. 336,962, ren. 7–21–56. Cl. 18.
Vital Products Mfg. Co., Cleveland, Ohio. 628,653–5, pub. 3–27–56. Cl. 23.
Walker, Hiram, & Sons, Inc., Peoria, Ill. 337,436, ren. 8–4–56. Cl. 49.
Wallace, R., & Sons Mfg. Co., Wallingford, Conn. 628,674, pub. 3–27–56. Cl. 28.
Watson Automotive Equipment Co.: *See*—
Watson, James A., Jr.
Watson, James A., Jr., d. b. a. Watson Automotive Equipment Co., Washington, D. C. 628,573–4, pub. 3–27–56. Cl. 19.
Weatherhead Co., The, Cleveland, Ohio. 628,538, pub. 3–27–56. Cl. 13.
Wegman, S. J., Co., New York, N. Y. 521,301, canc. Cl. 39.
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West Virginia Pulp and Paper Co., New York, N. Y. 628,513, pub. 3–27–56. Cl. 6.
West Virginia Steel and Mfg. Co., Huntington, W. Va. 628,532, pub. 3–27–56. Cl. 13.
Western Pottery Co., Inc., Hollydale, Calif. 628,533, pub. 3–27–56. Cl. 13.
Western Stove Co., Inc., Culver City, Calif. 628,703, pub. 3–27–56. Cl. 34.
Westside Farms, Phoenix, Ariz. 628,806, pub. 3–27–56. Cl. 46.
Westside Farms, Phoenix, Ariz. 628,813, pub. 3–27–56. Cl. 46.
Westside Farms, Phoenix, Ariz. 628,815, pub. 3–27–56. Cl. 46.
Wheeling Corrugating Co., Wheeling, W. Va. 337,050–1, ren. 7–28–56. Cl. 2.
Whitehouse Distributors, Inc., Mansfield, to The General Tire & Rubber Co., Akron, Ohio. 628,471, pub. 3–27–56. Cl. 1.
Whitman, Stephen F., & Son, Inc., Philadelphia, Pa. 521,290, canc. Cl. 46.
Whitney Blake Co., The, Hamden, New Haven, Conn. 628,598, pub. 3–27–56. Cl. 21.
Wil-Lar, Inc., to William H. Larsen, Racine, Wis. 628,599, pub. 3–27–56. Cl. 22.
Williamson Products Corp., Brooklyn, N. Y. 521,344, canc. Cl. 16.
Willing Co., The, Kansas City, Mo. 521,362, canc. Cl. 13.
Wink Soap Co., Inc., Racine, Wis. 628,845, pub. 3–27–56. Cl. 52.
Wire Specialties Co., Santa Clara, Calif. 628,524–5, pub. 3–27–56. Cl. 13.
Wood Flong Corp., Hoosick Falls, N. Y. 521,112, canc. Cl. 50.
Wood, Joseph T., Co., Ware, to The Springfield Co., Springfield, Mass. 521,232, canc. Cl. 39.
Woodhead, Daniel, Co., Chicago, Ill. 628,590, pub. 3–27–56. Cl. 21.
Worcester Pressed Aluminum Corp., Worcester, Mass. 628,536, pub. 3–27–56. Cl. 13.
Wright, C. Headlee: *See*—
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Wright, Corbyn G., to Elena V. Wright, Vivian M. Allison, C. Headlee Wright and, Homer G. Wright, Monte Vista, Clo. 334,010, ren. 4–14–56. Cl. 46.
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Wulf Bros., Inc., Troy, N. Y. 335,437, ren. 6–2–56. Cl. 39.
Xttrium Co., Chicago, Ill. 628,559, pub. 3–27–56. Cl. 18.
Yancey, Clement L., Jr., d. b. a. Greensboro Twine & Paper Co., and as Greensboro Twine Co., Greensboro, N. C. 628,516, pub. 3–6–56. Cl. 7.
Zelinka-Matlick, New York, N. Y. 628,736, pub. 3–27–56. Cl. 39.

U. S. GOVERNMENT PRINTING OFFICE: 0—1956

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
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PATENTS

NOTICES

Adjudicated Patent

(C. A. Conn.) Lines Patent No. 2,224,403 (219—39), for electrical heating of storage and transportation system for viscous liquids. Claims 4, 14, and 15 *Held* valid and infringed. *Electric Pipe Line, Inc.* v. *Fluid Systems, Inc.*, 231 F.2d 370; — USPQ —.

Disclaimer

2,539,474.—*Robert Alfred Redard* and *Antoine Fromageot*, Paris, France. TRANSMISSION OVER CABLES BY MEANS OF FREQUENCY MODULATION. Patent dated Jan. 30, 1951. Disclaimer filed May 14, 1956, by the assignee, *International Standard Electric Corporation*.

Hereby enters this disclaimer to claims 11 and 12 of said patent.

Patents Available for Licensing or Sale

2,739,557. Method and Apparatus for Deep Drawing of Metals. (Complete technical data and working dies available.) C. N. Fouse, President, Krailnator Limited, Preston, Ontario, Canada.

2,745,219. Plant Support. Ole Knud Olsen, Olsen's Perennial Garden, Route 2, Wautoma, Wis.

Des. 177,087. Set of Toy Cards or Similar Article. Gilbert Deschatre, Rio de Janeiro, Brazil. Correspondence to Michael S. Striker, 511 Fifth Ave., New York 17, N. Y.

Sigmund Takach, 302 Lincoln Ave., Youngstown, Ohio, offers the following two patents:

2,646,496. Combination Speaker and Heater for Outdoor Theaters.

2,683,407. Speaker Heater Apparatus for Drive-in Theaters.

Courtney Conover, 729 Dartmouth Ave., Silver Spring, Md., offers the following two patents:

2,703,116. Four-Motion Reciprocating Power Saw (Attachable to Power Mowing Machines).

2,723,688. Four-Motion Reciprocating Power Saw (Attachable to Power Mowing Machines).

General Electric Company offers the following patents for non-exclusive licensing on reasonable terms to domestic manufacturers.

Applications for license under the following patent may be addressed to: General Electric Company, Component Products Division, 1635 Broadway, Fort Wayne, Ind.

2,293,508. Dynamo-Electric Machine.

Applications for licenses under the following patent may be addressed to: General Electric Company, Motor and Generator Division, 1 River Road, Schenectady 5, N. Y.

2,578,436. Electrical Connector.

Applications for licenses under the following 5 patents may be addressed to: Patent Counsel, Switchgear & Control Division, General Electric Company, 6901 Elmwood Ave., Philadelphia 42, Pa.

2,232,538. Valve With Time Delay Action.

2,352,948. Electromagnetic Device.

2,392,201. Electric Circuit Breaker.

2,746,030. Metal Sulfide Resistance Elements.

2,741,672. Dual Axis Rotatable Blade Switch.

Classification Order No. 196

Classification Order No. 196, dated May 24, 1956, incorporates changes in the following classes:

Classes 1, 12, 29, 214.

The above changes will be incorporated in the Manual of Classification replacement sheets dated July 1956.

M. C. ROSA,
Executive Examiner.

May 15, 1956.

New Applications Received During April 1956

Patents	6,497
Designs	420
Plants	5
Reissues	19
Total	6,941

Issue

Patents	1,001—No.	2,750,591 to No.	2,751,591, incl.
Designs	72—No.	178,034 to No.	178,105, incl.
Plants	5—No.	1,483 to No.	1,487, incl.
Reissues	2—No.	24,167 to No.	24,168, incl.
Total	1,080		

CONDITION OF PATENT APPLICATIONS AS OF APRIL 30, 1956

Total number of pending applications (excluding Designs)	219,129
Total number of pending Design applications	6,908
Total number of applications awaiting action (excluding Designs)	122,613
Total number of Design applications awaiting action	2,652
Date of oldest new application	Jan. 12, 1955
Date of oldest amended application	Nov. 30, 1953

ROSA, M. C., Director, Patent Examining Operation

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 60, 63, 64.
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III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
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3. (VII) LE ROY, C. A. (WINDHAM, R. K., acting), Metal Founding and Treatment; Metallurgy (Process and apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	8-9-55	3-29-54
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	7-8-55	10-8-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	7-18-55	1-14-55
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11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	8-8-55	9-2-54
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17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	7-1-55	7-19-54
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26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	8-17-55	1-3-55
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28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	6-17-55	9-3-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	5-2-55	1-27-55
30. (VII) O'LEARY, R. A. (MICHAEL, E. J., acting), Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	10-18-55	6-24-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	4-21-55	11-4-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	7-20-55	2-1-55
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	8-1-55	4-8-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	7-11-55	4-6-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	7-18-55	11-2-54
36. (V) McFADYEN, A. D., Measuring and Testing	5-26-55	2-8-55
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	6-24-55	10-20-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g., Aso, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	8-1-55	12-1-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	8-22-55	6-23-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	8-2-55	2-2-55
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	4-25-55	4-27-54
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	2-18-55	7-27-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	6-6-55	8-16-54
44. (II) EVANS, N. H., Antennas; Automatic Pilots; Directive Radio Systems; Mass Spectrometers; Nuclear Batteries; Nuclear Resonant Devices; Neutron Detecting and Measuring; Radar; Sonar; Torpedoes	1-26-55	3-26-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	6-28-55	1-10-55
46. (II) WILES, W. G., Actinide Series (e. g., fissionable) Compounds; Sintered Metal Stock; Explosives; Power Plants (part); Metallurgy (part); Surgery (part); Radioactive Medicines; Irradiation Chemistry; Carbon Chemistry (part)	4-11-55	8-20-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	3-12-55	1-7-55
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	5-6-55	6-4-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	5-17-55	10-26-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resin Compositions, Synthetic Rubber Compositions, Natural Rubber	6-24-55	4-19-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	8-1-55	4-16-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	5-31-55	7-20-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	9-2-55	2-1-55
54. (II) NILSON, R. G. (SAX, E. J., acting), Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	6-2-55	6-1-54
55. (VII) KLINE, J. R., Surgery; Dentistry; Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	8-29-55	8-6-54
56. (I) KEELY, J. E. (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	8-4-55	2-3-55
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	11-4-55	8-31-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	8-2-55	4-13-54
59. (I) HENKIN, B. (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	5-27-55	6-2-54
60. (I) MANGAN, P. E., Carbon Chemistry (part), e. g., Synthetic Resins, Synthetic Rubber	7-1-55	5-7-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	7-13-55	1-24-55
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	7-13-55	11-17-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	7-15-55	9-2-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	8-1-55	5-17-54
66. (V) LISANN, I. (BUCHLER, M., acting), Geometric Instruments; Automatic Weighing Scales; Acoustics	7-1-55	4-6-54
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	5-20-55	4-26-55
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	6-1-55	1-13-54
70. (II) BREWRINK, J. L., Security laws administration.		
CLASS. DIVS. I (VII) LANHAM, B. E., Paper Making; Photographic Processes and Products	5-10-55	1-11-55
CLASS. DIVS. II (II) LADY, J. E., Oscillators; Amplifiers; Resistances and Rheostats	8-1-55	2-24-55
CLASS. DIVS. III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	9-21-55	9-28-54
CLASS. DIVS. IV (VI) SMITH (Mrs.), M. P., Harrows and Diggers; Plows; Fluid Sprinkling, Spraying and Diffusing	8-1-55	12-27-54
CLASS. DIVS. V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	8-1-55	7-1-55
DESIGNS (III) A—BREHM, G. L., Industrial Arts	10-31-55	10-11-55
DESIGNS (III) B—GRAY, M. A., Household, Personal and Fine Arts	10-3-55	10-10-55

The following divisions have been abolished: 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during June 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1955*.

Patents	Numbers 2,160,805 to 2,164,301, inclusive
Plant Patents	Numbers 330 to 333, inclusive

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

1,894,890, A. Rossi, Combined automatic clutch and transmission mechanism for automobiles, **filed** Sept. 15, 1952, D. C., Dist. of Columbia, Doc. 4137/52, *Antonio Rossi* v. *General Motors Corp.* Cause dismissed with prejudice Apr. 18, 1955.

2,138,172, C. S. Johnson, Batching apparatus, **filed** Aug. 25, 1954, D. C., S. D. Calif. (Los Angeles), Doc. 17121-HW, *C. S. Johnson Co.* v. *California Batching Equipment Co. et al.* Claims 1 and 5 of patent held invalid; complaint dismissed (notice May 18, 1956).

2,158,073, Keith and Walker, Amusement device, **filed** May 14, 1956, D. C. Oreg. (Portland), Doc. 8614, *Wayland D. Keith* v. *Everly Aircraft Co.*

2,178,965, J. W. Johnson, Cover for garment hangers, **filed** May 17, 1956, D. C., N. D. Ohio (Cleveland), Doc. 32807, *L. M. Leathers' Sons* v. *Foam-Craft Products Co. et al.*

2,200,824, Louisot and Muller, Mechanism for processing meat products, **filed** Feb. 14, 1956, D. C., N. D. Okla. (Tulsa), Doc. 3861, *Needham Mfg. Co., Inc., et al.* v. *Whitaker Beef-Steaker.* Decree holding patent valid and infringed: complaint dismissed without prejudice May 18, 1956.

2,210,869, J. M. Larson, Damper, **filed** Dec. 20, 1954, D. C., E. D. N. Y. (Brooklyn), Doc. 15036, *Minneapolis-Honeywell Regulator Co.* v. *Duro-Dyne Corp.* Consent order of dismissal May 23, 1956.

2,238,946, R. M. Roberts, Carpet fastener, **filed** May 24, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16584, *Roberts Mfg. Co.* v. *American Tackless Corp.*

2,302,340, E. Morf, Waterproof watch-case, **filed** Nov. 24, 1954, D. C., S. D. N. Y., Doc. 97/78, *Benrus Watch Co., Inc.* v. *Bulova Watch Co., Inc.* Stipulation and order of dismissal (notice May 17, 1956).

2,339,487, W. R. King, Time and volume control for gas intermitters; **2,709,445**, Garrett and Peters, Bellows mounting for valve, **filed** Dec. 4, 1950, D. C., S. D. Tex. (Houston), Doc. 5884, *Garrett Oil Tools, Inc., Dir. of U. S. Industries, Inc.* v. *Macco Oil Tool Co. et al.* Consent decree; Patent No. 2,339,487 held valid; claims 4, 5, 6, 7, 8, 9, 10, 11, and 13 of said patent held infringed; injunction granted; complaint dismissed without prejudice as to infringement of claims 1 and 2 of Patent No. 2,709,445 May 16, 1956.

2,366,986, K. A. Sidén, Drapery, curtain, and similar hangings, **filed** May 18, 1956, D. C., N. D. Calif. (Sacramento), Doc. 7391, *American Beautipleat, Inc. et al.* v. *Rankin Mfg. Co. et al.*

2,455,589, T. Kotzin, Trousers; **TM 555,364** (Pegger), A-1 Mfg. Co., Men's and boys' suits of clothes, **filed** July 18, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 18443-WM, *A-1 Mfg. Co.* v. *Edward Hyman Co. et al.* Consent judgment; patent and trademark registration held valid and infringed; injunction issued (notice May 18, 1956).

2,591,573, C. H. McBurney, Resinous insoluble reaction products of tertiary amines with haloalkylated vinyl aromatic hydrocarbon copolymers, **suit** for Declaratory Judgment filed Apr. 29, 1952, D. C., S. D. N. Y., Doc. 75/160, *The Permutit Co.* v. *Rohm & Haas Co.* Consent order transferring action to U. S. D. C., Dist. of Del. (notice May 21, 1956).

2,637,445, L. W. Patterson, Display rack for bottled goods, **filed** May 21, 1956, D. C., S. D. Ohio (Cincinnati), Doc. 3787, *Spring-A-Way Displays Inc. of Calif.* v. *Coca-Cola Bottling Works Co. et al.*

2,675,634, K. C. Knapp, Earth loosening apparatus, **filed** May 15, 1956, D. C., N. D. Tex. (Wichita Falls), Doc. 1035, *Kenneth C. Knapp* v. *Ted Price Construction Co.*

2,703,744, A. S. Karper, Rotary card file, **filed** Apr. 6, 1955, D. C., S. D. N. Y., Doc. 99/390, *Zephyr American Corp.* v. *Abraham S. Karper.* Stipulation and order of discontinuance (notice May 18, 1956).

2,709,445. (See 2,339,487.)

2,723,712, M. Yellen, Chair structure, **filed** May 17, 1956, D. C., S. D. N. Y., Doc. 109/359, *Yellen, Inc., et al.* v. *Fiel Mfg. Co.*

Des. 170,295, Ziskin and Billig, Canister or similar article, filed Mar. 26, 1956, D. C., S. D. N. Y., Doc. 108/118, *The Kromex Corp.* v. *May Department Stores Inc.* Stipulation and order of discontinuance (notice May 18, 1956).

Des. 170,386, J. J. Rohrbach, Combination metal and plastic spectacle front, **filed** Nov. 23, 1953, D. C., S. D. N. Y., Doc. 89/258, *Shuron Optical Co., Inc.* v. *K. Stenzel & Sons.* Stipulation and order of discontinuance (notice May 21, 1956).

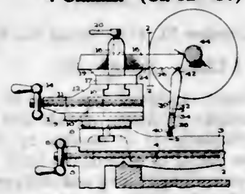
Des. 171,425, R. Semensohn, Brooch or similar article, **filed** Dec. 13, 1954, D. C., S. D. N. Y., Doc. 97/237, *Marcel Boucher et Cie* v. *Aimee Lee.* Order and default judgment favor plaintiff; injunction granted May 17, 1956.

REISSUES

JUNE 19, 1956

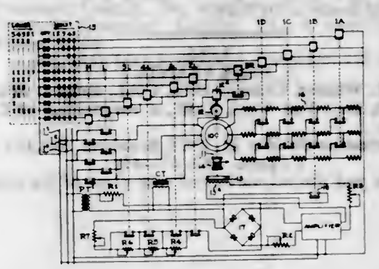
Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,167
AUXILIARY TOOL SUPPORT
Clarence C. Chelf, Lebanon, Ky.
Original No. 2,714,830, dated August 9, 1955, Serial No. 360,764, June 10, 1953. Application for reissue March 27, 1956, Serial No. 574,352
4 Claims. (Cl. 82—37)



1. In a lathe having a carriage with a horizontally and transversely moving cross feed member mounted thereon, and an adjustable compound carried by said cross feed member, and a vertical tool post on the compound adapted to receive and hold a cutting tool: the combination comprising a cutting tool mounted in the tool post and having a plurality of recesses arranged along the lower edge thereof adjacent the cutting end; an auxiliary tool support having an upper portion formed to fit selectively into any of the recesses and having a width that permits it to follow the tool into a cut, and a base member threadedly mounted in the lower end of the upper portion for adjusting the overall length of the tool support, whereby the upper portion fitting into a selected one of the recesses in the tool firmly positions the upper end of the auxiliary support therein when the auxiliary support is inclined from normal to the axis of tool advance, the base member being adjusted so that it seats on the surface of the cross feed member whereby longitudinal movement of the tool will swing the auxiliary support toward the normal to the said tool axis to increase the firmness of supporting action with respect to the tool and thereby prevent springing and consequent chattering of the tool in use.

24,168
INDUCTION MOTOR CONTROL BY ELECTRIC BRAKE
Eric Pell, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Original No. 2,636,157, dated April 21, 1953, Serial No. 190,361, October 16, 1950. Application for reissue March 28, 1955, Serial No. 497,434
11 Claims. (Cl. 318—302)



1. The combination with an alternating current motor and torque resisting means mechanically connected with the shaft of said motor including windings adapted upon excitation to vary the braking effect of said torque resisting means, of means affording a current of selected proportionality in magnitude and corresponding in direction to the voltage of a phase of said motor, means affording for combination with said current a second current proportional in magnitude and corresponding in direction to the load current of one side of said phase of said motor, and means to combine such currents to obtain a resultant current substantially proportional to the speed of said motor and to subject the windings of said torque resisting means to said resultant current to afford excitation of said torque resisting means to control the speed of said motor throughout its entire speed range.

PLANT PATENTS

GRANTED JUNE 19, 1956

Owing to the fact that almost all of the illustrations of the plant patents are in colors, it is not practicable to print a cut of the drawing.

1,483
AZALEA PLANT
Lenard L. Brooks, Modesto, Calif.
Application May 6, 1955, Serial No. 506,685
1 Claim. (Cl. 47—60)

A new and distinct variety of azalea plant substantially as shown and described, of the Kurume class, comprised of a cross between the Kurume azalea Hexe and the Belgian Indica azalea Wm. Van Orange, characterized particularly by its large and invariably perfectly formed hose in hose flowers bearing an undertone of orange; by its ease of reproduction on its own roots; by its high value as a greenhouse forcing or garden variety; by its much branched, compact habit of growth, and its large, glossy deep green leaves.

1,484
AZALEA PLANT
Lenard L. Brooks, Modesto, Calif.
Application May 6, 1955, Serial No. 506,686
1 Claim. (Cl. 47—60)

A new and distinct variety of azalea plant substantially as shown and described, of the Kurume class, comprised of a cross between the Kurume azalea Hexe and the Belgian Indica azalea Wm. Van Orange, characterized particularly by its beautiful orange red hose in hose flowers, its ease of reproduction on its own roots, its much branched, compact habit of growth, its beautiful dark green foliage, and its high value as a greenhouse forcing or garden variety.

1,485
PEACH TREE

Herbert C. Swim, Ontario, Calif., assignor to Armstrong Nurseries, Inc., Ontario, Calif., a corporation of California

Application May 23, 1955, Serial No. 510,594
1 Claim. (Cl. 47—62)

A new and distinct variety of peach tree of the yellow-fleshed, freestone fruit-bearing type, substantially as herein shown and described, characterized particularly as to novelty by its vigorous and upright growth, its relatively low winter-chilling requirements and attendant high and regular productivity in climates corresponding to that of Southern California, its large, double blooms of medium pink color which are borne from 1 to 4 flowers per node, with the nodes relatively closely spaced and giving a distinct ornamental appearance to the tree during the blooming period, its large, round fruit of relatively firm texture and consequent good handling qualities, and the delectable flavor of its fruit.

1,486
ROSE PLANT

Milton L. Whisler, Granada Hills, Calif., assignor to Germain's, Inc., Van Nuys, Calif., a corporation of California

Application October 21, 1955, Serial No. 542,123
1 Claim. (Cl. 47—61)

A new and distinct variety of rose plant of the hybrid tea class, substantially as herein shown and described, characterized particularly as to novelty by the vigorous and well-branched habit of growth of the plant, the deep glow of its flower petals and their good substance and texture which give the bloom a long-lasting quality as a cut flower, and its habit of bearing the blooms singly on long cutting stems.

1,487
ROSE PLANT

Milton L. Whisler, Granada Hills, Calif., assignor to Germain's, Inc., Van Nuys, Calif., a corporation of California

Application October 21, 1955, Serial No. 542,124

1 Claim. (Cl. 47—61)

A new and distinct variety of rose plant of the hybrid tea class, substantially as herein shown and described, characterized particularly as to novelty by its tall, upright and vigorous habits of growth, its habit of bearing flowers singly on exceptionally long and stiff cutting stems, and its large, doubie flowers having the general coloration and aspect of the variety "Dame Edith Helen" (unpatented).

PATENTS

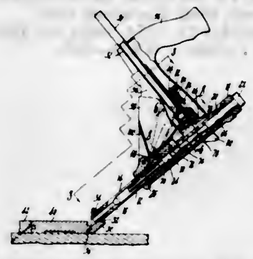
GRANTED JUNE 19, 1956

GENERAL AND MECHANICAL

2,750,591
NAIL FEEDING MECHANISM

Herman J. Stone, Brockton, Mass., assignor to The Independent Nail and Packing Company Inc., Bridgewater, Mass., a corporation of Massachusetts

Application May 19, 1953, Serial No. 355,897
3 Claims. (Cl. 1—6)

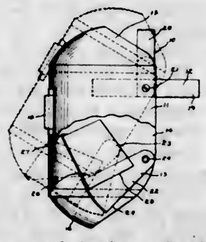


1. In a nail feeding and driving mechanism having an inner cylinder, a barrel slidably telescoping on said inner cylinder, a hollow block projecting from said barrel at right angles to the axis thereof, and a raceway with a longitudinal slot secured to said block; a device for feeding nails one by one into said inner cylinder, said device including a cylindrical member rotatably mounted in said block in line with said raceway, said member having a bayonet slot movable into and out of registry with the slot in said raceway, and means for oscillating said member, said means including a crank and pin, and a wedge cam carried by said inner cylinder to engage said pin when the barrel and inner cylinder telescope.

2,750,592
WELDING MASK

Jouko B. Salminen, Leicester, Mass.

Application June 20, 1952, Serial No. 294,566
6 Claims. (Cl. 2—8)

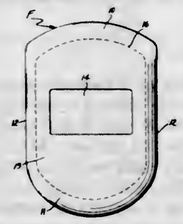


2. In a welding mask having a head harness and a hood hingedly connected to said harness, the hood having a front and sides terminating in a circular lower edge, the hood covering the welder's face during normal welding operations, a transparent guard hingedly attached within the hood to the lower portion of the sides of the hood for movement about a horizontal transverse axis and underlying the welder's chin for protection of the welder's face when the hood is in a slightly raised position, the guard lying within the hood and having an upper, generally cylindrical section an edge of which strikes the hood adjacent the circular lower edge thereof when the said hood is moved to the said raised position, the said edge of the guard being generally concentric with and of greater diameter than the said circular edge of the hood when said striking takes place.

2,750,593
WELDING HELMET FACE SHIELD

Frederick M. Bowers, Nether Providence Township, Delaware County, Pa., assignor to The Fibre Metal Products Company, Chester, Pa., a corporation of Pennsylvania

Application March 10, 1954, Serial No. 415,399
2 Claims. (Cl. 2—9)



1. In a welding helmet made of Fiberglas bonded in polyester resin, a face portion formed with a window opening and having inner and outer surfaces, the outer surface being exposed to the welding operation being performed by the wearer of the helmet, and a fine wire metal screen embedded in said face portion substantially throughout the extent thereof at said outer surface, with portions of said wire screen being exposed whereby said screen portions are adapted to be engaged by sparks from the welding operation and dissipate the heat from said sparks throughout the screen.

2,750,594
BASEBALL GLOVE WITH PRE-FORMED POCKET

Henry Denkert, Johnstown, N. Y., assignor to M. Denkert & Company, Johnstown, N. Y., a partnership

Application January 10, 1955, Serial No. 480,660
4 Claims. (Cl. 2—19)



1. A baseball glove comprising inner and outer shell members connected along peripheral edges to form a casing, each of said shell members having a front portion comprising finger, palm and heel covering portions, the front portion of said outer shell member having a curved line of perforations extending transversely across it between said palm and heel portions, a perforated strip secured to the outer face of said inner shell member in a position to underlie said line of perforations, palm padding means disposed between the palm portions of

said shell members, thicker heel padding means disposed between the heel portions of said shell members and lacing means extending through said perforations in the outer shell member and through perforations in said strip attached to the inner shell member to secure said shell members to one another along said curved line of perforations, said lacing passing between said palm padding means and said heel padding means and cooperating with said shell members and padding means to form a lasting pocket of predetermined shape and size in the palm covering portion of the glove.

2,750,595
UNDERGARMENT
Max Hollinger, Port Chester, N. Y.
Application August 24, 1954, Serial No. 451,823
3 Claims. (Cl. 2—113)



1. An undershirt of a knitted fabric and comprising a body portion having sleeves extending therefrom and a neck opening, and a neck-band extending around said opening and secured to the edge of said body portion defining said opening, said neck-band having at least one button hole extending therethrough each to receive a collar button for securing a detachable collar to the undershirt, said neck-band forming an elongated strip of nylon reinforced fabric folded on itself along a longitudinal medial line and embracing the edge of said body portion around said neck-opening and stitching extending parallel to said edge securing said strip to said body portion and around each button hole to join the layers of said band together around the related button hole, so as to be able to withstand the strains resulting from the securing of a detachable button thereto and repeated laundering without departing from its original shape.

2,750,596
IMPROVEMENTS IN WINDOW CURTAINS
Dora Galindo Amado, Long Beach, N. Y.
Application March 4, 1953, Serial No. 340,201
1 Claim. (Cl. 2—278)



A window curtain, comprising a quadrilateral curtain body having first and second marginal edge portions along one pair of edges thereof folded over to form one pair of pockets, and third and fourth marginal edge portions along the other pair of edges thereof folded over to form another pair of pockets, the marginal edge portions along said one pair of edges being held in folded over relation by lines of stitching extending substantially the full length of said marginal edge portions along the folded in edges thereof and having discontinuities therein, said third marginal edge portion being held in folded over relation by a line of stitching extending along the folded in edge thereof between the fold lines of said one pair of marginal edge portions, said fourth marginal edge portion being held in folded over relation by a line of stitching extending along the folded edge thereof between the folded in edges of said first and second marginal edge portions whereby the pockets formed by said first and second marginal edge portions are closed at their ends and the pockets formed by said third and fourth marginal edge portions are open at their ends, said stitching discontinuities being adjacent said line of stitching for said third marginal edge portion whereby to provide access into the pockets formed by said first and second marginal edge portions, whereby all of said pockets are adapted to receive elements of a curtain stretcher for stretching said curtain thereon.

2,750,597
WOMEN'S GARTER SUSPENDER
Paula Blatt, Cleveland, Ohio
Application May 10, 1954, Serial No. 428,746
1 Claim. (Cl. 2—305)



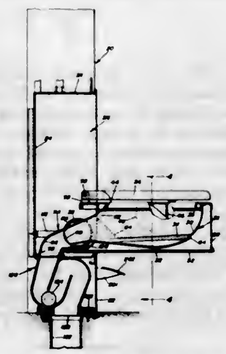
A maternity back support and garter suspender comprising a vertically elastic back-engaging member of heavy material of substantially trapezoidal shape adapted to occupy a position across the lower part of the back of the wearer's body and having its opposite lower side portions extended angularly downwardly and forwardly in narrow substantially rectangular three-sided form with squared end edges and corners so as to be adapted for engagement about the hips of the wearer's body and to terminate at approximately the vertical side middle lines of the hip regions of the wearer when in position upon her body, the squared end edge of each of said side extensions being adapted to extend downwardly and rearwardly at approximately 45 degrees when in position upon the body of the wearer and having one of a pair of garters attached at its upper end to and extending substantially at right angle to the end edge and at the forward corner thereof so as to extend along a substantially straight line along the front portion of the wearer's thigh, and the other of a pair of garters attached at its upper end to and extending at substantially right angle to the lower edge of said back-engaging member at the rearward corner thereof with said end edge so as to extend along a substantially straight line at the rear portion of the wearer's thigh, whereby the garters of each pair are adapted to extend at substantially right angle to each other at their points of attachment when in position upon the body of the wearer and in substantially straight lines along the forward and rearward parts of the wearer's thigh, respectively, so as to thereby co-operate in firmly maintaining said back-engaging member in its intended position for effective back-support, and an elastic shoulder strap extending upwardly from each upper corner of said back-engaging member and being attached in each instance at its other end to the side edge of said back-engaging member, the lower end of each of said shoulder straps being connected to said back-engaging member at a point substantially above the lower end of said side extension so as to co-operate in maintaining said back-engaging member in firm engagement with the sacroiliac region of the body of the wearer and so as to reduce the danger of said straps slipping down off of the shoulders of the wearer, the lines of force exerted by the garters of each stocking when in operative position being forwardly and rearwardly of the points of supporting engagement of said straps upon the shoulders so as to provide efficient suspension from the shoulders of the wearer and to thereby contribute to proper posture of the body of the wearer.

2,750,598
SPEAKING AID
Lothar B. Roemheld, Wauwatosa, Wis.
Application July 30, 1954, Serial No. 446,759
10 Claims. (Cl. 3—1.1)



1. In a device for aiding in producing speech without use of vocal cords, an electrically-activated vibrator for partially surrounding the neck of a person, a band attachable to retain the vibrator in a given position on the person's neck, the vibrator producing vibration of the air in the person's throat cavities, a source of electric current for connection with and actuation of the vibrator, and a plurality of electric switches adapted to be located on the person for closure while leaving the person's hands free, the switches being electrically connected in parallel for severally connecting the source of electric current with the vibrator.

2,750,599
BUILT-IN FOLD-AWAY WATER CLOSET
Angelo Colonna, Philadelphia, Pa.
Application December 21, 1953, Serial No. 399,345
16 Claims. (Cl. 4—10)



1. A fold-away water closet comprising, in combination, a stationary waste disposal conduit, a bowl having a flush water rim and a funneling and discharge neck, a hollow bowl-hinging head having a space therein for receiving and by-passing flush water under pressure, a delivery tube communicatively connecting said head with said rim, said neck being integrated with and passing diametrically through said head between the respective ends of the latter, the effluent end of said neck being open, no portion of said neck actually communicating with the water by-passing space of said head, an elbow-like fitting having communicating connection with said waste conduit and head means, the latter provided with spaced axially aligned bearings, and said hinging head having its end portions journalled for oscillation in said bearings, said hinging head being in the form of a cylinder having an axial water inlet hole at one end, a remote-controlled push-button operated flush valve having a communicable vertical depending flush water conducting pipe provided at its lower end with a valve union, a second horizontal inlet pipe at right angles to said vertical pipe registering at one end with said inlet hole, the other end of said inlet pipe rotating in said union and being closed at the latter end but also provided inwardly of said end with ports selectively communicable with said vertical pipe, the first named end of said horizontal pipe being fixed to, axially aligned with and rotatable with said cylinder.

2,750,600
INFLATABLE CUSHIONED RECEPTACLE
Elizabeth C. MacDonald, Long Beach, Calif.
Application January 5, 1954, Serial No. 402,327
1 Claim. (Cl. 4—113)



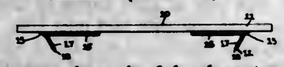
An inflatable cushioned receptacle comprising a flexible liquid-proof sheet, a toroidal shaped inflatable cushion fixed to the upper side of said sheet, said cushion having an air inlet opening at its outer circumference and formed with an inner flange spaced above said sheet, a receptacle seated on said sheet with the side wall terminating below said flange, a discharge nipple extending outwardly from said receptacle, and a flexible tube connected at one end to said nipple and extending outwardly between said cushion and said sheet.

2,750,601
LAUNDRY TUB STOPPER
Leon Edward Houle, Willimantic, Conn.
Application February 26, 1954, Serial No. 412,819
1 Claim. (Cl. 4—295)



In a device of the character described, an upstanding compressible resilient stopper body, a first disc engaging the lower surface of said body, a second disc engaging the upper surface of said body, an upstanding tube having the lower end fixed to said disc, an upstanding rod extending through said body and slidably through said tube and having the lower end fixed to said first disc, said rod having the portion adjacent the upper end projecting beyond the upper end of said tube, said projecting rod end portion terminating in a handle, series of teeth on opposite sides of said end portion, spring dogs on opposite sides of said tube, each of said dogs having one end fixed to the tube and a free end extending beyond the said end of the tube and engaging a related series of teeth, and finger pieces secured to the dogs at points intermediate the ends of the dogs for swinging the dogs away from opposite sides of the rod so as to disengage the free ends of the dogs from the series of teeth, each of said finger pieces and said handle consisting of a finger ring.

2,750,602
ADJUSTABLE LEG STRUCTURE FOR BED FRAME OR THE LIKE
Nathan E. Blanke, Cleveland Heights, Ohio
Application August 5, 1954, Serial No. 447,989
6 Claims. (Cl. 5—11)



1. In a body-supporting unit of the character described, the combination of a first pair of ground-engaging legs pivotally secured to said unit, a second pair of ground-engaging legs pivotally secured to said unit for rotation about an axis common to said pairs of legs, one of said pairs of legs being of greater length than the other of said pairs of legs, and one leg of one of said pairs being of greater length than the other leg of said one pair.

2,750,603
CRIB
William G. Pendleton, Shelby, N. C., assignor to Pendleton's, a partnership
Application May 8, 1952, Serial No. 286,788
2 Claims. (Cl. 5—99)



1. A crib construction comprising a pair of ends, each end including a corner post at each side, top and bottom rails and a plurality of spindles, a pair of sides, each side including a top and bottom rail and a plurality of spindles, said rails being secured to the adjacent corner posts of the ends, a mattress support including an end member adjacent each end of the crib and positively secured to the lower rail of each side, each end member of said mattress support being provided with a pair of dowels at each of its ends and the bottom rail of each side being provided with sockets for receiving the dowels, a cable extending through the mattress supporting end member at one end of the crib and through the mattress supporting end member at the other end of the crib and extending back and forth in generally parallel runs and passing through the end members at the end of each run, the ends of said cable being secured to the mattress supporting end members, a plurality of links interconnecting certain of said runs of cable providing angular relation between portions of said runs, said links serving to tension the cable to provide a relatively non-sagging mattress support and means for securing said parts together whereby the entire structure may be readily assembled and disassembled into a package of substantially the length of the side members and of breadth dimensions substantially less than any other dimensions of the finished crib, said mattress support being adapted to be coiled into a small space by wrapping the cable runs around the mattress supporting end members.

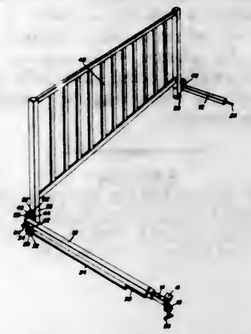
2,750,604
ADJUSTABLE BED COVER SUPPORT
Meldon Gold, Denver, Colo.
Application April 27, 1953, Serial No. 351,232
4 Claims. (Cl. 5—319)

1. An adjustable bed cover support comprising a frame unit including a rod engageable laterally and beneath the covers of a bed and like members fixedly outstanding in a common plane perpendicularly from and adjacent the ends of said rod, slide bearings coactable with said members, means engaging said sliide bearings and attachable to foot elements of a bed to support the associated frame unit for altitudinal adjustment, means on said members and slide bearings coactable to yieldably retain said frame unit in various of its positions of adjustment relative to said bearings, and a bed cover clamp rigidly spanning said frame unit between corresponding portions of said members remote from the rod and movable with said unit in a fixed spacing from and below the frame unit rod, wherein the frame unit members are cylindrical



stems, the slide bearings are tubular elements telescopically accommodative of said stems, corresponding wall areas of said tubular elements are longitudinally slotted for slidable accommodation of lugs fixedly outstanding radially from portions of said stems received within said elements, and the bed cover clamp is fixed at its ends to and bridges between said lugs.

2,750,605
ATTACHMENT FOR BEDS
Stanley D. Blevins, Billings, Mont.
Application April 15, 1953, Serial No. 348,857
2 Claims. (Cl. 5—331)



1. A guard attachment for beds comprising a pair of spaced supporting arms adapted to extend transversely to a bed, means carried by said supporting arms for securing said attachment to a bed, carriage rails depending from said supporting arms, a guard panel, and guide means depending from said guard panel engaging said carriage rails supporting said guard panel for transverse movement along said carriage rails, said guide means including rollers rotatably mounted on a shaft attached to said guard panel, said rollers being mounted on said carriage rails, said carriage rails having pockets at one end thereof providing means for lockingly seating said rollers with said guard panel in a vertical position.

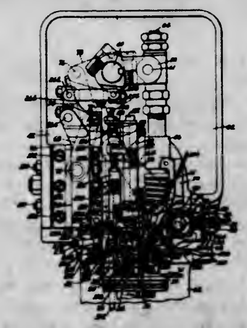
2,750,606
FOAM RUBBER PILLOW CONSTRUCTION
Abraham L. Freedlander, Dayton, Ohio, and Norman D. Waters, Mamaroneck, N. Y., assignors to The Dayton Rubber Company, a corporation of Ohio
Application May 14, 1953, Serial No. 354,936
6 Claims. (Cl. 5—337)



1. An article of bedding composed of a stereoreticulate, cellular rubber-like composition which comprises an interiorly disposed arrangement of flexible tubing forming interconnected air passages, and a surface opening

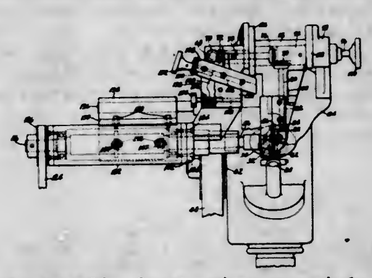
in association with said passages whereby, upon compression of said bedding article, the gas within the cells thereof may be vented through the passages to the surrounding atmosphere.

2,750,607
SOLE CHANNELING AND LIP SETTING MACHINES
Alfred S. Clark, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application February 14, 1955, Serial No. 487,748
3 Claims. (Cl. 12—18.7)



1. In a machine for channeling shoe soles. a work table for supporting a sole to which has been applied a coating of cement, a pair of channeling knives constructed and arranged to cut and partially raise a pair of channel lips on the sole, means for pressing together the partially raised channel lips to cause them to adhere together and thus to form an upstanding sewing rib, a presser gage engageable with the top face of the sole for gaging the depth of cut of the channeling knives and having a slot for receiving the leading end of the rib upon completion of the rib forming operation all the way around the marginal portion of the sole, a feed foot engageable with the top face of the sole at one side of the raised rib to enable it to clear the leading end of the rib at the completion of the operation, and a rib depresser adjustably secured in said slot for engaging the leading end of the sewing rib to hold the work piece down away from the knives to prevent the knives from cutting deeper into the work at the completion of the operation.

2,750,608
INSEAM TRIMMING MACHINES
John M. Whelton, Peabody, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application February 15, 1955, Serial No. 488,347
7 Claims. (Cl. 12—82)



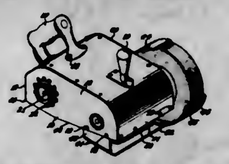
1. In a machine for operating progressively about a shoe bottom, the combination, with work feeding means, of a rotary cutter comprising a plurality of blades each having a first cutting edge and a second cutting edge, a first shearing member constructed and arranged to cooperate with said first cutting edge, and a second shearing member constructed and arranged to cooperate with said second cutting edge.

2,750,609
ADJUSTABLE LOADING DOCK
Lawrence F. Joseph, Memphis, Tenn., assignor to Dover Corporation, a corporation of Delaware
Application December 1, 1951, Serial No. 259,394
8 Claims. (Cl. 14—71)



1. An adjustable loading dock comprising a fixed support, a platform pivotally secured at its rearward edge to said support, means for raising and lowering the forward end of said platform, a bridge plate pivotally mounted to the forward end of said platform for movement into and out of bridging position, a pair of spaced platform supporting arms, means mounting said arms along each side and at the forward end of said platform for sliding movement longitudinally thereof, said arms being movable between two positions, an operative position in which they project beyond the forward end of said platform and an inoperative position in which they do not project appreciably beyond the forward end of said platform, and linkage means connecting said pivoted bridge plate to said supporting arms to advance said arms beyond the forward edge of said platform when said bridge plate is lowered into bridging position, and to retract said arms to inoperative position when said bridge plate is raised out of bridging position.

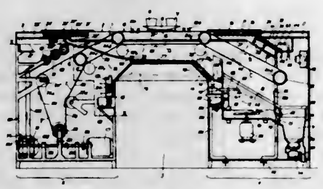
2,750,610
BUTCHER'S ACCESSORY
Ernest Bloch, Los Angeles, Calif.
Application November 2, 1953, Serial No. 389,633
2 Claims. (Cl. 15—4)



1. A portable butcher's accessory comprising a casing having a top, side walls, end walls and an open bottom providing a space therein, an electric motor mounted at one end of the casing with the shaft thereof horizontal and extending between the side walls and a housing in said space enveloping said motor, a plate parallel and proximate to one side wall and spaced inwardly therefrom and extending from said motor housing in a direction toward that end of the casing opposite said one end, a brush shaft at the end of the casing remote from the motor and having opposite ends of the brush shaft mounted respectively on said plate and on the side wall remote from the plate, means drivingly connecting said brush shaft to the shaft of the motor, and a wire brush on said brush shaft having the outer circumference of the brush extending to a level below the lower edges of said walls, and manual means on said casing whereby the casing is adapted to be tilted upwardly and down-

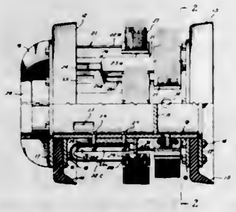
wardly about the lower edge of the end wall remote from the brush, said one side wall having an aperture therein, a coupling part on the brush shaft between the plate and the said one side wall, a removable stand comprising a leg secured to said remote side wall, a wheel housing secured to the said one side wall, and an abrasive wheel and a wheel shaft therefor mounted within the wheel housing with the axis thereof in axial alignment with the brush shaft axis, said wheel shaft having a coupling part at the inside end thereof and forming with the coupling part on the brush shaft an endwise releasable coupling connecting said brush shaft and said wheel shaft.

2,750,611
AUTOMATIC MEAL TABLE
Bertrand Châtel, Paris, France
Application April 29, 1952, Serial No. 284,997
Claims priority, application France January 18, 1952
14 Claims. (Cl. 15—74)



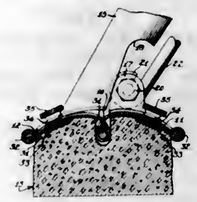
1. A meal table comprising a frame having a plurality of compartments and an opening in the top thereof, an endless belt, means guiding said belt for movement across said opening and through said compartments, mounting means on said belt at spaced intervals for detachably retaining dinnerware, cleaning means arranged within said compartments for cleaning dinnerware passed therethrough upon movement of said belt, means for driving said belt, means coordinated with said drive means for operating said cleaning means and manually operated means for controlling said drive means.

2,750,612
WEAR-COMPENSATING PIPE LINE SCRAPER
Burton Ver Nooy, Tulsa, Okla., assignor to T. D. Williamson, Inc., Tulsa, Okla., a corporation of Oklahoma
Application November 13, 1952, Serial No. 320,286
2 Claims. (Cl. 15—104.06)



1. A pipe line scraper which comprises, in combination, a body adapted to be disposed centrally within a pipe line, a plurality of reverse bend springs carried by said body at spaced points circumferentially thereof, one leg of each of said springs being attached to said body and the other leg thereof extending rearwardly of the body, a cleaning element mounted on said other leg in position to engage the pipe line, and a reinforcing member disposed between the legs of each spring and attached to the body, said member having a portion curved to substantial conformity with an slightly spaced from the bend of the spring in an unstressed condition of said spring.

2,750,613
WRINGER MOP STRUCTURE
Joseph H. Trindl, Chicago, Ill.
Application June 13, 1950, Serial No. 167,840
5 Claims. (Cl. 15—119)



2. A mop including two elongated mop plates having inner hinged portions and a hinge pin extending through said hinged portions and pivotally connecting said mop plates together, a handle secured to and extending from one of said mop plates, means secured to the other of said mop plates within the lateral limits thereof and operable to pivotally move said mop plates about said hinge pin toward and from each other, said mop plates each being of a concave-convex form in transverse section and the concave portions thereof forming two arcuate recesses on opposite sides of said hinged portions, a mop element comprising an elongated block of compressible material, means detachably securing said mop element to the concave recessed portions of said mop plates at points spaced closer to the outer than the inner margins thereof, said mop element having a recess extending longitudinally therealong and having said hinged portions extending therein beneath the top surface of said mop element when said mop plates are in extended relation with respect to each other, and said hinged portions and hinge pin moving away from said mop element to relieve said mop element adjacent said hinged portions upon pivotal movement of said mop plates toward each other to wring the mop element.

2,750,614
DISPENSING TOOTHBRUSH
Bernard J. Collins, Somerville, and Walter P. Zwirble, Boston, Mass.
Application April 8, 1952, Serial No. 281,204
1 Claim. (Cl. 15—131)

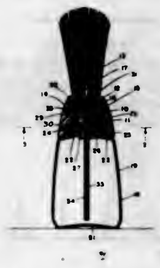


A toothbrush comprising a tubular paper handle, a tubular head portion having paper bristles projecting therefrom in spaced rows, an aperture in the wall of the head portion intermediate the rows of bristles, a sac of paste within the tubular head portion, said sac being formed of thin flexible material having rupturable means disposed adjacent the aperture intermediate the rows of bristles, and an opening in the wall of the tubular head portion spaced around the head portion from the bristles, a portion of the sac being accessible through the opening for the application of external pressure to rupture the sac and eject paste to the bristles.

2,750,615
SHAVING BRUSH
Paul J. Brazeman, Minneapolis, Minn.
Application June 5, 1953, Serial No. 359,731
2 Claims. (Cl. 15—136)

1. In a shaving brush, a body having a cavity therein and being formed at said cavity with internal threads, a flexible receptacle, a neck formed on said receptacle

and received within said cavity, said neck having external threads screwed into the threads in said body, said body having a bore communicating with said cavity and coaxially disposed with said neck, bristles mounted in said bore and issuing from said body and having a passageway therein communicating with the space between said bristles, an end structure within said cavity at the base of the bristles and having an opening therethrough communicating with the passageway in said bristles and the



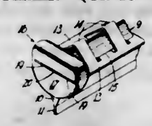
interior of said cavity, an annular conical seat formed on said end structure and encircling the opening in said end structure, a stopper received in and closing the opening in said neck, a nozzle on the end of said stopper extending outwardly therefrom and having a tip extending into the passageway in said bristles and a conical portion adjoining said tip and seated against the conical seat, said nozzle and stopper having a passageway therein communicating with the space between the bristles and the interior of the receptacle.

2,750,616
ADJUSTABLE BRUSHES
Julius Klugmann, New York, N. Y.
Application June 15, 1951, Serial No. 231,869
1 Claim. (Cl. 15—144)



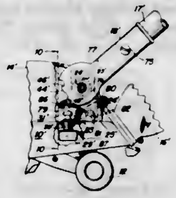
In a brush structure having a handle; an elongated holder member provided with a sleeve carrying a brush therein and further provided with a fork-shaped portion at an end opposite said brush, said fork-shaped portion having opposite inner walls, said handle being provided at one end with an extension and with a substantially flat finger rest disposed directly adjacent and rearwardly of said extension, said extension having opposite outer surfaces provided with teeth, said opposite inner walls of said fork-shaped portion being provided with teeth engaging with the teeth of said extension, a pivot pin passing through said fork-shaped portion with said inner walls and through said extension, whereby said holder member with said brush may be adjustably rotated about said pivot pin from an aligned position of said finger rest of said handle with said sleeve and said brush to an angular position thereto, while one finger of the hand of a person engages said finger rest and the other fingers of the same hand may actuate said elongated holder member without removing said hand from said handle, and means pivoted to the other end of said handle and provided with a substantially pointed end for application to a support and for facilitating use of said brush in a compass-like manner.

2,750,617
WINDSHIELD WIPER
John R. Oishei, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y.
Application May 23, 1950, Serial No. 163,599
7 Claims. (Cl. 15—245)



1. A windshield wiper having a squeegee element, a flexible channel holder therefor having flexible side rails arranged in coplanar relation and supporting the element at opposite sides and cross straps connecting the side rails and resiliently supporting them spaced apart, said element being longitudinally displaceable from between the ends of the side rails at one end of the wiper, and a relatively soft guard having an opening interlockably receiving the ends of the side rails at said one end of the wiper and obstructing such displacement, the rails having shoulders interlocking with the guard to preclude its displacement therefrom.

2,750,618
COMBINED HANDLE AND SWITCH CONTROL FOR SUCTION CLEANERS
George E. Kaufman, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application October 27, 1952, Serial No. 317,068
8 Claims. (Cl. 15—410)

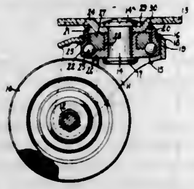


1. In combination, a suction cleaner having a wheel supported main body, a motor-driven suction fan thereon, a propelling handle pivotally supported on said cleaner, handle control means for holding said handle against downward pivotal movement from a predetermined non-propelling position thereof, a switch for controlling the operation of the motor for said suction fan, and means for selectively actuating said handle control means or said switch and said handle control means including a common manually operated actuator.

2,750,619
CASTER
Michael Kramcsak, Jr., Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a corporation of Connecticut
Continuation of abandoned application Serial No. 151,353, March 23, 1950. This application August 4, 1953, Serial No. 372,338
5 Claims. (Cl. 16—21)

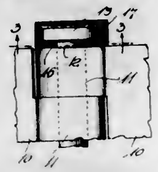
3. In a caster, a horn having a caster wheel mounted in the lower part thereof and having a flat top wall provided with a round aperture, an assembly located in part in said aperture comprising inner and outer ball races with interposed balls, an upper attaching plate, and a center pin with an integral lower head and a staked-over upper end serving to clamp the inner ball race to the attaching plate, the inner and outer ball races with their interposed balls being a preassembled unit having prehardened race members, the outer race member having a thicker lower

part presenting an external upwardly facing shoulder abutting the lower face of the horn top wall and a thinner cylindrical portion extending upwardly through and substantially beyond said aperture, said cylindrical portion terminating in an upper edge which is beveled in an upward and inward direction, said cylindrical portion having in a location spaced downwardly from said beveled portion an external annular groove the lower boundary of which is substantially flush with the top surface of the



horn, and a flat resilient snap ring having edgewise engagement in said groove and overlying the top surface of the horn to fix in place the ball-bearing unit and the other parts of said assembly, the beveling in an upward and inward direction of the upper end of the outer race member facilitating on the one hand the assembly movement in which the ball bearing is placed in the horn aperture, and on the other hand the spreading of the snap ring as it is moved over the upper end of the bearing toward its seated position.

2,750,620
OILING ATTACHMENT FOR HINGES
William Clarke, West Hollywood, Fla.
Application April 26, 1955, Serial No. 503,975
1 Claim. (Cl. 16—161)



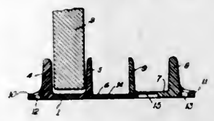
In combination with a hinge structure including a pintle having a shank and a head at the upper end of said shank, an oiling attachment for said hinge structure comprising an open-topped cylindrical member encompassing said head and having a centrally disposed aperture in the bottom thereof for receiving said shank therethrough, and a cap removably mounted on the upper end of said cylindrical member, said aperture having a plurality of relatively small circumferentially spaced radially extending grooves extending outwardly therefrom.

2,750,621
STAIR ANCHOR
Joseph M. White, Yorktown Village, Md.
Application October 2, 1952, Serial No. 312,782
3 Claims. (Cl. 16—10)



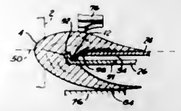
1. A unitary stairway carpet fastener adapter to be secured in the crotch of a stairway comprising reversible converging generally vertical and horizontal sections, each of said sections comprising an outer portion lying at a different level from an inner portion and interconnected by a flange, another flange located at the outer edge of each of said sections terminating in the same plane as the vertical and horizontal portions, both flanges being of such a length and so directed that the outer portions of said sections are slanted toward and lie within the included re-entrant angle of the converging sections, and carpet engaging hooks formed in the outer portions of said sections.

2,750,622
GUIDE RAIL ASSEMBLY FOR SLIDING DOORS
Harold Stark, Far Rockaway, N. Y.
Application September 8, 1953, Serial No. 378,780
3 Claims. (Cl. 16—90)



1. A guide rail assembly for sliding doors comprising a pair of guide rail members, each of said members having a flat base portion and upstanding integrally formed side walls to define a channel for guiding said doors, an integral flat strip extending from a wall of one of said members and inter-fitted in a groove in the other of said members, whereby the members are disposable with the said channels parallel to each other and spaced apart a distance less than the length of said strip.

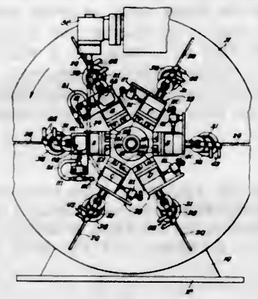
2,750,623
PROCESS FOR REMOVING BACKBONES FROM FISH
Rudolf Baader, deceased, late of Lubeck, Germany, by Rudolf Fahrig, executor, Lubeck, Germany, assignor to Nordischer Maschinenbau Rudolf Baader, Lubeck, Germany, a firm of Germany
Original application August 19, 1950, Serial No. 180,378, now Patent No. 2,704,377, dated March 22, 1955. Divided and this application September 27, 1954, Serial No. 458,572
3 Claims. (Cl. 17—45)



1. A method of separating the backbone of a fish, such as herring, from the surrounding flesh, said method comprising the steps of forming a first cut in the fish extending from the belly adjacent to one side of the backbone and beyond the backbone, canting the cut fish and then forming another cut in the fish extending from the belly adjacent to an opposite side of the backbone and beyond the backbone to meet the first cut between the backbone and the back of the fish.

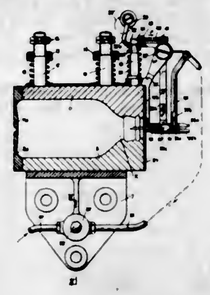
2,750,624
MACHINE AND METHOD FOR MAKING HOLLOW ARTICLES
Cecil C. Coates, Prescott, Ariz., and John D. Jackson, Western Springs, Ill., assignors to Royal Manufacturing Company, Inc., Prescott, Ariz., a corporation of Arizona
Application September 22, 1951, Serial No. 247,828
35 Claims. (Cl. 18—5)

18. An apparatus for making hollow plastic articles from a softened tubular plastic material comprising in combination a plurality of sectional molds each comprising a pair of mold halves defining a mold cavity having a longitudinal axis and adapted to receive the tubular plastic material when the mold is open, a rotatable support carrying said molds for successive alignment thereof with the tubular plastic material, means carried by said support for opening and closing said mold halves



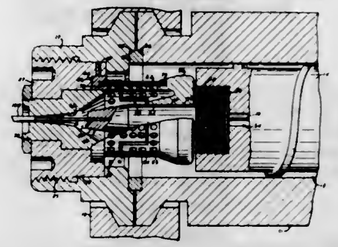
in predetermined sequence, means on each of said molds adjacent one end of the mold cavity for collapsing and sealing the tubular plastic material when the mold is in closed position, and retractable means operably associated with each of said molds adjacent the opposite end of the mold cavity for introducing an expanding fluid axially into the tubular plastic material when the mold is closed.

2,750,625
APPARATUS FOR CONTINUOUS MOULDING OF SYNTHETIC RESINS
Roberto Colombo, Turin, Italy, assignor to Royal Manufacturing Company, Inc., a corporation of Arizona
Application March 5, 1951, Serial No. 213,814
6 Claims. (Cl. 18—5)



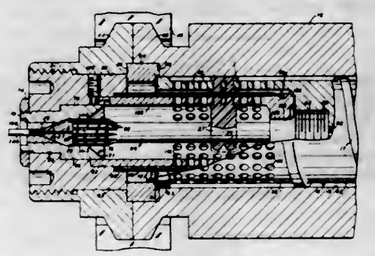
1. In an apparatus for making hollow plastic articles, a sectional mold comprising a pair of complementary mold halves adapted to be opened and closed and defining a mold cavity having a longitudinal axis adapted to receive an elongated tubular length of softened plastic material, means on said mold halves adjacent one end of the mold cavity for collapsing and sealing the tubular plastic material when the mold is closed, jaw means on said mold halves at the opposite end of the mold cavity for collapsing the tubular material, said jaw means providing in the closed position of the mold an end opening in the mold on said longitudinal axis, fluid injector means including a hollow needle supported for axial movement adjacent said opposite end of the mold cavity, and actuating means for effecting back and forth axial shifting movement of said needle, said actuating means including snap action spring means for projecting the needle forcibly through said end opening in the mold whereby to pierce the collapsed tubular material at said opposite end of the mold cavity for introducing an expanding fluid.

2,750,626
APPARATUS FOR PLASTICIZING AND STRAINING ORGANIC PLASTIC COMPOUNDS
George E. Henning, Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application October 6, 1954, Serial No. 460,573
8 Claims. (Cl. 18—13)



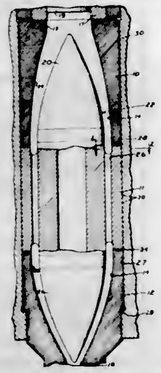
1. Apparatus for plasticizing and straining organic plastic material, which comprises a conduit, a stock screw mounted rotatably in the conduit for forcing plastic material through the conduit, an extrusion head having provided therein an opening forming an extension of the conduit, an elongated core tube mounted on the delivery end of the screw for rotation therewith and projecting axially therefrom into the opening in the extrusion head, a tubular, articulated strainer positioned between the delivery end of the screw and the extrusion head in axial alignment with the conduit, one end of said articulated strainer being supported by the core tube and the other end being mounted fixedly to the extrusion head surrounding the opening therein, and means for rotating the stock screw to force the plastic material along the bore and then through the strainer into the opening in the extrusion head.

2,750,627
APPARATUS FOR WORKING AND ADVANCING A PLASTIC MATERIAL
Alvin N. Gray, Edgewood, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application October 6, 1954, Serial No. 460,543
14 Claims. (Cl. 18—13)



1. Extrusion apparatus for working and extruding a plastic material, which comprises a conduit, an elongated stock screw mounted rotatably in the conduit for simultaneously working and forcing plastic material through the conduit, a hollow perforated shell connected for rotation with the screw, an extrusion head mounted at the delivery end of the conduit and provided with an opening formed therein in communication with the interior of the perforated shell, and means for rotating the screw continuously to force the plastic material axially along the conduit and radially through the perforations in the shell into the opening in the extrusion head.

2,750,628
HEATING UNIT FOR PLASTIC MOLDING MACHINES
William S. Reuter, Fond du Lac, Wis., assignor to Giddings & Lewis Machine Tool Company, Fond du Lac, Wis., a corporation of Wisconsin
Application August 29, 1951, Serial No. 244,233
2 Claims. (Cl. 18—30)



1. A heating unit of the class described comprising, in combination, a heating cylinder defining an elongated bore therein, a plurality of alined parts disposed end-to-end in said bore along its length and defining heated passageways adapted to permit the flow of plastic materials therethrough, adjacent ends of said alined parts defining at least one pair of annular abutment faces in abutting engagement with each other, said abutting faces being shaped to have mutual line contact along their inner edges and to diverge away from each other radially outwardly of said line of mutual contact to define an annular wedge shaped space extending radially inward to said line of mutual contact, the major portion of the outer surfaces of said alined parts opposed to surfaces of said cylinder bore being formed to have the same general configuration as the facing surfaces of said cylinder bore and being disposed in slightly spaced relation to said facing surfaces; and a body of solder-like bonding material in said annular space between said pair of opposed abutment faces and in said cylinder bore between said cylinder and said alined parts and forming an integral bond between said opposed abutment faces and between said cylinder and said alined parts.

2,750,629
DEVICE FOR THE MANUFACTURE OF MOLDED RUBBER BOOTS AND SIMILAR ARTICLES
Antoine Joseph Georges Baudou, Les Eglisottes, France
Application May 14, 1952, Serial No. 287,675
Claims priority, application France May 21, 1951
4 Claims. (Cl. 18—45)



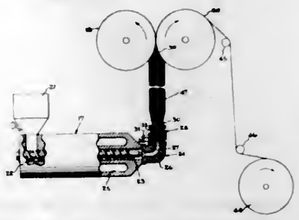
1. A device for the manufacture of molded rubber boots and similar articles having fabric lining comprising a mold of elliptical shaped cross section made up of a pair of companion relatively movable rigid shells separable along a plane containing the major axis of the elliptical cross section for receiving the rubber to be cured and a fabric-supporting hard core located within said mold, said companion shells defining at their junction plane a separation line and being subjected during the curing treatment to a pressure relatively moving said shells towards each other so as to press the rubber material between said shells and the core, said core being of elliptical shape in cross section and having on at least one portion of its surface adjacent and coextensive with a line defining the junction plane of said shells a mortise, a filler loosely accommodated in said mortise and having substantially the same cross sectional area but slightly smaller than that of the mortise, and actuating means for bringing said filler to a condition in which a portion of its periphery merges with and completes the outline of the core, thereby to stretch the fabric applied upon said core when the filler is retracted into rubber-fitting position.

2,750,630
METHOD OF MAKING ORNAMENTAL RINGS
Maximilian C. Meyer, Brooklyn, N. Y.
Application April 5, 1952, Serial No. 280,723
4 Claims. (Cl. 18—47.5)



1. A process of making an ornamental ring comprising the steps of providing a substantially solid rod of decorative material, removing portions of the material from said rod to provide at least one solid of revolution having a bulging center portion of substantially the same diameter as the original rod, and two axially extending side portions of considerably smaller diameter, cutting the said solid of revolution along a plane which includes the axis thereof to form two equal portions each having one flat side, and curving one of said half portions towards said flat surface until the ends of the side portions are adjacent one another to form a ring.

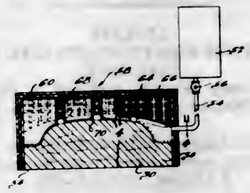
2,750,631
PROCESS FOR MANUFACTURING RIBBED EXTRUDED SHEET MATERIAL
Samuel J. Johnson, West Chester, Ohio, assignor to Clopay Corporation, Cincinnati, Ohio, a corporation of Maryland
Application July 22, 1952, Serial No. 300,211
4 Claims. (Cl. 18—57)



1. The method of producing a thin, ribbed sheet of material which includes extruding a molten thermoplastic composition in a vertical upward direction in the form of a seamless tube, forming a plurality of ribs on one surface of said tube, drawing said tubing upwardly, inflating said tube as it moves upwardly, and cooling said tubing as it moves upwardly, whereby the ribs formed on one surface appear on both surfaces.

2,750,632
METHOD OF MAKING SURFACE REPRODUCTION FIXTURES
Steven P. Kish, Lansing, Mich., assignor to Kish Plastic Products, Inc., Lansing, Mich., a corporation of Michigan
Application July 28, 1952, Serial No. 301,328
2 Claims. (Cl. 18—59)

1. The method of making a surface-reproduction fixture comprising spacing above the surface to be reproduced a core of essentially dimensionally stable material having cavities opening downwardly into the space between the core and said surface; masking off the space between the core and said surface with flexible dams extending between side faces of the core and bearing against said surface to be reproduced; then introducing a hard-



enable plastic material having substantially the same coefficient of thermal expansion as said core material into the masked-off areas so that the material completely fills said areas and extends into the cavities of said core to physically interlock the material with the core; and then hardening the plastic material.

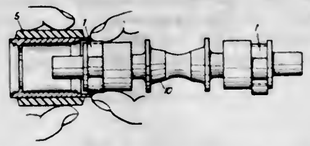
2,750,633
ROLLER WEIGHTING MEANS FOR SPINNING AND PREPARATORY MACHINES
Joseph Noguera, Salford, England, assignor to Casablancas High Draft Company Limited, Manchester, England, a British company
Application January 5, 1954, Serial No. 402,331
Claims priority, application Great Britain January 23, 1953
10 Claims. (Cl. 19—137)



1. Roller weighting means of the kind and for the purpose specified having a first saddle adapted to weight top rollers in the front and second roller lines and a second saddle adapted to weight top rollers in each rearward line, wherein the second saddle has a front projection which extends over and is pivotally connected to the first saddle and the saddle assembly is arranged to slide as a whole on the said top rollers in the second and each rearward roller line between a fully operative weighting position, in which downward pressure is applied to all the roller lines, and a retained rearward weighting position, in which the said pressure on the front roller line is removed, means being provided for limiting the downward displacement of the front end of said first saddle in said rearward weighting position.

2,750,634
RETAINING MEANS FOR DRAFTING ROLLERS
Wilhelm Stahlecker, Tubingen, and Hans Schurr, Sussen, Germany
Application November 30, 1953, Serial No. 395,242
Claims priority, application Germany December 1, 1952
8 Claims. (Cl. 19—142)

1. For use in a spinning machine, in combination, a spindle, a bearing race rotatable on said spindle, a roller comprising an outer sleeve having an inner elongated ungrooved cylindrical face portion of constant diameter, and means removably securing said sleeve on said race, said means comprising a substantially cylindrical leaf spring of resilient sheet material having opposite ends located adjacent each other to permit compression of the spring, said spring being loosely mounted on said race so as to permit radial play of said spring relative to said race, means on said race to retain said spring in a fixed



axial position on said race, said spring being adapted to be compressed when said race is inserted into said sleeve and then to press with its entire width against said inner ungrooved cylindrical face portion of said sleeve to retain the same in a fixed axial position.

2,750,635
WINDOW STRUCTURE HARDWARE
Arthur H. Soule, San Marino, Calif., assignor to Continental Specialties Company Ltd., Los Angeles, Calif., a corporation of California
Continuation of abandoned application Serial No. 139,983, January 23, 1950. This application August 25, 1953, Serial No. 376,403
3 Claims. (Cl. 20—42)

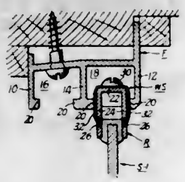


1. In a window operating structure of the character described, first and second slide members adapted to slide independently or together, latching means for connecting and disconnecting said slide members to slide together or independently, a retainer clip for retaining said first and second slide members in adjusted position relative to one another during shipment and installation thereof, said clip member comprising an elongated flat body member of substantially rigid disposable material, means formed on one end of said clip for engaging one of said slide members, said means comprising a hook formed by a transversely extending recess adjacent said end, and means at the opposite end of the clip to engage the other of said slide members, said last mentioned means comprising an apertured neck portion through the aperture of which a pin may extend to engage said second slide member to retain said element in predetermined spaced relation.

2,750,636
SASH CONSTRUCTION
Theodore Hauck, Bellmore, N. Y., assignor to General Bronze Corporation, Garden City, N. Y.
Application March 16, 1953, Serial No. 342,471
9 Claims. (Cl. 20—52)

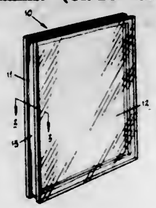
2. In a sliding window construction including a sash having upper and lower horizontal and vertical side rails having inner and outer faces, the improvement which comprises grooved seats in the inner and outer faces of one of said rails and extending longitudinally thereof and for substantially the full lengths thereof, a resilient

weather sealing member substantially U-shaped in cross-section embracing said last mentioned rail and having



shoe portions at the ends thereof slidably engaged in said seats.

2,750,637
MULTIPLE SHEET GLAZING UNITS
Charles M. Browne, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio
Application November 28, 1952, Serial No. 323,081
9 Claims. (Cl. 20—56.5)



1. A multiple sheet glazing unit comprising a pair of spaced glass sheets, a water vapor proof separator strip disposed between and bonded to the inner marginal portions of said sheets to form an enclosed space therebetween, said strip comprising a continuous flexible length of a resinous plastic material having its opposite end portions turned inwardly in adjacent relation to one another to form a recess therebetween, and a bonding material filling said recess and sealing said end portions together.

2,750,638
COMBINATION STORM VENT AWNING
James William Bonelli, Lyndhurst, N. J.
Application December 7, 1954, Serial No. 473,597
10 Claims. (Cl. 20—57.5)



1. A combined storm shutter and ventilated awning comprising a frame having louvers pivoted thereon, means for mounting said frame upon a window opening for vertical swinging movement between a lowered storm shutter position and a raised awning position, a lift arm adapted for vertical swinging movement at one end and at its other end operatively connected to the frame for effecting vertical swinging movement of the latter, operating means for said lift arm, actuating means operatively connected to said louvers and said lift arm for effecting opening movement of said louvers upon predetermined movement of said lift arm.

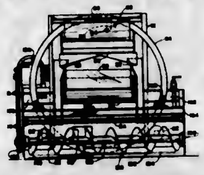
2,750,639
FEED-TROUGH FOR CENTRIFUGAL CASTING MACHINE
Jean Dunz, Nancy, France, assignor to La Compagnie De Pont-A-Mousson, Nancy, France, a French body corporate
Application January 5, 1953, Serial No. 329,535
Claims priority, application France January 10, 1952
5 Claims. (Cl. 22—79)



1. Single piece elongated pouring trough for flowing and feeding molten metal into a centrifugal casting machine for centrifugally casting pipes and the like metallic pieces, said trough comprising: a wall defined by a transverse downstream end surface and a transverse upstream end surface and by two longitudinal wall surfaces, and by a pouring lip at said downstream end surface; the first one of said longitudinal wall surfaces being external, convex, and having a cylindro-prismatic profile; the second of said wall surfaces being internal and concave; said second wall surface forming a longitudinal channel for feeding and pouring molten metal, said channel extending over the entire length of said trough from said upstream transverse end surface to said downstream transverse end surface; said internal and external longitudinal wall surfaces defining U-shaped transverse sections of the trough at each transverse plane of said trough; each of said U-shaped sections being inscribed substantially in circles having the same radius; said wall comprising a bottom portion, side portions and upper longitudinal rims; the thickness of said wall decreasing progressively from said upstream end surface to said downstream end surface; whereby the transverse cross-sections of said channel increase progressively from said upstream end surface to said downstream end surface; in each transverse plane of said trough, the area of the total cross-section of said wall having its center of gravity coinciding substantially with the center of gravity of the geometrical surface defined, in each said transverse plane, by a transverse line which, at all said transverse planes from said upstream end to said downstream end and at all transverse cross-sections of said channel, remains at a constant distance from said upper longitudinal rims, and by the portion below said transverse line of the contour of said internal wall surface in the corresponding transverse plane; said distance being comprised between a ratio of one-half and a ratio of one-third of the height of said channel, said ratio decreasing as said transverse cross-sections of said channel increase.

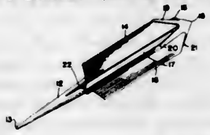
2,750,640
SAND CONDITIONING APPARATUS
George M. Butzow, Fort Wayne, Ind.
Application August 19, 1952, Serial No. 305,179
12 Claims. (Cl. 22—89)

9. In a sand handling mechanism, a chassis having transporting wheels, a sand handling apparatus supported on said chassis and comprising an operating frame which carries thereon a screening device and an annular sand conveyor arranged to collect and deliver sand to said screening device, means carried by said operating frame supporting said annular conveyor in an upright position for rotation about its axis, said screening device being disposed adjacent said conveyor for receiving sand therefrom, a conveyor screw mounted for rotation adjacent said annular conveyor for collecting and delivering material to the latter, a liquid-dispensing apparatus mounted



to dispense liquid adjacent said screw, means supported directly beneath said screening device for receiving sifted material from the latter, and auxiliary material-receiving means operatively supported by said operating frame and having an inlet adjacent said screening device for receiving from the latter a quantity of improperly processed material and for delivering this material to said screw conveyor for reprocessing.

2,750,641
CHILL
Charles Greif Raible, Chesterland, Ohio, assignor to Fanner Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application August 5, 1953, Serial No. 372,509
6 Claims. (Cl. 22—174)



1. In combination with a mold having a cavity for receiving molten metal, a chill having a tail portion of relatively small transverse cross section positioned to extend into the mold and a main body portion positioned to extend into the cavity to be surrounded by said molten metal and embedded therein for effecting the transfer of heat from said molten metal outwardly into said mold for the purpose of chilling the metal casting resulting from said molten metal, said chill being formed of metal in which said tail and body are integral, said body portion including a plurality of longitudinal radially extending vanes whose radial planes intersect, the radial length of each vane being appreciably greater than the transverse cross-sectional dimension of said body portion.

2,750,642
CLASP
Theodore L. England, Providence, R. I., assignor to Fulford Manufacturing Company, a corporation of Rhode Island
Application September 19, 1952, Serial No. 310,435
2 Claims. (Cl. 24—153)



1. A clasp for fastening sheets of material comprising a generally U-shaped member having two upstanding arms extending from a support means, said arms terminating in ball-shaped studs, a keeper generally channel shaped in cross section providing walls and a connecting bridge, said walls projecting lengthwise beyond the bridge thereof forming resilient end portions, each of said end portions adapted to grasp the ball-shaped studs, either of said studs selectively serving as a hinge to swing the keeper about one end when detached at its opposite end.

2,750,643
BELT BUCKLE
Irving Rubin, Bronx, N. Y.
Application January 22, 1952, Serial No. 267,631
4 Claims. (Cl. 24—166)

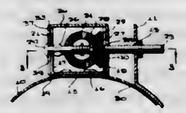


1. A belt buckle comprising a frame; a flexible arcuate tongue hingedly mounted on one run of said frame; a locking pin extending at an angle to said frame from an opposite run of said frame; an aperture in the tongue adjacent the free end of said tongue and engageable with said locking pin, said pin and aperture being brought into axial registry by depressing and slightly flattening the arcuateness of said tongue.

2,750,644
QUICK RELEASE ATTACHMENT FOR SAFETY BELTS
Donald W. Martin, St. Paul, and Ralph L. Holm, Minneapolis, Minn.
Application August 8, 1952, Serial No. 303,284
12 Claims. (Cl. 24—201)

9. An automatically releasable clamp for use in disconnecting a link member from a belt, comprising a first clamping member, means on said first clamping member for attachment with the belt, a second clamping member hingedly connected to said first clamping member on an axis transverse to the longitudinal axis of the belt, a projection on said second clamping member designed to extend into said link, the link engaging portion of said projection extending into said link being at an acute angle to the longitudinal axis of the belt in link engaging position of said clamping members to provide an inclined link engaging surface against which said link cannot remain engaged when said clamping members are hinged apart, the inclination of said link engaging surface of said projection being such as to urge said clamping members apart when a longitudinal pull is exerted against said link, and removable trigger means engaging said first and second clamping members and forming the sole means for holding the same from relative movement, whereby when said trigger means is removed longitudinal pull upon said link will urge said clamping members apart and release said link.

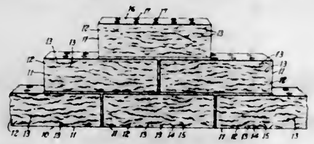
2,750,645
HOSE CLAMP
Robert W. Seltzer, Hartford, Conn.
Application January 9, 1953, Serial No. 330,533
4 Claims. (Cl. 24—279)



1. An adjustable hose clamp comprising a flexible strap having a screw threaded aperture adjacent one end thereof,

a receptacle secured to said strap adjacent the other end thereof and having a first aperture therein disposed in alignment with said screw threaded aperture when said clamp is in hose-clamping position, a screw extending through said first aperture in said receptacle and threaded through said screw threaded aperture in said strap, a first beveled gear disposed in said receptacle and secured to said screw coaxially thereof, a second beveled gear disposed in said receptacle and meshing with said first beveled gear, said receptacle having a second aperture therein spaced from said first aperture, and a stud extending through said second aperture and secured to said second beveled gear coaxially thereof with its rotational axis substantially at right angles to the rotational axis of said screw and having a tool receiving formation thereon at the outer side of said receptacle.

2,750,646
CERAMIC COLUMN TEXTURING MACHINES
Oscar V. Reidenbach, Baltic, Ohio, assignor to The General Clay Products Company, Columbus, Ohio, a corporation of Ohio
Application March 27, 1952, Serial No. 278,901
10 Claims. (Cl. 25—1)



4. In a ceramic column texturing machine, a frame including members enclosing a column pass-through opening, two laterally spaced side texturing rollers located adjacent the frame, each side texturing roller being adapted to operate on a side surface of a green ceramic column passing between the side texturing rollers, each side texturing roller having an axis of rotation parallel to the axis of rotation of the other and with a plane of the frame, each side texturing roller including a shaft having ends extending from the opposite ends thereof, a journal box journalling each end of each shaft, means slidably mounting each journal box on the frame, means releasably clamping each journal box on the frame, and common drive means for the side texturing roller shafts, the common drive means including a drive shaft extending crosswise of the side texturing roller shafts, a driven gear secured on each roller shaft, a drive gear slidably keyed on the drive shaft for each driven gear, each drive gear and its associated driven gear having teeth meshed with each other, a pivot link extending between each drive gear and its associated driven gear, each drive gear having a hub and a housing journalling the hub and each associated driven gear having a hub and a housing journalling the hub, means pivotally connecting the link with the drive gear journal housing, and means pivotally connecting the link with the driven gear journal housing, the drive shaft being spaced from similar ends of the side texturing roller shafts, the axis of rotation of the drive shaft intersecting extensions of the axes of rotation of the roller shafts, and each driven gear being a bevel gear wheel and each drive gear being a bevel pinion.

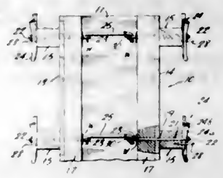
5. Adjustable power transmission apparatus for a ceramic column texturing machine and the like, including members forming a frame, some of the frame members enclosing an opening having a center plane, two laterally spaced driven shafts on opposite sides of the center plane, each driven shaft having opposite ends, a journal box journalling each end of each driven shaft, means mounting each journal box on the frame for movement towards and away from the center plane, means releasably positioning each journal box on the frame, and common drive means for the driven shafts, the common drive means including a drive shaft extending cross-wise of the driven shafts, a driven gear secured on each driven shaft, a drive gear slidably keyed on the drive shaft for each driven gear, each drive gear and its associated driven gear having teeth meshed with each other, a pivot link extending between each drive gear and its associated driven gear, each drive gear having a hub and a housing journalling the hub and each associated driven gear having a hub and a housing journalling the hub, means pivotally connecting each link with its associated drive gear journal housing, and means pivotally connecting each link with its associated driven gear journal housing.

2,750,647
HOLLOW CONCRETE CORE FORM
Edward Krieg, Corvallis, Oreg.
Application March 3, 1952, Serial No. 274,543
4 Claims. (Cl. 25—131)



1. In the construction of a hollow concrete wall, the combination of two spaced vertical outer forms adapted to be removed after the wall is erected and a hollow center form adapted to be made integral with and to be embedded within the center of the finished wall, said center form being arranged intermediate the two outer forms and comprising; two laterally spaced side sheets formed of non-metallic insulating material and an end spacer means interconnecting said side sheets to define a box-like structure having a hollow interior, insulation means carried within said hollow interior and abutting said side sheets to maintain the lateral spacing thereof, and a plurality of elongated tie wires extending laterally through said center form, the ends of said tie wires projecting beyond said side sheets but terminating short of the outer forms to tie the wall together across the center form, at least a portion of said center form being deformable and protruding above said outer forms to receive a removable spacer for inter connecting said outer and center forms during construction of said wall.

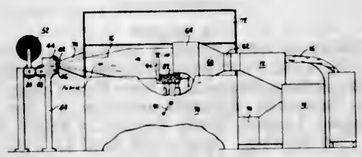
2,750,648
TIE ROD SYSTEM FOR MOLDS FOR CONCRETE COLUMNS, WALLS, AND THE LIKE
Edward C. Hallock, Summit, N. J.
Application June 16, 1953, Serial No. 361,997
4 Claims. (Cl. 25—131)



3. A demountable form for forming concrete columns and the like, comprising separate front and back panels, side panels interposed between said front and back panels and forming therewith a hollow box-like form, eye-bar members extending through the front and back panels

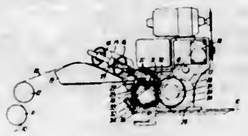
adjacent opposite edges thereof and each having an eye on its inner end, an elongated rod-like body and an enlarged head at its outer end, links having laterally bent ends engaging in the eyes of opposed eye-bar members and connecting them to hold said front and back panels against the edges of said side panels, removable clips mounted on at least one end of each link and detachably securing it to one of said eye-bar members, wedge members engaging the outer ends of said eye-bar members and slidable endwise to pull the eye-bar members endwise and press said front and back panels against the edges of said side panels, and means detachably and slidably securing said wedge members to said front and back panels.

2,750,649
MACHINE FOR DRYING TUBULAR FABRIC AND THE LIKE
Edwin H. Johnson, West Englewood, N. J., assignor, by mesne assignments, to Fitch Textile Company, Inc., College Point, Long Island, N. Y., a corporation of New York
Application June 17, 1953, Serial No. 362,261
20 Claims. (Cl. 26—56)



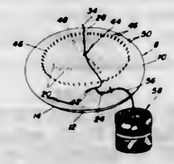
1. A drying machine for tubular fabric comprising a duct, means inserted into said tubular fabric and over which said fabric continually passes and is spread, means to cause a flow of hot air through said duct outside said fabric tube in the same direction as the fabric movement, said spreading means having an imperforate portion extending substantially perpendicularly to the axis of said duct, and means to direct the hot air flow directly against the fabric passing over said portion.

2,750,650
APPARATUS FOR MAINTAINING THE SELVEDGE OF A WEB OF TRAVELLING FABRIC OR THE LIKE UNCURLED
Kenneth S. Laurie, Thornliebank, Glasgow, Scotland, assignor to John Dalglish & Sons Limited, Thornliebank, Glasgow, Great Britain, a British company
Application March 31, 1953, Serial No. 345,860
Claims priority, application Great Britain April 2, 1952
21 Claims. (Cl. 26—57)



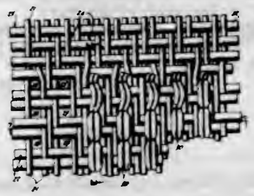
1. Apparatus for maintaining the selvedge of a web of travelling fabric uncurled, especially prior to entry to a finishing machine such as a stenter, comprising in advance of the entry end of the machine on each side thereof substantially rigid support means presenting a curved surface towards the path of movement of the web and adapted to act on one face of the web in the region of each selvedge to constrain the selvedge to follow an arcuate path thereover and to resist transverse outward displacement of the web, and uncurling means adapted to act on the other face of the web in the region of each selvedge so as to tend to keep the selvedge open and uncurled.

2,750,651
LACEWORK HOLDER
Koppo Saito, Tokyo, Japan
Application April 25, 1955, Serial No. 503,707
4 Claims. (Cl. 28—15)



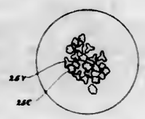
1. A lacework holder comprising a pin cushion embodying a snug-fitting casing and filler media encased therein, said filler being of a substance of material susceptible of permitting the pointed ends of common straight pins to be manually forced and securely anchored therein with the headed ends projecting above the top of said cushion, the top of said casing having preformed pin holes therein and said holes being expressly arranged in predetermined concentric circular or similar orderly rows for selective use, and a grommet at the axial center of said casing for reception, passage and retention of an insertable and removable center winding member, a needle for example, whereby to permit the lacework forming yarn, or other thread-like material, to be looped around said pins and center winding member in a generally well known manner such as is pursued in making so-called "Teneriffe" lace wheels and similar patterns or pieces.

2,750,652
PILE RUG AND RUG BASE
John J. Petroske, Methuen, Mass., assignor to Patchogue-Plymouth Mills Corporation, New York, N. Y., a corporation of New York
Application May 28, 1953, Serial No. 358,077
4 Claims. (Cl. 28—80)



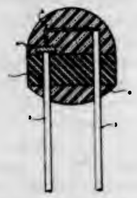
1. In a tufted pile rug, a woven backing consisting of warp threads constituted by twisted ribbons of paper treated to impart wet strength thereto, and filler threads constituted by yarns of jute, said filler and warp threads being interwoven to form a loose open weave which has well-defined interstices and in which there is relatively high slippage between the warp and filler threads, whereby in fabrication looping needles may pass through said interstices without excessive friction, said warp threads being stiff relative to said filler threads thereby imparting body to said rug.

2,750,653
YARN STRUCTURE
James C. White, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application January 19, 1955, Serial No. 482,753
2 Claims. (Cl. 28—81)



1. Cellulose organic acid ester yarn consisting of a plurality of filaments of clover-leaf cross-section and a plurality of filaments of Y-shaped cross-section.

2,750,654
MINIATURE RECTIFIER
Harry L. Owens, Belmar, N. J., assignor to the United States of America as represented by the Secretary of the Army
Application October 3, 1950, Serial No. 188,257
1 Claim. (Cl. 29—25.3)
(Granted under Title 35, U. S. Code (1952), sec. 266)



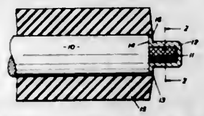
The method of fabricating a semiconductor device comprising initially positioning an insulating spacer near one end of a plurality of conductive leads; operatively attaching the semiconductor at said end of said conductive leads; dipping said insulating spacer, said semiconductor and said end portion of said conductive leads in a thermoplastic where upon solidification said plastic forms a solid bead which encases and fixes said spacer, said semiconductor and said conductive leads in position to form an integral device.

2,750,655
METHOD FOR MAKING FINE WIRE GRIDS
Henry V. Neher, Pasadena, Calif., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Original application December 11, 1945, Serial No. 634,295. Divided and this application March 23, 1950, Serial No. 151,460
4 Claims. (Cl. 29—25.18)



1. A method of making a grid wherein a sheet of metal is formed into a truncated cone having a hole at its tip, said cone is coated with a relatively fusible metal, said cone is placed tip down upon a grid of wires tightly wound upon a frame, said cone, grid and frame are heated together in a chemically inert atmosphere until said relatively fusible metal begins to flow around said wires, heating is stopped before surface tension pulls said fusible metal back from the periphery of said hole, said cone, grid and frame are permitted to cool until said fusible metal is solidified, and said frame and grid wires are removed from the outside of said hole leaving the remaining portions of said wires electrically connected and mechanically secured across said hole.

2,750,656
WRINGER ROLL
Harold George Dunn, Perivale, Greenford, England, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application April 22, 1953, Serial No. 350,401
2 Claims. (Cl. 29—123)

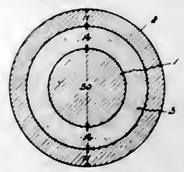


1. A wringer roll comprising a shouldered shaft of corrodible material, a bearing cap of corrosion resistant resin applied to each end of the shaft, each of the bearing caps having a portion covering an end face of the shaft and engaging a shouldered portion of the axial length thereof to seal the end face and engaged portion of the shaft against contact with washing liquids and a tubular cover of resilient material peripherally embracing the portion of the shaft between the bearing caps and forming the wringing surface of the roll and peripherally engaging the bearing caps to form a seal therewith whereby the entire shaft is protected from contact with washing liquids.

2,750,657
METHOD OF APPLYING A METAL ELECTRODE TO A HIGH PERMITTIVITY CERAMIC
John M. Herbert, Horton, and Peter Best, Greens-Norton, near Towcester, England, assignors to The Plessey Company Limited, Ilford, England, a British company
No Drawing. Application April 21, 1952, Serial No. 283,485
4 Claims. (Cl. 29—155.5)

1. A method of manufacturing a metal electrode on a sintered ceramic body, which comprises providing a layer of a homogeneous mixture of ceramic-forming materials substantially corresponding to two molecular proportions of barium oxide, two molecular proportions of titanium dioxide and 0.1 to 1.5 molecular proportions of magnesium oxide, applying to said layer a layer of finely divided base metal selected from the class consisting of nickel, tantalum, iron, cobalt, chromium, manganese, columbium and vanadium which sinters at the high temperature to which the ceramic forming materials are raised for formation of said ceramic body but does not react therewith, and heating the assembled layers to said high temperature in an inert atmosphere, thereby forming said ceramic body and sintering said layer of finely divided base metal, the composition of the ceramic material being such that it remains an electrical insulator at room temperature after said body has been formed at said high temperature in the complete absence of oxygen.

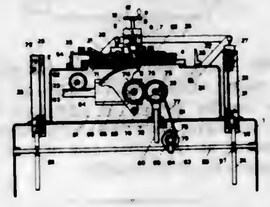
2,750,658
WIRE-SHAPED OBJECT
Jan Jacobus Went and Roelof Vermeulen, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application September 24, 1951, Serial No. 248,042
Claims priority, application Netherlands October 3, 1950
4 Claims. (Cl. 29—191.2)



1. A wire-shaped magnetic record carrier comprising an aluminum core, a concentric aluminum sheath spaced

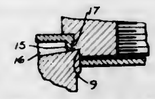
from said core and defining an annular space therebetween, and a finely divided permanently magnetizable ferromagnetic material filling said annular space.

2,750,659
MACHINE FOR THE AUTOMATIC FORMING OF THE LAMINATED IRON CORE OF TRANSFORMERS, INDUCTION COILS, AND THE LIKE
Umberto Sassi, Milan, Italy
Application July 6, 1950, Serial No. 172,336
5 Claims. (Cl. 29—203)



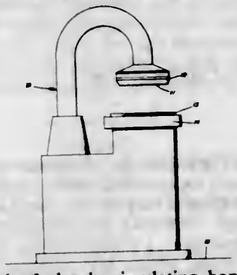
1. A machine for the automatic assembling of the laminated iron cores of transformers, induction coils and the like, comprising a device for locking the coil with its axis horizontal in a fixed position with respect to the machine, provided in register with the middle line of said machine, a pilot lamination for guiding and a device for supporting the laminations pushed into said coil, said latter device resiliently pressing said laminations against the pilot lamination applied in said coil against the top surface of the coil window and being adapted to move perpendicular to the coil axis as said laminations are individually pushed into said coil, two tubular magazines each containing a pile of I laminations and a pile of E laminations and arranged at opposite sides of said locking device, with the legs of said E laminations projecting towards said locking device and the E lamination magazines being disposed outwardly of the I lamination magazines with respect to said locking device, a slide bench extending at the two sides of said locking device, a plurality of magnets embedded in said slide bench, two parallel arms arranged at each side of said locking device and carrying a magnet, means for synchronously moving said arms from the position in which their magnets face the mouth of the respective magazines to the position facing said magnets in said slide bench, the latter magnets having an attracting force greater than the attracting force of said magnets carried by said arms, and a slider effecting a reciprocating motion parallel to said slide bench and having at each side of said locking device means for pushing said laminations into said coil along said slide bench, the motion of said slider being synchronized with the motion of said arms and timed relative thereto in such a manner that to a movement of said slider in one direction corresponds a movement of said arms in the opposite direction.

2,750,660
MECHANISM FOR AND METHOD OF CLINCHING NUTS
John F. Newcomb, Huntington Woods, Mich.
Application October 15, 1953, Serial No. 386,224
4 Claims. (Cl. 29—432)



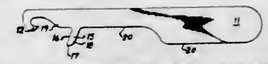
1. A die cooperating with a nut flanged on one of its faces and with a punch for shearing a hole through a metal panel and clinching the nut in the hole and on the side of the panel removed from the nut flange all in one stroke, said die comprising, a hollow member with channel-like recesses in its top, the hollow being the size and contour of the unflanged portion of the nut and the edges of the die around the end of the hollow die being shearing edges when a punch pushes the nut against the metal of the panel so as to shear a slug of the panel and drop it through the hollow interior of the die, however, the die at spots along its hollow interior departing from the shape of the body of the nut to provide edge portions at the inner ends and bottom of the channel-like recesses in the top of the die, which portions or nubs are located in the interior of the hollow die to be in the path of the body of the nut when it is shearing through the panel to divert or swage a portion off the body of the nut and cause the same to flow outwardly into the channel recesses to thereby clinch the nut to the back of the panel by extruded tongues all in the one shearing and punching operation.

2,750,661
METHOD OF MAKING HAMMERED WARE
Angelo C. Scavullo, Jamaica, N. Y., assignor to Victor K. Scavullo, Frank Scavullo, Charles Scavullo, Marie Scavullo Saegert and Margaret Scavullo Scott
Application July 10, 1953, Serial No. 367,192
3 Claims. (Cl. 29—553)



1. The method of closely simulating hand-hammered ornamentation in metals with crisp and clear delineation of detail, comprising first imparting the hand-hammered design in relief on a suitable die by annealing the die metal, hand peening the same, and hardening; and then imparting this design in intaglio on a selected metal article, rough-blanked to approximately the desired configuration by striking the die thereagainst with a single blow.

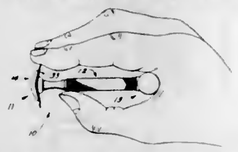
2,750,662
OPENER FOR WEAKENED CLOSURE CONTAINERS
Stanley S. Kubik and John Kubik, Los Angeles, Calif.
Application May 19, 1955, Serial No. 509,562
6 Claims. (Cl. 30—16)



1. An opener for weakened closure containers comprising an elongated body member formed from a single piece of rigid material, said body member having a straight top edge extending across its entire length and a bottom edge, a handle portion adjacent one end thereof adapted to be grasped by the hand, a hook portion adjacent the opposite end of said body member, said hook portion having a gripping surface extending substantially parallel to said top edge and directed rearwardly toward said handle portion, said body member having a cut-away portion directly above said hook portion, a cutting blade disposed substantially rearwardly from said hook portion, the portion of said body member between said hook portion and said cutting blade being substantially cut away, said cutting blade having a straight front edge

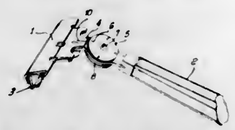
extending obliquely forwardly and downwardly from said body member, a bottom edge extending substantially parallel to the top edge of said body member and a rear edge curved convexly with respect to said front edge, a portion of the bottom edge of said body member between said cutting blade and said handle being inwardly directed, said hook portion being adapted to fit beneath and pivotly engage the lower edge of the beading of a container, said cutting blade adapted upon downward pivotal movement of said body member to engage and exert downward pressure upon the weakened closure area of a container, said cutting blade remaining in engagement with said weakened closure area to pivot the same downwardly to form a segment extending at substantially a right angle downwardly from the top of the container, the bottom edge of said body member at such time engaging the top of the beading on the opposite side of the container to prevent further downward pivotal movement of said body member, said hook being released upon reverse pivotal movement of said body member.

2,750,663
HAIR TRIMMER
Leon M. Coles, Portchester, N. Y.
Application August 9, 1951, Serial No. 241,064
6 Claims. (Cl. 30—31)



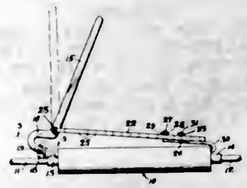
1. In a hair trimmer, an elongated top plate having a pair of spaced locating lugs on its under side, an elongated blade having a pair of end shoulders received between said lugs when said blade is disposed against the underside of said plate, a clamp disposed against the under side of said blade, means for drawing said clamp and plate toward one another to clamp said blade between them, said blade having a longitudinal cutting edge and a cutting edge at one of its ends, and said shoulders on said blade being so located that on loosening of said means the blade may be shifted longitudinally to dispose the selected shoulder of the blade against the selected one of said lugs whereby to selectively dispose said blade with said end cutting edge of the blade located between and extending beyond the end of the plate and clamp.

2,750,664
INDICATOR FOR RAZORS
Mario P. Merlo, Tarzana, Calif.
Application November 16, 1953, Serial No. 392,172
1 Claim. (Cl. 30—34)



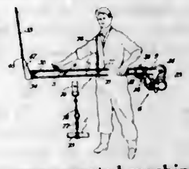
The combination with a razor having a head, a handle and a shank having a flat side interconnecting the head and the handle, of: pointer means on said shank, a disc on the flat side of said shank, said disc having a diameter substantially equal to the maximum transverse width of said shank, friction means on the opposite side of said shank, and means interconnecting the said disc, shank and friction means, said disc bearing indicia adapted to be successively positioned in alignment with the said pointer means when the disc is rotated to indicate the number of times a blade has been used.

2,750,665
MUFFLER FLANGE SPLITTING TOOL
Theodore R. Graumann, Ingleside, Tex.
Application December 19, 1955, Serial No. 554,110
5 Claims. (Cl. 30—91)



1. A muffler flange splitting tool comprising a lever, cutter blade means at the lower end of said lever adapted to shear the muffler flange, an elongated bar pivotally connected to said lever near said cutter blade means, and adjustable means at the other end of said bar for engaging the other end of the muffler.

2,750,666
AGRICULTURAL APPLIANCES
William Thomas Teagle, Blackwater, Truro, England
Application March 17, 1953, Serial No. 343,130
10 Claims. (Cl. 30—218)

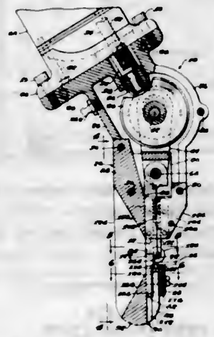


1. A portable power-operated machine for agricultural operations, comprising an elongated tubular frame, a power unit carried on the rear end of the frame, a reciprocatory tool projecting from the forward end of the frame, power transmitting means enclosed in the frame for driving the tool from the power unit, driving means for the tool including a rotary member driven from the power transmitting means, a bushing secured to the frame at its forward end and rotatably supporting said rotary member therein, and a crank mechanism driven by said rotary member and connected to the tool for converting rotational movement of said member into reciprocatory movement of the tool, and a supporting member for the tool having means for clamping it on said bushing for attaching the tool to the frame, said clamping means being adjustable around the bushing to vary the angle at which the tool projects from the frame.

2,750,667
PORTABLE POWER-DRIVEN CUTTING TOOL
Thomas B. Johnson, Ambridge, Pa., assignor to H. H. Robertson Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application October 11, 1952, Serial No. 314,305
2 Claims. (Cl. 30—228)

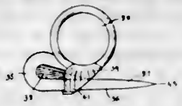
1. A portable power-driven tool for cutting metal sheets comprising a supporting member having upper and lower relatively thick, spaced portions and having cutaway surfaces forming a relatively thin, connecting web portion, said upper and lower portions having aligned grooves each provided with a rear wall and side walls, the front face of said connecting web portion being coextensive with the rear walls of said aligned grooves, an elongated punch having front and side cutting edges intermediate its length and mounted for reciprocation in said grooves and arranged to perform the cutting operation on its downward stroke, a die having front and side

cutting edges mounted on the upper face of said lower portion of said supporting member for cooperation with the corresponding cutting edges of the punch, the groove in said lower portion extending downwardly beyond the



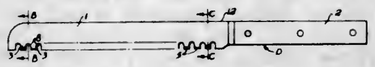
cutting edges of said die whereby to form a continuous rigid support for the rear face of said punch in said lower portion and to provide lateral support for the punch in said lower portion.

2,750,668
PAPER CUTTER WITH MULTIPLE USES
Georges Tarrazi, Marseilles, France
Application May 19, 1954, Serial No. 430,872
Claims priority, application France December 2, 1953
5 Claims. (Cl. 30—294)



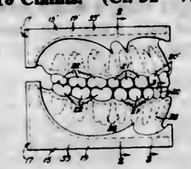
1. A paper cutter comprising, an elongated ramp portion having a tapered forward guide extremity and an upright rearward extremity, an upright handle spaced above said ramp portion between said forward and rearward extremities, an inclined cutting blade carried by said rearward extremity of said ramp portion and having a forward edge disposed substantially between said ramp portion and said handle, and paper deflecting arms carried by said handle and extending outwardly and downwardly at opposite sides of said ramp portion adjacent said forward edge of said cutting blade whereby to engage and to fold paper passing to said cutting blade.

2,750,669
FROZEN FOOD CUTTER
Joseph William Hohmann, North Bergen, N. J.
Application June 28, 1955, Serial No. 518,539
4 Claims. (Cl. 30—355)



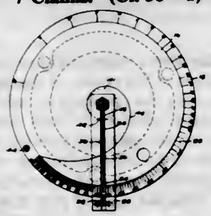
1. A frozen food package cutter, comprising a blade having a cutting edge, a plurality of substantially polygonal teeth on the cutting edge of said blade, the free ends of said teeth being hollow ground on an arc alternately from opposite sides forming substantially parallel rows of downwardly facing cutting points at the bottom corners of each tooth defining sharp slitting edges to triturate the material of the package on the line of severance of the cutter during operation of the blade and means alternating with said teeth to clear the triturated material at the line of severance.

2,750,670
DENTAL MODEL
John Vigg, Seattle, Wash.
Application October 13, 1952, Serial No. 314,475
18 Claims. (Cl. 32—71)



1. A dental model accurately simulating a jaw and tooth arrangement presenting the teeth in their natural form and relative arrangement, each tooth having a natural-form root structure, said dental model including: a jaw member having closed-bottom root sockets respectively shaped to receive said natural-form root structures of said teeth; and a gum-simulating sheath of elastic material removably covering said jaw member and detachably secured thereto independent of any coaction between said teeth and said jaw member, said sheath having separate orifices registering with and overlying said root sockets when said sheath is in place on said jaw member but extending openly through said sheath as openings when said sheath is removed from said jaw member, the root structure of each tooth being individually insertable into a corresponding root socket through its overlying orifice, each orifice being sized to resiliently grip its contained tooth when in place and hold it removably in natural position.

2,750,671
MICROHEMATOCRIT AND SEDIMENTATION READER
Alan Richardson Jones, Wellesley Hills, Mass., assignor to International Equipment Company, Boston, Mass., a corporation of Massachusetts
Application May 4, 1955, Serial No. 505,870
7 Claims. (Cl. 33—1)

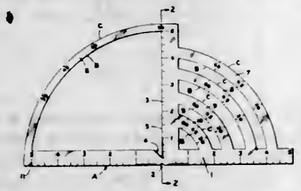


1. A device for determining the packed red cell percentage value of centrifuged blood in a capillary tube, comprising a base, a member mounted for rotation about a fixed axis on the base, means providing a logarithmic scale graduated from one to 100 associated with the rotatable member to move synchronously therewith past a fixed index, a disk superposed on the member for rotation therewith about said axis, means frictionally connecting the disk and member, a logarithmic spiral on the disk extending about said axis, and an arm fixed to the base and extending radially outward from said axis over the disk, the arm being adapted to support a capillary tube radially thereon and having an index adjacent to said axis and disposed therefrom a radial distance corresponding to that of the inner end of said spiral.

2,750,672
LAYOUT GAUGE
Eugene Danilow, North Arlington, N. J.
Application April 15, 1955, Serial No. 501,667
1 Claim. (Cl. 33—1)

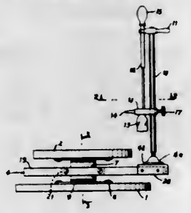
A layout gauge for finding the centers for holes to be drilled in castings or the like comprising a straight edge

having an inverted V-shaped notch on an edge thereof, a transverse member connected to said straight edge in the same plane and perpendicular thereto, said transverse member having one side falling in line with the V-shaped notch of said straight edge, a major arcuate member connecting the end of said transverse member to one end of said straight edge, and a plurality of arcuate members



connected at intermediate points inwardly of the ends of said straight edge and said transverse member, a spaced radial distance from each other and on the side opposite from said major arcuate member, and said plurality of arcuate members each forming part of a circle having radii with the same center point lying on the edge of said straight edge.

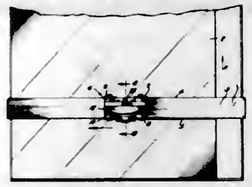
2,750,673
MACHINE FOR MARKING HEMS OF SKIRTS AND COATS
Saul Bashin, Hollywood, Calif.
Application June 15, 1954, Serial No. 436,883
2 Claims. (Cl. 33—10)



1. Marking apparatus comprising a base, a platform over the base, means at the center of the base and platform for rigidly connecting the platform to said base and maintaining the platform parallel to said base, a sleeve rotatably mounted on said means, anti-friction balls snugly engaging the ends of the sleeve and the adjacent faces of the base and platform, a pair of bars affixed to the sleeve at diametrically opposite points, and disposed parallel to the platform and base, a second pair of bars slidable horizontally and non-tiltably connected one to each of the first-named bars, and extending along the length and beyond the ends of the first-named bars, the second-named bars being rigidly connected at one end and forming a framework of material width, that is non-tiltable both longitudinally and transversely, an upright post rotatably and non-tiltably mounted at its lower end on said framework adjacent one end thereof and projecting above said platform, and a vertically adjustable marking device on said post.

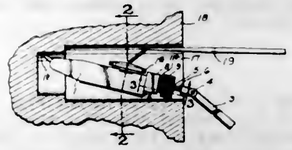
2,750,674
GLASS CUTTER
John W. Lee, Festus, Mo., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania
Application September 21, 1951, Serial No. 247,645
3 Claims. (Cl. 33—32)

1. A glass cutting machine arranged for movement longitudinally of a single guide rail and for complete transverse and vertical guidance by said single guide rail, comprising a main body, a supplementary body movable transversely with respect to said main body, means for adjusting the relative transverse spacing of said main body and said supplementary body, a pair of wheel shafts extending transversely through said bodies, a pair of wheels



on each of said wheel shafts, and means for holding said wheels in fixed transverse positions with respect to said main and supplementary bodies during adjustment of said transverse spacing.

2,750,675
TEST INDICATOR
Clarence E. Soring, Portland, Oreg.
Application September 13, 1955, Serial No. 534,001
6 Claims. (Cl. 33—172)

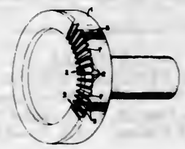


1. In combination with a dial-type test indicator, a handle comprising an elongated shank having a smaller cross section than that of said test indicator with which it is joined and terminating in a ball-shaped end, said handle also comprising a joining element lying intermediate said shank and said indicator, said joining element comprising a pair of complementary couplings screw-fitted to each other, said joining element having a first coupling provided with a face for engaging said test indicator and holding it against relative rotation therewith and having an opposite face with one half of a screw fitting formed thereon, a sleeve slidably mounted for axial movement in said first coupling and extending to the first mentioned face of said coupling, said sleeve having a greater overall length than that of said first coupling and having one end projecting therefrom, said projecting sleeve end having a concave recess formed therein, and a second threaded coupling screw-fitted to said first coupling and being of cup-shaped form having an internal chamber accommodating the projecting end of said sleeve and defining a socket for receiving the ball-shaped end of said shank, the ball-shaped end of said shank being seated in the recess formed in the end of said sleeve, whereby, when said screw fitted complementary couplings are rotated in one direction locking friction is induced between them and the parts that they join, by a force transmitted through said slidable sleeve from said ball-shaped end directly upon the test indicator connection, to hold said joining element rigid, and when said couplings are rotated in the opposite direction said locking friction is relaxed to permit said elements to articulate.

2,750,676
MASTER GAUGE FOR BEVEL GEARS
Albert S. Beam, Detroit, and Clarence B. Stapleton, Royal Oak, Mich., assignors to Vinco Corporation, Detroit, Mich., a corporation of Michigan
Application November 1, 1954, Serial No. 466,182
3 Claims. (Cl. 33—179.5)

1. A bevel gear checking master in the form of a toothed crown wheel corresponding to the basic spherical

rack of a bevel gear to be checked wherein a minor portion of contiguous teeth of said checking master are of



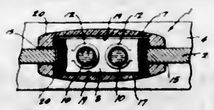
substantially less thickness than a major portion of the teeth of said checking master.

2,750,677
BUBBLE LEVEL
Armin Wirth, Zurich, Switzerland
Application December 20, 1951, Serial No. 262,605
8 Claims. (Cl. 33—211)



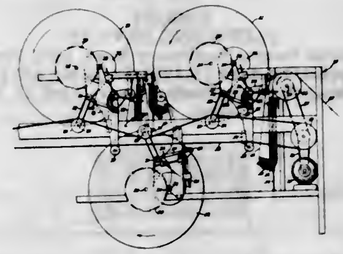
4. A bubble level comprising a one-piece bubble level body of transparent material with a cavity for the bubble level liquid and bubble, and a plug closing said cavity from one side, the thickness of the transparent material above said cavity being large in comparison with the width of said cavity, and the viewing face of said body being convex, the inner face of said plug being strongly light-reflecting.

2,750,678
SPIRIT LEVEL
Harry J. Ziemann, Elm Grove, Wis.
Application September 25, 1952, Serial No. 311,477
2 Claims. (Cl. 33—211)



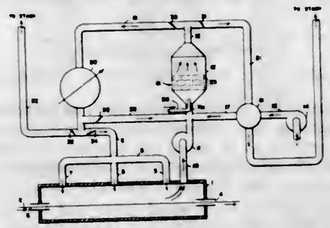
1. In a level the combination comprising an elongated frame, an aperture in said frame extending through said frame, a vial case having an open center disposed in said aperture and secured to said frame, a spirit level vial secured in said vial case transversing the open center thereof to be observable from either side thereof, said vial case and said frame adjacent thereto having a thickness not exceeding approximately twice the diameter of said vial, the open center of said vial case being large in relation to the diameter of said vial to permit inspection of said vial at a substantial angle of obliquity with respect to said frame, and a pair of cover glasses on the opposite sides of said vial case secured to said frame and spaced from one another a distance not exceeding approximately twice the diameter of said vial, each said cover glass having an outer cylindrical convex surface and an inner flat surface adjacent said vial constituting said cover glass a cylindrical lens, the radius of curvature of the cylindrical surface of said cover glass being large in relation to the spacing between said cover glasses and the average thickness of said cover glasses being small in relation to said radius of curvature, said cylindrical surface extending uninterruptedly, laterally, substantially, entirely across the opening in said vial case whereby free passage of light through said vial case to illuminate said vial is permitted while a defined image of said vial rectilinearly magnified is observed through said cover glass against a background consisting of diffused images of background objects located beyond the principal focal distance of the two cover glasses as a combined optical unit.

2,750,679
HANDLING APPARATUS FOR TEXTILE FABRIC
Joseph Cohn, Jules G. Walter, and Eugene Cohn, New York, N. Y., assignors to Samcoe Holding Corporation, Woodside, N. Y., a corporation of New York
Application October 23, 1952, Serial No. 316,422
8 Claims. (Cl. 34—25)



4. In a reel type dryer for a continuous strip of textile fabric including a plurality of rotary reels of air-pervious material adapted to receive the fabric and convey it successively around said reels, the size of said reels relative to their spacing being such that the fabric is directly supported by the surfaces thereof during a substantial portion of its travel through the dryer, the method of passing a continuous strip of moist textile fabric through said dryer for drying which comprises the steps of passing the strip in flat unfolded but tension-free condition about a first reel, accumulating the fabric of said strip as it leaves said first reel in a completely relaxed pile including folded over portions thereof, withdrawing the fabric of said strip from said pile and passing it about a second reel, repeating successively said steps until said fabric is discharged from the dryer, and passing drying air continually through said fabric both while on said reels and while it is being accumulated.

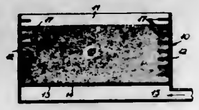
2,750,680
METHOD FOR TREATING MATERIALS
Eugene J. Houdry, Ardmore, and William M. Bowen III, Chester, Pa., assignors to Oxy-Catalyst, Inc., a corporation of Pennsylvania
Application August 2, 1952, Serial No. 302,386
7 Claims. (Cl. 34—35)



1. A method for drying articles which give off substantial quantities of combustible vapors during the drying operation, said method involving the use of a substantially inert drying gas which is continuously generated by the oxidation of vapors evolved in the course of the drying operation and comprising the steps of passing heated drying gas through a drying zone in contact with the articles to be dried, passing said drying gas containing evolved combustible vapors and at least sufficient oxygen to pro-

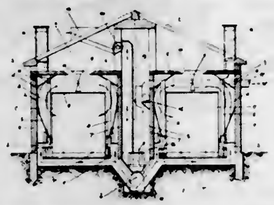
vide for complete oxidation of said vapors to a catalytic oxidation zone and therein contacting said mixture with an oxidation catalyst under conditions permitting substantially complete oxidation of said vapors, recycling heated, substantially vapor-free gas leaving said catalytic oxidation zone to said drying zone as drying gas, while limiting the overall addition of oxygen to the system such that the substantially vapor-free gas from the catalytic oxidation zone is so deficient in oxygen that the gas-vapor mixture formed therewith in said drying zone always remains outside the limits of flammability under operating conditions irrespective of the vapor concentration in said mixture.

2,750,681
FLUIDISING DEVICES
Francois Jacques Barthelemy Berry, Lille, France
Application April 16, 1954, Serial No. 423,741
Claims priority, application France April 21, 1953
3 Claims. (Cl. 34—57)



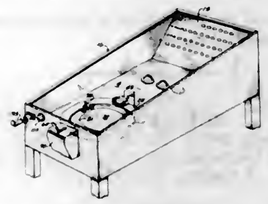
1. A device for fluidising a mass of fine granular solid products, said device comprising a container of cylindrical shape, a plurality of passages formed in the base of said container, said passages being so dimensioned that the particles of the said mass do not pass therethrough, a downwardly-projecting cylindrical portion formed by an extension of the cylindrical walls of said container below said base, a piston slidably mounted in said cylindrical extension, at least one articulated flap-valve mounted in the web of said piston, a supply of gas to the underside of said piston, and mechanical means including at least one articulated system for impressing an oscillating motion on said piston, whereby the gas forced through said mass is adapted to be given a pulsatory character.

2,750,682
DRYING APPARATUS
Carlo Garbuio, Treviso, Italy
Application May 12, 1953, Serial No. 354,460
Claims priority, application Italy May 17, 1952
5 Claims. (Cl. 34—225)



1. Apparatus for drying articles such as bricks and the like, comprising, in combination, a drying chamber in which the articles to be dried are adapted to be located, said drying chamber having a top wall formed with a pair of openings and having a partition located in said chamber adjacent to but spaced from said top wall and terminating short of opposite side walls of said drying chamber; an air chamber located above said drying chamber and communicating with the latter through said openings; means communicating with said air chamber for maintaining the air therein at a predetermined temperature and humidity; and a fan located between said partition and top wall of said drying chamber and between said openings of said top wall for circulating air about said partition and through said chamber, whereby moist air will pass to said air chamber through one of said top wall openings and whereby air of said predetermined temperature and humidity will be drawn into said drying chamber through the other of said top wall openings.

2,750,683
SKILL AND EFFORT TESTING MACHINE
Harold S. Theobald, Wauwatosa, Wis.
Application June 28, 1951, Serial No. 233,961
18 Claims. (Cl. 35—22)



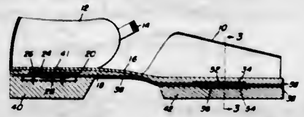
1. In a device for testing the ability of persons to conform to given rules under varying conditions for operation of the device, a figure moving at a constant speed, a figure movable at a variable speed under control of a person being tested for speed comparison with the first said figure, a plurality of indicators for varying conditions to be observed and met by the person being tested by varying movements of the second said figure, means for automatically and selectively energizing the indicators according to a predetermined pattern, an electrical circuit for interrupting movement of the second said figure, electrical contact means severally movable with the two said figures for coaction in energizing the circuit upon passing of the first said figure by the second said figure during energization of one of the varying condition indicators, means for automatically and visually indicating failures of the person being tested to conform to the rules as made applicable by the varying conditions indicators in controlling movement of the variable speed figure, means for automatically terminating operation of the device after a given number of movements of a figure, and means for resetting the device to an initial condition.

2,750,684
EXTENDED INSTEP SHOE
George Albert Lyon, Detroit, Mich.
Application June 11, 1953, Serial No. 360,862
2 Claims. (Cl. 36—2.5)



1. As an article of manufacture, a shoe made of thin gauge foot sustaining material including a sole having a ground engaging toe portion terminating rearwardly at substantially the ball region and an elevated shank and heel portion out of ground engagement, an upper tubular instep receiving portion connected to said sole at spaced side areas thereof only rearwardly of said toe portion, and a vertically extending upper extension rigidly connected to said tubular portion engageable with the front part of the leg of the wearer, whereby said upper extension when the shoe is attached to the leg of the wearer provides a support for the leg and transmits some of the weight of the body therethrough to the sole portion.

2,750,685
SANDAL WITH MEANS FOR DETACHABLY ATTACHING AN OUTER SOLE THERETO
Clyde H. Wiermaa, Ashland, Mass., assignor of fifty percent to Amando Giargiari, Ashland, Mass.
Application October 9, 1953, Serial No. 385,053
1 Claim. (Cl. 36—15)



In a shoe, an upper including an insole having toe and heel portions, an outer sole under said insole, said outer sole having toe and heel portions and thick toe and heel wear members secured to the underside thereof, a thickened insole member interposed between the heel portions of the insole and outer sole and secured thereto, a pair of upper and lower anchor plates recessed into the thickened insole portion and heel wear member and having a socket and tongue thereon, respectively, said tongue being slidably engageable in said socket to detachably attach said plates together and the socket and tongue being triangular for engaging with a wedging action, said heel portion of the inner sole member being apertured to accommodate said socket and tongue, and means detachably attaching said toe wear member to the toe portion of said insole.

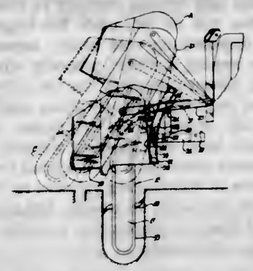
2,750,686
BEADED SHOE WELTING
William C. Vizard, Brockton, Mass., assignor to Barbour Welting Company, Brockton, Mass.
Application August 12, 1953, Serial No. 373,818
3 Claims. (Cl. 36—78)



1. A beaded shoe welt having an inseam flange along one marginal edge, a welt extension along the second marginal edge, and a flap integral with the welt extension and having a portion providing a bead upstanding from the surface of the welt extension, said flap having a core member and a wedge-shaped core supporting member, both being integral parts of the flap, said wedge-shaped core supporting member being tucked under the inseam side of the core for disposing the bead at an angle not exceeding 90° with respect to the surface of the welt extension.

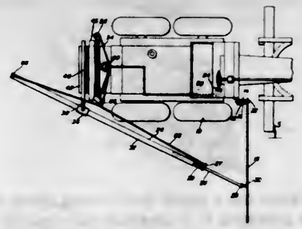
2,750,687
BOOM SUSPENSION MEANS FOR A CONTINUOUS BUCKET TRENCHING MACHINE
Guy Banister, Aurora, Ill., assignor to Barber-Greene Company, Aurora, Ill.
Application September 5, 1952, Serial No. 308,111
10 Claims. (Cl. 37—90)

1. A trenching machine having a continuous bucket line comprising a mobile main frame, an upright digging boom mounted at the rear end of said main frame, and having the bucket line guided for orbital movement thereabout, flexible draft means mounted on said main frame and suspending said boom in a digging position, and upright guide tracks movably mounted on said main frame and forming a slidable guide for said boom, said guide tracks being movable with respect to said main frame from an upright to a reclining position, and means on said main frame having supporting engagement with said guide tracks for supporting said guide tracks in a reclining position to support said boom in a generally re-



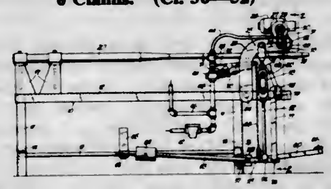
clining position with respect to its upright digging position, upon movement of said boom along said guide tracks by said flexible draft means.

2,750,688
WING ASSEMBLY FOR ROAD GRADERS
Paul W. Grabow, Twin Brooks, S. Dak.
Application November 29, 1954, Serial No. 471,725
1 Claim. (Cl. 37—155)



A wing assembly for a road grader comprising a standard adapted to be adjustably carried by a road grader, a wing blade adjustably pivotally mounted at one end thereof on said standard, a bracket adapted to be secured to a road grader and including a pivotally mounted sleeve, a rod pivotally attached to said wing blade, said rod being slidably received in said sleeve, a winch adapted to be carried by a road grader, a cable entrained about said winch secured to said rod for adjusting the position of said rod in said sleeve, and brake means for holding said winch to maintain the adjusted position of said rod in said sleeve, a cylinder adapted to be carried by a road grader, a pulley in said cylinder, said cable being entrained about said pulley, and a spring terminally secured to said pulley and said cylinder for continually holding said cable taut.

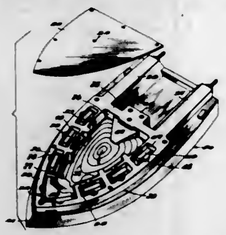
2,750,689
IRONING MACHINE FOR JACKETS OF LITHOGRAPH ROLLERS
Jonas Theodore Lindquist, Skokie, Ill., assignor to Roberts & Porter, Inc., Chicago, Ill., a corporation of Illinois
Application July 12, 1952, Serial No. 298,602
6 Claims. (Cl. 38—52)



1. A machine for ironing a tubular sleeve of fabric material, comprising a frame, a horizontally extending

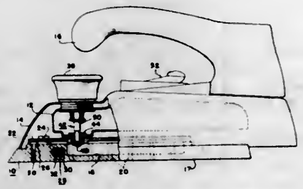
arbor carried on the frame and having one end free and unsupported, a head pivotally mounted on the frame and having a rotatable ironing member, said head being movable to position said ironing member in cooperating relation to the free end of the arbor for engaging a fabric sleeve when disposed on said arbor, means for driving said rotatable ironing member, whereby when said member engages a sleeve supported on the arbor said sleeve is caused to be fed longitudinally along said arbor, a foot treadle movably mounted on the frame, linkage interconnecting said head and treadle, whereby pressure on the treadle causes movement of the head to position said ironing member in cooperating relation to the arbor, and a counterweight for acting on treadle, linkage and head for returning said head to inoperative position upon release of pressure on said treadle.

2,750,690
STEAM IRON
John R. Gomersall, Elgin, Ill., assignor to McGraw Electric Company, Elgin, Ill., a corporation of Delaware
Application January 21, 1953, Serial No. 332,229
8 Claims. (Cl. 38—77)



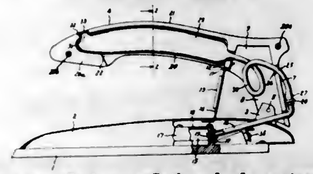
1. A sole plate for a steam iron having steam discharge ports therein arranged in a longitudinally-spaced series of transversely-alined pairs, and forwardly arched grooves formed in the ironing surface each connecting with one of said transversely-alined pairs of steam discharge ports and being convex toward the front of said iron, said grooves being of different curvature, each groove being of shallower curvature than the next forward groove.

2,750,691
STEAM IRON
Bernard F. Parr, Mansfield, Ohio, assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application July 17, 1952, Serial No. 299,334
3 Claims. (Cl. 38—77)



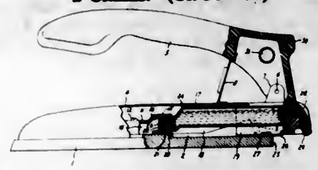
1. The combination in a steam pressing iron, a soleplate provided with a steam port, a manipulating handle disposed above said soleplate, means for heating said soleplate and steam-producing means communicating with said port, said soleplate having a pressing surface and said pressing surface being provided with a myriad of indentations in the area surrounding said port, the majority of said indentations partially overlapping one another for providing a plurality of connected passages adapted to disperse steam emitted from said port.

2,750,692
STEAM FLATIRON
Frank E. Finlayson, Ontario, Calif., assignor to General Electric Company, a corporation of New York
Application January 21, 1954, Serial No. 405,378
4 Claims. (Cl. 38—77)



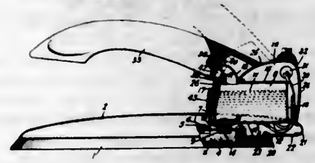
1. In a steam flatiron, a flatiron body, a steam chamber in the body, a handle attached to the body, said handle having a downwardly facing open-sided cavity therein, a flexible water reservoir in said cavity, a pipe for supplying water to said steam chamber, a flexible tube connected at one end to said reservoir, and means for detachably connecting the other end of said tube to said water supply pipe, said reservoir being so positioned with respect to the open side of the handle cavity that it is accessible for collapsing whereby said reservoir may be filled with water by detaching the flexible tube from said pipe and dipping the end of the tube in water in a receptacle.

2,750,693
COMBINATION DRY AND STEAM FLATIRON
William H. Tangeman, Ontario, Calif., assignor to General Electric Company, a corporation of New York
Application January 21, 1954, Serial No. 405,369
2 Claims. (Cl. 38—77)



1. In a flatiron, a flatiron body comprising a soleplate and a cover, walls in the body which define a steam chamber therein, said steam chamber having a rearwardly facing opening, walls which define a pocket in the body at the rear of the steam chamber, said pocket having an open rear end, a water reservoir in the pocket which is adapted to be removed from and replaced in the pocket by being slid through the open rear end of the pocket, and means at the inner end of the reservoir for connection with said opening for supplying water from the reservoir to the steam chamber.

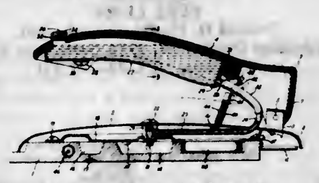
2,750,694
STEAM FLATIRON
Richard O. Spencer, Pacific Palisades, Calif., assignor to General Electric Company, a corporation of New York
Application January 21, 1954, Serial No. 405,328
5 Claims. (Cl. 38—77)



1. In a steam flatiron, a flatiron body comprising a soleplate and a top cover, walls which define a steam chamber in the body at its rear end, a cover plate for the steam chamber, said top cover having an opening a

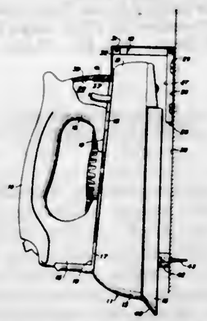
part of which is over said steam chamber cover plate, a water reservoir mounted through said opening on said top cover, means defining a metering orifice for regulating flow of water from the reservoir to the steam chamber, and a handle for the flatiron having at its rear end furcations which straddle the reservoir and are attached to the flatiron body on opposite sides of the reservoir whereby the reservoir is housed between said furcations.

2,750,695
STEAM FLATIRON
Alfred G. Swenson, Ontario, Calif., assignor to General Electric Company, a corporation of New York
Application January 21, 1954, Serial No. 405,327
4 Claims. (Cl. 38—77)



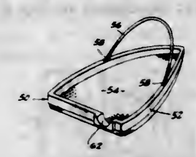
1. In a steam flatiron, a body having a steam chamber therein, a handle which extends across the body, hinge means connecting the handle to the body whereby the handle may be moved from an ironing position where it is spaced from the top wall of the body to a position where it is folded down against the body, a water supply pipe connected to said steam chamber, the outer end of said pipe terminating at the rear end of the flatiron in the vicinity of the handle hinge means, a water reservoir in said handle, and conduit means including hinge means connecting said reservoir to the outer end of said water supply pipe, said handle including a downwardly facing cavity at the rearward hinged end thereof, said conduit hinge means being concealed within said cavity.

2,750,696
ELECTRIC FLAT IRON AND HOLDER
Beverly B. Krammes, North Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application November 4, 1953, Serial No. 390,217
3 Claims. (Cl. 38—96)



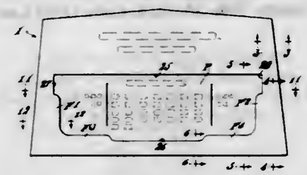
2. In combination an iron including a cover shell, a handle having a supporting leg mounted on said cover shell, means defining an opening between said cover shell and handle supporting leg to an interior surface of said iron, and a holder for the iron disconnectable therefrom when ironing and having means adapted to be mounted on a supporting surface, and hook means on said holder passing through said opening into engagement with said interior surface of said iron to support the latter on said holder.

2,750,697
FABRIC PROTECTING IRON SHOE
Sidney Jacobson, Van Nuys, Calif.
Application February 23, 1956, Serial No. 567,181
4 Claims. (Cl. 38—97)



4. A steam iron accessory comprising: a perforated sheet of heat treated polymerized tetrafluoroethylene to cover the bottom surface of the iron, and means connected to said sheet above the bottom surface thereof to attach said sheet to said iron in a substantially fixed position contiguous to the bottom surface of the iron.

2,750,698
TWO-PLY DISPLAY MOUNTS FOR CALENDAR PADS OR THE LIKE
Gordon R. Nichols, Middlebero, Mass., assignor to Winthrop-Atkins Co., Inc., Middlebero, Mass., a corporation of Massachusetts
Application November 17, 1951, Serial No. 256,913
2 Claims. (Cl. 40—120)



1. An easel type mount for a calendar pad comprising uniformly flat front and rear plies of sheet material of commensurate area arranged in contacting face to face relation without an intermediate spacer therebetween, said front ply comprising a faceboard having a display window therein, the lower part of the window having inwardly extending margins at its lower corners constricting the breadth and depth of the window opening to less than the corresponding dimensions of the pad to be inserted therein so as to provide overlapping retaining walls for the front of the pad at its lower part, and the upper portion of the window having a width slightly greater than the width of the pad to be inserted between the faceboard and the rear ply constituting the back-board permitting the pad to be inserted into the window from the front of the mount, and downwardly behind the overlapping retaining walls, said back and said apertured front being permanently joined marginally except at the interfaces bordering the opening, thereby providing unattached interfaces between the back and retaining wall at the lower part of the window between which may be inserted the margins of the pad, and said back-board being provided with angular incisions paralleling the edges of said inwardly extending margins and spaced inwardly therefrom to provide rearwardly deflectable portions to admit the thick calendar pad to be disposed in the rear of said face-board back of said overlapping margins.

2,750,699
GRAINING TOOL
Enoch R. Glen and Bruce E. Glen, Carmel, Calif.
Application June 8, 1953, Serial No. 360,016
1 Claim. (Cl. 41—5.5)

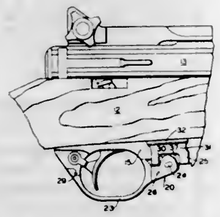
In a graining tool: a semi-resilient body having a rectangular convex surface; the body having opposing sides

that substantially parallel each other and extend at right angles to the convex surface; the sides being arranged close enough together and being of a size to permit the thumb to contact with one side and the fingers of the same hand to contact with the other side and the convex surface facing outwardly; the convex surface having elongat-



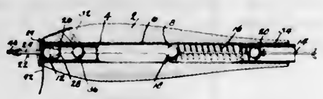
ed loops thereon formed by raised ribs integral with the surface and having other raised ribs that extend in the general direction of the length of the reactangular surface and are in the form of a wavy line from end to end thereof; the elongated loops having their major axes extending in the direction of the length of the rectangular surface.

2,750,700
CLAMP ASSEMBLY FOR A TRIGGER HOUSING
Earle M. Harvey, Agawam, Mass., assignor to the United States of America as represented by the Secretary of the Army
Application May 7, 1953, Serial No. 353,700
4 Claims. (Cl. 42—75)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A firearm including a stock and a mechanism comprising a barrel, a receiver and a trigger housing, said stock being provided with a vertical passageway for receiving said receiver and said trigger housing and a longitudinal channel for receiving said barrel, a trigger guard separably mounted by a transverse pin to said trigger housing for pivotal movement thereon between an open separable position and a closed locked position, a jaw member unitarily assembled to said trigger guard by said transverse pin, and cam means on said trigger guard to clamp said stock between said barrel and receiver and said jaw member when said trigger guard is in said closed position.

2,750,701
FISHING LURE
Clare F. Beames, West Hartford, Conn.
Application June 11, 1953, Serial No. 361,024
3 Claims. (Cl. 43—42.09)



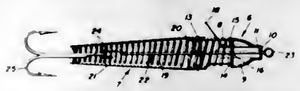
1. A fishing lure comprising, in combination, a body member having a longitudinal bore extending its entire length; a liner for said bore, flared at each end against the body member; a rod slightly longer than the lure, loosely extending along said bore; a fastener at each end of said rod; a pair of elements including a forward element and a rear element loosely slidably mounted upon said rod; a stop on the rod for the rearward element of said pair of elements; a spring loosely mounted on the rod intermediate said elements; a stop in the wall of said liner adapted to be engaged by the forward element of said pair of elements when said rod is moved along the liner, to place said spring under compression; a sleeve slidable within the liner at each end of the liner, each sleeve surrounding a fastener to reinforce and prevent spreading of the same; and a stop for each sleeve in the wall of said liner, to limit inward movement of the sleeves relative to the liner.

2,750,702
FISH LURE
Donald H. Hartig, Osceola, Ind.
Application October 18, 1954, Serial No. 462,731
5 Claims. (Cl. 43—42.17)



1. In a fishing lure, a wire having the outer portion thereof bent back on itself to form a loop, a long spine portion and a short arm portion in parallel relation, a hook with the eye thereof caught in the loop, means, slidably mounted on the parallel arm and spine above the loop, a bundle of flexible rubber strands of sufficient length to overlay the hook, caught between the arm and the spine, next above the slidable means, additional slidable means mounted on the arm and spine above the strands, the two slidable means being urged toward each other to partially compress said strands so that at least a portion of them are caused to stand out in skirt fashion, an elongated collar next above the additional sliding means and covering the terminal portion of the arm, a spoon mounted for swivel movement above the collar and a loop in the end of the spine above the spoon mounting for attaching the lure to a line.

2,750,703
FISH LURE
Joseph Puste, Lincoln Park, Mich.
Application November 12, 1954, Serial No. 468,256
2 Claims. (Cl. 43—42.21)



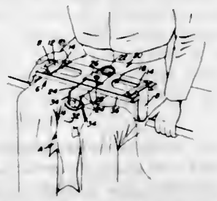
1. A fish lure of the character described comprising: a substantially bullet shaped, hollow metallic head open at its rear end, said head including complemental half sections, one of said half sections having a slot therein, said head further including a substantially U-shaped, integral nose connecting the forward ends of said half sections, the other of said half sections including an inwardly struck, integral bar engaged in the slot, said bar and said nose having aligned apertures therein, a resilient, tubular body mounted on the head and extending rearwardly therefrom, a coil spring mounted in the head in abutting engagement with the bar and projecting into the body, a resilient, longitudinally extending shaft journaled in the apertures and projecting into the body, a treble fish hook loosely connected to the rear end of said shaft, and fins on the head for rotating said head on said shaft.

2,750,704
FISHHOOK
Harvey B. Bemis, Wheaton, Minn.
Application August 23, 1954, Serial No. 451,395
1 Claim. (Cl. 43—43.16)



A fishhook comprising a straight shank of greater than usual length having a bill formed at one end thereof and having at its other end a first portion which extends laterally therefrom, a second portion which extends laterally from said first portion and in the opposite direction, a third portion which extends laterally from said second portion in the direction of said first portion, a fourth portion which extends laterally from said third portion in the direction of the second portion and a fifth portion which extends laterally from said fourth portion in the direction of said third portion, said second, third and fourth portions being of substantially the same length and said fifth portion being of substantially the same length as said first portion and having an extension in line with the shank which terminates in an eye, said laterally extending portions cooperating to form a grip of substantial area to facilitate the extraction of the hook from a fish.

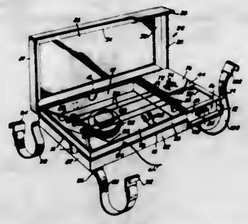
2,750,705
FISHHOOK EXTRACTING DEVICE
Leo P. Keveney, Toledo, Ohio
Application June 28, 1954, Serial No. 439,570
2 Claims. (Cl. 43—53.5)



1. A device of the class described comprising a flat lapboard adapted to be placed upon the lap of the user, a clamping plate, a fastener removably securing said plate to a top central portion of said board, said plate being provided at opposite end portions with flanges bent laterally toward said board, a spreader tool comprising a substantially U-shaped spring member embodying a coil spring and a pair of spreadable spring arms connected therewith, said arms resting atop said board with the intermediate portions of the arms slidably engaging the flanges and situated between the plate and the board for adjustment of the spread thereof, said arms being adapted to spreadably suspend an article in a readily manipulatable position from said lapboard.

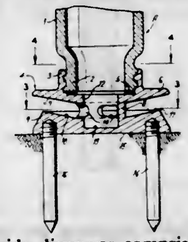
2,750,706
FISHING TACKLE BOX
Paul C. Seals, Grand Junction, Colo.
Application June 16, 1954, Serial No. 437,050
3 Claims. (Cl. 43—57.5)

1. A portable container for fishing tackle comprising a box having a bottom wall marginal front, rear, and interconnecting side walls, a hingedly mounted top wall providing a cover for said box, a V-shaped member fixedly mounted in said box and bridging the space between said front and rear walls, said V-shaped member forming a partition which, with said rear and bottom wall, forms a triangular compartment, the divergent portions of said V-shaped member providing selectively usable anchor surfaces for fishhooks carried by conventional type vari-



length shells, and a partition also fixedly mounted in said box and bridging the space between the front and rear walls, said partition being spaced from said V-shaped member, the upper portion of said partition having spaced teeth providing selectively usable hold-down anchors for the usual loop-equipped ends of the stated snells, whereby a plurality of snells varying in length may be removably placed in the space of said box by the facilities afforded by said V-shaped member and toothed partition.

2,750,707
INSECTICIDE DISPENSERS
Henry V. Ekstedt, Overland, Mo.
Application August 6, 1953, Serial No. 372,657
7 Claims. (Cl. 43—131)

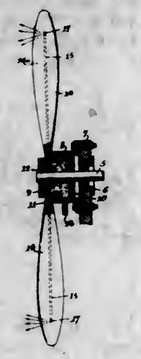


1. An insecticide dispenser comprising an open-ended bottle-like container, a dispensing head removably mounted in closurewise position across the open end of the container, said dispensing head being provided with a tubular neck having an internal bore opening to the interior of the container and said neck being provided with a plurality of small apertures extending radially therethrough in the provision of passageways from the interior of the bore and also being provided with an axial bore which extends below the level of said apertures in the formation of a depressed well, and a saucer-like member forming a part of the dispensing head and extending circumferentially outwardly therefrom, said saucer-like member being provided with a conically tapered surface, the inner portion of which is directly below said apertures and above the bottom of the well when the dispenser is in operative position with the dispensing head presented downwardly.

2,750,708
EJECTOR
Léopold Handfield, Beloeil Station, Quebec, Canada
Application April 12, 1954, Serial No. 422,569
2 Claims. (Cl. 43—147)

1. An ejector comprising a shaft, a hollow hub thereon, an inlet means for said hub adapted to afford entrance of powder or fluid into the interior of said hub, propeller

blades extending from said hub, each propeller blade having an outer face, a longitudinal tube in each blade communicating with the interior of said hub, the outer end



of each tube being disposed in the outer face of the corresponding blade and being open to the atmosphere, and a motor for driving said shaft.

2,750,709
REVERSIBLE LIFT FOR FURNITURE LEGS
Casimiro G. Saverino, East Paterson, N. J.
Application December 29, 1954, Serial No. 478,327
1 Claim. (Cl. 45—137)



Means for vertically adjusting the legs of a chair, comprising an elongated, open ended tubular member for snugly fitting on the lower free end portion of each leg, each tubular member having a fixed internal circumferential rib, the ribs of said members being uniformly spaced from the respective ends of said members, each rib providing a pair of axially spaced shoulders facing the opposite ends of the member, at least one of said shoulders being disposed nearer one end of the member than the other and said shoulders being selectively engageable by the free end of the chair leg admitted into said member for different vertical adjustments of the leg with respect to the opposing ends of the member selectively supported on the floor, a spacing element receivable within either end of said member and engageable with a corresponding shoulder, said spacing element being engageable by the free end of the leg for further vertical adjustment thereof, a yieldable foot frictionally and removably engaged with that end of said member which engages the floor and serving as a cushion and a removable closure therefor and defining within said member, between said rib and said foot, a chamber for housing said spacing element when the latter is not in use, the member being provided at each end thereof with an enlarged recess, and a deformable ring-like band engaged within one of said recesses for frictionally engaging upon the chair leg to retain the member on such leg.

2,750,710
SEWING WELT AND TRIM STRIP
Stephen D. Bradley, Detroit, Mich., assignor to Detroit Macoid Corporation, Detroit, Mich., a corporation of Michigan
Application December 5, 1950, Serial No. 199,322
1 Claim. (Cl. 45—138)



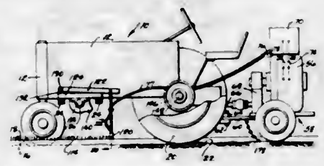
A trim panel unit comprising a plurality of panels of material joined adjacent the edges thereof and adapted to form a covering for a backing sheet and a welt extending between and secured along the joined edges of said panels of material, said welt comprising a translucent body formed of strip material and having a fold along a longitudinal line to provide a longitudinal recess therein and a reflecting insert member disposed within said recess, said panels of material having their edges joined to said translucent body member and reflecting insert member adjacent the open edge formed by the longitudinal fold in said body member so that the portion of the body member and reflecting insert adjacent the longitudinal fold forms an exposed decorative bead along the edges of said panels of material.

2,750,711
AERONAUTICAL TOY
Harlow B. Grow, Pacific Palisades, Calif.
Application December 8, 1953, Serial No. 396,948
3 Claims. (Cl. 46—74)



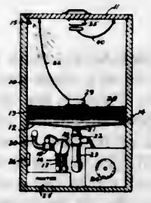
1. An aerial toy adapted to be catapulted into the air by means of a stick and a strand connected with the stick, said aerial toy including an elongated shaft, an air foil rigidly connected with one end of the shaft and extending laterally therefrom and of less length than the shaft to leave a projecting portion of said shaft, a stop at the end of the shaft remote from the air foil, a weight member having an opening through which the projecting end of the shaft extends, the weight member and shaft having relative movement for changing the center of gravity of the toy relative to the air foil, means on the weight member for attaching said strand to effect relative movement between said weight member and air foil for establishing contact of the weight member with said stop whereby the center of gravity is away from the air foil and the weight member is effective in controlling momentum of the toy when catapulted into the air, an elastic member connecting the weight member with the shaft and in tension when the weight member is in contact with said stop for effecting the relative movement between the weight member and air foil to bring the weight member near the air foil and establish center of gravity near the air foil when the momentum of the weight member is substantially expended whereby the air foil becomes effective in controlling descent of the toy in a spinning motion simulating the flight of a helicopter.

2,750,712
METHOD OF ELECTRICALLY DESTROYING UNDESIRED PLANT LIFE ALONG CROP ROWS
Earl Cecil Rainey, Tyronza, Ark.
Original application April 2, 1951, Serial No. 218,866, now Patent No. 2,687,597, dated August 31, 1954. Divided and this application June 28, 1954, Serial No. 439,651
5 Claims. (Cl. 47—1.3)



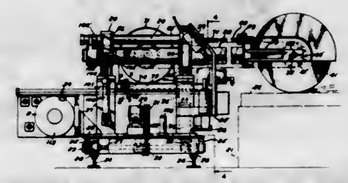
1. The method of destroying undesired plant and insect life along a row of plants germinated from seed planted along said row, and destroying insect eggs and larvae exposed during such planting, which method includes: subsequent to undesired growths of weeds and grass, but prior to growth of said plants through said row surface, traversing along in proximity to, but substantially free from contact with, the surface of said row and in contact with said undesired growths, insect eggs and larvae, the discharge element of a circuit from a grounded source of high voltage current whereby to cause high voltage flow of said current through said undesired growth and surface-overlying insect eggs or larvae; after subsequent growth of said plants through and above said row surface and regrowth of accompanying undesired plant life, similarly retraversing said row with said discharge element insulated on its front, rear and top sides in like intimate proximity to said row and during said retraversing movement intermittently elevating said discharge element from and replacing same in row proximity and contact with plant and other growths at spaced intervals, whereby to leave spaced undestroyed plant hills at the intervals of element elevation from plant contact, and subsequently after further plant growth in said hills and accompanying undesired growths therebetween, retraversing said row with displaceable discharge elements insulated on their front, rear and top sides, in like intimate proximity to said row and confining destructive action of said current to surface areas of said rows between said hills, by displacing action of the plants in said hills on the insulation of said discharge elements.

2,750,713
CONTROLS FOR BEAN SPROUTING MACHINE
John Chin, San Francisco, Calif.
Application September 21, 1953, Serial No. 381,357
4 Claims. (Cl. 47—14)



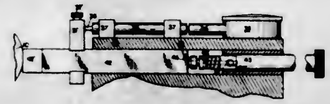
1. In a bean sprouting machine which includes a chamber to receive beans, a valve controlled water supply to the chamber, and a valve controlled drain for removing water from the chamber, electrically actuated means to open the water valve and close the drain valve, and a switch in said means operable upon water in the chamber reaching a level slightly above the beans therein and effective to close the water valve and open the drain valve, said switch being supported by the top of a mass of beans in the chamber whereby its position will change as the mass increases due to sprouting of the beans.

2,750,714
SWING GRINDER
Anthony A. Muehling, Detroit, Mich., assignor to Mid-West Abrasive Company, Owosso, Mich., a corporation of Delaware
Application December 4, 1950, Serial No. 198,950
15 Claims. (Cl. 51—32)



1. A machine for removing metal from work, comprising frame structure, a tubular housing having one end portion journaled in a bearing pivoted on the frame structure to permit vertical swinging movement of the housing, a bearing for the opposite end of the housing slidably supported on the frame structure, a boom non-rotatably and slidably supported in the housing, and a work performing element mounted on said boom.

2,750,715
STEADY REST AND INDICATOR GAUGE ASSEMBLY FOR SHAFT GRINDER
Roy A. Farnam, La Grande, Oreg.
Application April 21, 1953, Serial No. 350,040
6 Claims. (Cl. 51—105)

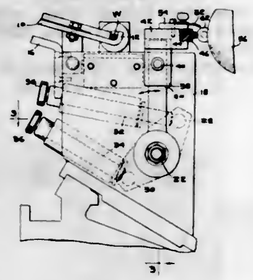


1. In a shaft grinding device including means for mounting and rotating the shaft and a rotary grinding wheel adapted to bear against the shaft during the grinding operation, a steady rest housing, a shaft-engaging bar slidably supported in said housing and extending at right angles to the axis of the grinding wheel and adapted to extend at right angles to the shaft, located opposite the grinding wheel, said bar slidable towards and away from the shaft, means for urging said bar against said shaft, said means comprising a manually-operable positioning screw in axial alignment with the longitudinal center line of said bar and a spring-loaded thrust element interposed between said positioning screw and the portion of said bar opposite from the shaft-engaging end of said bar, a gauge, a post carried on said bar between the shaft-engaging end of said bar and said spring-loaded thrust element and adjustable thereon, and means connecting said post with said gauge, whereby when said bar is maintained in engagement with the shaft during the grinding all movement of said bar caused by said shaft will be indicated on said gauge.

2,750,716
MAGNETIC WORK TRANSFER DEVICE
Arlon G. Semester, Leominster, Mass.
Application June 26, 1952, Serial No. 295,744
10 Claims. (Cl. 51—105)

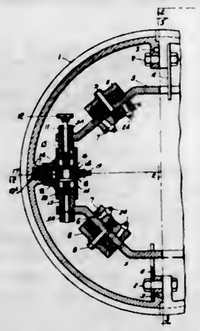
1. Transfer mechanism comprising a source for supplying elongated magnetic articles, a movable arm, means

to move the arm between the source and a delivery station for the articles, and a source of magnetic flux on the arm in position to receive the articles and secure the same thereto by magnetic lines of force and deliver the articles to the station, said flux source comprising a magnet having



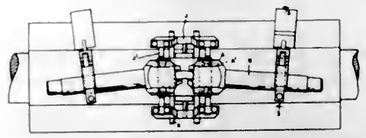
a plurality of faces each having an elongated article receiving surface slot of a different width, means holding the articles parallel to the magnet and to the slots, and the magnet being selectively rotatably movable to present any selected slot to the articles.

2,750,717
HONING DEVICE
John Hector Cowley Andrew, Glasgow, Scotland, assignor to Nicol & Andrew Limited, Glasgow, Scotland, a company of the United Kingdom of Great Britain and Northern Ireland
Application June 10, 1955, Serial No. 514,673
Claims priority, application Great Britain June 10, 1954
7 Claims. (Cl. 51—184.1)



1. A honing device for use in honing external cylindrical surfaces in situ comprising an outer ring member arranged for reception of a driving belt, a hone-supporting frame carried by said ring member within said ring member, the hone-supporting frame being formed of two portions, turnbuckle devices coupling said portions to one another at their ends, said turnbuckle devices each including screw-threaded elements fixed to said hone-supporting frame, a link member screw-threaded at opposite ends with right and left hand screw threads and engaged with said screw-threaded elements, a ratchet wheel fastened to said link member between said screw-threaded elements, a pawl carrier, a pawl supported by said pawl carrier, said pawl being spring-urged into engagement with said ratchet wheel, and a plunger located at the periphery of said outer ring member, said pawl carrier being coupled to said plunger and being spring-urged to rotate in the direction to cause said plunger to protrude from the periphery of said ring member.

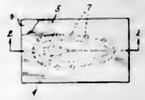
2,750,718
METHOD AND APPARATUS FOR GRINDING INNER SIDE FACES OF CHANNEL MEMBERS
Samuel G. Brady, Royal Oak, Mich., assignor to The Gear Grinding Machine Company, Detroit, Mich., a corporation of Delaware
Application December 14, 1953, Serial No. 397,862
2 Claims. (Cl. 51—281)



1. The method of grinding inner faces of channel members comprising rotating spaced disk grinder wheels about a common axis, intermittently advancing the channel members step by step through an orbit having stations in operative relation to the respective grinder wheels, the portion of said orbit of said stations being at opposite oblique angles to a plane which is perpendicular to the axis of rotation of said grinder wheels and with their openings outward for the entrance therein of the respective grinder wheels and with the peripheral surfaces thereof in grinding contact with opposite inner side faces of the channel, relatively moving said grinder wheels and stations longitudinally of the channels to effect the grinding of said inner faces, the cross sectional peripheral contour of said grinder wheels being at opposite oblique angles to their plane of rotation such that the sum of said angles and said angle of turning of said orbit between stations produces a predetermined angular relation to each other of the ground inner faces.

2. The method as in claim 1 in which a series of channel members is simultaneously advanced through said orbit with two members thereof in registration with the respective grinder wheels to simultaneously grind opposite inner faces thereof.

2,750,719
PACKAGING METHOD
Richard F. Wandelt, Gladstone, N. J., assignor to Industrial Radiant Heat Corporation, Fairmount, N. J., a corporation of Delaware
Application April 21, 1952, Serial No. 283,296
6 Claims. (Cl. 53—22)



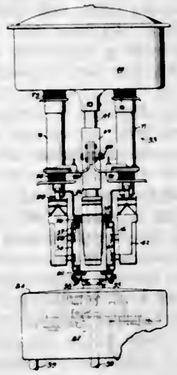
1. A packaging method including applying a profile of thermoactive adhesive to a sheet and forming a plurality of interspaced holes through the sheet adjacent to but spaced from the inner limits of the profile, supporting this sheet by means of a perforate wall with the profile facing away from the wall, placing an article to be packaged against the sheet and within the profile, applying a substantially similar profile of thermoactive adhesive to a thermoplastic sheet, positioning the thermoplastic sheet opposite to the other sheet without material deformation due to contacting the article and with the profiles interfacing, sealing the space between the thermoplastic sheet and the wall air-tightly, heating the thermoplastic sheet throughout to render it plastic, and applying suction to the side of the perforate wall opposite to the sheets and the article therebetween.

2,750,720
PACKAGE CONTAINING TEXTILE COVERED CORD FUSES AND MEANS FOR ITS PRODUCTION
Harold F. Brown, West Kilbride, and Hector Macdonald Marshall Phillips, Fairlie, Scotland, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain
Application November 28, 1951, Serial No. 258,732
Claims priority, application Great Britain December 22, 1950
2 Claims. (Cl. 53—24)



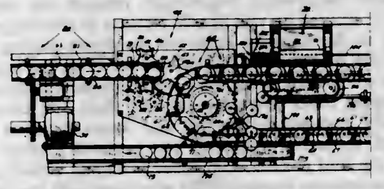
1. A process for the production of packages of textile covered fuse which comprises the steps of simultaneously winding a plurality of substantially equal lengths of capped fuse into parallel and contiguous individual coils under lateral restraint so that the laps of each coil lie in a single plane with detonators innermost, providing the peripheral surface of the pile with a retaining cylindrical sheath of flexible sheet material while said lateral restraint is yet effective, and then removing said lateral restraint and attaching retaining discs of sheet material to the annular end surfaces of the pile.

2,750,721
MACHINE FOR CHARGING AND CLOSING PAPER CONTAINERS
James F. Earp and Clarence M. Clemens, Detroit, Mich., assignors to Ex-Cell-O Corporation, Detroit, Mich., a corporation of Michigan
Application February 19, 1954, Serial No. 411,306
12 Claims. (Cl. 53—67)



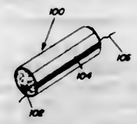
1. A machine for liquid filling and closing of paper cartons comprising a conveyor having elognated horizontal upper and lower support members, first and second upright tubular supports supportingly spacing said support members, means for conveying a plurality of carton carriers from station to station around said support members, a liquid reservoir supported over one end of said conveyor by said first upright tubular support, a transfer flask assembly over conveyor stations on both sides of said end of said conveyor slidably supported by said one of said tubular supports and coupled to a first actuating rod within the said one tubular support, stapling and sealing mechanisms supported on the upper horizontal support member over conveyor stations on both sides of the other end of said conveyor, said mechanisms coupled to a second actuating rod within said second upright tubular support, and a timed power drive system for intermittently advancing said conveyor and moving said rods within said first and second tubular supports.

2,750,722
PACKAGE HANDLING APPARATUS
John L. Ferguson and Richard C. Talbot, Joliet, Ill., assignors to J. L. Ferguson Company, Joliet, Ill., a corporation of Illinois
Application November 30, 1951, Serial No. 259,262
7 Claims. (Cl. 53—72)



6. In a machine for applying caps to a moving file of regularly spaced cartons, apparatus for receiving caps in inverted position and feeding said caps to a capping station in substantially right-side-up position, said apparatus including means for guiding said caps along a predetermined path curved through an angle of substantially 180° to invert said caps and terminating substantially tangent to the line of movement of said cartons at said capping station, and means for driving successive caps along said path in more closely-spaced relationship and at a slower speed than said cartons and in synchronism therewith, said guide means being so positioned relative to the line movement of said cartons that the forward lip of each successive cap may be engaged by the forward lip of the respective carton and said cap carried along at an accelerated rate by said carton, said guide means continuing into said capping station and being so located as to guide said cap firmly onto the rim of said carton.

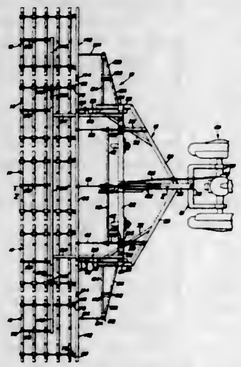
2,750,723
PACKAGING MACHINE
Sidney G. Fisher, Charleston, S. C.
Application December 29, 1952, Serial No. 328,433
1 Claim. (Cl. 53—215)



A rag packaging machine comprising a support platform having pairs of upwardly extending apron-support stud members secured at opposite end portions of said frame, an upwardly disposed arcuate platen having an upper convex surface supported intermediate the ends of said support frame and terminating at opposite edges between said apron-support stud members, side plate members secured between opposite pairs of aligned upwardly extending stud support members on opposite ends of said frame, a flexible apron extending between said side plates in overlying relationship on said platen, said apron having one end secured to opposite upper end portions of one pair of stud members at one end of said frame, the other pair of stud members at the other end of said frame including a plurality of vertically disposed aligned adjusting apertures, the other end of said apron being adjustably secured between the aligned apertures of the other pair of stud members and defining a variable upwardly opening fold portion in said apron for receiving rags to be packaged for forming variable sized bundles of packaged rags, the adjustable end of said apron in-

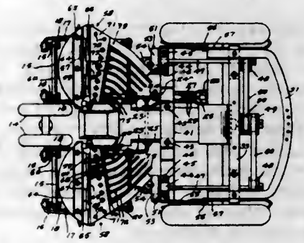
cluding a hem portion along the edge thereof, a rod element extending through said hem portion in the apron beyond the opposite edges thereof, said rod being insertable into oppositely disposed apertures in the other pair of stud members, a pair of upwardly extending elongated and opposed handle sections including a handle portion between upper end portions thereof and being pivotally connected at lower end portions at opposite side portions adjacent said frame, the pivotal connection thereof being equidistant from the arcuate upper surface of the platen, the support shaft extending between said handle sections in parallel relationship transversely beneath the apron, end plates secured on said handle sections in abutting relationship to the adjacent edges of the apron closing the ends of the fold portion defined therein when the handle sections are rotated about the pivotal connection thereof, a packaging roller journaled on said shaft and circumferentially engageable beneath said apron between the fold and vertically adjustable end portions thereof for closing the fold portion, said roller including closed ends having an annular recess in axial alignment with the longitudinal axis of the roller and shaft, a bearing race disposed within said recesses and engageable between said roller and shaft for reducing the frictional resistance to rotation between said shaft and roller, said fold portion cooperating with the side plate members for defining the hopper for receiving rags to be formed in a package, the fold portion being movable across the upper arcuate surface of said platen for forming a package with a suitable cover sheet juxtaposed on the upper surface of said platen, means on said handle for adjusting the shaft and roller toward and away from the pivotal end of said handle sections for varying the peripheral distance of the roller on the upper surface of the platen when the handle sections are rotated about their pivotal connection, said means including a pair of spaced brackets disposed on opposite sides of an aperture portion extending through each of said handle sections, threaded members journaled in said brackets in parallel relationship to the handle sections, means on the ends of the threaded members for rotating the same, ends of the support shaft extending through the aperture portions in said handle sections and secured to support blocks, the threaded members extending through the support blocks transversely of said support shaft enabling rotation of the threaded members to adjust the roller longitudinally relative to the handle sections.

2,750,724
HARROW HITCH
Hjalmer Stephenson, Northwood, N. Dak.
Application October 28, 1952, Serial No. 317,222
4 Claims. (Cl. 55—93)



1. In a harrow, a harrow hitch frame, a plurality of harrow frames carried by said harrow hitch frame, outermost of said harrow frames being disposed exteriorly of said harrow hitch frame, said harrow hitch frame including a transversely extending harrow frame tow bar pivotally connected to forward edges of said harrow frames, a transversely extending harrow frame support bar, flexible links connecting said support bar to said harrow frames, outer end portions of said tow bar and said support bar being hingedly connected to center portions to facilitate upward hinging of outermost harrow frames and outer end portions of said tow bar and support bar.

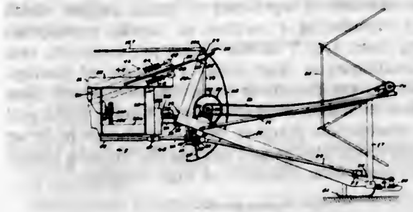
2,750,725
TRACTOR MOUNTED PEANUT HARVESTER HAVING VIBRATING SEPARATING FINGERS
Preston B. Mooney, Okemah, Okla.
Application March 20, 1953, Serial No. 343,692
7 Claims. (Cl. 55—142)



1. A harvesting attachment for tractors comprising, in combination with a tractor having a power takeoff shaft and separately controlled manually actuated cultivator supporting units mounted on either side of the forward portion of the tractor and vertically adjustable relatively to the ground over which the tractor is moving, a pair of harvesting blades, standards fixed to and rising from said blades and detachably secured to said supporting units for demountably supporting said blades individually beneath the supporting units, said blades being inclined downwardly and forwardly from their rear edges to their forward edges and being adjustably supported by the supporting units with their forward portions in sub-surface positions for digging vines of two rows and having their upper rear portions disposed in elevated positions relatively to the ground level, an agitator unit having a forward portion hingedly connected to the underside of each blade beneath and adjacent the upper rear edge thereof and extending rearwardly therefrom, said agitator units each including a plurality of transversely spaced fingers constituting the rear portion of the agitator unit; a supporting structure detachably secured to the tractor, bearings supported by said supporting structure, a pair of shafts journalled in said bearings, means forming a driving connection between said shafts and the power takeoff shaft, said shafts being disposed in substantially horizontal planes, a crankpin eccentrically connected to each of said shafts, and connecting rods connected to said crankpins and pivotally connected directly to rear portions of the agitator units for positively oscillating the agitator units vertically in both directions when the power takeoff shaft is revolved for conveying vines rearwardly over said units from the blades and for violently agitating the vines during their travel over the separator fingers for separating dirt therefrom.

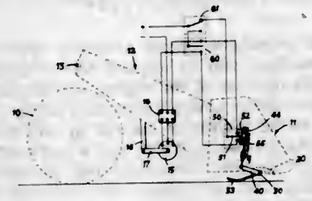
2,750,726
TRACTOR MOUNTED MOWER
Victor Boucard, Port-au-Prince, Haiti, and Horace D. Hume, Mendota, Ill.; said Boucard assignor to said Hume
Application May 29, 1953, Serial No. 358,332
7 Claims. (Cl. 56—25)

1. Means for mounting a mower upon a power driven vehicle comprising an attaching frame having means to secure it on the vehicle to project forwardly therefrom, a mower frame in front of said attaching frame, a transverse mounting bar at the front of said attaching frame and pivotally supported on the attaching frame for rocking movement about an axis that extends longitudinally of the attaching frame, the mower frame being pivoted at its rear end on the mounting bar to swing up and down,



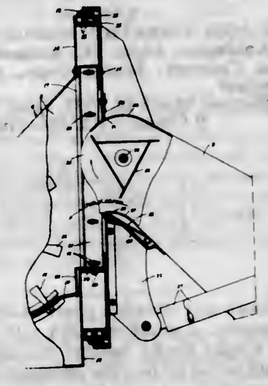
counterbalance spring means connected to said frames tending to lift the front end of the mower frame, means on the attaching frame and connected to the mower frame for lifting the front end of the mower frame clear of the ground for transport, and cooperating means on the attaching frame and moun.ing bar restricting pivotal movement of the mounting bar on the attaching frame.

2,750,727
AUTOMATIC HEADER CONTROL MEANS
Preston M. Wright, Vallonia, Ind.
Application January 14, 1953, Serial No. 331,159
5 Claims. (Cl. 56—208)



1. Apparatus for maintaining a substantially constant cutting height for the cutting head of a combine having a reversible drive for raising and lowering said head, comprising a plurality of ground engaging feeler members, means on said cutting head pivotally supporting said feeler members in closely spaced relation along substantially the entire length of said head and below the cutters thereof to detect any substantial variation in the contour of the ground beneath said cutters and along substantially the entire length of said head as the combine advances, each of said feeler members being of a relatively small dimension in the direction of the width of said head, a control on said combine and operatively connected with said drive for selectively actuating said drive to raise or lower said head, said control having a neutral position, means on said head for biasing said feeler members into contact with the ground, means connected with said pivotally supporting means for establishing a predetermined neutral position of said feeler members, means on said combine forming an operative connection between said feeler members and said control causing actuation of said drive in the direction to raise or lower said head in response to upward or downward movement respectively of said feeler members from said predetermined neutral position, and means for adjusting said feeler members with respect to said control to establish said neutral position of said feeler members in accordance with the desired cutting height of said head.

2,750,728
SEALING ASSEMBLY FOR THE HEADER MOUNT OF A SIDEHILL HARVESTER
Clifford D. Bailey, Stockton, Calif., assignor to Harris Manufacturing Company, Stockton, Calif., a corporation of California
Application June 20, 1951, Serial No. 232,646
12 Claims. (Cl. 56—209)



1. In a harvester, a threshing-cylinder housing in which the threshing mechanism is disposed, a header spout projecting ahead of the housing to feed grain into said housing, a mounting ring fixed on the front end of the housing, said end of the housing having an opening within the ring, a mounting disc attached to the rear end portion of the spout at right angles to the ring, the mounting disc having an opening through which said spout feeds, means securing the ring and disc adjacent the periphery for relative rotation, and sealing means engaged between the ring and disc without restricting said relative rotation thereof.

2,750,729
RAKE BAR BEARING
Lawrence H. Skromme, Manheim Township, near Lancaster, and Melvin J. Happe, New Holland, Pa., assignors, by mesne assignments, to Sperry Rand Corporation, a corporation of Delaware
Application April 5, 1952, Serial No. 280,752
1 Claim. (Cl. 56—377)



In a side delivery hay rake of the roller bar reel type, the combination of a rotatable member supported for rotation about a fixed axis, a tubular bar extending diagonally to said axis, said bar having a face which extends parallel to the rotational plane of said member, and means connecting said bar to said member at a point spaced from said axis, said means comprising a stud shaft one end of which is fixed to said member, said stud projecting outwardly of said member in a direction parallel to the said axis, a plate rigidly secured to said face of said bar, said plate having an aperture through which the end of said shaft opposite said one end projects, the diameter of said aperture being greater than the diameter of said shaft, a bearing including a housing therefor fixedly mounted on said shaft and interposed between said shaft and said plate, one axial end of said

bearing and its surrounding housing portion extending through said aperture and into said bar, means rigidly connecting said bearing housing to said plate, the location of said bearing being such that its center is approximate to the point of intersection of the axis of said stud shaft and the axis of said tubular bar.

2,750,730

SHOCK AND VIBRATION PROOF OSCILLATOR

Walter Kohlhagen, Elgin, Ill., assignor to The E. Ingraham Company, Bristol, Conn., a corporation of Connecticut

Application March 20, 1952, Serial No. 277,626
9 Claims. (Cl. 58—116)



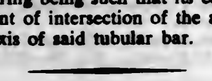
1. A shock and vibration proof oscillator, comprising a fixed support; a spring mounted with one end on said support; a rigid inertia member mounted on the other end of said spring so that the intermediate length of said spring is resiliently deformable, said inertia member and spring length being coordinated to form an oscillatory unit the oscillatory axis of which passes substantially through the center of gravity of said inertia member; and a fixed member, one of said members having a part with a longitudinal axis substantially in alignment with said oscillatory axis, and the other member having an aperture receiving said part for limited relative bodily movement of said members to prevent at all times bodily movement of said inertia member substantially other than its bodily creep during normal oscillation of said unit.

2,750,731

STATIONARY BEARING, INCLUDING AN END-STONE FOR PIVOTS, CHIEFLY CLOCKWORK PIVOTS

Henri Colomb, Prilly, Switzerland

Application October 15, 1953, Serial No. 386,291
Claims priority, application Switzerland October 17, 1952
12 Claims. (Cl. 58—140)



1. A bearing for a revoluble clockwork member, comprising an annular support provided with a central bore, with two diametrically opposed arcuate passageways extending in a plane perpendicular to the axis of the bore and communicating with the latter throughout their length and opening at one end into an outer transverse surface of the support, and with recesses opening laterally into the opposite ends of said passageways, a through-stone carried inside said bore, an endstone system carried by the support on the outside of said through-stone, an annular spring flange including four projections spaced at 90° from one another, of which two diametrically opposed projections extend outwardly and are adapted to enter said passageways and to engage the recesses in the support and the two other diametrically opposed projections are directed inwardly and engage the peripheral section of the endstone system to urge the latter into position towards the through-stone, the inner periphery of the annular spring flange between the two last mentioned projections lying outwardly of the endstone system and leaving a gap between it and the said endstone system.

2,750,732

SELF-IGNITING FUEL AND A METHOD OF USING SAME

Paul C. Condit and Manuel A. Pino, Berkeley, Calif., assignors to California Research Corporation, San Francisco, Calif., a corporation of Delaware

No Drawing. Application October 29, 1951, Serial No. 253,749
7 Claims. (Cl. 60—35.4)

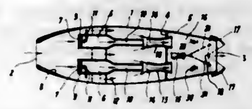
3. The method of operating a thrust engine which comprises introducing a mixture of acyclic mercaptans containing from 1 to 5 carbon atoms per molecule, said mixture containing at least 50% by volume of mercaptans selected from the group consisting of primary mercaptans and secondary mercaptans, and fuming nitric acid into the combustion chamber of the engine to form an ignited propulsion charge and ejecting the burning charge from the combustion chamber at high velocity.

2,750,733

JET PROPULSION ENGINE WITH PULSE JET UNITS

François G. Paris, Chaville, Jean Le Foll, Le Pre-Saint-Gervais, Jean H. Bertin, Neuilly-sur-Seine, and Marcel J. Baraut, Montgeron, France, assignors to Societe Nationale d'Etude et de Construction de Moteurs d'Aviation, Paris, France, a French company

Application April 21, 1953, Serial No. 350,072
Claims priority, application France April 24, 1952
7 Claims. (Cl. 60—35.6)



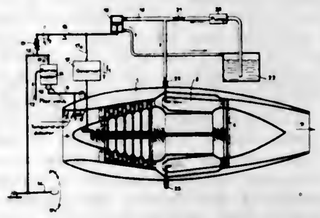
7. A jet propulsion engine having at least one pulse jet unit provided with an exhaust pipe extending generally towards the rear of the engine, said engine comprising an ejector device having a forwardly facing inlet spaced from and in the vicinity of the end of said exhaust pipe and a rearwardly facing outlet, and a rearwardly extending pressure chamber communicating, towards the rear thereof, with the atmosphere and, towards the front thereof, with said ejector device through said outlet, said pressure chamber being otherwise substantially closed.

2,750,734

MOTIVE FLUID FLOW CONTROL DEVICE FOR TURBINE COMPRESSOR UNITS USED FOR AIRCRAFT PROPULSION

René Anxionnaz and Roger J. Imbert, Paris, France, assignors, by direct and mesne assignments, to Societe Rateau (Societe Anonyme), Paris, France, a company of France

Application December 29, 1950, Serial No. 203,244
Claims priority, application France January 26, 1950
7 Claims. (Cl. 60—35.6)



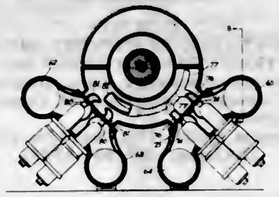
1. In combination with a jet propulsion unit having a gas turbine and an air compressor, a Mach number control device comprising a governor responsive to the speed of said unit, means for adjusting the velocity of the motive fluid flow through said unit, means responsive to the air temperature at the inlet to said compressor, and transmission means for bringing said flow adjusting means under the conjugate control of said governor and said temperature responsive means, the arrangement of said transmission means being such that the motive fluid flow is slowed down as the air temperature decreases and accelerated as the air temperature increases, whereby the maximum Mach number of said motive flow is maintained at an imposed value irrespective of variations in air temperature.

2,750,735

APPARATUS FOR THE GENERATION OF DRIVING GASES BY EXPLOSION AND PROCESS FOR OPERATING THE SAME

August H. Schilling, Atherton, Calif., assignor to Schilling Estate Company, San Francisco, Calif., a corporation of California

Application December 24, 1951, Serial No. 263,113
20 Claims. (Cl. 60—39.02)



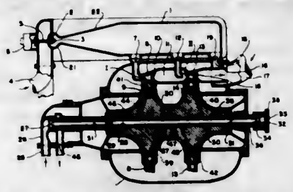
1. Process for the operation of a driving gas generator for producing combustion gases for use externally of the generator, said generator including at least one nozzle and rotor blading assembly and explosion chamber means for providing explosion gases which are charged into said nozzle and rotor assembly, the pressure of the gases in the nozzle assembly falling as the discharge of gases from an explosion chamber thereinto proceeds, said process comprising periodically raising the counterpressure behind the blading, viewed in the direction of gas flow, and then causing the counterpressure to fall, approximately during and synchronously with the expansion of the gases in the nozzle and blading assembly, whereby a substantially uniform change in enthalpy occurs in said nozzle and blading assembly.

2,750,736

EXPLOSION PLANT FOR GENERATING WORKING GASES AND PROCESS FOR OPERATING SAME

Hans Holzwarth, San Francisco, and August H. Schilling, Atherton, Calif., assignors to Schilling Estate Company, San Francisco, Calif., a corporation of California

Application December 24, 1951, Serial No. 263,116
16 Claims. (Cl. 60—39.04)



1. Process for the operation of driving gas generators for producing combustion gases by explosion with prior utilization of combustion gas drops in fixed nozzle assemblies and rotating bladings, comprising generating explosion gases in a plurality of constant volume explosion chambers operating out of phase, discharging the explosion gases from each chamber in at least three successive portions of progressively diminishing initial pressures, expanding at least the first two of said gas portions and directing them against different rotors each having only a single row of blading, and regulating the differentials between the impingement pressures in advance of each blading and the counterpressures developed synchronously therewith and likewise with similar characteristic, both viewed in the direction of gas flow, so that the partial drops produce in said single rows of blading a circumferential speed above 250 m./sec., whereby rotor efficiencies between 75% and 85% are obtained.

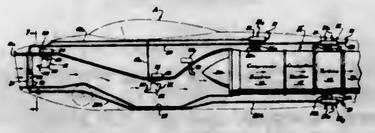
5. Apparatus for the production of driving gases, comprising a plurality of constant volume explosion chambers, a plurality of rotors each provided with only a single row of blading, means including nozzles for charging into said rotor bladings the gases generated in said chambers, and means for maintaining behind each blading a counterpressure which fluctuates synchronously and with substantially the same characteristic as the pressure drop in each nozzle and blading aggregate in order to maintain a substantially constant enthalpy drop in the bladings throughout at least a large portion of the duration of a gas discharge from each chamber.

2,750,737

DEICING APPARATUS FOR JET ENGINES

Leonard P. Leigh, Los Angeles, Calif.

Application April 20, 1953, Serial No. 349,735
14 Claims. (Cl. 60—39.09)



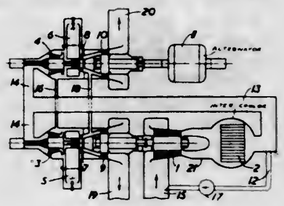
8. In deicing apparatus for the air inlet duct of jet engines: means for supplying hot air to the inlet end of said duct; a control device including a part for sensing air flow and pressure within said duct to create positive and negative actuating pressures; and means for controlling the supply of hot air to said duct inlet, including a pressure responsive member responsive to either the positive actuating pressure or the negative actuating pressure.

2,750,738

COMPOUND GAS TURBINE PLANT, INCLUDING SIMPLIFIED DUCTING ARRANGEMENTS

John Leslie Barrett, Jerzy Andrzej Leslaw Latoszynski, Clifford Morris, and Adolf Frankel, Rugby, England, assignors to The English Electric Company Limited, London, England, a British company

Application August 22, 1952, Serial No. 305,894
Claims priority, application Great Britain September 4, 1951
10 Claims. (Cl. 60—39.15)



1. A compound gas turbine power plant comprising in combination two high pressure compressors in parallel flow arrangement relative to one another, two high pressure gas turbines and two combustion chambers, each of the said high pressure turbines driving directly one of the said high pressure compressors and receiving compressed motive fluid therefrom through the said combustion chamber, each of the said two high pressure turbines and associated

bearing and its surrounding housing portion extending through said aperture and into said bar, means rigidly connecting said bearing housing to said plate, the location of said bearing being such that its center is approximate to the point of intersection of the axis of said stud shaft and the axis of said tubular bar.

2,750,730

SHOCK AND VIBRATION PROOF OSCILLATOR

Walter Kohlhagen, Elgin, Ill., assignor to The E. Ingraham Company, Bristol, Conn., a corporation of Connecticut

Application March 20, 1952, Serial No. 277,626
9 Claims. (Cl. 58—116)



1. A shock and vibration proof oscillator, comprising a fixed support; a spring mounted with one end on said support; a rigid inertia member mounted on the other end of said spring so that the intermediate length of said spring is resiliently deformable, said inertia member and spring length being coordinated to form an oscillatory unit the oscillatory axis of which passes substantially through the center of gravity of said inertia member; and a fixed member, one of said members having a part with a longitudinal axis substantially in alignment with said oscillatory axis, and the other member having an aperture receiving said part for limited relative bodily movement of said members to prevent at all times bodily movement of said inertia member substantially other than its bodily creep during normal oscillation of said unit.

2,750,731

STATIONARY BEARING, INCLUDING AN ENDSTONE FOR PIVOTS, CHIEFLY CLOCKWORK PIVOTS

Henri Colomb, Prilly, Switzerland

Application October 15, 1953, Serial No. 386,291
Claims priority, application Switzerland October 17, 1952
12 Claims. (Cl. 58—140)



1. A bearing for a revoluble clockwork member, comprising an annular support provided with a central bore, with two diametrically opposed arcuate passageways extending in a plane perpendicular to the axis of the bore and communicating with the latter throughout their length and opening at one end into an outer transverse surface of the support, and with recesses opening laterally into the opposite ends of said passageways, a through-stone carried inside said bore, an endstone system carried by the support on the outside of said through-stone, an annular spring flange including four projections spaced at 90° from one another, of which two diametrically opposed projections extend outwardly and are adapted to enter said passageways and to engage the recesses in the support and the two other diametrically opposed projections are directed inwardly and engage the peripheral section of the endstone system to urge the latter into position towards the through-stone, the inner periphery of the annular spring flange between the two last mentioned projections lying outwardly of the endstone system and leaving a gap between it and the said endstone system.

2,750,732

SELF-IGNITING FUEL AND A METHOD OF USING SAME

Paul C. Condit and Manuel A. Pino, Berkeley, Calif., assignors to California Research Corporation, San Francisco, Calif., a corporation of Delaware

No Drawing. Application October 29, 1951, Serial No. 253,749
7 Claims. (Cl. 60—35.4)

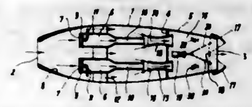
3. The method of operating a thrust engine which comprises introducing a mixture of acyclic mercaptans containing from 1 to 5 carbon atoms per molecule, said mixture containing at least 50% by volume of mercaptans selected from the group consisting of primary mercaptans and secondary mercaptans, and fuming nitric acid into the combustion chamber of the engine to form an ignited propulsion charge and ejecting the burning charge from the combustion chamber at high velocity.

2,750,733

JET PROPULSION ENGINE WITH PULSE JET UNITS

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Application April 21, 1953, Serial No. 350,072
Claims priority, application France April 24, 1952
7 Claims. (Cl. 60—35.6)



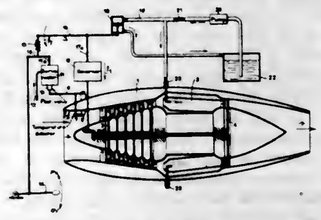
7. A jet propulsion engine having at least one pulse jet unit provided with an exhaust pipe extending generally towards the rear of the engine, said engine comprising an ejector device having a forwardly facing inlet spaced from and in the vicinity of the end of said exhaust pipe and a rearwardly facing outlet, and a rearwardly extending pressure chamber communicating, towards the rear thereof, with the atmosphere and, towards the front thereof, with said ejector device through said outlet, said pressure chamber being otherwise substantially closed.

2,750,734

MOTIVE FLUID FLOW CONTROL DEVICE FOR TURBINE COMPRESSOR UNITS USED FOR AIRCRAFT PROPULSION

René Anxionnaz and Roger J. Imbert, Paris, France, assignors, by direct and mesne assignments, to Societe Rateau (Societe Anonyme), Paris, France, a company of France

Application December 29, 1950, Serial No. 203,244
Claims priority, application France January 26, 1950
7 Claims. (Cl. 60—35.6)



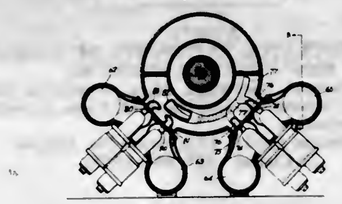
1. In combination with a jet propulsion unit having a gas turbine and an air compressor, a Mach number control device comprising a governor responsive to the speed of said unit, means for adjusting the velocity of the motive fluid flow through said unit, means responsive to the air temperature at the inlet to said compressor, and transmission means for bringing said flow adjusting means under the conjugate control of said governor and said temperature responsive means, the arrangement of said transmission means being such that the motive fluid flow is slowed down as the air temperature decreases and accelerated as the air temperature increases, whereby the maximum Mach number of said motive flow is maintained at an imposed value irrespective of variations in air temperature.

2,750,735

APPARATUS FOR THE GENERATION OF DRIVING GASES BY EXPLOSION AND PROCESS FOR OPERATING THE SAME

August H. Schilling, Atherton, Calif., assignor to Schilling Estate Company, San Francisco, Calif., a corporation of California

Application December 24, 1951, Serial No. 263,113
20 Claims. (Cl. 60—39.02)



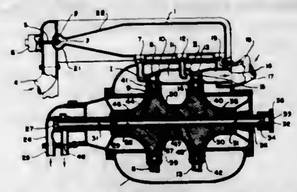
1. Process for the operation of a driving gas generator for producing combustion gases for use externally of the generator, said generator including at least one nozzle and rotor blading assembly and explosion chamber means for providing explosion gases which are charged into said nozzle and rotor assembly, the pressure of the gases in the nozzle assembly falling as the discharge of gases from an explosion chamber thereinto proceeds, said process comprising periodically raising the counterpressure behind the blading, viewed in the direction of gas flow, and then causing the counterpressure to fall, approximately during and synchronously with the expansion of the gases in the nozzle and blading assembly, whereby a substantially uniform change in enthalpy occurs in said nozzle and blading assembly.

2,750,736

EXPLOSION PLANT FOR GENERATING WORKING GASES AND PROCESS FOR OPERATING SAME

Hans Holzwarth, San Francisco, and August H. Schilling, Atherton, Calif., assignors to Schilling Estate Company, San Francisco, Calif., a corporation of California

Application December 24, 1951, Serial No. 263,116
16 Claims. (Cl. 60—39.04)



1. Process for the operation of driving gas generators for producing combustion gases by explosion with prior utilization of combustion gas drops in fixed nozzle assemblies and rotating bladings, comprising generating explosion gases in a plurality of constant volume explosion chambers operating out of phase, discharging the explosion gases from each chamber in at least three successive portions of progressively diminishing initial pressures, expanding at least the first two of said gas portions and directing them against different rotors each having only a single row of blading, and regulating the differentials between the impingement pressures in advance of each blading and the counterpressures developed synchronously therewith and likewise with similar characteristic, both viewed in the direction of gas flow, so that the partial drops produce in said single rows of blading a circumferential speed above 250 m./sec., whereby rotor efficiencies between 75% and 85% are obtained.

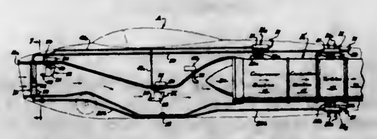
5. Apparatus for the production of driving gases, comprising a plurality of constant volume explosion chambers, a plurality of rotors each provided with only a single row of blading, means including nozzles for charging into said rotor bladings the gases generated in said chambers, and means for maintaining behind each blading a counterpressure which fluctuates synchronously and with substantially the same characteristic as the pressure drop in each nozzle and blading aggregate in order to maintain a substantially constant enthalpy drop in the bladings throughout at least a large portion of the duration of a gas discharge from each chamber.

2,750,737

DEICING APPARATUS FOR JET ENGINES

Leonard P. Leigh, Los Angeles, Calif.

Application April 20, 1953, Serial No. 349,735
14 Claims. (Cl. 60—39.09)



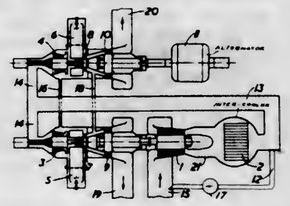
8. In deicing apparatus for the air inlet duct of jet engines: means for supplying hot air to the inlet end of said duct; a control device including a part for sensing air flow and pressure within said duct to create positive and negative actuating pressures; and means for controlling the supply of hot air to said duct inlet, including a pressure responsive member responsive to either the positive actuating pressure or the negative actuating pressure.

2,750,738

COMPOUND GAS TURBINE PLANT, INCLUDING SIMPLIFIED DUCTING ARRANGEMENTS

John Leslie Barrett, Jerzy Andrzej Leslaw Latoszynski, Clifford Morris, and Adolf Frankel, Rugby, England, assignors to The English Electric Company Limited, London, England, a British company

Application August 22, 1952, Serial No. 305,894
Claims priority, application Great Britain September 4, 1951
10 Claims. (Cl. 60—39.15)



1. A compound gas turbine power plant comprising in combination two high pressure compressors in parallel flow arrangement relative to one another, two high pressure gas turbines and two combustion chambers, each of the said high pressure turbines driving directly one of the said high pressure compressors and receiving compressed motive fluid therefrom through the said combustion chamber, each of the said two high pressure turbines and associated

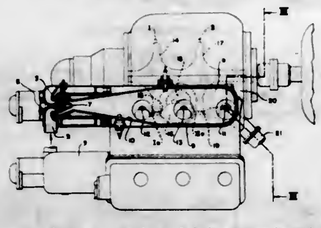
high pressure compressors being journalled independently of the other, two low pressure gas turbines each arranged directly in alignment and series flow connection with one of the said high pressure turbines but journalled for independent rotation, a low pressure compressor in alignment with and directly driven by one of the said low pressure turbines, and an intercooler directly connected with the discharge end of the said low pressure compressor and connected in parallel to the said two high pressure compressors, the other one of the said low pressure turbines driving the useful load.

2,750,739

APPARATUS FOR GENERATING DRIVING GASES

August H. Schilling, Atherton, and Hans Holzwarth, San Francisco, Calif., assignors to Schilling Estate Company, San Francisco, Calif., a corporation of California

Application December 24, 1951, Serial No. 263,114
17 Claims. (Cl. 60—39.16)



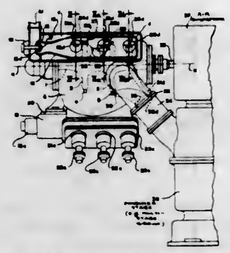
1. Apparatus for generating driving combustion gases, comprising a plurality of explosion chambers, nozzle and blading systems arranged to receive high pressure explosion gases from said chambers, a housing enclosing the said nozzle and blading systems, an air inlet valve for charging air under pressure into each of said explosion chambers, an outlet valve for each of said chambers for the discharge of the residual combustion gases, said air inlet and combustion gas outlet valves being adapted to be open simultaneously to cause the entering air to displace the residual combustion gases which are discharged through said outlet valve, and means connected with the outlet valve for conducting the residual gases to a space behind the last nozzle and blading system.

2,750,740

ARRANGEMENT OF EXPLOSION CHAMBERS AND TURBINE IN A PLANT FOR GENERATING HIGH PRESSURE GASES

Hans Holzwarth, San Francisco, Calif., assignor to Schilling Estate Company, San Francisco, Calif., a corporation of California

Application December 24, 1951, Serial No. 263,119
10 Claims. (Cl. 60—39.16)



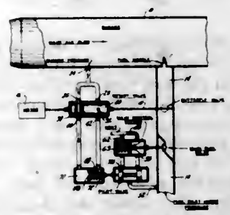
1. Heat power plant comprising an explosion turbine stage including a plurality of coaxially mounted bladed impulse rotors, a plurality of constant volume explosion chambers and a housing for the impulse rotors; at least one consumer stage, a conduit for conducting gases from the turbine housing to the consumer stage or stages; nozzles disposed laterally of the rotor bladings and arranged to discharge live explosion gases axially of the bladings; said explosion chambers being of elongated form and disposed about the turbine housing with their longitudinal axes parallel to the axis of the turbine rotor, and each having at least two outlet members spaced along the length of the chambers and discharging live gases into said nozzles; said nozzles being arranged radially inwardly of the outlet members; and control means for operating the outlet members of each chamber positively at different controlled instants and in timed relation with respect to the outlet members of the other chamber or chambers; there being at least partial axial overlapping of the turbine housing and explosion chamber lengths, the degree of overlapping being at least equal to the longitudinal distance along which all of the controlled live gas-discharging outlet members of the explosion chambers are arranged.

2,750,741

FUEL REGULATOR RESPONSIVE TO COMBUSTION CHAMBER PRESSURE

Charles K. Leeper, Cambridge, Mass., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware

Application April 5, 1951, Serial No. 219,344
13 Claims. (Cl. 60—39.28)



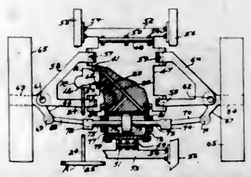
1. In a fuel control for a combustion chamber having a gas flowing therethrough, a source of fuel under pressure, means for conducting fuel to the burner to mix with said gas, a regulator for systematically varying the rate of fuel flow to the burner in increasing and decreasing amounts above a zero value, means for sensing the pressure in said burner including a valve movable in timed relation with said fuel flow variation, and means responsive to said sensing means for varying the amount of fuel flowing from said source to said regulator.

2,750,742

VEHICLE POWER OPERATED STEERING MEANS

Adolphe C. Peterson, Minneapolis, Minn.

Application August 18, 1952, Serial No. 305,043
3 Claims. (Cl. 60—52)



1. A means for pumping of liquid to or from opposite sides of a reciprocable piston means for road wheel steering actuation, and comprising: a pump means reversible in its operation to pump fluid either way and a conduit from one side of the pump means to one side of the said reciprocable piston means and a conduit from the other side of the pump means to the opposite side of the said reciprocable piston means, the said pump means comprised of a pair of pump rotor gears, each pump rotor gear having fixed thereto a bevel gear, a driving element having a pair of bevel gears and an intermediate spur gear, the last named pair of bevel gears located one on one side of the intermediate spur gear and in engagement with one of the first named bevel gears and the other located on the other side of the intermediate spur gear and in engagement with the other of the first named bevel gears, a smaller driving spur gear in engagement with the first named spur gear to drive it at reduced speed, the said driving element having means for manual rotation thereof in interconnection therewith.

2,750,743

CONTROL DEVICES FOR HYDRAULIC MOTORS

Eberhard Korkowski, Stuttgart-Feuerbach, Willy Volt, Stuttgart-Bad Cannstatt, and Gustav Schmidt, Stuttgart-Vaihingen, Germany, assignors to Robert Bosch G. m. b. H., Stuttgart, Germany

Application February 26, 1953, Serial No. 339,062
Claims priority, application Germany March 12, 1952
8 Claims. (Cl. 60—52)



1. A servo-motor arrangement, comprising, in combination, servo-motor means including a cylinder member, and a piston member defining in said cylinder member two chambers, one of said members being reciprocable, said reciprocable member being adapted to be urged to move by a load acting thereon; a pair of conduit means, each of said conduit means communicating with one of said chambers in said cylinder member; cock means for alternately connecting said conduit means to a source of pressure fluid for urging said reciprocable member to move at a predetermined speed; a pair of shut-off valves, each shut-off valve arranged in one of said conduit means, said shut-off valves being adapted to be opened by pressure fluid passing to said servo-motor means at a predetermined pressure and adapted to close when said reciprocable member reduces the pressure in the respective conduit means by moving at a higher speed than said predetermined speed; a pair of pistons, each piston fixedly connected to one of said shut-off valves; a pair of cylinders, each housing one of said pistons; means urging said pistons in closing direction of the associated shut-off valve; a distribution conduit means communicating at one end thereof with both of said cylinders, and adapted to be connected at the other end thereof with the source of pressure fluid for urging said pistons in opening direction of said shut-off valve.

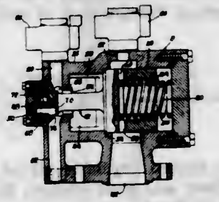
2,750,744

PREFILL VALVE WITH AUTOMATIC DECOMPRESSION MEANS

Robert K. Sedgwick, Cincinnati, Ohio, assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey

Application November 4, 1952, Serial No. 318,599
11 Claims. (Cl. 60—52)

6. In combination, a hydraulic motor comprising a cylinder having a ram reciprocal therein and defining therewith advance and return chambers, a reservoir of hydraulic fluid at a datum pressure, a reversible pump operative to alternately deliver pressure fluid to one of said chambers while withdrawing fluid from the other of said chambers, a prefill valve, comprising cylindrical pumping chambers of unequal bore and a valve stem with pistons of unequal diameter disposed for reciprocal movement within the respective pumping chambers, offering separate avenues of communication between the reservoir



and said first mentioned chambers, respectively, said valve being operative to admit datum pressured fluid to the advance chamber through one of said avenues during rapid advance of said ram and to close said one avenue during the pressure advance of said ram exclusively in response to the flow of pump delivered pressure fluid from the advance chamber to the tank through said one avenue and to the pump created vacuum in the return chamber.

2,750,745

HYDRAULIC TRANSMISSION MECHANISM

Tom H. Thompson, Daytona Beach, Fla., assignor to Sabre Research Corporation, Daytona Beach, Fla., a corporation of Florida

Application May 26, 1954, Serial No. 432,444
4 Claims. (Cl. 60—54)



2. In a variable speed hydraulic transmission, a fluid-filled normally freely rotatable housing, driving means within said housing including an impeller, driven means disposed within said housing including driven blades, means pivotally mounted in said housing between said impeller and said driven blades for reducing turbulence when said impeller and driven blades are rotating in the same direction and means to prevent rotation of said housing for causing said turbulence reducing means to be pivoted by the fluid to reverse the circumferential flow of fluid between the impeller and driven blades.

2,750,746

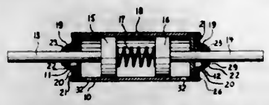
SAFETY DIAPHRAGMS FOR HYDRAULIC BRAKES

Lee D. Brannen, Rome, Ga.

Application June 29, 1953, Serial No. 364,698
2 Claims. (Cl. 60—54.6)

2. In combination, a brake cylinder having pistons therein, piston rods associated with the respective pis-

tons, said cylinder having closed ends receiving said piston rods slidably therethrough, a diaphragm and retaining ring means for securing said diaphragm to the outside of the respective closed ends of the cylinder, each of said diaphragms being substantially cup-shaped and having an outer end wall having a central opening therethrough adapted to receive said piston rods in sealing engagement therethrough, washers on the inner and outer faces of each of said diaphragm end walls surrounding the central openings therein, each of said inner and outer



washers having aligned angularly spaced openings therethrough, said inner and outer washers fitting tightly onto the piston rod in fixed engagement therewith, said diaphragm end walls having angularly spaced openings therein surrounding the central openings therein and adapted to be registered with the angularly spaced openings in said inner and outer washers, and screw means extending through said angularly spaced inner and outer washer and diaphragm end wall openings to fixedly connect the diaphragm end walls to the piston rods.

2,750,747
SLIDE DEVICE FOR DAM FLASHBOARDS
Jean Aubert, Paris, France
Application November 17, 1952, Serial No. 320,885
Claims priority, application France December 20, 1951
3 Claims. (Cl. 61—27)



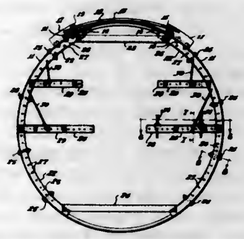
1. A dam flashboard controlling slide comprising a strut pivotally connected at one end to the down-stream side of said flashboard upon a horizontal axis and with lateral play therebetween, a foot carried by the other end of said strut, a rack having at least two spaced apart sections for at times guiding the foot of said strut during the pivoting of said flashboard with both sections extending substantially perpendicular to the axis of pivoting of said strut, each section of said rack having at least one tooth provided thereon for at times receiving and retaining the foot of said strut against down-stream movement, the up-stream section of said rack having a vertically inclined profile portion for laterally displacing the foot of said strut, when slid therealong, from said rack, means provided with said rack for guiding said foot across said up-stream section when so displaced therefrom upon up-stream movement of said foot, the down-stream section of said rack having profile portions inclined vertically and longitudinally of said rack for directing the elevation and lateral displacement of said strut foot onto said down-stream section upon being slid therealong when displaced from said up-stream rack section, and guiding means for directing said strut foot towards the ends of said rack sections when displaced therefrom upon movement of said foot longitudinally of said rack.

2,750,748
RETAINING DAM PROVIDED WITH A WATERPROOF LINING
Alfred Kretzschmar, Kulmbach, Germany
Application December 14, 1951, Serial No. 261,731
Claims priority, application Germany December 18, 1950
7 Claims. (Cl. 61—30)



1. A retaining dam comprising a body of earth having a sloping face, partitioning members dividing said face into a plurality of polygonal fields, means anchoring said members to said body, and a layer of waterproof material covering each said field.

2,750,749
UTILITY TUNNEL CONSTRUCTION
Edward L. Brown and John M. Robertson, Middletown, Ohio, assignors to Armco Steel Corporation, Middletown, Ohio, a corporation of Ohio
Application January 31, 1952, Serial No. 269,254
11 Claims. (Cl. 61—45)

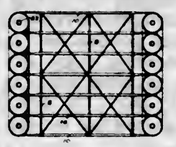


1. A utility tunnel structure of corrugated sheet metal comprising a plurality of sections in axially lapped relation, a plurality of hanger rings secured to the inside walls of said sections in spaced relation, said hanger rings each comprising two similar sub-semicircular arcuate members connected to each other at the top and bottom by strut members to strengthen and brace the structure, and provided with utility line supporting brackets, one at least of said sections having an opening at the top in the region spanned by the upper of said strut members, a cover member of a size to overlap the edges of said opening, and means for releasably securing said cover member in place.

2,750,750
DEEP WATER WELL DRILLING SYSTEM
Theodore M. Kuss, San Francisco, and Ralph D. Russell, Oakland, Calif.
Application October 18, 1948, Serial No. 55,044
4 Claims. (Cl. 61—46.5)

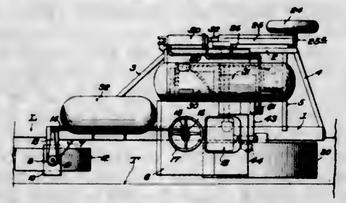
1. An offshore drilling and pumping system comprising a pair of elongated caissons respectively adapted to be floated horizontally to the desired site for up-ending onto the bed of the sea, each of said caissons being formed with hollow cells adjacent opposite ends and means for selectively admitting and expelling air and water to said

cells for causing movement of said caissons from horizontal position to up-ended position in water and vice-versa and for increasing and decreasing the buoyancy of said caissons when in vertical up-ended position as desired, means connected with said caissons respectively for securing them rigidly together when in up-ended position in water, said means including a connector adjacent the



lower ends of said caissons when the latter are in said vertical position, means securing said connector to one of said caissons for movement to and from a position extending between the said lower ends of said caissons spacing them apart, and means connected with said connector extending upwardly to a point adjacent their upper ends for manipulation at said point for causing said movement.

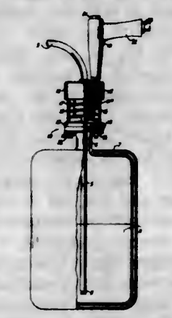
2,750,751
TRENCH ROLLERS
John F. Harrison, Springfield, Ohio, assignor to The Buffalo-Springfield Roller Co., Springfield, Ohio, a corporation of Ohio
Application April 17, 1950, Serial No. 156,465
3 Claims. (Cl. 61—63)



1. In a trench roller, a frame; a steering roll bracketed to the front of the frame; means on the frame for operating the steering roll; a relatively large drive roll at one side of the frame; a bracket carrying an axle on which the drive roll is journaled, said bracket extending outwardly from the side of the frame and extending within the overall width of the drive roll, with its outer end extending downwardly within the overall width of the drive roll, said axle extending outwardly from the lower end of the bracket, whereby the drive roll may operate in a trench of greater depth than half the diameter of the drive roll while the frame is maintained substantially parallel with the roadway adjacent the trench; means including a prime mover on the frame for driving the drive roll; a ground wheel of smaller diameter than the drive roll adjustably supporting the other side of the frame; and means for adjusting said wheel.

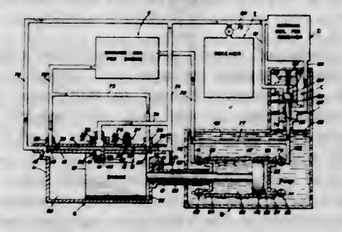
2,750,752
LIQUID DISPENSING DEVICE
Willard B. Yorgey, Jr., Allentown, Pa., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application November 23, 1953, Serial No. 393,769
2 Claims. (Cl. 62—1)

2. A device for dispensing liquefied gases from flasks comprising an annular disc member supported on the neck of the flask, one side of the disc having a resilient portion for making an airtight seal with the flask and the other side having a flat, rigid surface, a discharge tube for the flask, a main body member slidable with respect to the disc member for supporting the tube in the flask through the central hole in the disc member, said central hole being larger than the cross section of the tube extending therethrough to provide a venting passage therebetween, a resilient means on the main body for making an airtight seal against the flat, rigid surface on



the disc to close the venting passage, means for applying compressed air to the flask through the sealed venting passage to discharge liquid therefrom and means for holding the main body and the disc member in a normally separated position with the venting passage open.

2,750,753
SELF-POWERED LIQUID OXYGEN PUMP AND VAPORIZER
Richard W. Armstrong, Rockville, Md., assignor to the United States of America as represented by the Secretary of the Navy
Application September 14, 1955, Serial No. 534,416
8 Claims. (Cl. 62—1)
(Granted under Title 35, U. S. Code (1952), sec. 266)

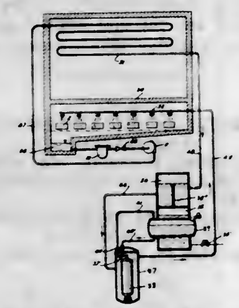


1. Apparatus for converting low pressure liquid to high pressure gas, comprising an engine having gas inlet and outlet ports, a warming coil connected to said engine for supply of high pressure engine actuating gases thereto, a pump operated by said engine to supply liquid to said engine warming coil, a receiver for storage of gases under pressure, conduits between the engine exhaust outlets and said receiver, a warming coil for supplying gas to said receiver, and a differential valve connected between said receiver warming coil and said pump, said valve normally passing liquid from said pump to said receiver warming coil only when the force due to the pump pressure exceeds that of the force due to the receiver pressure as developed at said differential valve.

2,750,754
APPARATUS FOR REFRIGERATION BY MEANS OF AQUEOUS SOLUTIONS
Theodor Emil Schmidt, Ettlingen, Baden, Germany
Application February 11, 1952, Serial No. 271,006
Claims priority, application Germany February 12, 1951
7 Claims. (Cl. 62—2)

3. A refrigeration system, comprising, in combination, container means adapted to contain ice; a first container; outlet conduit means connected at one end thereof to said first container and at the other end thereof to said

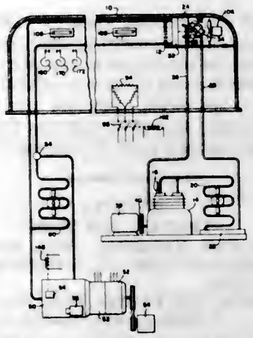
container means, and adapted to supply an aqueous solution contained in said first container to the ice contained in said container means; first inlet conduit means connected at one end thereof to said first container and at the other end thereof to said container means, and adapted to supply to said first container an aqueous solution the concentration of which has been reduced by contact with the ice in said container means; a second container adapted to contain a substance for increasing the concentration of the aqueous solution; supporting means for said containers supporting said second container at a higher level than said first container; a second inlet conduit means connected at one end thereof to said first container and at the other end thereof to said second container and adapted to supply to said first container an aqueous solution contained in said second container; conduit means connecting a portion of said first inlet conduit means located adjacent said first container, and thereby said first container with said second container and adapted to supply an aqueous solution to said second container, the concentration of said aqueous solution being increased by contact with the



substance contained in said second container while said aqueous solution passes through said second container from said upper portion thereof to said lower portion thereof; pump means in said first inlet conduit means producing in said portion of said first inlet conduit means a hydraulic pressure higher than the hydraulic pressure in said second inlet conduit means; electric motor means driving said pump means; a temperature-responsive contact means located in the vicinity of said ice-containing container means, and connected to said electric motor means for starting the same when the temperature in said vicinity exceeds a predetermined level; valve means mounted in said first container intermediate the interior of the same and said portion of said first inlet conduit means; and a floating body movably mounted in the interior of said first container and operatively connected to said valve means for actuating the same, said floating body being adapted to move in accordance with the concentration of the aqueous solution in said first container so that said first inlet conduit means is closed by said valve means when the concentration and the specific weight of the aqueous solution in said container differ from predetermined amounts.

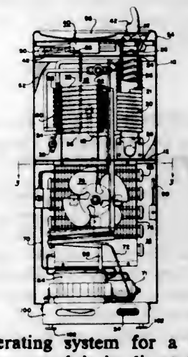
2,750,755
REFRIGERATING APPARATUS
Donald F. Alexander, Oakwood, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Original application March 7, 1946, Serial No. 652,515, now Patent No. 2,608,067, dated August 26, 1952. Divided and this application December 29, 1951, Serial No. 264,086
1 Claim. (Cl. 62—4)

Air conditioning means for an enclosure including a multiple cylinder compressor, a condensing means, a multiple section evaporating means, a motor for driving said compressor, an electrically operated unloading means for unloading at least one but not all of said cylinders, electrically operated fluid control means for disconnecting and rendering inoperative at least one but not all of the sections of the evaporating means, a first thermostatically controlled switch means responsive to the temperature of said enclosure for starting and stopping said motor, an electrically operated two-position switch means having a deenergized position for controlling the energization of the unloading means and the fluid control means to cause the unloading means to be in the unloading position and to cause the fluid control means to render inoperative at least one but not all of the sections



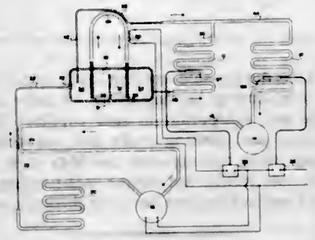
of the evaporating means, said two-position switch means having an energized position for controlling the energization of the unloading means and the fluid control means to cause the unloading means to be in the loading position and to cause the fluid control means to be in the open position, a time delay switch means and a second thermostatically controlled switch means connected in series circuit relation with the electric operating means of said two-position switch means, said time delay switch means including switch closing means operable to closed position a predetermined period after the closing of said first switch means, said higher temperature switch means being operable to closed position in response to a higher temperature of said enclosure than the temperature at which said first means closes.

2,750,756
REFRIGERATING APPARATUS FOR WATER COOLERS
James A. Canter, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 21, 1952, Serial No. 316,018
5 Claims. (Cl. 62—4)



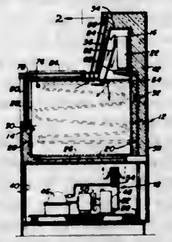
1. In a refrigerating system for a water cooler, an evaporator, a water conduit in direct thermal exchange relationship with said evaporator, a condenser, a compressor, refrigerant flow connections between said evaporator, condenser and compressor, fan means for flowing air in thermal exchange relationship with said condenser, and safety means for preventing pressures in said system low enough to cause freezing of the water, said safety means including thermostatic means for stopping said fan means in response to a reduction in the ambient air temperatures below approximately 60° F.

2,750,757
REFRIGERATING APPARATUS
Elmer W. Zearfoss, Jr., Philadelphia, Pa.
Application April 27, 1955, Serial No. 504,149
11 Claims. (Cl. 62—4)



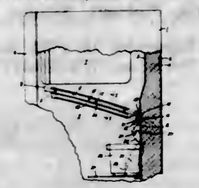
11. A refrigerating system including a condensing unit for selectively delivering liquid refrigerant to two evaporator circuits, a first sump, a second sump, the uppermost ends of said sumps being in open communication, said first sump having an inlet for condensed refrigerant and an outflow passage adapted to provide flow to one of said circuits, said second sump having an outflow passage disposed at a level below said first outflow passage and adapted to provide flow to the other of said circuits an inverted U-tube communicating with the lower ends of said sumps; a first heat exchange means adapted to cool said U-tube and cause flow of liquid from said first sump through said U-tube toward said second outflow passage; and a second heat exchange means operable to heat said U-tube thereby to terminate liquid flow therethrough and to restore the flow of liquid toward said first outflow passage.

2,750,758
AUTOMATIC DEFROSTING REFRIGERATOR CABINET
Theodore E. Hoye, Utica, and Vincent S. Robinson, Sauquoit, N. Y., assignors to Mohawk Cabinet Company, Inc., Chadwicks, N. Y., a corporation of New York
Application July 12, 1954, Serial No. 442,868
8 Claims. (Cl. 62—4)



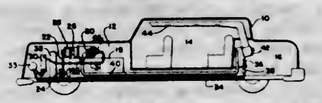
1. An automatically defrosting display cabinet for ice cream and the like comprising a frame including lower inner walls defining a product receiving chamber having an open top and upper walls defining an upper chamber having an open bottom communicating with a portion of said open top, a refrigerating apparatus including lower expansion coils carried by said frame adjacent to and entirely outside of said lower inner walls, an upper expansion coil in said upper chamber connected to said lower expansion coils, the relative cooling capacities of said upper and lower expansion coils being such as to cool the air in the upper chamber to a lower temperature than the temperature of the air in the product receiving chamber so as to establish a circulation of warmed air upwardly from said product receiving chamber into said upper chamber and cooled air downwardly therefrom into said product receiving chamber, means for controlling the operation of said refrigerating apparatus, means for automatically defrosting said upper coil, and heater means carried by said frame adjacent the open top thereof for creating a blanket of warm air therein so as to reduce air circulation in and out of said open top.

2,750,759
SLOPING BAFFLE FOR A REFRIGERATOR
Harold P. Harle, Erie, Pa., assignor to General Electric Company, a corporation of New York
Application July 30, 1952, Serial No. 301,756
11 Claims. (Cl. 62—103)



1. In a refrigerator including a storage compartment and cooling means located in the upper portion of said storage compartment and adapted to be defrosted, means for controlling the temperature of said food storage compartment and collecting defrost moisture from said cooling means comprising; a baffle disposed in said storage compartment beneath said cooling means, said baffle dividing said storage compartment into upper and lower portions, said baffle sloping downwardly toward the rear wall of said storage compartment, a member mounted on said rear wall, said baffle being differentially positionable with respect to said member for controlling the spilling of cold air from said upper portion of said storage compartment into said lower portion thereof, a pendent portion formed on the rear of said baffle, said pendent portion being bent away from said rear wall, and a trough spaced from said rear wall and receiving defrost moisture dropping from said pendent portion, the spacing of said trough from said rear wall facilitating circulation of air to said lower portion of said storage compartment and minimizing spilling of cold air into said trough thereby to avoid freezing of moisture therein.

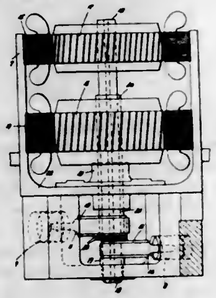
2,750,760
REFRIGERATING APPARATUS
Daniel L. Kaufman, Dayton, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application April 19, 1952, Serial No. 283,211
2 Claims. (Cl. 62—117.1)



1. In an air conditioning system for use in an automobile having an engine compartment, an engine in said engine compartment, a passenger compartment, and a luggage compartment; the combination, a compressor adapted to be removably mounted in the engine compartment, torque transmitting means for drivingly con-

necting said compressor to said engine, a condenser, an evaporator, refrigerant flow connections between said compressor, condenser and evaporator, said refrigerant flow connections including a suction line and a discharge line leading to and from the compressor respectively, a two piece adapter for removably connecting one of said lines to said compressor, a first one of said pieces being carried by said one line and including a valve for closing said line at said adapter, the second one of said pieces being carried by said compressor and including automatic valve means supported therein, said last named valve means including a valve element for automatically sealing the passage leading to the compressor in response to separation of said first piece from said second piece, and means for removably securing said first piece and the line connected thereto to said second piece.

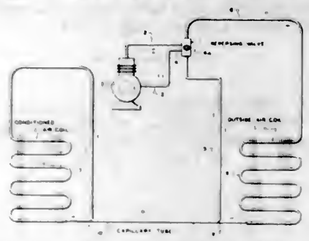
2,750,761
PLURAL TEMPERATURE REFRIGERATING APPARATUSES
Bror Knut Färe, Sibbhult, and Erik Holger Franzen, Lonsboda, Sweden, assignors to Aktiebolaget Fare Armaturfabrik, Sibbhult, Sweden, a corporation of Sweden
Application September 28, 1953, Serial No. 382,785
3 Claims. (Cl. 62—117.3)



1. A refrigerating apparatus comprising at least one refrigerator and at least one freezing box which are combined in a unit and having separate coolant circuits, a frame, a common motor compressor assembly for compressing the coolants in the coolant circuits on said frame, the motor compressor assembly having a compressor unit and a motor rotor for each coolant circuit, each rotor being connected to the compressor unit which it drives by means of a shaft, the shafts being arranged coaxially, the outside shafts bearing on the inner shafts, compressor units and motor rotors being arranged side by side along the common centre axis of the shafts.

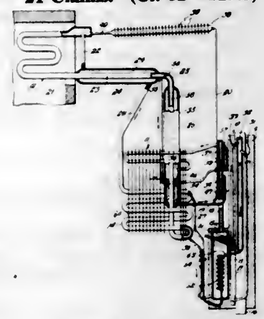
2,750,762
REFRIGERATION SYSTEM FOR AIR CONDITIONING APPARATUS
Gerard G. Coyne, Erie, Pa., assignor to General Electric Company, a corporation of New York
Application July 23, 1954, Serial No. 445,250
2 Claims. (Cl. 62—117.55)

1. In a reversible cycle refrigerating system for heating and cooling air for an enclosure, a compressor, first and second heat exchangers, a capillary tube connected between said heat exchangers and serving to expand refrigerant from condensing pressure to evaporating pressure during both the heating and the cooling cycle, means for selectively connecting the discharge and the suction of said compressor to said first and second heat exchangers respectively during the heating cycle and to said second and first heat exchangers respectively during the cooling cycle, said means including first and second conduits connected respectively to said first and second heat exchangers and a reversing valve connected to said conduits and to said compressor discharge and suction, said first conduit carrying hot discharge refrigerant from said compressor during said heating cycle and cool suction refrigerant to said compressor during said cooling cycle, and said first conduit being arranged in heat transfer relation with at least a part of said capillary tube for cooling said



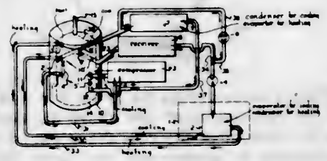
capillary tube during said cooling cycle and heating said capillary tube during heating cycle whereby the formation of gaseous refrigerant in said capillary tube is retarded during said cooling cycle and quickened during said heating cycle causing said capillary tube to be less effective to pass refrigerant during said heating cycle and effecting a lower refrigerant flow rate through said system.

2,750,763
ABSORPTION REFRIGERATION
Wilhelm Georg Kogel, Stockholm, Sweden, assignor to Aktiebolaget Elektrolux, Stockholm, Sweden, a corporation of Sweden
Original application July 14, 1949, Serial No. 104,771, now Patent No. 2,655,010, dated October 13, 1953. Divided and this application December 23, 1952, Serial No. 327,621
Claims priority, application Sweden July 22, 1948
21 Claims. (Cl. 62—119.5)



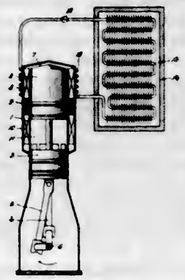
1. In the art of refrigeration with the aid of an absorption refrigeration system having a circuit in which inert gas normally circulates in a path of flow including a place of cooling in which refrigerant normally evaporates in the presence of the inert gas circulating between first and second regions thereof, the improvement which comprises flowing liquid refrigerant by gravity between the first and second regions in the place of cooling and conducting unevaporated refrigerant passing from the place of cooling to another place at a lower level which is outside the normal path of flow of circulating inert gas and in which the liquid surface normally is always out of physical contact with inert gas when liquid refrigerant is present in said other place, flowing refrigerant from the other place in a path of flow which includes raising such refrigerant in liquid phase against gravity by vapor lift action, effecting such raising of refrigerant against gravity while out of the presence of the inert gas, and conducting the raised refrigerant back to the place of cooling for gravity flow between the first and second regions thereof.

2,750,764
UNITARY REFRIGERATING AND HEATING SYSTEMS
Joseph F. Lynch, Cambridge, Mass., assignor of one-half to New England Trailer and Body Manufacturing Co., Medford, Mass., a corporation of Massachusetts
Application April 2, 1951, Serial No. 218,774
2 Claims. (Cl. 62—129)



1. A cooling and heating system for an enclosed compartment including a unit designated as an evaporator serving as such in a cooling cycle and as a condenser in a heating cycle, a unit designated as a condenser outside said compartment serving as a condenser in said cooling cycle and as an evaporator in a heating cycle, a compressor unit having a discharge line and a suction line, line connection means and valve control means for sending a refrigerant fluid in the cooling cycle through the condenser, through a receiver, through said evaporator and back to said compressor suction line and in reverse order in the heating cycle, said evaporator having three lines thereto comprising two liquid lines and a single line used for both discharge from and suction to the compressor and valve means and connecting lines for using either one but not both of said liquid lines dependent upon whether said single line is used for discharge or suction.

2,750,765
COLD GAS REFRIGERATOR
Jacob Willem Laurens Köhler and Willem Frederik Schalkwijk, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application April 3, 1952, Serial No. 280,278
Claims priority, application Netherlands April 11, 1951
5 Claims. (Cl. 62—136)

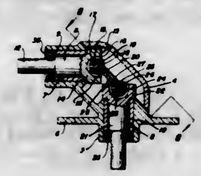


5. A cold gas refrigerator using a gas of invariable chemical composition which is subject to a closed thermodynamic cyclic process in which the gas is invariably in the same physical state comprising; at least one cylinder, a crankshaft, at least one piston in said cylinder connected to said crankshaft, said cylinder having a chamber on one side of said piston with a relatively low temperature and a chamber on another side of said piston having a temperature higher than said first chamber, said chambers varying continuously in volume, and means connecting a chamber of relatively low temperature with a chamber of relatively high temperature, said means comprising a freezer, regenerator and a cooler connected in series, said regenerator having a thermal capacity per cc. which is equal to

$$f\cdot\frac{k}{k-1}\cdot\frac{P_{mean}}{T_w}\cdot\frac{B_1}{B_2}$$

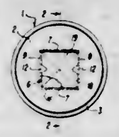
where f exceeds 0.08 and P_{mean} is at least 3 atmospheres absolute.

2,750,766
ANGULAR TRANSMISSION FOR SHAFTS
Owen H. Griswold, Paramus, N. J.
Application January 21, 1954, Serial No. 405,482
1 Claim. (Cl. 64—6)



In an angular transmission of the character described having branches extending therefrom at an angle of 90° to each other, a removable wall for said casing extending between the said branches and enclosing the transmission, said branches having bearings formed therein, shafts journalled in said branches having enlarged portions engaging said bearings and reduced portions extending from said branches and forming shoulders between said portions, seals in said branches engaging said shoulders and bearing against the reduced portions of the shafts to prevent leakage from said casing, said shafts having recesses at their inner ends having cylindrical walls, said walls having arcuate slots formed therein intermediate the ends of the recesses, said cylindrical walls extending through an arc of more than 180° and said slots being concentric with said cylindrical walls, and means for interconnecting said shafts to establish driving connection therebetween, said means comprising cylindrical rockers journalled in said recesses and extending throughout substantially the entire length of said recesses so as to be confined against axial removal from said recesses by said casing, said rockers having slots milled diametrically therein and extending the entire length of said rockers, pins carried by said rockers and having projecting ends extending into said slots to further insure against axial displacement of said rockers from said recesses, said pins extending across said milled slots, a polygonal link plate having end portions pivoted to the portions of said pins which extend across said milled slots and having slide fits in said milled slots, said plate having opposed flat side edges and converging end portions presenting flat edges which parallel the walls of the recesses when said last mentioned edges have reached their maximum movement toward said cylindrical walls.

2,750,767
DEVICE FOR BUTTERING SWEET CORN
Emil W. Von Knauf, Ringwood, and Arthur Melman, Chicago, Ill.
Application April 19, 1952, Serial No. 283,228
3 Claims. (Cl. 65—12)



1. A device for spreading butter on corn on the cob, said device comprising a body concave to conform in

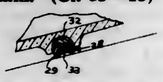
shape to the shape of a portion of the surface of an ear of corn and having a butter-receiving well open at the top to receive a pat of butter, said well having a bottom which is movable towards the top of the well so that upon inversion of the device with the top of the butter-receiving well facing downwardly onto an ear of corn said bottom can be pushed towards the ear of corn to force any butter that may be therein towards the ear of corn, means forming a flexible finger-receiving backing for said bottom to receive a finger of the operator of the device for moving said bottom towards said top and resilient means overhanging the open end of the butter receiving well for retaining a pat of butter within the well and being adapted to bend inwardly to enable a pat of butter to be freely inserted in the well opening.

2,750,768
DRINKING GLASS
Andre J. M. Laurent, Carmel, Calif.
Application June 3, 1953, Serial No. 359,371
1 Claim. (Cl. 65—13)



A drinking glass or the like comprising a glass which tapers from a relatively small bottom to a relatively large top, a handle on said glass, said handle being connected to the glass near the bottom and near the top of the glass, said handle extending away from the glass in the middle portions of both the glass and the handle, said handle having a hollow center for substantially its entire length and said hollow center having a single opening, said opening being into the body of the glass at a point near the bottom of the glass.

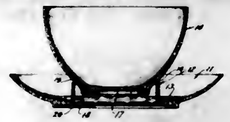
2,750,769
NON-SKID DISHES
Oscar A. Yost, New York, and Gilbert Adamec, Bronx, N. Y.; said Adamec assignor to said Yost
Application September 3, 1953, Serial No. 378,384
1 Claim. (Cl. 65—15)



A dish or the like having a bottom portion, depending socket projections on said bottom portion, ball elements adjustably disposed in said socket portions, each of said ball elements having a portion presenting a smooth contact surface and another portion of rubber with a vacuum cup opening therein for having frictional engagement with a supporting surface whereby the ball can be adjusted to present either a smooth surface or a frictional grip for engagement with the supporting surface.

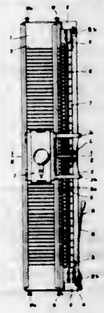
2,750,770
ANTI-DRIP DEVICE FOR COFFEE CUPS AND THE LIKE
Elaine Berg, Chicago, Ill., assignor of one-third to Robert H. Wendt, Evanston, Ill., and one-third to Faith P. Peters, Chicago, Ill.
Application November 2, 1953, Serial No. 389,701
2 Claims. (Cl. 65—65)

1. An anti-drip device for coffee cups and the like, comprising a strip of bendable, relatively stiff sheet material of rectangular shape formed with a crease extending longitudinally of its longest dimension parallel to both lateral edges, and causing the parts of said strip to be located in substantially U shape, engaging each other, the said folded strip being curved into substantially cylindrical form, which causes its two folded parts to be drawn tightly against each other, one end of the strip being inserted into the U shaped recess in the other end of the strip, and the diameter of the annulus thus formed being



of sufficient size to engage the lower side wall of a coffee cup or the like outside of and above the cup supporting rim on the bottom of the cup, the width of the annulus being sufficient to support said rim above the bottom of a saucer or other receptacle within which the annulus and cup are located.

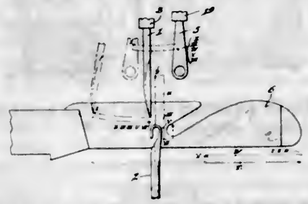
2,750,771
HAND-OPERATED KNITTING MACHINE
Erich Piltz, Markdorf, Baden, Germany, assignor to Willy Werner Lenkeit, Markdorf, Baden, Germany
Application December 14, 1954, Serial No. 475,258
Claims priority, application Germany December 24, 1953
9 Claims. (Cl. 66—6)



1. A hand-operated knitting machine for alternate knitting of plain and purled stitches, comprising, in combination, a stationary needle bed having a stationary underframe, a plurality of knitting needles lying side by side and being movable in said needle bed in a predetermined direction, an eccentric lock movable perpendicularly to the longitudinal direction of said knitting needles, said lock being provided with a thread guide and a stitch stripper; a looping comb having a plurality of looping needles extending in substantially perpendicular direction to said predetermined direction of said knitting needles, a supplementary comb having a plurality of supplementary needles arranged for motion parallel to said perpendicular direction, said supplementary needles being arranged at a distance which is equal to about twice the distance between said looping needles, a pair of arms holding said supplementary comb movably in said perpendicular direction, said pair of arms being rigidly connected to the smaller sides of said underframe, and a knocking-off rail being arranged between said needle bed and said supplementary comb and attached to said arms.

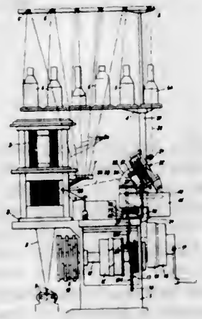
2,750,772
KNITTING MACHINE NEEDLE DEVICE
Eugene Bellini, Jackson, Ala., assignor to Vanity Fair Mills, Inc., Reading, Pa., a corporation of Pennsylvania
Application October 12, 1951, Serial No. 251,029
10 Claims. (Cl. 66—86)

1. A knitting machine yarn loop forming mechanism comprising in combination with yarn feeding means and sinker means, of two separate elongated complementary elements one of which includes a rigid hook end portion and the other an end portion for closing and opening said hook portion and which elements are adapted to form yarn loops in successive interconnected order with said yarn feeding means and sinker means by independent



lateral movement only of the element having the hook closing and opening end portion relative to the element having the hook end portion and by independent longitudinal movement of the element having the hook end portion, and means effecting said independent movements of the elements relative to each other.

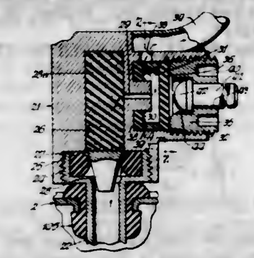
2,750,773
THREAD-FEEDING ATTACHMENT FOR KNITTING FRAMES
Paul Virchaux, Saint-Blaise, and Hans Korber, Fribourg, Switzerland
Application February 10, 1954, Serial No. 409,467
Claims priority, application Switzerland May 20, 1953
8 Claims. (Cl. 66—132)



1. In a thread-feeding attachment, in particular for knitting machines, the combination, with a disc rotating at uniform speed and operatively associated with pre-adjustable path limiting stops and including a feed roller pushing the thread to be fed against said disc, of a mechanism for moving said roller at pre-definable speed in a meridian plane of the disc with respect to the axis of rotation of the latter successively between positions determined by said stops.

2,750,774
LIGHTERS
Fred Perlin, Oconomowoc, Wis., assignor to The Parker Pen Company, Janesville, Wis., a corporation of Wisconsin
Application February 9, 1954, Serial No. 409,134
6 Claims. (Cl. 67—7.1)

1. A valve comprising a body having fluid conduit therethrough and having a port in and forming a portion of the conduit, a flexible closure element in said body opposite said port and sealingly secured around its peripheral portions and disposed for flexing movement of its central portion in a direction along the axis of said port into closing and sealing relation to the port, said closure element forming a portion of a bounding wall of said conduit and having an outer surface positioned for engagement by an actuating member for movement of its said central portion as mentioned, adjustable means



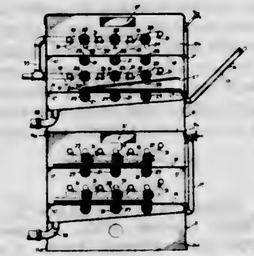
sealingly securing the closure element, and metering means including at least one resilient element defining an aperture variable in response to adjustment of the adjustable means

2,750,775
CANDLE AND ADAPTOR COMBINATIONS
Reuel R. Robertson and Amelia M. Robertson, Easton, Pa.
Application February 10, 1953, Serial No. 336,032
4 Claims. (Cl. 67—22)



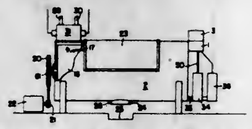
2. An adaptor for receiving the base end of a candle and maintaining the candle in upright position in a holder having an opening larger than the candle base, said adaptor comprising a cup-shaped member formed of highly compressible, readily resilient, distortable material, said material being porous and rubberlike.

2,750,776
LAUNDRY MACHINE
Joseph A. Dolan, Oakland, Calif.
Application July 7, 1952, Serial No. 297,538
9 Claims. (Cl. 68—12)



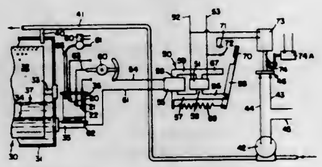
9. A laundry machine comprising a fluid tight chamber, a foraminous form within the chamber adapted to carry a piece or several pieces of laundry, means for washing, rinsing, drying and pressing the piece or pieces of laundry on the form, the form being compressible, the last named means including roller means for compressing and reciprocating the form, and means for causing the rollers to apply a first pressure to the form during the washing operation, an increased pressure during the rinsing operation, and a still greater pressure during the drying and pressing operations.

2,750,777
AUTOMATIC CONTROLS FOR COMMERCIAL WASHERS
Benjamin Alvin Buss, East Moline, Ill., assignor to American Machine and Metals, Inc., Moline, Ill., a corporation of Delaware
Application May 11, 1951, Serial No. 225,890
13 Claims. (Cl. 68—12)



7. In a washing machine for treating a load of laundry, the combination including a first control means having manually settable automatic control means thereon for controlling the level of the bath in said washing machine at a first selected level during sudsing, manually settable automatic control means thereon for controlling the level of the bath at a second level during rinsing, and second control means having manually settable automatic means thereon for controlling the number of the sudsing and rinsing operations of said load and controlled as to the level of the baths by said first means.

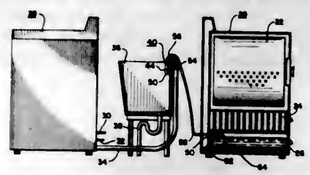
2,750,778
AUTOMATIC WASHER CONTROLS AND METHODS
Benjamin Alvin Buss, East Moline, Ill., assignor to American Machine and Metals, Inc., New York, N. Y., a corporation of Delaware
Application July 28, 1952, Serial No. 301,240
5 Claims. (Cl. 68—17)



1. In a washing machine having a shell, means for agitating a load of soiled laundry therein, and means feeding water and soap thereto, the combination including a separate chamber, means connecting a portion of said chamber spaced below the top thereof with said shell at a point near the normal water level in the shell, detecting means responsive to a predetermined suds level in said chamber, said suds level being proportional to the suds level in said shell, and means connected to said detecting means for shutting off soap supply when the suds in the shell have increased the effective liquid head in said shell a predetermined amount to cause the level in said chamber to rise and actuate said detecting means.

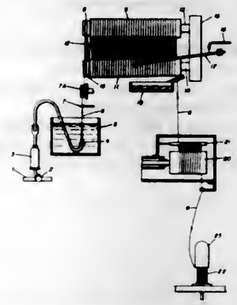
2,750,779
DOMESTIC APPLIANCE
Ronal H. Whyte, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 13, 1953, Serial No. 348,410
2 Claims. (Cl. 68—19)

1. In combination, a laundry washing machine having water inlet means and water discharge means, a laundry dryer having condensing means and liquid collecting means for condensing and collecting moisture removed from the clothes in the dryer, aspirator means having a pressure inlet and a suction inlet and a common discharge outlet, conduit means connecting said water discharge means and said pressure inlet, and conduit means having its entrance portion extending into contact with the liquid in said liquid collecting means and its exit portion connected to said suction inlet for removing liquid



from said liquid collecting means by the water discharged from the washing machine.

2,750,780
THREAD ADVANCING REEL HAVING LIQUID APPLICATOR AND WIPER
John H. Givens, Meriden, Leslie Rose, Whitefield, and John Wale, Coventry, England, assignors to Industrial Rayon Corporation, Cleveland, Ohio, a corporation of Delaware
Application June 18, 1952, Serial No. 294,172
4 Claims. (Cl. 68—19)



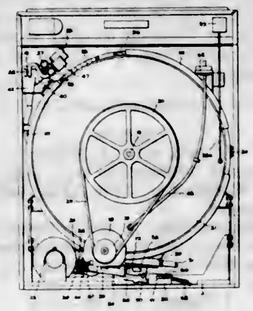
1. An apparatus for processing with a treating liquid a plurality of turns of thread being advanced in a helical path comprising; a pair of generally vertically spaced driven rolls; means to position said rolls relative to each other so as to advance and store thread in a generally elongated helix having substantially straight runs; a treating liquid applicator positioned in contact with one of said straight runs having a longitudinally continuous surface in contact with a plurality of consecutive turns of said thread helix; said applicator being positioned downwardly inclined from the horizontal so that an applied treating liquid will flow therealong by gravity to the thread helix; and a liquid wiper having a longitudinally continuous surface being in contact with a plurality of consecutive turns of said other straight run of said helix; said liquid wiper being positioned downwardly inclined from the horizontal so that processing liquid is discharged by gravity from its lowermost end.

2,750,781
APPARATUS FOR TREATING AND FINISHING HOSIERY
Sidney Bailey, Jr., Philadelphia, Pa.
Application December 8, 1951, Serial No. 260,613
11 Claims. (Cl. 68—20)



1. In an apparatus for treating textile articles, an autoclave comprising an elongated chamber and receiving and discharge chambers disposed at opposite ends thereof, all for receiving and containing respectively heated vaporous treating media under superatmospheric pressure, said chambers being inter-related for progressive passage of said articles therethrough and said elongated chamber being communicable with said receiving and discharge chambers, fluid-tight closure gates for selectively hermetically sealing the several chambers from each other and from atmosphere, means for exhausting the pressure medium from each of said receiving and discharge chambers while all of said chambers are hermetically sealed from each other and from atmosphere, a plurality of partitions in said elongated chamber for division thereof into compartments, each of said partitions having an opening therein for passage of said articles therethrough, said opening being of an outline closely conforming to that of the article to be passed therethrough so that said opening is substantially closed by passage of the articles successively therethrough, said articles being subjected to a presetting treatment effected by said pressure media, and means in each of said compartments for subjecting said articles to additional treatments.

2,750,782
LAUNDRY APPARATUS
Daniel L. Du Hamell, Jr., Marblehead, Mass., assignor to General Electric Company, a corporation of New York
Application August 4, 1955, Serial No. 526,413
6 Claims. (Cl. 68—140)



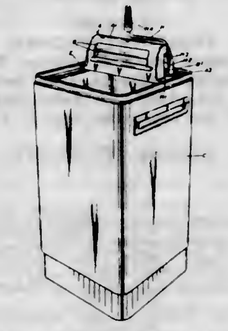
1. In laundry apparatus, a motor, a rotatable clothes-treating basket, means for driving said basket from said motor including a power transmission means having input and output pulleys, driving and driven belts connected respectively to said pulleys, a movable frame mounting said power transmission means, resilient means biasing said frame to apply tension to said belts and effective to cause movement of said frame upon failure of either of said belts, a switch, and means actuated by the movement of said frame for operating said switch whereby said switch is operated upon the failure of either of said belts.

2,750,783
THREAD MANUFACTURING APPARATUS
Harry A. Kuljian, Merion, Pa.
Application December 4, 1953, Serial No. 396,113
6 Claims. (Cl. 68—205)



1. For use in connection with an elongated rotary roll and means for applying different liquids to different, longitudinally spaced zones on said roll, means for removing some of said respective liquids from said roll and for minimizing intermingling of said liquids, said means including an elongated, horizontally disposed, shell which is arcuate in transverse section, a scraping element carried by, and projecting from the concave side of said shell, and means for mounting said shell in a manner to bring said scraping element into contact with said roll, said scraping element consisting of alternating V, and inverted V, shaped formations, with the lines bisecting the angles of said formations disposed transversely of said shell.

2,750,784
FOLDABLE WRINGER WASHING MACHINE
Adam Watson White, Perivale, Greenford, England, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application April 23, 1952, Serial No. 283,806
4 Claims. (Cl. 68—247)

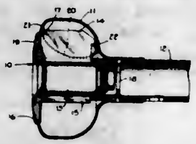


1. In a machine of the type having a container and a wringer mounted on the container for movement between an operating position in which the wringer extends above the container and a storage position in which the wringer is folded down into the container, a horizontal axis drive shaft for said wringer extending outwardly from one end thereof, a manually operated foldable driving means for the wringer comprising a handle having a hand grip portion, a shaft portion drivingly connected to said shaft by a hinge connection and a crank portion connecting said handle grip and shaft portions and extending substantially normal to the shaft portion and spaced from the hinged joint a distance greater than the distance from the hinged joint to the top of the wringer whereby the handle may be folded in a vertical plane to place the crank portion over and along the top of the wringer and to place the shaft portion parallel to one end of the wringer to allow the wringer to be folded into said storage position, and releasable means on said shaft portion for locking said hinged connection to lock said handle against folding movement and releasable to permit said handle to be folded upwardly along one end of the wringer and means on the wringer cooperating with said shaft portion for barring rotational movement of the handle about said drive shaft when the handle is in its folded position.

2,750,785
REMOVABLE CYLINDER FOR LOCK
Abraham H. Golden, Stamford, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn., a corporation of Connecticut
Application October 2, 1952, Serial No. 312,705
10 Claims. (Cl. 70—224)

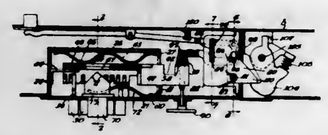
1. In a lock of the class described, a knob having an opening in its front end, a lock cylinder inserted through said opening into said knob, a part on said lock cylinder moving to a position juxtaposed to an inner surface of said knob through a tilting movement of said cylinder

as said cylinder is inserted in said knob, said surface thereafter obstructing removal of the lock cylinder from the knob except by reverse tilting movement of the cylinder, a spindle sleeve, a part of said knob assembled on said



spindle sleeve with the cylinder in said knob, and said spindle sleeve holding said lock cylinder against tilting movement to prevent its release from said knob when said knob is assembled on said spindle sleeve.

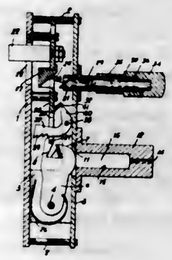
2,750,786
COMBINATION LOCK
Albert Sanowskis, Chicago, Ill.
Original application March 26, 1948, Serial No. 17,230, now Patent No. 2,665,577, dated January 12, 1954. Divided and this application June 5, 1953, Serial No. 359,683
5 Claims. (Cl. 70—313)



1. A combination lock comprising: a bolt for controlling the operation of a locking device; a pair of separately slidable racks for operating the bolt to release the locking device, each rack being provided with a longitudinal series of teeth; a series of selectively slidable keys spring-biased away from the racks and provided with elements for simultaneously engaging the teeth and shifting both racks step-by-step, the racks being provided with teeth for conjointly operating both racks a succession of steps only by the selective operation of certain of the keys in a predetermined sequence for releasing the locking device, and with some teeth for shifting one rack relatively to the other when other keys are operated or when said certain keys are operated out of sequence and thereby rendering the keys ineffective to operate the racks to release the locking device by the further operation of the keys.

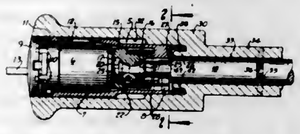
2,750,787
SAFETY LOCK
Antonio Soler Capdevila, Barcelona, Spain
Application December 3, 1951, Serial No. 259,521
Claims priority, application Spain December 6, 1950
4 Claims. (Cl. 70—337)

1. A safety lock comprising a casing, a series of wards constituted by small parallel plates standing in a vertical position and rotatable on a common axis adapted to be pushed by a lateral edge of a flat key, each of said wards being provided in their upper edge with a groove forming a slot of narrower entrance and broader bottom, said grooves being cut at different places in each ward, a displaceable blocking member placed over the wards and provided with a rib extending transversely to the wards and resting on the upper edge of same, the thickness of said rib permitting the introduction of same into the grooves when all the grooves are aligned by moving the wards, an aperture in said blocking member over said rib as broad as the width of the series of wards, a piece with an inclined surface on said blocking member, an external push button provided with a stud supported by a tubular guide of the casing acting on the blocking member, said stud having an inclined surface on its inner end which acts when the button is pushed on the inclined surface of the blocking member producing upward displacement of same, a tooth in the upper edge of each of said wards protruding a greater distance than the thickness of the rib of the blocking member, a dog placed over each ward protruding through the aperture



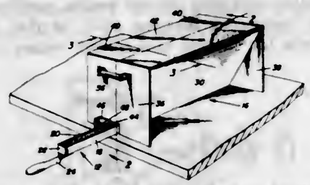
of the blocking member, all the dogs being mounted on a hinge pin parallel to the rocking axle of the wards, each of said dogs being provided in their bottom edge with several small teeth engageable in the tooth of each of the wards when said wards are pushed by means other than a corresponding key, a tail on each dog acting in cooperation with a raised part in the blocking member, said raised part acting on the tails of the dogs and raising same when the blocking member is moved upwards or downwards, permitting the setting of the wards at their initial position.

2,750,788
LOCK MECHANISM
Edward N. Jacobi, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a corporation of Delaware
Original application June 20, 1949, Serial No. 100,258, now Patent No. 2,650,492, dated September 1, 1953. Divided and this application January 12, 1953, Serial No. 330,712
5 Claims. (Cl. 70—379)



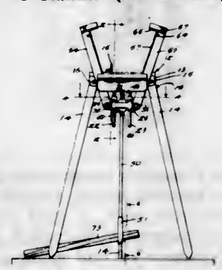
2. In a lock of the character described: a substantially tubular casing; a lock cylinder rotatable in the casing and accessible for key actuation at the front end of the casing, said cylinder having an axial hole in the rear thereof; an operating shaft having one end projecting into said axial hole in the cylinder and operatively coupled therewith; cooperating parts on the cylinder and the shaft interengaging with one another inside said hole to hold the cylinder and shaft against axial separation but permitting detachment of the shaft upon tilting thereof to a predeterminated angular position with respect to the cylinder axis; and a rearward extension on the casing encircling the shaft rearwardly of the cylinder to normally hold the shaft against tilting to said predetermined angular position, said extension having a notch in its side wall opening to the rear extremity of the extension to permit tilting of the shaft to said predetermined angular position in one position of rotation of the cylinder with respect to the casing.

2,750,789
TROWEL AND HOPPER
John Lamm, Kent, Ohio, assignor of one-half to Robert J. Lamm, Kent, Ohio
Application November 17, 1952, Serial No. 320,856
1 Claim. (Cl. 72—128)



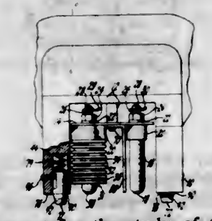
A mortar device comprising a hopper having inclined downwardly converging side panels, a substantially rectangular base panel secured to and extending between the lowermost portions of said side panels, spaced end panels secured to and extending between said side panels, a lid hingedly mounted at the top of said hopper, one of said end panels having a rectangular aperture therethrough opening into the bottom edge thereof, an elongated rectangular mortar receptacle having a handle on an end thereof, said receptacle being slidably mounted in said opening and on said base panel, the top edges of said receptacle extending upwardly to a position immediately adjacent the peripheral edge portion of said one of said end panels defining the upper limit of said aperture so that said peripheral edge portion levels off mortar as said receptacle is withdrawn from said hopper, a screen forming the bottom of said receptacle to permit excess water to drain therethrough and whereby internal suction will be reduced when said receptacle is inverted to deposit mortar along an edge of a building block, and a horizontally slidable door on said one of said end walls to close said aperture when the mortar receptacle is withdrawn.

2,750,790
MASONRY BLOCK MORTAR STRIP GAUGING DEVICE
Henry M. Peper, Baltimore, Md.
Application January 16, 1953, Serial No. 331,692
3 Claims. (Cl. 72—130)



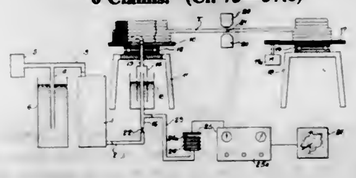
1. A mortar gauging machine comprising a block support table, depending supporting legs secured to said table, guide means secured to and extending downwardly from said table, a cross bar, a pair of spaced apart tubular sleeves integrally formed on said cross bar with their axes perpendicular to said cross bar, said sleeves being slidable on and adjustably secured to said guide means, a bearing block integrally secured to each end of said cross bar with the axes of said blocks parallel and arranged perpendicularly to the axes of said sleeves, said bearing blocks each having an axial bore extending therethrough, a shaft journalled in each of said bearing blocks, a pair of oppositely disposed spreadable gauging members, means securing the lower end of each of said gauging members to one end of said shafts, and means for rotating said shafts to actuate said gauging members.

2,750,791
THERMOELECTRIC INSTRUMENT FOR TESTING MATERIALS
Eugene A. Hanyuz and Edward F. Weller, Jr., Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 6, 1952, Serial No. 319,163
7 Claims. (Cl. 73—15)



1. An instrument for the study of thermal and electrical characteristics of metal objects comprising a leaf spring member, a support therefor, a plurality of spaced probles secured to said leaf spring member, means surrounding at least one of said spaced probes for heating the same to a fixed temperature above that of another of said plurality of spaced probes and an electrical lead connecting each of said plurality of probes to an electrical measuring device, the circuit to said electrical measuring device being completed through said object contacted by the free ends of the plurality of spaced probes during a testing operation, each of the free ends of the probes forming a thermoelectric junction with said object.

2,750,792
APPARATUS FOR MEASURING THE BORE OF TUBING
Geoffrey Fisher Morton, Sutton Coldfield, Raymond Chittleburgh, Birmingham, and Ernest Frederick Powell, Wylde Green, England, assignors to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a corporation of New York
Application December 8, 1953, Serial No. 396,976
Claims priority, application Great Britain December 9, 1952
6 Claims. (Cl. 73—37.6)

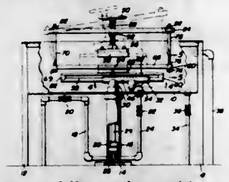


1. Apparatus for measuring the bore of a length of flexible tubing which comprises, a constant pressure air supply, a connection from said air supply to said tubing having a constriction, a magnetisable ball in said tubing of less diameter than the internal diameter of said tubing, an electro-magnet to hold said ball in fixed position relative to said electro-magnet, means to move said tubing lengthwise relative to said electro-magnet and ball and means to measure variations in pressure of air between said constriction and said ball.

2,750,793
RADIATOR TESTING DEVICE
Raymond M. Lunceford, Wills Point, Tex.
Application March 12, 1953, Serial No. 341,970
2 Claims. (Cl. 73—45.8)

1. A radiator testing device comprising a vat, a support cylinder in said vat, means extending into said vat and connected to said support cylinder for raising and lowering said support cylinder, a rod rotatably adjustably

slidably carried by said support cylinder, a plate attached to said rod, a shaft attached to said plate, a resilient pad mounted on said plate about said shaft, a tray rotatably mounted on said shaft and engaging said pad, said tray being adapted to support a radiator in said vat, a clamp and mounting means pivotally supporting said clamp on said tray for overlying the radiator and for clamping the



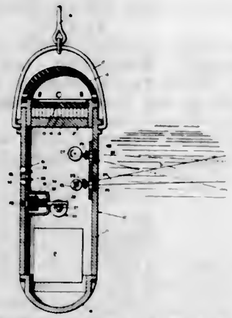
radiator to the tray while urging said tray toward said plate to frictionally engage said pad with said plate and said tray, said mounting means including a first pillar pivotally attached to said tray, a beam carried by said first pillar, said clamp being adjustably mounted on said beam, and a second pillar secured to said beam engageable with said tray, said clamp having a pad of resilient material depending therefrom and overlying said tray.

2,750,794

ACOUSTISONDE APPARATUS FOR MEASURING AND RECORDING PHYSICAL PROPERTIES OF THE SEA

George W. Downs, Altadena, Calif., assignor to the United States of America as represented by the Secretary of the Navy

Application November 7, 1952, Serial No. 319,252
11 Claims. (Cl. 73—53)



11. In a device of the class described, a source of groups of signals repetitive at group repetition rate, each group including a plurality of information signals and a marker signal transmitted in a predetermined order, indicating means, cyclical switch means for successively feeding said information signals to said indicating means in said order, means for effecting step by step actuation of said switch means from an initial position, and means independent of the position of said switch means and responsive to said marker signal for resetting said switch means at said initial position at said group repetition rate.

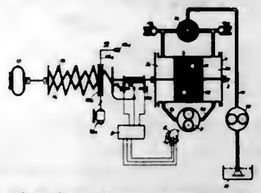
2,750,795

HYDRAULIC OSCILLATING-LOAD GENERATORS, PARTICULARLY FOR MATERIAL TESTING MACHINES

Klaus Federn, Darmstadt, Germany, assignor to Carl Schenck Maschinenfabrik G. m. b. H., a German corporation

Application February 24, 1953, Serial No. 338,485
Claims priority, application Germany February 28, 1952
6 Claims. (Cl. 73—92)

2. A pulsating load generator for imposing mechanical loads upon a specimen to be tested, comprising a hydraulic device having a reciprocating member and having variable-volume chambers for pressure medium on both sides respectively of said member, said reciprocating member forming one wall each of said variable-volume chambers, hydraulic pressure supply means of reversible pressure direction interconnecting said chambers and having pressure reversing control means, position-responsive means connected between said member and said control means for causing said control means to reverse



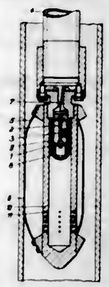
the pressure direction of said supply means at predetermined stroke positions of said member, a rigid gripping structure for attachment to the specimen, first spring means connecting said structure with said member for transmitting pulsating loads from said member to said specimen, a mechanical oscillator of a higher stroke frequency than said member, and second spring means connecting said oscillator with said structure in parallel relation to said first spring means for transmitting oscillatory loads from said oscillator to said specimen.

2,750,796

APPARATUS FOR MEASURING VARIABLE CONDITIONS IN BORE-HOLES

Werner Knoll, Hamburg, and Carl Hans Biedendieck, Benthelm, Germany, assignors to H. Malhak Aktiengesellschaft, a German corporation

Application May 31, 1951, Serial No. 229,062
Claims priority, application Germany June 9, 1950
7 Claims. (Cl. 73—152)



1. Apparatus for measuring temperature in a bore-hole which comprises a member having a coefficient of heat expansion different from steel, a steel wire tensioned in said member and adapted to be varied in tension by variation in the expansion of said member, an electromagnet located close to said wire and adapted to excite the said wire to oscillate at its natural frequency as determined by its tension and to convert the oscillations into electrical oscillations, means for transmitting said electrical oscillations to the surface of the bore-hole and means for measuring the frequency of such oscillations.

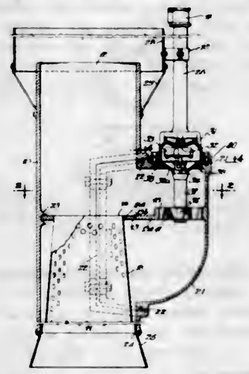
2,750,797

PROPORTIONAL WATER METER

Charles D. Hirst, San Jose, Calif., assignor to The Hersey Mfg. Co., South Boston, Mass., a corporation of Massachusetts

Application April 6, 1951, Serial No. 219,665
7 Claims. (Cl. 73—202)

1. In a proportional water meter for measuring a flow of water by metering a fractional part thereof, a hollow body having a fluid inlet opening and an outlet opening, a meter head mounted on and closing an opening into said body, an orifice plate structure dividing said body and said head into an inlet portion and an outlet portion, said plate structure comprising a removable plate seated in said body and a plate portion in said head, there being an aperture in said removable plate in the direct line of flow of liquid through the body and a second aperture in said plate portion out of the direct line of flow, a metering element in said second aperture, and an open-ended tubular screen mounted in said body to receive the entire flow to said inlet portion and leading from the inlet end of said inlet portion to said plate structure and being connected thereto to discharge through said first aperture, said screen filtering water for said metering element.

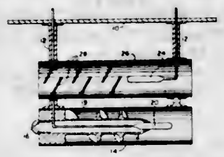


2,750,798

TRUE AIR SPEED METER

Robert E. Ruskin, Washington, D. C., and Robert D. Merrill, Rome, N. Y.

Application August 12, 1952, Serial No. 304,052
7 Claims. (Cl. 73—204)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A temperature indicating device comprising a housing member having front and rear apertures through which a fluid whose temperature is to be measured is adapted to be passed, a helical vane member mounted within said housing member and having a gradually decreasing downstream pitch, the axis of said vane member being in substantially the same direction as the rectilinear component of the fluid flow through said housing member, and a temperature sensitive element mounted so as to have a sensitive portion in substantial axial alignment with and downstream from said vane member.

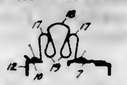
2,750,799

GAS METER DIAPHRAGM AND MOUNTING

Archie E. Weingard, Erie, Pa., assignor to American Meter Company, Incorporated, Erie, Pa., a corporation of Delaware

Application March 22, 1954, Serial No. 417,874
1 Claim. (Cl. 73—278)

In a gas meter, means forming a gas measuring chamber including a bellows shaped diaphragm of molded bias cut fabric impregnated with an elastomer with ends closed by rigid end walls supported for relative movement toward and away from each other to collapse and expand the bellows, said end walls having cylindrical portions which approach each other in the collapsed position of the bellows, said bellows being molded to a shape having at least three axially spaced convolutions with the crests of the convolutions adjacent the end walls of smaller diameter and narrower width than other of the convolutions and with the roots of the convolutions between the end walls of greater diameter than the cylindrical portions of the end walls, means including a flag rod for controlling the stroke of the bellows from a collapsed posi-



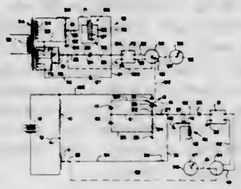
tion in which the roots and crests of the convolutions are adjacent each other to an expanded position in which the roots and crests of the convolutions are separated from each other, the length of the stroke being substantially less than the sum of the radial depths of the side walls of the convolutions and the side walls of the convolutions converging from the crests in the collapsed position and diverging from the crests in the expanded position whereby the side walls of the convolutions hinge about the roots and crests of the convolutions as the diaphragm is moved axially between expanded and collapsed positions without substantial deflection of the roots and crests of the convolutions.

2,750,800

RATE INDICATING APPARATUS FOR QUANTITY MEASUREMENTS

John W. Bancroft and John F. Storm, Minneapolis, Minn., assignors to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware

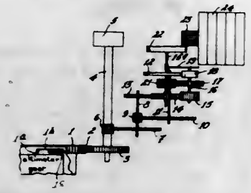
Application June 13, 1951, Serial No. 231,336
3 Claims. (Cl. 73—304)



1. Measuring apparatus comprising: means responsive to a condition to be measured, means controlled by said means responsive to a condition and operable at a frequency which is a function of the condition to be measured; a source of voltage; a first and a second impedance, at least one of which is a reactive impedance. connected in series across said source of voltage for simultaneous energization of said impedances; switching means connected across one of said impedances, said switching means being controlled by said means controlled by said means responsive to a condition to be measured to cause intermittent operation of said switching means at a frequency which is a function of the condition to be measured and thus controlling the magnitude of the voltage across the other of said impedances; motor means; means controlled by said motor means connected to said source of voltage for obtaining a voltage of varying magnitude and of opposite direction to the voltage across said other impedance; means connected to said motor means and connected to said last named means and said other impedance for comparing said last mentioned voltage with the voltage across said other impedance and deriving a resultant voltage for controlling the operation of said motor means such that said motor means is operated only upon a change in the magnitude of the voltage

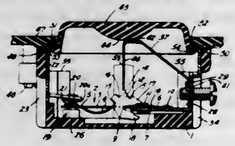
across said other impedance; an indicator; and means connecting said indicator to said motor means and providing an indication of the frequency of operation of said switching means.

2,750,801
ALTIMETER WITH BAROMETRIC CORRECTION TOTALIZING DEVICE
Pierre Ernest Rene Fauvelot, Ville-d'Avray, France, assignor to Societe Anonyme Etablissements Ed. Jaeger, Levallois-Perret, France
Application November 8, 1954, Serial No. 467,565
Claims priority, application France July 30, 1954
6 Claims. (Cl. 73—387)



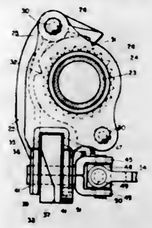
1. A barometric correction totalizing device for a barometric altimeter the mechanism of which is secured in a case adapted to be moved bodily relative to a stationary dial, and formed with a set of teeth, comprising, in combination, a barometric drum counter having a driving pinion and the barometric graduation of which appears through at least one window, a control gear wheel drivingly connected to the set of teeth formed on the altimeter mechanism case, a manual control device drivingly connected to said control gear wheel, a differential gear having a stationary shaft, a sun gear loosely mounted on said shaft and drivingly connected to said control gear wheel, a sun wheel secured on said shaft and drivingly connected to the driving pinion of the drum counter and an epicyclic device comprising a spindle, an input planet pinion carried by said spindle and meshing with said sun gear and an output planet wheel carried by said spindle and meshing with said sun wheel, and means for moving said epicyclic device about the periphery of said sun gear and sun wheel according to the difference existing between the pressure-altitude law and the linear correspondence between pressures and altitude given by said gears, wheels and pinions.

2,750,802
ALTERNATE ACTION MECHANISM
Robert W. Pashby, Park Ridge, Ill., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application July 27, 1951, Serial No. 238,989
11 Claims. (Cl. 74—100)



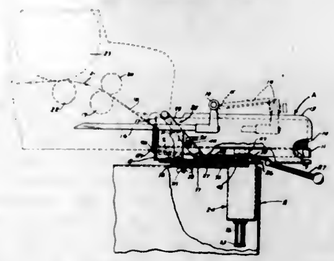
8. In an alternate action mechanism, an alternator, and an elongated spring member fixedly mounted at one end thereof in cantilever fashion and having an integral resilient arm extending laterally of the other end thereof for reciprocation toward and away from said alternator, said spring member biasing said arm in one direction out of engagement with said alternator, said arm being movable in the opposite direction against the bias of the spring member to engage said alternator and displace the same.

2,750,803
ROTATING MECHANISM FOR A BRAKE SLACK ADJUSTER
Gordon B. Dorey, Westmount, Quebec, Canada, assignor to Continental Transport Appliances, Limited, Montreal, Quebec, Canada, a corporation of Canada
Application November 29, 1954, Serial No. 471,868
7 Claims. (Cl. 74—157)



1. In a slack adjuster for the brake system of a railway car including a take-up device operable by rotation for varying the relation between certain parts of the system and thereby compensate for excessive slack; a lever pivotally mounted on said rotatable take-up device and a pawl pivotally mounted on the lever for limited swinging motion relatively to the lever to engage with the rotatable take-up device and rotate in unison therewith in one direction and independently thereof in the opposite direction; and means for regulating the direction and extent of relative movement between the pawl and lever including abutments on the lever spaced from each other in the direction of swinging movement and a cam shifter pivotally mounted on an axis extending in the general direction of swinging movement, said shifter having its outer portion formed of varying depth and extending in the space between the abutments to change the relative relation between the lever and pawl upon rotation of the shifter.

2,750,804
AUTOMATIC RAISING MECHANISM FOR FEED TRAYS
Carl A. Bergman, Melrose, Mass., assignor to Standard Duplicating Machines Corporation, Everett, Mass., a corporation of Massachusetts
Application November 15, 1952, Serial No. 320,771
4 Claims. (Cl. 74—169)



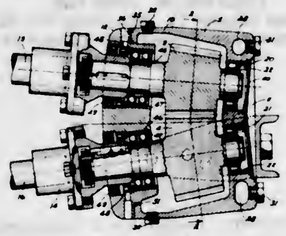
1. A lifting jack mechanism comprising in combination a sleeve, a load supporting shaft slidably received in said sleeve, two one-way clutches engaging the shaft through holes in the sleeve, said clutches comprising rings having slanted inside diameters around the sleeve with balls spaced around the inside of the rings and normally supported through the holes in the sleeve between the slanted inside diameters of the rings and the shaft, a pair of adjacent separating rings around the sleeve between the clutch rings, means for reciprocally rotating one of said separating rings about the sleeve relatively to the other separating ring, said separating rings having respectively oppositely slanted cam surfaces in their adjacent surfaces with balls positioned between them whereby the separating rings move apart and then together when one is reciprocally rotated relatively to the other, a spring supporting said clutch rings and separating rings in position longitudinally of said sleeve, said spring being at least strong enough to support the clutches, the separating rings and said shaft, and means to move said clutches along the sleeve against the tension of said spring until the distance between the slanted inside diameters of the clutch rings and the shaft at said holes through the sleeve is greater than the diameter of the balls which are through said holes.

2,750,805
BELT ALIGNER
Herbert C. Winkel, Watervliet, Mich.
Application November 2, 1953, Serial No. 389,576
7 Claims. (Cl. 74—240)



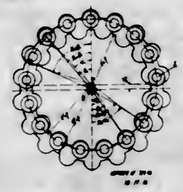
1. A device for aligning a flat, endless belt of inconstant flexibility and width, with respect to at least one pulley supporting said belt upon a machine, the combination comprising: an upper guide plate secured to said machine transverse of a course of said belt moving toward said pulley, said plate being wider than, parallel with, and adjacent to the upper surface of a relatively small portion of said course which is near to said pulley; a lower guide plate parallel with and spaced from said upper plate and substantially equal in width and length thereto, and adjacent to the lower surface of said course; a pair of similar, substantially parallel guide bars disposed between the opposing, transverse ends of said plates and adjacent to the lateral edges of said course, said bars being adjustable toward and away from each other and of substantially the same thickness as said belt; and means removably securing said lower plate and said bars to said upper plate.

2,750,806
GEAR BOX UNIT
Robert W. Hobbs, Miami, Fla.
Application March 7, 1950, Serial No. 148,160
10 Claims. (Cl. 74—417)



1. A case for a gear unit, including bevel gears and gear shafts, comprising a body having a generally cylindrical side wall, arcuate walls within the case and integral with and spaced from opposite parts of said side wall and partially defining upwardly extending sector-shaped cooling fluid chambers, the side wall having fluid inlet and outlet openings extending therethrough into each of said chambers aproximately midway between their ends.

2,750,807
SPECIAL INTERNAL ENGAGING GEAR SET
Kazushige Miyazaki, Ohta-ku, Tokyo, Japan
Application March 6, 1952, Serial No. 275,181
4 Claims. (Cl. 74—457)



1. A special internal engaging gear set, comprising internal engaging gear wheels which are adapted to engage one another, even when the difference of tooth number ratios is unity for both gear wheels, one of said gear wheels comprising circular teeth and the other of said gear wheels comprising semi-circular teeth, the gear wheel formed with semi-circular teeth being adaped to mesh with the other gear wheel formed with circular teeth by altering the rate of tooth pitch to tooth size into the following value

$$E_k=\frac{L}{2K.\sin\frac{360^\circ}{aN}}$$

$$R\rho=E_k\left\{\frac{\sin\frac{360^\circ}{aN}}{\sin\left(\frac{360^\circ}{an}-\frac{360^\circ}{aN}\right)}+\frac{K.\sin\frac{360^\circ}{aN}}{\sin K\frac{360^\circ}{aN}}\right\}$$

$$r\rho=E_k\left\{\frac{\sin\frac{360^\circ}{aN}}{\sin\left(\frac{360^\circ}{an}-\frac{360^\circ}{aN}\right)}-\frac{K.\sin\frac{360^\circ}{aN}}{\sin K\frac{360^\circ}{aN}}+1\right\}$$

or into their approximate value in which the relationship between R.r and L is varied by any arbitrary modifying factor K and a factor a to be determined relatively to the factor K and the modified values of the radii of engaging circles R and r relative to the tooth pitch and R and r and eccentricity E_k respectively, when R, L and E have the following relation

$$R.\sin\frac{360^\circ}{N}=r\left\{\sin\frac{360^\circ}{N}+\sin\left(\frac{360^\circ}{n}-\frac{360^\circ}{N}\right)\right\}$$

$$L=2R.\sin\frac{360^\circ}{N}\left\{1-\frac{\sin\frac{360^\circ}{N}}{\sin\frac{360^\circ}{N}+\sin\left(\frac{360^\circ}{n}-\frac{360^\circ}{N}\right)}\right\}$$

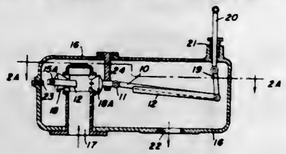
$$E=R-r$$

wherein the radii of the engaging circles of the outer and inner gear wheels are R and r, the number of teeth N and n, the radii of the circular teeth engaging with each other L and the eccentricity E, and further radii R and r of both outer and inner gear wheels, having circular and semi-circular teeth respectively, possess substantially the aforementioned values.

2,750,808
MECHANICAL DEVICES
George Dugan Mills, Gordon, New South Wales, Australia
Application October 18, 1951, Serial No. 251,882
6 Claims. (Cl. 74—471)

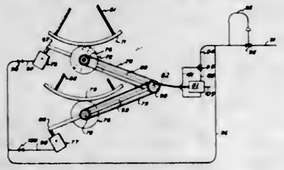
1. A device for applying substantially equal forces to two movable bodies, comprising a relatively long link and a relatively short link connected together by a common coupling at one end of each and extending in the

same general direction, a movable body operatively connected to the extended end of each link, means guiding the movements of said bodies along a common axis, and means for moving the common coupled ends of said links



toward and away from said axis, whereby one of said extended link ends is placed under compression while the other said link end is placed under tension to thereby move said bodies equal amounts measure on said axis.

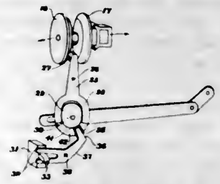
2,750,809
PORTABLE HAND WHEEL ACTUATOR
Henry A. Thomas, Baton Rouge, La., assignor to Ethyl Corporation, New York, N. Y., a corporation of Delaware
Application March 29, 1955, Serial No. 497,490
2 Claims. (Cl. 74—472)



1. Apparatus for driving a rotatable round element subject to variable load resistance, including; a driving roller adapted to engage and drive the rotatable element by frictional rolling contact, a gas motor operatively connected to said driving roller, said motor venting gas in proportion to speed of operation, and operable at a speed in inverse proportion to the torque generated, an engaging mechanism operatively connected to said driving roller and adapted to engage said driving roller with the rotatable element, said engaging mechanism being responsive to, and providing engaging pressure in proportion to gas pressure applied to said mechanism, a gas pressure regulator adapted to supply gas at low rates at pre-set pressures, but providing high rates of gas at lower pressure, the pre-set pressure and supply rate corresponding to high torque-low speed operation of said gas motor, a gas manifold conduit connected to said pressure regulator, said gas motor and said engaging mechanism, whereby venting of gas by said motor at low load-high speed conditions induces a reduction in engaging pressure applied by the engaging mechanism.

2,750,810
INTERLOCK CONTROL SYSTEM FOR MOTOR AND TRANSMISSION OF PROJECTOR
Vernon H. Jungjohann, George H. Hanken, and Herbert T. Robinson, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application March 3, 1955, Serial No. 491,866
2 Claims. (Cl. 74—472)

1. In a control interlock system, the combination with a support, a motor and a drive member actuated thereby mounted on said support, a switch on said support for starting and stopping said motor, a pair of spaced discs movably mounted on said support adjacent said drive member, of first means on said support for moving said discs selectively into and out of driven relation with said drive member, a cam on said first means, an arm movably mounted on said support for movement to and from an operative position, means connecting said arm to said moving means, and means on said connecting means en-



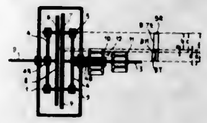
gaging said cam when said arm is moved from said operative position to actuate said moving means to shift said discs out of driven relation with said drive member.

2,750,811
BALER CRANK CONSTRUCTION
James H. Hollyday and Edwin B. Nolt, New Holland, Pa., assignors, by mesne assignments, to Sperry Rand Corporation, a corporation of Delaware
Application April 8, 1952, Serial No. 281,242
4 Claims. (Cl. 74—595)



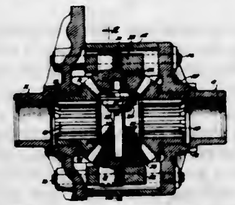
2. A crank construction comprising relatively opposed sides and relatively opposed edge plates rigidly connected in tubular formation, each said side comprising a main outer portion, an inwardly and reversely bent inner portion interiorily of the tubular formation, and an end portion integrally connecting said inner and outer portions, a reinforcing pad being disposed between and rigidly connected to said inner and outer portions, said portions and said pad being formed with a bore therethrough at the hub end of the crank, said pad being spaced from said end portion to therewith define a passageway perpendicular to the axis of the bore, said edge plates having openings therethrough aligned with and forming part of said passageway, said sides and pads being formed with slots opening from the said bore through said end portions and dividing the hub end of the crank into relatively opposed clamp segments, threaded means being disposed through the passageways of said sides to draw the clamp segments together.

2,750,812
VARIABLE SPEED TRANSMISSION
Eligio Mirone, Turin, Italy
Application January 22, 1952, Serial No. 267,529
Claims priority, application Italy January 24, 1951
2 Claims. (Cl. 74—686)



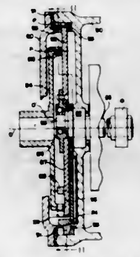
1. In an automatic variable speed transmission a casing, a driving shaft and a coaxial driven shaft supported at the opposite ends of said casing, a cage rotatably mounted about the common axis of said driving and driven shafts, a first set of pivots carried by said cage, a second set of pivots carried by said cage at a radial distance greater than the pivots of the first, a set of trains of three planet wheels fixedly connected together rotatably mounted on the first set of pivots carried by said cage, a set of pairs of planet wheels fixedly connected together rotatably mounted on the second set of pivots carried by said cage, one of the planet wheels of said first set meshing with one of the planet wheels of said second set, a gear fast with said driving shaft and meshing with the second gear of said train of three planet wheels, a small diameter gear fast with a sleeve rotating idly on the driving shaft and meshing with the third larger diameter gear of each of the trains of three planet wheels, a gear fast with said driven shaft and meshing with the second planet wheel of each pair, a driving member of a lower power automatic variable speed transmission carried by said sleeve, a driven member of a lower power variable speed transmission carried by said driven shaft and means for transmitting power between said driving and driven members, and means for braking the rotational movement of said cage.

2,750,813
DIFFERENTIAL GEAR SET
Kenneth E. Lyman, Hinsdale, Ill.
Application August 24, 1953, Serial No. 376,108
10 Claims. (Cl. 74—711)



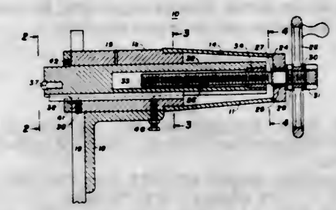
1. A differential gear set comprising a pair of coaxial bevel side gears mounted with their toothed surfaces facing and each having a hollow central portion to receive a shaft, means to hold the side gears against axial separation, bevel pinions meshing with the side gears, means on the pinions engaging the side gears to hold the bevel pinions against radial outward movement, a radially extending guide rod journaled in the pinions and extending between the side gears to guide the pinions, and stop means in the hollow central portion of each side gear to engage the end of a shaft fitting in the hollow central portion to limit axial movement of the shaft into the side gear.

2,750,814
TOOTHED GEARING
Ernest Wildhaber, Brighton, N. Y., assignor to The Gleason Works, Rochester, N. Y., a corporation of New York
Application October 30, 1951, Serial No. 253,781
28 Claims. (Cl. 74—805)



1. A gear drive comprising an eccentric and a gear rotatable on a common axis, a stationary gear concentric with said axis, and a planet gear rotatable on the eccentric having two sets of teeth, meshing respectively with the aforementioned gears, the teeth of all of said gears lying in substantially the same plane perpendicular to said axis.

2,750,815
BEARING RESEATING DEVICE
Samuel E. Bozell, William F. Richter, Robert E. Hall, Clayton R. Hall, and Leonard R. Dane, Clay City, Ill., assignors to The Pure Oil Company, Chicago, Ill., a corporation of Ohio
Application June 9, 1952, Serial No. 292,558
1 Claim. (Cl. 77—2)



A cutting device for resurfacing the inner circumferential surface of a counterbore in the end of a crankshaft of an engine, said counterbore supporting a clutch pilot bearing of a detachable power take-off unit, said unit being attached to an arcuate housing surrounding the counterbore end of said crankshaft, said housing having a flat peripheral surface in a plane perpendicular to the axis of rotation of said counterbore and said counterbore being inaccessible for ordinary metal cutting operations without disassembly of said engine, comprising the combination of a lathe tail stock having a housing, said housing having a longitudinal bore open at one end and closed at the other, a spindle slidably mounted in said bore and adapted to project exteriorly from the open end thereof, a cutting tool mounted on the projecting end of said spindle, a rotatable feed screw means journaled in the end of said bore and adapted to operatively engage the inner end portion of said spindle, bracket means attached to said housing to hold said tail stock and cutting tool in cutting relationship with said counterbore within said arcuate housing, said bracket means comprising an elongated supporting member extending transverse the axis of said housing and attached to the outside wall thereof adjacent the open end of said housing, terminal face plates attached to each end of said supporting member and said face plates having means to affix same flush to the flat peripheral surface of said arcute housing.

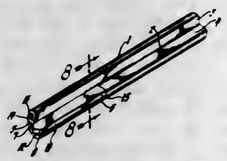
2,750,816
FLUID OPERATED DRILLING UNIT
John H. Mott, Havertown, Pa.
Application May 18, 1951, Serial No. 226,961
9 Claims. (Cl. 77—6)



1. An automatic tool unit comprising a rotatable spindle, a differential piston having a reduced forward end portion and mounting means for said spindle, chuck means for releasably mounting the tool on said spindle, a cylinder closed at one end to form a rear pressure chamber between the said closed end and the piston and supporting the piston for extension and retraction of the reduced end portion at the other end, sealing means at the last-named end of the cylinder forming a forward pressure chamber between the peripheral surface of the reduced end portion of the piston and the confronting wall of the cylinder, a tool-guiding guard member slidably mounted for relative axial movement in both said cylinder and on the said re-

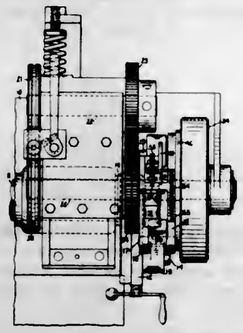
duced portion of the piston, said guard embracing the chuck means and operable to house the tool, means for introducing pressure oil to the forward chamber and for permitting discharge of oil from said chamber when the piston is advanced in the cylinder, means for rotating said spindle, means for introducing pressure fluid to said rear chamber to advance the piston, and valve means to regulate the flow of oil from said forward chamber during advance of the piston thereby regulating the rate of advance of the piston and the guard member.

2,750,817
DRILL
Virgil K. Eder, Indianapolis, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 22, 1952, Serial No. 305,840
2 Claims. (Cl. 77—68)



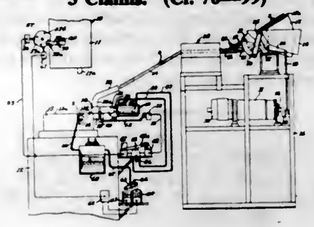
1. A drill comprising a thin-walled tubular member having a cylindrical portion and a portion formed by two flat walls extending the entire length of the tubular member and in planes substantially at 90° to each other whereby the cross-sectional shape of the passage in said tubular member is substantially a three-quarter sector of a circle, a slot at one end of said tubular member in the plane of one of said flat walls, and a flat carbide cutter insert secured in said slot and having cutting edges extending beyond the end of said tubular member, other edges of said flat carbide cutter being substantially flush with the external walls of the tubular member, said carbide cutter insert dividing the passage in the tubular member into two smaller passages.

2,750,818
WIRE FEED MECHANISM AND CONTROL OF SAME
Erwin B. Byam, Wolcott, Conn., assignor to The Waterbury Farrel Foundry & Machine Company, Waterbury, Conn., a corporation of Connecticut
Application February 16, 1951, Serial No. 211,289
3 Claims. (Cl. 78—97)



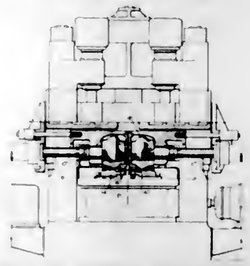
1. Drive mechanism for the feeding means of headers or like machines having a reciprocating gate, said mechanism comprising a rotatable driven member and means for effecting step-by-step rotation of said member including an oscillatable driving member, means drivingly connecting said driven and driving members upon movement of the latter in one direction, hydraulically operated means to render said connecting means inoperative, and means controlled by the position of said gate for preventing operation of said hydraulically operated means.

2,750,819
AUTOMATIC FEED DEVICE
John Joseph Gapstur, Euclid, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Original application November 27, 1946, Serial No. 712,555. Divided and this application November 15, 1952, Serial No. 320,970
3 Claims. (Cl. 78—99)



1. A feed device for use with a forging die press having a table with a die recess therein and a reciprocal plunger with a nose for projecting into said recess, comprising a carriage slidable over said table into and out of the path of said plunger, said carriage having a slug chamber adapted to be shifted from a slug-receiving station out of the path of the plunger to a slug-discharging station over the die recess, a pneumatic jack for shifting said carriage between said stations, a rotatable cam plate mounted adjacent said plunger, a tripping device on said plunger arranged to rotate said plate as the plunger is raised, a switch actuated by said cam plate, a valve controlled by said switch to supply air pressure into one end of said pneumatic jack to shift the carriage to its slug-discharging station, a second switch controlling said valve to admit air pressure to the other end of the jack for retracting the carriage to its slug-receiving station, and means actuated by the carriage itself for controlling operation of the second switch whereby the carriage will be retracted immediately upon advancing to its slug-discharge station.

2,750,820
METHOD FOR ROLL-FORGING AN ANNULAR DISK
Robert O. Greenshields, Grosse Pointe Farms, and Stuart M. Frey, Grosse Pointe, Mich., assignors to The Budd Company, Philadelphia, Pa., a corporation of Pennsylvania
Application August 25, 1953, Serial No. 376,402
3 Claims. (Cl. 80—60)



1. The method of forming a disk which comprises, providing a center-apertured blank having an outer annular zone with thickened inner and outer portions and a narrow downturned depending edge and an inner annular zone separated from the outer annular zone by a thin annular connecting strip, heating the outer zone

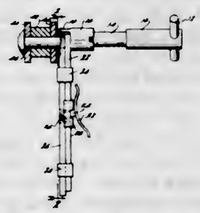
leaving the inner zone unheated, placing the heated blank upon a turntable with the inner zone fitted on a hub and with the depending edge only resting on the turntable, rolling the blank down by repeated passes, as by rotatable radially movable rolls, in which at each pass the metal is thinned in a narrow circumferential band progressively in an outward radial direction, while leaving the thickened heated portions thicker than the portion between them, whereby the thickened inner and outer portions act as reservoirs of heat to allow proper flow of metal without cracking and to return heat to the rolled zone as it is being reduced in successive passes, and also to prevent distortion of the unheated inner zone, and after rolling, trimming off the outer edge and the inner unheated zone at the thin strip.

2,750,821
TOOL FOR REMOVING DAMAGED SCREWS
Arthur R. Hilsinger, Mount Tabor, N. J., assignor to Sadler Bros., Inc., a corporation of Massachusetts
Application December 21, 1954, Serial No. 476,823
1 Claim. (Cl. 81—3.5)



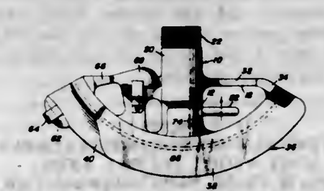
A tool for removing damaged relatively small screws comprising a body having a hardened steel shank extending from one end thereof provided with a plurality of sharpened teeth adapted to be manually forced and embedded in a screw to provide a purchase thereon to turn the same, each of said teeth being similar and triangular in longitudinal cross section providing three sides converging outwardly to a point providing three triangular shaped sides with one of said sides extending in continuation of the outer surface of said shank and the other two sides of said teeth extending from the edges of the said outer side inwardly and converging into a sharp edge providing three sharpened cutting edges extending from said point, and a handle at the other end of said body adapted to be engaged by the palm of the hand for applying a pressure on said tool for embedding the same into the material of the screw to be operated on.

2,750,822
SLIDABLY ADJUSTABLE COTTER PIN BENDING TOOL
Otto Kossuth and Robert George Corrigan, Ypsilanti, Mich., assignors to Detroit Harvester Company, Detroit, Mich., a corporation of Michigan
Application January 12, 1954, Serial No. 403,491
1 Claim. (Cl. 81—15)



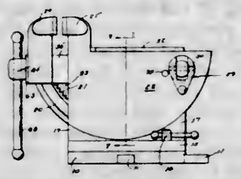
A tool for fastening cotter pins having legs of unequal length comprising a handle portion, a slide disposed at substantially right angles to said handle and slidable relatively thereto, openings in one end of the slide for receiving the cotter pin and the member carrying the same, means carried by the handle operable by rotation thereof for bending over the legs of a cotter pin, said means comprising an eccentrically located shank projecting in an axial direction from said handle and overlapping in spaced relation the edge of said one end of the slide, said shank engaging the longer leg of the cotter pin when the slide is in one position and for bending over the shorter leg when the slide is in another position with the longer leg bent, and a manually operable lever to actuate said slide.

2,750,823
PIPE BENDER WITH INTERCHANGEABLE PIPE-RECEIVING MEMBERS
Edward C. La Casse, Vallejo, Calif.
Substituted for application Serial No. 64,332, December 9, 1948. This application March 22, 1954, Serial No. 417,734
7 Claims. (Cl. 81—15)



1. A pipe bender comprising a base having a socket and an outer arcuate edge, an arcuate body member having inner and outer channels, said inner channel extending from one end of the member past the central part of said member, said outer arcuate edge of said base being received in the inner channel, said outer channel forming a pipe seat, means locking said base to said body member, and means for retaining a pipe in the pipe seat formed by said outer channel.

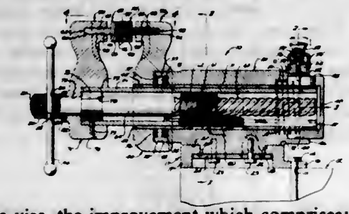
2,750,824
BENCH VISE ADJUSTABLE AROUND HORIZONTAL AXIS BY RACK AND PINION
Vincent J. Di Ruscio, Healdsburg, Calif.
Application December 21, 1953, Serial No. 399,209
1 Claim. (Cl. 81—33)



An improved bench swivel-vise comprising in combination, a swivel base mounted on and interlocked with a fixed base portion and means for locking said bases together, a saddle portion fixed to said swivel portion, an upstanding central portion of said saddle portion comprising a cylindrically concave and upwardly facing toothed rack having arcuate slideways located on its opposite sides, said rack and said slideways having a common horizontal axis of curvature, a vise-jaw superstructure having parallel side walls, said side walls having arcuate guideways complementary to said slideways and arcuately slidable thereon for adjustment of said superstructure about said horizontal axis of curvature, a pinion shaft journaled through said side walls and having central pinion teeth meshing the teeth of said concave rack, a pivoted crank handle pivoted to said pinion shaft for rotating said pinion shaft in order to adjust said superstructure about said axis of curvature,

said handle having a cam portion for locking said superstructure to said rack in any adjusted position, said superstructure having a raised vise-jaw-portion, a slidable jaw having a tubular guide portion which is square in cross section, said square tubular guide portion having its longitudinal axis normally extending horizontally, said square tubular guide portion being slidable in a slideway of square cross section, said square slideway being located in the superstructure between said side walls and below said raised vise-jaw portion, the square tubular portion of the slidable jaw merging into a solid front portion which is provided with a bore having its longitudinal axis coinciding with the longitudinal axis of said square tubular portion, a vise-operating screw journaled in said bore in said solid front portion, a sleeve nut threadedly engaged over the rear portion of said screw member and having its extreme rear end portion fixed between said side walls by means of a pin passing through said nut portion and the side walls, a forward end of said concave rack extending beyond said upstanding central portion and constituting a stop member for said superstructure, said stop member being engaged by the solid front portion of said slidable jaw when said longitudinal axis of said square tubular portion reaches its normal horizontal position.

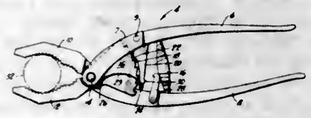
2,750,825
VISE HAVING JAW SUPPORTS ROTATABLE AS A UNIT ABOUT PLURAL AXES
Charles H. Clarke, North Hollywood, Calif.
Application March 29, 1954, Serial No. 419,185
10 Claims. (Cl. 81—41)



1. In a vise, the improvement which comprises: a body section; means defining a hollow bore within said body section communicating with opposite ends of said body section; a hollow shaft extending through said hollow bore and providing a shoulder means; a jaw support secured to one end of said hollow shaft externally of said body section; a plurality of teeth secured to one end of said body section around said hollow bore; a plurality of teeth secured to said jaw support around said hollow shaft adjacent said one end of said body section, said teeth being engageable with each other to prevent rotation of said jaw support with respect to said body section; a spring-actuated stop pin engaging said shoulder means to hold said teeth in engagement with each other but retractable to permit disengagement thereof; a second shaft and means for moving same longitudinally within said hollow shaft; and a jaw support carried by said second shaft opposite said jaw support that is secured to said hollow shaft.

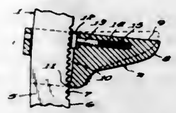
2,750,826
PLIERS
Julius E. Lisbon, Oakland, Calif.
Application June 7, 1955, Serial No. 513,755
3 Claims. (Cl. 81—84)

1. Pliers having a first member having a first jaw portion and a first handle portion with a first pivot point between said jaw and handle portions, a second handle portion, a short arm pivoted at one end to said first pivot point and pivoted at the opposite end to said second handle portion, said second handle portion having a depending arm, said depending arm having a tooth thereon extending toward the first pivot point, a second member having a second jaw portion and an arcuate segment, said segment having a series of teeth thereon, said second member being pivoted between the jaw and arcuate segment portion to said first member at said first pivot point,



a spring attached to and extending between said depending arm and said arcuate segment, the point of attachment of the spring to the arcuate segment being below an imaginary line drawn between the first pivot point and the point of attachment of the spring to the arm.

2,750,827
SPRING-BIASED, SLIDABLE INNER JAW WRENCH
John Evans, La Crescenta, Calif.
Application December 16, 1954, Serial No. 475,655
1 Claim. (Cl. 81—97)



A wrench for effecting caster and camber adjustments of the front wheels of motor vehicles, said wrench comprising a handle and shank component having a fixed jaw formed integrally therewith and a movable jaw component slidably mounted on said handle and shank component; said handle and shank component being of substantially uniform, rectangular cross section throughout its length and said fixed jaw having a nut engaging face disposed at less than a right angle to the general direction of the length of said handle and shank component and said handle and shank being curved throughout its length with the concave edge deriving therefrom disposed at the side from which said fixed jaw projects; said movable jaw component having a rectangular opening extending therethrough having a width closely fitting the sides of said handle and shank component and a length greater than the width of said handle and shank component sufficient to permit rocking movement of said movable jaw on said handle and shank component, a jaw having a nut engaging face opposed to said nut engaging face of said fixed jaw on said movable jaw component, a series of ratchet teeth on said concave edge of said handle and shank component, a spring biased plunger means carried by said movable jaw component yieldingly engaging said concave edge of said handle and shank component adjacent to the jaw face portion of said movable jaw component, and a detent element carried by said movable jaw component disposed at the end of said rectangular opening remote from said plunger projecting into said opening and engageable with selected ones of said ratchet teeth under rocking movement of said movable jaw component derived from said plunger means; said plunger means comprising a bore in said movable jaw component disposed adjacent to and parallel to said nut engaging jaw face thereof and extending from within said rectangular opening to a distal end adjacent the distal end of said movable jaw component, a compression spring seated in said end of said bore, a plunger shank slidably mounted in said bore and engaging the end of said spring, and a head on said plunger disposed in and engaging the side walls of said rectangular opening and urged by said spring into yielding engagement with the concave edge of said handle component; said head of said plunger having a dimension in a direction longitudinally of said handle which is equal to the distance between at least three adjacent ones of said teeth with resultant capacity to slide over said teeth incident to adjustment of said movable jaw on said handle component.

2,750,828
MAGNETIC SOCKET WRENCH
Le Roy J. Wendling, Dayton, Ohio, assignor to The Apex Machine & Tool Company, Dayton, Ohio, a corporation of Ohio
Application December 14, 1953, Serial No. 397,913
2 Claims. (Cl. 81—125)



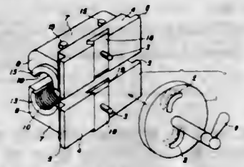
1. A magnetic socket wrench comprising an integral shank formed with a noncircular shoulder thereon and with a circular sleeve projecting outwardly therefrom, a bushing of nonmagnetic material within said sleeve, a permanent bar magnet fixedly mounted within said bushing and having its free end projecting beyond said sleeve, a hollow socket having a circular bore receivable over said sleeve in guiding and supporting relation thereon and having a driving socket at its inner end receivable in driving relation on said noncircular shoulder, said hollow socket having a recess at its outer end for receiving a workpiece, and means for releasably securing said socket upon said sleeve in predetermined axial relation thereon such that said magnet projects from said bore a limited distance into a bottom portion of said recess to locate the free end of said magnet in close magnetic relation with a driven workpiece.

2,750,829
POWER DRIVE AND LOCKING MECHANISM FOR ADJUSTABLE JAW WRENCHES
William A. Barnes, Utica, and Walter J. Rozmus, Whitesboro, N. Y., assignors to Utica Drop Forge & Tool Corporation, a corporation of New York
Application August 18, 1953, Serial No. 374,869
4 Claims. (Cl. 81—165)



1. In a wrench having a wrench body and at least one movable jaw, a manual device to adjust the jaw, a first drive means to drive said manual device, a clutch between said first drive means and said manual device, said first drive means being shiftable to move the clutch between a clutch engaging and a clutch disengaging position, a second drive means, relatively non-rotatable joint means joining said first and second drive means; and releasable holding means pivotally joining said second drive means to said wrench body, whereby said first drive means may be moved between said positions without releasing said second drive means from said wrench body to lock or release said manual device, and whereby said second drive means may be released from said body to drive the manual means when said first drive means is in said clutching position.

2,750,830
LATHE THREAD CHASING HALF-NUT ASSEMBLY
Walter Wonsowicz, Gary, Ind., assignor to United States Steel Corporation, a corporation of New Jersey
Application December 9, 1953, Serial No. 397,210
3 Claims. (Cl. 82—23)



3. In a half-nut assembly for driving engagement with the lead screw of a lathe, an upper carriage and a lower carriage, a pair of half-nuts, means detachably mounting said half-nuts respectively on said upper and lower carriages, a pair of vertically spaced operating pins respectively projecting laterally from said upper and lower carriages for operating said carriages vertically to move the half-nuts mounted thereon into and out of driving engagement with a lathe lead screw, and means for adjusting the driving fit of said half-nuts with the lathe lead screw engaged thereby comprising a pair of keys to which said pins are respectively secured, each of said carriages having a keyway mounting one of said keys, and set-screws for locking each key against movement in its keyway.

2,750,831
METHOD OF MANUFACTURING ELECTRIC BLASTING CAPS
Marshall Long, Overland Park, Kans., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application December 4, 1950, Serial No. 199,078
3 Claims. (Cl. 86—1)

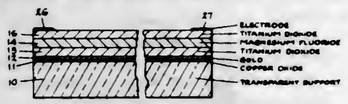


1. The method of manufacturing electric blasting caps which comprises; inserting a pair of conductor plates of a match head into an elastic insulating sleeve with the igniter bead of the match head beyond one end of the sleeve and with a layer of insulation between the conductor plates, said sleeve having a central bore and said conductor plates having a portion shaped to be received within said bore, inserting lead wires which are free of attachment with the conductor plates into the end of the sleeve opposite the igniter bead and into contact respectively with the conductor plates at a position within the bore, inserting the assembly of sleeve, match head, and unattached lead wires into a cup, and then crimping the cup about the assembly to an extent such as to retain said conductor plates, lead wires, and sleeve in assembled relationship within the cup and to maintain electrical contact between said lead wires and said conductor plates respectively.

2,750,832
ELECTRICALLY CONDUCTING FILTERS AND MIRRORS
Willard L. Morgan, Pittsburgh, Pa., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio
Application June 8, 1951, Serial No. 230,557
7 Claims. (Cl. 88—1)

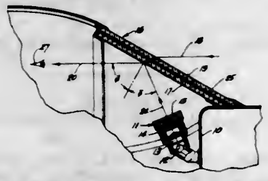
1. In a partially transparent and partially reflective electrically conducting unit, a transparent support body, a transparent electrically conducting layer of gold having a thickness of not more than 150 Angstrom units secured

to a surface of said support body, and alternately arranged substantially transparent layers of titanium dioxide and magnesium fluoride applied one upon the other and upon said layer of gold, said layers of titanium dioxide and magnesium fluoride coacting to reflect a portion of



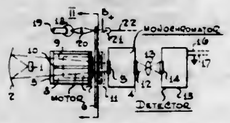
the spectrum and to transmit another portion thereof, and said electrically conducting layer of gold serving as an electrical conductor while enabling light rays transmitted by the layers of titanium dioxide and magnesium fluoride to pass therethrough.

2,750,833
POLARIZER MEANS FOR ELIMINATING DOUBLE IMAGES IN GUNSIGHTS
Arthur G. Gross, Torrance, Calif., assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif.
Application May 17, 1952, Serial No. 288,387
3 Claims. (Cl. 88—2.3)



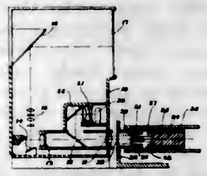
1. In a gun sighting system, a source of light, a transparent protective relatively thick shield having outer and inner surfaces at least partially reflective of light incident thereon and set at an angle to and traversed by the optical axis of the system, means for directing a collimated beam of light modulated with the form of a gun sight reticule from said source to be incident on the adjacent face of said shield at the polarizing angle, means interposed in the path of said beam to cause plane polarization thereof, the said polarizing means being so oriented as to cause the polarization plane of beam to make an angle with its plane of incidence on said outer surface of the shield, the last said angle being any whole number multiple of 90 degrees, and a plate of optically active means laminated within said shield to lie in the path of refracted components of said beam of such thickness as to cause rotation of the plane of polarization of the beam components through an angle which is any odd whole number multiple of 90 degrees before the said beam components become incident upon the inner surface of the remote face of the shield, whereby the light from the reticle is reflected by said inner surface into the optical axis.

2,750,834
SPECTROMETRIC METHOD AND APPARATUS FOR DETERMINING RADIATION RATIOS
Marcel J. E. Golay, West End, N. J.
Application February 25, 1952, Serial No. 273,195
21 Claims. (Cl. 88—14)



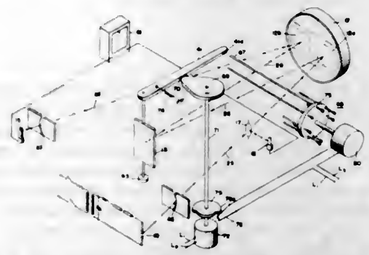
17. Spectrometric ratio measuring apparatus comprising means for generating two beams of radiation, means for modulating said beams at the same frequency to produce two sets of discrete pulses having a phase difference between 90 and 180 degrees, detecting means for converting said sets of pulses to an electrical signal varying in phase in measure of the ratio of the intensity of radiation in said modulated beams, generating means for producing a reference signal of said frequency and means for combining said reference signal and electrical signal to produce a D. C. signal having an amplitude which is in measure of the ratio of radiation in said beams.

2,750,835
BORE GAGE ATTACHMENT FOR CONTOUR PROJECTOR
Louis C. Nosco, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application October 25, 1954, Serial No. 464,378
2 Claims. (Cl. 88—14)



1. A gaging attachment for an episcopic projector of the type in which the episcopic illumination comes through at least the first objective of the projector lens system which forms an image on a screen carrying a gaging pattern, comprising a transparent sheet having a reticle thereon, means, for supporting the sheet with the reticle in alignment with, and at a fixed distance in front of, the objective, a mirror positioned to receive light from the reticle and to reflect it back through the reticle to the objective, the distance from the reticle to the mirror plus the distance of the mirror to the objective being such that the reticle image is focused on the screen, means for tiltably supporting the mirror in said position, and a spring urged feeler on the mirror support for resiliently engaging the surface to be gaged and for tilting said mirror.

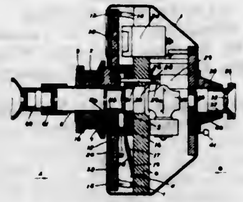
2,750,836
MONOCHROMATOR SYSTEM FOR SPECTRO-CHEMICAL ANALYSIS
William G. Fastie, Owings Mills, Md., assignor to Leeds and Northrup Company, Philadelphia, Pa., a corporation of Pennsylvania
Application July 27, 1954, Serial No. 446,106
17 Claims. (Cl. 88—14)



1. In an astigmatic optical system including reflecting means and dispersing means disposed for directing dispersed radiant energy to said reflecting means, said dispersing means being disposed on the central axis of said system, means for improving the spectral resolution of the system when using slits of substantial length comprising a circular slit for passage therethrough of radiant

energy from a source to said dispersing means, a like circular slit for receiving thereat an image of said first-named slit formed by reflected substantially monochromatic dispersed radiant energy from said source, each point of said first-named circular slit being imaged as a short straight line at said last-named circular slit, said circular slits being disposed opposite each other on the circumference of a common circle having its center on said axis of said optical system and in the focal plane of said reflecting means.

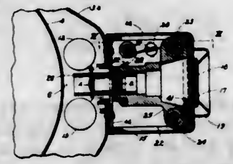
2,750,837
OPTICAL PYROMETERS
Peter Leslie Kershaw, West Twyford, London, England, assignor to Tinsley (Industrial Instruments) Limited, London, England, a British company
Application June 25, 1952, Serial No. 295,506
Claims priority, application Great Britain July 2, 1951
2 Claims. (Cl. 88—22.5)



1. In an optical pyrometer, the combination of a casing, a support fixedly mounted within said casing, a slide wire extending in a circular arc and fixed on said support, a rheostat fixed on said support concentrically with said slide wire, a disc mounted within said casing both for rotation relatively to said support and for axial movement relatively thereto, a galvanometer contact carried by said disc and engaging said slide wire, a carrier rotatably mounted within said casing, a contact mounted on said carrier and engaging said rheostat, a clutch element on said carrier, a co-operating clutch element carried by said disc, a bridge circuit including two ratio arms, means electrically connecting one end of said slide wire to one of said ratio arms, an electrical connection between the other end of said slide wire and the other of said ratio arms, a lamp including in said electrical connection, said lamp having a filament, means for comparing the brightness of an object of which the temperature is to be measured, with the brightness of the lamp filament, a galvanometer, means connecting one terminal of said galvanometer to said galvanometer contact, means connecting the other terminal of said galvanometer to the junction of said ratio arms, a circuit connecting said rheostat in shunt with said slide wire and said lamp, a battery in said circuit, and an operating member on said disc whereby said disc may be moved axially to effect engagement of the clutch elements and then rotated to take the carrier with it to effect simultaneous movement of the galvanometer contact with the rheostat contact along the slide wire and the rheostat respectively after which the clutch elements can be disengaged by reverse axial movement of the disc and the galvanometer contact can be moved independently of the rheostat contact by further rotation of the disc.

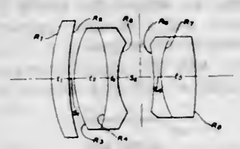
2,750,838
COMPUTING WEIGHING SCALE AND OPTICAL PROJECTION VIEWING MEANS
John A. Wells, Louisville, Ky., assignor to Stimpson Computing Scale Company, Louisville, Ky., a corporation of Kentucky
Application August 20, 1952, Serial No. 305,356
10 Claims. (Cl. 88—24)

1. A computing weighing scale having a sight plane comprising: a frame; a cylindrical, computing chart having a base reference line coinciding with the sight plane under no load conditions; a housing enclosing the chart, providing a sight plane slot extending lengthwise along the adjacent outer face of the chart in a direction generally parallel to the rotational axis of the chart, and forming an enclosed alleyway extending lengthwise along the outer side of said sight plane slot, said housing also providing another slot extending lengthwise along an outer



longitudinal side of said alleyway; an image screen over said other slot; and one optical means mounted within said alleyway on an adjacent portion of the housing to project data from the chart upon said screen; said housing including a stationary longitudinal cover detachably mounted on the housing proper in position to extend lengthwise along the alleyway so as to enclose the alleyway and provide for access to the alleyway space when detached.

2,750,839
THREE COMPONENT PHOTOGRAPHIC OBJECTIVE COMPRISING FIVE ELEMENTS
Willy E. Schade, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application August 3, 1953, Serial No. 371,947
9 Claims. (Cl. 88—57)



1. A photographic objective consisting of two cemented doublets enclosing a diaphragm space and a simple positive element axially aligned in front thereof, the middle component being negative and all three components being concave toward the diaphragm space, in which the simple front component has a refractive index greater than 1.68 and is so shaped that the curvature of the front surface thereof exceeds 1.1 times the curvature of the rear surface thereof by between 0.5/f and 0.85/f where f is the focal length of the objective, the power of the cemented surface of the middle component is between ⅙ f and ⅛ f, and each of the two rear components consists of a biconvex element cemented to a biconcave element, the refractive index of the rear element of each doublet exceeding that of the front element thereof by between 0.10 and 0.17, the radius of curvature of each optical surface of the objective being between f/6 and 5 f, the over-all length of the objective being between 0.35 f and 0.55 f, and each refractive index being between 1.55 and 1.90.

2,750,840
VIBRATION DAMPED MIRRORS
Clifford Sklarek, Los Angeles, Calif.
Application December 28, 1953, Serial No. 400,515
3 Claims. (Cl. 88—98)

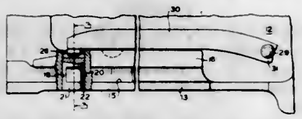
1. A vibration damped rear vision mirror comprising: a mirror proper adapted to be adjustably supported in an automotive vehicle adjacent the windshield thereof, and a spring arm attached to said mirror proper at each side of the point of support thereof, said arms being attached

to the mirror proper and extended outwardly towards the respective ends of the mirror proper and towards the windshield, said arms being of such length that, when



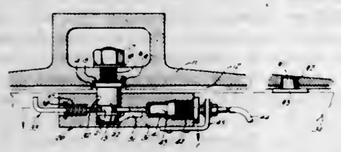
the free ends thereof are in contact with the windshield, said arms are under tension in any adjusted position of the mirror proper and the tension in one arm opposes and counterbalances that in the other arm.

2,750,841
EXTRACTOR SPRING RETAINER FOR A FIREARM
Frank C. La Borde, Springfield, Mass., assignor to the United States of America as represented by the Secretary of the Army
Application March 24, 1953, Serial No. 344,483
5 Claims. (Cl. 89—1)
(Granted under Title 35, U. S. Code (1952), sec. 266)



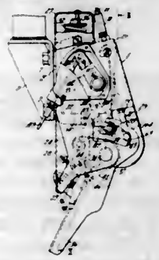
1. In a firearm having a receiver and a cover hingedly mounted thereto, an arched flat spring secured at one end to the cover, and a retainer transversely mounted in the cover, said retainer having an undercut portion for cooperation with the opposite end of said spring whereby said spring is resiliently retained in the cover.

2,750,842
EXPLOSIVE JETTISON DEVICE FOR AIRBORNE STORES
Walter H. Myers, Chalfont, Pa., assignor to the United States of America as represented by the Secretary of the Navy
Application June 9, 1954, Serial No. 435,655
5 Claims. (Cl. 89—1.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A releasable attachment means for detachably interconnecting first and second objects, said attachment means comprising a housing mounted adjacent the surface of one object, a generally cylindrical recess extending inwardly of the housing from its exposed surface, an elongated passageway within said housing disposed transversely of and intersecting said recess, a generally cylindrical stud member projecting from a second object and arranged to fit snugly within said recess in the housing, an indentation extending inwardly of said stud member from its outer surface intermediate the ends of said stud member and arranged to be disposed in alignment with said elongated passageway when the stud member is fully inserted within the recess, an elongated retaining member mounted for slidable movement within the passageway between a first extreme position in engagement with the indentation in said stud member and a second extreme position out of engagement with the indentation in said stud member, a firing chamber within said housing and in communication with the end of said passageway most remote from the second extreme position of said retaining member and a duct interconnecting said passageway and the innermost end of said recess, said duct being so disposed that it is closed with the retaining member in its first extreme position and opened when said retaining member is moved to its second extreme position, whereby detonation of a single explosive charge within said firing chamber is sequentially effective to displace the retaining member from its first extreme position to its second extreme position and then to forcibly displace said stud member from its fully seated position within said recess.

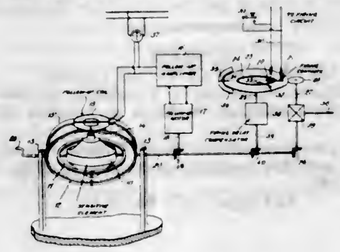
2,750,843
GUN FIRING SYSTEM
Robert Carlin, Milwaukee, Craig W. Cannon, Waukesha, and Joseph M. Mather, West Allis, Wis., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application December 23, 1954, Serial No. 477,192
10 Claims. (Cl. 89—27)



1. In a gun firing system, the combination of a support, a gun trigger control element pivotally mounted on said support, a releasable coupling mechanism including an actuating element rotatably mounted on said support and cooperable with said control element so as to impart a firing stroke to the latter by rotation of said actuating element from a cocked to an uncocked position, resilient means operatively interposed between said support and actuating element so as to be tensioned by rotation of said actuating element from said uncocked to said cocked position, a sear element adjustably mounted on said support for movement into and out of locking engagement with said control element while the latter is in a starting position for said firing stroke, trip means cooperable with said coupling mechanism so as to disconnect said actuating element from said control element upon movement of said actuating element from said cocked toward said uncocked position, and auxiliary resilient means operatively connected with said control element so as to urge the latter toward said starting position.

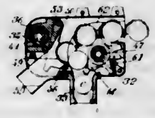
2,750,844
FIRE CONTROL APPARATUS
Arthur P. Davis, New York, N. Y., assignor to American Bosch Arma Corporation, a corporation of New York
Application September 1, 1936, Serial No. 98,877
10 Claims. (Cl. 89—28)

1. In fire-control apparatus for a gun mounted on an unstable support, the combination of stable means on the support, means movable in accordance with the movement of the support relatively to said stable means, a relatively fixed indicating member on the support, a relatively movable indicating member adapted to align with the relatively fixed member, operative connections between said movable member and said movable means, and means responsive to the velocity of movement of the movable means for displacing the relatively fixed member to advance the time of alignment of the rela-



tively movable member therewith, said members being adapted to indicate the time of firing of the gun by their alignment.

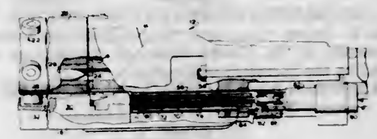
2,750,845
BELT FEED MECHANISMS FOR AUTOMATIC FIREARMS
Bernard Maillard, Geneva, Switzerland, assignor to Society "Brevets Aero-Mecaniques," S. A., Geneva, Switzerland, a society of the Republic of France
Application March 25, 1952, Serial No. 278,349
Claims priority, application Luxemburg March 27, 1951
7 Claims. (Cl. 89—33)



1. For use in connection with an indirect feed automatic firearm, a belt feed mechanism which comprises, in combination, a cartridge belt constituted by a plurality of cartridges and open links for interconnecting them, a frame, a rotor journalled in said frame provided with teeth engaging between the cartridges of said belt, means for rotating said rotor step by step in response to the firing of every shot by said firearm, guiding means carried by said frame around a portion of said rotor for preventing outward radial movement of the cartridges engaged by said rotor and still engaged with at least one link of said belt, a part movable in said frame away from and toward said rotor adapted to cooperate with one of the cartridges present in said rotor to be pushed by said cartridge away from said rotor at the beginning of every step of the rotation thereof, spring means interposed between said frame and said part for urging the latter toward said rotor to return it into its initial position at the end of every step, and a hook carried by said part to engage under the front end of the link surrrounding the first cartridge of said belt, whereby the movement of said part away from said rotor causes said hook to pull off said link from said cartridge.

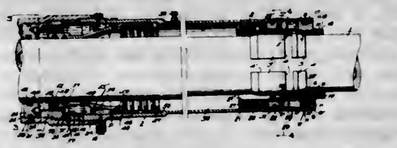
2,750,846
RETRACTOR
Donald P. Grover, Chicago, Ill., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Army
Application September 3, 1954, Serial No. 454,238
8 Claims. (Cl. 89—33)

1. In a weapon including a recoil unit, a drum with cartridge chambers pivoted on the recoil unit to include a firing position for the chambers, and an actuator for engagement with the drum biased to a battery position for selectively retaining the chambers in the firing position and axially disposed for reciprocal slidable operation including rearward strokes to successively rotate the chambers from the firing position responsive to continued discharge of the weapon, a retractor for preventing normal discharge of the weapon comprising an electric motor operable in reverse directions and a member for propelling the actuator in a portion of one of the



rearward strokes to rotate the chambers from the firing position and for sliding forwardly to permit the actuator to return to the battery position to rotate a chamber to the firing position respectively responsive to operation of said motor in said reverse directions.

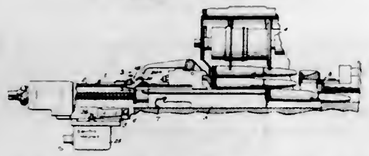
2,750,847
PNEUMATIC RECUPERATOR FOR A GUN
Victor F. Lucht, Arlington, Va., assignor to the United States of America as represented by the Secretary of the Army
Application May 17, 1951, Serial No. 226,925
7 Claims. (Cl. 89—43)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A pneumatic recuperator for guns operative in response to compressed gas confined to a space between the barrel and the cover by means of a stationary and a movable sealing means, said cover being secured at its rear end to the cradle of the gun, said stationary sealing means being located in the rear end of said cover and comprising a first retainer ring, a first nut for securing said first retainer ring against a shoulder in said cradle, a follower having a rear portion, a front portion, and a slanting portion connecting said rear portion to said front portion, said slanting portion including a flange portion, said rear portion and flange portion being provided with a plurality of aligned holes to permit passage of the sealing fluid to the rearward areas of said stationary sealing means, a second nut limiting the movement of said follower in one direction, a first spacer and a helical spring, said spring being interposed between said front portion and said first spacer thereby limiting the movement of said follower in the opposite direction, a pressure valve in said cover, and packings mounted in said first retainer ring, in said rear portion and in said front portion; said barrel having quadrantal bosses defining a circular groove and four aligned spline grooves; said movable sealing means being located in the front end of said cover and comprising a guide mounted over said bosses, said guide having four arcuate splines in slidable relation to said spline grooves, a key mounted in said circular groove for locking said guide to said barrel for movement therewith in one direction, a third nut threadably engaging said guide for locking said guide to said barrel for movement therewith in the opposite direction, a fourth nut mounted over said third nut threadably engaging said guide, said fourth nut including a pressure valve, a second retainer ring and a second spacer fastened to said fourth nut, a helical spring interposed between said second retainer ring and said second spacer, and packings mounted in said second retainer ring, in said fourth nut, and in the

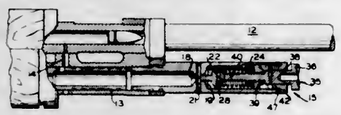
space between the third and fourth nut; and means for supplying gas under pressure to the space between said cover and said barrel intermediate said two sealing means.

2,750,848
DOUBLE FEED PREVENTION DEVICE
Charles P. Boyer, Glenview, Ill., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Army
Application April 16, 1954, Serial No. 423,868
3 Claims. (Cl. 89—137)



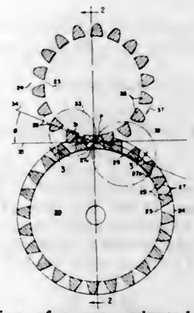
1. In a rapid fire gun having a breech bolt movable between battery and retracted positions, a sear spring-urged into position engaging and holding said bolt in retracted position, electro-magnetic means connected with said sear to hold the same free of said bolt when energized, a normally closed switch associated with the breech chamber of said gun and opened only by a cartridge casing therein, first and second contacts, a first lead connecting said first contact with ground and including said switch, a second lead connecting said second contact directly with ground, a slider adapted to engage either of said contacts, spring means urging said slider into position against said second contact, a source of voltage, a lead connecting said slider with said source and electro-magnetic means with ground and including a firing switch, and means responsive to movement of said bolt to retracted position to move said slider from said second to said first contact.

2,750,849
GAS RELIEF VALVE FOR FIREARMS
Earle M. Harvey, Agawam, Mass., assignor to the United States of America as represented by the Secretary of the Army
Application April 26, 1954, Serial No. 425,771
2 Claims. (Cl. 89—193)
(Granted under Title 35, U. S. Code (1952), sec. 266)



2. For a firearm having a gas cylinder, a gas regulator including a body member threadably mounted to the gas cylinder, said body member being provided with a longitudinal bore communicating with the gas cylinder, a larger diameter chamber extending therefrom and an annular shoulder formed thereby, a plurality of ports extending radially to the outside of said body from said bore and between the ends thereof, a reciprocable valve member having a body portion slidably mounted in said chamber and a rod portion slidably mounted in said bore for releasably blocking said ports during movement of said body portion from engagement with said shoulder to a relief position, said valve member being movably responsive to gas pressure in the gas cylinder, a spring biased against said body portion to resist movement of said valve member by said gas pressure, a rotatably mounted adjustment member extending longitudinally into said chamber through said spring for engagement by said valve member when in said relief position, a follower member threadably mounted on said adjustment member for cooperation with said spring to adjust the preload thereof when said adjustment member is rotated, and indent means assisted by said spring for indexing said adjustment member in one of a series of predetermined positions.

2,750,850
METHOD OF CUTTING GEARS
Ernest Wildhaber, Brighton, N. Y., assignor to The Gleason Works, Rochester, N. Y., a corporation of New York
Original application October 30, 1951, Serial No. 253,781. Divided and this application October 7, 1952, Serial No. 313,383
16 Claims. (Cl. 90—9.4)



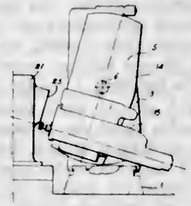
1. In the cutting of a gear adapted to mesh with a mating member running on a substantially parallel axis, the gear having its teeth extending axially from the body thereof, with the inter-tooth spaces open at both radial ends thereof, and with the working faces of the teeth being surfaces of revolution whose axes are parallel to the gear axis, the method which comprises rotating an annular cutter in engagement with the work while holding the latter against rotation, with the axis of the cutter parallel to the axis of the work and so spaced therefrom that the cutter simultaneously produces the opposite working faces of spaced teeth of the work, and with the axis of the cutter in a plane that contains the mean pitch point of a tooth face being produced and that is inclined to the pitch plane, that passes through said pitch point, by the pressure angle at said point.

9. The method of cutting a circular face toothed member which comprises rotating two concentric annular cutters with their axis so disposed, parallel to the axis of the member, that one cutter simultaneously operates in spaced tooth spaces of the member to produce the opposite working faces of spaced teeth and the other cutter operates simultaneously in two other tooth spaces of the member to remove stock therefrom.

2,750,851
MILLING AND BORING MACHINE WITH A TILTABLE HEADSTOCK
Charles William Berthiez, La Cote Bizy Vernon, France, assignor to Societe Anonyme dite: Societe Nouvelle de Construction de Machines-Outils et d'Outillages Procédés C. W. B., Paris, France
Application August 13, 1951, Serial No. 241,680
Claims priority, application France May 30,1951
6 Claims. (Cl. 90—17)

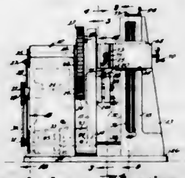
1. A machine tool comprising a work piece supporting base providing a surface in a horizontal plane on which to support a work piece, an upright disposed adjacent and offset horizontally from said work piece supporting base in a given direction, a pivot stud supported by said upright with its pivotal axis horizontal and above said horizontal plane surface of said base, said pivot stud being disposed with its axis transverse to said given direction, an elongated member supported adjacent the center

of its length on said pivot stud for pivotal movement of said member on said stud axis to and from positions of said member at either side of a vertical middle position, said elongated member providing thereon a slideway disposed in a plane perpendicular to said pivotal axis and extending vertically in said middle position and inclined to the vertical in positions at either side of said middle position, said slideway of said member in any of said positions having a substantial extent lengthwise of said member with a major portion of said length extending above said horizontal surface of said work piece supporting base, a headstock supported by said member for movement of said headstock along said



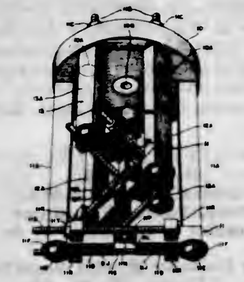
slideway of said member upwardly and downwardly in any of the several angularly related positions of said member and its slideway about said pivotal axis, a tool carrying spindle supported by said headstock for rotation thereof on its axis with said axis of said spindle in a plane perpendicular to said pivotal axis of said member, said spindle extending parallel to its axis transversely of the length of said slideway of said member toward said work piece supporting base in cantilever relation to said upright, and means operatively connected to said upright and to said pivotally supported elongated member and operable to effect said pivotal movement of said member on said stud to and from said positions at either side of the vertical.

2,750,852
SHAPER
Guillaume F. Selvaggio and Pierre C. Ringenbach, New York, N. Y.
Application July 28, 1953, Serial No. 370,723
1 Claim. (Cl. 90—24)



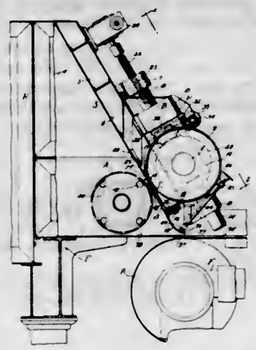
In a machine tool, the combination which comprises a vertically disposed head mounted on a base, a standard spaced from the head and also mounted on the base, a vertically positioned swinging arm having a longitudinally disposed slot therein, said arm being pivotally mounted in the lower part of the head providing a bed, an eccentrically positioned roller journaled in the head and extended into the slot of the bed for reciprocating the bed, work clamping means adjustably mounted on the bed, a carriage mounted to slide vertically on the standard, a plate mounted to slide horizontally on the carriage, means for adjusting the position of the plate on the carriage, means for manually adjusting the position of the carriage on the standard, a tool holder carried by the plate mounted to slide horizontally on the carriage and positioned whereby a tool clamped therein is adapted to cut work clamped to the bed, and means extended from the head to the standard for feeding the plate with the tool holder thereon with the tool traveling across the work with intermittent movements.

2,750,853
WIRE FINISHING APPARATUS
George John Stevens, Baltimore County, Md., assignor to Armco Steel Corporation, a corporation of Ohio
Original application July 25, 1949, Serial No. 106,705. Divided and this application November 4, 1952, Serial No. 318,590
4 Claims. (Cl. 90—33)



1. Apparatus for mechanically finishing metal stock, comprising, in combination, a centrally-orificed base plate, through which orifice the metal stock is supplied, a multiplicity of cutting elements supported by said base plate symmetrically about the stock and in spaced relation from each other and each with negative rake respecting said stock, and individual spring means associated with each said cutting element for yieldingly urging the cutting element against the stock.

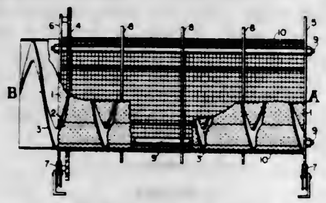
2,750,854
ADJUSTABLE SLICE
Theodore A. McAra, Downingtown, Pa., assignor to Downingtown Manufacturing Company, Downingtown, Pa., a corporation of Pennsylvania
Application March 26, 1953, Serial No. 344,737
4 Claims. (Cl. 92—44)



1. An adjustable slice of the character described for the head box of a paper making machine comprising an apron forming a lower slice lip, a front wall mounted in fixed rearwardly inclined relation with said apron and having the lower edge thereof spaced above said apron to leave a gap therebetween extending across the width of the head box, a frame supported on the lower portion of said inclined wall for up and down adjusting movement along said inclined wall toward and away from said apron, a structural member carried by said frame for rotational movement thereon about a horizontal axis parallel with said wall and for movement with said frame with respect to said apron, a slice plate mounted on said structural member for rotation therewith in position to extend across said gap and including an upper slice lip depending from the lower edge thereof, means for effecting adjusting movement of said frame on said wall to

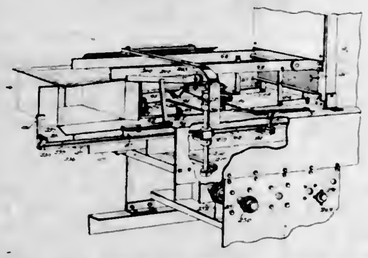
vary the effective slice opening below said upper slice lip, means for rotating said structural member on said frame to vary the horizontal position of said upper slice lip, a sealing strip mounted on the lower edge of said frame and depending therefrom along the upper edge of said gap, a cylindrically curved surface portion on said slice plate located substantially coaxially with said axis of said structural member for maintained sealing engagement with said sealing strip throughout the rotational movements of said structural member, and said curved surface portion extending substantially tangent to the remainder of said slice plate and having a relatively large radius to provide for smooth flow of the stock therepast to said slice opening.

2,750,855
DEWATERING OF PULP
Elbert C. Lathrop, Peoria, Ill., assignor to the United States of America as represented by the Secretary of Agriculture
Application December 20, 1951, Serial No. 262,641
3 Claims. (Cl. 92—20)
(Granted under Title 35, U. S. Code (1952), sec. 266)



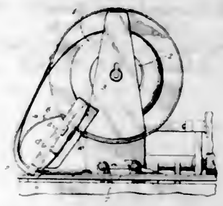
1. The method comprising providing a nuclear mass of partially dewatered pulp possessing the characteristics of a solid in contact with a relatively thin film of pulp, said film containing sufficient water to possess the characteristics of a fluid while removing water from the system, said film being of a generally undulant character, simultaneously causing the nuclear mass to move in contact with the film whereby the motion conforms to the undulant character of the film and whereby the mass agglomerates pulp from the film upon itself, said agglomerated pulp being thereby transferred from fluid to solid character, and recovering said agglomerated mass of pulp.

2,750,856
CASE HANDLING APPARATUS
John L. Ferguson and Richard C. Talbot, Joliet, Ill., assignors to J. L. Ferguson Company, Joliet, Ill., a corporation of Illinois
Application October 28, 1950, Serial No. 192,780
4 Claims. (Cl. 93—53)



1. In a case handling machine, a reciprocating carriage, a container for receiving and holding folded cases stacked therein with the walls of said cases lying substantially horizontal, a case ejector mounted on said carriage for engaging one edge of the lowermost case in said container and for moving said case horizontally out of said container to a case opening and flap folding position when said carriage moves in one direction, a track for supporting said cases as they are removed from said container, a movable stop lever for engaging the forwardmost folded edge of each successive case after said case has been completely removed from said container by said case ejector, holding means including a movable blade-like member for entering each successive case and holding the rearward edge of the lower forward wall of said case downwardly against said track, flap spreading means including a member movable in a direction substantially normal to the plane of said flaps for bending said flaps to form a V-shaped opening as said case ejector moves successive cases toward said stop lever, stationary guide means located adjacent said track for entering and maintaining said V-shaped openings as said case ejector advances the successive cases toward said stop lever to facilitate entrance of said holding means into said case, case opening means including a pivoted arm for rotating the lower rearward side of each successive case forwardly and upwardly about the forward edge thereof, mechanical means for folding at least three of the closing flaps at one end of each successive case to closed position, mechanical means for folding the closing flaps at the other end of each successive case outwardly of the case, and case propelling means for advancing each successive case from said case opening and flap folding position to a case loading position, said last-named means being mounted on and driven by said carriage, whereby said carriage, said case ejector and said case propelling means operate simultaneously to move an opened case from said flap folding position to said case loading position and to move a succeeding folded case from said container to said case opening and flap folding position.

2,750,857
SALES TAG MARKING MEANS
Joseph R. Lewis, Brooklyn, N. Y.
Application September 3, 1953, Serial No. 378,358
5 Claims. (Cl. 93—88)

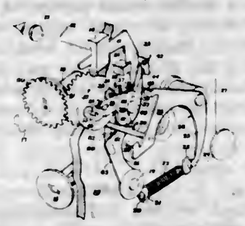


5. An adapter for tagging machines of the type having a roll of tags, means for printing said tags and means for fastening said tags; comprising means for distinctively marking said tags comprising color coding means connected to said machine adapted to mark said tags with a distinctive color, said color coding means comprising a turret having lettering pens mounted thereon, said turret being adjustably and detachably connected to said machine adjacent a strip of tags from said roll whereby the color may be quickly and easily changed by changing said pens without the necessity of changing the roll of tags.

2,750,858
DOUBLE EXPOSURE PREVENTION DEVICE
Edgar S. Marvin and Harold L. Malone, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application December 4, 1952, Serial No. 323,968
6 Claims. (Cl. 95—31)

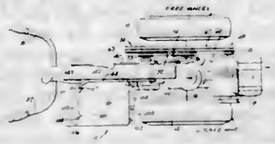
6. In a camera, the combination with a film feeding mechanism, a shutter actuating mechanism, of a flag lever rockably mounted on said camera, a finger lever pivotally

mounted on said flag lever, a spring connected to said finger lever and tending to pivot the latter in one direction relative to said flag lever, an exposure indicating member carried by said flag lever and movable into and out of exposure indicating position when said flag lever is rocked on said camera, a drive plate connected to and moved by said feeding mechanism when the latter is operated, a drive pin carried by said drive plate, a lug on said finger lever positioned in the path of said drive pin so as to be engaged thereby when said plate is moved by said feeding mechanism, the engagement of said pin with said lug first serving to pivot said finger lever relative to said flag lever to tension said spring and then to rock said finger and flag levers as a unit on said camera to move said member out of exposure indicating position, when said member is moved out of said indicating position said pin moving out of contact with said lug to disconnect said lever from said feeding mechanism, said disconnection enabling said tensioned spring to pivot said finger lever in said one direction relative to said flag lever, a fixed stop on said camera positioned in the path of said finger lever and engaged thereby to hold said member out of



exposure indicating position, an arm connected to said actuating mechanism and overlying said finger lever so that movement of said actuating mechanism to make an exposure will shift said arm into engagement with said finger lever again to pivot the latter relative to said flag lever to disconnect said finger lever from said stop, a blocking element associated with said actuating mechanism and positionable in the path of said flag lever upon exposure-making movement of said actuating mechanism to hold said flag lever against movement in another direction to retain said member out of indicating position, the completion of the operation of said actuating mechanism serving to shift said element out of the path of said flag lever to free the latter, spring means connected to said flag lever to rock the latter and said finger lever as a unit in another direction to shift said member into exposure indicating position, and a blocking shoulder formed on said flag lever and movable into the path of said blocking element when said flag member is moved in said other direction by said last-mentioned spring to prevent a second actuation of said actuation mechanism prior to the movement of said feeding mechanism.

2,750,859
ROTARY TILLER
George E. Smithburn, Berkeley, Calif.
Application January 8, 1952, Serial No. 265,415
11 Claims. (Cl. 97—40)



1. A cultivator comprising, a tractor having a motor and transverse axle means driven thereby and first and second ground engaging wheels carried by said axle means in locked and free wheeling connection thereto respectively, a tiller attachment for said tractor including a shaft having ground engaging tines secured thereto and projecting therefrom for tilling the earth, means connecting said axle means and said tiller shaft to said motor for rotation thereby with the peripheral speed of said tines exceeding the peripheral speed of said wheels whereby said tines will develop forward thrust with respect to said tractor, and means connecting said attachment and tractor and locating said tiller shaft in line with said first wheel and laterally offset from said second wheel so that said thrust will be resisted by said first named wheel.

2,750,860
SUB-SOIL AERATING CULTIVATOR
Angelo L. Zanola, Memphis, Tenn.
Application November 8, 1950, Serial No. 194,693
2 Claims. (Cl. 97—46.85)



1. A draft operated implement lift comprising an implement frame, an implement, rotary means for mounting said implement rotatably on said frame, a lifting frame having a forward end portion and a rearward end portion pivotally mounted on said rotary means intermediate its forward and rearward end portions, for oscillating movement thereabout, ground wheels on the rearward portion of the lifting frame, draft means mounted for back and forth substantially horizontal movement on the implement frame, and linkage means connected to said draft means and to the forward end portion of the lifting frame for transmitting the movement of the draft means to the lifting frame to swing the lifting frame on its pivot to move the wheels into and out of engagement with the ground.

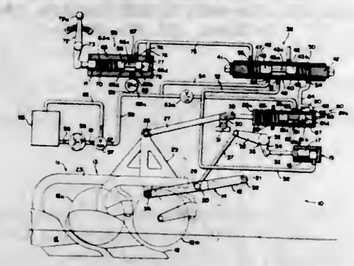
2,750,861
MOUNTING FOR DISC TYPE SOIL WORKING TOOLS
Robert L. Erwin, Royal Oak, Mich., assignor, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application July 21, 1952, Serial No. 300,069
1 Claim. (Cl. 97—54)



In an agricultural implement having a disc type soil working tool mounted in depending relation thereto; the combination of a transverse tool supporting member, at least one bifurcated upper support member fixedly secured to the forward side of said tool supporting member and having its bight section projecting below the tool supporting member, a substantially U-shaped leaf spring hanger comprised of an inner and outer leaf spring, means for fixedly securing the upper portion of said leaf spring hanger to the underside of the bight portion of the upper support member, a lower disc bracket, means for fixedly securing the lower portion of said leaf spring hanger to

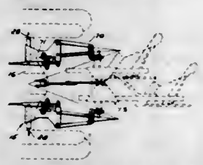
the upper portion of the lower disc bracket, means for rotatably mounting the disc on one arm of said lower disc bracket and maintaining said disc in a fixed relationship to said bracket, said upper support member, leaf spring hanger, and lower disc bracket being aligned in the same vertical plane and angularly disposed in substantial alignment or parallelism with the resultant of draft reacting forces acting on said disc.

2,750,862
HYDRAULIC CONTROL SYSTEM FOR TRACTORS
Curt H. Garmager, Royal Oak, Mich., assignor, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application August 9, 1950, Serial No. 178,516
5 Claims. (Cl. 97—46.07)



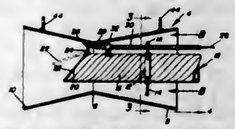
2. Apparatus for controlling the working level of tractor drawn farm implements, comprising fluid motor means for shifting the implement, means for producing a first hydraulic pressure which is a function of the draft demand of the implement, means for producing a second, substantially constant hydraulic pressure, a source of pressured fluid, a control valve interposed between said source and said fluid motor means, said control valve having a shiftable element controlling the flow of fluid to and from said fluid motor means, said shiftable element having a first position producing fluid flow to operate said fluid motor means in one direction, a second position producing exhaust fluid flow from said fluid motor means, and a neutral position intermediate said first and second positions wherein said fluid motor means is inoperative, and means for applying said first hydraulic pressure to said shiftable element to urge said shiftable element to said one position, and means for applying said second hydraulic pressure to said shiftable element in opposition to said first hydraulic presure to urge said shiftable element to said second position.

2,750,863
IMPLEMENT HITCH FOR TRACTORS
Raymond J. Miller and Ralph C. Frevik, Detroit, and Raymond W. Wilson, Ferndale, Mich., assignors, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application October 8, 1951, Serial No. 250,252
7 Claims. (Cl. 97—47.65)



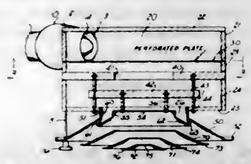
7. In an implement hitch for a tractor, a pair of spaced draft hitch links, each of said hitch links including a tractor-attached link element having a free end and a forward end pivotally attached to the tractor for movement about a horizontal axis, a second link element having an end thereof pivotally attached to the free end of the tractor-attached link element for movement about a vertical axis, means connecting the opposite end of the second link element with an implement, and a member pivoted to one of said link elements and swingable to a position restricting the pivotal movement of the second link element relative to the tractor-attached link element.

2,750,864
VENTILATOR FOR VEHICLE BODY
Wilho I. Maki, Hibbing, Minn.
Application September 11, 1953, Serial No. 379,537
3 Claims. (Cl. 98—2)



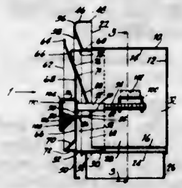
1. In a ventilating device for a vehicle body, an open-ended funnel having means whereby it may be fixedly attached to a predetermined portion of a vehicle body, said funnel having a central venturi restriction and a forwardly flaring leading and air intake end, and a rearwardly flaring air discharge end, said funnel being positioned, when in use, outside of the vehicle in air moving relative to the vehicle, a spider embodying a ring and radial spokes, said spider being mounted in said leading end, a ventilating conduit having an air discharge end portion supported in said ring and projecting into said funnel and having an oblique downwardly and rearwardly inclined terminal end projecting rearwardly of the venturi restriction and terminating within the limits of said rearwardly flaring end, the air intake end of said conduit being, when in use, in fluid communication with the interior of said vehicle body, and valve means operatively mounted on said terminal end, said valve means comprising a gravity-closed plate pivotally mounted on said terminal end and provided at its pivoted end with an actuating finger, and a flexible push-pull shaft slidably and operatively mounted on said conduit and having an end portion in alignment with and spaced from and thus operatively cooperable with said finger.

2,750,865
DIFFUSER
Richard D. Tutt, New Britain, Conn., assignor, by mesne assignments, to Allied Thermal Corporation, New Britain, Conn., a corporation of Connecticut
Application February 14, 1951, Serial No. 210,838
13 Claims. (Cl. 98—40)



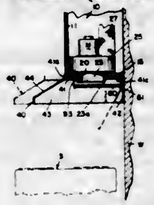
1. In a diffuser, a generally frusto-conical vane having a generally rectangular outwardly directed flange at its lower end, an annular outwardly and downwardly directed venturi nozzle adjacent the inner surface of the vane, and a second generally frusto-conical vane of smaller diameter than the first vane and of similar shape disposed generally coaxially with the first vane to form an interior air inlet passageway to the space adjacent the venturi nozzle and an air outlet passageway of substantially constant width between the vanes, said second vane having a generally rectangular outwardly extending flange of smaller size than the flange of the first vane and disposed at a greater distance from the nozzle.

2,750,866
AIR REGISTER
Robert G. Romig, Webster, N. Y., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 24, 1952, Serial No. 316,681
4 Claims. (Cl. 98—108)



1. In an air delivery system for tempered air, a terminal assembly comprising in combination, a register box having a tempered air inlet, an air-flow divider within said box for splitting the air stream into oppositely directed moving portions, a register covering an open side of said box and providing a frame member having flared portions surrounding the box, a panel having flared portions for deflecting air movement away from said box, and adjustable means supporting the panel centrally of said frame and telescopically engaging said frame for controlling the spacing of the flared portions at the periphery of the panel and the frame.

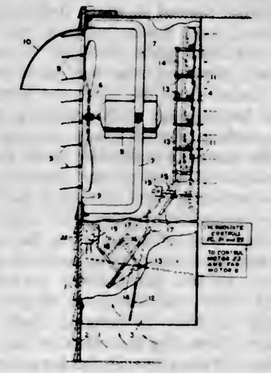
2,750,867
VENTING DEVICE FOR COOKING STOVES
George J. Meyer, Pomona, Calif.
Application October 11, 1954, Serial No. 461,503
6 Claims. (Cl. 98—115)



1. In a venting system the combination of a cabinet having a bottom wall presenting a pair of openings therein, a blower mounted in said cabinet with its inlet communicating with one of said openings, a light source mounted in said cabinet in register with the other of said openings, a pair of track members secured to said bottom wall, and a hood slidably suspended from said track members, said hood having a top wall presenting a pair of openings in register with said openings in said bottom wall of said cabinet.

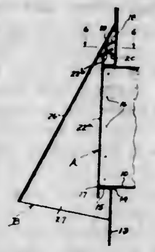
2,750,868
AIR CONTROL APPARATUS
Robert W. Mieczkowski, Leceyville, and Thaddeus S. Mieczkowski, Skinners Eddy, Pa.
Application May 26, 1950, Serial No. 164,464
2 Claims. (Cl. 98—116)

1. Apparatus for controlling the quality of air in a stable, comprising a vertical air duct adapted to be mounted on a wall of the stable, said duct having a closed top, an outlet opening in one of its side walls near the top of the duct to register with a corresponding opening in said stable wall and communicating with the atmosphere, an upper opening in a side wall of the duct adjacent the outlet opening for admitting air from the upper portion of the stable, said duct being open at the bottom to communicate with the stable for admitting air from the lower portion of said stable, an exhaust fan mounted in the aforesaid outlet opening, a plurality of shutters pivotally mounted in the upper opening, means biasing said shutters to closed position, a damper pivotally mounted in the lower portion of said duct intermediate the upper openings and the bottom opening of the duct, a linkage including a lost-motion means interconnecting said shutters and said damper, whereby when the damper is in a closed position the shutters are in an open position and when the damper is in a partly closed or fully open position the shutters will remain in their closed position, motor means for actuating said linkage, an electrical system including a plurality of thermostatic means for controlling said motor means and said fan, whereby on rise in temperature to a predetermined value in said stable the thermostatic means



will close a first circuit of said system to operate said fan and to leave said damper in a partly closed position and said shutters in a closed position, and whereby on further rise in temperature to another predetermined value said thermostatic means will close an additional circuit to operate the motor means so as to move the damper from its partly closed position to a fully open position and then stop with the shutters remaining in the closed position, and whereby on still further rise in temperature said thermostatic means will close a third circuit to operate the motor means so as to move the damper to a fully closed position and said shutters to a fully open position to remove air only from the upper portion of the stable while preventing the flow of air longitudinally from the bottom of the duct.

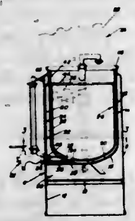
2,750,869
VALVED AIR EXHAUST FITTINGS
Arthur D. Cole and Frank L. Tourville, St. Paul, Minn., assignors to Cole-Sewell Engineering Company, St. Paul, Minn., a corporation of Minnesota
Application January 22, 1953, Serial No. 332,732
2 Claims. (Cl. 98—119)



1. It is an article of the character described, an exhaust pipe adapted to extend horizontally through the wall of a building from the inside to the outside thereof, an

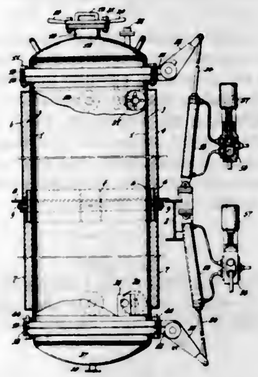
outer wall plate having an aperture therein and an annular flange about said aperture forming a sleeve, the outer end portion of said pipe being received in and secured to said sleeve, the outer edge of one of the said sleeve and pipe forming an annular valve seat, a pair of horizontally spaced tongues issuing from the upper portion of said wall plate, each tongue forming a tapered hook having a supporting reach extending upwardly and outwardly from said wall plate, a check plate including a body having a hinge member at the top thereof in the form of a flange inwardly inclined from said body, said hinge member being formed with a pair of horizontally spaced apertures therein, one aperture for each hook, said hooks being received in their respective apertures, the supporting reach of each hook being saddled by the hinge member at that portion thereof in which the aperture for such hook is formed, said hooks together with said hinge member of said check plate providing a connection between the check plate and outer wall plate swingably suspending the former from the latter, the supporting reach of each hook having edge walls providing upper corners at the upper surface of such reach converging upwardly and outwardly from the wall plate, each hook receiving aperture having at its upper portion laterally opposite side wall portions providing lower corners at the lower surface of said hinge member converging upwardly and inwardly toward the wall plate and overriding the upper corners of its respective hook supporting reach in point contact therewith in a vertical plane offset inwardly from the plane of said valve seat, the body of said check plate being adapted normally to hang in flush contact with said valve seat preventing the influx of air into the pipe from the outer end thereof, said check plate being adapted freely to swing outwardly away from said valve seat in response to air pressure from within the pipe.

2,750,870
URN WITH READILY INSERTABLE AND REMOVABLE COFFEE VESSEL
Angelo Colonna, Philadelphia, Pa.
Application December 24, 1953, Serial No. 400,229
3 Claims. (Cl. 99—279)



1. A coffee urn comprising, in combination, a heated water boiler embodying spaced inner and outer integrated walls defining a water containing and heating chamber between themselves, said inner wall having a bottom and being fashioned into an open-top receiver, a readily insertable and removable complemental coffee making and containing vessel fitting removably within the confines of said receiver, said vessel being provided at its bottom with a sump and an aligned coffee outlet, a drain tube integrated at one end with said bottom and in communication with said outlet, and a service faucet arranged exteriorly of said outer wall and separably and communicatively coupled to the other end of said drain tube by way of an opening in said outer wall, whereby when said faucet is uncoupled from said drain tube, the latter and said vessel, as a unit, may be bodily lifted and thus removed from said receiver for scouring and cleaning before being replaced in said receiver, said receiver having a vertical slot in one side ranging from the bottom to a point adjacent to the top of the receiver, said one side also having an elongated box-like shield projecting radially and registering with said slot, said shield being essentially imperforate and channel-shaped in cross-section and providing a clearance and guiding channel for the accommodation of and insertion and removal of said drain tube, the bottom portion only of one wall of said shield having an opening in alignment with the stated faucet opening in said outer wall.

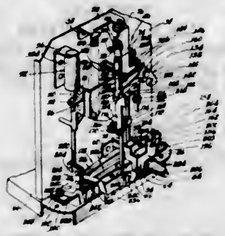
2,750,871
EXTRACTOR
Fred A. Landgraber, Sr., Bloomfield, and John M. Tolpa, Fair Lawn, N. J., assignors to Tolan Machinery Co., Inc., Port Newark, N. J., a corporation of New Jersey
Application October 15, 1953, Serial No. 386,292
2 Claims. (Cl. 99—302)



1. A pressure extractor for solvent extraction of comminuted solid material comprising a body member vertically disposed for holding said comminuted material, an inlet for said body member disposed near the top thereof, an upper chamber within and adjacent the wall of the body member and communicating with said inlet, said chamber being closed except at its top, a dome-like cover for said body member adapted to be moved to closed or open position relatively to the body member, said cover having an inlet communicating with said upper chamber when the cover is closed, a distributor nozzle carried by the cover and communicating with said cover inlet, said nozzle being directed toward the axis of the cover, an outlet for the body member near its base, a lower chamber within and adjacent the wall of the body member and communicating with said outlet, said last named chamber being closed except at its base, a dished bottom for the body member adapted to be moved to closed or open position relatively to the body member, said bottom having an inlet communicating with the base of the lower chamber of the body member when the bottom is closed, a suction pipe in said bottom and communicating with said inlet and thence leading downwardly toward the lower area of said bottom, and screen means intermediate the body member and said dished removable bottom.

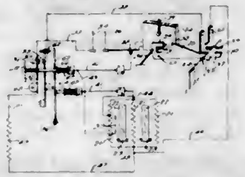
2,750,872
LATCH CONSTRUCTION FOR TOASTER
Murray Ireland, Elgin, Ill., assignor to McGraw Electric Company, Elgin, Ill., a corporation of Delaware
Application April 10, 1953, Serial No. 347,935
10 Claims. (Cl. 99—329)

1. A toaster comprising a toasting compartment, means for toasting a slice of bread in said compartment, a toast carrying tray in said compartment mounted for movement between toasting and non-toasting position, a carriage connected to said toast carrying tray, means for moving said carriage to move said tray from non-toasting to toasting position, means for urging said carriage to move said tray from toasting to non-toasting position, a detent including a lever pivotally mounted on said carriage, a fixed frame in said toaster, means on said frame engageable by said detent to hold said carriage with said tray in toasting position, means tending to move said detent out of engagement with said means on said frame, a latch lever pivotally mounted on said carriage, a member pivotally mounted on said latch lever



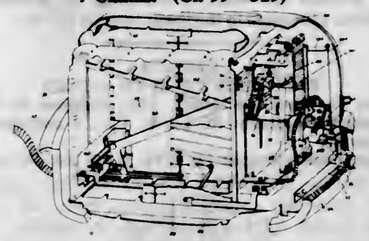
and having a catch thereon, means limiting movement of said member relative to said latch lever in one direction, means urging said member to the limiting position with said catch engageable with said detent lever to hold said detent in engagement with the means on said frame, and means for pivoting the latch lever to move said catch from said detent lever to free said detent for movement away from the means on said frame, said carriage urging means thereby being effective to move said carriage to effect movement of said tray to non-toasting position.

2,750,873
TOASTER TIMER
Emil E. Sivacek, Ann Arbor, Mich., assignor to King-Seeley Corporation, Ann Arbor, Mich., a corporation of Michigan
Application October 28, 1952, Serial No. 317,220
13 Claims. (Cl. 99—329)



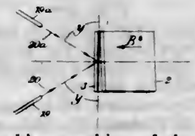
1. In a bread toaster or the like, heating means, means for energizing said heating means to initiate a toasting interval, control means for causing said heating means to be deenergized to end said toasting interval, said control means including a wire element having a substantial positive temperature coefficient of resistivity and sensitive to heat on the bread surface being toasted, said wire being so disposed relative to said surface as to permit substantially all of the surface to be directly heated by said heating means, a responding element having a substantial temperature coefficient of expansion, means for connecting said two elements in parallel and applying a voltage thereto, the voltage being sufficient to increase the wire temperature substantially above that which would be caused solely by its sensitivity to the surface heat on said bread slice, the head on said bread surface during the toasting interval causing said wire to change its resistance value with a corresponding change in the relative values of currents in said two elements, and means responsive to a predetermined change in length of said responding element for terminating said toasting interval and removing said voltage.

2,750,874
INTERLOCKED CONTROLS FOR COOKING APPARATUS
Murray Ireland, Elgin, Ill., assignor to McGraw Electric Company, Elgin, Ill., a corporation of Delaware
Original application December 10, 1949, Serial No. 132,305, now Patent No. 2,693,143, dated November 2, 1954. Divided and this application May 31, 1952, Serial No. 291,048
7 Claims. (Cl. 99—329)



1. In an automatic cooking device, the combination with cooking means, a carriage for receiving and supporting an article to be cooked and for moving it relative to said cooking means to and from a cooking position, electric power means for moving said carriage for carrying an article from said cooking position, automatic control means for energizing said power means for so moving said carriage, said control means including a movable actuator, means for deenergizing said power means in response to the resulting movement of said carriage, of, manual control means operable for energizing said power means for so moving said carriage, said manual control means including a manually movable member and a shiftable force-transmitting member mechanically connecting said manually movable member to said actuator and so arranged that movement of said manual member to actuated position moves said actuator to power-means-energizing position, and means providing a connection between said carriage and said shiftable member for shifting the latter in response to power operated movement of said carriage for thereby releasing said actuator from said manual member and disabling said manual control means.

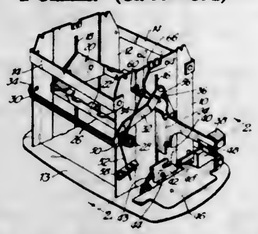
2,750,875
MEANS FOR DISCHARGING WAFER MAKING MACHINES
John Finlayson, London, England, assignor to Baker Perkins Limited, Peterborough, England, and McVitie & Price Limited, Edinburgh, Scotland
Application October 3, 1951, Serial No. 249,600
Claims priority, application Great Britain August 3, 1951
2 Claims. (Cl. 99—373)



1. In a wafer making machine of the type including a plurality of pairs of tongs movable in a predetermined path, including a component of movement in which the tongs are at an angle to the horizontal and said pairs of tongs each comprising an upper and a lower tong having leading edges, a discharge station past which the tongs move while in the angular relationship to the horizontal, means adjacent the discharge station for opening the tongs, and means for directing at least one jet of compressed air toward the oncoming tongs including a nozzle mounted at one side of the path of travel of the tongs so that the tongs can pass the same, said nozzle being directed at an angle of between 25° and 45° with respect to the leading edge of the lower tong and directed

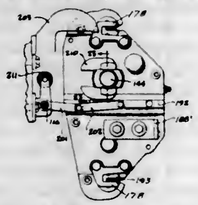
toward the path of movement of the lower tongs along a line that intersects the path of movement of the lower tongs approximately midway of the leading edge thereof so that air impinges against the leading edge only of the lower tong at its junction with the wafer at approximately the midpoint of the leading edge of the lower tong as the tongs are being opened whereby the angular relationship of the lower tong with respect to the horizontal permits the wafer to discharge by gravity when freed from adherence to the lower tong by the air.

2,750,876
BREAD LIFT FOR TOASTERS
Charles D. Visos, St. Louis, Mo., assignor to Knapp-Monarch Company, St. Louis, Mo., a corporation of Delaware
Application August 11, 1951, Serial No. 241,423
2 Claims. (Cl. 99—391)



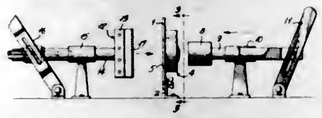
1. In a bread lift adapted to be positioned within a toaster casing, a frame having a vertically movable bread carrier mounted thereon, a coil spring rotatably mounted on said frame, one terminal end of said spring being fixedly secured to said frame and the other terminal end of said spring being laterally extended to provide a support arm, the free end of said support arm forming an upwardly open hook upon which an integral portion of said carrier is positioned, said hook serving to confine said carrier portion in lateral and downward directions while permitting free removal upwardly therefrom, said spring being biased so as to raise said support arm and thereby said carrier to a predetermined elevated position relative to said frame, said bread carrier being adapted for additional manual elevation above said predetermined elevated position, said portion of said carrier positioned upon said hook being lifted upwardly out of engagement therewith when said carrier is manually elevated above said predetermined elevated position, and a resilient stop member carried by said frame and positioned so as to engage said support arm and limit its biasing movement at said predetermined elevated position.

2,750,877
AUTOMATIC PICK-UP BALERS
Edwin B. Nolt, New Holland, Pa., assignor, by mesne assignments, to Sperry Rand Corporation, New Holland, Pa., a corporation of Delaware
Application September 6, 1950, Serial No. 183,321
20 Claims. (Cl. 100—4)



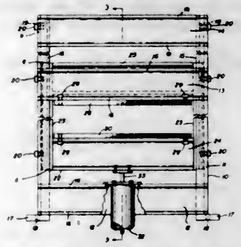
1. In a pick-up baler having means to compress hay, straw, and the like, into a bale form, and including means to band the formed hay with at least one strand of wire by twisting the ends of the wire strand together to complete the band, the improvement comprising a housing for carrying said twisting means, slide bearing means for supporting said housing, stripper means carried by said slide bearing means in position to project within a completed band, and means to relatively project said twister housing beyond said stripper means while the twisting operation is being completed and then to retract said housing past said stripper upon completion of a twisting cycle to effect removal of the completed wire band from the twisting means.

2,750,878
JUICE EXTRACTOR
Ralph Polk, Jr., Tampa, Fla.
Application December 8, 1953, Serial No. 396,823
14 Claims. (Cl. 100—37)



7. A method for extracting juice from citrus fruit comprising, positioning a half fruit against a plate having an orifice with the cut surface of the fruit substantially concentric to and facing the orifice and overlying the orifice and the marginal rim upon the plate surrounding the orifice, evaginating the fruit to project the pulp through the orifice, and squeegeeing the projected pulp with a flexible blade to express the juice.

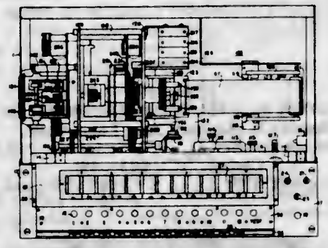
2,750,879
DIE PRESS WITH EXTENDED GUIDE OR BEARING SURFACES
Frank Palfy, Parma, Ohio, assignor to Palfy Die & Mold Co., Cleveland, Ohio, a corporation of Ohio
Application March 11, 1955, Serial No. 493,785
2 Claims. (Cl. 100—214)



1. In a press structure, a stationary frame, a first platen fixedly secured to said frame, a movable frame extending above and below the level of said first platen, continuous vertically extending guide means fixedly secured to said stationary frame, said guide means being coextensive with the upper and lower limits of the path of movement of said movable frame, continuous vertically extending bearing means mounted on said movable frame coextensive therewith and slidably engaging said guide means, and a second platen fixedly secured to said movable frame for movement relatively to said first platen.

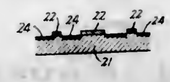
2,750,880
TICKET ISSUING MACHINE
Leith Johnston, Chicago, and Edwin C. Coulombe, Jr., Elgin, Ill., assignors to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Original application April 20, 1948, Serial No. 22,144, now Patent No. 2,691,342, dated October 12, 1954. Divided and this application January 15, 1953, Serial No. 331,448
10 Claims. (Cl. 101—66)

1. In an electrically controlled ticket issuing machine operable for one complete cycle of operation responsive to the operation of any one of a plurality of select keys for printing a marking corresponding to the operated key on a ticket constituting the end portion of a supply of uncut ticket paper in said machine, relay means operated in response to said key operation for starting said machine operation, a paper guide in said machine for holding said paper in printing position, means operated responsive to



said machine operation for advancing the printed ticket into the cut-off position beyond said guide and a new section of paper into printing position in said guide at the conclusion of the printing operation, an electrical circuit for said paper guide completed in case there is no paper in printing position in said paper guide, and relay means operated responsive to the completion of said circuit for disabling said first relay means.

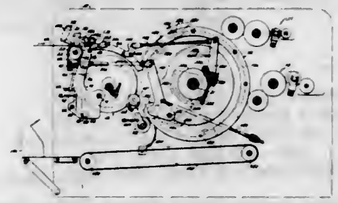
2,750,881
LITHOGRAPHIC PLATE PROCESS
Charles F. Geese, Old Greenwich, Greenwich, Conn., assignor to Steel Dot Corporation, Old Greenwich, Conn., a corporation of Connecticut
Application August 15, 1952, Serial No. 304,484
1 Claim. (Cl. 101—149.2)



In the process of making a chrome-on-steel lithographic plate whereon an image has been etched on steel, the steps of passivating chrome plated areas of the plate with dilute phosphoric acid, then rendering the etched steel portions of the plate ink receptive by treating said plate with a water-oil-detergent-acidic-metallic chemical blueing solution which evolves hydrogen sulfide on contact with steel, said blueing solution comprising (*a*) about one part of a mixture of equal parts of kerosene and a hydrocarbon base liquid detergent, and (*b*) about one part of a solution comprised of approximately 64 ounces of water, 5 ounces of alcohol, 6 ounces of hydrochloric acid, 1 ounce of copper chloride, 2 ounces of sodium hyposulfite and 1 ounce of bismuth chloride, next treating the plate with a dilute solution of phosphoric acid, and then applying rub-in ink to the plate while the plate is still moist.

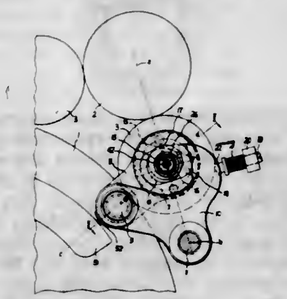
2,750,882
SHEET FEEDING MEANS FOR DUAL PURPOSE DUPLICATOR
William Ward Davidson, New York, N. Y.
Application January 21, 1953, Serial No. 332,430
20 Claims. (Cl. 101—232)

1. A printing press of the class described, comprising, a printing couple of two cylinders, one of which is approximately twice the diameter of the other, the larger of said two cylinders carrying semi-cylindrical plate and platen surface segments and the smaller of said two cylinders having a blanket surface; means mounting said two cylinders on substantially coplanar, parallel axes, paper gripper means associated with the larger of said two cylinders, feed stop means mounted adjacent the smaller of said two cylinders, preliminary feed means arranged to feed paper partially about said smaller cylinder and registeringly against said stop means, and pivotally movable translation gripper means constructed and arranged to



grip paper fed against said stop means and arcuately transfer the same outwardly of the periphery of said smaller cylinder to said paper gripper means of said larger cylinder at substantially the bite of said printing couple.

2,750,883
ADJUSTABLE MOUNTING FOR PRINTING PRESS ROLLS
Paul Hugo Dietrich, Robert Wilhelm Reinertz and Oskar Morgenländer, Augsburg, Germany, assignors to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a corporation of German Republic
Application March 23, 1953, Serial No. 343,926
Claims priority, application Germany April 9, 1952
8 Claims. (Cl. 101—348)



1. In a printing press of the character described having a plate cylinder, an inking roll and a friction roll, the combination which comprises a bearing bracket for supporting said inking roll, a swivel plate for supporting said bearing bracket, first pivot means for mounting said swivel plate on said press, second pivot means for mounting said bearing bracket on said swivel plate, first cam means for pivoting said swivel plate about said first pivot means, second cam means for pivoting said bearing bracket about said second pivot means, a control shaft for adjusting each said cam means, means for mounting said shafts in coaxial arrangement in said press, control means outside said press for rotating said shafts effecting adjustment of said cam means, and feeler means for tangibly transmitting vibrations of said inking roll to the outside of said press.

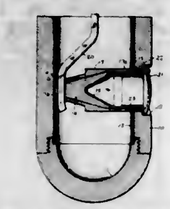
2,750,884
BLASTING OF UNDERGROUND FORMATIONS
Tom Gaines, Denver, Colo., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Application October 16, 1951, Serial No. 251,563
7 Claims. (Cl. 102—20)

1. An apparatus useful for shooting a well comprising an elongated support member provided with a plurality

of spaced apart openings formed in said member, said openings being adapted to receive a charge of high explosive and said member being formed solely of explosive material explodable by said charge of high explosive.

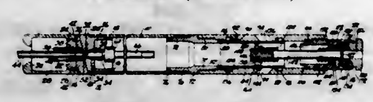


2,750,885
ALIGNING MEANS FOR SHAPED CHARGE PERFORATING APPARATUS
Marcel Schlumberger, Paris, France, assignor, by mesne assignments, to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application November 23, 1949, Serial No. 128,949
Claims priority, application France November 8, 1949
2 Claims. (Cl. 102—20)



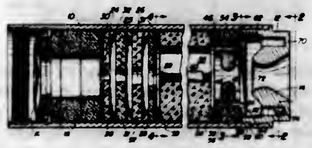
1. In well casing perforating apparatus, the combination of an enclosed, elongated cylindrical pressure resistant housing adapted to be lowered into a bore hole and having a plurality of ports formed in the side wall thereof, a plurality of closure means for said ports, each of said closure means having a cylindrical bore in the interior wall thereof, a cylindrical support in said housing having a plurality of opposed apertures therein at locations corresponding to said housing ports, a plurality of shaped charge containers mounted in the apertures in said support and having substantially cylindrical openings at the forward ends thereof of substantially the same diameter as the bores in said closure means, shaped charges in said containers each having a cavity therein facing a housing port and lined with an inert material, and hollow cylindrical sleeve means snugly fitted within the cylindrical opening in one of said charge containers and within the bore in the corresponding closure means for retaining said charge containers in accurate alignment with the corresponding ports in the housing.

2,750,886
GAS PRESSURE BLASTING DEVICE
Edward C. Flistrup, St. Joseph, Mich., assignor to Armstrong Coalbreak Company, Benton Harbor, Mich., a corporation of Michigan
Application March 16, 1951, Serial No. 215,974
6 Claims. (Cl. 102—25)



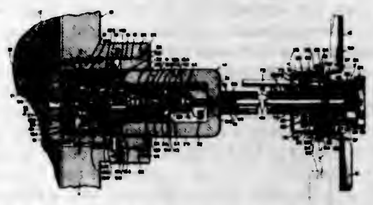
1. A gas pressure device comprising a hollow body having a lateral outlet and an end aperture, a shear member spanning said end aperture, a plunger slidable in said end aperture, a sleeve valve carried by said plunger and adapted to span said outlet, a differential area follower sleeve having a limited pressure responsive movement in said body and normally abutting said sleeve valve, a pair of annular resilient sealing members carried by said body in longitudinally spaced relation at opposite sides of said outlet, said sleeve valve and follower sleeve having abutting end surfaces engaging to define a valve preventing leakage of gas therebetween.

2,750,887
MOTOR MECHANISM FOR MISSILES
Stanley J. Marcus, China Lake, Calif.
Application January 31, 1952, Serial No. 269,318
4 Claims. (Cl. 102—49)
(Granted under Title 35, U. S. Code (1952), sec. 266)



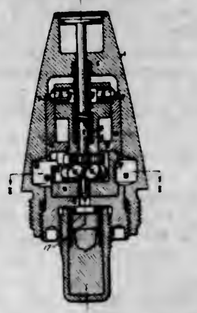
2. A self-propelled missile comprising an elongated body forming a combustion chamber, an axial nozzle for discharge of gases from the combustion chamber, a plurality of tangential orifices for discharge of gases from the combustion chamber, a valve member for obturating said orifices, a stop member formed of solid propellant and exposed to gases generated in the combustion chamber preventing movement of said valve to closed position, and a propellent charge in said combustion chamber formed of a relatively slow burning grain and a relatively fast burning grain, the latter being designed to be consumed at about the time said stop member is consumed.

2,750,888
LONG DELAY BOMB TAIL FUZE
Robert O. Wynn, Houston, Tex.
Application November 13, 1946, Serial No. 709,628
8 Claims. (Cl. 102—71)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A nonrecoverable time delay tail fuze for a bomb adapted to be dropped from an aircraft in flight upon a target and comprising a casing, an explosive charge arranged within said casing, means including a retractable firing unit for partially arming the fuze as the firing unit is moved a predetermined amount during the flight of the bomb toward the target, propeller means including a shaft in threaded engagement with said casing and connected to said firing means for moving said unit said predetermined amount, means including an inertia actuated plunger releasably secured to said firing unit for completing the arming of the fuze upon impact of the bomb with the target, said means including a spring actuated retainer, a normally locked firing pin arranged within said firing unit and adapted to be moved to a firing position when the firing pin is released, shearable means associated with said firing pin and adapted to release said firing pin when a predetermined period of time has elapsed after impact of the bomb with the target, means for urging said firing pin to said firing position when released and after said predetermined period of time has elapsed thereby to fire said explosive charge, and means for locking said fuze to the bomb upon said impact, said locking means comprising a lock weight responsive to the force of said impact and disposed within an eccentric arcuate recess arranged within the casing and having a pair of serrated arcuate surfaces thereon adapted to engage and grip the casing and bomb sufficiently to prevent removal of the casing from the bomb after the impact and in response to rotative movement of the fuze with respect to the bomb before the charge is fired.

2,750,889
FUSES FOR PROJECTILES
Georges Kuhn, Geneva, Switzerland, assignor to Mefina S. A., Binningen, Switzerland, a corporation of Switzerland
Application February 14, 1951, Serial No. 210,861
Claims priority, application Switzerland May 20, 1950
1 Claim. (Cl. 102—79)



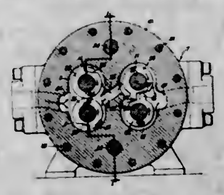
A direct action fuse for a projectile having rotary motion about its axis during projection from a gun and during flight comprising a body, a primer fixedly positioned therein, an axially movable firing pin provided with a boss mounted for movement towards the primer and a muzzle safety device for blocking movement of the firing pin toward the primer, said safety device comprising a fixed cage concentrically mounted about the firing pin and having a circumferential wall provided with a slot therein, the inner surface of said wall being in the form of a spiral ramp extending through an arc of less than 360° and increasing in radius in the direction of rotation of the projectile, an annular recess in said body defined by an inner surface of said body and the outer surface of said wall concentrically disposed radially outward of the boss, said recess being in communication with said ramp through said slot, a stationary stop integral with said wall projecting into the cage at the trailing edge of said wall where the spiral ramp is of smallest radius, said stop forming one wall of the slot and the leading end of the ramp forming the other wall of the slot, said slot being of a size to complete an arc of 360° with the ramp, a number of balls being provided to fill said cage and being positioned about the pin and serving to engage the boss on the pin to prevent movement of the pin toward the primer, the slope of said ramp being such that when the fuse is subjected to acceleration while traveling through a gun barrel, the inertia of the balls will cause them to bear against the stop, the inertia of the firing pin causing the balls to be held in that position, said balls being pressed between the bottom of the fixed cage and the boss of the firing pin, but when acceleration ceases, the pressure of the boss on the balls will cease, releasing the balls, and centrifugal force acting on the balls will cause them to move along said ramp away from said stop toward the slot and leave the cage successively through the slot thereby freeing the firing pin, and an annular leaf spring releasable under the action of centrifugal force embracing the outer wall of the cage and closing said slot for retaining the balls in the cage and preventing their removal through the slot prior to firing the projectile from a gun.

2,750,890
TIME DELAY FUZE FOR A MINE
George H. Leonard, Fairfield, Conn.
Application October 1, 1946, Serial No. 700,540
6 Claims. (Cl. 102—82)
(Granted under Title 35, U. S. Code (1952), sec. 266)



2. In a time-delay fuze adapted for use with an aircraft launched marine mine, firing means movable from a safe position to an armed position and adapted to respond to lateral shock when in said armed position, impeller means adapted to be operated in response to the movement of the mine through the air, a reduction gearing, a screw shaft adapted to be driven by said impeller through said gearing and adapted to hold the firing means in said safe position prior to the launching of the mine, means including a normally expanded bellows adapted to be collapsed gradually at a predetermined rate for maintaining the firing means in the safe position until the mine has entered the water, means controlled by said screw shaft for initiating collapse of the bellows thereby to permit movement of the firing means into said armed position after a predetermined interval of time has elapsed sufficient to complete the launching of the mine, and means for moving said firing means.

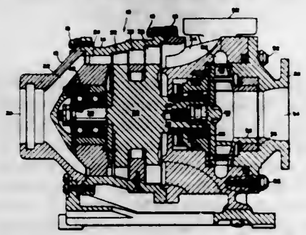
2,750,891
ROTARY POWER DEVICE OF THE ROTARY ABUTMENT TYPE
Frank Berry, Corlath, Miss., assignor to Oliver Iron and Steel Corporation, Pittsburgh, Pa., a corporation of Pennsylvania
Application December 9, 1952, Serial No. 324,943
6 Claims. (Cl. 103—5)



1. A fluid power device of the class described comprising a casing having at least four annular cylinders each of which has a fluid inlet and a fluid outlet, a shaft disposed centrally with respect to each of the annular cylinders, a piston slidably received in each of said annular cylinders and fixed to the shaft disposed centrally

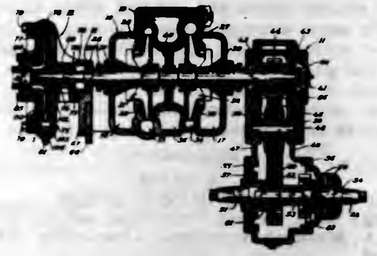
thereof, a cylindrical abutment with a recess to clear each of said pistons, the cylindrical abutments and recesses being formed as elements fixed to each piston with the recess adjacent the piston, the annular cylinders being arranged in pairs with the pistons and recesses of each pair arranged so that the pistons of one cylinder of the pair clears through the recess of the other cylinder of the pair while the piston of said other cylinder clears through the recess of the first, leaving the cylinders of said pair open between their inlets and outlets to by-pass fluid to or from another of said pairs of cylinders, and a fluid passage connecting the outlets of said one pair of cylinders to the inlets of said other pair of cylinders, the pistons of said one pair of cylinders being in operation in their respective cylinders when said other pair of cylinders are by-passing fluid and the pistons of said other pair of cylinders are passing through the respective abutment recesses.

2,750,892
TURBINE DRIVEN PUMP MEANS
Thomas W. Johnson, Westfield, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application November 13, 1952, Serial No. 320,253
2 Claims. (Cl. 103—87)



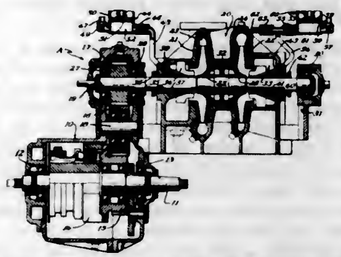
1. A combined turbine pump unit of the character described adapted for supplying fuel to the afterburner nozzles of a jet engine, comprising a unitary housing structure having an axial pressure air fluid inlet in one end adapted for connection to the compressor unit of the jet engine and an axial fuel inlet in the opposite end for connection to a source of fuel supply, a two stage impulse type turbine wherein the blades of each stage are axially spaced from those of the other and both stages are integral with a common body portion, a stub shaft integral with and projecting axially from one end of the turbine body portion to a point in close proximity to the pressure air fluid inlet, a bearing support in the housing carrying the stud shaft for rotatable movement therein, a series of nozzles in the housing communicating the first turbine stage with the pressure air fluid inlet, a fixed turbine stage intermediate of the blades of the first and second stages for guiding pressure air fluid flow from the first turbine stage to the second stage and the housing having an exhaust port communicating the second turbine stage to atmosphere, a second stub shaft integral with the turbine body and extending axially from the other end thereof, the latter shaft being recessed in its free end, the housing having an impeller chamber sealed off from the turbine stages, a fuel pump impeller positioned in the impeller chamber and having a short axial shaft portion extending from the inner face thereof and engaged in the recessed turbine shaft, a hollow shaft portion integral with the outer face of the impeller and axially communicating the interior of the impeller with the fuel inlet, the housing including a fuel outlet adapted for communicating the imepller chamber with the afterburner nozzles of the jet engine, and bearing means carried in the housing for axially supporting the hollow shaft of the impeller for rotatable movement thereof with the turbine.

2,750,893
FIRE PUMP
David F. Thomas, Minneapolis, and George A. Rathburn, St. Paul, Minn., assignors to Waterous Company, St. Paul, Minn., a corporation of Minnesota
Application September 19, 1949, Serial No. 116,538
4 Claims. (Cl. 103—106)



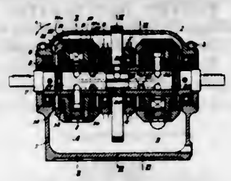
1. A centrifugal pump assembly including a main pump housing having a main pump discharge, a shaft extending transversely thereof, a pair of impellers on said shaft within said housing, said impellers each having an inlet and an outlet, means in said housing between the outlet of one impeller and the inlet of the other for connecting said impellers selectively in parallel or in series, an auxiliary housing connected to said main pump housing, a third stage impeller mounted upon said shaft within said auxiliary housing, an impeller chamber within said auxiliary housing having an inlet and an outlet, a passage connecting the discharge of the main pump housing with the intake of the auxiliary housing, means for selectively directing fluid through said last named passage, and a seal between said shaft and said auxiliary housing, said seal including a pair of normally spaced elements, means on said auxiliary housing holding one of said elements fixed from rotation relative thereto and means supporting the other element rotatable with said shaft, means normally urging said elements apart, one of said elements being axially movable when subjected to pressure within said auxiliary housing, said one element extending into direct communication with said auxiliary housing pressure, said elements being engageable to form a running seal when said impeller in said auxiliary housing is in liquid pumping operation.

2,750,894
CENTRIFUGAL PUMP
David F. Thomas, Minneapolis, and George A. Rathburn, St. Paul, Minn., assignors to Waterous Company, St. Paul, Minn., a corporation of Minnesota
Application March 16, 1951, Serial No. 215,888
6 Claims. (Cl. 103—108)



1. A centrifugal pump including a pump housing, a shaft supported in said housing, a pair of impellers upon said shaft within said housing, one of said impellers comprising a first stage impeller and the other impeller comprising a second stage impeller, intake chambers within said housing adjacent to said impellers and subject to variable pressures developed by said impellers, packing encircling said shaft between said shaft and said housing, and a source of lubricant under pressure connected to said housing and communicating with a point between the ends of said packing to lubricate the same, the portion of the packing between said point between the ends of said packing and the second stage impeller intake chamber being sufficiently free in fit to permit some leakage of fluid from the second stage impeller intake chamber to said point between the ends of said packing when said second stage impeller intake chamber is subjected to elevated pressure, whereby said point between the ends of said packing is also subject to said elevated pressure, and a check valve between said source of lubricant and said packing to permit a flow of lubricant toward said housing when the fluid pressure is too low to lubricate adequately the pump packing and to prevent a reverse flow of fluid under pressure toward said source of lubricant.

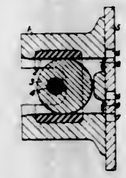
2,750,895
ROTARY PUMP AND MOTOR HYDRAULIC TRANSMISSION
Erwin Sturm, Boll near Goppingen, Germany
Application October 9, 1950, Serial No. 189,207
Claims priority, application Sweden October 14, 1949
12 Claims. (Cl. 103—120)



1. In a rotary machine, the combination of: a housing, a vane drum including a series of vanes, said vane drum being rotatably mounted in said housing, a casing enclosing said vane drum with said vanes, a support, journals arranged on said support at opposite sides thereof, said journals being axially displaceably and oscillatably mounted in said housing, a pair of bearings on said support, said casing being rotatably mounted in said bearings of said support, said support being displaceable along an axis of adjustment determined by the line of intersection between the horizontal plane located in the axis of said vane drum and a vertical center plane located centrally with reference to the ends of said vane drum, and adjusting means associated with said support for displacing same along said axis of adjustment for an adjustment of the eccentric position of said support relative to said vane drum, said support being rockable about said axis of adjustment realtive to said casing for an automatic compensation for differences of pressure in said bearings during an operation of the machine, said support comprising two sections detachably connected with each other, the line of separation of said two sections being in a plane of symmetry including the longitudinal axis of said journals and being perpendicular to the axis of rotation of said vane drum.

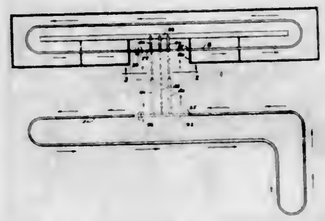
2,750,896
ROTARY PUMPS OR COMPRESSORS
Frederick W. McCombie, London, England, assignor to Megator Pumps & Compressors Limited, London, England
Application February 10, 1953, Serial No. 336,170
Claims priority, application Great Britain
February 15, 1952
3 Claims. (Cl. 103—216)

1. A displacement chamber for use with an eccentric rotor of a rotor pump or compressor, comprising an outer shell, a liner for said shell, said liner being made of a material differing in resilience from that of the shell, said shell and said liner having ports for receiving said rotor, the mouths of said ports being of greater diameter than the width of said rotor, said shell and said liner each



comprising two sections and the dividing line for the sections being contained in a plane perpendicular to the axis of rotation of the rotor and medial of the width of the rotor, and means for securing said sections in fixed relation to each other.

2,750,897
LOADING AND UNLOADING APPARATUS
John V. Davis, Detroit, Mich., assignor to The Udylite Corporation, Detroit, Mich., a corporation of Delaware
Application January 21, 1952, Serial No. 267,376
5 Claims. (Cl. 104—96)

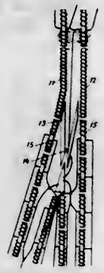


1. In a loading and unloading apparatus, a processing machine including a horizontal flat rail, a conveyor including a similar flat rail spaced horizontally and vertically from the first rail, said rails having respectively parallel portions with a gap in each such portion, said gaps being directly opposite each other and of equal length, a cylindrical rail segment adapted to fit selectively in said gaps, a support for said segment, means for shifting said support from either gap to the other, a portion of the surface of said segment lying above the surface of either rail when the segment is alined in a gap, a work carrier adapted to ride in suspended position on said rails and segment, said carrier having a recess dimensioned and positioned to receive said rails and having a protruding arcuate cavity dimensioned and positioned to receive said segment, and means for moving said segment from one gap to the other.

2,750,898
RAILWAY TRACK WITH ELECTRIC TOY TRAINS, TRAMCARS OR SIMILAR VEHICLES
Ingeman Hjortborg, Hellerup, Copenhagen, Denmark
Application April 23, 1952, Serial No. 283,819
3 Claims. (Cl. 104—148)

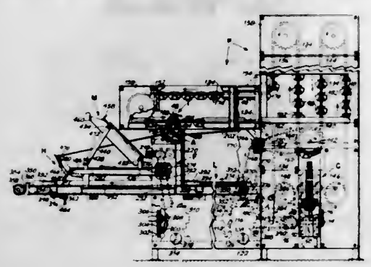
1. An electric toy comprising a track having at least two parallel rails, at least one of said rails consisting of electromagnetic coils which consist of windings of conducting insulated wire, each of said windings having an exposed upper portion which is devoid of insulation, means connecting said rails to a source of electrical energy, and at least one rotary element mounted on said

rails and consisting of a conducting and magnetizable material, said element engaging the exposed portion of



said coil and closing an electro-magnetic circuit causing a rolling of said element on said track.

2,750,899
COMBINATION DOUGH HANDLING, PROOFING, MOULDING, AND PANNING MACHINE
Fred D. Marasso, Joliet, Ill., assignor to Union Machinery Company, a corporation of Illinois
Application December 21, 1951, Serial No. 262,744
10 Claims. (Cl. 107—4)



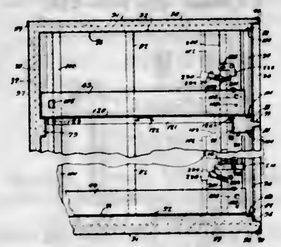
1. In combination with a dough proofer, flattener and panner for receiving dough lumps from a divider, proofing them, sheeting them, moulding them and panning them in pans of the type having individual pockets, of a drum having spaced peripheral pockets for receiving lumps of dough from the divider, an endless chain cross feed conveyor having movable dough supporting members to receive dough lumps from said drum, said members being movable from a dough supporting position to a dough releasing position, said proofer including a second chain conveyor having at least one run runnings at right angles to and below said first-named conveyor, said second conveyor having two substantially co-extensive parallel spaced endless chains and dough supporting trays suspended between said chains, means to simultaneously move a plurality of dough supporting members of said first-named conveyor to releasing position as they pass over the trays of the second conveyor, said dough proofer including a proofing chamber through which passes at least one run of said secondary conveyor, trip means for dumping the trays of the secondary conveyor at a predetermined station subsequent to their passing through the proofing chamber, an elongated trough-like structure to receive a plurality of dough lumps dumped at said station to support and deliver them in linear arrangement, said flattener including at least one pair of continuously driven sheeting rollers positioned at said trough-like structure, means for moulding the flattened dough lumps including a horizontal dough conveyor belt positioned beneath said sheeting rollers to receive flattened dough lumps therefrom, a chain skirt draping said last-named conveyor to roll flattened dough lumps, and a moulder foot positioned at a predetermined distance above and parallel to the conveyor belt to shape the rolled dough lumps, a second trough located at the discharge end of said dough conveyor belt to receive and re-align the rolled dough lumps, a gate on each of said troughs to release the contents, drive means on said proofer conveyor, means operated from said drive means for opening said gates at regular timed intervals corresponding to the time required to advance said proofer conveyor the distance of the center to center distance between the dough supporting members thereon, said panner including a continuously driven endless pan conveyor belt positioned to pass beneath said last-named trough and adapted to support pans of the type having individual pockets positioned on said continuously moving pan conveyor belt, and fingers mounted adjacent said last-named trough and adapted to engage the pockets of such pans and to move into a disengaging position, and means operated from and therefore timed with the driven means of said proofer conveyor and said gate opening means to move said fingers into and out of engaging position in timed relation to the opening of said gates.

2,750,900
INNER CONTAINER LOCKING MEANS FOR PASTRY DECORATOR
William V. Moore, Marietta, Ga.
Application December 31, 1954, Serial No. 479,035
2 Claims. (Cl. 107—52)



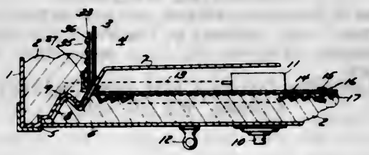
1. A device of the class described comprising an outer container, an inner container fitting within the outer container thereby defining an inner and an outer chamber, each adapted to contain a differently colored semi-fluid material, ejecting means for each chamber, a design-forming cap carried by said outer container, said design-forming cap having an inwardly protruding portion having a dome-shaped central portion, said design-forming cap having one group of slots outwardly of said protruding portion communicating with said outer chamber and having a second group of slots inwardly of said protruding portion, said second group of slots communicating with said inner chamber, said inner container having an open portion at its inner end contacting said cap intermediate said inner and outer groups of slots to direct the contents of said outer chamber through said outer group of slots and to direct the contents of said inner chamber through said inner group of slots, a closure cap for said outer chamber, the open portion at the inner end of said inner container receiving said dome-shaped central portion of said design-forming cap to clamp said inner container in a set position to separate the contents of one chamber from the other, and said dome-shaped central portion constituting means for directing the open portion at the inner end of said inner container into a proper registering position upon the inwardly protruding portion of said cap to hold the inner end of said inner container in proper spaced relation relative to said outer container.

2,750,901
INSULATED METAL CABINET CONSTRUCTION
Ralph E. McClellan, Toledo, Ohio, assignor to Mellink Steel Safe Company, Toledo, Ohio, a corporation of Ohio
Application May 18, 1953, Serial No. 355,496
37 Claims. (Cl. 109—59)



1. A fire resistant cabinet having a plurality of adjacent openings, separate closures for each of said openings, the walls of said cabinet and closures having inner and outer spaced metal shells, the space between said shells being filled with a heat resistant filler, a frame attached to said inner shell, said inner shell having two sets of inwardly extending reinforcing ribs, one set of ribs extending horizontally and being on one pair of opposite sides of said inner shell and the other set of ribs extending vertically and being along the other pair of opposite sides of said inner shell; said frame comprising: strips extending along the inside of said inner shell parallel to one set of said ribs, and channel means extending between and being attached to said strips.

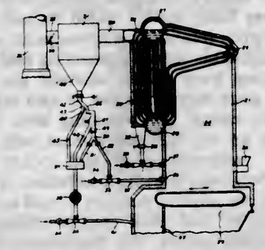
2,750,902
SAFE CONSTRUCTION
Ralph E. McClellan, Toledo, Ohio, assignor to Mellink Steel Safe Co., Toledo, Ohio, a corporation of Ohio
Application August 16, 1954, Serial No. 449,904
1 Claim. (Cl. 109—81)



A drill resistant wall comprising a pair of relatively thin hard spaced shells with a relatively thicker and softer filler therebetween, the improvement comprising: a hardened metal plate between said shells with said filler, at least one surface of said plate being irregular and having a plurality of alternate sharp projections and depressions connected by sloping surfaces having an angle of more than about 35° with the plane of said plate, said sloping surfaces between two adjacent sharp projections having different slopes to their intermediate depression, and means for fastening said plate in said wall to permit limited movement thereof in the plane of said plate.

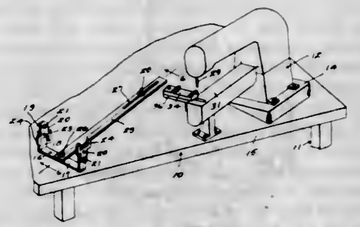
2,750,903
FLY-ASH REINJECTION
Earle C. Miller and L V Andrews, Worcester, Mass., assignors to Riley Stoker Corporation, Worcester, Mass., a corporation of Massachusetts
Application May 22, 1952, Serial No. 289,405
8 Claims. (Cl. 110—165)

1. Apparatus in combination with a steam generating unit having a combustion chamber, said apparatus comprising: a collector for receiving fly-ash from the products of combustion in said unit, means associated with said unit for disposing of ash, a fly-ash reinjection means connected to said unit for introducing into the combustion chamber fly-ash received by said collector, a magnetic



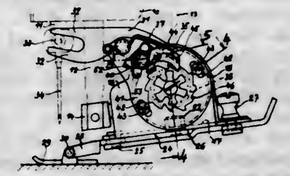
separator connected between the collector on the one hand and the disposal means and reinjection means on the other hand, the said magnetic separator permitting only the less magnetic particles of fly-ash to pass to the reinjection means.

2,750,904
MEANS FOR ATTACHING UMBRELLA COVERS TO FRAMES
William M. Lustgarten, New York, N. Y.
Application August 2, 1954, Serial No. 447,061
2 Claims. (Cl. 112—2)



1. A means for supporting an umbrella frame on a sewing table in a position to secure the cover to the frame, said means comprising a U-shaped cradle, a pair of rotatably adjustable staff supporting members carried by the parallel arms of said cradle, a base bar releasably secured to the bight of said cradle, and means adjustably securing said base bar to said table.

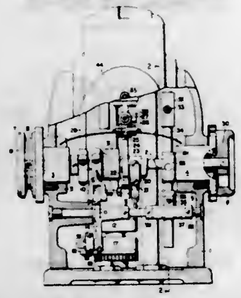
2,750,905
ATTACHMENT FOR SEWING MACHINES
Carl Heinz Würker, Alstaig (Neckar), Germany
Application April 22, 1952, Serial No. 283,613
Claims priority, application Germany February 25, 1950
6 Claims. (Cl. 112—160)



1. A zigzag attachment for sewing machines equipped with a presser bar and an oscillating needle bar; comprising cam means, plate means, shaft means, ratchet wheel means, actuating lever means, said shaft means being common to and supporting said cam means, said ratchet wheel means and said actuating lever means, rocker arm means for engagement with the material to be sewn and operatively connected to said cam means, whereby actua-

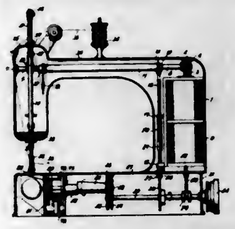
tion of said cam means produces reciprocation of said rocker arm means in a substantially horizontal plane, pawl means pivotally mounted on said plate means, spring means secured on said plate means and normally urging said pawl means into operative engagement with said ratched wheel means, said plate means and said actuating lever means being loosely seated on said shaft means to permit relative rotational displacement of said shaft means, and adjustable means connecting said plate means to said actuating lever means, whereby the angular position of said plate means relative to said actuating lever means may be varied, said actuating lever means being provided with an end for engagement with said needle bar, whereby reciprocation of said rocker arm means may be synchronized with the oscillation of said needle bar by varying the angular position of said actuating lever means relative to said plate means through actuation of said adjustable means, the disposition of said pawl means and of said spring means relative to said ratchet wheel means remaining unchanged during variation of said angular position.

2,750,906
SEWING MACHINE BALANCING
Hans Hacklander, South Sterling, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application February 3, 1954, Serial No. 407,832
3 Claims. (Cl. 112—220)



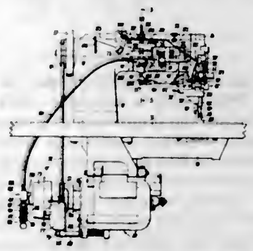
1. In a sewing machine having a frame, a rotary shaft journaled in said frame, a pivot rod secured in said frame generally parallel to said rotary shaft, feeding mechanism comprising a feed actuating element on said rotary shaft, a feed-actuating lever mounted on said pivot rod for oscillation about the same, and operative connections between said feed-actuating element and said lever for imparting oscillation to said lever upon rotation of said shaft, stitching mechanism comprising a needle-bar arranged upon the opposite side of said shaft from said pivot-rod, and mounted in said frame for longitudinal reciprocation in a direction normal to said shaft, a stitching mechanism actuating element on said rotary shaft, and operative connections between said needle-bar and said stitching mechanism actuating element to impart reciprocation to said needle-bar upon rotation of said shaft, and means for dynamically balancing the machine comprising eccentric weights carried by said rotary shaft and an independently actuated counterweight comprising a hub pivotally mounted on said pivot rod, a balancing rod fixed in said hub for longitudinal adjustment relative to the same, a weight of predetermined mass fixed to said balancing rod for adjustment longitudinally thereof, a balancing means actuating element fixed to said shaft, and a block mounted upon the balancing rod intermediate the hub and the counterweight, said block being operatively connected to the balancing means actuating element for imparting oscillation to said balancing rod about the pivot rod upon rotation of said shaft.

2,750,907
SEWING MACHINE
Walter Heinrich Daniel Langhein, Hamburg-Volksdorf, Germany, assignor to Ingolf Felix Friedrich Emil Pauls, Basel, Switzerland
Application September 4, 1953, Serial No. 378,656
Claims priority, application Germany September 8, 1952
5 Claims. (Cl. 112—220)



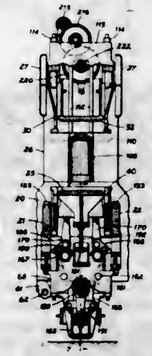
1. A sewing machine comprising, in combination, support means; a double solenoid mounted on said support means for driving the various parts of the sewing machine and including a pair of coils and a single armature extending through and beyond said coils and being connected to the sewing machine parts for transmitting a drive thereto; and control means mounted on said support means and being operatively connected to said double solenoid for controlling the same, said control means including a shaft turnably mounted on said support means and being operatively connected to said armature to be rotated thereby, a pair of opposed cams fixed to said shaft for rotation therewith, and two sets of contacts respectively connected electrically to said coils and respectively being located on said support means opposite said cams to be alternately closed thereby so as to alternately energize said coils and reciprocate said armature.

2,750,908
FLUID PRESSURE ACTUATED MECHANISMS FOR SEWING MACHINES
Charles R. Odermann, Milford, and Everett Poffenberger, Devon, Conn., assignors to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application October 3, 1952, Serial No. 312,934
9 Claims. (Cl. 112—235)



6. In a sewing machine having cyclically operated work manipulating instrumentalities, operating mechanism therefor, means associated with said operating mechanism for selectively varying the speed of operation of said sewing machine, a member acted upon by repetitive varying forces imparted by said work manipulating instrumentalities incident to the operation of said sewing machine, said member being supported on said sewing machine for bodily movement in response to said repetitive forces, means for biasing said bodily movable member toward a predetermined normal operating position, said means comprising a fluid chamber, means for delivering fluid under pressure into said chamber, means drivingly connected with said sewing machine operating mechanism for varying the pressure of said fluid in said chamber in a substantially direct proportion to the speed of operation of said sewing machine, a movable element forming a portion of said fluid chamber and defining a surface acted upon by said fluid pressure, said bodily movable member having a bearing extension connected thereto, said movable element bearing upon said extension to transmit forces imparted by said fluid pressure on said movable element to said bodily movable member in opposition to said repetitive forces.

2,750,909
PRESS
Arthur A. Byerlein, Detroit, Mich., assignor to Baldwin-Lima-Hamilton Corporation, a corporation of Pennsylvania
Application December 16, 1949, Serial No. 133,450
4 Claims. (Cl. 113—38)



1. In a sheet metal drawing press comprising a frame structure, a blank holder slide mounted for reciprocatory movement on said frame, actuating means mounted on said frame for moving said slide from an inoperative position to a clamping position, for causing a dwell of said slide, and thereafter returning said slide to its inoperative position, motor means for operating said actuating means, a draw slide mounted for reciprocatory movement in said blank holder slide, a separate actuating means mounted on said blank holder slide and connected with said draw slide for moving said draw slide with said blank holder slide between said inoperative and said clamping positions thereof, and with respect to said blank holder slide for reciprocating said draw slide while said blank holder slide is in its dwell, clamping position for performing a drawing operation, and separate motor means mounted on said blank holder connected to drive said second actuating means.

3. In a sheet metal drawing press comprising a frame structure, a blank holder slide mounted for reciprocatory movement on said frame, actuating means mounted on said frame for moving said slide from an inoperative position to a clamping position and causing a dwell of said slide in said clamping position and for thereafter returning said slide to its inoperative position, motor means for operating said actuating means, a draw slide mounted for reciprocatory movement in said blank holder slide and for movement therewith during said movement of said blank holder slide, and drive means wholly carried and supported by said two slides mechanically separately from said frame and including a motor mounted on one of said slides and means forming a driving connection between said motor and the other said slide for reciprocating said draw slide while said blank holder slide is in said clamping position to perform a drawing operation.

2,750,910
APPARATUS FOR PRODUCING CROWN CLOSURE
George Hammond, Jr., Manheim Township, Lancaster County, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a corporation of Pennsylvania
Application February 18, 1950, Serial No. 145,010
2 Claims. (Cl. 113—42)



1. In a die set for shearing and forming crown closure shells and similar articles from sheet material in a double-acting press, the combination of a hollow punch; a hollow forming member disposed within said punch having a forming surface on the inner periphery thereof, said hollow punch being provided with an external severing edge on the outer periphery thereof and a rounded edge in the inner periphery adjacent the outer edge of said forming member, the position of said forming member with respect to said punch being such that the top surface of the forming member terminates in a plane above the top surface of said punch; a hollow die having an internal severing edge on the inner periphery complementary to the severing edge of said punch when said punch is disposed within the said die to sever a blank from a sheet of material disposed between the punch and die upon the closing action of said press, with the outer periphery of the blank having a slightly curved surface extending toward the severing edge of the punch; a hollow clamping member disposed within said die and secured thereto; a clamping surface on said clamping member complementary to the top surface of said hollow forming member for slip-gripping the blank therebetween when the press is closed; and a forming ram, said ram being disposed within said clamping member and being movable with respect thereto to a position below said clamping member and within the said hollow forming member to engage a limited area of said blank on the side opposite the side engaged by the forming member to bend the same over said forming surface to form an article of the desired configuration upon the second action of said press, the outer diameter of the forming die being less than the inner diameter of the hollow punch to permit the forming die to center itself with respect to the forming ram.

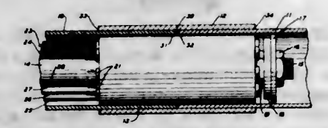
2,750,911
ROTATABLE, EXPANSIBLE WELDING FIXTURE
Reuben C. Baker, Coalinga, and Thomas M. Ragan, Downey, Calif., assignors to Baker Oil Tools, Inc., Vernon, Calif., a corporation of California
Application September 26, 1949, Serial No. 117,910
7 Claims. (Cl. 113—103)



1. In a welding fixture: a rotatable shaft; a pair of oppositely facing tapered expanders mounted on said shaft to rotate therewith; means for preventing longitudinal movement of said expanders on said shaft; a set of segmental elements slidable longitudinally along each expander and laterally into clamping engagement with a member disposed around said set of elements; a pair of sleeve means between said sets of segmental elements and slidable in opposite directions along the exterior of said shaft and engageable with said sets of elements for shift-

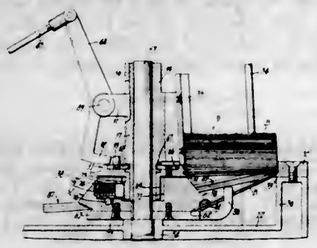
ing them along said expanders; and means including a shaft extending into said rotatable shaft for shifting said pair of sleeve means in opposite directions to move said sets of segmental elements longitudinally in opposite directions along said expanders.

2,750,912
APPARATUS FOR JOINING LENGTHS OF WAVE GUIDE OR THE LIKE
Archie P. King, Red Bank, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application September 11, 1951, Serial No. 246,068
6 Claims. (Cl. 113—111)



1. A device for joining sections of pipe comprising, in combination, a metal body having a transverse cross-sectional dimension slightly less than the inside transverse cross-sectional dimension of the pipes to be joined, said metal body having a thermal coefficient of expansion greater than that of the pipes to be joined, said body having a centrally located bore extended longitudinally therethrough and having a plurality of spaced heater holes extending longitudinally therethrough and displaced from said centrally located bore, said body further having a plurality of cooling holes spaced from said heater holes and displaced from said bore, heater elements inserted in said heater holes for heating said body and the pipes to be joined and means for inserting said body into and removing said body from inside the pipes to be joined.

2,750,913
CAN AND COVER FEEDING MECHANISM
William Pechy, Belmar, N. J., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application March 25, 1952, Serial No. 278,353
5 Claims. (Cl. 113—114)



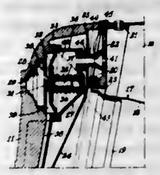
1. In a can end feeding mechanism, the combination of a conveyor for advancing cans, a magazine for holding a stack of can ends, a rotatable separator member mounted adjacent said magazine for engaging and partially separating the lowermost can end from said stack, a can end feed screw rotatably mounted beneath said separator member for completing the separation of said lowermost end from said stack, means yieldably connecting said feed screw to said separator member for normal conjoint rotation as a unit, means for continuously rotating said feed screw in one direction to successively separate and remove the lowermost can ends from said stack, a movable detector member engageable by cans advancing on said conveyor, a movable member connected to said detector member and normally held thereby out of engagement with said rotating separator member, and means responsive to the absence of a can on said conveyor for moving said detector member to engage said movable member with said separator member to arrest further rotation thereof by said yieldable connection.

2,750,914
CARGO ANTI-SHIFTING STRUCTURE FOR SHIPS' HOLDS
Robert MacGregor and Joseph MacGregor, Monkseaton, Whitley Bay, and James MacGregor, Whitley Bay, England
Application November 19, 1953, Serial No. 393,122
Claims priority, application Great Britain June 5, 1953
3 Claims. (Cl. 114—75)



1. In a ship's hold having a bottom portion and a hatch opening at its upper part, a cargo anti-shifting structure inside said hold, comprising plate means, a plurality of aligned vertically extending post means supporting said plate means and forming therewith removable partitions, each of said posts including at least two vertically aligned and pivotally interconnected channel shaped post elements, a hinged connection between the bottom of the hold and the adjacent end of the lowermost element of each of said posts, each of said post means being adapted alternatively to be folded to a collapsed position adjacent said hinged connection, thereby reducing obstruction in the hold and to be vertically erected, the channels defined by said elements of two adjacent posts facing one another, pulling means connected to the upper element of each of said posts for erecting said latter, said plate means including a series of metal shutter plates slidably located in the channels of two adjacent posts for removal therefrom, said plates spanning the space between two adjacent posts, each of said plates having its upper and lower edges bent so as to form lateral projections cooperating with corresponding bent portions of the vertically adjacent plates, the extreme lower element of said posts having a part of its channel edges cut away to enable the shutter plates to be removed from the channels from the bottom and hauled up.

2,750,915
STRUCTURE FOR INDICATING NEED FOR REMOVING SUCTION CLEANER DUST BAG
Erik Reinhold Carlberg, Stockholm, Sweden, assignor to Aktiebolaget Elektrolux, Stockholm, Sweden, a corporation of Sweden
Application December 11, 1953, Serial No. 397,743
Claims priority, application Sweden December 20, 1952
8 Claims. (Cl. 116—65)



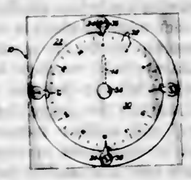
1. In a suction cleaner having a casing provided with an inlet and outlet for air adapted to flow therethrough and a filter element therein for removing foreign matter from air, the pressure differential at opposite sides of said filter element becoming increasingly greater responsive to foreign matter trapped at the side thereof initially contacted by the air, a device for producing an audible sound with the aid of air, movable valve means to control flow of air for operating said device, and means responsive to a predetermined pressure differential at opposite sides of said filter element to actuate said valve means for effecting flow of air to operate said device and produce such an audible sound.

2,750,916
HEAT INDICATOR FOR POT HANDLES
Charles A. Hanington, Freeport, N. Y.
Application December 7, 1953, Serial No. 396,704
2 Claims. (Cl. 116—102)



1. An indicator of the character described comprising a frame, a shaft fixed in said frame, a rotor loose on said shaft including a radially slotted end member, a heat responsive element secured to said shaft and extending into said slot and operable under distortion to turn the rotor on said shaft, a housing for the rotor having a sight opening, indicating means on the rotor for presentation to the sight opening and means on said frame for detachably mounting said indicator on the handle of a cooking receptacle.

2,750,917
ROTATABLE DISC INDICATOR ATTACHMENT
George E. Milligan, Medford, Oreg.
Application May 7, 1953, Serial No. 353,534
4 Claims. (Cl. 116—130)



1. The combination of an indicator attachment and an automatic direction finder dial, comprising a transparent disc, indicia inscribed on the disc graduating the same into geometrical degrees, means rotatably mounting said disc adjacent the dial and a knob carried by the disc, whereby the position of the disc may be rotatably adjusted relative to the dial.

2,750,918
CONTROL KNOB
Philip E. Willman, St. Charles, Ill., assignor to McGraw Electric Company, Elgin, Ill., a corporation of Delaware
Application November 10, 1953, Serial No. 391,245
1 Claim. (Cl. 116—133)

A control assembly including a base housing, a control disc pivotally mounted on said housing and having a generally horizontal body portion provided with an annular display of discrete indicia visible at the top thereof, said control disc also including an annular prismatic portion of transparent material depending from the body portion in the form of a rim, the outer surface of said prismatic portion depending angularly from adjacent the outer edges of the indicia on said body portion and the inner surface of said prismatic portion being inclined inwardly of the axis of the disc and upwardly toward the body portion to substantially underlie the indicia thereon and provide a reflecting surface, and a source of illumination carried by said housing and disposed within the rim on the body portion and generally vertically below the indicia on the body portion with the inner inclined reflecting surface of the prismatic portion substantially traversing and disposed between the source of illumination and the indicia on the body portion, said source of illumination operating to direct the light beam upwardly through the inner inclined surface of the prismatic portion to illuminate by outline the indicia from which the light beam is reflected to the inner inclined reflecting surface of the prismatic portion from which the image of the indicia will appear for view substantially radially through the outer surface of the prismatic portion.



2,750,919
INTERMITTENT TONE DEVICE
Martin L. Pearson, Birmingham, Mich.
Application October 19, 1954, Serial No. 463,197
1 Claim. (Cl. 116—138)

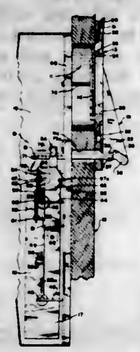


An air stream intermittent tone device comprising a duct for conducting a stream of air therethrough, an axle mounted across said duct, a plate mounted on said axle in said duct adapted to rotate in response to a stream of air flowing through said duct, said plate having an opening for receiving a sound tone vibrator member; and a tone vibrator member mounted on said plate overlying said opening so that the air stream flowing through said duct alternately passes said member to produce an interrupted sound tone as said plate turns and rotates, said plate in its rotation acting in the nature of an intermittent butterfly valve to alternately force air through said member and to permit free passage of air through said duct.

2,750,920
DOOR CHIME AND WICKET MECHANISM
Murry Tall, New Rochelle, N. Y.
Application September 8, 1952, Serial No. 308,430
17 Claims. (Cl. 116—141)

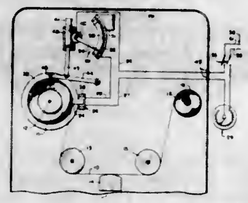
1. A door chime device comprising sound producing means, mechanism for striking said sound producing means for causing the emission of sound, a manually operable member, and a connection between the manually operable member and the striking mechanism for causing the emission of sound from the sound producing means when said manually operable member is moved in either of two opposite directions and while all of the operating parts of the device remain connected in the same manner, said operating mechanism including a rocking lever and means for engaging the lever selectively

from opposite directions at oppositely spaced points with respect to its fulcrum to cause rotation of the lever in



the same direction when engaged upon the one or the opposite side thereof.

2,750,921
TENSION CONTROL APPARATUS FOR THERMAL VAPORIZING COATING DEVICE
Chester A. Purdy, Hinsdale, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application January 12, 1953, Serial No. 330,687
4 Claims. (Cl. 118—11)



3. A tension control apparatus for a web including a vacuum chamber, which comprises a shaft holding a supply roll of the web against rotation relative thereto, bearings mounted on the walls of the chamber supporting the shaft rotatably, an electroconductive disc keyed to the shaft, an electromagnet provided with a coil and pole pieces so spaced as to closely bracket the disc, a support mounted on a wall of the chamber for mounting the electromagnet in a position in which the pole pieces bracket the disc, a variable resistance including a resistor and a contactor mounted in the chamber, a guide mounted in the chamber, a pinion mounted on the guide and fixed to the contactor, a rack meshing with the pinion and slidable in the guide, a pivotally mounted feeler urged into engagement with the roll, a link connecting the rack to the feeler, and means for supplying power to the electromagnet through the variable resistance.

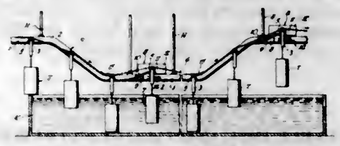
2,750,922
APPARATUS FOR DEVELOPING ELECTROPHOTOGRAPHIC PLATES
Lewis E. Walkup, Columbus, Ohio, Harold E. Copley, Elkton, Md., and Walter A. Beckdahl, Columbus, Ohio, assignors, by mesne assignments, to The Haloid Company, Columbus, Ohio, a corporation of Ohio
Application December 13, 1951, Serial No. 261,532
5 Claims. (Cl. 118—57)

1. An apparatus for developing electrophotographic plates comprising a rectangular, box-like, open tray having a bottom and side and end walls integrally formed to provide a dust-tight powder container, a cover portion connected between one end wall and adjacent portions of the side walls whereby to form a covered portion of the tray at one end thereof, the upper surfaces of said cover portion and side and end walls being substantially coplanar to form a bearing surface for supporting an electrophotographic plate, clamping means mounted on



the side walls of said tray for clamping an electrophotographic plate over the opening of said tray, trunnions formed on the side walls of the tray, a base member, and trunnion bearings on said base member for supporting the trunnions on the tray for rotational movement.

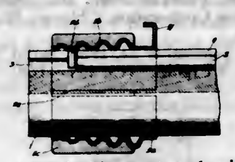
2,750,923
HOT DIP GALVANIZING APPARATUS
Marvin P. Daniel, Chicago, Ill., assignor to General Electric Company, a corporation of New York
Application November 28, 1952, Serial No. 323,038
4 Claims. (Cl. 118—423)



1. In a conveyor system for conveying articles into, through, and out of a liquid treatment bath, the combination comprising a main conveyor rail disposed above said bath, said rail having a substantially horizontal trackway portion from a side edge of which a coextensive web portion rises substantially vertically, a wheeled carriage riding on said trackway, said carriage having a yoke disposed beneath said trackway for the support of an article to be treated, means for propelling said carriage along said trackway, and a lifter section arranged to be fixed to said rail to raise said carriage temporarily above the level of said rail, said section including a ramp engaging said trackway portion for interception of said carriage wheels to divert said carriage from said trackway portion and rising to a dwell portion disposed above said trackway portion in overlying relation therewith, an upstanding guard plate extending upwardly from a side edge of said dwell portion in the plane of said web portion, said lifter section terminating abruptly above said trackway portion to permit said carriage to drop sharply toward said trackway portion after traversing said dwell portion, and means for removably attaching said lifter section rigidly to said conveyor rail.

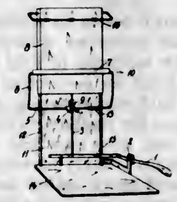
2,750,924
LEAD PENCILS
Hugh T. Knight, Montrose, Victoria, Australia
Application March 17, 1952, Serial No. 277,020
3 Claims. (Cl. 120—19)

1. In a propelling lead pencil, the combination of a lead-containing pencil body and a detachable lead-propelling and lead-clamping device adjustably attached to the lead-containing pencil body, said pencil body being tapered at the writing end and longitudinally slotted radially, the slot communicating within the pencil body with a longitudinal enlarged lead-accommodating chamber, and said detachable lead-propelling and lead-clamping device consisting of a taper-threaded spring-steel split sleeve having a tendency to part and fitted with a com-



plementary threaded locking nut and with a lead-propelling pin projecting through said slot into said lead-accommodating chamber.

2,750,925
ARRANGEMENT IN OR RELATING TO COPY HOLDER
Magnus Siegfried Andersen, Kapp, Ostre Toten, Norway, assignor to Sperry Rand Corporation, a corporation of Delaware
Application November 16, 1954, Serial No. 469,214
Claims priority, application Norway November 18, 1953
2 Claims. (Cl. 120—29)



1. In a copyholder, a copyholder plate mounted for vertical movement on a frame, a lever pivoted on the frame, means connecting said lever to said copyholder plate to move it upwardly in downward movement of the free end of said lever and to release said plate for downward movement in upward movement of the free end of said lever, and a copy sheet ruler mounted on said frame and normally moved toward the front face of said copyholder plate, the combination of an arm mounted on the portion of said copy sheet ruler carried by said frame, and means mounted on said first-mentioned means for engaging said arm in upward movement of the free end of said lever and moving said ruler outwardly away from said copyholder plate and copy attached thereto.

2,750,926
RETRACTING MECHANISM FOR BALL POINT PENS AND THE LIKE
Blanchard D. Smith, Atlanta, Ga., assignor to Scripto, Inc., Atlanta, Ga., a corporation of Georgia
Application August 14, 1953, Serial No. 374,395
3 Claims. (Cl. 120—42.03)



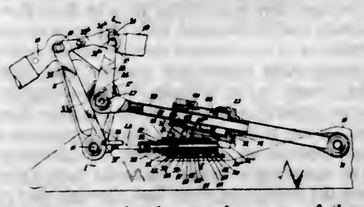
3. A retracting mechanism for a ball point pen or the like, said mechanism comprising a guide bracket having opposed flange portions joined in spaced relation by a shank portion at one side thereof, said opposed flange portions being formed with aligned apertures, a plunger slidably and rotatably extending through said apertures, a lateral projection on said plunger extending for abutment at a side edge of said shank portion, and a torsion spring anchored at one end on said bracket adjacent one flange portion thereof and engaging said lateral projection at the other end for yieldably maintaining said projection in abutting relation with said shank side edge, said spring also acting in compression to bias said projection yieldably toward said other flange portion, and said shank side edge being formed with a notch intermediate its length having an edge facing away from said other flange portion, whereby said plunger may be latched at a shifted position with respect to said guide bracket upon movement disposing said projection at said notch and may be unlatched by rotation against the pull of said torsion spring.

2,750,927
FOUNTAIN PENS
David Kahn, Englewood, N. J., assignor to David Kahn, Inc., North Bergen Township, Hudson County, N. J., a corporation of New Jersey
Application February 19, 1952, Serial No. 272,349
1 Claim. (Cl. 120—52)



In a unit adapted to be mounted in a fountain pen, a locking section bushing fabricated of a single piece of material and comprising a hollow tubular body, said single piece of material being preformed with a recess arranged in the interior of said body and extending inwardly from one end thereof, said recess being defined by side and end walls, the interior of said recess being provided with a cut-out, said cut-out being defined by side and end walls positioned within the confines of the side and end walls of said recess, said body having its ends open, a feeder bar, a pen point on said feeder bar, said pen point being received within said recess and abutting the side and end walls thereof and a pen point guard on said pen point, said pen point guard being received within said cut-out and abutting the side and end walls thereof.

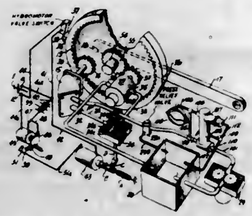
2,750,928
SERVO-ASSISTED CONTROL SYSTEMS
Hugh Graham Conway and Arthur Ernest Elmer, Gloucester, England, assignors to British Messier Limited, Gloucester, England, a British company
Application May 26, 1953, Serial No. 357,452
Claims priority, application Great Britain May 28, 1952
12 Claims. (Cl. 121—41)



1. In a servo-assisted control system of the class described, the combination of a movable element to be controlled, a powered booster operatively connected to said element, a pivotally-mounted output lever connected to the element to be controlled in such manner that angular movement of the lever about its pivot effects adjustment of said element, an input member mounted upon the output lever to produce said angular movement, an operator's control member connected to move the input member, control means for the powered booster, an actuating rod for the booster control means pivotally connected to the input member, the pivotal connection of the booster control actuating rod to the input member being substan-

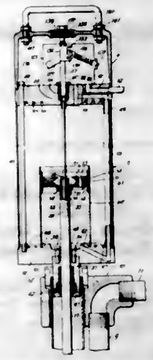
tially co-axial with the axis of the output lever pivot, and the mounting of the input member on the output lever being such as to allow limited relative movement between the input member and the output lever whereby the initial part of any deflection of the operator's control member to move the element to be controlled serves to initiate the control means for the booster thereby bringing the booster into action to assist the movement, and locking means for locking the input member to the output lever for full manual operation in the event of failure of the powered booster.

2,750,929
CYCLE CONTROL VALVE FOR HYDRAULIC MOTORS
George A. Bronson, Santa Monica, Calif., assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif.
Application August 27, 1951, Serial No. 243,837
22 Claims. (Cl. 121—44)



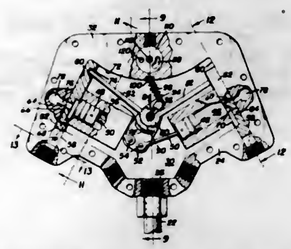
1. A control system for fluid-energized prime-movers, comprising: a fluid-energized prime-mover; a cyclically moved member drivenly connected to said prime-mover; a source of pressure fluid; a fluid-conductor path interposed between said source and said prime-mover and having respective source-connected portions leading respectively to, and from, said prime-mover; valvular means for cutting-off and establishing flow through said path operatively interposed in said path; an independent source of energy; activator means spaced at predetermined sub-cyclic intervals with respect to said cyclically moved member so as to be rendered active by the latter; means for operating the means for controlling fluid flow through said fluid path, said means-operating means normally being in energy-flow communication with the independent energy source in that energy-flow receiving condition that effects opening of said means for controlling said pressure fluid-flow through said fluid path; a normally closed energy-flow interrupting means flow-connected in circuit with the independent source and to said fluid flow-controlling means and so disposed with reference to said activator means as to be operated thereby and in turn operate said interrupting means and position said fluid-flow controlling means in an attitude that de-energizes said prime-mover; control means for controlling the flow rate and power factor of the flow of the prime-mover energizing fluid operatively disposed in said pressure-fluid path and so organized with said cyclically moved member as to phase the energizing fluid flow through said prime-mover into phases terminating with the termination of the sub-cyclic phases of said cyclically moved member, thereby halting said prime-mover at the ends of said sub-cyclic phases; and normally inactive auxiliary energy flow conducting means flow-connected in circuit with said independent energy source and adapted to be activated, to open the aforesaid means for controlling pressure-fluid flow through the fluid path to said prime-mover, when the energy communication between the independent energy source and the means for operating said valvular means that cut-off and establish fluid flow is disestablished by the activator means associated with the cyclically moved member.

2,750,930
FLUID PRESSURE MOTOR DRIVEN PUMP AND VALVE CONTROL DEVICE THEREFOR
John W. Baur, Glenview, Otto G. Pios, Cicero, and Stanley J. Simms, Franklin Park, Ill., assignors to Binks Manufacturing Corporation, Chicago, Ill., a corporation of Delaware
Application September 22, 1953, Serial No. 381,554
8 Claims. (Cl. 121—164)



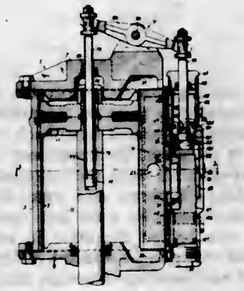
1. A valve control device for a reciprocating fluid pressure motor which comprises, a body provided with an inlet bore for the reception of fluid under pressure and a pair of outlet bores for connection to opposite ends of a reciprocating fluid motor, a pair of spaced resiliently seated check valves for respectively controlling communication between said inlet bore and each of said outlet bores, control means slidably movable substantially parallel to said spaced check valves for unseating said respective check valves, means for sliding said movable control means in said parallel direction to alternately unseat said check valves in timed relationship with the reciprocation of said motor, said last-mentioned means comprising a spring-pressed toggle linkage swingable generally parallel to the direction of movement of said control means, and means carried by said linkage for connection with the reciprocating mechanism of said motor to swing said toggle linkage.

2,750,931
POWER UNIT
Creo L. Penrod and Gertrude A. Penrod, South Bend, Ind.
Application December 10, 1951, Serial No. 260,880
5 Claims. (Cl. 121—120)



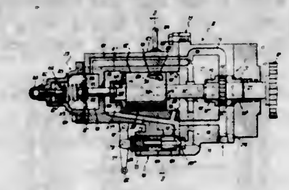
1. A hydraulic motor comprising a casing, an oscillatory power shaft journaled in said casing and having a crank arm, cylinders on opposite sides of said shaft, pistons in said cylinders connected to said crank arm, passages supplying hydraulic fluid to said cylinders, a separate valve controlling flow of fluid to and from each cylinder, actuating means connected to said crank arm and connected to said valves for operating the valves in reverse directions upon oscillation of said shaft, means for supplying hydraulic fluid under pressure to said passages, said valves including means for discharging fluid from said cylinders into said casing, means for educting fluid from said casing, said casing having slots disposed transversely of said cylinders, said valves comprising members slidable in said slots, an inlet port in each member registerable with said fluid supply means, a discharge passage in each member communicating with said inlet port and operable to selectively connect the associated cylinder with the fluid supply means or to the fluid educting means.

2,750,932
VALVE MECHANISM
Victor G. Klein, Defiance, Mo., assignor to Lincoln Engineering Company, St. Louis, Mo., a corporation of Missouri
Application May 18, 1953, Serial No. 355,624
2 Claims. (Cl. 121—154)



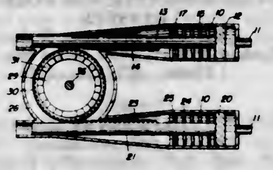
1. Valve mechanism for an expansible chamber motor, said motor comprising a cylinder having end heads, and a motor piston in the cylinder fixed on a piston rod, said valve mechanism comprising a block extending between the end heads at one side of the cylinder, said block having a flat outer face and a central exhaust passage with an exhaust hole thereto from said face, and feed passages extending longitudinally of the block from points adjacent opposite sides of the exhaust passage and open at the ends of the block to the opposite ends of the cylinder with feed holes thereto from said face on opposite sides of said exhaust hole, a valve plate secured on said face in sealed relation thereto, a valve chest secured in sealed relation overlying the valve plate, said valve chest having aligned piston-receiving bores at its opposite ends with a chamber for pressure fluid between the bores, the outer end of one bore being completely closed, a valve-actuating piston slidable at its ends in the bores between limiting end positions in each of which its ends remain in the bores, a valve-actuating piston rod having a lost-motion connection with the end of the valve-actuating piston toward the outer end of the other bore, the valve-actuating piston rod extending out of the valve chest through an opening in a closure at the outer end of said other bore, a main D-valve having a lost-motion connection with the valve-actuating piston slidable on the valve plate within the valve chest, an auxiliary D-valve alongside the main D-valve locked to the piston and slidable on the plate within the valve chest, the valve plate having a central main exhaust port in the line of motion of the main valve and aligned with said exhaust hole, main feed ports in said line of motion on opposite sides of the main exhaust port and aligned with said feed holes, a central auxiliary exhaust port in the line of motion of the auxiliary valve, auxiliary feed ports in the line of motion of the auxiliary valve on opposite sides of the auxiliary exhaust port, said valve mechanism further including passages connecting the auxiliary feed ports and the ends of said bores, a rod slidable in the motor piston rod having a lost-motion connection therewith and extending out of the cylinder, and means connecting the last-named rod and the valve-actuating piston rod.

2,750,933
FUEL INJECTION SYSTEM
John A. Lauck, Shaker Heights, Ohio, assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application February 29, 1952, Serial No. 274,178
11 Claims. (Cl. 123—139)



1. Mechanism for injecting fuel under pressure into the cylinders of an internal combusiion engine comprising a rotary valve having a discharge port therein, distributor means associated with said valve and having a plurality of ports connected to respective cylinders of said engine and adapted for successive registration with said discharge port when said valve is rotated, means for rotating said valve in timed relation with said engine, means for supplying fluid fuel under pressure to said valve for successive injection into said engine cylinders, a fluid flow restriction between said supply means and said valve, and injection advance means in fluid communication with said flow restriction and responsive to the pressure drop across said flow restriction for advancing the instant of initiation of injection into each cylinder in accordance with increase in pressure drop past said restriction.

2,750,934
TWO-DIRECTION ENGINE STARTER
Claude Hector May, Columbus, Ohio, assignor to The Murray Corporation of America, a corporation of Delaware
Application March 17, 1951, Serial No. 216,181
6 Claims. (Cl. 123—179)

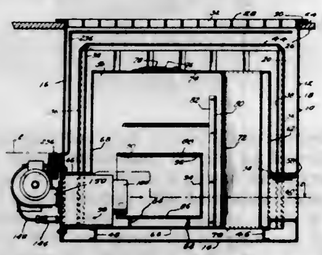


1. A starting device comprising two, oppositely disposed, fluid pressure operated racks, said racks having oppositely cut helical teeth, a pinion wheel freely positioned on a shaft between, and adapted to cooperate with, said racks, said pinion wheel being provided with oppositely disposed, and oppositely engageable axially extending, ratchet teeth on the periphery thereof, and two ratchet wheels, each of which is fixedly positioned on said shaft on either side of said pinion wheel, said wheels being provided with ratchet teeth adapted to cooperate with the ratchet teeth on said pinion wheel.

2,750,935
OIL BURNING FLOOR FURNACE
Mayo C. Buckley, Athens, Ga.
Application April 29, 1953, Serial No. 351,972
1 Claim. (Cl. 126—116)

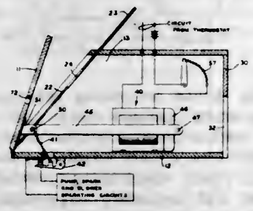
A liquid fuel furnace comprising a housing having upstanding side walls, a bottom wall secured to the side

walls, an outwardly extending flange formed at the top edge of said side walls for engagement with a floor of a building to be heated, said housing having its upper face completely open, a shell having an open bottom and an open top, means supporting said shell on said bottom wall with the lower edge of said shell spaced apart from said bottom wall, walls forming an inner chamber positioned within said shell and supported in spaced apart relation on said bottom wall by said means supporting said shell, a vertically extending air pipe passing through said chamber, a firebox comprising a bottom wall, a pair of opposed side walls, a rear wall, and supporting legs secured to said bottom wall, said firebox being positioned in said chamber with said rear wall positioned adjacent



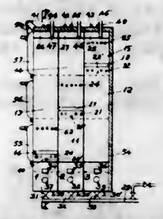
said air pipe, a pipe connecting said inner chamber adjacent the front end of said firebox and extending to an opening in said outer housing, a pot type burner having a horizontal nozzle providing a jet opening, said burner being mounted on said housing and extending through said pipe with the jet opening thereof positioned between the side walls of said firebox and directed toward the rear wall thereof so that flame emanating from said nozzle of said burner will impinge on said rear wall, a combustion gas outlet pipe extending from said chamber to an opening in said housing diametrically opposite to said burner, and a baffle, said baffle extending vertically from the bottom of said chamber between the sides thereof terminating below the top of said chamber, said baffle being positioned between said firebox and said air pipe.

2,750,936
ADJUSTABLE DAMPER FOR FUEL SAVING DEVICES
Luigi Salto, Brooklyn, N. Y.
Application June 17, 1953, Serial No. 362,367
1 Claim. (Cl. 126—290)



In a fuel saving device for furnaces, the combination of a horizontally elongated housing affording an air passage therethrough and having an air inlet at one end and an air outlet at its other end adapted to communicate with a furnace, the inlet end of said housing being inclined and said housing including a bottom wall, a top wall and a pair of side walls provided with opposing grooves adjacent and parallel to the inclined inlet end, an adjustable damper structure comprising an inclined damper plate slidable in said grooves to pre-adjust the volume of air passing through said inlet, an upwardly and outwardly swingable gate hinged to said bottom wall at the inlet end of the housing and movable from an externally projected open position to a slanting closed position wherein it rests on said damper plate, a closure operator provided in said housing, and a link extending from said operator to said gate for opening and closing the same.

2,750,937
STEAM COOKING APPARATUS
Väinö V. Sjöland, Stockholm, Sweden
Application February 19, 1952, Serial No. 272,419
Claims priority, application Sweden February 19, 1951
3 Claims. (Cl. 126—369.2)



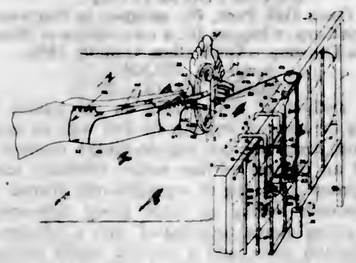
1. A steam cooking apparatus operable with steam at substantially atmospheric pressure comprising a plurality of chambers entirely separated from each other and disposed one above the other, the lowermost chamber serving as a water-chamber and the remaining chambers serving as cooking-chambers, said water-chamber being divided by vertical partition walls into entirely separate part-chambers, one behind the other in relation to the front side of said apparatus, a vertically disposed channel on each side of said cooking-chambers communicating a cooking-chamber with a corresponding part-chamber, their being a vertically disposed channel on each side of said cooking chambers for communicating a cooking-chamber with a corresponding part-chamber of said water-chamber, and horizontally disposed channels located above the uppermost cooking-chamber, said latter channels being entirely separated from each other, each of said latter channels serving as a connection between the vertically disposed channels on the sides of the cooking chambers communicating a cooking chamber with a corresponding part-chamber of said water-chamber.

2,750,938
OROPHARYNGEAL AIRWAY AND SUCTION TUBE
Emanuel Roy Bier, Winnipeg, Manitoba, Canada
Application January 24, 1955, Serial No. 483,734
7 Claims. (Cl. 128—2)



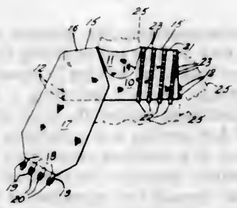
6. An oropharyngeal airway with respiratory sound amplifying device for insertion in the throat and attachment to a listening means comprising a rigid elongated tube of substantially uniform bore for insertion in a human throat, a hollow sound amplifying chamber having walls of rigid material and connected at one end to an end of said tube and being of substantially greater cross-sectional area than said tube, that portion of said tube adjacent said chamber being substantially straight and that portion of the tube remote from said chamber being curved outwardly and inwardly of the longitudinal axis of the straight portion of said tube, an unobstructed aperture in the wall of said chamber remote from said tube, a short neck-projecting member connected to said unobstructed aperture, a short tubular duct provided in the wall of said chamber located at a point intermediate said elongated tube and said unobstructed aperture, and locking means for holding listening means in connection with said duct.

2,750,939
TRACTION DEVICE FOR INVALIDS
Henry Bolger, Portland, Oreg.
Application May 20, 1953, Serial No. 356,150
2 Claims. (Cl. 128—84)



1. In a traction means, a leg band adapted to encircle a leg adjacent the knee, an ankle band, a relatively rigid plate engageable against the bottom of a foot, a pair of straps connected between said leg band and said plate, said pair of straps diverging from said band forwardly of said leg, a pair of straps connected between said ankle and said plate, and a ring extending from said plate for connection with a weight.

2,750,940
ARM SLING
Hazel A. Fear, Sioux City, Iowa
Application January 15, 1954, Serial No. 404,204
1 Claim. (Cl. 128—94)



An arm sling comprising a jacket having upper shoulder portions adapted to be supported on the shoulders of a wearer, a widened arm supporting flap attached to the top of one of said shoulder portions, said arm supporting flap being of sufficient width to at least partially enclose an arm of the wearer and normally extending generally downwardly from said shoulder portion, a plurality of straps attached to the top of the other of said shoulder portions, said straps passing generally downwardly, said arm supporting flap being adapted to be wrapped about a supported arm, a plurality of buckles attached to the lower terminal of said arm supporting flap, said straps having a plurality of spaced openings therein whereby said buckles can be attached at desired elevations to support said arm at desired angles and elevations, said jacket including chest and back covering portions.

2,750,941
MOUTH PROTECTOR
Jack F. Cathcart, Berkeley, Calif., assignor of one-half to Fred P. Moffett, Berkeley, Calif.
Application April 6, 1954, Serial No. 421,308
18 Claims. (Cl. 128—136)



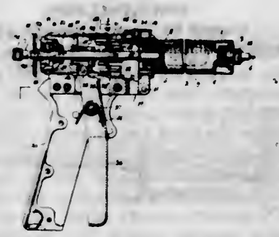
1. A mouth protector for use by persons engaged in competitive contact sports, comprising a preformed mouthpiece of soft rubber-like material and involving a handle free trough, a settable mastic in said trough for impression by the teeth and gums of the user of the protector, said mastic, when set, having an elasticity and resiliency sufficient to provide a shock-absorbing characteristic, and means securing such mastic in said trough.

2,750,942
SURGICAL DRESSINGS
John Percy Robson, Leicester, England, assignor to Dalmas Limited, Leicester, England, a British company
Application March 23, 1954, Serial No. 418,142
Claims priority, application Great Britain March 12, 1954
2 Claims. (Cl. 128—156)



1. A surgical dressing comprising a rectangular transparent non-adherent film having a strip of net material imbedded in said film along two opposite marginal edges thereof, a self-adhesive mass spread on the surface of the film over an area substantially coextensive with said net material, and a strip of absorbent material applied to said self-adhesive mass along the inner sides of said marginal edges.

2,750,943
ONE-HAND VETERINARY SYRINGE
Morris Dann, Havertown, Pa., assignor to American Home Products Corporation, New York, N. Y., a corporation of Delaware
Application December 21, 1954, Serial No. 476,742
8 Claims. (Cl. 128—235)



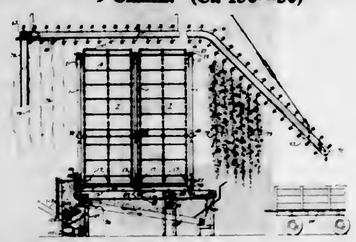
1. A multiple-dose injection syringe comprising a barrel adapted to contain an ampule connected with an injection needle and having a slidable plunger, a smooth push rod adapted when advanced in the syringe to move

the slidable plunger distally in the ampule, one-way drive means engageable with the push rod and adapted to move the push rod distally but to permit proximal movement of the push rod, releasable stop means engaging the push rod and adapted to prevent proximal movement of the push rod, manually operated release means to disengage said releasable stop from the push rod, manually operable means adapted to act on said drive means to cause it to engage the push rod and advance it distally, and a plurality of adjustable stops adapted to be brought one at a time into the path of the drive means to limit its distal movement and thus to regulate the volume displaced by the slidable plunger.

2,750,944
ABSORBENT BANDAGE
Duane H. Tollstrup, North Hollywood, Calif.
No Drawing. Application September 27, 1954, Serial No. 458,660
4 Claims. (Cl. 128—290)

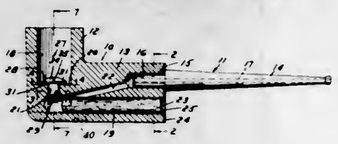
1. An absorbent bandage comprising from 50% to 95% cotton fibers and from 5% to 50% bentonite.

2,750,945
HOP-PICKING MACHINE
Millard E. Crowley, Santa Rosa, Calif., assignor to Lippincott & Smith, San Francisco, Calif., a partnership
Application September 28, 1951, Serial No. 248,731
9 Claims. (Cl. 130—30)



7. A hop picking machine comprising an endless chain-like array of picking means, means associated with said picking means for mounting them for movement around a closed path including a horizontal reach, an endless mesh conveyor, means to move the conveyor transversely of the picking means, said conveyor having a horizontal reach extending beneath that of said array in a direction transverse thereto and spaced therefrom by distances as to subject bines on said conveyor to the action of said picking means, whereby bines resting on said conveyor and carried thereby in one direction are subjected to combing action by said picking means moving transversely to the direction of motion of the conveyed bines.

2,750,946
SMOKING PIPE
Carroll M. Breed, Orlando, Fla.
Application July 7, 1952, Serial No. 297,553
3 Claims. (Cl. 131—203)



1. A smoking pipe comprising a body having an upwardly opening bowl and having a shank portion extending outwardly from said bowl, said shank portion having a bore extending inwardly from the outer end thereof to a point below the bottom of said bowl, a vertical passage connecting the bottom of said bowl to the inner end of said bore, a smoke passage in said body extending inwardly from the outer end of the said shank portion at an elevation above said bore and having the inner portion slanted downwardly and inwardly toward the axis of said bore, the inner end of said slanted portion communicating with the inner end portion of said bore at the top of the latter and also intersecting the lower end of said vertical passage, absorbent material located in said bore, and a stem having a part at the inner end thereof removably secured in the outer end of said smoke passage and having a passage therethrough communicating with said smoke passage.

2,750,947
HAIR TREATING COMPOSITION AND METHOD OF USE FOR SETTING
Virgil A. Gant, Oak Park, Ill., assignor to Northwestern Research Corp., Chicago, Ill., a corporation of Illinois
No Drawing. Application April 30, 1952, Serial No. 285,330
4 Claims. (Cl. 132—7)

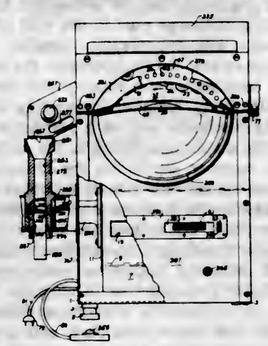
1. The method of setting hair on the human head comprising the steps of treating the hair with an aqueous composition containing an organo-silicon resinous material and an organic surface active lubricant selected from the group consisting of vegetable oils, Werner complex compounds having an acido group containing at least 10 carbon atoms coordinated with a trivalent nuclear chromium atom, and a cationic amine having an organic group having more than 10 carbon atoms attached to a base amine group, and then heating the hair with the composition thereon to set the organo-silicon resin and the lubricant on the hair fibers while the hair is positioned in the arrangement in which it is desired to be set.

2,750,948
HAIR CURLING
Nola Lutz, Baltimore, Md.
Application July 21, 1954, Serial No. 444,790
3 Claims. (Cl. 132—33)



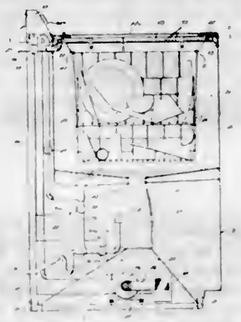
1. A hair curler assembly for forming pin curls and the like from a lock of hair and retaining the lock in curl form during application of waving compositions thereto comprising a spindle element including a base member adapted to be positioned against the head of the user and having a central hub portion and a plurality of radial projections extending in a common plane from said hub portion, a peg member having a longitudinal slot opening through one end thereof for reception of the end of a lock of hair, means rotatably journalling the other end of said peg member in the hub portion of said base member with said peg member disposed perpendicular to said common plane, means pivotally connecting end portions of the pair of leg sections defined by said slot with the adjacent portions of said peg intermediate the ends of said peg, and an open framework cage element adapted to be removably associated with said spindle element comprising an upper circular end bounded by a depending peripheral flange adapted to form with said base an open framework cylinder for enclosing and retaining in curled form a lock of hair wound about said peg, said flange having a relieved sector corresponding in extent to the space between one adjacent pair of projections to define an entrance for the admission of a lock of hair into said cage, and said pivoted leg sections being pivotable in opposite directions to overlie the upper end frame of said cage element when said cage element is in mated position with said spindle element to restrain said cage element against removal from said spindle element.

2,750,949
COIN COUNTER
Thomas E. Kulo, Glenview, and Clarence F. Rogler, Chicago, Ill., assignors to Johnson Fare Box Company, Chicago, Ill.
Application September 8, 1949, Serial No. 114,504
18 Claims. (Cl. 133—8)



1. In a coin counter, the combination of a coin counting means comprising a coin guide, a star wheel disposed adjacent the guide to form a coin gap therewith, coin pick-up means for feeding coins to said gap, coin ejecting means on said pick-up means, a pin drum having a number of rows of pins, each row having a different number of pins, means connecting said star wheel to advance said drum in accordance with the coin count and means selectively settable relative to said rows of pins for actuation by a pin in the selected row to operate said coin ejecting means.

2,750,950
DISH WASHER
Paul R. Inman, Spokane, and Stamatis George Velonis, Opportunity, Wash.
Application June 24, 1955, Serial No. 517,744
7 Claims. (Cl. 134—102)



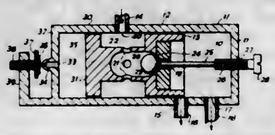
1. A dishwashing machine comprising a housing, a washing tank within the housing having side walls, a top wall, and a bottom wall, a perforated false bottom partition secured in the tank and spaced above the bottom wall, said partition having a multiplicity of apertures therein, a drain outlet in the partition, a waste pipe connected to said outlet and extending downwardly through said bottom wall and out of the housing, a secondary drain outlet in the bottom wall, a secondary drain pipe connected to said secondary drain outlet, valve means operable to close the main drain outlet and the secondary drain pipe, an air supply pipe connected to said secondary drain outlet whereby to supply air under pressure between the bottom wall and the partition, means connected to said air supply pipe to supply air under pressure to said pipe, and water supply means to fill the tank with water.

2,750,951
ARTICLE CARRYING ATTACHMENTS FOR CRUTCHES
Dorothy J. Barnwell, Orangeburg, S. C.
Application November 9, 1954, Serial No. 467,783
5 Claims. (Cl. 135—47)



5. An article carrying attachment for crutches of the type including a pair of convergent rods connected by a top cross piece and a hand grip, said attachment comprising a receptacle, means for suspending said receptacle directly from said hand grip, and a pair of horizontally spaced resilient hooks rigidly secured to said receptacle and constructed to embrace said rods at points below said hand grip.

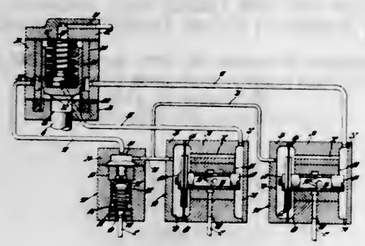
2,750,952
VALVE SYSTEMS FOR THE CONTROL OF FLUID PRESSURE
Denis Best and Cyril Charles Jones, Hollinwood, England, assignors to Ferranti Limited, Hollinwood, England
Application December 26, 1951, Serial No. 263,204
Claims priority, application Great Britain December 27, 1950
12 Claims. (Cl. 137—116.3)



1. A valve system for controlling fluid pressure, comprising, in combination, an elongated hollow member formed with a supply aperture, an exhaust port, and a delivery port; piston means in said elongated hollow member arranged for movement along the longitudinal axis of said hollow member and having a supply passage extending therethrough, said piston means dividing the interior of said hollow member into an inlet and an outlet chamber and occupying a rest position when the pressure within said outlet chamber is equal to a predetermined pressure, said supply aperture opening into said inlet chamber and said exhaust and delivery ports opening into said outlet chamber; a supply valve operatively associated with said piston means and movable between open and closed positions for opening and closing

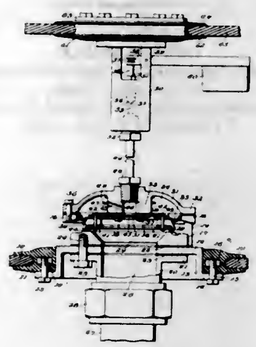
said supply passage, said supply valve being arranged in said inlet chamber in such a manner that the pressure of the fluid entering through said supply aperture tends permanently to hold said supply valve in closed position; means for automatically moving said supply valve into open position on movement of said piston means from its rest position toward said delivery port beyond a first predetermined position, thereby opening said supply passage; an exhaust valve arranged in said outlet chamber and being movable with said piston means between open and closed positions for opening and closing said exhaust port, said exhaust valve being closed when said piston means is in its rest position thereof, being automatically moved into open position on movement of said piston means from its rest position toward said supply aperture beyond a second predetermined position and being automatically returned into closed position upon returning movement of said piston means toward said delivery port into its rest position; and fluid pressure responsive means connected to said piston means for moving the latter from its rest position toward said delivery port beyond said first predetermined position when the pressure within said outlet chamber falls below said predetermined pressure, thereby opening said supply passage so as to permit the flow of fluid from said supply aperture through said supply passage into said outlet chamber, thus increasing the pressure therewithin, and also for permitting the pressure of the fluid in said outlet chamber, when the same is greater than said predetermined pressure, to move said piston means toward said supply aperture beyond said second predetermined position, thereby opening said exhaust so as to vent excess fluid in said outlet chamber, thus decreasing the pressure therewithin, whereby the pressure within said outlet chamber is constantly maintained at said predetermined pressure.

2,750,953
FLUID FLOW PROPORTIONER
Charles W. Helsley, Jr., Pacific Palisades, Calif., and Stuart F. Kutsche and Edward Orent, Grand Rapids, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 19, 1952, Serial No. 326,956
6 Claims. (Cl. 137—118)



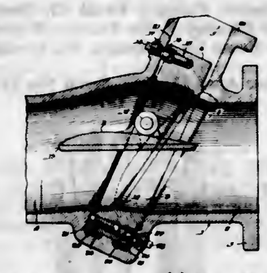
1. A unitary flow proportioner for maintaining predetermined rates of flow over a wide flow range in a plurality of conduits supplied in parallel from a common source of fluid under pressure comprising a valve housing including a main body member, a cover member on one side of the body member, and a cover member on the opposite side of the body member; a metering valve including an open-ended liner sleeve in the body member extending between the cover members, a piston reciprocable in the liner sleeve, an inlet passage in one cover member to connect the common source of fluid with one end of the liner sleeve and piston, a vent passage in the opposite cover member communicating with the opposite end of the liner sleeve and piston, a compression spring in the opposite end of the liner sleeve between the piston and opposite cover member, and a plurality of restrictor orifices arranged around the wall of the one end of the liner sleeve so that the effective areas thereof are varied by piston movement in response to fluid pressure changes in the one end of the liner sleeve acting against the compression spring in the opposite end of the liner sleeve; a pressure control passage in the body member to connect one of the conduits with the discharge side of one of the restrictor orifices; a resistance valve in the pressure control passage to retard flow therethrough; and a plurality of throttling valves arranged around the metering valve each including an open-ended insert sleeve in the body member extending between the cover members, a discharge port in the wall of the insert sleeve to connect with a respective conduit, a pair of interconnected chambers formed between the cover members and body member at the ends of the insert sleeve, a passage in the body member connecting one of the chambers to the discharge side of a respective restrictor orifice, a flexible diaphragm between the body member and one cover member separating the chamber at that end of the insert sleeve into a body chamber and cover chamber, passages in the body member and the last mentioned cover member connecting the cover chamber to the pressure control passage between the resistance valve and associated restrictor orifice, a piston reciprocable in the insert sleeve connected to the flexible diaphragm for movement in response to a pressure differential between the body and cover chambers, and a passage in the piston controlling communication between the discharge port and interconnected chambers in accordance with piston movement.

2,750,954
VALVE MECHANISM FOR FILLING AND CONTROLLING FUEL LEVEL IN A TANK
John G. Russell, Cleveland, Ohio
Application January 26, 1953, Serial No. 333,181
10 Claims. (Cl. 137—400)



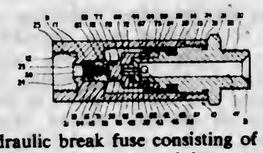
1. A valve mechanism for filling and controlling the level of fluid in a tank comprising a valve housing having an inlet opening for fluid surrounded by a valve seat and ports leading to the tank, said housing having a concave cap with a depending central portion opposite the inlet opening to form a fluid pressure chamber, a diaphragm attached at its outer margin to said housing and at its central section to said central portion of the cap so as to provide an annular flexible portion closing said chamber, an annular valve attached to the underside of said flexible portion of the diaphragm, said valve being adapted to engage and close said inlet, said housing having a restricted opening connecting said chamber to the inlet, a passageway leading from the chamber to the interior of the tank and a float-controlled pilot valve in said passageway.

2,750,955
VALVE SEAT MOUNTING
Kurt B. Bredtschneider, Chicago, and Eugene C. Petrie, Elmhurst, Ill., assignors to Crane Co., Chicago, Ill., a corporation of Illinois
Application January 24, 1952, Serial No. 268,048
3 Claims. (Cl. 137—454.2)



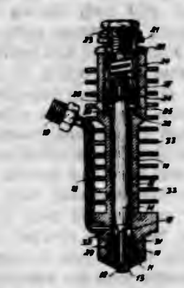
1. A valve structure comprising a one piece casing having a substantially straight flow passage and a transversely extending fluid chamber intersecting said flow passage, said chamber being open at the top and closed at the bottom, removable means for covering the top of the chamber in fluid tight relation, an insert member freely and unrestrictedly introducible within the fluid chamber when the covering is off and substantially filling the fluid chamber in the longitudinal flow passage extending direction of the valve structure when in mounted relation within the fluid chamber, said insert member having a substantially straight flow passage for registry with the flow passage of the casing when the member is mounted within the fluid chamber, said insert member being provided with a seat surface and a closure member for engagement with the seat surface, said closure member being pivotally mounted within the flow passage of the insert member, means for mounting said insert member within the fluid chamber when the flow passage thereof is in registry with the flow passage of the casing comprising spaced means within the insert member adapted to bear against a single surface within said fluid chamber whereby to force the insert member against an opposite surface of the fluid chamber in fluid sealed relation therewith, said spaced means cooperating with said insert member for this action and being operative upon rotation therewithin, said casing having openings in the wall of the fluid chamber thereof in substantial alignment with at least some of the spaced means when the insert member is in fluid registry position relative to the flow passage of the casing to permit rotation of these spaced means from exterior of the casing, and means normally covering these openings in substantial fluid tight relation with the casing, said spaced means being arranged in spaced apart relation around the periphery of said insert member.

2,750,956
HYDRAULIC BREAK FUSE REQUIRING RESET
Robert Stevenson, Barrington, R. I., assignor to Anco, Inc., a corporation of Rhode Island
Application April 2, 1952, Serial No. 280,097
2 Claims. (Cl. 137—460)



1. A hydraulic break fuse consisting of two oppositely disposed cylinders forming an inlet passageway and an outlet passageway respectively and united in fluid tight relationship to form a continuous passageway, means on opposite ends of said cylinders to be united with a hydraulic conduit, one cylinder in its continuous passageway having a chamber and a piston seat, the other cylinder having a shoulder, a neck projecting from said shoulder, a multiple number of ports in said neck, a nipple extending from said neck, a plurality of pins fixed in said shoulder, said continuous passageway having a restricted bore through said nipple, said ports forming an extension of said inlet passageway, a piston having a sleeve terminating in a well, externally said piston comprises a major diameter portion having a projection provided with a plurality of pin receiving orifices adapted to engage and disengage said pins fixed in said shoulder and a piston face housing a fluid tight packing, a multiple number of ports in said major diameter portion adapted to register with said multiple number of ports in said neck, said piston face and packing being adapted to engage and disengage said piston seat, said well being adapted to engage and disengage said nipple, resilient means located in said piston seat abutting the end of said piston, fluid entering said restricted bore from said inlet passageway acting on the base of said well to overcome the tension of said spring and force said piston face into engagement with said piston seat and said plurality of pins being constructed and arranged to abut said projection of said major diameter portion when retracted from said pin receiving orifices to retain said piston face in engagement with said piston seat.

2,750,957
INJECTION VALVE
Bruno Tavola, Milan, Italy
Application March 26, 1952, Serial No. 278,547
Claims priority, application Italy April 10, 1951
2 Claims. (Cl. 137—516)



1. In a valve device, in combination, a tubular housing means having an inner wall surface and an annular step portion projecting inwardly from said inner wall surface; an annular seat member in said tubular housing means comprising a tubular sleeve engaging said inner wall surface and resting on said annular step portion, said tubular sleeve having an annular flange extending inwardly from said inner wall surface and defining a central opening; a resilient deformable plate member arranged in said tubular housing means extending across the interior thereof and seated with one face on said annular flange of said seat member; an elongated valve member mounted in the interior of said tubular housing means extending along the axis thereof and adapted to reciprocate therein along said axis, said elongated valve member passing through said central opening of said annular seat member and having a portion engaging said one face of said plate member; roller means arranged in said tubular housing means in the central opening of said annular seat member in rolling engagement with said elongated valve member and said tubular sleeve of said seat member and axially movable between said annular step portion of said tubular housing means and said annular flange of said seat member for guiding the axial reciprocation of said valve member; resilient means in said tubular housing means pressing against the opposite face of said resilient deformable

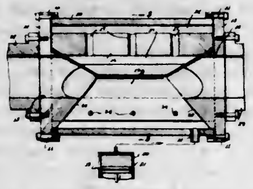
plate member centrally thereof; and elongated annular retaining means mounted in said tubular housing means around and spaced radially from said resilient means and having one end in contact with and pressed against said opposite face of said plate member, whereby said plate member is fluid-tightly held between said resilient means and said portion of said valve member, and between said retaining means and said annular seat member, to provide respective seals therebetween.

2,750,958
DRILL PIPE FLOAT VALVE
Reuben C. Baker, Coalinga, and Charles M. King, San Gabriel, Calif., assignors to Baker Oil Tools, Inc., Los Angeles, Calif., a corporation of California
Application April 27, 1953, Serial No. 351,383
3 Claims. (Cl. 137—515.7)



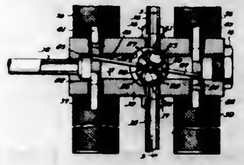
1. In a drill pipe float valve: a valve body having a metallic valve seat; a metallic valve head movable upwardly into engagement with said seat, said valve head engaging said seat only along substantially a circumferential line of contact; said body having a central hub portion below said head; a separate valve guide removably mounted in said hub portion and having a flange engaging one end of said hub portion to prevent longitudinal movement of said guide in one direction; retaining means on said guide engaging the other end of said hub portion to prevent longitudinal movement of said guide in the opposite direction; a valve stem secured to and depending from said head and slidable in said guide; and spring means surrounding said stem and engaging said head and guide to urge said head toward engagement with said stem, the force exerted by said spring means upon said valve head when it engages said seat being only slightly greater than the combined weights of said valve head and stem, whereby said valve head moves downwardly to a fully open position when a very low fluid pressure is imposed thereon.

2,750,959
VALVE OF RELATIVE MOVABLE FLEXIBLE DIAPHRAGMS
Ernest A. von Seggern, Burbank, Calif., assignor to Soundrive Pump Company, Hollywood, Calif., a corporation of California
Application December 4, 1951, Serial No. 259,784
9 Claims. (Cl. 137—525)



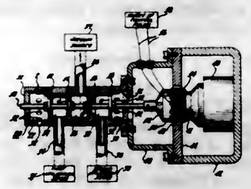
1. A valve diaphragm of elastic material and of trough shape, having substantially trapezoidal elastic sides joining one another to form a bottom, said trough-shaped diaphragm having two ends making obtuse angles with said bottom, and reinforcing means for said ends making said ends substantially non-elastic in all directions.

2,750,960
VALVE
George E. Hansen, Chicago, Frank D. Cotterman, La Grange, and Edmond P. De Craene, Westchester, Ill., assignors to Crane Co., Chicago, Ill., a corporation of Illinois
Application April 11, 1951, Serial No. 220,372
4 Claims. (Cl. 137—609)



1. In a valve construction or the like comprising a substantially fluid tight casing having a fluid inlet and a plurality of outlet openings, a shaft extending into the said casing, a closure member holder between said inlet and outlet openings rotatably movable on the shaft within the said casing and having oppositely disposed actuating rods extending therefrom, spherical closure means within said holder member and limitedly restricted in movement by the said closure member holder within a recessed portion on substantially oppositely disposed sides thereof thereby to selectively interrupt fluid flow through the said valve by seating of the said closure means in one of the outlet openings of the casing under line-fluid pressure upon predetermined rotative movement of the said holder, the side walls of the said recessed portion at opposite sides of the said spherical closure means contacting the said spherical closure means to move the latter member in opposite directions, the said shaft journally supporting the said holder and extending in a plane substantially at right angles to the said actuating rods, and apertured rod means reciprocally movable and with the apertures oppositely disposed in different planes within the casing to actuate the said holder rods.

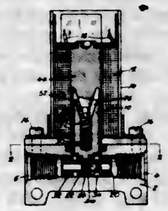
2,750,961
VALVE ACTUATING MECHANISM
Joseph M. Uritis, Haddon Township, Camden County, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application September 28, 1951, Serial No. 248,767
1 Claim. (Cl. 137—625.5)



A high-speed valving system comprising in combination, a valve body having valve controlled passages therethrough, a plurality of poppet-type valves for controlling said passages, a common operating rod for said valves for moving said valves to either of two predetermined positions, an overcenter biasing means for said valves for biasing said valves into either of said two positions, and an electrodynamic motor unit coupled to said rod for effecting the operation of said valves, said motor unit comprising means for producing a unidirectional magnetic field and including means defining an annular

air gap in said magnetic field, a coil, means including said operating rod for supporting said coil in and substantially coaxially with said annular air gap, and means electrically connected to said coil for applying electrical pulses of selected polarity to said coil, said coil being responsive to coaction between said pulses and said field to produce motion of said coil in one direction in response to a pulse of one polarity and in the opposite direction in response to a pulse of the opposite polarity whereby to operate said valves in response to the application of the pulses to said coil.

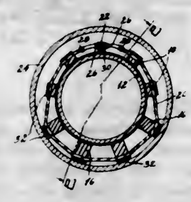
2,750,962
SOLENOID OPERATED VALVE STRUCTURE
Morton A. Kreitchman, West Orange, Benjamin P. Welt and Murray Maslow, South Orange, N. J.
Application June 28, 1955, Serial No. 518,604
4 Claims. (Cl. 137—625.48)



1. An impact opened, spring closed pressure responsive gate valve comprising in combination a valve body having a chamber therein provided with inlet and outlet ports, a valve seat member for said outlet port, a solenoid including a plunger passage communicating with said chamber and having an axis extending substantially at right angles to the axis of said outlet port and parallel to but spaced from the plane of said sealing surface, a spring in said passage, a plunger movable by said spring axially of said passage and having a portion extending into said chamber, a bore extending transversely of said portion and registerable with the outlet port upon movement of said plunger by said spring to a valve closing position, a sealing element having a flat sealing face and loosely fitted within said bore to permit pressure responsive movement of the element toward said seat and having an edge spaced from the side of said bore to provide lost motion axially of the plunger between the plunger and the edge of the sealing element, whereby when the solenoid is energized to open the valve the plunger is moved against the action of said spring and has an initial free motion with respect to said sealing member causing the plunger to strike the edge of the sealing element and displace it by impact from said sealing surface.

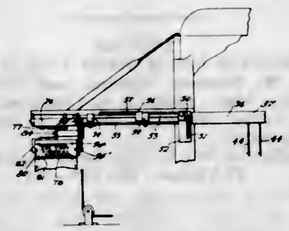
2,750,963
CONCENTRIC PIPE INSULATOR AND SPACER
Donald H. Bond, Houston, Tex., assignor, by mesne assignments, to The Texas Pipe Line Company, Houston, Tex., a corporation of Texas
Application May 15, 1952, Serial No. 287,998
3 Claims. (Cl. 138—65)

2. A pipe spacing device designed for maintaining an inner pipe in annularly spaced relation to the inner wall of a surrounding casing, said device comprising a plurality of elongated parallel spaced pipe spacer members formed of electrically insulating material and having apertures extending laterally therethrough, several of said spacer members having a height substantially equal to the space between the outer surface of said pipe and the inner surface of said casing, said last named members all being so positioned as to lie on one side of a diameter of said pipe when secured thereon, the rest of said spacer members having a lesser height so as to provide clearance between said casing and said pipe carrying said spacer members; a coupling member comprising a metallic bar arranged parallel to said spacer members and having a layer of electrically insulating material on the inner surface thereof for insulating said bar from said pipe; connecting means for securing said members in spaced relation about the periphery of said pipe, said connecting means comprising at least one elongated metallic connecting element passing laterally through said apertures



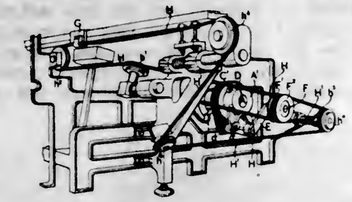
in said spacer members in position to be spaced from the surface of said pipe by all of said spacer members, and having extremities extending oppositely through said metallic bar, and means coacting with said extremities and the opposite faces of said bar for developing tension in said connecting element to hold said spacer members on a pipe; and retaining pins in said apertures wedging said connecting element against said spacer members for securing said members in fixed spaced relation on said connecting element.

2,750,964
WEAVING WITH HOOK ENGAGEMENT OF SELECTED PILE ENDS
Frank W. E. Hoeselbarth, Carlisle, Pa., assignor to C. H. Masland & Sons, Carlisle, Pa., a corporation of Pennsylvania
Application April 16, 1954, Serial No. 423,659
22 Claims. (Cl. 139—39)



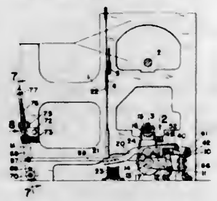
2. The method of making a float pile carpet, which comprises interweaving at least one pile warp, at least one binder warp, at least one stuffer warp and wefts, raising all ends of the pile warp over a wire at one transverse row to form pile, engaging hooks under certain pile warp ends, and thereby holding them above the next binding weft to form floats while lowering other pile warp ends behind the next binding weft, raising all ends of the pile warp over a wire at the next transverse row to form the ends of floats from some pile warp ends and the beginnings of floats from other pile warp ends, engaging hooks under the pile warp ends forming the beginnings of floats and thereby holding them above the next binding weft to form new floats while lowering the pile warp ends which form the ends of floats behind the next binding weft, raising all ends of the pile warp over a wire at the next transverse row to form pile and lowering the pile warp ends which form the new floats behind the next binder weft.

2,750,965
LOOMS FOR WEAVING
Ian Stephen Porter, Barnsley, England
Application August 25, 1952, Serial No. 306,248
2 Claims. (Cl. 139—42)



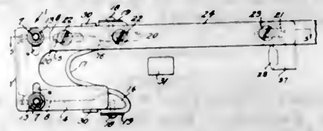
1. Means for the insertion and withdrawal of pile wires in looms having a frame and a pile wire carrying slide mounted thereon for weaving pile fabrics, comprising the combination with a constantly rotating shaft of the loom of an epicyclic driving arm mounted thereon, a short shaft rotatably mounted at one end of the epicyclic driving arm, a sprocket wheel carried on the short shaft, a stationary sprocket wheel carried by the frame in alignment with the first sprocket wheel and coaxial with the axis of rotation of the epicyclic driving arm, a chain connecting the two sprocket wheels, a driven arm secured on the short shaft, two pulleys mounted on the free end of the driven arm, a cord passing around one of said pulleys and being secured at one end to a stationary part of the loom and at the other end to the said slide for imparting movement thereto in one direction, a series of fixed guide pulleys around which said cord passes, a second cord passing around the other of said two pulleys and secured at one end to a stationary part of the loom and at the other end to said slide for imparting movement to said slide in the other direction, and a second series of fixed guide pulleys around which the second cord passes, the ratio of the gearing between the two sprocket wheels being such that as the epicyclic arm rotates, the free end of the driven arm and consequently the pulleys thereon are constrained to move with a straight line movement.

2,750,966
HARNESS MECHANISM FOR LOOM
Benjamin W. Brouwer, Auburn, and Albert Palmer, Worcester, Mass., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a corporation of Massachusetts
Application July 8, 1953, Serial No. 366,757
10 Claims. (Cl. 139—79)



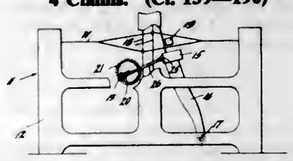
1. In a loom having a plurality of harness frames and a cam shaft having secured thereto a plurality of cams, a treadle lever for each harness frame operatively associated with the corresponding cam, each treadle lever having one end thereof operatively connected to its harness frame and having the opposite end thereof provided with a slot extending lengthwise of the lever in a direction generally toward and from the cam shaft, pivot means common to the treadle levers extending through the slots thereof mounted for movement in a direction along said slots, manual control mechanism, and operative connections between said mechanism and said pivot by which the position of the latter along the slots can be changed by manipulation of said manual control mechanism.

2,750,967
PICKER STICK CHECK
Marion M. Parrish and Walter L. Parrish, Columbus, Ga.
Application December 18, 1953, Serial No. 399,012
7 Claims. (Cl. 139—167)



1. A picker stick check comprising a bracket and means for securing said bracket on a loom, a pair of jaw members pivotally mounted on said bracket and having a pair of opposed adjacent free end portions, a flexible strap having its opposite ends secured to said free ends of said jaw members and extending therebetween, means connected with each of said jaw members constantly tending to urge the free ends thereof for movement away from each other, said flexible strap being disposed in the path of movement of said picker stick in one direction whereby said picker stick upon engagement with said strap pivots said free ends of said jaw members toward each other to lap said strap around said picker stick and to arrest the movement thereof, and means for adjusting each of said jaw members transversely with respect to said lay of said loom.

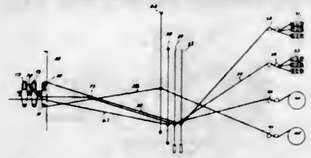
2,750,968
BEAT-UP MOTION FOR LOOMS
Norman E. Klein, Pendleton, S. C., assignor to Deering Milliken Research Corporation, Pendleton, S. C., a corporation of Delaware
Application May 17, 1952, Serial No. 288,428
4 Claims. (Cl. 139—190)



1. A drive for the lay of a mechanical loom comprising a driven crankshaft, a fixed annular gear member encircling said shaft, a second gear member rotatably carried by said shaft internally of said annular member, having a 1:3 gear ratio relative to said annular member, and meshing therewith, means linking said lay with said second member, the locus of the connection of said linking means with said second member being eccentric with respect to the axis of said second member said locus forming an equilateral triangle having an apex thereof directed toward the connecting point of said lay with said linking means, whereby said lay remains substantially in its back position for approximately one-third of a revolution of said crankshaft.

2,750,969
TERRY PILE WEAVE
Frank W. E. Hoeselbarth, Carlisle, Pa., assignor to C. H. Masland & Sons, Carlisle, Pa., a corporation of Pennsylvania
Original application May 29, 1952, Serial No. 290,733, now Patent No. 2,714,399, dated August 2, 1955. Divided and this application July 23, 1953, Serial No. 369,815
20 Claims. (Cl. 139—406)

1. A warp pile fabric having a binder warp, a plurality of pile warps and wefts interwoven into a fabric, having in the same transverse rows and in the same courses an end of one pile warp raised into a pile projection and an end of another pile warp raised into a pile loop, and having per course in a particular area of the fabric at



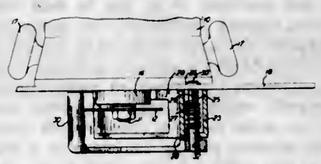
least one pile warp end of each pile warp between spaced binder warp ends forming a bracket, the binder warp ends all being woven together and in opposition to all of the pile warp ends.

2,750,970
GAUGE FOR INDICATING LINE OF CUT OF POWER DRIVEN TOOL
Walter L. Gaskell, Ypsilanti, Mich., assignor to King-Seeley Corporation, Ann Arbor, Mich., a corporation of Michigan
Application December 11, 1953, Serial No. 397,533
19 Claims. (Cl. 143—168)



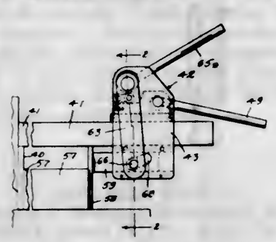
19. In a woodworking machine or the like having a table and a cutting tool, a gauge for indicating the kerf of said tool comprising a pair of movable members embedded in the surface of the table and each having an edge alignable with the corresponding one of the opposite sides of the kerf produced by the tool, said edges being visible on the surface of the table.

2,750,971
GUARD FOR PORTABLE ROUTER
Robert P. Collette, Bronxville, and Edward F. Michelich, Brooklyn, N. Y., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application April 15, 1954, Serial No. 423,460
5 Claims. (Cl. 144—251)



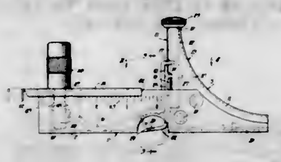
1. The combination with a portable router having a driven rotatable cutter, of a guide plate mounted on the router in a plane perpendicular to the axis of the cutter and spaced a predetermined distance from one side thereof, a fixed guard mounted on the guide plate, at the operator's side of the cutter, with an arcuate portion surrounding a segment of the cutter and a hollow work engaging portion spaced from the cutter, a movable arcuate guard normally resting against and partially conforming to the fixed guard with a free work engaging end and a pivotal end, a spindle carried by the hollow portion of the fixed guard to support the movable guard at the pivotal end thereof, and a spring urging the movable guard toward its normal position and causing the free end of the movable guard to engage the work and selectively lead or follow the cutter.

2,750,972
STRAIGHT BEAM ADJUSTABLE JAW CLAMP
Abram Levy, Jr., Atlanta, Ga.
Application March 10, 1952, Serial No. 275,773
3 Claims. (Cl. 144—303)



3. A clamping device comprising an elongated bar having a pair of clamping members mounted thereon, one of said clamping members being movable on said bar relative to the other of said members, means on said one member fixedly securing said one member on said bar in selected position, a housing carried by said means, a second bar slidably mounted in said housing for reciprocation toward and away from the other of said clamping members, a clamping jaw fixedly secured to the outer end of said bar, a cam mounted for rotation on said means, and cam actuated links extending between and connected with said cam and said second bar to effect reciprocation of said second bar upon actuation of said cam.

2,750,973
WOODWORKER'S HAND PLANE
George H. Palm, Chicago, Ill.
Application May 24, 1952, Serial No. 289,847
9 Claims. (Cl. 145—14)

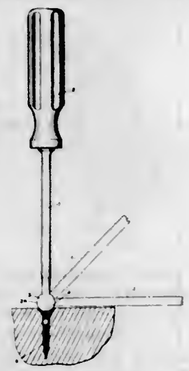


1. In a hand plane, the combination of an elongated body member, a screw rotatably carried by said body member, a blade member having a horizontal cutting edge at its lower end, said blade having means threadedly engaged with said screw, compression means carried by said body member and having a portion engaging said blade for exerting locking forces thereon, and adjusting means including a hand gripping member axially adjustable and operatively related to said compression means for moving said compression means in a blade locking direction, said compression means and screw having cooperable means for restricting axial movement of said screw.

2,750,974
SCREW DRIVER HAVING A DISC SHAPED BIT
Elmer J. Hart, Vancouver, Wash.
Application November 16, 1954, Serial No. 469,170
1 Claim. (Cl. 145—50)

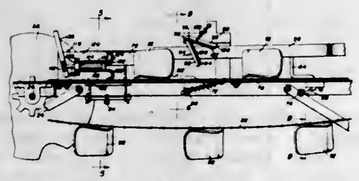
In a screw driver construction including a handle adapted to be grasped by a user, a shank projecting from said handle, a screw driver head on the end of said

shank for engaging in a slot in the head of a screw, said head being so formed as to engage in a screw head slot when the screw driver shank is in alignment with the screw, at right angles to the screw or any intermediate position relative to the screw, said head comprising a generally circular disc of considerably greater diameter than any transverse dimension through the shank parallel to the reference diameter of the head, the major portion of the circumferential marginal edge of said



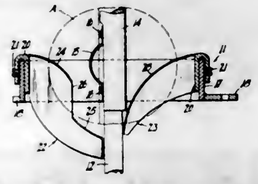
head being free from attachment to said shank and projecting outwardly therefrom, said head being joined along a radial line thereof to said shank, the thickness of said marginal edge portion of said head which is unattached to said shank being uniform in all directions throughout, enabling the use of the head throughout a variation of 180° in the position of the shank relative to a screw head with which said screw driver head is in contact while maintaining the same depth of penetration within the screw slot.

2,750,975
PEACH PITTING DEVICE
Leonard Vanderhoofven, Delta, Colo.
Application April 10, 1953, Serial No. 347,915
3 Claims. (Cl. 146—28)



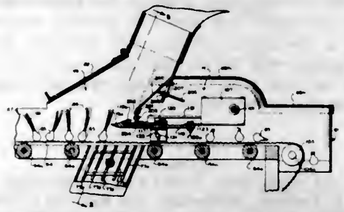
1. In a peach cutting apparatus including a pair of side by side conveyors having upper flights and coacting clamping members on the conveyors for gripping and moving peaches along a generally horizontal path, a frame supporting the conveyors, a rigid inverted V-shaped cutter pivotally supported at its apex from said frame and above the upper flights of the conveyors, the leg portions of the cutter having sharpened inner edges, said cutter being swingable about an axis disposed transversely of the path of movement of the peaches, spring means operatively associated with said cutter and retaining the remote ends of the leg portions of the cutter in facing relation to the path of movement of the peaches whereby the movement of the peach past the pivot axis of the cutter will pivot the cutter against the action of the spring means and cut the peach about a major portion of its periphery.

2,750,976
APPLE CELLING AND SLICING MACHINE
Ronald A. Ganze, Marion, N. Y., assignor to F. B. Pease Company, Inc., Rochester, N. Y.
Application July 29, 1952, Serial No. 301,478
5 Claims. (Cl. 146—40)



1. In a seed-celling and slicing machine, a rotary spindle, a seed-celling knife carried by said spindle, a slicing spider coaxial with said spindle and comprising two sets of alternately disposed radial slicing blades, means carried by said machine and operable to move cored fruit axially along said spindle toward and past said seed-celling knife and against said radial slicing blades, the portions of the slicing blades of one set which lie adjacent to said spindle being offset and spaced in an axial direction from the portions of the slicing blades of the other set which lie adjacent to the spindle whereby said offset portions enter the central portions of the fruit after the corresponding blade portions of the other set have sliced and passed through said central portions.

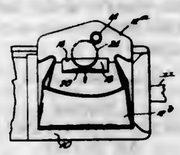
2,750,977
APPARATUS FOR CLIPPING TOPS FROM ONIONS
Salvatore S. Vella, Patsy J. Musso, Frank E. Musso, and Charles S. Musso, Albion, N. Y., assignors to Air-Flo Onion Clipper Mfg. Co., Inc., Albion, N. Y., a corporation of New York
Application May 20, 1953, Serial No. 356,206
6 Claims. (Cl. 146—83)



3. In an onion topping machine provided with an endless conveyor chain passing under an onion topping mechanism, in combination, air blower apparatus mounted on the machine and having an air outlet tube disposed below said conveyor chain and in such relationship to said onion topping mechanism that onions passing along said conveyor chain are subjected to positive air pressure from said air blower apparatus sufficient to cause onions moving along said conveyor to stand with tops extending upwardly while passing thereunder; means carried by said air outlet tube for changing the direction of the air under pressure passing therethrough, a hood mounted over said air outlet tube and said onion topping mechanism, and said hood being provided with an onion top outlet.

2,750,978
CONTAINER FOR COINS
Gertrude B. Hume, Newton, Mass., assignor to Buxton, Incorporated, Springfield, Mass., a corporation of Massachusetts
Application May 17, 1952, Serial No. 288,443
7 Claims. (Cl. 150—37)

1. In a receptacle having wall members including opposed wall members connected at three sides and forming a coin purse, the fourth side being open to provide access to the interior of the purse and a releasable closure member for said open side, one of said members having a coin slot formed therein for admission of coins to the purse when the closure member is in purse closing position, and a flexible flap connected at one end to one



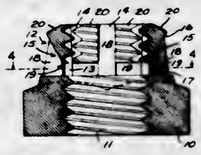
of said members outwardly of the purse at one side of the slot and extending through said opening and beyond the opposite side of the slot and forming means to guide coins through said slot and into the purse, the portion of the flap within the purse being positioned beyond said opposite side of the slot forming means to trap the coins within the purse.

2,750,979
INTERNALLY AND EXTERNALLY THREADED BUSHING HAVING INTERNAL AND EXTERNAL LOCKING MEANS
Charles S. Jewett, Hasbrouck Heights, N. J., assignor to Curtiss-Wright Corporation, a corporation of Delaware
Application May 6, 1952, Serial No. 286,332
1 Claim. (Cl. 151—21)



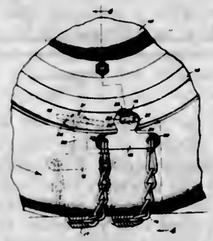
An internally and externally threaded self-locking bushing having an annular groove in each end surface, the portion of the bushing disposed radially outwardly of the groove at one end of the bushing comprising a first group of circumferentially-spaced segments extending axially from the bushing and the portion of the bushing disposed radially inwardly of the groove at the other end of the bushing comprising a second group of circumferentially-spaced segments extending axially from the bushing, the segments of the first group having external threads forming a continuation of the external bushing threads and having an outward set and the segments of the second group having internal threads forming a continuation of the internal bushing threads and having an inward set.

2,750,980
LOCK NUT HAVING FASTENING ZONE AND COLUMNAR SUPPORTED LOCKING ZONE
John C. Haggart, Jr., Los Angeles, Calif.
Application September 18, 1952, Serial No. 310,245
3 Claims. (Cl. 151—21)



1. An integral lock nut having a conventional polygonal threaded fastening portion of uniform pitch diameter and a reduced locking portion integrally attached to and extending from one face of the fastening portion, said locking portion comprising a circumferentially continuous and integral circular ring portion of substantially uniform axial cross section throughout coaxial with and axially spaced from the fastening portion and having an internal diameter throughout its length at least as large as the major diameter of the threads of the fastening portion and having on its inner face a plurality of equally spaced axially extending internally screw threaded projections forming a plurality of more than two spaced substantially non-deformable threaded segments, the screw threads of the fastening and locking portions being of the same pitch and lead and the threads of said locking portion being of uniform pitch diameter which is smaller than that of the threads of said fastening portion, said ring being attached to the fastening portion of the nut only by resiliently yielding columnar supports extending downwardly to said fastening portion from the bottom of said ring portion circumferentially between said inwardly extending threaded segments.

2,750,981
ANTI-SKID DEVICE
Herman S. Hoffman, Washington, D. C.
Application February 19, 1954, Serial No. 411,329
6 Claims. (Cl. 152—236)

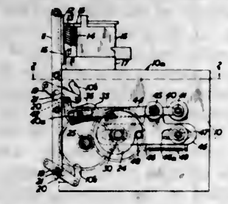


1. An anti-skid assembly for an automobile having a wheel mounted thereon for rotation, said wheel having on one side thereof means defining a circumferentially elongated aperture, mounting means fixed to the other side of said wheel, said anti-skid assembly comprising an open hook for engagement in said aperture means on the one side of the wheel, said hook and said aperture means defining coacting means to lock said hook against disengagement in one position of engagement, said hook being unlocked for disengagement from said aperture means in all other positions of engagement, an anti-skid chain connected at one end to said hook, a plate connected to the other end of said chain, said plate defining an elongated slot with the longitudinal axis of said slot obliquely disposed with respect to the longitudinal axis of said anti-skid chain, and said plate in engagement with said mounting means.

2,750,982
APPARATUS FOR ADJUSTING ELECTRICAL CONTACTS
Malcolm Simon and Frederick Emil Rommel, London, England, assignors to Telephone Manufacturing Company Limited, London, England, a British company
Application March 3, 1952, Serial No. 274,544
Claims priority, application Great Britain March 9, 1951
13 Claims. (Cl. 153—48)

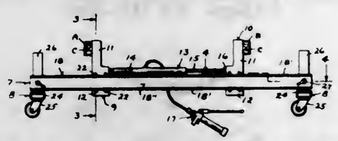
1. A machine for simultaneously adjusting a plurality of electrical contact springs comprising mounting means for mounting said springs on said machine in spaced relation in a column and relative to a datum position, means comprising a frame with spaced slots in which the ends of said springs are individually engaged, said frame being movable in alternate directions to bend the same through desired set positions with reference to said datum position, a driving member, a variable mechanical transmission means coupling said driving member to said spring

engaging means to move the same in alternate directions to bend the springs repeatedly through their desired set



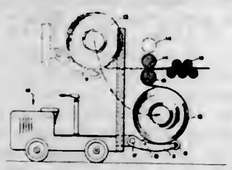
positions by displacements of decreasing amplitude in the successive movements.

2,750,983
FRAME STRAIGHTENING TOOL
Mack Rogers, Hayward, Calif.
Application November 13, 1952, Serial No. 320,259
1 Claim. (Cl. 153—48)



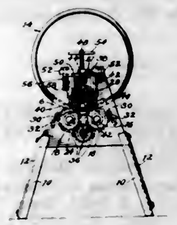
In apparatus for straightening the underframe of a floor-supported vehicle, a beam disposed beneath the underframe, complementary frame-engaging arms extending similarly and upwardly from said beam in a common plane with the lower arm portions having sliding and retaining connections with the beam for guided movements therealong while maintaining their angular relations to the beam and with the upper arm portions comprising jaws arranged to engage spaced points of the overlying underframe, complementary frame-engaging arms expoints while attaching the beam to the frame, a jack for direct engagement solely with and between intermediate arm points for operatively spreading the frame points engaged by the arms, caster-carried support members independently and releasably carrying the opposite beam ends spaced from the vehicle-supporting floor in adjusted height relation thereto for the operative disposition of the frame points to be engaged and their subsequent release when the beam is attached to the frame, and means cooperative between the beam and support members for retaining the members in fixed underlying relation to the beam while the beam is attached to the vehicle frame and the members are released from their supporting relation to the beam.

2,750,984
APPARATUS FOR UNCOILING SHEET METAL
Harvey D. Miller, Youngstown, Ohio, assignor to The McKay Machine Company, Youngstown, Ohio, a corporation of Ohio
Application July 19, 1951, Serial No. 237,503
1 Claim. (Cl. 153—54)



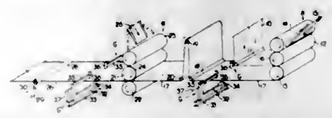
In apparatus for uncoiling metal strip to prevent the formation of coil breaks therein the combination of a pair of pinch rolls for drawing strip in a forward direction, means to rotatably support a coil of strip adjacent to and forwardly of said pinch rolls whereby a tangentially disposed projection of strip stock from said coil may be entered in a rearward direction into said pinch rolls, a carrier for said pinch rolls, and means mounting said carrier for rotation about an axis parallel and adjacent to the principal axis of one of said rolls whereby strip stock between said rollers and the coil proper may be looped reversely with respect to the curvature of the strip stock in the coil proper.

2,750,985
APPARATUS FOR CONVOLUTING THIN WALLED ARTICLES
William A. Scully, Port Orchard, and Oliver J. Snyder and Lee L. Linse, Bremerton, Wash.
Application February 6, 1953, Serial No. 335,618
3 Claims. (Cl. 153—77)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. Apparatus convoluting a tubular blank comprising a standard provided at each side with a pair of outwardly-beveled vertically-disposed tracks, a pair of laterally-spaced lower driven shafts carried by said standard, a reciprocating idler shaft disposed above and between said lower pair, roller dies slidably mounted on said shafts, means for driving said lower pair of shafts, means for reciprocating said idler shaft toward and away from said lower pair of shafts, and bearing means for detachably supporting said idler shaft for reciprocal movement along said standard tracks, said bearing means including a pair of beveled shaft-supporting bearing plates slidably mated with said pair of outwardly-beveled tracks, a tie-bar rigidly and detachably interconnecting said pair of plates for maintaining said mated engagements, and feeding means carried by said standard and detachably secured to each plate for reciprocating said plates, whereby said apparatus can be assembled by releasing said bearing plates and withdrawing the idler shaft laterally through a pair of tracks.

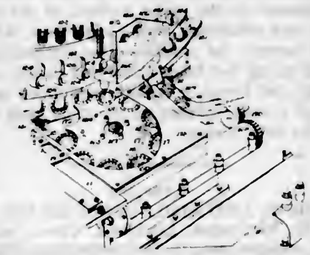
2,750,986
CONTROL APPARATUS FOR STRIPS
Roy W. Russell, Denver, and Elmer A. Steckel, Wheat Ridge, Colo., assignors to The Gates Rubber Company, Denver, Colo., a corporation of Colorado
Application March 20, 1953, Serial No. 343,752
2 Claims. (Cl. 154—1)



1. Apparatus for controlling the production of at least one layer of material to form a strip, through the passage of material between substantially parallel rolls provided with means for adjustment of at least one roll toward and away from the other to control the thickness

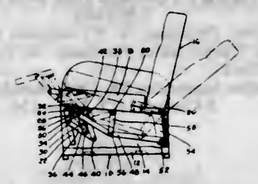
of the layer produced, such apparatus comprising means for directing beta rays or the like through said strip; means responsive to the proportion of rays passing through said strip; means controlled by said responsive means for producing a signal resulting from a change in the rays reaching said responsive means and indicating a change in thickness of said strip to a thickness greater than a first predetermined thickness and another signal indicating a thickness less than a second and lesser predetermined thickness; means for actuating said adjustment means for adjusting said rolls to a position closer together in response to a signal indicating a thickness of said strip greater than said first predetermined thickness; means for actuating said adjustment means for adjusting said rolls to a position further apart in response to a signal indicating a thickness of said strip less than said second predetermined thickness; and means for delaying subsequent action of each said actuating means for a period of time inversely proportional to the speed of said strip and thereby corresponding to the time required for said strip to move from said rolls to said ray directing and ray responsive means, said delay means including a time delay relay, a switch controlling said relay, and means for opening said switch periodically and at time periods inversely proportional to the speed of said strip.

2,750,987
PRESSER WHEEL FOR SECURING PADS TO CROWN CAPS
Andrew Weisenburg, Langhorne, Pa.
Application August 31, 1953, Serial No. 377,341
2 Claims. (Cl. 154—1.5)



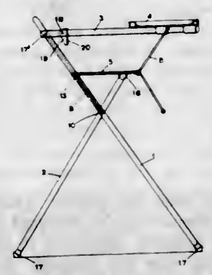
1. A machine for securing pads to crown caps comprising guideways for supporting and guiding caps having an adhesive with the pad therein, means for feeding the caps along said guideways, a presser wheel disposed at the ends of the guideways and rotatable about a horizontal axis, said presser wheel having a laterally projecting flange at the peripheral edge, the inner face of the flange being smooth and unbroken and adapted to receive the caps, a series of plungers mounted on said wheel inwardly from said flange for radial movement, a spring for each plunger adapted to move the plunger outwardly toward the flange, a roller on each plunger, a cam disposed in the path of the rollers for raising the plungers away from the flange, a cap supporting plate at the end of said guideways onto which the caps are discharged, the cap receiving portion of the flange being in alignment with the upper face of the plate, a rotatable disc having radially projecting arms forming pockets adapted to receive the caps discharged onto said plate, the arms of the pocket in the disc being adapted to move over the plate and over the inner surface of the flange beneath a raised plunger and into alignment therewith so that when said plunger is released from said cam it will enter the cap while in the pocket and press the pad against the adhesive in the cap, and means for heating the flange and cap for setting the adhesive.

2,750,988
ARTICLE OF REPOSE FOR SUPPORTING THE BODY OF A PERSON
Johannes Luckhardt, deceased, late of Berlin-Dahlem, Germany, by Wanda Luckhardt, administratrix, Berlin-Dahlem, Germany, assignor to Norman P. Martin and Otto L. Walter, as trustees of Eta Trust, Lake Worth, Fla.
Application December 28, 1954, Serial No. 478,019
16 Claims. (Cl. 155—106)



1. An article of repose for supporting the body of a person, comprising: a base, body supporting means including a seat and a back-rest movably mounted on said base, a primary pair of links including a first link and a second link pivotally connected with each other, a secondary pair of links including a third and a fourth link pivotally connected with each other, a leg-rest, said first link being pivoted to said seat at a point remote from its connection with said second link, said second link being pivoted to said leg-rest at a point remote from its connection with said first link, said third link being pivoted to said seat at a point remote from its connection with said fourth link and to the rear of the pivotal connection between said first link and the seat, said fourth link being pivoted to said leg-rest at a point remote from its connection with said third link and below the pivotal connection between said second link and the leg-rest, connecting means engaged with said primary pair of links and said secondary pair of links for effecting movements of said two pairs of links in coordination with each other, and controlling means engaged with said body supporting means, said base and a link of one of said two pairs of links at points remote from the before mentioned connections between the seat and the links of said pairs of links for effecting movements of the pairs of links in coordination with movements of said body supporting means.

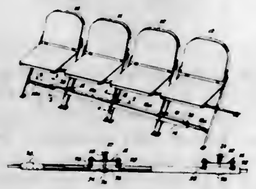
2,750,989
BABY CHAIRS
Thomas D. Ross, Crianlarich, Scotland
Application November 30, 1954, Serial No. 472,128
7 Claims. (Cl. 155—126)



1. A collapsible baby chair comprising a frame the lower ends of which constitute the front legs and the upper portions of which form the back of the chair, a second frame pivoted short of the upper end to the front legs and constituting the rear legs and pivotally mounted at the upper end to the frame constituting a seat and a third frame pivotally mounted at the inner ends to the upper portions of the frame presenting the front legs, sup-

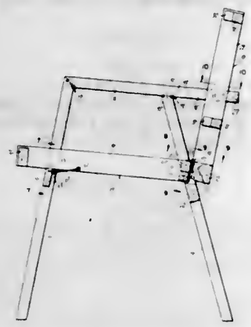
porting adjacent its outer end the usual tray and connected by links with the forward end of the seat frame and supporting forward of the inner ends a back rest for the child, the seat frame being slidable in guides in the upper portions of the front legs and being connected by tension springs with the pivots for the legs.

2,750,990
TEMPORARY CONNECTOR FOR FOLDING CHAIRS
John D. Eves, Cortland, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y., a corporation of New York
Application September 29, 1955, Serial No. 537,483
5 Claims. (Cl. 155—130)



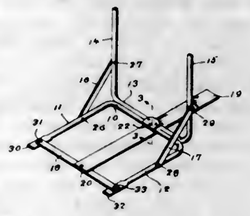
1. A temporary connector for folding chairs including in combination an elongated member; clamping members mounted throughout the length of said elongated member, said clamping members being constructed and arranged to bear on adjacent legs of folding chairs disposed between said clamping members and said elongated member when said chairs are positioned adjacent each other; and means to force said clamping members toward said elongated member whereby said clamping members and said elongated member bear against the chair legs disposed therebetween.

2,750,991
FOLDABLE CHAIR
Kenneth S. Lay, St. Louis, Mo.
Application March 2, 1953, Serial No. 339,541
4 Claims. (Cl. 155—148)



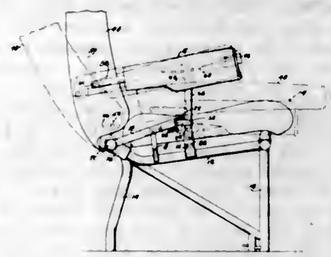
1. A foldable chair comprising spaced arm rests, a back brace rail connecting the rearward ends of said arm rests, front legs hingedly connected to the forward ends of said arm rests, rear legs hingedly connected to said arm rests between the forward and rearward ends thereof, a seat frame and a back frame hingedly interconnected for folding and unfolding movement relative to said legs and arm rests, means pivotally connecting said seat frame to said rear legs, said back frame in its unfolded position being supported against said back brace rail, a front brace rail connecting said front legs and being positioned to support said seat frame between said front legs, and releasable fastener means on said back frame and back brace rail releasably securing said back frame in unfolded position and, with said pivot means and the hinge connection of said rear legs to said arm rests, forming a triangle for locking the chair in unfolded position.

2,750,992
SPORTSMAN'S SEAT
Dwight M. Decker, Wilmington, Del.
Application January 12, 1954, Serial No. 403,476
3 Claims. (Cl. 155—153)



1. A collapsible seat comprising a U-shaped seat frame having side rails extended from the ends of a cross member, a U-shaped back frame having a cross member with side rails extended from ends thereof, diagonally disposed braces pivotally connected at one of the ends thereof to side rails of the seat frame and at their opposite ends to side rails of the back frame, a clip on the cross member of the seat frame and positioned to receive the cross member of the back frame, a cross bar connecting the extended ends of the side rails of the seat frame, a spring bar positioned on the under surface of the seat frame with one end connected to the cross bar and the other extended beyond the cross member connecting the side rails, said spring bar being connected to the cross member of the seat frame, a cushion positioned on said seat frame and a band connecting the upper ends of the side rails of the back frame.

2,750,993
FOLDING AND ADJUSTABLE CHAIR BACK
Eugene R. McGregor, Litchfield, Conn., assignor, by mesne assignments, to Reconstruction Finance Corporation, Washington, D. C.
Application December 16, 1953, Serial No. 398,487
7 Claims. (Cl. 155—155)



1. A chair comprising, in combination, a frame; a back pivoted to the frame; an arm rest; and lock-drag mechanism for controlling tilting of the back, said lock-drag mechanism comprising a rack within the arm rest and pivotally attached at its rear end to said back, a tension spring lying within the arm rest attached at one end to said rack and at its other end to the arm rest, a pinion within the arm rest meshing with said rack, and means carried by the arm rest for applying an adjustable braking effort to the pinion.

2,750,994
CHAIR BACK ADJUSTING MECHANISM
Russell B. Howell, Jr., Burbank, Calif., assignor to Burns Aero Seat Co., Inc., Burbank, Calif., a corporation of California
Application May 27, 1952, Serial No. 290,223
15 Claims. (Cl. 155—161)



5. A seat back adjusting mechanism for controlling the positioning of the back of the seat with respect to said seat comprising a rod movable substantially longitudinally in two directions, a fixed member, a spring for locking said rod to said fixed member, means attached to said fixed member for increasing the locking action of said spring on said rod when said rod is urged in one of said directions, and means on said rod for braking the movement of said rod through said spring, said braking action being greater when said rod is moved in one direction than when said rod is moved in the opposite direction.

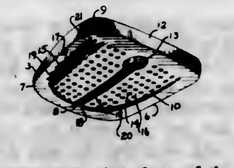
2,750,995
SHOCK ABSORBING SEAT BACK
Vergil R. Parks, Sierra Madre, Calif.
Application April 15, 1954, Serial No. 423,327
2 Claims. (Cl. 155—164)



1. A seat back comprising posts connected by a member at the upper ends thereof providing a U-shaped frame, means adapted to pivotally connect the posts to a seat frame, a floating frame positioned parallel to and spaced from the U-shaped frame, links positioned at both ends of the back of the seat pivotally connecting the floating frame to the posts, resilient elements connected to said links and to the back of the seat intermediate of said links for urging the links to neutral positions with said links perpendicular to the posts, a support member extended between the lower ends of the posts and carried thereby, and springs positioned between said support member and the lower end of the floating frame.

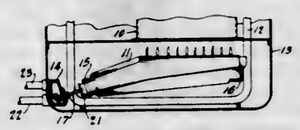
2,750,996
CHAIR SEAT AND CUSHION THEREFOR
Roy A. Cramer, Kansas City, Mo., assignor to Cramer Posture Chair Co., Inc., Kansas City, Mo., a corporation of Missouri
Application April 12, 1951, Serial No. 220,691
1 Claim. (Cl. 155—179)

As an article of manufacture, a chair seat cushion comprising, a body of latex foam corresponding in size and shape with the seat of a chair having a flat surface around the periphery thereof and spaced depressed portions at the front of the seat tapered toward the back of the seat and converging into a single depressed portion at the back leaving a raised portion near its front extending longitudinally of the seat, the upper surface of said body being substantially flat and unbroken, the undersurface of the body having a plane surface for engaging the plane surface around the periphery of the seat and spaced thickened portions near the front and extended into a single thickened portion at the back to conform to the depressed portion of the seat, the undersurface of said body being provided with a longitudinal cutaway portion defining an open slot arranged midway between the side edges of the body, said slot throughout its length extending from the undersurface of the body upwardly but terminating short of the upper surface of the body, said cushion having a plurality of cavities extending upwardly on each side of said slot from the undersurface



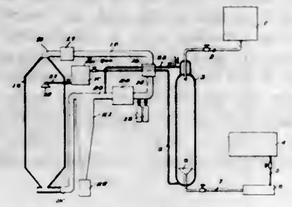
of the cushion and terminating short of the upper surface of the cushion to leave a body portion of substantially uniform thickness between the upper surface of the body and the top of the slot and the cavities, said cavities being arranged in rows both laterally and longitudinally to space them a substantially equal distance apart over the seating surface of the body, and said slot terminating short of the front and rear edges of the body and being provided with an enlarged well at its front end, the slot and cavities providing a substantial area allowing lateral and longitudinal flow of the latex foam to prevent bunching and upward flow of the latex foam in the central portion of the body under the pressures created by a person seated on the cushion.

2,750,997
DUAL FUEL APPARATUS FOR HEATERS
Malvern M. Reuter, Columbus, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a corporation of Ohio
Application October 17, 1952, Serial No. 315,335
1 Claim. (Cl. 158—106)



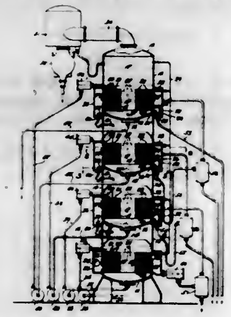
In burner apparatus, in combination: wall means forming first and second longitudinally extending fuel chambers including a dividing wall between said chambers and a second wall bounding the second fuel chamber and each of said walls having a longitudinally extending series of apertures therein with each aperture in the dividing wall axially aligned with an aperture in the second wall; a series of nozzles disposed in the apertures and forming axial fuel discharge ports from the first fuel chamber through each nozzle and a plurality of fuel discharge ports from the second fuel chamber in a circular series around each of said axial fuel discharge ports; a plurality of entraining tubes for receiving streams of fuel gas and air entrained therewith and delivering the gas-air mixture so formed to burner ports; means for securing said entraining tubes in parallel relation to each other and each aligned with one of said axial fuel discharge ports to receive fuel from said ports or from the ports in the circular series thereabout; means for supplying a first fuel to the first fuel chamber; and means for supplying a second gas to the second fuel chamber.

2,750,998
APPARATUS FOR REDUCING FOOD LIQUIDS TO POWDERS
David Pelton Moore, Glen Oaks, N. Y.
Application November 29, 1951, Serial No. 258,873
2 Claims. (Cl. 159—4)



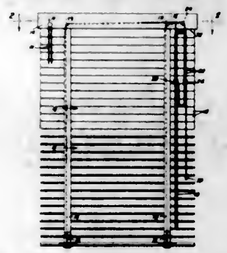
1. An apparatus of the character described, including in combination a dehydratable liquid supply, an inert gas supply, a closed chamber, means leading from the liquid supply to one end of the chamber, means leading from the inert gas supply to the opposite end of said chamber, whereby the gas permeates the moving liquid in said chamber and whereby the gas deoxygenates the liquid, means for leading the deoxygenated liquid from the chamber at a point opposite to the inlet of the liquid to said chamber, a tank connected to said last named means to receive the deoxygenated liquid, means for leading such liquid away from said tank, and a dehydrating apparatus connected to the latter means to dehydrate the deoxygenated liquid led from the tank.

2,750,999
MULTIPLE EFFECT EVAPORATOR TOWER
Reinier P. De Vries, Melrose, Mass.
Application February 4, 1954, Serial No. 408,212
3 Claims. (Cl. 159—18)



1. In a multiple effect evaporator apparatus comprising a columnar shell interiorly subdivided to provide a vertical succession of evaporator chambers, an annular heater drum extending across the interior of each evaporator chamber from wall to wall of said shell, each heater drum having a multiplicity of perpendicular endwise open solution passage tubes, external annular steam chests completely encircling said shell to respectively surround and communicate with the heater drums of respective evaporator chambers, the lower portions of said steam chests being respectively disposed in lapping relation to the upper end portions of below adjoining evaporator chambers, the shell walls surrounding the upper portion of a preceding evaporator chamber intermediate the latter and a steam chest serving a succeeding evaporator chamber having a plurality of circumferentially spaced discharge ports through which vapor from said preceding evaporator chamber is delivered into said steam chest and curved discharge nozzles within the latter with which said discharge ports communicate, said nozzles having their discharge ends angularly directed toward and spaced from the external circumferential wall of the steam chest so as to induce whirling flow of entering vapor around the lower portion of the steam chest interior, whereby liquid entrained in the vapor is separated therefrom by centrifugal force within said lower interior portion of the steam chest, an external trap sealed return pipe to conduct said separated liquid from the bottom of the steam chest back to the evaporator chamber from whence it came, means for supplying high temperature initial steam to the heater drum of the lowermost evaporator chamber, means for delivering solution undergoing evaporation from a preceding to a succeeding evaporator chamber, means for discharging evaporated solution from the uppermost evaporator chamber, and means for withdrawing vapor from the uppermost evaporator chamber.

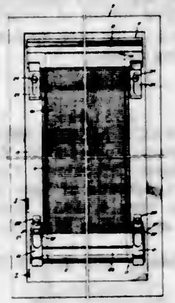
2,751,000
VENETIAN BLIND
Norman C. Mahan, Ashland, Ky., assignor of twenty-four and one-half per cent to James A. Anderson and twenty-four and one-half per cent to David P. Anderson, Ashland, Ky.
Application October 12, 1953, Serial No. 385,423
3 Claims. (Cl. 160—115)



1. In a Venetian blind construction having a plurality of slats supported in vertically spaced relation on a pair of ladder tapes, and having a support disposed above said slats, means on said support for simultaneously tilting all of said slats in the same direction, lift cords connected for simultaneous operation and secured to the lowermost of said slats and extending through each of said slats and over bearing members on said support for raising and stacking said slats, the improvement comprising manually controlled means operable to tilt a lower group of the slats in one general direction to a desired degree, said last named means comprising a pair of tilt cords attached at one end to one side of each of said ladder tapes adjacent the midpoint thereof, said cords passing upwardly through the upper group of slats and over bearing members on said support, one of said tilt cords having the other end thereof secured to said first cords with a slack therein equal in length to the degree of lift of said lift cords in lifting and stacking said lower group of slats, whereby said tilt cords will be pulled tight by said lift cords when said lower group is lifted and stacked and said tilt cords will be maintained taut by said lift cords during lifting and stacking of the remaining slats to prevent said tilt cords from bunching between said remaining slats, and a cord lock connecting the cords of said second pair for simultaneous movement of both cords upon movement of one of said cords.

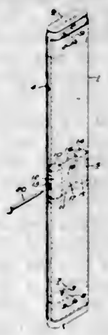
2,751,001
HOLD-DOWN DEVICE FOR FRAMELESS WINDOW SCREEN CONSTRUCTION
Albert Lang, Oakland, Calif.
Application February 3, 1953, Serial No. 334,932
3 Claims. (Cl. 160—328)

1. A hold-down device for a frameless window screen comprising: a bar connected to one end of the screen material; a screen tensioning roller adapted to be mounted above and in hold-down engagement at its lower inner side with the bar, with its axis offset outwardly of the plane of the screen material whereby the bar may be released by forcing it outwardly from under the roller



or again releasably latched by forcing it inwardly under the roller; and a bar actuating device adapted to be mounted adjacent the bar and operable to force said bar inwardly under the roller.

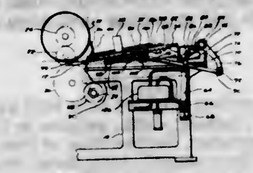
2,751,002
ADJUSTABLE CURTAIN TIE-BACK PIN HOLDER
William H. Musielak, Buffalo, N. Y.
Application April 30, 1953, Serial No. 352,071
6 Claims. (Cl. 160—349)



1. A curtain tie-back pin holder device comprising, an elongated case adapted for attachment to the frame of a window and having a slotted wall portion extending lengthwise thereof, and a slide member carried within said case for sliding movement lengthwise thereof and having tie-back pin receiving means aligned with said slotted wall portion for receiving and retaining a tie-back pin inserted therethrough, said member being slidable lengthwise of said case bodily with such tie-back pin for selectively adjusting the position of the latter while bearing against said case with sufficient force to retain such pin in adjusted position.

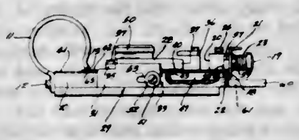
2,751,003
SHEET FEEDER
Louis Ernest Mueller, Detroit, Mich.
Application November 30, 1953, Serial No. 394,980
20 Claims. (Cl. 164—21)

1. Apparatus for obtaining precise registration of a work piece in an operation performed thereon by a pair of relatively movable members, one of which members is a movable work supporting member, positive drive means for moving said work-supporting member from an idle position through a working stroke and return, non-positive feed means for advancing a work piece onto said work supporting member during its initial movement in the working stroke, and rigid locator abutment means



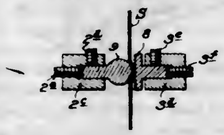
between said work supporting member and said feed means to limit advance of a work piece to a predetermined position on said work supporting member.

2,751,004
FILM CUTTER HAVING A KNIFE AND A TRANSPORT BLOCK FOR ADVANCING FILM TO THE KNIFE
Clinton O. Thompson and Selma C. Thompson, Cudahy, Wis.
Application March 19, 1953, Serial No. 343,359
5 Claims. (Cl. 164—42)



1. In a film cutter for cutting a continuous roll of photographic film into individual frames of the same length, a base, a knife operably mounted on said base to cut said film, a slide movably mounted on said base, film engaging means on said slide for selectively engaging said film for movement with said slide, and a pair of limit stops mounted on said base in position to limit the movement of said slide in either direction so that said slide is movable between said limit stops a distance conforming to the length of said individual frames, said limit stops being fixed relative to each other but adjustable as a unit relative to said base to adjust the location of the path of movement of said slide along the base whereby said film may be engaged for movement with said slide in one direction from one of said limit stops to the other, to advance the film the desired distance toward said knife, and the film may be released while the slide is moved in the opposite direction to its original position, to feed the film in the predetermined increments of movement toward the knife so that the individual frames of film will be accurately separated from the continuous roll.

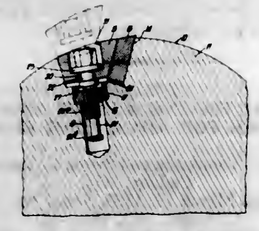
2,751,005
DEVICE FOR CUTTING A LINE OF STRIATIONS ACROSS STRIP MATERIAL
Delphin J. Parmer, Quincy, Fla.
Application September 11, 1952, Serial No. 309,063
10 Claims. (Cl. 164—42)



9. In a machine for scoring strip material passed therethrough by a feed mechanism, said machine having a pair of jaws between which said strip material passes and having means for periodically separating said jaws from each other and snapping said jaws together, scoring means comprising a cylindrical anvil fixed to one jaw and adapted to abut a die fixed to the other jaw, said die having a series

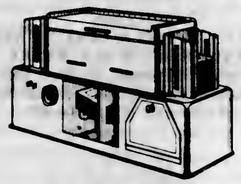
of sharpened teeth adapted to cut striations into said strip and weaken the same along the line of contact of the strip with the anvil, the plane of the cutting edges of said teeth being tangent to said cylindrical anvil when the jaws are closed.

2,751,006
KNIFE-CLAMPING MEANS FOR ROTARY SHEAR
John R. Lane, Pittsburg, Calif., assignor to United States Steel Corporation, a corporation of New Jersey
Application December 12, 1951, Serial No. 261,202
2 Claims. (Cl. 164—66)



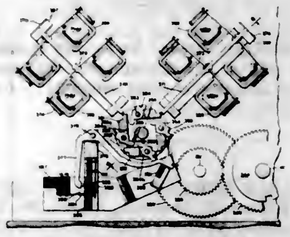
1. In a rotary shear cylinder having in its surface a slot parallel to the axis of the cylinder, with inwardly converging sides, the combination with an elongated knife in said slot abutting one of said sides and an elongated wedging bar with inwardly converging sides abutting said knife and the other side of said slot, respectively, said cylinder having at least one bore extending inwardly thereinto from the bottom of the slot, the outer portion of the bore wall being tapped, of a clamping screw extending through said bar and threaded into said tapped portion of said bore, the inner portion of the bore being larger in diameter than the shank of the screw and a portion of the length of said threaded portion spaced from the entering end thereof being turned down to a diameter smaller than that of said threaded portion, said turned-down portion of the screw having a slightly greater extent axially of the screw than the axial extent of said tapped portion of said bore, and means carried by the screw inwardly of said bar but outwardly of the portion of the screw which is threaded, effective to force the bar outwardly when said screw is backed off.

2,751,007
MACHINES FOR TRANSFERRING RECORDS FROM ONE CARD TO ANOTHER
Michael Maul, Schwabach, near Nuraberg, Germany
Application August 5, 1952, Serial No. 302,752
Claims priority, application Germany August 14, 1951
11 Claims. (Cl. 164—115)



1. In a machine for recording data upon multi-deck receiving cards under the control of multi-deck pattern cards, each kind of said cards having in each deck a plurality of adjacent record columns, each column being adapted to represent in index positions of the column a character designation, in combination, analyzing means common to all decks, recording means common to all decks, means for controlling said recording means by said analyzing means, means for feeding pattern cards consecutively to said analyzing means, means for feeding receiving cards consecutively to said recording means, both said feeding means normally operating synchronously to present corresponding decks of a pattern card and of a receiving card concomitantly to the analyzing means and to the recording means respectively, and means selectively presettable at the beginning of a record run for varying the timing of the presentation of the pattern cards to the analyzing means in predetermined stepped relation to the timing of the presentation of the receiving cards to the recording means.

2,751,008
STORAGE MECHANISM
James M. Cunningham, Endicott, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Original application May 1, 1952, Serial No. 285,566. Divided and this application May 28, 1953, Serial No. 357,994
3 Claims. (Cl. 164—115)

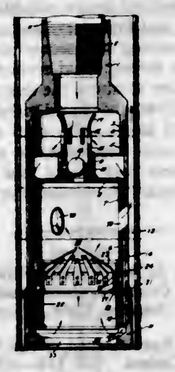


1. In a record controlled machine having at least two sensing mechanisms arranged a predetermined distance apart, a data storage device comprising, a group of setting means associated with each sensing mechanism and under control thereof, a row of interposers for each group of setting means and actuated thereby, said rows of interposers being arranged a predetermined distance apart according to the disposition of said sensing mechanisms, a plurality of settable elements, rotary means for carrying said settalbe elements past said rows of interposers, said interposers which are actuated being effective to set different ones of said settable elements at different times depending on the predetermined distance at which said interposers are disposed to store readings from both of said sensing mechanisms, and a single row of contact means actuated by the settable elements that have been set, upon further rotation of the latter to effect read out of said stored readings.

2,751,009
METHOD OF WORKING OVER WELLS
Lemuel D. Wooddy, Jr., Kingsville, Tex., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware
Application May 21, 1954, Serial No. 431,450
13 Claims. (Cl. 166—22)

1. A method for working over a cased and tubed well penetrating a plurality of hydrocarbon productive strata without removing the tubing from the well which comprises perforating the casing and obtaining production from a hydrocarbon productive stratum until said production becomes non-commercial, introducing a fluid, low water-loss cement through said tubing into said casing adjacent the perforations to seal said perforations, moving said tubing longitudinally in said well to provide a passage between the tubing and casing, removing excess fluid cement from said casing, moving said tubing longitudinally in said well to close said passage, lowering a perforator through said tubing to a level vertically displaced from the original perforations in said casing adjacent a hydrocarbon productive stratum, perforating the casing at said vertically displaced level, and obtaining production from said stratum adjacent said vertically displaced level.

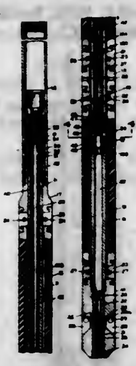
2,751,010
JUNK BASKET
Gus H. Trahan, New Iberia, La., assignor to Houston Engineers, Inc., Houston, Tex., a corporation of Texas
Application November 18, 1954, Serial No. 469,755
1 Claim. (Cl. 166—99)



A junk basket comprising an outer barrel, means to attach said outer barrel to the lower end of a tubular pipe, an inner barrel mounted in radially spaced relation to said outer barrel, thus forming an annular space, a closure member extending across the top of said inner barrel, an opening in said closure member adapted to be closed by a valve member, an exhaust port leading from the interior of said inner barrel to the exterior of said outer barrel, retaining spring fingers extending radially inwardly from said inner barrel, said inner barrel terminating below said retaining spring fingers and above the lower end of said outer barrel, said retaining spring fingers having their outer ends secured to a collar removably attached to the inside of said inner barrel, said collar having a dove-tail cross-section and being held in place by a removable lower end member on said inner barrel whereby said retaining fingers may be repaired or replaced, whereby when fluid flows to the interior of the upper part of said outer barrel and said valve member is seated in said opening, said fluid is forced to flow downwardly through said annular space and around the lower end of said inner barrel and then upwardly past said retaining spring fingers and finally through said port to the annulus between said outer barrel and the inner surface of a well bore.

2,751,011
SIDE WALL TESTING APPARATUS
Mordica O. Johnston, Glendale, Calif., assignor of one-fourth to Madge Johnston, one-twelfth to Edgar C. Johnston, Jr., one-twelfth to Gordon C. Johnston, and one-twelfth to Joseph Glenn Johnston, all of Longview, Tex., and one-eighth to Mordica O. Johnston, Jr., La Jolla, and one-eighth to Warren C. Johnston, Glendale, Calif.
Application February 12, 1954, Serial No. 409,879
4 Claims. (Cl. 166—120)

1. A side wall testing device comprising a tubular mandrel, upper and lower packers mounted on said mandrel, means connecting the upper end of the upper packer to a well string, a tubular spacer member slidable on the mandrel and connected to the lower end of the upper packer and the upper end of the lower packer, a tubular shoe connected to the lower end of the mandrel and the lower end of the lower packer, a plurality of wall-engaging dogs pivotally mounted on said shoe, each of said dogs having an inwardly extending lug extending into the central passage through said shoe, a sleeve slidably mounted for limited longitudinal movement in said central passage, an annular groove in said sleeve into which said lugs extend, and a restricted orifice in said tubular sleeve, whereby fluid pumped downwardly through said well string will force said sleeve downwardly relative to said shoe to pivot said dogs outwardly into



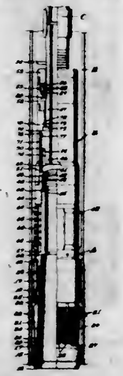
engagement with the bore wall and subsequent downward movement of said well string will telescope said packers downwardly relative to said mandrel and expand them laterally into contact with the bore wall.

2,751,012
WELL PACKER APPARATUS
Reuben C. Baker, Coalinga, and Martin B. Conrad, Downey, Calif., assignors to Baker Oil Tools, Inc., Los Angeles, Calif., a corporation of California
Application April 26, 1954, Serial No. 425,646
16 Claims. (Cl. 166—121)



1. In a well tool: a body adapted to be moved longitudinally in a well conduit; upper and lower expander means disposed on and movable longitudinally with said body in the conduit; slip members having conduit gripping portions normally in retracted position and movable longitudinally with respect to said body and upper and lower expander means and coacting with said upper and lower expander means, said upper expander means and gripping portions coacting with each other, upon relative downward movement of said upper expander means, to anchor said body to the conduit against downward movement, said lower expander means and gripping portions coacting with each other, upon relative upward movement of said lower expander means, to anchor said body to the conduit against upward movement; said slip members having drag portions frictionally engageable with the conduit to enable said body and upper and lower expander means to be moved longitudinally with respect to said slip members to expand said gripping portions into engagement with the conduit to selectively anchor said body against either downward or upward movement in the conduit.

2,751,013
WELL PACKER
Martin B. Conrad, Downey, Calif., assignor to Baker Oil Tools, Inc., Los Angeles, Calif., a corporation of California
Application April 2, 1954, Serial No. 420,586
17 Claims. (Cl. 166—121)



1. In a well packer: tubular body means adapted to be lowered in a well casing; a flexible sleeve carried by said body means; a plurality of circumferentially adjacent gripping members disposed around said sleeve and having external teeth to grip the casing; a plurality of circumferentially adjacent backing members interposed between and engageable with said sleeve and gripping members, said backing members being staggered with respect to said gripping members to bridge the spaces between adjacent gripping members and prevent said sleeve from passing into said spaces; the interiors of said sleeve and body means being in fluid communication with each other to cause fluid under pressure within said body means and sleeve to expand said sleeve and cause said sleeve to expand said backing members and gripping members outwardly to engage said gripping members with the casing.

2,751,014
WELL TESTING TOOL
Mordica O. Johnston, Glendale, and Harry C. Skipper, Montrose, Calif., assignors, by mesne assignments, to Johnston Testers, Inc., Houston, Tex., a corporation of Texas
Application September 4, 1951, Serial No. 244,918
8 Claims. (Cl. 166—145)



1. An oil well tool comprising a tubular housing, a sleeve disposed within and threadedly engaging the interior of the housing, a tubular mandrel slidably received by the sleeve, means preventing relative rotation between said sleeve and said mandrel, lateral ports in said mandrel adjacent to and above the bottom of said sleeve when said mandrel is in its upper position relative to said sleeve, lateral ports in said housing below and spaced from the bottom of said sleeve, said housing ports providing fluid communication between the interior and the exterior of the housing, a second sleeve slidable within said housing located below said first sleeve and above said housing ports, means connecting said second sleeve to said mandrel, a passageway through said second sleeve permitting fluid flow from below to above the second sleeve, whereby upon downward movement of said mandrel relative to said housing the second sleeve will cover said housing ports and the mandrel ports will move out of said first sleeve, and upon subsequent rotation of said mandrel, the first sleeve will be threaded downwardly to again cover said mandrel ports.

2,751,015
ROTARY WALL SCRATCHER FOR WELL BORES
Reuben C. Baker, Coalinga, Calif., assignor to Baker Oil Tools, Inc., Los Angeles, Calif., a corporation of California
Application April 2, 1954, Serial No. 420,526
6 Claims. (Cl. 166—173)



5. In a wall scratcher adapted to be mounted on a tubular string to be disposed in a well bore: an elongate outer member adapted to be secured to the tubular string lengthwise along the latter and including a base portion and inwardly directed flanges spaced from said base portion to provide a pair of opposed longitudinally extending grooves, the inner ends of said flanges being spaced from each other to provide a longitudinal opening; an elongate inner member having oppositely directed flanges slidable longitudinally in said grooves, said inner member including an intermediate apertured bead extending through said opening; a plurality of spring elements mounted within and confined by said bead and including spring fingers extending outwardly through said bead apertures and adapted to engage the wall of the well bore; and coengageable stop means on said members to limit the extent of relative longitudinal movement between said members.

2,751,016
TOOL FOR TESTING OIL WELLS
Joseph D. Watzlavick, Bellaire, Tex.
Application September 8, 1954, Serial No. 454,713
2 Claims. (Cl. 166—187)

1. A tool for taking samples from an oil well comprising a pipe having a closed lower end and being adapted and arranged to be lowered into a well to the test site, a pair of inflatable packings surrounding and secured to said pipe adjacent the closed end thereof and in spaced relation to each other, said pipe in the portions complemental to said packings being provided with passageways for air communicating with each of said pair of packings, a tube having a closed end concentrically arranged in said pipe so that its closed end is adjacent the closed end of said pipe and being formed with passageways in the portion adjacent its closed end communicating with said pipe, relief valves in said tube passageways operable to open at a greater pressure than that needed to inflate said packings into contact with the walls



of the well, and an inlet port in the portions of said pipe and tube intermediate said packings extending from said pipe inwardly to said tube and in communication with the space in said well between said packings whereby when air is pumped through said pipe and through said tube passageways free materials in said space will be sucked into said tube for ejecting at a point remote from said test site.

2,751,017
RETRIEVABLE WELL PACKER
Reuben C. Baker, Coalinga, and Martin B. Conrad, Downey, Calif., assignors to Baker Oil Tools, Inc., Los Angeles, Calif., a corporation of California
Application September 8, 1953, Serial No. 378,704
13 Claims. (Cl. 166—216)



1. In apparatus of the character described: a body; an inner expander on said body; a segmental outer expander slidable on said inner expander and initially occupying a retracted position on said inner expander; slips engageable with said outer expander to be expanded laterally outward; said inner and outer expanders having coengaging surfaces tapering in one longitudinal direction toward the axis of said body; said inner and outer expanders also having coengaging surfaces facing outwardly and inwardly, respectively, and disposed substantially parallel to the axis of said body which engage each other to hold said outer expander laterally outward; said outer expander and slips having coengaging surfaces tapering in the opposite longitudinal direction toward the axis of the body; means on said body for moving said inner expander longitudinally of said outer expander to shift said outer expander laterally outward and enable said surfaces substantially parallel to the axis of said body to coengage to hold said outer expander laterally outward; and means on said body for moving said slips longitudinally of said outer expander and laterally outward.

2,751,018
ALIGNED SLIP WELL TOOL
Reuben C. Baker, Coalinga, Calif., assignor to Baker Oil Tools, Inc., Los Angeles, Calif., a corporation of California
Application February 3, 1953, Serial No. 334,783
10 Claims. (Cl. 166—217)



1. A well tool, including a body adapted to be lowered in a well conduit on a running-in string, means for anchoring said body to the well conduit comprising a set of initially retracted segmental slips having an internal circumferential groove therein, an expander slidable on said body and along and within said slips to expand said slips outwardly into engagement with the well conduit, and an annular member movable longitudinally with respect to said body and disposed in said groove during outward expansion of said slips to maintain said segmental slips in transverse alignment with respect to each other.

2,751,019
APPARATUS FOR DISENGAGING THREADED JOINTS
Reuben C. Baker, Coalinga, Calif., assignor to Baker Oil Tools, Inc., Los Angeles, Calif., a corporation of California
Application February 23, 1954, Serial No. 411,771
6 Claims. (Cl. 166—218)

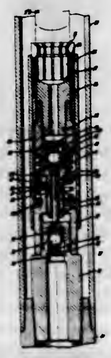


1. In subsurface apparatus: a well tool having a thread; an upper member attachable to a running-in string; a lower member telescopically related to said upper member; expansible and retractable latch means carried by and movable laterally of said lower member, said latch means having a thread companion to said well tool thread

and engageable therewith, said latch means being movable laterally in one direction on said lower member into threaded engagement with said well tool thread and laterally in the other direction on said lower member to an extent sufficient to position said threads out of engagement with each other to enable said latch means to be moved longitudinally and without rotation past said well tool thread; means providing a connection between said lower member and latch means for transmitting rotary motion therebetween; means providing a connection between said upper and lower members for transmitting rotary motion therebetween; and means urging said lower member and latch means in an upward direction relative to said upper member.

2,751,020
VALVE FOR USE WITH SIDE WALL TESTING APPARATUS

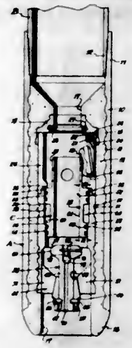
Mordica O. Johnston, Glendale, Calif., assignor of one-fourth to Madge Johnston, one-twelfth to Edgar C. Johnston, Jr., one-twelfth to Gordon C. Johnston, and one-twelfth to Joseph Glenn Johnston, all of Longview, Tex., one-eighth to Mordica O. Johnston, Jr., La Jolla, and one-eighth to Warren C. Johnston, Glendale, Calif.
Application April 19, 1954, Serial No. 424,089
10 Claims. (Cl. 166—219)



1. For use with a well testing tool, a valve assembly comprising a first valve housing adapted to be screwed into the flow passage of said testing tool, a tubular collar connected to said first valve housing and extending upwardly therefrom a first downwardly opening check valve in said first valve housing, a second valve housing telescopically connected to said collar, a second upwardly opening check valve in said second housing, a downwardly facing shoulder on said second valve housing, a sleeve surrounding the upper portion of said second valve housing in sliding relation therewith and having an upwardly facing shoulder adapted to abut the downwardly facing shoulder on said housing, the lower surface of said sleeve being normally spaced from the upper surface of said collar, spring means interposed between said collar and said sleeve to urge said valve housings toward their extended relationship, a groove formed in the exterior of said second valve housing between said sleeve and said collar, a spring steel split ring in said groove, said ring when relaxed having an external diameter greater than the external diameter of said housing to prevent telescopic movement of said second valve housing relative to said collar, a chamfer at the lower end of said sleeve, whereby when said sleeve is forced downwardly the chamfer acts to compress said ring to permit telescopic movement of said second valve housing relative to said collar, and a valve operating rod extending through said second housing between said valves and adapted to unseat said valves when said housings are moved together.

2,751,021
APPARATUS FOR AUTOMATICALLY FILLING CONDUIT STRINGS

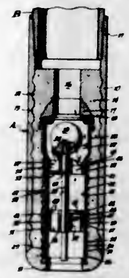
John F. Muse, Montebello, Calif., assignor to Baker Oil Tools, Inc., Vernon, Calif., a corporation of California
Application April 27, 1953, Serial No. 351,395
12 Claims. (Cl. 166—225)



1. In well apparatus: a tubular member having means thereon for securing said member in a conduit string to be lowered in a well bore; a valve seat in said tubular member; a valve member pivotally mounted in said tubular member and movable upwardly into engagement with said seat; a valve device in said tubular member for allowing upward flow of fluid in said tubular member, said device engaging said valve member to prevent its engagement with said seat; and releasable means engageable with said valve device and connected to said tubular member to hold said device in engagement with said valve member, said means being releasable to allow said valve device to be shifted downwardly in said tubular member out of engagement with said valve member to allow said valve member to engage said seat.

2,751,022
APPARATUS FOR ALLOWING WELL CONDUITS TO FILL WITH WELL BORE FLUID

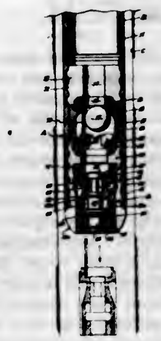
Reuben C. Baker, Coalinga, and Martin B. Conrad, Downey, Calif., assignors to Baker Oil Tools, Inc., Los Angeles, Calif., a corporation of California
Application December 14, 1951, Serial No. 261,639
19 Claims. (Cl. 166—225)



1. In apparatus of the character described: a tubular member adapted to form part of a conduit string positionable in a well bore; a valve seat on said member; a valve member engageable with said seat to restrict flow of fluid through said tubular member; a lower ported member below said valve member; means for preventing engagement of said valve member with said seat including releasable means engaging said lower ported member and said valve member; and an upper ported member above said lower ported member movable downwardly into engagement with said lower ported member to restrict fluid flow through said lower ported member whereby fluid pressure can release said releasable means and allow engagement of said valve member with said seat.

2,751,023
DEVICES FOR AUTOMATICALLY FILLING WELL CASING

Martin B. Conrad, Downey, Calif., assignor to Baker Oil Tools, Inc., Vernon, Calif., a corporation of California
Application December 18, 1950, Serial No. 201,456
14 Claims. (Cl. 166—225)

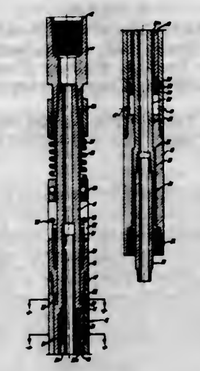


1. In well apparatus: a tubular member having means thereon for securing said member in a conduit string positionable in a well bore; a valve body; means securing said body in said member; a valve seat in said body; a valve member having a head portion movable into and out of engagement with said seat; said tubular member having a cylinder portion along which said valve member is slidable; means providing a confined space between said cylinder portion and valve member into which fluid cannot enter while said apparatus is in the well bore; said valve member having a resultant total first fluid pressure actuatable surface externally of said confined space and subject to the pressure of fluid internally of said tubular member and on the downstream side of said valve member only to urge said valve head portion into engagement with said seat, said valve member having a resultant total second fluid pressure actuatable surface externally of said confined space, when said head portion is out of engagement with said seat, remote and upstream from said head and subject to the pressure of fluid externally of said tubular member only to urge said head portion in a direction out of engagement with said seat; the area of said first surface being substantially greater than the area of said second surface.

2,751,024
WELL TOOL ACTUATING DEVICE

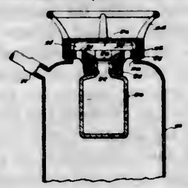
Jack A. Moosman, Glendale, Calif., assignor, by mesne assignments, to Johnston Testers, Inc., Houston, Tex., a corporation of Texas
Application March 29, 1954, Serial No. 419,413
7 Claims. (Cl. 166—237)

1. A well tool actuating device comprising a tubular housing adapted to be connected at its lower end to a well tool and having an enlarged internal recess intermediate its ends, an upper tubular mandrel adapted to be connected at its upper end to a well string and having a portion of enlarged external diameter at its lower end rotatably received in said housing recess, said enlarged portion being shorter in axial length than the axial length of said recess thereby permitting limited longitudinal movement of said upper mandrel relative to said housing, a lower mandrel having its upper end slidably but nonrotatably received within the upper mandrel, an enlarged external diameter portion on said lower mandrel below said upper mandrel, external threads on the enlarged portion of said lower mandrel, and internal threads on the inner surface of said housing below said enlarged recess interengaged with said external threads, whereby rotation of said upper mandrel relative to said housing will cause longitudinal movement of said lower mandrel relative to said housing.



2,751,025
FIRE EXTINGUISHER

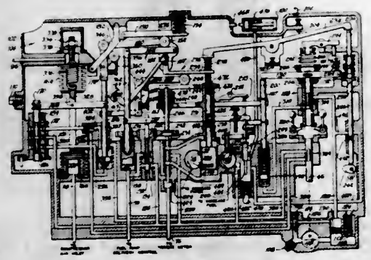
Ralph W. Austin, Weymouth, Mass., assignor to Process Engineering Inc., Somerville, Mass., a corporation of Massachusetts
Application July 26, 1954, Serial No. 445,857
3 Claims. (Cl. 169—32)



1. A fire extinguisher of the carbonate-acid type having an extinguisher casing for holding the carbonated extinguishing liquid provided at the upper end with an open mouth and a removable cap member closing the mouth, an acid receptacle suspended within the upper portion of the casing and having a lateral flange surrounding the upper portion thereof cooperating in engagement with the side walls of the casing to provide a carbonate-acid mixing chamber between the flanged acid receptacle and the cap member, said acid receptacle having a widely flaring discharge mouth and a substantially smaller discharge throat disposed a substantial distance below the top of the flange for controlling the flow of acid from the acid receptacle when the extinguisher is operated, said flange being provided with a plurality of openings disposed in spaced relation around the same for admitting carbonate liquid into the mixing chamber and the exit of carbon dioxide from the mixing chamber to within the casing, said flaring mouth terminating at the plane of the top of the openings in the flange through which the carbonate liquid passes into the body of the extinguisher whereby to assist in the substantially uniform flow of acid into a position to react with the carbonate liquid entering the mixing chamber, the total area of the openings in the flanged portion of the acid receptacle lying within the range of about 3 to 6 times the area

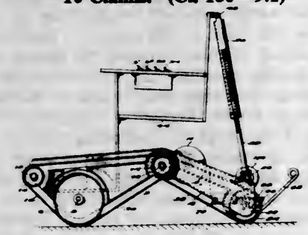
of the discharge throat from the acid receptacle into the mixing chamber whereby the gas pressure developed within the casing after the extinguisher is inverted diminishes gradually from its maximum.

2,751,026
PROPELLER PITCH CONTROL APPARATUS
Leighton Lee II, Rocky Hill, Conn., assignor, by mesne assignments, to Pratt & Whitney Company, Incorporated, West Hartford, Conn., a corporation of Delaware
Application July 19, 1947, Serial No. 762,038
1 Claim. (Cl. 170—135.72)



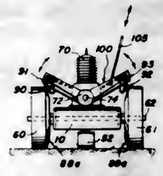
Apparatus for controlling the pitch of a variable pitch propeller, comprising pitch varying means, control means for said pitch varying means including a control element having a neutral position in which said pitch remains constant and effective upon opposite movements from said position to cause variation of said pitch in opposite senses, means responsive to the torque of said propeller for moving said element in one direction, means including a spring for applying a force to said element in the opposite direction to determine the value of torque which will maintain said element in said neutral position, a retainer for said spring, means for moving said retainer to vary the force applied to said element by said spring, said moving means comprising a manually movable cam, a follower for said cam, and a connection between said follower and said retainer, means for limiting the movement of said retainer to establish the maximum value of said torque, means for adjusting said limiting means, and a strain release in said connection to permit continued movement of said cam after said strain release is effective.

2,751,027
ENDLESS TRACK SUPPORTED INVALID CHAIR
Robert B. McLaughlin, Washington, D. C.
Application May 19, 1952, Serial No. 288,715
10 Claims. (Cl. 180—9.1)



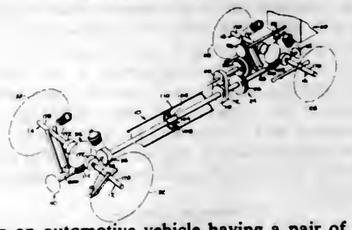
1. A vehicle comprising a pair of laterally spaced non-articulate side frames, front and rear wheels mounted upon said frames, and endless ground engaging tracks extending over said wheels with the lower portion of each track and of each frame between the front and rear wheels upwardly inclined to form a V-shaped track section and V-shaped frame.

2,751,028
LATERALLY SPACED ROLLERS SELECTIVELY ENGAGEABLE WITH AN ADJACENT WHEEL FOR FORWARD AND REVERSE VEHICLE DRIVE
Myron P. Laughlin, St. Petersburg, Fla.
Application April 16, 1952, Serial No. 282,600
5 Claims. (Cl. 180—19)



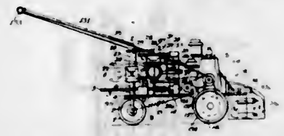
1. In apparatus of the character described, the combination of a platform, a power unit mounted on said platform and supported thereby, spaced ground-engaging wheels mounted on a common axle so as to turn in unison and being disposed to provide at least partial support for said platform, said wheels having friction surfaces on corresponding radial faces thereof, rollers operatively related to and mounted to turn on axes disposed generally normal to the turning axis of said wheels and having friction surfaces complemental to the friction surfaces of the wheels, tiltable roller mounting means extending generally between said wheels and normally disposing said rollers with their friction surfaces out of engagement with the associated friction surfaces of the wheels, means for selectively tilting said last-named means in direction as to engage one or the other of the roller friction surfaces with its associated wheel-friction surface, and drive transmission means operative between said power unit and both said rollers for driving the latter from the power unit.

2,751,029
FOUR WHEEL DRIVE MECHANISM AND BRAKING UNIT THEREFOR
Frederick William Dixon, Reigate, England, assignor to Harry Ferguson Research Limited, Abbotswood, Stow-on-the-Wold, England, a British company
Application December 27, 1950, Serial No. 202,894
Claims priority, application Great Britain December 28, 1949
6 Claims. (Cl. 180—44)



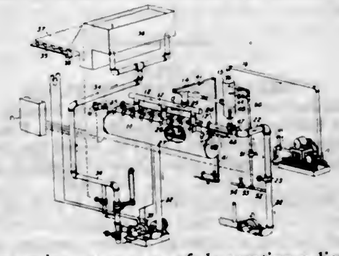
6. In an automotive vehicle having a pair of steerable front wheels and a pair of rear wheels together with an engine, a four wheel drive and braking system comprising, in combination, front and rear differentials drivingly interposed between the wheels of the respective pairs, a first drive shaft connected to drive said rear differential, means connecting said first drive shaft to be driven by said engine, a second drive shaft connected to drive said front differential, a two-way overrun device interposed between said first and second drive shafts to effect driving of the latter by the former and permitting overrunning of the latter with respect to the former when the front wheels run faster than the rear wheels as the vehicle negotiates corners, and means for applying braking torque to the front wheels and hence also to the rear wheels through said two-way overrun device.

2,751,030
LIGHT SENSITIVE AUTOMATICALLY CONTROLLED STEERING SYSTEM
Fay Edison Null, Beavercreek Township, Greene County, Ohio
Application November 13, 1952, Serial No. 320,308
11 Claims. (Cl. 180—79.1)



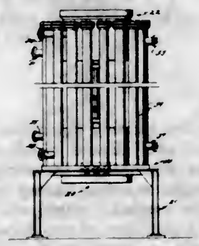
3. A photoelectric steering device for use in a harvester comprising a control system that guides the harvester on an uncut crop boundary consisting of an error detector comprised by two source-detector cell pairs, the first positioned above the uncut crop as a diffuse illumination level reference, and the second pair positioned so that an uncut crop obstructs the optical path between the source and detector cell elements, pick-off resistors with the detector cells of said source-detector cell pairs, an output circuit in which said pick-off resistors are connected in series with opposite polarities across the input of an amplifier with an output proportional to the input, common voltages on both the source elements and detector cells of said source-detector cell pairs that prevent unequal voltage output fluctuations that would be caused by voltage variations in different voltage sources, a three position relay and a followup potentiometer connected in series with the output of said amplifier so that the voltage polarity on said relay changes sign at the point where the voltage pickoff from said potentiometer is just equal in magnitude and opposite in polarity to that on the output of said amplifier, a reversible servo motor driven in the direction determined by the position of said three position relay, a guide wheel connected to the variable contact of said followup potentiometer and driven by said servo motor in a direction to keep the pickoff voltage of said potentiometer equal in magnitude and opposite in polarity to the output voltage of said amplifier so that the deflection of the guide wheel is proportional to the error signal for the position of said harvester relative to the uncut plot boundary.

2,751,031
CONDITIONING PAPER-MAKING STOCK
James A. Smith, Greenburgh, N. Y., and Cornelius J. Lyons, Norwalk, Conn., assignors, by mesne assignments, to Clark & Vicario Corporation, Bronxville, N. Y., a corporation of New York
Application May 21, 1953, Serial No. 356,382
2 Claims. (Cl. 183—2.5)



1. The continuous process of de-aerating a liquid suspension of paper-making constituents while heated to mill stock temperature, which comprises pumping such heated suspension and atomizingly spraying it into an enclosed de-aerating chamber, maintaining the effect of high vacuum in the chamber by suction of a steam-jet ejector, maintaining constant the liquid-level of a pool in the chamber of such sprayed de-aerated suspension, conducting such suspension from the pool under air-excluding conditions to the place of its use, sucking air from the chamber by the jet, conveying steam and sucked air from the jet to the atmosphere of an enclosed condenser, condensing the condensables in said steam and air by supplying to the steam and air entering the condenser a dilute suspension of paper-making constituents; collecting a quantity of such condensate and maintaining a pool thereof reaching to an elevation above the chamber but below the point of entry of the steam and air into the condenser while shielded from the atmosphere to receive and retain heat and pressure supplied thereto by the steam from the jet, and forcibly atomizingly spraying into the chamber such heated condensate from the maintained pool thereof independently of the said pumped spraying to de-aerate it while using as a correlated force therefor the steam-jet-induced pressure thereon plus the elevation of the pool whereby the pressure on the elevated condensate is greater than the pressure in the chamber and the heat of the steam is retained by rising temperature of the condensate to be substantially as hot as that of the pool in the chamber.

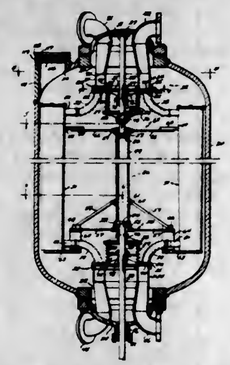
2,751,032
FLUID TREATING APPARATUS
Dan Ringo and Ernest B. Miller, Houston, Tex., assignors to Adsorption Research Corporation, Houston, Tex., a corporation of Texas
Application November 9, 1954, Serial No. 467,750
4 Claims. (Cl. 183—4)



1. Apparatus for treating fluids comprising a plurality of closed vessels adapted to contain fluid treating material; a pair of spaced-apart, hollow, cylindrical distribution chambers having closed top, bottom and side walls, each of said chambers having one wall provided with a circular row of circular openings for the passage of fluids; at least two conduits connected to one of the walls of one of said chambers for the passage of fluids thereto and therefrom: at least two conduits connected to one of the walls of the other of said chambers for the passage of fluids thereto and therefrom; a group of pipes each connecting one end portion of one of said closed vessels with one of said circular openings in one of said distribution chambers and a second group of pipes each connecting the other end portion of one of said closed vessels with one of the circular openings in the other of said distribution chambers; valve means mounted in each of said distribution chambers for rotation about the longitudinal axis thereof, each of said valve means including at least two annular trough-shaped conduits, each having its closed bottom side extending inwardly with respect to said chamber and its open outer side in communication with one of said conduits and with the outer ends of its walls in sealing engagement with the wall of the chamber to which the conduits are connected, and at least two circumferentially spaced arc-shaped and trough-shaped closed end conduits each having its closed bottom side extending inwardly with respect to said chamber and its open outer side positioned to communicate with a group of the circular openings in the distribution chamber and with the outer ends of its side and end walls in sealing engagement with

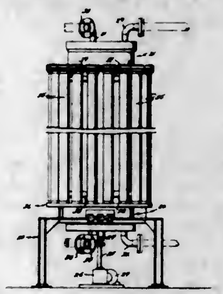
the walls of the chamber in which the circular openings are formed; and at least two ports, each forming a passageway connecting one of the annular conduits with one of the arc-shaped conduits; the construction and arrangement being such that at least two separate, distinct and continuous flows of fluid may flow through the apparatus; and means for synchronously rotating the valve means so that the separate flows of fluid will be directed successively through the vessels containing fluid treating material.

2,751,033
FLUID TREATING APPARATUS
Ernest B. Miller, Houston, Tex., assignor to Jefferson Lake Sulphur Company, New Orleans, La., a corporation of New Jersey
Application January 26, 1954, Serial No. 406,310
6 Claims. (Cl. 183—4.6)



1. Apparatus for treating fluids comprising a pair of vertically spaced and aligned distributive assemblages, the upper of the assemblages including a stationary annular trough-shaped member having an open bottom, a plurality of seals mounted within the annular member dividing it into a plurality of arc-shaped manifolds having open bottoms, a rotatable disc valve slidably engaging the open bottom of said annular member and provided with a circular row of openings positioned to communicate with the respective manifolds as the valve rotates, and a plurality of inlet-outlet conduits, each connected to one of said manifolds to permit separate flows of fluid through the distributive assemblage, the lower of said assemblages including a stationary annular trough-shaped member having an open top, a plurality of seals mounted within the annular member dividing it into a plurality of arc-shaped manifolds, a rotatable disc valve slidably engaging the open top of said annular member and provided with a circular row of openings positioned to communicate with the respective manifolds as the valve rotates, and a plurality of inlet-outlet conduits each connected to one of the manifolds to permit separate flows of fluid through the distributive assemblage; a plurality of elongated upright closed vessels adapted to contain fluid treating material mounted in a row extending around and spaced radially outward from said distributive assemblages; a group of pipes each connecting the upper end portion of one of said closed vessels to one of the openings in the disc valve in the upper distributive assemblage; a second group of pipes, each connecting the lower end portion of one of said closed vessels to one of the openings in the disc valve of the lower distributive assemblage; and means for rotating said closed vessels and the disc valves in said distributive assemblages about a common vertical axis so that the separate flows of fluid through said distributive assemblages will be directed successively through the vessels adapted to contain fluid treating material.

2,751,034
FLUID TREATING APPARATUS
Dan Ringo and Ernest B. Miller, Houston, Tex., assignors to Adsorption Research Corporation, Houston, Tex., a corporation of Texas
Application October 17, 1952, Serial No. 315,309
10 Claims. (Cl. 183—4.7)

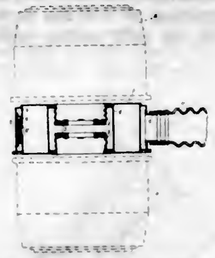


1. Apparatus for treating fluids comprising a plurality of closed vessels adapted to contain fluid treating material; a pair of cylindrical distribution chambers, each chamber having one end closed by a closure disc having at least two openings formed therein for the passage of fluids and the other end closed by a tube sheet disc having a circular row of circular openings formed therein for the passage of fluids; a group of pipes each connecting one end portion of one of said vessels with one of the circular openings in the tube sheet disc of one of the distribution chambers and a second group of pipes each connecting the other end portion of one of said vessels with one of the circular openings in the tube sheet disc of the other of said distribution chambers; a disc valve rotatably mounted in each of said distribution chambers, each of said disc valves having at least two annular recesses formed in one of its surfaces, at least two circumferentially spaced arc-shaped recesses having equal radii formed in the other of its surfaces, and a plurality of ports therein, each forming a fluid passage connecting one of the annular recesses with one of the arc-shaped recesses, said disc valves being mounted in their respective distribution chambers with each of its annular channels in communication with one of the openings in the adjacent closure disc and with each of its arc-shaped recesses in communication with a group of the circular openings in the adjacent tube sheet disc, the construction and arrangement being such that at least two separate, distinct and continuous flows of fluid may flow through the apparatus; and means for synchronously rotating the disc valves so that the separate flows of fluid will be directed successively through the vessels containing fluid treating material.

2,751,035
BREATHING APPARATUSES
Armand Jacques Julien Poelman, Paris, France, assignor to Etablissements R. Schneider, Paris, France
Application December 11, 1951, Serial No. 261,091
Claims priority, application France December 14, 1950
1 Claim. (Cl. 183—4.5)

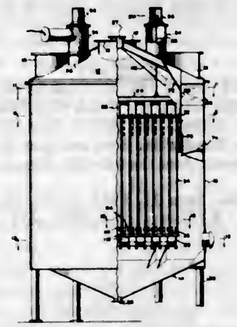
In a respiratory apparatus having a pair of purifying cartridges each containing a granulated adsorbing mass and each having a threaded tubular member projecting therefrom, and a hose adapted to be connected to a mask or respirator, that improvement comprising an auxiliary casing between said cartridges comprising a cylindrical case with end walls, an inwardly extending internally threaded neck in each end wall opening into said casing and into which the tubular members are threaded, said necks and the cylindrical wall of said casing defining between them an annular chamber, a pair of concentric

perforated walls within said annular chamber spaced from the wall of said casing and the necks and from each other, granulated adsorbing material contained in said space



between said walls and a ring member having a plug therein between the wall of said casing, and the concentric perforated wall spaced therefrom.

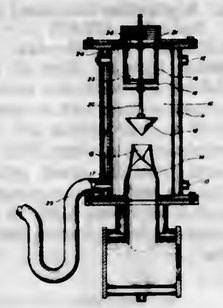
2,751,036
ELECTRICAL PRECIPITATOR
Gordon Busfield, Annandale, N. J., assignor to Research Corporation, New York, N. Y., a corporation of New York
Application November 4, 1954, Serial No. 466,757
11 Claims. (Cl. 183—7)



1. An electrical precipitator including a vertical shell, a horizontal partition dividing the shell intermediate the height of said shell, said partition including a plurality of individual elongated trough members, said trough members comprising an elongated box like structure having a base portion and upstanding side portions to provide support and liquid ponds for a plurality of spaced surface collecting electrodes, an assembly of complementary discharge electrodes supported in spaced relation to said collecting electrodes, gas outlet means in said shell above the partition, and gas inlet means communicating with the shell below said partition.

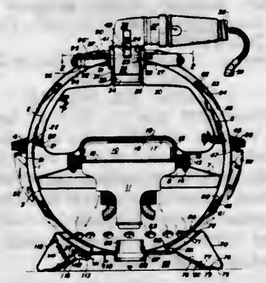
2,751,037
MIST ELIMINATOR
Merrill W. MacAfee and Herman A. Ruth, Los Angeles, Calif., assignors to Pacific Foundry Company, Ltd., San Francisco, Calif., a corporation of California
Application July 20, 1953, Serial No. 368,892
6 Claims. (Cl. 183—32)

1. In a device for removing mist from a gas stream, the combination which comprises a housing, an inlet pipe projecting into one end of the housing, a twisted vane disposed in the inlet pipe for imparting a swirling action to the entering gas stream, an outlet pipe projecting into the other end of the housing opposite the inlet pipe, a plate baffle disposed in the housing and spaced therefrom at its periphery between the outlet and inlet pipe and close to but spaced from the outlet pipe, means for adjusting the spacing between the outlet pipe and the plate baffle, a substantially conical baffle disposed between the plate baffle and the inlet pipe with the point of the conical baffle facing the inlet pipe, a drain connected to the end



of the housing into which the inlet pipe projects with the inlet pipe projecting into the housing beyond this drain and a second drain connected to the other end of the housing into which the outlet pipe projects with the outlet pipe projecting into the housing beyond this second drain.

2,751,038
AIR SUPPORTED CLEANER WITH CONTROL
Louis K. Acheson, North Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application May 14, 1954, Serial No. 429,940
12 Claims. (Cl. 183—37)



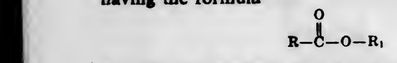
11. Suction cleaning apparatus comprising a casing, a filter in the casing, a suction hose connected to the casing to discharge into the filter, a suction producing unit in the casing arranged to draw air through the hose and filter and to place such air under pressure, a supporting structure for the casing including means defining an air chamber between the underside of the casing and a supporting surface, an air duct on the casing for conveying air under pressure from the suction producing unit to the air chamber, the casing and supporting structure each having concentric closely adjacent spherical sections, means on the supporting structure for supporting the casing thereon for rocking movement about the center of the spherical sections, port means in the spherical section of the supporting means open to the atmosphere, port means in the spherical section of the casing adapted to register with the port means in the spherical section of the supporting means to discharge such air under pressure therethrough, means biasing the casing to a position in which the port means are in registry, the port means in the casing and support means being spaced apart a distance greater than the maximum dimension of the port means whereby a pull on the hose will rock the casing on the support means to move the two port means out of registry and air under pressure discharging through the air duct supports the cleaning apparatus on an air cushion or bearing.

2,751,039
FILTERS COATED WITH THICKENED OILS

Fred J. Hanly, Berkeley, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware

No Drawing. Application December 23, 1952, Serial No. 327,697
6 Claims. (Cl. 183—44)

1. An impingement type air filter of improved adhesiveness and wicking characteristics comprising a permeable structural mass wetted with a composition consisting essentially of a hydrocarbon oil of lubricating viscosity and from about .5 to about 10% by weight of a compound selected from the group consisting of the cellulose oleates and a polymeric compound having a molecular weight of from about 4,000 to about 20,000, said polymeric compound being derived from a monomer having the formula



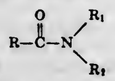
wherein R is an aliphatic hydrocarbon radical having an ethylenic linkage and from 2 to 8 carbon atoms and R_1 is an alkyl radical having from 4 to 12 carbon atoms, said composition being a Newtonian fluid at temperatures above about 190° F. and a non-Newtonian, semi-rigid mass at room temperature, said polymeric compound at room temperature being insoluble in the oil and being uniformly suspended therein.

2,751,040
FILTERS COATED WITH POLYAMIDE-THICKENED OILS

Fred J. Hanly, Berkeley, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware

No Drawing. Application December 23, 1952, Serial No. 327,698
6 Claims. (Cl. 183—44)

1. An impingement type air filter of improved adhesiveness and wicking characteristics comprising a permeable structural mass wetted with a composition consisting essentially of a hydrocarbon oil of lubricating viscosity and from about .5 to about 10% by weight of a polymeric amide having a molecular weight of about 4,000 to about 20,000, said polymeric amide being derived from a monomer of the formula



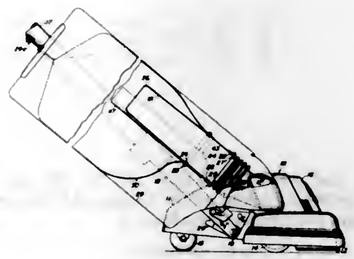
wherein R is a hydrocarbon radical containing an ethylene linkage and having from 2 to 3 carbon atoms, R_1 is selected from the group consisting of hydrogen and alkyl radicals, R_2 is an alkyl radical, and R_1 and R_2 together contain a total of from 4 to 12 carbon atoms; said composition being a Newtonian fluid at temperatures above about 190° F. and a non-Newtonian semi-rigid mass at room temperature, said polymeric amide at room temperature being insoluble in the oil and being uniformly suspended therein.

2,751,041
FILTER BAG

William D. Cropley, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio

Application May 18, 1953, Serial No. 355,805
8 Claims. (Cl. 183—51)

1. A non-reusable paper filter bag for use on a suction cleaner comprising, a main tubular body formed from air pervious paper material with a pair of opposite substantially flat walls, said body having a plurality of pleats extending along diametrically opposed sides of said body for the full length thereof intermediate said walls, said pleats forming inner and outer staggered creases throughout their lengths, means permanently closing the upper end of said body with the upper ends of said pleats flattened against one another, the lower end of said body having an air inlet opening of such size as to mate with and closely engage in air tight sealing relationship a filter

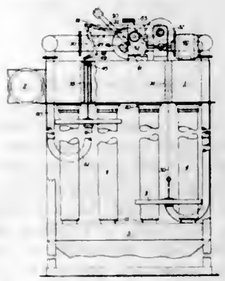


adapter of the suction cleaner, one side of said inlet being formed by one of said flat walls and the remainder being formed by the remaining peripheral lower edge portion of said body including flattened lower ends of said pleats arranged in staggered relation so that the inner creases are offset with respect to each other at said inlet.

2,751,042
MECHANICAL DRY TUBULAR-STOCKING DUST COLLECTOR OF THE TRAVERSING REVERSE-JET BLOW RING OR SELF-CLEANING TYPE

Stig G. Sylvan, Louisville, Ky., assignor to American Air Filter Company, Inc., Louisville, Ky., a corporation of Delaware

Application June 22, 1953, Serial No. 363,322
6 Claims. (Cl. 183—61)

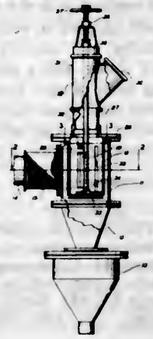


1. In a blow ring for an inflated filter tube of known outside diameter: a hollow structure having vertically spaced top and bottom metal walls and a peripheral metal wall cooperating to define an inner closed chamber for receiving gas under pressure, the top and bottom walls each containing an annular cup-shaped depression extending into said chamber, each cup-shaped depression having a washer-like bottom providing an outer annular bottom flange encircling a central bottom opening of smaller diameter than said filter tube diameter, said cup-shaped depressions being directed toward and aligned with each other and cooperating to form a tubular passageway through which said filter tube is adapted to extend, the washer-like flanges of their bottoms being spaced from each other to form therebetween an annular nozzle for jetting gas from said closed pressure chamber into a filter tube passing through said passageway.

2,751,043
SEPARATION OF SUSPENDED SOLIDS FROM FLUIDS

Herman A. Ruth and Merrill W. MacAfee, Los Angeles, Calif., assignors to Pacific Foundry Company, Ltd., San Francisco, Calif., a corporation of California

Application July 6, 1953, Serial No. 366,118
2 Claims. (Cl. 183—85)

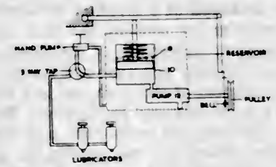


1. In a dust collector, the combination which comprises a tube having a wall curved around its longitudinal axis, an inlet conduit of substantially uniform cross section entering the tube through the wall and substantially tangential thereto and terminating in a slit adjacent the inside of the tube wall and extending for a substantial proportion of the tube length for introducing a stream of fluid containing the dust to be collected into the tube, the slit extending along the tube for a substantial proportion of its length and its width being but a small fraction of the width of the tube so that the stream enters the tube as a thin ribbon immediately adjacent the tube wall and swirls therein immediately adjacent the tube wall, the tube wall having at least one slit which is substantially tangential to the tube wall and which faces the swirling stream and is elongated in the direction of the tube axis, a housing disposed around the tube and spaced therefrom, an extension conduit fastened to and extending from one end of the tube and projecting outside the housing and closed at its outer end, a baffle disposed at the opposite end of the tube and extending transversely across it, a longitudinally movable stem connected at one end to the baffle and projecting through the tube and the extension conduit and through the closed outer end of the extension conduit, means for adjusting the longitudinal position of the stem, and a gas exit conduit connected to the side of the extension conduit outside the housing.

2,751,044
MEANS FOR LUBRICATING MACHINERY

Joseph Harris, Nairobi, Kenya

Application August 18, 1953, Serial No. 374,874
Claims priority, application Great Britain August 21, 1952
7 Claims. (Cl. 184—6)

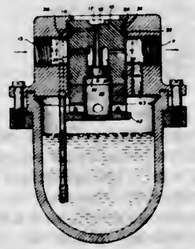


1. A lubrication system for a power machine having lubricators of controllable flow through which oil is fed to different rubbing surfaces in the machine comprising an oil pump adapted to be coupled to and driven by a moving part of the machine and to deliver oil in excess of the requirements of the machine, a pressure cylinder of substantial volume into which oil from the pump is delivered, a spring-loaded piston working in said cylinder and displaceable axially in one direction by the oil against the spring-loading, an overflow port in the cylinder wall which is at least partially uncovered by said piston so long as the oil supply is maintained by the pump at a pressure determined by the loading on the piston, means for feeding oil from said pressure cylinder to said lubricators, a warning device, and means actuated by axial movement of the piston by said spring means in the opposite direction on failure of the oil supply from the pump for operating said warning device, said cylinder being of such a capacity in relation to the flow through said lubricators that oil is fed by axial movement of said piston as a result of said spring loading to said lubricators after failure of said oil supply and after operation of said warning device for a sufficient time to enable action to be taken to restore said oil supply.

2,751,045
VENTURI PLUG

Delbert G. Faust, Englewood, Colo., assignor to C. A. Norgren Co., Englewood, Colo., a corporation of Colorado

Application June 12, 1953, Serial No. 361,249
7 Claims. (Cl. 184—55)



1. A venturi plug of the type described, comprising a cylindrical rotatable plug constricting the opening of a fluid carrying conduit, a lubricant passage in said plug, on end of said passage debouching into a venturi throat internally of said plug, an annular chamber encircling said passage adjacent and communicating with said throat, an inlet passage to said chamber having an opening facing upstream whereby fluid enters said chamber and exhausts through said throat forming a low pressure area in said lubricant passage, an outlet passage from said chamber of smaller cross sectional dimensions than said inlet passage having an opening facing downstream, and by-pass means cooperatively interconnected with said plug for providing a variable passage for fluid around said plug whereby rotation of the plug moves the inlet opening from fluid flow alignment to an angle incident thereto and simultaneously moves the by-pass means and outlet opening from closed to open position.

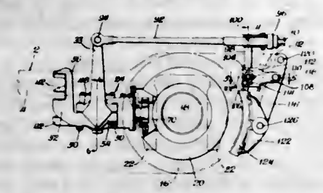
2,751,046
COMBINATION BRAKE

Carl E. Tack, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey

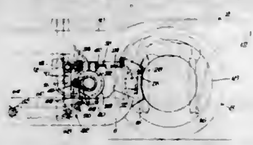
Application April 6, 1951, Serial No. 219,638
11 Claims. (Cl. 188—33)

1. In an interconnected, simultaneously braking, duplex brake system for a railway car truck having a wheel and axle assembly with a rotor thereon; the combination of a power operated rotor braking mechanism pivotally mounted on said truck, an arm secured to said braking mechanism for movement therewith, a rod pivotally connected to said arm, a hanger lever fulcrumed on said truck, friction means secured to said hanger lever for engagement

with said wheel, and means operatively connected between said rod and hanger lever to transmit a substantially unidirectional force to said hanger lever causing the engagement of said friction means with said wheel, irrespective of the direction of rotation of said wheel and rotor, said force being derived from the turning moment exerted upon said rotor braking mechanism.

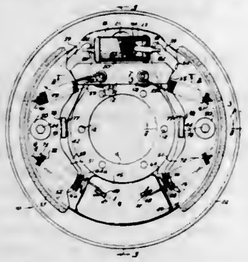


2,751,047
ROTOR BRAKE
Walter H. Baselt, Flossmoor, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application March 27, 1951, Serial No. 217,833
11 Claims. (Cl. 188—59)



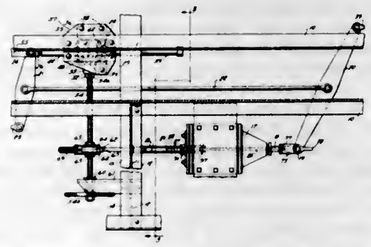
1. In a brake arrangement for a railway car truck having sprung and unsprung parts supported by a wheel and axle assembly with a brake surface; the combination of brake means rotatably supported by the sprung part and adapted to decelerate rotation of said surface, means for counteracting braking torque on said brake means comprising a lever system connected to both parts and to said brake means, said system being connected to said brake means independently of the connections of said system to said parts, whereby relative vertical movement of said parts rotates said brake means relative to the sprung part, actuating means for said brake means independent of said system, and means for frictionally resisting such rotation of the brake means relative to the sprung part, thereby frictionally damping relative vertical movement between the parts.

2,751,048
TRANSVERSELY EXPANDING WHEEL BRAKE
Ralph K. Super and Bryan E. House, Ashtabula, Ohio, assignors, by mesne assignments, to Rockwell Spring and Axle Company, Coraopolis, Pa., a corporation of Pennsylvania
Application September 12, 1952, Serial No. 309,204
26 Claims. (Cl. 188—78)



5. In a vehicle brake assembly, a support plate having on one side thereof spaced flat integral guide surfaces lying substantially in a plane, means mounted on said plate forming upper and lower stationary brake shoe abutment surfaces, brake lever actuating means mounted on said plate, oppositely rockable brake levers operatively connected to said actuating means and fulcrumed on said lower abutment surfaces and having one side slidably engaging said guide surfaces, brake shoes having webs maintained in slidable contact with the other sides of said levers and opposite ends adapted to contact said abutment surfaces, means rockably and slidably connecting each lever with one of said shoes, and a plurality of resilient means interconnecting each of said brake shoes and said support plate for urging said shoes against said abutment surfaces and maintaining said operative connection between the levers and associated shoe webs.

2,751,049
AUTOMATIC SLACK ADJUSTER
George B. Dorey, Westmount, Quebec, Canada, assignor to Continental Transport Appliances, Limited, Montreal, Quebec, Canada, a corporation of Canada
Application March 5, 1952, Serial No. 274,953
2 Claims. (Cl. 188—198)



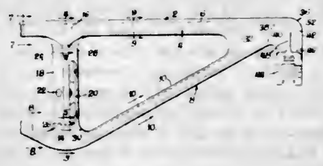
1. In a slack adjuster for a brake having a leverage system including interconnected live and dead levers and a cylinder having a push rod connected to the live lever and an adjustably movable fulcrum for the dead lever; the herein described mechanism for moving the dead lever fulcrum to compensate for excessive travel of the push rod, said mechanism including a longitudinally movable element on which the fulcrum is carried, said movable element having a screwthreaded section and a complementary screwthreaded rotatable nut member cooperating therewith for moving the said element by rotation of the nut member, means for rotating the nut member including a rotatable cross-shaft and interengaging bevel gearing between the cross-shaft and nut member; means for rotating the cross-shaft including a lever having a lost motion connection with the shaft and including a ratchet wheel fixedly carried by the shaft and a pawl pivoted on the lever to engage with the ratchet wheel for rotating the shaft in unison with the lever whereby the shaft is turned in one direction and independent movement of the lever in the other direction produces no turning movement of the shaft; a spring connected to the lever and anchored at a location stationary with respect to the cylinder for rotating the shaft and lever in unison by a swinging movement of the lever; and a connection between the lever and push rod for energizing the spring upon movement of the push rod in a brake applying direction; a guide disposed intermediate the lever and push rod for supporting the connection, and interengaging pawl and ratchet means for maintaining the spring energized until a predetermined extent of push rod travel is attained, said means including ratchet teeth on the connection and a pawl carried by the guide, said ratchet teeth upon movement of the push rod beyond the predetermined extent of push rod travel moving beyond the pawl to override the same and release the spring energy.

2,751,050
BRAKE BEAM
Eugene G. Opsahl, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application March 25, 1952, Serial No. 278,430
1 Claim. (Cl. 188—226.1)



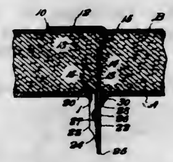
In a brake beam, tension and compression members comprising spaced generally horizontal top and bottom flanges interconnected at remote edges thereof by webs, a tubular strut interconnecting said members at the medial points thereof, said members converging and merging at the ends of the beam to form tubular end portions partially defined by the flanges and webs of said members, a brake head integrally formed on each end portion in such a manner that the line of presure of said head intersect said end portion, beam end walls connected to the web of said compression members, each beam end wall extending transversely of the beam and coplanar with the outboard face of the related brake head and defining the outboard limit of said related end portion, each brake head having a front face formed with pairs of toe and intermediate lugs, one pair of lugs being above the beam and the other pair of lugs being below the beam, a hanger slot formed in each head transversely thereof between the toe and intermediate lugs located above the beam, said hanger slots being located directly and vertically above the associated tubular end portions, a reinforcing wall defining the rearward extremity of each slot, upper and lower gussets integrally formed with the related end portions and brake heads and extending transversely of the beam, the upper gussets being integrally formed with said reinforcing walls, and a wall segment disposed medially between the intermediate lugs of each brake head, each of said wall segments forming a part of the tension member web and defining the front limit of the tubular end portion.

2,751,051
BRAKE BEAM
Robert B. Cottrell, Chicago, Ill., and Roland T. Leiuk, East Chicago, Ind., assignors to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application March 12, 1952, Serial No. 276,182
7 Claims. (Cl. 188—226.1)



1. A brake beam casting comprising tension and compression members of channel section having spaced flanges and connecting webs, a tubular strut connecting the members and merging with the flanges thereof centrally of the beam, a wall within each end of the strut and merging with adjacent flanges, said members converging toward the ends of the beam and having their flanges merging to form tubular end portions, brake heads mounted on the end portions, and vertical end walls extending transversely of the beam merging with the outboard edges of the tubular end portions, said walls being spaced from the central strut a distance at least equal to the distance between the strut and the line of pressure of the brake head.

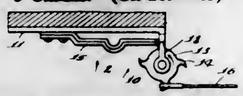
2,751,052
JOINT FOR ROOFING, WALL, FLOOR OR THE LIKE
Laurence H. Flora, Cleveland, Ohio, assignor to Tinnerman Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application September 2, 1953, Serial No. 378,063
1 Claim. (Cl. 189—36)



A joint comprising a sheet metal supporting part, a layer of compressible material thereon, and a sheet metal nail in predetermined penetrated position in said sheet metal supporting part comprising an elongate piece of sheet metal having a transverse bend providing a lateral head and a substantially channel-shaped shank extending in generally normal relation to said head and having a V-shaped lower end comprising cutting edges diverging from a point, said sheet metal supporting part having a passage pierced and cut therein by said point and lower end and said substantially channel-shaped shank extending through said layer of material and through said passage in said sheet metal supporting part, said substantially channel-shaped shank being curved transversely substantially in the form of a longitudinal corrugation comprising a longitudinal wall having substantially concave and convex surfaces with the longitudinal edge portions of said shank defining longitudinal ribs reinforcing said shank, said longitudinal ribs comprising upper rib portions and lower rib portions of reduced width defining abutments at the junctions of said upper and lower rib portions, the upper edges of said upper rib portions being in contact with the undersurface of said head and said abutments engaging said sheet metal supporting part at said predetermined penetrated position of the nail therein, said longitudinal wall having an intermediate partially severed area provided by an inverted substantially U-shaped slit defining an opening in said longitudinal wall and providing a tongue in said opening having a junction with said longitudinal wall, said tongue comprising a lower guide portion extending from said junction angularly inwardly within said channel-shaped shank and merging with the free end portion of said tongue extending angularly backwardly from said guide portion through said opening in said longitudinal wall with the extremity of said tongue defining a shoulder projecting from the convex surface of said longitudinal wall, said passage in the sheet metal supporting part being countersunk and enlarged along the concave surface of said channel shaped shank by the penetration of said lower rib portions into said sheet metal supporting part, whereby said tongue passes through said enlarged passage such that there is substantially no deformation of said tongue or displacement of the shoulder defined by the extremity of said tongue, said shoulder defined by the extremity of said tongue being spaced from said head of the nail a distance slightly less than the combined thickness of said sheet metal part and said layer of compressible material thereon, such that in said predetermined penetrated position of the nail, said layer of compressible material is compressed by the head of the nail with said shoulder defined by the extremity of said tongue extending through said passage in the sheet metal part in overlapping rela-

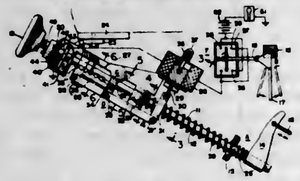
tion to the adjacent marginal edge of said passage at the underside of said sheet metal part, said compressed material being in expanded normal condition in the completed joint and providing a reverse axial pull on said shank maintaining said shoulder in positive engagement with said underside of said sheet metal part in locked relation therewith.

2,751,053
HOLDER
Henry P. Birkemeier, Chicago, Ill., assignor to Bell & Gossett Company, Morton Grove, Ill., a corporation of Illinois
Original application December 8, 1948, Serial No. 64,221, now Patent No. 2,635,718, dated April 21, 1953. Divided and this application February 25, 1953, Serial No. 338,863
3 Claims. (Cl. 189—45)



1. A resettable holder comprising a disk journaled for rotation and having a plurality of fingers extending therefrom for engagement of a selected finger with a tensioned connector attached to a movable part, the pull of the connector when the part is in one position tending to rotate the disk, and thermally responsive means normally engaging another finger to prevent rotation of the disk and acting at a predetermined temperature to disengage the last named finger and free the disk for rotation.

2,751,054
AUTOMATIC EMERGENCY BRAKE RELEASE MECHANISM
Michael A. Del Re, Sr., Norridge, Ill.
Application September 3, 1954, Serial No. 454,067
8 Claims. (Cl. 192—4)



1. In combination with a motor-vehicle emergency brake-rod and gear-shift lever, a locking element normally activated to lock the brake-rod in braking position, a solenoid having the armature thereof connected with the element to shift it out of locking position, electrical switch means associated with the gear-shift lever and normally open when the lever is in its neutral position but closed when the lever is shifted out of neutral and into either of its other functioning positions, and an electrical circuit connecting the solenoid and the switch means with the source of electrical energy for the vehicle.

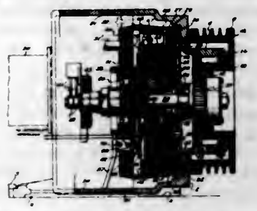
2,751,055
DOUBLE CLUTCHES
Adiel Y. Dodge and William A. Robertson, Rockford, Ill.
Application March 23, 1951, Serial No. 217,264
8 Claims. (Cl. 192—48)

1. A double clutch comprising a clutch plate, a second clutch plate secured in spaced relation to the first named clutch plate, an elongated hub coaxial with the clutch plates, a pressure plate mounted between the clutch plates for axial shifting in either direction, discs between the pressure plate and the clutch plates respectively, an axially movable shift collar on the hub, locking means to lock the shift collar selectively in a position adjacent to the clutch plates or in a second position remote from the clutch plates, a spring disc secured to the shift collar and having a plurality of outwardly extending spring



fingers, and means connecting the spring fingers to the pressure plate yieldingly to urge it toward one clutch plate or the other as the collar is shifted in one direction or the other.

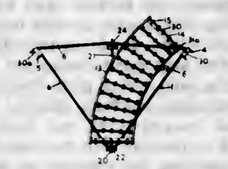
2,751,056
ELECTROMAGNETIC CLUTCH
Edward F. Aumaller, Lynbrook, Robert L. Dwight, Oyster Bay, and Raymond T. Kirchhoff, Smithtown, N. Y., assignors to Sperry Rand Corporation, a corporation of Delaware
Application March 26, 1951, Serial No. 217,634
3 Claims. (Cl. 192—84)



1. An electromagnetic jaw clutch for coupling two shafts comprising a pair of crowned rings forming two parts of the jaw clutch, a plate of magnetic material housed in one side of one ring and secured thereto, a spring disc secured at spaced points around its periphery to the other side of said ring, said disc having a plurality of cutout portions around its periphery and being secured near its center to one of said shafts, an axially spaced member of magnetic material housed in one side of the other ring, a winding for magnetizing said member and pulling said plate toward it against the bias of said disc, and a clamp ring on the far side of said disc clamping the disc to the first mentioned crowned ring around its periphery at spaced points only to permit limited bending axially, causing or permitting disengagement and engagement of the clutch as said winding is energized and de-energized and also transmitting torque to the shaft without buckling.

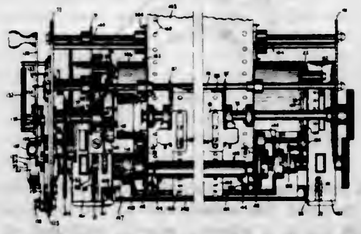
2,751,057
CONVEYOR FLIP-SWITCH
Thomas C. McGow, Convent Station, N. J., assignor to The Rapids-Standard Company, Inc., Grand Rapids, Mich., a corporation of Michigan
Application March 9, 1953, Serial No. 341,013
14 Claims. (Cl. 193—36)

1. In a gravity conveyor switch, the combination comprising: a switch bed having a pair of conveyor tracks at least one of which is longitudinally curved and frame means for rigidly securing said tracks together in vertically spaced back to back relationship; the ends of said tracks being vertically aligned at one end of said switch bed; a pair of pivots rotatably supporting said switch bed; the first of said pivots being mounted to said switch bed at the geometric center of said one end of said switch



bed; the second of said pivots being axially aligned with said first pivot; the axis of said pivots being tangential to the central axis of said curved track at said one end of said switch bed, inclined to the plane of said switch bed and between the ends of said switch bed between the upper and lower surfaces thereof.

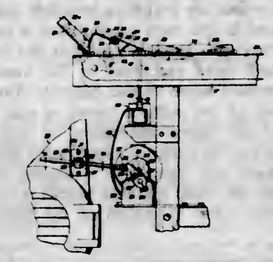
2,751,058
STRIP FEEDING DEVICE
John A. Schmidt, Dayton, Ohio, assignor to The Standard Register Company, Dayton, Ohio, a corporation of Ohio
Application November 13, 1951, Serial No. 256,072
16 Claims. (Cl. 197—128)



4. Recording apparatus wherein dual record strips in adjacent superposed relation are fed past a recording position, platen means interposed between said dual record strips at said recording position whereby the overlying record strip receives record entries to the exclusion of the underlying strip, means for withdrawing said platen means whereby the entry made on the overlying strip may be transmitted to the underlying strip, independent feeding devices for said strips, and means positioned by movement of said platen means to interposed position for preventing the operation of the feeding device associated with the underlying record strip in the interposed position of said platen means.

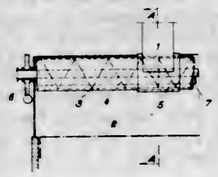
2,751,059
APPARATUS FOR GROUPING CONVEYED ARTICLES
Harry Klein, Brooklyn, and Theodore W. Zimmer, Woodside, N. Y., assignors to K and Z Machinery Corporation, Brooklyn, N. Y., a corporation of New York
Application April 28, 1955, Serial No. 504,632
3 Claims. (Cl. 198—34)

1. In an apparatus for receiving, grouping and conveying a plurality of units, in combination with a machine of the type having a delivery outlet and adapted to deliver a continuous row of said units to said outlet and further having a movable member operatively actuated upon the delivery operations of said machine, and with a counter-switch device operatively connected to said movable member and of the type adapted to be operatively actuated into circuit-opening and circuit-closing positions by a predetermined number of impulses, and having a shaft movable into two limiting positions upon the operative actuation of said device into its said circuit-opening and circuit-closing positions, each operative movement of said movable member comprising one of said impulses, the combination of a conveyor positioned to receive the units from said outlet, a holding device operatively movable between an operative limiting position in intercepting relation to the path of said row of units from said outlet to said conveyor, and an inoperative limiting position in non-obstructing relation to said path, electro-mechanical



means operatively connected between said holding device and said counter-switch device, whereby upon the operative actuation of said counter-switch device to said respective circuit-opening and circuit-closing positions said holding device is operatively moved between said two limiting positions, respectively; a pawl operatively mounted on said shaft and movable therewith, and reciprocating means operatively connected to said movable member and in operative engagement with said pawl, whereby the operative movements of said movable member will operatively actuate said shaft between its said two limiting positions.

2,751,060
STOKING DEVICES FOR FIRE GRATES
Karl Radermacher, Gummersbach-Strombach, Germany, assignor to L. & C. Steinmuller G. m. b. H., Gummersbach, Rhineland, Germany
Application August 18, 1952, Serial No. 304,887
Claims priority, application Germany September 18, 1951
7 Claims. (Cl. 198—56)

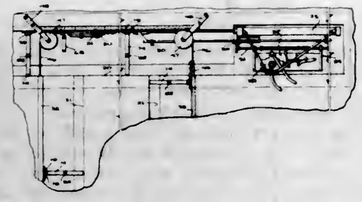


1. A distributing device comprising a fixed charging hopper, a distributing worm mounted beneath said hopper, a tubular member encasing said worm, said tubular member being closed at both ends and having a slot extending along its entire length and affording communication between said hopper and said worm, and means for rotating the worm at the tubular member together at the same angular velocity.

2,751,061
LITTER REMOVING APPARATUS
Ford L. Nickerson, Gilboa, N. Y.
Application June 29, 1954, Serial No. 440,142
5 Claims. (Cl. 198—79)

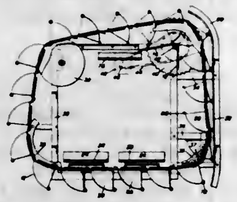
3. Litter removing apparatus comprising a beam movable in a linear path in opposite directions, means operatively connected to said beam for effecting the movements of said beam in opposite directions, an auxiliary beam arranged in end to end aligned relation with respect to said first mentioned beam and having the confronting

end flexibly connected to the confronting end of said first mentioned beam for movement with the latter, said auxiliary beam sloping upwardly from said first named beam, a plurality of spaced paddles each vertically disposed transversely of said auxiliary beam and carried by the last named beam so that it is held in a fixed vertical position upon execution of the linear movement of the last named beam in one direction and being freely swingable to a position other than a vertical position upon execution of the linear movement of the last named beam in the opposite direction, an arresting member positioned contiguous to and in the path of travel of a paddle of said auxiliary beam and operable to block the path of travel of said paddle upon execution of the linear movement of the last named beam in the opposite direction and to be shifted out of the path of travel of said paddle upon execution of the linear movement of said last named beam in said one direction, a cooperating element on said auxiliary beam and pressingly engaging said arresting member when the latter member blocks the path of travel of said paddle upon execution of the linear movement



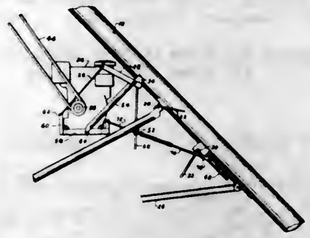
of the last named beam in the opposite direction and liftingly engaging said arresting member when the latter member is shifted out of the path of travel of said paddle upon execution of the linear movement of said last named beam in said one direction, a pair of beams arranged in parallel spaced relation positioned on one side of and perpendicular to said first beam, means connecting said pair of beams to said first named beam so that one of the pair of beams moves in a linear path in one direction while the other of the pair of beams moves in a linear path in the opposite direction in response to the execution of the linear path movement of said first named beam in one of its directions, and a plurality of spaced paddles each vertically disposed transversely of each of said first named beam and of said pair of beams, each of said paddles being carried by the adjacent beam so that it is held in a fixed vertical position upon execution of the linear movement of the last mentioned beam in one direction and being freely swingable to a position other than a vertical position upon execution of the linear movement of the last mentioned beam in the opposite direction.

2,751,062
DUMP ELEVATOR
Vernal B. Forbes, Idaho Falls, Idaho
Application August 25, 1953, Serial No. 376,392
3 Claims. (Cl. 198—102)



3. In combination with a potato harvester having a chassis, a dump elevator for use in lifting potatoes for conveyance comprising an endless series of links entrained about guide members and drive means for actuating said links and flexible resilient buckets pivotally attached to said links, an upwardly extending support carried by said chassis, rollers attached to said buckets, said rollers successively engaging said support during operation of said elevator, the upper end of said support being arcuate in shape, a tilting shield supported on said harvester adjacent said support, said buckets each having a lip engaging said tilting shield, said arcuate upper end of said support and said tilting shield cooperating to overturn said buckets after said drive means has conveyed said buckets upwardly, said tilting plate having an angularly downwardly extending platform adapted to receive the contents of said buckets after said buckets have been overturned, and a conveyor belt positioned adjacent said platform for removing the contents of said buckets received on said platform.

2,751,063
POWER DRIVEN ELEVATING CONVEYOR
Leon C. Wilcoxen and Charlie E. Pike, Dodge City, Kans., assignors to Mayrath Machinery Company, Inc., a corporation of Kansas
Application August 24, 1954, Serial No. 451,840
4 Claims. (Cl. 198—121)

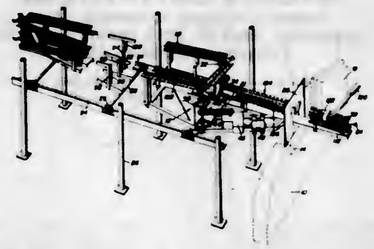


1. In a power-operated elevating conveyor, a conveyor housing mounted for adjustment of its inclination to the ground plane, a wheeled support including at least one radius rod pivoted to said conveyor housing at a point spaced from its lower end equal to the effective length of said radius rod, a control rod pivoted at one end to said housing and having its other end in pivoted sliding relation to said radius rod to maintain said control rod in vertical position as the inclination of said housing is altered, a parallelogram linkage suspended from said housing at one of its corners with one link of said linkage fixedly secured to said control rod, and an engine mount forming the link of said linkage opposite to said one link.

2,751,064
ICE CREAM MACHINE
Bud Russell, Ardmore, Okla.
Application October 2, 1952, Serial No. 312,688
3 Claims. (Cl. 198—131)

1. A confection conveyor, comprising: a horizontally disposed elongated channel-iron support, said support having a transversely extending projection intermediate its ends; a guide sprocket rotatably mounted horizontally adjacent one end of said elongated support in superposed relation with said support; a pair of superposed idler sprockets rotatably mounted in spaced-apart relation above the end of said support and opposite said first mentioned end; a pair of driver sprockets rotatably mounted in spaced-apart superposed relation above the outermost end of said transverse projection; a single idler sprocket rotatably mounted in spaced relation above said elongated support adjacent its juncture with said transverse projection, the last mentioned sprocket being selectively movable longitudinally relative to said elongated support; a

motor carried by said support; a sprocket chain drivably connecting said motor with the lowermost said driver sprocket; a bracketed endless conveyor chain entrained over said uppermost driver sprocket and said guide and idler sprockets forming a plurality of flights, said flights comprising an inlet flight extending longitudinally with relation to said support and in substantial horizontal parallel relation with said support between said guide sprocket and the said lowermost one of said pair of idler sprockets, and a rising flight extending between said lowermost idler sprocket and said uppermost driver sprocket, and an upper flight extending substantially horizontally



and in parallel relation with said support between said uppermost driver sprocket and the uppermost one of said pair of idler sprockets, said upper flight being entrained over said single idler sprocket, and an outlet flight extending between said uppermost one of said pair of idler sprockets and said guide sprocket; a plurality of vertically extending guide members carried by said support for guiding and supporting the said flights of said chain; and a plurality of laterally extending juxtaposed upwardly open trays rigidly carried by said endless chain, and whereby said motor rotates the lowermost said driver sprocket thereby continuously moving said endless chain and said trays throughout said flights.

2,751,065
CABLE DRIVEN CONVEYORS
Charles Thomson, Inverness, Scotland, assignor to Cable Belt Limited, Inverness, Scotland
Application June 19, 1952, Serial No. 294,373
Claims priority, application Great Britain October 8, 1947
10 Claims. (Cl. 198—191)



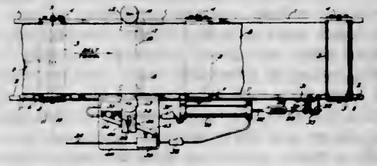
1. A conveyor comprising an endless flexible conveyor band, guide pulleys around which the said conveyor band passes at the ends of the conveyor, a pair of endless cables supported on sheaves to form a pair of parallel cable circuits, flexible cross members secured to said conveyor band for troughing therewith, shoes mounted on the ends of said cross members, a notch in each shoe to engage with one of said cables during one run of the conveyor to support the conveyor band from the cables during that run, a second notch in each shoe to engage with one of the cables during the other run of the conveyor and support the conveyor band from the cables during the said other run, and means forming loops in the cables at the ends of the conveyor run, which loops lead the cables out of engagement with the notches of one set and back into engagement with the notches of the other set.

2,751,066
CONVEYING AND GUIDING BELT COMPOSED OF FLATTENED METAL HELIX
Edwin T. Lorig, Ross Township, Allegheny County, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Application November 15, 1950, Serial No. 195,762
3 Claims. (Cl. 198—193)



1. A conveyor belt comprising an endless loop of flat metal strip wound into a continuous series of convolutions each of said convolutions having two opposite sides parallel and of substantially the same length, connected by arcuate portions forming the edges of the belt, said loop being adapted to be trained around spaced pulleys under tension with one of said parallel sides in contact therewith, said sides being relatively thin and of substantially less thickness than the edge portions whereby the thicker edge portions can move with respect to one another to relieve the strain on said edge portions.

2,751,067
CONVEYOR ALIGNING MECHANISM
John H. Nicholson, Upland, Calif., assignor to Sunkist Growers, Inc., Los Angeles, Calif., a corporation of California
Application December 20, 1954, Serial No. 476,180
2 Claims. (Cl. 198—202)

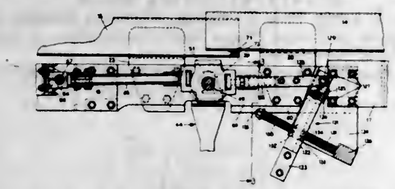


1. In a belt conveyor, a longitudinally shiftable member supporting one end of a plurality of belt supporting rollers, a double acting fluid motor connected to the shiftable member, a valve for controlling operation of the motor in one direction, a valve for controlling operation in the opposite direction, both valves being mounted on the shiftable member in opposed relationship, valve operating means mounted adjacent the conveyor belt for movement thereby when the belt shifts out of alignment and an angularly adjustable feeler blade angularly mounted on said operating means in a position to operate one or the other of said valves depending on the direction of misalignment.

2,751,068
VIBRATORY CONVEYER WITH IMPROVED STARTING APPARATUS
Roy Haddox, Jr., Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, a corporation of Ohio
Application September 12, 1950, Serial No. 184,438
2 Claims. (Cl. 198—220)

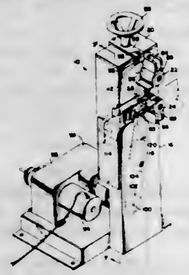
1. A vibratory conveyor including a deck, power operated means for vibrating said deck, said power operated means including a motor, means connecting said motor to vibrate said deck, a lever interposed in said connecting means, pivot means mounting said lever to move bodily with said deck and at the same amplitude, and opposed spring means resiliently restraining pivotal movement of said lever with respect to said deck, and means mounting

said spring means to move bodily with said deck and at the same amplitude whereby when said deck is being



driven substantially at full amplitude said lever ceases substantially to function as such.

2,751,069
VARIABLE SPEED ADJUSTABLE POWER FEED
George F. Goodman, Jr., Philadelphia, Pa.
Application January 15, 1954, Serial No. 404,338
5 Claims. (Cl. 203—260)



1. A mechanism adapted to feed stock of varying diameters to a cutting machine comprising a pair of upper and lower stock gripping rollers mounted on shafts, a pair of upper and lower members mounting said roller shafts, means to adjustably move said members toward and away from each other so that the rollers are moved from a closed to a maximum predetermined opened position, upper and lower sprockets mounted on said roller shafts, a motor, an endless chain drivingly connecting said sprockets to said motor, and means automatically applying uniform tension on said chain throughout the entire range of movement of said rollers, said means including an idler sprocket carried by said lower member and engaging said chain, the center of rotation of said idler sprocket lying on a horizontal line passing through the center of rotation of said upper roller shaft when the rollers are spread apart half the distance of their maximum opening.

2,751,070
ADJUSTABLE SUPPORT AND PROTECTIVE DISPLAY CONTAINER FOR ARTICLES
John J. Morse, Richmond, Va.
Application June 17, 1955, Serial No. 516,062
9 Claims. (Cl. 206—45.14)



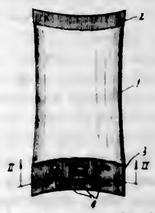
9. A support and display container of the character described comprising a ring-shaped body, a base secured to the periphery of said body for supporting said body in an upright edgewise position, a transparent disc disposed in said body adjacent one side thereof, a transversely disposed slot in the wall of said body diametrically opposite said base, a rod disposed in said slot and extending into said body, means on said rod for suspending an article within said body, means to adjustably secure said rod in said slot to permit adjustment of said rod radially and axially of said body to adjustably position an article suspended from said rod and a closure disc removably secured on the opposite side of said body.

2,751,071
HANGABLE DISPLAY PACKAGE
Samuel Goldband, Springfield, Mass.
Application April 29, 1955, Serial No. 504,873
2 Claims. (Cl. 206—45.31)



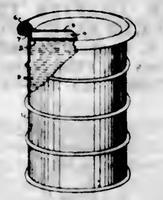
1. A package suitable for hanging, comprising, flat front and rear walls of transparent sheeting secured together along their vertical longitudinal and lower transverse edges and providing a flat container having an opening between the walls at the upper edges thereof, a closure strip of relatively stiff material folded over said opening and secured to the outer sides of said front and rear walls and enclosing said opening, a doll dress disposed between said front and rear walls, said closure strip provided with aligned pairs of openings through the folds of said closure strip, and a flat pliable hanger comprising a hook member and a pair of oppositely and angularly arranged arms, the arms of said hanger bearing against the outer side of one of the folds of said closure strip substantially throughout their lengths with the free outer ends of the arms inserted through the adjacent openings of said closure strip and bearing against the outer side of the other of the folds of said closure strip.

2,751,072
HEAT-SEALED PACKAGE OF LIQUID OR PLASTIC
Willem Pieter Adriaan Ditmar, Rotterdam, Netherlands, assignor to Lever Brothers Company, New York, N. Y., a corporation of Maine
Application February 2, 1953, Serial No. 334,635
Claims priority, application Netherlands February 13, 1952
1 Claim. (Cl. 206—46)



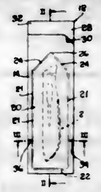
A container made of thermoplastic material filled with a liquid or plastic substance and sealed by means of at least one heat-seal, said seal being provided with characters or designs in high relief, which characters or designs are filled with the liquid or plastic substance, said seal completely surrounding the characters or designs in relief to prevent communication of the contents of the characters or designs with the contents of the container.

2,751,073
CONTAINER WITH DIAPHRAGM
Stanley R. Sheeran, Niagara Falls, N. Y., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application September 11, 1952, Serial No. 308,990
2 Claims. (Cl. 206—46)



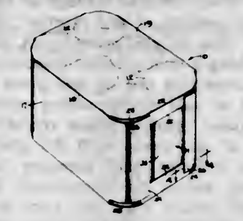
1. In a shipping drum having an opening of substantially the same diameter as the side wall of the drum at the section where the cover is applied, the combination when said drum is in the upright position comprising a liquid in said drum, the upper level of said liquid being in spaced downward relationship to the lip of said drum, a rigid removable cover secured to the lip of said drum, the inner surface of said cover being in upwardly spaced relationship to the upper surface of said liquid, and a flexible diaphragm impervious to said liquid, said diaphragm floating on the upper surface of said liquid and completely covering said liquid in said drum and having the edge of said diaphragm securely fastened between the cover and the lip of said drum, said diaphragm substantially completely separating the liquid and the gas phases in said drum.

2,751,074
PACKAGED SURGEON'S BLADE
Arthur G. Ringlen, Kings County, and Alexander Svirchev, Nassau County, N. Y., assignors to American Safety Razor Corporation, Brooklyn, N. Y., a corporation of Virginia
Application April 20, 1953, Serial No. 349,841
3 Claims. (Cl. 206—63.2)



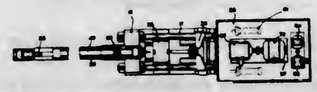
1. An air sealed package for a surgeon's blade having a heel portion for securing the blade to a handle member, said package comprising two superimposed wall sections made of foil material strongly bonded together along a relatively narrow airtight line of sealing about a central area and inwardly of the edges of the package to define a surgeon's blade receiving compartment within said seal line, a surgeon's blade air-tightly sealed within said compartment with its heel portion terminating short of an end edge, the two wall sections being lightly bonded to each other about and outside the strongly bonded and relatively narrow line of sealing, stop means located in the lightly bonded area at a level between the ends of the compartment, whereby separation of the two wall sections in the direction of the length of the blade may be initiated at said end edge of the package by separating the wall sections in the lightly bonded area and then continued by separating the wall sections in the airtight strongly bonded line of seal until said stop means are reached.

2,751,075
CARTON FOR PACKAGING CLUSTERS OF CYLINDRICAL OBJECTS
Lawrence E. Arneson, Morris, Ill., assignor to Morris Paper Mills, Chicago, Ill., a corporation of Illinois
Application July 17, 1951, Serial No. 237,207
4 Claims. (Cl. 206—65)



1. A can package comprising a generally rectangular cluster of cylindrical cans arranged in corresponding axial orientation, and a one-piece carton enclosing the same, including a plurality of generally rectangular adjoined panels including two end panels and two side panels arranged in alternate relation to each other, each of said end panels engaging non-cylindrical surfaces of the cans of said cluster, being equal in length to the cluster and having four corners rounded and positioned to conform generally to the annular edges of the cans defining the respective corners of the cluster, said side panels being substantially shorter in length than said end panels, and closure flaps on opposite ends of said side panels and said end panels, said closure flaps of said side panels being wrapped around the arcuate corners of the cluster and shaped by said arcuate corners in snug engagement with the contiguous cylindrical walls of the cans, said closure flaps of said end panels extending toward one another and parallel to the axes of the cans in confining engagement with an end of the cluster, said end panel closure flaps having lateral extensions secured in overlapped engagement with said side panel flaps to hold the respective panels to extend across opposite ends of the cluster and to define sizable openings in opposite ends of said carton.

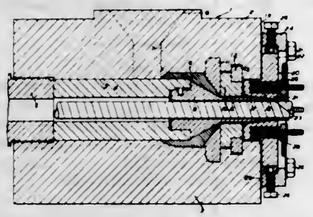
2,751,076
EXTRUSION PRESS INSTALLATION
Daniel L. Lombard, Youngstown, Ohio
Continuation of abandoned application Serial No. 730,955, February 26, 1947. This application February 16, 1953, Serial No. 336,913
2 Claims. (Cl. 207—2)



1. A self-contained metal extrusion press installation having a horizontally disposed frame adapted to be installed at floor level and mounting at one end an extrusion die with an adjacent billet container and at the other end a horizontally disposed cylinder having an integrally closed outer exposed end, a ram-type piston projecting into said cylinder, a ram interposed between said piston and said billet container and adapted to enter the latter during extrusion of a billet, means for retracting said ram laterally of the axis of extrusion when loading a billet into said container, a double acting cylinder of smaller diameter than said horizontally disposed cylinder for ac-

tuating said ram and piston in either direction, a hydraulic power source mounted directly over said horizontally disposed cylinder comprising a reservoir having a bottom wall positioned immediately above said horizontally disposed cylinder and a motor-driven pump of the kind having integral control means and two ports whereby the direction of flow of hydraulic fluid through the pump and between said ports may be stopped or reversed, said horizontally disposed cylinder having an enlarged port in its outer end, a dumping valve having an enlarged port closely coupled with said port in the outer end of said horizontally disposed cylinder and a second enlarged port closely coupled through an enlarged conduit with the lower portion of said reservoir as well as having means to close off said second port, said last named means comprising a fluid pressure responsive device, conduit means connecting one of said ports of said pump with one end of said double acting cylinder and with said device, other conduit means connecting the other of the ports of said pump with the other end of said double acting cylinder, said dumping valve including further valving means to interconnect the first mentioned conduit means with the port leading to said horizontally disposed cylinder upon said means to close off being actuated, and means to actuate said integral pump control means, the arrangement being such that upon actuation of said control means and during the subsequent initial stage of an extrusion cycle said piston and ram are rapidly moved in an extruding direction by said double acting cylinder while the outer end portion of the horizontally disposed cylinder is rapidly filled with fluid by free gravity flow of fluid from said reservoir after which said pressure responsive means actuates said closing off means and high pressure fluid from the first mentioned conduit means is discharged into said horizontally disposed cylinder to continue the movement of said piston and ram in an uninterrupted manner.

2,751,077
EXTRUSION APPARATUS FOR SHEATHING ELECTRIC CABLES
Aubrey Latin and George Thomas Wilson Grieve, London, and James Conning, Bexley, England, assignors to The Okonite Company, Passaic, N. J.
Application May 23, 1952, Serial No. 289,618
2 Claims. (Cl. 207—4)



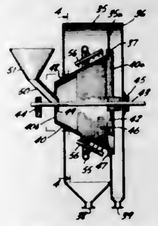
1. Extrusion apparatus for sheathing electric cables, said apparatus comprising, in combination, a die box consisting of upper and lower parts making joint in a horizontal plane, the contiguous faces of said parts being provided with cooperating recesses to form a through-bore; a tubular mandrel in said bore; an annular metal-charging chamber about the forward end of said mandrel; an externally conical, tubular inner die attached to the forward end of said mandrel and axially aligned therewith; an outer die cooperating with said inner die to form an annular extrusion orifice at the front end of said chamber; a masking ring having a tapered rear face set into said metal-charging chamber and cooperating with the conical surface of said inner die to impart a converging cross-section to said extrusion orifice for the formation of a sheath of nominal wall thickness; an extension on the forward end of said tubular inner die projecting beyond the outer die, the external surface of said extension providing an internal gauging member having a circumferentially continuous work-engaging surface; and a member composed of an annular flange and a hub mounted on the front end of the said die box, said hub having a conical opening which receives the said internal gauging member, the conical surface of said conical opening cooperating with the external surface of the internal gauging member to exert a squeezing action on parts of a sheath being extruded that are of greater thickness than the nominal.

2,751,078
WEED CLEANER ADAPTER UNIT FOR COMBINES AND AUGER EXTENSION THEREFOR
Hugh E. Cooper, Rochelle, Ill.
Application July 10, 1950, Serial No. 172,832
1 Claim. (Cl. 209—241)



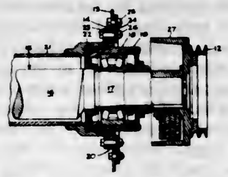
In a combine, having an elevator for carrying threshed grain from said combine and including a driven shaft, a bin adjacent said elevator supported by said combine, a conveyor conduit disposed horizontally over said bin in spaced relation to the upper end of said elevator and driven shaft for conducting grain from said elevator, and a power-operated auger in said conduit, the improvement which consists in the provision of a power operated weed-cleaner of elongated form interposed between the elevator and the grain conveyor conduit parallel to the latter and to the aforesaid driven shaft, said cleaner including a driven shaft driven by connection with the aforesaid driven shaft, said cleaner having an inlet receiving dirt and weed laden grain from the elevator and having two outlets, namely, a clean grain outlet, and a dirt and weed outlet arranged to discharge outside said bin, and another shaft for driving a dirt and weed discharge auger in said cleaner driven by connection with the driven shaft of the cleaner, the improvement which further consists in the provision of a conduit extension establishing communication between said clean grain outlet and said conveyor conduit and provided with a manually controllable two-position bypass whereby the clean grain may be discharged directly from the weed cleaner into the bin with the bypass in one position or into the conveyor conduit with the bypass in the other position.

2,751,079
METHOD OF SCREENING
Nikolai Ahlmann, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y., a corporation of New Jersey
Application December 30, 1953, Serial No. 401,266
Claims priority, application Denmark January 2, 1953
2 Claims. (Cl. 209—295)



1. A method of screening material by means of a rotary screen having the shape of a surface of revolution, which comprises depositing the material on the inner surface of the screen at one end to form a layer covering the entire screen surface, rotating the screen at a speed sufficient to hold the layer against the screen by centrifugal force, advancing the material in the layer along the screen toward the other end, and causing the layer of material to pulsate relative to the screen by directing air under pressure in a plurality of rows of jets spaced throughout the circumference of the screen against the outer surface of the screen, the air pressure and the speed of rotation of the screen being such that the jets overcome the centrifugal force acting on the layer and momentarily free from the screen the portions of the material struck by the jets, the centrifugal force immediately returning such portions of the material to the screen after the portions of the material have passed the jets.

2,751,080
VIBRATING SCREEN
Nelson J. Gleiser, Depew, N. Y., assignor to Screen Equipment Company, Inc., Cheektowaga, N. Y.
Application February 15, 1954, Serial No. 410,344
4 Claims. (Cl. 209—367)



1. In a vibrating screen, a screen body having alined shaft-assembly openings in its opposite sides, a shaft assembly removably supported on said screen body and having external attaching members therein in register with said openings for axial passage therethrough, and supporting means for the shaft assembly applied to the outer sides of the screen body in intersecting relation to its openings and detachably connected to the outer sides of the attaching members of said shaft assembly.

2,751,081
WATER DEMINERALIZER
Charles V. B. La Motte, Towson, Md.
Application February 12, 1954, Serial No. 409,819
3 Claims. (Cl. 210—24)



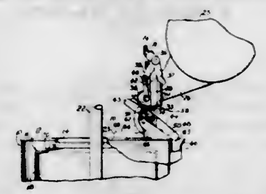
1. A water demineralizing device which comprises a cylindrical container adapted to receive and hold a measured quantity of water, a closure element having an elongated tip projecting outwardly therefrom and containing a longitudinal conduit centrally thereof secured to one end of said container, an integrated body of particulate demineralizing material removably secured within said closure element at the inner end of the conduit and extending into said container, means secured to the opposed end of the container to induce a flow of water into the container through said conduit and body of demineralizing material and subsequently to force a flow of water out of said container through said conduit and body of demineralizing materials.

2,751,082
FLUID MIXING DEVICE FOR THERMAL DIFFUSION APPARATUS
James H. Gary, Charlottesville, Va., assignor to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio
Application June 19, 1953, Serial No. 362,938
2 Claims. (Cl. 210—52.5)



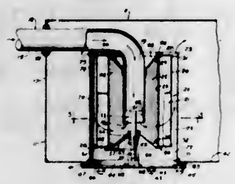
1. Thermal diffusion apparatus comprising two substantially parallel walls, the opposed faces of which are spaced apart to form a separation chamber, means for relatively heating and cooling said walls, a groove in one of the walls communicating with the separation chamber, fluid mixing means rotatable within the groove, and at least one passage for fluid extending from the groove to the exterior of the apparatus.

2,751,083
CENTRIFUGAL CHARGING APPARATUS
Joseph Hertrich, Hamilton, Ohio, assignor to The Western States Machine Company, Hamilton, Ohio, a corporation of Utah
Application October 19, 1951, Serial No. 252,076
8 Claims. (Cl. 210—63)



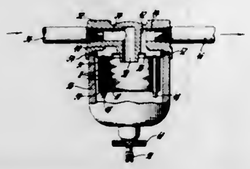
1. In centrifugal apparatus including a rotatable basket having a top opening, a stationary surrounding casing having a top opening and a movable cover element therefor, and a loading gate located for delivery of material through said top openings, a drip pan formed to catch material falling from said loading gate, means operative normally to hold said drip pan in a normal position beneath said gate in which said pan receives such material, an open top collector at a side of said casing, said pan in said normal position sloping downwardly from said gate over the casing to a lower end overlying the top of said collector, said lower end providing an outlet leading into said collector for draining such material into the collector, and means responsive respectively to opening and closing movements of said cover element for displacing the drip pan from normal position to a position not obstructing such delivery and for returning the drip pan to normal position, said outlet being spaced above and overlying said collector in all the positions of said pan so that material falling at any time from said outlet will enter said collector.

2,751,084
FUEL TANK FILTER INSTALLATION
John R. Wilhelm, Perth Amboy, N. J., assignor to Purolator Products, Inc., Rahway, N. J., a corporation of Delaware
Application March 11, 1954, Serial No. 415,470
6 Claims. (Cl. 210—150)



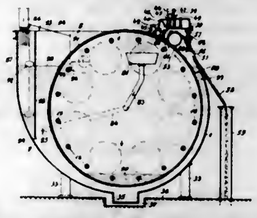
1. A fuel tank filter installation comprising a tank, a filler pipe having a vertically extending portion with an outlet end within said tank, a filter housing surrounding said downwardly extending portion of pipe and its outlet end within said tank, a stud, means for supporting said stud at the outlet end of said portion of pipe, a supporting member carried by said stud, a filter element carried by said supporting member and being completely contained within said filter housing and so positioned with respect to said outlet end that any fuel delivered to said filler pipe for storage in said tank must pass through said element for filtration and overflow the upper end of said housing before its actual storage in said tank can occur, and access providing means including a removable cover plate for an access hole in said tank to permit removal and replacement of said filter element when required.

2,751,085
FILTER FOR TREATMENT OF LIQUID
Roy L. Bowers, Flint, Mich., and John R. Gretzinger, Kansas City, Kans., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 3, 1951, Serial No. 224,346
1 Claim. (Cl. 210—169)



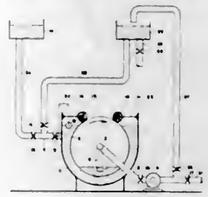
A filtering element for treating liquid adapted to be supported in a housing having a central inlet and an annular outlet chamber, said element comprising paper rings impregnated with a cured resin, said rings when assembled and held under compression forming a cylindrical stack of homogeneous porosity, said paper rings being formed of a linter-type paper having substantially parallel fibers and having a porosity to stop particles over 40 microns, said resin being of the order of 32 to 38 per cent content of the assembled stack and coating the fibers in a manner which retains the porosity of the rings, a rigid annular member with an outwardly extending supporting flange at one end of said stack to form a seal around said central inlet, said paper rings and said annular member having aligned arcuate openings forming passages leading to said outlet chamber, a rigid annular ring arranged at the other end of said stack terminating said passages, and means joining said annular member and rigid ring holding said stack under compression.

2,751,086
APPARATUS FOR THE SEPARATION OF PARTICLES, PARTICULARLY FIBRES, THAT ARE SUSPENDED IN A LIQUID
Olov Birger Börjeson, Bromma, Sweden, assignor to Seje & Thurne Aktiebolag, Stockholm, Sweden, a corporation of Sweden
Application July 16, 1952, Serial No. 299,199
Claims priority, application Sweden April 3, 1952
2 Claims. (Cl. 210—199)



1. An apparatus for separating fibers from a liquid fiber suspension, comprising a walled container for the liquid suspension, a rotary strainer drum comprising a cylindrical shell mounted for rotation in a predetermined direction in the container and dimensioned to provide a free liquid space between the cylindrical shell of the drum and the surrounding wall of the container, means for depositing an auxiliary fiber suspension on the upper, descending surface of said drum, whereby to form a continuous fibrous filter layer on the drum, said means comprising a supply receptacle for the auxiliary fiber suspension, an overflow chute receiving auxiliary suspension from said receptacle extending transversely over the entire length of the top portion of the strainer drum and having a sloping bottom tightly adjoining the shell of the drum, a take-up roller at the rising side of the strainer drum near said chute for discharging from the strainer drum the fibers deposited thereon, said roller positioned to adjoin tightly the fiber-covered drum, means defining an air passage between said chute and said take-up roller, and a suction box communicating with the interior of the strainer drum through said air passage.

2,751,087
MOVABLE BED TYPE FILTER FOR LIQUIDS
Ivar Wallquist, Karlstad, Sweden
Application April 14, 1954, Serial No. 423,121
Claims priority, application Sweden April 18, 1953
2 Claims. (Cl. 210—199)



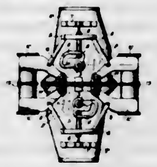
1. Apparatus for the filtration of liquids comprising a driven drum having a filtering peripheral surface, a vat having said drum rotatably mounted therein and supplied with liquid to be filtered, a band of filtering material, a supply shaft having a portion of said band wound thereon with the roll of said band being in contact with said drum for being rotated thereby at the same circumferential speed, a receiving shaft having a further portion of said band wound thereon with the roll of said band also being in contact with said drum for being rotated thereby at the same circumferential speed, means for maintaining said rolls in contact with said drum, said shafts being rotatably mounted above the liquid to be filtered with said band extending therefrom and moving around the filtering periphery of said drum beneath said liquid with the rotation of said drum and means for withdrawing filtered liquid from the interior of said drum to the exterior of said vat.

2,751,088
ADJUSTABLE PARTITION CLIP FOR TRAYS AND SHELVING
Huston Hargett, Madeira, Ohio, assignor to Commercial Display Corporation, Montgomery, Ohio, a corporation of Ohio
Application May 7, 1952, Serial No. 286,520
2 Claims. (Cl. 211—55)



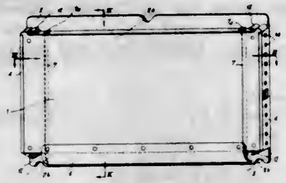
1. A device for providing separable compartments comprising a strip having a series of angular bends, a plurality of clips, each of said clips having a pair of side walls, a flat bottom wall adjoining said side walls with openings provided adjacent to the edges of the side wall and the flat bottom wall, said openings adapted to receive said strip, and an indentation on each side wall extending from the aforementioned opening to the top edge of each side wall, said indentation being of the same width as the aforesaid strip, whereby said clip lies flush when slid upon and positioned at the base of an angular portion of said strip.

2,751,089
AUTOMATIC CABLE CONNECTING APPARATUS FOR RAILROAD CARS AND THE LIKE
Walter Scharfenberg, Salzgitter-Thiede, Germany
Application February 23, 1955, Serial No. 490,099
8 Claims. (Cl. 213—1.3)



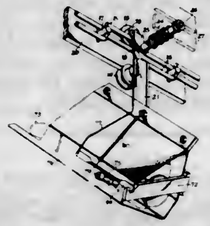
1. For use with railroad cars and the like, in combination, coupling means adapted to be mounted on a railroad car for coupling the same to another car, said coupling means including an operating member; support means supporting said operating member of said coupling means for movement between a first position where the coupling means is engaged and a second position where the coupling means is disengaged; a cable connector carried by said support means for movement between an operative position and an inoperative position; movement transmitting means carried by said support means and engaging said connector for moving the latter between said operative and inoperative positions thereof; and cam means operatively engaging said operating member of said coupling means to be moved thereby and operatively engaging said movement transmitting means for actuating the latter to move said cable connector between said operative and inoperative positions thereof when said operating member moves between said first and second positions thereof, respectively.

2,751,090
PORTABLE INDICATING HOLDERS AND SETTABLE INDICATORS THEREFOR
Robert Gourdon, Paris, France, assignor to Societe Anonyme dite: Centre d'Etudes M. B. A. (Mecanique Ballistique, Armement), Paris, France
Application October 20, 1951, Serial No. 252,383
Claims priority, application France January 16, 1946
24 Claims. (Cl. 214—11)



23. A portable indicating holder for detached articles, comprising side wall means and bottom wall means cooperating to form a pocket open only at the top for receiving and carrying a detached article, one of said wall means having at least one outwardly opening recess, an indicating element within said recess, said element being movable in its recess between at least two indicating positions and observable from outside said pocket in at least one of said two positions, means for releasably retaining said element in any of its indicating positions.

2,751,091
CONVEYOR SYSTEMS
Alfred Freeman, Isham, near Kettering, England
Application June 19, 1952, Serial No. 294,400
Claims priority, application Great Britain June 21, 1951
9 Claims. (Cl. 214—11)

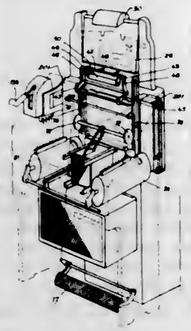


1. A conveyor system comprising a conveyor; means for mounting goods to be carried on said conveyor; a plurality of index devices located in use transversely of the conveyor to travel therewith, each said index device comprising a plurality of index elements each individually movable alternatively into a projected or non-projected position, whereby each index device is selectively set to a specific operative combination of projected and non-projected elements; and a plurality of trip devices at stations along the path of said conveyor, each of said trip devices comprising a frame, a set of control elements mounted on said frame in the path of the projected corresponding elements of a passing index device, and a tripping member pivoted to said frame and movable out of its tripping position by abutment with any one incorrectly-disposed control element.

2,751,092
CODING, DECODING, AND CODE SENSING MECHANISMS FOR SORTING APPARATUS
Robert Gourdon, Paris, France, assignor to Societe Anonyme dite: Centre d'Etudes M. B. A. (Mecanique Ballistique, Armement), Paris, France
Application July 22, 1952, Serial No. 300,160
Claims priority, application France January 16, 1946
20 Claims. (Cl. 214—11)

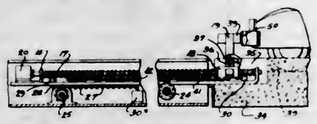
1. Apparatus for sorting articles, comprising a plurality of portable indicating holders for receiving individual

articles; a plurality of indicating elements permanently carried by each said holder, each said element being individually settable in a plurality of indicating positions; an indexing station including means operable to place an article in each holder and means operable to set the indicating elements on each holder to indicate one of a plurality of classes in which the article placed therein is classified; a plurality of receiving bins, one for each such class; conveyor means for said holders extending from said indexing station to said receiving bins and including trunk conveyor means leading from said indexing station



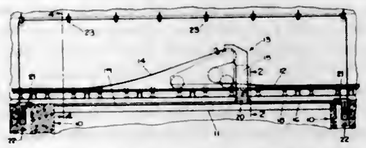
and a plurality of branch conveyor means having junctions with said trunk conveyor means and leading therefrom to said receiving bins, means at each junction to sense the settings of the indicating elements on the holders, means including said sensing means to selectively transfer the holders from the trunk conveyor means to the branch conveyor means in accordance with their respective classifications, said direction selecting means being effective to direct all the holders of the respective classifications toward their respective receiving bins; and means adjacent each bin to deliver the articles from the holders of its classification into said bin.

2,751,093
AUTOMATIC VEHICLE EJECTION DEVICE
Albert R. Theibault, Key West, Fla., assignor to Rosenbaum "Q-B-KL" Parking Co., New York, N. Y., a corporation of Delaware
Application November 9, 1951, Serial No. 255,655
3 Claims. (Cl. 214—16.1)



3. For use with a vehicle receiving elevator platform having grooves therein and adapted to be brought into vertical and horizontal registry with a vehicle receiving berth having complemental vehicle tire receiving grooves and a central recess in the floor of the vehicle receiving berth; a vehicle ejection device comprising a primary longitudinal carrier means on said elevator platform within the confines of said platform, a first drive means associated with said primary longitudinal carrier means, a first driven means positioned to be driven by said first drive means, a vehicle pusher member carried by said first driven means and movable therewith, driving means for actuating said first drive means thereby compelling said first driven means and vehicle pusher member to move longitudinally therealong, a secondary longitudinal means for supporting said primary longitudinal carrier means, said driving means being carried by said primary longitudinal carrier means, second drive means carried by said secondary longitudinal means, control means carried by both said primary and secondary longitudinal means and positioned therewith to cause said primary longitudinal carrier means to be driven longitudinally along said secondary longitudinal means thereby causing said primary longitudinal carrier means to extend beyond confines of said elevator platform and to enter the central recess in said vehicle receiving stall beneath the vehicle receiving surface a predetermined distance after said first driven means and pusher arm has stopped, said movement of said primary longitudinal carrier means being initiated upon said first driven means and pusher member actuating an element of said control means at its limit of travel, reversing means for said primary and secondary drive means, and electromagnetic means carried by said vehicle pusher member positioned to contact the bumper of the vehicle and upon actuating said reversing means to then withdraw the vehicle from the vehicle receiving stall pulling same onto the elevator platform.

2,751,094
BUNKER FEEDING SYSTEM
Paul V. Whitney, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, a corporation of Ohio
Application April 15, 1952, Serial No. 282,393
1 Claim. (Cl. 214—17)

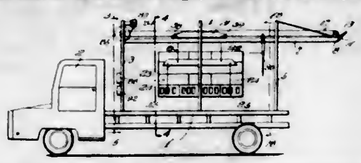


A bunker feeding system comprising an elongated bunker and an elongated bunker feed opening coextensive with the bunker and disposed thereabove, means for delivering material to the bunker including a feed chute above the feed opening for discharging material downwardly into the bunker through the feed opening, means mounting the feed chute for translatory movement in opposite directions from one end of the feed opening to the other end thereof with the discharge end of the feed chute being located closely adjacent the feed opening to avoid the spread of dust as the material is discharged to the bunker, means for closing the feed opening for the full length thereof on opposite sides of the feed chute comprising a flat belt overlying the feed opening and seating on the edges thereof to seal the opening to prevent the escape of dust from the bunker, the ends of the flat belt being fixedly secured to the discharge end of the feed chute on opposite sides thereof and extending therefrom in opposite directions overlying the feed opening, the belt being trained over idlers one at each end of the feed opening, said idlers guiding the belt downwardly, and take-up idlers adjacent the said idlers for maintaining the belt in a substantially taut condition, the belt being trained over the take-up idlers reversing the direction of the belt and guiding it in an upwardly direction, and a series of horizontally aligned idlers over which the belt runs after leaving the take-up idlers.

2,751,095
HYDRAULICALLY OPERATED LOAD HANDLING SYSTEM FOR TRUCKS
Harvey Lester Haverstick, Manheim, and Henry Chester Haverstick, Lancaster, Pa.
Application April 28, 1955, Serial No. 504,489
6 Claims. (Cl. 214—75)

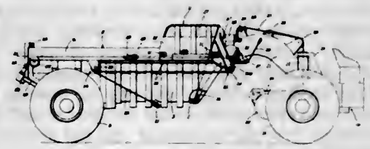
1. Loading and unloading apparatus comprising a load guiding trackway, a carriage movable longitudinally of said trackway, hydraulic propelling mechanism for moving said carriage in a horizontal plane longitudinally of

said trackway, a hydraulic lift mechanism mounted on said carriage, means connected with said carriage and extendible and collapsible longitudinally of said trackway in a plane substantially parallel with the horizontal plane of movement of said carriage, means carried by the afore-



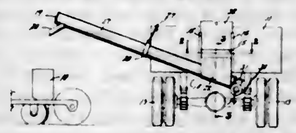
said means for conveying fluid power to said hydraulic lift mechanism and means adjacent said trackway for selectively controlling both said hydraulic propelling mechanism and said hydraulic lift mechanism for elevating and maneuvering a load supported by said hydraulic lift mechanism with respect to said trackway.

2,751,096
REAR DUMP WAGON
Wilbert J. Darkenwald, Sacramento, Calif., assignor, by mesne assignments, to Yuba Manufacturing Company, Benicia, Calif., a corporation of California
Application May 21, 1954, Serial No. 431,361
7 Claims. (Cl. 214—82)



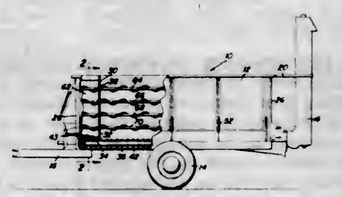
1. In a rear dump wagon which comprises a wagon body having a longitudinally flat bottom and upstanding side walls, the combination with an ejector gate normally closing the front end of the body and fitted between the side walls, and means to move the gate rearwardly to push the dirt in the body toward the rear; of a tailgate normally closing the rear end of the body, means hinging the tailgate at its normally lower end on the rear end of the body for downward swinging movement from a closed position, and control means separate from the gate moving means normally preventing opening of the tailgate.

2,751,097
GRAIN DRILL LOADER ATTACHMENT FOR TRUCKS
Boyd R. Miller, Denver, Colo.
Application March 8, 1954, Serial No. 414,595
2 Claims. (Cl. 214—83.32)



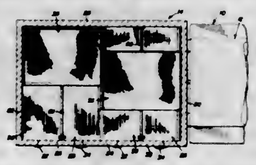
1. A grain drill loader attachment for grain vehicles of the type having a tail gate with a grain discharge opening therein, comprising: an inclined cylindrical conveyor tube; a scroll conveyor rotatably mounted in said tube; a grain entrance port formed in the forward side of said tube adjacent the lower extremity thereof; means for attaching said tube to said vehicle on an incline at the rear of said tail gate and parallel to the latter, with said grain entrance port facing toward said grain discharge opening in said tail gate; an intake scoop formed on said tube about said grain entrance port and projecting forwardly therefrom; a flat, horizontal bottom plate in said scoop adapted to pass through said grain discharge opening and lie flat on the bottom of said vehicle and acting to form a sub-bottom in said opening; upturned side plates on said bottom plate adapted to pass through said grain discharge opening at each side thereof; and means for driving said scroll conveyor.

2,751,098
VEHICLE MOUNTED GRAIN MIXER AND CONVEYOR
Fred J. Reiter, Cascade, Iowa
Application December 2, 1954, Serial No. 472,568
2 Claims. (Cl. 214—83.14)



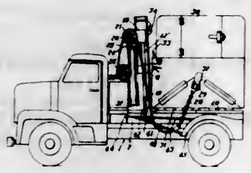
1. A material handling vehicle comprising a material container with a first end wall, a second end wall and a bottom wall, a discharge opening in said first end wall, a conveyor adjacent the bottom wall of said container, a partition in said container spaced from said second end wall and spaced from said bottom wall forming a compartment in conjunction with said second end wall, and means in said partition for permitting flow of material from said compartment onto said conveyor, said partition having an opening therethrough, said means including a trapdoor mounted for horizontal sliding movement on said partition, and adapted to close said opening, resilient means for urging said trapdoor to a closed position, and auger conveyor means rotatably supported between said first and second walls and extending through said partition.

2,751,099
SIDE LOADER FOR VEHICLES
Martin H. Johnson, Stoughton, Wis., assignor to Stoughton Cab & Body Company, Stoughton, Wis., a corporation of Wisconsin
Application October 7, 1952, Serial No. 313,401
2 Claims. (Cl. 214—83.24)



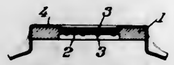
1. In a refrigerator delivery body, means for loading the body from openings in a side thereof, said means including a movable carrier aligned with each of said openings and movable towards and away from an associated opening, said carrier having a dimension in the direction of its movement equal to substantially one-half the width of said body, said delivery body including a slatted rack floor, said carrier having a base portion slidably positioned on said floor, individual slats of said floor extending in the general direction of the movement of said carrier, drive means for said carrier positioned between adjacent centrally located slats of said floor.

2,751,100
TRANSPORTING AND DUMPING EQUIPMENT
George R. Dempster and Harry W. Jones, Knoxville, Tenn.; said Jones assignor to Dempster Brothers, Inc., Knoxville, Tenn., a corporation of Tennessee
Application July 27, 1954, Serial No. 446,012
10 Claims. (Cl. 214—317)



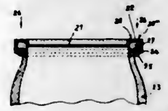
7. In transporting and dumping equipment, the combination with a container including a body portion and a dumping door connected therewith adapted to be opened for discharging the contents therefrom, of a base structure adapted to be mounted on a motor vehicle, an upright frame carried by the base structure, an elevator movably mounted on the upright frame, a hook having means for engagement with the body portion, means mounting the hook on the elevator for bodily movement relative thereto, and means connecting the dumping door with the elevator for permitting opening of the door upon lowering movement of the elevator without bodily movement of the hook relative thereto.

2,751,101
AIRTIGHT DISC FOR CROWN CAPS
Georges Leclerc, Viry-Chatillon, France, assignor to Societe Du Bouchon Couronne Crown Cork Company (France), Viry-Chatillon, Seine, France, a corporation of France
Application August 26, 1952, Serial No. 306,346
Claims priority, application France September 3, 1951
1 Claim. (Cl. 215—40)



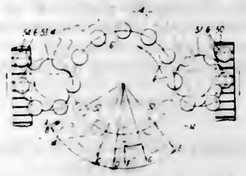
In a crown cap having a bottom and a skirt and a central cylindrical downwardly-projecting cup-shaped portion, a plastic sealing ring comprising an integral unit having an outer annular portion defining a central circular space adjoining the skirt of the crown cap and adapted to lie between the bottom of the cap and the upper edge of the neck of the container upon which the cap is applied, and a continuous central diaphragm portion completely filling the space within the outer annular portion, said outer annular portion having two axially spaced-apart annular faces and said central diaphragm portion having a substantially uniform thickness which is substantially less than the axial dimension of said annular portion and said diaphragm portion lying in a single plane substantially half-way between the faces of the annular portion throughout its entire extent, said central diaphragm portion being provided with a plurality of solid spaced circular projections extending from at least the upper face thereof, said projections being spaced axially-inwardly from the faces of said annular portion to accommodate said central projecting portion of the crown cap in said central circular space with the projections in face contact with the lower surface of said cup-shaped portion, whereby said faces of said annular portion lie axially outwardly of all surfaces of said central diaphragm portion and said annular projections.

2,751,102
CLOSURE CAP
Georges Achille Kihm, Collonges-au-Mont-d'Or, France
Application September 5, 1951, Serial No. 245,167
Claims priority, application France September 22, 1950
1 Claim. (Cl. 215—46)



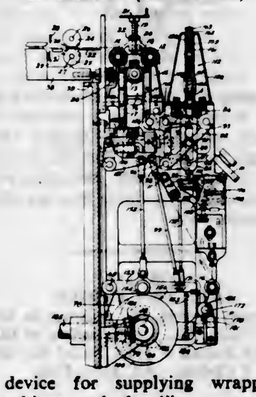
In combination, a container having a neck provided on its outer surface with an annular recess, and a cap closing said neck of said container, said cap being composed of flexible plastic material having a relatively low elasticity and comprising a central disc portion seating in said neck, a cylindrical portion integral with said disc portion and in tight engagement with the inner surface of said neck, said cylindrical portion extending upwardly on said neck to the top of said neck, a skirt portion surrounding said neck and extending upwardly to the top of said neck, said skirt portion terminating at its bottom in an inwardly directed annular flange of reduced inner diameter, said annular flange seating in said annular recess of said neck and being securely held therein because of the relative inelasticity of its reduced inner diameter, and a flat annular portion seating on the top of said neck and integrally connecting said skirt portion and said cylindrical portion, said flat annular portion being provided with a pair of weakened circular lines of greater diameter than the inner diameter of said neck of said container, said circular lines defining a circular tear strip for severing said disc portion, said cylindrical portion and part of said flat annular portion from the balance of said flat annular portion and said skirt portion.

2,751,103
LABELLING MACHINES
Thomas Vincent Scott, Sheffield, England, assignor to Morgan Fairest Limited, Sheffield, England
Application March 1, 1955, Serial No. 491,429
15 Claims. (Cl. 216—55)



1. A top-strapping labelling machine having a top-strapping head movable between stations at which respectively a label is applied across the face of the head and operative contact is made between a stoppered bottle and the head with the label, with an intermediate gumming device to gum the label on the head, a label stack carried alongside the head and movable with it, cams transversed by the head and the stack assembly in a movement in which the assembly enters both stations, a suction picker movable from a position opposite one end of the stack to another across the face of the head, and also movable towards and away from the stack and the head when in these positions, the cams in turn serving to move the picker towards and away from the stack, to move the picker with an extracted label across the face of the head, to move the picker and label to the face of the head, to withdraw the picker alone from the face of the head, and to return the picker into line with the stack, and suction openings in the face of the head to retain a label until the head applies the label to a bottle.

2,751,104
DEVICE FOR APPLYING CIGAR BANDS AND THE LIKE TO WRAPPERS
Edward F. Cornock, Springfield, and Kenneth F. Newell, Longmeadow, Mass., assignors to Package Machinery Company, East Longmeadow, Mass., a corporation of Massachusetts
Original application May 10, 1950, Serial No. 161,234. Divided and this application June 22, 1953, Serial No. 363,122
12 Claims. (Cl. 216—55)



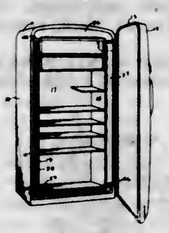
1. In a device for supplying wrappers to cigar wrapping machines and the like, means operative at predetermined intervals to advance a web of wrapping material, means operative during a period of rest of the wrapper web between the advancing movements of the web to apply adhesive to a predetermined area of one side of the web, means to apply a label over said adhesive area, a heated platen member movable against the other side of the web and opposite said area as the label is being applied thereto, and slitting knives carried by said platen to form slits at the sides of the label as the platen is moved against the web.

2,751,105
OUTLET BOX FOR WIRING CIRCUITS
Robert B. Eipper, Lomita, Calif.
Application March 22, 1954, Serial No. 417,827
2 Claims. (Cl. 220—3.3)



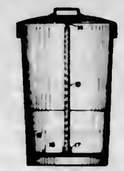
1. An elongated outlet box for mounting in an opening in a relatively thin wall panel to hold a circuit component that has relatively narrow apertured ears at its opposite ends for attachment by screws to the two ends of the outlet box and is adapted to carry a cover plate to conceal the outlet box, said outlet box comprising the combination of: a molded one-piece box-like body of plastic material having relatively thin bottom walls, relatively thin side walls and being relatively thin at the lower portions of its end walls, the upper portions of its two end walls being thickened to provide end rims wider than the side rims of the body to support said narrow ears of a circuit component, said end rims being recessed to provide planar seats offset inwardly from the plane of the side wall rims of the body and parallel to said plane to seat said narrow ears, said thickened end wall portions having central enlargements further increasing the width of said planar seats, said central enlargements on the two ends of the body having threaded bores for engagement by said attachment screws to hold said narrow ears against said planar seats; flat metal ear means at each end of said body parallel with said plane and extending longitudinally outward from the end rims of the body, said ear means being bonded directly to the rim material of the box and being apertured for attachment to the face of said panel adjacent said opening, said two ear means being U-shaped in plan and straddling the corresponding planar seats to provide clearance for said narrow ears; and anchoring means united with said two ear means respectively and embedded in said thickened end wall portions respectively of said body to hold said ear means rigid relative to the body.

2,751,106
REFRIGERATOR CABINET
Milford J. Schrader, Greenville, Mich., assignor to Gibson Refrigerator Company, Greenville, Mich., a corporation of Michigan
Application November 18, 1950, Serial No. 196,506
2 Claims. (Cl. 220—9)



1. A refrigerator cabinet comprising inner and outer shells connected together in spaced apart relation, said shells being open at the front to define an access opening to the cabinet, said shells having opposed flanges extending substantially at right angles to said shells, and a throat molding extending between said shells at a side of the access opening and overlying the space between and having a projection angularly disposed to and overlying the flange of said inner shell, a plurality of resilient clips attached to said throat molding rearwardly thereof and engaging the flanges on said shells, one of said clips being attached to said projection and being formed to compress within the space between said projection and the adjacent flange and to flex to hook in positive snap on engagement with said inner shell flange, said last mentioned clip being generally of W-shaped configuration, one of the U-shaped arms of said clip being fastened to the throat molding and the other U-shaped arm of said clip receiving said flange on said inner shell.

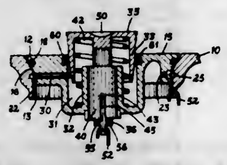
2,751,107
REFUSE RECEPTACLES
John Ritter, Chicago, Ill.
Application August 17, 1953, Serial No. 374,472
2 Claims. (Cl. 220—42)



1. A bucket-shaped refuse receptacle comprising, an annular body wall extending upwardly above a bottom and open at the opposite end, an annularly-flanged cover telescopically fitting over the open end of the body wall, a cup-shaped member telescopically fitting snugly in the lower portion of the body wall with the base of the cup-

shaped member resting on the bottom of the receptacle, a central upwardly-disposed and internally-threaded hub on the base of the cup-shaped member, an internally-threaded plate bonded to the inner face of the cover concentrically thereof, and a telescoping tube and rod each of a length substantially equal to the height of the body wall and externally threaded on one end, the tube and rod being screwed respectively into the hub and plate for free-sliding relationship with each other to retain the cover in associated axial alinement with the body wall for any elevation of the cover above the open end of the body wall a distance not to exceed the height of the body wall but permitting a complete removal of the cover from association with the body wall when the cover is lifted above the open end of the body wall a distance greater than the height of the body wall.

2,751,108
FILLER CAP ASSEMBLY
Delmond L. Getz and Glen E. Ridgway, Springfield, Ohio, assignors, by mesne assignments, to Kelsey-Hayes Wheel Company, Detroit, Mich., a corporation of Delaware
Application October 8, 1952, Serial No. 313,691
7 Claims. (Cl. 220—55)



7. A filler cap assembly for the inlet of a container to retain positive pressure on the contents thereof, comprising an adapter for said container including an annular rim defining an inlet opening, a closure adapted to be received within said opening and having a surface thereon adapted to mate with said rim, a gasket carried by said mating surface of said closure for sealing engagement with said rim, said closure having a circumferential groove therein located inwardly of said gasket, a split ring of resilient metal carried in said groove and normally of lesser diameter than said opening for fitting therewithin, said adapter having a peripheral groove within said opening forming a keeper for said ring, said peripheral groove and said split ring being proportioned with respect to said closure and said adapter to retain said closure with its outer surface within the outer plane of said adapter, means carried by said closure operable to expand said split ring into simultaneous locking engagement with both of said grooves around substantially the entire circumference of said opening, an operating member for said expanding means mounted for axial movement within said closure, means defining an outer position for said operating member wherein said expanding means are released and an inner position for said operating member causing operation of said expanding means, means biasing said operating member to said outer position, and cooperating means on said closure and said operating member responsive to relative rotation of said closure and said operating member in said inner position effecting said locking engagement of said ring in said grooves.

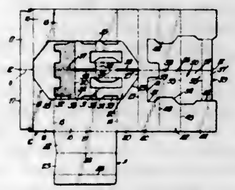
2,751,109
SEALED STRUCTURAL JOINT
Clyde Maurice Moore, Richmond, Va., assignor to Moorex Industries, Inc., Richmond, Va., a corporation of Virginia
Application February 2, 1951, Serial No. 209,169
2 Claims. (Cl. 220—80)

1. A structure comprising, sheet-like wall sections of resinous material with reenforcing fibers embedded therein, the peripheral edges of each wall section extending diagonally inwardly of said structure then being reversely bent to define outwardly directed flanges, said flanges terminating inwardly of the outer surface of said wall section, inner and outer clamping bars, said outer clamping bar having a groove therein embracing said flanges,



said inner clamping bar being of sheet metal and of generally W-shape in section having a reversely bent central portion, the said central portion thereof extending between said flanges and the edge portions thereof engaging the inner faces of said diagonally extending wall portions, and means drawing said clamping bars together to clamp said flanges therebetween.

2,751,110
ARTICLE CARRIER
Edwin L. Arneson, Morris, Ill., assignor to Morris Paper Mills, Chicago, Ill., a corporation of Illinois
Application August 4, 1951, Serial No. 240,319
2 Claims. (Cl. 220—113)

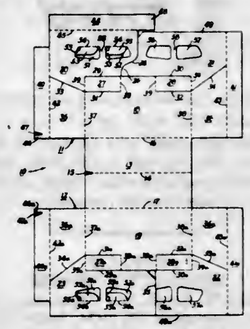


1. A flexible paperboard blank for an article carrier comprising opposed pairs of hingedly connected side and end wall panels, a bottom panel hinged to one of said side wall panels, and a partition structure integrally hinged by a transverse crease to each of said end wall panels, each partition structure comprising a first series of partition panels integrally and hingedly connected to one another by transverse creases in end-to-end order, and a further series of partition panels integrally hinged to one another by transverse creases in end-to-end order, said further series being hingedly connected by longitudinal creases to non-successive panels of said first series and being otherwise separated therefrom by a longitudinal cut disposed between and joining at its ends said longitudinal creases, one of the panels of said further series being adapted to be folded into substantially face-to-face relation to a panel of said first series and another panel of said further series being adapted to be disposed in substantially face-to-face relation to a side wall panel of one of said pairs, a second panel of said first series also being adapted to be disposed in substantially face-to-face relation to said last named side wall panel.

2,751,111
CARRIER
Sidney Conescu, Brooklyn, N. Y.
Application July 5, 1952, Serial No. 297,289
1 Claim. (Cl. 220—113)

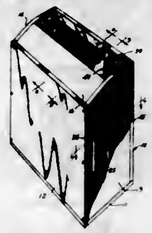
A collapsible carrier for bottles formed from a blank of co-operatively extended collapsible segments of cardboard material comprising a rectangular bottom member having a medial score line through its long dimension, two main foldable side panels extending from said bottom member at the opposite longitudinal edges thereof parallel to said medial score line; a foldable end strip extending

from each of the sides of said side panels; foldable side tabs having their lower portions extending respectively from the lateral edges of said end strips, each of said side tabs having its upper portion foldably joined to a foldable central handle segment so as to form two adjacent handle segment portions for each of said side panels; one foldable hinging partition strip integral with and extending from each of said handle segments, each of said hinging strips being integrally joined to and foldable with relation to the central upper portion of an adjacent side panel; each of the two of said handle segments disposed at opposite ends of said blank having a plurality of finger cutouts and a foldable tongue formed with a locking extension in each of said cutouts, each of



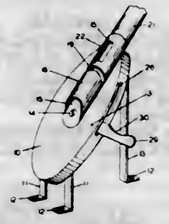
the other two of said handle segments respectively adjacent to said two opposite handle segments having finger cutouts registering with each other and with the finger cutouts of said first two mentioned handle segments, with the foldable tongues interlocking with said last named cutouts; said foldable side tabs being infolded, the mating surfaces of said side tabs being glued to one another; and an edge tab extending from the upper edge of one of said handle segments, said edge tab being folded over and glued to the mating surface of the opposing handle segment; whereby the carrier has a continuous bottom and a seven ply handle interlocked by the tongues folded into, and interlocked with, their registering finger cutouts of the adjacent handle segments.

2,751,112
COMBINED PAPER AND PENCIL DISPENSER
Howard L. Bierwert, Maplewood, N. J.
Application June 26, 1952, Serial No. 295,728
5 Claims. (Cl. 221—199)



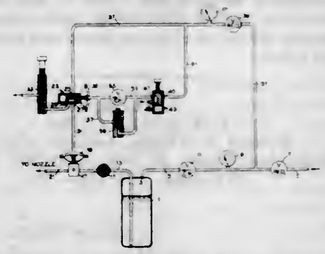
1. A dispenser for simultaneously ejecting a sheet of paper and a pencil comprising a cabinet structure having a paper compartment and a pencil compartment, each compartment having an open top, a vertically disposed slide member forwardly of said compartments, elastic means connected with the slide for maintaining the slide in its uppermost position within the cabinet, said slide having means for engaging a foremost sheet of paper in the paper compartment and also having means for engaging a slidable pencil support in the pencil compartment and a handle means for pressing said slide downwardly against the tension of the elastic means whereby upon release of said handle upward movement of the slide will elevate a sheet of paper and the pencil through the open tops of said compartments.

2,751,113
DISPENSERS
Michael J. Neyses, Milwaukee, Wis.
Application April 14, 1953, Serial No. 348,694
6 Claims. (Cl. 221—226)



1. A dispensing device of the character described comprising, a surface plate, an adaptor mounted to said surface plate, said adaptor being of a hollow semi-circular tubular construction having a flat surface at its bottom for engagement with said surface plate, said tubular adaptor having a semi-circular slot disposed laterally through its upper walls near the center thereof and extending downward toward said flat surface and a downwardly projecting member closing said hollow tube in alignment with one side of said slot, said downwardly projecting member being of the same contour as said slot.

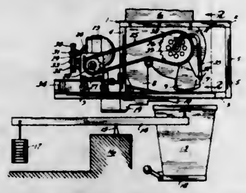
2,751,114
LIQUID DISPENSING APPARATUS
Herman Bruce Greaves, Lemay, Mo.
Application October 23, 1953, Serial No. 388,018
3 Claims. (Cl. 222—70)



1. Apparatus for dispensing measured dosages of a liquid, comprising a pressure vessel for containing a supply of the liquid, means for introducing air under pressure into the vessel, an outlet line for liquid leading from the vessel, an outlet valve in said outlet line having a control operable by air under pressure for opening the valve and adapted upon being vented to close the valve, a relay valve having an inlet for air under pressure, an outlet connected to said outlet valve control, and a vent port, an adjustable bleeder connected to the vent port, said relay valve, when inactive, blocking the inlet and venting the outlet and hence venting the control for the outlet valve via the vent port and bleeder and, when active, supplying air from the inlet to the outlet and thence to the control for the outlet valve and blocking the vent port, said relay valve having a control operable by air under pressure for activating it and being inactivated upon venting of the control, and means for supplying air under pressure to and venting it from said relay valve control including a manually operable valve having an

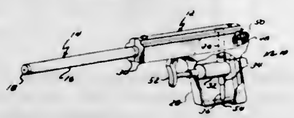
inlet for air under pressure, an outlet, and a vent port, said manually operable valve, when inactive, blocking its inlet and venting its outlet to its vent port, and when manually activated, supplying air from its inlet to its outlet and blocking its vent port, a line connecting the outlet of the manually operable valve to the relay valve control and including a check valve adapted to open for flow of air to the relay valve control when the manually operable valve is activated, and a bypass around the check valve including a bleeder.

2,751,115
REGULATOR FOR FEEDING POWDERED OR GRANULAR MATERIAL
Harold V. Kindseth, Minneapolis, Minn., assignor to Bemis Bro. Bag Company, Minneapolis, Minn., a corporation of Missouri
Application May 15, 1953, Serial No. 355,295
9 Claims. (Cl. 222—77)



1. In a device of the class described, a hopper having a discharge opening in its bottom portion, a gate normally closing said discharge opening, a scale mounted receptacle underlying said opening and being adapted to receive material delivered thereto from said hopper when the gate is open, a feeding drum journalled in the hopper for rotation about a horizontal axis and overlying said discharge opening, a plurality of axially extending radially projecting feeding vanes yieldable in a direction opposite to the direction of rotation of said drum, and means for detachably securing said vanes to said drum in circumferentially spaced relationship, said means including cooperating anchoring elements associated with said drum and said vanes.

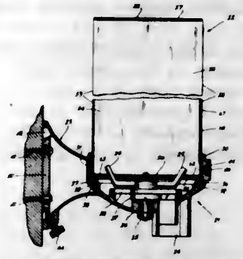
2,751,116
TOY WATER GUNS
Edward D. O'Brian, Anaheim, Calif.
Application January 26, 1956, Serial No. 561,387
13 Claims. (Cl. 222—79)



1. A toy gun which includes a barrel comprising: an elongated hollow tube of flexible material; and means capable of being easily bent by a child, said means being self supporting when bent to a desired configuration, said means extending substantially the length of said tube of flexible material so as to support said tube.

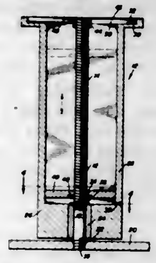
2,751,117
DISPOSABLE CARTON DISPENSER
George Horatio Packwood, Jr., St. Louis, Mo.
Application January 7, 1950, Serial No. 137,391
14 Claims. (Cl. 222—80)

1. In a dispenser, a base, dispensing operating means on the base, a disposable carton supported on and extending above the base, the base having walls defining a sleeve-like opening into which the carton fits and is stabilized at its end, the base having support means extending inwardly from the walls to support the end of the carton, and the carton having an opening in its end within said walls for passage of material within the carton onto the base, the carton comprising a reservoir for material intermittently dispensed from the dispenser, the



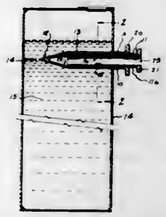
support means on the base having an upstanding portion inwardly adjacent said walls providing a groove around the base within the walls and separated by the end of the carton from the interior of the base, said upstanding portion comprising a knife-edged ridge against which the bottom of the carton may be pressed.

2,751,118
SPREAD DISPENSER
Charles W. Soulé, San Francisco, Calif.
Application November 12, 1954, Serial No. 468,320
3 Claims. (Cl. 222—80)



1. A spread dispenser comprising a base having a threaded standard rising therefrom, a housing having an open upper end rotatably mounted on said standard, a cutter plate secured to said standard closing said open end of said housing and a lift plate threadedly secured to said standard and rotatable with said housing, said housing having a circular recessed flange at the upper end thereof, said cutter plate overlying said flange and having blades downwardly struck therefrom forming openings for dispensing of spread carried by said lift plate.

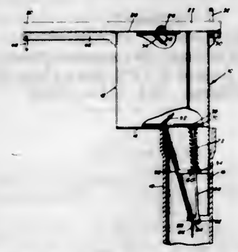
2,751,119
MILK BOTTLE TAP
Eugene S. Manning, Sr., Houston, Tex.
Application April 28, 1952, Serial No. 284,729
4 Claims. (Cl. 222—81)



1. A tap for withdrawing the contents from a container comprising, an outer tubular body having an axial

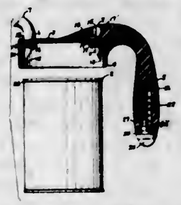
bore with an open end and a closed end terminating on the external surface of the body in a sharp smooth surfaced point, an inner tubular body fitting within said axial bore and extending from said open end of said outer tubular body, said inner and outer tubular bodies having alignable flow ports therein, the axial bore of said outer tubular body being of a reduced size at its closed end to limit the inward movement of said inner tubular body relative to said outer tubular body for positioning said flow ports in the same transverse plane, said sharp point being adapted to pierce the wall of the container upon a non-rotative longitudinal movement of the outer tubular body whereby the contents of the container may be withdrawn upon the alignment of said flow ports, and means for rotating said inner tubular body relative to said outer tubular body to align said flow ports when they are positioned in the same transverse plane for the withdrawal of the contents from the container.

2,751,120
DUSTPROOF OIL DISPENSER
Alfred A. Bond, Carlsbad, N. Mex., and George W. Achterberg, Fort Stockton, Tex.
Application January 13, 1954, Serial No. 403,764
5 Claims. (Cl. 222—83.5)



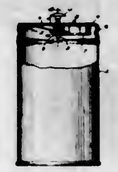
1. An oil dispenser comprising a hollow body having an open top, an operating lever hingedly secured to said body and overlying said body, a cover for said body attached to said operating lever, a first cutting blade secured to and depending from said cover, an aperture through said cover, a spring-pressed valve normally closing said aperture depending from said operating lever, a funnel secured to and in communication with said body, a second cutting blade secured to said body adjacent said funnel, a plate for preventing flow of fluid through said funnel, a rod pivotally connected to said plate, a platform pivotally carried by said rod and extending into said body, a guide in said funnel, said rod extending through said guide, and resilient means yieldingly engaging and extending between said platform and said guide to urge said plate into a closed position.

2,751,121
DISPENSER
Leslie V. Stober, Kansas City, Mo.
Application July 25, 1952, Serial No. 300,816
2 Claims. (Cl. 222—85)



1. A dispenser for cans comprising an annular wall and a flat top, said dispenser including a top with a substantially flat under face to conform with the flat top of said can and having an annular flange integral with said top of the dispenser for encircling the top of the can when the flat under face of said top is superimposed over the flat top of the can to embrace the upper portion of the can, said top of the dispenser having openings therethrough on opposite diametrical sides, a tube extending through one of said openings having a can puncturing portion projecting from said flat under face and an outer spout portion for dispensing contents of the can, a vent tube in the other of said openings and having a similar puncturing portion projecting from said flat under face, and gasket rings encircling the tubes and having seating contact with said top in substantially in plane with the flat under face and adapted to seat on the flat top of said can, said puncturing portions of said tubes having ends sloping transversely from outer diametrical sides to terminate at points on the inner diametrical sides thereof in spaced relation with said flat under face, a distance conforming to at least the thickness of the top of the can and the thickness of the gasket rings and having knurling projecting from the circumferential faces of said tubes and into said openings to secure the tubes in said openings and retain the gasket rings in seating contact with said flat under face and to wedge into openings of the top of the can made by said puncturing portions of the tubes to hold the gasket rings in compression and the dispenser embracing the can when the dispenser is applied thereto.

2,751,122
SHAKER DEVICE
Louis F. Durrell, San Antonio, Tex.
Application October 2, 1953, Serial No. 383,770
1 Claim. (Cl. 222—149)

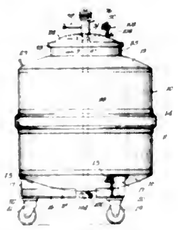


A condiment shaker comprising a container, a perforated cap closing said container, a bearing depending from the inner surface of said cap, said bearing having a rectangular bearing opening, a plunger extending a substantial distance beyond the end of said bearing, a horizontal yoke rigidly secured to said plunger within said cap and extending laterally from said plunger, prongs extending from said yoke, normally disposed within said perforations of the cap, said plunger having a transversely disposed opening below said bearing, a leaf spring having one of its ends secured to the inner side of said cap, the other end of said leaf spring being slidably mounted within said opening of said plunger, said spring adapted to normally bias said yoke towards the cap forcing said prongs through said perforations, clearing said perforations, said spring adapted to contact one end of said bearing restricting outward movement of said plunger, and said plunger adapted to move said yoke inwardly retracting the prongs from said perforations.

2,751,123
PORTABLE VACUUM TANK
Edward K. Kuhles, Wilmette, Ill., and Roy R. Graves, Valparaiso, Ind., assignors to The Graves-Stansbaugh Corporation, a corporation of Delaware
Application March 29, 1952, Serial No. 279,386
9 Claims. (Cl. 222—176)

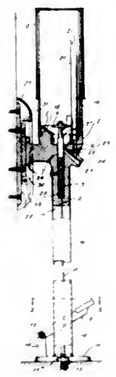
1. A portable vacuum tank for transporting liquids out of contact with air comprising, a tank having a bottom

wall provided with an open downwardly extending ferrule and a top wall provided with a manhole above the ferrule, the manhole and open ferrule permitting cleaning of the interior of the tank and draining the same, a removable cap for closing and sealing the ferrule to form a well,



a manhole cover for the manhole, means for removably securing and sealing the manhole cover to the manhole, and a valve carried by the manhole cover above the well and having a tube extending downwardly therefrom into the well for supplying liquid to and withdrawing liquid from the tank.

2,751,124
DISPENSING MACHINE FOR SOFT OR SEMI-FLUID MATERIALS
James T. Jones, Maplewood, Mo.
Application October 23, 1950, Serial No. 191,604
8 Claims. (Cl. 222—179)



1. A dispenser for semi-fluid substances comprising a vessel, a sump in the base thereof, a bore through the base of the sump, a discharge nozzle having a first passage communicating with said bore and a second passage affording communication between said first passage and the upper portion of said vessel, a shaft operable in and along the axis of said bore, a piston on said shaft adapted to be drawn thereby from within the vessel downward into and toward the base of the sump, and to be returned thereby upward to and above the top of the sump, the shaft having a valving portion subjacent the piston serving to close the bore when the piston is raised above the top of the sump and to establish flow communication through the bore between the sump and said first passage when the piston is within the sump, a column supporting the vessel and enclosing the shaft beneath the sump, and pedal means operatively connected to said shaft for lowering and raising the shaft within the bore.

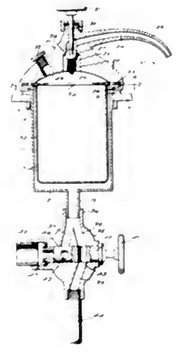
2,751,125
WITHDRAWN

2,751,126
MUSTARD DISPENSERS
Robert M. Chandler, Lexington, Ky.
Application November 6, 1953, Serial No. 390,682
4 Claims. (Cl. 222—386)



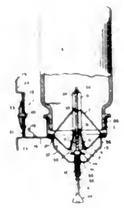
1. In a device for dispensing mustard, a container for holding mustard, a weight movably positioned in the bottom of the container, a cover for the container, said cover having a central aperture, said weight having an opening and a recess on its under side, a tube passing through the opening in the weight and the aperture in the cover, a spout formed on the cover, and means for attaching the cover to the container.

2,751,127
LIQUID SOAP DISPENSER
Horald Mitton, Drummond, Mont.
Application August 9, 1951, Serial No. 241,075
2 Claims. (Cl. 222—386.5)



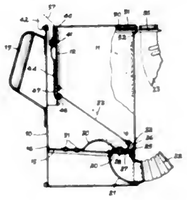
1. In a mechanism for dispensing liquid soap, a housing adapted to be attached to a sink and including an annular side wall and a horizontally disposed bottom wall, an annular threaded shoulder on said side wall, a lock nut positioned below said sink engaged with said shoulder, a plurality of spaced ears on said housing above said shoulder, a cap having a plurality of lugs for engagement with the ears, said cap having a filling opening, a plug for said filling opening, a nozzle extending from said cap, a spring pressed valve for controlling the flow of liquid soap through said nozzle, manually operable means for actuating said spring pressed valve, a flexible casing within said housing for holding a supply of the liquid soap therein, a flange extending from the top of said casing and interposed between said ears and cap, said casing having an opening in its top, a nipple extending from the bottom of said housing, a valve assembly including a body providing a plurality of passageways, a valve member rotatably mounted in said body and provided with a pair of spaced ports for movement into and out of registry with said passageways, said nipple being connected to said body and communicating with said passageways, and conduits for conveying fluid to and from said valve assembly.

2,751,128
SOAP DISPENSER
John M. Prince, Gary, Ind., assignor to Productive Inventions, Inc., a corporation of Indiana
Application March 16, 1953, Serial No. 342,485
11 Claims. (Cl. 222—447)



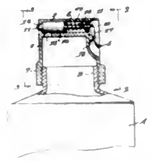
1. A dispenser mechanism comprising a member provided with an outlet, guide means on the member, a rod slidably mounted on the guide means, a helical spring having one end connected to the member adjacent the outlet and its other end connected to the rod, said spring having convolutions normally disposed to prevent the escape of a commodity therebetween, and a valve slidably mounted on the rod, abutment means on the rod cooperable with the valve for positioning the valve on the rod, the arrangement being such that when the rod is moved in one direction the helical spring will be stretched after the valve closes the outlet.

2,751,129
DISPENSERS
Loyal V. Locke, Delphos, Ohio, assignor to The Huffman Manufacturing Company, Dayton, Ohio, a corporation of Ohio
Application March 20, 1953, Serial No. 343,645
5 Claims. (Cl. 222—474)



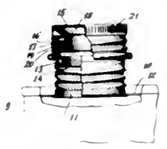
1. A liquid dispenser of the character described comprising a casing adapted to receive liquid contents for dispensing, said casing including a bottom having a discharge opening therein provided with spout means therebelow, a valve adapted to close said discharge opening from within said casing, a leaf spring having a pair of substantially flat end portions connected by an upwardly bowed intermediate portion, means securing one said flat portion of said spring to said valve, means mounting the other said flat portion on said casing bottom with said intermediate portion under tension to bias said valve to the closed position thereof, operating means for said valve mounted on an upper portion of said casing and including an operating handle operable from outside said casing, and means connecting said valve with said operating means for upward pulling movement against said spring to open said discharge opening, said mounting means for said spring including means securing said spring against angular movement on said bottom to maintain said valve in operating alignment with said discharge opening and thereby constituting with said spring the only means for guiding the movements of said valve.

2,751,130
CLOSURE FOR COLLAPSIBLE TUBES
Edward F. Murphy, Chicago, Ill.
Application August 3, 1951, Serial No. 240,176
1 Claim. (Cl. 222—509)



A device of the character described comprising a cap having an internally threaded skirt for mounting upon a paint tube, and a relatively thick upper portion having a transverse cylindrical bore through one side to a point adjacent the other side thereof, said other side of said thick portion having an orifice therein and said thick portion having a port communicating with the interior of sad cap adjacent said orifice, a cylindrical plunger slidably mounted in said bore, a nipple affixed to one end of said plunger and receivable in said orifice, a bearing mounted in said bore at that end thereof remote from said orifice, a rod affixed to said plunger and extending through said bearing, a lever mounted upon the outer side of said cap and pivotally connected to said rod, and a spring surrounding said rod and bearing at one end against said bearing and at its other end against said plunger.

2,751,131
RESILIENT POURING SPOUT
Robert Nyden, Manhasset, N. Y.
Application June 6, 1952, Serial No. 292,024
7 Claims. (Cl. 222—562)



1. As an article of manufacture, a one-piece pouring spout of resilient material for containers including a tubular body having an annular lip of uniform width inclining outwardly from one end of the body, the length of the body and the width of the lip being substantially the same.

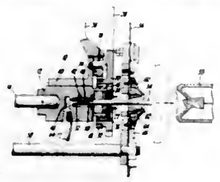
2,751,132
EXPANSIBLE WRIST WATCH BAND
Simon Myerson, Newton, Mass.
Application March 9, 1953, Serial No. 340,953
6 Claims. (Cl. 224—4)



1. A wrist watch band comprising two sections, corresponding ends of which may be attached to a wrist watch, the other ends of said sections having interengageable coupling means by which such ends are detachably connected when the band is worn about the wrist, each of said sections having an elongate sheath, and an elongate retracting member having a portion within one sheath and another portion within the other sheath, said retracting member extending across said coupling means and its opposite ends being anchored to the respective sheaths, the normal length of said retracting member being less than that of the two sections so as to exert a retracting force which normally holds the two sections

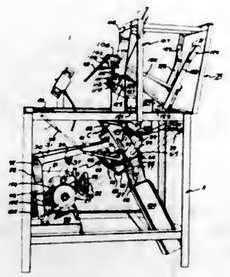
snugly about the wrist, the expanded length of said retracting member being sufficient to permit removal of the band from the wrist when said coupling means are detached.

2,751,133
EXHAUST HEAD CONSTRUCTION
Erle H. Dodge, Beverly, Mass., assignor to Sylvania Electric Products Inc., Salem, Mass., a corporation of Massachusetts
Application December 15, 1953, Serial No. 398,324
3 Claims. (Cl. 226—20.4)



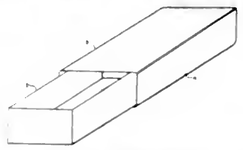
1. In a head through which an electrical device having a tubulation extending therefrom and in communication therewith may be placed in communication with exhausting and filling systems and the like, the combination of a resilient collar for receiving the tubulation of the electrical device; a pin slidably disposed in a chamber in the head and in axial alignment with said collar, said pin having ports therein establishing communication therethrough into said chamber, and said pin being movable into said collar; and means for pinching said resilient collar about said pin when said pin extends therethrough to effect a hermetic seal therebetween and close off the path of communication through said pin to said chamber.

2,751,134
BAG FILLING MECHANISM
Carl B. Walldow, Campbell, Calif., assignor, by mesne assignments, to Alaska Juneau Gold Mining Company, San Francisco, Calif., a corporation of West Virginia
Application August 17, 1953, Serial No. 374,500
24 Claims. (Cl. 226—49)



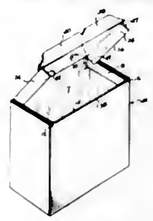
1. A bag filling machine comprising a tubular product receiving hopper open at both ends thereof, means mounted to move said hopper in recurring cycles along an arcuate path from axially horizontal product receiving position to axially upright product discharging position, bag gripping means mounted on said hopper, means for fitting a bag over said bag gripping means, actuating means mounted to move said gripping means to bag gripping position with the bag fitted thereover, a gate movably mounted to close the discharge end of the hopper during its movement from product receiving to product discharging position, and means mounted to open the gate as the hopper approaches its axially upright position to release the product in the hopper for gravitational discharge through the discharge end of the hopper into the bag gripped thereon.

2,751,135
FRICTIONALLY ENGAGED SLIDE BOX
Milton Kessler, Youngstown, Ohio
Application May 27, 1953, Serial No. 357,741
1 Claim. (Cl. 229—9)



A rectangular slide box comprising a cardboard-and-paper drawer having an open top, a bottom, at least two sides, and two end walls, a unitary sleeve cover of thin-walled extruded plastic material having much greater stiffness than the drawer material and having a smooth inside surface conforming in shape and dimension to the outside dimension of said bottom and two sides so that the drawer fits slidingly in said sleeve cover; and friction means consisting of two friction elements for insuring frictional engagement between said cover and said drawer, each said friction element comprising a bent-in portion in said sleeve cover protruding from said inside surface toward said drawer, said bent-in portion being perforated so as to produce sharp edges which frictionally engage the surfaces of the drawer by depressing same without tearing, said bent-in portions being formed by bending in a portion of the bottom corners of said sleeve, said two bent-in portions lying substantially in a plane transverse to the major axis of the sleeve.

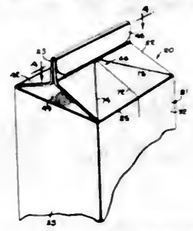
2,751,136
CONTAINER BLANK AND CONTAINER
George Arlington Moore, New York, N. Y.
Application December 18, 1953, Serial No. 399,000
13 Claims. (Cl. 229—17)



4. A container of sheet material comprising a tubular body portion of substantially rectangular cross section having four side walls arranged in opposing pairs and two opposed permanently sealed flat end closures for said body portion, each of said end closures being substantially identical after being alternately folded to provide filling means for intended contents of the container, each said closure including foldable marginal portions of two opposed side walls of said body portion each being folded inwardly at substantially right angles to the corresponding side wall and a like marginal portion thereof defined with a longitudinal fold line in said folded margin being folded upwardly, outwardly and downwardly upon the first folded integral portion, the longitudinal end edge of the second folded marginal portion being disposed in substantially coplanar relationship with the exterior face of said corresponding sidewall, thereby providing a pair of inwardly opposed horizontal closure wall seating ledges, one ledge of each alternate pair of ledges that are disposed at top and bottom of said body portion being provided with a perforated marginally divided fold line, said corresponding side wall having the top and bottom folded ledges each with perforated fold lines, being provided with a vertical side flange that is folded at right

angles over a corner edge of an adjacent side wall and being adhesively united upon a selective exterior surface margin of said side wall, the opposing wall of said adjacent side wall being provided with a full end closing panel, said panel being folded inwardly and downwardly upon the face of the upper disposed marginal portions of said seating ledges and being adhesively united therewith, said adjacent side wall that is related with said side flange being provided with a foldable panel, said panel being folded inwardly and downwardly upon the first folded end closing panel and being adhesively united therewith to complete said container, said side wall having the perforated pair of ledges and vertical flange being constituted to provide an openable and reclosable single closure formed wall of said container exclusive of said opposed permanent end closures thereof.

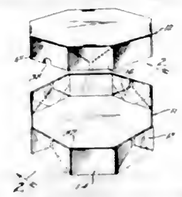
2,751,137
DISPENSING CONTAINER
Carroll R. Alden, Detroit, Mich., assignor to Ex-Cell-O Corporation, Detroit, Mich., a corporation of Michigan
Application January 20, 1950, Serial No. 139,628
6 Claims. (Cl. 229—17)



1. In a tubular container of paperboard or the like having four side panels of equal width, an end closure comprising the combination of three side panel extensions each having converging score lines defining therein triangular subpanels surmounted by a pair of substantially rectangular subpanels, the longer dimension of each such rectangular subpanel being equal to half the lateral dimension of one of said side panels, a fourth side panel extension having score lines defining therein a substantially rectangular subpanel terminating in a foldable flap, the common dimension of said rectangular subpanel and said flap being equal to the lateral dimension of one of said side panels, permanent adhesive junctures between said full width rectangular subpanel and said half width rectangular subpanels adjacent thereto, each of the remaining ones of said half width rectangular subpanels having a severance line dividing the same into an upper fixed portion and a lower separable portion, permanent adhesive junctures between the upper fixed portions of the remaining ones of said half width rectangular, subpanels, said separable lower portions of said remaining half width rectangular subpanels and the triangular subpanels associated therewith defining an extensible pouring spout, the latter when in extended position having a mouth in the shape of an equilateral parallelogram and when in collapsed position having a width substantially equal to that of said full width rectangular subpanel, and means for releasably securing said spout in collapsed position with said foldable flap overlying the same prior to initial opening of said container.

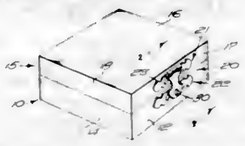
2,751,138
CONTAINER CONSTRUCTION
Donald G. Laver, Inkster, Mich.
Application February 7, 1951, Serial No. 209,804
2 Claims. (Cl. 229—32)

1. A container comprising, in combination, a body portion and a substantially similar cover portion of substantially the same depth as said body portion, said body portion comprising a central panel and a multi-paneled side wall having an even number of panels and at least six sides, said side wall of said body portion including panels having only a single ply of material and alternate panels having multiple plies of material, single ply integral wings at each end of said single ply panels, said multiple ply panels comprising an outer section and a



downwardly folded inner section which has the free end interlocked in a slot defined by said central panel, said inner and outer sections clamping therebetween adjacent wings of the adjacent single ply panels, said cover portion having its walls similarly formed and telescoping and overlapping said body portion with the multiple ply panels of the cover portion overlying the single ply panels of the body portion and in substantial contact therewith.

2,751,139
CATCH FOR A CARDBOARD BOX OR THE LIKE
Lewis Douglas Young, Providence, R. I., assignor to Douglas Young, Inc., a corporation of Rhode Island
Application April 23, 1953, Serial No. 350,581
2 Claims. (Cl. 229—47)



1. In a cardboard box, a body section and a cover section, each having vertically disposed back and front walls with their edges abutting, means to hinge the back walls together, means for detachably connecting the front walls comprising a catch member for each front wall, each having a metal plate extending along the outer surface of the front wall only of each section, each plate having a plurality of holes along its length with a plurality of integral projections along the edge of each hole embedded in the front wall over which the plate extends with the free ends of the projections deflected outwardly in a plurality of different directions and clinched over the inner surface of the front wall of the section and firmly securing the plate to the section, detachable connecting means comprising a part carried by one plate and a second part carried by the other plate, said parts being engageable to hold the pair of sections of the box closed and detachable for opening the box.

2,751,140
BAG
Charles V. Brady, St. Louis, Mo., assignor to Bemis Bro. Bag Company, St. Louis, Mo., a corporation of Missouri
Application April 6, 1953, Serial No. 346,924
2 Claims. (Cl. 229—55)

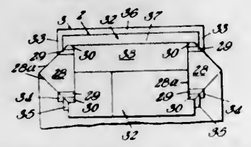
1. A bag comprising a heat-sealable tubular liner inside an outer tube, the outer tube only having slits extending from its bottom end in the front and back walls spaced inward of the sides of the bag forming front, back and side flaps from the material of the outer tube, at least the

front and back flaps being separated from the liner, the side flaps and the lower portion of the liner being folded into a diamond fold which is complete as to the liner, the width of each side of the diamond fold across the transverse center line of the fold being somewhat greater than half the width of the bag so that the front-to-back center line of the diamond fold is spaced from the bottom edge of the liner and the bottom edges of the side flaps, the portion of the liner between said front-to-back center line and the bottom edge of the liner having the form of a



flattened tubular tab and being heat-sealed to form a complete hermetic bag bottom closure, the end portions of the side flaps between the front-to-back center line and the bottom edges of the side flaps lying on opposite sides of the tab and being in face contact therewith, the tab and said contacting portions of the side flaps being folded over on said front-to-back center line to lie flat against the diamond fold, and front and back triangular sections of the diamond fold together with the front and back flaps and portions of the tab being folded one upon the other and secured together.

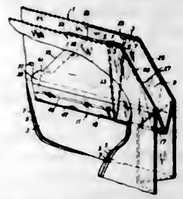
2,751,141
MULTIPLY PAPER SACKS
William Vincent Owens, Northfleet, England, assignor to Paper Sacks Limited, Bristol, England
Application July 7, 1952, Serial No. 297,491
Claims priority, application Great Britain July 12, 1951
3 Claims. (Cl. 229—55)



1. A multiply paper bag having an end block bottom closure comprising a pair of side flaps of rectangular shape and a pair of end flaps of combined triangular and rectangular shape, the plies of the side flaps being stepped longitudinally of the bag so that the plies of a first one of said side flaps are progressively longer from the inner to the outer ply, while the plies of the second one of said side flaps are progressively longer from the outer to the inner ply, the lateral edges of both the side flaps being stepped to expose areas of all plies for adhesive sealing, the inner terminal edges of the plies of both of the end flaps being coincident, the lateral edges of the plies of the rectangular portions of the end flaps being stepped to expose areas of all plies for adhesive sealing, said second side flap being turned over a line transverse to said bag length and adhered to parts of said end flaps, and said first side flap being turned over a line transverse to said bag length and having its stepped plies overlying and adhered to parts of said end flaps and the stepped plies of said second side flap.

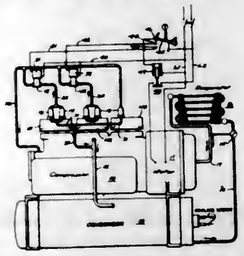
2,751,142
BAGS
Russell J. Williams, Clayton, and Milton J. Helmos, Lemay, Mo., assignors to Bemis Bro. Bag Company, St. Louis, Mo., a corporation of Missouri
Application December 16, 1954, Serial No. 475,636
10 Claims. (Cl. 229—62.5)

1. In a bag, a valve extending into the bag at one corner and adapted to receive a filling spout, the valve including an inwardly extending flexible valve sleeve, the sleeve being folded on its longitudinal center line and having adjacent sides, the sleeve being weakened along



its longitudinal center line toward its inner end, and a piece of sheet material of greater flexibility than the material of the sleeve secured to the sleeve over the weakened portion of the sleeve.

2,751,143
UNLOADING MECHANISMS FOR REFRIGERANT COMPRESSORS
Gerald L. Biehn, Needham, Mass., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application February 2, 1953, Serial No. 334,670
7 Claims. (Cl. 230—24)

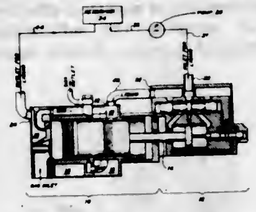


1. An unloader mechanism for a compressor having a cylinder, comprising valve means at the suction side of the cylinder for permitting, when open, gas compressed within said cylinder to pass to the suction side of the compressor, a control cylinder, a loosely fitted piston slidable in said control cylinder, means including a spring for causing said piston to hold said valve means normally open, means connected to the discharge side of said compressor and to said control cylinder for supplying compressed gas against one side of said piston for moving said piston against the action of said spring for permitting said valve means to close, means including a control valve connecting the interior of said control cylinder at the other side of said piston, with said suction side of said compressor for permitting, when said control valve is open, gas leaking past said piston, to flow to said suction side of said compressor, and means for closing said control valve for preventing the gas supplied against said one side of said piston from moving said piston against the action of said spring.

2,751,144
APPARATUS FOR COMPRESSING GASES
Jean A. Troendle, Hollywood, Calif.
Application November 17, 1951, Serial No. 256,883
2 Claims. (Cl. 230—52)

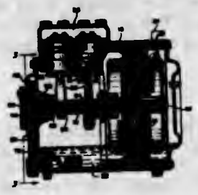
1. Apparatus for compressing gases comprising a compressor unit having inlet and outlet ports for admitting and discharging gas which is compressed by the compressor unit, a liquid cooling system disposed in heat exchange relationship with the compressor unit and having inlet and outlet ports which are independent of the ports for admitting and discharging gas which is compressed by the compressor unit, a hydraulic motor connected to and driving the compressor unit and having inlet and outlet

ports for receiving and discharging liquid, a conduit connecting the liquid outlet port of said motor with the inlet of the liquid cooling system of the compressor to provide a liquid for the cooling system for the compressor, with the cooling system being isolated from the ports for admitting and discharging gas for the compressor unit, liquid pressure means including a reservoir, a conduit coupling the



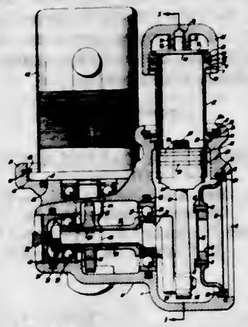
reservoir to the liquid inlet port for the motor for providing liquid under pressure to the motor, and liquid conduit means coupling the outlet of the liquid cooling system for the compressor unit to the liquid pressure means, with the reservoir and the conduits which couple it to the motor and the compressor having the outer surfaces thereof exposed to the atmosphere and serving to dissipate most of the heat which is generated by the compressor.

2,751,145
REFRIGERATING APPARATUS
James D. Olcott, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 21, 1952, Serial No. 316,009
2 Claims. (Cl. 230—58)



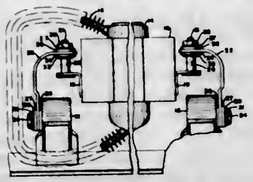
1. In a sealed motor-compressor unit, a main housing having an oil pump recess in its one vertically disposed wall, a motor stator supported by said housing, a horizontally disposed shaft journaled in said housing, a motor rotor secured to said shaft, compressor means in said housing including reciprocating impeller means, means whereby rotation of said shaft causes reciprocation of said impeller means for compressing a gas, said housing including an oil reservoir spaced downwardly from said horizontally disposed shaft, oil feed passages in said shaft, an oil pump adjacent one end of said shaft for forcefully pumping oil from said reservoir to said oil feed passages, said oil pump comprising a rotor drivingly connected to said shaft and a rotatable cylinder in said recess surrounding said rotor and coextensive axially with said rotor, a pair of diametrically opposed impeller means carried by said rotor arranged to frictionally engage said cylinder so as to urge said cylinder to rotate, means for limiting the rotation of said cylinder within said recess, said wall having first passage means extending from its bottom edge to said pump recess for conveying oil from said reservoir to said recess, the lower portion of said first passage having an enlargement therein, a check valve disposed in said enlargement, said wall having a second passage leading from said oil reservoir to the inlet side of said check valve, means for closing the lower end of said first passage and for holding said check valve in place, said cylinder having a radially extending inlet port arranged in communication with said first passage means at all times, third passage means for conveying oil from said recess to the oil feed passages formed in said shaft, and a pair of radially extending outlet ports provided in said cylinder for selective alignment with said second passage means.

2,751,146
AIR COMPRESSOR
Tomlinson I. Moseley, Atherton, Calif., assignor to Dalmo Victor Company, San Carlos, Calif., a corporation of California
Application October 29, 1951, Serial No. 253,590
4 Claims. (Cl. 230—172)



1. An air compressor of high volumetric efficiency comprising a cylinder, a piston within the cylinder, piston rings on said piston, said piston rings being made of a self-lubricating plastic material, means for reciprocating the piston in a manner such as to cause the piston to slightly protrude from the bore of the cylinder at the upper end of its stroke, a spring-pressed valve closing the bore of the cylinder at the top thereof and engaged by the piston when the piston is at the upper end of its stroke, a flat pad of elastomer material fixed to the underside of said valve, an air-tight housing including a crankcase enclosing the lower end of the cylinder, means for opening the portion of the cylinder bore above the piston to the housing when the piston is near the bottom of its stroke, and a pressure-responsive valve in the housing for opening the housing to ambient air during at least a portion of the upward stroke of the piston, and for closing the housing against the egress of air from the housing during at least a portion of the downward stroke of the piston to thereby provide crankcase compression.

2,751,147
SUPPORT FOR REFRIGERATING APPARATUS
Clifford H. Wurtz, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 20, 1952, Serial No. 327,073
2 Claims. (Cl. 230—235)



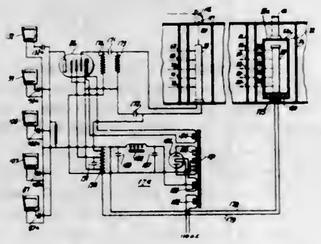
1. In combination: a support, a unit comprising a sealed casing having a motor and a compressor driven thereby located within said casing and adapted to be started and stopped, means suspendingly mounting said unit at two equally spaced apart points only therearound from said support for limited vibrational movement relative thereto,

each of said means including a bracket having its lower end secured to said support and a rigid member fixed to said unit, said rigid member extending outwardly away from said unit and thence upwardly a substantial distance above its fixed point thereto along a side of said casing to form a lever-like element thereon, said bracket extending upwardly from its secured lower end around the fixed point of said lever-like element to said unit and being resiliently clamped to the upper end of said lever-like element, the starting and stopping of said motor and said compressor imparting a rotary force to said casing, and the spacing of said fixed point of said lever-like element below the clamping of said bracket to the upper end thereof together with said two point mounting of said unit causing the rotary force imparted to said casing to be converted into a swinging movement of said unit about said resilient clamp in pendulum fashion throughout a limited arc relative to said support.

2,751,148
LIGHT RESPONSIVE CALCULATING MACHINE CONTROLS

Philip H. Allen, Los Gatos, Calif., and Benjamin J. Chromy, Washington, D. C.

Application November 6, 1952, Serial No. 319,091
11 Claims. (Cl. 235—61)



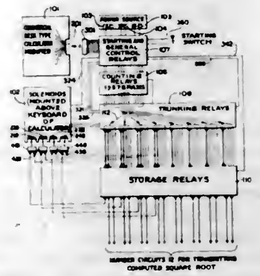
1. In an electro-optical calculating machine the combination of a source of light, means for deriving a plurality of beams of light from said source, means for modulating each of said light beams in accordance with a different frequency, key operated means for selectively controlling the transmission of said beams, a light responsive device for receiving said light beams, an amplifying device connected to said light responsive device, a plurality of electro-magnetic clutches for controlling machine operation and respectively corresponding to said beams of light, and means connected to said amplifier device for selectively controlling each of said respective magnetic clutches in response to the associated light beam.

2,751,149
DIGITAL COMPUTER FOR COMPUTING SQUARE ROOTS BY SUBTRACTING SUCCESSIVE ODD NUMBERS

Earle A. Young and Harold F. Bennett, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application January 24, 1951, Serial No. 207,562
16 Claims. (Cl. 235—61)

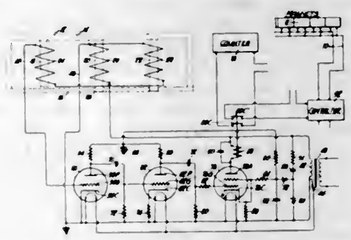
1. A square root computer comprising in combination (1) a starting switch, (2) an electrically driven mechanical digital calculator having a presettable register, number entry means, a control key and control means responsive to said control key for causing the calculator to perform a first series of subtractions of a subtrahend in the number entry means from a minuend preset in the register ending when an overdraft occurs, to perform a single addition after the overdraft, to shift the relative decimal position of the register and the number entry means after the addition and to perform a second series of subtractions ending when a second overdraft occurs, said number entry means comprising in each decimal order mutually meshable stepped-tooth gear means and pinion means, one of said two mutually meshable means being divided into two parts independently slidable on a non-circular shaft for selectively meshing the pinion means with different circumferences of the stepped-tooth gear means and thereby selectively rendering zero to nine teeth effective, (3) counting means for counting the subtractions in each series, (4) electrical number circuits operatively connected to said number entry means for sliding said slidable means (5) switching means initially under the control of said starting means and afterward under the control of said counting means for selectively energizing said number circuits according to a predetermined sequential pattern for rendering successive odd numbers of teeth of said stepped-tooth means effective in rotational sequence in one decimal order during successive subtractions of said first series of subtractions and in the next lower decimal order during the second series of subtractions.



2,751,150
MAGNETIC SWITCHING APPARATUS

Vello S. Buccicone, Gary, Ind.

Application June 6, 1952, Serial No. 292,033
16 Claims. (Cl. 235—98)

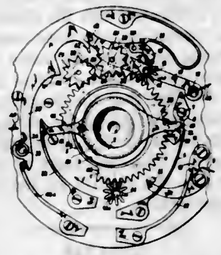


12. Apparatus for counting magnetic sheets moving over a conveyor comprising a box made of magnetic material and located adjacent said conveyor, a cover for said box made of non-magnetic material, three cores in said box extending from the base of said box to said cover, the center core being equally spaced from the end cores and of the same length as one of said end cores, the other end core being shorter than the center core, a coil surrounding the center core, identical coils surrounding each of said end cores, means connecting the center coil to a source of alternating current, said center coil when energized inducing a voltage in said identical coils, means connecting the end coils in series and opposite in polarity, and a counter operable by current induced in said end coils.

2,751,151
ITEM COUNTER AND TOTALIZER

Louis Cottier, Carouge-Geneva, Switzerland, assignor to Tavannes Watch Co. S. A., Tavannes, Switzerland, a Swiss firm

Application May 17, 1955, Serial No. 509,049
Claims priority, application Switzerland May 17, 1954
9 Claims. (Cl. 235—113)

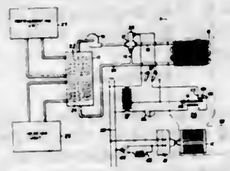


1. A counting and totalizing arrangement chiefly for scoring purposes comprising a plate, a spring barrel revolubly carried by said plate, a main spring inside the barrel urging the latter into a predetermined angular setting, a series of teeth rigid with the periphery of the barrel, a pawl pivotally secured to the plate, a spring urging said pawl into engagement with the barrel teeth to hold fast the barrel against its spring, a catch pivotally carried by the plate and adapted to engage the teeth on said barrel to provide a progression of the barrel by one tooth interval in the main spring winding direction, a push button adapted upon depression to urge said catch into operative engagement with the barrel teeth, a score-counting pinion operatively and permanently engaging the barrel teeth, a totalizer including a unit recording pinion, a rocking member pivotally secured to the plate and on which the unit pinion is revolubly carried, means urging the rocking member into a position for which the units pinion engages operatively the barrel teeth when the barrel revolves in the spring-unwinding direction, means controlling the pawl and adapted to disengage the latter and to allow a return movement of the barrel under the action of its spring into its predetermined starting position each time the barrel has advanced by ten teeth intervals beyond said starting position and to release said pawl and allow it to return into its barrel engaging position under the action of its spring whenever the barrel has returned into its starting position.

2,751,152
AIR CONDITIONING CONTROL SYSTEM

Francis R. Ellenberger, Verona, N. J., assignor to General Electric Company, a corporation of New York

Application August 7, 1952, Serial No. 303,665
4 Claims. (Cl. 236—1)

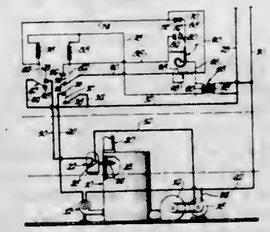


1. A control system for controlling the heat transfer between a heat transfer fluid and a second fluid to be conditioned in accordance with changes in the temperature of said second fluid, said system comprising a device for controlling the rate of heat transfer between said fluids, a heat operated motor including an electrical resistance for actuating said device and for modulating the position of said device in accordance with the energization of said resistance, a thermostat responsive to the temperature of said second fluid, a pair of electrical contacts positioned to be closed by said thermostat at a predetermined low temperature, and switching means selectively movable to a first position for connecting said resistance to be energized upon closing of said contacts and to a second position to connect said resistance to be energized when said contacts are opened and to be shorted out upon positions effect opposite response of said device upon a closing of said contacts whereby said first and second like change in temperature.

2,751,153
WARM AIR HEATING SYSTEM CONTROL

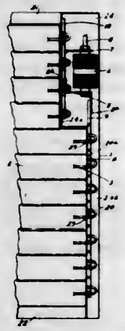
Donald W. Seifert, Highland Park, Mich.

Application June 23, 1953, Serial No. 363,637
20 Claims. (Cl. 236—9)



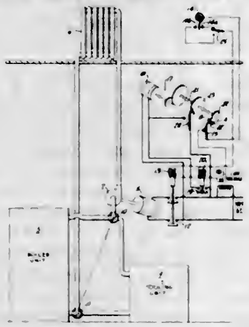
6. In a heating system, a warm air furnace including a fuel burner and a warm air chamber within which heated air may be stored, a furnace thermostat having a temperature measuring element responsive to the temperature in said warm air chamber, and a switch operatively associated with said temperature measuring element, said switch being closed upon the temperature in said warm air chamber being elevated to a first value, and said switch opening upon the temperature in said warm air chamber falling to a second value no greater than said first value, a blower for blowing the warm air from said warm air chamber through a space to be heated, a space thermostat in said space to be heated, said space thermostat including two sets of contacts that make and break in reverse order in response, respectively, to falling and rising temperatures affecting said thermostat, a source of electric power for operating said heater and said blower, said heater and said blower being electrically coupled to said source of power by separate electric circuits, the first set of said two sets of contacts of said space thermostat being in the circuit for said blower and the second set of contacts being in the electric circuit for said burner, said furnace thermostat switch being in the electric circuit for said blower, means operative, upon the first set of contacts of said space thermostat being made, for closing, in part, said blower circuit, means operative upon the second set of contacts of said space thermostat being made, for closing the burner circuit, said second set of contacts being broken upon the temperature in said space being elevated to a first predetermined level, said first set of contacts being broken upon the temperature in said space being elevated to a second predetermined level above said first predetermined level at which the second set of contacts break, and the first set of contacts being operative thereafter to make and break repeatedly as the temperature in said space falls and rises, so as to continue to deliver heated air to said space as long as the temperature in the warm air chamber is above the predetermined temperature at which the furnace thermostat is operative to open the furnace thermostat switch.

2,751,154
SHUTTER MECHANISM
Per Valtersson Valtersson, Hagersten, and Kjell Albert Ekland, Bromma, Sweden, assignors to Eric Georg Peterson, Stockholm, Sweden
Application October 20, 1952, Serial No. 315,712
Claims priority, application Sweden October 24, 1951
3 Claims. (Cl. 236—35.2)



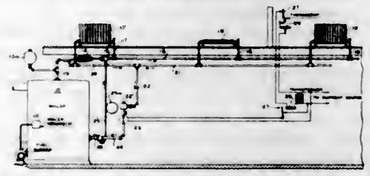
1. In a mechanism for automatically controlling the cooling liquid temperature of internal combustion engines for vehicles, said mechanism having disposed in front of the radiator of said vehicle a substantially rectangular frame with substantially vertical side channel members connected by top and bottom members, said vertical members having their web portions facing inwardly of the frame with a plurality of openings therein, shutter vanes mounted in said frame having pivots on the ends thereof extending through the openings in said web portions, and regulator means on said frame having a portion thereof movable in dependence on the temperature of the cooling liquid, that improvement comprising at least one reinforcement bar having one straight edge mounted on said web portion adjacent to one of the channel side walls and having a plurality of openings therein through which the pivots on said vanes extend, and at least one slide slidably mounted against said web portion between said reinforcement bar and a side wall of the vertical frame member and having a plurality of guide slots therein, the ends of said pivots being bent over and engaged in said openings, and said slide connected to said regulator means and movable thereby in response to a temperature change of said cooling liquid.

2,751,155
HOT WATER HEATING SYSTEM CONTROL
Edgar Collat, Milwaukee, Wis., assignor of one-half to Ira Milton Jones, Milwaukee, Wis.
Application May 20, 1955, Serial No. 509,820
5 Claims. (Cl. 236—46)



2. A hot water heating system of the type wherein water heated in a boiler is circulated through radiators located in the space to be heated, by an electric motor driven circulating pump in response to closure of a thermostat sensitive to the temperature of said space, characterized by the provision of: a timing mechanism; means to maintain the timing mechanism in operation for a definite time cycle after it is started; means connected with the timing mechanism and responsive to closure of the thermostat to start the timing mechanism when the thermostat closes; switch means operated by the timing mechanism and connected with the circulating pump motor and the thermostat to take over control of the circulating pump motor and stop the same after a predetermined time short of the time cycle of the timing mechanism despite the fact that the thermostat may still be closed; and means actuated by the timing mechanism before the completion of its time cycle and operable upon said switch means to effect reclosure of said switch means and thereby restore the control of the circulating pump motor to the thermostat.

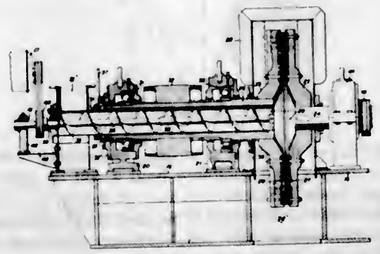
2,751,156
HOT WATER HEATING SYSTEM
David E. Morgan, Westmont, N. J., assignor to Warren Webster & Company, Camden, N. J., a corporation of New Jersey
Application May 12, 1955, Serial No. 507,852
9 Claims. (Cl. 237—8)



3. In a circulating hot water heating system, the combination comprising a boiler, conduit means for conducting hot water from the boiler through a radiating system and including a return connection back into the boiler, said conduit means including therein a motor-driven circulating pump, thermostatic means for controlling said motor-driven pump at intervals responsive to temperature changes in a space to be heated, a boiler by-pass having its ends connected respectively into the outgoing and return connections of the system, one of said ends being connected into a device through which the circulating water passes, said device having therein a heat-responsive valve-actuating means located in a position to be responsive to a predetermined temperature of the mixture of circulated water and by-pass water, and a valve operatively connected to said actuating means, said valve being positioned normally to check the flow of circulating boiler water but being arranged with a restricted passage means permitting at least a limited flow of circulating water normally to pass whenever the pump is operating, whereby after a period of delay following the starting of the pump the said mixture will rise to said predetermined temperature and cause said heat-responsive device to open said valve to allow a greater proportion of hot water to be circulated through the heating system while the pump remains in operation.

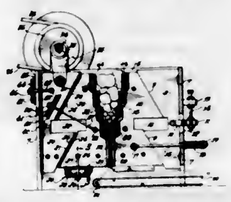
2,751,157
GRINDING MILL EMBODYING COAXIAL OPPOSITELY ROTATING GRINDING DISKS
Fritz Meyer, Duesseldorf-Gerresheim, and Friedrich Nicolaus, Duesseldorf, Germany, assignors to Gutehoffnungshütte Oberhausen Aktiengesellschaft, Oberhausen, Germany
Application April 10, 1953, Serial No. 347,956
Claims priority, application Germany April 12, 1952
5 Claims. (Cl. 241—38)

1. In a comminuting apparatus, two coaxially arranged grinding disks and between which material to be comminuted is fed, one of said disks having an aperture therethrough, a hollow shaft secured in the aperture and constituting a drive shaft for rotating said one disk, a drive shaft for the other disk, a feed worm for feeding the material to the space between the disks and mounted coaxially within said hollow drive shaft, drive means independent of the drive means that rotate the said shafts for rotating the feed worm, a feed tube arranged within the hollow shaft between the interior thereof and the feed



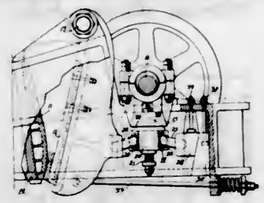
worm, said tube having a length such to extend at least the full length of the hollow shaft, means supporting the tube in spaced relation with respect to the interior of the shaft so as to provide an annular passage communicating with the space between the disks and means at the end of the hollow shaft remote from the disks for supplying liquid media to the annular passage to flow into the space between the disks to facilitate comminution and in passage along the tube and shaft to cool the same.

2,751,158
ROCK AND ORE JAW CRUSHERS
Robert P. Fisher, Los Angeles, Calif.
Application December 18, 1952, Serial No. 326,624
2 Claims. (Cl. 241—262)



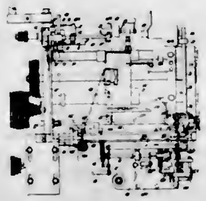
1. In a rock and ore crusher, the combination with an abutment member having inclined bearing surfaces and a jaw member having corresponding bearing surfaces, all of said bearing surfaces being parallel, bearing balls between said parallel bearing surfaces, and power means for moving said abutment member up and down for transmitting through said inclined bearing surfaces lateral crushing movement to said jaw member, of means for connecting said abutment member and said jaw member firmly together for relative sliding movement, said means comprising a bolt extending normal to said inclined bearing surfaces and having one end connected to said jaw member and its other end connected to said abutment member by means of a pair of plates extending parallel to all of said inclined bearing surfaces, and bearing balls interposed between said plates, said other end of the bolt being connected to one of said plates, the other plate being carried by said abutment member and having a slot therein through which said bolt extends and is movable during relative sliding movement between said abutment member and said jaw member along their inclined bearing surfaces, and a horizontal ball bearing set beneath said jaw member for slidably supporting the latter in its said lateral movement.

2,751,159
TOGGLE MECHANISM FOR JAW-TYPE CRUSHER
Samuel W. Traylor, Jr., Allentown, Pa.
Application August 3, 1953, Serial No. 371,992
9 Claims. (Cl. 241—269)



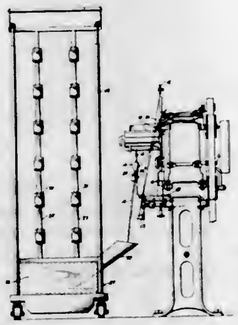
1. In a jaw-type crusher having a frame, a fixed jaw adjacent one end of said frame, and a depending swing jaw mounted on an axis substantially parallel to the fixed jaw for swinging movement toward and away from said fixed jaw, a toggle mechanism disposed between said swing jaw and the frame for effecting swinging movement of the swing jaw comprising a distributor, means limiting movement of said distributor in one vertical direction and affording rotary movement thereof in a substantially horizontal plane, at least two opposed elongated toggle members, each engaged at one end against said swing jaw, and inclined in said one vertical direction longitudinally and laterally of the frame into engagement at the opposite end against the distributor, at least two opposed elongated toggle members, each engaged at one end against the opposite end of the frame and inclined in said one vertical direction longitudinally and laterally of the frame into engagement at the opposite end against the distrubtor, and means biasing said swing jaw away from said fixed jaw to compress said toggle members and bias said distributor in said one vertical direction against said limit means.

2,751,160
WINDING MACHINE
Charles Alfred Freeland, Tunbridge Wells, England, assignor to J. Rawson & Sons Limited, Tunbridge Wells, England
Application April 23, 1954, Serial No. 425,291
24 Claims. (Cl. 242—27)



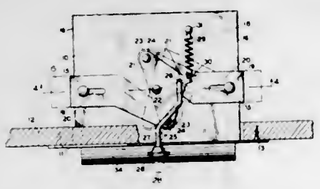
1. A winding machine comprising, in combination, means for rotatably supporting an article for winding, means operable to release a fully wound article from said supporting means, means for feeding and positioning an empty article for reception in said supporting means, at least two fluid actuated devices for respectively operating the releasing means for a fully wound article and the feeding and positioning means, and means controlled by movement of the first fluid actuated device for controlling fluid supplied to the second said device and thereby determining the sequence of operation of said devices.

2,751,161
DOFFING A WINDING MACHINE
Paul W. Markwood, Lowland, John T. Rich, Morristown, and Paul D. Lingerfelt, Lowland, Tenn., and Charles F. Nichols, Waynesville, N. C., assignors to American Enka Corporation, Enka, N. C., a corporation of Delaware
Application September 10, 1953, Serial No. 379,397
4 Claims. (Cl. 242—35.5)



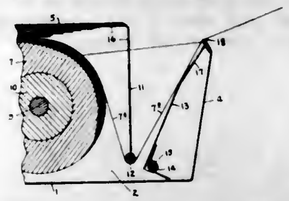
1. The method of doffing a winding machine including a rotatable spindle and a traverse for laying up a wound yarn body thereon from a continuous supply that comprises maintaining a suction zone, changing the path of yarn travel between said body and said traverse so the yarn passes from said traverse to said suction zone and then to said body, cutting said yarn between said zone and said body whereby the succeeding portions of the yarn supplied are drawn into said suction zone and the spindle may be stopped for removal therefrom of the wound body thereon.

2,751,162
TOILET TISSUE HOLDER
Henry Bolger, Portland, Oreg.
Application April 18, 1955, Serial No. 501,866
2 Claims. (Cl. 242—55.2)



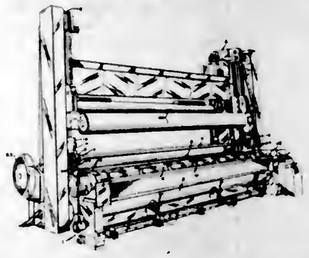
1. A toilet tissue holder comprising a substantially hollow rectangular member having an open side, a continuous peripheral flange integrally formed on said member and disposed adjacent said open side, said member having a pair of opposed spaced side walls each of which are provided with a transversely extending aperture, said apertures being aligned with one another, a spindle mounted in and extending through each of said apertures, a walking beam, means connecting each of said spindles with opposite ends of said walking beam, means disposed intermediate said ends of said walking beam pivotally connecting said walking beam on said member, manually operable means connected with said walking beam to effect rotation thereof about said pivotal means, and resilient means connected with said walking beam constantly tending to urge said walking beam for rotation in one direction about its said pivotal means.

2,751,163
ROLL PAPER HOLDER AND CUTTER
Edward Waltz, Grand Rapids, Mich., assignor to The E. O. Bulman Manufacturing Company, Inc., Grand Rapids, Mich., a corporation of Michigan
Application May 27, 1953, Serial No. 357,817
4 Claims. (Cl. 242—55.5)



1. A device of the class described, comprising a body adapted to receive and rotatably hold a roll of paper, a wall in said body adjacent said roll of paper, a cutting bar on said body and spaced from said wall, a flat plate swingably mounted in said body between said wall and said cutting bar, and spring means to swing said plate toward said wall, whereby paper unwound from said roll will pass around an edge of said wall and lie clamped between said wall and said plate, said plate having an area equal to a considerable part of the area of said wall.

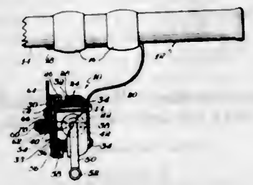
2,751,164
REWIND ROLL SUSPENSION AND BEARING
Felix Saco, West Islip, and Leonard Rockstrom, Manhasset, N. Y., assignors to Cameron Machine Company, Brooklyn, N. Y., a corporation of New York
Application February 2, 1954, Serial No. 407,631
11 Claims. (Cl. 242—66)



1. A web roll rewind machine having therein a pair of spaced uprights, a pair of spaced parallel rewind roll supporting rolls supported in and between the uprights, a rewind shaft bearing carriage sliding on each said upright having a bearing therein for one end of a rewind shaft, the combination therewith, endless means supporting each carriage, vertically spaced sprockets carried by said uprights supporting each said endless means to provide two upright runs therefor, counterweights for said carriages supported by said endless means, one said run having therein the bearing carriages and the other the counterweights to control the movement of the carriages and weights from both above and below.

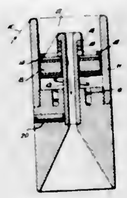
2,751,165
FISHING REEL
Edward F. Small, Newton, Mass.
Application December 10, 1953, Serial No. 397,289
7 Claims. (Cl. 242—84.1)

1. A fishing reel comprising a spool having a peripheral groove for receiving or paying off a line, means for nonrotatably supporting the spool on a rod with an end of the spool facing in the direction of the tip of the rod and with its axis spaced from and parallel to the axis of the rod, a winding bell mounted on the spool for rotation about the axis thereof, said bell having a peripheral flange radially spaced from the bottom of the groove and only partially covering the groove, the remainder of the groove being open radially so that the line is radially unconstrained as it is paid off or taken up, means for effecting rotation of the bell, a pick-up finger carried by the bell for rotation about the axis of the spool, means pivotally



supporting the finger on the bell for rotation about an axis spaced from and parallel to the axis of the spool, said finger being movable from a position lying within the periphery of the bell to a position extending outwardly from the periphery thereof, and means carried by the spool interengageable with a part of the finger by rotation of the bell to move the finger to said extended position.

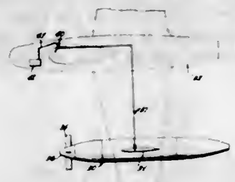
2,751,166
TENSION DEVICE
Jenö Beyer, Arnhem, Netherlands, assignor to American Enka Corporation, Enka, N. C., a corporation of Delaware
Application November 20, 1953, Serial No. 393,483
4 Claims. (Cl. 242—150)



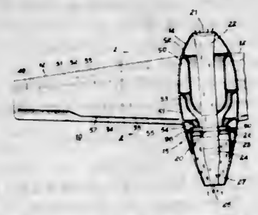
1. A thread tensioning device for a double twister comprising a first tube, a ring, supporting means including a surface for supporting said ring coaxially within the first tube below the upper end thereof and a second tube located coaxially within the ring and having its upper end lying in a plane closer than the plane of said ring to the upper end of the first tube, the upper ends of said tubes and the lower surface of said ring together defining a thread passageway from outside the first tube to within the second, said ring supporting means also including means magnetically to bias said ring against said supporting surface.

2,751,167
REELING APPARATUS FOR CONTROLLING A TOW CABLE FROM AN AIRCRAFT
Robert J. Hopper, Pacific Palisades, Calif., and Nell Lamont, Shalimar, Fla., assignors to Del Mar Engineering Laboratories, Inc., Los Angeles, Calif., a corporation
Application September 2, 1954, Serial No. 453,834
27 Claims. (Cl. 244—1)

4. In an apparatus of the character described for controlling a cable from an aircraft, the combination of: a reel carried by the aircraft to wind and unwind said cable; remotely controlled means to actuate said reel; and shock absorber means forming a variable offset in said cable to respond to changes in tension of the cable and to at least partially absorb shock forces in the towing of devices and to permit devices to be launched for engagement by the tow cable in the course of flight.



2,751,168
BOUNDARY LAYER INDUCTION SYSTEM FOR AIRCRAFT POWER PLANT
Edward A. Stalker, Bay City, Mich.
Application May 5, 1949, Serial No. 91,463
6 Claims. (Cl. 244—15)

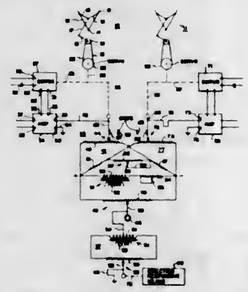


1. In an aircraft having a wing surface of substantial chordwise extent terminating in a trailing edge, the combination of means forming intake openings each of limited width in the chordwise direction and distributed over said wing surface providing for inward flow of air therethrough over a surface expanse extending forwardly from the trailing edge, induction means in communication with said wing interior for inducting only a limited inner portion comprising about 25% of the boundary layer air on said wing surface through each said intake opening producing laminar flow and developing low drag thereover, power means for operating said aircraft, means adjacent said trailing edge forming an intake opening through the wing surface of substantially greater width in the chordwise direction than that of said first-named openings respectively providing for the inflow of substantially the entire extent of boundary layer air into said induction means, and means for supplying said combined inducted flows of boundary layer air to said power means as a source of air of low total energy relative to the aircraft.

2,751,169
AUTOMATIC STEERING APPARATUS
Robert J. Kutzler, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application May 24, 1950, Serial No. 163,871
15 Claims. (Cl. 244—77)

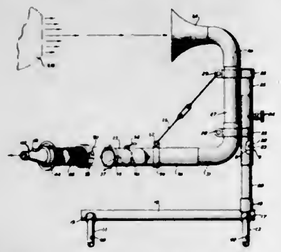
1. Steering apparatus for an aircraft having two rudders for positioning said craft about the vertical axis thereof, said rudders when operated exerting an opposite effect on said craft's position, comprising: a separate power means adapted to position each rudder; a motor means for each power means for controlling its operation; a balanceable electrical impedance network for controlling each motor means, each network including a selective controller common to each balanceable electrical impedance network for deriving a voltage upon displacement from a normal position for unbalancing either network and a rebalancing

voltage deriving controller driven by each motor means; stop means for limiting the adjustment of a rebalancing controller of one motor means when the said controller is moved in one direction and limiting the adjustment of the other rebalancing controller of the other motor means when the other controller is moved in the opposite direction, so that said motor means when said rebalancing con-



trollers are against their stops are operative on opposite voltage signals from said common controller; a voltage changer interconnecting both networks; and means connected thereto for adjusting said voltage changer to oppositely vary the voltage of both rebalancing controllers for causing operation of both motor means in opposite directions within small selective controller displacements.

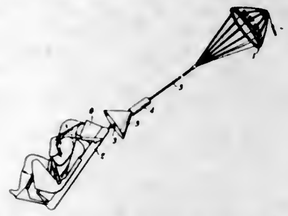
2,751,170
AIRPLANE DE-ICING APPARATUS
John P. Feltman, Jr., Brooklyn, N. Y.
Application December 3, 1954, Serial No. 472,937
1 Claim. (Cl. 244—134)



The method of de-icing an airplane of the turbojet propelled type, said method consisting in capturing gas from the exhaust outlet of the engine at a given distance therefrom for introducing a quantity of air in the gas to lower the temperature of the latter, and directing the flow of such air-gas mixture toward the elements of the plane to be de-iced at a predetermined temperature.

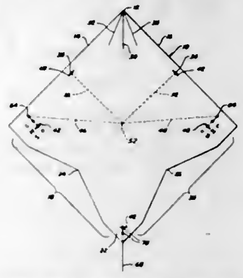
2,751,171
CONTROL MEANS FOR USE WITH EJECTION SEATS OF AIRCRAFT
James Martin, Higher Denham, near Uxbridge, England
Application September 9, 1953, Serial No. 379,196
2 Claims. (Cl. 244—141)

1. Means for slowing up an ejection seat after this has been ejected from an aircraft, comprising a rocket and a drogue, a tow line connected to the seat, said rocket and drogue being mounted in tandem on the tow line, a spring loaded firing pin for firing the rocket when said tow line becomes taut, a cone member projecting from the body of the rocket for deflecting the hot gases issuing from the rocket away from the seat, a body fixed to the cone and within which the firing pin works, a shackle fitting movable along said body, an initiator cartridge, and means controlled by the shackle fitting normally holding the firing pin away from the initiator cartridge, but which



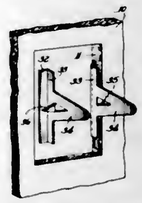
on movement of the shackle fitting is moved to release the firing pin to strike the cartridge and fire the rocket.

2,751,172
FLEXIBLE KITE
Gertrude Sugden Rogallo and Francis Melvin Rogallo, Warwick, Va.
Application November 17, 1952, Serial No. 320,897
3 Claims. (Cl. 244—153)



1. A kite comprising an airfoil member of a flexible material having sweptback leading edges meeting at a forward point and trailing edges joining corresponding leading edges at lateral wing points, said trailing edges meeting at a tail area and being recessed to reduce the rearward tail surface, the arrangement thus presenting the appearance of a flying wing; means for attaching bridle strings to edges of said airfoil member, said bridle strings being joined at a point and exerting simultaneous tension on respective edges to form a single arch across said airfoil member in an airstream, said airfoil being held longitudinally tilted in flight by said bridle lines to effect an angle of attack, wherein the shape of said arch varies as the strength of the supporting wind and said angle of attack.

2,751,173
METAL SWITCH BOX MOUNTING BRACKETS
Clyde R. Fredriksen, Gurney, Wis., assignor to Henry Hildebrandt, Genoa City, Wis.
Application January 2, 1952, Serial No. 264,437
2 Claims. (Cl. 248—27)



1. A metal bracket, which is utilized in pairs for securing in an opening in a wall of plasterboard or the like a switch box having upwardly and downwardly extending projections at the top and bottom of its open front face

for engaging the front face of the wall, comprising a metal angle bracket having a first wide leg for engaging the rear face of the wall and a second narrow leg for extending forwardly between the wall opening and the side of the switch box and including an ear portion constructed to be folded over the front side edge of the switch box into the switch box for securing the switch box in place in the opening in the wall, said first leg extending from one side face only of said second leg, and said second leg having a pointed prong adjacent to and extending substantially parallel with the first leg for insertion into the edge of the wall opening with the first leg engaging the back of the wall for holding the bracket in proper place on the wall as the switch box is being inserted in the opening in the wall and as the ear portion is being folded over the front side edge of the switch box.

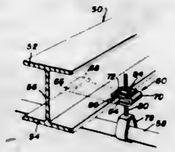
2,751,174
FISHING POLE HOLDER
Floyd S. Parker, McAlester, Okla.
Application December 19, 1952, Serial No. 326,840
1 Claim. (Cl. 248—42)



A holder for a pair of fishing rods comprising first and second posts each of which has its respective end portions disposed at an obtuse angle to each other; means on one end portion of the first post adapted for engagement in the ground, said one end portion and one end portion of the second post being fixedly connected in longitudinally contacting, parallel relation, the other end portions of the post diverging in a direction away from said means within a common plane; saddles of inverted U-shape adapted to individually straddle a pair of fishing rod butts and formed integrally and individually with the divergent extremities of said other end portions, each saddle extending laterally from the extremity to which it is extended in the space between said divergent other end portions, and having an outer leg formed as an extension of the end portion with which it is integral, said saddles lying in planes obliquely related to each other and to the plane of said other end portions of the posts; spaced arms respectively integral at one end with the other legs of the saddles and diverging in a direction away from the saddles, said arms inclining upwardly in the direction of the other ends and being extended substantially normally to the planes of the saddles; and U-shaped seats adapted to underlie said butts in supporting relation thereto and formed integrally with the divergent extremities of said arms, said seats being extended laterally of the arms in a direction away from the space between the arms, the seats having inner legs integral with said divergent extremities of the arms, the seat on each arm being disposed in a plane substantially parallel to the plane of the saddle at the other end of the same arm.

2,751,175
PIPE HANGER CLAMP
Jahugh Jones, Dunbar, W. Va., assignor of fifty per cent to Alfred H. Hoblitzell, Charleston, W. Va.
Application August 27, 1952, Serial No. 306,524
1 Claim. (Cl. 248—72)

In combination with a beam having a wide flange having opposite faces and free edges, a beam clamp assembly comprising a generally C-shaped strap having opposed hook portions connected by a web, said web engaging one of said faces, said hook portions extending around said free edges and engaging the other of said faces, said hook portions having opposed ends spaced apart a distance greater than the width of said flange, the distance between bases of said hook portions being greater than the width of said flange and one of said hook portions



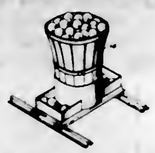
being larger than the other to facilitate engagement of said strap over said flange, aligned slots in said one hook portion extending longitudinally of said strap, a hanger passing through said slots, adjustably engaging one of said free edges and forcing the other of said free edges into said other hook portion, and a clamp plate carried by said one hook portion being in overlying interlocking relation with said one hook portion and retaining said hanger in position relative to said strap.

2,751,176
COLLAPSIBLE GOLF BAG STANDARD
Ivan H. Mowry, Spartanburg, S. C.
Application July 28, 1952, Serial No. 301,267
1 Claim. (Cl. 248—96)



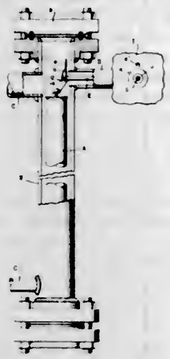
A readily attachable and detachable support means for golf bags or the like comprising an elongated tubular member of a length substantially equal to a golf bag, a golf bag top embracing and securing means comprising a rigid C-shaped member and flexible member thereon secured to the top end of said elongated tubular member, a golf bag bottom supporting and embracing means comprising a rigid C-shaped member and a flexible member thereon for embracing the golf bag and a recessed projecting foot portion adapted to extend underneath the golf bag, a spring-pressed rod slidable within said elongated tubular member, a slot in said tubular member, linkage connected to said rod and extending through said slot, and legs pivoted at their intermediate portions to said linkage, said legs being additionally pivoted at one end to the outer periphery of said tubular member, said rod, when pressed against the ground, adapted to cause said linkage to pivotally move the free ends of said legs from a position adjacent said tubular member to an extended position away from said tubular member, and said rod, when removed from contact with the ground, causing said linkage to return the free ends of said legs to a position adjacent said tubular member, the ground engaging ends of said rod and said legs having ground penetrating points and penetration limiting rings thereon spaced from said points.

2,751,177
NON-SPILL HOLDER FOR BASKETS OR THE LIKE
Zigmund J. York, Milford, Conn.
Application May 14, 1953, Serial No. 354,920
2 Claims. (Cl. 248—146)



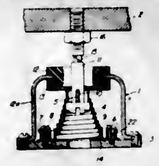
1. In a non-spill holder for baskets or the like, a base frame comprising a pair of equal length transversely aligned spaced parallel side strip members of channeled cross-section, a pair of equal length transversely aligned spaced parallel cross strip members of channeled cross-section at right angles to and superimposed upon said side strip members and rigidly secured adjacent their ends upon the upper sides of said side strip members at points equally spaced a substantial distance from the ends of said side strip members, the lower sides of said cross strip members being upwardly offset from the lower sides of said side strip members a distance at least equal to the height of said side strip members whereby a space is provided beneath said cross strip members in which an end of a side strip of a similar holder may be inter-engaged, and a basket receiving part comprising a cylindrical wall having a diameter substantially greater than the width of the space between said spaced cross strip members and substantially less than the lengtth of said cross strip members, its lower circular edge being engaged with and rigidly secured upon the upper sides of said cross strip members, and its vertical axis being centrally disposed between both said side strip members and said cross strip members, the cylindrical wall being substantially spaced inwardly from the ends of said side strip members, whereby when a plurality of the holders are placed in side-by-side relation the walls of adjacent holders may contact each other while an end portion of one side strip member of one holder is received beneath a cross strip member and against a side strip member of an adjacent holder.

2,751,178
LIQUID LEVEL RESPONSIVE FLOAT SUSPENSION
Norman Knecht, Philadelphia, Pa., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application January 28, 1953, Serial No. 333,730
3 Claims. (Cl. 248—317)



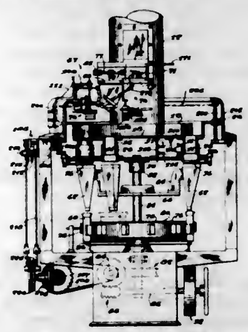
1. A suspension device comprising a vertical upper section, a horizontal lower section, and an inclined intermediate section, and formed with an upper aperture including a portion within said vertical section and a portion within said intermediate section, and formed with a portion of the vertical section of said device extending partially into said upper aperture, and formed with a lower aperture comprising a portion within said horizontal section and a portion within said inclined section, the portion of said lower aperture in said inclined section being of first cross sectional area, the portion of said lower aperture in said horizontal section being of a second cross sectional area less than said first cross sectional area, and the intermediate portion of said lower aperture between said first and second cross sectional areas forming a connecting channel whose width is less than any coresponding cross sectional dimension of said first or second cross sectional areas.

2,751,179
VIBRATION ISOLATOR
Emil G. Oravec, New Haven, Conn., assignor, by mesne assignments, to Textron American, Inc., Providence, R. I., a corporation of Rhode Island
Application February 9, 1953, Serial No. 335,946
5 Claims. (Cl. 248—358)



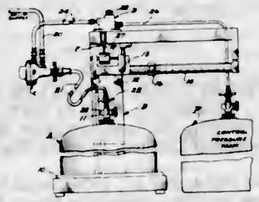
1. A vibration isolator comprising a spring element made of flat strip material wound in at least one volute coil and having at least one end inside the coil and at least one end outside the coil with at least one turn of the coil in contact with adjacent turns thereof to dampen axial movements of the inside end of the coil with respect ot the outside end thereof, two spaced support members, and means connecting said support members, respectively, to the inside and outside ends of the coil so as to hold said ends against relative circumferential movement, said connecting means including an adjusting element connected to one of said ends of the coil and to one support member and adapted to adjust the circumferential setting of the inside and outside ends of the coil with respect to each other and thereby the tightness of the coil, whereby the isolator can be given a new dampening characteristic with respect to relative movement between the support members in a direction axially of the coil.

2,751,180
PACKAGING AND CHECK WEIGHING MACHINE
Stanley R. Howard, Milton, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a corporation of Massachusetts
Application November 24, 1952, Serial No. 322,306
13 Claims. (Cl. 249—17)



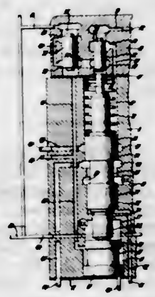
1. In a packaging machine, in combination, measuring means for intermittently forming successive measured loads, means for supplying flowable solid material in bulk form to the measuring means, means for intermittently removing samples from the bulk supply of the material prior to delivery thereof to the measuring means, check-weighing means cooperating with said sampling means for check weighing predetermined volumes of the sampled material, and means adjustably varying the volume of said measuring means in accordance with predetermined variations of said checked weights from a standard whereby to enable the delivery of measured loads of substantially uniform weight irrespective of variations in the density of the material being supplied to the measuring means.

2,751,181
AUTOMATIC FILLER UNIT
John D. Baldwin, Jr., Highland Heights, Theodore A. St. Clair, South Euclid, and Andrew G. Johnson, Lakewood, Ohio, assignors to The Weatherhead Company, Cleveland, Ohio, a corporation of Ohio
Application October 11, 1950, Serial No. 189,534
4 Claims. (Cl. 249—63)



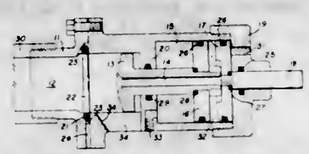
3. In a device of the class described, a shut-off valve, means biasing said shut-off valve to closed position, an expansible chamber connected to said shut-off valve to open the same when said chamber is expanded by fluid pressure, a source of pressure fluid, a control valve having an inlet connected to said source and an outlet connected to said expansible chamber, operating means for momentarily opening said control valve to admit pressure fluid from said source to said chamber to expand the same and open said shut-off valve, said control valve, when closed, acting to trap pressure fluid in said chamber and hold said shut-off valve open, and a vent valve adapted to be opened by a movable condition-responsive device to vent the pressure fluid trapped in said chamber and to close said shut-off valve.

2,751,182
SHIFT VALVE MECHANISM AND CONTROLS THEREFOR
Kenneth E. Snyder, Northville, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 4, 1952, Serial No. 323,965
16 Claims. (Cl. 251—28)



1. A shift valve mechanism for a hydraulically operated automatic transmission comprising a valve body having a bore therein, said bore being provided with a pair of ports connected to liquid conduits, a train of terminal and intermediate elements in said bore for sliding movement therein, an intermediate element of said train controlling communication between said pair of ports, spring means for biasing said intermediate element and only a first of the terminal elements of said train in one direction, said bore being ported for the application of liquid under variable pressure to said train to oppose said spring means, said bore being ported and connected to a supply for the application of liquid under variable pressure to elements of said train to aid said spring means, and means in said valve body actuated by liquid from different additional supplies of liquid under substantially constant pressure for selectively so connecting said bore to said different additional supplies of liquid under substantially constant pressure as to alternatively apply said liquid under substantially constant pressure to said intermediate element to aid said spring means.

2,751,183
MULTIPLE PISTON OPERATED MUD VALVE
Robert R. Crookston, Houston, Tex., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware
Application October 23, 1952, Serial No. 316,396
4 Claims. (Cl. 251—31)

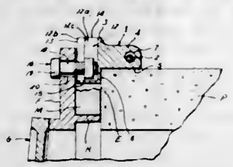


1. A mud valve which comprises a housing provided with a wall member defining with said housing first and second chambers having an inlet and outlet for said first chamber, a seating surface provided by said housing in said first chamber between the inlet and outlet, said inlet having a common longitudinal axis with said first chamber and said outlet being arranged in said housing downstream from said seating surface and having its longitudinal axis perpendicular to the longitudinal axis of the inlet for smooth and uninterrupted flow of mud from the inlet to the outlet through said chamber, a first piston arranged in said first chamber adapted to close and open said inlet by slidable movement along the longitudinal axis of the first chamber into and out of contact with said seating surface, a piston arm connected to said first piston protruding through an opening in said wall member into said second chamber, said first piston and said piston arm being provided with a central bore communicating the first chamber ahead of said first piston with the second chamber for flow of mud into said second chamber on movement of said first piston to close the inlet, a second piston in said second chamber rigidly mounted on said piston arm intermediate its ends, a third piston in said second chamber on the side of said second piston remote from said first piston and in slidable free relationship to said second piston, and separate means for supplying clean operating fluid to the opposite ends of said second chamber for moving said second and third pistons in said second chamber and thereby closing and opening said inlet by actuation of said first piston.

2,751,184
GATE ATTACHING STRUCTURE FOR CONCRETE PIPE
Daniel F. Wilson, Houston, Tex., assignor to Conflo Engineering & Mfg. Co., a corporation of Texas
Application September 22, 1954, Serial No. 457,644
5 Claims. (Cl. 251—147)

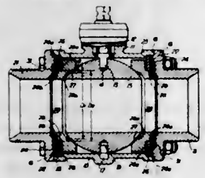
1. A structure for attaching a control gate to a concrete pipe, comprising, a plurality of separate lug mem-

bers adapted to be positioned in angularly spaced relation about the periphery of a concrete pipe adjacent an end thereof, each of said lug members comprising a head portion overhanging an end face of the pipe and having an integral rearwardly extending shank portion seated on



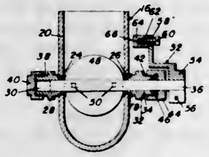
the exterior of the pipe, a hoop means surrounding the periphery of the pipe and engaging the shank portions of all said lug members whereby to clamp the lug members against the exterior of the pipe, and connector means carried by said head portions for attachment of a control gate thereto.

2,751,185
SEAT FOR ROTARY SPHERICAL PLUG VALVE
Stanley Grapes Shand, Cwmbran, Newport, England, assignor to Saunders Valve Company Limited, Cwmbran, Newport, England, a British company
Application January 28, 1949, Serial No. 73,238
Claims priority, application Great Britain February 13, 1948
15 Claims. (Cl. 251—172)



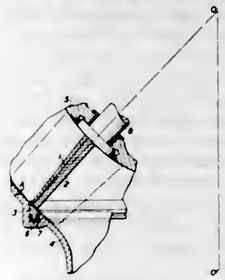
12. In a valve, a casing having a valve chamber and a port, a valve member movably mounted in said chamber, a sealing assembly mounted in said port and having a fluid passage therethrough in communication with the valve chamber, said sealing assembly comprising a carrier having a sealing face at one end thereof for engaging said valve member, an annular diaphragm clamped at its inner margin to the carrier, said diaphragm extending across a portion of the carrier and having its outer margin attached to the wall of said port, a rigid member mounted in said port and extending between a part of said unclamped diaphragm portion and a part of the carrier and serving to support said part of the unclamped diaphragm portion against flexure toward the valve member.

2,751,186
COOLANT CONTROL
Norris W. Glur, Grand Island, Nebr.
Application March 30, 1953, Serial No. 345,618
1 Claim. (Cl. 251—294)



In combination with a water outlet fitting adapted for use with an internal combustion engine, a coolant control, said coolant control comprising a transverse shaft through said outlet fitting, a flow control disk carried by said shaft within said outlet fitting, means for remotely controlling the position of said flow control disk, said transverse shaft having ends thereof journalled in bushings removably carried by said fitting, said shaft having one end terminating within one of said bushings, said one bushing having a cap removably secured thereto and sealing the same against escape of coolants therethrough, said shaft passing through the other of said bushings, said other bushing having packing associated therewith to prevent escape of coolants therethrough, said shaft having the other end thereof terminating outwardly of said other bushing, said means including a crank arm secured to said other end of said shaft outwardly of said bushing, said crank arm being generally Z-shaped with the free end disposed inwardly of the said other end of the shaft, a bracket clampingly supported between said fitting and said other bushing in surrounding relation to the shaft and extending outwardly in parallel relation to the free end of said crank arm and terminating in spaced relation thereto, and a cable secured to the free end of said crank arm and supported by said bracket for sliding movement with respect thereto for controlling said disk whereby the free end of the crank arm, bracket, and cable are disposed inwardly of the other end of the shaft.

2,751,187
FEATHERING RUNNER VANE TYPE HYDRAULIC TURBINES AND PUMPS
Paul Dériaz, Rugby, England, assignor to The English Electric Company Limited, London, England, a British company
Application November 22, 1954, Serial No. 470,445
Claims priority, application Great Britain December 8, 1953
3 Claims. (Cl. 253—31)



1. A hydraulic machine of the kind described, comprising in combination: a stationary casing, a runner rotatably mounted in the said casing, runner vanes pivoted in the said runner about axes converging in a point of the axis of rotation of the said runner having a closed position obturating the flow through the said machine, in the closed position contacting one another in the manner of a frusto-conical shutter and with their tips being clear of the said casing, and a sealing ring mounted on the said casing opposite the said tips of the runner vanes in their closed position the said ring having a sealing position tightly contacting said vane tips, and an inoperative position clearing the said tips.

2,751,188
CERAMIC PRODUCT
Werner Rath, Lauf (Pegnitz), Germany, assignor to Maschinenfabrik Augsburg-Nürnberg, A. G., Augsburg, Germany, a corporation of Germany
Application February 25, 1950, Serial No. 146,257
5 Claims. (Cl. 253—77)

4. A sintered ceramic turbine blade having a predetermined airfoil contour and adapted for use in a high speed, high temperature turbine and having low thermal expansion and high thermal conductivity, mechanical strength, and resistance to thermal shocks particularly above 600° C. and densely compacted crystal structure substantially free of gas pockets and swelling distortion comprising a major portion of about 60% to 93% of a steatite base material including magnesium metasilicate, a minor portion of about 40% to 7% of silicon carbide as a high thermal conductivity increasing component at



least 50% of said silicon carbide before sintering having a particle size from 0.25 to 0.005 millimeter, and minor portions of carbon and of sintering reaction products of said constituents, cavities in said blade produced during sintering being substantially filled with carbon and silicon particles, and said blade being substantially free of surface irregularities and distortions of said predetermined airfoil contour following said sintering.

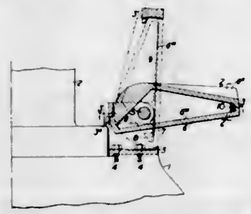
2,751,189
BLADE FASTENING MEANS
Walter A. Ledwith, Glastonbury, Conn., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application September 8, 1950, Serial No. 183,714
14 Claims. (Cl. 253—77)



6. In a blade fastening, a disc having an axial slot in its periphery, said slot extending the entire width of the disc, a blade having a root corresponding in shape to, and fitting in, said slot, said slot being undercut to prevent radial outward movement of the blade, said root and disc having a number of circumferentially extending matching grooves substantially the depth of the slot to provide for radial insertion of the root into the slot, said grooves in the root separating said root into a number of axially spaced root elements, the axial dimension of each of which is at least as small as the axial dimension of the associated groove in the disc.

2,751,190
HYDRAULIC TURBINES
Paul Dériaz, Rugby, England, assignor to The English Electric Company Limited, London, England, a British company
Application April 5, 1954, Serial No. 420,987
Claims priority, application Great Britain April 24, 1953
7 Claims. (Cl. 253—143)

1. A hydraulic vertical shaft turbine comprising in combination: a runner, runner vanes attached to the said runner, hollow hydro-brake vanes, pivot pins articulating the said hydro-brake vanes to the said runner, and an easily movable inertia medium partly filling the said hollow hydro-brake vanes, each of the said vanes having an outside wall sloping inwardly at a very steep angle in a normal working position in which the said medium assumes a position below the pivot pin of the hydro-brake vanes and keeps the same retracted in the said runner, an overspeed condition in which the said medium rises along the said steeply sloping wall above the said pivot pin and tilts the said hydro-brake vane out of the said



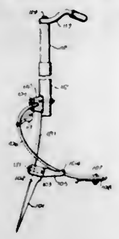
runner into the water vortex, a braking position in which the said medium accumulates in the hollow tip of the hydro-brake vane and keeps it in the tilted position, and a restoring position in which the said outer wall slopes inwardly at a moderate angle in which the said medium upon reduction of speed flows from the said hollow tip along said wall to a position inside of the said pivot, restoring the said hydro-brake vane to its said normal working position.

2,751,191
MOBILE JACK STAND
Vincent W. Schroeder, Wentzville, Mo.
Application July 31, 1953, Serial No. 371,471
1 Claim. (Cl. 254—2)



A mobile jack stand comprising a base plate, two opposed pairs of legs having upwardly converging ends secured by their lower ends to said plate one leg at each corner thereof, a vertically disposed guide cylinder secured to said legs at their converged ends, a ram slidably operable in said cylinder, a pair of axially aligned hinge sleeves secured to said base plate on one edge thereof, a handle including a pair of upwardly converging arms positioned between the two legs whose lower ends are secured to said base plate adjacent said one edge thereof and extending in longitudinal spaced relation with respect to said two legs, the lower ends of said arms being connected to said hinge sleeves for swinging movement of said arms from the longitudinal position to a position at an angle with respect to the longitudinal position, a vertically disposed sleeve secured to said arms at their convergent ends, a handle extension having a grip at one end arranged in an upright direction with respect to said arms with the grip adjacent the convergent ends of said arms and supported intermediate its ends for both sliding and rotating movements in said last mentioned sleeve, and a lug on the other end of said handle member and engageable with a ledge fixedly carried by one of said arms below said last mentioned sleeve for limiting the sliding movement of said handle member outwardly of the latter named sleeve.

2,751,192
SPADE
Heinrich Voortmann, Sarrebruck, Saar Territory, assignor to Wolf Gernete, St. Wendel, Saar Territory, a limited liability company of the Saar Territory
Application January 19, 1951, Serial No. 206,738
12 Claims. (Cl. 254—131.5)



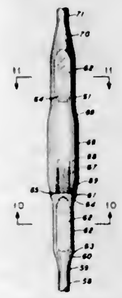
11. A spade, comprising a blade, a shank, a shoulder upon said blade, a fork-shaped collar member connected to said shoulder, a fork spring adapted to engage said collar member, a foot rest plate connected to said fork spring, plates connected with said shank adjacent the lower end thereof, said fork spring being connected with said plates, a tube having a lower end connected with the upper end of said shank, a handle bar connected with the upper end of said tube and a forked spring having an apex connected to said shoulder of the blade and upper arms connected to one of said plates.

2,751,193
PORTABLE CANTILEVER TOW SPOOL
Frank K. Loomis, Wallkill, N. Y.
Application September 3, 1953, Serial No. 378,309
1 Claim. (Cl. 254—166)



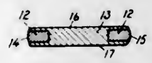
In combination, a spool arranged contiguous to a vehicle wheel and provided with a hollow compartment extending from its inner end, there being a threaded bore in the central portion of said spool communicating with said compartment, said bore being of less diameter than said compartment, an exteriorly threaded bolt arranged in engagement with said bore, a shank of reduced diameter extending into said compartment from the inner end of said bolt, a rectangular plate mounted on said shank and provided with a central opening for the projection therethrough of said shank, connecting means extending between said plate and the wheel of the vehicle, a hook member arranged on the outer surface of said spool, a cable trained over said spool and having one end connected to said hook member, and a plurality of inclined posts anchored in the ground and connected to each other, said cable being connected to one of said posts, said posts each including an upper section and a lower section, each of said sections being provided with an annular groove, a first pair of ears secured to said lower section, a second ear secured to said upper section and interposed between said first pair of ears, there being registering openings in said ears, a pin extending through said registering openings, the bottom end of each of said lower sections being pointed, and manually operable means for rotating said bolt, said manually operable means comprising a stem of reduced diameter extending from the outer end of said bolt, a handle secured to said stem, said connecting means comprising a plurality of chains each having a hook on an end thereof for engaging the vehicle wheel, swivel links connected to said hooks, there being a plurality of spaced openings in said plate engaged by said chains, there being a plurality of openings in said spool communicating with said compartment for the projection therethrough of said chains.

2,751,194
CORROSION PREVENTION
Gilson H. Rohrback, Whittier, and Dwite M. McCloud, Buena Park, Calif., assignors to California Research Corporation, San Francisco, Calif., a corporation of Delaware
Application December 1, 1950, Serial No. 198,524
3 Claims. (Cl. 255—28)



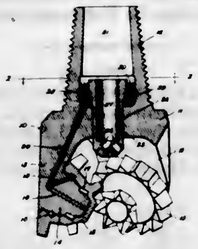
1. A sucker rod having a cylindrical body, a diametrically enlarged portion of circular cross section on one end of said body, a pin protruding from the end of said enlarged portion and in axial alignment with said body, the said enlarged portion gradually decreasing in diameter until it merges with said body, and a member of circular cross section connected to said pin and having one end thereof abutting said enlarged portion, the abutting end of said member having an external diameter coextensive with the adjacent end of said enlarged portion, the external surface of said member gradually increasing in diameter from the external diameter of said abutting end to its maximum diameter.

2,751,195
INSERT FOR ROCK DRILLS
Sven Erik Edström and Bo Gisner, Johanneshov, Sweden, assignors to Sandvikens Jernverks Aktiebolag, Sandviken, Sweden
Application April 20, 1951, Serial No. 221,957
Claims priority, application Sweden April 21, 1950
6 Claims. (Cl. 255—63)



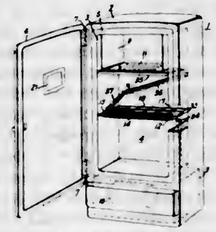
1. In a percussion, rock drill bit an insert of hard metal, composed of grains of carbide material and binding metal, said insert having substantially parallel side surfaces and being composed of two portions of hard metal of substantial hardness, and another portion composed of hard metal of less hardness but tougher than the hard metal in the aforementioned portions, said two portions being positioned in the other portion and being integrally united therewith, said two portions also being positioned at the ends of the insert and having three substantially plane inner side surfaces, perpendicular to each other and surrounded by the hard metal of less hardness, said two portions each having an outer side surface with a circular, cylindrical envelope surface, each of said two portions having a length, considerably shorter than the length of the insert in its longitudinal direction.

2,751,196
ROTARY BIT FOR DRY ROCK DRILLING
Belmont Duard Smith, Eaton, Ohio
Application April 22, 1955, Serial No. 503,292
5 Claims. (Cl. 255—304)



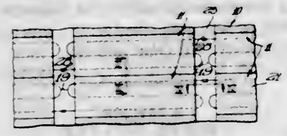
1. A rotary bit for dry rock drilling, comprising a bit body having a chamber in its upper portion for receiving compressed air, and a plurality of cutter elements rotatably carried by its lower portion, the body also being provided with an air passage extending from the chamber to adjacent said cutter elements, and with ducts extending from the chamber to the bearings of the cutter elements; and means extending upwardly from said air passage into the body chamber and in conjunction with portions of the walls of the latter providing an open-topped reservoir adapted to receive lubricant poured into the top of the chamber and thereby provide a lubricant pool the surface of which is subject to direct action of the compressed air in the chamber whereby such lubricant may be forced through said body ducts to the bearings of the cutter elements.

2,751,197
REFRIGERATOR HUMIDIFIER
Howard E. Herrman, Stratford, Conn., and Charles S. Grimshaw, Harborcreek Township, Pa., assignors to General Electric Company, a corporation of New York
Application January 5, 1953, Serial No. 329,598
2 Claims. (Cl. 257—3)



1. In a refrigerator, a food storage compartment, a butter conditioner cooled by air from said food storage compartment, said butter conditioner including a heating element and thermostatic means responsive to the temperature of the air entering said butter conditioner from said food storage compartment, said thermostatic means being effective when said temperature of said air from said food storage compartment decreases below a predetermined minimum for energizing said heating element thereby to increase the temperature of air in said butter conditioner, a receptacle disposed in said food storage compartment, said receptacle containing a supply of water, and a second heating element further contained by said receptacle, said second heating element being controlled by said thermostatic means in said butter conditioner and also energized when the temperature of air from said storage compartment decreases below said predetermined minimum for evaporating said supply of water thereby to maintain a satisfactory degree of humidity in said food storage compartment.

2,751,198
CEILING PLENUM AND AIR CONDITIONING SYSTEM
George M. Rapp, Hamden, Conn., assignor to Houdaille Industries, Inc., Detroit, Mich., a corporation of Michigan
Application January 5, 1951, Serial No. 204,604
1 Claim. (Cl. 257—124)



In a ceiling plenum air-conditioning system, a plurality of rows of conditioning units, each unit comprising: a rectangular sheet metal pan having upstanding side and end walls and having a perforate bottom wall deformed to provide a plurality of grooves in spaced parallel relation to each other and to said side walls, a length of heat exchange tubing extending sinuously on said bottom wall and including straight portions in said grooves and curved connecting portions projecting beyond said end walls with each end of said length of tubing also projecting beyond an end wall of said pan, and a block of sound absorbent material supported in said pan in spaced relation above said bottom wall and extending continuously over the entire cross section of the pan between the upstanding side and end walls thereof, said block having vertical edge surfaces sealed to said upstanding side and end walls to define therewith a plenum chamber sealed along its upper extremity, said units being disposed in aligned side-by-side relation in said rows with the end walls of the units of each row in spaced relation to the end walls of the adjacent rows, a plurality of imperforate plates coplanar with said bottom walls of said units and extending between the end walls of the units of each row and the end walls of the units of the adjacent rows, means disposed above said plates for interconnecting the heat exchange tubing of the units, said plates cooperating with said end walls to define air ducts between the rows of conditioning units and space for said connecting portions of the lengths of tubing with said plates being removable from below to provide access to said tubing interconnecting means, and each of said end walls being apertured to provide communication between said air duct and the plenum chambers of the units.

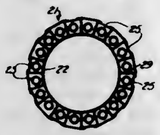
2,751,199
HEAT EXCHANGER
Burdell S. Williams, Larchmont, N. Y., assignor, by mesne assignments, to Taco Heaters, Incorporated, Cranston, R. I., a corporation of New York
Application April 18, 1951, Serial No. 221,665
9 Claims. (Cl. 257—184)



1. In a heat exchanger finned tube arrangement, the combination including a tube, shaped sheet means wrapped

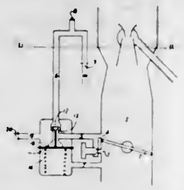
around said tube and forming heat transfer radial fin means, yieldable clip means removably holding said fin means firmly in assembled relationship on said tube and in direct contact therewith, a removable finned liquid metering means on said tube adjacent the end of said heat transfer means where liquid first passes, said distributing means being adapted to distribute liquid over said fins and exterior wall surface of said tube, the largest quantity of liquid being directed to the most effective heat transfer portions of said tube and fin.

2,751,200
LIQUID HEATER
Arthur W. Peters, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a corporation of Ohio
Application October 11, 1951, Serial No. 250,862
2 Claims. (Cl. 257—241)



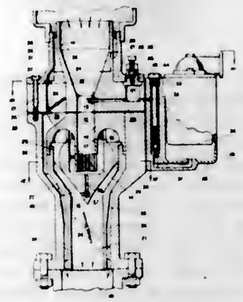
1. A heat exchanger for gas to liquid heat transfer, which comprises: a cylindrical shell; a series of spaced, inverted U-shaped channel members secured thereto by welds in axially parallel relation to form substantially equal spacing under the channel members and between them; a pair of end walls at the respective ends of the members of said series and secured thereto by welds; a series of cover plates each spanning the space between two adjacent members and welded thereto and to said end walls; the walls of the channel members being provided with orifices at alternate ends of said walls except for one wall which is imperforate, and liquid ingress and egress orifices being provided in the heat exchanger next adjacent to and on opposite sides of said imperforate wall whereby to form a circular series of liquid passages from end to end of the heat exchanger; and a series of gas conduit tubes passing through each space under and between the channels and secured to said end walls in holes therein provided.

2,751,201
COASTING ECONOMIZERS
Maurice Ben Heftler, Grosse Pointe Park, Mich.
Application May 24, 1952, Serial No. 289,753
2 Claims. (Cl. 261—41)



1. In a carburetor with a constant level fuel chamber, an air passage and a throttle in said air passage; a fuel channel leading from the fuel chamber upward to a point above the fuel level and thence to a port in said air passage between the throttle and the engine; a valve to close said fuel channel, said valve being actuated by a diaphragm with a spring to urge the valve to open, one side of the diaphragm being exposed to the vacuum existing in the air passage between the throttle and the engine and a portion of the other side of the diaphragm being continuously exposed to the vacuum existing in said fuel channel between the valve and said port; a connection between atmosphere and the said portion of the other side of the diaphragm; a second valve actuated by said diaphragm and controlling opening and closing of said connection to atmosphere, said last mentioned valve being closed when the first mentioned valve is open and being open when the first mentioned valve is closed.

2,751,202
GASIFYING DEVICES
Ottavio Benvenuti, Florence, Italy
Application October 27, 1953, Serial No. 388,572
Claims priority, application Italy December 13, 1952
4 Claims. (Cl. 261—47)

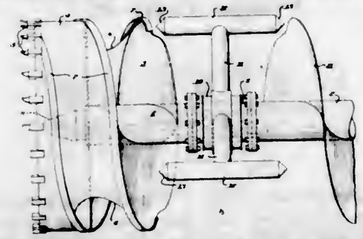


1. A gasifying device, more particularly for the production of air-fuel mixture for internal combustion engines including an exhaust conduit, an annular outlet surrounding said exhaust conduit, a throttle valve in said conduit, a main body connected to said conduit, an enlarged chamber therein, said conduit leading out of said chamber, a cup housed in a concentric position at a suitable distance from the chamber walls, the upper opening being arranged proximate to the ceiling of the enlarged chamber, a plurality of slots in the edge of said upper opening, said slots being extended in a substantially longitudinal direction, a mixing conduit aligned with said exhaust conduit and with said cup and having a smaller cross-section than that of the exhaust conduit, penetrating through the ceiling of the enlarged chamber, the inner end of said mixing conduit being provided with a series of slots arranged in a substantially longitudinal direction and opening adjacent the bottom of the cup, while the other end of said mixing conduit is provided with an enlarged portion communicating with the exterior, a supplemental conduit for a supplemental fluid, arranged on the side of said body, control means for the opening of said supplemental conduit, means starting the opening of said supplemental conduit when the requirement of the mixture exceeds a predetermined limiting volume, and a shaped jacket fitted on one side thereof to said supplemental conduit and on the other side thereof to said annular outlet surrounding said exhaust conduit.

2,751,203
ADVANCEABLE MINING MACHINE HEAD AND SHAFT CARRIED BEARING SUPPORT THEREFOR
Charles E. Compton, Clarksburg, W. Va.
Application December 5, 1952, Serial No. 324,368
1 Claim. (Cl. 262—7)

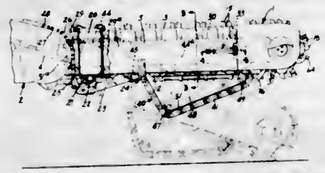
In a mining machine, a rotatable and advanceable structure comprising a shaft, a head rigidly connected with the shaft at the forward end of the shaft having means for cutting into a body of material to be mined and removing material from said body to form a bore in said body, bearing means rotatably supporting the shaft adjacent the head connected with the shaft so that the shaft is held against substantial movement axially of the shaft relatively to the bearing means, the bearing means having

at least three spoke-like portions extending generally outwardly from the shaft spaced apart circumferentially of the shaft providing space for relative movement therepast of large lumps of mined material, an elongated supporting member extending generally parallel to the axis of the shaft carried at the outer end of each of the spoke-like



members to guide the head in the bore, the outer surfaces of the elongated supporting members being disposed at a radial distance from the axis of the shaft approximating the radius of the first mentioned means, and conveying means connected and advanceable with the structure for conveying rearwardly material relatively moving past said spoke-like portions.

2,751,204
DISINTEGRATING HEAD MECHANISM WITH CHAIN TAKE-UP FOR A CONTINUOUS MINER
John R. Sibley, Franklin, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application January 23, 1952, Serial No. 267,717
16 Claims. (Cl. 262—9)



10. A disintegrating head mechanism comprising a head frame pivotally mounted to swing in vertical planes and comprising a rear head frame portion providing a rearward pivot and an adjustable head frame portion guided on said rear frame portion for adjustment in a direction extending radially of the head frame pivot, said head frame portions having parallel vertical side frame portions which cooperate to provide guideways about their margins, endless disintegrating chains guided for orbital circulation along said guideways, a rotary toothed drum journaled on the outer end of said adjustable frame portion and driven by said side chains, an endless conveyor mounted for orbital circulation on said head frame portions for receiving mineral disintegrated by said drum and for conveying such mineral rearwardly of the head mechanism, said conveyor extending longitudinally between said side frame portions, and devices arranged at the opposite sides of said head frame and connected between said rearward frame portion and said adjustable frame portion for adjusting the latter together with said drum and the forward portion of said conveyor longitudinally relative to said rear frame portion to vary the tension of said side chains.

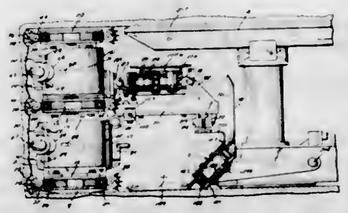
2,751,205
ROAD SURFACE DISINTEGRATOR
Henry T. Petersen, Fresno, Calif.
Application November 6, 1953, Serial No. 390,625
13 Claims. (Cl. 262—9)

7. A road surface disintegrator comprising a substantially horizontal rear frame transversely journaled on rear trailing wheels and having a central opening, a front frame transversely pivoted on said rear frame between the ends thereof and extending forwardly beyond the front end of said rear frame and supported by front steerable wheels, a rectangular roller frame transversely pivoted on the forward end portion of said rear frame and extending rearwardly, a front elevator means connecting the forward end of said rear frame to said front frame, a rear elevator means connecting the aft end of said roller frame to said rear frame, means for selectively actuating either or both of said elevator means to



adjust said frames relative to the ground, and a series of parallel trailing ground rollers transversely journaled in said roller frame and projecting through the central opening in said rear frame, each of said rollers having a multiplicity of ground disintegrating teeth extending therefrom and terminating in a common cylindrical plane concentric to their respective rollers, the teeth of each of the forward rollers of said series, each having a radially extending shank and a sharp terminal end bent angularly in the forward rotational direction of its roller, and the teeth of the rear roller of said series being radial teeth having rounded terminal ends.

2,751,206
CUTTING DEVICE ARRANGEMENT FOR GUIDED RECIPROCATION PARALLEL TO A FACE CONVEYOR
Joseph F. Joy, Pittsburgh, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application March 24, 1951, Serial No. 217,331
36 Claims. (Cl. 262—9)



1. In a mining apparatus, the combination comprising a cutting and dislodging device movable bodily along the face of a mine vein for mining mineral from a solid mine vein and comprising superimposed kerf cutters for cutting parallel kerfs in the mineral to form a projection of mineral between the kerfs, a splitting tool movable bodily in unison with said kerf cutters and having a pointed splitting instrument extending forwardly and inwardly with its splitting point lying in a vertical plane close to the inner sides of said kerf cutters for splitting the projection of mineral from the face, and a deflector disposed vertically between said kerf cutters and extending longitudinally to the rear of said tool and laterally toward the sides of said cutters remote from the vein-face, said deflector extending forwardly and inwardly toward said splitting instrument for deflecting the dislodged mineral laterally between said cutters away from the vein-face.

2,751,207
DRUM TYPE DISINTEGRATING HEAD FOR CONTINUOUS MINER

Arthur Lee Barrett, Franklin, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application August 17, 1953, Serial No. 374,693
15 Claims. (Cl. 262—26)



11. In a drum type disintegrating head, the combination comprising a rotary cylindrical drum-member having recesses spaced apart circumferentially about its exterior periphery, said recesses disposed in spaced apart relation along said drum-member and having sidewalls and rear endwalls, and supports for disintegrating teeth disposed with their base portions seated in said recesses and engaging said rear endwalls, the recess-sidewalls cooperating with the exterior side surfaces of the base portions firmly to position said supports with respect to said drum-member, said recesses being elongated circumferentially of said drum-member and having curved bottoms lying in the surface of a cylinder coaxial with said drum-member, said tooth supports having their base portions shaped to fit said recesses and provided with curved surfaces at the bottoms of their base portions fitting and seated against said curved recess-bottoms.

2,751,208
SWINGING MECHANISM FOR THE DISINTEGRATING HEAD OF A CONTINUOUS MINER

John D. Russell, Franklin, Pa., assignor to Joy Manufacturing Company, a corporation of Pennsylvania

Original application January 20, 1950, Serial No. 139,631. Divided and this application March 14, 1951, Serial No. 215,431
6 Claims. (Cl. 262—29)



1. In an apparatus of the character disclosed, the combination comprising a support, a disintegrating mechanism for dislodging mineral from a solid mine vein and pivotally mounted on said support to swing in vertical planes, and power operated means for swinging said disintegrating mechanism about its pivot comprising a lever pivotally connected at one end to a portion of said mechanism, said lever swinging downwardly about its pivotal connection with said disintegrating mechanism relative to the latter as said mechanism swings upwardly, a flexible link element at its upper portion engaging said support at a point above the opposite end of said lever and depending from said support, said link element having its lower portion connected to said opposite end of said lever, means on said support for causing flexing of said link element as said mechanism swings as aforesaid to provide for bodily movement of said lever with said mechanism relative to said support, and an extensible power device mounted on said disintegrating mechanism to swing in vertical planes therewith and pivotally connected at its lower end to said lever at a point spaced longitudinally from the ends of said lever, said lever extending longitudinally beneath said power device.

2,751,209
CONTINUOUS MINING APPARATUS WITH FLOOR CLEAN-UP MEANS

Arthur Lee Barrett, Franklin, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application September 14, 1949, Serial No. 115,742
8 Claims. (Cl. 262—29)

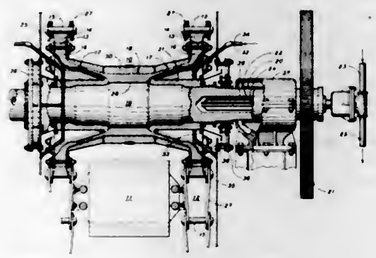


1. In combination, a base, a disintegrating head swingably mounted on said base, power swinging devices for said head, and a floor clean-up device mounted on said base to move forwardly and rearwardly near the floor level, said device including pusher means comprising a pusher frame having a forwardly and downwardly inclined upper surface terminating in a front nose portion disposed at the floor level, said frame having upright pusher plates located rearwardly of said nose portion and disposed perpendicular to said inclined upper surface, said pusher plates projecting laterally at opposite sides of said frame and extending transversely of the path of movement of said device for effecting in coaction with said nose portion a positive pushing action to accumulate loose material on the mine floor as said device is moved forwardly, said power swinging devices arranged on said base at the sides of said pusher frame and including motor elements arranged rearwardly of said pusher plates with the lower portions of said motor elements disposed below the tops of said plates whereby the latter obstruct movement of loose material from said pusher frame towards said swinging devices.

2,751,210
CONVEYOR HEAD SHAFT

Milton Ludwig, Berkeley, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware

Application March 5, 1953, Serial No. 340,599
9 Claims. (Cl. 263—8)

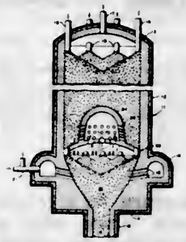


1. In a conveyor system, a wheel and shaft assembly for driving a pair of endless load-carrying means comprising a shaft adapted to be supported at its opposite ends by a pair of bearings and a wheel having a single hub portion concentrically supported on the central portion of said shaft, said wheel having axially elongated transition portions extending from said single hub portion toward the opposite ends of said shaft, said transition portions being radially divergent from said hub portion toward said opposite ends of said shaft when said shaft and said wheel are heated to operating conditions and radially-extending traction rim members formed adjacent the outer ends of said transition portions for engaging said endless load-carrying means of said conveyor system.

2,751,211
PEBBLE HEAT EXCHANGE CHAMBER

John W. Begley, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application July 25, 1952, Serial No. 301,003
6 Claims. (Cl. 263—19)

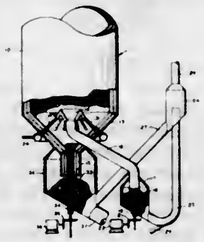


1. An improved pebble heater chamber comprising in combination a closed, upright, elongated shell; pebble inlet means in the upper end of said shell; gaseous effluent outlet conduit means in the upper end portion of said shell; pebble outlet means in the lower end of said shell; a perforate load supporting dome in the lower portion of the chamber formed within said shell, transversely disposed therein and supported at its periphery by said shell; pebble conduits extending through said perforate dome adjacent its periphery, said pebble conduits terminating a substantial distance below the top of said dome to provide a gas collecting space below said dome and the portion of the chamber below said dome being free space to permit the pebble level below said dome to approach the lower ends of said pebble conduits; and heating material inlet conduits extending into the chamber below said dome, spaced a substantial distance downwardly from the outlet ends of said pebble conduits through said dome, and provided at the periphery of said shell.

2,751,212
PEBBLE HEAT EXCHANGE CHAMBER

Robert L. McIntire, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application December 26, 1951, Serial No. 263,142
11 Claims. (Cl. 263—19)



1. Improved pebble heat exchange means comprising in combination a closed, upright, elongated shell; pebble inlet means in the upper end portion of said shell; gaseous effluent conduit means in the upper end portion of said shell; ring-like pebble collector means of predetermined size axially aligned with said pebble inlet means and disposed in the lower portion of the chamber formed within said shell spaced apart from the walls of said shell, the opening therethrough forming at least a portion of pebble conduit means extending downwardly from the chamber section above said collector means and axially aligned with said pebble inlet means; collector supports extending between the lower end of said shell and said collector means; a pebble flow control means operatively disposed immediately below the outlet of said pebble conduit means; at least one additional pebble flow control means operatively disposed below at least one additional pebble conduit formed in the lower portion of said chamber, said additional pebble conduit being adapted to convey pebbles from the chamber section other than that axially aligned with said pebble inlet means and above said collector means; gaseous material inlet means in the lower end portion of said shell; and common pebble outlet conduit means connected to the downstream ends of said pebble flow control means, said flow control means being independently regulatable.

2,751,213
PRICE INDICATOR FOR FULLY AUTOMATIC INCLINATION SCALES

Kurt Wagner, Ebingen, Wurttemberg, Germany, assignor to August Sauter K. G., Ebingen, Germany, a firm

Application November 15, 1952, Serial No. 320,648
Claims priority, application Germany November 17, 1951
2 Claims. (Cl. 265—29)

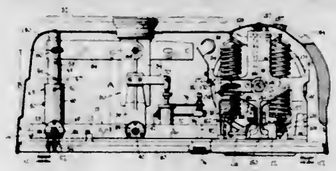


1. A computing scale comprising circular-shaped, revolvable weight indicator means including a transmission mechanism therefor, and substantially rectangular-shaped price indicator means including a ground-glass panel arranged below said weight indicator means and comprising a substantially transparent price table plate of minimum mass displaceable in a plane spaced from and substantially parallel and opposite to said ground-glass panel, said table plate being operatively connected to said mechanism from which said plate depends, whereby said plate is displaced commensurate with the revolution of said weight indicator means, and light rays projector means disposed with respect to said price table plate in order to project from the latter prices of weighed goods onto said ground-glass panel for reading off said prices.

2,751,214
WEIGHING SCALE

William Wilson Herrick, Stamford, Conn., assignor to Pitney-Bowes, Inc., Stamford, Conn., a corporation of Delaware

Application November 4, 1952, Serial No. 318,632
5 Claims. (Cl. 265—68)



1. In a weighing scale, a base; a weighing beam fulcrumed at one end on the base, said beam having the configuration of an open rectangular framework and including a nose consisting substantially of a straight line extension of one only of the sides of the open framework extending adjacent one side of the base; a rotatable indicator drum having a shaft supporting the same positioned parallel to the beam fulcrum and including a pinion on the shaft; an upright mounted on the base adjacent said nose and rotatably supporting one end of said shaft, said nose lying between said upright and the adjacent end of said drum; and a spring assembly providing the entire external counterbalancing effort for said weighing beam acting on said nose, said spring assembly compris-

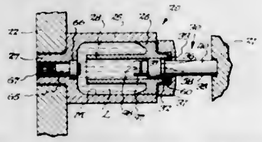
ing a pair of springs supported by said upright and positioned between the latter and the adjacent end of said drum, one at either side of said shaft, said pinion being between the adjacent drum end and the upright; a rack connected with the nose extension of said beam, extending between said springs and into mesh with said pinion, said nose including a connector element slidable thereon towards and away from said fulcrum; and means for fixing the position of the connector elements after sliding adjustment thereof; said spring assembly and said rack both being connected to said connector element as their sole connection with said beam.

2,751,215
WEIGHING SCALES
Mark A. Weckerly, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a corporation of New Jersey
Application July 24, 1952, Serial No. 300,610
8 Claims. (Cl. 265—68)



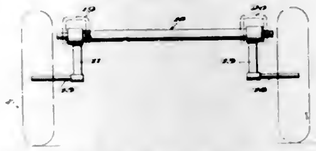
1. In a weighing scale of the class described, in combination, a base, a load receiver above said base, load counterbalancing flexure plates supported from said base, a horizontal scale chart mounted at one side of the base, an indicator operatively connected to the load counterbalancing flexure plates, a driver mounted on the load counterbalancing flexure plates, a horizontal drive shaft carrying a substantially vertical arm and a substantially horizontal arm, said vertical arm being adjustable relative to said horizontal drive shaft, the substantially horizontal arm engaging the driver whereby the drive shaft is pivoted in response to movement of the driver, a vertical pivotal indicator shaft carrying said indicator and having an arm engaging said substantially vertical arm whereby said vertical shaft sweeps the indicator over the chart in response to movements of the drive shaft, and means for urging said indicator toward its rest position on said chart.

2,751,216
LIQUID SPRING
Paul H. Taylor, Grand Island, N. Y., assignor to Wales-Strippit Corporation, North Tonawanda, N. Y., a corporation of New York
Application September 4, 1953, Serial No. 378,575
10 Claims. (Cl. 267—1)



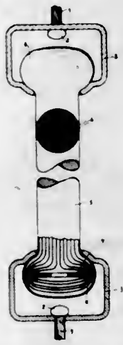
1. A liquid spring comprising a closed container filled with a compressible liquid, a cylinder fixed to one end of said container and mounted to extend inwardly into said container and opening thereinto at its inner end, a piston reciprocable in said cylinder and having an enlarged head slidable in said cylinder and a shank of reduced diameter which extends outwardly of said container through the outer end of said cylinder, said cylinder being closed at its outer end except for the opening through which the piston shank passes, and means for passing liquid from said container into the space between the piston head and the outer end of said cylinder on the inward stroke of said piston.

2,751,217
SELF-DAMPED TORSION SPRING
Tom H. Thompson, Daytona Beach, Fla., assignor to Sabre Research Corporation, Daytona Beach, Fla., a corporation of Florida
Application March 31, 1954, Serial No. 419,996
12 Claims. (Cl. 267—57)



10. A suspension system for a vehicle having a frame, an elongated circular torsion tube, an elongated circular torsion member fitted very tightly inside said tube and being in frictional engagement therewith along substantially the whole tube length, at least one of said members being fixed at both ends to said frame, the other of said members being fixed at one end to said frame and at the other end to a wheel.

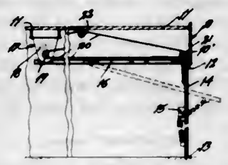
2,751,218
ELASTIC TOW ROPE
Wilhelm Pass, Jr., Schwelm, Westphalia, Germany
Application March 19, 1951, Serial No. 216,366
Claims priority, application Germany March 29, 1950
9 Claims. (Cl. 267—69)



1. A coupling device, comprising in combination, a resilient elongated unitary member composed of a plurality of elongated rubber filaments extending parallel and adjacent to each other and cohering to each other along their lengths; and connecting means at the opposite ends of said resilient elongated unitary member for connecting the same to other members, said connecting means including at each end of said member an enlargement forming part of said member and having an annular shoulder located inwardly from the extremity of said member and directed away from said extremity; and a housing enclosing said enlargement forming part, and having an annular end wall having an inner diameter smaller than the maximum diameter of said shoulder and engaging said shoulder.

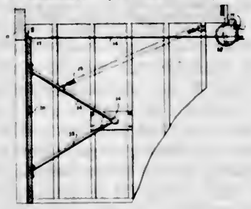
2,751,219
TORQUE SENSITIVE REVERSIBLE MOTION ACTUATOR
Howard G. Dodge, College Place, Wash.
Application August 30, 1954, Serial No. 452,850
2 Claims. (Cl. 268—59)

1. In a garage door operating mechanism wherein a door is carried by a mounting and is movable to open and closed positions by operation of a reversible drive mechanism, a control device for the drive mechanism comprising a rockable arm interposed in said drive mechanism and urged to swing in one direction from a mid point in response to torque transmitted by the drive mechanism when it is moving in one direction and urged to swing in the opposite direction in response to torque transmitted by the drive mechanism when it is moving in the opposite direction, a pair of spring pressed members engaging the rocker arm at the mid point, one member opposing move-



ment of the arm in one direction from mid point, means restraining said member from following the arm when it moves in the opposite direction from said mid point, the other member opposing movement of the arm from said mid point in said opposite direction, and means restraining the last named member from following the arm when the arm moves in said one direction and is opposed by the first named member.

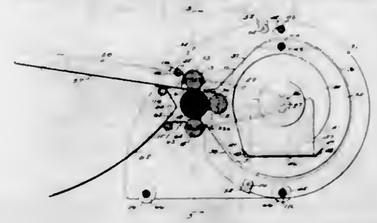
2,751,220
DOOR LOCKING MEANS
Moscow K. Richmond, Los Angeles, Calif.
Application March 1, 1954, Serial No. 413,237
7 Claims. (Cl. 268—74)



1. In an overhead operated door including a substantially horizontal elongated actuating member for swinging the door from an open overhead position to a closed vertical position against a door opening frame; means for locking said door in closed position, comprising, in combination: a bracket having a base plate secured to the top of said door, said base plate having upwardly turned side flanges straddling one end of said actuating member, said flanges having alined elongated slots; a pivot pin passing through one end of said actuating member and through said slots to pivotally couple said end of the actuating member to said bracket; and projecting means rigidly secured to said frame and positioned over said bracket in the closed position of the door, longitudinal movement of said actuating member toward the door after said door is closed against said frame, causing said one end of the actuating member to move from a position wherein it clears the projection upon opening of the door to a position wherein the projecting means lies in its path whereby to prevent opening of the door.

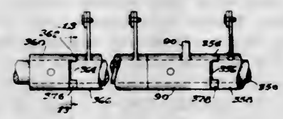
2,751,221
FOLDING MACHINE OF THE BUCKLE CHUTE TYPE
Walter J. Hanson, Port Chester, N. Y., assignor to Pitney-Bowes, Inc., Stamford, Conn., a corporation of Delaware
Application July 21, 1950, Serial No. 175,079
6 Claims. (Cl. 270—68)

1. In a sheet folding machine, the combination with sheet folding rollers including a central roller having an upper roller, lower roller and side roller frictionally engaged therewith; of buckle chutes comprising a group of vertically disposed and horizontally aligned spaced plates having horizontally aligned central openings and aligned slotted portions therein, stop means, the slotted



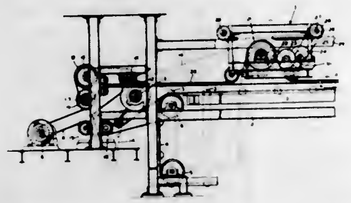
portions cooperating with the rollers and stop means to effect buckling and folding of the sheets fed thereto, supporting means for said vertically disposed plates, and a power drive for said central roller including a motor mounted within the central opening in said plates.

2,751,222
SHEET-FOLDING MACHINE
Robert G. Dexter, Lexington, Mass., assignor, by mesne assignments, to Barkley & Dexter, Incorporated, Fitchburg, Mass., a corporation of Massachusetts
Application June 19, 1952, Serial No. 294,307
8 Claims. (Cl. 270—81)



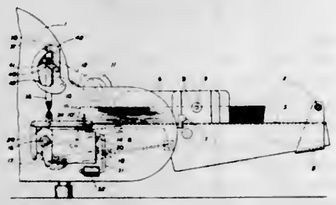
1. In a sheet-folding machine for folding sheets of varying lengths, in combination, sheet-folding means, means for advancing a sheet into operative relation to the folding means, and control means including a single photo-sensitive detector disposed a fixed distance in advance of said folding means for detecting the passage of the leading and trailing edges of the sheet being advanced into folding position, a differential timer responsive to said detector for actuating said folding means, said timer including a cam operative through a distance related to said fixed distance and to the rate of advance of the sheet and having two magnetic clutches selectively responsive to said single detector for cooperation with said cam, means for driving said clutches at different speeds relative to the advance of the sheet, one of said clutches being driven at a reduced rate proportionate to the division to be made by the fold when said leading edge intercepts the detector, the other clutch being driven at a rate corresponding to the advance of the sheet when the trailing edges pass the detector whereby to effect folding of the sheet at a predetermined point in the length of the sheet, said timer cam being mounted intermediate said magnetic clutches and adapted to be selectively attracted to one and then the other thereof upon passage of said leading and trailing edges respectively, a limit switch cooperating with said cam and circumferentially adjustable relative thereto arranged to actuate said folding means when the sheet has been advanced into operative position to be folded, and a fixed stop switch cooperating with said cam for discontinuing the operation of said timer at the end of one revolution to terminate a cycle of operation.

2,751,223
LOOP CONTROLLING MEANS IN SHEET HANDLING DEVICE
Edward G. Schairer, Manheim Township, Lancaster County, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a corporation of Pennsylvania
Application July 2, 1951, Serial No. 234,810
2 Claims. (Cl. 271—2.2)



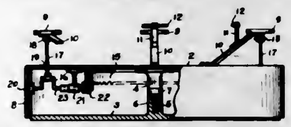
1. In a device of the type described for handling a continuous web of sheet material, the combination comprising a feed roll; a continuously moving accumulator for storing a quantity of material in festoons supplied by said feed roll; a supporting track positioned above said accumulator; a movable carriage positioned on said track, said carriage being provided with traction wheels in engagement with said track to move said carriage along said track; a pull-out roll mounted on said carriage for removing material from the accumulator; a slip clutch connected to said pull-out roll, the arrangement being such that the pull-out roll is positioned in a vertical plane slightly beyond the festoon farthest removed from the feed roll; common means for driving the feed roll, accumulator, carriage, and pull-out roll, said common driving means comprising dual driving wheels engageable with a common flexible drive means, said flexible drive means driving said carriage and engaging said pull-out roll to turn it in one direction; a clutch for each driving wheel; and means for selectively engaging each of the clutches with its separate driving wheel to reverse the direction of travel of said flexible driving means, said flexible means when moving in one direction causing said carriage to move in one direction and causing said pull-out roll to turn, and when said flexible means is moved in the other direction, causing said carriage to move in another direction and said pull-out roll to slip.

2,751,224
SHEET FEEDING ARRANGEMENTS
Leonard Herbert Neville Watton, New Malden, and Roland Brown and Frederick William Hall, London, England, assignors to Hall Telephone Accessories Limited, London, England, and Block & Anderson Limited, London, England, both British companies
Application March 27, 1953, Serial No. 345,042
Claims priority, application Great Britain March 31, 1952
6 Claims. (Cl. 271—43)



1. A sheet feeding arrangement comprising a feed table pivotally mounted at or near the end remote from that at which the feed sheet is delivered, spring means tending to urge the delivery end of the table in an upward direction, a shaft on which said spring means acts tending to rotate said shaft, means associated with said shaft for lifting said table by the rotation under the spring action, an escapement wheel on a further shaft positively geared to said first shaft so as to rotate therewith, an oscillatory escapement member cooperating with said escapement wheel and adapted to oscillate at a predetermined rate so as to regulate the rotation of said escapement wheel and thereby to regulate the rate of rise of said feed table under the action of said spring means, a detector located in position to engage the surface of the uppermost sheet, and locking means controlled by said detector and operating on said escapement member to lock said escapement member to arrest the upward travel of the delivery end of the table when it is positioned with the uppermost sheet at the desired level for being fed from the feed table.

2,751,225
OCCUPANT PROPELLED ROUNDABOUT
Helena B. Howell, Cornopolis Heights, Pa.
Application November 17, 1953, Serial No. 392,540
3 Claims. (Cl. 272—33)



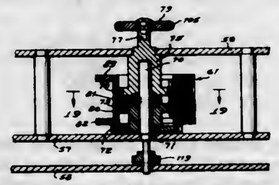
1. A toy merry-go-round comprising a turn-table mounted upon a base for rotation in a horizontal plane, a vertically oscillatory seat for a rider spaced above the top of said turn-table, means for supporting the entire weight of a rider comprising a spring-biased arm secured at one end to said seat and extending downwardly therefrom to a point of attachment to said turn-table, said arm being angularly movable with respect to said point of attachment to admit of the substantially vertical oscillatory movement of the seat, an annular gear concentric with and secured to rotate with said turn-table, a pinion rotatably mounted for driving engagement with said gear, and pinion-rotating means interconnecting the arm-and-seat unit with said pinion, the latter means comprising a connecting rod extending downwardly from beneath said seat and being vertically reciprocable under the direct effect of the alternate thrusts of the vertically exerted weight of the rider and the spring-biasing force of the arm for translating the vertical oscillation of said arm-and-seat unit to the rotation of said pinion, with the consequent rotation of the turn-table.

2,751,226
BASEBALL PRACTICE DEVICE
John J. Conway, Philadelphia, Pa.
Application March 23, 1953, Serial No. 343,891
1 Claim. (Cl. 273—26)



Game apparatus which comprises a standard adapted to have its lower end secured in fixed position relative to a playing surface with its upper end disposed thereabove, a vertical pin extending axially of the upper end of the standard, a plate about said pin providing a bearing surface, a collar received by said pin and mounted for rotation on said plate, abutment means on said pin above the collar for limiting upward axial movement of the collar and maintaining the collar generally normal to the pin, said collar having a lateral extension with a free end portion, a notch in said free end portion of the extension and an aperture in the extension spaced from the notch, a suspension cord having a captive ball at its free lower end portion and its upper end portion secured to the lateral extension, said upper end portion of the cord being threaded through the notch and aperture in the extension and providing an overlap immediately below the notch in the extension, rigid clamping means about the overlap, said clamping means maintaining the overlap below the notch and providing rigidity to the overlap whereby the suspension cord is prevented from being deflected above the extension when force is applied to the captive ball to cause it to describe a generally circulatory path about the standard.

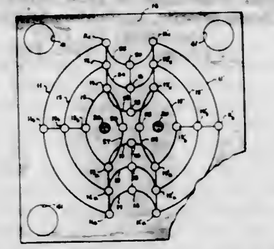
2,751,227
RACING GAME
Benjamin H. Seltzman, New Hyde Park, N. Y.
Application March 14, 1955, Serial No. 494,104
5 Claims. (Cl. 273—86)



1. In a racing game, a playing table shaped to define a race track, a plurality of flexible haul cords disposed in substantial parallelism along the course of said track, a plurality of cord moving mechanisms each mounting one of said haul cords for longitudinal movement along said track, each of said haul cords thus being adapted to carry a racing element along said track, a plurality of drive elements each operatively connected to one of said cord moving mechanisms to effect movement of the associated haul cord along said track at a predetermined speed, motive means operatively connected to said drive elements for actuating the latter, and independent control means associated with each of said drive elements to vary the speed of the respective drive element and hence of its haul cord, each of said drive elements comprising rotary input and output gears, and at least one rotary, revolvable planetary gear in transmitting connection between said input and output gears, said planetary gear being connected to the associated control means and revolved by the latter to vary the speed of said output gear relative to said input gear, each of said control means comprising a rotatable cam shaft, a cam removably keyed to said shaft, and a follower in engagement with said cam and connected to said planetary gear for revolving the latter in response to the contour of said cam.

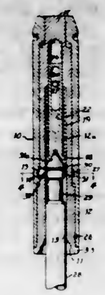
2,751,228
GAME BOARD AND PLAYING PIECES
Guadalupe Rojo, North Chicago, Ill.
Application January 24, 1955, Serial No. 483,506
3 Claims. (Cl. 273—131)

1. A game board and game playing pieces comprising a playing surface having a plurality of indicia each serving to identify a game piece playing position and suitable for receiving a game playing piece thereon; said indicia arranged in groups of three and being connected by a line forming an arc of one of at least three concentrically arranged circles with each of the terminal indicia of each said group of three indicia being connected with the laterally adjacent terminal indicia of another said group by a curved line having a game playing piece indicia intermediate the ends thereof, and each said terminal indicia also being connected to its immediately radially adjacent



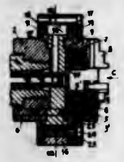
terminal indicia by a straight line, and each of said indicia adapted to receive game playing pieces in superimposed contacting position thereon.

2,751,229
RELEASABLE GRIPPER FOR HOLDING AN ARTICLE SUSPENDED
Arthur B. Schultz, Western Springs, Ill., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application November 16, 1953, Serial No. 392,531
2 Claims. (Cl. 279—75)



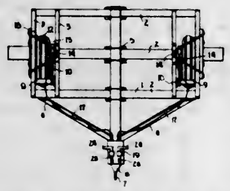
2. In combination, an article having at one end a head, a reduced neck, and a shoulder lying between the head and the neck and being larger in diameter than the neck, and smaller in diameter than the head, and a holding device comprising a hollow inner member receiving the said one end of the article, a hollow outer open end member receiving the said inner member and having internal shoulders formed by concentric bored portions progressing from the said open end of a relatively larger diameter, a relatively smaller diameter and an intermediate diameter, and holding elements mounted in the inner member and being of a size large enough to protrude internally against the shoulder on the article and simultaneously externally into the portion of intermediate diameter bore in the outer member, and small enough to be contained within the outermost portion of the inner member when protruding internally against the narrow neck on the article, and a plunger mounted in the inner member and spring urged against the said one end of the article so as to be enabled to move along the inner member to a position adjacent the holding elements when the article is removed from the holding device for restraining the holding elements from protruding internally of the inner member and thus causing them to protrude externally of the inner member into the said large diameter bore portion of the outer member whereupon the holding elements may engage the shoulder formed by the juncture of the said larger diameter and smaller diameter bores and restrain movement of the inner member with respect to the outer member.

2,751,230
HYDRAULIC CHUCK
Hans Korber, Fribourg, Switzerland
Application November 18, 1950, Serial No. 196,533
Claims priority, application Switzerland November 21, 1949
7 Claims. (Cl. 279—114)



1. A chuck with clamping jaws movable radially by means of a scroll plate; comprising a spindle, a plurality of ducts passing through said spindle for admission of a pressure medium, at least one reciprocable piston element arranged in a plane perpendicular to the longitudinal axis of said spindle and actuatable by said pressure medium, coupling means intermediate said reciprocable piston element and said scroll plate and operatively connectable with the latter to selectively move said scroll plate in a given direction and in a direction opposite thereto for displacing said jaws toward and away from each other, supporting means adapted for rotation simultaneously with said spindle, outer jacket means spaced from said supporting means and defining therebetween a substantially annular chamber, said reciprocable piston element being operatively connected to said jacket means and operatively retained within said chamber, said supporting means being provided with a pair of divergent radial passageways each communicating at one end with a respective duct and each communicating at its opposite end with said chamber, and segmental sealing means secured to said supporting means and disposed within said chamber extending through a predetermined arc between said opposite ends of said pair of passageways, thereby defining a fluid-tight segmental annular working chamber having substantially an angular magnitude of 360 degress less said predetermined arc.

2,751,231
TWIN PUMP SYSTEM FOR ELEVATING AND/OR LEVELLING A TWO-WHEEL SUPPORTED IMPLEMENT CHASSIS
Edwin Meidinger, Lethbridge, Alberta, Canada
Application July 16, 1953, Serial No. 368,259
1 Claim. (Cl. 280—6)



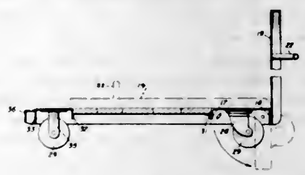
In an implement chassis including a substantially rectangular framework, a draft arm extending forwardly from said chassis, a pair of ground engaging wheels supporting said chassis, wheel arms pivotally secured to the side members of said framework, an axle secured adjacent the lower ends of each of said arms, said wheels being mounted for rotation upon said axle; an hydraulic cylinder and piston assembly extending between adjacent the lower end of each of said arms and said framework and a twin pump unit on said draft arm connected to said hydraulic cylinder and piston assemblies, said pump unit including a pair of independently operated pump handles extending upwardly therefrom, a pair of independently operated pressure release levers extending upwardly and rearwardly therefrom, said pump handles and said release levers having a common pivotal mounting, said pump handles and said release levers being in close coupled relationship, said pump handles each including horizontal portions and upwardly curved portions lying side by side and each terminating in outwardly turned handle portions whereby either or both may be operated by one hand.

2,751,232
BABY STROLLER AND LATCHING MECHANISM THEREFOR
Carl W. Sundberg, Birmingham, Mich., assignor, by mesne assignments, to Reo Motors, Inc., Lansing, Mich., a corporation of Delaware
Application October 7, 1953, Serial No. 384,619
11 Claims. (Cl. 280—41)



1. A baby stroller having a collapsible frame including a pair of corresponding support members, catches on said members, a handle connected to said support members, seat-supporting means carried by said frame and including a crossbar having arm portions pivotally connected to said handle and formed with terminal portions projecting beyond the connecting pivots defining latch elements movable upwardly into engagement and downwardly out of engagement with said catches by pivotal actuation of said bar.

2,751,233
COLLAPSIBLE TOW TRUCK
Frederick C. Racker, Nashville, Tenn., assignor to The Jakes Foundry Company, Nashville, Tenn., a corporation of Tennessee
Application April 5, 1955, Serial No. 499,335
6 Claims. (Cl. 280—41)



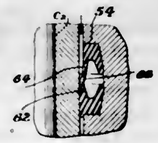
1. A truck comprising a deck, facing U-shaped channels receiving opposed edges of said deck within the same, spaced side plates located on opposte sides of said channels and having end portions extending beyond the ends of said channels, front and rear transverse frame members constructed to be disposed in spaced relation at opposite ends of said deck between said side plates, spaced fasteners for connecting one frame member to said side plates and located in substantially the same longitudinal position with regard to each side plate, the fasteners nearest the longitudinal center of each side plate being removable to permit pivotal movement of such frame member during storage and shipment, a rack mounted on said last mentioned frame member and which during storage and shipment can be disposed in collapsed position along said deck, and caster mounts and casters spaced transversely beneath each of said frame members with the caster mounts on the pivoted frame member rotatable about a substantially vertical axis to permit steering of the truck.

2,751,234
MEANS FOR REDUCING THE OVERALL HEIGHT OF A MOTOR VEHICLE TRAILER
Kibbey W. Couse, Newark, N. J., assignor to Reconstruction Finance Corporation, New York, N. Y., a corporation of the United States
Application April 5, 1952, Serial No. 280,735
5 Claims. (Cl. 280—44)



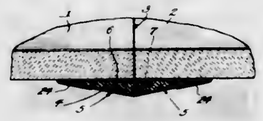
1. In combination, a motor vehicle trailer including a chassis the bottom surfaces of which constitute skid surfaces in a common horizontal plane, a rear truck, means removably connecting said truck directly to said chassis, a pair of cylinders fixed to said trailer disposed forwardly of said truck and spaced from each other transversely of the chassis, another pair of cylinders fixed to said trailer disposed to the rear of said truck and spaced from each other transversely of the chassis, an actuating element for each cylinder including a piston reciprocable therein and a ground-engaging element connected to said piston, said actuating elements being operable in one direction to move the ground engaging elements below said plane of said skid surfaces and into contact with the ground thereby to raise the chassis to provide for removal of the rear truck from the chassis, and said actuating elements being operable in the opposite direction to move the ground-engaging elements above said plane of said skid surfaces thereby to lower the trailer to bring said skid surfaces into contact with the ground.

2,751,235
WELL HEAD PIPE SUSPENSION
John D. Watts and Elwood K. Pierce, Jr., Houston, Tex., assignors to Gray Tool Company, Houston, Tex., a corporation of Texas
Application October 16, 1952, Serial No. 315,002
2 Claims. (Cl. 285—22)



1. For use between an oil well pipe and a well head member having a bore of slightly greater diameter than the outside diameter of the well pipe for receiving the well pipe and an annular recess open at one side toward the well pipe and closed at its opposite side; sealing means for providing a pressure-tight seal between the well pipe and well head member and operable upon an increase of fluid pressure from either axial direction to move into increased pressure-tight engagement, said sealing means comprising an annular pressure deformable sealing ring of rubber or the like adapted to be disposed within said recess, said ring being of a size to substantially fill said recess and having a relatively thin wall arranged to protrude beyond the open side of said recess into slidable pressure tight engagement with the exterior surface of the well pipe, relatively thick end walls extending from the edges of said first-mentioned wall toward the closed side of said recess, and integral wall means disposed on the free edges of said end walls arranged to engage the closed side of said recess and defining with said first-mentioned wall and said end walls a circular pressure chamber within said recess, the protruding part of said first-mentioned wall comprising spaced flexible lips diverging outwardly of said recess toward one another and an intermediate wall portion integrally interconnecting said lips, said intermediate wall portion having an opening extending therethrough into communication with said pressure chamber, said first-mentioned wall being sufficiently yieldable so that an increase in fluid pressure from either axial direction is operable to move the adjacent lip out of engagement with the exterior surface of the well pipe to thereby permit said increased pressure to enter said pressure chamber through said opening and urge the other lip into increased pressure-tight engagement with the exterior surface of the well pipe.

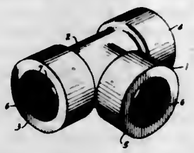
2,751,236
EXTERNAL JOINT SEALING STRIP
De Witt H. Wyatt, Columbus, Ohio
Application June 20, 1952, Serial No. 294,570
1 Claim. (Cl. 285—114)



In a flexible pipe coupling; a joint-encircling strip comprising an interior filling consisting of a tacky yieldable, pressure deformable composition, said strip normally being low and wide and substantially triangular in its transverse cross section, having a flat, inner surface for direct application to the outer circumferential surfaces and meeting ends of a pair of longitudinally aligned pipe members, the central region of the strip completely encircling and bridging the joint space formed between the meeting ends of said pipe members, the apex portion of the strip being covered by a relatively strong flexible material; and a relatively weak flexible sheet of covering material covering the base and meeting with the apex covering material on the sides of said strip and conforming to its configuration, said covering material adjacent the center of the flat inner surface of said strip being weakened along transversely spaced, parallel lines to provide a web adapted to be removed at the time of application of the strip to the pipe members, whereby to cause the central, longitudinally extending region of the tacky flat inner surface of the strip to engage directly with adjacent meeting ends of pipes about which the strip is to be applied, said interior filling tending to extrude into a joint space formed between the meeting pipe ends.

2,751,237
HOLLOW FIBER REINFORCED RESIN PRODUCTS SUCH AS PIPE FITTINGS WITH MOLDED INTERNAL THREADS AND METHOD OF MAKING SAME

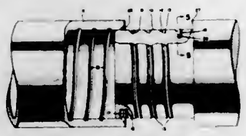
Edwin E. Conley, Tulsa, Okla.
Application November 10, 1952, Serial No. 319,714
10 Claims. (Cl. 285—210)



9. A molded glass fiber reinforced resin internally threaded pipe fitting comprising, a hollow body of molded thermosetting liquid resin having a plurality of laminations of glass fiber fabric in the walls of the body and extending circumferentially therein, branches on said body having molded internal screw threads in the ends thereof, a plurality of laminations of glass fiber fabric in the walls of the branches and extending circumferentially thereof under tension, the inner lamination of glass fiber fabric in the branches conforming substantially to the contour of the internal threads, and a fibrous strand having relatively high tensile strength extending circumferentially of each branch in alignment with the threads therein and in engagement with the outer surface of the portions of the inner lamination of the glass fiber fabric in the apex of the threads, said fibrous strand being in tension.

2,751,238
QUICK ACTING CONNECTOR

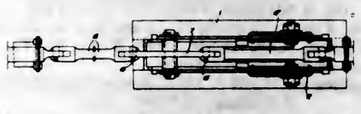
Conrad R. Vegren, Washington, D. C.
Application July 2, 1952, Serial No. 296,982
8 Claims. (Cl. 287—119)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In a connector assembly, a male member and a female member, both said members having substantially cylindrical surfaces for relatively close telescopic engagement, one of said members having coextensive first and second helical grooves, said second groove having a depth less than said first groove and communicating throughout its length with the first groove, said other member having a groove formed therein, said first groove being in substantial registry throughout its length with the groove of the other member when the first and second members are in telescopic engagement, a spring mounted in said first groove, means for releasably retaining said spring in tension in the first groove, said spring being adapted to move against said other member when released from tension, said first groove being of a depth to substantially contain the whole of said spring and the groove in the said other member being of a depth materially less than the cross section of the spring, means to release the spring from tension to cause it to move into the groove of the said other member upon assembly of the members, relative rotation of the members effecting movement of said first groove out of apposition with the spring and said second groove into apposition with the spring to effectively lock said members against separation.

2,751,239
HATCH FASTENER

Pierre François Nogrette, Paris, France, assignor to Saint Cloud Avions Marcel Dassault, Saint-Cloud, France, a body corporate of France
Application April 30, 1953, Serial No. 352,237
Claims priority, application France January 8, 1953
3 Claims. (Cl. 292—36)



2. An arrangement for locking a hatch to stationary parts on opposite sides of the hatch, comprising two oppositely directed bolts adapted to engage said stationary parts through a sliding movement in a plane parallel with that of the hatch, a first lever pivotally secured to the hatch, a link pivotally connecting said first lever to each bolt, a cam-shaped projection on said first lever, a control lever pivotally secured to the panel, springs urging one end of the said control lever into locking surface engagement with the cam-shaped projection on the first lever, said control lever being collapsed when engaging the first lever against the hatch, the release of the cam-shaped projection on the first lever being obtained through depression of the other end of the control lever against the action of the springs.

2,751,240
LID FASTENER

Arthur Claud-Mantle, Trumbull, Conn., assignor to The Bassick Company, Bridgeport, Conn., a corporation of Connecticut
Application November 30, 1953, Serial No. 395,073
8 Claims. (Cl. 292—113)

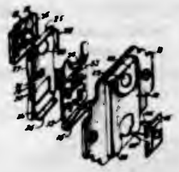


1. In a fastening assembly for attachment to a box body to fasten a box lid, a bracket, a swingable operating lever having one end thereof pivoted to the bracket, and latching means connected to the bracket and adapted to exert a resilient downward pull on the box lid, said means comprising a latching member having a portion thereof adapted for fastening the box lid, the latching member being mounted for sliding and swinging movement, the operating lever having operative means of connection with the latching member, said last-named means being swingable relatively to the latching member and said lever.

2,751,241
LOCK

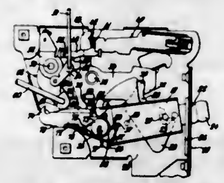
Edward H. Simonsen, Elmwood Park, Ill., assignor to Simonsen Metal Products Company, Chicago, Ill., a corporation of Illinois
Application December 17, 1954, Serial No. 475,913
7 Claims. (Cl. 292—175)

3. A lock for a box comprising an outer supporting casing having an indented portion providing a housing for a lock mechanism, a lock mechanism comprising an assembly plate provided with inturned flanges at the sides and ends which are adapted to be seated within the housing, a slidable lock plate assembled in sliding relation with the assembly plate and connected thereto by an interengaging tongue and slot connection, said outer supporting casing having an aperture and an operating member for the lock mechanism extending through the aperture and engaged with the lock plate.



2,751,242
LIFT BOLT DOOR LOCK REMOTE LOCKING MECHANISM

Bowley D. Priestman, Livonia, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 5, 1952, Serial No. 318,851
8 Claims. (Cl. 292—229)

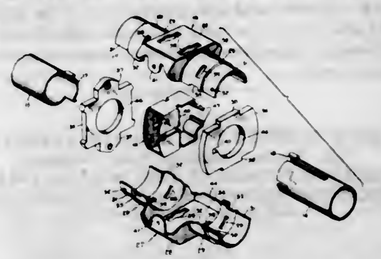


1. A door lock of the character described, including: a lock bolt movable between latched and released position; actuating means for releasing said bolt, including an actuating lever; a handle for operating said actuating lever; a hook lever adapted to engage said actuating lever when the bolt is in released position for preventing operation of said bolt by said handle; first spring means urging said hook lever toward said actuating lever; a control lever having a shoulder engaging said hook lever; second spring means operative through said control lever to move said hook lever away from said actuating lever when the bolt is in latched position, said second spring means being stronger than said first spring means; and shoulder means on said bolt adapted to engage said control lever and to move said control lever against the force of said second spring means when the bolt moves to released position, said hook lever moving into position to engage said actuating lever under the force of said first spring means.

2,751,243
LOCK CASE AND ROSE CONSTRUCTION

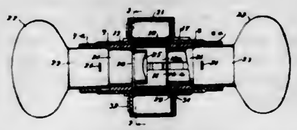
Daniel L. Biblin, Terryville, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn., a corporation of Connecticut
Application October 14, 1952, Serial No. 314,704
12 Claims. (Cl. 292—337)

9. In a lock of the class described, a spindle housing having a central portion and cylindrical outer and inner end portions, sheet metal complementary parts coextending parallel to one another axially of said housing and together forming each of the said central and end portions of said housing, a flat surface on each of said complementary parts adapted to support a bolt retractor for retracting movement in said central portion of said spindle housing, a pair of plates in said central portion, portions of said plates located in openings in each of said complementary housing parts whereby to mount said plates transversely to the axis of said housing for guiding said bolt retractor as it moves on said flat surfaces, outer and inner roses, and means assembling said outer and inner roses on said outer and inner end portions of said spindle housing.



2,751,244
DOOR LATCH OPERATING MECHANISM

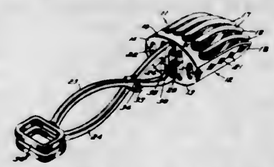
Frank J. McConnell, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a corporation of Connecticut
Application March 8, 1952, Serial No. 275,618
10 Claims. (Cl. 292—358)



6. A door latch operating unit including a casing, retractor means in said casing, a spindle rotatably carried by said casing and having a segmental portion extending therefrom, the said portion having opposite edge portions bent outwardly beyond the periphery of the spindle to provide rollback portions for operating said retractor means, a thrust washer surrounding the spindle, means preventing inward and outward movement of said washer relatively to the casing, the said rollback portions engaging the inner surface of the washer to prevent outward axial movement of said spindle relatively thereto, and means preventing inward axial movement of said spindle relatively to the washer.

2,751,245
MANUALLY OPERABLE TONGS

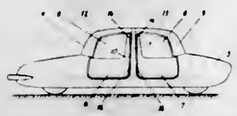
Leonard E. Boyd, Oakland, Calif.
Application August 17, 1951, Serial No. 242,350
3 Claims. (Cl. 294—11)



1. Tongs including a first elongated jaw member having a back plate downwardly curved in a plane transverse to the axis of the member and a plurality of elongated downwardly curved tines, a second jaw member cooperative with said first jaw member for engaging a load therebetween and including a back plate upwardly curved in a plane transverse to the axis of the member and a plurality of elongated upwardly curved tines whereby the ends of the respective tines may be brought into engaging relationship, a connecting lug extending rearwardly from each of said back plates with the lugs from the respective plates being horizontally and vertically offset from the closure plane of the jaws, an S-shaped lever secured to each of

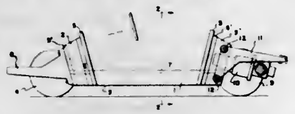
said lugs, and means pivotally connecting intermediate portions of said levers for relative rotary movement therebetween whereby said jaw members may be selectively opened and closed and with the distal ends of said levers in substantial immediate adjacency when said jaw members are closed.

2,751,246
ROOF SUPPORT FOR A MOTOR VEHICLE
Béla Barényi, Stuttgart-Rohr, Germany
Application February 17, 1950, Serial No. 144,800
Claims priority, application Germany February 19, 1949
6 Claims. (Cl. 296—28)



1. In a sedan passenger motor vehicle, a vehicle base portion and a vehicle upper portion enclosing the passenger space and including side doors and a roof, a pair of side struts on said base portion at opposite sides of said vehicle and extending substantially within the central vertical transverse plane of said upper portion and being interconnected at their upper end so as to form a single central roof support, and transparent sections forming front and rear windows and constituting at least a part of said roof and being principally supported by said side struts at the upper end thereof.

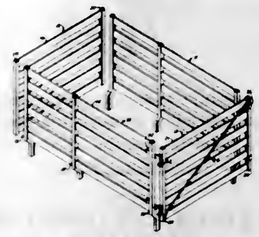
2,751,247
PASSENGER CAR FRAME STRUCTURE
Béla Barényi, Stuttgart-Rohr, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Untertürkheim, Germany
Application January 25, 1952, Serial No. 268,277
Claims priority, application Germany January 30, 1951
4 Claims. (Cl. 296—28)



1. In a passenger car provided with three individual seats adjacent one another with a predetermined spacing between any two adjacent seats, a frame structure comprising in combination two side members spaced from each other a distance approximately equal to the normal width of one of said individual seats and extending substantially parallel to each other in the region of the passenger compartment in the spacings provided between any two adjacent seats, in combination with plate means consisting of three plates and forming essentially the floor of said passenger compartment, the central plate lying between the lowermost parts of said side members and the two side plates being fastened to the outside of said lowermost parts and adjoining the same towards the outside thereof.

2,751,248
COMBINED STAKE RAIL CLAMP AND STAKE ANCHOR
Shelby M. Kritser, Amarillo, Tex.
Application June 9, 1955, Serial No. 514,170
15 Claims. (Cl. 296—43)

1. A stake of the character described comprising an elongated body of channel cross section having a web, substantially parallel sidewalls, spaced walls opposite said web terminating in inturned spaced substantially parallel flanges providing an elongated slot, said web having longitudinally spaced apertures whereby spaced rails may extend through said slot and said apertures, fastening means extending through said sidewalls and said rails to clamp said flanges in engagement with said rails, a laterally extending angularly disposed extension on one end of said body, an elongated base of substantially rectangular cross section secured to said extension and disposed in substantially parallel offset relation to said body,



an anchor strap secured to said extension and disposed in spaced substantially parallel relationship to said base and said base and said strap having aligned apertures whereby said base may be disposed in a socket with said extension engaging an end edge of said socket and with a wall of said socket received between said strap and said body, said aligned apertures registering with apertures in opposed walls of said socket to receive fastening means for anchoring said stake to said socket.

2,751,249
SELF-PROPELLED SPRINKLER
Edmund S. Olson, Santa Rosa, and John M. Reid, San Francisco, Calif.
Application March 4, 1954, Serial No. 414,180
1 Claim. (Cl. 299—50)



A sprinkler comprising an elongated body member having transverse axles journaled at its opposite ends, wheels carried by said axles for movably supporting said body member, a pair of spaced uprights secured to said body member, a bearing plate carried at the upper ends of said uprights, a vertical conduit journaled in said bearing plate, a pair of nozzle members extending radially from the upper ends of said conduits and having angular tip portions at their free ends, a supply pipe carried by said body member having a fitting at one end rotatably receiving the lower end of said conduit, a pulley journaled transversely of said body member, an elongated cable having a portion wrapped about said pulley, means connected to said conduit for rotating said pulley, spring means having one end attached to one end of said cable, ground engaging stake means securing the other end of the spring and the other end of the cable to the ground, and a pair of horizontally bored guide blocks in line with said pulley and secured to opposite ends of said body member, said guide blocks having the cable pass therethrough.

2,751,250
SPRINKLER GUARD
Elton E. Block, San Francisco, Calif.
Application July 18, 1955, Serial No. 522,618
4 Claims. (Cl. 299—60)

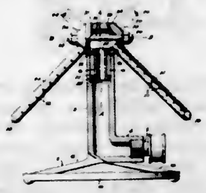
1. In a sprinkler head adapted to be secured on the upper end of an upstanding water supply pipe that is in the ground with said head in a position with its upper side approximately flush with the upper surface of the ground, a sprinkler guard comprising; a pair of generally

horizontally disposed plates formed along one of their edges with opposedly opening recesses in which said head is fitted with its sides substantially in engagement with the sides of said recesses, said plates having one of their marginal portions extending oppositely away from said recesses in lapping relation, means on said plates for



releasably securing them together against movement away from said head, said means including inverted U-shaped clips providing a pair of legs, openings in said plates in registration with each other, said legs extending through said openings from the upper sides of said plates and bent to angularly extending positions below said plates.

2,751,251
REACTION TYPE WATER SPRINKLER
Alexander J. Sak and Edmund S. Sak, Chicago, and Henry J. Ostrega, Cicero, Ill.
Application January 22, 1954, Serial No. 405,526
2 Claims. (Cl. 299—69)



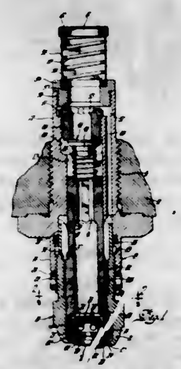
1. A sprinkler comprising; a hollow open-ended cylindrical head mounted for rotation about an axis normal to the axis of said cylinder, a separate closure for each end of said cylinder, each of said closures abutting an annular surface at its end of said cylinder in sealing relation therewith and being mounted thereon for independent rotation about the axis of said cylinder, a jet delivery tube extending outwardly from each closure oblique to the axis of said cylinder and being in communication with the hollow interior of said head, and a tension spring means extending axially through said head and engaging said closures to frictionally hold said closures in any position of adjustment about the axis of said cylinder.

2,751,252
WHIRL SPRAY NOZZLE
Fred W. Wahlin, Kane County, and Edward J. O'Brien, Bellwood, Ill., assignors to Spraying Systems Co., Bellwood, Ill., a corporation of Illinois
Application December 14, 1953, Serial No. 397,891
7 Claims. (Cl. 299—114)



3. A spray nozzle comprising a body having a chamber therein with an entrance thereto at one end and a spray discharge orifice at the other end thereof, said chamber having therein a series of circumferentially extending vanes which are interposed in the path of flow from the entrance to the discharge orifice and conjointly extend around and define a central unobstructed zone which is substantially concentric with the axis of the spray discharge orifice, each said vane having consecutive circumferentially extending portions of the length thereof disposed at an angle to one another and respectively in a plane substantially perpendicular to said axis and in a plane oblique to said axis.

2,751,253
ADJUSTABLE SPRAY NOZZLE
William J. Purchas, Jr., and Edward Orent, Grand Rapids, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 1, 1950, Serial No. 165,488
13 Claims. (Cl. 299—118)

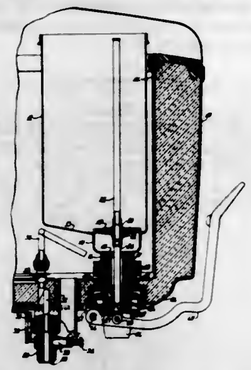


12. A liquid spray nozzle comprising an elongated body defining a liquid entrance passage into the body, means at one end of the body defining a liquid spray orifice, means defining first and second passages within the body from the liquid entrance passage to the orifice, valve means for closing the second passage against the flow of liquid to said orifice, the valve means comprising relatively movable engageable parts adapted to cut off the flow of liquid when in engagement and resilient means connected to the parts and urging the parts into engagement, a member connected to the resilient means mounted in the body for adjustment longitudinally of the body for varying the setting of the resilient means to adjust the pressure setting of the valve, the adjustably mounted member extending to the exterior of the body at one end thereof and having means thereon exterior to the body for adjustment thereof, and means for securing said movable member to said body in positions of relative adjustment over a predetermined range.

2,751,254
VALVE PARTICULARLY ADAPTED FOR BEVERAGE DISPENSERS
El Roy J. Kraft, Des Plaines, Ill., assignor to The Dole Valve Company, Chicago, Ill., a corporation of Illinois
Application November 5, 1951, Serial No. 254,865
4 Claims. (Cl. 299—150)

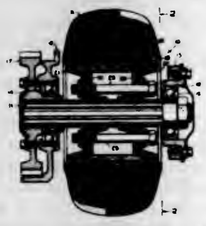
1. A valve comprising a vertically extending housing having an interior cylindrical wall, a discharge outlet leading from the lower end of said housing, an inlet for liquid leading into said housing through said wall intermediate the ends thereof, a valve member movable within said housing and having wall portions at opposite end portions thereof engageable with said interior cylindrical wall and an intermediate portion spaced inwardly from said cylindrical wall, a sealing ring within said housing and engaging the wall portion at the lower end portion of said valve member, for sealing said valve member to the lower end of said cylindrical wall, means for moving said valve

member out of engagement with said sealing ring to provide a flow passage along said cylindrical wall to accommodate the delivery of liquid to said discharge outlet, and baffle means on said valve member spaced beneath said



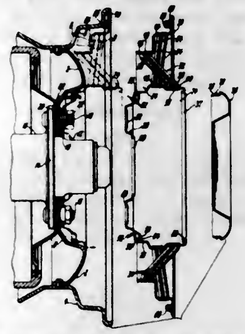
discharge outlet in alignment with said cylindrical wall in the flow path of liquid delivered through said discharge outlet and inclined with respect to said housing to deflect the liquid passing through said discharge outlet outwardly with respect thereto.

2,751,255
WHEEL ASSEMBLY
Charles S. Schroeder, Philadelphia, Pa., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn., a corporation of Connecticut
Application July 24, 1951, Serial No. 238,213
1 Claim. (Cl. 301—1)



A ground contacting truck wheel assembly comprising a splined axle, spaced bearing means mounting said axle in spaced frame members for rotation therebetween and adapted to release said axle for removal, a wheel rim and a pair of independent complementary wheel discs adapted for rotation with said axle on said bearing means and adapted to drop downwardly from between said frame members when said axle is released from said bearing means, each of said wheel discs having a central splined opening whereby to slide relatively to the other disc on the spline of the axle, the splined part of each disc extending a substantial distance in an axial direction on said spline of the axle and holding the wheel disc in aligned relation to the other disc on the axle and against rotation relatively to the axle, each of said wheel discs formed with a slot extending from its central splined opening to its periphery whereby each disc is compressible relatively to the spline of the axle to lock both discs against sliding on said axle spline, said wheel rim encircling both of the wheel discs and fitted against the outer periphery of each disc, coacting wedging surfaces on the wheel rim and each wheel disc, threaded means between said discs acting independently of said wheel rim to draw the wheel discs toward each other on the spline of the axle, said wheel rim acting through said wedging surfaces when the wheel discs are thus drawn toward each other to compress both discs upon the spline of the axle with the spline holding the discs in aligned relation and against rotation relatively to each other and the axle, whereby to assemble the wheel discs and wheel rim to said axle in a position between the frame members.

2,751,256
SIMULATED WIRE WHEEL
Daniel M. Adams, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 6, 1952, Serial No. 318,970
3 Claims. (Cl. 301—37)



1. A cover structure for disposition over the outer side of a vehicle wheel, including a rim and a central load bearing portion having at a radially inner part thereof a series of circumferentially spaced apertures therein for receiving wheel attaching bolts extending from an axle member, said cover structure comprising an inner hub portion, a radially outwardly disposed rim portion, an intermediate circumferentially arranged series of spokes interconnecting said hub and said rim, and a retainer member for said cover structure connected to said hub and relatively rotatable with respect thereto, said retainer having bolt receiving apertures therein adapted for alignment with the apertures in said wheel, said bolts being accessible when said cover structure is disposed on said wheel whereby said wheel and said cover structure may be simultaneously secured to said axle member by said bolts.

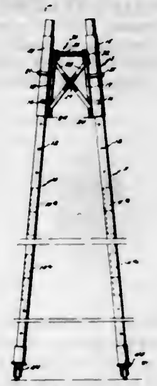
2,751,257
CONVEYANCE OF GRANULAR SOLIDS
Gale S. Peterson, Long Beach, and Charles J. Welsh, Orange, Calif., assignors to Union Oil Company of California, Los Angeles, Calif., a corporation of California
Application June 9, 1951, Serial No. 230,802
22 Claims. (Cl. 302—17)



1. A method for recirculating granular solids through at least one vessel which comprises passing solids from

said vessel into an induction zone, introducing a conveyance fluid thereinto under pressure, depressuring said conveyance fluid concurrently with a compact moving mass of said solids through an elongated conveyance zone provided with at least a primary and a secondary diverging conveyance zone separated by a converging foraminate transition zone, removing part of said conveyance fluid as a plurality of controlled streams at points along the length of said transition zone to maintain a substantially constant pressure gradient therein, restricting the discharge of the compact mass of flowing solids from said conveyance zone to maintain the flowing solids as a dense mass having substantially the solids' static bulk density, and flowing the conveyed solids into a vessel.

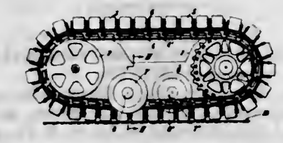
2,751,258
SCAFFOLD
Daniel Brattland, Fargo, N. Dak.
Application July 30, 1953, Serial No. 371,217
10 Claims. (Cl. 304—2)



1. An adjustable scaffold including at least two spaced pairs of uprights, the uprights of each pair being connected intermediate their extremities by a platform supporting assembly, comprising a pair of substantially vertical sleeves adapted to slidably embrace respective uprights, opposed parallel cross members fixed to the inner sides of the sleeves of each pair, adjacent the upper ends of the latter, a platform supported at its opposite longitudinal edges on the opposed cross members of each pair, crossed, diagonal braces respectively pivoted at one end to the corresponding ends of the opposed inner sides of a sleeve of each pair, means for slidably connecting the cross braces with respect to each other, a series of vertically spaced connecting means on the opposite ends of each of said sleeves, selectively engageable by the respective opposite ends of said diagonal braces, whereby the angular relation of the uprights and sleeves of each pair may be varied, said means for slidably connecting the cross braces coacting with said braces for locking the latter and the sleeves in selected position.

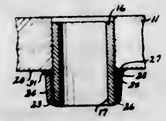
2,751,259
ROLLING DEVICE FOR VEHICLES OF EVERY KIND
Giovanni Bonmartini, Rome, Italy, assignor to "Est" Etablissement Sciences Techniques, Vaduz, Liechtenstein, a company of Liechtenstein
Application January 19, 1954, Serial No. 405,011
Claims priority, application Italy January 22, 1953
12 Claims. (Cl. 305—9)

1. A rolling device for track laying vehicles, which comprises an endless segment track, at least one roller associated with each segment of the track and freely rotatable about an axis parallel to the direction of the motion of the track, a braking device associated with each roller and arranged to prevent said roller from



rotating when said roller is in a selected portion of the track which is in contact with the ground.

2,751,260
REPLACEABLE LEADER PIN BUSHING
Kazimir Jankowski, Milwaukee, Wis.
Application September 12, 1950, Serial No. 184,366
9 Claims. (Cl. 308—4)



2. The combination with a die set platen having a face, an aperture, and a bushing in the aperture, said bushing comprising a sleeve having an extension beyond said platen face, of a collar comprising a wall co-axial with and enclosing the sleeve extension, one end of the collar being connected to the end of the sleeve extension and the other end of the collar constituting a shoulder in abutment against the platen face, and means connected with the collar and rigidly united with the face of the platen for connecting said collar to the platen.

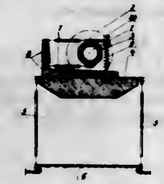
2,751,261
WHEEL AND BEARING ASSEMBLY
Carleton Wight Reade, Kalamazoo, Mich., assignor to Pemco Wheel Company, Kalamazoo, Mich.
Application August 31, 1953, Serial No. 377,601
8 Claims. (Cl. 308—16)



1. A wheel and bearing assembly comprising a tubular spindle having end portions with outwardly facing shoulders at the inner ends thereof, wheel members formed as sheet metal stampings and having facing concavo-convex inner portions, flat radial intermediate portions disposed in side by side relation and fixedly connected, and outwardly flaring outer portions coacting to constitute a channeled rim, the said inner portions having inwardly offset bearing portions of angular section, thrust collars sleeved upon said spindle end portions in abutting relation to said shoulders, annular bearing members of nylon supportedly sleeved upon said end portions of said spindle member at the outer sides of said thrust collars, said bearing members being peripherally conformed to coact with the angular bearing portions of said wheel members and having flanges engaging the outer sides of said wheel members, said bearing members having internal annular recesses opening at the outer sides thereof, and retaining collars disposed in said recesses in said bearing members and sleeved upon said

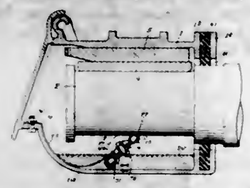
spindle end portions, the ends of the spindle member being upset into retaining engagement with said retaining collars.

2,751,262
RESILIENT BEARING SUPPORT FOR BALANCING MACHINES
Klaus Federn and Karl Ohly, Darmstadt, and Heinz Haardt, Darmstadt-Eberstadt, Germany, assignors to Carl Schenck Maschinenfabrik G. m. b. H., a corporation of Germany
Application January 25, 1952, Serial No. 268,178
16 Claims. (Cl. 308—26)



1. An elastically yieldable rotor bearing structure, particularly for balancing machines, comprising a rigid base, a bearing member for journalling the rotor, elastic supporting means vibratorily connecting said bearing member with said base and having two sets of elastic structures serially joined with each other and deflectable in mutually perpendicular directions within a plane perpendicular to the axis of rotation within said bearing member, both said sets being highly resistant to motion along said axis of rotation, said elastic structure of each set having an elastic characteristic of high resistance to torsional oscillations of said bearing member in said plane.

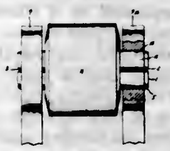
2,751,263
LUBRICATING DEVICE
Verl E. McCoy, La Grange, Ill.
Application November 6, 1953, Serial No. 390,453
13 Claims. (Cl. 308—85)



1. A lubricating device comprising, a box member, a housing in said box member, a race of balls in said housing, an opening in said housing in registration with said race of sufficient size to permit a portion of said balls to extend therethrough and apertures in said housing in registration with said race, a supply of lubricant in said box member and available to said housing apertures and means in said box member responsive to changes in temperature of said lubricant to vary the position of said housing within said box member.

2,751,264
SELF-LUBRICATING JOURNAL PIN
William H. Wood, Wesleyville, Pa., assignor to General Electric Company, a corporation of New York
Application January 21, 1954, Serial No. 405,366
1 Claim. (Cl. 308—104)

A bearing assembly comprising a hollow cylindrical journal pin having an inner surface substantially surrounding a reservoir and an outer bearing surface, said pin having an opening at one end communicating with said reservoir and having a longitudinal gap extending the length of said pin to thereby hydraulically connect said inner and outer surfaces, a pedestal bearing having two sides, each of said sides being provided with an aperture having an inner diameter slightly less than that of the free outer diameter of said pin to provide a forced fit between the ends of said pin and said bearing, a bevel on said outer surface of said pin at one end to facilitate assembling said pin in said bearing, a movable member pivotally mounted on said pin having an inner bore slightly larger than the diameter of said bearing to allow unrestricted rotation thereof, and a saturable wicking substantially filling said reservoir to retain lubricant therein.

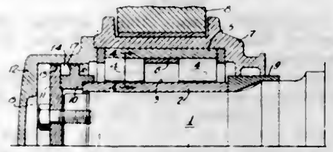


2,751,265
SHAFT BEARING
Lawrance W. Wightman, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application December 9, 1953, Serial No. 397,202
19 Claims. (Cl. 308—132)



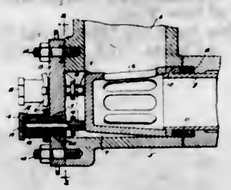
1. In a device having a rotatable shaft substantially within a housing, bearing means rotatably supporting said shaft and secured to said housing; said bearing means comprising a wick of lubricant absorbent material around said shaft and in contact therewith over a major part of the periphery thereof, radial bearing means around a portion of said shaft and having an end adjacent said wick, said radial bearing means extending for a short distance along said shaft relative to the diameter of said shaft, thrust bearing means for said shaft on the other side of said radial bearing means from said wick, a bearing housing secured to said first housing and supporting said radial bearing means and said thrust bearing means and forming a space therearound, said radial bearing means being supported intermediate its ends thereby to cause said bearing to align itself against the loaded side of said shaft when the same is under radial load, and lubricant absorbent material maintained within said space adjacent said bearing housing and in contact with said wick.

2,751,266
DEVICE FOR DAMPING BY FLUIDS, THE WEAVING MOTION OF RAILWAY CARS
Per Gunnar Palmgren and Frederick S. Ball, Philadelphia, Pa., assignors to SKF Industries, Inc., Philadelphia, Pa., a corporation of Delaware
Application July 10, 1950, Serial No. 172,854
17 Claims. (Cl. 308—180)



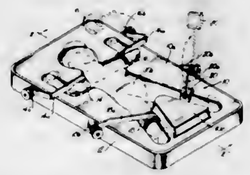
1. A railway axle journal assembly comprising in combination a journal box including a bearing, an axle extending into the box and fitted to said bearing, said axle having freedom for axial movement in the box, and a chamber between the axle and inner surfaces of said box and containing a fluid damping medium and forming with said axle a dash pot in which the fluid medium operates to damp the said movements of the axle.

2,751,267
FLUID END PUMP HEAD
Benjamin Franklin Waldron, Corpus Christi, Tex.
Application March 1, 1954, Serial No. 413,235
2 Claims. (Cl. 309—3)



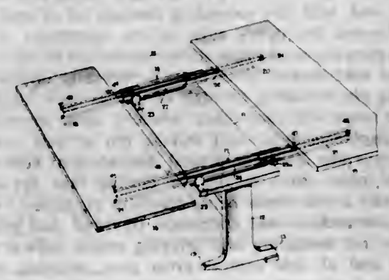
1. The combination with a pump cylinder and a liner within and adjustable longitudinally thereof, of a head secured to one end of said cylinder providing a substantially large space between the liner and head, at least one tubular member carried by said head, said head having an opening in which siad tubular member is tightly engaged, a piston slidable in said tubular member and engaging one end of the liner, an adjusting sleeve threadedly engaged with said tubular member and having a closed end against which the other end of the piston abuts, for shifting of the piston longitudinally of the tubular member responsive to threading of the sleeve upon said tubular member, and an annular rib formed on said piston disposed within said space between the liner and head, and normally spaced from said liner and head, said annular rib adapted to engage the end of said tubular member, limiting movement of said piston in one direction, under excessive pressure directed to said liner.

2,751,268
SURGICAL OPERATING TABLE FOR SMALL INFANTS
Raymond C. Creelman, Bremerton, Wash.
Application December 14, 1953, Serial No. 397,979
4 Claims. (Cl. 311—5)



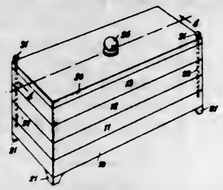
1. The infant immobilizing device for surgical use and the like, comprising a generally horizontally disposable infant supporting platform of substantially rigid continuous solid sheet form having a depression therein conformed approximately to the dorsal side of a small infant's body, said depression including conjoining portions respectively formed to provide underlying and close lateral support separately for at least the torso, legs and arms of the infant placed in dorsal recumbent position therein, said platform having a generally flat and horizontally disposed marginal portion substantially surrounding the peripheral edge of the depression, and an instrument table portion elevated above said marginal portion located directly between and above the two leg portions of said depression, said leg portions being divergent to provide space therebetween for said table portion, and releasable holder means fixed to said platform and arranged for engagement with frontal areas of selected portions of the infant's body to restrain such body portions against being raised out of said depression, the sides of said depression in the various portions of such depression extending materially upward along the respectively adjacent sides of the corresponding portions of the infant's body and thereby limiting lateral movement of the infant.

2,751,269
EXTENSION TABLE AND EXTENSION ARM THEREFOR
Frederick Hafekost, Hopatcong, N. J., assignor to Steel Slides, Inc., New Rochelle, N. Y., a corporation of New York
Application April 11, 1955, Serial No. 500,477
7 Claims. (Cl. 311—75)



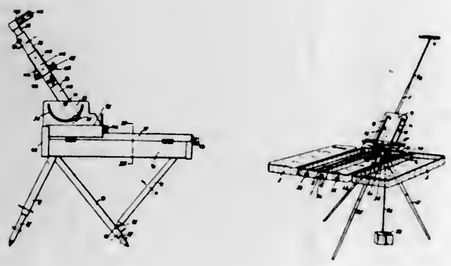
1. An extension arm comprising in combination: three nesting slide elements, each slide element including a channel portion having a base part formed with a uniform transverse outer dimension, said channel portion also having a flared part having an inner transverse dimension substantially equal to but slightly greater than the aforementioned outer transverse dimension whereby such flared part of one of said channel portions is nestable upon the bottom part of another channel portion (said flared part having a selected depth), a pair of primary flanges secured respectively along the parallel outer edges of said flared part of the channel portion, a pair of double subchannel portions secured respectively along the outer edges of said primary flanges, said double subchannel portions being in transverse cross-section substantially S- and reverse S-shaped respectively, each being secured to its respective flange by a flange fold and each having a peak fold and a base fold, said folds extending longitudinally of the slide element and being parallel with one another thereby forming a pair of opposed inturned flanges along the bases respectively of said double subchannel portions, which latter flanges, together with a respective mid-part of each of such subchannel portions, form a subchannel into which the opposite primary flanges extend of the next adjacent nesting slide element; a pair of sprocket wheels secured in spaced relationship to one of the base folds of the middle one of said three duplicate slide elements; an endless sprocket chain passing over said sprocket wheels at the opposite extremities of the runs thereof and held under tension by virtue of the spaced relationship of said sprocket wheels; means for interconnecting one of the outer of said slide elements near one extremity thereof with one run of said sprocket chain, and means for interconnecting the other of said outer slide elements to an opposite run of said chain and near an extremity thereof which is longitudinally opposite to the first-mentioned extremity of the first-mentioned outer slide element.

2,751,270
CONTAINERS OR TRAY STRUCTURES
Moritz Schoen, New York, N. Y.
Application December 3, 1952, Serial No. 323,860
2 Claims. (Cl. 312—202)



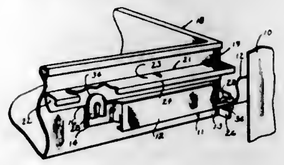
1. A container comprising a plurality of multi-cornered, similarly shaped trays for placement in stacked relation, each of said trays being provided in at least one corner with a hole, said holes being positioned in corresponding corners of said trays for alignment with each other when the trays are disposed in aligned stacked relation, a central pivot post having a lower end and an upper end, said post extending through all of said trays and beyond the upper edge of the uppermost of said trays, gripping means operatively connected to said upper end of said central pivot post, a vertically displaceable locking pin extending through said holes upon alignment of the latter with each other, whereby upon upward vertical displacement of said locking pin at least some of said trays are freed for pivotal displacement about said central post, cover means for closing said uppermost tray, said cover means being pivotally supported by said post intermediate said uppermost tray and said gripping means and contacting said gripping means adjacent said upper end of said central pivot post, securing means positioned adjacent said lower end of said central pivot post, and a pair of interengageable formations disposed, respectively, on said securing means and on said lower end of said central pivot post, whereby said gripping means may be rotated to secure said trays in predetermined open and closed positions, respectively, through engagement of said interengageable formations.

2,751,271
COMBINED BOX AND EASEL FOR PAINTING IN THE OPEN COUNTRY
Jacques Henri Desertenne and Gabriel Robert Dominguez y Salmeron, Paris, France
Application June 8, 1951, Serial No. 230,553
Claims priority, application France June 9, 1950
14 Claims. (Cl. 312—231)



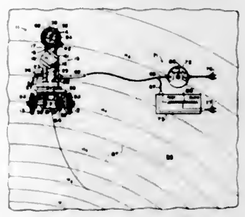
1. A combined easel and box for painting in the open comprising in combination a paint box, a pair of parallel flanges extending across said box to opposite sides of the bottom thereof, a canvas-carrying mast pivotally secured between the upper edges of an end portion of said flanges, a plurality of legs pivotally secured between the lower parts of said flanges adjacent said mast, said mast and legs being adapted to be collapsed against said box and means for holding said mast and said legs in any desired angular position relative to said box.

2,751,272
DRAWER SLIDES
Howard E. Hutzelmann, Corry, Pa., assignor to Corry-Jamestown Manufacturing Corporation, Corry, Pa., a corporation of New York
Application April 15, 1954, Serial No. 423,342
4 Claims. (Cl. 312—341)



1. Slide structure for a drawer comprising slides fixed to an enclosure for said drawer and including horizontal flanges, slides on the sides of said drawer partially overlying said fixed slides, laterally extending brackets at the rear of said drawer, said brackets having laterally opening recesses, pliant U-shaped members, the outer walls of said members and the walls of said recesses having a relationship such that when said members are mounted in said recesses the free ends thereof are caused to frictionally contact opposed surfaces of the flanges of said fixed slides, and contact members at the forward ends of said fixed slides engaged with said drawer slides.

2,751,273
PARTICLE TRAJECTORY PLOTTER
Bayard H. Rankin, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application October 7, 1952, Serial No. 313,418
6 Claims. (Cl. 346—8)



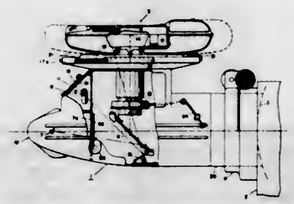
1. In a device for plotting the trajectory of atomic particles on a contour map of a magnetic field, the combination comprising a freely movable carriage having a chassis, a driving wheel, a steering wheel, and a stabilizing wheel, said wheels being rotatably affixed on said chassis at triangularly disposed positions by separate mountings, one of such mountings including means movable on said chassis to alter the distance between said steering wheel and said driving wheel; a first remotely controlled motor geared to said driving wheel for propelling said carriage at a substantially constant speed; and a second remotely controlled motor geared to said steering wheel for guiding said carriage in accordance with the contours being crossed.

2,751,274
MAGNETIC RECORDING
Dallas R. Andrews, Collingswood, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application April 1, 1952, Serial No. 279,868
12 Claims. (Cl. 346—74)



1. A magnetic record handling apparatus for magnetic memory units of the type having a movable magnetic record member with a plurality of parallel record tracks thereon extending in the general direction of movement of the magnetic record member, said apparatus comprising, in combination, a transducer for operatively engaging said magnetic record member, a carrier arm for said transducer, said carrier arm being rotationally movable in a direction substantially transverse to the direction of movement of the record member to position said transducer in operative engagement with a selected one of said record tracks, and indexing means for stopping said arm in said position.

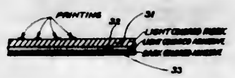
2,751,275
CATHODE-RAY OSCILLOGRAPH RECORDING CAMERA
Hyman P. Mansberg, Fairlawn, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware
Application October 20, 1951, Serial No. 252,360
2 Claims. (Cl. 346—110)



2. Apparatus for recording cathode ray oscillograph representations comprising a housing adapted for attachment to said oscillograph in front of the screen of the cathode ray tube thereof, said housing having a viewing opening therein, a camera having a lens and a camera-back containing photographic film to be exposed, said camera-back being slideably mounted on said housing for adjustment to a plurality of predetermined positions to provide a plurality of closely spaced images on a single plate of said photographic film contained therein.

CHEMICAL

2,751,276
COLORED ADHESIVE TAPE
Wentworth C. Eaton, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application April 29, 1953, Serial No. 351,849
4 Claims. (Cl. 8—18)



1. A tape consisting essentially of light colored cloth, one surface only being coated with pigmented light colored adhesive, said light colored adhesive being further coated with a black pressure-sensitive adhesive pigmented with graphite, said tape being light impermeable and capable of taking printing ink on the nonadhesive coated side.

2,751,277
BLEACHING OF POLYACRYLONITRILE FIBERS
Harry W. Coover, Jr., James E. Guillet, and Emmett V. Martin, Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
No Drawing. Application January 3, 1952, Serial No. 264,848
3 Claims. (Cl. 8—107)

1. A process of removing color from fibers made of homopolymers and copolymers of acrylonitrile said polymers having been made in the absence of oxalic acid which consists of bleaching the fibers only in a solution of oxalic acid and then washing the fibers to remove the acid therefrom.

2,751,278
PROCESS FOR THE CHEMICAL MODIFICATION OF COTTON SLIVER WITH SODIUM HYDROXIDE SOLUTION
Wilson A. Reeves, James R. Corley, and John D. Guthrie, New Orleans, La., assignors to the United States of America as represented by the Secretary of Agriculture
No Drawing. Application July 24, 1951, Serial No. 238,366
1 Claim. (Cl. 8—125)
(Granted under Title 35, U. S. Code (1952), sec. 266)

A process of producing chemically modified cotton comprising immersing cotton in the form of a sliver in an aqueous solution containing a mercerizing amount of sodium hydroxide until the weight of solution adsorbed and entrained by the cotton is substantially 10 times the weight of the cotton, and removing the so-modified cotton in the form of sliver from the solution.

2,751,279
PREPARATION OF CALCIUM TITANATE COMPOSITION
Leon Merker, Bronx, N. Y., assignor to National Lead Company, New York, N. Y., a corporation of New Jersey
No Drawing. Application September 18, 1953, Serial No. 381,115
3 Claims. (Cl. 23—51)

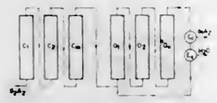
1. Preparation of finely divided calcium titanate adapted for the manufacture of single crystals which comprises admixing a titanium sulfate solution and a calcium sulfate solution, concentrating said mixture to SO_3 fumes to precipitate a double salt of calcium titanate sulfate, filtering and drying said precipitate, and calcining at elevated temperatures until the sulfate values are destroyed and the calcium titanate compound is obtained.

2,751,280

PROCESS FOR EFFECTING DOUBLE CONVERSION BETWEEN TWO SOLUTIONS OF IONOGENIC SUBSTANCES BY USING ION EXCHANGERS

Willem Hasselder, Geleen, Netherlands, assignor to Stamicarbon N. V., Heerlen, Netherlands

Application January 15, 1953, Serial No. 331,473
Claims priority, application Netherlands January 19, 1952
7 Claims. (Cl. 23—90)



1. In effecting double conversion between two solutions of ionogenic substances by alternately contacting columns filled with ion exchanger first with one of said solutions to load the ion exchanger and then with the other of said solutions to regenerate the ion exchanger using a process involving the steps of providing a first group of columns connected together in series to be loaded and a second group of columns connected together in series to be regenerated, passing the loading solution through the first group of columns to load the ion exchanger therein and withdrawing from the last column of this group of columns a solution containing the product formed by the loading operation and the ionogenic substance of the loading solution, removing the product formed by the loading operation from the thus withdrawn solution and returning the resulting liquor to the group of columns being loaded, passing the other solution of ionogenic substance through the second group of columns to be regenerated and withdrawing the product formed in this regenerating operation from the last column in this second group of columns, disconnecting the first column in the group of columns being regenerated and connecting same as the last column in the group of columns being loaded, disconnecting the first column in the group of columns being loaded and connecting same as the last column in the group being regenerated and thereafter repeating the above described loading and regenerating operation through the new groups of columns; the improvements whereby a product substantially free of regenerating substance is obtained from the regenerating operation, said improvements comprising returning the liquor resulting from removal of the product formed during the loading operation to an intermediate column in the group of columns being loaded, disconnecting the first column in the group of columns being regenerated when said first column is only partially regenerated and connecting said partially regenerated column as the last column in the group of columns being loaded and, in repeating said loading and regenerating operations, returning the liquor resulting from removal of the product formed during the loading operation to the column adjacent, and subsequent, to the intermediate column being loaded and to which this liquor was previously returned.

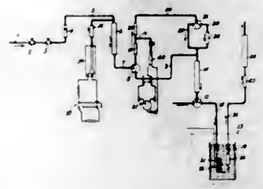
2,751,281

APPARATUS FOR THE CONTINUOUS ANALYSIS OF CONTAMINANTS IN GASES

Johan Gunther Cohn, West Orange, N. J., assignor to Baker & Company, Inc., Newark, N. J., a corporation of New Jersey

Application February 19, 1953, Serial No. 337,858
5 Claims. (Cl. 23—255)

1. A measuring apparatus for the continuous detection and assay of gaseous media containing low concentrations of contaminants in the range of 0.0001% to 0.001%, wherein a gas train conducts the gaseous medium through a purifier chamber and a dryer chamber and thence to a catalyst reaction chamber containing thermal responsive temperature measuring means to measure the temperature increment due to the heat developed by the reaction in said reaction chamber, and comprising a thermopile having at least a first and a second terminal lead, an indicating recorder having at least a first and a second terminal lead, said thermal responsive temperature measuring means exhibiting the characteristic of generating a small E. M. F., and including therewith back E. M. F. compensating means to supply a compensating D. C. potential



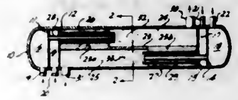
of proper polarity thereto and establish a zero point of the apparatus, said compensating means comprising a first pair of series resistances adapted to be connected across a source of D. C. potential, a variable potential divider having its resistor element in parallel with said first pair of resistances and adapted to be connected across a source of D. C. potential, a sliding contact wire electrically associated with said resistor element and being interconnected to a point between the first pair of resistance, the pairs of terminal leads of said thermopile and said recorder being interconnectable with the sliding contact wire.

2,751,282

APPARATUS FOR THE PRODUCTION OF ACETYLENE

William Smith Dorsey, Fullerton, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California

Original application March 26, 1951, Serial No. 217,633. Divided and this application January 29, 1953, Serial No. 334,015
6 Claims. (Cl. 23—284)



1. An apparatus for the production of acetylene comprising an elongated closed vessel having at least one heat-conducting longitudinal internal partition dividing said vessel into at least two adjacent elongated chambers of substantially equal volume; a conduit disposed coaxially within each of said chambers, the conduits associated with alternate chambers extending from one end of the vessel to a point on the proximate side of the transverse central plane of the vessel and the conduits associated with the remaining chambers extending from the opposite end of the vessel to a point on the proximate side of said transverse central plane, said conduits thus terminating at points on opposite sides of said transverse central plane and failing to overlap by an appreciable distance adjacent said transverse central plane; reactant gas inlet means communicating with the exterior end of each of said conduits; product gas withdrawal means communicating with that end of each of said chambers which is opposite the conduit associated therewith; and hydrogen-containing gas inlet means communicating with each of said chambers at a point adjacent the inner terminus of the conduit associated therewith.

2,751,283

RAPID GELLING BASIC ALUMINUM SOAPS

Richard E. Van Strien, Griffith, Ind., and Philip H. Towle, Chicago, Ill., assignors to Standard Oil Company, Chicago, Ill., a corporation of Indiana

Application March 2, 1953, Serial No. 339,504
12 Claims. (Cl. 44—7)

8. A hydrocarbon liquid gelling agent consisting essentially of a mixture of basic aluminum octanoate soaps of octanoic acid isomers prepared by the steps of reducing the moisture content of the mixed soaps below about 1.5 wt. per cent, and heat treating the said mixture within a sealed container at an elevated temperature in the range of between about 190° and 285° F. for at least one-half hour whereby the gelling rate of the gelling agent is substantially increased.

2,751,284

GELLING HYDROCARBON LIQUIDS WITH LIQUID GELLING AGENTS

Philip Hill, Lansing, Ill., and Richard E. Van Strien, Griffith, Ind., assignors to Standard Oil Company, Chicago, Ill., a corporation of Indiana

No Drawing. Application November 26, 1952, Serial No. 322,816
7 Claims. (Cl. 44—7)

1. The method of preparing a gelled hydrocarbon fuel which method comprises introducing into said hydrocarbon fuel two liquid streams, the first stream being a liquid reactant consisting esssentially of an anhydrous aromatic hydrocarbon solution of about 30 wt. per cent to about 75 wt. per cent of an aluminum alkoxide, the second stream being a liquid reactant consisting essentially of fatty acid having 8 carbon atoms per molecule dissolved in a low boiling ketone containing dissolved water, the amount of said fatty acid and water being sufficient to convert said aluminum alkoxide to a soap having an aluminum content corresponding to that of aluminum di-acyl hydroxide and the amount and proportions of the streams being sufficient to give an aluminum soap concentration in the gelled hydrocarbon fuel in the range of about .5 to 10 wt. per cent and agitating the commingled streams an hydrocarbon fuel to produce the gelled hydrocarbon fuel.

2,751,285

METHOD OF MINIMIZING THE OCTANE DEMAND OF AN ENGINE

John D. Bartleson, Beachwood Village, Ohio, assignor to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application January 21, 1953, Serial No. 332,567
5 Claims. (Cl. 44—76)

1. A gasoline containing from about 0.02 to about 5% by weight of an additive comprising a complex reaction product of boron trifluoride with an organic oxygen compound selected from the group consisting of alcohols, ethers and carbonyls and a gasoline-soluble solvent for said reaction product.

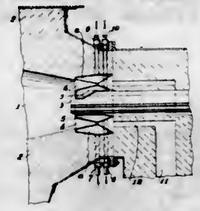
2,751,286

GASIFICATION APPARATUS WITH METALLIC WATER JACKET NOZZLE FOR STEAM

Friedrich Totzek, Essen (Ruhr), Germany, assignor, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware

Application August 11, 1951, Serial No. 241,413
9 Claims. (Cl. 48—67)

1. An apparatus for the production of combustible gases by the gasification of finely-divided fuel comprising a ceramic-lined gasification chamber, inlet means located at one end thereof, said inlet means comprising centrally-disposed nozzle means adapted to inject axially into said gasification chamber a stream of finely-divided fuel suspended in a free oxygen-containing gas, a first fluid-cooled annular metal member surrounding said centrally-disposed nozzle means, a second fluid-cooled annular metal member surrounding said first annular metal member and spaced therefrom to form therebetween an annular nozzle for the introduction of an endothermic gasifying agent, a



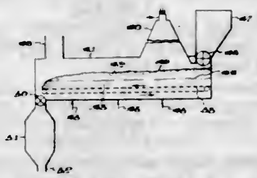
portion of the inner wall of said second annular metal member adjacent said chamber being disposed at an acute angle to the axis of said chamber and with respect to the direction of gas flow in divergent relationship with said axis.

2,751,287

GASIFICATION OF FUELS

Ernest Emanuel Donath, Pittsburgh, Pa., assignor to Koppers Company, Inc., a corporation of Delaware

Application October 23, 1952, Serial No. 316,391
18 Claims. (Cl. 48—73)



15. Apparatus for producing useful gases from carbonaceous fuel comprising at least one primary dust gasifier for gasifying finely-divided fuel with gasification media to produce a hot mixture of reaction products, a secondary gasifier comprising a chamber, means for continuously introducing solid fuel into said chamber, means for continuously moving said solid fuel in the form of a fixed bed having two substantially parallel surfaces through said chamber, an outlet for said primary gasifier for removing said hot mixture therefrom, said outlet being so positioned as to impinge said mixture upon a portion of one of said surfaces of said bed, means for flowing a stream of steam through said moving bed from the other of said surfaces to said surface upon which said hot mixture is impinged and an outlet for said chamber for removing product gases therefrom.

2,751,288

METHOD OF PRODUCING FINELY DIVIDED METALLIC SODIUM

Ernest R. Cornell, Thorold, Ontario, Canada, assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 30, 1955, Serial No. 550,203
2 Claims. (Cl. 75—.5)

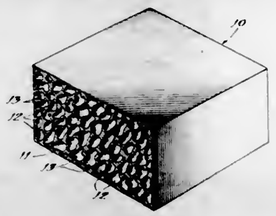
1. The method of preparing sodium spherules of substantially uniform particle size which comprises sequentially (1) dispersing liquid sodium in an inert liquid held at a temperature above the melting point of sodium, (2) reducing the pressure on the liquid and completely evaporating the same from the sodium while simultaneously cooling the sodium to a temperature below the melting point thereof and (3) finally recovering the sodium in particulate form.

2. The method of claim 1 in which the inert liquid is a member of the group consisting of petroleum ether, cyclohexane, heptane, toluene, ethylbenzene and xylene.

2,751,289
METHOD OF PRODUCING METAL FOAM

John C. Elliott, Madison, Wis., assignor to Bjorksten Research Laboratories, Madison, Wis., a corporation of Illinois

Application October 8, 1951, Serial No. 250,346
12 Claims. (Cl. 75—20)



1. The method of producing a composition suitable for the production of metal foam which comprises grinding zirconium hydride in a molten metal selected from the group consisting of magnesium, aluminum and mixtures thereof, said grinding being carried out at a temperature below the temperature at which the zirconium hydride decomposes to form hydrogen.

2,751,290
PROCESS FOR THE TREATMENT OF BISMUTH FOAM OBTAINED IN THE REFINING OF BI-CONTAINING LEAD

Gerhard Werner, Hamburg, Germany, assignor to Norddeutsche Affinerie, Hamburg, Germany

No Drawing. Application July 18, 1955, Serial No. 522,859
Claims priority, application Germany October 25, 1954
4 Claims. (Cl. 75—70)

1. A process for the treatment of bismuth foam obtained in the refining of bismuth containing lead with at least one metal selected from the group consisting of alkali, alkaline earth and earth metals, which comprises treating such foam with hydrochloric acid at a temperature above 500° C.

2,751,291
ALLOY STEEL

John N. Carter and Donald N. Rosenblatt, Salt Lake City, Utah, assignors to The Elmco Corporation, Salt Lake City, Utah, a corporation of Utah

No Drawing. Application May 20, 1955, Serial No. 510,036
5 Claims. (Cl. 75—128)

1. An alloy steel consisting of .85 to 1.3% carbon, .5 to 2.5% manganese, 1.5 to 4.5% copper, 5 to 10% nickel, up to 3% chromium, up to 3% molybdenum and up to 1.5% of at least one metal selected from the group consisting of vanadium, titanium, columbium and tungsten, the total of chromium, molybdenum and metals of said group being at least 2% and not exceeding about 5%, traces to .15% phosphorous traces to .1% sulphur and traces to 1.5% silicon, the balance substantially all iron.

2,751,292
PROCESS OF CASTING NODULAR IRON

Harold N. Bogart and Robert B. Melmoth, Detroit, Mich., assignors to Ford Motor Company, Dearborn, Mich., a corporation of Delaware

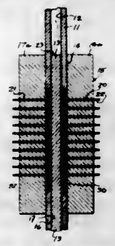
No Drawing. Application September 28, 1950, Serial No. 187,350
3 Claims. (Cl. 75—130)

1. In the production of nodular cast iron, the steps comprising adding to a quantity of molten iron sufficient magnesium to yield a nodular as cast product, treating the magnesium bearing molten metal with a flux having the property of wetting magnesium oxide, and casting the molten metal into a mold, said molten iron being protected from oxidizing gas after treatment with the flux.

2,751,293
PROCESS OF MAKING PERFORATED POWDERED METAL ARTICLE

John Haller, Northville, Mich., assignor, by mesne assignments, to Allied Products Corporation, Detroit, Mich., a corporation of Michigan

Application July 31, 1951, Serial No. 239,569
5 Claims. (Cl. 75—214)

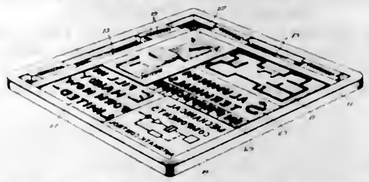


1. A process of making a perforated powdered metal article, comprising placing a charge of powdered metal in a cavity configured to the desired shape for said article, embedding in said powdered metal charge a multiplicity of perforation forms disposed in spaced relationship to one another in a predetermined pattern, each form being configured to the desired shape of the perforation and composed of metal infiltratable into the powdered metal of said charge, compressing said charge with the forms embedded therein sufficiently to sheer off said forms at the edges of said cavity and to produce a powdered metal body, and sintering said body to melt said forms and infiltrate the metal thereof into the pores of said body.

2,751,294
PHOTOGRAPHIC METHOD OF OBTAINING A FILM TRANSPARENCY

George L. Morrison, Evanston, Ill.

Application January 3, 1955, Serial No. 479,432
12 Claims. (Cl. 95—5)



1. The method of obtaining a film transparency having a plurality of images arranged into a montage formed therein from printing elements which have relief printing surfaces and transparent bases which have images formed therein, comprising the steps of, assembling selected printing elements into a printing form with all of the relief printing surfaces of said printing elements at approximately the same height, abrading the relief printing surfaces with a clean, resilient surface containing very fine abrasive particles therein to produce on said relief printing surfaces a clean, diffusively reflecting finish of sufficient fineness so that the individual lines in the surfaces are not visible to the naked eye, applying a light absorbing coating to the entire surface of the printing form, removing said coating from the relief printing surfaces while leaving the coating intact on the other surfaces of the printing form, applying a light reflective surface onto at least one of said transparent bases in intimate contact with the image formed therein, and then photographing

said prepared printing form and each reflectively surfaced, transparent base on the same photographic film and in suitable registration.

2,751,295
PHOTOGRAPHIC EMULSIONS CONTAINING TANNING DEVELOPING AGENTS

Ilmari F. Salminen, James A. Van Allan, and Edward C. Yackel, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

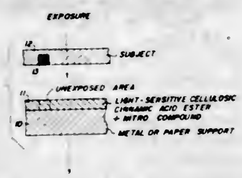
No Drawing. Application April 5, 1955, Serial No. 499,504
6 Claims. (Cl. 95—6)

1. A photographic emulsion containing a mixture of silver halide and a compound selected from the class consisting of a 4-phenoxycatechol, 4-(2-cyclopentenyl) catechol, 1,2 - diethoxalyl - 4 - phenylcatechol, 1,2,3 - triethoxalyl pyrogallol and 1,2 - diethoxalyl - 4 - phenoxy - catechol.

2,751,296
PHOTOSENSITIZATION OF CINNAMIC ACID ESTERS OF CELLULOSE

Louis M. Minsk, Werter P. Van Deusen, and Earl M. Robertson, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application September 6, 1952, Serial No. 308,283
14 Claims. (Cl. 95—7)

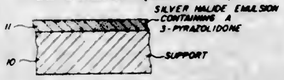


1. A photomechanical resist composition comprising a cinnamic acid ester of a member of the group consisting of cellulose and hydroxyl-containing cellulose derivatives, as a combined carrier and light-sensitive material and as a sensitizer for the composition a nitro aryl compound having a nucleus containing from 6 to 10 carbon atoms, from 1 to 3 nitro groups being attached to said nucleus, the mono-nitro compounds being free of amino, hydroxyl and formyl groups in a position ortho to the nitro group, said nitro aryl compounds being free of an amino and a hydroxyl group in positions ortho to each other, and free of carboxyl and sulfo groups.

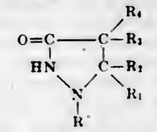
2,751,297
PHOTOGRAPHIC EMULSION LAYER CONTAINING A 3-PYRAZOLIDONE

Glay M. Hood and Paul R. Crookshank, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application August 3, 1953, Serial No. 371,948
12 Claims. (Cl. 95—7)



1. A light-sensitive photographic emulsion comprising a mixture of unexposed silver halide and a 3-pyrazolidone having the following general structure

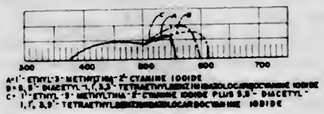


wherein R represents a member of the group consisting of heterocyclic groups and aryl groups of the benzene and naphthalene series and R_1, R_2, R_3 and R_4 each represent a member of the group consisting of a hydrogen atom, a mononuclear aryl group of the benzene series, and an alkyl group containing from 1 to 4 carbon atoms, in a small amount not in excess of about 2 grams per mol of silver halide in the emulsion.

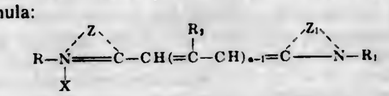
2,751,298
SUPERSENSITIZATION OF PHOTOGRAPHIC EMULSIONS WITH BENZIMIDAZOLOCYANINE DYES

Jean E. Jones, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

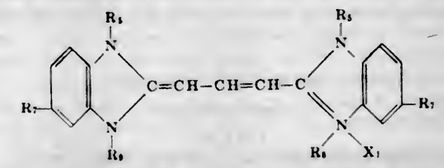
Application August 23, 1954, Serial No. 451,500
16 Claims. (Cl. 95—7)



1. A photographic silver halide emulsion sensitized with a supersensitizing combination of at least one cyanine dye selected from those represented by the following general formula:



wherein R and R_1 each represents an alkyl group, R_2 represents a member selected from the group consisting of an alkyl group, an aryl group, and a pyrryl group, *n* represents a positive integer of from 1 to 2, X represents an acid radical, and Z and Z_1 each represents the non-metallic atoms necessary to complete a heterocyclic nucleus containing from 5 to 6 atoms in the heterocyclic ring, and at least one carbocyanine dye selected from those represented by the following general formula:



wherein R_5 and R_6 each represents an alkyl group, R_7 represents a member selected from the group consisting of an acetyl group and an ethylcarbamyl group, and X_1 represents an acid radical.

2.751.299
MERCURY STABILIZERS FOR PHOTOGRAPHIC EMULSIONS SENSITIZED WITH POLYALKYLENE ESTERS, AMIDES, AND ETHERS

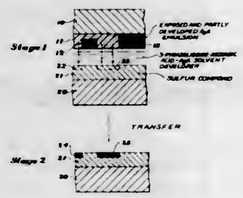
Burt H. Carroll, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application April 29, 1954, Serial No. 426,544
13 Claims. (Cl. 95—7)

1. A light-sensitive silver halide emulsion sensitized with an alkylene oxide polymer selected from the class consisting of condensation products of alkylene oxide with aliphatic acids, condensation products of alkylene oxide with aliphatic amines, and condensation products of alkylene oxide with phenols, said alkylene oxide containing from 2 to 4 carbon atoms and said alkylene oxide polymer having a molecular weight of at least 300, said emulsion containing a small amount of a molecular addition com-

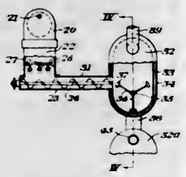
pound of a mercuric salt with a nitrogen compound selected from the class consisting of heterocyclic nitrogen compounds in which at least three bonds of the heterocyclic nitrogen atom are attached to carbon, amine-substituted mononuclear aromatic compounds in which three bonds of the amino nitrogen atom are attached to carbon, and their halogen acid salts, and the halogen acid salts of aliphatic amines containing at least three carbon atoms.

2,751,300
PHOTOGRAPHIC SOLVENT TRANSFER REPRODUCTION PROCESS
Thomas H. James and Leonard W. Tregillus, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application July 15, 1954, Serial No. 443,536
8 Claims. (Cl. 95—88)



1. A photographic reproduction process which comprises exposing a supported silver halide emulsion layer to a subject, developing the exposed emulsion layer in the presence of a 3-pyrazolidone silver halide developing agent and an ascorbic acid developing agent by means of an alkaline developing solution containing a silver halide solvent while said emulsion layer is in intimate contact for a portion of the development period with the surface of a receiving layer containing a silver precipitant, allowing development to proceed until a silver image has been formed in the exposed region of the emulsion layer and until at least a portion of the residual undeveloped silver halide has been dissolved by the silver halide solvent and has been transferred imagewise to the receiving sheet and silver has been precipitated thereon to form an image of appreciable optical density, then removing the emulsion layer from the receiving layer to obtain said image on the receiving layer.

2,751,301
SYSTEM FOR THE AGGLOMERATION OF SOLVENT-EXTRACTED FINE SOLID ORGANIC PARTICLES
Eugene H. Leslie, Ann Arbor, Mich., and Jerome M. Crockin, Pittsburgh, Pa., assignors, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa., a corporation of Delaware
Application October 8, 1949, Serial No. 120,392
3 Claims. (Cl. 99—2)



1. In a system for the agglomeration of solvent-extracted solid organic flour-like particles, the steps comprising, feeding said particles to a desolventizing zone, spraying water upon said particles while solvent-wet at a rate to increase the total water content of said particles to between from about 20% to about 30% by weight based on the weight of water plus solvent-free solids, agitating and moving said particles through said desolventizing zone to form substantially dustfree agglomerated nodules thereof, and heating said particles during said moving to evaporate substantially all solvent and added water therefrom.

2,751,302
METHOD OF ACTIVATING THE NUTRIENT CONSTITUENTS OF DEHYDRATED LEAFY VEGETATION
William R. Graham, Jr., Wilmette, Ill., George O. Kohler, Mission, Kans., and Charles G. Blauw, Siloam Springs, Ark., assignors, by direct and mesne assignments, to The Quaker Oats Company, Chicago, Ill., a corporation of Maryland
No Drawing. Application February 15, 1951, Serial No. 211,182
9 Claims. (Cl. 99—2)

1. A method of obtaining a feed of improved feeding value from leafy green vegetation comprising the step of reacting an oxidizing compound with said vegetation in the presence of moisture.

2,751,303
METHOD OF RAISING BEEF CATTLE AND SHEEP AND FEED RATIONS FOR USE THEREIN
Wise Burroughs, Ames, Iowa, assignor to Iowa State College Research Foundation, Inc., Ames, Iowa, a corporation of Iowa
No Drawing. Application November 9, 1955, Serial No. 546,008
10 Claims. (Cl. 99—2)

1. The method of growing and fattening meat-producing animals selected from the class consisting of immature beef steers, immature non-lactating beef heifers, and immature sheep, comprising orally administering an estrogenic substance to said animals at spaced intervals of time, and regulating the quantities of said estrogenic substance administered to said animals to accelerate the rates of weight gain of said animals but without appreciably affecting their reproductive systems, whenever the animals selected from said group are heifers said heifers remaining free from milk secretions throughout the course of said administration, the amount of said estrogenic substance administered to said animals when said animals are said steers and when said animals are said heifers having an activity ranging from about 0.1 to 8 milligrams of diethylstilbestrol per 100 pounds of body weight per 24 hours, the amount of said estrogenic substance administered to said animals when said animals are said sheep having an activity ranging from about 0.01 to 5.0 milligrams of diethylstilbestrol per 100 pounds of body weight per 24 hours, whereby more beef and sheep meat can be produced in the same time with a reduced amount of feed without impairing the quality of the meat.

2,751,304
PROCESS FOR THE PRODUCTION OF MOLECULARLY MODIFIED LARD
Robert W. Bates, Charles J. Davis, Jr., and Charles E. Morris, Chicago, Ill., assignors, by mesne assignments, to Swift & Company, a corporation of Illinois
Application September 15, 1953, Serial No. 380,289
6 Claims. (Cl. 99—118)

1. In a process for the molecular modification of lard by treatment in the liquid phase with an alkaline reacting interesterification catalyst, the steps which comprise continuously passing reaction mixture containing spent catalyst and undesirable side products to a mixing zone; therein automatically adding a pre-determined quantity of hot water and vigorously agitating the same to concomitantly kill the catalyst, hydrate undesirable side products, and form an emulsion; continuously passing said emulsion to a heating zone and therein heating said emulsion to a temperature in the range of 160 to 180° F. for a period sufficient to break said emulsion; and subsequently separating the aqueous phase containing undesirable side products and spent catalyst from the organic phase containing modified lard.

2,751,305
PROCESS FOR PRESERVING ROUGH RICE
Socrates A. Kaloyereas, Baton Rouge, La., assignor to Board of Supervisors of Louisiana State University and Agricultural and Mechanical College, Baton Rouge, La.
No Drawing. Application May 6, 1954, Serial No. 428,125
6 Claims. (Cl. 99—153)

1. A process of preserving rough rice during storage, which comprises maintaining said rough rice while in storage in an environoment containing from 50% to 80% carbon dioxide and 20% to 50% air.

2,751,306
PLASTIC-LIKE FOOD PRODUCT PACKAGING
Lloyd K. Snyder, Fleetwood, Pa.
Application December 17, 1953, Serial No. 398,810
6 Claims. (Cl. 99—171)



2. A package comprising a plastic-like food product, a tubular member formed of flexible material, a flat substantially rigid end-wall forming element having a one way acting, self-closing central segmental inlet aperture forming structure which is held closed by said product and which element is sealingly secured in transverse relation within one end section of said member, and means arranged to sealingly close the other end section of said member.

6. The method of forming and packaging a plastic-like food product so as to enable the slicing of said entire product into bodies of disc-like formation, which comprises the steps of forming an elongated container of substantially uniform cross-sectional dimensions that is closed at one end and has a flat substantially rigid end-wall forming element sealingly secured in transverse relation at its other end and which element is provided with a self-closing inlet aperture structure of a certain diameter, inserting through said inlet aperture structure a food product feeding nozzle of lesser diameter than the inlet structure so as to provide an air escape opening at this location, injecting the food product into the container under pressure from the nozzle while the air within the container flows through said air escape opening and until the food product compactly fills the entire container, and then withdrawing the nozzle from the inlet aperture structure so as to effect self-closing action of the latter.

2,751,307
METHOD FOR PRODUCING TITANIUM CONCENTRATES
David L. Armant, Metuchen, N. J., and Harold S. Sigurdson, Indianapolis, Ind., assignors to National Lead Company, New York, N. Y., a corporation of New Jersey
No Drawing. Application July 23, 1954, Serial No. 445,464
4 Claims. (Cl. 106—51)

1. A method for producing a digestible concentrate from titaniferous iron ore containing compounds of aluminum and silicon, wherein the TiO_2 content of said ore is from 8% to 60% by weight, which comprises admixing said ore with an oxidic compound of calcium and compound selected from the group consisting of oxidic compound of sodium and oxidic compound of potassium and mixtures thereof and a carbonaceous reducing agent, heating said mixture to form a slag and molten iron at a temperature between 1300° C. and 1700° C. until the FeO content of said slag is reduced to between 1% and 5%, the amount of oxidic compound of calcium and compound selected from the group consisting of oxidic compound of sodium and oxidic compound of potassium and mixtures thereof present in said mixture being sufficient to produce a slag which contains between 1% and 5% of a compound selected from the group consisting of oxidic compound of sodium and oxidic compound of potassium and mixtures thereof, calculated as oxide and in which the weight ratio:

$$\frac{CaO+(Na_2O+K_2O)}{Al_2O_3+SiO_2+TiO_2}=.16 \text{ to } .30$$

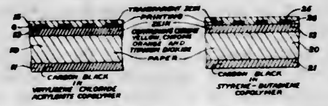
when the TiO_2 content in the titaniferous iron ore is between 8% and 20% and .11 to .30 when the TiO_2 content in the titaniferous iron ore is above 20% and up to 60%, leaching said slag with dilute sulphuric acid to remove the aluminum and silicon acid-soluble compounds and the compound selected from the group consisting of oxidic compound of sodium and oxidic compound of potassium and mixtures thereof and separating the leach liquor from the leached titanium slag.

2,751,308
CEMENT PAINT
Artil Arrighini, Southfield Township, Oakland County, Mich., assignor to Rockwall Company, Detroit, Mich., a corporation of Michigan
No Drawing. Application October 25, 1954, Serial No. 464,619
1 Claim. (Cl. 106—98)

A composition for producing a cement paint by the addition of water, consisting of:

	Pounds
White cement	150–225
Lime	75–175
Sand (very fine)	25–75
Sand (40–60 mesh)	75–125
Asbestos (short fiber)	5–25

2,751,309
PAPER FOR ROLL PHOTOGRAPHIC FILM
Ernest L. Baxter, New York, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application April 10, 1953, Serial No. 347,983
7 Claims. (Cl. 117—14)



1. Photographic backing paper having an overall thickness less than 0.0040 inch comprising a single sheet of kraft paper, as contrasted to a sheet of duplex paper, of a thickness of approximately 0.0026 inch which will permit passage of substantial amounts of actinic light, having on one side an opaquing coating composition comprising carbon black in a binder selected from the class consisting of vinylidene chloride-acrylonitrile copolymer and styrene butadiene copolymer, a lighter colored pigmented coating on the opposite surface of the paper comprising a yellow pigment in a binder selected from the class consisting of vinylidene chloride-acrylonitrile copolymer, styrene-butadiene copolymer and zein, printing on said colored coating, and a clear zein protection coating thereover, the complete backing paper structure being sufficiently opaque to prevent actinic light from passing therethrough.

2,751,310
TRANSFERABLE MARKING COMPOSITION FOR FACSIMILE TRANSMITTING BLANKS AND TRANSMITTING BLANKS

Bernard L. Kline, Manhasset, and Daniel P. Roddin, Howard Beach, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a corporation of New York

No Drawing. Application January 20, 1951, Serial No. 207,064
6 Claims. (Cl. 117—37)

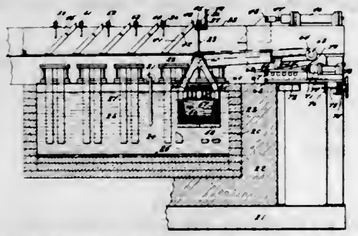
1. A facsimile message transmitting blank comprising a base sheet having a surface adapted to be scanned by an electrical stylus of a facsimile transmitter, the surface of said sheet having applied thereto message characters composed of an insulating composition which adheres to said surface and provides insulating characters thereon, whereby if the sheet is made conductive the current in the stylus circuit is interrupted when the stylus passes over the insulating characters, said insulating composition when applied consisting essentially of the following formula, all parts being by weight:

	Parts
Stearic acid	19–21
Carnauba wax	9–11
Mineral oil, viscosity approximately SAE 10 to 30	11–13
Pigment	14–16

2,751,311
ALUMINIZING

Leon B. Rosseau, Penn Valley, Narberth, Pa., assignor to Ajax Electric Company, Philadelphia, Pa., a corporation of Pennsylvania

Application September 28, 1954, Serial No. 458,821
4 Claims. (Cl. 117—52)



1. The method of selectively aluminizing, which comprises maintaining a bath of molten flux, maintaining a body of molten aluminum beneath the flux and in contact therewith to rectify the flux, immersing metal articles to be aluminized beneath the flux, maintaining a second body of molten aluminum beneath the flux, relatively raising the second body of molten aluminum until it surrounds at least a portion of the metallic articles to be aluminized while maintaining the second body of molten aluminum at all times beneath the level of the flux and then relatively lowering the second body of molten aluminum with respect to the metallic articles being coated and reestablishing instantaneous contact of flux with the articles which have been coated.

2,751,312
LUBRICANT COMPOSITION CONTAINING POWDERED LITHIUM CARBONATE AND METHOD OF ITS APPLICATION TO METAL BODIES

Harold J. Ness, Montclair, N. J., assignor to Metallurgical Processes Co., Newark, N. J., a corporation of New Jersey

No Drawing. Application August 1, 1950, Serial No. 177,135
6 Claims. (Cl. 117—53)

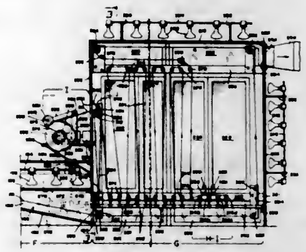
5. The method of producing a high temperature lubricating film on the surface of a metal body which comprises heating the body to a temperature of from about 1150° F. to 2500° F. and spraying a material consisting essentially of powdered lithium carbonate onto said surface while the latter is in the open air to form a continuous fused coating thereof on said surface.

6. A lubricant for the hot working of metal bodies composed of a powdered mixture of glass and lithium carbonate, each of said ingredients being present in sufficient amount to modify substantially the viscosity of the other when said mixture is in the molten state and said lithium carbonate comprising at least 50% of said mixture.

2,751,313
PRODUCTION OF MAGNETIC SOUND TAPE

William C. Speed, Riverside, and James J. Dwyer, Stamford, Conn., assignors to Audio Devices, Inc., New York, N. Y., a corporation of New York

Original application December 21, 1950, Serial No. 201,974. Divided and this application December 21, 1950, Serial No. 201,981
12 Claims. (Cl. 117—66)

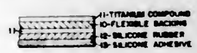


1. In the method of producing magnetic sound-recording and sound-reproducing tape by passing a relatively long and narrow non-magnetic tape base successively through a coating zone and a drying zone, one side of the tape base being coated with a layer of free-flowing liquid dispersion of magnetic oxide of iron while moving through the coating zone and the coating being dried while moving through the drying zone, the improvement which comprises magnetically testing the coated tape base after the coating is at least partially dried and as the tape base moves in its path of travel away from the coating zone to determine whether the coating has a predetermined thickness, and adjusting the thickness of the layer of magnetic material being applied to the tape base in the coating zone until the magnetic tests on the advancing tape base indicate a coating of such predetermined thickness, said testing and adjusting steps being conducted while the tape base is in transit at its normal rate of speed.

2,751,314
BONDING SILICONE RUBBER TO SOLID MATERIALS

Joseph W. Kell, Midland, Mich., assignor to Dow Corning Corporation, Midland, Mich., a corporation of Michigan

Application November 3, 1954, Serial No. 466,470
12 Claims. (Cl. 117—72)



3. A method of adhering silicone rubber to the surface of a solid comprising: (*a*) depositing on the surface of the solid a continuous coating consisting essentially of 50 to 100 per cent by weight of a titanium compound selected from the group consisting of titanium compounds of the general formula $Ti(OR)_4$ and hydrocarbon soluble partial hydrolyzates thereof in which compounds R is selected from the group consisting of aliphatic hydrocarbon radicals of less than 13 carbon atoms, and hydroxylated aliphatic hydrocarbon radicals of less than 13 carbon atoms and containing less than 4 hydroxyl groups per molecule, and 0 to 50 per cent by weight of a partially hydrolyzed alkyl polysilicate; (*b*) depositing on the surface of the layer (*a*), a coating consisting essentially of (1) 1 to 10 per cent by weight of a partially hydrolyzed alkyl polysilicate, (2) 90 to 99 per cent by weight of a toluene soluble organopolysiloxane consisting essentially of 50 to 100 mol per cent dimethylsiloxane and 0 to 50 mol per cent of an organopolysiloxane of the general formula

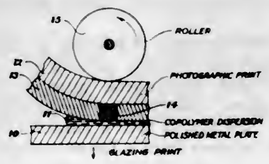
$$R_nSiO_{\frac{4-n}{2}}$$

where R represents any monovalent hydrocarbon radical and n has an average value of about 2; and (*c*) depositing on the surface of layer (*b*) a coating comprising a silicone adhesive.

2,751,315
METHOD OF APPLYING A PROTECTIVE COATING OVER A PHOTOGRAPHIC PRINT

Henry C. Staehle, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application January 2, 1953, Serial No. 329,227
9 Claims. (Cl. 117—76)



1. A method of applying a protective coating over a supported processed gelatin emulsion layer containing a photographic image, which comprises squeegeeing said emulsion layer onto a water-repellent surface with a layer between said emulsion and said surface, of an aqueous colloidal dispersion of a copolymer containing from about 1 to 25% of combined N-methyl methacrylamide, about 25 to 74% of combined n-butyl acrylate, and about 25 to 75% of combined acrylonitrile, thereafter removing said emulsion and copolymer layers together from said surface to obtain a coating of the copolymer on the emulsion surface.

2,751,316
COATED FILM

Herman G. Philips, Jr., Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application March 30, 1955, Serial No. 498,094
12 Claims. (Cl. 117—138.8)

1. A coated film comprising in combination a substrate of the group consisting of polyethylene terephthalate and polyvinylidene chloride and as a coating therefor a composition containing, as essential ingredients, nitrocellulose and a resinous plasticizing hydroabietyl derivative of the group consisting of hydroabietyl alcohol, dihydroabietyl phthalate and mixtures thereof in the ratio of 35 to 75% by weight of nitrocellulose to 65 to 25% by weight of said hydroabietyl derivative, the sum of the aforestated percentages being substantially 100%, said nitrocellulose and hydroabietyl derivative constituting at least about 85% by weight of the unpigmented ingredients of said composition.

2,751,317
METHOD OF REMOVING INSULATING COATINGS FROM WIRES

John A. Orme, Los Angeles, Calif.

Application June 3, 1950, Serial No. 166,005
5 Claims. (Cl. 117—231)



5. A method for removing insulating enamel from a portion of a wire and tinning said portion of said wire which comprises placing a portion of a wire to be denuded of enamel adjacent to a solid inorganic soldering flux, and applying a hot presoldered iron to said portion for loosening and removing the enamel from said portion of said wire, and applying solder to the treated portion of the wire simultaneously with the removal of said enamel.

2,751,318
METHOD OF MANUFACTURING COILS

Bernardus Willebrordus Speekman, Venlo, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application May 14, 1954, Serial No. 429,883
Claims priority, application Netherlands May 29, 1953
5 Claims. (Cl. 154—80)

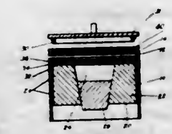


1. A method of manufacturing electrical coils comprising winding a stranded insulated wire together with a plurality of threads of thermoplastic material, said thermoplastic material being adapted to soften at a temperature at which said insulated winding wire is not unduly decomposed, and applying heat to said wire to obtain said temperature.

2,751,319
METHOD OF MAKING DRUM LINERS

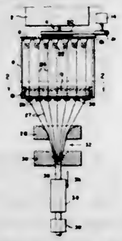
Donald W. Carlson, Terre Haute, Ind., assignor to The Visking Corporation, Chicago, Ill., a corporation of Virginia

Application August 12, 1952, Serial No. 303,980
6 Claims. (Cl. 154—83)



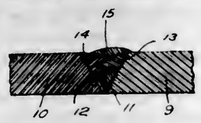
1. A method of preparing flat bottom cylindrical drum liners which comprises applying a radially expansive force interiorly of a cylindrical tubing formed of a flexible stretchable material at a spaced distance from one end thereof until the marginal end portion of said tubing immediately beyond the stretching zone folds inwardly and forms an inwardly extending flange and securing a flat sheet to the outer surface of said flange to provide the flat bottom of said liner.

2,751,320
METHOD OF CONTINUOUS PRODUCTION OF RODS, TUBES, AND THE LIKE
Clifton N. Jacobs, Norristown, and George H. Hopkins, Phoenixville, Pa., assignors to Taylor Fibre Co., Norristown, Pa., a corporation of Delaware
Application February 16, 1953, Serial No. 336,984
5 Claims. (Cl. 154—91)



5. The method of producing an extended member comprising applying binding material to a plurality of strands of material, drawing the strands carrying the applied material through a forming die and around a member disposed within the forming die and fixed against longitudinal movement through the die with the strands being formed to form the strands into a hollow member of desired shape composed of the material of the strands and the binding material, and solidifying the binding material in the hollow member to retain the strands in the form in which they are arranged in their passage through the forming die and around the fixed member.

2,751,321
METHOD OF BUTT WELDING THERMOPLASTIC SHEETS
Marcel Sans, Lyon-Villeurbanne, France, assignor to Societe de Constructions Mecaniques de Stains, Paris, France, a corporation of France
Application April 21, 1953, Serial No. 350,190
Claims priority, application France Apr. 23, 1952
3 Claims. (Cl. 154—116)



1. The method of butt welding abutted sheets of synthetic thermoplastic material having a groove of V-shaped cross section therebetween to receive a welding bead, which comprises superimposing in said groove a plurality of beads of the same material but in unplasticized condition and in the form of thin strips having wide top surfaces and tapering toward the sides in cross section, heating said beads and the adjacent edges of the sheet material to softening temperature and peening the beads to cause them to fill said groove.

2,751,322
ADHESIVE COMPOSITION, METHOD OF BONDING WITH SAME, AND BONDED ARTICLE
Howard W. Bost, Robstown, Tex., assignor to Phillips Petroleum Company, a corporation of Delaware
No Drawing. Application July 18, 1952, Serial No. 299,756
17 Claims. (Cl. 154—130)

1. A process for bonding solid materials which comprises placing between the materials a layer of adhesive composition comprising an organic rubber solvent having dispersed therein, in an amount sufficient to confer adhesive properties on the composition, a hydroxylated butadiene-derived rubbery polymer having an oxygen content in the range from 1 per cent to 20 per cent by weight, the Mooney value (ML–4) of the synthetic rubber polymer prior to hydroxylation being in the range of 10 to 100.

16. A composition of matter which comprises a hydroxylated butadiene-derived rubbery polymer produced by reacting a butadiene-derived rubbery polymer having a Mooney value of 10 to 100 with a reactant selected from the class consisting of hydrogen peroxide and compounds decomposable thereto in the presence of a catalyst selected from the group consisting of formic acid and lower alkyl esters thereof, at a temperature of 10 to 95° C. for a time of 1 to 60 hours, the resulting hydroxylated reaction product having an oxygen content of between 1 and 20 per cent by weight.

2,751,323
LAMINATED PRODUCTS AND METHOD OF PRODUCING THE SAME
James E. Pritchard, Bartlesville, and Pauline L. Quirk Myers, Barnsdall, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware
No Drawing. Application January 26, 1953, Serial No. 333,350
9 Claims. (Cl. 154—140)

1. A process of preparing a laminated article comprising applying to at least one of two surfaces to be joined a bonding composition comprising a polymer of a vinyl-substituted heterocyclic nitrogen base and a quaternizing agent, placing said surfaces in contact, and heating same to form a strong bond, said heating causing a reaction between at least a portion of the nitrogen atoms of said polymer and said quaternizing agent resulting in the formation of the fourth nitrogen to carbon bond.

5. A laminated product containing at least one layer which comprises the reaction product of a polymer of a vinyl-substituted heterocyclic nitrogen base and a quaternizing agent, said reaction product being characterized by the fact that at least a portion of the nitrogen atoms in said polymer have a fourth nitrogen to carbon bond.

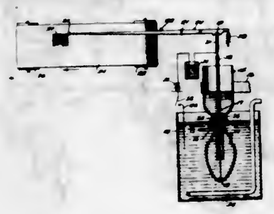
2,751,324
ANTIBIOTIC COMPOSITIONS COMPRISING OXYTETRACYCLINE AND CARBOMYCIN
Arthur R. English, Mineola, N. Y., assignor to Chas. Pfizer & Co., Inc., Brooklyn, N. Y., a corporation of Delaware
No Drawing. Application July 18, 1952, Serial No. 299,758
4 Claims. (Cl. 167—65)

1. A bacteriologically active composition which comprises an oxytetracycline antibiotic and a carbomycin antibiotic.

2,751,325
MERCURIAL DIURETIC COMPOSITIONS AND METHOD OF STABILIZATION
Gerhard R. Wendt, Philadelphia, Pa., assignor, by mesne assignments, to American Home Products Corporation, New York, N. Y., a corporation of Delaware
No Drawing. Application December 20, 1952, Serial No. 327,155
9 Claims. (Cl. 167—71)

1. A stabilized aqueous solution of a water-soluble organic mercurial diuretic containing the grouping —Hg·S— in which one Hg bond is connected to a terminal carbon atom of a substituted propylene chain and the S atom is the sulfhydryl sulfur of a thioglycolic acid residue, which solution comprises from 3.0 to 25.0 percent of the diuretic and a stabilizer selected from the class consisting of nitrilotriacetic acid and ethylenediaminetetraacetic acid, the nitrilotriacetic acid in an amount of about 0.1 percent and the ethylenediaminetetraacetic acid in an amount of 0.001 to 0.5 percent, the solution having a pH value in the range 8–9.5 and the percentages being in terms of grams per 100 milliliters of solvent.

2,751,326
ASSAY METHOD FOR DIGITALIS PREPARATION AND OTHER CARDIOTONIC SUBSTANCES
Albert Szent-Gyorgyi and Stephen Hajdu, Woods Hole, Mass., assignors to Armour and Company, Chicago, Ill., a corporation of Illinois
Application January 24, 1952, Serial No. 268,108
19 Claims. (Cl. 167—84.5)



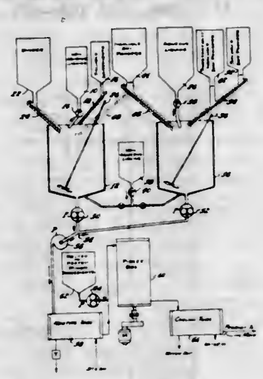
1. In a method of characterizing the potency of a heart stimulant preparation containing glucosides, the steps of forming a test solution from a sample of said preparation of unknown potency, suspending the severed heart of a frog or the like with at least a portion thereof immersed in said solution, electrically exciting said heart at uniform intervals to cause said heart to beat at a definite frequency, measuring the strength of the beat of said heart at said frequency, varying the length of said uniform intervals between the electrical excitation to cause said heart to beat at a different frequency, again measuring the strength of beat of said heart at the new frequency to determine whether the strength of beat has substantially changed and then comparing the measurements thus obtained with measurements obtained by the same procedure for a standard sample of the preparation having a known potency.

2,751,327
PREPARATION OF HAIR TREATING COMPOSITIONS IN SOLID FORM
Lionel Leslie Frederick Deadman, Leatherhead, England, assignor to Ashe Laboratories Limited, Leatherhead, England
No Drawing. Application September 12, 1952, Serial No. 309,354
Claims priority, application Great Britain April 4, 1952
7 Claims. (Cl. 167—87.1)

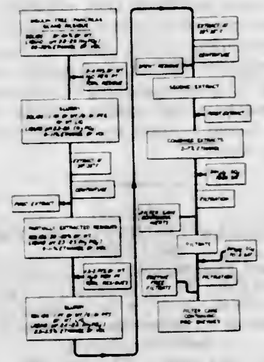
1. A process for preparing a solid composition containing a derivative of a mercapto carboxylic acid suitable on dissolution in water to form a hair-relaxing solution which comprises neutralising a mercapto carboxylic acid with a member of the class consisting of solid ammonium carbonate, solid ammonium bicarbonate and a solid mixture of these two salts, and incorporating a solid alkali which is substantially more basic than the said ammonium salt in sufficient quantity to absorb any water formed in the reaction and to bring the composition to an acidity such that an aqueous solution of it has a pH of 9.0 to 9.5.

2,751,328
TOOTHPASTE PROCESS
Judson H. Sanders, Wyoming, Ohio, assignor to The Procter & Gamble Company, Cincinnati, Ohio, a corporation of Ohio
Application October 2, 1951, Serial No. 249,368
7 Claims. (Cl. 167—93)

1. A process for producing a homogeneous paste-like product, the essential ingredients of which include a hydrophilic colloidal carbohydrate binder, insoluble non-colloid solid matter, aqueous liquid, and substantially non-aqueous but substantially water miscible liquid, without the use of heavy-duty mixing equipment, which process comprises blending said binder in dry, comminuted unhydrated form with said substantially non-aqueous but water-miscible liquid to form a mobile slurry, then blending said slurry and the remainder of said ingredients to form a homogeneous mixed mass, all prior to substantial hydration and gelation of the binder, then maintaining the said homogeneous mixed mass under mild agitation to prevent separation of ingredients until gelation and consequent stabilization has occurred, and thereafter discontinuing said agitation.



2,751,329
PREPARATION OF PANCREATIC ENZYMES—RIBONUCLEASE, TRYPSINOGEN, CHYMOTRYPSIN B AND ALPHA CHYMOTRYPSIN
Loyal C. Maxwell and William M. Thompson, Chicago, Ill., assignors to Armour and Company, Chicago, Ill., a corporation of Illinois
Application July 26, 1952, Serial No. 301,122
17 Claims. (Cl. 195—66)



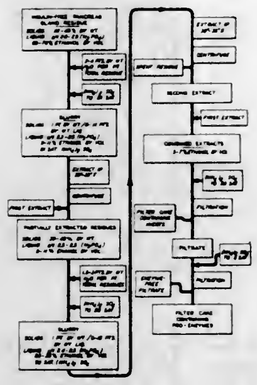
1. In a process for preparing pancreatic enzymes of the group consisting of ribonuclease and the proteolytic pro-enzymes trypsinogen, chymotrypsinogen B and alpha chymotrypsinogen from residues resulting from the extraction of insulin from pancreas glands with an acidified, water-miscible organic solvent for insulin, the steps of extracting the solids of said residues with an aqueous extraction solvent containing not over 4% by volume of said organic solvent, separating the solids from the extract, and then treating said extract with ammonium sulfate to fractionate and selectively separate said enzymes.

2,751,330

USE OF A SALT IN THE EXTRACTION SLURRY IN RECOVERING PROTEOLYTIC ENZYMES FROM PANCREAS GLAND MATERIAL

William M. Thompson, Kazys C. Sekmakas, and Ermintrude Dickinson, Chicago, Ill., assignors to Armour and Company, Chicago, Ill., a corporation of Illinois

Application August 27, 1952, Serial No. 306,686
11 Claims. (Cl. 195—67)



1. In a process for recovering pancreatic enzymes of the group consisting of ribonuclease and the proteolytic pro-enzymes alpha chymotrypsinogen, chymotrypsinogen B and trypsinogen from pancreas gland material comprising enzyme-bearing glandular solids in intimate association with an acidified liquid containing water and at least 50% by volume of an organic solvent selected from the group consisting of methanol, ethanol, and acetone, the steps of forming a slurry containing said solids in intimate association with a liquid containing sufficient water in admixture with said organic solvent to solubilize said enzymes and acidified with an acid selected from the group consisting of phosphoric acid, hydrochloric acid, and oxalic acid, extracting said enzymes into the liquid portion of said slurry while digesting said solids, incorporating in said slurry an inorganic salt to produce clotting of the digested solids, said salt being selected from the group consisting of ammonium sulphate, magnesium sulphate, and sodium chloride, and then separating said liquid portion by centrifugation from the solids in said slurry.

2,751,331

PROCESS FOR SELECTIVELY POLYMERIZING DIOLEFINS

Norman Alpert, Poughkeepsie, and Herbert E. Vermillion, Wappingers Falls, N. Y., assignors to The Texas Company, New York, N. Y., a corporation of Delaware

No Drawing. Application November 13, 1951, Serial No. 256,125
10 Claims. (Cl. 196—39)

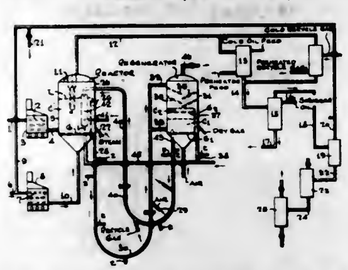
5. A process for removing conjugated diolefins from a hydrocarbon mixture which comprises contacting said hydrocarbon mixture with a catalyst consisting of a halogenated aliphatic carboxylic acid of 2–4 carbon atoms in which the alpha-carbon atom is substituted with at least two halogen atoms said catalyst being employed in an amount equivalent to 0.5 to 10 weight per cent of the treated mixture, effecting said contact at a temperature of 50 to 200° F. whereby said conjugated diolefins are polymerized and subpecting said hydrocarbon mixture to distillation to obtain a hydrocarbon fraction substantially free of conjugated diolefins.

2,751,332

FLUID HYDROFORMING OF HYDROCARBONS WITH CATALYST REGENERATION

Edward J. Gornowski, Cranford, and Wilson C. Rich, Jr., Mountainside, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application April 30, 1952, Serial No. 285,258
8 Claims. (Cl. 196—50)



5. In the method of hydroforming naphtha in a system comprising a reaction zone and a catalyst regeneration zone wherein the catalyst in the reaction zone is maintained in the form of a dense fluidized bed and a reaction is carried out at elevated temperatures and pressures in the presence of added hydrogen, further characterized in that carbonaceous deposits are formed on the catalyst during said reaction, the improvement which comprises withdrawing spent catalyst particles carrying carbonaceous deposits from the reaction zone, conducting the withdrawn catalyst to the regeneration zone, treating a minor portion of the spent catalyst in a dense fluidized bed in the lower portion of the regeneration zone with an oxygen-containing gas under conditions sufficient to completely regenerate said catalyst, withdrawing regeneration gases containing some unconsumed oxygen overhead from said bed, treating the major portion of said spent catalyst in the upper portion of the regeneration zone with the oxygen-containing regeneration gases withdrawn from the complete regeneration of the minor portion of the spent catalyst under conditions effecting partial regeneration of said catalyst and thereafter retaining the said completely regenerated catalyst and the partially regenerated catalyst substantially uncooled to the reaction zone in order to support the endothermic reaction of hydroforming therein taking place.

2,751,333

REFORMING CATALYST AND PROCESS

Heinz Heinemann, Swarthmore, Pa., assignor to Houdry Process Corporation, Wilmington, Del., a corporation of Delaware

No Drawing. Application June 20, 1951, Serial No. 232,661
13 Claims. (Cl. 196—50)

1. A catalyst having activity for promoting isomerization and dehydrogenation of hydrocarbons, comprising 0.05–2.0% by weight platinum on an activated alumina which has been acid-treated with an organic carboxylic acid, said activated alumina also containing 0.1% to 5% by weight of boria.

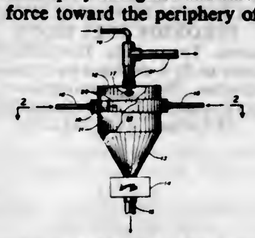
2,751,334

CONTINUOUS FLASH COKING PROCESS

John W. Scott, Jr., Berkeley, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware

Application March 24, 1954, Serial No. 418,316
6 Claims. (Cl. 196—65)

1. In a continuous coking process wherein a liquid petroleum feed stock is thermally converted into a vaporous hydrocarbon fraction and a particulate coke fraction, the steps comprising tangentially introducing a stream of oxygen-containing retort gases in continuous fashion at the periphery of a generally cylindrical, heated reaction zone while continuously withdrawing gaseous and vaporous effluent from the axial portion of the zone, thereby establishing a whirling body of hot retort gases in the reaction zone; continuously introducing a petroleum feed stock in liquid particulate form into a central portion of said whirling body of retort gases whereby the liquid feed particles are picked up by said gases and carried outwardly by centrifugal force toward the periphery of the reaction



zone, the temperature of said retort gases being sufficiently high to rapidly effect the desired thermal conversion of the feed particle into the respective vapor and coke product fractions during said outward movement; and continuously discharging the hydrocarbon and coke fractions obtained from the feed axially with respect to the reaction zone, said process being characterized by the maintenance of a combustion zone adjacent the periphery of the reaction zone to supply at least a portion of the heat required to effect thermal conversion of the feed.

2,751,335

METHOD AND APPARATUS FOR MIXING AND CONTACTING FLUIDS

John A. Carver, Scotch Plains, and Walter F. Rollman, Cranford, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application February 1, 1951, Serial No. 208,952
5 Claims. (Cl. 196—147)



1. A method for contacting substantially immiscible liquids of different specific gravities, comprising passing a stream of one of said liquids through a confined flow path, injecting a stream of the other of said liquids into said path, substantially combining said liquids as a single stream therein, maintaining a confined dispersion pool of said liquids in an enlarged vertically elongated contacting zone therefor, injecting said single combined stream of liquids into said dispersion pool as a pair of individual, substantially coaxial, opposed, jet streams thereof with a pressure drop on injection of from 2 to 20 lbs. per square inch, impinging said streams one against another at a distance from their respective points of injection which is not less than 1 times the diameter of said streams at their points of injection, nor more than 4 times said diameter, dispersing the materials of said streams into said dispersion pool at their point of impingement into the surrounding dispersion pool of said materials, separating the lower gravity liquid from the upper portion of said pool and the higher gravity liquid from the lower portion thereof, and separately withdrawing said separated liquids from the contacting zone.

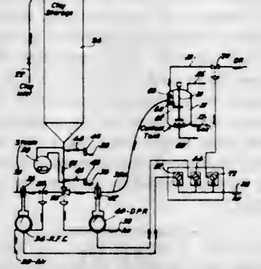
5. An apparatus for contacting substantially immiscible fluid materials, comprising an enlarged, confined contacting chamber, an inlet pipe having an outer end, and an inner end extended into said chamber at an intermediate level therein, a discharge head on the inner end of said pipe interiorly of said chamber, consisting of at least one pair of jet discharge nozzles disposed in coaxially aligned, opposed spaced relation longitudinally of their common axis, said spaced relation providing a spacing between the nozzles not less than 1 times the diameter of the discharge nozzles and not more than 4 times the diameter of said discharge nozzles, and in common communication with the inner end of said inlet pipe, a first conduit supply means for one of said fluid materials connected in conduit communication with the outer end of said inlet pipe, a second conduit supply means for another fluid connected to said inlet pipe intermediate the connection of said first conduit supply means and said discharge head, a first conduit discharge means for withdrawing one of said fluid materials from the contacting chamber after contact with said other fluid therein, communicating with said chamber at a level above said discharge head, a second conduit discharge means for withdrawing the other of said fluid materials from the contacting chamber communicating with said chamber at a level below said discharge head, and conduit means for reintroducing one of said fluid materials into said inlet pipe by way of said second conduit supply means.

2,751,336

CLAY CONTACTING OF LUBRICATING OIL

Hyman R. Davis, Jackson Heights, N. Y., assignor to The Lummus Company, New York, N. Y., a corporation of Delaware

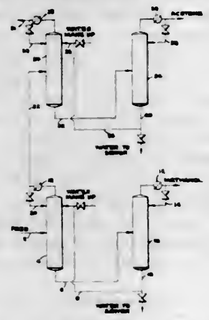
Application March 21, 1951, Serial No. 216,749
2 Claims. (Cl. 196—147)



1. In the process of continuously refining lubricating oil by contacting with clay wherein quantities of clay precisely measured with respect to the oil are delivered to a contacting tank at controllable rates and wherein the clay is stored in bulk in a vented storage bin from which the clay is removed by gravity, the improvement which comprises passing the clay from said storage bin to said contacting tank through a discharge leg and a transfer line, said discharge leg connected at its upper end to said storage bin and at its lower end to said transfer line, maintaining a constant density of clay in said discharge leg irrespective of fluctuations in the level of clay in said storage bin by introducing air into said leg in a quantity at least sufficient to aerate the clay, the amount of which air is controlled with respect to the differential pressure between two preselected points at different levels in the discharge leg, introducing steam to the end of the transfer line remote from the contacting tank to convey said clay through said transfer line, maintaining a uniform steam supply in the transfer line and controlling the rate of clay flow through said line within an error of less than 5 per cent of the desired amount by passing the clay

in said line through an orifice influencing differential pressure responsive means controlling the rate of clay flow into said transfer line.

2,751,337
PROCESS FOR SEPARATION OF ACETONE AND METHANOL FROM COMPLEX MIXTURES
Clifton S. Goddin, Jr., and Theodore Q. Eliot, Tulsa, Okla., assignors to Stanolind Oil and Gas Company, Tulsa, Okla., a corporation of Delaware
Application February 1, 1949, Serial No. 73,956
10 Claims. (Cl. 202—39.5)



1. In a process for the recovery of acetone and methanol, each in a substantially pure state, from aqueous homogeneous mixtures containing as impurities propionaldehyde, butyraldehyde and methyl acetate, the steps which comprise first removing the methanol from said mixture by subjecting the latter to fractional distillation in a column, countercurrently contacting the resulting vapors with water in an amount such that the ratio of the quantity of the water added to the total quantity of vapors leaving the top of the column is at least about 0.5 whereby an aqueous bottoms of substantially acetone-free methanol is obtained, collecting overhead an aqueous solution of acetone together with said impurities, fractionally distilling said overhead and countercurrently contacting the resulting vapors with water to selectively extract the acetone therefrom in the form of an aqueous solution substantially free from impurities, the water being employed in an amount such that the concentration of acetone in the resulting aqueous solution is between about 1 and 15 weight per cent.

2,751,338
PROCESS OF VAPORIZATION OF HYDROGEN PEROXIDE SOLUTIONS
John G. Schwemberger, Buffalo, N. Y., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application November 27, 1951, Serial No. 258,509
8 Claims. (Cl. 202—63)



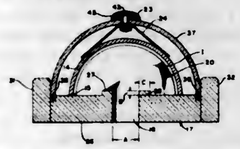
1. In a method for vaporizing hydrogen peroxide solutions in which vaporization is effected from a film of the hydrogen peroxide solution on a heated vaporizing surface, the step comprising turbulently agitating a film of said solution on a heated metallic vaporizing surface to prevent substantial decomposition of hydrogen peroxide during said vaporization.

2,751,339
METHOD FOR VAPORIZING HYDROGEN PEROXIDE SOLUTIONS
Byron N. Inman, Tonawanda Township, Erie County, N. Y., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application December 1, 1951, Serial No. 259,491
10 Claims. (Cl. 202—63)



1. In a method for vaporizing hydrogen peroxide solutions from a falling film of the solution on a heated vaporizing surface, the improvement comprising continuously removing as overhead product vapors corresponding to about 95 to about 99.5% of the volume of the solution fed to said surface while continuously removing from the bottom of said surface unvaporized concentrated hydrogen peroxide solution corrresponding to about 0.5 to about 5% of the volume of the solution fed and while continuously purging said unvaporized solution from the system, the solution fed to said vaporizing surface being one containing non-volatile impurities whose accumulation on said vaporizing surface is prevented by the removal from said surface of said unvaporized solution.

2,751,340
METHOD OF PLATING
Ralph A. Schaefer, Cleveland, and Harry V. Pochapsky and Henry J. Sedusky, Euclid, Ohio, assignors to Clevite Corporation, Cleveland, Ohio, a corporation of Ohio
Application January 5, 1953, Serial No. 329,574
6 Claims. (Cl. 204—23)



3. In a method of electroplating a uniform layer of metal of approximately .005 inch or less thick upon the bearing surfaces of flanged semi-cylindrical bearings, the steps which consist of placing the longitudinal edges of the bearings against and with the concave surfaces facing, an insulating barrier element having a slot opening parallel to and centrally located with respect to the longitudinal edges of the bearings, the width of said slot being 22 to 28% of the diameter of the bearings and being further provided with inwardly projecting lips at each side of said slot with the inward projection of such lips being approximately 3 to 4% of the diameter of the bearings and the width of such lips being approximately 6 to 10% of the diameter of said bearings,

and providing insulating shields projecting at right angles from said slots toward the bearing and being so spaced that the opening adjacent to the inner diameter of the bearing provides substantially no current leakage, the shields being 75 to 100% of the width of the flange faces of said bearings and the spacing of the shields between the bearings being 200 to 250% the width of the flange faces of said bearings, immersing the bearings, barrier element and shields in an electroplating bath, mounting an anode in the bath external to the barrier and passing a plating current from said anode to said bearing as a cathode.

2,751,341
ELECTRODEPOSITION OF LEAD AND LEAD ALLOYS
Clarence F. Smart, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
No Drawing. Application September 22, 1952, Serial No. 310,927
10 Claims. (Cl. 204—43)

9. An electroplating bath for electrodeposition of lead which consists essentially of an aqueous solution containing at least one anode corrosion promoter of the group consisting of citrates, tartrates and acetates, at least one member of the group of lead compounds consisting of lead oxide, lead acetate, lead chloride, lead fluoborate, and lead sulfate and an alkali metal salt of ethylene diamine tetra acetic acid in an amount sufficient to complex lead in solution.

2,751,342
POLISHING OF ALUMINUM AND ALUMINUM BASE ALLOYS
Karl Guggenberger, Nurnberg, Germany, assignor, by mesne assignments, to Fromson Orban Co., Inc., New York, N. Y., a corporation of Delaware
No Drawing. Application June 18, 1953, Serial No. 363,927
Claims priority, application Germany May 12, 1953
7 Claims. (Cl. 204—140.5)

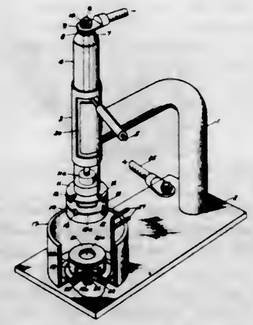
1. A process for shining articles made of aluminum or aluminum base alloys, which comprises polishing the articles by anodically treating them in an electrolytic bath the acid components of which consist per liter bath of from 600 to 1750 grams of sulphuric acid and from 3 grams of chromic acid up to the saturation limit.

2,751,343
PRODUCTION OF α-KETOCARBOXYLIC ACID ESTERS
John B. Wright, Kalamazoo Township, Kalamazoo County, Mich., assignor to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan
No Drawing. Application January 10, 1955, Serial No. 481,017
9 Claims. (Cl. 204—158)

1. A process for the production of an α-ketocarboxylic acid ester which comprises reacting an aldehydic acetal of an α-ketoaldehyde with a halogenating agent selected from the group consisting of N-haloamides and N-haloimides wherein the halo group is a halogen having an atomic weight from 35 to 80, inclusive, to produce an α-ketocarboxylic acid ester.

2,751,344
ELECTROPOLISHER
Charles A. Kienberger, Ralph E. Greene, Irving C. Flanders, and Arville R. Flynn, Oak Ridge, Tenn., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application June 21, 1949, Serial No. 100,358
4 Claims. (Cl. 204—225)

1. An electropolisher for polishing one side of a substantially flat metal disc comprising a frame, a cathode support slidably mounted in said frame, an electrolyte container placed in juxtaposition to said support, an anode mounted in said container, a cathode having a substantially flat surface mounted on said support so that its surface is essentially parallel to the surface of said anode and in alignment therewith, means for holding a metal



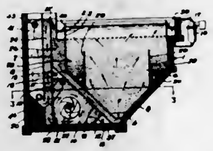
disc at a fixed distance from said cathode, said support, anode, cathode, and disc-holding members having a common vertical axis, and means for bringing said cathode within said container and for contacting the upper surface of said anode in pressure relation with the lower surface of said disc.

2,751,345
ELECTROPLATING RACK
Mitchell G. Osman, Washington Township, Hendricks County, Ind., assignor to Radio Corporation of America, a corporation of Delaware
Application May 24, 1955, Serial No. 510,779
8 Claims. (Cl. 204—297)



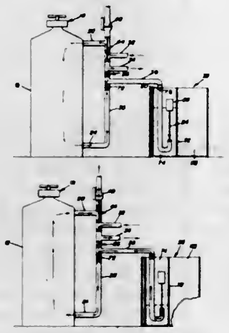
2. In a plating rack comprising a base portion and a masking portion adapted to be positioned adjacent a surface of said base portion, a plurality of locking cams spaced about the periphery of said base portion, each of said locking cams providing an external surface spaced from said base portion, an inclined shoulder joining said external surface and said base portion, said external surfaces of said plurality of locking cams defining a supporting plane parallel to said base portion, each of said locking cams having an internal cam surface inclined with respect to said surface of said base portion, a plurality of radial extensions spaced about the periphery of said masking portion, a plurality of other radial extensions spaced about the periphery of said masking portion, each of said internal cam surfaces being engaged with one of said first named radial extensions, each of said other of said radial extensions being engaged with one of said external surfaces, means for locking said masking portion when said other of said radial extensions are engaged with said external surfaces, means for rotating said masking portion with respect to said base portion, and said masking portion being locked against said surface of said base portion by said internal cam surfaces.

2,751,346
COLD PROCESS WATER SOFTENER OR COAGULATOR
Joseph F. Sebald, Bloomfield, N. J., assignor, by mesne assignments, to Cochrane Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application December 8, 1952, Serial No. 324,649
8 Claims. (Cl. 210—16)



1. In a cold process water softener or coagulator, a receptacle embodying a mixing chamber, means for delivering raw water to said mixing chamber, means for delivering chemicals to said mixing chamber, a settling chamber in said receptacle, a precipitation space in said receptacle leading upwardly from said mixing chamber and downwardly to the lower portion of said settling chamber, and a plurality of partitions in the downwardly leading portion of said precipitation space dividing it into a plurality of individual passages extending throughout the entire depth of the downwardly leading portion of the precipitation space, said receptacle including a collection space for treated water, and an outlet for treated water, a partition extending across said mixing chamber and forming a raw water inlet space independent of and separated from said mixing chamber, said partition provided with a plurality of spaced openings therein to permit flow of raw water from said raw water inlet space into said mixing chamber, and means for delivering raw water to said raw inlet water space.

2,751,347
LIQUID CONDITIONING APPARATUS
Omer E. Miller, South Plainfield, N. J.
Application January 29, 1954, Serial No. 406,911
6 Claims. (Cl. 210—24)



1. In a fluid-treating apparatus, the combination comprising a container having a treating bed therein and fluid-inlet and -outlet means communicating with said container, means for alternatly causing flow of said fluid and flow of a regenerating fluid through said bed, said means including a main conduit disposed adjacent said container and having outlet and return openings communicating with said fluid-inlet and -outlet means, said main conduit having supply and service openings and an inlet opening for regenerating fluid in longitudinally-spaced relation between said outlet and return openings; drain valve means in said main conduit above said outlet opening; double-acting valve means in said main conduit, said double-acting valve means comprising upper and lower spaced seats at opposite sides of said supply opening, and a valve element movable to upper and lower positions to alternately position on said seats; fluid-flow-responsive means in said main conduit between said outlet opening and said drain valve means; means connecting said fluid-flow-responsive means and said valve element so that actuation of said fluid-flow-responsive means causes said valve element to position on said upper seat; and ejector means in said main conduit below said double-acting valve adapted to draw regenerating fluid into said main conduit through said inlet opening upon reversal of flow in said conduit due to the positioning of said valve element on said upper seat.

2,751,348
COMPOSITION FOR ACIDIZING WELLS
Harold W. Brainerd, Jr., Tulsa, Okla., assignor to Stanolind Oil and Gas Company, Tulsa, Okla., a corporation of Delaware
No Drawing. Application April 9, 1953, Serial No. 347,828
10 Claims. (Cl. 252—8.55)

1. A composition of matter comprising an acid-in-oil emulsion of a strong mineral acid solution and an aliphatic hydrocarbon liquid containing Batu gum and sufficient saturated, water-soluble cyclic ether to disperse said gum in said liquid.

2,751,349
WATER RESISTANT LUBRICANTS THICKENED WITH INORGANIC GELLING AGENTS
William A. Marshall, Chicago, Ill., and Charles F. Steininger, Havertown, Pa., assignors to The Pure Oil Company, Chicago, Ill., a corporation of Ohio
No Drawing. Application May 21, 1954, Serial No. 431,583
7 Claims. (Cl. 252—28)

1. A gelatinous composition having lubricating qualities which comprises a major portion of an oleaginous lubricating liquid having incorporated therein a sufficient amount of an inorganic gelling agent to produce a gelatinous composition of greaselike consistency, the surfaces of said gelling agent being treated with a tin halide in an amount sufficient to impart water resistance characteristics to said composition.

2,751,350
RUST-INHIBITED SILICATE BASE OILS
Robert L. Peeler, Jr., Richmond, and Edward G. Foehr, San Rafael, Calif., assignors to California Research Corporation, San Francisco, Calif., a corporation of Delaware
No Drawing. Application February 9, 1953, Serial No. 335,986
10 Claims. (Cl. 252—33.4)

1. A machine gun lubricant comprising a major proportion of a silicate oil, from about 1 to about 3% by weight of a metal sulfonate, the metal being selected from the group consisting of lead and the metals of Group I and II of Mendeleeff's Periodic Table, and from about 1 to about 10% by weight of an alkyl polyalkylene glycol ether having the formula

$$R_1—O(—R—O—)_nR_2$$

wherein R is a divalent hydrocarbon radical containing from 2 to 4 carbon atoms, R_1 and R_2 are hydrocarbon groups each having not more than 20 carbon atoms and together having not more than 30 carbon atoms and n is a number from 2 to 18, the weight ratio between the ether and sulfonate being from about 0.2 to about 10.

2,751,351
COMPLEX ESTER BASE LUBRICATING GREASE COMPOSITIONS
David W. Young, Westfield, Arnold J. Morway, Clark Township, Union County, and Delmer L. Cottle, Highland Park, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application July 5, 1952, Serial No. 297,386
6 Claims. (Cl. 252—42)

2. A lubricating grease composition which comprises a complex ester synthetic lubricating oil formed by esterifying one mol of a 1-3 glycol selected from the group consisting of butanediol-1,3, methyl butanediol-1,3 and pentanediol-1,3 with two mols of a C_4 to C_{10} dibasic acid and two mols of a C_8 to C_{12} branched chain alcohol, said oil being thickened to a grease consistency with from 2% by weight to 20% by weight, based on the total composition, of the lithium soap of hydrogenated fish oil acid.

2,751,352
MAGNETIC FLUIDS
Arnold A. Bondi, Berkeley, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
No Drawing. Application August 23, 1951, Serial No. 243,349
5 Claims. (Cl. 252—62.5)

1. A stable magnetic fluid consisting essentially of a mixture of from about 60% to 90% of iron particles having dimensions of from 5 to 30 microns and from about 10% to about 40% of a liquid hydrocarbon, said mixture containing from about 0.01% to about 5% of an alkylene glycol selected from the group consisting of ethylene glycol and propylene glycol.

2,751,353
MAGNETIC MATERIAL
Evert Willem Gorter, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application April 11, 1950, Serial No. 155,175
Claims priority, application Netherlands April 28, 1949
7 Claims. (Cl. 252—62.5)

1. A ferromagnetic material consisting of mixed crystals having a spinel structure constituted by about 17.3 to 43 mol. per cent of $Li_2O.5Fe_2O_3$ and about 57 to 82.7 mol. per cent of $ZnFe_2O_4$.

2,751,354
METHOD OF MANUFACTURING A MAGNETIC FERRITE CORE
Frank G. Brockman, Dobbs Ferry, N. Y., assignor, by mesne assignments, to North American Philips Company, Inc., New York, N. Y., a corporation of Delaware
Application April 10, 1953, Serial No. 348,005
4 Claims. (Cl. 252—62.5)

1. A method of manufacturing a ferromagnetic ferrite core having a zero temperature coefficient of permeability comprising the steps forming a mixture containing about 20 mol. per cent of nickel oxide, 30 mol. per cent of zinc oxide and 50 mol. per cent of ferric oxide, presintering said mixture at a temperature of about 1040° C. for about 1 hour, grinding and compacting the presintered mixture under pressure to form a shaped core, sintering the so-shaped core at a temperature of from about 1000° C. to 1400° C. for about ¼ to 24 hours, and discontinuing the sintering when the temperature coefficient of permeability from about 20° C. to 85° C. reaches a value of about zero.

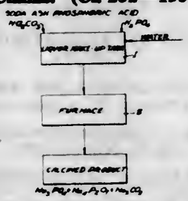
2,751,355
TRANSMISSION FLUID
John M. Clark, Birmingham, Mich., assignor to Studebaker-Packard Corporation, a corporation of Michigan
No Drawing. Application June 10, 1953, Serial No. 360,813
1 Claim. (Cl. 252—75)

A water base hydraulic fluid for use in automatic transmission systems for automobiles and the like consisting essentially of a 50% solution of water and ethylene glycol, said solution containing approximately .25 oz. per gallon of sodium oleate soap, .25 oz. per gallon of sodium nitrite, 1 oz. per gallon of borax, .005 oz. per gallon of triethanolamine, and .01 oz. per gallon of butyl phosphate.

2,751,356
HYDRAULIC PRESSURE TRANSMITTING FLUID
Chester M. White and Arthur W. Sawyer, Rochester, N. Y., assignors to Genesee Research Corporation, Rochester, N. Y., a corporation of New York
No Drawing. Application April 17, 1953, Serial No. 349,543
16 Claims. (Cl. 252—75)

1. A hydraulic pressure fluid consisting essentially of 5.0% to 30% of a synthetic lubricant from the group consisting of a polymerized ethylene glycol having a molecular weight of from 180 to 420, hexanetriol 1, 2, 6, tributoxyethyl phosphate, tributoxyethoxy ethyl phosphate and tricresyl phosphate, to 5.0 to 30% of a tall oil-potassium hydroxide soap and 40% to 89.9% of a solvent from the group consisting of aliphatic alcohols, glycols and glycol ethers, the amount of soap in no instance exceeding the amount of synthetic lubricant.

2,751,357
WATER SOFTENING AND DETERGENT COMPOSITION AND PROCESS OF PREPARING SAME
Frederic Charles Bowman and William Maxwell Ramsay, South Gate, Calif., assignors to Victor Chemical Works, Chicago, Ill., a corporation of Illinois
Application February 26, 1951, Serial No. 212,810
5 Claims. (Cl. 252—135)



1. A process of preparing a water softener and detergent by the simultaneous production of anhydrous trisodium phosphate, anhydrous tetrasodium pyrophosphate and anhydrous sodium carbonate, comprising the steps of heating at a temperature between 250° and 550° C. a mixture of phosphoric acid, sodium carbonate and water having an analytical ratio of $Na_2O:P_2O_5$ within the range of 2.0 to 5.1 for a sufficient length of time to produce a homogeneous white, friable and coarse product consisting of anhydrous trisodium phosphate, anhydrous tetrasodium pyrophosphate and anhydrous sodium carbonate in intimate mixture.

2,751,358
NON-FOAMING DETERGENTS
Maximilian Cavitt, The Hague, Netherlands, assignor to Shell Development Company, San Francisco, Calif., a corporation of Delaware
No Drawing. Application November 14, 1950, Serial No. 195,709
Claims priority, application Great Britain November 28, 1949
3 Claims. (Cl. 252—153)

1. A detergent composition comprising an aqueous solution of a mixture of sodium salts of secondary alkyl

sulfates wherein the alkyl groups contain from 10 to 18 carbon atoms produced by neutralizing sulfation products of a C_{10}–C_{18} alkene fraction together with a suspension in a substantially water-immiscible liquid hydrocarbon boiling above 100° C. of a N,N'-diacyl polymethylene diamide wherein the acyl groups are aryl groups of higher fatty acids having from 12 to 18 carbon atoms and the polymethylene group contains from 2 to 6 carbon atoms, said suspension containing about 0.05 to about 10% by weight of said diamide based on the weight of said liquid hydrocarbon and said polyamide being present in an amount of 1 to 500 p. p. m. of said aqueous solution.

2,751,359

BASIC ALUMINUM ALKANOATE GELLING AGENTS

Philip Hill, Lansing, Ill., Richard E. Van Strien, Griffith, Ind., and Philip H. Towle, Chicago, Ill., assignors to Standard Oil Company, Chicago, Ill., a corporation of Indiana

No Drawing. Application September 22, 1954, Serial No. 457,772

10 Claims. (Cl. 252—316)

1. A composition effective for gelling hydrocarbons boiling in the range of 100 to 600° F. when employed in amounts in the range of about 2 to 10 per cent by weight, which composition consists essentially of basic aluminum alkanoates having two alkanoate radicals and one hydroxy radical per aluminum atom, about 5 to 70 per cent of the total alkanoate radicals being normal straight chain radicals containing 8 to 9 carbon atoms and the remainder of the alkanoate radicals being branched chain alkanoate radicals containing 8 to 9 carbon atoms, the branches thereon being selected from the class consisting of methyl and ethyl, said composition having been dried to a moisture content less than about 1.3 per cent and ground to pass a No. 40 U. S. Standard sieve.

2,751,360

PRESOLVATED ALUMINUM SOAP GELLING AGENTS

Richard E. Van Strien, Griffith, Ind., assignor to Standard Oil Company, Chicago, Ill., a corporation of Indiana

No Drawing. Application December 30, 1953, Serial No. 401,397

10 Claims. (Cl. 252—316)

1. The method of making an agent for gelling a hydrocarbon boiling in the range of about 100 to 600° F., which method comprises intimately mixing an inorganic, water-soluble, aluminum salt with a dilute aqueous solution of alkali metal branched chain octanoate and alkali metal hydroxide in the presence of a heavy hydrocarbon oil having a Saybolt Universal viscosity in the range of about 100 to 1500 seconds at 100° F. and being of higher boiling range than the hydrocarbon to be gelled, the amount of said heavy hydrocarbon oil being in the range of about 2 to 25 per cent by weight based on the octanoic acid equivalent of the alkali metal branched chain octanoate in said solution, said heavy hydrocarbon oil being emulsified in aqueous solution during said mixing and sorbed in the water-insoluble basic aluminum branched chain octanoate which is precipitated during said mixing the branches on the branched chain octanoate radicals being selected from the class consisting of methyl and ethyl, washing the precipitated basic aluminum branched chain octanoate soap to free the precipitate of alkali metal and inorganic salt, drying said precipitate to a moisture content of not more than 3 per cent, and grinding the dried basic aluminum branched chain octanoate with the heavy oil sorbed therein.

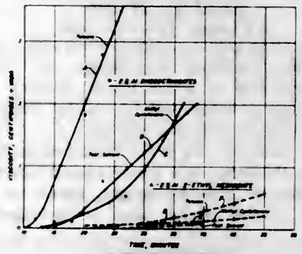
2,751,361

LIQUID HYDROCARBON GELLING AGENTS

Richard E. Van Strien, Griffith, Ind., and Philip H. Towle, Chicago, and Philip Hill, Lansing, Ill., assignors to Standard Oil Company, Chicago, Ill., a corporation of Indiana

Application June 14, 1954, Serial No. 436,355

13 Claims. (Cl. 252—316)



1. A composition effective for gelling hydrocarbons boiling in the range of about 100 to 600° F. when employed in either dry or humid atmospheres in amounts of about .5 to 10 per cent by weight, which composition consists essentially of finely ground, free flowing, basic aluminum branched chain alkanoates having two branched chain alkanoate radicals per aluminum atom, said branched chain alkanoate radicals each containing 8 to 9 carbon atoms and said branches being selected from the class consisting of methyl and ethyl, the number of methyl groups in the composition predominating over the number of ethyl groups, at least one radical being present in an amount of about 10 to 50 per cent based on total radicals in the soap mixture, said composition containing less than 1.5 per cent moisture, having a particle size small enough to pass a No. 40 U. S. Standard sieve and having a compact bulk density of about .4 to about .6 gram per milliliter.

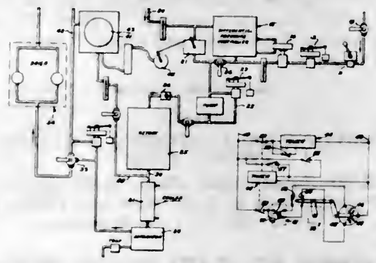
2,751,362

METHODS OF AND SYSTEMS FOR PRODUCING HEAT-TREATING GASES

Alfred W. Laird, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York

Application May 7, 1951, Serial No. 224,878

17 Claims. (Cl. 252—373)



1. The method of producing heat-treating gases, which comprises continuously mixing air and a hydrocarbon gas together, forcing the resulting mixture against and past a heated nicked catalyst bed to form carbon monoxide and slight amounts of carbon dioxide and water, continuously measuring the percentage of water in the resulting product, and regulating the flow of one of the hydrocarbon gas and air to keep a slight amount of water in the resulting product and to keep this amount at a minimum.

12. A system for producing heat-treating gas, which comprises a heated retort for cracking a hydrocarbon gas, a supply line extending to the retort, an air line connected to the supply line, a flow-regulating valve in the air line, a hydrocarbon gas line connected to the supply line, means for pumping air and gas through the supply line to and through the retort, means continuously measuring the moisture content of the gaseous mixture emerging from the retort, means for adjusting the flow-regulating valve to control the proportion of the air with respect to the hydrocarbon gas supplied to the retort, and means responsive to the measuring means for adjusting the actuating means.

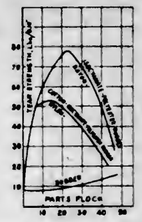
2,751,363

FLOCK-FILLED ISOCYANATE-CONTAINING ELASTOMER

Frank S. Martin, Cranston, R. I., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

Application April 2, 1953, Serial No. 346,474

5 Claims. (Cl. 260—9)



1. A synthetic elastomeric composition characterized by improved tear resistance comprising from 2 to 40 parts of a fibrous flock selected from the group consisting of cellulose flock, nylon flock, glass flock and wool flock as a reinforcing filler for the said elastomeric composition, and 100 parts of a polyurethane polymer which is a reaction product of a polyester and a diisocyanate cured to an elastomeric state in the presence of available isocyanate groups attached to the said polyurethane, and said polymer having been cured in admixture with the said flock.

2,751,364

POLYMERS OF UNSATURATED ESTERS OF CYCLOHEXANECARBOXYLIC ACIDS AND COMPOSITIONS CONTAINING THE SAME

Richard R. Whetstone, Orinda, and James R. Schofield, San Lorenzo, Calif., assignors to Shell Development Company, San Francisco, Calif., a corporation of Delaware

No Drawing. Application February 18, 1950, Serial No. 145,092

16 Claims. (Cl. 260—17)

1. A normally solid homopolymer obtained by heating allyl cyclohexanemonocarboxylate in the presence of a peroxide catalyst at a temperature between 65° C. and 300° C.

2,751,365

STABILIZED POLYCHLOROPRENE LATEX

George W. Scott, Claymont, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 24, 1953, Serial No. 338,596

4 Claims. (Cl. 260—29.7)

1. A process for removing labile chlorine from the polychloroprene in polychloroprene latices having a pH of at least 11.5, which comprises heating the latex at from 90° to 170° C., in the absence of oxygen, with sufficient excess of a strong base of the class consisting of inorganic bases and quaternary nitrogen bases to combine with the readily removable hydrogen chloride in the polymer, the heating being carried out for from about 1.5 minutes at 170° C. to about 12 hours at 90° C. so that substantially all of the labile chlorine is removed.

2,751,366

RUBBERS WITH METHOXY CONTAINING SILICA FILLERS

Richard O. Brandle, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 9, 1952, Serial No. 287,046

10 Claims. (Cl. 260—37)

1. A composition comprising a continuous phase of a water-insoluble organic elastomer selected from the group consisting of natural rubber, rubber-like diene hydrocarbon homopolymers, copolymers of diene hydrocarbons with polymerizable vinylidene compounds, rubber-like haloprene polymers, isobutylene polymers, polysulfide rubber, and silicone rubbers, and, dispersed therein as a discontinuous phase, a particulate, organophilic solid in a supercolloidal state of subdivision, the solid consisting of a substrate of inorganic siliceous material selected from the group consisting of amorphous silica and water-insoluble metal silicates, said substrate having a specific surface area of at least one square meter per gram and having methoxy groups chemically bound to surface silicon atoms thereof.

2,751,367

FRIABLE POLYACRYLATE POWDERS

John F. Yost, Noroton Heights, and Ilse B. Frederick, Glenbrook, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application June 14, 1952, Serial No. 293,662

5 Claims. (Cl. 260—41)

1. A composition of matter which comprises a mixture of 100 parts by weight of a reaction product having a molecular weight above about 88,000 of a monovalent base having a dissociation constant no smaller than 1.8×10^{-5} with a polymer of a compound of the group consisting of acrylic acid, acrylonitrile, acrylamide and lower alkyl acrylates, at least 50 parts of a nontacky inert powder of high sorptive power having a water absorbency of at least 42 percent by weight and a compacted dry bulk density less than 30 pounds per cubic foot, and a polyoxyalkylene 200–4000 ester of a fatty acyl substance containing from 8 to 22 carbon atoms per acyl chain.

2,751,368

SOLUBILIZED POLYACRYLATES

John F. Yost, Noroton Heights, and Ilse B. Frederick, Glenbrook, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application June 14, 1952, Serial No. 293,661

9 Claims. (Cl. 260—41)

1. A composition of matter which comprises a polyoxyalkylene 200–4000 ester of a fatty acyl substance containing from 8 to 22 carbon atoms per acyl chain, and a reaction product having a molecular weight between about 88,000 and about 265,000 of a monovalent base having a dissociation constant no smaller than 1.8×10^{-5} with a polymer of a compound of the group consisting of acrylic acid, acrylonitrile, acrylamide and lower alkyl acrylates.

2,751,369

PIGMENTED COMPOSITIONS AND METHODS OF MAKING SAME

Theodore A. Te Grotenhuis, Olmsted Falls, Ohio, assignor of twenty per cent to The General Tire and Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application March 30, 1945, Serial No. 585,824

5 Claims. (Cl. 260—41)

1. A method of making a solid polymeric material containing a pigment therein which comprises forming a mixture of water-immiscible polymerizable liquid containing as a main polymerizable constituent thereof at least one

member of the group consisting of the polymerizable conjugated dienes, isoprene, butadiene, dimethyl butadiene and the polymerizable mono-olefinic compounds styrene, nuclearly chlorinated styrene having 1 to 3 chlorine atoms, nuclearly fluorinated styrenes of 1 to 3 fluorine atoms, alkyl arylvinyl compounds, methyl methacrylate and acrylonitrile and a pigment that has an olefinic group attached to at least a portion of the surface thereof through silicon atoms and subjecting said polymerizable olefinic compound of said mixture to a polymerization catalyst and to agitation to cause polymerization while it is distributed as droplets in a continuous phase of water whereby said pigment is retained in particles of the polymeric material produced by polymerization of said olefinic compound, said pigment being one that has been contacted with an organosilicon compound having one to three water hydrolyzable groups and at least one unsaturated aliphatic group attached directly to the silicon atom.

2,751,370

RUBBERS STABILIZED WITH A 1-ARYL-2-MERCAPTO-2-IMIDAZOLINE

Philip A. Roussel, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application January 25, 1954, Serial No. 406,092
8 Claims. (Cl. 260—45.8)

1. A 1,3-diene elastomer stabilized against deterioration in the vulcanized state by having incorporated therein prior to vulcanization from 0.5% to 10% of a 1-aryl-2-mercapto-2-imidazoline in which the aryl group is of the benzene series.

2,751,371

SULFUR VULCANIZABLE RUBBER STABILIZED WITH A REACTION PRODUCT OF AN ALKYL-ARYLOXY PHOSPHORUS DICHLORIDE AND A SECONDARY AMINE

John C. Bill, Middlebury, Conn., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application October 16, 1953, Serial No. 386,650
7 Claims. (Cl. 260—45.9)

1. An unsaturated sulfur-vulcanizable elastomeric composition containing as a stabilizer therefor, a product of reaction of from 2 to 4 molecular proportions of a C-alkylaryloxy phosphorus dichloride and 1 molecular proportion of a non-aromatic secondary amine selected from the class consisting of aliphatic and heterocyclic secondary amines.

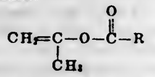
2,751,372

HIGHLY UNSATURATED POLYMERS DERIVED FROM POLYMERIC ISOPROPENYL ACYLATES

Eric W. Taylor and Cornelius C. Unruh, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application September 23, 1954, Serial No. 458,002
10 Claims. (Cl. 260—78.5)

1. A process for preparing a resinous polymer having a high degree of unsaturation which comprises heating a resinous polymer selected from the group consisting of (1) a homopolymer of an isopropenyl carboxylate having the general formula:



wherein R represents a number selected from the group consisting of an alkyl group containing from 1 to 3 carbon atoms and phenyl, and (2) an approximately 1:1 copolymer of the said isopropenyl carboxylate and a monomer selected from the group consisting of a dialkyl fumarate wherein each alkyl group contains from 1 to 4 carbon atoms and a dialkyl maleate wherein each alkyl group contains from 1 to 4 carbon atoms, at a temperature of from 190° to 250° C., substantially in the absence of oxygen, until substantially all of the available carboxylic acid in the said isopropenyl carboxylate of the said polymer has been split off to give said resinous polymer having a high degree of unsaturation.

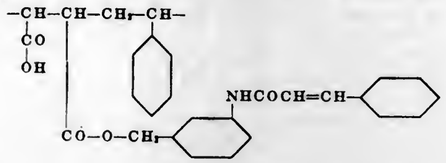
2,751,373

LIGHT-SENSITIVE POLYMERS FOR PHOTOMECHANICAL PROCESSES

Cornelius C. Unruh and Donald A. Smith, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application November 25, 1953, Serial No. 394,502
1 Claim. (Cl. 260—78.5)

A light-sensitive polymer capable of forming a continuous coating on a base and containing recurring units having the structure



2,751,374

POLYMERIZATION OF ACRYLONITRILE

Arthur Cresswell, Stamford, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application February 1, 1951, Serial No. 208,979
8 Claims. (Cl. 260—88.7)

1. A process which comprises the addition polymerization of polymerizable matter containing a major proportion of acrylonitrile in the presence of an oxidation-reduction catalyst system comprising chloric acid and an acid of the group consisting of sulfurous acid and hydrosulfurous acid.

2,751,375

PURIFICATION PROCESS FOR FLUORINE-CONTAINING POLYMERS

Russell M. Mantell, Orange, and William S. Barnhart, Cranford, N. J., assignors to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware

No Drawing. Application March 10, 1953, Serial No. 341,606
17 Claims. (Cl. 260—92.1)

1. A process for removing metallic impurities from a polymer of tetrafluoroethylene which comprises extracting metallic impurities from said polymer, said polymer being in finely divided form between about 10 and about 150 mesh, with between about 2 and about 20 times its weight of acetic acid maintaining said acid in contact with said polymer and contaminants at a temperature between room temperature and the boiling point of the acid for a period of time between about 1 and about 24 hours and recovering the polymer substantially free of metallic impurities as a product of the process.

2,751,376

PURIFICATION PROCESS FOR FLUORINE CONTAINING POLYMERS

William S. Barnhart, Cranford, and Russell M. Mantell, Orange, N. J., assignors to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware

Application March 10, 1953, Serial No. 341,564
20 Claims. (Cl. 260—92.1)

1. A process for removing contaminants selected from the group consisting of metallic contaminants and oxidizable organic contaminants from a polymer which contains carbon and fluorine and in which any other element is selected from the group consisting of chlorine and hydrogen which comprises contacting said contaminants and said polymer with a water-soluble carboxylic acid having not less than 2 and not more than 10 carbon



atoms and containing a minor proportion of water and a water-soluble inorganic metallic oxidizing reagent comprising a compound of a metal in its highest valence state which is reducible to a compound of said metal in a low valence state and recovering said polymer substantially free of said contaminants as a product of the progress.

2,751,377

METHOD OF EXTRACTING ANIMAL GLUE

Havard L. Kell, Clarendon Hills, August L. Lolli, Chicago, and Edward F. Cavanaugh, Wilmette, Ill., assignors to Armour and Company, Chicago, Ill., a corporation of Illinois

No Drawing. Application February 26, 1953, Serial No. 339,165
9 Claims. (Cl. 260—118)

1. The method of extracting animal glue from collagen-bearing animal tissues, characterized by the step of carrying out the extraction by contacting acidulated collagen-bearing animal tissues with hot water to extract the glue and also contacting said hot water with an insoluble base to maintain said water at a substantially non-acidic pH during said extraction, whereby the extraction is facilitated by the acidity of the tissues while the extracted glue is protected from acidic conditions which would impair its viscosity.

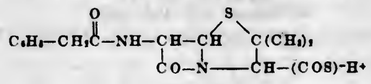
2,751,378

BENZYLPENICILLIN THIO ACID

David A. Johnson, Fayetteville, N. Y., and John C. Sheehan, Arlington, Mass., assignors to Bristol Laboratories Inc., Syracuse, N. Y., a corporation of New York

No Drawing. Application March 11, 1953, Serial No. 341,816
1 Claim. (Cl. 260—239.1)

Benzylpenicillin thioacid having the formula



2,751,379

PREPARATION OF STEROIDAL 11α-HYDROXY COMPOUNDS

Franz Sondheimer, Mexico City, Mexico, Carl Djerassi, Birmingham, Mich., and George Rosenkranz and Octavio Mancera, Mexico City, Mexico, assignors to Syntex S. A., Mexico City, Mexico, a corporation of Mexico

No Drawing. Application July 28, 1953, Serial No. 370,857
16 Claims. (Cl. 260—239.55)

1. A method for the production of steroidal 11α-hydroxy compounds which comprises treating the corresponding steroidal 11-keto compounds with sodium metal in the presence of an organic solvent selected from the group consisting of lower alcohol solvents and moist organic solvents.

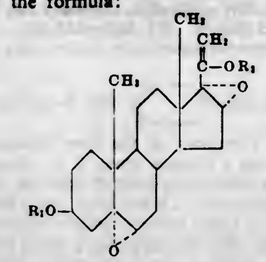
2,751,380

STEROID COMPOUNDS

George Slomp, Jr., Kalamazoo Township, Kalamazoo County, Mich., assignor to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application January 4, 1954, Serial No. 402,127
7 Claims. (Cl. 260—239.55)

1. A 3β,20-diacyloxy-5α(6α),16α(17α) - di - epoxy-20-pregnene of the formula:



wherein R_1 and R_2 are the acyl radicals of hydrocarbon carboxylic acids containing up to and including eight carbon atoms.

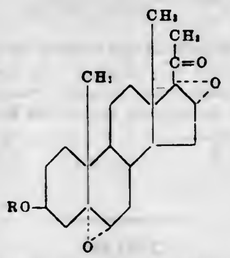
2,751,381

PROCESS OF PRODUCING EPOXY STEROID COMPOUNDS

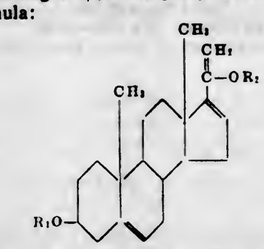
George Slomp, Jr., Kalamazoo Township, Kalamazoo County, Mich., assignor to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application January 4, 1954, Serial No. 402,128
6 Claims. (Cl. 260—239.55)

1. In a process for the production of a 3-oxygenated-5α(6α),16α(17α)-diepoxypregnan-20-one compound of the formula:



wherein R is selected from the group consisting of hydrogen and acyl radicals of carboxylic acids containing up to and including eight carbon atoms, the steps which comprise: mixing a 3β,20-diacyloxy-5,16,20-pregnatriene of the formula:



wherein R_1 and R_2 are acyl radicals of carboxylic acids containing up to and including eight carbon atoms, with

an organic peracid at a temperature between minus ten and plus forty degrees centigrade to give a 3β,20-diacyloxy-5α(6α),16α(17α)-diepoxy-20-pregnene and hydrolyzing the thus-obtained diepoxy-20-pregnene with a basic reagent to obtain 3β-hydroxy-5α(6α),16α(17α)-diepoxy-pregnan-20-one.

2,751,382

NEW CHEMO-THERAPEUTICALLY ACTIVE SALTS

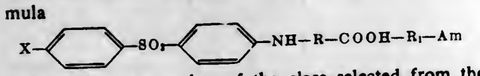
Henry Martin, Zurich, and Ernst Habicht, Schaffhausen, Switzerland, assignors to Cilag Limited, Schaffhausen, Switzerland, a company of Switzerland

No Drawing. Application July 2, 1954, Serial No. 441,174

Claims priority, application Germany July 6, 1953

5 Claims. (Cl. 260—239.65)

1. New chemo-therapeutically active salts of the formula



wherein X is a member of the class selected from the amino group and a halogen atom, R is a lower alkylene radical, R_1 is a substituent selected from the class consisting of a hydrogen atom, a lower alkyl, and a lower alkanol radical, Am is a group selected from the class consisting of a mono lower alkyl amino group, a mono lower alkanol amino group, a di-lower alkanol amino group, and a morpholino group.

2,751,383

FLUORESCENT HETEROCYCLIC COMPOUNDS AND PROCESS FOR THEIR MANUFACTURE

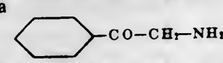
Otto Tröseken, Frankfurt am Main Fechenheim, Germany, assignor to Cassella Farbwerke Mainkur Aktiengesellschaft, Frankfurt am Main Fechenheim, Germany, a German company

No Drawing. Application June 2, 1953, Serial No. 359,231

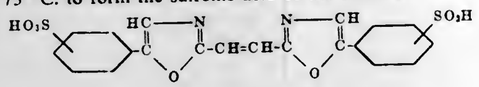
Claims priority, application Germany May 2, 1951

1 Claim. (Cl. 260—240)

Process which comprises reacting aminoacetophenone of the formula



with fumaric acid chloride and reacting the di-(fumaroyl)-aminoacetophenone thus obtained with concentrated sulfuric acid at temperatures ranging between 40° C. and 75° C. to form the sulfonic acid of the formula



2,751,384

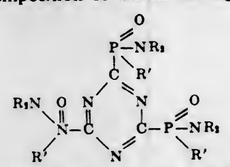
PHOSPHONAMIDE DERIVATIVES OF TRIAZINE

Harry W. Coover, Jr., and Richard L. McConnell, Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 29, 1954, Serial No. 465,744

10 Claims. (Cl. 260—248)

1. A new composition of matter having the structure



where R is an alkyl group containing 1 to 4 carbon atoms and R′ is selected from dialkylamido groups containing 1 to 4 carbon atoms in each alkyl group, alkoxy groups containing 1 to 8 carbon atoms, and aryloxy groups.

2,751,385

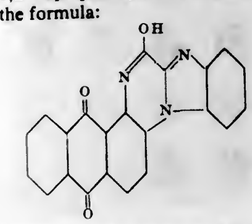
VAT DYES

Aaron Oken, Newark, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 28, 1955, Serial No. 491,175

5 Claims. (Cl. 260—262)

1. Compounds of the group consisting of 14-hydroxybenzimidazo[1,2 - a]naphtho[2,3 - f] - quinoxaline - 7,12-dione having the formula:



its mono and dibrominated, mono and dichlorinated and 14-methoxy derivatives.

2,751,386

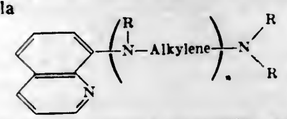
QUINOLYL ALIPHATIC ALKYLENE POLYAMINE POLY ACID

Frederick C. Bersworth, Verona, N. J., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application July 13, 1953, Serial No. 367,722

8 Claims. (Cl. 260—287)

1. A compound which is a member of the group consisting of compounds conforming to the following structural formula



wherein Alkylene is a lower molecular weight group which places 2–3 carbon atoms in the chain directly between the indicated nitrogen atoms, R is selected from the group consisting of

—CH_2COOH and —CH_2CH_2COOH;

n is a positive integer having a value in the range from at least 1 to about 4; and the alkali metal, ammonium base and acid addition salts of the said compounds.

2,751,387

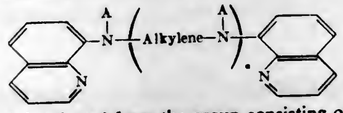
DI-QUINOLYL ALIPHATIC ALKYLENE POLYAMINO POLY ACIDS AND SALTS THEREOF

Frederick C. Bersworth, Verona, N. J., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application July 13, 1953, Serial No. 367,723

8 Claims. (Cl. 260—287)

1. Compounds corresponding to the generic formula:



wherein A is selected from the group consisting of hydrogen, lower alkyl groups, and —CH_2COOH

—CH_2CH_2COOH

and alkylene is a lower molecular weight alkylene group which places 2–3 carbon atoms directly between the indicated nitrogen atoms and n is a positive integer having a value of at least 1 to about 4 and the alkali metal, and ammonium base salts thereof and the acid addition salts of the acid forms of said compounds.

2,751,388

PROCESS FOR PREPARING BENZHYDRYL ETHERS

Joseph Levy, Union, N. J., assignor to Nopco Chemical Company, Harrison, N. J., a corporation of New Jersey

No Drawing. Application April 7, 1950, Serial No. 154,731

12 Claims. (Cl. 260—294.7)

1. A process for preparing benzhydryl ethers which comprises reacting a benzhydryl halide selected from the group consisting of substituted benzhydryl halides and unsubstituted benzhydryl halides, the substituted benzhydryl halides containing not more than one substituent radical in each phenyl group, said substituent radical being selected from the group consisting of halogen, methyl, ethyl, methoxy and ethoxy radicals, with an amino alcohol containing a tertiary amino group selected from the group consisting of piperidino alkanols, aliphatic amino alcohols, 1-methyl-4-piperidinol, 1-ethyl-4-piperidinol, 1-isopropyl-4-piperidinol, 1-cyclopentyl-4-piperidinol, 1-cyclohexyl-4-piperidinol, 1-phenyl-4-piperidinol, 1-benzyl-4-piperidinol, and 1-pyridyl-4-piperidinol in the presence of a tertiary amine selected from the group consisting of benzyl dibutylamine and tertiary alkyl amines, each of the alkyl radicals of the tertiary alkyl amines containing from 3 to 8 carbon atoms.

2,751,389

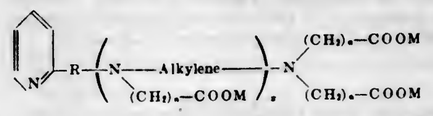
PYRIDYL ALIPHATIC ALKYLENE POLYAMINE POLY ACID COMPOUNDS AND SALTS

Frederick C. Bersworth, Verona, N. J., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application July 13, 1953, Serial No. 367,721

8 Claims. (Cl. 260—295)

1. Compounds selected from the group consisting of those corresponding to the following general formula and acid addition salts of acid forms of said compounds:



wherein Alkylene is a lower molecular weight bivalent alkylene group which places 2 to 3 carbon atoms in the chain directly between the indicated nitrogen atoms, R is an alkylene radical of 1 to 12 carbon atoms in length, n is a positive integer having a value in the range 1 to 2, x is a positive integer having a value in the range 1 to 4, M is selected from the group consisting of H, Na, K, Li, Ce, Rb, NH_4 and ammonium bases.

2,751,390

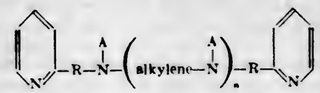
DI-PYRIDYL ALIPHATIC ALKYLENE POLYAMINE POLY ACIDS

Frederick C. Bersworth, East Orange, N. J., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Original application September 2, 1950, Serial No. 183,079. Divided and this application October 30, 1952, Serial No. 317,840

5 Claims. (Cl. 260—295)

1. A compound which is a member of the group consisting of compounds conforming to the following structural formula:



wherein A is one of the group consisting of H, —CH_2COOH, —CH_2CH_2COOH; R is an alkyl group containing not over 12 carbon atoms; alkylene is one of the group consisting of $CH_2{\cdot}CH_2$, $CH{\cdot}CH_3{\cdot}CH_2$ and $CH_2{\cdot}CH_2{\cdot}CH_2$; and n is one of the group consisting of 1, 2, 3 and 4; and the alkali metal and acid addition salts of said compounds.

2,751,391

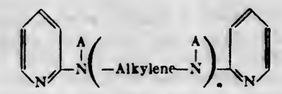
DIPYRIDYL ALIPHATIC ALKYLENE POLYAMINE POLY ACIDS

Frederick C. Bersworth, Verona, N. J., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application July 13, 1953, Serial No. 367,724

4 Claims. (Cl. 260—295)

1. Compounds conforming to the structural formula:



wherein A is selected from the group consisting of —CH_2COOH, and —CH_2CH_2COOH, alkylene is a lower molecular weight bivalent alkylene group which places 2 to 3 carbon atoms in the chain directly between the indicated nitrogen atoms, and n is an integer having a value in the range from at least 1 to about 4, and the alkali metal and ammonium base salts and acid addition products of the acid forms of said compounds.

2,751,392

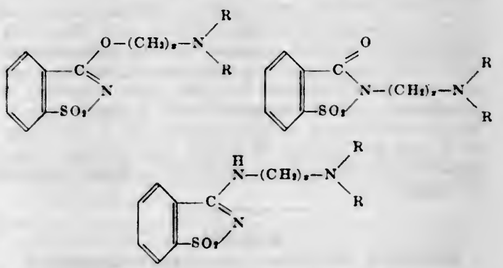
TERTIARY AMINE DERIVATIVES OF N- AND O-SACCHARIN

Charles H. Grogan, Falls Church, Va., and Leonard M. Rice, Baltimore, Md., assignors to Geschickter Fund for Medical Research, Inc., New York, N. Y., a corporation of New York

No Drawing. Application November 23, 1953, Serial No. 393,964

7 Claims. (Cl. 260—301)

1. As novel compositions of matter, the N- and O-saccharin derivatives taken from the group consisting of



where x represents a number from 2 to 6, and

$N\begin{matrix}R\\R\end{matrix}$

is taken from the group consisting of the dialkylamino having 1 to 6 carbon atoms in each alkyl chain and the heterocyclic ring systems of pyrrolidine, morpholine and piperidine.

6. The method of preparing saccharin derivatives comprised in reacting sodium saccharide with an alkyl halide selected from the group consisting of dialkylaminoalkyl and heterocyclic alkyl halides in a polar solvent.

2,751,393

IMIDAZOLINE DERIVATIVES OF ARYL INDOLES

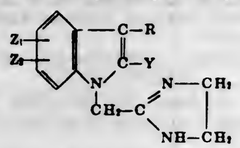
Walter Schindler and Franz Hüfliger, Basel, Switzerland, assignors to J. R. Geigy A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application May 11, 1954, Serial No. 429,102

Claims priority, application Switzerland May 13, 1953

2 Claims. (Cl. 260—309.6)

1. A compound corresponding to the general formula:



wherein R represents a member selected from the group consisting of hydrogen and lower alkyl radicals, Y represents a member selected from the group consisting of phenyl radicals substituted at vicinal carbon atoms by a bivalent radical selected from the group consisting of trimethylene and tetramethylene radicals; phenyl and naphthyl radicals, the phenyl radicals being substituted by at most two members selected from the group consisting of hydrogen, halogen, lower alkyl, lower alkoxy and hydroxy radicals, the naphthyl radicals being substituted by one member selected from the group consisting of hydrogen, halogen and lower alkyl radicals. Z_1 represents a member selected from the group consisting of hydrogen, halogen, lower alkyl, lower alkoxy and hydroxyl radicals, and Z_2 represents a member selected from the group consisting of hydrogen, halogen and lower alkyl radicals.

2,751,394

PROCESS OF TREATING ETHYLENE UREA AND PRODUCT

Ralph Marotta, Malden, Mass., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application November 8, 1954, Serial No. 467,657

15 Claims. (Cl. 260—309.7)

1. Solid ethylene urea having uniformly distributed therein a stabilizer substance selected from the group consisting of saturated aliphatic hydroxy polycarboxylic acids containing from 4 to 6 carbon atoms, inclusive, and acid salts thereof selected from the group consisting of ammonium, sodium, potassium, and mixtures thereof, which are soluble in molten ethylene urea to the extent of at least 0.05 percent by weight, said substance being present in an amount from about 0.05 to about 5 percent by weight.

2,751,395

ISOMERIC NITROSO-1-PHENYL PYRAZOLES

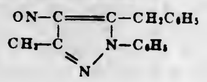
Wilfred Arthur Freeman, East Barnet, and Ronald Slack, London, England, assignors to May & Baker Limited, Dagenham, England, a British company

No Drawing. Application October 17, 1955, Serial No. 541,047

Claims priority, application Great Britain October 19, 1954

3 Claims. (Cl. 260—310)

1. The pyrazole of the formula:



2,751,396

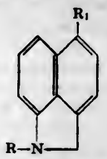
SUBSTITUTED BENZ [CD] INDOLINES

Edmund C. Kornfeld, Indianapolis, Ind., assignor to Eli Lilly and Company, Indianapolis, Ind., a corporation of Indiana

No Drawing. Application July 16, 1952, Serial No. 299,225

9 Claims. (Cl. 260—319)

1. A compound represented by the formula



wherein R represents a member of the group consisting of lower alkanoyl and monocarbocyclic aroyl radicals, and R_1 represents a member of the group consisting of formyl, cyano, alkanoyl, formylsemicarbazone, lower carboxyalkyl and lower carbalkoxyalkyl radicals.

2,751,397

REDUCTION OF 11α-ACYLOXY PREGNENES

Alan H. Nathan and John A. Hogg, Kalamazoo Township, Kalamazoo County, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application August 28, 1952, Serial No. 306,941

11 Claims. (Cl. 260—397.3)

1. A process for the saturation of the double bond in the 4(5)-position of an 11α-acyloxyprogesterone to produce a high proportion of 11α-acyloxypregnane-3,20-dione having the normal stereoconfiguration of hydrogen at carbon atom five of the steroid nucleus, which comprises: hydrogenating an 11α-acyloxyprogesterone wherein the acyloxy group has the formula AcO, Ac being the acyl radical of an organic carboxylic acid, with hydrogen in the presence of a palladium hydrogenation catalyst, to produce an 11α-acyloxypregnane-3,20-dione.

2,751,398

PROCESS FOR MONOENOLESTERIFICATION AT THE 20-POSITION OF 11,20-ALLOPREGNANE-DIONES

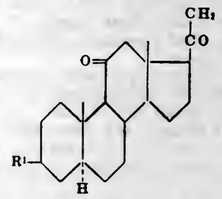
John Selwyn Hunt, Greenford, Thomas Walker, South Harrow, and Derek Harold Richard Barton, London, England, assignors to Glaxo Laboratories Limited, Greenford, England, a British company

No Drawing. Application June 15, 1953, Serial No. 361,842

Claims priority, application Great Britain August 29, 1952

9 Claims. (Cl. 260—397.45)

1. A process for the monoenolesterification at the 20-position of an allosteroid compound having the general formula



where R^1 is a group selected from the group consisting of a hydroxy group, an acyloxy derived from a lower alkyl carboxylic acid and a benzoyloxy group which comprises reacting said compound with an aliphatic carboxylic acid anhydride containing from 4–10 carbon atoms in the presence of perchloric acid and a solvent medium for said allosteroid compound.

2,751,399

HYDROGENATION OF STEROIDS

Gunther S. Fonken, Kalamazoo, Mich., assignor to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application January 8, 1952, Serial No. 265,547

7 Claims. (Cl. 260—397.45)

1. A process for the saturation of a double bond in the four position of a 3,20-diketo-Δ^4-pregnene which comprises the step of hydrogenating, with hydrogen and a hydrogenation catalyst, a 3,20-diketo-Δ^4-pregnene, the hydrogenation catalyst being palladium plus a member of the group consisting of the carbonate, the oxide, and mixtures of the carbonate and oxide, of a group 2B element of the periodic table, to obtain a hydrogenated product containing a high ratio of normal 3,20-diketopregnane to 3,20-diketo-allopregnane, and separating the normal 3,20-diketopregnane.

2,751,400

HYDROGENATION OF 11α-HYDROXYPREGNENES

Alan H. Nathan, Kalamazoo Township, Kalamazoo County, Mich., assignor to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application August 28, 1952, Serial No. 306,942

5 Claims. (Cl. 260—397.45)

1. A process for the saturation of the double bond in the 4(5)-position of a 3,20-diketo-11α-hydroxy-4-pregnene, to produce a high proportion of hydrogenated product having the normal stereochemical configuration of hydrogen at carbon atom five of the steroid nucleus, which comprises hydrogenating a 3,20-diketo-11α-hydroxy-4-pregnene, with hydrogen, in the presence of a palladium hydrogenation catalyst.

2,751,401

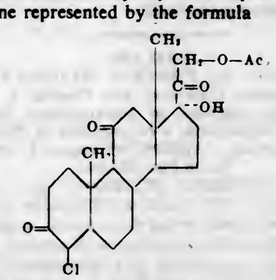
4-CHLOROPREGNANE-17α,21-DIOL-3,11,20-TRIONE AND 21-ESTERS THEREOF

Arthur R. Hanze and Robert H. Levin, Kalamazoo Township, Kalamazoo County, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application August 28, 1953, Serial No. 377,263

2 Claims. (Cl. 260—397.45)

1. A 4-chloro-21-acyloxy-17α-hydroxypregnane-3,11,20-trione represented by the formula



wherein Ac is the acyl radical of a hydrocarbon carboxylic acid containing from one to eight carbon atoms, inclusive.

2,751,402

OXIDATION OF HYDROCORTISONE ESTERS TO CORTISONE ESTERS

William P. Schneider, Kalamazoo, Mich., assignor to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application August 13, 1953, Serial No. 374,105

7 Claims. (Cl. 260—397.45)

1. A process for the production of 17α-hydroxy-21-acyloxy-4-pregnene-3,11,20-trione which comprises oxidizing 11β,17α-dihydroxy-21-acyloxy-4-pregnene-3,20-dione wherein the acyl radical is that of a hydrocarbon carboxylic acid containing from one to eight carbon atoms, inclusive, with a compound selected from the group consisting of N-chloro-carboxylic acid amides, N-chloro-carboxylic acid imides, N-bromo-carboxylic acid amides and N-bromo-carboxylic acid imides, in a substantially non-reactive organic solvent containing at least about a molar equivalent, calculated on the starting steroid, of an amine, to produce 17α-hydroxy-21-acyloxy-4-pregnene-3,11,20-trione.

2,751,403

CATALYST RECOVERY FROM ALCOHOL SYNTHESIS PROCESS

Joseph K. Mertzweiller, Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application December 31, 1952, Serial No. 328,951

9 Claims. (Cl. 260—414)

1. In a carbonylation process wherein olefinic carbon compounds are contacted in a carbonylation zone with CO and H_2 in the presence of a cobalt catalyst under conditions including temperatures of from about 150 to 450° F. and pressures of from about 1500 to 4500 p. s. i. g. to produce reaction products comprising aldehydes containing at least one more carbon atom than said olefinic compounds, and wherein a solution comprising said reaction products and dissolved cobalt catalyst is transferred to a catalyst removal zone and said cobalt is recovered, an improved method of removing and recovering said cobalt from said aldehyde product which comprises contacting said cobalt-contaminated aldehyde product with an aqueous solution of an organic acid at a temperature in the range of about 150 to about 200° F., converting said cobalt compounds dissolved in said aldehyde into water-soluble forms of cobalt, passing aldehyde product and aqueous solution of cobalt to a settling zone, withdrawing a substantially cobalt-free aldehyde product from said zone, withdrawing from said zone an aqueous solution of cobalt compounds wherein cobalt is present both in an anionic and a cationic form, passing said solution to a treating zone, making said solution acidic in said treating zone, subjecting said aqueous solution made acidic to an oxidizing treatment at about 100° to 150° F. whereby cobalt is converted substantially into cobaltous ion, and converting cobaltous ion-containing solution into olefin-soluble cobalt salts.

2,751,404

PROCESS FOR THE CATALYTIC TREATMENT OF GASES CONTAINING CARBON COMPOUNDS AND HYDROGEN

Bernhard Löpmann, Bergkamen, near Kamen, Germany, assignor to Chemische Werke Essener Steinkohle A. G., Bergkamen, Germany

No Drawing. Application May 16, 1952, Serial No. 288,304

Claims priority, application Germany May 17, 1951

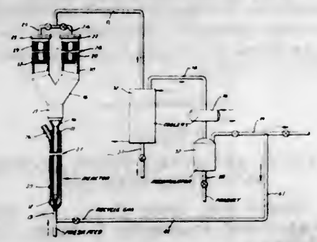
5 Claims. (Cl. 260—449.6)

1. A method of producing synthetic fuel comprising (*a*) a preliminary phase in which coke oven gas is caused to pass over a cobalt catalyst at a temperature in the range of 100° to 180° C. under a pressure in the range of ordinary atmospheric pressure up to about 284 lbs. per square inch, in order to form higher alcohols, which are separated from the gas; (*b*) converting the gas resulting from phase (*a*) into synthesis gas and (*c*) subjecting the synthesis gas to treatment under the conditions of the Fischer-Tropsch process.

2,751,405
SYNTHESIS OF ORGANIC COMPOUNDS FROM CARBON MONOXIDE AND HYDROGEN

Henry G. McGrath, Union, and Louis C. Rubin, West Caldwell, N. J., assignors to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware

Application April 9, 1951, Serial No. 220,050
1 Claim. (Cl. 260—449.6)



In a process for the hydrogenation of carbon monoxide in which a gaseous reaction mixture comprising hydrogen and carbon monoxide is passed through a reaction zone containing a finely divided iron catalyst at a velocity effective to suspend said catalyst in said gaseous mixture in said reaction zone under conditions such that hydrogen and carbon monoxide are reacted to produce organic compounds as products of the process, the improvement during the synthesis proper which comprises introducing into said reaction zone a fresh feed gas containing hydrogen and carbon monoxide in a mol ratio in excess of the mol ratio in which these components are reacted and containing a relatively small amount of carbon dioxide, passing the gaseous reaction mixture through said reaction zone at a rate equivalent to at least 30 standard cubic feet of total gas and between about 4 and about 15 standard cubic feet of carbon monoxide, per hour per pound of iron catalyst in the reaction zone, maintaining a temperature of reaction between about 550° F. and about 750° F., a reaction pressure between about 150 and about 600 pounds per square inch gage and a contact time between the reaction mixture and catalyst in the reaction zone of between about 8 and about 35 seconds, converting over-all a major proportion of the hydrogen and carbon monoxide in a mol ratio of at least 1.3 to products of reaction comprising organic compounds having at least one carbon atom per molecule and water, whereby under the conditions of operation a major proportion of the oxygen of the carbon monoxide is converted to water and not more than a minor proportion is converted to carbon dioxide, withdrawing a gaseous effluent from said reaction zone, cooling said gaseous effluent to condense water, separating condensate comprising water from an uncondensed portion of said effluent comprising hydrogen and carbon dioxide, and recycling said uncondensed portion of said effluent comprising hydrogen and carbon dioxide to the inlet of said reaction zone in a volumetric ratio of recycle gas to fresh feed gas of between about 0.5:1 and about 5:1 such that the total feed gas to said reaction zone contains hydrogen and carbon monoxide in a mol ratio greater than 2.3:1 and between about 6 and about 14 mol per cent carbon dioxide, the carbon dioxide concentration of the total feed being more than in the fresh feed.

2,751,406
OXIDATIVE CONDENSATION OF ARALKYL COMPOUNDS

Vladimir N. Ipatieff and Herman Pines, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application July 12, 1951,
Serial No. 236,458
4 Claims. (Cl. 260—465)

1. A process for producing a condensation product of an aralkyl compound selected from the group consisting of phenylacetone, phenyl acetaldehyde, phenyl acetic acid, esters of phenyl acetic acid, phenyl aceto nitrile, p-tolylacetone, naphthylacetone, and naphthylacetonitrile, which comprises heating said compound in substantially liquid phase to a temperature of from about 80° to about 250° C. in the presence of free oxygen, and recovering the resultant condensation product.

2,751,407
PURIFICATION OF 1,4-DICYANO-2-BUTENE ISOMERIC MIXTURES

Samuel P. Foster, Wilmington, and Gelu S. Stamatoff, Newark, Del., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application June 17, 1953,
Serial No. 362,418
3 Claims. (Cl. 260—465.8)

1. A process for producing from crude 1,4-dicyano-2-butene, contaminated with chlorine-containing impurities which are corrosive to mild and stainless steel, and which are present as a result of the process employed for manufacture of the said 1,4-dicyano-2-butene, namely its synthesis from dichlorobutene and HCN, a liquid mixture of isomers of 1,4-dicyano-2-butene and 1,4-dicyano-1-butene having a melting point within the range of 2° to 8° C., which comprises agitating a solution of the said crude 1,4-dicyano-2-butene in an inert organic liquid with a quantity of aqueous alkali metal hydroxide sufficient to produce a pH of from 10.5 to 12.0, in the water phase after separation from the organic phase, and further admixing the dicyanobutene thus produced, dissolved in an inert organic liquid, with from 0.3% to 5% of its weight of alkali metal hydroxide in aqueous solution, agitating the resulting mixture for a period of time within the range of 5 to 30 minutes at a temperature within the range of 50° to 70° C. until the resulting isomerization of the 1,4-dicyano-2-butene has proceeded to such an extent that the melting point of the mixed isomers thus formed is within the range of 2° to 8° C., withdrawing from the aqueous phase in the resulting mixture the nonaqueous phase comprising a solution of the said mixed isomers in the said inert organic liquid, and distilling the resulting mixture in the presence of an olefin oxide of the class consisting of ethylene oxide and propylene oxide in a stainless steel vessel, whereby corrosion of the said steel is avoided, and a distillate fraction containing the said mixed isomers is obtained.

2,751,408
TREATMENT OF PROTEIN HYDROLYSATES

Forest A. Hoglan, Glenview, and Preston A. Pugh, Jr., Skokie, Ill., assignors to International Minerals & Chemical Corporation, a corporation of New York

No Drawing. Application August 5, 1952,
Serial No. 302,802
15 Claims. (Cl. 260—519)

1. A process for the treatment of protein hydrolysates which comprises hydrolyzing protein with a mineral acid nonoxidizing under the conditions obtaining, separating humin from the hydrolysate at a pH between about 0.5 and about 4.0 and at a temperature between about 40° C. and about 100° C., adjusting the pH of the humin-free hydrolysate to between about 5.5 and about 10.0 and precipitating tyrosine-containing material from the adjusted solution.

2,751,409
PREPARATION OF THIOLALKYLAMIDES

Richard Kuhn and Günter Quadbeck, Heidelberg, Germany

No Drawing. Application August 2, 1951,
Serial No. 240,042
2 Claims. (Cl. 260—558)

1. The process of preparing a compound having the formula $H \cdot S \cdot CH_2 \cdot CH_2 \cdot NH \cdot CO \cdot R$ in which R represents a group selected from the class consisting of lower alkyl and mono-carbocyclic aryl hydrocarbon radicals which comprises mixing substantially equimolecular amounts of ethylenimine and a thio compound selected from the class consisting of R-thionic and R-thiolic carboxylic acids, R representing a group selected from the class consisting of lower alkyl and mono-carbocyclic aryl hydrocarbon radicals permitting the compounds to react with the evolution of heat, and then heating the mixture to complete the reaction.

2,751,410
3-PHENYLSALICYLAMIDE

Melville Sahyun and John A. Faust, Santa Barbara, Calif., assignors, by mesne assignments, to Cutter Laboratories, Inc., Berkeley, Calif., a corporation of California

No Drawing. Application March 11, 1954,
Serial No. 415,696
1 Claim. (Cl. 260—559)

3-phenylsalicylamide.

2,751,411
N-BUTYL-3-PHENYLSALICYLAMIDES

Melville Sahyun and John A. Faust, Santa Barbara, Calif., assignors, by mesne assignments, to Cutter Laboratories, Inc., Berkeley, Calif., a corporation of California

No Drawing. Application April 9, 1954,
Serial No. 422,245
4 Claims. (Cl. 260—559)

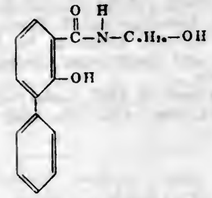
1. N-(butyl)-3-phenylsalicylamide.

2,751,412
N-(HYDROXYALKYL)-3-PHENYLSALICYLAMIDES

Melville Sahyun and John A. Faust, Santa Barbara, Calif., assignors, by mesne assignments, to Cutter Laboratories, Inc., Berkeley, Calif., a corporation of California

No Drawing. Application April 9, 1954,
Serial No. 422,246
2 Claims. (Cl. 260—559)

1. A compound selected from the group consisting of those compounds having the formula:



wherein *n* is an integer from two to six, inclusive.

2,751,413
DICHLORACETAMIDO NITROPHENYL-HYDROXYPROPANAL

Robert Michel Jacob, Ablon-sur-Seine, and Jacques Georges Robert, Paris, France, assignors to Parke, Davis & Company, Detroit, Mich.

No Drawing. Application August 7, 1952,
Serial No. 303,144
Claims priority, application France October 19, 1951
1 Claim. (Cl. 260—562)

2 - dichloracetamido-3-p-nitrophenyl-3-hydroxypropane-1-al.

2,751,414
PERHALOCARBON COMPOUNDS AND METHOD OF PREPARING THEM

William T. Miller, Ithaca, N. Y.

No Drawing. Application December 16, 1952,
Serial No. 326,357
17 Claims. (Cl. 260—566)

1. A process for the allylic replacement of an unsaturated perhalocarbon which comprises: reacting an unsaturated perhalocarbon having a first unsaturated carbon atom containing only fluorine halogen substitution once removed from an allylic carbon atom containing a fluorine substituent, and a second unsaturated carbon atom containing halogen substitution selected from the group consisting of fluorine and chlorine between said first unsaturated carbon atom and said allylic carbon atom, with a lower alkyl amine, whereby allylic halogen is replaced with the formation of corresponding carbon-nitrogen bonds to produce a reaction mass comprising the corresponding perhalovinyl compound derived from said unsaturated perhalocarbon.

2,751,415
PREPARATION OF THIURAM DISULFIDES

John R. Cheshire, Westfield, N. J., and William R. Trutna, Pasadena, Tex., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

Application August 20, 1953, Serial No. 375,410
5 Claims. (Cl. 260—567)

1. A continuous process for the preparation of tetramethylthiuram disulfide which comprises feeding into a pipe an aqueous solution of a salt of dimethyldithiocarbamic acid at about pH 9–11, gaseous chlorine, and an inert gaseous diluent at relative gas to liquid rates required to provide annular flow of the liquid component in the pipe, said chlorine being introduced into the pipe in mixture with at least a portion of said inert diluent in proportions of at least ten volumes of inert diluent per volume of chlorine, whereby said salt is oxidized by the chlorine to tetramethylthiuram disulfide as it is propelled thru the pipe in annular flow in aqueous solution by the gaseous component, and the pH of the liquid component decreases as the salt is oxidized; withdrawing the liquid component, containing the tetramethylthiuram disulfide which has formed, from the pipe at a pH above about pH 5, said pH above about pH 5 being maintained by adding a bicarbonate to the liquid component at a point in the pipe at which the pH of the liquid component is above about pH 7.0, and separating the tetramethylthiuram disulfide from the liquid component withdrawn from the pipe.

2,751,416
CONTINUOUS PROCESS FOR THE MANUFACTURE OF THIURAM DISULFIDES

Martin L. Nadler, Wilmington, and William E. Meece, New Castle, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

Application August 20, 1953, Serial No. 375,441
6 Claims. (Cl. 260—567)

1. A continuous process for the manufacture of tetramethyl thiuram disulfide which comprises containing an aqueous solution of sodium dimethyl dithiocarbamate having an initial pH of from 7 to 10 with chlorine gas diluted with an inert gas under turbannular flow at temperatures of from 0° to 60° C., the ratio of inert gas to chlorine being greater than 10:1 by volume and the amount of chlorine employed being at least that theoretically required to oxidize the sodium dimethyl dithiocarbamate to tetramethyl thiuram disulfide.

2,751,417
OXIDATION OF SATURATED CYCLIC HYDROCARBONS TO HYDROPEROXIDES

Herman I. Enos, Jr., Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application July 10, 1953,
Serial No. 367,366
10 Claims. (Cl. 260—610)

1. The process of preparing a tertiary hydroperoxide which comprises passing elementary oxygen through a

saturated naphthene hydrocarbon having a tertiary carbon atom in liquid phase at a temperature between about 40° C. and about 125° C. in the presence of a finely divided metal catalyst of atomic number in the range of 44–78 and classified in group VIII of the periodic table, the concentration of the finely divided metal catalyst in the oxidation reaction mixture being from 1 to 100 times the amount necessary to increase the rate of hydroperoxide production by 10% based on the naphthene hydrocarbon.

2,751,418
CATALYTIC OXIDATION OF HYDROCARBONS TO HYDROPEROXIDES
Herman I. Enos, Jr., Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application July 10, 1953, Serial No. 367,367
11 Claims. (Cl. 260—610)

1. The process of preparing a tertiary hydroperoxide which comprises passing elementary oxygen through an alkyl-substituted aromatic organic compound having the structural formula



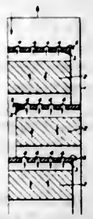
in liquid phase at a temperature between about 40° C. and about 125° C. in the presence of a finely divided metal of atomic number in the range of 44–78, and classified in group VIII of the periodic table, as a catalyst, the concentration of the finely divided metal catalyst in the oxidation reaction mixture being from 1 to 100 times the amount based on the alkyl-substituted aromatic compound which increases the rate of hydroperoxide production by 10%, and in the structural formula R_1 representing alkyl groups, R_2 representing aryl and alkyl groups, and Ar representing an aryl group.

2,751,419
PROCESS FOR PURIFICATION OF POLYTETRAMETHYLENEETHER
Frederick B. Hill, Jr., New Castle, and Robert A. Schulze, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
Application September 13, 1954, Serial No. 455,732
4 Claims. (Cl. 260—615)

1. A process for purifying a crude polytetramethyleneether glycol obtained by catalytic polymerization of tetrahydrofuran and containing acidic material and other impurities, which comprises washing it in a plurality of stages in a countercurrent manner in which the wash water from the more purified stage is used to wash the more crude polytetramethyleneether glycol in the less purified stage, and thereafter neutralizing the residual acid in the washed polytetramethyleneether glycol with an aqueous slurry of calcium hydroxide.

2,751,420
HYDRATION OF OLEFINES USING ALTERNATING CATALYST AND SCRUBBING ZONES
Denis William Huebner, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain
Application July 23, 1951, Serial No. 238,070
Claims priority, application Great Britain August 4, 1950
7 Claims. (Cl. 260—641)

1. A process for the direct hydration of olefines in the presence of an unsupported pelleted catalyst containing blue oxide of tungsten which comprises passing gaseous olefine under superatmospheric pressure and at superatmospheric temperature upwardly through a plurality of superimposed alternate catalyst hydration zones and scrubbing zones, passing water in the liquid phase through said scrubbing zones, contacting the gaseous products from each catalyst hydration zone with said liquid water in the

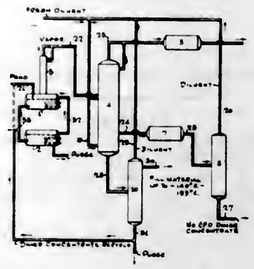


scrubbing zone immediately above said catalyst hydration zone and passing a substantial minor portion of said water in the liquid phase from said scrubbing zone on to the catalyst hydration zone below it, the remaining portion of said water in the liquid phase being passed from said scrubbing zone to the scrubbing zone next below.

2,751,421
STABILIZATION OF TRICHLOROETHYLENE
William O. Stauffer, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application February 18, 1954, Serial No. 411,289
8 Claims. (Cl. 260—652.5)

1. A composition comprising trichloroethylene and a stabilizing amount of a t-butyl-4-hydroxyanisole.

2,751,422
PROCESS FOR RECOVERY AND PURIFICATION OF CYCLODIENES FROM CRUDE PETROLEUM
Joseph F. Nelson, Rahway, Fred W. Banes, Westfield, and Addison W. Hubbard, Elizabeth, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application June 18, 1952, Serial No. 294,162
6 Claims. (Cl. 260—666)

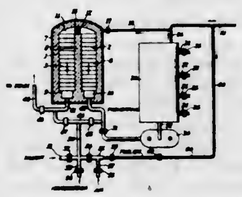


1. A process for separating and recovering cyclopentadiene and methylcyclopentadiene contained together as dimers and codimers in a cracked petroleum concentrate, said concentrate having a boiling range of about 130°–280° C., 75% or more boiling in the range of about 170°–225° C. and containing about 20–93 weight per cent cyclopentadiene and methylcyclopentadiene as dimers and codimers, which comprises the steps of thermally treating the concentrate to crack the cyclopentadiene and methylcyclopentadiene dimers and codimers; taking off a low boiling fraction containing predominantly cyclopentadiene and methylcyclopentadiene monomers from the cracking step to a fractionation zone; fractionating this predominantly cyclopentadiene and methylcyclopentadiene fraction in the fractionating zone in the presence of an added inert organic diluent, said diluent boiling in the range of about 80°–110° C. and being present in an amount required to maintain the maximum reboiler temperature in the fractionating zone at about 140° C.; taking overhead a predominantly cyclopentadiene product relatively free of methylcyclopentadiene; taking off as a side stream below the feed point of the fractionating zone a predominantly methylcyclopentadiene fraction containing appreciable amounts of diluent but relatively free of cyclopentadiene; thermally soaking this side stream methylcyclopentadiene fraction so as to dimerize the methylcyclopentadiene; distilling off the diluent therefrom to leave a predominantly pure dimer product; and also withdrawing from the fractionation zone a high boiling bottoms fraction containing diluent and dimers.

2,751,423
DISPROPORTIONATION REACTIONS WITH ALUMINUM CHLORIDE
William K. Conn., Springfield, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
No Drawing. Application December 23, 1952, Serial No. 327,657
9 Claims. (Cl. 260—676)

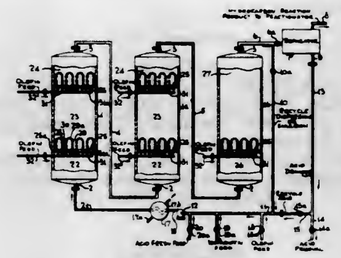
1. Process for the conversion of propane which comprises reacting, in liquid phase, propane with an isoparaffin having at least 5 carbon atoms and one tertiary hydrogen atom per molecule in the presence of aluminum chloride at a temperature of from 50° C. to 200° C., the mole ratio of propane to said isoparaffin being at least 1:1, to produce isoparaffins boiling intermediate said propane and said isoparaffin having at least 5 carbon atoms and one tertiary hydrogen atom per molecule.

2,751,424
PROCESS OF PRODUCING ACETYLENE BY PYROLYTIC REACTION FROM A SUITABLE HYDROCARBON
Rudolph Leonard Hasche, Johnson City, Tenn., assignor, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware
Application September 22, 1950, Serial No. 186,228
6 Claims. (Cl. 260—679)



1. In a cyclic process for the thermal conversion of an in-gas containing a normally gaseous hydrocarbon, which can be pyrolized to produce a cracked off-gas containing an operative proportion of acetylene, said process consisting of alternating recurrent cracking and heating steps carried out in an apparatus comprising first and second channeled regenerative zones communicating through a chamber connecting adjacent ends of the zones, the channels of said zones being unobstructed straight passageways, an improved combination of cracking and heating steps, said cracking step comprising passing an in-gas substantially devoid of molecular oxygen through the substantially unobstructed passageways of the first regenerative zone from the end thereof opposite the chamber-connected end toward the chamber-connected end, the chamber-connected end being at a temperature which is above and the opposite end being at a temperature below the temperature at which the hydrocarbon reacts to form acetylene, withdrawing resulting heated gas from the passageways of the first zone at the chamber-connected end thereof and immediately and without delay conducting the heated gas emerging from the first zone directly through the chamber and into the passageways of the second regenerative zone at the chamber-connected end thereof, passing the gas through the substantially unobstructed passageways in the second regenerative zone, the end of the second regenerative zone opposite its chamber-connected end being at a temperature below about 500° F. and the chamber-connected end of said second regenerative zone being at a temperature substantially higher than the average temperature of said second regenerative zone and withdrawing a relatively cool off-gas from the lower temperature end of the second regenerative zone, said heating step comprising cooling the second regenerative zone and heating the first regenerative zone by flowing a combustible mixture through the passageways of the second regenerative zone from the cooler end thereof to the chamber-connected end, thereby cooling the second regenerative zone and heating the mixture to above its ignition point to cause combustion with the formation of hot combustion products from the mixture, passing the hot combustion products directly through the chamber and through the passageways of the first regenerative zone, and shutting off the supply of the combustible component of the mixture at the end of the heating step and continuing the supply of the balance of the combustible mixture, thereby re-establishing the temperature conditions prevailing at the beginning of the cracking step.

2,751,425
METHOD AND APPARATUS FOR MIXING AND CONTACTING FLUIDS
Walter H. Rupp, Mountainside, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application February 1, 1951, Serial No. 208,955
4 Claims. (Cl. 260—683.4)



1. A method for effecting contact and reaction between at least two liquid reactant materials in the presence of a liquid acid catalyst for the reaction between said materials, comprising initially combining at least said liquid acid catalyst and said least reactive of said reactant materials to form at least a partial mixture of said least reactive material and said liquid acid catalyst, flooding a successive series of separate confined contacting and reaction zones in a reaction vessel with said mixture of materials to provide a common pool of said materials in each said zone, continuously passing said mixture from a common pool thereof in one of said zones into a com-

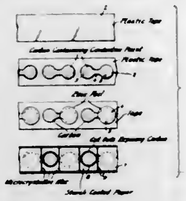
mon pool thereof in a succeeding zone as a plurality of paired, substantially coaxial, opposed jet stream portions, so as to impinge each of said paired jet stream portions against the other in each pair within the pool in said succeeding zone, whereby to create a plurality of areas of intensive agitation within said succeeding zone and to maintain said initial mixture of said materials, separately adding incremental portions of the most reactive of said reactant materials to said mixture in each of said contacting and reaction zones substantially as said mixture is passed from each of said zones into a succeeding zone in said series, and continuously removing contacted materials from the final zone in said series of contacting and reaction zones.

2,751,426
ETHYLATION OF OLEFINS
Rex D. Closson, Detroit, Alfred J. Kolka, Birmingham, and Waldo B. Ligett, Pontiac, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware
No Drawing. Application June 24, 1952, Serial No. 295,353
1 Claim. (Cl. 260—683.15)

An ethylation process which comprises reacting acyclic olefin containing allylic hydrogen with ethylene at a temperature of 100° C. to 182° C. and a pressure of 34 to 46 atmospheres for a reaction time of up to 1.25 hours in the presence of an organo-alkali metal compound as catalyst.

ELECTRICAL

2,751,427
BATTERY
William B. Woodring, Hamden, Conn., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application March 28, 1951, Serial No. 217,992
12 Claims. (Cl. 136—111)



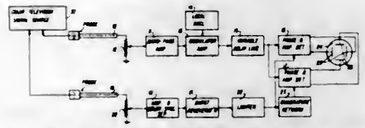
11. An electric dry battery wherein a plurality of flat battery cells, each cell including an electrolyte cell element with an anode and a cathode and a bonded electrical connector connecting an anode of one cell to a cathode of an adjacent cell, are arranged in a common sheath of flexible electrolyte-resisting dielectric material, said sheath being applied to said plurality of cells to form separate compartments within which said cells are individually enclosed, whereby said sheath prevents the escape of electrolyte from one cell to another while electrical contact between cells is obtained through said electrical connectors.

2,751,428
ELECTRIC CELL AND BATTERY
Pierre Depoix, Chasseneuil-du-Poitou, France, assignor to Societe de la Pile Leclanché, Chasseneuil-du-Poitou, France, a corporation of France
Application March 19, 1952, Serial No. 277,360
Claims priority, application France March 23, 1951
6 Claims. (Cl. 136—111)



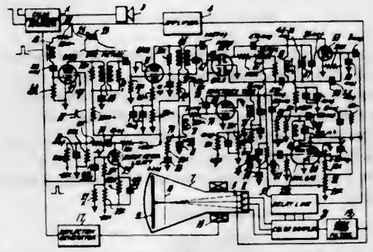
5. A battery structure comprising, in combination, an assembly of juxtaposed cells, each cell comprising at least a flat anode of electronegative metal, a flat conductive cathode superimposed on one side of said flat anode, and a depolarizing layer having edge faces and being superimposed on said flat cathode and formed with at least one channel therein traversing the width of said depolarizing layer and opening in an edge face thereof, said flat anode projecting beyond the periphery of said depolarizing layer and said flat cathode at at least part of its periphery adjacent the edge face in which said channel opens; a casing enclosing said assembly of cells having a wall portion connected to some of the projecting edges of said flat anodes and spaced from the projecting edges of the remaining flat anodes and the edges of said depolarizing layer and said flat cathode adjacent the opening of said channel, so as to define thereby chambers into which the channel of each depolarizing layer opens, said casing wall portion being formed with vent apertures communicating with the atmosphere and opening into said chambers; and filtering means covering said vent apertures in said casing wall portion being permeable to gas and impermeable to liquids for retaining moisture within said cells while allowing passage of gases therethrough.

2,751,429
VECTORSCOPE
Kurt Schlesinger, Maywood, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Application June 3, 1954, Serial No. 434,144
13 Claims. (Cl. 178—5.4)



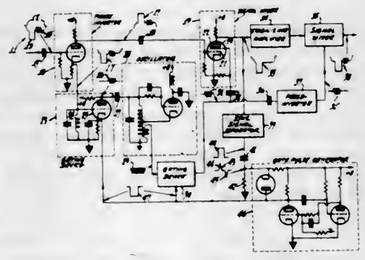
1. Apparatus for indicating vectorially the amplitude of a signal to be tested and the phase of such a signal with respect to a reference signal of like frequency and of at least double the amplitude thereof, said apparatus including in combination, first and second detector means each responsive to a pair of input signals of like frequency for producing an output signal of an amplitude corresponding to the amplitude of one of the input signals and to the phase relation between such input signals, a first input circuit for impressing the signal to be tested on said first and second detector means, first circuit means for supplying the signal to be tested to said first input circuit, a modulator included in said first circuit means for periodically varying the amplitude of the test signal, a second input circuit for impressing an in-phase component of the reference signal on said first detector means and including a phase-quadrature network for impressing a phase-quadrature component of the reference signal on said second detector means, second circuit means for supplying the reference signal to said second input circuit and including amplitude limiter means for establishing the reference signal at a constant amplitude of at least double the amplitude of the signal to be tested, a cathode-ray tube having a viewing screen and further having first and second deflection means for deflecting a cathode-ray beam in the tube across said viewing screen in mutually perpendicular directions, a first output circuit coupled to said first detector means for deriving a first control signal therefrom having an amplitude corresponding to the amplitude of the signal to be tested and to the phase displacement of such signal from the in-phase component of the reference signal, a second output circuit coupled to said second detector means for deriving a second control signal therefrom having an amplitude corresponding to the amplitude of the signal to be tested and to the phase displacement of such signal from the phase-quadrature component of the reference signal, means for impressing said first control signal on said first deflection means of said cathode-ray tube, and means for impressing said second control signal on said second deflection means of said cathode-ray tube.

2,751,430
TELEVISION COLOR SYNCHRONIZATION
Gordon E. Kelly, Westmont, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application November 1, 1951, Serial No. 254,377
8 Claims. (Cl. 178—5.4)



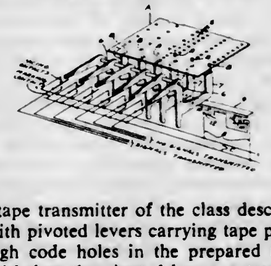
1. In a color television receiver employing a color synchronizing burst for color synchronization, a color synchronizer comprising in combination a color sampler, an oscillator connected to said color sampler for driving said color sampler, a piezo-electric crystal for stabilizing the frequency of said oscillator, means for comparing the phase of the output of said oscillator with the phase of said burst and developing control energy therefrom, and means for applying said control energy to said piezo-electric crystal.

2,751,431
COLOR TELEVISION SIGNALLING APPARATUS
Ralph C. Kennedy, Queens Village, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application June 16, 1953, Serial No. 362,032
The terminal 15 years of the term of the patent to be granted has been disclaimed
7 Claims. (Cl. 178—5.4)



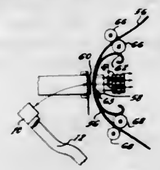
1. In a color television system employing a composite signal including a luminance video signal, a chrominance video signal-modulated color subcarrier wave, deflection synchronizing pulses, and periodic color synchronizing signal bursts of unmodulated color subcarrier wave following said deflection synchronizing pulses, apparatus for removing said subcarrier wave bursts from said composite signal to enable modification of the remainder of said composite signal, said apparatus comprising, means producing a continuous wave at substantially said subcarrier wave frequency, means coupled to said continuous wave-producing means to develop bursts of said continuous wave coinciding with the sub-carrier wave bursts of said composite television signal, and means coupled to said composite television signal source and to said continuous wave burst-developing means for combining said continuous wave bursts with said composite television signal in phase opposition to said subcarrier wave bursts to eliminate said subcarrier wave bursts from said composite television signal so that the remainder of said composite television signal may be modified.

2,751,432
RUB-OUT CORRECTION FOR LINE CASTING TAPE PRODUCTION TRANSMISSION
Henry Brener, New Fairfield, Conn., assignor to Tape Production Corporation, New York, N. Y., a corporation of Florida
Application May 3, 1952, Serial No. 285,990
2 Claims. (Cl. 178—17)



2. In a tape transmitter of the class described, in combination with pivoted levers carrying tape pins adapted to pass through code holes in the prepared tape, a switch box located below the pivoted levers, a transmission line, said switch box carrying a spring-pressed contact piece interposed in a short circuit across the transmission line, a part adapted to bear upon said spring-pressed contact piece, a second part carrying said first part bearing against said tape pin levers and controlling the position of said first part to permit the making and breaking of said short circuit.

2,751,433
CHARACTER ANALYZING SYSTEMS
Roland A. Linger, Washington, D. C., assignor to Radio Corporation of America, a corporation of Delaware
Application July 28, 1952, Serial No. 301,404
9 Claims. (Cl. 178—23)

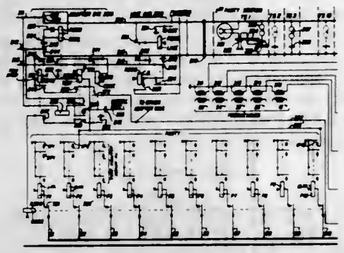


1. Apparatus for writing a reproducible message containing printed characters, each having areas magnetized in code combinations for each of said characters, comprising a plurality of electromagnets arranged in a preselected configuration, means for individually printing said characters on magnetizable paper, said electromagnets being positioned behind said paper at the area over which said characters are printed, actuating means for said printing means, and selecting means controlled by said actuating means, to energize preselected ones of said electromagnets in accordance with said coded combinations and simultaneously with the printing of said characters.

2,751,434
AUTOMATIC TELEPHONE SYSTEMS PROVIDED WITH PARTY LINES

Clarence E. Lomax, Chicago, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware

Application November 18, 1953, Serial No. 392,892
9 Claims. (Cl. 179—17)



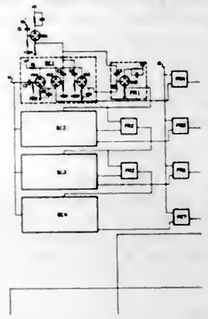
1. A telephone system comprising a party line adapted to serve a given maximum number of stations, a plurality of stations fewer in number than said given number operatively connected to said party line, a plurality of ringing conductors and a plurality of marking conductors each respectively corresponing to said given number of stations, a generator for applying in timed sequence in repeated cycles a corresponding plurality of ringing signals to said ringing conductors and a marking potential to said marking conductors, whereby a given ringing signal is applied to a corresponding given ringing conductor simultaneously with the application of said marking potential to a corresponding given marking conductor, a switch having access to said party line and to said ringing conductors, means for selectively operating said switch to select said party line and to select any one of said ringing conductors, means for completing a connection between said party line and said selected one ringing conductor so that the corresponding one ringing signal is projected over said party line, a line circuit associated with said party line and including a ring relay selectively controlled by said one ringing signal projected over said party line, means controlled jointly by said ring relay and by the simultaneous application of said marking potential to the particular one of said marking conductors corresponding to said one ringing signal for testing with respect to said party line the presence or absence of the particular one of said stations also corresponding to said one ringing signal, said switch including a cut off relay operative to interrupt said connection between said party line and said selected one ringing conductor, first means responsive to testing of the absence of said one station from said party line for operating said cut off relay, and second means responsive to answering on said party line for operating said cut off relay.

2,751,435
REGISTERING AND TRANSLATING CIRCUITS FOR USE IN TELECOMMUNICATION SYSTEMS

Ronald Threadgold, Liverpool, England, assignor to Automatic Telephone & Electric Company Limited, Liverpool, England, a British company

Application June 23, 1953, Serial No. 363,557
Claims priority, application Great Britain July 9, 1952
18 Claims. (Cl. 179—18)

1. In a switching system, a control circuit, a plurality of controlled circuits, a plurality of serially-connected two-position switching devices, one of said devices being associated with each of said controlled circuits, means in said control circuit for transmitting a signal to each of said controlled circuits, means in each of said controlled circuits for responding to said transmitting signal and for applying a conditioning potential to the associated two-position switching device in the event that the controlled circuit requires to be operatively connected to said control circuit, means in said control circuit for applying a pulse to the first of said serially-connected two-position switching devices, means in each of said serially-connected two-position switching devices responsive to a pulse applied thereto for operatively connecting the associated

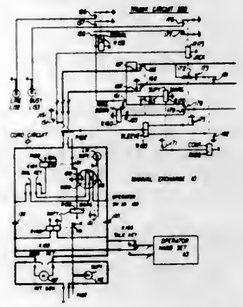


controlled circuit to said control circuit in the event that the two-position switching device has a conditioning potential applied thereto from the associated controlled circuit, and means in each of said serially-connected two-position switching devices responsive to a pulse applied thereto in the absence of a conditioning potential for repeating the pulse to the next two-position switching device in the series.

2,751,436
CARRIER CURRENT TELEPHONE SYSTEMS

Pier Bakker, Chicago, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware

Application March 27, 1952, Serial No. 278,899
17 Claims. (Cl. 179—27)

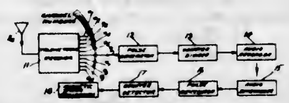


1. In a telephone system comprising first and second exchanges and a carrier frequency signal circuit, said first exchange including an operator switchboard and a first carrier current terminal coupled to said signal circuit, said second exchange including a plurality of subscriber substations and automatic switching apparatus and a second carrier current terminal coupled to said signal circuit, means included in said first terminal for normally transmitting a first carrier frequency signal over said signal circuit, means included in said second terminal for normally transmitting a second carrier frequency signal over said signal circuit, means for completing a connection from said operator switchboard to said first terminal, means included in said first terminal and responsive to the completion of said last-mentioned connection for interrupting said first carrier frequency signal transmitted over said signal circuit and for transmitting a third carrier frequency signal over said signal circuit, means included in said second terminal and responsive to said third carrier frequency signal for completing a connection therefrom to said switching apparatus, means for transmitting one or more digits from said operator switchboard to said first terminal, means included in said first terminal and responsive to said one or more digits for interrupting in accordance therewith said third carrier frequency signal transmitted over said signal circuit, means included in said second terminal and responsive to said interruptions of said third carrier frequency signal for repeating a corresponding digit or digits to said switching apparatus, said switching apparatus being operative in response to said digit or digits to select a corresponding called one of said subscriber substations in order to extend a call thereto, means included in said second terminal and responsive to answering of the call at said one subscriber substation, means controlled by said last-mentioned means for interrupting said second carrier frequency signal transmitted over said signal circuit and for transmitting a fourth carrier frequency signal over said signal circuit and then after a short time interval for interrupting said fourth carrier frequency signal transmitted over said signal circuit and for retransmitting said second carrier frequency signal over said signal circuit, whereby a short pulse of said fourth carrier frequency signal is transmitted from said second terminal over said signal circuit, and means included in said first terminal and responsive to said short pulse of said fourth carrier frequency signal for interrupting said third carrier frequency signal transmitted over said signal circuit and for retransmitting said first carrier frequency signal over said signal circuit.

2,751,437
SIGNAL TRANSLATION SYSTEMS

Conrad H. Hoeppner, Waltham, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware

Application October 19, 1950, Serial No. 190,995
3 Claims. (Cl. 179—100.2)



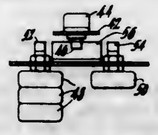
1. A communication system comprising a source of a plurality of frequency signals, the frequencies of said signals representing the intelligence being communicated, recording means for recording said intelligence, said frequencies including a frequency outside the range of response of said recording means, a pulse generator for converting each cycle of each frequency signal into a pulse, means for proportionally reducing the frequencies of said pulses in accordance with a fixed proportional factor whereby all of the reduced frequency pulses are brought within the range of response of said recording means, means for supplying said reduced frequency pulses to said recording means, and reproduction means for producing a usable signal from said recording means.

2,751,438
MAGNETIC RECORDING APPARATUS

John S. Baer, Woodbury, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application March 30, 1955, Serial No. 497,839
10 Claims. (Cl. 179—100.2)

1. A magnetic recording-reproducing apparatus for use with a magnetic record member, said apparatus comprising an operating arm mounted for limited pivotal movement about a fixed pivot located adjacent one end of said arm, an operating knob carried by said arm adjacent the end remote from said pivot, said arm being movable between a first and second switching position, a first switch means engageable by said knob at said first position of said arm, a second switch means engageable

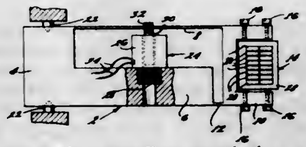


by said knob at said second position of said arm, a magnetic record transducer, and means for effecting engagement between said transducer and said record member when said arm is in said first position.

2,751,439
MAGNETIC RECORDING APPARATUS

Lockwood D. Burton, Collingswood, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application March 31, 1955, Serial No. 498,264
5 Claims. (Cl. 179—100.2)

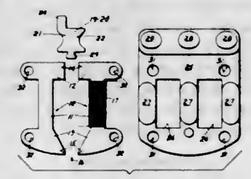


1. In a magnetic recording-reproducing system, a magnetic record transducer, a mounting arm for said transducer, said arm including a transducer holding yoke, a rigid support portion, a first and a second leg member extending from said rigid support portion toward said yoke, said first one of said legs being substantially rigid with respect to said support portion, said second leg being deformable with respect to said first leg, a deformable link, said yoke being secured to said first leg by said deformable link, said second leg being directly secured to said yoke, and signal responsive motive means coupled to said second leg to effect deformation thereof in response to applied signals.

2,751,440
MAGNETIC RECORDING-PLAY-BACK HEADS

John E. DeTurk, Cambridge, John H. MacNeill, Stoughton, and Norman Eliot Gibbs, Waltham, Mass., assignors to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware

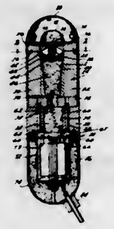
Application July 22, 1950, Serial No. 175,402
2 Claims. (Cl. 179—100.2)



1. A multiple magnetic recording and play-back head comprising: an assembly of superposed units, each including a magnetizable core providing pole pieces spaced to define a working gap, a coil wound upon said core, contact members electrically connected, respectively, to the ends of said coil, and support plates, having substantially greater mass than said core, bonded, respectively, to opposite sides of said core and said contact members, said plates incorporating recesses receptive of said coil, and bosses engaging said contact members; a magnetic shield, substantially coextensive with said plates,

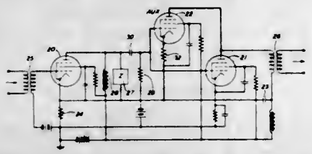
disposed intermediate each pair of said units; and a plurality of guide rods passing through apertures in said cores, plates and shields to maintain said units in fixed inter-relationship, with said working gaps in alignment with each other.

2,751,441
UNIDIRECTIONAL MICROPHONE
Harry F. Olson, Princeton, and John Preston, Metedi-conk, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application March 2, 1953, Serial No. 339,808
6 Claims. (Cl. 179—115.5)



1. In a microphone, the combination comprising means defining a magnetic field, a vibratory conductor mounted for vibration in said field, a pair of parallelly disposed magnetic members, means including said magnetic members defining a cavity adjacent said vibratory conductor, and a layer of fibrous material disposed adjacent said conductor to damp said conductor and said cavity.

2,751,442
DISTORTIONLESS FEEDBACK AMPLIFIER
Raymond W. Ketchledge, Middlesex, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application September 26, 1952, Serial No. 311,580
4 Claims. (Cl. 179—171)



1. An amplifier including a pair of tubes each having at least the elements of a triode, and having their control grids connected together and their anodes connected together, a load coupling, a feedback impedance, a path for signal waves extending from the common anode connection through said load coupling to the cathode of the first tube, and in series through said feedback impedance to the cathode of said second tube, an input signal source having a pair of terminals, a connection from one of said terminals to the cathode of said second tube and a signal wave-transfer path from said other terminal to the common grid connection of said tubes.

2,751,443
COAXIAL LOW-NOISE AMPLIFIER
Edward L. Crosby, Jr., Baltimore, and Charles E. Pfund, Timonium, Md., assignors to Bendix Aviation Corporation, Towson, Md., a corporation of Delaware
Application September 28, 1953, Serial No. 382,790
8 Claims. (Cl. 179—171)

1. A low-noise amplifier system comprising: a pair of planar triode tubes; a coaxial connection between the plate and the cathode of the first of said tubes and the cathode and the grid of the second of said tubes respectively; the center conductor of said coaxial connection being a direct connection between said plate of said first of said tubes and said cathode of said second of said tubes; the outer conductor of said coaxial connection being capacitively connected between said cathode of said first of said tubes and said grid of said second of said tubes; said coaxial connection joining said tubes such that the R. F. potential between one set of extremities of said conductors is equal to the R. F. potential between the other set of extremities thereof; means being designed and adjusted, in conjunction with the inter-electrode capacitance between said cathode and the grid of said first of said tubes, such that an R. F. impedance exists between these electrodes; a second means being designed and adjusted,



in conjunction with the interelectrode capacitance between said grid and said plate of said first of said tubes, such that a parallel resonant circuit exists between these electrodes; a coupling arrangement inserting an input signal into said system; an impedance means connected between said cathode and said grid of said second of said tubes; a third means being designed and adjusted, in conjunction with the interelectrode capacitance of said grid and the plate of said second of said tubes, such that an R. F. impedance exists between these electrodes; a source of potential; an impedance means connected between said plate of said second of said tubes and said source of potential; and a coupling means for removing an output signal from said system.

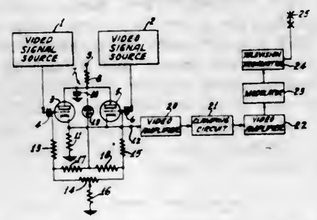
2,751,444
STABILIZER FOR RADIO FREQUENCY AMPLIFIER
Richard C. Koch, Indianapolis, Ind., assignor to Industrial Development Engineering Associates, Inc., Indianapolis, Ind., a corporation of Indiana
Application May 21, 1952, Serial No. 289,221
12 Claims. (Cl. 179—171)



1. A circuit stabilizing device for a push pull amplifier comprising a flat fiber base, a first pair of elongated condenser plates mounted on said base in parallel spaced relation, said plates having parallel lugs which extend outwardly from said base in the plane thereof, the first plate being constituted by a metal strap which passes through an opening in said base and which is bent to have parallel extending legs which lie on opposite sides of said base, said legs terminating in one of the aforesaid lugs, the second plate being substantially identical to the first plate and being similarly mounted on said base, said second plate having a leaf portion which extends laterally from one leg thereof into variably spaced juxtaposition with one leg of the first plate to form a variable capacitor therewith, a second pair of elongated condenser plates which are mounted on said base and which superpose in parallel relation respective ones of said first pair of plates but on the side of said base opposite the aforementioned leaf, the respective juxtaposed plates forming a pair of substantially identical capacitors, a flat fiber tuning member adjustably mounted on said base and operable to engage said second pair of plates to adjust the latter simultaneously toward and away

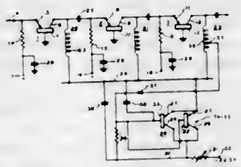
from said first pair of plates to provide gang tuning thereof, and a pair of substantially identical but oppositely wound inductors installed in companion openings in said base in symmetrical relation with respect to the first and second pairs of condenser plates, each of said inductors having one end connected to a respective one of the second pair of plates, the remaining end of each inductor serving as a solder lug.

2,751,445
VIDEO SIGNAL MIXING AMPLIFIER CIRCUITS
Joseph F. Dobosy, Avon Lake, Ohio, assignor to Radio Corporation of America, a corporation of Delaware
Application January 12, 1953, Serial No. 330,866
The terminal 15 years of the term of the patent to be granted has been disclaimed.
2 Claims. (Cl. 179—171)



1. A signal translating circuit including, a plurality of electron discharge tubes having cathodes connected in common, anodes connected in common and control electrodes, a first resistive element having a terminal connected to said anodes and another terminal, a second resistive element having a terminal connected to said cathodes and another terminal, means to apply energizing potential between said other terminals of said resistive elements, a glow discharge device having an electron collector connected to said anodes and an electron emitter, a plurality of resistance components connected individually to said control electrodes, further resistance components connected between the terminals of said plurality of resistance components remote from said control electrodes and the other terminal of said second resistive element, additional resistance components having given terminals connected in common to the electron emitter of said glow discharge device and other terminals connected individually to the individual junctions between said resistance components connected in circuit with each control electrode, means to apply signals individually between said control electrodes and a point on said second resistive element, and means to derive an output signal across said second resistive element.

2,751,446
AUTOMATIC GAIN CONTROL CIRCUIT FOR TRANSISTOR AMPLIFIERS
Calvin C. Bopp, Cincinnati, Ohio, assignor to Avco Manufacturing Corporation, Cincinnati, Ohio, a corporation of Delaware
Application October 15, 1953, Serial No. 386,254
10 Claims. (Cl. 179—171.9)



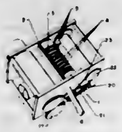
1. A gain control circuit for a main transistor amplifier, said main transistor amplifier having an emitter electrode, a collector electrode and a base electrode, said gain control circuit including a direct current transistor amplifier, said direct current transistor amplifier having an emitter electrode, a collector electrode, and a base electrode, a source of bias voltage for the collector electrode of said main transistor amplifier, means connecting said source of bias voltage in series with the collector electrode to emitter electrode circuit of said direct current transistor amplifier and with said collector electrodes of said main transistor amplifier, and means for varying the collector electrode to emitter electrode impedance of said direct current transistor amplifier.

2,751,447
LIFTER LUG ON BLADE OF MOVABLE CONTACT
Lawrence E. Bartlett, Oliver M. Olivier, and Harry J. Schumacker, Pittsburgh, Pa., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application October 15, 1953, Serial No. 386,342
4 Claims. (Cl. 200—14)



1. A switch comprising a panel, a plurality of stationary blades affixed to said panel and uniformly spaced on an arc and a moving contact assembly including a rigid conductive member and means for moving said conductive member with respect to said blades, the face of said member having two contact buttons and a lug disposed between said buttons, said buttons spaced apart on said member to simultaneously make contact with adjacent of said blades and said member providing a direct path for current between said buttons, said lug being formed and disposed to contact and wipe said blades over the entire surface of said blades contacted by said contact buttons upon movement of said member.

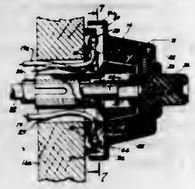
2,751,448
PROGRAMMING DEVICE
Harold Andrew Timken, Jr., and Frederick Clark Lancor, Silver Spring, Md., assignors to Vitro Corporation of America, Verona, N. J.
Application April 17, 1953, Serial No. 349,534
12 Claims. (Cl. 200—46)



1. In combination, an insulator member provided with a first plurality of physically and insulatedly separated electrically conductive elements imbedded in the external surface thereof, one of said elements being designated as a common element and extending in a first direction along said surface, the remaining elements being designated as channels and extending in a second direction along said surface; an insulator strip, one surface of which includes a second plurality of physically and insulatedly separated parallel subdivisions equal in number to said channels, a selected area of at least one of said subdivisions being covered with an electrically conductive coating; and a supporting structure for said member, said structure including apparatus for urging a particular portion of said strip into a physical contact with said elements at which corresponding portions of said subdivisions are

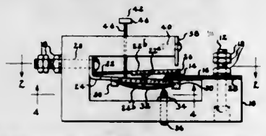
positioned in registration with said channels and said selected area electrically bridges the insulated separation between its associated channel and said common element.

2,751,449
TELEVISION KNOB SWITCH
Fred Krahulec, Skokie, and Henry A. Rahmel, Evanston, Ill., assignors to A. C. Nielsen Company, Chicago, Ill., a corporation of Illinois
Application December 19, 1951, Serial No. 262,374
16 Claims. (Cl. 200—61.85)



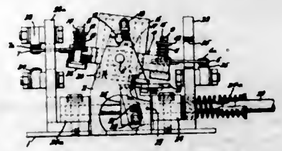
1. In a system for determining the viewing and listening habits of television receiver users, a television receiver of the type comprising a pair of coaxially arranged tuning shafts the inner of which is a station selector shaft with separately controllable knobs on the ends of said shafts which protrude outside the cabinet of the television receiver, an annular multiple contact switch, means for supporting said switch from the front of said television cabinet concentric with said shafts, said switch being of such size as to be smaller in diameter than the largest of said knobs, said switch including a plurality of stationary contacts and a cooperating movable contact for selectively engaging said stationary contacts, means of supporting said movable contact for movement relative to said stationary contacts, and means operatively relating said last mentioned means with said inner station selector shaft whereby movement of said inner station selector shaft causes relative movement of said contacts.

2,751,450
ELECTRIC SNAP SWITCHES
Charles R. Smith, Mequon, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application October 5, 1953, Serial No. 384,030
5 Claims. (Cl. 200—67)



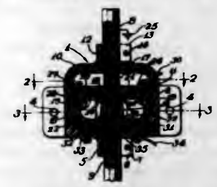
1. In a snap-action switch, in combination, a movable contact carrier biased in a given direction to effect engagement of a set of contacts, a movable flipper carrier biased in a direction opposite to said given direction and positioned relative to said contact carrier to cause said biases to urge said carriers toward each other, a resilient metal flipper member pivotally connected at each end thereof to said flipper carrier and normally bowed in one direction or the other with respect to the latter, said contact carrier having a projection extending toward said flipper member, an adjustable stationary abutment positioned adjacent said flipper member on the opposite side thereof from said contact carrier, and a switch actuating member to overcome said bias on said flipper carrier to cause said flipper member to contact said abutment thereby causing said flipper member to snap over-center and strike said projection on said contact carrier to move said contact carrier against its above-mentioned bias to thereby effect disengagement of said set of contacts.

2,751,451
SNAP SWITCH
Robert B. Bradstock and Wyndham R. Hickin, Erie, Pa., assignors to General Electric Company, a corporation of New York
Application July 29, 1953, Serial No. 370,992
8 Claims. (Cl. 200—70)



1. A snap switch mechanism comprising an operating plunger, a plurality of spring members energized by said operating plunger, movable support means connected to said spring members for actuation thereby, contact means attached to said support means, a U-shaped extension attached to said support means, and a latching means attached to said operating plunger and operable in conjunction with said U-shaped extension to prevent the actuation of said support means until said plunger has been moved a predetermined distance whereby a more positive snap action is obtained.

2,751,452
ADJUSTABLE SPEED RESPONSIVE SWITCH
James K. Gaylord and Irving R. Green, Chicago, Ill., ass!gnors to Gaylord Products, Incorporated, Chicago, Ill., a corporation of Delaware
Application December 15, 1953, Serial No. 398,313
2 Claims. (Cl. 200—80)



1. An electric switch responsive to the speed of rotation of a rotating body comprising a closed housing, a rotatable element in said housing, means for connecting said rotating element and said rotating body to rotate said element in timed relationship with the rotation of said body, said rotatable element comprising a vane constructed of an electrical conductive material and substantially horizontally disposed pivot means for pivotally suspending said vane, a pool of non-conductive liquid carried in said housing in which the free end of said vane dips, an annular relatively flat conductive plate positioned in said housing in said pool of liquid with its plane disposed substantially horizontally and with which said vane makes contact when said rotatable element is stationary, said vane breaking contact with said plate by the frictional deflective force of said liquid upon said vane when said rotating element rotates at a predetermined speed, means for adjustably raising and lowering said plate transverse to its plane to change the angle of contact of said vane and plate when said element is stationary, an electrically conductive contact member positioned in said housing and disposed in the path of travel of said vane when said vane is deflected a predetermined degree at a predetermined speed of said element, means for adjustably raising and lowering said contact member in said housing to cause contact of said contact member and said vane at different speeds of said element, means for connecting said plate and vane to an electrical circuit, and means for connecting said contact member and said vane to an electrical circuit.

2,751,453
RESILIENTLY BIASED ROTARY SPEED-RESPONSIVE SWITCH
James K. Gaylord and Paul T. Hahn, Chicago, Ill., assignors to Gaylord Products, Incorporated, Chicago, Ill., a corporation of Delaware
Application January 29, 1954, Serial No. 407,083
3 Claims. (Cl. 200—80)



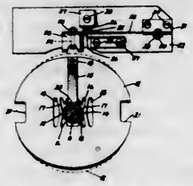
1. An electric switch responsive to the rotary speed of a body which comprises a container, an annular electrically conductive plate carried by and within the container, said container being adapted to carry a non-conductive liquid above said conductive member, a rotatable member carried in said container, a vane hingedly connected to said rotatable member with a free end depending portion thereof dipping in said non-conductive liquid and in contact with said plate when said rotatable member is stationary to complete an electrical circuit, means for rotating said rotatable member in a plane substantially parallel to and above said plate to cause the free end depending portion of said vane to be deflected by friction between said non-conductive liquid and said vane to cant said free end depending portion away from and out of contact with said plate to break the electrical circuit, resilient means connected between said vane and said rotatable member for resiliently urging the free edge of the vane into resilient contact with said plate and for resiliently opposing canting of said vane, and means for connecting the vane and plate in an electrical circuit.

2,751,454
MAGNETIC CONTROLLED ROTARY SPEED RESPONSIVE SWITCH
James K. Gaylord and Paul T. Hahn, Chicago, Ill., assignors to Gaylord Products, Incorporated, Chicago, Ill., a corporation of Delaware
Application January 29, 1954, Serial No. 407,084
6 Claims. (Cl. 200—80)



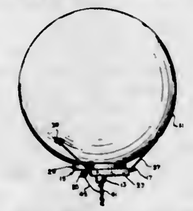
1. An electric switch responsive to the rotary speed of a body which comprises a container, an electrically conductive member carried in the container, said container being adapted to carry a non-conductive liquid above said conductive member, an electrically conductive element, means for pivotally suspending said element above said electrically conductive member with a free end portion thereof dipping in said non-conductive liquid and in contact with said electrically conductive member when said element is stationary, means for rotating said element in a plane substantially parallel to said electrically conductive member to cause the free end portion of said element to be deflected by friction between said non-conductive liquid and said element to cant said free end portion away from and out of contact with said conductive member, magnetic attractive means adjacent the free end portion of said element for urging the free end portion of said element toward said conductive member for opposing the canting of said element, and means for connecting the conductive member and conductive element in an electirc circuit.

2,751,455
MAGNETIC CENTRIFUGAL DEVICE
Karl M. Feiertag, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application February 23, 1954, Serial No. 411,671
6 Claims. (Cl. 200—80)



1. Speed responsive apparatus comprising a substantially circular member pivotably secured to a rotatable part so as to be rotatable therewith and biased to a canted position with respect to the axis of rotation of said part when said part is at rest, said member being movable to a vertical position by centrifugal force at a predetermined speed of rotation, and magnetic means located substantially in the same plane as said member when the same is in its vertical position and beyond the periphery of said member, said magnetic means being biased away from said member and being susceptible to magnetic force between it and said member to overcome said bias and move toward said member when it is in its vertical position, said member having a pair of diametrically opposite peripheral cut-away portions located in line with the pivotal axis of said member thereby to preclude movement of said magnetic means toward said member below said predetermined speed of rotation.

2,751,456
RADIOSONDE BALLOON BREAKAGE SWITCH
Edgar A. Terhune, Little Silver, N. J., assignor to the United States of America as represented by the Secretary of the Army
Application December 31, 1952, Serial No. 329,158
5 Claims. (Cl. 200—81)
(Granted under Title 35, U. S. Code (1952), sec. 266)

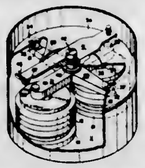


1. A device for determining the breaking time of a balloon or the like comprising discrete juxtaposed plate members secured to said balloon, means to normally urge said plate members apart, a switch operably associated with said plate members, means intermediate one of said plate members and said balloon to urge said plates into intimate contact with each other only when said balloon is inflated and a finger between said plate members for actuating said switch whereby when said plates are in intimate engagement said switch is operative and inoperative when said plates are spaced from each other.

2,751,457
CONTROL DEVICE

Robert D. Donaldson, Anoka, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware

Application February 25, 1954, Serial No. 412,482
9 Claims. (Cl. 200—81.5)

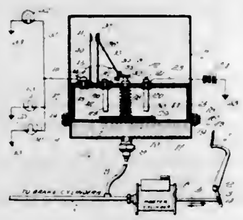


7. A control device comprising, a frame including a flat top plate and a flat diaphragm forming the center portion therein, a pressure responsive sensing means mounted on said frame, a lever actuated by said pressure responsive sensing means, said lever having two oppositely disposed lateral extensions terminating in pivotal abutments engaging said top plate of said frame radially removed from said diaphragm center portion of said top plate, said pivotal abutments establishing a pivotal axis for said lever in the plane of said diaphragm and passing through its center, an extension of said lever protruding through and rigidly attached to said diaphragm, a second lever attached to the end of said extension of said first lever, switch contacts actuated by said second lever and spring means acting on said second lever biasing said levers in one direction about the pivotal axis, the force of said springs means being applied in a direction to bias said pivotal abutments against the top plate of said frame.

2,751,458
HYDRAULIC BRAKE SYSTEM OPERATED FLASHING SIGNAL

Joseph Kayuha, Jr., Wheeling, W. Va.

Application January 2, 1953, Serial No. 329,399
2 Claims. (Cl. 200—83)

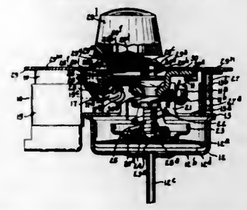


1. A pressure responsive electrical switch comprising a support of electrical insulating material, a pair of electrodes extending downwardly from said support, a rod slidably mounted through said support, pressure actuated means for moving said rod longitudinally in accordance with the amount of pressure received thereby, a flexible contact member of electrical current conducting material carried by said rod for contacting said electrodes upon upward movement of said rod and conducting current therebetween, a means for supplying electrical current connected to one of said electrodes, a pair of spaced contact bars mounted at one end to said support, a wire of thermo-expansive and electrical resistance material connected to the free end of one of said contact bars for making and breaking contact between said bars upon the expansion and contraction of said wire and capable of moving said bar towards the other of said bars in accordance with the upward movement of said rod for varying the space between said bars thereby varying the timing of the making and breaking of the contact therebetween, insulating material connecting said wire and said rod for movement together, an electrical connecting means connected to the other of said contact bars and means electrically connecting the insulated end of said wire to said connecting means.

2,751,459
CIRCUIT CONTROLLING DEVICES

Uriel F. Carter, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware

Application June 17, 1954, Serial No. 437,483
5 Claims. (Cl. 200—83)

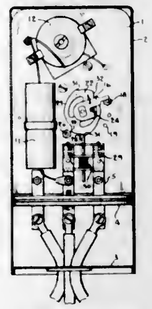


1. In a circuit controlling device, in combination, a housing comprising a top plate and a base plate and a substantially U-shaped housing member positioned edgewise between said plates to provide an opening at one end of said housing, a control switch including an insulating contact carrying base mounted within said open end of the housing, a pressure responsive device mounted upon said base plate and having a loading spring associated therewith located within said housing, said loading spring having a fixed adjustment thereof to insure a constant cut-in characteristic of said controlling device, a snap operating mechanism for said switch mounted within said housing and normally operable to cause opening and closure of said switch as an incident to predetermined degrees of inward and outward movement of said pressure responsive device, means including a spring-biased pivoted lever operatively associated with said snap operating mechanism, said lever having a cam follower formed thereon, a cam member rotatably supported by said top plate and continuously engaged with said cam follower, and said cam member having a manually operable member associated therewith and located exteriorly of said top plate, said manually operable member providing for selection at will of the cut-out characteristic of said controlling device.

2,751,460
REMOTE CONTROLLED ELECTRIC SWITCH

Clifford W. Petersen, Wauwatosa, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware

Application June 12, 1953, Serial No. 361,241
5 Claims. (Cl. 200—92)



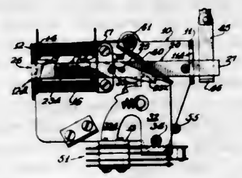
1. A remote controlled electric switch designed for use in a system where controlling impulses are furnished

for two different lengths of time, said remote controlled electric switch comprising a self-starting synchronous motor designed to rotate in one direction only, a switch, a driving member driven from said motor and arranged to move from a zero position to a first or second position in the same direction without completing a full revolution, a normally open clutch between said motor and said driving member arranged to magnetically close when said motor is energized, biasing means for returning said driving member to zero position from either said first or second position, a cam follower for operating said switch, a cam driven from said driving member and having its face divided into at least one series of portions including a shorter portion and a longer portion coacting with said cam follower to respectively open and close said switch, a first stop located at the zero position of said driving member, a second stop located at the second position of said driving member, and pawl means for positively connecting said cam and driving member while said driving member is executing driving action.

2,751,461
DUAL-MOTION ADVANCING AND RESETTING MECHANISM FOR RELAYS

Frank G. Nicolaus, Chicago, Ill., assignor to Raymond T. Moloney, Chicago, Ill.

Application March 29, 1951, Serial No. 218,147
16 Claims. (Cl. 200—105)



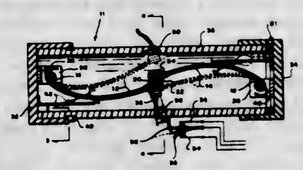
13. In an electromagnetic ratchet mechanism, a ratchet member adapted to be advanced by a driving pawl in one direction; means normally and yieldingly acting to move the ratchet member in the opposite direction; releasably movable holding pawl means normally engaged with the ratchet member to prevent said opposite movement thereof; magnetic armature means including a driving pawl and means mounting the same to move both axially and laterally, the axial movement being toward and away from said ratchet member and the lateral movement being in a direction toward and away from said holding pawl means; a solenoid mounted so that said armature means can move both axially and laterally in the bore thereof; spring means normally urging said armature means to a position outwardly of said bore and away from said holding pawl means, momentary energization of the solenoid and coaction of said spring means reciprocating said armature means axially to step said ratchet member by action of said driving pawl therewith; and electromagnetic means energizable to move said armature means laterally to dispose a part thereof toward and against said holding pawl to dislodge the latter from holding engagement with said ratchet member for release of the latter for opposite movement as aforesaid.

2,751,462
FUSE CIRCUIT BREAKER

Oscar Markowitz, Philadelphia, Pa.

Application July 7, 1954, Serial No. 441,959
9 Claims. (Cl. 200—113)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A circuit breaker for use as a replacement for a conventional cylindrical fuse, including a pair of axially aligned elongated electrically conductive members normally in contact with each other and arranged to be inserted in an electrical circuit, at least one of which is an arcuately curved bimetallic member pivotally mounted at one end and normally in contact with the other member at its other end, biasing means adjacent said bimetallic member for continuously deflecting said bimetallic member toward the other member, said bimetallic member being arranged to deflect arcuately in response to

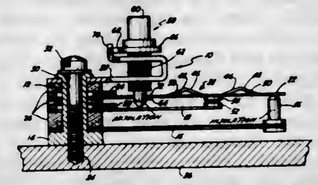


heat generated by excessive electric current to an increasingly curved configuration so that it bears against the other member with increased pressure until it becomes sufficiently foreshortened to slide off and move rapidly away from the other member, and means operable, as one member is rotated through 360° relative to the other, to restore the normal contact between said members.

2,751,463
POSITIVE OPENING AND CLOSING SWITCH

Edmond G. Franklin, Minneapolis, Minn., assignor to General Mills, Inc., a corporation of Delaware

Application November 2, 1953, Serial No. 389,627
11 Claims. (Cl. 200—137)

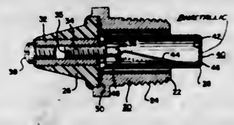


1. A contact structure for a thermal switch comprising an electrically conductive element, a contact, and means mounting said contact for movement relative to said element, said means including at least two current conducting struts having only their ends lying remote from said contact joined to said element, each strut being comprised of two portions inclined at an angle with respect to said element and capable of lengthwise expansion upon the passage of sufficient current therethrough with those portions nearest said contact having a more rapid rate of expansion than the other portions.

2,751,464
TEMPERATURE RESPONSIVE SWITCH

Brooks H. Short and George B. Shaw, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application July 2, 1953, Serial No. 365,678
3 Claims. (Cl. 200—138)



1. In a temperature indicating device adapted to close an electric circuit in response to a predetermined temperature having; a support, a metallic cup member carried by a support and adapted to be surrounded by a media of variable temperature and an electric contact carried by said support and having one end projecting into said metallic cup, a temperature responsive bimetallic element,

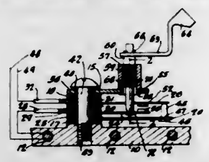
comprising; an enlarged base portion attached to the portion of said cup member remote from said adjustable contact and secured in heat and electrical conducting relation with said cup; a curved portion having a thickness less than the remaining portions of said bimetallic element integrally formed therewith and adapted to have the shape thereof changed in response to the heat received from said base portion, a contact portion integrally formed on said element remote from said base portion and normally out of contact with the contact carried by said support, and an arm portion integrally formed with and connecting said curved portion with said contact portion and disposed substantially at a 45 degree angle from said contact portion and adapted to magnify and transmit the movement of said curved portion to said contact portion for moving said contact portion relative to said contact when said curved portion changes its shape in response to heat transmitted through the base portion from said cup member.

2,751,465
THERMORESPONSIVE SWITCH MEANS
Robert J. Cassidy, Mansfield, Ohio, assignor to Pace, Inc., Mansfield, Ohio, a corporation of Ohio
Application September 10, 1954, Serial No. 455,174
11 Claims. (Cl. 200—139)



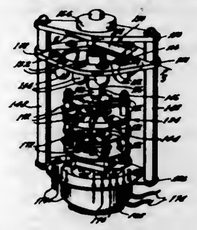
1. Apparatus of the character disclosed, in combination, switch means having flexible current-conducting members, a thermoresponsive means, an insulating member carried by said thermoresponsive means and arranged for engagement with one of said flexible current-conducting means for moving the latter upon variations in temperature, and a retaining member having portions engaging the thermoresponsive means and a centrally disposed raised portion engaging said insulating member for securing the insulating member to the thermoresponsive means.

2,751,466
SWITCH MECHANISM
John W. Huffman, Mansfield, Ohio, assignor to Pace, Inc., Mansfield, Ohio, a corporation of Ohio
Application September 9, 1954, Serial No. 454,873
12 Claims. (Cl. 200—139)



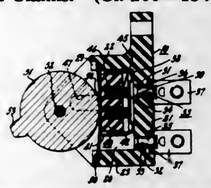
1. A circuit-controlling means for a heating element including, in combination, a switch mechanism having two relatively movable switch arms, cooperating contacts carried by said arms for completing a circuit through said switch arms, a thermostat element disposed to be influenced by heat from the heating element, a member of insulating material disposed between the thermostatic element and one of said switch arms, a manually adjustable element having a socket formed therein, a pin formed of insulating material having one end engageable in the socket formed in said manually adjustable element, said pin being formed at its other end with a zone of noncircular cross section, the second of said switch arms being formed with a noncircular recess adapted to receive the noncircular end portion of the pin whereby said pin is restrained against rotation during adjusting movements of the manually adjustable element.

2,751,467
HIGH VOLTAGE, HIGH FREQUENCY APPARATUS
Matthew R. Alexy, Philadelphia, Pa., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Air Force
Application June 30, 1953, Serial No. 365,042
4 Claims. (Cl. 200—144)



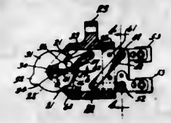
1. In a miniaturized high voltage high frequency switching apparatus having a rotatable contact member, a plurality of contact elements positioned in the path of said rotatable contact member to make contact therewith, and means for rotating said rotatble contact member so as to momentarily and conductively intercept each one of said plurality contact elements in a predetermined adjustable sequence, the combination comprising a shaft having said rotatable contact member mounted thereon, insulating coupling means integrally molded to said shaft and to said rotating means, corona discharge shielding means surrounding said rotatable contact member and each one of said plurality of contact elements, said shielding means surrounding said rotatable contact member comprising a substantially cylindrical shell having dome-shaped portions at extremities thereof and apertures through which project a portion of said rotatable contact member for making contact with said contact elements, and each one of said plurality of contact elements being surrounded by corona shielding means comprising hollow dome-shaped shells.

2,751,468
SWITCH
William E. Brown, Carl O. Decker and Charles W. Landes, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 27, 1952, Serial No. 290,546
2 Claims. (Cl. 200—154)



1. An electric switch comprising a one-piece molded rectangular box shaped housing of electrical insulating material having an open side, said box having the wall opposite the open side provided with two spaced contacts, a bridging contact means slidably mounted within said housing for sliding movement into and out of bridging contact with said two spaced contacts, a pivoted actuator extending through said open side and located partially within said housing, a pivot pin extending through said actuator and being mounted in portions of said housing on opposite sides of the open side, a wire spring extending transversely to said pivot pin across the opening in said housing over said bridging contact means and being supported at its ends by said housing, and operating connections extending on opposite sides of said wire spring between said actuator and said bridging contact means.

2,751,469
ELECTRIC SWITCH
Frederick G. Torley, Pontiac, and William J. de Beaubien, Birmingham, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Continuation of application Serial No. 234,018, June 28, 1951. This application August 2, 1952, Serial No. 302,307
5 Claims. (Cl. 200—154)



1. An electric switch comprising, a housing having a longitudinal passage therethrough; a plate of insulating material fixed to the housing and having one end extending into the passage; stationary electrical contact means carried by the plate and having end portions disposed on opposite sides of the plate and located within the passage; a disc-like operating member extending into the passage and rotatably mounted on the housing; electric bridging means carried by the operating member and adapted to engage end portions of said contact means; and means operable upon movement of an operating member a predetermined distance for continuing the limited rotary movement of the operating member in either direction, said means having a curved apex portion including cam means on the end of the plate within the passage and a cooperable biased member movable with the operating member.

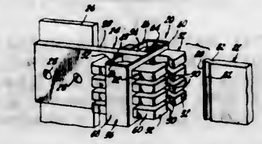
2,751,470
ELECTRIC SWITCH
Paul E. Bissonnette, Pawtucket, R. I.
Application May 10, 1955, Serial No. 507,225
2 Claims. (Cl. 200—165)



1. An electric switch of the push pull type comprising an insulating body provided axially with a chamber terminating in a tubular outlet, an insulating base provided with a slot, a first electrical contact formed as a plate having a dependent arm and a bore, a second electrical contact formed as a bolt having a shank with a head on one end, said shank and head being slidably mounted in said chamber with said shank passing through said tubular outlet, resilient means forcing said head away from the base of said chamber, said head engaging and disengaging said first electrical contact plate, a projection having a handle formed on one end, a cam surface formed in the projection, said projection being slidably mounted in said slot, a cam follower slidably mounted in said bore with one end engaging said head and the other end, through said resilient means acting upon said head, engaging said cam surface, said base and plate being fixed to said body, said handle positioning said cam surface to cause said cam follower to control the engaging and discharging of said head with said plate.

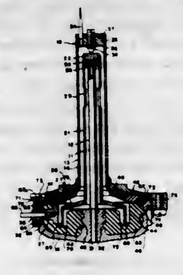
2,751,471
CONTACT ASSEMBLY
Ervin E. Wills, Affton, Mo., assignor to Federal Electric Products Company, a corporation of Delaware
Application February 12, 1953, Serial No. 336,515
11 Claims. (Cl. 200—166)

1. In a contact assembly having companion relatively movable contacts, one of said contacts comprising a conducting part and a part for effecting electrical connection of said conducting part and the other of said contacts, said parts having electrically contacting portions, and said parts being relatively movable in wiping relation when



said contacts are brought into engagement, and said other contact having means cooperating with said electrical connecting part to condition the latter for said wiping movement.

2,751,472
POTENTIOMETER FOR VERTICAL REFERENCE SYSTEM
Joseph B. Helmann, River Edge, N. J., assignor to Kearfott Company, Inc., Little Falls, N. J., a corporation of New York
Application July 7, 1953, Serial No. 366,569
12 Claims. (Cl. 201—48)



1. A pendulous potentiometer comprising a cup of electrically conducting material; a lining of insulating material to outline and define an annular chamber as a well to receive a current-conducting electrolyte; two pairs of diametrically opposed contacts co-ordinately disposed and supported on the insulating material, with the faces of the contacts flush with the wall of the material in a cylindrical plane concentric with the axis of the cup; a center post co-axially disposed and supported on the cup, and having a pivot support on its top end; and a pendulum pivotally supported from the pivot support at the top of the center post, said pendulum comprising a shell bob with a cylindrical body concentric with the cup axis and depending into the annular well to dispose its outer peripheral surface uniformly equidistant from the contact surfaces when the pendulum is in true vertical position.

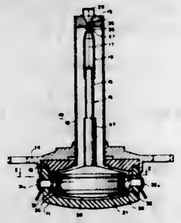
2,751,473
ELECTRIC RESISTOR
Myron A. Coler and Arnold S. Louis, New York, N. Y.; said Louis assignor to said Coler
Application March 12, 1953, Serial No. 341,934
5 Claims. (Cl. 201—55)



1. A potentiometer comprising in combination: a resistance element comolded from two electrically conductive compositions of unlike temperature coefficients of resistivity; a contact member adapted to be variably positioned in contact with said resistance element; two normally fixed spaced terminals electrically connected to said resistance element; wherein said resistance ele-

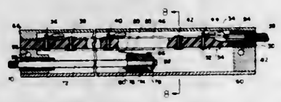
ment provides two parallel electrically conductive paths between said terminals, said paths being in continuous electrical connection.

2,751,474
VERTICAL REFERENCE SYSTEM WITH POTENTIOMETER CONTROL
Wladimir A. Reichel, Hackensack, and John F. Emerson, Hasbrouck Heights, N. J., assignors to Kearfott Company, Inc., Little Falls, N. J., a corporation of New York
Application May 22, 1953, Serial No. 356,635
19 Claims. (Cl. 201—57)



1. A pendulous potentiometer comprising a vertical seeking pendulum supported at its upper end and having its free end oscillatable in any direction; a damping fluid immersing the free end of the pendulum, the damping fluid having current-conducting characteristics to enable it to serve as a current conducting electrolyte; contact means disposed at the ends of twe equal intersecting diametral paths through the electrolyte; and means constituting a closed vessel for supporting the pendulum and the contact means and the electrolyte to place the point of intersection of said two paths in the true vertical line of said pendulum.

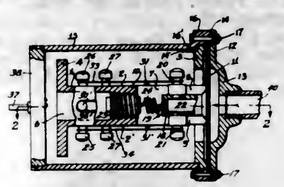
2,751,475
ELECTRIC TRANSDUCER
Herbert A. Gottschall, Nutley, N. J., assignor to Myron A. Coler, Scarsdale, N. Y.
Application November 8, 1954, Serial No. 467,593
7 Claims. (Cl. 201—62)



1. A transducer including, an insulating plastic base, a first conductive plastic resistance member adapted to be electrically contacted by a movable contact member and a pair of conductive plastic padding resistors comolded to said base, electrically conductive means interconnecting said padding resistors and said first resistance member, said first resistance member being interposed in series between said padding resistors, a movable arm, a movable contact member in contact with said first resistance member arranged to be positioned by the motion of said arm and means to electrically connect said movable contact member and said series resistances with an external circuit.

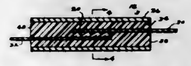
2,751,476
ELECTRIC TRANSDUCER
Louis D. Statham, Beverly Hills, Calif., assignor to Statham Laboratories, Inc., Los Angeles, Calif., a corporation of California
Application May 11, 1953, Serial No. 354,294
8 Claims. (Cl. 201—63)

1. A transducer comprising a frame, a diaphragm mounted on said frame, a wire mounting structurally united to said diaphragm, an electrical resistance strain wire connected to said wire mounting, a connection between said wire and said frame, a spring mounted in



said frame, said spring being connected to said diaphragm, and means for adjusting said spring.

2,751,477
ELECTRICAL RESISTIVE DEVICE
John Vincent Fitzgerald, New Kensington, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania
Application July 15, 1952, Serial No. 299,045
7 Claims. (Cl. 201—73)

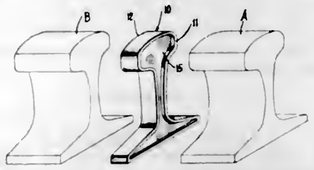


1. An electrical device comprising a layer of glass consisting essentially of 50 to 55 per cent by weight of silver oxide, 40 to 45 per cent by weight of boric oxide and about 5 per cent by weight of silicon dioxide, and electrodes in contact with opposite surfaces of said layer.

2,751,478
WELDING COMPOSITION
Clarence E. Jackson and Arthur E. Shrubsall, Niagara Falls, N. Y., assignors to Union Carbide and Carbon Corporation, a corporation of New York
No Drawing. Application April 28, 1953,
Serial No. 351,756
3 Claims. (Cl. 219—10)

1. In an electric welding process of the submerged melt type wherein a blanket of comminuted, silicon-containing welding medium covers the welding region of a workpiece and a welding electrode is submerged in said welding medium, the improvement of preventing the enrichment of the silicon content in the weld metal, and enriching the weld metal in molybdenum and chromium content, said improvement comprising incorporating oxides of chromium and molybdenum in the welding medium in amounts between about 1% and 10%, and between about 0.4% and 2%, respectively, by weight of the welding medium.

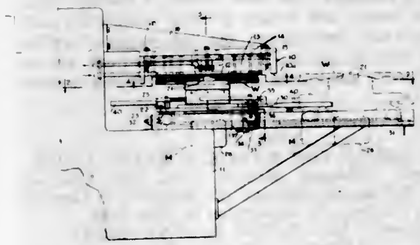
2,751,479
METHOD AND MEANS FOR INDUCTION WELDING
John V. Cowan, Danbury, Conn., assignor to Sperry Products, Inc., Danbury, Conn., a corporation of New York
Application February 16, 1954, Serial No. 410,479
4 Claims. (Cl. 219—10)



1. The method of inductively welding parts of relatively large cross-sectional areas in which the outer portions normally tend to heat up faster than the inner portions, which consists in positioning between the parts to

be welded an auxiliary member of the same material and cross-section as said parts, heating the auxiliary member inductively, conducting the heat from the outer portion of said auxiliary member to said parts, insulating the inner portion of said auxiliary member against heat transfer to said parts prior to the welding push-up, pushing the parts and said auxiliary member together after the outer portion of said member has reached welding temperature whereby the inner portion of said member will transfer its heat to the inner portions of said parts.

2,751,480
INDUCTION HEATING APPARATUS AND METHOD OF HEATING EXTENSIVE SURFACE AREAS
Carl G. Eisen, Detroit, Mich., assignor to The Budd Company, Philadelphia, Pa., a corporation of Pennsylvania
Application September 1, 1953, Serial No. 377,810
7 Claims. (Cl. 219—10.69)



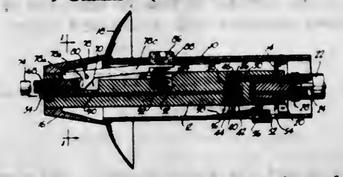
6. Induction heating apparatus for heating the wide annular surface of an annular workpiece, comprising in combination, a flat spiral pancake induction heating coil formed about a vertical axis and mounted horizontally within a furnace, a track below said coil extending out of the furnace, a carriage mounted to move on said track, and means on said carriage for supporting and rotating the workpiece about the axis of its annular shape beneath said coil with the axis of the workpiece at the axis of the coil.

2,751,481
CLAMPING DEVICE INTENDED FOR THE ELECTRICAL CONNECTION OF A WORK-COIL FOR THE INDUCTIVE HEATING OF WORK-PIECES TO THE SECONDARY WINDING OF THE OUTPUT COIL OF A HIGH-FREQUENCY
Lourens Blok and Dirk Christiaan van Iperen, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application March 15, 1952, Serial No. 276,885
Claims priority, application Netherlands April 20, 1951
3 Claims. (Cl. 219—10.79)



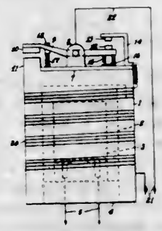
1. A clamping device for electrically connecting a work-coil for the inductive heating of work pieces to a secondary winding of an output coil of a high frequency generator comprising at least one pair of heat conducting members connected to said high frequency generator, said members having opposed clamping surfaces for holding at least one work-coil therebetween, means for adjustably spacing said members relative to one another, a work-coil clamped between said opposed surfaces, and a plurality of cooling channels in each of said members for artificially cooling said members and said work-coil by means of a circulating cooling agent in said channels.

2,751,482
CUTTING AND GOUGING TORCHES AND ELECTRODES THEREFOR
Myron Davis Stepath, Bremerton, Wash.
Application May 10, 1952, Serial No. 287,145
9 Claims. (Cl. 219—15)



1. Electric arc apparatus comprising an electrode in the form of an elongated conductive rod having on one side thereof means forming an open-sided gas channel extending throughout the length of said rod, and electrode holder means comprising an electrode supporting member providing a seat for the channeled side of said electrode rod, a clamp member pressing upon the opposite side of said electrode rod and urging it to its seat, and gas jet orifice means in the end of said holder means immediately adjacent said electrode rod seat hence adjacent the channeled side of said electrode rod, said gas jet orifice means being disposed for directing a high velocity stream of gas in and along said gas channel toward the end of said electrode rod projecting from the holder.

2,751,483
CONSTANT TEMPERATURE OVEN
Harry J. Keen, Middletown, and Robert J. Papaleck and Alfred J. Gilbert, Jr., Matawan, N. J., assignors to Lavoie Laboratories, Inc., Morganville, N. J., a corporation of New Jersey
Application June 28, 1954, Serial No. 439,518
5 Claims. (Cl. 219—19)



1. In a crystal oven, a chamber adapted to receive a crystal, at least a portion of said chamber being formed of a ferromagnetic material having a selected Curie temperature, an electric heater disposed in heating relationship to said chamber, a magnet movably mounted on said chamber in a position to be attracted to said ferromagnetic material and spaced from and not having contact with said heater, resilient means for moving said magnet away from said ferromagnetic material, and means for supplying current to said heater including an electric switch operated by movement of said magnet to supply current to said heater when said ferromagnetic material is below its Curie temperature and said magnet is attracted to said material and to reduce said current when said ferromagnetic material is above its Curie temperature and said magnet is moved away from said ferromagnetic material by said resilient means.

2,751,484
ELECTRIC SOLDERING IRON
Thomas Elmer Moon, Norfolk, Va.
Application June 22, 1955, Serial No. 517,270
3 Claims. (Cl. 219—26)

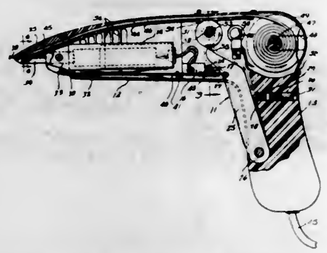
1. An electric soldering iron comprising a handle means of low heat conductive material, a line cord head-

ing inwardly of said handle means, terminal means of high heat resistance material carried by said handle means, said terminal means being provided with a threaded recess, a mandrel of high heat conducting aluminum alloy directly connected at one end thereof into said recess in the terminal means, the other end of said mandrel being provided with a threaded recess, a heating



element wound about said mandrel, said element comprising resistance wire encased in a fiberglass tubing and said element being electrically connected to said line cord at said terminal means, a sleeve of low heat conductive steel material connected to said handle means and enclosing said heating element, and a soldering tip connected into said mandrel threaded recess in a loosely threaded relationship.

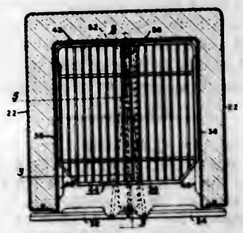
2,751,485
SOLDERING TOOL
James D. Sauer, Columbus, Ohio
Application December 3, 1954, Serial No. 472,857
3 Claims. (Cl. 219—27)



1. A soldering tool comprising a housing having a depending handle portion, a heater in said housing, a forwardly projecting soldering tip secured to said heater, a jaw member hinged to said housing adjacent said soldering tip, said jaw member and housing being formed with registering passages arranged to receive solder wire, the passage of said jaw member opening adjacent said tip, a wheel member rotatably mounted in said housing and having a toothed upper portion projecting into the passage in said housing for engagement with said soldering wire, said wheel member having a notch in its lower portion, a lever pivoted to said depending handle portion and engaging in said notch, spring means biasing said lever forwardly, said lever being rotatable rearwardly responsive to squeezing force exerted on said handle portion, whereby the solder wire is advanced by the wheel member through said passages, means connecting said lever to said jaw member and being arranged to urge said jaw member toward said soldering tip responsive to rearward rotation of said lever, and switch means in said housing connected to said heater and controlled by said lever.

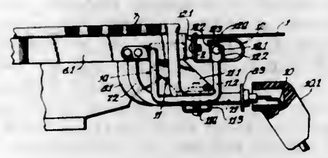
2,751,486
DOMESTIC APPLIANCE
Jesse L. Evans, Tipp City, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 30, 1953, Serial No. 365,142
3 Claims. (Cl. 219—35)

3. An electric oven including walls enclosing an oven compartment and providing a door opening, an electric heating means within the compartment for heating the oven, a shelf within the compartment, means for movably mounting said shelf within the compartment, door means cooperating with said walls to close the door opening of said compartment, the outer surface of one of the



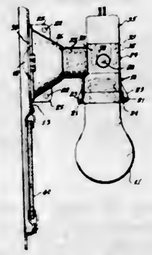
walls being provided with guide means, a traveler upon said guide means, link means pivotally connecting said traveler and said door means, and link means extending from said shelf around the front edge of said one wall to said traveler for moving the shelf along with the traveler.

2,751,487
SPRING HINGE FOR RANGE SURFACE UNITS
Ben Joseph Vallorani, Melrose Park, and Clarence Joseph McConnell, Chicago, Ill., assignors to General Electric Company, a corporation of New York
Application April 29, 1953, Serial No. 351,982
4 Claims. (Cl. 219—37)



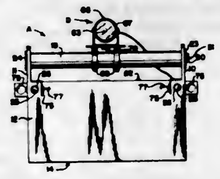
3. In an electric range having structure providing a cooking top formed with an opening for the reception of a cooking unit in an operative position substantially parallel with said cooking top, the combination of a cooking unit removably positioned in said opening and including rigid support means and a heating element arranged on said support means in flat coil form, means for securing said heating element on said support means, and means for hingedly mounting said cooking unit relative to said cooking top for movement between said operative position and a raised position, including a rigid hinge arm secured to said support means and terminating in an upwardly extending member having a clearly-defined apex disposed beneath said cooking top; a hinge element secured to said cooking top and extending beneath said cooking top in substantially diametric relation to said cooking top opening; pivot means disposed below said apex for attaching said hinge arm member to said hinge element beneath said cooking top laterally remote from the opening therein for rotation of said hinge arm in a vertical plane about a fixed pivot point, said apex being between said pivot means and said cooking top opening when said cooking unit is in operative position and more remote from said opening than said pivot means when said hinge arm is swung to move the cooking unit to raised position, and a spring arm extending from said hinge element to overlie said upwardly extending hinge arm member in continuous pressure engagement with the apex thereof, whereby said spring arm will urge said hinge arm into rotation toward or away from said cooking top opening according to the relative position of said apex and pivot point.

2,751,488
GERMICIDAL AND ILLUMINATING LAMP ASSEMBLY
Harold E. Morrison, Benton Harbor, Mich., assignor, by mesne assignments, to Whirlpool-Seeger Corporation, St. Joseph, Mich., a corporation of Delaware
Application February 6, 1953, Serial No. 335,546
3 Claims. (Cl. 240—2)



1. In a combined germicidal and illuminating lamp assembly particularly adapted for clothes driers having a clothes tumbling drum contained within a cabinet and a bulkhead confronting a perforate wall of said drum to effect the circulation of air therethrough, a casing for securement to the bulkhead and having two socket-receiving portions disposed at angles with respect to each other, one socket-receiving portion having a lamp socket therein for a germicidal lamp and the other socket-receiving portion extending at an angle with respect to the one socket-receiving portion and having an illuminating lamp therein of a higher voltage than the voltage of the germicidal lamp and of substantially line voltage, conducting receptacles for electrical conductors leading into said casing and having conductors connected with said sockets and connecting said sockets in series to afford a resistance for the germicidal lamp through the illuminating lamp, and the socket receiving portion for the germicidal lamp including a generally frusto-conical reflector extending about the germicidal lamp and having an annular rib at its edge adapted to abut the bulkhead and having projecting lugs projecting therefrom for securement to the bulkhead to position the reflector to project the rays of the germicidal lamp through the bulkhead into the clothes tumbling drum.

2,751,489
ILLUMINATED TACKLE BOX
Herman S. Cole, Silver Spring, Md.
Application May 29, 1953, Serial No. 358,436
2 Claims. (Cl. 240—6.4)



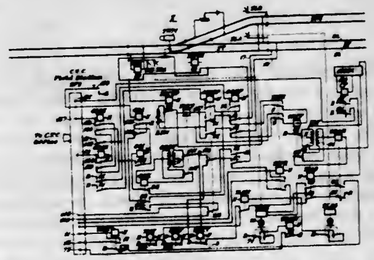
1. In an illuminated tackle box, walls, including opposite upwardly extending walls, and an upwardly-swinging closure, defining a compartment, a hollow handle bridging said opposite walls, disposed above the horizontal plane of said closure when said closure is in a closed position, and disposed within the path of travel of said closure after said closure is swung to a vertical position, a portable lamp normally disposed within said compartment and provided with means to detachably mount said lamp upon said handle, and electrical energy providing means carried within said hollow handle to supply electrical energy to illuminate said lamp.

2,751,490
FLASHLIGHT
David E. Emerson, Los Angeles, Calif.
Application July 11, 1955, Serial No. 521,189
1 Claim. (Cl. 240—10.6)



In an electric lighting device having a lamp bulb and having an annular dished reflector shell extending forwardly of the bulb, adjustable light filter means for said lamp, comprising a dished light filter element pivotally mounted at one end on the shell forwardly of the lamp, a dished plate mounted in said shell for rotation about the axis of the shell, said plate having an axially extending slot, said shell having an arcuate slot between the inner and outer axial limits of the slot in said plate and on a side of the shell opposite said one end of said filter element, said dished plate overlying the arcuate slot in the shell and being of sufficient width to cover said arcuate slot at any position of intersection of said arcuate and axially extending slots, and an operating element extending through both said slots and secured to the other end of said filter, said filter element being laterally swingable between its ends to a position in front of said lamp bulb upon movement of said operating element to one end of the slot in said shell and to a position to one side and forward of said lamp bulb upon movement of said operating element to the other end of the slot in said shell.

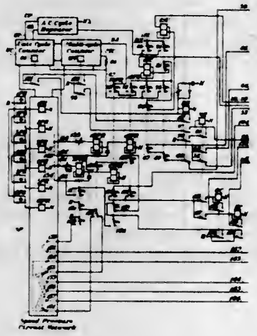
2,751,491
SINGLE TRACK RAILWAY SIGNAL SYSTEMS USING NORMALLY DEENERGIZED CODED TRACK CIRCUITS
Thomas W. Tizzard, Downers Grove, Ill., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application September 6, 1951, Serial No. 245,284
11 Claims. (Cl. 246—3)



1. In combination, a main track having a passing siding including a first and a second track switch, a siding leaving signal positioned to govern traffic moving from the siding through said first switch and having means operable to display a different indication for each of a plurality of different traffic conditions, said main track formed with a first and a second track section which extend in opposite directions from said first switch, traffic controlled means including a current source and code transmitting means operable to supply current of different codes according to different traffic conditions, said traffic controlled means having connections to said second track section at the end remote from said first switch; supply means including a current source and another code transmitting means operable to supply current of a selected code, means including a circuit controller to at times

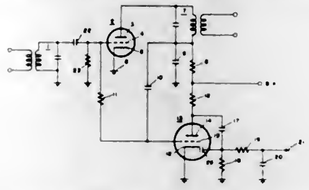
connect said supply means to said first track section at the end remote from said first switch, a first code following relay connected to said first track section at the end adjacent said first switch and responsive to the code of the current supplied by said supply means; control means including a second code following relay, a decoding device and a control relay for each of said traffic conditions; said decoding device and control relays connected to the second code following relay to energize the control relays according to the code of the current supplied to the second code following relay, means including contacts of said first code following relay to connect at times said second code following relay to said second track section at the end adjacent said first switch to selectively engage said control relays according to the traffic code supplied by said traffic controlled means, and circuit means including contacts of said control relays to govern said siding leaving signal.

2,751,492
RAILWAY CAR SPEED DETERMINING AND CONTROL APPARATUS
David P. Fitzsimmons, Trafford, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application April 23, 1952, Serial No. 283,931
19 Claims. (Cl. 246—182)



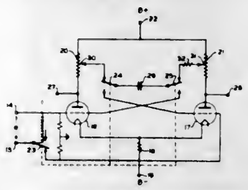
1. In apparatus for repeatedly measuring the speed of a railway car by a time measuring means having an initial position to which it is biased and an extreme position toward which it is operated from the initial position when supplied with current, the combination comprising, a series of consecutive track sections which are numbered in an ascending order for a given direction of traffic, said sections of substantially the same length, a series of normally energized track relays one for each said section, each said relay having a holding circuit and a shunting circuit, the holding circuit for each said track relay including a current source, a front contact of each of the other track relays in advance and a front contact and a winding of the relay; the shunting circuit for each said track relay including a connection from one terminal of the source of the corresponding holding circuit to one rail of the corresponding section and another connection from the other rail of the corresponding section to the holding circuit at the terminal of the relay winding toward the other terminal of the corresponding source, a first and a second circuit means each having connections to a given current source for supplying current therefrom, and said first circuit means including in multiple a back contact of each of the track relays of odd numbered sections of said series and said second circuit means including in multiple a back contact of each of the track relays of even numbered sections of said series.

2,751,493
NOISE SQUELCH SYSTEM
Atwood H. Hargrove, Baltimore, Md., assignor to Bendix Aviation Corporation, Towson, Md., a corporation of Delaware
Application October 22, 1953, Serial No. 387,751
4 Claims. (Cl. 250—20)



4. In a frequency or angle modulated receiver containing an amplitude limiting stage having an output circuit, a noise squelching system comprising: a first amplifying tube, a pair of serially connected impedance networks connected in the output circuit of said limiting stage as the load impedance thereof, the first of said networks having a higher impedance for currents of the useful frequency range of said stage than for frequencies outside said range; a capacitor connected to the junction of said networks; a second amplifying tube in said limiting stage, impedance elements connected between the input of said second tube and said capacitor and means connecting the junction of said capacitor and said impedance elements to the input of said first tube, whereby said impedance elements, said capacitor and the second of said impedance networks form a voltage dividing network connecting said inputs, said voltage dividing network coupling to said input of said first tube a signal consisting of D. C. and A. C. components and said capacitor coupling thereto a signal from the output of said limiting stage, said voltage divider network having the values of its components so selected that it filters A. C. components from said signal coupled to said input of said first tube thereby, said filtering action being more effective at the frequencies lying within the useful frequency range of said limiting stage than at frequencies below said range; a rectifying tube; means coupling the output of said first tube to said rectifier tube for rectification thereby and means filtering the output of said rectifier tube.

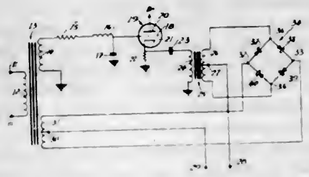
2,751,494
CONTROL CIRCUIT
John W. Gray, Cambridge, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application March 18, 1946, Serial No. 655,309
2 Claims. (Cl. 250—27)



1. A control circuit comprising a differential amplifier, including first and second electron tubes each having at least a cathode, a plate, and a control grid, first and second plate load resistances, a condenser connected between the plate load resistances of said differential amplifier, the location of said condenser connections on said plate load resistances causing a charge to be placed on said condenser proportional to the error signal input to said differential amplifier, and switching means, said switching means

adapted to connect said condenser between the grids of said differential amplifier when the input signal has ceased, the voltage applied by said condenser causing the output of said differential amplifier to be altered in the same proportion as that existing between said error signal and said charge on said condenser at the time of operation of said switching means.

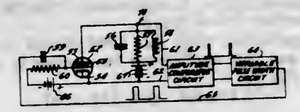
2,751,495
FREQUENCY ERROR SENSING MEANS
Charles B. Grady, Jr., West Orange, N. J., assignor to The W. L. Maxson Corporation, New York, N. Y., a corporation of New York
Application May 7, 1952, Serial No. 286,587
4 Claims. (Cl. 250—27)



1. In a device responsive to deviation in the frequency of an alternating current source from a predetermined value, in combination: a series circuit comprising an inductor and a capacitor energized by said source, the inductance of the inductor and capacitance of the capacitor being such as to produce resonance at said predetermined frequency; amplifying means connected to said series circuit intermediate said inductor and said capacitor for deriving a potential therefrom shifted in phase with respect to the potential of said source by a phase angle of ninety degrees at said predetermined frequency; a first circuit means including a center tap connected to derive a potential directly from said source and independently from said amplifier; a second circuit means including a center tap connected to derive a potential from the potential derived by said amplifying means; four non-linear rectifying elements serially connected in a closed ring with connection points between adjacent rectifier elements, the several polarities being such that every rectifying element will permit current flow only in the same direction around the ring, two opposed connection points separated by two intervening rectifier elements of the ring being connected to the first circuit means and the other two conjugate opposed points being connected to the second circuit means; and a third circuit means connected between the center-taps of the first and second circuit means for deriving a unidirectional control signal therefrom whose magnitude and direction varies in accordance with the magnitude and direction of the deviation of said phase angle from said value of ninety degrees, the resonance curve of said series circuit being sufficiently broad to cause said output variation to be substantially linear throughout a predetermined range of variation in the frequency of said source and also to produce an output compatible with relatively large variation in the frequency of said source beyond said predetermined range.

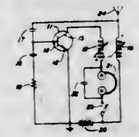
2,751,496
OSCILLATOR
Lawrence J. Giacoletto, Princeton Junction, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application January 4, 1954, Serial No. 401,810
6 Claims. (Cl. 250—36)

1. An oscillator comprising a source of power, a resonant circuit having capacitive and inductive elements to produce an oscillating voltage, control means to periodically connect said source of power to said resonant circuit by the application of a pulse thereto, a variable pulse width circuit to produce electrical output pulses, means for applying said oscillating voltage to said pulse width



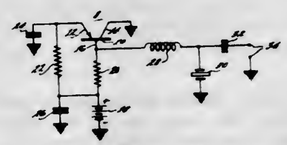
circuit to initiate said pulse, and means for applying said pulses to said control means to connect said source of power to said resonant circuit for the duration of said pulse.

2,751,497
SUPERREGENERATIVE TRANSISTOR BROADCAST RECEIVER
Robert S. Duncan, Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application December 15, 1953, Serial No. 398,283
6 Claims. (Cl. 250—36)



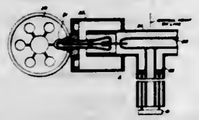
1. A superregenerative radio receiver for operation over a predetermined frequency band which comprises an oscillator in the form of a transistor having a semi-conductive body and emitter, collector, and base electrodes and a current gain factor which decreases with frequency over said predetermined frequency band, one of said electrodes serving as an input electrode and another of said electrodes serving as an output electrode, and a regenerative feedback circuit coupling said output electrode to said input electrode, and circuit means cooperating with said feedback circuit to match the amount of feedback from said output electrode to said input electrode to the current-gain frequency characteristic of said transistor coupled between said input electrode and the third of said electrodes to render said oscillator alternately oscillatory and non-oscillatory, whereby a substantially constant level of oscillation is maintained over the entire said frequency band of operation of the receiver.

2,751,498
CRYSTAL CONTROLLED OSCILLATOR CIRCUIT
Max E. Malchow, Collingswood, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application April 30, 1954, Serial No. 426,732
6 Claims. (Cl. 250—36)



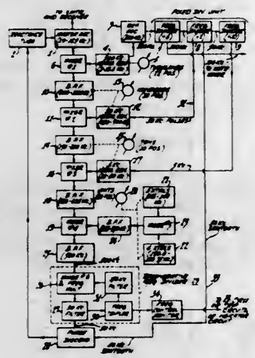
1. A crystal controlled oscillator circuit comprising a semi-conductor device having a semi-conductive body and base, emitter and collector electrodes cooperatively associated therewith, means for applying operating bias voltages to said electrodes, and frequency determining means for said oscillator circuit including an impedance element and a piezoelectric crystal serially connected between said base electrode and a source of reference potential.

2,751,499
TUNING AND FREQUENCY STABILIZING ARRANGEMENT
Myron S. Glass, West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Original application May 22, 1944, Serial No. 536,761. Divided and this application November 9, 1950, Serial No. 194,829
2 Claims. (Cl. 250—36)



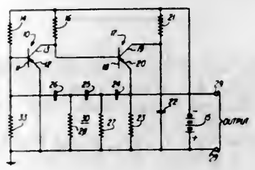
1. In a coaxial cable transmission system, an oscillator whose frequency is subject to fluctuations in response to changes in load impedance, a load whose impedance changes, a main coaxial cable connecting said oscillator with said load, said cable, when energy is applied thereto from said oscillator, having points therealong one-half wavelength apart where an inductive susceptance applied across said cable will elevate and a capacitive susceptance applied across said cable will lower the frequency of said oscillator, and a stub connected to said coaxial cable for controlling the impedance of said line, said stub connection being at one of said points to introduce frequency sensitive reactance as these values of the load change to maintain a substantially constant frequency of said oscillator in said transmission system.

2,751,500
FREQUENCY MONITORING ARRANGEMENT
Harris A. Robinson, Palmyra, N. J., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Air Force
Application November 10, 1953, Serial No. 391,263
11 Claims. (Cl. 250—36)



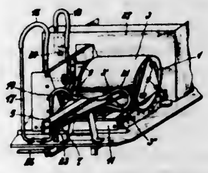
1. A frequency control system for an oscillator comprising at least one mixer excited by waves from said oscillator and by waves of stable frequency to produce beat frequency resultant waves, a frequency divider receptive of the output of said mixer for producing therefrom divided-frequency waves, means responsive to variations in the frequency of said divided-frequency waves from a predetermined value for controlling the frequency of said oscillator, and means in circuit with said frequency divider, and responsive to the decrease below a certain amplitude level of said resultant waves applied to said divider, for closing a signal circuit.

2,751,501
TRANSISTOR OSCILLATOR
Everett Eberhard, Phoenix, Ariz., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Application December 24, 1954, Serial No. 477,511
6 Claims. (Cl. 250—36)



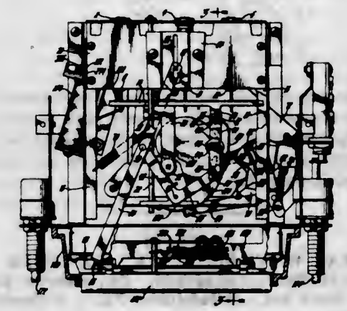
1. A phase-shift type oscillator circuit including in combination a first transistor having base, emitter and collector electrodes; means connecting said emitter electrode to a point of reference potential; first resistor means connecting said base electrode to said point of reference potential; biasing means for providing a unidirectional potential with respect to said point of reference potential; second resistor means connecting said collector electrode to said biasing means; a second transistor having base, emitter and collector electrodes; means connecting said collector electrode of said first transistor to said base electrode of said second transistor; third resistor means connecting said emitter electrode of said second transistor to said point of reference potential; means connecting said collector electrode of said second transistor to said biasing means, and a resistance-capacity phase-shifting feedback network connected between said first and third resistor means for providing a 180° phase shift to a signal of a selected frequency appearing across said third resistor means and for applying the shifted signal to said first resistor means so as to sustain oscillation in the oscillator at such selected frequency.

2,751,502
HIGH-FREQUENCY HEATING GENERATOR
Lourens Blok, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application August 7, 1952, Serial No. 303,195
Claims priority, application Netherlands September 26, 1951
3 Claims. (Cl. 250—36)



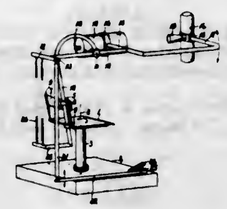
1. A high-frequency generator comprising; a discharge tube oscillator provided with a water-cooled anode, a water-cooled primary coil operatively connected to said oscillatory, a secondary coil in the form of a circularly bent metal strip surrounding said primary coil with relatively small spacing therebetween, a water supply pipe for cooling the primary coil, and an electrically controllable valve in said water supply pipe including an armature, a source of electrical current, an electromagnet which upon magnetization operates said valve to permit the flow of cooling water only when said generator and said electromagnet have said current applied thereto but does not interrupt the continual supply of water to the anode of said oscillator.

2,751,503
SOLENOID POWERED TUNER
Bertram A. Schwarz, Kokomo, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application February 27, 1952, Serial No. 273,730
13 Claims. (Cl. 250—40)



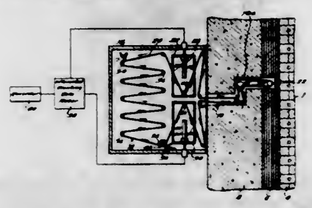
1. In tuning means for radio apparatus having variable impedance means to tune the same over a prescribed band, a movable carriage upon which the impedance means are mounted, cam means whose surface engages a portion of the carriage to cause the same to move, energizable means to drive the cam, driving means interconnecting the energizable means and the cam relay controlled stopping means engageable with a portion of the driving means between the energizable means and the cam to lock the same upon relay deenergization.

2,751,504
SUPPORT FOR IMAGE AMPLIFIERS
Willem Hondius Boldingh, Jan Jesayas Christiaan Hardenberg, Wybe Johannes Oosterkamp, and Adrianus Verhoeff, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application May 1, 1952, Serial No. 285,498
Claims priority, application Netherlands June 14, 1951
6 Claims. (Cl. 250—79)



1. A support for an X-ray tube, image intensifier and an optical viewing device comprising a carrier being provided with at least two clamping arms, one of said clamping arms embracing said image intensifier and optical viewing device and the other of said clamping arms embracing said X-ray tube in a fixed, spaced relationship with said image intensifier and said optical viewing device, a standard, and means pivoting said carrier on said standard at a point adjacent the end of said image intensifier remote from said X-ray tube, said carrier being adapted to be rotated about the horizontal axis of said pivoting means the horizontal axis of said pivoting means extending in a direction perpendicular to said carrier, and the displacement of said optical viewing device being such that the rotation of said carrier may be followed in said optical viewing device by the observer by bending only the upper part of his body.

2,751,505
NEUTRONIC REACTOR DEVICE
Herbert L. Anderson, Chicago, Ill., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application December 29, 1948, Serial No. 67,811
14 Claims. (Cl. 250—83.1)



1. Apparatus for measurement of neutron flux comprising, in combination, an elongated endless tape of silver, a system of pulleys upon which said endless tape is strung, said pulley system extending from the region of said neutron flux to a region remote from said region of neutral flux, the portion of said pulley system which is remote from the region of neutron flux bearing the major portion of said elongated tape, driving means for continuously circulating said tape around the pulley system, radioactivity detecting means adjacent the portion of the tape approaching said region of neutron flux, radioactivity detecting means adjacent the portion of the tape leaving said region of neutron flux, and differential metering means coupled to both of said detecting means.

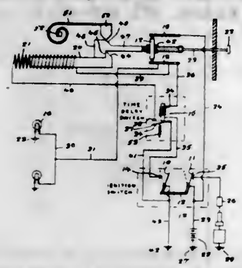
2,751,506
WEAR TEST METHOD
James F. Black and Ernest V. Wilson, Roselle, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application December 29, 1953, Serial No. 401,077
3 Claims. (Cl. 250—83.6)

1. A method of determining wear of interacting surfaces of two iron containing objects, comprising irradiating a first one of said objects by bombardment with neutrons to produce Fe^{59} and Fe^{55} isotopes in said first object, aging said first irradiated object for a period to reduce substantially the Fe^{59} isotope content thereof by radioactive decay, irradiating the second one of said objects by bombardment with neutrons to produce Fe^{59} and Fe^{55} isotopes in said second object, then without substantially aging of said second object, subjecting said objects to interacting surface wear one with another in the presence of a liquid capable of receiving and carrying wear debris from the surfaces of said objects measuring the intensity of X-radiation and beta radiation from said liquid produced by wear debris contained therein, which debris includes Fe^{55} and aged Fe^{59} isotopes from said first object, and separately measuring the intensity of gamma radiation from said liquid produced by wear debris contained therein in which debris includes the unaged Fe^{59} isotope from said second object, each of said measurements substantially excluding the measurement of radiation produced by wear debris from one of said objects.

2,751,507
AUTOMATIC CIRCUIT BREAKER SYSTEM
Paul C. Crum, Chicago, Ill.
Application February 25, 1953, Serial No. 338,677
3 Claims. (Cl. 307—10)

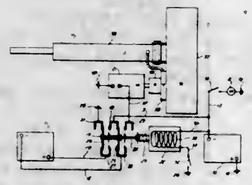
3. In a motor vehicle light control circuit, the combination which comprises a light, a source of current, a main circuit connecting said light to said source of current, spaced contacts connected in said main circuit, a stem having a button on an extended end and a contact bar for bridging the spaced contacts of the main circuit there-

on, a solenoid having a core, means for operatively connecting the core of the solenoid to the stem whereby upon energizing the solenoid the contact bar of the stem is separated from said spaced contacts, an auxiliary circuit connected to opposite terminals of the solenoid and to



contact terminals of said main circuit whereby current thereto is supplied by the main circuit, and a time delay relay in said auxiliary circuit whereby the solenoid actuates the contact bar through said stem after a predetermined time interval to open a circuit to said light.

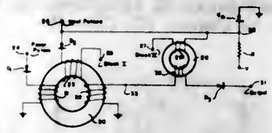
2,751,508
ELECTRICAL SYSTEM FOR MOTOR VEHICLES
Fayette Elam Marsh, Irl W. Anspach, and Irven Wilbur McRoberts, Hastings, Nebr., assignors, by mesne assignments, to Wyatt Manufacturing Company, a corporation of Kansas
Application March 16, 1953, Serial No. 342,334
3 Claims. (Cl. 307—10)



3. In an electrical switch, a case, a pair of U-shaped electrodes on one side of the case, a second group of three U-shaped electrodes on the opposite side of said case and in an offset relation thereto, a pair of resiliently mounted disks positioned to move between the U-shaped portion of the first mentioned pair of electrodes on one side and the adjacent surfaces of the second mentioned electrodes on the other side to establish alternate connection between said opposed electrodes, the first pair of electrodes being connected to the opposite poles of a single power source, the outermost electrodes of the three electrodes being connected to a second power source and the center electrode being connected to a power driven unit whereby lateral movement of the two disks will cause the two power sources to be connected in parallel or alternately to be connected in series to the aforementioned motor.

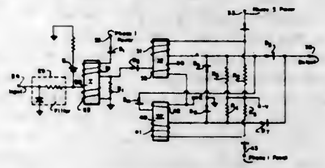
2,751,509
SNEAK PULSE SUPPRESSOR
Robert D. Torrey, Philadelphia, Pa., assignor, by mesne assignments, to Sperry Rand Corporation, New York, N. Y., a corporation of Delaware
Application April 7, 1955, Serial No. 499,858
18 Claims. (Cl. 307—88)

17. An amplifier circuit comprising a pulse type magnetic amplifier having an input and an output, said amplifier being responsive to selectively applied input pulses at said input for producing output pulses at said output, a variable impedance device coupled to said output for controlling the passage of said output pulses to an output point, said variable impedance device comprising a core of magnetic material having first and second windings thereon, means coupling said first winding to said amplifier output thereby to cause said core to operate over a first predetermined portion of its hysteresis loop



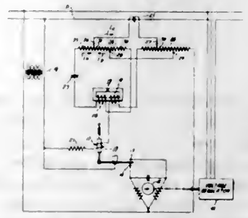
in the absence of said input pulses, and control means including a second winding on said core to cause said core to operate over a second predetermined portion of its hysteresis loop when said input pulses are applied to said magnetic amplifier.

2,751,510
FULL WAVE MAGNETIC AMPLIFIER
Theodore H. Bonn, Philadelphia, Pa., assignor to Remington Rand Inc., Philadelphia, Pa., a corporation of Delaware
Application April 5, 1955, Serial No. 499,376
17 Claims. (Cl. 307—88)



1. In an amplifier system, first amplifier means selectively producing a first train of output pulses, second amplifier means coupled to said first amplifier means for producing a second train of pulses in response to said first train of pulses, third amplifier means coupled to said second amplifier means for producing a third train of pulses in response to said second train of pulses, and means coupled to the outputs of said second and third amplifier means for interlacing said second and third trains of pulses.

2,751,511
LINE DROP COMPENSATOR
Harry R. West and Morris T. Reese, Pittsfield, Mass., assignors to General Electric Company, a corporation of New York
Application August 2, 1955, Serial No. 525,940
7 Claims. (Cl. 307—103)



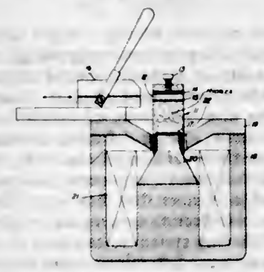
7. In a line drop compensator circuit for controlling a voltage regulator to maintain a constant voltage at a remote point on an electrical transmission system, means for obtaining in phase and quadrature components of compensation voltage continuously ajdustable over a range including both positive and negative values comprising a voltage regulating relay having a coil and contacts, said contacts being connected to selectively actuate the motor drive for controlling said voltage regulator, a potential transformer having a primary winding connected

to said transmission system, reactor means having first and second closely inductively coupled windings, a first potentiometer for controlling the magnitude of the in phase component of said compensation voltage, said voltage regulating relay coil, the secondary winding of said potential transformer, said first winding, and said first potentiometer being connected in series, a second potentiometer for controlling the magnitude of the quadrature component of said compensation voltage, the capacitor, said second winding, second potentiometer, and capacitor being connected in series, a current transformer coupled to said transmission system having a secondary winding connected between the arms of said potentiometer, an intermediate tap on each of said potentiometers, and a connection between said taps, said second potentiometer, capacitor and second winding being proportioned so that the expression:

$$\frac{Z_{22}-R_{22}}{Z_{22}+Z_{23}+R_{24}}$$

has no real component, where Z_{22} is the impedance of said second winding, R_{22} is the resistance of said second winding, Z_{23} is the impedance of said capacitor, and R_{24} is the total resistance of said second potentiometer.

2,751,512
HIGH FREQUENCY VIBRATION EXCITER AND CALIBRATOR
Gerald K. Reen and Galt B. Booth, New Haven, Conn., assignors, by mesne assignments, to Textron American, Inc., Providence, R. I., a corporation of Rhode Island
Application February 9, 1953, Serial No. 335,764
8 Claims. (Cl. 310—27)

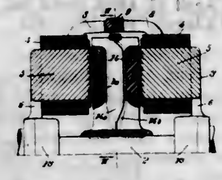


1. A vibration exciter having a stationary magnetic structure and a driver element adapted to move in a gap in that structure, said driver element being formed of glass-bonded mica.

8. A vibration exciter comprising a stationary magnetic pole, a stationary magnetic body having a base, a stationary magnetic cover, and an air gap between said cover and said pole, the stationary magnetic pole conically increasing in diameter from the air gap toward the base of said stationary magnetic body, in combination with a driver extending into the air gap, said cover being conically depressed toward the pole, whereby the flux density in the air gap is increased over that when the cover is flat, and the performance is improved.

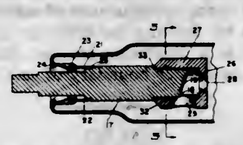
2,751,513
ELECTRIC BRAKES OR SLOWING DOWN DEVICES
Pierre Etienne Bessière, Paris, France, assignor to Compagnie Telma, Paris, France, a French society
Application August 16, 1954, Serial No. 449,870
Claims priority, application France August 19, 1953
3 Claims. (Cl. 310—93)

1. An electric brake for braking a shaft with respect to a frame, which comprises, in combination a rotor rigid with said shaft, two sets of electro-magnets carried by said frame and disposed on either side of said rotor, to form an electromagnetic field in which said rotor is located whereby Foucault currents are produced when this rotor is turning inside said field, said rotor being constituted by two discs both fixed at their respective central portions on said shaft but extending substanially parallel to each



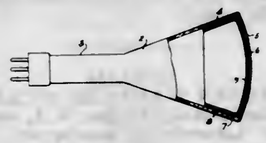
other, and means carried by the peripheral portions of said two discs respectively for preventing said peripheral portions from moving away from each other while leaving them free to move toward each other.

2,751,514
HOODED ANODE X-RAY TUBE
Zed J. Atlee, Chicago, Ill., assignor to Dunlee Corp., Chicago, Ill., a corporation of Illinois
Application April 15, 1952, Serial No. 282,435
5 Claims. (Cl. 313—55)



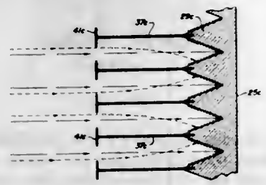
4. An X-ray tube comprising an anode member and a glass envelope, a metallic annular anode supporting sleeve sealed at one end to said envelope, a tubular anode hood member overlapping and tightly fitted about the target end of said anode member and projecting therefrom, an annular recess in the surface of one of said members intermediate the ends of the overlapped surface thereof, a first uniting film of solder between said anode and said hood member having a melting point above the normal operating temperature of said tube, said sleeve encompassing the opposite end of said anode member, and a second uniting film of solder between said sleeve and said anode member having a melting point at least 50° C. above the melting point of said first-mentioned solder.

2,751,515
CATHODE-RAY TUBE
Jan Peper, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application December 16, 1952, Serial No. 326,183
Claims priority, application Netherlands January 2, 1952
1 Claim. (Cl. 313—92)



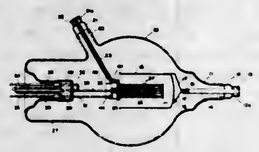
A cathode ray tube comprising an envelope having a cylindrical portion and a conical portion flaring outwardly from said cylindrical portion, a transparent window sealed to the open end of said conical portion, a layer of luminescent material covering said window portion and extending a substantial distance along the adjoining inner wall of said conical portion, and a reflective metal layer continuously extending over said luminescent layer on said window and said adjoining wall portion.

2,751,516
POLYCHROME CATHODE RAY TUBE
Ernest O. Lawrence, Berkeley, Calif., assignor, by mesne assignments, to Chromatic Television Laboratories, Inc., New York, N. Y., a corporation of California
Application April 25, 1950, Serial No. 157,943
5 Claims. (Cl. 313—92)



1. A target for receiving an electron beam comprising a recessed foundation having an electron-sensitive target surface, an electrode assembly having a plurality of oppositely located plate-like electrode elements mounted with one end adjacent to the target surface to define the outer boundary of an electron-beam path which terminates upon the said target surface, and electrode means disposed adjacent to the opposite ends of said plate-like electrode elements for limiting the diameter of any entering electron beam to a dimension smaller than that of the space between said outer boundary of said path.

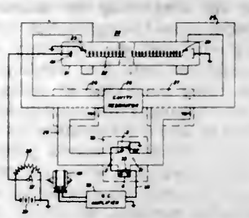
2,751,517
FILAMENT STRUCTURE FOR ELECTRON TUBE
Howard D. Doolittle, Stamford, Conn., assignor to Machlett Laboratories, Incorporated, Springdale, Conn., a corporation of Connecticut
Application November 1, 1951, Serial No. 254,371
4 Claims. (Cl. 313—265)



1. An electron tube having a filament structure and an adjacent electrode within a vacuum envelope, said filament structure comprising a plurality of filament strands, means supporting the filament strands, a resilient bumper member arranged with portions disposed adjacent each of said filament strands, the filament structure having strands disposed on both sides of the bumper with respect to the adjacent electrode, the bumper being spaced from each strand a distance smaller than the spacing between the filament strands and the adjacent electrode, and means supporting the bumper.

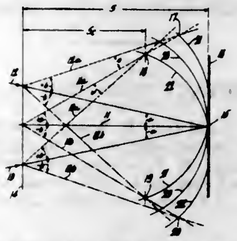
2,751,518
FREQUENCY STABILIZED OSCILLATOR
John R. Pierce, Berkeley Heights, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application October 1, 1953, Serial No. 383,620
6 Claims. (Cl. 315—3.5)

1. In combination, an amplifying element having input and output terminals, means forming a regenerative feedback path between said output and input terminals for forming with said amplifying element a closed oscillatory loop including a high-Q resonant means serially connected therein which is tuned to a desired frequency of oscillation, means for deriving a measure of the phase shift of the oscillatory wave in said loop in its traversal through said resonant means, and means for utilizing said measure to



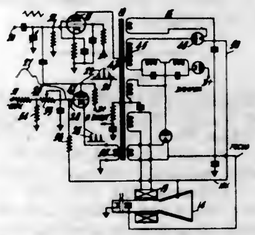
vary the oscillatory frequency whereby said phase shift is minimized.

2,751,519
ELECTRON BEAM CONTROLLING SYSTEM
Albert W. Friend, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application May 26, 1950, Serial No. 164,444
24 Claims. (Cl. 315—13)



1. In a cathode ray tube having a target electrode, an electron beam-controlling system comprising, means for generating a plurality of mutually spaced electron beam components the effective points of origin of which being at different respective distances from substantially all points on said target electrode, a beam-deflecting system disposed in a region spaced from said target electrode, means for directing said electron beam components into said deflecting region in such a manner that they are differently affected by said beam-deflecting system, means for variably energizing said deflecting system to cause all of said beam components to scan a predetermined raster on said target electrode and an electron-optical system adjacent the paths of said beam components and energizable as a function of said beam deflection to maintain predetermined relative positions of said beam components at all points of said raster.

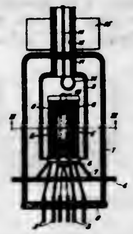
2,751,520
POWER SUPPLY REGULATION
Morris D. Nelson, New York, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application August 23, 1952, Serial No. 305,976
14 Claims. (Cl. 315—27)



1. Apparatus for voltage regulation in a flyback type power supply circuit having a deflection output amplifier, comprising sensing control means coupled to said power

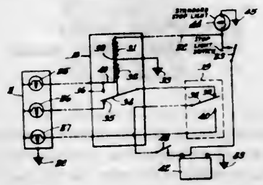
supply circuit for developing a control potential varying in response to variations of the output voltage of said power supply circuit, and a circuit coupling said sensing control means to said deflection output amplifier to variably control conduction of said output amplifier during the flyback period in response to said control potential, said coupling circuit including a pulse amplifier circuit conductive in response to both flyback pulses in said power supply circuit and potential developed by said sensing control means, whereby said deflection output amplifier conducts during said flyback period in an amount effective to load said power supply circuit to keep the voltage output thereof substantially constant.

2,751,521
DUPLEX TUBE
Eduard Gerhardus Dorgelo, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application August 6, 1953, Serial No. 372,726
Claims priority, application Netherlands September 2, 1952
2 Claims. (Cl. 315—39)



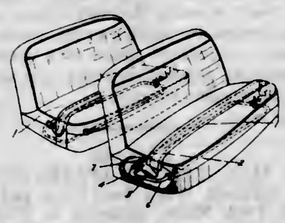
1. An electric discharge tube comprising an envelope, an electrode system disposed in said envelope, said electrode system including a common cathode, two semicylindrical grids, a common screen grid and an anode mounted in that order, means supporting said cathode and grids at one end, said anode comprising a cylinder of given diameter open at one end and including a pair of diametrically-opposed slots extending from the open end of said cylinder toward the other end, a conductive cylinder of diameter smaller than said given diameter sealed directly in said envelope, said conductive cylinder supporting said anode, an axial conductor extending through said conductive cylinder, and means coupling said axial conductor to the space enclosed by the anode.

2,751,522
SIGNAL LIGHT SYSTEM FOR MOTOR VEHICLES
Charles B. Spangenberg, Chicago, Ill., assignor, by mesne assignments, to Auto Lamp Manufacturing Company, Chicago, Ill., a copartnership
Application September 5, 1951, Serial No. 245,119
15 Claims. (Cl. 315—79)



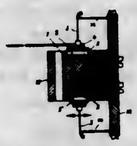
1. In a signal light system for a motor vehicle having red, ambler and green signal lights, a relay including a relay coil and a single pole double throw switch operated thereby, an electrical connection for the relay coil from the standard stop light switch of the motor vehicle for energizing the relay when the motor vehicle brakes are applied, a second single pole double throw switch, means operated by the accelerator mechanism of the motor vehicle for operating the second single pole double throw switch, electrical connections for the two single pole double throw switches for connecting the same in series between the motor vehicle voltage source and the red, amber and green signal lights for illuminating the green signal light when the motor vehicle accelerator is depressed, for illuminating the amber signal light when the motor vehicle accelerator is released and for illuminating the red signal light when the motor vehicle brakes are applied, and an electrical connection between the relay coil and the single pole double throw switch operated thereby for maintaining the relay energized after it is energized by the standard stop light switch until the second single pole double throw switch is operated to illuminate the green signal light for maintaining the red signal light illuminated after release of the motor vehicle brakes until the motor vehicle accelerator is depressed to illuminate the green signal light.

2,751,523
ELIMINATING STATIC ELECTRIC SHOCK FROM AUTOMOBILE SEAT COVERS
Clifford C. Adams, Birmingham, Ala.
Application January 2, 1953, Serial No. 329,253
2 Claims. (Cl. 317—2)



1. A device of the character described comprising a strip of flexible material, pieces of wire woven into said strip with part of the wire exposed in one face of the material, a steel wire coil spring attached to the ends of the wire at each end of the material, a fastening wire clip on the end of each steel wire spring, said strip of material with wire therein being of a size to fit upon and along the center portion of an automobile seat cushion with the said clips in contact with the metal structure of the automobile.

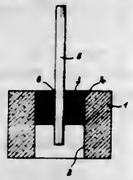
2,751,524
MOVING COIL INSTRUMENT WITH STRETCHED STRIP SUSPENSION
Friedrich Eadlich, Langen in Hessen, and Walter Hufbauer, Frankfurt am Main, Germany, assignors to Hartmann & Braun Aktiengesellschaft, Frankfurt am Main, Germany, a corporation of Germany
Application March 3, 1953, Serial No. 340,018
Claims priority, application Germany March 8, 1952
12 Claims. (Cl. 317—168)



1. A measuring instrument having a moving coil, a core, a pair of strips and springs, the coil being fixed to the two strips stretched by the springs, said coil turnable around the core, guide parts fixed to the coil, a face of said core having a recess, the guide parts having ends protruding into said recess, said recess being shaped so

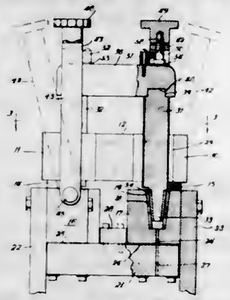
as to allow the protruding ends of the guide parts to move in their orbits but having only a clearance in radial direction smaller than the least distance in radial direction occurring between the coil and any other part of the instrument.

2,751,525
PERMANENT MAGNET
Maarten Hekelaar, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application July 6, 1954, Serial No. 441,549
Claims priority, application Netherlands July 24, 1953
4 Claims. (Cl. 317—201)



1. In combination, a hollow cylindrical permanent magnet defining a central bore, said magnet consisting essentially of a composition $MFe_{12}O_{19}$, M being a metal selected from the group consisting of barium, strontium, and lead, said magnet having a high retentivity and coercivity, a shaft centrally disposed within said bore and extending substantially parallel to the central axis of said magnet, and a cylindrical sleeve of a dense non-porous ceramic material disposed between and secured to the shaft and the magnet by cement.

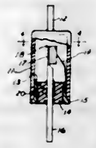
2,751,526
MAGNETIZING APPARATUS
Gerald A. Mitchell, White Bear Lake, and Norman V. Yost, St. Paul, Minn., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application April 13, 1954, Serial No. 422,728
5 Claims. (Cl. 317—203)



5. A magnetizing apparatus, which comprises a base, a pair of non-magnetic electroconductive sockets mounted on the base and insulated therefrom, non-magnetic insulating means mounted on the sockets, a removable U-shaped non-magnetic electroconductive bar, and non-magnetic electroconductive means for electrically detachably connecting the arms of the bar within the sockets.

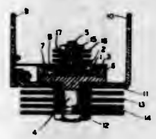
2,751,527
SEMICONDUCTOR DEVICES
Edmund G. Shower, Bucks County, Pa., assignor to National Union Electric Corporation, Orange, N. J., a corporation of Delaware
Application May 13, 1955, Serial No. 508,011
5 Claims. (Cl. 317—234)

1. A semiconductor device comprising, a semiconductor crystal, a conductor having one end in contact with a surface of said crystal, a glass-beaded metal eyelet comprising a cylindrical metal wall member surrounding a glass bead hermetically sealed thereto, another conductor hermetically sealed through the glass of said eyelet, said



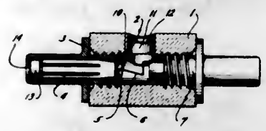
crystal being attached directly to the inner end of said other conductor, the free end of the first mentioned conductor being in electrical contact with the metal wall member of said eyelet, and a metal enclosing bulb sealed to the rim of said eyelet.

2,751,528
RECTIFIER CELL MOUNTING
Lester W. Burton, Danvers, Mass., assignor to General Electric Company, a corporation of New York
Application December 1, 1954, Serial No. 472,297
7 Claims. (Cl. 317—234)



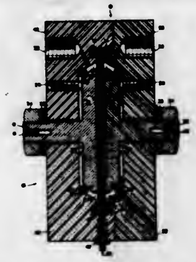
1. A rectifier cell mounting comprising a unilaterally conductive cell having oppositely disposed contact surfaces, a pair of contact members one of which is conductively secured to one of the contact surfaces of said cell and the other of which is conductively secured to the other of said contact surfaces of said cell and has a rim portion extending beyond said cell and said one of said contact members, and a flexible sheet of material having a mid-portion through which said one of said contacts project and having a peripheral portion mounted on and electrically insulated from the rim portion of said other of said contact members, said assembly constituting a sealed enclosure for said cell.

2,751,529
POINT CONTACT SEMICONDUCTIVE DEVICE
Jacob W. Stineman, Jr., Villanova, and Samuel A. Robinson, Lansdale, Pa., assignors to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application August 26, 1952, Serial No. 306,446
12 Claims. (Cl. 317—236)



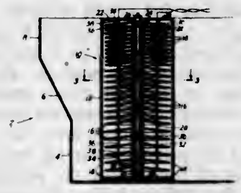
1. In a shock-resistant point-contact semiconductor device having low-noise properties, a semiconductive material, a fine filamentary electrode of diameter less than about 2 mils bearing lightly upon said semiconductive material and forming a rectifying contact point therewith, and a minuscule globule of cement positioned about said point and rigidly bonding said electrode to said semiconductive material, the volume of said globule being less than that of a sphere having a diameter of 0.004 inch.

2,751,530
DIFFERENTIAL PRESSURE SENSING UNIT
Robert W. Armstrong, Orono Township, Hennepin County, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application January 4, 1954, Serial No. 402,084
2 Claims. (Cl. 317—246)



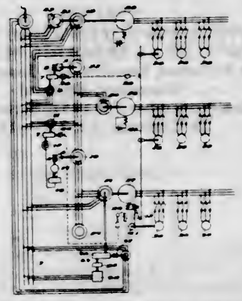
1. A differential pressure sensing unit consisting of a diaphragm, two O-rings engaging said diaphragm on opposite surfaces adjacent the periphery of said diaphragm, a casing in which said O-rings and said diaphragm are mounted, said casing having a T-shaped annular slot for holding said O-rings, said O-rings fitting in the wings of said T-shaped annular slot with said diaphragm extending through the stem of said T-shaped annular slot and clamped between said O-rings, said casing having pressure connections to permit application of pressures to chambers on opposite sides of said diaphragm, two capacitor plates one on each side of said diaphragm, said capacitor plates bearing on adjustable abutments on said casing, said plates each having an extension protruding through the casing, said extensions threaded with a nut provided for drawing up each of said capacitor plates against said adjustable abutments, a second pair of O-rings provided between said casing and each of said capacitor plates for sealing of said chambers, said capacitor plates with said diaphragm as a common plate forming a double capacitor, a differential of pressures applied to said chambers on opposite sides of said diaphragm causing deflection of said diaphragm with a resultant change in relative capacity of each half of said double capacitor.

2,751,531
LIQUID LEVEL MEASURING DEVICE
Elton T. Barrett, Thornwood, N. Y., assignor to The Liquidometer Corp., Long Island City, N. Y.
Application September 14, 1951, Serial No. 246,622
1 Claim. (Cl. 317—246)



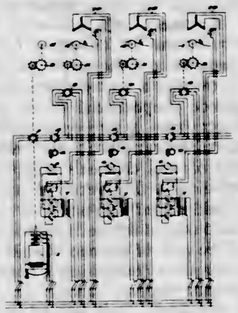
In a liquid level measuring system wherein the liquid is measured by means of change in electrical capacitance, a measuring condenser adapted for use in a tank having different cross-sectional areas at different levels comprising a plurality of condenser plates, said plates describing the surface of truncated cone, means supporting said plates in overlapping relationship one above each other, insulating spacers positioned between adjacent truncated portions of said plates, means connecting together alternate ones of said plates, and means connecting together the intervening ones of said plates, the vertical distance between adjacent surfaces of certain successive ones of said plates being different from the vertical distance between other successive ones of said plates, said plates having surfaces forming an acute angle with the horizontal so that liquid will not be trapped between the plates.

2,751,532
RELATIVE SPEED CONTROL OF PLURAL MOTORS ESPECIALLY FOR TENSION CONTROL
André Benoît de la Bretonière, Arnhem, Netherlands, assignor to American Enka Corporation, Enka, N. C., a corporation of Delaware
Application June 25, 1953, Serial No. 364,065
Claims priority, application Netherlands June 30, 1952
4 Claims. (Cl. 318—7)



1. In a control system for regulating the relative speeds of a plurality of wound rotor polyphase induction drive motors which are connected each to a three-phase stator supply voltage; a plurality of frequency converters, each comprising a wound rotor polyphase induction motor, first conductor means interconnecting the wound rotor of one of said drive motors to the stator of one of said frequency converters, second conductor means interconnecting the wound rotor of each frequency converter to the stator of another frequency converter and to the wound rotor of one of said drive motors, individual drive means including a mechanical variator and a unilaterally-acting transmission for driving the rotor of each frequency converter at a predetermined speed.

2,751,533
ADJUSTABLE ELECTRICAL TRANSMISSION SYSTEM
André Benoît de la Bretonière, Arnhem, Netherlands, assignor to American Enka Corporation, Enka, N. C., a corporation of Delaware
Application July 21, 1952, Serial No. 300,035
Claims priority, appplication Netherlands August 7, 1951
10 Claims. (Cl. 318—7)



1. A driving system for a plurality of utilities required to operate on a flexible work piece at functionally de-

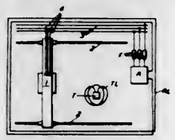
pendent speeds, comprising an electrical differential operatively associated with each utility to supply at least a part of the power to operate the utility, each differential having a rotor and a stator, an electrical input to the stator of polyphase alternating current of frequency controlled in accordance with the requirements of the system, a mechanical input to the rotor, feeder means connected to sample tension in said flexible work piece and develop a signal in response to changes therein, means responsive to said signal to control the angular velocity of the mechanical input to said rotors of said differentials, and at least one motor in mechanical driving connection with the respective utility, the rotor of the motor being connected to receive current from the rotor of the differential cooperating with that utility.

2,751,534

INDUCTIVELY EFFECTED REMOTE CONTROL FOR PLURAL ELECTRIC MOTORS

Sidney Jefferson, London, and Joseph Garden, Worcester, England

Application November 14, 1951, Serial No. 256,344
19 Claims. (Cl. 318—16)



1. In a control system for the remote control of apparatus including a transmitter comprising a magnetic wave generating means, a magnetic wave launching means and a control unit having a control member capable of being distinctively set in accordance with the control desired at the remote apparatus and able to modulate the transmitter output in accordance therewith, said transmitter being mobile within a given working area, and a receiver for receiving magnetic waves, a demodulating means to demodulate magnetic wave signals received from said transmitter and a controlling means for controlling said apparatus in accordance with demodulated signals received from the demodulating means, the combination with said receiver of a loop antenna connected to said receiver and surrounding the working area within which the transmitter operates and which is responsive to the magnetic waves launched by the transmitter but is non-responsive to magnetic wave interference in the vicinity of said working area.

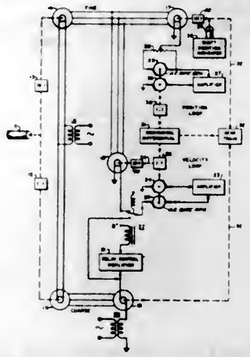
2,751,535

POSITION CONTROL SYSTEM

Alexander H. Kuhnel, Mount Vernon, N. Y., assignor to the United States of America as represented by the Secretary of the Army

Application June 18, 1953, Serial No. 362,643
6 Claims. (Cl. 318—19)

1. In a servo system for changing the position of a first object in response to a change in position of a second object, means providing a voltage having a characteristic having a magnitude proportional to the displacement of said second object from a reference position, a pair of channels connected in parallel to said means for control thereby, the first of said channels comprising a velocity servo loop including a first receiver having an output proportional to said magnitude, and first means connected for control by said output for deriving therefrom a torque proportional to the rate of change of said magnitude, the second of said channels comprising a position servo loop including a second receiver having an output proportional to said magnitude, and second means connected for control by said output of said second receiver for deriving therefrom a torque proportional to the extent of change of said magnitude; the output of said first means being supplied to said first and second receivers in such sense as substantially to null the outputs of said receivers, and means for adding the outputs of said first and second



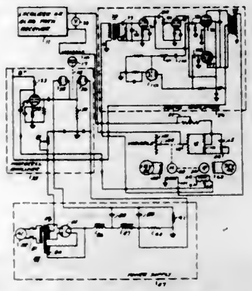
means and supplying a torque proportional to the resultant thereof to said second receiver in such sense as to reduce to zero any residual voltage output therefrom, said first object being driven by said last-named means.

2,751,536

SERVO SYSTEM ADAPTED FOR WEAK SIGNAL RECORDING

Lester E. Lundquist, Jr., Dayton, Ohio, assignor to the United States of America as represented by the Secretary of the Air Force

Application October 25, 1951, Serial No. 253,068
4 Claims. (Cl. 318—29)



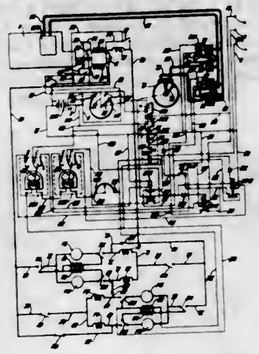
1. A fluctuation significance preserving amplifier of electrical potential of small magnitude, comprising a source of fluctuating electrical potential of small magnitude, a light producing first circuit receiving as input the fluctuating electrical potential of small magnitude from the source thereof and having as its output a light beam displaced in direction by the potential fluctuations, a first resistor bridge in said first circuit provided with a potentiometer having a tap to which the fluctuating electrical potential of small magnitude from the source thereof is applied and the potentiometer tap being adjustable on the potentiometer for altering the potentiometer adjustment in said first resistor bridge, a permanent record producing second circuit receiving as its input the potential fluctuation modulated light beam output from the first circuit, electronic means in said second circuit for converting the light beam direction displacements derived from said first circuit into electrical signal modulated in conformity with the fluctuations in the electrical potential of small magnitude at the source thereof, and field winding modulated servo-system means in said second circuit for converting the modulated electrical signal into mechanical tap adjustments on the potentiometer in said first resistor bridge and also into mechanical recordings preserving the fluctuation significance in the small magnitude potential from the source thereof.

2,751,537

DYNAMIC BRAKING CONTROL

Paul H. Seward, Downers Grove, Ill., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application February 25, 1953, Serial No. 338,649
16 Claims. (Cl. 318—88)



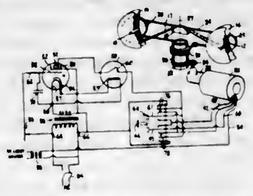
1. A dynamic braking control system for a railway vehicle comprising a generator having separate excitation means therefor in electrical circuit with a voltage source, variable resistive means in electrical circuit with said separate excitation means and said voltage source for varying the excitation of said generator, a hydraulic motor having a vane operable to vary said resistive means, electrically operated valve means effective to apply and relieve hydraulic pressure on opposite sides of the vane of said motor, an electrical traction motor having an armature rotatable by the momentum of said vehicle and excitation means therefor in electrical circuit with the armature of said generator, a dynamic braking resistor connected across the armature of said traction motor, and voltage sensitive means connected across said dynamic braking resistor responsive to predetermined voltages impressed across said resistor to control the energization of said electrically operated valve means and excitation of said generator and said traction motor to automatically regulate the current flow in said resistor within safe operating limits.

2,751,538

ELECTRIC MOTOR AND CONTROL CIRCUIT

Richard C. Beltz, Amherst, N. Y., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts

Original application December 3, 1948, Serial No. 63,417, now Patent No. 2,610,540, dated September 16, 1952. Divided and this application December 28, 1951, Serial No. 263,795
10 Claims. (Cl. 318—345)



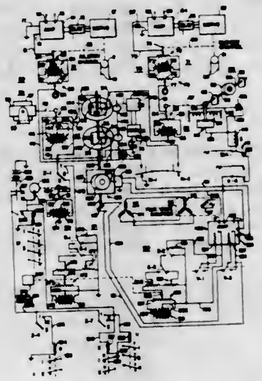
1. The combination of a series type electric motor, a power supply circuit for connecting said motor to a source of alternating current, a power transmitting thermionic tube having an anode and a cathode connected in series with said motor in said power supply circuit so that the anode current thereof may energize said motor, a transformer having a primary winding whose opposite ends are connected across said supply circuit and a secondary winding whose opposite ends are connected to said tube so as to heat said cathode, one end of said primary winding and one end of said secondary winding being connected together and to said cathode, a phase-shifting network comprising reactance and resistance elements connected in series relation to each other and having the opposite ends of said network connected respectively to the opposite ends of said windings, the common junction between said reactance and resistance elements being connected to a control grid of said tube so as to control the phase relation between the grid and anode voltages and thereby regulate the amount of anode current being supplied by said tube, and a normally open control switch in said power supply circuit, said switch being arranged when in one predetermined operative position to close said circuit and allow said anode current to operate said motor at a low speed, and movable to another predetermined operative position for connecting said cathode through a circuit around said anode to said motor and thereby by-passing said tube and allowing alternating current from said source to energize said motor and effect a higher speed of operation thereof.

2,751,539

AIRCRAFT CONTROL APPARATUS

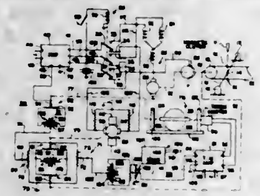
John W. Anderson and Theodore J. Wilson, Minneapolis, Minn., assignors to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware

Application February 17, 1950, Serial No. 144,832
6 Claims. (Cl. 318—489)



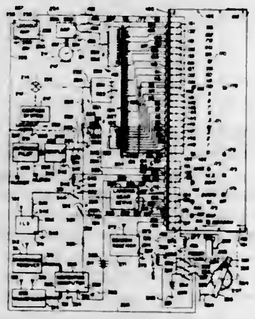
3. Steering apparatus for a dirigible craft, comprising: a directional gyroscope; a servomotor adapted to operate a control surface of said craft; a controller operated from a normal position by said gyroscope; a controller operated from a normal position by said servomotor, the relative positions of said controllers from their normal positions controlling said servomotor; means for precessing said gyroscope to effect operation of its controller; a magnetic compass for operating said precessing means to prevent change in course of said craft; a controller operated in proportion to deviation of said craft from a selected ground track; means for severing control of said precessing means from said compass during changes in course; means for operating said precessing means from said ground track controller to change course of said craft an additional controller operated in proportion to deviation of said craft from the selected ground track; and means for directly controlling said servomotor from said additional controller.

2,751,540
AUTOMATIC STEERING APPARATUS
Jack W. Lower, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application April 10, 1952, Serial No. 281,525
8 Claims. (Cl. 318—489)



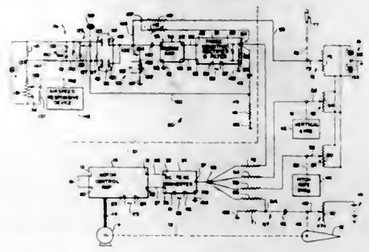
1. Apparatus for selectively controlling the attitude of a craft automatically in accordance with a signal and permitting direct manual control of the craft, said apparatus comprising: a gyroscope having a rotor with but two axes of freedom namely a spin axis and a precession axis, a signal generator operated in accordance with the precession of the rotor and a torque motor for precessing said gyroscope to limit said signal generated in proportion to the rate of change of craft attitude; a servomotor for operating a control surface to change attitude; a trim motor for operating a signal generator; means operated during positioning of said control surface for generating a follow-up signal; means for alternatively manually positioning said control surface; and means for coupling said gyroscope signal generator to said servomotor during automatic control and to said trim motor during manual control of said surface; means for further controlling said trim motor from said follow-up signal generator and said trim motor generator during manual control of the surface; and means for also applying said further control from said follow-up signal generator and said trim motor generator to the torque motor of said gyroscope during both manual and servomotor operation of the control surface.

2,751,541
AUTOMATIC FLIGHT CONTROL APPARATUS
Oscar Hugo Schuck, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application January 16, 1952, Serial No. 266,699
7 Claims. (Cl. 318—489)



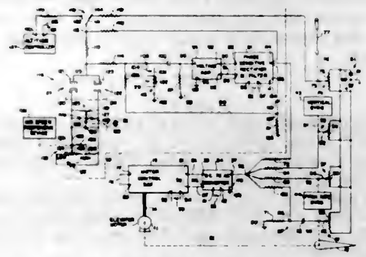
5. Control apparatus of the class described comprising, in combination: a record means having fields of perforations representative of desired values of variables in successive selected steps of a control sequence, each said field including a control portion and a sequence initiation selecting portion; means, including a bank of perforation sensing members and means positioning said record means so that one of said fields is adjacent thereto, for converting perforations in said record means to completed electrical circuits; a plurality of sources supplying signals each indicating that a variable of said control sequence has achieved a selected value; and means connected to one of said sources, determined by said perforation sensing members of the sequence initiation selecting portion of said field, for repositioning said record means so that another field of perforations is brought adjacent said bank of said sensing members.

2,751,542
AIRCRAFT ACCELERATION LIMITERS
Herbert S. Woodward II, Golden Valley, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application October 24, 1951, Serial No. 252,914
21 Claims. (Cl. 318—489)



8. Apparatus of the class described comprising, in combination: an amplifier normally giving an output proportional to the input supplied thereto; adjustable means for preventing the effective value of said input from exceeding a selected value; means giving a signal in accordance with the rate of change of said output; and a means adjusting said preventing means in accordance with said signal.

2,751,543
ACCELERATION LIMITING APPARATUS FOR AIRCRAFT
Ross C. Alderson, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application September 20, 1951, Serial No. 247,449
15 Claims. (Cl. 318—489)



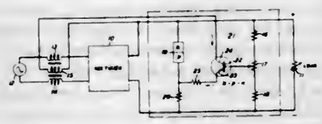
1. Apparatus of the class described comprising, in combination: a controlling member actuable to give a signal of variable magnitude and rate of change; a controlled member to be positioned in accordance with the magnitude of said signal, and at a maximum rate which is less than the maximum rate of change of said signal; and control means energized from said signal to actuate said controlled member, including a feedback amplifier resistance-capacitance integrator giving a control output in accordance with the time integral of an input including said signal; feedback means modifying said signal in accordance with said output to comprise said input; and means limiting the effective value of said input to a selected maximum regardless of the magnitude or rate of change of said signal.

2,751,544
DOSIMETER CHARGER
John R. Stirnkorb, Dillonville, Ohio, assignor to Bendix Aviation Corporation, Detroit, Mich., a corporation of Delaware
Application July 23, 1954, Serial No. 445,230
11 Claims. (Cl. 320—1)



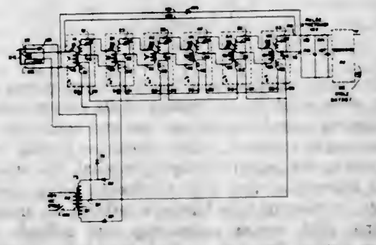
1. Apparatus for charging a capacitance in an instrument having a flexible diaphragm and a conductive portion in the diaphragm for establishing a charging circuit to the capacitance in the instrument to produce an initial deflection of a fiber to a particular position on a scale, including, a housing, a socket extending externally of the housing to receive the instrument and to establish electrical continuity with the instrument, a pin within the socket for engaging the conductive portion of the instrument diaphragm upon the positioning of the instrument on the socket and for flexing the diaphragm upon the application of pressure on the instrument to produce a continuous circuit to the instrument capacitance, a normally open switch having a movable contact positioned externally of the housing to produce a closure of the switch upon an actuation of the contact, and a circuit including the switch for charging the instrument capacitance upon a closure of the switch and upon a proper positioning of the instrument on the socket.

2,751,545
TRANSISTOR CIRCUITS
Fay H. Chase, Short Hills, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application March 10, 1953, Serial No. 341,519
17 Claims. (Cl. 321—18)



2. In combination, a rectifier for rectifying current from an alternating-current supply source and for supplying the rectified current to a load circuit, a saturable reactor for controlling the current supplied from said source to said rectifier to thereby control the current supplied to said load circuit, said reactor having an impedance winding through which current from said source is supplied to said rectifier and a saturating winding to which current is supplied for controlling the impedance of said impedance winding, a transistor having a collector, an emitter and a base, a current path comprising said saturating winding connecting said collector to said load circuit, a second current path connected across said load comprising in series a resistor and a constant voltage device and having a first terminal which is common to said resistor and said constant voltage device, a resistance path connected across said load having a second terminal intermediate its end terminals, means for connecting said base to one of said first and second terminals, and means for connecting said emitter to the other of said first and second terminals.

2,751,546
TWENTY CYCLE GENERATOR
Robert P. Dimmer, Lombard, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Application May 15, 1952, Serial No. 287,973
11 Claims. (Cl. 321—68)



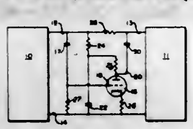
1. A frequency reducing system comprising a plurality of interconnected magnetically retentive, memory storage units connected in a ring circuit, one of said units magnetized in a particular direction and the other units having a different state of retained magnetism, means for causing full wave rectification of received alternating current to thereby obtain pulses of the same polarity, means for connecting said memory storage units to said rectifying means, said connecting means effective in response to the receipt of the first rectified pulse to reverse the magnetization of said one unit, means interconnecting each of said units with a succeeding unit for reversing the magnetization of the succeeding unit, said reversing means effective in response to the reversal of magnetization in said first unit to reverse the magnetization of the next unit, said reversing means in each unit effective in response to reversal of magnetization of the previous unit, said change in magnetization of each unit corresponding momentarily to the received pulses, an output circuit, means responsive to the reversal of magnetization in the last unit for transmitting a pulse into said output circuit, the output of said last unit comprising a series of pulses occurring at the frequency which is a submultiple of the input frequency.

2,751,547
REGULATED POWER SUPPLY ELECTRONIC CONTROL CIRCUIT
Milton M. Moorhead, Jr., Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
Application May 4, 1953, Serial No. 352,883
5 Claims. (Cl. 323—22)



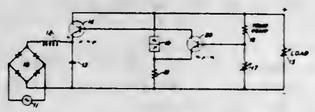
1. In a regulated power supply comprising a variable impedance between the input and output of the supply and capable of rapid, ripple-free response with a high degree of stability at high gain, a voltage feedback direct current amplifier, an alternating current amplifier in parallel with the direct current amplifier connected between the input and output of the direct current amplifier means to impress voltage variations on the amplifiers, a summing circuit connected to the outputs of the A. C. and D. C. amplifier for the summing of the voltage outputs thereof, and means to impress the summed voltage output on the variable impedance to control the voltage drop across the same to thereby maintain the output voltage of the supply substantially constant.

2,751,548
RIPPLE COMPENSATOR
Charles F. Gunderson, Belmar, N. J.
Application September 6, 1951, Serial No. 245,414
3 Claims. (Cl. 323—22)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In combination with a direct current power supply having substantial ripple content at its output terminals, a decoupling impedance having one end connected to the positive output terminal, a first condenser having one end connected to the negative output terminal, the other ends of said impedance and said condenser being connected together, an electron tube having a cathode, an anode, and a control grid, means connecting said cathode to the negative output terminal, a load impedance having one end connected to said anode ad the other end connected intermediate said decoupling impedance and said first condenser, a second condenser connected between said anode and said positive terminal, a third condenser connected between said positive terminal and said grid, and an impedance connecting said grid to said negative terminal, whereby said ripple is applied to said grid and a corresponding output voltage of opposite phase is derived from said anode to cancel said ripple.

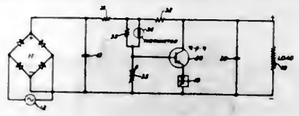
2,751,549
CURRENT SUPPLY APPARATUS
Fay H. Chase, Short Hills, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application February 25, 1954, Serial No. 412,437
7 Claims. (Cl. 323—66)



1. The combination with a source of direct current for supplying current to a load circuit including a load, of a first and a second transistor one of which is of the n-p-n type and the other of which is of the p-n-p type, each of said transistors having a collector, an emitter and a base, means for connecting the collector-emitter path of said first transistor in series with said source and said load circuit so that the current supplied to said load circuit flows through said collector-emitter path, and means for controlling the current in said load circuit comprising said second transistor, means for directly conductively connecting the base electrode of said first transistor to the collector electrode of said second transistor so that the current flowing out of one of said electrodes flows into the other of said electrodes, and means for controlling the current flowing through the base-emitter path of said second transistor to control the collector current of said second transistor.

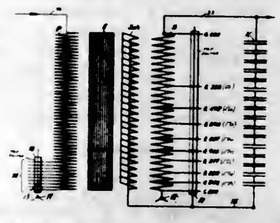
2,751,550
CURRENT SUPPLY APPARATUS
Fay H. Chase, Short Hills, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application October 12, 1953, Serial No. 385,570
1 Claim. (Cl. 323—66)

In combination, a first and a second resistor having a common terminal, means for supplying current from a direct-current source through said first and second resistors in series to a load, a voltage dividing resistance path having end terminals connected to a terminal of said load and to said common terminal respectively and having an intermediate terminal between said end terminals, a transistor having a collector, an emitter and a base, means for directly conductively connecting said collector to one terminal of said load, a constant voltage



device, means for connecting said emitter through said constant voltage device to the other terminal of said load and means for connecting said base to said intermediate terminal, said voltage dividing resistance path comprising temperature responsive resistance means for minimizing changes of collector current due to ambient temperature changes.

2,751,551
ADJUSTABLE POWER FACTOR CORRECTION SYSTEM
Bernhard Jansen, Regensburg, Germany
Application October 8, 1952, Serial No. 313,695
Claims priority, application Germany October 9, 1951
10 Claims. (Cl. 323—110)

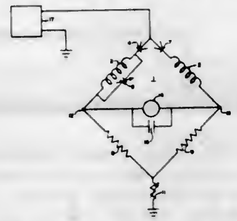


1. In a power factor correction system, in combination with a constant voltage power distribution network comprising at least one high voltage power distribution conductor, a return conductor for said high voltage conductor, at least one further power distribution conductor operating at a relatively lower voltage, a lower voltage return conductor for said lower voltage distribution conductor, and a power distribution transformer having a primary winding connected to said high voltage distribution conductor and said high voltage return conductor and a secondary winding connected to said lower voltage conductor and said lower voltage return conductor, the provision of: a plurality of taps connected to spaced points along said secondary winding; a multi-position tap switch connected to said taps for selectively establishing a connection with a desired one of said taps; and a power factor correction capacitor of fixed capacitance connected to said distribution network through said secondary winding by means of a circuit comprising said tap switch and said desired tap.

2,751,552
THICKNESS GAGE FOR METALLIC COATINGS
Abner Brenner, Chevy Chase, Md., and Billy J. Wagoner, Arlington, Calif., assignors to the United States of America as represented by the Secretary of Commerce
Application September 17, 1952, Serial No. 310,148
3 Claims. (Cl. 324—34)
(Granted under Title 35, U. S. Code (1952), sec. 266)

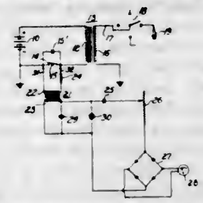
1. A gage for measuring nondestructively the local thickness of a nonmagnetic metallic coating on a nonmagnetic metallic base, said gage comprising: a first circuit having a unilateral conducting device in series with

a parallel combination of a point contact type probe having wound thereon a self-inductance test coil with a diameter of less than one-eighth inch and a variable capacitor, said coil and capacitor combination being resonant at a frequency in excess of 100 cycles; a second circuit having a unilateral conducting device in series with an impedance, said second circuit being connected



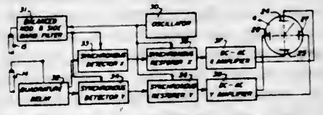
in parallel with said first circuit; a first means for supplying to said first and second circuits an alternating current of a frequency that is greater than 100 cycles and that is approximately equal to the resonant frequency of said coil and capacitor combination in said first circuit; and a second means for comparing the current through said first and said second circuits.

2,751,553
ELECTRICAL TACHOMETER
Howard G. McEntee, Ridgewood, N. J.
Application July 13, 1953, Serial No. 367,663
3 Claims. (Cl. 324—70)



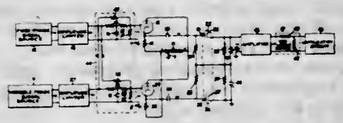
1. An electrical tachometer for an internal combustion engine having an ignition system, there being breaker points in said ignition system, which comprises a transformer having primary and secondary windings, means for connecting the primary winding of said transformer across one of the components of the ignition system, a metering circuit comprising a condenser, a resistor connected in series with the secondary winding of the transformer, a second condenser and a gaseous discharge bulb connected in parallel across said secondary transformer winding, whereby an electric current passes through the metering circuit whose magnitude is proportional to the rate of breaking of the breaker points, and means for measuring the current passing through the metering circuit.

2,751,554
ELECTRONIC DISPLAY MEANS
Kurt Schlesinger, Maywood, and Leroy W. Nero, Chicago, Ill., assignors to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Application April 22, 1952, Serial No. 283,784
6 Claims. (Cl. 324—88)



1. Apparatus for displaying a test signal to be observed on the screen of a cathode ray tube as a vector, with the length of the vector representing the amplitude of the test signal and with the inclination of the vector representing the phase of the test signal with respect to a reference signal of the same frequency, said apparatus including in combination, first input terminal means adapted to be connected to a source of the test signal, an oscillator for producing a writing oscillation of a selected frequency, a network coupled to said first input terminal means and responsive to the test signal for producing a pair of components respectively in phase and in phase quadrature with the test signal, second input terminal means adapted to be connected to a source of the reference signal, a modulator coupled to said second input terminal means and to said oscillator for intermodulating said writing oscillation and the reference signal to produce selected sidebands, detector means coupled to said modulator and to said network for combining said selected sidebands with said pair of test signal components to produce two distinct signals of the frequency of said writing oscillation and having amplitudes corresponding respectively to the amplitude of the in-phase component and phase quadrature component of said test signal with respect to said reference signal, and means for utilizing said two distinct signals to deflect the cathode ray beam in said cathode ray tube along mutually perpendicular axes.

2,751,555
EXTENDED-RANGE PHASE COMPARATOR
George M. Kirkpatrick, Syracuse, N. Y., assignor to General Electric Company, a corporation of New York
Application October 3, 1951, Serial No. 249,581
13 Claims. (Cl. 324—89)



1. A phase comparator responsive to the phase relation between two electromotive forces of the same frequency and subject to variations in phase relative to one another including a pair of rectifiers, a pair of phasing networks coupled to said rectifiers for supplying said electromotive forces thereto and having means for introducing a fixed phase displacement of less than $\pi/2$ radians at said frequency between said electromotive forces as applied to each of said rectifiers, crossover connector means for applying each of said electromotive forces to a rectifier without undergoing appreciable phase shift, an output circuit including series-connected reactive elements for combining the rectified components of the electromotive forces applied to said rectifiers normally to derive a substantially linear characteristic relating the instantaneous amplitude values of the output electromotive force and said variations in phase, a utilization circuit coupled to said output circuit, and resistive network means including a non-linear element interposed between said output circuit and said utilization circuit adapted to improve the linearity of said characteristic.

2,751,556
VARIABLE TRANSFER DIRECTIONAL COUPLER FOR MICROWAVE ENERGY
Kiyo Tomiyasu and Seymour B. Cohn, Flushing, N. Y., assignors to Sperry Rand Corporation, a corporation of Delaware
Application November 22, 1950, Serial No. 197,064
6 Claims. (Cl. 333—10)

1. Variable microwave energy transmission apparatus comprising first and second wave guides each having a rectangular cross section, a narrow wall of said first wave

guide being adjacent to and separated from a narrow wall of said second wave guide, said narrow wall of said first wave guide having a substantially rectangular longitudinally extensive opening therein appreciably longer than the width of said narrow wall of said first wave guide, said narrow wall of said second wave guide having a substantially rectangular longitudinally extensive opening therein appreciably longer than the width of said narrow wall of said second wave guide, the length of the rectangular longitudinally extensive openings in said first and second wave guides being at least equal to that length required for full energy transfer from one of said wave guides to the other wave guide when said openings are in full register, one of said adjacent narrow walls including a series of spaced inductance cross-bars

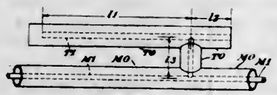


across the rectangular longitudinally extensive opening therein, a substantially rectangular plate having a length and width substantially equal to the length and width of said rectangular longitudinally extensive openings and having a thickness substantially equal to the sum of the thickness of the narrow wall of one of said wave guides and the separation between adjacent narrow walls of said first and second wave guides, said rectangular plate being situated within one of said wave guides and extending longitudinally along its narrow inner wall opposite the rectangular longitudinally extensive opening therein, the surface of said plate as measured along its width being contiguous with said opposite narrow wall, and means guiding one of said guides relative to the other for providing longitudinal variation of coupling through the openings in the adjacent walls.

2,751,557
T-CONNECTED STUB FILTERS FOR USE ON VERY HIGH FREQUENCIES

Bolesław Marian Sosin, Great Baddow, Chelmsford, England, assignor to Marconi's Wireless Telegraph Company Limited, London, England, a company of Great Britain

Application February 11, 1952, Serial No. 270,925
Claims priority, application Great Britain February 26, 1951
8 Claims. (Cl. 333—73)

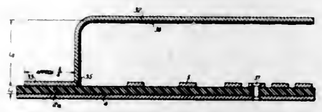


1. A filter or the like of the line type comprising at least one "straight" T-connected stub having a connecting arm which is other than a whole number, including unity, of quarter wave lengths long at any frequency within the frequency range having the stop frequency of the filter as one limit and the pass frequency of the filter as the other limit and two other arms, said connecting arm being parallel connected to the other two arms at their junction, one of said other two arms being open circuited at its far end and being substantially a whole odd number, including unity, of quarter wave lengths long at a frequency within said range and the other of said other two arms being short circuited at its far end and being short in relation to a quarter wave length at any frequency within said range.

2,751,558
RADIO FREQUENCY FILTER

Donald D. Grieg, North Caldwell, and Herbert F. Engelmann, Mountain Lakes, N. J., assignors to International Telephone and Telegraph Corporation, a corporation of Maryland

Application October 21, 1952, Serial No. 316,047
12 Claims. (Cl. 333—73)

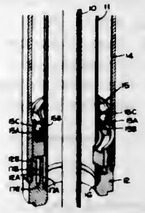


1. A filter comprising a first conductor disposed to present a given configuration, a second conductor disposed in substantially parallel, spaced relation to said first conductor, the spacing between said first and second conductors being a fraction of a wavelength of the mid-frequency of the operating band, the width of said second conductor being greater than the greatest width of the configuration of said first conductor so that substantially the entire electric field distribution is concentrated therebetween in a manner substantially the same as the field distribution between one conductor and the neutral plane of a two-conductor parallel system, the configuration of said first conductor presenting, in conjunction with said second conductor, inductance and capacitance to form a resonant filter section, and a third conductor disposed in overlying relation wtih respect to at least certain of the configurations of said first conductor, said third conductor being spaced from said first conductor by an amount sufficiently greater than the spacing between said first and second conductors as to have negligible effect upon said field concentration between said first and second conductors, said third conductor comprising a cover having top and side walls overlying in spaced relation the configuration of said first conductor with said side walls electrically coupled to said second conductor, said side walls including a rim approximately a quarter wavelength wide and means to support said rim in spaced relation to said second conductor to form therewith an electric choke.

2,751,559
ROTATABLE WAVE GUIDE JOINTS

Joe G. McCann, Pacific Palisades, and Romar E. Stein, Los Angeles, Calif., assignors to Gilfillan Bros., Inc., Los Angeles, Calif., a corporation of California

Application September 5, 1950, Serial No. 183,264
8 Claims. (Cl. 333—97)



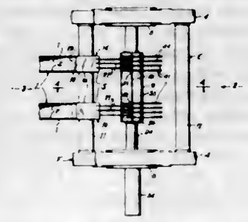
1. In a rotatable wave guide construction arranged to guide energy of high frequency, a base, an annular sleeve, bearing means mounting said sleeve for rotation with respect to said base, an annular opening defined between said sleeve and said base through which high frequency energy may leak, said base having a wall cooperating with the outer wall of said sleeve and defining therewith a first cavity section, said cavity section having one of its ends in communication with said annular opening, a second cavity section extending between said bearing means and the other end of said first cavity section, a third cavity section in said base having one of its ends

terminating at a wall in said base and having the other one of its ends in communication with said other end of said first section, each of said first, second and third cavity sections being one quarter wave length long, each of the designated wave lengths being the wave length of said high frequency energy as measured in the corresponding cavity section.

2,751,560
HIGH FREQUENCY CAPACITATOR

Emil F. Brinker, Matawan, N. J., assignor to Lavoie Laboratories, Inc., Morganville, N. J., a corporation of New Jersey

Application March 16, 1953, Serial No. 342,667
4 Claims. (Cl. 333—97)

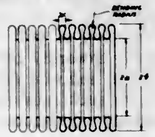


1. In a balanced transmission line having a pair of laterally spaced parallel rectangular conductors, a high frequency capacitator comprising a pair of spaced stator units comprising base portions forming continuations respectively of said conductors and having substantially the same cross sectional size and shape and the same electrical transmission characteristics as said conductors and a plurality of laterally spaced parallel blades forming continuations of said base portions said parallel blades having their sides parallel to the sides of said rectangular conductors, and a rotor comprising a shaft normal to said blades, two groups of spaced blades mounted on said shaft, said groups being spaced apart from one another in a direction axial of said shaft direction and the blades of said groups interleafing respectively with the blades of said stator units, and a conducting bar electrically connecting one of said groups of rotor blades with the other of said groups of rotor blades adjacent the outer peripheries of said blades.

2,751,561
WAVE-GUIDE MODE DISCRIMINATORS

Archie P. King, Red Bank, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application December 20, 1950, Serial No. 201,792
3 Claims. (Cl. 333—98)



1. In a fully confined wave guide system for circular electric waves characterized by circular field lines coaxial with the guide, a source of said circular electric waves, a first substantially straight length of fully enclosed hollow conductive wave guide of circular cross section connected to said source, a second substantially straight length of fully enclosed hollow conductive wave guide of circular cross section, said first and second straight lengths of wave guide having smooth, substantially cylindrical inner wall surfaces and having their respective longitudinal axes displaced so as to be out of alignment with each other, and a curved length of hollow conductive wave guide of circular cross section joining said straight lengths to form a fully enclosed hollow conductive wave guide system therewith, said curved length of wave guide having circumferential grooves in its inner wall surface, the depth of said grooves being such that and the spacing of said grooves along the length of said curve being small enough that the propagational velocity of a degenerate transverse magnetic wave mode within the curved length of wave guide is rendered materially different from the propagational velocity of the circular electric wave mode within the said curved length, thereby minimizing wave energy transfer from the circular electric mode to the degenerate transverse magnetic mode.

2,751,562
DRY-TYPE TRANSFORMER

Guglielmo Camilli, Friend H. Kierstead, Wayne J. Vandergrift, and John C. Russ, Pittsfield, Mass., assignors to General Electric Company, a corporation of New York

Application December 13, 1951, Serial No. 261,544
5 Claims. (Cl. 336—60)

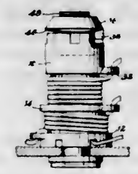


1. A stationary electrical induction apparatus of the gas-insulated type comprising an enclosing casing, a magnetic core contained within said casing, said magnetic core having at least one winding leg for the reception of electrical windings, a plurality of electrical windings coaxially disposed about said winding leg, the radially outermost of said windings being a winding of the disk type, said windings being radially displaced with respect to each other and separated from each other by axially-extending ducts, said ducts providing paths for the passage of cooling gas adjacent said windings, and a baffle member extending from the inner surface of said enclosing casing to closely adjacent the radially outer surface of said disk winding in a plane substantially perpendicular to the vertical axis of said enclosing casing, said baffle member being positioned at an axial height substantially in alignment with the natural draft hottest spot of said disk winding prior to placement of said baffle.

2,751,563
RADIO FREQUENCY TRANSFORMER AND COIL FORM

Leslie A. Willyard, Inglewood, and Ingemar R. V. Taegtstroem, Los Angeles, Calif.; said Taegtstroem now by change of name Ralph Textrom; assignors to Hoffman Electronics Corporation, Los Angeles, Calif., a corporation of California

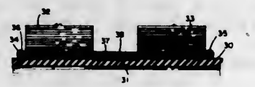
Application June 20, 1952, Serial No. 294,618
8 Claims. (Cl. 336—65)



1. A coil form comprising a base portion, a hollow body portion secured to said base portion, apertured lugs on both said portions, a hollow cap portion loosely re-

ceived in said body portion for axial movement with respect to said body portion, said cap portion and said body portion being threaded internally on a common axis, a magnetic tuning slug threadedly received in said cap portion and said body portion, and resilient means between said cap portion and said body portion for urging said portions away from one another to clamp said tuning slug in position within said body portion.

2,751,564
CORE AND COIL ARRANGEMENT
James C. Marsh, Indianapolis, Ind., assignor to Ransburg Electro-Coating Corp., Indianapolis, Ind., a corporation of Indiana
Application May 9, 1952, Serial No. 286,927
5 Claims. (Cl. 336—197)



5. In electrical apparatus a core-surrounding casing of insulating material having a casing-encircling recess in its outer surface; two coils each having opposed inner and outer faces, said coils being spaced on said casing with their faces facing each other from opposite sides of said recess; two casing-encircling outer retaining members of insulating material each fitted snugly against said casing and an outer face of each coil; an inner casing-encircling retaining member of insulating material fitted snugly into said recess and with its sides fitted snugly against the inner faces of each coil; and means for binding said retaining members together.

2,751,565
SLIP RING DEVICE FOR ELECTRIC CABLE REEL
Henry E. Johnston, Philadelphia, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application October 9, 1950, Serial No. 189,275
5 Claims. (Cl. 339—5)



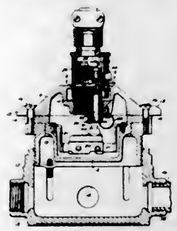
1. In a slip-ring device for an electric cable reel of the type which is rotatable about a stationary shaft, a slip-ring unit comprising a rotor and a stator; said rotor including a non-conducting supporting member having opposite side faces, contact brushes attached to said side faces, and means for connecting said member with said reel to rotate therewith, said supporting member having a circular opening; said stator including a non-conducting disc structure composed of an inside disc sandwiched between two outside discs, said inside disc being mounted in said opening and said outside discs projecting axially beyond said side faces of said supporting member, conducting rings of an outer diameter greater than the diameter of said disc structure, said rings being mounted on said outside discs and engaged by said brushes, and means for connecting said disc structure with said stationary shaft to be thereby held against rotation with said supporting member.

2,751,566
SAFETY PLUG AND KEEPER FOR MAGNETIC SOCKET
Adolph P. Buquor, Washington, D. C.
Application November 29, 1954, Serial No. 471,663
6 Claims. (Cl. 339—12)



1. In combination, a magnetic socket having an inner end and an open outer end, a bipolar permanent magnet situated at the inner end of said socket and comprising an electrical contact, a side contact in said socket and insulated from said magnet, and a removable safety plug serving as a closure for said socket, said safety plug comprising a body of insulating material having an end portion provided with a paramagnetic terminal secured thereto spanning and engaging the poles of said magnet, said body projecting substantially to the open outer end of said socket and being of such transverse dimensions as to substantially close the open outer end of said socket, the portion of said plug opposite said side contact being a portion of the insulating material of said plug body.

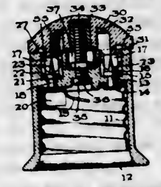
2,751,567
ELECTRICAL CONNECTOR
Carl H. Bissell and Willard E. Parish, Syracuse, N. Y., assignors to Crouse-Hinds Company, Syracuse, N. Y., a corporation of New York
Application December 30, 1953, Serial No. 401,112
4 Claims. (Cl. 339—70)



4. An electrical connector including plug and receptacle members, a sleeve fixedly mounted in the receptacle, a contact slidably mounted in said sleeve, means yieldingly acting against the inner end of said contact to position the same with the outer end portion thereof outwardly from the outer end of said sleeve, a contact fixedly mounted in the plug for coacting with said receptacle contact, said plug contact being formed at its outer end with an annular series of resilient fingers for engaging the outer end portion of said receptacle contact to move the same axially inwardly upon movement of the plug into the receptacle, and said sleeve being cooperable with said fingers upon such movement to contract said fingers into interlocking engagement with the receptacle contact.

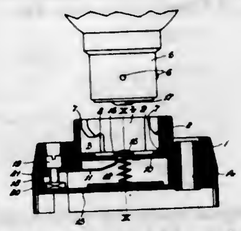
2,751,568
WIRE CENTERING MEANS FOR PIN-TYPE INSULATION-PIERCING CONNECTORS
Victor R. Despard, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Syracuse, N. Y., a corporation of New York
Application November 15, 1954, Serial No. 468,783
2 Claims. (Cl. 339—99)

1. A pin type connector adapted to penetrate the insulation and engage the conductor of an insulated wire of circular configuration selected from among such wires having various overall diameters, comprising in combination, a block of insulation having a U-shaped channel therein for receiving an insulated wire usable with the connector, a tapering conductive pin extending transversely of said channel from the bottom of said U, fins of insulation arranged in pairs on opposite sides of the pin, the fins of a pair extending from opposite walls of the channel toward the other to center an insulated wire of



less diameter than channel width over said pin to insure penetration of the conductor when the wire is pressed in the channel and to deform and enter the insulation of a wire of overall diameter greater than the spacing of the edges of a pair of fins, and said pairs of fins being spaced apart longitudinally of the channel not substantially more than the width thereof.

2,751,569
LAMP HOLDER
Charles Henri Joseph Anderson and Johannes Hendricus Franciscus van Werd, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application April 17, 1952, Serial No. 282,852
Claims priority, application Netherlands May 28, 1951
4 Claims. (Cl. 339—188)

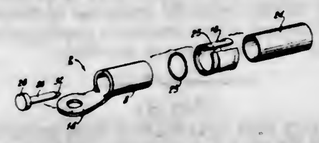


1. A lamp holder for a bayonet type lamp comprising a housing; a sub-base plate in said housing, a movable relatively flat base plate having a plurality of apertures therein and being superposed and spaced from said sub-base plate, said base plate forming the bottom of said lamp base enclosing space, a side wall in said holder being provided with an abutment, and at least two contacts, resilient means co-acting with said contacts whereby each of said contacts extends a limited distance through an aperture in said base plate thereby urging said base plate in a direction substantially transverse to the plane of said sub-base plate and against said abutment, and means for securing said sub-base plate to said housing.

2,751,570
ELECTRICAL CONNECTOR
William F. Broske, Harrisburg, Pa., assignor to Aircraft-Marine Products, Inc., Harrisburg, Pa., a corporation of New Jersey
Application October 26, 1950, Serial No. 192,188
11 Claims. (Cl. 339—223)

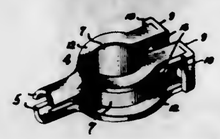
1. In a solderless connector for making a mechanical and electrical connection to a wire, the combination comprising a wire-receiving ferrule portion, and a solid core of non-conductive resiliently deformable material secured to and positioned within said ferrule and extending lengthwise thereof, whereby said core being spaced

to receive at least a part of a wire between it and a contact area of the inner face of the ferrule, said core is compressed by the wire when said ferrule is crimped



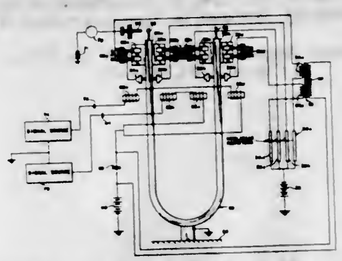
around a wire inserted therein and the area of contact between said wire and said ferrule is maintained under continuous pressure by the resilient properties of said core.

2,751,571
BATTERY POST CLAMP
James Lee Colyer, Evansville, Ind.
Application November 6, 1953, Serial No. 390,535
2 Claims. (Cl. 339—228)



1. A clamp for engagement around a battery post comprising an elongated strip of resilient metal bent upon itself intermediate its ends to provide a pair of arms to be engaged with opposite sides of said post and normally spaced apart a distance greater than the cross sectional dimension of said post, the ends of said arms having aligned openings therein, ribs projecting from the longitudinal edges of said arms in spaced parallelism, the ends of said arms bent outwardly at right angles thereto, a toe projecting rearwardly from the ends of said inturned portions, a nut engaged with one of said arms and held therein against rotation by said ribs and said inturned portion, and a bolt extending through the aligned openings in said arms and through said nut and engaged with the threads thereof.

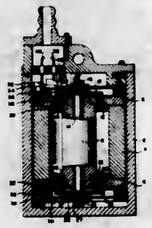
2,751,572
SIGNAL COMPARATOR
Robert W. Hart, Lynn, Mass.
Application September 27, 1951, Serial No. 248,625
11 Claims. (Cl. 340—6)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. Apparatus for comparing the amplitude of two signals comprising, a tuned resonant system, means for driving said tuned resonant system at a constant amplitude of oscillation, a first signal means providing one of said signals, a second signal means providing the other of said signals, first and second auxiliary driving means associated with said tuned resonant system, said two auxiliary driving means having opposite effects upon the amplitude of oscillation of said resonant system in response to like energization, means controlled by the oscil-

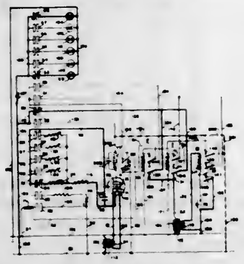
lations of said tuned resonant system for periodically coupling said first and second signal means to said first and second auxiliary driving means, respectively, and means for indicating when the amplitude of oscillation of said tuned resonant system reaches a predetermined amplitude other than said constant amplitude.

2,751,573
APPARATUS FOR CHANGING THE RESONANT FREQUENCY OF A SEISMIC DETECTOR
John W. Millington, Beaumont, Tex., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
Application February 1, 1952, Serial No. 269,564
2 Claims. (Cl. 340—17)



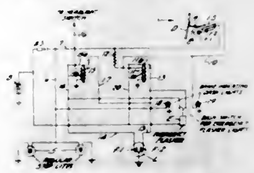
1. Apparatus for seismic surveying including a detector comprising relatively movable elements providing an output signal due to their relative motion and means for yieldingly suspending one of said elements, said suspending means having non-linear load-deflection characteristics and comprising a pair of substantially flat spring means each including a plurality of outwardly extending arms, each of said arms having the radial axis of its outer end displaced from the axial plane of the radial axis of its inner end and the arms of one of the pair of spring means having their ends displaced oppositely to the displacement of the arms of the other of the pair of spring means, said spring means producing opposing torques around the axis of motion of said one of said elements when they are correspondingly simultaneously displaced, and means for loading said suspending means for adjustment of the resonant frequency of said detector by changing the effective spring constant of the suspending means.

2,751,574
TRAFFIC SIGNAL CONTROLLER
Walter M. Jeffers, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a corporation of New York
Application August 31, 1953, Serial No. 377,332
6 Claims. (Cl. 340—37)



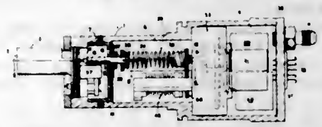
1. A signal controller for controlling the go, caution and stop signals at the intersection of a main street and a cross street, a cam shaft having a series of cams thereon, a switch actuated by each cam, certain of said switches being connected in signal circuits, a motor operatively connected with said shaft to effect rotation thereof step by step through a succession of positions, there being one position for the display of the main street go signal, one position for the display of the main street caution signal, one position for display of the cross street caution signal, a position for the display of the initial portion of the cross street go signal, and a series of positions for the display of the remainder of cross street go signal, a first motor running circuit energized through one of said cam actuated switches normally open and being closed only during rotation of the cam shaft, a motor starting circuit, a relay operable when energized to connect said starting circuit to a power supply, a timer for controlling said relay including a series of control elements individually operable by a series of cam actuated switches normally open and being closed respectively during the various positions of the cam shaft, each of said control elements being operable to cause said timer to energize said relay after the elapse of a predetermined period of time, a second running circuit for said motor including the contacts of said relay when the same is deenergized, another one of said cam actuated switches closed during the display of the cross street go signal and a switching mechanism, a detector element positioned in the cross street for actuation by traffic approaching the intersection and operable upon actuation during display, of the cross street go signal to actuate said switch mechanism to open said second running circuit.

2,751,575
EMERGENCY SIGNAL SYSTEM FOR MOTOR VEHICLES
Marcellus L. Jacobs and Joseph H. Jacobs, Minneapolis, Minn.
Application March 8, 1954, Serial No. 414,539
5 Claims. (Cl. 340—72)



1. A safety signal system for motor vehicles provided with the conventional brake controls, having in combination an emergency electrical signalling light adapted to furnish intensive illumination and disposed in a predetermined position at the rear of a motor vehicle, an electrical circuit including said signal light, a switch in said circuit actuated only when said vehicle very rapidly decelerates its speed, and a control switch in said circuit actuated by said first mentioned switch and switch holding means adapted to be connected with such a brake control to maintain said circuit closed through said signal lamp until the brake control is completely released.

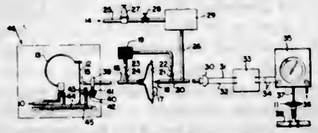
2,751,576
CLOSED-CYCLE PRESSURE TRANSDUCER
David G. Soergel and Frederick H. Gardner, Long Beach, Calif., assignors to North American Aviation, Inc.
Application January 14, 1952, Serial No. 266,374
12 Claims. (Cl. 340—187)



11. A closed-cycle transducer for producing a voltage output which is proportional to fluid pressure change com-

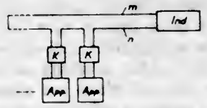
prising a torsional straight line Bourdon tube having a fixed end and a torque end rotationally responsive to said fluid pressure change, an inductive "E" pick-off detector having an armature and a stator with said armature rigidly attached to the torque end of said Bourdon tube and said stator positioned to detect angular displacement of said armature, a straight line torsional spring composed of the same material as said Bourdon tube, a feedback shaft one end of which is rigidly attached to said detector armature, the other end of which is rotationally associated with one end of said torsional spring, a torquer with output shaft rotatably associated with the second end of said torsional spring, an amplifier with input from the output of said detector and with output furnishing power to said torquer, and voltage output means coupled to said amplifier.

2,751,577
MEASURING APPARATUS
Robert Clark Du Bois, Fairfield, Conn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application October 15, 1954, Serial No. 462,556
18 Claims. (Cl. 340—208)



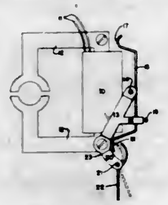
1. A sound wave transmitter for transmitting a sound signal whose frequency varies over a predetermined range comprising, a regulable fluid supply pressure transmitting conduit, a bleed nozzle attached to one end of said conduit, a vibratable string, said nozzle having a fluid under pressure issuing therefrom acting as a means for vibrating said string, and means for subjecting the ends of said string to a predetermined tension when a variable to be determined is of one magnitude and subjecting it to other tensions when said variable is of other magnitudes, said supply pressure conduit acting to transmit the sound of said string vibrations through said conduit.

2,751,578
FAULT INDICATOR FOR PLURAL CONNECTED DEVICES
Nils-Olof Johannesson, Hagersten, Sweden, assignor to Telefonaktiebolaget L M Ericsson, Stockholm, Sweden, a company of Sweden
Application February 4, 1953, Serial No. 335,132
1 Claim. (Cl. 340—253)



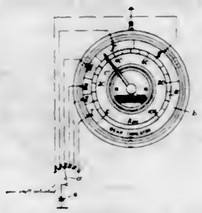
Apparatus for indicating abnormal operation of one or more electrical devices within a group of such devices comprising, in combination, indicating equipment having an oscillator, attenuator means, an alarm, said means being connected directly to modify the oscillator output to the alarm, control wires reflecting by variable impedance changes the condition of supervised apparatus, said attenuator means being connected to said control wires and having non-linear transmission properties in response to variations in impedance between control wires, a control means connected to the control wires for each device within the group, the impedance of each control means during normal operation being arranged to be responsive continuously to electrical conditions in the corresponding device, the impedance change of each control means being abnormally great, when conditions within its corresponding device exceed limits fixed for maximum deviations during normal operations, said control means being all connected in series to each other and to said control wires, whereby abnormal operation of any device causes a very high impedance of the corresponding control means.

2,751,579
SIGNAL RESPONSIVE TO RESTORATION OF INTERRUPTED CURRENT FLOW
Dana E. Phillips and Oris E. Phillips, Denver, Colo.; said Dana E. Phillips assignor of one-fourth to Lily E. Phillips, Denver, Colo.
Application March 15, 1954, Serial No. 416,263
8 Claims. (Cl. 340—253)



1. A signal of the character described comprising, an electric circuit, an electromagnetic coil included in said circuit, a core axially traversing and magnetizable by flow of current through said coil, a member of magnetically-susceptible material hinged intermediate its ends longitudinally of an exteriorly adjacent said coil to rock in a plane radially of the coil, an angularly-related portion at one end of said member terminating in a contact plate engageable against and for magnetic retention by the adjacent end of said core, an angularly-related finger at the other end of said member vibratorily reactive in appropriate close approach to the other end of said core, said finger being retracted out of coacting relation with the core when said contact plate is held to the core, and adjustable means engageable by and to limit swing of said member when the contact plate is released from magnetic grip against the core, whereby to determine consequent approach of said finger to the core.

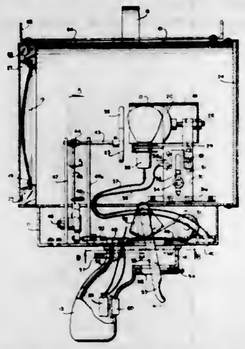
2,751,580
VEHICLE SPEED INDICATING DEVICE FOR MOTOR VEHICLES
Eugen Stump, Stuttgart-Unterturkheim, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application December 16, 1952, Serial No. 326,202
5 Claims. (Cl. 340—263)



1. In a speed indicating device for motor vehicles having a change-speed transmission and means for engaging the individual speeds of said transmission, a speedometer with a scale indicating the vehicle speed and including an indicating member, means operating said indicating member in dependence of the speed of the vehicle, said scale being partitioned into individual ranges, each of said last-mentioned ranges defining a corresponding speed of the transmission, signal means for indicating the

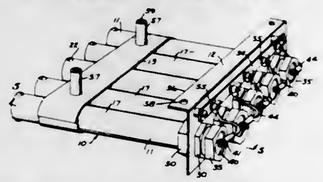
particular speed of said transmission engaged and the vehicle speed range coordinated therewith, and means operated by the means for engaging the individual speeds of said transmission for operating said signal means.

2,751,581
HAND-OPERATED PORTABLE TRAFFIC SIGNAL LIGHT
Dallas H. Waltman, Alexandria, Va.
Application June 22, 1953, Serial No. 363,421
2 Claims. (Cl. 340—321)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A signal lamp comprising a housing provided with a window at one end for the transmission of light, a principal reflector in the rear of the housing facing the window, an auxiliary reflector of smaller diameter than the principal reflector spaced from and facing the principal reflector, a light emitting source positioned between the reflectors, a tubular opaque shield encircling the auxiliary reflector and said source of light to confine the rays of light reflected from the auxiliary reflector to a narrow path leading to the principal reflector, a screen carrying successively color lenses spaced by an opaque wall, each color lens being substantially of the same diameter as said narrow path, means for mounting the screen for bodily movement at right angles across said narrow path whereby the colors can be successively flashed from the principal reflector spaced by darkness as the opaque wall crosses the narrow path, and means for actuating the screen in said movement.

2,751,582
FLARE IGNITING AND DISCHARGING DEVICE
Jack Kuykendall, Detroit, Mich.
Application January 4, 1954, Serial No. 401,912
5 Claims. (Cl. 340—366)



1. A flare igniting and discharge device comprising, a tube having an open end, said tube being adapted to have a flare inserted therein, spring means in said tube arranged to be stressed by a flare inserted into said tube and tending to discharge the flare therefrom, a member detachably secured to said tube at said open end, said member having an open central portion aligned with said open end, a heat destructible disc secured in said open central portion so that said member and said disc cooperate to form a closure for said open end, said disc being operative to secure a flare in said tube against the action of said spring, a heater element carried by said disc, said heater element being positioned to ignite a flare in said tube, whereby when said heater element is activated to ignite a flare, said disc will be destroyed by the heat therefrom to permit ejecting a flare from said tube by said spring.

2,751,583
SHUTTER FOR TELEVISION PICTURE TUBE
Jerome L. Jones, Temple, Tex.
Application March 2, 1954, Serial No. 413,521
1 Claim. (Cl. 340—367)



In combination with a television set including a casing having a front opening and a view plate extending across the opening, an opaque shutter in said casing and means for raising and lowering said shutter into selective alignment with a portion of the opening, said means including a shaft journalled in opposite walls of said casing, a gear on said shaft at each end thereof, a rack attached to said shutter at each end thereof, said gears engaging corresponding racks, a pair of spaced guide brackets secured to said shutter, said brackets having elongated slots therein, said shaft extending through said slots, a pinion gear also mounted on said shaft, a worm gear for actuating said pinion gear, another shaft connected to the worm gear and a knob mounted on the casing on the end of said other shaft for driving said worm gear.

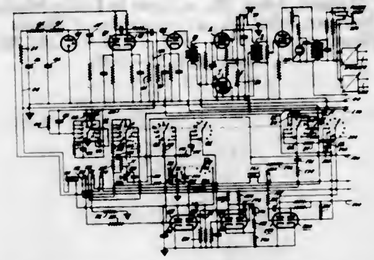
2,751,584
VISUAL READOUT DEVICE
Carl L. Isborn, Hawthorne, Calif., assignor, by mesne assignments, to The National Cash Register Company, a corporation of Maryland
Application November 10, 1953, Serial No. 391,262
6 Claims. (Cl. 340—380)



1. A visual readout device comprising a stack of thin transparent plates lying face to face, each of said plates having the outline of a symbol scribed on the same viewing surface thereof and a plurality of holes located in the outer portion thereof which are aligned with similar holes in the other plates; a reflective coating on the edges of all the holes of a plate except one; a plurality of electric bulbs; and means for supporting one of said bulbs in each of the aligned holes of said stack such that each bulb has its filament positioned in the uncoated hole of one of said plates.

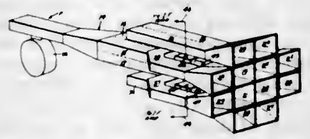
2,751,585
ARTIFICIAL GUN SHOT EFFECTS
Jarrett L. Hathaway, Manhasset, N. Y., and Raymond E. Lafferty, Fairlawn, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application January 12, 1953, Serial No. 330,678
12 Claims. (Cl. 340—384)

1. In a sound effects system for electrically generating signals representative of firearms discharge, a signal conveying channel comprising a generator of random electrical voltages, an amplifier for said voltages connected with the generator, transducing means for converting electrical energy to sound energy connected with said amplifier, a first control means connected with said amplifier to maintain said amplifier blocked, and a further control



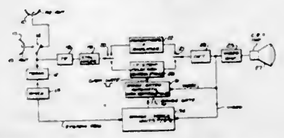
means connected with said amplifier for momentarily rendering said amplifier unblocked in time duration and amplitude such that random electrical voltages from said generator are passed through said system to said transducer in an envelope which simulates signals representative of said firearms discharge.

2,751,586
SIGNAL-WAVE TRANSMISSION SYSTEMS
Henry J. Riblet, Wellesley Hills, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application November 22, 1950, Serial No. 197,137
6 Claims. (Cl. 343—16)



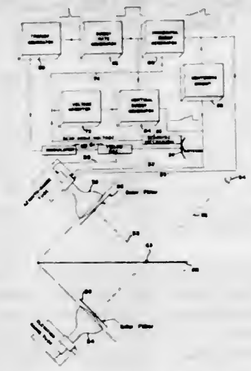
1. An echo ranging system comprising means for radiating signals, and a directive-receiving channel fed by radiation-receiving means differing in radiation directivity from said radiating means, said radiation receiving means including said radiating means, said radiation-receiving means being connected to said channel through directive-coupling means.

2,751,587
RANGE GATED AUTOMATIC GAIN CONTROL
Homer G. Tasker, Van Nuys, and William T. O'Neil, La Crescenta, Calif., assignors to Gilfillan Bros., Inc., Los Angeles, Calif., a corporation of California
Application March 3, 1952, Serial No. 274,610
2 Claims. (Cl. 343—17.1)



1. In a system of the character described, means deriving video echo signals from a plurality of objects, said means including means for producing an electromagnetic beam and periodically scanning the same through space to derive a corresponding video echo signal from each of said plurality of objects in the space scanned, means deriving a plurality of range gates, each of which is delayed in time, in an amount representative of the range of the corresponding object, amplifying means for amplifying said video signals, said amplifying means being disposed in a single video signal channel between a preceding and a succeeding stage in said channel to amplify each video echo signal, said amplifying means including gain control means, means sensitive to the coincidence of a particular one of said video signals with a corresponding range gate for developing a pulse for controlling said gain control means, said amplifying means comprising a balanced pulse modulator stage for amplifying said echo signals, and means applying said pulse to said balanced modulator stage, said balanced pulse modulator stage being link coupled, on the one hand, to said preceding stage, and on the other hand, to said succeeding stage to modulate the intensity of each of said echo video signals passing through said channel.

2,751,588
THREE DIMENSIONAL RADAR INDICATOR
George Victor Rodgers, Lexington Park, Md.
Application October 29, 1952, Serial No. 317,608
3 Claims. (Cl. 343—112)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A display arrangement for a radar landing system for aircraft comprising a first and a second oscilloscope indicating means each graphically displaying a respective one of two mutually perpendicular coordinates representing the position of an airplane with respect to a third mutually perpendicular coordinate reference point and positioned normal to each other, a partially reflecting mirror positioned intermediate said oscilloscopes, an optical axis extending through an observing point and through said partially reflecting mirror to the indicating surface of said first oscilloscope indicating means, the second oscilloscope indicating means being positioned normal to the optical axis at a point where the partially reflecting mirror intersects the optical axis, distinguishing means for each of said indicating means, and electronic means connected in the circuit of said second oscilloscope indicating means for slanting its display whereby an observer views from the observing point a single simulated three-dimensional display of the position of the airplane in space relative to said reference point.

2,751,589
FOLDED SLOT ANTENNAE
Rex Henry John Cary, Great Malvern, England, assignor to National Research Development Corporation, London, England, a British corporation
Application June 9, 1952, Serial No. 292,529
Claims priority, application Great Britain June 20, 1951
38 Claims. (Cl. 343—767)

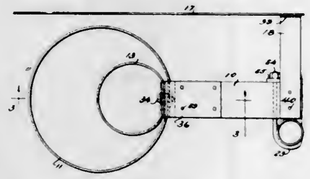
1. In a reactance compensated folded slot antenna in which the inherent reactance of the folded slot is compensated within desired limits over a frequency band by

means of slot feeder reactance in series therewith, the combination of a conductive sheet having a slot therein, a centre conductor located in the slot, feeder connection means comprising a pair of feed elements connected one to a feed point on said centre conductor and the other to the edge of said slot adjacent the feed point on said



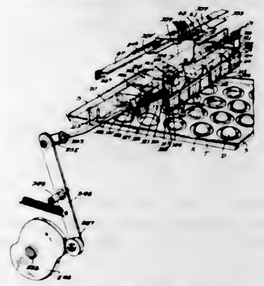
centre conductor, the construction being such that the two slot feeders which result are connected in parallel to said feeder connection means and are of electrically dissimilar dimensions whereby within the operative frequency band at least one of said slot feeders provides effective feed of energy to the slot from the feeder connection.

2,751,590
OUTDOOR CIRCULAR BAND ANTENNA
Wilbur Earl Troutman, Los Angeles, Calif.
Application November 25, 1952, Serial No. 322,541
6 Claims. (Cl. 343—866)



2. An antenna comprising a conductor including small and large circular bands with the bands positioned in vertically spaced substantially horizontal planes and with the small band above the large band and positioned with an edge of the small band aligned vertically with an edge of the large band, and a reflector positioned in a plane extended through the large band and spaced from said large band.

2,751,591
DOUGH PANNING MACHINE
Fred D. Marasso, Joliet, Ill., assignor to Union Machinery Company, Joliet, Ill., a corporation of Illinois
Application January 25, 1951, Serial No. 207,781
28 Claims. (Cl. 53—160)



5. In a dough panning machine, the combination of conveying means for continuously moving a plurality of dough receiving pans along a predetermined substantially horizontal line of travel, conveying means comprising dough carrying members including pivoted doors therefor for receiving and continuously transporting a plurality of series of lumps of dough above and transversely across the line of travel of said pans, gate means positioned between said line of travel and said dough transporting means, said gate means including an inclined bottom plate provided with compartments for intermittently receiving successive series of lumps of dough and also including a plurality of gates for the respective compartments for discharging each respective series of lumps of dough therefrom in a pan therebelow at predetermined time intervals, and means for continuously feeding lumps of dough into said transporting means.

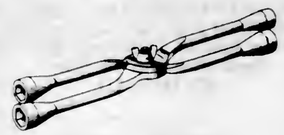
DESIGNS

JUNE 19, 1956

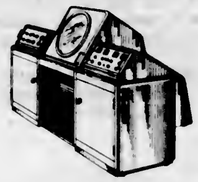
178,034
ELECTRIC SWITCH PLATE
Herman Blau, New York, N. Y.
Application December 20, 1955, Serial No. 39,396
Term of patent 14 years
(Cl. D26—13)



178,035
FOLDING TIRE WRENCH
Clark M. Bolser, Cedar Falls, Iowa, assignor to Champ Products Co., Cedar Falls, Iowa, a copartnership
Application January 30, 1956, Serial No. 39,964
Term of patent 14 years
(Cl. D54—16)



178,036
ELECTRONIC DISPLAY CONSOLE
John H. Brown, San Diego, Calif., assignor to General Dynamics Corporation, a corporation of Delaware
Application December 28, 1955, Serial No. 39,505
Term of patent 14 years
(Cl. D26—5)



178,037
FLOWER POT HOLDER
Marie C. Cimo, New Orleans, La.
Application July 26, 1955, Serial No. 37,131
Term of patent 7 years
(Cl. D33—3)



178,038
VEGETABLE SHREDDER
Herbert A. Clemens, Fort Wayne, Ind.
Application March 2, 1955, Serial No. 34,828
Term of patent 14 years
(Cl. D89—1)



178,039
GROOVED TACK
Geoffrey Coleman, Leicester, England, assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application September 13, 1955, Serial No. 37,899
Claims priority, application Great Britain March 30, 1955
Term of patent 14 years
(Cl. D54—9)



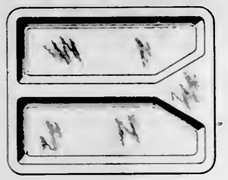
178,040
AUTOMOBILE TIRE
David E. Crooker, Ontonagon, Mich., and Evan A. Frary, Marshfield, Wis.; said Frary assignor to Lloyd L. Felker, Marshfield, Wis.
Application November 9, 1953, Serial No. 27,513
Term of patent 14 years
(Cl. D90—20)



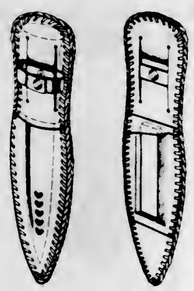
178,041
JAW-INSERT PLIERS
Woodford J. Crump, Southgate, Calif., assignor to Aircraft Tools, Inc., Los Angeles, Calif., a corporation of California
Application March 6, 1956, Serial No. 40,479
Term of patent 14 years
(Cl. D54—13)



178,042
DUAL BREADING BOWL
Rose A. Davis, Washington, D. C.
Application October 6, 1955, Serial No. 38,245
Term of patent 14 years
(Cl. D44—1)



178,043
COMBINED KNIFE AND HONE SHEATH
Donald H. Douglass, San Diego, Calif.
Application July 21, 1955, Serial No. 37,067
Term of patent 14 years
(Cl. D22—6)



178,044
WATCH FACE
Henry Du Pasquier, Neuchatel, Switzerland, assignor to Ernest Borel & Cie S. A., Neuchatel, Switzerland, a Swiss corporation
Application March 31, 1955, Serial No. 35,294
Term of patent 14 years
(Cl. D42—1)



178,045
BASE FOR TROPHIES
Alfred John Flauder, Trumbull, Conn., assignor to Alexander M. Pistey, Bridgeport, Conn.
Application December 22, 1955, Serial No. 39,441
Term of patent 7 years
(Cl. D29—23)



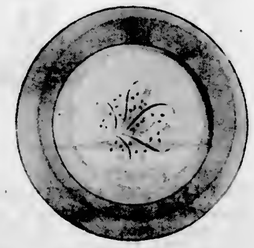
178,046
COMBINED TWIN BED AND TABLE UNIT
Louis Elliott Frey, Los Angeles, Calif.
Application June 27, 1955, Serial No. 36,692
Term of patent 14 years
(Cl. D15—11)



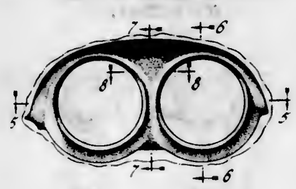
178,047
DINNER PLATE OR SIMILAR ARTICLE
Richard H. Garvin, Syracuse, N. Y., assignor to Onondaga Pottery Company, Syracuse, N. Y., a corporation of New York
Application December 14, 1955, Serial No. 39,329
Term of patent 14 years
(Cl. D44—15)



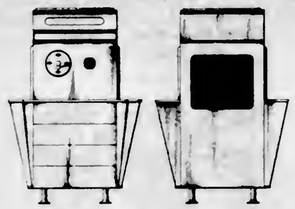
178,048
DINNER PLATE OR SIMILAR ARTICLE
Richard H. Garvin, Syracuse, N. Y., assignor to Onondaga Pottery Company, Syracuse, N. Y., a corporation of New York
Application December 14, 1955, Serial No. 39,331
Term of patent 14 years
(Cl. D44—15)



178,049
LAMP BEZEL
Edward E. Glowacke, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application Jan. 13, 1956, Serial No. 39,744
Term of patent 7 years
(Cl. D48—32)



178,050
UNIT FOR FREEZING ICE CREAM
Melvin M. Greene, Port Chester, N. Y., assignor to Milk Maid Ice Cream Co., Inc., Rochester, N. Y., a corporation of New York
Application October 25, 1955, Serial No. 38,565
Term of patent 14 years
(Cl. D67—2)



178,051
HAND CULTIVATOR
Joseph J. Greiner, Arlington, Va.
Application March 31, 1955, Serial No. 35,295
Term of patent 14 years
(Cl. D39—1)



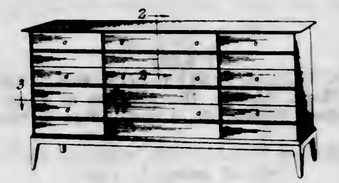
178,052
BASEBOARD REGISTER
Clarence O. Griner, Ceresco, Mich., assignor to United States Register Company, Battle Creek, Mich., a corporation of Michigan
Application September 10, 1954, Serial No. 32,236
Term of patent 14 years
(Cl. D61—21)



178,053
CHEST
Ernest Herrmann, Hillsdale, N. J., assignor to Heywood-Wakefield Company, Gardner, Mass., a corporation of Massachusetts
Application March 14, 1955, Serial No. 35,035
Term of patent 7 years
(Cl. D33—6)



178,054
TRIPLE DRESSER
Ernest Herrmann, Hillsdale, N. J., assignor to Heywood-Wakefield Company, Gardner, Mass., a corporation of Massachusetts
Application March 14, 1955, Serial No. 35,038
Term of patent 7 years
(Cl. D33—6)



178,055
COCKTAIL TABLE OR THE LIKE
Ernest Herrmann, Hillsdale, N. J., assignor to Heywood-Wakefield Company, Gardner, Mass., a corporation of Massachusetts
Application March 14, 1955, Serial No. 35,039
Term of patent 7 years
(Cl. D33—14)

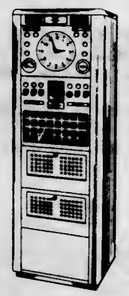


178,056
CHEST
Ernest Herrmann, Hillsdale, N. J., assignor to Heywood-Wakefield Company, Gardner, Mass., a corporation of Massachusetts
Application March 14, 1955, Serial No. 35,040
Term of patent 7 years
(Cl. D33—6)

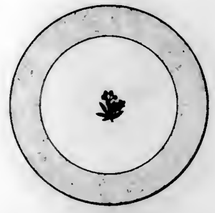


178,057
CHINA CABINET OR THE LIKE
Ernest Herrmann, Hillsdale, N. J., assignor to Heywood-Wakefield Company, Gardner, Mass., a corporation of Massachusetts
Application March 14, 1955, Serial No. 35,041
Term of patent 7 years
(Cl. D33—19)

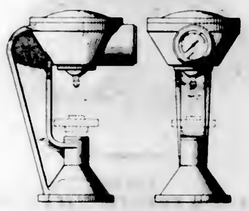
178,058
TRAFFIC SIGNAL SYSTEM CONTROL CABINET
John W. Hotle, Moline, Ill., assignor to Eagle Signal Corporation, Moline, Ill., a corporation of Massachusetts
Application May 31, 1955, Serial No. 36,294
Term of patent 14 years
(Cl. D26—5)



178,059
PLATE OR SIMILAR ARTICLE
Takeshi Inoue, Atsuta-ku, Nagoya, Japan, assignor to Noritake Co., Inc., New York, N. Y., a corporation of New York
Application November 29, 1954, Serial No. 33,280
Term of patent 7 years
(Cl. D44—15)



178,060
MATERIAL HARDNESS TESTER OR SIMILAR ARTICLE
Reuben H. Karol, Highland Park, N. J., assignor to Tinius Olsen Testing Machine Company, Willow Grove, Pa., a corporation of Pennsylvania
Application October 18, 1955, Serial No. 38,806
Term of patent 14 years
(Cl. D52—1)



178,061
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 39,003
Term of patent 7 years
(Cl. D45—16)



178,062
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 39,004
Term of patent 7 years
(Cl. D45—9)



178,063
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 39,006
Term of patent 7 years
(Cl. D45—9)



178,064
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 39,007
Term of patent 7 years
(Cl. D45—16)



178,065
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 39,008
Term of patent 7 years
(Cl. D45—9)



178,066
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application November 23, 1955, Serial No. 39,010
Term of patent 7 years
(Cl. D45—16)



178,067
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application December 8, 1955, Serial No. 39,227
Term of patent 7 years
(Cl. D45—16)



178,068
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application December 8, 1955, Serial No. 39,231
Term of patent 7 years
(Cl. D45—16)



178,069
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application December 8, 1955, Serial No. 39,232
Term of patent 7 years
(Cl. D45—19)



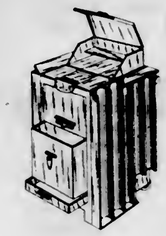
178,070
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application December 8, 1955, Serial No. 39,233
Term of patent 7 years
(Cl. D45—16)



178,071
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application December 8, 1955, Serial No. 39,236
Term of patent 7 years
(Cl. D45—9)



178,072
DISPLAY CABINET
Frederick J. Klay, South Braintree, Mass.
Application May 31, 1955, Serial No. 36,298
Term of patent 7 years
(Cl. D80—9)

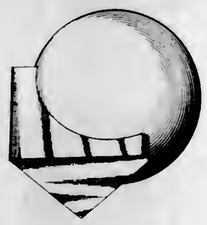


178,073
ANIMATED DECORATIVE LAMP
Aubrey B. Leech, Los Angeles, Calif., assignor to Econolite Corporation, Los Angeles, Calif., a corporation of California
Application June 24, 1955, Serial No. 36,672
Term of patent 7 years
(Cl. D48—20)



178,074
PRODUCE TRAY
Raoul P. Lemieux, Fairfield, Maine, assignor to Keyes Fibre Company, Portland, Maine, a corporation of Maine
Application September 22, 1952, Serial No. 21,543
Term of patent 14 years
(Cl. D58—13)

178,075
ELECTRIC LIGHTING FIXTURE
Robert H. Manley, West Miami, Fla.
Application October 6, 1955, Serial No. 38,274
Term of patent 14 years
(Cl. D48—2)



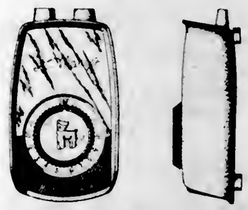
178,076
RADIO PAGING MOBILE UNIT
Francis P. Meserow, Chicago, Ill.
Application November 30, 1954, Serial No. 33,338
Term of patent 14 years
(Cl. D72—1)



178,077
BATHING HOLDER FOR INFANTS
Luella E. Moore, Myrtle Creek, Oreg.
Application December 12, 1955, Serial No. 39,292
Term of patent 14 years
(Cl. D4—4)



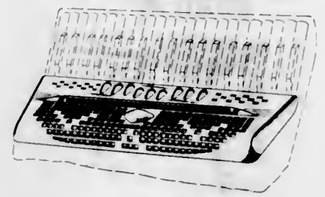
178,078
ELECTRIC BEDCOVERING CONTROL UNIT
Carl Otto, New York, N. Y., assignor to Bobrich Products Corp., New York, N. Y., a corporation of New Jersey
Application August 22, 1955, Serial No. 37,610
Term of patent 7 years
(Cl. D26—1)



178,079
ELECTRIC BEDCOVERING CONTROL UNIT
Carl Otto, New York, N. Y., assignor to Bobrich Products Corp., New York, N. Y., a corporation of New Jersey
Application August 22, 1955, Serial No. 37,611
Term of patent 7 years
(Cl. D26—1)



178,080
ACCORDION GRILL
Mario Pancotti, Scarsdale, N. Y.
Application July 12, 1954, Serial No. 31,376
Term of patent 14 years
(Cl. D56—1)



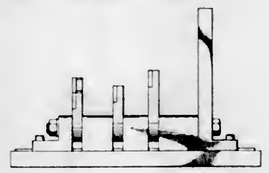
178,081
ROTARY WING AIRCRAFT
Peter J. Papadakos, St. James, N. Y., assignor to Gyrodyne Company of America, Inc., Flowerfield, N. Y., a corporation of New York
Application January 19, 1955, Serial No. 34,079
Term of patent 14 years
(Cl. D71—1)



178,082
COIN SAVINGS BANK OR SIMILAR ARTICLE
Bernard Piermont, San Diego, Calif.
Application November 7, 1955, Serial No. 38,781
Term of patent 14 years
(Cl. D34—11)



178,083
MOUNTING FOR GAUGE
Leo Price, Cleveland, Ohio
Application May 20, 1955, Serial No. 36,135
Term of patent 14 years
(Cl. D52—1)



178,084
BACON AND EGG FRYER OR SIMILAR ARTICLE
Frank W. Reed and Gordon E. Miner, Paramount, Calif.
Application January 10, 1955, Serial No. 33,912
Term of patent 14 years
(Cl. D44—1)



178,085
COMBINED HOLDER AND COASTER FOR CANNED BEVERAGES
Robert H. Reily, Springfield Township, Hamilton County, and Robert V. Tynan, Colerain Township, Hamilton County, Ohio
Application July 29, 1955, Serial No. 37,217
Term of patent 3½ years
(Cl. D44—10)



178,086
SPOON OR ANALOGOUS ARTICLE
Oscar Riedener, New York, N. Y., assignor to Tiffany & Company, a corporation of New York
Application December 23, 1955, Serial No. 39,468
Term of patent 14 years
(Cl. D54—12)



178,087
COIN HOLDER FOR AUTOMOBILES
Robert L. Robertson, Kansas City, Mo.
Application February 20, 1956, Serial No. 40,236
Term of patent 14 years
(Cl. D52—4)



178,088
DECORATIVE COVER FOR AN ELECTRIC BULB
Sidney Roth, New York, N. Y.
Application December 5, 1955, Serial No. 39,151
Term of patent 14 years
(Cl. D26—8)



178,089
WATER HEATER CASING
Kenneth P. Schory, Bensenville, Ill., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application June 3, 1955, Serial No. 36,363
Term of patent 7 years
(Cl. D81—2)



178,090
CIGARETTE LIGHTER
Harry Schweitzer, Toronto, Ontario, Canada
Application December 12, 1955, Serial No. 39,303
Term of patent 3½ years
(Cl. D48—27)



178,091
WATCH OR SIMILAR ARTICLE
Lawrence W. Sparks, Bergen County, N. J., assignor to Vacheron & Constantin-Le Coultre Watches, Inc., New York, N. Y., a corporation of New York
Application September 14, 1955, Serial No. 37,927
Term of patent 14 years
(Cl. D42—8)



178,092
BENCH OR SIMILAR ARTICLE OF FURNITURE
John O. Van Koert, New York, N. Y., assignor to Drexel Furniture Company, Drexel, N. C., a corporation of Delaware
Application August 2, 1955, Serial No. 37,265
Term of patent 7 years
(Cl. D15—8)



178,093
EXTENSION TABLE
John O. Van Koert, New York, N. Y., assignor to Drexel Furniture Company, Drexel, N. C., a corporation of Delaware
Application August 2, 1955, Serial No. 37,266
Term of patent 7 years
(Cl. D33—14)



178,094
DROP LEAF EXTENSION TABLE
John O. Van Koert, New York, N. Y., assignor to Drexel Furniture Company, Drexel, N. C., a corporation of Delaware
Application August 2, 1955, Serial No. 37,267
Term of patent 7 years
(Cl. D33—14)



178,095
SIDE CHAIR
John O. Van Koert, New York, N. Y., assignor to Drexel Furniture Company, Drexel, N. C., a corporation of Delaware
Application August 2, 1955, Serial No. 37,269
Term of patent 7 years
(Cl. D15—1)



178,096
ARM CHAIR
John O. Van Koert, New York, N. Y., assignor to Drexel Furniture Company, Drexel, N. C., a corporation of Delaware
Application August 2, 1955, Serial No. 37,270
Term of patent 7 years
(Cl. D15—1)



178,097
DESK
John O. Van Koert, New York, N. Y., assignor to Drexel Furniture Company, Drexel, N. C., a corporation of Delaware
Application August 2, 1955, Serial No. 37,273
Term of patent 7 years
(Cl. D33—7)



178,098
COFFEE TABLE
John O. Van Koert, New York, N. Y., assignor to Drexel Furniture Company, Drexel, N. C., a corporation of Delaware
Application August 2, 1955, Serial No. 37,275
Term of patent 7 years
(Cl. D33—14)



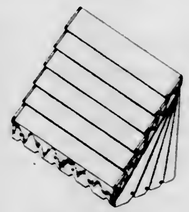
178,099
COFFEE TABLE
John O. Van Koert, New York, N. Y., assignor to Drexel Furniture Company, Drexel, N. C., a corporation of Delaware
Application August 2, 1955, Serial No. 37,276
Term of patent 7 years
(Cl. D33—14)



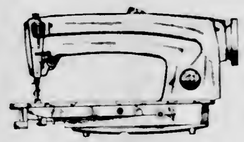
178,100
CHAIR
John O. Van Koert, New York, N. Y., assignor to Drexel Furniture Company, Drexel, N. C., a corporation of Delaware
Application August 15, 1955, Serial No. 37,470
Term of patent 7 years
(Cl. D15—1)



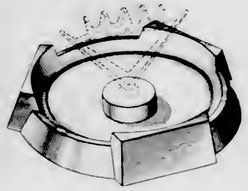
178,101
AWNING
Elmer G. Voelker, Eggertsville, N. Y.
Application August 25, 1955, Serial No. 37,664
Term of patent 14 years
(Cl. D21—6)



178,102
SEWING MACHINE
Chauncey E. Waltman, Chicago, and Charles T. Waltman, Highland Park, Ill., assignors to Union Special Machine Company, Chicago, Ill., a corporation of Illinois
Application October 18, 1955, Serial No. 38,431
Term of patent 14 years
(Cl. D70—1)



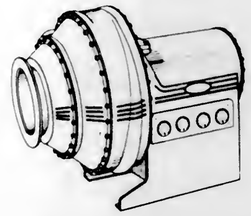
178,103
ASH TRAY
Eric Wedemeyer, Floral Park, N. Y., assignor to Hamilton Art Metal Corporation, New York, N. Y., a corporation of New York
Application November 16, 1955, Serial No. 38,924
Term of patent 14 years
(Cl. D85—2)



178,104
PORTABLE SEAT
David Wolyn, Hewlett, N. Y., assignor to Nylow Sit-Rite Corporation, New York, N. Y.
Application November 23, 1954, Serial No. 33,198
Term of patent 7 years
(Cl. D15—8)



178,105
CENTRIFUGAL COMPRESSOR
Adolph Zulinke, Syracuse, N. Y., assignor to Carrier Corporation, Syracuse, N. Y., a corporation of Delaware
Application April 20, 1955, Serial No. 35,598
Term of patent 14 years
(Cl. D65—1)



LIST OF REISSUE PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 19TH DAY OF JUNE, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Chelf, Clarence C. Auxiliary tool support. Re. 24,167, 6–19–56, Cl. 82—37.
Cutler-Hammer, Inc.: *See*—
Pell, Eric. Re. 24,168.
Pell, Eric, to Cutler-Hammer, Inc. Induction motor control by electric brake. Re. 24,168, 6–19–56, Cl. 318—302.

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Armstrong Nurseries, Inc.: *See*—
Swim, Herbert C. 1,485.
Brooks, Lenard L. Azalea plant. 1,483, 6–19–56, Cl. 47—60.
Brooks, Lenard L. Azalea plant. 1,484, 6–19–56, Cl. 47—60.
Germain's, Inc.: *See*—
Whisler, Milton L. 1,486.
Whisler, Milton L. 1,487.
Swim, Herbert C., to Armstrong Nurseries, Inc. Peach tree. 1,485, 6–19–56, Cl. 47—62.
Whisler, Milton L., to Germain's, Inc. Rose plant. 1,486, 6–19–56, Cl. 47—61.
Whisler, Milton L., to Germain's, Inc. Rose plant. 1,487, 6–19–56, Cl. 47—61.

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Aircraft Tools, Inc.: *See*—
Crump, Woodford J. 178,041.
Blau, Herman. Electric Switch plate. 178,034, 6–19–56, Cl. D26—13.
Bobrich Products Corp.: *See*—
Otto, Carl. 178,078.
Otto, Carl. 178,079.
Bolser, Clark M., to Champ Products Co. Folding tire wrench. 178,035, 6–19–56, Cl. D54—16.
Borel, Ernest & Cie S. A.: *See*—
Du Pasquier, Henry. 178,044.
Brown, John H., to General Dynamics Corp. Electronic display console. 178,036, 6–19–56, Cl. D26—5.
Carrier Corp.: *See*—
Zulinke, Adolph. 178,105.
Champ Products Co.: *See*—
Bolser, Clark M. 178,035.
Cimo, Marie C. Flower pot holder. 178,037, 6–19–56, Cl. D33—3.
Clemens, Herbert A. Vegetable shredder. 178,038, 6–19–56, Cl. D89—1.
Coleman, Geoffrey, to United Shoe Machinery Corp. Grooved tack. 178,039, 6–19–56, Cl. D54—9.
Coro, Inc.: *See*—
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Crooker, David E., and E. A. Frary; said Frary assgr. to L. L. Felker. Automobile tire. 178,040, 6–19–56, Cl. D90—20.
Crump, Woodford J., to Aircraft Tools, Inc. Jaw-insert pliers. 178,041, 6–19–56, Cl. D54—13.
Davis, Rose A. Dual breading bowl. 178,042, 6–19–56, Cl. D44—1.
Douglass, Donald H. Combined knife and bone sheath. 178,043, 6–19–56, Cl. D22—6.
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Van Koert, John O. 178,092–178,100.
Du Pasquier, Henry, to Ernest Borel & Cie S. A. Watch face. 178,044, 6–19–56, Cl. D42—1.
Eagle Signal Corp.: *See*—
Hotle, John W. 178,058.
Econolite Corp.: *See*—
Leech, Aubrey B. 178,073.
Felker, Lloyd L.: *See*—
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Flauder, Alfred J., to A. M. Pistey. Base for trophies. 178,045, 6–19–56, Cl. D29—23.
Frary, Evan A.: *See*—
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Garvin, Richard H., to Onondaga Pottery Co. Dinner plate or similar article. 178,048, 6–19–56, Cl. D44—15.
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Glowacke, Edward E., to General Motors Corp. Lamp bezel. 178,049, 6–19–56, Cl. D48—32.
Greene, Melvin M., to Milk Maid Ice Cream Co., Inc. Unit for freezing ice cream. 178,050, 6–19–56, Cl. D67—2.
Greiner, Joseph J. Hand cultivator. 178,051, 6–19–56, Cl. D39—1.
Griner, Clarence O., to United States Register Co. Baseboard register. 178,052, 6–19–56, Cl. D81—21.
Gyrodyne Co. of America Inc.: *See*—
Papadakos, Peter J. 178,081.
Hamilton Art Metal Corp.: *See*—
Wedemeyer, Eric. 178,103.
Herrmann, Ernest, to Heywood-Wakefield Co. Chest. 178,053, 6–19–56, Cl. D33—6.
Herrmann, Ernest, to Heywood-Wakefield Co. Triple dresser. 178,054, 6–19–56, Cl. D33—6.
Herrmann, Ernest, to Heywood-Wakefield Co. Cocktail table or the like. 178,055, 6–19–56, Cl. D33—14.
Herrmann, Ernest, to Heywood-Wakefield Co. Chest. 178,056, 6–19–56, Cl. D33—6.
Herrmann, Ernest, to Heywood-Wakefield Co. China cabinet or the like. 178,057, 6–19–56, Cl. D33—19.
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Inoue, Takeshi, to Noritake Co., Inc. Plate or similar article. 178,059, 6–19–56, Cl. D44—15.
Karol, Reuben H., to Tinius Olsen Testing Machine Co. Material hardness tester or similar article. 178,060, 6–19–56, Cl. D52—1.
Katz, Adolph, to Coro, Inc. Link chain for a bracelet or the like. 178,061, 6–19–56, Cl. D45—16.
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Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 178,066, 6–19–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Link chain for a bracelet or the like. 178,067, 6–19–56, Cl. D45—16.
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Katz, Adolph, to Coro, Inc. Brooch or the like. 178,069, 6–19–56, Cl. D45—19.
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Katz, Adolph, to Coro, Inc. Earring or the like. 178,071, 6–19–56, Cl. D45—9.
Keyes Fibre Co.: *See*—
Lemieux, Raoul P. 178,074.
Klay, Frederick J. Display cabinet. 178,072, 6–19–56, Cl. D80—9.
Leech, Aubrey B., to Econolite Corp. Animated decorative lamp. 178,073, 6–19–56, Cl. D48—20.
Lemieux, Raoul P., to Keyes Fibre Co. Produce tray. 178,074, 6–19–56, Cl. D58—13.
Manley, Robert H. Electric lighting fixture. 178,075, 6–19–56, Cl. D48—2.
Meserow, Francis P. Radio paging mobile unit. 178,076. 6–19–56, Cl. D72—1.
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Moore, Luella E. Bathing holder for infants. 178,077, 6–19–56, Cl. D4—4.
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Garvin, Richard H. 178,047.
Garvin, Richard H. 178,048.

Otto, Carl, to Bobrich Products Corp. Electric bedcovering control unit. 178,078, 6–19–56, Cl. D26—1.
Otto, Carl, to Bobrich Products Corp. Electric bedcovering unit. 178,079, 6–19–56, Cl. D26—1.
Pancotti, Mario. Accordion grill. 178,080, 6–19–56, Cl. D56—1.
Papadakos, Peter J., to Gyrodyne Co. of America Inc. Rotary wing aircraft. 178,081, 6–19–56, Cl. D71—1.
Piermont, Bernard. Coin savings bank or similar article. 178,082, 6–19–56, Cl. D34—11.
Pistey, Alexander M.: *See*—
Flauder, Alfred J. 178,045.
Price, Leo. Mounting for gauge. 178,083, 6–19–56, Cl. D52—1.
Reed, Frank W., and G. E. Miner. Bacon and egg fryer or similar article. 178,084, 6–19–56, Cl. D44—1.
Reilly, Robert H., and R. V. Tynan. Combined holder and coaster for canned beverages. 178,085, 6–19–56, Cl. D44—10.
Riedener, Oscar, to Tiffany & Co. Spoon or analogous article. 178,086, 6–19–56, Cl. D54—12.
Robertson, Robert L. Coin holder for automobiles. 178,087, 6–19–56, Cl. D52—4.
Roth, Sidney. Decorative cover for an electric bulb. 178,088, 6–19–56, Cl. D26—8.
Schory, Kenneth P., to A. O. Smith Corp. Water heater casing. 178,089, 6–19–56, Cl. D81—2.
Schweitzer, Harry. Cigarette lighter. 178,090, 6–19–56, Cl. D48—27.
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Schory, Kenneth P. 178,089.
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Van Koert, John O., to Drexel Furniture Co. Coffee table. 178,098, 6–19–56, Cl. D33—14.
Van Koert, John O., to Drexel Furniture Co. Coffee table. 178,099, 6–19–56, Cl. D33—14.
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Wolyn, David, to Nylow Sit-Rite Corp. Portable seat. 178,104, 6–19–56, Cl. D15—8.
Zulinke, Adolph, to Carrier Corp. Centrifugal compressor. 178,105, 6–19–56, Cl. D65—1.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 19TH DAY OF JUNE, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Acheson, Louis K., to The Hoover Co. Air supported cleaner with control. 2,751,038, 6–19–56, Cl. 183—37.
Achterberg, George W.: *See*—
Bond, Alfred A., and Achterberg. 2,751,120.
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Reeves, Wilson A., Corley and Guthrie. 2,751,278.
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Alexander, Donald F., to General Motors Corp. Refrigerating apparatus. 2,750,755, 6–19–56, Cl. 62—4.
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Mahan, Norman C. 2,751,000.
Anderson, Herbert L., to the United States of America as represented by the United States Atomic Energy Commission. Neutronic reactor device. 2,751,505, 6–19–56, Cl. 250—83.1.
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Andrew, John H. C., to Nicol & Andrew Ltd. Honing device. 2,750,717, 6–19–56, Cl. 51—184.1.
Andrews, Dallas R., to Radio Corp. of America. Magnetic recording. 2,751,274, 619–56, Cl. 346—74.
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Armstrong, Robert W., to Minneapolis-Honeywell Regulator Co. Differential pressure sensing unit. 2,751,530, 6–19–56, Cl. 317—246.
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Arrighini, Artil. to Rockwall Co. Cement paint. 2,751,308, 6–19–56, Cl. 106—98.
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Deadman, Lionel L. F. 2,751,327.
Atlee, Zed J., to Dunlee Corp. Hooded anode X-ray tube. 2,751,514, 6–19–56, Cl. 313—55.
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Speed, William C., and Dwyer. 2,751,313.
Aumuller, Edward F., R. L. Dwight, and R. T. Kirchhoff, to Sperry Rand Corp. Electromagnetic clutch. 2,751,056, 6–19–56, Cl. 192—84.
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Baader, Rudolf, deceased; R. Fahrig, executor, to Nordischer Maschinenbau Rudolf Baader. Process for removing backbones from fish. 2,750,623, 6-19-56, Cl. 17—45.

Baer, John S., to Radio Corp. of America. Magnetic recording apparatus. 2,751,438, 6-19-56, Cl. 179—100.2.

Bailey, Clifford D., to Harris Mfg. Co. Sealing assembly for the header mount of a sidehill harvester. 2,750,728, 6-19-56, Cl. 56—209.

Bailey, Sidney, Jr. Apparatus for treating and finishing hosiery. 2,750,781, 6-19-56, Cl. 68—20.

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Baker, Reuben C., to Baker Oil Tools, Inc. Rotary wall scratcher for well bores. 2,751,015, 6-19-56, Cl. 166—173.

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Baker, Reuben C., to Baker Oil Tools, Inc. Apparatus for disengaging threaded joints. 2,751,019, 6-19-56, Cl. 166—218.

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Baker, Reuben C., and C. M. King, to Baker Oil Tools, Inc. Drill pipe float valve. 2,750,958, 6-19-56, Cl. 137—515.7.

Baker, Reuben C., and M. B. Conrad, to Baker Oil Tools, Inc. Well packer apparatus. 2,751,012, 6-19-56, Cl. 166—121.

Baker, Reuben C., and M. B. Conrad, to Baker Oil Tools, Inc. Retrievable well packer. 2,751,017, 6-19-56, Cl. 166—216.

Baker, Reuben C., and M. B. Conrad, to Baker Oil Tools, Inc. Apparatus for allowing well conduits to fill with well bore fluid. 2,751,022, 6-19-56, Cl. 166—225.

Bakker, Pier, to Automatic Electric Laboratories, Inc. Carrier current telephone systems. 2,751,436, 6-19-56, Cl. 179—27.

Baldwin, John D., Jr., T. A. St. Clair, and A. G. Johnson, to The Weatherhead Co. Automatic filler unit. 2,751,181, 6-19-56, Cl. 249—63.

Baldwin-Lima-Hamilton Corp.: *See*—
Byerlein, Arthur A. 2,750,909.

Ball, Frederick S.: *See*—
Palmgren, Per G., and Ball. 2,751,277.

Bancroft, John W., and J. F. Storm, to Minneapolis-Honeywell Regulator Co. Rate indicating apparatus for quantity measurements. 2,750,800, 6-19-56, Cl. 73—304.

Banes, Fred W.: *See*—
Nelson, Joseph F., Banes, and Hubbard. 2,751,422.

Banister, Guy, to Barber-Greene Co. Boom suspension means for a continuous bucket trenching machine. 2,750,687, 6-19-56, Cl. 37—90.

Baraut, Marcel J.: *See*—
Paris, François G., Le Foll, Bertin, and Baraut. 2,750,733.

Barber-Greene Co.: *See*—
Banister, Guy. 2,750,687.

Barbour Welting Co.: *See*—
Vizard William C. 2,750,686.

Barényl, Béla. Roof support for a motor vehicle. 2,751,246, 6-19-56, Cl. 296—28.

Barényl, Béla, to Daimler-Benz Aktiengesellschaft. Passenger car frame structure. 2,751,247, 6-19-56, Cl. 296—28.

Barkley & Dexter, Inc.: *See*—
Dexter, Robert G. 2,751,222.

Barnes, William A., and W. J. Rozmus, to Utica Drop Forge & Tool Corp. Power drive and locking mechanism for adjustable jaw wrenches. 2,750,829, 6-19-56, Cl. 81—165.

Barnhart, William S.: *See*—
Mantell, Russell M., and Barnhart. 2,751,375.

Barnhart, William S., and R. M. Mantell, to The M. W. Kellogg Co. Purification process for fluorine-containing polymers. 2,751,376, 6-19-56, Cl. 260—92.1.

Barnwell, Dorothy J. Article carrying attachments for crutches. 2,750,951, 6-19-56, Cl. 135—47.

Barrett, Arthur L., to Joy Mfg. Co. Drum type disintegrating head for continuous miner. 2,751,207, 6-19-56, Cl. 262—26.

Barrett, Arthur L., to Joy Mfg. Co. Continuous mining apparatus with floor clean-up means. 2,751,209, 6-19-56, Cl. 262—29.

Barrett, Elton T., to The Liquidometer Corp. Liquid level measuring device. 2,751,531, 6-19-56, Cl. 317—246.

Barrett, John L., J. A. L. Latoszynski, C. Morris, and A. Frankel, to The English Electric Co. Ltd. Compound gas turbine plant, including simplified ducting arrangements. 2,750,738, 6-19-56, Cl. 60—39.15.

Bartleson, John D., to The Standard Oil Co. Method of minimizing the octane demand of an engine. 2,751,285, 6-19-56, Cl. 44—76.

Bartlett, Lawrence E., O. M. Olivier, and H. J. Schumacker, to Allis-Chalmers Mfg. Co. Lifter lug on blade of movable contact. 2,751,447, 6-19-56, Cl. 200—14.

Barton, Derek H. R.: *See*—
Hunt, John S., Walker, and Barton. 2,751,398.

Baselt, Walter H., to American Steel Foundries. Rotor brake. 2,751,047, 6-19-56, Cl. 188—59.

Bashin, Saul. Machine for marking hems of skirts and coats. 2,750,673, 6-19-56, Cl. 33—10.

Bassick Co., The: *See*—
Claud-Mantle, Arthur. 2,751,240.
Kramcsak, Michael, Jr. 2,750,619.

Bates, Robert W., C. J. Davis, Jr., and C. E. Morris, to Swift & Co. Process for the production of molecularly modified lard. 2,751,304, 6-19-56, Cl. 99—118.

Baudou, Antoine J. G. Device for the manufacture of molded rubber boots and similar articles. 2,750,629, 6-19-56, Cl. 18—45.

Baur, John W., O. G. Plos, and S. J. Simms, to Binks Mfg. Corp. Fluid pressure motor driven pump and valve control device therefor. 2,750,930, 6-19-56, Cl. 121—164.

Baxter, Ernest L., to Eastman Kodak Co. Paper for roll photographic film. 2,751,309, 6-19-56, Cl. 117—14.

Beam, Albert S., and C. B. Stapleton, to Vinco Corp. Master gauge for bevel gears. 2,750,676, 6-19-56, Cl. 33—179.5.

Beams, Clare F. Fishing lure. 2,750,701, 6-19-56, Cl. 43—42.09.

Beckdahl, Walter A.: *See*—
Walkup, Lewis E., Copley, and Beckdahl. 2,750,922.

Begley, John W., to Phillips Petroleum Co. Pebble heat exchange chamber. 2,751,211, 6-19-56, Cl. 263—19.

Beitz, Richard C., to American Optical Co. Electric motor and control circuit. 2,751,538, 6-19-56, Cl. 318—345.

Bell & Gossett Co.: *See*—
Birkemeier, Henry P. 2,751,053.

Bell Telephone Laboratories, Inc.: *See*—
Chase, Fay H. 2,751,545.
Chase, Fay H. 2,751,549.
Chase, Fay H. 2,751,550.
Duncan, Robert S. 2,751,497.
Glass, Myron S. 2,751,499.
Ketchledge, Raymond W. 2,751,442.
King, Archie P. 2,750,912.
King, Archie P. 2,751,561.
Pierce, John R. 2,751,518.

Bellini, Eugene, to Vanity Fair Mills, Inc. Knitting machine needle device. 2,750,772, 6-19-56, Cl. 66—86.

Bemis Bro. Bag Co.: *See*—
Brady, Charles V. 2,751,140.
Kindseth, Harold V. 2,751,115.
Williams, Russell J., and Helmos. 2,751,142.

Bemis, Harvey B. Fishhook. 2,750,704, 6-19-56, Cl. 43—43.16.

Bendix Aviation Corp.: *See*—
Crosby, Edward L., Jr., and Pfund. 2,751,443.
Hargrove, Atwood H.: 2,751,493.
Johnson, Thomas W. 2,750,892.
Stirnkorb, John R. 2,751,544.

Bennett, Harold F.: *See*—
Young, Earle A., and Bennett. 2,751,149.

Benvenuti, Ottavio. Gasifying devices. 2,751,202, 6-19-56, Cl. 261—47.

Berg, Elaine, ⅛ to R. H. Wendt and ⅛ to F. P. Peters. Anti-drip device for coffee cups and the like. 2,750,770, 6-19-56, Cl. 65—65.

Bergman, Carl A., to Standard Duplicating Machines Corp. Automatic raising mechanism for feed trays. 2,750,804, 6-19-56, Cl. 74—169.

Berry Francois J. B. Fluidising devices. 2,750,681, 6-19-56, Cl. 34—57.

Berry, Frank, to Oliver Iron and Steel Corp. Rotary power device of the rotary abutment type. 2,750,891, 6-19-56, Cl. 103—5.

Bersworth, Frederick C., to The Dow Chemical Co. Quinolyl aliphatic alkylene polyamine poly acid. 2,751,386, 6-19-56, Cl. 260—287.

Bersworth, Frederick C., to The Dow Chemical Co. Diquinolyl aliphatic alkylene polyamino poly acids and salts thereof. 2,751,387, 6-19-56, Cl. 260—287.

Bersworth, Frederick C., to The Dow Chemical Co. Pyridyl aliphatic alkylene polyamine poly acid compounds and salts. 2,751,389, 6-19-56, Cl. 260—295.

Bersworth, Frederick C., to The Dow Chemical Co. Dipyridyl aliphatic alkylene polyamine poly acids. 2,751,390, 6-19-56, Cl. 260—295.

Bersworth, Frederick C., to The Dow Chemical Co. Dipyridyl aliphatic alkylene polyamine poly acids. 2,751,391, 6-19-56, Cl. 260—295.

Berthiez, Charles W., to Societe Anonyme dite: Societe Nouvelle de Construction de Machines-Outils et d'Outillages Procédés C. W. B. Milling and boring machine with a tiltable headstock. 2,750,851, 6-19-56, Cl. 90—17.

Bertin, Jean H.: *See*—
Paris, Francois G., Le Foll, Bertin, and Baraut. 2,750,733.

Bessière, Pierre E., to Compagnie Telma. Electric brakes or slowing down devices. 2,751,513, 6-19-56, Cl. 310—93.

Best, Denis, and C. C. Jones, to Ferranti Ltd. Valve systems for the control of fluid pressure. 2,750,952, 6-19-56, Cl. 137—116.3.

Best, Peter: *See*—
Herbert, John M., and Best. 2,750,657.

Beyer, Jenö, to American Enka Corp. Tension device. 2,751,166, 6-19-56, Cl. 242—150.

Biblin, Daniel L., to The Yale & Towne Mfg. Co. Lock case and rose construction. 2,751,243, 6-19-56, Cl. 292—337.

Biedendieck, Carl H.: *See*—
Knoll, Werner, and Biedendieck. 2,750,796.

Biehn, Gerald L., to Westinghouse Electric Corp. Unloading mechanisms for refrigerant compressors. 2,751,143, 6-19-56, Cl. 230—24.

Bier, Emanuel R. Oropharyngeal airway and suction tube. 2,750,938, 6-19-56, Cl. 128—2.

Bierwert, Howard L. Combined paper and pencil dispenser. 2,751,112, 6-19-56, Cl. 221—199.

Bill, John C., to United States Rubber Co. Sulfur vulcanizable rubber stabilized with a reaction product of an alkylidable rubber stabilized with a reaction product of an alkylaryloxy phosphorus dichloride and a secondary amine. 2,751,371, 6-19-56, Cl. 260—45.9.

Binks Mfg. Corp.: *See*—
Baur, John W., Plos, and Simms. 2,750,930.

Birkemeier, Henry P., to Bell & Gossett Co. Holder. 2,751,053, 6-19-56, Cl. 189—45.

Bissell, Carl H., and W. E. Parish, to Crouse-Hinds Co. Electrical connector. 2,751,567, 6-19-56, Cl. 339—70.

Bissonette, Paul E. Electric switch. 2,751,470, 6-19-56, Cl. 200—165.

Bjorksten Research Laboratories: *See*—
Elliott, John C. 2,751,289.

Black, James F., and E. V. Wilson, to Esso Research and Engineering Co. Wear test method. 2,751,506, 6-19-56, Cl. 250—83.6.

Blanke, Nathan E. Adjustable leg structure for bed frame or the like. 2,750,602, 6-19-56, Cl. 5—11.

Blatt, Paula. Women's garter suspender. 2,750,597, 6-19-56, Cl. 2—305.

Blauw, Charles G.: *See*—
Graham, William R., Jr., Kohler, and Blauw. 2,751,302.

Blaw-Knox Co.: *See*—
Leslie, Eugene H., and Crockin. 2,751,301.

Blevins, Stanley D. Attachment for beds. 2,750,605, 6-19-56, Cl. 5—331.

Bloch, Ernest. Butcher's accessory. 2,750,610, 6-19-56, Cl. 15—4.

Block & Anderson Ltd.: *See*—
Watton, Leonard H. N., Brown, and Hall. 2,751,224.

Block, Elton E. Sprinkler guard. 2,751,250, 6-19-56, Cl. 299—60.

Blok, Lourens, and D. C. van Iperen, to Hartford National Bank and Trust Co., as trustee. Clamping device intended for the electrical connection of a work-coil for the inductive heating of workpieces to the secondary winding of the output coil of a high-frequency. 2,751,481, 6-19-56, Cl. 219—10.79.

Blok, Lourens, to Hartford National Bank and Trust Co., as trustee. High-frequency heating generator. 2,751,502, 6-19-56, Cl. 250—36.

Bogart, Harold N., and R. B. Melmoth, to Ford Motor Co. Process of casting nodular iron. 2,751,292, 6-19-56, Cl. 75—130.

Boldingh, Willem H., J. J. C. Hardenberg, W. J. Oosterkamp, and A. Verhoeff, to Hartford National Bank and Trust Co., trustee. Support for image amplifiers. 2,751,504, 6-19-56, Cl. 250—79.

Bolger, Henry. Traction device for invalids. 2,750,939, 6-19-56, Cl. 128—84.

Bolger, Henry. Toilet tissue holder. 2,751,162, 6-19-56, Cl. 242—55.2.

Bond, Alfred A., and G. W. Achterberg. Dust proof oil dispenser. 2,751,120, 6-19-56, Cl. 222—83.5.

Bond, Donald H., to The Texas Pipe Line Co. Concentric pipe insulator and spacer. 2,750,963, 6-19-56, Cl. 138—65.

Bondi, Arnold A., to Shell Development Co. Magnetic fluids. 2,751,352, 6-19-56, Cl. 252—62.5.

Bonelli, James W. Combination storm vent awning. 2,750,638, 6-19-56, Cl. 20—57.5.

Bonmartini, Giovanni, to "Est" Etablissement Sciences Techniques. Rolling device for vehicles of every kind. 2,751,259, 6-19-56, Cl. 305—9.

Bonn, Theodore H., to Remington Rand Inc. Full wave magnetic amplifier. 2,751,510, 6-19-56, Cl. 307—88.

Booth, Galt B.: *See*—
Reen, Gerald K., and Booth. 2,751,512.

Bopp, Calvin C., to Avco Mfg. Corp. Automatic gain control circuit for transistor amplifiers. 2,751,446, 6-19-56, Cl. 179—171.9.

Borg-Warner Corp.: *See*—
Lauck, John A. 2,750,933.
Schlumberg, Marcel. 2,750,885.

Börjeson, Olov B., to Seje & Thurne Aktiebolag. Apparatus for the separation of particles, particularly fibres, that are suspended in a liquid. 2,751,086, 6-19-56, Cl. 210—199.

Bosch, Robert, G. m. b. H.: *See*—
Korkowski, Eberhard, Volt, and Schmidt. 2,750,743.

Bost, Howard W., to Phillips Petroleum Co. Adhesive composition, method of bonding with same, and bonded article. 2,751,322, 6-19-56, Cl. 154—130.

Boucard, Victor, and H. D. Hume; said Boucard assor. to said Hume. Tractor mounted mower. 2,750,726, 6-19-56, Cl. 56—25.

Brouwer, Benjamin W., and A. Palmer, to Crompton & Knowles Loom Works. Harness mechanism for loom. 2,750,966, 6-19-56, Cl. 139—79.

Bowen, William M., III: *See*—
Houdry, Eugene J., and Bowen. 2,750,680.

Bowers, Frederick M., to The Fibre Metal Products Co. Welding helmet face shield. 2,750,593, 6-19-56, Cl. 2—9.

Bowers, Roy L., and J. R. Gretzinger, to General Motors Corp. Filter for treatment of liquid. 2,751,085, 6-19-56, Cl. 210—169.

Bowman, Frederic C., and W. M. Ramsey, to Victor Chemical Works. Water softening and detergent composition and process of preparing same. 2,751,357, 6-19-56, Cl. 252—135.

Boxell, Samuel E., W. F. Richter, R. E. and C. R. Hall, and L. R. Dane, to The Pure Oil Co. Bearing reseating device. 2,750,815, 6-19-56, Cl. 77—2.

Boyd, Leonard E. Manually operable tongs. 2,751,245, 6-19-56, Cl. 294—11.

Boyer, Charles P., to the United States of America as represented by the Secretary of the Army. Double feed prevention device. 2,750,848, 6-19-56, Cl. 89—137.

Bradley, Stephen D., to Detroit Macoid Corp. Sewing welt and trim strip. 2,750,710, 6-19-56, Cl. 45—138.

Bradstock, Robert B., and W. R. Hickin, to General Electric Co. Snap switch. 2,751,451, 6-19-56, Cl. 200—70.

Brady, Charles V., to Bemis Bro. Bag Co. Bag. 2,751,140, 6-19-56, Cl. 229—55.

Brady, Samuel G., to The Gear Grinding Machine Co. Method and apparatus for grinding inner side faces of channel members. 2,750,718, 6-19-56, Cl. 51—281.

Braendle, Richard O., to E. I. du Pont de Nemours and Co. Rubbers with methoxy containing silica fillers. 2,751,366, 6-19-56, Cl. 260—37.

Brainerd, Harold W., Jr., to Stanolind Oil and Gas Co. Composition for acidizing wells. 2,751,348, 6-19-56, Cl. 252—8.55.

Brannen, Lee D. Safety diaphragms for hydraulic brakes. 2,750,746, 6-19-56, Cl. 60—54.6.

Brattland, Daniel. Scaffold. 2,751,258, 6-19-56, Cl. 304—2.

Braseman, Paul J. Shaving brush. 2,750,615, 6-19-56, Cl. 15—136.

Bredtschneider, Kurt B., and E. C. Petrie, to Crane Co. Valve seat mounting. 2,750,955, 6-19-56, Cl. 137—454.2.

Breed, Carroll M. Smoking pipe. 2,750,946, 6-19-56, Cl. 131—203.

Brenner, Abner, and B. J. Wagoner, to the United States of America as represented by the Secretary of Commerce. Thickness gage for metallic coatings. 2,751,552, 6-19-56, Cl. 324—34.

Breuer, Henry, to Tape Production Corp. Rub-out correction for line casting tape production transmission. 2,751,432, 6-19-56, Cl. 178—17.

Brewer-Titchener Corp., The: *See*—
Eves, John D. 2,750,990.

Briggs & Stratton Corp.: *See*—
Jacobi, Edward N. 2,750,788.

Brinker, Emil F., to Lavole Laboratories, Inc. High frequency capacitator. 2,751,560, 6-19-56, Cl. 333—97.

Bristol Laboratories Inc.: *See*—
Johnson, David A., and Sheehan. 2,751,378.

British Messier Ltd.: *See*—
Conway, Hugh G., and Elmer. 2,750,928.

Brockman, Frank G., to North American Philips Co., Inc. Method of manufacturing a magnetic ferrite core. 2,751,354, 6-19-56, Cl. 252—62.5.

Bronson, George A., to Douglas Aircraft Co., Inc. Cycle control valve for hydraulic motors. 2,750,929, 6-19-56, Cl. 121—44.

Broske, William F., to Aircraft-Marine Products, Inc. Electrical connector. 2,751,570, 6-19-56, Cl. 339—223.

Brown, Edward L., and J. M. Robertson, to Armco Steel Corp. Utility tunnel construction. 2,750,749, 6-19-56, Cl. 61—45.

Brown, Harold F., and H. M. M. Phillips, to Imperial Chemical Industries Ltd. Package containing textile covered cord fuses and means for its production. 2,750,720, 6-19-56, Cl. 53—24.

Brown, Roland: *See*—
Watton, Leonard H. N., Brown, and Hall. 2,751,224.

Brown, William E., C. O. Decker, and C. W. Landes, to General Motors Corp. Switch. 2,751,468, 6-19-56, Cl. 200—154.

Browne, Charles M., to Libbey-Owens-Ford Glass Co. Multiple sheet glazing units. 2,750,637, 6-19-56, Cl. 20—56.5.

Buccicone, Vello S. Magnetic switching apparatus. 2,751,150, 6-19-56, Cl. 235—98.

Buckley, Mayo C. Oil burning floor furnace. 2,750,935, 6-19-56, Cl. 126—116.

Budd Co., The: *See*—
Eisen, Carl G. 2,751,480.
Greenshields, Robert O., and Frey. 2,750,820.

Buffalo-Springfield Roller Co., The: *See*—
Harrison, John F. 2,750,751.

Bulman, E. O., Mfg. Co., Inc., The: *See*—
Waltz, Edward. 2,751,163.

Buquor, Adolph P. Safety plug and keeper for magnetic socket. 2,751,566, 6-19-56, Cl. 339—12.

Burns Aero Seat Co., Inc.: *See*—
Howell, Russell B., Jr. 2,750,994.

Burroughs, Wise, to Iowa State College Research Foundation, Inc. Method of raising beef cattle and sheep and feed rations for use therein. 2,751,303, 6-19-56, Cl. 99—2.

Burton, Lester W., to General Electric Co. Rectifier cell mounting. 2,751,528, 6-19-56, Cl. 317—234.

Burton, Lockwood D., to Radio Corp. of America. Magnetic recording apparatus. 2,751,439, 6-19-56, Cl. 179—100.2.

Busfield, Gordon, to Research Corp. Electrical precipitator. 2,751,036, 6-19-56, Cl. 183—7.

Buss, Benjamin A., to American Machine and Metals, Inc. Automatic controls for commercial washers. 2,750,777, 6-19-56, Cl. 68—12.

Buss, Benjamin A., to American Machine and Metals, Inc. Automatic washer controls and methods. 2,750,778, 6-19-56, Cl. 68—17.

Butzow, George M. Sand conditioning apparatus. 2,750,640, 6-19-56, Cl. 22—89.

Buxton, Inc.: *See*—
Hume, Gertrude B. 2,750,978.

Byam, Erwin B., to The Waterbury Farrel Foundry & Machine Co. Wire feed mechanism and control of same. 2,750,818, 6-19-56, Cl. 78—97.

Byerlein, Arthur A., to Baldwin-Lima-Hamilton Corp. Press. 2,750,909, 6–19–56, Cl. 113—38.

Cable Belt Ltd.: *See*—
Thomson, Charles. 2,751,065.

California Research Corp.: *See*—
Condit, Paul C., and Pino. 2,750,732.
Hanly, Fred J. 2,751,039.
Hanly, Fred J. 2,751,040.
Ludwig, Milton. 2,751,210.
Peeler, Robert L., Jr., and Foehr. 2,751,350.
Rohrback, Gilson H., and McCloud. 2,751,194.
Scott, John W., Jr. 2,751,334.

Cameron Machine Co: *See*—
Saco, Felix, and Rockstrom. 2,751,164.

Camilli, Guglielmo, F. H. Klerstead, W. J. Vandergrift, and J. C. Russ, to General Electric Co. Dry-type transformer. 2,751,562, 6–19–56, Cl. 336—60.

Cannon, Craig W.: *See*—
Carlin, Robert, Cannon, and Mather. 2,750,843.

Canter, James A., to General Motors Corp. Refrigerating apparatus for water coolers. 2,750,756, 6–19–56, Cl. 62—4.

Carlberg, Erik R., to Aktiebolaget Elektrolux. Structure for indicating need for removing suction cleaner dust bag. 2,750,915, 6–19–56, Cl. 116—65.

Carlin, Robert, C. W. Cannon, and J. M. Mather, to Allis-Chalmers Mfg. Co. Gun firing system. 2,750,843, 6–19–56, Cl. 89—27.

Carlson, Donald W., to The Visking Corp. Method of making drum liners. 2,751,319, 6–19–56, Cl. 154—83.

Carroll, Burt H., to Eastman Kodak Co. Mercury stabilizers for photographic emulsions sensitized with polyalkylene esters, amides and ethers. 2,751,299, 6–19–56, Cl. 95—7.

Carter, John N., and D. N. Rosenblatt, to The Elmco Corp. Alloy steel. 2,751,291, 6–19–56, Cl. 75—128.

Carter, Uriel F. to Cutler-Hammer, Inc. Circuit controlling devices. 2,751,459, 6–19–56, Cl. 200—83.

Carver, John A., and W. F. Rollman, to Esso Research and Engineering Co. Method and apparatus for mixing and contacting fluids. 2,751,335, 6–19–56, Cl. 196—147.

Cary, Rex H. J., to National Research Development Corp. Folded slot antennae. 2,751,589, 6–19–56, Cl. 343—767.

Casablancas High Draft Co. Ltd.: *See*—
Noguera, Joseph. 2,750,633.

Cassella Farbwerke Mainkur Aktiengesellschaft: *See*—
Trösken Otto. 2,751,383.

Cassidy, Robert J., to Pace, Inc. Thermoresponsive switch means. 2,751,465, 6–19–56, Cl. 200—139.

Cathcart, Jack F., ¼ to F. P. Moffett. Mouth protector. 2,750,941, 6–19–56, Cl. 128—136.

Cavanaugh, Edward F.: *See*—
Kell, Havard L., Lolli, and Cavanaugh. 2,751,377.

Cavitt, Maximillian, to Shell Development Co. Non-foaming detergents. 2,751,358, 6–19–56, Cl. 252—153.

Chandler, Robert M. Mustard dispensers. 2,751,126, 6–19–56, Cl. 222—386.

Chase, Fay H., to Bell Telephone Laboratories, Inc. Transistor circuits. 2,751,545, 6–19–56, Cl. 321—18.

Chase, Fay H., to Bell Telephone Laboratories, Inc. Current supply apparatus. 2,751,549, 6–19–56, Cl. 323—66.

Chase, Fay H., to Bell Telephone Laboratories, Inc. Current supply apparatus. 2,751,550, 6–19–56, Cl. 323—66.

Châtel, Bertrand. Automatic meal table. 2,750,611, 6–19–56, Cl. 15—74.

Chemische Werke Essener Steinkohle A. G.: *See*—
Löpmann, Bernhard. 2,751,404.

Cheshire, John R., and W. R. Trutna, to E. I. du Pont de Nemours and Co. Preparation of thiuram disulfides. 2,751,415, 6–19–56, Cl. 260—567.

Chin, John. Controls for bean sprouting machine. 2,750,713, 6–19–56, Cl. 47—14.

Chittleburgh, Raymond: *See*—
Morton, Geoffrey F., Chittleburgh, and Powell. 2,750,792.

Chromatic Television Laboratories, Inc.: *See*—
Lawrence, Ernest O. 2,751,516.

Chromy, Benjamin J.: *See*—
Allen, Philip H., and Chromy. 2,751,148.

Cilag Ltd.: *See*—
Martin, Henry, and Habicht. 2,751,382.

Clark, Alfred S., to United Shoe Machinery Corp. Sole channeling and lip setting machines. 2,750,607, 6–19–56, Cl. 12—18.7.

Clark, John M., to Studebaker-Packard Corp. Transmission fluid. 2,751,355, 6–19–56, Cl. 252—75.

Clark & Vicario Corp.: *See*—
Smith, James A., and Lyons. 2,751,031.

Clarke, Charles H. Vise having jaw supports rotatable as a unit about plural axes. 2,750,825, 6–19–56, Cl. 81—41.

Clarke, William. Oiling attachment for hinges. 2,750,620, 6–19–56, Cl. 16—161.

Claud-Mantle, Arthur, to The Bassick Co. Lid fastener. 2,751,240, 6–19–56, Cl. 292—113.

Clemens, Clarence M.: *See*—
Earp, James F., and Clemens. 2,750,721.

Clevite Corp.: *See*—
Schaefer, Ralph A., Pochapsky, and Sedusky. 2,751,340.

Clopay Corp.: *See*—
Johnson, Samuel J. 2,750,631.

Closson, Rex D., A. J. Kolka, and W. B. Ligett, to Ethyl Corp. Ethylation of olefins. 2,751,426, 6–19–56, Cl. 260—683.15.

Coates, Cecil C., and J. D. Jackson, to Royal Mfg. Co., Inc. Machine and method for making hollow articles. 2,750,624, 6–19–56, Cl. 18—5.

Cochrane Corp.: *See*—
Sebald, Joseph F. 2,751,346.

Cohn, Eugene: *See*—
Cohn, Joseph, Walter, and Cohn. 2,750,679.

Cohn, Johan G., to Baker & Co., Inc. Apparatus for the continuous analysis of contaminants in gases. 2,751,281, 6–19–56, Cl. 23—255.

Cohn, Joseph, J. G. Walter, and E. Cohn, to Samcoe Holding Corp. Handling apparatus for textile fabric. 2,750,679, 6–19–56, Cl. 34—25.

Cohn, Seymour B.: *See*—
Tomiyasu, Kiyo, and Cohn. 2,751,556.

Cole, Arthur D., and F. L. Tourville, to Cole-Sewell Engineering Co. Valved air exhaust fittings. 2,750,869, 6–19–56, Cl. 98—119.

Cole, Herman S. Illuminated tackle box. 2,751,489, 6–19–56, Cl. 240—6.4.

Coler, Myron A.: *See*—
Gottschall, Herbert A. 2,751,475.

Coler, Myron A., and A. S. Louis; said Louis assor. to said Coler. Electric resistor. 2,751,473, 6–19–56, Cl. 201—55.

Cole-Sewell Engineering Co.: *See*—
Cole, Arthur D., and Tourville. 2,750,869.

Coles, Leon M. Hair trimmer. 2,750,663, 6–19–56, Cl. 30—31.

Collat, Edgar, ½ to I. M. Jones. Hot water heating system control. 2,751,155, 6–19–56, Cl. 236—46.

Collette, Robert P., and E. F. Michelich, to Western Electric Co., Inc. Guard for portable router. 2,750,971, 6–19–56, Cl. 144—251.

Collins, Bernard J., and W. P. Zwirble. Dispensing toothbrush. 2,750,614, 6–19–56, Cl. 15—131.

Colomb, Henri. Stationary bearing, including an end-stone for pivots, chiefly clockwork pivots. 2,750,731, 6–19–56, Cl. 58—140.

Colombo, Roberto, to Royal Mfg. Co., Inc. Apparatus for continuous moulding of synthetic resins. 2,750,625, 6–19–56, Cl. 18—5.

Colonna, Angelo. Built-in fold-away water closet. 2,750,599, 6–19–56, Cl. 4—10.

Colonna, Angelo. Urn with readily insertable and removable coffee vessel. 2,750,870, 6–19–56, Cl. 99—279.

Colyer, James L. Battery post clamp. 2,751,571, 6–19–56, Cl. 339—228.

Commerce, United States of America as represented by the Secretary of: *See*—
Brenner, Abner, and Wagoner. 2,751,552.

Commercial Display Corp.: *See*—
Hargett, Huston. 2,751,088.

Commonwealth Engineering Co. of Ohio, The: *See*—
Moorhead, Milton M., Jr. 2,751,547.

Compagnie Telma: *See*—
Bessière, Pierre E. 2,751,513.

Compton, Charles E. Advanceable mining machine head and shaft carried bearing support therefor. 2,751,203, 6–19–56, Cl. 262—7.

Condit, Paul C., and M. A. Pino, to California Research Corp. Self-igniting fuel and a method of using same. 2,750,732, 6–19–56, Cl. 60—35.4.

Conescu, Sidney. Carrier. 2,751,111, 6–19–56, Cl. 220—113.

Conflo Engineering & Mfg. Co.: *See*—
Wilson, Daniel F. 2,751,184.

Conley, Edwin E. Hollow fiber reinforced resin products such as pipe fittings with molded internal threads and method of making same. 2,751,237, 6–19–56, Cl. 285—210.

Conn, William K., to Sun Oil Co. Disproportionation reactions with aluminum chloride. 2,751,423, 6–19–56, Cl. 260—676.

Conning, James: *See*—
Latin, Aubrey, Grieve, and Conning. 2,751,077.

Conrad, Martin B.: *See*—
Baker, Reuben C., and Conrad. 2,751,012.
Baker, Reuben C., and Conrad. 2,751,017.
Baker, Reuben C., and Conrad. 2,751,022.

Conrad, Martin B., to Baker Oil Tools, Inc. Well packer. 2,751,013, 6–19–56, Cl. 166—121.

Conrad, Martin B., to Baker Oil Tools, Inc. Devices for automatically filling well casing. 2,751,023, 6–19–56, Cl. 166—225.

Continental Specialties Co. Ltd.: *See*—
Soule, Arthur H. 2,750,635.

Continental Transport Appliances, Ltd.: *See*—
Dorey, Gordon B. 2,750,803.
Dorey, George B. 2,751,049.

Conway, Hugh G., and A. E. Elmer, to British Messier Ltd. Servo-assisted control systems. 2,750,928, 6–19–56, Cl. 121—41.

Conway, John J. Baseball practice device. 2,751,226, 6–19–56, Cl. 273—26.

Cooper, Hugh E. Weed cleaner adapter unit for combines and auger extension therefor. 2,751,078, 6–19–56, Cl. 209—241.

Coover, Harry W., Jr., J. E. Guillet, and E. V. Martin, to Eastman Kodak Co. Bleaching of polyacrylonitrile fibers. 2,751,277, 6–19–56, Cl. 8—107.

Coover, Harry W., Jr., and R. L. McConnell, to Eastman Kodak Co. Phosphonamide derivatives of triazine. 2,751,384, 5–19–56, Cl. 260—248.

Copley, Harold E.: *See*—
Walkup, Lewis E., Copley, and Beckdahl. 2,750,922.

Corley, James R.: *See*—
Reeves, Wilson A., Corley, and Guthrie. 2,751,278.

Cornell, Ernest R., to E. I. du Pont de Nemours and Co. Method of producing finely divided metallic sodium. 2,751,288, 6–19–56, Cl. 75—0.5.

Cornock, Edward F., and K. F. Newell, to Package Machinery Co. Device for applying cigar bands and the like to wrappers. 2,751,104, 6–19–56, Cl. 216—55.

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Kossuth, Otto, and Corrigan. 2,750,822.

Corry-Jamestown Mfg. Corp.: *See*—
Hutzelman, Howard E. 2,751,272.

Cotterman, Frank D.: *See*—
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Cottier, Louis, to Tavannes Watch Co. S. A. Item counter and totalizer. 2,751,151, 6–19–56, Cl. 235—113.

Cottle, Delmer L.: *See*—
Young, David W., Morway, and Cottle. 2,751,351.

Cottrell, Robert B., and R. T. Leisk, to American Steel Foundries. Brake beam. 2,751,051, 6–19–56, Cl. 188—226.1.

Coulombe, Edwin C., Jr.: *See*—
Johnston, Leith, and Coulombe. 2,750,880.

Couse, Kibbey W., to Reconstruction Finance Corp. Means for reducing the overall height of a motor vehicle trailer. 2,751,234, 6–19–56, Cl. 280—44.

Cowan, John V., to Sperry Products, Inc. Method and means for induction welding. 2,751,479, 6–19–56, Cl. 219—10.

Coyne, Gerard G., to General Electric Co. Refrigeration system for air conditioning apparatus. 2,750,762, 6–19–56, Cl. 62—117.55.

Cramer Posture Chair Co., Inc.: *See*—
Cramer, Roy A. 2,750,996.

Cramer, Roy A., to Cramer Posture Chair Co., Inc. Chair seat and cushion therefor. 2,750,996, 6—9–56, Cl. 155—179.

Crane Co.: *See*—
Bredtschneider, Kurt B., and Petrie. 2,750,955.
Hansen, George E., Cotterman, and De Craene. 2,750,960.

Creelman, Raymond C. Surgical operating table for small infants. 2,751,268, 6–19–56, Cl. 311—5.

Cresswell, Arthur, to American Cyanamid Co. Polymerization of acrylonitrile. 2,751,374, 6–19–56, Cl. 260—88.7.

Crockin, Jeroine M.: *See*—
Leslie, Eugene H., and Crockin. 2,751,391.

Crompton & Knowles Loom Works: *See*—
Brouwer, Benjamin W., and Palmer. 2,750,966.

Crookshank, Paul R.: *See*—
Hood, Glay M., and Crookshank. 2,751,297.

Crookston, Robert R., to Esso Research and Engineering Co. Multiple piston operated mud valve. 2,751,183, 6–19–56, Cl. 251—31.

Cropley, William D., to The Hoover Co. Filter bag. 2,751,041, 6–19–56, Cl. 183—51.

Crosby, Edward L., Jr., and C. E. Pfund, to Bendix Aviation Corp. Coaxial low-noise amplifier. 2,751,443, 6–19–56, Cl. 179—171.

Crouse-Hinds Co.: *See*—
Bissell, Carl H., and Parish. 2,751,567.
Jeffers, Walter M. 2,751,574.

Crowley, Millard E., to Lippincott & Smith. Hop-picking machine. 2,750,945, 6–19–56, Cl. 130—30.

Crum, Paul C. Automatic circuit breaker system. 2,751,507, 6–19–56, Cl. 307—10.

Cunningham, James M., to International Business Machines Corp. Storage mechanism. 2,751,008, 6–19–56, Cl. 164—115.

Curtiss-Wright Corp.: *See*—
Jewett, Charles S. 2,750,979.

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Sahyun, Melville, and Faust. 2,751,410.
Sahyun, Melville, and Faust. 2,751,411.
Sahyun, Melville, and Faust. 2,751,412.

Daimler-Benz Aktiengesellschaft: *See*—
Barényi, Béla. 2,751,247.
Stump, Eugen. 2,751,580.

Dalgliah, John, & Sons Ltd.: *See*—
Laurie, Kenneth S. 2,750,650.

Dalmas Ltd.: *See*—
Robson, John P. 2,750,942.

Dalmo Victor Co.: *See*—
Moseley, Tomlinson I. 2,751,146.

Dane, Leonard R.: *See*—
Boxell, Samuel E., Richter, R. E. and C. R. Hall, and Dane. 2,750,815.

Daniel, Marvin P., to General Electric Co. Hot dip galvanizing apparatus. 2,750,923, 6–19–56, Cl. 118—423.

Danilow, Eugene. Layout gauge. 2,750,672, 6–19–56, Cl. 33—1.

Dann, Morris, to American Home Products Corp. One-hand veterinary syringe. 2,750,943, 6–19–56, Cl. 128—235.

Darkenwald, Wilbert J., to Yuba Mfg. Co. Rear dump wagon. 2,751,096, 6–19–56, Cl. 214—82.

Davidson, William W. Sheet feeding means for dual purpose duplicator. 2,750,882, 6–19–56, Cl. 101—232.

Davis, Arthur P., to American Bosch Arma Corp. Fire control apparatus. 2,750,844, 6–19–56, Cl. 89—28.

Davis, Charles J., Jr.: *See*—
Bates, Robert W., Davis, and Morris. 2,751,304.

Davis, Hyman R., to The Lummus Co. Clay contacting of lubricating oil. 2,751,336, 6–19–56, Cl. 196—147.

Davis, John V., to The Udylite Corp. Loading and unloading apparatus. 2,750,897, 6–19–56, Cl. 104—96.

Dayton Rubber Co., The: *See*—
Freedlander, Abraham L., and Waters. 2,750,606.

Deadman, Lionel L. F., to Ashe Laboratories Ltd. Preparation of hair treating compositions in solid form. 2,751,327, 6–19–56, Cl. 167—87.1.

De Beaubien, William J.: *See*—
Torley, Frederick G., and de Beaubien. 2,751,469.

Decker, Carl O.: *See*—
Brown, William E., Decker, and Landes. 2,751,468.

Decker, Dwight M. Sportman's seat. 2,750,992, 6–19–56, Cl. 155—153.

De Craene, Edmond P.: *See*—
Hansen, George E., Cotterman, and De Craene. 2,750,960.

Deering Milliken Research Corp.: *See*—
Klein, Norman E. 2,750,968.

De la Bretonière, André B., to American Enka Corp. Relative speed control of plural motors especially for tension control. 2,751,532, 6–19–56, Cl. 318—7.

De la Bretonière, André B., to American Enka Corp. Adjustable electrical transmission system. 2,751,533, 6–19–56, Cl. 318—7.

Del Mar Engineering Laboratories, Inc.: *See*—
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Del Re, Michael A., Sr. Automatic emergency brake release mechanism. 2,751,054, 6–19–56, Cl. 192—4.

Dempster Brothers, Inc.: *See*—
Dempster, George R., and Jones. 2,751,100.

Dempster, George R., and H. W. Jones, said Jones to Dempster Brothers, Inc. Transporting and dumping equipment. 2,751,100, 6–19–56, Cl. 214—317.

Denkert, Henry, to M. Denkert & Co. Baseball glove with pre-formed pocket. 2,750,594, 6–19–56, Cl. 2—19.

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Depoix, Pierre, to Societe de la Pile Leclanché. Electric cell and battery. 2,751,428, 6–19–56, Cl. 136—111.

Dériaz, Paul, to The English Electric Co. Ltd. Feathering runner vane type hydraulic turbines and pumps. 2,751,187, 6–19–56, Cl. 253—31.

Dériaz, Paul, to The English Electric Co. Ltd. Hydraulic turbines. 2,751,190, 6–19–56, Cl. 253—143.

Despard, Victor R., to Pass & Seymour, Inc. Wire centering means for pin-type insulational-piercing connectors. 2,751,568, 6–19–56, Cl. 339—99.

Dessertenne, Jacques H., and G. R. Dominguez y Salmeron. Combined box and easel for painting in the open country. 2,751,271, 6–19–56, Cl. 312—231.

Detroit Harvester Co.: *See*—
Kossuth, Otto, and Corrigan. 2,750,822.

Detroit Macoid Corp.: *See*—
Bradley, Stephen D. 2,750,710.

De Turk, John E., J. H. MacNeill, and N. E. Gibbs, to Raytheon Mfg. Co. Magnetic recording-play-back heads. 2,751,440, 6–19–56, Cl. 179—100.2.

De Vries, Reinier P. Multiple effect evaporator tower. 2,750,999, 6–19–56, Cl. 159—18.

Dexter, Robert G., to Barkley & Dexter, Inc. Sheet-folding machine. 2,751,222, 6–19–56, Cl. 270—81.

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Thompson, William M., Sekmakas, and Dickinson. 2,751,330.

Dietrich, Paul H., R. W. Reinartz, and O. Morgenländer, to Maschinenfabrik Augsburg-Nurnberg A. G. Adjustable mounting for printing press rolls. 2,750,883, 6–19–56, Cl. 101—348.

Dimmer, Robert P., to Automatic Electric Laboratories, Inc. Twenty cycle generator. 2,751,546, 6–19–56, Cl. 321—68.

Di Ruscio, Vincent J. Bench vise adjustable around horizontal axis by rack and pinion. 2,750,824, 6–19–56, Cl. 81—33.

Ditmar, Willem P. A., to Lever Brothers Co. Heat-sealed package of liquid or plastic. 2,751,072, 6–19–56, Cl. 206—46.

Dixon, Frederick W., to Harry Ferguson Research Ltd. Four wheel drive mechanism and braking unit therefor. 2,751,029, 6–19–56, Cl. 180—44.

Djerassi, Carl: *See*—
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Dobosy, Joseph F., to Radio Corp. of America. Video signal mixing amplifier circuits. 2,751,445, 6–19–56, Cl. 179—171.

Dodge, Adiel Y., and W. A. Robertson. Double clutches. 2,751,055, 6–19–56, Cl. 192—48.

Dodge, Erle H., to Sylvania Electric Products Inc. Exhaust head construction. 2,751,133, 6–19–56, Cl. 226—20.4.

Dodge, Howard G. Torque sensitive reversible motion actuator. 2,751,219, 6–19–56 Cl. 268—59.

Dolan, Joseph A. Laundry machine. 2,750,776, 6–19–56, Cl. 68—12.

Dole Valve Co., The: *See*—
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Donaldson, Robert D., to Minneapolis Honeywell Regulator Co. Control device. 2,751,457, 6-19-56, Cl. 200—81.5.

Donath, Ernest E., to Koppers Co., Inc. Gasification of fuels. 2,751,287, 6–19–56, Cl. 48—73.

Doolittle, Howard D., to Machlett Laboratories, Inc. Filament structure for electron tube. 2,751,517, 6–19–56, Cl. 313—265.

Dorey, George B., to Continental Transport Appliances, Ltd. Automatic slack adjuster. 2,751,049, 6–19–56, Cl. 188—198.

Dorey, Gordon B., to Continental Transport Appliances, Ltd. Rotating mechanism for a brake slack adjuster. 2,750,803, 6–19–56, Cl. 74—157.

Dorgelo, Eduard G. to Hartford National Bank and Trust Co., trustee. Duplex tube. 2,751,521, 6–19–56, Cl. 315—39.

Dorsey, William S., to Union Oil Co. of California. Apparatus for the production of acetylene. 2,751,282, 6–19–56, Cl. 23—284.

Douglas Aircraft Co., Inc.: See—
Bronson, George A. 2,750,929.
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Dow Chemical Co., The: *See*—
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Downingtown Mfg. Co.: *See*—
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Downs, George W., to the United States of America as represented by the Secretary of the Navy. Acoustisonde apparatus for measuring and recording physical properties of the sea. 2,750,794, 6–19–56, Cl. 73—53.

Du Bois, Robert C., to Minneapolis-Honeywell Regulator Co. Measuring apparatus. 2,751,577, 6-19-56, Cl. 340—208.

Du Hamell, Daniel L., Jr., to General Electric Co. Laundry apparatus. 2,750,782, 6–19–56, Cl. 68—140.

Du Mont, Allen B., Laboratories, Inc.: *See*—
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Duncan, Robert S., to Bell Telephone Laboratories, Inc. Superregenerative translator broadcast receiver. 2,751,497, 6–19–56, Cl. 250—36.

Dunlee Corp.: *See*—
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Dunlop Tire and Rubber Corp.: *See*—
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Dunn, Harold G., to The Hoover Co. Wringer roll. 2,750,656, 6–19–56, Cl. 29—123.

Dunz, Jean, to La Compagnie De Pont-A-Mousson. Feed-trough for centrifugal casting machine. 2,750,639, 6–19–56, Cl. 22—79.

Du Pont, E. I., de Nemours and Co.: *See*—
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Cheshire, John R., and Trutna. 2,751,415.
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Inman, Byron N. 2,751,339.
Nadler, Martin L., and Meece. 2,751,416.
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Schwemberger, John G. 2,751,338.
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Sheeran, Stanley R. 2,751,073.
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Durrell, Louis F. Shaker device. 2,751,122, 6–19–56, Cl. 222—149.

Dwight, Robert L.: *See*—
Aumuller, Edward F., Dwight, and Kirchhoff. 2,751,056.

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"Est" Etablissement Sciences Techniques: *See*—
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Carroll, Burt H. 2,751,299.
Coover, Harry W., Jr., Guillet, and Martin. 2,751,277.
Coover, Harry W., Jr., and McConnell. 2,751,384.
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Jones, Jean E. 2,751,298.
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White, James C. 2,750,653.
Young Earle A., and Bennett. 2,751,149.

Eaton, Wentworth C., to Eastman Kodak Co. Colored adhesive tape. 2,751,276, 6–19–56, Cl. 8—18.

Eberhard, Everett, to Motorola, Inc. Transistor oscillator. 2,751,501, 6–19–56, Cl. 250—36.

Eder, Virgil K., to General Motors Corp. Drill. 2,750,817, 6–19–56, Cl. 77—68.

Edström, Sven E., and B. Gisner, to Sandvikens Jernverks Aktiebolag. Insert for rock drills. 2,751,195, 6–19–56, Cl. 255—63.

Elmco Corp., The: *See*—
Carter, John N., and Rosenblatt. 2,751,291.

Elpper, Robert B. Outlet box for wiring circuits. 2,751,105, 6–19–56, Cl. 220—3.3.

Elsen, Carl G., to The Budd Co. Induction heating apparatus and method of heating extensive surface areas. 2,751,480, 6–19–56, Cl. 219—10.69.

Eklund, Kjell A.: *See*—
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Ekstedt, Henry V. Insecticide dispensers. 2,750,707, 6–19–56, Cl. 43—131.

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Ellenberger, Francis R., to General Electric Co. Air conditioning control system. 2,751,152, 6–19–56, Cl. 236—1.

Elliott, John C., to Bjorksten Research Laboratories. Method of producing metal foam. 2,751,289, 6–19–56, Cl. 75—20.

Elmer, Arthur E.: *See*—
Conway, Hugh G., and Elmer. 2,750,928.

Emerson, David E. Flashlight. 2,751,490, 6–19–56, Cl. 240—10.6.

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Endlich, Friedrich, and W. Hufbauer, to Hartmann & Braun Aktiengesellschaft. Moving coil instrument with stretched strip suspension. 2,751,524, 6–19–56, Cl. 317—168.

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England, Theodore L., to Fulford Mfg. Co. Clasp. 2,750,642, 6–19–56, Cl. 24—153.

English, Arthur R., to Chas. Pfizer & Co., Inc. Antibiotic compositions comprising oxytetracycline and carbomycin. 2,751,324, 6–19–56, Cl. 167—65.

English Electric Co. Ltd., The: *See*—
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Enos, Herman I., Jr., to Hercules Powder Co. Oxidation of saturated cyclic hydrocarbons to hydroperoxides. 2,751,417, 6–19–56, Cl. 260—610.

Enos, Herman I., Jr., to Hercules Powder Co. Catalytic oxidation of hydrocarbons to hydroperoxides. 2,751,418, 6–19–56, Cl. 260—610.

Erwin, Robert L., to Ford Motor Co. Mounting for disc type soil working tools. 2,750,861, 6–19–56, Cl. 97—54.

Esso Research and Engineering Co.: *See*—
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Rupp, Walter H. 2,751,425.
Wooddy, Lemuel D., Jr. 2,751,009.
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Ethyl Corp.: *See*—
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Thomas, Henry A. 2,750,809.

Evans, Jesse L., to General Motors Corp. Domestic appliance. 2,751,486, 6–19–56, Cl. 219—35.

Evans, John. Spring-biased, slidable inner jaw wrench. 2,750,827, 6–19–56, Cl. 81—97.

Eves, John D., to The Brewer-Titchener Corp. Temporary connector for folding chairs. 2,750,990, 6–19–56, Cl. 155—130.

Ex-Cell-O Corp.: *See*—
Alden, Carroll R. 2,751,137.
Earp, James F., and Clemens. 2,750,721.

Fahrig, Rudolf: *See*—
Baader, Rudolf. 2,750,623.

Fanner Mfg. Co.: *See*—
Raible, Charles G. 2,750,641.

Färe, Bror K., and E. H. Franzen, to Aktiebolaget Fare Armaturfabrik. Plural temperature refrigerating apparatuses. 2,750,761, 6–19–56, Cl. 62—117.3

Farnam, Roy A. Steady rest and indicator gauge assembly for shaft grinder. 2,750,715, 6–19–56, Cl. 51—105.

Fastle, William G., to Leeds and Northrup Co. Monochromator system for spectrochemical analysis. 2,750,836, 6–19–56, Cl. 88—14.

Faust, Delbert G., to C. A. Norgren Co. Venturi plug. 2,751,045, 6–19–56, Cl. 184—55.

Faust, John A.: *See*—
Sahyun, Melville, and Faust. 2,751,410.
Sahyun, Melville, and Faust. 2,751,411.
Sahyun, Melville, and Faust. 2,751,412.

Fauvelot, Pierre E. R., to Societe Anonyme Etablissements Ed. Jaeger. Altimeter with barometric correction totalizing device. 2,750,801, 6–19–56, Cl. 73—387.

Fear, Hazel A. Arm sling. 2,750,940, 6–19–56, Cl. 128—94.

Federal Electric Products Co.: *See*—
Wills, Ervin E. 2,751,471.

Federn, Klaus, to Carl Schenck Maschinenfabrik G. m. b. H. Hydraulic oscillating-load generators, particularly for material testing machines. 2,750,795, 6–19–56, Cl. 73—92.

Federn, Klaus, K. Ohly, and H. Haardt, to Carl Schenck Maschinenfabrik G. m. b. H. Resilient bearing support for balancing machines. 2,751,262, 6–19–56, Cl. 308—26.

Feiertag, Karl M., to General Electric Co. Magnetic centrifugal device. 2,751,455, 6–19–56, Cl. 200—80.

Feltman John P., Jr. Airplane de-icing apparatus. 2,751,170, 6–19–56, Cl. 244—134.

Ferguson, Harry, Research Ltd.: *See*—
Dixon, Frederick W. 2,751,029.

Ferguson, J. L., Co.: *See*—
Ferguson, John L., and Talbot. 2,750,722.
Ferguson, John L., and Talbot. 2,750,856.

Ferguson, John L., and R. C. Talbot, to J. L. Ferguson Co. Package handling apparatus. 2,750,722, 6–19–56, Cl. 53—72.

Ferguson, John L., and R. C. Talbot, to J. L. Ferguson Co. Case handling apparatus. 2,750,856, 6–19–56, Cl. 93—53.

Ferranti Ltd.: *See*—
Best Denis, and Jones. 2,750,952.

Fibre Metal Products Co., The: *See*—
Bowers Frederick M. 2,750,593.

Filstrup, Edward C., to Armstrong Coalbreak Co. Gas pressure blasting device. 2,750,886, 6–19–56, Cl. 102—25.

Finlayson, Frank E., to General Electric Co. Steam flatiron. 2,750,692, 6–19–56, Cl. 38—77.

Finlayson, John, to Baker Perkins Ltd. and McVitie & Price Ltd. Means for discharging wafer making machines. 2,750,875, 6–19–56, Cl. 99—373.

Fisher, Robert P. Rock and ore jaw crushers. 2,751,158, 6–19–56, Cl. 241—262.

Fisher, Sidney G. Packaging machine. 2,750,723, 6–19–56, Cl. 53—215.

Fitch Textile Co., Inc.: *See*—
Johnson, Edwin H. 2,750,649.

Fitzgerald, John V., to Pittsburgh Plate Glass Co. Electrical resistive device. 2,751,477, 6–19–56, Cl. 201—73.

Fitzsimmons, David P., to Westinghouse Air Brake Co. Railway car speed determining and control apparatus. 2,751,492, 6–19–56, Cl. 246—182.

Flanders, Irving C.: *See*—
Kienberger, Charles A., Greene, Flanders, and Flynn. 2,751,344.

Flora, Laurence H., to Tinnerman Products, Inc. Joint for roofing, wall, floor or the like. 2,751,052, 6–19–56, Cl. 189—36.

Flynn, Arville R.: *See*—
Kienberger, Charles A., Greene, Flanders, and Flynn. 2,751,344.

Foehr, Edward G.: *See*—
Peeler, Robert L., Jr., and Foehr. 2,751,350.

Fonken, Gunther S., to The Upjohn Co. Hydrogenation of sterolds. 2,751,399, 6–19–56, Cl. 260—397.45.

Forbes, Vernal B. Dump elevator. 2,751,062, 6–19–56, Cl. 198—102.

Ford Motor Co.: *See*—
Bogart, Harold N., and Melmoth. 2,751,292.
Erwin, Robert L. 2,750,861.
Garmager, Curt H. 2,750,862.
Miller, Raymond J., Frevik, and Wilson. 2,750,863.

Foster, Samuel P., and G. S. Stamatoff, to E. I. du Pont de Nemours and Co. Purification of 1,4-dicyano-2-butene isomeric mixtures. 2,751,407, 6–19–56, Cl. 260—465.8.

Frankel, Adolf: *See*—
Barrett, John L., Latoszynski, Morris, and Frankel. 2,750,738.

Franklin, Edmond G., to General Mills, Inc. Positive opening and closing switch. 2,751,463, 6–19–56, Cl. 200—137.

Franzen, Erik H.: *See*—
Färe, Bror K., and Franzen. 2,750,761.

Frederick, Ilse B.: *See*—
Yost, John F., and Frederick. 2,751,367.
Yost, John F., and Frederick. 2,751,368.

Fredriksen, Clyde R., to H. Hildebrandt. Metal switch box mounting brackets. 2,751,173, 6–19–56, Cl. 248—27.

Freedlander, Abraham L., and N. D. Waters, to The Dayton Rubber Co. Foam rubber pillow construction. 2,750,606, 6–19–56, Cl. 5—337.

Freeland, Charles A., to J. Rawson & Sons Ltd. Winding machine. 2,751,160, 6–19–56, Cl. 242—27.

Freeman, Alfred. Conveyor systems. 2,751,091, 6–19–56, Cl. 214—11.

Freeman, Wilfred A., and R. Slack, to May & Baker Ltd. Isomeric nitroso-1-phenyl pyrazoles. 2,751,395, 6–19–56, Cl. 260—310.

Frevik, Ralph C.: *See*—
Miller, Raymond J., Frevik, and Wilson. 2,750,863.

Frey, Stuart M.: *See*—
Greenshields, Robert O., and Frey. 2,750,820.

Friend, Albert W., to Radio Corp. of America. Electron beam controlling system. 2,751,519, 6–19–56, Cl. 315—13.

Fromson Orban Co., Inc.: *See*—
Guggenberger, Karl. 2,751,342.

Fulford Mfg. Co.: *See*—
England, Theodore L. 2,750,642.

Gaines, Tom, to The Texas Co. Blasting of underground formations. 2,750,884, 6–19–56, Cl. 102—20.

Gant, Virgil A., to Northwestern Research Corp. Hair treating composition and method of use for setting. 2,750,947, 6–19–56, Cl. 132—7.

Ganze, Ronald A., to F. B. Pease Co., Inc. Apple celling and slicing machine. 2,750,976, 6–19–56, Cl. 146—40.

Gapstur, John J., to Thompson Products, Inc. Automatic feed device. 2,750,819, 6–19–56, Cl. 78—96.

Garbulo, Carlo. Drying apparatus. 2,750,682, 6–19–56, Cl. 34—225.

Garden, Joseph: *See*—
Jefferson, Sidney, and Garden. 2,751,534.

Gardner, Frederick H.: *See*—
Soergel, David G., and Gardner. 2,751,576.

Garmager, Curt H., to Ford Motor Co. Hydraulic control system for tractors. 2,750,862, 6–19–56, Cl. 97—46.07.

Gary, James H., to The Standard Oil Co. Fluid mixing device for thermal diffusion apparatus. 2,751,082, 6–19–56, Cl. 210—52.5.

Gaskell, Walter L., to King-Seeley Corp. Gauge for indicating line of cut of power driven tool. 2,750,970, 6–19–56, Cl. 143—168.

Gates Rubber Co., The: *See*—
Russell, Roy W., and Steckel. 2,750,986.

Gaylord, James K., and I. R. Green, to Gaylord Products, Inc. Adjustable speed responsive switch. 2,751,452, 6–19–56, Cl. 200—80.

Gaylord, James K., and P. T. Hahn, to Gaylord Products, Inc. Resiliently biased rotary speed-responsive switch. 2,751,453, 6–19–56, Cl. 200—80.

Gaylord, James K., and P. T. Hahn, to Gaylord Products, Inc. Magnetic controlled rotary speed responsive switch. 2,751,454, 6–19–56, Cl. 200—80.

Gaylord Products, Inc.: *See*—
Gaylord, James K., and Green. 2,751,452.
Gaylord, James K., and Hahn. 2,751,453.
Gaylord, James K., and Hahn. 2,751,454.

Gear Grinding Machine Co., The: *See*—
Brady, Samuel G. 2,750,718.

Geese, Charles F., to Steel Dot Corp. Lithographic plate process. 2,750,881, 6–19–56, Cl. 101—149.2.

Geigy, J. R., A. G.: *See*—
Schindler, Walter, and Häfliger. 2,751,393.

General Bronze Corp.: *See*—
Hauck, Theodore. 2,750,636.

General Clay Products Co., The: *See*—
Reidenbach, Oscar V. 2,750,646.

General Electric Co.: *See*—
Bradstock, Robert B., and Hickin. 2,751,451.
Burton, Lester W. 2,751,528.
Camilli, Guglielmo, Kierstead, Vandergrift, and Russ. 2,751,562.
Coyne, Gerard G. 2,750,762.
Daniel, Marvin P. 2,750,923.

General Electric Co.: *See*—Continued.
Du Hamell, Daniel L., Jr. 2,750,782.
Ellenberger, Francis R. 2,751,152.
Feiertag, Karl M. 2,751,455.
Finlayson, Frank E. 2,750,692.
Harle, Harold P. 2,750,759.
Herrman, Howard E., and Grimshaw. 2,751,197.
Kirkpatrick, George M. 2,751,555.
Spencer, Richard O. 2,750,694.
Swenson, Alfred G. 2,750,695.
Tangeman, William H. 2,750,693.
Vallorani, Ben J., and McConnell. 2,751,487.
West, Harry R., and Reese. 2,751,511.
Wightman, Lawrance W. 2,751,265.
Wood, William H. 2,751,264.

General Mills, Inc.: *See*—
Franklin, Edmond G. 2,751,463.

General Motors Corp.: *See*—
Adams, Daniel M. 2,751,256.
Alexander, Donald F. 2,750,755.
Bowers, Roy L., and Gretzinger. 2,751,085.
Brown, William E., Decker, and Landes. 2,751,468.
Canter, James A. 2,750,756.
Eder, Virgil K. 2,750,817.
Evans, Jesse L. 2,751,486.
Hanysz, Eugene A., and Weller. 2,750,791.
Helsley, Charles W., Jr., Kutsche, and Orent. 2,750,953.
Kaufman, Daniel L. 2,750,760.
Olcott, James D. 2,751,145.
Priestman, Bewley D. 2,751,242.
Purchas, William J., Jr., and Orent. 2,751,253.
Romig, Robert G. 2,750,866.
Schwarz, Bertram A. 2,751,503.
Seward, Paul H. 2,751,537.
Short, Brooks H., and Shaw. 2,751,464.
Smart, Clarence F. 2,751,341.
Snyder, Kenneth E. 2,751,182.
Torley, Frederick G., and de Beaubien. 2,751,469.
Whyte, Ronal H. 2,750,779.
Wurtz, Clifford H. 2,751,147.

General Tire and Rubber Co., The: *See*—
Te Grotenhuis, Theodore A. 2,751,369.

Genesee Research Corp.: *See*—
White, Chester M., and Sawyer. 2,751,356.

Geraete, Wolf: *See*—
Voortmann, Heinrich. 2,751,192.

Geschickter Fund for Medical Research, Inc.: *See*—
Grogan, Charles H., and Rice. 2,751,392.

Getz, Delmond L., and G. E. Ridgway, to Kelsey-Hayes Wheel Co. Filler cap assembly. 2,751,108, 6–19–56, Cl. 220—55.

Giacoletto, Lawrence J., to Radio Corp. of America. Oscillator. 2,751,496, 6–19–56, Cl. 250—36.

Giargiari, Amando: *See*—
Wierman, Clyde H. 2,750,685.

Gibbs, Norman E.: *See*—
De Turk, John E., MacNeill, and Gibbs. 2,751,440.

Gibson Refrigerator Co.: *See*—
Schrader, Milford J. 2,751,106.

Giddings & Lewis Machine Tool Co.: *See*—
Renier, William S. 2,750,628.

Gilbert, Alfred J., Jr.: *See*—
Keen, Harry J., Papaleck, and Gilbert. 2,751,483.

Gilfillan Bros., Inc.: *See*—
McCann, Joe G., and Stein. 2,751,559.
Tasker, Homer G., and O'Neil. 2,751,587.

Gisner, Bo: *See*—
Edström, Sven E., and Gisner. 2,751,195.

Givens, John H., L. Rose, and J. Wale, to Industrial Rayon Corp. Thread advancing reel having liquid applicator and wiper. 2,750,780, 6–19–56, Cl. 68—19.

Glass, Myron S., to Bell Telephone Laboratories, Inc. Tuning and frequency stabilizing arrangement. 2,751,499, 6–19–56, Cl. 250—36.

Glaxo Laboratories Ltd.: *See*—
Hunt, John S., Walker, and Barton. 2,751,398.

Gleason Works, The: *See*—
Wildhaber, Ernest. 2,750,814.
Wildhaber, Ernest. 2,750,850.

Gleiser, Nelson J., to Screen Equipment Co., Inc. Vibrating screen. 2,751,080, 6–19–56, Cl. 209—367.

Glen, Bruce E.: *See*—
Glen, Enoch R., and B. E. 2,750,699.

Glen, Enoch R., and B. E. Graining tool. 2,750,699, 6–19–56, Cl. 41—5.5.

Glur, Norris W. Coolant control. 2,751,186, 6–19–56, Cl. 251—294.

Goddin, Clifton S., Jr., and T. Q. Eliot, to Stanolind Oil and Gas Co. Process for separation of acetone and methanol from complex mixtures. 2,751,337, 6–19–56, Cl. 202—39.5.

Golay, Marcel J. E. Spectrometric method and apparatus for determining radiation ratios. 2,750,834, 6–19–56, Cl. 88—14.

Gold, Meldon. Adjustable bed cover support. 2,750,604, 6–19–56, Cl. 5—319.

Goldband, Samuel. Hangable display package. 2,751,071, 6–19–56, Cl. 206—45.31.

Golden, Abraham H., to The Yale & Towne Mfg. Co. Removable cylinder for lock. 2,750,785, 6–19–56, Cl. 70—224.

Gomersall, John R., to McGraw Electric Co. Steam iron. 2,750,690, 6–19–56, Cl. 38—77.

Goodman, George F., Jr. Variable speed adjustable power feed. 2,751,009, 6–19–56, Cl. 203—260.

Gornowski, Edward J., and W. C. Rich, Jr., to Esso Research and Engineering Co. Fluid hydroforming of hydrocarbons with catalyst regeneration. 2,751,332, 6–19–56, Cl. 196—50.

Gorter, Evert W., to Hartford National Bank and Trust Co., trustee. Magnetic material. 2,751,353, 6–19–56, Cl. 252—62.5.

Gottschall, Herbert A., to M. A. Coler. Electric transducer. 2,751,475, 6–19–56, Cl. 201—62.

Gourdon, Robert, to Societe Anonyme dite: Centre d'Etudes M. B. A. (Mecanique Ballistique, Armement). Portable indicating holders and settable indicators therefor. 2,751,090, 6–19–56, Cl. 214—11.

Gourdon, Robert, to Societe Anonyme dite: Centre d'Etudes M. B. A. (Mecanique Ballistique, Armement). Coding, decoding, and code sensing mechanisms for sorting apparatus. 2,751,092, 6–19–56, Cl. 214—11.

Grabow, Paul W. Wing assembly for road graders. 2,750,688, 6–19–56, Cl. 37—155.

Grady, Charles B., Jr., to The W. L. Maxson Corp. Frequency error sensing means. 2,751,495, 6–19–56, Cl. 250—27.

Graham, William R., Jr., G. O. Kohler, and C. G. Blauw, to The Quaker Oats Co. Method of activating the nutrient constituents of dehydrated leafy vegetation. 2,751,302, 6–19–56, Cl. 99—2.

Graumann, Theodore R. Muffler flange splitting tool. 2,750,665, 6–19–56, Cl. 30—91.

Graves, Roy R.: *See*—
Kuhles, Edward K., and Graves. 2,751,123.

Graves-Stambaugh Corp., The: *See*—
Kuhles, Edward K., and Graves. 2,751,123.

Gray, Alvin N., to Western Electric Co., Inc. Apparatus for working and advancing a plastic material. 2,750,627, 6–19–56, Cl. 18—13.

Gray, John W., to the United States of America as represented by the Secretary of the Navy. Control circuit. 2,751,494, 6–19–56, Cl. 250—27.

Gray Tool Co.: *See*—
Watts, John D., and Pierce. 2,751,235.

Greaves, Herman B. Liquid dispensing apparatus. 2,751,114, 6–19–56, Cl. 222—70.

Green, Irving R.: *See*—
Gaylord, James K., and Green. 2,751,452.

Greene, Ralph E.: *See*—
Kienberger, Charles A., Greene, Flanders, and Flynn. 2,751,344.

Greenshields, Robert O., and S. M. Frey, to The Budd Co. Method for roll-forging an annular disk. 2,750,820, 6–19–56, Cl. 80—60.

Gretzinger, John R.: *See*—
Bowers, Roy L., and Gretzinger. 2,751,085.

Grieg, Donald D., and H. F. Engelmann, to International Telephone and Telegraph Corp. Radio frequency filter. 2,751,558, 6–19–56, Cl. 333—73.

Grieve, George T. W.: *See*—
Latin, Aubrey, Grieve, and Conning. 2,751,077.

Grimshaw, Charles S.: *See*—
Herrman, Howard E., and Grimshaw. 2,751,197.

Griswold, Owen H. Angular transmission for shafts. 2,750,766, 6–19–56, Cl. 64—6.

Grogan, Charles H., and L. M. Rice, to Geschickter Fund for Medical Research, Inc. Tertiary amine derivatives of N- and O-saccharin. 2,751,392, 6–19–56, Cl. 260—301.

Gross, Arthur G., to Douglas Aircraft Co., Inc. Polarizer means for eliminating double images in gunsights. 2,750,833, 6–19–56, Cl. 88—2.3.

Grover, Donald P., to the United States of America as represented by the Secretary of the Army. Retractor. 2,750,846, 6–19–56, Cl. 89—33.

Grow, Harlow B. Aeronautical toy. 2,750,711, 6–19–56, Cl. 46—74.

Guggenberger, Karl, to Fromson Orban Co., Inc. Polishing of aluminum and aluminum base alloys. 2,751,342, 6–19–56, Cl. 204—140.5.

Guillet, James E.: *See*—
Coover, Harry W., Jr., Guillet, and Martin. 2,751,277.

Gunderson, Charles F. Ripple compensator. 2,751,548, 6–19–56, Cl. 323—22.

Gutehoffnungshütte Oberhausen Aktiengesellschaft: *See*—
Meyer, Fritz, and Nicolaus. 2,751,157.

Guthrie, John D.: *See*—
Reeves, Wilson A., Corley, and Guthrie. 2,751,278.

Haardt, Heinz: *See*—
Federn, Klaus, Ohly, and Haardt. 2,751,262.

Habicht, Ernst: *See*—
Martin, Henry, and Habicht. 2,751,382.

Hacklander, Hans, to The Singer Mfg. Co. Sewing machine balancing. 2,750,906, 6–19–56, Cl. 112—220.

Haddox, Roy, Jr., to The Jeffrey Mfg. Co. Vibratory conveyer with improved starting apparatus. 2,751,068, 6–19–56, Cl. 198—220.

Hafekost, Frederick, to Steel Slides, Inc. Extension table and extension arm therefor. 2,751,269, 6–19–56, Cl. 311—75.

Häfliger, Franz: *See*—
Schindler, Walter, and Häfliger. 2,751,393.

Haggart, John C., Jr. Lock-nut having fastening zone and columnar supported locking zone. 2,750,980, 6–19–56, Cl. 151—21.

Hahn, Paul T.: *See*—
Gaylord, James K., and Hahn. 2,751,453.
Gaylord, James K., and Hahn. 2,751,454.

Hajdu, Stephen: *See*—
Szent-Gyorgyi, Albert, and Hajdu. 2,751,326.

Hall, Clayton R.: *See*—
Boxell, Samuel E., Richter, and R. E. and C. R. Hall, and Dane. 2,750,815.

Hall, Frederick W.: *See*—
Watton, Leonard H. N., Brown, and Hall. 2,751,224.

Hall, Robert E.: *See*—
Boxell, Samuel E., Richter, R. E. and C. R. Hall, and Dane. 2,750,815.

Hall Telephone Accessories Ltd.: *See*—
Watton, Leonard H. N., Brown, and Hall. 2,751,224.

Haller, John, to Allied Products Corp. Process of making perforated powdered metal article. 2,751,293, 6–19–56, Cl. 75—214.

Hallock, Edward C. Tie rod system for molds for concrete columns, walls, and the like. 2,750,648, 6–19–56, Cl. 25—131.

Haloid Co., The: *See*—
Walkup, Lewis E., Copley, and Beckdahl. 2,750,922.

Hammond, George, Jr., to Armstrong Cork Co. Apparatus for producing crown closure. 2,750,910, 6–19–56, Cl. 113—42.

Handfield, Léopold. Ejector. 2,750,708, 6–19–56, Cl. 43—147.

Hanington, Charles A. Heat indicator for pot handles. 2,750,916, 6–19–56, Cl. 116—102.

Hanken, George H.: *See*—
Jungjohann, Vernon H., Hanken, and Robinson. 2,750,810.

Hanly, Fred J., to California Research Corp. Filters coated with thickened oils. 2,751,039, 6–19–56, Cl. 183—44.

Hanly, Fred J., to California Research Corp. Filters coated with polyamide-thickened oils. 2,751,040, 6–19–56, Cl. 183—44.

Hansen, George E., F. D. Cotterman, and E. P. De Craene, to Crane Co. Valve. 2,750,960, 6–19–56, Cl. 137—609.

Hanson, Walter J., to Pitney-Bowes, Inc. Folding machine of the buckle chute type. 2,751,221, 6–19–56, Cl. 270—68.

Hanysz, Eugene A., and E. F. Weller, Jr., to General Motors Corp. Thermoelectric instrument for testing materials. 2,750,791, 6–19–56, Cl. 73—15.

Hanze, Arthur R., and R. H. Levin, to The Upjohn Co. 4-chloropregnane-17α,21-diol-3,11,20-trione and 21-esters thereof. 2,751,401, 6–19–56, Cl. 260—397.45.

Happe, Melvin J.: *See*—
Skromme, Lawrence H., and Happe. 2,750,729.

Hardenberg, Jan J. C.: *See*—
Boldingh, Willem H., Hardenberg, Oosterkamp, and Verhoeff. 2,751,504.

Hargett, Huston, to Commercial Display Corp. Adjustable partition clip for trays and shelving. 2,751,088, 6–19–56, Cl. 211—55.

Hargrove, Atwood H., to Bendix Aviation Corp. Noise squelch system. 2,751,493, 6–19–56, Cl. 250—20.

Harle, Harold P., to General Electric Co. Sloping baffle for a refrigerator. 2,750,759, 6–19–56, Cl. 62—103.

Harris, Joseph. Means for lubricating machinery. 2,751,044, 6–19–56, Cl. 184—6.

Harris Mfg. Co.: *See*—
Bailey, Clifford D. 2,750,728.

Harrison, John F., to The Buffalo-Springfield Roller Co. Trench rollers. 2,750,751, 6–19–56, Cl. 61—63.

Hart, Elmer J. Screw driver having a disc shaped bit. 2,750,974, 6–19–56, Cl. 145—50.

Hart, Robert W. Signal comparator. 2,751,572, 6–19–56, Cl. 340—6.

Hartford National Bank and Trust Co.: *See*—
Anderson, Charles H. J., and van Werd. 2,751,569.
Blok, Lourens. 2,751,502.
Blok, Lourens, and van Iperen. 2,751,481.
Boldingh, Willem H., Hardenberg, Oosterkamp, and Verhoeff. 2,751,504.
Dorgelo, Eduard G. 2,751,521.
Gorter, Evert W. 2,751,353.
Hekelaar, Maarten. 2,751,525.
Köhler, Jacob W. L., and Schalkwijk. 2,750,765.
Peper, Jan. 2,751,515.
Speekman, Bernardus W. 2,751,318.
Went, Jan J., and Vermeulen. 2,750,658.

Hartig, Donald H. Fish lure. 2,750,702, 6–19–56, Cl. 43—42.17.

Hartmann & Braun Aktiengesellschaft: *See*—
Endlich, Friedrich, and Hufbauer. 2,751,324.

Harvey, Earle M., to the United States of America as represented by the Secretary of the Army. Clamp assembly for a trigger housing. 2,750,700, 6–19–56, Cl. 42—75.

Harvey, Earle M., to the United States of America as represented by the Secretary of the Army. Gas relief valve for firearms. 2,750,849, 6–19–56, Cl. 89—193.

Hasche, Rudolph L., to Koppers Co., Inc. Process of producing acetylene by pyrolytic reaction from a suitable hydrocarbon. 2,751,424, 6–19–56, Cl. 260—679.

Hasselder, Willem, to Stamicarbon N. V. Process for effecting double conversion between two solutions of ionogenic substances by using ion exchangers. 2,751,280, 6–19–56, Cl. 23—90.

Hathaway, Jarrett L., and R. E. Lafferty, to Radio Corp. of America. Artificial gun shot effects. 2,751,585, 6–19–56, Cl. 340—384.

Hauck, Theodore, to General Bronze Corp. Sash construction. 2,750,636, 6–19–56, Cl. 20—52.

Haverstick, Harvey L. and H. C. Hydraulically operated load handling system for trucks. 2,751,095, 6–19–56, Cl. 214—75.

Haverstick, Henry C.: *See*—
Haverstick, Harvey L. and H. C. 2,751,095.

Heftler, Maurice B. Coasting economizers. 2,751,201, 6–19–56, Cl. 261—41.

Heimann, Joseph B., to Kearfott Co., Inc. Potentiometer for vertical reference system. 2,751,472, 6–19–56, Cl. 201—48.

Heimos, Milton J.: *See*—
Williams, Russell J., and Heimos. 2,751,142.

Heinemann, Heinz, to Houdry Process Corp. Reforming catalyst and process. 2,751,333, 6–19–56, Cl. 196—50.

Hekelaar, Maarten, to Hartford National Bank and Trust Co., trustee. Permanent magnet. 2,751,525, 6–19–56, Cl. 317—201.

Helsley, Charles W., Jr., S. F. Kutsche, and E. Orent, to General Motors Corp. Fluid flow proportioner. 2,750,953, 6–19–56, Cl. 137—118.

Henning, George E., to Western Electric Co., Inc. Apparatus for plasticizing and straining organic plastic compounds. 2,750,626, 6–19–56, Cl. 18—13.

Herbert, John M., and P. Best, to The Plessey Co. Ltd. Method of applying a metal electrode to a high permittivity ceramic. 2,750,657, 6–19–56, Cl. 29—155.5.

Hercules Powder Co.: *See*—
Enos, Herman I., Jr. 2,751,417.
Enos, Herman I., Jr. 2,751,418.
Phillips, Herman G., Jr. 2,751,316.

Herrick, William W., to Pitney-Bowes, Inc. Weighing scale. 2,751,214, 6–19–56, Cl. 265—68.

Herrman, Howard E., and C. S. Grimshaw, to General Electric Co. Refrigerator humidifier. 2,751,197, 6–19–56, Cl. 257—3.

Hersey Mfg. Co., The: *See*—
Hirst, Charles D. 2,750,797.

Hertrich, Joseph, to The Western States Machine Co. Centrifugal charging apparatus. 2,751,083, 6–19–56, Cl. 210—63.

Hickin, Wyndham R.: *See*—
Bradstock, Robert B., and Hickin. 2,751,451.

Hildebrandt, Henry: *See*—
Fredriksen, Clyde R. 2,751,173.

Hill, Frederick B., Jr., and R. A. Schulze, to E. I. du Pont de Nemours & Co. Process for purification of polytetramethyleneether. 2,751,419, 6–19–56, Cl. 260—615.

Hill, Philip: *See*—
Van Strien, Richard E., Towle, and Hill. 2,751,361.

Hill, Philip, and R. E. Van Strien, to Standard Oil Co. Gelling hydrocarbon liquids with liquid gelling agents. 2,751,284, 6–19–56, Cl. 44—7.

Hill, Philip, R. E. Van Strien, and P. H. Towle, to Standard Oil Co. Basic aluminum alkanoate gelling agents. 2,751,359, 6–19–56, Cl. 252—316.

Hilsinger, Arthur R., to Sadler Bros., Inc. Tool for removing damaged screws. 2,750,821, 6–19–56, Cl. 81—3.5.

Hirst, Charles D., to The Hersey Mfg. Co. Proportional water meter. 2,750,797, 6–19–56, Cl. 73—202.

Hjortberg, Ingeman. Railway track with electric toy trains, tramcars or similar vehicles. 2,750,898, 6–19–56, Cl. 104—148.

Hobbs, Robert W. Gear box unit. 2,750,806, 6–19–56, Cl. 74—417.

Hoblitzell, Alfred H.: *See*—
Jones, Jahugh. 2,751,175.

Hoeppner, Conrad H., to Raytheon Mfg. Co. Signal translation systems. 2,751,437, 6–19–56, Cl. 179—100.2.

Hoeselbarth, Frank W. E., to C. H. Masland & Sons. Weaving with hook engagement of selected pile ends. 2,750,964, 6–19–56, Cl. 139—39.

Hoeselbarth, Frank W. E., to C. H. Masland & Sons. Terry pile weave. 2,750,969, 6–19–56, Cl. 139—406.

Hoffman, Herman S. Anti-skid device. 2,750,981, 6–19–56, Cl. 152—236.

Hogg, John A.: *See*—
Nathan, Alan H., and Hogg. 2,751,397.

Hoglan, Forest A., and P. A. Pugh, Jr., to International Minerals & Chemical Corp. Treatment of protein hydrolysates. 2,751,408, 6–19–56, Cl. 260—519.

Hohmann, Joseph W. Frozen food cutter. 2,750,669, 6–19–56, Cl. 30—355.

Hollinger, Max. Undergarment. 2,750,595, 6–19–56, Cl. 2—113.

Hollyday, James H., and E. D. Nolt, to Sperry Rand Corp. Baler crank construction. 2,750,811, 6–19–56, Cl. 74—595.

Holm, Ralph L.: *See*—
Martin, Donald W., and Holm. 2,750,644.

Holzwarth, Hans: *See*—
Schilling, August H., and Holzwarth. 2,750,739.

Holzwarth, Hans, and A. H. Schilling, to Schilling Estate Co. Explosion plant for generating working gases and process for operating same. 2,750,736, 6–19–56, Cl. 60—39.04.

Holzwarth, Hans, to Schilling Estate Co. Arrangement of explosion chambers and turbine in a plant for generating high pressure gases. 2,750,740, 6–19–56, Cl. 60—39.16.

Hood, Glay M., and P. R. Crookshank, to Eastman Kodak Co. Photographic emulsion layer containing a 3-pyrazolidone. 2,751,297, 6–19–56, Cl. 95—7.

Hoover Co., The: *See*—
Acheson, Louis K. 2,751,038.
Cropley, William D. 2,751,041.
Dunn, Harold G. 2,750,656.
Kaufman, George E. 2,750,618.
Krammes, Beverly B. 2,750,696.
White, Adam W. 2,750,784.

Hopkins, George H.: *See*—
Jacobs, Clifton N., and Hopkins. 2,751,320.

Hopper, Robert J., and N. Lamont, to Del Mar Engineering Laboratories, Inc. Reeling apparatus for controlling a tow cable from an aircraft. 2,751,167, 6–19–56, Cl. 244—1.

Houdaille Industries, Inc. *See*—
Rapp, George M. 2,751,198.

Houdry, Eugene J., and W. M. Bowen, III, to Oxy-Catalyst, Inc. Method for treating materials. 2,750,680, 6–19–56, Cl. 34—35.

Houdry Process Corp.: *See*—
Heinemann, Heinz. 2,751,333.

Houle, Leon E. Laundry tub stopper. 2,750,601, 6–19–56, Cl. 4—295.

House, Bryan E.: *See*—
Super, Ralph K., and House. 2,751,048.

Houston Engineers, Inc.: *See*—
Trahan, Gus H. 2,751,010.

Howard, Stanley R., to Pneumatic Scale Corp., Ltd. Packaging and check weighing machine. 2,751,180, 6–19–56, Cl. 249—17.

Howell, Helena B. Occupant propelled roundabout. 2,751,225, 6–19–56, Cl. 272—33.

Howell, Russell B., Jr., to Burns Aero Seat Co., Inc. Chair back adjusting mechanism. 2,750,994, 6–19–56, Cl. 155—161.

Hove, Theodore E., and V. S. Robinson, to Mohawk Cabinet Co., Inc. Automatic defrosting refrigerator cabinet. 2,750,758, 6–19–56, Cl. 62—4.

Hubbard, Addison W.: *See*—
Nelson, Joseph F., Banes, and Hubbard. 2,751,422.

Huebner, Dennis W., to Imperial Chemical Industries Ltd. Hydration of olefines using alternating catalyst and scrubbing zones. 2,751,420, 6–19–56, Cl. 260—641.

Hufbauer, Walter: *See*—
Endlich, Friedrich, and Hufbauer. 2,751,324.

Huffman, John W., to Pace, Inc. Switch mechanism. 2,751,466, 6–19–56, Cl. 200—139.

Huffman Mfg. Co., The: *See*—
Locke, Loyal V. 2,751,129.

Hume, Gertrude B., to Buxton, Inc. Container for coins. 2,750,978, 6–19–56, Cl. 150—37.

Hume, Horace D.: *See*—
Boucard, Victor, and Hume. 2,750,726.

Hunt, John S., T. Walker, and D. H. R. Barton, to Glaxo Laboratories Ltd. Process for monoenolesterification at the 20-position of 11,20-allopregnanediones. 2,751,398, 6–19–56, Cl. 260—397.45.

Hutzelman, Howard E., to Corry-Jamestown Mfg. Corp. Drawer slides. 2,751,272, 6–19–56, Cl. 312—341.

Imbert, Roger J.: *See*—
Anxionnaz, René, and Imbert. 2,750,734.

Imperial Chemical Industries Ltd.: *See*—
Brown, Harold F., and Phillips. 2,750,720.
Huebner, Denis W. 2,751,420.

Independent Nail and Packing Co. Inc., The: *See*—
Stone, Herman J. 2,750,591.

Industrial Development Engineering Associates, Inc.: *See*—
Koch, Richard C. 2,751,444.

Industrial Radiant Heat Corp.: *See*—
Wandelt, Richard F. 2,750,719.

Industrial Rayon Corp.: *See*—
Givens, John H., Rose, and Wale. 2,750,780.

Ingraham, E., Co., The: *See*—
Kobilhagen, Walter. 2,750,730.

Inman, Byron, N., to E. I. du Pont de Nemours and Co. Method for vaporizing hydrogen peroxide solutions. 2,751,339, 6–19–56, Cl. 202—63.

Inman, Paul R. and S. G. Velonis. Dish washer. 2,750,950, 6–19–56, Cl. 134—102.

International Business Machines Corp.: *See*—
Cunningham, James M. 2,751,008.

International Equipment Co.: *See*—
Jones, Alan R. 2,750,671.

International Minerals & Chemical Corp.: *See*—
Hogland, Forest A., and Pugh. 2,751,408.

International Telephone and Telegraph Corp.: *See*—
Grieg, Donald D., and Engelmann. 2,751,558.

Iowa State College Research Foundation, Inc.: *See*—
Burroughs, Wise. 2,751,303.

Ipatieff, Vladimir N., and H. Pines, to Universal Oil Products Co. Oxidative condensation of aralkyl compounds. 2,751,406, 6–19–56, Cl. 260—465.

Ireland, Murray, to McGraw Electric Co. Latch construction for toaster. 2,750,872, 6–19–56, Cl. 99—329.

Ireland, Murray, to McGraw Electric Co. Interlocked controls for cooking apparatus. 2,750,874, 6–19–56, Cl. 99—329.

Isborn, Carl L., to The National Cash Register Co. Visual readout device. 2,751,584, 6–19–56, Cl. 340—380.

Jackson, Clarence E., and A. E. Shrubsall, to Union Carbide and Carbon Corp. Welding composition. 2,751,478, 6–19–56, Cl. 219—10.

Jackson, John D.: *See*—
Coates, Cecil C., and Jackson. 2,750,624.

Jacob, Robert M., and J. G. Robert, to Parke, Davis & Co. Dichloracetamidonitrophenyl-hydroxypropanol. 2,751,413, 6–19–56, Cl. 260—562.

Jacobi, Edward N., to Briggs & Stratton Corp. Lock mechanism. 2,750,788, 6–19–56, Cl. 70—379.

Jacobs, Clifton N., and G. H. Hopkins, to Taylor Fibre Co. Method of continuous production of rods, tubes, and the like. 2,751,320, 6–19–56, Cl. 154—91.

Jacobs, Joseph H.: *See*—
Jacobs, Marcellus L. and J. H. 2,751,575.

Jacobs, Marcellus L. and J. H. Emergency signal system for motor vehicles. 2,751,575, 6–19–56, Cl. 340—72.

Jacobson, Sidney. Fabric protecting iron shoe. 2,750,697, 6–19–56, Cl. 38—97.

Jakes Foundry Co., The: *See*—
Racker, Frederick C. 2,751,233.

James, Thomas H., and L. W. Tregillus, to Eastman Kodak Co. Photographic solvent transfer reproduction. 2,751,300, 6–19–56, Cl. 95—88.

Janiszewski, Kasimir. Replaceable leader pin bushing. 2,751,260, 6–19–56, Cl. 308—4.

Jansen, Bernhard. Adjustable power factor correction system. 2,751,551, 6–19–56, Cl. 323—110.

Jaseph, Lawrence F., to Dover Corp. Adjustable loading dock. 2,750,609, 6–19–56, Cl. 14—71.

Jeffers, Walter M., to Crouse-Hinds Co. Traffic signal controller. 2,751,574, 6–19–56, Cl. 340—37.

Jefferson Lake Sulphur Co.: *See*—
Miller, Ernest B. 2,751,033.

Jefferson, Sidney, and J. Garden. Inductively effected remote control for plural electric motors. 2,751,534, 6–19–56, Cl. 318—16.

Jeffrey Mfg. Co., The: *See*—
Haddox, Roy, Jr. 2,751,068.
Whitney, Paul V. 2,751,094.

Jewett, Charles S., to Curtiss-Wright Corp. Internally and externally threaded bushing having internal and external locking means. 2,750,979, 6–19–56, Cl. 151—21.

Johannesson, Nils-Olof, to Telefonaktiebolaget L M Ericsson. Fault indicator for plural connected devices. 2,751,578, 6–19–56, Cl. 340—253.

Johnson, Andrew G.: *See*—
Baldwin, John D., Jr., St. Clair, and Johnson. 2,751,181.
Johnson, David A., and J. C. Sheehan, to Bristol Laboratories Inc. Benzylpenicillin thio acid. 2,751,378, 6–19–56, Cl. 260—239.1.
Johnson, Edwin H., to Fitch Textile Co., Inc. Machine for drying tubular fabric and the like. 2,750,649, 6–19–56, Cl. 26—56.
Johnson Fare Box Co.: *See*—
Kulo, Thomas E., and Rogier. 2,750,949.
Johnson, Martin H., to Stoughton Cab & Body Co. Side loader for vehicles. 2,751,099, 6–19–56, Cl. 214—83.24.
Johnson, Samuel J., to Clopay Corp. Process for manufacturing ribbed extruded sheet material. 2,750,631, 6–19–56, Cl. 18–57.
Johnson, Thomas B., to H. H. Robertson Co. Portable power-driven cutting tool. 2,750,667, 6–19–56, Cl. 30—228.
Johnson, Thomas W., to Bendix Aviation Corp. Turbine driven pump means. 2,750,892, 6–19–56, Cl. 103—87.
Johnston, Edgar C., Jr.: *See*—
Johnston, Mordica O. 2,751,011.
Johnston, Mordica O. 2,751,020.
Johnston, Gordon C.: *See*—
Johnston, Mordica O. 2,751,011.
Johnston, Mordica O. 2,751,020.
Johnston, Henry E., to Philco Corp. Slip ring device for electric cable reel. 2,751,565, 6–19–56, Cl. 339—5.
Johnston, Joseph G.: *See*—
Johnston, Mordica O. 2,751,011.
Johnston, Mordica O. 2,751,020.
Johnston, Leith, and E. C. Coulombe, Jr., to Automatic Electric Laboratories, Inc. Ticket issuing machine. 2,750,880, 6–19–56, Cl. 101—66.
Johnston, Madge: *See*—
Johnston, Mordica O. 2,751,011.
Johnston, Mordica O. 2,751,020.
Johnston, Mordica O., ¼ to M. Johnston, ½ to E. C. Johnston, Jr., ½ to G. C. Johnston, ½ to J. G. Johnston, ⅛ to M. O. Johnston, Jr., and ⅛ to W. C. Johnston. Side wall testing apparatus. 2,751,011, 6–19–56, Cl. 166—120.
Johnston, Mordica O., and H. C. Skipper, to Johnston Testers, Inc. Well testing tool. 2,751,014, 6–19–56, Cl. 166—145.
Johnston, Mordica O., ¼ to M. Johnston, ½ to E. C. Johnston, Jr., ½ to G. C. Johnston, ½ to J. G. Johnston, ⅛ to M. O. Johnston, Jr., and ⅛ to W. C. Johnston. Valve for use with side wall testing apparatus. 2,751,020, 6–19–56, Cl. 166—219.
Johnston, Mordica O., Jr.: *See*—
Johnston, Mordica O. 2,751,011.
Johnston, Mordica O. 2,751,020.
Johnston Testers, Inc.: *See*—
Johnston, Mordica O., and Skipper. 2,751,014.
Moosman, Jack A. 2,751,024.
Johnston, Warren C.: *See*—
Johnston, Mordica O. 2,751,011.
Johnston, Mordica O. 2,751,020.
Jones, Alan R., to International Equipment Co. Microhematocrit and sedimentation reader. 2,750,671, 6–19–56, Cl. 33—1.
Jones Cyril C.: *See*—
Best, Denis, and Jones. 2,750,952.
Jones, Harry W.: *See*—
Dempster, George R., and Jones. 2,751,100.
Jones, Ira M.: *See*—
Collat, Edgar. 2,751,155.
Jones, Jahugh, 50% to A. H. Hoblitzell. Pipe hanger clamp. 2,751,175, 6–19–56, Cl. 248—72.
Jones, James T. Dispensing machine for soft or semi-fluid materials. 2,751,124, 6–19–56, Cl. 222—179.
Jones, Jean E., to Eastman Kodak Co. Supersensitization of photographic emulsions with benzimidazolocyanine dyes. 2,751,298, 6–19–56, Cl. 95—7.
Jones, Jerome L. Shutter for television picture tube. 2,751,583, 6–19–56, Cl. 340—367.
Joy, Joseph F., to Joy Mfg. Co. Cutting device arrangement for guided reciprocation parallel to a face conveyor. 2,751,206, 6–19–56, Cl. 262—9.
Joy Mfg. Co.: *See*—
Barrett, Arthur L. 2,751,207.
Barrett, Arthur L. 2,751,209.
Joy, Joseph F. 2,751,206.
Russell, John D. 2,751,208.
Sibley, John R. 2,751,204.
Jungjohann, Vernon H., G. H. Hanken, and H. T. Robinson, to Eastman Kodak Co. Interlock control system for motor and transmission of projector. 2,750,810, 6–19–56, Cl. 74—472.
K and Z Machinery Corp.: *See*—
Klein, Harry, and Zimmer. 2,751,059.
Kahn, David, to David Kahn, Inc. Fountain pens. 2,750,927, 6–19–56, Cl. 120—52.
Kahn, David, Inc.: *See*—
Kahn, David. 2,750,927.
Kaloyereas, Socrates A., to Board of Supervisors of Louisiana State University and Agricultural and Mechanical College. Process for preserving rough rice. 2,751,305, 6–19–56, Cl. 99—153.
Kaufman, Daniel L., to General Motors Corp. Refrigerating apparatus. 2,750,760, 6–19–56, Cl. 62—117.1.
Kaufman, George E., to The Hoover Co. Combined handle and switch control for suction cleaners. 2,750,618, 6–19–56, Cl. 15—410.
Kayuha, Joseph, Jr. Hydraulic brake system operated flashing signal. 2,751,458, 6–19–56, Cl. 200—83.
Kearfott Co., Inc.: *See*—
Heimann, Joseph B. 2,751,472.
Reichel, Wladimir A., and Emerson. 2,751,474.
Keen, Harry J., R. J. Papaleck, and A. J. Gilbert, Jr., to Lavoie Laboratories, Inc. Constant temperature oven. 2,751,483, 6–19–56, Cl. 219—19.
Keil, Harvard L., A. L. Lolli, and E. F. Cavanaugh, to Armour and Co. Method of extracting animal glue. 2,751,377, 6–19–56, Cl. 260—118.
Keil, Joseph W., to Dow Corning Corp. Bonding silicone rubber to solid materials. 2,751,314, 6–19–56, Cl. 117—72.
Kellogg, M. W., Co., The: *See*—
Barnhart, William S., and Mantell. 2,751,376.
Mantell, Russell M., and Barnhart. 2,751,375.
McGrath, Henry G., and Rubin. 2,751,405.
Kelly, Gordon E., to Radio Corp. of America. Television color synchronization. 2,751,430, 6–19–56, Cl. 178—5.4.
Kelsey-Hayes Wheel Co.: *See*—
Getz, Delmond L., and Ridgway. 2,751,108.
Kennedy, Ralph C., to Radio Corp. of America. Color television signalling apparatus. 2,751,431, 6–19–56, Cl. 178—5.4.
Kershaw, Peter L., to Tinsley (Industrial Instruments) Ltd. Optical pyrometers. 2,750,837, 6–19–56, Cl. 88—22.5.
Kessler, Milton. Frictionally engaged slide box. 2,751,135, 6–19–56, Cl. 229—9.
Ketchledge, Raymond W., to Bell Telephone Laboratories, Inc. Distortionless feedback amplifier. 2,751,442, 6–19–56, Cl. 179—171.
Keveney, Leo P. Fishhook extracting device. 2,750,705, 6–19–56, Cl. 43—53.5.
Kienberger, Charles A., R. E. Greene, I. C. Flanders, and A. R. Flynn, to the United States of America as represented by the United States Atomic Energy Commission. Electropolisher. 2,751,344, 6–19–56, Cl. 204—225.
Kierstead, Friend H.: *See*—
Camilli, Guglielmo, Kierstead, Vandergrift, and Russ. 2,751,562.
Kihm, Georges A. Closure cap. 2,751,102, 6–19–56, Cl. 215—46.
Kindseth, Harold V., to Bemis Bro. Bag Co. Regulator for feeding powdered or granular material. 2,751,115, 6–19–56, Cl. 222—77.
King, Archie P., to Bell Telephone Laboratories, Inc. Apparatus for joining lengths of wave guide or the like. 2,750,912, 6–19–56, Cl. 113—111.
King, Archie P., to Bell Telephone Laboratories, Inc. Waveguide mode discriminators. 2,751,561, 6–19–56, Cl. 333—98.
King, Charles M.: *See*—
Baker, Reuben C., and King. 2,750,958.
King-Seeley Corp.: *See*—
Gaskell, Walter L. 2,750,970.
Sivacek, Emil E. 2,750,873.
Kirchhoff, Raymond T.: *See*—
Aumuller, Edward F., Dwight, and Kirchhoff. 2,751,056.
Kirkpatrick, George M., to General Electric Co. Extended-range phase comparator. 2,751,555, 6–19–56, Cl. 324—89.
Kish Plastic Products, Inc.: *See*—
Kish, Steven P. 2,750,632.
Kish, Steven P., to Kish Plastic Products, Inc. Method of making surface reproduction fixtures. 2,750,632, 6–19–56, Cl. 18—59.
Klein, Harry, and T. W. Zimmer, to K and Z Machinery Corp. Apparatus for grouping conveyed articles. 2,751,059, 6–19–56, Cl. 198—34.
Klein, Norman E., to Deering Milliken Research Corp. Beat-up motion for looms. 2,750,968, 6–19–56, Cl. 139—190.
Klein, Victor G., to Lincoln Engineering Co. Valve mechanism. 2,750,932, 6–19–56, Cl. 121—154.
Kline, Bernard L., and D. P. Roddin to The Western Union Telegraph Co. Transferable marking composition for facsimile transmitting blanks and transmitting blanks. 2,751,310, 6–19–56, Cl. 117—37.
Klugmann, Julius. Adjustable brushes. 2,750,616, 6–19–56, Cl. 15—144.
Knapp-Monarch Co.: *See*—
Visos, Charles D. 2,750,876.
Knecht, Norman, to Minneapolis-Honeywell Regulator Co. Liquid level responsive float suspension. 2,751,178, 6–19–56, Cl. 248—317.
Knight, Hugh T. Lead pencils. 2,750,924, 6–19–56, Cl. 120—19.
Knoll, Werner, and C. H. Biedendieck, to H. Maihak Aktiengesellschaft. Apparatus for measuring variable conditions in bore-holes. 2,750,796, 6–19–56, Cl. 73—152.
Koch, Richard C., to Industrial Development Engineering Associates, Inc. Stabilizer for radio frequency amplifier. 2,751,444, 6–19–56, Cl. 179—171.
Kogel, Wilhelm G., to Aktiebolaget Elektrolux. Absorption refrigeration. 2,750,763, 6–19–56, Cl. 62—119.5.
Kohler, George O.: *See*—
Graham, William R., Jr., Kohler, and Blauw. 2,751,302.
Köhler, Jacob W. L., and W. F. Schalkwijk, to Hartford National Bank and Trust Co., trustee. Cold gas refrigerator. 2,750,765, 6–19–56, Cl. 62—136.
Kohlhagen, Walter, to The E. Ingraham Co. Shock and vibration proof oscillator. 2,750,730, 6–19–56, Cl. 58—116.
Kolka, Alfred J.: *See*—
Closson, Rex D., Kolka, and Ligett. 2,751,426.
Koppers Co., Inc.: *See*—
Donath, Ernest E. 2,751,287.
Hasche, Rudolph L. 2,751,424.
Totzex, Friedrich. 2,751,286.
Korber, Hans: *See*—
Virchaux, Paul, and Korber. 2,750,773.
Korber, Hans. Hydraulic chuck. 2,751,230, 6–19–56, Cl. 279—114.
Korkowski, Eberhard, W. Volt, and G. Schmidt, to Robert Bosch G. m. b. H. Control devices for hydraulic motors. 2,750,743, 6–19–56, Cl. 60—52.
Kornfeld, Edmund C., to Eli Lilly and Co. Substituted benz [CD] indolines. 2,751,396, 6–19–56, Cl. 260—319.

Kossuth, Otto, and R. G. Corrigan, to Detroit Harvester Co. Slidably adjustable cotter pin bending tool. 2,750,822, 6–19–56, Cl. 81—15.
Kraft, El Roy J., to The Dole Valve Co. Valve particularly adapted for beverage dispensers. 2,751,254, 6–19–56, Cl. 299—150.
Krahulec, Fred, and H. A. Rahmel, to A. C. Nielsen Co. Television knob switch. 2,751,449, 6–19–56, Cl. 200—61.85.
Kramcsak, Michael, Jr., to The Bassick Co. Caster. 2,750,619, 6–19–56, Cl. 16—21.
Krammes, Beverly B., to The Hoover Co. Electric flat iron and holder. 2,750,696, 6–19–56, Cl. 38—96.
Kreitchman, Morton A., B. P. Welt, and M. Maslow. Solenoid operated valve structure. 2,750,962, 6–19–56, Cl. 137—625.48.
Kretzschmar, Alfred. Retaining dam provided with a waterproof lining. 2,750,748, 6–19–56, Cl. 61—30.
Krleg, Edward. Hollow concrete core form. 2,750,647, 6–19–56, Cl. 25—131.
Kritser, Shelby M. Combined stake rail clamp and stake anchor. 2,751,248, 6–19–56, Cl. 296—43.
Kubik, John: *See*—
Kubik, Stanley S., and J. 2,750,662.
Kubik, Stanley S., and J. Opener for weakened closure containers. 2,750,662, 6–19–56, Cl. 30—16.
Kuhles, Edward K., and R. R. Graves, to The Graves-Stambaugh Corp. Portable vacuum tank. 2,751,123, 6–19–56, Cl. 222—176.
Kuhn, Georges, to Mefina S. A. Fuses for projectiles. 2,750,889, 6–19–56, Cl. 102—79.
Kuhn, Richard and G. Quadbeck. Preparation of thiolalkylamides. 2,751,409, 6–19–56, Cl. 260—558.
Kuhnel, Alexander H., to the United States of America as represented by the Secretary of the Army. Position control system. 2,751,535, 6–19–56, Cl. 318—19.
Kuljian, Harry A. Thread manufacturing apparatus. 2,750,783, 6–19–56, Cl. 68—205.
Kulo, Thomas E., and C. F. Rogier, to Johnson Fare Box Co. Coin counter. 2,750,949, 6–19–56, Cl. 133—8.
Kuss, Theodore M., and R. D. Russell. Deep water well drilling system. 2,750,750, 6–19–56, Cl. 61—46.5.
Kutsche, Stuart F.: *See*—
Heisley, Charles W., Jr., Kutsche, and Orent. 2,750,953.
Kutzler, Robert J., to Minneapolis-Honeywell Regulator Co. Automatic steering apparatus. 2,751,169, 6–19–56, Cl. 244—7.
Kuykendall, Jack. Flare igniting and discharging device. 2,751,582, 6–19–56, Cl. 340—366.
La Borde, Frank C., to the United States of America as represented by the Secretary of the Army. Extractor spring retainer for a firearm. 2,750,841, 6–19–56, Cl. 89—1.
La Casse, Edward C. Pipe bender with interchangeable pipe receiving members. 2,750,823, 6–19–56, Cl. 81—15.
La Compagnie De Pont-A-Mousson: *See*—
Dunx, Jean. 2,750,639.
Lafferty, Raymond E.: *See*—
Hathaway, Jarrett L., and Lafferty. 2,751,585.
Laird, Alfred W., to Western Electric Co., Inc. Methods of and systems for producing heat-treating gases. 2,751,362, 6–19–56, Cl. 252—373.
Lamm, John, ½ to R. J. Lamm. Trowel and hopper. 2,750,789, 6–19–56, Cl. 72—128.
Lamm, Robert J.: *See*—
Lamm, John. 2,750,789.
Lamont, Neil: *See*—
Hopper, Robert J., and Lamont. 2,751,167.
La Motte, Charles V. B. Water demineralizer. 2,751,081, 6–19–56, Cl. 210—24.
Lancor, Frederick C.: *See*—
Timken, Harold A., Jr., and Lancor. 2,751,448.
Landes Charles W.: *See*—
Brown, William E., Decker, and Landes. 2,751,468.
Landgraber, Fred A., Sr., and J. M. Tolpa, to Tolan Machinery Co., Inc. Extractor. 2,750,871, 6–19–56, Cl. 99—302.
Lane, John R., to United States Steel Corp. Knife-clamping means for rotary shear. 2,751,006, 6–19–56, Cl. 164—66.
Lang, Albert. Hold-down device for frameless window screen construction. 2,751,001, 6–19–56, Cl. 160—328.
Langhein, Walter H. D., to Ingolf Felix Friedrich Emil Pauls. Sewing machine. 2,750,907, 6–19–56, Cl. 112—220.
Lathrop, Elbert C., to the United States of America as represented by the Secretary of Agriculture. Dewatering of pulp. 2,750,855, 6–19–56, Cl. 92—20.
Latin, Aubrey, G. T. W. Grieve, and J. Conning, to The Okonite Co. Extrusion apparatus for sheathing electric cables. 2,751,077, 6–19–56, Cl. 207—4.
Latoszynski, Jerzy A. L.: *See*—
Barrett, John L., Latoszynski, Morris, and Frankel. 2,750,738.
Lauck, John A., to Borg-Warner Corp. Fuel injection system. 2,750,933, 6–19–56, Cl. 123—139.
Laughlin, Myron P. Laterally spaced rollers selectively engageable with an adjacent wheel for forward and reverse vehicle drive. 2,751,028, 6–19–56, Cl. 180—19.
Laurent, Andre J. M. Drinking glass. 2,750,768, 6–19–56, Cl. 65—13.
Laurie, Kenneth S., to John Dalglish & Sons Ltd. Apparatus for maintaining the selvedge of a web of travelling fabric or the like uncurled. 2,750,650, 6–19–56, Cl. 26—57.
Laver, Donald G. Container construction. 2,751,138, 6–19–56, Cl. 229—32.
Lavoie Laboratories, Inc.: *See*—
Brinker, Emil F. 2,751,560.
Keen, Harry J., Papaleck, and Gilbert. 2,751,483.
Lawrence, Ernest O., to Chromatic Television Laboratories, Inc. Polychrome cathode ray tube. 2,751,516, 6–19–56, Cl. 313—92.
Lay, Kenneth S. Foldable chair. 2,750,991, 6–19–56, Cl. 155—148.
Leclerc, Georges, to Societe Du Bouchon Couronne Crown Cork Co. (France). Air tight disc for crown caps. 2,751,101, 6–19–56, Cl. 215—40.
Ledwith, Walter A., to United Aircraft Corp. Blade fastening means. 2,751,189, 6–19–56, Cl. 253—77.
Lee, John W., to Pittsburgh Plate Glass Co. Glass cutter. 2,750,674, 6–19–56, Cl. 33—32.
Lee, Leighton, II, to Pratt & Whitney Co., Inc. Propeller pitch control apparatus. 2,751,026, 6–19–56, Cl. 170—135.72.
Leeds and Northrup Co.: *See*—
Fastie, William G. 2,750,836.
Leeper, Charles K., to United Aircraft Corp. Fuel regulator responsive to combustion chamber pressure. 2,750,741, 6–19–56, Cl. 60—39.28.
Le Foll, Jean: *See*—
Paris, François G., Le Foll, Bertin, and Baraut. 2,750,733.
Leigh, Leonard P. Deicing apparatus for jet engines. 2,750,737, 6–19–56, Cl. 60—39.09.
Leisk, Roland T.: *See*—
Cottrell, Robert B., and Leisk. 2,751,051.
Lenkeit, Willy W.: *See*—
Plitz, Erich. 2,750,771.
Leonard, George H. Time delay fuze for a mine. 2,750,890, 6–19–56, Cl. 102—82.
Leslie, Eugene H., and J. M. Crockin, to Blaw-Knox Co. System for the agglomeration of solvent-extracted fine solid organic particles. 2,751,301, 6–19–56, Cl. 99—2.
Lever Brothers Co.: *See*—
Ditmar, Willem P. A. 2,757,072.
Levin, Robert H.: *See*—
Hanze, Arthur R., and Levin. 2,751,401.
Levy, Abram, Jr. Straight beam adjustable jaw clamp. 2,750,972, 6–19–56, Cl. 144—303.
Levy, Joseph, to Nopco Chemical Co. Process for preparing benzhydryl ethers. 2,751,388, 6–19–56, Cl. 260—294.7.
Lewis, Joseph R. Sales tag marking means. 2,750,857, 6–19–56, Cl. 93—88.
Libbey-Owens-Ford Glass Co.: *See*—
Browne, Charles M. 2,750,637.
Morgan, Willard L. 2,750,832.
Ligett, Waldo B.: *See*—
Closson, Rex D., Kolka, and Ligett. 2,751,426.
Lilly, Eli, and Co.: *See*—
Kornfeld, Edmund C. 2,751,396.
Lincoln Engineering Co.: *See*—
Klein, Victor G. 2,750,932.
Lindquist, Jonas T., to Roberts & Porter, Inc. Ironing machine for jackets of lithograph rollers. 2,750,689, 6–19–56, Cl. 38—52.
Linger, Roland A., to Radio Corp. of America. Character analyzing systems. 2,751,433, 6–19–56, Cl. 178—23.
Lingerfelt, Paul D.: *See*—
Markwood, Paul W., Rich, Lingerfelt, and Nichols. 2,751,161.
Linse, Lee L.: *See*—
Scully, William A., Snyder, and Linse. 2,750,985.
Lippincott & Smith: *See*—
Crowley, Millard E. 2,750,945.
Liquidometer Corp., The: *See*—
Barrett, Elton T. 2,751,531.
Lisbon, Julius E. Pliers. 2,750,826, 6–19–56, Cl. 81—84.
Locke, Loyal V., to The Huffman Mfg. Co. Dispensers. 2,751,129, 6–19–56, Cl. 222—474.
Lolli, August L.: *See*—
Keil, Havard L., Lolli, and Cavanaugh. 2,751,377.
Lomax, Clarence E., to Automatic Electric Laboratories, Inc. Automatic telephone systems provided with party lines. 2,751,434, 6–19–56, Cl. 179—17.
Lombard, Daniel L. Extrusion press installation. 2,751,076, 6–19–56, Cl. 207—2.
Long, Marshall, to Olin Mathieson Chemical Corp. Method of manufacturing electric blasting caps. 2,750,831, 6–19–56, Cl. 86—1.
Loomis, Frank K. Portable cantilever tow spool. 2,751,193, 6–19–56, Cl. 254—166.
Lüpmann, Bernhard, to Chemische Werke Essener Steinkohle A. G. Process for the catalytic treatment of gases containing carbon compounds and hydrogen. 2,751,404, 6–19–56, Cl. 260—449.6.
Lorig, Edwin T. to United States Steel Corp. Conveying and guiding belt composed of flattened metal helix. 2,751,066, 6–19–56, Cl. 198—193.
Louis, Arnold S.: *See*—
Coler, Myron A., and Louis. 2,751,473.
Louisiana State University and Agricultural and Mechanical College, Board of Supervisors of: *See*—
Kaloyereas, Socrates A. 2,751,305.
Lower, Jack W., to Minneapolis-Honeywell Regular Co. Automatic steering apparatus. 2,751,540, 6–19–56, Cl. 318—489.
Lucht, Victor F., to the United States of America as represented by the Secretary of the Army. Pneumatic recuperator for a gun. 2,750,847, 6–19–56, Cl. 89—43.
Luckhardt, Johannes, deceased, by W. Luckhardt, administrator, to N. P. Martin and O. L. Walter, as trustees. Article of repose for supporting the body of a person. 2,750,988, 6–19–56, Cl. 155—106.
Luckhardt, Wassili: *See*—
Luckhardt, Johannes. 2,750,988.
Ludwig, Milton, to California Research Corp. Conveyor head shaft. 2,751,210, 6–19–56, Cl. 263—8.
Lummus Co., The: *See*—
Davis, Hyman R. 2,751,336.

Lunceford, Raymond M. Radiator testing device. 2,750,793, 6–19–56, Cl. 73—45.8.

Lundquist, Lester E., Jr., to the United States of America as represented by the Secretary of the Air Force. Servo system adapted for weak signal recording. 2,751,536, 6–19–56, Cl. 318—29.

Lustgarten, William M. Means for attaching umbrella covers to frames. 2,750,904, 6–19–56, Cl. 112—2.

Lutz, Nola. Hair curling. 2,750,948, 6–19–56, Cl. 132—33.

Lyman, Kenneth E. Differential gear set. 2,750,813, 6–19–56, Cl. 74—711.

Lynch, Joseph F., ½ to New England Trailer and Body Mfg. Co. Unitary refrigerating and heating systems. 2,750,764, 6–19–56, Cl. 62—129.

Lyon, George A. Extended instep shoe. 2,750,684, 6–19–56, Cl. 36—2.5.

Lyons, Cornelius J.: *See*—
Smith, James A., and Lyons. 2,751,031.

MacAfee, Merrill W.: *See*—
Ruth, Herman A., and MacAfee. 2,751,043.

MacAfee, Merrill W., and H. A. Ruth, to Pacific Foundry Co., Ltd. Mist eliminator. 2,751,037, 6–19–56, Cl. 183—32.

MacDonald, Elizabeth C. Inflatable cushioned receptacle. 2,750,600, 6–19–56, Cl. 4—113.

MacGregor, James: *See*—
MacGregor, Robert, James, and Joseph. 2,750,914.

MacGregor, Joseph: *See*—
MacGregor, Robert, James, and Joseph. 2,750,914.

MacGregor, Robert, James, and Joseph. Cargo anti-shifting structure for ships' holds. 2,750,914, 6–19–56, Cl. 114—75.

Machlett Laboratories, Inc.: *See*—
Doolittle, Howard D. 2,751,517.

MacNeill, John H.: *See*—
De Turk, John E., MacNeill, and Gibbs. 2,751,440.

Mahan, Norman C., 24½% to J. A. Anderson, and 24½% to D. P. Anderson. Venetian blind. 2,751,000, 6–19–56, Cl. 160—115.

Maihak, H., Aktiengesellschaft: *See*—
Knoll, Werner, and Biedendieck. 2,750,796.

Maillard, Bernard, to Society "Brevets Aero-Mecaniques," S. A. Belt feed mechanisms for automatic firearms. 2,750,845, 6–19–56, Cl. 89—33.

Maki, Wilho I. Ventilator for vehicle body. 2,750,864, 6–19–56, Cl. 98—2.

Malchow, Max E., to Radio Corp. of America. Crystal controlled oscillator circuit. 2,751,498, 6–19–56, Cl. 250—36.

Malone, Harold L.: *See*—
Marvin, Edgar S., and Malone. 2,750,858.

Mancera, Octavio: *See*—
Sondheimer, Franz, Djerassi, Rosenkranz, and Mancera. 2,751,379.

Manning, Eugene S., Sr. Milk bottle tap. 2,751,119, 6–19–56, Cl. 222—81.

Mansberg, Hyman P., to Allen B. Du Mont Laboratories, Inc. Cathode-ray oscillograph recording camera. 2,751,275, 6–19–56, Cl. 346—110.

Mantell, Russell M.: *See*—
Barnhart, William S., and Mantell. 2,751,376.

Mantell, Russell M., and W. S. Barnhart, to The M. W. Kellogg Co. Purification process for fluorine-containing polymers. 2,751,375, 6–19–56, Cl. 260—92.1.

Marasso, Fred D., to Union Machinery Co. Combination dough handling, proofing, moulding and panning machine. 2,750,899, 6–19–56, Cl. 107—4.

Marasso, Fred D., to Union Machinery Co. Dough panning machine. 2,751,591, 6–19–56, Cl. 53—160.

Marconi's Wireless Telegraph Co. Ltd.: *See*—
Sosin, Boleslaw M. 2,751,557.

Marcus, Stanley J. Motor mechanism for missiles. 2,750,887, 6–19–56, Cl. 102—49.

Markowitz, Oscar. Fuse circuit breaker. 2,751,462, 6–19–56, Cl. 200—113.

Markwood, Paul W., J. T. Rich, P. D. Lingerfelt, and C. F. Nichols, to American Enka Corp. Doffing a winding machine. 2,751,161, 6–19–56, Cl. 242—35.5.

Marotta, Ralph, to Monsanto Chemical Co. Process of treating ethylene urea and product. 2,751,394, 6–19–56, Cl. 260—309.7.

Marsh, Fayette E., I. W. Anspach, and I. W. McRoberts, to Wyatt Mfg. Co. Electrical system for motor vehicles. 2,751,508, 6–19–56, Cl. 307—10.

Marsh, James C., to Ransburg Electro-Coating Corp. Core and coil arrangement. 2,751,564, 6–19–56, Cl. 336—197.

Marshall, William A., and C. F. Steininger, to The Pure Oil Co. Water resistant lubricants thickened with inorganic gelling agents. 2,751,349, 6–19–56, Cl. 252—28.

Martin, Donald W., and R. L. Holm. Quick release attachment for safety belts. 2,750,644, 6–19–56, Cl. 24—201.

Martin, Emmett V.: *See*—
Coover, Harry W., Jr., Guillet, and Martin. 2,751,277.

Martin, Frank S., to United States Rubber Co. Flock-filled isocyanate-containing elastomer. 2,751,363, 6–19–56, Cl. 260—9.

Martin, Henry, and E. Habicht, to Cilag Ltd. New chemotherapeutically active salts. 2,751,382, 6–19–56, Cl. 260—239.65.

Martin, James. Control means for use with ejection seats of aircraft. 2,751,171, 6–19–56, Cl. 244—141.

Martin, Norman P.: *See*—
Luckhardt, Johannes. 2,750,988.

Marvin, Edgar S., and H. L. Malone, to Eastman Kodak Co. Double exposure prevention device. 2,750,858, 6–19–56, Cl. 95—31.

Maschinenfabrik Augsburg-Nürnberg, A. G.: *See*—
Dietrich, Paul H., Reinartz, and Mörgenlander. 2,750,883.
Rath, Werner. 2,751,188.

Masland, C. H., & Sons: *See*—
Hoeselbarth, Frank W. E. 2,750,964.
Hoeselbarth, Frank W. E. 2,750,969.

Maslow, Murray: *See*—
Kreitchman, Morton A., Welt, and Maslow. 2,750,962.

Mather, Joseph M.: *See*—
Carlin, Robert, Cannon, and Mather. 2,750,843.

Maul, Michael. Machines for transferring records from one card to another. 2,751,007, 6–19–56, Cl. 164—115.

Maxson, W. L., Corp., The: *See*—
Grady, Charles B., Jr. 2,751,495.

Maxwell, Loyal C., and W. M. Thompson, to Armour and Co. Preparation of pancreatic enzymes-ribonuclease, trypsinogen, chymotrypsin B and alpha chymotrypsin. 2,751,329, 6–19–56, Cl. 195—66.

May & Baker Ltd.: *See*—
Freeman, Wilfred A., and Slack. 2,751,395.

May, Claude H., to The Murray Corp. of America. Two-direction engine starter. 2,750,934, 6–19–56, Cl. 123—179.

Mayrath Machinery Co., Inc.: *See*—
Wilcoxen, Leon C., and Pike. 2,751,063.

McArn, Theodore A., to Downingtown Mfg. Co. Adjustable slice. 2,750,854, 6–19–56, Cl. 92—44.

McCann, Joe G., and R. E. Stein, to Gilfillan Bros., Inc. Rotatable wave guide joints. 2,751,559, 6–19–56, Cl. 333—97.

McClellan, Ralph E., to Mellink Steel Safe Co. Insulated metal cabinet construction. 2,750,901, 6–19–56, Cl. 109—59.

McClellan, Ralph E., to Mellink Steel Safe Co. Safe construction. 2,750,902, 6–19–56, Cl. 109—81.

McCloud, Dwite M.: *See*—
Rohrback, Gilson H., and McCloud. 2,751,194.

McComble, Frederick W., to Megator Pumps & Compressors Ltd. Rotary pumps or compressors. 2,750,896, 6–19–56, Cl. 103—216.

McConnell, Clarence J.: *See*—
Vallorani, Ben J., and McConnell. 2,751,487.

McConnell, Frank J., to The American Hardware Corp. Door latch operating mechanism. 2,751,244, 6–19–56, Cl. 292—358.

McConnell, Richard L.: *See*—
Coover, Harry W., Jr., and McConnell. 2,751,384.

McCoy, Veri E. Lubricating device. 2,751,263, 6–19–56, Cl. 308—85.

McEntee, Howard G. Electrical tachometer. 2,751,553, 6–19–56, Cl. 324—70.

McGow, Thomas C., to The Rapids-Standard Co., Inc. Conveyor flip-switch. 2,751,057, 6–19–56, Cl. 193—36.

McGrath, Henry G., and L. C. Rubin, to The M. W. Kellogg Co. Synthesis of organic compounds from carbon monoxide and hydrogen. 2,751,405, 6–19–56, Cl. 260—449.6.

McGraw Electric Co.: *See*—
Gomersall, John R. 2,750,690.
Ireland, Murray. 2,750,872.
Ireland, Murray. 2,750,874.
Petersen, Clifford W. 2,751,460.
Willman, Philip E. 2,750,918.

McGregor, Eugene R., to Reconstruction Finance Corp. Folding and adjustable chair back. 2,750,993, 6–19–56, Cl. 155—155.

McIntire, Robert L., to Phillips Petroleum Co. Pebble heat exchange chamber. 2,751,212, 6–19–56, Cl. 263—19.

McKay Machine Co., The: *See*—
Miller, Harvey D. 2,750,984.

McLaughlin, Robert B. Endless track supported invalid chair. 2,751,027, 6–19–56, Cl. 180—9.1.

McRoberts, Irven W.: *See*—
Marsh, Fayette E., Anspach, and McRoberts. 2,751,508.

McVitie & Price Ltd.: *See*—
Finlayson, John. 2,750,875.

Meece, William E.: *See*—
Nadler, Martin L., and Meece. 2,751,416.

Mefina S. A.: *See*—
Kuhn, Georges. 2,750,889.

Megator Pumps & Compressors Ltd.: *See*—
McComble, Frederick W. 2,750,896.

Meidinger, Edwin. Twin pump system for elevating and/or levelling a two-wheel supported implement chassis. 2,751,231, 6–19–56, Cl. 280—6.

Mellink Steel Safe Co.: *See*—
McClellan, Ralph E. 2,750,901.
McClellan, Ralph E. 2,750,902.

Melman, Arthur: *See*—
Von Knauf, Emil W., and Melman. 2,750,767.

Melmoth, Robert B.: *See*—
Bogart, Harold N., and Melmoth. 2,751,292.

Merker, Leon, to National Lead Co. Preparation of calcium titanate composition. 2,751,279, 6–19–56, Cl. 23—51.

Merlo, Mario P. Indicator for razors. 2,750,664, 6–19–56, Cl. 30—34.

Merrill, Robert D.: *See*—
Ruskin, Robert E., and Merrill. 2,750,798.

Mertzweiller, Joseph K., to Esso Research and Engineering Co. Catalyst recovery from alcohol synthesis process. 2,751,403, 6–19–56, Cl. 260—414.

Metallurgical Processes Co.: *See*—
Ness, Harold M. 2,751,312.

Meyer, Fritz, and F. Nicolaus, to Gutehoffnungshütte Oberhausen Aktiengesellschaft. Grinding mill embodying coaxial oppositely rotating grinding disks. 2,751,157, 6–19–56, Cl. 241—38.

Meyer, George J. Venting device for cooking stoves. 2,750,867, 6–19–56, Cl. 98—115.

Meyer, Maximilian C. Method of making ornamental rings. 2,750,630, 6–19–56, Cl. 18—47.5.

Michelich, Edward F.: *See*—
Collette, Robert P., and Michelich. 2,750,971.

Mid-West Abrasive Co.: *See*—
Muehling, Anthony A. 2,750,714.

Mieczkowski, Robert W. and T. S. Air control apparatus. 2,750,868, 6–19–56, Cl. 98—116.

Mieczkowski, Thaddeus S.: *See*—
Mieczkowski, Robert W. and T. S. 2,750,868.

Miller, Boyd R. Grain drill loader attachment for trucks. 2,751,097, 6–19–56, Cl. 214—83.32.

Miller, Earle C., and L. V. Andrews, to Riley Stoker Corp. Fly-ash reinjection. 2,750,903, 6–19–56, Cl. 110—165.

Miller, Ernest B.: *See*—
Ringo, Dan, and Miller. 2,751,032.
Ringo, Dan, and Miller. 2,751,034.

Miller, Ernest B., to Jefferson Lake Sulphur Co. Fluid treating apparatus. 2,751,033, 6–19–56, Cl. 183—4.6.

Miller, Harvey D., to The McKay Machine Co. Apparatus for uncoiling sheet metal. 2,750,984, 6–19–56, Cl. 153—54.

Miller, Omer E. Liquid conditioning apparatus. 2,751,347, 6–19–56, Cl. 210—24.

Miller, Raymond J., R. C. Frevik, and R. W. Wilson, to Ford Motor Co. Implement hitch for tractors. 2,750,863, 6–19–56, Cl. 97—47.65.

Miller, William T. Perhalocarbon compounds and method of preparing them. 2,751,414, 6–19–56, Cl. 260—566.

Milligan, George E. Rotatable disc indicator attachment. 2,750,917, 6–19–56, Cl. 116—130.

Millington, John W., to Sun Oil Co. Apparatus for changing the resonant frequency of a seismic detector. 2,751,573, 6–19–56, Cl. 340—17.

Mills, George D. Mechanical devices. 2,750,808, 6–19–56, Cl. 74—471.

Minneapolis-Honeywell Regulator Co.: *See*—
Alderson, Ross C. 2,751,543.
Anderson, John W., and Wilson. 2,751,539.
Armstrong, Robert W. 2,751,530.
Bancroft, John W., and Storm. 2,750,800.
Donaldson, Robert D. 2,751,457.
Du Bois, Robert C. 2,751,577.
Knecht, Norman. 2,751,178.
Kutzler, Robert J. 2,751,169.
Lower, Jack W. 2,751,540.
Pashby, Robert W. 2,750,802.
Schuck, Oscar H. 2,751,541.
Woodward, Herbert S., II. 2,751,542.

Minsk, Louis M., W. P. Van Deusen, and E. M. Robertson, to Eastman Kodak Co. Photosensitization of cinnamic acid esters of cellulose. 2,751,296, 6–19–56, Cl. 95—7.

Mirone, Eligio. Variable speed transmission. 2,750,812, 6–19–56, Cl. 74—686.

Mitchell, Gerald A., and N. V. Yost, to Western Electric Co., Inc. Magnetizing apparatus. 2,751,526, 6–19–56, Cl. 317—203.

Mitton, Horald. Liquid soap dispenser. 2,751,127, 6–19–56, Cl. 222—386.5.

Miyazaki, Kazushige. Special internal engaging gear set. 2,750,807, 6–19–56, Cl. 74—457.

Moffett, Fred P.: *See*—
Cathcart, Jack F. 2,750,941.

Mohawk Cabinet Co., Inc.: *See*—
Hoye, Theodore E., and Robinson. 2,750,758.

Moloney, Raymond T.: *See*—
Nicolaus, Frank G. 2,751,461.

Monsanto Chemical Co.: *See*—
Marotta, Ralph. 2,751,394.

Moon, Thomas E. Electric soldering iron. 2,751,484, 6–19–56, Cl. 219—26.

Mooney, Preston B. Tractor mounted peanut harvester having vibrating separating fingers. 2,750,725, 6–19–56, Cl. 55—142.

Moore, Clyde M., to Moorex Industries, Inc. Sealed structural joint. 2,751,109, 6–19–56, Cl. 220—80.

Moore, David P. Apparatus for reducing food liquids to powders. 2,750,998, 6–19–56, Cl. 159—4.

Moore, George A. Container blank and container. 2,751,136, 6–19–56, Cl. 229—17.

Moore, William V. Inner container locking means for pastry decorator. 2,750,900, 6–19–56, Cl. 107—52.

Moorex Industries, Inc.: *See*—
Moore, Clyde M. 2,751,109.

Moorhead, Milton M., Jr., to The Commonwealth Engineering Co. of Ohio. Regulated power supply electronic control circuit. 2,751,547, 6–19–56, Cl. 323—22.

Moosman, Jack A., to Johnston Testers, Inc. Well tool actuating device. 2,751,024, 6–19–56, Cl. 166—237.

Morgan, David E., to Warren Webster & Co. Hot water heating system. 2,751,156, 6–19–56, Cl. 237—8.

Morgan Fairest Ltd.: *See*—
Scott, Thomas V. 2,751,103.

Morgan, Willard L., to Libbey-Owens-Ford Glass Co. Electrically conducting filters and mirrors. 2,750,832, 6–19–56, Cl. 88—1.

Mörgenlander, Oskar: *See*—
Dietrich, Paul H., Reinartz, and Mörgenlander. 2,750,883.

Morris, Charles E.: *See*—
Bates, Robert W., Davis, and Morris. 2,751,304.

Morris, Clifford: *See*—
Barrett, John L., Latoszynski, Morris, and Frankel. 2,750,738.

Morris Paper Mills: *See*—
Arneson, Edwin L. 2,751,110.
Arneson, Lawrence E. 2,751,075.

Morrison, George L. Photographic method of obtaining a film transparency. 2,751,294, 6–19–56, Cl. 95—5.

Morrison, Harold E., to Whirlpool-Seeger Corp. Germicidal and illuminating lamp assembly. 2,751,488, 6–19–56, Cl. 240—2.

Morse, John J. Adjustable support and protective display container for articles. 2,751,070, 6–19–56, Cl. 206—45.14.

Morton, Geoffrey F., R. Chittleburgh, and E. F. Powell, to Dunlop Tire and Rubber Corp. Apparatus for measuring the bore of tubing. 2,750,792, 6–19–56, Cl. 73—37.6.

Morway, Arnold J.: *See*—
Young, David W., Morway, and Cottle. 2,751,351.

Moseley, Tomlinson L., to Dalmo Victor Co. Air compressor. 2,751,146, 6–19–56, Cl. 230—172.

Motorola, Inc.: *See*—
Eberhard, Everett. 2,751,501.
Schlesinger, Kurt. 2,751,429.
Schlesinger, Kurt, and Nero. 2,751,554.

Mott, John H. Fluid operated drilling unit. 2,750,816, 6–19–56, Cl. 77—6.

Mowry, Ivan H. Collapsible golf bag standard. 2,751,176, 6–19–56, Cl. 248—96.

Muehling, Anthony A., to Mid-West Abrasive Co. Swing grinder. 2,750,714, 6–19–56, Cl. 51—32.

Mueller, Louis E. Sheet feeder. 2,751,003, 6–19–56, Cl. 164—21.

Murphy, Edward F. Closure for collapsible tubes. 2,751,130, 6–19–56, Cl. 222—509.

Murray Corp. of America, The: *See*—
May, Claude H. 2,750,934.

Muse, John F., to Baker Oil Tools, Inc. Apparatus for automatically filling conduit strings. 2,751,021, 6–19–56, Cl. 166—225.

Musielak, William H. Adjustable curtain tie-back pin holder. 2,751,002, 6–19–56, Cl. 160—349.

Musso, Charles S.: *See*—
Vella, Salvatore S., and P. J., F. E., and C. S. Musso. 2,750,977.

Musso, Frank E.: *See*—
Vella, Salvatore S., and P. J., F. E., and C. S. Musso. 2,750,977.

Musso, Patsy J.: *See*—
Vella, Salvatore S., and P. J., F. E., and C. S. Musso. 2,750,977.

Myers, Pauline L. Q.: *See*—
Pritchard, James E., and Myers. 2,751,323.

Myers, Walter H., to the United States of America as represented by the Secretary of the Navy. Explosive jettison device for airborne stores. 2,750,842, 6–19–56, Cl. 89—1.5.

Myerson, Simon. Expansible wrist watch band. 2,751,132, 6–19–56, Cl. 224—4.

Nadler, Martin L., and W. E. Meece, to E. I. du Pont de Nemours & Co. Continuous process for the manufacture of thiuram disulfides. 2,751,416, 6–19–56, Cl. 260—567.

Nathan, Alan H., and J. A. Hogg, to The Upjohn Co. Reduction of 11α-acyloxy pregnenes. 2,751,397, 6–19–56, Cl. 260—397.3.

Nathan, Alan H., to The Upjohn Co. Hydrogenation of 11α-hydroxy pregnenes. 2,751,400, 6–19–56, Cl. 260—397.45.

National Cash Register Co., The: *See*—
Isborn, Carl L. 2,751,584.

National Lead Co.: *See*—
Armant, David L., and Sigurdson. 2,751,307.
Merker, Leon. 2,751,279.

National Research Development Corp.: *See*—
Cary, Rex H. J. 2,751,589.

National Union Electric Corp.: *See*—
Shower, Edmund G. 2,751,527.

Navy, United States of America as represented by the Secretary of the: *See*—
Armstrong, Richard W. 2,750,753.
Downs, George W. 2,750,794.
Gray, John W. 2,751,494.
Myers, Walter H. 2,750,842.
Neher, Henry V. 2,750,655.

Neher, Henry V., to the United States of America as represented by the Secretary of the Navy. Method for making fine wire grids. 2,750,655, 6–19–56, Cl. 29—25.18.

Nelson, Joseph F., F. W. Banes, and A. W. Hubbard, to Esso Research and Engineering Co. Process for recovery and purification of cyclodienes from crude petroleum. 2,751,422, 6–19–56, Cl. 260—666.

Nelson, Morris D., to Radio Corp. of America. Power supply regulation. 2,751,520, 6–19–56, Cl. 315—27.

Nero, Leroy W.: *See*—
Schlesinger, Kurt, and Nero. 2,751,554.

Ness, Harold J., to Metallurgical Processes Co. Lubricant composition containing powdered lithium carbonate and method of its application to metal bodies. 2,751,312, 6–19–56, Cl. 117—53.

Newcomb, John F. Mechanism for and method of clinching nuts. 2,750,660, 6–19–56, Cl. 29—432.

Newell, Kenneth F.: *See*—
Cornock, Edward F., and Newell. 2,751,104.

New England Trailer and Body Mfg. Co.: *See*—
Lynch, Joseph F. 2,750,764.

Neyses, Michael J. Dispensers. 2,751,113, 6–19–56, Cl. 221—226.

Nichols, Charles F.: *See*—
Markwood, Paul W., Rich, Lingerfelt, and Nichols. 2,751,161.

Nichols, Gordon E., to Winthrop-Atkins Co., Inc. Two-ply display mounts for calendar pads or the like. 2,750,698, 6–19–56, Cl. 40—120.

Nicholson, John H., to Sunkist Growers, Inc. Conveyor aligning mechanism. 2,751,067, 6–19–56, Cl. 198—202.

Nickerson, Ford L. Litter removing apparatus. 2,751,061, 6–19–56, Cl. 198—79.

Nicol & Andrew Ltd.: *See*—
Andrew, John H. C. 2,750,717.

Nicolaus, Frank G., to R. T. Moloney. Dual-motion advancing and resetting mechanism for relays. 2,751,461, 6–19–56, Cl. 200—105.

Nicolaus, Friedrich: *See*—
Meyer, Fritz, and Nicolaus. 2,751,157.

Nielsen, A. C., Co.: *See*—
Krahulec, Fred, and Rahmel. 2,751,449.

Nogrette, Pierre F., to Saint-Cloud Avions Marcel Dassault. Hatch fastener. 2,751,239, 6–19–56, Cl. 292—36.

Noguera, Joseph, to Casablancas High Draft Co. Ltd. Roller weighting means for spinning and preparatory machines 2,750,633, 6–19–56, Cl. 19—137.

Nolt, Edwin B.: *See*—
Hollyday, James H., and Nolt. 2,750,811.
Nolt, Edwin B., to Sperry Rand Corp. Automatic pick-up balers. 2,750,877, 6–19–56, Cl. 100—4.
Nopco Chemical Co.: *See*—
Levy, Joseph. 2,751,388.
Norddeutsche Affinerie: *See*—
Werner, Gerhard. 2,751,290.
Nordischer Maschinenbau Rudolf Baader: *See*—
Baader, Rudolf. 2,750,623.
Norgren, C. A., Co.: *See*—
Faust, Delbert G. 2,751,045.
North American Aviation, Inc.: *See*—
Soergel, David G., and Gardner. 2,751,576.
North American Philips Co., Inc.: *See*—
Brockman, Frank G. 2,751,354.
Northwestern Research Corp.: *See*—
Gant, Virgil A. 2,750,947.
Nosco, Louis C., to Eastman Kodak Co. Bore gage attachment for contour projector. 2,750,835, 6–19–56, Cl. 88—14.
Null, Fay E. Light sensitive automatically controlled steering system. 2,751,030, 6–19–56, Cl. 180—79.1.
Nyden, Robert. Resilient pouring spout. 2,751,131, 6–19–56, Cl. 222—562.
O'Brian, Edward D. Toy water guns. 2,751,116, 6–19–56, Cl. 222—79.
O'Brien, Edward J.: *See*—
Wahlin, Fred W., and O'Brien. 2,751,252.
Odermann, Charles R., and E. Poffenberger, to The Singer Mfg. Co. Fluid pressure actuated mechanisms for sewing machines. 2,750,908, 6–19–56, Cl. 112—235.
Ohly, Karl: *See*—
Federn, Klaus, Ohly, and Haardt. 2,751,262.
Olshei, John R., to Trico Products Corp. Windshield wiper. 2,750,617, 6–19–56, Cl. 15—245.
Oken, Aaron, to E. I. du Pont de Nemours and Co. Vat dyes. 2,751,385, 6–19–56, Cl. 260—262.
Okonite Co., The: *See*—
Latin, Aubrey, Grieve, and Conning. 2,751,077.
Olcott, James D., to General Motors Corp. Refrigerating apparatus. 2,751,145, 6–19–56, Cl. 230—58.
Olin Mathieson Chemical Corp.: *See*—
Long, Marshall. 2,750,831.
Woodring, William B. 2,751,427.
Oliver Iron and Steel Corp.: *See*—
Berry, Frank. 2,750,891.
Ollvier, Oliver M.: *See*—
Bartlett, Lawrence E., Ollvier, and Schumacker. 2,751,447.
Olson, Edmund S., and J. M. Reid. Self-propelled sprinkler. 2,751,249, 6–19–56, Cl. 299—50.
Olson, Harry F., and J. Preston, to Radio Corp. of America. Unidirectional microphone. 2,751,441, 6–19–56, Cl. 179—115.5.
O'Neil, William T.: *See*—
Tasker, Homer G., and O'Neil. 2,751,587.
Oosterkamp, Wybe J.: *See*—
Boldingh, Willem H., Hardenberg, Oosterkamp, and Verhoeff. 2,751,504.
Opsahl, Eugene G., to American Steel Foundries. Brake beam. 2,751,050, 6–19–56, Cl. 188—226.1.
Oravec, Emil G., to Textron American, Inc. Vibration isolator. 2,751,179, 6–19–56, Cl. 248—358.
Orent, Edward: *See*—
Helsley, Charles W., Jr., Kutsche, and Orent. 2,750,953.
Purchas, William J., Jr., and Orent. 2,751,253.
Orme, John A. Method of removing insulating coatings from wires. 2,751,317, 6–19–56, Cl. 117—231.
Osman, Mitchell G., to Radio Corp. of America. Electroplating rack. 2,751,345, 6–19–56, Cl. 204—297.
Ostrega, Henry J.: *See*—
Sak, Alexander J. and E. S., and Ostrega. 2,751,251.
Owens, Harry L., to the United States of America as represented by the Secretary of the Army. Miniature rectifier. 2,750,654, 6–19–56, Cl. 29—25.3.
Owens, William V., to Paper Sacks Ltd. Multiply paper sacks. 2,751,141, 6–19–56, Cl. 229—55.
Oxy-Catalyst, Inc.: *See*—
Houdry, Eugene J., and Bowen. 2,750,680.
Pace, Inc.: *See*—
Cassidy, Robert J. 2,751,465.
Huffman, John W. 2,751,466.
Pacific Foundry Co., Ltd.: *See*—
MacAfee, Merrill W., and Ruth. 2,751,037.
Ruth, Herman A., and MacAfee. 2,751,043.
Package Machinery Co.: *See*—
Cornock, Edward F., and Newell. 2,751,104.
Packwood, George H., Jr. Disposable carton dispenser. 2,751,117, 6–19–56, Cl. 222—80.
Palfy Die & Mold Co.: *See*—
Palfy, Frank. 2,750,879.
Palfy, Frank, to Palfy Die & Mold Co. Die press with extended guide or bearing surfaces. 2,750,879, 6–19–56, Cl. 100—214.
Palm, George H. Woodworker's hand plane. 2,750,973, 6–19–56, Cl. 145—14.
Palmer, Albert: *See*—
Brouwer, Benjamin W., and Palmer. 2,750,966.
Palmgren, Per G., and F. S. Ball, to SKF Industries, Inc. Device for damping by fluids, the weaving motion of railway cars. 2,751,266, 6–19–56, Cl. 308—180.
Papaleck, Robert J.: *See*—
Keen, Harry J., Papaleck, and Gilbert. 2,751,483.
Paper Sacks Ltd.: *See*—
Owens, William V. 2,751,141.
Paris, François G., J. Le Foll, J. H. Bertin, and M. J. Baraut, to Societe Nationale d'Etude et de Construction de Moteurs d'Aviation. Jet propulsion engine with pulse jet units. 2,750,733, 6–19–56, Cl. 60—35.6.
Parish, Willard E.: *See*—
Bissell, Carl H., and Parish. 2,751,567.
Parke, Davis & Co.: *See*—
Jacob, Robert M., and Robert. 2,751,413.
Parker, Floyd S. Fishing pole holder. 2,751,174, 6–19–56, Cl. 248—42.
Parker Pen Co., The: *See*—
Perlin, Fred. 2,750,774.
Parks, Vergil R. Shock absorbing seat back. 2,750,995, 6–19–56, Cl. 155—164.
Parmer, Delphin J. Device for cutting a line of Striations across strip material. 2,751,005, 6–19–56, Cl. 164—42.
Parr, Bernard F., to Westinghouse Electric Corp. Steam iron. 2,750,691, 6–19–56, Cl. 38—77.
Parrish, Marion M. and W. L. Picker stick check. 2,750,967, 6–19–56, Cl. 139—167.
Parrish, Walter L.: *See*—
Parrish, Marion M. and W. L. 2,750,967.
Pashby, Robert W., to Minneapolis-Honeywell Regulator Co. Alternate action mechanism. 2,750,802, 6–19–56, Cl. 74—100.
Pass & Seymour, Inc.: *See*—
Despard, Victor R. 2,751,568.
Pass, Wilhelm, Jr. Elastic tow rope. 2,751,218, 6–19–56, Cl. 267—69.
Patchogue-Plymouth Mills Corp.: *See*—
Petroske, John H. 2,750,652.
Pauls, Ingolf F. F. E.: *See*—
Langhein, Walter H. D. 2,750,907.
Pearson, Martin L. Intermittent tone device. 2,750,919, 6–19–56, Cl. 116—138.
Pease, F. B., Co., Inc.: *See*—
Ganze, Ronald A. 2,750,976.
Pechy, William, to American Can Co. Can and cover feeding mechanism. 2,750,913, 6–19–56, Cl. 113—114.
Peeler, Robert L., Jr., and E. G. Foehr, to California Research Corp. Rust-inhibited silicate base oils. 2,751,350, 6–19–56, Cl. 252—33.4.
Pemco Wheel Co.: *See*—
Reade, Carleton W. 2,751,261.
Pendleton, William G., to Pendleton's. Crib. 2,750,603, 6–19–56, Cl. 5—99.
Pendleton's: *See*—
Pendleton, William G. 2,750,603.
Penrod, Creo L. and G. A. Power unit. 2,750,931, 6–19–56, Cl. 121—120.
Penrod, Gertrude A.: *See*—
Penrod, Creo L. and G. A. 2,750,931.
Peper, Henry M. Masonry block mortar strip gauging device. 2,750,790, 6–19–56, Cl. 72—130.
Peper, Jan, to Hartford National Bank and Trust Co., trustee. Cathode-ray tube. 2,751,515, 6–19–56, Cl. 313—92.
Perlin, Fred, to The Parker Pen Co. Lighters. 2,750,774, 6–19–56, Cl. 67—7.1.
Peters, Arthur W., to Surface Combustion Corp. Liquid heater. 2,751,200, 6–19–56, Cl. 257—241.
Peters, Faith P.: *See*—
Berg, Elaine. 2,750,770.
Petersen, Clifford W., to McGraw Electric Co. Remote controlled electric switch. 2,751,460, 6–19–56, Cl. 200—92.
Petersen, Eric G.: *See*—
Valtersson, Per V., and Eklund. 2,751,154.
Petersen, Henry T. Road surface disintegrator. 2,751,205, 6–19–56, Cl. 262—9.
Peterson, Adolphe C. Vehicle power operated steering means. 2,750,742, 6–19–56, Cl. 60—52.
Peterson, Gale S., and C. J. Welsh, to Union Oil Co. of California. Conveyance of granular solids. 2,751,257, 6–19–56, Cl. 302—17.
Petrie, Eugene C.: *See*—
Bredtschneider, Kurt B., and Petrie. 2,750,955.
Petroske, John J., to Patchogue-Plymouth Mills Corp. Pile rug and rug base. 2,750,652, 6–19–56, Cl. 28—80.
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English, Arthur R. 2,751,324.
Pfund, Charles E.: *See*—
Crosby, Edward L., Jr., and Pfund. 2,751,443.
Philco Corp.: *See*—
Johnston, Henry E. 2,751,565.
Stineman, Jacob W., Jr., and Robinson. 2,751,529.
Phillips, Herman G., Jr., to Hercules Powder Co. Coated film. 2,751,316, 6–19–56, Cl. 117—138.8.
Phillips, Dana E. and O. E.: said D. E. Phillips assor. of ¼ to L. E. Phillips. Signal responsive to restoration of interrupted current flow. 2,751,579, 6–19–56, Cl. 340—253.
Phillips, Hector M. M.: *See*—
Brown, Harold F., and Phillips. 2,750,720.
Phillips Lily E.: *See*—
Phillips, Dana E. and O. E. 2,751,579.
Phillips, Oris E: *See*—
Phillips, Dana E. and O. E. 2,751,579.
Phillips Petroleum Co.: *See*—
Begley, John W. 2,751,211.
Bost, Howard W. 2,751,322.
McIntire, Robert L. 2,751,212.
Pritchard, James E., and Myers. 2,751,323.
Pierce, Elwood K., Jr.: *See*—
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Pike, Charlie E.: *See*—
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Piltz, Erich, to W. W. Lenkeit. Hand-operated knitting machine. 2,750,771, 6–19–56, Cl. 66—6.
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Ipatieff, Vladimir N., and Pines. 2,751,406.
Pino, Manuel A.: *See*—
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Pitney-Bowes, Inc.: *See*—
Hanson, Walter J. 2,751,221.
Pitney-Bowes, Inc.: *See*—
Herrick, William W. 2,751,214.
Pittsburgh Plate Glass Co.: *See*—
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Lee, John W. 2,750,674.
Plessey Co., Ltd., The: *See*—
Herbert, John M., and Best. 2,750,657.
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Pneumatic Scale Corp., Ltd.: *See*—
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Pochapsky, Harry V.: *See*—
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Poelman, Armand J. J., to Etablissements R. Schneider. Breathing apparatuses. 2,751,035, 6–19–56, Cl. 183—4.8.
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Odermann, Charles R., and Poffenberger. 2,750,908.
Polk, Ralph, Jr. Juice extractor. 2,750,878, 6–19–56, Cl. 100—37.
Porter, Ian S. Looms for weaving. 2,750,965, 6–19–56, Cl. 139—42.
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Morton, Goeffrey F., Chittleburgh, and Powell. 2,750,792.
Pratt & Whitney Co., Inc.: *See*—
Lee, Leighton, H. 2,751,026.
Preston, John: *See*—
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Priestman, Bewley D., to General Motors Corp. Lift bolt door lock remote locking mechanism. 2,751,242, 6–19–56, Cl. 292—229.
Prince, John M., to Productive Inventions, Inc. Soap dispenser. 2,751,128, 6–19–56, Cl. 222—447.
Pritchard, James E., and P. L. Q. Myers, to Phillips Petroleum Co. Laminated products and method of producing the same. 2,751,323, 6–19–56, Cl. 154—140.
Process Engineering Inc.: *See*—
Austin, Ralph W. 2,751,025.
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Sanders, Judson H. 2,751,328.
Productive Inventions, Inc.: *See*—
Prince, John M. 2,751,128.
Pugh, Preston A., Jr.: *See*—
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Purchas, William J., Jr., and E. Orent, to General Motors Corp. Adjustable spray nozzle. 2,751,253, 6–19–56, Cl. 299—118.
Purdy, Chester A., to Western Electric Co., Inc. Tension control apparatus for thermal vaporizing coating device. 2,750,921, 6–19–56, Cl. 118—11.
Pure Oil Co., The: *See*—
Boxell, Samuel E., Richter, R. E. and C. R. Hall, and Dane. 2,750,815.
Marshall, William A., and Steininger. 2,751,349.
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Puste, Joseph. Fish lure. 2,750,703, 6–19–56, Cl. 43—42.21.
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Radio Corp. of America: *See*—
Andrews, Dallas R. 2,751,274.
Baer, John S. 2,751,438.
Burton, Lockwood D. 2,751,439.
Dobony, Joseph F. 2,751,445.
Friend, Albert W. 2,751,519.
Gincoletto, Lawrence J. 2,751,496.
Hathaway, Jarrett L., and Lafferty. 2,751,585.
Kelly, Gordon E. 2,751,430.
Kennedy, Ralph C. 2,751,431.
Linger, Roland A. 2,751,433.
Malchow, Max E. 2,751,498.
Nelson, Morris D. 2,751,520.
Olson, Harry F., and Preston. 2,751,441.
Osman, Mitchell G. 2,751,345.
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Ragan, Thomas M.: *See*—
Baker, Reuben C., and Ragan. 2,750,911.
Rahmel, Henry A.: *See*—
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Raible, Charles G., to Fanner Mfg. Co. Chill. 2,750,641, 6–19–56, Cl. 22—174.
Rainey, Earl C. Method of electrically destroying undesired plant life along crop rows. 2,750,712, 6–19–56, Cl. 47—1.3.
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Marsh, James C. 2,751,564.
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Rapp, George M., to Houdaille Industries, Inc. Ceiling plenum and air conditioning system. 2,751,198, 6–19–56, Cl. 257—124.
Rath, Werner, to Machinenfabrik Augsburg-Nürnberg, A. G. Ceramic product. 2,751,188, 6–19–56, Cl. 253—77.
Rathburn, George A.: *See*—
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Thomas, David F., and Rathburn. 2,750,894.
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McGregor, Eugene R.: 2,750,993.
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Reichel, Waldimir A., and J. F. Emerson, to Kearfott Co., Inc. Vertical reference system with potentiometer control. 2,751,474, 6–19–56, Cl. 201—57.
Reid, John M.: *See*—
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Reidenbach, Oscar V., to The General Clay Products Co. Ceramic column texturing machines. 2,750,646, 6–19–56, Cl. 25—1.
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Reiter, Fred J. Vehicle mounted grain mixer and conveyor. 2,751,098, 6–19–56, Cl. 214—83.14.
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Research Corp.: *See*—
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Reuter, Malvern M., to Surface Combustion Corp. Dual fuel apparatus for heaters. 2,750,997, 6–19–56, Cl. 158—106.
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Richmond, Moscow K. Door locking means. 2,751,220, 6–19–56, Cl. 268—74.
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Getz, Delmond L., and Ridgway. 2,751,108.
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Ringlen, Arthur G., and A. Svirchev, to American Safety Razor Corp. Packaged surgeon's blade. 2,751,074, 6–19–56, Cl. 206—63.2.
Ringo, Dan, and E. B. Miller, to Adsorption Research Corp. Fluid treating apparatus. 2,751,032, 6–19–56, Cl. 183—4.
Ringo, Dan, and E. B. Miller, to Adsorption Research Corp. Fluid treating apparatus. 2,751,034, 6–19–56, Cl. 183—4.7.
Ritter, John. Refuse receptacles. 2,751,107, 6–19–56, Cl. 220—42.
Robert, Jacques G.: *See*—
Jacob, Robert M., and Robert. 2,751,413.
Roberts & Porter, Inc.: *See*—
Lindquist, Jonas T. 2,750,689.
Robertson, Amelia M.: *See*—
Robertson, Reuel R. and A. M. 2,750,775.
Robertson, Earl M.: *See*—
Minsk, Louis M., Van Deusen, and Robertson. 2,751,296.
Robertson, H. H., Co.: *See*—
Johnson, Thomas B. 2,750,667.
Robertson, John M.: *See*—
Brown, Edward L., and Robertson. 2,750,749.
Robertson, Reuel R. and A. M. Candle and adaptor combinations. 2,750,775, 6–19–56, Cl. 67—22.
Robertson, William A.: *See*—
Dodge, Adiel Y., and Robertson. 2,751,055.
Robinson, Harris A., to the United States of America as represented by the Secretary of the Air Force. Frequency monitoring arrangement. 2,751,500, 6–19–56, Cl. 250—36.
Robinson, Herbert T.: *See*—
Junejohann, Vernon H., Hanken, and Robinson. 2,750,810.
Robinson, Samuel A.: *See*—
Stineman, Jacob W., Jr., and Robinson. 2,751,529.
Robinson, Vincent S.: *See*—
Hoye, Theodore E., and Robinson. 2,750,758.
Robson, John P., to Dalmas Ltd. Surgical dressings. 2,750,942, 6–19–56, Cl. 128—156.
Rockstrom, Leonard: *See*—
Saco, Felix, and Rockstrom. 2,751,164.
Rockwell Spring and Axle Co.: *See*—
Super, Ralph K., and House. 2,751,048.
Rocwall Co.: *See*—
Arrighini, Artil. 2,751,308.
Roddin, Daniel P.: *See*—
Kline, Bernard L., and Roddin. 2,751,310.
Rodgers, George V. Three dimensional radar indicator. 2,751,588, 6–19–56, Cl. 343—112.

Roemheld, Lothar B. Speaking aid. 2,750,598, 6–19–56, Cl. 3—1.1.

Rogallo, Francis M.: *See*—
Rogallo, Gertrude S. and F. M. 2,751,172.

Rogallo, Gertrude S. and F. M. Flexible kite. 2,751,172, 6–19–56, Cl. 244—153.

Rogers, Mack. Frame straightening tool. 2,750,983, 6–19–56, Cl. 153—48.

Rogier, Clarence F.: *See*—
Kulo, Thomas E., and Rogier. 2,750,949.

Rohrback, Gilson H., and D. M. McCloud, to California Research Corp. Corrosion prevention. 2,751,194, 6–19–56, Cl. 255—28.

Rojo, Guadalupe. Game board and playing pieces. 2,751,228, 6–19–56, Cl. 273—131.

Rollman, Walter F.: *See*—
Carver, John A., and Rollman. 2,751,335.

Romig, Robert G., to General Motors Corp. Air register. 2,750,866, 6–19–56, Cl. 98—108.

Rommel, Frederick E.: *See*—
Simon, Malcolm, and Rommel. 2,750,982.

Rose, Leslie: *See*—
Givens, John H., Rose, and Wale. 2,750,780.

Rosenbaum "Q-B-KL" Parking Co.: *See*—
Theibault, Albert R. 2,751,093.

Rosenblatt, Donald N.: *See*—
Carter, John N., and Rosenblatt. 2,751,291.

Rosenkranz, George: *See*—
Sondheimer, Franz, Djerassi, Rosenkranz, and Mancera. 2,751,379.

Ross, Thomas D. Baby chairs. 2,750,989, 6–19–56, Cl. 155—126.

Rosseau, Leon R., to Ajax Electric Co. Aluminizing. 2,751,311, 6–19–56, Cl. 117—52.

Roussel, Philip A., to E. I. du Pont de Nemours and Co Rubbers stabilized with a 1-aryl-2-mercapto-2-imidazoline 2,751,370, 6–19–56, Cl. 260—45.8.

Royal Mfg. Co., Inc.: *See*—
Coates, Cecil C., and Jackson. 2,750,624.
Colomobo, Roberto. 2,750,625.

Rozmus, Walter J.: *See*—
Barnes, William A., and Rozmus. 2,750,829.

Rubin, Irving. Belt buckle. 2,750,643, 6–19–56, Cl. 24—166.

Rubin, Louis C.: *See*—
McGrath, Henry G., and Rubin. 2,751,405.

Rupp, Walter H., to Esso Research and Engineering Co. Method and apparatus for mixing and contacting fluids. 2,751,425, 6–19–56, Cl. 260—683.4.

Ruskin, Robert E., and R. D. Merrill. True air speed meter. 2,750,798, 6–19–56, Cl. 73—204.

Russ, John C.: *See*—
Camilli, Guglielmo, Kierstead, Vandergrift, and Russ. 2,751,562.

Russell, Bud. Ice cream machine. 2,751,064, 6–19–56, Cl. 198—131.

Russell, John D., to Joy Mfg. Co. Swinging mechanism for the disintegrating head of a continuous miner. 2,751,208, 6–19–56, Cl. 262—29.

Russell, John G. Valve mechanism for filling and controlling fuel level in a tank. 2,750,954, 6–19–56, Cl. 137—400.

Russell, Ralph D.: *See*—
Kuss, Theodore M., and Russell. 2,750,750.

Russell, Roy W., and E. A. Steckel, to The Gates Rubber Co. Control apparatus for strips. 2,750,986, 6–19–56, Cl. 154—1.

Ruth, Herman A.: *See*—
MacAfee, Merrill W., and Ruth. 2,751,037.

Ruth, Herman A., and M. W. MacAfee, to Pacific Foundry Co., Ltd. Separation of suspended solids from fluids. 2,751,043, 6–19–56, Cl. 183—85.

SKF Industries, Inc.: *See*—
Palmgren, Per G., and Ball. 2,751,266.

Sabre Research Corp.: *See*—
Thompson, Tom H. 2,750,745.
Thompson, Tom H. 2,751,217.

Sacco, Felix, and L. Rockstrom, to Cameron Machine Co. Rewind roll suspension and bearing. 2,751,164, 6–19–56, Cl. 242—66.

Sadler Bros., Inc.: *See*—
Hilsinger, Arthur R. 2,750,821.

Saegert, Marie S.: *See*—
Scavullo, Angelo C. 2,750,661.

Sahyun, Melville, and J. A. Faust, to Cutter Laboratories, Inc. 3-phenylsalicylamide. 2,751,410, 6–19–56, Cl. 260—559.

Sahyun, Melville, and J. A. Faust, to Cutter Laboratories, Inc. N-butyl-3-phenylsalicylamides. 2,751,411, 6–19–56, Cl. 260—559.

Sahyun, Melville, and J. A. Faust, to Cutter Laboratories, Inc. N-(hydroxyalkyl)-3-phenylsalicylamides. 2,751,412, 6–19–56, Cl. 260—559.

St. Clair, Theodore A.: *See*—
Baldwin, John D., Jr., St. Clair, and Johnson. 2,751,181.

Saint-Cloud Avions Marcel Dassault: *See*—
Nogrette, Pierre F. 2,751,239.

Saito, Koppo. Lacework holder. 2,750,651, 6–19–56, Cl. 28—15.

Saito Luigi. Adjustable damper for fuel saving devices. 2,750,936, 6–19–56, Cl. 126—290.

Sak, Alexander J. and E. S., and H. J. Ostrega. Reaction type water sprinkler. 2,751,251, 6–19–56, Cl. 299—69.

Sak, Edmund S: *See*—
Sak, Alexander J. and E. S., and Ostrega. 2,751,251.

Salminen, Ilmari F., J. A. Van Allan, and E. C. Yackel, to Eastman Kodak Co. Photographic emulsions containing tanning developing agents. 2,751,295, 6–19–56, Cl. 95—6.

Salminen, Jouko B. Welding mask. 2,750,592, 6–19–56, Cl. 2—8.

Samcoe Holding Corp.: *See*—
Cohn, Joseph, Walter, and Cohn. 2,750,679.

Sanders, Judson H., to The Procter & Gamble Co. Toothpaste process. 2,751,328, 6–19–56, Cl. 167—93.

Sandvikens Jernverks Aktiebolag: *See*—
Edström, Sven E., and Gisner. 2,751,195.

Sangster, Arlon G. Magnetic work transfer device. 2,750,716, 6–19–56, Cl. 51—105.

Sanowskis, Albert. Combination lock. 2,750,786, 6–19–56, Cl. 70—313.

Sans, Marcel, to Societe de Constructions Mecaniques de Stains. Method of butt welding thermoplastic sheets. 2,751,321, 6–19–56, Cl. 154—116.

Sassi, Umberto. Machine for the automatic forming of the laminated iron core of transformers, induction coils, and the like. 2,750,659, 6–19–56, Cl. 29—203.

Sauer, James D. Soldering tool. 2,751,485, 6–19–56, Cl. 219—27.

Saunders Valve Co., Ltd.: *See*—
Shand, Stanley G. 2,751,185.

Sauter, August, K. G.: *See*—
Wagner, Kurt. 2,751,213.

Saverino, Casimiro G. Reversible lift for furniture legs. 2,750,709, 6–19–56, Cl. 45—137.

Sawyer, Arthur W.: *See*—
White, Chester W., and Sawyer. 2,751,356.

Scavullo, Angelo C., to V. K., F. and C. Scavullo, M. S. Saegert, and M. S. Scott. Method of making hammered ware. 2,750,661, 6–19–56, Cl. 29—553.

Scavullo, Charles: *See*—
Scavullo, Angelo C. 2,750,661.

Scavullo, Frank: *See*—
Scavullo, Angelo C. 2,750,661.

Scavullo, Victor K.: *See*—
Scavullo, Angelo C. 2,750,661.

Schade, Willy E., to Eastman Kodak Co. Three component photographic objective comprising five elements. 2,750,839, 6–19–56, Cl. 88—57.

Schaefer, Ralph A., H. V. Pochapsky, and H. J. Sedusky, to Clevite Corp. Method of plating. 2,751,340, 6–19–56, Cl. 204—23.

Schairer, Edward G., to Armstrong Cork Co. Loop controlling means in sheet handling device. 2,751,223, 6–19–56, Cl. 271—2.2.

Schalkwijk, Willem F.: *See*—
Köhler, Jacob W. L., and Schalkwijk. 2,750,765.

Scharfenberg, Walter. Automatic cable connecting apparatus for railroad cars and the like. 2,751,089, 6–19–56, Cl. 213—1.3.

Scheibli, James R.: *See*—
Whestone, Richard B., and Scheibli. 2,751,364.

Schenck, Carl, Maschinenfabrik G. m. b. H.: *See*—
Federn, Klaus. 2,750,795.
Federn, Klaus, Obly, and Haardt. 2,751,262.

Schilling, August H.: *See*—
Holzwarth, Hans, and Schilling. 2,750,736.

Schilling, August H., to Schilling Estate Co. Apparatus for the generation of driving gases by explosion and process for operating the same. 2,750,735, 6–19–56, Cl. 60—39.02.

Schilling, August H., and H. Holzwarth, to Schilling Estate Co. Apparatus for generating driving gases. 2,750,739, 6–19–56, Cl. 60—39.16.

Schilling Estate Co.: *See*—
Holzwarth, Hans. 2,750,740.
Holzwarth, Hans, and Schilling. 2,750,736.
Schilling, August H. 2,750,735.
Schilling, August H., and Holzwarth. 2,750,739.

Schindler, Walter, and F. Häfliger, to J. R. Geigy A. G. Imidazoline derivatives of aryl indoles. 2,751,393, 6–19–56, Cl. 260—309.6.

Schlesinger, Kurt, to Motorola, Inc. Vectorscope. 2,751,429, 6–19–56, Cl. 178—5.4.

Schlesinger, Kurt, and L. W. Nero, to Motorola, Inc. Electronic display means. 2,751,554, 6–19–56, Cl. 324—88.

Schlumberger, Marcel, to Borg-Warner Corp. Aligning means for shaped charge perforating apparatus. 2,750,885, 6–19–56, Cl. 102—20.

Schmidt, Gustav: *See*—
Korkowski, Eberhard, Volt, and Schmidt. 2,750,743.

Schmidt, John A., to The Standard Register Co. Strip feeding device. 2,751,058, 6–19–56, Cl. 197—128.

Schmidt, Theodor E. Apparatus for refrigeration by means of aqueous solutions. 2,750,754, 6–19–56, Cl. 62—2.

Schneider, William P., to The Upjohn Co. Oxidation of hydrocortisone esters to cortisone esters. 2,751,402, 6–19–56, Cl. 260—397.45.

Schoen, Moritz. Containers or tray structures. 2,751,270, 6–19–56, Cl. 312—202.

Schrader, Milford J., to Gibson Refrigerator Co. Refrigerator cabinet. 2,751,106, 6–19–56, Cl. 220—9.

Schroeder, Charles S., to The Yale & Towne Mfg. Co. Wheel assembly. 2,751,255, 6–19–56, Cl. 301—1.

Schroeder, Vincent W. Mobile jack stand. 2,751,191, 6–19–56, Cl. 254—2.

Schuck, Oscar H., to Minneapolis-Honeywell Regulator Co. Automatic flight control apparatus. 2,751,541, 6–19–56, Cl. 318—489.

Schultz, Arthur B., to the United States of America as represented by the United States Atomic Energy Commission. Releasable gripper for holding an article suspended. 2,751,229, 6–19–56, Cl. 279—75.

Schulze, Robert A.: *See*—
Hill, Frederick B., Jr., and Schulze. 2,751,419.

Schumacker, Harry J.: *See*—
Bartlett, Lawrence E., Olivier, and Schumacker. 2,751,447.

Schurr, Hans: *See*—
Stahlecker, Wilhelm, and Schurr. 2,750,634.

Schwarz, Bertram A., to General Motors Corp. Solenoid powered tuner. 2,751,503, 6–19–56, Cl. 250—40.

Schwemberger, John G., to E. I. du Pont de Nemours and Co. Process of vaporization of hydrogen peroxide solutions. 2,751,338, 6–19–56, Cl. 202—63.

Scott, George W., to E. I. du Pont de Nemours and Co. Stabilized polychloroprene latex. 2,751,365, 6–19–56, Cl. 260—29.7.

Scott, John W., Jr., to California Research Corp. Continuous flash coking process. 2,751,334, 6–19–56, Cl. 196—65.

Scott, Margaret S.: *See*—
Scavullo, Angelo C. 2,750,661.

Scott, Thomas V., to Morgan Fairest Ltd. Labeling machines. 2,751,103, 6–19–56, Cl. 216—55.

Screen Equipment Co., Inc.: *See*—
Gleiser, Nelson J. 2,751,080.

Scripto, Inc.: *See*—
Smith, Blanchard D. 2,750,926.

Scully, William A., O. J. Snyder, and L. L. Linse. Apparatus for convoluting thin walled articles. 2,750,985, 6–19–56, Cl. 153—77.

Seals, Paul C. Fishing tackle box. 2,750,706, 6–19–56, Cl. 43—57.5.

Sebald, Joseph F., to Cochrane Corp. Cold process water softener or coagulator. 2,751,346, 6–19–56, Cl. 210—16.

Sedgwick, Robert K., to American Steel Foundries. Prefill valve with automatic decompression means. 2,750,744, 6–19–56, Cl. 60—52.

Sedusky, Henry J.: *See*—
Schaefer, Ralph A., Pochapsky, and Sedusky. 2,751,340.

Seifert, Donald W. Warm air heating system control. 2,751,153, 6–19–56, Cl. 236—9.

Seje & Thurne Aktiebolag: *See*—
Börjeson, Olov B. 2,751,086.

Sekmakas, Kazys C.: *See*—
Thompson, William M., Sekmakas, and Dickinson. 2,751,330.

Seltzer, Robert W. Hose clamp. 2,750,645, 6–19–56, Cl. 24—279.

Seltzman, Benjamin H. Racing game. 2,751,227, 6–19–56, Cl. 273—86.

Selvaggio, Guillaume F., and P. C. Ringenbach. Shaper. 2,750,852, 6–19–56, Cl. 90—24.

Seward, Paul H., to General Motors Corp. Dynamic braking control. 2,751,537, 6–19–56, Cl. 318—88.

Shand, Stanley G., to Saunders Valve Co. Ltd. Seat for rotary spherical plug valve. 2,751,185, 6–19–56, Cl. 251—172.

Shaw, George B.: *See*—
Short, Brooks H., and Shaw. 2,751,464.

Sheehan, John C.: *See*—
Johnson, David A., and Sheehan. 2,751,378.

Sheeran, Stanley R., to E. I. du Pont de Nemours and Co. Container with diaphragm. 2,751,073, 6–19–56, Cl. 206—46.

Shell Development Co.: *See*—
Bondi, Arnold A. 2,751,352.
Caviët, Maximilian. 2,751,358.
Whestone, Richard R., and Scheibli. 2,751,364.

Short, Brooks H., and G. B. Shaw, to General Motors Corp. Temperature responsive switch. 2,751,464, 6–19–56, Cl. 200—138.

Shower, Edmund G., to National Union Electric Corp. Semiconductor devices. 2,751,527, 6–19–56, Cl. 317—234.

Shrubsall, Arthur E.: *See*—
Jackson, Clarence E., and Shrubsall. 2,751,478.

Sibley, John R., to Joy Mfg. Co. Disintegrating head mechanism with chain take-up for a continuous miner. 2,751,204, 6–19–56, Cl. 262—9.

Sigurdson, Harold S.: *See*—
Armant, David L., and Sigurdson. 2,751,307.

Simms, Stanley J.: *See*—
Baur, John W., Pios, and Simms. 2,750,930.

Simon, Malcolm, and F. E. Rommel, to Telephone Mfg. Co. Ltd. Apparatus for adjusting electrical contacts. 2,750,982, 6–19–56, Cl. 153—48.

Simonsen, Edward H., to Simonsen Metal Products Co. Lock. 2,751,241, 6–19–56, Cl. 292—175.

Simonsen Metal Products Co.: *See*—
Simonsen, Edward H. 2,751,241.

Singer Mfg. Co., The: *See*—
Hacklander, Hans. 2,750,906.
Odermann, Charles R., and Poffenberger. 2,750,908.

Sivacek, Emil E., to King-Seeley Corp. Toaster timer. 2,750,873, 6–19–56, Cl. 99—329.

Sjölund, Väinö V. Steam cooking apparatus. 2,750,937, 6–19–56, Cl. 126—369.2.

Skipper, Harry C.: *See*—
Johnston, Mordica O., and Skipper. 2,751,014.

Sklarek, Clifford. Vibration damped mirrors. 2,750,840, 6–19–56, Cl. 88—98.

Skromme, Lawrence H., and M. J. Happe, to Sperry Rand Corp. Rake bar bearing. 2,750,729, 6–19–56, Cl. 56—377.

Slack, Ronald: *See*—
Freeman, Wilfred A., and Slack. 2,751,395.

Slomp, George, Jr., to The Upjohn Co. Steroid compounds. 2,751,380, 6–19–56, Cl. 260—239.55.

Slomp, George, Jr., to The Upjohn Co. Process of producing epoxy steroid compounds. 2,751,381, 6–19–56, Cl. 260—239.55.

Small, Edward F. Fishing reel. 2,751,165, 6–19–56, Cl. 242—84.1.

Smart, Clarence F., to General Motors Corporation. Electrodeposition of lead and lead alloys. 2,751,341, 6–19–56, Cl. 204—43.

Smidth, F. L., & Co.: *See*—
Ahlmann, Nikolai. 2,751,079.

Smith, Belmont D. Rotary bit for dry rock drilling. 2,751,196, 6–19–56, Cl. 255—304.

Smith, Blanchard D., to Scripto, Inc. Retracting mechanism for ball point pens and the like. 2,750,926, 6–19–56, Cl. 120—42.03.

Smith, Charles R., to Cutler-Hammer, Inc. Electric snap switches. 2,751,450, 6–19–56, Cl. 200—67.

Smith, Donald A.: *See*—
Unruh, Cornelius C., and Smith. 2,751,373.

Smith, James A., and C. J. Lyons, to Clark & Vicario Corp. Conditioning paper-making stock. 2,751,031, 6–19–56, Cl. 183—2.5.

Smithburn, George E. Rotary tiller. 2,750,859, 6–19–56, Cl. 97—40.

Snyder, Lloyd E. Plastic-like food product packaging. 2,751,306, 6–19–56, Cl. 99—171.

Snyder, Kenneth E., to General Motors Corp. Shift valve mechanism and controls therefor. 2,751,182, 6–19–56, Cl. 251—28.

Snyder, Oliver J.: *See*—
Scully, William A., Snyder, and Linse. 2,750,985.

Societe Anonyme dite: Centre d'Etudes M. B. A. (Mecanique Ballistique, Armement): *See*—
Gourdon, Robert. 2,751,090.
Gourdon, Robert. 2,751,092.

Societe Anonyme dite: Societe Nouvelle de Construction de Machines-Outils et d'Outillages Procédés C. W. B.: *See*—
Berthiez, Charles W. 2,750,851.

Societe Anonyme Etablissements Ed. Jaeger: *See*—
Fauvelot, Pierre E. R. 2,750,801.

Societe de Constructions Mecaniques de Stains: *See*—
Sans, Marcel. 2,751,321.

Societe de la Pile Leclanché: *See*—
Depoix, Pierre. 2,751,428.

Societe Du Bouchon Couronne Crown Cork Co. (France): *See*—
Leclerc, Georges. 2,751,101.

Societe Nationale d'Etude et de Construction de Moteurs d'Aviation: *See*—
Paris, François G., Le Foll, Bertin, and Baraut. 2,750,733.

Societe Rateau (Societe Anonyme): *See*—
Anxionnaz, René, and Imbert. 2,750,734.

Society "Brevets Aero-Mecaniques," S. A.: *See*—
Maillard, Bernard. 2,750,845.

Soergel, David G., and F. H. Gardner, to North American Aviation, Inc. Closed-cycle pressure transducer. 2,751,576, 6–19–56, Cl. 340—187.

Soler Capdevila, Antonio. Safety lock. 2,750,787, 6–19–56, Cl. 70—337.

Sondheimer, Franz, C. Djerassi, G. Rosenkranz, and O. Mancera, to Syntex S. A. Preparation of steroidal 11α-hydroxy compounds. 2,751,379, 6–19–56, Cl. 260—239.55.

Soring, Clarence E. Test indicator. 2,750,675, 6–19–56, Cl. 33—172.

Sosin, Boleslaw M., to Marconi's Wireless Telegraph Co. Ltd. T-connected stub filters for use on very high frequencies. 2,751,557, 6–19–56, Cl. 333—73.

Soule, Arthur H., to Continental Specialties Co. Ltd. Window structure hardware. 2,750,635, 6–19–56, Cl. 20—42.

Soulé, Charles W. Spread dispenser. 2,751,118, 6–19–56, Cl. 222—80.

Soundrive Pump Co.: *See*—
Von Seggern, Ernest A. 2,750,959.

Spangenberg, Charles B., to Auto Lamp Mfg. Co. Signal light system for motor vehicles. 2,751,522, 6–19–56, Cl. 315—79.

Speed, William C., and J. J. Dwyer, to Audio Devices, Inc. Production of magnetic sound tape. 2,751,313, 6–19–56, Cl. 117—66.

Speekman, Bernardus W., to Hartford National Bank and Trust Co., trustee. Method of manufacturing coils. 2,751,318, 6–19–56, Cl. 154—80.

Spencer, Richard O., to General Electric Co. Steam flatiron. 2,750,694, 6–19–56, Cl. 38—77.

Sperry Products, Inc.: *See*—
Cowan, John V. 2,751,479.

Sperry Rand Corp.: *See*—
Andersen, Magnus S. 2,750,925.
Aumuller, Edward F., Dwight, and Kirchhoff. 2,751,056.
Hollyday, James H., and Nolt. 2,750,811.
Nolt, Edwin B. 2,750,877.
Skromme, Lawrence H., and Happe. 2,750,729.
Tomiyasu, Kiyo, and Cohn. 2,751,556.
Torrey, Robert D. 2,751,509.

Spraying Systems Co.: *See*—
Wahlin, Fred W., and O'Brien. 2,751,252.

Staehle, Henry C., to Eastman Kodak Co. Method of applying a protective coating over a photographic print. 2,751,315, 6–19–56, Cl. 117—76.

Stahlecker, Wilhelm, and H. Schurr. Retaining means for drafting rollers. 2,750,634, 6–19–56, Cl. 19—142.

Stalker, Edward A. Boundary layer induction system for aircraft power plant. 2,751,168, 6–19–56, Cl. 244—15.

Stamatoff, Gelu S.: *See*—
Foster, Samuel P., and Stamatoff. 2,751,407.

Stamicarbon N. V.: *See*—
Hasselder, William. 2,751,280.

Standard Duplicating Machines Corp.: *See*—
Bergman, Carl A. 2,750,804.

Standard Oil Co., The: *See*—
Bartleson, John D. 2,751,285.
Gary, James H. 2,751,082.
Hill, Philip, and Van Strien. 2,751,284.
Hill, Philip, Van Strien, and Towle. 2,751,359.
Van Strien, Richard E. 2,751,360.
Van Strien, Richard E., and Towle. 2,751,283.
Van Strien, Richard E., Towle, and Hill. 2,751,361.

Standard Register Co., The: *See*—
Schmidt, John A. 2,751,058.

Stanolind Oil and Gas Co.: *See*—
Brainerd, Harold W., Jr. 2,751,348.
Goddin, Clifton S., Jr., and Eliot. 2,751,337.

Stapleton, Clarence B.: *See*—
Beam, Albert S., and Stapleton. 2,750,676.

Stark, Harold. Guide rail assembly for sliding doors. 2,750,622, 6–19–56, Cl. 16—90.
Statham Laboratories, Inc.: *See*—
Statham, Louis D. 2,751,476.
Statham, Louis D., to Statham Laboratories, Inc. Electric transducer. 2,751,476, 6–19–56, Cl. 201—63.
Stauffer, William O., to E. I. du Pont de Nemours and Co. Stabilization of trichloroethylene. 2,751,421, 6–19–56, Cl. 260—652.5.
Steckel, Elmer A.: *See*—
Russell, Roy W., and Steckel. 2,750,986.
Steel Dot Corp.: *See*—
Geese, Charles F. 2,750,881.
Steel Slides, Inc.: *See*—
Hafekost, Frederick. 2,751,269.
Stein, Romar E.: *See*—
McCann, Joe G., and Stein. 2,751,559.
Steininger, Charles F.: *See*—
Marshall, William A., and Steininger. 2,751,349.
Steinmuller, L. & C., G. m. b. H.: *See*—
Radermacher, Karl. 2,751,060.
Stepath, Myron D. Cutting and gouging torches and electrodes therefor. 2,751,482, 6–19–56, Cl. 219—15.
Stephenson, Hjalmer. Harrow hitch. 2,750,724, 6–19–56, Cl. 55—93.
Stevens, George J., to Armco Steel Corp. Wire finishing apparatus. 2,750,853, 6–19–56, Cl. 90—33.
Stevenson, Robert, to Anco, Inc. Hydraulic break fuse requiring reset. 2,750,956, 6–19–56, Cl. 137—460.
Stimpson Computing Scale Co.: *See*—
Wells, John A. 2,750,838.
Stineman, Jacob W., Jr., and S. A. Robinson, to Philco Corp. Point contact semiconductive device. 2,751,529, 6–19–56, Cl. 317—236.
Stirnkorb, John R., to Bendix Aviation Corp. Dosimeter charger. 2,751,544, 6–19–56, Cl. 320—1.
Stober, Leslie V. Dispenser. 2,751,121, 6–19–56, Cl. 222—85.
Stone, Herman J., to The Independent Nail and Packing Co. Inc. Nail feeding mechanism. 2,750,591, 6–19–56, Cl. 1—6.
Storm, John F.: *See*—
Bancroft, John W., and Storm. 2,750,800.
Stoughton Cab & Body Co.: *See*—
Jonnson, Martin H. 2,751,099.
Studebaker-Packard Corp.: *See*—
Clark, John M. 2,751,355.
Stump, Eugen, to Daimler-Benz Aktiengesellschaft. Vehicle speed indicating device for motor vehicles. 2,751,580, 6–19–56, Cl. 340—263.
Sturm, Erwin. Rotary pump and motor hydraulic transmission. 2,750,895, 6–19–56, Cl. 103—120.
Sun Oil Co.: *See*—
Conn, William K. 2,751,423.
Millington, John W. 2,751,573.
Sundberg, Carl W., to Reo Motors, Inc. Baby stroller and latching mechanism therefor. 2,751,232, 6–19–56, Cl. 280—41.
Sunkist Growers, Inc.: *See*—
Nicholson, John H. 2,751,067.
Super, Ralph K., and B. E. House, to Rockwell Spring and Axle Co. Transversely expanding wheel brake. 2,751,048, 6–19–56, Cl. 188—78.
Surface Combustion Corp.: *See*—
Peters, Arthur W. 2,751,200.
Reuter, Malvern M. 2,750,997.
Svirchev, Alexander: *See*—
Ringlen, Arthur G., and Svirchev. 2,751,074.
Swenson, Alfred G., to General Electric Co. Steam flatiron. 2,750 695, 6–19–56, Cl. 38—77.
Swift & Co.: *See*—
Bates, Robert W., Davis, and Morris. 2,751,304.
Sylvan, Stig G., to American Air Filter Co., Inc. Mechanical dry tubular-stocking dust collector of the traversing reverse-jet blow ring or self-cleaning type. 2,751,042, 6–19–56, Cl. 183—61.
Sylvania Electric Products Inc.: *See*—
Dodge, Erle H. 2,751,133.
Snytex S. A.: *See*—
Sondheimer, Franz, Djerassi, Rosenkranz, and Mancera. 2,751,379.
Szent-Gyorgyi, Albert, and S. Hajdu, to Armour and Co. Assay method for digitalis preparation and other cardiotonic substances. 2,751,326, 6–19–56, Cl. 167—84.5.
Tack, Carl E., to American Steel Foundries. Combination brake. 2,751 046, 6–19–56, Cl. 188—33.
Taco Heaters, Inc.: *See*—
Williams, Burdell S. 2,751,199.
Talbot, Richard C.: *See*—
Ferguson, John L., and Talbot. 2,750,722.
Ferguson, John L., and Talbot. 2,750,856.
Tall, Murry. Door chime and wicket mechanism. 2,750,920, 6–19–56, Cl. 116—141.
Tangeman, William H., to General Electric Co. Combination dry and steam flatiron. 2,750,693, 6–19–56, Cl. 38—77.
Tape Production Corp.: *See*—
Breuer, Henry. 2,751,432.
Tarraxi, Georges. Paper cutter with multiple uses. 2,750,668, 6–19–56, Cl. 30—294.
Tasker, Homer G., and W. T. O'Neil, to Gilfillan Bros., Inc. Range gated automatic gain control. 2,751,587, 6–19–56, Cl. 343—17.1.
Tavannes Watch Co. S. A.: *See*—
Cottier, Louis. 2,751,151.
Tavola, Bruno. Injection valve. 2,750,957, 6–19–56, Cl. 137—510.
Taylor, Erle W., and C. C. Unruh, to Eastman Kodak Co. Highly unsaturated polymers derived from polymeric isopropenyl acylates. 2,751,372, 6–19–56, Cl. 260—78.5.
Taylor Fibre Co.: *See*—
Jacobs, Clifton N., and Hopkins. 2,751,320.
Taylor, Paul H., to Wales-Strippit Corp. Liquid spring. 2,751,216, 6–19–56, Cl. 267—1.
Teagle, William T. Agricultural appliances. 2,750,666, 6–19–56, Cl. 30—218.
Te Grotenhuis, Theodore A., 20% to The General Tire and Rubber Co. Pigmented compositions and methods of making same. 2,751,369, 6–19–56, Cl. 260—41.
Telefonaktiebolaget L M Ericsson: *See*—
Johannesson, Nils-Olof. 2,751,378.
Telephone Mfg. Co. Ltd.: *See*—
Simon, Malcolm, and Rommel. 2,750,982.
Terhune, Edgar A., to the United States of America as represented by the Secretary of the Army. Radiosonde ballon breakage switch. 2,751,456, 6–19–56, Cl. 200—81.
Texas Co., The: *See*—
Alpert, Norman, and Vermillion. 2,751,331.
Gaines, Tom. 2,750,884.
Texas Pipe Line Co., The: *See*—
Bond, Donald H. 2,750,963.
Textron American, Inc.: *See*—
Oravec, Emil G. 2,751,179.
Reen, Gerald K., and Booth. 2,751,512.
Textron, Ralph: *See*—
Willyard, Leslie A., and Taegtatroem. 2,751,563.
Theibault, Albert R., to Rosenbaum "Q-B-KL" Parking Co. Automatic vehicle ejection device. 2,751,093, 6–19–56, Cl. 214—16.1.
Theobald, Harold S. Skill and effort testing machine. 2,750,683, 6–19–56, Cl. 35—22.
Thomas, David F., and G. A. Rathburn, to Waterous Co. Fire pump. 2,750,893, 6–19–56, Cl. 103—106.
Thomas, David F., and G. A. Rathburn, to Waterous Co. Centrifugal pump. 2,750,894, 6–19–56, Cl. 103—108.
Thomas, Henry A., to Ethyl Corp. Portable hand wheel actuator. 2,750,809, 6–19–56, Cl. 74—472.
Thompson, Clinton O. and S. C. Film cutter having a knife and a transport block for advancing film to the knife. 2,751,004, 6–19–56, Cl. 164—42.
Thompson Products, Inc.: *See*—
Gapstur, John J. 2,750,819.
Thompson, Selma C.: *See*—
Thompson, Clinton O. and S. C. 2,751,004.
Thompson, Tom H., to Sabre Research Corp. Hydraulic transmission mechanism. 2,750,745, 6–19–56, Cl. 60—54.
Thompson, Tom H., to Sabre Research Corp. Self-damped torsion spring. 2,751,217, 6–19–56, Cl. 267—57.
Thompson, William M.: *See*—
Maxwell, Loyal C., and Thompson. 2,751,329.
Thompson, William M., K. C. Sekmakas, and E. Dickinson, to Armour and Co. Use of a salt in the extraction slurry in recovering proteolytic enzymes from pancreas gland material. 2,751,330, 6–19–56, Cl. 195—67.
Thomson, Charles, to Cable Belt Ltd. Cable driven conveyors. 2,751,065, 6–19–56, Cl. 198—191.
Threadgold, Ronald, to Automatic Telephone & Electric Co. Ltd. Registering and translating circuits for use in telecommunication systems. 2,751,435, 6–19–56, Cl. 179—18.
Timken, Harold A., Jr., and F. C. Lancor, to Vitro Corp. of America. Programming device. 2,751,448, 6–19–56, Cl. 200—46.
Tinnerman Products, Inc.: *See*—
Flora, Laurence H. 2,751,052.
Tinsley (Industrial Instruments) Ltd.: *See*—
Kershaw, Peter L. 2,750,837.
Tizzard, Thomas W., to Westinghouse Air Brake Co. Single track railway signal systems using normally deenergized coded track circuits. 2,751,491, 6–19–56, Cl. 246—3.
Tolan Machinery Co., Inc.: *See*—
Landgraber, Fred A., Sr., and Tolpa. 2,750,871.
Toledo Scale Co.: *See*—
Weckerly, Mark A. 2,751,215.
Tollstrup, Duane H. Absorbent bandage. 2,750,944, 6–19–56, Cl. 128—290.
Tolpa, John M.: *See*—
Landgraber, Fred A., Sr., and Tolpa. 2,750,871.
Tomiyasu, Kiyo, and S. B. Cohn, to Sperry Rand Corp. Variable transfer directional coupler for microwave energy. 2,751,556, 6–19–56, Cl. 333—10.
Torley, Frederick G., and W. J. de Beaubien, to General Motors Corp. Electric switch. 2,751,469, 6–19–56, Cl. 200—154.
Torrey, Robert D., to Sperry Rand Corp. Sneak pulse suppressor. 2,751,509, 6–19–56, Cl. 307—88.
Totzek, Friedrich, to Koppers Co., Inc. Gasification apparatus with metallic water jacket nozzle for steam. 2,751,286, 6–19–56, Cl. 48—67.
Tourville, Frank L.: *See*—
Cole, Arthur D., and Tourville. 2,750,869.
Towle, Philip H.: *See*—
Hill, Philip, Van Strien, and Towle. 2,751,359.
Van Strien, Richard E., and Towle. 2,751,283.
Van Strien, Richard E., Towle, and Hill. 2,751,361.
Trahan, Gus H., to Houston Engineers, Inc. Junk basket. 2,751,010, 6–19–56, Cl. 166—99.
Traylor, Samuel W., Jr. Toggle mechanism for jaw-type crusher. 2,751,159, 6–19–56, Cl. 241—269.
Tregillus, Leonard W.: *See*—
James, Thomas H., and Tregillus. 2,751,300.
Trico Products Corp.: *See*—
Olshei, John R. 2,750,617.
Trindl, Joseph H. Wringer mop structure. 2,750,613, 6–19–56, Cl. 15—119.
Troendle, Jean A. Apparatus for compressing gases. 2,751,144, 6–19–56, Cl. 230—52.
Trösken, Otto, to Cassella Farbwerke Mainkur Aktiengesellschaft. Fluorescent heterocyclic compounds and process for their manufacture. 2,751,383, 6–19–56, Cl. 260—240.
Troutman, Wilbur E. Outdoor circular band antenna. 2,751,590, 6–19–56, Cl. 343—866.

Trutna, William R.: *See*—
Cheshire, John R., and Trutna. 2,751,415.
Tutt, Richard D., to Allied Thermal Corp. Diffuser. 2,750,865, 6–19–56, Cl. 98—40.
Udylite Corp., The: *See*—
Davis, John V. 2,750,897.
Union Carbide and Carbon Corp.: *See*—
Jackson, Clarence E., and Shrubsall. 2,751,478.
Union Machinery Co.: *See*—
Marasso, Fred D. 2,750,899.
Marasso, Fred D. 2,751,591.
Union Oil Co. of California: *See*—
Dorsey, William S. 2,751,282.
Peterson, Gale S., and Welsh. 2,751,257.
United Aircraft Corp.: *See*—
Ledwith, Walter A. 2,751,189.
Leeper, Charles K. 2,750,741.
United Shoe Machinery Corp.: *See*—
Clark, Alfred S. 2,750,607.
Whelton, John M. 2,750,608.
United States Atomic Energy Commission, United States of America as represented by the: *See*—
Anderson, Herbert L. 2,751,505.
Kienberger, Charles A., Greene, Flanders, and Flynn. 2,751,344.
Rankin, Bayard H. 2,751,273.
Schultz, Arthur B. 2,751,229.
United States Rubber Co.: *See*—
Bill, John C. 2,751,371.
Martin, Frank S. 2,751,363.
United States Steel Corp.: *See*—
Lane, John R. 2,751,006.
Lorig, Edwin T. 2,751,066.
Wonsowicz, Walter. 2,750,830.
Universal Oil Products Co.: *See*—
Ipatieff, Vladimir N., and Pines. 2,751,406.
Unruh, Cornelius C.: *See*—
Taylor, Erle W., and Unruh. 2,751,372.
Unruh, Cornelius C., and D. A. Smith, to Eastman Kodak Co. Light-sensitive polymers for photomechanical processes. 2,751,373, 6–19–56, Cl. 260—78.5.
Upjohn Co., The: *See*—
Fonken, Gunther S. 2,751,399.
Hanze, Arthur R., and Levin. 2,751,401.
Nathan, Alan H. 2,751,400.
Nathan, Alan H., and Hogg. 2,751,397.
Schneider, William P. 2,751,402.
Slomp, George, Jr. 2,751,380.
Slomp, George, Jr. 2,751,381.
Wright, John B. 2,751,343.
Uritis, Joseph M., to Radio Corp. of America. Valve actuating mechanism. 2,750,961, 6–19–56, Cl. 137—625.5.
Utica Drop Forge & Tool Corp.: *See*—
Barnes, William A., and Rozmus. 2,750,829.
Vallorani, Ben J., and C. J. McConnell, to General Electric Co. Spring hinge for range surface units. 2,751,487, 6–19–56, Cl. 219—37.
Valtersson, Per V., and K. A. Eklund, to E. G. Petersen. Shutter mechanism. 2,751,154, 6–19–56, Cl. 236—35.2.
Van Allan, James A.: *See*—
Salminen, Ilmari F., Van Allan, and Yackel. 2,751,295.
Vandergrift, Wayne J.: *See*—
Camilli, Guglielmo, Kierstead, Vandergrift, and Russ. 2,751,562.
Vanderhoofven, Leonard. Peach pitting device. 2,750,975, 6–19–56, Cl. 146—28.
Van Deusen, Werter P.: *See*—
Minsk, Louis M., Van Deusen, and Robertson. 2,751,296.
Van Iperen, Dirk C.: *See*—
Blok Lourens, and van Iperen. 2,751,481.
Vanity Fair Mills, Inc.: *See*—
Bellini, Eugene. 2,750,772.
Van Strien, Richard E.: *See*—
Hill, Philip, and Van Strien. 2,751,284.
Van Strien, Richard E.: *See*—
Hill, Philip, Van Strien, and Towle. 2,751,359.
Van Strien, Richard E., and P. H. Towle, to Standard Oil Co. Rapid gelling basic aluminum soaps. 2,751,283, 6–19–56, Cl. 44—7.
Van Strien, Richard E., to Standard Oil Co. Presolvated aluminum soap gelling agents. 2,751,360, 6–19–56, Cl. 252—316.
Van Strien, Richard E., P. H. Towle, and P. Hill, to Standard Oil Co. Liquid hydrocarbon gelling agents. 2,751,361, 6–19–56, Cl. 252—316.
Van Werd, Johannes H. F.: *See*—
Anderson, Charles H. J., and van Werd. 2,751,569.
Vegren, Conrad R. Quick acting connector. 2,751,238, 6–19–56, Cl. 287—119.
Vella, Salvatore S., and P. J., F. E. and C. S. Musso, to Air-Flo Onion Clipper Mfg. Co., Inc. Apparatus for clipping tops from onions. 2,750,977, 6–19–56, Cl. 146—83.
Velonis, Stamatis G.: *See*—
Inman, Paul R., and Velonis. 2,750,950.
Verhoeff, Adrianus: *See*—
Boldingh, Willem H., Hardenberg, Oosterkamp, and Verhoeff. 2,751,504.
Vermeulen, Roelof: *See*—
Went, Jan J., and Vermeulen. 2,750,658.
Vermillion, Herbert E.: *See*—
Alpert, Norman, and Vermillion. 2,751,331.
Ver Nooy, Burton, to T. D. Williamson, Inc. Wear-compensating pipe line scraper. 2,750,612, 6–19–56, Cl. 15—104.06.
Victor Chemical Works: *See*—
Bowman, Frederic C., and Ramsey. 2,751,357.
Vigg, John. Dental model. 2,750,670, 6–19–56, Cl. 32—71.
Vinco Corp.: *See*—
Beam, Albert S., and Stapleton. 2,750,676.
Virchaux, Paul, and H. Korber. Thread-feeding attachment for knitting frames. 2,750,773, 6–19–56, Cl. 66—132.
Visking Corp., The: *See*—
Carlson, Donald W. 2,751,319.
Visos, Charles D., to Knapp-Monarch Co. Bread lift for toasters. 2,750,876, 6–19–56, Cl. 99—391.
Vitro Corp. of America: *See*—
Timken, Harold A., Jr., and Lancor. 2,751,448.
Vizard, William C., to Barbour Welting Co. Beaded shoe welting. 2,750,686, 6–19–56, Cl. 36—78.
Volt, Willy: *See*—
Korkowski, Eberhard, Volt, and Schmidt. 2,750,743.
Von Knauf, Emil W., and A. Melman. Device for buttering sweet corn. 2,750,767, 6–19–56, Cl. 65—12.
Von Seggern, Ernest A., to Soundrive Pump Co. Valve of relative movable flexible diaphragms. 2,750,959, 6–19–56, Cl. 137—525.
Voortmann, Heinrich, to Wolf Geraete, Spade. 2,751,192, 6–19–56, Cl. 254—131.5.
Wagner, Kurt, to August Sauter K. G. Price indicator for fully automatic inclination scales. 2,751,213, 6–19–56, Cl. 265—29.
Wagoner, Billy J.: *See*—
Brenner, Abner, and Wagoner. 2,751,552.
Wahlin, Fred W., and E. J. O'Brien, to Spraying Systems Co. Whirl spray nozzle. 2,751,252, 6–19–56, Cl. 299—114.
Waldron, Benjamin F. Fluid end pump head. 2,751,267, 6–19–56, Cl. 309—3.
Wale, John: *See*—
Givens, John N., Rose, and Wale. 2,750,780.
Wales-Strippit Corp.: *See*—
Taylor, Paul H. 2,751,216.
Walker, Thomas: *See*—
Hunt, John S., Walker, and Barton. 2,751,398.
Walkup, Lewis E., H. E. Copley, and W. A. Beckdahl, to The Haloid Co. Apparatus for developing electrophotographic plates. 2,750,922, 6–19–56, Cl. 118—57.
Walldow, Carl B., to Alaska Juneau Gold Mining Co. Bag filling mechanism. 2,751,134, 6–19–56, Cl. 226—49.
Wallquist, Ivar. Movable bed type filter for liquids. 2,751,087, 6–19–56, Cl. 210—199.
Walter, Jules G.: *See*—
Cohn, Joseph, Walter, and Cohn. 2,750,679.
Walter, Otto L.: *See*—
Luckhardt, Johannes. 2,750,988.
Waltman, Dallas H. Hand-operated portable traffic signal light. 2,751,581, 6–19–56, Cl. 340—321.
Waltz, Edward, to The E. O. Bulman Mfg. Co., Inc. Roll paper holder and cutter. 2,751,163, 6–19–56, Cl. 242—55.5.
Wandelt, Richard F., to Industrial Radiant Heat Corp. Packaging method. 2,750,719, 6–19–56, Cl. 53—22.
Waterbury Farrel Foundry & Machine Co., The: *See*—
Byam, Erwin B. 2,750,818.
Waterous Co.: *See*—
Thomas, David F., and Rathburn. 2,750,893.
Thomas, David F., and Rathburn. 2,750,894.
Waters, Norman D.: *See*—
Freedlander, Abraham L., and Waters. 2,750,606.
Watton, Leonard H. N., R. Brown, and F. W. Hall, to Hall Telephone Accessories Ltd., and Block & Anderson Ltd. Sheet feeding arrangements. 2,751,224, 6–19–56, Cl. 271—43.
Watts, John D., and E. K. Pierce, Jr., to Gray Tool Co. Well head pipe suspension. 2,751,235, 6–19–56, Cl. 285—22.
Watzlavick, Joseph D. Tool for testing oil wells. 2,751,016, 6–19–56, Cl. 166—187.
Weatherhead Co., The: *See*—
Baldwin, John D., Jr., St. Clair, and Johnson. 2,751,181.
Webster, Warren, & Co.: *See*—
Morgan, David E. 2,751,156.
Weckerly, Mark A., to Toledo Scale Co. Weighing scales. 2,751,215, 6–19–56, Cl. 265—68.
Weingard, Archie E., to American Meter Co., Inc. Gas meter diaphragm and mounting. 2,750,799, 6–19–56, Cl. 73—278.
Weisenburg, Andrew. Presser wheel for securing pads to crown caps. 2,750,987, 6–19–56, Cl. 154—1.5.
Weller, Edward F., Jr.: *See*—
Hanysz, Eugene A., and Weller. 2,750,791.
Wells, John A., to Stimpson Computing Scale Co. Computing weighing scale and optical projection viewing means. 2,750,838, 6–19–56, Cl. 88—24.
Welsh, Charles J.: *See*—
Peterson, Gale S., and Welsh. 2,751,257.
Welt, Benjamin P.: *See*—
Kreitchman, Morton A., Welt, and Maslow. 2,750,962.
Wendling, Le Roy J., to The Apex Machine & Tool Co. Magnetic socket wrench. 2,750,828, 6–19–56, Cl. 81—125.
Wendt, Gerhard R., to American Home Products Corp. Mercurial diuretic compositions and method of stabilization. 2,751,325, 6–19–56, Cl. 167—71.
Wendt, Robert H.: *See*—
Berg, Elaine. 2,750,770.
Went, Jan J., and R. Vermeulen, to Hartford National Bank and Trust Co., trustee. Wire-shaped object. 2,750,658, 6–19–56, Cl. 29—191.2.
Werner, Gerhard, to Norddeutsche Affinerie. Process for the treatment of bismuth foam obtained in the refining of bi-containing lead. 2,751,290, 6–19–56, Cl. 75—70.
West, Harry R., and M. T. Reese, to General Electric Co. Line drop compensator. 2,751,511, 6–19–56, Cl. 307—103.
Western Electric Co., Inc.: *See*—
Collette, Robert P., and Michelich. 2,750,971.
Gray, Alvin N. 2,750,627.
Henning, George E. 2,750,626.
Laird, Alfred W. 2,751,362.
Mitchell, Gerald A., and Yost. 2,751,526.
Purdy, Chester A. 2,750,921.
Yorgey, Willard B., Jr. 2,750,752.

Western States Machine Co., The: *See*—
Hertrich, Joseph. 2,751,083.
Western Union Telegraph Co., The: *See*—
Kline, Bernard L., and Roddin. 2,751,310.
Westinghouse Air Brake Co.: *See*—
Fitzsimmons, David P. 2,751,492.
Tizzard, Thomas W. 2,751,491.
Westinghouse Electric Corp.: *See*—
Blehn, Gerald L. 2,751,143.
Parr, Bernard F. 2,750,691.
Whelton, John M., to United Shoe Machinery Corp. Inseam trimming machines. 2,750,608, 6–19–56, Cl. 12—82.
Whestone, Richard R., and J. R. Scheibli, to Shell Development Co. Polymers of unsaturated esters of cyclohexanecarboxylic acids and compositions containing the same. 2,751,364, 6–19–56, Cl. 260—17.
Whirlpool-Seeger Corp.: *See*—
Morrison, Harold E. 2,751,488.
White, Adam W., to The Hoover Co. Foldable wringer washing machine. 2,750,784, 6–19–56, Cl. 68—247.
White, Chester M., and A. W. Sawyer, to Genesee Research Corp. Hydraulic pressure transmitting fluid. 2,751,356, 6–19–56, Cl. 252—75.
White, James C., to Eastman Kodak Co. Yarn structure. 2,750,653, 6–19–56, Cl. 28—81.
White, Joseph M. Stair anchor. 2,750,621, 6–19–56, Cl. 16—10.
Whitney, Paul V., to The Jeffrey Mfg. Co. Bunker feeding system. 2,751,094, 6–19–56, Cl. 214—17.
Whyte, Ronal H., to General Motors Corp. Domestic appliance. 2,750,779, 6–19–56, Cl. 68—19.
Wierman, Clyde H., 50% to A. Giargiari. Sandal with means for detachably attaching an outer sole thereto. 2,750,685, 6–19–56, Cl. 36—15.
Wightman, Lawrence W., to General Electric Co. Shaft bearing. 2,751,265, 6–19–56, Cl. 308—132.
Wilcoxen, Leon C., and C. E. Pike, to Mayrath Machinery Co., Inc. Power driven elevating conveyor. 2,751,063, 6–19–56, Cl. 198—121.
Wildhaber, Ernest, to The Gleason Works. Toothed gearing. 2,750,814, 6–19–56, Cl. 74—805.
Wildhaber, Ernest, to The Gleason Works. Method of cutting gears. 2,750,850, 6–19–56, Cl. 90—9.4.
Wilhelm, John R., to Purolator Products, Inc. Fuel tank filter installation. 2,751,084, 6–19–56, Cl. 210—150.
Williams, Burdell S., to Taco Heaters, Inc. Heat exchanger. 2,751,199, 6–19–56, Cl. 257—184.
Williams, Russell J., and M. J. Helmos, to Bemis Bro. Bag Co. Bags. 2,751,142, 6–19–56, Cl. 229—62.5.
Williamson, T. D., Inc.: *See*—
Ver Nooy, Burton. 2,750,612.
Willman, Philip E., to McGraw Electric Co. Control knob. 2,750,918, 6–19–56, Cl. 116—133.
Wills, Ervin E., to Federal Electric Products Co. Contact assembly. 2,751,471, 6–19–56, Cl. 200—166.
Willyard, Leslie A., and I. R. V. Taegtstroem; said Taegtstroem now by change of name Ralph Textrom, to Hoffman Electronics Corp. Radio frequency transformer and coil form. 2,751,563, 6–19–56, Cl. 336—65.
Wilson, Daniel F., to Conflo Engineering & Mfg. Co. Gate attaching structure for concrete pipe. 2,751,184, 6–19–56, Cl. 251—147.
Wilson, Ernest V.: *See*—
Black, James F., and Wilson. 2,751,506.
Wilson, Raymond W.: *See*—
Miller, Raymond J., Frevik, and Wilson. 2,750,863.
Wilson, Theodore J.: *See*—
Anderson, John W., and Wilson. 2,751,539.
Winkel, Herbert C. Belt aligner. 2,750,805, 6–19–56, Cl. 74—240.
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NOTE.—First number = class, second number = subclass, third number = patent number

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55.5: 2,751,163
66: 2,751,164
84.1: 2,751,165
150: 2,751,166
244— 1: 2,751,167
15: 2,751,168
77: 2,751,169
134: 2,751,170
141: 2,751,171
153: 2,751,172
246— 3: 2,751,491
182: 2,751,492
248— 27: 2,751,173
42: 2,751,174
72: 2,751,175
96: 2,751,176
146: 2,751,177
317: 2,751,178
358: 2,751,179
249— 17: 2,751,180
63: 2,751,181
250— 20: 2,751,493
27: 2,751,494
2,751,495
36: 2,751,496
2,751,497
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2,751,502
40: 2,751,503
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83.1: 2,751,505
83.6: 2,751,506
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147: 2,751,184
172: 2,751,185
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252— 8.55: 2,751,348
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33.4: 2,751,350
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62.5: 2,751,352
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2,751,354
75: 2,751,355
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135: 2,751,357
153: 2,751,358
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257— 3: 2,751,197
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184: 2,751,199
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260— 9: 2,751,363
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29.7: 2,751,365
37: 2,751,366
41: 2,751,367
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45.8: 2,751,370
45.9: 2,751,371
78.5: 2,751,372
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88.7: 2,751,374
92.1: 2,751,375
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239.1: 2,751,378
239.55: 2,751,379
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239.65: 2,751,382
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309.6: 2,751,393
309.7: 2,751,394
310: 2,751,395
319: 2,751,396
397.3: 2,751,397
397.45: 2,751,398
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2,751,402
414: 2,751,403
449.6: 2,751,404
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465: 2,751,406
465.8: 2,751,407
519: 2,751,408
558: 2,751,409
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562: 2,751,413
566: 2,751,414
567: 2,751,415
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610: 2,751,417
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615: 2,751,419
641: 2,751,420
652.5: 2,751,421
666: 2,751,422
676: 2,751,423
679: 2,751,424
683.15: 2,751,426
683.4: 2,751,425
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262— 7: 2,751,203
9: 2,751,204
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262— 26: 2,751,207
29: 2,751,208
2,751,209
263— 8: 2,751,210
19: 2,751,211
2,751,212
265— 29: 2,751,213
68: 2,751,214
2,751,215
267— 1: 2,751,216
57: 2,751,217
69: 2,751,218
268— 59: 2,751,219
74: 2,751,220
270— 68: 2,751,221
81: 2,751,222
271— 2.2: 2,751,223
43: 2,751,224
272— 33: 2,751,225
273— 26: 2,751,226
86: 2,751,227
131: 2,751,228
279— 75: 2,751,229
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280— 6: 2,751,231
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44: 2,751,234
285— 22: 2,751,235
114: 2,751,236
210: 2,751,237
287— 119: 2,751,238
292— 36: 2,751,239
113: 2,751,240
175: 2,751,241
229: 2,751,242
337: 2,751,243
358: 2,751,244
294— 11: 2,751,245
296— 28: 2,751,246
2,751,247
43: 2,751,248
299— 50: 2,751,249
60: 2,751,250
69: 2,751,251
114: 2,751,252
118: 2,751,253
150: 2,751,254
301— 1: 2,751,255
37: 2,751,256
302— 17: 2,751,257
304— 2: 2,751,258
305— 9: 2,751,259
307— 10: 2,751,507
2,751,508
88: 2,751,509
2,751,510
103: 2,751,511
308— 4: 2,751,260
16: 2,751,261
26: 2,751,262
85: 2,751,263
104: 2,751,264
132: 2,751,265
180: 2,751,266
309— 3: 2,751,267
310— 27: 2,751,512
93: 2,751,513
311— 5: 2,751,268
75: 2,751,269
312— 202: 2,751,270
231: 2,751,271
341: 2,751,272
313— 55: 2,751,514
92: 2,751,515
2,751,516
265: 2,751,517

315— 3.5: 2,751,518
13: 2,751,519
27: 2,751,520
39: 2,751,521
79: 2,751,522
317— 2: 2,751,523
168: 2,751,524
201: 2,751,525
203: 2,751,526
234: 2,751,527
2,751,528
236: 2,751,529
246: 2,751,530
2,751,531
318— 7: 2,751,532
2,751,533
16: 2,751,534
19: 2,751,535
29: 2,751,536
88: 2,751,537
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320— 1: 2,751,544
321— 18: 2,751,545
68: 2,751,546
323— 22: 2,751,547
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66: 2,751,549
2,751,550
110: 2,751,551
324— 34: 2,751,552
70: 2,751,553
88: 2,751,554
89: 2,751,555
333— 10: 1,751,556
73: 2,751,557
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97: 2,751,559
2,751,560
98: 2,751,561
336— 60: 2,751,562
65: 2,751,563
197: 2,751,564
339— 5: 2,751,565
12: 2,751,566
70: 2,751,567
99: 2,751,568
188: 2,751,569
223: 2,751,570
228: 2,751,571
340— 6: 2,751,572
17: 2,751,573
37: 2,751,574
72: 2,751,575
187: 2,751,576
208: 2,751,577
253: 2,751,578
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263: 2,751,580
321: 2,751,581
366: 2,751,582
367: 2,751,583
380: 2,751,584
384: 2,751,585
343— 16: 2,751,586
17.1: 2,751,587
112: 2,751,588
767: 2,751,589
866: 2,751,590
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110: 2,751,275

Classification of Designs

D 4— 4: Des. 178,077
D15— 1: Des. 178,095
Des. 178,096
Des. 178,100
8: Des. 178,092
Des. 178,104
11: Des. 178,046
D21— 6: Des. 178,101
D22— 6: Des. 178,043
D26— 1: Des. 178,078
Des. 178,079
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D26— 5: Des. 178,058
8: Des. 178,088
13: Des. 178,034
D29—23: Des. 178,045
D33— 3: Des. 178,037
6: Des. 178,053
Des. 178,054
Des. 178,056
7: Des. 178,097
14: Des. 178,055
Des. 178,093
Des. 178,094

D33—14: Des. 178,098
Des. 178,099
19: Des. 178,057
D34—11: Des. 178,082
D39— 1: Des. 178,051
D42— 1: Des. 178,044
8: Des. 178,091
D44— 1: Des. 178,042
Des. 178,084
10: Des. 178,085
15: Des. 178,047
Des. 178,048

D44—15: Des. 178,059
D45— 9: Des. 178,062
Des. 178,063
Des. 178,065
Des. 178,071
16: Des. 178,061
Des. 178,064
Des. 178,066
Des. 178,067
Des. 178,068
Des. 178,070
19: Des. 178,069

D48— 2: Des. 178,075
20: Des. 178,073
27: Des. 178,090
32: Des. 178,049
D52— 1: Des. 178,060
Des. 178,063
4: Des. 178,087
D54— 9: Des. 178,039
12: Des. 178,086
13: Des. 178,041
16: Des. 178,035
D56— 1: Des. 178,080

D58—13: Des. 178,074
D65— 1: Des. 178,105
D67— 2: Des. 178,050
D70— 1: Des. 178,102
D71— 1: Des. 178,081
D72— 1: Des. 178,076
D80— 9: Des. 178,072
D81— 2: Des. 178,089
21: Des. 178,052
D85— 2: Des. 178,103
D89— 1: Des. 178,038
D90—20: Des. 178,040

TRADEMARKS

NOTICES

Service by Publication

A petition, No. 6651, having been filed to cancel the registration of Dr. Ballowitz & Co. Chemische-Pharmaz. Fabrik G. m. b. H., No. 360,479, dated September 20, 1938, of which Split-Tablets Corporation, a corporation of New York is the assignee of record, and the notice of such proceeding sent by registered mail having been returned by the post office as undeliverable, notice is hereby given that unless said Split-Tablets Corporation, its assigns or legal representatives, shall enter an appearance herein within thirty days from the date of this publication, the cancellation will be proceeded with as in the case of default.

DAPHNE LEEDS,
Assistant Commissioner of Patents.

A petition to cancel the registration identified below having been filed and notice of such proceeding sent by registered mail to the registrant having been returned undeliverable, and this Office having been informed that the registrant is deceased, notice is hereby given that unless the assigns or legal representatives of the registrant shall enter an appearance within thirty days from the date of this publication, the cancellation will be proceeded with as in the case of default.

Morris Lazow, Brooklyn, N. Y., Reg. No. 356,953, Canc. No. 6690.

DAPHNE LEEDS,
Assistant Commissioner of Patents.

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 195,359 (Representation of a symbol for the name "Chanel"), Chanel, Inc., Face powder, perfume, etc.; **TM 422,335** (No. 5), **TM 510,992** (Chanel), same, Perfume, toilet water, etc.; **TM 506,022** (Representation of a perfume box), **TM 511,105** ("Chanel No. 5" and perfume bottle design), same, Perfume, **filed** May 18, 1956, D. C., S. D. N. Y., Doc. 109/369, *Chanel, Inc.* v. *Le Sure Prod. Co.*

TM 209,644 (Neiman Marcus Company Individual Shops for Gentle Women), Neiman-Marcus Company, Misses' and women's suits, coats, knickers, etc.; **TM 379,183** (Neiman Marcus Permanized), same, Silk hosiery; **TM 405,250** ("Neiman-Marcus Dallas" and design), same, Women's, misses' and junior misses' coats, suits, dresses, etc.; **TM 576,357** (Neiman-Marcus Palomino), same, Women's fur garments—namely, coats, capes, jackets, etc.; **TM 601,375** (Neiman-Marcus), same, Women's and misses' wearing apparel—namely, coats, raincoats, suits, etc.; **TM 601,723**, same, Men's clothing—namely, overcoats, suits, jackets, sport coats, etc.; **TM 601,864**, same, Jewelry—namely, rings, bracelets, watch fobs, cuff links, etc., **filed** May 18, 1956, D. C., W. D. Tex. (San Antonio), Doc. 2316, *Neiman-Marcus Co.* v. *Sam Kamens et al.*

TM 319,402 (Tintz), Tintz Company, Shampoo; **TM 511,302**, same, Hair rinse, hair coloring, hair touch-up pencil, cream shampoo and shampoo, **filed** May 21, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c910, *The Fleetwood Co.* v. *Stineway Drug Co.*

TM 322,650 (Evenflo), The Pyramid Rubber Co., Nipples, nipple retaining caps, and nursing bottles; **TM 562,415, TM 566,385, same**, Complete nursers; **TM 587,172, TM 587,174**, same, Electric devices for heating water, etc.; **TM 352,346** (Vitaflo), same, Nipples, retaining caps, sealing discs, and nursing bottles; **TM 549,434, TM 562,725** ("Evenflo" and design), same, Nursers, nursing bottles, etc.; **TM 587,173**, same, Electric devices for heating water, **filed** Feb. 3, 1955, D. C., S. D. N. Y., Doc. 98/303, *The Pyramid Rubber Co.* v. *Mac Marie, Inc.* Consent judgment for injunction May 17, 1956.

CONDITION OF TRADEMARK APPLICATIONS AS OF MAY 25, 1956

Total number of applications awaiting action [excluding renewals and Sec. 12 (c)]		8,544
Date of oldest new application	Nov.	7, 1955
Date of oldest amended application	Jan.	3, 1956

MERCHANT, JOHN, Director, Trademark Examining Operation

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application: New	Oldest Application: Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	1-3-56	2-2-56
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	11-7-55	2-2-56
III. WENDT, C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	11-23-55	1-3-56
Renewals (All Classes)	3-19-56	5-18-56
Sec. 12 (c) Publications (All Classes)	3-12-56	5-1-56

Applications Filed During Week Ending May 25, 1956—476

Registrations Issued	447	—No. 628,860 to No. 629,306
Act of 1905	1	—No. 444,811
Renewals Issued	90	

TM 352,346. (See TM 322,650.)

TM 379,183. (See TM 209,644.)

TM 405,250. (See TM 209,644.)

TM 422,335. (See TM 195,359.)

TM 508,022. (See TM 195,359.)

TM 510,992. (See TM 195,359.)

TM 511,105. (See TM 195,359.)

TM 511,302. (See TM 319,402.)

TM 524,725. (See TM 568,635.)

TM 549,434. (See TM 322,650.)

TM 555,364 (Pegger), A-1 Mfg. Co., Men's and boys' suits of clothes: 2,455,589, T. Kotzin, Trousers, filed July 18, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 18443-WM, *A-1 Mfg. Co.* v. *Edward Hyman Co. et al.* Consent judgment; patent and trademark registration held valid and infringed; injunction issued (notice May 18, 1956)

TM 562,415. (See TM 322,650.)

TM 562,725. (See TM 322,650.)

TM 566,385. (See TM 322,650.)

TM 568,635 ("Little League Baseball" and design), Little League Baseball, Inc., Promoting and developing sportsmanship, team play, and athletic ability through the medium of organized juvenile baseball teams; **TM 590,251**, same, Young boys' T-shirts and sweatshirts; **TM 606,748** (Little Leaguer), same, Magazines; **TM 621,335** (Little League), same, Pen and pencil sets; **TM 524,725**, same, Lubin-Weeker Co., Inc., Pajamas, filed May 18, 1956, D. C., S. D. Fla. (Tampa), Doc. 2917-T, *Little League Baseball, Inc.* v. *Florida Little Major League Association, Inc., et al.*

TM 576,357. (See TM 209,644.)

TM 584,406 (Hazel Bishop), Hazel Bishop Inc., Lipsticks and liquid creme rouge, filed Nov. 15, 1954, D. C., S. D. N. Y., Doc. 97/1, *Hazel Bishop, Inc.* v. *Paula Himmel, Laurel Products Co. Inc., and Gray Distributors, Inc.* Stipulation and order of discontinuance as to defendant Gray Distributors, Inc. only Jan. 14, 1955: Final decree: defendants enjoined May 21, 1956.

TM 587,172. (See TM 322,650.)

TM 587,173. (See TM 322,650.)

TM 587,174. (See TM 322,650.)

TM 590,251. (See TM 568,635.)

TM 592,331 (manpower), **TM 596,928** ("m i manpower, inc." and design), Manpower, Inc., Furnishing of its employees on a contract basis to persons or places of business requiring part-time or temporary help, including stenographers, typists, etc., filed May 23, 1956, D. C., Dist. of Columbia, Doc. 2171/56, *Manpower, Inc.* v. *Manpower Employment Service.*

TM 596,928. (See TM 592,331.)

TM 601,375. (See TM 209,644.)

TM 601,723. (See TM 209,644.)

TM 601,864. (See TM 209,644.)

TM 603,838 (Geritinic), Geriatric Pharmaceutical Corp., Medicinal tonic preparation, filed Aug. 11, 1955, D. C., S. D. N. Y., Doc. 102/342, *Geriatric Pharmaceutical Corp.* v. *The Vitarine Co. Inc.* Stipulation and order of discontinuance (notice May 18, 1956).

TM 605,905 (Beer Nuts), Brewster Food Service, Shelled and salted peanuts, filed May 21, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c909, *Brewster Food Service* v. *Cheese Products Co., Inc.*

TM 606,748. (See TM 568,635.)

TM 621,335. (See TM 568,635.)

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.

As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 695,998. Fred Rueping Leather Company, Fond du Lac, Wis. Filed Oct. 6, 1955.

MANITOU

For Leather.
First use Mar. 11, 1955.

SN 696,687. American Colloid Company, Chicago, Ill. Filed Oct. 19, 1955.

PELBON

For Bentonite.
First use Sept. 28, 1955.

SN 697,058. Union Bay State Chemical Co., Inc., Cambridge, Mass. Filed Oct. 24, 1955.

UNIBAC

For Synthetic Latex for Use in Textile Backing, Coating, and Impregnating Compositions.
First use May 27, 1955.

SN 697,105. Metals Disintegrating Company, Inc., Elizabeth, N. J. Filed Oct. 25, 1955.

YUBA

For Barite.
First use August 1946.

CLASS 2

SN 692,812. Sprague Products Company, North Adams, Mass. Filed Aug. 10, 1955.

KLEER-PAK

For Transparent Boxes for Packaging a Plurality of Electrical Components, Particularly Capacitors and Resistors.
First use July 6, 1955.

SN 692,951. Orianna Metal Products, Inc., Philadelphia, Pa. Filed Aug. 12, 1955.



No claim is made to the words "Metal Spools" except in the association shown.
For Spools for Holding Wire.
First use July 15, 1954.

SN 693,359. Atlas Plywood Corporation, Boston, Mass. Filed Aug. 19, 1955.



No claim is made to the representation of a packing box apart from the mark shown. Owner of Reg. No. 208,762.
For Packing Cases, Shipping Cases, Shooks, Knock-Down Boxes, Furniture Boxes, and Butter Tubs.
First use Aug. 11, 1925.

SN 696,553. Lincoln Metal Products Corp., Brooklyn, N. Y. Filed Oct. 17, 1955.



For Housewares—Namely, Bread Boxes, Canister Sets, Paper Dispensers, Waste Baskets, Step On Cans, and Cleanser Cabinets.
First use Jan. 3, 1955.

SN 699,643. J-L Plastic Enterprises, Flint, Mich. Filed Dec. 8, 1955.



Owner of Reg. Nos. 591,419 and 591,420.
For Portable Plastic Storage Boxes.
First use Nov. 14, 1955.

SN 700,754. Royal Manufacturing Company, Inc., Prescott, Ariz. Filed Dec. 28, 1955.



For Plastic Containers—Namely, Bottles and Jars.
First use November 1952.

SN 2,740. Atlantic Products Corporation, Trenton, N. J. Filed Feb. 16, 1956. Sec. 2(f).

CARISAC

Owner of Reg. No. 578,926.
For Garment Bags.
First use Apr. 13, 1950.

SN 2,804. Ames Harris Neville Co., Portland, Oreg. Filed Feb. 16, 1956.

GRAB-TAB

For Plastic, Cloth, and Knit Bags.
First use June 29, 1953.

SN 2,833. Union Bag & Paper Corporation, New York, N. Y. Filed Feb. 16, 1956.

TWO-TEN

For Paper Boxes.
First use Feb. 2, 1956.

SN 2,834. Union Bag & Paper Corporation, New York, N. Y. Filed Feb. 16, 1956.

2-10

For Paper Boxes.
First use Feb. 2, 1956.

CLASS 3

SN 922. Swank, Inc., Attleboro, Mass. Filed Jan. 17, 1956.

OMNIBUS

For Wallets.
First use Oct. 1, 1955.

SN 1,493. Morris White, New York, N. Y. Filed Jan. 25, 1956.

A MORRIS WHITE PRODUCT

For Handbags and Wallets.
First use Jan. 5, 1906.

SN 2,176. North Bergen Leather Products Co., North Bergen, N. J. Filed Feb. 6, 1956.

For Ladies' Handbags, Made of Leather, Fabric, and Plastic.
First use Apr. 11, 1955.

SN 2,265. Theodor of California, Inc., Los Angeles, Calif. Filed Feb. 7, 1956.

TEDDY

For Handbags.
First use Nov. 14, 1955.

SN 2,626. Lydia Foster, New York, N. Y. Filed Feb. 14, 1956.

CARPETBAGGER

For Handbags and Luggage.
First use July 8, 1955.

CLASS 4

SN 698,662. Sunglaze Company, Inc., Los Angeles, Calif. Filed Nov. 21, 1955.

SUNGLAZE

For Protective Coating and Polishing Composition.
First use Sept. 16, 1955.

SN 699,427. August Santangelo, Lockport, N. Y. Filed Dec. 5, 1955.

AUGUST CO. BAR-NUN Wonder cleaner LOCKPORT N.Y.

Applicant disclaims the term "Wonder Cleaner" and the words "Lockport, N. Y."
For Cleaner for Chrome, Painted, and Lacquered Surfaces That Cleans, Waxes, and Polishes in One Operation.
First use about the Month of November 1955.

SN 699,736. Permacel Tape Corporation, New Brunswick, N. J. Filed Dec. 9, 1955.

PERMACEL

Owner of Reg. Nos. 388,238, 597,932, and others.
For Steel Wool Pads.
First use May 3, 1954.

CLASS 6

SN 696,319. Rohm & Haas Company, Philadelphia, Pa. Filed Oct. 12, 1955.

PARAPLEX

Owner of Reg. Nos. 279,547 and 440,940.
For Synthetic Chemical Compositions for Use in Industry.
First use July 7, 1930.

SN 696,508. Crown Zellerbach Corporation, San Francisco, Calif. Filed Oct. 17, 1955.

Owner of Reg. Nos. 247,311, 601,509, and others.
For Solids of Waste Sulfite Liquor, for Use as a Wetting Agent, Dispersing Agent, Emulsifier, Yeast Nutrient, and Intermediate for the Production of Organic Chemicals.
First use Nov. 6, 1951.

SN 696,638. Dexter Chemical Corporation, New York, N. Y. Filed Oct. 18, 1955.

TELL

For Surface Active, Rewetting, and Antistatic Agents and Optical Brighteners for Application to Textiles.
First use Oct. 6, 1955.

CLASS 7

SN 697,869. Union Wire Rope Corporation, Kansas City, Mo. Filed Nov. 7, 1955.

Tuffy

Owner of Reg. Nos. 430,400, 430,401, and 511,483.
For Wire Rope and Wire Rope Cables.
First use January 1941.

CLASS 10

SN 688,258. Plainsman Fertilizers, Inc., Plainview, Tex. Filed May 25, 1955.

PLAINSMAN NITRO 10 PHOS

For Liquid Fertilizer.
First use Feb. 1, 1955.

SN 284. The Sherwin-Williams Company, Cleveland, Ohio. Filed Jan. 10, 1956. Sec. 2(f).



The drawing is lined for the colors red and green. Owner of Reg. No. 506,790.
For Horticultural Hormone Spray for Fruit Trees for Reducing the Pre-Harvest Drop of Fruit.
First use on or about June 13, 1940.

CLASS 12

SN 688,966. Scatton Brothers Manufacturing Company, Hazleton, Pa. Filed June 6, 1955.



For Metal Awnings, Storm Doors, Storm Windows, and Combination Storm and Screen Doors and Windows.
First use Oct. 15, 1953.

SN 689,261. Armstrong Cork Company, Lancaster, Pa. Filed June 10, 1955.

ARMABESTOS

For Pipe Covering in the Form of Hollow Cylinders and Blocks, Composed of Asbestos With an Inorganic Binder.
First use Mar. 3, 1955.

SN 689,664. Sivad Ceramic Corporation, Oak Hill, Ohio. Filed June 16, 1955.

Damascus

For Plastic Fire Brick Consisting of Calcined Clays, Flint Aggregate, and Minerals, for General Use in Furnace Linings.
First use Nov. 15, 1954.

SN 691,384. C. G. Pardee Co., Inc., Long Island City, N. Y. Filed July 15, 1955.

EXPANDITE

For Grouting Compound in Powder Form for Setting Machinery Bases, Bridge Seats, Column Bases, Etc.
First use July 7, 1942.

SN 691,987. Emco Cement Products, Inc., Paxinos, Pa. Filed July 27, 1955.

BRANDSTONE

For Artificial Building Stone.
First use Aug. 18, 1953.

SN 692,524. Karas & Karas Glass Company, Inc., South Boston, Mass. Filed Aug. 5, 1955.

KALKO

For Metal Products for Storefront Construction Comprising Sills, Interlocking Head and Side Jambs, End Mouldings, Fluted Facia Mouldings, Structural Glass Mouldings, Awning Hoods, Bars, Division Bars, Stiffeners, Rolled Aluminum Corner Bars, Steel Stiffeners, Anchors, Glass Settings, Radial Door Jambs, Door Stops, Thresholds, Awning Flaps, Pier and Marquee Facings, Rectangular Tubing, Aluminated Aluminum Sheet Stock, Extruded Aluminum Doors and Frames.
First use Dec. 29, 1954.

SN 692,868. The Robinson Clay Product Company, Akron, Ohio. Filed Aug. 11, 1955. Sec. 2(f).

CAS-TO-FIT

Owner of Reg. No. 353,056.
For Castable Refractory Material.
First use on or about Jan. 15, 1935.

SN 692,869. The Robinson Clay Product Company, Akron, Ohio. Filed Aug. 11, 1955. Sec. 2(f).

PATCH-TITE

Owner of Reg. No. 353,057.
For Plastic Fire Brick.
First use on or about Jan. 30, 1936.

SN 693,321. Harris Manufacturing Company, Johnson City, Tenn. Filed Aug. 18, 1955.

BondWood

For Flooring, Particularly Parquet Flooring.
First use Feb. 4, 1955.

SN 693,323. Harris Manufacturing Company, Johnson City, Tenn. Filed Aug. 18, 1955.

BW

For Flooring, Particularly Parquet Flooring.
First use Feb. 4, 1955.

SN 695,128. Allied Chemical & Dye Corporation, New York, N. Y. Filed Sept. 22, 1955.

EVER-FAST

For Composition Roofing.
First use December 1931.

SN 698,579. Canadian Forest Products Ltd., Vancouver, British Columbia, Canada. Filed Nov. 21, 1955.

PV BRAND

The applicant disclaims the right to the exclusive use of the word "Brand." Owner of Canadian Reg. No. N. S. 42,414, dated Apr. 9, 1952.
For Veneer, Plywood Made of Laminated Veneers, and Hardboard.

CLASS 13

SN 687,876. Multiplex Manufacturing Company, Berwick, Pa. Filed May 19, 1955.

MM

For Pressure Air Valves, Air and Vacuum Valves, Turbine Valves, Air Vent Valves, and Slip Joints.
First use on or about Dec. 31, 1943.

SN 698,424. Gerber Plumbing Fixtures Corp., Chicago, Ill. Filed Nov. 17, 1955. Sec. 2(f).

GERBER

Owner of Reg. No. 528,6[illegible].
For Plumbing Fixtures—Namely, Water Closets, Water Closet Tanks, Lavatories, Bathtubs, Urinals, Bidets, Shower Stalls, Valves and Plumbing Brass Goods, Including Bath and Shower Fixtures, Bathtub Drains, Lavatory Fixtures, Laundry Tray Faucets, Closet Tank Trims, Kitchen Faucets, and Kitchen Sink Strainers.
First use Sept. 20, 1947.

SN 104. TV Time Foods, Inc., Chicago, Ill. Filed Jan. 3, 1956.

T V TIME

Owner of Reg. Nos. 553,867 and 589,179.
For Popcorn Poppers.
First use Aug. 27, 1954.

SN 1,958. Irrigation Equipment Co., Inc., Eugene Oreg. Filed Feb. 2, 1956.

STEELUME

For Field Irrigation Systems and Parts Thereof, Including Couplers, T's, Elbows, Valves, End Plugs, and Gates.
First use in December 1949; and June 1, 1955, in its present form.

SN 1,959. Irrigation Equipment Co., Inc., Eugene, Oreg. Filed Feb. 2, 1956.

MAINLUME

For Field Irrigation Systems and Parts Thereof, Including Couplers, T's, Elbows, Valves, End Plugs, and Gates.
First use June 1, 1955.

SN 1,960. Kel-Win Manufacturing Co., Inc., Richmond, Va. Filed Feb. 2, 1956.

KEL-WIN LEAKNOT

For Valves and Faucets.
First use Nov. 25, 1955, on faucets.

SN 1,993. Southwestern Plastic Pipe Co., Mineral Wells, Tex. Filed Feb. 2, 1956.

SOUTHWESTERN PLASTIC PIPE CO.

For Plastic Pipe.
First use on or about Oct. 10, 1955.

SN 2,024. Dor-O-Matic Division of Republic Industries, Inc., Chicago, Ill. Filed Feb. 3, 1956.



For Door Control Devices Consisting of Automatic Door Operators, Door Checks and Parts Therefor.
First use during September 1953.

SN 2,039. Kel-Win Manufacturing Company, Inc., Richmond, Va. Filed Feb. 3, 1956.

KEL-WIN

For Valves and Faucets.
First use Nov. 25, 1955, on faucets.

SN 2,063. All-American Mfg. Co., Los Angeles, Calif. Filed Feb. 6, 1956.

SN 2,063. All-American Mfg. Co., Los Angeles, Calif. Filed Feb. 6, 1956.

GARD–ETTE

For Shower Heads.
First use June 7, 1955.

SN 2,583. Speakman Company, Wilmington, Del. Filed Feb. 13, 1956. Sec. 2(f).

SPEAKMAN

For Shower Heads, Valves and Accessories, Shower and Bath Combination Bath Fittings, Lavatory and Sink Fittings, Hospital Fittings, and Flush Valves.
First use 1927.

CLASS 15

SN 697,842. Reilly-Whiteman-Walton Co., Conshohocken, Pa. Filed Nov. 7, 1955.

DUO-KOTE

For Lubricant Coating for Forming, Drawing, Rolling, and Similar Metal Working Processes and To Prevent Corrosion of Metal Surfaces.
First use July 14, 1955.

SN 510. Pate Oil Company, Milwaukee, Wis. Filed Jan. 11, 1956.

GLIDE

For Soluble Oils and Cutting Oils.
First use Dec. 22, 1955.

SN 592. Harco Chemical Company, Cranford, N. J. Filed Jan. 12, 1956.

HARCOITE

For Fuel Oil Stabilizers.
First use Nov. 26, 1937.

SN 703. The Standard Oil Company, Cleveland, Ohio. Filed Jan. 13, 1956.

AUTOMATION

For Lubricating Oils.
First use Jan. 6, 1956.

SN 1,065. Esso Standard Oil Company, New York, N. Y. Filed Jan. 19, 1956.

P-ARABAR

Owner of Reg. No. 316,091.
For Oxidation and Corrosion Inhibiting Additives for Use in Industrial and Automotive Lubricants and Fuels.
First use Nov. 1, 1955.

SN 1,101. Muench-Kreuzer Candle Co., Inc., Syracuse, N. Y. Filed Jan. 19, 1956.

HOSTESS

For Candles.
First use July 1940.

SN 1,912. Stewart-Warner Corporation, Chicago, Ill. Filed Feb. 1, 1956.

KT KLEEN TREET

For Additive for Motor Fuel.
First use Jan. 3, 1956.

SN 2,509. The Consumers Cooperative Association, d. b. a. Falcon Oil Company, Kansas City, Mo. Filed Feb. 13, 1956.

FALCON

Owner of Reg. No. 600,643.
For Gasoline, Lubricating Oils, and Greases.
First use Dec. 15, 1955.

SN 2,728. Sun Oil Company, Philadelphia, Pa. Filed Feb. 15, 1956.

SUNQUENCH

Owner of Reg. No. 548,922.
For Quenching Oil for Use in Metallurgy.
First use Nov. 30, 1955.

SN 2,918. Socony Mobil Oil Company, Inc., New York, N. Y. Filed Feb. 17, 1956.

WHITEREX

For Industrial White Oils.
First use Dec. 28, 1955.

SN 2,920. Socony Mobil Oil Company, Inc., New York, N. Y. Filed Feb. 17, 1956.

TECREX

For Rust Preventive Oils and Compounds.
First use Dec. 28, 1955.

SN 5,008. Cities Service Oil Company, New York, N. Y. Filed Apr. 23, 1956.

CITIES SERVICE

Owner of Reg. Nos. 227,262, 342,887, and others.
For Refined or Unrefined Petroleum Products, With or Without Admixture of Other Materials, for Illuminating, Heating, Power, Burning, Lubricating, Cutting, Cooling, Greasing, Tempering, Quenching, Slushing, and Flushing, and Mineral Wax.
First use as early as May 1921.

CLASS 16

SN 687,253. Lloyd W. Broome, d. b. a. Armotec Products, Chelsea, Mass. Filed May 11, 1955.

ARMOTEC

For Clear Lacquer-Type Coating for Application to Polished Metals, Wooden Floors, Floor Coverings, Furniture, and Other Surfaces To Protect the Same From Weather, Corrosion, Acids, and General Wear.
First use Apr. 1, 1953.

SN 690,553. Houghton Laboratories, Inc., Olean, N. Y. Filed June 30, 1955.

HYSOL
Product of HOUGHTON LABORATORIES, Inc.

The words "Product of Houghton Laboratories, Inc." are disclaimed apart from the mark.
For Paints and Enamels.
First use Apr. 27, 1950.

SN 691,465. Grand Rapids Varnish Corporation, Grand Rapids, Mich. Filed July 18, 1955.

PERMAGARD

For Enamels.
First use July 5, 1955.

SN 691,466. Grand Rapids Varnish Corporation, Grand Rapids, Mich. Filed July 18, 1955.

EPONAIR

For Enamels.
First use July 5, 1955.

SN 691,467. Grand Rapids Varnish Corporation, Grand Rapids, Mich. Filed July 18, 1955.

GLOGARD

For Enamels.
First use July 5, 1955.

SN 697,591. Tropical Paint Company, Cleveland, Ohio. Filed Nov. 2, 1955.

RUSTIKOTE

For Coatings for Rusted Metal.
First use Jan. 9, 1933.

SN 700,093. The Farboil Company, Baltimore, Md. Filed Dec. 16, 1955.

WETSALL

For Paints Which Prevent the Rusting of Surfaces to Which Said Paints Are Applied.
First use Jan. 30, 1953.

SN 700,147. Sun Chemical Corporation, Long Island City, N. Y. Filed Dec. 5, 1955. Sec. 2(f).

BERKLEY

For Paint Enamels, Varnishes, Ready-Mixed Paints, Lacquers, and Paint Undercoatings.
First use September 1931.

SN 700,460. Lasting Products Company, Baltimore, Md. Filed Dec. 22, 1955. Sec. 2(f).

COOL ROOF

For Compositions in the Nature of Paints for Use as Roof Coatings.
First use Apr. 1, 1945.

SN 633. The Synkoloid Company, Los Angeles, Calif. Filed Jan. 12, 1956.

TRU-VAL

For Exterior Stucco and Masonry Paint and Interior Plaster and Plasterboard Paint.
First use Oct. 4, 1955, on exterior stucco and masonry paint.

SN 4,925. The Lowe Brothers Company, Dayton, Ohio. Filed Mar. 21, 1956.

Style-Tested PAINT COLORS

No claim is made to the words "Style-Tested," "Paint," and "Colors," apart from the mark as shown.
For Paints (Ready-Mixed, Semi-Paste and Paste Form); Varnishes, Enamels in the Nature of Varnishes and Paints; Lacquers; Undercoaters in the Nature of Varnishes, Lacquers, Enamels, and Paints; Thinners for Paints, Varnishes, Enamels and Lacquers; Stains; and Paint and Varnish Removers.
First use on or about June 4, 1945.

CLASS 17

SN 686,572. Rogers Imports Inc., New York, N. Y. Filed Apr. 29, 1955. Sec. 2(f).

Rogers

The lining shown in the drawing represents the color gold.
Owner of Reg. Nos. 532,992, 532,993, and others.
For Smoking Tobacco.
First use Jan. 1, 1910.

CLASS 18

SN 692,123. Anthony A. Conte, Chippewa Township, Beaver County, Pa. Filed July 29, 1955.

TRISYNAL

For Antacid-Antispasmodic Tablets.
First use Sept. 15, 1954.

SN 696,676. Tablerock Laboratories, Inc., Greenville, S. C. Filed Oct. 18, 1955.

TA-VERM

For Anthelmintic Preparation.
First use July 29, 1955.

SN 696,822. Purepac Corporation, New York, N. Y. Filed Oct. 20, 1955.

BIO-THRYCIN

For Medicated Throat Lozenges.
First use Sept. 8, 1955.

SN 697,825. Nicholas Products Laboratories Limited, Slough, England. Filed Nov. 7, 1955.

MEGIMIDE

Owner of British Reg. No. 738,568, dated Jan. 25, 1955.
For Pharmaceutical Preparations and Substances for Human Use and Veterinary Use, All Being Imide Compounds.

SN 697,954. Abbott Laboratories, North Chicago, Ill. Filed Nov. 9, 1955.

FILMTAB

Owner of Reg. No. 603,850.
For Taste-Inhibiting Coating on Orally Administered Medicinal Tablets.
First use Nov. 29, 1954.

SN 698,000. The Upjohn Company, Kalamazoo, Mich. Filed Nov. 9, 1955.

CORDEX

Owner of Reg. No. 577,247.
For Combination of Anti-Inflammatory Agents for the Treatment of Metabolic Disturbances.
First use Sept. 19, 1955.

SN 698,385. The Upjohn Company, Kalamazoo, Mich. Filed Nov. 16, 1955.

KAOMYCIN

For Medicinal Preparation for the Treatment of Intestinal Conditions.
First use Sept. 20, 1955.

SN 698,601. Gilbert Laboratories, Morristown, N. J. Filed Nov. 21, 1955.

KUTAMIN

For Medicinal Preparation in Liquid, Tablet, and Ointment Form for Administration Internally by Mouth, or by Intramuscular Injection, or Externally by Local Application.
First use July 22, 1929.

CLASS 19

SN 694,340. Trailmobile, Inc., Cincinnati, Ohio. Filed Sept. 7, 1955.

TWIN-GRIP

For Fifth Wheels for Trailer-Tractor Combinations.
First use Aug. 26, 1955.

SN 696,038. International Manufacturing Co., Boston, Mass. Filed Oct. 7, 1955.

Excellency

For License Plate Frames, and Guide Posts for Fenders.
First use on or about Apr. 8, 1954.

SN 697,165. Hickok Manufacturing Co. Inc., Rochester, N. Y. Filed Oct. 26, 1955. Sec. 2(f).

HICKOK

For Automobile Safety Belts.
First use Nov. 1, 1954.

SN 697,697. Peerless Trailer and Truck Service, Inc., Portland, Oreg. Filed Nov. 4, 1955.

Peerless

For Truck Trailers.
First use April 1944.

SN 698,772. Cardinal Products, Inc., Chicago, Ill. Filed Nov. 23, 1955.

TIRE MATE

For Fabric Automobile Tire Covers.
First use Aug. 12, 1955.

SN 699,479. Harvey M. De Vane, d. b. a. Turn-A-Mirror, Oxnard, Calif. Filed Dec. 6, 1955.

TURN-A-MIRROR

For Rear View Mirrors and Mounting Brackets, for Automotive Vehicles.
First use Sept. 14, 1955.

SN 700,829. U. S. Metal Products Company, Inc., Brooklyn, N. Y. Filed Dec. 29, 1955.

US

For Automobile Accessories—Namely, License Plate Frames and Side View Mirrors.
First use in about 1944.

SN 2,941. American Brake Shoe Company, New York, N. Y. Filed Feb. 20, 1956.

COMET

Owner of Reg. Nos. 617,141 and 617,143.
For Brake Shoes.
First use Apr. 13, 1955.

CLASS 20

SN 31. Congoleum-Nairn Inc., Kearny, N. J. Filed Jan. 3, 1956.

NAIRON

Owner of Reg. Nos. 105,920, 514,486, and others.
For Composition Surface Covering in Sheet or Tile Form Having a Synthetic Resinous Binder.
First use Oct. 26, 1955.

SN 33. Congoleum-Nairn Inc., Kearny, N. J. Filed Jan. 3, 1956.

NAIRONTOP

Owner of Reg. Nos. 105,920, 514,486, and others.
For Composition Surface Covering in Sheet or Tile Form Having a Synthetic Resinous Binder.
First use Dec. 20, 1955.

CLASS 21

SN 689,118. Armel Electronics, Inc., Brooklyn, N. Y. Filed June 8, 1955.

ARMEL

The representation of the goods is disclaimed apart from the mark.
For Electrical Terminals, Connectors, Fittings, and Electrical Equipment Units—Namely, Insulators, Resistors, Capacitors, and Inductances.
First use Feb. 1, 1955.

SN 689,627. Hester Battery Manufacturing Company, Inc., Nashville, Tenn. Filed June 16, 1955.

EVER-START

For Storage Batteries.
First use Jan. 1, 1953.

SN 693,098. The Steam-O-Matic Corporation, Kansas City, Mo., to Rival Manufacturing Company, Kansas City, Mo. Filed Aug. 15, 1955.

KNIFE-O-MATIC

Owner of Reg. Nos. 403,597 and 559,914.
For Electric Motor-Driven Sharpeners for Cutlery and Scissors.
First use July 23, 1955.

SN 693,503. Terado Co., St. Paul, Minn. Filed Aug. 22, 1955.

Rov-A-Lite

For Storage Battery Fluorescent Light for Mounting on Boats and Trailers.
First use June 1, 1955.

SN 694,387. Radio Frequency Laboratories, Inc., Boonton, N. J. Filed Sept. 8, 1955.

VOICON

For Terminal Apparatus for the Transmission and Reception of Radio Waves in Voice Communication and for Transmitting and Receiving Low Frequency Signals for Performing a Control Function.
First use May 1955.

SN 696,335. Vick Chemical Company, New York, N. Y. Filed Oct. 12, 1955.

MEDI STEAM

For Electric Vaporizer.
First use July 20, 1955.

SN 697,134. Westinghouse Air Brake Company, Pittsburgh, Pa. Filed Oct. 25, 1955.

Owner of Reg. Nos. 74,915 and 115,558.
For Electronic Amplifiers; Electrical Power Supplies; Audio Frequency Oscillators; Coded Current Transmitters; Coded Current Decoding Units; Line Circuit Carrier Modulators; Tuned Electrical Alternators; Battery Charge Control Units; Audio Frequency Overlay Track Circuit Receivers; Electrical Switches; Electrical Inductors; Electrical Transformers; Electrical Reactors; Electrical Condensers; Electrical Relays; Electrical Relay Snub Units; Copper Oxide and Selenium Dry Contact Rectifiers; Electrical Plug Connectors; Electrical Network Subassemblies—Namely, Resonant Units, Arc Suppressors, Interstage Coupling Units, Electrical Interference Suppressors, Passive Networks, Buffer Coils and Phase Shift Networks; Electrical Filters, and Parts Therefor; Loudspeakers; Electrical Contactors; Lightning Arresters; Electric Motors; Electromechanical Audible Indicators; Voice Operated Calling Devices; Train Communication Systems; Telephone Communication Apparatus of the Modulated Carrier Wave Type, and Audial and Visual Indicating Call Detectors Therefor; Voice and/or Code Modulated Carrier Communication and/or Indication and/or Control Equipment, and Components Thereof—Namely, Transmitters, Receivers, Modulators, and Code Repeaters; Multiplex Code Control Systems; Data Display and Transfer Systems; Channel Selectors for Multiple Indication, Multiple Channel Locomotive Cab Signal Systems; Electronic Systems for Indicating at a Station Platform Prior to the Arrival of a Train the Origin, Destination and/or Class of the Train; Hermetically Sealed and Potted Transformers and/or Choke Coils; Interlocking Systems for Railways; Railway Signaling and/or Control System Sectionalizing Units; Train Control systems, and Parts Therefor—Namely, Reversing Switches, Equipment Boxes and Receiver Coils; Office Line, Office and/or Field Coding Units, Auxiliary Line Units, Field and/or Line Storage Units, Remote Code Indication Systems, Indication Registry Units, and Etched Train Graph Panels for Centralized Railway Traffic Control Systems; Car Retarder Systems; Electric Switch and Lock Movements; Electric Switch Locks; Railway Slide Detectors; Impedance Bonds for Railway Track Circuits; Draw Bridge Circuit Controllers; Highway Crossing Signals; Electrically Operated Highway Crossing Bells; Railway Wayside Visual Motor Car Indicators; Railway Wayside and/or Overhead Visual Signals—Namely, Light Signals, Dwarf Signals, and Searchlight Signals; Locomotive Cab Signals; Equipment Boxes for Train Control Systems; Relay and/or Filter and/or Instrument Cases, Racks, Panels and/or Housings and Junction and Terminal Boxes.
First use Apr. 13, 1915, on dwarf signals.

SN 700,768. Edwin L. Wiegand Company, Pittsburgh, Pa. Filed Dec. 28, 1955. Sec. 2(f).

SUPREME

Owner of Reg. No. 543,208.
For Electric Heating Units, Particularly for Electric Ranges or Hot Plates, and Parts Thereof.
First use on or about Apr. 1, 1949.

SN 700,784. Electrend Products Corporation, St. Joseph, Mich. Filed Dec. 29, 1955.

Coiltenna

For Radio Antennae.
First use May 1, 1955.

SN 700,810. Raytheon Manufacturing Company, Waltham, Mass. Filed Dec. 29, 1955. Sec. 2(f).

WELDPOWER

Owner of Reg. No. 514,648.
For Electric Welding Heads.
First use on or about Sept. 7, 1950.

SN 700,849. Entron, Inc., Bladensburg, Md. Filed Dec. 30, 1955.

EQUATROL

For Passive Divider Network Used in High Frequency Distribution Lines.
First use May 1954.

SN 700,850. Entron, Inc., Bladensburg, Md. Filed Dec. 30, 1955.

EQUALINE

For Repeater Amplifier Used in High Frequency Transmission and Distribution Lines.
First use September 1954.

SN 700,851. Entron, Inc., Bladensburg, Md. Filed Dec. 30, 1955.

ACRASPLIT

For Automatic Gain Control Amplifiers Used in High Frequency Transmission and Distribution Lines.
First use June 1955.

SN 227. American Auto Accessories Stores, Inc., Wilkes-Barre, Pa. Filed Jan. 6, 1956.

LIFE SEAL

For Storage Batteries.
First use Dec. 14, 1955.

SN 1,728. Shure Brothers Incorporated, Chicago, Ill. Filed Jan. 30, 1956.

Music Lovers

For Phonograph Pickup Cartridges.
First use in or about June 1955.

SN 1,762. Roland Bolteux, Santiago, Chile. Filed Jan. 31, 1956.

MOODLITE

Owner of Chilean Reg. No. 108,941, dated Nov. 21, 1955.
For Portable Electric Lamps.
First use July 1, 1955; in commerce Aug. 19, 1955.

SN 1,893. Natvar Corporation, Woodbridge, N. J. Filed Feb. 1, 1956.

ISOVAR

For Electrical Insulation Varnish.
First use Jan. 13, 1956.

SN 1,908. Silvray Lighting, Inc., New York, N. Y. Filed Feb. 1, 1956.

SILVER-DOT

For Electric Lighting Fixtures.
First use September 1951.

SN 2,273. Anaconda Wire and Cable Company, New York, N. Y. Filed Feb. 8, 1956.

DENTROL

For Electric Wires and Cables.
First use Jan. 13, 1956.

SN 2,827. Silvray Lighting, Inc., New York, N. Y. Filed Feb. 16, 1956.

SILVER-SPOT

For Electric Lighting Fixtures.
First use September 1951.

SN 4,084. R. S. Ballantyne, d. b. a. The Ballantyne Company, Omaha, Nebr. Filed Mar. 22, 1956.

LIGHT MASTER

Owner of Reg. No. 513,766.
For Theatre Projection Arc Lamps.
First use Sept. 24, 1938.

CLASS 22

SN 662,304. Charles Garcia & Co., Inc., New York, N. Y. Filed Mar. 9, 1954.

GARCIA PLIAFIL

Owner of Reg. No. 576,516.
For Fishing Line.
First use on or about July 8, 1953.

SN 680,154. Jacob Levin, d. b. a. Palabra Products, Miami, Fla. Filed Jan. 19, 1955.

Palabra

For Playing Card Meld Holder.
First use Jan. 10, 1955.

SN 683,514. Cecil M. Jackson, d. b. a. Tru-Craft, Santa Monica, Calif. Filed Mar. 15, 1955.

TRU CRAFT

Owner of Reg. No. 419,088.
For Board Games—Namely, Chess and Checker Games and a Spelling Game Involving the Spelling of a Word Backwards and the Giving of Definitions; and Toy Figures—Namely, Toy Soldiers, Athletes, Tents, Trees, Guns, Barracks, and Forts.
First use Feb. 15, 1943, on toy figures.

SN 684,903. Wilkening Manufacturing Company, Philadelphia, Pa. Filed Apr. 4, 1955.

Mr. Wiggle!

For Coil Spring Toy.
First use Jan. 7, 1955.

SN 686,277. Cheerio Toys, Inc., Chicago, Ill. Filed Apr. 26, 1955.

CHEERIO Glitter Spin

Owner of Reg. Nos. 441,391, 541,992, and others.
For Bandalore Toy Spinning Tops.
First use Apr. 10, 1947.

SN 686,281. D-L Sales, Toledo, Ohio. Filed Apr. 26, 1955.

WHAMMIE

For Artificial Fish Bait, Fish Bait Harness, and Artificial Fish Lures—Namely, Flies, Plugs, and Spinners.
First use Feb. 10, 1954.

SN 689,326. Woolly Bear Inc., New York, N. Y. Filed June 10, 1955.

WOOLLY BEAR

For Toy Stuffed Caterpillar.
First use May 3, 1955.

SN 692,153. Model Craft, Inc., Chicago, Ill. Filed July 29, 1955.

Kay Stanley's

The trademark is substantially the facsimile signature of Kay Stanley, whose consent is of record.
For Children's Toys Including Toy Airplanes, Toy Kitchen Sets, and Toy Television Sets.
First use in or about July 1949.

SN 692,503. Milton Bradley Company, Springfield, Mass. Filed Aug. 5, 1955.

CHUGGEDY CHUG

For Board Game With Movable Playing Pieces.
First use June 6, 1955.

SN 692,526. Elisabeth Martin Knight, Baltimore, Md. Filed Aug. 5, 1955.

DIRTY BIRD

For Rag Dolls.
First use Apr. 21, 1955.

SN 692,842. Hassenfeld Bros., Inc., Central Falls, R. I. Filed Aug. 11, 1955.

CRAY-N-PAINT

The drawing is lined for yellow, blue, orange, pink, and green, but color is not claimed.
For Games—Namely, Children's Drawing Kit Comprising Colored Crayons, a Plastic Water Dish, and Supply of Special Paper.
First use on or about May 13, 1955..

SN 693,293. Domenick Ippolito, d. b. a. Hollywood Doll Mfg. Co., Glendale, Calif. Filed Sept. 7, 1955. Sec. 2(f).

Woden's Baby born On Wednesday

For Dolls and Dolls' Clothes.
First use Apr. 8, 1949.

SN 693,917. Roger Malicki, d. b. a. Regor, New York, N. Y. Filed Aug. 30, 1955.

CAPITALIST

For Game Played With Stage Money and Imitation Securities Such as Bonds, Debentures, Shares of Stock, Etc.
First use Nov. 2, 1954.

SN 694,303. Crosman Arms Company, Inc., Fairport, N. Y. Filed Sept. 7, 1955.

PELLGUN

Owner of Reg. No. 617,688.
For Targets.
First use May 7, 1954.

SN 694,314. Domenick Ippolito, d. b. a. Hollywood Doll Mfg. Co., Glendale, Calif. Filed Sept. 7, 1955. Sec. 2(f).

Sun's Baby born on Sunday

For Dolls and Dolls' Clothes.
First use Apr. 8, 1949.

SN 694,315. Domenick Ippolito, d. b. a. Hollywood Doll Mfg. Co., Glendale, Calif. Filed Sept. 7, 1955. Sec. 2(f).

Moon's Baby born on Monday

For Dolls and Dolls' Clothes.
First use Apr. 8, 1949.

SN 694,316. Domenick Ippolito, d. b. a. Hollywood Doll Mfg. Co., Glendale, Calif. Filed Sept. 7, 1955. Sec. 2(f).

Tiu's Baby born on Tuesday

For Dolls and Dolls' Clothes.
First use Apr. 8, 1949.

SN 694,317. Domenick Ippolito, d. b. a. Hollywood Doll Mfg. Co., Glendale, Calif. Filed Sept. 7, 1955. Sec. 2(f).

Thor's Baby born on Thursday

For Dolls and Dolls' Clothes.
First use Apr. 8, 1949.

SN 694,318. Domenick Ippolito, d. b. a. Hollywood Doll Mfg. Co., Glendale, Calif. Filed Sept. 7, 1955. Sec. 2(f).

Freya's Baby born on Friday

For Dolls and Dolls' Clothes.
First use Apr. 8, 1949.

SN 694,319. Domenick Ippolito, d. b. a. Hollywood Doll Mfg. Co., Glendale, Calif. Filed Sept. 7, 1955. Sec. 2(f).

Saturn's Baby born on Saturday

For Dolls and Dolls' Clothes.
First use Apr. 8, 1949.

SN 694,719. The Hubley Manufacturing Co., Lancaster, Pa. Filed Sept. 15, 1955.

JIM BOWIE

For Toy Rifles.
First use June 10, 1955.

SN 695,879. American Machine & Foundry Company, New York, N. Y. Filed Oct. 5, 1955.

PINWHEEL

For Apparatus for Handling and Lifting Bowling Pins in Bowling Alleys and Bowling Pin Spotting Machines.
First use June 28, 1955.

SN 695,880. American Machine & Foundry Company, New York, N. Y. Filed Oct. 5, 1955.

SINGLE-T

For Bowling Alley Ball Returns and Ball Rests and Parts Therefor.
First use Apr. 27, 1955.

SN 695,919. David Kemp, d. b. a. New York Drop Cloth Mfg. Co., Long Island City, N. Y. Filed Oct. 5, 1955.

SMOKY MOUNTAIN CAMPING EQUIPMENT

No claim is made to the exclusive use of the words "Camping Equipment" apart from the mark shown in the drawing.
Owner of Reg. No. 605,306.
For Canvas Camping Equipment—Namely, Outdoor Sleeping Bags.
First use the month of January 1947.

SN 695,952. Luther Alexander Smith, Burlington, N. C. Filed Oct. 5, 1955.

PONY GOLF

For Indoor Golf Equipment.
First use Oct. 15, 1953.

SN 696,018. Cortland Line Company, Inc., Cortland, N. Y. Filed Oct. 7, 1955.

PLION

For Fishing Lines of Nylon.
First use on or about Aug. 23, 1955.

SN 696,055. Nay-Wolfe Engineering Corporation, d. b. a. Pacific Tackle Co., Pasadena, Calif. Filed Oct. 7, 1955.

"SQUIDEROO"

Owner of Reg. No. 37,414.
For Fishing Lures.
First use Feb. 7, 1935.

SN 696,295. Frabill Manufacturing Co., Milwaukee, Wis. Filed Oct. 12, 1955.

BOB'EM

For Fishing Bobbers.
First use May 25, 1946.

SN 696,529. B. F. Gladding & Company, Inc., South Otselic, N. Y. Filed Oct. 17, 1955.

25 Fathom

For Fishing Lines.
First use Aug. 15, 1955.

SN 696,530. B. F. Gladding & Company, Inc., South Otselic, N. Y. Filed Oct. 17, 1955.

SEA'N'SURF

For Fishing Lines.
First use Aug. 15, 1955.

SN 696,531. B. F. Gladding & Company, Inc., South Otselic, N. Y. Filed Oct. 17, 1955.

20 Fathom

For Fishing Lines.
First use Aug. 15, 1955.

SN 696,532. B. F. Gladding & Company, Inc., South Otselic, N. Y. Filed Oct. 17, 1955.

MAGISTRATE

For Fishing Lines.
First use Aug. 15, 1955.

SN 696,533. B. F. Gladding & Company, Inc., South Otselic, N. Y. Filed Oct. 17, 1955.

CLEARON

For Fishing Lines.
First use Aug. 15, 1955.

SN 696,535. B. F. Gladding & Company, Inc., South Otselic, N. Y. Filed Oct. 17, 1955.

TROLKING

For Fishing Lines.
First use Aug. 15, 1954.

SN 696,795. General Sportcraft Co., Ltd., New York, N. Y. Filed Oct. 20, 1955.



For Sports Games, and Specifically Archery Sets and Accessories; Badminton Sets and Accessories; Tethered Ball Games; Bat Tennis Sets and Accessories; Bean Bag Games; Bowling Games; Croquet Sets and Accessories; Darts Sets and Accessories; Deck Tennis Sets and Accessories; Fencing Sets and Accessories; Field Hockey Equipment; Boomerangs, Bullboards; Golf Sets, Clubs, Balls and Accessories; Quoits Sets and Accessories; Shuffleboard Sets and Accessories; Soccer Equipment; Swimming Accessories; Table Tennis Sets and Accessories; Tennis Equipment, and Volley Ball Equipment.
First use Aug. 25, 1955.

SN 697,334. Spinner Games, Incorporated, Bridgeport, Conn. Filed Oct. 28, 1955.

"MEGO" MY LUCKY SPINNER

For Games Comprising a Spinner Counter for Different Combinations of Numbers.
First use Aug. 1, 1955.

SN 697,363. The Enterprise Manufacturing Company, Akron, Ohio. Filed Oct. 31, 1955.

SEA STAR

Owner of Reg. No. 76,045.
For Fishing Reels, Especially, Salt Water Spinning Reels.
First use Oct. 7, 1955.

SN 697,374. Ivan and Smietana Enterprises, Chicago, Ill. Filed Oct. 31, 1955.

GRID KING

For Card Game.
First use on or about Aug. 6, 1955.

SN 697,597. Wallace Brands Co., Toledo, Ohio. Filed Nov. 2, 1955.

Roofus Goofus

For Plastic or Paper Balls and Combinations Thereof Simulating Characters and Having Miniature Toys Enclosed Therein.
First use Nov. 12, 1953.

SN 697,666. Cadaco-Ellis, Chicago, Ill. Filed Nov. 4, 1955. Sec. (2f).

ALL-STAR BASEBALL

For Parlor Type Baseball Game.
First use July 1941.

SN 697,724. The United States Playing Card Company, Cincinnati, Ohio. Filed Nov. 4, 1955.

BEVERLY

Owner of Reg. No. 335,501.
For Playing Cards.
First use 1931.

SN 697,935. Rich Industries, Inc., Tupelo, Miss. Filed Nov. 8, 1955.

MAGIC

For Toy Bowling Game.
First use May 17, 1955.

SN 697,957. Bromo-Mint Co., Inc., d. b. a. Kenner Products Company, Cincinnati, Ohio. Filed Nov. 9, 1955.

BLOW-a-PLANE

For Toy Airplanes and Assemblies for Making Toy Airplanes.
First use Aug. 18, 1955.

SN 697,968. Rael Cowan, d. b. a. Rael Cowan Co., New York, N. Y. Filed Nov. 9, 1955.

BAFFLE

For Game Played With Cards and a Game Board.
First use Aug. 2, 1955.

SN 698,132. G. Noel Bolinger, d. b. a. Fur-Joy Dog Toys, Shelbyville, Ill. Filed Nov. 14, 1955.

FUR-JOY

For Toys for Dogs.
First use Sept. 3, 1955.

SN 698,238. Time, Incorporated, New York, N. Y. Filed Nov. 14, 1955.

MATCHWIT

The drawing is lined for the color red. Owner of Reg. No. 614,451.
For Games in the Nature of Puzzles.
First use Aug. 31, 1955.

SN 4,923. Wilson Sporting Goods Co., Chicago, Ill. Filed Apr. 10, 1956.

K-28

For Golf Clubs and Golf Balls.
First use Sept. 30, 1936.

SN 4,924. Kenneth L. Burgett, d. b. a. The K. L. Burgett Company, Peoria, Ill. Filed Apr. 9, 1956.

PARGLOV

For Golfer's Glove.
First use Jan. 8, 1936.

CLASS 23

SN 633,379. Saladmaster Corporation, from Saladmaster Sales, Inc., Dallas, Tex. Filed Aug. 1, 1952.

Saladmaster

For Hand Operated Choppers and Cutters.
First use on or about Oct. 1, 1946.

SN 682,293. Republic Engineering & Manufacturing Company, St. Paul, Minn. Filed Feb. 24, 1955. Sec. 2(f).

NEVERSLIP

For Pulleys.
First use May 31, 1930.

SN 690,711. Industrial Brush Company, Arcadia, Calif. Filed July 5, 1955.

PARALAX

For Industrial and Commercial Rotary, Washing, and Cleaning Brushes.
First use May 23, 1955.

SN 691,711. The Ridge Tool Company, Elyria, Ohio. Filed July 21, 1955.

RIDGID LR

For Hand Operated Oilers.
First use June 6, 1955.

SN 692,144. Industrial Brush Company, Arcadia, Calif. Filed July 29, 1955.

RADAX

For Industrial and Commercial Rotary, Washing, and Cleaning Brushes.
First use May 23, 1955.

SN 692,867. Rival Manufacturing Company, Kansas City, Mo. Filed Aug. 11, 1955.

Knife-O-Mat

Owner of Reg. Nos. 346,876, 580,733, and others.
For Hand-Operated Knife Sharpeners.
First use Aug. 25, 1948.

SN 693,189. Reaction Motors, Inc., Denville, N. J. Filed Aug. 16, 1955.

RMI

As indicated by the horizontal lining, the background of the mark is colored blue.
For Rocket Engines and Component Parts Thereof.
First use Aug. 13, 1955, on regulators; and October 1942 as to "RMI."

SN 694,140. Holman Brothers Limited, Camborne, Cornwall, England. Filed Sept. 2, 1955.

DUSTUCTOR

Owner of British Reg. Nos. 695,371 and 695,372, dated Jan. 17, 1951.
For Mining Machinery, and Drilling Machines, Hand Tools, and Parts Thereof.

SN 694,612. Wacker-Chemie G. m. b. H., Munich, Bavaria, Germany. Filed Sept. 13, 1955.

ASL

Owner of German Reg. No. 676,513, dated May 24, 1955.
For Apparatus, and Parts Thereof, for Cleaning and Drying Metals With the Use of Chlorinated Hydrocarbons.

SN 697,133. Westinghouse Air Brake Company, Pittsburgh, Pa. Filed Oct. 25, 1955.

Owner of Reg. Nos. 74,915 and 115,558.
For Car Retarder Valves, Mechanical Railway Track Switch and Lock Movements, Facing Point Lock Railway Track Switch Movements, Crank Stands; Train Stops, Buffer Type Rail Contactors, Railway Track Switch Valves, Oil Buffer Shock Absorbers, Reflector Button Signs, Highway Crossing Gates, Train Control Governors.
First use Feb. 1, 1909.

SN 697,544. H. P. Fine, d. b. a. Finebilt Equipment Co., Los Angeles, Calif. Filed Nov. 2, 1955.

FINEBILT

For Hydraulic Presses and Parts Thereof.
First use Jan. 15, 1944.

SN 1,302. Wire Abrasives Company, d. b. a. Metal Improvement Equipment Company, Los Angeles, Calif. Filed Jan. 23, 1956.

PEENAMATIC

For Shot-Peening Machine.
First use Dec. 23, 1955.

CLASS 24

SN 673,600. David Lehrman, d. b. a. The Ironees Company, Philadelphia, Pa. Filed Sept. 22, 1954.

COVER-LOCK

For Adjustable Cover Tightener for Ironing Board Pads and Covers.
First use on or about Sept. 16, 1953.

SN 675,437. Short Brothers and Harland Limited, Newtownards, Northern Ireland. Filed Oct. 23, 1954.

METOLUX

Owner of British Reg. No. 686,459, dated Feb. 16, 1950.
For Laundry Wringers and Accessories Therefor—Namely, Stands and Clamps, and Parts of These Goods.

SN 681,052. Trio Novelty Mfg. Corp., New York, N. Y. Filed Feb. 3, 1955.

INSUL-FOAM

For Ironing Board Pad.
First use Jan. 3, 1955.

SN 686,580. Edward R. Snyder, d. b. a. The Securit Company of America, Ypsilanti, Mich. Filed Apr. 29, 1955.

Securit

For Hosiery Dryers.
First use Apr. 15, 1953.

SN 689,676. Textile Mills Company, Chicago, Ill. Filed June 16, 1955.

Perma-Gold

For Ironing Board Pads and Ironing Board Covers.
First use on or about June 8, 1955.

SN 692,078. Phillips Petroleum Company, Bartlesville, Okla. Filed July 28, 1955.

Philqas

Owner of Reg. No. 599,996.
For Automatic Clothes Dryers.
First use Sept. 16, 1954.

SN 697,382. Mapco Corporation, New York, N. Y. Filed Oct. 31, 1955.

SILALUM

For Ironing Board Covers.
First use Jan. 14, 1955.

SN 738. Borg-Warner Corporation, Chicago, Ill. Filed Jan. 16, 1956.

B-W

Owner of Reg. Nos. 331,103, 607,848, and others.
For Laundry Equipment Including Washing Machines, Machines for Drying Textiles and Similar Fabrics, and Accessories and Parts Thereof for Replacement and Repair.
First use Oct. 8, 1955, on washing machines.

CLASS 25

SN 697,624. Gerardo Anglada Domenech and Vicente Anglada Domenech, Barcelona, Spain. Filed Nov. 3, 1955.

CHEK

Owner of Spanish Reg. No. 291,061, dated May 25, 1955.
For Fasteners, Locks for Handbags and Briefcases, Automatic Snap Fasteners.

SN 2,271. Adams Rite Manufacturing Company, Glendale, Calif. Filed Feb. 8, 1956.

M.S.

For Door Bolts and Locks.
First use Jan. 10, 1956, on locks.

SN 3,124. Stoffel Seals Corporation, Tuckahoe, N. Y. Filed Feb. 21, 1956.

FEED-O-MATIC

For Base Metal Seals To Be Applied to Consumer Goods, Seal Tags Made of Metal or Combination of Metal and Paper.
First use Dec. 15, 1955.

CLASS 26

SN 675,646. Karl Muller, d. b. a. The Novoflex Fotogeratebau Karl Muller, Memmingen, Bavaria, Germany. Filed Oct. 28, 1954.

NOVOFLEX

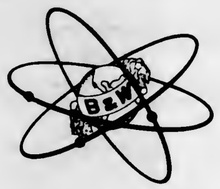
Owner of German Reg. No. 630,988, dated Dec. 2, 1952.
For Lens-Equipped Camera Appliances—Namely, View Finders, Camera Lenses, Lens Carrying Devices for Attachment to Cameras, Sun Shield Means for Cameras, and Devices for Taking Panoramic and Wide-Angle Pictures.
First use June 15, 1954.

SN 677,795. Kamerabau-Anstalt, Vaduz, Liechtenstein. Filed Dec. 6, 1954.

Kilfitt

Owner of Liechtenstein Reg. No. 398, dated Apr. 13, 1954.
For Photographic Equipment—Namely, View Finders, Objective Mounts, Bellows Mounts, Housings, Objectives, Diaphragms, Shutters, Enlargers, Reproducers, Viewing Devices, Close Range Focusing Devices, Cameras, Stereo Cameras, Stereo Picture Apparatus, Stereo Viewers, Projectors, Stereo Projectors, Telescopes, Binoculars, Magnifiers, Optical Measuring and Testing Devices, Light Meters, Objective Testing Devices, Collimators, Focal Distance Measuring Devices, Frosted Glass Mirror Reflex Devices, Prisms, Wedges, Lenses, Film Transporting Mechanisms, Shutter Releases, Tripods, and Stands.

SN 685,159. The Babcock & Wilcox Company, New York, N. Y. Filed Apr. 8, 1955.



Owner of Reg. Nos. 44,904, 430,739, and others.
For Equipment Useful in the Production or Utilization of Special Nuclear Material or Atomic Energy, Such as Nuclear Reactors, Nuclear Reactor Fuel Elements, Heat Exchange Apparatus and the Like.
First use in or about June 1954.

SN 685,732. Menlo Research Laboratory, Menlo Park, Calif. Filed Apr. 18, 1955.

MENLOLAB

For Geiger Counters and Other Equipment for Detection of Nuclear Radiation.
First use November 1954.

SN 691,085. Paul Rosenbaum, d. b. a. Thermal Control Co., Los Angeles, Calif. Filed July 11, 1955.

Thermodulator

For Unitary Temperature Responsive Control Apparatus for Air Conditioning and Heating Systems, and Replacement Parts Therefor.
First use Nov. 26, 1954.

SN 696,633. Georg Burgin-Muller, Bern, Switzerland. Filed Oct. 18, 1955.

PARKOMATIC

Priority claimed under Sec. 44(d) on Swiss Reg. No. 156,018, dated May 10, 1955.
For Time Recorders—Namely, Parking Meters.

SN 696,690. Bell & Howell Company, Chicago, Ill. Filed Oct. 19, 1955.

SELECTRON

For Slide Changers for Stereopticon Projectors.
First use October 1949.

SN 697,135. Westinghouse Air Brake Company, Pittsburgh, Pa. Filed Oct. 25, 1955.

Owner of Reg. Nos. 74,915 and 115,558.
For Alternating Current Pulse Length Recorders; Carrier Level Meters for Voice and/or Code Modulated Carrier Communication and/or Indication and/or Control Equipment; Mobile Testing Equipment for Simulators, Computers and/or Electrical Servomechanisms, and Parts Therefor—Namely, Servomotor Operated Ratiometers and Servomechanism Analyzers; Portable Electronic Tube Characteristic Test Sets; Clockwork Time Releases; Screw Time Releases; Railroad Dragging Equipment Detectors; Flight Training Simulators; Condenser-Type Timing Units; Apparatus for Railway Classification Yards—Namely, Automatic Track Switching Systems, Car Speed Control Systems, Rolling Resistance Recording and Storage Units, and Track Capacity Indicators; Electronic Systems for Processing, Storing and/or Displaying Air Traffic Control Information; and Portable Electronic Inductor Test Sets.
First use Sept. 4, 1911, on clockwork time releases.

SN 697,992. Wm. P. Poythress & Co., Inc., Richmond, Va. Filed Nov. 9, 1955.

ovutect

For Chemical Testing Set Sold as a Unit Used on Excreted Urine To Determine the Period of Ovulation in Women and Containing Reagent Solution, Concentrating Solvent, pH Control Salt, Test Tubes, Closures, Transfer Glass Tubes, Tube Brush, and Instruction Booklet With Color Scale and Record Sheet.
First use Oct. 11, 1955.

SN 699,470. The Borg-Erickson Corporation, Chicago, Ill. Filed Dec. 6, 1955.

FLIGHT

For Scales.
First use Dec. 7, 1953.

SN 699,973. Johannes Jost, d. b. a. Filmosto-Projektion Johannes Jost, Essen, Germany. Filed Dec. 14, 1955.

Filmosto

Owner of German Reg. No. 376,917, dated Nov. 18, 1927.
For Projectors and Accessories Thereto—Namely, Frames for Holding Transparencies.

SN 700,083. Century Lighting, Inc., New York, N. Y. Filed Dec. 16, 1955.

PROJECTORAMA

For Wide Angle Projection System.
First use July 25, 1955.

SN 1,219. Detroit Controls Corporation, Detroit, Mich. Filed Jan. 23, 1956.

Classic

For Thermostats for Controlling Heating and Cooling Apparatus.
First use Aug. 3, 1955.

SN 1,220. Detroit Controls Corporation, Detroit, Mich. Filed Jan. 23, 1956.

Duo-Classic

For Thermostats for Controlling Heating and Cooling Apparatus.
First use Mar. 8, 1955.

SN 3,162. Doerr Glass Co., Vineland, N. J. Filed Feb. 23, 1956.

D

For Laboratory Apparatus—Namely, Burettes, Pipettes, Centrifuge Tubes, Flasks, Hydrometer Jars, Graduated Cylinders, Condensers, Funnels, Urinalysis Apparatus, Diagnostic Apparatus, and Oil Testing Apparatus.
First use March 1955.

SN 3,213. Mitchell Manufacturing Company, Chicago, Ill. Filed Feb. 23, 1956.

Electromagic
FILTER EYE

For Filter Gauge Used in Connection With an Electrically Operated Air Conditioning Unit.
First use January 1955.

SN 3,269. The Beta Corporation, Henrico County, Va. Filed Feb. 24, 1956.

VIBRASWITCH

For Vibration Detectors.
First use Aug. 23, 1954.

CLASS 27

SN 3,811. Bulova Watch Company, Inc., Flushing, N. Y. Filed Mar. 5, 1956.

PREP

For Watches.
First use Feb. 6, 1956.

SN 3,812. Bulova Watch Company, Inc., Flushing, N. Y. Filed Mar. 5, 1956.

FRESHMAN

For Watches.
First use Feb. 6, 1956.

CLASS 28

SN 683,975. H. Hamburger Co., Inc., New York, N. Y. Filed Mar. 22, 1955.

Majesty

For Diamonds and Diamond Rings.
First use Mar. 1, 1955.

SN 697,906. Forstner, Inc., Irvington, N. J. Filed Nov. 8, 1955.

FORTEX

For Ornamental Bracelets, Watch Bracelets, Watch Straps, and Extensible Key Chains.
First use June 1953.

CLASS 29

SN 683,836. American Sanitary Wipers Co., Birmingham, Ala. Filed Mar. 21, 1955.

MAGICWIPE

For Wiping and Polishing Cloths.
First use June 30, 1939.

CLASS 30

SN 691,073. Ozark Mountain Store, Inc., Windsor, Mo. Filed July 11, 1955.

OZARK MOUNTAIN STORE

For Porcelain, Earthenware and Crockery—Namely, Cookie Jars, Jugs, Trays, Salt and Pepper Shakers, Cream and Sugar Bowls, Catsup and Mustard Dispensers, Serving Trays, and Butter and Hot Sauce Servers.
First use Feb. 28, 1955.

SN 1,768. Castleton China, Inc., New Castle, Pa. Filed Jan. 31, 1956.

ASTRID

For China Dinnerware.
First use Dec. 31, 1950.

SN 3,986. Castleton China, Inc., New Castle, Pa. Filed Mar. 7, 1956.

WOODMERE

For China Dinnerware.
First use Dec. 31, 1951.

CLASS 31

SN 668,323. Home Manufacturing & Sales Co., Piqua, Ohio. Filed June 16, 1954.

Sta Cold

For Sealed Container of Fluid Having High Latent Heat of Fusion for Repeated Use in Keeping Articles Cold.
First use May 4, 1954.

SN 696,215. Clack Water Treatment Service, Madison, Wis. Filed Oct. 11, 1955.

DUOMATIC

Owner of Reg. No. 591,672.
For Water Treatment and Water Softening Equipment of the Ion-Exchange Type and Control Valves Therefor.
First use June 28, 1955.

SN 696,305. Kem Manufacturing Company, Inc., Fair Lawn, N. J. Filed Oct. 12, 1955.

MICRO-BRONZE

For Automobile Fuel Filters.
First use Mar. 2, 1950.
Subj. to Intf. with SN 697,920.

SN 697,920. Micro Bronze Filter Corporation, Los Angeles, Calif. Filed Nov. 8, 1955.

Micro BRONZE

The mark comprises the words "Micro Bronze" in distinctive form on an orange background having a hexagonal black outline.
For Fluid Filters, Especially Oil Filters or Other Viscous Material Filters.
First use on or about Oct. 30, 1954.
Subj. to Intf. with SN 696,305.

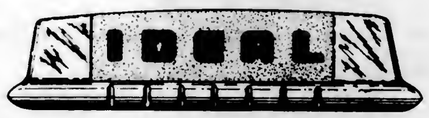
CLASS 32

SN 652,232. Serta Associates, Inc., Chicago, Ill. Filed Aug. 24, 1953. Sec. 2(f).



For Mattresses.
First use Sept. 15, 1947.

SN 676,629. Ideal Store Fixture Co., Inc., Brooklyn, N. Y. Filed Nov. 15, 1954.



For Store Fixtures—Namely, Wall Cases, Counters, Checking Counters, Display Shelves, Island Display Stands, Display Tables or Gondolas.
First use October 1951.

SN 680,697. Revolva Products, Inc., Portland, Oreg. Filed Jan. 28, 1955.

REVOLVA SEL

The drawing is lined for the color red but no claim is made to color.
For Display and Storage Cabinets.
First use Nov. 15, 1954.

SN 687,888. Portable Tables, Inc., Staten Island, N. Y. Filed May 19, 1955.

FOLD N' CARRY

For Foldable Bridge and Utility Tables.
First use Apr. 22, 1955.

SN 693,943. The Spring-Air Company, Chicago, Ill. Filed Aug. 30, 1955.

SPRING AIR HEALTH CENTER

Owner of Reg. Nos. 515,868 and 609,589.
For Mattresses and Innerspring Boxsprings.
First use on or about Feb. 16, 1954.

SN 60. Carl Forslund, Inc., Grand Rapids, Mich. Filed Jan. 3, 1956.



For Household Furniture—Namely, Dining Tables, Library Tables, Serving Tables, End Tables, Coffee Tables, Drop-Leaf Tables, Extension Tables, Tilt-Top Tables, Gate-Leg Tables, Draw-Leaf Tables, Dressing Tables, Nests of Tables, Sewing Tables, Console Tables, Cocktail Tables, Lamp Tables, Sofa Tables, Tea Tables, Occasional Tables, Dining Chairs, Rocking Chairs, Parlor Chairs, Pull-Up Chairs, Occasional Chairs, Wing Chairs, Tufted Chairs, Lounge Chairs, Davenports, Sofas, Love Seats, Sewing Stands, Plant Stands, Night Stands, Smoking Stands, Lamp Stands, Lamp Bases, Telephone Benches, Commodes, Beds, Tea Wagons, Buffets, China Cabinets, Folding Screens, Settees, Day Beds, Chaise Lounges, Magazine Racks, Wall Racks, Foot Stools, Hassocks, Mirror Frames, Desks, Secretary Desks, Chiffonobes, Costumers, Dressers, Vanity Dressers, Chiffoniers, Wardrobes, and Chests.
First use May 9, 1955.

SN 446. Salmanson & Co., Inc., New York, N. Y. Filed Jan. 10, 1956.

ARISTEEL

For Articles of Furniture Having Metal Framework—Namely, Chairs, Rockers, Tables With Umbrellas, Tables Without Umbrellas, Serving Tables or Carts, Racks, Bridge Sets, Cots, Chaises, Lounges, Settees and Gliders, None of Which Are Upholstered.
First use Sept. 5, 1955.

SN 793. The Illinois Shade Cloth Corporation, Chicago Heights, Ill. Filed Jan. 16, 1956.

Gold Seal

Owner of Reg. No. 220,041.
For Window Shades.
First use Jan. 2, 1920.

SN 799. The Illinois Shade Cloth Corporation, Chicago Heights, Ill. Filed Jan. 16, 1956.

Excello

Owner of Reg. No. 220,041.
For Window Shades.
First use May 1, 1920.

SN 3,875. Nachman Corporation, Chicago, Ill. Filed Mar. 5, 1956.

FLEXSEET

For Spring Assembly Units for Upholstered Furniture.
First use Feb. 28, 1956.

SN 3,907. Yawman and Erbe Manufacturing Company, Inc., Rochester, N. Y. Filed Mar. 5, 1956.

MOD-U-ELL

For Sectional Office Furniture Including Desk Tops, Panels and Pedestals Therefor, Cabinets, Bookcases, Shelving, and Drawers.
First use Feb. 17, 1956.

SN 4,159. Slumber Products Corporation, d. b. a. Sealy Mattress Company, Memphis, Tenn. Filed Mar. 8, 1956.

BACK SAVER

For Mattresses.
First use Feb. 7, 1956.

SN 4,187. E. Payson Fairchild, d. b. a. Fairchild Company, Montclair, N. J. Filed Mar. 9, 1956.

SIMPLEX BEACH BOY

For Outdoor Furniture—Namely, Beach Tables.
First use Feb. 11, 1956.

SN 4,188. E. Payson Fairchild, d. b. a. Fairchild Company, Montclair, N. J. Filed Mar. 9, 1956.

SIMPLEX LAWN BOY

For Outdoor Furniture—Namely, Lawn Tables.
First use Feb. 11, 1956.

CLASS 34

SN 693,429. Barmotive Products, Incorporated, San Leandro, Calif. Filed Aug. 22, 1955.

S-I-A

The drawing is lined to indicate the color red. No claim is made to color as a feature of the mark.

For Gas Generators To Produce Combustion Gases Useful in the Treatment and Preservation of Foods and Other Perishable Products.

First use Apr. 12, 1955.

SN 2,122. General Motors Corporation, Detroit, Mich. Filed Feb. 6, 1956.



For Building Service Water Heaters, Air Conditioners, Dehumidifiers, and Parts Thereof.

First use in or before September 1946 on service water heaters.

SN 2,251. Rodorn, Inc., New York, N. Y. Filed Feb. 7, 1956.

Candl-ever

For Artificial Candles.

First use Nov. 10, 1955.

CLASS 35

SN 616. The New York Air Brake Company, New York, N. Y. Filed Jan. 12, 1956.



The mark comprises the letters "N" and "Y" written as a conventionalized monogram. Owner of Reg. No. 86,727.

For Hose, Particularly Industrial Hose for Transmitting Air or Other Fluids Under Pressure.

First use Jan. 18, 1955.

CLASS 36

SN 687,279. Good Time Jazz Record Co. Inc., Hollywood, Calif. Filed May 11, 1955.



For Mechanically Grooved Phonograph Records.

First use Nov. 15, 1952.

SN 696,214. Nazzareno Cialabrini, d. b. a. Castle Accordions, Castelfidardo, Ancona, Italy. Filed Oct. 11, 1955.

Castle

Owner of Italian Reg. No. 123,352, dated May 9, 1955.

For Accordions.

First use Aug. 14, 1948; in commerce Aug. 14, 1948.

SN 696,934. E. K. Blessing Co., Inc., Elkhart, Ind. Filed Oct. 24, 1955. Sec. 2(f).

BLESSING

For Musical Instruments—Namely, Cornets, Trumpets, Trombones, Altos, French Horns, Baritones, Sousaphones, Mellophones, Clarinets, Saxophones, Flutes, Piccolos, Oboes, and Bassoons.

First use January 1906 on cornets.

SN 697,755. Jack Bergman, New York, N. Y. Filed Nov. 7, 1955.

GEM

Owner of Reg. Nos. 411,901 and 430,717.

For Electric Phonographs.

First use in the year 1950.

SN 698,514. The Gray Manufacturing Company, Hartford, Conn. Filed Nov. 18, 1955.

GRAY AUDOGRAPH

Owner of Reg. Nos. 376,890 and 517,216.

For Disk Sound Recording Machines, Dictation Machines, Disk Sound Records, Transcribing Machines, Carrying Cases for Said Machines, Record Index Strips and Folders for Records.

First use Oct. 27, 1939, on disk sound recording machines, dictation machines, and disk sound records.

CLASS 37

SN 635,226. Laminite Products Corporation, New York, N. Y., to Corro Ltd., New York, N. Y. Filed Sept. 13, 1952.

TRI-WALL PAK

For Corrugated Paper Board: for Use in Making: Corrugated Paperboard Containers; Forms for Cushioning and Packaging Merchandise; Two Piece Telescopic Boxes; and Corrugated Paperboard Specialties.

First use June 7, 1952.

SN 658,311. Orchard Paper Co., St. Louis, Mo. Filed Dec. 21, 1953.

BEAUTY MATCHED

For Paper Bags.

First use July 15, 1953.

SN 671,771. Oregon-Washington-California Pear Bureau, Portland, Oreg. Filed Aug. 16, 1954. Sec. 2(f).

The Hartman Wrap

For Paper Wrap for Fruit.

First use on or about Mar. 1, 1933.

SN 673,728. Cohoes Envelope Company, Inc., Cohoes, N. Y., now by change of name to Cohoes Carrybag Company, Inc. Filed Sept. 24, 1954. Sec. 2(f).

COHOES Carrybags

Applicant disclaims the term "Carrybags" apart from the mark as shown and without waiving any of its common law rights in said expression. Owner of Reg. Nos. 513,232 and 532,448.

For Paper Parcel Bags and Envelopes for Merchandise.

First use January 1937.

SN 684,638. Cory Corporation, Chicago, Ill. Filed Mar. 31, 1955.

Memorama

For Diaries and Memorandum Books.

First use on or about Mar. 4, 1955.

SN 689,360. Crocker, Burbank Papers Inc., Fitchburg, Mass. Filed June 13, 1955.

HARMONY

For Greeting Card Printing Paper.

First use in the month of May 1953.

SN 689,621. Gibraltar Corrugated Paper Company, Inc., North Bergen, N. J. Filed June 16, 1955.

COR-RETARD

For Paperboard and Corrugated Paperboard.

First use Apr. 11, 1955.

SN 691,703. Master Metal Products, Incorporated, Buffalo, N. Y. Filed July 21, 1955.

Sanette

For Paper Bags.

First use on or about Jan. 21, 1926.

SN 693,797. Bankers Box Company, Chicago, Ill. Filed Aug. 29, 1955.

Magic

For Binding Posts.

First use September 1936.

SN 694,979. Eaton Paper Corporation, Pittsfield, Mass. Filed Sept. 20, 1955.

MONTH-AT A-GLANCE

Owner of Reg. No. 338,598.

For Memorandum Books and Calendar Books.

First use Mar. 27, 1953.

SN 695,236. Moore Business Forms, Inc., Niagara Falls, N. Y. Filed Sept. 23, 1955. Sec. 2(f) as to "Moore."

MOORE

Owner of Reg. No. 565,837.

For Paper Record Forms for Use With Autographic Registers and Other Recording Machines Such as Tabulators, Accounting Machines, Typewriters, Teletypers, Billing Machines, Electronic Printers, Addressing Machines; Paper Record Forms in Books; Padded Forms; Duplicating Forms; Carbon Papers.

First use May 23, 1952; and Aug. 9, 1946, as to "Moore."

SN 698,896. Nashua Corporation, Nashua, N. H. Filed Nov. 25, 1955.

DAVAC

For Gummed Paper.

First use Nov. 16, 1955.

699,202. Columbia Envelope Company, Melrose Park, Ill. Filed Dec. 1, 1955.

COLOR-TEX

For Envelopes.

First use Aug. 15, 1955.

SN 699,317. M. Grumbacher, Inc., New York, N. Y. Filed Dec. 2, 1955. Sec. 2(f).

COROT

For Artists' Crayons.

First use Aug. 30, 1950.

SN 699,402. Keuffel & Esser Company, Hoboken, N. J. Filed Dec. 5, 1955.

STABILENE

Owner of Reg. No. 581,490.

For Sheets for Making Highly Accurate Tracings and Photoreproductions—Namely, Glass Tracing Cloth and Glass Reproduction Cloth and Tracing and Reproduction Film of Plastic Materials, Such as Polyester Materials.

First use June 1949 on glass cloth.

SN 699,539. Allied Specialties, Incorporated, Bristol, Conn. Filed Dec. 7, 1955.

Lustretal

For Glossy, Cast-Coated, Decorated Paper Bridge Tallies.
First use Oct. 15, 1955.

SN 699,703. Continental Can Company, Inc., New York, N. Y. Filed Dec. 9, 1955.

Owner of Reg. Nos. 76,433, 536,340, and others.
For Multiple Ply Sheets in the Form of Laminations, Rolls, Wrappers, and Bags or Similar Containers.
First use June 7, 1954.

SN 699,894. Eagle Pencil Company, New York, N. Y. Filed Dec. 13, 1955.

MAGIC

For Wood Encased Pencils.
First use Nov. 15, 1955.

SN 699,895. Eagle Pencil Company, New York, N. Y. Filed Dec. 13, 1955.

MAGICOLOR

For Wood Encased Pencils.
First use Nov. 15, 1955.

CLASS 38

SN 667,631. Intercontinental Marketing Corporation, New York, N. Y. Filed June 3, 1954.

IMC

For Catalogs and Other Business Publications.
First use Oct. 16, 1953.

SN 674,806. Cope Research & Development, Inc., Hollywood, Calif. Filed Oct. 14, 1954.

Silhouette

For Motion Picture Film That Includes a Developed Sound Track.
First use on or about May 1, 1954.

SN 685,037. National Council of the Churches of Christ in the United States of America, New York, N. Y. Filed Apr. 6, 1955.

National Council Religious Features

Applicant disclaims the words "Religious Features" apart from the mark as shown.
For Pamphlets and Other Literature Used in Promoting the Publication in Newspapers of Bible Lessons and Other Religious Writings.
First use on or about Oct. 1, 1953.

SN 686,485. Sears, Roebuck and Co., Chicago, Ill. Filed Apr. 28, 1955. Sec. 2(f).

Readers Review

For Periodic Publication or Circular, Published Bi-Monthly.
First use on or about Mar. 31, 1950.

SN 686,683. Parke, Davis & Company, Detroit, Mich. Filed May 2, 1955.

Polio Patterns

For Publication for the Medical Profession Issued Weekly During a Portion of the Year and Otherwise Monthly.
First use Mar. 28, 1955.

SN 692,743. The Sherwin-Williams Company, Cleveland, Ohio. Filed Aug. 9, 1955. Sec. 2(f).

HOME DECORATOR

For Publication Issued Annually Showing the Latest in Color Combinations, Finishes, and Application Methods for Interior and Exterior Protective and Decorative Coatings for the Home.
First use on or about December 1930.

SN 695,710. The Elliott Calendar Company, Coshocton, Ohio. Filed Oct. 3, 1955.

KIDDIE

For Calendars.
First use on or about Sept. 1, 1955.

SN 698,243. United Newspapers Magazine Corporation, New York, N. Y. Filed Nov. 14, 1955.

Personalized Patterns

For Syndicated Column or Magazine Section.
First use Oct. 2, 1955.

SN 698,548. Milton N. Pierson, d. b. a. Flair Studios, Chicago, Ill. Filed Nov. 18, 1955.

flair studios

Applicant specifically disclaims any right to the term "Studios" per se.
For Advertising Art Work and Photographs Used in Advertising.
First use Apr. 15, 1954.

SN 698,718. Pacific Jazz Enterprises, Inc., Hollywood, Calif. Filed Nov. 22, 1955.

jazz west coast



For Publication Issued Periodically.
First use Jan. 1, 1955.

SN 699,634. Gateway Promotions, Inc., St. Louis, Mo. Filed Dec. 8, 1955.

GIFT BOND

For Trading Stamps.
First use Feb. 1, 1955.

SN 699,639. Bernard D. Hathcock, Atlanta, Ga. Filed Dec. 8, 1955.

MULTITECH

For Letter Published From Time to Time and Containing Stock Market Analysis Information.
First use Nov. 19, 1955.

SN 87. PatRice, Inc., New York, N. Y. Filed Jan. 3, 1956.

PATRICE DECORES

For Adhesive Plastic Motifs for Decoration of Furniture, Walls, and Similar Articles.
First use on or about Dec. 13, 1955.

SN 140. Dell Publishing Company, Inc., New York, N. Y. Filed Jan. 4, 1956.

"DELL JUNIOR TREASURY"

For Children's Magazines Published Quarterly.
First use Apr. 5, 1955.

SN 272. Southern California Floral Association, Los Angeles, Calif. Filed Jan. 6, 1956.

THE BLOOMIN' NEWS

For Magazine Pertaining to Horticulture and Related Subjects and Containing Advertising Matter.
First use in October of 1946.

SN 333. Hyster Company, Portland, Oreg. Filed Jan. 9, 1956.

SPACE

For Periodical Produced Quarterly.
First use Oct. 1, 1949.

SN 377. Shaw-Barton, Inc., Coshocton, Ohio. Filed Jan. 9, 1956.

SCULPTORAMA

For Calendars.
First use Nov. 15, 1955.

SN 474. Alfred M. Best Company, Inc., New York, N. Y. Filed Jan. 11, 1956. Sec. 2(f).

Safety Maintenance and Production

Owner of Reg. No. 553,288.
For Magazine.
First use Oct. 3, 1950.

CLASS 39

SN 658,251. Alfred Dunhill of London, Inc., New York, N. Y., to Alfred Dunhill Limited, London, England. Filed Dec. 21, 1953.

ALFRED dunhill

For Men's Neckties.
First use in or about 1929.

SN 670,197. Edgar C. Hyman Co., Inc., New York, N. Y. Filed July 19, 1954.



The word "Originations" is disclaimed apart from the mark as shown, without waiving any common law rights thereto.
Owner of Reg. Nos. 246,934 and 524,118.
For Scarfs, Squares, Ties, Shawls, Stoles, Shrugs, Capes, Mantles, Mantillas, Neckerchiefs.
First use 1928.

SN 675,012. Sea-B's, Inc., New York, N. Y. Filed Oct. 18, 1954.

Molda-Bra

For Women's and Misses' Swimwear.
First use on or about Apr. 1, 1954.

SN 681,040. I. Schneierson & Sons, Inc., New York, N. Y. Filed Feb. 3, 1955.

TWINKLE-TEX

For Ladies' and Children's Slips and Nightgowns of a Textile Fabric.
First use Jan. 10, 1954.

SN 681,770. Home Manufacturing Company, Inc., Decatur, Ill. Filed Feb. 16, 1955.

Simpli-Smart BY SIMPLICITY

Owner of Reg. No. 345,390.
For Women's and Misses' House Dresses.
First use Sept. 17, 1954.

SN 683,562. Selberling Rubber Company, Barberton, Ohio. Filed Mar. 15, 1955.

FIRM-GRIP

For Soles and Heels for Boots and Shoes.
First use Dec. 19, 1953, on soles.

SN 684,696. Standard Knitting Mills, Inc., Knoxville, Tenn. Filed Mar. 31, 1955. Sec. 2(f) as to "Freedom Sleeve" and "Healthknit."

FREEDOM SLEEVE

By Healthknit

Owner of Reg. Nos. 353,963, 543,705, and others.
For Men's, Boys', and Girls' Knitted Pajamas, Children's Knitted Sleepers, and Men's and Boys' Sweat Shirts.
First use Feb. 2, 1955; in March 1933 as to "Freedom Sleeve" on sweat shirts; and on Jan. 30, 1939, as to "Healthknit" on pajamas and children's sleepers.

SN 684,698. Standard Knitting Mills, Inc., Knoxville, Tenn. Filed Mar. 31, 1955. Sec. 2(f) as to "Full Freedom Sleeve."

FULL FREEDOM SLEEVE

Owner of Reg. Nos. 353,963, 404,621, and others.
For Men's, Boys', and Girls' Knitted Pajamas, Children's Knitted Sleepers, and Men's and Boys' Sweat Shirts.
First use Feb. 2, 1955; and as early as July 29, 1940, on sweat shirts.

SN 685,429. Cluett, Peabody & Co., Inc., Troy, N. Y. Filed Apr. 13, 1955.

CANNES

For Sports Shirts.
First use Oct. 30, 1954.

SN 687,541. Cabby's Merchandising Co., New York, N. Y. Filed May 16, 1955.

Cabby's

For Ladies' Underwear and Women's Dresses and Women's Hosiery.
First use Apr. 30, 1950.

SN 687,806. Palm Beach Company, Sanford, Maine. Filed May 18, 1955.

SPORTAIR

For Men's Sport Coats, Slacks, Walking Shorts, and Sport Shirts.
First use Mar. 22, 1955.

SN 689,275. Federated Department Stores, Inc., Cincinnati, Ohio. Filed June 10, 1955.

Thrifty 50

For Men's Suits and Coats.
First use June 3, 1955.

SN 689,518. Joseph M. Rubin & Sons, Gloversville, N. Y. Filed June 14, 1955.

Crazy-legs

For Hosiery.
First use Mar. 1, 1955.

SN 690,603. Central States Uniform Company, Carthage, Mo. Filed July 1, 1955.

Centco

For Men's Work Clothes—Namely, Work Shirts, Work Pants, One Piece Suits, Jackets, Blue Jeans, and Sport Shirts.
First use Apr. 1, 1955.

SN 690,664. Victor Gloves Inc., New York, N. Y. Filed July 1, 1955.

SENSI-TIP

For Ladies' and Men's Gloves Made of Fabric.
First use May 11, 1955.

SN 691,075. Ozark Mountain Store, Inc., Windsor, Mo. Filed July 11, 1955.

OZARK MOUNTAIN STORE

For Hats for Men, Women, and Children, and Moccasins Made of Leather and Fabric.
First use Feb. 28, 1955.

SN 692,104. Wembley, Inc., New Orleans, La. Filed July 28, 1955.

TEAR DROP

For Men's Neckties.
First use July 1, 1955.

SN 692,437. Super-Form Brassiere Inc., New York, N. Y. Filed Aug. 3, 1955.

"young 'n heart"

For Brassieres.
First use Apr. 29, 1955.
Subj. to Intf. with Reg. No. 624,116.

SN 692,499. Lillian Kolodney Abbott, New York, N. Y. Filed Aug. 5, 1955.

FAMILY AFFAIR

For Ladies', Misses', Girls', Men's and Boys' Dungarees, Coveralls, Sport Jackets, Sport and Dress Shirts, Suits, Coats, Slacks, Walking and Play Shorts, Hats and Caps, Outer Belts and Suspenders, Hosiery, Raincoats and Hoods, Sweaters and Gloves; Ladies', Misses' and Girls' Slips, Petticoats, Panties, Camisoles, Overalls, Jumpers, Blouses, Outer Skirts, Dresses, Bathing Suits, and Pedal Pushers, and Men's and Boys' Trousers and Bathing Trunks.
First use May 1, 1952.

SN 692,547. Resistol Hats, Inc., Garland, Tex. Filed Aug. 5, 1955. Sec. 2(f).

Churchill

For Men's Hats.
First use April 1928.

SN 693,331. Netz Glove & Mitten Co., Milwaukee, Wis. Filed Aug. 18, 1955.

By Drake

For Men's, Women's, and Children's Leather and Fabric Gloves and Mittens for Work, Utility, Sport, and Dress.
First use Feb. 5, 1954.

SN 693,339. F. W. Woolworth Co., New York, N. Y. Filed Aug. 18, 1955.

Susan Smart

Owner of Reg. No. 585,068.
For Hair Nets and Water Wave Nets.
First use Mar. 25, 1953, on hair nets.

SN 696,330. United Sheeplined Clothing Co., Inc., West Long Branch, N. J. Filed Oct. 12, 1955.

Daniel Boone

Owner of Reg. No. 360,024.
For Coats and Jackets for Men, Women, and Children.
First use Feb. 15, 1938.

SN 697,768. Drylegs Company, Woodstock, Va. Filed Nov. 7, 1955.

DRYLEGS

For Tubular and Water-Proof Clip-On Leg Shields Which Are Used To Keep Pants Legs Dry.
First use Oct. 10, 1955.

SN 699,356. Burma-Bibas, Inc., New York, N. Y. Filed Dec. 5, 1955.

ARPET

For Neckties.
First use July 20, 1955.

SN 699,454. Sam Zuckerberg, d. b. a. The Zuckerberg Company, New York, N. Y. Filed Dec. 5, 1955.

PERMA-FOLD

For Shirt Collars.
First use February 1955.

SN 699,496. Frank W. Harman, III, San Marino, Calif. Filed Dec. 6, 1955.

Show Toppers

For Head-Dresses for Theatrical and Display Purposes.
First use July 1, 1955.

SN 699,748. Sportville Men's Wear, Inc., New York, N. Y. Filed Dec. 9, 1955.

BERNETTA

For Men's Clothing—Namely, Sport Shirts, Swim Shorts, Walk Shorts, and Lounging Robes.
First use July 9, 1955, on sport shirts.

SN 1,000. Morris Metzger and Sons, Inc., New York, N. Y. Filed Jan. 18, 1956.

"MERENGUE"

For Ladies' and Misses' Coats.
First use Jan. 4, 1956.

SN 1,354. The H. E. Frisch Knitting Mills Co., Cleveland, Ohio. Filed Jan. 24, 1956. Sec. 2(f).

THE BELGIUM SHAWL

Owner of Reg. Nos. 541,241 and 555,520.
For Shawls for Babies.
First use on or about Aug. 24, 1949.

SN 2,225. Country Tweeds, New York, N. Y. Filed Feb. 7, 1956. Sec. 2(f).

Country Tweeds

For Women's, Misses' and Junior Coats.
First use May 1, 1941.

SN 2,397. Wonder Bra Company, Incorporated, New York, N. Y. Filed Feb. 9, 1956.

Accomplice

For Brassieres.
First use Jan. 12, 1956.

SN 2,551. Milady Brassiere & Corset Co., Inc., New York, N. Y. Filed Feb. 13, 1956.

PORTUGESE
fisherman

For Women's and Misses' Sportswear—Namely, Ladies' Shorts, Slacks, and Pedal Pushers.
First use Sept. 15, 1955.

SN 2,552. Milady Brassiere & Corset Co., Inc., New York, N. Y. Filed Feb. 13, 1956.

Roxanne RUSTICS

For Women's and Misses' Sportswear—Namely, Slacks, Skirts, Jumpers, Blouses, Jackets, and Dresses.
First use Sept. 15, 1955.

SN 2,581. Shadowline, Inc., Morganton, N. C. Filed Feb. 13, 1956. Sec. 2(f).

Shadowline

Owner of Reg. No. 511,102.
For Ladies' Panties, Nightgowns, Slips, Bandeaux, and Pajamas.
First use July 7, 1947.

CLASS 40

SN 687,234. Louise Varney, New York, N. Y. Filed May 10, 1955.

Zip-a-Lift

For Aids in the Nature of Clip-On Chains for Pulling Zippers.
First use Jan. 21, 1954.

SN 691,018. Easthampton Rubber Thread Co., Easthampton, Mass. Filed July 11, 1955.

Stripalastic

Owner of Reg. No. 337,817.
For Rubber Tape.
First use July 27, 1934.

SN 697,609. American Hard Rubber Company, New York, N. Y. Filed Nov. 3, 1955.

ACE Crew Man

Owner of Reg. Nos. 131,017, 404,919, and others.
For Comb for Dressing, Ornamenting and Cleaning the Hair.
First use Oct. 19, 1955.

CLASS 41

SN 698,931. Tackles-Puf, Inc., New York, N. Y. Filed Nov. 25, 1955.

TACKLES-PUF

For Umbrella Rib Runner Protectors Known to the Trade as Umbrella Puffs.
First use Nov. 7, 1955.

CLASS 42

SN 688,699. Amerotron Corporation, New York, N. Y. Filed June 2, 1955.

Fur-Bloom

For Piece Goods Consisting of Wool and Beaver.
First use Mar. 29, 1955.

SN 692,271. Hilda M. Rice, Rome, N. Y. Filed Aug. 1, 1955.

Sign-a-Cloth

For Table Cloths, Bridge Table Covers, and Decorative Scarves of Cotton, Rayon, and Combinations Thereof.
First use June 2, 1955.

SN 693,026. Curlator Corporation, East Rochester, N. Y. Filed Aug. 15, 1955.

RANDO-WEB

Owner of Reg. No. 558,770.
For Non-Woven Fabric Made From Textile Fibers and the Like.
First use July 8, 1955.

SN 697,282. Fox-Wells, Tricot Division, Inc., New York, N. Y. Filed Oct. 28, 1955.

COLORLIFE

For Acetate Tricot Fabrics.
First use July 20, 1955.

SN 698,335. Bemis Bro. Bag Company, St. Louis, Mo. Filed Nov. 16, 1955.

SEW-TITE

Owner of Reg. Nos. 426,740, 500,703, and 519,846.
For Woven Mesh Fabric for Bags.
First use July 30, 1954.

SN 700,472. Martel Mills Corporation, New York, N. Y. Filed Dec. 22, 1955. Sec. 2(f).

TRINITY

For Cotton Piece Goods—Namely, Ticking.
First use 1931.
Subj. to Intf. with Reg. No. 622,367.

SN 700,500. Burlington Industries, Inc., New York, N. Y. Filed Dec. 23, 1955.

Burlington QUALITY

The word "Quality" is disclaimed apart from the mark as shown. Owner of Reg. Nos. 49,211, 509,900, and others.
For Piece Goods of Cotton, Wool, Linen, Silk, and Synthetic Fabrics.
First use Nov. 16, 1955.

SN 403. Amerotron Corporation, New York, N. Y. Filed Jan. 10, 1956.

Kennora

For Piece Goods of Synthetic Fibers.
First use Sept. 15, 1955.

SN 1,115. Rosewood Fabrics, Inc., New York, N. Y. Filed Jan. 19, 1956.

CREASE-KEEPER

For Fabrics Having Natural and Synthetic Fiber Warps With Synthetic Fiber Yarns for Filling the Fabric Finished To Be Water-Repellent and Crease-Resistant.
First use Jan. 3, 1956.

SN 1,209. Celanese Corporation of America, New York, N. Y. Filed Jan. 23, 1956.

AMCEL

Owner of Reg. No. 149,817.
For Textile Fabrics Made of Synthetic Fibers, Alone and in Admixture With Cotton, Wool, or Silk.
First use Jan. 9, 1956.

SN 1,288. William Skinner & Sons, New York, N. Y. Filed Jan. 23, 1956.

8217

For Fabrics of Silk, Wool, Cotton, Man-Made Fibers, and Combinations Thereof.
First use Feb. 8, 1937.

SN 1,331. Castleton Fabrics, Inc., New York, N. Y. Filed Jan. 24, 1956.

ABERSHAN

For Textile Fabrics in the Piece, Composed of Rayon, Cotton, Linen, Wool, Nylon, and Silk Goods.
First use June 1, 1955.

SN 1,355. The H. E. Frisch Knitting Mills Co., Cleveland, Ohio. Filed Jan. 24, 1956. Sec. 2(f).

THE BELGIUM SHAWL

Owner of Reg. Nos. 541,241 and 555,520.
For Knitted Baby Blankets.
First use on or about Aug. 24, 1949.

SN 1,770. Cosmopolitan Juniors Inc., New York, N. Y. Filed Jan. 31, 1956.

CLOUD MIST

For Woolen Piece Goods.
First use Sept. 1, 1955.

SN 1,778. D. B. Fuller & Co., Inc., New York, N. Y. Filed Jan. 31, 1956.

ALHAMBRA

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
First use Jan. 17, 1955.

CLASS 44

SN 697,567. Medical Research Institute, Inc., Cincinnati, Ohio. Filed Nov. 2, 1955.

Therma Meter

For Electronic Clinical Thermometers for Use in Taking the Temperature of Human Beings.
First use Sept. 1, 1954.

SN 699,588. Ophthalmos, Inc., Union City, N. J. Filed Dec. 7, 1955.

FLUOR I STRIP

For Impregnated Cellulosic Fibre Strips for Use in Ophthalmic Diagnosis.
First use June 5, 1955.

SN 699,596. Realty Service, North Palm Springs, Calif. Filed Dec. 7, 1955.

HELIFT

For Muscular Reinforcement or Aid, Particularly for the Muscle Bulbocavernosus.
First use Nov. 16, 1955.

SN 699,625. Davis & Geck, Inc., Danbury, Conn. Filed Dec. 8, 1955.

SURGILAR

For Surgical Sutures.
First use Oct. 13, 1955.

SN 4,922. Youngs Rubber Corporation, New York, N. Y. Filed Apr. 10, 1956.



All wording except "Trojans," and the representation of the label are disclaimed apart from the mark. The drawing is lined for blue and red.
For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
First use Nov. 5, 1946.

CLASS 46

SN 647,432. McCalliater Dairy Farms, Inc., Warren, Ohio. Filed May 21, 1953.



The drawing is lined for red and blue.
For Ice Cream.
First use May 1, 1948.

SN 656,216. Farmers Educational and Cooperative Union of America, Denver, Colo. Filed Nov. 12, 1953.

Family Farmer

For Frozen Blackberries, Frozen Raspberries, Frozen Strawberries, Canned Green Beans, and Butter.
First use on or about Oct. 1, 1951, on butter.

SN 663,213. Roberts Pacific, Ltd., San Francisco, Calif. Filed Mar. 24, 1954.



For Spice Seasonings, Spices, Seasoning Salts, and Culinary Herbs.
First use Jan. 10, 1954.

SN 672,224. F & F Laboratories, Inc., Chicago, Ill. Filed Aug. 25, 1954.

COFFEE HOUR

For Hard Candy.
First use Aug. 19, 1954.

SN 674,050. Calavo Growers of California, Los Angeles, Calif. Filed Sept. 30, 1954.

CALAVO

Owner of Reg. Nos. 214,759 and 521,886.
For Avocado Pulp.
First use Aug. 21, 1951.

SN 681,975. Anderson, Clayton & Co., Sherman, Tex. Filed Feb. 21, 1955.

FRiBASE

Owner of Reg. No. 421,225.
For Vegetable Oil Shortening.
First use Jan. 31, 1955.

SN 681,977. Anderson, Clayton & Co., Sherman, Tex. Filed Feb. 21, 1955.

Hybase

Owner of Reg. No. 421,225.
For Vegetable Oil Shortening.
First use Jan. 31, 1955.

SN 682,459. The Ohio Provision Company, Cleveland, Ohio. Filed Feb. 28, 1955.

SANDY MAC

Owner of Reg. No. 373,344.
For Freshed, Smoked, Pickled, Dry Salted, and Otherwise Cured Cuts of Pork Carcasses, Pork Offals, Lard, and Meat Loaves and Spreads and Sausages Containing Pork.
First use Feb. 14, 1939, on bacon.

SN 683,718. J. R. Short Milling Company, d. b. a. Mount Vernon Milling Company, Mount Vernon, Ind. Filed Mar. 17, 1955.

CERATEX

Owner of Reg. Nos. 281,822 and 610,488.
For Corn Flour.
First use Aug. 16, 1954.

SN 683,812. Arthur F. Purma, Bentonville, Ark. Filed Mar. 18, 1955.



No claim is made to the words "Spiced-Chick" apart from the mark shown.
For Prepared Frozen Chicken.
First use September 1954.

SN 684,398. William Capland, d. b. a. Southcoast Quick Freezing and Packing Co., Miami, Fla. Filed Mar. 29, 1955.

Southcoast

For Frozen Breaded Shrimp, Frozen Shrimp.
First use in the year 1949.

SN 684,644. Dunkin Donuts of America, Inc., d. b. a. Dunkin' Donuts, Boston, Mass. Filed Mar. 31, 1955.

Dunkin' Donuts

For Doughnuts and Doughnut Flour, Fruit Fillings for Doughnuts, Cookies, Cakes and Pies, Vegetable Oil Shortening and Coffee.
First use May 1952 on doughnuts.

SN 684,810. Consolidated Blenders, Inc., Fremont, Nebr. Filed Apr. 4, 1955.

GREENULES

For Dehydrated Alfalfa in Bulk and Pellet Form for Use as an Ingredient in Feed for Cattle, Hogs, Sheep, and Poultry.
First use Jan. 24, 1955.

SN 686,452. Scott Ferguson, d. b. a. Mountain View Feed & Grain, Colorado Springs, Colo. Filed Apr. 28, 1955.

SWEET PEAK

For Livestock Feed.
First use on or about Oct. 1, 1954.

SN 689,412. The Rapp-Ramsey Company, Shenandoah, Iowa. Filed June 13, 1955.

Sweet-10

For Non-Caloric Sweetener in Liquid, Granular, and Tablet Form for Use as a Substitute for Sugar in Sweetening Foods.
First use May 12, 1955.

SN 690,446. Florida Chemical Research, Inc., Sarasota, Fla. Filed June 29, 1955.

Clear Sky Farm

For Fresh Eggs.
First use Dec. 20, 1954.

SN 690,502. Steak-E-Rator, Inc., Oklahoma City, Okla. Filed June 29, 1955.

STEAK-E-RATOR

For Steak Seasoning.
First use Jan. 17, 1955.

SN 691,694. Chas. Hollenbach, Inc., Chicago, Ill. Filed July 21, 1955.

SMOKY-JO

For Summer Sausage.
First use Apr. 1, 1955.

SN 691,894. A. Russo & Co., Chicago, Ill. Filed July 25, 1955.

MAC-O

For Alimentary Foods—Namely, Macaroni.
First use Mar. 18, 1950.

SN 692,007. McCormick & Company, Incorporated, Baltimore, Md. Filed July 27, 1955.

McCORMICK
SEASON-ALL
Savor Salt

No claim is made to the words "Savor Salt" apart from the mark as shown, applicant reserving all common law rights.
Owner of Reg. Nos. 362,407, 605,889, and others.
For Seasoning and Flavor Intensifier for Food, Consisting of Salt, Monosodium Glutamate, Spices, and Magnesium Carbonate.
First use July 1, 1955.

SN 692,884. Martha White Mills, Inc., Nashville, Tenn. Filed Aug. 11, 1955.

Hot Rize

Owner of Reg. No. 618,741.
For Flour.
First use July 8, 1955.

SN 692,964. Standard Brands Incorporated, New York, N. Y. Filed Aug. 12, 1955.

VYTEES

For Dog Food.
First use Oct. 8, 1946.

SN 692,978. Washington Creamery New York Corp., New York, N. Y. Filed Aug. 12, 1955.

MONTAUK CHIEF

For Frozen Poultry—Namely, Turkey and Other Fowl.
First use July 22, 1955.

SN 693,190. Recipe Foods Inc., Baltimore, Md. Filed Aug. 16, 1955. Sec. 2(f).

BENNETT'S

Owner of Reg. Nos. 371,362 and 595,737.
For Mayonnaise, Prune Juice, Chili Sauce, Tartar Sauce, Salad Spread, Salad Dressing, French Dressing, Thousand Island Dressing Mayonnaise-Based Relishes and Fruit Flavored Syrups for Food Purposes.
First use May 1, 1933.

SN 693,492. Rosenberg Bros. & Co. Inc., San Francisco, Calif. Filed Aug. 22, 1955.

Paradise



For Rice.
First use May 11, 1955.

SN 693,681. Knott's Berry Farm, Buena Park, Calif. Filed Aug. 25, 1955.



Owner of Reg. Nos. 613,274 and 622,410.
For Canned Boysenberries; Jams; Jellies; Fruit Preserves; Fruit and Berry Toppings; Marmalades; Watermelon Pickles; Cucumber and Onion Pickles; Spiced Fruits, Figs, Melons, Dates, and Grapefruit Peel; French Dressing; Salad Dressing; Thousand Island Dressing; Meat Sauce (Meatless); Barbecue Sauce; Cocktail Sauce; Cranberry Sauce; Green Olives; Peanut Butter; Almond Butter; Cashew Butter; Seasoning Salts; Cinnamon; Sage; Poultry Seasoning; Powdered Mustard; Nutmeg; Chili Powder Blend; Paprika; Seasoned Herbs; Black Pepper; Maraschino Cherries; Pancake Syrup; Candy, Bread, and Pie.
First use July 16, 1954, on candy.

SN 693,682. Knott's Berry Farm, Buena Park, Calif. Filed Aug. 25, 1955. Sec. 2(f).

KNOTT'S

Owner of Reg. Nos. 613,274 and 622,410.
For Canned Boysenberries; Jams; Jellies; Fruit Preserves; Marmalades; Watermelon Pickles; Cucumber and Onion Pickles; Spiced Fruits, Figs, Melons, Dates, and Grapefruit Peel; French Dressing; Salad Dressing; Thousand Island Dressing; Meat Sauce (Meatless); Barbecue Sauce; Cocktail Sauce; Cranberry Sauce; Green Olives; Peanut Butter; Almond Butter; Cashew Butter; Seasoning Salts; Cinnamon; Sage; Poultry Seasoning; Powdered Mustard; Nutmeg; Chili Powder Blend; Paprika; Seasoned Herbs; Black Pepper; Maraschino Cherries; Pancake Syrup; Fruit and Berry Toppings.
First use July 1935 on canned boysenberries.

SN 693,798. The Battle Creek Food Company, Battle Creek, Mich. Filed Aug. 29, 1955.

Battle Creek Sanitarium

The drawing is lined for red, blue, and yellow. Owner of Reg. Nos. 176,228, 615,054, and others.
For Canned Vegetables, Canned Vegetable Juices, Canned Fruits and Canned Fruit Juices.
First use 1948; and first use as to "Sanitarium" 1920.

SN 693,893. Anderson, Clayton & Co., Sherman, Tex. Filed Aug. 30, 1955.

Velvet B

Owner of Reg. No. 117,868.
For Hydrogenated Vegetable Oil.
First use Sept. 28, 1953.

SN 693,894. Anderson, Clayton & Co., Sherman, Tex. Filed Aug. 30, 1955.

Velvet M

Owner of Reg. No. 117,868.
For Hydrogenated Vegetable Oil.
First use Aug. 30, 1954.

SN 693,937. Mrs. Schlorer's, Incorporated, Philadelphia, Pa. Filed Aug. 30, 1955. Sec. 2(f).

MRS. SCHLORER'S

For Mayonnaise, Salad Dressing, French Dressing, Fruit Nectars, Fruit Juices, Table Syrups, Fruit Flavored Syrups for Food Purposes, Honey, Pickles, and Pickle Relishes.
First use June 1911 on salad dressings and vegetable relishes.

SN 694,124. Breast-O'-Chicken Tuna, Inc., d. b. a. Sun Harbor Packing Co., Terminal Island, Calif. Filed Sept. 2, 1955.

SEABOARD

Owner of Reg. No. 241,277.
For Canned Dog and Cat Pet Food.
First use Jan. 1, 1954.

SN 694,362. Gentile Bros. Company, Cincinnati, Ohio. Filed Sept. 8, 1955.



Owner of Reg. No. 197,972.
For Fresh Citrus Fruits, Fresh Tomatoes, and Fresh Bananas.
First use in or about the year 1909.

SN 694,446. The Nitragin Company, Inc., Milwaukee, Wis. Filed Sept. 9, 1955.

NITRAGREEN

For Dehydrated Alfalfa Meal Intended for Consumption by Cattle, Poultry, and Hogs.
First use Aug. 1, 1955.

SN 695,704. Diana Fruit Preserving Company, Santa Clara, Calif. Filed Oct. 3, 1955.

Alexander Diana

Owner of Reg. No. 360,026.
For Maraschino Cherries.
First use Dec. 29, 1937.

SN 695,960. Samuel S. Vener, d. b. a. Samuel S. Vener Co., National City, Calif. Filed Oct. 5, 1955.

"Debby Doll"

For Fresh Celery.
First use the year 1949.

SN 695,961. Samuel S. Vener, d. b. a. Samuel S. Vener Co., National City, Calif. Filed Oct. 5, 1955.

OEB

For Fresh Vegetables.
First use the year 1948.

SN 696,625. Chase & Company, Sanford, Fla. Filed Oct. 24, 1955. Sec. 2(f).

CELERYETTS

For Celery.
First use Jan. 28, 1939.

SN 696,716. Mother's Cake & Cookie Co., Oakland, Calif. Filed Oct. 19, 1955.

Mother's

The drawing is lined for red. Owner of Reg. No. 577,159.
For Cookies and Cakes.
First use July 25, 1955; and first used as to "Mother's" on June 1, 1914.

SN 696,717. Mother's Cake & Cookie Co., Oakland, Calif. Filed Oct. 19, 1955.



Applicant makes no claim to the word "Cookies" apart from the mark as shown, without waiving its common law rights.
For Cakes and Cookies.
First use July 25, 1955.

SN 696,946. Chandler Heights Citrus Growers, Chandler Heights, Ariz. Filed Oct. 24, 1955.

TRADING POST

For Fresh Citrus Fruits.
First use Nov. 27, 1948.

SN 3,066. The Beardstown Mills Company, Beardstown, Ill. Filed Feb. 29, 1956.

CRITIC

Owner of Reg. Nos. 279,956, 522,292, and 533,842.
For Wheat Flour and Corn Meal.
First use January 1890.

SN 3,332. Northwest Popcorn & Seed Co., Delaware, Ohio. Filed Mar. 9, 1956.

BIG POP

For Unpopped Popcorn.
First use Jan. 1, 1946.

CLASS 47

SN 677,139. Chandon Champagne Corporation, New York, N. Y. Filed Nov. 23, 1954.



No claim is made to the wording "Champagne"; "Vintage 1928"; and "Produce of France." Owner of Reg. Nos. 204,410, 204,498, and others.
For Champagne Wines.
First use November 1936.

CLASS 48

SN 668,917. O'Keefe's Brewing Company Limited, Toronto, Ontario, Canada. Filed June 25, 1954. Sec. 2(f) as to "O'Keefe's."



The applicant disclaims the wording "Extra Old Stock Ale" per se and apart from the mark as a whole. In the drawing the hatched areas indicate the color gold.
For Ale.
First use Oct. 29, 1932; in commerce Dec. 2, 1937.

CLASS 49

SN 691,552. Compania Ron Bacardi, S. A., Santiago de Cuba City, Cuba. Filed Jan. 3, 1956.

1862

For Rum.
First use on or about May 13, 1955.

SN 696,800. Hayden's Inc., Washington, D. C. Filed Oct. 20, 1955.

"BABY GIRL!"

For Whiskey.
First use Oct. 13, 1955.

SN 696,802. Hayden's Inc., Washington, D. C. Filed Oct. 20, 1955.

"BABY BOY!"

For Whiskey.
First use Oct. 13, 1955.

SN 700,841. James Burrough Limited, London, England. Filed Dec. 30, 1955. Sec. 2(f).

BURROUGH'S

Owner of Reg. No. 308,053.
For Gin, Rum, Whisky, and Spirituous Cordials.
First use Nov. 11, 1909; in commerce Sept. 5, 1935.

CLASS 50

SN 683,587. Jacques Ducas, d. b. a. Jacques Ducas Studios, New York, N. Y. Filed Mar. 16, 1955.

visomatic

For Display Devices Comprising a Set of Cards, Charts, and Posters and a Container Therefor Permitting Successive Display of Copy by Manual Operation of Such Cards, Charts, and Posters.
First use May 6, 1954.

SN 694,700. Craft Originals Co., West Englewood, N. J. Filed Sept. 15, 1955.



For Holder Racks for Bow Ties.
First use Apr. 28, 1955.

SN 695,972. Calvin C. Cosner, d. b. a. The Stenpho Company, Dayton, Ohio. Filed Oct. 6, 1955.



For Automobile Emblems.
First use Sept. 15, 1955.

SN 697,415. Rochester Razor, Inc., Rochester, N. Y. Filed Oct. 31, 1955.

CASTAWAY SHAVE

For Disposable Razor Kit Comprising a Disposable Razor, Shaving Cream, Face Soap, and Towel.
First use Oct. 7, 1955.

SN 1,130. Starlite Paper Products Co., Chicago, Ill. Filed Jan. 19, 1956.

STARLITE

For Drinking Straws.
First use Nov. 25, 1955.

SN 1,203. Milton O. Buchanan, d. b. a. Buchanan Plastics, Okemos, Mich. Filed Jan. 23, 1956.

Glasbote

For Plastic Boat Covering and Kits and Fiber Glass for Boat Covering.
First use Sept. 12, 1955.

SN 1,351. Flyndustries, Inc., New York, N. Y. Filed Jan. 24, 1956.

DECO-TOP

For Closures for Containers.
First use Sept. 6, 1955.

SN 1,484. Robert L. Taylor, d. b. a. Midway Corporation, Baltimore, Md. Filed Jan. 25, 1956.

KAR-PETS

For Deodorizing Block on Which Is Mounted a Plastic or Cardboard Likeness of an Animal, for Use as a Deodorizer and an Amusement Device for Children.
First use Oct. 14, 1955.

SN 1,777. Henry Fitzpatrick, d. b. a. H. Fitzpatrick Hat Clip Co., Danville, Calif. Filed Jan. 31, 1956.

"A T-EEZ"

For Hat Identification Clips.
First use March 1953.

CLASS 51

SN 697,721. Union Pharmaceutical Co., Inc., Bloomfield, N. J. Filed Nov. 4, 1955.

SURGI-CREAM

For Depilatory.
First use June 15, 1955.

SN 698,737. J. Strickland & Co., Memphis, Tenn. Filed Nov. 22, 1955.

Mel's

Owner of Reg. Nos. 501,679 and 605,951.
For Bleach Cream, Cologne, Shaving Lotion, Hand Lotion, Talcum Powder, Personal Deodorant, Hair Oil, and Stick Brilliantine.
First use Aug. 22, 1947, on bleach cream.

SN 698,819. Simonetta Inc., New York, N. Y. Filed Nov. 23, 1955.

Simonetta

For Perfume and Cologne.
First use July 26, 1955.

CLASS 52

SN 671,991. Economics Laboratory, Inc., St. Paul, Minn. Filed Aug. 20, 1954.



For Soap and Detergent Product Useful in Cleaning Walls, Woodwork, Linoleum, Tile, Pots, Pans, Silverware, and Enamelware.
First use Jan. 2, 1938.

SN 684,381. Armour and Company, Chicago, Ill. Filed Mar. 29, 1955.



Owner of Reg. Nos. 549,768 and 572,002.
For Soap.
First use June 1, 1948.

SN 688,614. Reliable Remover & Lacquer Corp., Long Island City, N. Y. Filed May 16, 1955. Sec. 2(f).

RELIABLE

Owner of Reg. No. 406,397.
For Paint, Varnish, and Lacquer Removers, "No Wash" Removers, Denatured Solvents, Brush and Roller Cleaners, Paste Removers.
First use Jan. 6, 1925.

SN 690,184. National Dairy Research Laboratories, Inc., Islip, N. Y. Filed June 24, 1955.

NDP - 29

Owner of Reg. No. 599,187.
For Alkaline Cleaner Having Good Detergency in the Presence of Hard Water and Organic Soil, Used for Cleaning Dairy and Other Food Equipment and for General Household Cleaning.
First use Oct. 29, 1953.

SN 692,531. F. Mees & Son, St. Louis, Mo. Filed Aug. 5, 1955.



For Aluminum Cleaning Compound.
First use May 10, 1955.

SN 696,774. The Clarkson Laboratories, Inc., Philadelphia, Pa. Filed Oct. 20, 1955.

DIGIT

For Industrial Detergent Composition Intended Primarily for Use in Connection With the Cleaning of Glass Surfaces.
First use in or about September 1954.

SN 697,918. Los Angeles Soap Company, Los Angeles, Calif. Filed Nov. 8, 1955.

WHITE KING D

Owner of Reg. Nos. 110,051, 611,892, and others.
For Detergent in Powder Form for Household Use.
First use Aug. 27, 1954.

SN 698,922. Safeway Stores, Incorporated, Oakland, Calif. Filed Nov. 25, 1955.

BOOST

For Synthetic Detergent for Use in Laundering.
First use Aug. 31, 1955.

SN 699,019. Ultra Chemical Works, Inc., Paterson, N. J. Filed Nov. 28, 1955.

MERRY MAID

Owner of Reg. No. 434,480.
For Compositions for Household and Like Uses in the Cleaning of Textile Fabrics.
First use Nov. 25, 1946.

SN 699,250. Safeway Stores, Incorporated, Oakland, Calif. Filed Dec. 1, 1955.

STURDY

For Synthetic Detergent for Use in Laundering.
First use Aug. 31, 1955.

SN 2,005. The Lincoln Industrial Chemical Co., Inc., Reading, Pa. Filed Feb. 6, 1956.



For Liquid Soap.
First use Mar. 1, 1947.

SERVICE MARKS

CLASS 100

SN 686,884. Gordon and Jeanne Chambers, Milwaukee, Wis. Filed May 5, 1955.



For Photographic Services.
First use July 3, 1954.

SN 692,595. The General Tire & Rubber Company, Akron, Ohio. Filed Aug. 8, 1955.



Applicant disclaims the use of the descriptive wording "Industrial Products Division, Wabash, Indiana" in the mark.
Owner of Reg. Nos. 114,963, 395,212, and 372,525.
For Engineering and Consultation Services—Namely, Furnishing Technical and Consultant Services for Others as to the Development, Design, Fabrication, and Operation of Industrial Products Made From Metal, Plastic, or Rubber.
First use Apr. 12, 1954.

SN 3,329. Variety Clubs International, Dallas, Tex. Filed Mar. 19, 1956.

Variety Clubs International
THE HEART OF SHOW BUSINESS

For Charity Services—Namely, the Raising and Distribution of Funds for Charitable and Humanitarian Purposes.
First use Jan. 1, 1929.

SN 3,330. Variety Clubs International, Dallas, Tex. Filed Mar. 19, 1956.



THE HEART OF SHOW BUSINESS

For Charity Services—Namely, the Raising and Distribution of Funds for Charitable and Humanitarian Purposes.
First use Dec. 5, 1946.

CLASS 101

SN 682,440. KTTV Inc., Los Angeles, Calif. Filed Feb. 28, 1955.

STAR SHOPPERS

For Advertising Food Products of Sponsors Through the Medium of a Television Broadcast Program.
First use Feb. 27, 1953.

SN 690,966. Pickands Mather & Co., Cleveland, Ohio. Filed July 8, 1955.



The drawing is lined for red and black.
For Services in Management and Mining Operations as Agents for Owners of Iron Ore Properties and of Coal Properties; and in General Sales Agency Services for Coal Mining Companies and for Producers of Pig Iron, Ferro Alloys, and Coke.
First use 1931.

SN 695,020. Plackards, Inc., Hewlett, N. Y. Filed Sept. 20, 1955.

ADUCATION

For Advertising the Goods and Services of Others Through the Medium of Placards Placed in School Buses.
First use on or about Sept. 14, 1954.

CLASS 102

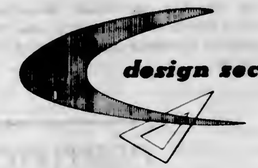
SN 689,280. Hamilton Credit Corporation, New York, N. Y., now The Diners' Club, Inc. Filed June 10, 1955. Sec. 2(f).

the Diners' Club

For Extension of Credit to Customers Who Purchase at Subscribing Retail Establishments and Making Collections From Such Customers Through a Central Billing System.
First use March 1950.

CLASS 103

SN 697,927. Original Designs, Ltd., Honolulu, Territory of Hawaii. Filed Nov. 8, 1955.



The drawing is lined for red.
For Designing and Constructing Residential Buildings.
First use Oct. 8, 1955.

CLASS 105

SN 677,625. Neptune Storage, Inc., New Rochelle, N. Y. Filed Nov. 19, 1954.

NEPTVNE

For Services in Moving, Packing, Shipping, and Storing Household and Personal Goods, Machinery and Equipment, and Other Portable Articles.
First use 1898.

SN 683,476. Auto Convoy Co., Dallas, Tex. Filed Mar. 15, 1955. Sec. 2(f).



For Transportation of Motor Vehicles for Others.
First use Aug. 1, 1946.

CLASS 106

SN 687,964. Metallizing Engineering Co. Inc., Westbury, N. Y. Filed May 20, 1955.

METCO

Owner of Reg. Nos. 358,092, 552,362, and others.
For Applying Decorative and Protective Metallic and Non-Metallic Coatings, Including Spray Metal Coatings, to Material.
First use Oct. 20, 1934.

SN 696,212. Checkline, Inc., Chicago, Ill. Filed Oct. 11, 1955.



The drawing is lined for red. Exclusive use of the words "Insuring Constant Quality" is not claimed apart from the mark shown.

For Finish Machining Services on Goods Belonging to Others, Including Internal and External Grinding and Polishing Operations and Centerless Grinding and Polishing Operations on Manufactured Parts.

First use Dec. 8, 1947.

CERTIFICATION MARKS

CLASS A

SN 676,920. Underwriters' Laboratories, Inc., Chicago, Ill. Filed Nov. 18, 1954.



The mark certifies the safety and effectiveness of the goods.

For Electrical Equipment, Usually Not of a Voltage Exceeding 600 Volts; Building Materials and Equipment; Fire Fighting and Fire Prevention Equipment; Chemicals, Such as Detergents, Flares, Flammable Liquids, Safety Matches, Photographic Film, and Similar Chemicals; Hydraulic Equipment; Equipment for the Handling and Utilization of Hazardous Liquids and Gases, Including Heaters; Automotive Equipment; Equipment and Systems for Protection Against Burglary and Theft Safety Appliances and Air Ducts.

First use on or about Jan. 10, 1935, on electrical equipment—namely, vacuum cleaners.

SN 694,606. Harry C. Stein, New York, N. Y. Filed Sept. 13, 1955.

GEAR ACTION

The mark certifies a particular shoe construction, and the meeting of standards of manufacture and quality set up by applicant.

For Shoes.

First use Jan. 20, 1954.

CLASS 107

SN 693,641. Warrenton-Fauquier County Junior Chamber of Commerce, Inc., Warrenton, Va. Filed Aug. 24, 1955.



No exclusive claim is made to the wording apart from the composite mark as shown.

For Promotion of Country Music Festivals.

First use June 1955.

TRADEMARK REGISTRATIONS ISSUED

ACT OF 1905

CLASS 18

444,811. LAN-LAY AND DESIGN. Lan-Lay Co. SN 504,850. Pub. 9-9-52. Filed 6-29-46.

PRINCIPAL REGISTER

CLASS 1

628,860. KIRBY AND DESIGN. D. Landreth Seed Company. SN 660,737. Pub. 9-20-55. Filed 2-8-54.

628,861. LASTICALF. Barrett & Company, Inc. SN 673,800. Pub. 4-3-56. Filed 9-27-54.

628,862. FARLITE. Farley & Loetscher Mfg. Co. SN 677,651. Pub. 4-3-56. Filed 12-2-54.

628,863. SHELL-PRODUCER. Limestone Products Corporation of America. SN 678,335. Pub. 4-3-56. Filed 12-14-54.

628,864. BRO-CEL. Bro-Cel Textile Corporation. SN 681,136. Pub. 4-3-56. Filed 2-7-55.

628,865. ENDURON. The Parker Pen Company. SN 681,706. Pub. 4-3-56. Filed 2-15-55.

628,866. ROYAL GOLD. A. J. Di Betta, d. b. a. A. J. Ranch. SN 682,715. Pub. 4-3-56. Filed 3-3-55.

CLASS 2

628,867. RAINBOLINE. Molded Fiberglass Tray Company. SN 690,961. Pub. 4-3-56. Filed 7-8-55.

628,868. OCTO-CLEAR. M & L Plastic Corporation. SN 692,150. Pub. 4-3-56. Filed 7-29-55.

628,869. MAUSO-LAWN. James Leo Halley. SN 693,048. Pub. 4-3-56. Filed 8-15-55.

628,870. "CMPC" WITHIN CLOVERLEAF DESIGN. Chicago Molded Products Corporation. SN 698,136. Pub. 4-3-56. Filed 11-14-55.

628,871. THE DORIC AND DESIGN. The Doric Vault Manufacturers Association. SN 698,392. COLLECTIVE MARK. Pub. 4-3-56. Filed 11-16-55.

CLASS 3

628,872. ROXANNE. Roxanne Leather Goods, Inc. SN 696,592. Pub. 4-3-56. Filed 10-17-55.

628,873. BLUE RIBBON. Philip Florin, Inc. SN 697,545. Pub. 4-3-56. Filed 11-2-55.

628,874. PRESTIGE. Philip Florin, Inc. SN 697,546. Pub. 4-3-56. Filed 11-2-55.

CLASS 4

628,875. A FRIEND TO THE FINISH. Karseal Corporation. SN 654,058. Pub. 4-3-56. Filed 10-1-53.

628,876. WIPE-EASY. Murray Borowitz. SN 678,017. Pub. 4-3-56. Filed 12-9-54.

628,877. SCUFF-MASTER. The Kiwi Polish Company Proprietary Limited. SN 696,050. Pub. 4-3-56. Filed 10-7-55.

CLASS 6

628,878. IRONTITE. Salsbury Corporation. SN 632,000. Pub. 3-17-53. Filed 6-30-52.

628,879. TY-BOND. Cowles Chemical Company. SN 662,420. Pub. 6-14-55. Filed 3-11-54.

628,880. REPRESENTATION OF HEAD AND SHOULDERS OF A SCOTSMAN. Continental Ventures, Inc. SN 671,807. Pub. 4-3-56. Filed 8-17-54.

628,881. THRIFTY SPRAY SHINE. Continental Ventures, Inc. SN 671,809. Pub. 4-3-56. Filed 8-17-54.

628,882. O. R. I. Esso Standard Oil Company. SN 679,659. Pub. 4-3-56. Filed 1-10-55.

628,883. RATOPAX AND DESIGN. Biocerta Corporation. SN 681,903. Pub. 4-3-56. Filed 2-18-55.

628,884. FLY-CHARMER SOLUTION AND DESIGN. Pittsburgh Coke & Chemical Company. SN 682,592. Pub. 4-3-56. Filed 3-1-55.

628,885. AROX. General Aniline & Film Corporation. SN 683,972. Pub. 12-6-55. Filed 3-22-55.

628,886. SCENT-SAVER AND DESIGN. Julius Samann. SN 686,099. Pub. 4-3-56. Filed 4-22-55.

628,887. CHEELOX. General Aniline & Film Corporation. SN 687,555. Pub. 4-3-56. Filed 5-16-55.

628,888. PUSH BUTTON. McConnon & Company. SN 688,250. Pub. 4-3-56. Filed 5-25-55.

628,889. SUCROCIDE. Eastern States Farmers' Exchange, Incorporated. SN 688,632. Pub. 4-3-56. Filed 6-1-55.

628,890. AQUAPEL. Hercules Powder Company. SN 689,839. Pub. 4-3-56. Filed 6-20-55.

628,891. DURA-WOOD AND DESIGN. Darworth Incorporated. SN 692,206. Pub. 4-3-56. Filed 8-1-55.

628,892. NOPCO LDF. Nopco Chemical Company. SN 692,414. Pub. 4-3-56. Filed 8-3-55.

628,893. NOPCO LDC. Nopco Chemical Company. SN 692,415. Pub. 4-3-56. Filed 8-3-55.

628,894. NOPCO LDV. Nopco Chemical Company. SN 692,416. Pub. 4-3-56. Filed 8-3-55.

628,895. CREST. A. E. Staley Manufacturing Company. SN 692,435. Pub. 4-3-56. Filed 8-3-55.

CLASS 8

628,896. SHERATON. Lane, Limited. SN 695,551. Pub. 4-3-56. Filed 9-29-55.

CLASS 9

628,897. METHANITE. Hercules Powder Company. SN 697,224. Pub. 4-3-56. Filed 10-27-55.

CLASS 10

628,898. CHEMCO AND DESIGN. Chemco. SN 671,138. Pub. 7-19-55. Filed 8-5-54.

628,899. AIR-O-LOAM. Ag Products Co. SN 690,987. Pub. 4-3-56. Filed 7-11-55.

628,900. POWER TO GROW AND DESIGN. The Consolidated Mining and Smelting Company of Canada Limited. SN 696,505. Pub. 4-3-56. Filed 10-17-55.

628,901. POWER TO GROW. The Consolidated Mining and Smelting Company of Canada Limited. SN 696,506. Pub. 4-3-56. Filed 10-17-55.

628,902. OLKABIMOLIO AND DESIGN. Rafael Klein, d. b. a. Brangolmore Chemical Co. SN 696,549. Pub. 4-3-56. Filed 10-17-55.

628,903. GROSO. Chase & Company. SN 696,624. Pub. 4-3-56. Filed 10-21-55.

CLASS 11

628,904. BOURGES SOLOTONE. Bourges Color Corporation. SN 689,207. Pub. 4-3-56. Filed 6-9-55.

CLASS 12

628,905. INLAND. Inland Homes Corporation. SN 654,972. Pub. 4-20-54. Filed 10-19-53.

628,906. COLONEL LOGAN. Logan Co. SN 659,936. Pub. 4-3-56. Filed 1-22-54.

628,907. PERFECT SEAL. P. O. B. Manufacturing Co., Inc. SN 680,027. Pub. 4–3–56. Filed 1–17–55.

628,908. REDI-ROLL. Rock-Tred Corporation. SN 682,484. Pub. 4–3–56. Filed 2–28–55.

628,909. JUNIOR AND DESIGN. The Babcock & Wilcox Company. SN 684,185. Pub. 4–3–56. Filed 3–25–55.

628,910. PRESSCON. Concrete Engineering Company. SN 687,260. Pub. 4–3–56. Filed 5–11–55.

628,911. CHANNEL-LAP. The Celotex Corporation. SN 687,762. Pub. 4–3–56. Filed 5–18–55.

628,912. SP MI QUALITY LUMBER AND DESIGN. Southeastern Pine Marketing Institute. SN 688,865. COLLECTIVE MARK. Pub. 4–3–56. Filed 6–3–55.

628,913. EXCELOK. Globe Roofing Products Co., Inc. SN 692,058. Pub. 2–7–56. Filed 7–28–55.

628,914. GREENCOTE. A. P. Green Fire Brick Company. SN 692,936. Pub. 4–3–56. Filed 8–12–55.

628,915. ARISLIDE. Michel & Pfeffer Iron Works, Inc. SN 693,068. Pub. 4–3–56. Filed 8–15–55.

628,916. SQUARE AND DESIGN. Paul Jacobi Taxey. SN 693,868. Pub. 4–3–56. Filed 8–29–55.

628,917. SPECPLY. Western Veneer & Plywood Company. SN 696,480. Pub. 4–3–56. Filed 10–14–55.

628,918. GLAZ-KALK. The Sherwin-Williams Company. SN 283. Pub. 4–3–56. Filed 1–10–56.

CLASS 13

628,919. KWIK ANKR AND DESIGN. Hyman D. Kraft. SN 689,726. Pub. 4–3–56. Filed 6–17–55.

628,920. POWERCLEATS. Powernail Company. SN 697,637. Pub. 4–3–56. Filed 11–3–55.

628,921. CONTROLADOR AND DESIGN. Controlador Company. SN 697,761. Pub. 4–3–56. Filed 11–7–55.

628,922. VACU-VALVE. Aerodyne Development Corp. SN 698,113. Pub. 4–3–56. Filed 11–14–55.

628,923. SMOOTH-FLO. Armco Steel Corporation. SN 698,119. Pub. 4–3–56. Filed 11–14–55.

628,924. KUT-BAK. The G. E. Prentice Mfg. Co. SN 698,301. Pub. 4–3–56. Filed 11–15–55.

628,925. EVERLEVEL. Ever-Level Glides, Inc. SN 698,415. Pub. 4–3–56. Filed 11–17–55.

628,926. WOBBLE STOPPER. Ever-Level Glides, Inc. SN 698,416. Pub. 4–3–56. Filed 11–17–55.

628,927. UNIBOLT. Thornhill-Craver Company, Inc. SN 698,663. Pub. 4–3–56. Filed 11–21–55.

CLASS 15

628,928. ALL-TEMP. Chas. F. Kellom & Co., Inc. SN 680,475. Pub. 8–23–55. Filed 1–25–55.

628,929. KENLUBE. Kendall Refining Company. SN 692,525. Pub. 4–3–56. Filed 8–5–55.

628,930. HI-CYL. The Standard Oil Company. SN 695,772. Pub. 4–3–56. Filed 10–3–55.

628,931. MELCOLENE. Metal Lubricants Co. SN 695,986. Pub. 4–3–56. Filed 10–6–55.

628,932. MELCOLUBE. Metal Lubricants Co. SN 695,987. Pub. 4–3–56. Filed 10–6–55.

628,933. MELCOLATE. Metal Lubricants Co. SN 698,050. Pub. 4–3–56. Filed 11–10–55.

CLASS 16

628,934. SELECT-A-TINT. International Paint Company, Inc. SN 670,788. Pub. 4–3–56. Filed 7–29–54.

628,935. LIQUI-GLAS AND DESIGN. Pearl-Pressman Liberty Printing and Lithographing Company. SN 682,055. Pub. 4–3–56. Filed 2–21–55.

628,936. FLORMARK. Rock-Tred Corporation. SN 682,485. Pub. 4–3–56. Filed 2–28–55.

628,937. PABCOLOR. Pabco Products Inc. SN 684,871. Pub. 4–3–56. Filed 4–4–55.

628,938. POLIPAN. Schramm Lack- und Farbenfabriken Aktiengesellschaft. SN 686,857. Pub. 4–3–56. Filed 5–4–55.

628,939. KRIL-TEX. Paint Products Corporation. SN 687,884. Pub. 4–3–56. Filed 5–19–55.

628,940. RODIN (FANCIFUL). Oscap Manufacturing Co., Inc., d. b. a. Rodin. SN 695,106. Pub. 4–3–56. Filed 9–21–55.

628,941. LACOA. Lacquer Corporation of America. SN 696,052. Pub. 1–17–56. Filed 10–7–55.

628,942. HURRY-UP. W. W. Lawrence & Company. SN 281. Pub. 4–3–56. Filed 1–10–56.

628,943. DESIGN OF COLORED DISKS AND HORIZONTAL BAND. The Martin-Senour Company. SN 287. Pub. 4–3–56. Filed 1–11–56.

CLASS 17

628,944. SHERATON. Lane, Limited. SN 695,552. Pub. 4–3–56. Filed 9–29–55.

CLASS 18

628,945. MASON'S OLIVCREME. J. J. Nichols. SN 651,123. Pub. 4–3–56. Filed 7–30–53.

628,946. LANDA. Stan-Way Pharmaceutical Laboratory. SN 662,574. Pub. 4–3–56. Filed 3–12–54.

628,947. 20/FOS. International Minerals & Chemical Corporation. SN 676,503. Pub. 4–3–56. Filed 11–12–54.

628,948. REM. The Maryland Pharmaceutical Company. SN 680,966. Pub. 4–3–56. Filed 2–2–55.

628,949. ACTOID. Schenley Laboratories, Inc. SN 681,108. Pub. 4–3–56. Filed 2–4–55.

628,950. CHAP-ICE AND DESIGN. Commerce Drug Co., Inc. SN 681,907. Pub. 4–3–56. Filed 2–18–55.

628,951. BRADEX. Ciba Limited. SN 681,964. Pub. 4–3–56. Filed 2–17–55.

628,952. STELADONE. Ciba Limited. SN 681,965. Pub. 4–3–56. Filed 2–17–55.

628,953. ADELPHANE. Ciba Limited. SN 681,966. Pub. 4–3–56. Filed 2–17–55.

628,954. PANTHO-F. U. S. Vitamin Corporation. SN 682,213. Pub. 4–3–56. Filed 2–23–55.

628,955. PRELAFAL. American Home Products Corporation, d. b. a. Ayerst Laboratories, Division of American Home Products Corporation. SN 683,257. Pub. 4–3–56. Filed 3–11–55.

628,956. SINTROM. Geigy Chemical Corporation. SN 683,589. Pub. 4–3–56. Filed 3–16–55.

628,957. SINTHROM. Geigy Chemical Corporation. SN 683,590. Pub. 4–3–56. Filed 3–16–55.

628,958. METANITE. The Drug Products Co., Inc. SN 685,672. Pub. 4–3–56. Filed 4–18–55.

628,959. ASLUM. The Drug Products Co., Inc. SN 685,674. Pub. 4–3–56. Filed 4–18–55.

628,960. THIXOKON. Mallinckrodt Chemical Works. SN 685,837. Pub. 4–3–56. Filed 4–19–55.

628,961. BOVIRUM. The Cudahy Packing Company. SN 686,622. Pub. 4–3–56. Filed 5–2–55.

628,962. MASTI-KURE. Jules Silver, V. M. D., d. b. a. Masti-Kure Products Co. and as Farmers Veterinary Distributors. SN 688,992. Pub. 4–3–56. Filed 6–6–55.

628,963. ROMPER. H. & D. Laboratories, Inc. SN 689,279. Pub. 4–3–56. Filed 6–10–55.

628,964. SANTA LUMA. Alphabet Dietary Corporation. SN 689,602. Pub. 4–3–56. Filed 6–16–55.

628,965. VAS I ZINC. Ophthalmos, Inc. SN 689,647. Pub. 4–3–56. Filed 6–16–55.

628,966. PEPULCIN. American Home Products Corporation, d. b. a. Ives-Cameron Company Division of American Home Products Corporation. SN 689,691. Pub. 4–3–56. Filed 6–17–55.

628,967. TRANSVASIN. Lloyd Hamol Limited. SN 692,229. Pub. 4–3–56. Filed 8–1–55.

628,968. GLYTHEONATE. The E. L. Patch Company. SN 692,261. Pub. 4–3–56. Filed 8–1–55.

628,969. CAPILON. The Paul Plessner Company. SN 692,264. Pub. 4–3–56. Filed 8–1–55.

628,970. PLOVAC. Parsons Pharmaceuticals, Inc. SN 692,537. Pub. 4–3–56. Filed 8–5–55.

628,971. ATH-O-LENE. Volunteer Chemical Company, Inc. SN 692,555. Pub. 4–3–56. Filed 8–5–55.

628,972. ERYSIPOGEN. Merck & Co., Inc. SN 692,624. Pub. 4–3–56. Filed 8–8–55.

628,973. TURKEE TEE. The Gland-O-Lac Company. SN 693,455. Pub. 4–3–56. Filed 8–22–55.

628,974. BROIL'R TEE. The Gland-O-Lac Company. SN 693,456. Pub. 4–3–56. Filed 8–22–55.

628,975. DESIGN OF GROTESQUE TURKEY. The Gland-O-Lac Company. SN 693,457. Pub. 4–3–56. Filed 8–22–55.

628,976. DESIGN OF GROTESQUE CHICKEN. The Gland-O-Lac Company. SN 693,458. Pub. 4–3–56. Filed 8–22–55.

628,977. TRIONINE. Hoffmann-La Roche Inc. SN 693,677. Pub. 4–3–56. Filed 8–25–55.

628,978. L-GLUTAVITE. Gray Pharmaceutical Co., Inc. SN 693,820. Pub. 4–3–56. Filed 8–29–55.

628,979. ILYNET. Ames Company, Inc. SN 693,890. Pub. 4–3–56. Filed 8–30–55.

628,980. ZANTHET. Ames Company, Inc. SN 693,891. Pub. 4–3–56. Filed 8–30–55.

628,981. PROSTALL. Metabolic Products Corporation. SN 693,921. Pub. 4–3–56. Filed 8–30–55.

CLASS 19

628,982. SKYLARK. The Cleveland Welding Company, to American Machine & Foundry Company. SN 674,942. Pub. 4–3–56. Filed 10–18–54.

628,983. STAR FIRE. The Cleveland Welding Company, to American Machine & Foundry Company. SN 674,943. Pub. 4–3–56. Filed 10–18–54.

628,984. MOTORAMA. Bernard Cahn Co., Inc. SN 685,473. Pub. 1–24–56. Filed 4–14–55.

628,985. FAIRLANE. Ford Motor Company. SN 694,867. Pub. 4–3–56. Filed 9–19–55.

628,986. TOP-R CAR VALET. John G. Behrendt. SN 695,206. Pub. 4–3–56. Filed 9–23–55.

628,987. GERONIMO AND DESIGN. The Charles Machine Works. SN 697,899. Pub. 4–3–56. Filed 11–8–55.

628,988. BOXWELD. A. O. Smith Corporation. SN 698,084. Pub. 4–3–56. Filed 11–10–55.

628,989. RHINO AND DESIGN. The Four Wheel Drive Auto Company. SN 699,555. Pub. 4–3–56. Filed 12–7–55.

CLASS 20

628,990. GUARD AND DESIGN. Columbus Coated Fabrics Corporation. SN 691,194. Pub. 4–3–56. Filed 7–13–55.

CLASS 21

628,991. STANDARD ELECTRIC. Standard Electric Manufacturing Company, Inc. SN 653,781. Pub. 5–10–55. Filed 9–25–53.

628,992. CAPRI. Sonic Industries, Inc. SN 656,463. Pub. 4–3–56. Filed 11–16–53.

628,993. PROTECTOLARM. Protectolarm, Inc., to B & B Engineering Company. SN 665,375. Pub. 8–16–55. Filed 4–28–54.

628,994. MIRRO-VUE. National Dryer Manufacturing Corporation. SN 680,090. Pub. 8–16–55. Filed 1–18–55.

628,995. MAGNASONIC. The Magnavox Company. SN 680,768. Pub. 4–3–56. Filed 1–31–55.

628,996. SPEEDSAW. Speedway Manufacturing Company. SN 681,369. Pub. 4–3–56. Filed 2–9–55.

628,997. POWER VENT. Progress Manufacturing Company, Inc. SN 681,943. Pub. 4–3–56. Filed 2–18–55.

628,998. VP. Versailles Products Company. SN 684,504. Pub. 11–1–55. Filed 3–29–55.

628,999. NEW YORKER TELECTRONICS. New Yorker Telectronics, Inc. SN 688,956. Pub. 4–3–56. Filed 6–6–55.

629,000. CLE-MATIC. The Cleveland Electric Motor Co. SN 692,505. Pub. 4–3–56. Filed 8–5–55.

629,001. COLLAMATIC AND DESIGN. Collamatic. SN 693,440. Pub. 4–3–56. Filed 8–22–55.

629,002. BUOY. The Buckeye Stamping Company. SN 694,193. Pub. 4–3–56. Filed 9–6–55.

629,003. MAGNACOLOR. The Magnavox Company. SN 694,434. Pub. 4–3–56. Filed 9–9–55.

629,004. GARRARD AND DESIGN. The Garrard Engineering & Manufacturing Co., Ltd. SN 694,989. Pub. 4–3–56. Filed 9–20–55.

629,005. KIP AND DESIGN. Kip Electronics Corporation. SN 695,165. Pub. 2–7–56. Filed 9–22–55.

629,006. HYDROFEED AND DESIGN. Components Corporation. SN 695,699. Pub. 4–3–56. Filed 10–3–55.

629,007. WONDER STEAM. Vick Chemical Company. SN 696,334. Pub. 4–3–56. Filed 10–12–55.

629,008. CID. The Welcker Corporation. SN 698,097. Pub. 4–3–56. Filed 11–10–55.

629,009. KINEPLEX. Collins Radio Company. SN 698,139. Pub. 4–3–56. Filed 11–14–55.

629,010. CAT-O-RAY. Telet, Inc. SN 698,233. Pub. 4–3–56. Filed 11–14–55.

629,011. CAT-O-RAY AND REPRESENTATION OF CAT AND DESIGN. Telet, Inc. SN 698,234. Pub. 4–3–56. Filed 11–14–55.

629,012. SCOTCHCAST. Minnesota Mining and Manufacturing Company. SN 698,450. Pub. 4–3–56. Filed 11–17–55.

629,013. SHORTHORN AND DESIGN. Paul W. Klipsch, d. b. a. Klipsch and Associates. SN 698,881. Pub. 4–3–56. Filed 11–25–55.

629,014. VOLTMASTER. Mallory Electric Corporation. SN 699,406. Pub. 4–3–56. Filed 12–5–55.

629,015. MITEE. International Electric Fence Co., Inc. SN 699,565. Pub. 4–3–56. Filed 12–7–55.

629,016. R. B. S. R. B. S. Manufacturing and Sales Company, Inc. SN 699,829. Pub. 4–3–56. Filed 12–12–55.

CLASS 22

629,017. DEEP BLUE. Continental Elastic Corporation. SN 628,611. Pub. 4–3–56. Filed 4–24–52.

629,018. SPUTTERBUG. Fred Arbogast Company, Inc. SN 686,134. Pub. 4–3–56. Filed 4–25–55.

629,019. GARYLEE. Garylee, Inc. SN 692,131. Pub. 4–3–56. Filed 7–29–55.

629,020. A LA BOARD RUMMY. Angelo J. Rallo, d. b. a. Elliott-Rallo Co. SN 692,160. Pub. 4–3–56. Filed 7–29–55.

CLASS 23

629,021. REPRESENTATION OF A BIRD INSIGNIA. Ohlsson & Rice Inc. SN 647,950. Pub. 4–3–56. Filed 5–29–53.

629,022. MILLIONTHS OF AN INCH FOR SALE. Vinco Corporation. SN 665,664. Pub. 4–3–56. Filed 5–3–54.

629,023. DUPLOMATIC AND DESIGN. Tovaglieri & Co., Società Italiana per Azioni. SN 670,316. Pub. 4–3–56. Filed 7–20–54.

629,024. SAAZOR. Walztechnik G. m. b. H. SN 682,513. Pub. 4–3–56. Filed 2–28–55.

629,025. MOTOR-PAL. Myron H. Bigsby. SN 683,015. Pub. 4–3–56. Filed 3–8–55.

629,026. GRAND STANDARD AND DESIGN. Grand Specialties Company. SN 693,319. Pub. 4–3–56. Filed 8–18–55.

629,027. BUCYRUS ERIE. Bucyrus-Erie Company. SN 696,863. Pub. 4–3–56. Filed 10–21–55.

629,028. WESTERN GARDNER AND DESIGN. Trale Corporation. SN 697,198. Pub. 4–3–56. Filed 10–26–55.

629,029. SOUTHERN GARDNER AND DESIGN. Trale Corporation. SN 697,199. Pub. 4–3–56. Filed 10–26–55.

629,030. MISTKOP. Aget Manufacturing Co. SN 697,346. Pub. 4–3–56. Filed 10–31–55.

629,031. PENTA. Aktiebolaget Volvo. SN 697,347. Pub. 4–3–56. Filed 10–31–55.

629,032. MODERNAIRE. R. Wallace & Sons Manufacturing Company. SN 697,599. Pub. 4–3–56. Filed 11–2–55.

629,033. ROPEX. Goodman Manufacturing Company. SN 697,680. Pub. 4–3–56. Filed 11–4–55.

629,034. TRAILBLAZER. The Sheffield Corporation. SN 697,858. Pub. 4–3–56. Filed 11–7–55.

629,035. CORAL REEF. The International Silver Company. SN 697,912. Pub. 4–3–56. Filed 11–8–55.

629,036. "ACCORDING TO HOIL" H_2OIL AND DESIGN. H_2Oil Engineering Corporation. SN 698,028. Pub. 4–3–56. Filed 11–10–55.

629,037. GAS-GARD. H_2Oil Engineering Corporation. SN 698,029. Pub. 4–3–56. Filed 11–10–55.

629,038. KYORITU. Kyoritu Noki Company Limited. SN 698,182. Pub. 4–3–56. Filed 11–14–55.

629,039. WINSOM. White Sewing Machine Corporation. SN 698,252. Pub. 4–3–56. Filed 11–14–55.

629,040. VP MONOGRAM IN TWO CIRCLES. Vandervell Products Limited. SN 698,387. Pub. 4–3–56. Filed 11–16–55.

629,041. ROCKETDYNE AND DESIGN. North American Aviation, Inc. SN 698,452. Pub. 4–3–56. Filed 11–17–55.

629,042. CYCLOMATIC. East Chicago Machine Tool Corp. SN 698,509. Pub. 4–3–56. Filed 11–18–55.

629,043. RELI SAF. Independence Specialties Co., Inc. SN 698,752. Pub. 4–3–56. Filed 11–22–55.

629,044. PREVUE. The International Silver Company. SN 698,787. Pub. 4–3–56. Filed 11–23–55.

629,045. VENTURE. The International Silver Company. SN 698,788. Pub. 4–3–56. Filed 11–23–55.

629,046. KLUSTRITE. Houston Oil Field Material Company, Inc. SN 698,873. Pub. 4–3–56. Filed 11–25–55.

629,047. PENDRAGON. Justrite Manufacturing Company. SN 700,512. Pub. 4–3–56. Filed 12–23–55.

629,048. SEQUENCOMATIC. Straight Engineering Co. SN 700,688. Pub. 4–3–56. Filed 12–27–55.

629,049. TOG-LOC. Tog-Loc, Inc. SN 700,692. Pub. 4–3–56. Filed 12–27–55.

629,050. WELDWEAR. The Penfield Saw Works, Inc. SN 700,747. Pub. 4–3–56. Filed 12–28–55.

629,051. "GRASS-BLITZER." Worthington Mower Company. SN 700,921. Pub. 4–3–56. Filed 12–30–55.

629,052. SUPERLOFT AND DESIGN. Universal Winding Company. SN 112. Pub. 4–3–56. Filed 1–3–56.

629,053. WINDOW-MATIC. Brother Sewing Machine Corporation of Pennsylvania. SN 190. Pub. 4–3–56. Filed 1–5–56.

629,054. HY-SCOR. Gopher Grinders, Inc. SN 201. Pub. 4–3–56. Filed 1–5–56.

629,055. GOPHER. Gopher Grinders, Inc. SN 202. Pub. 4–3–56. Filed 1–5–56.

CLASS 26

629,056. CERTO POST. Bell Punch Company Limited. SN 641,668. Pub. 4–3–56. Filed 2–3–53.

629,057. MEASURE MASTER. Isle of View Co. SN 669,441. Pub. 4–3–56. Filed 7–6–54.

629,058. CENTRAMATIC. Wesix Electric Heater Co. SN 681,317. Pub. 4–3–56. Filed 2–8–55.

629,059. RONTEX. Schueler & Co. SN 697,027. Pub. 4–3–56. Filed 10–24–55.

629,060. BROILTROL. Robertshaw-Fulton Controls Company. SN 697,120. Pub. 4–3–56. Filed 10–25–55.

629,061. COMPU PUNCH. Friden Calculating Machine Co., Inc. SN 697,679. Pub. 4–3–56. Filed 11–4–55.

629,062. SIMPLAMATIC. Underwood Corporation. SN 697,999. Pub. 4–3–56. Filed 11–9–55.

629,063. PROJECT-O-MATIC. Viewlex, Inc. SN 698,316. Pub. 4–3–56. Filed 11–15–55.

CLASS 28

629,064. MULTI-FLEX. Mira-Flex Watchband Corp. SN 672,745. Pub. 4–26–55. Filed 9–3–54.

CLASS 29

629,065. SISCO. David D. Greenspon, d. b. a. Scientific Industrial Supply Co. SN 689,035. Pub. 4–3–56. Filed 6–7–55.

629,066. REDI-PAT. Juva-Tex, Inc. SN 697,226. Pub. 4–3–56. Filed 10–27–55.

629,067. DUST AID. Albert W. Weigle. SN 698,749. Pub. 4–3–56. Filed 11–22–55.

629,068. SWEEPSAVER. Safeway Stores, Incorporated. SN 698,800. Pub. 4–3–56. Filed 11–23–55.

CLASS 31

629,069. K KELLER TOOLS AND DESIGN. Keller Tool Company, to Gardner-Denver Company. SN 677,963. Pub. 4–3–56. Filed 12–8–54.

629,070. NEW YORKER. Humberto A. Garcia, d. b. a. The New Yorker Sewing Machine Company. SN 700,599. Pub. 4–3–56. Filed 12–27–55.

CLASS 32

629,071. RANCHOME. Western Provincial. SN 649,742. Pub. 4–13–54. Filed 7–2–53.

629,072. VU-MASTER. Grand Rapids Store Equipment Company. SN 653,136. Pub. 6–22–54. Filed 9–14–53.

629,073. EASE-O-MATIC. Modecraft Company, Inc. SN 680,892. Pub. 4–3–56. Filed 2–1–55.

629,074. ADELE AND DESIGN. Leo H. Spivack, Inc. SN 697,335. Pub. 4–3–56. Filed 10–28–55.

629,075. SUPER-PEDIC. Charles A. Powell, d. b. a. Rockford Mattress Company. SN 697,583. Pub. 4–3–56. Filed 11–2–55.

629,076. TRUEASE. Sealy, Incorporated. SN 698,221. Pub. 4–3–56. Filed 11–14–55.

629,077. SEALY REST. Sealy, Incorporated. SN 698,222. Pub. 4–3–56. Filed 11–14–55.

629,078. HEALTH-GUARD. Slumber Products Corporation. SN 698,228. Pub. 4–3–56. Filed 11–14–55.

CLASS 34

629,079. MOORE SUPERVENT. The Moore Company. SN 653,987. Pub. 4–3–56. Filed 9–30–53.

629,080. REXCO. The Moore Company. SN 694,441. Pub. 4–3–56. Filed 9–9–55.

629,081. WIND-O-COOL. Belco Industries, Inc. SN 695,601. Pub. 4–3–56. Filed 9–30–55.

629,082. VICTORIA. Bechhofer Brothers, Inc. SN 696,282. Pub. 4–3–56. Filed 10–12–55.

629,083. DUO-RAD. Penn Boiler & Burner Mfg. Corp. SN 696,459. Pub. 4–3–56. Filed 10–14–55.

629,084. PACE-KING. Burnham Corporation. SN 696,634. Pub. 4–3–56. Filed 10–18–55.

629,085. NERO ADAPTER. Daniel P. Nero. SN 696,662. Pub. 4–3–56. Filed 10–18–55.

629,086. SHUT-O-VENT. Reed Unit-Fans, Inc. SN 696,829. Pub. 4–3–56. Filed 10–20–55.

629,087. IRON FIREMAN AND DESIGN. Iron Fireman Manufacturing Company. SN 697,447. Pub. 4–3–56. Filed 11–7–55.

629,088. THE IRON MAN. Iron Fireman Manufacturing Company. SN 697,448. Pub. 4–3–56. Filed 11–7–55.

629,089. VENT-O-MODE. S. & S. Vent-O, Inc. SN 697,639. Pub. 4–3–56. Filed 11–3–55.

629,090. EMBER-GLO. Mid-Continent Metal Products Co. SN 698,051. Pub. 4–3–56. Filed 11–10–55.

629,091. FIXT-AIRE. Hart & Cooley Manufacturing Co. SN 698,352. Pub. 4–3–56. Filed 11–16–55.

CLASS 36

629,092. ECHOES. Vox Productions Inc. SN 677,372. Pub. 4–3–56. Filed 11–26–54.

629,093. REC-O-RAC. John L. Lyons, d. b. a. Lyons Sales Agency. SN 693,062. Pub. 4–3–56. Filed 8–15–55.

629,094. VELVETONE. Roberts Pivot & Needle, Inc. SN 696,589. Pub. 4–3–56. Filed 10–17–55.

629,095. PRINCESS. M. Hohner, Inc. SN 696,980. Pub. 4–3–56. Filed 10–24–55.

629,096. IMPERATOR. M. Hohner, Inc. SN 696,983. Pub. 4–3–56. Filed 10–24–55.

629,097. ALA. Wing Record Corporation. SN 697,064. Pub. 4–3–56. Filed 10–24–55.

629,098. PICTURE-PLAY. The Record Guild of America, Inc. SN 697,118. Pub. 4–3–56. Filed 10–25–55.

CLASS 37

629,099. COCK AND DESIGN. J. S. Staedtler. SN 653,936. Pub. 1–24–56. Filed 9–29–53.

629,100. RICHGLOSS. The Mead Corporation. SN 665,839. Pub. 4–3–56. Filed 5–6–54.

629,101. E-Z CARI. Gulf States Paper Corporation. SN 691,212. Pub. 4–3–56. Filed 7–13–55.

629,102. COMO. Peavey Paper Mills, Inc. SN 691,323. Pub 4–3–56. Filed 7–14–55.

629,103. STUBBY PAD AND DESIGN. Stuart Hall Company, Inc SN 691,944. Pub. 4–3–56. Filed 7–26–55.

629,104. STANDARD REGISTER DAYTON, O. AND DESIGN. The Standard Register Company. SN 692,173. Pub. 4–3–56. Filed 7–29–55.

629,105. ACCOBIND. Acco Products, Inc. SN 692,291. Pub. 4–3–56. Filed 8–2–55.

629,106. FLO-RITE. American Pencil Company, Inc. SN 692,300. Pub. 4–3–56. Filed 8–2–55.

629,107. ART-GUILD. American Pencil Company, Inc. SN 692,302. Pub. 4–3–56. Filed 8–2–55.

629,108. MILAM AND DESIGN. Milprint, Inc. SN 692,482. Pub. 4–3–56. Filed 8–4–55.

629,109. BLU-ZIP. Para-Tone Incorporated. SN 692,636. Pub. 4–3–56. Filed 8–8–55.

629,110. ACCOPRESS. Acco Products, Inc. SN 692,688. Pub. 4–3–56. Filed 8–9–55.

629,111. ACCOSTOR. Acco Products, Inc. SN 692,689. Pub. 4–3–56. Filed 8–9–55.

629,112. ACCOFLEX. Acco Products, Inc. SN 692,690. Pub. 4–3–56. Filed 8–9–55.

629,113. AMBERGLO. Brown Company. SN 692,706. Pub. 4–3–56. Filed 8–9–55.

629,114. AAA AND DESIGN. The American Automobile Association (Incorporated). SN 697,887. Pub. 4–3–56. Filed 11–23–55.

CLASS 38

629,115. CENTRAL CIRCLE SYSTEM AND DESIGN. R. S. Nelson, to Central Circle Airport Corporation. SN 669,793. Pub. 11–15–55. Filed 7–12–54.

629,116. POPULAR GARDENING. Gardening Publications Inc. SN 684,120. Pub. 4–3–56. Filed 3–24–55.

629,117. TRAVEL AGE. The Circle Publishing Co. SN 690,684. Pub. 4–3–56. Filed 7–5–55.

629,118. LOGEGRAM. Logetronics, Inc. SN 696,243. Pub. 4–3–56. Filed 10–11–55.

629,119. ANNIE AND FANNIE. United Feature Syndicate, Inc. SN 697,131. Pub. 4–3–56. Filed 10–25–55.

629,120. TINY TALLS. Norcross, Inc. SN 697,236. Pub. 4–3–56. Filed 10–27–55.

629,121. THE STYLIST. Grand Rapids Furniture Makers Guild. SN 697,257. Pub. 4–3–56. Filed 10–27–55.

629,122. TIME AND DESIGN. Time, Incorporated. SN 697,340. Pub. 4–3–56. Filed 10–28–55.

629,123. PRODUCT DESIGN & DEVELOPMENT. Franklin H. Johnson, Inc. SN 697,377. Pub. 4–3–56. Filed 10–31–55.

629,124. PD&D. Franklin H. Johnson, Inc. SN 697,378. Pub. 4–3–56. Filed 10–31–55.

629,125. PERSPECTO. C. G. Mitchell, Inc. SN 697,384. Pub. 4–3–56. Filed 10–31–55.

629,126. W AND DESIGN OF WINDMILL. The Wayside Gardens Co. SN 697,602. Pub. 4–3–56. Filed 11–2–55.

629,127. DESIGN OF ELEPHANT. Top Value Enterprises, Inc. SN 697,648. Pub. 4–3–56. Filed 11–3–55.

629,128. AAA AND DESIGN. The American Automobile Association (Incorporated). SN 697,885. Pub. 4–3–56. Filed 11–23–55.

629,129. AMERICAN MOTORIST. The American Automobile Association (Incorporated). SN 697,886. Pub. 4–3–56. Filed 11–23–55.

629,130. COTTON WOODS. General Features Corporation. SN 697,907. Pub. 4–3–56. Filed 11–8–55.

629,131. DESIGN OF AIRPLANE AND GLOBES. Time, Incorporated. SN 697,942. Pub. 4–3–56. Filed 11–8–55.

629,132. FLORIDA CITRUS MUTUAL TRIANGLE. Florida Citrus Mutual. SN 698,024. Pub. 4–3–56. Filed 11–10–55.

629,133. POWER ENGINEERING. Technical Publishing Company. SN 698,087. Pub. 4–3–56. Filed 11–10–55.

629,134. MECHANICS AND HANDICRAFT. Popular Science Publishing Company, Inc. SN 698,111. Pub. 4–3–56. Filed 11–29–55.

629,135. POPULAR SCIENCE MONTHLY. Popular Science Publishing Company, Inc. SN 698,112. Pub. 4–3–56. Filed 11–29–55.

CLASS 39

629,136. KWIKI. Harry Lang Mfg. Co., from Lang Industries. SN 540,292. Pub. 8–5–52. Filed 11–6–47.

629,137. LANG'S KWIKI. Harry Lang Mfg. Co., from Lang Industries. SN 552,992. Pub. 8–5–52. Filed 3–25–48.

629,138. WILLOWELT. W. B. Coon Company. SN 622,379. Pub. 8–19–52. Filed 12–12–51.

629,139. LEAGUE OF CHAMPIONS. The League of Champions, Inc. SN 649,790. Pub. 11–23–54. Filed 7–3–53.

629,140. TRU VAL PLAY BOY. Truval Manufacturers, Inc. SN 662,901. Pub. 8–31–54. Filed 3–18–54.

629,141. DIANA. Diana Stores Corporation. SN 663,259. Pub. 6–28–55. Filed 3–25–54.

629,142. GUANAZA. Patricia Scott Inc., d. b. a. Scott Enterprises. SN 683,560. Pub. 4–3–56. Filed 8–15–55.

629,143. RENOIR. Hollywood-Maxwell Co. SN 688,041. Pub. 4–3–56. Filed 5–23–55.

629,144. THE PERFECT PIVOT AND DESIGN. Emons Shoe Co., Inc. SN 688,516. Pub. 4–3–56. Filed 5–31–55.

629,145. KEY LARGO. Bayard Shirt Corporation. SN 688,797. Pub. 4–3–56. Filed 6–3–55.

629,146. "SUN SILLIES." Elsa Originals. SN 688,916. Pub. 4–3–56. Filed 6–6–55.

629,147. REPRESENTATION OF A HUMAN FIGURE SITTING ON A FENCE. Haymaker Sports Inc. SN 689,036. Pub. 4–3–56. Filed 6–7–55.

629,148. GRAND-SLAM. Munsingwear, Inc. SN 689,296. Pub. 4–3–56. Filed 6–10–55.

629,149. SPARKLE BRIEFS. M. H. Goldsmith and Co., d. b. a. Milford Lingerie Co. SN 689,941. Pub. 4–3–56. Filed 6–21–55.

629,150. BUBBLE DUDS. Vesta Underwear Company. SN 692,103. Pub. 4–3–56. Filed 7–28–55.

629,151. ELLEN HALL. Eastern Hosiery Company, Inc. SN 692,318. Pub. 4–3–56. Filed 8–2–55.

629,152. THE REPEATER. Jay C. Siegel, d. b. a. J. C. Siegel Company. SN 693,206. Pub. 4–3–56. Filed 8–16–55.

629,153. FANDANGO AND DESIGN. Deb Shoe Company, Inc. SN 693,976. Pub. 4–3–56. Filed 8–31–55.

629,154. VICEROY. Freeman Hardy and Willis Limited. SN 696,888. Pub. 4–3–56. Filed 10–21–55.

629,155. BEAU-TIES. Rockingham Shoe Company. SN 697,323. Pub. 4–3–56. Filed 10–28–55.

629,156. EDGE KEEPERS AND DESIGN. The Coward Shoe, Inc. SN 697,361. Pub. 4–3–56. Filed 10–31–55.

629,157. HI-JINX. Vanity Corset Company, Inc. SN 697,427. Pub. 4–3–56. Filed 10–31–55.

629,158. NITE-EASE. The Linden Spencer Company. SN 697,487. Pub. 4–3–56. Filed 11–1–55.

629,159. SAFE-TEE BUNNY SUIT. M. Parrish Manufacturing Co. SN 697,490. Pub. 4–3–56. Filed 11–1–55.

629,160. GALLANAIRE. Frank Gallant, Inc. SN 697,547. Pub. 4–3–56. Filed 11–2–55.

629,161. ROUND MAGIC. United Mills Corporation. SN 697,592. Pub. 4–3–56. Filed 11–2–55.

629,162. ACTION BACK. United States Rubber Company. SN 697,594. Pub. 4–3–56. Filed 11–2–55.

629,163. FLARONG. Marcel Wagner Gloves, Inc. SN 697,728. Pub. 4–3–56. Filed 11–4–55.

629,164. NI-LIFTS. Guida Wood Heel Company. SN 697,790. Pub. 4–3–56. Filed 11–7–55.

629,165. HERBET AND DESIGN. Millicent Levin, d. b. a. Herbet Theatrical Shoe Co. SN 697,806. Pub. 4-3-56. Filed 11-7-55.

629,166. MANHATTAN. The Manhattan Shirt Company. SN 697,808. Pub. 4-3-56. Filed 11-7-55.

629,167. VAPORETTE. Marshall Field & Company. SN 697,812. Pub. 4-3-56. Filed 11-7-55.

629,168. TENNY-C-MAID. Boot-Ster Mfg. Co., Inc. SN 697,896. Pub. 4-3-56. Filed 11-8-55.

629,169. EDITH CAVELLE. Jacobs Brothers, Inc. SN 697,913. Pub. 4-3-56. Filed 11-8-55.

629,170. DR. A REED CUSHION SHOES. Dr. Reed Cushion Shoe Company. SN 697,934. Pub. 4-3-56. Filed 11-8-55.

629,171. SUN-HI. United Mills Corporation. SN 697,943. Pub. 4-3-56. Filed 11-8-55.

629,172. BALI ROSE. Hanes Hosiery Mills Company. SN 698,031. Pub. 4-3-56. Filed 11-10-55.

629,173. IMPRINTS. Rich Therapedic Shoe Laboratories, Inc. SN 698,081. Pub. 4-3-56. Filed 11-10-55.

629,174. PROWL-ABOUTS. Thomas Textile Co., Inc. SN 698,090. Pub. 4-3-56. Filed 11-10-55.

629,175. SLANT-CUP. California Forms, Inc. SN 698,134. Pub. 4-3-56. Filed 11-14-55.

629,176. HI-THI. Kordell Sportswear, Inc. SN 698,287. Pub. 4-3-56. Filed 11-15-55.

629,177. HOOPCRAFT. Robert H. Einhorn, d. b. a. Crinet Company. SN 698,344. Pub. 4-3-56. Filed 11-16-55.

629,178. FLOPSY Heathcote Hosiery Company. SN 698,354. Pub. 4-3-56. Filed 11-16-55.

629,179. BEAPS. Health-O-Swim Products Co. SN 698,522. Pub. 4-3-56. Filed 11-18-55.

CLASS 40

629,180. CARE-FREE. William E. Wright & Sons Company. SN 698,101. Pub. 4-3-56. Filed 11-10-55.

629,181. SHU-PUFFS. Reda R. Strauss. SN 698,231. Pub. 4-3-56. Filed 11-14-55.

629,182. CONTURES. Catalina, Inc. SN 698,773. Pub. 4-3-56. Filed 11-23-55.

629,183. LADY FAIR. National Ribbon Corp. SN 699,162. Pub. 4-3-56. Filed 11-30-55.

CLASS 41

629,184. ROYAL LADY. Frankford Umbrella Manufacturing Company. SN 692,779. Pub. 4-3-56. Filed 8-10-55.

CLASS 42

629,185. CORDALON. Bigelow-Sanford Carpet Co., Inc., to Collins & Aikman Corporation. SN 622,000. Pub. 7-22-52. Filed 12-3-51.

629,186. CANDALON. Collins & Aikman Corporation. SN 630,990. Pub. 12-16-52. Filed 6-10-52.

629,187. ANZCO. Anzarut & Company. SN 646,918. Pub. 4-3-56. Filed 5-13-53.

629,188. TESSUTO LEGLER TEXTILES AND DESIGN. Cotonificio Legler S. P. A. SN 665,570. Pub. 4-3-56. Filed 5-3-54.

629,189. LEGLER AND DESIGN. Cotonificio Legler S. P. A. SN 665,893. Pub. 4-3-56. Filed 5-7-54.

629,190. NY-LUX. The Jen-Cel-Lite Corp. SN 675,798. Pub. 4-3-56. Filed 11-1-54.

629,191. K IN A CIRCLE DESIGN. Klopman Mills, Inc. SN 676,733. Pub. 7-12-55. Filed 11-16-54.

629,192. MORALIN. Morgan-Jones, Inc. SN 684,582. Pub. 4-3-56. Filed 3-30-55.

629,193. DELSPUN. Bachmann Uxbridge Worsted Corporation. SN 688,890. Pub. 1-3-56. Filed 6-6-55.

629,194. BOLTA. The General Tire & Rubber Company. SN 690,451. Pub. 4-3-56. Filed 6-29-55.

629,195. GAYDEX ETC. AND DESIGN. A. Cover & Company Limited. SN 691,009. Pub. 4-3-56. Filed 7-11-55.

629,196. DELFIELD. Deltox Rug Company. SN 696,418. Pub. 4-3-56. Filed 10-14-55.

629,197. DELVOGUE. Deltox Rug Company. SN 696,419. Pub. 4-3-56. Filed 10-14-55.

629,198. BRALINE. Rubber Fabrics Company. SN 697,123. Pub. 4-3-56. Filed 10-25-55.

629,199. POLYSPUN. Klear-Vu Corporation. SN 697,170. Pub. 4-3-56. Filed 10-26-55.

629,200. TRI-ORDINATES. Forstmann Woolen Co. SN 697,219. Pub. 4-3-56. Filed 10-27-55.

629,201. PETTI-CHINE. A. B. Rydell Co., Inc. SN 697,244. Pub. 4-3-56. Filed 10-27-55.

629,202. DOUBLOON. D. B. Fuller & Co., Inc. SN 697,478. Pub. 4-3-56. Filed 11-1-55.

629,203. PROVIDENCE. Lincoln Mills of Alabama. SN 697,486. Pub. 4-3-56. Filed 11-1-55.

629,204. ZEPHYR-SET. Indian Head Mills, Inc. SN 697,558. Pub. 4-3-56. Filed 11-2-55.

629,205. WAISHIRE. Waite Carpet Company. SN 697,651. Pub. 4-3-56. Filed 11-3-55.

629,206. MOROPA. John Flocker and Company. SN 700,495. Pub. 4-3-56. Filed 12-29-55.

CLASS 43

629,207. 'TERYLENE' ICI ETC. AND DESIGN. Imperial Chemical Industries Limited. SN 682,432. Pub. 4-3-56. Filed 2-28-55.

629,208. WEHCO BRAND AND DESIGN. Wehrlin & Co., Inc. SN 690,352. Pub. 4-3-56. Filed 6-27-55.

629,209. BERNHARD ALTMANN THE HOUSE OF CASHMERE AND DESIGN. Bernhard Altmann Worsted Corporation of America, to Bernhard Altmann International Corporation. SN 695,372. Pub. 4-3-56. Filed 9-27-55.

629,210. DUAL TORQUE. Textile Licensing Company. SN 699,861. Pub. 4-3-56. Filed 12-12-55.

629,211. MAMMOTH. The American Thread Company. SN 700,705. Pub. 4-3-56. Filed 12-28-55.

CLASS 44

629,212. RE-LAX-O-PRODUCT AND DESIGN. L. French Widmoyer, d. b. a. Dr. Widmoyer's Re-Lax-O Products. SN 664,904. Pub. 4-3-56. Filed 4-20-54.

629,213. GOLD-PACK AND CIRCLE DESIGN. L. E. Shunk Latex Products Co. SN 677,362. Pub. 4-3-56. Filed 11-26-54.

629,214. TISSUE FEEL. Frank Allen. SN 678,504. Pub. 4-3-56. Filed 12-17-54.

629,215. LIQUASEPTIC. Seaboard Chemical Corporation. SN 681,307. Pub. 4-10-56. Filed 2-8-55.

629,216. TIL-E-TABS AND DESIGN. Frank Natale, d. b. a. Til-E-Tabs. SN 682,039. Pub. 4-3-56. Filed 2-21-55.

629,217. MEDIC. Rosedale Knitting Company. SN 691,964. Pub. 4-3-56. Filed 7-26-55.

629,218. SANAPANT. Champion Togs, Inc. SN 693,233. Pub. 4-3-56. Filed 8-17-55.

629,219. INTERLAKEN. Becton, Dickinson and Company. SN 695,383. Pub. 4-3-56. Filed 9-27-55.

629,220. PIKIT. The Gadgeteers, Inc. SN 695,412. Pub. 4-3-56. Filed 9-27-55.

629,221. EVEREADY. The Seamless Rubber Company. SN 695,573. Pub. 4-3-56. Filed 9-29-55.

629,222. PENTYPE. Pentype Corp. SN 695,643. Pub. 4-3-56. Filed 9-30-55.

629,223. COTTON TAILS (FANCIFUL). Glasco Products Company. SN 695,814. Pub. 4-3-56. Filed 10-4-55.

629,224. S. E. S. I. Societé d'Exploitation des Seringues Industrielles S. E. S. I. SN 695,955. Pub. 4-3-56. Filed 10-5-55.

629,225. CAVITIP. Cavitron Corporation. SN 696,015. Pub. 4-3-56. Filed 10-7-55.

629,226. CAVIDENT. Cavitron Corporation. SN 696,211. Pub. 4-3-56. Filed 10-11-55.

629,227. ARCROSS ARVELS. The May Department Stores Company. SN 696,561. Pub. 4-3-56. Filed 10-17-55.

CLASS 46

629,228. EL CHICO MEXICAN FOOD AND DESIGN. El Chico Cafe. SN 587 432. Pub. 11-28-50. Filed 11-7-49.

629,229. EL CHICO MEXICAN BRAND FOOD ETC. AND DESIGN. El Chico Cafe. SN 607,583. Pub. 4-8-52. Filed 12-12-50.

629,230. RONA. C. J. Van Houten & Zoon N. V. SN 617,001. Pub. 4-3-56. Filed 7-26-51.

629,231. NESTLÉ QUIK. The Nestlé Company, Inc. SN 642,363. Pub. 4-3-56. Filed 2-17-53.

629,232. FRESH N HOT. Chas. P. Wagner & Bro., Inc. SN 645,610. Pub. 4-3-56. Filed 4-20-53.

629,233. H WITHIN CIRCLE. J. S. Hoffman Company. SN 660,870. Pub. 4-3-56. Filed 2-10-54.

629,234. TRADER VIC'S. Victor J. Bergeron, d. b. a. Trader Vic and Trader Vic's. SN 663,345. Pub. 4-3-56. Filed 3-26-54.

629,235. MA-TROVITE AND DESIGN. Liga Fabrieken N. V. SN 664,768. Pub. 4-3-56. Filed 4-19-54.

629,236. DUNCAN HINES. Hines-Park Foods, Inc. SN 669,192. Pub. 4-3-56. Filed 6-30-54.

629,237. ARMSTRONG'S. Swift & Company, d. b. a. Armstrong Packing Company. SN 672,604. Pub. 4-3-56. Filed 9-1-54.

629,238. HOLLOWAY HOUSE. John R. Thompson Co., d. b. a. Holloway House Cafeterias, Holloway Cafeteria Co. or Holloway House, Inc. SN 674,426. Pub. 4-3-56. Filed 10-6-54.

629,239. SPACOID. British Glues & Chemicals Limited, to B. Young & Co. of America, Ltd. SN 679,512. Pub. 4-3-56. Filed 1-6-55.

629,240. PAN-D-ORO. International Milling Company, d. b. a. Halstead Milling and Elevator Company. SN 679,908. Pub. 4-3-56. Filed 1-14-55.

629,241. MINI-CANES. Korday Candles, Inc. SN 680,761. Pub. 4-3-56. Filed 1-31-55.

629,242. TASTEE POP. E. F. Drew & Co., Inc. SN 680,945. Pub. 4-3-56. Filed 2-2-55.

629,243. PAILLE D'OR. Etablissements Lefèvre-Utile "Societe en Nom Collectif." SN 681,433. Pub. 4-3-56. Filed 2-10-55.

629,244. PACIFIC FRESH. Santa Cruz Processors. SN 681,454. Pub. 4-3-56. Filed 2-10-55.

629,245. "CHICKEN LITTLE." Fred Abbey. SN 683,010. Pub. 4-3-56. Filed 3-8-55.

629,246. MR. BEAN AND DESIGN. R. G. Free, d. b. a. Washington Foods. SN 684,036. Pub. 4-3-56. Filed 3-23-55.

629,247. AUNT NELLIE'S. Aunt Nellie's Farm Kitchen, Inc. SN 684,101. Pub. 4-3-56. Filed 3-24-55.

629,248. 8 IN 1 DOG CRUNCHIES ETC. 8 in 1 Pet Products, Inc. SN 684,408. Pub. 4-3-56. Filed 3-29-55.

629,249. DERBY WINNER AND DESIGN. Vita Food Products, Incorporated. SN 684,707. Pub. 4-3-56. Filed 3-31-55.

629,250. ORANGE BUTTER AND DESIGN. Olsen G. Fairchild. SN 685,896. Pub. 4-3-56. Filed 4-20-55.

629,251. SASSY AND DESIGN. California Sea Food Corp., d. b. a. Sassy Dog & Cat Food Co. SN 686,148. Pub. 4-3-56. Filed 4-25-55.

629,252. HOLMES TO HOMES. Holmes & Son, Inc., to General Baking Company. SN 686,794. Pub. 4-3-56. Filed 5-12-55.

629,253. KITCHEN KING AND DESIGN. Russell Brothers. SN 687,220. Pub. 4-3-56. Filed 5-10-55.

629,254. CRYSTAL PACK. Crystal City Canneries, Inc. SN 688,216. Pub. 4-3-56. Filed 5-25-55.

629,255. MEXI-TROP ETC. AND DESIGN. Calavo, Inc., now by merger Calavo Growers of California. SN 688,385. Pub. 4-3-56. Filed 5-27-55.

629,256. CORRIDA. Hobbs Banana Company. SN 688,532. Pub. 4-3-56. Filed 5-31-55.

629,257. ROSARITA AND DESIGN. Rosita Products Company, Inc. SN 690,329. Pub. 4-3-56. Filed 6-27-55.

629,258. SOFTIE. Williamson Candy Company. SN 691,915. Pub. 4-3-56. Filed 7-25-55.

629,259. AQUA-LIFE AND DESIGN. Precision-Bilt Products Co. SN 692,350. Pub. 4-3-56. Filed 8-2-55.

629,260. ICECUP. The Halo-Star Corporation. SN 693,142. Pub. 4-3-56. Filed 8-16-55.

629,261. GRANDMA'S. Ronas Corporation. SN 693,195. Pub. 4-3-56. Filed 8-16-55.

629,262. PRIM. The Ohio Valley Baking Company. SN 693,332. Pub. 4-3-56. Filed 8-18-55.

629,263. GAY BOUQUET. W. F. Schrafft & Sons Corporation. SN 693,336. Pub. 4-3-56. Filed 8-18-55.

629,264. PACIFIC BAY. A. Martinez Costa, S. A. SN 693,615. Pub. 4-3-56. Filed 8-24-55.

629,265. DIXIE RYE. Interstate Bakeries Corporation. SN 693,994. Pub. 4-3-56. Filed 8-31-55.

629,266. HEART OF BUCKWHEAT AND DESIGN. Pen Argyl Milling Co., Inc. SN 694,147. Pub. 4-3-56. Filed 9-2-55.

CLASS 49

629,267. COLUMBIA. Schenley Industries, Inc. SN 692,089. Pub. 4-3-56. Filed 7-28-55.

629,268. POLO CLUB. The American Distilling Company Incorporated. SN 695,675. Pub. 4-3-56. Filed 10-3-55.

629,269. HAM-GIN. H. C. König. SN 697,630. Pub. 4-3-56. Filed 11-3-55.

629,270. OLD POINDEXTER. Associated Kentucky Distilleries Co. SN 698,573. Pub. 4-3-56. Filed 11-21-55.

CLASS 50

629,271. TAB SEAL. American Flange & Manufacturing Co. Inc. SN 677,853. Pub. 3-6-56. Filed 12-7-54.

629,272. SUPERFLEX. Congoleum-Nairn Inc. SN 679,644. Pub. 4-3-56. Filed 1-10-55.

629,273. TRAIL GAZER AND DESIGN. Leybourn Specialties, Inc. SN 680,960. Pub. 4-3-56. Filed 2-2-55.

629,274. TOI-LOK. Stich Brothers Manufacturing Company. SN 683,932. Pub. 4-3-56. Filed 3-21-55.

629,275. PPC. Penn-Plastics Corporation. SN 690,585. Pub. 4-3-56. Filed 7-19-55.

629,276. ROBIN HOOD. J. W. Johnson Company. SN 693,148. Pub. 4-3-56. Filed 8-16-55.

629,277. SAKS-FIFTH AVENUE. Saks & Company. SN 696,834. Pub. 4-3-56. Filed 10-20-55.

CLASS 51

629,278. TALIKA AND DESIGN. Madame Louis Maitrejean, born Roche (Yvonne), d. b. a. Laboratoires Danielle Roches. SN 663,670. Pub. 4-3-56. Filed 3-31-54.

629,279. VELVEDERM. I. Robert Magalnick, d. b. a. The IRM Laboratories. SN 668,766. Pub. 4-3-56. Filed 6-23-54.

629,280. EMULGADE. Dehydag Deutsche Hydrierwerke AG. SN 672,570. Pub. 4-3-56. Filed 9-1-54.

629,281. LANO TWIST. Harf, Inc., d. b. a. Harf. SN 683,504. Pub. 4-3-56. Filed 3-15-55.

629,282. TRU-VAL. John L. Michael, Inc. SN 280. Pub. 4-3-56. Filed 1-9-56.

CLASS 52

629,283. IBBCO. Indianapolis Brush & Broom Mfg. Co. SN 682,740. Pub. 4-3-56. Filed 3-3-55.

629,284. TWINN DETERGENT AND DESIGN. Gillam Soaps & Chemicals, Inc. SN 686,969. Pub. 4-3-56. Filed 5-6-55.

629,285. SOLVE AND DESIGN. Harold F. Williams. SN 683,830. Pub. 4-3-56. Filed 3-18-55.

629,286. SUPER EZOLL AND DESIGN. Gillam Soaps & Chemicals, Inc. SN 686,968. Pub. 4-3-56. Filed 5-6-55.

629,287. COMET. The Procter & Gamble Company. SN 689,653. Pub. 4-3-56. Filed 6-16-55.

629,288. DEHYDOL. Dehydag Deutsche Hydrierwerke GMBH. SN 695,079. Pub. 4-3-56. Filed 9-21-55.

629,289. KD8-3. Klensade Products, Incorporated. SN 695,731. Pub. 4-3-56. Filed 10-3-55.

629,290. TEASIE WEASIE. Raymond (Art de Beauté) Limited. SN 696,461. Pub. 4-3-56. Filed 10-14-55.

629,291. OVEN SHOW. R. M. Hollingshead Corporation. SN 696,653. Pub. 4-3-56. Filed 10-18-55.

629,292. PERSULAN. Morris S. Plotkin. SN 696,906. Pub. 4-3-56. Filed 10-21-55.

Service Marks

CLASS 102

629,293. 2 FOR 1 AND ENTIRE LABEL AND DESIGN. The Minnesota Mutual Life Insurance Company. SN 607,441. Pub. 4-3-56. Filed 12-8-50.

629,294. HEALTH LIVING PROTECTION AND DESIGN. La Salle Casualty Company. SN 674,263. Pub. 3-6-56. Filed 10-4-54.

629,295. THE HOMEFINDERS INC. AND DESIGN. The Homefinders, Inc. SN 681,595. Pub. 4-3-56. Filed 2-14-55.

CLASS 103

629,296. OTIS AND DESIGN. Otis Elevator Company. SN 643,501. Pub. 4-3-56. Filed 3-11-53.

CLASS 106

629,297. MILIUM. Deering, Milliken & Co., Inc. SN 642,202. Pub. 4-3-56. Filed 2-13-53.

CLASS 107

629,298. NECCHI. Vittorio Necchi Societa per Azioni. SN 643,870. Pub. 4-3-56. Filed 3-18-53.

629,299. NEW ENGLAND (ORIGINAL) "HAYLOFT JAMBOREE." Wilmer J. O'Brien. SN 679,233. Pub. 4-3-56. Filed 12-31-54.

629,300. RADIO SCRAMBO. Radio Columbus, Inc. SN 688,578. Pub. 4-3-56. Filed 5-31-55.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 2

629,301. Richmond Dental Cotton Company, Charlotte, N. C. SN 689,080. Filed P. R. 6-7-55. Am. S. R. 3-27-56.

TILTOP

For Cotton Pellet Dispensers.
First use December 1954.

CLASS 14

629,302. Harvey Machine Co., Inc., Torrance, Calif. SN 3,855. Filed 3-5-56.

HARVEY Aluminum

The word "Aluminum" is disclaimed apart from the mark as shown.
For Titanium Ingot.
First use Oct. 1, 1954.

CLASS 19

629,303. Trailmobile, Inc., Cincinnati, Ohio. SN 680,981. Filed P. R. 2-2-55. Am. S. R. 6-25-56.

Integral Post

For Highway Trailers and Structural Parts Thereof.
First use Jan. 20, 1955.

CLASS 23

629,304. Cummins Engine Company, Inc., Columbus, Ind. SN 681,836. Filed P. R. 2-17-55. Am. S. R. 5-17-56.

TURBODIESEL

For Internal Combustion Engines and Parts Thereof.
First use Dec. 20, 1954.

629,305. Koebel Diamond Tool Co., Detroit, Mich. SN 4,926. Filed 3-7-56.

THE MATERIAL WITH A MILLION POINTS

For Diamond Carrying or Diamond Impregnated Rolls, Wheels, Drills, Dressing and Cutting Tools.
First use on or about Jan. 21, 1955.

CLASS 35

629,306. National Cylinder Gas Company, Chicago, Ill. SN 659,886. Filed P. R. 1-21-54. Am. S. R. 12-7-55.

GAS-TITE

For Seating Rings Used in Conjunction With Flame Welding and Cutting Equipment, Attachments, Accessories and Parts Therefor.
First use January 1953.

TRADEMARK REGISTRATIONS RENEWED

108,388. CROCE VERDE. Cl. 46. 2-8-16.
108,685. B N AND DESIGN. Cl. 24. 2-22-16.
109,060. MIGNON. Cl. 46. 3-21-16.
109,134. SA-TAN-IC AND DESIGN. Cl. 18. 3-21-16.
109,378. LIGGETT. Cl. 45. 4-4-16.
109,715. CONVENT. Cl. 43. 4-18-16.
109,757. OKAY. Cl. 39. 4-18-16.
110,314. E AND DESIGN. Cl. 46. 5-16-16.
110,603. EAGLE SHIRT. Cl. 39. 6-6-16.
111,190. DESIGN OF BEAR. Cl. 52. 7-4-16.
111,460. PALMOLIVE. Cl. 51. 7-18-16.
111,633. NORTHWIND. Cl. 21. 7-25-16.
111,931. EMERSON. Cl. 21. 8-15-16.
112,167. PHOTOSTAT. Cl. 6. 8-22-16.

330,407. LA TROPICAL. Cl. 17. 12-3-35.
330,492. F. GARCIA Y HERMANOS AND DESIGN. Cl. 17. 12-3-35.
330,506. LA TROPICAL AND DESIGN. Cl. 17. 12-3-35.
330,815. NUCHAR AQUA AND DESIGN. Cl. 31. 12-17-35.
331,113. MADAM JONES AND DESIGN. Cl. 51. 12-31-35.
331,393. WHITE RIBBON. Cl. 49. 1-7-36.
331,451. SUPER MULTIPLATE PPGCO. Cl. 33. 1-7-36.
331,816. MYRTLE BANK. Cl. 49. 1-21-36.
332,409. MISTOL. Cl. 44. 2-11-36.
332,689. VISKOPLUS. Cl. 6. 2-25-36.
332,746. HARVA-CARBS HARVEY'S. Cl. 18. 2-25-36.
332,802. TWEEN TEEN. Cl. 39. 2-25-36.
332,819. PYRAL. Cl. 36. 2-25-36.
332,834. BISMUTH VIOLET TABLE ROCK ETC. Cl. 18. 2-25-36.
332 883. ROLLOP. Cl. 26. 3-3-36.
332,884. PLAUBEL. Cl. 26. 3-3-36.
332,885. ANTICOMAR. Cl. 26. 3-3-36.
332,903. DOCUMENT. Cl. 42. 3-3-36.
332,921. GOLDEN HARVEST. Cl. 46. 3-3-36.
333,026. ATLANTIC. Cl. 23. 3-10-36.
333,040. OPHTHALGAN DOHO ETC. AND DESIGN. Cl. 18. 3-10-36.
333,125. VITALIS. Cl. 51. 3-10-36.
333,182. SCOTT'S AND DESIGN. Cl. 18. 3-10-36.
333,186. VOYAGE A PARIS. Cl. 51. 3-10-36.
333,227. TALISMAN. Cl. 47. 3-10-36.
333,228. TALISMAN. Cl. 49. 3-10-36.
333,349. SURGITEX. Cl. 42. 3-17-36.
333,522. CORRUX. Cl. 23. 3-24-36.
333,701. VASELINE AND DESIGN OF CARTON. Cl. 6. 3-31-36.
333,702. BLUE SEAL VASELINE AND DESIGN OF CAP. Cl. 6. 3-31-36.
333,703. VASELINE AND DESIGN OF LABEL. Cl. 6. 3-31-36.
333,808. MACY'S YOUTH CENTRE AND DESIGN. Cl. 39. 4-7-36.
333,973. SILVER SKILLET. Cl. 46. 4-14-36.
334,055. MERRY-GO-ROUND. Cl. 39. 4-21-36.
334,068. GREEN CROSS AND DESIGN. Cl. 39. 4-21-36.
334,122. SILVER ANCHOR. Cl. 45. 4-21-36.
334,128. MATCHMASTER. Cl. 2. 4-21-36.
334,223. K AND DESIGN. Cl. 2. 4-21-36.
334,232. WAPCO. Cl. 46. 4-21-36.
334,332. MAKINA. Cl. 26. 4-28-36.
334,345. MAPROMIN. Cl. 6. 4-28-36.
334,346. MAPROMOL. Cl. 6. 4-28-36.
334,401. LIBERTY AND DESIGN. Cl. 37. 5-5-36.
334,457. KINGS MOUNTAIN. Cl. 49. 5-5-36.
334,496. S. O. S. Cl. 45. 5-5-36.
334,544. GOLDEN HARVEST AND DESIGN. Cl. 46. 5-5-36.
334,740. HELIOGEN. Cl. 18. 5-12-36.
334,974. EARLY MORN. Cl. 46. 5-19-36.
335,334. SHEERSTEP. Cl. 39. 6-2-36.
335,425. WHITE HART INN AND DESIGN. Cl. 46. 6-2-36.
335,582. EAGLE. Cl. 16. 6-9-36.
335,609. KAL. Cl. 16. 6-9-36.
335,698. REYTRIM. Cl. 37. 6-9-36.
335,801. KLIBROOKE CLOTHES AND DESIGN. Cl. 39. 6-16-36.
335,883. VANI-TRED. Cl. 39. 6-16-36.
336,048. DR. C. WILSON AND DESIGN. Cl. 32. 6-23-36.
336,161. TIRAX. Cl. 23. 6-30-36.
336,335. FORSYTE. Cl. 37. 6-30-36.
336,556. KING'S CAMEL. Cl. 39. 7-7-36.
336,618. BONNIE. Cl. 46. 7-14-36.
336,639. CIRCLE. Cl. 27. 7-14-36.
336,725. LITE AND DESIGN. Cl. 52. 7-14-36.
336,776. WEST-OVER. Cl. 46. 7-14-36.
336,823. COURTLEY. Cl. 51. 7-21-36.
336,942. QUEEN ASTRID. Cl. 32. 7-21-36.
337,001. NADCO. Cl. 46. 7-28-36.
337,026. RIPTIDE. Cl. 46. 7-28-36.
337,273. RUM RICADO. Cl. 49. 8-4-36.
337,371. LUCKYDAY. Cl. 40. 8-4-36.
337,624. WHITE SATIN. Cl. 49. 8-11-36.
337,643. LITTLE MAN AND DESIGN. Cl. 48. 8-18-36.
337,664. PERSONNA. Cl. 23. 8-18-36.
337,691. LAUX AND DESIGN. Cl. 5. 8-18-36.
337,697. TRIPLE DUTY. Cl. 16. 8-18-36.
337,733. CALADEX. Cl. 6. 8-18-36.
337,745. SANTOBRITE. Cl. 6. 8-18-36.

TRADEMARK REGISTRATIONS CANCELED

Section 7

555,524. THE AMERICAN BOTTLER. Cl. 38. 2-26-52.

Section 8

76,258. BLUE RIBBON AND DESIGN. Cl. 35. 12-28-09.
248,772. WILCO X ETC. AND DESIGN. Cl. 15. 10-30-28.
253,386. FURNITURE SOUTH. Cl. 38. 2-26-29.
264,326. "HIPPO". Cl. 52. 11-26-29.
264,951. REPRESENTATION OF SMILING BOY AND TIRE. Cl. 35. 12-10-29.
265,298. REPRESENTATION OF SMILING BOY AND TIRE. Cl. 5. 12-24-29.
269,075. REPRESENTATION OF RISING SUN LINED FOR PURPLE ORANGE AND YELLOW. Cl. 51. 3-25-30.
521,389. VARSITY. Cl. 38. 2-28-50.
521,393. PADDOCK FAVORITE AND HORSE DESIGN. Cl. 46. 2-28-50.
521,395. CIRCO DEE TEE SOLVENT. Cl. 6. 2-28-50.
521,403. RE-CORD-O-FONE AND DESIGN. Cl. 21. 2-28-50.
521,405. NORMIL. Cl. 1. 2-28-50.
521,412. F BAR F. Cl. 50. 2-28-50.
521,415. THE MARCIE DOLL AND DESIGN. Cl. 22. 2-28-50.
521,416. VENTU-ROTOR. Cl. 34. 2-28-50.
521,417. ARISTO CRAFT. Cl. 21. 2-28-50.
521,421. ZINCLAD. Cl. 13. 2-28-50.
521,422. MIL MAR. Cl. 13. 2-28-50.
521,427. SUPREME. Cl. 15. 2-28-50.
521,431. CLUB ALUMINUM TABLE SERVICE AND DESIGN. Cl. 50. 2-28-50.
521,437. TWIN ROSE. Cl. 10. 2-28-50.
521,438. RED DOT SYMBOL DESIGN. Cl. 22. 2-28-50.
521,439. SPOT-O-LITE AND DESIGN. Cl. 21. 2-28-50.
521,441. GOURMET. Cl. 23. 2-28-50.
521,444. PAN-AMERICAN. Cl. 34. 2-28-50.
521,449. "KITCHEN IMP". Cl. 23. 2-28-50.
521,450. CRYSTO-CLEER. Cl. 50. 2-28-50.
521,451. DOR-TITE. Cl. 50. 2-28-50.
521,452. "EASYCRAFT". Cl. 22. 2-28-50.
521,453. TEX-ICE AND DESIGN. Cl. 1. 2-28-50.
521,454. KOOLID AND DESIGN. Cl. 13. 2-28-50.
521,455. PINABORD. Cl. 50. 2-28-50.
521,457. PRESTO. Cl. 13. 2-28-50.
521,458. HIDE-OUT. Cl. 12. 2-28-50.
521,462. CONDIT AND DESIGN. Cl. 21. 2-28-50.
521,465. SUR LES CIMES. Cl. 51. 2-28-50.
521,466. GLO-FLITE. Cl. 15. 2-28-50.
521,474. PIONEER. Cl. 21. 2-28-50.
521,476. CUMBERLAND. Cl. 34. 2-28-50.
521,479. SOUTHLAND AND DESIGN. Cl. 6. 2-28-50.
521,480. NILITE. Cl. 13. 2-28-50.
521,484. MEDALLION DESIGN. Cl. 10. 2-28-50.
521,489. MILWAUKEE. Cl. 34. 2-28-50.
521,491. LEATHOKLENE AND DESIGN. Cl. 50. 2-28-50.
521,493. BD. Cl. 22. 2-28-50.
521,494. FLOORMAID. Cl. 21. 2-28-50.
521,497. RAILLEY. Cl. 21. 2-28-50.
521,502. QUINIPLEX. Cl. 18. 2-28-50.
521,505. ANTHONY, Cl. 13. 2-28-50.
521,507. CLOVER FARM. Cl. 44. 2-28-50.
521,508. PEARLS IN WINE. Cl. 52. 2-28-50.
521,511. ICE CRAFTER. Cl. 23. 2-28-50.
521,513. TON AIR. Cl. 22. 2-28-50.
521,519. FACT. Cl. 23. 2-28-50.
521,520. BEL-MAN AND DESIGN. Cl. 21. 2-28-50.
521,522. ENTERPRISE AND DESIGN. Cl. 21. 2-28-50.
521,524. PLANTATION PRODUCTS AND DESIGN. Cl. 34. 2-28-50.

521,526. FRITILIZER. Cl. 10. 2-28-50.
521,527. RIGHT ON THE JOB. Cl. 38. 2-28-50.
521,528. H AND DIAMOND DESIGN COAL COKE QUALITY SERVICE. Cl. 1. 2-28-50.
521,529. KOOLERWAVE. Cl. 44. 2-28-50.
521,530. TRANSTYPE. Cl. 38. 2-28-50.
521,534. THE SILENT MILKMAN. Cl. 50. 2-28-50.
521,536. DECOR AND DESIGN. Cl. 50. 2-28-50.
521,537. SEA SPRAY AND DESIGN. Cl. 22. 2-28-50.
521,538. DESIGN OF ARROWS. Cl. 30. 2-28-50.
521,539. COMPASS AND DESIGN. Cl. 1. 2-28-50.
521,542. POLIBASE. Cl. 6. 2-28-50.
521,546. RAMCO. Cl. 10. 2-28-50.
521,547. RAMCO RANDALL MILLS CORP. LEADERS IN QUALITY AND DESIGN. Cl. 10. 2-28-50.
521,548. SCOOTERPOOPER. Cl. 22. 2-28-50.
521,553. CALDEVEL. Cl. 18. 2-28-50.
521,554. AIRWRAP AND DESIGN. Cl. 50. 2-28-50.
521,559. STYLES OF TOMORROW BY VULCAN AND DESIGN. Cl. 50. 2-28-50.
521,562. RANGELAND. Cl. 22. 2-28-50.
521,566. TOMMY TOPPLE. Cl. 22. 2-28-50.
521,567. ALWAYS. Cl. 21. 2-28-50.
521,570. MORNING MIST. Cl. 51. 2-28-50.
521,571. KEY DESIGN. Cl. 12. 2-28-50.
521,573. LADY JOY. Cl. 24. 2-28-50.
521,575. CLEVELON. Cl. 21. 2-28-50.
521,576. CARNIVAL. Cl. 22. 2-28-50.
521,583. AUSTRALIA WIGGS. Cl. 22. 2-28-50.
521,584. DIAMOND AND DESIGN. Cl. 21. 2-28-50.
521,587. ACE BINGO BOARD. Cl. 22. 2-28-50.
521,597. ROHANA. Cl. 22. 2-28-50.
521,600. LADY OLIVIA. Cl. 51. 2-28-50.
521,602. TOSTRINA. Cl. 18. 2-28-50.
521,604. WILKIT AND DESIGN. Cl. 22. 2-28-50.
521,608. SPRINGTRED. Cl. 50. 2-28-50.
521,609. ALUMITEL. Cl. 21. 2-28-50.
521,613. CHAMP. Cl. 22. 2-28-50.
521,616. RESILO AND DESIGN. Cl. 22. 2-28-50.
521,618. F & N. Cl. 13. 2-28-50.
521,620. CITIES SERVICE. Cl. 15. 2-28-50.
521,621. CITIES SERVICE. Cl. 21. 2-28-50.
521,622. MOROCCO. Cl. 22. 2-28-50.
521,626. IT HAPPENS EVERY DAY. Cl. 38. 2-28-50.
521,629. LABORGRAPH. Cl. 38. 2-28-50.
521,631. CORONA. Cl. 22. 2-28-50.
521,633. CIP AND REPRESENTATION OF TWO GLOBES. Cl. 38. 2-28-50.
521,637. SEW'N'SEW ABOUT STARDUST. Cl. 38. 2-28-50.
521,639. LOCKER LIVING. Cl. 38. 2-28-50.
521,640. THE GAMEBUSTERS AND DESIGN. Cl. 22. 2-28-50.
521,643. PHENOXADRINE. Cl. 18. 2-28-50.
521,646. PSYKO-FUN. Cl. 22. 2-28-50.
521,648. PRO-COP. Cl. 6. 2-28-50.
521,649. GUIDE. Cl. 22. 2-28-50.
521,658. SORBOINT. Cl. 18. 2-28-50.
521,659. VULCAN. Cl. 15. 2-28-50.
521,660. FONAP. Cl. 15. 2-28-50.
521,661. BEAVER PENN. Cl. 15. 2-28-50.
521,662. VALVULINA. Cl. 15. 2-28-50.
521,667. CAT EMBLEM. Cl. 10. 2-28-50.
521,671. SASCO AND DESIGN. Cl. 10. 2-28-50.
521,673. MERPACO. Cl. 16. 2-28-50.
521,676. RE-NU-BRITE. Cl. 52. 2-28-50.
521,677. PRESSURELOCK. Cl. 23. 2-28-50.
521,681. MODEL AND DESIGN. Cl. 39. 2-28-50.
521,682. SUCKER-UPPER. Cl. 23. 2-28-50.
521,686. RAIN WRAPS. Cl. 39. 2-28-50.
521,688. IN-R-SPRING HEEL AND DESIGN. Cl. 39. 2-28-50.
521,691. CHAPULTEPEC. Cl. 42. 2-28-50.
521,692. FASHIONED BY VOGUE KNIT. Cl. 39. 2-28-50.
521,693. METAL-WORKING EQUIPMENT AND DESIGN. Cl. 38. 2-28-50.
521,694. NEW YORK GEAR WORKS STOCK GEARS AND DESIGN. Cl. 23. 2-28-50.
521,697. TO DISPENSE TRUTH IS TO DEFEND FREEDOM. Cl. 38. 2-28-50.
521,698. FRESHNUT. Cl. 46. 2-28-50.
521,699. FOR YOUR LEISUREFUL LIFE. Cl. 39. 2-28-50.
521,701. MRS. INMAN'S. Cl. 46. 2-28-50.
521,703. COLOR FLAX. Cl. 42. 2-28-50.
521,704. EVER-TRED. Cl. 42. 2-28-50.
521,705. MOTO POUCH AND DESIGN. Cl. 23. 2-28-50.
521,706. INDUSTRIAL SHEET METAL. Cl. 38. 2-28-50.
521,707. THE INSURANCE LETTER. Cl. 38. 2-28-50.
521,709. LIVE AS WELL AS YOU LOOK. Cl. 38. 2-28-50.

Section 18

399,820. ONCE OVER. Cl. 52. 2-2-43. Intf. 5208.
542,746. LEATHERMASTER. Cl. 39. 5-22-51. Canc. 6176.
549,307. VERIPAQUE. Cl. 18. 10-9-51. Canc. 6680.
565,513. FIRE-GARD, ETC., AND DESIGN. Cl. 16. 10-21-52. Canc. 6579.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

110,295. KNICKERBOCKER BRAND AND DESIGN. Cl. 46. 5-16-16. Phenix Cheese Co. Kraft Foods Company, Chicago, Ill. Amended to appear:

KNICKERBOCKER BRAND

195,848. JKO STONE MOUNTAIN. Cl. 39. 3-3-25. J. K. Orr Shoe Company. General Shoe Corporation, Nashville, Tenn. Amended to appear:

STONE MOUNTAIN

258,385. THE EXCELSIOR SHOE FOR BOYS ETC. AND DESIGN. Cl. 39. 7-9-29. The Excelsior Shoe Company. General Shoe Corporation, Nashville, Tenn. Amended to appear:



505,836. REPRESENTATION OF DUTCH GIRL. Cl. 4. 1-18-49. The Cudahy Packing Company. Purex Corporation, Ltd., South Gate, Calif. Amended: In the statement, line 18, the period following "1905" is changed to a comma and *and the modernized version of the Dutch girl was first used on July 14, 1955, and in commerce on July 14, 1955.* is inserted, and the drawing is amended to appear:



591,642. TRUEMASTER. Cl. 26. 6-22-54. The Frederick Post Company, Chicago, Ill. Corrected: In line 3 of the certificate and in line 1 of the printed copy of the registration, "Delaware" should be *Illinois.*

600,189. SALAMANDER AND DESIGN. Cl. 1. 1-4-55. Salamander Aktiengesellschaft, Kornwestheim, Wurttemberg, Germany. Corrected:



611,023. ROLCUT. Cl. 23. 8-23-55. Carl E. Malone and Hugh M. Sutton, Fort Lauderdale, Fla. Amended: In line 2 of the printed copy of the registration, "212 N. Andrews Ave." is deleted and *1712 Davie Blvd.* is inserted in lieu thereof, and the drawing is amended to appear:

ROLCUT

622,067. STANDARD ELECTRIC ETC. AND DESIGN. Cl. 21. 2-28-56. Standard Electric Manufacturing Company, Inc., West Berlin, N. J. Corrected: In line 4 of the certificate and in line 2 of the printed copy of the registration, "New York" should be *New Jersey.*

623,408. DIOGENES AND DESIGN. Cl. 23. 3-20-56. Hellmuth Herder, doing business as Herder & Sohn, Solingen-Ohligs, Germany. Corrected: In column 2, line 4 of the printed copy of the registration, "1936" should be *1930.*

624,944. LONG REACH. Cl. 23. 4-10-56. Anderson, Clayton & Co., Houston, Tex. Corrected: In the last line of column 2 of the printed copy of the registration, "1952" should be *1932.*

624,984. FAS-FLO. Cl. 31. 4-10-56. Suchar Engineering and Sales Company, New York, N. Y. Corrected: In line 3 of the certificate and in lines 1-2 of the printed copy of the registration, "corporation" should be *copartnership.*

625,666. IMMUCOTE. Cl. 6. 4-24-56. Haas Miller Corporation, Philadelphia, Pa. Corrected: In line 2 of the printed copy of the registration, "Briston" should be *Bristol.*

625,848. "SOFTIE." Cl. 29. 4-24-56. Tu-Way Products Company, Detroit, Mich. Corrected: In lines 2 and 13 of the certificate and in line 1 of the printed copy of the registration, "Tru-Way" should be *Tu-Way.*

626,100. SIOUXLAND. Cl. 18. 5-1-56. Milligan & Son, Inc., Sioux City, Iowa. Corrected: In column 2, line 2 of the printed copy of the registration, "blood" should be *bloat.*

TRADEMARK REGISTRATIONS—NEW CERTIFICATES

New Certificates issued under sections 7(c), 7(f), 7(g) of the Trademark Act of 1946 for the unexpired term of the original registrations.

386,265. BLUTONE ETC. AND DESIGN. Cl. 15. I. L. Schurman. 4-1-41. New Cert. Sec. 7(c), to I. L. Schurman and G. L. Schurman, a copartnership, doing business as I. L. Schurman, Chicago, Ill., 6-19-56.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 1

434,955. Dec. 9, 1947. The J. Chas. McCullough Seed Company, Cincinnati, Ohio. Pub. by registrant.

SHADY NOOK

For Lawn Seed.

CLASS 6

331,528. Jan. 14, 1936. Kinetic Chemicals, Inc., Wilmington, Del. Pub. by E. I. du Pont de Nemours and Company, Wilmington, Del.

F-113

For Trichlorotrifluorcethane, Being Fluorinated Hydrocarbons Used as Refrigerants, Propellants, and Fire Extinguishing Preparations.

331,529. Jan. 14, 1936. Kinetic Chemicals, Inc., Wilmington, Del. Pub. by E. I. du Pont de Nemours and Company, Wilmington, Del.

F-21

For Dichloromonofluoromethane, Being Fluorinated Hydrocarbons Used as Refrigerants, Propellants, and Fire Extinguishing Preparations.

331,530. Jan. 14, 1936. Kinetic Chemicals, Inc., Wilmington, Del. Pub. by E. I. du Pont de Nemours and Company, Wilmington, Del.

F-12

For Dichlorodifluoromethane, Being Fluorinated Hydrocarbons Used as Refrigerants, Propellants, and Fire Extinguishing Preparations.

331,643. Jan. 14, 1936. Kinetic Chemicals, Inc., Wilmington, Del. Pub. by E. I. du Pont de Nemours and Company, Wilmington, Del.

F-11

For Trichloromonofluoromethane, Being Fluorinated Hydrocarbons Used as Refrigerants, Propellants, and Fire Extinguishing Preparations.

441,871. Jan. 18, 1949. Advance Solvents & Chemical Corporation, New York, N. Y. Pub. by Carlisle Chemical Works, Inc., Reading, Ohio, and New York, N. Y.

ADVAWET

For Chemical Wetting Agents, Emulsifiers for Paints, Varnishes, Resins, and Oils.

CLASS 10

399,091. Dec. 15, 1942. International Minerals & Chemical Corporation, Chicago, Ill. Pub. by registrant.

INTERNATIONAL FERTILIZERS

No claim is made to the word "Fertilizers."
For Fertilizers.

CLASS 22

336,325. June 30, 1936. The United States Playing Card Company, Cincinnati, Ohio. Pub. by registrant.



No claim is made to the right to the exclusive use of the words "Playing Cards," "Made in U. S. A." and "Cincinnati, Ohio, U. S. A.," and the outline representation of the carton per se.
For Playing Cards.

CLASS 26

108,932. Mar. 7, 1916. Eastman Kodak Co., Rochester, N. Y. Pub. by Eastman Kodak Company, Flemington, N. J.

VELOX

For Sensitized Photographic Paper.

CLASS 38

57,354. Nov. 13, 1906. William R. Hearst, New York, N. Y. Pub. by Hearst Publishing Company, Inc., San Francisco, Calif.

The San Francisco Examiner

For Newspaper.

LIST OF REGISTRANTS OF TRADEMARKS

Ag Products Co., Chicago, Ill. 628,899, pub. 4–3–56. Cl. 10.
A. J. Ranch: *See*—
Di Betta, A. J.
Abbey, Fred, La Crosse, Wis. 629,245, pub. 4–3–56. Cl. 46.
Acco Products, Inc., Ogdensburg, N. Y. 629,105, pub. 4–3–56. Cl. 37.
Acco Products, Inc., Ogdensburg, N. Y. 629,110–12, pub. 4–3–56. Cl. 37.
Ace Bingo and Equipment: *See*—
Herring, Mark.
Advance Solvents & Chemical Corp., New York, N. Y., to Carlisle Chemical Works, Inc., Reading, Ohio. 332,689, ren. 2–25–56. Cl. 6.
Advance Solvents & Chemical Corp., New York, N. Y., by Carlisle Chemical Works, Inc., Reading, Ohio, and New York, N. Y. 441,871, 12(c) pub. 6–19–56. Cl. 6.
Aerodyne Development Corp., Cleveland, Ohio. 628,922, pub. 4–3–56. Cl. 13.
Aget Mfg. Co., Adrian, Mich. 629,030, pub. 4–3–56. Cl. 23.
Air-Lite Window Shield Corp., New York, N. Y. 521,458, canc. Cl. 12.
Aktiebolaget Volvo, Hisingen, Goteborg, Sweden. 629,031, pub. 4–3–56. Cl. 23.
Allen, Frank, New York, N. Y. 629,214, pub. 4–3–56. Cl. 44.
Allen, Mark W., & Co., Detroit, Mich. 269,075, canc. Cl. 51.
Allis-Chalmers Mfg. Co., Milwaukee, Wis. 521,462, canc. Cl. 21.
Alphabet Dietary Corp., Los Angeles, Calif. 628,964, pub. 4–3–56. Cl. 18.
Altmann, Bernhard, International Corp.: *See*—
Altmann, Bernhard, Worsted Corp. of America.
Altmann, Bernhard, Worsted Corp. of America, New York, N. Y., to Bernhard Altmann International Corp., Dover, Del. 629,209, pub. 4–3–56. Cl. 43.
Aluminum Cooking Utensil Co., Inc., The: *See*—
Kensington, Inc.
American Automobile Association (Inc.), The, Washington, D. C. 629,114, pub. 4–3–56. Cl. 37.
American Automobile Association (Inc.), The, Washington, D. C. 629,128–9, pub. 4–3–56. Cl. 38.
American Battery Mfg. Co., d. b. a. Pioneer Battery Co., Kansas City, Mo., and Kansas City, Kans. 521,474, canc. Cl. 21.
American Crayon Co., The, Sandusky, Ohio. 336,335, ren. 6–30–56. Cl. 37.
American Distilling Co. Inc., The, New York, N. Y. 629,268, pub. 4–3–56. Cl. 49.
American Flange & Mfg. Co. Inc., New York, N. Y. 629,271, pub. 3–6–56. Cl. 50.
American Home Products Corp., d. b. a. Ayerst Laboratories, Division of American Home Products Corp., New York, N. Y. 628,955, pub. 4–3–56. Cl. 18.
American Home Products Corp., d. b. a. Ives-Cameron Co., Division of American Home Products Corp., New York, N. Y. 628,966, pub. 4–3–56. Cl. 18.
American Machine & Foundry Co.: *See*—
Cleveland Welding Co., The.
American Pencil Co., Inc., Lewisburg, Tenn. 629,106–7, pub. 4–3–56. Cl. 37.
American Safety Razor Corp.: *See*—
Atlantic Blade Corp.
Personna Blade Co. Inc.
American Safety Razor Corp., Richmond, Va. 333,522, ren. 3–24–56. Cl. 23.
American Thread Co., The, New York, N. Y. 629,211, pub. 4–3–56. Cl. 43.
Ames Co., Inc., Elkhart, Ind. 628,979–80, pub. 4–3–56. Cl. 18.
Anderson, Clayton & Co., Houston, Tex. 624,944, cor. Cl. 23.
Anthony Co., The, Long Island, N. Y. 521,505, canc. Cl. 13.
Ansarut & Co., New York, N. Y. 629,187, pub. 4–3–56. Cl. 42.
Arbogast, Fred, Co., Inc., Akron, Ohio. 629,018, pub. 4–3–56. Cl. 22.
Aristo Power Tools, Inc., to Middle West Export Co., Chicago, Ill. 521,417, canc. Cl. 21.
Armand Co., The, Des Moines, Iowa. 521,508, canc. Cl. 52.
Armco Steel Corp., Middletown, Ohio. 628,923, pub. 4–3–56. Cl. 13.
Armstrong-Bray & Co., Chicago, Ill. 521,480, canc. Cl. 13.
Armstrong Packing Co.: *See*—
Swift & Co.
Ashtabula Printing Co., The, Ashtabula, Ohio. 521,697, canc. Cl. 38.
Associated Kentucky Distilleries Co., New York, N. Y. 629,270, pub. 4–3–56. Cl. 49.
Atlantic Blade Corp., Brooklyn, N. Y., to American Safety Razor Corp., Richmond, Va. 333,026, ren. 3–10–56. Cl. 23.
Aunt Nellie's Farm Kitchen, Inc., Clyman, Wis. 629,247, pub. 4–3–56. Cl. 46.
Ayerst Laboratories, Division of American Home Products Corp.: *See*—
American Home Products Corp.
B & B Engineering Co.: *See*—
Protectolarm, Inc.
Babcock & Wilcox Co., The, New York, N. Y. 628,909, pub. 4–3–56. Cl. 12.
Bachmann Uxbridge Worsted Corp., New York, N. Y. 629,193, pub. 1–3–56. Cl. 42.
Bamberger, L., & Co., Newark, N. J., to R. H. Macy & Co., Inc., New York, N. Y. 333,227–8, ren. 3–10–56. Cl. 47.
Banker Publishing Co., Inc., Atlanta, Ga. 555,524, canc. Cl. 38.
Barber-Hall Printing Co., High Point, N. C. 253,386, canc. Cl. 38.
Barrett & Co., Inc., Newark, N. J. 628,861, pub. 4–3–56. Cl. 1.
Bartsch, Ernst A., d. b. a. Pinabord Mfg. Co., Chicago, Ill. 521,453, canc. Cl. 50.
Bayard Shirt Corp., New York, N. Y. 629,145, pub. 4–3–56. Cl. 39.
Bechhofer Brothers, Inc., New York, N. Y. 629,082, pub. 4–3–56. Cl. 34.
Becton, Dickinson and Co., Rutherford, N. J. 629,219, pub. 4–3–56. Cl. 44.
Behrendt, John G., Chicago, Ill. 628,986, pub. 4–3–56. Cl. 19.
Belco Industries, Inc., St. Louis, Mo. 629,081, pub. 4–3–56. Cl. 34.
Bell Punch Co. Ltd., London, England. 629,056, pub. 4–3–56. Cl. 26.
Bell Sound Systems, Inc., The, Columbus, Ohio. 521,403, canc. Cl. 21.
Bellingham Mfg. Co., Bellingham, Wash. 521,520, canc. Cl. 21.
Bens, George, Sons, Inc., St. Paul, Minn., to Schenley Distillers, Inc., New York, N. Y. 331,393, ren. 1–7–56. Cl. 49.
Bergeron, Victor J., Oakland, Calif., d. b. a. Trader Vic and Trader Vic's. 629,234, pub. 4–3–56. Cl. 46.
Berry, Joseph N., Murray, Ky. 521,707, canc. Cl. 38.
Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., to Collins & Aikman Corp., New York, N. Y. 629,185, pub. 7–22–52. Cl. 42.
Bigsby, Myron H., Pitman, N. J. 629,025, pub. 4–3–56. Cl. 23.
Biocerta Corp., New York, N. Y. 628,883, pub. 4–3–56. Cl. 6.
Bjelland, Chr., & Co., Inc., New York, N. Y. 109,060, ren. 3–21–56. Cl. 46.
Bloch, Robert, and Simone Van Moppes Bloch, New York, N. Y. 521,538, canc. Cl. 30.
Bloch, Simone V. M.: *See*—
Bloch, Robert and Simone V. M.
Bloomingdale Bros., Inc., to Federated Department Stores, Inc., New York, N. Y. 331,816, ren. 1–21–56. Cl. 49.
Bloomingdale Bros., Inc., to Federated Department Stores, Inc., New York, N. Y. 334,055, ren. 4–21–56. Cl. 39.
Bloomingdale Bros., Inc., to Federated Department Stores, Inc., New York, N. Y. 334,457, ren. 5–3–56. Cl. 49.
Boland Mfg. Co., Winona, Minn. 521,450, canc. Cl. 50.
Boot-Ster Mfg. Co., Inc., Clarksville, Tenn. 629,168, pub. 4–3–56. Cl. 39.
Borowitz, Murray, New York, N. Y. 628,876, pub. 4–3–56. Cl. 4.
Boscowitz, H. Huber, New York, N. Y. 521,640, canc. Cl. 22.
Bourges Color Corp., New York, N. Y. 628,904, pub. 4–3–56. Cl. 11.
Brangolmore Chemical Co.: *See*—
Klein, Rafael.
Brignall, Guy E., d. b. a. Lite Soap Co., Aurora, Ill. 336,725, ren. 7–14–56. Cl. 52.
Bristol Laboratories Inc., Syracuse, N. Y. 521,643, canc. Cl. 18.
Bristol-Myers Co., to Bristol-Myers Co., New York, N. Y. 333,125, ren. 3–10–56. Cl. 51.
British Glues & Chemicals Ltd., Welwyn Garden City, England, to B. Young & Co. of America, Ltd., New York, N. Y. 629,239, pub. 4–3–56. Cl. 46.
Bro-Cel Textile Corp., Brooklyn, N. Y. 628,864, pub. 4–3–56. Cl. 1.
Brother Sewing Machine Corp. of Pennsylvania, Philadelphia, Pa. 629,053, pub. 4–3–56. Cl. 23.
Brown Co., Berlin, N. H. 629,113, pub. 4–3–56. Cl. 37.
Buckeye Stamping Co., The, Columbus, Ohio. 629,002, pub. 4–3–56. Cl. 21.
Buckley-Newhall Co., The, New York and Brooklyn, to John Mullins & Sons, Inc., Brooklyn, N. Y. 108,685, ren. 2–22–56. Cl. 24.
Bucyrus-Erie Co., Wilmington, Del. 629,027, pub. 4–3–56. Cl. 23.
Buffalo Hobby Haven, Buffalo, N. Y. 521,452, canc. Cl. 22.
Bureau of National Affairs, Inc., The, Washington, D. C. 521,629, canc. Cl. 38.
Burnham Corp., Irvington, N. Y. 629,084, pub. 4–3–56. Cl. 34.
Cabbage Patch Circle, Louisville, Ky. 521,583, canc. Cl. 22.
Cahn, Bernard, Co., Inc., New York, N. Y. 628,984, pub. 1–24–56. Cl. 19.
Calavo Growers of California: *See*—
Calavo, Inc.
Calavo, Inc., Los Angeles, Calif., now by merger Calavo Growers of California. 629,255, pub. 4–3–56. Cl. 46.
California Forms, Inc., Culver City, Calif. 629,175, pub. 4–3–56. Cl. 39.
California Pet Foods Co., to A. D. Lynn, Sacramento, Calif. 336,618, ren. 7–14–56. Cl. 46.
California Sea Food Corp., d. b. a. Sassy Dog & Cat Food Co., Long Beach, Calif. 629,251, pub. 4–3–56. Cl. 46.
Cameo Doll Products Co. Inc., Brooklyn, N. Y., and Port Allegany, Pa. 521,613, canc. Cl. 22.
Campbell, Metzger & Jacobson, New York, N. Y., to Peri-Lusta, Ltd., Leek, England. 109,715, ren. 4–18–56. Cl. 43.
Caravetta Foods Co.: *See*—
Caravetta, Louis.
Caravetta, Louis, to Caravetta Foods Co., Chicago, Ill. 108,388, ren. 2–8–56. Cl. 46.
Carlisle Chemical Works, Inc.: *See*—
Advance Solvents & Chemical Corp.
Carolina Chemical Mfg. Co., Inc.: *See*—
State Chemical Co., Inc.

Carter Machine & Tool Co., Rockford, Ill. 521,449, canc. Cl. 23.
Castilian Products Corp., Los Angeles, to Lee Ltd., Beverly Hills, Calif. 336,823, ren. 7-21-56. Cl. 51.
Catalina, Inc., Los Angeles, Calif. 629,182, pub. 4-3-56. Cl. 40.
Catholic Intercontinental Press, Inc., New York, N. Y. 521,633, canc. Cl. 38.
Cavitron Corp., Long Island City, N. Y. 629,225-6, pub. 4-3-56. Cl. 44.
Celotex Corp., The, Chicago, Ill. 628,911, pub. 4-3-56. Cl. 12.
Central Circle Airport Corp.: *See*—
Nelson, R. S.
Champion Togs, Inc., New York, N. Y. 629,218, pub. 4-3-56. Cl. 44.
Charles Machine Works, The, Perry, Okla. 628,987, pub. 4-3-56. Cl. 19.
Chase & Co., Sanford, Fla. 628,903, pub. 4-3-56. Cl. 10.
Chemco, Audubon, Iowa. 628,898, pub. 7-19-55. Cl. 10.
Chem-L-Co Industries: *See*—
Lawley, Charles F.
Cheney, Greeff & Co., Inc.: *See*—
McCutcheon, James, & Co.
Chesebrough Mfg. Co., Consolidated, to Chesebrough-Pond's Inc., New York, N. Y. 333,701-3, ren. 3-31-56. Cl. 6.
Chesebrough-Pond's Inc.: *See*—
Chesebrough Mfg. Co., Consolidated.
Chicago Food Products Co., Chicago, to Silver Skillet Brands, Inc., Skokie, Ill. 333,973, ren. 4-14-56. Cl. 46.
Chicago Molded Products Corp., Chicago, Ill. 628,870, pub. 4-3-56. Cl. 2.
Ciba Ltd., Basel, Switzerland. 628,951-3, pub. 4-3-56. Cl. 18.
Cincinnati Tool Co., The, Norwood, Ohio. 521,677, canc. Cl. 23.
Circle Publishing Co., The, Philadelphia, Pa. 629,117, pub. 4-3-56. Cl. 38.
Circle Watch Corp., New York, N. Y. 336,639, ren. 7-14-56. Cl. 27.
Circo Products Co., Cleveland, Ohio. 521,395, canc. Cl. 52.
Cities Service Oil Co., Bartlesville, Okla. 521,620, canc. Cl. 15.
Cities Service Oil Co., Bartlesville, Okla. 521,621, canc. Cl. 21.
Cleveland Container Co., The, Cleveland, Ohio. 521,575, canc. Cl. 21.
Cleveland Electric Motor Co., The, Cleveland, Ohio. 629,000, pub. 4-3-56. Cl. 21.
Cleveland Welding Co., The, Cleveland, Ohio, to American Machine & Foundry Co., New York, N. Y. 628,982-3, pub. 4-3-56. Cl. 19.
Clover Farm Stores Corp., Cleveland, Ohio. 521,507, canc. Cl. 44.
Club Aluminum Products Co., Chicago, Ill. 521,431, canc. Cl. 50.
Colgate & Co., Jersey City, N. J., and New York, N. Y., to Colgate-Palmolive Co., Jersey City, N. J. 111,190, ren. 7-4-56. Cl. 52.
Colgate-Palmolive Co.: *See*—
Colgate & Co.
Johnson, B. J., Soap Co.
Collamatic, Wayne, N. J. 629,001, pub. 4-3-56. Cl. 21.
Collins & Aikman Corp.: *See*—
Bigelow-Sanford Carpet Co., Inc.
Collins & Aikman Corp., Philadelphia, Pa. 629,186, pub. 12-16-52. Cl. 42.
Collins Radio Co., Cedar Rapids, Iowa. 629,009, pub. 4-3-56. Cl. 21.
Columbus Coated Fabrics Corp., Columbus, Ohio. 628,990, pub. 4-3-56. Cl. 20.
Commerce Drug Co., Inc., Brooklyn, N. Y. 628,950, pub. 4-3-56. Cl. 18.
Commercial Camera Co., to Photostat Corp., Providence, R. I. 112,167, ren. 8-22-56. Cl. 6.
Commonwealth Publishing Co., Chicago, Ill. 334,401, ren. 5-5-56. Cl. 37.
Components Corp., Denville, N. J. 629,006, pub. 4-3-56. Cl. 21.
Concrete Engineering Co., Knoxville, Tenn. 628,910, pub. 4-3-56. Cl. 12.
Conde Nast Publications Inc., The, New York, N. Y. 521,709, canc. Cl. 38.
Congoleum-Nairn Inc., Kearny, N. J. 629,272, pub. 4-3-56. Cl. 50.
Consolidated Mining and Smelting Co. of Canada Ltd., The, Montreal, Quebec, Canada. 628,900-1, pub. 4-3-56. Cl. 10.
Continental Elastic Corp., New Bedford, Mass. 521,438, canc. Cl. 22.
Continental Elastic Corp., New Bedford, Mass. 629,017, pub. 4-3-56. Cl. 22.
Continental Ventures, Inc., Detroit, Mich. 628,880-1, pub. 4-3-56. Cl. 6.
Controlador Co., Oakland, Calif. 628,921, pub. 4-3-56. Cl. 13.
Coon, W. B., Co., Rochester, N. Y. 629,138, pub. 8-19-52. Cl. 39.
Cooper, T. G., & Co., Inc., Philadelphia, Pa. 521,542, canc. Cl. 6.
Costa, A. Martinez, S. A., Lima, Peru. 629,264, pub. 4-3-56. Cl. 46.
Cotonificio Legler S. P. A., Ponte San Pietro, Italy. 629,188-9, pub. 4-3-56. Cl. 42.
Cover, A., & Co. Ltd., Manchester, England. 629,195, pub. 4-3-56. Cl. 42.
Coward Shoe, Inc., The, New York, N. Y. 629,156, pub. 4-3-56. Cl. 39.
Cowles Chemical Co., Cleveland, Ohio. 628,879, pub. 6-14-55. Cl. 6.
Crinet Co.: *See*—
Einhorn, Robert H.
Crystal City Canneries, Inc., Crystal City, Tex. 629,254, pub. 4-3-56. Cl. 46.
Cudahy Packing Co., The, Purex Corp., Ltd., South Gate, Calif. 505,836. Am. 7(d). Cl. 4.
Cudahy Packing Co., The, Omaha, Nebr. 628,961, pub. 4-3-56. Cl. 18.
Cummins Engine Co., Inc., Columbus, Ind. 629,304. Cl. 23.
Darworth Inc., Simsbury, Conn. 628,891, pub. 4-3-56. Cl. 6.
Deb Shoe Co., Inc., St. Louis, Mo. 629,153, pub. 4-3-56. Cl. 39.
Deering, Milliken & Co., Inc., New York, N. Y. 629,297, pub. 4-3-56. Cl. 106.
Dehydag Deutsche Hydrierwerke AG, Dusseldorf-Holthausen, Germany. 629,280, pub. 4-3-56. Cl. 51.
Dehydag Deutsche Hydrierwerke GMBH, Dusseldorf, Germany. 629,288, pub. 4-3-56. Cl. 52.
Delia Bros., Brooklyn, N. Y. 521,539, canc. Cl. 1.
Diana Stores Corp., New York, N. Y. 629,141, pub. 6-28-55. Cl. 39.
Deltox Rug Co., Oshkosh, Wis. 629,196-7, pub. 4-3-56. Cl. 42.
Di Bettu, A. J., d. b. a. A. J. Ranch, Moreno, Calif. 628,866, pub. 4-3-56. Cl. 1.
Di Frances, Anthony, Milwaukee, Wis. 399,820, canc. Cl. 52.
Distillers Co., Ltd., The, Linden, N. J. 337,624, ren. 8-11-56. Cl. 49.
Doho Chemical Corp., New York, N. Y. 333,040, ren. 3-10-56. Cl. 18.
Doric Vault Manufacturers Association, The, Cincinnati, Ohio. 628,871, pub. 4-3-56. Cl. 2.
Dortch Stove Works, Inc., The, Franklin, Tenn. 521,444, canc. Cl. 34.
Drew, E. F., & Co., Inc., New York, N. Y. 629,242, pub. 4-3-56. Cl. 46.
Drug Products Co., Inc., The, Brooklyn, N. Y. 628,958-9, pub. 4-3-56. Cl. 18.
Dumore Co., The, Racine, Wis. 521,494, canc. Cl. 21.
Duplate Corp., to Pittsburgh Plate Glass Co., Pittsburgh, Pa. 331,451, ren. 1-7-56. Cl. 33.
Du Pont, E. I., de Nemours and Co.: *See*—
Kinetic Chemicals, Inc.
Durkee-Atwood Co., Minneapolis, Minn. 521,451, canc. Cl. 50.
Eagle-Picher Co., The: *See*—
Eagle-Picher Lead Co., The.
Eagle-Picher Lead Co., The, to The Eagle-Picher Co., Cincinnati, Ohio. 335,582, ren. 6-9-56. Cl. 16.
Eagle Shirtmakers, Inc.: *See*—
Miller, Jacob, Sons & Co.
East Chicago Machine Tool Corp., East Chicago, Ind. 629,042, pub. 4-3-56. Cl. 23.
Eastern Hosiery Co., Inc., Chicago, Ill. 629,151, pub. 4-3-56. Cl. 39.
Eastern States Farmers' Exchange, Inc., West Springfield, Mass. 628,889, pub. 4-3-56. Cl. 6.
Eastman Kodak Co., Rochester, N. Y., by Eastman Kodak Co., Flemington, N. J. 108,932, 12(c) pub. 6-19-56. Cl. 26.
Ehrat, Geo.: *See*—
Caravetta Foods Co.
Ehrat, Geo., to Caravetta Foods Co., Chicago, Ill. 110,314, ren. 5-16-56. Cl. 46.
8 In 1 Pet Products, Inc., New York, N. Y. 629,248, pub. 4-3-56. Cl. 46.
Einhorn, Robert H., d. b. a. Crinet Co., Brooklyn, N. Y. 629,177, pub. 4-3-56. Cl. 39.
El Chico Cafe, Dallas, Tex. 629,228, pub. 11-28-50. Cl. 46.
El Chico Cafe, Dallas, Tex. 629,229, pub. 4-8-52. Cl. 46.
Elliott-Rallo Co.: *See*—
Rallo, Angelo J.
Elliotte, Marion A., Grafton, N. Y. 521,682, canc. Cl. 23.
Elsa Originals, New York, N. Y. 629,146, pub. 4-3-56. Cl. 39.
Emerson Electric Mfg. Co., The, St. Louis, Mo. 111,633, ren. 7-25-56. Cl. 21.
Emerson Electric Mfg. Co., The, St. Louis, Mo. 111,931, ren. 8-15-56. Cl. 21.
Emons Shoe Co., Inc., Auburn, Maine. 629,144, pub. 4-3-56. Cl. 39.
Esslinger's, Inc., Philadelphia, Pa. 337,643, ren. 8-18-56. Cl. 48.
Esso Standard Oil Co., New York, N. Y. 628,882, pub. 4-3-56. Cl. 6.
Etablissements Lefevre-Utile "Societe en Nom Collectif," Nantes, Loire-Inferieure, France. 629,243, pub. 4-3-56. Cl. 46.
Ever-Level Glides, Inc., Brooklyn, N. Y. 628,925-6, pub. 4-3-56. Cl. 13.
Excelsior Shoe Co., The, General Shoe Corp., Nashville, Tenn. 258,385. Am. 7(d). Cl. 39.
Excelsior Shoes, Inc., to The Selby Shoe Co., Portsmouth, Ohio. 335,883, ren. 6-16-56. Cl. 39.
Exhibit Supply Co., Chicago, Ill. 521,622, canc. Cl. 22.
Fact Corp., The, Meadville, Pa. 521,519, canc. Cl. 23.
Fairchild, Olsen G., Orlando, Fla. 629,250, pub. 4-3-56. Cl. 46.
Farley & Loetscher Mfg. Co., Dubuque, Iowa. 628,862, pub. 4-3-56. Cl. 1.
Farmers Veterinary Distributors: *See*—
Silver, Jules.
Fearing, David, Co., South St. Paul, Minn. 521,412, canc. Cl. 50.
Federated Department Stores, Inc.: *See*—
Bloomingdale Bros., Inc.
Felton & Son, Inc., Boston, Mass., to The Fleischmann Distilling Corp., New York, N. Y. 337,273, ren. 8-4-56. Cl. 49.
Ferro Enamel Corp., Cleevland, Ohio. 521,526, canc. Cl. 10.

Fields, Edward, Co., Inc., New York, N. Y. 521,703-4, canc. Cl. 42.
Fisk Rubber Co., The, Chicopee Falls, Mass., and Cudahy, Wis. 264,951, canc. Cl. 35.
Fisk Rubber Co., The, Chicopee Falls, Mass., and Cudahy, Wis. 265,298, canc. Cl. 5.
Fleishmann Distilling Corp., The: *See*—
Felton & Son, Inc.
Flocker, John, and Co., Pittsburgh, Pa. 629,206, pub. 4-3-56. Cl. 42.
Florida Citrus Mutual, Lakeland, Fla. 629,132, pub. 4-3-56. Cl. 38.
Florin, Philip, Inc., Newark, N. J. 628,873-4, pub. 4-3-56. Cl. 3.
Ford Motor Co., Dearborn, Mich. 628,985, pub. 4-3-56. Cl. 19.
Forstmann Woolen Co., Passaic, N. J. 629,200, pub. 4-3-56. Cl. 42.
Four Wheel Drive Auto Co., The, Clintonville, Wis. 628,989, pub. 4-3-56. Cl. 19.
Frankford Umbrella Mfg. Co., Philadelphia, Pa. 629,184, pub. 4-3-56. Cl. 41.
Frederick & Nelson: *See*—
Marshall Field & Co.
Free, R. G., d. b. a. Washington Foods, Washington Court House, Ohio. 629,246, pub. 4-3-56. Cl. 46.
Freedom-Valvoline Oil Co., Freedom, Pa. 521,659-62, canc. Cl. 15.
Freeman Hardy and Willis Ltd., Leicester, England. 629,154, pub. 4-3-56. Cl. 39.
Friden Calculating Machine Co., Inc., San Leandro, Calif. 629,061, pub. 4-3-56. Cl. 26.
Fuller, D. B., & Co., Inc., New York, N. Y. 629,202, pub. 4-3-56. Cl. 42.
Gadgeteers, Inc., The, Lakeside, Mich. 629,220, pub. 4-3-56. Cl. 44.
Galiant, Frank, Inc., New York, N. Y. 629,160, pub. 4-3-56. Cl. 39.
Garcia, Humberto A., d. b. a. The New Yorker Sewing Machine Co., Miami, Fla. 629,070, pub. 4-3-56. Cl. 31.
Gardening Publications Inc., New York, N. Y. 629,116, pub. 4-3-56. Cl. 38.
Gardner-Denver Co.: *See*—
Keller Tool Co.
Garrard Engineering & Mfg. Co., Ltd., The, Swindon, Wiltshire, England. 629,004, pub. 4-3-56. Cl. 21.
Garylee, Inc., Miami, Fla. 629,019, pub. 4-3-56. Cl. 22.
Geigy Chemical Corp., New York, N. Y. 628,956-7, pub. 4-3-56. Cl. 18.
General Aniline & Film Corp., New York, N. Y. 628,885, pub. 12-6-55. Cl. 6.
General Aniline & Film Corp., New York, N. Y. 628,887, pub. 4-3-56. Cl. 6.
General Baking Co.: *See*—
Holmes & Son, Inc.
General Features Corp., New York, N. Y. 629,130, pub. 4-3-56. Cl. 38.
General Shoe Corp.: *See*—
Excelsior Shoe Co., The.
Orr, J. K., Shoe Co.
General Tire & Rubber Co., The, Akron, Ohio. 629,194, pub. 4-3-56. Cl. 42.
Gillam Soaps & Chemicals, Inc., Fort Worth, Tex. 629,284, pub. 4-3-56. Cl. 52.
Gillam Soaps & Chemicals, Inc., Fort Worth, Tex. 629,286, pub. 4-3-56. Cl. 52.
Gland-O-Lac Co., The, Omaha, Nebr. 628,973-6, pub. 4-3-56. Cl. 18.
Glasco Products Co., Chicago, Ill. 629,223, pub. 4-3-56. Cl. 44.
Globe Roofing Products Co., Inc., Whiting, Ind. 628,913, pub. 2-7-56. Cl. 12.
Golden State Enterprises: *See*—
Schelnes, Arthur.
Goldsmith, M. H., and Co., d. b. a. Milford Lingerie Co., New York, N. Y. 629,149, pub. 4-3-56. Cl. 39.
Goodman Mfg. Co., Chicago, Ill. 629,033, pub. 4-3-56. Cl. 23.
Gopher Grinders, Inc., Anoka, Minn. 629,054-5, pub. 4-3-56. Cl. 23.
Grand Rapids Furniture Makers Guild, Grand Rapids, Mich. 629,121, pub. 4-3-56. Cl. 38.
Grand Rapids Store Equipment Co., Grand Rapids, Mich. 629 072, pub. 6-22-54. Cl. 32.
Grand Specialties Co., Chicago, Ill. 629,026, pub. 4-3-56. Cl. 23.
Grand Union Co., The, East Paterson, N. J. 334,974, ren. 5-19-56. Cl. 46.
Gray Pharmaceutical Co., Inc., Boston, Mass. 628,978, pub. 4-3-56. Cl. 18.
Green, A. P., Fire Brick Co., Mexico, Mo. 628,914, pub. 4-3-56. Cl. 12.
Greenebaum, J., Tanning Co., Chicago, Ill. 521,405, canc. Cl. 1.
Greenspon, David D., d. b. a. Scientific Industrial Supply Co., Chicago, Ill. 629,065, pub. 4-3-56. Cl. 29.
Grove, William R., Laurel, Fla. 521,554, canc. Cl. 50.
Guida Wood Heel Co., Brooklyn, N. Y. 629,164, pub. 4-3-56. Cl. 39.
Gulf States Paper Corp., Tuscaloosa, Ala. 629,101, pub. 4-3-56. Cl. 37.
Guttman, Joseph, & Bros., New York, N. Y. 521,692, canc. Cl. 39.
H. & D. Laboratories, Inc., Cleveland, Ohio. 628,963, pub. 4-3-56. Cl. 18.
Haas Miller Corp., Philadelphia, Pa. 625,666, cor. Cl. 6.
Haddad, Amram, New York, N. Y. 521,415, canc. Cl. 22.
Halley, James L., San Francisco, Calif. 628,869, pub. 4-3-56. Cl. 2.
Halo-Star Corp., The, Chicago, Ill. 629,260, pub. 4-3-56. Cl. 46.
Halstead Milling and Elevator Co.: *See*—
International Milling Co.
Hamol, Lloyd, Ltd., London, England. 628,967, pub. 4-3-56. Cl. 18.
Hanes Hosiery Mills Co., Winston-Salem, N. C. 629,172, pub. 4-3-56. Cl. 39.
Harf: *See*—
Harf, Inc.
Harf, Inc., d. b. a. Harf, Hatfield, Pa. 629,281, pub. 4-3-56. Cl. 51.
Harshaw Chemical Co., The, Cleveland, Ohio. 521,648, canc. Cl. 6.
Hart & Cooley Mfg. Co., Holland, Mich. 629,091, pub. 4-3-56. Cl. 34.
Harvey, G. F., Co., The, Saratoga Springs, N. Y. 332,746, ren. 2-25-56. Cl. 18.
Harvey Machine Co., Inc., Torrance, Calif. 629,302. Cl. 14.
Haymaker Sports Inc., New York, N. Y. 629,147, pub. 4-3-56. Cl. 39.
Health-O-Swim Products Co., New York, N. Y. 629,179, pub. 4-3-56. Cl. 39.
Hearst Publishing Co., Inc.: *See*—
Hearst, William R.
Hearst, William R., New York, N. Y., by Hearst Publishing Co., Inc., San Francisco, Calif. 57,354, 12(c) pub. 6-19-56. Cl. 38.
Heathcote Hosiery Co., New York, N. Y. 629,178, pub. 4-3-56. Cl. 39.
Helbig, L. F., Co.: *See*—
Helbig, Leonard F., Jr.
Helbig, Leonard F., Jr., d. b. a. L. F. Helbig Co., Philadelphia, Pa. 521,537, canc. Cl. 22.
Heliogen Ltd., to P. M. Salerni, Westminster, England, to Heliogen Products, Inc., Long Island City, N. Y. 334,740, ren. 5-12-56. Cl. 18.
Heliogen Products, Inc.: *See*—
Heliogen Ltd.
Helmreich, Edwin, West Lafayette, Ohio. 521,705, canc. Cl. 23.
Hendley, C. W., & Co., Inc., Baltimore, Md. 521,528, canc. Cl. 1.
Herbet Theatrical Shoe Co.: *See*—
Levin, Millicent.
Hercules Powder Co., Wilmington, Del. 628,890, pub. 4-3-56. Cl. 6.
Hercules Powder Co., Wilmington, Del. 628,897, pub. 4-3-56. Cl. 9.
Herder, Hellmuth, d. b. a. Herder & Sohn, Solingen-Ohligs, Germany. 623,408, cor. Cl. 23.
Herder & Sohn: *See*—
Herder, Hellmuth.
Herring, Mark, d. b. a. Ace Bingo and Equipment, Denver, Colo. 521,587, canc. Cl. 22.
Hines-Park Foods, Inc., Ithaca, N. Y. 629,236, pub. 4-3-56. Cl. 46.
Hobbs Banana Co., El Paso, Tex. 629,256, pub. 4-3-56. Cl. 46.
Hodges, F. G., Bedding Co., Reading, Pa. 336,048, ren. 6-23-56. Cl. 32.
Hoffman, J. S., Co., Chicago, Ill. 629,233, pub. 4-3-56. Cl. 46.
Hoffmann-La Roche Inc., Nutley, N. J. 628,977, pub. 4-3-56. Cl. 18.
Hogue, Geo., Mercantile Co., Kansas City, Mo. 521,698, canc. Cl. 46.
Hohner, M., Inc., New York, N. Y. 629,095-6, pub. 4-3-56. Cl. 36.
Holland-Rantos Co., Inc., New York, N. Y. 333,349, ren. 3-17-56. Cl. 42.
Hollingshead, R. M., Corp., Camden, N. J. 629,291, pub. 4-3-56. Cl. 52.
Hollingsworth, C. C., Detroit, Mich. 521,649, canc. Cl. 22.
Holloway House Cafeterias Co.: *See*—
Thompson, John R., Co.
Holloway House, Inc.: *See*—
Thompson, John R., Co.
Hollywood-Maxwell Co., Los Angeles, Calif. 629,143, pub. 4-3-56. Cl. 39.
Holmes & Son, Inc., Washington, D. C., to General Baking Co., New York, N. Y. 629,252, pub. 4-3-56. Cl. 46.
Homefinders, Inc., The, Evanston, Ill. 629,295, pub. 4-3-56. Cl. 102.
Hough Shade Corp., Janesville, Wis. 521,608, canc. Cl. 50.
Household Specialties, Inc., Cincinnati, Ohio. 521,573, canc. Cl. 24.
Houston Oil Field Material Co., Inc., Houston, Tex. 629,046, pub. 4-3-56. Cl. 23.
Hoyen, Campbell J., Portland, Oreg. 521,524, canc. Cl. 34.
H-Oil Engineering Corp., Tulsa, Okla. 629,036-7, pub. 4-3-56. Cl. 23.
IRM Laboratories, The: *See*—
Magalnick, I. Robert.
IceCrafter, Inc., Blue Island, Ill. 521,511, canc. Cl. 23.
Imperial Chemical Industries, Ltd., London, England. 629,207, pub. 4-3-56. Cl. 43.
Independence Specialties Co., Inc., Charlotte, N. C. 629,043, pub. 4-3-56. Cl. 23.
Indian Head Mills, Inc., New York, N. Y. 629,204, pub. 4-3-56. Cl. 42.
Indianapolis Brush & Broom Mfg. Co., Indianapolis, Ind. 629,283, pub. 4-3-56. Cl. 52.
Industrial Chemical Sales Co., Inc., to West Virginia Pulp and Paper Co., New York, N. Y. 330,815, ren. 12-17-55. Cl. 31.
Inland Homes Corp., Piqua, Ohio. 628,905, pub. 4-20-54. Cl. 12.
Inman, May L., Galesburg, Mich. 521,701, canc. Cl. 46.

International Electric Fence Co., Inc., Vancouver, Wash. 629,015, pub. 4–3–56. Cl. 21.
International Milling Co., d. b. a. Halstead Milling and Elevator Co., Minneapolis, Minn. 629,240, pub. 4–3–56. Cl. 46.
International Minerals & Chemical Corp., Chicago, Ill. 399,091, 12(c) pub. 6–19–56. Cl. 10.
International Minerals & Chemical Corp., Chicago, Ill. 628,947, pub. 4–3–56. Cl. 18.
International Paint Co., Inc., New York, N. Y. 628,934, pub. 4–3–56. Cl. 16.
International Silver Co., The, Meriden, Conn. 629,035, pub. 4–3–56. Cl. 23.
International Silver Co., The, Meriden, Conn. 629,044–5, pub. 4–3–56. Cl. 23.
Interstate Bakeries Corp., Kansas City, Mo. 629,265, pub. 4–3–56. Cl. 46.
Interstate Sales Co., Waco, Tex. 521,570, canc. Cl. 51.
Iowa Soap Co., Burlington, Iowa. 264,326, canc. Cl. 52.
Iron Fireman Mfg. Co., Portland, Oreg. 629,087–8, pub. 4–3–56. Cl. 34.
Isle of View Co., Los Angeles, Calif. 629,057, pub. 4–3–56. Cl. 26.
Ives-Cameron Co. Division of American Home Products Corp.: *See*—
American Home Products Corp.
Jacobs Brothers, Inc., Baltimore, Md. 629,169, pub. 4–3–56. Cl. 39.
Jen-Cel-Lite Corp., The, Seattle, Wash. 629,190, pub. 4–3–56. Cl. 42.
Johnson, B. J., Soap Co., Milwaukee, Wis., to Colgate-Palmolive Co., Jersey City, N. J. 111,460, ren. 7–18–56. Cl. 51.
Johnson, Franklin H., Inc., New York, N. Y. 629,123–4, pub. 4–3–56. Cl. 38.
Johnson, J. W., Co., Bellwood, Ill. 629,276, pub. 4–3–56. Cl. 50.
Justrite Mfg. Co., Chicago, Ill. 629,047, pub. 4–3–56. Cl. 23.
Juva-Tex, Inc., Chicago, Ill. 629,066, pub. 4–3–56. Cl. 29.
Karseal Corp., Hollywood, Calif. 628,875, pub. 4–3–56. Cl. 4.
Keller Tool Co., Grand Haven, Mich., to Gardner-Denver Co., Denver, Colo. 629,069, pub. 4–3–56. Cl. 31.
Kellom, Chas. F., & Co., Inc., Holmesburg, Philadelphia, Pa. 628,928, pub. 8–23–55. Cl. 15.
Kendall Refining Co., Bradford, Pa. 628,929, pub. 4–3–56. Cl. 15.
Kensington, Inc., to The Aluminum Cooking Utensil Co., Inc., New Kensington, Pa. 334,128, ren. 4–21–56. Cl. 2.
Kensington, Inc., to The Aluminum Cooking Utensil Co., Inc., New Kensington, Pa. 334,223, ren. 4–21–56. Cl. 2.
Kinetic Chemicals, Inc., by E. I. du Pont de Nemours and Co., Wilmington, Del. 331,528–30, 12(c) pub. 6–19–56. Cl. 6.
Kinetic Chemicals, Inc., by E. I. du Pont de Nemours and Co., Wilmington, Del. 331,643, 12(c) pub. 6–19–56. Cl. 6.
Kip Electronics Corp., Stamford, Conn. 629,005, pub. 2–7–56. Cl. 21.
Kiwi Polish Co., Proprietary Ltd., The, Richmond near Melbourne, Victoria, Australia. 628,877, pub. 4–3–56. Cl. 4.
Klear-Vu Corp., New York, N. Y. 629,199, pub. 4–3–56. Cl. 42.
Klein, Rafael, d. b. a. Brangolmore Chemical Co., New York, N. Y. 628,902, pub. 4–3–56. Cl. 10.
Klensade Products, Inc., Beloit, Wis. 629,289, pub. 4–3–56. Cl. 52.
Kline Brothers Co., New York, N. Y. 335,801, ren. 6–16–56. Cl. 39.
Klipsch and Associates: *See*—
Klipsch, Paul W.
Klipsch, Paul W., d. b. a. Klipsch and Associates, Hope, Ark. 629,013, pub. 4–3–56. Cl. 21.
Klopman Mills, Inc., New York, N. Y. 629,191, pub. 7–12–55. Cl. 42.
Koebel Diamond Tool Co., Detroit, Mich. 629,305. Cl. 23.
Kohnstamm, H., & Co., Inc., New York, N. Y. 334,122, ren. 4–21–56. Cl. 45.
König, H. C., Steinhagen, Westphalia, Germany. 629,269, pub. 4–3–56. Cl. 49.
Koolid Co.: *See*—
Sturdevant, Kathryn C.
Korday Candles, Inc., Brooklyn, N. Y. 629,241, pub. 4–3–56. Cl. 46.
Kordell Sportswear, Inc., New York, N. Y. 629,176, pub. 4–3–56. Cl. 39.
Kraft Foods Co.: *See*—
Phenix Cheese Co.
Kraft, Hyman D., New York, N. Y. 628,919, pub. 4–3–56. Cl. 13.
Kyoritu Noki Co. Ltd., Mitaka, Tokyo, Japan. 629,038, pub. 4–3–56. Cl. 23.
Laboratoires Danielle Roches: *See*—
Maitrejean, Madame Louis.
Lacquer Corp. of America, Brooklyn, N. Y. 628,941, pub. 1–17–56. Cl. 16.
Lady Olivia, Inc., Boston, Mass. 521,600, canc. Cl. 51.
Landreth, D., Seed Co., Philadelphia, Pa. 628,860, pub. 9–20–55. Cl. 1.
Lane, Ltd., New York, N. Y. 628,896, pub. 4–3–56. Cl. 8.
Lane, Ltd., New York, N. Y. 628,944, pub. 4–3–56. Cl. 17.
Lang, Harry, Mfg. Co., from Lang Industries, Des Moines, Iowa. 629,136–7, pub. 8–5–52. Cl. 39.
Lang Industries: *See*—
Lang, Harry, Mfg. Co.
Lan-Lav Co., San Francisco, Calif. 444,811, pub. 9–9–52. Cl. 18.
La Salle Casualty Co., Chicago, Ill. 629,294, pub. 3–6–56. Cl. 102.
Laucks, I. F., Inc., Seattle, Wash., to Monsanto Chemical Co., St. Louis, Mo. 337,691, ren. 8–18–56. Cl. 5.
Lawrence, W. W., & Co., Pittsburgh, Pa. 628,942, pub. 4–3–56. Cl. 16.
Lawyer, C. Ray, d. b. a. C. Ray Lawyer Companies, Berkeley, Calif. 521,562, canc. Cl. 22.
Lawyer, C. Ray, Companies: *See*—
Lawyer, C. Ray.
Lawley, Charles F., d. b. a. Chem-L-Co Industries, Wyoming, Pa. 521,466, canc. Cl. 15.
League of Champions, Inc., The, New York, N. Y. 629,139, pub. 11–23–54. Cl. 39.
Lee Ltd.: *See*—
Castillan Products Corp.
Levin, Millicent, d. b. a. Herbet Theatrical Shoe Co., New York, N. Y. 629,165, pub. 4–3–56. Cl. 39.
Leybourn Specialties, Inc., Toledo, Ohio. 629,273, pub. 4–3–56. Cl. 50.
Liga Fabrieken N. V., Roosendaal, Netherlands. 629,235, pub. 4–3–56. Cl. 46.
Lilly, Eli, and Co., Indianapolis, Ind. 521,602, canc. Cl. 18.
Lilly, Eli, and Co., Indianapolis, Ind. 521,658, canc. Cl. 18.
Limestone Products Corp. of America, Newton, N. J. 628,863, pub. 4–3–56. Cl. 1.
Lincoln Mills of Alabama, Huntsville, Ala. 629,203, pub. 4–3–56. Cl. 42.
Linden Spencer Co., The, Spencer, Mass. 629,158, pub. 4–3–56. Cl. 39.
Lippische Camerafabrik Richter & Fischer G. m. b. H.: *See*—
Photo Marketing Corp.
Lite Soap Co.: *See*—
Brignall, Guy E.
Locker Management, Inc., St. Louis, Mo. 521,639, canc. Cl. 38.
Logan Co., Louisville, Ky. 628,906, pub. 4–3–56. Cl. 12.
Logetronics, Inc., Washington, D. C. 629,118, pub. 4–3–56. Cl. 38.
Lonergan Mfg. Co., Albion, Mich. 521,416, canc. Cl. 34.
Lynn, Allan D.: *See*—
California Pet Foods Co.
Lyons, John L., d. b. a. Lyons Sales Agency, Glendale, Calif. 629,093, pub. 4–3–56. Cl. 36.
Lyons Sales Agency: *See*—
Lyons, John L.
M & L Plastic Corp., East Hampton, Mass. 628,868, pub. 4–3–56. Cl. 2.
Macy, R. H., & Co., Inc.: *See*—
Bamberger, L., & Co.
Macy, R. H., & Co., Inc., New York, N. Y. 333,808, ren. 4–7–56. Cl. 39.
Magalnick, I. Robert, d. b. a. The IRM Laboratories, Philadelphia, Pa. 629 279, pub. 4–3–56. Cl. 51.
Magnavox Co., The, Fort Wayne, Ind. 628,995, pub. 4–3–56. Cl. 21.
Magnavox Co., The, Fort Wayne, Ind. 629,003, pub. 4–3–56. Cl. 21.
Maitrejean, Madame Louis, born Roche (Yvonne), d. b. a. Laboratoires Danielle Roches, Paris, France. 629,278, pub. 4–3–56. Cl. 51.
Mallinckrodt Chemical Works, St. Louis, Mo. 628,960, pub. 4–3–56. Cl. 18.
Mallory Electric Corp., Detroit, Mich. 629,014, pub. 4–3–56. Cl. 21.
Malone, Carl E., and Hugh M. Sutton, Fort Lauderdale, Fla. 611,023. Am. 7(d). Cl. 23.
Manhattan Shirt Co., The, New York, N. Y. 629,166, pub. 4–3–56. Cl. 39.
Marshall Field & Co.: *See*—
Rosenblatt A., Sons & Co., Inc.
Marshall Field & Co., also d. b. a. Frederick & Nelson, Chicago, Ill., and Seattle, Wash. 521,618, canc. Cl. 13.
Marshall Field & Co., Chicago, Ill. 629,167, pub. 4–3–56. Cl. 39.
Marshall-Wells Co., Duluth, Minn. 521,631, canc. Cl. 22.
Martin-Senour Co., The, Chicago, Ill. 628,943, pub. 4–3–56. Cl. 16.
Maryland Pharmaceutical Co., The, Baltimore, Md. 628,948, pub. 4–3–56. Cl. 18.
Masti-Kure Products Co.: *See*—
Silver, Jules.
Matheson Chemical Corp.: *See*—
Southern Acid & Sulphur Co., Inc.
May Department Stores Co., The, St. Louis, Mo. 629,227, pub. 4–3–56. Cl. 44.
Maze, W. H., Co., Peru, Ill. 521,421, canc. Cl. 13.
McClung, C. M., & Co., Knoxville, Tenn. 521,476, canc. Cl. 34.
McConnon & Co., Winona, Minn. 628,888, pub. 4–3–56. Cl. 6.
McCullough, J. Chas., Seed Co., The, Cincinnati, Ohio. 434 955. 12(c) pub. 6–19–56. Cl. 1.
McCutcheon, James, & Co., New York, N. Y., to Cheney, Greeff & Co., Inc., Manchester, Conn. 332,903, ren. 3–3–56. Cl. 42.
McMillan Bros., La Conner, to San Juan Islands Cannery, Mount Vernon and La Conner, Wash. 337,026, ren. 7–28–56. Cl. 46.
Mead Corp., The, Dayton, Ohio. 629,100, pub. 4–3–56. Cl. 37.
Merck & Co., Inc., Rahway, N. J. 628,972, pub. 4–3–56. Cl. 18.
Mercury Advertising Agency, Inc., Los Angeles, Calif. 521,626, canc. Cl. 38.
Merkin, M. J., Paint Co., Inc., New York, N. Y. 521,673, canc. Cl. 16.
Merske, Lawrence J., Milwaukee, Wis. 335,334, ren. 6–2–56. Cl. 39.
Metabolic Products Corp., Boston, Mass. 628,981, pub. 4–3–56. Cl. 18.
Metal Lubricants Co., Chicago, Ill. 628,931–3, pub. 4–3–56. Cl. 15.

Michael, John L., Inc., Orlando, Fla. 629,282, pub. 4–3–56. Cl. 51.
Michel & Pfeffer Iron Works, Inc., South San Francisco, Calif. 628,915, pub. 4–3–56. Cl. 12.
Mid-Continent Metal Products Co., Chicago, Ill. 629,090, pub. 4–3–56. Cl. 34.
Middle West Export Co.: *See*—
Aristo Power Tools, Inc.
Milford Lingerie Co.: *See*—
Goldsmith, M. H., and Co.
Miller, Jacob, Sons & Co., to Eagle Shirtmakers, Inc., Philadelphia, Pa. 110,603, ren. 6–6–56. Cl. 39.
Milligan & Son, Inc., Sioux City, Iowa. 626,100, cor. Cl. 18.
Milprint, Inc., Milwaukee, Wis. 629,108, pub. 4–3–56. Cl. 37.
Minden Cotton Oil & Ice Co., Ltd., Minden, La. 521,667, canc. Cl. 10.
Minnesota Mining and Mfg. Co., St. Paul, Minn. 629,012, pub. 4–3–56. Cl. 21.
Minnesota Mutual Life Insurance Co., The, St. Paul, Minn. 629,293, pub. 4–3–56. Cl. 102.
Mira-Flex Watchband Corp., New York, N. Y. 629,064, pub. 4–26–55. Cl. 28.
Mishawaka Rubber and Woolen Mfg. Co.: *See*—
Mishawaka Woolen Mfg. Co.
Mishawaka Woolen Mfg. Co., to Mishawaka Rubber and Woolen Mfg. Co., Mishawaka, Ind. 109,757, ren. 4–18–56. Cl. 39.
Mitchell, C. G., Inc., Binghamton, N. Y. 629,125, pub. 4–3–56. Cl. 38.
Modecraft Co., Inc., Brooklyn, N. Y. 629,073, pub. 4–3–56. Cl. 32.
Molded Fiberglass Tray Co., Linesville, Pa. 628,867, pub. 4–3–56. Cl. 2.
Monsanto Chemical Co.: *See*—
Laucks, I. F., Inc.
Monsanto Chemical Co., St. Louis, Mo. 337,745, ren. 8–18–56. Cl. 6.
Moore Co., The, Marceline, Mo. 629,079, pub. 4–3–56. Cl. 34.
Moore Co., The, Charleston, W. Va. 629,080, pub. 4–3–56. Cl. 34.
Morgan-Jones, Inc., New York, N. Y. 629,192, pub. 4–3–56. Cl. 42.
Mullins, John, & Sons, Inc.: *See*—
Buckley-Newhall Co., The.
Munsingwear, Inc., Minneapolis, Minn. 629,148, pub. 4–3–56. Cl. 39.
Muscatine Pearl Works, Inc., Muscatine, Iowa. 337,371, ren. 8–4–56. Cl. 40.
N. V. Amsterdamsche Chininefabriek, Amsterdam, Netherlands. 521,502, canc. Cl. 18.
Nash-De Camp Co., Visalia, Calif. 337,001, ren. 7–28–56. Cl. 46.
Natale, Frank, d. b. a. Til-E-Tabs, Watertown, Mass. 629,216, pub. 4–3–56. Cl. 44.
National Cylinder Gas Co., Chicago, Ill. 629,306. Cl. 35.
National Dryer Mfg. Corp., Chicago, Ill. 628,994, pub. 8–16–55. Cl. 21.
National Hygienic Products Corp., Akron, Ohio. 521,576, canc. Cl. 22.
National Ribbon Corp., Long Island City, N. Y. 629,183, pub. 4–3–56. Cl. 40.
Nelson, Katherine D., Mankato, Minn. 521,534, canc. Cl. 50.
Nelson, R. S., to Central Circle Airport Corp., Miami, Fla. 629,115, pub. 11–15–55. Cl. 38.
Nero, Daniel P., Glendale, Calif. 629,085, pub. 4–3–56. Cl. 34.
Nestlé Co., Inc., The, White Plains, N. Y. 629,231, pub. 4–3–56. Cl. 46.
Neumann, Morton G., d. b. a. Valmor Products Co., Chicago, Ill. 331,113, ren. 12–31–55. Cl. 51.
New England Apple Products Co.: *See*—
New England Vinegar Works, Inc., The.
New England Vinegar Works, Inc., The, d. b. a. New England Apple Products Co., Littleton, Mass. 332,921, ren. 3–3–56. Cl. 46.
New England Vinegar Works, Inc., The, d. b. a. New England Apple Products Co., Littleton, Mass. 334,544, ren. 5–5–56. Cl. 46.
New England Vinegar Works, Inc., The, d. b. a. New England Apple Products Co., Littleton, Mass. 335,425, ren. 6–2–56. Cl. 46.
New York Gear Works, Richmond Hill, N. Y. 521,694, canc. Cl. 23.
New Yorker Sewing Machine Co., The: *See*—
Garcia, Humberto A.
New Yorker Telectronics, Inc., Mount Vernon, N. Y. 628,999, pub. 4–3–56. Cl. 21.
Newberg Vineyards, The, Visalia, Calif. 521,393, canc. Cl. 46.
Nichols, J. J., Philadelphia, Pa. 628,945, pub. 4–3–56. Cl. 18.
Nichols Wire and Aluminum Co., Davenport, Iowa. 521,609, canc. Cl. 21.
Nopco Chemical Co., Harrison, N. J. 628,892–4, pub. 4–3–56. Cl. 6.
Norcross, Inc., New York, N. Y. 629,120, pub. 4–3–56. Cl. 38.
North American Aviation, Inc., Los Angeles, Calif. 629,041, pub. 4–3–56. Cl. 23.
Notogravure, Inc., New York, N. Y. 521,530, canc. Cl. 38.
O'Brien, Wilmer J., New York, N. Y. 629,299, pub. 4–3–56. Cl. 107.
Ohio Valley Baking Co., The, Chillicothe, Ohio. 629,262, pub. 4–3–56. Cl. 46.
Ohlsson & Rice Inc., Los Angeles, Calif. 629,021, pub. 4–3–56. Cl. 23.
Onyx Oil & Chemical Co.: *See*—
Richards Chemical Works, The.
Ophthalmos, Inc., Union City, N. J. 628,965, pub. 4–3–56. Cl. 18.
Orr, J. K., Shoe Co. General Shoe Corp., Nashville, Tenn. 195,848. Am. 7(d). Cl. 39.
Oscap Mfg. Co., Inc., d. b. a. Rodin, Washington, D. C. 628,940, pub. 4–3–56. Cl. 16.
Otis Elevator Co., New York, N. Y. 629,296, pub. 4–3–56. Cl. 103.
P. O. B. Mfg. Co., Inc., Cincinnati, Ohio. 628,907, pub. 4–3–56. Cl. 12.
Pabco Products Inc., San Francisco, Calif. 628,937, pub. 4–3–56. Cl. 16.
Paint Products Corp., Elgin, Ill. 628,939, pub. 4–3–56. Cl. 16.
Para-Tone Inc., Lagrange, Ill. 629,109, pub. 4–3–56. Cl. 37.
Parents' Institute, Inc., The, New York, N. Y. 521,389, canc. Cl. 38.
Parfumerie International Corday: *See*—
Parfums Corday, Inc.
Parfums Corday, Inc., to Parfumerie International Corday, Lagarenne-Colombes, France, to Parfums Corday, Inc., New York, N. Y. 333,186, ren. 3–10–56. Cl. 51.
Parker Pen Co., The, Janesville, Wis. 628,865, pub. 4–3–56. Cl. 1.
Parrish, M., Mfg. Co., Walled Lake, Mich. 629,159, pub. 4–3–56. Cl. 39.
Parsons Pharmaceuticals, Inc., Washington, D. C. 628,970, pub. 4–3–56. Cl. 18.
Patch, E. L., Co., The, Stoneham, Mass. 628,968, pub. 4–3–56. Cl. 18.
Pearl-Pressman Liberty Printing and Lithographing Co., Philadelphia, Pa. 628,935, pub. 4–3–56. Cl. 16.
Peavey Paper Mills, Inc., Ladysmith, Wis. 629,102, pub. 4–3–56. Cl. 37.
Peerless Rubber Mfg. Co., New York, N. Y. 76,258, canc. Cl. 35.
Pen Argyl Milling Co., Inc., Pen Argyl, Pa. 629,266, pub. 4–3–56. Cl. 46.
Penfield Saw Works, Inc., The, Thomaston, Conn. 629,050, pub. 4–3–56. Cl. 23.
Penn Boiler & Burner Mfg. Corp., Lancaster, Pa. 629,083, pub. 4–3–56. Cl. 34.
Penn-Plastics Corp., Glenside, Pa. 629,275, pub. 4–3–56. Cl. 50.
Pentype Corp., St. Paul, Minn. 629,222, pub. 4–3–56. Cl. 44.
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Perfecto Garcia & Bros., Tampa, Fla., to Perfecto Garcia & Bros. Inc., Chicago, Ill. 330,492. ren. 12–3–55. Cl. 17.
Perfecto Garcia & Bros., Tampa, Fla., to Perfecto Garcia & Bros. Inc., Chicago, Ill. 330,506, ren. 12–3–55. Cl. 17.
Perfecto Garcia & Bros. Inc.: *See*—
Perfecto Garcia & Bros.
Peri-Lusta, Ltd.: *See*—
Campbell, Metzger & Jacobson.
Permanente Metals Corp., The, Oakland, Calif. 521,484, canc. Cl. 10.
Personna Blade Co. Inc., New York, N. Y., to American Safety Razor Corp., Richmond, Va. 337,664, ren. 8–18–56. Cl. 23.
Phenix Cheese Co. Kraft Foods Co., Chicago, Ill. 110,295. Am. 7(d). Cl. 46.
Photo Marketing Corp., New York, N. Y., to Lippische Camerafabrik Richter & Fischer G. m. b. H., Barntrup/Lippe, West Germany. 332,883, ren. 3–3–56. Cl. 26.
Photo Marketing Corp., New York, N. Y., to Plaubel Feinmechanik und Optik, Frankfurt/Main, West Germany. 332,884–5, ren. 3–3–56. Cl. 26.
Photo Marketing Corp., New York, N. Y., to Plaubel Feinmechanik und Optik, Frankfurt/Main, West Germany. 334,332, ren. 4–28–56. Cl. 26.
Photostat Corp.: *See*—
Commercial Camera Co.
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Pioneer Battery Co.: *See*—
American Battery Mfg. Co.
Pittsburgh Coke & Chemical Co., Pittsburgh, Pa. 628,884, pub. 4–3–56. Cl. 6.
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Duplate Corp.
Plaubel Feinmechanik und Optik: *See*—
Photo Marketing Corp.
Plessner, Paul, Co., The, Detroit, Mich. 628,969, pub. 4–3–56. Cl. 18.
Plotkin, Morris S., Highland Park, Mich. 629,292, pub. 4–3–56. Cl. 52.
Plough, Inc.: *See*—
Stanco Inc.
Popular Science Publishing Co., Inc., New York, N. Y. 629,134–5, pub. 4–3–56. Cl. 38.
Post, Frederick, The, Co., Chicago, Ill. 591,642, cor. Cl. 26.
Powell, Charles A., d. b. a. Rockford Mattress Co., Rockford, Ill. 629,075, pub. 4–3–56. Cl. 32.
Powernail Co., Chicago, Ill. 628,920, pub. 4–3–56. Cl. 13.
Precision-Bilt Products Co., Brooklyn, N. Y. 629,259, pub. 4–3–56. Cl. 46.
Prefab Homes and Supplies, Inc., Baltimore, Md. 521,571, canc. Cl. 12.
Prentice, G. E., Mfg. Co., The, Kensington, Conn. 628,924, pub. 4–3–56. Cl. 13.
Procter & Gamble Co., The, Cincinnati, Ohio. 629,287, pub. 4–3–56. Cl. 52.
Progress Mfg. Co., Inc., Philadelphia, Pa. 628,997, pub. 4–3–56. Cl. 21.
Protectolarm, Inc., Philadelphia, Pa., to B & B Engineering Co., Norwood, La. 628 993, pub. 8–16–55. Cl. 21.
Psyko-Fun, Inc., Bridgeport, Conn. 521,646, canc. Cl. 22.
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Cudahy Packing Co., The.
R. B. S. Mfg. and Sales Co., Inc., Shawnee, Okla. 629,016, pub. 4–3–56. Cl. 21.

Radio Columbus, Inc., Columbus, Ohio. 629,300, pub. 4–3–56. Cl. 107.
Railley Corp., Cleveland, Ohio. 521,497, canc. Cl. 21.
Rallo, Angelo J., d. b. a. Elliott-Rallo Co., Hollywood, Calif. 629,020, pub. 4–3–56. Cl. 22.
Randall Mills Corp., Paramount, Calif. 521,546–7, canc. Cl. 10.
Raymond (Art de Beauté) Ltd., London, England. 629,290, pub. 4–3–56. Cl. 52.
Record Guild of America, Inc., The, New York, N. Y. 629,098, pub. 4–3–56. Cl. 36.
Reed, Dr., Cushion Shoe Co., Chicago, Ill. 629,170, pub. 4–3–56. Cl. 39.
Reed Unit-Fans, Inc., New Orleans, La. 629,086, pub. 4–3–56. Cl. 34.
Reich, John F., Kansas City, Mo. 521,536, canc. Cl. 50.
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Reyburn Mfg. Co., Inc., The, Philadelphia, Pa. 335,698, ren. 6–9–56. Cl. 37.
Rich Therapedic Shoe Laboratories, Inc., New York, N. Y. 629,173, pub. 4–3–56. Cl. 39.
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Richmond Dental Cotton Co., Charlotte, N. C. 629,301. Cl. 2.
Rilling Co., Bridgeport, Conn. 521,529, canc. Cl. 44.
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Robertshaw-Fulton Controls Co., Greensburg, Pa. 629,060, pub. 4–3–56. Cl. 26.
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Rockford Mattress Co.: *See*—
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Rockingham Shoe Co., Newmarket, N. H. 629,155, pub. 4–3–56. Cl. 39.
Rock-Tred Corp., Skokie, Ill. 628,908, pub. 4–3–56. Cl. 12.
Rock-Tred Corp., Skokie, Ill. 628,936, pub. 4–3–56. Cl. 16.
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Rohana, Inc., Saginaw, Mich. 521,597, canc. Cl. 22.
Ronas Corp., Farmingdale, N. J. 629,261, pub. 4–3–56. Cl. 46.
Rosedale Knitting Co., Reading, Pa. 629,217, pub. 4–3–56. Cl. 44.
Rosenblatt, A., Sons & Co., Inc., Philadelphia, Pa., to Marshall Field & Co., Chicago, Ill. 332,802, ren. 2–25–56. Cl. 39.
Rosita Products Co., Inc., Phoenix, Ariz. 629,257, pub. 4–3–56. Cl. 46.
Roxanne Leather Goods, Inc., New York, N. Y. 628,872, pub. 4–3–56. Cl. 3.
Rubber Fabrics Co., New York, N. Y. 629,198, pub. 4–3–56. Cl. 42.
Russell Brothers, Fort Fairfield, Maine. 629,253, pub. 4–3–56. Cl. 46.
Rydell, A. B., Co., Inc., New York, N. Y. 629,201, pub. 4–3–56. Cl. 42.
S. F. Appliances, Ltd., Ridgefield, N. J. 521,584, canc. Cl. 21.
S. & S. Vent-O, Inc., San Angelo, Tex. 629,089, pub. 4–3–56. Cl. 34.
Safeway Stores, Inc., Oakland, Calif. 629,068, pub. 4–3–56. Cl. 29.
Saks & Co., New York, N. Y. 629,277, pub. 4–3–56. Cl. 50.
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Salsbury Corp., Los Angeles, Calif. 628,878, pub. 3–17–53. Cl. 6.
Samann, Julius, Zug, Switzerland. 628,886, pub. 4–3–56. Cl. 6.
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Santa Cruz Processors, Santa Cruz, Calif. 629,244, pub. 4–3–56. Cl. 46.
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Sapolin Paints Inc.: *See*—
Sapolin Co. Inc.
Sassy Dog & Cat Food Co.: *See*—
California Sea Food Corp.
Sa-Tan-Ic Medicine Co., Wichita, Kans., to The Sa-Tan-Ic Medicine and Mfg. Corp., Mena, Ark. 109,134, ren. 3–21–56. Cl. 18.
Sa-Tan-Ic Medicine and Mfg. Corp., The: *See*—
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Schrafft, W. F., & Sons Corp., Boston, Mass. 629,263, pub. 4–3–56. Cl. 46.
Schramm Lack- und Farbenfabriken Aktiengesellschaft, Offenbach am Main, Germany. 628,938, pub. 4–3–56. Cl. 16.
Schueler & Co., New York, N. Y. 629,059, pub. 4–3–56. Cl. 26.
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Schurman, I. L.
Schurman, I. L., to I. L. and G. L. Schurman, d. b. a. I. L. Schurman, Chicago, Ill. 386,265, new cert. Cl. 15.
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Scooterpooper Sales, Inc., Columbia, S. C. 521,548, canc. Cl. 22.
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Seamless Rubber Co., The, New Haven, Conn. 629,221, pub. 4–3–56. Cl. 44.
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Seminole Flavor Co., Chattanooga, Tenn. 334,496, ren. 5–5–56. Cl. 45.
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Sherwin-Williams Co., The, Cleveland, Ohio. 628,918, pub. 4–3–56. Cl. 12.
Shoe Form Co. Inc., Auburn, N. Y. 521,493, canc. Cl. 22.
Shunk, L. E., Latex Products Co., Akron, Ohio. 629,213, pub. 4–3–56. Cl. 44.
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Slumber Products Corp., Memphis, Tenn. 629,078, pub. 4–3–56. Cl. 32.
Smidth, F. L., & Co., Jersey City, N. J. 336,161. ren. 6–30–56. Cl 23.
Smith, A. O., Corp., Milwaukee, Wis. 521,489, canc. Cl. 34.
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Smith, Herbert H., Bay Shore, N. Y. 521,688, canc. Cl. 39.
Smith & Nichols, Inc., New York, N. Y. 521,427, canc. Cl. 15.
Snell-Jones Tack Corp., Brockton, Mass. 521,457, canc. Cl. 13.
Societe Anonymie, Bienaime, Paris, France. 521,465, canc. Cl. 51.
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Sonic Industries, Inc., Long Island City, N. Y. 628,992, pub. 4–3–56. Cl. 21.
Sound Devices, Inc., Covington, Ky. 521,513, canc. Cl. 22.
Southeastern Pine Marketing Institute, Savannah, Ga. 628,912, pub. 4–3–56. Cl. 12.
Southern Acid & Sulphur Co., Inc., St. Louis, Mo., to Mathieson Chemical Corp., New York, N. Y. 521,671, canc. Cl. 10.
Southland Co., The, Yazoo City, Miss. 521,479, canc. Cl. 6.
Speedway Mfg. Co., Cicero, Ill. 628,996, pub. 4–3–56. Cl. 21.
Spivack, Leo H., Inc., New York, N. Y. 629,074, pub. 4–3–56. Cl. 32.
Staeditler, J. S., Nurnberg, Germany. 629,099, pub. 1–24–56. Cl. 37.
Staley, A. E., Mfg. Co., Decatur, Ill. 337,733, ren. 8–18–56. Cl. 6.
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Standard Electric Mfg. Co., Inc., West Berlin, N. J. 628,991, pub. 5–10–55. Cl. 21.
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Standard Overall Co., The, Baltimore, Md. 521,681, canc. Cl. 39.
Standard Register Co., The, Dayton, Ohio. 629,104, pub. 4–3–56. Cl. 37.
Stan-Way Pharmaceutical Laboratory, Chicopee Falls, Mass. 628,946, pub. 4–3–56. Cl. 18.
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Stine, Lester G., Harrisburg, Pa. 521,616, canc. Cl. 22.
Straight Engineering Co., Adel, Iowa. 629,048, pub. 4–3–56. Cl. 23.
Strauss, Reda R., Des Moines, Iowa. 629,181, pub. 4–3–56. Cl. 40.
Street & Smith Publications, Inc., New York, N. Y. 521,527, canc. Cl. 38.
Stuart Hall Co., Inc., Kansas City, Mo. 629,103, pub. 4–3–56. Cl. 37.
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Swift & Co., d. b. a. Armstrong Packing Co., Chicago, Ill. 629,237, pub. 4–3–56. Cl. 46.
Table Rock Laboratories, Inc., Greenville, S. C. 332,834, ren. 2–25–56. Cl. 18.
Taxey, Paul J., Chicago, Ill. 628,916, pub. 4–3–56. Cl. 12.
Taylor & Sledd, Inc., Richmond, Va. 336,776, ren. 7–14–56. Cl. 46.
Technical Publishing Co., Chicago, Ill. 629,133, pub. 4–3–56. Cl. 38.
Telet, Inc., Louisville, Ky. 629,010–11, pub. 4–3–56. Cl. 21.
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Texas Ice & Refrigerating Co., Fort Worth, Tex. 521,453, canc. Cl. 1.
Textile Licensing Co., North Wales, Pa. 629,210, pub. 4–3–56. Cl. 43.
Thomas Mfg. Corp., Newark, N. J. 521,566, canc. Cl. 22.
Thomas Textile Co., Inc., New York, N. Y. 629,174, pub. 4–3–56. Cl. 39.
Thompson, Benton, Co., Inc., The, Naugatuck, Conn. 521,686, canc. Cl. 39.
Thompson, John R., Co., d. b. a. Holloway House Cafeterias Co., or Holloway House, Inc., Chicago, Ill. 629,238, pub. 4–3–56. Cl. 46.
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Tog-Loc, Inc., Bellevue, Wash. 629,049, pub. 4–3–56. Cl. 23.
Top Value Enterprises, Inc., Dayton, Ohio. 629,127, pub. 4–3–56. Cl. 38.
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Truval Manufacturers, Inc., New York, N. Y. 629,140, pub. 8–31–54. Cl. 39.
Tu-Way Products Co., Detroit, Mich. 625,848, cor. Cl. 29.
Twin Rose Products Co., to Twin Rose Products Co., Swink, Colo. 521,437, canc. Cl. 10.
Underwood Corp., New York, N. Y. 629,062, pub. 4–3–56. Cl. 26.
Union Engineering, Inc., Los Angeles, Calif. 565,513, canc. Cl. 16.
United Drug Co., Boston, Mass., to Rexall Drug Co., Los Angeles, Calif. 109,378, ren. 4–4–56. Cl. 45.
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United Mills Corp., Mount Gilead, N. C. 629,161, pub. 4–3–56. Cl. 39.
United Mills Corp., Mount Gilead, N. C. 629,171, pub. 4–3–56. Cl. 39.
United States Gypsum Co., Chicago, Ill. 335,609, ren. 6–9–56. Cl. 16.
United States Playing Card Co., The, Cincinnati, Ohio. 336,325, 12(c) pub. 6–19–56. Cl. 22.
United States Rubber Co., New York, N. Y. 629,162, pub. 4–3–56. Cl. 39.
United States Shoe Corp., The, Cincinnati, Ohio. 334,068, ren. 4–21–56. Cl. 39.
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Universal Winding Co., Cranston, R. I. 629,052, pub. 4–3–56. Cl. 23.
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Vick Chemical Co., New York, N. Y. 629,007, pub. 4–3–56. Cl. 21.
Viewlex, Inc., Long Island City, N. Y. 629,063, pub. 4–3–56. Cl. 26.
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Vita Food Products, Inc., New York, N. Y. 629,249, pub. 4–3–56. Cl. 46.
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U. S. GOVERNMENT PRINTING OFFICE: 0—1959

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
June 26, 1956 Volume 707 Number 4

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NOTICES

Adjudicated Patent

(D. C. N. Y.) Volman Patent No. 2,477,531 (273—95), for an improvement in magnetic dart games, *Held* invalid. *Toy Enterprises of America* v. *Pressman Toy Corp.*, 139 F. Supp. 701; — USPQ —.

Adverse Decisions in Interferences

In the designated interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed.

Pat. 2,526,347, L. R. Goliaday, Method of and means for producing frequency modulation, decided May 24, 1956, Interference No. 85,468, claims 1 and 2.

Pat. 2,666,177, R. S. Brannin, Jr., and P. Halpert, Servomotor system having differential torque displacement feedback, decided May 11, 1956, Interference No. 87,212, claims 2, 3, 5, 6, and 7.

Pat. 2,683,349, O. N. Lawrence, Jet engine combustion system having burner in the jet pipe and controlling means therefor, decided May 23, 1956, Interference No. 87,585, claim 1.

Pat. 2,710,575, E. G. Overman, Frankfurter barbecue spit, decided May 21, 1956, Interference No. 87,788, claim 1.

Disclaimer

2,583,134.—*Harold V. Atwell*, Beacon, N. Y. CATALYTIC SYNTHESIS OF HYDROCARBONS. Patent dated Jan. 22, 1952. Disclaimer filed May 2, 1956, by the assignee, *The Texas Company*.

Hereby enters this disclaimer to claims 1, 2, 3, 6, 7, 8, 9, 10, 11, and 12 of said patent.

Patents Available for Licensing or Sale

2,728,925. Bed Rail Attachment (for Supporting Various Articles, Such as Clothing, Etc.) R. L. Ray, 302 N. Main St., Lenoir, N. C.

2,737,731. Foot Cushion (Shoe). John D. Kostouros, 593 Potrero Ave., San Francisco, Calif.

2,744,352. Water Kite (Fisherman's Fishing Kite). Arvid R. Holgerson, 3225 C St., Sacramento 16, Calif.

2,746,322. Roof Foiler for Repairing Shingles. John Joseph French, 1535 Grant St., Bellingham, Wash.

2,747,048. Shockproof Socket. John C. Peters, 6204 Lincoln Ave., Morton Grove, Ill.

2,747,122. Spark Plugs. Ernest G. Booth, 5605 N. Church Ave., Tampa 3, Fla.

General Electric Company offers the following 14 patents for non-exclusive licensing on reasonable terms to domestic manufacturers.

Applications for licenses under the following 6 patents may be addressed to: Patent Counsel, Turbine Division, General Electric Company, 273 North Ave., Schenectady 5, N. Y.

2,554,212. Pneumatic Vibrator Machine.

2,726,523. Lubrication Arrangement for Flexible Couplings.

2,729,033. Hobbing Type Apparatus and Method for Grinding Gears.

2,729,260. Screw Locked by Deforming Pin.

2,731,576. 6-Phase, 2-Circuit Generator.

2,737,993. Deformable Locking Device Used With Axially Recessed Rotatable Members.

Applications for licenses under the following 5 patents may be addressed to: General Electric Company, Patent Counsel, Measurements and Industrial Products Division, 920 Western Ave., West Lynn 3, Mass.

2,647,033. Spark Stylus Recording Apparatus.

2,654,254. Caging Device for Gyroscopes.

2,656,449. Electric Radiant Heat Drier.

2,723,366. Starting and Operating Circuit for High Pressure Gaseous Discharge Device.

2,729,282. Electrically Operated Device for Starting Combustion in Liquid Fuel Burners.

Applications for licenses under the following 3 patents may be addressed to: General Electric Company, Component Products Division, 1635 Broadway, Fort Wayne, Ind.

2,740,904. Circuit for Vehicle Refrigeration.

2,740,905. Reactive Device.

2,740,931. Instantly Switching Reversible Motor.

New Applications Received During April 1956

Patents	6,497
Designs	420
Plants	5
Reissues	19
Total	6,941

Issue

Patents	1,003	No. 2,751,592 to No.	2,752,594, incl.
Designs	60	No. 178,106 to No.	178,165, incl.
Plants	4	No. 1,488 to No.	1,491, incl.
Reissues	4	No. 24,169 to No.	24,172, incl.
Total	1,071		

CONDITION OF PATENT APPLICATIONS AS OF APRIL 30, 1956

Total number of pending applications (excluding Designs)	219, 129
Total number of pending Design applications	6, 908
Total number of applications awaiting action (excluding Designs)	122, 613
Total number of Design applications awaiting action	2, 652
Date of oldest new application	Jan. 12, 1955
Date of oldest amended application	Nov. 30, 1953

ROSA, M. C., Director, Patent Examining Operation

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 60, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 44, 46, 48, 51, 54, 69, 70.
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 10, 18, 22, 28, 45, 47
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE.	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	4-7-55	6-30-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	8-1-55	2-1-55
3. (VII) LE ROY, C. A. (WINDHAM, R. K., acting), Metal Founding and Treatment; Metallurgy (Process and apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	8-9-55	3-29-54
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	7-8-55	10-8-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	7-18-55	1-14-55
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic Amides, Amines, General Organic Processes	5-18-55	8-9-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	8-10-55	3-29-54
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	3-7-55	6-9-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	6-22-55	7-12-54
10. (VI) BOYD, S., Firearms; Ordnance; Ammunition; Explosive Charge Making	3-4-55	5-5-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	8-8-55	9-2-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	4-4-55	1-8-54
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	4-6-55	2-23-54
14. (III) MANIAN, J. C., Metal Working (part), e. g. Sheet Metal, Wire Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	3-22-55	4-19-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	8-1-55	4-29-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	6-17-55	2-24-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	7-1-55	7-19-54
18. (VI) BLUM, A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	4-22-55	6-29-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	7-5-55	8-16-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	7-29-55	5-20-54
21. (III) MADER, R. C., Textiles	7-26-55	5-21-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	7-26-55	7-26-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	1-12-55	11-30-53
24. (III) DRACOPOULOS, P. T. (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	6-13-55	1-27-55
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	8-1-55	10-1-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	8-17-55	1-3-55
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	7-11-55	11-22-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	6-17-55	9-3-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	5-2-55	1-27-55
30. (VII) O'LEARY, R. A. (MICHAEL, E. J., acting), Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	10-18-55	6-24-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	4-21-55	11-4-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	7-20-55	2-1-55
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	8-1-55	4-8-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	7-11-55	4-6-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	7-18-55	11-2-54
36. (V) McFADYEN, A. D., Measuring and Testing	5-26-55	2-8-55
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	6-24-55	10-20-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g., Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	8-1-55	12-1-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	8-22-55	6-22-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	8-2-55	2-2-55
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	4-25-55	4-27-54
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	2-18-55	7-27-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	6-6-55	8-16-54
44. (II) EVANS, N. H., Antennas; Automatic Pilots; Directive Radio Systems; Mass Spectrometers; Nuclear Batteries; Nuclear Resonant Devices; Neutron Detecting and Measuring; Radar; Sonar; Torpedoes	1-26-55	3-26-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	6-28-55	1-10-55
46. (II) WILES, W. G., Actinide Series (e. g., fissionable) Compounds; Sintered Metal Stock; Explosives; Power Plants (part); Metallurgy (part); Surgery (part); Radioactive Medicines; Irradiation Chemistry; Carbon Chemistry (part)	4-11-55	8-20-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	8-12-55	1-7-55
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	5-6-55	6-4-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	5-17-55	10-26-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resin Compositions, Synthetic Rubber Compositions, Natural Rubber	6-24-55	4-19-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	8-1-55	4-16-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	5-31-55	7-28-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	9-2-55	2-1-55
54. (II) NILSON, R. G. (SAX, E. J., acting), Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	6-2-55	6-1-54
55. (VII) KLINE, J. R., Surgery; Dentistry; Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	3-29-55	5-6-54
56. (I) KEELY, J. E. (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	8-4-55	2-3-55
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	11-4-55	8-31-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	8-2-55	4-12-54
59. (I) HENKIN, B. (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	5-27-55	6-2-54
60. (I) MANGAN, P. E., Carbon Chemistry (part), e. g., Synthetic Resins, Synthetic Rubber	7-1-55	5-7-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	7-13-55	1-24-55
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	7-13-55	11-17-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	7-15-55	9-2-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	8-1-55	5-17-54
66. (V) LISANN, I. (BUCHLER, M., acting), Geometric Instruments; Automatic Weighing Scales; Acoustics	7-1-55	4-6-54
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	5-20-55	4-25-55
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	6-1-55	1-13-54
70. (II) BREWRINK, J. L., Security laws administration.	5-10-55	1-11-55
CLASS. DIVS. I (VII) LANHAM, B. E., Paper Making; Photographic Processes and Products	8-1-55	2-24-55
CLASS. DIVS. II (II) LADY, J. E., Oscillators; Amplifiers; Resistances and Rheostats	9-21-55	9-28-54
CLASS. DIVS. III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	8-1-55	12-27-54
CLASS. DIVS. IV (VI) SMITH (Mrs.), M. P., Harrows and Diggers; Plows; Fluid Sprinkling, Spraying and Diffusing	8-1-55	7-1-55
CLASS. DIVS. V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	10-31-55	10-11-55
DESIGNS (III) A—BREHM, G. L., Industrial Arts	10-8-55	10-10-55
DESIGNS (III) B—GRAY, M. A., Household, Personal and Fine Arts		

The following divisions have been abolished: 65 and 66

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during June 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1955*.

Patents	Numbers 2,160,805 to 2,164,301, inclusive
Plant Patents	Numbers 330 to 333, inclusive

DECISIONS IN PATENT AND TRADEMARK CASES

United States Court of Appeals Second Circuit

HELENE CURTIS INDUSTRIES, INC. ET AL. v. SALES AFFILIATES, INC.

THE GILLETTE COMPANY ET AL. v. SALES AFFILIATES, INC.

SALES AFFILIATES, INC. ET AL. v. C. V. LAYDEN, DOING BUSINESS AS SOUTHWESTERN BEAUTY PRODUCTS COMPANY

SALES AFFILIATES, INC. ET AL. v. SKILLERN & SONS, INC. ET AL.

Doc. Nos. 23185, 23186, 23187, 23188. Decided April 9, 1956

[— F.2d — : — 109 USPQ 159 —]

1. SPECIFICATION — DISCLOSURE — CRITICAL LIMITATIONS— 35 U. S. C. 112.

Held that a disclosure in a specification which teaches that a limitation is critical is enough to satisfy 35 U. S. C. 112 even though that limitation is not expressly stated to be critical.

2. SPECIFICATION AND CLAIMS—CLAIMS MAY INCLUDE ONLY A PORTION OF DISCLOSED INVENTION.

Held that "a patentee may so state his claims, which will measure the scope of his monopoly, as to include only a portion of his disclosed invention and abandon the remainder to the public."

3. SPECIFICATION—DISCLOSURE—CRITICALITY.

Held that criticality may not be based solely on commercial superiority; that a limitation is critical only if based on physical or chemical fact.

4. SAME—SAME—SAME—DETERMINATION OF.

"It is, of course, true that patentable invention must be measured by the advance which it teaches over the prior art. But in determining the existence or nonexistence of such physical phenomena as demonstrate a critical advance over the prior art, we think the court is entitled to such aid as derives from any relevant technique—even one not developed until after the invention at issue."

5. INVENTION—DEPENDS ON PRIOR ART EXISTING AT INVENTION DATE.

"The question of patentable invention depends upon the prior art existing at the invention date of the patent in suit."

6. PRIOR ART—LATER ISSUING, EARLIER FILED PATENT.

Held that a patent which did not issue until after the filing date of the patent in suit although earlier filed, should not be treated as part of the prior art for purposes of determining the issue of patentable invention.

7. REFERENCE—TYPEWRITTEN CANADIAN PATENT AS PRIOR ART.

Held that a Canadian patent which was typewritten—not printed—was a prior art reference.

8. ANTICIPATION—UNDER 35 U. S. C. 102 (a) AND 35 U. S. C. 102 (e).

Held that earlier filed U. S. patents which did not go to issue until after the filing date of the patent in suit could not constitute part of the prior art or be anticipating patents under 35 U. S. C. 102 (a) but that, nevertheless, they were anticipatory under the doctrine of *Alexander Milburn Co.* v. *Davis-Bournonville Co.*, 270 U. S. 390, now codified in 35 U. S. C. 102 (e).

9. SAME—*Alexander Milburn* DOCTRINE AND 35 U. S. C. 102 (e).

Held that the scope of the *Alexander Milburn* doctrine and of 35 U. S. C. 102 (e) encompasses anticipatory material contained in patent claims as well as matter disclosed in the specification.

10. CLAIMS—DEFINITENESS—CLAIMS NARROWER THAN DISCLOSURE.

"• • • the applicant if he wished was entitled to claim a monopoly narrower in scope than that of his full disclosure and thereby abandon to the public so much of his invention as lay outside his stated claims. That is what the defendant insists was done. However, because this was done the requirement of the act for definiteness in the statement of claims must be strictly construed. In the ordinary case, in which the intended scope of the claims is commensurate with the scope of the disclosure, any peripheral uncertainty as to the claims can be clarified by reference to the application. Not so, however, when the claims are concededly narrower than the disclosure, as here. Confronted with claims such as these, a member of the public is left at his peril to guess just where the applicant has drawn the line between his claimed monopoly and the public domain."

11. MOTION FOR NEW TRIAL—NEWLY DISCOVERED EVIDENCE.

A motion for a new trial on the ground of newly discovered evidence based on a U. S. patent application *Held* not seasonably brought after appeal when issues of the Official Journal of Patents of South Africa reporting the filing and granting of a patent corresponding to the U. S. application had been received in the U. S. Patent Office before presentation of evidence had been concluded.

12. SAME—SAME.

"In one aspect, it is indeed harsh to charge the defendant with lack of diligence for its failure earlier to discover the allegedly impeaching material of this patent and its underlying application. But absence of knowledge by an inventor of the existence of an earlier patent will not save him from its anticipatory effect; and when a defendant, charged with infringement, is preparing his defense he must make his search for anticipatory patents in season to present them at trial. To relieve either the inventor or the infringer of these requirements would vastly add to the already great uncertainty as to the validity of outstanding patents: it would open the door to patent litigation on an interminable piecemeal basis. The same results will follow if after trial an infringer whose defense of invalidity has been overruled is given opportunity to reopen the case for the presentation of after discovered anticipations or if after trial a patentee whose patent has been adjudged invalid can reopen his case to present after discovered patents for material thought either to support his own position or to destroy or weaken his adversaries' position."

13. PARTICULAR PATENTS — McCONOUGH PATENT NO. 2,577,710—VALIDITY.

The decrees of the District Court holding invalid McDonough Patent No. 2,557,710, for permanent hair waving compositions, and dismissing on the merits a counterclaim based on alleged tortious interference with the prosecution of the patent application, affirmed.

ON APPEAL from decrees of the United States District Court for the Southern District of New York.

AFFIRMED.

Kenyon & Kenyon (*Theodore S. Kenyon*, *Maurice S. Cayne*, and *Malvin R. Mandelbaum* of counsel) for Helene Curtis Industries, Inc., Helene Curtis Sales, Inc., and C. V. Layden, doing business as Southwestern Beauty Products Company.

Henry R. Ashton (*Edgar H. Kent*, *Rynn Berry*, and *Martin Kirkpatrick* of counsel) for The Gillette Company.

Hawkins, Delafield & Wood (*Clarence Fried* of counsel) for Skillern & Sons, Inc., and Walgreen Drug Company of Texas.

Morgan, Finnegan, Durham & Pine (*George B. Finnegan, Jr.*, *William D. Denson*, and *Jerome G. Lee* of counsel) for Sales Affiliates, Inc.

Before MEDINA and HINCKS, *Circuit Judges*, and BURKE, *District Judge*

HINCKS, *Circuit Judge*, delivered the opinion of the court.

These four appeals all involve the validity and infringement of United States Patent No. 2,577,710 which issued to McDonough on December 4, 1951, on an application dated June 16, 1941. The appeals are brought from four decrees of the District Court for the Southern District of New York, in each of which, on a considered opinion reported in 121 F. Supp. 490, it was adjudged that the patent in suit was invalid. The decrees were entered in four suits which had been consolidated for trial and referred to Honorable Simon R. Rifkind as Special Master for report together with his findings of fact and conclusions of law. Two of these suits were actions brought for the infringement of the patent in suit by Sales Affiliates, Inc. against several defendants; the other two were actions for declaratory judgments brought against Sales Affiliates, Inc., seeking a declaration of validity and non-infringement. For purposes of this opinion, we will hereinafter refer to the parties by the terminology used by the Master and the court below, using the designation of "plaintiffs" to refer to the parties collectively attacking the patent and "defendant" to refer to Sales Affiliates, the equitable owner of the patent.

Although the patent in suit as issued contained 18 claims, all of which were dealt with below, the defendant on brief states: "For the purpose of this appeal, appellant stands on claims 2, 12, 17 and 18." We take this to be a concession that as to the other claims in suit below, the decree may be affirmed. We shall, therefore, focus our attention on these four claims.

We turn first to consider the scope of the invention claimed. The patent relates generally to a chemical composition suitable for permanent hair waving. The inventor's objective, as stated in the patent specifications, was a composition as effective and as rapid, even when applied without heat, as the sulfides used by the prior art, but free from the bad odor and toxicity characteristic of the sulfides. In his specifications the patentee says "I have discovered that I can obtain these objects [sic] by providing as a waving agent a mercaptan or mixture of mercaptans * * * and that an effective waving solution can be obtained by proper formulation including a mercaptan in water." And the specifications further recite discovery (1) that mercaptans become less effective as their molecular weight increases, stating by way of "Example" that a specified mercaptan having a molecular weight of 77 "is far more efficient as a waving agent than cysteine (molecular weight 121)"; (2) that both the polar and non-polar mercaptans function satisfactorily when used in solutions having a concentration of "usually less than 15%"; (3) that they "are especially effective when the pH range is from 7.0 to 10.0, the preferred range being about 9.2"; and (4) that to produce the desired alkalinity, alkaline materials "are particularly effective with less hair destructive effect" if they have "a dissociation constant less than 5×10^{-3} and preferably about 10^{-5}."

The claims relied on all assert a permanent waving composition in which, whether applied with or without heat, a mercaptan is the waving agent and, in each of the four claims all four of the "discoveries" listed serially above are included as limiting factors. Thus in each the mercaptan is limited to one having a molecular weight of "less than 121" and in all four the dissociation constant of the alkaline base is that stated in the specifications to be "particularly effective." The alkalinity of the solution is, respectively, limited to that "ranging from about pH 9.2 to not higher than 9.5" (claims 2 and 12); to "about pH 9.2" (claim 17); and to "higher than pH 7 and not higher than pH 9.5" (claim 18). The concentration of the mercaptan solution is variously stated as "3% to less than about 8%" (claims 2 and 12); as "1% to about 10%" (claim 17); and "about 6%" (claim 18).

In his penetrating analysis of the claimed invention, the master wrote as follows:

"It is of course elementary in the patent law that generic claims, such as involved in the present patent, cannot survive where a species within the claimed genus has been invented, known or used by others prior to the patentee's date of invention. 'A generic monopoly must rest upon a generic discovery.' *Metals Recovery Co.* v. *Anaconda Copper Mining Co.*, 31 F.2d 100, 103 (9th Cir. 1929). Prior invention, disclosure or use of a species anticipates the genus. *In re Steenbock*, 83 F.2d 912 (CCPA 1936); *Application of Kyrides*, 159 F.2d 1019 (CCPA 1947).

"That McDonough was not the first to discover the usefulness of mercaptans as permanent waving agents or hair softeners is clear beyond peradventure. The U. S. Patent No. 2,201,929, to Speakman, issued May 21, 1940, on an application dated December 9, 1935, specifically disclosed and claimed a method of permanently waving hair in which the waving agent is cysteine hydrochloride, a mercaptan salt, in an alkaline solution of at least pH 10.

"And so here, defendant posits invention not on the broad generic discovery of mercaptan waving lotions, but rather on the discovery that special laws and criteria govern mercaptans in hair waving."

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"In more conventional patent terminology, the invention on which these claims may be said to rest, is the discovery that certain *critical* limits exists for mercaptan waving. Indeed, the law of criticality has been the battlefield upon which much of the present contest has been waged with seemingly irreconcilable views as to the meaning of the term and its applicability to the facts at hand.

"The term 'criticality' as used in the patent sense is not synonymous with invention, but rather, more precisely, is a device for determining the presence or absence of invention. The question always is whether the inventive act is of sufficient magnitude to justify the extension of a legal monopoly for the matter covered by the claims. And in determining whether a patentable invention is present, certain rules have been formulated, among which is that of criticality. Thus, as has frequently been said, the mere location of the optimum conditions of use for a known composition of matter does not constitute 'invention' so as to entitle the discoverer thereof to a monopoly. That objective, however useful the final result, can be achieved by 'patient experiment,' see *Wallace* v. *F. W. Woolworth Co.*, 133 F.2d 763, 764, cert. denied 320 U. S. 739 (1943): no inventive genius is necessary. Rather, it is only where, other requisites being present, the patentee has found a point or points at which some result differing in kind—and not merely in degree—from the results achieved by the prior art, that an inventive act may be said to exist. At least for this circuit, the Court of Appeals has summarized the rule in definite terms. In *Kwik Set, Inc.* v. *Welch Grape Juice Co.*, 86 F.2d 945, 947 (2d Cir. 1936), it said:

"'A patentee may not arbitrarily select a point in a progressive change and maintain a patent monopoly for all operations in that progressive change falling on one particular side of that arbitrarily selected point. It is only where the selected point corresponds with the physical phenomenon and the patentee has discovered the point at which that physical phenomenon occurs that the maintenance of a patent monopoly is admissible.'"[1]

This analysis was accepted by the court below and, except for the applicability of the Kwik Set case, has not been questioned by the defendant on this appeal. We, too, accept it not only as a correct statement of the law generally applicable but also as broadly stating the scope of the patentable subject-matter in a sub-generic discovery such as is here involved.

[1] As the master noted, the Kwik Set case was cited with apparent approval in *Dow Chemical Co.* v. *Halliburton Co.*, 324 U. S. 320, 329.

Disclosure of Criticality

It was held below that under 35 U. S. C. A. § 112 the patent was invalid for lack of disclosure that any one of the four limiting factors listed above was a "critical" limitation. [1] As to this, we hold that a disclosure which teaches that a limitation is critical is enough to satisfy § 112 even though the limitation is not expressly stated to be "critical." We think it plain that even to one skilled in the art the reference to a mercaptan *concentration* as "usually less than 15%" would not teach that the limit stated marked a difference in phenomenon. Similarly, nothing in the specifications relating to the molecular weight of the selected mercaptan teaches "less than 121" is a critical limit. Nor, we think, do the specifications teach a *critical range* for the dissociation constant of the alkaline base. So far, we sustain the holding below. But we cannot sustain the holding that the specifications failed to teach that there was anything critical about the pH of the described solution. The specifications speak of a pH range of 7 to 10. They first say that this range is "especially effective" and later refer to it as the "desired range." Then the specifications go on to say:

"This pH range is particularly critical when the waving agent is used for that type of waving employing a chemical setting agent, as in the so-called 'cold waving' method, since in that system the necessary requirement of speed without hair destruction demands a high concentration of the waving agent in the waving solution. If the pH value is not high enough slow waving action will result and if too high the hair will be destroyed or badly damaged. While with sulfite a shorter waving time may require a pH of 10 or above, with these more powerful waving agents, the use of pH's higher than 9.5 must be watched very carefully for with pH of 10 or above, hair destruction or injury may occur before a satisfactory wave is obtained."

We agree that this passage, in saying that if the pH value "is not high enough slow waving action will result" does not teach that pH 7 is a critical low limit of the range: the language used does not import any difference of phenomenon below pH 7 but suggests at most a difference in the degree of the speed of the wave. So far, we agree, there was no disclosure of criticality. But in saying that "if too high the hair will be destroyed or badly damaged" we think the subsequent clause in the passage quoted, on which the range, pH 10, is critical. It teaches that above that limit the solution will have a different and damaging reaction on the hair. And that teaching, though somewhat weakened, we think not wholly nullified by the subsequent clause in the passage quoted, on which the master largely relied, saying "hair destruction or injury *may* occur before a satisfactory wave is obtained."

We have then this situation. The patent, as we read it, teaches that a pH ceiling of 10 is a critical limitation: it does *not* teach that a pH floor of 7, or a floor of any pH lower than 10, is a critical limitation. As a result, we hold, the patent, if it survives attacks on its validity on other grounds, is not invalid because of a complete failure to disclose criticality. It discloses an invention comprising all the specified solutions which have a pH characteristic of less than 10.

Criticality in Fact

We turn next to appraise the proofs on which the plaintiffs rely for their contention that none of the limitations disclosed in the patent, including the limitation to a pH 10 ceiling, are in fact critical. That the criticality of pH *10* is the crucial problem is not altered by the fact that the applicant chose to limit his claims to solutions having a lower pH characteristic than 10. [2] For a patentee may so state his claims, which will measure the scope of his monopoly, as to include only a portion of his disclosed invention and abandon the remainder to the public.[2]

[3] The defendant argues strenuously that the criticality of pH 10 must be tested by the commercial requirements of the tightest curl values without damage in the shortest time. Thus defendant's position is predicated on the premise that criticality may be based solely on commercial superiority. This contention we overrule on the authority of *Kwik Set, Inc.* v. *Welch Grape Juice Co.*, 2 Cir., 86 F.2d 945, 947, which we now reaffirm. We hold that the applicable standard is one of physical (in this case, of chemical) phenomenon—that a limitation is critical only if based on physical or chemical fact.[3]

It was found below that successful hair waving without damage to the hair could be accomplished by the use of mercaptan solutions having an alkalinity in excess of pH 10. That finding was based in part on the result of tests made by the plaintiffs' expert witness Brown.[4] These tests, it is true, indicated that solutions below pH 10 effected tighter curls. But we think that fact demonstrates not criticality at any particular degree of alkalinity but only that the optimum range lay somewhat below pH 10. The finding below had further substantial support from the evidence relating to tests made by the defendant which showed (1) a successful wave without hair damage by the use of a mercaptan solution of pH 10.2 and (2) tests resulting in hair damage with mercaptan solutions of pH 9.5 and even at pH 9.2. We hold this finding was supported by adequate evidence properly admitted.

The defendant, however, contends that Brown's tests were not admissible on the issue of criticality. It asserts that commercial practice in hair waving in 1941, when his application was made, was to wave by the "circulation" method and not by the "direct application" method used in Brown's tests. And so, the defendant argues, to test the criticality of McDonough's pH range by the direct application method was erroneously to apply a testing technique which postdated McDonough's invention date. We think the argument is fallacious in law. [4] It is, of course, true that patentable invention must be measured by the advance which it teaches over the prior art. But in determining the existence or non-existence of such physical phenomena as demonstrate a critical advance over the prior art, we think the court is entitled to such aid as derives from any relevant technique—even one not developed until after the invention at issue.

It is not necessary, however, for us to rest our decision on the ground that the defendant's argument is unsound in law. It also lacks a basis on the facts. For in the field of hair waving, the "direct application" method, even though it may not have been the

[2] *United Chromium* v. *International Silver Co.*, 2 Cir., 60 F.2d 913, cert. denied, 288 U. S. 600.

[3] *Libbey-Owens-Ford Glass Co.* v. *Celanese Corp. of America*, 6 Cir., 135 F.2d 138, 145–6; *David Belais, Inc.* v. *Goldsmith Bros. Smelting & Refining Co.*, 2 Cir., 10 F.2d 673; *Brady Brass Co.* v. *Ajax Metal Co.*, 3 Cir., 160 Fed. 84.

[4] These tests also demonstrated the absence of criticality in the other factors which, under the claims, were imposed on the use of mercaptans.

predominating commercial method in 1941, at least as early as 1940 had had substantial commercial vogue. It was the method of application used in "cold waving" by the so-called "Turban" wave system. It had been used with waving solutions as early as 1934. Its existence was attested in Speakman's Canadian Patent No. 365,290,[5] issued April 6, 1937, on an application dated December 10, 1935. It also was reflected in Speakman's U. S. Patent No. 2,261,094, issued October 28, 1941, on an application filed December 7, 1935,[5] which disclosed along with other waving agents the mercaptan cysteine hydrochloride, and definitely taught cold waving by the direct application, as well as the circulation, method.

We are satisfied that the finding made below, that the pH 10 ceiling was not critical in fact, was supported by ample evidence. Even more imperatively the proofs required a finding that a limitation to a pH floor of 7—if, contrary to our interpretation of the patent, that limitation had been disclosed as critical—was not in fact critical. Likewise as to other disclosed limitations such as that relating to the molecular weight of the selected mercaptans. At most, all these limitations disclosed some teaching—perhaps useful teaching—as to matters of degree affecting the use and selection of mercaptans in hair waving. But such teaching, we hold, did not rise to the level of patentable invention: it did not warrant a private monopoly over the preferred area of the previously disclosed genus of mercaptan hair waving.

The plaintiffs did not confine their attack on the validity of McDonough's claims to the proof of the non-criticality of the limitations stated in the claims. They contended below, and press their contentions on appeal, that the claims in other respects lack patentable invention These contentions also were sustained, on the Master's recommendation, by the court below. We, too, will consider and rule on those grounds of the decision below. For purposes of our ensuing discussion, we will assume—contrary to our holdings indicated above—that a pH range of 7 to 10 was both disclosed by the specifications as critical and was in fact critical.

[5] The question of patentable invention depends upon the prior art existing at the invention date of the patent in suit. Consequently, we will preface our discussion of the problem as to invention by an examination of the holding made below that McDonough was not entitled to a pre-application invention date.

McDonough's Invention Date

The defendant contends that McDonough conceived his invention and reduced it to practice long prior to his application date which was June 16, 1941. It points to a memo by McDonough dated September 12, 1935, in which it was noted that "cysteine even at pH 7 will give a satisfactory permanent waving solution." It points to McDonough's contribution to the commercial production of thioglycollic acid in 1940. It stresses tests and experiments made between 1935 and 1941 with various mercaptan solutions of various pH contents. All the defendant's proofs on this issue we have examined and find wholly without serious challenge to the holding below. Proof that McDonough in 1935 tested cysteine in a pH 7 solution noting a satisfactory result, and that McDonough was a "pioneer" in the mercaptan-hair-waving field, and proof of his experiments in the 1935–1941 period, falls far short of demonstration that prior to his application date McDonough had discovered that the broad genus of mercaptans were suitable for hair waving only in solutions having an alkalinity of less than pH 10. The defendant in its brief asserts that in 1937 McDonough's first cold waving test with thioglycollic acid and ammonia in a pH 8.9 solution having a 6% concentration "was a reduction to practice of the very composition covered by claims 17 and 18." But proof of a test with a specific waving agent at a specific pH and at a specific percentage of concentration is hardly a reduction to practice of the broad range of waving agents in the broad areas of concentrations and pH's specified in claims 17 and 18, respectively. Moreover, since the defendant itself argues that the claims are narrower than the disclosed invention, it cannot consistently urge that a test within the limits of the claims constitutes a reduction to practice of the broader invention which it insists is disclosed in the specifications. It is the date of *that* discovery which operates as McDonough's "invention" date—not the date on which a successful test was made with a single mercaptan solution within the disclosed pH limit. It is asserted that early in 1941 a series of tests had been made in which McDonough reported "pH seems best about 8–9." Certainly that comment was inadequate to show that McDonough then had in mind pH 10 as a top, critically, limiting factor. Nor does the March 1941 preliminary draft of his patent application definitely indicate that even then his invention had been completed. This document says the mercaptan solutions "are most effective when the pH range is 7.5 to 9.5." It goes on to say that this range "is particularly critical" in cold waving, and that "pH's higher than 9.5 must be watched very carefully and with pH of 10 or above hair destruction * * * occurs." A comparison between the language quoted from this document and that of the application as filed on June 16, 1941, suggests that as late as March 1941, McDonough's conception of his invention was still in process of change. After weighing all the evidence to which the defendant particularly points as supporting a pre-filing date against the evidence summarized by the master and judge below which looks the other way, and having in mind that the burden was on the patentee to prove a pre-filing date by clear and convincing evidence, *United Shoe Machinery Corp.* v. *Brooklyn Wood Heel Corp.*, 2 Cir., 77 F.2d 263, we sustain the finding that the defendant has not proved a pre-filing date of invention.

Lack of Invention

Having found, rightly we hold, that McDonough was not entitled to a pre-filing invention date, the court below held that the McDonough claims lacked patentable invention over Maeder's Australian Patent No. 17990/34, issued on March 7, 1935, on an application dated June 13, 1934; Pye's U. S. Patent No. 2,183,894, issued on December 19, 1939, on an application dated July 26, 1937; the first Speakman U. S. Patent No.

[5] That Speakman's Canadian patent was not printed and that his U. S. Patent 2,261,094 did not issue until after McDonough's application date are incidents not affecting their relevance and competence to prove the contemporaneous existence of a commercial practice.

2,201,929, issued May 21, 1940, on an application dated December 6, 1935; the second Speakman U. S. Patent No. 2,261,094, issued on October 28, 1941, on an application dated December 9, 1935; Speakman's Canadian Patent No. 365,290, issued on April 6, 1937, on an application dated December 10, 1935; and over the depilatory art including U. S. Patent No. 2,352,524 to Evans and McDonough, issued June 27, 1944, on an application dated June 20, 1938.

[6] We think the defendant is right in its insistence that the second Speakman patent, which did not issue until after McDonough's filing date, should not be treated as part of the prior art for purposes of determining the issue of patentable invention in McDonough's claims. *Old Town Ribbon & Carbon Co.* v. *Columbia R. & C. Mfg. Co.*, 2 Cir., 159 F.2d 379; *Comolite Corp.* v. *Davidovicz*, 2 Cir., 111 F.2d 121; *Stelos Co.* v. *Hosiery Motor-Mend Corp.*, 2 Cir., 72 F.2d 405. However, even if the court below erred in treating that as a prior art patent, the error is of no moment because Speakman's Canadian Patent No. 365,290, which issued on April 6, 1937, on an application filed December 10, 1935, *was* part of the prior art and just as clearly as Speakman's second U. S. patent, disclosed in its specifications the use of cysteine hydrochloride as a waving agent in a pH 8 solution, which in reaction to the natural acidity of the hair, might be expected to drop to pH 6; and also that optimum results are obtained when the solution is either pH 6, or 10, or above. [7] The defendant now contends that Speakman's Canadian patent was not a prior art reference because it was typewritten—not printed. That contention we think untenable. *Sirocco Engineering Co.* v. *B. F. Sturtevant Co.*, 2 Cir., 220 F.137. Cf. *Trico Products Corp.* v. *Delman Corp.*, 8 Cir., 180 F.2d 529.

We think it rightly held below that in view of Pye it involved no patentable invention over Speakman's first U. S. patent and Speakman's Canadian patent, to "discover" that to prevent hair damage a mercaptan waving agent must be used in a solution having an alkalinity not in excess of pH 10. For Pye had taught that permanent waving is accomplished by a swelling of the hair fibres, "the swelling being proportional to the pH of the solution," and that a solution causing excessive swelling "approaches that of a depilatory." His claims include solutions having a pH range of from 8 to 11. More specifically he taught "that alkali metal sulfides and organic sulfides when adjusted in pH to below 11, will soften the hair * * * without excessive swelling" and that "though the minimum pH, required for stability of most of the solutions of this invention, is between 9 and 9.5, this is entirely a characteristic peculiar to the individual compound used." Whether Pye disclosed the use of mercaptans as waving agents was the subject of conflicting testimony below which was resolved below by a finding in favor of the plaintiffs, with the result that Pye was found to completely anticipate the claims in suit. However, for the impact of Pye on the issue of patentable invention, we will assume that Pye's discovery did not include the use of mercaptans as waving agents but related only to sulfide solutions. Even so, however, we think it was rightly held below that the claims in suit lacked patentable invention over Speakman's first United States patent (which disclosed cysteine hydrochloride as a waving agent) and over his Canadian patent (which disclosed cysteine hydrochloride in a pH 8 solution as the waving agent), in view of Pye who disclosed a sulfide solution with a pH range of 8 to 11 and taught that hair damage could be avoided by lowering the pH of the solution.[6]

However, the holding below did not rest solely on the lack of McDonough's advance over Speakman plus Pye. For there was evidence that the permanent waving art and the depilatory art were at least closely analogous if not part and parcel of a single art. Fletcher's French Patent No. 824,804, published February 17, 1938, disclosed a depilatory compound consisting of a mercaptan adjusted to a pH value not lower than 10, thus, like McDonough, teaching that mercaptan solutions at pH 10 and above will cause depilation, or hair damage. A similar disclosure was contained in Bohemen's British Patent No. 484,467, granted April 27, 1938. We conclude, therefore, that even on the assumption—contrary to fact, as we hold—that McDonough's disclosure of criticality in the use of mercaptans in solutions having a pH range of 7 to 10 disclosed a limitation which was critical in fact, the holding that the claims lacked patentable invention over the prior art disclosures of Pye, the first Speakman patent, and Speakman's Canadian patent derives additional support in the prior art disclosures of the depilatory patents of Fletcher and Bohemen.

Anticipation

The plaintiffs contend, and the court below held, that the patent in suit was anticipated by each of the following references: Speakman's second U. S. patent, Speakman's Canadian patent, the Pye patent, the Evans and McDonough U. S. Patent No. 2,352,524, issued on June 27, 1944, on an application dated June 20, 1938, the Leavell and Ellis article on colorimetric analysis published in "Industrial and Engineering Chemistry" in 1934, and specific prior uses made by Martin and Grant in 1941. Our ensuing comment on these rulings will still proceed on the assumption that McDonough's application had disclosed that a limitation of mercaptan solutions as to those having a pH range of 7 to 10 was critical and that the limitation was in fact critical.

[8] Both Speakman's second U. S. patent and the Evans and McDonough patent did not go to issue until after the filing date of the patent in suit. On that account they could not be held to constitute part of the prior art or as anticipating patents under 35 U. S. C. A. § 102 (a). Nevertheless, they were anticipatory under the doctrine of *Alexander Milburn Co.* v. *Davis-Bournonville Co.*, 270 U. S. 390, now codified in 35 U. S. C. A. § 102 (e). *Old Town Ribbon & Carbon Co.* v. *Columbia R. & C. Mfg. Co.*, supra; *Stelos Co.* v. *Hosiery-Mend Corp.*, supra. The defendant does not challenge the findings below that a portion of each of these patents falls within the area of McDonough's alleged invention. It bases its attack on the anticipatory effect of these patents upon its contention that McDonough is entitled to a pre-filing date of invention.

[6] It will be noted that in so holding we have assumed that both limits of McDonough's pH range of 7 to 10 are critical. The holding is even more imperatively required if we are right in our prior holding that neither limit was in fact critical.

That attack falls with our holding, already indicated, to the contrary.

[9] In connection with Speakman, the defendant also contends that the scope of the *Alexander Milburn* doctrine, and of 35 U. S. C. A. § 102 (e), does not encompass anticipatory material contained in patent *claims* but is restricted to matter disclosed in the *specifications*. That contention is in direct conflict with the *Alexander Milburn* opinion, as construed by our decision in *Old Town Ribbon and Carbon*, supra. Moreover, as was rightly found below, the anticipatory material in Speakman was not confined to his claims: Speakman in the specifications of his original application disclosed the mercaptan, cysteine hydrochloride, at pH's of 6, 8 and 10 as waving compositions.

The defendant further contends that the Evans and McDonough patent is not an available anticipatory reference because the application by Evans and McDonough, as joint inventors, was not an application by "another" (i. e., other than McDonough) within the meaning of § 102 (e).[7] This contention the court below overruled. That decision, insofar as we have been able to ascertain, is one of first impression in this or any other circuit and, especially in view of the policy considerations involved, we are reluctant to commit this court to that interpretation of § 102 (e) unless the holding is needed for the disposition of this case. We see no such need. For if we were to hold that the Evans and McDonough patent is a patent of the *same* inventor, we should be constrained to hold that the patent in suit was void for double patenting. *Miller* v. *Eagle Manufacturing Co.*, 151 U. S. 186; *Traitel Marbel Co.* v. *W. T. Hungerford Co.*, 151 U. S. 186; *Traitel Marble Co.* v. *W. T. Hungerford Brass & Copper Co.*, 2 Cir., 22 F.2d 259. The master's acute and accurate reasoning on this problem, which we quote in a footnote,[8] inescapably leads to that conclusion. With the defendant thus placed between the two horns of a dilemma, there is no need for us now to say which carries the coup de grace. One horn or the other is fatal.

[7] 35 U. S. C. A. 102. *Conditions for patentability; novelty and loss of right to patent.*
"A person shall be entitled to a patent unless—
* * * * * * *
"(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent. * * *."

[8] "Plaintiffs also contend that the permanent waving patent is invalid because of double patenting, i. e., issuing two patents for the same invention to the same assignee. While plaintiffs do not press this point vigorously, the Board of Appeals in the Patent Office so held and there is indeed much merit in the argument. Aside from preferences which are expressed in the specifications, the claims of the two patents do overlap and there is definitely a double patenting of compositions falling within the area of overlap. Defendant urges, however, that the compositions specified in the claims of the depilatory patent are necessarily different because the claims call for concentrations of mercaptans sufficient to render the hair removable after contact therewith, whereas none of the compositions falling within the ranges specified in the claims of the permanent waving patent will cause removal of the hair. This is so, it is to be supposed, because the claims of the permanent waving patent require the concentration and pH of the composition to be adjusted so as to obtain 'a permanent change in the configuration of the hair during a given time of application without damage to the hair structure.' But double patenting cannot be avoided simply by defining the compositions in terms of function if in fact the compositions claimed in one are the same as those claimed in the other. Moreover, as the tests in the record show, McDonough's permanent waving compositions, if left on the hair for a sufficient length of time, will depilate. And since the critical factor of time is nowhere defined in McDonough's claims, defendant can derive little comfort from the functional distinction on which it relies."

Speakman's Canadian patent which, as we have held, was part of the prior art, reads directly on the patent in suit. This is so even if McDonough's disclosed range limits of pH 7 to 10 were in fact critical since the Canadian Patent discloses solutions of pH 8. Its anticipatory scope is even greater if, as we have held, either of McDonough's pH range limits is not critical in fact. For the Canadian patent also discloses mercaptan solutions of "about pH 6" (claim 3), of "about pH 4" (claim 5) and of "pH 10 or more" (claim 4). We therefore hold that Speakman's Canadian patent, as well as his second United States patent, anticipates.

We also affirm the holding of anticipation by prior uses by Grant and by Martin, each of whom as early as March 1941 had reduced to practice at least one mercaptan waving solution having a pH falling within McDonough's pH range of 7 to 10.

Whether the disclosures of the Pye patent and of the Leavell and Ellis publication on colorimetric analysis were, each in itself, adequate to constitute anticipations, as was held below, we have considerable doubt. These questions, as well as that of anticipation by Evans and McDonough, we pass since we prefer to place our dispositive rulings as to anticipation on the other references indicated above which seem to us to provide a more solid foundation for our judgment.

Invalidity on Other Grounds

The court below, on the master's recommendation, overruled the plaintiffs' contention that the claims in suit were void for inoperativeness and for the inclusion of new matter not included in the applicant's disclosure. Those rulings we affirm on the opinion below.

The court below also ruled that the claims were void for indefiniteness. This ruling we also affirm. We will, however, somewhat amplify the reasoning relied on below by the following observations. The range limits of concentration and of pH stated in the claims, notwithstanding the lack of precision with which the limits were stated, were distinctly narrower than the critical limits of the invention which the defendant claims to have disclosed in the specifications. [10] As we have already observed in connection with our discussion of criticality, the applicant if he wished was entitled to claim a monopoly narrower in scope than that of his full disclosure and thereby abandon to the public so much of his invention as lay outside his stated claims. That is what the defendant insists was done. However, because this was done the requirement of the act for definiteness in the statement of claims must be strictly construed. In the ordinary case, in which the intended scope of the claims is commensurate with the scope of the disclosure, any peripheral uncertainty as to the claims can be clarified by reference to the application. Not so, however, when the claims are concededly narrower than the disclosure, as here. Confronted with claims such as these, a member of the public is left at his peril to guess just where the applicant has drawn the line between his claimed monopoly and the public domain. We think the facts that the applicant himself and the defendant's expert witness were in disagreement as to the meaning of the limits of the claims as stated, and that there were several commercial compositions falling within the peripheral area of uncertainty, were significant.

Especially in the light of this consideration, we think the holding of indefiniteness is required.[9] Claim 18 may be thought to be the narrowest and most definitely stated of all the claims. Let it be granted that the limitation in claim 18 to a "solution having a pH higher than pH 7 and not higher than pH 9.5" is sufficiently definite. But what is meant by the concentration limit of "about 6%"? Having in mind that the specifications do not teach, and the defendant does not claim, that there is anything critical about a 6% concentration, does this mean that compositions which in other respects would infringe claim 18 are abandoned to the public if their concentration is somewhat above or below 6%? If so, why did not the applicant state 6% without the qualifying word "about"? The very use of the qualification imports that the limitation suggests some *range* of concentration. But nothing in the four corners of the patent defines that range. And the holding of indefiniteness even more conclusively applies to the other claims in all of which (2, 12, and 17) both the pH range limits and the concentration range limits are stated with similar ambiguity. We do not, of course, go so far as to hold generally that claims defining range limitations with some degree of approximation are in all cases fatally indefinite. Our holding here relates to limitations on claims which are narrower than the invention disclosed in the specifications and which purport to assert a private monopoly of compositions falling within a known chemical genus.

In affirming the holding of indefiniteness, we think it unnecessary to rule upon the impact of the so-called adjustment clause which is contained in these claims or the conflicting positions of the parties as to whether the claims now before us fell within the scope of the master's conclusions as to the effect of the adjustment clause. Even were these problems resolved in accordance with the defendant's contentions, we should adhere to our holding that the claims are fatally indefinite.

Being abundantly satisfied that the claims in suit are invalid for inadequate disclosure, for lack of criticality and invention, for anticipation, and for indefiniteness, we shall not discuss or rule upon the findings in infringement made below.

DEFENDANT'S COUNTERCLAIM AGAINST HELENE CURTIS

Also referred to the master and dealt with by him and the court below was the defendant's counterclaim against Helene Curtis, one of the plaintiffs herein. On this counterclaim the defendant sought recovery of large damages claimed to have been caused by the act of Helene Curtis, through its agent, Grant, by filing on April 4, 1948, in the Patent Office, while the defendant's McDonough application was pending therein, a "protest" against the grant of a patent thereon containing deliberate and malicious misrepresentations of fact tending to show that the McDonough application was not patentable. The counterclaim further alleged that, because of this protest, on June 16, 1948, the Examiner "withdrew his previous allowance of claims in said application, reversing his holding of patentability of subject-matter therein without citing any new prior art or new grounds for rejection, and finally rejecting all claims therein which covered any composition or method then or now being made, used or sold by defendant or by plaintiff." Because of this malicious or intentional conduct on the part of Helene Curtis, the defendant in its counterclaim further alleges that the defendant was "put to extraordinary delay and expense in the further prosecution of said patent application, including exceedingly expensive and prolonged research to develop technical data and evidence to refute the position taken by said Examiner on and after June 16, 1948" and including unsuccessful prosecution of an appeal to the Board of Appeals of the Patent Office and prosecution to final judgment in favor of the defendant of a § 4915 suit. This delay in the issuance of its patent, it was alleged, in addition to the expense of research and litigation, caused the "loss of royalties and other damages."[10]

The court below found that the defendant had failed to prove that the protest, which concededly Helene Curtis filed through Grant, contained actionable misrepresentations of fact or that it was the cause of damage to the defendant. Since our study of the voluminous record satisfies us that there was inadequate proof of any causal connection between the plaintiff's protest and the defendant's alleged damages, we affirm that finding and shall not extend our discussion beyond that issue.

Prior to the filing of this protest, there was nothing in the record to show that the application had been either formally allowed or informally indicated as allowable. On the contrary, after the application had been twice rejected the applicant had on August 3, 1945, submitted a proposed amendment and affidavits, and on August 13, 1945, filed an appeal to the Board of Appeals. On June 14, 1946, the Examiner mailed to the applicant a notice of advisory action on the proposed amendment of August 3, 1945, indicating no change in his conclusion that the application was unpatentable. Thereafter, on September 10, 1946, apparently for purposes of the appeal and in alleged response to the advisory action of June 14, 1946, the applicant filed an amendment wherein he canceled all claims and substituted claims 68 to 88, inclusive, with 105 pages (as measured in the file wrapper) of additional affidavits and supporting argument. On February 12, 1947, the Examiner notified the applicant by letter that his claim 88 was in interference with claim 40 in a co-pending application of one Martin and that his "claims 68 through 87 will be held subject to rejection as unpatentable over the issue in the event of an award of priority adverse to the applicant." On June 16, 1947, applicant moved to dissolve the declared interference on the ground that the interference count (which was identical with his own claim 88) was "unpatentable for the reason that it is vague and indefinite" and not supported by the applicant's disclosure. In response to this motion, on December 9, 1947, the

[9] *Standard Oil Co. of California* v. *Tide Water Associated Oil Co.*, 3 Cir., 154 F.2d 579, 581–6; *Libbey-Owens-Ford Glass Co.* v. *Celanese Corp. of America*, 6 Cir. 135 F.2d 138, 144–5. Cf. *Dow Chemical Co.* v. *Halliburton Co.*, 324 U. S. 320, 329.

[10] The defendant also filed a counterclaim against the Gillette Company. However, as the master noted, this counterclaim was wholly unsupported by evidence and on his recommendation it was dismissed by the court below with the comment that "it was abandoned in fact, if not formally." This ruling has not been raised as a ground of appeal. It is of interest only for the side-light which it throws on the tactics of the defendant who complains that Helene Curtis caused it additional expense in prosecuting its application in the Patent Office and yet put Gillette to the expense of preparing a defense to a counterclaim which is supported by no evidence whatever.

Examiner dissolved the interference "pro forma as to the original count on interference" but, stating that "there is undoubtedly a common invention involved," suggested a new count in interference, designated as "Count E." On December 17, 1947, applicant moved that the Examiner strike from his ruling of December 9, 1947, "his suggestion of a new count based on common inventive subject-matter in the two interfering applications and his comment that an issue of priority thereon is considered 'essential'." This motion the Examiner denied on December 30, 1947. After an unsuccessful motion to the Primary Examiner for a dissolution of the interference, the applicant on February 7, 1948, addressed a petition to the Commissioner to direct the Primary Examiner to strike Count E suggested as being in interference with Martin's application. All this, it will be observed, occurred prior to Grant's "protest."

Thereafter, under date of June 16, 1948, the Commissioner referred the applicant's prior petition to the Examiner "with discretion to consider anew his suggestion of the count proposed by him." The Examiner then in response to applicant's motion of February 7, 1948, withdrew his proposed Count E "as being unpatentable for lack of invention" and dissolved the interference. On June 16, 1948, the Examiner mailed to the applicant a response to his amendment of September 10, 1946. In this action claim 88 was rejected, as well as other specified claims, "as being drawn to non-elected species"; all claims were stated to stand rejected "as being unduly multiplied," as had been indicated in prior Office actions; and also consistent with prior Office action all other claims were rejected as lacking invention over specified references except claim 82 which was held to be amendable.

The defendant by brief asserts that the proofs show that prior to Grant's protest the "Examiner had withdrawn his rejection of McDonough claims and had held the subject-matter of the application to be patentable." We find in the record no evidence whatever to support this assertion. Certainly it is directly contrary to all Office actions, as appears from the foregoing résumé of the file wrapper. It is true that in his remarks appended to its amendment of September 7, 1948, the defendant's counsel asserted that its prior amendment of September 10, 1946, "was entered after interviews on September 5 and 6, 1946, at which time the Honorable Examiner stated informally that he considered the claims to be allowable." But we find no support for this self-serving assertion either in the pretrial depositions of the Examiners which are in evidence or elsewhere in the record. And the Board of Appeals in its opinion on a petition preliminary to the hearing of the defendant's appeal on the merits said: "The allegations of appellant that all of the claims in the case were allowable and the case put in condition for issue by the entry of the amendment of September 10, 1946, are without basis in fact. The record unequivocally shows that all the claims were never allowed. Appellants' assertions to the contrary are without weight." They are without weight with us also.

The defendant further seeks to buttress his assertion that prior to the protest the claims had been found to be in an allowable state by arguing that the interference with Martin declared on February 12, 1948, and the subsequent motions and rulings thereon, necessarily so imported: absent allowable claims there would have been no occasion for interference proceedings—so the argument runs. But certainly the fact that claim 88 was thought to be in interference carried not the slightest implication that the Examiner considered all the other, non-interfering, claims to be allowable.

Even if the Examiner, when he declared the interference with claim 88, had considered that claim to include patentable matter we see not the slightest ground for inference that his subsequent action as to claim 88, any more than his subsequent action on the other claims, had been affected by Grant's protest. The defendant in its motion to dissolve the interference had conceded that claim 88 was unpatentable for its vagueness: the Examiner rejected it on the ground that it was drawn to an unelected species—a ground of rejection which had been applied in earlier Office actions. We think it preposterous to urge that the defendant's subsequent labor and research activities were caused by the rejection of a claim which it conceded to be unpatentable for vagueness. It even is equally untenable to urge that a rejection which was officially predicated on the ground of nonelected species was caused by the alleged misrepresentations in the protest. For the protest was not relevant to the ground of "unelected species." Furthermore, the Board of Appeals in its opinion of May 2, 1949, on the merits noted that claim 88, and certain other claims, "have been rejected as not inclusive of the elected subject-matter. Since that *rejection has not been challenged*, we need not further consider these claims." [Emphasis supplied.] Thereafter, claim 88 was not put in issue in the § 4915 suit and was not included in the patent as issued. The defendant's acquiescence, thus indicated, in the official disposition of claim 88 is in basic conflict with its assertion that its subsequent labor and expense was an effort to undo harm caused by the protest.

We find nothing in the pretrial depositions of the Examiners or in their Office actions and rulings to warrant even a suspicion that they were affected by the protest. Their Office actions were in all respects expressly predicated on other references. We conclude that the expense and damages for which the defendant seeks recovery on this counterclaim were incidental to a persistent and vigorous prosecution of an extraordinarily complex application and not at all caused by Grant's protest. The conclusion makes it unnecessary to consider whether an action lies to recover damages for wrongful interference with the prosecution of an application for a patent which, after issue, is held to be invalid. Whatever may be the correct answer to that question, on the ground above discussed we hold that the record in this case warrants, indeed requires, an affirmance of the dismissal of this counterclaim.

Validity of Procedure Below

The defendant also presses on appeal a claim of error based on its contention that it was deprived of a fair trial in that it was denied an opportunity to argue orally on the merits before the master. At the close of evidence the master inquired whether counsel wished to submit their arguments on brief or to have an oral argument as well. Counsel expressed preference for oral argument and it was agreed that if there

was to be an argument it should be held after the briefs were in. The master throughout the discussion indicated that he had no preference in the matter and was willing to adopt whatever procedure would suit counsel's convenience. Upon learning of counsel's preference the master stated: "Very well, then the disposition will be that after the briefs are in, unless counsel change their minds, there will be a day set for argument." The final disposition of the matter as stated by defendant's counsel was: "I suppose the time for oral argument would be something we would agree upon later with the master," to which the master replied: "I should rather think so. I think to fix a date for argument beyond the 15th of June (the date reply briefs were to be submitted) is an attempt to foresee the future beyond our capacity."

The main briefs were exchanged on April 30. Thereafter, a meeting was held on May 14, 1953, at which the master and opposing counsel were present. As to the understanding reached at this conference on the subject of oral argument there are conflicting recollections. The following facts, however, are undisputed. (*a*) In the preliminary negotiations between opposing counsel arranging for the May 14 meeting counsel for the defendant suggested that they "ascertain, at that time, whether he [the master] will want oral arguments and try to arrange a tentative date for that." (*b*) At the meeting the master stated that after he had studied the briefs and the record (at that time the reply briefs had not yet been exchanged) he would advise counsel if he, the master, wanted oral argument on any matter but that this should not preclude counsel from making argument generally or on any points they might wish to discuss. (*c*) No request for oral argument was made thereafter. (*d*) The reply briefs were exchanged on June 15, 1953. (*e*) The master filed his report on January 13, 1954, without prior communication with the parties. (*f*) Thereafter defendant's counsel did not assert its desire for oral argument to the master by petition for reconsideration although he was in communication with the master as to other matters pertaining to the case. To these undisputed facts defendant's counsel adds his recollection that it was his "*understanding* that, prior to rendering his final written report, the master would inform counsel whether or not he wished oral argument and that after being so informed it would then be appropriate for either party to request argument if desired" and that he "*indicated* that I would *probably desire* to make an argument for defendant whether the master or plaintiffs requested same or not."

Considering the importance which the defendant now attaches to the lack of oral argument, we find it difficult to comprehend how counsel would have relied on an "understanding" and an "indication of probable desire" for a period of eight months as a basis for protection of its right to oral argument. The defendant submitted a total of 456 printed pages of briefs before the master and never after the May 14 meeting gave any indication by formal request or otherwise that it was demanding an oral argument. Nor does it now assert that it was denied an opportunity to present to the master any arguments not contained in its briefs.

Moreover, in addition to failing to request an oral argument by petition for reconsideration before the master, defendant's counsel omitted to argue the point either orally or by brief before the District Court.

Taking into consideration all of the foregoing factors and the admonition of the Supreme Court to decide the necessity of oral argument as a requirement of procedural due process on a case-to-case basis, *Federal Communications Commission* v. *WJR*, 337 U. S. 265, 274–277, we hold that the defendant has been accorded all the requirements of a fair and proper trial.

DENIAL OF DEFENDANT'S MOTION FOR NEW TRIAL

After the appeals herein had been docketed, the defendant obtained permission of this court to file below a motion for a new trial on the ground of newly discovered evidence. This motion was denied below and that ruling is now before us on appeal.

The evidence on which the defendant based its motion was a patent application Serial No. 222,527, filed April 23, 1951, in the United States Patent Office by A. E. Brown, the patent on which issued to the plaintiff Gillette, as assignee, on September 14, 1954. Until that date application Serial No. 222,527 was not available to the defendant's inspection in the United States Patent Office. However, a certified copy of said application had been filed in the Patent Office of the Union of South Africa in support of an identical application for a patent with Gillette, as Brown's assignee, had filed in that office on March 31, 1952, upon which a patent was granted to Gillette as such assignee by the Union of South Africa on October 20, 1952. The Official Journal of Patents of South Africa of April 9, 1952, and November 5, 1952, showed, respectively, the filing of the application and the granting of the patent thereon (No. 14,869) to Gillette as Brown's assignee and that the subject-matter was "Improvements in or Relating to Hair Waving Compositions." These issues of the South African Journal of Patents were received in the United States Patent Office on June 4, 1952, and December 8, 1952, respectively. We have no reason to question the assertion of the defendant's counsel that this South African application did not come to his attention until December 1954. But from an uncontradicted affidavit of the plaintiff it appears that the evidence on which the new trial was sought was a patent application the existence, ownership and subject-matter of which a counterpart had been published to the world, and notice whereof had been on file in the United States Patent Office before the presentation of evidence to the master in the case below had been concluded.[11]

Brown, the applicant of U. S. Serial No. 222,527, had testified as an expert witness for the plaintiffs in the trial below. The new trial was sought to afford defendant an opportunity to impeach the testimony which he there gave and also to show an alleged and wrongful suppression of evidence by Brown and by a Gillette executive, one Reed, who had testified in a pretrial deposition.

[11] The Australian Official Journal of Patents of May 8, 1952, received in the United States Patent Office on August 28, 1952, gave notice that a corresponding patent application had been filed in the Australian Patent Office on April 22, 1952, by Brown and Gillette as assignee for a hair waving composition, and the Australian Journal of June 29, 1952, which was received in the United States Patent Office on August 1, 1952, disclosed that the complete application had been laid open to public inspection.

In its motion addressed to this court for permission to file its motion for a new trial, the defendant refers to numerous extracts from Brown's application which were thought to be inconsistent with Brown's testimony on trial. But a careful study of the plaintiffs' memorandum and affidavits in opposition make it clear that many of the claimed inconsistencies are due to the defendant's use of incomplete extracts or to meanings inconsistent with the context. As a result most of the alleged inconsistencies disappear like snow under a March sun. Even the defendant in its reply shifts its position as to most of these claimed inconsistencies: instead of persistence in a contention that passages in Brown's application were necessarily inconsistent with Brown's testimony below it repeatedly asks in various forms, "What tests were performed to ascertain the truthfulness of this statement?" in the Brown application, thereby insinuating that such tests, if they had been put in evidence might have been helpful to the defendant's case on the merits. Of course, after the evidence had closed and judgment had been entered, the defendant was not at liberty to embark on a fresh fishing expedition in the hope that evidence of tests made in connection with Brown's application might disclose information tending to support its position as to the patent in suit.

For such an effort there was no basis in the pretrial examination of Mr. Reed who, the defendant charges, by his testimony intentionally suppressed evidence as to tests which Gillette had made. The defendant's charge of "untruthful testimony" and "wilful suppression" of evidence, as made in his motion to remand, was based on Reed's negative answer to a question by defendant's counsel as to whether he had made experiments in his work "*specifically directed* at determining the criticality of pH with cold waving solutions, mercaptans." That answer we find wholly consistent with Brown's No. 222,527 application which was predicated not at all on the criticality of any pH range or indeed on the criticality of any of the factors involved in the patent in suit. The defendant, in its reply memorandum, charged that to give Reed's answer what we find to be its plain meaning (which the transcript shows the master to have fully understood) was "to indulge in semantic quibbling." This charge is conclusively disposed of by Reed's testimony immediately preceding the extracts which the defendant quoted, wherein the witness made it abundantly clear that over a period of time, in a belief based on broad research exploring pH ranges with various mercaptans, he had come to the conclusion that there was "nothing in the pH value of 10 in thioglycolate solutions for cold hair waving" and being of that conclusion had "never conducted a series of experiments exclusively aimed at the answer to that question." Thus the witness had not suppressed, but rather proclaimed, the existence of prior research work and there is nothing to show that the defendant ever demanded to see, or that the plaintiffs refused to produce, any records made of such research. If there has been any semantic quibbling connected with the charge of suppression it can only be that defendant's counsel was the author.

The defendant, in its reply to plaintiffs' affidavits in opposition, did, however, persist in claiming that the following paragraph from Brown's application is inconsistent with Brown's testimony and the plaintiff's position in the trial.

> "My invention is particularly striking in its effects as demonstrated in relation to the thiol cysteine. This compound, used in concentrations and at pH values which are both safe and commercially feasible, does not provide an acceptable wave; indeed, at room temperature it shows so little waving activity that for all practical purposes it is valueless for home waving. Upon the addition of a few mols of urea, however, the composition becomes substantially as effective as the conventional ammonium thioglycolate compositions."

This is the most plausible and, for its impact on the merits, the most serious claim of inconsistency upon which the defendant bases its motion for a new trial. But Brown's testimony in the trial, which the defendant now seeks to impeach, was directed to the issue of criticality. And defendant's contention that the materials in Brown's application constituted impeachment of his testimony and admissions against the plaintiff Gillette rests on his further contention that criticality may be measured by commercial superiority. Having rejected that contention we find no irreconcilability between Brown's testimony at the trial and his application for the patent in question.

Moreover, we think the surface suggestion of inconsistency largely evaporates in the light of Brown's answering affidavit in which he points out that he was there speaking of the *safety* and the *commercial feasibility* of cysteine and its *practicability* for cold waving in the home. He alleges in his affidavit, without contradiction, that cysteine is a vastly more expensive ingredient than other mercaptans and also than urea. That it was a weaker reducing agent than other mercaptans and, consequently, was correspondingly effective only in higher concentrations was in line with his evidence at the trial. Also at the trial he had testified to the toxic effect on the scalp of highly alkaline solutions—an effect independent of hair damage from solutions of excessive pH content. We think it obvious that especially for home waving an inexpensive solution is a factor making for commercial success. In the light of these considerations, we do not think that his testimony on trial would be seriously impugned by the statement in his application which, as we confidently interpret it, went no further than to say that a cysteine solution of a pH low enough to be safe from toxic effects on the scalp and of a concentration high enough to give a satisfactory cold wave under home conditions would be too expensive for commercial success—a difficulty which could be mitigated by his proposed addition of urea to the solution.

We cannot believe that the inclusion of such tenuous "impeaching" material in the record on the merits would have changed the ultimate conclusions of the master or the judge below. Especially is this so since their conclusion of "invalidity" was based also on grounds other than lack of criticality to which alone this desired impeachment seems to be relevant. And we can with even greater confidence say that the inclusion of Brown's application and patent in the basic record if the case were reopened to permit its receipt into the evidence would not, in view of all the proofs, affect our ultimate holding on the merits. We conclude, therefore, that in denying the motion for a new trial, there was no error. The matter was concededly within the discretion of the trial judge. Certainly no abuse of discretion was shown. Indeed, we think that on the merits of the motion his discretion was wisely exercised.

[11] We will add—although the conclusion just stated is not dependent on this additional observation—that we think the motion was not seasonably made in view of the facts recited above relating to Brown's South African application and patent and the notices contained in the South African Journal of Patents. [12] In one aspect, it is indeed harsh to charge the defendant with lack of diligence for its failure earlier to discover the allegedly impeaching material of this patent and its underlying application. But absence of knowledge by an inventor of the existence of an earlier patent will not save him from its anticipatory effect; and when a defendant, charged with infringement, is preparing his defense he must make his search for anticipatory patents in season to present them at trial. To relieve the inventor or the infringer of these requirements would vastly add to the already great uncertainty as to the validity of outstanding patents: it would open the door to patent litigation on an interminable piecemeal basis. The same results will follow if after trial an infringer whose defense of invalidity has been overruled is given opportunity to reopen the case for the presentation of after discovered anticipations or if after trial a patentee whose patent has been adjudged invalid can reopen his case to present after discovered patents for material thought either to support his own position or to destroy or weaken his adversaries' position.

The closest question involved in defendant's motion to obtain a new trial, in our opinion, is raised by the plaintiffs' request that we impose upon defendant plaintiffs' costs and counsel fees incurred in defense of the motion. We agree with plaintiffs' counsel that the charges of false testimony and wilful suppression of evidence were serious and wholly unsupported by the showing made, and that most of the claims of inconsistencies were without substance. They were inexcusable in the sense that they were wholly unnecessary to the effective presentation of such merit as the motion could reasonably be thought, even by a partisan advocate, to have. Nevertheless, we cannot say that there was no ground for making the motion: we think it not unreasonable that the defendant should have thought that the paragraph quoted above from Brown's application might have some impeaching effect on his testimony. On the whole, we think the request to tax plaintiffs' counsel's fees against the defendant should be denied. Their printing costs will, of course, be taxed in their favor in the usual course.

[13] AFFIRMED.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

2,654,989. (See 2,732,327.)

2,209,824, Louisot and Muller, Mechanism for processing meat products, **filed** Feb. 9, 1956, D. C., W. D. Okla. (Oklahoma City), Doc. 6968, *Needham Mfg. Co., Inc., et al.* v. *Minit Steaker Co.* Consent decree: patent held valid and infringed: cause dismissed without prejudice Mar. 14, 1956.

2,236,946, R. M. Roberts, Carpet fastener, **counterclaim** filed May 18, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19903–Y, *Edgemaster Corp.* v. *Roberts Mfg. Co.*

2,402,464, H. Suter, Velocity measuring system, **filed** May 28, 1956, D. C., W. D. N. Y. (Buffalo), Doc. 7044, *Traffic Controls, Inc., et al.* v. *City of Buffalo, N. Y.*

2,465,470. (See 2,732,327.)

2,498,514. (See 2,732,327.)

2,510,438, K. M. Tuohy, Contact lens, **filed** May 28, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19986–T, *Solex Laboratories, Inc.* v. *Dr. Harry Bleeck.*

2,533,475, C. G. Koonter, Rearview mirror for motor vehicles, **filed** June 1, 1954, D. C., E. D. Mich. (Detroit), Doc. 13484, *George C. Knight Co.* v. *J. T. Templeton, Inc.* Stipulation and consent judgment; cause dismissed with prejudice June 1, 1956.

2,558,354, I. S. Gottscho, Hot die marking device; **2,643,609**, same, Holder for rubber type; **2,662,469**, same, Marking device; **2,502,558**, Gottscho and Kuett, same; **2,641,999**, J. K. Jackson, Marking apparatus; **2,602,393**, M. Hirschey, same; **2,655,103**, same, Printing apparatus; **2,604,039**, Gottscho and Hirschey, Apparatus for marking continuously moving articles; **2,632,383**, same, Repositioning device for marking wheels, **filed** Sept. 30, 1955, D. C. N. J. (Newark), Doc. 914/55, *American Marking Corp.* v. *Adolph Gottscho, Inc.* Order of dismissal May 29, 1956.

2,559,177, Terry and Wheeler, Plasticized polyvinyl resin compositions, **suit** for Declaratory Judgment filed May 9, 1956, D. C. Minn. (Minneapolis), Doc. 5468, *Archer-Daniels-Midland Co. et al.* v. *General Mills, Inc.*

2,589,589, S. H. Woodruff, Distributing nozzle, **filed** May 28, 1956, D. C., W. D. Okla. (Oklahoma City), Doc. 7109, *Steve Woodruff* v. *New State Ice Co. et al.*

2,502,558. (See 2,558,354.)

2,602,393. (See 2,558,354.)

2,604,039. (See 2,558,354.)

2,632,383. (See 2,558,354.)

2,641,999. (See 2,558,354.)

2,643,609. (See 2,558,354.)

2,645,860, Bender and Shooter, Wheel testing device, **filed** July 14, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 18425–C, *John H. Bender et al.* v. *Cornwell Quality Tool Co., Bruce W. Miller, and California Tool Co.* Patent held valid and infringed by defendants Bruce W. Miller and California Tool Co.; injunction restraining said defendants from further infringement (notice May 23, 1956).

2,648,610, J. T. Martin, Packaged popcorn kernels and popping oil, **filed** May 25, 1956, D. C., Dist. of Columbia, Doc. 2224/56, *Rose Kist Popcorn Co., Inc.* v. *Mazo Brothers, Inc., et al.*

2,651,346, D. J. Nash, Closure for wallets or billfolds, **filed** Mar. 7, 1955, D. C. N. J. (Newark), Doc. 210/55, *Nash, Inc.* v. *I. Smallman & Sons Co. (Inc.).* Consent order of dismissal favor defendant June 1, 1956.

2,651,705, G. S. Clemens, Heater assembly for electric driers, **filed** May 23, 1956, D. C., E. D. Pa. (Philadelphia), Doc. 20759, *World Dryer Mfg. Corp. et al.* v. *Dryer Company of America, Inc., et al.*

2,655,103. (See 2,558,354.)

2,662,469. (See 2,558,354.)

2,667,775, F. L. Aibel, Knitted fabric, **filed** May 29, 1956, D. C., S. D. N. Y., Doc. 110/105, *George Knitting Mills et al.* v. *Fredric L. Aibel.* Same, **filed** May 31, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16593, *Artvale, Inc.* v. *George Knitting Mills, Inc.*

2,673,016, J. Gerbe, Bag distending apparatus, **filed** May 29, 1956, D. C., S. D. N. Y., Doc. 110/101, *Irving Wolf et al.* v. *Everett Sales & Equipment Corp.*

2,675,644, H. Senior et al., Weeping doll, **filed** Sept. 17, 1954, D. C. Md. (Baltimore), Doc. 7725, *American Character Doll Co. et al.* v. *Baltimore Products Co. et al.* Patent held valid as to claims 1, 2, 4, 7, and 8 Mar. 12, 1956. Same, **appeal** filed May 17, 1956, C. C. A., 4th Cir., Doc. 7229, *Baltimore Products Co. et al.* v. *American Character Doll Co. et al.*

2,667,912, T. R. Beauchamp, Grille guard, **filed** Feb. 10, 1955, D. C., E. D. Mich. (Detroit), Doc. 14115, *Thomas R. Beauchamp* v. *Penn-Michigan Mfg. Corp.* Stipulation and order dismissing cause with prejudice June 1, 1956.

2,715,388, Cofield and Seech, Writing instrument, **filed** May 31, 1956, D. C. N. J. (Newark), Doc. 463/56, *Scripto, Inc.* v. *Ferber Corp.*

2,717,015. (See Des. 147,477.)

2,721,825, W. R. Hardie, Irrigation fluid for cystoscopy and transurethral prostatectomy, **filed** May 31, 1956, D. C., N. D. Ohio (Cleveland), Doc. 32829, *Cutter Laboratories* v. *The Continental Pharmacal Co.*

2,732,327, W. K. Teller, Anti-perspirant stick; **2,654,989**, W. C. Moore, Compositions for application to the human skin; **2,465,470**, A. L. Omohundro, Insect repellent stick; **2,498,514**, H. L. Van Mater, Zirconium compound deodorant and anti-perspirant, **filed** May 28, 1956, D. C., S. D. N. Y., Doc. 110/79, *Helene Curtis Industries Inc.* v. *Pharma-Craft Corp.*

2,732,919, L. E. Johnson, Jr., Sliding door frame assembly, **filed** June 1, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c975, *Kennatrack Corp.* v. *Chicago Builders Supply Co. et al.*

Des. 147,477, M. Shanzer, Combined bottle and diaper utility bag; **2,717,015**, M. J. Berry, Bag, **filed** May 25, 1956, D. C., S. D. N. Y., Doc. 110/45, *Fashioncraft Products* v. *Canvas Specialty Co.*

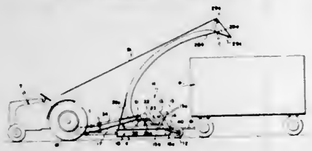
REISSUES

JUNE 26, 1956

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,169
FORAGE CROP CUTTING AND CONVEYING DEVICE

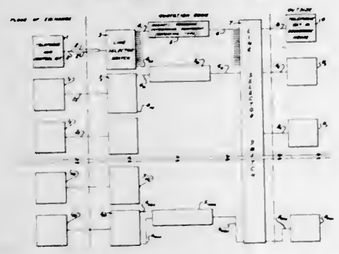
Richard H. Arrington, near Montgomery, Ala.
Original No. 2,720,070, dated October 11, 1955, Serial No. 463,535, October 20, 1954. Application for reissue March 9, 1956, Serial No. 570,661
17 Claims. (Cl. 56—23)



1. In a mobile harvester of the type adapted to be drawn over a field of forage to crop and pneumatically discharge the same into a trailing wagon as silage, a horizontal supporting platform having front and rear ends and having downwardly directed members framing said platform, vertically adjustable supporting traction wheels for said platform, a forage cropping and conveying means mounted on said platform, said means including horizontally disposed cutting blades mounted to rotate in a plane between and above the lower edges of said framing members, a circular wall depending from said platform and concentrically overlying said blades at their outer ends and terminating above the plane of rotation of said blades, air impeller vanes projecting upwardly from the outer end portions of said blades into the area defined by said circular wall and each having its vertical portion oblique relative to the radius of its blade with its outer edge forward of its inner edge, a spiral-form channel passage supported on the top surface of said platform and overlying the path of rotation of the vanes and open along its underside to communicate therewith and terminating at its larger end in a curved duct rising from said platform and directed to discharge into a trailing wagon, *and* a driving means *for said blades* supported on the top surface of said platform.

24,170
COMMUNICATION SYSTEM UTILIZING MAGNETIC RECORDERS

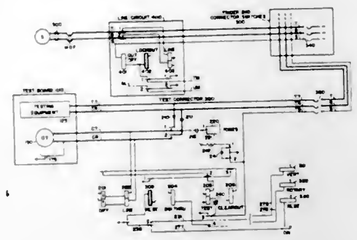
George H. Lee, Oak Ridge, Tenn.
Original No. 2,669,605, dated February 16, 1954, Serial No. 38,104, July 10, 1948. Application for reissue July 13, 1955, Serial No. 521,941
40 Claims. (Cl. 179—6)



7. In a telephonic communication system, a telephone and control set; a plurality of magnetic recorders each having a telephone line associated therewith; selective switching means for connecting said telephone and control set to any one of said telephone lines; each of said recorders having associated therewith an input recording circuit and an output transmitting circuit, a relay operated switch operatively connecting said recording circuit to the associated line, and a relay winding, electrically connected to the associated line, for controlling the position of said relay operated switch; and manually operable means at said telephone and control set for energizing the relay connected to that telephone line which is currently connected to the telephone and control set.

24,171
LINE-CLEARING APPARATUS FOR A TELEPHONE SYSTEM

John L. Culbertson, Harvey, Ill., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Original No. 2,717,284, dated September 6, 1955, Serial No. 312,276, September 30, 1952. Application for reissue March 13, 1956, Serial No. 571,364
6 Claims. (Cl. 179—175.2)

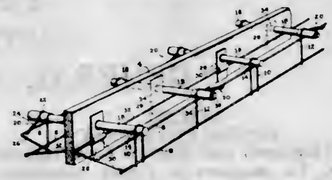


5. In a switching system, communication links and first switching means for extending connections respectively thereover, means including a separate electromagnet for each link for controlling the first switching means, circuit elements for each link providing an incomplete circuit path for the electromagnet of the link through a direct-current source, control apparatus common to the links including a condenser and means for charging it in a given polarity direction, second switching means and means for selectively operating it to connect the control apparatus to any link, circuit elements included in the common apparatus and in the second switching means for completing the said incomplete circuit path of the electromagnet of the connected link by connecting the charged condenser in series therewith in series-aiding relationship to the potential of the said current source therein, circuit elements providing a by-pass path around the condenser including a by-pass rectifier serially related therein and so poled as to resist discharge of the condenser therethrough, whereby the electromagnet of the connected link is first energized by discharge current through the condenser and current source in series and is thereafter maintained energized by current through the rectifier and the current source in series.

24,172
TRANSLOAD DEVICE

Alan E. Brickman, Williamsville, N. Y., assignor to United States Steel Corporation, a corporation of New Jersey
Original No. 2,642,789, dated June 23, 1953, Serial No. 61,876, November 24, 1948. Application for reissue June 22, 1955, Serial No. 517,408
5 Claims. (Cl. 94—8)

5. In a transload device for adjacent slabs, the combination including two pairs of outboard longitudinal rods, the rods in each pair being spaced apart one above the other, spaced apart rods extending between and welded to the longitudinal rods of each pair of rods, each of said last named rods having a U-shaped upper portion extending above the upper longitudinal rod to form a closed loop, a dowel passing through each closed loop with one end welded to the walls thereof, a clamping rod between adjacent pairs of said U-shaped rods and in alignment with the U-shaped rod attached to the opposite pair of longitudinal rods, each of said clamping rods extending between and welded to the longitudinal rods of each pair of rods, each of said clamping rods extending above the top longitudinal rod and having a loop receiving the



dowel welded to the aligned U-shaped rod, each of said clamping rods extending from said last named loop along said top longitudinal rod and having a hook portion at the free end passing below and around the top longitudinal rod.

PLANT PATENTS

GRANTED JUNE 26, 1956

Owing to the fact that almost all of the illustrations of the plant patents are in colors, it is not practicable to print a cut of the drawing.

1,488
PURPLE VERBENA PLANT

Florence Clyde Chandler, Ardsley, N. Y., assignor to Boyce Thompson Institute for Plant Research, Inc., Yonkers, N. Y., a corporation of New York
No Drawing. Application July 18, 1955, Serial No. 522,889
1 Claim. (Cl. 47—60)

The new and distinct variety of purple verbena plant substantially as illustrated in Plant Pat. 1,333 and described herein, characterized by large individual flowers which are uniformly purple in large clusters of many flowers borne on stiff, erect and long stems, by large deep green leaves, and by good vigor.

1,489
ROSE PLANT

Francis Meilland, Cap Azura, Cap d'Antibes, Alps Maritime, France, assignor to The Conard-Pyle Company, West Grove, Pa., a corporation of Pennsylvania
Application July 8, 1955, Serial No. 520,943
Claims priority, application France July 30, 1954
1 Claim. (Cl. 47—61)

A new and distinct variety of rose plant of the hybrid tea class, substantially as herein shown and described, characterized particularly as to novelty by its vigorous habit of growth, abundant foliage, and good resistance to blackspot, its large, full blooms of excellent form, and the distinctive two-toned color of its flowers, the petals of which are irridescent Rose Red in general color tonality on their inner surface and White, suffused with Pink in general color tonality on their reverse surface.

1,490
ROSE PLANT

Herbert C. Swim, Ontario, Calif., assignor to Armstrong Nurseries, Inc., Ontario, Calif., a corporation of California
Application July 5, 1955, Serial No. 520,168
1 Claim. (Cl. 47—61)

A new and distinct variety of rose plant of a class falling intermediate the hybrid tea and hybrid polyantha classes, substantially as herein shown and described, characterized particularly as to novelty by its tall and rangy habit of growth, the relatively long and somewhat urn-shaped form of its buds, the medium size of its blooms, the many individual blooms borne on long flowering stems which often originate from a single basic stem, the abundance of its blooms throughout the growing season, the good petal substance and attendant lasting qualities of its blooms, and the distinctive dark red general color tonality of its blooms.

1,491
ROSE PLANT

Josephine D. Brownell, Little Compton, R. I.
Application August 3, 1955, Serial No. 526,342
1 Claim. (Cl. 47—61)

A new and distinct variety of rose plant, substantially as shown and described characterized by its color pattern, fragrance, form and color and its Wichuraiana traits.

PATENTS

GRANTED JUNE 26, 1956

GENERAL AND MECHANICAL

2,751,592
FINGER COVERING
Joseph E. Longstreth and Albert Edward Honour, New York, N. Y., assignors to Critics Associated, New York, N. Y., a copartnership
Application May 24, 1954, Serial No. 431,902
4 Claims. (Cl. 2—21)



1. A disposable sheath for covering part of the human hand near the region of the thumb, the index finger and the middle finger, said sheath comprising front and back panel members of the same configuration, the said panel members each having two side edges which converge toward each other and an end edge opposite the converging end portion of the two side edges, the front and back panels adjacent the end edge being connected together to form a stall for the thumb and a stall for said fingers, the lower end of each of the two side edges near the converging end portion being unsecured, the unsecured side edges forming an opening to receive part of the hand.

2,751,593
WOMEN'S UNDERGARMENTS
Sydney S. Alberts, Yonkers, N. Y.
Application August 9, 1951, Serial No. 241,009
6 Claims. (Cl. 2—42)



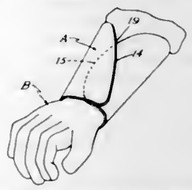
1. A garment of the class described comprising a pair of breast pockets, side sections secured, one to each of the outer side edges of said pockets, said side sections being connected together at the rear to secure the garment in position, two flattened tubular elastic members secured, one along the lower edge of each of said pockets and having their outer ends secured to said respective side sections below said pockets, the portions of said tubular members adjacent their respective inner ends overlapping one another and being secured together by seaming and their inner upper ends being joined to the lower edge of the opposite breast pocket, an elongated flat strip of elastic fabric disposed within each of said flattened tubular members, the outer ends of said strips being anchored to said side sections, and the inner ends of said strips being secured to said seaming, said flattened tubular members being transversely flexible and forming flexible hinges between said elastic strips and said pockets the fabric of said elastic strip being heavier and bulkier than the fabric of said flattened tubular member and providing resistance to rolling and bending of the lower edge of the garment.

2,751,594
INFANTS' SAFETY GARMENT
Esther Susan Brissenden, Osgoode, Ontario, Canada
Application November 8, 1954, Serial No. 467,587
Claims priority, application Canada September 28, 1954
1 Claim. (Cl. 2—49)



An infant's safety garment of the wrap around type comprising a front panel having a neck edge terminating at its ends in relatively narrow shoulder sections and having sides and a straight waist edge; a pair of substantially triangular back panels having outer sides connected to the sides of the front panel and having relatively narrow shoulder sections connected to the shoulder sections of the front panel, the upper portions of both the sides of the front panel and the outer sides of the back panels being inwardly curved to form arm holes; each of said back panels further including a straight bottom edge forming a continuation of the waist edge of the front panel and including an inner side which is sloped downwardly from the shoulder sections away from the outer sides and toward the bottom edge to form therewith an elongated, integrally extending tie, said ties having substantially parallel opposing side edges for the major portion of their lengths, one of said back panels being adapted to overlap the other back panel and said one panel having a slot formed therein perpendicular and adjacent to its bottom edge for receiving the tie of the other panel and the other panel having a loop forming means formed adjacent to and perpendicular to its bottom edge for receiving the tie of the one panel, said slot and loop forming means being substantially in vertical alignment with the shoulder sections of the back panels and being not materially greater in vertical dimension than the width of the ties.

2,751,595
WRIST GUARD
Donald T. Patraw and John E. Nekowitsch, St. Paul, Minn.
Application March 31, 1954, Serial No. 419,976
3 Claims. (Cl. 2—59)



1. A guard for use by packing house workers and the like comprising an elongated, relatively stable tapered

sleeve of flexible resilient plastic impregnated "Fiberglas" material capable of returning to its original form after being flexed out of its normal shape, said sleeve being longitudinally split and of proper size to encircle the wrist portion of the arm and having longitudinal edges which overlap when in wrist encircling position, said sleeve being expandable to pass over the hand and returning to edge overlapping position when encircling the wrist.

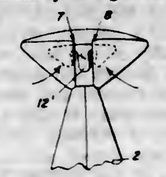
2,751,596
JACKET
Lewis Bagaloff, Hammond, Ind.
Application October 16, 1953, Serial No. 386,419
3 Claims. (Cl. 2—93)



1. In a jacket, a turn down collar, an outer back panel having upper, lower and side edges, an inner back panel having upper and lower edges arranged so that it faces said outer panel with the upper and lower edges matching respectively with the upper and lower edges of said outer panel, the matching lower edges of said inner and outer back panels being secured together so as to provide a wide hem, the side edges of said outer panel being unattached, there being a centrally disposed notch extending downwardly from the upper edge of said inner panel and terminating at a point spaced from the lower edge of said inner panel, a vest including a central panel having upper and lower edges arranged so that it faces said inner back panel with the upper edge matching with the matching upper edges of said outer and inner panels, the matching upper edges of said outer, inner and central panels being attached to said collar, a pair of vest panels each having an upper, lower and side edges arranged so that one of the side edges match each other with the lower edge matching with the lower edge of said central panel, said vest panels having the other of the side edges attached to said central panel, a split waistband carried by the matching lower edges of said vest and central panels and having the split ends matching the edges of the panels, the upper edges of said vest panels being secured to said collar, a pair of front panels each having an upper, lower and side edge arranged so that the side edges match each other with the lower edges matching each other, said front panels being attached to said inner back panel, the matching lower edges of said front panels being unattached and spaced above said waistband, cooperating fastening means on the matching split ends of said waistband, the side edges of said vest and front panels for securing same together, and spaced flexible members connecting said wide hem to said waistband.

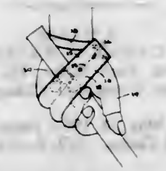
2,751,597
PRE-TIED NECKTIES AND METHODS FOR MAKING THE SAME
Joseph W. Less, Clinton, Iowa, assignor to One-in-Hand-Tie Company, Clinton, Iowa
Application August 29, 1952, Serial No. 307,127
18 Claims. (Cl. 2—150)

3. In a pre-tied tail-less tie, the combination of a fabric main tie body portion, a closed fabric knot-forming loop joining said body portion at the top thereof and extending laterally relative to said tie body, and means maintaining a substantially triangular portion of said loop on each side of said body portion folded upon itself upwardly and inwardly behind said body portion with one side of each substantially triangular portion extending laterally of said body portion substantially at right angles thereto to re-



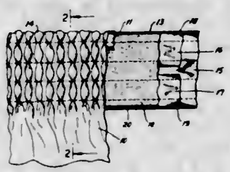
tain said loop in the tapered form of a four-in-hand tie knot.

2,751,598
GOLF GLOVES
Benjamin B. Romeo, Mount Vernon, N. Y.
Application June 28, 1954, Serial No. 439,610
7 Claims. (Cl. 2—161)



1. A golf glove comprising a body including a palm portion, a wrist portion, and finger stalls for the four fingers and the thumb, said finger stalls for the third and fourth fingers being joined, an extension strip connected at a lower end thereof to the wrist portion of the glove, a plurality of clasp fasteners on the other end of the strip, and complementary clasp fasteners on the rear side of said third and fourth finger stalls and adapted to be engaged by said extension end fasteners for maintaining said third and fourth finger stalls in a folded position against said palm portion.

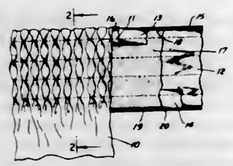
2,751,599
GARMENT BAND CONSTRUCTION
Albert C. Peterson, Park Ridge, Ill., assignor to Union Special Machine Company, Chicago, Ill., a corporation of Illinois
Application May 20, 1953, Serial No. 356,177
1 Claim. (Cl. 2—237)



In a garment having a portion formed of fabric and provided with an opening arranged to receive a part of the body of the wearer, an elastic band defining said opening and arranged to surround said part of the body and snugly fit the same which comprises a hem formed of said fabric in the region of said opening, a broad strip of sheet rubber overlying said hem and a portion of said fabric, and a sheath of fabric overlying said strip of sheet rubber, said sheath having its longitudinal edges folded inwardly to provide hems, the arrangement being such that said strip of sheet rubber has one of its longitudinal edges disposed between the outer face of said first mentioned hem and the outer face of a hem of said sheath, the other longitudinal edge of said strip of sheet rubber being disposed between the outer face of the other hem of said sheath and the fabric of said portion of said garment, the longitudinal edges of said strip of sheet rubber extending substantially along the fold lines of the hems

of said sheath but slightly inwardly thereof and the fold line of the outer hem of said sheath being positioned slightly inwardly of the fold line of said hem of the garment fabric, and a plurality of lines of stitching extending longitudinally of said band, one of said lines of stitching extending through said sheath, one hem thereof, said strip of sheet rubber, said hem of said garment fabric and the main body of said garment fabric, another of said lines of stitching extending through said sheath, the other hem thereof, said strip of sheet rubber and the main body of said garment fabric, each of said lines of stitching being spaced inwardly a substantial distance from the fold line of the hem of the sheath through which said line of stitching passes, and said rubber strip normally holding said sheath and the adjacent portion of the garment fabric in a contracted condition and being capable of extension under tension with said sheath and said adjacent portion of the garment fabric.

2,751,600
GARMENT BANDS
Albert C. Peterson, Park Ridge, Ill., assignor to Union Special Machine Company, Chicago, Ill., a corporation of Illinois
Application May 20, 1953, Serial No. 356,178
1 Claim. (Cl. 2—237)



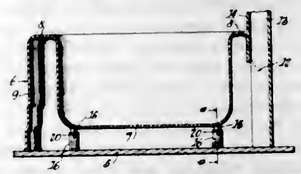
In a garment having a fabric portion arranged to provide an opening adapted to receive a part of the body of the wearer, an elastic band defining said opening which comprises a section of said fabric portion folded over to provide a hem, a strip of sheet rubber, and a sheath formed of fabric having each of its longitudinal edges folded over to provide a hem, said sheath being disposed along the inner face of said fabric portion in the region of said opening with the outer fold line of said sheath positioned a slight distance inwardly of the fold line of said fabric portion, said strip of sheet rubber having one of its longitudinal edges incorporated in and enclosed within the outermost of said hems of the sheath, said edge of the strip being closely adjacent to the inner face of the fold line of said outermost hem of the sheath, the opposite edge of said strip of sheet rubber being free and interposed between the outer face of the other of said hems of the sheath and said fabric portion, said opposite edge of said strip being positioned inwardly of but closely adjacent to the fold line of said other of said hems of the sheath, the arrangement of the strip being such that it is disposed diagonally from top to bottom thereof and has its upper longitudinal edge spaced by two of said hems from the main body of said fabric portion and its lower longitudinal edge disposed against said main body of said fabric portion and spaced by another of said hems from the main body of said sheath, and a plurality of lines of stitching extending longitudinally of the band and passing through said fabric portion, said strip of sheet rubber and said sheath to unite the same, at least one of said lines of stitching passing through said hem of said fabric portion and one of the hems of said sheath along a line spaced a substantial distance inwardly of the fold line of said one hem of the sheath, and at least one other of said lines of stitching passing through the other of said hems of the sheath along a line spaced a substantial distance inwardly of the fold line of said other hem of the sheath.

2,751,601
FLUSH TANK BALL VALVE
Samuel Siber, Canton, Ohio
Application October 8, 1951, Serial No. 250,216
1 Claim. (Cl. 4—56)



In combination with a cylindrical drain pipe in a toilet flush tank, said pipe having a valve seat in the open upper end thereof, a substantially solid spherical ball valve of yieldable material disposed on said valve seat with the seat shaped to receive a portion of the ball valve, said ball valve having a depending tongue extension integral therewith extending downwardly into the drain pipe for guiding movement of the valve ball in relation to the valve seat, a wire rod embedded in said ball valve and extending upwardly from the surface of the ball in diametric opposition to the extension and terminating in a reversely bent portion forming an eye with the free end thereof in abutting engagement with the surface of the ball valve, and a valve rod having a closed eye on the lower end thereof connected to the eye on the wire rod, said surface of said ball valve adjacent the free end of the reversely bent portion of the wire rod being depressible to permit passage of the periphery of the eye on the valve rod under the free end of the reversely bent portion of the wire rod thereby forming a quick detachable universal connection between the ball valve and valve rod.

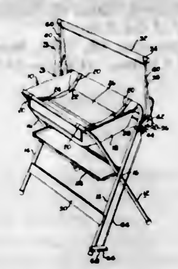
2,751,602
BATHTUB SUPPORT
Edward D. Wilkerson, Livingston, N. J.
Application May 13, 1952, Serial No. 287,567
8 Claims. (Cl. 4—173)



1. In combination, a bathtub having a laterally extending flange portion, a wall structure having a trim surface overlying said flange portion, and supporting means disposed to support at least a part of the weight of the bathtub and including spring means constantly applying pressure upwardly against a portion of the bathtub for progressively urging and holding said flange portion tightly against said trim surface, thereby preventing development of an unsightly crack between said flange portion and trim surface.

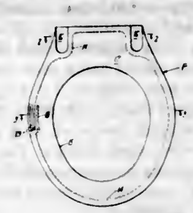
2,751,603
FOLDING BATH STAND
John K. Brinkman, Pasadena, Calif., assignor to Pride Products Co., Los Angeles, Calif., a corporation of California
Application April 11, 1951, Serial No. 220,501
7 Claims. (Cl. 4—177)

1. The combination with a cross-legged folding bath stand and tub of a pair of housings pivotally mounted upon corresponding legs of said bath stand, a dressing table mounted in said pivotally mounted housings, and said housings guiding raising and lowering said table when



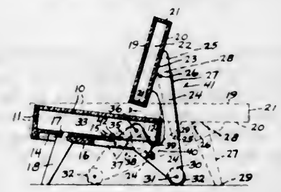
said housings are pivoted to a position where said table is substantially vertical and means for maintaining said table in an upper position wherein said table forms a draft guard.

2,751,604
SILENCING DEVICE FOR TOILET SEAT
Leroy William Young, Arvada, Colo.
Application January 5, 1953, Serial No. 329,513
4 Claims. (Cl. 4—237)



2. A silencing device for a toilet seat which is mounted above a toilet bowl, said device comprising a ring-shaped pad corresponding in shape to said seat and having a substantial thickness and a normal width less than said seat, said pad being formed of resilient material and having an inwardly and laterally extending flange providing a relatively wide upper surface of said pad for adhesive attachment to the underside of said seat, said pad having a section provided with a labyrinth passage leading from the inside to the outside.

2,751,605
DAVENPORT-BED COMBINATION
Roger L. Sogge, Sioux Falls, S. Dak.
Application August 24, 1953, Serial No. 376,021
2 Claims. (Cl. 5—38)



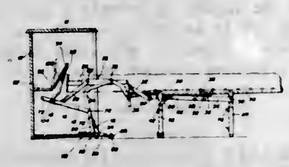
1. A davenport-bed combination comprising a substantially horizontal fixed frame portion, legs pivotally attached to said frame portion and at a distance from one side of said frame portion, said legs including substantially vertical portions which extend substantially vertically when the davenport-bed is used in davenport position, said legs having cut-away portions between the pivotal point of said legs and said davenport used substantially vertical portions, and whereby one side of said horizontal frame portion will abut against the bottom of said cut-away portions when in davenport position, auxiliary legs pivoted to said legs, a further framework portion attached to the upper portions of said legs and being inclined slightly from the vertical to provide a davenport back when said legs are in davenport position, said auxiliary legs being pivoted outwardly when said further framework portion is pivoted downwardly to provide a support for the same.

2,751,606
HYDRAULICALLY ADJUSTABLE HOSPITAL BED
William C. Bonker, St. Paul, Minn.
Application March 7, 1952, Serial No. 275,374
2 Claims. (Cl. 5—79)



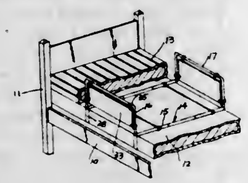
1. In a hospital bed having a bed frame with supporting legs, a pivotal spring section supported on said frame, a first cross shaft pivotally mounted across the bed frame below said spring section and having lift arms rigidly attached towards the ends thereof for sliding engagement with the underside of said spring section for raising and lowering the same, the improvement comprising in combination, a hydraulic jack for raising and lowering said spring section including a cylinder having an upper end and a lower end, a piston mounted in said cylinder, a piston rod connected with the piston and extending out from the upper end of said cylinder, an oscillating lever actuated hydraulic pump and a control valve mounted on said pump, a hydraulic jack control lever fixed to said control valve and adapted to move the same, said cylinder being pivotally connected at its lower end to a leg of said bed frame at a point spaced below said spring section and extending at an upward incline in all positions of lift toward but under the spring section wherein the pump cylinder and piston rod in all positions of operation extend in a straight line which intersects said pivotal spring section being raised and lowered; said piston rod being directly connected to one of said lift arms toward the end thereof which is in sliding engagement with the underside of said spring section whereby the hydraulic cylinder has the thrust thereof always acting in a direction to intersect said spring section; a second cross shaft spaced parallel to said first cross shaft and pivotally attached to said bed frame and having means at each end for detachably connecting the manually actuatable lever; an actuating lever for oscillating said second shaft detachably mounted on one end of the second cross shaft and mountable on the other end and extending upwardly beyond said bed frame for manual actuation; an arm rigidly attached to said second shaft and depending therefrom below said bed frame; a connecting rod having one end pivotally connected to said second cross shaft arm and at the other end pivotally connected to the lever of said oscillating lever actuated pump for the hydraulic jack; control means for said hydraulic jack control valve lever attachable to said bed frame adjacent said actuating lever and connected to the hydraulic jack control valve lever for moving same whereby the hydraulic jack is allowed to raise said spring section when the control valve lever is moved to one position and the hand lever connected to the second cross shaft is oscillated and when the control valve lever is moved to another position said hydraulic jack allows said spring section to be lowered.

2,751,607
CONVERTIBLE FURNITURE
Joseph R. Thomas, Chicago, Ill.
Application November 21, 1952, Serial No. 321,880
7 Claims. (Cl. 5—149)



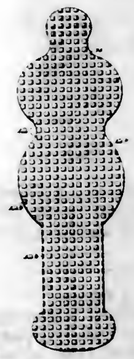
1. The combination with a cabinet structure having a fixed top and a front opening, of a foldable bed structure composed of connected sections, the rearmost end section having levers pivoted thereto and to the insides of the cabinet for mounting it to swing from a folded position within the cabinet to a position with the sections in horizontal alignment extending from the cabinet, the sections when folded within the cabinet occupying a substantially L-shaped position with a space at the rear and upper portion of the cabinet, means forming a receptacle open at the top positioned in the said space at the rear and upper portion of the cabinet, and connecting means pivoted at the folding bed structure and to the front wall of the receptacle for tilting it forwardly where the open top is more accessible from the front of the cabinet structure below the fixed top when the bed structure is extended to open position.

2,751,608
HIDE AWAY BED GATES
George R. Lucas, Detroit, Mich.
Application September 17, 1953, Serial No. 380,738
1 Claim. (Cl. 5—331)



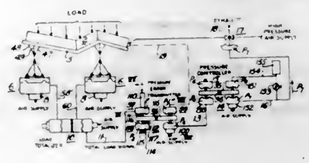
A hide away bed gate construction comprising a horizontal tubular support having spaced tubular assemblies adapted to span the spring of a bed, means for holding the tubular assemblies in longitudinally spaced relationship and a vertically extending side secured to each end of the tubular assemblies, guard members of inverted U-shape having vertical support members adapted to be fitted into said vertical extending sockets or into the ends of the tubular assemblies when not in use, each of the tubular assemblies comprising large diameter tubes and an intermediate small diameter tube spacing said large diameter tubes and having slight fit engagement therewith to permit the extension of the tube assemblies, and vertical sheets lying within each of said U-shaped side guards and having grommets along the edges thereof and tie members extending through the grommets and slidably fitted along the guard parts, each of said sockets depending from the ends of said tubular assemblies and adapted to abut the sides of the spring, the upper ends of said sockets lying below the ends of said assemblies to permit the insertion therewithin of said vertical support members, said means for holding the tubular assemblies in the longitudinally spaced relationship comprising a pair of rods disposed at right angles to said tubes and terminating in bifurcated portions adapted to embrace said large diameter tubes.

2,751,609
INSULATING GROUND PAD
James Fred Oesterling, Philadelphia, Henry A. Sinski, Aldan, and Edward R. Frederick, Pittsburgh, Pa., assignors to the United States of America as represented by the Secretary of the Army
Application September 10, 1953, Serial No. 379,481
2 Claims. (Cl. 5—344)



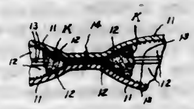
1. An insulating ground pad consisting of a flexible fabric backing, and a multiplicity of compressible solid elastomer blocks each securely fixed to one face of the fabric backing, the blocks being each capable of supporting a compression load of about 2 p. s. i. and being spaced sufficiently far apart from each other to permit the pad to be rolled up without excessive bulk arising from contact of blocks with other blocks; the elastomer being capable of maintaining its compressibility at temperatures as low as —70° F., and being a good heat insulator and a non-absorbent of moisture.

2,751,610
PNEUMATIC CUSHIONS
Ray F. Griswold, Castle Shannon, Pa., assignor to Hagan Corporation, Pittsburgh, Pa., a corporation of Pennsylvania
Application September 9, 1954, Serial No. 454,996
11 Claims. (Cl. 5—348)



1. A pneumatic "G" cushion for supporting a pilot of aircraft having high rates of acceleration, and provided with means for controlling the pressure in the cushion in accordance with changes in the apparent weight of the pilot on the cushion, said means comprising mechanism for measuring the weight of the pilot on the cushion as affected by acceleration, and developing an output pressure that is proportional to such weight, means for supplying a pressure medium to the cushion, and regulating means responsive to the pressure in the cushion and to the output pressure of said weight-measuring mechanism, for developing a pressure output that is the function of the relation of said cushion pressure to the pressure output of said weight-measuring mechanism, for establishing a pressure in said cushion that is a function of the relation of said pressure outputs.

2,751,611
SWIMMING BELT
Julia I. Mann, Santa Rosa, Calif.
Application August 23, 1954, Serial No. 451,489
1 Claim. (Cl. 9—17)



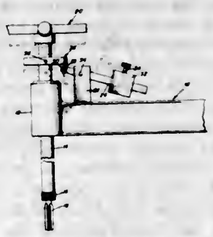
An improved swimming belt comprising, a plurality of sealed plastic water-tight containers, said containers being filled with a buoyant material and formed from two sheets of plastic material having wide sealed flange-like edges on four sides of said containers, adjacent edges of said containers overlapping each other, a fabric cover located over said containers, said containers and cover being stitched together along the four sides of said belt, and transversely across said belt through the said overlapping flange-like edges of said containers, and means for tieing the ends of said belt together when worn on the body of a person.

2,751,612
WATER SKI HYDROFOIL
Harwood Shepard, Auburn, N. Y.
Application March 1, 1954, Serial No. 413,199
9 Claims. (Cl. 9—21)



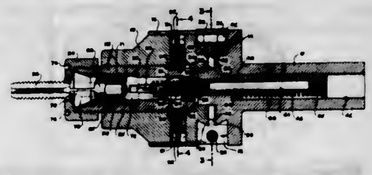
1. Water sports apparatus comprising a pair of water skis adapted to support a person in standing position upon the upper surfaces thereof, a pair of hydrofoil members, one each for said pair of skis, said hydrofoil members being fixed with respect to and extending below said skis, whereby the skis, upon the person being towed over the surface of a body of water, are lifted upwardly to further raise the person above the surface of the water.

2,751,613
WEIGHT BALANCING DEVICE FOR TAPPING SPINDLE
Carl O. Lassy, Plainville, Conn.
Application October 19, 1953, Serial No. 386,826
1 Claim. (Cl. 10—129)



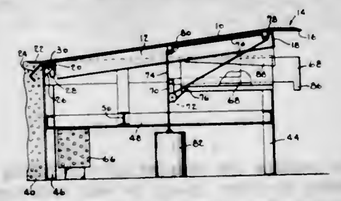
In a hand tapping machine having a horizontally disposed frame portion provided at its free end with a boss and having an elongated spindle slidably and rotatably received in said boss, the spindle removably carrying a tap at its lower end and being provided with manually operable means for imparting rotation thereto at its upper end, a weight balancing device for preventing a broaching action by said tap comprising, an annular collar concentrically secured on said spindle between said boss and said manually operable means, bracket ears secured to said frame portion, an elongated bar pivotally carried by said ears and having one end portion underlying said collar, a contact wheel rotatably journalled on said one end portion of the bar, said wheel freely engaging the under surface of said collar, and a weight element adjustably slidably carried adjacent the opposite end portion of said bar whereby the weight of said spindle is counterbalanced by said weight.

2,751,614
TOOL HOLDER PROVIDED WITH READILY ADJUSTABLE ALIGNMENT MEANS
Emil Joseph Bourguignon, Farmingdale, N. Y.
Application December 2, 1953, Serial No. 395,656
9 Claims. (Cl. 10—129)



3. A tool holder adjustable to compensate for the misalignment of a machine, comprising a body section including means for securing a tool in its forward end on a tool axis, a shank section including a shank having an axis for mounting the tool holder on a machine, a pair of similar spaced adjacent annular locking elements respectively integral with the body section and shank section, said elements facing each other and having a common axis parallel to and eccentrically arranged with respect to the tool and shank axes, said axes being equidistant from said common axis, a split hinged clamping ring engaging said elements for locking the body section to the shank section of the tool holder, and a cylindrical guiding means concentric with said elements carried by one of said sections and extending slidably into the other, said other section being provided with a cylindrical bore receiving and fitting said guiding means, said locking elements being in spaced relation with respect to each other when the clamping ring is in locking engagement therewith, said body section and said shank section being rotatable with respect to each other about the common axis of said elements and guiding means, when the ring is loosened, whereby the tool and shank axes may be offset with respect to each other for adjusting the tool holder to compensate for misalignment of the machine.

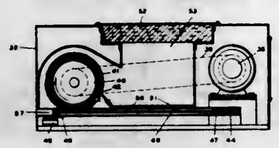
2,751,615
DOCKBOARD
Garrett P. Kelley, Milwaukee, Wis.
Application February 8, 1954, Serial No. 408,647
11 Claims. (Cl. 14—71)



11. An adjustable dockboard assembly comprising a frame, a dockboard carried by said frame and mounted for pivotal movement about its rear edge between raised and lowered positions, an arm mounted on the frame for

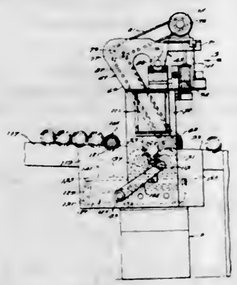
movement between projected and retracted positions relative to said board, motion transmission means interconnecting the board and the arm, means to bias the board to said raised position and to urge the arm to said projected position for actuation to retracted position by a truck backing towards the dockboard, said motion transmission means being responsive to movement of the arm toward retracted position to lower the dockboard onto the bed of the truck.

2,751,616
BRUSH CLEANING DEVICE
Milo I. Turner, Jr., Livonia, and Clyde R. Mayo, Rochester, N. Y., assignors to The Haloid Company, Rochester, N. Y., a corporation of New York
Application July 17, 1953, Serial No. 368,692
2 Claims. (Cl. 15—77)



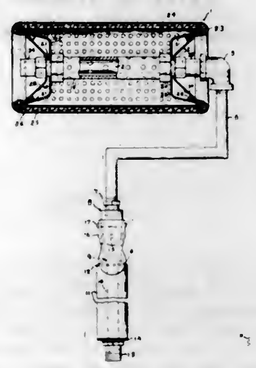
1. Apparatus for removal of electrostatically adhering particles from a xerographic plate surface comprising a rotatable brush mounted within a hood, means to support a xerographic plate surface to be cleaned in contact with said brush, means to guide the surface to be cleaned past the rotatable brush, means for rapidly rotating the brush, flicking means along the length of the brush to compress the brush whereby air from between the brush bristles is expelled, said flicking means for compressing the brush comprising a member positioned at a point along the direction of rotation of the brush just before the brush contacts the plate surface and positioned to impinge substantially deeper into the brush bristles than does the surface to be cleaned, a passageway disposed to receive air ejected from the brush and convey said air away from the hood area, said passageway extending to said flicking means and the hood thereby maintaining removed particles away from the surface being cleaned.

2,751,617
AXLE CLEANING DEVICE
John R. McLaggan, Springfield, Mo.
Application April 11, 1952, Serial No. 281,806
6 Claims. (Cl. 15—88)



1. A machine for cleaning axles including stationary supporting structure, means on said stationary supporting structure for supporting and rotating an axle to be cleaned, means on said stationary supporting structure adjacent said supporting and rotating means for supporting a second axle to be cleaned, a device movably supported adjacent said supporting and rotating means for carrying means to engage and clean the axle during its rotation, means for moving said device longitudinally of the axle so that the axle will be cleaned from one predetermined point to another, means supported on said stationary supporting structure adjacent said axle supporting and rotating means actuatable to engage the axle and move the same away from said supporting means after the axle has been cleaned, means supported on said stationary supporting structure adjacent said second axle supporting means actuatable to engage the second axle and move the same into engagement with said axle supporting and rotating means, after the one axle has been cleaned, and means supported on said stationary supporting structure and operatively connected with both of said axle engaging and moving means actuatable by said device at the end of its movement during the cleaning operation to cause the actuation of both said axle engaging and moving means.

2,751,618
CONTINUOUS SUPPLY PAINT ROLLER
Selma Pruitt, Jamaica, N. Y.
Application July 22, 1953, Serial No. 369,576
2 Claims. (Cl. 15—128)



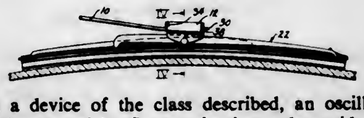
1. In a paint applicator of the character described, a paint applying roller unit comprising a foraminate tubular member having reduced threaded end portions; a foraminate open ended cylinder member coaxial about the tubular member and of relatively larger diameter and length than the latter; a pair of dished closure members carried axially, one on each reduced end portion of the tubular member, the dished members having opposed convexed faces and the marginal rim portion of each dished member forming an annular channel facing that of the other, in which channels the ends of the cylinder member are removably received; a double layered sleeve member of heavy woven paint pervious cloth covering the cylinder and a single layered sleeve member of finer woven paint pervious cloth material covering the latter sleeve member, the several cloth sleeve members drawn taut and having end portions overlapping the dished face of the respective dished members; a dished collar axially carried on each reduced end portion of the tubular member and nesting in the dished face of the respective dished members over the related ends of the sleeve members; and a nut threaded onto each reduced end of the tubular member in tight abutment with the dished collar whereby the several elements of the roller are held together as a unit, the tubular member adapted to be mounted for rotation on a pressurized paint supply connected shaft having perforations in communication with those of the tubular member.

2,751,619
WINDSHIELD WIPER BLADE FOR CURVED GLASS
Herbert I. Chambers, Toledo, Ohio
Application December 31, 1952, Serial No. 328,998
10 Claims. (Cl. 15—245)



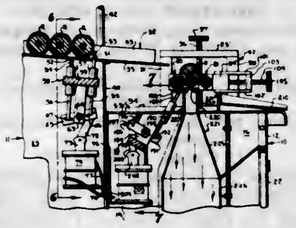
1. In a windshield wiper suitable for use with a planar or curved windshield surface, a wiper member comprising a flexible body having a wiping edge, a flat spring member attached to the flexible body substantially throughout its length for supporting said flexible body, said flat spring member having its broad surface in parallel juxtaposition to the windshield surface being wiped, a pair of arcuate nested yokes pivoted together intermediate their ends and attached at their ends to the spring member at four spaced points, and means for attaching said wiper member to an oscillating arm at the pivot point, each of said yokes having outer portions extending from the pivot point to the ends of the spring member and inner portions extending oppositely from the pivot point to intermediate points on said spring member, whereby force applied by the oscillating arm to the pivot point flexes the spring member and the flexible body to conform to the windshield surface being wiped.

2,751,620
CONNECTOR MEANS FOR WINDSHIELD WIPER BLADE
Louis B. Ehrlich, Toledo, Ohio
Application June 13, 1951, Serial No. 231,291
9 Claims. (Cl. 15—250)



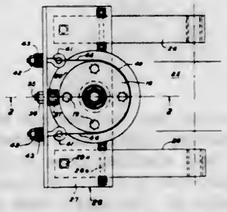
1. In a device of the class described, an oscillatable arm having a straight, flat terminating end provided with a catch, a wiper blade adapted to be attached to said arm, a member pivoted to said blade having means including a channel with inwardly extending side portions defining a pocket adapted to house the end of the arm by relative longitudinal movement, spring means cooperating with the member, and means cooperating between the spring means and the catch for interengagement to prevent withdrawal of the arm end from the pocket, said last means being adapted for manual manipulation to disengage said parts to allow withdrawal of the arm end.

2,751,621
CLEARER ROLL STRIPPING APPARATUS
George W. Mitchell, Lockhart, S. C.
Application January 14, 1953, Serial No. 331,253
13 Claims. (Cl. 15—307)



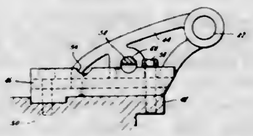
1. Apparatus for stripping accumulated fibres and the like from textile clearer rolls and the like comprising a pair of closely spaced, horizontally disposed transverse stripper rolls, an inclined chute having its lower end disposed substantially parallel to, and slightly above, the stripper rolls and on which said clearer rolls may be positioned so they extend transversely of the chute in side by side relationship, means normally restraining movement of said clearer rolls along the inclined chute as affected by gravity, means for alternately driving said stripper rolls in a first direction and in a second opposite direction between movements thereof in the first direction, a suction device disposed closely adjacent said stripper rolls and including a hollow member having a nozzle provided with apertures therein disposed closely adjacent, and extending in parallel relation to, the stripper rolls, means operable automatically for releasing the foremost of the clearer rolls from the restraining means each time the stripper rolls are caused to move in said first direction whereby said foremost clearer roll will move, by gravity, off of the chute and onto and partially between the stripper rolls, and means operable automatically for ejecting each successive clearer roll out of engagement with the stripper rolls at substantially each time at which the stripper rolls are driven in said first direction.

2,751,622
CASTER WHEEL MOUNTING
Elmer L. Nelson, Chicago, Ill.
Application August 3, 1953, Serial No. 371,961
5 Claims. (Cl. 16—35)



1. A caster wheel mounting comprising a member providing a bearing surface, a brake surface, and a thrust surface, a bracket secured to the member for rotation about a substantially vertical axis and having a surface portion engaging said bearing surface, a supporting arm secured to the bracket and extending away from said bracket on one side of said vertical axis means on the outer end of said arm for rotatably carrying the caster wheel, brake means on the bracket, means for urging the brake means into braking engagement with said brake surface, and a thrust roller rotatably carried by the bracket and engaging the thrust surface on the other side of said vertical axis.

2,751,623
ADJUSTABLE HINGE PLATE ASSEMBLY
Alfred C. Sinclair, Houston, Tex., assignor to Anderson, Clayton & Co., Houston, Tex., a corporation of Delaware
Original application April 2, 1953, Serial No. 346,425, now Patent No. 2,690,115, dated September 28, 1954. Divided and this application May 14, 1954, Serial No. 429,758
6 Claims. (Cl. 16—130)



1. An adjustable hinge plate assembly comprising, a stationary hinge plate having laterally-extending inverted

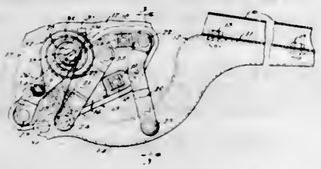
T-slots disposed in spaced parallel relation and a plurality of laterally-spaced sets of longitudinally-aligned grooves proximate the top of said hinge plate, said grooves comprising circular arcs, when viewed in cross-section, hinge brackets having inverted T-shaped projections slideable in said inverted T-slots and having longitudinally-aligned circular apertures proximate the top of said hinge plate, and a cylindrical locking bar extending through the apertures and seating in one set of grooves, said bar having a flat portion between each hinge bracket whereby the locking bar may be rotated to permit sliding of the brackets to another of the sets of grooves and there rotated to lock said hinge brackets with respect to said hinge plate.

2,751,624
SPRING ANCHOR UNIT FOR OVERHEAD SWINGING DOORS
Henry P. Lipking, Brea, Calif., assignor to Harlan E. Stocks, Fresno, Calif.
Application January 25, 1954, Serial No. 405,748
7 Claims. (Cl. 16—163)



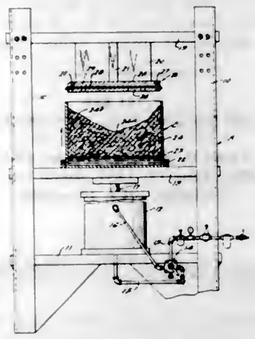
7. A spring anchor unit for overhead swinging doors comprising a mounting bracket for attachment to a door jamb, a pair of door attaching arms pivotally mounted at one set of their ends in vertically spaced relation on said bracket, means for attaching a door spring to said bracket above the pivotal mounting of the upper of said arms and laterally offset from said bracket to permit movement of the arms between the bracket and spring, and means for attaching the free ends of said arms and spring to a door in generally vertically spaced relation to one another, the free end of the spring being between the free ends of said arms.

2,751,625
DECK LID HINGE
Trygve Vigmostad, Detroit, Mich., assignor, by mesne assignments, to Chrysler Corporation, a corporation of Delaware
Application February 23, 1951, Serial No. 212,428
5 Claims. (Cl. 16—163)



3. In a hinge device for connecting a rear deck lid to a vehicle body, a hinge arm adapted to be secured to the lid and extending generally horizontally forward therefrom when the lid is closed, means for swinging the arm rearwardly from the closed position and for suspending the arm from the body when the lid is closed comprising vertically swinging forward and rearward links, the rearward link being substantially upright when the lid is closed and having a lower end pivoted on said arm and having an upper end adapted to be pivoted on said body, the forward link being inclined rearwardly when the lid is closed and having a lower end pivoted on said arm in advance of said rearward link and having an upper end adapted to be pivoted on said body, means for exerting an endwise rearward thrust on said arm when the lid is closed comprising a pair of pivotally connected toggle links, the outer end of one toggle link being pivoted on the hinge arm near the latter's forward end, the outer end of the other toggle link being adapted to be pivoted on the body adjacent and in advance of the pivotal connection between the first toggle link and said arm when the lid is closed, and spring means yieldingly urging unfolding movement of said toggle links, said toggle links being substantially equal in length and inclined rearwardly when the lid is closed.

2,751,626
APPARATUS AND METHOD FOR MAKING DIES
Fred Lyijynen, Detroit, and Stanley L. Bay, Hazel Park, Mich., assignors, by mesne assignments, to Chrysler Corporation, a corporation of Delaware
Application February 2, 1953, Serial No. 334,392
9 Claims. (Cl. 18—16)



1. In an apparatus for preparing a resin saturated mass of glass fibers for use in making a die, upper and lower relatively movable press members, a container adapted to be supported on the lower press member and adapted to contain a quantity of liquid resin and a quantity of fiber glass, said upper press member being dimensioned to snugly enter said container and in cooperation therewith to compress said resin and fiber glass together upon relative movement of the press members, said upper press member comprising a pair of apertured pressure plates and a fiber glass screening layer interposed between said plates, and said screening layer and the apertures in said plates providing for the escape of excess resin therethrough during the compression operation.

2,751,627
PROCESS FOR PRODUCING CELLULAR THERMOPLASTIC BODIES
Herbert Lindemann, Sins, Switzerland, assignor to Lonza Electric and Chemical Works Ltd., Gampel, Switzerland
No Drawing. Application November 25, 1952, Serial No. 322,586
Claims priority, application Switzerland November 29, 1951
11 Claims. (Cl. 18—48)

1. A process for producing a gas-expanded cellular thermoplastic body having closed cells, comprising, in combination the steps of heating a thermoplastic mass in a mold while exposing said thermoplastic mass to a gaseous medium under pressure so as to force gas into said thermoplastic mass, thereby forming a gas-containing thermoplastic body; cooling said gas-containing thermoplastic body; reducing the pressure in said mold; removing said cooled gas-containing thermoplastic body from said mold so as to cause the same to expand and form an intermediate cellular thermoplastic body having all cells closed and filled with gas at higher than atmospheric pressure; heating said gas-containing cellular thermoplastic body while applying superatmospheric pressure thereto so as to substantially uniformly heat said gas-containing cellular thermoplastic body throughout while preventing substantial expansion of the same; and reducing said applied superatmospheric pressure so as to expand said gas-containing thermoplastic body and form a gas-expanded cellular thermoplastic body.

2,751,628
MOLDED ACETYLENIC POLYMER AND METHOD OF PRODUCTION
Gilbert B. Carpenter, Mountain Lakes, and Otis W. Fortner and Allo J. Buselli, New Providence, N. J., assignors to Air Reduction Company, Incorporated, New York, N. Y., a corporation of New York
No Drawing. Application March 23, 1953, Serial No. 344,216
11 Claims. (Cl. 18—55)

11. The method of molding polyacetylene which comprises compressing the polyacetylene in a mold at a temperature within the range of from about 90° C. to about 400° C., said temperature being selected sufficient to effect a chemical transformation of carbon-hydrogen bonds in the polyacetylene to carbon-carbon bonds without complete carbonization under a pressure of at least 15,000 p. s. i. for at least one hour, and preventing oxidation of the resulting molded article while cooling to the ambient temperature.

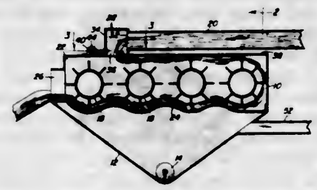
2,751,629
PROCESS OF RESHAPING PLASTIC MATERIALS
Franklin Dick, New York, N. Y., assignor to Richard A. Fisch, Long Island City, N. Y.
Application December 11, 1953, Serial No. 397,583
6 Claims. (Cl. 18—59)



1. In a process of making a hard thermoplastic material, the steps comprising providing a pellicular body of thermoplastic material which is substantially free of volatile solvent liquids and containing 3–50% of a plasticizer which is soluble in a volatile organic solvent which does not dissolve the thermoplastic material, fitting the pellicular body about an object which is substantially the same size but smaller than the pellicular body, treating the pellicular body while fitted on said object in a leaching bath comprising a volatile organic solvent in which the plasticizer is soluble but in which the thermoplastic material is not soluble, removing the object and pellicular body from the leaching bath and drying the pellicular body whereby the pellicular body shrinks onto the object about which it is fitted to form a layer of the thermoplastic material of increased hardness thereon due to the loss of plasticizer from the original pellicular body.

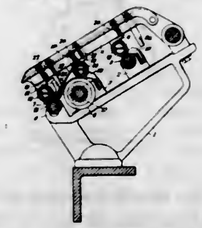
2,751,630
FIRE EXTINGUISHER AND STATIC ARRESTER SYSTEM FOR SEED COTTON PRECLEANER
William R. Bryant, Jonesboro, Ark.
Application March 14, 1955, Serial No. 494,151
11 Claims. (Cl. 19—66)

1. A precleaner for seed cotton having an entrance opening into a cleaning chamber adjacent the top thereof, means for conveying seed cotton and air in a relatively narrow stream from a source of supply, means for passing the cotton and air from said stream downwardly in



a relatively widening stream and with free fall through the entrance opening and into the cleaning chamber, means for impinging moisture upon said widening stream during said free fall.

2,751,631
TEXTILE DRAFTING APPARATUS
William Aldred Hunter, Reginald Maymann Blackburn, and Walter Nutter, Helmshore, Rossendale, England, assignors to T. M. M. (Research) Limited, Rossendale, England
Application February 19, 1952, Serial No. 272,444
Claims priority, application Great Britain February 28, 1951
6 Claims. (Cl. 19—131)



1. A drafting apparatus comprising, in combination, a large lower drafting roller, an apron opposed to said roller and bearing against it from above over an extensive arc for pressing the fibers against the roller and for driving the apron, an apron guiding roller disposed above and behind the lower drafting roller, a forward guide for the apron, an advance pair of drafting rollers beyond the forward guide, the forward guide being spaced forwardly away from said lower drafting roller, means for supporting and adjusting the forward guide in position independently of said apron guiding roller, and both with respect to its distance from the nip of the advance pair of drafting rollers, with respect to the plane containing said nip and the nip of said large lower drafting roller, and with respect to the nip of the apron guiding roller, thereby simultaneously affording an adjustment of the length of the arc of contact between the apron and the single drafting roller over which the apron is stretched.

2,751,632
TEXTILE DRAWING MECHANISM
Erwin Friedrich Dausch, Esslingen (Neckar), Wurttemburg, Germany, assignor to SKF Kugellagerfabriken Gesellschaft mit beschrankter Haftung
Application September 12, 1951, Serial No. 246,243
Claims priority, application Germany September 23, 1950
12 Claims. (Cl. 19—135)

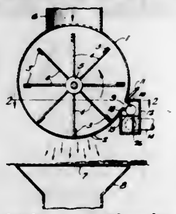
1. Textile drawing mechanism comprising a supporting device including a front part and a rear part, the front part being telescopically and movably received within the rear part, pairs of center and rear top rolls, a guide arm for each of said pairs of rolls, resilient means for applying weight to said guide arms, an underframe

for the support of bottom rolls, a shaft in fixed relation to the underframe, the supporting device being arranged to be tilted about the shaft, a member arranged to slide



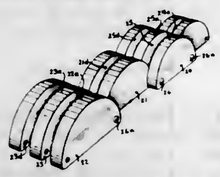
along the front part of the supporting device, said member being provided with recesses, and a lever mounted on said shaft, said lever being provided at one end with a projection adapted to engage any one of said recesses.

2,751,633
METHOD AND APPARATUS FOR REMOVING DENSE FROM LIGHTER MATERIAL
James D'A. Clark, Longview, Wash., assignor to A. B. Dick Company, Chicago, Ill., a corporation of Illinois
Application September 10, 1949, Serial No. 114,942
11 Claims. (Cl. 19—156)



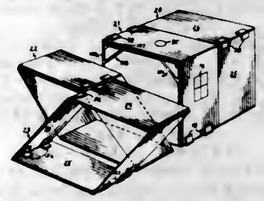
1. In a fiber dry felting operation in which fibers are moved over a foraminous surface through which some fibers pass to be deposited in the form of a felt, the steps of moving the fibrous material over an exit opening, directing a counterflow of air through said exit opening for the selective removal of the heavier material through the opening, collecting said heavier material removed through the opening, repeatedly agitating the collected heavier material after passing through the opening to separate therefrom individual fibers and directing said counterflow of air through the collected heavier material to carry off the fibers separated therefrom.

2,751,634
ARTICULATED STRUCTURE
Nathaniel W. Washington, Ephrata, Wash.
Application November 27, 1951, Serial No. 258,386
1 Claim. (Cl. 20—0.5)



In a toy, a chain of articulating links having a single said link alternating with pairs of said links and characterized in that all of said links are correspondingly shaped to each define, in plan, an oblong figure bordered by a base margin and a generally arcuate top margin with the arc which forms the top margin being fairly flat so that the figure is quite long by comparison with its width, each articulation comprising a connecting pin located in such close proximity to the adjacent end limit of the concerned link that the nose extremity of said link projects to little or no degree beyond the marginal limits of an articulating link or links when the articulating links are swingably moved one in relation to the other, the connections made by such pins being such as to create, between the pivoted nose of each single said link and the noses of the paired links which connect therewith, a sufficient friction to yieldingly hold the links of the chain in any position in which the same may be placed.

2,751,635
PORTABLE PREFABRICATED SHELTER
Thomas C. Donnahue, Alexandria, Va.
Application March 9, 1950, Serial No. 148,680
4 Claims. (Cl. 20—2)
(Granted under Title 35, U. S. Code (1952), sec. 266)

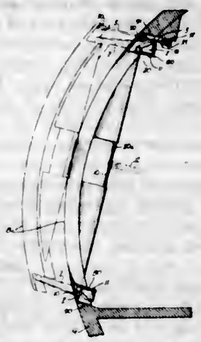


1. In a prefabricated building, a first collapsible section comprising a pair of oppositely disposed side panels of equal dimensions, top and bottom panels of equal width and length, hinge means connecting the top and bottom edges of each of said oppositely disposed side panels respectively to said top and bottom panels in such a manner as to allow the sections to be flattened into a parallel disposition by rotation of the side panels in a direction perpendicular to the side panels, cooperating means on the hinged edges of said panels preventing movement of said panels in the other direction beyond a perpendicular position with respect to each other, a second collapsible section of construction similar to said first section wherein the hinge means and cooperating means are effective to permit said section to be flattened only by rotation in a direction opposite to that of the first section and to prevent movement of the panels of said second section in the other direction beyond a perpendicular position with respect to each other, the sections having matching intermating means on the ends of adjacent sections and being placed on a surface with their bottom panels disposed side by side with the panels of each section in coaxial abutting intermating relationship, each section locking the adjacent sections against hinged movement since the matching intermating means on the ends of adjacent sections are mated together to hold the sections erect with their side panels perpendicular to the top and bottom panels.

2,751,636
PLUG-TYPE DOORS FOR PRESSURIZED CABINS
Milton Heinemann and Varnell L. R. James, Seattle, Wash., assignors to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application April 11, 1955, Serial No. 500,636
10 Claims. (Cl. 20—16)

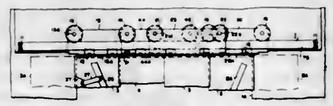
10. In combination with the structure of a pressurized aircraft cabin which is formed with a doorway to the exterior defined by a sill, a lintel, and two spaced jambs, a door of a height approximating the spacing between the sill and lintel but sufficiently less that it may pass therebetween, and of a width exceeding the spacing between jambs so as to be held seated upon said jambs by the cabin pressure acting outwardly upon the interior surface of the door, and guiding and supporting means interconnecting the door and the aircraft structure adjacent the doorway, organized and arranged to displace

the door, in opening outwardly from its closed position, initially inwardly at a first edge and bodily laterally with said first edge leading, and outwardly at the second edge,



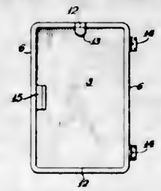
and subsequently edgewise outwardly through the doorway with said second edge leading, to an opened position substantially clear of the doorway and outwardly of the aircraft structure.

2,751,637
CENTER-OPENING DOOR ASSEMBLIES
Joseph K. Kraft, Verona, N. J., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application May 26, 1951, Serial No. 228,445
7 Claims. (Cl. 20—19)



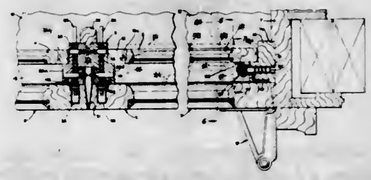
1. In a door assembly, first and second spaced parallel rails, a pair of center-opening first and second doors disposed in a common plane for movement in directions parallel to said rails, a first door-hanger assembly for the first door, said door-hanger assembly including a first guide element engaging the first rail to guide the first door therealong, and said door-hanger assembly including a second guide element engaging the second rail to guide the first door therealong, said guide elements constituting the only guide elements associated with the first door for engaging said rails, said guide elements being spaced in a direction parallel to said rails, and having an overall dimension in said direction which is substantially larger than the corresponding dimension of the first door.

2,751,638
REFRIGERATOR CABINET CONSTRUCTION
Ralph E. Wallenbrock, Evansville, Ind., assignor, by mesne assignments, to Whirlpool-Seeger Corporation, a corporation of Delaware
Application November 14, 1952, Serial No. 320,504
4 Claims. (Cl. 20—35)



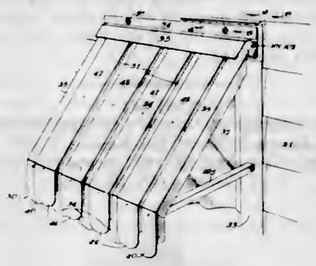
2. A door for a refrigerator cabinet comprising an outer panel, an inner panel, insulation disposed between said panels except at the edges thereof, compression gasket means disposed between said panels at the edges thereof for maintaining said panels in a spaced-apart relationship, a channel-shaped member disposed around the edges of and overlapping said panels for maintaining said panels in alignment, a breaker strip disposed between said channel-shaped member and said inner panel at the outer marginal edges thereof to substantially reduced any thermal contact between said channel-shaped member and said inner panel, and a sealing gasket mounted on said channel-shaped member on the opposite side thereof from the side cooperating with said breaker strip thereby preventing the passage of any heat between said door and said refrigerator cabinet when mounted to cooperate with said refrigerator cabinet.

2,751,639
CASEMENT WINDOW STRUCTURE
Joseph H. Oswald, South Euclid, Ohio
Application April 5, 1952, Serial No. 280,710
16 Claims. (Cl. 20—53)



12. A mullion structure for casement windows comprising a wood post and a resilient mullion and weather seal member formed of a strip of sheet material folded longitudinally to approximately V cross section, the said resilient member being loosely secured to and projecting from the outer side of the wood post with its fold edge and divergent sides exposed.

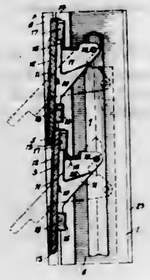
2,751,640
METAL AWNING CONSTRUCTION
Sidney A. Miller and Edward W. Gorkowski, Chicago, Ill., assignors of one-third to Philip Miller, Chicago, Ill.
Application October 10, 1952, Serial No. 314,034
3 Claims. (Cl. 20—57.5)



1. An awning which comprises an assemblage of elongate panels arranged in parallel engagement one alongside the other, said panels comprising top members of downwardly opening channel formation and bottom members of upwardly opening channel members, said members each providing a pair of side legs and a connecting web, the side legs of each top member having inwardly extending edge flanges, the side legs of each bottom member terminating in inwardly directed edge flanges, said members being overlapped in alternate sequence with the edge flanges of adjacent panels wedgingly engaged to lock the panels against free lateral separation of their adjacent edge flanges, and means force fitted between the

outer panels of the assemblage and preventing lateral separation of the said edge flanges comprising an elongate, rigid bar secured transversely between said outer panels maintaining the assemblage under a strain condition such that upon removal of the said bar, the panels are freely movable laterally to permit lateral separation of the engaged edge flanges.

2,751,641
JALOUSIE WINDOWS AND DOORS
Bert Josephson, Coral Gables, Fla., assignor to Royal Jalousie Company, Hialeah, Fla., a corporation of Florida
Application July 23, 1954, Serial No. 445,210
1 Claim. (Cl. 20—62)



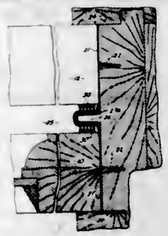
A jalousie-type construction for windows and doors comprising, a frame having a side member provided with a longitudinal channel, a flange formed integrally on the frame member and extending forwardly of the channel, a lengthy continuous rib formed on a face of the flange, a plurality of rocker arms mounted on spaced pivots extending through the rib, a lifter bar pivotally attached to the rocker arms, said lifter bar being positioned in and movable through the channel, panes engaged at their ends by the rocker arms, each rocker arm having a forward flange taking over the face of a pane, each rocker arm having integral inturned lips at its upper and lower edges extending respectively over the upper and lower edges of a pane, each rocker arm having a pair of spaced integral rear flanges extending behind the pane, resilient elements in the form of rubber cushions maintained by the spaced rear flanges between said rear flanges and the pane, and each rocker being provided with a longitudinal rib located between its pivot and its lower end and operative as a stop against the rib on which the rocker arms are pivotally mounted.

2,751,642
LOUVERED WINDOW CONSTRUCTION
Joseph R. Klein, Los Angeles, Calif.
Application August 12, 1952, Serial No. 303,897
7 Claims. (Cl. 20—62)



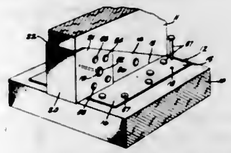
1. A window structure comprising: vertically extending end frames having flanges turned inwardly at the front thereof; a plurality of substantially rectangular panes extending transversely between said frames just rearwardly of said flanges; gasket members mounted on the lower edge of each of said panes and adapted to seal against the upper edge of the next adjacent pane when said panes are in the vertical position, said gasket members having end portions projecting outwardly beyond the ends of said panes; brackets mounted on said frames in horizontally disposed pairs, having a lower ledge to rotatably support the end portions of said gasket members and an upper keeper preventing rearward or upward displacement of said members, said brackets being pivotally mounted on said frames and rotatable to a position permitting releasing movement of said members between said ledge and said keeper; a plurality of interconnected levers pivotally mounted adjacent one of said end frames, extending from the rear toward the front and pivoted near the rear end thereof, each of said levers having a lifting pin on the front end thereof for bearing against one of said panes and urging said pane toward said flanges when said lever is in a substantially horizontal position, said levers being pivotally depressible to swing said lifting pins away from said panes and permit said panes to pivot rearwardly to an open position; and operating means connected to said levers for simultaneously controlling the movement thereof.

2,751,643
WEATHER STRIPPING
John P. Dacey, Winchester, Mass., assignor to The Standard Products Company, Cleveland, Ohio, a corporation of Ohio
Application October 24, 1951, Serial No. 252,821
3 Claims. (Cl. 20—69)



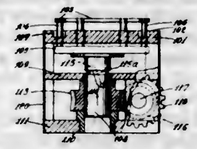
2. A weather strip member for a double hung window structure having upper and lower relatively movable sashes, said member comprising a strip of resilient sheet metal provided with a longitudinally disposed ridge or rib for location in the space between the planes of movement of said sashes and constituting inner guiding stops for said sashes, the side walls of said ridge or rib being substantially parallel and being provided with fabric coverings having elongated masses of pile fibers for sealing engagement with said window sashes, and said strip also having longitudinal flange portions on opposite sides of said ridge or rib and which serve as bearing runways for said window sashes.

2,751,644
JOIST HANGER
Axel V. Pedersen, Los Angeles, Calif.
Application December 14, 1953, Serial No. 397,998
2 Claims. (Cl. 20—94)



1. A connection between a joist and a beam or header comprising angular sheet metal members positioned in the corners formed between the joist and beam or header having portions lying against the beam or header and portions lying against the sides of the joist, a U-shaped sheet metal strap positioned beneath the bottom of the joist and having its sides in overlapping relationship to the portions of the angular members which lie against the sides of the joist, and nails driven through the angular members into the joist and beam or header respectively, at least some of the nails being driven through both the U-shaped strap and a portion of an angular member.

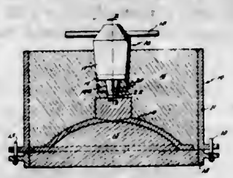
2,751,645
EJECTOR MECHANISM FOR PATTERN PLATES
Gwynville Jenkins, Staines, and George William Taylor, The Causeway, Staines, England, assignors, by mesne assignments, to Polygram Casting Company Limited, London, England
Application September 3, 1952, Serial No. 307,646
Claims priority, application Great Britain August 8, 1952
8 Claims. (Cl. 22—20)



1. Apparatus for making hollow articles by applying to a heated pattern a moulding mixture comprising a pulverulent material and a hardenable synthetic resin in powder form to form a coating on the pattern, and curing said coating by heat, said apparatus comprising a horizontal rotatable table, a plurality of pattern carriers spaced at equal intervals around the periphery of said table, each of said carriers being hinged to said table for radially outward swinging movement in a vertical plane, and each of said carriers including means for ejecting a cured coating from a pattern, and an element for actuating said ejector means, said actuating element being movable in one direction to operate the ejector means to perform ejection and in the opposite direction to reset the ejector means, an oven of arcuate form extending around a part of the table in the path of the pattern carriers, a container for moulding mixture disposed adjacent to the periphery of the table, means for rotating the table intermittently with a dwell each time a pattern carrier arrives opposite the container, whereby said carrier can be swung radially outwards about its hinges to position it over the mouth of the container with the pattern inverted within the latter, a fixed cam member disposed in the path of the ejector actuating element as the latter travels from a point within the oven to the container, said cam member serving to effect the ejecting movement of the ejector actuating element, and a cam track disposed in the path of the ejector actuating element during the radially outward swing of the pattern carrier, said cam track serving to effect the resetting movement of the ejector actuating element.

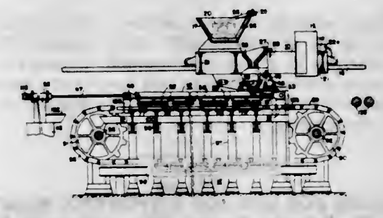
2,751,646
CUTTER HEAD FOR METAL-CASTING MOLDS
Oscar H. Mann, Shreveport, La.
Application January 29, 1953, Serial No. 333,874
3 Claims. (Cl. 22—38)

1. A removable cutter head adapted for use in mold casting of metals, comprising an upper, conically shaped body portion having the lower end thereof smallest, a lower conically shaped body portion separable from and removably secured to said upper body portion, said lower body portion having its lower end smaller and being of smaller diameter than said upper body portion and having a vertical opening from the bottom thereof upwardly, adapted for mounting on an extension integrated with a pattern, a plurality of separate, radially spaced sand cutting wires secured to said head, extending outwardly from said lower portion, and peripherally forming a wire sand



cutting and removing cage network, said head being rotatable on said extension, whereby said wires cut a core of sand surrounding the casting mold and said network serves to remove the core and form a metal holding basin.

2,751,647
CONTINUOUS HORIZONTAL HOT MOLTEN METAL CASTING APPARATUS
Benjamin Brownstein, Ellwood City, Pa.
Application July 8, 1954, Serial No. 442,098
5 Claims. (Cl. 22—57.3)

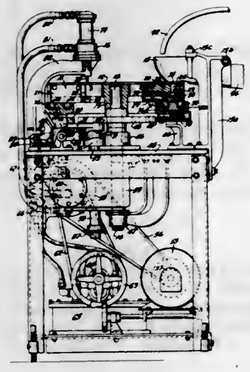


1. Casting apparatus including a conveyor, a plurality of molds positioned end-to-end and adapted to be advanced longitudinally by the conveyor, each mold communicating with adjacent molds whereby a single, integral article may be cast which extends substantially the combined lengths of the molds, means to center the molds for their longitudinal travel, rearwardly extending side arms on each mold, a rear roller on each side arm, a front roller on each side of each mold but spaced from the front thereof to accommodate the rearwardly extending arm of a preceding mold, at least one side arm on each mold having a trailing link connected thereto and disposed adjacent the corresponding rear roller thereof and adjacent a front roller of the succeeding mold to link the molds together, said link having slotted holes to allow relative movement between said molds, means for pressing the molds together to eliminate the slack from the slotted holes in the links and hold the molds in fixed abutting contact to receive a molten charge, and means to move the conveyor whereby as the molds leave the upper flight of the conveyor they pivot about the rear rollers and strip away from the solidified charge without lifting it at any point.

2,751,648
CASTING MACHINE
Clyde D. Merliatt, Minneapolis, Minn., assignor to Gould-National Batteries, Inc., St. Paul, Minn., a corporation of Delaware
Application August 15, 1952, Serial No. 304,613
5 Claims. (Cl. 22—77)

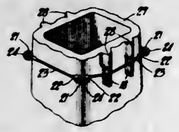
2. A casting machine comprising a rotary mold carrier adapted to be rotated about a substantially vertical axis and having an annular, substantially horizontally disposed top plate formed with a series of circumferentially spaced filling openings, a series of molds spaced apart circumferentially of and depending from said carrier, said molds being movable by said carrier along a circular path and

each having a fixed cavity member and outer and inner movable cavity members disposed respectively at the radially outward and radially inward sides of the fixed cavity member, the cavities in said fixed cavity members being in continuous communication with said filling openings, endless cams severally disposed beneath the outer



and inner movable cavity members, means operatively connecting the several movable cavity members to said cams whereby to actuate said movable members to and from open position relative to said fixed cavity members, and power-driven means operatively connected to said carrier for rotating it.

2,751,649
HOLDER FOR HOT-TOP SUPPORTING BLOCKS
Alden W. Peterson, Lorain, Ohio, assignor to United States Steel Corporation, a corporation of New Jersey
Application May 12, 1952, Serial No. 287,395
4 Claims. (Cl. 22—147)



1. A device for holding the supporting blocks on a hot-top comprising corner plates adapted to be positioned at the corners of a hot-top, elongated flexible coil springs adapted to extend along all the sides of the hot-top, and means attaching said springs to said plates and thereby forming a closed loop, the attaching means on at least two of said corner plates being hinged thereto.

2,751,650
HIGH STRENGTH SHELL MOLDS
Charles F. Froberger, Oak Park, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
No Drawing. Application November 19, 1952, Serial No. 321,509
13 Claims. (Cl. 22—193)

8. A method of forming a smooth-surfaced shell mold which includes the steps of placing a mixture of a refractory filler material, a thermoplastic lignin type resinous material derived from wood and containing both methoxyl and hydroxyl groups, and a thermosetting binder into contact with a heated pattern so that a thin smooth-surfaced layer of the mixture is formed adjacent said pattern, thereafter curing the mold and removing it from the pattern surface.

2,751,651
BAND-CLAMPS FOR CONDUITS
Charles G. Cooper, San Francisco, Calif.
Application January 30, 1953, Serial No. 334,226
1 Claim. (Cl. 24—20)



In a band-clamp for a conduit: a strip-like band wrapped around a conduit to overlap itself; the wrapped band being substantially spiral-shaped from end to end thereof, and defining opposing lateral edges; this band having a preformed offset disposed substantially midway between and parallel with said lateral edges, and extending lengthwise of the band; this offset defining a groove in one face of the band and a projecting rib on its opposing face; both the rib and the groove extending throughout the entire length of the band between opposing ends thereof; the rib being disposed in the groove in the overlapped portion of the band; and a staple having a pair of legs extending through the layers of the overlapped portion of the band and penetrating into the conduit; the staple lower ends of these legs sloping in opposite directions to thereby anchor the staple to the conduit; the staple including a cross-bar at its top, which is confined in the groove of the band.

2,751,652
PLATE SPACER FOR VENT PIPE
Saul Epstein, Los Angeles, Calif.
Application October 3, 1952, Serial No. 312,898
3 Claims. (Cl. 24—73)



1. A spacer member for supporting a vent pipe in a wall comprising, a flat elongated sheet metal body portion having means at the ends thereof for securing the same to a wall structure, a central integral portion of said body portion extending from one edge thereof and having integral resilient fingers thereon extending in generally opposite directions therefrom and generally in the direction of length of said body portion but both being offset to the same side of the plane of said body portion and outwardly of said one edge, the end portions of said fingers being bent to extend generally toward said body portion and terminating closely adjacent thereto.

2,751,653
VENETIAN BLIND LOCK
Saul Leibow, Providence, R. I.
Application July 1, 1953, Serial No. 365,478
5 Claims. (Cl. 24—73)



1. A lock for a Venetian blind, comprising a lower section having a terminal hook at one end adapted to snap seat over the forward edge of a window sill, an upper section of shorter length having a terminal hook at one end adapted to releasably grip the lower base slat of a Venetian blind, said sections being in superimposed relation with their hooks back to back, a spring element integral with one section and engaging the other section, and pivotal means resiliently connecting the other ends of the sections together.

2,751,654
CUFF BUTTON COVER
Ludwig Armbruster, Irvington, N. J., assignor to Forstner Chain Corporation, a corporation of New Jersey
Application April 9, 1953, Serial No. 347,748
2 Claims. (Cl. 24—113)



1. In an ornamental cover for a sewed button, a hollow button receiving housing having a bottom plate, an arched top plate extending over said bottom plate, said bottom plate being spaced at its forward edge from the forward edge of the top plate and having a central recess extending to the forward edge thereof, whereby a sewed button may be received within said housing, said top plate having an opening adjacent its front edge, a lock lever hinged to said top plate and having a tongue adapted to extend through said opening when the lock lever is seated on the top plate, and means for releasably securing the lock lever to the top plate.

2,751,655
EYELET TYPE SAFETY CATCH
John R. Watson, Bristol, R. I., assignor to B. A. Ballou & Co., Incorporated, a corporation of Rhode Island
Application July 10, 1953, Serial No. 367,134
4 Claims. (Cl. 24—156)



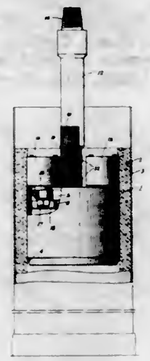
1. A safety catch comprising a body member having a major portion thereof of a definite thickness with an opening therethrough, the stock of said member about said opening being of a greater thickness in the direction of the axis of said opening than said major portion of the member, and a keeper member of tubular form having a rotatable bearing in said opening with its opposite ends rolled outwardly, one of its ends being rolled outwardly over said thicker stock about said opening.

2,751,656
SAFETY BELT BUCKLE
William M. Noe, South Pasadena, Calif.
Application February 18, 1952, Serial No. 272,072
1 Claim. (Cl. 24—170)



A safety belt buckle comprising, in combination: a frame having parallel side members and having a fixed clamp jaw and a belt attachment bar connecting the side members and defining an entrance opening for a belt end, a release lever pivotally connected to the frame side members at a location adjacent said bar, the release lever having a substantially flat plate extending between the side members, said plate having parallel flanges projecting downward therefrom along the margins thereof, said flanges being wholly received between said parallel side members, and the plate being substantially flush with the upper surfaces of said side members, the flanges extending from the pivotal connection between the release lever and the frame and terminating short of said fixed clamp jaw, the plate also extending over said fixed clamp jaw beyond said side flanges to form a substantially flat projecting handle, a movable clamp element pivotally mounted on the release lever at a location between the pivotal axis of the release lever and said fixed clamp jaw, the movable clamp element being recessed under said plate and having a portion thereof confined between said flanges, said movable clamp element having a jaw confronting said fixed clamp jaw, the jaw on said movable clamp element engaging the under side of said plate, the jaw on said movable clamp element cooperating with the projecting handle portion of said plate to define a guide means for deflecting a belt strap inserted through said entrance opening into position between the handle portion and the fixed jaw.

2,751,657
ROTARY PACKER HEAD
Harold G. Holston, Caruthers, Calif.
Application February 9, 1953, Serial No. 335,639
7 Claims. (Cl. 25—36)



1. A rotary packer head, for a concrete pipe making machine, comprising a vertical axis troweling cylinder, a circular top plate in the upper end of the cylinder, means releasably securing the top plate in place in the cylinder, a spindle upstanding centrally from the top plate, and pipe forming and working instrumentalities mounted on the top plate about said spindle; said top plate securing means including inward projections on the cylinder, the top plate seating on the projections, a bottom plate abutting the projections from above, and releasable tie elements connecting said plates and clamping the same against said projections.

2,751,658
SEWER PIPE ELBOW DIE
Steward G. Gibboney, Sr., Grove City, Ohio
Application November 26, 1954, Serial No. 471,146
2 Claims. (Cl. 25—39)

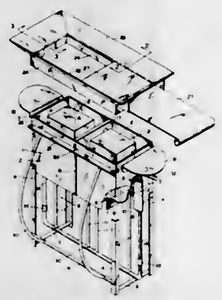
1. A die for molding L's of clay or other plastic material, comprising; a tubular outer die member having a tapered inner end portion adapted at its larger end for attachment to a source from which moldable material is forced under pressure, and having an outer end portion extending from the smaller end of the inner end portion

and curved about the radius of the L to be formed, said larger end terminating in a plane substantially perpendicular to the longitudinal center line of the outer die member, said smaller end terminating in a plane oblique to the first plane; a core extending within the outer die member and spaced from the wall thereof to define a mold cavity therebetween, said core having an inner end portion terminating at its opposite ends in the respective planes, the



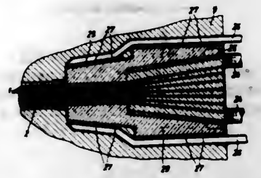
inner end portion extending within and being tapered oppositely to the inner end portion of the outer die member, the core having an outer end portion housed within and curved correspondingly to the outer end portion of the outer die member, said outer end portions at their outer ends terminating in a plane obliquely related to both the first named planes; and an end closure removably engageable with the respective outer end portions at the outer extremities thereof.

2,751,659
BLOCK FORMING APPARATUS
Louis Henry, Carlton, Oreg.
Application November 17, 1952, Serial No. 320,919
1 Claim. (Cl. 25—41)



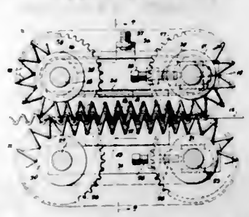
A block forming apparatus, comprising a box, an open frame depending from and supporting the box, a partition in the mold box to form a pair of molds, the partition having upwardly extending spring arms on its edges, the free ends of the arms having latches, catches on the sides of the box with which the latches engage to support the partition, a pair of cores supported in the divided box, said cores being spaced from the wall of the box, the partition, and the cores, a U-shape bar depending from the box, guides on the box through which the U-shape bar extends, bottom sections mounted in the spaces between the cores and the walls of the mold box and partition, supporting rods secured to and extending below the bottom sections and fastened at the lower ends to the U-shape bar, rockers fastened at their upper ends to the box and at their lower ends to the open frame, and means for leveling the top of the mix poured in the space formed between the cores and box and partition when forming a block, whereby the box and open frame may be rocked to turn the apparatus upside down to permit sliding the mold box on the U-shape bar free of the formed blocks.

2,751,660
METHOD OF PRE-STRESSING REINFORCED CONCRETE STRUCTURAL ELEMENTS
Walter Nakonz, Duesseldorf-Benrath, Germany
Application January 26, 1952, Serial No. 268,383
Claims priority, application Germany February 3, 1951
2 Claims. (Cl. 25—154)



1. A method of pre-stressing concrete structures reinforced by at least one bundle of steel bars mounted in a tubular recess terminating in a conical enlargement, the method comprising in combination, cementing the ends of the steel bars in a hollow metal cone of a configuration complementary to the configuration of said conical enlargement of the tubular recess and mounted displaceably within said conical enlargement, drawing the cone, after setting of the cement, in the outward direction relatively to the concrete structure, and filling the annular space formed between the conical enlargement of the recess and the cone with further cement mortar.

2,751,661
YARN CRIMPING APPARATUS
Ewart H. Shattuck, Wilmington, Del., assignor to Alexander Smith, Incorporated, Yonkers, N. Y., a corporation of New York
Application August 17, 1955, Serial No. 528,900
7 Claims. (Cl. 28—1)



6. Apparatus for crimping yarn or the like, comprising a pair of oppositely wound, endless, coiled springs, means including a pair of feed rolls for advancing each spring in a closed path with the two paths overlapping to bring the springs into interleaved relationship, means feeding the yarn to be crimped between the interleaved springs to be folded in zig-zag form thereby for setting the crimp, and means for heating the yarn while confined between said springs, gear means connecting said feed rolls for rotation in unison and means adjusting the rolls in a direction to vary the pitch of said springs.

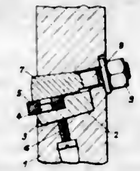
2,751,662
METHOD OF MAKING AN ELECTRONIC GRID
William E. Glenn and Earl W. Hostetter, Berkeley, Calif., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application October 2, 1951, Serial No. 249,374
4 Claims. (Cl. 29—25.17)



1. A method of forming an electronic grid comprising the steps of cutting a flat end on an annular ring of

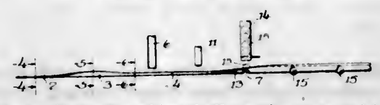
relatively soft metal, cutting a spiral groove in the flat end of said ring with a sharply pointed cuting tool held at an angle to the cutting surface whereby the lands formed between adjacent turns of the spiral groove slope radially outward, winding a hard wire about a hard flat plate in parallel turns, forcing a face of said wire wound plate against the flat end of said annular ring whereby said wires are imbedded in the surface of said ring and the lands on the end thereof bend radially outward to place said wires in tension, cutting said wires free from said flat plate, and shearing off the loose ends of wire extending beyond said annular ring.

2,751,663
FACING HEAD, PARTICULARLY FOR THE MILLING OF STEEL, BRONZE AND CAST IRON
Jacques Leuzinger, Zurich, Switzerland, assignor to Stahag Steel & Hard Metal Import Trading Co., Zurich, Switzerland
Application August 13, 1952, Serial No. 304,096
1 Claim. (Cl. 29—105)



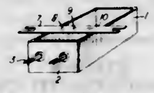
A facing head of the type employing at least one revolving and releasing cutter secured in the head, said head being provided with at least one frusto-conical recess and including frusto-conical clamping means disposed in said recess, said clamping means including a holder portion and a counter-holder portion complementary therewith and defining therebetween a seat for a segment of a cylindrical ring, which seat is spaced from the wall defining said recess, a mandrel on one of said portions and extending axially of the seat defined therebetween, a cylindrical cutter ring rotatably disposed about said mandrel on said seat and up to about one-third of said ring projecting outwardly of said recess, screw means on one of said portions and extending through said facing head, and means for tightening said screw means to thereby withdraw said one portion into said recess, whereby said cutter ring is held securely between said portions thereby preventing rotation.

2,751,664
METHOD OF MAKING BALL CARRIERS
Fred H. Arnit, Mount Prospect, Ill., assignor to Garden City Plating & Manufacturing Co., a corporation of Illinois
Application October 29, 1952, Serial No. 317,559
3 Claims. (Cl. 29—148.4)



1. A method of making ball carriers comprising the steps of bending the longitudinal edges of a metal strip upwardly and inwardly into juxtaposition with the body portion of said strip to form doubled edge portions, blanking an aperture in the center portion of said strip, bending said apertured strip progressively along its longitudinal center line, positioning a ball bearing larger than the width of said aperture on said strip with a portion of its peripheral surface projecting through said aperture, and continuing bending of said strip around said ball bearing to form a tubular member with said doubled edge portions juxtaposed, and said ball bearing rotatably retained in said tubular member, with a portion of its peripheral surface projecting through said aperture, by said doubled edge portions and the edges of said tubular member contiguous to said aperture.

2,751,665
METHOD OF MOUNTING AN ELECTRIC CONDENSER OR OTHER ELECTRIC COMPONENTS IN A METAL CASE
Frans Hendrik De Roovere, Antwerp, Belgium, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application March 13, 1952, Serial No. 276,416
Claims priority, application Netherlands April 16, 1951
2 Claims. (Cl. 29—155.5)



1. A method of mounting an electrical component within a metal case, the metal case being provided with at least one electrical terminal extending from inside the case to outside the case, the electrical component having at least one lead extending therefrom inside the case, the method comprising connecting firmly said lead to said terminal inside said case, filling said case with an insulating compound in the liquid state, solidifying said compound, whereby the lead and terminal are firmly embedded in said compound together with said electrical component, and removing the adjacent metal surrounding said lead and terminal, thereby insulating the lead and terminal from the case.

2,751,666
METHOD OF MANUFACTURING CYLINDRICAL SELF-INDUCTION COILS COMPRISING A CERAMIC CORE AS A CARRIER FOR THE WINDING
Stanislaus Galleé, Berlin-Zehlendorf, Germany, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application November 10, 1951, Serial No. 255,856
Claims priority, application Germany November 17, 1950
3 Claims. (Cl. 29—155.58)



1. The process of manufacturing an electrical coil mounted on a hollow core consisting of separable parts, comprising coating the winding and core with an insulating material, heating the winding and core thereby causing the winding to expand and the insulator material to melt, separating the core by increasing the diameter thereof, thus increasing the tautness of the wire and permitting the insulator material to enter the space therebetween, and solidifying the insulator to maintain the core in its enlarged form.

2,751,667
METHOD OF FORMING CENTER SECTIONS FOR HOLLOW PROPELLER BLADES
Frederick A. Gruetjen, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application May 15, 1950, Serial No. 161,987
1 Claim. (Cl. 29—156.8)

A method of making a center section for a hollow aircraft propeller blade which comprises heating a plate-

like metal blank to forging temperature, forging said blank to form beads on one surface of the blank adjacent two opposite edges thereof, rolling the beaded blank to increase the length thereof, thereafter again rolling the beaded blank to form thickened opposite transverse edges for welding and to further extend the length thereof,



forging the beads to form ribs disposed normally to the plane of the body of the blank, heating the forged blank and placing the same in a die for stress relieving and straightening, and thereafter flash welding the ribs of said blank to similarly formed ribs of a complementary blank to complete the section.

2,751,668

METHOD OF PRODUCING TITANIUM CARBIDE AND ARTICLE THEREOF

Percy P. Turner, Jr., Euclid, Ohio, and Lewis J. Jones, Elizabeth, Pa., assignors to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio

No Drawing. Application June 3, 1953, Serial No. 359,430
6 Claims. (Cl. 29—182.8)

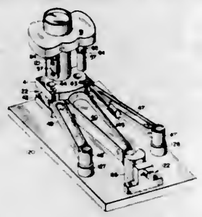
1. A super-refractory article comprising at least 45 per cent by weight of titanium carbide and the balance consisting essentially of a Ni_3Al binder.

2,751,669

FIXTURE DEVICE

Virgil R. Crumpacker, San Lorenzo, Lester C. Fenstermaker, Alameda, and John D. Chatten, Castro Valley, Calif.

Application October 13, 1953, Serial No. 385,902
5 Claims. (Cl. 29—200)
(Granted under Title 35, U. S. Code (1952), sec. 266)



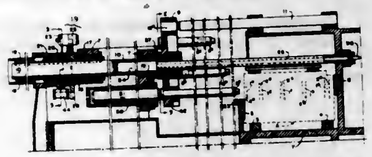
5. A fixture device for installation of knuckle pins in an aircraft engine rod assembly for radial engines, said assembly including link rods having sockets therein for accommodating said pins, said pins having laterally extending apertures therein for the passage of fasteners to assemble the pins in said rod assembly, said device comprising a base plate for supporting said rod assembly, said plate having a vertically extending cylindrical guide member, a clamp mounted to the plate in spaced relation to the guide member and having a V-block for securing said rod assembly in a predetermined centered position against the guide member, lugs on the plate member adjacent said guide member and positioned in line with the sockets of said rod assembly to contact one end of said pins for proper positioning thereof in said rod assembly, a ram head slidably engaging said guide member for movement of the former toward and away from said base plate, a plurality of gripper members connected to said ram head, each of said gripper members including a base member, a lug connected to the side of said base member, a sleeve slidably positioned on said base member and a longitudinal slot in said sleeve for engaging said lug, the length of said slot being such that said sleeve is movable longitudinally a short predetermined distance beyond the end of said base member, whereby said gripper members are adapted to grip one end of each of said knuckle pins to maintain them substantially in parallel relation to each other and in a plane normal to the surface of said base plate, and alignment means for positioning said pins in said gripper members for proper alignment of said apertures upon positioning said pins in said rod assembly.

2,751,670

BUSHING ASSEMBLY PRESS

Adolf R. Grad, Wauwatosa, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a corporation of Wisconsin

Application December 30, 1950, Serial No. 203,721
9 Claims. (Cl. 29—252)



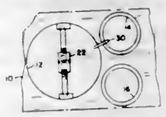
1. In a machine for pressing a bushing into each of a plurality of axially alined bores, the combination of a support for holding in a stationary position a work piece having a plurality of bores formed therein in axial alinement and spaced from each other, a turret rotatably and slidably supported by said support with its axis of rotation spaced from the axis of said bores, a plurality of rams of various lengths fixed to said turret and having a bushing supporting portion on the free end of each ram, said rams being equal in number to said bores and of such lengths that when the bushing supporting portion of one ram is within one of said bores the bushing supporting portions of the other rams are in radial alinement with the other bores respectively, means for indexing said turret to successively position said rams in axial alinement with said bores, means arranged upon the axis of said bores for exerting upon the axis of the ram in alinement with said bores a force for advancing said turret to enable that ram to press a bushing into one of said bores, and means operable after a bushing has been pressed into a bore for effecting retraction of said turret.

2,751,671

METHOD OF REPAIRING CRACKED CASTINGS

Lewis W. Welch and Albert Fegel, Los Angeles, Calif., assignors to Novi Equipment Company, Novi, Mich., a corporation of Michigan

Application September 15, 1952, Serial No. 309,646
3 Claims. (Cl. 29—402)



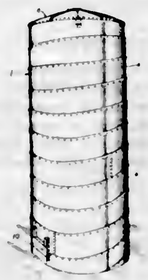
1. The method of repairing a motor block having a crack extending transversely thereof between a cylinder and an adjacent valve passage containing a removable valve seat, comprising the steps of removing the valve seat from said passage, applying internal pressure in the cylinder generally perpendicular to the direction of the crack to separate the opposed surfaces of the crack apart a perceptible amount, cutting a smooth surfaced slot to coincide with the crack to remove the surface irregularities of the crack, forcing into the slot a strip of malleable steel adapted to fit snugly therein to fill the slot and to extend beyond the ends and open side of the slot, relieving said internal pressure, impacting the projecting portions of the strip to upset material of the strip within the slot, machining the impacted strip to remove therefrom any remaining portions thereof within the interior of the cylinder and passage and to form a groove for the valve seat, and replacing the valve seat within said groove.

2,751,672

METHOD AND APPARATUS FOR ERECTING HELICAL STORAGE VESSEL

Daniel J. Reed, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York

Application March 5, 1953, Serial No. 340,438
10 Claims. (Cl. 29—429)



6. A method of erecting the body portion of a storage vessel from a metal sheet comprising, introducing a sheet carrying member onto a helical track, engaging said carrying member with the upper edge portion of said sheet, moving said carrying member upwardly on said track to progressively wind said sheet into a series of helical convolutions, disengaging said carrying member from said sheet, and securing the lower edge portion of each convolution to the upper edge portion of the following convolution to provide an integral substantially airtight body portion.

2,751,673

METHODS AND MEANS FOR PREPARING AND LAYING SHEET METAL ROOFING

Glen H. Huntington, Denver, Colo.

Application January 8, 1951, Serial No. 204,952
4 Claims. (Cl. 29—429)



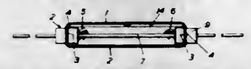
1. A device for forming and laying sheet metal roofing comprising: a wheeled truck frame; a hinge shaft supported by said truck frame; a tilting frame hingedly mounted at its one extremity on said hinge shaft and extending over said truck frame; adjustable means supporting the free extremity of said tilting frame at any desired height; a plurality of strip-forming rolls rotatably supported by said tilting frame in parallel, aligned relation; means for supporting a reel of sheet metal strip adjacent the hinged extremity of said tilting frame; a delivery chute; adjustable supporting means supporting one extremity of said delivery chute in aligned relation with said rolls; and means for supporting the other extremity of said delivery chute at an elevation to cause the chute to incline in correspondence with the incline of said tilting frame.

2,751,674

METHODS OF SEALING ELECTRICAL COMPONENTS IN METAL CASINGS

William John Stray, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware

Application January 29, 1952, Serial No. 268,825
Claims priority, application Great Britain February 1, 1951
2 Claims. (Cl. 29—463)



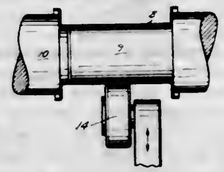
1. A process for sealing an electrical insulating bush, provided with a circumferential groove, to a metal case, the metal case comprising a pair of dish-shaped parts having upturned rims, the rim of each said part being provided with a truncated slot; the process comprising metallizing said groove, placing said bush partially within one of said dish-shaped parts with the edge of the truncated slot thereof fitting in said groove, placing the other dish-shaped part on said one part so that the rim of one fits within the rim of the other, the two rims overlapping and contacting one another, the edge of the other truncated part also fitting in said groove, and sealing said edges in said groove.

2,751,675

METHOD OF FORMING METALLIC SPOOLS

Frederick J. Bieber, Minneapolis, Minn., assignor to Acrometal Products, Inc., Minneapolis, Minn., a corporation of Minnesota

Application September 8, 1953, Serial No. 378,717
1 Claim. (Cl. 29—463)



The method of forming a metallic spool which comprises forming from flat sheet stock a pair of spool sections each including a tubular drum element having a radially projecting annular flange at one end, placing said elements on a rotating expanding mandrel with said drum elements in axial alignment and with their edges in tight abutment, rotating said elements while an electrowelding device is brought to bear upon the abutting edges of said spool elements whereby to weld said sections together, and finally rotating said spool on a second rotating mandrel while forcing a hardened roller against and adjacent to said welded area to remove the surface irregularities caused by said welding, and to restore the hardness of the metal rendered soft by said welding.

2,751,676

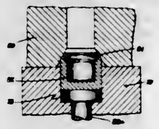
METHOD OF COLD WORKING METAL

Ben Kaul, Warren, Ohio, assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation, New York, N. Y., a corporation of Delaware

Application October 20, 1952, Serial No. 315,616
4 Claims. (Cl. 29—535)

1. In a method of cold working a solid steel blank, the steps of providing a disc-like steel starting blank, successively subjecting the blank to a series of axial compressions while laterally confining the same to progressively decrease the diameter of the blank and to first increase and then decrease the axial thickness of the blank, initially forming an angular annular shoulder in the top surface of the blank during the first axial pressure applica-

tion, maintaining said angular annular shoulder throughout subsequent axial pressure applications, utilizing said shoulder for the final axial pressure application to produce a finished cylindrical cup-shaped article with tubular



side walls, and rearwardly flowing metal from the blank side walls to form a thin annular terminal side wall portion above said shoulder during said final axial pressure application.

2,751,677
METHOD OF MAKING METALLIC CONTAINERS FOR CONFINING FLUID MEDIUM UNDER PRESSURE
Daniel Mapes, West Caldwell, N. J., assignor to Specialties Development Corporation, Belleville, N. J., a corporation of New Jersey
Application July 9, 1952, Serial No. 297,880
1 Claim. (Cl. 29—543)



The method of making a metal one-piece, seamlessly formed cylindrical container for storing compressed fluid medium under pressure and having a cylindrical side wall of a predetermined substantially uniform thickness and having substantially hemispherical end walls of a thickness about equal to about half that of the side wall and about equal to the side wall thickness of a cylindrical container of equal capacity constructed to withstand the highest working pressures at which fluid medium may be safely confined therein under normal conditions of use without further reinforcement, which method consists of forming a circular steel plate into a cylindrical cup provided with a substantially flat end wall and a side wall each having a substantially uniform and equal thickness, drawing the cup in stages to form a cylindrical shell of greater length and smaller diameter than the cup while maintaining the thicknesses of the end wall and of the side wall substantially uniform and equal to each other, extending the end wall outwardly while shaping the same into a hemispherical end wall having a thickness about half that of the side wall, reducing the thickness of the side wall at a cylindrical zone adjacent the open end of the shell to about half that of the side wall, and necking the zone to form a substantially hemispherical end wall of a thickness about equal to that of the first formed end wall.

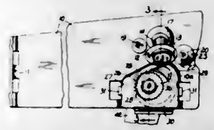
2,751,678
CAN OPENERS
David M. Bauer, Norristown, Pa.
Application February 2, 1956, Serial No. 563,071
7 Claims. (Cl. 30—6.1)

1. A can opener comprising a can engaging member, a lever having a central portion with downwardly extending side flanges, a horizontal pivot member extending through said side flanges and pivotally connecting said lever to said can engaging member, a downwardly extending cutter member pivotally mounted on said lever at said central portion, and a resilient member carried by said lever and engaging said cutter member for urging



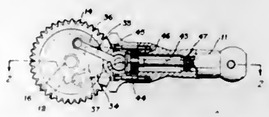
said cutter member to a position at an angle with respect to said lever.

2,751,679
CAN OPENER
John T. Hellyer, Geneva, Ill., assignor to The Dazey Corporation, St. Louis, Mo., a corporation of Missouri
Application November 3, 1955, Serial No. 544,716
8 Claims. (Cl. 30—8.5)



1. In a can opener, a base, a cutting member mounted on said base, a yieldable thrust plate mounted in a relatively fixed location on said base, said thrust plate having a guide slot formed therein, a feeding wheel movable along said guide slot toward and away from said cutting member, said thrust plate bearing axially against the feeding wheel, and means for rotating said feeding wheel and for moving the same toward and from the cutting member.

2,751,680
FLAYING DEVICES
Walter Wezel, Maulbronn, Germany, assignor to firm Schmid & Wezel, Maulbronn, Württemberg, Germany, an open partnership organized under the laws of the German Federal Republic
Application May 25, 1954, Serial No. 432,161
5 Claims. (Cl. 30—219)



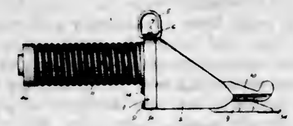
1. In a flaying device comprising a hand grip, a housing consisting of two shells, two toothed cutting discs mounted rotatably within, and extending peripherally from, the said housing, an eccentric mounted on an eccentric shaft within the said hand grip, fastened to the said eccentric two driving levers, each adapted to oscillate one of the said cutting discs over an arc of about 10° against the other, a first bevel gear keyed to the eccentric shaft, and in operative alignment with the said first bevel gear a second bevel gear mounted at one end of a drive shaft positioned concentrically within the said hand grip, the improvement consisting of two hollow ground cutting discs the teeth of which are adapted to intercept each other with a self-sharpening effect upon oscillation of the said discs in close proximity with each other and mounting the said discs in close proximity with each other.

2,751,681
MITER GUIDE
Frank Hillson, Irvington, N. J.
Application May 27, 1955, Serial No. 511,611
6 Claims. (Cl. 30—229)



1. In combination, a cutting tool of the type adapted to cut shaped sections on the upper and lower flanges of channel type work members, and guide means attachable thereto for enabling the upper and lower cuts to be made in precise alignment, said guide means comprising a plurality of aligning members disposed to conform with said shaped sections.

2,751,682
POWER SHEAR
Harold Edgar Stout, West Leesport, Pa., assignor to Textile Trimming & Boarding Machine Co., Inc., Reading, Pa., a corporation of Pennsylvania
Application March 1, 1954, Serial No. 413,047
8 Claims. (Cl. 30—233)



1. A shearing device which comprises a first longitudinal blade, a second longitudinal blade pivotally connected to said first blade, a support, a bracket which has a lateral flange, means fixing said first blade to said bracket, said lateral flange being transversely adjustable relative to said support, means fixing said lateral flange in adjusted transverse position to said support, an operating shaft turnably connected to said support, and link-means connecting said operating shaft to said second blade, said link-means being adapted and operative to oscillate said second blade around its pivot when said shaft is rotated.

2,751,683
BABY SPOON
Corydon T. Johns, Tampa, Fla.
Application January 18, 1954, Serial No. 404,452
2 Claims. (Cl. 30—324)



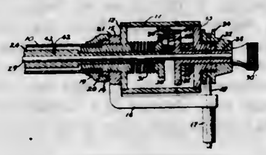
1. A baby spoon comprising a bowl, a handle having a generally hemispherical end of a diameter of approximately three quarters of an inch and said diameter being about ¼ the total length of the bowl and handle, the handle adjacent said generally hemispherical end being also rounded for at least a portion of its length whereby a tiny hand may grasp the handle end or side portion adjacent thereto with substantially equal facility as it would in grasping a ball, the length of the handle being roughly about two to two and one half times the diameter of said hemispherical end.

2,751,684
KNIFE HAVING A REPLACEABLE BLADE
James F. Parker, Fresno, Calif., assignor of forty per cent to William C. Myers, Jr., Webb City, Mo.
Application June 1, 1954, Serial No. 433,418
4 Claims. (Cl. 30—330)



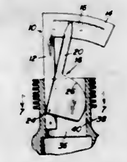
1. A knife comprising a handle having a bifurcated end portion and also having a longitudinal groove at one longitudinal edge of the handle, a lever including an arm at one end and a handle portion at its other end, means pivotally connecting the arm of the lever to the handle of the knife for swinging the arm into and out of closed position in said bifurcated end portion, and a blade carried by the arm and swingable therewith, said handle portion of the lever being swingable into the groove of the knife handle to move said arm into a closed position in said bifurcated end portion, and said blade being supported in an outwardly projecting longitudinal position at the bifurcated end portion of the knife handle when the lever is closed.

2,751,685
MOTOR DRIVEN DENTAL SCALER
Irving M. Sharon, San Francisco, and William W. Scherer, Oakland, Calif.; said Scherer assignor to said Sharon
Application November 5, 1954, Serial No. 467,066
2 Claims. (Cl. 32—50)



1. A dental scaler which comprises a tubular hand piece, a plunger reciprocably mounted therein, a chuck for holding scaling tools in the forward end of said plunger, a face-type cam at the rear end of said plunger, drive means including a rotary member with an anti-friction member fixed thereto and bearing on said cam to impart a forward thrust thereto and resilient means for returning the plunger.

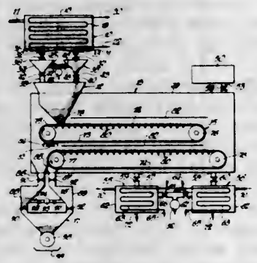
2,751,686
BORE WEAR INDICATOR
Fred H. Etzelt, Delray Beach, Fla.
Application April 7, 1955, Serial No. 499,883
3 Claims. (Cl. 33—147)



1. A bore wear indicator comprising a gauge adapted to be positioned in a bore, and a dial member, said gauge comprising a pointer adapted to project up out of a

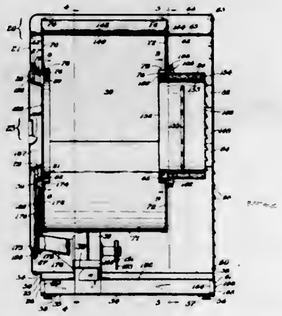
bore, a body member connected to a lower end of said pointer, said body member including a corner adapted to engage a surface of a confining wall of a bore, a gauge surface on said body member remote from said corner, said gauge surface increasing in distance from said corner, said dial member including a leg adapted to depend in a bore along said pointer and a dial at the upper end of said leg and projecting to one side thereof.

2,751,687
PROCESS AND APPARATUS FOR PRODUCING STABILIZED PRODUCTS
Ralph F. Colton, Chicago, Ill., assignor to Proctor Drying and Freezing Corporation, Philadelphia, Pa., a corporation of Illinois
Application May 21, 1952, Serial No. 289,187
15 Claims. (Cl. 34—5)



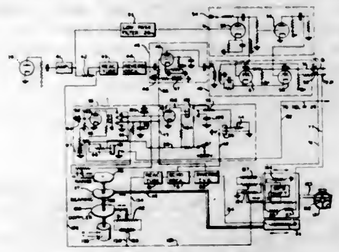
1. The process of producing stabilized products of the type described from raw or prepared materials in a normal liquid state, such process comprising the steps of molding the liquid into the form of a pellet of substantially predetermined size by heat transfer from the liquid to another material by first dropping a predetermined quantity of the liquid into a cavity of predetermined size on the surface of the other material to form a globule, freezing the globule in the cavity to form a pellet and then removing the frozen pellet from the cavity, thereafter feeding the frozen pellet onto a conveyor in a manner to form a relatively uniform layer thereon, desiccating the pellet in substantially the formed size while maintaining the frozen state thereof in a rarefied atmosphere, and collecting the desiccated pellet from the conveyor.

2,751,688
LAUNDRY DRYERS
Peyton W. Douglas, Syracuse, N. Y., assignor to Pennsylvania Range Boiler Co., Philadelphia, Pa., a corporation of Pennsylvania
Application June 19, 1953, Serial No. 362,820
13 Claims. (Cl. 34—82)



1. In a laundry dryer, a cabinet structure having a front wall with a circular access opening therein surrounded by an integral rearwardly projecting cylindrical bearing flange, a rotary tumbling drum comprising an annular forward end wall, having an annular axially forward facing bearing channel formed integrally therewith around its axial opening and adapted to telescope the bearing flange of the front cabinet wall, and resilient bearing strips mounted on said flange and engaging the opposed side walls of said bearing channel.

2,751,689
DEMONSTRATOR FOR UNDERWATER ECHO RANGE AND BEARING APPARATUS
Floyd Burton Jones, Austin, Tex., and Oscar Hugo Schuck, Belmont, and Neil E. Handel, Cambridge, Mass., assignors to the United States of America as represented by the Secretary of the Navy
Application August 2, 1945, Serial No. 608,586
11 Claims. (Cl. 35—10.4)



1. In a trainer for simulating operation of a ship-installed system in which a target is located by transmitting an energy pulse from a transducer and receiving an echo thereof from said target, the combination comprising an indicator, a signal generator including an oscillator, an inverse time varied gain unit for attenuating the oscillator output, means to key said oscillator at a predetermined time, circuit means connecting the attenuated oscillator output to said indicator, means for varying the frequency of the oscillator output above and below its normal value to simulate the Doppler shift of frequency caused by motion of said target, said last-mentioned means including a cam, a cam follower and means controlled by said cam follower for changing the oscillator frequency.

2,751,690
EDUCATIONAL DEVICE FOR TEACHING MATHEMATICS BY OVERLYING TRANSPARENCIES
Julius G. Cohen, Jefferson, Mo.
Application December 11, 1952, Serial No. 325,379
1 Claim. (Cl. 35—31)



An educational device comprising a plurality of transparent sheets, indicia and mathematical symbols on each sheet representing a step in solving a mathematical problem, indicia on each sheet for describing the step, said sheets being selectively disposed in overlying relation with the problem disposed on the rearmost sheet and each succeeding step in the solution disposed on the preceding sheets, the forwardmost sheet having the final step thereon, said indicia being aligned and positioned so the entire mathematical problem and solution is illustrated when all the sheets are superimposed.

2,751,691
SHOE CONSTRUCTION
Otis T. Clark, Jr., Fort Worth, Tex.
Application September 30, 1954, Serial No. 459,485
3 Claims. (Cl. 36—1)



1. In a shoe construction having an upper, an outsole and an insole, a recess formed across the forward end of said outsole and under said insole, a toe cap having a bottom portion seated in said recess and enclosing the forward end of said insole, and means comprising a screw in said outsole and penetrating said bottom portion of said toe cap for removably securing the same on said outsole.

2,751,692
VENTILATED CUSHIONED SHOES
Joseph Cortina, New York, N. Y.
Application November 19, 1954, Serial No. 469,897
2 Claims. (Cl. 36—3)



1. A shoe comprising a shoe upper, an inner sole secured to the bottom of said shoe upper and adapted to support the foot thereon, said inner sole being perforated, an outer sole, spacer means for supporting said inner sole on said outer sole in freely spaced relationship thereto whereby to provide an internal air space, a perforated strip connecting and secured to the peripheries of said inner and outer soles, whereby to permit the circulation of air downwardly through said inner sole and outwardly through said perforated strip, said spacer means comprising a plurality of longitudinally spaced, transverse supporting members secured to the undersurface of said inner sole and supported on said outer sole, said transverse members being perforated longitudinally whereby to allow complete circulation of air through every portion of the shoe, said outer sole including an inner layer supporting the undersurface of said transverse members, the lower edges of said perforated strip being secured to the periphery of said inner layer, said outer sole including a heel, said heel having a central bore therethrough, a bottom plate secured to said heel, and resilient spacer means secured to the undersurface of said inner sole within said bore and adapted to abut the inner face of said plate, said resilient spacer means comprising a rigid supporting member secured to the undersurface of said inner sole and a resilient pad at the lower end of said supporting member.

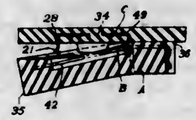
2,751,693
TOE SPACING SANDAL
Della V. Baker, Tucson, Ariz.
Application January 25, 1955, Serial No. 483,921
1 Claim. (Cl. 36—8.5)

A sandal comprising a sole, a plurality of toe straps, the toe straps being longitudinally arranged with respect to the sole and attached to the sole near the toe end thereof with the attachment points of adjacent toe straps spaced apart approximately the width of a toe and positioned to enter the spaces between the toes of the wearer, an elongated toe separator slidably mounted on each of said toe straps, each toe separator being of a sufficiently large cross-section in a plane normal to the length of the toe strap to fill a relatively large portion of the spacing between adjacent toe straps and being deformable by pressure exerted by the toes of the wearer, a heel engaging member fastened to the end of the sole remote from the toe end, strap means including tensioning means therefor transversely arranged with respect to the sole and associated with the heel engaging member, the transversely



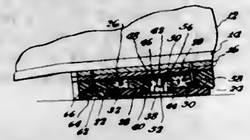
arranged strap means being so arranged as to engage the foot of the wearer when in use and to releasably fasten the sandal on the foot of the wearer, each of the toe straps having means toward the rearward end thereof connecting the same to said transversely arranged strap means, said tensioning means acting to tension said transversely arranged strap means across the front of the foot thereby tensioning each of the longitudinally arranged toe straps in a direction toward the rear of the foot of the wearer.

2,751,694
HEEL ATTACHMENT DEVICE
Edward G. Deschenes, Lowell, Mass.
Application February 19, 1954, Serial No. 411,326
7 Claims. (Cl. 36—36)



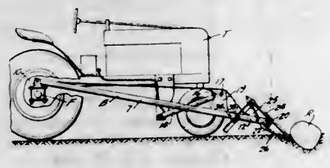
1. In a shoe, an inverted, cup shaped, male fastening member of rigid material for retaining a heel tread member on said shoe, said male member having a flat bottom adapted to be securely attached centrally of the heel portion of the shoe sole and having integral, downwardly bent, vertical side walls extending laterally across the front and back, and longitudinally along opposite sides of a central area of said heel portion, all of said side walls terminating in an outwardly turned anchoring shoulder located in a plane parallel to, and spaced below, the planes of said plate bottom and of the lower face of said sole and all of said shoulders outlining a closed polygonal figure having at least four straight sides extending entirely around said male member; a shoe heel tread member having a recess in its upper face conforming in outline to the closed polygonal figure defined by said shoulders and adapted to receive the same when the upper face of said heel is flatwise against the lower face of said sole, and a resilient wire, female fastening member for forming attachment shoulders extending entirely around the recess in said shoe heel tread member adapted to snap on, but not snap off, said anchoring shoulder, said female member outlining a closed polygonal figure with at least four straight sides extending inwardly into said recess for attachment engagement on said anchoring shoulders entirely around said male member and said female fastening member having outwardly bent portions at spaced distances entirely therearound firmly embedded in the material of said heel tread member surrounding said recess.

2,751,695
SHOE HEEL
Merle E. Johnson, Chicago, Ill.
Application April 1, 1954, Serial No. 420,369
5 Claims. (Cl. 36—39)



1. In a device of the character described, a heel of substantially uniform thickness formed with an annular recess in the bottom thereof, said recess inclined downwardly towards the rear thereof, a replaceable annular plate mounted in said recess with a rear portion thereof protruding below the bottom of the heel, means for mounting said plate in said recess in substantially non-rotatable relationship, said plate manually rotatable for repositioning successive sectors of the same one during each of a plurality of periods of wear.

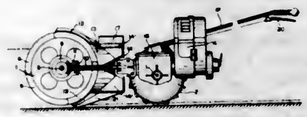
2,751,696
STONE DIGGER
Clarence M. Weinbold, Cottonwood, Minn.
Application October 8, 1952, Serial No. 313,705
5 Claims. (Cl. 37—2)



1. A stone digger attachment for use upon a boom frame pivotally mounted upon the upper rear portion of a tractor frame and extending forwardly along opposite sides of the tractor and including a pair of booms having extreme forward end portions controllably swingable vertically and having a shaft extending transversely between the forward end portions thereof, said digger attachment comprising a small rigid tubular member adapted to be mounted on such a shaft in closely encasing relation between such booms, a second and larger rigid tubular member fixedly secured to said first tubular member and surrounding the same, a plurality of rigid teeth members mounted on said tubular member in spaced relation to each other along its length and extending transversely thereof and outwardly therefrom and including a plurality of elongated brace elements each extending between the forward end of one of said teeth and said second tubular member and being fixedly connected thereto on an opposite side thereof relative to the remainder of the teeth structure, and means for securing said teeth in downwardly and outwardly extending position relative to said boom frame and against movement relative to said boom frame and said shaft whereby said teeth may be utilized to surface rocks when such boom frame is mounted upon a tractor with hydraulic cylinder assemblies for controllably raising and lowering such a boom frame.

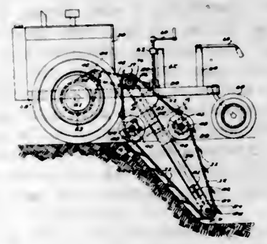
2,751,697
SNOWPLOW
Edwin E. Bucher, Davos, Switzerland
Application August 7, 1951, Serial No. 240,684
10 Claims. (Cl. 37—43)

1. In a snow plow having a power-driven blower, a casing having a cylindrical inner surface extending transversely to the path of the plow and being formed with a centrally located opening communicating with the intake opening of the blower, the improvements which comprise, a transversely divided rotor extending transversely to the direction of travel of the plow and having a plurality of blades carried by each half of the rotor, the outer edges of said blades defining a cylinder disposed in close proximity to said cylindrical surface of the casing, the several blades carried by the respective halves of said shaft having angularly pitched portions formed and



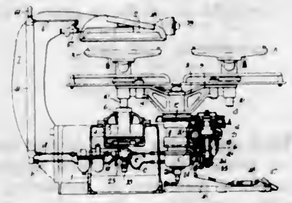
arranged to impel snow outward and longitudinally from the trailing end portions of said blades into said centrally located intake opening of the blower along a spiral path not exceeding 180 degrees circumferentially of the rotor, portions of the several blades adjacent to the leading ends being forwardly inclined in the direction of rotation of the rotor, the length of the cylinder defined by said blades being less than twice the diameter of said cylinder and power-driven means for rotating said rotor.

2,751,698
ADJUSTMENT MECHANISM FOR TRACTOR MOUNTED ENDLESS DITCH DIGGER
Dale G. Brown, Oklahoma City, Okla.
Application May 18, 1951, Serial No. 227,088
1 Claim. (Cl. 37—86)



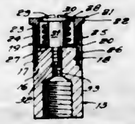
In a trench digging machine, a chassis including side channels, bearings on said side channels, hubs supported by said bearings, a mounting shaft supported by said hubs, arms depending from said hubs, a boom connected to said arms, an endless chain mounted on said boom, a plurality of spaced apart digging elements carried by said chain, a first pair of laterally disposed screw conveyors positioned on the leading side of said boom, a second pair of screw conveyors positioned on the trailing side of said boom, a block slidably mounted on the lower end of said boom, a lug secured to said boom, an adjusting screw threadedly engaging said lug and connected to said block, a first sprocket connected to said block, a second sprocket connected to said mounting shaft and said chain being trained over said sprockets, chain and sprocket means connected to said conveyors, the threads of the conveyors being right hand on one side and left hand on the other side, arcuate plates connected to said boom, a block mounted between said arcuate plates and having pins extending therefrom, a support extended upwardly from said chassis, a bearing mounted on said support, a screw member having its lower end engaging said last named block and having a crank on its upper end, a cross frame on said chassis, handles extending from said cross frame, and rollers supporting the trailing end of said machine.

2,751,699
GARMENT AND LIKE PRESSES
John Simpson, Junior, Luton, England, assignor to himself and John Simpson
Application May 21, 1953, Serial No. 356,565
14 Claims. (Cl. 38—22)



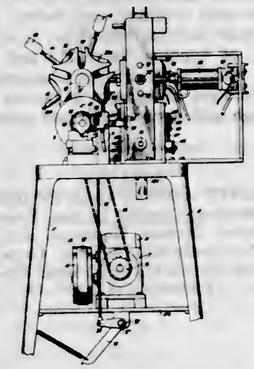
1. A garment press comprising, in combination with a rotatable carrier, press tables supported by the said carrier, fluid-pressure operated gear for turning the said carrier, a fluid-pressure operated ram device engageable with the said tables and a fluid-pressure supply system connected to the said turning gear and ram device; a control arrangement comprising an automatic valve device and an operator's control valve co-operative for controlling the communication of pressure in the said system, operating and retaining means operatively associated with said operator's control valve and movable by the operator between a valve-closing and a valve-opening position, means for automatically holding said retaining means in the position so set until moved by the operator to the other position, said automatic valve device having means for controlling the communication of fluid pressure to both the turning gear and the ram device for producing one cycle of operation of the press once communication has been opened through the operator's control valve and for automatically causing the said cycle to be repeated as long as such communication is maintained through the said valve, whereby a single cycle of operation is obtained by movement of the said valve-operating and retaining means first to the opening and then to the closing position, whereas repeated cycles are obtained by leaving the said means in the opening position.

2,751,700
INDICATORS
William E. Danjczek, Easton, Pa., assignor to L. & C. Hardtmuth, Inc., Bloomsbury, N. J., a corporation of New Jersey
Application November 4, 1953, Serial No. 390,208
2 Claims. (Cl. 40—68)



2. In an adjustable indicating device, the combination of three relatively adjustable rotary elements comprising two inner cylindrical elements abutting with one another and one outer tubular element, said inner elements having adjacent portions of a uniform diameter and double shoulder formations of larger diameters at their remote ends, the outer element engaging and being supported at its ends by said double shoulder formations of the inner elements, one of the inner elements being cup-shaped and having a central aperture at its bottom, a headed and shouldered screw connecting the elements so that its shoulder passes through the aperture of the cup-shaped element and forcibly engages with its end the abutting face of the other inner element, a tension spring extending between the screw head and the solid bottom portion adjacent the aperture in said cup-shaped element, whereby all three elements are kept under tension.

2,751,701
METHOD AND APPARATUS FOR PRINTING BLOWN BOTTLES
William F. Grupe, Union City, N. J., assignor to Peerless Roll Leaf Company Incorporated, a corporation of New York
Application May 4, 1953, Serial No. 352,865
9 Claims. (Cl. 41—1)



1. Transfer applying apparatus for printing indicia on open-mouth containers of the type having a base and flexible side walls, comprising a movable carrier having a plurality of container closures, each constructed to receive and support one of the containers, a container printing station beside the carrier, stop motion drive mechanism for operating said carrier to bring said closures successively into register with said station, die holding members internally shaped to conform with the outer contour of the container at said station, intermittently operated mechanism synchronized with said carrier for positioning said die holding members about each container arriving at said station to embrace the walls thereof, at least one of said die holding members having a printing die on the inner face thereof, and means including a duct through each closure for subjecting a container supported by that closure to internal pressure during the interval that the container is embraced by said die holding members, thereby to urge the container walls outwardly toward said die holding members and die.

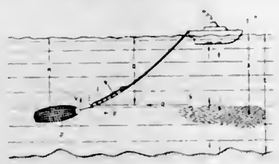
2,751,702
CARTRIDGE FEEDING IN A TUBULAR MAGAZINE FIREARM
Lexie Ray Crittendon, Wilmington, Del., and Ellis William Hailston, Ilion, N. Y., assignors to Remington Arms Company, Inc., Bridgeport, Conn., a corporation of Delaware
Application January 19, 1955, Serial No. 482,726
5 Claims. (Cl. 42—17)



1. In a firearm adapted for cartridges comprising head rims of a diameter greater than body diameter, the combination comprising a receiver; a barrel having therein a bolt stem guideway of a diameter not substantially greater than cartridge rim diameter; a bolt reciprocable in said receiver and having a cartridge head engaging stem slidable in said guideway; a tubular magazine adapted to contain a column of cartridges; spring-urged cartridge following means in said magazine; a cartridge receiving passage in said barrel and receiver communicating with said magazine, extending rearwardly and upwardly therefrom

and intersecting said bolt stem receiving guideway whereby when said bolt stem is retracted in said guideway the head of the rearmost cartridge in said passage partially projects into said guideway in the path of forward movement of said bolt stem; a slot in said barrel joining said passage and said bolt stem guideway, said slot having a length greater than cartridge length, having end portions of a width greater than cartridge body diameter and less than cartridge head diameter, and having a mid portion of a width greater than cartridge head diameter shaped to define a pair of opposed forwardly and upwardly inclined tracks whereby a cartridge engaged by said bolt stem in its forward movement is moved forward and upward through said slot and into said guideway.

2,751,703
FISHNET ADJUSTABLE IN DEPTH
Hans Kletz, Bremen, Theodor Leman, Eystrup, and Martin Schumacher, Bremen, Germany, assignors to Atlas-Werke Aktiengesellschaft, Bremen, Germany, a firm
Application March 17, 1952, Serial No. 276,906
11 Claims. (Cl. 43—8)



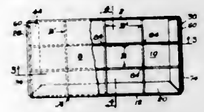
1. An auxiliary fishing equipment adapted to be used from a fishing vessel comprising a fishing net, a pressure hose connected from the fishing net to the vessel, said pressure hose having an open lower end, means for supplying compressed air to said hose, means responsive to the air pressure in said hose indicating the depth of said net, and means responsive to the last named means for changing the depth of said net.

2,751,704
ARTIFICIAL PLUG BAIT
Theodore B. Gusdanovic, Brooklyn, N. Y.
Application November 22, 1952, Serial No. 322,043
1 Claim. (Cl. 43—42.48)



A fishing lure, comprising an elongated body having outwardly contracted ends joined by a large diameter central portion, one end constituting the tail of the body, the other constituting the head end, the head end being defined by a round lower surface and a transversely flat rearwardly contracted upper surface extending to said central portion, the sides of the upper flat surface being substantially straight and converging longitudinally of the body to said central portion, said sides, at their inner extremities, being spaced from each other and merging into the surface of the central portion, the outer end of the head terminating centrally in a mouth having angularly disposed upper and lower lips, the surfaces of said lips being disposed at substantially 90° to each other, the upper lip joining said upper flat surface in a straight edge, and a leader eye being positioned centrally of the forward end of said upper flat surface, the length of said body being materially greater than the diameter of said central portion, said body being longitudinally curved at the top and bottom, and the longitudinal curvature of the top and bottom being each substantially uniform from the head end to the tail end.

2,751,705
GIANT-SIZE TOY BLOCK
John L. Joseph, Hasbrouck Heights, N. J.
Application June 11, 1952, Serial No. 292,839
4 Claims. (Cl. 46—24)



1. A toy block comprising a shell formed from sheeted paperboard of substantial strength and longitudinal and transverse partition members of substantial structural strength having dimensions substantially equal to the internal dimensions of said shell and snugly received within the interior thereof, said shell comprising a first side wall, top and bottom walls secured respectively to the top and bottom edges of said first side wall and each having a free side edge, side wall sections secured to the free side edges respectively of said top and bottom walls, the combined heights of said side wall sections equalling the height of said first side wall, said side wall sections being bent up to meet and define a second side wall, flaps secured to the meeting edges of said side wall sections, end wall sections secured to the end edges of said top and bottom walls so as to define opposing pairs of end wall sections, the combined heights of each opposing pair of end wall sections equalling the height of said first mentioned side wall, each opposing pair of end wall sections being bent up to meet and define end walls, and flaps secured to the meeting edges of said end wall sections, the end edges of said partition members adjacent said side and end wall sections having slots aligned with the meeting edges of said sections and into which the flaps secured to said sections are received so as to lock said block in erected condition.

2,751,706
CHILD'S CONSTRUCTION TOY
Martin Metal, Sausalito, Calif.
Application May 25, 1953, Serial No. 356,945
4 Claims. (Cl. 46—31)

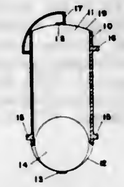


1. In a child's construction toy, a generally triangular planar member of relatively thin sheet material having a pair of substantially equal relatively long convergently extending side edges and formed along one of said edges with a row of openings adapted to be engaged by a connecting element for releasably interlocking such element and said member together, the remaining side edge of said member defining a reentrant angle having a pair of sides, the junctures of said last mentioned sides and said side edges defining a pair of outwardly extending projections.

2,751,707
SOMERSAULT DEVICE
Johannes Kask, Baltimore, Md.
Application April 23, 1954, Serial No. 425,123
1 Claim. (Cl. 46—134)

A somersault device adapted for incorporation in the body of a doll-like structure, said device comprising an elongated housing having curved side walls and arcuate

ends, a relatively heavy ball slidable within the housing, stop means for said ball carried by the housing at one of said arcuate ends, a deflector at the opposite arcuate end, said deflector having arcuate outer walls and being carried by said housing completely to one side of the longitudinal axis of the housing, whereby it will constantly tend to cause the device to be tilted by the ball to



the opposite side of the longitudinal axis when the device rests on the aforesaid arcuate outer walls, and said device will rest in equilibrium only when the ball is situated at the end of the housing opposite to that having the deflector, said deflector having a bent portion across its associated housing end acting as a stop when the ball is situated at said end.

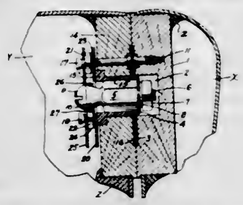
2,751,708
HAND PUPPET
Harry D. Plummer, Seattle, Wash.
Application March 9, 1954, Serial No. 414,965
3 Claims. (Cl. 46—154)



1. In a hand puppet, a hollow lower face member shaped to simulate the lower part of a face, said member being of a deformable material and being formed open at one end to permit insertion of a hand for manipulating selected portions of said member; a flexible, elongated yoke element connected at its ends to opposite sides of said face member at the other end thereof; and an upper face member formed as an inflatable balloon having depicted thereon the upper part of a face, said upper face member, when inflated with the yoke extending thereabout, tensioning the yoke to draw the lower face member into engagement with the upper face member.

2,751,709
MANIKIN FRICTION JOINTS
Carmen Barrango, San Francisco, Calif.
Application December 2, 1950, Serial No. 198,868
3 Claims. (Cl. 46—173)

1. A readily attachable and detachable manikin friction joint for adjustably securing limbs to the body comprising a pivot base fixed in said limbs having a hexagonal stud with a rounded head and an inwardly tapered neck and projecting from said pivot base; a socket base fixed in the body of said manikin having a central opening therethrough; a frictional socket rotatable within the opening through said socket base and projecting therefrom and having a hexagonal opening slidably engaging said stud; opposed front and back friction plates bearing against the opposite ends of said socket respectively and bolted together through said socket base; and a spring latch mounted upon said socket base and engaging said tapered



neck for releasably latching said stud within said socket, said release being attained by an axial outward force against the resistance of said spring latch.

2,751,710
MUSICAL DOLL-CRADLE
Percy L. Pace, Johnstonville, Calif.
Application April 29, 1954, Serial No. 426,386
2 Claims. (Cl. 46—175)



1. A musical doll cradle comprising a frame having curved supporting rockers, a plurality of tensioned piano wires on said frame, gravity operated weight pivotally mounted on said frame, and a plurality of resilient pins projecting radially from said weight for engaging and vibrating the wires thereby creating a musical sound, wherein said frame being provided with end, side and bottom panels, said bottom and one of said end panels formed from a pair of spaced panel members, said wires being positioned between the panel members forming the bottom and said weight positioned between the panel members forming said one end panel, said end panel members having a closure top thereby providing an enclosed cradle, said wires being positioned longitudinally of said frame, said wires positioned over a bridge adjacent one end of the frame, and a tension coil spring attaching an end of each wire to the frame thereby tensioning the wires over the bridge, said weight being freely swingable on a horizontal pin, said weight having an arcuate lower end for swinging movement over the wires, said resilient pins projecting outwardly from the lower end of the weight and terminating at equal distances from the arcuate lower end of the weight, said pins being constructed of spring steel and rigidly secured to the weight.

2,751,711
TOY PROJECTILE AND MEANS TO PROPEL SAME
Murray Greenwood, Laurelton, N. Y.
Application August 31, 1953, Serial No. 377,285
4 Claims. (Cl. 46—199)

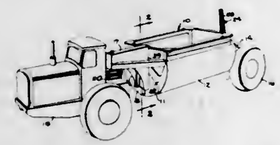
1. A toy of the character described comprising, in combination, a launching device including a tubular barrel member having a transverse imperforate wall fixedly secured thereto adjacent its forward end, dividing said barrel into a forwardly directed explosion cavity, and a rearwardly disposed housing, said transverse wall having a front face and a rear face, a retractable hammer member located in said housing, spring means urging said hammer member toward said transverse wall rear face,

and a projectile having a rearwardly extending base portion so shaped as to slidably nest in said explosion cavity,



said base portion having a rear face confronting and in close proximity to said transverse wall front face.

2,751,712
TOY HOPPER
Bernard C. Klint, Rockford, Ill.
Application July 1, 1952, Serial No. 296,640
4 Claims. (Cl. 46—214)

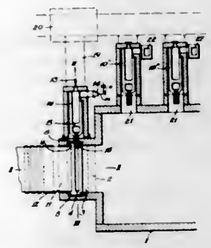


1. In a toy, the combination of, a box-like body having a bottom opening and wheels for positioning the body above a supporting surface, clamshell gates for closing said opening and having arms upstanding from opposite ends, means pivotally connecting the free ends of the corresponding arms to said body for swinging of the gates about an axis extending longitudinally of said body and spaced above said opening, said arms at one end of said body having elements thereon movable back and forth between positions higher and lower than said axis in the movement of said gates between open and closed positions, a contractile spring stretched between said elements for movement across said axis in the movement of said gates between said open and closed positions, a member mounted on said body to slide vertically along one end thereof, means connecting said member and said arms to swing the latter aparts as the member is raised, and a bell crank lever mounted on said body to swing about an axis extending transversely thereof and spaced outwardly from said member, said bell crank having one leg bearing upwardly against said member to raise the latter and an upstanding leg constituting a handle movable longitudinally of said body.

2,751,713
SYSTEMIC INSECTICIDES
Walter W. Abramitis, Downers Grove, Ill., assignor to Armour and Company, Chicago, Ill., a corporation of Illinois
No Drawing. Application May 6, 1952, Serial No. 286,423
17 Claims. (Cl. 47—58)

1. A method of increasing the resistance of growing plants to attack by insects characterized by having present in the soil within the feed root range of said plants a tetraalkylammonium salt having less than 5 carbon atoms in each of its alkyl groups selected from the group consisting of the halide and fatty acid salts thereof.

2,751,714
PROCESS AND APPARATUS FOR THE CONTINUOUS PRODUCTION OF FLASHED GLASS
Albert Knaff, Uccle-Brussels, Belgium, assignor to Glaceries de St. Roch Societe Anonyme, Luxembourg, Brussels, Belgium, a Belgian company
Application January 21, 1952, Serial No. 267,348
Claims priority, application Belgium February 1, 1951
10 Claims. (Cl. 49—3)



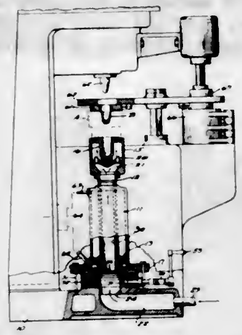
1. A furnace for the continuous production of flashed glass comprising a melting tank for the base glass having a sill at a downstream outlet end over which molten base glass flows in a thin layer, a trough-shaped float extending across the outlet end of said tank, said float being partly immersed in the base glass and having an overflow lip situated below the level of said base glass, means for feeding flashing glass into said float, thereby causing said flashing glass to flow over said lip and spread out as a surface layer on the layer of base glass as it flows over said sill and means controlling the flow of flashing glass into said float and level of said float in said tank to control the thickness of the layer of flashing glass.

9. Method for the continuous production of flashed glass, which comprises feeding flashing glass composition in a solid state from a source to an auxiliary melting station, melting the flashing glass composition, supplying the melted flashing glass from said auxiliary melting station to the surface of a flowing molten base glass, flowing said flashing glass in the form of a thin web onto the surface of the flowing base glass with the top surface of the flashing glass out of contact with a solid body, controlling the thickness of the web of overflowing flashing glass by mechanically controlling the level of the bottom surface of said web with relation to the normal level of the surface of the base glass and by controlling the rate of feeding of the flashing glass composition to the auxiliary melting station, to control the level of the top surface of said web.

2,751,715
MOLD COOLING SYSTEM
Robert R. Denman, Columbus, Ohio, assignor to Owens-Illinois Glass Company, a corporation of Ohio
Application July 30, 1954, Serial No. 446,709
4 Claims. (Cl. 49—40)

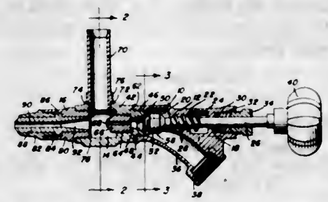
1. In an apparatus for forming articles from molten glass the combination of a parison forming mold, means supporting said mold and enclosing the side walls thereof, a series of cooling nozzles within said enclosure equally spaced circumferentially about the vertical axis of said mold, a primary cooling duct individual to said mold and extending along the vertical axis thereof, an entrance

means at the lower end of said duct having an opening centrally of the vertical axis thereof, and means operable



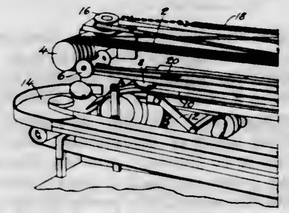
to vary the effective flow area of said opening equally about its vertical axis.

2,751,716
BLAST GUN
Clarence B. Pletcher, Buchanan, Mich.
Application April 19, 1954, Serial No. 424,013
1 Claim. (Cl. 51—11)



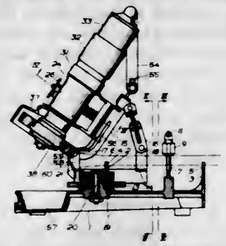
A sand blast gun comprising a body member having an axial passage, a portion of said passage being internally threaded, said passage having an inner end terminating in a coaxially enlarged valve chamber, a rod axially disposed in the passage and having a portion of its surface externally threaded and enmeshed with the threaded portion of the passage, the threads on both parts being acutely pitched so that a slight rotational movement of the rod will effect a considerable axial movement thereof in the passage, said rod extending outwardly of the passage and having an enlargement, provided with an undulated peripheral surface, on its extending end for manually rotating the rod to move it axially of the passage, an enlarged cylindrical valve body detachably socketed on the inner end of the rod and disposed in the valve chamber, said valve body having an inwardly tapering end and being of less diameter than the valve chamber, a mixing chamber attached to the body member and aligned with the valve chamber and disposed forwardly thereof, a partition disposed transversely between the valve chamber and the mixing chamber, said partition having a bore aligned with the valve chamber and communicating the valve chamber and the mixing chamber, said partition having a wall facing the valve chamber and a valve seat formed in such wall and being outwardly flared to receive the end of the valve body, said body member having an inlet bore of constant cross-section for water under pressure formed below the passage; said inlet bore being curved forwardly and tangentially opening into the bottom of the valve chamber and extending over the entire bottom of the valve chamber, a jet nozzle removably fixed in the partition bore and extending forwardly into the mixing chamber, said nozzle having an axial bore of considerably less diameter than the bore in the partition and of constant cross-sectional area and communicating centrally with the valve chamber and the mixing chamber, an inlet nozzle for air and sand communicated with the mixing chamber, said mixing chamber having a threaded opening in its top wall and the inlet nozzle having a lower end threaded in such opening so that the inlet nozzle is disposed perpendicular to the mixing chamber and at right angles to the jet nozzle, said jet nozzle terminating in alignment with the inner wall of the inlet nozzle and a discharge nozzle carried by the mixing chamber and extending forwardly thereof, said discharge nozzle having an axial bore aligned with and axially spaced from the jet nozzle and said bore of the discharge nozzle tapering forwardly from the mixing chamber and terminating outwardly in an outlet section of constant cross-sectional area.

2,751,717
EGG CLEANING EQUIPMENT
Otto C. Niederer, Otto Niederer, and Herbert O. Niederer, Titusville, N. J.
Application June 30, 1953, Serial No. 365,218
4 Claims. (Cl. 51—16)



4. Egg cleaning equipment comprising a support for an egg to be cleaned, two spaced members, a plurality of abrasive bands movable between said members, said bands being permanently shaped so as to maintain a form which throughout its length is concave in cross section with abrasive material located on the concave surface thereof and means for moving said concave surfaces of said bands over the surface of an egg located on said support.

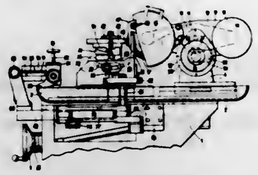
2,751,718
ROCK DRILL GRINDERS
Hans Hugo Falkman, Johanneshov, and Erik Magnus Olsson and Per Olof Söderblom, Nacka, Sweden, assignors to Atlas Copco Aktiebolaget, Nacka, Sweden, a corporation of Sweden
Application September 10, 1951, Serial No. 245,876
Claims priority, application Sweden September 21, 1950
13 Claims. (Cl. 51—32)



3. A rock drill grinder comprising a substructure, a device for clamping a rock drill steel including means for supporting a rock drill steel in fixed position with the longitudinal axis of the drill steel substantially in a horizontal plane, a frame mounted to swing on said substructure on an axis forming an angle with respect to said plane, said swinging axis being an axis of a surface of revolution including the cutting end face of the drill steel, means for mounting a rotary grinding wheel and a motor

in driving connection therewith on said frame so as to grind along said surface and means for imparting to said grinding wheel a reciprocating movement in the direction of a generatrix of the grinding surface of said wheel, said frame and mounting means and grinding wheel and motor having a common center of gravity disposed adjacent said swinging axis.

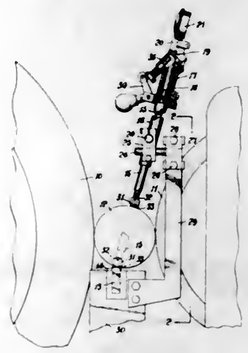
2,751,719
COPYING GRINDING MACHINE
Walter Reichel, Frankfurt am Main, Germany, assignor to F. Bissl & Co., Solothurn, Switzerland
Application March 12, 1954, Serial No. 415,893
5 Claims. (Cl. 51—100)



1. A grinding machine comprising in combination, a grinding wheel; a first support adapted to hold a work piece, guide means for guiding said grinding wheel and said first support in a relative translatory motion to each other in two perpendicular directions of a plane parallel to that meridional plane of the grinding wheel which crosses the surface to be ground; a grinding wheel trueing device which has points arranged to engage respectively the periphery and the sides of the profile of the grinding wheel and which is rigidly connected to said first support; a feeler member having a guiding profile similar to that of the grinding wheel; a second support, guide means for guiding said feeler member and said second support in a relative translatory motion to each other in two perpendicular directions of a plane; a pantographic device by which the motions of said first support relative to said grinding wheel are made to be similar, geometrically spoken, to those of the second support relative to said feeler member, but reduced at a predetermined ratio; a master pattern and a trueing pattern both fixed to said second support, the trueing pattern having points similarly located as those of the trueing device, whereby, when any one of the points of the trueing pattern is moved along the juxtaposed portion of the guiding profile of said feeler member, the corresponding point of the trueing device trues the juxtaposed portion of the profile of the guiding wheel, this profile obtaining thus a configuration which is an exact image of the guiding profile of the feeler member, reduced at the ratio of the pantographic device, when the trueing operation has been accomplished with all points, so that consequently, when said master pattern is subsequently guided to move with its contour in contact with the guiding profile of the feeler member, the grinding wheel grinds on the work piece a surface the contour of which is an exact image, reduced at the ratio of the pantographic device, of the contour of the master pattern.

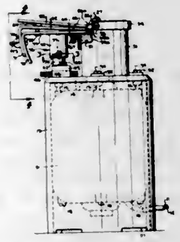
2,751,720
CENTERLESS GRINDING GAGE
Shubel A. Foster, Birmingham, Mich., assignor to Foster Engineering Corporation, Royal Oak, Mich., a corporation of Michigan
Application February 26, 1954, Serial No. 412,887
2 Claims. (Cl. 51—103)

1. In a device of the character described, a pair of oppositely spaced centerless grinding wheels, a blade located between said wheels and having a substantially flat face for supporting a work piece, a support means adjacent said wheels and having an arm located above said blade, adjustable mounting means, on said arm, slidably and swingably supporting a sleeve, a work-contacting gage bar fitted in said sleeve, said sleeve being slidable toward or away from said blade face, said mounting means being angularly adjustable for swinging said sleeve



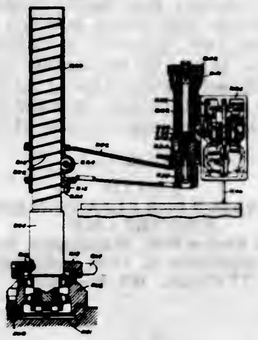
into perpendicular alignment with said blade face and having means for fixing said sleeve in adjusted slidable position properly spaced from said blade whereby said bar may contact the surface of a work piece at a point diametrically opposite to the blade face point of contact with said work-piece.

2,751,721
BLADE SHARPENING APPARATUS
Richard B. Smith, Hickory, N. C.
Application July 13, 1953, Serial No. 367,596
18 Claims. (Cl. 51—128)



1. Apparatus for sharpening blades, such as knives and the like, comprising a rotatable drum having an abrasive outer end surface thereon and also having a cavity in its outer end, a circular magnet partially disposed in said cavity, means loosely supporting said magnet for rotation about an axis substantially parallel to the axis of said drum, a blade guide comprising outer and inner complementary plates extending substantially radially from said drum and having coinciding concave arcuate edges thereon adjacent said drum, said arcuate edges being of a radius substantially the same as the external radius of said drum, means maintaining said arcuate edges substantially concentric with said drum, first resilient means normally maintaining the outer surface of the outer plate in a position slightly outwardly of said abrasive outer surface of said drum, means for adjusting said outer plate as to angularity relative to the inner plate and parallel to the axis of said drum, and second resilient means for maintaining the innermost ends of said outer and inner plates in contacting engagement.

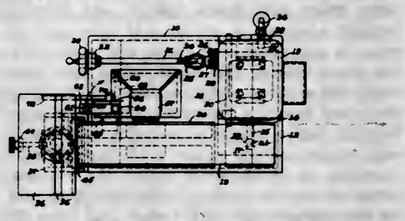
2,751,722
GAUGING DEVICE FOR SURFACE GRINDER
Harold F. Skillings, West Medford, Mass., assignor to The Blanchard Machine Company, Cambridge, Mass., a corporation of Massachusetts
Application July 14, 1951, Serial No. 236,781
30 Claims. (Cl. 51—131)



1. In a surface grinding machine, a base, a rotatable work support with a flat work supporting face mounted from the base, a grinding wheel support and a grinding wheel mounted from the base, means operable for imparting a rotary movement to said work support and a relative depth feeding movement to said supports of controlled extent for the removal of surplus stock from any workpiece disposed on said work supporting surface, and a gauging device for gauging the work thickness during the progress of said surplus stock removal operation, which comprises a gauge support on the machine disposed over said work supporting face, a work engaging element movably supported on said support to move to a predetermined limit position on the support toward the work supporting face and further arranged and shaped to be retracted from said face by engagement with a workpiece on said face passing beneath the work engaging element, means moving the work engaging element yieldably against and beyond the surface of an oversized workpiece to said limit position toward the work supporting face, an actuating element on the gauge support actuated by movement of the work engaging element to said predetermined limit position having an alternate response to said movements of the work engaging element to and retracting movements away from said position and a steady response to the continued engagement of the work engaging element in said position, and a signal device controlled by said actuating element to signal the change from alternating to a steady response of said actuating element.

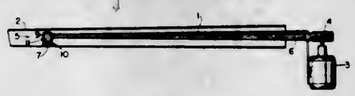
2,751,723
LAPPER FOR CARBIDE TIPPED TOOLS
Karl L. Lindmark, Loves Park, Ill., assignor, by mesne assignments, to Fenlind Engineering Co., Loves Park, Ill., a corporation of Illinois
Application February 6, 1953, Serial No. 335,459
7 Claims. (Cl. 51—135)

1. In combination, an endless abrasive belt of suitable width, a suitably rotatably supported wheel of appreciable radius having a rim with a wide flat smooth unyielding periphery on which said belt operates under tension, means for driving said belt and wheel, a work support having a surface in a plane parallel to a radius of said wheel on which a tool bit the tip of which is to be lapped by contact with said abrasive belt is adapted to be carried, a pillar on top of which said support is carried for adjustment in a direction parallel to a tangent to said wheel, a guide for said pillar, means for adjusting said pillar in said guide, and an elongated gauge member disposed adjacent said work support parallel to said pillar on the face of which toward the work support are provided transverse graduations spaced longitudinally of said gauge member, said graduations indicating directly the different levels for supporting a tool bit for lapping different angles on



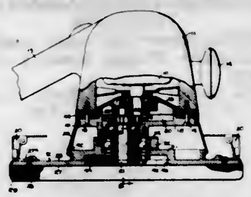
the tool bit tip, whereby said work support with a tool bit resting thereon with the tip disposed adjacent said gauge member is adapted to be adjusted to a predetermined position for a predetermined angle of lapping by adjusting it with the tool bit movable in close proximity relative to the gauge member.

2,751,724
BELT GRINDING APPARATUS
John O. Polzer, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application December 26, 1952, Serial No. 328,060
5 Claims. (Cl. 51—141)



1. In an apparatus for grinding a metal surface, an endless abrasive belt adapted to be driven at high speed in contact with the article to grind the same, a generally thin fixture for carrying the belt and formed with a substantially flat grinding support surface disposed flatwise to the surface to be ground and having a pair of diagonally extending lateral edge portions bordering said support surface, said belt being adapted to approach and leave said fixture while traveling in a longitudinal direction to said fixture and traveling around each of said diagonally extending edge portions to travel the belt transversely of the fixture along the support surface to grind the article.

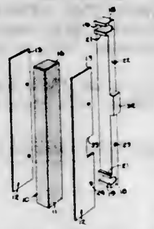
2,751,725
ORBITAL ACTION RUBBING MACHINE
Roy J. Champayne, Rockford, Ill.
Application August 13, 1954, Serial No. 449,690
3 Claims. (Cl. 51—170)



1. A rubbing machine having, in combination, a rigid frame, a rotary drive shaft journaled in said frame with one end projecting from the bottom of said frame, a rubbing shoe including a top plate and a pad of yieldable material secured to the bottom of said plate for attachment of a rubbing sheet thereto, said shoe and the parts thereon having a center of mass disposed closely adjacent the plane of said plate, means joining said frame and

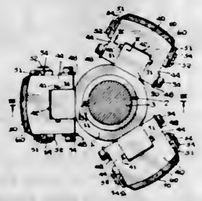
plate and acting to hold said shoe against rotation but permitting bodily gyration thereof around the shaft axis, a flange rigid with and upstanding a short distance from the top of said plate, a bearing supported in the upper part of said flange, an eccentric on said shaft disposed immediately below said frame bottom and journaled in said bearing whereby to gyrate said shoe and its center of mass in said plane, said flange and plate defining around the lower end of said shaft below said bearing a generally flat annular enclosure disposed substantially in said plane and having a diameter substantially larger than said bearing, and a weight of a radius substantially equal to said enclosure fixed to said shaft immediately below said eccentric so as to rotate within the enclosure with its center of gravity disposed substantially in said plane but on the opposite side of the shaft axis from the center of mass of said shoes.

2,751,726
HONING ELEMENT
James B. Klein, Rockford, Ill., assignor to Barnes Drill Co., Rockford, Ill., a corporation of Illinois
Application January 19, 1953, Serial No. 332,014
13 Claims. (Cl. 51—184.3)



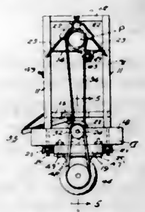
1. A honing element comprising a rigid stick of bonded abrasive of uniform rectangular cross section throughout its length, thin flat layers of material having a wear rate no less than that of the abrasive stick, said layers lying along opposite sides of the latter with one edge of at least one layer disposed substantially flush with the working face of said stick and the opposite edge portions of the layers projecting beyond the bottom of the stick to form laterally spaced and stiff parallel flanges cooperating with the stick bottom to define an open channel, a supporting bar received in said channel and lying against the bottom of said stick, the ends of said bar projecting beyond the ends of said stick and having grooves therein for receiving garter bands, and a device extending through matching apertures in said bar and one of said flanges to connect the same detachably together.

2,751,727
GRINDING HEAD AND GRINDING SURFACE THEREFOR
Walter E. McAfee, Somerville, Mass., assignor to Leavitt Machine Company, Orange, Mass., a corporation of Massachusetts
Application August 28, 1953, Serial No. 378,339
7 Claims. (Cl. 51—190)



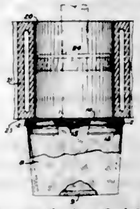
1. A grinding head for a globe valve grinding machine, said head comprising a central core mountable on a driving shaft for rotation therewith, a grinding shoe extending radially outwardly from and immovably affixed to the central core, said grinding shoe being defined by opposed side walls and an outermost end face presented in the working plane at that angle to the axis of rotation of the core required by the angle of the surface to be ground, and a relatively thin, flexible separably formed replaceable abrasive strip having extension portions at its opposite ends bent rearwardly to embrace the side walls of the shoe to hold the intermediate portion of the strip in superimposed relation to and at the angle of said end face and a yieldable cushion interposed between said end face and said intermediate portion of the abrasive strip.

2,751,728
APPARATUS FOR CLEANING PIPES AND THE LIKE
Paul Eugene Petit, Philadelphia, Pa.
Application September 14, 1955, Serial No. 534,282
12 Claims. (Cl. 51—241)



1. In a machine for cleaning the outer surface of a pipe, tubular or like member, framework means for suspension freely from said member supported in a horizontal position and for lateral shifting movement axially of said member, means revolubly carried by said framework means and disposed in underlying spaced relation to said member, an endless belt trained over said revoluble means and adapted to be additionally trained over said member with an inner abrasive surface thereof engaging the outer surface of said member, and means carried by said framework means for actuating said revoluble means and belt.

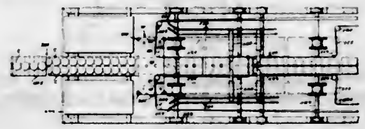
2,751,729
RECEPTACLE FOR CYLINDER FINISHING WASTE
Leslie H. Christiansen, Milwaukee, Wis.
Application September 30, 1954, Serial No. 459,501
10 Claims. (Cl. 51—262)



1. A receptacle for cylinder finishing waste, comprising, a bag having its mouth portion provided with a magnet assemblage formed to hold said bag portion in sealing engagement with a ferrous end of the cylinder adjacent to its bore.

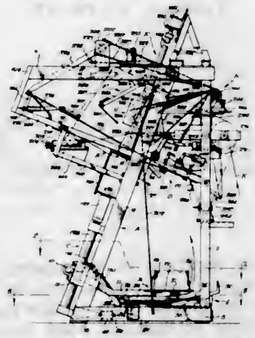
2,751,730
PACKAGING METHOD AND MEANS
Hermond G. Gentry, Atlanta, Ga., assignor to Atlanta Paper Corporation, a corporation of Georgia
Application December 21, 1954, Serial No. 476,650
8 Claims. (Cl. 53—32)

1. The method of packaging which comprises supporting and causing continuous serial travel of articles to be packaged while maintaining said articles successively separated in package units, successively aligning a wrapper blank with each continuously traveling package unit and maintaining said alignment while folding each aligned wrapper blank downwardly over the sides of each package unit with end portions of said blank extending below the support for said package unit for overlapping, then progressively folding said blank end portions inwardly toward overlapping relation beneath said package unit and transferring the direct support of said package unit to said inwardly folded blank portions as the overlapping thereof is completed, whereby said blank portions are overlapped directly and tightly beneath each package unit while traveling, and finally securing the overlapped portions of each blank while thus folded about said continuously traveling package units.



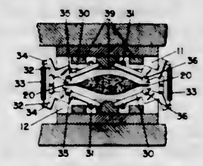
5. Apparatus for packaging articles in a wrapper blank comprising means for continuously conveying said articles successively in separated package groups with an aligned wrapper blank folded across the top and downwardly over the sides of each package unit, an elongated stationary plate member no wider than said package groups and tapering substantially toward one end, said plate member being disposed so that said package groups are caused by said first mentioned means to slide thereon toward said tapered end with the downwardly folded portions of said blanks extending below said plate member at each side, and means for progressively folding said extending blank portions inwardly beneath said package groups after they are slid toward said tapered plate member end, said means extending beyond said tapering end so that the direct support of said package groups is transferred from said plate member to said inwardly folded blank portions and the inward folding of said blank portions is completed in overlapping relation directly and tightly beneath said package groups as they are slid off of the tapering end of said plate member.

2,751,731
BANDING MACHINE FOR BAG BUNDLES
Arthur J. Evers, Brooklyn, N. Y., assignor to International Paper Company, New York, N. Y., a corporation of New York
Application July 8, 1953, Serial No. 366,805
13 Claims. (Cl. 53—124)



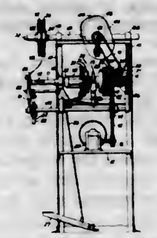
1. In a machine for banding bundles of paper bags, a basket for supporting a loose bundle of bags, means for depositing on said basket a predetermined number of bags, means effective after a loose bundle of bags has been deposited on said basket for moving said basket to a band-applying station, two separately movable sets of fingers for retaining said loose bundle on said basket while said basket is being moved to said band-applying station, means for retracting said fingers from their bundle-engaging positions as said basket reaches said band-applying station, an elevator for receving said loose bundle from said basket, means for positioning a predetermined length of sheet banding material at the band-applying station, a limitedly movable presser foot overlying said banding material, means to raise said elevator whereby to compress said bag bundle against said banding material and said presser foot, means for returning said basket to its bag bundle-receiving position, means for applying and securing said banding material around said compressed bundle, means for lifting said presser foot an amount sufficient to release the externally applied compression from said bag bundle, and means for ejecting the banded bundle from the machine.

2,751,732
AUTOMATIC PACKAGING MACHINES
Joseph G. Woppman, Baltimore, Md., assignor to W. R. Grace & Co., Norwalk, Conn., a corporation of Connecticut
Application June 30, 1953, Serial No. 365,015
6 Claims. (Cl. 53—180)



1. In a packaging machine comprising means for shaping suitable opposed strips of packaging material, means for sealing the side margins of said strips to thereby form a tube, a pair of vertically reciprocating end sealing dies for successively drawing the packaging material through said shaping means and closing longitudinally spaced portions of the resulting tube to produce a succession of individual commodity containers, the improvement comprising in combination means mounted on said end sealing dies to engage the packaging material at the margins thereof and stretch said material horizontally before the end sealing dies close, and means to disengage said grasping means from said packaging material following sealing but before the end sealing dies open.

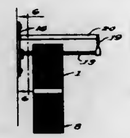
2,751,733
MACHINE FOR TAPING WIRE COIL
Alden W. Nelson, Pawtucket, R. I., assignor to The James L. Entwistle Company, Providence, R. I., a copartnership
Application July 3, 1952, Serial No. 297,146
2 Claims. (Cl. 53—198)



1. A machine for applying adhesive tape to a coil of wire mounted on a reel which comprises in combination

a frame, a gear reduction drive electric motor mounted on said frame, a shaft protruding from said gear reduction drive, said shaft having a sprocket at one end, a rotatable shaft including a clutch journaled transversely of said frame with one end portion of said shaft extending beyond said frame and provided with reel engaging means, said rotatable shaft having a sprocket drive near the other end, chain drive means connecting said shaft to the sprocket on the gear reduction drive shaft, a foot pedal operably connected to said clutch adapted to rotate said reel engaging means, a slide bar including a cam follower journaled transversely of said frame in spaced parallelism with said rotatable shaft, and a cam journaled on said frame with its axis of rotation normal to said slide bar and adapted for reciprocating said bar, sprocket and chain drive means connecting said cam to said rotatable shaft in a worm gear, said slide bar including an extended end portion with means for receiving a roll of tape, and switch means actuated by said cam for stopping said motor after each traversing movement of said slide bar.

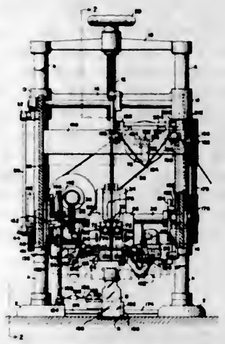
2,751,734
GARMENT BAGGING MEANS
Wayne Ratliff, Los Angeles, Calif.
Application August 14, 1953, Serial No. 374,230
4 Claims. (Cl. 53—241)



3. A garment bagging means comprising a plurality of flattened paper garment bags stacked in flat relation; each of said bags having an open lower end and an upper end closed except for a central opening for passage of a garment hanger hook therethrough, and each of said bags having an unattached longitudinally extending strap disposed therein and extending from the upper end of the bag through which it extends to a point below the lower end of the bag; all of said bags and the straps associated therewith having aligned holes extending through the upper ends thereof, a rod extending through said aligned holes, a head on one end of said rod, a removable clip on said rod at the side of said stacked bags remote from said head, effective to hold said bags compressed against said head, and removable means engaging the side edges of said stacked bags effective to prevent independent movement of said bags about said rod and to hold said bags in compressed condition.

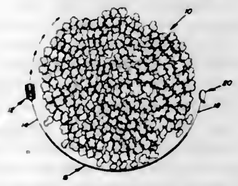
2,751,735
DEVICE FOR APPLYING BANDS TO CONTAINERS
Richard J. Bartlett, Chalfonte, and Robert W. Hompe, Ithan, Pa., assignors, by mesne assignments, to Geo. J. Meyer Manufacturing Co., Cudahy, Wis., a corporation of Wisconsin
Application November 13, 1951, Serial No. 256,016
31 Claims. (Cl. 53—292)

1. A device for applying bands to containers comprising a frame, means for supporting a bottle with its axis substantially vertical, a vertically reciprocable slide carried by the frame, means for reciprocating the slide, opposed vacuum-type gripper devices designed to hold an open band in axial alignment with the bottle as the slide completes its downward stroke, cutting means mounted on the slide designed to cut a band from a continuous tube, means actuable by downward motion of the slide to operate the cutting means, gripping means mounted on the slide and which are operative to feed a continuous tube of banding material into operative engagement with



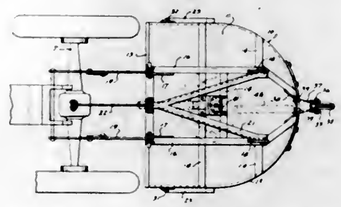
the cutting means, and means actuable by downward motion of the slide for operating the band-feeding means.

2,751,736
DRAG CUTTER ASSEMBLY FOR CLEARING LAND
Robert R. Hennemer, Houston, Tex.
Application October 19, 1953, Serial No. 386,339
4 Claims. (Cl. 55—60)



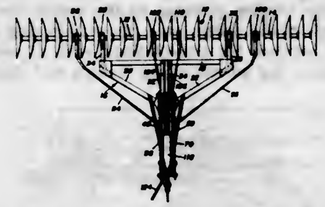
1. A cutter assembly for clearing land comprising a plurality of elongated cutter elements flexibly interconnected in end-to-end relation, a drag member secured to an end one of said cutter elements, means for connecting the opposite end one of said cutter elements to a powered vehicle, said drag member being in the form of a flat plate having a rudder member secured to and depending from the bottom surface thereof and extending longitudinally therealong.

2,751,737
DISC TYPE MOWING APPARATUS HAVING PIVOTED BLADES
Henderson B. Herod, Montgomery, Ala.
Application September 25, 1953, Serial No. 382,406
2 Claims. (Cl. 55—62)



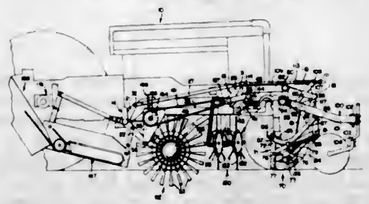
1. In mowing apparatus of the rotating disc type, a supporting structure comprising a hood having a flange along a substantial portion of its periphery, a drive shaft extending normally through said hood, a cutter supporting disc on the lower end of said shaft spaced below said hood, an inclined guard member extending downwardly from said hood and substantially concentric with at least the forward portion of said disc, at least two cutters extending outwardly from said disc and pivoted thereto, the pivot point of each cutter being off-set from its longitudinal center toward its leading edge.

2,751,738
GANG DISC ANGLE CONTROL DEVICE
Carl Luze, Dysart, Iowa
Application July 10, 1952, Serial No. 298,057
3 Claims. (Cl. 55—81)



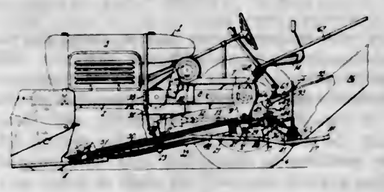
2. A power actuated angle control device for disc harrow gangs comprising a hitch bar, a disc hitch frame including a pair of spaced apart side frame members telescopingly engaging said hitch bar, an actuating lever pivoted on said frame, said lever extending above and below said frame, an upper clevis plate secured on said hitch bar, said clevis plate extending laterally over said side frame members, a link extending between said clevis plate and a point adjacent the top of said lever, an anchor post mounted on said frame, a fluid actuated cylinder connected in operative relation between said post and said lever, an angle limiting means including a stationary stop plate adjustably secured to said frame, a sliding stop plate, said sliding stop plate being fixed to said hitch bar and extending laterally under said frame, spring means operatively connected between the top of said lever and the forward end of said frame, disc sections attached to said disc hitch, inner disc control rods connected between the inner ends of said disc sections and the lower end of said lever, and anchor links securing the outer ends of said disc sections to said sliding stop plate.

2,751,739
ADJUSTABLE BEET DIGGING AND LIFTING DEVICE
Talbert W. Paul, Moline, Ill., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Application May 29, 1952, Serial No. 290,753
9 Claims. (Cl. 55—108)



1. In a beet harvester including a mobile frame and raising and lowering means thereon, the improvement comprising a sub-frame extending in generally fore-and-aft relation, beet lifting means carried at the rear end of said sub-frame, top engaging means carried at the front end of said sub-frame, a pair of fore-and-aft spaced swingable arms for connecting the end portions of said sub-frame with said mobile frame for raising and lowering the sub-frame, the rear swingable arm being longer than the front arm, link means interconnecting said arms to cause them to swing together, a link connecting the front end of said sub-frame with the shorter arm, said link extending from said sub-frame upwardly and forwardly toward said shorter arm, whereby as said sub-frame is raised by the upward swinging of said arms, the forward end is raised at a substantially lower rate than the rear end, and means for connecting said swingable arms with said raising and lowering means.

2,751,740
ELEVATOR DRIVE MEANS FOR CORN HARVESTERS
Rector C. Ferguson, Gadsden, Ala., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application August 18, 1949, Serial No. 111,057, now Patent No. 2,663,983, dated December 29, 1953, which is a continuation of application Serial No. 447,025, June 15, 1942. Divided and this application May 11, 1953, Serial No. 354,161
3 Claims. (Cl. 56—18)

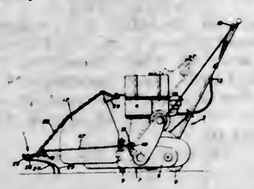


1. A corn harvester attachment for tractors comprising, in combination, a frame adapted for mounting on a tractor in longitudinally extending relation thereto, a main drive shaft mounted on said frame for rotation on a transversely extending axis, harvester rolls and associated conveying means operatively mounted on said frame and connected in driven relation with said main drive shaft, said conveying means having a delivery end rearwardly of said harvester rolls; an elevator drive shaft mounted on said frame for rotation on a transverse axis rearwardly of said main drive shaft; an elevator housing pivotally supported on said frame coaxially with said elevator drive shaft and having a receiving well in material receiving relation to said delivery end of said conveying means; means within said elevator housing including an endless conveying element trained about and driven by said drive shaft for advancing material from said receiving well longitudinally of said elevator housing; and power transmitting means operatively connecting said main drive shaft in driving relation with said elevator drive shaft, said power transmitting means comprising an overload release clutch having relatively rotatable driving and driven clutch elements mounted on said elevator drive shaft, a control clutch having an axially fixed driving element mounted on said elevator drive shaft for rotation relative thereto and an axially loose driven element connected in torque transmitting relation with said driving element of said overload release clutch for shifting movement into and out of cooperative engagement with said axially fixed driving element of said control clutch, and a power transmitting element secured to said main drive shaft and connected in driving relation with said axially fixed driving element of said control clutch.

2,751,741
RAKE ATTACHMENT FOR POWER MOWERS
George E. Carson, Denver, Colo.
Application February 8, 1954, Serial No. 408,827
1 Claim. (Cl. 56—27)

A rake for attachment to a lawn mower in front thereof comprising a rake head including a head bar adapted to extend transversely in front of the lawn mower, a pair of laterally spaced shafts parallel with and in front of said head bar, tandem series of resilient rake tines extending rearwardly beneath said head bar with downwardly curved rakjng ends and other ends attached to said shafts, a pair of head bar supporting rods extending

rearwardly from the ends of the head bar and having rear ends pivotally attachable to opposite sides of the lawn mower for upward and rearward swinging to swing said rake head upwardly and rearwardly from a raking position into an inverted position, a chain attached at one end to said head bar and attachable at its other end to the lawn mower to suspend said rake head in raking position, a pair of transverse bars on said head bar extending forwardly from the ends thereof, a pair of clamps



coacting with said transverse bars to clamp the ends of said shafts therebetween with the shafts in different angular positions to adjust said series of tines vertically independently and adapted to be loosened to permit said series of tines to move vertically freely, and clamps for attaching the head bar to its supporting rods in different angular positions to adjust said rake head angularly in its raking position and vary the angle at which said tines will rake.

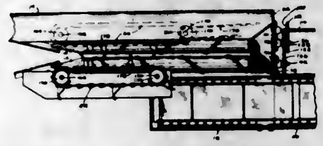
2,751,742
SLAT MOUNTING FOR COTTON PICKERS
Percy A. Keith and Rector C. Ferguson, Gadsden, Ala., assignors to Allis-Chalmers Manufacturing Company, West Allis, Wis.
Application December 3, 1953, Serial No. 395,886
9 Claims. (Cl. 56—42)



1. In a cotton picker, the combination of a vertically extending slat member for mounting rotary picking spindles, a hinge member pivotally connectable on a vertical axis with a horizontally movable endless slat carrier, a stud element rigidly connected with one of said members on an axis extending in the general direction of movement of said slat carrier, the other of said members having a horizontally extending open ended recess for cooperative engagement with said stud element upon movement of one of said members toward the other in a direction generally transverse to said direction of movement of said slat carrier, and releasable locking means operatively interconnecting said slat and hinge members.

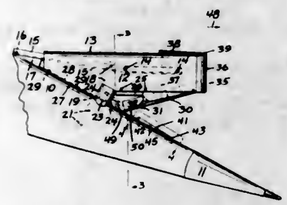
2,751,743
SNAPPING ROLLS HAVING TRASH REMOVING MEANS
Carl W. Bauer, Hildreth, Nebr.
Application May 13, 1953, Serial No. 354,821
2 Claims. (Cl. 56—104)

1. In a pair of snapping rollers for use in a corn picker, the combination which comprises a pair of cylindrical bodies having conical-shaped points on leading ends thereof and shafts extended from the trailing ends, the leading ends of the bodies having annular recesses spaced inwardly from said conical-shaped points, bearing in said recesses and positioned to retain the rollers in spaced relation, the surfaces of said rollers having spiral ridges thereon and the convolutions of the ridges of one roller being positioned between adjacent convolutions of the ridges of the other roller, the surfaces of the rollers also having spaced longitudinally disposed ribs extended from the convolutions on the trailing portions of the rollers toward the trailing ends of the rollers, said ribs terminating at points positioned between the convolutions, each of said rollers having spaced lug wheels at the trailing end thereof and



the outside diameters of the lugs being greater than the diameters of the rollers whereby the lugs of the lug wheels project beyond the peripheral surfaces of the rollers, discs of resilient material positioned between said lug wheels, said lug wheels and discs being positioned on the shafts extended from the trailing ends of the rollers, and the openings through said lug wheels and discs being circular whereby the discs of resilient material provide the only means for preventing rotation of the lug wheels so that the lugs grip stalks of corn from which ears have been removed with a resilient action snapping the stalks downwardly toward the ground, and means for retaining the lug wheels and discs in assembled relation on the shafts extended from the trailing ends of the rollers.

2,751,744
CORN SAVER ATTACHMENT
Gerald L. Reade and Conrad Ekle, Canton, S. Dak.
Application August 24, 1953, Serial No. 376,066
4 Claims. (Cl. 56—119)

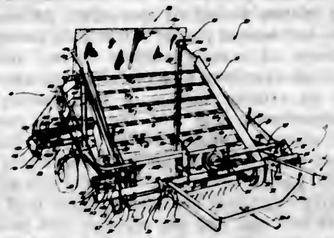


1. A corn saver attachment comprising a vertically positioned frame member, means for attaching said frame member to a corn picker apron, a downwardly inclined platform positioned generally at right angles to said frame member and attached thereto, said platform including an inner vertically positioned flange at the lower terminal thereof, whereby ears of corn will be entrapped on said platform and will gravitate downwardly towards said apron.

2,751,745
PICK-UP AND WINDROWING MACHINE
Kenneth L. Magee, Burlington, Iowa, assignor to J. I. Case Company, Racine, Wis., a corporation of Wisconsin
Application August 1, 1951, Serial No. 239,740
2 Claims. (Cl. 56—372)

1. An agricultural machine for lifting, shaking, and depositing an apron of crop material in a windrow comprising a movably supported frame adapted to be drawn by a propelling means, a pick-up elevator carried by the

frame and extending at an inclination forwardly and downwardly, said pick-up elevator being provided with spaced pick-up fingers, the lowermost fingers being positioned in substantially close proximity to the ground, a conveying platform carried transversely on the movably supported frame rearwardly of said pick-up elevator for receiving the apron of crop material delivered rearwardly by said pick-up elevator, a conveying device on said conveying platform for moving crop material deposited thereon in one direction for forming a windrow laterally of said pick-up elevator, means for driving said pick-up elevator and said conveying device, a deflector rearwardly spaced from said pick-up elevator substantially in the



plane thereof and transverse with respect thereto and above said conveying platform wherein said pick-up elevator is driven at a speed sufficient to throw the apron of crop material rearwardly across the space between said elevator and said deflector against said deflector with a force sufficient to disintegrate any dirt clinging to said crop material, said crop material being deflected downwardly upon said conveying platform by said deflector, a stripping roll rotatably carried by said conveying platform adjacent the discharge end of said conveying device, and means for driving said stripping roll in a direction of rotation corresponding to the movement of said conveying device for stripping the apron of crop material thrown laterally by said conveying device.

2,751,746
DONNING MECHANISM FOR CONTINUOUS SPINNING MACHINES
Juan Badia Busquets, Martorell, and Pedro Baulenas Forgas, Sabadell, Spain
Application October 19, 1951, Serial No. 252,068
Claims priority, application Spain October 24, 1950
1 Claim. (Cl. 57—52)

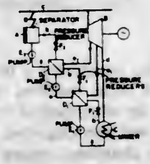


A device for simultaneously donning empty tubes on a series of spindles in continuous spinning machines and the like comprising a horizontal shaft parallel to and above said series of spindles and located in the same vertical plane as said spindles, means for raising and lowering said shaft, means for turning said shaft at least about 180°, a series of cartridges secured to said shaft, and at the inside of said cartridges a plurality of clamping elements for resiliently engaging and releasing the tubes for the spindles.

2,751,747
PROCESS OF PRODUCING DUAL TWIST YARN
Aaron Burleson, Burlington, N. C., assignor to Patentex, Inc., a corporation of New York
No Drawing. Application February 8, 1956, Serial No. 564,127
6 Claims. (Cl. 57—157)

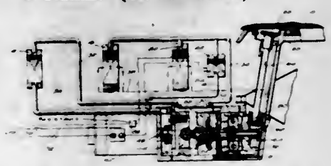
1. A process of producing dual twist nylon yarn comprising twisting nylon yarn in one direction to insert therein a desired number of turns twist throughout the length of the yarn, next twisting said yarn in the opposite direction while winding up said yarn at a sufficiently rapid rate to avoid substantial reverse twisting for a given length of the yarn, and then continuing said reverse twisting and winding up said yarn at a sufficiently slow rate to impart an opposite twist in the next succeeding length of yarn.

2,751,748
THERMODYNAMIC PLURAL-SUBSTANCE PROCESSES AND PLANTS FOR CONVERTING HEAT INTO MECHANICAL ENERGY
Herbert Bachl, Erlangen, Germany
Application October 26, 1953, Serial No. 388,355
Claims priority, application Germany September 3, 1951
11 Claims. (Cl. 60—36)



4. In a thermodynamic cycle process for converting thermal energy into mechanical energy, comprising an auxiliary process with a working substance in the liquid phase composed of a mixture of at least two components, and a main process with a working substance consisting of a gaseous component of said mixture, in combination, the steps of effecting in the auxiliary process the heating of the mixture in a plurality of stages of sequentially higher pressures and higher temperatures, expelling by heating an amount of gaseous component in a heat exchanger of one of said stages of lower pressure and admixing the expelled gas to the liquid in another one of said stages of a higher pressure.

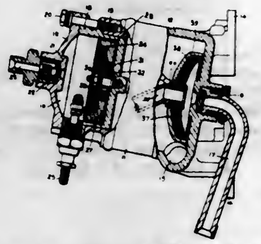
2,751,749
LUBRICATING AND STARTING SYSTEMS FOR GAS TURBINES
Philip P. Newcomb, Manchester, Conn., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application June 27, 1951, Serial No. 233,772
8 Claims. (Cl. 60—39.08)



5. In a lubrication system for gas turbine power plants, a rotor, at least one bearing for the rotor, a pump for lubricant for the bearing, means for driving said pump, and a conduit from the pump to the bearing for supplying lubricant thereto, in combination with starting means for the rotor including said driving means, and pressure responsive means connected to said conduit and responsive to the lubricant pressure therein for enabling said driving means to turn the rotor when the pump pressure reaches a predetermined value and a releasable con-

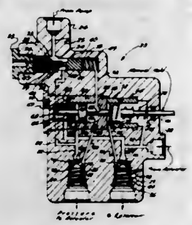
nection between said driving means and said rotor such that the driving means will not operate during operation of the power plant.

2,751,750
REACTION CHAMBERS FOR THE DECOMPOSITION OF MONOFUELS
Douglas Francis Welch, Thurleston, near Rugby, Kenneth Barrington Randall, Coventry, and Ian Gourlay Strang, Rugby, England, assignors to The British Thomson-Houston Company Limited, a British company
Application October 19, 1954, Serial No. 463,298
Claims priority, application Great Britain October 22, 1953
7 Claims. (Cl. 60—39.46)



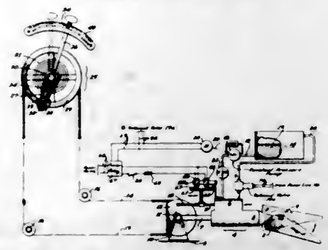
1. Apparatus for producing a flow of gaseous working fluid comprising a main reaction chamber, orifice means for introducing a jet of monofuel into said reaction chamber, an auxiliary reaction chamber, heating means in said auxiliary reaction chamber, means for introducing atomized monofuel into said auxiliary reaction chamber so that said atomized monofuel impinges on said heating means, a transfer conduit leading from said auxiliary reaction chamber into said main reaction chamber, said transfer conduit being directed so that decomposed monofuel from said auxiliary reaction chamber impinges directly upon said orifice means, and an outlet conduit leading from said main reaction chamber for conveying the flow of gaseous working fluid produced by decomposition of monofuel introduced through said orifice means.

2,751,751
DIFFERENTIAL RATE HYDRAULIC FUSE
Chalmers A. Strayer, Torrance, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application December 18, 1953, Serial No. 398,945
6 Claims. (Cl. 60—52)



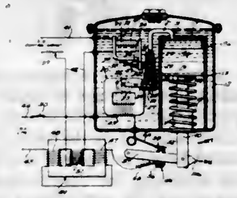
5. A hydraulic fuse comprising: a housing portions of which define a first chamber therein; a valve seat dividing said chamber into first and second sub-chambers; a valve in said first sub-chamber movable between seated and unseated positions with respect to said seat; a first piston in said second sub-chamber dividing the latter into first and second compartments; resilient means normally acting to maintain said valve in said unseated position and said valve and piston in abutting relation; portions of said housing defining a second chamber therein; a partition having an aperture therein dividing said second chamber into high and low pressure fluid chambers; a piston assembly comprising a piston and piston rod operationally mounted in said high pressure fluid chamber; a second piston operationally mounted in said low pressure fluid chamber; an end portion of said piston rod extending through said aperture to alternately provide a fluid by-pass and a fluid tight seal between adjacent ends of said high and low pressure fluid chambers according to operational positions of said piston assembly; resilient means normally acting to maintain said piston assembly in a position in which said piston rod provides said fluid tight seal and maintains said end portion of said piston rod and said second piston in abutting relation during all operational positions of said assembly and second piston; a first fluid passage extending between an exterior surface of said housing and said first sub-chamber; a second fluid passage extending between an exterior surface of said housing and said first compartment; said first and second passages and said first chamber defining a high pressure fluid passage when said valve is in said unseated position; a low pressure fluid passage extending between non-adjacent exterior surfaces of said housing; identical fluid restrictors located in said high and low pressure fluid passages; unidirectional fluid flow occurring through said high and low pressure fluid passages during the operation of said fuse, the fluid entering said high pressure passage via said first passage; a fluid passage extending between said high pressure chamber at the end thereof spaced from said partition and said high pressure passage upstream with respect to said restrictor located therein; a fluid passage extending between said high pressure chamber at the end thereof adjacent said partition and said high pressure passage downstream with respect to said restrictor located therein; a passage extending between said second compartment at the end thereof most removed from said valve seat and said high pressure chamber at the end thereof adjacent said partition; a passage extending between the low pressure chamber at the end thereof spaced from said partition and said low pressure passage up-stream with respect to said restrictor located therein; and a fluid passage extending between said low pressure chamber at the end thereof adjacent said partition and said low pressure passage downstream with respect to said restrictor located therein.

2,751,752
ELECTRIC-HYDRAULIC FLAP CONTROL SYSTEM
Herbert E. Metcalf, Los Angeles, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application April 17, 1953, Serial No. 349,508
6 Claims. (Cl. 60—52)



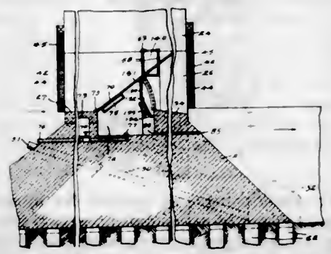
2. Apparatus for effecting predetermined angular movements of a structure, comprising: a primary structure; a secondary structure pivotally mounted on said primary structure; a unitary hydraulic actuator. comprising a servo valve, piston cylinder, piston, and housing, attached to said primary and secondary structures and being adapted to angularly move the latter structure; a source of hydraulic fluid; hydraulic supply and return lines extending between said source and actuator; a pump in said supply line; a motor for driving said pump; said valve having a neutral position and non-neutral positions with respect to said housing in which fluid does not flow and fluid flows, respectively, to said piston cylinder to effect movement of said secondary structure; the mounting of said actuator providing follow up means whereby said valve is returned from said non-neutral positions to said neutral position by movement of said secondary structure; electrical switch means operatively connected with said motor and being responsive to positions of said valve so that said motor is de-energized or energized when said valve is in said neutral or non-neutral positions, respectively; a control element pivotally mounted on said primary structure; and cable means connected between said control element and valve whereby the latter may be moved from its neutral position.

2,751,753
HYDRAULIC MOTOR SYSTEM
William A. Ray, North Hollywood, Calif., assignor to General Controls Co., a corporation of California
Application January 11, 1955, Serial No. 481,110
12 Claims. (Cl. 60—52)



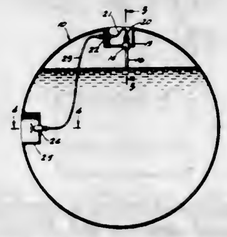
1. In a system of the character described: a movable load operator; electrically energizable motor means for moving the load operator; an electrically energizable device for rendering said energized motor means effective; a saturable reactor in circuit with the motor means, and including a direct current coil; and means connecting said controlling device to said coil, for reducing the reactor impedance when said controlling device is energized.

2,751,754
POWER DAM SLUICEWAY GATE
Donald Campbell, Medford, Oreg.
Application February 17, 1953, Serial No. 337,283
4 Claims. (Cl. 61—27)



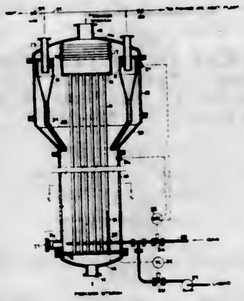
1. In a dam construction including a plurality of elongated, hollow, substantially rectangular piers disposed in substantially spaced parallel relation, each pair of adjacent piers having confronting sidewalls, a sluiceway between each of said confronting sidewalls, a substantially rectangular gate disposed between each pair of said confronting sidewalls, means pivotally connecting one end of said gate on said sluiceway with its oppositely disposed end extending upwardly at an inclined angle with respect to said sluiceway, each of said piers having a well and auxiliary wells being in communication with each other against their respective lower ends, pulleys mounted on the bottoms of each of said wells, pulleys mounted on the top of each of said piers adjacent each of said wells, a float tank in each of said wells, cables having one of their ends connected with each of said float tanks and trained around said pulleys and over each pair of confronting sides of said piers, a weight of fixed value connected with the other ends of said cables, a pin projecting laterally from each side of said gate and engaging on said weight and means for introducing water into and discharging water from said wells to raise and lower said float tanks whereby said weights are raised and lowered to effect the raising and lowering of said gate.

2,751,755
PRESSURE TANK
Ralph L. Fowler, Los Angeles, Calif., assignor to Superior Tank & Construction Co., Los Angeles, Calif., a corporation of California
Application May 14, 1954, Serial No. 429,960
2 Claims. (Cl. 62—1)



2. A pressure tank having a recess in the top wall thereof and a recess in the side wall thereof, an outage tube extending downwardly into the tank through the bottom of the top recess, means movably mounting the outage tube in the wall of the top recess, a bleeder valve in the side recess, means forming a conduit disposed within the tank connecting the bleeder valve with a wall of the top recess, and a conduit disposed within the top recess connecting the mentioned conduit with the top of the outage tube.

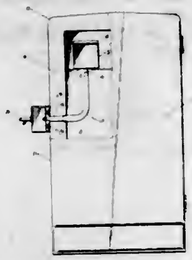
2,751,756
COOLING WALLS WITH FLUIDIZED SOLIDS AND LIQUID VAPORIZATION
Richard R. Hughes, San Anselmo, Charles V. Sternling, Oakland, and Charles E. Sanborn, Concord, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application January 26, 1953, Serial No. 333,234
13 Claims. (Cl. 62—2)



1. A method of cooling a process stream comprising the steps of flowing said process stream in contact with one side of a heat-conductive wall and thereby transferring heat from said material to said wall; maintaining in contact with the other side of said wall a fluidized

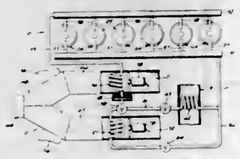
bed of heat-transmitting solids and thereby effecting heat transfer from the wall to said solids; admitting to direct contact with said solids a liquid having a vapor pressure that exceeds the pressure at the point of liquid admission for the lowest temperature of said wall and thereby effecting total vaporization of the said liquid; flowing the resultant gas upwards through the bed as fluidizing gas to maintain the solids in a fluidized state and to cool said solids; and discharging the gas from above the fluidized bed.

2,751,757
LIQUID DISPENSER FOR REFRIGERATORS
William E. Hobbs and Newton P. Whaley, Jr., Dallas, Tex.
Application June 14, 1955, Serial No. 515,372
2 Claims. (Cl. 62—89)



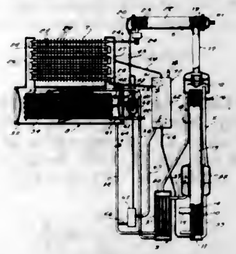
1. In a refrigerator including a conventional storage shelf, a door-closed opening and flexible sealing-strip thereabout; a liquid container on said storage shelf with a liquid outlet extending downward between the grills of said storage shelf, a flexible hose removably connected to said liquid outlet, the other end of said hose being connected to a liquid conduit, having a flattened portion of said liquid conduit extending from the inside of said refrigerator to the outside across the front face of said refrigerator, permitting the compression of said flexible sealing-strip around said liquid conduit without interfering with the operation of the door, the end of said liquid conduit extending outside making a ninety degree turn to parallel the side wall of the refrigerator, and being connected to a ninety degree adapter, the other end of said ninety degree adapter being removably connected to a liquid dispensing valve, that portion of the liquid conduit on the outside of said refrigerator and the liquid dispensing valve being enclosed in part by a housing which is provided with suitable attachment means to the side wall of the refrigerator, said liquid dispensing valve providing for the flow of liquid from said liquid container with the refrigerator door closed or open.

2,751,758
VEHICLE AIR CONDITIONER
William C. Parrish, Puente, Calif.
Application June 15, 1953, Serial No. 361,491
3 Claims. (Cl. 62—117.1)



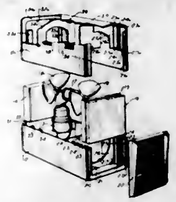
1. An automobile air conditioning system, which comprises a plurality of flexible-wall pumps in continuous communication with the combustion chambers of the engine of said automobile, a heat pump-refrigerating circuit interconnected with said pumps, said circuit including a first heat transfer element on the high pressure side of said pumps, a second heat transfer element on the low pressure side of said pumps, an expansion valve between said heat transfer elements, and first and second duct means to continuously direct air over said first and second heat transfer elements, said first and second duct means discharging selectively overboard and into said automobile depending upon whether it is desired to heat or cool the same.

2,751,759
ABSORPTION REFRIGERATION
Eugene P. Whitlow, Evansville, Ind., assignor to Servel, Inc., New York, N. Y., a corporation of Delaware
Application July 29, 1954, Serial No. 446,589
5 Claims. (Cl. 62—119)



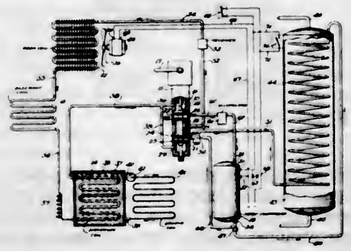
1. In a vacuum type absorption refrigeration system in which non-condensable gases are apt to occur that interfere with the proper operation of the system, a concentration control vessel connected in the system to receive and store unevaporated liquid refrigerant out of solution, a gas storage vessel enclosing the concentration control vessel, and a purging device for withdrawing non-condensable gases from one part of the system and transferring them to the storage vessel to provide a low pressure gas barrier between the concentration control vessel and atmospheric ambient.

2,751,760
TWO-PIECE ROOM AIR-CONDITIONER CABINET
Si J. Williams, Jr., Evansville, Ind., assignor, by mesne assignments, to Whirlpool-Seeger Corporation, a corporation of Delaware
Application November 23, 1954, Serial No. 470,616
8 Claims. (Cl. 62—129)



1. An air conditioning unit adapted for mounting in the window structure of an enclosed space to be cooled, comprising: a cabinet structure fashioned with an upper and a lower section; said upper section having a greater vertical length than the lower section and being dimensioned for telescopic positioning over said lower section; means fashioned integral with said sections for interlocking one of said sections with the other; means including a partition fashioned integral therewith for dividing said cabinet structure into a cooling compartment and a machinery compartment; refrigeration apparatus including a motor compressor, an evaporator, a condenser, a filter element, a fan motor, an evaporator fan and a condenser fan mounted in said cabinet structure and disposed partly in each of said compartments; means fashioned integral with said cabinet structure providing a fan shroud in each of said compartments for enclosing the said fans; and a plurality of individual members fashioned integral with said cabinet structure for fixedly positioning the condenser, evaporator, and filter element components of said refrigeration apparatus within said cabinet structure.

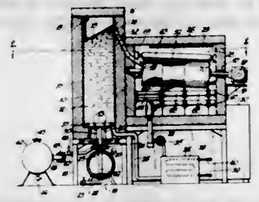
2,751,761
COMBINATION HEAT PUMP AND WATER HEATER
William F. Borgerd, Evansville, Ind., assignor, by mesne assignments, to Whirlpool-Seeger Corporation, a corporation of Delaware
Application October 15, 1951, Serial No. 251,380
5 Claims. (Cl. 62—129)



4. In a heat pump for conditioning the air within a building, a refrigeration system comprising a first heat exchange unit, a second heat exchange unit and a third heat exchange unit, said heat exchange units connected in series to a compressor, a refrigerant flowing within said system, a metering device connected between said second heat exchange unit and said third heat exchange unit, means for reversing the flow of refrigerant for heating and cooling cycles so that said first and second heat exchange units will operate as evaporators and said third heat exchange unit will operate as a condenser during the cooling cycle, and so that said first and second heat exchange units will operate as condensers and said third heat exchange unit will operate as an evaporator during the heating cycle, said first heat exchange unit being in heat exchange relation with the room air of the building, said second heat exchange unit being in heat exchange relation with the basement air of said building, a coil positioned in heat exchange relation with a water container, said coil being connected in said system so that a portion of the compressed refrigerant from the compressor will flow through the coil before being conveyed through said heat exchange units so that said coil will operate as a condenser only, fan means for circulating said room air over said first heat exchange unit, and manual means selectively operable to one position for operating the compressor alone and to another position for operating the compressor and the fan means simultaneously.

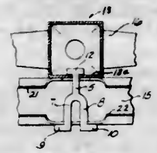
2,751,762
METHOD OF FREEZING MATERIALS
Ralph F. Colton, Chicago, Ill., assignor to Proctor Drying and Freezing Corporation, Philadelphia, Pa., a corporation of Illinois
Application August 8, 1952, Serial No. 303,326
4 Claims. (Cl. 62—173)

1. The method of freezing material by direct contact with a frigid liquid with which the material is immiscible and in a limited space which comprises the steps of feeding the material into a column of frigid liquid having a specific gravity at the normal operating temperature of the frigid liquid which differs from that of the material by a preselected amount between three percent and ten percent of the specific gravity of the frigid liquid, allowing the material to move through the frigid liquid by virtue of the aforesaid difference of specific gravity until the material is frozen, and then separating the frozen material from



the frigid liquid, said frigid liquid being constituted of trifluorotrichlorethylene and normal heptane mixed in proportions to provide the specified specific gravity.

2,751,763
FINGER RING SET WITH SHEET METAL LATCH
Seymour Padwe, Newark, N. J.
Application November 10, 1954, Serial No. 467,969
1 Claim. (Cl. 63—15.2)



The combination of a first finger ring, a second finger ring, said rings being adjacent and substantially parallel, each of said rings having a hollow ornamental portion with side walls disposed in the direction of the sides of the ring, the first ring having opposed openings in both of its side walls and the second ring having essentially an opening only in its inner side wall, a one-piece branched locking link passing thru said apertures and connecting said rings together solely by contact with the outer wall of the first ring and with the adjacent inner wall of the second ring, said locking link comprising a single ring-retaining crosspiece at one end thereof, said crosspiece engaging the inner side of the inside wall of the second ring, and a pair of oppositely and laterally extending crosspieces at the ends of the branches of the link and engaging the outer side of the outer wall of the first ring, the branches of the link pressing laterally outward against the outer wall of the first ring, the branches of the link being laterally resilient so that they may be pressed toward each other to facilitate the insertion and withdrawal of the link from both of said rings, the length of the aperture in the second ring being greater than its width, the length of said single crosspiece being longer than the width of said second ring aperture but shorter than the length thereof, the length of said link between the inside face of said single crosspiece and the inside faces of said pair of crosspieces on the branches being substantially equal to the distance between the outside face of the first ring and the inside face of the second ring engaged by said single crosspiece, the dimensions of said single crosspiece being such that it may pass thru both apertures of the first ring, and pass thru the aperture of the second ring when its length is aligned with the length of the last mentioned aperture.

2,751,764
PERFUMER MOUNTED IN A SPRING TUBULAR RING
Henry N. Hudes, Orange, N. J., and Max Marquardt, East Greenwich, R. I., assignors to Marquardt-Hudes, Inc., a corporation of Rhode Island
Application April 22, 1953, Serial No. 350,400
4 Claims. (Cl. 63—21)

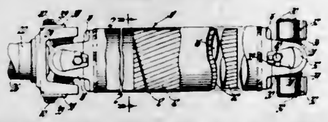
1. A combined ornament and perfume container comprising an elongated container open at one end and hav-

ing a stem at the other end thereof extending axially thereof, a removable closure for said container, said stem having bearings at opposite sides thereof, a split resilient tubular ring, said bearing being pivotally received within



the ends of said ring and resiliently held therein, said container being of a length relative to said ring whereby said container may be swung to engage said closure at a location diametrically opposite to the location of the pivot.

2,751,765
PROPELLER SHAFT
Dan R. Rowland and Martin H. Stark, Saginaw, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 16, 1953, Serial No. 392,216
4 Claims. (Cl. 64—1)



1. A tubular propeller shaft for motor vehicles and the like having therein a paper liner serving to damp vibrations of the shaft in use, said liner being substantially coextensive with the length of the shaft and having a corrugated exterior, the corrugations following a spiral path and enabling a press fit of the liner within the shaft.

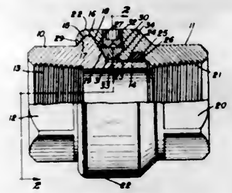
2,751,766
CLUTCH INSTALLATION FOR PREVENTION OF NOISES
Kazuma Adachi, Osaka, Japan
Application May 11, 1953, Serial No. 354,356
1 Claim. (Cl. 64—27)



A clutch installation comprising a clutch plate, a hub adjacent said clutch plate having an aperture therein to receive a splined shaft, said hub having a plurality of circumferentially spaced recesses on its outer perimeter, a plurality of supports mounted on said clutch plate and projecting outwardly adjacent said hub, a plurality of levers rotatably mounted on said supports, each lever having one end thereof engaged in one of said circumferentially spaced recesses, a plurality of leaf springs each secured at one end to the other end of one of said levers and secured at the other end to the other end of an adjacent one of said levers, said springs adapted to be resiliently distorted on relative movement between said hub and said clutch plate, and a retaining plate retaining said levers and springs between said clutch plate and retaining plate.

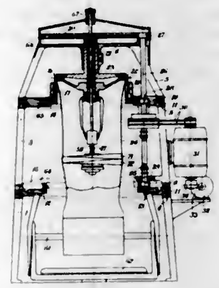
2,751,767
COMBINATION FREE SWIVEL AND CONTROLLED TORQUE JOINT
Robert R. Hedden, Whittier, Calif., assignor to Emsco Manufacturing Company, Los Angeles, Calif., a corporation of California
Application June 27, 1955, Serial No. 518,298
4 Claims. (Cl. 64—30)

1. In a swivel connection: a first swivel part having its outer end arranged for connection to a conduit and having at its other end an inwardly projecting cylinder portion of external diameter less than that of said outer end, said first part having an annular collar projecting therefrom in a position between said outer end and said inwardly projecting cylinder portion, and an annular inwardly faced shoulder adjacent said collar; a second swivel part having its outer end arranged for connection to a conduit and having in its inner end a recess receiving said collar and said inwardly projecting cylinder portion, and a lip extending beyond said collar and being contracted radially inwardly adjacent the face of said collar disposed toward said outer end of said first swivel part to hold said first



and second swivel parts together, and said second swivel part having in the inner face of the wall which forms said recess a brake block cavity with a back wall which slopes toward said shoulder, and a threaded opening communicating with said brake block cavity; sealing means arranged between said swivel parts; a brake block in said cavity arranged to slide along said back wall toward said shoulder of said first swivel part; and a screw in said threaded opening for moving said brake block along said back wall into frictional, braking engagement with the face of said shoulder, whereby the torque required to effect relative rotation of said swivel parts may be controlled.

2,751,768
PLAIN AND RIB CIRCULAR KNITTING MACHINE
Bernard Lebocey, Troyes, France
Application December 27, 1951, Serial No. 263,604
Claims priority, application France December 28, 1950
10 Claims. (Cl. 66—28)



1. A high-speed circular knitting machine for the production of knitwork tubes spinning downwards in the machine coaxial therewith which comprises a vertically extending pedestal having a circular top end: a first annular member boxed in the circular top end of the pedestal; an intermediate frame portion with a circular bottom end fitted on said annular member; means rigidly interconnecting the top end of the pedestal, the annular member and the bottom end of the intermediate frame portion, said intermediate frame portion having a circular top end coaxial with its bottom end; a second annular member boxed in the top end of the intermediate frame portion; a top frame portion having its bottom end fitted on the top end of said second annular member; means to rigidly interconnect the top end of the intermediate frame portion, said second annular member and the bottom end of the top frame portion; a fixed shaft rigid with the top frame portion extending downwards coaxial with said annular members; a first spur ring having a running fit in the first annular member; a second spur ring having a running fit in the second annular member; a sleeve having a running fit on the fixed shaft within the top frame portion; a spur wheel keyed on said sleeve; a vertical main shaft mounted in the top frame portion, extending into the intermediate frame portion and provided at its lower end with a flexible extension; a first pinion having its shaft mounted in the intermediate frame portion and its upper end coupled with the lower end of said flexible extension, said pinion meshing with the first spur ring; a second pinion keyed on the main shaft and meshing with the second spur ring; a third pinion keyed likewise on the main shaft and meshing with the spur wheel; means to drive said main shaft at high speed and at low speed as desired; a horizontal disc rigid with said sleeve; a set of needles arranged in a horizontal bed on the disc; a vertical annular guide rigid with the second spur ring; a further set of needles arranged in a vertical bed against the annular guide; a knitwork-stretching mechanism actuated by the rotation of the knitwork tube adapted to exert from the inside of the same a downward pull thereon which is uniform throughout its circumference; a knitwork take-up mechanism actuated by the first spur ring and means in the bottom of the pedestal to receive the roll of tubular knitwork.

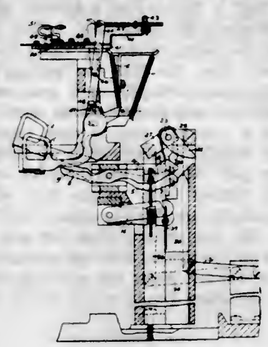
2,751,769
PICKING MECHANISM
Joseph Wawzonek, Manville, R. I., assignor to Hemphill Company, Pawtucket, R. I., a corporation of Massachusetts
Application February 17, 1954, Serial No. 410,907
3 Claims. (Cl. 66—48)



1. For a circular, independent needle, knitting machine having needles with operating butts movable in a horizontal plane, a needle picking mechanism which comprises a supporting bracket, a supporting member mounted on a pivot on said bracket, a supporting arm carried by a pivot on said member, and a needle picking head carried by said arm, said needle picking head and said arm supporting pivot lying in substantially the same horizontal plane at the beginning of the needle picking operation which plane is substantially coincident with the plane of the horizontal path of said needle butts, and said member supporting pivot lying in a different horizontal plane.

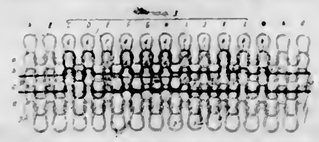
2,751,770
YARN LEVER CONTROL MECHANISM
Eugene St. Pierre, Pawtucket, and Joseph Wawzonek, Cumberland, R. I., assignors to Hemphill Company, Pawtucket, R. I., a corporation of Massachusetts
Application August 14, 1953, Serial No. 374,367
5 Claims. (Cl. 66—138)

1. In or for a circular, independent needle, knitting machine a plurality of yarn feeding levers, a plurality of rockers for operating said levers, a plurality of first rocker operating members adapted to engage individual rockers and one or more second rocker operating members each coupled to two or more rockers with separate slip coupling devices for each rocker, said coupling devices permitting the individual rocker with which they are associated to be moved by a first rocker operating



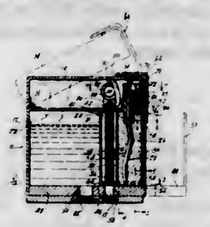
member independently of other rockers and of the second operating member to which it is coupled.

2,751,771
CIRCULAR KNITTED FABRIC AND GARMENT
Edward Overfield-Collins, Beckenham, and Alfred Percy Saunders, Leicester, England, assignors to Wildt and Company Limited, Leicester, England, a British company
Application January 25, 1955, Serial No. 483,967
Claims priority, application Great Britain September 1, 1954
7 Claims. (Cl. 66—171)



1. Circular weft knitted fabric comprising a structure of loops knitted of a ground yarn and in which is produced an isolated design of a circumferential extent less than that of the said fabric, said design including a plurality of partial courses of loops knitted of individually incorporated non-continuous portions of at least one patterning yarn, floats of the said ground yarn extending coursewise at the back of the said loops, loops knitted of the ground yarn and coursewise extending floats of the patterning yarn at the back of the last mentioned knitted loops, the non-continuous portions of patterning yarn being interengaged with knitted loops of the ground yarn at predetermined points restricted to the design area whereby said portions are locked in the structure aforesaid.

2,751,772
CIGARETTE LIGHTER
Alexander Salzer, New York, N. Y.
Application January 6, 1955, Serial No. 480,261
12 Claims. (Cl. 67—7.1)



6. A lighter comprising a casing, a lid therefor, a wick projecting out of the casing, means supporting the wick

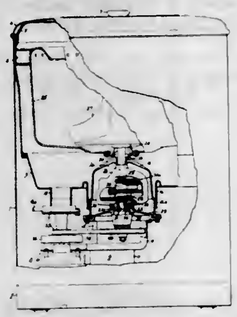
in the casing, means to charge the wick with a predetermined quantity of fluid, a tube in the casing adapted to hold a flint, a flint wheel rotatably mounted above the tube adjacent the wick, and means responding to elevation of the lid to rotate the wheel in a direction to strike a spark from the flint for igniting the wick, the flint rotating means comprising a gear wheel rotatably mounted adjacent said flint wheel to rotate with the flint wheel about a common axis, a rack rigid with the lid and meshing with said gear wheel, whereby to cause rotation of the gear wheel in one direction on elevation of the lid, and ratchet teeth on the flint wheel and gear wheel respectively, arranged to cause rotation of the flint wheel with the gear wheel when the gear wheel is rotated in said one direction, while permitting the flint wheel to remain stationary when the gear wheel is rotated in an opposite direction during return of the lid to a closed position.

2,751,773

DRIVE MECHANISM FOR CLOTHES WASHING MACHINE AND THE LIKE

Thomas T. Woodson, Jeffersontown, Ky., assignor to General Electric Company, a corporation of New York

Application July 18, 1952, Serial No. 299,555
2 Claims. (Cl. 68—23)



1. In a clothes washing machine, a spin basket, an agitator therein, a gear casing provided with an annular hub, a gear cage in the gear casing connected to the spin basket and provided with a gear cage hub rotatably mounted in said annular hub, gearing carried by the gear cage connected to the agitator, a drive shaft, a pinion on the drive shaft for turning said gearing, and two helically wound springs connected to said gear cage hub and engaging surfaces of said gear cage hub with said drive shaft and said annular hub respectively which upon rotation of said drive shaft in one direction are unwound to loosen the engagement between the one spring and said drive shaft and tighten the engagement between the other spring and said annular hub to thereby hold said gear cage stationary and effect operation of said agitator, and upon rotation of said drive shaft in the other direction are wound to tighten the engagement between said one spring and said drive shaft and loosen the engagement between the other spring and said annular hub to thereby release the gear cage for rotation by the drive shaft to effect rotation of said spin basket.

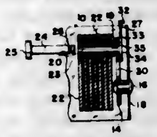
2,751,774

KEY RETAINER

Leon Bluestone, Brooklyn, N. Y.

Application August 8, 1955, Serial No. 527,067
9 Claims. (Cl. 70—456)

1. A key retainer comprising a supporting plate, a transverse boss having a longitudinal bore therethrough extending from said plate and adapted to be received in the opening of a key head whereby a plurality of keys may be mounted thereon, a locking pin removably received in said boss for preventing the dislodgement of keys from said boss, a slide element reciprocably carried by said supporting plate, means provided on said locking pin and complementary means provided on said slide for engagement therewith whereby said pin is releasably retained within said boss.

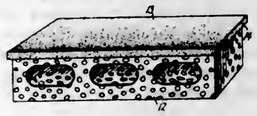


2,751,775

MASONRY BLOCK HAVING AN INTEGRAL MOLDED FACING LAYER AND METHOD OF MAKING SAME

John A. Sergovic, Baltimore, Md., assignor to The Burns & Russell Company of Baltimore, Baltimore, Md., a corporation of Maryland

Application July 12, 1955, Serial No. 521,529
10 Claims. (Cl. 72—35)



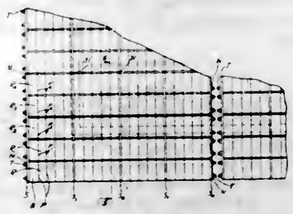
1. A masonry block having an integral molded facing layer of a composition comprising the reaction product of an ethylenically unsaturated alkyd resin and a polymerizable vinyl monomer and sand as a filler, the latter being in an amount of at least fifty percent and not over 90% of the total of the resin, monomer and filler by weight, the composition of said facing layer permeating the adjacent surface of said block, said composition being cured to permanently interlock said facing layer and block and to form a facing layer having a hard, abrasion resistant surface substantially free of pits and pinholes and possessing elasticity enabling the layer to be resistant to peeling, crazing and cracking due to blows and to differences in coefficients of expansion and contraction between the said block and the said facing thereon.

2,751,776

STRESSED BLOCK BUILDING SLAB

Albert G. Streblow and Donald O. McCall, Napa, Calif., assignors to The Whitacre-Greer Fireproofing Company, Waynesburg, Ohio, a corporation of Ohio

Application July 21, 1950, Serial No. 176,162
4 Claims. (Cl. 72—68)



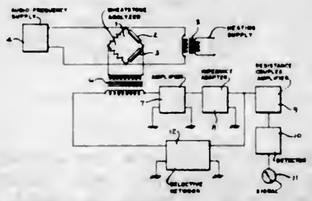
1. A stressed wide, long, thin and flat prefabricated load bearing slab for building construction made of a plurality of preformed blocks arranged side by side and end to end, the slab having width and length not substantially less than several times its thickness, said slab comprising a plurality of parallel longitudinally extending rows of preformed blocks arranged end to end in each row and side by side in adjacent rows, plates extending transversely of the slab traversing said rows of blocks and tension means aligned with said rows of blocks traversing said plates and extending longitudinally of the slab; the blocks having uniform depth and width and having equal lengths and having smooth, flat, load bearing end faces and having strength in compression and stressed endwise in compression by said tension means, said blocks being disposed in stressed end to end contact with each other and with said plates in each row and aligned side by side with their end faces in parallel transverse planes, said plates having smooth, flat side surfaces engaging end faces of adjacent blocks and having strength in tension, compression and shear and being relatively more flexible in side bending than edge bending and having aggregate width approximately equal to the thickness of the slab and aggregate length approximately equal to the width of the slab adjacent the plate, at least one of said plates being forcibly squeezed in the slab between proximate smooth, flat end faces of adjacent blocks disposed on opposite sides of said plate, said plates bridging between transversely aligned smooth, flat end faces of blocks lying side by side and being forcibly frictionally bonded to said end faces and being both prestressed and stressed under load into tight bonding engagement with said end faces, and said plates resisting relative motion, bending and shear between and distributing load between side by side blocks in said slab, said tension means forcibly maintaining stressed and prestressed compression in and between said blocks and plates in the longitudinal direction of said slab and forcibly frictionally bonding said plates to said end faces of said blocks, said blocks and tension means conjointly and actively supporting said plates against flexure and stiffening said plates and said plate stiffening and strengthening said slab, said blocks carrying endwise compression load as working beam elements when the slab is loaded as a beam supported at its ends, and said slab having monolithic strength as a beam supported at either its ends or sides or as a cantilever at least in the direction of its width.

2,751,777

GAS ANALYSIS APPARATUS

Claude Michel Cherrier, Saint-Mande, France, assignor to Societe Anonyme des Manufactures des Glaces et Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France

Application March 6, 1952, Serial No. 275,079
Claims priority, application France March 8, 1951
5 Claims. (Cl. 73—27)



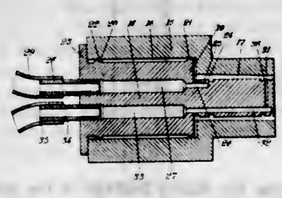
1. Gas analysis apparatus including a Wheatstone bridge having four arms of which one includes a temperature responsive resistance and means to flow gas over it and another includes an identical resistance enclosed within a comparator gas, means to supply said bridge with heating current of low frequency, means to supply said bridge with measuring current of a separably higher frequency, both sources being connected to the bridge across both sensitive resistors, transformer means connected to the output of the bridge and to an indicating circuit including an amplifier and separating and filtering means which separate the said frequencies and return all frequencies except the measuring frequency to the input of the amplifier.

2,751,778

MEASUREMENT APPARATUS FOR CHECKING UP THE INSIDE OF HOLLOW PIECES

Marcel Mennesson, Neuilly-sur-Seine, France, assignor to Societe Anonyme pour la Construction de Materiel Automobile (S. A. C. M. A.), Neuilly-sur-Seine, France, a society of France

Original application May 15, 1948, Serial No. 27,165. Divided and this application August 5, 1952, Serial No. 302,689
Claims priority, application France July 21, 1947
4 Claims. (Cl. 73—37.9)



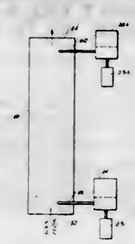
1. An apparatus for checking a piece provided with a cavity the wall of which includes two cylindrical surfaces of revolution of different respective diameters and coaxial with each other, said apparatus comprising a plug made of two coaxial cylindrical portions integral with each other and placed end to end, these two portions being of different diameters substantially smaller than those of said two surfaces respectively, two concentric flanges carried by one of said two cylindrical plug portions, located at a distance from each other, the other plug portion having means including at least one air nozzle for measuring the radial distance of a point of said last mentioned plug portion from the inner wall of said cavity.

2,751,779

METHOD FOR FINDING THE EFFICIENCY OF GAS CLEANING APPARATUS

Peter Hodson and David G. Peterson, Wellsville, N. Y., assignors, by mesne assignments, to Apra Precipitator Corporation, New York, N. Y., a corporation of Delaware

Application July 30, 1954, Serial No. 446,902
5 Claims. (Cl. 73—38)



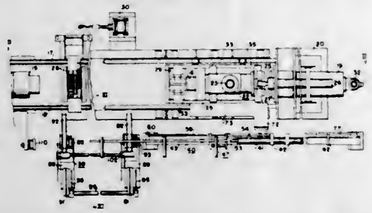
1. The method of determining the efficiency of a gas cleaning device including the steps of drawing a sample of dust entrained gas from the inlet end of the gas cleaning device through a filtering medium to remove entrained particles therefrom, drawing a continuous sample of cleaned gas from the outlet end of the cleaning device through a filtering medium to remove any residually entrained foreign particles; making a single photograph of the inlet filter after a predetermined period of flow and then making a multiple exposure photographic record of the outlet filter until said filter is equal in discoloration to the inlet filter, whereupon the time required to produce an outlet filter discoloration similar to that at the inlet filter may be computed by determining the number of photographic exposures made before both filtering mediums arrive at a condition of equal discoloration.

2,751,780
LEAKAGE TESTING APPARATUS
Robert F. Plott, Chicago, Ill., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application March 17, 1945, Serial No. 583,275
3 Claims. (Cl. 73—49.2)



1. Apparatus for testing leakage of the end of a container comprising, in combination: an inverted bell-shaped vessel having a transparent portion; a base sealed in fluid-tight relationship to the open end of said vessel; an aperture in said base, said aperture being adapted to receive the end portion of an object under test; a rubber-like gasket having an aperture adapted to receive in tight-fitting relationship the end portion of an object under test; means for clamping said gasket in fluid-tight relationship against the outer surface of said base, the apertures in said base and said gasket being aligned; and means for flowing into said inverted vessel a liquid in an amount sufficient to completely cover the end of an object under test but insufficient to fill said vessel; the portion of said vessel above the level of said liquid being adapted to be evacuated, so that leaks in the end of the container will be evidenced by bubbles arising in the liquid.

2,751,781
POSITIONING APPARATUS FOR ELONGATED ARTICLES TO BE DELIVERED TO A MACHINE
William Maynard McConnell, McKeesport, Pa., assignor to Taylor-Wilson Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application January 7, 1953, Serial No. 330,116
15 Claims. (Cl. 73—49.6)



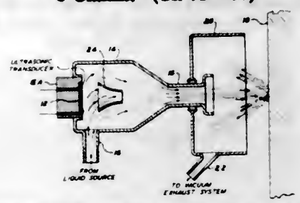
7. Apparatus for testing successive elongated articles of varying lengths including spaced-apart test heads for engaging opposite ends of an article, one head being movable toward and away from the other, and an aligner for positioning the elongated articles for subsequent transfer to the test heads comprising a pusher head to engage an end of an article, means to move the pusher head whereby the article is placed in a desired position for transfer to the test heads, a carriage carried by the pusher head during its movement, lugs projecting from the carriage, a platform carried by the movable test head, switches supported by the platform, whereby the relative movement between the carriage and the movable test head engages the lugs with the witches wherein operation of one switch reduces the speed of travel of the movable test head, operation of another switch stops that test head, and operation of a further switch positions that test head with respect to the other whereby the distance between the test heads is at least equal to the length of the article just positioned by the pusher head.

2,751,782
METHOD AND APPARATUS FOR DETERMINING CRITICAL PIGMENT VOLUME CONCENTRATIONS
Walter Karl Asbeck, Cleveland, Ohio, assignor to The Sherwin-Williams Company, Cleveland, Ohio, a corporation of Ohio
Application December 23, 1947, Serial No. 793,504
3 Claims. (Cl. 73—61)



1. The method of determining the critical pigment volume concentration of a pigment-vehicle combination containing a known volume of pigment, which comprises the steps of metering a predetermined volume of the combination into a filter cell having a known volume, filtering out the excess vehicle from the combination thus leaving a filter cake in the cell, and metering a sufficient quantity of a liquid immiscible with said filter cake to fill said cell, the volume of said filter cake being the difference between the known volume of said cell and the amount of said liquid added thereto and the critical pigment volume concentration being the volume of pigment present in the predetermined volume of the combination divided by the volume of the filter cake.

2,751,783
APPARATUS FOR COUPLING ULTRASONIC WAVES
Donald C. Erdman, Pasadena, Calif., assignor to Electro-circuits Incorporated, Pasadena, Calif., a corporation of California
Application January 25, 1952, Serial No. 268,220
8 Claims. (Cl. 73—67)

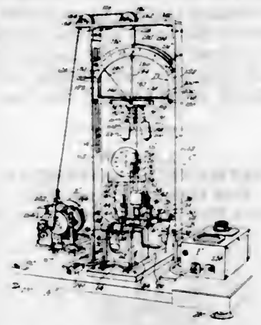


5. Apparatus for ultrasonic flaw detection comprising a source of ultrasonic waves, means producing a liquid jet flowing between the source and a member to be tested to impinge on the member, means energizing the source to transmit ultrasonic vibrations for propagation into the member through the liquid jet whereby waves are reflected from the member and travel in the opposite direction in the jet to impinge on the source.

2,751,784
APPARATUS FOR TESTING ADHESIVE TAPE
Solomon Gershberg, New York, N. Y.
Application June 20, 1952, Serial No. 294,762
4 Claims. (Cl. 73—150)
(Granted under Title 35, U. S. Code (1952), sec. 266)

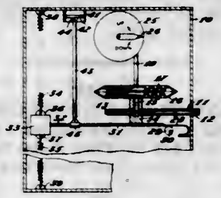
4. Apparatus for testing adhesiveness of adhesive tape carrying an adhesive coating on a side thereof, which

comprises, in combination, a testing table for receiving tape to be tested, holding means for the tape on the table, heating means for heating the tape to a selected known temperature as it is passed along the table, means for feeding the tape at selected constant time intervals through the holding means and beneath an apertured provided in the holding means for reception of a tape-testing plunger, oppositely spaced substantially vertically extending frame members carried by the testing table, a scale frame vertically shiftable in the frame member, suspension means for the scale frame including a flexible suspension cable secured to the scale frame, and pulley sheaves mounted on an overhead beam connecting the said vertically extending frame members, motor-actuated means connected to the suspension cable for imparting vertical reciprocatory movement to the scale frame through a fixed distance, a pair of pulley sheaves mounted on lower portions of the scale frame in adjacent juxtaposition, flexible cables passing in opposite directions over and around these pulley sheaves and secured adjacent to one end of the said sheaves at diammetrically opposite locations for oppositely rotating the pulley sheaves, pendulum-type counterweights depending from the pulley sheaves, hanger means suspended from the last mentioned flexible cables and including a pair of parallel coupling links provided with spacer pins between the links, the said last mentioned flexible cables having free ends secured to the said links, a suspension hook having



a shank portion pivotally secured to a lower pin between the said links, a tubular connecting yoke suspended from the suspension hook, a weight of known value mounted in the connecting yoke and slidable relative thereto, a graduation on the yoke extending transversely thereof, means retaining the said hook in the yoke and defining indicating means coinciding with the graduation on the yoke when the weight is applied to the tape for indicating constant pressure on the tape, the said weight including a depending plunger of known dimensions having a free end of known area adapted to enter the aperture in the tape-holding means for engaging the free end of the plunger with the tape under the said fixed pressure exerted by the weight for adhering the plunger to the tape, the combined values of the pendulum-type counterweights equaling the combined weight values of the said plunger, the weight carrying the plunger, the suspension yoke, the hook, and the said parallel links, whereby the said counterweights and oppositely-directed cables turn the pulley sheaves towards each other during downward movements of the scale frame for applying the plunger to the tape, and away from each other during upward movement of the scale frame for pulling the plunger away from the tape adhering thereto, a scale mounted on the scale frame for indicating amount of pull required to separate the plunger from the tape, a scale pointer mounted on the scale frame for pivotal movement relative thereto along and adjacent to the scale from a starting position to an end position of the movement corresponding to the total pull exerted by the tape on the plunger, an actuating pinion carried by the pointer, a gear carried by a pulley sheave meshing with the pinion for turning the pinion and scale pointer to advance the pointer over the scale from a starting zero position to a terminal position indicating total pull of the tape on the plunger, a stop pointer pivotally mounted on the scale frame independently of the scale pointer, an abutment on the stop pointer engageable by the scale pointer as the latter advances responsively to the pull on the plunger exerted by the tape, the scale pointer thereby carrying the stop pointer to the end of advancing movement of the scale pointer for indicating total pull exerted by the tape, the stop pointer remaining in the said position as the scale pointer is returned to its starting position responsively to separation of the plunger from the tape, and means for manually resetting the stop pointer for re-engagement with the scale pointer during a succeeding determination on the tape.

2,751,785
RATE OF CLIMB METER
Maurice E. Fowler, San Diego, Calif., and Theodore R. Willis, Cedar Rapids, Iowa, assignors to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application December 22, 1952, Serial No. 327,324
7 Claims. (Cl. 73—179)

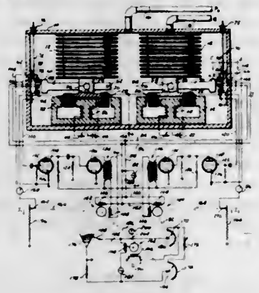


1. A rate of climb meter which has time lag eliminated comprising, a container member, a flexible tube supported in one wall of said container member with one end open to the atmosphere external of said container, the inner end of said tube necked-down to form a small opening into the inside of the container, a block supported by said tube and formed with a central opening which is fluidily connected with said tube, a pair of diaphragms connected together at their outer peripheries and fluidly connected to the central opening of said block, a meter movement connected to one of said diaphragms, a rate of climb indicator connected to said meter movement, a first shaft pivotally supported by said container and connected to said block, a cylinder connected to said container, a piston received in said cylinder, a second shaft connected to said piston and said first shaft, a mass connected to said first shaft, and spring bias means connected to said mass and to said container.

2,751,786
TRUE AIR SPEED METER
William C. Coulbourn, Roslyn Heights, and Herbert J. Sandberg, New York, N. Y., assignors, by mesne assignments, to Norden Ketay Corporation, a corporation of Illinois
Application April 14, 1953, Serial No. 348,794
9 Claims. (Cl. 73—182)

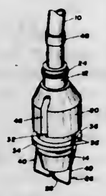
1. A true air speed meter comprising in combination a housing having means communicating with the atmosphere, a first pressure-responsive device and a second pressure-responsive device mounted in said housing, means providing communication between the interior of said second pressure-responsive device and Pitot dynamic pressure, first and second windings carried respectively by said first and second pressure-responsive devices, a pair of magnets mounted on said housing, respective first and

second windings each being disposed in the field of one of said magnets, first and second variable means for supplying currents to said first and second windings, means responsive to the displacement of each of said pressure-responsive devices to vary respective variable means to change the currents through respective first



and second windings and a Wheatstone bridge having a balancing arm and a temperature-responsive arm, said bridge also including means for adjusting the impedance ratio of said balancing arm and said temperature-responsive arm with respect to an impedance ratio which varies as a function of the currents through respective first and second windings to balance said bridge and obtain an indication of true air speed.

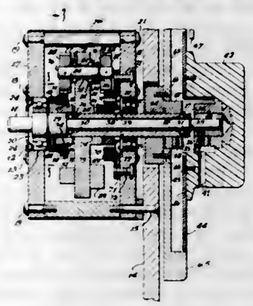
2,751,787
SAMPLING TUBE WITH DRAIN VALVE
John S. Porter, Escondido, Calif.
Application April 19, 1954, Serial No. 424,011
4 Claims. (Cl. 73—425.4)



1. A fluid sampling device comprising a transparent tube having at one end a valve body, a non-return inlet valve in said body, a barrel slidably mounted on said body, means to bias said barrel to move axially of said barrel and away from said one end of the tube, a valve-actuating clip pivotally attached to said barrel, said clip being frictionally engaged with the end of said body at one position of said barrel and holding said valve open at another position of said barrel.

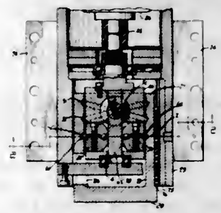
2,751,788
TWO SPEED TUNING DIAL
John W. Forrest, West Acton, Mass., assignor to Acton Laboratories, Inc., Boston, Mass.
Application February 8, 1955, Serial No. 486,867
6 Claims. (Cl. 74—10.52)

1. A two speed tuning dial comprising a housing, a main shaft through said housing rotatably supported therein, inner and outer circular dial faces concentric with said shaft, a dial knob mounted on one end of said main shaft and connected to said inner dial face, a first sleeve mounted rotatably on said main shaft and having said outer dial face connected to it, a second sleeve having a shoulder at one end mounted fixedly on said main shaft, a first friction disk mounted on said second sleeve and having one face against said shoulder, an anti-backlash gear mounted rotatably on said second sleeve, a retaining ring mounted in said second sleeve and against said anti-backlash gear to retain said anti-backlash gear on said sleeve, a second friction disk mounted rotatably on said sleeve against said anti-backlash gear between said first friction disk and said anti-backlash gear, said first and second friction disks being spring biased to hold said anti-backlash gears against said retaining ring, an arm mounted fixedly on said first sleeve, a pinion shaft mounted rotatably in



one end of said arm, a first pinion gear mounted on said pinion shaft and engaging said anti-backlash gear, a fixed gear mounted concentric with said shaft and connected to said housing, a second pinion gear mounted on said pinion shaft and engaging said fixed gear so that as said outer dial face is rotated said inner dial face rotates at angular speeds having a fixed ratio to the angular speed of said outer dial face, said dial knob rotating said inner dial face independently of said outer dial face.

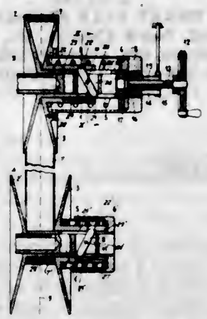
2,751,789
MECHANICAL MOVEMENT
Emil Orenick, Parma, Ohio
Application May 21, 1953, Serial No. 356,570
3 Claims. (Cl. 74—57)



1. A mechanical movement comprising in combination, a fixed hollow head, a hollow cylindrical ram slidably mounted within the head and adapted to freely reciprocate therein the said ram having a first pair of criss-crossed endless spiral cam tracks cut in the inner face thereof and a second pair of criss-crossed endless spiral cam tracks spaced from the first pair, the crossover points of the second pair being positioned 90° from those of the first pair, all of the tracks being semi-circular in cross-section, the peak of the tracks of each pair being aligned with the trough of its paired track; a cylindrical rotor co-axially mounted in the head within the hollow ram having first and second diametrical bores therethrough at 90° to one the other, the axes of said bores being spaced apart on the longitudinal axis of the rotor a distance equal to the vertical distance between the cross-over points of the first and second paired cam tracks, a plurality of cylindrical cam follower housings journaled in the said bores at the ends thereof, each of the said housings having a circular ball race therein of circular cross-section lying in the plane of its lateral axis and interrupted at that face facing toward its mating cam track, the interrupted

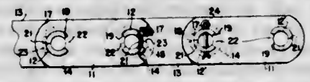
section of the race being semi-circular in cross-section and being complemented by the semi-circular wall of its mating cam track to maintain the continuity of the race; a plurality of balls riding free in said race and engageable with the said cam track when in the interrupted section of the race, the balls of the housings journaled in the first bore being engaged with the first pair of tracks, the balls of the housings journaled in the second bore being engaged with the second pair of tracks, each of the housings being free to oscillate in its bore to maintain the interrupted section of its race in alignment with the complementary face of its mating cam track at all times; and rotary driving means mounted in the head and coupled to the rotor for rotating the same within the ram relative to the cam tracks, whereby the cam follower balls in following their respective tracks cause the ram to reciprocate within the head relative to the rotor, toward and away from the base.

2,751,790
V-BELT PULLEY
Fritz Ingold, Littau, Lucerne, Switzerland, assignor to Müller A. G. Maschinenfabrik und Eisengiesserei, Brugg, Aargau, Switzerland
Application September 15, 1953, Serial No. 380,297
Claims priority, application Switzerland September 19, 1952
1 Claim. (Cl. 74—230.17)



In a V-belt pulley, a first cone-faced disc, a first tubular hub member on said disc projecting axially therefrom at the apex side of the disc and provided with a longitudinal slot, a second cone-faced disc, a second tubular hub member on said second disc projecting axially therefrom at the base side of said second disc and slidably mounted on said first tubular member with the apex sides of the discs facing each other, said second tubular member being shorter than the first tubular member, a collar secured to said first tubular member beyond the end of said second tubular member, a compression coil spring surrounding said tubular members with one end abutting said collar and adapted to bias said second disc towards said first disc, an axially stationary trunnion in said first tubular member said trunnion having a longitudinal slot therein, means preventing relative rotation between said first and second tubular members, means preventing relative rotation between said first tubular member and said trunnion, a lever pivotally mounted in said slot in the trunnion for rotation on an axis perpendicular to the axis of said trunnion, one end of said lever axially drivingly engaging said second tubular member through said slot and the other end of said lever axially drivingly engaging said first tubular member so that sliding movement of one of said tubular members causes the other tubular member to slide an equal distance in the opposite direction, a screw, means rotatably and non-reciprocably supporting said screw in the end portion of said first tubular member concentrically therewith, a stationary bracket member, a nut slidably and non-rotatively mounted in said bracket member in operative engagement with said screw, a flange member secured to said second disc, and means rotatably and non-slidably connecting said flange member with said nut, whereby turning of said screw causes relative longitudinal movement between said first and second discs.

2,751,791
ENDLESS SPROCKET CHAIN
Edgar L. Harris, Brookfield Township, Waukesha County, and Samuel C. Harris, Milwaukee, Wis., assignors to Chain Belt Company, Milwaukee, Wis., a corporation of Wisconsin
Application July 27, 1953, Serial No. 370,572
3 Claims. (Cl. 74—254)



1. In an endless chain comprising pivotally connected links having longitudinal members consisting of laterally spaced side bars connected to each other by inner and outer cross members, the inner cross member at the end of one link extending through the outer cross member at the end of an adjacent link to provide a journal, said cross members being hollow cylinders with notches at their respective ends and having longitudinal seams throughout their length, said side bars being apertured to accommodate the ends of said cross members and said apertures having smooth interior surfaces except for interfitting lugs engaging said notches in the ends of the cross members to prevent turning of the cross members, the lugs on the bars connecting the inner cylindrical cross member being opposite the seam of such cylinder, the seam of said inner cross member being adjacent the seam of the outer cross member in which it is journalled, and said seams being substantially 180° from the contacting surfaces of said journal when the chain is under tension and the links are aligned.

2,751,792
DRIVE MECHANISM
Georges André Miesch, Paris, France, assignor to Societe d'Exploitation des Procedes Serix, Paris, France, a French body corporate
Application December 2, 1953, Serial No. 395,696
Claims priority, application France December 6, 1952
23 Claims. (Cl. 74—436)



1. Drive mechanism, which stores energy in the course of an operational cycle, for connecting to a motor furnishing a constant motive power a driven device that consumes power which varies in magnitude and passes, in the course of said cycle, through a peak value that is greater than said motive power, this drive mechanism comprising in combination: a rotative driving member operatively connected to said motor so as to be driven thereby with a uniform motion and be capable of transmitting a constant driving torque, a driven member for connection to the device to drive, a mechanical connecting device between the driving and driven members, energy storing means movable between a loaded position and an unloaded position, and

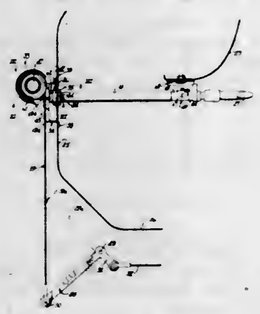
two pairs of conjugate mechanical contact members in each pair of which one contact member is provided on said driving member and the other on the energy storing means in such positions that for a given direction of rotation of said driving member each pair of contact members enter into contact in succession, the contact members of one of the pairs of contact members entering into contact only when the contact members of the other pair cease to be in contact, and these pairs of contact members being so adapted and arranged that at each instant they permit for said direction of rotation of said driving member an exchange of power between said driving member and the energy storing means, one of said pairs of contact members permitting said exchange of power in a direction from said energy storing means to said driving member and the other pair of contact members permitting said exchange of power in a direction from said driving member to said energy storing means, these exchanges of power corresponding respectively to the excess and deficiency of the motive power relative to the power consumed at each instant.

2,751,793

STRAIGHT PULL BRAKE LEVER STRUCTURE AND CABLE PULLEY

Ray A. Sandberg, Waukegan, Ill., assignor to Houdaille Industries, Inc., a corporation of Michigan

Application September 18, 1951, Serial No. 247,131
9 Claims. (Cl. 74—502)



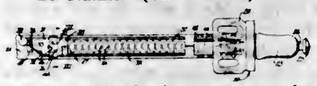
1. A straight pull brake lever structure for actuating the brakes of a vehicle comprising a tubular support having an end extending through and attached to a wall of the vehicle, an actuating assembly movably mounted in said tubular support on the inner side of the wall, an actuating cable connected to said actuating assembly and extending in said tubular support through said wall to the outer side thereof, a pulley bracket comprising a base mounted on said end of the support on the outer side of said wall having an opening through which the support end extends, an outwardly extending body portion extending substantially at right angles from said base and spaced from said support end, a reversely extending body portion extending generally parallel to said base and toward said tube support end and a pulley mounting plate extending obliquely outwardly from said reversely extending body portion and having a generally circular outer margin with a substantially right angle pulley cover flange thereon, and a pulley mounted on said mounting plate and lying in closely spaced relation to said cover flange for receiving said cable trained reversely over the pulley to pass the entering portion of the cable and generally along said wall, said pulley extending substantially parallel to said obliquely extending mounting plate to offset the entering and departing cable portions so that the cable will not contact itself.

2,751,794

STRAIGHT PULL BRAKE LEVER MECHANISM

Ray A. Sandberg and Ernest Van Sickel, Waukegan, Ill., assignors to Houdaille Industries, Inc., a corporation of Michigan

Application November 19, 1951, Serial No. 257,014
16 Claims. (Cl. 74—503)



1. In a straight pull brake lever structure including a reciprocal and rotary actuating rod mounted in a support and a mechanism to retain the rod in incremental brake-setting positions, said mechanism being disengageable by rotation of the rod, a sleeve disposed about said rod, means engaging said sleeve and said support to substantially prevent relative rotation therebetween, but accommodating relative longitudinal movements of the sleeve and support, means engaging said sleeve and said rod in one relative longitudinal position of said sleeve with respect to said rod to substantially prevent rotation of said rod relative to said sleeve, means for longitudinally moving said sleeve relative to said rod to a second relative longitudinal position, and means for rotating said rod relative to said sleeve in said second relative position to disengage said rod retaining mechanism.

2,751,795

HAND BRAKE PULL ROD ASSEMBLY

Burnet J. Powell, North Chicago, Ill., assignor to Houdaille Industries, Inc., a corporation of Michigan

Application September 7, 1950, Serial No. 183,535
17 Claims. (Cl. 74—503)



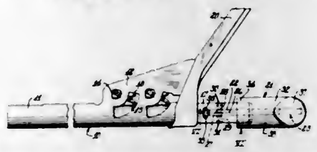
1. In combination in a hand brake actuating assembly, a pull rod having a handle at its rear end and means at its forward end for attachment to a brake setting cable, an elongated tubular housing within which the rod is reciprocable, interengaging pawl and ratchet means on the housing and rod for retaining the rod in various brake setting positions, said tubular housing being throughout its major extent of substantially larger diameter than the rod, means on the tubular housing adjacent its rear end bearingly supporting the rod, a bearing bushing carried adjacent to the forward end of the rod and affording limited area sliding engagement with the enlarged diameter portion of the tubular housing, said rod being rotatable in the housing as well as reciprocable, and means reciprocably movable with said rod but help against rotation therewith and cooperating with the bushing for limiting the range of rotary movement of the rod.

2,751,796

HAND BRAKE LEVER HANDLE CONSTRUCTION

Ray A. Sandberg, Waukegan, Ill., assignor to Houdaille Industries, Inc., a corporation of Michigan

Application September 18, 1951, Serial No. 247,132
8 Claims. (Cl. 74—543)



1. In combination in a hand brake lever construction, a brake actuating rod having an end with a longitudinal

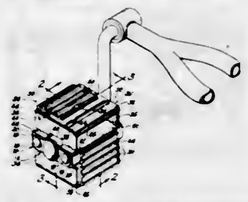
bifurcating rectangular slot therein, the slotted end having transverse aligned openings therein longitudinally spaced from the end of the slot and extending into the slot, a handle insert of generally flat plate construction including a stem and integral oppositely extending ears, the stem having a rectangular end for insertion in said slot and a transverse opening therein for alignment with said aligned slot openings when said stem end is seated in the slot, a pin for insertion in said aligned openings to retain the handle insert in engagement with said rod, said handle insert stem end having a reduced end portion, said rod being deformed against said reduced end portion to prevent rocking of said insert on said pin, and a handle formed on said insert including a tubular hub portion affording a socket for receiving the slotted end of said rod upon fitting of the insert in said slot to further prevent rocking of said insert on said pin.

2,751,797

BUILT-UP PEDAL CONSTRUCTION

Daniel M. Pearl, Chicago, Ill., assignor to Darwin Products, Inc., Chicago, Ill., a corporation of Illinois

Application June 18, 1952, Serial No. 294,222
15 Claims. (Cl. 74—594.4)



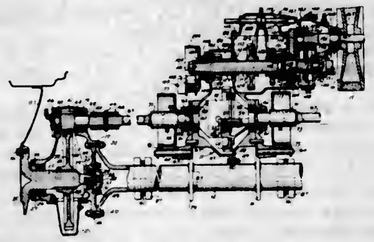
1. In combination with a pedal assembly comprising a crank and rubber tread cleats at opposite sides of and along and mounted to rotate about said crank, a tread unit comprising a pair of identical rigid members engaging said cleats, each member having a first rectangular face remote from said cleats and two parallel end faces extending from opposite edges of the first face toward said cleats, said end faces of each member being respectively coplanar with said end faces of the other member, and an elastic rubber tread sleeve connected with and stretched between said members and substantially completely overlying said first faces, with the planes of said end faces disposed at the open ends of said sleeve, said members having sharp edges embedded by said sleeve in said cleats.

2,751,798

HOUSING STRUCTURE FOR DRIVE AXLE MECHANISM

Beverly W. Keese and John E. Williams, Oshkosh, Wis., assignors, by mesne assignments, to Rockwell Spring and Axle Company, Coraopolis, Pa., a corporation of Pennsylvania

Application July 21, 1950, Serial No. 175,146
2 Claims. (Cl. 74—606)



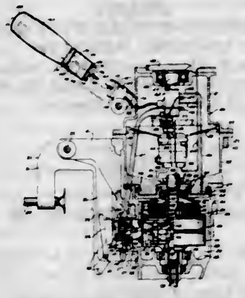
1. In a vehicle, an axle housing comprising two housing members enlarged at adjacent ends for defining a differential receiving space and rigidly secured together at said adjacent ends, integral substantially parallel walls extending from one of said axle housing members and enclosing a variable speed transmission gearing space, and an integral wall extending from the other of said axle housing members to cooperate with one of the walls of said transmission housing in defining and enclosing a reduction gear chamber alongside the transmission gearing space and open to said differential receiving space.

2,751,799

FORWARD AND REVERSE PLANETARY TRANSMISSION

Arthur R. Long, Kiel, Wis., assignor to Hart-Carter Company, Peoria, Ill., a corporation of Delaware

Application February 26, 1951, Serial No. 212,795
6 Claims. (Cl. 74—769)



1. In an outboard motor having a vertical depending drive shaft and having a driven shaft vertically aligned therewith, and having a depending casing for said shafts, said casing including an upper section forming an oil reservoir which surrounds said drive shaft, a first carrier plate rotatable on said drive shaft below said reservoir, a second carrier plate rotatable on said drive shaft below the first carrier plate, planetary reducing pinions rotatably carried by one of said carrier plates, a sun gear on said drive shaft in mesh with said planetary pinions, a ring gear in said casing surrounding said pinions and having internal teeth which are engaged by said planetary pinions, a brake band surrounding said ring gear for engaging the latter, a set of reversing planetary pinions on said second carrier plate, a second sun gear fixed to said drive shaft and in mesh with pinions of said reversing set, a second ring gear fixed to said driven shaft and surrounding said set of reversing pinions and having internal teeth which are engaged by pinions of said reversing gear set, a brake band surrounding said second ring gear for engaging the latter, means connecting said first and second carrier plates for rotation together, hydraulic means including oil from said reservoir for selectively operating said brake bands to control said driven shaft, and a control for said hydraulic means which is accessible to the operator of the motor.

2,751,800

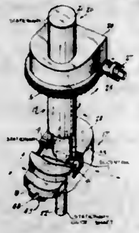
BORING DEVICE FOR ELLIPTICAL OR THE LIKE OPENINGS

Edward J. Beach, Brooklyn, N. Y., assignor to Beach-Russ Company, Brooklyn, N. Y., a corporation of New York

Application July 17, 1953, Serial No. 368,591
9 Claims. (Cl. 77—61)

1. An attachment for boring cylinders out-of-round on lathes, horizontal and vertical boring machines, milling machines and other cutting or drilling machines comprising a hollow spindle, a boring head with a movable slide having a crosswise slotted opening secured to one end of the spindle, a stationary crank with a center portion extending through and rotatably mounting the spindle, said crank having two axially aligned end portions,

one adapted to be fixed to a cutting machine with the center portion of the crank axially aligned with the center of the work cylinder, said boring head being centered on the free end of the crank.



2,751,801
SELF-ADJUSTING PLIER-TYPE TOGGLE LOCKING WRENCH
John L. Hostetter, Murray, Nebr.
Application May 17, 1954, Serial No. 430,241
2 Claims. (Cl. 81—84)



1. In a wrench, the combination of an elongated handle forming a body portion provided at one end with a stationary jaw and formed with an elongated recess, a coacting movable jaw pivoted to said body, a second handle pivoted to said movable jaw, a toggle link pivotally attached to said second handle and extending away from said jaws and toward the farther end of said recess, a section of said handle portion which is spaced a substantial distance from said jaws being provided with a hollow portion having first and second spaced apart surfaces disposed opposite each other and extending generally linearly of said handle, said first and second surfaces each being inclinedly disposed with respect to each other and diverging away from each other toward the ends thereof closest the jaw end of said handle, said first and second surfaces defining straight parallel lines extending longitudinally of said elongated handle, first and second movable wedges disposed between said oppositely disposed surfaces and arranged with their wide ends juxtaposed and facing the jaw end of the wrench and with their narrow ends facing the other end of the wrench, means pivotally connecting said toggle linkage to said first wedge, resilient means urging said first wedge toward said stationary jaw, said wedges being of cooperative sizes and shapes for the setting of said first and second wedges firmly between said oppositely disposed surfaces when said wrench is clamped onto an object and before said toggle link connection with said second handle reaches a point on an imaginary line between said second handle-movable jaw connection and said toggle-linkage first wedge connection, means connecting said second wedge with said movable jaw in a manner such that as said movable jaw moves toward a closed position said second wedge moves away from said stationary jaw for the above described setting.

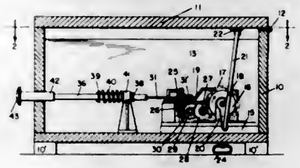
2,751,802
BOX WRENCH HAVING A PIVOTALLY MOUNTED WORKPIECE ABUTMENT
Camille Reuillard, Buffalo, N. Y., assignor to Chauncey R. Hatch, Jr., Buffalo, N. Y.
Application June 30, 1953, Serial No. 365,110
1 Claim. (Cl. 81—121)

A wrench, comprising a handle having a curved portion terminating in a socket-head having a socket-opening therein to receive boltheads or nuts of varying formations so as to cause the bolts or the nuts entered in said socket-opening to rotate with said wrench when swinging the latter circularly; said socket-head being disposed at an obtuse angle to the major portion of said handle; a flexible strip of metal pivotally secured to said



handle adjacent said socket-opening and overlying the curved end thereof so as to have its free end overhang said socket-opening, said strip of metal being frictionally retained in position against the curved portion of said handle and capable of being swung free of said socket-opening when not required.

2,751,803
SELF-OPENING CONTAINER AND MUSIC BOX
Rex MacGowan, Portland, Oreg.
Application September 12, 1955, Serial No. 533,768
4 Claims. (Cl. 84—95)



1. In a self-opening container, a lid hinged on said container, a spring-wound music-box mechanism in said container, a driven rotating cylinder in said mechanism, a crank connected with said cylinder and rotated therewith, lid opening and closing means connected with and operated by said crank and so arranged that said lid will be in closed position when said crank is in its lowest position and will be opened and closed with the rotation of said crank, a control member for said mechanism, cylinder-engaging means on said member, cooperating means carried on the end of said cylinder adapted to be engaged by said cylinder-engaging means, whereby to stop the rotation of said cylinder when said crank has reached its lowest position, and a manually-operable member for momentarily moving said control member and therewith said cylinder-engaging means into releasing position, said manually-operable member extending to the outside of said container, whereby, upon the manual actuation of said manually-operable member, said cylinder will be free to make one revolution and to cause said lid to be opened and closed while said music-box mechanism is functioning.

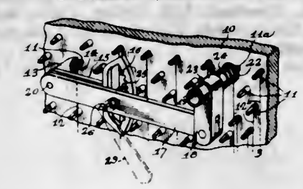
2,751,804
SELF-ADJUSTING PIANO ACTION DAMPER MECHANISM
Joseph J. Comparetti, Long Island City, N. Y.
Application January 3, 1955, Serial No. 479,327
3 Claims. (Cl. 84—255)

1. In a piano action damper mechanism having a bracket adapted to be fixed to an action rail and a lever intermediately pivoted to said bracket; a yoke pivotally connected to the top portion of said lever, a spring biasing said yoke, around its pivot, in one direction, a stop on said yoke limiting pivotal movement of said yoke in said one direction, locking means on said yoke adapted to lock said yoke to said lever in any position of pivotal adjustment, an extension member on said yoke, and a pad having a pivotal connection to said extension member, said pivotal connection between said pad and said extension member being constructed and arranged to be



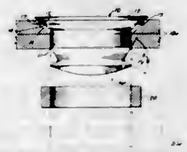
held rigid in any position of pivotal adjustment of said pad.

2,751,805
PIANO TUNING WRENCHES
Stanley Leonard Leftly, Toronto, Ontario, Canada
Application February 1, 1955, Serial No. 485,539
3 Claims. (Cl. 84—459)



1. A piano tuning device adapted to turn in either direction any one of the tuning pins of the pin block of a piano, comprising a socket wrench adapted to engage axially the pin to be turned, a sleeve adapted to be fitted over a second pin remote from the pin to be turned, said sleeve having a reduced opening in the base thereof the wall of which opening is engageable with the pin at a point distant from the tip of the pin, a linkage having one end pivoted to said wrench and having the other end thereof pivoted to said sleeve, an internally toothed sector gear coaxial and rigid with said wrench, a means for turning said sector gear, said sleeve having an external flange on its base extending outwardly from the sleeve and a limit stop longitudinally spaced from the flange, a compression spring surrounding said sleeve between said flange and said stop, said other end of said linkage being additionally slidable on said sleeve and positioned between said spring and said stop whence said spring normally urges said other end of the linkage outward toward said stop.

2,751,806
FASTENER PROVIDED WITH CIRCUMFERENTIAL FLUID SEALING RING BONDED IN RECESS
William Robert Dickie, Manhattan Beach, Calif., assignor, by mesne assignments, to Hi-Shear Rivet Tool Company, Los Angeles, Calif., a corporation of California
Application October 12, 1953, Serial No. 385,463
2 Claims. (Cl. 85—9)



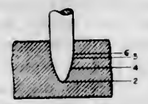
1. A fastener for holding overlapped apertured bodies together, said fastener having a shank for passing through the apertures and a head at one end of the shank, and a substantially conical surface at the junction of the head and the shank, said surface being adapted to make surface contact with a complementary surface of at least the adjacent one of said apertured bodies, a circumferential recess of uniform cross-section formed in an intermediate portion of said conical surface, said recess comprising a base surface which is recessed relative to said conical surface, and end surfaces joining said base surface to said conical surface, said end surfaces diverging from each other in the direction from the base surface toward the conical surface and at least one of the end surfaces being filleted at its junction with the base surface, and a resilient sealing material of uniform cross-section bonded to at least a substantial portion of said base surface and one of said end surfaces, a part of said sealing material lying within said recess, and the remainder of said sealing material protruding out of said recess in the form of a circumferential bead and leaving a circumferential void within the end of said recess having the filleted end surface when the fastener is not in engagement with said apertures, the volume of the sealing material which protrudes from said recess being equal to the volume of said void, whereby upon engagement of the fastener through the apertures, the sealing material is distorted to completely fill the void and the conical surface makes surface-to-surface contact with said complementary surface on both sides of said recess without any flow of sealing material between said conical and complementary surfaces.

2,751,807
THUMB TACK HAVING CURVED SHANK AND BENT SHEET METAL HEAD
Kurt Johan Staugaard Harre, Bromsten, Sweden
Application December 13, 1951, Serial No. 261,517
2 Claims. (Cl. 85—16)



1. In a thumb tack the combination of an elongated rigid sheet metal head, one end portion of which is bent sharply upwards to form an obtuse angle with the plane of the other end portion, and a curved pin protruding from the bottom side of one of said end portions of said head in a manner to have the center of its curvature on a fulcrum line formed in the place where said end portions of said head merge into each other, the point of said pin being located slightly above an imaginary extension of the plane of said remote end portion of said head.

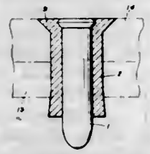
2,751,808
EXPLOSIVELY DRIVEN STUD HAVING POLISHED POINT
Robert J. MacDonald and Arthur D. Schwope, Columbus, Ohio, assignors, by mesne assignments, to Remington Arms Company, Inc., Bridgeport, Conn., a corporation of Delaware
Application May 4, 1953, Serial No. 352,954
4 Claims. (Cl. 85—30)



1. A fastening stud of ferrous metal adapted to be explosively driven into a metal host and to adhere therein with a force of not less than 13,500 pounds per square

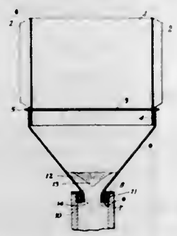
inch, said stud comprising a host penetrating ogival point, the surface of said point being polished to a fineness of not over 33 microinches.

2,751,809
HOLLOW RIVET AND EXPANDER PIN HAVING CURVED ENGAGING SURFACES
William T. Barker, Los Angeles, Calif., assignor to North American Aviation, Inc.
Application May 5, 1952, Serial No. 286,192
7 Claims. (Cl. 85—40)



3. A rivet comprising a continuous tubular collar of relatively hard material having an exteriorly projecting head portion at one end and a substantially cylindrical exterior for the remainder of its length; and a pin member of relatively hard material adapted to be driven into said collar for radially expanding portions thereof, the interior of said collar being substantially cylindrical from said end thereof and at the opposite end portion being of continuously decreasing diameter defining a slightly curved surface tangential to said cylindrical portion, the equivalent center of curvature of said curved surface being within the axial limits of said collar and radially remote from the exterior thereof, said pin member having a substantially cylindrical exterior for a major portion of its length, said exterior being substantially complementary to said cylindrical portion of said collar interior, one end of said pin having a continuously decreasing diameter defining a curved surface tangential to the cylindrical portion thereof and of sharper curvature than said curved surface of said collar interior for thereby providing initial contact between said curved surfaces of said pin and said collar along said tangential portions thereof when said pin is driven into said collar and permitting said pin to radially expand said curved portion of said collar.

2,751,810
EXPLOSIVE LOADING
John D. Clark, Brentwood, Mo., and Russell C. McKenney, East Alton, Ill., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application May 12, 1950, Serial No. 161,698
2 Claims. (Cl. 86—20)



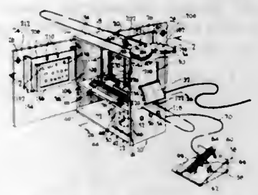
2. A filling device for filling a projectile having a filling aperture surrounded by a casing, said filling device being adapted to be charged with particulate explosive and, upon heating, to discharge molten explosive into said projectile with substantially complete displacement of the air in said projectile, said filling device comprising a hopper with heat exchange means, a funnel shaped conduit means depending from said hopper and having a discharge end having a resilient gasket thereabout and within the filling aperture of the projectile, and an annular flange adapted to rest on the end of the projectile, said discharge end being detachably secured in said filling aperture of said projectile with said flange resting on said casing and with said gasket compressed between said casing and said conduit means, thereby preventing molten explosive from creeping between said discharge end and the casing about said aperture as the projectile is filled therewith, and a perforated plate separating the hopper from said conduit means adapted to support an explosive in particulate form but to permit, upon heating, molten explosive to flow through the perforations in small rivulets and droplets and to drop into said conduit and projectile and to substantially completely displace the air as the projectile and a portion of the conduit is filled with molten explosive, said gasket permitting free movement of said conduit relative to said projectile to permit separation of said filling device from said projectile after cooling and solidification of the explosive by breaking apart the portions of explosive in said projectile and in said conduit.

2,751,811
DIRECT READING ANALYTICAL SPECTROSCOPE
Frederick K. Vreeland, Mill Valley, Calif., assignor to Vreeland Corporation, Hoboken, N. J., a corporation of New Jersey
Application September 28, 1949, Serial No. 118,352
8 Claims. (Cl. 88—14)



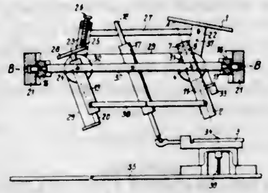
2. A spectroscope wherein are combined means for exciting and projecting the spectrum of a sample, means for simultaneously projecting a continuous spectrum in juxtaposition with the spectrum of the sample, and a translucent standard spectrogram mounted in juxtaposition with the position of the spectrum of the sample when projected and positioned for illumination by the continuous spectrum, whereby the lines of the standard spectrogram appear in their true spectral colors.

2,751,812
PORTABLE EYE-TESTING EQUIPMENT
Richard L. Sheppard, Leno J. Mastache, and Herbert J. Shapiro, New York, N. Y., and Donald S. Buck, Arlington, Va.; by judicial decree said Herbert J. Shapiro name changed to Herbert J. Sheppard; said Buck assignor to said Richard L. Sheppard, said Mastache, and said Herbert J. Sheppard
Application March 11, 1950, Serial No. 149,098
2 Claims. (Cl. 88—20)



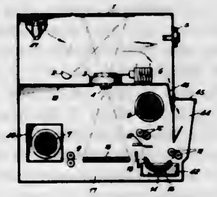
1. A device for testing persons such as drivers of automobiles, the device including a cabinet including a pair of side walls, a pair of end walls, and a top wall, one of the end walls having a sight opening therein, means within the cabinet and visible through the opening for determining the ability of the person being tested to determine relative locations of objects, the relative-location-testing means including test target members mounted in the cabinet for adjustment relatively to each other, means extending from the cabinet for manipulation by the tested person to effect such relative adjustment as such person observes the members through the opening, light sources in the cabinet, means in the cabinet for directing light from the sources to illuminate the relative-location-testing means and make them visible to the test person through said opening, the side walls being supported to swing outwardly from the cabinet to present their faces to be observed by the tested party in his position for manipulation of the relative-adjustment means, and means for receiving vision testing means, the receiving means being disposed on the faces of the side walls presented to be observed by the tested party when the side walls have been swung outwardly from the cabinet, the light-directing means functioning to direct light from the sources to the said faces.

2,751,813
OPTICAL SYSTEM FOR PHOTOGRAMMETRIC PLOTTING INSTRUMENTS
Walther Bauersfeld, Heidenheim (Brenz), and Heinrich Sonnberger, Oberkochen, Germany, assignors to Carl Zeiss, Heidenheim (Brenz), Wurttemberg, Germany
Application February 24, 1954, Serial No. 412,166
Claims priority, application Germany March 4, 1953
6 Claims. (Cl. 88—24)



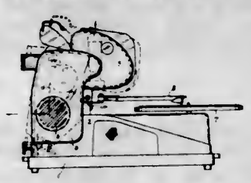
1. In a photogrammetric plotting instrument an optical system serving for projecting a portion of a photo view upon a plate provided with a measuring mark, all lenses of the system being arranged so as to have one optical axis in common, said system being gimbal suspended on the projection center of the photo view, said system having a diaphragm at the locus of the said projection center and having both ahead of and behind this diaphragm a fixed lens, and a focusing element slidable along said common optical axis, means to shift said focusing elements so as to image a point lying on said photo view and on said optical axis on to said plate, and to let pass the light rays coming from said point parallel through said diaphragm.

2,751,814
PHOTOGRAPHIC PRINT MAKING MACHINE
Walter Limberger, Hamburg, Germany, assignor to Messrs. Lumoprint Zindler K. G., Hamburg, Germany
Application June 28, 1952, Serial No. 296,170
Claims priority, application Germany December 31, 1951
8 Claims. (Cl. 88—24)



1. A device for making photographic prints comprising exposure means for exposing a light-sensitive sheet including an objective lens, a shutter and a shutter operating mechanism, a developer for developing the exposed light-sensitive paper, feeding rollers for moving the light-sensitive paper and a light-insensitive transfer paper through said developer, pressing rollers at the exit side of said developer for pressing the two papers coming from the developer against each other, a first controlling gear operatively connected to said pressing rollers, a second controlling gear operatively connected to said feeding rollers, an electric driving motor in driving connection with said first and said second controlling gear, switch means for switching on said motor and said two controlling gears in response to the shutting operation of said shutter, and means adapted to be actuated by said first gear for switching off said motor.

2,751,815
STRIP FILM PROJECTION APPARATUS
Robert H. Larson, Batavia, Ill., assignor to Du Kane Corporation, St. Charles, Ill., a corporation of Illinois
Application June 3, 1952, Serial No. 291,371
10 Claims. (Cl. 88—28)



1. A manually controlled film frame advance mechanism for a strip film projector, said advance mechanism comprising a base including a vertical supporting panel, one side of said panel having a film sprocket including a sprocket shaft, the other side of said panel having mechanism as follows: a Geneva star wheel on said sprocket shaft, a spindle offset from but parallel to said sprocket shaft, a first sleeve and Geneva cam on said spindle, said sleeve constituting a clutch follower part, a second sleeve freely rotatable on said spindle, a coil spring on said second sleeve having one end thereof rigidly joined to said second sleeve and having the other end thereof free with free end spring turns overlying said first sleeve, the free spring coils being normally loose on said first sleeve, an electric motor supported on said panel, means for driving said second sleeve and coil spring from said motor, a presser finger for engaging the loose turns of the coil spring to force the same against the first sleeve, means for biasing said presser finger to an inoperative position from which position it may be moved to an operative position for engaging the spring coils to cause clutch action, manually controlled means for moving said presser finger into an operative position for causing clutch engagement, and means operated by the turning of said first sleeve for disengaging said presser finger to permit the same to respond to its bias, said presser finger being tripped when said first sleeve makes a complete turn.

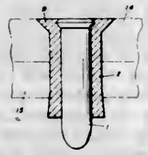
2,751,816
PARABOLOIDAL REFLECTOR
John D. Strong,, Eccleston, Md., assignor to the United States of America as represented by the Secretary of the Army
Application September 12, 1951, Serial No. 246,270
1 Claim. (Cl. 88—73)



In an optical object resolving system of telescopic precision including a remote source of radiation providing a

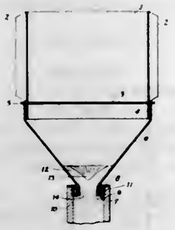
inch, said stud comprising a host penetrating ogival point, the surface of said point being polished to a fineness of not over 33 microinches.

2,751,809
HOLLOW RIVET AND EXPANDER PIN HAVING CURVED ENGAGING SURFACES
William T. Barker, Los Angeles, Calif., assignor to North American Aviation, Inc.
Application May 5, 1952, Serial No. 286,192
7 Claims. (Cl. 85—40)



3. A rivet comprising a continuous tubular collar of relatively hard material having an exteriorly projecting head portion at one end and a substantially cylindrical exterior for the remainder of its length; and a pin member of relatively hard material adapted to be driven into said collar for radially expanding portions thereof, the interior of said collar being substantially cylindrical from said end thereof and at the opposite end portion being of continuously decreasing diameter defining a slightly curved surface tangential to said cylindrical portion, the equivalent center of curvature of said curved surface being within the axial limits of said collar and radially remote from the exterior thereof, said pin member having a substantially cylindrical exterior for a major portion of its length, said exterior being substantially complementary to said cylindrical portion of said collar interior, one end of said pin having a continuously decreasing diameter defining a curved surface tangential to the cylindrical portion thereof and of sharper curvature than said curved surface of said collar interior for thereby providing initial contact between said curved surfaces of said pin and said collar along said tangential portions thereof when said pin is driven into said collar and permitting said pin to radially expand said curved portion of said collar.

2,751,810
EXPLOSIVE LOADING
John D. Clark, Brentwood, Mo., and Russell C. McKenney, East Alton, Ill., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application May 12, 1950, Serial No. 161,698
2 Claims. (Cl. 86—20)



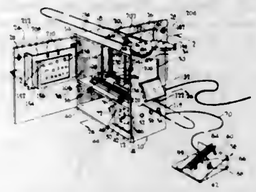
2. A filling device for filling a projectile having a filling aperture surrounded by a casing, said filling device being adapted to be charged with particulate explosive and, upon heating, to discharge molten explosive into said projectile with substantially complete displacement of the air in said projectile, said filling device comprising a hopper with heat exchange means, a funnel shaped conduit means depending from said hopper and having a discharge end having a resilient gasket thereabout and within the filling aperture of the projectile, and an annular flange adapted to rest on the end of the projectile, said discharge end being detachably secured in said filling aperture of said projectile with said flange resting on said casing and with said gasket compressed between said casing and said conduit means, thereby preventing molten explosive from creeping between said discharge end and the casing about said aperture as the projectile is filled therewith, and a perforated plate separating the hopper from said conduit means adapted to support an explosive in particulate form but to permit, upon heating, molten explosive to flow through the perforations in small rivulets and droplets and to drop into said conduit and projectile and to substantially completely displace the air as the projectile and a portion of the conduit is filled with molten explosive, said gasket permitting free movement of said conduit relative to said projectile to permit separation of said filling device from said projectile after cooling and solidification of the explosive by breaking apart the portions of explosive in said projectile and in said conduit.

2,751,811
DIRECT READING ANALYTICAL SPECTROSCOPE
Frederick K. Vreeland, Mill Valley, Calif., assignor to Vreeland Corporation, Hoboken, N. J., a corporation of New Jersey
Application September 28, 1949, Serial No. 118,352
8 Claims. (Cl. 88—14)



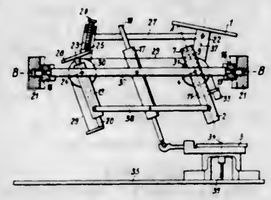
2. A spectroscope wherein are combined means for exciting and projecting the spectrum of a sample, means for simultaneously projecting a continuous spectrum in juxtaposition with the spectrum of the sample, and a translucent standard spectrogram mounted in juxtaposition with the position of the spectrum of the sample when projected and positioned for illumination by the continuous spectrum, whereby the lines of the standard spectrogram appear in their true spectral colors.

2,751,812
PORTABLE EYE-TESTING EQUIPMENT
Richard L. Sheppard, Leno J. Mastache, and Herbert J. Shapiro, New York, N. Y., and Donald S. Buck, Arlington, Va.; by judicial decree said Herbert J. Shapiro name changed to Herbert J. Sheppard; said Buck assignor to said Richard L. Sheppard, said Mastache, and said Herbert J. Sheppard
Application March 11, 1950, Serial No. 149,098
2 Claims. (Cl. 88—20)



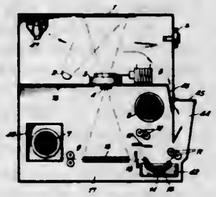
1. A device for testing persons such as drivers of automobiles, the device including a cabinet including a pair of side walls, a pair of end walls, and a top wall, one of the end walls having a sight opening therein, means within the cabinet and visible through the opening for determining the ability of the person being tested to determine relative locations of objects, the relative-location-testing means including test target members mounted in the cabinet for adjustment relatively to each other, means extending from the cabinet for manipulation by the tested person to effect such relative adjustment as such person observes the members through the opening, light sources in the cabinet, means in the cabinet for directing light from the sources to illuminate the relative-location-testing means and make them visible to the test person through said opening, the side walls being supported to swing outwardly from the cabinet to present their faces to be observed by the tested party in his position for manipulation of the relative-adjustment means, and means for receiving vision testing means, the receiving means being disposed on the faces of the side walls presented to be observed by the tested party when the side walls have been swung outwardly from the cabinet, the light-directing means functioning to direct light from the sources to the said faces.

2,751,813
OPTICAL SYSTEM FOR PHOTOGRAMMETRIC PLOTTING INSTRUMENTS
Walther Bauersfeld, Heidenheim (Brenz), and Heinrich Sonnberger, Oberkochen, Germany, assignors to Carl Zeiss, Heidenheim (Brenz), Wurttemberg, Germany
Application February 24, 1954, Serial No. 412,166
Claims priority, application Germany March 4, 1953
6 Claims. (Cl. 88—24)



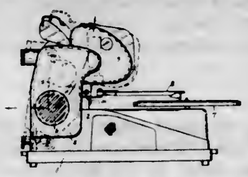
1. In a photogrammetric plotting instrument an optical system serving for projecting a portion of a photo view upon a plate provided with a measuring mark, all lenses of the system being arranged so as to have one optical axis in common, said system being gimbal suspended on the projection center of the photo view, said system having a diaphragm at the locus of the said projection center and having both ahead of and behind this diaphragm a fixed lens, and a focusing element slidable along said common optical axis, means to shift said focusing elements so as to image a point lying on said photo view and on said optical axis on to said plate, and to let pass the light rays coming from said point parallel through said diaphragm.

2,751,814
PHOTOGRAPHIC PRINT MAKING MACHINE
Walter Limberger, Hamburg, Germany, assignor to Messrs. Lumoprint Zindler K. G., Hamburg, Germany
Application June 28, 1952, Serial No. 296,170
Claims priority, application Germany December 31, 1951
8 Claims. (Cl. 88—24)



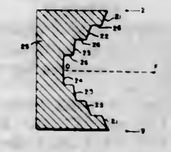
1. A device for making photographic prints comprising exposure means for exposing a light-sensitive sheet including an objective lens, a shutter and a shutter operating mechanism, a developer for developing the exposed light-sensitive paper, feeding rollers for moving the light-sensitive paper and a light-insensitive transfer paper through said developer, pressing rollers at the exit side of said developer for pressing the two papers coming from the developer against each other, a first controlling gear operatively connected to said pressing rollers, a second controlling gear operatively connected to said feeding rollers, an electric driving motor in driving connection with said first and said second controlling gear, switch means for switching on said motor and said two controlling gears in response to the shutting operation of said shutter, and means adapted to be actuated by said first gear for switching off said motor.

2,751,815
STRIP FILM PROJECTION APPARATUS
Robert H. Larson, Batavia, Ill., assignor to Du Kane Corporation, St. Charles, Ill., a corporation of Illinois
Application June 3, 1952, Serial No. 291,371
10 Claims. (Cl. 88—28)



1. A manually controlled film frame advance mechanism for a strip film projector, said advance mechanism comprising a base including a vertical supporting panel, one side of said panel having a film sprocket including a sprocket shaft, the other side of said panel having mechanism as follows: a Geneva star wheel on said sprocket shaft, a spindle offset from but parallel to said sprocket shaft, a first sleeve and Geneva cam on said spindle, said sleeve constituting a clutch follower part, a second sleeve freely rotatable on said spindle, a coil spring on said second sleeve having one end thereof rigidly joined to said second sleeve and having the other end thereof free with free end spring turns overlying said first sleeve, the free spring coils being normally loose on said first sleeve, an electric motor supported on said panel, means for driving said second sleeve and coil spring from said motor, a presser finger for engaging the loose turns of the coil spring to force the same against the first sleeve, means for biasing said presser finger to an inoperative position from which position it may be moved to an operative position for engaging the spring coils to cause clutch action, manually controlled means for moving said presser finger into an operative position for causing clutch engagement, and means operated by the turning of said first sleeve for disengaging said presser finger to permit the same to respond to its bias, said presser finger being tripped when said first sleeve makes a complete turn.

2,751,816
PARABOLOIDAL REFLECTOR
John D. Strong,, Eccleston, Md., assignor to the United States of America as represented by the Secretary of the Army
Application September 12, 1951, Serial No. 246,270
1 Claim. (Cl. 88—73)



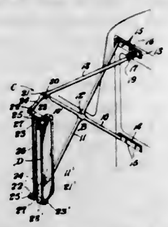
In an optical object resolving system of telescopic precision including a remote source of radiation providing a

beam of approximately parallel rays and off-axis rays, means to bring said rays to a focus on a common focal plane comprising; a composite paraboloidal mirror having a plurality of annular reflecting surfaces of revolution constituting zones of successively increasing diameter including a vertex zone formed on a common axis and having a common focal point, the distances from said focal point to said zones decreasing respectively as the zone diameters increase, said diameters increasing successively toward the focal plane, each reflecting zone intercepting a corresponding cylindrical portion of said off-axis rays and forming a real image of said source on said focal plane and forming also a circle of comatic aberration thereon, the spacing of said zones relative to said focal plane being such that as the zone diameters increase successively the centers of said comatic circles fall successively on a common point on the focal plane, said point being defined by the axial ray of said cylinder reflected from the vertex of the first paraboloid the diameters and spacing of said zonal reflecting elements giving the desired concentric superposition of comatic circles thereby reducing the resultant comatic aberration to a minimum conforming approximately to the relation

$$f_k = \frac{f_1}{1+2i_k^2}$$

where f_1 is the focal length of the first paraboloid as measured from said common focal point to its vertex, f_k is the focal length of the kth paraboloid as measured from said common focal point to the vertex of the kth zone and i_k is the angle of incidence measured in radians for said off-axis rays incident at the mid-point of said kth zone.

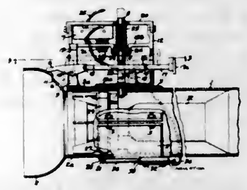
2,751,817
REARVIEW MIRROR CONSTRUCTION
Lucas Lapckas, Kalamazoo, Mich., assignor to See-Mor Truck Mirror Corporation, Kalamazoo, Mich., a corporation of Michigan
Application June 4, 1953, Serial No. 359,540
8 Claims. (Cl. 88—93)



1. A rear view mirror assembly for a vehicle, comprising a bracket attached to the vehicle, a mirror, and a mirror support connecting the bracket to the mirror, said bracket including a pair of crossed arms immovably connected together at an intermediate point thereon mounted in a substantially vertical plane, the inner ends of said arms being rigidly attached to said vehicle, and a supporting arm attached at its inner end to said vehicle and at its outer end to the outer end of one of said crossed arms, said supporting arm extending substantially horizontally outwardly from said vehicle at an acute angle to said vertical plane.

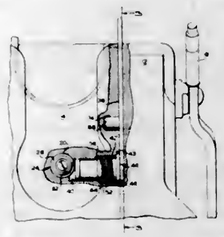
2,751,818
LATCH MECHANISM FOR A ROCKET LAUNCHER
Mitchell E. Bonnett, Havre de Grace, Md., assignor to the United States of America as represented by the Secretary of the Army
Application June 19, 1952, Serial No. 294,526
3 Claims. (Cl. 89—1.7)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. In a rocket launcher for an electrically fired rocket having a firing contact thereon and a forwardly-facing stop surface, a launcher tube, a frame secured to the breech end of said tube, a stop pin axially slidable in said frame radially of said tube, from a first position with one end projecting into said tube in the path of the stop surface of the rocket to a second position free and clear of said path, spring means urging said stop pin into first position, a lift bar, parallelogram link means mounting said bar on said frame substantially parallel with the axis of said tube, said link means including a vane pivotable from a first position clear of the exhaust blast from



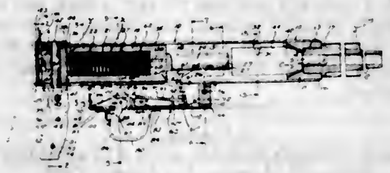
a rocket in said tube to a second position to be impinged by said blast and moved thereby to first position, a connection moving said pin from first to second position by and in response to actuation of said bar to pivot said vane to second position, a switch carried by said frame in position to be closed by and in response to the final movement of said bar in moving said pin to second position, a contact carried by said tube in position to engage the firing contact of the rocket when its stop surface engages said pin in first position, and a circuit including said contact and switch in series.

2,751,819
COCKING MECHANISM FOR A SLIDE BLOCK CANNON
Owen D. Hoopes, Latham, and John B. Sillery, Albany, N. Y., assignors to the United States of America as represented by the Secretary of the Army
Application December 23, 1954, Serial No. 477,436
6 Claims. (Cl. 89—27)
(Granted under Title 35, U. S. Code (1952), sec. 266)



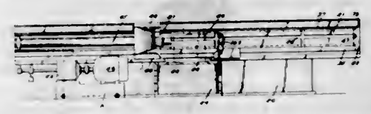
2. In a cannon having a breech ring with an attached tube, a breechblock mounted for slidable movement in the breech ring, said breechblock being provided with a cylindrical hole aligned with the tube and a bore normal thereto, a firing pin having an annular flange mounted for linear sliding movement in said hole, a cylindrical shaft mounted for rotary movement in said bore, a cocking lever mounted to said breechblock for pivotal movement responsive to said slidable movement of said breechblock, a first cam means for translating said pivotal movement of said cocking lever to said rotary movement of said shaft, and a second cam means for translating said rotary movement of said shaft to said linear movement of said firing pin.

2,751,820
TRIGGER AND SEAR CONTROL MECHANISM
Arthur J. Pope, Madison, Conn.
Original application June 24, 1950, Serial No. 170,178. Divided and this application May 3, 1952, Serial No. 285,839
6 Claims. (Cl. 89—140)



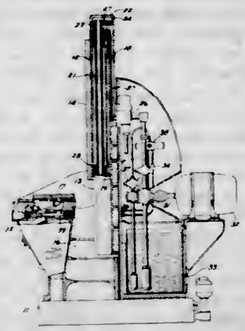
1. A gun construction for automatic successive firing of projectiles having a reciprocable member operable in repeated cycles each comprising a forward stroke and a retrograde stroke, a sear having means mounting it for movement into and out of the path of said member for respectively holding and releasing said member, a push rod having a round cross-sectioned head at one end and having a pivotal connection at its other end with said sear, said head having a substantially flat end face shaped substantially like a segment of a circle and the head being cut away at its under side to form a cam-like portion terminating in the chord of said segment-shaped end face, spaced bearing means for slidably supporting said push rod comprising a cylindrical bearing through which said round cross-sectioned head extends and a bearing for the other end of the push rod, said last-mentioned bearing and said other end of the push rod having coacting parts to prevent rotary movement of said push rod and head and to maintain said segment-shaped end face and cut away under side portion of the head against rotational displacement, spring means for biasing said sear in holding direction and for biasing said head in a direction outwardly of its cylindrical bearing, a pivoted trigger structure comprising a unitary lever having a downwardly projecting lever arm forming a finger piece and having an upwardly projecting lever arm having a vertical edge face terminating adjacent said segment-shaped end face of the head, said edge face being cut away to provide a rigid integral element, said upwardly projecting lever arm pivotally carrying an element positioned in the cut away portion of said vertical edge with spring means biasing said second-mentioned element upwardly against said first-mentioned element projecting toward said head beyond said first-mentioned element and normally engaging said segment-shaped head end face and having an upper cam face adapted for coaction with the chord-like edge of said end face, whereby, to effect operation of said reciprocable member in only one cycle, the finger lever arm is moved throughout only part of its range of swing to press said second-mentioned element against said segment-shaped end face of said head and upon continued movement to push said rod and to slide said element downwardly toward the chord-like edge of the end face of said head and at its cam face to be cammed downwardly by said chord-like edge for accommodation thereof in said cut away under portion of said head and thereby free said push rod and sear for movement in holding direction and, to effect operation of said reciprocable member in repeated cycles, said finger lever arm is given a greater range of movement to bring the other of said elements into pushing engagement with said head end face and to hold said head and push rod and sear against movement in holding direction.

2,751,821
HORIZONTAL BROACHING MACHINE
Floyd W. Scrase and Joseph Kupinski, Detroit, Mich., assignors to Detroit Broach Company, Inc., Rochester, Mich., a corporation of Michigan
Application September 21, 1953, Serial No. 381,312
3 Claims. (Cl. 90—33)



1. In a broaching machine, a bed, a super-structure thereon having vertically spaced laterally projecting and longitudinally extending parallel portions, a broach carrying slide on which the tool is mounted, and spaced upper and lower portions extending within the spaced portions of said super-structure with V-shaped channels in their top and bottom faces extending longitudinally thereof, gibs mounted on the spaced portions of the super-structure having V-shaped ways engaging said channels and forming slideways therefor, one of said gibs being adjustable on its mounting to take up wear, and a fluid motor including a cylinder, piston and piston rod located in the space between said parallel portions being connected at one end to said super-structure and at the opposite end to said slide.

2,751,822
BROACHING MACHINE WITH ANTI-CHATTER CONTROL
Bernard P. Schiltz, Cleveland, Ohio, assignor to The Foote-Burt Company, Cleveland, Ohio, a corporation of Ohio
Application October 13, 1951, Serial No. 251,200
5 Claims. (Cl. 90—33)

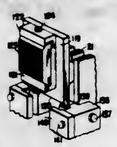


1. A machine tool comprising a slide reciprocable for effecting a machining operation, a hydraulic cylinder for reciprocating the slide, means for supplying fluid under pressure, a control valve for directing the fluid to the cylinder to control the movement thereof, a regulating valve to oppose flow of fluid displaced from the cylinder, a conduit interconnecting the two ends of the cylinder, and an orifice in the conduit to inhibit chatter of the cylinder.

2,751,823
BROACHING MACHINE
Roy J. Freter, Worthington, Ohio
Application November 12, 1953, Serial No. 391,516
7 Claims. (Cl. 90—33)

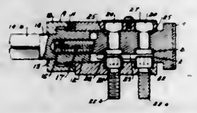
1. A machine for broaching a plurality of work pieces in continuous production comprising, in combination, a continuous broach carrying means having a plurality of broaches in spaced relationship thereon, said broaches being sequentially moved through a broaching station; a plurality of work-holding stations carrying a plurality of

said work pieces thereon; means for moving said broach carry means; means for moving and stopping said work-holding stations to sequentially locate said work pieces in stationary disposition in said broaching station; means for synchronizing said movement of said broaches with



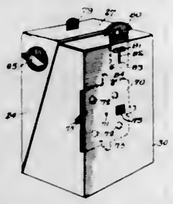
said movement of said work-holding stations to effect said movement of said work-holding stations when said broaches are absent from said broaching station due to the presence of a space between said broaches; and power means for said means for effecting said movements.

2,751,824
CLAMPING DEVICE
Harry E. Sloan and Herbert W. Hickey, Hartford, Conn., assignors to The Cushman Chuck Company, Hartford, Conn.
Application April 17, 1953, Serial No. 349,394
2 Claims. (Cl. 90—61)



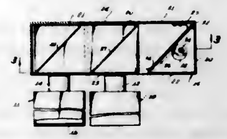
1. A clamping device comprising a body member having a cylindrical opening extending therethrough providing a top wall and a bottom wall; said bottom wall having a hole therethrough communicating with said opening and said top wall having a hole therethrough substantially in alignment with the hole in said bottom wall, a cylindrical bar slidably disposed in said opening and having a longitudinal slot in its periphery extending for a portion of its length and a hole extending therethrough and communicating with said slot, a fastening member extending through the hole in the bottom wall and having a head portion disposed in said opening and extending into said slot; the outer end of said slot providing a stop which is engageable with said head portion to limit inward movement of said bar to a position wherein the hole therein will be in alignment with said fastening member and with the hole in the top wall whereby access to said fastening member is provided, a clamping portion on said bar, and rotatable means for moving said bar in said opening; the said slot being open at its outer end to receive the head portion of the fastening member as the bar is being inserted into the cylindrical opening.

2,751,825
PINHOLE CAMERA
Jacob Fried, Bronx, N. Y.
Application January 30, 1952, Serial No. 268,991
1 Claim. (Cl. 95—11)



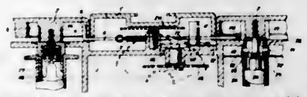
A camera construction formed of one piece of material foldable upon itself to form bottom, top and side walls and a front section composed of a plurality of thicknesses, an aperture through said front wall, a pin hole lens positioned in one of said front walls and a shutter rotatably mounted adjacent said aperture, said shutter having a plurality of openings therein and a plurality of operating handles whereby the movement of one of said handles will expose said pin hole lens while the movement of the successive handle will cover said pin hole lens said shutter being notched adjacent said handles, a front and rear sight for said camera, said front sight being slidably mounted and having at its lower end a finger which will engage one of said notches in said shutter to lock it into place when the front sight is depressed.

2,751,826
COLOR STEREO SYSTEM AND ATTACHMENT
William H. Harrison, Los Angeles, Calif.
Application March 23, 1953, Serial No. 344,006
7 Claims. (Cl. 95—18)



1. A stereoscopic device of the class described which includes: supporting means adapted to be positioned before the lens of a camera, having a pair of forward apertures, one aligned with, and one horizontally offset from, the optical axis of said lens; a reflecting member mounted in said supporting means behind said offset aperture and angularly positioned to reflect light from said offset aperture toward said optical axis; a semi-reflecting, semi-transparent means mounted in said supporting means behind said aligned aperture and with its semi-reflecting, semi-transparent surface at an angle to said optical axis and substantially parallel to said reflecting member, whereby approximately one-half the light from said aligned aperture is transmitted through, and approximately one-half the light from said offset aperture is reflected by said semi-reflecting, semi-transparent surface, along said optical axis toward said lens; manually adjustable means for varying the angle said semi-reflecting, semi-transparent surface makes with the light reflected from said reflecting member, said angle being varied about a generally horizontal axis for varying the alignment of images formed by said surface and said member; and, means for observing the image formed by the light from said aligned aperture that is reflected by, and the light from said offset aperture that is transmitted through, said semi-reflecting, semi-transparent surface, whereby said alignment may be visually checked as said camera is operating.

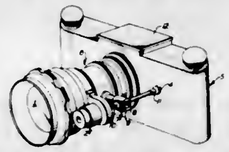
2,751,827
MINIATURE CAMERAS WITH AUTOMATIC WINDING MECHANISM
Josef Helmuth Danzer, Nurnberg, Germany
Application April 3, 1952, Serial No. 280,215
Claims priority, application Germany April 16, 1951
8 Claims. (Cl. 95—31)



1. In a roll film camera, a frame, a rotatable mounting therein for a winding-on spool, a frictional drive coupled to the rotatable mounting, a winding-on knob coupled to the frictional drive, said knob having a radially-spiralled track recess, a slide movable in the frame radially with respect to the winding-on knob, a finger on the slide

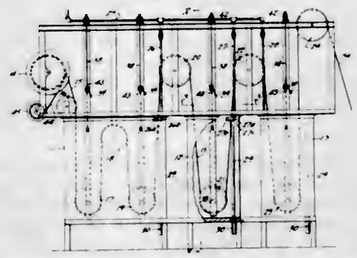
engaged in the track recess of the winding-on knob, spring-loaded means connected between the slide and the frame to urge the slide away from the winding-on knob into unloaded position, the slide being movable from un-loaded position to loaded position by one complete rotation of the winding-on knob in the direction to wind on the film, and the track recess being formed to release the slide after the slide has been moved fully radially inwards with respect to the winding-on knob, a sprocket rotatably mounted in the frame and disposed so as to be engaged by the usual longitudinal series of sprocket holes of the film, a cam disk integral with said sprocket, locking means mounted pivotally on the frame and urged into engagement with said cam disk by spring-loading means, a tooth on the slide disposed so as to engage with the locking means whereby when the slide is in un-loaded position the tooth holds the locking means out of engagement with the cam disk and when the slide is in loaded position the tooth allows the locking means to move to lock the cam disk, cocking means on the frame for the usual shutter, and a finger on the slide disposed so as to couple to the cocking means for the shutter.

2,751,828
LENS TUBE FOR SINGLE LENS REFLEX CAMERAS
Joseph Wirgin, Mount Vernon, N. Y.
Application May 20, 1954, Serial No. 431,017
1 Claim. (Cl. 95—64)



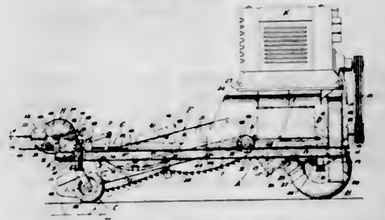
A lens tube extension for use in combination with a single lens reflex camera and a lens therefor provided with an automatic pre-set diaphragm mechanism comprising an open-ended hollow extension tube having means at one end thereof for connection to a camera, and means at the other end thereof for connection of a lens thereto, a post connected rigidly to and extending radially from the outer surface of said tube, a forked shaped member positioned at the end of said post defining a slot for a cable release therethrough extending in the axial direction of said tube, and a set screw extending through one side of said forked shaped member for securing a cable release in said slot.

2,751,829
MACHINE FOR DEVELOPING PHOTO-PRINTED COATINGS ON METAL WEBS
Norman B. Mears, West St. Paul, Minn., assignor to Buckbee-Mears Company, St. Paul, Minn., a corporation of Minnesota
Application June 25, 1951, Serial No. 233,323
2 Claims. (Cl. 95—94)



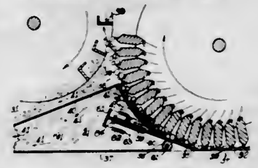
1. A machine for developing and baking photo-printed coatings of fragile character on both sides of an elongated metal web simultaneously comprising, means for guiding said web for longitudinal movement along a determined path with both of the photo-printed coatings exposed for treatment, said guiding means engaging the web along its longitudinal margins only, means spaced along said path for successively applying developing fluid to both of the coated sides of the web and then heating both to a temperature sufficiently high to bake on the coatings, said heating means comprising, a heating chamber containing radiant heating elements which are spaced from the path of said web at opposite sides and longitudinally thereof whereby said coatings are heated equally at opposite sides of the web solely by radiation and convection, and power-actuated means for continuously moving the web along said path and through said heating chamber under sufficient tension to support the web in spaced relation to said heating elements.

2,751,830
DIGGING AND DISINTEGRATING MACHINE FOR LUMP SOLIDS
Alfred Stauffer, Honey Brook, Pa., assignor to Lukens Steel Company, Coatesville, Pa., a corporation of Pennsylvania
Application April 11, 1951, Serial No. 220,378
2 Claims. (Cl. 97—10)



1. In a mobile unit for disintegrating hard lump solids, a disintegrating device mounted on the unit adjacent an end thereof, a digging conveyor having its digging end positioned adjacent the other end of the unit and having its discharge end positioned to deliver lump solids to the disintegrating device, a horizontal pivot for mounting the conveyor on the unit with freedom for vertical swinging movement of the digging end of the conveyor, a leaf spring shackled at one end to the digging conveyor adjacent the digging end thereof and shackled at the saddle and other end to the unit, said spring extending from the region of the digging end of the conveyor toward the discharge end thereof, a bellcrank mounted on the unit, a link interconnecting one arm of said bellcrank and said one end of the spring, power operated mechanism mounted on the unit for vertically moving the digging end of the conveyor, and a link interconnecting the other arm of said bellcrank and the power operated mechanism.

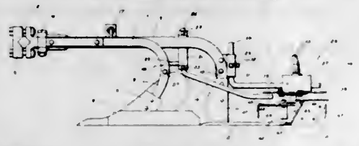
2,751,831
SOIL PULVERIZERS
Fay E. Null, Beavercreek Township, Greene County, Ohio
Application June 4, 1953, Serial No. 359,490
3 Claims. (Cl. 97—10)



1. In a soil pulverizer, the combination of, pickup means mounted on a rotor, a soil guide, said pickup means having small clearance with said soil guide, a

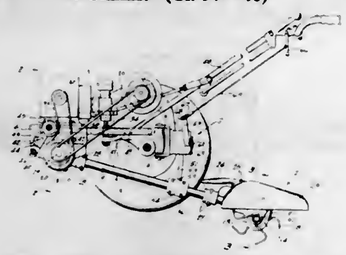
soil pocket bounded by said guide and two adjacent, undeflected pickup means whose radial depth is small relative to the normal plowing depth, said pickup means being deflectable by a large stone in the opposite direction to the rotation of said rotor, a restoring means attached to each pickup means, said pickup means being able to raise said rotor and said soil guide to pass over a stone when said pickup means are deflected by an amount to shorten their effective radii by substantially the depth of said soil pocket, a retractible slide on the front end of said guide, a roller mounted on said guide behind said slide, said slide being retractible under the push of a stone of appreciable size until it is flush with said roller which has a low coefficient of friction and can readily roll up the side of a large stone when assisted by the lift of deflected pickup means.

2,751,832
ROTARY PULVERIZER
Ernest V. Briscoe, Kerman, Calif.
Application October 11, 1952, Serial No. 314,378
1 Claim. (Cl. 97—35)



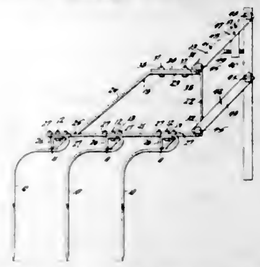
A plow structure including with a plow blade and a draft member from which the blade is supported, a horizontal arm rigidly supported from the draft member and projecting rearwardly from adjacent the front end of the blade, a sleeve turnably mounted on the arm, releasable clamping means normally holding the sleeve against rotation, a mounting plate rigid with and projecting laterally from one side of the sleeve, a vertically short rotary pulverizing unit clear of the ground disposed below and relatively close to the plate, and a drive motor directly supported on the plate and including a rotary drive shaft laterally offset from the arm projecting through the plate and directly connected to the pulverizing unit axially thereof; the height of the arm from the ground being sufficient to enable the unit to be swung upwardly on the plate side of the arm and about said arm as an axis.

2,751,833
POWER DRIVEN IMPLEMENT ATTACHMENT FOR GARDEN TRACTORS
Arleigh Glynn Hupp, Milwaukee, Wis., assignor to Andrus & Sceales, Milwaukee, Wis., a copartnership
Application May 12, 1950, Serial No. 161,700
4 Claims. (Cl. 97—40)



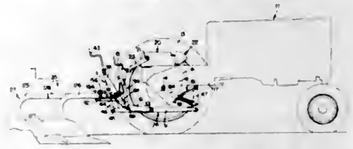
2. A rotary tiller for attachment to a two-wheeled garden tractor comprising, a longitudinal drive shaft rotatably disposed within a tubular sleeve, a transverse tiller shaft disposed adjacent to the rear end of said drive shaft, tiller tines disposed to revolve about said tiller shaft, a power transmission from said tractor to said drive shaft reduction gear means between the drive shaft and tiller shaft, means for pivotally securing the forward end of said tubular sleeve to said tractor to provide for pivotal raising and lowering of the tiller relative to the tractor, said power transmission including gears disposed to drive said drive shaft at said pivotal connection and tending to effect pivoting of said tiller under load, and an adjustable means for securing said tiller attachment to said tractor whereby said tiller attachment can be pivoted about a transverse axis adjacent the forward end of said tubular sleeve relative to said tractor and then secured in any one of a plurality of relative positions against pivoting of said tiller by said gears under power load.

2,751,834
VERTICALLY SHIFTABLE TRACTOR WEEDER
Lloyd Q. Hines, Sr., and Edward Henry Harris, Suffolk, Va., assignors to The Ferguson Manufacturing Company, Inc., Suffolk, Va., a corporation of Virginia
Application March 18, 1952, Serial No. 277,248
4 Claims. (Cl. 97—47.5)



2. In a weeder having a plurality of ground engaging teeth carried by a plurality of spaced rails, a pair of supporting frames for said teeth and rails each including a strap member bent to provide a lower rail engaging portion, a forward upstanding portion, an upper rearwardly extending portion, and a downwardly and rearwardly extending rear portion secured at its end to said lower portion, a strap member adjustably secured to said upper rearwardly extending portion of each frame, a pair of parallel links pivotally connecting each of said frames to a bar, one of said links being pivotally secured to the forward end of said strap member and the other of said links being pivotally secured to said frame at the junction of said lower portion with said forward upwardly extending portion, and depending lugs carried by one link of each pair and having adjustable means thereon for engagement with said bars to limit downward pivoting movement of said links.

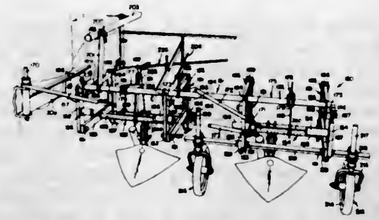
2,751,835
TOOL CARRIER
Walter H. Silver, Moline, Ill., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Application October 17, 1951, Serial No. 251,753
12 Claims. (Cl. 97—47.14)



2. An agricultural implement adapted to be connected to a tractor of the type having a power lift unit, said implement comprising a generally vertically swingable member disposed generally centrally of the tractor and attachable at its forward portion to the tractor, a second generally centrally disposed member pivotally connected for vertical swinging movement with said first member,

a transverse tool-receiving section carried by said second member and extending at its end portions laterally outwardly of said second member, a ground-engaging tool having forwardly facing laterally spaced apart socket means adapted to detachably engage said transverse section, generally centrally disposed means for detachably connecting said tool with said second member at a point spaced from said socket means, and lifting means connected with the laterally outer ends of said transverse tool-receiving section and extending generally upwardly for connection with the tractor power lift unit, said lifting means being adjustable for leveling the implement.

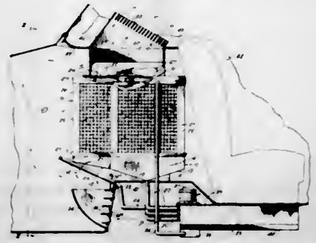
2,751,836
ATTACHMENT FRAME FOR TRACTOR PLANTERS
William P. Oehler and Charles H. Youngberg, Moline, Ill., assignors to Deere & Company, Moline, Ill., a corporation of Illinois
Original application March 22, 1950, Serial No. 151,276. Divided and this application August 25, 1952, Serial No. 306,852
2 Claims. (Cl. 97—47.41)



2. In an agricultural implement adapted to be mounted on a tractor: the improvement comprising an attachment frame adapted to be attached to the tractor and including two pairs of laterally spaced apart normally vertically disposed brackets, a transverse member rigidly connected to said brackets intermediate the ends of the latter, said brackets being fixed to said transverse member at laterally spaced apart points on the latter generally from the inner end portion to the outer end portion thereof, a first pair of generally rearwardly extending arms pivotally connected at their forward ends to the lower ends of the inner pair of brackets, a second pair of generally rearwardly extending arms pivotally connected at their forward ends to the lower ends of the outer pair of brackets, a transverse connecting bar rigidly connected at its ends to the arms of each pair of arms intermediate their ends so as to constrain said pairs of arms, respectively, for up and down movement together and to restrain lateral deflection of said arms, two pairs of upper links pivotally connected at their forward ends to the upper ends of said brackets, a transverse shaft rockably mounted in the upper ends of said brackets, and two pairs of normally vertically disposed standards, each having at its lower end a portion disposed in a generally horizontal fore and aft extending direction and carrying tool-receiving means, means for pivotally connecting the rear ends of said arms and links to the vertical portions of said standards, and a pair of arms fixed to said transverse shaft and connected with said transverse connecting bars for raising said rigidly interconnected arms and the associated standards connected therewith.

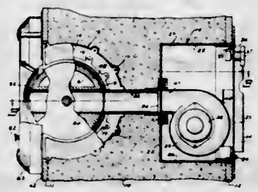
2,751,837
EVAPORATIVE COOLING APPARATUSES
Charles R. Carney, Jr., Dallas, Tex.
Application December 1, 1952, Serial No. 323,460
4 Claims. (Cl. 98—2)

1. In a vehicle provided with a rear deck compartment, a passenger compartment, and a substantially horizontal shelf separating said compartments; an evaporative cooling system comprising a cabinet disposed in said rear deck compartment having a closed base and a closed top, frame members mounted on said base supporting said top in spaced relation to said base providing open sides, porous material mounted over said open sides, said sides being spaced from the walls of the rear deck compartment to present a large evaporative surface, a forwardly opening air inlet opening in a wall of said rear deck compartment communicating with the exterior of said vehicle whereby forward movement of said vehicle will cause air to flow through said air inlet opening into said rear deck compartment to build up air pressure therein and thus create



a pressure differential between the interior of the rear deck compartment and the passenger compartment, outlet means mounted in said cabinet top extending through said horizontal shelf into said passenger compartment, the deck compartment functioning as a plenum chamber to distribute air evenly over the open sides of the cabinet and pass the same, because of said pressure differential, through the porous material into the interior of the cabinet and then through said outlet means into said passenger compartment, means in said cabinet for moistening the porous material from the upper end by gravity flow through the porous material, and a trough in said base for collecting water falling through said porous material.

2,751,838
VAULT VENTILATOR
Earle McKay Jones, Minneapolis, Minn., assignor to Protection Equipment Co., Inc., Minneapolis, Minn., a corporation of Minnesota
Application March 28, 1952, Serial No. 279,020
7 Claims. (Cl. 98—33)



1. In a vault ventilator, a housing having an open side and a curved side embedded in a wall, there being a continuous opening through the curved side of said housing and said wall, a rotor constituted as a cylindrical member in and extending transversely of said continuous opening and having its longitudinal axis mounted in the housing and its periphery disposed in adjacent relation to the curved side of said housing, said cylindrical member having a transverse passageway therethrough to be out of alinement with said continuous opening when the rotor is in a first position closing off the continuous opening and to be alined with said continuous opening when said rotor is in a second position, means biasing said rotor normally to situate it in said second position, means accessible at an inner side of said wall for rotating the rotor about its longitudinal axis from said second posi-

tion to said first position, first mechanism for retaining said rotor in said first position against force of said biasing means, and second mechanism for releasing the rotor when in said first position to action of said biasing means.

2,751,839
VENTILATOR FOR STORM WINDOWS
Ben M. Moore, Nashville, Tenn.
Application August 25, 1952, Serial No. 306,175
4 Claims. (Cl. 98—96)



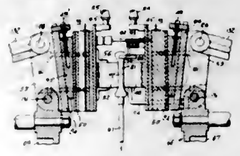
1. A ventilator for storm windows or the like, comprising: a fixed horizontally elongated vertically disposable sheet-material panel having a plurality of ventilating openings therein: a slide panel of sheet material overlying and substantially co-extensive with said fixed panel and having ventilating openings therein of such sizes and positions as to register with the openings in said fixed panel in one relatively adjustable position of said panels, and to be out of registry therewith in another position thereof; an upper strip of sheet material having its central portion overlying the upper edges of said panels proper, having an inner upturned flange attached to an extension of said fixed panel and forming a pane-engaging strip therewith, and having an outer downturned flange forming with said fixed panel a guide channel for said movable panel, the top of said central portion constituting a ledge for receiving the lewer edge of said pane and a bridging and sealing putty wedge between itself and the lower outer face of said pane, and a lower strip of sheet material having a horizontal central portion underlying and supporting said movable panel, having an upturned flange forming with said fixed panel a guide channel for said movable panel, having a downturned flange connected to said fixed panel to constitute therewith an anchorage strip adapted to seat vertically against the pane seat of the window frame, and being of a thickness and height permitting a retaining and sealing bridging putty wedge to be formed between itself and the outer edge of said seat, whereby said ventilator can be installed during or after window fabrication.

2,751,840
COOKING UTENSIL
Mary Etta Layton, Greensboro, N. C., and Gilbert Adamec, Bronx, N. Y.; said Adamec assignor to said Layton
Application January 22, 1953, Serial No. 332,704
4 Claims. (Cl. 99—349)



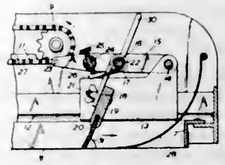
1. A cooking utensil comprising a bottom part having a peripheral flange and a plurality of longitudinally spaced raised portions with flat surfaces, said flat surfaces adapted to support bacon slices and bacon lifters hingedly connected to the ends of the raised portions and having rearwardly extending handle projections adjacent the peripheral flange, a cam slide connected to the peripheral flange for adjustment therealong, and said slide having cam projections adapted as the slide is moved to engage the respective handle projections of the respective bacon lifters to jointly lift the same.

2,751,841
METHOD OF AND MACHINE FOR PRINTING ON COLLAPSIBLE ARTICLES
William F. Grupe, Lyndhurst, N. J., assignor to Peerless Roll Leaf Company, Inc., Union City, N. J., a corporation of New Jersey
Application February 9, 1954, Serial No. 409,143
13 Claims. (Cl. 101—44)



1. Apparatus for printing indicia on open-mouthed containers of the type having a base and flexible side walls, comprising a movable carrier having a plurality of container closures, each constructed to receive and support one of the containers, a container printing station beside the carrier, stop motion drive mechanism for operating said carrier to bring said closures successively into register with said station, means including a vacuum duct through each closure for impressing a vacuum on each container as it is disposed at the printing station, to thereby move the container walls into contact with each other so as to present, essentially, while under vacuum, a single thickness combined wall to take the printing impression, printing impression means at said station including cooperating printing members, at least one of which is yieldable, and intermittently operated mechanism synchronized with said carrier stop drive mechanism for moving said printing means against said articles while they are so disposed at the printing station under vacuum.

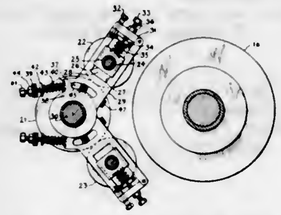
2,751,842
SCREEN STENCIL-PRINTING MACHINES
James Napier McLaurin, Edinburgh, Scotland, assignor of one-half to E. T. Marler Limited, London, England
Application June 8, 1953, Serial No. 359,987
Claims priority, application Great Britain December 13, 1952
2 Claims. (Cl. 101—123)



1. In a screen stencil-printing machine having a screen mounted in a screen frame and a squeegee reciprocable over the screen, a squeegee assembly comprising a transverse suspension supporting the squeegee for rocking motion thereon, levers supporting said transverse suspension, slide blocks movable in guides at each side of the screen frame, means for pivotally attaching the forward ends of said levers to said slide blocks, endless conveyor chains travelling over front and rear sprockets at each side of said screen frame, a pivotal connection between the rear end of each of said levers and its adjacent conveyor chain, spring means normally urging the

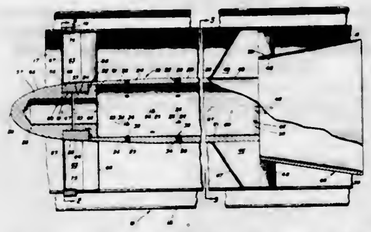
squeegee to rotate about the axis of the transverse suspension in a direction to cause the squeegee to rock forwards when lifted clear of the screen by the travel of said pivotal connections around the front sprockets, adjustable pressure means carried by said levers and operative to hold the squeegee in resilient pressure contact with the screen when said slide blocks are carried forwards by the conveyor chains to effect the printing stroke, and abutment means at the rear end of the screen and operative to rock the squeegee backwards about its axis of transverse suspension when said pivotal connections pass around the rear sprockets.

2,751,843
SELF-ADJUSTING FORM ROLL
Harry W. Faeber, Larchmont, N. Y., assignor to Time, Incorporated, New York, N. Y., a corporation of New York
Application August 29, 1952, Serial No. 307,056
4 Claims. (Cl. 101—349)



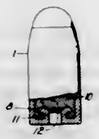
1. In a printing machine having a plate cylinder and a distributor roll coupled in locked-up position by at least one form roll, the combination comprising means for adjusting the form roll comprising a radial arm pivotable about the axis of the distributor roll for supporting each end of the form roll radially and circumferentially of the distributor roll, means on each arm for pressing the form roll against the distributor roll with an adjustable resilient pressure, means for pivoting each arm toward the plate cylinder with a resilient pressure and means for clamping the pivotal position of each arm when the form roll is in contact with the plate cylinder in locked-up position.

2,751,844
IGNITION FLARE
Harold W. Bixby, Encino, Calif., assignor to the United States of America as represented by the Secretary of the Navy
Application June 30, 1952, Serial No. 296,334
11 Claims. (Cl. 102—49)



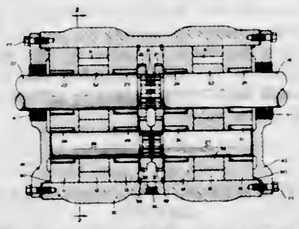
1. In combination with an aerial missile of the ramjet type having a forward diffuser section and a tailpipe section, a flare holder assemblage for holding an ignition flare in the combustion chamber of said tailpipe section, comprising, a body having a portion thereof with a bore for receiving said flare, means for holding said flare in position in said bore, means secured to the rear portion of said body for freely supporting said body against said tailpipe, means located between said diffuser and tailpipe sections, and means secured to the forward portion of said body and to said last mentioned means for rigidly supporting said body, thereby making it possible for said assemblage to expand and contract independently of said aerial missile and thus preventing straining and warpage of parts under the intense heat during combustion of the air-fuel mixture.

2,751,845
COMPOUND PROJECTILE
George E. Frost, Hamden, Conn., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application March 5, 1952, Serial No. 274,870
6 Claims. (Cl. 102—91)



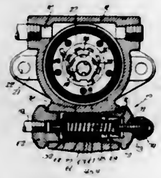
1. A projectile comprising a core and a jacket, said jacket having a mushroom shaped protuberance embedded in said core comprising a stem portion of substantially uniform cross-sectional dimensions throughout its length and terminating in a closed end having a rim thereabout which extends outwardly from the walls of the stem into said core.

2,751,846
ROTARY PUMP OR MOTOR
Robert Lapsley, Buchanan, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a corporation of Michigan
Application April 18, 1952, Serial No. 283,058
9 Claims. (Cl. 103—4)



1. A machine operable as a motor when supplied with fluid under pressure or as a pump when power-driven, comprising a tubular casing, a series of three discs disposed end to end in said tubular casing, said discs extending transversely of the axis of said tubular casing and with the outer peripheries thereof in sealing and bearing contact with the adjacent inner periphery of said tubular casing, end plates for closing the ends of said tubular casing, locating means to hold said discs in proper relationship, a first shaft extending through one of said end plates and said discs, said first shaft being journaled in at least one disc of said series of discs, second and third shafts extending through said series of discs, said second and third shafts being journaled in at least one disc of said series of discs, an impeller secured to said first shaft within the intermediate disc of said series of discs, rotatable valve means secured to said second and third shafts within the intermediate disc of said series of discs, means for synchronizing rotation of said first, second and third shafts whereby said impeller and said valve means rotate in synchronism, an inlet fluid passageway communicating with said impeller and said valve means, and an outlet fluid passageway communicating with said impeller and said valve means.

2,751,847
FUEL PUMP
Robert W. Erikson, Rockford, Ill., assignor to Sundstrand Machine Tool Co., a corporation of Illinois
Application February 28, 1952, Serial No. 273,810
8 Claims. (Cl. 103—42)



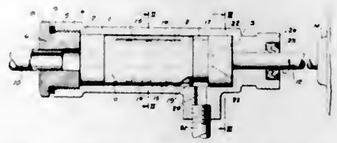
1. An oil burner pump having, in combination, a casing, a pumping means in the casing, a reservoir in the casing to which the inlet of the pumping means is connected, a bore in the casing closed at one end to form a valve chamber, an inlet port opening to said chamber and connected to the outlet of the pumping means, an outlet in the bore leading from said chamber, a piston valve slidable in said bore and controlling the outlet port, said valve having a closed end subject to the pressure of the fluid in said valve chamber and urged thereby toward open position, means positioned in the portion of the bore separated from the valve chamber by the piston valve for biasing said valve towards closed position, and bypass means for the valve including a bypass port opening into said bore at a point remote from the valve chamber, a bypass passage communicating at one end with the bypass port and at the other end with the reservoir, a passage in the casing constantly open at one end to receive a portion of the fluid in the valve chamber and opening at the other end to the bore at a point spaced inwardly from said valve chamber, passage means in the exterior surface of the piston valve and spaced from the closed end thereof and movable with said valve relative to said passage to control flow from said passage to said bypass port, and sealing means for sealing the portion of the bore separated from the valve chamber by the piston valve from the liquid in the valve chamber and from liquid flowing through said bypass means in all operating positions of said piston valve.

2,751,848
MEANS FOR RAISING LIQUIDS FROM GREAT DEPTHS
Edward W. Smith, Melrose Highlands, Mass.
Application July 11, 1951, Serial No. 236,152
1 Claim. (Cl. 103—75)



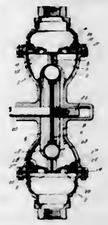
In combination with a well casing having a wall providing an enclosed confined liquid well column, means for drawing the liquid from the top of the well casing comprising a one way valve at the bottom of the well casing permitting liquid to flow in the well casing, an outlet in the well casing above the top of the liquid well column, a fluid displacement member at the top of the liquid well column, means connected to said member for periodically applying motion to the member at the resonant frequency of the liquid well column wherein the liquid well column is one half wave length and odd number of half wave lengths referred to the frequency and means for gradually increasing the magnitude of the applied aforesaid motion to said fluid displacement member until full resonance in the liquid well column of the well has been built up to the desired value, said last mentioned means comprising hydraulic coupling means having two opposing sections connected between the displacement member and the means for periodically applying motion to said member and further having pressure release means between the opposing sections of said coupling means.

2,751,849
PUMP
Walter A. Sherwood, Hempstead, N. Y., assignor to The Farmingdale Corporation, Farmingdale, N. Y., a corporation of New York
Application November 1, 1954, Serial No. 466,095
10 Claims. (Cl. 103—84)



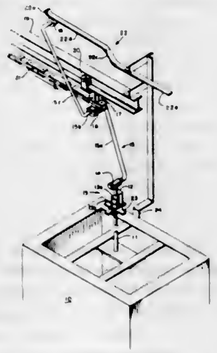
1. A pump for viscous fluids comprising, a stator provided with a cylindrical chamber, a cylindrical rotor freely rotatable within said chamber and having a complementary surface concentric with the surface of said chamber and defining a clearance therebetween, means for rotating the rotor, at least one radially floating elongated axially disposed vane mounted on said rotor to bear resiliently against the surface of said chamber along at least a major part of the length thereof, an axial bore in said rotor, at least one radial passage providing communication from said axial bore to the surface of the rotor at a point adjacent to said vane on the upstream side thereof considered circumferentially with respect to the direction of rotation of the rotor, means for supplying fluid to said axial bore and means for conducting fluid under pressure from the clearance on the downstream side of said vane and for delivering said fluid.

2,751,850
DIAPHRAGM STRUCTURE AND DEVICE EMBODYING IT
Charles D. Hoover, Fort Wayne, Ind., assignor to Tokheim Corporation, a corporation of Indiana
Application April 25, 1949, Serial No. 89,448
6 Claims. (Cl. 103—150)



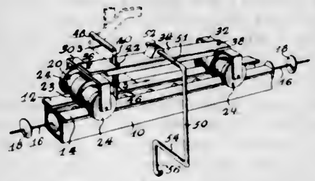
1. In a diaphragm device having a casing and an operating member reciprocable with respect to the casing through a stroke of predetermined length, a diaphragm structure comprising a central piston portion carried with the operating member and spaced radially from a surrounding casing portion, an annular working portion connected at its inner and outer peripheries respectively to said piston portion and said casing portion, said working portion including axially opposite walls outwardly convex with respect to each other and each extending in section directly from said piston and casing portions through an arc of substantially 180° between its inner and outer peripheries, filling means contained between said walls and mutually supporting each from the other, said predetermined stroke length being between 1 and 1.25 times the wall-section diameter.

2,751,851
APPARATUS FOR CONVEYING ARTICLES
Norman S. Curtis and Robert C. Juvinall, Indianapolis, Ind., assignors to Ransburg Electro-Coating Corp., Indianapolis, Ind., a corporation of Indiana
Application September 10, 1952, Serial No. 308,856
4 Claims. (Cl. 104—93)



1. An article conveying apparatus comprising a generally horizontal conveyor track, a plurality of trolleys movable along said track, means for propelling said trolleys in fixed spaced relation along said track, a plurality of rigid adjustment arms each pivotally mounted at a point between its ends on a trolley and pivotally carrying at its lower end an article support, and an article-positioning cam spaced from and extending along a predetermined portion of said conveyor track, said cam having an extended cam surface adapted to engage the upper portion of said adjustment arms as the arms move on said trolleys along said predetermined track portion to change the position of said adjustment arms and thereby to vary the horizontal spacing between successive article supports moving along said track portion.

2,751,852
MONORAIL-TYPE CONVEYOR WITH DISENGAGEABLE DRIVE
Richard J. Joy, Montreal, Quebec, Canada
Application November 2, 1953, Serial No. 389,818
5 Claims. (Cl. 104—94)



1. A monorail-type conveyor comprising in combination, a cable-way of substantially U-shaped form in general cross section with transverse horizontal flanges extending from the top of both sides of said U to constitute spaced-apart supporting surfaces, a flexible driving cable extending within said cable-way section beneath said guiding surfaces, a plurality of stop members mounted on said flexible cable, said stop members extending outwardly from said cable on all sides and being fixed thereto in regular spaced-apart relationship and having a configuration suitable for free passage within said cable-way U-section, a mobile carriage having a main body and spaced-apart wheel assemblies mounted for trans-axial pivotal movement at opposite ends of said body, said mobile carriage being mounted on top of said cable-way guiding surfaces with said wheel assemblies having portions of increased diameter descending beneath and between the top surfaces of said guiding surfaces to prevent lateral displacement of said carriage, said carriage being otherwise free for upward vertical movement relative thereto, a resiliently biased cable-engaging plunger mounted for sliding movement in said carriage body so as to extend perpendicularly downwards therefrom between said cable-way guiding surfaces, said cable-engaging plunger including a bifurcate end portion adapted to fit over said cable and engage with said spaced-apart stop members, a coil spring mounted over said dependent cable-engaging plunger adapted to resiliently urge said plunger into contact with said cable, said cable-engaging plunger having an extended portion projecting transversely outwards to one side and above said carriage body, said extension being adapted to act as a lever raising said cable-engaging plunger from engagement with said cable, and a load-carrying member pivotally mounted to said carriage body and extending beneath said carriage body and cable-way so as to be adapted to suspend a load directly beneath said carriage and cable-way.

2,751,853
TRANSPORTATION SYSTEMS
John B. Templeton, Dallas, Tex.
Application December 4, 1950, Serial No. 199,102
6 Claims. (Cl. 104—135)

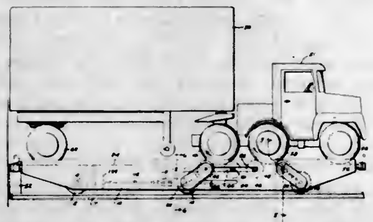


1. A transportation system comprising: a plurality of widely spaced sets of aligned piles, the piles of each set of piles being aligned laterally of two spaced parallel rows of piles; a cap beam on each set of piles; a cross arm suspended from each cap beam; a pair of rollers rotatably mounted on each of said cross arms, the rollers on the cross arms being aligned in two spaced parallel rows, and a vehicle having a main platform and a pair of rails secured to and beneath the main platform in spaced parallel relationship to one another, one of said rails engaging the rollers of one of the rows and the other of said rails engaging the rollers of the other of the rows during the movement of said vehicle, said vehicle being supported on said rollers.

2,751,854
CONSTRUCTION OF TRUCK-DRIVEN RAILWAY CARS
Lars C. Pedersen, Chicago, Ill.
Application July 27, 1951, Serial No. 238,967
3 Claims. (Cl. 105—159)

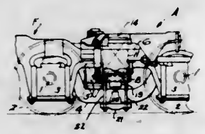
2. The combination of a truck-trailer having dual sets of driving wheels and a railway car having wheels to run on rails, a platform on said railway car to support said truck-trailer, two pairs of sets of spaced rollers mounted on said car cross-wise of the same, the driving wheels of the truck-trailer resting on the periphery of each pair of said sets of rollers medially therebetween, and driving means between one set of each pair of sets of said rollers and said car wheels to transmit rotary movement of the

driving wheels of said truck-trailer to revolve said rollers to move said railway car forward on the rails, each pair of sets of rollers including one set of driving and one set of idler rollers, both said sets of idler rollers removable when a single axle truck is positioned on the freight



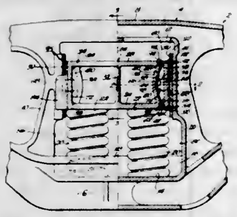
car, and means for moving one of said sets of driving rollers forward adjacent the other set of driving rollers, said means including brackets which support said set of driving rollers and a screw-threaded rod member for moving said brackets and rollers in a back and forth manner.

2,751,855
RAILWAY TRUCK SPRING SUPPORT STRUCTURE
William C. Krautheim, Pasadena Park, Mo., assignor to General Steel Castings Corporation, Granite City, Ill., a corporation of Delaware
Application November 7, 1952, Serial No. 319,202
12 Claims. (Cl. 105—196)



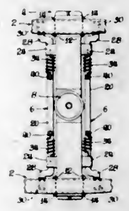
1. In a railway truck comprising spaced wheel and axle assemblies and a structure carried thereby, including a spring seat mounting, a spring seat on said mounting, a spring unit on said spring seat, and a load-carrying bolster having an end portion mounted on said spring unit, there being a vertical opening in said mounting below the spring seat providing access from below the mounting to that portion of the spring seat exposed by the opening, there being bearings on said structure positioned at opposite sides of the spring seat and arranged to detachably mount lifting device support elements extending downwardly therefrom and beneath the opening in the spring seat mounting.

2,751,856
SNUBBED TRUCK
Egbert J. Maatman, South Holland, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application December 1, 1950, Serial No. 198,635
14 Claims. (Cl. 105—197)



1. In a railway car truck, a side frame having a friction surface thereon, a bolster member spring supported from the frame adjacent the surface, a friction shoe member carried by the bolster member in engagement with the surface, a curved concave depression in one of said members, a curved leaf spring interposed between the bolster member and shoe member and having a flexed portion received within and continuously complementarily abutting said depression, and bevelled surfaces on the top and bottom of one of the members accommodating rocking of the members relative to each other, about an axis extending substantially transversely of the side frame.

2,751,857
SPRING BOLSTER TRUCK
Charles L. Heater and Claus J. Werner Clasen, Chicago, Ill., assignors to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application April 22, 1952, Serial No. 283,735
8 Claims. (Cl. 105—197)



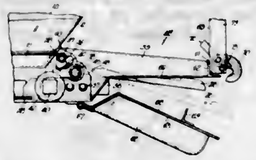
8. A railway car truck comprising a frame structure, a bolster extending transversely thereof, generally horizontal slots in said frame structure, members positioned in said slots in direct slidable frictional engagement with the frame structure for movement therein lengthwise of the structure, shafts at opposite sides of the bolster rotatably journaled within complementary openings thereof, crank arms on said shafts journaled in said members, and spring means connected to the shafts and bolster for resisting movement of the shafts under the load of the bolster.

2,751,858
DISCHARGE OUTLET COVER PLATE
Clarence J. Koranda, Western Springs, and Harry A. Withall, Chicago, Ill., assignors to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application February 2, 1955, Serial No. 485,789
5 Claims. (Cl. 105—282)



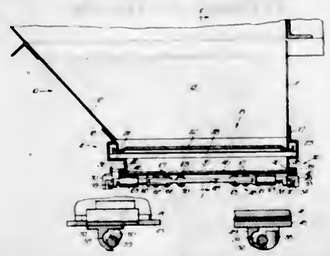
1. In a discharge valve for mounting on the underside of a hopper for a railway car or the like, in combination, a housing defining a downwardly directed discharge opening, a removable plate extending transversely across said opening for closing the same, a stationary keeper depending from one side of said housing below said plate and having an upwardly facing downwardly and inwardly inclined wall, a movable keeper pivotally mounted on and depending from the opposite side of said housing below said plate to swing toward and away from said stationary keeper and having an upwardly facing downwardly and inwardly inclined wall, a locking bar having the undersides of its ends inclined upwardly to wedgingly engage the respective inclined walls of said keepers and underlying said plate to hold the same in closed position, and means holding said locking bar in plate supporting position.

2,751,859
OUTLET ASSEMBLY WITH COMPLETELY ENCLOSED SLIDING GATE FOR RAILWAY CAR HOPPER
George E. Dath, Mokena, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application January 15, 1953, Serial No. 331,352
4 Claims. (Cl. 105—282)



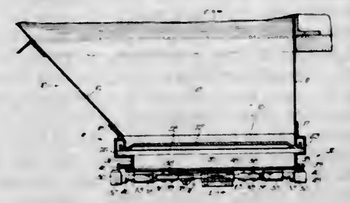
1. An outlet assembly for a railway car hopper comprising, in combination, a frame adapted to be secured around the hopper opening, a gate carried by said frame and slidable thereon horizontally from a position within said frame where it closes off said opening to a position without said frame where it permits the discharge of lading from said hopper, upper and lower shroud means positioned at one end of said frame for receiving said gate in its open position and enclosing it to prevent contamination by extraneous matter, said upper shroud means being fixed to said frame, said lower shroud means being hinged to said frame at said end thereof whereby it can be swung downwardly to permit removal of said gate from said frame for cleaning purposes, latching means carried by said frame for holding said lower shroud means in closed position, and track means carried by said lower shroud means for supporting said gate when the same is moved to its open position, said track means being swingable with said lower shroud means.

2,751,860
REMOVABLE CLOSURE FOR DISCHARGED OUTLET FOR RAILWAY CAR HOPPER
George E. Dath, Mokena, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application March 4, 1953, Serial No. 340,367
9 Claims. (Cl. 105—282)



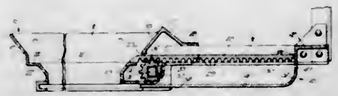
1. For combination with a railway car hopper having a discharge opening, a horizontally slidable gate for closing said opening, and a discharge chute beneath said gate; a removable closure plate for application to the underside of said discharge chute for protecting the inner surface of said chute and the under surface of said gate from contamination by extraneous material, a pair of keepers adapted to depend from opposite sides of said chute, bearing means on the underside of said closure plate, and a single latch bar extending the length of and beyond the ends of said closure plate and rockably mounted on said bearing means, said latch bar having a journal portion longer than the length of said bearing means in an amount sufficient to permit movement of the ends of said latch bar endwise into and out of engagement with said keepers, the ends of said latch bar being eccentric relative to said journal portions and when in engagement with said keepers cooperating therewith and with said closure plate for camming the latter into sealing engagement with said chute and holding it in closed position, said latch bar in cooperation with said keepers constituting the only means for locking said closure plate in operative position and permitting bodily removal thereof by reversal of the movement of said ends of said latch bar.

2,751,861
PROTECTING MEANS FOR GATE AND CHUTE OF A RAILWAY CAR HOPPER
Harry A. Withall, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application February 24, 1953, Serial No. 338,227
20 Claims. (Cl. 105—282)



1. For combination with a railway car hopper having a discharge opening, a horizontally slidable gate for closing said opening, and a discharge chute beneath said gate for directing the flow of lading from said opening and having a downwardly facing sealing surface; a removable closure plate having a flat upper surface for cooperating with said sealing surface of said discharge chute for protecting the inner surface of said chute and the under surface of said gate from contamination by extraneous material, a pair of keepers depending from opposite sides of said chute below said closure plate; and latch bar means carried by the underside of said closure plate, cooperating with said keepers, and constituting the only means to latch said closure plate in operative position on said discharge chute and permitting bodily removal thereof from said discharge chute.

2,751,862
HOPPER DISCHARGE OUTLET STRUCTURE AND SEALING MEANS THEREFOR
George B. Dorey, Westmount, Quebec, Canada, assignor to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application May 1, 1953, Serial No. 352,530
7 Claims. (Cl. 105—282)



1. In a load containing hopper having a discharge opening through which lading can flow by gravity, a sliding gate for contacting said lading and closing said opening, a frame around said discharge opening and slidably supporting said gate and providing therewith a lading tight closure for said discharge opening, an auxiliary gate slidably mounted on said frame underneath said gate to slide parallel thereto and when closed protecting the underside of said gate from contamination by extraneous material, and means operatively interconnecting said gates whereby the same are moved conjointly.

2,751,863
PARTITIONS
Joseph Usinger, Salt Lake City, Utah
Application May 18, 1953, Serial No. 355,457
1 Claim. (Cl. 105—376)



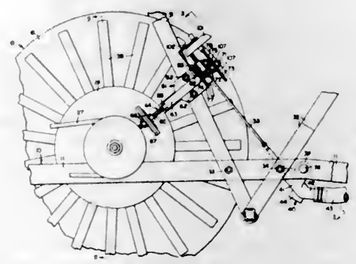
In a partition, the combination of a pair of channel irons, each having a base and a pair of flanges extending the full length of the channel normal to the base; means on said irons for mounting said irons in pairs in spaced relation on a pair of supporting media, respectively, each of said flanges having a plurality of vertically spaced, angularly disposed registering slots, the slots in one channel iron of a pair being aligned in a horizontal plane with the slots in the other channel iron of that pair; a plurality of stops mounted in said slots, each of said stops comprising a closed, rectangular loop having one side in two of said slots in two of said adjacent flanges, respectively, its opposite side resting on the outer edges of said two flanges, and its other two sides engaging the outer faces of said two flanges, respectively; and a plurality of planks, each plank having an end disposed between the flanges of one of said irons, and resting on one of said stops.

2,751,864
BANANA CORE EXTRACTION TOOL
Henry G. Parker, New Orleans, La.
Application August 10, 1953, Serial No. 373,325
2 Claims. (Cl. 107—1)



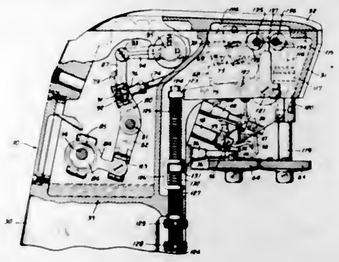
2. A combination banana core extractor and funnel for filling the banana with solids after the core has been removed, comprising a thin walled tubular body adapted to be inserted axially into a banana, said tubular body having one end flared to provide a handle portion and also to provide a concave recess adapted to fit the contour of a human finger and to permit sealing of the end of the tubular body during extraction of the core and also to provide a funnel for filling the banana with solids after the core has been removed, and a longitudinal knife secured within said tubular body having a wedge-shaped cross section providing a knife edge adjacent the opposite end of said tubular body and extending transverse to the axis thereof, said edge being adapted to cut through the banana when the tubular body is inserted into the banana, said knife also having a butt end parallel to said knife edge and lying in a plane transverse to the axis of the tubular body, said butt end being adapted to engage the core and substantially support the same within the tubular body during removal of the core from the banana.

2,751,865
TRANSPLANTER
Frank H. Horey, Yakima, Wash., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Application September 23, 1952, Serial No. 311,084
5 Claims. (Cl. 111—2)



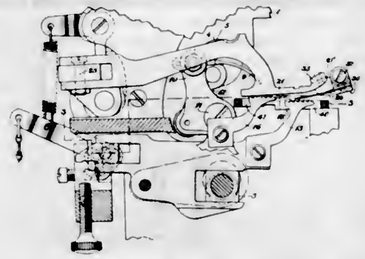
1. A transplanter including frame means, a rotatable shaft, a shaft support on said frame means rotatably receiving said shaft, a valve-operating member movably mounted on said shaft support and actuated by movement of said shaft, a spring acting between said valve-operating member and said valve and serving normally to transmit movement of said valve-operating member in one direction to said valve, and controllable means connected with said valve-operating member and acting against said spring for holding said valve closed notwithstanding movement of said valve-operating member in said one direction.

2,751,866
CUP FEED SEWING MACHINES
Albert M. Schweda, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a corporation of Illinois
Application March 23, 1953, Serial No. 344,092
14 Claims. (Cl. 112—16)



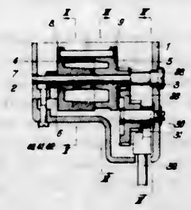
1. In a cup feed sewing machine a plurality of feed cups arranged to support and advance the work to be seamed, stitch forming mechanism cooperating with the work as it is advanced by the feed cups, means for imparting a step of movement to said feed cups upon each stitch forming cycle, said means including elements freely movable in relation to each other at all times to vary the length of said step of movement, means operable at will by the leg of the operator during operation of the machine for shifting said elements in relation to each other and thereby varying the extent of said step of movement of the feed cups, and spring means normally urging said elements into a predetermined relation.

2,751,867
SEWING MACHINE SHIRRING MEANS
John M. Washburn and Bernard N. Pierce, West Hartford, Conn., assignors to The Merrow Machine Company, Hartford, Conn., a corporation of Connecticut
Application August 5, 1952, Serial No. 302,682
10 Claims. (Cl. 112—134)



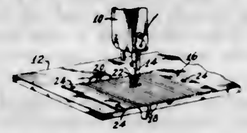
1. In a sewing machine shirring mechanism having a pair of differential feeding devices and a presserfoot opposed to said devices, a needle plate provided with a pair of work engaging surfaces disposed at different levels with respect to said presserfoot and a sloping surface extending between said two surfaces, said pair of surfaces being formed with apertures through which said feeding devices cooperate with said presserfoot, and a separator blade extending over one of said feeding devices into proximity with said sloping surface between the levels of said work engaging surfaces to direct work material advancing between said blade and the last mentioned feeding device into contact with said sloping surface whereby further advancement of said material over said sloping surface forms said material into uniform loops beneath said presserfoot.

2,751,868
SEWING MACHINE
Max Schwab, Schwetzingen, Germany
Application June 19, 1953, Serial No. 362,868
Claims priority, application Germany June 20, 1952
8 Claims. (Cl. 112—210)



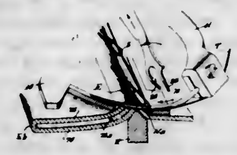
1. In an electrically operated and electromagnetically controlled sewing machine employing a main drive member operable at a predetermined speed the combination comprising an auxiliary drive member for actuating said machine at a reduced speed, a stitch setting means for changing said machine over between forward and reverse sewing of said machine, an electromagnet for actuating said stitch setting means when energized to effect changes in sewing direction of said machine, a control device adapted to actuate said auxiliary drive member and switching means for correlating the action of said control device and said electromagnet comprising a lever operable by an operator, means connected to said lever to actuate said switching means in only one direction to selectively energize and deenergize said control device and said electromagnet in a given cycle of operation.

2,751,869
SEWING MACHINE GUIDE
Charles H. Walcoff, Trenton, N. J., assignor to Joseph Fishberg, Trenton, N. J.
Application December 18, 1953, Serial No. 399,048
2 Claims. (Cl. 112—260)



1. A guide for a sewing machine comprising a flat thin plate adapted to be placed on the bed of the machine in the proximity of the needle and between the needle and the operator, said plate having a plurality of straight parallel ridges which form grooves therebetween, said grooves having such width as to enable the fingers of the operator to easily feel and follow them thru the work in guiding the work toward or away from the needle without the need for observing said plate, said grooves extending clear to that edge of the plate which is adapted to be positioned nearest the operator without any increase in level from the grooves to said edge, whereby the fingers of the operator can smoothly enter the grooves, and means located outside the area of the grooves and adjacent one side of the plate for fastening the plate to the bed of the machine, the location of said fastening means being such and the bottom of said plate being so constructed and arranged that tightening pressure on said fastening means cannot change the dimensions of said grooves.

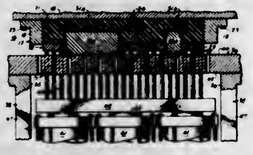
2,751,870
METHOD OF MAKING FELLING STITCHES
Mario Buono, Fort Washington, N. Y., assignor to U. S. Blind Stitch Machine Corp., New York, N. Y., a corporation of New York
Original application August 11, 1953, Serial No. 373,574. Divided and this application April 2, 1954, Serial No. 420,478
5 Claims. (Cl. 112—268)



1. A method of sewing a lining to a tubular sleeve, said sleeve having a longitudinal axis, said sleeve having a body which has a fold-edge at one end thereof, said body being integral at said fold-edge with an external flap, said external flap extending longitudinally inwardly from said fold-edge towards the other edge of said sleeve to overlie the respective adjacent part of said body, which consists in locating said adjacent part of said body and said flap on a work-support while keeping the major part of said body off said work-support, intermittently turning said supported body in successive feeding strokes in a feeding direction which is transverse to said longitudinal axis to feed the top of said respective adjacent part and the top of said flap towards a sewing station, forming an upwardly directed U-shaped bight which has two legs and a peak in said top of said adjacent part and also in said top of said flap, the line of said peak being formed in said feeding direction, said fold-edge being kept at the right end of said sleeve as viewed at an observation station which is located in front of said sewing station, said bight being formed intermediate said fold-edge and the other edge of said flap, applying the lining to the leg

of said bight which is the left leg thereof as viewed at said observation station, and forming chain stitches at said sewing station which sew said lining to said left leg, said chain stitches being formed during the intervals between successive feeding strokes, said chain stitches being formed at said sewing station by needle thread which is forced through said flap and said lining in right-to-left sewing strokes as viewed at said observation station, said needle thread being successively engaged in each sewing stroke with the right leg of said bight and with said left leg and said lining as viewed at said observation station, the sewing thread being enchained to form chain stitches at the right of said peak as viewed at said observation station.

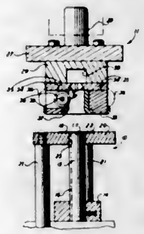
2,751,871
FORMING APPARATUS
Alfred P. Higgins and Garland R. Gordon, Fort Worth, Tex., assignors, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application October 11, 1951, Serial No. 250,906
4 Claims. (Cl. 113—44)



1. Apparatus for shape-forming planar metallic sheets, comprising a die-holder for mounting an open housing with a flexible compressible substance mounted therein having a planar, resilient die-forming face, a die-support of rectangular form having a multiplicity of rows of equally spaced holes, each successive row of holes being displaced one-half the center distance between the holes, said rows of holes arranged substantially throughout the entire working area of the die-support, said rows of holes adapted to accommodate means permitting the readily, removable mounting and variously locating of a plurality of male die members in position to be engaged by said die-forming face, means for supporting said die-support solely at its edges, an integral clamping means positioned in juxtaposition to said male die members having a multiplicity of openings for receiving said male die members and adapted with the latter to support work pieces in position to be formed, a plurality of reciprocable rods passing through certain of said holes in said die-support to engage said clamping means with their upper extremities, and pressure means operative upon the lower extremities of said rods for applying pressure upon said clamping means, which pressure is directed in opposition to the pressure exerted, in the forming operation, by said resilient die-forming face against the draw ring portions of said work pieces interposed between said resilient die-forming face and said clamping means to maintain an effective clamping pressure on said draw ring portions while said work pieces are formed.

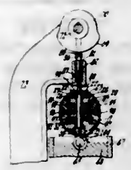
2,751,872
DRAWING AND INDENTING DIE
Albert Hodes, Burbank, Calif., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application October 12, 1951, Serial No. 251,065
1 Claim. (Cl. 113—46)

An apparatus for drawing and grooving an article from a blank of material comprising a drawing punch element having a free end portion of a contour to which the interior of the article is to be formed and a groove extending longitudinally through the free end portion, a support for the punch element, a pressure pad to support a blank of material normally adjacent the free end of the drawing punch element, a drawing die element having an entrance end and an opening in a side of the die element beyond the entrance end adjacent to the groove in the punch element when the elements are in closed positions, a support for the drawing die element, means to cause relative movement of the supports through operating cycles to cause in-



terengagement of the punch element with the die element to draw the blank into a cup-shaped article, and a roller rotatably carried by the support for the die element and having its periphery extending through the opening in the die element to roll a portion of the material into the groove following the elements forming the material to complete the cup-shaped article with a groove extending the full depth of the cup-shaped article including the bottom thereof.

2,751,873
CAN BODY SOLDERING APPARATUS
Custis S. Woolford, South Orange, N. J., and William H. Schoenfeld, Jr., Glen Ellyn, Ill., assignors to American Can Company, New York, N. Y., a corporation of New Jersey
Application September 4, 1951, Serial No. 244,976
7 Claims. (Cl. 113—60)

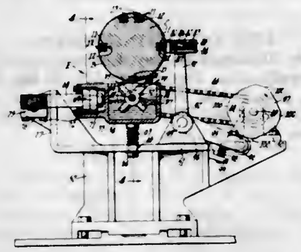


1. A machine for making can bodies, comprising an inside horn for supporting a can body having a side seam, means for intermittently advancing said can body along said horn to and past a solder applying station, a rotating solder applying roll disposed at said station and extending longitudinally of said horn adjacent the path of travel of said side seam, said roll being spaced from said horn and from said side seam as said body is moved into and out of said station by said advancing means, and pressure means disposed at said station for moving said can body side seam interposed between said horn and said solder applying roll toward and against said roll while said can body is at said station between advances, at least a portion of said horn at said station being yieldably mounted to permit said side seam to move toward said solder applying roll.

2,751,874
CAN BODY SIDE SEAM SOLDER FLUXING MECHANISM
Erik Gedde, Park Ridge, Ill., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application November 6, 1952, Serial No. 319,022
10 Claims. (Cl. 113—95)

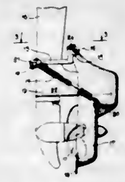
1. In a mechanism for applying a liquid flux to the side seams of container bodies, the combination of a horn

for supporting the bodies, feeding means for intermittently advancing the container bodies along said horn in spaced end to end relation to and through a fluxing station, a flux pot movably mounted below said horn at said fluxing station for retaining a bath of liquid flux, a rotatable substantially cylindrical flux applying element fixedly mounted on said flux pot with its axis of rotation disposed in substantial parallelism with the axis of said horn, said applying element having circumferentially spaced radially projecting blades extending longitudinally of said horn, each of said blades terminating in a continuous longitudinal land for transverse wiping engagement against the side seam of a container body advanced to said station,



means for continuously rotating said applying element in said flux pot in time with the intermittent movement of said feeding means to effect advancement of a container body into said station and into the space between adjacent blades of said applying element and thereafter to wipe onto the entire side seam of the container body at said station the flux picked up from said bath by the trailing blade of said adjacent blades, and a yieldable mounting for said flux pot to provide resilient pressure engagement between the flux wiping land of said rotating applying element and said side seam throughout its longitudinal extent and to insure uniformity of said wiping engagement along the entire length of said side seam.

2,751,875
CONTROL DEVICE FOR OUTBOARD MOTORS
Howarth P. Henry, Englishtown, N. J.
Application December 4, 1951, Serial No. 259,753
5 Claims. (Cl. 115—18)



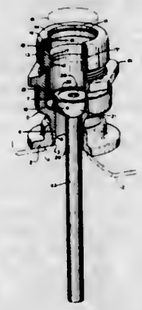
1. In a device for automatically controllling the direction in which a boat is propelled by a motor-driven propeller, the combination comprising a support, said support being located above a propeller, a plate, means pivotally mounting the plate on the support at a point above the propeller, said plate having a portion extending downwardly from the support and opposing the thrust of the propeller and being movable about its pivot point from said downwardly extending position to a generally horizontal position, the portion of the plate opposing the propeller having a curved surface partially enclosing the propeller, spring means for automatically controlling pivotal movement of the plate, said spring means including a tension spring having one end thereof connected to the plate at a point located beneath the pivot point and having its other end connected to the support at a point spaced from the pivot point of the plate, said spring normally acting to hold the plate in its downwardly extending position, said locations of said points of connection providing a shortened line of action of the spring as the plate moves from its downwardly extending position towards its horizontal position and fulcrum means positioned in the path of travel of the spring, said fulcrum means engaging with the spring at a point intermediate its ends when the spring reaches the dead center position in movement of the plate toward its horizontal position.

2,751,876
MANUAL PROPULSION AND STEERING MEANS FOR WATERCRAFT
Harry W. Ogilvie, San Diego, Calif.
Application June 20, 1955, Serial No. 516,383
12 Claims. (Cl. 115—32)



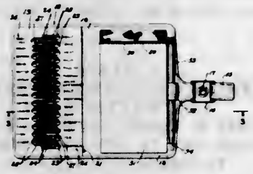
1. A manual propulsion and steering means for watercraft comprising: a carriage; means for mounting said carriage for longitudinal sliding motion in a watercraft; a generally upright post mounted for axially slidable and rotatable motion in said carriage; a handle on the upper end of said post; a paddle mounted on the lower end of said post for pivotal movement to a generally horizontal position on the idle return stroke of the paddle; said post and paddle having cooperating stop means for retaining said paddle in a generally vertical position during the power stroke of the paddle.

2,751,877
LIQUID LEVEL SIGNALING DEVICE
Wallace D. Boone and Arthur F. Briede, Cincinnati, Ohio, assignors to OPW Corporation, Cincinnati, Ohio, a corporation of Ohio
Application April 7, 1955, Serial No. 499,942
4 Claims. (Cl. 116—109)



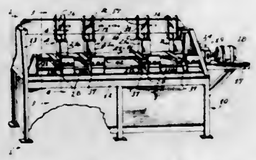
1. A liquid storage signaling unit comprising a body member provided with a central chamber terminating in a top and bottom opening of lesser cross-section than the chamber for providing a top and bottom seat, means for connecting the body to a storage tank with one opening in communication with an opening in said tank, a poppet valve mounted in the chamber adapted to seat on the bottom seat on the body when the valve is closed, oppositely disposed ears on the poppet valve of greater cross-section than the top opening to limit the opening of the poppet valve, a whistle tube mounted on the poppet valve and depending therefrom for projecting into the interior of the tank, and a whistle mounted on the top end of the whistle tube.

2,751,878
SHOPPING REMINDER
Paul De Bodor, Hollywood, Fla., assignor to Apex Products Corporation, Dania, Fla., a corporation of New York
Application May 23, 1955, Serial No. 510,067
2 Claims. (Cl. 116—135)



1. A shopping reminder comprising a book-form casing having front and rear hinged covers, the inside surface of one of said covers having a column of horizontally disposed aligned depressed and tubular raised portions, the raised portions having openings in one end thereof, removable sliding pins extending through said openings and being encased in said tubular portions, the open ends of alternate raised portions facing in opposite directions, and indicia printed on opposite sides of said column of depressed and raised portions in line with the open ends of said tubular raised portions, said pins having head portions seated on the depressed portions in line with the printed indicia.

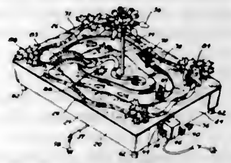
2,751,879
WOOD TREATING APPARATUS
Samuel J. Holtzman, Baltimore, Md.
Application June 24, 1953, Serial No. 363,888
4 Claims. (Cl. 118—301)



1. A board wetting apparatus of the character described comprising a frame including a pair of spaced longitudinal members and an overhead frame member arranged above said pair of members in substantially parallel relation thereto, a plurality of upper and lower spray sections each adjustable longitudinally of said frame for variable relative spacing, said lower spray sections each comprising supporting means adjustably supported on said longitudinal frame members, and an upwardly directed spray nozzle carried on said supporting means, said upper spray sections each comprising a bracket adjustably supported on said upper longitudinal frame member, and a downwardly directed spray nozzle carried on each of said brackets, an elongated driving roller extended longitudinally substantially the length of the frame, a pulley supported for rotation on each of said supporting means, and a plurality of conveyor belts cooperating with said driving roller and said pulleys for conveying boards to be wetted between corresponding upper and lower nozzles, said belts being adjustable longitudinally of said roller for alinement with respective supporting means.

2,751,880
ANIMATED DISPLAY AQUARIUMS
Adam M. Markowski, Philadelphia, Pa.
Application January 22, 1953, Serial No. 332,709
20 Claims. (Cl. 119—5)

1. In combination, an aquarium comprising a container in the form of a continuous channel; power operated current-producing means in said channel and adapted to im-



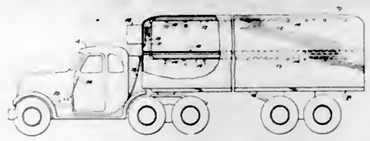
pel a flow of water substantially along the course of said channel and in a manner to aspirate air thereinto.

2,751,881
FISH DIVERTING MEANS
Henry Theodore Burkey, Los Angeles, Calif.
Original application December 31, 1946, Serial No. 719,553, now Patent No. 2,612,861, dated October 7, 1952. Divided and this application March 13, 1952, Serial No. 276,343
2 Claims. (Cl. 119—3)



1. In a system of the character described, in which fish are maintained in a first stream and diverted from a second stream, a series of nozzles, a pump having its outlet connected to said nozzles and its inlet connected to one of said streams, said nozzles being so directed as to create a stream of water flowing generally transversely to the direction of said first stream and at the junction of said first stream with said second stream.

2,751,882
TRACTOR AND TRUCK SPRAY APPARATUS
James M. Coyner, Madison, Wis.
Application February 26, 1953, Serial No. 339,110
4 Claims. (Cl. 119—7)

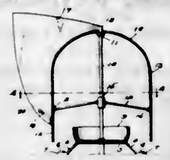


1. In a livestock vehicle, a cooling means comprising a water tank supported on the vehicle, a conduit in said vehicle along an upper part thereof and connected to said tank, a power-operated pressure pump between said tank and said conduit, control means operatively connected to said pump, and mist-producing nozzles on said conduit, whereby when water is introduced into said conduit under pressure a fine mist will be produced at said nozzles, to cool livestock in said vehicle.

2,751,883
TWO-WAY LIVESTOCK FEEDER
Allan R. Bacon, McQueeney, Tex.
Application September 15, 1955, Serial No. 534,553
1 Claim. (Cl. 119—51)

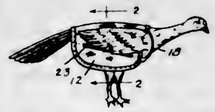
A feeder of the class described, comprising a leg supporting stand, a food receptacle mounted on said stand, a vertical post rising from the center of said stand, an inverted U-shaped hood rotatable on said post embodying a length of wide sheet metal material bent intermediate its ends forming an arcuate bight and a pair of vertical skirts with the skirts of said hood extending downwardly

at opposite sides of said receptacle, terminating adjacent to the stand, providing opposed feeding openings whereby livestock may gain access to the feed in said receptacle through opposite sides of said hood, a collar fixed on said post engaging the lower side of said bight, a weather vane



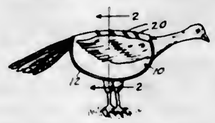
secured to said hood for effecting turning of the hood and guarding the feed within the receptacle, a second collar loose on said post, and outwardly divergent bracing bars fixed between said second collar and the lower portions of said skirts.

2,751,884
TURKEY SADDLE
Maurice H. Brown and Howard R. Brown, North Baltimore, Ohio, assignors to The D. S. Brown Company, North Baltimore, Ohio, a corporation of Ohio
Application November 8, 1954, Serial No. 467,600
7 Claims. (Cl. 119—143)



1. A saddle for turkeys and the like comprising a disk-like fabric body, at least one pair of spaced substantially parallel ribs bound to one side thereof, an elastomer layer on the exposed surfaces of said ribs, and a pair of elastomer wing bands secured to said body adjacent the ends of said pair of ribs, said wing bands being capable of stretching to permit insertion of a turkey's wing.

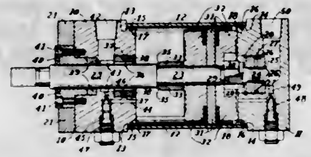
2,751,885
MOLDED TURKEY SADDLE
Delmont D. Brown, North Baltimore, Ohio, assignor to The D. S. Brown Company, North Baltimore, Ohio, a corporation of Ohio
Application November 5, 1954, Serial No. 466,975
7 Claims. (Cl. 119—143)



1. A saddle for turkeys and the like comprising a disk-like sheet of molded elastomer having one side smooth and the opposite side provided with at least one pair of spaced substantially parallel ribs, said sheet being provided adjacent the ends of said pair of ribs with a pair of wing receiving openings, the material forming the outside periphery of each of said openings being capable of stretching to permit insertion of a turkey's wing.

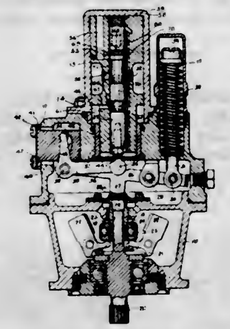
2,751,886
AIR CYLINDER
Kingsley A. Doutt, Alpena, Mich., assignor to Petch Manufacturing Company, Alpena, Mich., a corporation of Michigan
Application May 6, 1953, Serial No. 353,280
4 Claims. (Cl. 121—38)

1. The improvement in a piston and cylinder construction wherein a self-cushioning construction is employed and including a piston and piston rod, a barrel, end castings secured to the ends of said barrel, said end castings having fluid passageways therein and annular chambers merging with said fluid passageways, an extenion on said piston rod beyond said piston, a circular centrally apertured rigid member positioned in said annular chamber, said passageway and annular chamber lying on a common axis and in axial alignment with said extension



on said piston rod, said circular member having a groove in its peripheral edge and a resilient O ring in said groove, said O ring sealingly engaging said annular chamber and said extension registering with said aperture in said circular member when moved toward the same and acting to close said annular chamber and passageway when said piston rod extension is engaged in said aperture in said circular member.

2,751,887
OVERSPEED GOVERNOR WITH SPEED RESPONSIVE SERVOMOTOR
Sidney E. Miller, Suffield, Conn., and Carl H. Nystrom, West Springfield, Mass., assignors to American Bosch Arma Corporation, a corporation of New York
Application June 1, 1951, Serial No. 229,364
11 Claims. (Cl. 121—42)

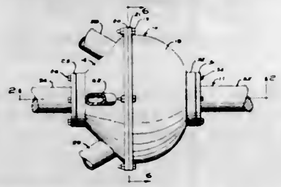


1. In a device of the character described, a housing having a cylinder, a servo piston member in said cylinder and having a bore, a control valve within said bore, a speed sensitive mechanism for controlling said valve and a motion multiplying system between said valve and speed sensitive mechanism, said motion multiplying mechanism comprising a spring loaded pivoted lever operatively connected to said speed sensitive mechanism and a cam controlled bell crank member pivotally connected to said lever and connected to said control valve for changing the rate of motion of said pilot valve relative to said speed sensitive mechanism.

2,751,888
FLUID TURBINE
John H. Bonner, Jr., Wetumpka, Ala.
Application March 27, 1953, Serial No. 345,158
2 Claims. (Cl. 121—^{95})

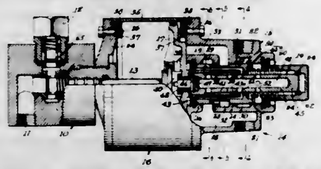
1. In a fluid turbine, a stator comprising a solid wear plate of truncated conical shape and having a bore extending coaxially therethrough, there being a counterbore extending inwardly from the smaller end of said wear plate and terminating at a point spaced from said

smaller end, the terminating point of said counterbore forming a shoulder, a hollow housing in the form of a half sphere arranged so that its open side is disposed against the larger end of said wear plate, means detachably securing the open side of said housing to the larger end of said wear plate, a hollow cylindrical boss projecting from the closed side of said housing and in axial alignment with said bore, a rotor including a pair of shaft portions arranged in longitudinal alignment with a hemispherical solid body between said shaft portions positioned so that the hemispherical body is wholly within said housing with one of the shaft portions extending through said boss and the other of said shaft portions



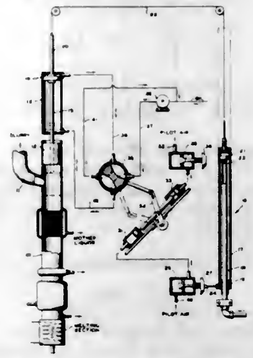
abutting said shoulder, said other shaft portion having a part of lesser diameter than that of said shaft, said part extending through said counterbore, means in said counterbore rotatably supporting said reduced part of said other shaft portion, means in said boss rotatably supporting said one shaft portion, the solid hemispherical body of said rotor having longitudinal slots, longitudinal vanes in said slots, said vanes having arcuate edges conforming to and running close to the closed side of the housing and flat edges slidably bearing against the larger end of the wear plate, and means pivotally securing the vanes in place in the slots for movement toward and away from said larger end of the wear plate.

2,751,889
AIR-OPERATED MOTOR
William F. Mohler, Hermosa Beach, Calif., assignor of one-third to John Vedder, West Covina, Calif., and one-third to Borgert Vedder, Fullerton, Calif.
Application April 5, 1954, Serial No. 420,803
8 Claims. (Cl. 121—157)



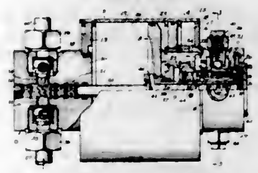
1. An air-operated motor comprising an air cylinder, a valve body having an axial bore and provided with transverse walls, to which said bore is common, and which divide the interior of the body into an air inlet passage, an air exhaust passage and an intermediate passage in communication with said air cylinder, a piston in said cylinder and having passages therethrough, a sleeve valve in said bore controlling flow of air between the three mentioned passages in said body, a spring normally holding said sleeve valve in position to communicate the inlet and intermediate passages, a tubular member concentric to said sleeve and connected to the piston, said member being in communication with the passages of said piston having apertures near the end thereof remote from the piston, a pilot shifter valve slidably engaged in said tubular member and said sleeve valve, said shifter valve having a hollow interior in communication with said member and said sleeve valve through plural sets of ports, and an orifice plug in one end of said pilot shifter valve to permit said cylinder to vent when said spring holds said sleeve valve in said aforesaid position.

2,751,890
CRYSTAL PURIFICATION APPARATUS CONTROL
Elton E. Rush, Waco, Tex., assignor to Phillips Petroleum Company, a corporation of Delaware
Application April 13, 1953, Serial No. 348,347
6 Claims. (Cl. 121—164)



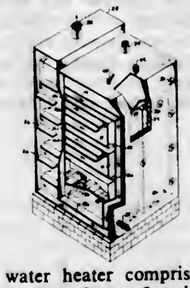
1. In a piston-type crystal purifier wherein the crystal compression piston is operated by a hydraulic fluid supplied to a hydraulic piston the improvement which comprises a piston-follower adapted to duplicate the stroke of said hydraulic piston against a predetermined fluid pressure; and adjustable means actuated by said follower at the end of each stroke so as to reverse the flow of the hydraulic fluid when the hydraulic piston has traveled a predetermined distance whereby the direction of movement of said piston is reversed.

2,751,891
FLUID ACTUATED MOTOR
William F. Mohler, Hermosa Beach, Calif., assignor of one-third to John Vedder, West Covina, and one-third to Borgert Vedder, Fullerton, Calif.
Application September 23, 1953, Serial No. 381,907
7 Claims. (Cl. 121—164)



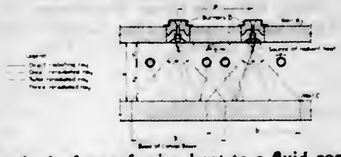
1. A motor comprising a housing having a cylinder and a hub, said hub being provided with a concentric bore smaller than said cylinder, three annular chambers opening on said bore, a sleeve slidable in said bore and cooperating with the wall of said bore to control the flow of pressure fluid between the chambers, one of said chambers being connected to a pressure fluid inlet and communicating with an adjacent chamber through said bore, said sleeve having an opening adapted to communicate the first mentioned chamber with the interior of said sleeve, said adjacent chamber being in communication with the third chamber through said bore and in communication with said cylinder through a longitudinal passage, radial passage means venting said third chamber to atmosphere, a piston in said cylinder, a hollow stem on said piston extending into said sleeve, the piston being movable in one direction by pressure of fluid flowing through the first-mentioned chamber and adjacent chamber and said longitudinal passage, and movable in the other direction by fluid flowing through said first-mentioned chamber, the opening in the sleeve, the interior of said sleeve, and said hollow piston stem, and lost-motion means interconnecting the sleeve and the piston stem to cause endwise shifting of the former by the latter during the end portions of the stroke of the latter.

2,751,892
DEVICE FOR HEATING A HEAT TRANSFER MEDIUM
Michael J. De Leonardis, Valley Stream, N. Y.
Application August 15, 1950, Serial No. 179,464
1 Claim. (Cl. 122—135)



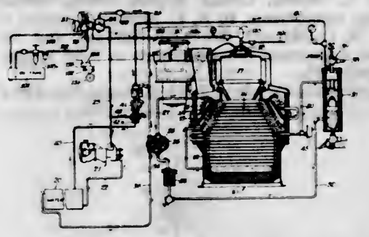
A boiler or water heater comprising a plurality of nesting chambers, including a first innermost chamber comprising a combustion chamber, an intermediate chamber for a heat transfer medium, and a third chamber substantially surrounding the intermediate chamber and forming a flue gas chamber, vertical partition means dividing said flue gas chamber into a plurality of portions overlying different portions of said intermediate chamber and intercommunicating at their bottoms, a passage for the flue gas extending from said first chamber to a first portion of the flue gas chamber, and vent means communicating with the top of a second of said portions of the flue gas chamber, said intermediate chamber comprising a portion disposed above said passage and portions projecting into said combustion chamber below said passage, said projecting portions extending across the combustion chamber and opening into the main portion of the intermediate chamber along their rear and lateral margins.

2,751,893
RADIANT TUBULAR HEATER AND METHOD OF HEATING
Karl Permann, Oakland, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application July 21, 1952, Serial No. 299,987
26 Claims. (Cl. 122—275)



1. The method of transferring heat to a fluid comprising: flowing said fluid through a tube located between two radiant walls; radiating heat from an initial source near the first of said walls essentially as a confined beam predominantly against a limited area of the facing surface of the second wall with only a small portion of the radiated energy falling directly on said tube, the main part of said beam, containing all high intensity direct radiations, being unobstructed; re-radiating heat from the same surface of said second wall; absorbing part of said re-radiated heat on the side of the tube exposed toward said second wall and immitting another part of the re-radiated heat on the facing surface of the first wall; re-radiating immitted heat from the same surface of said first wall; and absorbing a portion of the heat re-radiated from said first wall on the side of the tube exposed toward said first wall, the said small portion of the radiated energy falling directly on said tube being a minor part of the total radiated heat absorbed by the tube.

2,751,894
AUTOMATIC CONTROL SYSTEM FOR BOILER OR STEAM GENERATOR
Alick Clarkson, Paul's Spur, Ariz., and Donald W. Miller, Elmhurst, Ill., assignors of one-half to Vapor Heating Corporation, Chicago, Ill., a corporation of Delaware
Application May 1, 1951, Serial No. 224,026
8 Claims. (Cl. 122—448)



8. The method of controlling a continuously operable liquid heating unit supplied with a heating medium and through which a liquid to be heated is passed in a continuous stream in heat exchanging relation to said heating medium, which method comprises utilizing the flow of said liquid into said unit to actuate a movable element to an extent directly proportional to variations in the flow of said liquid, utilizing the movements of said element to directly proportionately control the amount of heating medium supplied to said heating unit to heat the said liquid sufficiently to provide vapor pressure within the heating unit, and utilizing said vapor pressure to vary the rate of flow of said fluid into said heating unit so as to increase the rate of flow of fluid into the heating unit as said vapor pressure in said unit decreases and vice versa.

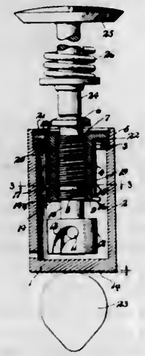
2,751,895
VALVE CONTROL FOR INTERNAL COMBUSTION ENGINES
Johannes Gassmann, Altbach, near Esslingen (Neckar), Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application May 14, 1953, Serial No. 355,063
Claims priority, application Germany May 20, 1952
3 Claims. (Cl. 123—90)



1. A valve control for internal combustion engines having a valve adapted to alternately open and close a valve duct leading to the cylinder space by the reciprocating movement thereof, and a valve control mechanism, said control mechanism comprising a first cam operatively and directly engaging said valve to positively control the opening movement thereof, a second cam, a lever system between said second cam and said valve to transmit the control effect of said second cam to said valve including a first lever arm operatively engaging said second cam, a second lever arm operatively engaging said valve to effect closing movement thereof, a resilient member between said two lever arms to resiliently connect said lever arms with each other and constantly urge simultaneous

engagement of said first lever arm with said second cam and of said second lever arm with said valve, and mutually abutting stop means on said lever arms operative upon predetermined limited relative movement of said lever arms to limit the maximum spreading angle thereof and to provide positive predetermined deceleration of said valve in the opening movement thereof and positive predetermined acceleration in the closing movement thereof by the action of said second cam upon abutting engagement of said stop means.

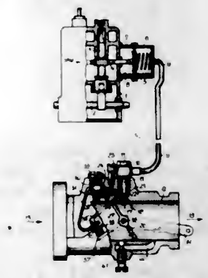
2,751,896
MECHANICAL VALVE TAPPET
Robert C. Moser, Grand Rapids, Mich., assignor, by mesne assignments, to B. C. Skinner, Jacques B. Skinner, B. L. Skinner, Bruce W. Skinner, and Vivian S. Miles, copartners doing business as S-M Tappet Sales, Dunedin, Fla.
Application October 12, 1950, Serial No. 189,695
3 Claims. (Cl. 123—90)



1. An insert mechanism adapted to be entered at the upper end of and into a vertically positioned tappet hollow body having a closed lower end comprising, a vertically positioned screw having a head at its upper end, an upper longer threaded section and a shorter lower threaded section spaced from the upper threated section, said screw having a groove therearound between said threated sections and said screw, below the lower threaded section having a downwardly extending cylindrical plain section, a pin extending radially from said last mentioned plain section, a ring member in said groove of the screw, a nut threaded on the lower threaded section adapted to come against said ring at its upper side, a second longer nut threaded on the upper threaded section and spaced at its lower end from the first mentioned nut, said second nut having an outwardly extending annular portion, abutment means supported by said hollow body engageable by said annular portion to limit the movement of said second nut inwardly of the body, a coiled spring attached at its upper end to the upper nut and at its lower end to the lower nut, and a weight through which the lower pain section of the screw freely passes, said weight having a curved slot therein, from its lower edge extending upwardly and laterally, said slot being closed at its upper end, into which slot said radially positioned pin extends.

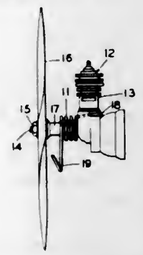
2,751,897
COMBUSTIBLE FLUID SUPPLY APPARATUS FOR INTERNAL COMBUSTION ENGINES
Alfred Schweizer, Stuttgart-Degerloch, and Karl Brecher, Stuttgart-Oberturkheim, Germany, assignors to Robert Bosch G. m. b. H., Stuttgart, Germany
Application October 11, 1954, Serial No. 461,574
12 Claims. (Cl. 123—140)

1. In an internal combustion engine with spark ignition, in combination, support means, an enclosure carried by said support means and having a wall portion formed with an opening passing therethrough to provide communication between the interior of said enclosure and the outer atmosphere; a diaphragm fixed to and extending across the interior of said enclosure to divide the latter into a pair of chambers one of which communicates with the outer atmosphere through said opening; an elongated fuel-supply adjusting member movably carried by said support means for adjusting the supply of fuel to a fuel-air mixture used in the engine, said adjusting member extending into said one chamber and having an end connected to said diaphragm so that movement of the latter upon a change in the ratio between pressures in said chambers moves said adjusting member for automatically adjusting the fuel supply; an intake manifold for supplying air to be mixed with the fuel, said intake manifold having



a wall portion formed with a pair of bores which communicate with each other; conduit means leading from the other of said chambers to one of said bores to provide communication between the interior of said other chamber and that portion of the intake manifold where said one bore is located; a valve member turnably carried by said intake manifold in the interior thereof, said valve member in its closed position engaging the inner surface of said manifold and having an edge portion located between said bores; passage means communicating with the interior of said intake manifold and bypassing said valve member in the closed position thereof for supplying air to the fuel mixture for idling purposes; and means located on and communicating with the interior of said passage means for adjustably constricting the cross-sectional area of a portion thereof to adjust the flow of air through said passage means.

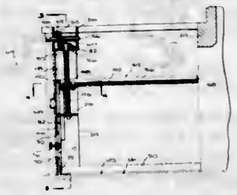
2,751,898
MODEL ENGINE STARTER
Philip Miles De Groat, Binghamton, N. Y.
Application August 3, 1954, Serial No. 447,553
9 Claims. (Cl. 123—179)



1. A model internal-combustion engine having a piston-operated crank shaft, a stationary journal for said shaft, and a drive-shaft connection projecting from said journal; and a spring starter for said engine comprising a torsion spring encircling said journal, said spring having one end secured to a stationary portion of said engine,

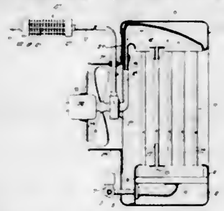
and having a free end detachably connected to said drive shaft connection for automatic disengagement from said shaft connection when said spring becomes de-energized.

2,751,899
ADJUSTABLE GRILL FOR OUTDOOR FIREPLACES
Elbert R. Hamilton, Austin, Tex.
Application April 17, 1953, Serial No. 349,373
1 Claim. (Cl. 126—25)



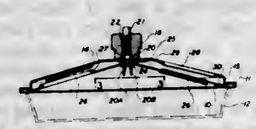
A grill for an outdoor fireplace comprising a stationary support frame having two transversely spaced horizontal base members, an end member connected at each end to each of said base members at the ends thereof, said end members being adapted and arranged to be disposed at the lower ends of the side walls of a fireplace from front to rear of the opening thereof, with said end member disposed at the open front end, upstanding angularly shaped vertical posts connected one each at its lower end to said base members at the junction of each base member with said end member, a horizontally disposed upper cross member secured at its ends to said posts at their upper ends, a horizontally disposed lower cross member secured at its ends to said posts midlength thereof, said lower cross member having an angularly formed recess at each of its ends forming a guideway with each of said posts; a grill frame having spaced apart side members and front and rear transverse members defining a rectangular open frame work, a vertically depending leg secured at each end of said front transverse member and being slidable one each in said guideways, a vertically extending screw journaled at its lower end in said lower cross member and at its upper end in said upper cross member midlength of each, a first bevel gear secured on the upper end of said screw, a second bevel gear rotatably supported on said upper cross member and being in mesh with said first bevel gear, a block secured to said front transverse member midlength thereof and being formed with a threaded opening adapted to receive said screw, said block being operable to vertically adjust said grill frame in response to rotatable movement of said screw and said bevel gears; and a grill member removably supported on said grill frame.

2,751,900
COMBUSTION TYPE HEATER
Arthur B. Modine, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a corporation of Wisconsin
Application May 22, 1951, Serial No. 227,686
3 Claims. (Cl. 126—110)



1. In a self-contained heater of the type adapted to be positioned in a space to be heated, the combination of a housing having a plenum chamber defining an air passage therethrough, upper and lower manifolds within said housing interconnected by heat exchange means extending across said air passage, burner means associated with said lower manifold and serving to supply hot products of combustion to said heat exchange means, forced draft means including a pump associated with said upper manifold adapted to withdraw said products of combustion therefrom, and space heating fluid impeller means supported adjacent to said housing and serving to direct the fluid to be heated past and in contact with said heat exchange means, said pump being disposed in the line of flow of fluid through said air passage and interposed between said heat exchange means and said space heating fluid impeller means.

2,751,901
VESSEL COVER
Henry W. Livermore, El Monte, Calif.
Application September 29, 1952, Serial No. 312,101
4 Claims. (Cl. 126—384)



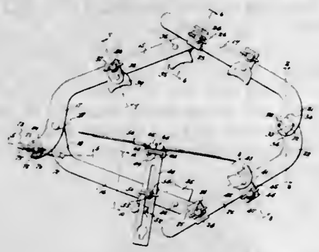
1. A pan cover comprising a lower substantially conical member having a plurality of equally angularly spaced, radially oriented elongated openings therethrough, upwardly projecting lips circumscribing each of the openings in the lower member, an upper frusto-conical member having a plurality of equal angularly spaced radially oriented elongated openings generally conforming in size and shape with the openings in the lower member, downwardly projecting lips circumscribing each of the openings in the upper member, a downwardly depending peripheral lip on the upper member and means detachably joining the upper and lower members at their centers with their conical sides substantially parallel and spaced apart by the peripheral lip resting upon the periphery of the said lower conical member, the two members being so angularly oriented that the openings in one lie out of vertical registry with the openings in the other.

2,751,902
ADJUSTABLE SURGICAL RETRACTOR
Jacob F. Loeffler, West Point Pleasant, N. J.
Application June 15, 1955, Serial No. 515,593
7 Claims. (Cl. 128—20)



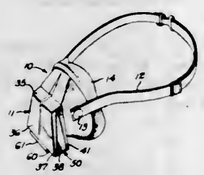
7. A surgical retractor comprising a tapered carrier bar providing an inclined plane top face downwardly and outwardly descending from its butt end, a retractor blade dependent from the butt end of said carrier bar in swiveling connection therewith, a carrier member through which said carrier bar extends whereby the former is movable along the latter, a second retractor blade dependent from said carrier member in swiveling connection therewith, a lockscrew threaded through said carrier member in opposed relation to the inclined plane top face of the carrier bar, and a spiral spring having its inner end affixed to said lockscrew and its outer end anchored to said carrier member, said spring being adapted to automatically rotate the lock screw in direction to constantly engage said inclined plane top face of the carrier member.

2,751,903
ADJUSTABLE RETRACTOR FOR SURGICAL USE
Harry S. Ivory and Jacob F. Loeffler, Point Pleasant, N. J.
Application April 22, 1954, Serial No. 424,932
9 Claims. (Cl. 128—20)



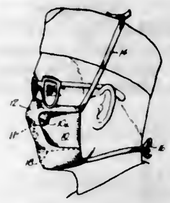
1. A surgical retractor comprising an expansible retractor frame formed by oppositely extending sections, each section comprising a pair of frame bars pivotally joined at their outer ends, the inner end portions of corresponding frame bars of respective sections being engaged in meeting relation for relative pivotal and longitudinal movements, whereby to permit adjustment of the retractor frame as to initial length, coupling means pivotally mounted on an end portion of one of each pair of engaged frame bars to slidably receive that of the other, said coupling means including means to releasably secure the meeting end portions of said frame bars in relatively longitudinally adjusted condition, the joined outer ends of the frame bars of one section of the retractor frame having cooperative interengageable male and female ratchet teeth adapted, when engaged, to automatically hold the retractor frame sections in laterally expanded condition, to which the retractor frame is adjusted, and incision spreading retractor fingers depending from the retractor frame.

2,751,904
RESPIRATOR
Howard B. Lewis, Newport Beach, Calif.
Application September 30, 1952, Serial No. 312,245
12 Claims. (Cl. 128—146)



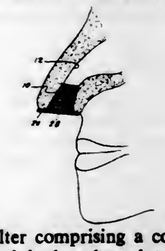
1. In a respirator, the combination of: a mask member adapted to fit the face of the wearer and to cover the nostrils and mouth of the wearer, said mask member having an air inlet opening; a filter member having an air outlet opening and mounted on said mask member with said air outlet opening in communication with said air inlet opening; and means for securing said filter member to said mask member, including a tube mounted on one of said members and defining said opening therein and extending through said opening in the other of said members, and including a sealing element engaging said other member adjacent the periphery of said opening therein and engaging the outer periphery of said tube so as to retain said members in assembled relation, said sealing element being provided with a peripheral groove therein which receives said periphery of said opening in said other member so as to mount said sealing element on said other member.

2,751,905
ANTI-BACTERIAL MASKS
Raymond C. Creelman, Bremerton, Wash.
Application August 23, 1954, Serial No. 451,457
6 Claims. (Cl. 128—146)



5. An anti-bacterial face mask comprising a cloth mask formed to cover the wearer's face generally below the eyes, said mask comprising an inner face-contacting panel having a nose reception aperture therein, an outer panel overlying portions of said inner panel and said aperture, and means attached to the mask for securing said mask in position on the wearer's head.

2,751,906
NOSE FILTERS
Mary E. Irvine, Richmond, Ky.
Application October 26, 1953, Serial No. 388,250
2 Claims. (Cl. 128—148)



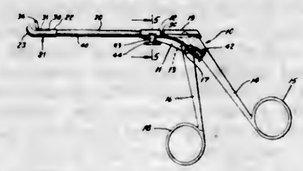
1. A nose filter comprising a comparatively rigid hollow cone-shaped body adapted to be inserted into the nostril and frictionally held therein, said body open at its upper and at its lower ends and having a flange around its larger end, a filter disc holder of comparatively flexible material attached to said flange and having a medial opening therethrough, said holder being circular and having a rolled-over edge, and a replaceable filter disc positioned in said holder and held against removal by said rolled-over edge.

2,751,907
PELLET INJECTOR
George M. Hickey, Paoli, Pa., assignor to J. Bishop & Co. Platinum Works, Malvern, Pa., a corporation of Pennsylvania
Application September 18, 1953, Serial No. 380,961
3 Claims. (Cl. 128—221)



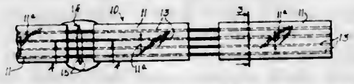
1. A hypodermic needle comprising a hollow cylindrical body portion and an integral hollow conical portion having a single opening in the side wall thereof which terminates at a substantial distance from the apex of said tip portion, the maximum dimension of said opening measured in the direction perpendicular to the longitudinal axis of the needle being equal to the internal diameter of said cylindrical body portion.

2,751,908
SURGICAL INSTRUMENT
Frederick J. Wallace, New York, N. Y., assignor to American Cystoscope Makers, Inc., New York, N. Y., a corporation of New York
Application March 19, 1953, Serial No. 343,328
8 Claims. (Cl. 128—321)



1. In a surgical instrument of the character described, a tubular member, a device secured to and projecting beyond the distal end of the tubular member, said device including a hollow first jaw that is open at one end and a body intermediate the jaw and the tubular member, said body having a recess formed therein, a rod reciprocable in the tubular member, a second jaw, and an arm secured to the second jaw and the distal end of the rod, said arm including a free end that registers with the recess, said second jaw being movable into and out of engagement with the open end of the first jaw in response to reciprocatory movement of the rod with respect to the tubular member.

2,751,909
INTERRUPTED ADHESIVE TAPE JOINED BY LONGITUDINAL SPACED FILAMENTS
Geza Weitzner, New York, N. Y.
Application November 4, 1952, Serial No. 318,713
11 Claims. (Cl. 128—335)



1. A surgical adhesive comprising an elongated continuous strip divided into a plurality of aligned shorter strips of adhesive plaster having a coating of adhesive on the undersurface thereof, and longitudinal, spaced filaments partially embedded in said adhesive, said shorter strips being longitudinally spaced from each other and interconnected by said filaments, said filaments extending substantially the length of said shorter strips and adhesive, said filaments being formed of a rigid material which is non-combustible, whereby to retain the adapted edges of a wound in proper spaced relationship and to permit sterilizing said filaments by heat or flame prior to application on a wound.

2,751,910
SUTURES
Edward L. Howes, New York, N. Y.
No Drawing. Application June 25, 1953,
Serial No. 364,205
6 Claims. (Cl. 128—335.5)

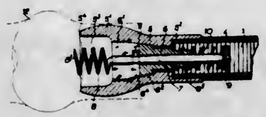
1. A surgical suture consisting of a thread of natural fiber which retains the appearance and structure of the thread but which is impregnated with a small percentage of an anti-bacterial agent and a material of a plastic nature that is soluble in an organic solvent so that it may be applied in a dissolved state and which is substantially unaffected by being boiled in water, such material being selected from the group consisting of the plastic formed by the combination of vinylidine chloride and vinyl chloride, and the high melting point waxes and such material being used in an amount insufficient to fill the interstices between the strands of the thread to render the surface of the thread slick and impermeable.

2,751,911
SURGICAL INSTRUMENT AND COUPLING THEREFOR
Joseph E. Held, New Rochelle, N. Y., assignor to American Cystoscope Makers, Inc., New York, N. Y., a corporation of New York
Application January 23, 1953, Serial No. 332,828
7 Claims. (Cl. 128—349)



1. In a surgical instrument of the character described, a first unit comprising an elongated flexible member that is adapted to be inserted in a body passage, a second unit comprising a surgical instrumentality for insertion in the body passage after the first unit, and a coupling permanently secured to one of the units and detachably secured to the other unit, said coupling comprising a universal connection permitting angular movement of one unit with respect to the other unit in the course of and subsequent to assembly of the instrument.

2,751,912
EXTRACTING DEVICE FOR USE WITH OESOPHAGEAL PROBES, INTENDED PARTICULARLY FOR RUMINANTS
Mario Christoni, Saint-Etienne-Loire, France
Application March 27, 1953, Serial No. 345,021
Claims priority, application France April 7, 1952
5 Claims. (Cl. 128—356)



1. In an oesophageal probe intended chiefly for ruminants and having a stem, the combination with the stem of the probe of extracting means including a probang fitted on the inner end of the probe stem, the front part of said probang having a reduced diameter smaller than the maximum diameter of said probang, said probang being recessed at its front end to form a circular chamber of a large diameter opening at its front end into the front part of reduced diameter of the probang and extending to the rear into an axial partly conical bore formed inside the probang, a socket fitted inside said bore and the wall of which is slotted in a diametrical plane, a corkscrew-shaped part having a sharp forward end and

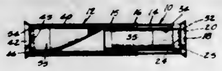
adapted to engage a foreign body in the oesophagus of the ruminant through said sharp forward end, a rod carrying said corkscrew-shaped part coaxially at the front end of said rod and slidingly housed inside the socket, a radial stud rigid with said rod and engaging the slot in the socket, and a spring urging normally the corkscrew-shaped part inwardly to allow only the extreme front thereof to project beyond the front edge of the probang for engagement with the foreign body.

2,751,913
LADIES' PISTOL COMPACT
Marvin Wilk, Bronx, N. Y.
Application June 17, 1954, Serial No. 437,315
10 Claims. (Cl. 132—79)



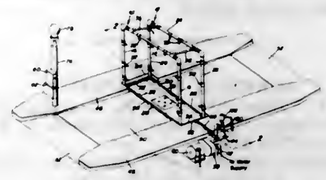
1. A pistol type compact for ladies comprising a body formed in the simulation of a pistol and including a handle and a barrel, said handle and barrel having recesses defining compartments for cosmetics, covers for the respective compartments, a trigger movably mounted on said body, and trigger-controlled means for shifting the covers to open position, said covers being swingably mounted upon the body, said trigger being mounted for sliding movement upon said body, the trigger-controlled means of one of said covers including a link attached at one end to the trigger to shift therewith during sliding movement of the trigger, said link having a sliding and pivotal connection at its other end to its associated cover, for swingably shifting the cover to open position responsive to sliding movement of the trigger in one direction.

2,751,914
LIPSTICK DEVICE
Grace M. Katz, Hollywood, Calif.
Application February 18, 1955, Serial No. 489,076
2 Claims. (Cl. 132—79)



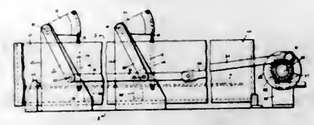
1. A cosmetic device of the character described comprising: a first casing shell closed at one end; a mirror mounted on the outer closed end of said shell; means to hold a lipstick inside said shell; a second casing shell closed at one end, the open end of said second shell being dimensioned to telescope into the open end of the first shell to form therewith a closed container, and a brush member for applying the material of said lipstick, said brush member being movably mounted in said second shell for retractable extension from the open end thereof, the open end of said second shell being reduced in inside diameter to provide a shoulder to abut and stabilize said brush member at the extended position of the brush member, said brush member being tapered and said shoulder being correspondingly tapered to receive the extended brush member with an immobilizing wedging action for making the extended brush member rigid relative to the second shell.

2,751,915
AUTOMATIC VEHICLE WASHING DEVICE
Roy J. Roberts, Corpus Christi, Tex.
Application December 3, 1953, Serial No. 395,983
3 Claims. (Cl. 134—123)



1. A vehicle washer comprising a rectangular frame, said frame being formed of a plurality of intercommunicated pipes, each of said pipes being provided with inwardly directed nozzles, pump means connected to said frame, means for controlling operation of said pump, said frame including a lower horizontal pipe, nozzles carried by said lower horizontal pipe being intended to pass under a vehicle for washing the underside thereof, a pair of guideways, said frame extending transversely of said guideways and therebetween, vertical portions of said frame extending upwardly from notches in said guideways, said vertical portions being protected by said guideways.

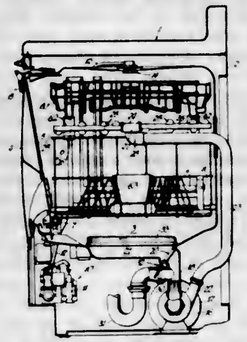
2,751,916
APPARATUS FOR USE IN PICKLING BARS, TUBES, AND THE LIKE
Ronald Hampton, Wightwick, near Wolverhampton, England, assignor to Patents and Investments Limited, Wolverhampton, England
Application June 14, 1955, Serial No. 515,347
6 Claims. (Cl. 134—160)



1. Apparatus for pickling bars, comprising, in combination with a bath for the pickling liquid, cradle means for supporting the bars in said bath and power driven mechanism which operates upon said cradle means in a repeating cycle, so as to impart movement to the supported bars, by slowly raising said cradle means and then allowing same to lower rapidly.

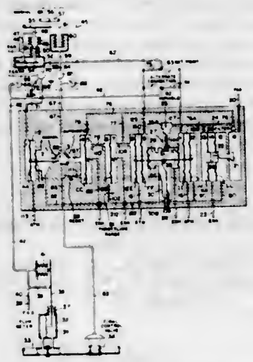
2,751,917
DISHWASHING MACHINE
Frank D. Low, La Grange Park, Ill., assignor to General Electric Company, a corporation of New York
Application January 4, 1952, Serial No. 264,873
5 Claims. (Cl. 134—176)

1. In apparatus such as dishwashers and the like having a tub throughout which a substantial quantity of liquid is to be circulated for a desired period and waste liquid discarded following said circulation period, the improvement in liquid circulation and disposal apparatus comprising a pump having an inlet port disposed beneath said tub, motor means for operating said pump, a substantially vertically disposed pump inlet pipe communicating directly between a sump at the bottom of said tub and the inlet portion of said pump for conveying liquid to said inlet port from said sump, a pump discharge pipe for returning liquid to said tub substantially above the free surface of any liquid accumulation within said sump, fluid circulation means connected to said discharge pipe within the upper portion of said tub for forcefully circulating the discharge of said pump throughout said tub and a waste liquid disposal pipe communicating directly with said inlet pipe substantially solely by means of a wall opening in said pump inlet pipe below said tub and in vertically spaced relation to said pump inlet port, said disposal pipe extending angularly from said inlet pipe; the discharge rate of said pump into said tub being greater than the rate of flow from said sump into and through said pump inlet pipe, whereby liquid within said inlet



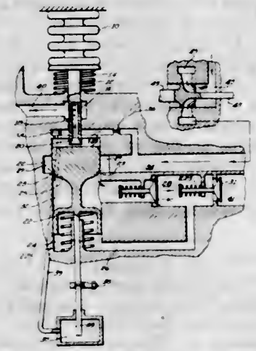
pipe will be prevented from rising to the level of the waste disposal pipe inlet for flow thereinto during the operation of said pump the volumetric capacity of said pump inlet pipe intermediate said pump inlet port and said waste disposal pipe inlet being substantially less than the volumetric capacity of said pump discharge pipe measured between the pump and the point of connection of said fluid circulation means to said pump discharge pipe.

2,751,918
MANUALLY OR AUTOMATICALLY ACTUATED AIR-PRESSURE-RESPONSIVE CONTROLLER
Stephen P. Higgins, Jr., Philadelphia, and Pemberton H. Drinker, Strafford, Pa., assignors to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application December 28, 1950, Serial No. 203,174
12 Claims. (Cl. 137—8.5)



1. A fluid-operated controller including, a casing composed of a plurality of interconnected parts defining chambers between them, a plurality of diaphragms sealing said chambers against leakage and dividing said chambers, a valve-operating element carried by at least one of said diaphragms, a second of said diaphragms and the cooperating chamber forming a fluid-operated motor, an inlet valve having a mechanical connection with said second diaphragm, an outlet valve having a mechanical connection with said second diaphragm, said inlet and outlet valves being operable to control the pressure in a chamber supplied from a source of fluid controlled by said inlet valve, said chamber being vented by said outlet valve, a port communicating with said second diaphragm and its chamber and with a source of fluid, a valve engaging said valve-operating element and controlling the flow of fluid through said port and thereby actuating said inlet or said outlet valve by means of said second diaphragm, a first spring biasing said valve-operating element in one direction and biasing said valve toward said port, a second frusto-conically coiled helical spring biasing said valve-operating element in the opposite direction and biasing said valve away from said port, a third spring biasing said valve-operating element in said one direction, and means manually operable from the outside of said casing to adjust the tension of one of said springs so that the natural force of said springs biases said valve-operating member and said valve toward said port or away from said port.

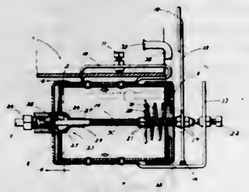
2,751,919
SERVO-MOTOR CONTROL VALVE FOR AN AIRPLANE ENGINE
Leonard W. Kell, Wayne, Mich., assignor to Holley Carburetor Company, Detroit, Mich., a corporation of Michigan
Application November 17, 1952, Serial No. 320,982
1 Claim. (Cl. 137—81)



In a fluid flow controlling device, responsive to capsule movement, a housing having a hydraulic servo-valve and an associated piston slave-valve, an operating capsule connected to said servo-valve, an inlet in said housing for said slave-valve, said servo-valve being cup-shaped and provided with an aperture in its wall, said piston slave-valve having a flat end face at right angles to the axis of the slave valve and cooperating with the mouth of said cup shaped servo-valve for controlling the flow of liquid therethrough, a cylinder in said housing in which the slave piston valve reciprocates, an opening in the end of said cylinder providing a cylindrical shaped escape orifice from the end of said cylinder adjacent said flat face through said servo-valve, a restricted passage leading to the end of said cylinder in which the cup shaped servo-valve is slidably mounted, means for admitting pressure liquid from said inlet to the restriction and so to said end of said cylinder, a low pressure escape outlet for said cup shaped servo-valve, means for regulating the flow of liquid under pressure comprising an annular port in said cylinder in communication with said inlet, a reduced waist portion on said piston valve adapted to form with the inner edge of said port, a variable restriction, a main outlet downstream from the cylinder downstream of said variable restriction, a second variable restriction in the outlet downstream of said first variable restriction, a third variable restriction in the outlet downstream of

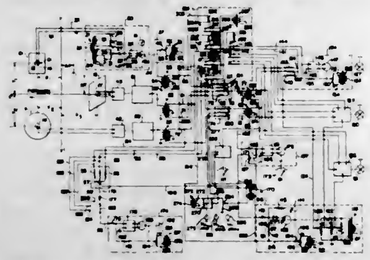
said second restriction, a passage leading from the main outlet at a point between the two latter restrictions to the other end of said cylinder.

2,751,920
LIQUID FEEDER VALVE UNIT
George A. Kanelos, Sacramento, Calif., assignor of forty-nine per cent to Sam J. Bacchini, Florin, Calif.
Application June 14, 1952, Serial No. 293,613
2 Claims. (Cl. 137—98)



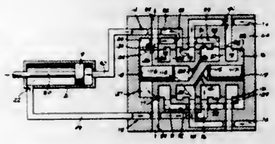
1. A liquid feeder valve unit comprising a cylindrical body having a rear end cap and a front end cap, a normally closed valve assembly mounted on the rear end cap, pipe means arranged to deliver liquid to and from the valve assembly, a slidable valve control rod extending from the valve assembly forwardly through the front end cap, a rearwardly opening C clamp on the inner side of the body adapted to straddle a pump discharge pipe from its outlet end so as to secure the body to said pipe, an extension bar projecting forward from the body on its outer side, a lever arm pivoted on the extension bar ahead of the front end of the body and projecting laterally thereacross to a termination in front of said outlet end of the pump discharge pipe, means connecting the lever arm and adjacent portion of the rod, and spring means in the body yieldably resisting forward swinging of the lever arm and resultant forward sliding of the rod, the valve assembly opening upon the rod so sliding forward.

2,751,921
CONTROL APPARATUS
John H. Baldwin, Minneapolis, Kimball C. Cummings, Golden Valley, and Oscar Hugo Schuck, Minneapolis, Minn., assignors to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application August 10, 1953, Serial No. 373,373
20 Claims. (Cl. 137—98)



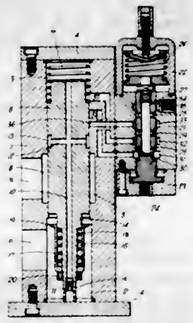
1. Apparatus for controlling the center of gravity of a plurality of fuel tanks each having an outlet valve in a craft comprising, in combination: separate quantity indicating means associated with each tank, each means deriving a signal voltage indicative of the quantity of fuel in that tank with which it is associated; moment summing means for a first axis; means connecting said quantity indicating means to said moment summing means and algebraically adding the fuel quantity signals through moment resistors, the magnitudes of the resistors being of predetermined values with respect to each other depending upon the perpendicular distance of the center of gravity of each tank to the first axis, each quantity indicating means signal being added having a relative polarity with respect to the polarity of the other quantity indicating means signals being added dependent upon the direction of the tank from the axis with respect to the direction of the other tanks from the axis; moment summing means for a second axis; means connecting said quantity indicating means to said moment summing means for the second axis and algebraically adding the fuel quantity signals through moment resistors, the magnitudes of the resistors being of predetermined values with respect to each other depending upon the perpendicular distance of the center of gravity of each tank to the second axis, each quantity indicating means signal being added having a relative polarity with respect to the polarity of the other quantity indicating means signals being added dependent upon the direction of the tank from the second axis with respect to the direction of the other tanks from the second axis; totalizing means; means connecting all of said quantity indicating means to said totalizing means and adding the fuel quantity signals and obtaining a signal voltage indicative of the total quantity of fuel; scheduling means; means connecting said totalizing means to said scheduling means and deriving a signal voltage for each tank depending upon the total quantity of fuel in all the tanks and the quantity of fuel each tank should have with respect to the quantity of fuel the other tanks should have at that particular total quantity of fuel in order that the center of gravity of the plurality of tanks be the desired center of gravity; separate control servo means connected to the outlet valve of each tank; means connecting said first and said second moment summing means and said scheduling means to each of said control servo means to control said servo means such that the flow of fuel from each tank with respect to the total flow of fuel from all the tanks is such as to maintain the center of gravity of the plurality of tanks within predetermined limits; first indicator means; means connecting said first moment summing means and said totalizing means to said first indicator means and providing an indication of the perpendicular distance of the center of gravity of the tanks from the first axis; second indicator means; means connecting said second moment summing means and said totalizing means to said second indicator means and providing an indication of the perpendicular distance of the center of gravity of the tanks from the second axis; override control means; means connecting said quantity indicating means to said override control means and energizing said override control means upon one of the tanks being empty; and means connecting said override control means to said control servo means and controlling the operation of said control servo means upon said override control being energized.

2,751,922
PORTABLE POWER DRIVEN RECIPROCATING TOOL
Leonidas C. Miller, Los Angeles, Calif.
Application August 4, 1952, Serial No. 302,477
9 Claims. (Cl. 137—106)



1. In a shuttle valve assembly, the combination of a body member having a bore, the body member having an inlet passage, an exhaust vent, and first and second conduits all communicating with the bore, a shuttle valve mounted to reciprocate axially within said bore, and acting alternately to connect each conduit to the vent and the passage, respectively, and then to the passage and the vent, respectively, the shuttle valve having axially aligned separate openings in the opposed ends thereof, separate independent stationary elements mounted within each of said openings and adapted to slidably engage said openings upon reciprocation of said shuttle valve, and ports in the shuttle valve extending from the inner ends of said openings and communicating with said bore at axially spaced locations.

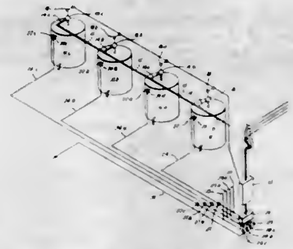
2,751,923
LIQUID PRESSURE ACTUATED AUTOMATIC BY-PASS VALVES
John Maurice Towler, Rodley, and Frank Hathorn Towler, Dob Park, near Otley, England, assignors to Electraulic Presses Limited, Rodley, near Leeds, England, a British company
Application July 11, 1952, Serial No. 298,356
Claims priority, application Great Britain July 11, 1951
8 Claims. (Cl. 137—108)



1. A valve mechanism for maintaining a substantially constant pressure in a hydraulic system supplied with fluid under pressure from a continuous source of supply through a check valve operative to prevent fluid flow toward the source of supply, said valve mechanism comprising, in combination, a by-pass valve including a valve member spring biased toward closed position and normally subjected to the same fluid pressure at both ends to maintain it in hydraulic balance, said by-pass valve being adapted for connection to said hydraulic system between the source of supply and the check valve, a pilot valve adapted for connection to the hydraulic system on the side of the check valve remote from the source of supply and normally biased toward closed position, said pilot valve being operative when the fluid pressure in the hydraulic system exceeds a predetermined value to relieve the fluid pressure at one end of said by-pass valve member to permit movement of the valve member thereof toward open position by the pressure acting on its other end, and means for further relieving the fluid pressure at said one end of the by-pass valve member to accelerate its movement as an incident to the opening movement of said by-pass valve member.

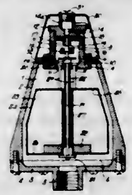
2,751,924
AUTOMATIC TANK BATTERY AND CONTROL
Irvin W. Hynd, Midland, Tex.
Application July 27, 1954, Serial No. 446,084
13 Claims. (Cl. 137—121)

13. An electrically-actuated system for effecting coordinated control and sequential filling of a plurality of tanks including supply and discharge means for supplying and discharging material to and from each of the tanks, inlet and outlet valves in said supply and discharge means, respectively, said system comprising a switch adapted to be actuated at a predetermined level of liquid in one of said tanks, a first relay actuated by said switch, a position relay, a control relay provided with a plurality of pairs of electrical contacts, a valve motor adapted to be connected to one of said inlet valves and actuated by said position relay, said position relay being connected in a first circuit of said first relay, said first circuit being closed when its associated tank is being filled, said first relay being provided with a second circuit connected to a first pair of said pairs of electrical contacts, said second circuit being open when said associated tank is being filled, said control relay being connected to and actuated by said



position relay, said control relay being provided with a normally-open third circuit connected to a second pair of said pairs of electrical contacts, one each of said first and second pairs of electrical contacts being connected, a second position relay connected in said second circuit whereby when the liquid reaches said predetermined level in its associated tank it actuates the switch thereby changing the position of the first relay which opens said first circuit, said position relay and de-energizes the valve motor for stopping flow of the liquid into said tank, closing said second circuit and thereby closing said third circuit for energizing said second position relay.

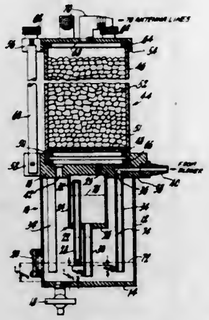
2,751,925
AUTOMATIC AIR RELIEF DEVICE
Axel Nore Alexander Axlander, Stocksund, Sweden
Application April 23, 1952, Serial No. 283,897
3 Claims. (Cl. 137—202)



1. An automatic air relief device for use in liquid systems, which comprises the combination of a hollow member forming a float chamber and having an inlet opening for admitting liquid and air into the chamber, said member also forming a valve sub-chamber above said float chamber, a perforated partition separating said sub-chamber from the float chamber, the sub-chamber having an outlet for exhausting air from said chambers, an air relief valve in the sub-chamber controlling flow through said outlet, a float in the float chamber movable vertically relative to the valve, the air relief valve including a stem extending downward into the float chamber, a tube depending from said partition and surrounding the valve stem, a central tube in the float surrounding and guided by said depending tube, means including an upper abutment on the stem within the sub-chamber for establishing an operative connection through said partition and between the stem and the float to close the valve upon rising the float, the valve being held in its closed position by the air pressure in the sub-chamber

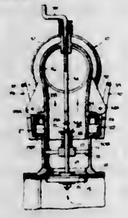
and means including a lower abutment on the stem in the float chamber below the float for establishing an operative connection between the stem and float to open the valve against said air pressure upon downward movement of the float, said abutments being spaced apart sufficiently to permit a free movement of the float between the abutments, said depending tube preventing movements of the float from being transmitted to the valve stem otherwise than through said abutments.

2,751,926
LIQUID SEAL
John A. Liggett, Haddonfield, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application March 20, 1953, Serial No. 343,780
6 Claims. (Cl. 137—251)



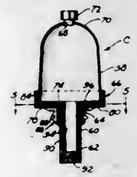
1. In an arrangement for delivering gas under pressure to a space to be filled with gas, in combination, a closed container adapted to be partially filled with a liquid to a given level; first tubular means adapted to be connected at one end to a source of gas under pressure and extending at its free end into said container to a point below said given level; an air reservoir formed with an opening to the atmosphere; second tubular means communicating with said air reservoir and container extending from the lower portion of said air reservoir, when the latter is in operative position above said given level, to a point in said container below the free end of said first tubular means, third tubular means communicating with said air reservoir and container extending from the upper portion of said reservoir, when the latter is in said operative position, to a point in said container below said given level but above said free end of said first tubular means; and outlet means including a passageway through the wall of said container at the upper portion of said container adapted to communicate with said space to be filled with gas.

2,751,927
VALVED COUPLING ARRANGEMENT
Wilbur C. Kinney, Vista, Calif.
Application November 6, 1951, Serial No. 255,076
3 Claims. (Cl. 137—322)



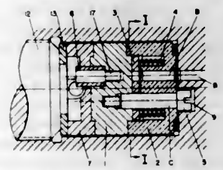
3. In combination, a supply line having an outlet tube with the end of said tube having an enlarged annular continuous hub, said supply line having spring pressed valve means normally closing said supply line, a coupling element comprising a 90° elbow having a tubular portion extending into said outlet tube, flange means on said coupling element engageable with said enlarged hub to limit movement of said coupling element in said outlet tube, a pair of hooks pivoted on said coupling element extending around said annular continuous hub and engaging the under side thereof, said hooks being so formed and weighted that their free ends are relatively close to said tubular portion and are required to be pivoted away from said tubular portion to allow said tubular portion to be inserted into said outlet tube, valve actuating means mounted on said coupling element comprising a rod which extends generally parallel to one leg of said coupling element and substantially perpendicular to the plane of said annular continuous hub, said spring-pressed valve means being effective to press the free ends of said hooks against the underside of said hub.

2,751,928
LIQUID LEVEL CONTROL RESERVOIR
James A. Rook, Los Angeles, Calif.
Application February 25, 1952, Serial No. 273,325
7 Claims. (Cl. 137—453)



3. A reservoir unit for maintaining a constant liquid level in a lower body of liquid comprising, in combination: walls defining a closed liquid reservoir having a dependent tubular stem with a closed bottom, the interior of said stem being in communication with the reservoir; an outer tubular stem having a closed bottom, the inner walls of said last stem and bottom being disposed in juxtaposition to the corresponding walls of the inner stem and rotatable thereabout on a longitudinal axis, said two stems being formed with a bottom aperture passing jointly therethru eccentric to said longitudinal axis, and a lateral opening formed jointly thru said stem spaced vertically above the bottom opening; attachment means for mounting the reservoir unit above the body of liquid while allowing access of air to the latter and with the bottom of said outer stem in contact with the liquid body; and means for holding together the reservoir and the outer stem while permitting relative rotation of one stem in respect to the other, whereby the corresponding bottom apertures and lateral openings of the respective stems may be moved to and from positions of alignment so as respectively to permit the flow and stop the flow of liquid from the reservoir through the bottom apertures.

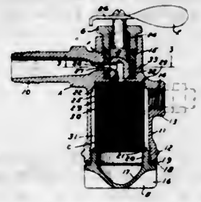
2,751,929
VALVE FOR RECIPROCATING COMPRESSORS
Arthur Seligman, Erie, Pa.
Application September 30, 1953, Serial No. 383,305
9 Claims. (Cl. 137—540)



1. Automatic valve, primarily for reciprocating gas compressors, consisting of a seat, a guard, a plate, and

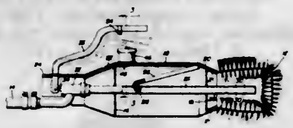
a bolt, built and assembled in the following manner: a seat and guard member forming a valve body are aligned to each other by a peripheral recess on one of said seat and guard and a mating central recess on the other of said seat and guard in such a way that they face each other with two parallel planes at a right angle to their axes, the distance between which equals the thickness of the plate plus the plate lift; the plate is a flat disc with two parallel faces and on its periphery slidingly fitted into said central recess; the bolt is threaded on at least one end and has a cylindrical part at its middle; seat, guard, and plate bear holes parallel to the valve axis and of approximately equal size, whose center lines form the lateral edges of an approximately regular triangular prism and are in the following referred to as A, B, and C respectively; the seat has at location A a through hole, and at C a hole drilled to a certain depth, but not through, which at its open end fits closely the middle part of the bolt, and bears at its bottom a female thread mating with the male thread of the bolt; the plate has two holes through it, the first of which, at location C, engages the middle part of the bolt with a sliding fit, whereas the second hole is put at location B, and no hole at location A; the guard has a through hole at location C, which at least along a part of its length fits closely the middle part of the bolt, and another hole at location B; the bolt extending through the guard and plate and into the seat at location C, engages at one end with the thread in the seat and at its other end by suitable means with the guard, thus holding the parts together and securing them in their correct position relative to each other.

2,751,930
INTEGRAL FLUID FILTER AND VALVE CONSTRUCTION
Roland A. Redner, Farmington, Mich., assignor to Unifilter Company, Farmington, Mich., a partnership
Application August 8, 1952, Serial No. 303,311
2 Claims. (Cl. 137—549)



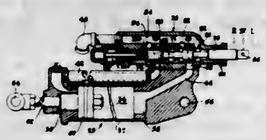
1. An integral fluid filter and valve construction comprising an integral valve and filter body having superimposed concentric filter and valve chambers of cylindrical contour and separated by an apertured interior divider wall; an inherently resilient, incompressible valve sleeve insert fixedly disposed in said valve chamber and bottomed against said wall; said body having a plurality of inlet ports communicating with the valve chamber through a plurality of corresponding and aligned ports formed in said valve sleeve insert, and said body also having an outlet port communicating only with said filter chamber and generally beneath said inlet ports; compression means urging said sleeve insert against said wall in a fluid tight sealing relation therewith; a cylindrical rotatable valve core concentric with said valve chamber and telescoped within said sleeve insert in fluid tight peripheral contact therewith, said valve core having a passage therethrough for establishing communication between a selected one of said ports and the filter chamber; a tubular, open-ended filter screen disposed in said filter chamber to receive through one open end thereof the discharge from said valve core, said screen being interposed between said valve chamber and said outlet port; and a closure cap for said filter chamber closing the other end of said filter screen and having a central trap chamber underlying said filter chamber in communication with the interior of said filter screen to accommodate the removal of filtered particles therefrom.

2,751,931
FOOTWEAR DISINFECTOR
Lyman C. Morrow, Frederic, Wis.
Application October 5, 1953, Serial No. 384,138
1 Claim. (Cl. 137—587)



A footwear disinfector comprising: a casing for the reception of a disinfectant, an air vent valve on said casing, a fluid conduit passing through the casing and communicating therewith for receiving disinfectant therefrom, a control valve on said conduit, and a hand lever pivotally mounted at an intermediate point on the casing and having one end portion operatively connected to the control valve, the other end portion of the lever extending in spaced, opposed relation to the vent valve and engageable therewith for opening same after the control valve has been opened by the initial movement of said lever.

2,751,932
FLUID-PRESSURE CONTROL VALVE FOR MATERIAL LOADERS
Harold M. Stueland, East Moline, Ill., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Application June 6, 1952, Serial No. 292,171
1 Claim. (Cl. 137—621)



A control valve of the character described for use with a fluid motor providing a fluid-receivable chamber having opposite high- and low-pressure ends, comprising: a valve housing including a valve bore having opposite ends; a three-position cylindrical valve member axially shiftable in the valve bore among "neutral," "raise" and "lower" positions; said housing having a supply port intermediate the ends of and opening into the valve bore, first and second motor ports spaced axially at opposite sides respectively of the supply port, first and second exhaust ports opening freely into the valve bore respectively axially beyond the motor ports, and an intermediate exhaust port opening freely into the valve bore axially intermediate the supply port and the second motor port, and chamber means freely interconnecting all the exhaust ports outside the valve bore; said valve member having first and second lands axially separated by a central groove, and first and second end grooves respectively axially beyond the lands; said lands and grooves being so arranged relative to the ports that in the neutral position of the valve member the first and second lands respectively block the motor ports and the central groove connects the supply port with the intermediate exhaust port, in the raise position of the valve member the central groove connects the supply port

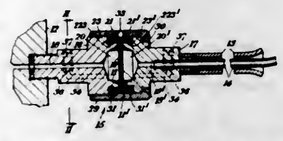
with the first motor port while the first and second lands respectively block the first and intermediate exhaust ports and the second groove connects the second motor port and the second exhaust port, and in the lower position of the valve member only the second exhaust port is blocked by the second land but the first groove freely connects the first motor port and the first exhaust port and the central groove freely connects both the supply port and the second motor port to each other and to the intermediate exhaust port.

2,751,933
MULTIPLE SERVO SELECTOR
Jaime Urteaga, Santiago, Chile
Application June 24, 1952, Serial No. 295,271
2 Claims. (Cl. 137—622)



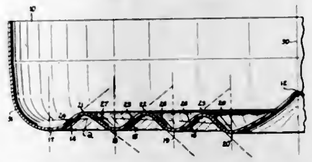
1. A servo-selector system comprising a plurality of fluid-pressure selection pipe circuits disposed in a panel and placed one beside another, a plurality of valves inserted in each selection pipe to control fluid flow therein, all said valves being arranged in longitudinal and transverse rows with at least one of the valves in each succeeding selection pipe circuit having a progressively advanced transverse position relative to one of the valves in preceding circuits, a plurality of fluid-pressure command pipes each corresponding to one of the said longitudinal rows of valves, a plurality of command valves corresponding to each of the respective command pipes, all the valves of the selection pipe circuits forming groups which in number and disposition are related to the number of valves intercalated in each selection pipe circuit and to the number of command pipes, the selection pipes forming separate pipe circuits, two valves inserted in each pipe circuit and each pipe circuit being activated by putting into action a pre-selected combination of two command pipes, all the valves in the selection pipe circuits forming a multiplicity of combinations wherein the first selection pipe of the first group of valves combines the first with the second command pipe, the second selection pipe of the same group combines the first with the third command pipe, and so on successively until the last selection pipe of the first group of valves combines the first with the last command pipe of the selector, the second group of valves forming a multiplicity of combinations wherein the first selection pipe of this group combines the second with the third command pipe, the second selection pipe of this group combines the second with the fourth command pipe, the third selection pipe of this group combines the second with the fifth command pipe, and so on successively until the last selection pipe of the second group combines the second with the last command pipe of the selector; for the third group of valves, the first selection pipe of this group combines the third with the fourth command pipe, the second selection pipe of this group combines the third with the fifth command pipe, and so on successively until the last selection pipe of the third group combines the third with the last command pipe of the selector, the said combination system being applied successively for all the remaining groups of valves until the last group, which consists of only one selection pipe, combines the two last command pipes of the selector.

2,751,934
HYDROSTATIC COUPLING
Frank Stanley Saunders, Kingswood, England, assignor of one-half to Alltools Limited, Brentford, England
Application June 3, 1954, Serial No. 434,225
Claims priority, application Great Britain July 27, 1953
3 Claims. (Cl. 137—791)



1. In a conduit for transmitting hydrostatic pressure, the combination of two separable conduit members each having a spigot end, the spigot end of each conduit member having a narrow bore and a wider recess communicating with said bore, a pair of flexible diaphragms, each diaphragm covering one of said spigot ends and having a body portion covering and sealing the recess in said spigot end, a skirt portion extending axially of said spigot end in contact with the outer wall of said spigot end, an enlarged bead on said skirt portion accommodated in a circumferential retaining groove in said outer wall and an annular flange extending from said body portion at a location spaced inwardly from said skirt portion and adapted to be maintained by the pressure in the conduit in engagement with the recess in the associated spigot end, and a detachable coupling member adapted to fit over the spigot ends to secure them together end to end with the body portions of the two diaphragms in close abutment.

2,751,935
DIAPHRAGM ELEMENTS
Charles R. Smith, Mequon, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application December 13, 1954, Serial No. 474,952
9 Claims. (Cl. 137—795)

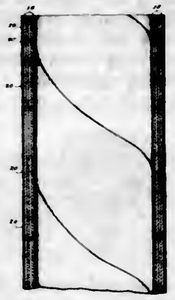


1. A pressure responsive diaphragm having formed therein a series of concentric corrugations the heights of the inner sides of which increase in successive inner corrugations and the heights of the outer sides of which decrease in successive inner corrugations.

2,751,936
TEXTILE CARRIER AND MEANS FOR FORMING SAME
Charles K. Dunlap and Thomas G. Crawford, Hartsville, S. C., assignors to Sonoco Products Company, a corporation of South Carolina
Application January 8, 1953, Serial No. 330,292
4 Claims. (Cl. 138—78)

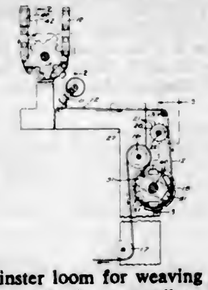
1. A laminated tubular body of spiral wound construction, said tubular body being formed of flexible ply material capable of being spirally wound, the inner plies of said tubular body being spiral wound in edge abutting relation, and the outer ply thereof being twice as wide as the adjacent inner ply and being spiral wound to overlap approximately one-half its width.

3. The method of forming a laminated tubular body of spiral wound construction which comprises spiral winding the inner plies thereof in edge abutting relation, while spiral winding an outer ply thereon in twice



the width of the adjacent inner ply and with an overlap of approximately one-half its width.

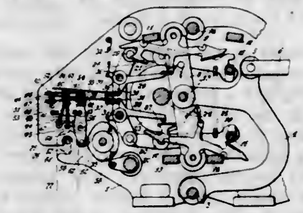
2,751,937
PATTERN CONTROL FOR AXMINSTER LOOM
Leroy N. Linscott, Yonkers, N. Y., assignor to Alexander Smith, Incorporated, White Plains, N. Y., a corporation of New York
Application May 14, 1954, Serial No. 429,751
11 Claims. (Cl. 139—7)



1. In an Axminster loom for weaving a carpet having a repeat pattern and having an endless conveyor carrying a set of Axminster tube frames adapted to weave a complete pattern at each complete revolution of said conveyor and feed means for feeding the woven carpet past a weaving station, a member positioned to be driven by the feed of the woven carpet in advance of said feed means, an index member, means connecting said driven member to cause said index member to make one revolution in response to the feed of a length of woven carpet corresponding to a predetermined pattern length, and means carried by said conveyor to indicate a predetermined repeat point in successive patterns.

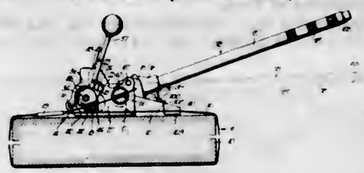
2,751,938
DOUBLE LIFT SHEDDING MOTION
Hugo Stäubli, Horgen, and Walter Wicker, Oberrieden, Switzerland, assignors to Gebr. Stäubli & Co., Horgen, Switzerland
Application June 24, 1953, Serial No. 363,865
Claims priority, application Switzerland September 2, 1952
3 Claims. (Cl. 139—68)

1. In a double lift shedding motion for a loom, a plurality of swing levers, means for connecting each of said swing levers to a heald, a pair of hooks connected with each of said levers, movable knives engageable with said hooks to impart movement to said hooks, levers and healds and means for controlling the engagement of said hooks with said knives comprising means for feeding a pattern card periodically every second pick during idle motion of said knives, a group of three push needles for each heald, means connecting one needle of each of said groups to one of said hooks associated with the respective heald to control the engagement of said hook with a cooperating knife, means connecting the remaining two push needles of each group with the other of said hooks associated with the respective heald to control the engagement of said latter hook with a cooperating knife, push bars movable laterally of themselves to push said push needles, a reading needle carried by each of said push



needles and engageable with the pattern card to position said push needles selectively in or out of position to be engaged by said push bars depending on the pattern, said push bar cooperating with said remaining two push needles for each heald having recesses at intervals equal to twice the distance between said push needles and means for shifting said last mentioned push bar longitudinally between a position in which it engages alternate ones only of said push needles, intervening push needles coinciding with said recesses, and a position in which it engages said intervening push needles only.

2,751,939
STRAP-TENSIONING TOOL
Ernest C. Barker, La Grange Highlands, Ill., assignor to United States Steel Corporation, a corporation of New Jersey
Application November 5, 1951, Serial No. 254,875
6 Claims. (Cl. 140—93.6)



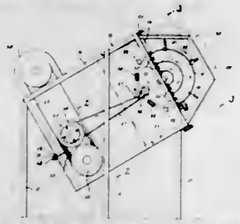
1. In a tool for use in tensioning a strap about an object with the ends of the strap arranged in overlapped relation to receive a seal, a base having a forwardly projecting portion over which one of the overlapped ends of the strap is adapted to be positioned, a gripper pivotally mounted on the base in vertically spaced relation to said portion for movement downwardly and laterally in an arc in a direction opposite the direction of projection of said strap end into clamped engagement with the latter, said gripper being provided above the strap gripping portion thereof with a forwardly opening slot for the passage of the other end of the strap, which other end is adapted to be engaged and pulled by an associated tensioning device, a reciprocating cutter mounted on the gripper above said slot for shearing coaction with the edge of the slot to cut the end of the strap passing through the same, a rack associated with the cutter, a pinion journaled in the gripper in mesh with the rack, a hand lever connected with the pinion for turning the same to reciprocate the rack, and a lost-motion connection between the hand lever and the gripper for permitting the lever to be moved in one direction independently of the gripper to actuate the cutter, said lost-motion connection including a stop for limiting the movement of the lever relative to the gripper in the other direction, whereby movement of the lever in said other direction will upon engagement with said stop return the gripper to its raised position.

2,751,940
FLUID PRESSURE POWER-OPERATED RECIPROCATING SHAFT TOOL
Leonidas C. Miller, Los Angeles, Calif.
Application February 23, 1952, Serial No. 273,058
3 Claims. (Cl. 143—68)



1. In a portable power operated tool, the combination of: a fluid operated power cylinder assembly having a stationary housing and a reciprocable piston rod extending axially through one end of the housing, a valve assembly fixed relative to the housing at the other end thereof for controlling operation of the piston rod, a lever on the valve assembly for operating the valve assembly, and movable in a certain plane, a tubular support having a central opening receiving a portion of said piston rod, a movable work element supported upon the tubular support and operatively connected for activation by the piston rod, said work element having a plane of action, a ring encircling a portion of the tubular support and constituting an enlargement thereof, a nut threaded on the housing, the nut having a bore slidably receiving the tubular support and also having a counterbore to receive said ring, the nut acting to clamp the ring axially against the housing to prevent relative turning movement therebetween, loosening of the nut acting to permit such relative turning movement to enable the plane of action of the work element to be turned with respect to the plane of movement of said lever.

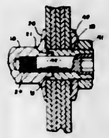
2,751,941
TUBULAR POWER SAW
Egmont S. Smith, Houston, Tex., assignor to B. & B. Engineering & Supply Company, Inc., Houston, Tex., a corporation of Texas
Application June 22, 1953, Serial No. 363,059
15 Claims. (Cl. 143—85)



8. In a power saw having a tubular saw blade rotatably positioned in a framework by a plurality of supporting rollers, the improvement which resides in the combination therewith of a pair of drive rollers, means pivoted to said framework and carrying said drive rollers for arcuate movement toward and away from said blade, said rollers being laterally spaced apart and disposed to receive a portion of the saw blade therebetween, and means applying a pivoting force to the drive roller carrying means and a drive force to the drive rollers to maintain the drive rollers in frictional engagement with the blade while driving the same.

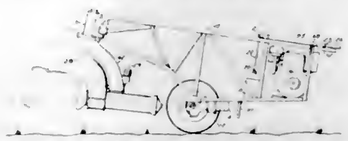
2,751,942
CUTTER ARBOR SHAFT FOR PORTABLE POWER OPERATED TOOLS
Arthur N. Emmons, Nedrow, and Walter A. Papworth, Syracuse, N. Y., assignors to Porter-Cable Machine Company, Syracuse, N. Y., a corporation of New York
Application April 10, 1952, Serial No. 281,635
1 Claim. (Cl. 143—155)

A cutter arbor shaft structure for portable power operated tools comprising an arbor shaft formed with a radial cutter engaging flange and having a short cylindrical cutter supporting portion extending outwardly from said flange for supporting a saw blade of normal thickness, a cylindrical extension member of uniform diameter for supporting wide cutters, said member being formed with an annular flange encircling the cylindrical portion of the arbor shaft and abutting against said radial flange, said arbor shaft being formed with a bore extending axially



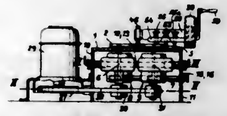
inwardly from the outer end thereof, the inner portion of said bore being provided with an internal thread, a screw member extending through said extension member into said bore and being threaded into said arbor shaft and being cooperable to clamp said extension member against said flange, and a nut and washer assembly mounted on the outer end portion of said extension for clamping said wider cutter against said first mentioned flange.

2,751,943
SELF-PROPELLED HYDRAULIC CLEAVING MACHINE FOR FELLING AND BUCKING TREES IN LOGGING OPERATIONS
Robert S. Ford, Pascagoula, Miss.
Application March 7, 1952, Serial No. 275,361
7 Claims. (Cl. 144—34)



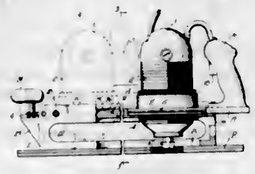
3. In a tree cutting cutterhead, a power operated moving jaw, a yoke supporting the jaw, a blade opposing the jaw and secured to the yoke with a re-entrant recess lying behind the blade edge whereby increased stress carrying area is obtained on the inside of the yoke, and a pair of fins attached to the yoke and adapted to mask the blade tip and prevent the passage of uncut material into the recess.

2,751,944
MILLING MACHINE
Gottlieb Stoll and Georg Schrag, Esslingen (Neckar), Germany, assignors to Festo-Maschinenfabrik Gottlieb Stoll, Esslingen (Neckar), Germany
Application April 20, 1954, Serial No. 424,432
Claims priority, application Germany April 24, 1953
6 Claims. (Cl. 144—134)



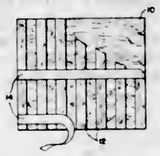
1. A machine for shaping profiles simultaneously on opposite sides of wooden strips comprising a work table having a top, a pair of cutter spindles extending through said top, bearing units below said top for rotatably mounting said spindles, each of said units comprising a housing, a bushing rotatably supporting one of said spindles and slidable in axial direction of said spindle within said housing, a shaft rotatably mounted in said housing transversally to said bushing, eccentric means on said shaft engaging said bushing, means for turning said shaft for adjusting the position of said bushing and the spindle therein in axial direction thereof, and means for locking said shaft in adjusted position, driving means, and transmission means connected to said spindles for relative movement in the axial direction of said spindles, said transmission means connecting said driving means with said spindles for rotating said spindles in opposite directions.

2,751,945
ROUTER GUIDE MECHANISM
Robert W. Beach, Seattle, Wash., assignor to American Manufacturing Company, Inc., Tacoma, Wash., a corporation of Washington
Application March 17, 1953, Serial No. 342,814
3 Claims. (Cl. 144—136)



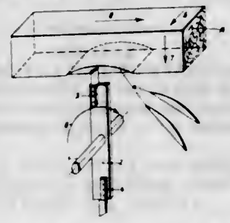
1. In router mechanism incorporating a router tool, the improvement comprising base means adapted to rest on the work for supporting the router mechanism, router tool supporting means operable to support the router tool for engagement with the work beneath said base means, and guide means operable to guide said router tool supporting means for movement of the router tool relative to said base means in a path generally parallel to the surface of the work for cutting a groove therein and including two parallel pairs of interfitting wedging rib and groove members elongated parallel to such path of movement, one member of each such pair being supported by said router tool supporting means along opposite sides thereof, respectively, and the other member of each such pair being supported by opposite sides, respectively, of said base means at opposite sides of said tool supporting means, and a plurality of adjusting means spaced lengthwise of said wedging rib and groove members, interengaged between at least one of said members and its supporting means to hold the opposite ends of such member in any of various positions relative to its paired member for arranging said rib and groove members in precise parallelism and snugly interfitted.

2,751,946
PANEL AND METHOD OF MANUFACTURE
Clarence U. Gramelspacher, Jasper, Ind., assignor to Gramwood of Indiana, Jasper, Ind., a corporation of Indiana
Application November 3, 1951, Serial No. 254,760
4 Claims. (Cl. 144—309)



1. The method of making a plywood panel having a three-dimensional surface comprising; fixing a veneer layer to a backing sheet to form a panel, and cutting grooves in the veneer layer in the general direction of the grain thereof, said grooves extending at least through the veneer layer so as to expose the backing sheet, and working the surface of the panel to dig material out from the exposed soft grain.

2,751,947
METHODS FOR PRODUCING WOOD PARTICLES FOR THE MANUFACTURE OF FIBER BOARDS AND THE LIKE MATERIALS
Oswald Fidel Wyss, Flims-Waldhaus, Graubuenden, Switzerland, assignor to Allwood Incorporated, Glarus, Switzerland, a corporation of Switzerland
Original application August 16, 1948, Serial No. 44,546. Divided and this application March 18, 1952, Serial No. 277,107
Claims priority, application Switzerland April 12, 1946
2 Claims. (Cl. 144—309)



1. The method of producing a mass of wood particles for use in wood composition products, which comprises shaving pieces of wood material into pourable elongated shavings all of substantially the same predetermined length and flat shape, applying each individual cut over only a fraction of the total width of the individual pieces of material to be reduced, said fraction being equal to one of the desired dimensions of the shavings to be produced, placing a number of such individual cuts side by side along said total width, orienting the material relative to the cuts with the length of the shavings substantially coincident with the direction of natural fiber growth, and repeating the shaving operation until substantially complete reduction of the material into a mass of such pourable shavings.

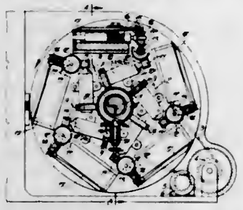
2,751,948
CHERRY PITTER HAVING THREE SPOON SHAPED PITTING BLADES
Arturo Facchini, Voghera, Pavia, Italy, assignor to Teresa Cavanna, Voghera, Pavia, Italy
Application July 30, 1952, Serial No. 301,764
Claims priority, application Italy August 3, 1951
1 Claim. (Cl. 146—18)



A pit removing device comprising, in combination, an elongated hollow shaft; a first elongated, substantially pointed, spoon-shaped member fixed to and extending from one end of said shaft and having a sharp peripheral edge; a pair of additional spoon-shaped members substantially identical with said first spoon-shaped member and nesting in each other and said first spoon-shaped member in one position of the device, all of said spoon-shaped members being completely separated from each other; a pair of rods respectively fixed at one end to said pair of spoon-shaped members and extending through said hollow shaft so as to be turnable therein; and a pair of cranks respectively fixed to said rods at the ends thereof opposite from said pair of spoon-shaped members and located beyond the end of said shaft opposite from said first spoon-shaped member, so that said pair of spoon-shaped members may be simultaneously turned, upon actuation of said cranks, in opposite directions, respectively, away from and back to said one position, said first spoon-

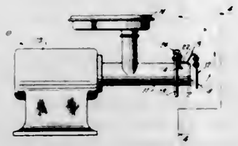
shaped member being located in its entirely on one side of the axis of said hollow shaft and having its pointed end spaced from said axis, and said pair of additional spoon-shaped members respectively being located in their entirety on one side of the axes of the rods to which they are respectively fixed with their pointed ends respectively spaced from said axes, so that all of said spoon-shaped members may be turned with respect to each other to a position where they are all spaced from each other and distributed about a common axis with the pointed ends of said spoon-shaped members all spaced from said common axis.

2,751,949
KNIFE ADVANCING AND LATCHING MEANS FOR A TOBACCO CUTTING MACHINE
Arthur Ritscher, Hamburg-Bergedorf, Germany, assignor to Kurt Korber & Co. K. G., Hamburg-Bergedorf, Germany
Application June 1, 1953, Serial No. 358,926
Claims priority, application Germany June 16, 1952
1 Claim. (Cl. 146—117)



In a tobacco cutter, a frame structure, a rotary cutter head mounted in the frame structure, a plurality of knives adjustably mounted on said cutter head with their cutting edges adjacent the periphery thereof, individual feed screws operatively connected with each of said knives for advancing the same outwardly, a gear member connected to the feed screw, a gear element loosely mounted on the cutter head and arranged about the axis thereof, gearing drivingly connecting said gear element to said gear members, and a spring loaded detent carried by the frame structure adapted to engage the gear element and hold the same against rotation to cause said gearing to drive said feed screws.

2,751,950
DEFLECTING SHIELD FOR MEAT GRINDERS
Jack M. Scott, Dallas, Tex.
Application March 30, 1953, Serial No. 345,505
3 Claims. (Cl. 146—182)



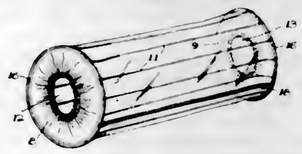
1. A shield for use on a meat grinding machine having a barrel provided with an outlet through which meat is ejected and a ring disposed about said barrel rearwardly of said outlet including: a plate; a bracket having one end portion secured to said plate and having the other end provided with a clamp, said clamp having a pair of opposed angular resilient gripping members adapted to resiliently frictionally grip the ring for detachably and movably securing said shield to said ring whereby said plate may be moved between an operative position and an inoperative position while said shield is secured to said ring, said clamp having an intermediate portion, said intermediate portion being perpendicular to said plate and disposed relatively nearer the center of the plate than is the clamp and being adapted to abut said barrel to hold said plate in front of and in spaced relation to said outlet to deflect said meat ejected from said outlet when in operative position, said plate being disposed outwardly of said barrel and remote from said outlet whereby said outlet is unobstructed by said shield when said shield is in operative position.

2,751,951
ROAST BOARD
John Strathaus, Granada Hills, Calif.
Application December 31, 1953, Serial No. 401,595
3 Claims. (Cl. 146—215)



2. A roast board comprising: a board having an annular recess therein, a prong retaining member removably positioned in said recess with the prongs projecting above the surface of said board, and screws in said board, the heads of said screws projecting above the prong retaining member.

2,751,952
KITCHEN PARING BAG
Gilbert B. Mirus, Monrovia, Calif.
Application August 3, 1953, Serial No. 371,959
3 Claims. (Cl. 150—.5)



1. A bag for use in the hand preparation of vegetables with the retention of the juices and vapors therein, comprising an elongated hollow body of thin, flexible and transparent material, a wall at each end of said body of thin, flexible and transparent material, each of said end walls being provided with a hand receiving opening, elastic sealing means encircling each opening for embracing the wrists of a user when his hands are inserted into the body in a vegetable preparation, a reinforcing strip disposed at the juncture of each of said end walls with the respective end of said body and extending completely around the same, and laterally spaced reinforcing strips extending longitudinally of said body substantially from one of said first reinforcing strips to the other thereof.

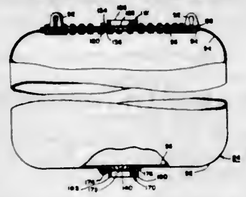
2,751,953
COLLAPSIBLE CONTAINER
Bruce F. Grimm, Washington, D. C.
Application October 1, 1953, Serial No. 383,712
3 Claims (Cl. 150—.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A collapsible container formed of normally spaced inner and outer walls of flexible material, an inlet valve

connected with the inner wall to permit the entrance of air to the space between the walls, said container provided with a filling opening, a closure for said opening, said closure provided with an inwardly-opening valve for the opening therein.

2,751,954
FLEXIBLE CONTAINER AND FITTINGS
Donald W. Dryg, Le Roy Jamison, and Joseph J. von Edeskuty, Minneapolis, Minn., assignors to General Mills, Inc., a corporation of Delaware
Application March 4, 1952, Serial No. 274,732
10 Claims. (Cl. 150—1)



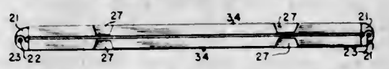
1. A container assembly comprising in combination a container formed of flexible material and having side and end walls, one end wall being provided with an opening for yielding access to the contents, a continuous beam extending adjacent the location of the joining of the side and end walls, a backing member having the same shape as said beam but being divided into sections for insertion into the interior of the container through said opening, securing members extending through said backing member, container material and beam member to secure the beam member to the container, and attaching means on said beam member for securing a lifting hoist for transporting the container.

2,751,955
GOLF BAGS
James M. Nabon, Tangier, Morocco
Application October 21, 1952, Serial No. 315,894
Claims priority, application Morocco October 25, 1951
2 Claims. (Cl. 150—1.5)



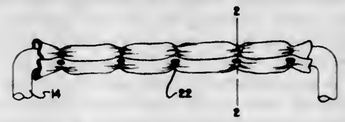
1. A golf bag comprising a rigid frame including a lower collar and an upper collar, a back tensioning bar extending between said collars, a plurality of flat side tensioning bars extending between said collars at the sides of the latter with said flat side bars being disposed at right angles to the sides of said collars to which they are connected, rigid reinforcing elements extending laterally across said collars at the opposite ends of said side tensioning bars to strengthen said collars and reinforce the opposite ends of partitions in the bag, said collars having cut-outs in the confronting edges thereof adjacent the related ends of said side tensioning bars, a sheet of covering material wrapped successively around said side tensioning bars and received at its opposite end edges in said cut-outs to define an enclosure of rectangular cross-section, and a tubular bag body extending around said frame so that the laterally extending portions of said rectangular enclosure divide the interior of the bag body into segregated club receiving compartments.

2,751,956
METHOD OF MAKING BAG FRAMES AND BLANKS THEREFOR
Edward M. Karron, Neponsit, N. Y.
Application April 21, 1954, Serial No. 424,681
7 Claims. (Cl. 150—29)



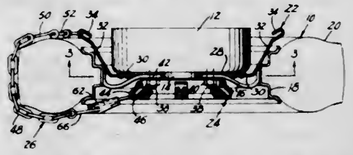
1. A metal blank for forming one channel shaped part of a two-part frame for a handbag or the like, including a strip of bendable material, a pivot ear at each end of such strip, a pair of spaced trapezoidal openings in one edge of such strip, the bottom edge of each opening being parallel to the edges of the strip, said openings also being spaced from the ends of the strip, said blank being adapted to be bent along longitudinal lines which are parallel to the edges of the strip in order to form upwardly extending channel side walls, the parallel line nearest the said one edge of the strip being spaced inwardly of the bottom edge of each of the openings so as to leave between each such bottom edge and the inner face of the bottom wall of the channel-shaped part sufficient material which may be caused to undergo plastic deformation in a direction parallel to the channel bottom wall so that said deformed material will extend substantially up to the opposite channel side wall, the side edges of each of the openings diverging outwardly from the respective bottom edge of each opening, whereby after the channel shaped frame part is bent to provide a corner, the side edges of each of the openings are substantially parallel to each other.

2,751,957
COVER FOR THE HANDLE OF A BABY COACH OR THE LIKE
Elise M. Langerman, Philadelphia, Pa.
Application May 13, 1953, Serial No. 354,738
1 Claim. (Cl. 150—52)



A cover for the handle of a baby coach comprising an elongated substantially rectangular piece of a fluffy, textile heat-insulating material of a length sufficient to cover said handle longitudinally and of a width greater than that necessary for covering the handle circumferentially, a plurality of spaced, transversely extending elastic bands secured to the inner side of said material and being of less length than the width of said material to provide a plurality of shirred grip portions, and complementary fastening devices at the junctions of the opposite ends of said bands with the longitudinal edges of said material.

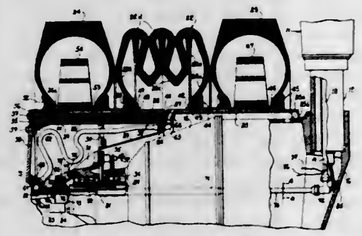
2,751,958
ANTISKID CHAINS
Charles E. Weddington, Crest Line, Calif.
Application May 10, 1955, Serial No. 507,425
3 Claims. (Cl. 152—233)



1. An antiskid device for a vehicle wheel having a wheel body, a tire, a drum to which the body is removably

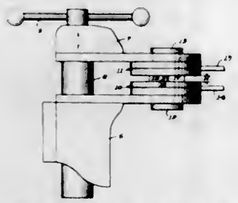
affixed, and studs projecting from the drum, comprising: an inner anchor plate engageable between one face of the wheel body and said drum; an outer anchor plate engageable against the opposite face of the wheel body, each plate having near its center an annular series of stud receiving apertures and including at its margin a circumferential series of hook elements; and at least one chain unit connectible between the plates in position to straddle the tire and including means at its ends engageable with selected hook elements of the plates.

2,751,959
VEHICLE WHEEL
Albert E. Blomquist, Ringoes, N. J., assignor to Fairchild Engine and Airplane Corporation, Hagerstown, Md., a corporation of Maryland
Application June 11, 1953, Serial No. 360,908
19 Claims. (Cl. 152—416)



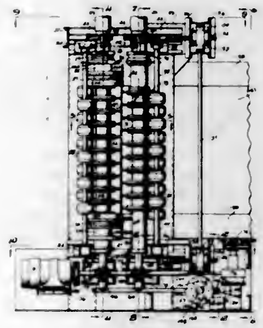
1. A vehicle wheel comprising first rim means adapted for securing a first tire thereto, second rim means adapted for securing a second tire thereto, tire holding means adapted for holding a pneumatic tire thereon between first and second tires secured to said first and second rim means respectively, and mounting means for mounting said first and second rim means and said tire holding means for rotation about a common axis of rotation, said first rim means being mounted by said mounting means in axially movable relation to said second rim means for varying the spacing between said first and second rim means between a first position of spacing, adapted to accommodate a pneumatic tire when deflated that is held by said tire holding means between and adjacent first and second tires secured to said first and second rim means, and a second position of greater spacing adapted to accommodate a pneumatic tire when inflated that is held by said tire holding means between first and second tires secured to said first and second rim means respectively.

2,751,960
MULTI-PURPOSE PRECISION BENDING MACHINE
Roscoe G. Beals, De Kalb, Ill.
Application April 11, 1951, Serial No. 220,403
12 Claims. (Cl. 153—39)



1. In a bending machine, a frame carrying a pair of spaced parallel die plates between which the material to be bent is adapted to be placed, said plates being adjustable toward or away from one another to suit one dimension in the section of the material to be bent, two bending jaw members slidable under spring pressure in guides provided therefor in said die plates parallel to the axis of rotation of said plates, the one jaw being spring pressed relative to one plate toward engagement with the other plate, and the other jaw being spring pressed relative to the latter plate toward engagement with the former plate, each of said plates having a substantially diametrically extending guideway provided therein and a slide positioned in said guideway, a central mandrel supported in registering axial guides provided in said slides, said plates and jaws being adjustable relative to said mandrel by a sliding adjustment between said plates and slides, the spacing of the central mandrel relative to the jaws being in accordance with the transverse dimension of the section of the material to be bent, means for maintaining the slides and plates in their adjusted position, and means for turning one die plate relative to the other.

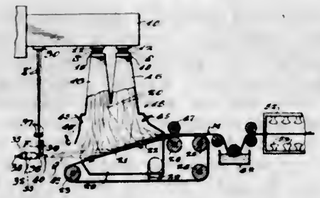
2,751,961
METHOD AND APPARATUS FOR CORRUGATING PIPE SECTIONS
James P. Zallea, Wilmington, Del.
Application September 18, 1951, Serial No. 247,060
27 Claims. (Cl. 153—73)



1. In a machine for forming a series of circumferential corrugations in a pipe section for use as a flexible member in an expansion joint, a frame structure, elongated outer and inner roller die assemblies carried by said structure and mounted for rotation about generally parallel axes, the axis of said outer roller die assembly being fixed, elongated outer and inner cam assemblies carried by said structure and disposed thereby in generally parallel relation to said roller die assemblies, said outer cam assembly and inner roller die assembly being mounted for movement outward from an initial to a final forming position, and said inner cam assembly being mounted for movement inward from an initial forming to an innermost position, means connecting said outer cam assembly and inner roller die assembly for simultaneous movement from said initial to said final forming position, additional means securing said inner cam assembly against shifting movement during said simultaneous movement and for release thereof at the completion of said simultaneous movement, said connecting means being disengagable for independent inward movement of said inner roller die assembly for moving said inner cam assembly from said initial forming to said innermost position, said outer cam assembly and inner roller die assembly being positionable for fully re-engaging, respectively, said outer roller die assembly and said inner cam assembly while the latter is in said innermost position, and said additional means being operative to connect said inner cam and roller die assemblies for simultaneous movement outward to said initial forming position, and means for turning said roller die assemblies in opposite directions while a portion of said pipe section interposed therebetween is firmly gripped thereby for forming said corrugations, and for rotating said pipe section about its central longitudinal axis during the forming operation, said central axis being disposed in generally parallel relation to said axes of said roller die assemblies.

22. In a machine for forming a series of circumferential corrugations in a pipe section for use as a flexible member in an expansion joint, a frame structure, a pair of roller die shafts carried by said structure for rotation about generally parallel axes, roller dies carried by each of said roller die shafts for rotation therewith and for sliding movement axially thereof, a pair of cam assemblies each comprising cam shafts carried by said structure in generally parallel relation to said roller die shafts, cam members carried by each of said cam shafts for sliding movement axially thereof, said cam members being positionable in staggered relation to one another for supporting the roller dies carried by said roller die shafts in staggered relation to one another, said cam members and roller dies presenting coacting surface portions affording controlled diminution of the spacing of the latter in response to shifting movement of one of said roller die shafts and one of said cam assemblies relative to the other roller die shaft and the other cam assembly during the forming operation, and means for shifting said roller die shafts and cam assemblies as aforesaid for applying to the wall of said pipe section interposed between the roller dies carried respectively by said roller die shafts forces radially of said pipe section for forming said corrugations.

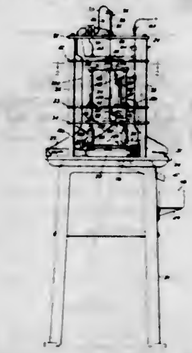
2,751,962
METHOD AND APPARATUS FOR PRODUCING FIBROUS PRODUCTS
Warren Wendell Drummond, Newark, Ohio, assignor to Owens-Corning Fiberglas Corporation, a corporation of Delaware
Application November 16, 1950, Serial No. 195,952
15 Claims. (Cl. 154—1.7)



1. A method of concomitantly forming relatively coarse and fine fibers including the steps of flowing streams of molten fiber-forming material; of directing a blast of gas of a temperature below that of the molten material into engagement with the streams to continuously attenuate the same into relatively coarse fibers; of concomitantly establishing a high velocity blast of intensely hot gases of a temperature above the attenuating temperature of the fiber-forming material; of continuously feeding a body of fiber-forming material into the blast of intensely hot gases to attenuate the body into relatively fine fibers; of directing both coarse and fine fibers during their attenuation into a mixing zone wherein the coarse and fine fibers are interfelted in a common mass.

9. Apparatus for producing fibers from fiber-forming material including, in combination; a receptacle adapted to contain a supply of flowable fiber-forming material; a bushing disposed adjacent the receptacle having a plurality of orifices through which flow streams of the material; a shroud into which the streams are directed; means for establishing a blast of gas of a temperature below that of the stream of material directed against the streams as they enter the shroud for attenuating the streams to fibers within the shroud; a second bushing having means for flowing a body of fiber-forming material to form a filament; a chamber for burning a combustible mixture and having a restricted orifice to produce a high velocity blast of hot gases of a temperature above the attenuating temperature of the fiber-forming material; means for supporting the chamber to direct the blast of hot gases to attenuate the filament to fibers and convey the fibers into the shroud, and a movable conveyor disposed adjacent the shroud for continuously collecting fibers formed by both fiber attenuating blasts into a common mass.

2,751,963
MACHINE FOR MAKING POWDER PUFFS, SACHET PACKETS, AND ROUGE APPLICATORS
Joseph E. Valentine, Caldwell, N. J., assignor to Valcourt, Inc., New York, N. Y., a corporation of New York
Application April 7, 1951, Serial No. 219,880
12 Claims. (Cl. 154—1.8)

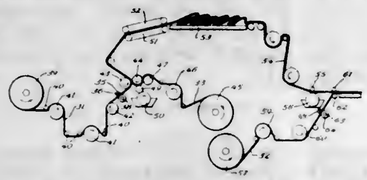


6. In the manufacture of a power puff including a facing member having its perimeter overlapping the perimeter of a filler in the puff, a work table having a mould therein, a platform underlying said work table and closing the lower end of said mould, said mould having a peripheral enlargement at the end thereof next to said platform, means at the other end of said mould for positioning a facing member in symmetrical relation to said bore, means for applying a filler at the top mid portion of said facing member, a plunger for forcing said member and filler into said mould and compressing the mid portion of said member into contact with said platform and causing said facing member to form a peripheral wall confined within said mould and around said plunger and filler, and means insertable into said mould peripherally of said plunger and above said peripheral wall and movable downwardly toward the upper end of said wall for forcing said wall out of its confinement between the mould and plunger into said enlargement and into overlapping relation to the perimeter of said filler.

2,751,964
METHOD OF MAKING DOUBLE-FACED CORRUGATED BOARD HAVING A TEAR STRIP THEREIN
Reynolds Guyer, St. Paul, Minn., assignor to Waldorf Paper Products Company, St. Paul, Minn., a corporation of Minnesota
Application April 13, 1953, Serial No. 348,413
5 Claims. (Cl. 154—33.05)

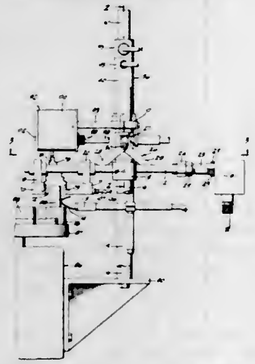
1. A method of manufacturing double-faced corrugated board having a tear strip therein for use in container manufacture comprising continuously advancing two moving webs of material which are to form liners, continuously advancing a web of material which is to form the corrugating medium, continuously corrugating said last-mentioned web along lines which extend transversely of the web to provide transverse flutes, continuously applying

glue to all of the flutes on both sides of the corrugated web, continuously applying said liners to opposite sides of the corrugated web, and including the further steps of slitting one of the moving liners on spaced longitudinally



extending lines just prior to its being applied to the corrugated web to form longitudinal sections which are continuous, and maintaining said sections in their original relationship to each other prior to their being applied to the corrugated web.

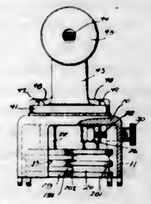
2,751,965
TUBE SEALER
Leonidas C. Miller, Los Angeles, Calif.
Application October 2, 1953, Serial No. 383,858
11 Claims. (Cl. 154—42)



1. In a device of the class described, the combination of: a frame, first and second die members each slidably mounted on the frame for reciprocating movement toward and away from each other, a crosshead mounted for reciprocating movement on the frame in a direction at right angles to the direction of movement of said members, power means for reciprocating the crosshead, a toggle mechanism including a pair of diverging links each having one end pivotally connected to the crosshead, a tension element extending in the direction of movement of said members, means including pivot means connecting the other end of one of the links to one of said members and the other end of the other link to the tension element so that spreading of the latter said ends of the links is effective to move said members toward each other.

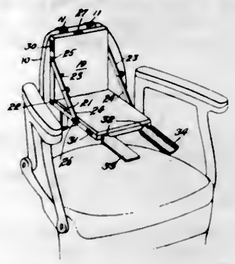
2,751,966
HAND HEAT SEALER
Herbert F. Techtmann, Milwaukee, Wis., assignor to Techtmann Industries, Milwaukee, Wis., a partnership
Application December 18, 1952, Serial No. 326,677
11 Claims. (Cl. 154—42)

11. In a heat sealer, the combination of paired crimping rolls, said rolls respectively having surfaces provided with peripheral ribs and peripheral channels, means for mounting one of the rolls for movement to and from the other, means for biasing the said movable roll yieldably toward the other, the ribs normally engaging the bottom of the channels and the channels in said channeled surface being wider in cross section than the ribs thereby to provide work accommodating clearance there-



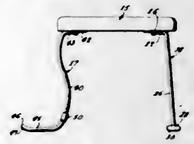
between even when the ribs are seated to their full extent in said channels.

2,751,967
SEAT AND ATTACHMENTS FOR SUPPORTING CRIPPLED CHILDREN IN STANDARD DENTAL CHAIRS
Ralph M. Sitterley, Brooklyn, N. Y.
Application May 5, 1954, Serial No. 427,844
4 Claims. (Cl. 155—79)



4. Attachable and removable child's seat for standard dental chair, comprising a mounting frame having supporting members with means engageable over the back of a standard dental chair, a child's seat having hingedly connected back and seat panels and supporting means for the seat panel disconnectible to permit lowering of the seat panel, said back panel having means removably engaged in vertically adjustable relation with said supporting members on said mounting frame, said back and seat panels having mounting sockets in different positions thereon and body rest members having mounting shanks detachably engaged in said sockets providing body supports in different relations on said child's seat.

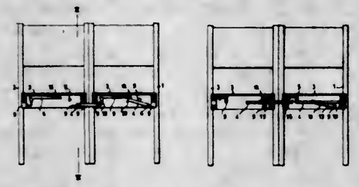
2,751,968
ARMREST FOR AUTOMOBILE SEATS
Antoinette J. Fleming, Hawthorne, Calif.
Application July 31, 1953, Serial No. 371,667
2 Claims. (Cl. 155—112)



1. A portable armrest for a vehicle seat having a seat cushion and a back rest overhanging the rear portion of the seat cushion and forming therewith a rearwardly extending seat crevice, said armrest comprising: an elongate body member to extend forward from said back rest at a level spaced above said seat cushion; a first leg means to rest on said seat cushion forward of said back rest to support the forward portion of said body member, said

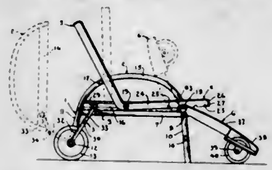
first leg means having an offset portion at its upper end extending in one longitudinal direction of the body member to lie against the underside of the body member when said leg means is in its normal supporting position; a first hinge means connecting the end of said offset portion to said body member for pivotal movement relative thereto; a second leg means to support the rear end of said body member, said second leg means having a forwardly extending offset portion at its lower end to extend into said crevice and hook under said back rest for maintaining the second leg means upright against the forward surface of the back rest; and a second hinge means connecting said second leg means to the rearward end portion of said body member.

2,751,969
COUPLING DEVICE FOR INTERCONNECTING CHAIRS AND SIMILAR SEATING FURNITURE INTO A ROW
Willem Jan Kruijt, Mijdrecht, Netherlands
Application April 9, 1954, Serial No. 422,116
8 Claims. (Cl. 155—130)



1. A coupling device for interconnecting chairs and the like into rows, said device comprising for securement to each device in combination, catch means movable to an extended and a retracted position, biasing means urging said catch means toward its retracted position, movable pawl means engageable with the catch means secured to an adjacent chair when the last named catch means is moved to its extended position for detaining the latter against retraction, said first named catch means, when in its retracted position, rendering said pawl means inoperative.

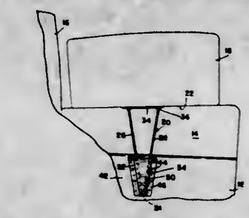
2,751,970
FOLDABLE LOUNGE CHAIR
Marion J. Smith, Columbia City, Ind.
Application April 20, 1954, Serial No. 424,415
6 Claims. (Cl. 155—139)



5. A chair of the kind described comprising a base having downwardly divergent front legs and rear legs, an arm unit of a length the same as the distance between the legs at their upper ends, and pairs of links connecting the arm unit to the base for manual movement to an operative position thereon or to an inoperative position substantially between the legs of the base.

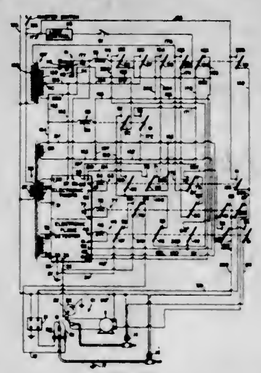
2,751,971
DETACHABLE INSIDE ARM REST FOR SOFA BED
Fred V. Gentsch, Birmingham, Mich.
Application July 20, 1953, Serial No. 369,110
1 Claim. (Cl. 155—198)

In a sofa bed or the like having a supporting frame and at least one removable arm rest, means for removably mounting said arm rest on one side of the frame in overlying relation to the adjacent side edge portion of the frame, said means comprising a rigid bar member bent at its mid-portion to provide legs diverging from said portion, parallel terminal portions integrally connecting into the ends of the respective legs and extending at right angles to the plane of the legs, means for removably securing said terminal portions to the underside of said arm rest, said terminal portions extending transversely of said arm rest and said legs depending from the outer



side edge of said arm rest, said securing means comprising a strap removably secured to the underside of said arm rest, said strap having grooves in the upper surface extending transversely of said arm rest and receiving said terminal portions and cooperating with the underside of said arm rest to frictionally clamp said terminal portions, and a bracket secured to said one side of the frame, said bracket having an upwardly opening slot formed with opposite side walls which diverge upwardly at substantially the same angle as the angle between said legs, whereby to removably receive said legs in said slot.

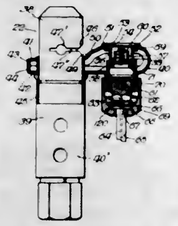
2,751,972
BURNER SAFETY CONTROL APPARATUS
John A. Loeber, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application January 28, 1954, Serial No. 406,708
15 Claims. (Cl. 158—28)



1. A burner control system comprising, a fuel burner unit comprising an electrically energizable fuel feeding means and blower, time delayed safety cutout means having an electrically energizable actuator and a switch, means normally causing energization of said safety cutout means actuator upon the absence of flame at the fuel burner unit, first electrically operable means for energizing said blower, means to initially energize said first means including the actuator and switch of said safety cutout means, holding means including said safety cutout means switch to maintain said first means energized, means controlled by said first means to deenergize said safety cutout means actuator upon energization of said first means, prepurge timing means to delay energiza-

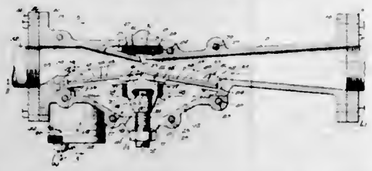
tion of said fuel valve for a time period after energization of said blower, manually selectable means to vary the time delay period of said prepurge timing means, and means rendered operable by said prepurge timing means to again energize the actuator of said safety cutout means at the end of said time delay period.

2,751,973
ELECTRIC IGNITER
Eugene E. Meusy, Milwaukee, Wis., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis., a corporation of Wisconsin
Application February 28, 1950, Serial No. 146,686
11 Claims. (Cl. 158—115)



6. In combination with a gaseous fuel burner having a burner body provided with an outlet port for discharging gaseous fuel therefrom, means defining a depression spaced from said burner in the direction of discharge of said fuel, said depression having a mouth opening in a direction substantially normal to the direction of said fuel discharge, a member providing a surface leading from adjacent said port to adjacent the margin of said depression mouth and positioned in the path of at least a portion of the discharged gas and inclined with respect to the direction of said gas discharge to deflect said discharged gas in the direction toward which said depression opens and cause the gaseous fuel to flow along said surface toward said depression, a deflector at the end of said surface adjacent said depression positioned to further deflect a substantial portion of the discharged gas away from the depression mouth and affording eddies of said discharged gas flowing into said depression, and electric ignition means within said depression for igniting said gas within said depression.

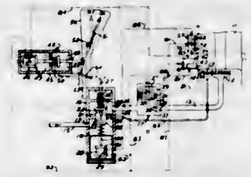
2,751,974
VENTURI TYPE PROPORTIONAL MIXER WITH MEANS FOR ADJUSTING THE EFFECTIVE CROSS SECTIONAL AREAS OF THE ADJACENT SMALL EXTREMITIES OF THE OUTWARDLY FLARED EXHAUST AND INWARDLY TAPERED INTAKE PASSAGES THEREOF
Albert Stadler, Rockford, Ill., assignor to Eclipse Fuel Engineering Co., Rockford, Ill., a corporation of Illinois
Application June 2, 1952, Serial No. 291,154
4 Claims. (Cl. 158—118)



1. A Venturi type proportional mixer of the character described, comprising an elongated hollow member formed for the most part of cast material and having one end part thereof shaped to form an outwardly flared exhaust passage, provided at its outer extremity with means for connecting the large outer end of the exhaust passage to a burner arrangement, and embodying at its inner end portion a wall structure that defines an elongated slot-like space which is located at one side and lengthwise of the inner end portion of the exhaust passage and extends outwards from the inner extremity of said discharge passage, said member having the other end part thereof shaped to form an inwardly tapered intake passage with the inner extremity thereof in alignment but spaced apart relation with the inner extremity of the exhaust passage, provided at its outer extremity with means for connecting the large outer end of the intake passage to a source of air under super-atmospheric pressure, adapted to direct the air under super-atmospheric pressure so that it enters and flows through the exhaust passage after flowing through said intake passage, and embodying at its inner end portion a wall structure that defines an elongated slot-like space which is located at one side and lengthwise of the inner end portion of the intake passage, extends outwards from the inner extremity of said intake passage, and is in longitudinal alignment with the first mentioned slot-like space, said member being provided with an additional wall structure which cooperates with the two aforesaid wall structures to form a suction chamber adjacent to and in communication with the inner extremities of the exhaust and intake passages, and also provided with means for connecting the chamber to a source of gaseous fuel under substantially atmospheric pressure to the end that the fuel in the chamber is entrained by the air under super-atmospheric pressure directly before it enters said exhaust passage; a rigid strip-like part disposed in, and shaped conformably to, the first mentioned slot-like space, forming a part of said inner end portion of the one end part of the member, and provided at the end thereof that is farther from the inner extremity of said exhaust passage with a pivotal connection whereby it is permitted to swing laterally back and forth in order to vary the cross sectional area of said inner extremity of the exhaust passage; a second rigid strip-like part formed separately from the first mentioned strip-like part, disposed in, and shaped conformably to, the second mentioned slot-like space, forming a part of said inner end portion of the other end part of the member, provided at the end thereof that is farther from the inner extremity of the intake passage with a pivotal connection whereby it is permitted to swing laterally back and forth in order to vary the cross sectional area of said inner extremity of the intake passage, and having its distal end spaced from the adjacent distal end of the first mentioned strip-like part in order to form therebetween a passage between the suction chamber and the space between said inner extremities of the exhaust and intake passages; and means operative positively and conjointly to swing said rigid strip-like parts back and forth and also releasably to retain them in the various positions into which they are swung and including a member disposed in the suction chamber and having certain parts thereof pivotally connected to said distal ends of the rigid strip-like parts.

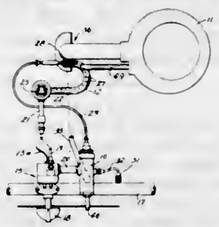
2,751,975
CONTROL APPARATUS
Russell B. Matthews, Wauwatosa, Wis., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis., a corporation of Wisconsin
Application May 5, 1953, Serial No. 353,107
17 Claims. (Cl. 158—122)

12. Condition responsive control apparatus comprising, a thermoelectric generator adapted when heated by burning fuel to afford a source of electric energy, a resettable control device, an electromagnetic device having an operating member movable from a first position to a second position by thermoelectric energization of said device, and a condition responsive single-pole-double-throw circuit-controlling device having contacts in circuit with said thermoelectric generator, said resettable control device, and said electromagnetic device, said circuit-controlling device being operable in response to one condition to complete the circuit between said generator and said resettable control device for thermoelectric energization of the latter, and said circuit-controlling device also being operable in response to another condition to interrupt the circuit between said generator and said re-



settable control device and to complete the circuit between said generator and said electromagnetic device to thereby effect deenergization of said resettable control device and thermoelectric energization of said electromagnetic device and thereby actuation of said operating member to said second position, said operating member when in its said second position preventing resetting of said resettable control device.

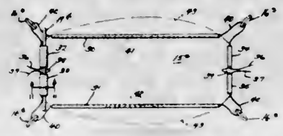
2,751,976
GAS BURNER IGNITION SYSTEM
Peter I. Hollman, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a corporation of Illinois
Application January 19, 1952, Serial No. 267,288
5 Claims. (Cl. 158—130)



1. In a gas burner lighting system, the combination of a main gas burner, a supply line connecting the main burner to a gas supply, main shut-off valve means in the gas supply line to the main burner operative when open to permit the supply of gas thereto, normally closed safety valve means connected in the gas supply line to the main burner between the main shut-off valve and the main burner controlling the flow of gas thereto operative when closed to block the flow of gas to the main burner and operative when open to permit the supply of gas thereto, an ignition pilot burner in igniting relation to the main burner operative to be lighted when said main shut-off valve means is opened, heat responsive means positioned in heat receiving relation to said pilot burner and operative when heated sufficiently thereby to maintain said safety valve means open to permit the flow of gas therethrough to the main burner, and by-pass conduit means by-passing said main shut-off valve and connected to said safety valve means operative to supply gas to the main burner through the safety valve means independent of said main shut-off valve means as long as said safety valve means remains open.

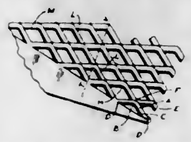
2,751,977
ONE MAN AUTOMOBILE COVER
Dale F. Pinkerton, Fort Collins, Colo.
Application October 24, 1952, Serial No. 316,670
1 Claim. (Cl. 160—368)

A protection for automobiles comprising a flexible cover having transverse end casings with open corner portions, said transverse casings being divided transversely thereof, cords slidably threaded through said casings and formed into projecting loops at the exposed corner portions of the



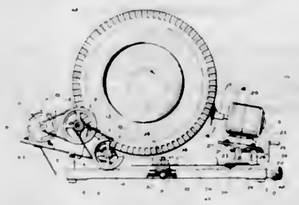
cover, the ends of the cords projecting from the division points of the transverse casings and being accessible for tying, and elastic members provided on said loops.

2,751,978
EXPANDED METAL AND METHOD OF FORMING SAME
Onni S. Koskinen, Birmingham, Mich.
Application July 29, 1953, Serial No. 370,939
6 Claims. (Cl. 164—6.5)



1. The method of forming expanded metal consisting in feeding, step by step, a sheet of metal to be operated upon longitudinally of the grain of said metal across the path of operation of shearing and forming mechanism diagonally thereof, maintaining the shearing and forming mechanism in fixed longitudinal relation to the line of shearing and forming, and operating said mechanism between each feeding step for forming in the metal a path of plurality of quadrilaterals connected together at their apexes with one of their sides extending parallel to the longitudinal edge of the expanded metal formed.

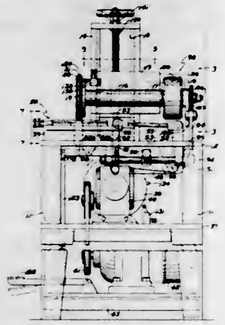
2,751,979
TIRE TREAD TRIMMING MACHINE
John A. Holland, Riverside, Calif.
Application December 29, 1953, Serial No. 401,005
6 Claims. (Cl. 164—10.2)



1. In a machine for trimming the tread of a tire for the purpose of perfecting the running balance thereof when mounted on a vehicle wheel while on a vehicle, a main frame, a tire supporting unit including a table that is transversely pivotally adjustably connected to said main frame, a friction drum rotatably supported by said table for engaging the periphery of said tire, means for driving the drum for rotataing said tire circularly about the wheel axle as its main transverse axis, a tire tread cutting unit carried by said main frame and axially spaced from said table and friction drum and including a circular blade and means for rotating the blade for trimming the tread of said tire, said cutting unit including a platform that is longitudinally slidably mounted on said main frame and horizontally arcuately transversely adjustable thereon about a vertical axis, for adjusting the

angular position of said blade arcuately horizontally with respect to the axial radius of the tread of said tire, means for adjusting said platform axially of said frame, a support for said blade transversely pivotally connected to said cutting unit platform and manually operable means for rocking said support and cutting blade about its transverse pivot for adjusting the angular disposition of said blade in a vertical plane with respect to plane of the axial radius of the tire tread.

2,751,980
INCISING BELTS
Richard F. Garver, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a corporation of New York
Application May 6, 1952, Serial No. 286,271
9 Claims. (Cl. 164—50)



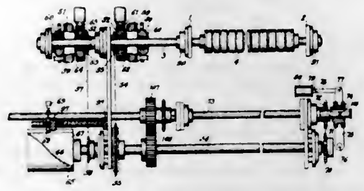
1. Apparatus for forming substantially equally spaced, transverse incisions in an endless belt, said apparatus comprising a rotatable support for an endless belt, an anvil for retaining the sides of a portion of the belt on said support, means for moving said support toward and away from the anvil, knives disposed on opposite sides of the support and movable transversely of the anvil when the belt is located therein to form a transverse incision in the belt by cuts directed from opposite sides of the belt, and means for rotating the support when the support is in position away from the anvil to advance the belt circumferentially relative to the knives to provide the required spacing between adjacent incisions in the belt.

2,751,981
SHEET FORMING AND STACKING APPARATUS
James R. Hawkins, Deerfield, Ohio, assignor to Armour and Company, Chicago, Ill., a corporation of Illinois
Application May 31, 1951, Serial No. 229,073
2 Claims. (Cl. 164—68)



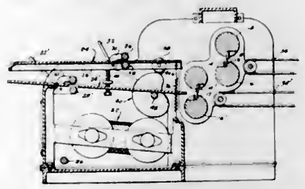
1. In a sheet forming and stacking device having a slitting means and a cross-cutting means for forming an elongated web into a plurality of sheets, the improvement which comprises a conveyor to receive the sheets from the cross-cutting means, said conveyor having a feed end portion positioned vertically beneath said cross-cutting means, a pivotally-mounted frame supporting said feed end portion, the pivot axis of said frame being aligned with but laterally offset from said cross-cutting means, and means for adjusting the inclination of said frame about said pivot axis and thereby the height of said feed end portion with respect to said cross-cutting means, whereby the sheets falling onto said feed end portion are received to face in a single direction.

2,751,982
SHEET MATERIAL FEEDING AND CUTTING APPARATUS
Philip G. Schlemmer, Nanuet, N. Y., assignor to National Equipment Corporation, New York, N. Y., a corporation of New York
Application January 18, 1954, Serial No. 404,430
10 Claims. (Cl. 164—68)



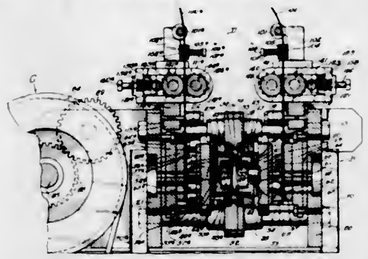
1. An apparatus for feeding sheet material for severance into lengths of selected sizes comprising, a feed roll and a pressure roll between which the sheet is moved to a cutting means, a shaft carrying the feed roll, said shaft carrying a plurality of electro-magnetic clutches driven at different rotative speeds, switch means by which one or the other of the clutches is energized to thereby rotate the shaft at either a slow or a faster rotative speed and to selectively cause rotation of the shaft at different speeds, and adjustable means by which the time of energization of either magnetic clutch can be regulated.

2,751,983
CUTTING KNIFE—EXTRA RANGE
Albert F. Shields, Forest Hills, N. Y., assignor to S & S Corrugated Paper Machinery Co., Inc., Brooklyn, N. Y., a corporation of New York
Application March 26, 1953, Serial No. 344,785
2 Claims. (Cl. 164—68)



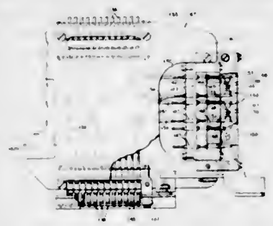
1. In a mechanism for cutting continuously moving sheet material, a cyclic rotary cutter, means for feeding said sheet material at a normal sheet speed along a predetermined path to said cutter, a variable speed drive operatively connected to said cutter for driving said cutter at variable speeds throughout the cycle and at an increased speed during cutting of said sheet material, and means arranged along said path for increasing the length of said path during cutting of said strip material in accordance with the difference between the increased cutting speed and said normal sheet speed to render said speeds synchronous during cutting, said means including a tilting bed supporting said sheet material during movement along said path, a first guide roller disposed below said tilting bed and protruding thereinto so as to be contiguous to the undersurface of a sheet passing over said bed, a second guide roller mounted on said tilting bed and disposed above the first guide roller, said guide rollers cooperating to guide the sheet to the cutter at any tilted position of the bed, said bed being tiltable about the axis of said first guide roller and actuating means controlled by said cutter driving means for periodically tilting said bed into a predetermined angular position relative to said sheet path.

2,751,984
PUNCH PRESS
George H. Kuhl, Glen Ellyn, Ill.
Original application February 27, 1951, Serial No. 212,975. Divided and this application July 21, 1955, Serial No. 523,447
5 Claims. (Cl. 164—90)



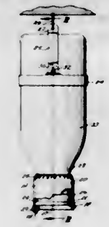
1. A punch press comprising a base, a pair of spaced parallel bolster plates vertically upstanding from the base, a plurality of parallel tie rods extending horizontally between and secured to the bolster plates, a bearing mounted on each tie rod, a flywheel mounted on a shaft rotatably supported at each end in the base, pitmans connecting the flywheel to the bearings for reciprocating the same in a horizontal plane with rotation of the flywheel, a ram secured to the bearings, an annular sleeve integrally secured to the ram and having external threads at one end thereof, a punch holder having external threads turned opposite to the threads on the sleeve, a ring engaging the threads on the punch holder and sleeve and rotatable to shift the punch holder relative to the sleeve, said punch holder being provided with a concave outer face having a central opening therein, a male die part having a convex face coinciding with the concave face of the punch holder and a central lug having a loose fit in said opening, means for securing the lug in the opening to secure the male die part in adjusted position on the punch holder, a female die part cooperable with the male die part and carried on the base, and means for rotating the flywheel.

2,751,985
FIELD SELECTION MECHANISM FOR RECORD CONTROLLED MACHINES
Otto E. Kase, Stamford, Conn., assignor to Sperry Rand Corporation, a corporation of Delaware
Application December 5, 1952, Serial No. 324,313
29 Claims. (Cl. 164—115)



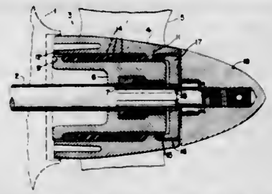
1. A machine for transferring data from one card to another and adapted to operate with one of the cards having a zone thereof divided into fields of data and in which either card is provided with control holes indicative of the fields of data to be selected, and having means to permit said card to remain in the machine for one or more cycles of operation which comprises means for sensing the data of said fields, means for retaining said sensed data, a plurality of latching means for normally disabling said retaining means, means for transferring said sensed data to the other card, and means made effective by the control holes to release one or more of said latching means to permit transfer of data only from selected fields of the first card to the second card.

2,751,986
AUTOMATIC AND MANUAL FIRE EXTINGUISHER
Leonard C. Deye, Lewiston, Idaho, assignor of one-half to E. N. James, Lewiston, Idaho
Application July 8, 1953, Serial No. 366,660
3 Claims. (Cl. 169—26)



1. A fire extinguisher cap comprising a closure including a web having an annular flange and adapted to be positioned on the end of a neck of a bottle, a sleeve positioned around said closure and adapted to be crimped on the neck of the bottle, a disc hinged in the lower end of said sleeve, and a fusible element connecting the sides of the disc opposite to the side on which the hinge is positioned for retaining the disc in the sleeve with the disc adapted to retain the closure against the end of the neck of a bottle upon which the sleeve is crimped.

2,751,987
RESILIENT PROPELLER MOUNTING AND SLIP CLUTCH RESPONSIVE TO PROPELLER THRUST
Elmer C. Kiekhaefer, Cedarburg, Wis.
Application September 14, 1953, Serial No. 379,878
2 Claims. (Cl. 170—135.75)



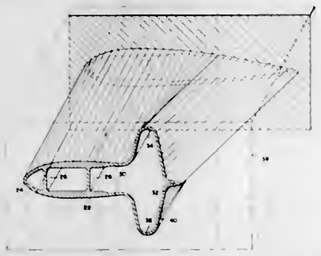
1. A marine propeller assembly for driving a propeller having a different thrust in each direction and providing the resilient support for the propeller on the shaft, a bushing for the shaft and having a cylindrical surface, an annular abutment member at each end of said bushing, a plurality of O-rings of resilient material of circular cross-section, said O-rings being mounted on said bushing between said abutments, each O-ring comprising a separate element movable axially on said bushing and compressible axially and radially respecting the shaft, and a cylindrical sleeve forming part of the propeller hub and mounted on the said O-rings to provide resilient support of the propeller, said sleeve having an annular rib extending between two of said O-rings and axially engageable therewith to secure the propeller axially of the propeller shaft, given numbers of said O-rings being dis-

posed between said annular rib and said annular abutment members, a greater number of O-rings in one direction of said rib providing the greater torque capacity so that the thrust of the propeller in response to the rotation of the shaft in each direction moves the propeller axially of the shaft and selectively effects the compression of the corresponding given number of said O-rings in each corresponding direction whereby the torque capacity provided by the driving engagement thereof is proportional to the different torque requirements necessary for the rotation of the propeller in each direction.

2,751,988
BLADE FOR AIRCRAFT AND MANUFACTURE THEREOF

Harold E. Lemont, Jr., and Alexandre Berger, Pottstown, Pa., assignors to Jacobs Aircraft Engine Company, Pottstown, Pa., a corporation of Pennsylvania

Application June 3, 1952, Serial No. 291,452
5 Claims. (Cl. 170—159)



1. The method of forming a hollow, one piece blade section of airfoil contour comprising producing by extrusion an elongated blank having a rounded leading edge portion of substantially the same contour as that of the blade section to be produced, having a stiffening web extending longitudinally through said leading edge portion, and having its chord substantially less than that of the blade section to be produced but with the perimeter of a transverse cross-section of the blank approximately equal to that of the blade section to be produced by reason of outward bulging of the trailing portions of the blank walls, and passing said blank through a die shaped to guide the leading edge portion of the blank without substantial distortion thereof but to flatten gradually the bulging portions of the blank walls, with concurrent increase of the chord, to the desired contour of the blade section.

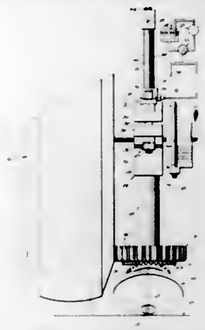
5. A blade for aircraft comprising an elongated hollow blade section of airfoil contour and uniform chord throughout its length, and having at least one internal spanwise extending reinforcing web, a faired balancing weight having a rounded leading edge portion, a rod extending from the trailing edge of said balancing weight and through the leading edge and web of said blade section and secured thereto, and a fairing section interposed and clamped between said balancing weight and leading edge of said blade section.

2,751,989
PARKING DEVICE FOR AUTOMOTIVE VEHICLES

Charles A. Dreisbach, Yonkers, N. Y.

Application May 14, 1952, Serial No. 287,735
6 Claims. (Cl. 180—1)

1. A parking installation in an automotive vehicle having a chassis including rear wheels with tires, comprising jacks carried in inverted fashion by the chassis between and near the rear wheels, respectively, each jack having a ram axially movable toward and away from the ground into operative and inoperative positions, respectively; power means for operating said jacks; a stud projecting from the lower end of the ram of each jack and at an oblique angle to the axis thereof, the axes of said studs being oppositely inclined to each other and equally inclined to the ground and lying in planes substantially parallel to the median planes of the adjacent rear wheels, respectively; identical rollers rotatably but axially immovably mounted on the studs of said jacks, respectively, said rams, when moved into their respective operative positions, lowering said rollers onto the ground sufficiently to raise the rear wheels off the ground and assume their load, and said rollers having frusto-conical surfaces



adapted to be in substantially uniform rolling engagement with the ground when said rams are in their respective operative positions; a friction disc mounted on, and axially fixed with respect to, each of said rams, and rotatable about the axis of the corresponding ram; and permanently meshing bevel gears on each roller and associated friction disc, respectively, said friction discs being moved into and from frictional driving engagement with the side walls of the tires on the adjacent rear wheels, respectively, on moving said rams into said operative and inoperative positions, respectively.

2,751,990
AIRPLANE GROUND TUG

Donald W. Finlay and Raymond E. Pearson, Seattle, Wash., assignors to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware

Application November 13, 1950, Serial No. 195,208
7 Claims. (Cl. 180—6.2)



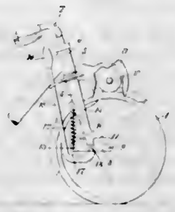
1. In combination, a wheeled vehicle to be moved including a wheel support means and a wheel carried by said wheel support means, a tug vehicle operable to effect ground movement of said wheeled vehicle, said tug vehicle including a power friction roll, means supporting said power friction roll on one end of said tug vehicle to rotate about an axis extending horizontally and transversely of said tug vehicle and enabling said roll to engage the periphery of said wheel in rolling contact, power means operable to rotate said roll in a sense tending to run up the periphery of said wheel when held in contact therewith, and roll translation guide means interconnecting said roll support means and said wheel support means and constraining said roll to follow a translational path of contact with said wheel approaching gradually and progressively closer to the axis of said wheel, said guide means comprising link means connected at one end to said roll support means and means pivotally connecting the opposite end of said link means to said wheel support means to permit swinging of said link means and of said

roll about a pivotal axis substantially parallel to and offset materially from the axis of said wheel, the location of said pivotal axis relative to the axis of said wheel and the length of said link means relative to the radius of said wheel cooperatively establishing said translational path of contact as an arc intersecting the wheel periphery at an acute angle.

2,751,991
MOUNTING OF BICYCLE FRONT WHEEL AND AUXILIARY DRIVE ENGINE THEREFOR

Marcel Mennesson, Neuilly-sur-Seine, France, assignor to Societe d'Appareils de Controle et d'Equipment des Moteurs (S. A. C. E. M.), Neuilly-sur-Seine, France, a society of France

Application August 21, 1953, Serial No. 375,784
Claims priority, application France October 1, 1952
2 Claims. (Cl. 180—31)

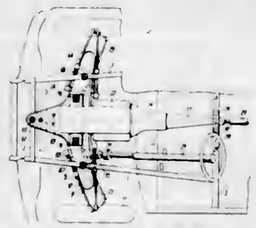


1. A bicycle which comprises, in combination, a frame, a front fork pivoted in said frame, a front wheel, a tire mounted on said wheel, two parallel levers pivoted at their front ends about the axle of said wheel, one on each side thereof, said levers having their intermediate portions pivoted to the branches of said fork respectively about a horizontal axis parallel to the axle of said wheel, a motor carried by said fork, a roller driven by said motor and also carried by said fork to cooperate with the tire of said wheel for driving it, said roller having its axis located substantially in the same vertical plane as the axle of said wheel whereby said roller forms an abutment for said tire during the upward displacements of said wheel with respect to said frame, and springs interposed between the rear ends of said levers and said frame for resiliently suspending said frame with respect to said wheel, said springs being of such predetermined strength to move said roller out of contact with said tire when the cyclist gets off said bicycle.

2,751,992
UNIT POWER PLANT AND AXLE UNIT SUSPENSION IN MOTOR VEHICLES

Friedrich K. H. Nallinger, Stuttgart, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Untertürkheim, Germany

Application July 28, 1950, Serial No. 176,346
Claims priority, application Germany July 30, 1949
27 Claims. (Cl. 180—64)

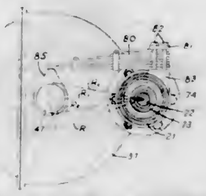


7. In connection with a motor vehicle, a vehicle superstructure, a rigid auxiliary supporting member, a wheel assembly comprising a pair of wheels arranged opposite each other, wheel guiding members and wheel suspension means for said wheels, with means for supporting the wheel guiding members and the wheel suspension means on said auxiliary supporting member, elastic means for elastically attaching said auxiliary supporting member to said vehicle superstructure, a driving unit, means for partially supporting said driving unit on said auxiliary supporting member, and elastic means for partially elastically supporting said driving unit directly on said superstructure of the vehicle independently of said auxiliary supporting member.

2,751,993
LEAF SPRING MOUNTING OF TRACTOR DRIVE WHEELS

Richard B. Hopkins, East Lansing, Mich.

Original application June 9, 1949, Serial No. 98,081, now Patent No. 2,650,668, dated September 1, 1953. Divided and this application June 24, 1953, Serial No. 363,758
5 Claims. (Cl. 180—71)

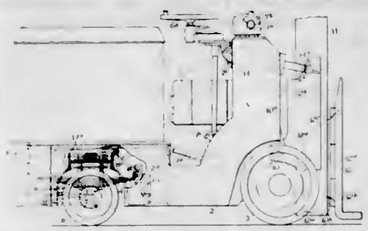


1. In a land vehicle with a drive shaft enclosed in a casing and connected by power transmission means with a wheel axle, a housing inclosing the transmission means and supporting the axle, a tube movably mounted in the drive shaft casing and having the drive shaft extending therethrough, the transmission-axle housing being mounted on the tube and extending at an angle relative to the drive shaft, and a leaf spring acting between the drive shaft casing and the transmission-axle housing for restraining oscillation of the wheel axle about the drive shaft axis.

2,751,994
LOAD LIMIT MECHANISM

Edward H. Remde, Cleveland, Ohio, assignor, by mesne assignments, to The Baker-Raulang Company, a corporation of Ohio

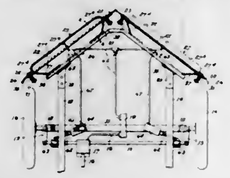
Application February 8, 1950, Serial No. 143,064
14 Claims. (Cl. 180—82)



1. In a vehicle, the combination of a frame mounted on a front pair of wheels, a member for supporting a rear pair of wheels, a load carrier on said frame and projecting at the front end thereof beyond the adjacent front wheels whereby a load on said carrier tends to tilt said frame about the axis of said wheels to effect upward movement of the rear end portion of said frame relative to the rear wheels, connections between said supporting member for said rear wheels and adjacent the rear end portion of said frame, an electric motor for driving certain of said wheels, a source of current supplying a circuit between said current supply and said motor including a normally closed switch, a movable device on said frame

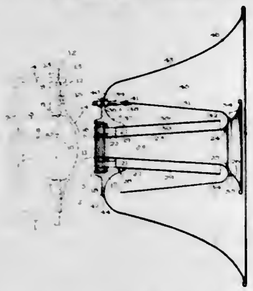
adapted to be operated by an element of said connections to open said switch and stop said motor when said frame is tilted due to an overload on said carrier, first and second bearings on said frame and spaced longitudinally thereof adjacent the rear end portion, said supporting member having forwardly and rearwardly extending trunnions mounted in said bearings with said trunnions providing the connections between said supporting member and said frame and one of said trunnions being the element of said connections that operates said device, said bearings including resilient means permitting relative movement between said frame and said trunnions.

2,751,995
COMBINATION BUMPER AND STEERING CONTROL FOR AUTOMOBILES
Frank Kastory, Bradenton, Fla.
Application October 5, 1953, Serial No. 384,094
7 Claims. (Cl. 180—83)



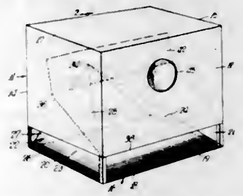
1. In an automobile, a chassis including the usual longitudinal side members, and front axle, a pair of front wheels, steering knuckles connecting said wheels to said chassis and a tie rod connecting said knuckles, in combination with a bumper, a supporting frame for said bumper rigidly mounted on the forward ends of said longitudinal side members of said chassis, a pair of longitudinally extending buffers on said bumper, arranged one upon each side of the center thereof, each of said buffers being provided with means for yieldingly holding the same with the outer face thereof positioned forwardly of said bumper throughout the length of said buffers, and means actuated upon inward movement of either of said buffers for turning said wheels to steer the automobile to the side opposite that of said actuating buffer.

2,751,996
HORN FOR LOUDSPEAKERS
Sidney E. Levy, White Plains, N. Y.
Application April 29, 1953, Serial No. 351,961
6 Claims. (Cl. 181—27)



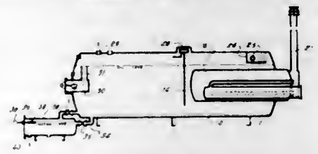
5. A loudspeaker horn of the class described, comprising a support having concentric laterally spaced sound wave inlets therein, a relatively short tone arm connected to said support and having a straight sound passage therethrough in communication with one of the inlets in said support, and a plurality of walls of circular cross-section carried by said support and defining a relatively long sound passage therethrough, one of said walls merging with the outer periphery of said tone arm and another of said walls merging with said support and forming reverse bends in said long passage.

2,751,997
LOW FREQUENCY HORN
Edward J. Gately, Jr., Drexel Hill, Pa.
Application August 5, 1954, Serial No. 447,943
11 Claims. (Cl. 181—31)



1. A horn for use with a loud speaker unit, comprising a substantially rectangular cabinet having a floor, a top wall, front and back walls and side walls, a baffle structure rising from said floor adjacent its walls and tapering to a point against the back wall of said cabinet substantially midway between its side walls, said front and side walls each having an opening adjacent said floor, said openings defining the mouth of the horn, an inclined baffle plate in said cabinet spaced from said baffle structure to define a passageway therebetween, said baffle plate having its lower edge substantially aligned with the upper edge of the opening in the front wall and its upper edge spaced from the top of the baffle structure, the sectional area of said passageway increasing exponentially from one end to the other.

2,751,998
EMULSION TREATERS AND EMULSION TREATING METHODS
Clarence O. Glasgow, Tulsa, Okla., assignor to National Tank Company, Tulsa, Okla., a corporation of Nevada
Application June 1, 1953, Serial No. 358,918
12 Claims. (Cl. 183—2.7)

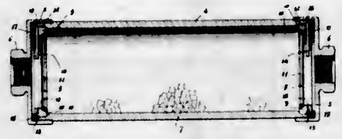


11. The method of treating well emulsion streams to resolve the stream into oil and water strata including the steps of, conducting the emulsion stream into a heating zone, flowing substantially all the stream downwardly in the heating zone while heating the stream and driving off gas, withdrawing gas from the upper portion of the heating zone, withdrawing substantially all the heated emulsion stream horizontally from the lower portion of the heating zone, directing the withdrawn heated emulsion stream horizontally into a stratification zone, flowing the emulsion stream in an elongate unidirectional substantially horizontal path in the stratification zone, withdrawing gas, and withdrawing clean oil and water.

2,751,999
MEANS TO RELEASABLY MOUNT SCREENS IN THE OPPOSITE END PORTIONS OF TUBULAR DEHYDRATORS
Albert L. Semon, Short Hills, N. J.
Application April 1, 1952, Serial No. 279,750
3 Claims. (Cl. 183—4.8)

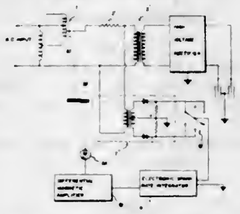
1. In a dehydrator or filter, a tubular body having an internal shoulder spaced inwardly from each end of the

body, a pair of rigid rings, each rigid ring having one end seated on a shoulder of the tubular body and having a screen extending transversely of the opening in said rigid ring adjacent the end of the ring seated on the shoulder, and an expansion ring carried on the outer face of each rigid ring adjacent the end opposite the end seated on the shoulder to impinge the inner face of the



tubular body and releasably retain the rigid ring against the shoulder of the tubular body and said expansion ring having opposite end portions extended inwardly toward the centers of the rigid ring and expansion ring to facilitate disengagement of the expansion ring from the tubular body and removal of the rigid ring from the tubular body by fingers extended into the open end of the tubular body.

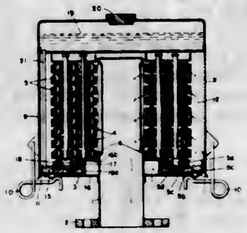
2,752,000
ELECTRICAL PRECIPITATOR CONTROL SYSTEM
Herbert J. Hall, Hopewell Township, N. J., assignor to Research Corporation, New York, N. Y., a corporation of New York
Application March 4, 1954, Serial No. 414,003
7 Claims. (Cl. 183—7)



7. An electrical precipitator system comprising a high voltage step-up transformer supplied from an alternating current supply source, high voltage rectifying means for the output of said transformer, precipitator electrodes supplied by the output of said rectifier; means responsive to individual sparking events at said electrodes comprising circuit means for deriving a voltage related to the instantaneous voltage across the primary of said transformer, and differentiating circuit means for producing a pulse output upon the occurrence of a voltage transient disturbance in the transformer primary due to a sparking event across said precipitator electrodes, the constants of said differentiating circuit means being of such value as to produce no appreciable output in response to the ordinary power supply frequency, a pulse integrating circuit for producing an electrical output related to the integrated pulse input rate, and a voltage control device for controlling the input to said high voltage transformer in accordance with the value of said electrical output.

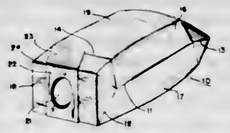
2,752,001
FILTER FOR GASEOUS FLUIDS
Jacques Muller, La Garenne-Colombes, France
Application November 25, 1953, Serial No. 394,416
Claims priority, application France November 27, 1952
10 Claims. (Cl. 183—15)

1. A filter for gaseous fluids, for use in motors, compressors, and similar engines, comprising a filter block consisting of a plurality of axially spaced coaxial annular discs, a plurality of concentric annular filter units in the form of toroidal coil springs positioned between pairs of said plates, the convolutions of said toroidal coils between a pair of plates being closer together from one toroidal coil spring to another in the direction of flow of fluid to be filtered, a central slotted tube on which said block is mounted, a circular plate fast on said tube for sup-



porting said block, a cap covering the assembly, and elastic clasps pivoted externally on the skirt of the cap and bearing on the lower face of the plate for clamping the block against the plate.

2,752,002
DISPOSABLE DUST BAG FOR VACUUM CLEANER
Julius P. Wied, Cleveland Heights, Ohio
Application March 16, 1955, Serial No. 494,707
2 Claims. (Cl. 183—51)

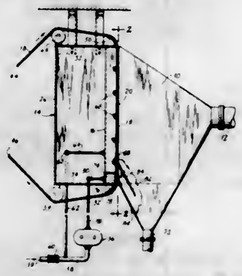


1. A disposable dust bag for a canister type vacuum cleaner provided with a removable top cover, a bag compartment in the upper portion of the cleaner, and a suction inlet tube projecting into said compartment, the bag being adapted to be detachably secured to said tube against the pressure of indrawn air solely by frictional engagement with said tube, said bag being formed of filter paper and having an opening adapted to receive said tube, said bag in open position having flat generally parallel top and bottom walls and a flat end wall in which said opening is formed, a cardboard reinforcing strip fixed to the front face of said end wall and encircling the opening therein, said strip terminating downwardly substantially at the bag bottom wall and having a top portion extending upwardly about the bag top wall, and the strip being scored substantially in the plane of the bag top wall whereby the strip top portion may be folded back to form an inverted V with the lower portion of the strip and provide a hand grip means for connecting and disconnecting the strip.

2,752,003
MEDIUM
FILTER WITH CONTINUOUS WEB FILTER
Henry J. Hersey, Jr., Chatham, N. J., and Leslie Silverman, Dover, Mass.
Application May 22, 1953, Serial No. 356,621
2 Claims. (Cl. 183—61)

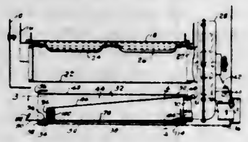
1. In a filter for separating particles from a gas the combination of means defining a generally rectangular opening; suction boxes disposed along two opposite edges of said opening, each of said suction boxes having a relatively narrow elongated orifice extending substantially the full length of said edges; a filter medium in the form of an elongated web having a central longitudinal zone pervious to gas and longitudinal edge zones relatively impervious to gas, said web being of such width that the said impervious edge zones thereof may overlie the orifices in said suction boxes while the pervious longi-

tudinal central zone thereof covers said rectangular opening; guide plates disposed along the remaining opposite edges of said rectangular opening, said guide plates being curved about axes extending transversely of the width of said web and serving to guide successive portions of the length of said web over said opening with said impervious edge zones thereof overlying the orifices in said suction boxes; means for exhausting air from said suction boxes to seal said impervious edge zones of said web against said suction boxes; means for conducting particle-laden gas to one surface of the portion of said filter medium



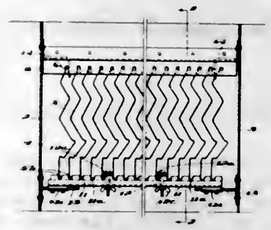
covering said rectangular opening under gaseous pressure greater than that on the opposite surface thereof; the curved guide plate over which said web passes in leaving said rectangular opening having formed therein a narrow orifice extending transversely of and over the full width of said web in a position such as to direct a narrow jet of air through said filter medium in a direction opposite to the flow of particle-laden gas to dislodge accumulated solids from successive portions of said filter medium as the same passes through the curved path established by said curved guide plate; and means for supplying air under pressure to said orifice.

2,752,004
LAUNDRY DRYERS
Herbert E. Hullar, Syracuse, N. Y., assignor, by mesne assignments, to The Murray Corporation of America, Detroit, Mich., a corporation of Delaware
Application June 25, 1953, Serial No. 364,020
2 Claims. (Cl. 183—62)



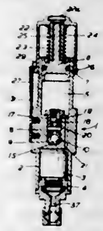
1. A laundry dryer lint trap comprising an elongated substantially rectangular sectioned housing, said housing being open at its forward end, and having a closure with an inlet port at the other, an elongated screen assembly within said housing slidable therefrom through the open end, said screen assembly comprising a base plate slidable upon the bottom wall of said housing, and a lengthwise extending perforate screen, said screen having a portion extending upwardly from a central longitudinally extending region of said base plate, and having a lateral inclined portion extending to a side wall of said housing, said port being located to direct a stream of lint-laden air in the region beneath and along the underside of said lateral inclined portion, said lateral portion sloping forwardly and downwardly from a point above said port and having substantially vertically extending closure means at the forward end thereof, an auxiliary outlet in said closure laterally disposed from said inlet port and said lateral portion of said screen, and a front end closure plate detachably secured to said housing.

2,752,005
ELIMINATOR PLATE ASSEMBLY FOR AIR WASHERS
William W. Avera and Marcellus G. Saunders, Winston-Salem, N. C., assignors to The Bahnson Company, Winston-Salem, N. C., a corporation of North Carolina
Application October 7, 1954, Serial No. 460,836
4 Claims. (Cl. 183—113)



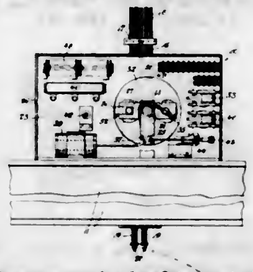
1. For use in an air washer and similar apparatus, a plurality of eliminator plates and means for supporting said plates in closely spaced relation to form tortuous air passages therebetween, said supporting means comprising pivotal means individual to each plate and secured thereto, means detachably receiving said pivotal means, each said plate being swingable individually about its pivotal support to enable said plates to be spread apart for cleaning, and spacer means extending across said plates along one edge thereof and removably secured to said plates for maintaining said plates in closely spaced relation.

2,752,006
LUBRICANT INJECTION UNIT
Camille Clare Sprankling Le Clair, Toronto, Ontario, Canada, assignor to Tecalemit Limited, Brentford, England
Application August 14, 1952, Serial No. 304,415
5 Claims. (Cl. 184—7)



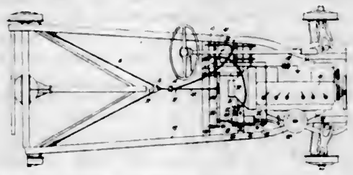
1. An injection unit comprising a body having a lubricant inlet adapted to be connected to means for alternately supplying lubricant under pressure to said inlet and then relieving lubricant pressure at said inlet, a cylinder in said body, a port connecting said inlet to said cylinder and having a non-return valve therein, a piston slidable in said cylinder, spring means yieldingly urging said piston toward said port, said body providing a housing, a connecting passage permanently connecting said cylinder with said housing, a metering device in said housing and having an outlet disposed outside of said housing, said metering device comprising a hollow body disposed within said housing and open to the interior of said housing and having a discharge passage connected to said outlet, a coiled tube disposed in said hollow body and having a bore of capillary dimensions, said tube having one end open to the interior of the hollow body and having its other end connected to said discharge passage and thus to said outlet, said piston being forced against said spring means to compress the same when lubricant is fed under pressure through said inlet, whereas when the pressure on the lubricant in said inlet is relieved said piston moves inwards to cause lubricant in said cylinder to pass through said connecting passage to said housing and into the hollow body of said metering device and through said coiled tube and said discharge passage to said outlet.

2,752,007
ELEVATOR OVERLOAD INDICATOR AND SAFETY DEVICE
William Doolan, Washington, D. C.
Application August 19, 1955, Serial No. 529,544
9 Claims. (Cl. 187—29)



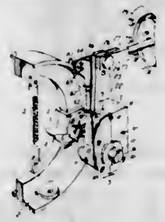
9. In an elevator overload safety control and load indicating and overload warning system, a cut-off switch mounted on an elevator cage cradle or frame, movable control means for said switch having a range of movement including a position at which the switch is turned on and cut off in opposite directions, lost motion linkage between said control means and the support means for said cradle or frame, for moving said control means cumulatively in response to changes in loading the cage while the cage gate is open, and for providing lost motion and holding said control means stationary while the cage gate is closed and relative movement between the cage frame and its support occurs due to inertia or a change in external loading on said cage such as caused by a change in the length of compensating chain or cable which may be hanging under the cage at different floor levels, a load indicating and overload warning device in said cage, said control means being also operatively connected to control said device to indicate the loading on a scale through a range of overload, colored to emphasize the warning.

2,752,008
VACUUM OPERATED HAND BRAKE UNIT FOR VEHICLES
Arthur L. Peterson, Lee's Summit, and Odell E. Peterson, Kansas City, Mo.
Application September 10, 1953, Serial No. 379,354
6 Claims. (Cl. 188—152)



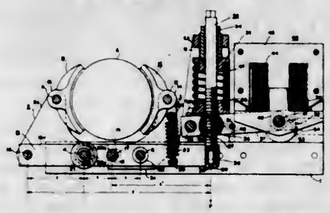
1. In an automobile having an engine, a pair of rear wheels, each provided with a brake, an actuating cable for said brakes having a yoke, and a hand lever provided with a cable attached to said yoke, a vacuum operated unit for actuating said brakes separately from said lever, said unit including a vacuum cylinder; a conduit coupling the cylinder with the intake manifold of said engine to provide a suction for the cylinder when the engine is operating; a control valve in said conduit; a piston reciprocable in the cylinder and provided with a stem; means operably connecting the stem with said yoke; structure for opening said valve to admit suction to the cylinder and thereby shift the piston to one end of its path of travel, said structure including a manually reciprocable plunger; a latch engageable with said stem for holding the piston at said one end of its path of travel when the plunger has been reciprocated to open said valve; and means coupling the plunger and said latch for releasing the latter upon retraction of the plunger.

2,752,009
SLACK ADJUSTING MECHANISM
Kirkland B. MacDougall, Benton, Pa.
Application March 19, 1953, Serial No. 343,331
16 Claims. (Cl. 188—196)



1. In a slack adjusting mechanism for mounting on a cam shaft, a casing, a worm gear within said casing, a worm gear within said casing and adapted to turn the cam shaft when mounted thereon, a spindle rotatably mounted in said casing transversely of said warm gear, a worm carried by said spindle and meshing with the worm gear, a ratchet at one end of said spindle, a second ratchet rotatable relative to the first ratchet and having teeth meshing with teeth of the first ratchet, a shank projecting from the second ratchet and out of said casing, a lever connected with and extending from said casing, a longitudinally shiftable operating rod having spaced arms at one end, one of said arms being pivoted to said lever and tilting the lever and said casing and for rocking said worm gear when the rod is shifted longitudinally, and a link connecting the other arm with said shank and disposed in spaced relation to said lever and serving to rotate the second ratchet and thereby impart turning movement to the spindle and for turning the worm gear to an adjusted position when the operating rod is moved longitudinally beyond a normal distance.

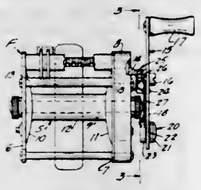
2,752,010
SINGLE ADJUSTMENT BRAKE
Gilbert Currie, Williamsville, N. Y., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application October 3, 1951, Serial No. 249,498
16 Claims. (Cl. 188—171)



12. A brake assembly, comprising, a support, a brake wheel, a pair of brake arms pivotally connected to said support on opposite sides of said brake wheel, a brake shoe connected to each brake arm, a brake actuating lever assembly including a lever pivotally engaging each brake arm at a point on each brake arm displaced from the point of pivotal connection of the respective brake

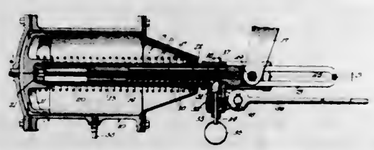
arms on said support, and means frictionally engaging said lever with one of said brake arms to provide a torque transmitting connection therebetween which slips when the brake shoe on said one brake arm is applied to said brake wheel by angular displacement of said lever.

2,752,011
FISHING REEL BRAKE
Frank A. Janousek, Hutchinson, Minn.
Application October 15, 1952, Serial No. 314,873
1 Claim. (Cl. 188—186)



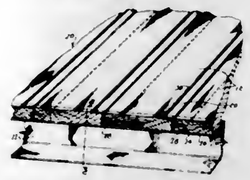
In fishing reel braking apparatus, a frame, a shaft bearing on the frame and having a boss extending from the frame, a shaft in the bearing, a handle carried on the shaft to rotate the shaft, said handle extending outwardly from and substantially normally to the shaft, and said handle having a slot formed longitudinally therein, a weight slidably mounted in said slot for free movement therewithin and for rotation with said handle, a brake band encircling the boss, and linkage extending between said weight and said brake band to cause the latter to be tightened and frictionally engage the boss when said weight is moved away from the axis of rotation of the shaft by centrifugal force whereby the rotation of the shaft and the handle will be retarded proportionally to the speed of rotation of said arm.

2,752,012
SLACK ADJUSTER FOR AIR BRAKES
Thomas Moorhead, Atchison, Kans., assignor to The Locomotive Finished Material Company, Atchison, Kans.
Application February 13, 1952, Serial No. 271,357
1 Claim. (Cl. 188—198)



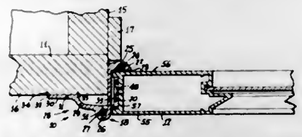
In an air brake system for railway cars, the combination with an air brake cylinder, a piston having a tubular stem slidable in the cylinder, a brake-operating lever, a sleeve in the tubular piston stem, stem slidably mounted in said sleeve for shifting said lever, and a clip connecting the outer end of the piston stem and the sleeve, for shifting the sleeve with the piston, the piston, sleeve and stem in the sleeve being operable to increase the stroke of the lever upon an increase of slack in the brake system; of slack adjusting mechanism comprising; a series of ratchet teeth on the stem in the sleeve and a spring-pressed dog mounted on the sleeve and for latching the stem in the sleeve against inward movement, a second series of ratchet teeth on the stem, a second spring-pressed dog having latching engagement with the second series of teeth, an air cylinder mounted on the sleeve, a piston slidable in the cylinder on the sleeve, an arm fixed to the last named piston on which the second dog is slidably mounted, for latching engagement with the second series of ratchet teeth, means for delivering air from the brake cylinder to the cylinder on the sleeve upon a predetermined increase of the stroke of the piston in the brake cylinder, for slidably shifting the second dog to over-run a tooth on said second series of teeth, and a spring for shifting the second dog to shift the stem outwardly when air is released from the cylinder on the sleeve.

2,752,013
VEHICLE FLOOR SKID RAIL AND SECURING MEANS
Nelson E. Cole, Reading, Pa., assignor to Dana Corporation, Toledo, Ohio, a corporation of Virginia
Application March 20, 1952, Serial No. 277,655
2 Claims. (Cl. 189—34)



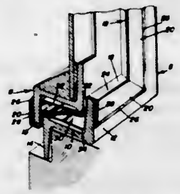
1. In a vehicle body having a plurality of cross sills, a flooring for said body comprising a plurality of laterally spaced boards, each of said boards being provided with a skid rail having a web portion secured to one edge thereof, said skid rail having a horizontal portion spanning the space between adjacent floor boards, and a second horizontal portion underlying only the board to which it is secured and said underlying portion engaging the cross sills, and welds between each of said sills and said underlying portions of said skid rails, said welds being the only means to secure said flooring to said cross sills, the space between said boards being such that free expansion and contraction is permitted while still confined by the first horizontal portion of said skid rail.

2,752,014
EXTRUDED METAL DOOR FRAME AND HINGE ASSEMBLY
William A. Watson, Ellwood City, Pa.
Application May 18, 1953, Serial No. 355,553
2 Claims. (Cl. 189—46)



1. A device for mounting a door in a doorway, said device comprising an elongated member adapted to be arranged longitudinally of and secured to the jamb of said doorway, said member including a first longitudinally extending portion arranged within said doorway in face-to-face abutting relation with respect to said jamb, a first knuckle formed on one edge of said first longitudinally extending portion and extending outwardly of said doorway and having an internal surface forming an arc of more than 180°, said first knuckle being provided with a plurality of transversely extending cut-outs, a second longitudinally extending portion formed integrally with said first knuckle and arranged in abutting relation with respect to the outer face of said jamb, a longitudinally extending ridge on said second longitudinally extending portion adjacent the free edge thereof and adapted to penetrate the outer face of said jamb, a plurality of single hinge plates secured to a door to support it for swinging movement into and out of said doorway, each said hinge plate having a hinge knuckle disposed transversely thereof and extending into one of said cut-outs, the internal surface of said hinge knuckles defining an arc of more than 180°, said arc being of a radius substantially equal to that of said first knuckle and a hinge pintle made of a continuous rod extending through all of said hinge knuckles and said first knuckle.

2,752,015
WEATHER STRIP FOR METAL CASEMENT WINDOWS
Stephen J. Nolan, Mount Vernon, N. Y.; Elizabeth Nolan, executrix of said Stephen J. Nolan, deceased
Application October 23, 1953, Serial No. 387,879
2 Claims. (Cl. 189—65)



1. For use on either a casement window frame or a supporting frame therefor wherein said frame embodies a central web with a pair of lengthwise flanges extending from opposite lengthwise sides and at right angles to the plane of the web, and wherein one of said flanges presents itself as a practical and convenient clamp accommodation and anchoring member; a weather strip construction which is applicable for ready use without requiring the use of headed fasteners such as screws, bolts, or the like, comprising an elongate clamp which is channel-shaped in cross-section and which is thus adapted to be saddled over said anchoring flange for retention thereon, said clamp embodying spaced walls joined by way of a connecting web, one wall having a yieldable lengthwise friction retaining tongue extending into the channel portion and adapted to bear yieldingly against a coacting surface of said anchoring flange, a substantially rigid adapting and positioning flange having one edge joined with and extending at right angles from the free edge portion of the other wall of said clamp and adapted to parallel the aforementioned web, a resilient weather strip portion disposed at an oblique angle to and overlying said flange in spaced slanting relation and having one longitudinal edge portion joined to the adjacent other edge of the positioning flange by way of a firmly clenched return bend, the weather strip portion being corrugated and providing needed stability, whereby buckling and undesirable deformation is reduced to a minimum, the corrugations thus provided constituting close-spaced parallel lengthwise ribs, said ribs being individually distinct, V-shaped in cross-section with their vertices all on one and the same side of said weather strip portion, and directed into the space existing between the flange and said weather strip portion.

2,752,016
REPLACEABLE WINDOW SILLS
John Bellack, Philadelphia, Pa.
Application June 23, 1955, Serial No. 517,475
4 Claims. (Cl. 189—75)



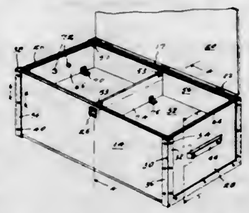
1. A replaceable window sill, comprising a sheet of material having a top portion and a depending front flange, spaced channels fixed to the bottom of said top portion, locking members slidable between said channels and top portion, means to move the locking members outwardly into locking position, and jacks carried by and depending from said top portion to raise the top portion into assembled position.

2,752,017
LIGHT DIFFUSING CEILING CONSTRUCTION
Leon Jacob Segil, Chicago, Ill., assignor to Luminous Ceilings Inc., a corporation of Illinois
Application November 30, 1950, Serial No. 198,404
1 Claim. (Cl. 189—88)



A supporting structure for mounting removable light transmitting and diffusing false ceiling panels below the fixed flat ceiling of a room, comprising: a plurality of elongated structural shapes secured to the fixed ceiling and extending in general parallel spaced relation between opposite walls of the room, spacer members maintaining each structural shape spaced from the fixed ceiling, a plurality of depending flexible and adjustable hangers secured to the structural shapes, extending through the space between the structural shapes and the fixed ceiling and arranged in parallel rows extending generally transversely to said structural shapes, and an inverted T-track mounted upon each row of depending hangers, each track having upwardly extending hanger clips for direct attachment to the depending hangers, said hanger clips having an upper portion bent back upon itself with an opening therein at the bend and a second opening in the side thereof, said flexible hanger extending through the opening in the bend, between the bent back portions and outwardly through the second opening, the attachment being adjustable in elevation by flexing the hanger at a selected point along its length, the point of flexure of the hanger engaging the hanger clip at the point at which the hanger passes through the second opening to maintain the T-track level throughout its length without twisting, said T-tracks being supported in level parallel relation by said depending hangers and having laterally extending panel supporting surfaces so as to cooperatively support the false ceiling panels extending between them and loosely resting on said surfaces.

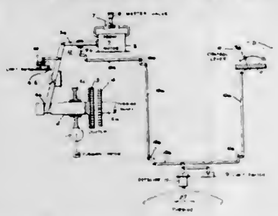
2,752,018
COLLAPSIBLE TRUNK OR FOOT LOCKER
William H. Arlitt, Jr., San Antonio, Tex.
Application August 24, 1953, Serial No. 376,187
2 Claims. (Cl. 190—21)



1. A collapsible trunk comprising a bottom wall, a front wall, means hinging said front wall to the front

edge of said bottom wall whereby said front wall is adapted to fold from a position perpendicular to said bottom wall to a position parallel to and against the top face of said bottom wall, a rear wall, means hinging said rear wall to the rear edge of said bottom wall whereby said rear wall is adapted to fold from a position parallel to said front wall to a position parallel to and against the bottom face of said bottom wall, a lid, means hingedly and detachably securing said lid to the upper edge of said rear wall, a pair of end walls, an angle iron member having one flange thereof secured to the side edge portion and the bottom edge portions of said end walls with the other flange thereof spaced from the side edges and bottom edge thereof to provide a channel between said second flange and said edges with the end edges of said bottom wall, said front and said rear walls seated in said channels, and means detachably securing said bottom, front and rear walls to said second flanges.

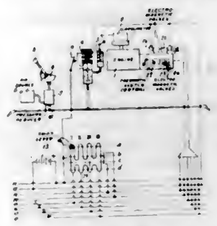
2,752,019
TURNING GEAR FOR STEAM TURBINE
Edward Louis Neville Towle, Stockport, England, assignor to Metropolitan-Vickers Electrical Company Limited, London, England, a company of Great Britain
Application August 27, 1953, Serial No. 376,928
6 Claims. (Cl. 192—.02)



1. Turning equipment for a steam turbine rotor including an electric turning motor, a toothed clutch adapted for movement from a disengaged position to an engaged position for interconnecting the motor with the turbine rotor, a servo-motor for moving the clutch between its disengaged and engaged positions and a manual control device operable between a position corresponding to the clutch being disengaged and a position corresponding to the clutch being engaged, in combination with control means for said turning motor and servo-motor, comprising electric switching means responsive to movement of the control device from the clutch-disengaged position to energise the electric turning motor, timing relay means conditioned by the control device with the clutch in disengaged position so as at the end of a predetermined time interval to de-energise the motor and to condition the servo motor for engaging the clutch, means responsive to failure of the clutch teeth to interengage and operable to condition the servo motor for moving the clutch towards its disengaged position, and means for automatically re-energising the motor and reconditioning the servo motor for moving the clutch from its disengaged position to the engaged position.

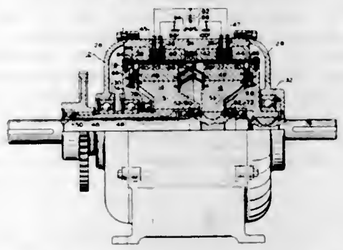
2,752,020
REMOTE CONTROL SYSTEMS FOR MECHANICAL TRANSMISSION GEARS
Léon Saives, Billancourt, France, assignor to Regie Nationale des Usines Renault, Billancourt, France
Application May 27, 1952, Serial No. 290,366
Claims priority, application France August 3, 1951
7 Claims. (Cl. 192—.092)

1. In a power transmission, particularly for motor driven vehicles, a plurality of driving units, at least one driven unit, a transmission unit connecting each of said driving units with the driven unit, each of said transmission units comprising a clutch and gears providing a plurality of speed ratios, means for actuating the clutch and shifting the gears of one transmission unit, means for automatically actuating the clutch and shifting the gears of a second transmission unit in like manner, and a delay relay



interposed between said transmission units to delay the actuation of the clutch and the shifting of the gears of said second transmission unit so that the speed change of said second transmission unit occurs after that of the first mentioned transmission unit.

2,752,021
POWER TRANSMISSION
Philip H. Trickey, Webster Groves, Mo., assignor to Vickers Incorporated, Detroit, Mich., a corporation of Michigan
Application September 7, 1950, Serial No. 183,496
3 Claims. (Cl. 192—21.5)

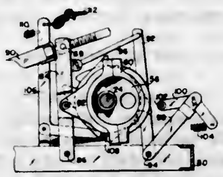


1. A magnetic torque transmitting device comprising a pair of separate cylindrical inner coupling members having peripheral magnetic surfaces, a separate outer hollow cylindrical coupling member substantially enclosing the inner members and having a magnetic cylindrical wall with an inner surface cooperating with said peripheral surfaces to define a radial gap between the outer member and each inner member, and means for selectively coupling the outer member with the inner members, said means including magnetic particles disposed in said gaps, and magnetizing means for exciting said gaps, said last means including a stationary magnetizing yoke around said outer member and having separate removable ring magnetic poles with energizing coil means disposed therebetween.

2,752,022
DUAL CLUTCH ARRANGEMENT
Wesley A. Harper, Bellevue, Ohio, assignor, by mesne assignments, to Cockshutt Farm Equipment Limited, a corporation of Canada
Original application July 11, 1950, Serial No. 173,212. Divided and this application November 2, 1951, Serial No. 254,539
7 Claims. (Cl. 192—23)

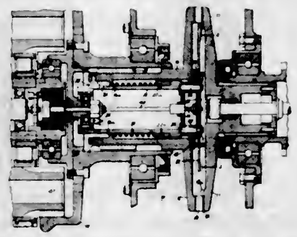
1. In a dual clutch arrangement; a rotary housing forming a driving clutch member, two driven clutch plate members adapted for being driven by the housing, an element carried by each plate resiliently urged toward driving engagement with the housing, means for selectively clutching one of said driven plate members to the housing, means

for automatically unclutching the said one member from the housing upon movement of the said one member a predetermined amount, mechanism driven by said one



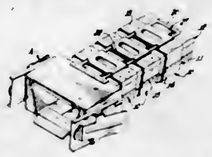
member, and means actuated by said mechanism operable alternately to clutch and unclutch said second driven member and said housing upon successive cycles of movement of said first driven member.

2,752,023
JET ENGINE STARTER CLUTCH WITH TEETH SYNCHRONIZING MEANS
Dallas E. Cain and George H. Fry, Jr., Schenectady, N. Y., assignors to General Electric Company, a corporation of New York
Application December 17, 1952, Serial No. 326,504
13 Claims. (Cl. 192—35)



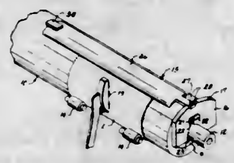
1. In a mechanism for starting engines, a clutch assembly for transmitting torque from a starter motor and adapted to engage with a clutch member carried by the engine to be started comprising, a first clutch element mounted for rotary and axial movement and having a contacting face with teeth thereon and a tubular body portion for connection to said starter motor, a second clutch element mounted for rotary movement only and interconnected concentrically within said first clutch element, means for causing said first clutch element to move axially upon relative rotation between said first and second clutch elements, and synchronizing means for ensuring toothed engagement between said clutch assembly and said engine clutch member mounted on said second clutch element for rotation therewith and means for moving said synchronizing means axially for contact with said teeth on said engine clutch member.

2,752,024
FLEXIBLE LINK AMMUNITION CHUTE
Elmar Kolehmainen, Los Angeles, Calif., assignor to West Coast Tool & Supply Co., Los Angeles, Calif., a corporation of California
Application February 17, 1951, Serial No. 211,560
3 Claims. (Cl. 193—25)



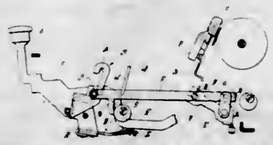
1. A flexible chute comprising: a series of articulated chute elements composed of articulated sheet metal outer frames of box-section formed to entirely enclose a passage, each of said outer frames having two parallel opposite side walls, and two edge walls connecting said side walls, central panel portions of said side walls being outwardly offset, means on the edges of said outwardly offset central panel portions for connecting successive outer frames for variation in the spacing and relative angles thereof, and sheet metal liner frames of box-section fixed to the outer frames consisting of two flat walls positioned in contact with the inside surfaces of said two edge walls, and with two flat walls positioned in contact with the inside surfaces of the non-offset portions of said two parallel side walls, the four flat inner frame walls integrally joining one another in the four angles of said outer frame, said four inner liner frame walls having projecting convergent wall portions extending from said outer frames and slidably received inside the liner frames of the next adjacent chute elements in the series to partially overlap and lie adjacent and in sliding contact with the inside surface of said liner frames in said next adjacent chute elements, the projecting convergent portions of said four inner liner frame walls integrally joining one another to form closed corner portions projecting from the interior angles of the corresponding outer frame, so as to provide a convergent box-section extension with closed corner portions.

2,752,025
LABEL HOLDER
Adolph T. Munn, Pageland, S. C.
Application August 25, 1953, Serial No. 376,347
5 Claims. (Cl. 197—136)



1. In combination with a typewriting machine having a platen, a label holding attachment comprising a head member and a leaf spring member secured to said head member, said leaf spring member being arcuate in cross-section and being biased into engagement with the platen, said head member having an L-shaped slot therein, and a bayonet-type lug on one end of said platen adapted to penetrate said slot for releasably securing said label holder to said platen.

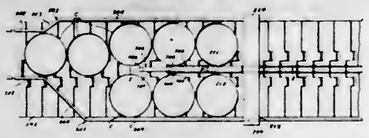
2,752,026
RIBBON VIBRATING MECHANISM FOR TYPEWRITERS AND LIKE MACHINES
Charles B. Letterman, West Hartford, Conn., assignor to Underwood Corporation, New York, N. Y., a corporation of Delaware
Application December 24, 1952, Serial No. 327,721
1 Claim. (Cl. 197—157)



In a typewriter, in combination, a platen, a series of type bars operable against said platen to type at a printing point, key levers to operate said type bars, a ribbon vibrator holding a typewriter ribbon normally retired below a printing point, a universal bar having spring fingers whereby said key levers are adapted to operate it, an arm, a pivot axis for said arm, said arm pivotally rock-

able by the operations of said universal bar, a link having at one end an operative connection with said vibrator and about such connection being swingable at its other end toward and away from the said pivot axis to link it to said arm at a greater or a lesser arm's length from the said pivot axis, whereby uniform rocking movements of said arm will cause greater or lesser-extent ribbon-vibrating movements of said link and said vibrator, depending on the arm's length at which said link is linked to said arm, an adjustable stop to limit said vibrator to said greater-extent movement whenever said link is linked to said arm at said greater arm's length, and an adjustable stop for cooperation with said link near the swingably settable end thereof to limit it to the said lesser-extent movement, the said link having an abutment which is in cooperative range of said last stop only if it is linked with said arm at the said lesser arm's length, each spring finger having a position on the universal bar for its related key lever to effect said limited lesser or greater-extent operation of the said link and after accomplishment of said operation to exert in a terminal portion of a key lever stroke a spring bias on said universal bar keeping said link and the ribbon vibrator operated in the exact limit position.

2,752,027
SEPARATING MEANS
Hermond G. Gentry, Atlanta, Ga., assignor to Atlanta Paper Company, a corporation of Georgia
Application February 15, 1955, Serial No. 488,291
4 Claims. (Cl. 198—31)



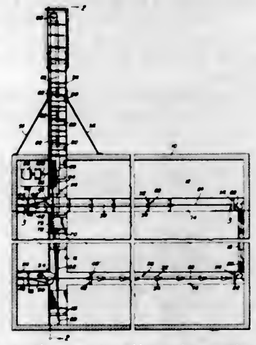
1. Separating means for dividing a traveling row of cans or the like into two rows while maintaining said cans traveling, said means comprising spaced guides having an inlet section confining said traveling cans in a single row and an outlet section permitting lateral shifting of said cans to form two rows, and means spaced centrally between said guides at said outlet section and incorporating a yieldable retractable abutment member by which said cans are caused to shift laterally at said outlet section and are relieved from jamming during later spreading thereof.

2,752,028
ORIENTING DEVICE
Lester R. Moskowitz, Fort Monmouth, and Roger E. Schell, Woodbury, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application June 28, 1952, Serial No. 296,148
11 Claims. (Cl. 198—33)



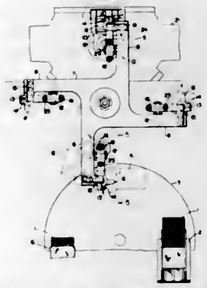
7. In a vibratory feeding machine of the type wherein a line of containers are moved forwardly on a feeding track by means of a vibratory motion imparted to said machine, an orienting device for orienting randomly aligned containers into a base-first position, said containers comprising a body having a base at one end and a neck extending from the other end, said neck having a smaller transverse diameter than that of said body; said orienting device comprising guide means fixed to said feeding track and adjacent an end thereof for guiding said containers onto said device, plate supporting means extending forwardly from said guide means, a U-shaped bracket having arms fixed to said plate supporting means and extending downwardly from the forward end thereof, an exit track extending forwardly from the lower end of said U-shaped bracket, a pair of plates adjustably mounted on said plate supporting means at an angle of less than 180° to each other, said plates having lower straight edges substantially parallel to each other and spaced apart a distance greater than the transverse diameter of said neck but smaller than the transverse diameter of said body, and said edges defining a plane below said feeding track and above said exit track.

2,752,029
BARN CLEANER
William H. Hammond, Millbrook, N. Y.
Application June 11, 1951, Serial No. 230,992
6 Claims. (Cl. 198—79)



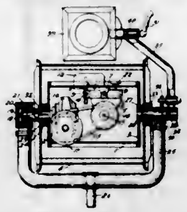
1. In a barn including a plurality of parallel contributory gutters and a main gutter extending transversely across the contributory gutters, gutter cleaners slidably mounted in said contributory gutters, a main gutter cleaner slidably positioned in the main gutter, means operatively connected to the main gutter cleaner for reciprocating the same in said main gutter, and means operatively connecting said main gutter cleaner to the contributory gutter cleaners for reciprocating the latter in the contributory gutters in one direction during reciprocation of said main gutter cleaner, and means operatively connecting the contributory gutter cleaners for reciprocation of each by the other in the opposite direction.

2,752,030
MAGNETIC SEAL CLAMP
Warren E. Erickson, Madison, Wis., assignor to Gisholt Machine Company, Madison, Wis., a corporation of Wisconsin
Application February 8, 1954, Serial No. 408,758
10 Claims. (Cl. 198—211)



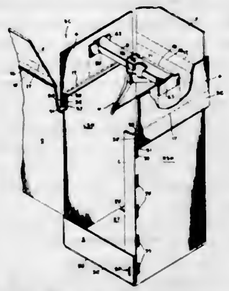
1. In a machine of the class described for placing tubular seals on bottle tops and the like, a rotary member carrying a spear at its circumference adapted to spear a seal at a pick-off station and to carry the seal to a transfer station where it is picked up from the spear by a transfer head, and a magnet clamp carried by said member and adapted to clamp the seal upon the spear.

2,752,031
CONVEYOR REEL
Walter Huber, Netstal, Switzerland, assignor to Stoffel & Cie, Sankt Gallen, Switzerland, a Swiss company
Application July 21, 1952, Serial No. 300,005
3 Claims. (Cl. 203—385)



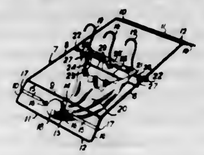
1. In a skein transporting arrangement, in combination, a conveyor reel comprising a rotatable drum, a stationary cage inside the drum, reduction gearing mounted inside the cage and connected for rotating the drum, a fixed diameter V-belt pulley driving said reduction gearing, a V-belt trained on said fixed diameter pulley, and means for driving said V-belt at variable speed comprising an electric motor mounted on a base tiltable about an axis perpendicular to the plane of the V-belt, a variable speed V-belt pulley comprising two drive-pulley half portions movable axially in relation to each other to alter the effective diameter of the pulley, said half, portions being spring mounted to provide for said axial movement, said spring pulley portions being driven by the motor shaft and embracing the V-belt between them, and means for tilting said base about said axis perpendicular to the plane of the belt for moving the variable speed pulley toward and away from the fixed diameter pulley to vary the effective diameter of the variable speed pulley by varying the distance between the variable speed and fixed pulley.

2,752,032
MULTIPLE GARMENT SHIPPING CONTAINER
Bernard Fish, Brooklyn, N. Y., assignor to Interstate Container Corporation, Glendale, N. Y., a corporation of New York
Application May 31, 1955, Serial No. 511,913
5 Claims. (Cl. 206—7)



1. A corrugated fiberboard container adapted to enclose garment sustaining hangers and foldable out of a one piece scored blank; comprising, front, rear and a pair of side walls, said side walls defining an opening at the front part of said container; a sill and a door above said sill and both normally accessible outside of said container and both constituting said front wall and both integrally merged with one of said side walls, said door and rear wall at their upper parts each having a swingable flap foldable downwardly adjacent the upper edges of said side walls to close the upper part of said container, the other side wall of said pair carrying a swingable lip integral therewith and adapted to be disposed within said opening, said sill being disposed between said side walls and secured to said lip to close the lower part of said opening, said door being bodily swingable with one of said flaps and relative to said side walls to arrange said door against said lip to removably close the upper part of said opening and concomitantly arrange said last mentioned flap adjacent said edges, wings extending from said side walls and having primary leg portions having upper parts integral with and swingably connected to the upper parts of said side walls and defining therewith spaced inverted U-shaped loops, a rack for supporting said hangers and sustained by and having means for receiving and straddling said loops to hold the latter closed, said wings having secondary leg portions swingably connected to the lower parts of said primary leg portions to define therewith outside and accessible U-shaped loops adapted to receive and embrace outer end parts of said rack, and said wings having remainder portions integrally merged with the upper parts of said secondary leg portions and foldable relative to said secondary leg portions and downwardly against said flaps.

2,752,033
MOTHPROOF STORAGE BAG
Samuel Edward Fineberg, Montreal, Quebec, Canada
Application December 2, 1954, Serial No. 472,603
6 Claims. (Cl. 206—10)

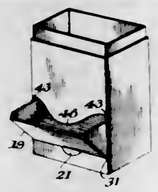


1. A storage bag comprising top, side and bottom walls formed of soft flexible sheet material which is gas impervious, a frame of a size and shape conforming to that of said top wall, adapted to be positioned immediately beneath said top wall and comprising a cross piece secured across the middle of said frame hooks secured to said cross piece and extending upwardly therefrom and through said top wall so that the storage bag may be suspended thereby, one of said side walls having a main opening, a slide fastener closure for said opening, a nipple inserted into one of said walls and tightly secured thereto, a removable gas tight closure for said nipple and a gas pervious pocket extending within said bag and having its intermediate portion spaced from the walls of said bag and having its mouth attached to and surrounding said nipple and its outer end secured to said cross piece whereby solid mothproofing material introduced through said nipple into said pocket will come into contact with air entering said bag from all sides thereof.

2,752,034
MATCH BOX DISPENSER
Mary Phyne Newell, St. Louis, Mo.
Application February 28, 1951, Serial No. 213,192
5 Claims. (Cl. 206—31)

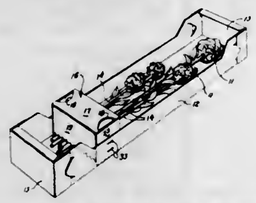
1. A match box convertible into a match dispenser comprising an open ended slide-on cover, an open top tray and a match retaining strip adapted to form a trough, said cover having a portion of the lower front thereof bent inwardly leaving an aperture in said cover, said inwardly bent portion being hinged to the lower edge of

said aperture, a trough inserted in said aperture with the front portion of the trough extending outwardly from the lower edge of the aperture, opening at an angle from the front of the cover to form an upwardly disposed opening, the sides of the trough extending normal to the front of the trough and provided with right angle scored notches to engage the upper corners of the cover aperture, said notches determining the outwardly projecting position of the trough, the inwardly positioned portions of the sides of the trough extending upwardly behind the front wall of the cover and positioned rearwardly adjacent to the side walls thereof and being secured between said side walls and the side walls of said tray, the base of the trough extending inwardly adjacent the inwardly bent portion of the cover and being secured between the



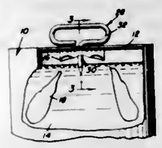
tray and said inwardly bent portion of the cover, a center tab in the base of the trough positioned to extend outwardly adjacent the lower front portion of the cover and below the lower edge of the cover opening, said tray positioned in the cover inwardly and adjacent the end portions of the sides of the trough within the cover with the lower open portion of the open top tray facing the outwardly disposed opening formed by the trough to form the bottom of the assembled dispenser at the end of the tray, a pair of small circled score lines faced lengthwise on the back of the open ended cover and intermediate sides thereof and the tops and bottoms thereof, said score lines forming openings for securing the assembled dispenser to a wall support, and a pair of scored guide lines for guiding the placement of the securing means.

2,752,035
FLORAL PACKAGING UNIT
Daniel S. Shinoda, San Lorenzo, Calif.
Application October 12, 1953, Serial No. 385,359
1 Claim. (Cl. 206—45.14)



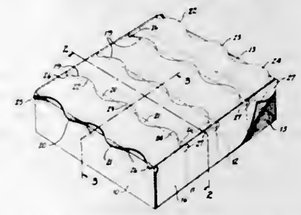
In combination: an elongate open top tray having parallel upright sides for containing flowers having elongate stems; a cleat shaped and proportioned for removable insertion in said open top tray transversely thereof with opposite ends engaging the upright sides of said tray; said cleat comprising a rectangular box-like unit open at its bottom and the bottoms of said cleat ends resting on the bottom of said tray; the bottoms of the sides of the cleat which extend transversely of the tray terminating short of the bottoms of said cleat ends and the bottom edges of said cleat sides formed with a plurality of spaced serrations defining flower stem engaging members disposed above the bottom of the tray; each serration in one side of said cleat aligned with a like serration formed in the opposite side of said cleat; first and second tool access openings formed in the top panel of said box-like cleat structure and disposed adjacent opposite ends thereof to permit insertion of a fastening tool interiorly of said box-like cleat adjacent the points of joinder of cleat ends to tray sides.

2,752,036
CONTAINER FOR CHEMICALS
John C. Parkhurst, Jr., Oklahoma City, Okla.
Application March 29, 1954, Serial No. 419,473
16 Claims. (Cl. 206—47)



8. In a container including a lid, means for carrying unmixed chemical components within the container including a puncturable receptacle having a constricted portion, means attaching said constricted portion to the undersurface of said lid with a part of said constricted portion in contact with the undersurface of said lid, and rigid means for penetrating said lid from the exterior thereof and puncturing said constricted portion to release the receptacle from its attachment to the lid.

2,752,037
CHAIN WRAPPER FOR PLASTIC AND LIKE PRODUCTS
Clarence W. Vogt, Norwalk, Conn.
Application February 28, 1951, Serial No. 213,110
4 Claims. (Cl. 206—56)

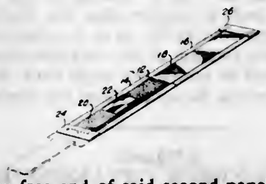


1. A package, comprising a plurality of similarly shaped enwrapped products and a holding member having an adhesive on one side thereof adhesively securing the products in side-by-side relation with meeting sides of adjacent products in contiguous relationship, said holding member being secured only to the opposite ends and one intermediate non-meeting side of each of the products, said holding member having marginal portions over-lying the ends of the products and a plurality of cuts in said holding member spaced apart in a direction parallel to the marginal portions and at a distance equal to the width of the products and having at least a part thereof lying in directions intersecting the planes of the meeting faces of the products to form flaps alternately overlapping and secured to adjacent sides of the products lying in the same plane, the cuts extending to at least the inner edges of said marginal portions and terminating inwardly of their outer side edges.

2,752,038
BANDAGE PACKAGE
Lewis D. Abbott, New York, N. Y.
Application June 29, 1954, Serial No. 440,170
8 Claims. (Cl. 206—63.2)

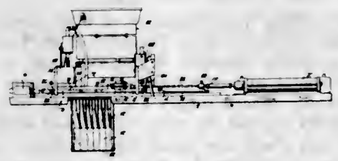
7. A packaged surgical dressing comprising a strip of frangible material folded along a transverse axis to define first and second panels connected by a hinge, a separable protective strip narrower than said frangible strip and

symmetrically superimposed upon said first panel and extending substantially from said hinge to the free end of said first panel and being secured to said first panel, a dressing carrying adhesive tape not exceeding the width of said protective strip and superimposed upon said second panel, adhesive face up, and having one end thereof se-



cured to the free end of said second panel and its other end free, said first and second panels being folded along said hinge and secured along their confronting edges to define an envelope enclosing said dressing carrying adhesive tape and said protective strip superimposed upon the adhesive face of said tape.

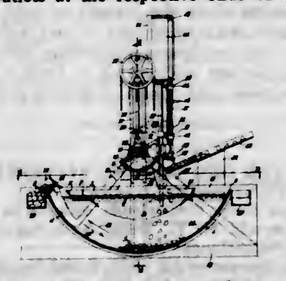
2,752,039
AUTOMATIC RESISTANCE TESTER FOR RESISTOR PRODUCING SYSTEM
Victor A. Woodell, Atchison, Kans., and Paul R. Hanaway, Independence, Mo., assignors to Electra Manufacturing Company, Kansas City, Mo., a corporation of Missouri
Application April 24, 1952, Serial No. 284,098
11 Claims. (Cl. 209—81)



1. In a machine for automatically sorting electrical devices into a plurality of groups with a number of said groups each consisting of a range having a known maximum and a known minimum electrical value, the maximum values of the ranges progressively increasing, said machine including releasable structure for holding one of said devices, said structure being movable; means for moving said structure; a bridge circuit; means coupling said one device electrically within the circuit while the one device is held and moved by said structure; means forming a part of said bridge for introducing progressively increased resistance into series with said one device as the latter is moved in one direction by said structure, whereby the current flow of said circuit is varied as the structure is moved; and means responsive to a predetermined current flow in said circuit for releasing said structure and thereby said one device held by the structure, said releasing means being electrically coupled with said circuit and operably connected with said structure.

2,752,040
SINK-FLOAT SEPARATORY APPARATUS
Rudolf Schreiber, Manhasset, and Gerhart W. Schuetz, New York, N. Y., assignors to The Ore & Chemical Corporation, New York, N. Y., a corporation of New York
Application August 17, 1953, Serial No. 374,686
7 Claims. (Cl. 209—173)

1. Apparatus for gravity separation of materials in liquid media, comprising a vessel to contain a pool of liquid medium, said vessel being of generally arcuate form in vertical section, a rake mounted for oscillation with reference to a horizontal axis located above the surface of the pool so that the rake moves in a generally arcuate path adjacent the inner surface of the vessel, discharge outlets at the respective ends of said arcuate



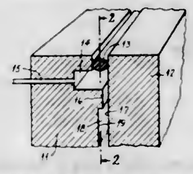
path, said rake serving to move sunken material from the bottom of the vessel to said discharge outlets, and a discharge weir for material suspended in the liquid medium.

2,752,041
PORTABLE DRY CONCENTRATOR FOR ORES
Roy E. Clint, Placerville, Calif.
Application December 23, 1954, Serial No. 477,277
2 Claims. (Cl. 209—475)



1. In a dry concentrator for ores including an air pressure chamber open to the top and a hollow concentrating table having pervious-to-air top and bottom surfaces disposed in face-to-face spaced relation with respect to each other, said table being disposed in superimposed relation with respect to and closing the top of said chamber, the improvement consisting in providing means for creating eddies in the air passing through the table from said chamber, said means comprising a plurality of bars disposed transversely within said table in side-by-side spaced relation with respect to each other, said bars having their bottoms in abutting relation with the bottom surface of said table and their tops in abutting relation with the top surface of said table, each of said bars being formed with a passage for air extending from the bottom to the top for conducting air from the bottom surface of said table to the top surface, said passages being formed so that air passing therethrough and air passing between said bars eddies when commingled above said table top surface.

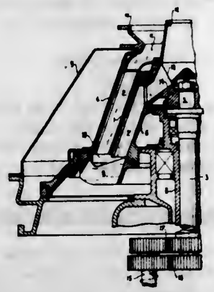
2,752,042
LIQUID THERMAL DIFFUSION PORT DESIGN
Warner E. Scovill, Lakewood, Ohio, assignor to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio
Application August 27, 1953, Serial No. 376,927
3 Claims. (Cl. 210—52.5)



1. Liquid thermal diffusion apparatus comprising two substantially parallel, liquid-impervious stationary walls, the opposed faces of which are smooth and spaced apart to form a substantially uniform narrow thermal diffusion slit, means providing ports communicating with the slit through which the liquid is introduced into and withdrawn from said slit, at least one of said ports including an elongated groove longitudinally disposed adjacent said slit

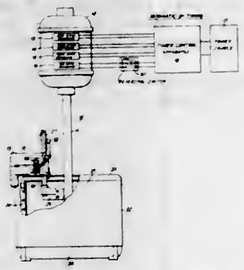
and in the face of one of said walls, a passage for liquid connected with said elongated groove and communicating with the exterior of the apparatus, a ledge in one of said walls running along the breadth of said elongated groove and positioned between said slit and said elongated groove and in such contiguous relationship with the other of said two stationary walls so as to form a restricted passageway between said elongated groove and said slit.

2,752,043
METHODS FOR DEWATERING MATERIAL IN A CENTRIFUGAL MACHINE
Pieter Van Riel, Delft, Netherlands, assignor to Machinefabriek Reineveld N. V., Delft, Netherlands, a company of the Netherlands
Application November 12, 1953, Serial No. 391,681
3 Claims. (Cl. 210—69)



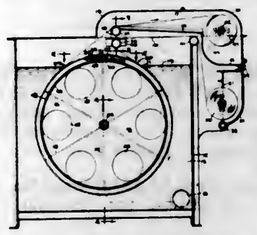
1. A method for dewatering material in a centrifugal machine provided with a perforated inner drum and a perforated outer drum concentrically surrounding the inner drum and rotatable with an angular speed slightly differing from that of the inner drum, which consists in introducing into the inner drum the material to be dewatered, introducing into the outer drum particles of the same material of a larger size, the material forming a layer on the inner walls of both drums, displacing both said layers towards the discharge end of the drums, and discharging both said layers together.

2,752,044
DRIVING MEANS FOR CENTRIFUGAL MACHINES
Charles A. Olcott, Hewitt, N. J.
Application April 20, 1953, Serial No. 349,836
1 Claim. (Cl. 210—70)



The method of operating a sugar centrifugal machine of the type having a basket, which is adapted to be cyclically rotated through accelerating, running, decelerating and unloading stages by a power source and by an electric motor having a high speed winding and a low speed winding and connections for reversing the direction of rotation produced by said low speed winding, and a plow for unloading said basket, which comprises the steps of accelerating the basket for operation in the counter-clockwise direction by successively energizing the low speed winding and the high speed winding, continuing to energize the high speed winding for operation of the basket in the same direction during the normal running period of said machine, energizing the low speed winding for operation of the basket in the same direction during the decelerating period, and unloading the basket by energizing the low speed winding by the reversing connections in such a manner that the basket passes through zero speed and builds up in the clockwise direction, during which rotation in the clockwise direction the plow is positioned to scrape the sugar from the basket, without disconnecting the motor from the power source.

2,752,045
PERFORATED DRUM TYPE LIQUID FILTER
Lloyd Hornbostel, Beloit, Wis., assignor of one-half to Rogers Hornbostel and one-half to Lloyd Hornbostel, Jr., both of Beloit, Wis.
Application July 28, 1953, Serial No. 370,737
3 Claims. (Cl. 210—199)



1. A filter having in combination, a tank adapted to contain a body of liquid to be filtered, a drum having a perforated periphery mounted within said tank to turn about a horizontal axis coincident with the drum axis, parallel vertically spaced supply and take up rolls disposed outwardly beyond the side wall of said tank and mounted to turn about axes paralleling the drum axis, a pair of guides paralleling the drum axis and mounted above said drum, a flexible filter sheet encircling said supply roll and extending generally horizontally across the top of said tank, around one of said guides, then downwardly around the drum to cover the perforated area thereof, upwardly and around the other of said guides and finally generally horizontally to said take up roll, a member disposed beneath the horizontal run of said sheet to prevent material falling from the sheet from returning to said tank, and means for draining filtrate from the interior of the drum.

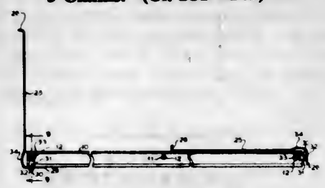
2,752,046
VERTICAL TYPE GUN RACK
William G. Levy, North Conway, N. H.
Application March 2, 1953, Serial No. 339,760
9 Claims. (Cl. 211—4)

1. A rack for holding guns in side-by-side upstanding relation, said rack comprising a base for supporting the butts of said guns, a pair of spaced opposing upright members extending from the sides of said base and having a pair of opposing apertures therein, a transverse upper member opposing said base in spaced relation thereto and having at least one aperture therein for receiving the barrels of said guns, a second transverse member intermediate said base and upper member having a plurality of pairs of spaced forwardly extending projections for receiving said guns therebetween, the projections of each pair being spaced apart by an amount slightly greater than the narrow thickness of the stocks of the guns to hold them against lateral twisting movement, a transverse locking bar disposed between said base and upper members forwardly of and in substantially the same horizontal plane as said second transverse member and said projections and being positioned closely adjacent the ends of said projections, said projections, said second transverse member and said locking bar defining a space having a smaller dimension than the butt end of the gun stock, said locking bar having its ends slidably received in said



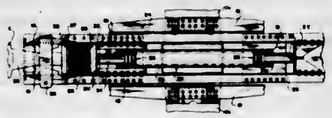
apertures in said upright frame members and being laterally slidable to and from a first position in which said guns are locked against removal from said rack and a second position in which said guns are removable from said rack, and means slidable in at least one of said upright members for locking said bar in said first position.

2,752,047
ADJUSTABLE BOOK SHELF
Charles H. Gersley and Karl P. Schumacher, Orange, Va., assignors, by mesne assignments, to Pathe Manufacturing Corporation, a corporation of Delaware
Application November 29, 1950, Serial No. 198,172
5 Claims. (Cl. 211—149)



4. In a book shelf, elongated shelf structure, a rod secured transversely adjacent one end thereof, an end bracket having an inwardly extending flange along its bottom edge, a curved recess adjacent said flange and openings in said flange, pivot arms mounting said bracket on said rod, said arms having ends located in said openings, and at the opposite ends of said arms tabs pivoted upon said rod providing a hinge connection between said end bracket and said shelf.

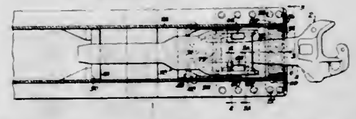
2,752,048
CUSHION UNDERFRAMES
Stanley H. Fillion, Scarsdale, N. Y., assignor to Waugh Equipment Company, New York, N. Y., a corporation of Maine
Application February 12, 1954, Serial No. 409,973
14 Claims. (Cl. 213—8)



1. In a railway car, the combination with an underframe including transverse structural members in pairs, with one pair being near each end of the underframe,

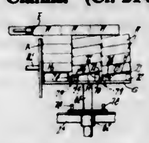
of a movable draft and buffing column extending lengthwise of the car and having at least one longitudinally-extending opening in its bottom, filler means attached to the structural members of each pair on opposite sides of the column and projecting into the column through the bottom opening, a cushioning device rigid throughout its length against transverse movement and mounted rigidly on and supported by the filler means within the column, a stop on the column inward from the cushioning device and acting on the device to compress it on outward movement of the column, and means on the column outward from the cushioning device and acting on the device to compress it upon inward movement of the column.

2,752,049
ROTARY COUPLER CONNECTION
Frank H. Kayler, Alliance, Ohio, assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application June 20, 1951, Serial No. 232,640
20 Claims. (Cl. 213—75)



7. A coupler mounting comprising a yoke having a parti-spherical socket and having top and bottom walls offset upwardly and downwardly therefrom, respectively, and extending forwardly from said socket, said yoke comprising side walls extending forwardly from said socket and merging with said top and bottom walls, a coupler having a shank comprising a ball end with a parti-spherical surface complementary to that of said socket and seated against said socket surface, a pair of top and bottom bearing blocks disposed forwardly of said socket and having parti-spherical surfaces engaged with complementary surfaces of said ball end, all of said surfaces being substantially concentric, a pair of lugs on the inner surfaces of respective side walls disposed between said blocks to maintain them in spaced relationship with respect to each other, key slots through said top and bottom walls, a pair of keys engaged with the forward surfaces of the blocks and extending through the related key slots, said keys being engaged with the top and bottom walls at the forward ends of said key slots, another pair of lugs on the inner surfaces of respective side walls engageable with the forward edges of the keys to reduce bending stresses thereon, said other lugs being aligned horizontally with the first mentioned lugs, and slots through said ball end aligned with said lugs whereby said lugs may be passed through said last-mentioned slots during assembly and disassembly of the yoke and shank.

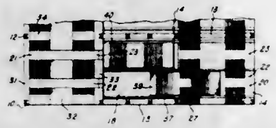
2,752,050
MACHINE FOR SLIDING ARTICLES INTO STACKED RELATION
Ronald E. J. Nordquist, Maplewood, N. J., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application July 3, 1953, Serial No. 366,029
7 Claims. (Cl. 214—6)



1. In a machine for stacking articles in layers for packaging, the combination of a support, means for ad-

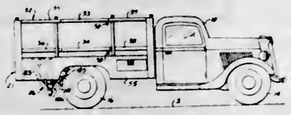
vancing toward said support parallel rows of articles to produce a unit layer thereon, means for lowering said support step-by-step as unit layers of articles are formed thereon to build up a stack of a plurality of layers, and a plurality of movable platforms mounted on said support in parallel rows and having supporting faces for receiving and supporting the rows of articles of the initial unit layer of said stack, the supporting faces of said platforms being arranged in stepped relation to facilitate sliding of said rows of articles from one platform to the next without interference to form said initial unit layer of articles and to facilitate sliding of the rows of articles of subsequent unit layers over each other without interference to build up said stack of articles.

2,752,051
VEHICLE PARKING APPARATUS
Allen D. Strahm and Joseph W. Patterson, Tulsa, Okla.; said Patterson assignor to said Strahm
Application November 6, 1952, Serial No. 319,046
14 Claims. (Cl. 214—16.1)



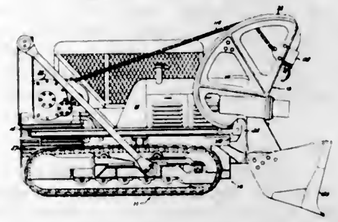
1. In a vehicle parking apparatus having a pair of separated storage spaces with a pair of stalls in each space alined with the stalls of the other space, a vehicle carrying platform movable into and out of position between the storage spaces and their stalls, a pair of carriages mounted on the platform for alinement with the stalls and for movement selectively into and out of either alined stall upon movement of said platform into position therebetween, vehicle elevating means mounted on each carriage and including vertically movable tire engaging members for raising and lowering a vehicle to transfer the same to and from a selected stall, and vehicle alining means mounted on each carriage and coacting with each other to move a vehicle transversely of said platform into and out of alinement with a selected stall.

2,752,052
TRUCK BODY WITH ELEVATOR FOR LOADING AND UNLOADING
Marvin L. Trotter and Cecil Wayne Jarvis, Columbia, S. C., assignors to Marvin L. Trotter, Columbia, S. C.
Application October 12, 1953, Serial No. 385,396
6 Claims. (Cl. 214—77)



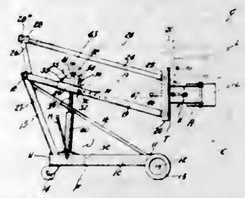
1. A truck body adapted to be mounted on the chassis of a truck comprising a bed, means for mounting said bed on said chassis, said bed having an opening in the rearmost portion thereof forming an elevator well, an elevator frame mounted in said well and having a portion extending beneath said well, an elevator platform movable in said well, a pair of generally arcuate links pivoted at opposite ends to the elevator platform and to the portion of said elevator frame extending beneath said well, a bell crank comprising a relatively long generally arcuate arm and a relatively short generally straight arm pivotally connected at their juncture to the portion of the elevator frame extending beneath the well at a point below the pivotal connection of the links thereto, the free end of the generally arcuate arm of the bell crank being pivotally connected to the elevator platform at a point beneath the pivotal connections of the links thereto, means for moving said elevator comprising an electric motor, a motor housing, a ram mounted in said housing and movable by said motor, said motor housing being pivotally connected to said truck body and the free end of said ram being pivotally connected to the free end of the relatively short arm of the bell crank, whereby the elevator platform may be raised and lowered in a generally arcuate path while maintaining a constant level attitude relative to the truck bed.

2,752,053
MATERIAL HANDLING MACHINE
Daniel M. Schwartz and Theodore N. Hackett, Salt Lake City, Utah, assignors to The Eimco Corporation, Salt Lake City, Utah, a corporation of Utah
Original application October 24, 1950, Serial No. 191,808, now Patent No. 2,689,660, dated September 21, 1954. Divided and this application April 2, 1953, Serial No. 346,402
4 Claims. (Cl. 214—131)



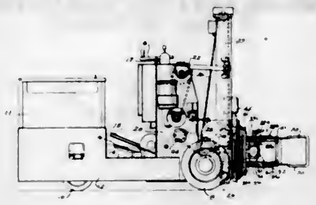
1. In a material handling machine, the combination with a frame of an overhead rocker bucket device comprising parallel tracks on said frame, paired rocker arms mounted for rolling engagement on said tracks, thrust pivots secured to the ends of the tracks and thrust bearing surfaces on said rocker arms involute to the curvature of the rocker arm surface for engagement with the thrust pivots.

2,752,054
INDUSTRIAL TRUCK
Irving C. Thompson, Detroit, Mich.
Application February 2, 1953, Serial No. 334,473
7 Claims. (Cl. 214—147)



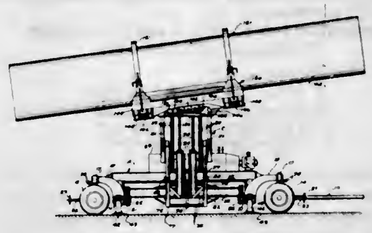
1. In a barrel truck, a wheeled frame, upwardly extending support means on the rear end thereof, forwardly extending lift arms pivotally mounted on said support means, a lift bracket carried by said lift arms and overhanging the front edge of said frame, a turntable revolvable on the front of said lift bracket, a pair of spaced-apart, forwardly extending arms on said lift bracket, means for adjusting the relative position of said clamp arms to clamp the work therebetween, jack means between the ends of said lift arms and connected thereto for swinging said lift arms in a vertical plane and elevating and lowering the work, circumferentially spaced openings in said turntable, and pin means on said bracket normally accommodated in one of said openings to maintain the turntable in an angularly adjusted position, said pin means being retractable to permit angular adjustment of said turntable to an adjusted position in which the barrel is tilted and the contents thereof can be poured.

2,752,055
ROLL GRIPPING MEANS FOR AN INDUSTRIAL TRUCK
Herman J. Hoppert, Euclid, Ohio, assignor to The Elwell Parker Electric Company, Cleveland, Ohio, a corporation of Ohio
Application June 11, 1954, Serial No. 436,051
8 Claims. (Cl. 214—652)



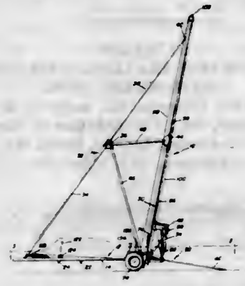
1. In an industrial truck of the tier lift type having an elevatable carriage, a turntable on the carriage, and a load engaging structure mounted on the turntable, a load engaging structure comprising: a first load engaging member fixed on the turntable, a swingable second load engaging member swingable toward and away from and cooperating with the first member in load engagement, a pivotal mounting means for the swingable load engaging member comprising a slide structure on the turntable slidable toward and away from the first load engaging member and a travelable connection between the swingable load engaging member and the fixed load engaging member for effecting a swinging of the second member toward and away from the first member with advance or retraction of the slide structure toward or away from the first member.

2,752,056
LOAD HANDLING, TRANSPORTING AND POSITIONING VEHICULAR MACHINE
Le Grand H. Lull, Minneapolis, Minn., assignor, by mesne assignments, to The Baker-Raulang Company, a corporation of Delaware
Application December 12, 1951, Serial No. 261,229
15 Claims. (Cl. 214—660)



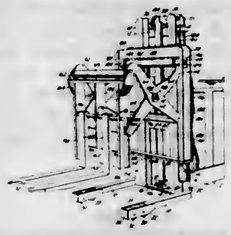
1. In a load handling and positioning machine of the character described, front and rear wheeled supports, a frame member rigidly connecting the supports and spaced from one side of the machine, a load carrier supported on the machine between said supports, means mounting the carrier for up and down movements, means mounting the carrier for transverse movements out from between the supports, means supporting the carrier for swinging movements about a vertical yaw axis, and means supporting the carrier for swinging movements about a horizontal pitch axis, all of said means being located between the said supports.

2,752,057
MOBILE GIN POLE HAY STACKER
Thomas C. Rush, Mansfield, Mo.
Application October 29, 1953, Serial No. 388,962
14 Claims. (Cl. 214—701)



1. A gin pole hay stacker comprising a wheeled supporting frame, a gin pole mounted on said frame, a carriage movably carried on said gin pole, a hay fork carried by said carriage, lifting means for moving said fork, tilting means for automatically tilting said fork to and resiliently maintaining said fork in a tilted ground engaging position when it is lowered on the gin pole, and dumping and leveling means for moving said fork from said ground engaging to a lifting position, and for moving said fork from a lifting to a dumping position, and brace means for retaining said fork against side sway.

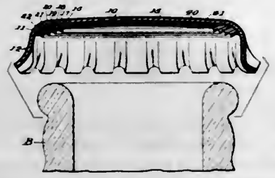
2,752,058
MATERIAL HANDLING LIFT TRUCK
Christian D. Gibson, Greene, N. Y., assignor to The Raymond Corporation, Greene, N. Y., a corporation of New York
Application July 22, 1953, Serial No. 369,559
12 Claims. (Cl. 214—730)



1. In a material handling truck, the combination with a mast, a carriage slidable up and down said mast and means for effecting the sliding movements of said carriage, of a rectilinearly projectable and retractable load support so mounted on said carriage as to support its load in front of said carriage and unconfined in any way thereby in all positions of projection or retraction, a wheel-supported base upon which said mast is fixedly mounted, said base having a low stabilizing extension in front of said mast, with supporting wheels near its front end, which base extension is forked to embrace the load support in its lowered retracted position and has free clearance thereabove for any retractable load, and projecting and retracting linkage between said carriage and said load support, operable, in any position of said carriage on said mast, to carry said load support substantially rectilinearly between a retracted position in which it may support a load with the vertically projected center of gravity of the load within or not substantially outside the truck wheel base and a projected position in which it may pick up or deposit a load which is, or is to be, located in front of said wheel base, the carriage including an upright rectangular frame and the projectable and retractable load

support including a second frame adapted to nest within the carriage frame and on which the load engaging means are mounted, the projecting and retracting linkage connecting said frames in such overlapping relation thereto as also to nest within said carriage frame when in retracted condition.

2,752,059
CLOSURE WITH SEALING PAD HAVING CONCENTRIC RIBS
Julius L. Schneider, Chicago, Ill., assignor to Continental Can Company, Inc., a corporation of New York
Application November 8, 1950, Serial No. 194,661
5 Claims. (Cl. 215—40)



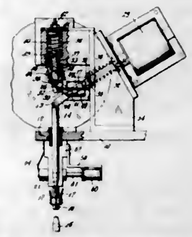
1. A crown cap adapted for pressure containers having a closure shell and a cushion pad of resiliently elastic material, the closure shell having an internally domed circular portion with a smooth internal surface bounded by a top corner radius portion of smooth curvature and having a peripheral skirt portion joined to said top corner radius portion and adapted for engagement with the locking ring of the container, characterized in that the cushion pad has a smooth back adherent to the shell and extending over said internal surface and onto said top corner radius portion and terminating at said top corner radius portion whereby said skirt portion can be engaged directly with the container, said pad having a thin central portion for location over the container mouth and having at the annular region for contact with the top sealing surface of the container lip a multiplicity of concentric ribs alternating with grooves; the lip-contacting portion of each rib, before application to the container lip, projecting farther from the closure shell than the thickness of the thin central portion and the grooves providing spaces into which the material of the adjacent ribs can be elastically spread when flattened during application to the container and as held by engagement of the skirt with the locking ring.

2,752,060
CONTAINER CLOSURE
Warren N. Martin, Prairie Village, Kans.
Application February 16, 1955, Serial No. 488,587
5 Claims. (Cl. 215—41)



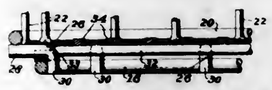
1. Packaging structure comprising a container having a substantially cylindrical portion open at one extremity thereof and provided with an external, annular shoulder thereon, a part of said portion being provided with external threads; and a cap of resilient material threadably mounted on said threads of the portion, said cap having a tubular side wall, an end wall closing one extremity of the side wall and a pair of opposed, inturned flanges on the other extremity of the side wall, the distance between said flanges being less than the outer diameter of the shoulder when the cap is in its normal configuration, said cap being distortable from said normal configuration upon application of a squeezing force thereto to a temporary configuration disposing said flanges in positions spaced from each other a distance greater than said diameter of the shoulder, whereby the cap may be removed from closing disposition upon the container by the application of said force and rotation of the cap relative to the portion.

2,752,061
ELECTROMAGNETIC RIVET SETTING MACHINE
Carl P. Michlein, Shelton, Conn., assignor to The Shelton Tack Company, Shelton, Conn., a corporation of Connecticut
Application April 8, 1950, Serial No. 154,750
3 Claims. (Cl. 218—2)



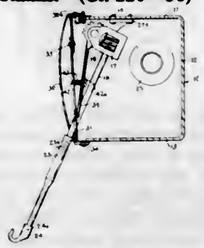
1. A machine for setting a rivet comprising in combination: a movable rivet driver; an opposed anvil for said driver, said anvil having a surface for setting a rivet; a direct-current solenoid supplying the power to impart a work stroke to said movable rivet driver; a source of alternating current; means supplying full-wave rectified current to the direct-current solenoid from said source of alternating current; a hopper barrel containing a supply of rivets; an alternating-current solenoid; means including a cooperating linkage to impart intermittent rotation to said hopper barrel in response to repeated energization of said alternating current solenoid, to feed rivets for the rivet setting operation; means for connecting said alternating-current solenoid to said source of alternating current; and switch means connected to the source of alternating current, providing for simultaneous energization of said solenoids at the will of an operator.

2,752,062
CARRYING CASE
Donald R. Swingle, Chattanooga, Tenn., assignor to Cumberland Case Company, Chattanooga, Tenn., a corporation of Tennessee
Application July 9, 1954, Serial No. 442,269
15 Claims. (Cl. 220—19)



1. A carrying case comprising vertical side walls including top and bottom perimeter frame wires of substantially equal corresponding transverse dimensions, a stacking ring disposed below said bottom perimeter frame wire, the transverse dimensions of said stacking ring being less than the corresponding transverse dimensions of said top perimeter frame wire, said case being adapted to be stacked upon a like case with said stacking ring disposed within the top perimeter frame wire of said like case whereby said stacking ring will prevent said case from being transversely displaced from its stacked position, a plurality of short rods extending between said bottom perimeter frame wire and said stacking ring along each side thereof for securing said stacking ring to said bottom perimeter frame wire, each of said rods having an outer end secured to the undersurface of said bottom perimeter frame wire and an inner end forming a vertical leg having its lower end secured to said stacking ring, the undersurface of said rods below said bottom perimeter frame wire being arranged to engage the top perimeter frame wire of a like case so as to support said case in stacked relation thereon, and horizontally extending means disposed in the bottom of said case for supporting articles placed therein.

2,752,063
AWNING HOUSING BOXES
Errol P. D'Azzo, Brooklyn, N. Y.
Application May 21, 1952, Serial No. 289,039
5 Claims. (Cl. 220—36)



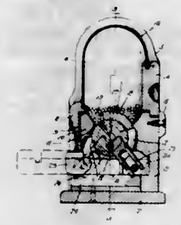
3. A hinged awning box lid having upper and lower edge flanges, said lid having a forward bulge, and a stiffening brace bar for said lid having corresponding end flanges to fit snugly against the edge flanges of the lid, said stiffening brace bar comprising a main section and a minor section having overlapping relation to each other and pivotally connected to each other in such overlapping relation, the sections of the brace bar being foldable on each other to permit the insertion of the brace bar between the edge flanges of the lid and the swinging of one of said sections on the other section to forcibly position the terminal flanges of said brace bar against the inner sides of the edge flanges of the lid, each of the sections of the brace bar being connected to the lid by screws; a lever having slidable connection with said brace, and means for operating the lever to open and close the lid.

2,752,064
CAN OPENER AND GUIDE
Joseph A. Edmond, Cordova, Territory of Alaska, assignor of forty per cent to Jack Dinneen, Cordova, Territory of Alaska
Application September 11, 1953, Serial No. 379,631
1 Claim. (Cl. 220—52)



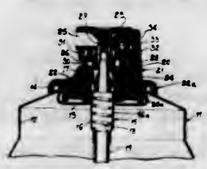
A can opener and guide comprising an elongated key having an open ended slot at one end and a handle portion at its other end, a rectangular guide having spaced side and end walls, the upper of said side walls having an aperture for rotatably and slidably receiving said one end of said key, a projecting portion extending from said upper side wall in parallel spaced relation to said key, a right angular bent portion on the end of the projection, said bent portion having an aperture slidably and rotatably receiving said key adjacent said handle, stop detents on said key for engaging said bent portion for limiting outward sliding movement of the key, the lower side wall of said guide forming an abutment limit for the inward movement of the key, said side walls extending equally on each side of said key and forming a guide for metal tape as it is torn from a can and coiled around the slotted end of the key, said key being slidable outwardly so that the open end of the slot is substantially flush with the said upper side wall thereby withdrawing the key from engagement with a metal tape wound therearound, said guide being formed from a single strip of material with the upper side wall being of a double thickness of material with the projection formed as a continuation of the upper thickness of the upper side wall.

2,752,065
DISPENSING DEVICE FOR CYLINDRICAL OBJECTS
Alfred J. Schupp, San Antonio, Tex.
Application April 25, 1952, Serial No. 284,237
1 Claim. (Cl. 221—238)



A dispensing device comprising a housing including a container, said housing having a front wall formed with a discharge opening, a stationary guide member and article supporting surface secured within the housing opposite to said discharge opening, spaced parallel delivery arms slidably mounted on the stationary guide member, said delivery arms having vertical notches extending from the upper edges thereof into which articles dispensed fall, the lower ends of the notches being in a plane intermediate the top and bottom of the stationary guide member providing article supporting surfaces, whereby an article resting in the notches provides a stop for contact with the ends of the stationary guide upon movement of the arms in one direction, and a manually rotatable horizontal delivery cylinder operating within the housing adapted to deliver articles from said container to said notches of said arms for delivery exteriorly of the housing, said arms and delivery cylinder being coupled for simultaneous movement.

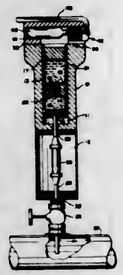
2,752,066
COMBINED DISPENSER AND VALVE OPERATING MECHANISM
John E. Ayres, Mountainside, N. J., assignor, by direct and mesne assignments, to Oil Equipment Laboratories, Incorporated, Elizabeth, N. J., a corporation of New Jersey
Application November 9, 1953, Serial No. 390,831
18 Claims. (Cl. 222—41)



1. A combined dispenser and valve operating mechanism for a pressurized container having a valve controlled opening through which the contents of the container are discharged which comprises a base mounted on a container, said base having an opening extending therethrough, said opening communicating with a valve in an opening in the container, a cap rotatably mounted on the base and being movable vertically with respect to

the base, a sleeve of flexible material carried by the cap and extending into the opening in the base, said sleeve engaging with the base and forming a seal between the cap and the base, said cap having a discharge passageway therein communicating with the opening in the base through said sleeve, a valve operating member carried by the cap and extending through the opening in the base, interfitting members on opposing surfaces of the cap and the base, said interfitting members having interengaging portions on opposing surfaces thereof for controlling vertical movement of the cap relative to the base and an index member extending upwardly from the base at one side of the cap, said index member extending over the outlet of the discharge passageway in the cap in one position of the cap.

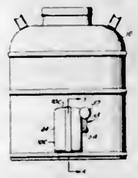
2,752,067
INJECTOR
Jerome Kohl, Berkeley, and Richard L. Newacheck, Concord, Calif., assignors to Tracerlab, Inc., Boston, Mass., a corporation of Massachusetts
Application September 24, 1952, Serial No. 311,174
5 Claims. (Cl. 222—80.5)



5. A cartridge for use with an injector having a cartridge-receiving cavity having one end closed and into which a sharpened discharge tube extends, said cartridge comprising an elongated cylinder closed at one end by a puncturable plug and at the other end by a first piston arranged to slide longitudinally of said cylinder in sealing relation with the interior thereof, a puncturable floating piston disposed intermediate said plug and said first piston dividing said cartridge into first and second compartments and arranged to slide longitudinally of said cylinder in sealing relation with the interior thereof, said first and second compartments being filled with a radioactive solution and a flushing solution, respectively, said floating piston being slideable to a position in contact with said plug to expel said radioactive solution through a discharge tube from said first compartment upon entry therein of said tube and to permit puncturing of said floating piston by said tube and entry thereof into said second compartment, said first piston being slideable to a position in contact with said floating piston to expel said flushing solution through said tube.

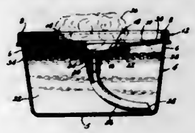
2,752,068
LIQUID DISPENSING DEVICES
Forrest L. Bryant, East Orange, N. J., assignor to Dairymat Corporation, Long Island City, N. Y., a corporation of New York
Application May 3, 1952, Serial No. 285,899
5 Claims. (Cl. 222—108)

1. Dispensing means for a liquid food container, comprising, in combination with the container body and an outlet nipple operatively connected to a side wall thereof, a catch plate, interlocking means on said catch plate and on said wall for holding said catch plate against the outside surface of said wall, a block mounted on said catch plate and having a substantially quarter cylindrical convex surface extending downwardly and outwardly from said container wall substantially from the height of the bottom of said nipple, a collapsible resilient sanitary tube connected to said nipple and led over said surface of said block, means on said block engaging the lower end of said tube and maintaining the same in a downward pointing direction, and an L-shaped operating handle, the extremity of the foot of said handle constituting a pivot pin engaged in said block, said handle further comprising an L-shaped



arm mounted on said foot and having a portion extending therefrom parallel to the body of said handle and further having a cock portion extending thence parallel to said pivot pin portion and in overlying relation to said tube, said handle collapsing said tube against said quarter cylindrical convex surface of said block in the position of rest of said handle, and the contents of said container discharging through said tube when said handle is lifted.

2,752,069
LIQUID DISPENSER
William W. Welsh, Rockville, Md., assignor to Bowen & Company, Rockville, Md., a corporation of Delaware
Application May 20, 1954, Serial No. 431,038
10 Claims. (Cl. 222—207)

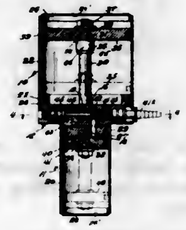


1. In a dispenser for liquids, a container for the liquid, a resiliently flexible top wall on said container mounted thereon in airtight relation thereto, said top wall being provided with a shallow and smoothly concave dished portion, an opening through said dished portion adjacent the bottom thereof, a flexible tubular conduit in said container fixed to said top wall to normally extend from said opening to the bottom of said container, and a relatively small vent opening through said top wall laterally displaced from said first-named opening.

2,752,070
DEVICE FOR DISPENSING A MEASURED QUANTITY OF LIQUID
Joseph J. Rodth, Swansea, Mass., assignor to Glenmore Corporation, a corporation of Massachusetts
Application October 7, 1953, Serial No. 384,623
4 Claims. (Cl. 222—255)

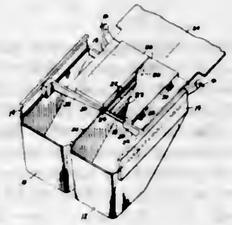
1. A device for dispensing a measured quantity of liquid comprising a pair of hydraulic cylinders spaced from each other by a common cylinder head, said cylinders each having a piston thereof connected to each other for movement in unison in the same direction, internal passages formed entirely within said head for connecting said cylinders to a supply of liquid under pressure, one of said cylinders being of larger diameter than the other and means whereby the smaller of the cylinders may be constantly exposed to said liquid under pressure acting on the piston thereof in a direction tending to oppose movement of the piston of larger diameter when exposed to

said liquid under pressure, a discharge passage from the larger of said cylinders open to the atmosphere, means for controlling said supply passage to said larger cylinder and means for controlling the discharge passage whereby upon closing of the said supply passage to said larger cylinder and opening of said discharge passage, a pres-



sure drop will be had in the said larger cylinder and the pressure acting on said piston of the smaller cylinder will overcome the pressure acting on the piston of the larger cylinder to move the smaller piston and the larger piston connected thereto to discharge the said liquid in the larger cylinder.

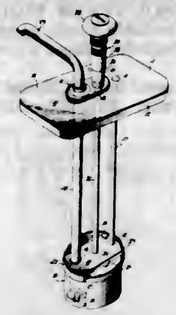
2,752,071
ARTICLE COUNTING AND TRANSFERRING APPARATUS
Eino E. Lakso, Fitchburg, Mass., assignor to The Lakso Company Incorporated, Fitchburg, Mass., a corporation of Massachusetts
Application June 24, 1952, Serial No. 295,258
3 Claims. (Cl. 222—277)



1. Article counting apparatus comprising a tilting drop platform for alternate lowering to deposit articles and raising to receive and temporarily store a succeeding charge of articles for accurate count thereof, a barrier stopping the article progress while the platform is raised, and a series of generally parallel ribs on the platform arranged to form a series of passageways to store the articles and to act as chutes to discharge the articles as the platform drops below the barrier, said barrier being arranged with an inclined lower edge so that each passageway or chute discharges articles substantially separately, and a continuous single line of articles is discharged until the platform is empty.

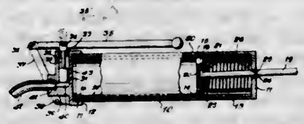
2,752,072
ADJUSTABLE STROKE SYRUP PUMP
Vernon P. Steele, Noroton, Conn., assignor to Kenco Products Corporation, New York, N. Y.
Application June 12, 1952, Serial No. 293,057
5 Claims. (Cl. 222—309)

1. In an adjustable stroke syrup pump, including a cover member, a fluid tube and a stay rod mounted in and integral with the cover, the improvements comprising a syrup cup having an offset lip including opposed peened-in groove sections, and supporting means for the cup comprising a rectangular plate integral with the fluid tube and the stay rod and fixedly spaced from and supported by the cover member, said plate having arcuate



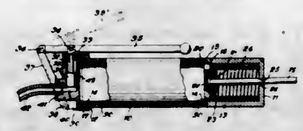
ends adapted for locking engagement with the said groove sections.

2,752,073
GREASE GUNS
Henry Martin, Chatsworth, Ill.
Application February 9, 1953, Serial No. 335,643
7 Claims. (Cl. 222—326)



1. In a grease gun, a barrel having a substantially cylindrical bore therein, a front end cover on said barrel, a rear end cover on said barrel outlet means in said front end cover, means for ejecting grease through said outlet means including a piston reciprocably mounted in said barrel and having a diameter less than the diameter of the cylindrical bore in said barrel, and a substantially cylindrical insert permanently secured in the rear end portion of the bore in said barrel, said insert having an outer diameter substantially equal to the diameter of the bore in said barrel and having an inner diameter substantially equal to the diameter of said piston, whereby said piston may be moved forwards from within said insert into a grease cartridge held in end abutting relation between said front end cover and the front end of said insert and having an inner diameter at least as large as the inner diameter of said insert.

2,752,074
GREASE GUNS
Henry Martin, Chatsworth, Ill.
Application February 9, 1953, Serial No. 335,642
4 Claims. (Cl. 222—326)



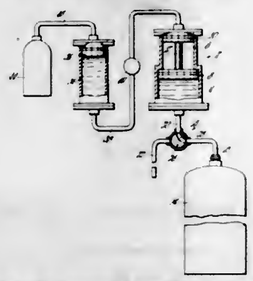
1. In a grease gun, a barrel having a front end and a rear end, covers at both ends of said barrel, an outlet in the front end cover, an annular shoulder in said barrel, inclined so as to form a truncated conical surface having its apex toward the front end of the barrel, a grease cartridge in said barrel having its rear end in engagement with said shoulder, means for ejecting grease through said outlet, and means for escape of air from said barrel during insertion of a filled grease cartridge therein, said escape means being closed by the fully inserted grease cartridge.

2,752,075

APPARATUS FOR DISPENSING SEPARATE SUCCESSIVE PREDETERMINED QUANTITIES OR MEASURED AMOUNTS OF LIQUID

Herbert S. Hill, Westfield, Mass., assignor to Glenmore Corporation, Springfield, Mass., a corporation of Massachusetts

Application August 9, 1954, Serial No. 448,437
1 Claim. (Cl. 222—334)



Apparatus for dispensing separate successive predetermined measured amounts of pressurized beverage, a closed liquid container for a supply of beverage under pressure, a measuring device having an upper ejecting bore and a lower measuring bore of relatively greater area than said ejecting bore, separate connected ejecting and measuring pistons in said ejecting and measuring bores reciprocable in said bores downwardly in dispensing and upwardly in non-dispensing directions, a closed gas container for a supply of gas under pressure, a gas closed cylinder for gas under pressure having a gas piston reciprocable therein in downwardly in dispensing and upwardly in non-dispensing directions, a closed connection between said gas container and upper side of said gas cylinder whereby said gas piston may be subjected to gas pressure at all times, a closed connection between the lower side of said gas cylinder and upper side of the upper bore of the measuring device for liquid whereby the ejecting piston may be actuated through liquid by the gas piston and vice versa, a control valve body having a filling connection to the liquid container and a filling-discharge connection to the lower filling bore of the measuring device and provided with a discharge, a plug rotatable in said body, between filling and dispensing position having a passage therethrough arranged in filling position of the plug for the flow of beverage from the liquid container to the lower bore of the measuring device to elevate the measuring piston of the measuring device against liquid on the ejecting piston as applied by gas pressure on said gas piston and adapted in dispensing position of said plug for the flow of beverage from said lower bore to discharge as influenced by liquid on the ejector piston according to gas pressure on said gas piston.

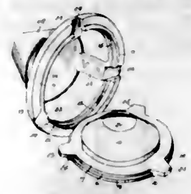
2,752,076

APPARATUS FOR DELIVERING MEASURED VOLUMETRIC QUANTITIES OF GRANULAR, PULVERULENT AND LIKE FLUENT SOLID MATERIALS

Maurice Locker, Manchester, England

Application November 27, 1953, Serial No. 394,858
Claims priority, application Great Britain November 29, 1952
4 Claims. (Cl. 222—455)

1. In combination, a container with exteriorly screwed mouth, an open-ended conical pouring nozzle shaped at its larger end to screw on to the mouth of the container, said nozzle having an inner shoulder near its said larger end, a baffle member comprising separate inner and outer closely fitting concentric parts, the inner part having an integral upstanding conical outlet, said outer part having an integral inverted conical measuring cup connected to it by spaced legs or struts holding it in spaced relationship away from the baffle and open end of the conical nozzle with its inner open end adjacent the said conical



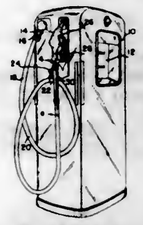
outlet and its outer end opposite the nozzle outlet, the outer part of the baffle fitting against the said inner shoulder in the nozzle and extending over the wall of the container mouth.

2,752,077

GASOLINE HOSE AND NOZZLE FOR DISPENSING GASOLINE

Kenneth R. Lung, Dayton, Ohio, assignor to The Tait Manufacturing Company, a corporation of Ohio

Application November 14, 1952, Serial No. 320,393
4 Claims. (Cl. 222—527)



4. In a gasoline dispensing system of the character described including apparatus for delivering gasoline at a predetermined output pressure and volumetric rate to a dispensing nozzle having an inlet of predetermined inner diameter, the combination of a flexible hose connected at the inlet end thereof to said apparatus and of predetermined substantially lesser inner diameter than said nozzle inlet providing a substantially higher velocity flow therethrough than through a hose of substantially the same inner diameter of said nozzle inlet at said output pressure, and means forming a diffuser directly connecting the outlet end of said hose and said nozzle inlet, said diffuser having an internal flow passage substantially matching the inner diameter of said hose at the upstream end thereof and gradually increasing to substantially the same inner diameter as said nozzle inlet at the downstream end thereof to effect delivery of gasoline to said nozzle inlet at increased pressure with respect to the pressure within said hose and at substantially the same volumetric rate as a hose of the same inner diameter as said nozzle inlet directly connecting said apparatus with said nozzle.

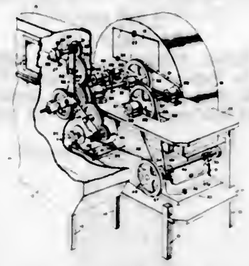
2,752,078

HAT CLEANING AND DRYING MACHINE

Emmett W. Johnson, Hot Springs, Ark.

Application November 23, 1954, Serial No. 470,735
7 Claims. (Cl. 223—23)

1. A hat cleaning and drying machine comprising a supporting structure, housing means for hats to be treated, hat supporting means in said housing means including a fixed gear, a shaft rotatable in said gear, arms extending substantially at right angles in equally spaced relation from said shaft, a second gear rotatably carried by each of said arms intermediate the ends thereof and meshing with said first gear whereby when the shaft with the arms thereon is rotated said second gear will also be rotated from said fixed gear, a third gear carried on the outer end of each of said arms and engaging said second gear to be rotated thereby, a hat support connected to each of said third gears, said housing means



including a receptacle for holding cleaning fluid located so that hats carried by said support will be caused to rotate and while rotating be carried into and from said receptacle, and a motor connected to drive said first shaft gearing and hat supports.

2,752,079

AUTOMOBILE-TOP CARRIERS FOR SKIS AND LIKE ARTICLES

Marcellus S. Merrill, Denver, Colo.

Application February 16, 1953, Serial No. 337,116
3 Claims. (Cl. 224—42.1)



1. For an automobile having a top with drip molds along the sides of said top, a carrier for skis and like articles including, in combination, a main bar adapted to extend transversely across said top, a mounting unit associated with each end portion of said bar, said unit including means at its end nearest the adjacent drip mold and beneath and adjacent the bar end for resilient engagement of the unit to the drip mold and at its other end a resilient support for said other end of said unit and for the bar, said support providing a resilient fulcrum, beneath said bar and inwardly of the bar end, whereby a depression of the central portion of the bar will raise the end of the bar and the drip-mold-engaged end of the unit, said unit including a shank attached to and beneath the bar end portion and having means for seating it upon the top of the automobile, the shank being attached to the bar by means including spacers at each end portion of the shank and thereby held in spaced parallelism with the main bar, said resilient engagement means comprising a link between the drip mold and said shank at a point between the spacers, the shank having a plurality of link-engaging means between the spacers whereby the link may be engaged to the shank at selected positions along the shank.

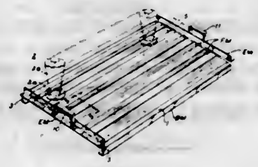
2,752,080

PORTABLE STORAGE RACK

Anna M. Lawlor, Morristown, and Patricia C. Kadow, Newark, N. J., assignors to College of Saint Elizabeth, Morristown, N. J., a corporation of New Jersey

Application December 7, 1954, Serial No. 473,575
6 Claims. (Cl. 224—48)

1. A rack for storing and transporting simultaneously and safely a plurality of containers of the type having an enlarged lower portion and a smaller upper portion, and containing materials which are essentially liquid in form, comprising a table-like base member having a flat top of substantially rectangular shape, providing a supporting surface for these containers; a plurality of fin members affixed to the top of said base member and disposed thereon so as to provide between these members and said supporting surface of said base member a plurality of guide grooves or slots extending longitudinally, in substantially parallel relation with each other at spaced points across said surface, from one end of the rack to the other, the configuration of each of said grooves being such that it is adapted to hold a number of such containers securely therein in an upright position, a pair of end members respectively hingedly connected to opposite ends of said base member so that when they are both swung in one direc-



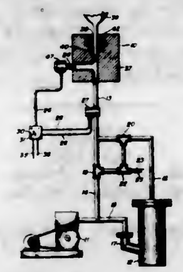
tion to one extreme position they will effectively block the ends of all the grooves at both ends of the rack so as to prevent any of the containers from accidentally falling off the rack during its movement from one location to another, and when either is swung in the other direction to another extreme position it unblocks the ends of the grooves at that end of the rack so that the containers may be inserted into or removed from the grooves at that end, and a pair of handles respectively affixed to the end members at opposite ends of the rack, which, when both said end members are in said one extreme position, provide means for enabling said rack to be lifted and moved by a single person.

2,752,081

PRESSURE MONITORING ASSEMBLY FOR EVACUATING APPARATUS

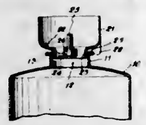
Roy C. Gauger, Rochester, N. Y., assignor, by mesne assignments, to Consolidated Electrodynamics Corporation, Pasadena, Calif., a corporation of California

Application July 26, 1952, Serial No. 301,101
4 Claims. (Cl. 226—20.4)



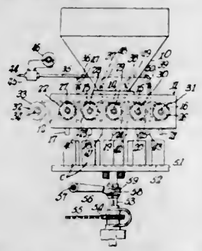
1. Evacuating apparatus comprising in combination an evacuating system including a vacuum port adapted to engage an article to be evacuated and vacuum pumping means connected to said vacuum port, a spark plug mounted on said evacuating system and having the base portion of said spark plug projecting into the interior of said evacuating system, the base portion of said spark plug including an elongated center electrode and a conductive shell disposed around the electrode, the shell having an opposing electrode extending toward the center electrode, means for applying a voltage to the two electrodes, and means operable in response to discharge current across the electrodes for interrupting the evacuation through said port.

2,752,082
PROTECTIVE CLOSURE SHELL AND FUNNEL
Arnold Nergaard, St. Charles, Ill.
Application February 18, 1953, Serial No. 337,567
7 Claims. (Cl. 226—31)



1. A funnel-like structure having a side wall of revolution about an axis and open ends, one end being large and tapering therefrom toward the other end to a smaller opening, bolt-mounting means integral with and extending from the interior wall toward the axis of the structure in the vicinity of the smaller end, and a coaxial bolt fixedly carried by said means projecting toward said larger end.

2,752,083
METHODS AND MEANS FOR FILLING CONTAINERS WITH FOAMABLE LIQUID
Fred E. Ullman, Winnetka, and Norman A. Virta, Mount Prospect, Ill., assignors to Triangle Package Machinery Company, Chicago, Ill., a corporation of Illinois
Application January 14, 1954, Serial No. 403,984
13 Claims. (Cl. 226—68)



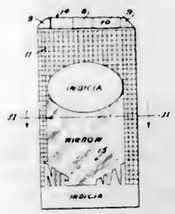
1. The method of filling a container with a foamable liquid which consists in depositing the liquid into the container in a plurality of increments, and in subjecting the foam generated by the deposition of at least one increment, prior to the deposition of at least a second increment, to at least one stream of gas at a velocity sufficient to break down at least a substantial part of the previous generated foam.

2,752,084
CARTON
Ernest L. Shepard, Fairfield, Maine, assignor to Keyes Fibre Company, Portland, Maine, a corporation of Maine
Application September 9, 1953, Serial No. 379,226
3 Claims. (Cl. 229—2.5)



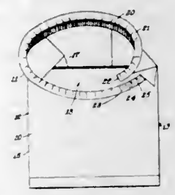
2. An integral molded pulp carton having two mating sections foldably united along a common margin, one of the sections having a foldable extension at one of its other margins to overfold over a portion of the other of said sections, said portion and said extension having locking elements for locking the carton in closed position, the locking element of the foldable extension corresponding in shape to a portion of a row of article-receiving pockets formed in said other section, said pockets including cushioning formations extending up from the floors of the pockets, and said foldable extension including at least a portion corresponding in shape to the cushioning formations.

2,752,085
PAPER BAGS
William H. Bryce, Memphis, Tenn., assignor to Dixie Wax Paper Company, Dallas, Tex.
Original application August 3, 1949, Serial No. 108,341. Divided and this application June 23, 1950, Serial No. 170,010
2 Claims. (Cl. 229—55)



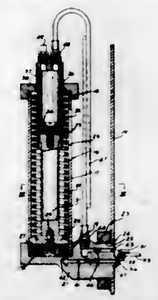
1. A paper bag formed from a single web comprising a sheet of transparent paper, layers of wax-rubber-like compositions covering the opposite marginal portions of said sheet with a transparent medial portion therebetween, said sheet having said covered marginal portions being bent providing a double thickness thereof and said sheet being bent forming a paper bag with said double thickness marginal portions providing the side and rear walls of said bag and said transparent medial portion providing a window within the front wall of said bag.

2,752,086
DISPOSABLE BAG FOR VACUUM CLEANERS
William W. Freschl, Pelham, N. Y., assignor to Modern Dust Bag Co., Inc., West Haverstraw, N. Y., a corporation of New York
Application June 9, 1954, Serial No. 435,478
5 Claims. (Cl. 229—55)



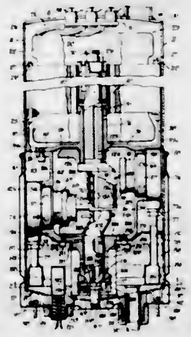
1. A bag of the nature set forth, having an infold gusset portion extending from its bottom substantially to the top edge; and a seating member of relatively stiff material attached to the bag at its top edge and along the inner face of the bag, said member being flanged above said edge with the flanged portion extending outwardly over the edge to afford in the use of the bag a support therefor, and the said seating member being interrupted substantially at the infolded portion and having an unattached end portion overlapping the attached edge portion whereby an adjustment of the mouth opening over substantially one-half the width of the infold portion is possible, and the said unattached portion of the member being adapted to overlap the juxtaposed attached portion over its exposed upper flange surface which is coated with a pressure-sensitive adhesive for securing of the unattached portion variously to the upper juxtaposed surface of the seating member to maintain the selected bag opening thereat.

2,752,087
DEVICE FOR AIRING WATER TANKS
Reynolds E. Wallace, New Orleans, La., assignor of one-third to T. S. Grimes and one-third to Charles W. Cogdell, both of Columbus, Ga.
Application August 25, 1952, Serial No. 306,115
6 Claims. (Cl. 230—20)



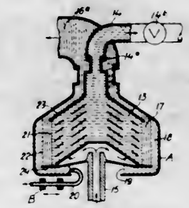
1. In a device for maintaining a given volume of air in the pressure tank of a water system or the like, a cylinder and a piston slidable substantially fluid tight therein, means forming a passageway for the flow of water under pressure from the tank into one end of the cylinder thereby to cause the piston to move, said passageway being the only passage leading to the said end of the cylinder whereby water may flow from the cylinder back into the tank, an air pump driven by said piston comprising a second cylinder and a piston therein, an air reservoir connected at one end to the tank and at the other end to the air pump, and a valve connected to said passage operable to admit water under pressure through said passage to the first named cylinder in accordance with a predetermined volume of air in the tank.

2,752,088
HERMETICALLY SEALED RADIAL COMPRESSOR ASSEMBLY
William F. Borgerd, John Calling, and Isaac M. Wherry, Evansville, Ind., assignors, by mesne assignments, to Whirlpool-Seeger Corporation, a corporation of Delaware
Application May 20, 1952, Serial No. 288,846
17 Claims. (Cl. 230—58)



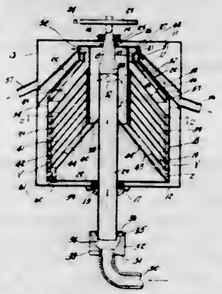
1. In a device of the class described, a casing having closed upper and lower ends, a motor and compressor structure therewithin and comprising a motor component at its upper end, a compressor component intermediate its ends, said structure bearing at its lower end upon the bottom closed end of the casing, an apertured bulkhead between said components dividing said casing into upper and intermediate chambers, said upper chamber containing said motor component and said intermediate chamber containing said compressor component and affording an intake manifold therefor, said structure further including a baffle disposed beneath said compressor component and in fluid tight engagement with said casing, and defining the lower end of the intermediate chamber, a sump chamber containing lubricating oil at the lower end of the casing beneath the baffle, said baffle provided with a few small apertures sufficient to permit gas to pass between said sump chamber and the intermediate chamber but effective to prevent oil froth, developed by dissolved gas separating from the oil under predetermined conditions, from expanding into the intermediate chamber.

2,752,089
APPARATUS FOR CONTINUOUS CENTRIFUGAL SEPARATION
Stig Holger Bjarne Zachariassen, Stockholm, Sweden, assignor to Aktiebolaget Separator, Stockholm, Sweden, a corporation of Sweden
Application October 21, 1952, Serial No. 315,862
2 Claims. (Cl. 233—19)



1. A centrifugal separator comprising a rotatable centrifugal bowl having three outlets, one for each of three separated components of different specific gravity, an adjustable paring device coacting with the outlet for the heaviest component for discharging said last component from the bowl, a stationary discharge pipe hermetically connected to the lightest component outlet, and a valve in said pipe for regulating the discharge through said last outlet.

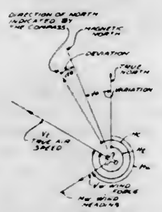
2,752,090
CENTRIFUGAL SEPARATORS
James L. Kyselka, Fife Lake, Mich., and Floyd A. Kent, deceased, late of Midland, Mich., by Violet B. Kent, administratrix, Midland, Mich., assignors of twenty per cent to Robert S. Mode and twenty per cent to Roland P. Place, Midland, Mich.
Application August 29, 1952, Serial No. 307,041
4 Claims. (Cl. 233—29)



1. In a centrifugal separator, a substantially cylindrical, substantially closed casing, vertical drive shaft extending therethrough from end-to-end thereof, said casing being mounted concentrically on said shaft to rotate therewith, the greater portion of said shaft being hollow to admit a liquid mixture forced thereinto and formed with ports therein adjacent the upper end of said tubular portion opening into said casing, a cylindrical shell mounted concentrically within said casing and spaced from said shaft

to form an annular chamber therebetween the lower end of said shell being spaced from the bottom of said casing to provide an annular passage out of said shell, vertical spacer bars having upwardly inclined, vertically spaced slots therein mounted on the wall of said casing, a plurality of superimposed, conical separating disks with the outer peripheral edges thereof accommodated in said slots, said disks connecting with said shell to form a series of vertically spaced compartments, said slots terminating short of the outer surfaces of said bars the outer peripheral edges of said disks are spaced from the casing to form passages between said spacer bars and permit the upward passage of the heavier components of said liquid mixture, openings near the inner edges of said disks for the passage of the lighter components of the liquid mixture upwardly through said compartments to effect a progressive separation, means for removing the heavier components from said casing, and means for separately removing the lighter components from said separator.

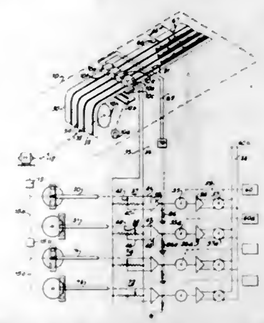
2,752,091
GROUND POSITION INDICATOR SYSTEM
Henry F. McKenney, Valley Stream, and George A. Lieske, Bayside, N. Y., assignors to Sperry Rand Corporation, a corporation of Delaware
Application October 12, 1953, Serial No. 385,641
5 Claims. (Cl. 235—61)



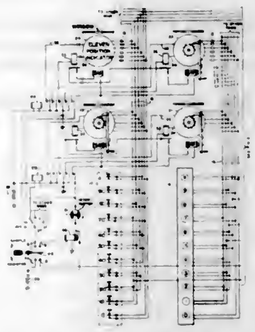
4. A secant computer and a servo follow up system for insuring an accurate application of the output of said computer comprising an adding network, means for applying a voltage to said adding network, an amplifier connected to the output of said adding network, a cosine resolver connected to said amplifier, the output of said resolver being connected as a feed back to said adding network, a second adding network connected to the output of said amplifier, a servo amplifier connected to the output of said second adding network, a servomotor energized by said servo amplifier and a voltage source responsive to the output of said motor and connected as a feed back to said second adding network, the output of which is nullified when the last mentioned feed back current and the input current placed therein by the first mentioned amplifier are equal.

2,752,092
WAVE ANALYSIS
Frank J. McDonal, Dallas, Tex., assignor, by mesne assignments, to Socony Mobil Oil Company, Inc., a corporation of New York
Application October 22, 1951, Serial No. 252,561
7 Claims. (Cl. 235—61)

2. A system for measuring a selected frequency component of a preselected segment of a complex wave recorded in phonographically reproducible form together with a first marker at the beginning and a second marker at the end of said preselected segment of said recorded wave which comprises means for producing a first signal comprising a voltage which varies in magnitude in accordance with said complex wave during a scaled time interval related to the original time-duration of said selected segment of said complex wave by a scaling factor, an output circuit including means for multiplying said first signal by a sine function whose frequency is related to said selected frequency component by said scaling factor, a shorting circuit connected across said output circuit, means for producing a second signal from said first marker at the beginning of said preselected segment, control means responsive to said second signal for opening said shorting circuit, a circuit connected to said output circuit for integrating said multiplied voltage when said shorting circuit is open, and means for producing a third signal from said second marker for closing said shorting circuit in time-coincidence with the end of said preselected segment.

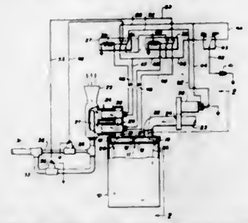


2,752,093
INDICATOR DEVICE AND ANALOGUE COMPUTER CIRCUIT
George L. Bush, Flushing, and John W. Cornwell, Syosset, N. Y., assignors to The Teleregister Corporation, New York, N. Y., a corporation of Delaware
Application July 18, 1952, Serial No. 299,706
17 Claims. (Cl. 235—61)



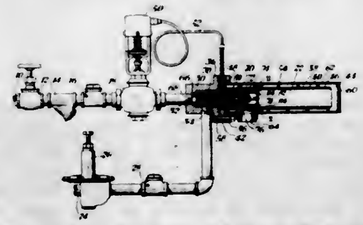
4. Apparatus responsive to code signals for selectively setting a drum dial indicator directly from an old to a new display position, the number of alternative display positions being greater than the number of code elements in the adopted code, comprising a step-by-step driving mechanism to rotate the drum, a pulsing circuit to motivate said mechanism, a sensing device having a segmented commutator with brushes wiping over it for responding to an applied code signal, the brushes of said device being rotatable with the drum and the segments of the commutator being individually identified with and corresponding to the code elements, and circuit opening means for de-activating said driving mechanism after driving the brush elements into simultaneous contact with two segments which are chosen to sense a particular combination of code elements.

2,752,094
AIR SAMPLING TEMPERATURE CONTROL SYSTEM
James A. Dunham, Burbank, Calif., assignor to North American Aviation, Inc.
Application October 1, 1952, Serial No. 312,605
8 Claims. (Cl. 236—1)



1. In an air sampling temperature control system for an enclosed space, means for introducing a supply of conditioning air thereto including an adjustable valve, apparatus including a dual speed jet pump in communication with the enclosed space arranged to induce a sampling flow of air outwardly therefrom into the apparatus, temperature sensitive units disposed to be contacted by the sampling flow of air, one of said temperature sensitive units being adapted to respond to a lower temperature limit and another of said temperature units being set to respond to an upper temperature limit and mechanism controlled by the temperature sensitive units adapted to operate the jet pump at its higher speed when the temperature is below the lower limit and to regulate the setting of the adjustable valve to compensate for temperature variations occurring within the enclosed space.

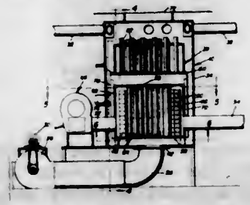
2,752,095
FLUID MIXING DEVICE
Louis M. Puster, Knoxville, Tenn., assignor to Robertshaw-Fulton Controls Company, Greensburg, Pa., a corporation of Delaware
Application May 22, 1952, Serial No. 289,322
9 Claims. (Cl. 236—12)



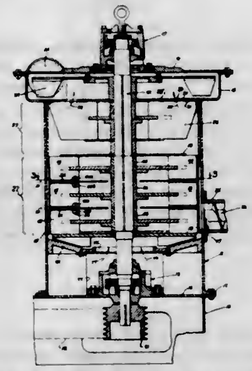
1. In a device for mixing fluids of different temperatures to obtain a mixture of substantially uniform temperature, the combination of means providing a mixing chamber including a plurality of walls defining a substantially annular enclosed space and surrounding said chamber, a thermally responsive medium in said space. means for supplying one of the fluids to be mixed directly to said chamber, means for supplying another of the fluids to be mixed directly to said chamber, and control means responsive to temperature conditions sensed by said medium for controlling the supply of at least one of the fluids to said chamber.

2,752,096
CIRCULATING TOBACCO CURER
Flay B. Stevens and Moses W. Williams, Lumberton, N. C.
Application October 22, 1953, Serial No. 387,620
5 Claims. (Cl. 237—53)

5. In a tobacco curing system for tobacco barns, a housing having a bottom opening and top openings, an inlet conduit including a section adapted to be disposed at the peak of a barn and provided with longitudinally spaced inlet apertures and a section connected to the bottom opening of said housing, the latter section having a blower therein, a firebox disposed within said housing and presenting an air chamber therearound with which the top and bottom openings communicate, an enlarged horizontal tube disposed between opposite sides of said firebox and communicating at opposite ends with said air chamber, vertical tubes extending from the horizontal tube through the top of said firebox, the upper portions of the opposite ends of said horizontal tube projecting beyond the corresponding sides of the firebox, and said firebox having banks of vertical tubes disposed on either side of said horizontal tube and communicating at opposite ends with said air chamber, said firebox having a force feed fuel inlet, a generally U-shaped reflector wall disposed within said firebox with the open end of its legs facing said fuel inlet, said banks of tubes being disposed adjacent and between the legs of said reflector wall.



2,752,097
METHOD AND APPARATUS FOR THE PRODUCTION OF FINE AND ULTRAFINE PARTICLES
Joseph Lecher, Basel, Switzerland, assignor to The Microcyclomat Co., Minneapolis, Minn., a corporation of Delaware
Application August 17, 1951, Serial No. 242,390
23 Claims. (Cl. 241—17)

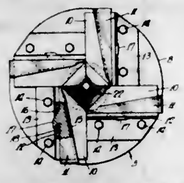


1. The method of disintegrating granules of solid material which comprises carrying said solid material in a dry gaseous fluid and subjecting said solid material to collision with solid surfaces sufficient to fracture said granules and simultaneously disintegrating the fractured granules by subjecting them to intense sonic energy at a level of at least about 120 decibels.

2,752,098
IMPELLER FOR IMPACT CRUSHER
Charles A. Adams, Wurtsboro, N. Y.
Application August 9, 1954, Serial No. 448,571
2 Claims. (Cl. 241—197)

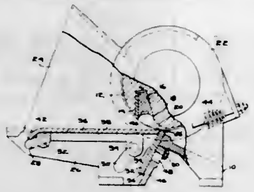
1. In an impact crusher, a generally vertical shaft, a bottom impeller plate carried by said shaft, an upstand-

ing wall on said impeller plate, said upstanding wall having a hole therethrough, a wear plate fitting against said upstanding wall, said wear plate having a laterally and outwardly extending wedge tongue extending through said hole, said wedge tongue having forward and rear wedge surfaces engageable with the forward and rear edges of said hole, whereby movement of said wear plate in radi-



ally outward direction will cause said forward wedge surface and engaging edge of hole to wedge said plate into tight engagement with said upstanding wall, and radial movement in a radially inward direction will cause the rearward wedge surface and the rear edge of said hole to wedge said wear plate laterally away from said upstanding wall.

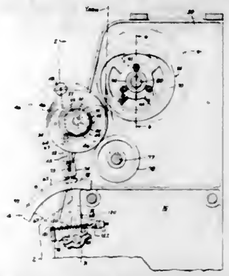
2,752,099
WOOD AND BRUSH CHIPPING MACHINE
William O. Forman, Fitchburg, Mass., assignor to Fitchburg Engineering Corporation, Fitchburg, Mass., a corporation of Massachusetts
Application April 3, 1953, Serial No. 346,734
5 Claims. (Cl. 241—221)



1. A self-feeding chipping machine comprising a rotary cylindrical cutting head, longitudinal cutting knives arranged thereon, a work feeding platform located in general tangential relation to the cylindrical cutting head, and a bed knife arranged in fixed position and having an edge parallel and close to the cutting edges of the cutting knives, said bed knife being arranged generally at the point of intersection of a line projected from the feed plate in the plane thereof and a radius of the cylindrical cutting head at the point of tangency thereto of the projected line.

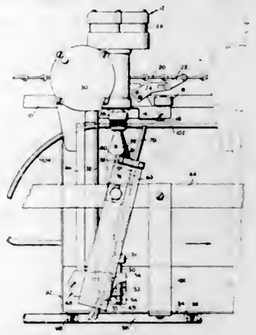
2,752,100
YARN WINDING MACHINE
Ferdinand F. Stange, Westfield, Mass., assignor to Foster Machine Company, Westfield, Mass., a corporation of Massachusetts
Application February 2, 1954, Serial No. 407,691
7 Claims. (Cl. 242—18)

1. In a yarn winding machine, the combination of spaced traverse and drive rolls, a bobbin support for carrying a bobbin upon which a package is to be wound by friction drive between the drive roll and package surface, means for mounting said bobbin support to move along a curved path whose axis is offset from but parallel to the axes of the drive and traverse rolls, a transverse section of the machine showing the drive roll center between the curved path center and traverse roll center, the three centers being in general alignment, the drive roll and traverse roll radii both being smaller than the maximum package radius, said maximum package radius being less than the curved path radius, said curved path, when extended, intersecting the line of centers between the traverse and drive rolls at a point nearer the drive roll then the transverse roll but outside the circumfer-



ence of the drive roll, said bobbin center at the start of the package being upon one side of said intersection and moving away therefrom with increasing package size.

2,752,101
ATTACHMENT FOR AUTOMATIC WINDERS
Albert D. Harmon, Laurens, S. C., assignor to Deering Milliken Research Corporation, Pendleton, S. C., a corporation of Delaware
Application January 15, 1953, Serial No. 331,356
5 Claims. (Cl. 242—32)

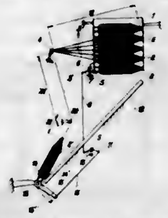


1. The combination with a machine for automatically winding yarn upon bobbins moving along a fixed path during said winding cycle comprising means movable to release said bobbins from said machine, of means normally projecting into the path of said bobbins and adapted to sense the extent of winding of yarn upon said bobbins and means rendered operative by said sensing means to move said releasing means when the amount of yarn wound upon said bobbins falls below a predetermined level.

2,752,102
SPOOL SUPPLY APPARATUS FOR TEXTILE MACHINES
Stefan Fürst, M. Gladbach, Rhineland, Germany, assignor to Walter Reiners, Waldniel, Lower Rhine, Germany
Application February 4, 1953, Serial No. 334,997
Claims priority, application Germany February 6, 1952
9 Claims. (Cl. 242—35.6)

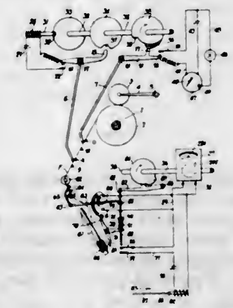
1. Apparatus for supplying spools of yarn and the like successively to a predetermined operating station after a spool at the operating station becomes exhausted, comprising, in combination, support means; holding means mounted on said support means for holding an end portion of a length of yarn extending from a spool; container means mounted on said support means for holding a plurality of fresh spools in reserve with a part of each spool, from which a length of yarn extends to said holding

means, located substantially at a predetermined distance from said holding means; carrier means mounted on said support means for carrying a spool at the predetermined operating station with the part of the spool from which a length of yarn extends to said holding means also located substantially at said predetermined distance from said



holding means; and conveying means for conveying a spool from said container means to said carrier means along a path located substantially at said predetermined distance from said holding means so that a length of yarn extending from a spool to said holding means will not be stretched or slackened appreciably during movement of the spool from said container means to said carrier means.

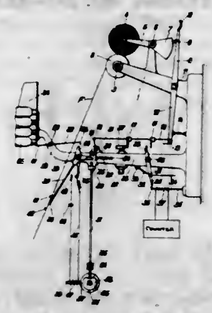
2,752,103
THREAD-FAULT RESPONSIVE CONTROL APPARATUS FOR COIL WINDING MACHINES
Stefan Fürst, M. Gladbach, Rhineland, Germany, assignor to Walter Reiners, Waldniel, Lower Rhine, Germany
Application February 4, 1953, Serial No. 335,000
Claims priority, application Germany February 4, 1952
12 Claims. (Cl. 242—36)



4. Fault-responsive control apparatus in machines for winding thread from a supply coil comprising thread guiding means defining a thread path between the supply coil and a take-up point, thread-fault responsive sensing means disposed along said path, a single-stroke pulse generating device connected with said sensing means to be controlled thereby, an integrating device connected with said pulse generating device for incrementally integrating a physical magnitude under control by consecutive pulses from said generating device, said integrating device having a given decay period of said integrated magnitude, and supply-coil exchange control means connected with said device and responsive to a predetermined value of said integrated magnitude.

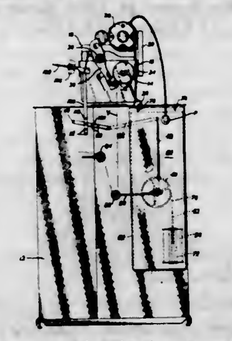
2,752,104
APPARATUS FOR CONTROLLING THE THREAD FEELER MEANS OF A TEXTILE MACHINE
Stefan Fürst, M. Gladbach, Germany, assignor to Walter Reiners, Waldniel, Lower Rhine, Germany
Application February 4, 1953, Serial No. 334,999
Claims priority, application Germany February 9, 1952
11 Claims. (Cl. 242—36)

1. In a textile machine for winding thread from a supply spool onto a take-up spool, in combination, a support; feeler means mounted on said support for engaging a thread moving from a supply spool to a take-up spool and for moving by gravity upon breakage of the thread between the supply spool and take-up spool; and control



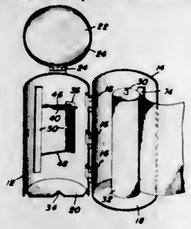
means mounted on said support adjacent said feeler means for preventing movement thereof when thread does not move to the take-up spool for a reason other than a breakage of the thread extending from the supply spool to the take-up spool.

2,752,105
WINDING MACHINE
John V. Keith, Warwick, R. I., assignor to Universal Winding Co., Cranston, R. I., a corporation of Massachusetts
Application July 8, 1953, Serial No. 373,465
9 Claims. (Cl. 242—45)



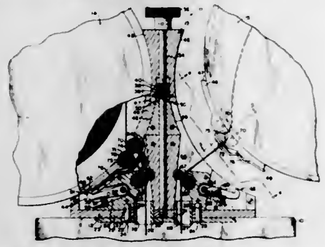
8. In a winding machine having a rotatable winding spindle and means for traversing a running strand of yarn across a predetermined length of said spindle, the combination comprising an electric motor having variable speed characteristics for rotating said spindle, an electric current supply line for driving said motor, means including a reactor coil and a core of magnetic material movable axially into and out of said coil for controlling the amount of current flowing through said motor to thereby control its speed, means adapted to be engaged by said strand of yarn prior to its being engaged by said traversing means and to move in response to changes in tension therein, flexible means connecting said core and said yarn engaging means whereby movement of said yarn engaging means in response to changes in tension in said strand of yarn being wound moves said core into and out of said coil, an idler pulley in engagement with said flexible means, means preventing rotation of said pulley in one direction whereby said flexible means is forced to slide over the periphery thereof to thereby damp the movement of said yarn engaging member in one direction, and compensating means for applying a force to said yarn engaging means substantially equal and opposite to the force exerted thereon by the magnetic attraction of said coil on said core.

2,752,106
GAUZE HOLDER
Reuben A. Thompson, Slaton, Tex.
Application September 2, 1952, Serial No. 307,418
2 Claims. (Cl. 242—55.2)



1. A holder for gauze and the like comprising a container, a central support in said container for receiving a roll of material, means within said container for resisting unreeling of material from said support, said container including a tubular body portion, top and bottom walls, said tubular body portion being divided with halves thereof hingedly connected together along one abutting edge, means carried by said halves urging said halves apart, said top wall engaging said halves to limit separation thereof whereby opposite edges of said halves are retained in spaced relation to form a material dispensing opening.

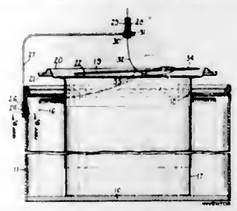
2,752,107
FILM MAGAZINE
Harry R. Schenck, Jr., Los Angeles, Calif.
Application August 16, 1952, Serial No. 304,812
4 Claims. (Cl. 242—71)



1. In a magazine assembly the combination of: a magazine, a projection on said magazine having side walls and oppositely undercut ends, a support for said magazine having a surface to engage it beyond the projection, said support having a recess therein with side walls to engage those of the projection and an undercut end wall complementary to and adapted to receive one of the undercut ends of the projection, a latch housed within said recess, means pivoting said latch in said recess for movement between extended and retracted positions, said latch having an undercut hook end complementary to the other of said undercut ends of said projection, and positioned to hold the same when in the extended position and to be disengaged therefrom when in the retracted position, and means for releasably retaining said latch in said extended position.

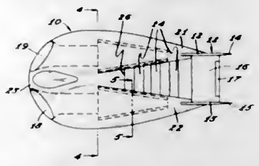
2,752,108
SHIPPING CONTAINER AND PAYING-OFF DEVICE
William H. Richardson, Hamden, Conn., assignor to The Driscoll Wire Company, Shelton, Conn., a corporation of Connecticut
Application August 28, 1952, Serial No. 306,760
2 Claims. (Cl. 242—128)

1. Means for supporting a coil of wire or rod material comprising a container having an outer wall and a bottom, a cylindrical core member therein having its outer surface spaced from the inner surface of the container wall, said core member comprising two telescopically related parts, one of which is fixed to the bottom of the container, the other core part having a laterally extending flange on the outer end thereof and being adjustable



vertically relatively to the fixed part to raise said flange above the outer wall of the container and vary the distance of said flange from the bottom of the container, and a disk member lying freely within said flange, said disk member being provided with a relatively small central opening to receive the wire as it comes from the coil over said flange.

2,752,109
FLUID SUSTAINED AND PROPELLED AIRCRAFT
Alexander M. Lippisch, Cedar Rapids, Iowa, assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application October 6, 1954, Serial No. 460,676
2 Claims. (Cl. 244—23)

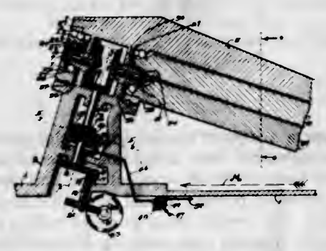


1. An aircraft comprising a forward body portion, a pair of booms extending rearwardly from said body portion and defining a space therebetween, an empennage connecting the rear ends of said booms, a plurality of control surfaces supported between said booms adjustable about horizontal transverse axes, said body having a pair of intake openings in its front end, each of said booms having an inboard lo gitudinally disposed slot communicating with said space, a first passage extending longitudinally in said body portion and in one of said booms connecting one of said intake openings with one of said slots, a second passage extending longitudinally in said body portion and in the other of said booms connecting the other of said intake openings with the other of said slots, an axial blower in each of said passages, and driving means connected to said blowers, said blowers being adapted to force air rearwardly through said passages and downwardly and rearwardly across said control surfaces to produce lift and propulsion forces on the aircraft.

2,752,110
VARIABLE WING AIRCRAFT
Adolphe C. Peterson, Edina, Minn.
Application July 11, 1951, Serial No. 236,163
6 Claims. (Cl. 244—43)

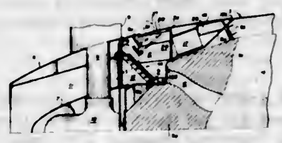
1. In an aircraft, an aircraft frame structure and in combination therewith: an airfoil pivotal bearing fixed on the aircraft frame structure; a fixed wing means fixed on said airfoil pivotal bearing substantially at right angles to the axis of said pivotal bearing and trailing rearwardly from the location of the pivotal bearing, the forward end of the fixed wing means secured at the upper end of

said pivotal bearing; a pair of oscillatable wing sections mounted for oscillation on the pivotal bearing to swing oppositely on the axis of the pivotal bearing in planes substantially parallel to and in closely tiered relation with said fixed wing means and at right angles to the said axis of the pivotal bearing to positions stacked under the said fixed wing means in closely tiered relation or to positions circumferentially removed from the said positions under the said fixed wing means, the fixed wing means and the oscillatable wing sections in either position forming substantially one static airfoil, and means interconnected with the oscillatable wing sections to



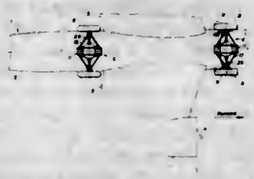
force the said oscillatable wing sections from the one position to the other, the said last named means including, a bevel gear mounted on and secured on the underside of the pivoted end of one said oscillatable wing section and a bevel gear mounted on and secured on the upper side of the other of said oscillatable wing sections, an intermediate gear means between the said bevel gears and in engagement on one side with one said bevel gear and on the other side with the other said bevel gear, and a rotative power driving element in inter-engagement with said intermediate gear means to impart driving rotative torque to said intermediate gear means to rotate it in either direction.

2,752,111
AIR INTAKE SYSTEM FOR AIRCRAFT POWER PLANTS
George S. Schairer, Seattle, Wash., assignor to Boeing Airplane Company, a corporation of Delaware
Application March 26, 1952, Serial No. 278,673
12 Claims. (Cl. 244—57)



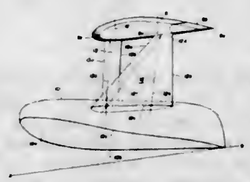
1. In aircraft, a power plant installation including a relatively fixed cowl, a spinner cowl rotatably mounted in a streamlined continuation of said fixed cowl, a rammed air inlet formed by said spinner cowl and an adjacent portion of said relatively fixed cowl, a static pressure inlet and an adjacent air chamber formed within said fixed cowl, a screen disposed across said rammed airflow inlet, a resiliently biased closure for said static pressure inlet, means for conducting air supplied from both said inlets to said chamber within said fixed cowl. the normal rammed airflow into said chamber producing sufficient pressure to maintain said resiliently biased static pressure inlet closure in its closed position, means for conveying air from said chamber to a power plant within said fixed cowl whereby impairment of said screen retarding the flow through said rammed air inlet reduces the pressure within said chamber for opening said closure for providing alternate air supply to the power plant, a heat exchange device disposed in a duct normally receiving rammed air from said chamber and exhausting through an opening in said fixed cowl, the pressure relationship of said chamber, said static air inlet and said heat exchange opening being such that as said alternate air is supplied to the power plant air is also admitted into said opening for flow past said heat exchange device in the reverse direction, and means for controlling the airflow through said heat exchange device in both the normal and reverse flow directions.

2,752,112
STEERABLE AND RETRACTABLE AIRCRAFT LANDING GEAR
Fred A. Payne, Jr., Playa Del Rey, Calif., assignor to North American Aviation, Inc.
Application March 31, 1953, Serial No. 345,760
8 Claims. (Cl. 244—102)



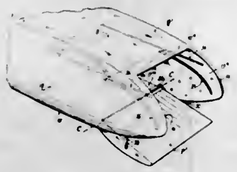
1. In an aircraft, a landing gear comprising a central support member fixed to the aircraft, a pair of laterally spaced ground-engaging wheels retractably supported from said central support member, mechanism for steering said wheels in parallel planes about their respective laterally spaced axes, means for retracting said wheels upwardly and laterally inwardly into the aircraft and centering means including a spring biased bell-crank pivotally connected to said wheel steering mechanism, said centering means and said steering mechanism so arranged to maintain said wheels parallel to the longitudinal axis of the aircraft as said wheels are retracted.

2,752,113
FLOAT SUPPORT STRUCTURE
George Garner Green, La Jolla, Calif., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application February 1, 1954, Serial No. 407,205
12 Claims. (Cl. 244—105)



6. In an aircraft having a cantilever wing and stabilizing float, a support structure for the sole support of said float from said wing comprising a central vertically disposed strut of constant airfoil cross-section connected to said wing and to said float and a pair of laterally disposed outwardly and upwardly extending struts of tapered airfoil cross-section symmetrically attached on opposite sides of said vertically disposed strut adjacent their converging ends to said float and attached at their diverging ends to said wing, the chordwise dimension of the converging end portions of each of said pair of laterally disposed struts being of the order of four times the chordwise dimension of the diverging end portions.

2,752,114
FLYING MACHINE FOR TRANSPORT OF FREIGHT
Pierre Calvy, Courbevoie, France, assignor to Societe Nationale de Constructions Aeronautiques du Nord, Paris, France, a French body corporate
Application November 18, 1952, Serial No. 321,198
Claims priority, application France April 2, 1952
3 Claims. (Cl. 244—118)



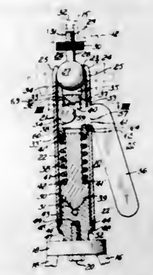
1. In a flying machine for the transport of freight and large objects that may be jettisoned in flight: a fuselage which comprises a hold and is composed of four double walls forming a floor, two longitudinally disposed side walls and a ceiling, and is provided at the rear with an opening having a substantially rectangular shape and a clearance area substantially equal to the largest cross-section of said hold, closing means for this opening, at least a portion of said means including a rigid and retractable panel that is mobile between an active position wherein it closes said opening and a retracted position within the double wall constituting said ceiling, two guiding means supported by each of said double walls forming the side walls of the fuselage and adapted to so guide this rigid and retractable panel that it never projects outside of the fuselage, and actuating means provided within the double walls of the fuselage for moving said rigid retractable panel between its active position and its retracted position.

2,752,115
FOLDING TRIPOD FISHING POLE STAND
John G. Green, Greensboro, N. C.
Application September 16, 1953, Serial No. 380,520
5 Claims. (Cl. 248—46)



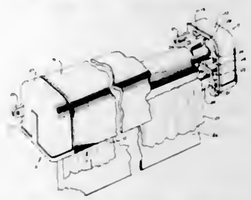
1. A foldable fishing rod support comprising a body having a notch in the upper end and a bifurcated lower end, a leg pivotally mounted on each side of said bifurcated end, said legs extending outwardly and downwardly, an elongated bar pivotally mounted on the lower end of said body and extending between the furcations, a latch member pivotally mounted on said bar and engaging one side of said body to hold said bar in unfolded position, a loop member pivotally mounted on the end of said bar adjacent said latch member, an extension bar slidably mounted on the opposite end of said bar, clamp means to lock said extension bar in adjusted position, a relatively short leg pivotally secured to the end of said extension bar and extending at an angle thereto, ground engaging spikes on said legs, a handle, a ground engaging spike on said handle, a flexible member connecting said handle and said elongated bar and apertured blocks on one of said first mentioned legs for receiving the spike on said handle whereby a fishing rod may be supported in said notch with the butt of said rod extending through said loop member.

2,752,116
CAMERA SUPPORTING HEADS FOR TRIPODS OR THE LIKE
Luther W. Minnis, San Bernardino, Calif.
Application February 15, 1955, Serial No. 488,311
1 Claim. (Cl. 248—181)



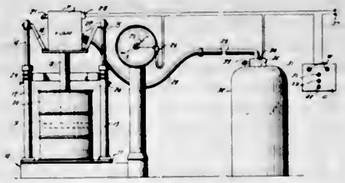
For a camera a support comprising an elongated frame having a longitudinal bore extending therethrough, said frame being counter-bored adjacent one end thereof to provide an enlarged portion of said bore, said frame adjacent the other end thereof being provided with a plurality of diametrally disposed slots defining integral finger portions, said finger portions being curved inwardly to provide a bore mouth of reduced diameter, a pivot member disposed in said frame bore for co-operative engagement with said fingers, camera mounting means secured to said pivot member and projecting beyond said frame for engagement with a camera spaced from said frame, an axially rotatable leg member having an annular rib about its mid-section, a portion of said leg being received in the bore of said frame with the rib portion thereof in the enlarged portion of said bore, an inwardly projecting annular lip for engaging said annular rib to retain a portion of said leg within the enlarged portion of said frame bore, a first clamping member reciprocable in said frame bore engageable with said pivot member for urging same into fixed engagement with said fingers, a second clamping member reciprocable in said frame bore engageable with said leg for urging same into fixed engagement with said annular lip, resilient means urging said clamping members toward clamping relation to said pivot member and leg, and means including a crank lever for moving said clamping members away from clamping relation to said pivot member and leg in opposition to said resilient means, whereby said camera mounting means and said leg may be repositioned relative to said frame as desired.

2,752,117
VALANCE SUPPORTING DEVICE
Robert H. Hummert and Ralph P. Halpin, Dayton, Ohio, assignors to Standard-Thomson Corporation, Dayton, Ohio, a corporation of Delaware
Application January 19, 1952, Serial No. 267,242
5 Claims. (Cl. 248—255)



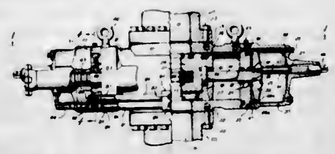
2. An end cap for a valance comprising an end wall, an edge wall having an arcuate inner surface conforming substantially to the contour of the adjacent end portion of said valance and adapted to receive the same, said edge wall having parts extending inwardly therefrom at the respective ends of said conforming surface and provided with transversely disposed grooves to receive the longitudinal edge portions of said valance and guide the latter to a predetermined position with relation to said edge wall, said end wall of said cap having a part having a circular recess projecting inwardly therefrom to receive and support the adjacent end of a curtain rod, said edge wall also having a projection provided with a recess to receive and support the adjacent end of a drapery supporting bar, and adjustable means for securing said cap to a structure on which said valance is to be mounted.

2,752,118
MATERIAL HANDLING SYSTEMS
Frank O. Halle, Dallas, Tex.
Application August 21, 1952, Serial No. 305,605
4 Claims. (Cl. 249—7)



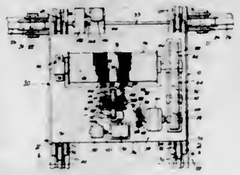
1. A shortening handling system for delivering shortening to a mixing bowl including, an automatically resetting platform scale having a movable platform, a pump mounted on the movable platform for pumping shortening from a drum placed on the movable platform, a conduit connected to the pump and having an outlet communicating with the mixing bowl for delivering material pumped from the drum to the mixing bowl, a valve for closing the conduit at its outlet end adjacent the mixing bowl, control means for simultaneously starting the pump and opening the valve, and control means operable by the scale for stopping the pump and closing the valve to completely shut off flow through and from said conduit when a predetermined amount of shortening has been pumped from the drum on the movable platform, said control means being set to stop said pump and close said valve at predetermined batch withdrawals of fixed amounts determined by reduction of weight of shortening in the drum by such fixed amounts.

2,752,119
BLOWOUT PREVENTER
Herbert Allen, Madden T. Works, and John P. Oliver, Houston, Tex., assignors to Cameron Iron Works, Inc., Houston, Tex., a corporation of Texas
Application March 24, 1952, Serial No. 278,243
19 Claims. (Cl. 251—1)



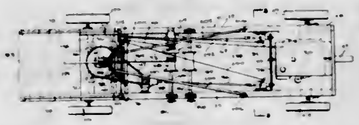
1. A blowout preventer which comprises, in combination, a body having a passage therethrough and chambers extending laterally from said passage, rams reciprocally received in said chambers, closed power cylinders mounted for movement toward and away from said body chambers in a direction parallel to that of said rams, a piston reciprocally mounted in each cylinder and having a connection with a ram to reciprocate the latter, means for selectively introducing fluid to opposite sides of said pistons, and means limiting movement of the cylinders in one direction with respect to said body including mutually engageable parts carried by the cylinders and the body, each of said rams having a sufficiently tight fit within its chamber that the force required for its movement is greater than that required to move the corresponding cylinder with respect to said body in a direction opposite to said one direction.

2,752,120
PRECISION LOAD-POSITIONING DEVICE FOR CRANES
Aubrey B. Bogle, Highland Park, Mich.
Application January 13, 1954, Serial No. 403,709
8 Claims. (Cl. 254—168)



1. In a crane including a supporting structure carrying a rotatable cable winding drum and a rotatable equalizer pulley together with a hoisting cable trained around said drum and around the pulleys of a load-holding block suspended therefrom and also around said equalizer pulley, a precision load-positioning device comprising an equalizer pulley support movably mounted upon said supporting structure for travel relatively thereto and having said equalizer pulley rotatably mounted thereon, and power-driven mechanism operatively engaging said support for moving said support and said equalizer pulley relatively to said supporting structure toward and away from said load-holding block.

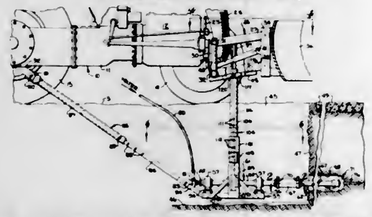
2,752,121
WELL DRILLING APPARATUS
Fred H. Marcotte, Zurich, Kans.
Application October 10, 1952, Serial No. 314,121
2 Claims. (Cl. 255—19)



2. In well drilling apparatus, an elongated horizontal frame having a first end and a second end, a derrick mounted on and rising from said frame at said first end of the frame, a rotary turntable mounted on the frame at said first end of the frame, a drill stem depending from the derrick and nonrotatably engaging and traversing the turntable, a first differential mounted on said frame near said derrick, said first differential being operatively connected to the turntable, a first drive shaft connected to said first differential and extending toward the said second end of the frame, a second differential mounted on said frame between said first differential and said second end of the frame, a second drive shaft connected to said second differential and extending toward said second end of the frame, a cable drum mounted on said frame in the region of said second differential and operatively connected to said second differential, a cable wound on said drum, trained over the derrick and secured to the drill stem, a single prime mover mounted on said frame at said second end of the frame, first and second manually operated transmissions mounted on said frame in the region of said prime mover, said first and second drive shafts being operatively connected to the first and second transmissions, respectively, and means operatively

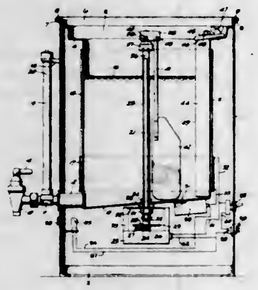
connecting both of said transmissions to said prime mover, an operator's platform on said frame at said first end of the frame, and individual transmission control means leading from said first and second transmissions to said platform.

2,752,122
TRACTOR DRIVEN BORING IMPLEMENT
David H. Hyatt, Statesville, Harry Ross Sigmon, Stony Point, and Charles Rex Adams, Statesville, N. C.; said Hyatt assignor to said Sigmon and said Adams
Application October 21, 1954, Serial No. 463,692
5 Claims. (Cl. 255—20)



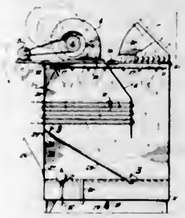
1. An earth boring attachment for a tractor, said tractor having a lift mechanism at its lower forward end and a power take-off also disposed at the forward end of said tractor; said earth boring attachment comprising a base, a pair of laterally spaced substantially vertically disposed frame members fixed to said base and extending upwardly therefrom, means pivotally connecting the upper ends of said frame members to said lift mechanism, at least one upwardly and rearwardly inclined frame member fixed to the rear portion of said base, means pivotally connecting the upper end of said inclined frame member to the rear portion of said tractor, a substantially horizontal tubular boring tool having a rear portion journaled on said base and a front portion extending forwardly substantially beyond the vertical plane of said base, means pivotally and communicatively connecting the rear end of the front portion to the front end of the rear portion of said boring tool, the forward end of the front portion of said boring tool having at least one port therein, a blade fixed to said front portion, means for directing water into said tubular boring tool whereby it is exhausted through said port, and driving connections between said power take-off and said boring tool for imparting rotation to the boring tool.

2,752,123
BEVERAGE HEATING AND DISPENSING APPARATUS
Andrew L. Deuschel and Elsworth C. Austin, Los Angeles, Calif.; said Austin assignor to said Deuschel
Application December 8, 1953, Serial No. 396,831
1 Claim. (Cl. 257—2)



In an apparatus for uniformly heating a beverage throughout its mass, the combination of a substantially cylindrical container having a heat conductive wall and a bottom wall, a heating element mounted on the outer side of the lower portion of the heat conductive wall above the level of the bottom, a heat distributing conductor element having a portion thereof interposed between the cylindrical wall and the heating element and in contact therewith, said conductive element having an extending portion lying along and in contact with the container wall above the level of the heating element, operating to withdraw heat from the immediate vicinity of the heating element and transmit the same to the container wall along its length, a thermo-static device mounted on the outside of the bottom wall and adjacent said conductive wall so as to receive heat therefrom, to control the functioning of said heating element, a baffle means extending upwardly along and connected to the inner wall of the container and extending below the level of said beverage, a flat, vertically disposed, elongated, radially extending, rotary stirring means mounted for rotation about the axis of the container and having its outer edge located at a substantial distance from the inner edge of the baffle means, means for rotating said stirring means to displace quantities of the beverage in the outer circumferential zone in which said baffle is located inwardly to mix with inner portions of the mass of beverage and thereby raising the temperature of portions of the mass of beverage that have not come in direct contact with the portions of the container wall that are heated by the heating element, and a dispensing outlet at the bottom of the container wall having a valve therein for controlling the dispensing of the beverage through said outlet.

2,752,124
EVAPORATIVE CONDENSER
Jay C. Nofziger, Los Angeles, Calif.
Application May 15, 1953, Serial No. 355,361
11 Claims. (Cl. 257—37)

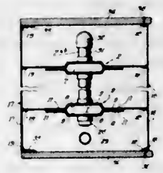


1. An evaporative condenser comprising, a rectangular casing having vertically directed front and rear walls, the casing terminating at the bottom thereof in a sump pan, conduits horizontally mounted in the upper portion of the casing for a fluid to be condensed, nozzles above said conduits for directing sprays of water downwardly over the conduits and into the sump pan, a downwardly inclined partition in the casing, said partition having its upper edge fastened to the front wall of the casing and extending rearwardly below the water level in the sump pan to form a water-tight seal between the spaces in the casing behind and in front of the partition, and overflow preventing devices in the pan in front of the partition, there being an opening in the front wall below said partition affording access to said overflow preventing devices at all times.

2,752,125
CONVECTOR
Arthur B. Modine, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a corporation of Wisconsin
Application February 16, 1951, Serial No. 211,245
5 Claims. (Cl. 257—136)

1. In a heat exchange device, the combination of a plurality of elongated vertically extending sheets of metal,

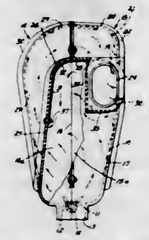
each generally U-shaped in cross-section, and including leg portions extending in parallel relation and being co-extensive in width and an intermediate portion, the free edges of the leg portions terminating in inwardly extending, oppositely disposed flanges, said sheets being assembled in corresponding relation with the flanges of each sheet positioned adjacent to the intermediate portion of the next sheet and secured thereto, each of said intermediate portions including a vertically extending offset portion adapted to form a part of a fluid chamber positioned between the leg portions, a second sheet for each of said first sheets, smaller in size than the latter including a similar offset portion, each of said second sheets being metallically joined adjacent its peripheral edges to said intermediate portion of its associated first sheet in sealing relation contiguous to the offset portions, the offset portions of the sealed area of said sheets being spaced from one another to form the fluid chamber therebetween, the metal forming each respective joint at the aforesaid peripheral edges and extending in opposed relation on opposite sides of said fluid chamber formed by said first and second sheets, providing a simulated sub-



stantially tapered heat transfer fin, a liner structure positioned in each chamber, the liner for each of said sheets formed from a material which will not deteriorate under action of the fluid flowing within the fluid chambers of said heat exchange device, each of said chambers having a pair of aligned inlet ports and a pair of aligned outlet ports therein, each pair of ports being aligned with corresponding pairs of ports in the adjacent chambers, a tubular member extending through each respective series of aligned ports and operatively connected in fluid-tight relationship to the respective sheets forming said chambers, each respective tubular member having openings therein respectively communicating with said chambers, one of said tubular members forming a fluid inlet therefor, and the other a fluid outlet therefor, a pair of end walls positioned adjacent the respective endmost sheets and operatively secured thereto, and a top wall secured to the structure covering the top edges of said sheets, a corresponding leg portion of each sheet being less in longitudinal length than the intermediate portion and terminating at points spaced from each end of the latter whereby the assembled portions form a wall having an air inlet opening and an air outlet opening therein.

2,752,126
SPACE HEATER CONSTRUCTION
Albert H. Crone, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a corporation of Illinois
Application May 13, 1953, Serial No. 354,793
2 Claims. (Cl. 257—151)

2. A heat radiator comprising a pair of castings formed with mating flanges along the top and ends thereof, fasteners securing said sections together with the flanges thereon in abutting relation to define an internal chamber having an open bottom forming a heated products inlet, one of said castings having a side wall extending upwardly and inwardly, said side wall having a plurality of upwardly extending channels formed therein of progressively increasing depth from the bottom to the top thereof with the apexes of the channels defining a plane which diverges outwardly from said side wall, said channels being spaced apart lengthwise of said one casting and communicating with said chamber, said one casting having a top wall of sinuous configuration defining a plurality of horizontally extending channels forming continuations of said upwardly extending channels, the other casting having a substantially flat side wall extending upwardly and outwardly and a top wall of sinuous configuration extending across the top of said chamber and defining a plurality of channels communicating with the channels in the top wall of said one casting and forming continuations thereof, said other casting having a heated products outlet opening in the end thereof below the channels in the top wall, a baffle formed of a single piece and secured to said side wall in said one casting intermediate the upper and lower ends thereof and extending upwardly along said side wall to separate the channels therein from one another and

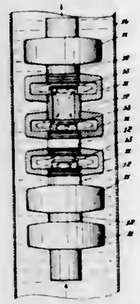


cause the heated products in the chamber to pass in separate flows through said upwardly extending channels, said baffle extending along the top walls in said castings to a point spaced from the side wall in said other casting to separate the channels in said top walls from each other, said baffle extending downwardly from the top wall in spaced relation to the side wall in the other casting and horizontally across the chamber into engagement with the side wall in said other casting to define a heated products passage therewith and to limit the flow of heated products upward along said side wall in the other casting and to direct the heated products flowing along the side wall in said other casting across the chamber into the upwardly extending channels in said one casting, and means for securing said baffle to the side walls of each of said castings.

2,752,127
DEVICE FOR COOLING OR CONDENSING STRONGLY CORROSIVE OR ETCHING LIQUIDS, GASES OR VAPORS
Fritz Campe, Albert Hermann, and Michael Schmid, Rheinfelden, Baden, Germany, assignors, by mesne assignments, to Dynamit-Actien-Gesellschaft vormals Alfred Nobel & Co., Troisdorf, Germany
Application May 29, 1951, Serial No. 228,821
In Germany December 23, 1948
Public Law 619, August 23, 1954
Patent expires December 23, 1968
3 Claims. (Cl. 257—241)

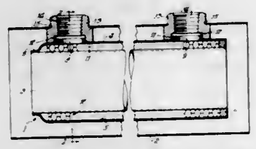
1. In combination in a vertical column for the chemical industry, especially for cooling and condensing strongly corrosive etching and the like liquids, gases, and vapors: a plurality of individual hollow flat bodies, each of said hollow bodies having a chamber of a diameter equaling a multiple of its height and also having an axial bore therethrough with two spaced threaded sections separated from each other by said chamber and provided with identical thread, a plurality of hollow connecting bodies provided with two spaced threaded sections corresponding to the threaded sections of said hollow flat bodies, each of said hollow connecting bodies having a portion thereof interposed between two adjacent hollow flat bodies and having its threaded sections in engagement with the threaded sections of the respective adjacent hollow flat bodies, each of said hollow connecting bodies having an axial bore open at one end and closed

at the other end and also having radial passages adjacent said closed end of said axial bore and arranged within the hollow chamber of the respective adjacent flat body to thereby effect communication of the respective axial bore with the chamber of the respective adjacent hollow body, and a tubular container surrounding



all of said hollow flat bodies and said connecting bodies in spaced relationship thereto, the arrangement being such as to allow the passage of one fluid through said hollow flat and said hollow connecting bodies and to allow passage of another fluid through said tubular container around said hollow flat and said hollow connecting bodies.

2,752,128
HEAT EXCHANGE STRUCTURE
Lewis Joseph Dedo, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a corporation of Wisconsin
Application October 17, 1955, Serial No. 540,837
7 Claims. (Cl. 257—246)



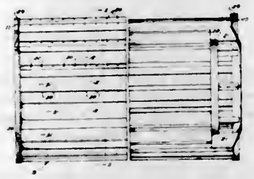
1. A heat exchange structure for operatively mounting within a fluid passage so as to permit said fluid to flow through the heat exchange structure and therearound, said heat exchange structure comprising a pair of cooperable tubular members, one positioned in the other and forming a fluid passage therebetween, means for closing the ends of the passage so formed providing a passage for the fluid therethrough, an intermediate turbulator structure interposed between said tubular members, and extending across said fluid passage in heat transfer engagement with the adjacent side walls of said tubular members, said intermediate structure being formed from sheet material which is slit along groups of parallel co-extensive lines with such groups being arranged on parallel axes and corresponding lines of different groups being aligned, the material between adjacent slits of a group being disposed out of the plane of the sheet material alternately at opposite sides thereof and corresponding portions of adjacent groups being alternately disposed at opposite sides of the sheet material providing parallel extending and undulating substantially U-shaped strip fins affixed together intermediate the slits of the contiguous groups, said turbulator structure being bent intermediate said groups to impart a shape to the structure corresponding to the shape of said passageway, and means associated with the outer member adapted to operatively connect said passageway in a fluid line and form supporting means for the heat exchange structure.

2,752,129
CONVECTOR OR OTHER HEAT EXCHANGE DEVICE
Arthur B. Modine, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a corporation of Wisconsin
Application January 13, 1951, Serial No. 205,860
3 Claims. (Cl. 257—256)



1. In a finned fluid conduit for use in a heat transfer structure, the combination of an outer housing structure formed from ferrous sheet material and comprising a pair of longitudinally extending sections, one of which is provided with a longitudinally extending offset portion therein, an inner separate liner structure formed from nonferrous sheet material and comprising a pair of sections complementary to the interior surfaces of the housing sections, said housing sections having continuously extending, peripheral mating flanges, one of said pair of mating flanges of lesser width, said liner sections having similar continuously extending, complementary mating flanges positioned between corresponding mating flanges of the housing section and forming a fluid conduit when affixed together in fluid-tight relationship and also providing substantially simulated tapered fins, means for securing together in fluid-tight relationship mating flanges of the liner sections and the latter to adjacent flanges of the housing sections to form a closed chamber, said means for securing comprising a welded connection between the flanges of the liner and housing sections. said housing and liner structures each having a pair of longitudinally spaced and aligned openings therein, the openings in the separate liner structure being axially aligned with the openings of the housing structure, said openings communicating with said chamber and forming inlet and outlet ports therefor, and separate sleeve connections positioned in their respective openings and secured in fluid-tight relationship to said liner structure, and said separate sleeve connections extending normally outwardly with respect to the longitudinally extending sections of the finned fluid conduit.

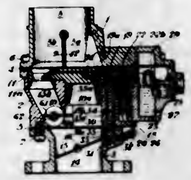
2,752,130
DEHYDRATOR DRUM CONSTRUCTION
Henry C. French, Elm Grove, Wis., assignor to Arnold Dryer Co., Milwaukee, Wis., a corporation of Wisconsin
Application September 30, 1953, Serial No. 383,230
10 Claims. (Cl. 259—89)



1. A dehydrator drum construction comprising a plurality of longitudinal sections arranged to form a cylinder, each section having a cross-sectional shape which forms a hollow longitudinally extending flight projecting inwardly from the inner surface of the cylinder, the hollow portion of the flight being open on the outer side of the cylinder to provide for cooling of the flight, there being a longitudinally extending relatively flat part in each section which extends at an angle from said hollow flight adjacent said open side, and said flat part having an edge forming one of the edges of the section which has a flange

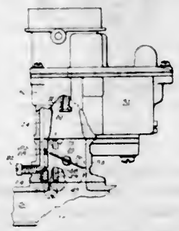
bent outwardly to project beyond the outer surface of the cylinder, the opposite edge of the section having a longitudinally extending projecting part which fits against the bent flange of an adjacent section, and means located outwardly beyond the outer surface of the cylinder for securing said part and bent flange together to hold the sections in assembled position.

2,752,131
CARBURETORS
George J. Gretz, Pittsburgh, Pa.
Application December 17, 1952, Serial No. 326,495
4 Claims. (Cl. 261—23)



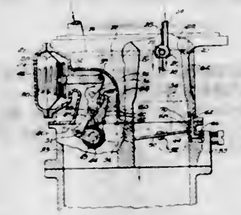
3. In a carburetor having a single air inlet and a single induction passage connected through main and auxiliary venturi openings, means for discharging fuel into said venturi openings to provide a fuel mixture, a throttle valve in said induction passage, and a second valve disposed at the lower end of said auxiliary venturi opening and normally biased to a closed position by a spring connected to said throttle valve, said second valve having a portion extending into the air stream through said main venturi opening for opening said second valve to provide additional fuel mixture in response to high engine velocity when the throttle is open.

2,752,132
NON-ICING CARBURETOR
Ray Nye, Detroit, Mich., assignor to Holley Carburetor Company, Detroit, Mich., a corporation of Michigan
Application April 17, 1953, Serial No. 349,435
4 Claims. (Cl. 261—23)



1. In an internal combustion engine having an inlet manifold and a carburetor mounted thereon, an air entrance to said carburetor, a mixing chamber, a first housing containing said chamber, a mixture outlet and a butterfly throttle, a second housing therefor interposed between the first housing and said manifold, and having a mixture passage therein, a low speed fuel passage in the first and second housings and having an outlet subjected to the suction at the upstream lip of the butterfly throttle when it is first moved away from its closed position in said second housing, an air by-pass around said throttle located in said second housing, a flat lower surface to said first housing and a similar one for the upper surface of said second housing, an upper slot in said upper surface of said second housing forming a passage with the lower surface of the first housing extending from said by-pass into the mixing chamber above said throttle, a flat lower surface on said second housing and a similar one for the manifold, a lower slot in said bottom surface of the second housing forming a passage extending from said air by-pass into the mixture outlet below said throttle, a second slot in the bottom face of said second housing also forming a similar passage extending from said low speed fuel passage into the mixture outlet below said throttle, and in which the lower slot of the air by-pass is located so as to enter the mixture outlet non-radially to the mixture outlet so as to rotate the mixture therein.

2,752,133
TWO-STAGE CARBURETOR
William E. Egerer, Detroit, Mich., assignor to Holley Carburetor Company, Detroit, Mich., a corporation of Michigan
Application January 20, 1954, Serial No. 405,160
1 Claim. (Cl. 261—23)

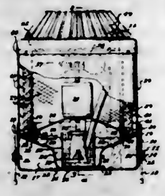


In a two-stage carburetor having a first stage throttle and a second stage throttle and the usual one-way connection from the first stage to the second stage throttle, comprising a first stage throttle lever, a second stage throttle lever having a slot, a link from the first throttle lever engaging the second throttle lever through said slot so that the second stage throttle is positively closed when the first stage throttle is closed but the first stage throttle may be opened without opening the second stage throttle, suction operated means for opening the second stage throttle including means for delaying the opening of the second stage throttle comprising a venturi in the first stage, a passage therefrom, a vacuum chamber connected thereto, a cover therefor, a diaphragm forming the other wall of said chamber, a lever pivoted on the body of said second stage carburetor, a link extending from said diaphragm connected to one end of said body lever, a second lever mounted on the second stage throttle shaft which is loose thereon, a third second stage throttle lever fixed to said shaft, a pivot pin on the other end of said body lever, a link connected thereto and to said third second stage throttle lever, a contoured surface on the side of said loose lever, spring means tending to rotate said loose lever so that said contoured surface engages said pivot pin, the contour being such that considerable suction must be created in said primary venturi before said diaphragm can overcome said spring means, but less is required to hold the secondary throttle open.

2,752,134
EVAPORATIVE AUTOMOBILE COOLER
Howard L. Paulus, Phoenix, Ariz., assignor to Wright Manufacturing Co., Phoenix, Ariz., a corporation of Arizona
Application June 1, 1954, Serial No. 433,672
5 Claims. (Cl. 261—29)

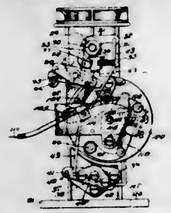
3. In an automobile cooler of the evaporative type, a reservoir pan having a bottom and integral sides, a splash control baffle comprising an inner fabricated member having a lip around its upper edge engaging with a press fit into the inside portion of the upper part of the sides of said reservoir pan, a recessed bead formed in said sides below the top edge thereof to provide a lock for

said baffle when presented in said pan, a depressed center portion in said baffle having a bottom piece resting on the bottom of said pan below the water line thereof when said lip thereof locks into said bead, and fluid flow



holes formed in said depressed center portion below said water line and adjacent the bottom thereof to provide fluid communication between the reservoir pan and the inner portion of said splash control baffle.

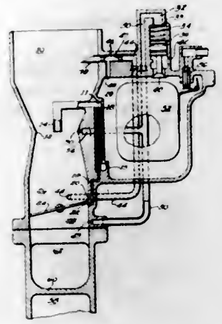
2,752,135
FUEL INJECTING DEVICE FOR INTERNAL COMBUSTION ENGINE
Theodore N. Saaty, Providence, R. I.
Application May 28, 1952, Serial No. 290,399
13 Claims. (Cl. 261—39)



10. A fuel atomizer for an internal combustion engine comprising an air flow conduit, a throttle valve in said conduit, a fuel nozzle discharging in said conduit, a fuel regulating valve, resilient means urging said valve to closing position, a vane pivotally supported in said conduit between the throttle valve and nozzle and arranged in said conduit for the air flow to engage substantially all at one side of the pivotal mounting thereof, means connecting said vane to said throttle valve for initial opening movement therewith and for movement independently thereof, means connecting said vane to said fuel regulating valve whereby flow of air against said vane tends to move the same towards open position and open said fuel regulating valve, and resilient means urging the vane in a closing direction, said vane being pivotally supported at one marginal edge thereof at one side of the conduit whereby the flow of air through said conduit will be all to one side of said vane.

2,752,136
CARBURETOR CONTROL VALVE
Dale Gardner, Fort Wayne, Ind., assignor to Holley Carburetor Company, Detroit, Mich., a corporation of Michigan
Application November 23, 1953, Serial No. 393,704
5 Claims. (Cl. 261—42)

1. In a carburetor having an air entrance, a venturi therein, a fuel nozzle discharging therein, a mixture outlet, a throttle valve therein, a constant level fuel supply chamber connected to the fuel nozzle, the improvement in the means for controlling the pressure in the constant level chamber comprising a fuel chamber vent passage leading from the air entrance to the upper portion of said chamber, an air pressure passage from the mixture outlet downstream the throttle, a cylinder connected thereto, a moving wall in said cylinder, a spring therein engaging said wall, a passage from the atmosphere to the space above the level in the fuel supply chamber controlled by a second valve, the pressure downstream the throttle transmitted through said air pressure passage opposing said spring and tending to close second valve, and in which there is a secondary air pressure passage connected to the mixture outlet upstream of the said



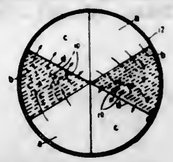
throttle when said throttle is closed and partly closed and connected downstream said throttle when said throttle is moved away from its closed position to near its wide open position, said secondary air passage being connected to the fuel supply chamber to increase the depression therein when the throttle is more than a certain degree open and to be ineffective at other positions of the throttle.

2,752,137
CARBONATING APPARATUS
William J. Brendel, Ellicott City, Md., and Joseph S. Schapiro, Beverly Hills, Calif., assignors to Sparkle Beverages, Inc., Ellicott City, Md., a corporation of Maryland
Application March 27, 1953, Serial No. 345,202
3 Claims. (Cl. 261—112)



3. In an apparatus for producing a carbonated beverage, a vessel adapted to be charged with a carbonating gas at superatmospheric pressure, exclusively singular means for introducing into said vessel when charged as aforesaid a liquid to be carbonated by said gas, an upright member in said vessel, means disposed in crowning relation to said upright member for receiving said liquid from said introducing means for distribution thereof for gravity flow downwardly in contact with the surfaces of said upright member in the form of thin films which provide ample surface area for effectively entraining in a maximum amount said gas in said liquid, said distributing means including an apron having an upwardly presenting flow surface upon a portion of which the discharge from said introducing means is concentrated, and a member in the form of a channel for receiving said liquid from said apron after the same has flowed in a thin film from said flow surface portion upon which said discharge is concentrated over the remaining flow surface portion of substantial area for intitial entrainment of some of said gas in said liquid, the base wall of said channel being provided with discharge openings for distributing said liquid over said upright member as aforesaid.

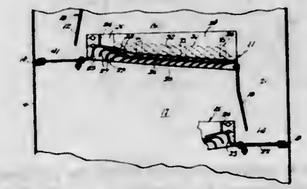
2,752,138
CONTACT PLATE STRUCTURE FOR USE IN A RECTIFYING OR CONTACTING COLUMN
Walter Kittel, Gmunden, Austria
Application July 15, 1952, Serial No. 299,036
Claims priority, application Austria July 16, 1951
12 Claims. (Cl. 261—113)



1. In a structure of contact plates, for use in a rectifying or contacting column wherein a specifically heavier medium flowing in descending direction and a specifically lighter medium flowing in ascending direction are brought into intimate contact, said structure comprising: a series of contact plates arranged at different levels, each of said contact plates including a first non-perforated portion forming a bottom and a second perforated portion forming the base of a zone of contact between the media, a plurality of walls joining each of said non-perforated bottoms so as to form in conjunction with the latter a container capable of receiving the heavier medium, each of said perforated portions having a plurality of passages for the passage of the lighter medium and said passages being arranged for discharging the lighter medium in a uniform substantially tangential direction relative to the symmetrical configuration having the centers of symmetry thereof in the vertical axis of said structure, one of said walls of each container having a discharge opening communicating with the associated zone of contact of the contact plate for discharging the heavier medium from said container to said zone of contact in a uniform direction substantially parallel to the direction of flow of the lighter medium discharged from the passages of the perforated portion into said zone of contact whereby rotating flows of the media having substantially parallel directions are obtained at said passage for the lighter medium, and each zone of contact with the exception of the lowermost communicating with the container arranged on the next lower contact plate for conducting the heavier medium to said container, the non-perforated portion of said contact plates being alternatively arranged at the outer side and at the inner side of the perforated portion of said plates in successive levels whereby the discharge of the heavier medium from a container to a zone of contact occurs alternatively in successive levels at the outer side and at the inner side of said zone of contact and whereby the discharge of the heavier medium from a zone of contact to a container occurs alternatively in successive levels at the inner side and at the outer side of said zone of contact.

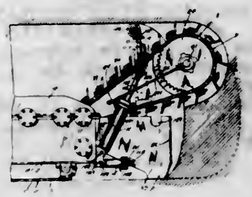
2,752,139
GAS-LIQUID CONTACT APPARATUS
Clifford Andrew Huggins, Wichita, Kans., assignor to Koch Engineering Company, Inc., Wichita, Kans., a corporation of Kansas
Application October 1, 1952, Serial No. 312,546
4 Claims. (Cl. 261—114)

1. A gas-filled contact tray having a liquid receiving end and a liquid discharge end for flowing a liquid across the upper surface thereof comprising a plurality of spaced elongated baffle plates having substantially parallel longitudinal axes arranged transversely of the direction of movement of liquid flowed across said tray, each of said plates being in the form of an inverted trough with the lower portion thereof arranged in an upwardly extending plane and with the upper portion thereof lying within a transverse plane, said upper portions of said baffle plates overlapping the corresponding portions of adjacent baffle plates and collectively defining the lower portion of a substantially unobstructed liquid passageway over the upper surface of said tray for the unobstructed flow of liquid thereover between said ends, the overlapping portions of the baffle plates being spaced more closely together than the lower portions of the corresponding plates thereby forming gas passageways through said tray which direct gas from underneath said tray



across the upper surface thereof into said liquid passageway in the direction of movement of said liquid between said ends whereby liquid movement in said direction across the upper surface of said tray in said liquid passageway is assisted, said upper surface of at least one of said baffle plates adjacent the liquid receiving end being provided with perforations arranged transversely of the direction of movement of liquid across said tray, whereby initial breakup of liquid passing across said tray is effected.

2,752,140
MINING AND LOADING APPARATUS
Joseph F. Joy, Pittsburgh, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application September 25, 1951, Serial No. 248,154
28 Claims. (Cl. 262—9)

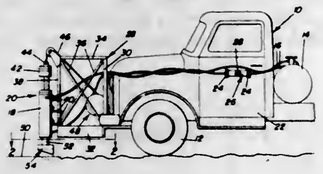


1. In a mining and loading apparatus, the combination comprising a mobile base, a horizontal frame structure carried by said base, a mine vein disintegrating head mechanism pivotally mounted on the forward portion of said frame structure to swing in vertical planes with respect thereto for dislodging and disintegrating the mineral of a solid mine vein, shrouding means pivotally mounted on the forward portion of said frame structure and having its sides extending upwardly along the outer sides of said head mechanism and a bottom portion extending transversely between said sides, said shrouding means cooperating with said disintegrating head mechanism for confining the disintegrated mineral within the apparatus as it is disintegrated and moved rearwardly by said head mechanism, conveying means carried by said frame structure and having a forward receiving portion extending forwardly and downwardly into adjacency to said head mechanism and within said shrouding means, said bottom portion having the forward receiving portion of said conveying means mounted thereon, and separately operable means for swinging said head mechanism and said shrouding means about their respective pivots and for holding the same in adjusted positions.

2,752,141
APPARATUS FOR PULVERIZING PAVEMENT AND THE LIKE

Joseph P. Silvestri, San Mateo, Calif.

Application July 21, 1953, Serial No. 369,432
1 Claim. (Cl. 262—15)

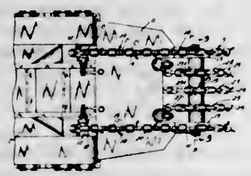


A device for pulverizing and breaking pavements comprising an attachment for mounting on the forward end of a self-propelled vehicle having an operator's cab, said attachment comprising a vertically disposed frame, a cylinder and piston mechanism vertically adjustably mounted on said frame, a piston rod extending downwardly from the cylinder, a tool on the lower end of the piston rod for impact with a pavement, and pneumatic means for reciprocating said piston rod and tool for breaking a pavement, remote control means for said pneumatic means positioned adjacent the vehicle cab for manipulation by the vehicle operator, said tool having inclined surfaces that are joined along an inclined longitudinal line and that terminate in a vertical rear surface, said surfaces extending to their lowermost point rearwardly along the path of movement of the tool thereby progressively breaking a pavement by reciprocation of the tool during longitudinal movement of the vehicle.

2,752,142
DISINTEGRATING HEAD MECHANISM FOR A MINING APPARATUS

Joseph F. Joy, Pittsburgh, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania

Original application September 25, 1951, Serial No. 248,154. Divided and this application November 12, 1954, Serial No. 468,472
16 Claims. (Cl. 262—20)

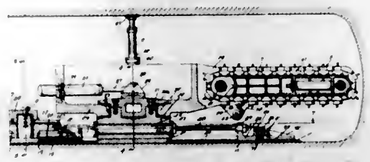


1. In a mining apparatus, a mine vein disintegrating head mechanism comprising a swingable frame, a series of parallel, orbitally movable, cutting and disintegrating elements carried by said frame at its outer end portion for forming a series of parallel kerfs in the mineral of a solid mine vein to form parallel cores of mineral between the kerfs, means for mounting certain of said orbitally movable elements for movement relative to said frame into and out of parallelism, and means embodied in said disintegrating head mechanism at the outer end portion thereof for moving certain of said orbitally movable elements out of mutual parallelism to effect dislodgment of said cores of mineral between the kerfs.

2,752,143
MINING AND LOADING MACHINE WITH PIVOTALLY CONNECTED FRONT AND REAR BASE SECTIONS

Joseph F. Joy, Pittsburgh, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application November 20, 1951, Serial No. 257,329
27 Claims. (Cl. 262—29)

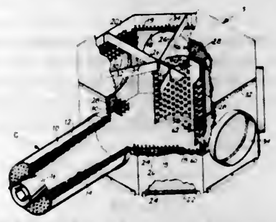


1. A mining machine comprising, in combination, a base movable over the floor of a mine including a base member, a frame swiveled on said base member to turn horizontally about a vertical axis, a mine vein disintegrating head, means for pivotally mounting said head on said frame to swing in vertical planes with respect thereto for removing a vertical segment of mineral from a solid vein, means for mounting said swiveled frame on said base member for rectilinear feeding movement in directions at substantially right angles with respect to the working face irrespective of the angular position of said disintegrating head with said swiveled frame about said vertical axis relative to the path of rectilinear feed of said mounting means for said swiveled frame, and means operatively associated with said base member for varying the horizontal angular position of said mounting means for said swiveled frame with respect to said base member thereby to vary the direction of rectilinear movement of said frame relative to the working face.

2,752,144
HEAT DISTRIBUTING APPARATUS

Henry A. Oldenkamp, Valhalla, and Philip Kaftol, Brooklyn, N. Y., assignors to American Machine & Foundry Company, a corporation of New Jersey

Application June 4, 1951, Serial No. 229,742
6 Claims. (Cl. 263—19)

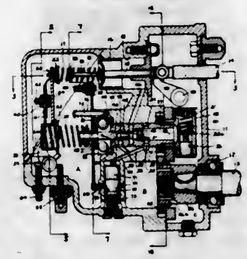


1. A tobacco curing barn heat distributing apparatus having a fire box made of refractory material having openings extending laterally from said firebox, a firing tube made of refractory material connected to one of said openings for conducting gases in the process of combustion to said firebox, a perforated baffle positioned vertically inside of said firebox and transversely in front of the gases undergoing combustion as they are discharged through said firing tube, said baffle being constructed and arranged to prevent the escape of flame out through said openings and, heat distributing ducts made of sheet metal connected to each of said openings for conducting heat from said firebox to the outer area of the tobacco curing barn.

2,752,145
HYDRAULIC GOVERNOR FOR FUEL INJECTION PUMP

Harry O. Hill, Lansing, and Robert S. Johnson, Lake Odessa, Mich., assignors to American Bosch Arma Corporation, a corporation of New York

Application May 10, 1951, Serial No. 225,532
7 Claims. (Cl. 264—3)

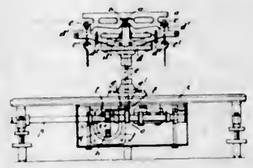


2. In a device of the character described, a shaft adapted to be rotated, a valve member operatively associated with said shaft, said valve member being longitudinally adjustable to control the supply of fluid, and a piston adapted to be connected to the control rack of a fuel injection pump, said piston being actuated by fluid controlled by said control valve member, a spring opposing the action of said piston and an adjustable leaf spring for varying the spring forces on said piston.

2,752,146
RELIEVING MECHANISM FOR USE WITH ANALYTICAL BALANCES

George Francis Hodsman, Portman Square, London, England, assignor to L. Oertling Limited, London, England, a British company

Application May 13, 1952, Serial No. 287,584
8 Claims. (Cl. 265—54)

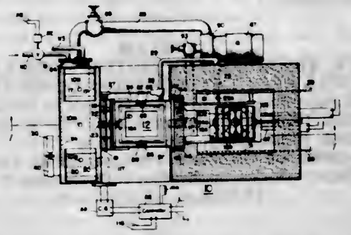


1. In a balance, a weighbeam, a sharp fulcrum knife edge fixed to said weighbeam, sharp load knife edges fixed to said weighbeam, a fixed bearing surface engageable by said fulcrum knife edge, load bearing planes engageable with said load knife edges, supporting means for releasably holding said load bearing planes above and out of engagement with said load knife edges and for releasably holding said fulcrum knife edge above and out of engagement with said fixed bearing surface, manually operable means for lowering said supporting means to cause said fulcrum knife edge to engage said fixed bearing surface and said load bearing planes to engage said load knife edges and motion retarding means acting independently of the speed of movement of said manually operable means for controlling the velocity of impact of said fulcrum knife edge upon said fixed bearing surface and the velocity of impact of said load bearing planes upon said load knife edges.

2,752,147
METALLURGICAL FURNACE AND METHOD OF TREATMENT OF WORK

Wayne Leo Besselman, Philadelphia, James Henry Somerset, Glenside, and Gustave M. Tauber, Philadelphia, Pa., assignors to Leeds and Northrup Company, Philadelphia, Pa., a corporation of Pennsylvania

Application December 21, 1950, Serial No. 201,906
14 Claims. (Cl. 266—4)

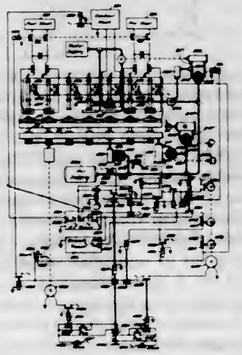


1. A heat-treating furnace having a heating chamber and a vestibule for receiving work preparatory to delivery into said heating chamber, a fan disposed within said heating chamber having a high-pressure zone for forced circulation of gases within said heating chamber, walls forming a flow passage extending between said heating chamber and said vestibule with an entrance portion extending into said heating chamber to a point within said high-pressure zone and adjacent said fan portion extending into said heating chamber to a point for forced flow of gases from said heating chamber into said vestibule to form therein an atmosphere having substantially the same constituent quality as that within said heating chamber, and means including a constituent-sensitive device exposed to the atmosphere of said heating chamber for controlling the constituent concentration in said heating chamber and of the atmosphere in said vestibule formed by the gases transferred thereto from said chamber.

2,752,148
ELECTRONIC HEAT TREATING DEVICE

Homer F. Kincaid, Carbon Cliff, Ill., John D. Graham, Louisville, Ky., Delos J. Reynolds, Chicago, Ill., and Edward M. Wharff, Baltimore, Md., assignors to Westinghouse Electric Corporation, a corporation of Pennsylvania, and International Harvester Company, a corporation of New Jersey, jointly

Original application September 8, 1948, Serial No. 48,296, now Patent No. 2,657,301, dated October 27, 1953. Divided and this application June 22, 1953, Serial No. 363,143
9 Claims. (Cl. 266—5)



1. In heat treating apparatus including a conveyor of articles, the combination of first switch connections responsive to said articles; a motor for actuating said con-

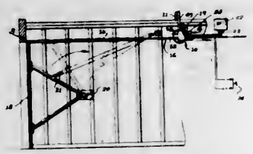
veyor, second switch connections interposed between said first switch connections and said motor for periodically testing said first switch connections to determine if said first switch connections have responded to an article and if not to prepare said motor for stopping, and third switch connections responsive to said second switch connections for stopping said motor with said conveyor in a predetermined position in the absence of articles on said conveyor.

2,752,149
SHOCK ABSORBER FOR MOTOR VEHICLES WITH SELF REGULATING SLIDING FRICTION
Renzo Forcellini, Milan, Italy, assignor to Società Applicazioni Gomma Antivibranti S. A. G. A. Società per Azioni, Milan, Italy, a corporation
Application October 2, 1950, Serial No. 188,005
Claims priority, application Italy October 7, 1949
19 Claims. (Cl. 267—9)



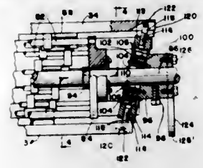
1. A shock absorber for vehicles and the like comprising, a pair of relatively movable members, a deformable elastic element carried by one of said members and adapted to be deformed into frictional engagement with the other of said members, said element initially being out of engagement with the said other of said members, and inertia means movably carried by said one of said members and operable by inertia forces upon relative movement of said members to engage and deform said element into frictional engagement with the said other of said members.

2,752,150
GARAGE DOOR OPERATOR
Moscow K. Richmond, Los Angeles, and Richard D. Holmes, Beverly Hills, Calif.
Application November 28, 1952, Serial No. 322,974
11 Claims. (Cl. 268—74)



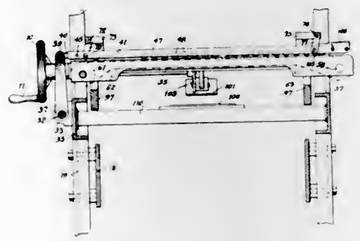
1. In an apparatus for operating a garage door, a beam having one end operatively connected to the door, a driving roller adapted to engage one side of said beam, an idler roller adapted to engage the opposite side of said beam, means for urging said rollers towards one another whereby said beam is squeezed between said rollers with a given force, a power source for rotating said driving roller such rotation moving the beam longitudinally and causing said idler roller to rotate, an element frictionally coupled to said idler roller whereby the element is urged in a given direction with a force substantially proportional to the rate of rotation of said idler roller; and normally closed contact means cooperating with said element and said power source, said contact means being adapted to open to shut off the power means in response to a change in speed between said driving roller and said idler roller, for stopping the movement of said beam.

2,752,151
CLOTH-GUIDING DEVICES
Paul Levine, Jamaica, N. Y.
Application September 3, 1953, Serial No. 378,280
4 Claims. (Cl. 271—2.6)



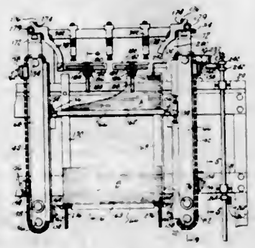
1. In a cloth-guiding device having a roller on which cloth is to be wound into a roll, and means for guiding the cloth flowing thereto in a laterally straight path including cloth-shifting means having a rotatable drum with reciprocally sliding slats on its periphery whereby the drum and the slats are rotated unitarily by the cloth passing therearound; the improvement comprising a rockable shaft from which the drum is rotatably supported, a cam-faced sleeve member fixed to the rockable shaft at each end thereof with each cam-face facing inwardly, an annular rim member rotatably supported from each sleeve and to which the slats are pivotally fastened, and automatic means for pivotally changing the plane in which the rim members rotate about a point lying at their center of rotation by rockably adjusting the shaft with the cam-faced sleeve members fixed thereto while the rim members are rotating thereon.

2,752,152
SHEET-TRANSPORTING APPARATUS
Philip G. Schlemmer, Nanuet, N. Y., assignor to National Equipment Corporation, New York, N. Y., a corporation of New York
Application February 12, 1954, Serial No. 409,983
6 Claims. (Cl. 271—50)



1. In an apparatus for moving sections of sheet material, a continuously moving, endless-chain conveyor on which the sheets are successively received for transport, a roller-carrying frame mounted above the chain and having controlled movement to and from the chain, said frame carrying a plurality of closely-spaced rollers for contact with a substantial portion of the length of the chain the rollers borne by said frame holding opposite marginal edge portions of the sheets in contact with the chain for a substantial portion of their length and while the frame is in its lowered position to thereby cause the sheets to be engaged for a substantial portion of their length and transported by the chain, means for moving the frame to and from the chain and for controlling the periods of time during which the frame is in its lowered position to thereby regulate the distance of feed of each sheet, and stop means for limiting the extent of feed of each sheet.

2,752,153
STACK MECHANISM FOR BOOK COMPONENTS
Carl Schramm, North Coventry, Conn., assignor to The Smyth Manufacturing Company, Hartford, Conn., a corporation of Connecticut
Original application July 8, 1947, Serial No. 764,236. Divided and this application November 17, 1950, Serial No. 196,170
23 Claims. (Cl. 271—62)



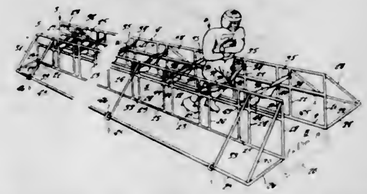
1. In a stack mechanism for sheets or book components, the combination of two similar endless chains having adjacent parallel vertically extending upwardly movable portions, supporting means connected respectively with the two chains and each movable in an endless path, mechanism connected with both chains and normally continually operable for slowly moving both of them at the same speed and in the direction for moving the said vertically extending portions thereof upward, two similar stack plates simultaneously engageable in superposed positions with two supporting means respectively on the vertically extending portions of the two chains and movable upward by the said two supporting means between common lower and upper limits, the said stack plates being adapted to support two stacks of similar sheets or components and the said plates being constructed to enable the uppermost plate to be manually withdrawn horizontally from its stack and from the corresponding supporting means, and chain moving mechanism supplemental to the first said chain moving mechanism for effecting relatively rapid independent movement in the same direction of the chain having its supporting means engaged by the lower stack plate so as to independently move the said lower stack plate rapidly upward to bring the stack thereon substantially into engagement with the bottom of the slowly moving upper stack plate whereby the said upper stack plate may be then withdrawn to enable both stacks to be supported by and to be slowly moved upward by the remaining stack plate.

2,752,154
CARD RECEIVING STATION
Alfred M. Nelson, Redondo Beach, Calif., assignor to Hughes Aircraft Company, Culver City, Calif., a corporation of Delaware
Application May 2, 1955, Serial No. 505,307
6 Claims. (Cl. 271—74)



1. A card transporting and receiving system comprising, in combination, a rotatable drum having at least two annular grooves in the surface thereof; means for creating a partial vacuum on the surface of said drum; a stationary receiving hopper fixedly positioned adjacent to the drum and including first and second members each having at least two fingers extending partially into associated ones of said annular grooves, said first and second members respectively providing first and second projections protruding from the surface of the drum, said second projection being spaced from said first projection in the direction of rotation of said drum by substantially less than a card length; and a stopping wall associated with said receiving hopper and fixedly positioned beyond said second projection less than a card length in the direction of rotation of said drum from said first projection, whereby a stopped card has its leading edge abutting against said stopping wall, its trailing edge overhanging said first projection, its fore and aft portions resting upon said second and first projections, respectively, and its middle portion clamped by means of said partial vacuum in sliding contact with the surface of said drum betwixt said first and second projections, thereby to cause a succeeding card being transported upon the surface of said drum when said drum is rotating to assume the position previously occupied by said stopped card.

2,752,155
LEG RESISTOR RUNWAY
Zygmund Nedwick, Glen Cove, N. Y.
Application March 3, 1953, Serial No. 340,087
3 Claims. (Cl. 273—55)

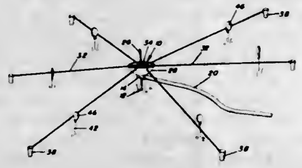


1. A leg resistance runway of the character described, including a pair of substantially parallel and separate top guide rails spaced a predetermined distance apart; separate ground supported means individually supporting each top guide rail to form two opposed parallel guide rail structures defining a running path between them for a runner; each ground supported means comprising a plurality of upright posts directly supporting each top guide rail, an individual base rail disposed a predetermined distance beneath and parallel to each top guide rail to which the upright posts are secured, an outrigger base rail spaced a predetermined distance outwardly from each top guide rail and its base rail, each top guide rail with its base rail and outrigger base rail being disposed at three points forming a triangle, inclined reinforcing bars and horizontal connecting bars securing each outrigger base rail to one of the top guide rails and its base rail and completing the triangular construction of each guide rail structure, a plurality of resilient resistance members projecting inwardly over said path from the inner opposite sides of the two guide rail structures in effective positions to offer impeding resistance to the legs of the runner when running between said guide rail structures, a plurality of separate fixtures secured upon the inner opposite sides of said two guide rail structures and individually supporting the resilient resistance members; and a plurality of anchoring means for engaging with the ground and securing the ground supported means separately to the ground in fixed positions.

2,752,156
SPRINKLER TOY
Alfred F. Washburn, Old Tappan, N. J.
Application December 31, 1953, Serial No. 401,509
3 Claims. (Cl. 273—101)

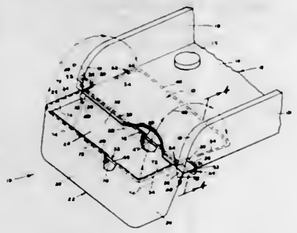
1. A sprinkler toy comprising a vertically disposed flexible tube, a water supply line connected to said tube,

and a plurality of means extending radially of said tube wherein said tube may be directed by said means thereby guiding the discharge from said tube. each of said means



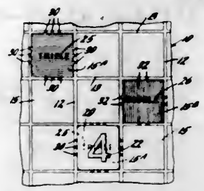
including a flexible cord member having a receptacle secured to its outer end for catching water discharged from said tube.

2,752,157
RECEPTACLE FOR A DISC GAME BOARD
Robert E. Towle, Jr., Omaha, Nebr.
Application July 9, 1954, Serial No. 442,305
2 Claims. (Cl. 273—126)



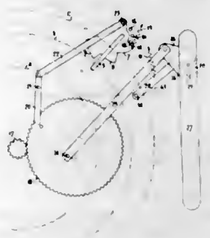
1. In combination, a disc game board having a bottom member having a normally horizontal upper surface and two spaced apart horizontally extending elongated parallel sidewalls attached to said bottom at their lower sides and extending upwardly therefrom, and a receptacle assembly comprising a flexible and collapsible bag normally disposed at an end of said gameboard, said bag having an open top to receive discs sliding off said end of said bottom and extending downwardly a substantial distance for receiving a plurality of discs, and said receptacle assembly further comprising attaching means comprising a frame member of approximately a U-shape and having a center portion spaced from said end of said gameboard and having side portions extending forwardly from said center portion and pivotally attached to the inner sides of said side members of said gameboard whereby said frame member can pivot toward said board about its inner ends to be received between said sideboards, the inner ends of said side portions being spaced inwardly from said end of said bottom member whereby the said end of said bottom member is engaged by and supports said side portions of said frame member, said frame member being attached to and supporting the side and outer end upper edges of said bag, a supporting member adjacent said end of said game board having a transverse portion extending under and across said gameboard from one side of said gameboard to the other side of said gameboard, said supporting member having end portions on each end of said transverse portion and being of a shape and size and being pivotally attached to said board in a manner causing said transverse portion to be spaced downwardly from the underside of said gameboard and permitting said transverse portion to pivotally swing upwardly and toward said end of said gameboard at times when said frame member is being moved to a storage position, and said supporting member being attached to and supporting the inner edge of said bag.

2,752,158
GAME APPARATUS
James Brunot and Helen Brunot, Newtown, Conn.
Application October 28, 1954, Serial No. 465,222
Claims priority, application Great Britain June 11, 1954
5 Claims. (Cl. 273—135)



1. Board game apparatus comprising a playing board having a flat playing surface, means on said board dividing the playing surface into a plurality of definitely delineated small areas constituting spots for occupancy by playing pieces, means formed on certain selected ones of said spots constituting primary value indicia, a plurality of playing pieces, each of said playing pieces being of a size and configuration such as to approximately cover one of said spots and completely conceal said primary indicia means, means formed on each of said playing pieces for identifying the piece, means projecting from each of said selected spot areas and constituting supplemental value indicia, said last named means extending laterally marginally from said spot areas, said last named means also projecting beyond the confines of the playing piece occupying said selected area, and being of a number corresponding to the value indicated by the primary indicia means.

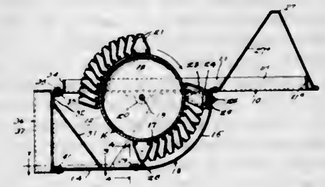
2,752,159
TALKING MACHINE WITH DISC CHANGING DEVICE
Eric Bacher, Yverdon, Switzerland, assignor to Paillard S. A., Sainte-Croix, Switzerland, a company of Switzerland
Application January 16, 1952, Serial No. 266,688
Claims priority, application Switzerland January 23, 1951
13 Claims. (Cl. 274—10)



1. In a talking machine having disc changing means for automatic reproduction of discs of different diameters previously stored above a disc turntable, the disc changing means comprising a cyclic device controlling the change of discs and the movement of a pick-up arm, the combination comprising, a chassis, a feeler movably mounted on the chassis and moved by a falling disc exceeding a certain diameter downwardly and outwardly of the path of the falling disc, a plate member rigid and movable with the feeler and including a plurality of cams, the feeler and plate member being urged upwardly and horizontally outwardly of the turntable axis, spaced stops, one for each cam, mounted on the lower chassis side and of different vertical lengths and successively engaged by

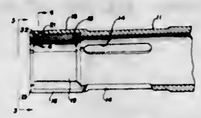
the plate member during its downward movement caused by the weight of a disc exceeding a certain diameter and dropping on the turntable and thereby depressing and horizontally deflecting the feeler and plate member outwardly of the turntable axis depending on the diameter of the dropping disc, a pick-up arm pivoted on the chassis, a lever pivoted on the chassis and urged to engage the pick-up arm to swing same toward the center of the disc to be played, the lever being controlled by one of the cams on the plate member according to the position thereof determined by the diameter of the dropping disc to be played, means controlled by the cyclic device and swinging the pick-up arm away from the center of a disc played to a position outside the path of the next dropping disc to be played prior to engagement of the feeler by such disc, and means intermittently operable by the cyclic device and moving the feeler to a position below the discs stored and above the turntable.

2,752,160
HIGH SPEED CUTTER FOR USE IN CUTTING STRAW, HAY, OR THE LIKE
Landon W. Fahrner, Helena, Mont., assignor to V. Perry Alloway, Spokane, Wash.
Application February 3, 1953, Serial No. 334,898
3 Claims. (Cl. 275—3)



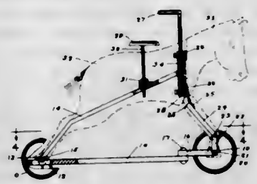
1. A rotary cutter comprising a substantially rectangular frame formed of angle members and including a pair of spaced substantially parallel side frame members and a pair of spaced substantially parallel front and rear frame members positioned at substantially 90° with respect to said first pair of frame members, a housing comprising a pair of oppositely disposed end walls, a flat bottom wall, and a front wall curving upwardly and forwardly from said bottom wall and terminating at its upper end in a forwardly extending flange, means connecting the upper ends of said end walls with said side frame members with said upper end of said front wall being positioned intermediate said front and rear frame members, an inverted substantially V-shaped guide member having one of its arms secured to said front frame member and its other arm secured to said flange, a plurality of spaced longitudinally aligned cutting blades fixedly secured to said front wall adjacent said upper end thereof, a plurality of horizontally aligned cutting blades fixedly secured to the forward end of said bottom wall, a cylinder, means journalling said cylinder on said end walls, a plurality of spirally positioned cutting blades mounted on said cylinder and projecting therefrom, said last named blades passing between the individual blades of the respective pluralities of said fixed blades upon rotation of said cylinder, a vertical V-shaped baffle having an end thereof fixedly secured to said bottom wall adjacent the outer end thereof and adjacent a side thereof, means fixedly securing the other end of said baffle to said rear frame member, and at least one vertically extending spreader plate having an upper and lower flange, and means securing said upper and lower flanges to said rear frame member and to the outer end of said bottom wall. respectively, with the inlet side of said spreader being positioned adjacent a discharge side of said baffle.

2,752,161
PUSHERS
Larry F. Smrekar, Solon, Ohio, assignor of one-half to John R. Cox and one-half to Alfred A. Abramoska
Application July 24, 1953, Serial No. 370,094
6 Claims. (Cl. 279—46)



1. In combination, a pusher for use in a machine tool, a plurality of stock-receiving pads, said pusher being adapted to hold said stock-engaging pads within its bore adjacent the forward end thereof, one of said pads having a recess formed at its forward end, said recess having a bottom wall extending forwardly and radially in a slope and having spaced side walls extending radially of the pad, said pusher being split at its forward end to provide a plurality of resilient fingers, each having an arcuate transverse shape at the forward end of the pusher, a pad-engaging stop member carried by one of said fingers to limit circumferential movement of said pads in said bore relative to the pusher, said stop member being formed of a portion of said one finger being partially cut from said one finger longitudinally thereof and displaced radially inward at a location spaced from said forward end of the pusher, said portion extending in a slope forwardly and radially inward of said pusher and having longitudinally extending and radially disposed side edges protruding in said bore to oppose in a circumferential direction said side walls of said recess to provide abutments to said pad moved in either circumferential direction, the said finger forwardly of said displaced portion being conformed to said arcuate shape of the finger at said forward end, said stop member being positioned to interengage said one pad in said bore and to hold the same against circumferential movement.

2,752,162
HORSELIKE MOVEMENT SIMULATING PEDALLESS TRICYCLE
Reginald M. Bowman, Baltimore, Md.
Application October 21, 1952, Serial No. 315,943
2 Claims. (Cl. 280—1.192)



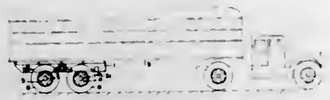
1. A toy of the class described comprising in combination a horizontal platform, wheels fixedly attached to the rear end of said platform, rocker support means pivotally attached to the rear of said platform, a bracket parallel to the platform and pivotally connected at the front of said platform, an axle attached to said bracket, a driving wheel mounted on said axle, parallel levers each having one end attached to the opposite ends of said axle, connecting rods for joining the rocker support to the free ends of the said parallel levers to rotate the front wheel and move the toy along the terrain, and guiding means carried by the rocker support at the front end thereof and connected to the connecting rods to rotate the front wheel about the pivotal connection of the bracket with the platform.

2,752,163
WHEELED CARRIER FOR TRANSPORTING LUGGAGE
Thomas Ralph Sneyd-Kynnersley, London, England
Application January 14, 1953, Serial No. 331,186
Claims priority, application Great Britain February 11, 1952
4 Claims. (Cl. 280—47.26)



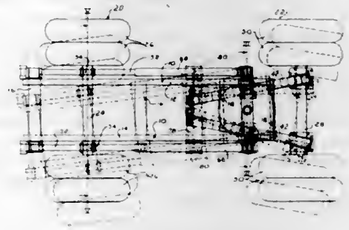
1. A device for facilitating the handling or porterage of suitcases and the like; said device comprising a wheeled carrier adapted to be applied to a corner of a suitcase, a strap for extension around the suitcase to secure said wheeled carrier relative to the latter, and a handle assembly adapted to be applied to a corner of the suitcase diagonally opposite to that having the wheeled carrier thereon, said handle assembly including an angled plate shaped to fit around the related corner of the suitcase under said strap, a pair of spaced apart guide elements extending from said plate and between which said strap passes, a handle pivoted at one end on said guide elements, a ring on said handle intermediate the ends of the latter and through which said strap is extended, and securing means at the other end of said handle engageable with said strap to hold the handle in an operative position whereby, after said strap has been extended around the suitcase and through said ring and guide elements with the handle angularly displaced from said operative position, swinging of said handle to its operative position forms a bight in the strap to tension the latter.

2,752,164
TANDEM AXLE SPRING SUSPENSION
Harman J. Bower, Roanoke, Va.
Application June 3, 1953, Serial No. 359,405
3 Claims. (Cl. 280—104.5)



1. A running gear for the rear end of trailers comprising a frame, a front and rear axle arranged in tandem relationship carried below the frame, wheels mounted outwardly on each end of each of the two axles, radius rods having their front ends connected to each other and pivotally connected to the frame and their rear ends hingedly connected to the rear axle, semi-elliptical springs connected intermediate their ends to the front axle, means on the frame for longitudinally slidably supporting the front ends of said springs and for preventing lateral movement thereof, a pair of semi-elliptical springs fixedly connected intermediate their ends to the rear axle, a rigid equalizer bar pivotally mounted in the frame between and slidably supporting adjacent ends of the front and rear springs, said equalizer bar having depending guide flanges on each side of the said spring ends, the guide flanges for the front spring preventing lateral movement of the front spring, the guide flanges for the rear spring being spaced therefrom to permit lateral swinging movement of the rear spring upon lateral movement of the axle, means on the frame for slidably supporting the rear ends of the rear springs for individual transverse and longitudinal movement, the frame between the wheels on the rear axle being substantially spaced from said rear axle wheels to clear the wheels upon their lateral movement relative to the frame.

2,752,165
LEAF SPRING SPREAD TANDEM AXLE ASSEMBLY
Arthur M. Compton, Bethel, Kans., assignor, by mesne assignments, to Standard Steel Works, Inc., Dallas, Tex., a corporation of Texas
Application July 30, 1953, Serial No. 371,307
7 Claims. (Cl. 280—104.5)



1. In a transportation vehicle having a trailer adapted for use with a tractor and provided with a frame, an undercarriage including a pair of spaced, tandem wheel and axle assemblies; an elongated, front spring unit having a forwardmost end disposed in supporting relationship to the frame; means attaching said unit intermediate the ends thereof to the axle of one of said assemblies; an elongated, rear spring unit; means attaching the rearmost end of the rear unit to the axle of the other assembly; means swingably attaching said rear unit intermediate the ends thereof to said frame; elongated rocker means having a rearmost end and extending forwardly toward the front unit; pivot means at said rearmost end of the rocker means securing the same to the frame for swinging movement on a horizontal axis; means at the forwardmost end of the rocker means adapting the latter for support by the rearmost end of the front unit; and structure on the rocker means intermediate the ends thereof supporting the forwardmost end of the rear unit, whereby the front unit yieldably biases the rear unit toward one end of its swinging path of travel.

2,752,166
VEHICLE SPRING SUSPENSION OF THE SHEAR RUBBER TYPE
Albert F. Hickman, Eden, N. Y., assignor to Hickman Developments, Inc., Eden, N. Y., a corporation of New York
Application July 10, 1952, Serial No. 298,027
13 Claims. (Cl. 280—124)



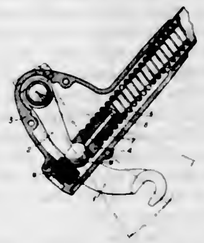
1. A spring suspension for a highway vehicle having an axle with wheels journaled on the ends thereof and a body, comprising a bar member secured to each end of said axle and having an upright face extending transversely of said body, a body member secured to said body at each end of said axle and having an upright face extending transversely of said body, a body of rubber at each end of said axle and interposed between the corresponding pair of said faces and yieldingly permitting lateral movement of said axle with reference to said body, at least one of said faces at each end of said axle inclining in a horizontal direction with reference to each other to toe out toward one end of the vehicle whereby said lateral movement of said axle with reference to said body is translated into a turning movement of said axle about a vertical axis.

2,752,167
SPRING FORK STRUCTURE FOR BICYCLES
Matthias J. Propst and Rudolph G. Blaho, Chicago, Ill., assignors to Monark Silver King, Inc., Chicago, Ill., a corporation of Delaware
Application November 22, 1952, Serial No. 322,105
9 Claims. (Cl. 280—276)



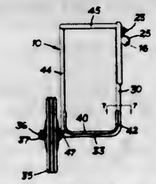
1. A spring fork structure for a bicycle, comprising a head frame portion having a pivot pin extending through the lower central portion thereof, a fender support pivotally mounted upon said pivot pin and having a tapped opening in the lower portion thereof, a hub extending forwardly of the lower portion of said head frame portion and apertured to receive a bolt, fork members at each end of said hub and being pivotal relative thereto, bolt means extending through said fork members and said hub, and a nut secured to one end of said bolt, a yoke above said fork members and secured to the ends thereof, a drum secured upon the upper portion of said head frame portion and having an apertured inner wall, a bolt secured at one end to said yoke and having its other end extending through the apertured wall and slidable freely within said drum, a resilient member secured to the inner end of said bolt, and a coil spring fixedly secured to said yoke and to said drum, said fender support being pivotal in the same direction as said fork members.

2,752,168
FRONT WHEEL SUSPENSION FOR MOTORCYCLES
Pier Luigi Torre, Milan, Italy
Application November 14, 1952, Serial No. 320,478
1 Claim. (Cl. 280—277)



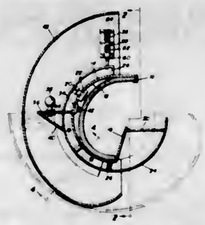
A suspension for the front wheel of a motorcycle comprising a lubricant-tight housing completely filled with lubricant, a rotative lever externally of said housing for connection to the wheel, said lever being journaled in said housing, an arm within said housing secured to said lever and rotative therewith about the same axis of rotation of said lever, an end of said arm being ball shaped, said housing having an elongated portion, a spring in said portion, a co-axial member position in said spring and disposed at an end thereof and having a portion extending therefrom terminating in a spherical socket engaging the ball-shaped end of said arm, said spring engaging said coaxial member and pressing it into engagement with said end of said arm, said coaxial member having an elongated portion serving as an internal guide for said spring, said coaxial member being closed except for an unobstructed bore axially therethrough from end to end thereof for conducting lubricant to the engaged surfaces of said ball and said socket, including a resilient cushioning element in axial alignment with said spring and said co-axial member and disposed on the opposite side of said ball-shaped end for engagement thereby, a removal screw-threaded plug closing said housing, said resilient element being secured to said plug and removable therewith.

2,752,169
BICYCLE STABILIZER
Frederick Abel, Dayton, Ohio, assignor to The Huffman Manufacturing Company, Dayton, Ohio, a corporation of Ohio
Application April 16, 1954, Serial No. 423,749
2 Claims. (Cl. 280—304)



1. A stabilizer of the character described for a bicycle comprising a single rod formed to define a substantially rectangular frame having upper and lower horizontal portions and inner and outer vertical portions, said outer vertical portion terminating at the lower end thereof adjacent said lower horizontal portion, said lower horizontal portion extending outwardly beyond said outer vertical portion to form a stub shaft, a wheel on said stub shaft, means securing said end of said outer vertical portion to the inner end of said stub shaft, a bracket plate of sheet metal secured to said inner vertical portion and having an aperture therethrough for receiving the rear axle of the bicycle, means on said bracket plate forwardly of said aperture for engaging a horizontal frame member of the bicycle, a step of sheet metal secured on said lower horizontal portion of said rod to receive the foot of a passenger, said step being of stirrup shape providing upwardly extending end portions thereon engaging said vertical rod portions, said step having a peripheral stiffening flange, said flange being relieved at the top of each said end portion for engagement with the adjacent said vertical rod portion to brace said step with respect to said rod, and said upper horizontal portion being formed in a forwardly extending loop with respect to said vertical portions to receive the leg of such passenger.

2,752,170
TRAILER HITCH WITH RETRACTIBLE GUARD
James L. Eversole, Gibsonburg, Ohio
Application October 30, 1953, Serial No. 389,332
2 Claims. (Cl. 280—507)



2. A trailer hitch comprising a semi-circular bracket adapted to be attached to a vehicle bumper, a ball member secured to said bracket, a cover member concealing

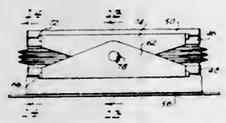
said bracket and ball member and means slidably securing said cover to said bracket for moving said cover to a position covering said ball and bracket and a position providing access to said ball and bracket, said means includes a second semi-circular bracket secured in spaced relation to said first mentioned bracket, a pair of arcuate guide members secured to each side of said cover in closely spaced relation for slidably receiving the edges of said second bracket, said second bracket is provided with a plurality of arcuately spaced apertures and said cover is provided with a spring urged plunger selectively engageable with said apertures wherein said cover may be locked in adjusted position.

2,752,171
DUST JACKET FOR BOOKS OR THE LIKE
Elva A. Endres, New York, N. Y.
Application July 16, 1952, Serial No. 299,083
2 Claims. (Cl. 281—20)



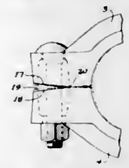
1. A dust jacket for books comprising a rectangular-shaped flexible body portion, a similarly-shaped flap integral with the body portion and extending from one end thereof and forming a prolongation thereof for folding over and protecting the rear edges of the leaves of a book placed on said body portion, a second similarly-shaped flap integral with the body portion and extending from one side thereof for folding over and protecting a group of leaf edges adjacent the rear edges of the leaves of the book, a third similarly-shaped flap integral with the body portion and extending from the opposite side thereof for folding over and protecting a group of leaf edges opposite the edges protected by said second flap, the end edges of the second and third side flaps being in alignment with the edge of the other end of the body portion, an extension on said third flap forming a prolongation thereof, said extension having tapering end edges continuing into an elongated narrow tongue member, said second flap having a pair of equi-spaced slots parallel to each other and to the free end edge of said second flap for selectively receiving the tongue member, said extension having a slot parallel to the slots in the second flap and being disposed in alignment with the tongue member for receiving the tongue member after passing through a selected slot in the second flap.

2,752,172
RECTANGULAR BELLOWS AND METHOD OF MAKING SAME
Eugene H. Ziebold, La Jolla, Calif., assignor to Solar Aircraft Company, San Diego, Calif., a corporation of California
Application August 1, 1952, Serial No. 302,048
5 Claims. (Cl. 285—90)



4. An expansion joint having an even number of angularly related walls including a first convoluted section forming one wall, a second convoluted section forming an adjacent wall, means securing said sections together with a portion of their end edges in line contact, and separate inner convoluted sections disposed in full surface contact along their lengths, respectively, with said first and second convoluted sections.

2,752,173
FLEXIBLE OR RIGID JOINT PIPE COUPLINGS
John H. Krooss, Westfield, N. J., assignor to Victaulic Company of America, Union, N. J., a corporation of New Jersey
Application June 2, 1952, Serial No. 291,220
4 Claims. (Cl. 285—129)



1. A housing for a grooved end pipe coupling and for assembly with another substantially identical housing for coupling pipe sections together by either a rigid or flexible joint which comprises, an arcuate member forming an arc of a circle, said arcuate member being formed internally with a gasket receiving recess, said gasket receiving recess having a base and said base being bordered at each side by upstanding continuous collars having pipe groove engaging end faces normally concentric with the arc of said arcuate member for normally movably engaging the similarly curved bases of grooves in the surface of a pipe, lugs extending outwardly at each end of said arcuate member, the outer portions of said lugs being formed for the reception of a clamping member, the ends of said arcuate member and the under face of the adjacent lugs forming surfaces generally transverse with respect to said arcuate member for engagement with similar surfaces on said other housing when said housings are assembled together, said transverse surfaces being formed with inner and outer surface portions meeting at fulcrum lines extending across said transverse surfaces, each of said inner surface portions normally lying in a plane extending radially with respect to the curvature of said arcuate member and each of said outer surface portions lying in a plane inclined outwardly from said fulcrum line at an angle with respect to the plane of its adjoining inner surface portion, said fulcrum lines being positioned back of said base of said recess, said pipe groove engaging faces of such assembled housings forming a continuous circular curve movably receivable in said pipe grooves to provide a flexible joint when said inner surface portions of said assembled housings are in engagement and the clamping members securing said housings together are under normal stress and on further tightening of said clamping means, said inner surface portions being separated at an angle about said fulcrum and portions of said pipe groove engaging faces of said collars adjacent the ends of said arcuate members being deformed inwardly and departing from their circular contour to tightly engage the adjacent portions of the base of said pipe groove to provide a rigid joint.

2,752,174
HINGED PIPE COUPLING AND METHOD OF MAKING THE SAME
Raymond B. Frost, Springfield, N. J., assignor to Victaulic Company of America, Union, N. J., a corporation of New Jersey
Application June 16, 1953, Serial No. 361,935
6 Claims. (Cl. 285—194)

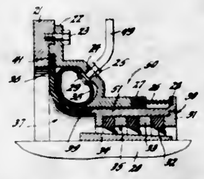
1. A pipe coupling comprising a pair of mated hemi-cylindrical housings hinged together at one end of each to be swung apart for reception of pipe ends to be coupled and to be drawn toward each other for the

coupling of such pipe ends, each of said housings being formed with transversely extending end faces at each end of a diameter of the cylinder thereof, the outer edges of one opposed pair of said end faces coming together to form a fulcrum line extending transversely of said faces and about which said housings swing to form a complete cylinder, and hinge means for swinging the housings toward and away from each other, said hinge means having a part secured to the outer surfaces of each



of said housings adjacent said fulcrum line with the axis of said hinge means lying outwardly of said fulcrum and laterally with respect to a radius of the curvature of said housings extending to said fulcrum whereby said housings swing on their hinge to a position just short of closing, with the completion of said closing being effected by the further swinging of said housings about said fulcrum line to stress said hinge and prevent any lost motion therein.

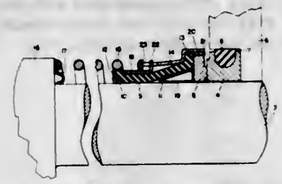
2,752,175
SHAFT SEAL
Albert E. Fletcher, North Arlington, Va.
Original application February 9, 1950, Serial No. 143,289, now Patent No. 2,719,737, dated October 4, 1955. Divided and this application June 8, 1955, Serial No. 514,137
5 Claims. (Cl. 286—9)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In combination, a shaft seal comprising a rotatable member, a housing enclosing a part of said rotatable member, an annular outwardly sloping wedge member affixed to said rotatable member and arranged for rotation therewith, a compressible sealing ring, slidable holding means for said sealing ring positioning said sealing ring in spaced concentric relation to said sloping wedge member and normally maintaining said sealing ring out of engagement with said wedge member, flexible means connected at one end to said holding means and at the other end to said housing, and fluid pressure means positioned adjacent said flexible means for expanding the latter and thereby pulling said sealing ring into engagement with said sloping wedge member.

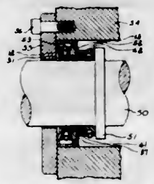
2,752,176
SEALS FOR ROTATING SHAFTS
Robert W. Ayling, Utica, N. Y., assignor to Carrier Corporation, Syracuse, N. Y., a corporation of Delaware
Application February 4, 1953, Serial No. 335,117
7 Claims. (Cl. 286—11)

1. A rotary seal for a shaft comprising a stationary seal member surrounding the shaft, a rotatable seal member in sealing engagement with the stationary seal member, a resilient sleeve member including a first portion thereof in sealing engagement with the shaft, a second portion having a generally conical shape and a third portion constituting a flanged section, means for resiliently urging said third portion of the sleeve into sealing contact with the rotatable seal member, an annular spacer member having a substantially triangular cross section



disposed about the shaft and being in substantially continuous surface contact with the second portion of the sleeve member whereby axial movement in the seal is taken up in said second portion of the sleeve by the elasticity of the material without substantial change in the geometry of the sleeve member.

2,752,177
FLUID SEAL
Robert Stevenson, Barrington, R. I., assignor to Anco, Inc., a corporation of Rhode Island
Application June 27, 1951, Serial No. 233,797
1 Claim. (Cl. 286—11.15)

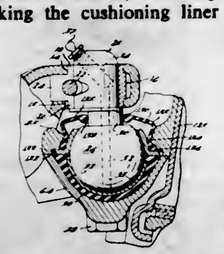


An oil seal for shaft and body members comprising a concentric annular flange on said shaft, an annular assembly mounted for rotation with said flange, said assembly including a first annular expansible washer fabricated from oil impervious material and provided with a groove in its radially outer peripheral face having an angular radial side, a steel ring vulcanized to one side of said washer, the opposite side of said washer having a smooth face, a spring in said groove exerting a force on said angular radial side to make oil tight the surface between said smooth face and said concentric annular flange, a second annular assembly fixed in said body, said second assembly including a second expansible washer and a collar having a radially inner concentric ledge, angular side and a radially outer straight edge, said second expansible washer having a V-shaped groove and resting on said concentric ledge with one leg of the V of the second expansible washer co-operating with said angular side in said collar, a housing having an angular wall co-operating with the other leg of the V and a cylindrical wall connected to the angular wall at its outer periphery, a spring fixed in said V-shaped groove urging said V legs outwardly and downwardly, said cylindrical wall of said housing being crimped radially inwardly at its free end to co-operate with said straight edge in said collar to retain the assembly in position and an annular seal washer fixed to said collar between the two assemblies and engaging said steel ring.

2,752,178
CUSHIONED UNIVERSAL BEARING STRUCTURE
Roscoe C. Hoffman, Detroit, Mich.
Original application April 22, 1949, Serial No. 89,125, Divided and this application January 15, 1952, Serial No. 266,501
10 Claims. (Cl. 287—90)

1. A ball and socket joint structure comprising a ball, a rigid backing element having a socket portion therein,

said socket portion being substantially larger in inside diameter than the ball, a relatively thin and hemispherical bearing shell engaging the ball and having a free edge lying substantially in one plane, said ball being substantially smaller than the socket, a resilient cushioning liner between said backing element and shell and circumferentially stretched over the shell, and flange means mechanically interlocking the cushioning liner with respect to



the free edge of the shell and maintaining the same in stretched condition independently of compressive force exerted thereupon by the backing element and shell, the radial spacing between the backing element and shell being less than the thickness of said liner when the liner is stretched, whereby the cushioning liner is compressed substantially radially between the shell and backing element.

2,752,179
TUBE AND SOCKET CONNECTION AND METHOD OF MAKING
Alfred L. Le Febvre, Windsor, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a corporation of Connecticut
Application January 26, 1951, Serial No. 207,982
2 Claims. (Cl. 287—119)



2. A tube and socket member connection comprising in combination, a thin-walled sheet metal socket member having a rear section bent to form a generally cylindrical socket, the metal of the said socket having longitudinal edges which are substantially in contact with each other in the rear portion of the said socket and which are separated from each other in the front portion of the said socket so as to provide a longitudinal slot in the said front portion and the said socket having a short polygonally shaped zone in the said rear portion thereof adjacent the rear end of the slot and spaced forwardly from the rear end of the said rear portion which polygonally shaped zone has exterior faces that are outwardly exposed and has interior faces that are parallel to said exterior faces and the said socket having transition zones adjacent the ends of the polygonally shaped zone thereof wherein the polygonal shape merges with the generally cylindrical shape, and a metallic tube having its wall thinner than the metal of the socket and having a generally cylindrical shape, said tube having its front portion positioned within and fitting the socket of the socket member and having on its said front portion an outwardly projecting longitudinal rib which is a folded portion of the metal of the tube entered in the longitudinal slot in the front portion of the socket and which rib has permanent forced engagement with the edges of the said slot, the said tube also having a short polygonally shaped zone within said short polygonally shaped zone of the socket which polygonally shaped zone of the tube has exterior faces engaging and fitting the interior faces of the polygonally shaped zone of the socket member and has interior faces that are parallel to the last said exterior faces and the said tube further having transition zones adjacent the ends of the polygonally shaped zone thereof wherein the polygonal shape merges with the cylindrical shape which last said transition zones fit the said transition zones of the socket.

2,752,180
PROTECTION CAPS FOR JOINTS
Jakob Vogt, Dusseldorf-Oberkassel, Germany, assignor to A. Ehrenreich & Cie.
Application August 20, 1953, Serial No. 375,457
1 Claim. (Cl. 288—19)



An elastic protective casing for a ball and socket joint comprising a socket and a ball headed rod having a shank projecting from said socket, said socket being of the type having a lower cup portion presenting a substantially spherical outer surface adjacent to said shank and said shank presenting a substantially cylindrical surface, said casing being of elastic material and having a lower aperture adapted to closely fit around said shank, an upwardly and outwardly extending portion having a conical inner surface merging by way of an upwardly and inwardly curved grooved portion into an inwardly extending lip portion; said grooved portion being substantially in the form of a recess intermediate said lip portion and said conical inner surface, and said lip portion turning outwardly pressing said recess against said spherical outer surface for the position of said casing in situ on said lower cup portion, and a closely fitting tubular sleeve portion extending around said shank and upwardly from said aperture toward the inside of said casing.

2,752,181
GASKET
Lewis A. Safford, Watertown, N. Y., assignor to The New York Air Brake Company, a corporation of New Jersey
Application December 8, 1952, Serial No. 324,652
2 Claims. (Cl. 288—33)



2. An annular gasket for mounting in a confining groove formed in one of two mating surfaces, said gasket comprising an annulus of cellular, resilient plastic material substantially quadrilateral in cross-section so as to have two generally conoidal surfaces and two generally cylindrical surfaces, and a continuous, pellicular shell of impervious, resilient plastic material sustained by three of the four surfaces, namely the two conoidal surfaces and one only of the cylindrical surfaces.

2,752,182
VIBRATORY SANDER
Morris Mermelstein, Schodack Center, N. Y.
Application May 16, 1952, Serial No. 288,284
5 Claims. (Cl. 291—25)

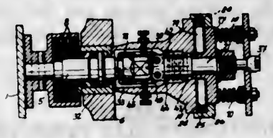
1. A demountable vibratory sanding device for use on an automobile, comprising an L-shaped bracket; a resilient suction cup secured adjacent the top of said bracket for removable attachment to the outside of a rear fender to hold said bracket in a suspended, stand-off position therefrom adjacent a rear wheel; a rigid container for holding a quantity of loosely divided sand therein, and having an opening at its bottom for the passage of said sand; a fixed baffle in the bottom of said container, overlying said opening and in spaced relation thereto normally

to check the flow of sand from said container until the same is vibrated; a flexible conduit connected to said bracket in communication with said opening to extend downwardly to a point adjacent the path of said wheel;



and an arm connected to said bracket at one end extending downwardly to contact said wheel at its other end to cause said bracket and container to vibrate when said wheel is in motion to scatter sand in the path of said wheel.

2,752,183
APPARATUS FOR UNFASTENING COKE OVEN DOORS
Franz Doll, Essen, Germany, assignor, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware
Application July 7, 1952, Serial No. 297,433
Claims priority, application Germany July 25, 1951
12 Claims. (Cl. 292—1)



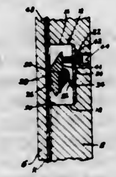
1. Fastener apparatus for unfastening coke oven door latches slidably mounted on a support axially of a doorway, and provided with a spring member for exerting the total closure pressure between the latch and a door to be latched thereby, with the axial support provided with an element for exerting a pull on the spring member and keeper means for coaction with grasping means for transmitting a pulling force to the spring member through the axial support for the latch, comprising: two oppositely movable fluid pressure responsive reciprocable pressure heads and a fluid pressure casing providing a fluid pressure chamber within the same between the heads, a spring cardan joint structure supporting the apparatus as a single unitary whole, a shaft rigidly secured axially to one of said pressure heads and slidably extending axially through the other of said two pressure heads, grasping elements pivotably mounted on the end of said shaft at a region beyond the other pressure head where the slidable shaft projects out of the same for coupling connection with keeper means on the axial supports for said latches, said grasping elements also having an abutting element in position to turn the grasping elements about their pivot into grasping engagement with a said keeper means when the unitary whole is pressed up against a said axial support for a latch on a coke oven door, and said other pressure head having thrust member in position thereon for exerting an opposing thrust on the spring member for a said latch when the grasping means is in operative engagement with an axial support for a said latch for exerting a pull thereon.

2,752,184
SPRING ACTUATED LATCH DEVICE FOR DOORS AND LIKE CLOSURES
Charles Thomas Hammond, Thornton Heath, England, assignor to Redwing Limited, Thornton Heath, Croydon, England, a British company
Application July 23, 1953, Serial No. 369,790
6 Claims. (Cl. 292—71)



1. Latch mechanism for a closure member including a casing having an aperture, a latch tongue mounted in said casing and having a nose portion projecting through said aperture, resilient supporting means for said tongue permitting movement of said tongue relatively to said aperture, said tongue having oppositely disposed smoothly curved surfaces and said aperture having oppositely disposed wall portions having a smooth curvature complementary to the said curved surfaces of the tongue to form bearing surfaces over which the said surfaces of the tongue will make smooth sliding engagement on movement of the tongue relative to said aperture.

2,752,185
CONTROL DEVICE FOR SLIDING MEMBERS
James S. Coppola, Lynn, Mass.
Application January 2, 1953, Serial No. 329,352
2 Claims. (Cl. 292—78)



1. A control device for a sliding window comprising a supporting member having two sides and a front for insertion into an opening in a window sash, said front having a hole therethrough, a shaft mounted on and supported by said supporting member sides, a pressure member rotatably mounted on said shaft having an exterior contacting surface and having a shoulder portion commencing at an end extremity of said contacting surface and extending therefrom in a general direction towards, and reaching a point adjacent said shaft, said hole being appreciably lower than the upper extremity of said shoulder portion, and a stop member adapted to extend into an opening in said window sash and passing horizontally through said hole, movably supported by said supporting member front and adapted to contact said shoulder portion.

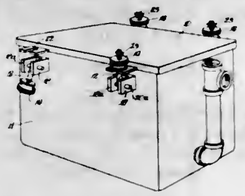
2,752,186
SAFETY CLOSURE LATCH
John A. Morrison, Seattle, Wash., assignor to Boeing Airplane Company, a corporation of Delaware
Application May 17, 1954, Serial No. 430,258
6 Claims. (Cl. 292—139)



2. In a latch arrangement for a closure for a wall having an opening therein, rectilinearly movable latching means slidably carried by the closure for engagement with an edge of said wall opening, actuator means car-

ried by said closure operatively connected to said rectilinearly movable latching means and lever means having a contact portion extendible through an opening in said actuator means, said actuating means and said lever means each mounted upon said closure upon separate but adjacent pivots, the improvement comprising detent portions cooperatively carried by said actuator means and said lever means arranged to form a safety catch for locking said lever means to said actuator means such that application of pressure to said lever means through the opening in said actuator means causes release of said safety catch for the initial release of said actuator means from said lever means and subsequent rotation of said actuator means causes rectilinear movement of said latching means for its disengagement from the edge of said wall opening.

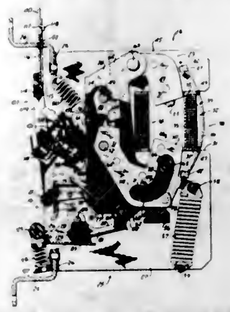
2,752,187
EYE BOLT LATCHING ASSEMBLY AND METHOD OF ASSEMBLING
Arthur Gordon, Chicago, Ill.
Application April 16, 1953, Serial No. 349,271
1 Claim. (Cl. 292—256.75)



In a container having a body and a cover, means for securing the cover to the body comprising; a pair of spaced ears on the body, each ear having a circular aperture and said apertures being aligned axially parallel to the cover; a lug on the cover having an outwardly opening slot in general longitudinal alignment with the space between the ears; a metallic eye bolt having an aperture at one end, the diameter of the aperture being smaller than the diameter of the ear apertures, a threaded opposite end having a diameter substantially less than the width of the lug slot, said eye bolt having a width axially of its aperture substantially less than the spacing between the body ears to permit shifting said eye bolt laterally between said ears to any one of a plurality of positions; a locking nut mounted on the threaded end and having an outside diameter substantially larger than the lug slot width; and a generally cylindrical pin having ends pivotally mounted in the ear apertures, and a longitudinally serrated mid-portion having a diameter less than the diameter of the ear apertures, said mid-portion being formed of a material harder than the eye bolt and adapted to penetrate the inner wall of the eye bolt aperture to secure fixedly the pin to the eye bolt while allowing pivotal motion of the eye bolt relative to the ears, whereby the threaded end of the eye bolt may be moved transversely into the lug slot and the locking nut advanced thereon to abut the cover lug and urge it toward said ears.

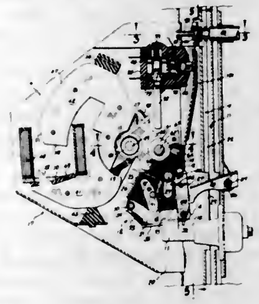
2,752,188
ELECTROMAGNETICALLY OPERATED DOOR LATCH MECHANISM
Robert W. Bachi, Itasca, Ill., assignor to Soreng Products Corporation, Schiller Park, Ill., a corporation of Delaware
Application April 8, 1953, Serial No. 347,437
24 Claims. (Cl. 292—332)

6. In a door latch mechanism of the type wherein movement of a latching element from latching to unlatching position to disengage a latch bolt thereon from a keeper provides for relative separating motion between the keeper and the latching element to thus free the door for opening: means mounting the latching element for rocking motion between latching and unlatching positions; actuating means connected to the latching element for imparting such rocking motion thereto, said actuating means including spring means for effecting return of the latching element to latching position; cooperating means on the latching element and the actuating means brought into interengaging relationship as a consequence of rocking of the latching element to its unlatching position by the actuating means for releasably holding the latching ele-



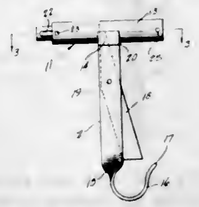
ment against spring biased return to its latching position; and a trip finger mounted on the latching element near the latch bolt to be carried by the latching element substantially into the position vacated by the latch bolt upon rocking of the latching element to unlaching position, whereby the trip finger and the keeper will be brought into engagement with one another as a consequence of closure of the door to effect disengagement of said cooperating means on the latching element and the actuating means and release of the latching element for spring propelled return to its latching position.

2,752,189
ELECTROMAGNETICALLY OPERATED LATCH MECHANISM
Robert W. Bachi, Itasca, and Hardin Y. Fisher, Hillside, Ill., assignors, by mesne assignments, to Soreng Products Corporation, a corporation of Delaware
Application February 11, 1952, Serial No. 270,924
26 Claims. (Cl. 292—336)



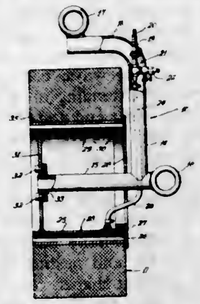
7. Latching mechanism of the type wherein movement of a latching element from an operative keeper engaging position to an inoperative keeper releasing position is effected as a consequence of energization of an electromagnet to cause core means for the electromagnet to move from retracted to attracted positions: characterized by the fact that said latching mechanism comprises two cooperating members movable relative to one another, one of said members comprising a portion of the latching element; a connection between the other of said members and the core means constraining said other member to move with the core means during attraction thereof; and cooperating parts on said members brought into interengagement by movement of the core means to attracted position and the latching element to its keeper releasing position to releasably hold the latching element in its inoperative keeper releasing position out of which it may be tripped by moving one of said cooperating members relative to the other independently of the electromagnet.

2,752,190
HAND ROD HOOK
Wavy L. Baker, Plainville, Kans.
Application October 10, 1952, Serial No. 314,126
2 Claims. (Cl. 294—26)



1. A rod or pipe handling device comprising a flat shank, a tubular cross bar secured transversely to the top end of the shank with the axis of said cross bar parallel to the plane of the shank, an upwardly facing hook rigidly carried at the lower end of the shank, a latch bar pivoted at its intermediate portion to the intermediate portion of said shank for rotary movement in a plane parallel to the shank, the lower end of the latch bar extending adjacent said hook and the top end of the shank extending into the cross bar, and spring means in said cross bar acting between the cross bar and the top end of said latch bar to bias said latch bar to a position wherein the lower end of the latch bar projects over the hook, said latch bar being rotatable to a position wherein said lower end of the latch bar is substantially flush with the shank.

2,752,191
COIL LIFTER
Robert C. Pierce, Niles, Mich., assignor, by mesne assignments, to National-Standard Company, a corporation of Delaware
Application August 13, 1953, Serial No. 374,085
4 Claims. (Cl. 294—93)



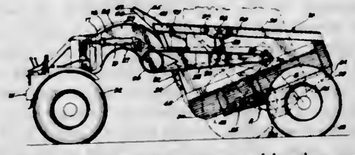
1. A device for attaching a conventional hoist means to an annular coil of wire and the like, comprising in combination, a cylindrical drum structure, a first bar means disposed coaxially of said drum structure and extending beyond one end thereof, a second bar means having a curved portion adjacent its outer end disposed and connected transversely to said first bar means outwardly of said drum structure, eye-ring means adjacent the outermost end of each of said bar means, an inflatable rubber annulus supported on the exterior of said drum, filling valve and tube connection means providing a system for inflating said rubber annulus, and vent valve means for rapidly exhausting pressurized fluid from said annulus.

2,752,192
SEAL MEANS FOR A CONVERTIBLE VEHICLE TOP
Clifford B. Doty and Gerald R. Thomas, Detroit, Mich., assignors, by mesne assignments, to Chrysler Corporation, a corporation of Delaware
Application August 8, 1952, Serial No. 303,298
2 Claims. (Cl. 296—107)



2. In a convertible body having an outer side panel, a foldable top including flexible top material secured to the rear of the body and having a vertical side section extending downwardly within the body at the region of said panel, a backing sheet of flexible material disposed at the inner side of said top material, a weatherstrip member interposed between said backing sheet and top material and confined within a pocket formed by an outwardly protruding portion of said top material, and means for attaching said backing sheet and top material along spaced lines immediately above and below said weatherstrip member, the bottom of said protruding portion being seated firmly on the upper edge of said panel to comprise a weather seal thereat and extending laterally beyond said edge to deflect water therefrom.

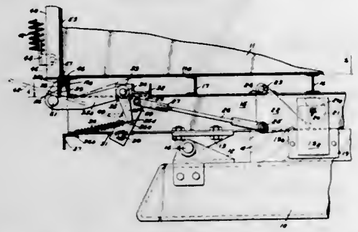
2,752,193
REAR DUMP TRAILER
Robert W. Kling, Wilmette, Ill., assignor to Athey Products Corporation, Chicago, Ill., a corporation of Illinois
Application January 17, 1955, Serial No. 482,142
15 Claims. (Cl. 298—22)



1. In a rear dump trailer, the combination comprising a body shaped for rear dumping and including side walls and a bottom which normally slopes downwardly from the rear toward the front, axle means secured to the body and having wheels thereon providing a support for the body, said body being tiltable in a vertical plane between hauling and dumping positions, the center of gravity of the body being normally in front of the axle means when the body is in the hauling position and rearward of the axle means when the body is in the dumping position, a draft yoke including side arms which extend rearwardly in spaced relationship to the opposite side walls of the body, means connecting the side arms to the adjacent side walls of the body at positions normally forward and above the axle means so that the body is swingable relative to the side arms between said hauling and dumping positions, and hydraulic rams mounted on the side arms forwardly of the last mentioned means

and connected to the body for lifting the body upwardly at the front end relative to the draft yoke to the dumping position, said hydraulic rams being of the multistage type with one stage of a length to raise the body to a position in which the body bottom is approximately level and one stage double acting for returning the body from the dumping position to one in which gravitational forces urge the body toward the hauling position.

2,752,194
LOCKING MEANS FOR DOORS OF GARBAGE DUMP TRUCKS OR THE LIKE
Victor A. Galloway, St. Clair Shores, Mich.
Application February 15, 1951, Serial No. 211,141
7 Claims. (Cl. 298—23)



1. In a dump truck adapted for carrying garbage or the like, a chassis, a body pivotally mounted on said chassis for movement to and from either an inclined dumping or a horizontal transporting position, said body having a rear dumping opening, a closure for said opening hingedly connected adjacent to its upper end to said body, resilient moisture repellent sealing means interposed between said body and the bottom and lower side edges of said closure, latching means for engaging the lower edge of said closure and holding it in tightly clamped liquid tight sealing engagement with said sealing means and cam means automatically actuated by the movement of said body from its horizontal to its inclined position to move said latching means to unlocked disengaged position, comprising a swinging latch carrying structure, a plurality of spaced locking latches pivotally carried thereby for movement into clamped engagement with the bottom of said closure, a pivoted cam actuated means carried by said body and connections therefrom to said latch-carrying structure, cam means carried by said chassis interposed in the path of movement of said cam-actuated means for automatically swinging said structure to disengage the latches carried thereby from their clamped engagement with said closure as said body is initially moved from its horizontal to its inclined dumping position, and stops adapted to engage said latches after further movement of said body to swing said latches out of the path of movement of said closure to fully opened position.

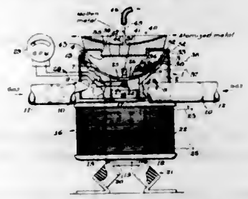
2,752,195
LAWN SPRINKLERS
Thomas E. Whitehead, Pleasantville, N. J.
Application March 4, 1954, Serial No. 414,147
2 Claims. (Cl. 299—61)

1. In a lawn sprinkler a casing, a weighted piston loosely mounted therein and having a central aperture therethrough, a flexible rubber tube secured to the upper end of said piston and provided with spiral grooves on its outer circumference throughout its length; a valve closure secured near the upper end of the piston, an inlet pipe extending within the bottom of said casing, a cap for the top of the casing, provided with a central orifice of slightly greater internal diameter than the outside diameter of the tube, the bottom of the cap acting as a valve seat; the valve closure being less in outside diameter than the internal diameter of the casing; the piston and rubber tube adapted to rise in the casing when water is admitted to the casing and to flow around the valve closure and through the aperture in the cap until the piston reaches its full height, when the valve



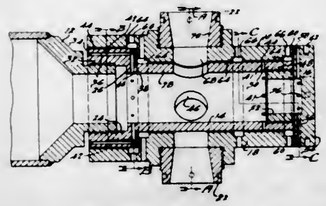
closure will close the said valve and prevent the water from going out through the opening in the cap around the tube to thereby cause the water to flow only through the rubber tube and, due to the spiral grooves about the tube, will cause the tube to swing in a circle with the top of the cap as a pivotal point.

2,752,196
APPARATUS FOR ATOMIZING METAL
Douglas S. Chisholm and Gordon F. Hershey, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
Application May 12, 1953, Serial No. 354,584
6 Claims. (Cl. 299—63)



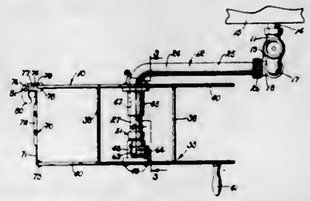
6. In an apparatus for atomizing a molten metal, the combination of a stator of generally upstanding cylindrical form and having a concave upper end, said stator having an axial opening from top to bottom and a plurality of gas inlet passageways, each passageway lying in a vertical plane and extending in an upward direction from the outer to the inner end and terminating in a nozzle opening at the said concave upper end; an electromagnet comprising an energizing coil and an iron core, one end of said core extending into the said axial opening; a rotor comprising a solid piece of steel having the general form of a segment of a sphere the convex surface thereof being substantially parallel to the concave upper end of the stator and nesting therein, said rotor having a series of crescent shaped recesses formed in the convex surface in a zone parallel to the base and nearer to the apex than to the base of the segment and adapted to act as turbine buckets on receiving a jet of compressed gas from the nozzle openings, said rotor having a flange integral therewith extending outwardly from the upper edge, the outer margin of the flange on the underside being substantially horizontal; and an atomizing disc of steel secured to the upper side of the rotor, said disc having a concave upper surface.

2,752,197
ROTARY NOZZLE FOR SOOT BLOWERS AND THE LIKE
Salvatore M. Marco, Columbus, Ohio, assignor to Diamond Power Specialty Corporation, Lancaster, Ohio, a corporation of Ohio
Application November 23, 1953, Serial No. 393,538
7 Claims. (Cl. 299—69)



1. A reaction-driven nozzle assembly adapted to be carried by a lance tube of a soot blower or the like, comprising a first body having an inner bearing surface, nozzle-defining means carried by said first body and operative to rotatably drive said first body and to emit blasts of cleaning fluid supplied thereto, a second body having an interior cavity, said first body being journaled on said second body with a loose-fit therebetween defining a bearing passage, a plurality of axially spaced radially extending fluid feed passage means in said second body interconnecting said bearing passage and said interior cavity, means for introducing fluid under pressure to said interior cavity, whereby the fluid flows through said fluid feed passage means to said bearing passage for floatingly mounting said first body on said second body, and a plurality of fluid escape passage means extending through said first body at positions axially spaced from one another and from said feed passage means and also axially spaced from said nozzle-defining means.

2,752,198
HOSE REELS
Howard M. Crow, Lindsay, Calif.
Application January 19, 1953, Serial No. 331,967
4 Claims. (Cl. 299—78)



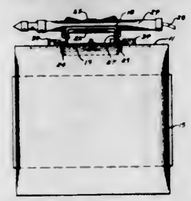
1. In a portable hose reel assembly the combination of a hose spool comprising a pair of substantially circular parallel end plates, cylindrically arranged parallel struts interconnecting the end plates in fixed spaced relation, spokes radially extended from the plates, and rims mounted on the spokes concentrically of their respective end plates; a bearing mounted concentrically of one of the end plates; a conduit having an end adapted for rigid connection to a faucet and an opposite journal end portion slidably and rotatably extended inwardly through the bearing and its end plate; a coupling mounted concentrically in the end plate opposite to the bearing and having a bore therein coaxially aligned with the bearing rotatably and slidably fitted to the inwardly extended end of the journal portion of the conduit; hose connecting means mounted in the spool having fluid connection to the coupling and having an end extended between the struts of the spool adapted for connection of a hose thereto; a gasket in fluid tight compression between the inner end of the journal portion of the conduit and the hose connecting means; a handle mounted on a rim for pivotal movement between a retracted position pivoted outwardly against an end plate of the spool and an operable position extended between the rims; and a latch mounted on the handle having a hook end adapted for releasable connection with the rim opposite to that on which the handle is mounted and an opposite lever end adapted to lock against the handle end of a hose fastened to the connecting means and wound on the spool when the hook end of the latch is in rim connection.

2,752,199
DISPENSERS OF THE SQUEEZE BOTTLE TYPE
Robert E. Newell, Jr., Irwin, Pa.
Application December 9, 1954, Serial No. 474,080
2 Claims. (Cl. 299—90)



1. A dispensing device, comprising a container of resilient material, having a tight-fitting cap of relatively rigid material that has an inlet hole, a discharge tube that extends through the cap, from a point within the container to a point exteriorly thereof and has tight fit therewith, a resiliently-flexible disc, a relatively narrow friction washer that holds the disc flatly against the inner surface of the cap, the disc thus normally covering the hole, a spray nozzle on the outer end of the tube, and an outwardly-opening check valve adjacent to the outer end of the tube, that prevents back flow through the spray head, the disc serving as an inwardly-opening check valve.

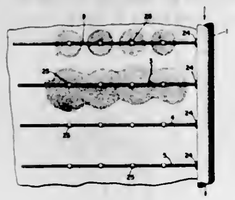
2,752,200
SPRAYER
Vincent Santarelli, Detroit, Mich.
Application April 19, 1955, Serial No. 502,490
5 Claims. (Cl. 299—101)



4. In a portable garden sprayer of the class described, a storage container for a liquid insecticide; a spray nozzle connected to said container; a fill opening in the top of said container; a cover for said opening; a handle fixed on said cover; a pair of fixed outwardly extending arms on said handle; a pair of laterally spaced apart retainer brackets mounted on the top of said container; a notch in one end of one of said retainer brackets, on the inner side thereof, and a similar notch in the other end of the other of said retainer brackets, on the inner side thereof, whereby said handle may be releasably locked in place on said container by engaging one of said arms in one of said notches and the other of said arms in the other of said notches and rotating the handle through said notches and

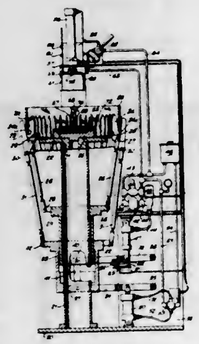
into said retainer brackets; the upper part of said handle being concavely curved, in an upwardly facing direction, and being adapted to have stored therein the spray nozzle; and a spring bail swingably mounted on said handle and adapted to engage the top of the spray nozzle and hold it in place on said handle.

2,752,201
METHOD OF AND MEANS FOR THE IRRIGATION OF LAND
Ludwig Blass, Wembley, England
Application September 21, 1949, Serial No. 116,872
6 Claims. (Cl. 299—106)



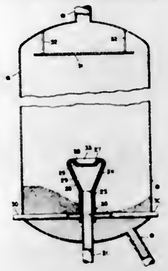
1. An irrigation line made of impervious material, watering nozzles provided in said line at intervals, a circuitous resistive channel in each of said watering nozzles restricting the issue of water, and means for reducing the terminal velocity of the water to a small fraction of that prevailing at the narrowest cross-section of said channel.

2,752,202
BUFF-MAKING MACHINES
Morris Schloss, New York, N. Y.
Application October 16, 1952, Serial No. 314,977
18 Claims. (Cl. 300—1)



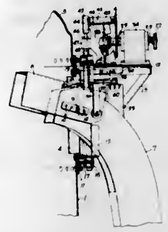
1. In a device of the character described, in combination, a circular support, an inner plurality of circumferentially spaced fingers pivoted to said support to swing inward thereon in radial planes from positions substantially in a cylindrical surface parallel to the axis of said support to positions substantially in a common plane normal to said axis, an outer plurality of circumferentially spaced fingers pivoted to said support to swing inward thereon in radial planes intermediate said first mentioned radial planes from positions outwardly beyond said cylindrical surface to positions substantially in said common normal plane, and means to swing all said fingers from said outer positions simultaneously into said inner position.

2,752,203
GAS LIFT DISENGAGER
Clarence H. Thayer, Wallingford, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
Application December 29, 1950, Serial No. 203,324
13 Claims. (Cl. 302—59)



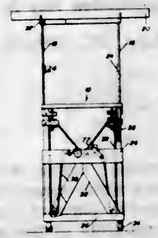
1. Method for disengaging granular solids from gas after elevation of granular material suspended in a confined stream of said gas through a substantially vertical confined zone which comprises: discharging gas and granular material from said confined zone into an expansion zone as a rising stream; discharging an inclined stream of separately introduced gas downwardly from outside said rising stream into said rising stream; and passing granular solids upwardly in said expansion zone to a level above the level of discharge of said separately introduced gas.

2,752,204
SILAGE DISTRIBUTING APPARATUS
Dean C. Broughton, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application June 17, 1953, Serial No. 362,383
5 Claims. (Cl. 302—60)



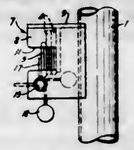
1. A material distributing apparatus adapted to uniformly distribute loose material into a storage vessel through an opening in the upper portion thereof which comprises, a conduit extending within the opening and adapted to convey the material and discharge the same into the vessel, a hood pivotally secured to the discharge end of said conduit, a frame secured to the outer surface of the vessel, power means supported by said frame and connected to the discharge end of said conduit for pivoting said conduit in a generally horizontal plane about a vertical axis, a vertically reciprocating member carried by the frame and connected to said hood and the power means, said member being disposed in alignment with the vertical axis about which said conduit is pivoted and adapted upon reciprocation by the power means to pivot said hood vertically about the discharge end of said conduit as said conduit is simultaneously pivoted horizontally by said power means to drive said hood through an approximate sine curve path during horizontal reciprocation of the conduit and uniformly distribute the loose material to all portions of said vessel.

2,752,205
SHEET ROCK LIFT
Lowell U. Ward and Louis J. Ward, Sacramento, Calif.
Application July 27, 1954, Serial No. 446,128
3 Claims. (Cl. 304—29)



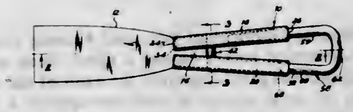
1. A sheet rock lift comprising a pair of vertically disposed frame members, brace means interconnecting said frames in longitudinally spaced relation, each of said claims including inwardly opening channel members forming vertical guides, a pair of vertically movable article supporting frames slidably supported in said guides, each of said movable frames including a plurality of projecting members slidably received in said channel members, means for simultaneously raising and lowering the movable frames, said raising and lowering means including a pair of vertically spaced gears mounted adjacent each of the vertically disposed frames, a pair of parallel shafts mounted transversely of said brace means between the frames, said shafts being geared together for simultaneous rotation, handle means operatively associated with one of said shafts for rotation thereof, a centrally mounted gear on each shaft in alignment with the vertically spaced gears, an endless chain positioned over a central gear on a shaft and a pair of the vertically spaced gears, and means for attaching the chains adjacent the bottom of the respective movable frames whereby said movable frames are simultaneously movable upon rotation of the handle.

2,752,206
SCAFFOLD BRACING
John Allen Kirkpatrick, Zelienople, Pa., assignor to Universal Manufacturing Corporation, Zelienople, Pa., a corporation of Pennsylvania
Original application February 16, 1949, Serial No. 76,828, now Patent No. 2,620,237, dated December 2, 1952. Divided and this application October 28, 1952, Serial No. 317,288
2 Claims. (Cl. 304—40)



2. The combination with a pair of spaced vertical legs, of bracing comprising brackets projecting from the sides of the legs, each bracket having spaced side walls provided with open end slots extending inward toward the leg supporting it and also extending laterally entirely through said walls, a removable brace for connecting the legs together and having end portions mounted in said brackets, said end portions being of greater height than said slots, each end portion being provided with a vertical notch receiving the outer end of one of said side walls to permit said end portion to be inserted in a direction perpendicular to the longitudinal axis of the brace into the open end of the slot in that wall and moved inward toward the leg, a pivot pin extending across each bracket below its slots, the ends of the pin being supported by the side walls of the bracket, a locking member mounted on said pin and extending upward across the outer face of a brace end portion to hold the brace in the bracket, and a counterweight connected with the locking member to normally hold it up in brace-locking position.

2,752,207
TOOL AND APPLIANCE HANDLE
John P. Young, Colton, Calif.
Application November 12, 1952, Serial No. 319,944
5 Claims. (Cl. 306—41)



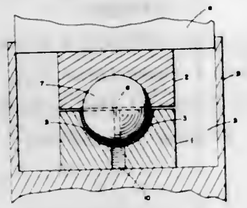
4. A handle comprising a pair of separate laterally spaced side members, each member having a tool gripping portion at one end, a fulcrum member extending between and having an element at each end rockably engaging said side members, and means releasably engaging the other ends of said side members to rock the same about the fulcrum to detachably grip a tool.

2,752,208
SHAFT BEARING
Lawrance W. Wightman, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application September 27, 1954, Serial No. 458,632
22 Claims. (Cl. 308—171)



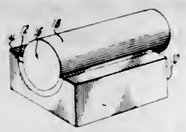
1. In combination, a bearing and a shaft rotatably mounted therein; said shaft having first and second helical grooves formed therein in oppositely disposed relation to each other; said bearing comprising a bearing member positioned over the part of said shaft having said first groove, wick means of absorbent material having spring qualities abutting an end of said bearing member, a thrust bearing member abutting said wick means and positioned over the part of said shaft having said second groove, a member formed on said shaft and positioned in rotatably abutting relation with said thrust bearing member, said grooves each extending to said wick means, said wick means being adapted to be impregnated with lubricant whereby rotation of said shaft will cause supplies of lubricant to be pumped respectively by said first groove across the surface of said bearing member and by said second groove to the surface of said thrust bearing member, and means for returning both of said supplies of lubricant to said wick means.

2,752,209
INSTRUMENT BEARING
Joseph S. Acterman and Darwin L. Freebairn, Jr., Long Beach, and Bert J. Sherwood, Lakewood, Calif., assignors to North American Aviation, Inc.
Application September 15, 1952, Serial No. 309,711
3 Claims. (Cl. 308—172)



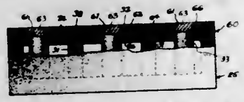
1. A boundary-lubrication type spin bearing comprising a hemispherical socket having a metal faced surface and having grooves extending from the nadir of the socket along arcs of great circles of said hemisphere, a hemispherical metal surfaced ball mating precisely with said socket, said grooves extending continuously along the entire bearing surface between said ball and said socket, a fixed thin molecular layer of a lubricant consisting essentially of fatty acid between said ball and socket and in said groove, an inert atmosphere surrounding said lubricant, and means to confine said inert atmosphere around said lubricant.

2,752,210
BEARING CONSTRUCTION
Earl L. Clark and Carson O. Donley, Indianapolis, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 18, 1952, Serial No. 321,214
10 Claims. (Cl. 308—238)



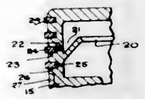
1. A bearing assembly comprising a combination of surfaces capable of relative movement, one of said surfaces being formed of a metallic carbide and the other surface of a relatively soft non-ferrous metallic bearing material.

2,752,211
SELF-LUBRICATING MACHINE ELEMENT
John Haller, Northville, Mich., assignor, by mesne assignments, to Allied Products Corporation, Detroit, Mich., a corporation of Michigan
Application December 24, 1952, Serial No. 327,764
3 Claims. (Cl. 308—240)



1. A self-lubricating wear-resisting machine element comprising a hollow sintered powdered metal body having a lubricant chamber therein and a load-sustaining wall with a wear surface thereon to be lubricated, a porous sintered powdered metal lubricant-transmitting structure extending from said chamber into proximity to said wear surface, said lubricant-transmitting structure having a coarser porosity than said load-sustaining wall, and a layer of bearing metal disposed upon said load-sustaining wall, said bearing metal being dissimilar to the metal of said body.

2,752,212
PISTON FOR INTERNAL COMBUSTION ENGINE
Harry O. Hedges, Seattle, Wash., assignor to Hedges Motor Company, Seattle, Wash., a corporation of Washington
Original application May 20, 1949, Serial No. 94,368. Divided and this application July 3, 1952, Serial No. 297,024
1 Claim. (Cl. 309—8)



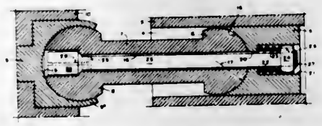
In an internal combustion engine of the character described, a piston having baffle means formed internally thereof adapted upon each outward (nonpower) stroke thereof to force oil outwardly of the piston by way of openings formed in the side wall of the piston and in communication with an oil ring channel formed externally of the piston, the sidewall of the piston being provided with additional openings in communication with a second oil ring channel disposed below the first mentioned oil ring channel and through which said oil may be forced inwardly of the piston upon each inward (power) stroke thereof.

2,752,213
FABRICATED PISTON
Richard H. Swart, Syracuse, and Robert W. Ayling, Utica, N. Y., assignors to Carrier Corporation, Syracuse, N. Y., a corporation of Delaware
Application April 16, 1953, Serial No. 349,139
5 Claims. (Cl. 309—10)



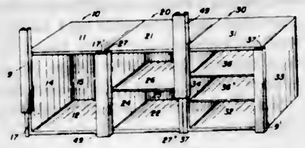
1. A piston comprising a skirt and a head secured thereto, two spaced lugs depending from the head, each lug being provided with an expansible opening having at least one slit in the margin of said opening.

2,752,214
PISTON AND CONNECTING ROD ASSEMBLY
Walter Ferris, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a corporation of Wisconsin
Application April 16, 1953, Serial No. 349,169
14 Claims. (Cl. 309—20)



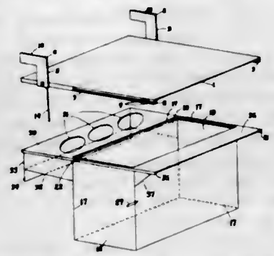
1. In a hydrodynamic machine having a thrust member and a cylinder, the combination of a piston fitted in said cylinder and having a passage extending therethrough, a spherical seat formed in the end of said piston toward said thrust member, a connecting rod having a spherical head formed thereon to engage said spherical seat, a spring seat formed upon said piston in opposition to said spherical seat, a bolt carried by said connecting rod and extending through said passage and said seats, a spring retainer fastened upon said bolt, and spring means arranged between said spring seat and said retainer for holding said spherical seat in contact with said head.

2,752,215
CABINET
Henry Peiss, Madison, Wis.
Application April 9, 1953, Serial No. 347,713
4 Claims. (Cl. 312—111)



1. A wood cabinet assembly comprising a plurality of unit cabinets each comprising two sides, a top and a bottom and each provided with solid projections extending forwardly from substantially the top to substantially the bottom of the frontal vertical edges thereof devoid of fastening means and devoid of space adapted to enclose fastening means, each two adjoining said unit cabinets being attached together without overlapping of projections by means of a grooved strip of wood slidingly engaged vertically over a pair of adjacent said projections to attach said cabinets together by virtue of locking said projections together, further characterized by said strip being unremovable forwardly and by the interior contour of said groove in said strip substantially following the exterior contour of said projections.

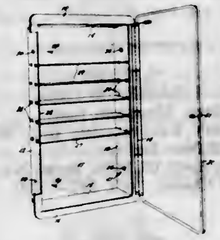
2,752,216
COLD STORAGE DEVICE FOR VEHICLES
Locksley Thompson, West Palm Beach, Fla.
Application June 5, 1952, Serial No. 292,003
1 Claim. (Cl. 312—214)



A cold storage device for mounting beneath the instrument panel of an automobile comprising a double walled ice chamber, heat insulating material between said double walls, a lid covering said ice chamber, a pair of parallel guideways provided near the top and on opposed sides of said ice chamber, said guideways extending beyond the periphery of said ice chamber, a cover covering said ice chamber and lid thereof, parallel guideways on said cover operably engaging said ice chamber guideways to support said ice chamber therefrom, projections secured to said cover guideways adapted to abut and project over the end of an instrument panel, extensible members on said cover guideways adapted to abut the fire wall of an automobile and urge said projections against the instrument panel, and a resilient member intermediate said cover and lid and abutting each of them and secured to one of them.

2,752,217
MEDICINE CABINET
Sidney Simon, Los Angeles, Calif.
Application December 21, 1953, Serial No. 399,322
2 Claims. (Cl. 312—242)

1. A cabinet or the like enclosure for installation between a pair of spaced opposed portions of a building wall, said cabinet including flexible side walls and a back wall secured to said side walls, said side wall being disposed in spaced relation to one another and being adapted to be inserted between said opposed wall portions, said side walls having integral laterally outwardly projecting protuberances thereon countersunk internally of said cabinet with respect to the planes of the respective inside surfaces of said side walls, each of said protuberances having two intersecting slanted surfaces, one directed toward the back of the cabinet and the other toward the



front of the cabinet, said one slanted surface being adapted to cam said protuberance and its corresponding side wall past and over the edge of a corresponding opposed wall portion, and the other of said surfaces making a sharp angle with said one surface at their intersection, said intersection defining an edge adapted to engage against and press into such wall portion under the influence of its said flexible side wall and thereby resist any attempt to remove said cabinet forwardly out of position between the opposed wall portions.

2,752,218
DESK
James J. Shea, Sr., Springfield, Mass., assignor to Milton Bradley Company, Springfield, Mass., a corporation of Massachusetts
Application March 9, 1954, Serial No. 415,053
1 Claim. (Cl. 312—255)



Leg construction adjustable in length for supporting a desk or the like comprising, an elongated tubular upper leg section and a tubular foot slidable therein, said upper leg section provided on a forward wall thereof with longitudinally spaced upper and lower hub receiving holes, said foot provided on a forward wall thereof with hub receiving longitudinally spaced sockets and with connecting slots and with openings aligned with the sockets in the rear wall thereof, an upper retainer secured in the upper hole of said upper leg section, a resilient leaf spring secured thereto and depending therefrom within said upper leg section and into said foot and having a lower end engaging the rear wall of said foot, a lower retainer intermediate the ends of said spring and fixed thereto having a forward hub receivable in a socket of said foot and the lower hole of said upper leg section, a control screw threaded in the lower retainer for inner and outer posi-

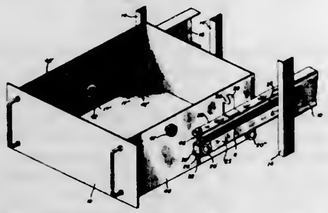
tions thereof having an inner end adapted in inner position of said screw to engage the rear wall of said upper leg section through one of said openings in the rear wall of said foot to urge the hub of said retainer into the lower hole of said upper leg section and a socket of said foot aligned with the opening to thereby lock said upper leg section and foot against relative axial movement and arranged in outer position to permit the hub of the lower retainer to be depressed inwardly out of said hole and against the action of said spring whereby said upper leg section and foot are free for relative axial movement.

2,752,219

DRAWER SLIDES

William A. Yonkers, Mountain Lakes, N. J., assignor to Radio Frequency Laboratories, Inc., Boonton, N. J., a corporation of New Jersey

Application April 15, 1954, Serial No. 423,335
3 Claims. (Cl. 312—341)



2. An arrangement for slidably mounting on a vertical rack a chassis having side walls, said arrangement comprising a pair of elongated channel members secured in spaced parallel position on the rack, a pair of longitudinally spaced channel rollers associated with each channel, said rollers being disposed between the flanges of said channel members and rotatable about individual shafts secured to the webs of the channel members, an elongated track member slidable within each channel member, each track member comprising a structure consisting of a top generally horizontal flange forming an upper runway the lower surface of which is engaged by said channel rollers, a flange therebeneath forming a top surface intermediate runway and an angle iron with a generally horizontal upper flange secured to the lower surface of said second-mentioned flange and forming a bottom surface lower runway, each of said runways being continuous and extending substantially the full length of its track member, aligned main rollers rotatable about individual shafts extending from opposite sides of the chassis, each of said main rollers being rotatable on an intermediate runway, a pair of aligned supporting rollers normally disposed below said main rollers and rotatable about individual shafts extending from opposite sides of said chassis, each of said supporting rollers being rotatable on the lower surface of the upper flange of said angle iron of the associated track member and swingable with the chassis from engagement therewith about the axis of the main rollers beyond the lower flange of said angle iron to present to view the lower side of said chassis, and means at the ends of each track member effectively closing off the runways.

2,752,220

PENS

John P. Squier, Dallas, Tex.

Application August 21, 1952, Serial No. 305,570
7 Claims. (Cl. 346—140)



1. An ink supply system for a pen having an elongate arm provided with a pen point comprising: a reservoir adapted to be mounted on said arm; an elongate tube extending from the reservoir to a point closely adjacent but spaced from said pen point, said tube extending upwardly through the bottom of the reservoir and upwardly therein to a point adjacent the upper end of eaid reservoir; a wick extending through said tube and having an upper end extending outwardly from the tube and downwardly into the reservoir and a lower end extending outwardly from the tube and adapted to extend into the pen point; and a needle valve means insertable into the upper end of the tube to variably compress the wick to regulate the rate of the capillary flow of ink through the wick.

CHEMICAL

2,752,221

CORROSION INHIBITION

Aaron Wachter, Oakland, and Nathan Stillman, Berkeley, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application October 20, 1950, Serial No. 191,330

11 Claims. (Cl. 21—2.5)

1. A method of stabilizing dicyclohexylammonium nitrite against decomposition which comprises incorporating therewith dicyclohexylamine in a minor amount greater than about 0.4 wt. percent based upon the total of said nitrite and said amine.

2,752,222

PREPARATION OF POTASSIUM BICARBONATE

Antoine Birman, Paris, France, assignor to Societe d'Etudes Chimiques pour l'Industrie et l'Agriculture, Paris, France

No Drawing. Application March 29, 1951, Serial No. 218,270

Claims priority, application France April 5, 1950

8 Claims. (Cl. 23—64)

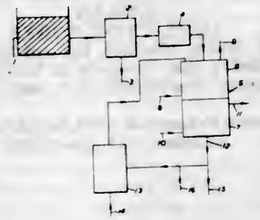
1. The method of producing potassium bicarbonate which comprises reacting gaseous carbon dioxide with an aqueous solution consisting essentially of potassium chloride and an amine of the group consisting of monomethylamine, dimethylamine, monoethylamine, and diethylamine and mixtures thereof, and separating the resulting precipitated bicarbonate from the solution.

2,752,223

PRODUCTION OF FERRIC CHLORIDE

Lewis Reeve, Sheffield, England, assignor to The United Steel Companies Limited, Sheffield, England

Application December 29, 1952, Serial No. 328,341
Claims priority, application Great Britain January 1, 1952
6 Claims. (Cl. 23—87)



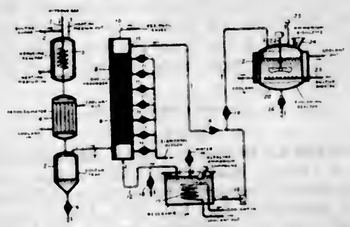
1. In a process for obtaining ferric chloride from a material selected from the group consisting of iron ore and other material containing iron oxide the steps of treating said material with hydrochloric acid to form a chloride solution in which the iron is present as ferric chloride, spraying said solution onto the surface of particulate refractory material at a temperature between 212 and 390° F. to form a dried deposit of ferric chloride upon the surface of said particulate material, said particulate refractory material being in the form of at least one fluidised bed, and heating said particulate refractory material bearing said ferric chloride as a dried deposit in the form of a fluidized bed to a higher temperature between 390 and 750° F. in the presence of a sufficient amount of hydrogen chloride to prevent hydrolysis of the ferric chloride to ferric oxide to vaporize said ferric chloride therefrom.

2,752,224

PRODUCING AMMONIUM NITRITE AND AMMONIUM HYDROXYLAMINE DISULFONATE BY A NITROUS GAS ABSORPTION PROCESS

George G. Joris, Madison, N. J., assignor to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

Application May 11, 1953, Serial No. 354,144
6 Claims. (Cl. 23—104)



1. A process for producing a reaction product containing ammonium nitrite and ammonium hydroxylamine disulfonate which comprises admixing a nitrous gas, said nitrous gas containing nitric oxide and oxygen additional to any oxygen derived from the nitric oxide component, said additional oxygen being at least one member of the group consisting of molecular oxygen and oxygen combined with nitric oxide to form nitrogen dioxide, at temperature of at least about 150° C. but not above about 600° C. with a combustible reducing agent consisting essentially of at least one material of the group consisting of sulfur and hydrogen sulfide in amounts sufficient to produce substantial quantities of sulfur dioxide, and to fix the stoichiometric mol ratio of nitric oxide:oxygen in the gas i. e. the nitric oxide:oxygen mol ratio including any nitrogen dioxide in the gas as the stoichiometrically equivalent amount of nitric oxide and oxygen at a value of at least 10:1; bringing the resulting gas into contact with an aqueous solution of a basically-reacting ammonium compound maintained below 45° C.; and adding elemental oxygen to said gas in amounts restricted to keep the stoichiometric mol ratio of nitric oxide:oxygen therein at least at 10:1, thereby forming ammonium nitrite and ammonium hydroxylamine disulfonate in said aqueous solution.

2,752,225

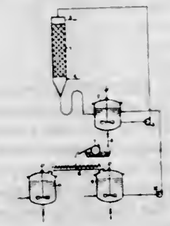
METHOD OF PREPARING NITRATING ACIDS

Leonardus J. Revallier, Geleen, Netherlands, assignor to Stamicarbon N. V., Heerlen, Netherlands

Application April 21, 1953, Serial No. 350,189

Claims priority, application Netherlands April 25, 1952

5 Claims. (Cl. 23—114)



1. In the process of producing solid crystalline (NO_2^+) ($HS_2O_7^-$) which comprises supplying to an absorption liquid of about the same composition as the desired product maintained at a temperature above 100° C. an SO_3-containing gas and a liquid-containing nitric acid, the proportions of the supplied ingredients being adjusted to maintain a molar ratio of SO_3:N_2O_3 of about 4, withdrawing a portion of the absorbing liquid in an amount corresponding to the amount of supplied ingredients, and cooling the withdrawn liquid to crystallize (NO_2^+) ($HS_2O_7^-$), the improvement which comprises employing as the liquid containing nitric acid which is supplied to the absorption liquid a mixture produced by dissolving crystalline (NO_2^+) ($HS_2O_7^-$) in concentrated nitric acid, said mixture consisting essentially of from 35 to 50 parts of SO_3, 65 to 50 parts of HNO_3 together with up to 2% water.

2,752,226

PRODUCTION OF SODIUM PEROXIDE

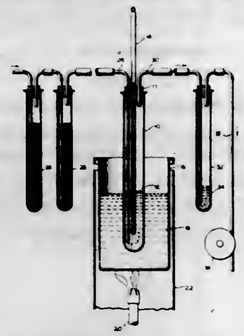
Walter Klabunde, Lewiston, and James H. Young, Niagara Falls, N. Y., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 21, 1950, Serial No. 202,152

11 Claims. (Cl. 23—184)

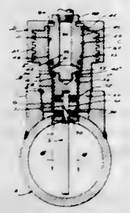
1. The method of producing sodium peroxide comprising intimately contacting an agitated body of particulate sodium oxide containing at least 50% sodium peroxide with a gas mixture comprising an inert gas and 0.5% to not more than 4% oxygen while adding metallic sodium to said oxide body at such a rate that not to exceed 5% by weight of sodium will be present at any one time and as will maintain said body at a temperature within the range 280 to 400° C., whereby said sodium is reacted with sodium peroxide to produce sodium monoxide and sodium monoxide is simultaneously oxidized to sodium peroxide.

2,752,227
PROCESS FOR DETERMINING ACID OR ACID-VAPOR FORMATION CHARACTERISTICS OF A SUBSTANCE
Walter F. Welland, Lincoln, Nebr.
Application July 18, 1951, Serial No. 237,313
6 Claims. (Cl. 23—230)



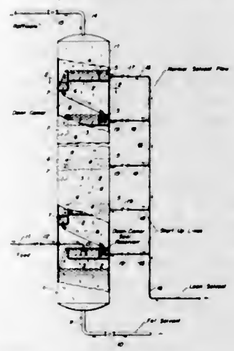
1. A process for determining the acid vapor formation characteristics of a substance selected from the group consisting of lubricating oils and greases and mixtures of the two, said substance having an acid vapor temperature not above about 160° F., which comprises the steps of applying heat at a continuously increasing temperature at a controlled rate to the sample to be tested and simultaneously with said application of heat passing a stream of pre-washed and dried gas vigorously through said sample, conducting the gas and vapors from said sample to a measured quantity of a volatile, acid-sensitive indicator and measuring the temperature of the sample at the precise time that said volatile, acid-sensitive indicator indicates the presence of acidic vapors in the gas and vapor products bubbling through said indicator, whereby from the temperature of said sample at which said indicator shows the first indication of acidity the acid vapor temperature of the sample may be ascertained.

2,752,228
ADAPTER FOR HANDLING FLUID UNDER HIGH PRESSURE
Jay P. E. Gould, La Canada, Calif.
Application July 7, 1952, Serial No. 297,588
8 Claims. (Cl. 73—422)



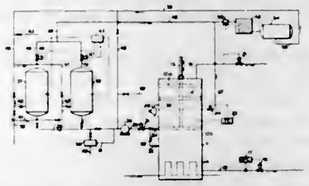
4. A device applicable to a pressure carrying vessel having a wall with an aperture therethrough comprising a tubular base adapted to be mounted on said vessel in communication with said aperture, said base having a seat intermediate its ends, a core threaded into said base and having packing means adjacent its inner end engageable with said seat, said core having a longitudinally extending bore therethrough provided with means at its outer end to receive a pressure measuring device and a lateral opening outwardly of said packing means, and a member secured to the inner end of said core and adapted to extend into said vessel and having means at its inner end provided with a restricted flow passage and a port extending from said flow passage to said longitudinal bore, whereby the pressure of the fluid in said vessel at said flow passage may be measured when said packing means engages said seat and the static pressure of said fluid may be measured when said packing means is disengaged from said seat.

2,752,229
CONTACTING TOWER
Kenneth M. Brown, Hinsdale, Ill., and James R. Strong, Crawfordsville, Ind., assignors to Universal Oil Products Company, Des Plaines, Ill., a corporation of Delaware
Application February 4, 1953, Serial No. 335,076
2 Claims. (Cl. 23—270.5)



1. In a contacting tower for the countercurrent contact of fluid streams, the combination of a plurality of vertically spaced, perforate liquid distributing decks extending across the tower, a weir forming with a portion of the tower wall a liquid seal reservoir on each of said decks at one side of the tower, said reservoirs being in substantially vertical alignment on said side of the tower, a second weir forming with another portion of the tower wall a liquid receiving well at each deck opposite the liquid seal reservoir, said wells being in substantially vertical alignment on the other side of the tower, a sloping conduit extending across the tower between adjacent decks and connecting the liquid receiving well of an upper deck with the liquid seal reservoir of the next lower deck, fluid inlet means to the lower portion of the tower, and fluid outlet means from both the upper and lower portions of the tower.

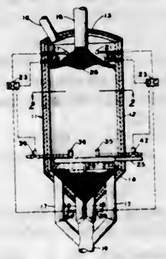
2,752,230
CRYSTAL PURIFICATION APPARATUS
Robert A. Findlay, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Original application July 28, 1950, Serial No. 176,505. Divided and this application July 7, 1952, Serial No. 297,542
5 Claims. (Cl. 23—273)



1. Apparatus for the purification of discrete organic crystals containing occluded impurities comprising in combination an upright elongated closed cylinder; heating means communicating with the lower end of said cylinder adapted for melting and maintaining a melt of crystals

therein; a reciprocable finely-perforate, liquid-pervious, crystal-impervious, close-fitting piston in the upper end of said cylinder adapted for compressing crystals from a slurry into the lower end of said cylinder while permitting liquid to pass through the piston; a feed line opening into said cylinder at a point below said piston at the end of the compression stroke; a liquid-level controller communicating with a valve in said feed line and with an area of said cylinder intermediate the extreme piston positions; a liquid take-off line opening into the upper section of said cylinder above said piston at the end of the upstroke; a vapor take-off line opening into said cylinder at a level just above the liquid level control level; a pressure control valve in said liquid take-off line; a flow control valve in said vapor take-off line; a temperature control element in communication with said flow control valve and with the interior of said cylinder just below the level of said liquid control level; and a liquid effluent line opening into the lower end of said cylinder.

2,752,231
MEANS FOR CONVERTING HYDROCARBONS
Louis C. Bearer, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application July 20, 1951, Serial No. 237,714
14 Claims. (Cl. 23—284)



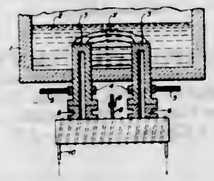
1. An improved pebble heat exchange chamber comprising in combination a closed upright shell; at least one pebble inlet conduit extending downwardly into the closed upper end of said shell and one said inlet conduit extending into the axial portion of said shell; at least one gaseous effluent conduit extending from the closed upper end of said shell; at least one pebble outlet conduit extending downwardly from the closed lower end of said shell and one said pebble outlet conduit extending downwardly from the axial portion of said shell; a first plurality of gas variable sensing members disposed in the upper portion of said shell and disposed about the peripheral portion of the chamber formed within said shell; a second plurality of similar gas variable sensing members disposed in the upper portion of said shell and disposed intermediae the axial and peripheral portions of the chamber formed within said shell, each said second sensing member being paired with a said first sensing member and one member of each pair being at a different level than the other member of that pair; differential controller means connected to each pair of said first and second gas variable sensing members; at least one first constant feed inlet means disposed in and around the lower and peripheral portion of said shell; a first feed inlet conduit extending into said shell and connected to said first feed inlet means; a plurality of second feed inlets disposed in and around the lower portion of said shell and intermediate said first feed inlet means and the axial portion of said shell, one of said second feed inlets being disposed below each pair of sensing members; second feed inlet conduits extending into said shell and connected to individual said second feed inlets; and a flow control valve in each said second feed inlet conduit and operatively connected to the differential controller which is connected to a pair of sensing members in a vertical section above the second feed inlet means and which feed inlet is connected to respective said flow control valves.

2,752,232
PRODUCTION OF SYNTHESIS GAS
John Henry Arnold, Summit, N. J., assignor to Hydrocarbon Research, Inc., New York, N. Y., a corporation of New Jersey
Application August 25, 1951, Serial No. 243,636
4 Claims. (Cl. 48—196)



1. In a process for the partial combustion of a hydrocarbon wherein the hydrocarbon in gaseous form and an oxygen-containing gas are introduced as separate streams into a reaction zone into admixture with one another to produce a product gas comprising carbon monoxide and hydrogen substantially completely free from uncombined carbon, the improvement which comprises introducing product gas into said zone to form a stream substantially surrounding said hydrocarbon and oxygen-containing gas.

2,752,233
METHOD FOR EXTRACTING SIMPLE ELEMENTS FROM FUSIBLE MATERIALS CONTAINING THEM
Ivan Peyches, Paris, France, assignor to Societe Anonyme des Manufactures des Glaces et Produits Chimiques de St. Gobain, Chauny & Cirey, Paris, France
Application July 14, 1954, Serial No. 443,349
Claims priority, application France March 8, 1948
6 Claims. (Cl. 75—10)

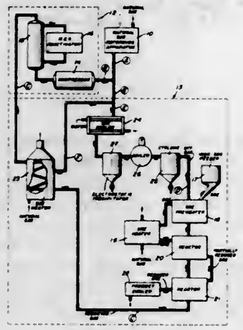


1. The method of extracting pure elements of the metal and metalloid class and of the type of arsenic, antimony, beryllium, cadmium and magnesium from poor gangues comprising molten metal silicates that comprises fusing and reducing the silicates and vaporizing the released metal in a closed furnace by means of electrodes which pass heating current through the molten silicates, said electrodes being porous, hollow reducing agents, having pores on the order of 5–50 microns, and establishing a differential pressure between the inside and outside of the electrodes tending to draw the reduced metal into the hollows of the electrodes, and condensing the reduced metal after it is drawn from the bath.

2,752,234
PROCESS FOR CONTINUOUS GASEOUS REDUCTION OF IRON ORE IN A FLUIDIZED BED SYSTEM
Earl H. Shipley, Homewood Township, Cook County, Ill., assignor to United States Steel Corporation, a corporation of New Jersey
Application July 7, 1955, Serial No. 520,427
3 Claims. (Cl. 75—26)

1. A continuous direct reduction process for iron ore comprising feeding iron ore of relatively fine size successively to a preheater, a heater and a reactor, heating a reducing gas whose reducing constitutents consist es-

sentially of hydrogen and carbon monoxide to about 1500 to 1700 F., introducing ascending currents of the heated reducing gas to the reactor to reduce the ore to metallic iron, introducing ascending currents of off-gas from the reactor to the preheater to preheat the ore to about 700 F., introducing ascending gas currents to the heater and burning fuel therein to heat the ore to about 1600 to 1800 F., said ascending currents maintaining ore in the re-



actor, heater and preheater as fluidized beds, cooling the off-gas from the preheater to about 100 F., continuously withdrawing a portion of this off-gas to limit nitrogen build up, continuously adding fresh reducing gas to the remaining off-gas to replace the portion withdrawn and consumed by reduction, regenerating the combined remaining off-gas and fresh reducing gas to eliminate carbon dioxide, re-using the regenerated gas in the reduction process, and recovering a metallic iron product from the reactor.

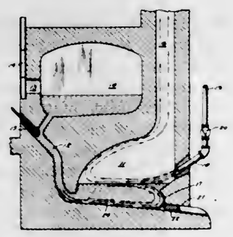
2,752,235

METHOD AND APPARATUS FOR MAKING STEEL

James P. Burke, Poland, Ohio, assignor to Ethel M. Burke, Poland, Ohio

Application May 27, 1952, Serial No. 290,301

7 Claims. (Cl. 75—60)



1. A metallurgical furnace for introducing oxygen into molten metal, the said furnace including a retort, an inlet orifice in said retort in one side thereof adjacent the bottom thereof, the wall of the retort opposite to the inlet orifice being curved upwardly and inwardly with respect to the bottom wall of the retort, a flue in communication with said retort and means for introducing oxygen into said retort at a point above the said curved wall whereby metal introduced into the retort through the said inlet will flow across the bottom thereof in one direction and be directed by the said curved wall in an opposite direction and across the top of the inflowing metal so that all of the metal introduced progressively flows across the top of a pool formed in the retort and is subjected to the said oxygen.

2,752,236

METHOD OF RECOVERING TIN FROM TIN BEARING MATERIALS

Lyall J. Lichty, Ottawa, Ontario, Canada, assignor to Quebec Metallurgical Industries Limited, Toronto, Ontario, Canada, a company of Canada

No Drawing. Application September 13, 1952, Serial No. 309,548

3 Claims. (Cl. 75—85)

1. The method for obtaining a high recovery of tin from materials containing not more than about 20 per cent of tin and which are essentially oxygen compounds of tin, iron, silicon, aluminum, calcium and magnesium and in which the ratio of the combined amount by weight of lime, alumina, magnesia and iron oxide to silica is greater than one and not greater than about 5 and the ratio of iron to tin is not less than about 1.5 and not greater than about 12 which comprises melting a finely divided mixture comprising essentially said material and a reducing agent which comprises essentially silicon, recovering from the reaction mass the major portion of the tin in said material as an alloy containing substantially equal amounts by weight of tin and iron, and controlling the composition of said mixture to produce a slag in which the ratio of the weights of basic components to acidic components is greater than one, the amount of reducing agent used being at least equal to the amount theoretically required to reduce to metal all the iron oxide in said material and being not more than about the amount theoretically required to reduce to metal the combined amounts of iron oxide and tin oxide in said material when the iron oxide and tin oxide are computed as ferrous oxide and stannic oxide.

2,752,237

SILVER POWDER AND METHOD FOR PRODUCING SAME

Oliver A. Short, Metuchen, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application June 13, 1955, Serial No. 515,239

10 Claims. (Cl. 75—118)

1. A precipitated silver powder having an apparent density of 2 to 5 grams per cc.

2. In a process for the preparation of precipitated silver the step which comprises adding to an aqueous silver nitrate solution containing between 550 and 940 grams per liter of silver (calculated as metallic silver) and between 1.0 and 35 grams per liter of the residual nitric acid, such a quantity of an alkali metal salt taken from the group consisting of sodium and potassium carbonates, bicarbonates and hydroxides in excess of that which will precipitate substantially all of the silver from said solution and will react with substantially all of the nitric acid as will constitute the alkaline equivalence of between 0.5% and 25% by weight of said silver content of sodium carbonate.

2,752,238

STRAIGHT CHROME STAINLESS STEEL PRESSURE VESSEL

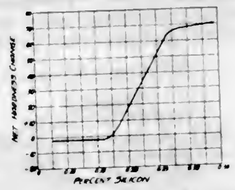
Carl S. Walton, Sewickley, Pa., assignor to United States Steel Corporation, a corporation of New Jersey

Application October 1, 1952, Serial No. 312,511

3 Claims. (Cl. 75—126)

1. A pressure vessel of the type subjected in use to prolonged heating in the temperature range of 1000 to 1300° F. formed of ferritic straight chromium stainless steel containing between .03 and .35% carbon, 24 to 30% chromium, 1.00% maximum manganese, and less than

.17% silicon, said pressure vessel being characterized by substantially complete freedom from sigma phase embrit-



tlement after being heated for 10,000 hours in the temperature range of 1000 to 1300° F.

2,752,239

ALUMINUM BASE BEARING

Alfred W. Schluchter, Dearborn, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

No Drawing. Application December 27, 1952, Serial No. 328,265

8 Claims. (Cl. 75—148)

1. A bearing formed of an alloy consisting of approximately 0.2% to 10% silicon, 0.1% to 3% lead, 0.1% to 0.8% chromium, and the balance substantially all aluminum.

2,752,240

ALUMINUM BASE ALLOY BEARING

Alfred W. Schluchter, Dearborn, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

No Drawing. Application December 27, 1952, Serial No. 328,266

7 Claims. (Cl. 75—148)

1. A bearing formed of an alloy consisting essentially of approximately 0.2% to 10% silicon, 0.1% to 5% bismuth, 0.1% to 0.8% chromium, and the balance substantially all aluminum.

2,752,241

COPPER BASE NICKEL, ANTIMONY, LEAD BEARING ALLOY

Walter V. Berry, Pittsburgh, Pa., assignor to Berry Metal Company, Reno, Nev., a corporation of Nevada

Application July 9, 1952, Serial No. 297,933

10 Claims. (Cl. 75—159)



1. A copper base alloy consisting essentially of 55% to 85% copper, ½% to 10% nickel, 3% to 15% antimony, 1% to 35% lead, and a trace (0.001%) to 3% phosphorus, said alloy containing inter-metallic compounds of nickel, copper, antimony and phosphorus, which compounds are characterized by their hardness.

2,752,242

COPPER-NICKEL-TITANIUM ALLOY AND PROCESS FOR MAKING SAME

James C. Holzwarth, Royal Oak, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

No Drawing. Original application August 8, 1950, Serial No. 178,345, now Patent No. 2,720,459, dated October 11, 1955. Divided and this application October 7, 1952, Serial No. 313,580

6 Claims. (Cl. 75—159)

1. A copper base alloy consisting essentially of about 4% to 10% titanium, 8% to 40% nickel, and the balance substantially all copper, the proportion of titanium to the combined amounts of nickel and titanium being in the range between about 15% and 30%, a substantial proportion of said nickel and titanium being present in the form of a hard network of Ni_3Ti.

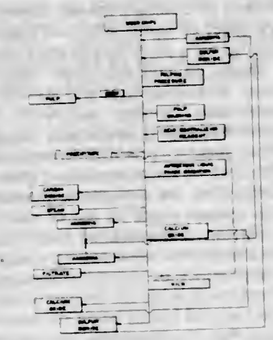
2,752,243

AMMONIA-SULFUR DIOXIDE COOKING ACID REGENERATION

Daniel M. Barton and Eugene W. Schoeffel, Kronenwetter, Wis., assignors to Sterling Drug Inc., New York, N. Y., a corporation of Delaware

Application June 24, 1954, Serial No. 439,068

5 Claims. (Cl. 92—2)



1. The process which includes: pulping wood chips with an ammonia-sulfur dioxide cooking liquor; separating a waste ammonia sulfite liquor; neutralizing said waste liquor with an acid neutralizing agent to a pH of at least 7.5; heating this neutralized liquor at a temperature above 150 degrees centigrade and under at least 200 pounds per square inch pressure in the presence of at least enough oxygen to convert all the carbon to carbon dioxide and all the hydrogen to steam; collecting the ammonia from the liquid effluent by treatment with an alkaline earth hydroxide; separating the alkaline earth precipitate thus-formed; and, treating additional wood chips with the collected ammonia.

2,752,244

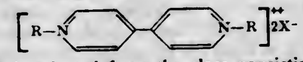
METHOD AND COMPOUNDS FOR DISCHARGING FILTER DYES IN PHOTOGRAPHIC FILM

Joseph A. Sprung, Binghamton, N. Y., assignor to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application February 23, 1955, Serial No. 490,117

13 Claims. (Cl. 95—2)

1. In the processing of light sensitive photographic materials having a light sensitive silver halide emulsion and a filter containing a non-diffusing azo filter dyestuff by exposing and developing said light sensitive material and then indiscriminately discharging said dyestuff, the improvement which comprises effecting dye discharge by subjecting said developed material to the action of an aqueous alkaline discharge bath containing a strong reducing agent and as a catalyst a bipyridylium compound having the following constitution:

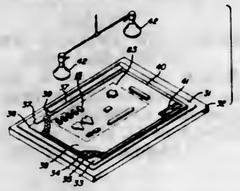


wherein R is selected from the class consisting of lower aliphatic radicals and aralkyl radicals, and X is an anion of an acid.

2,752,245
PHOTOGRAPHIC DRAWING METHOD

William R. Hough, Vincent F. Dugar, and Jay W. Picking, Cleveland, Ohio, assignors to The Reliance Electric & Engineering Company, a corporation of Ohio

Application November 21, 1950, Serial No. 196,918
4 Claims. (Cl. 95—5)



1. The method of making a master drawing comprising, placing a first sheet of photo-sensitized material with sensitized surface up on a support, placing a plurality of first transparent blocks on said first sheet, said blocks being smaller in area than said sheet and having opaque lines thereon, illuminating the sheet and blocks to expose the first photo-sensitized sheet, developing the image on said photo-sensitized sheet to produce a rough drawing, placing a second sheet of photo-sensitized material with the sensitized surface up on a support, placing said rough drawing as an opaque mask on top of said second sensitized sheet, placing a transparent mask on said rough drawing, said transparent mask having opaque lines thereon, placing a plurality of second transparent blocks on said transparent mask using the images of said first blocks as a guide, said second blocks being substantially identical in shape to said first blocks and having opaque lines thereon, removing said rough drawing, illuminating the remaining sheets and second blocks to expose said second photo-sensitized sheet, developing the image on said second photo-sensitized sheet to produce a sheet having photographically developed images thereon, and connecting said images by producing lines on said last-mentioned sheet to complete said master drawing.

2,752,246
PROCESS OF PREPARING A LIGHT SENSITIVE SILVER HALIDE EMULSION

Clay Weaver, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application June 16, 1953,
Serial No. 362,151
18 Claims. (Cl. 95—7)

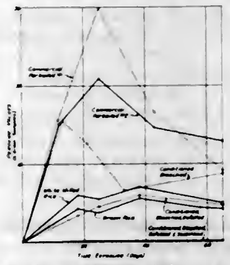
1. The process of preparing light-sensitive silver halides which comprises precipitating silver halides in an aqueous solution containing as the sole organic polymeric constituent from 1% to 30% of the weight of the silver halides of a nonionic surface-active dispersing agent containing at least 6 intralinear oxyalkylene groups of 2 to 3 carbon atoms linked through an atom taken from the group consisting of O, S and N atoms to a hydrophobic group including a hydrocarbon group of at least 8 carbon atoms containing an alkyl radical of at least 4 carbon atoms.

2,752,247
RICE PROCESSING

Ray C. Chandler, Palo Alto, Calif.

Application February 4, 1952, Serial No. 269,814
15 Claims. (Cl. 99—80)

1. The process for conditioning rice paddy comprising soaking rice paddy having an initial water content of about 14% in water for from about 20 minutes at room temperature to about 5 minutes at 60° to 80° C. to wet the paddy, draining surplus water from the rice paddy and permitting the so wet rice paddy to stand at a normal atmospheric temperature for at least about twelve hours to establish a substantially uniform distribution of moisture through the rice paddy and increase the moisture content to the range between 25% and 40%.



2,752,248
PREPARATION OF EGG WHITE ADDITIVES

Philip Blick, Chicago, and Ervin W. Hopkins, Hinsdale, Ill., assignors to Armour and Company, Chicago, Ill., a corporation of Illinois

No Drawing. Application May 6, 1952,
Serial No. 286,422
7 Claims. (Cl. 99—113)

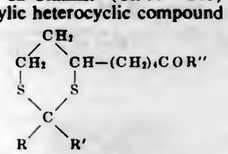
1. The process for preparing an egg white additive, which comprises treating liquid egg whites with between about 1 to 3% by weight of sodium hydroxide to bring about the gelation of said egg whites, liquefying the gel thus obtained by heating it at a temperature between 30 to 50° C., and adding a sufficient amount of an edible acid to the liquefied product to restore it to about the normal pH of egg whites.

2,752,249
SUBSTITUTED 1,3-DITHIANYL PENTANOIC ACIDS

George H. Latham, Forwood, Del., Charles W. Todd, Westtown, Pa., and Winston J. Wayne, Centerville, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application October 6, 1953,
Serial No. 384,512
12 Claims. (Cl. 99—163)

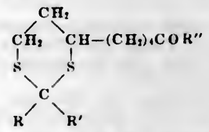
1. A carboxylic heterocyclic compound of the formula



wherein R″ is selected from the class consisting of the carboxylic hydroxyl group and groups hydrolyzable to such hydroxyl group and R and R′ when taken separately are selected from the class consisting of hydrogen and monovalent hydrocarbon radicals of not more than eight carbons and when taken together form a divalent hydrocarbon radical of not more than eight carbons.

7. Process wherein a member of the class consisting of 6,8-dimercaptooctanoic acid and esters thereof is reacted with an oxo compound whereby a member of the class consisting of 5-(1,3-dithiane-4-yl)pentanoic acid and esters thereof is obtained.

8. An edible glyceride containing a minor amount, effective to repress the rancidification of said edible glyceride, of a 5-(1,3-dithiane-4-yl)pentanoic acid compound of the formula



wherein R″ is selected from the class consisting of the carboxylic hydroxyl group and groups hydrolyzable to such hydroxyl group and R and R′ when taken separately are selected from the class consisting of hydrogen and monovalent hydrocarbon radicals of not more than eight carbons and when taken together form a divalent hydrocarbon radical of not more than eight carbons.

2,752,250
COATING FRUIT

Morris Kasser, Roseville, Calif.

Application April 17, 1952, Serial No. 282,765
3 Claims. (Cl. 99—168)

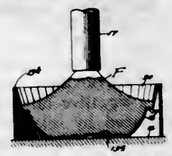


1. In a process of applying a shiny sealing coating to fruit, the steps of coating the surface of said fruit with an oily material capable of producing luster, subjecting said coated surface to a spray of hot water until a selected trace of said material is left on said surface, and forcing said trace of material into the crevices and pores of said surface.

2,752,251
SOFT PLASTIC FOOD PACKAGE

Leo Peters, Evanston, Ill.

Application June 29, 1953, Serial No. 364,799
4 Claims. (Cl. 99—171)



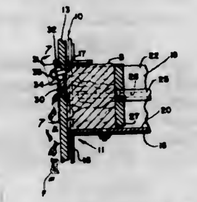
1. In a soft plastic food package, an outer carton having a flat bottom panel, a support received within said carton and providing a supporting edge portion surrounding an opening therein, a pocket of thin, flexible thermoplastic film having a peripheral portion about the mouth thereof in contact with the supporting edge of said support and being steadied thereby with the rest of said pocket being disposed below said supporting edge, said pocket also having a generally flat portion at the bottom thereof aligned with the flat bottom of said carton and supported thereby, and a soft plastic food body within said pocket with the weight of said food body supported jointly by the flat bottom of said carton and the supporting edge of said support, the walls of said pocket including the bottom portion thereof being provided with indented ornamental designs, and the design in said bottom portion having a plurality of spaced points in all directions across said design in contact with the bottom of said carton.

2,752,252
METHOD OF PRODUCING A FROZEN MEAT PRODUCT

Howard M. Condon, Akron, Ohio, assignor to Grand Duchess Steaks, Inc., Akron, Ohio, a corporation of Ohio

Application September 11, 1951, Serial No. 246,125
6 Claims. (Cl. 99—194)

1. A process of treating meat which comprises the steps of fast freezing a block of raw meat at a temperature range of 0° F. to —40° F. to be in substantially hard frozen state throughout, tempering the hard frozen block to a temperature between 0° F. and 25° F., slicing from the tempered block relatively thin flakes of meat, tempering the flakes to be within a temperature range of 25° F. to 32° F., compressing a multiplicity of the tempered flakes into a compact integrated mass in which the softened flakes are thereby substantially impalpable in the mass, and freezing the compacted mass to hardened state throughout.



2,752,253
PREPARATION OF CONCENTRATED PUREES

William F. Talburt, Berkeley, and Myron J. Powers, Lafayette, Calif., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application November 3, 1953,
Serial No. 390,099
1 Claim. (Cl. 99—204)
(Granted under Title 35, U. S. Code (1952), sec. 266)

A method of preparing and preserving a concentrated fruit puree which comprises subjecting non-sulphited, whole, skin-intact fruit to partial dehydration with the application of heat, until its solids content is from about 20% to about 50%, pulping the hot, partially dehydrated fruit to produce a hot, nonsulphited, concentrated puree, and subjecting the puree to a preservation treatment.

2,752,254
HECTOGRAPH BLACK

Walter G. Drautz, Glenmont, N. Y., assignor to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application April 29, 1953,
Serial No. 352,020
2 Claims. (Cl. 106—14.5)

1. A hectograph dye composition produced by mixing, calculated on a dry weight basis, about 35 to 45 parts of Crystal Violet, 40 to 45 parts of Chrysoidine, and 15 to 20 parts of Rhoduline Blue, in water, in proportions of about 80 to 200 parts by weight of water for each 100 parts of said dyestuff, and then drying the resulting suspension to a moisture content of no more than about 2%.

2,752,255
CRYSTAL VIOLET COMPOSITION

Wallace G. Clarke, Rensselaer, and Walter G. Drautz, Glenmont, N. Y.

No Drawing. Application April 29, 1953,
Serial No. 352,019
8 Claims. (Cl. 106—14.5)

1. A process for the production of a hectograph dye mixture containing Crystal Violet comprising applying a layer of an aqueous dispersion containing about 40 to 80% of solids, at least 30% of which is Crystal Violet, to a moving surface heated sufficiently to reduce the moisture content of the dispersion to less than about 2% within a period of about 5 to 30 seconds, and within such period, removing the dried product from said surface as a powder having a moisture content of less than about 2%.

2,752,256
TIRE COATING LIQUID

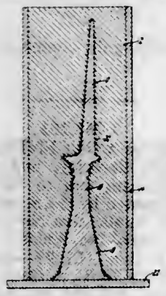
Alexander H. Hargis, Yakima, Wash.

No Drawing. Application October 16, 1953,
Serial No. 386,651
3 Claims. (Cl. 106—36)

1. A liquid composition for coating vehicle tires to increase the traction thereof on ice and snow consisting

of by volume, 15–35% of methyl alcohol, 7% sodium hypochlorite, .75% sodium chloride and 57.25–77.25% water.

2,752,257
INVESTMENT MOLDING
James P. Bradley and Robert R. Dohrmann, Bedford, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 15, 1952, Serial No. 320,736
3 Claims. (Cl. 106—38.22)



1. A dip coat for application to a destructible pattern to be invested in a refractory mold, said dip coat consisting essentially, by weight, of approximately 15% to 30% of an air-setting silicate cement, 35% to 70% silica flour, 15% to 35% water, sodium silicate not in excess of 7%, 0.1% to 0.3% dry wetting agent, 0.1% to 1% octyl alcohol, glycerine not in excess of 2%, 0.1% to 0.4% animal gelatine, and an acid not in excess of 0.3%.

2,752,258
SILICON NITRIDE-BONDED SILICON CARBIDE REFRACTORIES
John P. Swentzel, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a corporation of Delaware
No Drawing. Application March 2, 1955, Serial No. 491,781
4 Claims. (Cl. 106—44)

1. A bonded silicon carbide article consisting essentially of granular silicon carbide and a silicon nitride bond in which substantially all the silicon of the bond is combined with nitrogen as silicon nitride having the chemical formula Si_3N_4, said article having a minimum modulus of rupture at 1350° C. of 2500 pounds per square inch, and being resistant to oxidation and heat shock.

2,752,259
MODIFIED HIGH ZIRCON REFRACTORY
Ralph L. Cook, Champaign, Ill., assignor to The University of Illinois Foundation, a non-profit corporation of Illinois
No Drawing. Application August 4, 1951, Serial No. 240,433
5 Claims. (Cl. 106—57)

1. A refractory having a porosity of from 0.5 to 3%, a firing temperature of approximately 2600–2900° F. and about 70% zircon, 15% clay and 15% of an alkaline earth zirconium silicate.

2,752,260
WATER PROOFING AND STABILISING OF SOIL-CEMENT BRICKS AND MIXTURES
Stanley Wallace Hawkins, Northwich, and Winifred Jane Levy, Sandiway, England, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain
No Drawing. Application September 12, 1952, Serial No. 309,376
Claims priority, application Great Britain September 14, 1951
10 Claims. (Cl. 106—90)

9. A waterproofed and stabilized compacted mixture of a material selected from the group consisting of moist soil and sand together with hydraulic cement containing from 1% to 10% by weight of the latter and between 0.05% and 1% by weight of polymethine coloring matters having the general formula:

$$(ArNH.CH{:}CH.CH{:}C(OH).CH{:}NHAr)^{+}X^{-}$$

where X^- is the anion of a strong acid and Ar is an aryl group of the benzene series free from sulfonic groups.

2,752,261
HYDRAULIC BINDER
Pierre André Jean Dournaud, Toulouse, France
Application December 15, 1951, Serial No. 261,845
Claims priority, application France December 18, 1950
8 Claims. (Cl. 106—117)

3. A water setting cement composition formed by a mixture of pozzolana and of basic water granulated blast furnace slag wherein the proportions of pozzolana and of blast furnace slag are selected to neutralize the acidity of pozzolana, said mixture further comprising calcium sulphate and calcium chloride each in a proportion from 1% to 3% to prevent the formation of aluminic and ferro-aluminic gels respectively.

2,752,262
LINOLEUM CEMENTS CONTAINING TALL OIL PARTIAL ESTERS
Lawrence H. Dunlap, Lancaster Township, Lancaster County, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a corporation of Pennsylvania
No Drawing. Application December 27, 1950, Serial No. 203,017
15 Claims. (Cl. 106—123)

1. A linoleum cement obtained by oxidizing by agitating in air at a temperature between about 160° F. and 240° F. a mixture containing a siccative fatty oil and a partially esterified tall oil produced by selective esterification of only the fatty acid content of tall oil with a polyhydric alcohol containing 3–5 carbon atoms.

2,752,263
ADHESIVE COMPOSITION
Stanley W. Pierce, Glen Ellyn, Ill., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
No Drawing. Application March 3, 1952, Serial No. 274,674
4 Claims. (Cl. 106—230)

1. A laminating adhesive composition for cellulosic material comprising from about 16 to 17 per cent by weight of paraffin wax from about 17 to 19 per cent by weight of microcrystalline wax, from about 31 to 33.5 per cent by weight of asphalt, and from about 31 to 32 per cent by weight of a glycerol ester of a material selected from the class consisting of rosin and hydrogenated rosin, said percentages being based on the weight of the finished adhesive.

2,752,264
ASPHALTENE AND DRYING OIL COMPOSITIONS
Marion W. Pickell, Oklahoma City, Okla., assignor to Kerr-McGee Oil Industries, Inc., a corporation of Delaware
No Drawing. Application February 3, 1953, Serial No. 334,969
10 Claims. (Cl. 106—248)

1. A protective and decorating coating composition comprising a fatty drying oil and a bituminous material which exhibits substantial freedom from solvent gelling, the bituminous material consisting of asphaltenes having a needle penetration hardness at 77° F. of substantially zero.

2,752,265
METHOD OF PRODUCING A POROUS METAL COAT ON A COMPOSITE
Marshall G. Whitfield, Garden City, and Victor Sheshunoff, Jericho, N. Y., assignors to Whitfield & Sheshunoff, Incorporated, Garden City, N. Y., a corporation of New York
Application July 24, 1951, Serial No. 238,278
1 Claim. (Cl. 117—65)



In the art of producing an aluminum coating on the surface of a ferrous base metal wherein the aluminum coating is bonded to said article by an intermediate layer of an aluminum-iron alloy and a line of dissolved gases is formed in said aluminum coating close to said base metal and remote from the free surface of said coating, the improvement of controlling and producing a uniform degree of porosity in the free surface of said aluminum coating for receivably absorbing and retaining a lubricant therein without affecting the bonding strength of said intermediate layer, said improvement comprising dipping said ferrous article into a bath of gas-occluded aluminum for a sufficient time to produce said intermediate layer of a thickness between 2 and 7 mils, and heat treating said coated base metal at a temperature between 1700° F. and 1900° F. for a period between 35 minutes and 2 hours whereby the line of dissolved gases migrates to and produces a uniform degree of porosity in the free surface of said coating.

2,752,266
METHOD OF PRODUCING NON-BLOCKING, MOISTUREPROOF, HEAT-SEALABLE REGENERATED CELLULOSE FILM
Charles H. Hofrichter, Jr., Madison, and Preston M. Kempmeyer, Guilford, Conn., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia
No Drawing. Application April 2, 1953, Serial No. 346,523
5 Claims. (Cl. 117—76)

1. A method of preventing the blocking of superimposed layers of anchored non-fibrous hydrophilic cellulose film comprising applying to the uncoated film a coating of aqueous thermosetting resin solution, and promptly thereafter and while the film is still wet with said resin solution, applying an aqueous thermoplastic resin composition that provides a moistureproof, heat-sealable top coat to the film, and drying the coated film.

2,752,267
COATING COMPOSITIONS AND METHOD OF COATING
Norman T. Shideler, Pittsburgh, Pa., assignor to Pittsburgh Coke & Chemical Company, Pittsburgh, Pa., a corporation of Pennsylvania
No Drawing. Application June 29, 1953, Serial No. 364,921
11 Claims. (Cl. 117—79)

9. In the art of coating metals with hot coal tar enamel by a method including the steps of first applying a primer to the metal, drying said primer and thereafter applying the hot coal tar enamel to the primed metal, the improvement which comprises utilizing as the primer, a composition comprising chlorinated rubber, heavy creosote and a volatile solvent for said chlorinated rubber and heavy creosote.

2,752,268
PROCESS OF MAKING ALUMINUM COATED FERROUS BODIES
Marshall G. Whitfield, Garden City, and Victor Sheshunoff, Jericho, N. Y., assignors to Whitfield & Sheshunoff, Incorporated, Garden City, N. Y., a corporation of New York
No Drawing. Application August 4, 1951, Serial No. 240,447
3 Claims. (Cl. 117—114)

1. In the process of bonding a coating of aluminum to a plain carbon steel base by dipping said plain carbon steel base into a bath of molten aluminum to form a coating of aluminum thereon and a ferro-aluminum bonding alloy at the interface between said plain carbon steel base and said aluminum coating, the improvement comprising initially alloying in said plain carbon steel base about 1 per cent of a metal selected from the group consisting of molybdenum and tungsten, immersing the resulting alloyed body into a bath of molten aluminum maintained at a temperature not above about 1350° F. for a period to form the desired thickness of said coating, said bonding alloy being simultaneously formed and automatically controlled to a thickness not in excess of 0.6 mil, irrespective of the time of immersion in said molten bath.

2,752,269
TREATMENT OF TEXTILE MATERIALS
Fred E. Condo, El Cerrito, and Carl W. Schroeder, Berkeley, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware
No Drawing. Application December 1, 1951, Serial No. 259,504
13 Claims. (Cl. 117—139.4)

1. A process for producing crease resistant and wrinkle resistant textile fabrics containing substantially all cellulosic material of the group consisting of cotton and rayon having a soft feel and improved resistance to washing and low chlorine retention which comprises impregnating the textile fabric with a water-alcohol solution containing a saturated polyglycidyl ether of a polyhydric alcohol having an epoxy equivalency greater than 1.0 and a molecular weight between 300 and 900 and an acid curing agent, drying the composition for a short period, and then heating the composition at a temperature between 50° C. and 200 °C. to cure the polyepoxide within the fibers of the said fabric.

2,752,270
PROCESS OF HYDROLYZING WOOD IN PREPARING CRYSTALLINE GLUCOSE
Hugo Specht, Mannheim-Rheinau, Germany, assignor to Deutsche Bergin-Aktiengesellschaft, Mannheim-Rheinau, Germany
No Drawing. Application January 5, 1954, Serial No. 402,401
Claims priority, application Germany January 31, 1949
4 Claims. (Cl. 127—37)

2. In the process of preparing crystalline glucose by prehydrolyzing a vegetable cellulosic material with a dilute mineral acid, separating the treated residue, hydrolyzing the residue with cold concentrated hydrochloric acid, distilling off the bulk of said concentrated hydrochloric acid, diluting the remaining syrup and heating the thus obtained sugar solution in a final hydrolysis step for the production of glucose, the improvement which comprises heating the cellulosic material in the prehydrolysis step with a member of the group consisting of dilute sulfuric acid and dilute hydrochloric acid at temperatures of about 120 to 140° C. until the monosaccharides contained in said cellulosic material have been substantially dissolved, and adjusting in said final hydrolysis step the sugar solution to a sugar concentration of about 10 to 15 per cent by weight, and to a hydrochloric acid concentration of about 0.4 to 1 per cent, and heating the solution

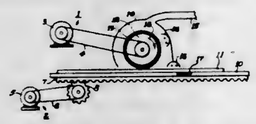
at a temperature of about 110–130° C. for a time sufficient to convert the polysaccharides contained in said solution substantially into glucose.

2,752,271

ELECTROSTATIC CLEANING OF XEROGRAPHIC PLATES

Lewis E. Walkup and Herbert E. Carlton, Jr., Columbus, Ohio, assignors, by mesne assignments, to The Haloid Company, Rochester, N. Y., a corporation of New York

Application October 5, 1955, Serial No. 538,697
3 Claims. (Cl. 134—1)



1. The method of cleaning a residual xerographic image comprising particulate material remaining after transfer of the developed image from the surface of the photoconductive insulating layer of a xerographic plate, said method comprising placing a negative electrostatic charge on the surface of the photoconductive insulating layer carrying the residual image to make the composite surface of the xerographic plate and the residual image electrostatically negative, and rapidly brushing the surface to remove the residual image.

2,752,272

REMOVAL OF COKE FROM TUBES

Philip S. Fay, Lyndhurst, Ohio, assignor to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application December 9, 1952, Serial No. 325,036
6 Claims. (Cl. 134—17)

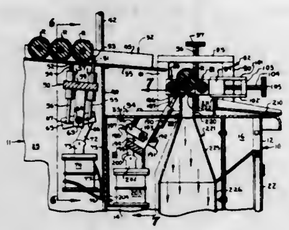
1. A method of removing coke deposits from the bore of a coked tube which comprises distributing an explosive material inside the tube substantially along the entire length of that portion of the tube from which the coke is to be removed and detonating said explosive material inside the bore of said tube whereby the coke is subjected to physical shock.

2,752,273

METHOD OF STRIPPING CLEARER ROLLS

George W. Mitchell, Lockhart, S. C.

Original application January 14, 1953, Serial No. 331,253. Divided and this application October 13, 1955, Serial No. 540,273
7 Claims. (Cl. 134—21)



1. That method of removing previously collected random fibers and the like from textile clearer rolls and the like which comprises rotating said clearer rolls in engagement with at least one rotatable stripper roll first in one direction and then in the other direction while subjecting the rolls to suction currents to thereby cause said fibers to be withdrawn from the rolls.

2,752,274

METHOD OF BRIGHT HEAT-TREATING METALS

Edward A. Fox, Pitcairn, and Samuel Damon, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application November 12, 1953, Serial No. 391,748
11 Claims. (Cl. 148—13.1)

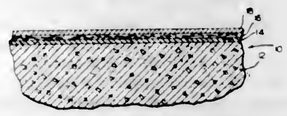
1. In the method of heat-treating oxidizable metals, the steps comprising coating the metal with a liquid silicone polymer having a ratio of from 1.8 to 3.0 organic groups per silicon atom, the organic groups being attached to the silicon atoms by carbon silicon linkages, and being selected from at least one of the group consisting of methyl, ethyl, and phenyl radicals, introducing the coated metal into a hot purging chamber having a non-oxidizing atmosphere flowing therethrough in such manner as to remove the silicone coating from the metal, and thereafter moving the metal into the heat-treating zone of a furnace.

2,752,275

SURFACE FINISHED MASONRY CONSTRUCTION UNIT

Betty L. Raskin and Allen W. Morton, Baltimore, Md., assignors, by mesne assignments, to Burns and Russell Company, Baltimore, Md., a corporation of Maryland

Application September 5, 1952, Serial No. 308,106
10 Claims. (Cl. 154—45.9)



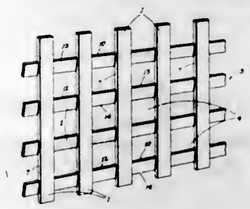
1. A masonry construction unit in the form of a member of the group consisting of cinder, slag, cement and concrete blocks, clay bricks and unglazed tiles having on at least one surface thereof an initial coating comprising a polyester resin and a filler therefor, a fibrous mat material bonded to said initial coating, and a finish coating on the outer surface of said fibrous material, said finish coating comprising a polyester resin.

2,752,276

PLASTIC WEB-SHEET AND METHOD OF MAKING SAME

Walter R. J. Woock, Lodi, Calif., assignor to Plastaket Manufacturing Company, Lodi, Calif., a limited partnership

Application December 11, 1950, Serial No. 200,149
3 Claims. (Cl. 154—46)



1. In an integral plastic web-sheet comprised of a plurality of bars and rails intersecting in lattice arrangement; each rail inclining downwardly and laterally outwardly from its upper longitudinal edge when the web-sheet is in upstanding position, and said upper longitudinal edge of each rail being disposed wholly between the faces of the adjacent bars; the lower and inner longitudinal corner of each rail being alined with the outer face of said adjacent bars.

2,752,277

CARPETING

William Rollin Keen, Media, Pa., assignor to Collins & Aikman Corporation, Philadelphia, Pa., a corporation of Delaware

Application July 14, 1954, Serial No. 443,383
1 Claim. (Cl. 154—49)



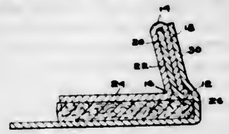
In carpeting or the like, a face layer of fabric having looped pile projecting from a base weave of interlaced warps and wefts; a heavy stuffer layer of latex bonded to the back of the base weave of the fabric and anchoring the pile in said base weave; said stuffing layer having coarse granules of cork embedded therein with some of the granules protruding from the back surface thereof; and a relatively thin layer of latex forming spot projections over the protruding cork granules to serve as an anti-slip surface for the carpeting.

2,752,278

SINGLE TAPE SEWING RIB FOR INSOLES

Victor A. Sherbrook, Upton, Mass.

Original application May 19, 1952, Serial No. 288,690, now Patent No. 2,713,692, dated July 26, 1955. Divided and this application October 14, 1954, Serial No. 462,228
4 Claims. (Cl. 154—53.6)



2. Sewing rib for insoles comprising relatively narrow tape longitudinally folded at least twice along spaced lines forming at least three layers, two of which have free edges, the free edge of one of said layers overlapping the fold forming the layer having the other free edge, the overlapping free edge comprising a fold forming a fourth layer tucked in between two layers, said fold forming a narrow sewing strip closely adjacent the remaining layer.

2,752,279

EMBOSSED LAMINATED FOAM RUBBER AND FABRIC MATERIAL AND METHOD OF MAKING SAME

Sterling W. Alderfer, Akron, Ohio, assignor, by mesne assignments, to The Kendall Company, Walpole, Mass., a corporation of Massachusetts

Application August 3, 1954, Serial No. 447,519
11 Claims. (Cl. 154—100)



1. The method of making a laminated embossed material having composite layers comprising the steps of flowing a mass of foamed latex onto a fabric sheeting carried on a moving belt, leveling off the mass on the belt to form a layer of uniform thickness, and applying atop the layer of foamed latex an additional layer of plastic material, gelling said foamed latex layer, softening said plastic layer, deeply embossing said plastic layer into said foamed layer at spaced locations to form a pattern, and vulcanizing the foamed latex layer.

2,752,280

PRINTER'S BLANKET AND METHOD OF MAKING SAME

Giles B. Cooke and Mordecai N. Timbs, Baltimore, Md., assignors to Crown Cork & Seal Company, Inc., Baltimore, Md., a corporation of New York

Application February 2, 1953, Serial No. 334,698
6 Claims. (Cl. 154—118)



4. A method of making a printer's blanket which comprises positioning a natural rubber layer over a base layer, the base layer having a larger surface area to thereby extend laterally beyond the marginal edges of said intermediate rubber layer, bonding said intermediate rubber layer to said base layer, positioning an outer protective layer of a composition which includes an olefin polysulfide reactive product over said natural rubber layer, said outer layer also having a larger surface area than the intermediate layer to thereby extend laterally beyond the marginal edges of said intermediate layer, and thereafter bonding the extended portions of said base layer and outer protective layer to thereby completely encase the natural rubber layer and protect the latter from the deleterious effects of printing ink solutions.

6. A printer's blanket comprising a resilient layer and an outer protective layer, said outer protective layer enclosing said resilient layer on one surface and having marginal walls enclosing the edges of said resilient layer, said resilient layer being formed of compounded natural rubber and said outer protective layer comprising synthetic rubber, carbon black, stearic acid, zinc peroxide and an olefin polysulfide reaction product.

2,752,281

IODINE DISSOLVED IN AQUEOUS SOLUTIONS OF MALEIC ANHYDRIDE-VINYL ETHER COPOLYMERS

Warren D. Niederhauser, Huntingdon Valley, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application June 1, 1953, Serial No. 358,975
5 Claims. (Cl. 167—17)

1. As a new composition, an aqueous solution containing iodine and a water-soluble copolymer of maleic anhydride and a vinyl ether having the formula

$$CH_2=CH—O—R$$

wherein R is a member of the class consisting of the methyl, ethyl, methoxyethyl, and ethoxyethyl groups, said copolymer being present in an amount from 5% by weight to saturation of the solution, said copolymer imparting to an aqueous 2% solution thereof a viscosity at 25° C. from 1.5 to 12 centipoises, and said iodine being present in an amount from 1% to 10% of the weight of said copolymer.

2,752,282

AGRICULTURAL FUNGICIDE

Albert A. Somerville, Carmel, N. Y., assignor to R. T. Vanderbilt Company, Inc., New York, N. Y., a corporation of New York

No Drawing. Application September 17, 1952, Serial No. 310,130
1 Claim. (Cl. 167—22)

An agricultural fungicide containing as active fungicidal ingredients about 99 per cent by weight of the ferric salt of a mixture of dimethyl dithiocarbamic acid and 2-mercaptobenzothiazole in the weight ratio of about 90:10 and about 1 per cent by weight of the zinc salt of said mixture, based upon the total weight of the two aforementioned salts.

2,752,283
PHOSPHORUS DERIVATIVES, PROCESS FOR THEIR PREPARATION AND COMPOSITIONS CONTAINING THEM

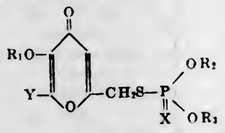
Jean Metivier, Arpajon, France, assignor to Societe des Usines Chimiques Rhone-Poulenc, Paris, France, a French body corporate

No Drawing. Application March 25, 1955, Serial No. 496,941

Claims priority, application Great Britain April 1, 1954

10 Claims. (Cl. 167—33)

10. Pesticidal compositions containing at least one compound of the general formula:



in which X is selected from oxygen and sulphur, Y is selected from hydrogen and chlorine, R_1 represents a member of the class consisting of hydrogen and alkyl groups containing at most four carbon atoms, and R_2 and R_3 each represent an alkyl group containing at most four carbon atoms, in association with a diluent.

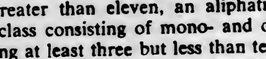
2,752,284
SPERMICIDAL COMPOSITION

Victor R. Berliner, North Branch, William C. Mende, Neshanik, and Heron O. Singher, Plainfield, N. J., assignors to Ortho Pharmaceutical Corporation, a corporation of New Jersey

No Drawing. Application September 27, 1952, Serial No. 311,954

6 Claims. (Cl. 167—58)

1. A spermicidal composition comprising in combination with a vehicle, a water-soluble alkylphenoxyethanol having the formula



in which R is an alkyl radical having at least seven but not more than nine carbon atoms and x is at least seven but not greater than eleven, an aliphatic acid selected from the class consisting of mono- and dibasic aliphatic acids having at least three but less than ten carbon atoms in a concentration such that at least 20 millimols per liter of undissociated acid are present in the formulation, an acid buffer system, in which the acid is selected from the class consisting of mono- and dibasic aliphatic acids having at least two but less than ten carbon atoms, that maintains the pH of the formulation within the range of from about four to about eight and one-half and a higher unsaturated fatty acid having at least ten carbon atoms.

2,752,285
PROCESS FOR THE PRODUCTION OF AT LEAST APPROXIMATELY NEUTRAL SOLUTIONS OF SUBSTITUTED XANTHINES

Helmut Weissenburger, Konstanz, and Ladislaus Szabo, Munich, Germany

No Drawing. Application October 6, 1951, Serial No. 250,186

Claims priority, application Germany October 9, 1950

15 Claims. (Cl. 167—67)

1. A process for the production of a stable solution of a substituted xanthine, which comprises dissolving in water a xanthine selected from the group consisting of theophylline, caffeine, theobromine, 8-chloro-theophylline, chloro-caffeine, chloro-theobromine, 1-monomethyl xanthine, 1.3-diethyl xanthine and 1.3-di-(hydroxyl)-ethyl xanthine and a soluble salt formed by the reaction of an acid selected from the group consisting of sulpho-hydroxy benzoic acids, sulpho-hydroxy-methyl benzoic acids, sulpho resorcylic acids, sulpho-hydroxy naphthoic acids, disulpho-hydroxy naphthoic acids, sulpho-dihydroxy naphthoic acids, and at least one base selected from the group consisting of sodium, calcium, ethylenediamine, papaverine, diethanolamine, ephedrine, lobeline, adrenaline, N-α-pyridyl-N-benzyl-N', dimethylethylenediamine, p-aminobenzoic-diethyl-aminoester, diethylaminoethanol, dimethylaminoethyl - benzhydryl-ether, hydroxy-ethylamine and N-dimethylaminoethyl-N-p-methoxybenzyl-α-amino-pyridine and adjusting the pH to between 5 and 7.5.

2,752,286
EXTRACTION OF INSULIN FROM PANCREAS TISSUE

Kristian Schultz and Lindson P. Anderson, Chicago, Ill., assignors to Armour and Company, Chicago, Ill., a corporation of Illinois

Application September 11, 1952, Serial No. 309,017

2 Claims. (Cl. 167—75)



1. In a process of extracting insulin from pancreas glands, the steps of suspending comminuted pancreas glandular tissues in an aqueous organic solvent for insulin to form a slurry, and passing the suspended tissues in said solvent through an impeller pump by means of said pump, said pump comprising a hollow casing providing a central inlet and a peripheral outlet, and a bladed impeller mounted for free rotation within said casing and arranged to propel material from said inlet to said outlet, said tissues being squeezed and stretched sufficiently within said pump to promote the extraction of the insulin therein while at the same time limiting the extent and duration of the said squeezing and stretching to prevent said tissues from being disintegrated into an emulsion, the bladed impeller of said pump being rotated at a speed of at least 450 revolutions per minute but below a speed at which the average diameter of the tissue particles discharged from said pump outlet approaches 20 microns.

2,752,287
TREATMENT OF PETROLEUM RESIDUES TO OBTAIN INCREASED YIELD OF GAS OIL IMPROVED DIESEL INDEX

Frederick William Bertram Porter and Roy Purdy Northcott, Sunbury-on-Thames, England, assignors to The British Petroleum Company Limited, a British corporation

No Drawing. Application March 18, 1953, Serial No. 343,234

Claims priority, application Great Britain March 20, 1952

1 Claim. (Cl. 196—24)

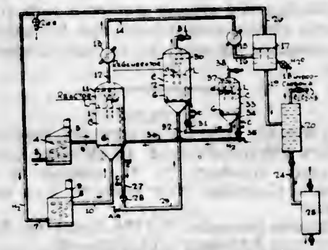
A process of treating a petroleum residue to obtain an increased yield of gas oil of satisfactory diesel index therefrom which comprises contacting the residue at a temperature within the range of about 750 to 800° F., and at a pressure of about 1,000 p. s. i. gauge, and at a space velocity of up to 2 v./v./hr. of the liquid feedstock, with a sulphur resistant hydrogenation catalyst consisting essentially of the oxides of cobalt and molybdenum on alumina, and in the presence of hydrogen, whereby organically combined sulphur is converted into hydrogen sulphide, and separating the hydrogen sulphide from the treated residue, recovering the hydrogen rich gas mixture from the treated residue and recycling same to the desulphurization zone at a rate of between 1,000 to 10,000 S. C. F./B., and fractionating the treated residue and recovering a gas oil fraction therefrom.

2,752,288
METHOD OF PRETREATING HYDROFORMING CATALYSTS

Alexis Voorhies, Jr., and Warren M. Smith, Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application June 21, 1952, Serial No. 294,842

8 Claims. (Cl. 196—50)



1. In the hydroforming of virgin naphthas containing sulfur in a continuous operation wherein a hydroforming catalyst, comprising molybdenum oxide carried on one of the class consisting of active alumina and zinc alumina spinel, in powdered form is maintained in the form of a fluidized bed in a reaction zone and also in a regeneration zone, between which zones the catalyst circulates as it is required to be withdrawn from the reaction zone, regenerated and returned to said reaction zone, further characterized in that both zones are maintained at super atmospheric pressure, and wherein, further, the catalyst acquires sulfur bodies as well as carbonaceous deposits during the reaction period, the improvement which comprises removing sulfur bodies from the regenerated catalyst by treating said regenerated catalyst with a gasiform material, in the form of a dense fluidized bed in a pretreating zone for a period of from about 1–60 minutes, at a pressure of the same order as to that existing in the reaction zone and the regeneration zone, said gasiform material containing free hydrogen existing at a partial pressure sufficiently low so as to cause removal of sulfur bodies from the said regenerated catalyst.

2,752,289
CONDITIONING CATALYSTS EMPLOYED IN THE REFORMING OF HYDROCARBONS

Vladimir Haensel, Hinsdale, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application January 27, 1950, Serial No. 140,943

6 Claims. (Cl. 196—50)

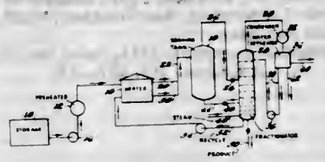
1. In the reforming of a hydrocarbon distillate containing chlorine in contact with a catalyst having dehydrogenating and hydrocracking activity, wherein chlorine from the distillate accumulates on the catalyst, whereby the hydrocracking activity of the catalyst is increased to an undesirable extent, the process which comprises discontinuing the contacting of the chlorine-containing distillate with said catalyst when the catalyst has accumulated an amount of chlorine causing excessive hydrocracking of the distillate, thereafter washing the catalyst with an aqueous solution of a compound having an anion convertible to an oxide and a cation selected from the group consisting of ammonium and aluminum, drying the washed catalyst, and subsequently resuming the contacting of hydrocarbon distillate with the thus treated catalyst.

2,752,290
PRODUCTION OF PITCH FROM PETROLEUM RESIDUES

Robert D. Beattie, Arlington, Mass., assignor to Godfrey L. Cabot, Inc., Boston, Mass., a corporation of Massachusetts

Application November 27, 1953, Serial No. 394,558

6 Claims. (Cl. 196—50)



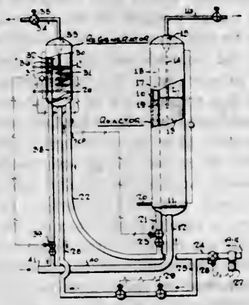
1. A process for producing pitch from petroleum which comprises heating a petroleum residual oil to above about 750° F., conducting the hot oil to a soaking zone, retaining the oil therein under superatmospheric pressure for a period of at least three hours, thereby converting the oil to the pitch and volatile by-products, conducting pitch and volatile by-products from said zone and recycling a portion of said pitch thereto at a ratio of recycle to product recovery volume of at least 0.4.

2,752,291
FLUID HYDROFORMING

Walter A. Rex, Westfield, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application June 2, 1952, Serial No. 291,150

1 Claim. (Cl. 196—50)



In a process for reforming hydrocarbons in contact with finely divided reforming catalysts in accordance with the fluidized solids technique wherein hydrocarbons and catalyst are continuously supplied to a reaction zone, reaction products and catalyst are continuously withdrawn from the reaction zone, the catalyst particles are regenerated in a separate regeneration zone, and recycled to the reaction zone, the improvement which comprises supplying catalyst and hydrocarbon feed to the reaction zone at a rate to establish a catalyst-to-oil ratio of between 0.5 and 1.5, discharging a stream of spent catalyst from the reaction zone into a transfer line for conveyance to the regeneration zone, adjusting the flow of air to the spent catalyst transfer line to raise the temperature of the spent catalyst at a point just prior to discharge into the regenerator, to substantially the same temperature as in the regenerator while burning a substantial portion but not all of the carbonaceous deposits from the catalyst in the transfer line, supplying the remainder of the air necessary for regeneration directly to the regeneration zone, thereafter maintaining a substantially constant rate of flow of air to said transfer line and directly to the regenerator and maintaining the temperature of the catalyst at said point substantially constant by increasing the flow of spent catalyst into the transfer line as the temperature

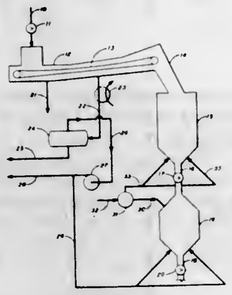
increases and decreasing the flow of spent catalyst into the transfer line as the temperature of the catalyst decreases at said point.

2,752,292

SHALE RETORTING PROCESS

John W. Scott, Jr., Berkeley, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware

Application August 31, 1951, Serial No. 244,620
2 Claims. (Cl. 202—19)



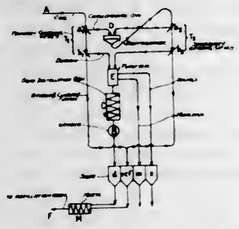
1. In a process for retorting shale by countercurrently contacting downwardly moving shale particles with hot gas in a retorting zone to decompose the organic constituents of the shale forming shale oil and shale gas, the improved method which comprises withdrawing vapors comprising normally liquid and normally gaseous products from the upper portion of the retorting zone, cooling the vapors to condense shale oil, withdrawing a minor proportion of the uncondensed gas as a product, reheating the major proportion of the uncondensed gas by contacting it with hot spent shale in a reheating zone, withdrawing reheated gas from the reheating zone and passing it into a combustion zone, introducing into the combustion zone a quantity of a free oxygen-containing gas having an oxygen content stoichiometrically sufficient to cause combustion of only a minor proportion of the reheated gas and burning a minor proportion of the reheated gas sufficient to raise the temperature of the mixture of combustion products and unburned gas to retorting temperature in the combustion zone, and passing the mixture of combustion products and unburned gas from the combustion zone into the retorting zone.

2,752,293

PROCESS FOR CARBONIZING COALS HAVING A HIGH VOLATILE MATTER CONTENT

Eugène M. Burstlein, Thionville, Moselle, France, assignor of one-half to Societe des Acieries de Longwy (Societe Anonyme), Paris, France, a company of France

Application October 28, 1950, Serial No. 192,678
Claims priority, application France November 14, 1949
4 Claims. (Cl. 202—25)



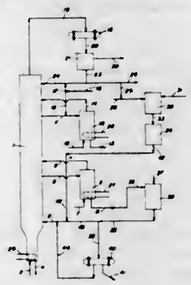
1. The process of manufacturing from badly coking coal containing a high content of volatile matter and carboniferous constituents in the form of free particles of durain, vitrain, clarain, fusain and conglomerates, a good metallurgical coke solely from said constituents comprising the steps of: (*a*) size-grading said coal to segregate the free particles of the durain from the vitrain, clarain, fusain and the conglomerates; (*b*) purifying said segregated durain to substantially eliminate tailings and middlings contained therein; (*c*) subjecting said purified durain to low temperature distillation to convert it to semi-coke; (*d*) grinding said semi-coke to a granulometric size of the magnitude of 1 mm.; (*e*) proportioning and mixing said ground semi-coke with at least said vitrain and clarain constituents; and (*f*) subjecting the mixture obtained by step (*e*) to high temperature distillation.

2,752,294

FRACTIONAL DISTILLATION OF DECOMPOSITION PRODUCTS OF DIARYLALKANES

Leon Lazare, Westbury, N. Y., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

Application December 7, 1955, Serial No. 551,667
5 Claims. (Cl. 202—40)



1. In a process for separating the components of a combined mixture comprising (*a*) the synthesis reaction products and (*b*) the catalytic decomposition reaction products of 1,1-diarylethane, said mixture containing as major constituents undecomposed diarylethane, a compound selected from the group consisting of mono- and di-alkyl nuclear-substituted styrene and a compound selected from the group consisting of mono- and di-alkyl-substituted benzene, the steps which comprise combining (*a*) and (*b*), deriving sufficient heat and steam from the reaction products of (*b*) to vaporize and act as diluent for said combined mixture and separating the mixture in a fractional distillation column by passing the vaporized mixture upwardly through the zones of said column; withdrawing the diarylethane as liquid from a lower zone, treating said liquid to volatilize material having a lower boiling point, recovering the diarylethane and returning said volatile material into the distillation column at substantially the point of original withdrawal, continuing the distillation, introducing a polymerization inhibitor into the liquid, and withdrawing said styrene compound as liquid from an intermediate zone of said column, treating said liquid to volatilize material having a lower boiling point, recovering said styrene compound and returning said volatile material into the distillation column at substantially the point of original withdrawal, withdrawing from the uppermost of said zones all of the steam present together with the vaporous aforementioned substituted benzene, condensing the material from the uppermost zone, separating said substituted benzene compound as liquid from the condensate, and returning a portion of this liquid substituted benzene to the uppermost of said zones as reflux, in sufficient amounts to avoid condensation of steam in said column.

2,752,295

AZEOTROPIC SEPARATION OF VINYLTOLUENE FROM ETHYLTOLUENE

William F. Yates and Pennell C. Kelly, Texas City, Tex., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application May 17, 1952, Serial No. 288,528
7 Claims. (Cl. 202—42)

1. In a process for the separation of vinyltoluene from a crude mixture containing vinyltoluene and ethyltoluene, the step which comprises adding diacetone alcohol to said mixture and subjecting the resulting mixture to distillation at a pressure below about 20 mm. Hg absolute and a temperature below about 100° C. in the presence of a polymerization inhibitor to remove the diacetone alcohol-ethyltoluene azeotrope formed.

2,752,296

FRACTIONAL DISTILLATION OF DECOMPOSITION PRODUCTS OF DIARYL ALKANES

Leon Lazare, Westbury, N. Y., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

Application August 26, 1954, Serial No. 452,413
17 Claims. (Cl. 202—46)



13. A process for treating a volatile organic aromatic material containing a mixture of 1,1-dixylylethane, dimethylstyrene and xylene having different boiling points in a fractional distillation column having a plurality of zones which comprises passing said material with sufficient steam to act as diluent and to volatilize said material into a fractional distillation column having a plurality of zones, passing the volatilized material upwardly through the zones of said column, withdrawing from a lower zone the 1,1-dixylylethane as liquid, treating said liquid to volatilize material having a lower boiling point, recovering the 1,1-dixylylethane and returning said volatile material into the distillation column at the point of original withdrawal, continuing the distillation in said column, withdrawing at an intermediate zone the dimethylstyrene as liquid, introducing sulfur as a polymerization inhibitor into the liquid, treating said liquid to volatilize material having a lower boiling point, recovering the dimethylstyrene containing sulfur as a polymerization inhibitor and returning said volatile material into the distillation column at the point of original withdrawal, withdrawing from the uppermost of said zones of the column all of the steam present together with the vaporous xylene, condensing the materials withdrawn from the uppermost of said zones, separating the xylene as liquid from said condensate and returning a portion of said xylene to the uppermost of said zones as reflux in sufficient amounts to avoid condensation of steam in the column.

2,752,297

METHOD OF REMOVING HEXACHLOROCYCLOPENTADIENE FROM IMPURITIES

Morton Kleiman, Chicago, Ill., assignor to Velsicol Chemical Corporation, a corporation of Illinois

No Drawing. Application March 8, 1952, Serial No. 275,657
3 Claims. (Cl. 202—57)

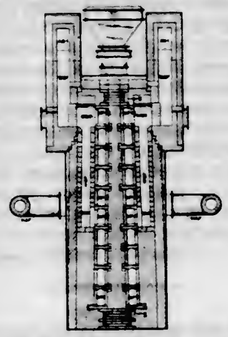
1. A method of removing hexachlorocyclopentadiene from its impurities in the crude product resulting from the chlorination of cyclopentadiene with an alkali metal hypochlorite at a temperature below about 50° C., said crude product containing fractions boiling above and below the boiling point of hexachlorocyclopentadiene, which consists in heating said crude product at a temperature above about 125° C. to convert said fraction boiling below hexachlorocyclopentadiene to material boiling above hexachlorocyclopentadiene, and then subjecting said modified crude product to simple vacuum distillation and recovering substantially pure hexachlorocyclopentadiene as the first substantial overhead fraction.

2,752,298

VERTICAL RETORT

Charles H. Hughes, Glen Ridge, N. J., assignor to Hughes By-Product Coke Oven Corporation, New York, N. Y., a corporation of New York

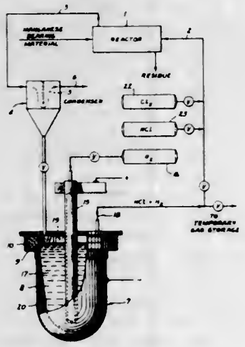
Application April 1, 1953, Serial No. 346,060
8 Claims. (Cl. 202—122)



1. Improved, continuously-operated vertical twin retorts adapted for the heat treatment of carbonaceous material at high temperatures required for calcining, charring, coking and for removing gases and volatiles from said carbonaceous material and capable of yielding controlled high temperatures within a range of about 1700° F. up to about 2400° F. to effect a desired high heat treatment of said carbonaceous materials for the production of char, coke, and calcined carbonaceous material, gases, volatiles and/or by-products which comprises twin, externally-heated vertical retorts in tandem having their narrow ends adjacent to each other and their wide sides in alignment with each other and adapted for high temperature heat treatment, said retorts having their feed ends at the top narrower than their discharge ends at the bottom to provide a taper to permit a free flow of the heat treated material downwardly in a vertical direction through the retort, a heating flue system common to said twin retorts made of silicon carbide and adapted for high conductivity of heat at high temperatures of the order of about 2000° F., said heating flue system constructed as a floating unit within the retorts and having horizontal flues externally and operatively associated with the wide sides thereof, means incorporated in said heating flue system and arranged for controlling the temperatures in each horizontal heating flue from the bottom to the top in such a manner as to insure substantially uniform transfer of heat rapidly and uniformly to carbonaceous material under treatment

within said retorts, interlocking shapes projecting from the outermost part of the heating flue system and so arranged to allow vertical and horizontal expansion without subjecting the heating flue system to failure by collapse or otherwise, back-up brickwork surrounding said twin retorts and said horizontal heating flue system and made of a refractory material capable of withstanding heat coming from said retorts when at high temperatures within a range of about 1700° F. to about 2400° F., interlocking shapes incorporated within said brickwork to interlock with the interlocking shapes of the heating flue system in such a manner as to leave a free space permitting free vertical and horizontal movement of the interlocking shapes due to differences in expansion and growth of the heating flue system and the back-up brickwork, a tubular recuperator directly connected to said heating flue system for removing the hot gases therefrom and for preheating air going to the horizontal flues of said heating flue system, means for controlling preheated air supplied by said tubular recuperator to each horizontal flue whereby the temperatures in each heating flue can be controlled from the lowest at the top of the retorts to the highest at the bottom thereof, a supply hopper connected to both of said twin retorts with a gas-tight seal for supplying said carbonaceous material thereto whereby the charging of the material into the hopper can be effected with selected short cycles proportioned not only to the discharge of heat-treated material but also to the continuous travel of the material through the retorts, a dry discharge system located at the bottom of the retorts and having a gas-tight connection thereto for controlling the downward flow of the material under treatment through said twin retorts without crushing the same, for lowering the temperature of the heat-treated material to a temperature where such material will not ignite when coming into contact with the atmosphere and for discharging the heat-treated material as a cooled finished product in a dry manner, and a dry-cooled receiving hopper operatively associated with said dry discharge system in a gas-tight manner whereby said cooled finished product can be discharged intermittently and whereby a marketable product having a selected quality and produced in a selected quantity is assured.

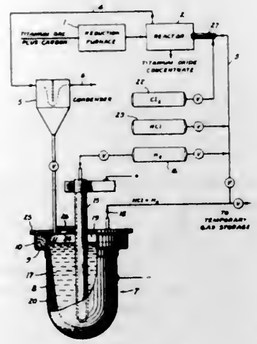
2,752,299
ELECTROLYTIC PRODUCTION OF MANGANESE AND FERROMANGANESE
Hugh S. Cooper, Shaker Heights, Ohio, assignor to Walter M. Weil, Cleveland, Ohio
Application January 8, 1952, Serial No. 265,395
18 Claims. (Cl. 204—10)



1. A process for recovering manganese values as anhydrous chloride from alloys and oxide ores containing manganese, iron, and other material, comprising contacting the material under anhydrous conditions in a reaction chamber at a temperature between about 315° C. and 700° C. with a chloridizing reagent consisting essentially of chlorine to convert at least a portion of the iron to ferric chloride and sublime the same, separating gaseous ferric chloride at it is formed, contacting the residue under anhydrous conditions in a reaction chamber at a temperature above about 800° C. with a chloridizing reagent consisting essentially of anhydrous hydrogen chloride to convert the maganese to manganous chloride and any remaining iron to ferrous chloride and to sublime the same, and removing and condensing the second sublimate under anhydrous conditions, active oxidizing gases and active reducing gases being excluded from the reaction chamber during each of the chloridizing reactions.

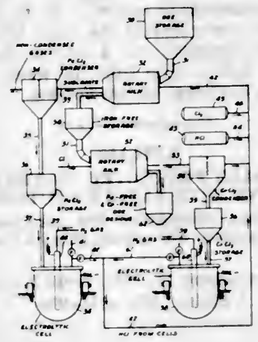
5. The process of claim 1 in which said second sublimate is dissolved in a fused alkali metal chloride bath in a closed electrolytic cell and is electrolyzed while diffusing hydrogen gas through the bath to deposit manganese and any iron present at the cathode and release chlorine at the anode, whereby anhydrous hydrogen chloride is formed in the bath by reaction of hydrogen and chlorine, and removing anhydrous hydrogen chloride from the cell as it is formed and returning it to the process for treating additional residue from the first chloridizing reaction.

2,752,300
BENEFICIATING TITANIUM OXIDE ORES
Hugh S. Cooper, Shaker Heights, Ohio, assignor to Walter M. Weil, Cleveland, Ohio
Application May 4, 1953, Serial No. 352,826
6 Claims. (Cl. 204—10)



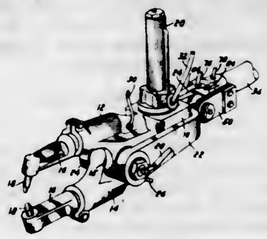
1. A process for producing substantially iron-free titanium dioxide concentrates from mineral material containing titanium and iron, at least the titanium content being in the form of oxide, as TiO_2, comprising contacting the mineral material with a stream of anhydrous chloridizing gas at a temperature in the range of about 600° to 1000° C. in the substantial absence of air until substantially all iron in said mineral material has been converted to an iron chloride sublimate, removing the sublimate to leave a substantially iron-free titanium oxide concentrate, condensing the sublimate under anhydrous conditions to produce substantially anhydrous iron chloride, electrolyzing the iron chloride in a fused bath vehicle consisting essentially of alkali metal chloride, in the presence of hydrogen gas diffused through the bath, to deposit iron powder and release chlorine for reaction with said hydrogen to form anhydrous hydrogen chloride, and withdrawing the hydrogen chloride so formed and using it to chloridize more of said mineral material.

2,752,301
RECOVERY OF CHROMIUM AND IRON VALUES FROM CHROMIUM-IRON ORES
Hugh S. Cooper, Shaker Heights, Ohio, assignor to Walter M. Weil, Cleveland, Ohio
Application March 7, 1951, Serial No. 214,247
22 Claims. (Cl. 204—10)



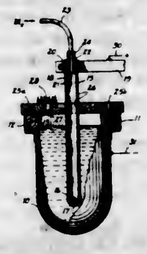
1. A process for beneficiating chromite to increase the chromium-to-iron ratio by selectively forming and subliming ferrous chloride, comprising contacting the ore in a chamber at a temperature above about 850° C. under anhydrous conditions with a gaseous reagent consisting essentially of dry hydrogen chloride, and removing gaseous ferrous chloride from said chamber as it is formed; free chlorine and active oxidizing gases and active reducing gases being excluded from said chamber during the reaction, and any free carbon in the chamber during the reaction being limited to an amount not exceeding one part to six parts by weight of any iron oxide left in the ore residue at the end of the reaction, whereby substantially the entire chromium content of the ore remains as oxide in the ore residue.

2,752,302
PROCESS OF TREATING ALUMINUM WORK PIECES
Paul Guy Magnuss, Huntington Woods, Mich., assignor, by mesne assignments, to Warren Alloy, Warren, Mich., a copartnership
Application July 28, 1950, Serial No. 176,411
4 Claims. (Cl. 204—29)



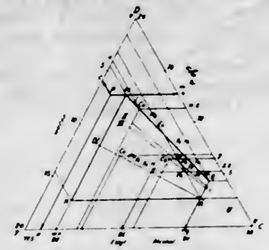
1. The process of forming a lightweight, electrical conducting work piece which is characterized by a high electrical conductivity after extended periods of use which comprises forming the work piece as an aluminum alloy casting, filling the tiny pores on the surface of the casting under super atmospheric pressure with a tung oil which is adapted to be retained in place in said pores by polymerization to form an insoluble solid which is chemically inert toward said alloy, cleaning said casting to remove the excess of said tung oil, polymerizing said tung oil in situ in said pores, and thereafter plating the surface of said casting by electro-deposition with a corrosion-resistant metal.

2,752,303
FUSED BATH ELECTROLYSIS OF METAL CHLORIDES
Hugh S. Cooper, Shaker Heights, Ohio, assignor to Walter M. Weil, Cleveland, Ohio
Application September 2, 1954, Serial No. 453,898
18 Claims. (Cl. 204—64)



1. The process of depositing metals in solid form from a fused salt bath in an electrolytic cell, comprising employing a closed, heat resistant, metal alloy pot as the cathode of said cell, the upper portion of the side wall of the pot about its entire periphery being constructed to provide an upper inner surface of non-metallic refractory material that is substantially inert to chemical attack by the contents of the pot, electrolyzing in said pot a fused salt bath consisting essentially of alkali metal chloride and the salt of at least one metal to be deposited, the salt being selected from the class consisting of chromium chloride, iron chloride, manganese chloride, and mixtures thereof, carrying out the electrolysis in the presence of hydrogen gas diffused through the fused salt bath, and, continuously during electrolysis, maintaining the surface of the fused salt bath above the lower edge of said upper inner surface of the pot.

2,752,304
ELECTROLYTIC POLISHING OF METALS
Emile Eugène Darmois and Izraël Epelboin, Paris, France, assignors to Centre National de la Recherche Scientifique, Paris, France
Application November 9, 1951, Serial No. 255,606
Claims priority, application France November 10, 1950
2 Claims. (Cl. 204—140.5)



1. Electrolytic bath for polishing metals constituted solely by a solution of a salt of perchoric acid in ethyl alcohol, said solution comprising from 80% to 92% of ethyl alcohol by weight, cation of said salt satisfying the inequality $r_s > r_e$ in which r_s is the radius of the cation in the said solution, and r_e is the radius of the cation as determined by measurements made upon the salt in the crystalline state.

2,752,305

PROCESSES OF ELECTROLYTIC POLISHING OF METALS

Hubert Laurence Turner, Potters Bar, England, assignor to Union Carbide and Carbon Corporation, New York, N. Y.

No Drawing. Application January 14, 1953, Serial No. 331,327
8 Claims. (Cl. 204—140.5)

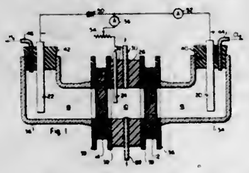
1. A process for producing a smooth, lustrous surface on an article of aluminum or an aluminum-rich alloy, said process comprising immersing said article in an electrolyte, said electrolyte comprising, by weight, 45% to 80% phosphoric acid, 5% to 20% sulfuric acid, the total of the acids being not more than 90% of said electrolyte, 1% to 5% in the aggregate of at least one of the phosphorus containing material in the group consisting of a phosphoric acid ester of a polyhydric alcohol and a salt of said ester, the remainder water, etching said article in said electrolyte, and, subsequently, subjecting said article to a direct current voltage while making said article an anode in said electrolyte.

2,752,306

PRODUCTION OF DRINKING WATER

Walter Juda, Lexington, and Wayne A. McRae, Arlington, Mass., assignors to Ionics, Incorporated, Cambridge, Mass., a corporation of Massachusetts

Application April 14, 1953, Serial No. 348,721
5 Claims. (Cl. 204—151)



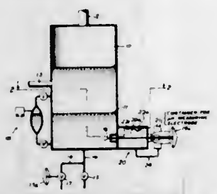
1. In the method of producing demineralized water from aqueous electrolytic solutions containing dissolved chloride wherein the solution is contacted with an anion permeable barrier and a cation permeable barrier and a direct electric current is passed in series through the solution and contacting barriers, the step of rendering said solution aseptic comprising contacting at least a fraction of said solution with an electrode, applying an anodic potential to said electrode to discharge chloride ions and liberate chlorine, and mixing the chlorine with said solution.

2,752,307

pH SAMPLING APPARATUS

Edward C. Baran, Euclid, William H. Fletcher, Hudson, Henry A. Jatzek, Parma Heights, and Michael A. Pappas, Lima, Ohio, assignors to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio

Application October 10, 1950, Serial No. 189,414
1 Claim. (Cl. 204—195)



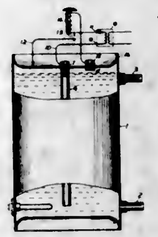
Apparatus for sampling and measuring the pH of water in a vessel containing a bottom layer of water and a top layer of hydrocarbon, which comprises a device for sensing the level of the water in the vessel, a pH measuring device including electrodes and a housing therefor outside the vessel, a trough communicating at one end with the lower portion of the vessel, a pipe connecting the bottom of the trough at the other end to the housing, a valve for controlling the flow of water from the vessel through the trough and the pipe to the housing, said valve being actuated by the water level sensing device to open and thereby permit a flow of water from the vessel to the electrode housing when the water level is above a predetermined minimum in the vessel and to close when the water level in the vessel falls below said predetermined minimum, and a weir in the trough for removing any hydrocarbon from the water entering the trough prior to its passage into the housing.

2,752,308

CATHODICALLY PROTECTED WATER STORAGE TANK WITH SAFETY SHUTOFF

Orrin E. Andrus, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York

Application August 18, 1952, Serial No. 305,091
1 Claim. (Cl. 204—196)



A water storage unit comprising a closed metal tank having inlet and outlet openings with the outlet opening being located at all times during the operation of the storage unit below the level of water in the tank and adjacent the top of the tank, an anode disposed within the tank and insulated therefrom, means to impress a potential dfference between the anode and the tank wall to provide a current flow from the anode through the water in the tank to the tank wall, a control electrode disposed in the top of said tank and insulated therefrom, means connecting said control electrode in series with said anode in an electrical circuit, and a relay switch in the circuit of said first named means and having its energizing coil connected in series circuit with said control electrode to be energized by flow of current therein, whereby when the water level in said tank drops below said control electrode the relay coil is de-energized and the flow of current from the anode to said tank wall is interrupted by said relay switch.

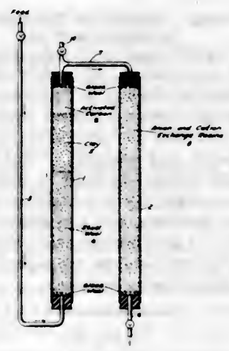
2,752,309

PROCESS FOR WATER DECONTAMINATION

Ardath H. Emmons, Ann Arbor, Mich., and Robert A. Lauderdale, Jr., Cambridge, Mass., assignors to the United States of America as represented by the United States Atomic Energy Commission

Application April 30, 1952, Serial No. 285,108
4 Claims. (Cl. 210—24)

1. A process for reducing the radioactivity of water containing trace quantities of radioactive nuclear fission products of the group consisting of radioactive isotopes of Ru, Zr, Sr, Ce, Cs, Nb, Te, and rare earth elements to a physiologically safe level for human consumption, comprising the steps of first removing substantially more than half of each of said radioactive isotopes by contacting said water with finely divided readily oxidizable ferrous metal, and subsequently removing additional amounts of the remainder of each of said radioactive isotopes by contacting the resulting water with adsorbents comprising an



argillaceous adsorbent, a cation exchange adsorbent and an anion exchange adsorbent.

2,752,310

HYDROPHOBIC SILICA BASE LUBRICANTS CONTAINING 1,3-DIOLS AS ANTI-GELATION AGENTS

John W. Blattenberger, Rosemont, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

No Drawing. Application July 13, 1953, Serial No. 367,727
4 Claims. (Cl. 252—28)

1. A grease composition comprising a major proportion of lubricating oil, colloidal hydrophobic silica gel dispersed therein in minor proportion sufficient to substantially thicken the composition, and a small amount sufficient to inhibit gelation upon heating of the composition of an aliphatic diol having 6–12 carbon atoms per molecule and having its hydroxyl groups attached to carbon atoms which are separated by one carbon atom.

2,752,311

LUBRICANT CONTAINING A METAL DERIVATIVE OF A HYDROXYARYLALKYL POLYAMINE AND A METAL DITHIOCARBAMATE

Frederic C. McCoy and James M. Caffrey, Jr., Beacon, N. Y., and William R. Hencke, Old Tappan, N. J., assignors to The Texas Company, New York, N. Y., a corporation of Delaware

No Drawing. Application July 26, 1952, Serial No. 301,162
3 Claims. (Cl. 252—33.6)

1. A lubricant composition comprising a major proportion of a mineral lubricating oil having admixed therewith about 0.1–5.0 per cent by weight based on the weight of the composition of the methoxy magnesium derivative of N,N'bis(2-hydroxy-5-alkyl(C_{15-30})benzyl) - 1,2 - diamino ethane and about 0.1–5.0 per cent by weight based on the weight of the composition of zinc dibutyl dithiocarbamate.

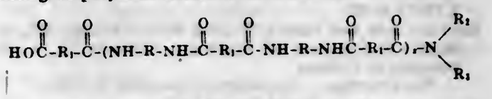
2,752,312

POLYAMIDE-POLYAMATE-THICKENED GREASE

Joseph A. Dixon, Berkeley, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware

No Drawing. Application August 19, 1952, Serial No. 305,287
7 Claims. (Cl. 252—33.6)

1. A grease composition comprising a major proportion of a lubricating oil and, in an amount sufficient to thicken said lubricating oil to the consistency of a grease, a grease thickening agent selected from the group consisting of polyamic acids of the formula:



wherein R is a hexamethylene group, R_1 is a tetramethylene group, R_2 is a hydrocarbon group having from 16 to 18 carbon atoms, and R_3 is selected from the group consisting of hydrogen and hydrocarbon groups having from 16 to 18 carbon atoms, and z is a number having a value from 1.5 to 4, and the alkali metal salts of said polyamic acids, said hydrocarbon groups being selected from the group consisting of saturated and unsaturated, straight-chain, and branched-chain hydrocarbon radicals.

2,752,313

ERYTHEMAL PHOSPHOR AND METHOD OF MAKING THE SAME

Robert W. Wollentin, Bloomfield, N. J., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application March 31, 1953, Serial No. 345,884
3 Claims. (Cl. 252—301.4)

1. A phosphor having a high output in the erythemal region and only a very small output of visible radiations, consisting essentially of a thallium-activated phosphate of calcium with from 0.05 to 6% by weight of lanthanum phosphate in solid solution and having its peak of emission at between about 3250 and 3300 A. U.

2,752,314

EXTRACTION OF ANTIOXIDANT FROM OSAGE ORANGE FRUIT

John R. Clopton, Boulder, Colo., assignor of one-half to Texas Research Foundation, Renner, Tex., a corporation of Texas

No Drawing. Application January 9, 1953, Serial No. 330,585
9 Claims. (Cl. 252—398)

1. A process for preparing an antioxidative substance for organic materials subject to oxidative deterioration comprising drying Osage orange fruit by heating to a temperature of at least 60° C., extracting said dried Osage orange fruit with a solvent capable of dissolving fats, and recovering the resulting solution of extract containing said antioxidative substance.

2,752,315

POLYMERIZED STYRENE MOLDING COMPOSITIONS

NS Kuettel, Arlington, N. J., assignor, by mesne assignments, to Curtiss-Wright Corporation, a corporation of Delaware

No Drawing. Application September 2, 1950, Serial No. 183,087
6 Claims. (Cl. 260—23)

1. An injection molding material comprising substantially the following constituents:

100.0 parts of polystyrene resin
20.0 parts of diatomaceous silica
6.0 parts of wax material selected from the group consisting of carnauba wax, Acra wax, Stroba wax and coumarone-indene resin
0.5 part of stearic acid.

2,752,316

ASPHALT COMPOSITIONS CONTAINING A SMALL AMOUNT OF CHLOROSULFONATED POLYETHYLENE

John A. Bolt and Joseph W. Van Wyk, Chicago, Ill., assignors to Standard Oil Company, Chicago, Ill., a corporation of Indiana

No Drawing. Application September 2, 1954, Serial No. 453,934
4 Claims. (Cl. 260—28.5)

1. A modified asphalt composition which consists essentially of asphalt and a small amount not exceeding about 10% by weight of a chlorosulfonated polyethylene.

2,752,317

CHLOROSULFONATED HYDROCARBON POLYMER COMPOSITIONS CONTAINING ANTI-GELLING AGENTS

Ralph H. Sudekum, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 24, 1953, Serial No. 338,611
5 Claims. (Cl. 260—29.1)

1. A fluid composition comprising an uncured halosulfonated hydrocarbon polymer in an inert organic liquid taken from the group consisting of solvents for the polymer and non-solvents for the polymer which are capable of swelling the polymer, compounding agents for curing said polymer and at least one anti-gelling agent taken from the class consisting of monohydric aliphatic alcohols, acetic acid, citric acid, phthalic acid, adipic acid, maleic acid, salicylic acid and the anhydrides of said acids.

2,752,318

ACRYLONITRILE POLYMERS DISSOLVED IN SOLVENT MIXTURES COMPRISING ETHYLENE SULFITE

Hobson D. De Witt, Decatur, Ala., assignor to The Chemstrand Corporation, Decatur, Ala., a corporation of Delaware

No Drawing. Application December 13, 1954, Serial No. 475,001
13 Claims. (Cl. 260—29.6)

1. A new composition of matter comprising a homogenous miscible mixture of a solvent mixture of from about ten to about 50 percent ethylene sulfite and from about 50 to about 90 percent of a compound selected from the group consisting of N,N-dimethylacetamide, N,N-dimethylformamide and nitromethane containing 0.5 to 3.0 percent water, and a polymer of which acrylonitrile is at least 70 percent of the total polymerized monomer content.

2,752,319

HEAT-STABILIZED POLYVINYL CHLORIDE COMPOSITION

Paul H. Lipke, Jr., and Robert S. Montgomery, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application September 3, 1954, Serial No. 454,218
6 Claims. (Cl. 260—31.4)

1. A heat stable polymeric composition consisting essentially of (1) polyvinyl chloride, (2) an alkylene glycol ester, whereof the glycol constituent is selected from those mono-, di-, and trialkylene glycols and their monoethers wherein the alkylene group contains from 2 to 3 carbon atoms and the acid constituent is from the group consisting of organic mono- and dicarboxylic acids, (3) from 0.1 to 10 per cent based on the weight of the glycol ester of a triaryl-phosphite, free from strongly basic groups, and (4) a heat stabilizer for polyvinyl chloride from the group consisting of basic silicate of lead, dibasic lead phosphite, dibasic lead phosphate, lead carbonate, and lead stearate.

2,752,320

POLYESTER COMPOSITIONS

Hobson D. De Witt, Decatur, Ala., assignor to The Chemstrand Corporation, Decatur, Ala., a corporation of Delaware

No Drawing. Application December 27, 1954, Serial No. 477,950
19 Claims. (Cl. 260—33.4)

1. A new composition of matter comprising a homogeneous miscible mixture of a solvent selected from the group consisting of molten chloral hydrate, molten mixtures of not less than five percent by weight chloral hydrate and phenol, and solutions of not less than 50 percent by weight chloral hydrate in halogenated alkanes of one to four carbon atoms containing at least four halogen atoms per molecule, and a synthetic linear condensation polyester of a dicarboxylic acid and a glycol in which the terminal hydroxy groups are separated by from two to ten methylene groups inclusive.

2,752,321

LUBRICATING TETRAFLUOROETHYLENE POLYMERS

George W. Heller, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 27, 1953, Serial No. 339,455
4 Claims. (Cl. 260—33.6)

1. The method for lubricating particulate polytetrafluoroethylene and improving the extrudability thereof which comprises admixing particles consisting essentially of polytetrafluoroethylene with from 7 to 45 cc. of lubricating organic liquid per 100 grams of said polytetrafluoroethylene, said lubricating organic liquid consisting essentially of hydrocarbon oil, until a non-uniform free-flowing mass of powder and lubricant is formed, and thereafter compressing the said mass into a confining space under a pressure of at least 50 lbs./sq. in. until the said lubricant becomes uniformly distributed through the mass as a result of the said compression, whereby a pasty mass which can be readily extruded is obtained, said lubricating organic liquid having a viscosity within the range of from 1 to 100 centipoises.

2,752,322

IMPREGNATING AND INSULATING MATERIALS

Ernst Knust, Leverkusen-Bayerwerk, Germany, assignor to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application March 1, 1952, Serial No. 274,499
Claims priority, application Germany March 1, 1951
7 Claims. (Cl. 260—33.8)

1. A process for the manufacture of a composition of matter for impregnating and insulating purposes, which consists essentially of heating a molten mixture of (1) a waxy chlorinated naphthalene and (2) a condensable halogen-containing aromatic hydrocarbon capable of splitting off hydrogen halide when heated in the presence of an autocondensation catalyst for said halogen-containing aromatic hydrocarbon, said heating being conducted in the presence of said autocondensation catalyst.

2,752,323

REINFORCING FILLER FOR THE RUBBER INDUSTRY

Hans Monrad Aufinset, Oslo, Norway

No Drawing. Application January 15, 1953, Serial No. 331,489
Claims priority, application Sweden January 19, 1952
2 Claims. (Cl. 260—41.5)

1. A composition consisting essentially of (*a*) a member selected from the group consisting of natural rubber and isoprene polymer rubber, and of (*b*) a finely-divided inorganic mineral filler consisting of illite in an amount of up to 50% by volume based upon said rubber, and of (*c*) carbon black in an amount up to 50% by volume based upon said rubber.

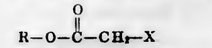
2,752,324

DYEABLE FIBER-FORMING MIXTURES OF ACRYLONITRILE POLYMERS AND ALKENYL HALOACETATE POLYMERS

Alfred B. Craig and George E. Ham, Decatur, Ala., assignors to The Chemstrand Corporation, Decatur, Ala., a corporation of Delaware

No Drawing. Application March 2, 1953, Serial No. 339,911
20 Claims. (Cl. 260—45.5)

1. A method of preparing a dyeable fiber-spinning composition which comprises blending (A) a polymer of at least 80 percent by weight of acrylonitrile and up to 20 percent of another mono-olefinic monomer copolymerizable therewith, and (B) a polymer of at least 30 percent by weight of an alkenyl haloacetate of the structure:



wherein X is a halogen atom selected from the group consisting of chlorine and bromine and R is a radical selected from the group consisting of vinyl, allyl, methallyl and isopropenyl, and up to 70 percent of another mono-olefinic monomer copolymerizable therewith, the only source of alkenyl haloacetate in the blend being the (B) polymer, the polymers being blended in such proportions that from 2 to 20 percent of the total weight is the said alkenyl haloacetate, and reacting the blended polymer with a compound of the group consisting of mercapto substituted N-heterocyclic compounds, wherein the mercapto group is substituted on a carbon atom, and alkali metal salts thereof.

2,752,325

REACTION PRODUCTS OF AN ORGANIC TIN COMPOUND WITH A GLYCOL ESTER OF A MERCAPTOCARBOXYLIC ACID, AND HIGH MOLECULAR WEIGHT HALOGENATED MATERIALS STABILIZED THEREWITH

William E. Leistner, Brooklyn, and William E. Setzler, Seaford, N. Y., assignors to Argus Chemical Laboratory, Inc., a corporation of New York

No Drawing. Application May 23, 1952, Serial No. 289,683
13 Claims. (Cl. 260—45.75)

1. A stabilized chlorine containing resinous composition containing 0.1% to 10% by weight of a compound of claim 12.

12. As novel organic derivatives of tetravalent tin, the reaction products of an ester formed of two moles of a mercapto-substituted carboxylic acid containing 2–4 carbon atoms and one mole of a glycol containing 2–6 carbon atoms, with an organic tin derivative selected from the group of consisting of an organic tin oxide and organic tin mono-and dihalides, wherein 2–3 valences of the tin are linked to an alkyl radical and the remaining valences of the tin are linked to the sulfur atom of the ester radical of said mercapto-substituted carboxylic acid.

2,752,326

OXYCRESYL CAMPHENE AS A LIGHT STABILIZER FOR COPOLYMER OF ISOBUTYLENE AND STYRENE

Robert E. Clayton, Jr., Roselle Park, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application March 29, 1952, Serial No. 279,460
1 Claim. (Cl. 260—45.95)

A composition comprising a high molecular weight tough thermoplastic resinous solid copolymer of about 40% isobutylene and about 60% styrene, said copolymer having an intrinsic viscosity above about 0.7 and being substantially free from aliphatic unsaturation and normally quite resistant to oxidation but being subject to deterioration under the effects of light, and as a stabilizer therefor about 1 part of oxycresyl camphene per 100 parts of copolymer.

2,752,327

RESINOUS PRODUCTS FROM AROMATIC POLYKETONES AND THIO ACID POLYAMIDES

Herman S. Bloch, Chicago, and Ralph B. Thompson, Hinsdale, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application April 28, 1952, Serial No. 284,826
10 Claims. (Cl. 260—65)

1. A process for the production of a resinous material which comprises reacting resinifying reactants consisting essentially of an aromatic polyketone containing at least two carbonyl groups per molecule and a thio acid polyamide having at least two sulfur-containing thio acid amide groups per molecule at resin-forming reaction conditions, said carbonyl groups being the only amido-reactive substituents in said aromatic polyketone.

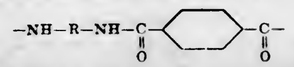
2,752,328

POLYAMIDES OF TEREPHTHALIC ACID AND DIAMINES HAVING METHYL SUBSTITUTED HYDROCARBON CHAIN

Eugene Edward Magat, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 16, 1952, Serial No. 271,968
13 Claims. (Cl. 260—78)

1. A linear terephthalamide polymer composed of recurring structural units of the formula



wherein R is a methyl-substituted saturated hydrocarbon chain 6 to 8 carbon atoms in length in which the methyl substitution consists of 1 to 2 methyl groups attached to the hydrocarbon chain in the 2 to 5 positions and R has a total number of carbon atoms which does not exceed the value obtained by subtracting the number of methyl groups from 10, the NH groups being attached to the end carbons of the chain.

2,752,329

SOLUBLE ELASTOMERS DERIVED FROM 2,3-DICHLORO-1,3-BUTADIENE

Richard J. Reynolds, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application April 18, 1952, Serial No. 283,121
5 Claims. (Cl. 260—79.5)

1. The process of solubilizing 2,3-dichloro-1,3-butadiene polymers which comprises reacting said polymer at a temperature within the range of 60° C. to 120° C. with from 5–100 mol percent, based on the weight of the polymer, of an aliphatic mercaptan of from 2–20 carbon atoms, said mercaptan having its sulfhydryl group attached to a carbon atom bearing at least one hydrogen atom, in the presence of a catalyst present in the amount of from 1–10%, based on the weight of the polymer.

2,752,330
EMULSION POLYMERIZATIONS OF BUTADIENE-1,3 COMPOUNDS

Stanford J. Hetzel, Cheltenham, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

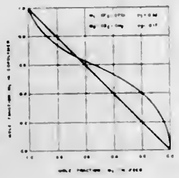
No Drawing. Application January 3, 1952, Serial No. 264,849
10 Claims. (Cl. 260—82.1)

1. Method for polymerizing a butadiene-1,3 compound which comprises: subjecting such butadiene-1,3 compound in aqueous emulsion to low temperature polymerizing conditions in the presence of water-soluble emulsifying agent comprising alkali metal soaps of petroleum naphthenic acids and a material selected from the group consisting of alkali metal soap of fatty acid, alkali metal soap of rosin acid, and mixtures of such soap of rosin acid and such soap of fatty acid, said alkali metal soaps being potassium soaps when the polymerization temperature is below about 32° F.

2,752,331
COPOLYMERS OF A PERFLUOROCHLOROETHYLENE AND A FLUOROETHYLENE AND METHOD FOR THEIR PREPARATION

Albert L. Dittman, North Bergen, Herbert J. Passino, Englewood, and Wilber O. Teeters, River Edge, N. J., assignors to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware

Application January 21, 1953, Serial No. 332,218
10 Claims. (Cl. 260—87.7)

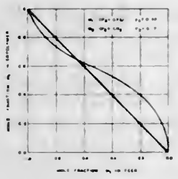


1. A copolymer of about 25 to about 50 mole per cent trifluorochloroethylene and correspondingly about 75 to about 50 mole per cent vinylidene fluoride as substantially the sole monomeric components.

2,752,332
COPOLYMERS OF A PERFLUOROCHLOROETHYLENE AND A FLUOROETHYLENE AND METHOD FOR THEIR PREPARATION

Francis J. Honn, Bloomfield, N. J., assignor to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware

Application January 21, 1953, Serial No. 332,186
15 Claims. (Cl. 260—87.7)



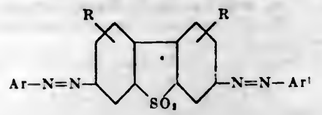
1. A copolymer of about 70 to about 80 mole per cent trifluorochloroethylene and correspondingly about 30 to about 20 mole per cent vinylidene fluoride as substantially the sole monomeric components.

2,752,333
METALLIZED AZO DYES FROM DIAMINODIBENZOTHIOPHENE DIOXIDES

Hans Z. Lecher, Plainfield, and Sien Moo Tsang, Middlesex, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application November 25, 1952, Serial No. 322,566
6 Claims. (Cl. 260—146)

1. Metal complexes of azo dyes having the formula



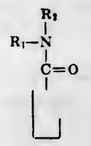
in which R is a metallizable group ortho to the azo linkage and Ar and Ar¹ are radicals of aromatic coupling components substituted by metallizable groups in a position ortho to the azo group; said azo dyes being sulfonated, said metal complexes being derived from metals of atomic weight from 52 to 64.

2,752,334
N-SUBSTITUTED LACTOBIONAMIDES

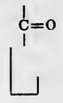
Henry Walton, Islip, N. Y., assignor to National Dairy Research Laboratories, Inc., Oakdale, N. Y., a corporation of Delaware

No Drawing. Application March 1, 1952, Serial No. 274,507
5 Claims. (Cl. 260—211)

1. As a new compound, an N-substituted lactobionamide having the general formula



where R_1 and R_2 are selected from the group consisting of hydrogen, aliphatic, aromatic, mixed aliphatic-aromatic and cycloaliphatic groups, of which no more than one of R_1 and R_2 is hydrogen, and



stands for the lactobionic acid molecule.

2,752,335
ALUMINUM-PENICILLIN-SULFA SALTS AND PROCESS

Jack Kyle Dale and Marshall Edward Bennett, Kalamazoo, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application May 8, 1953, Serial No. 353,896
12 Claims. (Cl. 260—239.1)

11. A compound of the formula

$$Al(Pen)_n(Sulf)_{3-n}$$

wherein Al represents a trivalent aluminum atom, Pen represents a monovalent radical of penicillin, Sulf represents a monovalent p-aminobenzenesulfonamide radical selected from the group consisting of sulfamethazine, sulfacetamide, sulfamerazine, sulfadiazine, sulfapyridine, sulfathiazole, phthalylsulfathiazole, succinylsulfathiazole and mixtures thereof, and *n* represents a positive integer of less than three.

2,752,336
PROCESS FOR THE PURIFICATION OF LACTAMS

Johannes W. P. Boon, Berg and Terblijt, and Leonard W. F. Kampschmidt, Beek, Netherlands, assignors to Stamicarbon N. V., Heerlen, Netherlands

No Drawing. Application November 2, 1953, Serial No. 389,855
Claims priority, application Netherlands November 15, 1952
5 Claims. (Cl. 260—239.3)

1. A process for purifying a contaminated lactam which comprises forming a substantially water-free, single phase, homogeneous solution of the contaminated lactam dissolved in an inert organic solvent, thereafter freeing contaminants from said lactam by subjecting said lactam solution to oxidation at the boiling point of said solution in the absence of any substantial amount of water so as to maintain said solution throughout said oxidation in its single phase, homogeneous form without the formation of an aqueous layer and then separating the thus treated lactam from contaminating material freed therefrom by said oxidation.

2,752,337
STEROID ENAMINES

Milton E. Herr, Kalamazoo, Mich., assignor to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application June 28, 1951, Serial No. 234,163
34 Claims. (Cl. 260—239.5)

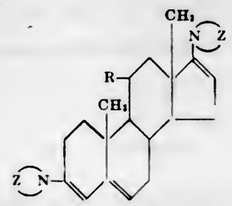
1. A process for the introduction of a 20:22 double bond in a steroid compound which includes: forming a 20:22-ene-22-tertiaryamino steroid by heating a steroid 22-aldehyde with a secondary amine at a temperature between approximately 25 and approximately 125 degrees centigrade.

2,752,338
TERTIARY AMINO STEROID COMPOUNDS

Milton E. Herr and Frederick W. Heyl, Kalamazoo, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application September 2, 1954, Serial No. 453,966
13 Claims. (Cl. 260—239.5)

13. A 3,17-di-(N-tertiaryamino)-3,5,16-androstatriene of the formula



wherein the tertiaryamino radical —N⌒Z is selected from the group consisting of piperidino, pyrrolidino, morpholino and tetrahydrooxazolino and wherein R is selected from the group consisting of 11β-hydroxy and 11-keto.

2,752,339
PREPARATION OF CORTISONE

Percy L. Julian, Maywood, John Wayne Cole, Oak Park, and Edwin W. Meyer and William J. Karpel, Chicago, Ill., assignors to The Glidden Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application September 9, 1950, Serial No. 184,124
29 Claims. (Cl. 260—239.55)

1. The process of producing 21-acyl derivatives of cortisone from 16,17-oxidopregnan-3α-ol-11,20-dione which comprises converting the oxido group to an α-bromhydrin group by treatment with HBr, reductively removing the bromine thus introduced by treatment with Raney nickel, introducing a 21-bromo group by treatment with bromine, replacing the 21-bromo group with an acyloxy group by treatment with a metal salt of a carboxylic acid, converting the 3-OH group to a keto group by oxidation with chromic acid under conditions minimizing contact of the 3-keto compound initially formed with the oxidizing medium and forming a double bond in the 4,5-position by first introducing a bromo group in the 4-position by bromination and then treating with a dehydrobrominating agent to remove the elements of HBr, said process being further characterized in that (1) the bromination to introduce the 21-bromo group is carried out on a compound containing a 17α-hydroxy group, (2) the oxidation of the 3-OH group is carried out subsequent to the introduction of the 21-bromo group, and (3) the steps leading to the formation of the 4,5-double bond are carried out subsequent to the formation of the 21-acyloxy group and the 3-keto group.

2,752,340
PROCESS OF PREPARING 16.17-OXIDO-PREGNENE COMPOUNDS

Gustav Ehrhart and Heinrich Ruschig, Bad Soden am Taunus, Josef Schmidt-Thomé, Frankfurt am Main-Unterliederbach, Werner Haede, Frankfurt am Main-Sindlingen, and Werner Fritsch, Frankfurt am Main-Rodelheim, Germany, assignors to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius und Brüning, Frankfurt am Main Hoechst, Germany

No Drawing. Application February 9, 1953, Serial No. 336,022
Claims priority, application Germany February 11, 1952
7 Claims. (Cl. 260—239.55)

1. The process which comprises reacting a $\Delta^{4,16}$-pregnadiene-3,20-diketone with hydrogen peroxide in an alkaline medium to thereby selectively introduce an epoxy group across the 16–17 carbon atoms, and terminating the reaction when the molar extinction has decreased at 240 mμ from about 26,000 to about 14,000.

2,752,341
STEROID HALOKETONES AND PROCESS

Barney J. Magerlein, Kalamazoo, Mich., assignor to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application July 31, 1952, Serial No. 301,979
19 Claims. (Cl. 260—239.55)

1. A process for the production of an 11-acyloxy-17-halopregnane-20-one which includes mixing together (1) an organic solvent solution of an 11,20-diacyloxy-17(20)-pregnene wherein the acyloxy group has the formula AcO, Ac being the acyl radical of an organic carboxylic acid containing from one to eight carbon atoms, inclusive, and (2) an aqueous solution of a hypohalous acid, at a temperature between about zero and eighty degrees centigrade, and recovering the thus-produced 11-acyloxy-17-halopregnane-20-one.

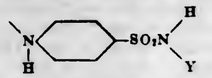
2,752,342
PREPARATION OF INTESTINAL DISINFECTANTS

Arthur Ernest Wilder Smith and Emil Hofstetter, Wolhusen, Switzerland, assignors to Ed. Geistlich Söhne A. G. für Chemische Industrie, Wolhusen, Lucerne, Switzerland

No Drawing. Application November 9, 1953, Serial No. 391,141
Claims priority, application Switzerland November 14, 1952
5 Claims. (Cl. 260—239.95)

1. As a new intestinal disinfectant, the salt of 8-hy-

droxyquinoline and an N^4 sulfanilamide dicarboxylate in which said sulfanilamide has the formula



wherein Y is a radical selected from the group consisting of thiazole and acetamid radicals, and said dicarboxylate consists of two carboxyl groups spaced by a radical selected from the group consisting of phenylene and lower alkylene radicals, said 8-hydroxyquinoline neutralizing the free carboxyl group of said dicarboxylate.

2,752,343

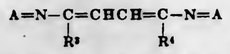
ISOMERIZATION OF DIAMINOBUTYNES

Marion F. Fegley, Mont Clare, and Newman M. Bortnick, Oreland, Pa., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application October 23, 1952, Serial No. 316,558

9 Claims. (Cl. 260—240)

6. Compounds of the structure



wherein A represents a divalent chain from the class consisting of —$CH_2CH_2OCH_2CH_2$—,

—$CH_2CH_2SCH_2CH_2$—, —$CH_2CH_2CH_2CH_2$—

and —$CH_2CH_2CH_2CH_2CH_2CH_2$—, and R^3 and R^4 representing a member of the class consisting of hydrogen, alkyl groups of not over 11 carbon atoms, and the phenyl group.

2,752,344

PIPERAZINE GLYCOLYLARSANILATE

Geza S. Delmar, Baie d'Urfe, Quebec, and Ernest Neil Macallum, Lachine, Quebec, Canada, assignors to Delmar Chemicals Limited, Lachine, Quebec, Canada, a corporation of Canada

No Drawing. Application July 23, 1954, Serial No. 445,478

3 Claims. (Cl. 260—242)

1. As new products piperazine salts selected from the group consisting of piperazine di-glycolylarsanilate and piperazine glycolylarsanilate hydrochloride.

2,752,345

GENTISIC ACID SALTS OF AMINOALKYL-PHENTHIAZINES

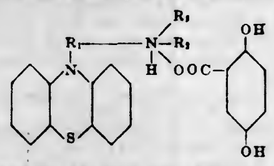
Walther Persch, Frankfurt am Main Hochst, Germany, assignor to Cassella Farbwerke Mainkur Aktiengesellschaft, Frankfurt am Main-Fechenheim, Germany, a German company

No Drawing. Application December 2, 1952, Serial No. 323,719

Claims priority, application Germany December 21, 1951

2 Claims. (Cl. 260—243)

1. As therapeutically valuable salts the gentisic acid salts of dialkyl-aminoalkyl-phenothiazines of the formula



wherein R_1 and the R_2's are lower alkyl radicals.

2,752,346

PROCESS FOR PRODUCTION OF ISOINDOLENINE DERIVATIVES

Georg Rösch, Walther Wolf, and Heinrich Vollmann, Leverkusen, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a manufacturing and trading organization of Germany

No Drawing. Application September 4, 1952, Serial No. 307,903

Claims priority, application Great Britain August 25, 1949

12 Claims. (Cl. 260—247.1)

1. The process for the production of 1-amino-3-imino-isoindolenine derivatives which comprises reacting at temperatures up to about 160° C. an aromatic dinitrile with a nitrogen containing compound which, in the form of its free base, is one of the general formula



wherein R_1 and R_2 stand for radicals selected from the group consisting of hydrogen, alkyl, cycloalkyl, aralkyl, aryl having at most three rings and —SO_2 aryl, and R_1+R_2 stand for a radical selected from the group consisting of the divalent radicals —$(CH_2)_5$— and —$(CH_2)_2O(CH_2)_2$— both free valences being attached to the nitrogen atom.

2,752,347

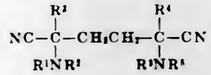
DIAMINOADIPONITRILES

Newman M. Bortnick, Oreland, and Marion F. Fegley, Mont Clare, Pa., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

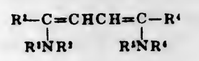
No Drawing. Application October 23, 1952, Serial No. 316,557

11 Claims. (Cl. 260—247.5)

1. A process for preparing diaminoadiponitriles of the structure

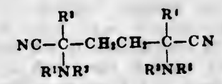


which comprises reacting by addition between about 0° and 100° C. hydrogen cyanide and a compound of the formula



in the above formulas R^1, R^2, R^5, and R^6 when taken individually representing alkyl groups of not over four carbon atoms, R^1 and R^2 when taken together and R^5 and R^6 when taken together representing divalent chains from the class consisting of —$CH_2CH_2CH_2CH_2$—, —$CH_2CH_2CH_2CH_2CH_2$—, and —$CH_2CH_2OCH_2CH_2$— which together with the nitrogen form a heterocyclic amino group, and R^3 and R^4 representing a member of the class consisting of hydrogen, phenyl, and alkyl groups of not over 11 carbon atoms.

7. As new chemical compounds, substances of the formula



wherein R^1, R^2, R^5, and R^6 when taken individually represent alkyl groups of not over four carbon atoms, R^1 and R^2 when taken together and R^5 and R^6 when taken together represent divalent chains from the class consisting of —$CH_2CH_2CH_2CH_2$—, —$CH_2CH_2CH_2CH_2CH_2$—, and —$CH_2CH_2OCH_2CH_2$— which together with the nitrogen form a heterocyclic amino group, and R^3 and R^4 represent a member of the class consisting of hydrogen, phenyl and alkyl groups of not over 11 carbon atoms.

2,752,348

VITAMIN B_1 DERIVATIVES AND THE PREPARATION THEREOF

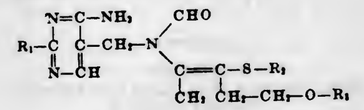
Taizo Matsukawa and Hajime Kawasaki, Osaka, Japan, assignors to Takeda Pharmaceutical Industries, Ltd., Osaka, Japan

No Drawing. Application January 10, 1955, Serial No. 481,013

Claims priority, application Japan June 14, 1952

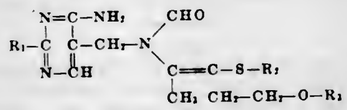
8 Claims. (Cl. 260—256.5)

1. A member selected from the group consisting of compounds having the general formula

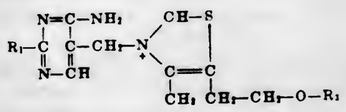


and their therapeutically useful acid salts, wherein R_1 is a member selected from the group consisting of methyl and ethyl radicals, R_2 is a member selected from the group consisting of lower fatty acid acyl radicals and mononuclear aryl carboxylic acid acyl radicals and R_3 is a member selected from the group consisting of hydrogen, lower fatty acid acyl radicals and mononuclear aryl carboxylic acid acyl radicals.

7. A process for preparing the compounds having the general formula



wherein R_1 represents a member selected from the group consisting of methyl and ethyl radicals, R_2 represents a member selected from the group consisting of lower fatty acid acyl radicals and mononuclear aryl carboxylic acid acyl radicals, and R_3 represents a member selected from the group consisting of hydrogen, lower fatty acid acyl radicals and mononuclear aryl carboxylic acid acyl radicals, which comprises reacting the compounds having the general formula



at nonacidic pH, with a member selected from the group consisting of carboxylic acid anhydrides and carboxylic acid halides.

2,752,349

VAT DYESTUFFS AND PROCESS FOR MAKING SAME

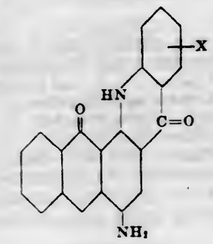
Werner Zerweck and Ernst Heinrich, Frankfurt am Main-Fechenheim, Germany, assignors to Cassella Farbwerke Mainkur Aktiengesellschaft, Frankfurt am Main-Fechenheim, Germany, a German company

No Drawing. Application February 9, 1953, Serial No. 335,992

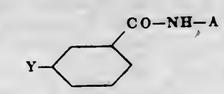
Claims priority, application Germany February 19, 1952

3 Claims. (Cl. 260—276)

1. Process which comprises reacting an aminophthalyl-acridone of the formula

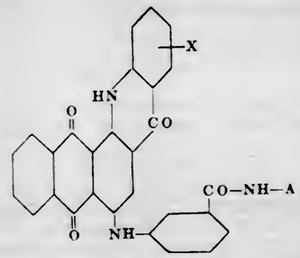


wherein X means a radical of the group consisting of hydrogen, chlorine and bromine, with a halogenbenzoyl-aminoanthraquinone compound of the formula



wherein Y means a radical of the group consisting of chlorine and bromine, and A means an anthraquinone radical of the group consisting of anthraquinone and 5-benzoylaminoanthraquinone and wherein the anthraquinone radical is connected to the CONH-group in its 1-position, in nitrobenzene as a solvent in the presence of an acid binding agent and of copper to temperatures of 200° C.

2. Vat dyestuffs of the general formula



wherein X means a radical of the group consisting of hydrogen, chlorine and bromine, A means an anthraquinonic radical of the group consisting of anthraquinone and 5-benzoylaminoanthraquinone and wherein the anthraquinone radical is connected to the CONH-group in its 1-position.

2,752,350

TREATMENT OF EXTRACTION LIQUORS FROM POPPY STRAW

Hanns G. Maister, Peoria, Ill., assignor to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application July 13, 1954, Serial No. 443,177
5 Claims. (Cl. 260—285)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. Method for the separation of morphine alkaloids contained in an isobutanol solution containing minor amounts water and said alkaloids together with wax-like substances extracted from poppy straw, which comprises evaporating said solution in an evaporation zone and condensing the resulting vapors, adding sufficient water to said evaporation zone to produce a residual aqueous liquor substantially free of isobutanol containing said morphine alkaloids, and also containing dispersed therein said wax-like substances, separating said wax-like impurities from said residual liquor, and recovering alkaloid from said residual liquor.

2,752,351

CRYSTALLINE RESERPINE, SALTS AND COMPOSITIONS THEREOF

Emil Schlittler, Madison, N. J., and Johannes Mueller, Arlesheim, Switzerland

No Drawing. Application July 10, 1953, Serial No. 367,357
8 Claims. (Cl. 260—286)

1. A crystalline product of manufacture consisting of a member selected from the group consisting of reserpine and the therapeutically active acid addition salts thereof.

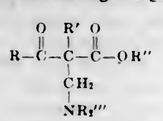
2,752,352

DERIVATIVES OF THE ESTERS OF BETA-KETONIC ACIDS AND PROCESS

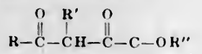
Jules Henri Theophile Ledrut, St. Gilles-Brussels, Belgium, assignor to Heyden Pharmacal Company, New York, N. Y., a corporation of Delaware

No Drawing. Application December 20, 1952, Serial No. 327,167
4 Claims. (Cl. 260—294.3)

1. A process for the preparation of a derivative of an ester of a β-ketonic acid having the general formula



wherein R represents a phenyl radical, R′ and R″ represent lower alkyl radicals, and NR_2''' represents the N-piperidyl radical, which comprises reacting a β-ketonic ester having the general formula



wherein R represents a phenyl radical, and R′ and R″ represent lower alkyl radicals with formaldehyde and piperidine.

2,752,353

DEHYDRATION OF 3-CYANO-4-CARBOXAMIDE-6-METHYL-2-PYRIDONE

John Song, North Plainfield, and John Edson Gordon, Boonton, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application March 5, 1954, Serial No. 414,511
7 Claims. (Cl. 260—294.9)

1. A process of producing 3,4-dicyano-6-methyl-2-pyridone which comprises heating 3-cyano-6-methyl-2-pyridone-4-carboxamide with at least 0.8 part of phosphorus oxychloride per part of amide and less than sufficient to produce substantial chlorination in at least 6 parts of a reaction medium composed of at least 70% of an α,α,α trichloroalkane of not more than two carbon atoms, the heating taking place in the presence of sufficient acid binding agent to react with all of the hydrochloric acid evolved in the reaction, the reaction temperature being maintained at 55–70° C. until dehydration is substantially complete.

2,752,354

PROCESS FOR PREPARING CITRAZINAMIDE AND CITRAZINIC ACID

Robert Ginell, Flushing, and Rolf Steinmann, Brooklyn, N. Y., assignors, by mesne assignments, to R. S. Aries & Associates, Inc., New York, N. Y., a corporation of New York

No Drawing. Application October 27, 1953, Serial No. 388,676
16 Claims. (Cl. 260—295)

1. A process for the preparation of citrazinamide which comprises reacting at elevated temperature urea and a member of the group consisting of citric and aconitic acids in the presence of a solvent medium comprising an inert organic polyhydroxy compound containing only carbon, hydrogen and oxygen atoms.

2. A process for the production of a stable solution which comprises reacting at elevated temperature urea and a member of the group consisting of citric and aconitic acids in the presence of a solvent medium comprising an inert organic polyhydroxy compound containing only carbon, hydrogen and oxygen atoms, precipitating the citrazinamide formed by neutralization of the reaction mass with acid, separating the precipitate and decomposing it with alkali for form a soluble of the alkali salt of citrazinic acid, and acidifying to precipitate purified citrazinic acid.

2,752,355

PROCESS FOR THE PREPARATION OF NICOTINAMIDE

Otto Lustig, New York, N. Y.

No Drawing. Application May 28, 1954, Serial No. 433,260
6 Claims. (Cl. 260—295.5)

1. A process for preparing nicotinamide, which comprises reacting a nicotinic acid ester of a saturated monohydric alochol selected from the group consisting of methyl, ethyl, propyl, butyl, amyl, cyclohexyl, and tetrahydrofurfuryl alcohols with ammonia at temperatures ranging from 10–50° C. for less than 24 hours in the presence of aluminum as a catalyst, and isolating the nicotinamide in crystallized form.

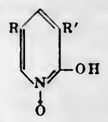
2,752,356

PROCESS OF PREPARATION OF 2-HYDROXY-PYRIDINE-1-OXIDE AND HOMOLOGS

Francis Edward Cislak, Indianapolis, Ind., assignor to Reilly Tar & Chemical Corporation, Indianapolis, Ind., a corporation of Indiana

No Drawing. Application July 12, 1954, Serial No. 442,888
4 Claims. (Cl. 260—297)

1. In the preparation of 2-hydroxypyridine-1-oxides having the general formula:



in which R and R′ represent hydrogen, a lower alkyl, and a benzyl group, the steps which comprise heating with acetic anhydride at a temperature substantially corresponding to the boiling point of acetic anhydride, a pyridine-1-oxide which has hydrogen attached to pyridine ring carbon at the 2-position, the 4-position and the 6-position, oxidizing at a temperature of about 40° C. to about 90° C. the resulting reaction product with hydrogen peroxide, and recovering the 2-hydroxypyridine-1-oxide.

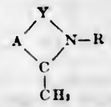
2,752,357

CYCLIC COMPOUNDS

Warren H. Watanabe, Philadelphia, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application June 20, 1955, Serial No. 516,761
5 Claims. (Cl. 260—307)

1. A process for preparing cyclic compounds of the structure



which comprises mixing a compound of the formula

HA-Y-NHR

a vinyl ether, $R^0OCH{=}CH_2$, and catalyst from the class consisting of silver salts soluble in water and mercury salts of carboxylic acids having a pKa value in water of 3.5 to 7, heating the mixture between 50° and 150° C., and separating a said cylic compound, in the above formulas R^0 being a member of the class consisting of alkyl, alkenyl, cycloalkyl, aralkyl, alkoxyalkyl, phenoxyalkyl, and hydroxyalkyl, R being a member of the class consisting of hydrogen and hydrocarbon groups of not over 12 carbon atoms free of olefinic and acetylenic unsaturation, A being a member of the class consisting of —O—, =NH, and =NR, and Y being an alkylene group having two to three carbon atoms between A and N and containing a total of not over 12 carbon atoms.

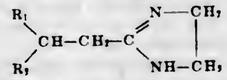
2,752,358

INDOLYL COMPOUNDS AND A PROCESS OF PREPARING THEM

Gustav Ehrhart, Am Burgberg, Bad Soden (Taunus), and Heinrich Leditschke, Frankfurt am Main, Germany, assignors to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius und Bruning, Frankfurt am Main-Hoechst, Germany

No Drawing. Application December 30, 1952, Serial No. 328,831
Claims priority, application Germany January 5, 1952
6 Claims. (Cl. 260—309.6)

1. A compound selected from the group consisting of compounds of the general formula



wherein R_1 is a member selected from the group consisting of phenyl and methoxy phenyl radicals and R_2 is a member selected from the group consisting of an indolyl-(3)-2-methyl-indolyl-(3) and 2-methyl-5-chloro-indolyl-(3) radicals, and the hydrochlorides thereof.

2,752,359

ANTIMICROBIAL AGENTS

Walter D. Celmer, Garden City, N. Y., assignor to Chas. Pfizer & Co., Inc., Brooklyn, N. Y., a corporation of Delaware

No Drawing. Application October 6, 1952, Serial No. 313,349
7 Claims. (Cl. 260—326.3)

4. A process for the preparation of an acylated derivative of pyrrothine which comprises heating pyrrothine with an acylating agent.

2,752,360

IMPROVEMENT IN THE MANUFACTURE OF 3-SUBSTITUTED 4-HYDROXYCOUMARINS

Donald F. Starr, Montclair, N. J., and Carmine C. Di Santo, New York, N. Y., assignors to S. B. Penick & Company, Incorporated, New York, N. Y., a corporation of Delaware

No Drawing. Application March 23, 1953, Serial No. 344,208
12 Claims. (Cl. 260—343.2)

1. The improvement in the manufacture of 3-substituted 4-hydroxycoumarins which comprises heating the ethyl ester of 3-carboxy-4-hydroxycoumarin with an α,β-unsaturated ketone selected from the group consisting of benzalacetone, benzalacetophenone, anisal acetone and parachlorbenzalacetone dispersed in water in the presence of a compound selected from the group consisting of ammonia, lower tertiary alkyl amines, aniline and pyridine.

2,752,361

POLY-HALOGEN-CONTAINING ALPHA SUBSTITUTED ALKYLENIC SUCCINIC ACIDS AND ANHYDRIDES

Paul Robitschek, Buffalo, and Claude Thomas Bean, Jr., Niagara Falls, N. Y., assignors to Hooker Electrochemical Company, Niagara Falls, N. Y., a corporation of New York

No Drawing. Application September 10, 1952, Serial No. 308,923
6 Claims. (Cl. 260—346.6)

3. A hexachlorocyclopentadiene adduct of a member of the group consisting of itaconic and aconitic acids, itaconic and aconitic anhydrides.

2,752,362

PROCESS FOR THE OXIDATION OF ETHYLENE

Ralph Landau, Roslyn Heights, N. Y., assignor to Chemipatents, Inc., New York, N. Y., a corporation of Delaware

No Drawing. Original application November 8, 1949, Serial No. 126,246. Divided and this application April 16, 1952, Serial No. 282,719
8 Claims. (Cl. 260—348.5)

1. In a process for the preparation of ethylene oxide by the catalytic selective partial oxidation of ethylene with molecular oxygen containing gas by reacting a feed gas mixture containing appropriate amounts of ethylene and oxygen together with inerts in the presence of a silver containing catalyst at a temperature in the range of 150–400° C. and recovering ethylene oxide product from he resulting gaseous mixture, the improvement which comprises carrying out said process in the presence of a catalyst arranged in fixed relationship in an elongated reaction zone, said catalyst comprising essentially silver disposed on the surface of substantially equal sized spherical support particles of a diameter in the range of about 0.2 to 0.5 inch having a rough outer surface, said spheres being prepared from finely divided refractory inorganic material and being capable of retaining their spherical form at kiln roasting temperatures.

2,752,363

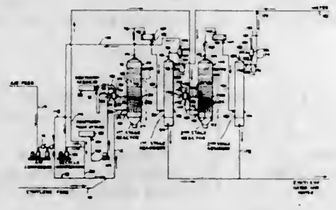
TWO STAGE OXIDATION OF OLEFINS USING A FLUIDIZED CATALYST

Virgil D. Drummond, Southport, Conn., and Merle L. Gould and Raphael Katzen, Cincinnati, Ohio, assignors to The Vulcan Copper & Supply Co., Cincinnati, Ohio, a corporation of Ohio

Application December 23, 1952, Serial No. 327,488
6 Claims. (Cl. 260—348.5)

1. A catalytic oxidation process which comprises continuously passing a feed of gaseous charge comprising an olefin and molecular oxygen upwardly at a temperature of between about 100 to 400° C. through a first fluidized dense phase bed of particles comprising discrete particles of an inorganic metal halide compound which

is a solid at said temperature and does not undergo substantial chemical transformation on contact with the gaseous charge at said temperature, discrete particles of a silver oxidative catalytic component selected from the group consisting of elemental silver particles and particles of a silver compound which is transformed into elemental silver on contact with an olefin and molecular oxygen at a temperature of about 100 to 400° C., and discrete particles of an inert filler component, to form an effluent comprising an olefin oxide, cooling said



effluent, withdrawing olefin oxide from said effluent, dividing the remainder of said effluent into major and minor portions, said major portion equalling between about 70 to 90 per cent by weight of the feed introduced to said first fluidized dense phase bed, recycling said major portion of the remainder of said effluent plus additional gaseous charge sufficient to complete said feed through said first fluidized dense phase bed of particles at a temperature of between about 100 to 400° C. to form additional olefin oxide, transferring the minor portion of the remainder of said effluent plus additional molecular oxygen upwardly at a temperature of between about 100 to 400° C. through a second fluidized dense phase bed of particles comprising discrete particles of an inorganic metal halide compound which is a solid at said temperature and does not undergo substantial chemical transformation on contact with the gaseous charge at said temperature, discrete particles of a silver oxidative catalytic component selected from the group consisting of elemental silver particles and particles of a silver compound which is transformed into elemental silver on contact with an olefin and molecular oxygen at a temperature of about 100 to 400° C., and discrete particles of an inert filler component, to form an effluent comprising an olefin oxide.

2,752,364

PRODUCTION OF QUINIZARIN

Marvin O. Shrader, Pittsburgh, Pa., assignor to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application December 26, 1952, Serial No. 328,131

1 Claim. (Cl. 260—383)

In a process for producing quinizarin by heating a mixture comprising p-chlorophenol, phthalic anhydride, boric acid, and sulfuric acid at about 150° to 220° C., the improvement consisting in including in said mixture an amount of trichlorobenzene sufficient to form a surface film on the reaction mass.

2,752,365

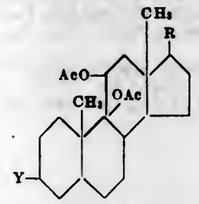
HYDROLYSIS OF OXIDOSTEROIDS

Paul E. Marlatt, Arthur R. Hanze, A Vern McIntosh, Jr., and Robert H. Levin, Kalamazoo, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application December 21, 1951, Serial No. 262,906

24 Claims. (Cl. 260—397.1)

1. A 9,11-diacyloxy steroid having the formula:



wherein Ac is an acyl group of a hydrocarbon carboxylic acid containing from one to eight carbon atoms, inclusive, wherein Y is selected from the group consisting of carbonyl oxygen and an acyloxy group wherein the acyl group is of a hydrocarbon carboxylic acid containing from one to eight carbon atoms, inclusive, and wherein R is a side chain which contains from one to eight carbon atoms, inclusive, and hydrogen and oxygen only.

2,752,366

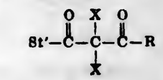
CARBONYLOXYSTEROIDS

John A. Hogg, Philip F. Beal, and Frank H. Lincoln, Jr., Kalamazoo, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application November 6, 1952, Serial No. 319,173

41 Claims. (Cl. 260—397.1)

1. In a process for the production of a compound selected from steroid $\Delta^{7(20)}$-unsaturated-21-acids of the formula St=CH—COOH, wherein St is a cyclopentanopolyhydrophenanthrene nucleus attached to the side chain at carbon atom 17, salts thereof, and esters thereof, the step of contacting a steroid represented by the following formula:



wherein X is a halogen having an atomic weight from 35 to 127, inclusive, wherein R is selected from the group consisting of hydrogen and a radical of the formula —COO—hydrocarbon, and wherein St' represents a cyclopentanopolyhydrophenanthrene nucleus attached to the above-identified side chain at carbon atom 17 and having a 17-hydrogen atom, with a base, in the presence of ions selected from the group consisting of hydrogen ions and alkoxy ions, to produce a $\Delta^{17(20)}$-unsaturated-21-carbonyloxysteroid.

2,752,367

STEROID COMPOUNDS

Raymond L. Pederson, Kalamazoo Township, Kalamazoo County, and Arnold C. Ott, Kalamazoo, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application October 8, 1952, Serial No. 313,811

4 Claims. (Cl. 260—397.2)

1. A method for the synthesis of a 24-lower-alkyl-4,22-cholestadien-3-one from a 3-acyloxy-5,6,22,23-tetrabromo-24-lower-alkyl-cholestane comprising: hydrolyzing a 3-acyloxy-5,6,22,23-tetrabromo-24-lower-alkyl-cholestane with an acid hydrolyzing agent to obtain a 5,6,22,23-tetrabromo-24-lower-alkyl-cholestan-3-ol, oxidizing the 5,6,22,23-tetrabromo-24-lower-alkyl-cholestan-3-ol with an inorganic oxidizing agent to obtain a 5,6,-22,23-tetrabromo-24-lower-alkyl-cholestan-3-one, said oxidation being carried out at a temperature below that at which decomposition is appreciable, dehalogenating the 5,6,22,23-tetrabromo-24-lower-alkyl-cholestan-3-one with zinc and an acid, and isolating the 24-lower-alkyl-4,22-cholestadien-3-one produced.

2,752,368

OXIDATION OF $\Delta^{20(22)}$-22-TERTIARY AMINO STEROIDS

Roman P. Holysz, Kalamazoo, Mich., assignor to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application March 4, 1952, Serial No. 274,840

21 Claims. (Cl. 260—397.3)

1. A process for the production of a useful 20-keto steroid by the oxidative cleavage of the 20(22) double bond of a 22-tertiaryamino-20(22)-unsaturated compound of the bisnorcholane series, which includes mixing together, in a solvent, a 22-tertiaryamino-20(22)-unsaturated compound of the bisnorcholane series, wherein the tertiary amino radical is selected from the group consisting of dialkylamino, dicycloalkylamino, diaralkylamino, alkyl aralkylamino, aryl alkylamino, and cyclic amino wherein the nitrogen is part of the ring, with chromic acid, and recovering the thus-produced 20-keto steroid.

2,752,369

OXIDATION OF STEROID-ENAMINES

Roman P. Holysz and John C. Babcock, Kalamazoo Township, Kalamazoo County, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application February 25, 1954, Serial No. 412,637

15 Claims. (Cl. 260—397.3)

1. A process for the production of 20-ketopregnane compounds which comprises: reacting a 22-tertiaryamino-$\Delta^{20(22)}$-steroid with a chromic anhydride-heterocyclic amine complex to obtain a 20-ketopregnane.

2,752,370

PROCESS FOR PRODUCING Δ^{16}-20 KETO STEROIDS FROM 16-SUBSTITUTED-20-KETO STEROIDS

David H. Gould, Palisades Park, N. J., assignor to Schering Corporation, Bloomfield, N. J., a corporation of New Jersey

No Drawing. Application December 26, 1950, Serial No. 202,821

23 Claims. (Cl. 260—397.4)

1. Process for the manufacture of Δ^{16}-20-keto steroids which comprises thermally decomposing a 20-keto-steroid having in the 16-position a carboxylic organic acid ester group linked to the 16-carbon through carboxylic oxygen, by heating the same in a substantially anhydrous organic liquid medium of the group consisting of hydrocarbons, cyclic amines, and acetic acid and acetic anhydride, at temperatures above 100° C. until such group, together with hydrogen from the adjacent 17-carbon, is split off to introduce a 16,17-double bond.

2,752,371

PREPARATION OF 3β-PREGNANOL-11,20-DIONE

Gunther S. Fonken and Robert H. Levin, Kalamazoo, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application November 17, 1951, Serial No. 256,961

5 Claims. (Cl. 260—397.45)

4. A process for the conversion of the 3-keto group in pregnane-3,11,20-trione to a 3-beta-hydroxy group which includes: hydrogenating pregnane-3,11,20-trione in methanol with about one molar equivalent of hydrogen in the presence of a Raney nickel catalyst at a pressure between about ten and fifteen pounds per square inch, and separating 3β-hydroxypregnane-11,20-dione.

2,752,372

3,14,21-TRIHYDROXY PREGNANEDIONES-(11,20) AND PROCESS

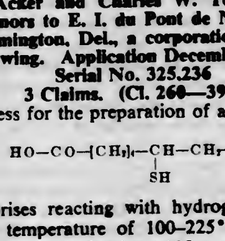
Tadeus Reichstein, Basel, Switzerland, assignor to Organon, Inc., Orange, N. J., a corporation of New Jersey

Application September 23, 1953, Serial No. 381,820

Claims priority, application Netherlands September 13, 1947

10 Claims. (Cl. 260—397.45)

7. The 3,14,21-trihydroxy pregnanedione-(11,20) compound of the formula



wherein X and Y are substituents selected from the group consisting of the hydroxyl group and the lower alkanoyloxy group.

2,752,373

PROCESS FOR PREPARING 6,8-DITHIOOCTANOIC ACID

Donald S. Acker, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 10, 1952, Serial No. 325,237

4 Claims. (Cl. 260—399)

1. The process for the preparation of 6,8-dithiooctanoic acid which comprises bringing hydrogen and hydrogen sulfide at a temperature of 100–225° C. and a pressure of at least 100 lbs./sq. in. in contact with a hydrogenation catalyst and a compound

wherein Z is selected from the class consisting of oxygen, sulfur, and imino, Y is selected from the class consisting of the hydroxyl group and groups hydrolyzable thereto and X is a group selected from the class consisting of the thiol group, groups hydrolyzable to the thiol group, and groups reducible to the thiol group.

2,752,374

PREPARATION OF ACIDS HAVING THIOL GROUPS ON THE ULTIMATE AND ANTEPENULTIMATE CARBONS FROM THE CARBOXYL

Donald S. Acker and Charles W. Todd, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 10, 1952, Serial No. 325,236

3 Claims. (Cl. 260—399)

1. A process for the preparation of a compound of the formula

which comprises reacting with hydrogen and hydrogen sulfide at a temperature of 100–225° C. and a superatmospheric pressure of at least 100 p. s. i. in the presence

of a hydrogenation catalyst which is active in the presence of sulfur, a compound of the formula

$$Y—CO—[CH_2]_4—X$$

wherein Y is selected from the class consisting of hydroxyl and groups hydrolyzable to hydroxyl and X is a three-carbon chain having a multiple bond between two of the carbons, one of which is joined to the third carbon by a single bond, the third carbon being multiply bonded to an element of the class consisting of oxygen, sulfur, and nitrogen with the proviso that when said carbon is multiply bonded to an oxygen, said oxygen atom is the only oxygen atom attached to said carbon.

2,752,375

7-CYANO-6-KETOHEPTANOIC ACIDS AND THEIR PREPARATION

Donald S. Acker, near Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application June 26, 1953, Serial No. 364,498

7 Claims. (Cl. 260—404)

1. 7-cyano-6-ketoheptanoic acid.

2,752,376

HYDROXYLATION OF VEGETABLE OILS AND PRODUCTS THEREOF

Percy L. Julian, Oak Park, Herbert T. Iveson, Elmhurst, and Sol B. Radlove, Chicago, Ill., assignors to The Glidden Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application April 19, 1952, Serial No. 283,248

16 Claims. (Cl. 260—405)

1. The process which comprises the steps of: treating glyceride ester material selected from the group consisting of glyceride oil having unsaturation in at least one fatty acid radical thereof, unsaturated blown glyceride oil and mixtures thereof, at temperatures between about 70° C. and reflux temperatures with an aqueous treating agent composed essentially of hydrogen peroxide having a concentration of at least about 70% and at least one water-soluble lower hydroxy carboxylic acid, until the iodine value of the treated material has been reduced at least about 20 units but has not been reduced below a value of about 15; thereafter recovering the treated material and drying it; the amount of hydroxy carboxylic acid in said aqueous treating agent being between about 0.25 and 0.55 mol per hydroxyl group introduced into the treated material.

2,752,377

SOLVENT EXTRACTION PROCESS

Dan McDonald, Aurora, Ill., assignor, by mesne assignments, to Barber-Greene Company, Aurora, Ill., a corporation of Illinois

Application December 4, 1950, Serial No. 198,922

6 Claims. (Cl. 260—412.8)

2. The process of extracting oleaginous substances from materials containing such substances, which comprises subjecting the material to successive grinding operations in a hot chlorinated solvent and thereby progressively reducing the particle size of the ground material, separating the slurry resulting from individual grinding operations into a miscella fraction of solvent and oleaginous substance dissolve therein, and a fraction containing substantially all of the ground material and successively grinding the said separated fractions of ground oleaginous material in the presence of a miscella separated from a slurry formed after the next succeeding grinding operation.

2,752,378

HYDRATION METHOD OF REFINING GLYCERIDE OILS

Percy L. Julian, Oak Park, and Herbert T. Iveson, Elmhurst, Ill., assignors to The Glidden Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application October 25, 1952, Serial No. 316,950

18 Claims. (Cl. 260—425)

1. In the process of refining animal and vegetable oils which contain sterols, the improvement which comprises: providing a mass of said glyceride oil containing natural free fatty acids in an amount between about 0.15% and 1%, and having a gum content below about 0.5% bringing said oil to a temperature between about 50° and 70° F. and while maintaining the oil within said range of temperature emulsifying it with a small quantity of an aqueous solution which: (*a*) has a specific gravity between about 12° Bé. and 20° Bé.; (*b*) contains at least one alkali metal alkali dissolved therein in an amount at least sufficient to neutralize the free fatty acid content of the oil; and (*c*) which contains dissolved therein an emulsion breaking amount of at least one emulsion breaking agent from the group consisting of alkali metal borates, pyrophosphates, silicates, acetates, and oxalates, and alkali metal salts of ethylene diamine tetraacetic acid; maintaining said emulsion at temperatures between about 50° F. and 70° F. for a time period between about 3 and 20 minutes, while subjecting it to vigorous agitation; at the end of said time period promptly passing the emulsion to a centrifuge wherein the emulsion is broken as a result of the presence of said emulsion breaking amount of emulsion breaking agent and is separated into a substantially neutral refined oil as the light effiuent, and a heavier "foots" fraction characterized by having a higher concentration of sterols therein than is present in a comparable "foots" fraction secured when the said provided mass of oil is similarly treated, but without any emulsion-breaking agent.

2,752,379

RESOLVING CHLOROSILANE MIXTURES

George H. Wagner, Clarence, and William G. Whitehead, Jr., Kenmore, N. Y., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application October 29, 1952, Serial No. 317,592

5 Claims. (Cl. 260—448.2)

1. The method of separating inorganic chlorosilanes taken from the group consisting of silicon chlorides and hydrogen silicon chlorides from mixtures thereof with alkylchlorosilanes, which comprises converting the inorganic chlorosilanes to solid reaction products by addition to said mixtures of a tertiary unsaturated-N-heterocyclic amine and distilling off the alkylchlorosilanes.

2,752,380

DEHYDROCHLORINATION OF CHLOROALKYL-CHLOROSILANES

George H. Wagner, Kenmore, and Arthur N. Pines, Snyder, N. Y., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application December 18, 1952, Serial No. 326,784

14 Claims. (Cl. 260—448.2)

1. A process for dehydrochlorinating a chloroalkylchlorosilane which comprises heating said chloroalkylchlorosilane in the presence of a Friedel-Crafts catalyst taken from the group consisting of aluminum chloride and aluminum bromide to a temperature at which hydrogen chloride is evolved from the chloroalkyl group thereof to produce the corresponding unsaturated chlorosilane.

2,752,381

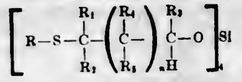
ORTHOSILICATE ESTERS

William J. Peppel, Austin, Tex., and Richard S. Schiefelbein, Wilmington, Del., assignors to Jefferson Chemical Company, Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application March 11, 1954, Serial No. 415,686

19 Claims. (Cl. 260—448.8)

1. A synthetic liquid having a high viscosity index, a high flash point and resistant to oxidation consisting essentially of an orthosilicate ester having the following formula



in which R is an alkyl group containing from 2 to 8 carbon atoms, R_1, R_2, R_3, R_4 and R_5 are from the group consisting of hydrogen, methyl and ethyl, n is an integer from 0 to 2, inclusive, and the total number of carbon atoms in the ester molecule is from 20 to 60.

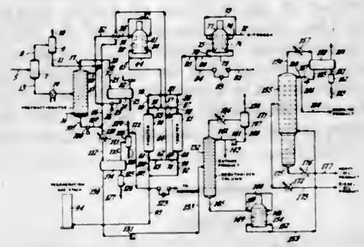
2,752,382

PROCESS FOR UPGRADING DIESEL OIL FRACTIONS DERIVED FROM FISCHER-TROPSCH SYNTHESIS

Luther W. Garrett, Jr., Levittown, N. Y., and Martin R. Smith, Glen Ridge, N. J., assignors to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware

Application July 3, 1952, Serial No. 297,004

4 Claims. (Cl. 260—450)



1. A process which comprises separating a hydrocarbon oil containing diesel oil, wax, oxygenated organic compounds and metal contaminants which are derived from the hydrogenation of carbon monoxide into a relatively high boiling fraction containing wax, diesel oil and substantially all of said metal contaminants and a relatively low boiling fraction containing diesel oil and oxygenated organic compounds and substantially free from said metal contaminants, contacting said relatively low boiling fraction wih an alumina-containing catalyst at an elevated temperature suitable for deoxygenation to produce water, removing water from product of the aforesaid alumina treating step, recombining product containing diesel oil from said alumina treating step with relatively high boiling constituents including diesel oil of said initial separation, subjecting the resulting combined mixture to a distillation step to recover a diesel oil fraction containing components derived from both said high boiling and said low boiling fractions of said initial separation and a higher boiling fraction containing wax and substantially all of said metal contaminants.

2,752,383

PRODUCTION OF FORMALDEHYDE CYANOHYDRIN

Salem F. Belt, Texas City, Tex., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application October 19, 1953, Serial No. 387,029

8 Claims. (Cl. 260—465.6)

1. A process for the production of formaldehyde cyanohydrin which comprises passing vapors of formaldehyde and hydrogen cyanide through a reaction tube heated to a temperature within the range from 185 to 300° C.

2,752,384

SURFACE ACTIVE POLYETHOXY ETHER ESTERS OF BIS(CHLOROPHENYL) ACETIC ACID

Warren D. Niederhauser, Huntingdon Valley, and Edwin J. Smialkowski, Philadelphia, Pa., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application May 5, 1953, Serial No. 353,245

5 Claims. (Cl. 260—469)

1. Compounds of the formula

$$(ClC_6H_4)_2CHCO_2(CH_2CH_2O)_xR^o$$

where R^o is an alkyl group of not over four carbon atoms and x is an integer from 4 to 20.

2,752,385

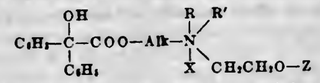
QUATERNARY AMMONIUM SALTS OF ALKYL (HYDROXYALKYL) AMINOALKYL BENZILATES AND ESTERS THEREOF

John W. Cusic, Skokie, and Richard A. Robinson, Morton Grove, Ill., assignors, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application January 15, 1953, Serial No. 331,513

7 Claims. (Cl. 260—473)

1. A quaternary ammonium salt of the formula



wherein Alk is an alkylene radical containing at least 2 and not more than 4 carbon atoms, R and R′ are alkyl radicals containing not more than 3 carbon atoms, X is one equivalent of an anion and Z is selected from the group consisting of hydrogen and lower alkanoyl radicals.

2,752,386

PRODUCTION OF COLORLESS OXO-ALCOHOL PLASTICIZER ESTERS

Norvik Ackroyd and Sidney Arthur Lamb, Norton-on-Tees, England, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application August 14, 1950, Serial No. 179,376

Claims priority, application Great Britain September 12, 1949

10 Claims. (Cl. 260—475)

1. A process for the production of diesters having a color as determined in a Lovibond 6 inch cell not inferior to about 0.3 red and about 0.6 yellow from acyclic mono-alkene mixtures made by cracking hydrocarbons and containing alicyclic mono-olefines, di- and polyenes which tend to form hydroperoxides and unsaturated alcohols, which comprises preparing therefrom a mixture selected from the group consisting of (1) acyclic mono-alkenes from which have been separated by a method selected from the group consisting of distillation and solvent extraction alicyclic mono-olefines, di- and polyenes and hydroperoxides and unsaturated alcohols derived therefrom and (2) acyclic mono-alkenes containing the above

mentioned alicyclic mono-olefines, di- and polyenes inhibited against formation therefrom of hydroperoxides and unsaturated alcohols by the addition of an oxidation inhibitor, carbonylating said mixture of acyclic monoalkenes in the presence of a dissolved cobalt catalyst and in the substantial absence of hydroperoxides, hydrogenating the resulting product in the presence of a catalyst, and thereafter esterifying the resulting alcohol.

2,752,387

LIQUID ACRYLIC ESTER TELOMERS WITH ISOPROPYLATED BENZENE AND PROCESS FOR THEIR PRODUCTION

Chessie E. Rehberg, Glenside, Pa., assignor to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application July 29, 1952, Serial No. 301,615
10 Claims. (Cl. 260—475)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A process comprising maintaining an isopropylated benzene at substantially its atmospheric boiling point while dissolving therein a monomeric lower alkyl acrylate wherein the alkyl group contains 2 to 4 carbon atoms at a rate substantially equal to the rate at which the said lower alkyl acrylate polymerizes in said isopropylated benzene, thereby producing a stable, low-molecular weight, liquid telomer of the said lower alkyl acrylate which has a boiling point in the range of about from 72° to 178° C. at a pressure of about 0.01 mm. of mercury.

2,752,388

CATALYTIC MONO-ACYLATION OF HEXYLRESORCINOL AND ITS KETO-ANALOG

Joseph Sylvester Dereska, Copley, Ohio, assignor to Strong, Cobb and Company, Inc., Cleveland, Ohio, a corporation of Delaware

No Drawing. Application August 28, 1952, Serial No. 306,954
5 Claims. (Cl. 260—479)

1. A catalytic process for preparing the crystalline ester isomer of a C_6 alkyl- and alkanoylresorcinol which comprises reacting one of said resorcinols at a temperature of about 25–70° C. with acetic anhydride, in the presence of a trace of a catalyst selected from the group consisting of concentrated sulfuric acid, gaseous hydrogen chloride, gaseous hydrogen bromide, gaseous hydrogen iodide, aqueous hydrogen iodide, hydrogen fluoride, acetyl chloride, mercuric chloride, boron fluoride and aluminum chloride and in a heptane solvent, recovering the oil and crystalline ester isomers so produced and isolating the crystalline isomer.

2,752,389

PREPARATION OF ESTERS OF 5-CHLORO-3-PENTEN-1-OL AND 3-CHLORO-4-PENTEN-1-OL

Theodore E. Bockstahler, Moorestown, N. J., assignor to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application November 7, 1952, Serial No. 319,407
4 Claims. (Cl. 260—497)

1. A process for the preparation of a mixture of the isomeric esters having the formulas

$$RCOOCH_2CH_2CH{=}CHCH_2Cl$$

and

$$RCOOCH_2CH_2CH(Cl)CH{=}CH_2$$

in which R is a member of the class consisting of a hydrogen atom, a methyl group and an ethyl group, which comprises reacting, at a temperature below 50° C. and under anhydrous conditions, and in the presence of an acidic catalyst, a mole of butadiene, a mole of formaldehyde, at least one mole of hydrogen chloride and at least one mole of an acid, RCOOH, in which R has the significance described above.

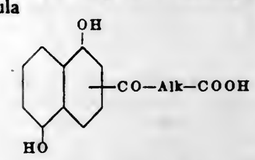
2,752,390

1,5-DIHYDROXYNAPHTHALENE KETO ALKANOIC ACIDS

Robert R. Burtner, Skokie, Ill., assignor, by mesne assignments, to G. D. Searle & Co., Skokie, Ill., a corporation of Delaware

No Drawing. Application December 29, 1951, Serial No. 264,245
4 Claims. (Cl. 260—520)

1. A member of the group consisting of a keto acid of the formula



and salts thereof, wherein Alk is in alkylene radical containing from two to five carbon atoms, inclusive.

2,752,391

PREPARATION OF GLYCERIC ACID

Gerald Gilbert and William S. Johnson, Philadelphia, Pa., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application December 4, 1952, Serial No. 324,121
3 Claims. (Cl. 260—535)

1. A process for preparing glyceric acid which comprises reacting acrylic acid and sodium chlorate in an aqueous medium in the presence of 0.01% to 0.05% osmium tetroxide, based on the weight of the reaction mixture, at a temperature from about 30° C. to about 80° C., extracting glyceric acid from the reaction mixture with an organic liquid which is a member of the class consisting of water-insoluble aldehydes and ketones, and thereafter separating said glyceric acid and said organic liquid by steam distillation.

2,752,392

MANUFACTURE OF PHOSPHORUS AMIDES

George A. Saul, Nitro, and Kenneth L. Godfrey, St. Albans, W. Va., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application April 11, 1952, Serial No. 281,886
19 Claims. (Cl. 260—545)

1. The method of making phosphorus amides which comprises reacting one molecular proportion of $PXCl_3$ where X represents a member of the group consisting of oxygen and sulfur and at least one but not more than about three molecular proportions of a dialkylamine containing less than five carbon atoms in each alkyl group and then to the reaction mixture gradually adding with stirring at least one but not more than about three molecular equivalents of an inorganic base, the amount being substantially equivalent to that required for neutralization of the total hydrogen chloride expected from the desired end product which base comprises a metal above yttrium in the displacement series and is characterized by forming water and a neutral salt by double decomposition in the neutralization.

13. In the process of making bis(dialkylamido)halophosphates the steps which comprise reacting a lower dialkyl amine with a phosphoryl halide in a molar proportion of approximately 2:1 in the presence of an inert water-immiscible solvent and then gradually adding with stirring to the reaction mix so obtained at a temperature below about 30° C. a hydroxide of a metal selected from the group consisting of alkali and alkaline earth metals and mixtures of said metals, the proportion of the said hydroxide being substantially equivalent to but not more than about 110% of the theoretical amount.

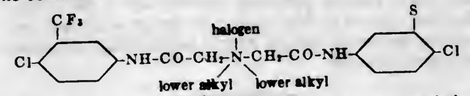
2,752,393

TRIFLUOROMETHYL-IMINO-BISACETANILIDE AMMONIUM SALTS

Henry Martin, Schaffhausen, Switzerland, assignor to Variapat A. G., Basel, Switzerland

No Drawing. Application April 14, 1951, Serial No. 221,120
Claims priority, application Switzerland April 21, 1950
3 Claims. (Cl. 260—558)

2. The quaternary ammonium salt compound having the formula:



where S is a member selected from the group consisting of CF_3 and Cl.

2,752,394

METHOD OF MANUFACTURING VANILLIN

Nils Andreas Sörensen, Trondheim, and Jorunn Mehlum, Skaun, Norway

No Drawing. Application December 18, 1951, Serial No. 262,333
4 Claims. (Cl. 260—600)

1. A method of manufacturing vanillin from products containing a material selected from the class consisting of lignin and lignin sulphonic acid, comprising decomposing said products by means of alkali and an oxidation agent in the presence of an alkaline buffer, said buffer being selected from the group consisting of an aqueous mixture of sodium hydroxide and sodium sulfide and white liquor from the manufacture of sulphate cellulose which contains sodium hydroxide and sodium sulfide.

2,752,395

CARBONYLATION OF OLEFIN-DIOLEFIN MIXTURES; SELECTIVE DIOLEFIN REMOVAL

Philip Geoffrey Harvey and Sidney Arthur Lamb, Norton-on-Tees, England, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application August 21, 1950, Serial No. 180,706
Claims priority, application Great Britain September 12, 1949
8 Claims. (Cl. 260—604)

1. A process for the production of aldehydes from olefine mixtures obtained by cracking hydrocarbons and containing predominantly alkenes and a minor amount of at least one olefine selected from the group consisting of di- and poly-enes, which comprises removing from said mixture the di- and poly-enes which it contains and thereafter continuously carbonylating the resultant liquid mixture with a gas comprising carbon monoxide and hydrogen in which the $CO:H_2$ ratio is from 1:4 up to 2:3 at a temperature of 130° to 190° C. and a pressure of 200 to 300 atmospheres gauge in the presence, as catalyst, of a small cancentration of cobalt of about 0.1% by weight introduced as a soluble organic salt and dissolved in said liquid.

2,752,396

CARBONYLATION OF OLEFIN-DIOLEFIN MIXTURES

Philip Geoffrey Harvey and Arthur William Charles Taylor, Norton-on-Tees, England, assignors to Imperial Chemical Industries Limited, London, England, a corporation of Great Britain

No Drawing. Application November 28, 1951, Serial No. 258,752
Claims priority, application Great Britain September 12, 1949
6 Claims. (Cl. 260—604)

1. A continuous process for the production of aldehydes by carbonylating an olefine mixture produced by the cracking of hydrocarbons and containing alkenes having at least four carbon atoms in the molecule and a minor amount of at least one olefine selected from the group consisting of aliphatic and alicyclic di- and polyenes which comprises initially preforming a large bulk of a solution of cobalt carbonyl catalyst in an inert organic medium by treating therein a solution of a dissolved organic compound of cobalt in a concentration equivalent to at least 0.01% of cobalt metal under superatmospheric temperature and pressure with a carbon monoxide/hydrogen gas mixture having a $CO:H_2$ molar ratio of at least 1:5 and having a carbon monoxide partial pressure of at least 50 atmospheres and thereafter introducing and continuously feeding to said initially formed bulk of cobalt carbonyl solution said olefine mixture at 130° to 190° C. and at 200 to 300 atmospheres, while maintaining the concentration of cobalt at small concentration of not less than 0.1% of cobalt metal by weight of the said olefine mixture by introducing a soluble organic compound of cobalt in solution and a carbon monoxide/hydrogen gas mixture in which the molar ratio of $CO:H_2$ is from 3:7 to 2:3.

2,752,397

CARBONYLATION OF MONOOLEFIN-POLYOLEFIN MIXTURES

Arthur William Charles Taylor and Philip Geoffrey Harvey, Norton-on-Tees, England, assignors to Imperial Chemical Industries Limited, London, England, a corporation of Great Britain

No Drawing. Application November 28, 1951, Serial No. 258,751
Claims priority, application Great Britain September 12, 1949
5 Claims. (Cl. 260—604)

1. A continuous process for the production of aldehydes by carbonylating in the liquid phase and in the presence of a dissolved organic cobalt compound as catalyst, an olefine mixture produced by the cracking of hydrocarbons and containing alkenes having at least four carbon atoms in the molecule and a minor amount of at least one olefine selected from the group consisting of aliphatic and alicyclic di- and poly-enes which comprises initially subjecting a large bulk of said olefine mixture to carbonylation with a carbon monoxide/hydrogen gas mixture having a $CO:H_2$ molar ratio of at least 2:3 in the presence of at least but not substantially greater than 0.3% by weight of cobalt metal dissolved in said mixture at a temperature of 130 to 190° C. and at a pressure of 200 to 300 atmospheres gauge until reaction is established, and thereafter introducing and continuously feeding to said bulk of olefine mixture, fresh olefine mixture together with a carbon monoxide/hydrogen gas mixture having a molar ratio of $CO:H_2$ of 3:7 to 2:3 at a temperature of 130 to 190° C. and at a pressure of 200 to 300 atmospheres gauge, while maintaining the concentration of cobalt in dissolved form in the liquid at a concentration of at least but not substantially greater than 0.1% by weight.

2,752,398
COLOR STABILIZATION OF PHENOLS WITH PHOSPHORIC ACIDS

Horace E. Riley, Verona, N. J., assignor to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application June 23, 1953, Serial No. 363,665
6 Claims. (Cl. 260—624)

4. Para-tertiary-butyl phenol in admixture with between about 0.1 and 0.001% by weight of ortho-phosphoric acid.

2,752,399
2 HYDROXY 1,1,1-TRIMETHYLOL PROPANE

Walter Grimme, Utfort, Moers, and Johannes Wöllner, Moers, Germany, assignors to Rheinpreussen Aktiengesellschaft fuer Bergbau und Chemie, Homberg, Niederrhein, Germany, a corporation of Germany

No Drawing. Application July 29, 1954, Serial No. 446,657
Claims priority, application Germany August 3, 1953
2 Claims. (Cl. 260—635)

1. As a new chemical compound, 2 hydroxy 1,1,1-trimethylol propane.

2,752,400
METHOD FOR PREPARING PHENYLTRIFLUOROETHYLENE

Maurice Prober, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

No Drawing. Application June 26, 1953, Serial No. 364,474
1 Claim. (Cl. 260—651)

The method of preparing phenyl trifluoroethylene which comprises effecting reaction between benzene and chlorotrifluoroethylene at a temperature of from about 350–700° C. in the presence of boron trifluoride.

2,752,401
MANUFACTURE OF CHLORINATED HYDROCARBONS

William J. Joseph, deceased, late of Pittsburg, Calif., by Adolphus B. Bianchi, administrator, San Francisco, Calif., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

Application October 6, 1950, Serial No. 188,666
6 Claims. (Cl. 260—659)

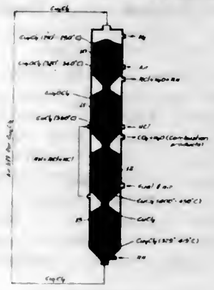


1. The method which comprises establishing a moving bed of a solid reaction mass comprising an inert carrier and a chloride of copper, moving the entire said bed at a substantially uniform rate successively through a zone in which a part of the cuprous chloride is oxidized to cupric oxychloride by reaction with a gas containing free oxygen, thence through another zone in which the cupric oxychloride portion of the reaction mass reacts with hydrogen chloride and is converted to cupric chloride, thence through another zone in which the remaining cuprous chloride portion of the reaction mass reacts with oxygen and hydrogen chloride and is thereby converted to cupric chloride, the temperature of the solid reaction mass being increased in each said zone due to the exothermic reaction therein, then moving the supported cupric chloride mass through a final zone in which it reacts with a volatile and chlorinatable feed material and is reduced to cuprous chloride, and finally returning the solid reaction mass at the same substantially uniform rate to the first said zone at a reduced temperature, while passing countercurrent to portions of said moving bed the chlorinatable feed introduced into the last said zone and initially consisting of a material selected from the group consisting of the readily volatile hydrocarbons and their volatile and less than fully chlorinated chlorine reaction products, at a rate to avoid solids turbulence in the reaction zones and to reduce the cupric chloride in the last and hottest zone to cuprous chloride, the reaction products from said hottest zone being conveyed thence and introduced in countercurrent flow to the zone wherein said mass contains a mixture of cuprous chloride and cupric oxychloride; recovering chlorinated hydrocarbon from the effluent from said zone; and, between the two zones employed for contact between the hydrocarbon and the solid reaction mass, causing hydrogen chloride and a gas containing free oxygen to flow countercurrent to said mass, converting the copper values therein substantially completely to cupric chloride.

2,752,402
OXYCHLORINATION OF HYDROCARBONS

David J. Pye, Concord, Calif., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

Application October 6, 1950, Serial No. 188,676
7 Claims. (Cl. 260—659)

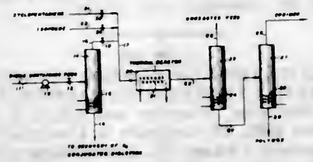


1. The method which comprises establishing a moving bed of a solid reaction mass comprising an inert carrier and a chloride of copper, moving the entire said bed at a substantially uniform rate successively through a zone in which cuprous chloride is oxidized to cupric oxychloride, thence through another zone in which cupric oxychloride reacts with hydrogen chloride and is converted to cupric chloride, thence through another zone in which the temperature of the cupric chloride containing mass is increased by the heat of combustion of a volatile fuel, thence through a final zone in which the so-heated cupric chloride reacts with a volatile and chlorinatable feed material and is reduced to cuprous chloride, and finally returning the solid reaction mass at the same substantially uniform rate to the first said zone at a reduced temperature, while passing countercurrent to said moving bed the chlorinatable feed, initially consisting of a material selected from the group consisting of the readily volatile hydrocarbons and their volatile and less than fully chlorinated chlorine reaction products, at a rate to avoid solids turbulence in the reaction zones and to reduce the cupric chloride in the said final and hottest zone to cuprous chloride, the volatile reaction products from said hottest zone being then conveyed around the combustion zone and introduced with added hydrogen chloride to the zone in which cupric oxychloride is converted to cupric chloride, the amount of added hydrogen chloride being just sufficient to complete said conversion and being insufficient to provide any significant amount of hydrogen chloride in the effluent from said zone; and recovering chlorinated hydrocarbon from the said effluent; the conversion of cuprous chloride to cupric oxychloride in the first said zone being effected by passing air continuously through said zone.

2,752,403
CO-DIMERIZATION OF CONJUGATED CYCLIC DIENES AND ACYCLIC DIENES

Henry G. Schutze, Sam H. Hastings, and James A. Anderson, Jr., Baytown, Tex., assignors, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware

Application April 11, 1952, Serial No. 281,822
11 Claims. (Cl. 260—666)



1. A polymerization process which comprises reacting a cyclic conjugated diolefin having 5 carbon atoms in a ring with an acyclic conjugated diolefin at a temperature in the range from 350° to 450° F. for a sufficient length of time no more than 120 minutes to form a product containing a substantial amount of a co-dimer of said diolefins, said cyclic conjugated diolefin being present in an amount at least equal to the amount of acyclic conjugated diolefin.

2,752,404
PROCESS OF PRODUCING INDANES FROM PARA-CYMENE

Ernest H. Polak, Middletown, N. Y., assignor to Polak's Frutal Works, Inc.

No Drawing. Application October 9, 1953, Serial No. 385,261
11 Claims. (Cl. 260—668)

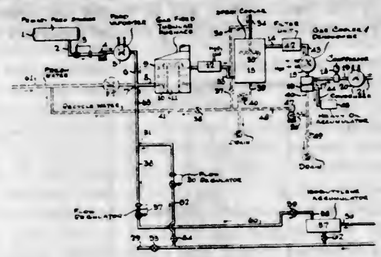
6. A process of producing poly alkyl indanes from para-cymene, which comprises reacting para-cymene with an alcohol from the group consisting of tertiary butanol, methyl isopropyl carbinol, methyl isobutyl carbinol, dimethyl isopropyl carbinol, methyl diethyl carbinol, dimethyl isobutyl carbinol, diisopropyl carbinol and diisobutyl carbinol at a temperature of from —10° to 20° C. in the presence of a solution containing from 85% to 93% sulfuric acid and from 7% to 15% water.

2,752,405
MANUFACTURING PROCESS FOR ACETYLENIC HYDROCARBONS

John Happel, Yonkers, and Charles J. Marsel, New York, N. Y.

Application December 10, 1952, Serial No. 325,106
8 Claims. (Cl. 260—678)

1. An improved process for the manufacture of acetylenic hydrocarbons which comprises the steps of passing a feed selected from the group consisting of tertiary-butyl alcohol and isobutylene and mixtures thereof to a vaporizing zone wherein the liquid feed is converted to vapor, admixing said vaporized feed with at least 50 mole per cent of steam, passing said mixture of vaporized feed and steam to a pyrolysis zone wherein a controlled cracking temperature of 850 to 1050° C. is maintained, holding said mixture within the pyrolysis zone for a period of less than 10 seconds, immediately thereafter passing the hot, cracked gases to a quenching zone wherein said gases are cooled to at least 500° C., thereafter separating said cooled, cracked gases containing the acetylenic products from solid contaminants, passing said cracked gases to a cooling and dehumidifying zone wherein a substantial portion of water vapor is condensed and

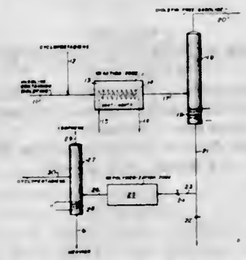


removed, concentrating the cracked gas stream to give a stream richer in acetylenic hydrocarbon components than the initial cracked pyrolysis gases, passing said concentrated gas stream to at least one pressure distillation zone from which a fraction rich in methylacetylene is removed as a product stream.

2,752,406
REMOVING DIOLEFINS FROM PETROLEUM FRACTIONS BY FORMING CODIMERS WITH CYCLIC DIOLEFINS AND DISTILLING

Wilson D. Seyfried, Baytown, Tex., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware

Application April 11, 1952, Serial No. 281,717
6 Claims. (Cl. 260—681.5)



1. A method for removing diolefins from a hydrocarbon fraction boiling in the range from about 80° to about 320° F. containing conjugated acyclic diolefins which comprises adding to said hydrocarbon fraction containing conjugated acyclic diolefins a conjugated cyclic diolefin having a five carbon atom ring in an amount sufficient to provide a ratio of cyclic diolefin to acyclic diolefin in the range from 0.1:1 to 1:1 to react with the conjugated acyclic diolefins, heating the hydrocarbon fraction to which cyclic diolefin has been added to a temperature in the range between 350° and 450° F. for a time sufficient to react substantially completely said diolefins and to form a codimer of said diolefins and distilling the reacted hydrocarbon fraction to recover a substantially diolefin-free hydrocarbon fraction and said codimer.

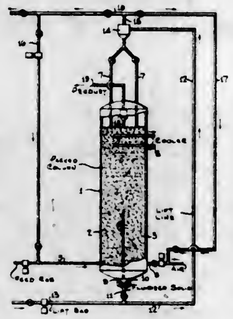
2,752,407
SHORT-TIME REACTIONS OF GASES AT ELEVATED TEMPERATURES

Robert P. Cahn, Elizabeth, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application September 17, 1951, Serial No. 246,973
6 Claims. (Cl. 260—683)

5. An autothermic process for cracking saturated hydrocarbons to ethylene which comprises separately intro-

ducing a relatively cool ethane-containing hydrocarbon gas stream and a relatively cool oxygen-containing gas stream into separate adjacent packed preheating zones in the lower part of a packed column, the amount of oxygen-containing gas introduced being sufficient to oxidize enough of the hydrocarbon gas to supply the required heat of cracking, introducing finely divided relatively cold



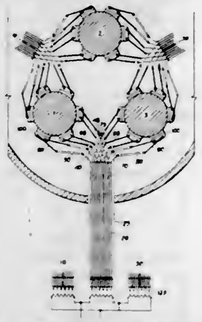
powdered solids having a particle size in the range of about 20 to 300 microns at the top of the packed column and passing them downwardly therethrough in countercurrent contact with rising gases, passing the introduced gas streams upwardly through the interstices of the respective packed zones at a velocity sufficient to maintain the downflowing solids as a dense, liquid-simulating phase therein, combining the gas streams at an intermediate level in the column, thereby raising the combined gas to a temperature of at least 1500° F. by the heat of combustion resulting from the combination of the hydrocarbon and oxygen-containing streams and thereby converting the gas to ethylene, passing the hot product gas upwardly to the top of the column in countercurrent contact with the relatively cold powdered solids and at a velocity sufficient to maintain the downflowing solids as a dense, liquid-simulating phase; withdrawing the finely divided solids from the bottom of each of the packed zones at the bottom of the column, said packed column being provided with coarser packing in the intermediate, reactive portion of the column than in the preheating zones located therebelow, the relative coarseness of the packing being such that substantially the same gas velocity is maintained in said reactive portion as in the preheating zones despite the intervening increase in gas volume; and removing relatively cold product gas from the top of the column.

2,752,408
STABILIZATION OF RUBBER BY ADDING THERETO 1,7-DIHYDROXYNAPHTHALENE
Harry E. Whitmore, Evanston, and Alfred E. Hoffman, Clarendon Hills, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware
No Drawing. Application December 14, 1951, Serial No. 261,751
4 Claims. (Cl. 260—810)

3. Rubber containing a stabilizing amount of a 1,7-dihydroxynaphthalene.

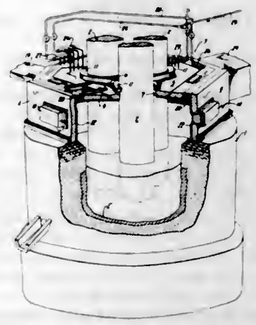
ELECTRICAL

2,752,409
LOW VOLTAGE CONNECTIONS FOR ELECTRODE FURNACE
Milton Eaton, Shawinigan Falls, Quebec, Canada, assignor to Shawinigan Chemicals Limited, Montreal, Quebec, Canada, a corporation of Canada
Application April 1, 1955, Serial No. 498,686
2 Claims. (Cl. 13—9)



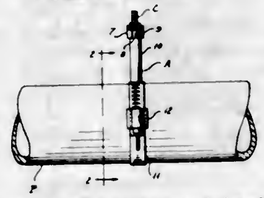
1. Low-voltage connections between a transformer, having a plurality of secondary windings in parallel, and the electrode contact shoes of a three-phase covered electric furnace having three electrodes in triangular spacing, comprising elements connected in sequence as follows: (*a*) interlaced transformer terminals made of thin bars, (*b*) three groups of interlaced "plus" and "minus" bars (one bar for each transformer terminal, and one group for each phase), (*c*) distributor bars (one for each of the interlaced bars) extended horizontally from the interlaced bars, those from the "plus" bars being directed toward the contact shoes of one electrode, and those from the "minus" bars being directed toward the contact shoes of another electrode, (*d*) water-cooled connectors, (*e*) water-cooled flexible leads, and (*f*) water-cooled contact shoes symmetrically arranged around each electrode; the longitudinal axis of the furnace end of each group of interlaced bars being symmetrical with respect to the two electrodes to which the bars are connected and each group of interlaced bars being terminated at a location such that the total length of the series-connected distributor bars, water-cooled connectors, and water-cooled flexible cables is a minimum.

2,752,410
ELECTRICAL REDUCTION FURNACE HAVING MEANS TO PROTECT THE WALLS THEREOF FROM HEAT WITHIN THE FURNACE AND TO UTILIZE OTHERWISE WASTED HEAT
Sven M. J. Olsson, Mount Vernon, N. Y., assignor to Sunrod Manufacturing Corporation, New York, N. Y., a corporation of Delaware
Application June 20, 1955, Serial No. 516,652
3 Claims. (Cl. 13—9)



1. The combination with an electric furnace having a crucible to contain the material to be smelted and/or molten and electrodes extending down into the crucible to be embedded in the contents thereof: of a cover closing the top of the crucible and having ports through which the electrodes pass; and means to protect the walls of the cover against the intense heat emanating from the molten crucible contents and the combustion of gases thereabove, and at the same time utilize said heat for the generation of steam, said means comprising closely spaced tubes covering the inner surfaces of the cover and directly exposed to the radiant heat of the incandescent or molten crucible contents and the burning gases, and means for circulating a steam-water emulsion through said tubes.

2,752,411
THERMOCOUPLES
Fred S. Walter, Allendale, N. J., assignor to Thermo Electric Co., Inc., a corporation of New Jersey
Application September 29, 1954, Serial No. 459,089
1 Claim. (Cl. 136—4)



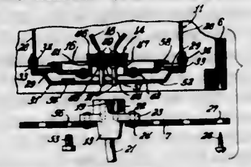
The combination of an elongated band adapted to encircle a pipe, means for adjustably clamping the band about the pipe, said band having an aperture therein, an elongated sleeve surrounding the aperture and extending perpendicularly to the band, said sleeve being fixed at one end to the band and having the opposite end open and with an open passage entirely therethrough for passage of a tool through the sleeve to form a seat in the outer face of the pipe, an elongated thermocouple having a terminal end, said thermocouple and terminal end being of smaller external size than the size of the passage through the sleeve for insertion through the sleeve with the terminal end extending through the aperture in position for engagement with the seat formed in the pipe, said thermocouple extending outwardly through the sleeve to the outer end thereof, and means mounted on the outer end of the sleeve for supporting the thermocouple therein, whereby the band may be applied to the pipe with the sleeve constituting a jig for a tool extended therethrough to form the seat in the outer face of the pipe and thereafter the tool be removed and the thermocouple inserted without removing the band and sleeve from their clamped relation to the pipe.

2,752,412
WELDING CABLE WINDING
Frederick S. Wreford and John S. Wreford, Detroit, Mich.; Annie A. M. Wreford, executrix of the estate of said Frederick S. Wreford, deceased, assignors to Gar Wood Industries, Inc., Wayne, Mich., a corporation of Michigan
Application May 1, 1951, Serial No. 223,912
1 Claim. (Cl. 174—15)



A flexible electric welding cable winding comprising a tubular casing of flexible insulating material having a bore therethrough of approximately circular cross-section, a single tubular welding current conductor insulator of flexible heat-resisting insulating material and of approximately semi-circular cross-section loosely and relatively slidably mounted within and extending substantially end-to-end of said casing, and a pair of flexible electrical welding current conductors of approximately semi-circular cross-section disposed side by side within said casing with their flatter sides facing one another in transversely-spaced relationship, said tubular insulator having a relatively flat conductor-separating portion lying between said conductors and extending across substantially the diametral portion of said casing in the space between said flatter sides of said conductors, said tubular insulator also having an approximately semi-cylindrical conductor-retaining portion in contact with the inside wall of said casing, one only of said conductors being disposed inside said tubular insulator and substantially filling the entire interior space thereof and the other conductor being disposed outside said tubular insulator and substantially filling the remaining space outside said tubular insulator and inside said casing, each of said conductors being composed of loosely-packed multiple strands of minute wire separated from one another by minute interstices forming cooling liquid passages.

2,752,413
ELECTRICAL INTERLOCK
Arthur H. Junkins, Geneva, Ill., assignor to Admiral Corporation, Chicago, Ill., a corporation of Delaware
Application October 2, 1950, Serial No. 187,866
3 Claims. (Cl. 174—50)

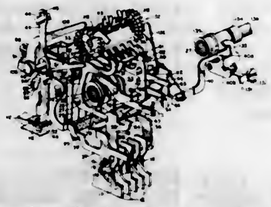


1. The combination with television equipment housed in a cabinet one of the sides of which is open and the equipment includes a frame for support of high voltage producing apparatus collectively enveloped by movable and fixed inner cowl members within the cabinet, of a first pair of terminals, bracket means on the frame to support the terminals independently of said cowling and in electrical communication with the high voltage producing apparatus, an outer cowl member to at least partly close the open side of the cabinet, said outer cowl member when closing the cabinet being adapted to lock the movable cowl member against opening, a second pair of terminals carried by the outer cowling at the end of a supply cable, said second pair of terminals being adapted to extend into electrical communication with the first pair of terminals when the opening is closed by the outer cowl member, opening of said inner cowl thereby being possible only after said outer cowl has been removed from the cabinet and one of the pairs of terminals concurrently disengaged from the other pair of terminals, first stop means in connection with said bracket means, and second stop means in connection with the fixed inner cowl member, said respective stop means being adapted to cooperate with each other when one of the pair of terminals is disengaged from the other pair of terminals to resist permanent deflection of said bracket means.

2,752,414
ANSWER BACK DEVICE FOR PRINTING TELEGRAPH SYSTEMS
Theodore I. Prayslocki, Park Ridge, Ill., assignor to Teletype Corporation, Chicago, Ill., a corporation of Delaware
Application September 16, 1952, Serial No. 309,755
2 Claims. (Cl. 178—4)

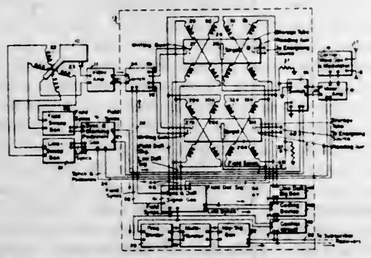
2. In a telegraph communication system including a calling station and a called station connected over a signal-

ing channel, an answer-back mechanism at each station, each mechanism comprising in combination a dually controlled transmitting apparatus including a drum carrying a plurality of transmitting cams, one for each impulse of a code, a series of contacts, a corresponding series of contact operating levers controlled by said cams, a first set of code elements, a keyboard comprising key operated means for controlling said code elements, a set of transfer levers articulated to said code elements and adapted to control the response of said contact operating levers to said cams, an auxiliary transmitting drum comprising a second set of code elements, sensing means on said contact operating levers cooperable with said second set of code elements, coded facilities on said transfer levers, a pair of probing means cooperable with said coded



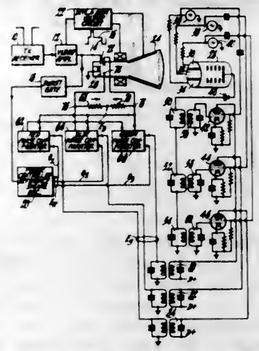
facilities, means for effecting the sequential selection of said probing means, means for stepping said auxiliary transmitting drum, a normally key operated single revolution clutch, means for effecting a predetermined number of successive operations of said clutch in response to the successive operation in a predetermined sequence of said probing means, means at each said calling and called station for initiating the answer-back mechanisms thereat into operation, and dually functional means at each station, said dually functional means effective substantially simultaneously under predetermined conditions of operation of said probing means to lock the keyboards at both said calling and called stations and to shunt the transmitting contacts at said calling station, whereby the called station alone is rendered effective to transmit over said signal line.

2,752,415
CODING APPARATUS FOR TELEVISION TRANSMITTERS
Erwin M. Roschke, Broadview, Ill., assignor to Zenith Radio Corporation, a corporation of Illinois
Application June 28, 1951, Serial No. 233,966
5 Claims. (Cl. 178—5.1)



1. A control system for television apparatus for changing the mode of a video signal derived during a series of successive trace intervals from a video-signal source, said control system comprising: a first and a second storage device each having a scanning system associated therewith to effect signal storage therein; a switching device for applying the video signal from said source to said first and second storage devices during alternate intervals each corresponding to a selected number of the aforementioned trace intervals; a further scanning system associated with each of said storage devices to effect reading of the signal information stored in said devices to develop an output video signal during a further series of trace intervals; coding apparatus coupled to at least one of said storage devices for altering the mode of said output video signal developed by said storage devices relative to the mode of the video signal from said source; and a coding signal source coupled to said coding apparatus for effecting actuation thereof to alter the mode of said output video signal from time to time in accordance with a coding schedule.

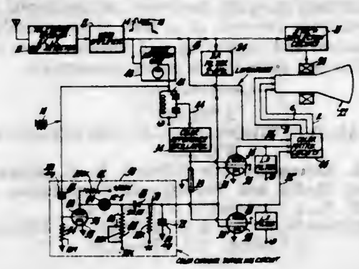
2,752,416
COLOR TELEVISION SYSTEMS
George C. Sziklai, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application July 9, 1954, Serial No. 442,321
13 Claims. (Cl. 178—5.4)



1. In a color television signal processing system including discrete color light producing elements and means for selectively energizing said elements, a system for detecting the presence and intensity of light waves from said elements comprising: a photoelectric device, said photoelectric device comprising a plurality of photocathodes and an anode, each of said photocathodes being sensitive to emit electrons when illuminated by light within a particular range of wave lengths, means for modulating the emissions of each of said plurality of photocathodes, means for forming an electrical signal which varies as the total emission from all of said photocathodes, frequency separating means connected to receive said electrical signal, said frequency separating means for separating said electrical signal into a plurality of modulated signals, and demodulating means for demodulating each of said modulated signals to form light intensity signals, each of said light intensity signals being representative of the intensity of light within a particular range of wave lengths present on said plurality of photocathodes and adapted to effect registration of said energizing means.

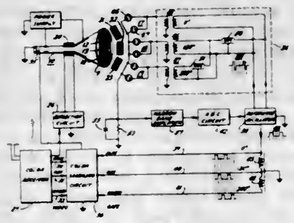
2,752,417
SIGNAL OPERATED AUTOMATIC CONTROL CIRCUIT
Dalton H. Pritchard, Princeton, N. J., assignor to Radio Corporation of America, a Delaware corporation
Application August 21, 1953, Serial No. 375,606
17 Claims. (Cl. 178—5.4)

1. A television receiver for providing one of two conditions of operation including color image reproduction and monochrome image reproduction, depending upon the reception of color television signals or monochrome television signals, such color signals including an indentifying waveform, said receiver comprising, means for separating such identifying waveform from a received color signal; a color signal processing channel for operating upon such received color signal to reproduce a color image; means for rendering said color channel inoperative during the reception of a monochrome signal, said latter means comprising a gas discharge device having a conducting and a non-conducting state; means coupled to said discharge device and to said waveform separating means and responsive to the output of said separating



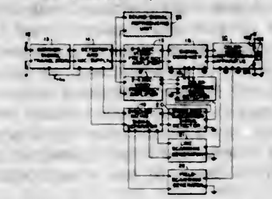
means for placing said discharge device into one of said states during the reception of a signal which includes such waveform and for placing said device into the other of its states during the reception of a signal lacking such identifying waveform; and means responsive to one of the states of said discharge device for developing a color channel disabling signal.

2,752,418
COLOR TELEVISION INDEXING SYSTEM
Richard G. Clapp, Narberth, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application November 3, 1953, Serial No. 390,062
18 Claims. (Cl. 178—5.4)



1. In a color television indexing system including a cathode ray television tube having an array of targets individually designated for reproduction of different colors and arranged for excitation by the cathode ray beam at different beam positions, and means connected for both modulating and scanning the beam periodically across the targets in synchronism with a source of color video signals; the improvement comprising, color sampling means including an oscillator connected for exciting the beam periodically with varying video signals representing particular colors as the beam is directed to target positions designating corresponding colors, bilaterally-conductive color-responsive photocell means responsive to the light produced by impingement of the beam on designated targets, electrical driving means for synchronously exciting said photocell means in a fixed phase relationship with respect to said oscillator at the sampling frequency, and means connected for controlling the oscillator phase with resultant signals derived from the photocell means in response to changes in phase of reproduced colors with respect to the electrical excitation from said oscillator, the control of the oscillator being in such sense to direct the sampling means to excite the beam with only those video signals representing the color corresponding to that of the target to which the beam is directed.

2,752,419
COLOR-IMAGE-REPRODUCING APPARATUS OF THE PROJECTION TYPE
William F. Bailey, Valley Stream, N. Y., assignor to Hazeltine Research, Inc., Chicago, Ill., a corporation of Illinois
Application May 14, 1954, Serial No. 429,941
17 Claims. (Cl. 178—5.4)

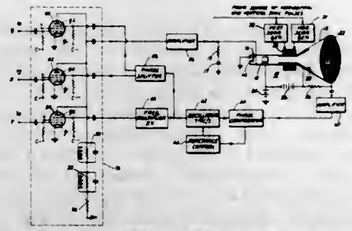


1. In a color-television receiver including circuit means for supplying signals representative of the intensities of predetermined primary colors of a color image to be reproduced, circuit means for supplying scanning signals, circuit means for supplying a beam-focus current, and an image-display screen, electromechanical color-image-reproducing apparatus of the projection type for displaying on the screen component color images and subject to temperature variations which tend to degrade the image register comprising: a supporting box; first, second, and third cathode-ray optical units mounted on said box and including a first electromagnetic beam-focus winding structure responsive to said beam-focus current for developing a first magnetic field of predetermined polarity and second and third electromagnetic beam-focus winding structures, respectively, responsive to said current for developing two similar beam-focus magnetic fields of opposite polarity to said first field and having groups of mounting elements, said cathode-ray units being responsive jointly to the color-representative signals and the scanning signals for developing and projecting component color images individually representative of predetermined primary colors of a color image to be reproduced; and a pair of intersecting plane dichroic mirrors disposed within said box for translating said component color images to the display screen in register; said beam-focus winding structures and said groups of mounting elements being subject to undesirable dimensional variations due to temperature variations of the apparatus and each group of said mounting elements comprising a nonadjustable element, a first adjustable element for controlling the position of the component color image developed by a cathode-ray unit along one direction of the scanning raster thereof, and a second adjustable element for controlling the image position along another direction of said scanning raster, said nonadjustable and second adjustable elements of said first cathode-ray unit having relative positions which are reversed with respect to corresponding elements of said second and third units for causing temperature variations to shift the scanning rasters of said units in the same direction as projected on the display screen, thereby substantially to reduce any image-register degradation on the display screen due to temperature variations.

2,752,420
COLOR TELEVISION RECEIVING SYSTEMS
William G. Ehrich, Barrington, N. J., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application October 9, 1953, Serial No. 385,075
5 Claims. (Cl. 178—5.4)

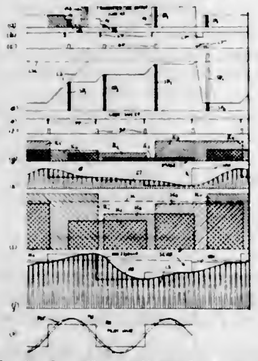
1. A cathode ray tube system for reproducing a color television image, comprising a cathode ray tube having a source of an electron beam, a control electrode for varying the intensity of the beam and a beam intercepting image screen, said image screen comprising a plurality of

stripes of three different materials each producing light of a different color upon electron impingement, one of said materials having a visual efficiency substantially less than required to produce color balance in the reproduced image as determined by the visual efficiency of another of said materials, said stripes being arranged in a repetitive pattern wherein the stripes of said material of less efficiency are symmetrically positioned with respect to the stripes of each of said other materials and the number of said stripes of less efficient material is substantially equal to twice the number of stripes of each of said other materials, said screen further comprising stripe regions of a material adapted to produce upon electron impingement a response detectably different from the response of said light producing stripes, said stripe regions being arranged in register with the stripes of one of said other materials



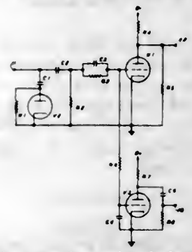
whereby said stripes of less efficiency are symmetrically positioned with respect to said indexing regions, means for periodically deflecting said beam across said image screen thereby to energize said light producing stripes and said stripe regions, means for applying to said beam intensity control means an image signal indicative at consecutive intervals of desired energization of said light producing stripes, said intervals recurring in a pattern corresponding to the pattern of said light producing stripes, means for deriving from said image screen a control signal having amplitude variations recurring in synchronism with the scanning of said beam over said stripe regions, and means responsive to said control signal for controlling the relationship between the time phase position of said image signal and the position of said beam on said image screen.

2,752,421
SCANNING METHOD AND TELEVISION SYSTEM USING SAME
Karl F. Ross, Bronx, N. Y.
Application March 11, 1952, Serial No. 275,953
20 Claims. (Cl. 178—6.8)



1. The method of coding a linearly scannable message within a limited time, preparatorily to reproduction, which comprises the steps of linearly scanning said message at a rate substantially faster than that required for constant-speed scanning of said message within the time allotted therefor, making a first measurement of the intensity of the message content at a point adjacent any point encountered during scanning at which said intensity changes by at least a predetermined minimum amount, concurrently making a second measurement concerning the location of any such point of change, interrupting the scanning upon encountering any such point, resuming scanning after a time which is short relative to said allotted time but long enough to make successive measurements occur during successive intervals of at least approximately uniform duration, and registering said measurements in the form of first and second code pulses, respectively.

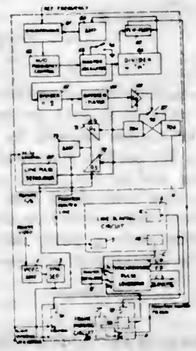
2,752,422
VERTICAL SYNCHRONIZING PULSE SEPARATION SYSTEM
Samuel B. Alexander, New Milford, N. J., assignor to Emerson Radio and Phonograph Corporation, New York, N. Y., a corporation of New York
Application September 6, 1951, Serial No. 245,324
2 Claims. (Cl. 178—7.3)



1. In a television receiver circuit having a synchronizing signal separator circuit with an input to which is applied a composite signal having picture components, vertical and horizontal synchronizing components and noise impulses limited to an amplitude no greater than said synchronizing components, said separator circuit producing a negative bias voltage at its input corresponding to the peak amplitude of said synchronizing components, the improvement comprising circuit means coupled to the input of said separator circuit and also supplied with said noise-limited composite signal and said bias for attenuating said picture components, horizontal synchronizing components and noise impulses to a greater extent than said vertical components to provide an output signal having relatively accentuated vertical synchronizing components, said circuit means also having isolating means providing a direct current path for said bias whereby said output signal also has said bias as a component thereof, a vertical separator tube directly coupled to said circuit means output to have said accentuated signal and said bias applied thereto, means including a very large output resistor connected in series with the anode of said vertical separator tube for producing a large change in anode potential in response to a small anode current, and a condenser coupled between said anode and ground and having with said resistor a time constant long compared to the recurrence frequency of said vertical synchronizing components, whereby said vertical separator tube will pass said vertical components and suppress the remainder of said composite signal.

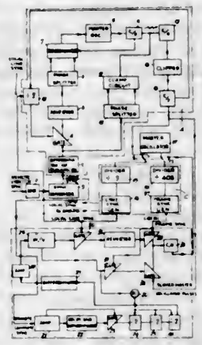
2,752,423
SYNCHRONISING ARRANGEMENT, PARTICULARLY FOR TELEVISION APPARATUS
Donald John Davey Pugsley, Cambridge, England, assignor to Pye Limited, Cambridge, England, a British company
Application January 13, 1954, Serial No. 403,846
Claims priority, application Great Britain January 28, 1953
17 Claims. (Cl. 178—69.5)

1. Television transmitting apparatus for selectively synchronising a synchronising pulse generator at a local station from synchronising pulses produced at said local station and synchronising pulses produced at a remote station, comprising an electronic switch, means for feeding said synchronising pulses produced at the local station to the electronic switch, means for feeding said synchronising pulses from the remote station to the electronic switch, a selector switch for selecting the controlling synchronising pulses, means controlling the electronic switch



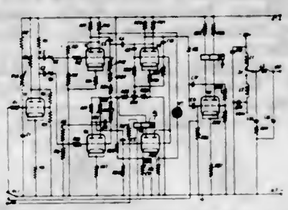
in response to operation of the selector switch, and means for rendering said controlling means operative upon the substantial coincidence of the local synchronising pulses with the remote synchronising pulses to operate the electronic switch in accordance with the predetermined selection of said selector switch to feed the selected controlling synchronising pulses to said synchronising pulse generator at said local station.

2,752,424
SYNCHRONISING ARRANGEMENT, PARTICULARLY FOR TELEVISION APPARATUS
Donald J. D. Pugsley, Cambridge, England, assignor to Pye Limited, Cambridge, England, a British company
Application January 21, 1953, Serial No. 332,275
Claims priority, application Great Britain January 23, 1952
14 Claims. (Cl. 178—69.5)



1. A synchronising arrangement, particularly for television apparatus, for locking the frame synchronising pulses produced by a generator of a waveform comprising line and frame synchronising pulses in step with the frame synchronising pulses of an incoming similar waveform, comprising a master oscillator, means for feeding the master oscillator pulses to a divider in the waveform generator through a gating device, means for producing the local frame pulses from the output of said divider, means for closing the gating device by the leading edge of the locally produced frame synhcronising pedestal, means for opening the gating device by the trailing edge of said frame synchronising pedestal, means for producing a switching pulse at a predetermined time interval after the beginning of the incoming frame pulses, means for applying said switching pulse to said gating device so as to open the gate if said switching pulse occurs before the trailing edge of the local frame synchronising pedestal, a second gating device, means for opening said second gating device by said switching pulse, if it occurs during the period of the local frame synchronising pedestal, means for closing said second gating device by the trailing edge of said frame synchronising pedestal, said second gating device, when open, injecting auxiliary pulses into the divider, the arrangement being such that when the local frame synchronising pedestal is in synchronism with the incoming frame synchronising pulses the number of auxiliary pulses injected compensates for the master oscillator pulses which have been gated out, whilst when the local frame synchronising pedestal is out of synchronism with the incoming frame synchronising pulses the total number of pulses fed to the divider during the period of the local frame synchronising pedestal is increased or decreased to advance or retard the count in the divider until the local frame synchronising pedestal is brought into synchronism with the incoming synchronising pulses.

2,752,425
REGENERATIVE REPEATER
Gordon Taylor Dain, Taplow, Buckinghamshire, England, assignor to British Telecommunications Research Limited, Taplow, Buckinghamshire, England, a British company
Application April 20, 1949, Serial No. 88,571
Claims priority, application Great Britain June 14, 1948
8 Claims. (Cl. 178—70)

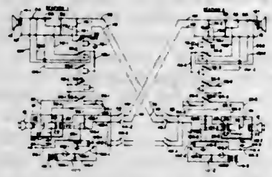


1. In a regenerative repeater for start-stop telegraph systems, a multi-vibrator having a period equal to the length of each code element, a timing device, means responsive to the receipt of a signal of the polarity of a start signal for setting said timing device in operation, means for terminating the operation of said timing device on the cessation of said signal, means controlled by said timing device if it remains in operation for a predetermined time for setting said multi-vibrator in operation to generate pulses, a receiving relay, a retransmitting relay, means operative on receipt of each pulse from said multi-vibrator for setting said retransmitting relay in accordance with the instantaneous setting of said receiving relay, and means for terminating the operation of said multi-vibrator after a predetermined number of operations.

2,752,426
INTERCOMMUNICATION APPARATUS
Richard H. Campbell, Racine, Wis., assignor to Webster Electric Company, Racine, Wis., a corporation of Delaware
Application June 30, 1952, Serial No. 296,415
7 Claims. (Cl. 179—38)

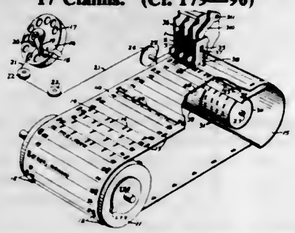
1. In an intercommunication system, the combination including, a plurality of stations, separate voice receiving and transmitting means at each station, an amplifier at each station, a source of plate voltage for each amplifier, the transmitting means at each station being permanently connected to the input of the amplifier, interstation com-

munication circuits between stations, the receiving means at each station being connected to an interstation circuit individual to the station, each amplifier including amplifier gain control means, reception volume control means for the receiving means at each station, and means including plural position amplifier gain, reception volume and plate voltage supply control means at each station for controlling said amplifier gain control means, reception volume control means and the connections of the amplifier to the plate voltage source, said plural position con-



trol means in one position breaking the plate voltage supply circuit and conditioning said reception volume control means for reception at maximum volume; in a second position completing the plate voltage supply circuit for the amplifier, conditioning the amplifier for operation at minimum gain and said reception means for reception at an intermediate volume, and in a third position conditioning said amplifier for operation at maximum gain, completing the plate voltage supply circuit, and conditioning said receiving means for reception at minimum volume.

2,752,427
CONTROL MECHANISM FOR AN AUTOMATIC TELEPHONE DIALER OR THE LIKE
James Kilburg, Burlingame, Calif., assignor to James Kilburg Corporation, San Mateo, Calif., a corporation of California
Original application November 30, 1948, Serial No. 62,720. Divided and this application August 14, 1951, Serial No. 241,768
17 Claims. (Cl. 179—90)



1. In a device for imparting dialing movements to a telephone or the like which includes groups of selector dogs advanceable to control clutch mechanism for determining numbers to be dialed, plate-like members adapted to be selectively positioned adjacent the dogs to obstruct their advancing movement, openings in said plate-like members to permit advancing movement therethrough of selected dogs in said groups representing a telephone number, a key for each plate-like member, and means effective upon depression of any one of said keys to position the corresponding plate-like member for control of the dogs.

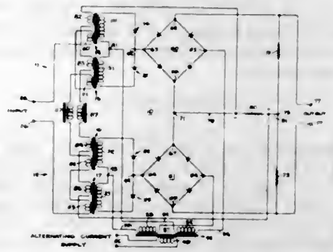
2,752,428
PHONOGRAPH TRANSLATING DEVICE
Benjamin B. Bauer, Oak Park, Ill., assignor to Shure Brothers, Incorporated, Chicago, Ill., a corporation of Illinois
Application May 3, 1951, Serial No. 224,339
10 Claims. (Cl. 179—100.41)

1. A pickup element for a phonograph pickup comprising, an elongated piezoelectric element adapted to be supported at one end in said pickup for transverse bending deformation and having its other end free, a needle chuck comprising a flattened tube having at one end a groove horizontally disposed within which the free end of piezoelectric element is received for enabling said chuck to lie in a certain position in said pickup and have an initial stress free relation with said piezoelectric element, said chuck being disposed substantially along the



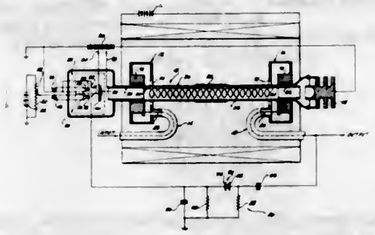
axis of said piezoelectric element and being cemented substantially rigidly thereto at said groove for supporting said chuck without further support by said pickup, and a needle having a flat portion removably received within the flattened other end of the chuck and disposed substantially in line with said chuck and the axis of said piezoelectric element, said needle including a portion comprising substantially only a point offset from the flat portion thereof for engaging record grooves.

2,752,429
MAGNETIC AMPLIFIER
Karl M. Hanson, Rockford, Ill., assignor to Woodward Governor Company, Rockford, Ill., a corporation of Illinois
Application January 7, 1952, Serial No. 265,271
6 Claims. (Cl. 179—171)



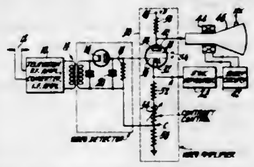
1. A push-pull magnetic amplifier, comprising, in combination, two pairs of saturable reactors having respective main, control and bias windings, two full wave rectifiers having respective pairs of input and output terminals, two alternating current sources, two pairs of half-wave rectifiers, leads connecting said main windings of each pair of said reactors in a parallel combination and connecting said parallel combination in series with one of said sources and with said input terminals of one of said full-wave rectifiers, one pair of said half-wave rectifiers being interposed in series with each pair of said respective main windings, said half-wave rectifiers of each pair being oppositely polarized so that one said main winding of each pair carries positive current and the other carries negative current, amplifier input leads interconnecting the two control windings of each pair of said reactors and connecting said two interconnected control windings of one pair in push-pull with said two interconnected control windings of the other pair, the respective output terminals of one polarity of said full-wave rectifier being connected together, a pair of load devices connected in series between the other output terminals of said full-wave rectifiers, a resistor connected between the common connection of said one polarity full-wave rectifier terminal and the junction of said load devices, means connecting said bias windings in series across said resistor to be energized by a voltage across said resistor proportional to the sum of currents through said two full-wave rectifiers, said bias winding being polarized oppositely to said respective main windings, and an inductive choke in series with said bias windings.

2,752,430
TRAVELING-WAVE TUBE AUTOMATIC GAIN CONTROL
Dean Allen Watkins, Menlo Park, Calif., assignor to Hughes Aircraft Company, Culver City, Calif., a corporation of Delaware
Application March 11, 1954, Serial No. 415,572
5 Claims. (Cl. 179—171)



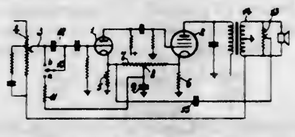
1. A wave-type amplifier tube circuit capable of producing an output signal having a substantially constant amplitude, said circuit comprising a wave-type amplifier tube including means for propagating a signal wave along a path at a predetermined velocity substantially less than the velocity of light, the cross-sectional area of said path at any point along said path including first and second substantially mutually exclusive parallel portions, means for producing a first electron stream, means for directing said first electron stream along the first portion of said path at a velocity to effect constructive interaction between said first electron stream and said signal wave, thereby amplifying said signal, means for producing a second electron stream having less current than the current of said first stream, and means for directing said second electron stream along the second portion of said path at a velocity capable of producing a change in the amplitude of said signal wave in proportion to the current of said second stream; and means responsive to the amplified signal for controlling the current of said second electron stream in proportion to the magnitude of the amplified signal to produce an output signal of substantially constant amplitude.

2,752,431
AMPLIFIER GAIN CONTROL
Hunter C. Goodrich, Collingswood, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application October 22, 1953, Serial No. 387,739
6 Claims. (Cl. 179—171)



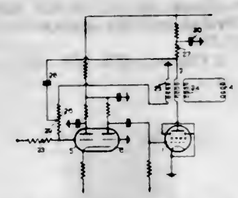
2. Gain control apparatus for an amplifier having a cathode, anode and control electrode, which comprises: a variable resistor; a second resistor; means connecting said resistors in series between said cathode and a point of fixed potential such that said variable resistor is remote from said point of fixed potential; means for applying a signal between said control electrode and the junction of said first and second resistors; and an anode load circuit operatively connected to said anode, such that variation of said variable resistor controls the gain of said amplifier for signals appearing in said anode load circuit.

2,752,432
TONE-CONTROL CIRCUIT-ARRANGEMENT FOR USE IN LOW-FREQUENCY AMPLIFIER
Gustav Rudolf Richter, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application April 22, 1953, Serial No. 350,292
Claims priority, application Netherlands May 21, 1952
3 Claims. (Cl. 179—171)



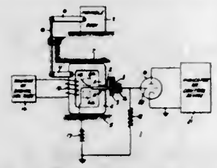
1. A low-frequency signal amplifier circuit provided with tone control comprising a first electron discharge tube amplifier having an input circuit, an output circuit and an unbypassed cathode resistor, a second electron discharge tube amplifier having an unbypassed cathode resistor and an input circuit coupled to the output circuit of the first amplifier, a resistor element intercoupling said cathode resistors for producing a positive feedback between the second and first amplifiers, a capacitor connected between a point on said element and a point of constant potential to by-pass the high-tone range of said signal, a negative feedback impedance, and a switch connecting the input circuit of said first amplifier through said impedance to said point of said element to effect attenuation of the low-tone range of said signal.

2,752,433
NEGATIVE FEEDBACK AMPLIFIERS
Eric Lawrence Casling White, Richings Way, Iver, and Peter Frederic Thomas Cryer Stillwell, Haddenham, Aylesbury, England, assignors to Electric & Musical Industries Limited, Hayes, England, a company of Great Britain
Application September 21, 1950, Serial No. 185,916
Claims priority, application Great Britain September 26, 1949
3 Claims. (Cl. 179—171)



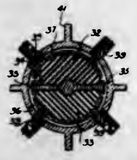
1. A negative feedback thermionic valve amplifier comprising an input circuit, an amplifying path leading from said input circuit and including a thermionic valve having an output electrode, a complex load impedance connected to said output electrode, filter means leading to said input circuit, means for applying voltage variations set up across said complex impedance to said filter means, said filter means being dimensioned to transmit voltage variations in a relatively low frequency range and to attenuate voltage variations in a higher frequency range, a resistance connected in a space current path of said valve, second filter means leading to said input circuit, and means for applying voltage variations set up across said resistance to said second filter means, said second filter means being dimensioned to transmit voltage variations in said higher frequency range and to attenuate voltage variations in said lower frequency range, and the respective filter means being connected to produce negative feedback to said input circuit in response to the transmitted voltage variations.

2,752,434
MAGNETO-RESPONSIVE DEVICE
William Crawford Dunlap, Jr., Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Original application October 19, 1949, Serial No. 122,243. Divided and this application March 22, 1952, Serial No. 278,055
4 Claims. (Cl. 179—171)



1. A magneto-responsive device system for providing an amplified replica of a signal voltage comprising an electromagnetic structure having a winding excited in accordance with said signal voltage, a paper-thin high resistance germanium sheet arranged entirely within a gap in said magnetic structure, the resistance of said germanium sheet being controlled by a magnetic field set up by said structure, sheet-supporting insulating members secured to opposite faces of said sheet, connections at opposite edges of said sheet for supplying a current through said germanium sheet in a direction perpendicular to said magnetic field to derive an output voltage between said connections varying in accordance with the resistance of said sheet, a voltage source connected to one of said connections, and a load element connected to the remaining connection, said voltage source, said germanium sheet, and said load element being connected in series circuit relationship.

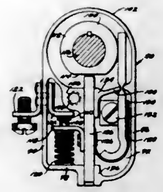
2,752,435
COMMUTATOR SWITCH FOR USE IN FLOW MEASUREMENT APPARATUS
Henry P. Kalmus, Washington, D. C., and Albert L. Hedrich, Silver Spring, Md., assignors to the United States of America as represented by the Secretary of Commerce
Original application December 30, 1952, Serial No. 328,543, now Patent No. 2,724,269, dated November 22, 1955. Divided and this application May 23, 1955, Serial No. 510,588
2 Claims. (Cl. 200—26)



2. In an electric switch a rotatable member comprising a shaft, shielding means extending radially from said shaft and terminating in arcuate portions concentric with said shaft, arcuate segments extending between said arcuate portions and insulated therefrom, and insulating sectors situated between said arcuate segments in said shaft.

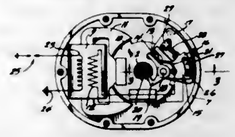
2,752,436
BREAKER MECHANISM FOR A MAGNETO
Russell E. Phelon, Longmeadow, Mass.
Application July 6, 1954, Serial No. 441,596
15 Claims. (Cl. 200—30)

1. In a breaker mechanism for a magneto or the like which includes a frame, a rotatable shaft and a cam fixeu thereto, the combination of a housing having a rear wall and forwardly extending walls, a cover detachably secured to said housing to define a dust proof enclosure in cooperation with said forwardly extending walls, tongue and groove means interengaging the said rear wall of the housing and the frame for adjustment of the housing toward and away from the shaft and the cam, means for detachably securing said housing in adjusted position, one of said forwardly extending walls adjacent the cam having an opening therein, a cam follower wholly supported by said housing and snugly fitting and projecting



through said opening for engagement with the cam, means biasing said follower into engagement with the cam and cooperating with the cam to cause reciprocation of the follower during each rotation of the cam, a first electrical contact fixed to said follower for movement therewith within said housing, and a second electrical contact fixedly supported within said housing for engagement by said first contact during each reciprocation of the follower.

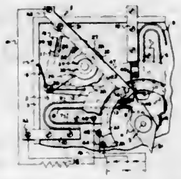
2,752,437
BREAKER ADJUSTMENT FOR MAGNETOS
Berton A. Purdy, Frankfort, Ind., assignor to Kiekhaefer Corporation, Fond du Lac, Wis., a corporation of Wisconsin
Application July 3, 1952, Serial No. 297,063
5 Claims. (Cl. 200—31)



1. A circuit breaker for a magneto mounted on a base and having a rotor mounted on a shaft for rotation therewith, comprising a fixed pivot pin spaced from and carried by said base parallel to said shaft, a plate pivotally mounted on said pin and having a contact spaced from said pin, said plate being adapted to be normally secured to said base, a movable lever member pivotally mounted on said pin and having a contact disposed to make and break an electrical connection with said first named contact, a cam carried by said shaft to rotate therewith and engageable with said lever to move the latter relative to said plate on said pin in a direction to separate said contacts, spring means carried by said base and connected to said plate to bias the latter on said pivot pin in a direction to separate said contacts, a spring carried by and connecting said lever and plate and biasing the same relatively on said pivot pin oppositely of each other to close said contacts, and manually operable clamping means for selectively securing said plate relative to said base for normal operation of the breaker and opening and reclosing of said contacts by said cam and last named spring, respectively, in predetermined relation to the rotation of said cam and rotor, said spring being effective against the biasing action of said spring means, and said manually operable clamping means being releasable to allow said plate to be moved relative to said lever by said spring to close said contacts and said lever and said plate with said contacts closed to be oscillated together on said pivot pin by said spring means and said cam with rotation of said crankshaft whereby said plate and contact associated therewith is precisely positioned for resecurement by said clamping

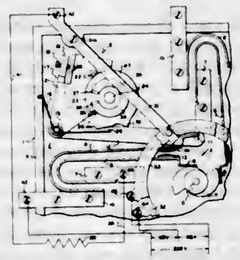
means relative to said lever so that the further rotation of said cam moving said lever relative to said plate is immediately effective to separate said contacts.

2,752,438
INFINITELY VARIABLE CONTROL SWITCH
Merle J. Lewis, Clinton, Iowa, and Milton S. Williams, Jr., Louisville, Ky., assignors to General Electric Company, a corporation of New York
Application December 28, 1953, Serial No. 400,541
8 Claims. (Cl. 200—31)



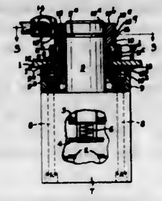
1. In a device for periodically supplying current to a heating element or the like for selectively variable intervals of time, the combination of first and second movable cooperating contacts adapted to be connected in circuit with said heating element, continuously operable means for periodically moving said first contact toward and away from said second contact, manually adjustable means for positioning said second contact so as to selectively vary the intervals during which said contacts are in engagement, said adjustable means including means providing first and second ranges of movement in each of which said second contact is movable to a plurality of positions, switch means operable by said adjustable means for connecting said heating element to a relatively low voltage source of energy when said adjustable means is in said first range of movement and to a relatively high voltage source of energy when said adjustable means is in second range of movement, and means operated by said continuously operable means rendering said switch means inoperable during the intervals when said contacts are in engagement.

2,752,439
INFINITELY VARIABLE CONTROL SWITCH
Merle J. Lewis, Clinton, Iowa, and Thomas H. Lennox, New Albany, Ind., assignors to General Electric Company, a corporation of New York
Application December 28, 1953, Serial No. 400,642
6 Claims. (Cl. 200—31)



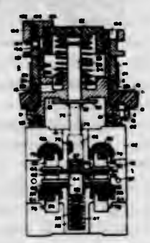
1. In a device for periodically supplying current to a heating element or the like for selectively variable intervals of time, the combination of first and second movable cooperating contacts adapted to be connected in circuit with said heating element, continuously operable means for periodically moving said first contact toward and away from said second contact, manually adjustable means for positioning said second contact so as to selectively vary the intervals during which said contacts are in engagement, said adjustable means including means providing first and second ranges of movement in each of which said second contact is movable to a plurality of positions including a series of positions common to both of said ranges of movement, switch means operable by said adjustable means for connecting said heating element to a relatively low voltage source of energy when said adjustable means is in said first range of movement and to a relatively high voltage source of energy when said adjustable means is in said second range of movement, and means for maintaining said contacts in spaced apart relation upon movement of said adjustable means between said first and second ranges of movement.

2,752,440
PUSH-BUTTON OPERATED DEVICES
Clyde F. Robbins, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application March 18, 1953, Serial No. 343,048
11 Claims. (Cl. 200—44)



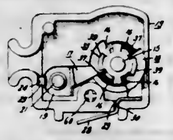
1. The combination with a device having an operating push-button, of a latching member pivotally positioned relative to said push-button and capable of engaging said button to positively prevent movement thereof from a given normal operative position thereof or alternatively engaging said button to retain the same in a different position, and over-center C-spring means in engagement with said latching member to maintain said latching member engaged with or disengaged from said button as desired.

2,752,441
ELECTRIC SWITCHES
Stanley L. Frank, Beaver, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Original application September 9, 1947, Serial No. 772,938, now Patent No. 2,669,616, dated February 16, 1954. Divided and this application June 19, 1953, Serial No. 362,723
10 Claims. (Cl. 200—44)



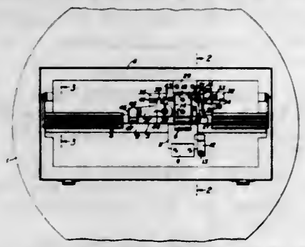
2. A pushbutton switch comprising, separable contacts, a mounting sleeve in which a pushbutton operator for said contacts is slidably mounted, a locking ring rotatably mounted on said sleeve for movement in a substantially spiral path when rotated and having a part overlying said pushbutton, whereby when said ring is moved in one direction said part will move said pushbutton inwardly to one predetermined position, and means on said ring for receiving lock means to retain the ring at a locking position.

2,752,442
PULL-OPERATED SWITCH WITH ARC SNUFFER
George B. Bonander, Oaklawn, R. I., assignor to General Electric Company, a corporation of New York
Application March 30, 1955, Serial No. 497,902
5 Claims. (Cl. 200—51.15)



1. In a rotary switch comprising a hollow housing having a series of arcuate ratchet steps formed on an inner wall surface of said housing centered around an inwardly projecting stud member, fixed contacts located on opposite steps of the housing and being separated by arcuate steps of relatively narrow width, and a rotary contactor mounted over said stud for making and breaking the circuit through the fixed contacts, said contactor having a pair of contact blades oppositely arranged thereon for edgewise engagement with the fixed contacts, the said edgewise blades of the rotary contactor serving to open the switch when positioned in the arcuate steps of narrow width, whereby the small clearances between the edgewise blades and the side walls of the narrow steps act to extinguish the arc formed between the blades and the fixed contacts.

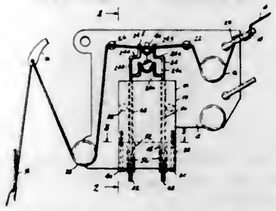
2,752,443
SIGNALLING DEVICE FOR PHOTOCOPY MACHINE
Edward R. Sabel and Frank I. Galbrecht, Rochester, N. Y., assignors to The Haloid Company, Rochester, N. Y., a corporation of New York
Application December 12, 1952, Serial No. 325,600
11 Claims. (Cl. 200—61.14)



1. Mechanism for indicating the approach of a splice in a film to the focal plane of a camera comprising a pair of rolling elements between which and in contact with which the film travels, a fixed support for one of said rolling elements and a slidable plate on which the other of said rolling elements is mounted for movement toward and from the first mentioned rolling element in a direction normal to the direction of travel of the film, a flange on said slidable plate, a pivoted signal actuating member including an arm located in the path of said flange and engaged and operated by said slidable plate, and a spring connected to said pivoted signal actuating member and actuating said slidable plate toward the film.

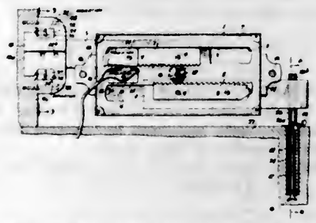
2,752,444
STOP-MOTION MERCURY SWITCHES FOR SEWING MACHINES
Edward Vossen, Lynbrook, N. Y., assignor to Stop-Motion Devices Corp., Brooklyn, N. Y.
Application June 1, 1953, Serial No. 358,824
5 Claims. (Cl. 200—61.18)

1. A stop-motion mercury switch for sewing machines and the like, comprising a dielectric block having two elongated cavities formed therein in spaced relation to each other, a body of mercury in each cavity, a pair of terminal contact members secured to said block in spaced relation to each other and projecting into said cavities and into contact with said bodies of mercury, a dielectric cover secured to said block, a plurality of guide holes formed in said cover in registration with each of the two cavities in the block, and two-legged thread probes individually mounted for slidable movement in said guide holes into and out of contact with said bodies of mercury,



one leg of each said probe being positioned for contact with one of said bodies of mercury and the other leg being positioned for contact with the other body of mercury, thereby closing the circuit between said bodies of mercury and between said terminal contact members, each said probe comprising a single length of wire bent intermediate its ends to form a pair of downwardly extending parallel legs, a pair of upwardly extending loops being formed at the upper ends of said legs, and a downwardly extending loop formed between and joining the two upwardly extending loops.

2,752,445
LOCKS FOR SLIDING CLOSURE MEMBERS
Angel Navarrete, Santiago de Chile, Chile
Application March 26, 1951, Serial No. 217,621
Claims priority, application Spain March 31, 1950
7 Claims. (Cl. 200—61.68)

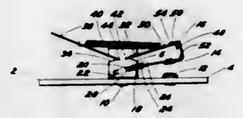


7. In a lock for a sliding closure slidably mounted in a pair of side frames between a top and bottom sill, a casing adapted for attachment to but shorter than one edge of the closure, a pair of bolts movable within said casing and through the opposite ends thereof, means in said casing for simultaneously actuating said bolts either to project or to retract both said bolts relative to said casing, means including a removable key for operating said actuating means, a first hasp for receiving one of said bolts, said first hasp being mounted on one of said side frames and a second hasp for receiving the other of said bolts, said second hasp being mounted on one of said sills.

2,752,446
SNAP SWITCH
John E. Carlson, West Cheshire, Conn.
Application October 19, 1953, Serial No. 386,730
4 Claims. (Cl. 200—67)

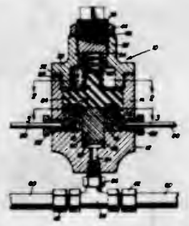
1. In a two-position snap-acting switch, a support having a fixed switch contact, a driving toggle arm pivoted to said support at a first point laterally displaced from a reference line through said fixed switch contact,

a driven toggle arm pivoted to said support in end-to-end relation with said driving toggle arm, a first tension spring connected between said driving and driven toggle arms, a rigid switch arm pivoted to said support at a second point laterally disposed between said first point and said reference line and carrying a movable switch contact for engaging said fixed switch contact, a second spring biasing said switch arm toward said fixed switch contact, a striker on said driven toggle arm for engaging said switch arm



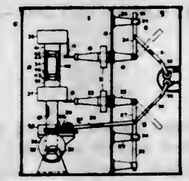
after said toggle arms pass dead center in moving toward said reference line to snap said switch contacts closed, and a projection on said switch arm disposed for engagement by said driven toggle arm after said toggle arms pass dead center in moving away from said reference line to snap said switch contacts open, said projection having a lateral spacing from the point of engagement of said strike with said driven toggle arm equal to a substantial portion of the throw of said driven arm.

2,752,447
HYDRAULIC SAFETY SWITCH FOR MOTOR VEHICLES
Albert R. Shaffer, York, Pa.
Application June 25, 1953, Serial No. 364,141
1 Claim. (Cl. 200—82)



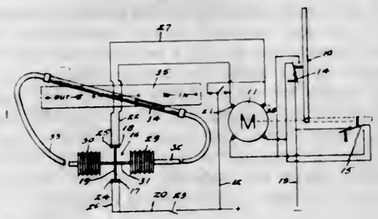
A pressure operative switch comprising a cup-shaped housing having a tubular upper portion and a bottom, a pair of fixed space contacts in the bottom of said tubular portion at diametrically opposite sides thereof adapted to be connected to opposite ends of an ignition wire of an automobile ignition circuit, a contact ring, an insulated plunger in said tubular portion above said ring carrying said ring and movable vertically toward and from said contacts to move said ring into and from bridging engagement with said contacts to close and open said circuit respectively, a pressure operative piston separate from said plunger slidable in said bottom for moving said plunger upwardly from said contacts and adapted to be exposed to hydraulic pressure in an automobile brake line for operation by the pressure in said line, a cap surmounting and threaded into said upper portion and closing said upper portion while limiting upward movement of said plunger, and spring means for moving said plunger towards said contacts comprising a settable member in said cap, and a coil spring interposed between said settable member and said plunger and variably compressible by setting of said member for movement of the plunger by said piston under pressure in the brake line above normal operating pressure.

2,752,448
SWITCHING EQUIPMENT FOR COMPRESSED AIR CIRCUIT BREAKERS
John B. MacNeill, Wilkinsburg, and Benjamin P. Baker, Turtle Creek, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application April 27, 1951, Serial No. 223,361
7 Claims. (Cl. 200—82)



1. In a switchgear structure, in combination, a cubicle having a breaker compartment and a switch compartment, a vertical partition separating said compartments, a circuit breaker of the air blast type disposed in the breaker compartment, said breaker having a pair of contacts one of which is movable to open the circuit and then recloses and a valve mechanism for controlling the operation of said breaker contacts, insulated conductors electrically connected to said breaker contacts, said conductors extending horizontally through said partition, a pair of disconnect switches disposed in the switch compartment, each disconnect switch having one terminal connected to one of said insulated conductors, said switches being connected in series-circuit relation with the breaker contacts through said conductors on opposite sides of the contacts, a fluid-actuated mechanism for operating said switches, said valve mechanism controlling the operation of said fluid-actuated mechanism to open the switches to isolate the breaker after each opening of the breaker contacts and before they reclose, with said disconnecting switches then maintaining the circuit through the breaker contacts open, and manually controlled valve means for controlling the operation of the fluid-actuated mechanism to close said switches, said valve means admitting a pressure fluid to the fluid-actuated mechanism when the valve means is in one position and exhausting the pressure fluid when the valve means is in another position.

2,752,449
CIRCUIT CLOSING MEANS FOR AN ELECTRICALLY OPERATED GARAGE DOOR
Eustace Loring Rose, Charleston, W. Va.
Application July 17, 1953, Serial No. 368,725
3 Claims. (Cl. 200—85)



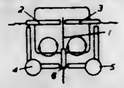
3. In an electrically operated garage door, a switch formed of opposed pairs of contacts, a bridging member between said contacts, a bellows means connected with said bridging member, and an elongated flexible tube secured to the opposite ends of said bellows means, said tube having a straight intermediate portion adapted to be disposed on a driveway at an oblique angle to the length of the driveway whereby the weight of a wheel moving thereover will effect expansion of said bellows means in one direction and movement of said bridging member to circuit closing position.

2,752,450

ELECTROMAGNETIC LIGHT CURRENT CONTACT MAKING RELAYS

Christopher Henry Foulkes, Percy Arthur Childs, and Raymond Ernest Smith, London, England, assignors to International Standard Electric Corporation, New York, N. Y.

Application December 29, 1951, Serial No. 264,084
Claims priority, application Great Britain January 3, 1951
12 Claims. (Cl. 200—87)



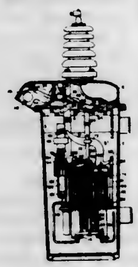
1. A light current contact-making electromagnetic relay having a sealed contact assembly comprising a pair of insulating buttons, conductive enclosing means for supporting said buttons in parallel spaced relation to each other and sealed to said buttons, so as to form an enclosure therewith, a fixed contact member of magnetic material sealed in each button and extending therethrough, a movable contact of magnetic material movably mounted between said buttons, so as to be engageable alternately with said fixed contacts, said movable contact being connected to said conductive enclosing means, and magnetic means for energizing said fixed contact members for selectively controlling the movement of said movable contact into engagement with predetermined of said fixed contacts.

2,752,451

CIRCUIT INTERRUPTER

James M. Wallace, Pittsburgh, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application February 23, 1951, Serial No. 212,375
19 Claims. (Cl. 200—89)



1. An automatic reclosing circuit breaker comprising, separable contacts, solenoid means connected in series with said contacts and having a movable part responsive to overloads on the circuit for causing separation of said contacts, means for automatically closing said contacts following a circuit opening operation, normally ineffective time delay means, and means including a movable part operable in response to magnetic leakage flux from said solenoid means for rendering said delay means operable to delay the next circuit opening operation.

2,752,452

CIRCUIT INTERRUPTERS

Herbert L. Rawlins, Pittsburgh, James M. Wallace, Braddock, and Alvin W. Ogg, Swissvale, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application December 11, 1943, Serial No. 513,860
31 Claims. (Cl. 200—89)

7. In an automatic reclosing circuit interrupter, separable contacts, means responsive to a predetermined electrical condition of the circuit for separating said contacts to interrupt the circuit, means responsive to a circuit interruption for automatically reclosing said contacts, time delay means for delaying the interrupting operation of the interrupter, means for rendering said time delay means ineffective to perform any delaying action during at least one cycle of operation of said interrupter



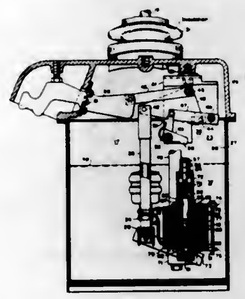
comprising an interrupting operation and subsequent reclosing operation of any series of closely successive cycles of operation, and said means for rendering said time delay means ineffective being adjustable so that it may be adjusted to render said time delay means either effective or ineffective for one or more interrupting operations in any such series of cycles of operation.

2,752,453

CIRCUIT INTERRUPTER AND COUNTER THEREFOR

James M. Wallace, Pittsburgh, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application October 9, 1950, Serial No. 189,082
11 Claims. (Cl. 200—108)



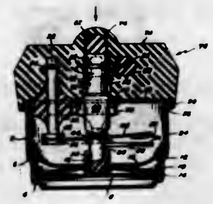
1. A resetting electromagnetic counter comprising: a tube; an electromagnetic circuit having two spaced magnetizable pole-piece plates, each having an opening at least partially surrounding said tube; two normally spaced armatures, only one of which is slidably movable, and the other of which is fixed in the tube adjacent one end thereof, said movable armature carrying a relatively movable piston-like operating member, each of said armatures at some time extending partly within and partly without the space between the two plates, each of said armatures having a fluid-flow passage therethrough and each having a valve for closing said passage so as to resist rapid fluid-flow through said passage in a direction out of the end of the tube having the fixed armature; a compressible spring between the two armatures, the operating member of the movable armature being biased toward the fixed armature for resetting said operating member so as to be ready for another counting-operation, said movable armature being movable in response to overloads and the cessation of overloads to pump a measured amount of fluid against the operating member, and magnetic detent means on said operating member cooperative with one of said plates to magnetically position said operating member.

2,752,454

EXTERNALLY RESETTABLE HERMETICALLY SEALED THERMOSTAT

Edward F. Kurtz, Attleboro, Mass., assignor to Metals & Controls Corporation, Attleboro, Mass., a corporation of Massachusetts

Application October 22, 1954, Serial No. 463,949
12 Claims. (Cl. 200—138)



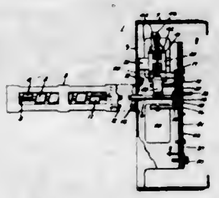
1. An externally-resettable sealed thermostat comprising a container; a closure plate closing an opening into said container; a thermostat element operatively mounted in said container; control means within said container positioned to be moved by said element; a cap of molded and flexible moisture-proof material covering at least a portion of the exterior of said closure plate, said closure plate being provided with a hole therethrough and said cap having a thin diaphragm section closing said hole; and movable means positioned between said diaphragm section and said thermostatic element, said movable means being movable by pressure on said diaphragm to reset said thermostat element and said control means.

2,752,455

THERMAL RESPONSIVE CONTROL DEVICE

Morris W. Carlson, Morrison, Ill., assignor to General Electric Company, a corporation of New York

Application January 25, 1954, Serial No. 405,952
11 Claims. (Cl. 200—138)



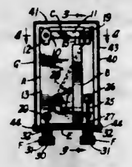
1. A thermal responsive control device comprising temperature sensing means adapted to be deflected in response to temperature changes, a shaft member connected to said temperature sensing means and arranged for rotational movement in response to deflection thereof, a pair of operating members mounted on said shaft member and moveable therewith, a switch adapted to be connected to the apparatus to be controlled and having a normal position and a second position, and an actuating member for said switch having two stable positions, said actuating member in its first position holding said switch in its second position and in its second position allowing said switch to return to its normal position, one of said operating members engaging said actuating member in its first position and moving the same into its second position responsive to a predetermined movement of said shaft member in one direction, the other of said operating members engaging said actuating member in its second position and moving the same to its first position responsive to a predetermined movement of said shaft member in the other direction.

2,752,456

TEMPERATURE SENSITIVE RELAY OR SWITCH

Frank W. Anchmoody, Fords, and William F. Brauner, West New York, N. J., assignors to Jo-Har Laboratories, Summit, N. J., a corporation of New Jersey

Application June 30, 1952, Serial No. 296,448
12 Claims. (Cl. 200—138)



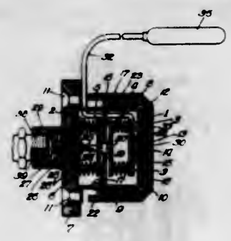
1. A temperature sensitive switch or relay comprising a tubular enclosure having perforated side walls, a rectangular mounting insulator plate provided with stop contact elements and a resilient leaf bimetallic element, a circular transverse insulator base upon which said plate is mounted, and mounting posts and connectors extending through said base, said bimetallic element being of J-shape with the short leg of the J riveted to the plate adjacent the base and with the end of the long leg terminating at the end of the plate away from the base and said contact elements extending transversely toward each other across said plate adjacent the end remote from the base and overlapping above and below the end of the long leg of the J, said plate extending diametrically across substantially the full width and length of said tubular enclosure and mounted at one edge of said base.

2,752,457

CONDITION RESPONSIVE CONTROL DEVICE

Russell B. Matthews, Wauwatosa, Wis., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis., a corporation of Wisconsin

Application July 16, 1952, Serial No. 299,118
20 Claims. (Cl. 200—140)



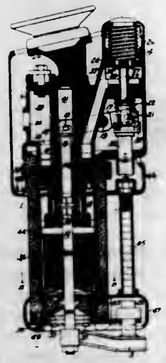
2. A temperature responsive control device including a low voltage circuit and comprising, in combination, a pair of low resistance contacts, a first hermetically sealed expansible and contractible enclosure enclosing said contacts against exposure to the atmosphere and against contamination in use by formation thereon of oxide layers, said first enclosure containing an inert fill immersing said contacts and effective to prevent contamination and oxidation of said contacts, and a second hermetically sealed expansible and contractible enclosure out of communication with the interior of said first enclosure and containing a volatile fill which expands and contracts with accompanying expansion and contraction of said second enclosure with changes in temperature, said second enclosure coacting with said first enclosure for accompanying actuation of said first enclosure with expansion of said second enclosure to produce relative movement of said contacts for control of said circuit.

2,752,458
CIRCUIT INTERRUPTERS
Benjamin P. Baker and William A. Gaskill, Turtle Creek, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application July 26, 1952, Serial No. 301,112
18 Claims. (Cl. 200—149)



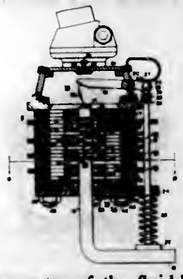
1. A circuit interrupting device including means defining an elongated arc passage having an opening at one end, means for establishing an arc within the arc passage, a plurality of gas-evolving insulating apertured blocks disposed along the arc passage whereby a blast of gas flows longitudinally along the arc passage and out said opening, and a plurality of relatively nonerodible arc-resistant insulating apertured blocks interspersed between the aforesaid gas-evolving blocks and having apertures no larger than the apertures in the gas-evolving blocks.

2,752,459
CIRCUIT BREAKER WITH ARC RESTRAINING MEMBERS IN FLUID SUPPLY PASSAGEWAYS
Philip L. Taylor, Abington, and Arthur C. Kelle, Stoughton, Mass., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application April 27, 1953, Serial No. 351,262
12 Claims. (Cl. 200—150)



1. In a circuit interrupter, means for establishing an arc, means including a plurality of contiguously disposed insulating plates forming a stack for defining a substantially enclosed arc passage for confining the arc along a major portion of its length, said plates comprising a plurality of insulating inlet plates, each said inlet plate providing a pair of diametrically positioned inlet passages on one level so that an incoming flow of fluid may pass through the inlet passages inwardly toward the arc substantially transversely thereto on opposite sides thereof, the arc passage openings of alternately arranged inlet plates having different dimensions.

2,752,460
CIRCUIT INTERRUPTERS
Winthrop M. Leeds, Pittsburgh, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application April 10, 1953, Serial No. 348,068
11 Claims. (Cl. 200—150)



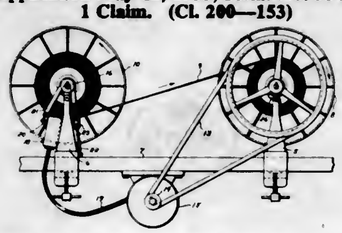
1. A circuit interrupter of the fluid-blast type including an arc-extinguishing unit, means for establishing a pressure-generating arc within the unit, an interrupting arc passage within the unit, contact means including a movable contact for establishing an interrupting arc along the interrupting arc passage, a first venting means associated with the interrupting arc passage permitting exhaust of fluid from the unit, said first venting means adapted to be opened while the said movable contact is in the interrupting arc passage, a first fluid-transmitting passage interconnecting the pressure-generating arc with the interrupting arc passage, a second valve-controlled venting means permitting exhaust of fluid from the unit, a second fluid-transmitting passage leading from the interrupting arc passage to said second valve-controlled venting means, valve means responsive to the magnitude of the current being interrupted within the arc-extinguishing unit to open the second venting means, and opening of the second venting means causing fluid to flow against the interrupting arc for additional interrupting action.

2,752,461
SWITCH ASSEMBLY
George M. Euler, Morrison, Ill., assignor to General Electric Company, a corporation of New York
Application January 26, 1954, Serial No. 406,258
3 Claims. (Cl. 200—153)



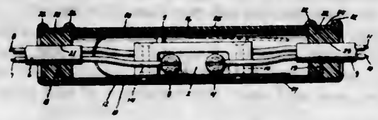
1. A switch assembly comprising a snap acting switch including an actuating button having a first normal position and a second position, a mounting member having an opening formed therein, said switch being secured to one side of said mounting member with said actuating button extending through said opening, a spring mounting member having one end secured to said first named mounting member, a cantilever spring member having one end secured to said spring mounting member adjacent the other end thereof and engaging said switch actuating button, said first named mounting member having an extension formed on one end thereof, screw means engaging said mounting member extension and said other end of said spring mounting member for adjusting the pressure applied on said switch actuating button by said spring, said first named mounting member having a pair of projections extending on either side thereof away from said switch, a base member secured to said projections, and another actuating member engaging the other end of said spring member and having its other end pivoted, said base member having an opening formed therein, said other actuating member having an extension extending through said base member opening, said other actuating member extension being adapted to be moved to a first position under the influence of an external force to deflect said spring member and thereby permitting said switch actuating button to move said normal position.

2,752,462
AUTOMATIC SHUT-OFF FOR WINDING APPARATUS
John A. Russell and Frank X. Smith, Portland, Maine
Application May 12, 1953, Serial No. 354,523
1 Claim. (Cl. 200—153)



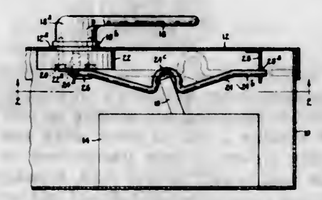
In combination, a supporting standard on which is carried a rotatable shaft and pulley, an electric switch mounted on the standard and provided with a switch control arm movable between switch closing and switch opening positions, a flexible member connected at one end to said control arm, a spring having one end anchored to the standard, and a turnbuckle interposed between the spring and the flexible member and having one end attached to the free end of the spring and its other end attached to the free end of the flexible member to vary the tension of the spring, said spring yieldably pulling the flexible member in a direction to move said control arm in switch opening direction, said flexible member being trained over said pulley and frictionally engaging therewith to overcome the action of said spring when the shaft is rotating in a direction to exert a pull on said member opposite to that exerted by said spring.

2,752,463
SWITCH
Louis E. Staak, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application February 3, 1955, Serial No. 485,880
7 Claims. (Cl. 200—168)



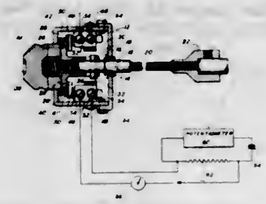
1. An electric switch comprising a switching mechanism having a movable member extending therefrom, said member being adapted to close an electric circuit upon maintenance of said member in a predetermined position, an elongated base member secured to said mechanism, means secured to said base member and arranged to be deflected to move said movable member to said predetermined position, a pair of closure members arranged respectively on each side of said mechanism and secured to said base member, each of said closure members having formed thereon a pair of spaced ridges thereby to provide a clamp seat therebetween, and a flexible hollow member arranged to be mounted over said closure members, said hollow member being secured to said closure members respectively by tight engagement with the outer surface thereof, said means having at least a portion thereof arranged adjacent said hollow member whereby said movable member may be moved to said predetermined position by an external force acting through said hollow member on said means.

2,752,464
OPERATING MEANS FOR ELECTRIC SWITCHES
Edwin W. Seeger, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application August 3, 1953, Serial No. 371,782
8 Claims. (Cl. 200—172)



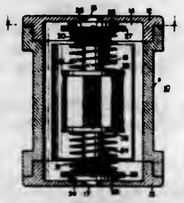
6. In an enclosed electric switch, in combination, a switch cabinet having an openable cover, a switch operating handle movably mounted on said cover, an electric switch mounted within said cabinet and having switch operating means, a spring interconnection comprising a single spring wire formed with at least one shoulder for normally cooperating with said handle and said switch operating means to transmit motion therebetween, and supporting means adjacent opposite ends of said wire to maintain said shoulder in operative alinement with its associated parts.

2,752,465
COMBINATION LOCKING PUSH BUTTON AND ADJUSTMENT KNOB
Duncan N. MacDonald, Arcadia, Calif., assignor, by mesne assignments, to Consolidated Electrodynamics Corporation, Pasadena, Calif., a corporation of California
Application February 24, 1953, Serial No. 338,343
7 Claims. (Cl. 200—172)



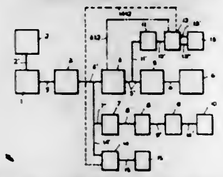
1. In a control for an apparatus, the combination comprising an axially constrained rotatable shaft to be angularly adjusted, a rotatable member mounted in constant contact with the shaft such that the shaft and member are rotationally dependent but axially shiftable with respect to each other, means urging the shaft and member in opposite axial directions, a body at a fixed distance from the shaft having a hole larger than the member and through which the member projects, a radial extension on the member located between the body and the shaft, a piece of substance having a high coefficient friction relative to the body and the radial extension disposed between the radial extension and the body for inhibiting rotation at any angular position of the member when the member is forced toward the body, switching means, and means actuating the switching means when the member is forced away from the body.

2,752,466
ACCELEROMETER
Charles R. Bonnell, Columbia Heights, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application August 11, 1954, Serial No. 449,035
7 Claims. (Cl. 201—48)



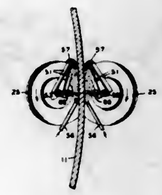
1. An acceleration sensing device comprising, a shaft, a signal potentiometer including a winding and a wiper, bearing means mounting said winding on said shaft such that said winding is free to move along said shaft and substantially prevent it from translational or rotational movement with respect to said shaft, a casing mounting said shaft and encircling said shaft and said potentiometer with the wiper of said potentiometer mounted on the inner periphery of said casing and in cooperating relationship with said winding, biasing means positioned between said winding and said casing and positioning said winding in a neutral position on said shaft, means insulating said winding from said shaft and constituting with said winding a mass movable longitudinally along said shaft in response to normal accelerational forces applied to said casing, a damping plate attached to said casing and positioned within said casing partially encircling said shaft and said windings, a damping fluid filling said casing and cooperating with said damping plate to dampen movement of said winding along said shaft, and electrical connection means connecting said winding to said casing.

2,752,467
MEASURING AND/OR CONTROL INSTALLATION FOR ELECTRIC WELDING
Richard Peretz, Ixelles, Belgium, assignor to Societe Anonyme "Electromecanique," Anderlecht (Brussels), Belgium
Application August 28, 1953, Serial No. 377,199
Claims priority, application Belgium September 2, 1952
4 Claims. (Cl. 219—4)



1. Electric resistance welding machines comprising two arms for bearing the welding electrodes, a saturable closed magnetic core situated in the magnetic field generated by the flow of the welding current, disposed on one side of one of said arms, at least two windings wound on said core in such a manner as not to induce an electromotive force at the exterior of the whole formed by the core and the windings on it, said core and windings being positioned in such a manner that the magnetic circuit presented to the induction flux generated by the welding current is formed substantially by air, an oscillator generating electric oscillations of a frequency higher than that of the welding current, said generator feeding said windings, a resistance connected in series with said oscillator and windings, and a rectifier in shunt on the terminals of said resistance for giving the mean value of the rectified tension generated between the terminals of the resistance, the value of the latter and that of the tension produced by the oscillator as well as the characteristics of the magnetic material constituting said core being so chosen that the rectified value of the alternating current which flows through said windings is a quadratic response to the welding current.

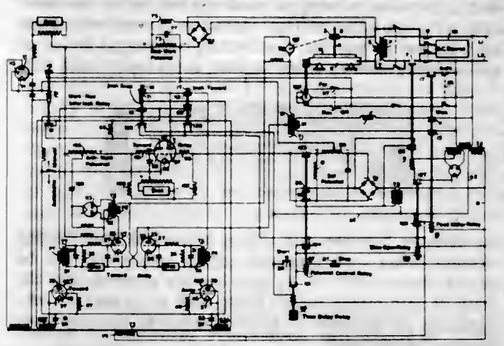
2,752,468
APPARATUS FOR FIELD WELDING SEAMS IN HORIZONTAL PLATE
Robert B. Costello, Rahway, N. J., assignor to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware
Application February 16, 1954, Serial No. 410,570
7 Claims. (Cl. 219—8)



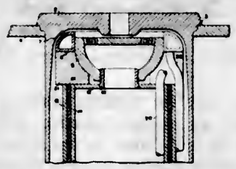
1. In apparatus for electric arc welding horizontal seams between superimposed upstanding elements, the combination comprising a support movable relatively along a horizontal seam between superimposed upstanding elements, means movable with said support and adapted to supply a welding electrode for discharge of electric current of predetermined characteristics at said seam, an endless deformable member carried by said support and positionable against the surface of the lower one of said elements adjacent said seam, means mounting said endless member for gyratory movement about a substantially vertically disposed axis to carry the peripheral portion of said endless member through a substantially horizontally disposed circular path, means for positioning said endless member against said surface and below said seam and for resiliently applying pressure to said endless member to deform a continuous length of said peripheral portion out of said circular path into a path complementing said surface in contact therewith and to provide an uninterrupted zone of intimate contact between said surface and said endless member, sections of said peripheral portion continuously entering said path complementing said surface at one end thereof and sections of said peripheral portions continuously leaving said path complementing said surface at the other end thereof as said support means move along said horizontal seams, and means for depositing granular flux on said zone to cover said seam for the extent of said zone.

2,752,469
AUTOMATIC WELDER
Robert W. Price, East Aurora, N. Y., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application September 28, 1951, Serial No. 248,848
30 Claims. (Cl. 219—8)

13. An automatic arc welder for welding work with a consumable rod comprising means for impressing potential between said rod and said work; means for moving said rod towards and away from said work; start means for rendering effective said potential impressing means and said moving means to operate to produce welds and stop means for rendering effective said moving means to move said rod away from said work only, while said potential impressing means remains effective, for a predetermined interval of time and thereafter to render said moving means and said potential impressing means ineffective.

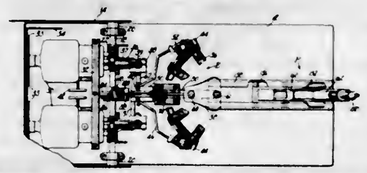


2,752,470
HEAT TREATMENT OF METALLIC WORKPIECES
John A. Redmond, Baltimore, and Edward J. Carbo, Towson, Md., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application June 19, 1953, Serial No. 362,787
7 Claims. (Cl. 219—10.43)



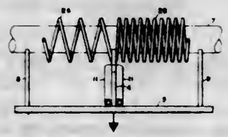
1. In apparatus for the high frequency heat treatment of a metallic cartridge case, said cartridge case including a cylindrical body portion having an axis and a head portion connected to said body portion with an internal radius being provided at the connection of the head portion to the body portion of said case, the combination of an annular inductor member shaped to heat treat said internal radius, and adapted to be positioned inside said body portion and adjacent said head portion, high frequency power supply leads connected to said inductor member and positioned along the axis of the cartridge case body portion, and coolant fluid members connected to said inductor member and adapted to supply a coolant fluid to said inductor member, said coolant fluid members being positioned substantially parallel to said body portion axis.

2,752,471
SHOEMAKING APPARATUS
Norman S. Derrah, Lynn, and Carl Juhola, Manchester, Mass., assignors to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application June 9, 1953, Serial No. 360,476
4 Claims. (Cl. 219—10.63)



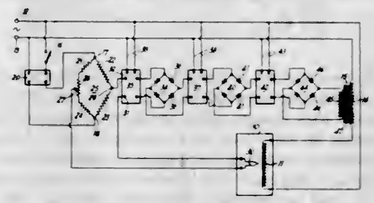
4. In high-frequency dielectric heating apparatus, in combination, an electrode assembly including a pair of cooperative electrode elements, a carrier supporting one of said elements and movable to transfer said one element toward and away from a predetermined work location, a cover adapted to provide an enclosure for said assembly and movable between opened and closed positions, and connections between said cover and said carrier, said connections being operable by closing movement of said cover resiliently to urge said one electrode element toward said predetermined work location during a limited portion only of the closing movement of said cover and then, upon further closure thereof, to release said electrode element from such resilient urging.

2,752,472
INDUCTION HEATER COIL
William A. Emerson, Austin, Tex., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application April 21, 1953, Serial No. 349,996
9 Claims. (Cl. 219—10.79)



8. In an inductor heating apparatus, the combination of a helical inductor and a central work-support, with said inductor having an axis, an inner face and two coaxial sections of opposite pitch, said coaxial sections extending perpendicular to and in opposite directions relative to said central work-support, with said work-support extending in a direction perpendicular to said axis inside said inductor beyond said inner face of the helical inductor.

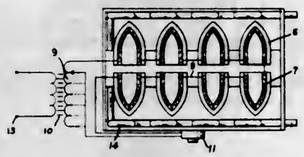
2,752,473
MAGNETIC TYPE TEMPERATURE CONTROLLER
William T. Hage, Alliance, Ohio, assignor to The Babcock & Wilcox Company, New York, N. Y., a corporation of New Jersey
Application June 26, 1952, Serial No. 295,763
3 Claims. (Cl. 219—20)



1. An automatic temperature controller for maintaining a constant pre-set temperature of an electrically heated device comprising, in combination, a source of A. C. potential in circuit connection with the heating means of said device; a temperature sensing element operatively associated with said device and having an output electric potential substantially proportional to the temperature of said device; a magnetic current reference connected to said A. C. source and operable to provide a substantially constant A. C. reference current; reference potential means comprising a fixed impedance connected to the output of said magnetic means and thus having a substantially constant potential drop thereacross; comparator means having inputs in circuit connection with said sensing element and said magnetic current reference and constructed and arranged to provide an output signal potential having a sense and magnitude corresponding to the differential of the reference potential and the output potential of said element;

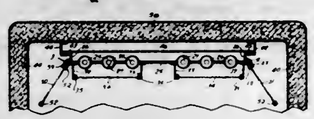
magnetic amplifier means connected to the output of said comparator means to amplify the signal potential; inductive means interposed between said A. C. source and said heating means; and dry-type rectifier means connected to the output of said amplifier means and operatively associated with said inductive means to modulate the effective impedance of the latter in accordance with the amplified value of the signal potential.

2,752,474
ELECTRICAL HEATING UNIT
August F. P. Stenzy, Glen Burnie, Md.
Application June 4, 1953, Serial No. 359,607
1 Claim. (Cl. 219—20)



A unit of the class described, including a series of electrical heating elements, means for connecting the elements in series, a saturated transformer having a tapped secondary winding, means for connecting said series connected heating elements to said tapped winding and means for surrounding said heating elements by a sinuously formed tubular element containing fluid or other medium to be heated.

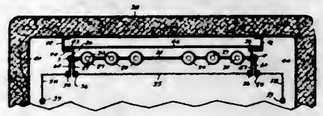
2,752,475
BROILER UNIT FOR ELECTRIC COOKING RANGES
Ralph J. Norris, Mansfield, Ohio, assignor to The Tappan Stove Company, Mansfield, Ohio, a corporation of Ohio
Original application May 23, 1951, Serial No. 227,766. Divided and this application May 11, 1953, Serial No. 354,204
14 Claims. (Cl. 219—37)



1. A broiler unit for electric cooking ranges comprising a frame, an exposed electric resistance heating coil carried by said frame, a fine mesh wire screen means incorporated in said unit as an integral part thereof and comprising a horizontally disposed element and a pair of angularly disposed side elements mounted on opposite sides of said horizontally disposed element, said screen means being so positioned with respect to said heating element that it will intercept flying globules of grease being thrown from broiling meat below said unit and will not be heated above 1100° F. by said heating element, and the mesh of said screen means being such as to prevent substantially all globules of grease impinging thereon from passing therethrough.

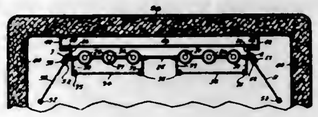
2,752,476
BROILER UNIT FOR ELECTRIC COOKING RANGES
Ralph J. Norris, Mansfield, Ohio, assignor to The Tappan Stove Company, Mansfield, Ohio, a corporation of Ohio
Application May 23, 1951, Serial No. 227,766
6 Claims. (Cl. 219—37)

1. A broiler unit for electric cooking ranges comprising a frame, an exposed electric resistance heating element carried by said frame, a fine mesh wire screen means which comprises a horizontally disposed central section and a pair of side sections which extend outwardly and downwardly from opposite sides of said central section, said screen means being permanently secured to the lower ends of a plurality of legs extending downwardly from said frame in position to intercept flying globules of grease being thrown from broiling meat below said unit,



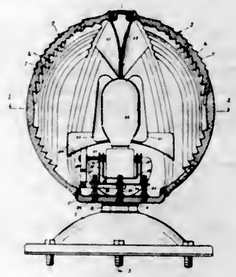
the distance between said screen means and said heating element being such that said screen means will not be heated above 1100° F. by said heating element, and the mesh of said screen means being such as to prevent substantially all globules of grease impinging thereon from passing therethrough.

2,752,477
BROILER UNIT FOR ELECTRIC COOKING RANGES
Ralph J. Norris, Mansfield, Ohio, assignor to The Tappan Stove Company, Mansfield, Ohio, a corporation of Ohio
Application March 26, 1954, Serial No. 418,979
12 Claims. (Cl. 219—37)



1. A broiler unit for electric cooking ranges comprising a frame, an exposed electric resistance heating element carried by said frame, screen means supported by said frame in spaced relation to said heating element and disposed in position to intercept flying globules of grease being thrown from broiling meat below said unit, the gauge of said screen means being in the order of 24 to 18, the mesh of said screen means being in the order of three thirty-seconds ($\frac{3}{32}$) of an inch to one fourth ($\frac{1}{4}$) of an inch, and the distance between said screen means and said heating element being in the order of one (1) inch to three eighths ($\frac{3}{8}$) of an inch, the larger the gauge the larger the mesh and the closer the screen to the heating element.

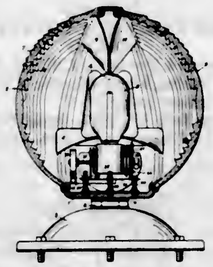
2,752,478
CONTACT OR RUNWAY LIGHT
Philip B. Clark, South Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application December 2, 1952, Serial No. 323,656
23 Claims. (Cl. 240—1.2)



1. A marker light for an airport runway including in combination a lamp having a light emitting filament, means including a variable control device for varying

the current to said filament, a lens having a focusing portion for projecting a light signal emanating from said filament in a predetermined direction relative to the geometric axis of said lens, said lamp and said lens being relatively movable transversely of said geometric axis for projecting said light signal in a predetermined direction relative to said runway at a predetermined light intensity of said filament, and means responsive to variations in current in said filament for controlling the relative movement of said lamp and lens, whereby said light signal may be automatically angularly deflected inwardly of said runway as the intensity of light emanating from said filament increases responsive to increased current supplied thereto.

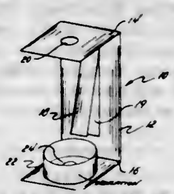
2,752,479
SIGNAL LIGHT PROJECTOR
Joseph G. Atwood, Wauwatosa, and Philip B. Clark, South Milwaukee, Wis., assignors to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application December 2, 1952, Serial No. 323,655
16 Claims. (Cl. 240—1.2)



1. A marker light for an airport runway including in combination a lamp having a light emitting filament arranged for connection with an electrical circuit having a variable control with predetermined maximum and minimum variable limits, a lens having a focusing portion for projecting a light signal emanating from said filament in a predetermined direction relative to the geometric axis of said lens, said lamp and said lens being relatively movable transversely of said geometric axis for projecting said light signal in a predetermined direction relative to said runway at a predetermined light emitting intensity of said filament, and a prime mover operatively related to said lamp and lens and including a driving member directly responsive to variations in current in said filament and an eccentric motion translating means operatively connected to said driving member, said translating means further being operatively related to said lamp and said lens to translate said direct current responsive drive into a tailored motion throughout a range of eccentric movement for automatically deflecting said light signal angularly inwardly of said runway at an angular velocity exponentially functionally related to an increase in current supplied to said filament.

2,752,480
VEHICLE LIGHT CONSTRUCTION
Clarence A. Priebe, Lincoln Park, Mich.
Application April 9, 1953, Serial No. 347,656
4 Claims. (Cl. 240—8.2)

1. A substantially C-shaped light bracket for use with a lamp having a base and a bulb affixed thereto, comprising an upright leg, an unrestrained resilient upper finger forming substantially a right angle with said upright leg, an unrestrained resilient lower finger forming substantially a right angle with said upright leg, bulb retaining means in said upper finger adapted to engage the top of a lamp bulb and hold the same in position under a cushioned preload exerted by resilient upper finger, a lamp base seat formed in said lower finger and adapted to seat a lamp base and hold the same in position under a cushioned preload exerted by said resilient lower finger, a lamp grounding member provided by said bracket and



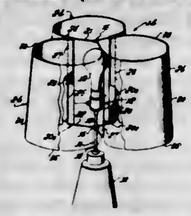
adapted to contact the side of the lamp base, and attaching means on said upright leg for use in affixing the bracket to a suitable backing, the positioning of said attaching means on said leg leaving said fingers free to resiliently hold the lamp.

2,752,481
SEALED BEAM LIGHTING UNIT
Robert N. Falge, Anderson, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application July 3, 1953, Serial No. 365,815
5 Claims. (Cl. 240—41)



1. In a lamp of the type having a casing and a sealed lighting unit supported within said casing, a light bulb supported within said lighting unit the base of said bulb having a plurality of anchor elements, one of said elements being the electrical contact of said bulb, at least one other of said elements being a dummy contact, a bridge element interconnecting said electrical and dummy contacts and connecting means for said lighting unit comprising an insulated electrical conductor wire having an end fixedly secured to said bridge element and in electrical connection therewith and with said electrical contact, the other end being secured to a detachable electrical connector device positioned within said casing, said wire being of sufficient length to allow the removal of said sealed unit from said casing without breaking the electrical connection at said device.

2,752,482
LAMP SHADE AND LAMP
Dale D. Smith, Los Angeles, Calif., assignor to Harley Earl, Inc., a corporation of Michigan
Application January 29, 1953, Serial No. 334,010
5 Claims. (Cl. 240—108)



1. In a lamp: a supporting upright; a lamp shade frame having upper and lower central members, one of said mem-

bers being secured to said upright, sets of upper and lower bars secured to and extending laterally from said upper and lower members, respectively, a longitudinally extending bar secured to and extending between the outer ends of the upper and lower bars of each set; longitudinally spaced pins extending transversely from each longitudinally extending bar; and outwardly convex shade sections disposed between said longitudinally extending bars, each shade section having marginal holes corresponding in spacing to that of said pins and receiving said pins to secure each section in convex fashion to said longitudinally extending bars.

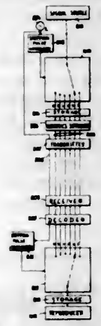
2,752,483
MINIATURE RAILWAY SWITCH
Anthony Collett, Verona, N. J., assignor to Colber Corp., Irvington, N. J., a corporation of New Jersey
Application February 27, 1952, Serial No. 273,599
4 Claims. (Cl. 246—251)



1. A switch for connecting current-carrying rails of a miniature electric railway system to an electrical unit, said switch comprising a dielectric sheet, a first conductor point secured to and depending from said sheet and adapted to be connected to a rail, a flexible conductor arm disposed beneath said sheet and rigidly fixed at one end thereof to said sheet at a point spaced from said first point, said arm being elongated to extend from said fixing point to the first point, with the free end thereof disposed in registry therewith, a second conductor point at said free end of said arm normally in contact with said first point and normally spaced, by such contact from the sheet intermediate the first point and the point of rigidly securing the flexible arm to the sheet, whereby said free end of said arm will normally support the weight of said switch, said sheet having an axial slot therein intermediate the fixed end of the arm and the first mentioned point, and a pin extending through said slot and slidably disposed therein, said pin having a head on its lower end and beneath the slot and adapted to engage the flexible arm on movement of the pin in said slot and toward the fixed end of said arm, to space the first conductor point from the free end of the arm, said spacing increasing progressively with movement of said pin toward sail fixed end, thus spacing the contacts and electrically disconnecting the rails and switch and holding said contacts so spaced until weight is imposed on said rails as by a train car passing over said rails, causing the flexible arm to bend over the said pin head to bring said free end into contact with the first conductor point.

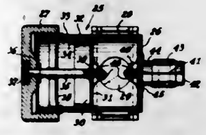
2,752,484
HIGH-FREQUENCY SIGNALING SYSTEM
Karl F. Ross, New York, N. Y.
Application October 8, 1952, Serial No. 313,630
21 Claims. (Cl. 250—13)

1. The method of converting periodically recurring signal pulses of varying amplitudes, having a width substantially less than their spacing, into sinusoidal waves which comprises the steps of lengthening each pulse to form a rectangular wave step having a width substantially equal to at least a major fraction of the reciprocal of the pulse cadence, thereby producing a stepped wave having a fundamental frequency of the order of said pulse cadence, harmonics of said fundamental frequency, and side-band frequencies up to twice the fundamental frequency, producing a sine wave of said fundamental frequency, amplitude-modulating said sine wave with said stepped wave, and substantially suppressing all of said harmonics above



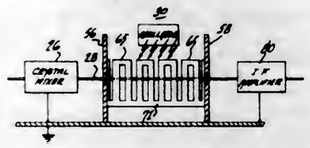
the highest of said side-band frequencies by smoothing out discontinuities of the modulated sine wave.

2,752,485
ULTRAHIGH FREQUENCY WAVE CONTROL MEANS
Ernest C. Okress and David G. Clifford, Montclair, N. J., assignors to Westinghouse Electric Corporation, a corporation of Pennsylvania
Application July 17, 1942, Serial No. 451,356
14 Claims. (Cl. 250—13)



8. A TR box comprising a hollow-body resonator resonant to low power wave energy, said resonator having end walls at the axial ends thereof, opposed spark-gap electrodes in said resonator each projecting inwardly thereof from an opposite end wall and having their inward ends in proximity but spaced from each other for shorting high power wave energy, and damping means for each of said electrodes for damping out undesired modes of oscillation in the resonator, the damping means for one electrode being connected to the end wall from which that electrode projects and the damping means for the other electrode being connected to the other end wall.

2,752,486
ULTRA HIGH FREQUENCY OSCILLATION INJECTION EQUALIZER
Wen Yuan Pan, Collingswood, and Robert D. Flood, Haddonfield, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application October 18, 1950, Serial No. 190,786
The terminal 15 years of the term of the patent to be granted has been disclaimed
7 Claims. (Cl. 250—20)



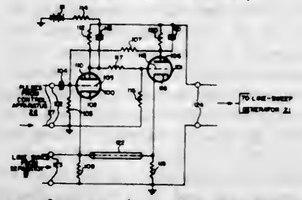
1. In an ultra high frequency system, a first source of ultra high frequency currents tunable to different frequencies in a band of ultra high frequencies, a second source of high frequency currents tunable to different frequencies in a different band, a first coupling element coupled between said sources and characterized by a sloping amplitude-frequency characteristic, a second coupling element comprising a shielding member partially surrounding said first coupling element and characterized by an amplitude-frequency characteristic that is complementary to said first-mentioned characteristic, said shielding member being of substantially cylindrical configuration and having a longitudinal axis, a cut-away portion parallel with said axis and a plurality of slots perpendicular to said axis and said second source of high frequency currents, said first coupling element and said second coupling element are disposed within a shield whereby said coupling elements are within the confined field of said source.

2,752,487
PULSE GENERATING CIRCUITS
Henry B. De Vore, Belle Meade, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application September 7, 1950, Serial No. 183,581
12 Claims. (Cl. 250—27)



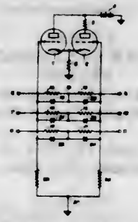
1. A circuit for producing positive voltage pulses comprising a power tube having a cathode, an anode and a control grid, a control tube having a cathode, an anode and a control grid, the cathode of the power tube being connected to the anode of the control tube through an impedance device, the control grid of the power tube being connected through a direct current connection to the anode end of said device, the cathode of the control tube being connected substantially directly to ground, in operation a direct current voltage being connected between the anode of the power tube and the cathode of the control tube in the direction to put positive voltage on the anode of the power tube and in operation the only current flowing through said impedance device being current flowing through said power tube, said current acting to provide the sole biasing voltage applied to the control grid of said power tube, and means provided to capacitively connect a load between the cathode of the power tube and ground whereby a positive voltage pulse is supplied from the power tube cathode to said load in response to the application of a negative voltage pulse to the control grid of said control tube.

2,752,488
SUBSCRIPTION TELEVISION SYSTEM
Erwin M. Roschke, Broadview, Ill., assignor to Zenith Radio Corporation, a corporation of Illinois
Application March 13, 1951, Serial No. 215,249
5 Claims. (Cl. 250—27)



1. Apparatus for repeating pulses of a given time duration and for selectively changing the timing of such pulses in accordance with a coding schedule comprising: a trigger circuit, including a pair of cross-connected electron-discharge devices, having two alternate stable operating conditions in each of which one of said devices is predominantly conductive; a delay line connected to at least one of said devices for introducing a preselected time delay to pulses translated thereby; means for applying to both of said devices pulses of a given duration to be repeated; a common output circuit for said devices for connection to a utilizing circuit; a control network included in said trigger circuit and having a time-constant long with respect to said given time duration so as to render said trigger circuit unresponsive to pulses of said given duration; and means for supplying to one of said devices triggering pulses having a duration long relative to said given duration and in accordance with a coding schedule.

2,752,489
POTENTIAL COMPARING DEVICE
Pierre R. R. Aigrain, Paris, France, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application March 2, 1951, Serial No. 213,513
Claims priority, application France March 3, 1950
6 Claims. (Cl. 250—27)

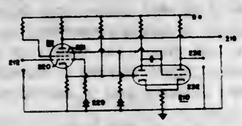


1. A potential comparing device comprising a differential amplifier having two input circuits with a common portion and adapted to have two conditions of operation, a source of potential, said common portion being connected to one terminal of said source, a resistance in each of said input circuits between said amplifier and said common portion, said amplifier being adjusted so that said input circuits normally maintain one condition of operation of said amplifier, a pair of unidirectional current-carrying devices connected in series between said input circuits at the ends of said resistances farthest from said common portion, said devices having the same polarity, a pair of resistances each having a first end connected to the juncture of said devices, means for applying a reference potential to the other end of one of said last-mentioned resistances, whereby the potential on one of said input circuits is changed in a direction to cause said amplifier to assume the other condition of operation, and means for applying a potential to be compared to the other end of the other of said last-mentioned resistances, whereby when said potential to be compared is of sufficient value and polarity to counter-balance said reference potential, said amplifier will be restored to its original condition of operation.

2,752,490
METHOD OF PRODUCING SHORT PULSES
Jerome Rothstein, Belmar, N. J., assignor to the United States of America as represented by the Secretary of the Army
Original application October 2, 1950, Serial No. 188,042. Divided and this application January 29, 1953, Serial No. 334,768
1 Claim. (Cl. 250—27)
(Granted under Title 35, U. S. Code (1952), sec. 266)

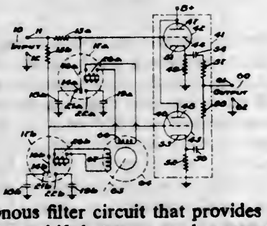
A circuit for generating pulses comprising a first vacuum tube having an anode, a cathode, a first control electrode adjacent to said cathode and a second control electrode further removed from said cathode, means for

biasing said first control electrode to render said first vacuum tube normally non-conducting, a second vacuum tube having an anode, a cathode and a control electrode, a third vacuum tube having an anode, a cathode and a control electrode, the cathodes of said second and third vacuum tubes connected together and to a common cathode impedance, supply means for said tubes including a load impedance connected in the anode circuit of each



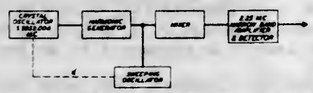
tube, means coupling the cathode of said first vacuum tube to the control electrode of said second vacuum tube, means coupling the anode of said second vacuum tube to the second control electrode of said first vacuum tube and the control electrode of said third vacuum tube, means for applying positive pulses to the said first control electrode of said first vacuum tube and an output circuit connected to the anode of said first vacuum tube.

2,752,491
PHASE INSENSITIVE SYNCHRONOUSLY TUNED FILTER
Richard M. Ringoen, Cedar Rapids, Iowa, assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application September 16, 1954, Serial No. 456,580
11 Claims. (Cl. 250—27)



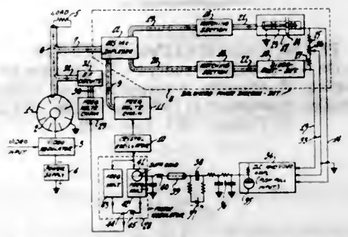
1. A synchronous filter circuit that provides an output insensitive to phase shift between synchronous signal and switching frequencies comprising, a first synchronous filter having a single switching means, a second synchronous filter having a single switching means, the inputs of said filters connected to receive said signal, means providing a substantially ninety degree phase displacement between said synchronous switching means, and means for vectorially summing the outputs of said first and second filters.

2,752,492
HIGH FREQUENCY MARKER
Harry R. Foster, Lake Valhalla, and Elmo E. Crump, West Caldwell, N. J., assignors to Ohmega Laboratories, Pine Brook, N. J., a partnership
Application February 16, 1954, Serial No. 410,561
4 Claims. (Cl. 250—36)



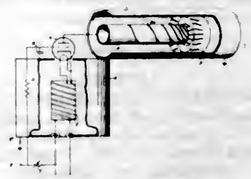
1. In the ultra high frequency channels used in television work now ranging from 470 megacycles to 890 megacycles, means comprising an arrangement of these frequencies and deviations thereof for producing markers on a passband curve from any of said television channels by showing the location of the picture and sound carriers, said apparatus including a circuit arrangement having a single crystal oscillator delivering approximately 5.995 megacycles and connected to a harmonic generator and mixer to which is connected a sweeping oscillator and a 2.25 megacycle narrow band amplifier, the output of the circuit delivering markers for showing the location of the picture and sound carriers.

2,752,493
OSCILLATOR FREQUENCY STABILIZATION SYSTEM
Donald G. Moore, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application January 22, 1954, Serial No. 405,588
11 Claims. (Cl. 250—36)



1. In a frequency stabilization system for a source of modulated wave energy which energy may be subject to incidental phase modulation, a source of stable frequency waves, a coupling including a phase modulator between said second-named source and said first-named source, whereby phase modulated waves of stable frequency may be injected into said first-named source to lock the frequency thereof to the frequency of the second-named source, means for detecting the phase modulation present on the modulated wave energy output of said first-named source, and a coupling capable of passing direct current between the output of said means and said phase modulator, thereby to apply the direct current output of said means to said phase modulator as a modulating voltage therefor.

2,752,494
WIDE RANGE RESONATOR
Herbert A. Finke, Brooklyn, and John E. Ebert, Lynbrook, N. Y., assignors to Polytechnic Research and Development Company Incorporated, Brooklyn, N. Y., a corporation of New York
Application August 22, 1951, Serial No. 243,078
7 Claims. (Cl. 250—36)



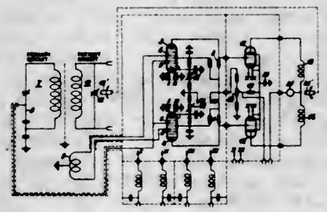
1. A broad-band resonator comprising a resonant chamber formed of conducting inner and outer tubular members arranged in concentric relation on a common axis, an annular short-circuiting slider mounted in the space between said inner and outer tubular members and forming one end wall of said chamber, said annular slider being mounted for sliding movement along said axis to vary the length of said chamber, said tubular members being insulated from each other at the other end of said chamber, a portion of said inner tubular member at the insulated end thereof being formed of a solid tubular section extending over a portion of the range of movement of said slider, the remainder of said inner tubular member being formed as a tubular helix.

2,752,495
FERROELECTRIC FREQUENCY CONTROL
Marlin G. Kroger, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application May 8, 1951, Serial No. 225,237
12 Claims. (Cl. 250—36)



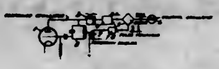
1. Electrical apparatus comprising a magnetron type microwave generator having a plurality of cavity resonators, a non-linear substantially reactive ceramic ferroelectric material disposed within at least one of said plurality of cavity resonators, and means for varying the substantially reactive characteristic of said disposed ferroelectric material for modulating said magnetron type generator in a predetermined manner.

2,752,496
CIRCUIT ARRANGEMENT FOR AUTOMATIC RESONANCE TUNING OF A HIGH-FREQUENCY GENERATOR, MORE PARTICULARLY FOR THE PURPOSE OF THERAPY
Günter Martens, Darmstadt, Germany, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application February 26, 1952, Serial No. 273,516
Claims priority, application Germany May 22, 1951
3 Claims. (Cl. 250—36)



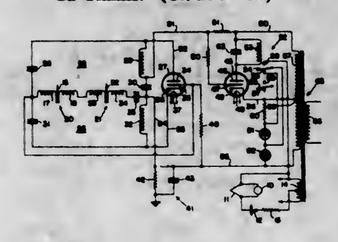
1. In a system wherein oscillations produced by a generator having a resonant circuit are fed to a load via a tunable output circuit coupled to said resonant circuit, apparatus for maintaining said output circuit in resonance with said resonant circuit comprising a bridge constituted by two parallel branches, one of said branches including a pair of electron discharge tubes each having first and second grids and the other branch including a pair of output resistors for deriving a control voltage therefrom, means connected to said resonant circuit to apply said oscillations produced by said generator to the respective first grids of said tubes, a coil coupled to said output circuit and having its ends connected to the respective second grids of said tubes, the center point of said coil being grounded whereby the voltage applied to said second grids are in phase opposition, the voltage induced in said coil being displaced substantially ninety degrees relative to said oscillations in said resonant circuit only when said output circuit is in resonance therewith and diverging from ninety degrees when said output circuit departs from resonance to thereby produce in said bridge the control voltage depending on the extent of said divergence, means to control the frequency of said tunable output circuit, and means to apply said control voltage to said control means to effect said resonance tuning.

2,752,497
DEVELOPING ELECTRICAL OSCILLATION
Johannes Enslak, Hilversum, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application October 25, 1950, Serial No. 191,984
Claims priority, application Netherlands November 8, 1949
8 Claims. (Cl. 250—36)



1. A control system comprising a regenerative feedback oscillator producing an oscillatory wave and having a frequency determining circuit, an outgoing channel coupled to said oscillator and including means to convert said oscillatory wave into a pulsatory wave, a source of control oscillations, a pulse mixer, means to apply said control oscillations and said pulsatory wave as inputs to said mixer to produce output pulses, an incoming channel coupled to said oscillator and including means coupling the output of said mixer to said frequency determining circuit to apply said output pulses thereto to control the frequency of said oscillatory wave, and a passive phase-shifting network comprising a plurality of impedances at least one of which is a reactance and interposed in one of said channels whereby the component of said output pulses whose frequency corresponds to the frequency of said oscillator is shifted approximately 90° relative to the voltage across said frequency-determining circuit.

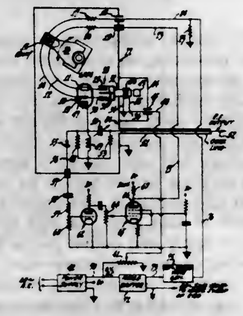
2,752,498
CONTROL APPARATUS
Robert J. Ehret, Philadelphia, Pa., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application June 11, 1952, Serial No. 292,909
11 Claims. (Cl. 250—36)



1. A control apparatus comprising, an electronic oscillator having a pair of resonant tank circuits, a first variable inductive element connected to the circuits as a common element to said pair of tank circuits, a first movable vane arranged to vary the affect of said first inductive element on said oscillator and cause said oscillator to go into and out of oscillation in accordance with the position of said vane with respect to said inductive element, a condition responsive means connected to move said vane in accordance with the magnitude of a variable condition, a second variable inductive element connected in series with said first inductive element and common to said pair of resonant tank circuits, a second movable vane arranged to vary the affect of said second inductive element on said oscillator, periodically actuated vane moving means connected to said second inductive element to effect periodic variations in the impedance of said second inductive element, said periodic variations of said second inductive element effecting periodic periods of oscillation of said oscillator when said first movable vane has a predetermined relation with respect to said first inductive element, and a current responsive means con-

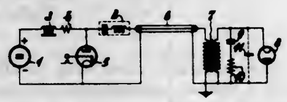
nected to said oscillator to be rendered energized or de-energized in accordance with the oscillatory or non-oscillatory condition of said oscillator.

2,752,499
ULTRAHIGH FREQUENCY SWEEP GENERATOR
Horace F. Hamthorn, Woodbury, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application November 2, 1953, Serial No. 389,720
15 Claims. (Cl. 250—36)



1. An oscillator comprising, a vacuum tube having cathode, grid and plate electrodes, a two conductor tuning line having one conductor directly connected to said plate and the other conductor directly connected to said grid, means to apply direct current bias potentials thru said line respectively to said plate and said grid, a shorting capacitor connected between the conductors of said line to determine the effective length of said line and the frequency of oscillation of the oscillator, and an output circuit including a resistor and an inductor connected in parallel from said cathode to a point of reference potential.

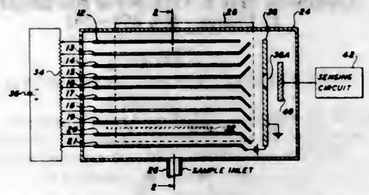
2,752,500
PULSE GENERATOR
Hugo Georg Bruyning, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application December 14, 1953, Serial No. 398,141
Claims priority, application Netherlands December 24, 1952
6 Claims. (Cl. 250—36)



1. A circuit-arrangement comprising a pulse-operated device, a source of electrical pulses connected in parallel with said device, and a series combination of a capacitor and a voltage-dependent resistor the resistance of which decreases with an increase in applied voltage, said combination being connected in parallel with said device and said source of pulses.

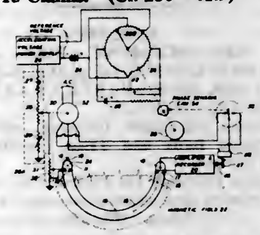
2,752,501
METHOD AND APPARATUS FOR MASS SEPARATION
Charles F. Robinson, Pasadena, Calif., assignor, by mesne assignments, to Consolidated Electrodynamics Corporation, Pasadena, Calif., a corporation of California
Application March 21, 1952, Serial No. 277,773
9 Claims. (Cl. 250—41.9)

1. An ion source for a mass spectrometer comprising an ionizing chamber having an ion outlet aperture, means for establishing a uniform electrical field across the chamber, means for establishing a magnetic field across the chamber normal to the electric field, means for ionizing a sample to be analyzed in a plane spaced from the aperture and normal to the electric field whereby ions are



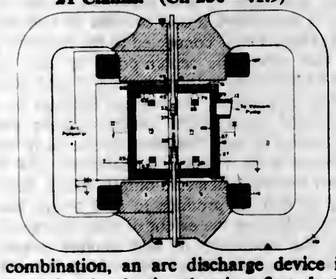
propelled from the plane of origin under the influence of the electrical and magnetic fields in cycloidal trajectories so that certain ions will be propelled through the aperture after approximately one-quarter cycle of cycloidal travel.

2,752,502
MASS SPECTROMETRY
Robert L. Sink, Altadena, Calif., assignor, by mesne assignments, to Consolidated Electrodynamics Corporation, Pasadena, Calif., a corporation of California
Application April 16, 1953, Serial No. 349,161
15 Claims. (Cl. 250—41.9)



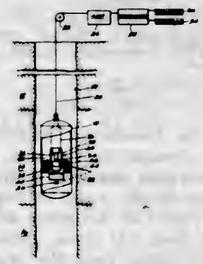
1. In a mass spectrometer having an analyzer chamber, ionization chamber, accelerating electrodes, a source of D. C. voltage connected to impress an accelerating potential on the accelerating electrodes for propelling ions from the ionization chamber into and through the analyzer chamber, means for establishing a transverse magnetic field in the analyzer chamber control means for selectively focusing at least one ion beam on a collector electrode and means for recording the relative magnitude of the signal developed by discharge of the ions of said beam at the collector, the combination comprising means for oscillating the ion beam whereby the recorded signal is caused to oscillate, and means operable responsive to unsymmetrical oscillation of the recorded signal to adjust the control means in a direction to return the recorded signal to symmetrical oscillation.

2,752,503
ISOTOPE SEPARATORS
Joseph Slepian, Pittsburgh, Pa.
Application November 18, 1954, Serial No. 469,784
21 Claims. (Cl. 250—41.9)



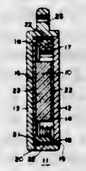
1. In combination, an arc discharge device including an evacuated chamber having therein a first electrode and a second electrode, means for impressing a potential between said electrodes adequate to produce an arc therebetween such that said first electrode is electrically negative relative to said second electrode, and means for impressing a magnetic field coaxial with said electrodes, the said combination being characterized by a first electrode consisting of a conducting material surrounding a core of electron emissive material.

2,752,504
NEUTRON GAMMA-RAY WELL LOGGING
Alexander S. McKay, Bellaire, Tex., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Application February 15, 1952, Serial No. 271,755
2 Claims. (Cl. 250—71)



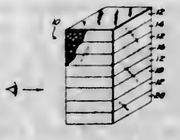
1. The method of examining an earth formation traversed by a bore hole to determine whether said formation contains chlorine or oil which comprises bombarding said formation with neutrons from a point within said bore hole to induce gamma rays therein, causing those induced gamma rays reaching a zone in the bore hole spaced vertically from said source by a distance of approximately 4 to 6 inches to impinge upon a body with the resultant transfer of gamma ray energy to electrons which in turn produce photons while causing substantially all of the energy of the electrons to be dissipated in said body, causing said photons by electron cascade to produce electrical pulses proportional in amplitude to the energy of the activating gamma rays, and recording those pulses having high amplitudes of the order of 8 mev., the presence of any substantial number of these pulses being indicative of the presence of chlorine in said formation.

2,752,505
HIGH ENERGY RADIATION DOSIMETER
Clifford C. Klick, Washington, D. C., assignor to the United States of America as represented by the Secretary of the Navy
Application February 6, 1953, Serial No. 335,612
7 Claims. (Cl. 250—83)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A radiation dosimeter comprising a radiation detector element in the form of a solid slab of silver activated phosphate glass having a relatively high sensitivity to relatively soft rays of 30,000 to 200,000 electron volts effective and relatively lower sensitivity to hard gamma rays of the order of 200,000 to 3,000,000 electron volts, and radiation shielding means shielding a relatively large generally distributed portion of the detector element from soft radiation from all directions, said shielding means having voids of relatively small area distributed around the detector element at least one on each of six opposite sides opposed along three mutually perpendicular lines, whereby the detector will be unshielded from relatively small portions of radiations approaching from any direction to permit the detector to receive hard rays from any direction in relatively large proportion and soft rays from any direction in relatively small proportion.

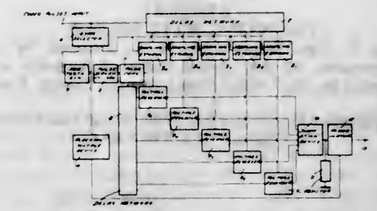
2,752,506
METER FOR HIGH RADIATION FLUXES
John V. Fitzgerald, George S. Bachman, and Kenneth M. Laing, New Kensington, Pa., assignors to Pittsburgh Plate Glass Company
Application January 17, 1952, Serial No. 266,952
11 Claims. (Cl. 250—83)



1. A device for the integrated measurement of hard radiations lying outside the visible spectrum comprising a glass element characterized by discoloration by such irradiation, and a plurality of color standard members secured adjacent said element, said members being formed of a glass material insensitive to said radiation and having permanent graded colors corresponding to the visual color of said element produced by different values of irradiation

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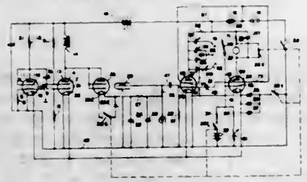
2,752,507
DEVICE FOR DECODING OF CODED ELECTRIC PULSES
Gabriel Henri Leon Dureau, Le Perreux, France, assignor to Societe Alsacienne de Constructions Mecaniques Paris, France
Application November 3, 1954, Serial No. 466,600
3 Claims. (Cl. 250—27)



1. A decoding device for recurring electric coded pulse groups, comprising means for receiving periodic synchronization pulses transmitted together with said coded pulse groups, means for applying all the received pulses to a synchronization pulse selector, a generator of a periodic saw tooth voltage synchronized by synchronization pulses selected by said selector, means for further applying the whole of said received pulses to a first delay network provided with n taps, staggered along said network in such a manner that the time of propagation between two consecutive taps be equal to the duration of one of said coded pulses, means for producing from said selected synchronization pulses, periodic control pulses actuating n storing devices, to which are respectively and simultaneously applied the electric voltages present at said n taps of said first delay network, each of said storing devices delivering at its output a control

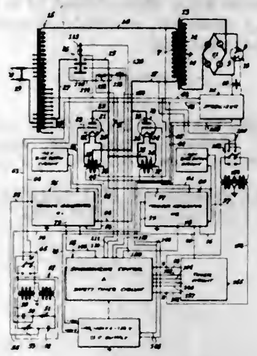
voltage having one or the other of two predetermined constant values according to the value of the voltage present at that one of said taps to which it is connected at the time of generation of said control pulses, an electronic tube generator controlled by said saw tooth voltage and generating periodically, within a time at most equal to the duration of one of said groups, a basic sequence of $2^n+(n-1)$ signals with equal individual durations and each one of which consists in the presence or absence of a pulse, said basic sequence of $2^n+(n-1)$ signals having such a composition that any group of n consecutive signals taken in said sequence be different, means for applying said signal sequence to a polarity converter transforming it into a sequence of $2^n+(n-1)$ pulses having one or the other of two opposite polarities according to the presence or absence of one pulse in said signal sequence, a second delay network supplied by said transformed pulse sequence and provided with a number n of taps so staggered along said second network that the time of propagation between two consecutive taps be equal to the duration of one pulse in said transformed sequence, n voltage reversers, respectively supplied, on the one hand by the voltage produced at each one of said n taps of said second delay network and on the other hand by the control voltage produced at the output of one of said storing devices, each one of said voltage reversers delivering, at its output, according to the value of said control voltage, a pulse sequence identical with said transformed sequence or a complementary sequence obtained by reversing the polarity of each pulse in said transformed sequence, a summation device comprising n inputs respectively energized by the n outputs of said voltage reversers, and delivering to a resistance a resulting pulse only when the voltages of pulses from all said n reversing devices are all simultaneously of one predetermined polarity, means for applying said resultant pulse to a demodulator for pulses modulated in their time positions, means for deriving from the synchronization pulses from said selector periodic release signals with a substantially rectangular wave shape and for applying them so as to make said demodulator active only for the duration of said release signals and means for applying the demodulated signals from said demodulator to a utilization circuit.

2,752,508
COUNTING-RATE METER
George V. Zito, Jersey City, N. J., assignor, by mesne assignments, to the United States of America as represented by the United States Atomic Energy Commission
Application November 22, 1950, Serial No. 197,000
6 Claims. (Cl. 250—83.6)



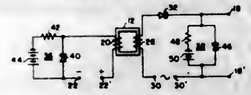
5. In a device for determining average intensity of radio-active particle bombardment, a Geiger-Mueller tube adapted to provide random electrical pulses in response to radio-active particles bombarding said tube, a multivibrator adapted to receive said pulses and including a pair of electron tubes each having a cathode, a plate and a control grid, at least one of said tubes having a screen grid functioning as an anode independently of said plate, and integrating means including an indicator calibrated in units of biological dosage and connected in the plate circuit in said last-mentioned tube.

2,752,509
X-RAY APPARATUS AND CONTROLS
Charles T. Zavales, New York, N. Y., assignor to F-R Machine Works, a firm
Application September 2, 1950, Serial No. 183,019
10 Claims. (Cl. 250—95)



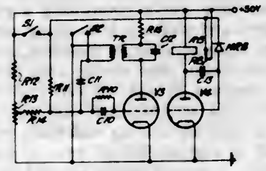
8. An X-ray tube transformer control comprising a pair of thyratrons connected back to back, a pair of negative voltage bias supplies connected to the grids of said thyratrons, a phase shifter, a pair of trigger generators connected to the output of said phase shifter for sharpening the voltage from said phase shifter, a feed back transformer, synchronizing controller connected to said trigger generators and to said feed back transformer, said trigger generators being responsive to said controller to superimpose said sharpened voltage on said grids to render said thyratrons alternately operative, a timer, said feed back transformer connected to said timer, said timer including a condenser, said condenser receiving a predetermined charge during the firing of each of said thyratrons during each half cycle, and also a synchronizing transformer for adding a spike voltage to the condenser only during the negative half cycles of conduction of said thyratrons, and means responsive to the sum of the condenser and spike voltages to effect the operation of said controller, whereby said controller suppresses the superimposition of said sharpened voltage on said grids.

2,752,510
MAGNETIC CIRCUITS
William G. Hall, Wilkinsburg, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application May 24, 1955, Serial No. 510,670
7 Claims. (Cl. 307—88)



7. In a magnetic device, the combination comprising, a magnetic core member, a gating circuit including a load winding disposed in inductive relationship with the magnetic core member, a series circuit having a rectifier and an impedance member of relatively high impedance value, the series circuit being adapted to have a source of direct current connected thereacross so as to apply a forward bias to the rectifier, a blocking rectifier, terminals to which is applied an alternating voltage, and circuit means for so connecting the terminals, the load winding, and the blocking rectifier in series circuit relationship with one another and with the rectifier connected in the series circuit that on one half-cycle of the alternating voltage current flows through the load winding and on the other half-cycle of the alternating voltage the blocking rectifier blocks the flow of current through the load winding, and a reset circuit consisting only of a reset winding disposed in inductive relationship with the magnetic core member, a series circuit having a rectifier and an impedance member of relatively high impedance value, the latter series circuit being adapted to have a source of direct current connected thereacross so as to apply a forward bias to the rectifier of the reset circuit, terminals to which is intermittently applied a direct-current control signal, and other circuit means for so connecting the last mentioned terminals and the reset winding in series circuit relationship with one another and with the rectifier of the reset circuit that during said other half-cycle of the alternating voltage the direct-current control signal, when applied, always effects a driving of the magnetic core member to negative saturation.

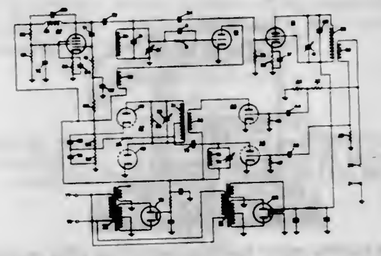
2,752,511
ELECTRICAL TIMING CIRCUITS
Raymond Beaufoy, Taplow, England, assignor to British Telecommunications Research Limited, Taplow, England, a British company
Application July 7, 1951, Serial No. 235,625
Claims priority, application Great Britain July 31, 1950
14 Claims. (Cl. 307—132)



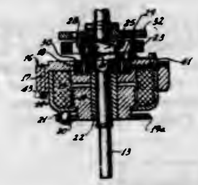
14. An electrical timing circuit for effecting a switching operation at the end of a predetermined period comprising in combination, a first thermionic valve, a relay in the anode circuit of said valve, first contacts operated by said relay for controlling an external circuit, second contacts operated by said relay for controlling the timing circuit, a second thermionic valve, a capacitor connected to the grid of said second valve, means for charging said capacitor, means controlled by said second relay contacts for progressively discharging said capacitor so as to increase the grid potential and thereby cause said second valve to conduct, coupling means between the anode and grid circuits of said second valve whereby when said valve starts to conduct oscillations of rapidly increasing amplitude are set up, and circuit connections including a rectifier between the grid of said second valve and the grid of said first valve whereby when said second valve is set in oscillation a negative potential for effecting the cut-off of said first valve is rapidly built up on the grid thereof.

2,752,512
SONIC ENERGY SOURCE
Everett R. Sarratt, Cleveland, Ohio, assignor, by mesne assignments, to Clevite Corporation, Cleveland, Ohio, a corporation of Ohio
Application May 10, 1952, Serial No. 287,126
6 Claims. (Cl. 310—8.1)

1. A source of sonic radiations, comprising: a body of electromechanically sensitive material, having a mechanical resonant frequency which varies with temperature changes of said body within a given temperature range, and having the property at temperatures within said temperature range, under electrical excitation at a frequency in the vicinity of said resonant frequency, of vibrating with maximum amplitude only when the power factor of said electrical excitation is substantially a predetermined value; a source of electrical excitation, coupled to said body of said material to excite said body at a frequency in the vicinity of said mechanical resonant frequency, and including frequency-varying means adapted in response to a control signal to vary said frequency of excitation within limits permitting substantial compensation for said resonant frequency variations within said given temperature range; means, responsive primarily only to the power factor of said electrical excitation of said body, for developing a control signal when changes of temperature cause said power factor to deviate from said predetermined value; and means for applying said control signal to said frequency-varying means to adjust the frequency of said source of electrical excitation to maintain said power factor at substantially said predetermined value with resultant excitation of said body to vibrate with substantially maximum amplitude at all temperatures within said predetermined range of temperatures.

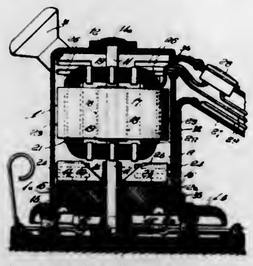


2,752,513
STEPPER MOTOR
Leo B. Boyd, Los Angeles, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application June 8, 1953, Serial No. 360,306
9 Claims. (Cl. 310—23)



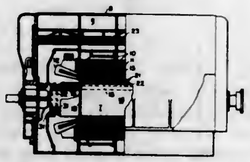
1. In a pulse operated electrical instrument, having a driving unit provided with a solenoid coil, an armature angularly moved in one direction each time said coil is energized by an electrical pulse, and means returning the armature to initial position after each pulse; motion converting mechanism comprising: a disc moved in one direction by said armature and in the reverse direction by the means returning the armature to initial position; a driven disc mounted in a plane parallel to the first mentioned disc; means mounted on and movable relatively to the first mentioned disc; a part stationary with respect to the first mentioned disc; rear stop cam means and front stop cam means mounted on said stationary part and effective to enable the means mounted on said first mentioned disc to move into engagement with the driven disc on the commencement of the movement of said first mentioned disc and to hold said means out of engagement with said driven disc toward the termination of the reverse movement of said first mentioned disc; a shaft rotated by said driven disc; and resilient means urging said means mounted on said first mentioned disc toward the driven disc when said means is free from engagement with the rear stop cam means.

2,752,514
ELECTRIC MOTOR HOUSING
Carl Alvin Schwenden, Alhambra, Calif., assignor to Junior Tool Company, Azusa, Calif., a corporation of California
Original application June 14, 1950, Serial No. 167,995. Divided and this application March 9, 1953, Serial No. 340,995
8 Claims. (Cl. 310—50)



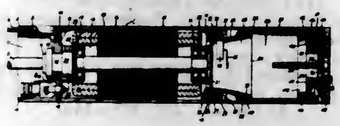
1. An electric motor housing comprising a flat mounting plate, a housing formed by a pair of substantially semi-cylindrical coacting casings disposed on an axis extending substantially normal to the plane of said flat mounting plate, said casings having projections axially extending from each end thereof, the said projections extending contiguous with each other beyond the limits of the ends of said casings, means extending laterally through the projections at one end of said housing for binding said casings together as a cylindrical assembly, means extending through said flat mounting plate and into certain of said projections at the other end of said housing for uniting said pair of semi-cylindrical coacting casings with said flat mounting plate, journaling means disposed interiorly of said pair of coacting casings and a rotative shaft journaled in said journaling means and extending through said flat mounting plate.

2,752,515
BOOSTER-FAN ROTOR-VENTILATION
René A. Baudry, Pittsburgh, and Paul R. Heller, Irwin, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application September 28, 1951, Serial No. 248,851
1 Claim. (Cl. 310—55)



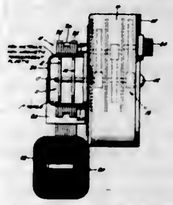
A dynamo-electric machine having stator and rotor members, both having cylindrical cores, both cores having axially extending slots and having windings carried by said slots, the stator-winding being a polyphase armature-winding, and the rotor-winding being a field-winding of a lower voltage than the armature-winding; both said stator member and said rotor member having cooling-passageways therein, the cooling-passageways of at least the rotor member including axially extending ducts and also, near the midpoint in the length of the machine, radial ducts venting said axial ducts to the air-gap of the machine, the air-gap being more than two inches, and the axially extending rotor-ducts including conductor-cooling ducts in good thermal relation with at least the portions of the rotor-winding which are disposed in the rotor-slots, at least the slot-lying portions of the rotor-winding having major slot-insulation which surrounds the rotor-conductors and their associated conductor-cooling ducts; a housing enclosing the entire machine; a filling of hydrogen at more than 15 pounds per square inch gauge-pressure in said housing; a heat-exchanger disposed within said housing; and fan-means carried by the rotor member, at at least one end of the rotor core, for maintaining a recirculation of the gas through the cooling-passageways of the stator and rotor members; characterized by said fan-means having means for creating a fan-pressure which is effective in the stator cooling-passageways, and having additional means for creating a larger fan-pressure which is effective in the axially extending rotor-ducts.

2,752,516
DEEP WELL PUMP MOTOR
Irving Kalikow, Swampscott, Mass., assignor to General Electric Company, a corporation of New York
Application July 24, 1953, Serial No. 370,038
3 Claims. (Cl. 310—87)



1. A submersible motor comprising a pair of spaced apart apertured end walls, a first casing connecting said end walls and defining a cavity therewith, a rotor mounted on a shaft within said cavity, said shaft extending through an aperture in one of said end walls, sealing means on said end wall adjacent said aperture and surrounding said shaft for sealing said shaft with respect to said end wall to prevent the entrance of external liquid into said cavity, a second casing secured to the other of said end walls in axial alignment with said first casing, a coupling member extending downward from said first casing, a flexible tubular member providing a fluid reservoir positioned within said second casing and having a first end secured to the lower end of said coupling member and a free re-entrant end, a cylindrical closure member spaced inwardly from said second casing to define a peripheral gap therewith for closing said re-entrant end, said fluid reservoir communicating with said cavity through the other said end wall and adapted to be filled with an insulating oil, a spring in said second casing engaging said closing means to exert a force tending to telescope the lower end of said tubular member into its upper end to place said fluid under continuous pressure and tending to cause the same to leak outwardly past said sealing means, said coupling member serving to limit the upward movement of said closure member to provide a minimum volume below the first casing to collect any external liquid entering the motor.

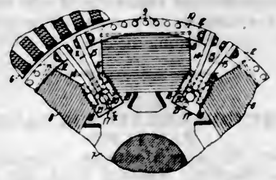
2,752,517
MOTOR CONSTRUCTION
Florens J. von Delden, Pasadena, Calif., assignor to General Controls Co., Glendale, Calif., a corporation of California
Application April 27, 1953, Serial No. 351,095
7 Claims. (Cl. 310—88)



1. In a motor construction of the character described, a gear box having an input shaft and an output shaft,

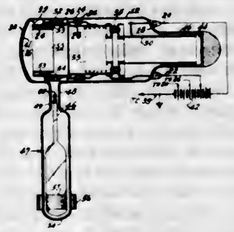
a first and a second rotor unmodified disc mounted in spaced relationship on said input shaft with the planes of said discs extending perpendicular to the axis of rotation of said shaft, said discs being spaced apart a predetermined distance, a stack of laminations comprising a first laminated section, a second laminated section and a third laminated section sandwiched between said first and second sections, said first section and second sections each having a single semi-circularly apertured open ended portion with a curvature substantially the same as the curvature of the discs and adapted to partially embrace said first and second rotor disc elements respectively, said third section of laminations maintaining said first and second sections in spaced relationship, said third section terminating near said open ended apertured portion whereby an air gap exists between the spaced open ended portions of said first and second sections.

2,752,518
CONNECTOR FOR SYNCHRONOUS MACHINE DAMPER WINDING
William L. Ringland, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application November 2, 1953, Serial No. 389,561
6 Claims. (Cl. 310—183)



1. In a dynamoelectric machine having a rotor with circumferentially spaced salient poles having damper windings and damper segments with a segment disposed at the opposite ends of each of said damper windings, means securing one end of each of said segments to said rotor, said means including a member attached at radially spaced points thereof to an end of said segment and to said rotor, respectively, with the portion of said member intermediate said spaced points providing for circumferential movement of the end of said segment with respect to said rotor, and means pivotably connecting said member to said rotor to provide for movement of said segment axially of said rotor upon temperature changes of said damper winding.

2,752,519
METHOD AND APPARATUS FOR USE IN CHEMICAL EVAPORATION PROCESSES
John E. Ruedy, Princeton, N. J., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application October 20, 1952, Serial No. 315,805
14 Claims. (Cl. 313—65)



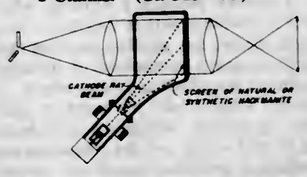
5. An electron tube comprising an envelope containing a cathode surface to be sensitized with chemical by evaporation from a chemical carrier, a plurality of tubular electrodes mounted along a common axis in said envelope and coaxial with said envelope surface and with each other and spaced along said common axis from said surface, one of said electrodes remote from said surface normally containing a field-free space, a movable tubular shield coaxially positioned within said electrodes for shielding said electrodes from said chemical during the process of evaporation, said shield being in sliding contact with one or more of said tubular electrodes, whereby said shield may be held in shielding position during evaporation and thereafter stored within said field-free space after said evaporation process has been completed.

2,752,520
TRI-COLOR KINESCOPE
Albert M. Morrell, East Petersburg, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Application June 25, 1953, Serial No. 364,041
12 Claims. (Cl. 313—70)



1. An electron discharge device comprising, electron gun means including a source of electrons for providing a plurality of beams along respective paths in a common general direction, a target electrode mounted transversely to said beam paths, and means between said electron source and said target for providing a magnetic field in the path of each electron beam for converging said beams at said target, said beam converging means including a plurality of pairs of pole pieces mounted with one of said beam paths passing between each pair of said pole pieces, and other means mounted on said gun means and associated with only one of said beams for providing a second and separate magnetic field transverse to said one beam path and to the other transverse field associated with said one beam.

2,752,521
SCREEN MATERIAL
Henry F. Ivey, Bloomfield, N. J.
Application April 9, 1953, Serial No. 347,729
8 Claims. (Cl. 313—92)



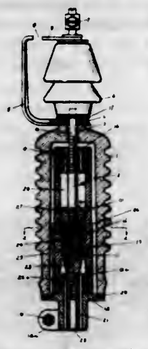
1. A cathode ray device having an image screen comprising M'_2O, Al_2O_3, SiO_2 and MX where M and M' stand for an alkali metal and X is a halogen.

2. A cathode ray device having an image screen of natural hackmanite.

2,752,522
LIGHTNING ARRESTER
William D. Kyle, Jr., Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Wisconsin
Application May 29, 1953, Serial No. 358,360
6 Claims. (Cl. 313—231)

1. A lightning arrester comprising an insulating tubular retainer member having a bore closed at one end and open at the other, the bore of said tubular retainer having

an upper and lower electrode spaced apart by a tight fitting insulating plug, the upper of said electrodes providing a means for carrying an electrical surge off a power line and having a plurality of light electrode fingers ex-



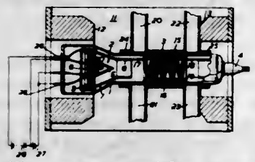
tending downwardly over a portion of the insulating plug and intermediate the outer periphery of said plug and the bore surface of said retainer member, said light electrode fingers providing upper termini for arc paths.

2,752,523

ELECTRON DISCHARGE APPARATUS

Marcus Campbell Goodall, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware

Application April 8, 1952, Serial No. 281,148
Claims priority, application Great Britain May 15, 1951
3 Claims. (Cl. 315—3.5)



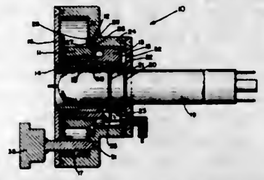
1. A travelling wave amplifier comprising in an evacuated envelope means for producing, along a given rectilinear path, solely two steady fields consisting of an axial magnetic field and a radial electrical field, means for projecting into said path, with a finite velocity in the axial direction, an electron space charge rotating about said axis to thereby produce a beam in which the electrons travel in uniform helices and have the same axial velocity and means for guiding electromagnetic waves along a path having a component of its length substantially parallel to the rotational components of the beam and a velocity substantially the same as said rotational components to provide continuous interchange between the energy of said waves and the rotational energy of the beam, resulting in amplification of said waves, said wave guiding means being a conductor coiled into a first helix which is itself coiled into a further helix of larger diameter, the arrangement being such that the pitch of the larger diameter helix is substantially the same as that of the electron paths and the winding of the smaller diameter helix is such that a component of the said electromagnetic waves travels along the convolutions of the larger diameter helix with a velocity substantially equal to that of the outer electrons along their helical paths, said electron projecting means comprising a substantially conical cathode with its apex pointing in the direction of propagation of the electron beam, a frusto-conical first anode surrounding the said cathode and similarly orientated a cylindrical second anode member contiguous with the first anode and a collector electrode facing the cathode at the other end of the said envelope.

2,752,524

OSCILLATOR TUBE CAVITY TUNER

Edward G. Martin, Cambridge, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy

Application December 13, 1945, Serial No. 634,846
5 Claims. (Cl. 315—5)



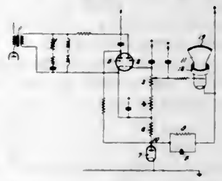
3. A tuned cavity resonator for a reflex velocity modulated tube oscillator having an electron discharge device with cavity defining electrodes extending transversely through the envelope of said tube, said tuned cavity resonator comprising, an annular cavity structure adapted to be removably mounted external to said tube, means for adjusting the volume of said structure, means for clamping said structure to the external portion of said electrodes to complete said cavity resonator, and insulating spacers adapted to be positioned externally of said tube envelope between said electrodes to prevent deformation of said electrodes by said clamping means.

2,752,525

PROTECTION CIRCUIT FOR CATHODE RAY TUBES

Bryan William St. Leger Montague, Chipstead, England, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application September 10, 1952, Serial No. 308,760
Claims priority, application Great Britain September 24, 1951
1 Claim. (Cl. 315—20)



A television receiver comprising a cathode-ray tube having a fluorescent screen, a cathode and control grid assembly for producing an electron beam, and a permanent magnet for focusing said electron beam, means connected to apply a biasing voltage to said cathode, a resistance connected at an end thereof to said control grid, a diode having an anode connected to the other end of said resistance and having a cathode connected to electrical ground, a source of voltage which is of positive polarity with respect to electrical ground, a resistor and a capacitor connected in parallel combination, said combination being connected between said source of voltage and said anode, said source of voltage having a sufficiently high value to cause said diode to be conductive whereby current flows in said resistor thereby charging said capacitor with the resultant voltage drop across said resistor, a line deflecting circuit and a frame deflecting circuit, a first rectifier connected between said line deflecting circuit and a point on said resistance to produce a direct voltage on a portion of said resistance from the line deflecting signal, and a second rectifier connected between said frame deflecting circuit and a point on said resistance to produce a direct voltage on another portion of said resistance from the frame deflecting signal, said rectifiers being polarized so that each of said direct voltages con-

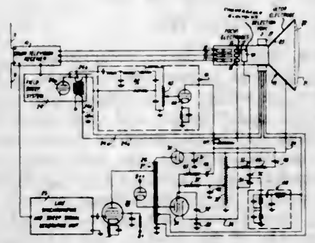
tributes a positive-polarity component of bias voltage to said control grid whereby the sum of said direct voltages and the voltage at the anode of said diode apply a correct operating bias voltage to said control grid and whereby in the event of failure of either of said deflecting circuits the bias voltage at said grid will become reduced sufficiently to reduce the intensity of said electron beam to prevent it from damaging said screen, said parallel combination of a resistor and capacitor having a time constant sufficiently large so that, when said receiver is is turned off and said diode ceases to be conductive, the voltage charge on said capacitor will reduce the voltage at said control grid to reduce the intensity of said electron beam, thereby preventing it from damaging said screen, until said cathode has cooled sufficiently to substantially suppress said electron beam.

2,752,526

CONVERGENCE CONTROL SYSTEM FOR COLOR IMAGE REPRODUCING DEVICE

Douglas W. Taylor, Chicago, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois

Application November 29, 1954, Serial No. 471,642
3 Claims. (Cl. 315—22)



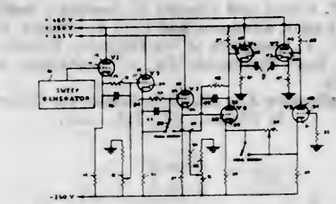
1. In a color television receiver including a cathode-ray image reproducing tube having means for developing a plurality of cathode-ray beams therein; said tube also having means for converging the beams, means for focusing the beams and means for accelerating the beams, and said receiver further including a line sweep system and a field sweep system; a power supply for the reproducing tube including in combination, a source of a first uni-directional potential of a selected value but subject to vary therefrom, means for impressing the first uni-directional potential on said accelerating means, first potential divider means connected across said source for producing different potentials at various points thereon and each such potential being subject to vary with variations in said first uni-directional potential, means for connecting said converging means to one of said points on said potential divider means, a second source of a second uni-directional potential, means for impressing said second uni-directional potential on said focusing means, an electron discharge device included in said second source and including a control electrode, said discharge device controlling the value of said second uni-directional potential in response to variations in a direction current control potential applied to said control electrode, a connection extending from a second of said points on said potential divider means to said control electrode to cause said second uni-directional potential to follow variations in said first uni-directional potential so as to maintain a predetermined relation therebetween, circuit means for deriving a field dynamic control potential from the field sweep system, means for impressing said control potential on said converging means, second potential divider means connected across said circuit means, means for coupling an intermediate point on said second potential divider means to said control electrode, second circuit means for deriving a line dynamic control potential from the line sweep system, means for impressing said line dynamic control potential on said converging means, third potential divider means connected across said second circuit means, and means for coupling an intermediate point on said third potential divider means to said control electrode.

2,752,527

METHOD OF MAGNIFYING WAVEFORMS ON A CATHODE-RAY TUBE AND CIRCUIT THEREFOR

Richard L. Ropiequet and Clifford H. Moulton, Portland, Oreg., assignors to Tektronix, Inc., Portland, Oreg., a corporation of Oregon

Application August 18, 1953, Serial No. 374,871
12 Claims. (Cl. 315—26)



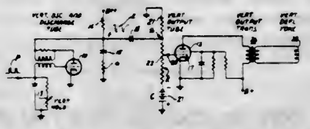
1. A method of magnifying a portion of a time base on a cathode-ray tube screen wherein the cathode-ray tube includes deflection plates and an amplifier connecting the latter to a time base source, said method comprising feeding the amplifier output signal back to the amplifier input, providing said feedback path with spaced points of equal potential, and varying the impedance between said spaced points, whereby to vary the gain of the amplifier and correspondingly magnify said portion of the time base.

2,752,528

WAVEFORM CONTROL FOR TELEVISION DEFLECTION SYSTEM

Ramon H. Aires, Philadelphia, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania

Application March 10, 1951, Serial No. 214,971
1 Claim. (Cl. 315—27)



In a vertical deflection system for a television receiver, a vertical deflection circuit to which a substantially sawtooth current must be supplied to effect substantially linear vertical deflection, it being necessary to provide for adjustment of the amplitude of said current in order to enable adjustment of picture height, a grid-controlled driver tube having its output circuit coupled to said deflection circuit, said tube inherently having a non-linear grid voltage-plate current characteristic necessitating application to its control grid of a non-linear deflection signal to produce a substantially linear plate current, and also necessitating change of bias on the control grid, whenever the amplitude of said signal is changed, in order to maintain the substantially linear form of the plate current, a source of said signal, a pair of resistances and a source of D.-C. biasing potential serially connected across said signal source, one of said resistances being interposed between the negative terminal of said biasing source and the other resistance, means connecting the positive terminal of said biasing source to the cathode of said tube, an adjustable tap on said other resistance connected to the control grid of said tube, and means providing a return path for current flowing from said biasing source through

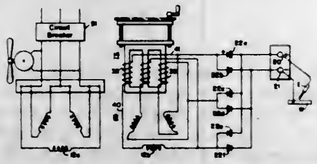
said resistances to apply a variable bias to the control grid of said tube according to the adjustment of said tap, said one resistance determining the miinmum amplitude of said signal and consequently the minimum picture height, and said other resistance determining the maximum amplitude of said signal and consequently the maximum picture height, the adjustment of said tap effecting adjustment of the picture height between the maximum and minimum heights and also effecting the necessary adjustment of said grid bias to maintain the substantially linear form of the plate current of said tube.

2,752,529

RECTIFIER TYPE ARC WELDING APPARATUS

Charles P. Croco and Charles H. Jennings, Buffalo, Ray Verne Lester, Kenmore, and Emil F. Steinert, Williamsville, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application July 28, 1950, Serial No. 176,302
15 Claims. (Cl. 315—141)



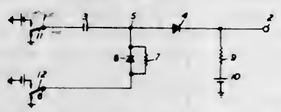
7. The combination in arc welding apparatus, of a three-phase transformer having secondary windings connected in a closed delta circuit, a three-phase reactor having a reactance winding connected in series circuit relation with each secondary winding within the delta, a welding electrode and material to be welded by an electric arc between the electrode and the material, first rectifier means connecting each apex of the delta to said electrode and poled to conduct current of one polarity to said electrode, and second rectifier means connecting each apex of the delta to the material and poled to conduct current of the opposite polarity to said material, the open circuit voltage impressed by said secondary windings through said rectifiers between said electrode and said material being derived substantially only from said secondary windings, so that in the event of an arc outage the maximum voltage for restarting the arc is available.

2,752,530

IMPULSE COINCIDENCE CIRCUIT

Pierre Roger Raoul Aigrain, Paris, France, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware

Application February 19, 1953, Serial No. 337,840
Claims priority, application France February 21, 1952
4 Claims. (Cl. 315—168)



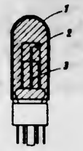
1. An impulse coincidence circuit comprising a condenser having two terminals, a source of negative impulses, means for applying the negative impulses from said source across said condenser to charge said condenser with a given polarity, and with one terminal of said condenser at a predetermined potential, a source of positive impulses, means for applying the positive impulses from said last-mentioned source across said condenser to charge said condenser with the same polarity but with the other terminal at said predetermined potential, means including both said impulse-applying means to apply said impulses across said condenser from said sources in series and with neither terminal at said predetermined potential upon simultaneous operation of said impulse-applying means, a threshold circuit connected across said condenser, and means for causing said threshold circuit to operate in response to simultaneous operation of said impulse-applying means to apply impulses from both sources in series across said condenser.

2,752,531

DEVICE FOR REDUCING THE DE-IONIZATION TIME IN GLOW DISCHARGE TUBES AND THE LIKE

Johan Bertil Westberg, Stockholm, Sweden, assignor to Telefonaktiebolaget L M Ericsson, Stockholm, Sweden, a Swedish company

Application December 3, 1952, Serial No. 323,741
Claims priority, application Sweden December 8, 1951
8 Claims. (Cl. 315—335)



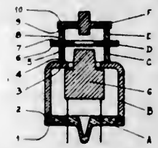
1. A glow discharge device comprising an envelope containing a gaseous atmosphere composed of rare gas and hydrogen, an anode, and a cathode and a triggering electrode within said envelope, and an electrode disposed upon the outside wall of said envelope thereto and at least partly covering the envelope, the said outer electrode being connected to a point having a potential during operation fixed relative to the operational cathode voltage and coacting capacitatively with the operational potential on the inner side of the envelope for maintaining said latter potential higher than the anode potential decreasing upon extinction of the device whereby the deionization time of the device is reduced.

2,752,532

MANUFACTURE PROCESS OF TUBES OR VACUUM ENVELOPES

Pierre Dussaussoy and Maxime Grivot, Paris, France, assignors to Compagnie Generale de Telegraphie Sans Fil, a corporation of France

Application January 17, 1951, Serial No. 206,347
Claims priority, application France March 4, 1950
8 Claims. (Cl. 316—19)



1. A method of producing a vacuum tight sealed joint between two parts of a hermetic envelope in abutting relationship, consisting of machining the opposed edges of the coacting parts to give them complementary surfaces enabling the parts to establish an accurate mating relation, coating at least one of the mating edges with a thin layer of a substance which adheres intimately and tightly to the surface of the said edge, said coating having the property of molecular diffusion under pressure in the material of the edge of the opposite mating part at a temperature lower than the deformation temperature of said joined parts, imparting to said coating and to the edge of the opposite mating part a polish of the character required for a vacuum-tight contact-joint, creating a high vacuum within said parts when in assembled mating relation with said polished edges in direct contact, and heating the zone of said contact while submitting the mating parts to pressure to seal the contacting intimately mating edges by the effect of their molecular diffusion in a solid state below the deformation temperature of the parts.

2,752,533

APPARATUS FOR THE EDUCTION OF ELECTROSTATIC CHARGES FROM THE SURFACE OF MATERIALS OF POOR ELECTRICAL CONDUCTIVITY

Friedrich Julius Maas, Zurich, Switzerland, assignor to Societe Financiere d'Expansion Commerciale et Industrielle SA. "SFINDEX," Sarnen, Switzerland, a Swiss company

Application January 17, 1952, Serial No. 266,913
Claims priority, application Switzerland January 20, 1951
4 Claims. (Cl. 317—2)



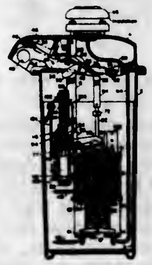
1. An apparatus for the eduction of electrostatic charges from a material, said apparatus comprising in combination with a high frequency high potential generator; at least one round insulator rod adapted to engage said material, said rod having formed therein at least one longitudinal groove extending in the direction of the rod, a thin electrode disposed in said groove and having a smooth outer surface, and means operatively connecting said electrode with said generator, whereby a silent glow discharge is formed along that surface of the electrode which faces the material as soon as sufficiently high potential is supplied to the electrode.

2,754,534

AUTOMATIC RECLOSING CIRCUIT BREAKERS

Andrew W. Edwards, East McKeesport, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application April 21, 1951, Serial No. 222,283
8 Claims. (Cl. 317—22)



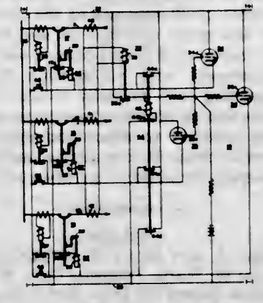
1. An automatic reclosing circuit breaker comprising, separable contacts, solenoid means responsive to overloads on the circuit above a predetermined value for causing separation of said contacts, means for automatically closing said contacts following a circuit opening operation, means operable to provide the contacts with an inverse time-current operating characteristic, and thermoresponsive means arranged in non-current-conducting relation with the solenoid but in heat transfer relation thereto so as to be actuated by heat produced by the solenoid and thus be responsive to a predetermined temperature condition of said solenoid caused by an overload below said predetermined value but of sustained duration for shifting said inverse time-current characteristic of the breaker to a substantially lower current rating to thereby obtain operation of said breaker at said lower value of overload to disconnect said solenoid from said circuit.

2,752,535

CIRCUIT BREAKER CONTROL SYSTEM

Lawrence L. Fountain, Pittsburgh, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application August 30, 1952, Serial No. 307,208
7 Claims. (Cl. 317—46)



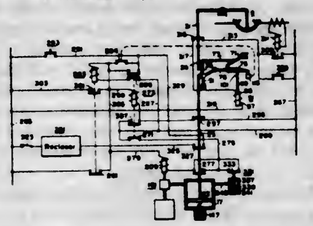
1. In a control system for a plurality of circuit breakers each having a trip mechanism with a trip coil for operating the mechanism to open the breaker, a fault responsive relay having normally open contacts, a master relay having contacts, circuit means including the contacts of the fault responsive relay connecting the master relay to make it operable in response to operation of the fault responsive relay to simultaneously provide energizing circuits for the trip coils of the several circuit breakers, means including a hot cathode gaseous discharge device connecting each trip coil to a source of electrical energy when conductive, circuit means including contacts of the fault responsive relay connecting the discharge devices to render them conductive in response to operation of the fault responsive relay and independently of the master relay, and contact means connected in circuit with each trip coil to interrupt the energizing circuit thereof when its circuit breaker opens.

2,752,536

PNEUMATICALLY OPERATED CIRCUIT BREAKER WITH SELECTIVE AIR CUT-OFF

Ralph O. Bonine and Willard T. Parker, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application June 18, 1952, Serial No. 294,154
6 Claims. (Cl. 317—59)



1. An automatic reclosing circuit breaker including a control circuit, operating means for said breaker power means for closing said breaker, electroresponsive means operable when energized to effect energization of said power means, first auxiliary contacts connected in said circuit in series relation with said electroresponsive means and closed by said breaker operating means at a predetermined time during the opening operation of said breaker operating means, second auxiliary contacts con-

nected in said circuit in series relation with said first auxiliary contacts and closed by said breaker operating means during the opening operation of said breaker operating means before said first auxiliary contacts close, said second auxiliary contacts being opened by said breaker during a closing operation of said breaker after said first auxiliary contacts open, normally closed contact means connected in said circuit in parallel relation with said first auxiliary contacts to permit said second auxiliary contacts to effect energization of said electroresponsive means before said first auxiliary contacts close to thereby effect quick reversal of the moving parts of said breaker and quick reclosure of said breaker before said breaker reaches full open position, and means operative simultaneously with energization of said power means for opening said normally closed contact means upon the initiation of a closing operation to permit said first auxiliary contacts to effect deenergization of said electroresponsive means before said second auxiliary contacts open during the closing operation of said breaker.

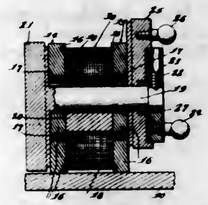
2,752,537
ELECTRICAL APPARATUS WIRING SYSTEM
John W. Wolfe, Palisades Park, N. J.
Application August 29, 1952, Serial No. 307,133
7 Claims. (Cl. 317—101)



1. A wiring system for electrical apparatus comprising a plurality of separate flat members of insluating material laid one on the other; each of said members having a series of spaced electrically conductive contact elements thereon arranged identically on each of said members; corresponding contact elements of each of said series on adjacent flat members being in contact with each other whereby all corresponding contact elements are in electrical connection respectively; such connections being automatically effected upon merely laying one flat member atop the other with corresponding contact elements in alignment, means to hold said flat members together to maintain them in such assembly and electrical components carried on at least some of said flat members respectively, but only one electrical component being carried on one of said flat members which carry them; the terminals of each of said electrical components being electrically connected only to predetermined contact elements respectively of the series of contact elements on its associated flat member.

2,752,538
MAGNETIC WORK SUPPORT
Axel Anderson, Rockford, Ill., assignor to Sundstrand Magnetic Products Co., a corporation of Illinois
Application September 22, 1951, Serial No. 247,893
5 Claims. (Cl. 317—163)

3. A magnetic work support for use with a machine table composed of magnetically permeable material comprising a pair of spaced parallel plates, each of said plates being composed of strips of magnetically permeable material separated by strips of non-magnetic material, said non-magnetic strips serving to direct lines of magnetic flux outside said plates, means for fixedly maintaining said plates in parallel spaced relation, a core of magnetically permeable material extending between said plates at a point near the center thereof, a winding disposed about said core in the space between said plates, a rotatable magnetizable cam mounted adjacent the outside of



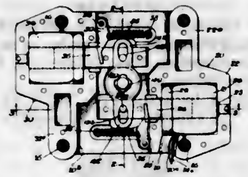
one of said plates, said cam being of a size and shape so as to extend beyond the plates in different rotative positions of the cam and, at all times, extend across said strips of non-magnetic material, and means passing through said one plate for rotatably mounting said cam, said winding being energizable to create a first magnetic flux path through said cam whereby its rotation is prevented and a second magnetic flux path through a base portion of said plates whereby said support is adapted to be clamped to the machine table.

2,752,539
INDUCTION-TYPE ALTERNATING-CURRENT RELAYS
William K. Sonnemann, Roselle Park, N. J., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application March 5, 1952, Serial No. 274,845
10 Claims. (Cl. 317—167)



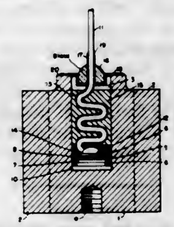
1. In a time-delay induction relay device responsive to an alternating quantity, a magnetic structure having first, second and third pole pieces, field-producing means cooperating with the magnetic structure to direct magnetic flux through said pole pieces to develop a shifting magnetic field, said field producing means comprising a winding surrounding the first pole piece and effective when energized for directing magnetic flux in parallel through the second and third pole pieces, an electroconductive member mounted for movement relative to the magnetic structure under the influence of the shifting magnetic field, said pole pieces having pole faces adjacent the electroconductive member for directing thereto magnetic flux having components substantially transverse to the electroconductive member, and closed circuit electroconductive means associated with only one of the pole pieces for continuously and uniformly altering the time phase of magnetic flux passing therethrough when the winding alone is energized, said closed-circuit electroconductive means being adjustable for varying the effect thereof on magnetic flux passing through the associated pole piece, and damping means for opposing rotation of the electroconductive member by an adjustable force which varies as a function of the rate of rotation of the electroconductive member.

2,752,540
OPERATING MAGNET STRUCTURE FOR ROTARY ELECTRIC SWITCHES
Harold E. Schleicher, West Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a corporation of Connecticut
Application May 15, 1953, Serial No. 355,311
17 Claims. (Cl. 317—190)



1. Electromagnetic operating means comprising an insulating base, a rotary operating shaft passing through said base for moving switch contacts, an actuating link turnable with said shaft, an armature actuating said link, a field-piece, a solenoid coil within said field-piece into which said armature enters when said coil is energized, means pressing said shaft and armature into unattracted position, and spring-biased means outside said coil engageable by said armature prior to reaching full-attracted position to provide an initial force on said armature toward unattracted position in addition to the force of said shaft-pressing means, said spring-biased means being unengaged by the armature in unattracted position and during the first portion of its movement toward attracted position.

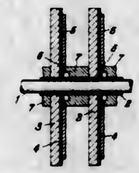
2,752,541
SEMICONDUCTOR RECTIFIER DEVICE
Ezekiel F. Losco, Whitehall, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application January 20, 1955, Serial No. 483,072
6 Claims. (Cl. 317—234)



1. In combination, a metal body having a hollow therein, a semiconductor device disposed in the hollow, said semiconductor device having metal terminal members, means for securing one of the terminal members to the metal body with a joint of good thermal and electrical conductivity, a flexible insulated conductor attached to another of said terminal members and extending out of the hollow, a mass of finely divided heat-resistant insulating material in the hollow completely covering the semiconductor device, a mass of metal substantially filling the hollow above the insulating material, and means for closing and sealing the hollow.

2,752,542
DRY-PLATE RECTIFIER
Erich Nitsche, Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, a German joint-stock company
Application September 21, 1951, Serial No. 247,573
Claims priority, application Germany September 23, 1950
2 Claims. (Cl. 317—234)

1. Dry-plate rectifier comprising a rod, a stack of rectifying plates mounted on said rod, said plates having respective coatings of semi-conductive material on one side of each plate, each of said plates having a central opening surrounding said rod and having on said coating an annular layer of fusible insulating material around said opening, an electrode layer of fused metal disposed upon said coating and said insulating layer, said metal layer forming a fusion joint with said coating and with said in-



sulating layer, and spacer bushings on said rod interleaved with said rectifier plates, the end face of each of said bushings bearing against the electrode-carrying side of the associated one of said plates being internally recessed thereby restricting the area of contact between said bushing and said side of said plate to an annular bearing surface surrounding said rod and being peripherally spaced therefrom.

2,752,543
ELECTRICAL CONDENSER
Stanley James Smith, Briarcliff, N. Y., assignor to Simmonds Aerocessories, Inc., Tarrytown, N. Y., a corporation of New York
Application June 11, 1953, Serial No. 361,002
10 Claims. (Cl. 317—246)

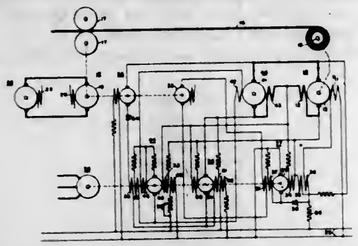


1. An electrical condenser wherein the total capacitance varies with increase in condenser length in accordance with a predetermined non-linear law, comprising support means extending along the length of the condenser, a first condenser electrode comprising a continuous winding of electrically conductive material having a substantially uniform cross-section and disposed around said support means along said length, and a second condenser electrode comprising a continuous winding of electrically conductive material having a substantially uniform cross-section and disposed around said support means along said length at a substantially uniform distance from said first electrode winding throughout said length, predetermined different pairs of adjacent turns of said first electrode winding having different relative spacings along said length to establish said predetermined non-linear law.

2,752,544
WARD-LEONARD MOTOR CONTROL SYSTEMS FOR REEL MOTORS
Loren F. Stringer, Pittsburgh, Pa., and Donald E. Abell, Buffalo, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application December 16, 1953, Serial No. 398,489
8 Claims. (Cl. 318—6)

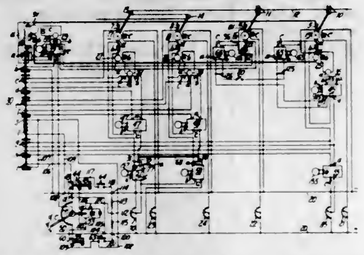
1. The combination with a reel motor connected in driving relation with a reel for winding a strip of material and having a field winding and an armature, of regulating means for regulating excitation of the field winding to maintain a substantially constant value of motor

counter electromotive force, additional regulating means having a plurality of excitation windings including windings having excitation responsive to the armature current



and a fixed reference, and circuit means for applying to another of said windings voltages responsive to the speed of the motor and the speed of the strip in opposed relation.

2,752,545
CONTROL SYSTEM UTILIZING MAGNETIC AMPLIFIER FOR REFERENCE VOLTAGE
Allan C. Halter, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application November 18, 1953, Serial No. 392,811
5 Claims. (Cl. 318—7)



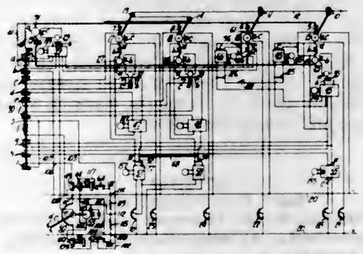
1. In a control system for maintaining constant a first current in the first armature winding and first series field winding of a first motor and a second current in the second armature winding and second series field winding of a second motor, a first control generator for controlling said first current, a first rectifier, a first resistor, a first magnetic amplifier having a first input winding and a first reactance winding, a source of direct current, means connecting said first input winding to said source of direct current, means connecting said first reactance winding to a source of alternating current through said first rectifier and said first resistor for producing in said first resistor a first reference voltage, first regulating means responsive to the difference of said first reference voltage and the voltage drop across said first series field winding for energizing said first control generator to maintain said first current substantially constant, a second control generator for controlling said second current, a second rectifier, a second resistor, a second magnetic amplifier having a second input winding and a second reactance winding, means connecting said second input winding to said source of direct current, means connecting said second reactance winding to said source of alternating current through said second rectifier and said second resistor for producing in said second resistor a second reference voltage, second regulating means responsive to the difference of said second reference voltage and the voltage drop across said second series field winding for energizing said second control generator to maintain said second current substantially constant, a rheostat connected to said source of direct current and to said first and second input windings for determining the ratio of said first current to said second current, first adjusting means for said first resistor for determining the magnitude of said first current, second adjusting means for said second resistor for determining the magnitude of said second current, and linking means for said first and second adjusting means for simultaneously operating said adjusting means to maintain said ratio constant.

2,752,546
LINEAR MOTION DEVICE
Erling Frisch, Pittsburgh, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application April 26, 1955, Serial No. 504,075
20 Claims. (Cl. 318—135)



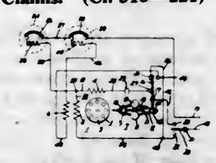
1. A rectilinear motor comprising, a plurality of spaced aligned solenoids, a shaft member projecting through said solenoids, coupling means having an armature located to be actuated by energizing one of said solenoids for coupling said shaft to the movable armature of a second one of said solenoids so that the second solenoid when energized will move its movable armature and shaft a predetermind distance, and a locking means having an armature located to be actuated by energizing a third one of said solenoids for holding said shaft at the position to which it is moved by said second solenoid so that said coupling means may be disengaged from said shaft and returned to its original position, whereupon the shaft may be again moved in the same direction an additional predetermined amount in a step-by-step fashion.

2,752,547
CONTROL SYSTEM FOR STOPPING AND STARTING MOTOR
Allan C. Halter, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application November 18, 1953, Serial No. 392,810
7 Claims. (Cl. 318—143)



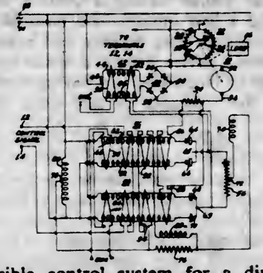
1. The combination comprising a first circuit including in series the armature winding of a first motor, a field winding of said first motor and the armature winding of a first booster generator, a second circuit including in series the armature winding of a second motor, a field winding of said second motor and the armature winding of a second booster generator, a main generator for supplying voltage to said circuits, main generator control means including a main exciter generator and a main magnetic amplifier for controlling the excitation of said main generator, said main magnetic amplifier having a speed reference winding responsive to a speed reference voltage and a signal winding responsive to a first portion of the voltage of said main generator and adaptable to respond to a second portion of said voltage of said main generator, a first exciter generator for controlling the excitation of said first booster generator, a first magnetic amplifier for exciting said first exciter generator, said first magnetic amplifier having a control winding normally responsive to the difference of a first current reference voltage and the voltage drop in the series field winding of said first motor, said control winding being adaptable to respond solely to the voltage drop across the series field winding of said first motor, a second exciter generator for said second booster generator, a first field winding for said second exciter generator responsive to the difference of a second current reference voltage and the voltage drop across the series field winding of said second motor, a second field winding for said second exciter generator adaptable to respond to the voltage across the armature winding of said second motor, a rheostat having a positionable member for controlling the magnitude of said speed reference voltage to regulate the speed of said motors, and means for stopping said motors including switching means responsive to a limit position of said member for opening the circuit of said speed reference winding, for adapting said signal winding to respond to said second portion of the voltage of said main generator, for adapting said control winding to respond solely to the voltage drop across the series field winding of said first motor, for opening the circuit of said first field winding, and for adapting said second field winding to respond to the voltage across the armature winding of said second motor.

2,752,548
DYNAMOELECTRIC MACHINE
Richard E. Seely, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application March 24, 1954, Serial No. 418,259
7 Claims. (Cl. 318—221)



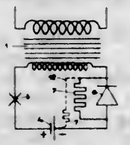
1. A multispeed electric motor comprising a plurality of running windings arranged to be selectively energized, a starting winding connected in parallel with one of said running windings, and means operable at a predetermined speed of said motor to stop energization of said starting winding, said running windings being so connected that said starting winding and said running winding in parallel therewith will be energized when any of said running windings is selected while said motor is rotating below said predetermined speed, said means being operable at said predetermined speed to effect energization of the selected running winding alone; and protective means for said windings comprising heating elements serially connected with said windings respectively and selectively operable with said windings, and bimetallic elements serially connected with said heating elements and said running and starting windings respectively to disconnect the same at a predetermined temperature, said bimetallic elements being in physical proximity to said heating elements respectively and being serially connected.

2,752,549
MAGNETIC AMPLIFIER MOTOR CONTROL
Ernst F. W. Alexanderson, Schenectady, N. Y.
Application July 27, 1953, Serial No. 370,268
30 Claims. (Cl. 318—296)



1. A reversible control system for a direct current motor having an armature and a field winding and comprising a high power magnetic amplifier of the direct current output type connected to deliver current of one sense only to the motor armature; a pair of low power magnetic amplifiers, one connected to deliver current in one sense and the other in the opposite sense to the motor field winding; a pair of terminals to receive a direct current control voltage; each of said low power amplifiers having a control winding, the control windings being connected to said terminals in such sense that a signal current in one sense causes field current in one sense to exceed that of the other, and vice-versa; said high power amplifier having a control winding connected across the output terminals of the said pair of low power amplifiers, and said low power amplifiers having a further control circuit connected to be energized from the current in the circuit of said motor armature to apply a negative feedback signal to said pair of low power amplifiers.

2,752,550
PROCESS AND APPARATUS FOR RENEWING EXHAUSTED PRIMARY, MORE PARTICULARLY DRY, ELECTRIC CELLS OR BATTERIES
Ernst Beer, The Hague, Netherlands
Application April 15, 1952, Serial No. 282,378
Claims priority, application Netherlands May 7, 1951
3 Claims. (Cl. 320—4)

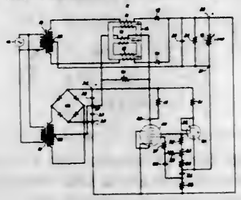


1. In a process for reactivating exhausted primary electric batteries having cases which are sealed gas tight, the steps of passing a unidirectional current through said battery in a direction opposite to the direction of current flow in use of said battery and simultaneously passing alternating current through said battery to suppress gas formation during reactivation of said battery, thereby effecting reactivation of said sealed battery without breaking the seal and without objectionable expansion of said case by internal gas pressure, said alternating current being greater than said unidirectional current.

2,752,551
REGULATED RECTIFYING APPARATUS
William H. Bixby, Detroit, Mich., assignor to Donald R. Middleton and Stanley M. Hanley, doing business as Power Equipment Company, a copartnership, Detroit, Mich.
Application February 23, 1955, Serial No. 489,913
5 Claims. (Cl. 321—18)

1. In combination, a saturable reactor having first and second windings on a core of magnetic material, said

second winding having a first and a second terminal, a rectifier, means for supplying unidirectional current from an alternating-current supply source through said first winding and said rectifier in series to a load, an auxiliary direct-current source having a positive and a negative terminal and a first intermediate terminal having a potential intermediate said positive and negative terminals, a space current device having a space current path between a pair of electrodes and having control means for controlling the resistance of said space current path, a



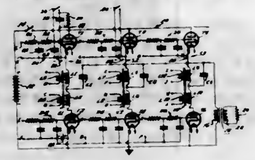
current path connecting said positive and negative terminals comprising said space current path and resistance means in series therewith, said current path having a second intermediate terminal having a potential intermediate said positive and negative terminals, means for connecting the first and second terminals of said second winding to said first and second intermediate terminals, respectively, and means for controlling said control means to control the current in said second winding to thereby regulate the load current.

2,752,552

SELF-EXCITED MULTIPLE GAS TUBE INVERTER

Charles C. Shumard, Hopewell, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application January 2, 1953, Serial No. 329,349
7 Claims. (Cl. 321—36)



1. Apparatus for converting a source of unidirectional voltage to an A.-C. voltage comprising a plurality of series inverters, means to apply said unidirectional voltage across each of said series inverters, each of said series inverters comprising two discharge tubes, a capacitor, a charging circuit for said capacitor including one of said tubes and a discharging circuit for said capacitor including the other of said tubes, an output circuit included in said charging circuit and in said discharging circuit, a plurality of switching means connected to predetermined ones of said tubes to fire said predetermined ones of said tubes at will, and means coupled between said series inverters to fire cyclically a single tube from each of said series inverters, the tubes within each series inverter being fired alternately in each cycle.

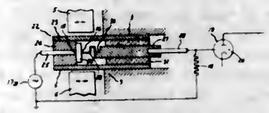
2,752,553

MAGNETO-RESPONSIVE DEVICE CONTROL SYSTEM

William Crawford Dunlap, Jr., Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

Original application October 19, 1949, Serial No. 122,243. Divided and this application March 10, 1953, Serial No. 341,573
4 Claims. (Cl. 321—46)

1. A magneto-responsive device system comprising a germanium rectifier having a rectification ratio in excess of 100 to 1 and including a high resistivity germanium element and a pair of spaced connections thereto for the conduction of current therethrough, one of said connections comprising a metal electrode making a point contact with said element the order of 10^{-7} square inches in area which produces good rectification of alternating currents supplied between said connections, means for establishing a variable magnetic field of high intensity through said element and encompassing said point contact connection to vary the resistance of said element



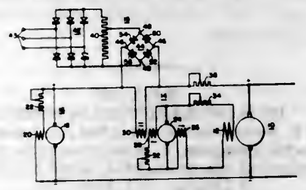
both within the bulk of said element and at said point contact so that said rectifier both rectifies and controls the magnitude of alternating current supplied between said connections, a source of alternating voltage and a load resistance connected in series circuit relationship with said rectifier so that the voltage developed across said load resistance comprises a rectified image of said alternating voltage which is varied in magnitude in accord with variations in the magnetic field established through said rectifier.

2,752,554

CONTROL APPARATUS FOR DYNAMO-ELECTRIC MACHINES

Donald E. Abell, Buffalo, N. Y., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application November 25, 1953, Serial No. 394,238
6 Claims. (Cl. 322—28)



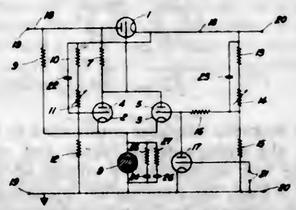
6. In control apparatus for controlling the magnitude of the output voltage of a generator, the combination comprising, a control exciter connected to control the operation of the generator, said control exciter including a control field connected to be responsive to the output of the generator and disposed to control the magnitude of the output voltage of the generator, control means interconnected with the control field and with the output of the generator, said control means having an output reference voltage which effects a direct current flow through the control field and thus a build-up of the output voltage of the generator, and biasing means including a variable resistor, means for applying to said variable resistor a substantially constant direct-current voltage, a blocking rectifier having input and output terminals, the control field being connected across the input terminals of the blocking rectifier, and a predetermined portion of said variable resistor being connected across the output terminals of the blocking rectifier, so that when the ampere-turns of the control field, during the building up of the output voltage of the generator, reaches a predetermined value current from said control means flows through the blocking rectifier and said variable resistor to by-pass the control field and thus limit the rate of change in the magnitude of the output voltage of the generator as the generator is being brought up to normal voltage.

2,752,555

ELECTRICAL REGULATED POWER SUPPLIES

Leon Henry Light, Glasgow, Scotland, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application June 30, 1953, Serial No. 365,067
Claims priority, application Great Britain June 30, 1952
10 Claims. (Cl. 323—22)



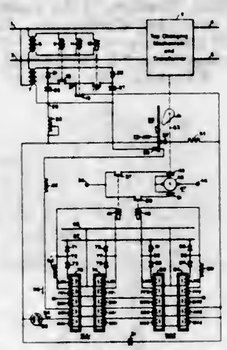
1. A voltage stabilizer circuit capable of being switched from one stabilized and preset direct current output voltage to another stabilized and preset direct current output voltage comprising a variable impedance connected between an input terminal and an output terminal, means for producing a plurality of fractions of the output voltage, each fraction being independently preset, and further means enabling each of the fractions at separate times to be compared with a reference voltage, the result of the comparison being used to influence said variable impedance so as to cause the output voltage to stabilize at a value corresponding to the fraction being compared.

2,752,556

ELECTRICAL TIME DELAY APPARATUS

Bryan Webb, Jr., Sharon, and Gilbert D. Throop, Shenango Township, Mercer County, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application May 10, 1955, Serial No. 507,214
14 Claims. (Cl. 323—43.5)



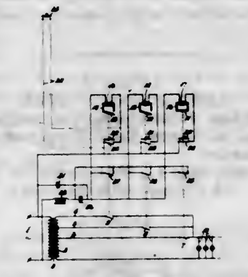
8. In a voltage regulating system including an electrical transformer having primary and secondary windings, and motor driven apparatus for changing taps on said windings and for varying the secondary voltage of said transformer, the combination comprising: first and second direct voltage producing means of opposite polarities having a common first terminal, first relay means responsive to secondary voltages less than a first given magnitude operative to connect the free end of said first direct voltage producing means to a second terminal; second relay means responsive to secondary voltages greater than a second given magnitude operative to connect the free end of said second direct voltage producing means to said second terminal; a motor for driving said motor driven apparatus; third and fourth relay means having contacts which when closed energize said motor for rotation in one direction or the opposite; time delay apparatus for selectively energizing said third and fourth relay means in accordance with the polarity of the signal voltage across said first and second terminals; resistor means and capacitor means serially connected across said signal voltage terminals; magnetic amplifier means having direct-current output circuitry and at least first, second and third control winding means for controlling output current from said amplifier means in accordance with magnetomotive force produced by said winding means; said first winding means being coupled across said capacitor by bi-directional gaseous discharge tube means having a breakdown voltage of magnitude less than the maximum amplitude of said signal voltage; said second winding means being coupled across said serially-connected capacitor and resistor means; said third winding means being connected to said direct-current output circuit as a positive-feedback loop; said first, second and third winding means being individually inoperative to effect flow of output current from said magnetic amplifier means when energized at least in pairs with signal voltage of a predetermined magnitude impressed on said signal voltage terminals; said third and fourth relay means being connected to said output of said magnetic amplifier means so as to be energized thereby by output voltages of opposite polarity; and switch means actuated by a cam driven by said motor operative to short circuit said capacitor at the end of a tap changing cycle.

2,752,557

SELECTIVE SWITCHING SYSTEM FOR VOLTAGE REGULATION

Jozef Cornelis Moerkens and Theodorus Hebenkamp, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

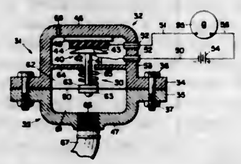
Application August 3, 1953, Serial No. 372,100
Claims priority, application Netherlands August 29, 1952
5 Claims. (Cl. 323—43.5)



1. A system for selectively applying one of a plurality of predetermined different voltage sources to a given load, said system comprising a plurality of switches, one of said switches being connected between each of said sources and said load, a plurality of electromagnetic relays, one of said relays being operatively coupled to each of said switches, an energizing source for said relays, a plurality of control switching means adapted to be normally in an open position, each of said relays having an energizing winding connected to one of said switching means, and a common lead including a series combination of an inductor and a capacitor connecting said relays via said switching means to said energizing voltage source, each of said electromagnetic relays having a first auxiliary contact and means connecting said auxiliary contact to short circuit said capacitor in the energized condition of the corresponding relay, said inductor and said capacitor having values at which a voltage from said energizing voltage source operates one of said relays when corresponding control switching means connect the ener-

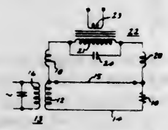
gizing winding of said one relay to said energizing source, each of said relays having a second auxiliary contact via which the corresponding relay is maintained energized when only one of said control switching means connects one of said windings to said energizing source, the winding of each of said relays having an impedance value during its operating condition at which said one relay becomes de-energized when another of said switching means connects another of said relays in parallel with said one relay whereby the short circuit is removed from said capacitor and said another relay becomes energized.

2,752,558
ELECTRIC TRANSDUCER
Ernest M. Kane, Oxnard, Calif.
Application April 22, 1953, Serial No. 350,539
1 Claim. (Cl. 323—64)
(Granted under Title 35, U. S. Code (1952), sec. 266)



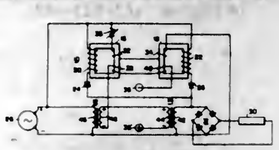
A transducer which comprises a first electrode having an end portion in the shape of a convex surface, a second electrode formed of resilient conductive material having an essentially flat surface, the convex surface of said first electrode being partially in contact with the essentially flat surface of said second electrode, electrical leads directly connecting said electrodes with a source of electrical energy, said electrodes being mounted for movement relative to each other, means for transforming a physical characteristic to be measured into a force for urging said electrodes toward and into closer engagement with each other, and spring means for restoring said electrodes to their original position upon removal of said force.

2,752,559
AMPLIFYING SYSTEM
Daniel M. Lipkin, Philadelphia, Pa., assignor, by mesne assignments, to Sperry Rand Corporation, a corporation of Delaware
Application May 31, 1951, Serial No. 229,175
10 Claims. (Cl. 323—66)



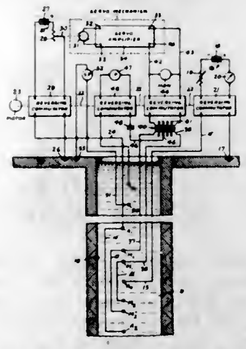
1. In combination, a conductor at least partially paramagnetic, a load device, a first set of circuit connections adapted to connect said conductor and said load device with a source of periodic electric energy having a first frequency, whereby a current of said first frequency flows along said conductor, and a second set of connections adapted to impress electric energy of frequency lower than said first frequency on said conductor, whereby a current of said second frequency flows along said conductor, the dimensions and characteristics of said conductor and said first frequency being so related that the impedance presented by said conductor to energy at said first frequency in the absence of excitation of said second set of connections is at least twice the impedance presented by said conductor to direct current.

2,752,560
MAGNETIC AMPLIFIERS
Floyd A. Baker, Los Angeles, Calif., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application April 18, 1955, Serial No. 502,103
8 Claims. (Cl. 323—89)



1. In a magnetic amplifier constructed to be energized from an alternating-current source and controlled in accordance with an alternating voltage so as to supply energy to a load, the combination comprising, magnetic core means, a pair of load windings disposed in inductive relationship with the magnetic core means, circuit means for so interconnecting the pair of load windings with the load and with the alternating-current source that the load windings are alternately energized, a transformer having an input and an output, the input of the transformer being connected to be responsive to the current flow through the pair of load windings, another transformer having an input and an output, the input of said another transformer being such as to be interconnected with the alternating-current source, a control winding disposed in inductive relationship with the magnetic core means, and other circuit means for connecting the outputs of said transformers and the control winding in series circuit relationship with one another and for rendering said series circuit responsive to said alternating voltage, so that the voltage induced in the said series circuit is bucked out by the output voltage of the said transformers.

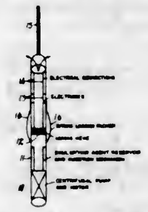
2,752,561
SERVOMECHANISM CONTROL SYSTEM
George K. Gillies, Houston, Tex., assignor to Schlumberger Well Surveying Corporation, Houston, Tex., a corporation of Delaware
Application September 26, 1951, Serial No. 248,384
7 Claims. (Cl. 324—1)



2. In an electrical logging system, the combination of an electrode array comprising a central current emitting electrode, two pairs of longitudinally spaced apart potential pickup electrodes disposed symmetrically above and below said central electrode, the inner pickup electrodes being electrically connected and the outer pickup electrodes being electrically connected, and two electrically connected auxiliary current emitting electrodes placed symmetrically above and below said central electrode and outside of said pickup electrodes, a source of electrical energy connected to said central current emitting electrode and to a relatively remote reference point,

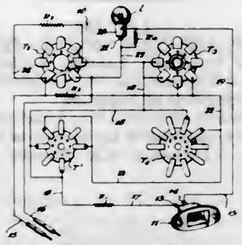
an adjustable source of electrical energy connected to said auxiliary current electrodes and to a relatively remote reference point, servomotor means for controlling the adjustment of said adjustable source, servoamplifier means responsive to the potential differences between the electrically connected pickup electrodes comprising said two pairs for energizing said servomotor means to cause current to be emitted from said auxiliary current electrodes to reduce said potential differences substantially to zero, and means for providing indications of potential difference between a point intermediate the two electrodes comprising one of said pairs of pickup electrodes and a relatively remote reference point.

2,752,562
DETECTION OF WATER IN CRUDE OIL FLOW
Leendert De Witte, Ponca City, Okla., assignor to Continental Oil Company, Ponca City, Okla., a corporation of Delaware
Application February 2, 1955, Serial No. 485,654
7 Claims. (Cl. 324—2)



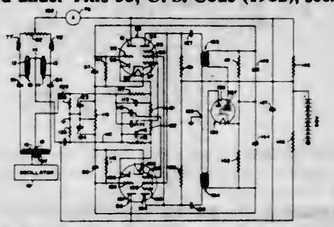
1. In the testing of an oil stream known to contain water, the steps of forming a substantially uniform emulsion of the oil and water at a predetermined point in the flow thereof, and measuring the electrical capacity of such emulsion.

2,752,563
ELECTRONIC TUBE FILAMENT CONTINUITY TESTER
Ralph H. Bowden, Chicago, Ill.
Application February 2, 1955, Serial No. 485,664
7 Claims. (Cl. 324—22)



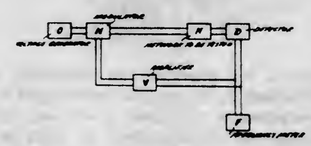
1. Apparatus for testing continuity of electronic tube filaments comprising, a conventional A. C. line, a plurality of voltage dropping resistors and a lamp igniting resistor, all resistors being in series and connected across the line, a gaseous discharge device connected across said lamp igniting resistor, the ratio of resistance of the said lamp igniting resistor to the total resistance of all resistors being less than the ratio of ignition voltage of said discharge device to the line voltage, a plurality of tube sockets adapted to accommodate electronic tubes of various types therein, said tube sockets having filament terminals engaged by the pins of inserted tubes, and connections from said terminals to the said voltage dropping resistors so that the insertion of a tube with a continuous filament in any socket will short circuit at least one of said voltage dropping resistors and increase the resistance ratio at least to ignition voltage ratio, one of said sockets adapted to accommodate three different types of tubes the filaments of which are respectively connected to pairs of pins which are permutations of three pins.

2,752,564
APPARATUS FOR DETECTING A MAGNETIC FIELD
Clifford M. Ryerson, Washington, D. C., assignor to the United States of America as represented by the Secretary of the Navy
Original application January 14, 1947, Serial No. 722,016, now Patent No. 2,727,206, dated December 13, 1955. Divided and this application October 17, 1955, Serial No. 544,622
7 Claims. (Cl. 324—43)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In a feedback magnetometer employing means for introducing asymmetries in alternate half cycles of an alternating current wave proportional to the magnitude of the field to be measured and selectively in accordance with the sign of said field, and means responsive to said asymmetries for generating a neutralizing field substantially equal in magnitude but opposite in sign to said first named field, means for amplifying the components of voltage resulting from said asymmetries and deriving a direct neutralizing current therefrom, said means comprising a pair of thermionic rectifiers for producing rectified voltages proportional respectively to the peak values of alternate half cycles of said voltage, a pair of thermionic amplifiers adapted respectively to amplify alternate half cycles of said voltage, means for differentially biasing said thermionic amplifiers from the rectified voltages developed by said rectifiers whereby the amplifier energized by one half cycle has its bias controlled by the peak value of the other half cycle, a pair of rectifier means individually energized by said amplifier tubes, and a circuit for combining the outputs of said rectifier means to obtain said neutralizing current.

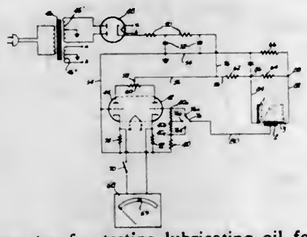
2,752,565
METHOD AND DEVICE FOR TESTING THE PHASE-CHARACTERISTICS OF NETWORKS
Adelbert Van Weel, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application July 22, 1952, Serial No. 300,139
Claims priority, application Netherlands August 31, 1951
13 Claims. (Cl. 324—57)



1. Apparatus for testing the phase characteristic of a network, said apparatus comprising a modulator having its output connected to the input of said network, an alternating measuring voltage source, means applying said measuring voltage to the input of said modulator, a detector coupled to the ouput of said network, and amplifying means coupling the output of said detector to the

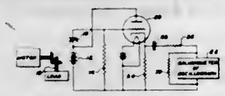
input of said modulator to produce a predetermined auxiliary oscillation therein having a frequency lower than that of said measuring voltage to combine with said measuring voltage.

2,752,566
METHODS AND MEANS FOR INDICATING CONTAMINATION OF LUBRICATING OIL
Wayne E. Quinton, Seattle, Wash., assignor, by direct and mesne assignments, of one-third to Richard W. Wells and one-third to Ole Bardahl, Seattle, Wash.
Application January 5, 1952, Serial No. 265,154
9 Claims. (Cl. 324—65)



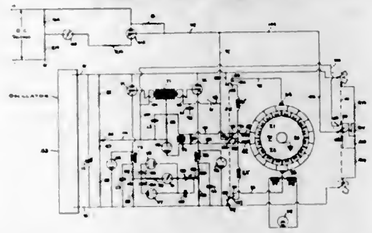
5. Apparatus for testing lubricating oil for solid and chemical contamination thereof, comprising a first electrode pair of predetermined effective common area and having a relatively wide distance of separation therebetween when operatively positioned, a second electrode pair of substantially the same predetermined effective common area and having a relatively narrow distance of separation therebetw. en when operatively positioned, said electrode pairs being adapted for insertion of a lubricating oil test sample between the electrodes thereof, and electrical conductivity test circuit means including a source of electric potential including voltage divider means having a common reference potential point connected to one side of said electrode pairs, said voltage divider means further having high and relatively low voltage points connected to the opposite sides of said first and said second electrode pairs, respectively, electric current indicator means interposed in the circuit connection between said common reference potential point and said first side of the electrode pairs, and means operable to select the individual electrode pairs for testing conductivity of such an oil sample between each pair separately, as indicated by said electric current indicating means.

2,752,567
ANGULAR VELOCITY MEASUREMENT APPARATUS
John F. Kinkel, Pasadena, Calif., assignor, by mesne assignments, to Consolidated Electrodynamics Corporation, Pasadena, Calif., a corporation of California
Application March 21, 1952, Serial No. 277,874
5 Claims. (Cl. 324—70)



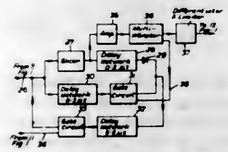
1. Apparatus for providing an indication of instantaneous variations in the angular velocity of a rotatable member comprising a condenser, a resistor, and a source of D. C. potential all connected in series in a closed circuit, means connected across the resistor for providing an indication of variations in the current which flows through the series circuit with respect to time, the condenser having a rotatable rotor and providing a capacitance which varies substantially linearly with angular movement of its rotor, and means for coupling the rotor of the condenser to the rotatable member to cause the rotation of the rotor to be a known function of the rotation of the member and provide cyclical variations in the capacitance of the condenser, the product of the rate of change of the capacitance of the condenser in farads per second and the resistance of the resistor in ohms being less than unity, whereby the waveform of the signal which is produced across the resistor is approximately a square wave due to the polarity reversal which occurs as the capacitance of the condenser passes through the minimum and maximum conditions, and variations in the flat-tops of each half-cycle of the square wave due to instantaneous variations in the linear change of capacitance provide an indication of instantaneous variations in the angular velocity of the rotatable member.

2,752,568
APPARATUS FOR LOCATING THE NEUTRAL PLANE IN GENERATORS AND MOTORS
Delbert J. Ward, Los Angeles, Calif.
Application June 10, 1952, Serial No. 292,616
6 Claims. (Cl. 324—158)



1. In a device for locating the neutral plane of an armature, a combination including: a pair of brushes for contacting the commutator of said armature; a coiled conductive means rotatable around said armature within the field of the armature coils; means for detecting an induced current in said conductive means when the armature coils are energized by alternating current from said brushes; and calibrated means for indicating the relative angular position of said conductive means with respect to the angular position of at least one of said brushes.

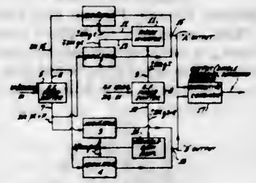
2,752,569
ELECTRIC PULSE CODE MODULATION SYSTEMS
Cyril Gordon Treadwell, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application March 13, 1951, Serial No. 215,280
Claims priority, application Great Britain March 21, 1950
2 Claims. (Cl. 332—1)



1. An electric pulse code modulating arrangement for generating a code group of pulses representing the instantaneous amplitude of a signal wave according to a binary code of *n* elements, and with reference to a stepped amplitude scale having a specified maximum amplitude, comprising means for generating a signal pulse having the said instantaneous amplitude, a closed code pulse generating loop including a delay device so arranged that if an input pulse be applied at a point in the loop it will return to that point after a given delay, part of the loop consisting of two parallel branches, the first of which passes only pulses having an amplitude exceeding half the specified maximum amplitude and the second

of which passes only pulses having an amplitude less than or equal to the specified maximum amplitude, both branches being designed to double the amplitude of any pulses or portions of pulses passed thereby, means for positively blocking one of the branches when a pulse is passed by the other branch, means for applying the signal pulse to the inputs of the said branches, means for interrupting or blocking the closed loop when *n* pulses have traveled round the loop, and means for deriving the code group of pulses from one of the branches, wherein the first branch includes an amplitude limiting device arranged to subtract half the specified maximum amplitude from the amplitude of each pulse which it passes and to double the amplitude which remains, and in which the second branch includes a gate circuit adapted to be shut by a gating pulse produced in response to each pulse passed by the amplitude limiting device, the gate circuit being also arranged to double the amplitudes of all pulses which are permitted to pass therethrough, and wherein each pulse passed by the amplitude limiting device is applied to operate a single-stroke multivibrator, comprising means for differentiating the pulses generated by the multivibrator and for selecting all the differentiated pulses of one sign to serve as the transmitted code group, and means for applying pulses generated by the multivibrator to serve as gating pulses for shutting the said gate circuit.

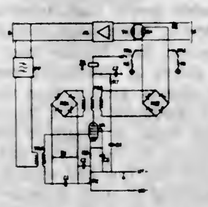
2,752,570
SINGLE SIDEBAND GENERATOR
James R. Hall, Haddonfield, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application February 26, 1953, Serial No. 339,150
17 Claims. (Cl. 332—45)



1. In a single sideband transmitter, four modulators arranged in first and second pairs, means for applying a modulating wave antiphasally to the two modulators of said first pair, means for applying the modulating wave cophasally to the two modulators of said second pair, the modulating wave applied to the modulators of said second pair being in phase quadrature with the modulating waves applied to the modulators of said first pair, means for applying a carrier wave of reference phase to only one modulator of each of said pairs, means for applying the same carrier wave but shifted in phase to only the other modulator of each of said pairs, whereby the carrier wave energy applied to one modulator of each of said pairs is out of phase with the carrier wave energy applied to the other modulator of the same pair, means for combining the outputs of the two modulators constituting said first pair, and means for combining the outputs of the two modulators constituting said second pair.

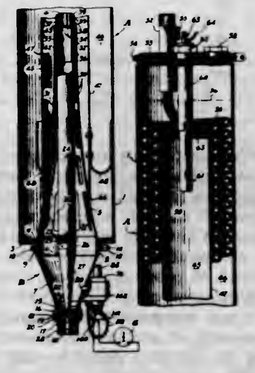
2,752,571
CARRIER CURRENT TRANSMISSION SYSTEMS
Teseo Bruno Dante Terroni, Liverpool, England, assignor to Automatic Telephone & Electric Company Limited, Liverpool, England, a British company
Application March 14, 1952, Serial No. 276,641
Claims priority, application Great Britain April 12, 1951
4 Claims. (Cl. 333—16)

1. In a carrier current transmission system employing a pilot signal for automatically controlling the gain of at least one amplifier in the transmission path, a control path, a control amplifier in said control path and having an input circuit, means in said control path for separating the pilot signal from the transmission path and for applying said pilot signal to said input circuit, a first output circuit for said control amplifier, gain regulating means in said transmission path for controlling the gain of the amplifier in said transmission path, means for applying a control current derived from said first output circuit to said gain regulating means, a second output circuit for said control amplifier, rectifying means in said second



output circuit, means for applying a standing cut-off bias to said input circuit, means for applying a voltage derived from said rectifying means to said input circuit in opposition to said standing bias whereby said control amplifier is cut off only in the absence of the pilot signal, a third output circuit for said control amplifier, a switching device controlled by the current flow in said third output circuit and gain stabilizing means for said gain regulating means and controlled by said switching device to apply a constant current to said gain regulating means when said control amplifier is cut off in the absence of said pilot signal.

2,752,572
LIQUID-COOLED LOAD FOR A COAXIAL TRANSMISSION LINE
James R. Bird, Chagrin Falls, and Harold E. Stevens and Blossy D. Frederico, Cleveland, Ohio, assignors to Bird Electronic Corporation, Cleveland, Ohio, a corporation of Ohio
Application January 26, 1949, Serial No. 72,782
34 Claims. (Cl. 333—22)



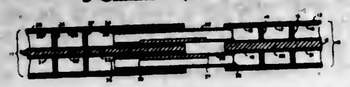
1. In a high frequency electrical device of the character described, inner and outer spaced conductors arranged in a coaxial line, baffle means surrounding one end of the line in spaced relation, a casing surrounding the conductors and the baffle means for containing a liquid dielectric and coolant to immerse the conductors and the baffle means, the baffle means dividing the casing into chambers one within the other, and the outer conductor being formed with apertures for the flow of liquid dielectric and coolant between each of the chambers and the space between the conductors.

2,752,573

VARIABLE LENGTH COAXIAL LINE SECTION

Victor H. Ramsey, Columbus, Ohio, assignor to Minister of Supply in His Majesty's Government of the United Kingdom of Great Britain and Northern Ireland, London, England

Application August 18, 1948, Serial No. 44,953
3 Claims. (Cl. 333—35)



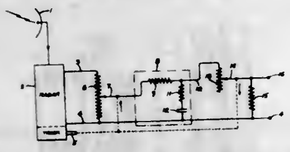
1. An adjustable length high-frequency electrical energy transfer device, comprising, a first end section of coaxial transmission line having inner and outer conductors, a first sleeve of conductive material having an inside diameter slightly greater than the outside diameter of the inner conductor of the transmission line section and at least equal in length to one wavelength at the mean frequency of the energy and held in a fixed position relative to the first end section, a second sleeve of conductive material of outer diameter slightly less than the inner diameter of the outer conductor of the transmission line and equal in length to that of the first sleeve and held in a fixed position relative to the outer conductor, and a second end section of coaxial transmission line slidably engaging at selected portions thereof the inner surface and outer surface respectively of said first and second sleeves whereby is permitted energy transfer between the first and second end sections of coaxial transmission line, two end portions of said first sleeve each one quarter wavelength long at the mean frequency of the energy and having equal but smaller diameters than the center portions thereof to maintain substantially matched impedance operation over a wide frequency range.

2,752,574

METHOD AND APPARATUS FOR ELECTRICAL FILTERING

Harry F. Ragland, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

Application October 6, 1950, Serial No. 188,796
8 Claims. (Cl. 333—70)



8. The method of filtering an oscillatory electrical signal to attenuate undesired components thereof within the frequency spectrum of said signal without attenuating desired components thereof, which comprises: producing a variable function inversely related to said desired signal components, electrically multiplying said signal by said variable function to produce an electric quantity having a substantially constant component which is a function of said desired signal components, attenuating the high frequency components of said electric quantity, and electrically dividing the resulting signal by said variable function to reproduce said desired signal component.

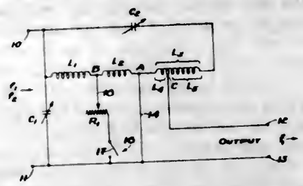
2,752,575

REJECTION FILTER

Fletcher J. Maclary, Dallas, Tex., assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa

Application March 4, 1953, Serial No. 340,249
8 Claims. (Cl. 333—76)

1. A filter for rejecting an undesired signal which has a frequency close to the frequency of a desired signal comprising, a pair of input terminals, a first condenser connected between said input terminals, a first and a second inductor connected in a series combination, said series combination connected in parallel with said first condenser between the input terminals, a second condenser, a third and a fourth inductor connected in series with said second condenser between said input terminals and arranged so that said second and said fourth inductors are connected together, a pair of output terminals, a first one of said output terminals being connected to the junction of said second and fourth inductors, a second one of said



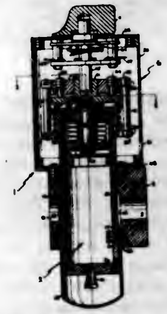
output terminals being connected to the junction of said third and fourth inductors so that the fourth inductor is between said output terminals, said second and fourth inductors being closely inductively coupled and being wound in opposite directions such that the degree and sense of coupling causes substantial cancellation of the undesired signal between said output terminals, the transfer characteristic of said filter being tuned to the desired frequency, and the series combination of said second condenser, said third inductor and said fourth inductor being tuned to resonance at the undesired frequency.

2,752,576

TUNING MECHANISM FOR REFERENCE CAVITY RESONATORS

Robert C. Hilliard, Beverly Farms, and John E. Burr, Jr., Wenham, Mass., assignors to Bomac Laboratories Inc., Beverly, Mass., a corporation of Massachusetts

Application May 23, 1955, Serial No. 510,089
7 Claims. (Cl. 333—83)



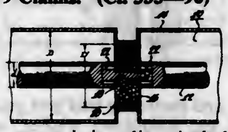
7. Tuning apparatus for reference cavity resonators to translate rotary motion into linear displacement of a tuning plunger extending axially within a resonant cavity to fixed predetermined dimensions to accurately tune said resonant cavity to fixed resonant frequencies substantially independent of temperature and mechanical variations comprising a rotatable and axially movable member having a flat step portion formed on opposed ends thereof, a stationary member having a plurality of adjustable pins disposed in circular array therein with the tips of said pins extending below the lower surface, diametrically opposed pairs of said pins being set at variable distances from the plane of said lower surface, the total limit of displacement of said tuning plunger being equal to the sum of the differences in the variable settings of said pins, said rotatable member contacting the exposed tips of said pins in the area of said inclined step portion, compressible means cooperating with said rotatable member to retain said member in contact with said pins and means for rotating said rotatable member to a plurality of fixed positions.

2,752,577

WIDE BAND COAXIAL TRANSMISSION LINE

Charles Polk, Westmont, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application December 26, 1951, Serial No. 263,257
9 Claims. (Cl. 333—96)



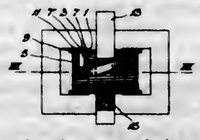
3. A coaxial transmission line including an inner conductor, an outer conductor, a dielectric medium of given dielectric constant located within said outer conductor and surrounding said inner conductor along at least one portion of the length of said line, a dielectric supporting member having a dielectric constant different from said given dielectric constant located within said outer conductor and surrounding said inner conductor along at least another portion of the length of said line adjacent said one portion for maintaining said two conductors in spaced relation, the inner diameter of said outer conductor and the diameter of said inner conductor being changed sufficient amounts along the length of said other portion to maintain the characteristic impedances of said two portions of line substantially the same, and to adjust the cutoff frequency of the next-to-dominant mode of wave transmission in said other portion of said line to a value at least as great as that of said one portion of said line.

2,752,578

ELECTRICAL TRANSFORMER

Jan Te Winkel, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application May 1, 1952, Serial No. 285,458
Claims priority, application Netherlands June 13, 1951
4 Claims. (Cl. 336—130)



1. A transformer for the transmission of signals comprising a ferromagnetic core which is substantially closed, two winding assemblies surrounding said core, one of said assemblies surrounding the other assembly, and a ferromagnetic control body for controlling the stray inductance of said transformer, said body comprising a resilient flexible insulating strip having a flexible ferromagnetic layer provided thereon over at least part of its length, said body being slidably arranged between said winding assemblies and being arcuately formed to resiliently engage said winding assemblies.

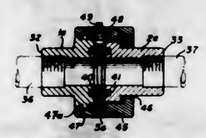
2,752,579

PIPE UNION WITH INSULATED CONTACT PLATE

Joseph A. Caldwell, Houston, Patrick H. Monaghan, Bellaire, and Robert C. Rumble and Leo V. Uhrig, Houston, Tex., assignors, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware

Application March 30, 1953, Serial No. 345,578
4 Claims. (Cl. 339—15)

1. A pipe union comprised of a first metallic member adapted to be connected rigidly to a pipe having a seating face on an end opposite a pipe connecting end, a second metallic member adapted to be connected rigidly to a pipe having a seating face on an end opposite a pipe connecting end, a metallic annular plate arranged between said faces, first and second annular electrical insulating means arranged between outer surfaces of said plate and each of said faces, said plate presenting at least one electrically exposed surface, a coupling member



surrounding a first of said members and engageable with a second of said members to hold said members in coupling relationship, said coupling member being provided with electrical insulating means insulating electrically said coupling member from said first member and said coupling member also being provided with a passageway communicating an exterior of said coupling member with said exposed surface of said plate.

2,752,580

PRINTED CIRCUIT BOARD AND TERMINAL CONNECTIONS

Charles A. Shewmaker, Cheyenne, Wyo.

Application April 27, 1953, Serial No. 351,178
4 Claims. (Cl. 339—17)



1. An electrical interconnecting device for interconnecting a circuit board having a printed line thereon with at least one terminal to a terminal board having at least one terminal thereon, said connecting device comprising a first female flanged plug extending through a terminal of said printed line and having its flange secured in firm contact with the external surface of said line by a press fit between said plug and an insulating sheet onto which said circuit line is affixed, a second female plug at a terminal point of said terminal board, and a double-ended male plug having one end thereof complementary to and releasably held in said first-named female plug and the other end thereof complementary to and releasably held in the other said female plug whereby said terminal of said terminal board is connected electrically to and mechanically to said terminal of said printed line through said first-named female plug, double-ended male plug and second female plug.

2,752,581

CONVENIENCE OUTLET WITH PROTECTIVE ROTATING SHUTTERS

George B. Benander, Oaklawn, R. I., assignor to General Electric Company, a corporation of New York

Application March 30, 1955, Serial No. 497,903
6 Claims. (Cl. 339—41)

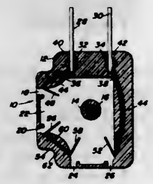
1. In an outlet for electric wiring systems comprising a body member and a cover member assembled together to form a hollow housing, said housing having at least one circular depression in its front face, and a pair of slots formed in said depression for receiving the prongs of an attachment plug, the interior of said housing having recesses in alignment with the said slots, contact members positioned in said recesses and adapted to make connection with the said prongs, a central bore formed in said circular depression between the said slots, a rotating

shutter having a similar pair of prong-receiving slots positioned in said depression and having an apertured stud held in the said central bore by a suitable fastening means, a stop means for limiting the rotation of the shutter to approximately 90°; the invention comprising an adjustable torsion spring having one end secured to the fastening means of the rotating shutter to rotate there-



with while the opposite end extends diagonally across the spring and is shaped to be seated in a cross-shaped opening in the back wall of the housing whereby the proper spring tension may be adjusted after the outlet is completely assembled so that the slots in the shutter are normally spring biased to be 90° out of alignment with the prong-receiving slots in the front face of the body member.

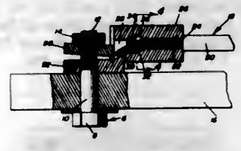
2,752,582
REMOTE CONTROL ELECTRIC PLUG
Frank J. Cargill, Plainville, Conn.
Application May 24, 1955, Serial No. 510,775
2 Claims. (Cl. 339—155)



2. An electric connector comprising a housing having a hollow interior, said housing having electrically insulative walls, said housing having pairs of plug inlet apertures therein, said pairs of apertures extending normal to each other, said housing including a corner portion having a channel therein opening only into said hollow interior of said housing, said channel extending angularly with respect to said pairs of apertures, a pair of externally projecting prongs forming a power inlet plug, contact members each connected to said prongs and positioned adjacent an aperture of said pairs of apertures, and a series connecting element having a pair of contacts interconnected by a connecting portion, said contacts extending adjacent the other apertures of said pairs of apertures, said connecting portion being received in said channel.

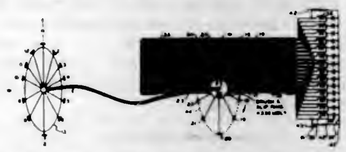
2,752,583
CLAMP FOR JOINING AN ELECTRIC CONDUCTOR TO A TERMINAL POST
Arthur V. Tracy, Baltimore, Md., assignor of ten per cent to Johannes C. Den Engelsen, Baltimore, Md.
Application October 20, 1953, Serial No. 387,149
2 Claims. (Cl. 339—225)

1. In combination, a screw threaded terminal post, a terminal block having a passage for an electrical conductor, a conductor crimping and clamping pin mounted for oscillation in said block, said pin intersecting said passage and having a hole registerable with said passage and through which said conductor is threaded so that when the pin is rocked and rotated relative to the block and conductor, the latter is bent, crimp-locked, and anchored in said block, and means for detachably but clampingly joining said block to said terminal post, said means embodying a hold-down washer fixed to said block and encircling said post, a nut threaded on said post to retain said washer in its intended position, a second washer



independent of and encircling said post and interposed between the nut and hold-down washer, and means mechanically and positively joining said pin and second washer with each other, said means characterized by a rigid operating connection between the pin and second washer, whereby said pin, second washer and operating connection move in unison and function as a unit.

2,752,584
SONIC SYSTEM
Thomas F. Burke, Jr., Falls Church, Va., assignor to Melpar, Incorporated, Alexandria, Va.
Application December 13, 1950, Serial No. 200,672
12 Claims. (Cl. 340—6)

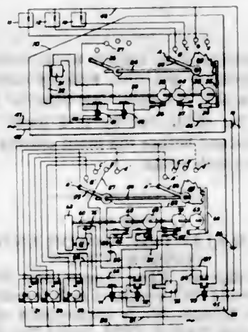


1. In a directional system for receiving wave energy, the combination of a plurality of wave energy intercept devices arranged in a first predetermined pattern in space, an indicator, phase adjusting means interposed between each of said wave energy intercept devices and said indicator, said phase adjusting means comprising a plurality of electromagnetic coupling devices arranged in a further predetermined pattern in space, said first and further predetermined patterns congruent one to another and of different dimensions, a further magnetic coupling device having a large number of laterally extending parallel current conducting members connected in a series circuit, said first mentioned electromagnetic coupling devices each comprising a magnetic pickup head including a magnetic loop having an open slot adjacent said further magnetic coupling device, said open slot having a fixed orientation in space with respect to the orientation of said current conducting members, said orientation adapted to suppress secondary lobes of radiation pattern of received wave energy and a delay line having delay segments each connected in series with a different plurality of said current conducting members in said series circuit, means connecting said indicator to said delay line and means for providing mutual rotation of all said electromagnetic devices and of said current conducting members.

2,752,585
TELEMETRIC APPARATUS
Abraham Walter Jacobson, New Haven, and Pasquale P. Famiglietti, Waterbury, Conn., assignors to The Bristol Company, Waterbury, Conn., a corporation of Connecticut
Application December 11, 1952, Serial No. 325,464
17 Claims. (Cl. 340—183)

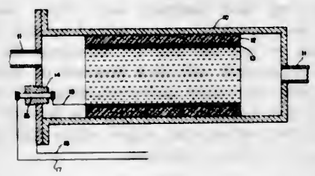
1. In a telemetering system, the combination of a plurality of transmitting instruments each adapted to control the timing of electrical signals in correspondence to the

values of a measured quantity, receiving means to provide mutually distinct exhibitions of the quantities measured by the respective transmitting instruments, a single interconnecting channel forming the sole means of communication between said transmitting instruments and said exhibiting means, first selector means at the transmitting terminus of said channel and adapted in each cycle of operation thereof to assume positions to connect successively said transmitting instruments operatively to said channel to control signals therein, second selector means at the receiving terminus of said channel in each cycle of operation thereof and adapted to assume positions to render said exhibiting means successively responsive to signals controlled by the respective transmitting instru-



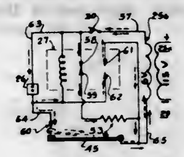
ments, means for advancing said first selector means periodically from position to position, means for normally advancing said second selector means periodically from position to position in step with said first selector means, and means for establishing and maintaining synchronism between said respective advancing means and comprising at the transmitting terminus means adapted during a predetermined portion of said cycles to impress upon said channel a fixed-interval electrical signal differing only in duration from said timed signals, and at the receiving terminus means responsive only to said fixed-interval signals solely during said predetermined portion of said cycles to affect the time of advance of said second selector means.

2,752,586
DEVICE FOR DETECTION OF WATER IN OIL
Otis D. Jordan, Zanesville, Ohio, assignor to Ohio Ferro-Alloys Corporation, Canton, Ohio, a corporation of Ohio
Application January 20, 1954, Serial No. 405,113
7 Claims. (Cl. 340—235)



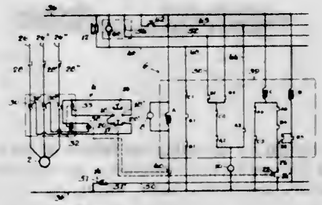
1. A device for detecting the presence of water in oil, said device including an imperforate chamber with inlet and outlet connected in an oil line through which oil is continuously circulated, spaced electrodes of electroconductive material in said chamber, a separator of hygroscopic material in mutual contact with said electrodes and separating the electrodes from each other, means for maintaining contact between said hygroscopic material and the oil being tested, an electric current actuated warning and control operating means, and conductors connecting said last named means to said electrodes.

2,752,587
GAS ESCAPE ALARM
Mac Naphtal and Irving Naphtal, Los Angeles, Calif.
Application November 16, 1953, Serial No. 392,232
2 Claims. (Cl. 340—237)



1. In a gas escape alarm, in combination, an electric power source; a relay having a coil, a set of normally closed and a set of normally open contacts; a normally open switch in circuit with said source and said coil; a signal connected in shunt to said coil; a bimetal strip arranged when heated to close said switch; a resistance wire adapted to cause catalytic burning of the gas to be detected connected to said source through said normally closed contacts and being arranged to radiate heat directly to said bimetal strip; and said normally open contacts being connected to close a holding circuit from said source to said coil when the latter is energized.

2,752,588
MOTOR CONTROL ANNUNCIATOR
Robert J. Marmorstone, Chicago, Ill., assignor to Panellit, Inc., Skokie, Ill., a corporation of Illinois
Application November 2, 1954, Serial No. 466,293
11 Claims. (Cl. 340—248)

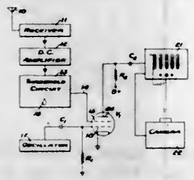


1. In combination with a control circuit having means for energizing and deenergizing apparatus to be controlled, condition responsive means which is actuated by the energizing and deenergizing of said apparatus, a condition indicating means controlled by said condition responsive means for indicating the condition of said apparatus, an annunciator system for indicating the deenergization of said apparatus by means other than by said control and including an alarm indicating means and an alarm preventing means, said condition responsive means being connected to operate said alarm indicating means when said apparatus is deenergized, and means actuated by the operation of said control means to its position which deenergizes said apparatus for rendering said alarm preventing means operative to prevent the operation of said alarm indicating means.

2,752,589
AUTOMATIC SIGNAL LEVEL VERSUS TIME ANALYZER
Clive O. De Long, Jr., Irving, Tex., assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application July 20, 1953, Serial No. 368,886
6 Claims. (Cl. 340—253)

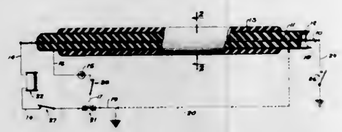
1. Means for indicating the percentages of time which a signal is above a plurality of set levels comprising, a

plurality of threshold circuits receiving said incoming signal and each adjustable independently to establish a preset reference level, a plurality of gate tubes, the first grids of each of said gate tubes connected, respectively, to the outputs of said threshold circuits, an oscillator, a pulse forming circuit connected to the output of said



oscillator, the second grids of each of said plurality of gate tubes connected to the output of said pulse forming circuit, a plurality of counters connected to the plates of the plurality of gate tubes to indicate, respectively, the percentages of time that the incoming signal is above the reference levels.

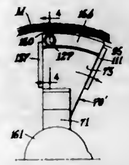
2,752,590
INSULATION FAILURE DETECTOR FOR ELECTRIC CABLES
Robert G. Towle, Summit Hill, N. Y., assignor to Specialties Development Corporation, Belleville, N. J., a corporation of New Jersey
Application March 1, 1954, Serial No. 413,192
8 Claims. (Cl. 340—255)



1. In a system for detecting the failure of the insulation of a cable for conducting electricity, the combination of an electrically conductive wire, insulation covering said wire, an electrically conductive shield surrounding said insulation, insulation covering said shield, a source of electrical energy, one end of said wire being connected to one side of said source and its other end being grounded, electrically operated indicating means having one terminal connected to the other side of said source and having another terminal connected to said shield, and a second source of electrical energy having one side connected to said first mentioned terminal of said indicating means and having its other side grounded, whereby, upon failure of said first insulation and the establishment of contact between said wire and said shield, operation of said indicating means is effected, and, upon failure of said second mentioned insulation and grounding of said shield, operation of said indicating means is effected.

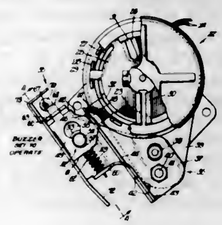
2,752,591
EARTH STRATA CUTTING INDICATORS FOR REMOTELY CONTROLLED BORE MINING MACHINES
George T. Felbeck, Princeton, N. J., and Graham Cook and Robert R. Cosner, South Charleston, W. Va., assignors to Union Carbide and Carbon Corporation, a corporation of New York
Application September 19, 1952, Serial No. 310,526
8 Claims. (Cl. 340—261)

1. An earth strata indicating system for remotely controlled bore mining machines having rotary cutting heads provided with main cutting teeth, comprising the combination of a strata cutting-scanning tooth mounted in front of said main teeth on at least one of such heads, means whereby the relative torque or force applied to such tooth in cutting the various strata likely to be encountered thereby is translated into electrical signals the relative amplitude of which corresponds to such cutting torque,



means transmitting such signals to an oscilloscope, and means synchronizing the time base of such signals with that of said tooth, whereby the relative hardness and position and the strata cut by said tooth are indicated on said oscilloscope before the main cutting teeth of such head encounter such strata.

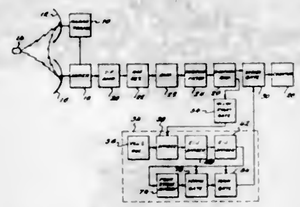
2,752,592
COMBINED ELECTRIC MOTOR AND BUZZER CONSTRUCTION
William P. Gallagher, River Forest, and Paul G. Bielik, North Riverside, Ill., assignors to International Register Company, Chicago, Ill., a corporation of Illinois
Application April 6, 1954, Serial No. 421,396
10 Claims. (Cl. 340—393)



1. A buzzer mechanism comprising, in combination, signal control means manually operable to set and off positions and adapted to be actuated to as on position upon the expiration at a predetermined time interval after being placed in the set position, alternating current electromagnetic means, a hammer of magnetic material adapted to be attracted by said electromagnetic means, means biasing said hammer away from said electromagnetic means, and means actuated by said signal control means in the set and off positions to hold said hammer immovable and in a position of minimum reluctance with respect to said electromagnetic means and to release said hammer to reciprocate toward and away from said electromagnetic means when said signal control means is in the on position.

2,752,593
INITIATING AND TIMING CIRCUIT FOR A DOPPLER TYPE CHRONOGRAPH
John W. Downs, Glen Cove, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware
Application October 11, 1951, Serial No. 250,887
17 Claims. (Cl. 343—8)

17. A chronograph for measuring the initial velocity of a projectile, said chronograph comprising a high frequency transmitter-receiver means for producing an alternating current output signal having a frequency proportional to the projectile velocity, counting circuit means responsive to said output signal for registering the number of cycles in a train of waves of said output signal, and timing means triggered by the initial movement of



the projectile and including means for retaining the counting circuit means inactive for a predetermined time interval after initiation of the travel of the projectile, and means for activating said counting circuit means for a second predetermined time interval.

2,752,594
RADAR REFLECTOR
John C. Link, District Heights, Md., and Robert S. Trautvetter, Washington, D. C., assignors to the United States of America as represented by the Secretary of the Navy
Application March 19, 1953, Serial No. 343,532
7 Claims. (Cl. 343—18)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. An electromagnetic energy reflecting device, comprising a non-metallic balloon having a multitude of discrete metallic elements of small surface area compared to that of the balloon adhered to the wall of said balloon by a non-rigid yielding material.

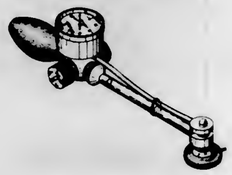
DESIGNS

JUNE 26, 1956

178,106
SWIVEL CLIP FOR WINDOW SCREENS AND STORM SASH
John S. Alexander, Homestead, Fla., assignor to American Screen Products Company, Miami, Fla., a corporation of Florida
Application January 19, 1956, Serial No. 39,840
Term of patent 14 years
(Cl. D10—11)



178,107
INFANT RESUSCITATOR
Vivian Ray Bennett, Beverly Hills, Calif.
Application March 7, 1955, Serial No. 34,898
Term of patent 14 years
(Cl. D83—1)



178,108
CONDIMENT DISPENSER
John F. Bonistall, Zanesville, Ohio, assignor to Shawnee Pottery Company, Zanesville, Ohio, a corporation of Ohio
Application March 1, 1955, Serial No. 34,816
Term of patent 14 years
(Cl. D44—22)



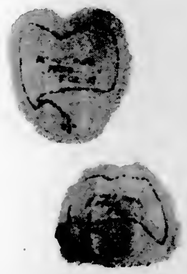
178,109
PUTTING TARGET
John R. Brandell, Evanston, Ill.
Application May 23, 1955, Serial No. 36,156
Term of patent 14 years
(Cl. D34—5)



178,110
FISHING LURE
Erling P. Bugge, Los Angeles, Calif.
Application June 27, 1955, Serial No. 36,688
Term of patent 7 years
(Cl. D31—4)



178,111
HAT
Elizabeth Carrozza, Woodside, N. Y.
Application June 21, 1955, Serial No. 36,610
Term of patent 14 years
(Cl. D3—13)



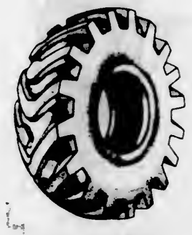
178,112
BUILDING PANEL
Alexander A. Chalmers, Roselle, N. J., assignor to Brixite Manufacturing Co., Inc., South Kearny, N. J., a corporation of New Jersey
Application September 17, 1953, Serial No. 26,849
Term of patent 3½ years
(Cl. D68—1)



178,113
PORTABLE PNEUMATIC PLAYPEN
Frederick Chandler, New York, and Frank Costarella, Corona, N. Y., assignors to Ernest Chandler, Inc., New York, N. Y., a corporation of New York
Application December 6, 1954, Serial No. 33,410
Term of patent 7 years
(Cl. D34—15)



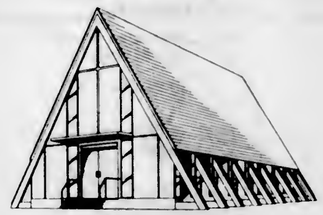
178,114
TIRE
John Robert Davis, Birmingham, England, assignor to Dunlop Rubber Company Limited, Birmingham, England, a corporation of Great Britain
Application January 24, 1956, Serial No. 39,898
Claims priority, application Great Britain August 20, 1955
Term of patent 14 years
(Cl. D90—20)



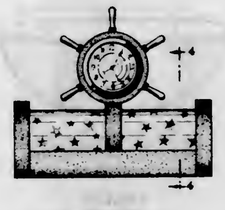
178,115
RADIO RECEIVER CABINET
Jack De Young, Spring Lake, Mich., assignor to Zenith Radio Corporation, a corporation of Illinois
Application January 19, 1956, Serial No. 39,852
Term of patent 14 years
(Cl. D56—4)



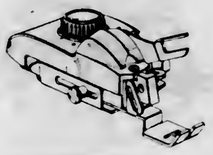
178,116
CHAPEL
John P. Eberhard, Urbana, Ill.
Application April 28, 1954, Serial No. 30,229
Term of patent 14 years
(Cl. D13—1)



178,117
COMBINED ELECTRIC CLOCK AND LAMP
Ludwig Eickemeyer, Union, N. J., assignor to Gibraltar Manufacturing Co., Inc., Jersey City, N. J., a corporation of New Jersey
Application February 13, 1956, Serial No. 40,149
Term of patent 7 years
(Cl. D48—20)



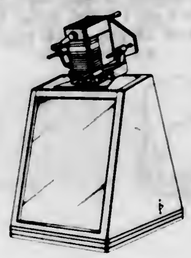
178,118
WORK-JOGGING ATTACHMENT FOR SEWING MACHINES
John P. Enos, Union, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application October 8, 1954, Serial No. 32,602
Term of patent 14 years
(Cl. D70—2)



178,119
ASH TRAY
Philip John Evett, Austin, Tex.
Application January 6, 1956, Serial No. 39,638
Term of patent 3½ years
(Cl. D85—2)



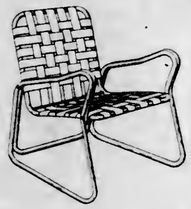
178,120
MICROFILM READER OR THE LIKE
Clyde L. Forrester, Glenview, Ill., assignor to Bell & Howell Company, Chicago, Ill., a corporation of Illinois
Application August 5, 1955, Serial No. 37,341
Term of patent 14 years
(Cl. D61—1)



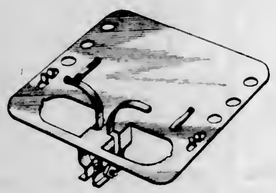
178,121
STREET LIGHTING REFRACTOR
Kurt Franck and Robert G. McPhail, Newark, Ohio, assignors to Holophane Company, Inc., New York, N. Y., a corporation of Delaware
Application November 14, 1955, Serial No. 38,887
Term of patent 14 years
(Cl. D48—16)



178,122
CHAIR
David Grossberg, Miami Beach, and Samuel Langer, Coral Gables, Fla.
Application October 12, 1954, Serial No. 32,650
Term of patent 3½ years
(Cl. D15—1)



178,123
GOLF CART HANDLE ARTICLE SUPPORT
Raymond J. Harke, Chicago, Ill.
Application August 25, 1954, Serial No. 32,013
Term of patent 14 years
(Cl. D34—5)



178,124
JACKET TYPE COASTER
Elmer Haslett, Forest Hills, N. Y.
Application April 1, 1955, Serial No. 35,318
Term of patent 14 years
(Cl. D44—10)

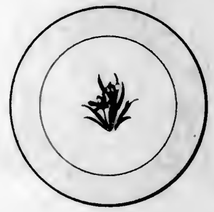


178,125
TABLET ARMCHAIR
Severin B. Hendrickson, Templeton, Mass., assignor to Heywood-Wakefield Company, Gardner, Mass., a corporation of Massachusetts
Application February 28, 1955, Serial No. 34,775
Term of patent 7 years
(Cl. D15—1)



178,126
FRAME FOR A BRUSH
Ray Rice Hutcheson, Belleville, N. J., assignor to Ox Fibre Brush Co., Inc., Frederick, Md., a corporation of Delaware
Application May 12, 1955, Serial No. 35,952
Term of patent 14 years
(Cl. D9—2)

178,127
PLATE OR SIMILAR ARTICLE
Takeshi Inoue, Atsuta-ku, Nagoya, Japan, assignor to Noritake Co., Inc., New York, N. Y., a corporation of New York
Application November 29, 1954, Serial No. 33,279
Term of patent 3½ years
(Cl. D44—15)



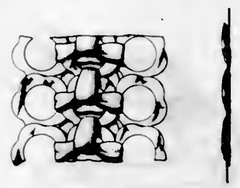
178,128
TIRE
Frank Bernard Jones, Castle Bromwich, Birmingham, England, assignor to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a corporation of New York
Application January 24, 1956, Serial No. 39,903
Claims priority, application Great Britain September 21, 1955
Term of patent 14 years
(Cl. D90—20)



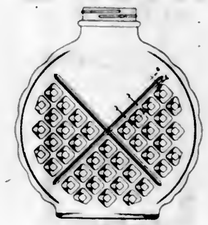
178,129
DISPLAY STAND
Stanley Joseloff, Westport, Conn.
Application December 3, 1954, Serial No. 33,388
Term of patent 14 years
(Cl. D80—9)



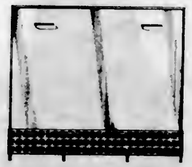
178,130
ORNAMENTAL LINK CHAIN
Eve Therese Lecoy, Beaumont, Calif.
Application June 3, 1955, Serial No. 36,351
Term of patent 14 years
(Cl. D45—16)



178,131
DECANTER
Arnold I. Lorenzen, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a corporation of Ohio
Application September 17, 1953, Serial No. 26,852
Term of patent 14 years
(Cl. D58—6)



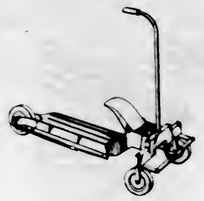
178,132
COMBINED FIREPLACE SCREEN AND PLANTER OR SIMILAR ARTICLE
Loweda H. Love, Oak Ridge, Tenn.
Application March 28, 1955, Serial No. 35,235
Term of patent 14 years
(Cl. D81—5)



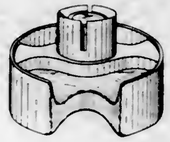
178,133
MIRROR CLIP
Robert Lurie, Petersburg, Va.
Application December 16, 1952, Serial No. 22,727
Term of patent 14 years
(Cl. D29—20)



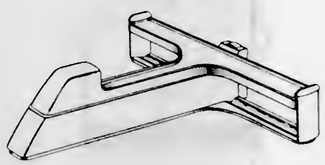
178,134
SELF-PROPELLED THREE-WHEELED SCOOTER
William A. Maher, Burbank, Calif.
Application February 21, 1955, Serial No. 34,602
Term of patent 3½ years
(Cl. D34—15)



178,135
HAIR CURLER
Della M. Mally, Gibson City, Ill.
Application July 12, 1955, Serial No. 36,927
Term of patent 14 years
(Cl. D86—10)



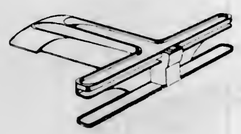
178,136
BOWLING BALL RETURN
Marjory K. Martin, Shelby, Ohio
Application January 6, 1956, Serial No. 39,628
Term of patent 14 years
(Cl. D34—5)



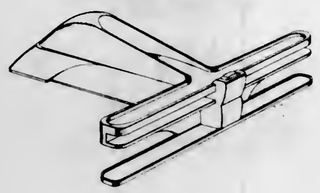
178,137
BOWLING BALL RETURN
Marjory K. Martin, Shelby, Ohio
Application January 6, 1956, Serial No. 39,629
Term of patent 14 years
(Cl. D34—5)



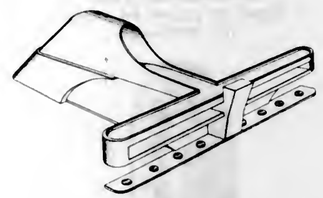
178,138
BOWLING BALL RETURN
Marjory K. Martin, Shelby, Ohio
Application January 6, 1956, Serial No. 39,635
Term of patent 14 years
(Cl. D34—5)



178,139
BOWLING BALL RETURN
Marjory K. Martin, Shelby, Ohio
Application January 6, 1956, Serial No. 39,636
Term of patent 14 years
(Cl. D34—5)



178,140
BOWLING BALL RETURN
Marjory K. Martin, Shelby, Ohio
Application January 6, 1956, Serial No. 39,637
Term of patent 14 years
(Cl. D34—5)



178,141
SUCTION CLEANER BRUSH NOZZLE
Eugene F. Martinec, East Cleveland, Ohio, assignor to Health-Mor, Inc., Chicago, Ill., a corporation of Illinois
Application March 21, 1955, Serial No. 35,136
Term of patent 14 years
(Cl. D9—2)



178,142
SUCTION CLEANER POLISHER ATTACHMENT
Eugene F. Martinec, East Cleveland, Ohio, assignor to Health-Mor, Inc., Chicago, Ill., a corporation of Illinois
Application March 21, 1955, Serial No. 35,138
Term of patent 14 years
(Cl. D9—2)



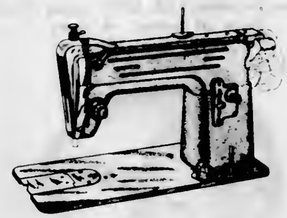
178,143
FRAME FOR A PICTURE OR SIMILAR ARTICLE
Isaac Mershon, New York, N. Y., assignor to Globe Silver Co., Inc., New York, N. Y., a corporation of New York
Application June 17, 1955, Serial No. 36,568
Term of patent 3½ years
(Cl. D29—20)



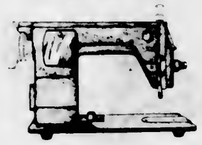
178,144
COMBINATION BOTTLE AND TRAY
Catherine Miller, Antioch, Ill.
Application May 6, 1955, Serial No. 35,866
Term of patent 3½ years
(Cl. D58—6)



178,145
SEWING MACHINE
Phillip S. Morse, New York, N. Y.
Application May 25, 1953, Serial No. 25,180
Term of patent 14 years
(Cl. D70—1)



178,146
SEWING MACHINE
Phillip S. Morse, New York, N. Y.
Application July 14, 1953, Serial No. 25,939
Term of patent 14 years
(Cl. D70—1)



178,147
SWEATER
John Muller, New York, N. Y.
Application October 1, 1954, Serial No. 32,510
Term of patent 14 years
(Cl. D3—4)



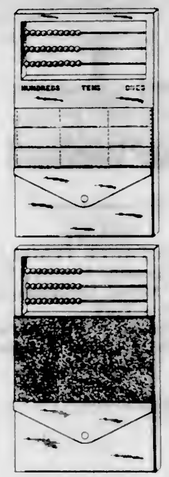
178,148
CLOCK
Joseph F. Punzak, Brooklyn, N. Y., assignor to United Metal Goods Manufacturing Co., Inc., Brooklyn, N. Y., a corporation of New York
Application March 16, 1955, Serial No. 35,077
Term of patent 7 years
(Cl. D42—7)



178,149
COMBINATION FREEZER AND REFRIGERATOR CABINET OR SIMILAR ARTICLE
Jean O. Reinecke, Oak Park, Ill., assignor to Amana Refrigeration, Inc., Amana, Iowa, a corporation of Iowa
Application September 6, 1955, Serial No. 37,801
Term of patent 14 years
(Cl. D67—3)



178,150
ARITHMETIC TEACHING AID
Arden K. Ruddell, San Jose, and Gerald W. Brown, Los Angeles, Calif.
Application February 28, 1955, Serial No. 34,729
Term of patent 14 years
(Cl. D25—1)



178,151
ELECTRIC IRON
Sheldon M. Rutter, Evanston, Ill., assignor to John C. Hockery, Kansas City, Mo., as trustee
Application March 31, 1955, Serial No. 35,309
Term of patent 14 years
(Cl. D49—6)



178,152
TEXTILE FABRIC
Harold B. Schwartz, Brooklyn, N. Y.
Application December 30, 1954, Serial No. 33,763
Term of patent 3½ years
(Cl. D92—1)



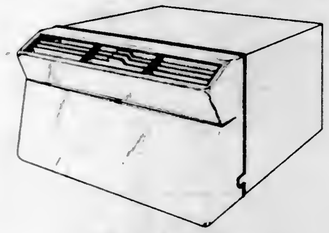
178,153
VENTURI FITTING
Johannes Spring, Cranston, R. I., assignor to Taco Heaters, Incorporated, Cranston, R. I., a corporation of New York
Application September 16, 1954, Serial No. 32,318
Term of patent 14 years
(Cl. D91—3)



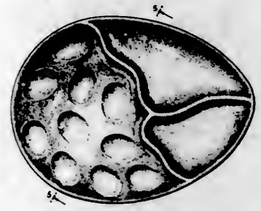
178,154
SPECTACLE TEMPLE
Raymond F. E. Stegeman, Greece, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a corporation of New York
Application December 9, 1955, Serial No. 39,273
Term of patent 7 years
(Cl. D57—1)



178,155
ROOM COOLERS
Frank D. Stevens, Syracuse, N. Y., assignor to Carrier Corporation, Syracuse, N. Y., a corporation of Delaware
Application June 1, 1955, Serial No. 36,331
Term of patent 3½ years
(Cl. D62—4)



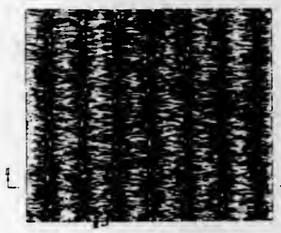
178,156
HORS D'OEUVRES PLATE OR SIMILAR ARTICLE
Carlo Stringa, Nove-Vicenza, Italy, assignor to Pitman-Dreitzer & Co., Inc., New York, N. Y., a corporation of New York
Application December 22, 1955, Serial No. 39,439
Term of patent 14 years
(Cl. D44—15)



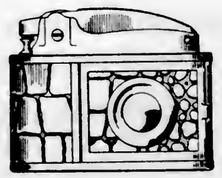
178,157
WHEEL CHOCK
Ralph V. Switzer, Park Ridge, Ill., assignor to The Aldon Company, Chicago, Ill., a corporation of Illinois
Application September 9, 1955, Serial No. 37,873
Term of patent 14 years
(Cl. D41—1)



178,158
PLASTIC COATED SHEET MATERIAL
Arthur D. Sylvester and Arno Scheiding, Rowayton, Conn., assignors to L. E. Carpenter & Co., Inc., Wharton, N. J., a corporation of New Jersey
Application September 15, 1954, Serial No. 32,302
Term of patent 14 years
(Cl. D87—3)



178,159
COMBINATION LIGHTER AND FLASHLIGHT
Edmund Szamborski, Woodside, N. Y.
Application February 27, 1956, Serial No. 40,372
Term of patent 3½ years
(Cl. D48—27)



178,160
DISPENSING CAN FOR INSECTICIDES OR SIMILAR ARTICLE
Herbert F. Tomasek, Pittsburgh, Pa., assignor to Pittsburgh Coke & Chemical Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application September 1, 1954, Serial No. 32,130
Term of patent 14 years
(Cl. D58—17)



178,161
DEVICE FOR DESTROYING INSECTS
Herbert F. Tomasek, Pittsburgh, Pa., assignor to Pittsburgh Coke & Chemical Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application April 19, 1955, Serial No. 35,585
Term of patent 14 years
(Cl. D31—3)



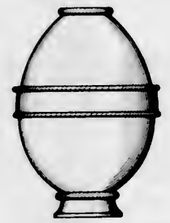
178,162
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Malcome Van Ike, North Hollywood, Calif.
Application May 10, 1954, Serial No. 30,383
Term of patent 14 years
(Cl. D35—3)



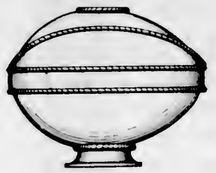
178,163
DRAWER HANDLE OR THE LIKE
John O. Van Koert, New York, N. Y., assignor to Drexel Furniture Company, Drexel, N. C., a corporation of Delaware
Application August 15, 1955, Serial No. 37,456
Term of patent 7 years
(Cl. D10—8)



178,164
TABLE ORNAMENT
Adelaide S. West, Chicago, Ill.
Application June 27, 1955, Serial No. 36,712
Term of patent 14 years
(Cl. D58—11)



178,165
TABLE ORNAMENT
Adelaide S. West, Chicago, Ill.
Application June 27, 1955, Serial No. 36,713
Term of patent 14 years
(Cl. D58—11)



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NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Arrington, Richard H. Forage crop cutting and conveying device. Re. 24,169, 6–26–56, Cl. 56—23.
Brickman, Alan E., to United States Steel Corp. Transload device. Re. 24,172, 6–26–56, Cl. 94—8.
Culbertson, John L., to International Telephone and Telegraph Corp. Line-clearing apparatus for a telephone system. Re. 24,171, 6–26–56, Cl. 179—175.2.
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Lee, George H. Communication system utilizing magnetic recorders. Re. 24,170, 6–26–56, Cl. 179—6.
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Brownell, Josephine D. Rose plant. 1,491, 6–26–56, Cl. 47—61.
Chandler, Florence C., to Boyce Thompson Institute for Plant Research, Inc. Purple verbena plant. 1,488, 6–26–56, Cl. 47—60.
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Reinecke, Jean O. 178,149.
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Bell & Howell Co.: *See*—
Forrester, Clyde L. 178,120.
Bennett, Vivian R. Infant resuscitator. 178,107, 6–26–56, Cl. D83—1.
Bonistall, John F., to Shawnee Pottery Co. Condiment dispenser. 178,108, 6–26–56, Cl. D44—22.
Brandell, John R. Putting target. 178,109, 6–26–56, Cl. D34—5.
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Chalmers, Alexander A. 178,112.
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Davis, John R., to Dunlop Rubber Co. Ltd. Tire. 178,114, 6–26–56, Cl. D90—20.
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Enos, John P., to The Singer Mfg. Co. Work-jogging attachment for sewing machines. 178,118, 6–26–56, Cl. D70—2.
Evett, Philip J. Ash tray. 178,119, 6–26–56, Cl. D85—2.
Forrester, Clyde L., to Bell & Howell Co. Microfilm reader or the like. 178,120, 6–26–56, Cl. D61—1.
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Haslett, Elmer. Jacket type coaster. 178,124, 6–26–56, Cl. D44—10.
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Joseloff, Stanley. Display stand. 178,129, 6–26–56, Cl. D80—9.
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Love, Loweda H. Combined fireplace screen and planter or similar article. 178,132, 6–26–56, Cl. D81—5.
Lurie, Robert. Mirror clip. 178,133, 6–26–56, Cl. D29—20.
Maher, William A. Self-propelled three-wheeled scooter. 178,134, 6–26–56, Cl. D34—15.
Mally, Della M. Hair curler. 178,135, 6–26–56, Cl. D86—10.
Martin, Marjory K. Bowling ball return. 178,136, 6–26–56, Cl. D34—5.
Martin, Marjory K. Bowling ball return. 178,137, 6–26–56, Cl. D34—5.
Martin, Marjory K. Bowling ball return. 178,138, 6–26–56, Cl. D34—5.
Martin, Marjory K. Bowling ball return. 178,139, 6–26–56, Cl. D34—5.
Martin, Marjory K. Bowling ball return. 178,140, 6–26–56, Cl. D34—5.
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Morse, Phillip S. Sewing machine. 178,146, 6–26–56, Cl. D70—1.
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Tomasek, Herbert F. 178,161.
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Ruddell, Arden K., and G. W. Brown. Arithmetic teaching aid. 178,150, 6–26–56, Cl. D25—1.
Rutter, Sheldon M., to J. C. Hockery, trustee. Electric iron. 178,151, 6–26–56, Cl. D49—6.
Scheiding, Arno: *See*—
Sylvester Arthur D., and Scheiding. 178,158.
Schwartz, Harold B. Textile fabric. 178,152, 6–26–56, Cl. D92—1.
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Stegeman, Raymond F. E., to Bausch & Lomb Optical Co. Spectacle temple. 178,154, 6–26–56, Cl. D57—1.
Stevens, Frank D., to Carrier Corp. Room coolers. 178,155, 6–26–56, Cl. D62—4.
Stringa, Carlo, to Pitman-Dreitzer & Co., Inc. Hors d'oeuvres plate or similar article. 178,156, 6–26–56, Cl. D44—15.
Switzer, Ralph V., to The Aldon Co. Wheel chock. 178,157, 6–26–56, Cl. D41—1.
Sylvester, Arthur D., and A. Scheiding, to L. E. Carpenter & Co., Inc. Plastic coated sheet material. 178,158, 6–26–56, Cl. D87—3.
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Taco Heaters, Inc.: *See*—
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West, Adelaide S. Table ornament. 178,165, 6–26–56, Cl. D58—11.
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NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Abbott, Lewis D. Bandage package. 2,752,038, 6–26–56, Cl. 206—63.2.
Abel, Frederick, to The Huffman Mfg. Co. Bicycle stabilizer. 2,752,169, 6–26–56, Cl. 280—304.
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Abramitis, Walter W., to Armour and Co. Systemic insecticides. 2,751,713, 6–26–56, Cl. 47—58.
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Acker, Donald S., to E. I. du Pont de Nemours and Co. Process for preparing 6,8-dithiooctanoic acid. 2,752,373, 6–26–56, Cl. 260—399.
Acker, Donald S., and C. W. Todd, to E. I. du Pont de Nemours & Co. Preparation of acids having thiol groups on the ultimate and antepenultimate carbons from the carboxyl. 2,752,374, 6–26–56, Cl. 260—399.
Acker, Donald S., to E. I. du Pont de Nemours and Co. 7-cyano-6-ketoheptanoic acids and their preparation. 2,752,375, 6–26–56, Cl. 260—404.
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Alberta, Sydney S. Women's undergarments. 2,751,593, 6–26–56, Cl. 2—42.
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Arnold, John H., to Hydrocarbon Research, Inc. Production of synthesis gas. 2,752,232, 6–26–56, Cl. 48—196.
Arrow-Hart & Hageman Electric Co., The: *See*—
Schleicher, Harold E. 2,752,540.
Asbeck, Walter K., to The Sherwin-Williams Co. Method and apparatus for determining critical pigment volume concentrations. 2,751,782, 6–26–56, Cl. 73—61.
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Atlanta Paper Co.: *See*—
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Atlanta Paper Corp.: *See*—
Gentry, Hermond G. 2,751,730.
Atlas Copco Aktiebolaget: *See*—
Falkman, Hans H., Olsson, and Soderblom. 2,751,718.
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Kletz, Hans, Leman, and Schumacher. 2,751,703.
Atwood, Joseph G., and P. B. Clark, to McGraw Electric Co. Signal light projector. 2,752,479, 6–26–56, Cl. 240—1.2.
Auchmoody, Frank W., and W. F. Brauner, to Jo-Har Laboratories. Temperatures sensitive relay or switch. 2,752,456, 6–26–56, Cl. 200—138.
Austin, Elsworth Co.: *See*—
Deuschel, Andrew L., and Austin. 2,752,123.

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Terroni, Teseo H. D. 2,752,571.
Avera, William W., and M. G. Saunders, to The Bahnson Co. Eliminator plate assembly for air washers. 2,752,005, 6–26–56, Cl. 183—113.
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Ayling, Robert W., to Carrier Corp. Seals for rotating shafts. 2,752,176, 6–26–56, Cl. 286—11.
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Smith, Egmont S. 2,751,941.
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Holysz, Roman P., and Babcock. 2,752,369.
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Bachl, Robert W., and H. Y. Fisher, to Soreng Products Corp. Electromagnetically operated latch mechanism. 2,752,189, 6–26–56, Cl. 292—336.
Bachl Herbert. Thermodynamic plural-substance processes and plants for converting heat into mechanical energy. 2,751,748, 6–26–56, Cl. 60—36.
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Fitzgerald, John V., Bachman, and Laing. 2,752,506.
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Bagaloff, Lewis. Jacket. 2,751,596, 6–26–56, Cl. 2—93.
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Avera, William W., and Saunders. 2,752,005.
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Baker, Benjamin P., and W. A. Gaskill, to Westinghouse Electric Corp. Circuit interrupters. 2,752,458, 6–26–56, Cl. 200—149.
Baker, Delia V. Toe spacing sandal. 2,751,693, 6–26–56, Cl. 36—8.5.
Baker, Floyd A., to Westinghouse Electric Corp. Magnetic amplifiers. 2,752,560, 6–26–56, Cl. 323—89.
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Remde, Edward H. 2,751,994.
Baker, Wavy L. Hand rod hook. 2,752,190, 6–26–56, Cl. 294—26.
Baldwin, John H., K. C. Cummings, and O. H. Schuck, to Minneapolis-Honeywell Regulator Co. Control apparatus. 2,751,921, 6–26–56, Cl. 137—98.
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Watson, John R. 2,751,655.
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Barker, William T., to North American Aviation, Inc. Hollow rivet and expander pin having curved engaging surfaces. 2,751,809, 6–26–56, Cl. 85—40.
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Barrango, Carmen. Manikin friction joints. 2,751,709, 6–26–56, Cl. 46—173.
Bartlett, Richard J. and R. W. Hompe, to Geo. J. Meyer Mfg. Co. Device for applying bands to containers. 2,751,735, 6–26–56, Cl. 53—292.
Barton, Daniel M., and E. W. Schoeffel, to Sterling Drug, Inc. Ammonia-sulfur dioxide cooking acid regeneration. 2,752,243, 6–26–56, Cl. 92—2.
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Bauer, Carl W. Snapping rolls having trash removing means. 2,751,743, 6–26–56, Cl. 56—104.
Bauer, David M. Can openers. 2,751,678, 6–26–56, Cl. 30—6.1.
Bauersfeld, Walther, and H. Sonnberger, to C. Zeiss. Optical system for photogrammetric plotting instruments. 2,751,813, 6–26–56, Cl. 88—24.
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Beer, Ernest. Process and apparatus for renewing exhausted primary, more particularly dry, electric cells or batteries. 2,752,550, 6–26–56, Cl. 320—4.
Bellack, John. Replaceable window sills. 2,752,016, 6–26–56, Cl. 189—75.
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Berry, Walter V. 2,752,241.
Berry, Walter V., to Berry Metal Co. Copper base nickel, antimony, lead bearing alloy. 2,752,241, 6–26–56, Cl. 75—159.
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Birman, Antoine, to Societe d'Etudes Chimiques pour l'Industrie et l'Agriculture. Preparation of potassium bicarbonate. 2,752,222, 6–26–56, Cl. 23—64.
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Bixby, Harold W., to the United States of America as represented by the Secretary of the Navy. Ignition flare. 2,751,844, 6–26–56, Cl. 102—49.
Bixby, William H., to D. R. Middleton and S. M. Hanley, d. b. a. Power Equipment Co. Regulated rectifying apparatus. 2,752,551, 6–26–56, Cl. 321—18.
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Bonnell, Charles R., to Minneapolis-Honeywell Regulator Co. Accelerometer. 2,752,466, 6–26–56, Cl. 201—48.

Bonner, John H., Jr. Fluid turbine. 2,751,888, 6–26–56, Cl. 121—95.
Bonnett, Mitchell E., to the United States of America as represented by the Secretary of the Army. Latch mechanism for a rocket launcher. 2,751,818, 6–26–56, Cl. 89—1.7.
Boon, Johannes W. P., and L. W. F. Kampschmidt, to Stamicarbon N. V. Process for the purification of lactams. 2,752,336, 6–26–56, Cl. 260—239.3.
Boone, Wallace D., and A. F. Briede, to OPW Corp. Liquid level signaling device. 2,751,877, 6–26–56, Cl. 116—109.
Borgerd, William F., to Whirlpool-Seeger Corp. Combination heat pump and water heater. 2,751,761, 6–26–56, Cl. 62—129.
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Bowman, Reginald M. Horselike movement stimulating pedalless tricycle. 2,752,162, 6–26–56, Cl. 280—1.192.
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Brown, Maurice H. and H. R. 2,751,884.
Brown, Dale G. Adjustment mechanism for tractor mounted endless ditch digger. 2,751,698, 6–26–56, Cl. 37—86.
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Clarke, Wallace G., and W. G. Drautz. Crystal violet composition. 2,752,255, 6–26–56, Cl. 106—14.5.

Clarkson, Alick, and D. W. Miller, ½ to Vapor Heating Corp. Automatic control system for boiler or steam generator. 2,751,894, 6–26–56, Cl. 122—448.

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Clopton, John R., ½ to Texas Research Foundation. Extraction of antioxidant from osage orange fruit. 2,752,314, 6–26–56, Cl. 252—398.

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Compton, Arthur M., to Standard Steel Works, Inc. Leaf spring spread tandem axle assembly. 2,752,165, 6–26–56, Cl. 280—104.5.

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Cooper, Hugh S., to W. M. Weil. Beneficiating titanium oxide ores. 2,752,300, 6–26–56, Cl. 204—10.

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Fay, Philip S., to The Standard Oil Co. Removal of coke from tubes. 2,752,272, 6-26-56, Cl. 134—17.

Fegel, Albert: *See*—
Welch, Lewis W., and Fegel. 2,751,671.

Fegley, Marian F.: *See*—
Bortnick, Newman M., and Fegley. 2,752,347.

Fegley, Marian F., and N. M. Bortnick, to Rohm & Haas Co. Isomerization of diaminobutynes. 2,752,343, 6-26-56, Cl. 260—240.

Felbeck, George T., G. Cook, and R. R. Cosner, to Union Carbide and Carbon Corp. Earth strata cutting indicators for remotely controlled bore mining machines. 2,752,591, 6-26-56, Cl. 340—261.

Fenlind Engineering Co.: *See*—
Lindmark, Karl L. 2,751,723.

Fenstermaker, Lester C.: *See*—
Crumpacker, Virgil R., Fenstermaker, and Chatten. 2,751,669.

Fergason, Rector C.: *See*—
Keith, Percy A., and Fergason. 2,751,742.

Fergason, Rector C., to Allis-Chalmers Mfg. Co. Elevator drive means for corn harvesters. 2,751,740, 6-26-56, Cl. 56—18.

Ferguson Mfg. Co., Inc., The: *See*—
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Ferris, Walter, to The Oilgear Co. Piston and connecting rod assembly. 2,752,214, 6-26-56, Cl. 309—20.

Festo-Maschinenfabrik Gottlieb Stoll: *See*—
Stoll, Gottlieb, and Schrag. 2,751,944.

Fillion, Stanley H., to Waugh Equipment Co. Cushion underframes. 2,752,048, 6-26-56, Cl. 213—8.

Findlay, Robert A., to Phillips Petroleum Co. Crystal purification apparatus. 2,752,230, 6-26-56, Cl. 23—273.

Fineberg, Samuel E. Mothproof storage bag. 2,752,033, 6-26-56, Cl. 206—10.

Finke, Herbert A., and J. E. Ebert, to Polytechnic Research and Development Co. Inc. Wide range resonator. 2,752,494, 6-26-56, Cl. 250—36.

Finlay, Donald W., and R. E. Pearson, to Boeing Airplane Co. Airplane ground tug. 2,751,990, 6-26-56, Cl. 180—6.2.

Firm Schmid & Wezel: *See*—
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Fisch, Richard A.: *See*—
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Fisher, Hardin Y.: *See*—
Bachi, Robert W., and Fisher. 2,752,189.

Fitchburg Engineering Corp.: *See*—
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Fitzgerald, John V., G. S. Bachman, and K. M. Laing, to Pittsburgh Plate Glass Co. Meter for high radiation fluxes. 2,752,506, 6-26-56, Cl. 250—83.

Fleming, Antoinette J. Armrest for automobile seats. 2,751,968, 6-26-56, Cl. 155—112.

Fletcher, Albert E. Shaft seal. 2,752,175, 6-26-56, Cl. 286—9.

Fletcher, William H.: *See*—
Baran, Edward C., Fletcher, Jatzek, and Pappas. 2,752,307.

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Foote-Burt Co., The: *See*—
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Forcellini, Renzo, to Società Applicazioni Gomma Antivibranti S. A. G. A. Società per Azioni. Shock absorber for motor vehicles with self regulating sliding friction. 2,752,149, 6-26-56, Cl. 267—9.

Ford, Robert S. Self-propelled hydraulic cleaving machine for felling and bucking trees in logging operations. 2,751,943, 6-26-56, Cl. 144—34.

Forgas, Pedro B.: *See*—
Busquets, Juan B., and Forgas. 2,751,746.

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Foster Engineering Corp.: *See*—
Foster, Shubel A. 2,751,720.

Foster, Harry R., and E. E. Crump, to Ohmega Laboratories. High frequency marker. 2,752,492, 6-26-56, Cl. 250—36.

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Foster, Shubel A., to Foster Engineering Corp. Centerless grinding gage. 2,751,720, 6-26-56, Cl. 51—103.

Foulkes, Christopher H., P. A. Childs, and R. E. Smith, to International Standard Electric Corp. Electromagnetic light current contact making relays. 2,752,450, 6-26-56, Cl. 200—87.

Fountain, Lawrence L., to Westinghouse Electric Corp. Circuit breaker control system. 2,752,535, 6-26-56, Cl. 317—46.

Fowler, Maurice E., and T. R. Willis, to Collins Radio Co. Rate of climb meter. 2,751,785, 6-26-56, Cl. 73—179.

Fowler, Ralph L., to Superior Tank & Construction Co. Pressure tank. 2,751,755, 6-26-56, Cl. 62—1.

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Bird, James R., Stevens, and Frederico. 2,752,572.

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Freschl, William W., to Modern Dust Bag Co., Inc. Disposable bag for vacuum cleaners. 2,752,086, 6-26-56, Cl. 229—55.

Freter, Roy J. Broaching machine. 2,751,823, 6-26-56, Cl. 90—33.

Fried, Jacob. Pinhole camera. 2,751,825, 6-26-56, Cl. 95—11.

Frisch, Erling, to Westinghouse Electric Corp. Linear motion device. 2,752,546, 6-26-56, Cl. 318—135.

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Ehrhart, Gustav, Ruschig, Schmidt-Thomé, Haede, and Fritsch. 2,752,340.

Froberger, Charles F., to General Motors Corp. High strength shell molds. 2,751,650, 6-26-56, Cl. 22—193.

Frost, George E., to Olin Mathieson Chemical Corp. Compound projectile. 2,751,845, 6-26-56, Cl. 102—91.

Frost, Raymond B., to Victaulic Co. of America. Hinged pipe coupling and method of making the same. 2,752,174, 6-26-56, Cl. 285—194.

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Fürst, Stefan, to W. Reiners. Thread-fault responsive control apparatus for coil winding machines. 2,752,103, 6-26-56, Cl. 242—36.

Fürst, Stefan, to W. Reiners. Apparatus for controlling the thread feeler means of a textile machine. 2,752,104, 6-26-56, Cl. 242—36.

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Galle6, Stanislaus, to International Standard Electric Corp. Method of manufacturing cylindrical self-induction coils comprising a ceramic core as a carrier for the winding. 2,751,666, 6-26-56, Cl. 29—155.58.

Galloway, Victor A. Locking means for doors of garbage dump trucks or the like. 2,752,194, 6-26-56, Cl. 298—23.

Gar Wood Industries, Inc.: *See*—
Wreford, Frederick S. and J. S. 2,752,412.

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Arnit, Fred H. 2,751,664.

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Garrett, Luther W., Jr., and M. R. Smith, to The M. W. Kellogg Co. Process for upgrading diesel oil fractions derived from Fischer-Tropsch synthesis. 2,752,382, 6-26-56, Cl. 260—450.

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Baker, Benjamin P., and Gaskill. 2,752,458.

Gassmann, Johannes, to Daimler-Benz Aktiengesellschaft. Valve control for internal combustion engines. 2,751,895, 6-26-56, Cl. 123—90.

Gately, Edward J., Jr. Low frequency horn. 2,751,997, 6-26-56, Cl. 181—31.

Gauger, Roy C., to Consolidated Electrodynamics Corp. Pressure monitoring assembly for evacuating apparatus. 2,752,081, 6-26-56, Cl. 226—20.4.

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General Electric Co.: *See*—
Benander, George B. 2,752,442.
Benander, George B. 2,752,581.
Cain, Dallas E., and Fry. 2,752,023.
Carlson, Morris W. 2,752,455.
Dunlap, William C., Jr. 2,752,434.
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General Motors Corp.: *See*—
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Schluchter, Alfred W. 2,752,240.

General Steel Castings Corp.: *See*—
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Gentry, Hermond G., to Atlanta Paper Corp. Packaging method and means. 2,751,730, 6-26-56, Cl. 53—32.

Gentry, Hermond G., to Atlanta Paper Co. Separating means. 2,752,027, 6-26-56 Cl. 198—31.

Gentsch, Fred V. Detachable inside arm rest for sofa bed. 2,751,971, 6-26-56, Cl. 155—198.

Gershberg, Solomon. Apparatus for testing adhesive tape. 2,751,784, 6-26-56, Cl. 73—150.

Gersley, Charles H., and K. P. Schumacher, to Pathe Mfg. Corp. Adjustable book shelf. 2,752,047, 6-26-56, Cl. 211—149.

Gibboney, Steward G., Sr. Sewer pipe elbow die. 2,751,658, 6-26-56, Cl. 25—39.

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Gilbert, Gerald, and W. S. Johnson, to Rohm & Haas Co. Preparation of glyceric acid. 2,752,391, 6-26-56, Cl. 260—535.

Gillies, George K., to Schlumberger Well Surveying Corp. Servomechanism control system. 2,752,561, 6-26-56, Cl. 324—1.

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Gisholt Machine Co.: *See*—
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Hill, Herbert S. 2,752,075.
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Glenn William E., and E. W. Hostetter, to the United States of America as represented by the United States Atomic Energy Commission. Method of making an electronic grid. 2,751,662, 6-26-56, Cl. 29—25.17.

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Goodrich, B. F., Co., The: *See*—
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Goodrich, Hunter C., to Radio Corp. of America. Amplifier gain control. 2,752,431, 6-26-56, Cl. 179—171.

Gordon, Arthur. Eye bolt latching assembly and method of assembling. 2,752,187, 6-26-56, Cl. 292—256.75.

Gordon, Garland R.: *See*—
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Gould, Jay P. E. Adapter for handling fluid under high pressure. 2,752,228, 6-26-56, Cl. 73—422.

Gould, Merle L.: *See*—
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Grad, Adolf R., to The Oilgear Co. Bushing assembly press. 2,751,670, 6-26-56, Cl. 29—252.

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Gramelspacher, Clarence U., to Gramwood of Indiana. Panel and method of manufacture. 2,751,946. 6-26-56, Cl. 144—309.

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Gramelspacher, Clarence U. 2,751,946.

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Green George G., to General Dynamics Corp. Float support structure. 2,752,113, 6-26-56, Cl. 244—105.

Green, John G. Folding tripod fishing pole stand. 2,752,115, 6-26-56, Cl. 248—46.

Greenwood, Murray. Toy projectile and means to propel same. 2,751,711, 6-26-56, Cl. 46—199.

Gretz, George J. Carburetors. 2,752,131, 6-26-56, Cl. 261—23.

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Grimm, Bruce F. Collapsible container. 2,751,953, 6-26-56, Cl. 150—0.5.

Grimme, Walter, and J. Wöllner, to Rheinpreussen Aktiengesellschaft fuer Bergbau und Chemie. 2-hydroxy 1,1,1,-trimethyiol propane. 2,752,399, 6-26-56, Cl. 260—635.

Griswold, Ray F., to Hagan Corp. Pneumatic cushions. 2,751,610, 6-26-56, Cl. 5—348.

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Grupe, William F., to Peerless Roll Leaf Co. Inc. Method and apparatus for printing blown bottles. 2,751,701, 6–26–56, Cl. 41—1.

Grupe, William F., to Peerless Roll Leaf Co., Inc. Method of and machine for printing on collapsible articles. 2,751,841, 6–26–56 Cl. 101—44.

Gusdanovic, Theodore B. Artificial plug bait. 2,751,704, 6–26–56, Cl. 43—42.48.

Guyer, Reynolds, to Waldorf Paper Products Co. Method of making double-faced corrugated board having a tear strip therein. 2,751,964, 6–26–56, Cl. 154—33.05.

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Haile, Frank O. Material handling systems. 2,752,118, 6–26–56, Cl. 249—7.

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Hall, James R., to Radio Corp. of America. Single sideband generator. 2,752,570, 6–26–56, Cl. 332—45.

Hall, William G., to Westinghouse Electric Corp. Magnetic circuits. 2,752,510, 6–26–56, Cl. 307—88.

Haller, John, to Allied Products Corp. Self-lubricating machine element. 2,752,211, 6–26–56, Cl. 308—240.

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Halpin, Ralph P.: *See*—
Hummert, Robert H., and Halpin. 2,752,117.

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Halter, Allan C., to Allis-Chalmers Mfg. Co. Control system for stopping and starting motor. 2,752,547, 6–26–56, Cl. 318—143.

Ham, George E.: *See*—
Craig, Alfred B., and Ham. 2,752,324.

Hamilton, Elbert R. Adjustable grill for outdoor fireplaces. 2,751,899, 6–26–56, Cl. 126—25.

Hammond, Charles T., to Redwing Ltd. Spring actuated latch device for doors and like closures. 2,752,184, 6–26–56, Cl. 292—71.

Hammond, William H. Barn cleaner. 2,752,029, 6–26–56, Cl. 198—70.

Hampton, Ronald, to Patents and Investments Ltd. Apparatus for use in pickling bars, tubes, and the like. 2,751,916, 6–26–56, Cl. 134—160.

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Woodell, Victor A., and Hanaway. 2,752,039.

Handel, Neil E.: *See*—
Jones, Floyd B., Schuck, and Handel. 2,751,689.

Hanley, Stanley M.: *See*—
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Marlatt, Paul E., Hanze, McIntosh, and Levin. 2,752,365.

Happel, John, and C. J. Marsel. Manufacturing process for acetylenic hydrocarbons. 2,752,405, 6–26–56, Cl. 260—678.

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Hargis, Alexander H. Tire coating liquid. 2,752,256, 6–26–56, Cl. 106—36.

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Harris, Samuel C.: *See*—
Harris, Edgar L., and S. C. 2,751,791.

Harrison, William H. Color stereo system and attachment. 2,751,826, 6–26–56, Cl. 95—18.

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Ensink, Johannes. 2,752,497.
Light, Leon H. 2,752,555.
Martens, Günter. 2,752,496.
Moerkens, Josef C., and Hebenkamp. 2,752,557.
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Te Winkel, Jan. 2,752,578.
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Harvey, Philip G., and S. A. Lamb, to Imperial Chemical Industries Ltd. Carbonylation of olefin-diolefin mixtures; selective diolefin removal. 2,752,395., 6–26–56, Cl. 260—604.

Harvey, Philip G., and A. W. C. Taylor, to Imperial Chemical Industries Ltd. Carbonylation of olefin-diolefin mixtures. 2,752,396, 6–26–56, Cl. 260—604.

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Hawkins, James R., to Armour and Co. Sheet forming and stacking apparatus. 2,751,981, 6–26–56, Cl. 164—68.

Hawkins, Stanley W., and W. J. Levy, to Imperial Chemical Industries Ltd. Water proofing and stabilising of soil-cement bricks and mixtures. 2,752,260, 6–26–56, Cl. 106—90.

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Heater, Charles L., and C. J. W. Clasen, to American Steel Foundries. Spring bolster truck. 2,751,857, 6–26–56, Cl. 105—197.

Hedden, Robert R., to Emsco Mfg. Co. Combination free swivel and controlled torque joint. 2,751,767, 6–26–56, Cl. 64—30.

Hedges, Harry O., to Hedges Motor Co. Piston for internal combustion engine. 2,752,212, 6–26–56, Cl. 309—8.

Hedges Motor Co.: *See*—
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Heinemann, Milton, and V. L. R. James, to Boeing Airplane Co. Plug-type doors for pressurized cabins. 2,751,636, 6–26–56, Cl. 20—16.

Heinrich, Ernst: *See*—
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Held, Joseph E., to American Cystoscope Makers, Inc. Surgical instrument and coupling therefor. 2,751,911, 6–26–56, Cl. 128—349.

Heller, George W., to E. I. du Pont de Nemours and Co. Lubricating tetrafluoroethylene polymers. 2,752,321, 6–26–56, Cl. 260—33.6.

Heller, Paul R.: *See*—
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Hellyer, John T., to The Dazey Corp. Can opener. 2,751,679, 6–26–56, Cl. 30—8.5.

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Hencke, William R.: *See*—
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Henry, Howarth P. Control device for outboard motors. 2,751,875, 6–26–56, Cl. 115—18.

Henry, Louis. Block forming apparatus. 2,751,659, 6–26–56, Cl. 25—41.

Hermann, Albert: *See*—
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Herod, Henderson B. Disc type mowing apparatus having pivoted blades. 2,751,737, 6–26–56, Cl. 55—62.

Herr, Milton E., to The Upjohn Co. Steroid enamines. 2,752,337, 6–26–56, Cl. 260—239.5.

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Higgins, Stephen P., Jr., and P. H. Drinker, to Minneapolis-Honeywell Regulator Co. Manually or automatically actuated air-pressure-responsive controller. 2,751,918, 6–26–56, Cl. 137—8.5.

Hill, Harry O., and R. S. Johnson, to American Bosch Arma Corp. Hydraulic governor for fuel injection pump. 2,752,145, 6–26–56, Cl. 264—3.

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Hilliard, Robert C., and J. E. Burr, Jr., to Bomac Laboratories Inc. Tuning mechanism for reference cavity resonators. 2,752,576, 6–26–56, Cl. 333—83.

Hillson, Frank. Miter guide. 2,751,681, 6–26–56, Cl. 30—229.

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Hughes, Charles H., to Hughes By-Product Coke Oven Corp. Vertical retort. 2,752,298, 6–26–56, Cl. 202—122.

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Julian, Percy L., H. T. Iveson, and S. B. Radlove, to The Glidden Co. Hydroxylation of vegetable oils and products thereof. 2,752,376, 6–26–56, Cl. 260—405.
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Kastory, Frank. Combination bumper and steering control for automobiles. 2,751,995, 6–26–56, Cl. 180—83.
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Keith, John V., to Universal Winding Co. Winding machine. 2,752,105, 6–26–56, Cl. 242—45.
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Kinney, Wilbur C. Valved coupling arrangement. 2,751,927, 6–26–56, Cl. 137—322.
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Klein, Joseph R. Louvered window construction. 2,751,642, 6–26–56, Cl. 20—62.
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Kling, Robert W., to Athey Products Corp. Rear dump trailer. 2,752,193, 6–26–56, Cl. 298—22.
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Kuettel, NS, to Curtiss-Wright Corp. Polymerized styrene molding compositions. 2,752,315, 6–26–56, Cl. 260—23.
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Harvey, Philip G., and Lamb. 2,752,395.
Landau, Ralph, to Chempatents, Inc. Process for the oxidation of ethylene. 2,752,362, 6–26–56, Cl. 260—348.5.
Langerman, Elise M. Cover for the handle of a baby coach or the like. 2,751,957, 6–26–56, Cl. 150—52.
Lapekas, Lucas, to See-Mor Truck Mirror Corp. Rear view mirror construction. 2,751,817, 6–26–56, Cl. 88—93.
Lapsley, Robert, to Clark Equipment Co. Rotary pump or motor. 2,751,846, 6–26–56, Cl. 103—4.
Larson, Robert H., to Du Kane Corp. Strip film projection apparatus. 2,751,815, 6–26–56, Cl. 88—28.
Lassy, Carl O. Weight balancing device for tapping spindle. 2,751,613, 6–26–56, Cl. 10—129.
Latham, George H., C. W. Todd, and W. J. Wayne, to E. I. du Pont de Nemours & Co. Substituted 1,3-dithianyl pentanoic acids. 2,752,249, 6–26–56, Cl. 99—163.
Lauderdale, Robert A., Jr.: *See*—
Emmons, Ardath H., and Lauderdale. 2,752,309.
Lawlor, Anna M., and P. C. Kadow, to College of Saint Elizabeth. Portable storage rack. 2,752,080, 6–26–56, Cl. 224—48.
Layton, Mary E., and G. Adamec, said Adamec to said Layton. Cooking utensil. 2,51,840, 6–26–56, Cl. 99—349.
Lazare, Leon, to American Cyanamid Co. Fractional distillation of decomposition products of diarylalkanes. 2,752,294, 6–26–56, Cl. 202—40.
Lazare, Leon, to American Cyanamid Co. Fractional distillation of decomposition products of diaryl alkanes. 2,752,296, 6–26–56, Cl. 202—46.
Leavitt Machine Co.: *See*—
McAfee, Walter E. 2,751,727.
Lebocey, Bernard. Plain and rib circular knitting machine. 2,751,768, 6–26–56, Cl. 66—28.
Lecher, Hana Z., and S. M. Tsang, to American Cyanamid Co. Metallized azo dyes from diaminodibenzothiophene dioxides. 2,752,333, 6–26–56, Cl. 260—146.
Lecher, Joseph, to The Microcyclomat Co. Method and apparatus for the production of fine and ultrafine particles. 2,752,097, 6–26–56, Cl. 241—17.
Le Clair, Camille C. S., to Tecalemit Ltd. Lubricant injection unit. 2,752,006, 6–26–56, Cl. 184—7.
Leditschke, Heinrich: *See*—
Ehrhart, Gustav, and Leditschke. 2,752,358.
Ledrut, Jules H. T., to Heyden Pharmacal Co. Derivatives of the esters of beta-ketonic acids and process. 2,752,352, 6–26–56, Cl. 260—294.3.
Leeds and Northrup Co.: *See*—
Besselman, Wayne L., Somerset, and Tauber. 2,752,147.
Leeds, Winthrop M., to Westinghouse Electric Corp. Circuit interrupters. 2,752,460, 6–26–56, Cl. 200—150.
Le Febvre, Alfred L., to The Fuller Brush Co. Tube and socket connection and method of making. 2,752,179, 6–26–56, Cl. 287—119.
Leftly, Stanley L. Piano tuning wrenches. 2,751,805, 6–26–56, Cl. 84—459.
Leibow, Saul. Venetian blind lock. 2,751,653, 6–26–56, Cl. 24—73.
Leistner, William E., and W. E. Setzler, to Argus Chemical Laboratory, Inc. Reaction products of an organic tin compound with a glycol ester of a mercaptocarboxylic acid, and high molecular weight halogenated materials stabilized therewith. 2,752,325, 6–26–56, Cl. 260—45.75.
Leman, Theodor: *See*—
Kietz, Hans, Leman, and Schumacher. 2,751,703.
Lemont, Harold E., Jr., and A. Berger, to Jacobs Aircraft Engine Co. Blade for aircraft and manufacture thereof. 2,751,988, 6–26–56, Cl. 170—159.
Lennox, Thomas H.: *See*—
Lewis, Merle J., and Lennox. 2,752,439.
Less, Joseph W., to One-in-Hand-Tie Co. Pre-tied necktles and methods for making the same. 2,751,597, 6–26–56, Cl. 2—150.
Lester, Ray V.: *See*—
Croco, Charles P., Jennings, Lester, and Steinert. 2,752,529.
Letterman, Charles B., to Underwood Corp. Ribbon vibrating mechanism for typewriters and like machines. 2,752,026, 6–26–56, Cl. 197—157.
Leuzinger, Jacques, to Stahag Steel & Hard Metal Import Trading Co. Facing head, particularly for the milling of steel bronze and cast iron. 2,751,663, 6–26–56, Cl. 29—105.
Levin, Robert H.: *See*—
Fonken, Gunther S., and Levin. 2,752,371.
Marhatt, Paul E., Hanze, McIntosh, and Levin. 2,752,365.
Levine, Paul. Cloth-guiding devices. 2,752,151, 6–26–56, Cl. 271—2.6.
Levy, Sidney E. Horn for loudspeakers. 2,751,996, 6–26–56, Cl. 181—27.
Levy, William G. Vertical type gun rack. 2,752,046, 6–26–56, Cl. 211—4.
Levy, Winifred J.: *See*—
Hawkins, Stanley W., and Levy. 2,752,260.
Lewis, Howard B. Respirator. 2,751,904, 6–26–56, Cl. 128—146.
Lewis, Merle J., and M. S. Williams, Jr., to General Electric Co. Infinitely variable control switch. 2,752,438, 6–26–56, Cl. 200—31.
Lewis, Merle J., and T. H. Lennox, to General Electric Co. Infinitely variable control switch. 2,752,439, 6–26–56, Cl. 200—31.
Lichty, Lyall J., to Quebec Metallurgical Industries Limited. Method of recovering tin from tin bearing materials. 2,752 236 6–26–56, Cl. 75—85.
Lieske, George A.: *See*—
McKenney, Henry F., and Lieske. 2,752,091.
Liggett, John A., to Radio Corp. of America. Liquid seal. 2,751,926, 6–26–56, Cl. 137—251.
Light, Leon H., to Hartford National Bank and Trust Co., trustee. Electrical regulated power supplies. 2,752,555, 6–26–56, Cl. 323—22.
Limberger, Walter, to Messrs. Lumoprint Zindler K. G. Photographic print making machine. 2,751,814, 6–26–56, Cl. 88—24.
Lincoln, Frank H., Jr.: *See*—
Hogg, John A., Beal, and Lincoln. 2,752,366.
Lindemann, Herbert, to Lonza Electric and Chemical Works Ltd. Process for producing cellular thermoplastic bodies. 2 751,627, 6–26–56, Cl. 18—48.
Lindmark, Karl L., to Fenlind Engineering Co. Lapper for carbide tipped tools. 2,751,723, 6–26–56, Cl. 51—135.
Link, John C., and R. S. Trautvetter, to the United States of America as represented by the Secretary of the Navy. Radar reflector. 2,752,594, 6–26–56, Cl. 343—18.
Linscott, Leroy N., to Alexander Smith, Inc. Pattern control for Axminster loom. 2,751,937 6–26–56, Cl. 139—7.
Lipke, Paul H., Jr., and R. S. Montgomery, to The Dow Chemical Co. Heat-stabilized polyvinyl chloride composition. 2752,319, 6–26–56, Cl. 260—31.4.
Lipkin, Daniel M., to Sperry Rand Corp. Amplifying system. 2,752,559, 6–26–56 Cl. 323—66.
Lipkin, Henry P., to H. E. Stocks. Spring anchor unit for overhead swinging doors. 2,751 624, 6–26–56, Cl. 16—163.
Lippisch, Alexander M., to Collins Radio Co. Fluid sustained and propelled aircraft. 2,752,109, 6–26–56, Cl. 244—23.
Livermore, Henry W. Vessel cover. 2 751,901, 6–26–56, Cl. 126—384.
Locker, Maurice. Apparatus for delivering measured volumetric quantities of granular, pulverulent and like fluent solid materials. 2,752,076, 6–26–56, Cl. 222—455.
Locomotive Finished Material Co., The: *See*—
Moorhead, Thomas. 2,752,012.
Loeber, John A., to Minneapolis-Honeywell Regulator Co. Burner safety control apparatus. 2,751,972, 6–26–56, Cl. 158—28.
Loeffler, Jacob F.: *See*—
Ivory, Harry S., and Loeffler. 2,751,903.
Loeffler, Jacob F. Adjustable surgical retractor. 2,751,902, 6–26–56 Cl. 128—20.
Long, Arthur R., to Hart-Carter Co. Forward and reverse planetary transmission. 2,751,799, 6–26–56, Cl. 74—769.
Longstreth, Joseph E., and A. E. Honour, to Critics Associated. Finger covering. 2,751,592, 6–26–56, Cl. 2—21.
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Lindemann, Herbert. 2,751,627.
Losco, Ezekiel F., to Westinghouse Electric Corp. Semiconductor rectifier device. 2 752,541, 6–26–56 Cl. 317—234.
Low, Frank D., to General Electric Co. Dishwashing machine. 2,751,917, 6–26—56, Cl. 134—176.
Lucas, George R. Hide away bed gates. 2,751,608, 6–26–56, Cl. 5—331.
Lukens Steel Co.: *See*—
Stauffer, Alfred. 2,751,830.
Lull, Le Grand H., to The Baker-Haulang Co. Load handling, transporting and positioning vehicular machine. 2,752,056, 6–26–56, Cl. 214—660.
Luminous Ceilings Inc.: *See*—
Segil, Leon J. 2,752,017.
Lung, Kenneth R., to The Tait Co. Gasoline hose and nozzle for dispensing gasoline. 2,752,077, 6–26–56, Cl. 222—527.
Lustig, Otto. Process for the preparation of nicotinamide. 2,752,355 6–26–56, Cl. 260—295.5.
Luze, Carl. Gang disc angle control device. 2,751,738, 6–26–56, Cl. 55—81.
Lyijyen, Fred, and S. I. Bey, to Chrysler Corp. Apparatus and method for making dies. 2,751,626, 6–26–56, Cl. 18—16.
Maas, Friedrich J., to Societe Financiere d'Expansion Commerciale et Industrielle SA, "SFINDEX." Apparatus for the eduction of electrostatic charges from the surface of materials of poor electrical conductivity. 2,752,533, 6–26–56, Cl. 317—2.
Maatman, Egbert J., to American Steel Foundries. Snubbed truck. 2,751,856, 6–26–56, Cl. 105—197.
Maccallum, Ernest N.: *See*—
Delmar, Geza S. and Macallum. 2,752,344.
MacDonald, Duncan N., to Consolidated Electrodynamics Corp. Combination locking push button and adjustment knob. 2,752,465, 6–26–56, Cl. 200—172.
MacDonald, Robert J., and A. D. Schwope, to Remington Arms Co., Inc. Explosively driven stud having polished point. 2,751 808 6–26–56, Cl. 85—30.
MacDougall, Kirkland B. Slack adjusting mechanism. 2,752 009, 6–26–56, Cl. 188—196.
MacGowan, Rex. Self-opening container and music box. 2,751,803, 6–26–56, Cl. 84—95.
Machinefabriek Reineveld N. V.: *See*—
Van Riel, Pieter. 2,752,043.
Maclary, Fletcher J., to Collins Radio Co. Rejection filter. 2,752 575, 6–26–56, Cl. 333—76.
MacNelll, John B., and B. P. Baker, to Westinghouse Electric Corp. Switching equipment for compressed air circuit breakers. 2,752,448, 6–26–56, Cl. 200—82.
Maganus, Paul G., to Warren Alloy. Process of treating aluminum work pieces. 2,752,302, 6–26–56, Cl. 204—29.
Magat, Eugene E., to E. I. du Pont de Nemours and Co. Polyamides of terephthalic acid and diamines having methyl substituted hydrocarbon chain. 2,752,328, 6–26–56, Cl. 260—78.
Magee, Kenneth L., to J. I. Case Co. Pick-up and windrowing machine. 2,751,745, 6–26–56, Cl. 56—372.
Magerlein, Barney J., to The Upjohn Co. Steroid haloketones and process. 2,752,341, 6–26–56, Cl. 260—239.55.
Maister Hanna G., to the United States of America as represented by the Secretary of Agriculture. Treatment of extraction liquors from poppy straw. 2,752,350, 6–26–56, Cl. 260—285.

Mann, Julia I. Swimming belt. 2,751,611, 6-26-56, Cl. 9—17.

Mann, Oscar H. Cutter head for metal-casting molds. 2,751,646, 6-26-56, Cl. 22—38.

Mapes, Daniel, to Specialties Development Corp. Method of making metallic containers for confining fluid medium under pressure. 2,751 677, 6-26-56, Cl. 29—543.

Marco, Salvatore M., to Diamond Power Specialty Corp. Rotary nozzle for soot blowers and the like. 2,752,197, 6-26-26, Cl. 299—69.

Marcotte, Fred H. Well drilling apparatus. 2,752,121, 6-26-56, Cl. 255—19.

Markowski, Adam M. Animated display aquariums. 2,751,880, 6-26-56, Cl. 119—5.

Marlatt, Paul E., A. R. Hanze, A V. McIntosh, Jr., and R. H. Levin, to The Upjohn Co. Hydrolysis of oxidosteroids. 2,752,365, 6-26-56, Cl. 260—397.1.

Marler, E. T., Ltd.: *See*—
McLaurin, James N. 2,751,842.

Marmorstone, Robert J., to Panellit, Inc. Motor control annunciator. 2,752,588, 6-26-56, Cl. 340—248.

Marquardt-Hudes Inc.: *See*—
Hudes, Henry N., and Marquardt. 2,751,764.

Marquardt, Max: *See*—
Hudes, Henry N., and Marquardt. 2,751,764.

Marsel, Charles J.: *See*—
Happel, John, and Marsel. 2,752,405.

Martens, Günter, to Hartford National Bank and Trust Co., trustee. Circuit arrangement for automatic resonance tuning of a high-frequency generator more particularly for the purpose of therapy. 2,752,496, 6-26-56, Cl. 250—36.

Martin, Edward G., to the United States of America as represented by the Secretary of the Navy. Oscillator tube cavity tuner. 2,752,524, 6-26-56, Cl. 315—5.

Martin, Henry. Grease guns. 2 752,073, 6-26-56, Cl. 222—326.

Martin, Henry. Grease guns. 2,752,074, 6-26-56, Cl. 222—326.

Martin, Henry, to Variapat A. G. Trifluoromethyl-imino-biacetanilide ammonium salts. 2,752,393, 6-26-56, Cl. 260—558.

Martin, Warren N. Container closure. 2,752,060, 6-26-56, Cl. 215—41.

Mastache, Leno J.: *See*—
Sheppard, Richard L., Mastache, Shapiro, and Buck. 2,751,812.

Matsukawa, Taizo, and H. Kawasaki, to Takeda Pharmaceutical Industries, Ltd. Vitamin B_1 derivatives and the preparation thereof. 2,752,348, 6-26-56, Cl. 260—256.5.

Matthews, Russell B., to Milwaukee Gas Specialty Co. Control apparatus. 2,751,975, 6-26-56, Cl. 158—122.

Matthews, Russell B., to Milwaukee Gas Specialty Co. Condition responsive control device. 2,752,457, 6-26-56, Cl. 200—140.

Mayo, Clyde R.: *See*—
Turner, Milo L., Jr., and Mayo. 2,751,616.

McAfee, Walter E., to Leavitt Machine Co. Grinding head and grinding surface therefor. 2,751,727, 6-26-56, Cl. 51—190.

McCall, Donald O.: *See*—
Streblow, Albert G., and McCall. 2,751,776.

McConnell, William M., to Taylor-Wilson Mfg. Co. Positioning apparatus for elongated articles to be delivered to a machine. 2,751,781, 6-26-56, Cl. 73—49.6.

McCoy, Frederic C., J. M. Caffrey, Jr., and W. R. Hencke, to The Texas Co. Lubricant containing a metal derivative of a hydroxyaryialkyl polyamine and a metal dithiocarbamate. 2,752 311, 6-26-56, Cl. 252—33.6.

McDonal, Frank J., to Socony Mobil Oil Co., Inc. Wave analysis. 2,752,092, 6-26-56, Cl. 235—61.

McDonald, Dan, to Barber-Greene Co. Solvent extraction process. 2 752,377, 6-26-56, Cl. 260—412.8.

McGraw Electric Co.: *See*—
Atwood Joseph G., and Clark. 2,752,479.
Clark, Philip B. 2,752,478.
Kyle, William D., Jr. 2,752,522.

McIntosh, A Vern, Jr.: *See*—
Marlatt, Paul E., Hanze, McIntosh, and Levin. 2,752,365.

McKay, Alexander S., to The Texas Co. Neutron gamma-ray well logging. 2,752 504, 6-26-56, Cl. 250—71.

McKenney, Henry F., and G. A. Lieske, to Sperry Rand Corp. Ground position indicator system. 2,752,091, 6-26-56, Cl. 235—61.

McKenney, Russell C.: *See*—
Clark, John D., and McKenney. 2,751,810.

McLaggan, John R. Axle cleaning device. 2,751,617, 6-26-56, Cl. 15—88.

McLaurin, James N., ½ to E. T. Marler Ltd. Screen stencil-printing machines. 2,751,842, 6-26-56, Cl. 101—123.

McRae, Wayne A.: *See*—
Juda, Walter, and McRae. 2,752,306.

Mears, Norman B., to Buckbee-Mears Co. Machine for developing photo-printed coatings on metal webs. 2,751,829, 6-26-56, Cl 95—94.

Mehlum, Jorunn: *See*—
Sörensen, Nils A., and Mehlum. 2,752,394.

Melpar, Inc.: *See*—
Burke, Thomas F., Jr. 2,752,584.

Mende, William C.: *See*—
Berliner, Victor R., Mende, and Singher. 2,752,284.

Mennesson, Marcel, to Societe Anonyme pour la Construction de Materiel Automobile (S. A. C. M. A.). Measurement apparatus for checking up the inside of hollow pieces. 2,751,778, 6-26-56, Cl. 73—37.9.

Mennesson, Marcel, to Societe d'Appareils de Controle et d'Equipment des Moteurs (S. A. C. E. M.). Mounting of bicycle front wheel and auxiliary drive engine therefor. 2,751,991, 6-26-56, Cl. 180—31.

Merilatt, Clyde D., to Gould-National Batteries, Inc. Casting machine. 2,751,648, 6-26-56, Cl. 22—77.

Mermelstein, Morris. Vibratory sander. 2,752,182, 6-26-56, Cl. 291—25.

Merrill, Marcellus S. Automobile-top carriers for skis and like articles. 2,752,079, 6-26-56, Cl. 224—42.1.

Merrow Machine Co., The: *See*—
Washburn, John M., and Pierce. 2,751,867.

Messrs. Lumoprint Zindler K. G.: *See*—
Limberger, Walter. 2,751,814.

Metal, Martin. Child's construction toy. 2,751,706, 6-26-56, Cl. 46—31.

Metals & Controls Corp.: *See*—
Kurtz, Edward F. 2,752,454.

Metcalf, Herbert E., to Northrop Aircraft, Inc. Electric-hydraulic flap control system. 2,751,752, 6-26-56, Cl. 60—52.

Metivier, Jean, to Societe des Usines Chimiques Rhone-Poulenc. Phosphorus derivatives, process for their preparation and compositions containing them. 2,752,283, 6-26-56, Cl. 167—33.

Metropolitan-Vickers Electrical Co. Ltd.: *See*—
Towle, Edward L. N. 2,752,019.

Meusy, Eugene E., to Milwaukee Gas Specialty Co. Electric igniter 2,751 973 6-26-56, Cl. 158—115.

Meyer, Edwin W.: *See*—
Julian, Percy L., Cole, Meyer, and Karpel. 2,752,339.

Meyer, Geo. J., Mfg. Co.: *See*—
Bartlett, Richard J., and Hompe. 2,751,735.

Michlein, Carl P., to The Shelton Tack Co. Electromagnetic rivet setting machine. 2,752,061, 6-26-56, Cl. 218—2.

Microcyclomat Co., The: *See*—
Lecher, Joseph. 2,752,097.

Middleton, Donald R.: *See*—
Bixby, William H. 2,752,551.

Miesch, Georges A., to Societe d'Exploitation des Procedes Serix. Drive mechanism. 2,751,792, 6-26-56, Cl. 74—436.

Miles, Vivien S.: *See*—
Moser, Robert C. 2,751,896.

Miller, Donald W.: *See*—
Clarkson, Alick, and Miller. 2,751,894.

Miller, Leonidas C. Portable power driven reciprocating tool. 2,751,922, 6-26-56, Cl. 137—106.

Miller, Leonidas C. Fluid pressure power-operated reciprocating shaft tool. 2,751,940, 6-26-56, Cl. 143—68.

Miller, Leonidas C. Tube sealer. 2,751,965, 6-26-56, Cl. 154—42.

Miller, Philip: *See*—
Miller, Sidney A., and Gorkowski. 2,751,640.

Miller, Sidney A., and E. W. Gorkowski, ½ to P. Miller. Metal awning construction. 2,751,640, 6-26-56, Cl. 20—57.5.

Miller, Sidney E., and C. H. Nystrom, to American Bosch Arma Corp. Overspeed governor with speed responsive servomotor. 2,751,887, 6-26-56, Cl. 121—42.

Milwaukee Gas Specialty Co.: *See*—
Matthews, Russell B. 2,751,975.
Matthews, Russell B. 2,752,457.
Meusy, Eugene E. 2,751,973.

Minister of Supply, in His Majesty's Government of the United Kingdom of Great Britain and Northern Ireland: *See*—
Rumsey, Victor H. 2,752,573.

Minneapolis-Honeywell Regulator Co.: *See*—
Baldwin, John H., Cummings, and Schuck. 2,751,921.
Bonnell, Charles R. 2,752,466.
Elret, Robert J. 2,752,498.
Higgins, Stephen P., Jr., and Drinker. 2,751,918.
Loeber, John A. 2,751,972.

Minnis, Luther W. Camera supporting heads for tripods or the like. 2,752,116, 6-26-56, Cl. 248—181.

Mirus, Gilbert B. Kitchen paring bag. 2,751,952, 6-26-56, Cl. 150—0.5.

Mitchell, George W. Clearer roll stripping apparatus. 2,751,621, 6-26-56, Cl. 15—307.

Mitchell, George W. Method of stripping clearer rolls. 2,752,273, 6-26-56, Cl. 134—21.

Mode, Robert S.: *See*—
Kyselka, James L., and Kent. 2,752,090.

Modern Dust Bag Co., Inc.: *See*—
Freschl, William W. 2,752,086.

Modine, Arthur B., to Modine Mfg. Co. Combustion type heater. 2,751 900, 6-26-56, Cl. 126—110.

Modine, Arthur B., to Modine Mfg. Co. Convector. 2,752,125, 6-26-56, Cl. 257—136.

Modine, Arthur B., to Modine Mfg. Co. Convector or other heat exchange device. 2,752,129, 6-26-56, Cl. 257—256.

Modine Mfg. Co.: *See*—
Dedo, Lewis J. 2,752,128.
Modine, Arthur B. 2,751 900.
Modine, Arthur B. 2,752,125.
Modine, Arthur B. 2,752 129.

Moerkens, Jozef C., and T. Hehenkamp, to Hartford National Bank and Trust Co., trustee. Selective switching system for voltage regulation. 2,752,557, 6-26-56, Cl. 323—43.5.

Mohler, William F., ½ to J. and ½ to B. Vedder. Air-operated motor. 2 751,889, 6-26-56, Cl. 121—157.

Mohler, William F., ½ to J. and ½ to B. Vedder. Fluid actuated motor. 2,751,891, 6-26-56, Cl. 121—164.

Monaghan, Patrick H.: *See*—
Caldwell, Joseph A., Monaghan, Rumble, and Uhrig. 2 752 579.

Monark Silver King, Inc.: *See*—
Propst, Matthias J., and Blaho. 2,752,167.

Monsanto Chemical Co.: *See*—
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Saul, George A., and Godfrey. 2,752 392.
Yates, William F., and Kelly. 2,752,295.

Montgomery, Robert S.: *See*—
Lipke, Paul H., Jr., and Montgomery. 2,752,319.

Moore, Ben. M. Ventilator for storm windows. 2,751,839, 6-26-56, Cl. 98—96.

Moore, Donald G., to Radio Corp. of America. Oscillator frequency stabilization system. 2,752,493, 6-26-56, Cl. 250—36.

Moorhead, Thomas, to The Locomotive Finished Material Co. Slack adjuster for air brakes. 2,752,012, 6-26-56, Cl. 188—198.

Morrell, Albert M., to Radio Corp. of America. Tri-color kinescope. 2,752,520, 6-26-56, Cl. 313—70.

Morrison, John A., to Boeing Airplane Co. Safety closure latch. 2,752,186, 6-26-56, Cl. 292—139.

Morrow, Lyman C. Footwear disinfector. 2,751,931, 6-26-56, Cl. 137—587.

Morton, Allen W.: *See*—
Raskin, Betty L., and Morton. 2,752,275.

Moser, Robert C., to B. C. Skinner, J. B. Skinner, B. L. Skinner, B. W. Skinner, and V. S. Miles, copartners doing business as S-M Tappet Sales. Mechanical valve tappet. 2,751,896, 6-26-56, Cl. 123—90.

Moskowitz, Lester R., and R. E. Schell, to Radio Corp. of America. Orienting device. 2,752,028, 6-26-56, Cl. 198—33.

Motorola, Inc.: *See*—
Taylor, Douglas W. 2,752,526.

Moulton, Clifford H.: *See*—
Ropiequet, Richard L., and Moulton. 2,752,527.

Mueller, Johannes: *See*—
Schlittler, Emil, and Mueller. 2,752,351.

Müller A. G. Maschinenfabrik und Eisengiesserei: *See*—
Ingold, Fritz. 2,751,790.

Muller, Jacques. Filter for gaseous fluids. 2,752,001, 6-26-56, Cl. 183—15.

Munn, Adolph T. Label holder. 2,752,025, 6-26-56, Cl. 197—136.

Murray Corp. of America, The: *See*—
Hullar, Herbert E. 2,752,004.

Myers, William C., Jr.: *See*—
Parker, James F. 2,751,684.

Nahon, James M. Golf bags. 2,751,955, 6-26-56, Cl. 150—1.5.

Nakonz, Walter. Method of pre-stressing reinforced concrete structural elements. 2,751,660, 6-26-56, Cl. 25—154.

Nallinger, Friedrich K. H., to Daimler-Benz Aktiengesellschaft. Unit power plant and axle unit suspension in motor vehicles. 2,751,992, 6-26-56, Cl. 180—64.

Naphtal, Irving: *See*—
Naphtal, Mac, and I. 2,752,587.

Naphtal, Mac, and I. Naptal. Gas escape alarm. 2,752,587, 6-26-56, Cl. 340—237.

National Dairy Research Laboratories, Inc: *See*—
Walton, Henry. 2,752,334.

National Equipment Corp.: *See*—
Schlemmer, Philip G. 2,751,982.
Schlemmer, Philip G. 2,752,152.

National-Standard Co.: *See*—
Pierce, Robert C. 2,752,191.

National Tank Co.: *See*—
Glasgow, Clarence O. 2,751,998.

Navarrete, Angel. Locks for sliding closure members. 2,752,445, 6-26-56, Cl. 200—61.68.

Navy, United States of America as represented by the Secretary of the: *See*—
Bixby, Harold W. 2,751,844.
Jones, Floyd B., Schuck, and Handel. 2,751,689.
Klick, Clifford C. 2,752,505.
Link, John C., and Trautvetter. 2,752,594.
Martin, Edward G. 2,752,524.
Ruedy, John E. 2,752,519.
Ryerson, Clifford M. 2,752,564.

Nedwick, Zygmund, Leg resistor runway. 2,752,155, 6-26-56, Cl. 273—55.

Nekowitsch, John E.: *See*—
Patraw, Donald T., and Nekowitsch. 2,751,595.

Nelson, Alden W., to The James L. Entwistle Co. Machine for taping wire coil. 2,751,733, 6-26-56, Cl. 53—198.

Nelson, Alfred M., to Hughes Aircraft Co. Card receiving station. 2,752,154, 6-26-56, Cl. 271—74.

Nelson, Elmer L. Caster wheel mounting. 2,751,622, 6-26-56, Cl. 16—35.

Nergaard, Arnold. Protective closure shell and funnel. 2,752,082, 6-26-56, Cl. 226—31.

Newacheck, Richard L.: *See*—
Kohl, Jerome, and Newacheck. 2,752,067.

Newcomb, Philipp, to United Aircraft Corp. Lubricating and starting systems for gas turbines. 2,751,749, 6-26-56, Cl. 60—39.08.

Newell, Mary P. Match box dispenser. 2,752,034, 6-26-56, Cl. 206—31.

Newell, Robert E., Jr. Dispensers of the squeeze bottle type. 2,752,199, 6-26-56, Cl. 299—90.

New York Air Brake Co., The: *See*—
Safford, Lewis A. 2,752,181.

Niederer, Herbert O.: *See*—
Niederer, Otto C., and O., and H. O. Niederer. 2,751,717.

Niederer, Otto: *See*—
Niederer, Otto C., and O. and H. O. Niederer. 2,751,717.

Niederer, Otto C., O. Niederer, and H. O. Niederer. Egg cleaning equipment. 2,751,717, 6-26-56, Cl. 51—16.

Niederhauser, Warren D., to Rohm & Haas Co. Iodine dissolved in aqueous solutions of maleic anhydride-vinyl ether copolymers. 2,752,281, 6-26-56, Cl. 167—17.

Niederhauser, Warren D., and E. J. Smialkowski, to Rohm & Haas Co. Surface active polyethoxy ether esters of bis (chlorophenyl) acetic acid. 2,752,384, 6-26-56, Cl. 260—469.

Nitsche, Erich, to Siemens-Schuckertwerke Aktiengesellschaft. Dry-plate rectifier. 2,762,542, 6-26-56, Cl. 317—234.

Noe, William M. Safety belt buckle. 2,751,656, 6-26-56, Cl. 24—170.

Nofziger, Jay C. Evaporative condenser. 2,752,124, 6-26-56, Cl. 257—37.

Nolan, Elizabeth: *See*—
Nolan, Stephen J. 2,752,015.

Nolan, Stephen J., deceased; E. Nolan, executrix of said S. J. Nolan. Weather strip for metal casement windows. 2,752,015, 6-26-56, Cl. 189—65.

Norden Ketay Corp.: *See*—
Coulbourn, William C., and Sandberg. 2,751,786.

Nordquist, Ronald E. J., to American Can Co. Machine for sliding articles into stacked relation. 2,752,050, 6-26-56, Cl. 214—6.

Norris, Ralph J., to The Tappan Stove Co. Broiler unit for electric cooking ranges. 2,752,475, 6-26-56, Cl. 219—37.

Norris, Ralph J., to The Tappan Stove Co. Broiler unit for electric cooking ranges. 2,752,476, 6-26-56, Cl. 219—37.

Norris, Ralph J., to The Tappan Stove Co. Broiler unit for electric cooking ranges. 2,752,477, 6-26-56, Cl. 219—37.

North American Aviation, Inc.: *See*—
Acterman, Joseph S., Freebairn, and Sherwood. 2,752,209.
Barker, William T. 2,751,809.
Dunham, James A. 2,752,094.
Payne, Fred A., Jr. 2,752,112.

Northcott, Roy P.: *See*—
Porter, Frederick W. B., and Northcott. 2,752,287.

Northrop Aircraft, Inc.: *See*—
Boyd, Leo B. 2,752,513.
Metcalf, Herbert E. 2,751,752.
Strayer, Chalmers A. 2,751,751.

Novi Equipment Co.: *See*—
Welch, Lewis W., and Fegel. 2,751,671.

Null, Fay E. Soil pulverizers. 2,751,831, 6-26-56, Cl. 97—10.

Nutter, Walter: *See*—
Hunter, William A., Blackburn, and Nutter. 2,751,631.

Nye, Ray, to Holley Carburetor Co. Non-icing carburetor. 2,752,132, 6-26-56, Cl. 261—23.

Nystrom, Carl H.: *See*—
Miller, S. E., and Nystrom. 2,751,887.

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Oehler, William P., and C. H. Youngberg, to Deere & Co. Attachment frame for tractor planters. 2,751,836, 6-26-56, Cl. 97—47.41.

Oertling, L., Ltd.: *See*—
Hodsman, George F. 2,752,146.

Oesterling, James F., H. A. Sinski, and E. R. Frederick, to the United States of America as represented by the Secretary of the Army. Insulating ground pad. 2,751,609, 6-26-56, Cl. 5—344.

Ogg, Alvin W.: *See*—
Rawlins, Herbert L., Wallace, and Ogg. 2,752,452.

Ogilvie, Harry W. Manual propulsion and steering means for watercraft. 2,751,876, 6-26-56, Cl. 115—32.

Ohio Ferro-Alloys Corp.: *See*—
Jordan, Otis D. 2,752,586.

Ohmega Laboratories: *See*—
Foster, Harry R., and Crump. 2,752,492.

Oil Equipment Laboratories, Inc.: *See*—
Ayres, John E. 2,752,066.

Oilgear Co., The: *See*—
Ferris, Walter. 2,752,214.
Grad, Adolf R. 2,751,670.

Okress, Ernest C., and D. G. Clifford, to Westinghouse Electric Corp. Ultrahigh frequency wave control means. 2,752,485, 6-26-56, Cl. 250—13.

Olcott, Charles A. Driving means for centrifugal machines. 2,752,044, 6-26-56, Cl. 210—70.

Oldenkamp, Henry A., and P. Kaftol, to American Machine & Foundry Co. Heat distributing apparatus. 2,752,144, 6-26-56, Cl. 263—19.

Olin Mathieson Chemical Corp.: *See*—
Clark, John D., and McKenney. 2,751,810.
Frost, George E. 2,751,845.
Hofrichter, Charles H., Jr., and Kempmeyer. 2,752,266.

Oliver, John P.: *See*—
Allen, Herbert, Works, and Oliver. 2,752,119.

Olsson, Erik M.: *See*—
Falkman, Hans H., Olsson, and Soberblom. 2,751,718.

Olsson, Sven M. J., to Sunrod Mfg. Corp. Electrical reduction furnace having means to protect the walls thereof from heat within the furnace and to utilize otherwise wasted heat. 2,752,410, 6-26-56, Cl. 13—9.

One-in-Hand-Tie Co.: *See*—
Less, Joseph W. 2,751,597.

Ore & Chemical Corp., The: *See*—
Schreiber, Rudolf, and Schuetz. 2,752,040.

Orenick, Emil. Mechanical movement. 2,751,789, 6-26-56, Cl. 74—57.

Organon, Inc.: *See*—
Reichstein, Fadeus. 2,752,372.

Ortho Pharmaceutical Corp.: *See*—
Berliner, Victor R., Mende, and Singher. 2,752,284.

Oswald, Joseph H. Casement window structure. 2,751,639, 6-26-56, Cl. 20—53.

Ott, Arnold C.: *See*—
Pederson, Raymond L., and Ott. 2,752,367.

Overfield-Collins, Edward, and A. P. Saunders, to Wildt and Co. Ltd. Circular knitted fabric and garment. 2,751,771, 6-26-56, Cl. 66—171.

Owens-Corning Fiberglas Corp.: *See*—
Drummond, Warren W. 2,751,962.

Owens-Illinois Glass Co.: *See*—
Denman, Robert R. 2,751,715.

Pace, Percy L. Musical doll-cradle. 2,751,710, 6-26-56, Cl. 46—175.

Padwe, Seymour. Finger ring set with sheet metal latch. 2,751,763, 6–26–56, Cl. 63—15.2.

Paillard S. A.: *See*—
Bacher, Eric. 2,752,159.

Pan, Wen Y., and R. D. Flood, to Radio Corp. of America. Ultra high frequency oscillation injection equalizer. 2,752,486, 6–26–56, Cl. 250—20.

Panellit, Inc.: *See*—
Marmorstone, Robert J. 2,752,588.

Pappas, Michael A.: *See*—
Baran, Edward C., Fletcher, Jatzek, and Pappas. 2,752,307.

Papworth, Walter A.: *See*—
Emmons, Arthur N., and Papworth. 2,751,942.

Parker, Henry G. Banana core extraction tool. 2,751,864, 6–26–56, Cl. 107—1.

Parker, James F., 40% to W. C. Myers, Jr. Knife having a replaceable blade. 2,751,684, 6–26–56, Cl. 30—330.

Parker, Willard T.: *See*—
Bonine, Ralph O., and Parker. 2,752,536.

Parkhurst, John C., Jr. Container for chemicals. 2,752,036, 6–26–56, Cl. 206—47.

Parrish, William C. Vehicle air conditioner. 2,751,758, 6–26–56, Cl. 62—117.1.

Passino, Herbert J.: *See*—
Dittman, Albert L., Passino, and Teeters. 2,752,331.

Patentex, Inc.: *See*—
Burleson, Aaron. 2,751,747.

Patents and Investments Ltd.: *See*—
Hampton, Ronald. 2,751,916.

Pathe Mfg. Corp.: *See*—
Gersley, Charles H., and Schumacher. 2,752,047.

Patterson, Joseph W.: *See*—
Strahm, Allen D., and Patterson. 2,752,051.

Patraw, Donald T., and J. E. Nekowitsch. Wrist guard. 2,751,595, 6–26–56, Cl. 2—59.

Paul, Talbert W., to Deere & Co. Adjustable beet digging and lifting device. 2,751,739, 6–26–56, Cl. 55—108.

Paulus, Howard L., to Wright Mfg. Co. Evaporative automobile cooler. 2,752,134, 6–26–56, Cl. 261—29.

Payne, Fred A., Jr., to North American Aviation, Inc. Steerable and retractable aircraft landing gear. 2,752,112, 6–26–56, Cl. 244—102.

Pearl, Daniel M., to Darwin Products, Inc. Built-up pedal construction. 2,751,797, 6–26–56, Cl. 74—594.4.

Pearson, Raymond E.: *See*—
Finley, Donald W., and Pearson. 2,751,990.

Pedersen, Axel V. Joist hanger. 2,751,644, 6–26–56, Cl. 20—94.

Pedersen, Lars C. Construction of truck-driven railway cars. 2,751,854, 6–26–56, Cl. 105—159.

Pederson, Raymond L., and A. C. Ott, to The Upjohn Co. Steroid compounds. 2,752,367, 6–26–56, Cl. 260—397.2.

Peerless Roll Leaf Co., Inc.: *See*—
Grupe, William F. 2,751,841.
Grupe, William F. 2,751,701.

Peiss, Henry. Cabinet. 2,752,215, 6–26–56, Cl. 312—111.

Penick, S. B., & Co., Inc.: *See*—
Starr, Donald F., and Di Santo. 2,752,360.

Pennsylvania Range Boiler Co.: *See*—
Douglas, Peyton W. 2,751,688.

Peppel, William J., and R. S. Schiefelbein, to Jefferson Chemical Co., Inc. Orthosilicate esters. 2,752,381, 6–26–56, Cl. 260—448.8.

Peretz, Richard, to Societe Anonyme "Electromecanique," Measuring and/or control installation for electric welding. 2,752,467, 6–26–56, Cl. 219—4.

Permann, Karl, to Shell Development Co. Radiant tubular heater and method of heating. 2,751,893, 6–26–56, Cl. 122—275.

Persch, Walther, to Cassella Farbwerke Mainkur Aktiengesellschaft. Gentisic acid salts of aminoalkylphenthiazines. 2,752,345, 6–26–56, Cl. 260—243.

Petch Mfg. Co.: *See*—
Doutt, Kingsley A. 2,751,886.

Peters, Leo. Soft plastic food package. 2,752,251, 6–26–56, Cl. 99—171.

Peterson, Adolphe C. Variable wing aircraft. 2,752,110, 6–26–56, Cl. 244—43.

Peterson, Albert C., to Union Special Machine Co. Garment band construction. 2,751,599, 6–26–56, Cl. 2—237.

Peterson, Albert C., to Union Special Machine Co. Garment bands. 2,751,600, 6–26–56, Cl. 2—237.

Peterson, Alden W., to United States Steel Corp. Holder for hot-top supporting blocks. 2,751,649, 6–26–56, Cl. 22—147.

Peterson, Arthur L. and O. E. Vacuum operated hand brake unit for vehicles. 2,752,008, 6–26–56, Cl. 188—152.

Peterson, David G.: *See*—
Hodson, Peter, and Peterson. 2,751,779.

Peterson, Odell E.: *See*—
Peterson, Arthur L. and O. E. 2,752,008.

Petit, Paul E. Apparatus for cleaning pipes and the like. 2,751,728, 6–26–56, Cl. 51—241.

Peyches, Ivan, to Societe Anonyme des Manufactures des Glaces et Produits Chimiques de St. Gobain, Chauny & Cirey. Method for extracting simple elements from fusible materials containing them. 2,752,233, 6–26–56, Cl. 75—10.

Pfizer, Chas., & Co., Inc.: *See*—
Celmer, Walter D. 2,752,359.

Phelon, Russell E. Breaker mechanism for a magneto. 2,752,436, 6–26–56, Cl. 200—30.

Philco Corporation: *See*—
Aires, Ramon H. 2,752,528.
Clapp, Richard G. 2,752,418.
Ehrich, William G. 2,752,420.

Phillips Petroleum Co.: *See*—
Bearer, Louis C. 2,752,231.
Findlay, Robert A. 2,752,230.
Rush, Elton E. 2,751,890.

Pickell, Marion W., to Kerr-McGee Oil Industries, Inc. Asphaltene and drying oil compositions. 2,752,264, 6–26–56, Cl. 106—248.

Picking, Jay W.: *See*—
Hough, William R., Dugar, and Picking. 2,752,245.

Pierce, Bernard N.: *See*—
Washburn, John M., and Pierce. 2,751,867.

Pierce, Robert C., to National-Standard Co. Coil lifter. 2,752,191, 6–26–56, Cl. 294—93.

Pierce, Stanley W., to American Can Co. Adhesive composition. 2,752,263, 6–26–56, Cl. 106—230.

Pines, Arthur N.: *See*—
Wagner, George H., and Pines. 2,752,380.

Pinkerton, Dale F. One man automobile cover. 2,751,977, 6–26–56, Cl. 160—368.

Pittsburgh Coke & Chemical Co.: *See*—
Shideler, Norman T. 2,752,267.

Pittsburgh Plate Glass Co.: *See*—
Fitzgerald John V., Bachman, and Laing. 2,752,506.

Place, Roland P.: *See*—
Kyselka, James L., and Kent. 2,752,090.

Plastaket Mfg. Co.: *See*—
Woock, Walter R. J. 2,752,276.

Fletcher, Clarence B. Blast gun. 2,751,716, 6–26–56, Cl. 51—11.

Plott, Robert F., to the United States of America as represented by the United States Atomic Energy Commission. Leakage testing apparatus. 2,751,780, 6–26–56, Cl. 73—49.2.

Plummer, Harry D. Hand puppet. 2,751,708, 6–26–56, Cl. 46—154.

Polak, Ernest H., to Polak's Frutal Works, Inc. Process of producing indanes from para-cymene. 2,752,404, 6–26–56, Cl. 260—668.

Polak's Frutal Works, Inc.: *See*—
Polak, Ernest H. 2,752,404.

Polk, Charles, to Radio Corp. of America. Wide band coaxial transmission line. 2,752,577, 6–26–56, Cl. 333—96.

Polygram Casting Co. Ltd.: *See*—
Jenkins, Gwynville, and Taylor. 2,751,645.

Polytechnique Research and Development Co. Inc.: *See*—
Finke, Herbert A., and Ebert. 2,752,494.

Polzer, John O., to A. O. Smith Corp. Belt grinding apparatus. 2,751,724, 6–26–56, Cl. 51—141.

Pope, Arthur J. Trigger and sear control mechanism. 2,751,820, 6–26–56, Cl. 89—140.

Porter-Cable Machine Co.: *See*—
Emmons, Arthur N., and Papworth. 2,751,942.

Porter, Frederick W. B., and R. P. Northcott, to The British Petroleum Co. Ltd. Treatment of petroleum residues to obtain increased yield of gas oil improved Diesel index. 2,752,287, 6–26–56, Cl. 196—24.

Porter, John S. Sampling tube with drain valve. 2,751,787, 6–26–56, Cl. 73—425.4.

Powell, Burnet J., to Houdaille Industries, Inc. Hand brake pull rod assembly. 2,751,795, 6–26–56, Cl. 74—503.

Power Equipment Co.: *See*—
Bixby, William H. 2,752,551.

Powers, Myron J.: *See*—
Talburt, William F., and Powers. 2,752,253.

Price, Robert W., to Westinghouse Electric Corp. Automatic welder. 2,752,469, 6–26–56, Cl. 219—8.

Pride Products Co.: *See*—
Brinkman, John K. 2,751,603.

Priebe, Clarence A. Vehicle light construction. 2,752,480, 6–26–56, Cl. 240—8.2.

Pritchard, Dalton H., to Radio Corp. of America. Signal operated automatic control circuit. 2,752,417, 6–26–56, Cl. 178—5.4.

Prober, Maurice, to General Electric Co. Method for preparing phenyltrifluoroethylene. 2,752,400, 6–26–56, Cl. 260—651.

Proctor Drying and Freezing Corp.: *See*—
Colton, Ralph F. 2,751,687.
Colton, Ralph F. 2,751,762.

Pronst, Matthias J., and R. G. Blaho, to Monark Silver King, Inc. Spring fork structure for bicycles. 2,752,167, 6–26–56, Cl. 280—276.

Protection Equipment Co., Inc.: *See*—
Jones, Earle M. 2,751,838.

Pruitt, Selma. Continuous supply paint roller. 2,751,618, 6–26–56, Cl. 15—128.

Przysiecki, Theodore L., to Teletype Corp. Answer back device for printing telegraph systems. 2,752,414, 6–26–56, Cl. 178—4.

Pugsley, Donald J. D., to Pye Ltd. Synchronizing arrangement particularly for television apparatus. 2,752,424, 6–26–56, Cl. 178—69.5.

Pugsley, Donald J. D., to Pye Ltd. Synchronizing arrangement particularly for television apparatus. 2,752,423, 6–26–56, Cl. 178—69.5.

Purdy, Berton A., to Kiekhaefer Corp. Breaker adjustment for magnetos. 2,752,437, 6–26–56, Cl. 200—31.

Puster, Louis M., to Robertshaw-Fulton Controls Co. Fluid mixing device. 2,752,095, 6–26–56, Cl. 236—12.

Pye, David J., to The Dow Chemical Co. Oxychlorination of hydrocarbons. 2,752,402, 6–26–56, Cl. 260—659.

Pye Ltd.: *See*—
Pugsley, Donald J. D. 2,752,424.
Pugsley, Donald J. D. 2,752,423.

Quebec Metallurgical Industries Ltd.: *See*—
Lichty, Lyall J. 2,752,236.

Quinton, Wayne E., ⅓ to R. W. Wells and ⅓ to O. Bardahl. Methods and means for indicating contamination of lubricating oil. 2,752,566, 6–26–56, Cl. 324—65.

Radio Corp. of America: *See*—
De Vore, Henry B. 2,752,487.
Goodrich, Hunter C. 2,752,431.
Hall, James R. 2,752,570.
Hanthorn, Horace F. 2,752,490.
Kroger, Martin G. 2,752,495.
Liggett, John A. 2,751,926.
Moore, Donald G. 2,752,493.
Morrell, Albert M. 2,752,520.
Moskowitz, Lester R., and Schell. 2,752,028.
Pan, Wen Y., and Flood. 2,752,486.
Polk, Charles. 2,752,577.
Pritchard, Dalton H. 2,752,417.
Shumard, Charles C. 2,752,552.
Sziklai, George C. 2,752,416.

Radio Frequency Laboratories, Inc.: *See*
Youkers, William A. 2,752,219.

Radlove, Sol B.: *See*—
Julian, Percy L., Iveson, and Radlove. 2,752,376.

Ragland, Harry F., to General Electric Co. Method and apparatus for electrical filtering. 2,752,574, 6–26–56, Cl. 333—70.

Randall, Kenneth B.: *See*—
Welch, Douglas F., Randall, and Strang. 2,751,750.

Ransburg Electro-Coating Corp.: *See*—
Curtis, Norman S., and Juvinall. 2,751,851.

Raskin, Betty L., and A. W. Morton, to Burns and Russell Co. Surface finished masonry construction unit. 2,752,275, 6–26–56, Cl. 154—45.9.

Ratliff, Wayne. Garment bagging means. 2,751,734, 6–26–56, Cl. 53—241.

Rawlins, Herbert L., J. M. Wallace, and A. W. Ogg, to Westinghouse Electric Corp. Circuit interrupters. 2,752,452, 6–26–56, Cl. 200—89.

Ray, William A., to General Controls Co. Hydraulic motor system. 2,751,753, 6–26–56, Cl. 60—52.

Raymond Corp., The: *See*—
Gibson, Christian D. 2,752,058.

Reade, Gerald L., and C. Ekle. Corn saver attachment. 2,751,744, 6–26–56, Cl. 56—119.

Redmond, John A., and E. J. Carbo, to Westinghouse Electric Corp. Heat treatment of metallic workpieces. 2,752,470, 6–26–56, Cl. 219—10.43.

Redner, Roland A., to Unifilter Co. Integral fluid filter and valve construction. 2,751,930, 6–26–56, Cl. 137—549.

Redwing Ltd.: *See*—
Hammond, Charles T. 2,752,184.

Reed, Daniel J., to A. O. Smith Corp. Method and apparatus for erecting helical storage vessel. 2,751,672, 6–26–56, Cl. 29—429.

Reeve, Lewis, to The United Steel Companies Ltd. Production of ferric chloride. 2,752,223, 6–26–56, Cl. 23—87.

Regie Nationale des Usines Renault: *See*—
Saives, Léon. 2,752,020.

Rehberg, Chessie E., to the United States of America as represented by the Secretary of Agriculture. Liquid acrylic ester telomers with isopropylated benzene and process for their production. 2,752,387, 6–26–56, Cl. 260—475.

Reichel, Walter, to F. Blasi & Co. Copying grinding machine. 2,751,719, 6–26–56, Cl. 51—100.

Reichstein, Ladeus, to Organon, Inc. 3,14 21-trihydroxy pregnanediones-(11,20) and process. 2,752,372, 6–26–56, Cl. 260—397.45.

Reilly Tar & Chemical Corp.: *See*—
Cislak, Francis E. 2,752,356.

Reiners, Walter: *See*—
Fürst, Stefan. 2,752,102.
Fürst, Stefan. 2,752,103.
Fürst, Stefan. 2,752,104.

Reliance Electric & Engineering Co., The: *See*—
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Remde, Edward H., to The Baker-Raulang Co. Load limit mechanism. 2,751,994, 6–26–56, Cl. 180—82.

Remington Arms Co., Inc.: *See*—
Crittendon, Lexie R., and Hailston. 2,751,702.
MacDonald, Robert J., and Schwope. 2,751,808.

Research Corp.: *See*—
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Reuillard, Camille, to C. R. Hatch, Jr. Box wrench having a pivotally mounted workpiece abutment. 2,751,802, 6–26–56, Cl. 81—121.

Revallier, Leonardus J., to Stamicarbon N. V. Method of preparing nitrating acids. 2,752,225, 6–26–56, Cl. 23—114.

Rex, Walter A., to Esso Research and Engineering Co. Fluid hydroforming. 2,752,291, 6–26–56, Cl. 196—50.

Reynolds, Delos J.: *See*—
Kincaid, Homer F., Graham, Reynolds, and Wharff. 2,752,148.

Reynolds, Richard J., to E. I. du Pont de Nemours and Co. Soluble elastomers derived from 2,3-dichloro-1,3-butadiene. 2,752,329, 6–26–56, Cl. 260—79.5.

Rheinpreussen Aktiengesellschaft fuer Bergbau und Chemie: *See*—
Grimme, Walter, and Wöllner. 2,752,399.

Richardson, William H., to The Driscoll Wire Co. Shipping container and paying-off device. 2,752,108, 6–26–56, Cl. 242—128.

Richmond, Moscow K., and R. D. Holmes. Garage door operator. 2,752,150, 6–26–56, Cl. 268—74.

Richter, Gustav R., to Hartford National Bank and Trust Co., trustee. Tone-control circuit arrangement for use in low-frequency amplifier. 2,752,432, 6–26–56, Cl. 179—171.

Riley, Horace E., to Union Carbide and Carbon Corp. Color stabilization of phenols with phosphoric acids. 2,752,398, 6–26–56, Cl. 260—624.

Ringland, William L., to Allis-Chalmers Mfg. Co. Connector for synchronous machine damper winding. 2,752,518, 6–26–56, Cl. 310—183.

Ringoen, Richard M., to Collins Radio Co. Phase insensitive synchronously tuned filter. 2,752,491, 6–26–56, Cl. 250—27.

Ritscher, Arthur, to Kurt Korber & Co. K. G. Knife advancing and latching means for a tobacco cutting machine. 2,751,949, 6–26–56, Cl. 145—117.

Robbins, Clyde F., to Cutler-Hammer, Inc. Push-button operated devices. 2,752,440, 6–26–56, Cl. 200—44.

Roberts, Roy J. Automatic vehicle washing device. 2,751,915, 6–26–56, Cl. 134—123.

Robertshaw-Fulton Controls Co.: *See*—
Puster, Louis M. 2,752,095.

Robinson, Charles F., to Consolidated Electrodynamics Corp. Method and apparatus for mass separation. 2,752,501, 6–26–56, Cl. 250—41.9.

Robinson, Richard A.: *See*—
Cusic, John W., and Robinson. 2,752,385.

Robitschek, Paul, and C. T. Bean, Jr., to Hooker Electrochemical Co. Poly-halogen-containing alpha substituted alkylenic succinic acids and anhydrides. 2,752,361, 6–26–56, Cl. 260—346.6.

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Roschke, Erwin M., to Zenith Radio Corp. Coding apparatus for television transmitters. 2,752,415, 6–26–56, Cl. 178—5.1.

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Rose, Eustace L. Circuit closing means for an electrically operated garage door. 2,752,449, 6–26–56, Cl. 200—85.

Ross, Karl F. Scanning method and television system using same. 2,752,421, 6–26–56, Cl. 178—6.8.

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Rowland, Dan R., and M. H. Stark, to General Motors Corp. Propeller shaft. 2,751,765, 6–26–56, Cl. 64—1.

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OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
June 26, 1956 Volume 707 Number 4

TRADEMARKS

NOTICES

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 551,291 (Milium), Deering, Milliken & Co., Inc., Textile fabrics of cotton, rayon, nylon, etc., filed May 28, 1956, D. C., S. D. N. Y., Doc. 110/65, *Deering, Milliken & Co., Inc.* v. *Gilbert Textile Co.*

TM 566,213 (Chromspun), Tennessee Eastman Corp., Synthetic staple fiber; **TM 571,024**, same, Eastman Kodak Company, Synthetic yarn, filed Apr. 30, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16504, *Eastman Kodak Co.* v. *David Glasgow et al.* Consent judgment May 28, 1956.

TM 571,024. (See TM 566,213.)

CONDITION OF TRADEMARK APPLICATIONS AS OF JUNE 1, 1956

Total number of applications awaiting action [excluding renewals and Sec. 12 (c)]	8,671
Date of oldest new application	Dec. 1, 1955
Date of oldest amended application	Jan. 3, 1956

MERCHANT, JOHN, Director, Trademark Examining Operation

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application: New	Oldest Application: Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	1-16-56	2-2-56
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	12-1-55	3-1-56
III. WENDT, C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	12-9-55	1-3-56
Renewals (All Classes)	3-20-56	5-22-56
Sec. 12 (c) Publications (All Classes)	3-14-56	5-21-56

Applications Filed During Week Ending June 1, 1956—438

Registrations Issued 461—No. 629,307 to No. 629,767
Renewals Issued 85

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.

As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 661,587. Florence J. Pyne, d. b. a. Pyne Flowers & Gifts, Milford, Mass. Filed Feb. 24, 1954.



For Fresh Flowers.
First use Dec. 31, 1953.

SN 685,034. Macon Seed Company, Inc., Decatur, Ill. Filed Apr. 6, 1955.



For Hybrid Seed Corn.
First use on or about Dec. 1, 1951.

SN 685,035. Macon Seed Company, Inc., Decatur, Ill. Filed Apr. 6, 1955



The drawing is lined to indicate the colors red, yellow, blue, and green.

For Small Seed—Namely, Clover, Mammoth Red Clover, Alsike, Sweet Clover, Alfalfa, Timothy, Lespedeza, Seed Wheat, Oats, and Blue Grass.

First use on or about Mar. 1, 1940.

SN 688,381. American Air Filter Company, Inc., Louisville, Ky. Filed May 27, 1955.

Roll-O-MAT

Owner of Reg. No. 607,283.

For Rolls of a Flexible Air-Cleaning Web of Fiber Glass, of Expansible-Contractible Air Flow Depth, Wound in a Compressed Condition.

First use Dec. 30, 1954.

SN 691,599. Algemene Kunstzijde Unie N. V., Arnhem, Netherlands. Filed July 20, 1955.

TERLENKA

Priority claimed under Sec. 44(d) on Dutch application filed Jan. 24, 1955; Reg. No. 120,784, dated Feb. 2, 1955. Owner of U. S. Reg. Nos. 441,121, 543,030, and others.

For Synthetic Textile Fibres, Twisted Synthetic Straw and Twisted Synthetic Hair.

SN 692,829. F. Burkart Manufacturing Company, St. Louis, Mo., c/o Textron American, Inc., Providence, R. I. Filed Aug. 11, 1955.

BURHAIRE

Owner of Reg. No. 373,592.

For Textile Batting for Industrial Uses.

First use Jan. 21, 1954.

SN 696,688. American Potash & Chemical Corporation, Los Angeles, Calif. Filed Oct. 19, 1955.

BIKALITH

Owner of Reg. No. 615,528.

For Lithium Ore.

First use Sept. 15, 1955.

SN 697,467. Burnett's Foods, Inc., Newark, N. J. Filed Nov. 1, 1955.

CUTTLECONE

For Picking Block for Birds.

First use on or about November 1953.

SN 697,838. Puget Sound Pulp & Timber Co., Bellingham, Wash. Filed Nov. 7, 1955.

Q-BROXIN

For Well Drilling Mud Thinner.

First use Aug. 1, 1955.

SN 698,407. Charcoal Container Corp., Cleveland, Ohio. Filed Nov. 17, 1955.

CHARKIES

For Boxed Charcoal Briquets.

First use on or about July 25, 1955.

SN 698,516. Marcelo Grosz, Buenos Aires, Argentina. Filed Nov. 18, 1955.



Owner of Argentina Reg. No. 348,522, dated Apr. 1, 1955.

For Hides and Skins, Raw, Tanned, and Otherwise Preserved.

First use Oct. 29, 1934.

CLASS 2

SN 637,201. Mauser Kommandit-Gesellschaft, Koeln-Ehrenfeld, Germany. Filed Oct. 27, 1952. Sec. 2(f).



Owner of German Reg. No. 318,597, dated Aug. 13, 1924.

For Barrels, Drums, Cans; Large Covered Tin Cans for Shipping Materials; Protecting Cages, Buckets, Vats, Tubs, Troughs, Tanks; Metal Bottles for Liquefied Gas; Zinced, Tinned and Enameled Articles and Articles Made of Aluminum—Namely, Pails and Coppers; Packing Cases of Steel, Metal, and Non-Metallic Materials.

First use January 1900; in commerce March 1905.

SN 688,897. Bemis Bro. Bag Company, St. Louis, Mo. Filed June 6, 1955.

RESISTAL-WELD

For Plastic Bags.

First use May 10, 1955.

SN 691,074. Ozark Mountain Store, Inc., Windsor, Mo. Filed July 11, 1955.



For Baskets.

First use Feb. 28, 1955.

SN 691,905. Triple H Company, Glendale, Calif. Filed July 25, 1955. Sec. 2(f).

Protect-a-Vase

For Concrete Protectors for Cemetery Flower Holders.

First use Apr. 30, 1954.

SN 387. Theodore Will, Syosset, N. Y. Filed Jan. 9, 1956.

WILTAIR

For Empty Cartons for Food, Cigarettes, and Soap Products.

First use Dec. 1, 1955.

SN 1,358. Gibraltar Fabrics, Inc., Brooklyn, N. Y. Filed Jan. 24, 1956.

Grommet Grip

For Laundry Net Bags.

First use Dec. 16, 1955.

CLASS 4

SN 689,162. Pyramid Chemical Co., Detroit, Mich. Filed June 8, 1955. Sec. 2(f).



The drawing is lined for yellow and blue.

For Liquid Glass and All-Surface Polish.

First use July 1947.

SN 697,990. Norton Pike Company, Troy, N. Y. Filed Nov. 9, 1955.



For Abrasives, Consisting of Abrasive Grains or Particles Such as Quartz, Sand, or Aluminous Oxide Held in Position by an Adhesive.

First use on or about May 21, 1930.

SN 699,851. Shur-Gloss Mfg. Co., Inc., Chicago, Ill. Filed Dec. 12, 1955.

LEATHER-BRITE

For Cleaning, Polishing, and Preserving Compound for Leather, Leatherette, and Plastic Upholstery and Trim.
First use Nov. 25, 1955.

SN 699,939. Ultra Chemical Works, Inc., Paterson, N. J. Filed Dec. 13, 1955.

ULTRA Chemical WORKS

Owner of Reg. Nos. 586,343, 615,470, and others.
For Floor Waxes.
First use Nov. 14, 1955.

CLASS 6

SN 671,286. Air Reduction Company, Incorporated, New York, N. Y. Filed Aug. 9, 1954.

AIRCO METFLUX

For Compositions and Mixtures in Powder Form for the Treatment of Molten Metal.
First use June 9, 1954.

SN 678,640. Koppers Company, Inc., Pittsburgh, Pa. Filed Dec. 20, 1954. Sec. 2(f) as to "Koppers."



Owner of Reg. No. 557,158.
For Expandable Synthetic Resinous Material.
First use Aug. 10, 1948.

SN 688,908. Jay S. Conley, d. b. a. Jay S. Conley & Co., South San Francisco, Calif. Filed June 6, 1955.



For Materials for Conditioning Metal, Concrete, Bricks, and Painted Surfaces of All Kinds To Receive Paint Cover, Wall Paper Remover, and Wood Bleach.
First use July 22, 1954.

SN 688,954. National Polychemicals, Inc., Wilmington, Mass. Filed June 6, 1955.

POLY-ZOLE

For Chemicals—Namely, Accelerators for Rubber.
First use Apr. 26, 1954.

SN 690,321. Petro-Tex Chemical Corporation, Houston, Tex. Filed June 27, 1955.

BAYOU

For Chemicals Derived From Petroleum or Natural Gas Used in the Manufacture of Rubber and Other Chemical Compositions.
First use May 10, 1955.

SN 692,838. General Aniline & Film Corporation, New York, N. Y. Filed Aug. 11, 1955.

EUKANOL

Owner of Reg. Nos. 235,204 and 592,639.
For Pigment Dyestuffs and Finishing Agents for Leather.
First use Sept. 4, 1931.

SN 697,491. Patek and Co., San Francisco, Calif. Filed Nov. 1, 1955. Sec. 2(f).

RITESIZE

For Linen Sizing.
First use 1930.

SN 697,497. Samuel Pressner, d. b. a. American Brands Company, Richmond, Va. Filed Nov. 1, 1955.

WASHO

For Bleach and Starch.
First use August 1939 on bleach.

SN 697,734. Golden Touch Products, Inc., Boston, Mass. Filed Nov. 3, 1955.

Golden Flame

For Fire Starter in Jelly Form.
First use Sept. 15, 1955.

SN 697,837. Proban Limited, London, England. Filed Nov. 7, 1955.

PROBAN

Owner of British Reg. No. 735,608, dated Nov. 1, 1954.
For Fireproofing Preparations.

SN 698,094. Ultra Chemical Works, Inc., Paterson, N. J. Filed Nov. 10, 1955.

DETERGOL

For Wetting, Leveling, and Desizing Agents.
First use June 1930.

SN 698,128. W. H. & L. D. Betz, Philadelphia, Pa. Filed Nov. 14, 1955.

PETROMEEN

For Corrosion Inhibitor Added to Hydrocarbons and Hydrocarbon Mixtures.
First use Sept. 26, 1955.

SN 698,150. Emery Industries, Inc., Cincinnati, Ohio. Filed Nov. 14, 1955.

SOFT SET

For Oil Base Material for Softening Woolen Fabrics.
First use August 1952.

SN 698,165. The Haloid Company, Rochester, N. Y. Filed Nov. 14, 1955.

COPYFLO

For Developers Consisting of a Mixture of Electroscopic Powder and Granular Material Used in Producing Powder Images in Making Xerographic Copies, and Toners Comprising Electroscopic Powder Used in Connection With Granular Material To Produce Developer Powders, Used in Copying Machines for Making Reproductions by xerography.
First use Aug. 15, 1955.

SN 698,262. Bayer Agriculture Limited, London, England. Filed Nov. 15, 1955.

BOTRILEX

Owner of British Reg. No. 649,289, dated June 28, 1946.
For Insecticides, Fungicides, and Preparations for Killing Weeds and Destroying Vermin.

SN 698,263. Bayer Agriculture Limited, London, England. Filed Nov. 15, 1955.

FOLOSAN

Owner of British Reg. No. 570,217, dated July 14, 1936.
For Fungus Destroying or Preventing Preparations for Agricultural Purposes.

SN 698,417. Farbwerke Hoechst Aktiengesellschaft, vormals Meister Lucius und Brüning, Frankfurt am Main Hochst, Germany. Filed Nov. 17, 1955.

IMPERON

Owner of German Reg. No. 477,510, dated July 12, 1935.
For Dyestuffs, Chemical Dyeing and Printing Auxiliaries for the Textile Industry.

SN 698,459. Research Products Corporation, Madison, Wis. Filed Nov. 17, 1955.

RP

Owner of Reg. No. 390,640.
For Moist or Tacky Coating Compositions for Air Filters and Other Gas Pervious Media and Dispenser-Containers for Same.
First use December 1948.

SN 698,570. Anheuser-Busch, Incorporated, St. Louis, Mo. Filed Nov. 21, 1955.



Owner of Reg. Nos. 28,866, 525,304, and others.
For Starch Products for Industrial Use—Namely, Unmodified Pearl Starch and Modified Starch in Pellet Form, Moulding Starch, Dusting Starch, Laminating Starch, and Dextrines.
First use January 1938 on powdered starch.

CLASS 10

SN 689,740. Phillips Petroleum Company, Bartlesville, Okla. Filed June 17, 1955.

66

The drawing is lined for black. Owner of Reg. No. 568,987.
For Nitrogenous and Phosphorous Containing Fertilizers.
First use on or about Oct. 11, 1948.

SN 689,747. Phillips Petroleum Company, Bartlesville, Okla. Filed June 17, 1955.



The drawing is lined for orange and black. Owner of Reg. No. 568,987.
For Nitrogenous and Phosphorous Containing Fertilizers.
First use on or about Oct. 11, 1948.

CLASS 12

SN 683,847. The Celotex Corporation, Chicago, Ill. Filed Mar. 21, 1955. Sec. 2(f).

TRIPLE SEALED

For Saturated Felt Base Roofing and Siding Products in the Form of Shingles and Sidings as Strips, Units, and Rolls—Namely, Asphalt Shingles, Asphalt Sidings, Mineral Surfaced Roll Roofings, and Smooth Surfaced Roll Roofings.
First use Sept. 1, 1938.

SN 689,662. Sivad Ceramic Corporation, Oak Hill, Ohio. Filed June 16, 1955.

Daviset

For Bonding Mortar in Plastic or Dry Form for Use in Coating Refractory Masonry Work Applied With a Brush or Spray Gun.
First use Nov. 15, 1954.

SN 689,663. Sivad Ceramic Corporation, Oak Hill, Ohio. Filed June 16, 1955.



For Plastic and Dry Powdered Forms of Refractory Cement, Mortars, and Linings.
First use Aug. 18, 1954.

SN 689,666. Sivad Ceramic Corporation, Oak Hill, Ohio. Filed June 16, 1955.

Dragoon

For Plastic Monolithic Ladle Lining Consisting of Carbon Monolithic Refractory.
First use Aug. 18, 1954.

SN 690,940. Crown Zellerbach Corporation, San Francisco, Calif. Filed July 8, 1955.

SOILOX

For Sulfite Waste Liquor-Petroleum Oil Emulsions, for Use as a Road Binder and Roadway Subgrade Stabilizer.
First use May 27, 1955.

SN 691,988. Entec Products Corporation, New York, N. Y. Filed July 27, 1955.

ENTEC

For Sections, Shaped To Imitate Cut Brick or Stone, and Made From Cork, for Use as Surfacing on Interior Walls and Ceilings.
First use May 6, 1955.

SN 696,327. Solar Aircraft Company, San Diego, Calif. Filed Oct. 12, 1955.

ALCERMET

For Coatings and/or Adhesives of Ceramic-Metallic Composition in Dry Powdered Form Known to the Trade as Frit, and in Liquid Form Known to the Trade as Slurry.
First use July 26, 1954.

SN 698,043. Lasting Products Company, Baltimore, Md. Filed Nov. 10, 1955. Sec. 2(f).

LASTING

Owner of Reg. Nos. 422,843, 427,592, and 621,665.
For Glazing and Caulking Compounds, Roofing and Caulking Compounds, Roof Coating, Asphalt and Asbestos Cement, Bituminous Plastic Cement, and Various Water Proofing, Damp Proofing Compositions for Concrete, Stucco, Brick, and Masonry.
First use January 1933.

SN 698,065. Modern Shower Door Co., Cleveland, Ohio. Filed Nov. 10, 1955.

MODERNVIEW

For Assembled Panels of Transparent or Translucent Material for Use as Space Partitions or Enclosures—Namely, Doors, Exterior Walls or Portions Thereof, Interior Walls or Portions Thereof, and Room Dividers or Portions Thereof.
First use June 14, 1955.

SN 698,189. Masters Die Mold Company, River Grove, Ill. Filed Nov. 14, 1955.

Beauty Crest

For Plastic Tile.
First use Mar. 11, 1955.

SN 698,519. Wilbert W. Haase Co., Broadview, Ill. Filed Nov. 18, 1955.

Wilbert
PLASCO

Owner of Reg. Nos. 559,495 and 585,410.
For Asphaltic Concrete Curing and Decorative Stippling Paint Base Composition for Coating the Surfaces of Concrete Burial Vaults.
First use on or about Feb. 22, 1951; on or about Apr. 15, 1946, in another form—namely, in a stencilled style of lettering.

SN 700,110. M and M Wood Working Company, Portland, Oreg. Filed Dec. 16, 1955.

Malarkey

Owner of Reg. Nos. 550,879, 526,847, and 526,848.
For Wooden Doors, Plywood, Wooden Pipe, and Redwood Lumber.
First use Oct. 20, 1955, on plywood.

SN 517. Reliance Steel Products Company, McKeesport, Pa. Filed Jan. 11, 1956.

Relgrit

For Metal Gratings Having Abrasive Tread Surfaces.
First use on or about Nov. 18, 1955.

SN 648. American-Marietta Company, d. b. a. Keystone Asphalt Products Company, Chicago, Ill. Filed Jan. 13, 1956.

KAPCORK

For Premolded Expansion Joints for Concrete Construction.
First use on or about Nov. 4, 1955.

SN 649. American-Marietta Company, d. b. a. Keystone Asphalt Company, Chicago, Ill. Filed Jan. 13, 1956.

JETSEAL

For Sealing Compound for Sealing Expansion Joints, Contraction Joints, and Cracks in Concrete.
First use on or about Sept. 29, 1955.

SN 674. Globe Roofing Products Co., Inc., Whiting, Ind. Filed Jan. 13, 1956.

ALUMI-HIDE

Owner of Reg. No. 573,727.
For Aluminum Surfaced Roll Roofing, Aluminum Surfaced Asphalt Shingles, Aluminum Surfaced Sidings, and Aluminum Surfaced Vapor Barrier Roll Roofing.
First use Jan. 5, 1956.

SN 853. The Visador Company, Dallas, Tex. Filed Jan. 16, 1956.

for flush panel doors
VISADOR
LIGHTS LOUVERS
since 1950

Applicant makes no claim to the wording "For Flush Panel Doors," "Lights," "Louvers," or "Since 1950" apart from the mark as shown.
For Door Lights and Louvers.
First use on or about Dec. 13, 1951.

CLASS 13

SN 664,411. Continental Copper & Steel Industries, Inc., New York, N. Y. Filed Apr. 13, 1954.

STARLINE

Owner of Reg. Nos. 85,438 and 424,371.
For Aluminum, Bronze, Galvanized, Nickel Steel Alloy, and Stainless Steel Wire Insect Screening.
First use Apr. 1, 1953; Jan. 1, 1912, as to the word "Star" and the symbol of a star.

SN 672,666. Ideal Corporation, Brooklyn, N. Y. Filed Sept. 2, 1954.

WIRE SEAL

For Hose Clamps.
First use on or about Nov. 1, 1950.

SN 694,838. Acme Steel Company, Chicago, Ill. Filed Sept. 19, 1955.



The stripes between the black lines on the mark are colored yellow as shown on the drawing. The word "Steel" is disclaimed apart from the mark shown.
For Metal Strap Fastening Seals.
First use Jan. 1, 1955.

SN 2,860. Croessant Machine Works, Inc., Temple, Pa. Filed Feb. 17, 1956.

JACK NUT

For Screw Anchors.
First use Nov. 21, 1955.

SN 2,995. William H. Koch, d. b. a. The International Steel Co., Minneapolis, Minn. Filed Feb. 20, 1956.

SWING-O-MATIC

For Gates, Particularly Gravity Return Bump-Actuated Gates.
First use on or about Apr. 1, 1949.

SN 3,060. Warren Manufacturing Company, Riverdale, N. J. Filed Feb. 20, 1956.

LINE-LOK

For Pipe Couplers.
First use December 1955.

SN 5,698. Forman Family, Inc., Brooklyn, N. Y. Filed May 2, 1956.

SERV-O-LATOR

For Coffee Maker and Dispenser.
First use Feb. 16, 1954.

CLASS 16

SN 675,936. Watson-Standard Company, Pittsburgh, Pa. Filed Nov. 2, 1954.

FIRE GUARD

For Fire Retardant Paints.
First use Aug. 9, 1948.

SN 681,513. Charles Ortibine Grisby, Jr., d. b. a. Lorraine Company, Glenview, Ill. Filed Feb. 11, 1955.



The drawing is lined for the colors red and grey.

For Thermoplastic Coatings, Coating Thinners, Cleaner and Primer Combinations, Cement Water Proofings, Wood Primers, Cleaners, and Neutralizers.

First use Jan. 15, 1954.

CLASS 18

SN 666,710. The E. V. White Pharmacal Co., Front Royal, Va. Filed May 19, 1954.



The drawing is lined for the color green.

For Liquid Pharmaceutical Preparation Used in Relieving Nasal Stuffiness and Symptoms Associated With Croup, and Bronchial Congestion.

First use May 19, 1954.

SN 684,581. Samuel Miller, d. b. a. Miller Laboratories, New York, N. Y., to Miller Laboratories, Inc., New York, N. Y. Filed Mar. 30, 1955.

ANATOID

For Rectal Suppositories.

First use on or about Mar. 1, 1955.

SN 689,779. Benjamin Zirin, d. b. a. Zirin Enterprises, Miami, Fla. Filed June 17, 1955.



For Medicinal Product—Namely, a Vitamin Preparation.

First use Feb. 22, 1955.

SN 689,780. Benjamin Zirin, d. b. a. Zirin Enterprises, Miami, Fla. Filed June 17, 1955.

HEATS-OFF

For Hormone Preparation for Veterinary Use.

First use Feb. 22, 1955.

SN 693,995. Kenwood Laboratories, Inc., Brooklyn, N. Y. Filed Aug. 31, 1955.

ELIXATRON

For Hematinic for the Treatment of Anemias.

First use July 1, 1955.

SN 698,011. Dale V. Bell, d. b. a. The Belport Company, Seattle, Wash. Filed Nov. 10, 1955.

GINGI-PAK

For Dental Retracting Cord, and—Namely, a Cord Saturated in a Solution Having a Vasoconstrictor as a Principal Ingredient.

First use on or about Nov. 29, 1954.

SN 698,449. Miles Laboratories, Inc., Elkhart, Ind. Filed Nov. 17, 1955. Sec. 2(f).

ONE A DAY

Owner of Reg. Nos. 397,637 and 523,578.

For Vitamin Tablets.

First use Sept. 30, 1940.

SN 698,467. Vick Chemical Company, Wilmington, Del. Filed Nov. 17, 1955.

ACTIVIZER

For Cold Tablets.

First use Oct. 27, 1955.

SN 698,535. The Wm. S. Merrell Company, Reading, Cincinnati, Ohio. Filed Nov. 18, 1955.

Consol

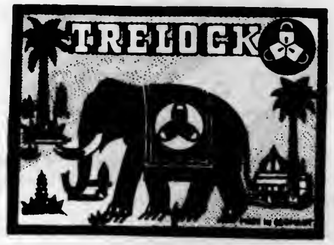
Owner of Reg. No. 139,166.

For Cough Preparation in Liquid Form.

First use Nov. 3, 1955.

CLASS 19

SN 695,590. Aug. Winkhaus, Telgte, Westphalia, Germany. Filed Sept. 29, 1955.



Owner of German Reg. No. 656,260, dated Apr. 13, 1954.

For Bicycle Bells.

First use Feb. 1, 1928.

SN 696,363. Holan Thrift Line Corporation, Griffin, Ga. Filed Oct. 13, 1955.

Thrift Line

For Public Utility Truck Bodies and Parts Thereof.

First use July 29, 1955.

SN 3,602. Evans Products Company, Plymouth, Mich. Filed Feb. 29, 1956.

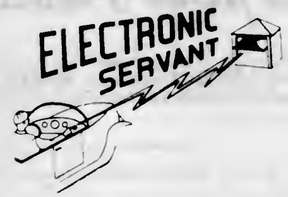
NIGHT RIDER

For Bicycles.

First use Sept. 20, 1955.

CLASS 21

SN 699,450. John R. Wiegand, d. b. a. Wiegand Manufacturing Co., Valley Stream, N. Y. Filed Dec. 5, 1955.



For Interceptor Transformers for Opening Garage Doors.

First use October 1955.

SN 699,613. Robert Bosch Gesellschaft mit beschraenkter Haftung, Stuttgart, Germany. Filed Dec. 8, 1955.



Owner of German Reg. Nos. 231,561, dated May 5, 1919; 544,602, dated Apr. 23, 1942; and 636,389, dated Apr. 2, 1953.

For Electric Motors and Their Parts; Magneto-Electric and Battery Ignition Systems for Internal Combustion Engines, Comprising Magnetos, Ignition Distributors, Ignition Coils, Contact Breakers, Spark Plugs, Glow Plugs; Electric Lighting Sets for Motor Vehicles and for Bicycles, Electric Current Generators, Regulators, Cut-Out Switches, Electric Headlights, Electric Lighting Signals, Blinkers, Direction Indicators, Electric Stop Signs, Electric Starting Systems for Internal Combustion Engines, Electric Storage Batteries, Coils, Capacitors, Switches, Switch Boxes, Fuse Boxes, Electrical Insulators, Interference Suppression Apparatus, Interference Suppression Parts, Electric Horns; Electric Tools and Portable and Movable Electric Machine Tools, Comprising Hand Machine Tools and Their Parts, Multipurpose Hand Motors, Portable Electric Tools—Namely, Drilling Machines, Drilling and Reaming Machines, Grinders, Nut Runners, Tappers, Sheet Metal Shears, Milling Machines, Polishers for Wet and Dry Polishing, Roll Pickers for Cleaning of Spinning Machines, Drill Hammers, Drilling Blowers, Percussion Hammers, Plumber's and Electrician's Power Hammers, Tools, Such as Drills, Milling Cutter Files, Woodworking Tools (Rasps), Counter-Sinking Tools, Filing Discs, Polishing Cups and Discs, Brushes, Grinding Discs, Shapers; Supports for Electric Hand Motors; Builder's Power Hammers; Magnetic Tools—Namely, Magnetic Chucks for Workpieces and Tools, Magnetic Bases for Tools and Measuring Instruments; Electric Machines for Domestic Use for Preparing Food, and Accessories Comprising Kneaders, Mixers, Liquidizers, Slicers, Shredders, Pommes-Frites (Potato Chip) Discs, Potato Peelers, Citrus Presses, Meat Mincers, Juice Extracting Attachments, Grating Attachments, Noodle Making Attachments, Fritter Making Attachments, Sausage Stuffers; Refrigerator Controls, and Parts of All of the Said Goods.

SN 64. General Electric Company, Schenectady, N. Y. Filed Jan. 3, 1956.

POLYEX

For Electrical Insulation—Namely, Electrical Insulation Basically Comprising Polyester Films and Fibers and Resin Which Is Applied to Electrical Conductors.

First use in or about October 1955.

SN 101. Sorensen and Company, Inc., Stamford, Conn. Filed Jan. 3, 1956.



No claim is made to the exclusive use of the word "Sorensen" apart from the mark shown. Owner of Reg. Nos. 576,299 and 572,803.

For Voltage Regulators.

First use Dec. 6, 1955.

SN 180. Carl von der Crone & Co., Ludenscheid, Germany. Filed Jan. 4, 1956.



For Electric Flashlights.

First use May 13, 1953.

SN 211. NuTone, Inc., Cincinnati, Ohio. Filed Jan. 5, 1956.

Motor-Maid

For Electrically Operated Combination Unit for Mixing and Blending Food, Meat Grinding, Fruit Juicing, and Knife Sharpening.

First use Dec. 15, 1955.

SN 235. Channel Master Corporation, Ellenville, N. Y. Filed Jan. 6, 1956.

GOLDEN ROTOR

For Antenna Rotators.

First use May 3, 1955.

SN 528. Swivelier Company, Inc., New York, N. Y. Filed Jan. 11, 1956.

"NIMBLE-LITE"

For Electrical Lighting Fixtures and Parts Thereof.

First use Jan. 25, 1945.

SN 732. Blackburn Electronic Corporation, Wyoming, Pa. Filed Jan. 16, 1956.



For Power and Precision Resistors, Deflection Yokes, Focus Coils, Wire Wound Components and Photo-Electric Devices.
First use Aug. 5, 1955.

SN 2,035. Hatheway & Company, Jersey City, N. J. Filed Feb. 3, 1956.

SUPER-DUCT

For Light Wall Electric Conduit, Known Generally in the Trade as "Thinwall."
First use in or about April 1924.

SN 2,124. General Motors Corporation, Detroit, Mich. Filed Feb. 6, 1956.



For Electric Ranges, Ovens, Food Waste Disposers, Dish Washing Machines, and Parts Thereof.
First use in or before September 1946 on electric ranges.

SN 2,237. Hughes Aircraft Company, Culver City, Calif. Filed Feb. 7, 1956.



Owner of Reg. Nos. 601,594 and 601,595.
For Direct Viewing Cathode-Ray Storage Tubes With Half-Tone Presentation.
First use Jan. 4, 1956.

SN 2,650. Price Battery Corporation, Hamburg, Pa. Filed Feb. 14, 1956.



For Storage Batteries.
First use July 2, 1945.

SN 5,527. Hughes Aircraft Company, Culver City, Calif. Filed Mar. 30, 1956.

TYPOTRON

Owner of Reg. No. 601,594.
For Cathode Ray Tubes.
First use on or about Nov. 18, 1953.

CLASS 22

SN 658,336. The Humpal Manufacturing Co., Boulder, Colo., formerly Spinn-X Co. Filed Dec. 21, 1953.

Spinn-o-matic

For Fishing Tackle—Namely, Reels, Fish Hooks, Bait Boxes, Bobbers, Creels, Artificial Flies, Lines, Artificial Lures, Fishing Nets, Fishing Poles, Sinkers, Swivels, Snap Swivels.
First use Oct. 8, 1953.

SN 674,878. E. & A. Sales Company, Detroit, Mich. Filed Oct. 15, 1954.

Eddy Allen

For Sporting Goods—Namely, Golf Balls and Golf Clubs.
First use May 14, 1954.

SN 683,457. United Specialties of Birmingham, Inc., Birmingham, Ala. Filed Mar. 14, 1955.

Thunderbird

For Children's Wagons.
First use Mar. 8, 1955.

SN 683,523. Lindquist Bros. Bait Co., Ltd., Tecumseh, Ontario, Canada. Filed Mar. 15, 1955.

CANADIAN WIGGLER

For Fishing Lures.
First use Sept. 1, 1949.

SN 687,992. Style-Crafters, Incorporated, Greenville, S. C. Filed May 20, 1955.

LIFE-RAFT

For Marine Safety Products—Namely, Life Preserver Type Marine or Boat Cushions Filled With Kapok or Unicelluiar Plastic of Various Fabrics, Shapes, and Sizes.
First use 1946.

SN 687,993. Style-Crafters, Incorporated, Greenville, S. C. Filed May 20, 1955.

AQUA-FLOAT

For Marine Safety Products—Namely, Life Preserver Jackets and Vests for Swimming, Fishing, Water-Skiing, and Boating.
First use February 1952.

SN 694,814. Sifo Company, St. Paul, Minn. Filed Sept. 16, 1955.

ROCK-A-BYE BUILD-UP

For Rocker Platform With Built-Up Blocks.
First use Apr. 15, 1955.

SN 699,307. Franklin Manufacturing Company, Westmont, N. J. Filed Dec. 2, 1955.

SATELLITE

For Kites.
First use in August 1951.

SN 699,449. Wideman's, Inc., Wetumpka, Ala. Filed Dec. 5, 1955.

"FLIPPY.. THE WONDER PUP"

For Animated Toys.
First use July 12, 1954.

SN 699,546. The Bridge Hand of the Month Club, Inc., Bayside, N. Y. Filed Dec. 7, 1955.

I-DEAL

For Card Games.
First use Nov. 10, 1955.

SN 699,650. Moore & Hansen Manufacturing Co., d. b. a. Pla-Mor, Englewood, Colo. Filed Dec. 8, 1955.

AUTO-MAGIC

For Bingo Boards.
First use on or about Nov. 4, 1955.

CLASS 23

SN 676,734. Lincoln Engineering Company, St. Louis, Mo., now by merger The McNeil Machine & Engineering Company (Ohio), Akron, Ohio. Filed Nov. 16, 1954.

PRESSURE-FLO

For Anti-Surge Mechanism for Relieving the Pressure in a Fluid Spray System.
First use Feb. 22, 1954.

SN 680,069. Durbin Durco, Inc., St. Louis, Mo. Filed Jan. 18, 1955.

RED-D-GRAB

For Load Binders in the Nature of a Hand Tool Equipped With Hooks for Binding or Tightening Chains, Wire, and the Like.
First use Dec. 1, 1954.

SN 681,641. Royal McBee Corporation, New York, N. Y. Filed Feb. 14, 1955. Sec. 2(f).

TOUCH CONTROL

Owner of Reg. No. 360,173.
For Key Tension Devices for Use on Typewriting Machines.
First use Apr. 2, 1935.

SN 685,412. Stoffel Seals Corporation, Tuckahoe, N. Y. Filed Apr. 12, 1955. Sec. 2(f).

Stoffel

Owner of Reg. Nos. 412,067 and 397,290.
For Hand Tools and Automatic Machines for Closing and Attaching Identification Tags to Merchandise, for Use in Connection With Seal Cups Made of Metal, Synthetic Composition, and Cardboard To Close Such Seal Cups.
First use May 1, 1941.

SN 686,573. E. C. Rollins, d. b. a. General Machine Co., Ogden, Utah. Filed Apr. 29, 1955.

GEMCO

For Beet Harvester Machine.
First use on or about Mar. 1, 1951.

SN 687,404. A. J. Parsons, Washington, Pa. Filed May 12, 1955.



For Vehicle Mounted Compressors, Vehicle Mounted Trenching Machines, and Vehicle Mounted Cold Welding Apparatus.
First use Feb. 22, 1955.

SN 687,909. American Positive Grip Vise Corporation, Williamsett, Mass. Filed May 20, 1955.



For Vise.
First use Nov. 10, 1953.

SN 690,571. Nickles Machine Corporation, Ponca City, Okla. Filed June 30, 1955.

NIMCO

For Cylinders, Cylinder Liners, Cylinder Heads, Pistons and Parts Thereof, Bearings, Valves and Parts Thereof, Valve Guides, Fuel Pump Parts, Rocker Arm Assemblies, Fulcrum Arms and Fulcrum Pins.
First use Nov. 3, 1953, on cylinders, pistons, piston parts, cylinder liners, valve parts, and pump parts.

SN 691,743. Bemis Bro. Bag Co., Minneapolis, Minn. Filed July 22, 1955.

Taper-Grip

For Bag Holders.
First use July 1955.

SN 700,554. American Liquid Gas Corporation, Los Angeles, Calif. Filed Dec. 27, 1955.

ALGAS

Owner of Reg. No. 518,226.
For Apparatus for Use in Connection With Internal Combustion Engines, Said Apparatus Comprising Carburetors, Liquid-to-Gas Converters, Pressure Regulators, Air and Gas Mixers, Vaporizers, and Heat Exchangers.
First use Dec. 15, 1943.

SN 838. Star Cutter Company, Farmington, Mich. Filed Jan. 16, 1956.

STARBORE

For Metal Cutting Tool—Namely, Drills.
First use Oct. 3, 1955.

CLASS 26

SN 693,430. Chr. Beck & Sohne, KG, Kassel, Germany. Filed Aug. 22, 1955.

BECK KASSEL CBS

Owner of German Reg. No. 413,109, dated Jan. 13, 1930.
For Binoculars, Glasses, and Microscopes.

SN 696,162. Micafil Aktiengesellschaft Werke für Elektro-Isolation und Wickeleinrichtungen, Zurich, Switzerland. Filed Oct. 10, 1955.

MICAFIL

Owner of Swiss Reg. No. 121,670, dated July 15, 1947.
For Control Device Indicating the Flow of Coolant, e. g., Oil in the Cooling System of Electrical Transformers.
First use 1922; in commerce 1931.

SN 700,352. Wright Machinery Company, Durham, N. C. Filed Dec. 20, 1955.

BAGMASTER

For Apparatus for Feeding, Weighing, Filling, and Transferring Bags of Various Kinds of Products.
First use Oct. 15, 1954.

SN 700,432. Compagnie Generale de Metrologie (Societe Anonyme), Seynod, Chemin de la Croix-Rouge, Haute-Savoie, France. Filed Dec. 22, 1955.

CARTEX

Owner of French Reg. No. 1,147, dated Sept. 18, 1950.
For Scientific and Electrical Measuring Appliances—Namely, Voltmeters, Ohmmeters, Ammeters, Impedance Bridges, Electronic Tube Testers, Standard Signal Generators, and Oscillators.

SN 700,724. The Haloid Company, Rochester, N. Y. Filed Dec. 28, 1955.

HALEX

For Sensitized Photographic Paper.
First use Oct. 24, 1955.

SN 700,725. The Haloid Company, Rochester, N. Y. Filed Dec. 28, 1955.

VARALOID

For Sensitized Photographic Paper.
First use Oct. 24, 1955.

SN 700,916. The Vogel Mfg. Company, Bridgeport, Conn. Filed Dec. 30, 1955.

Let-R-Scale

For Combination Postage Scale, Ruler, and Letter Opener.
First use on or about Dec. 1, 1955.

SN 5,337. Electro-Mec Laboratory, Inc., Long Island City, N. Y. Filed Apr. 27, 1956.

DIGITOMETER

For Analog-to-Digital Converters and Coded Commutators.
First use Sept. 30, 1954.
Subj. to Intf. with SN 683,840.

CLASS 27

SN 3,817. Bulova Watch Company, Inc., Flushing, N. Y. Filed Mar. 5, 1956.

BUTTERFLY

For Watches.
First use Feb. 6, 1956.

SN 3,818. Bulova Watch Company, Inc., Flushing, N. Y. Filed Mar. 5, 1956.

SCHOLASTIC

For Watches.
First use Feb. 6, 1956.

SN 3,819. Bulova Watch Company, Inc., Flushing, N. Y. Filed Mar. 5, 1956.

PROM

For Watches.
First use Feb. 6, 1956.

SN 3,821. Bulova Watch Company, Inc., Flushing, N. Y. Filed Mar. 5, 1956.

STORM KING

For Watches.
First use Feb. 6, 1956.

SN 3,823. Bulova Watch Company, Inc., Flushing, N. Y. Filed Mar. 5, 1956.

KNOCKABOUT

For Watches.
First use Feb. 6, 1956.

SN 4,349. Movado Watch Agency, Inc., New York, N. Y. Filed Mar. 12, 1956.

VISCOUNT

For Watches.
First use Nov. 28, 1955.

SN 4,735. Montres Rolex S. A. (Rolex Uhren AG.) (Rolex Watch Co. Ltd.), Geneva, Switzerland. Filed Mar. 16, 1956.

BENVENUTO CELLINI

Priority claimed under Sec. 44(d) on Swiss Reg. No. 159,607, dated Jan. 19, 1956.
For Timepieces of All Kinds and Parts Thereof.

CLASS 28

SN 4,682. R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Filed Mar. 15, 1956.

LAMERIE

For Sterling Silver Flatware, i. e. Knives, Forks, and Spoons.
First use 1936.

SN 4,686. R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Filed Mar. 15, 1956.

WINDSOR MANOR

For Sterling Silver Flatware, i. e. Knives, Forks, and Spoons.
First use 1936.

SN 4,946. Feature Ring Co., Inc., New York, N. Y. Filed Mar. 21, 1956.

DIAMOND JUBILEE

For Finger Rings and Finger Ring Mountings Made of Precious Metal.
First use Mar. 5, 1956.

CLASS 31

SN 678,469. Olin Mathieson Chemical Corporation, East Alton, Ill. Filed Dec. 16, 1954.

Roll-Bond

For Refrigerator Evaporators.
First use on or about Oct. 13, 1954.

CLASS 32

SN 3,795. Aireloom Bedding Company, Alhambra, Calif. Filed Mar. 5, 1956.

Slumberlounge

For Sofa Beds and Sofa Bed Chairs.
First use July 25, 1954.

SN 4,332. Kool Kooshion Manufacturing Company, Oklahoma City, Okla. Filed Mar. 12, 1956.



For Fabricated Cushions Having Air-Circulation Space.
First use Oct. 1, 1955.

SN 4,333. Kool Kooshion Manufacturing Company, Oklahoma City, Okla. Filed Mar. 12, 1956.

"KAY"

For Fabricated Cushions Having Air-Circulation Space.
First use Oct. 1, 1955.

CLASS 33

SN 3,611. Knox Glass, Inc., Knox, Pa. Filed Feb. 29, 1956.



For Glass Bottles.
First use in the year 1932.

CLASS 34

SN 648,546. Albert E. Griffiths and Alfred Wright, Brooklyn, N. Y. Filed June 10, 1953.

Scot Ex cel N Y USA

Applicant disclaims the words "NY" and "USA" apart from the mark as shown.
For Fuel Oil Burner Head and Nozzle.
First use June 4, 1953.

SN 685,181. Florence Stove Company, Chicago, Ill. Filed Apr. 8, 1955.

GOVERNESS

For Gas Range Burner Controls.
First use Dec. 14, 1954.

SN 2,590. Surface Combustion Corporation, Toledo, Ohio. Filed Feb. 13, 1956.

ALLCASE

For Furnaces.
First use Dec. 29, 1952.

SN 2,607. Western Gold and Platinum Company, San Francisco, Calif. Filed Feb. 13, 1956.

WESGO

For Melting Dishes, Boats, Slabs, and Crucibles.
First use on or about July 1, 1931, on melting dishes.

SN 2,689. Dallas Engineers, Inc., Dallas, Pa. Filed Feb. 15, 1956.

Coal-O-Matic

For Automatic Coal Burners.
First use 1938.

SN 2,798. Morrison Products, Inc., Cleveland, Ohio. Filed Feb. 16, 1956.

Intra - Drive

For Blowers and Parts Thereof.
First use Nov. 25, 1955.

SN 2,865. Dimplex Limited, Totton, near Southampton, Hampshire, England. Filed Feb. 17, 1956.

dimplex

Owner of British Reg. No. 652,391, dated Oct. 8, 1946.
For Radiators for Heating Purposes.

SN 2,888. The Lau Blower Company, Dayton, Ohio. Filed Feb. 17, 1956.

ELECTRO-WHEEL

For Centrifugal Blowers.
First use on or about Jan. 17, 1956.

SN 3,044. Southern Heater Corporation, Compton, Calif. Filed Feb. 20, 1956.

ULTRA-GLAZE

For Glass Lined Water Heaters.
First use June 8, 1955.

SN 3,101. Kidde Manufacturing Co., Inc., Bloomfield, N. J. Filed Feb. 21, 1956.

Jet King

For Blow Torches.
First use on or about Dec. 15, 1955.

CLASS 36

SN 688,728. Grossman Music Corporation, Cleveland, Ohio. Filed June 2, 1955. Sec. 2(f).

Flutophone

Owner of Reg. No. 429,233.
For Fifes, Flageolets, Flutes, Whistles, and Mouthpieces for Musical Wind Instruments.
First use on or about Nov. 26, 1945.

CLASS 37

SN 682,081. Tension Envelope Corporation of Kansas City, Kansas City, Mo. Filed Feb. 21, 1955.

KWIK KLASP

For Envelopes for Mailing, Filing, Packaging, and Business Systems.
First use Jan. 12, 1955.

SN 683,833. Advance Products, Inc., Milwaukee, Wis. Filed Mar. 21, 1955.

Kingware

For Paper Products—Namely, Paper Napkins, Paper Table Covers, Paper Doilies, Toilet Paper, Paper Bibs, Paper Toweling, Paper Aprons, Paper Plates, Wrapping Paper, Paper Boxes, Paper Bags, and Paper Cups.
First use on or about Jan. 17, 1955, on paper napkins, doilies, toweling, and bags.

SN 690,634. Newark Paraffine & Parchment Paper Co., Newark, N. J. Filed July 1, 1955.

NEWARK PARAFFINE
Ivorytone
PARCHMENT NEWARK PAPER CO. N.J.

Applicant disclaims its trade name "Newark Paraffine & Parchment Paper Co.," and its location "Newark, N. J."
Owner of Reg. No. 355,684.
For Waxed Paper.
First use January 1933.

CLASS 38

SN 664,880. H. Pettus Randall, Washington, D. C. Filed Apr. 20, 1954.

BUSINESS DIGEST and FORECAST

For Periodical at Present Published Semi-Monthly.
First use Jan. 1, 1954.

SN 679,555. The Catholic Digest, Incorporated, St. Paul, Minn. Filed Jan. 7, 1955.

Catholic Digest

Owner of Reg. Nos. 347,302 and 348,939.
For Monthly Periodical.
First use on or about October 1934.

SN 687,222. Saint Germain Press, Inc., Chicago, Ill. Filed May 10, 1955.



For Periodicals, Books, Printed Lectures, Musical Compositions, and Pictures of Religious or Spiritual Nature.
First use May 1935.

SN 687,341. The Board of Publication of the Methodist Church, Inc., d. b. a. The Graded Press, Nashville, Tenn. Filed May 12, 1955.

MATURE YEARS

For Periodical Issued Quarterly.
First use Sept. 15, 1954.

SN 687,864. Kemicolor Company, Providence, R. I. Filed May 19, 1955.

SIMPLICISSIMUS

For Books and Pamphlets.
First use May 6, 1955.

SN 688,550. La Tienda, Inc., New York, N. Y. Filed May 31, 1955.

SonoColor

For Photographic Slides or Transparencies.
First use May 6, 1955.

SN 689,421. Save-A-Life League of America, Inc., Omaha, Nebr. Filed June 13, 1955.

SAVE-A-LIFE CRUSADE

For Gummed Back Pictorial Stickers or Labels.
First use on or about Mar. 23, 1955.

CLASS 39

SN 678,065. John Wanamaker Philadelphia, Philadelphia, Pa. Filed Dec. 9, 1954.

Leichtfubig

For Shoe Soles Sold Only as a Part of Shoes.
First use Sept. 29, 1954.

SN 685,015. Gem Footwear Company, New York, N. Y. Filed Apr. 6, 1955.

Terry-Pals

For Children's Washable Fabric Slippers.
First use Feb. 4, 1955.

SN 691,082. Quality Maid Footwear, Inc., New York, N. Y. Filed July 11, 1955.

Reliever's

For Women's Shoes.
First use June 1, 1955.

SN 692,346. Ray J. Pastene, d. b. a. Pastene & Co., San Francisco, Calif. Filed Aug. 2, 1955.

Cloud Walk

For Men's, Women's, and Children's Sandals Made Entirely of Rubber.
First use June 5, 1955.

SN 697,453. Isidore Aaronson, d. b. a. Isidore Aaronson Company, New York, N. Y. Filed Nov. 1, 1955.

AIRANSUN

For Men's and Boys' Clothing—Namely, Suits, Sport Coats and Jackets, Blazers, Trousers, Shorts, Knickers, Top Coats, Overcoats, and Outer Coats.
First use 1936.

SN 698,298. Murphy, Brill and Sahner, Incorporated, New York, N. Y. Filed Nov. 15, 1955.

RIB 'N ROLL

For Hosiery, Particularly Socks.
First use Aug. 2, 1955.

CLASS 42

SN 685,626. West Point Manufacturing Company, West Point, Ga. Filed Apr. 15, 1955.

Interlon

For Cellulosic Wadding in Sheet Form Sold in Rolls and Bolts for Interfacings and Linings for Dresses and Other Garments and Similar Purposes.
First use Apr. 15, 1954.

SN 687,448. Chatham Manufacturing Company, Elkin, N. C. Filed May 13, 1955. Sec. 2(f).

NEWPORT

For Blankets.
First use 1935.

SN 689,457. Beaunit Mills, Inc., New York, N. Y. Filed June 14, 1955.

BEMBERG

No claim is made to the word "Pre-Shrunk" apart from the mark shown. Owner of Reg. Nos. 222,453, 594,285, and others.
For Woven, Knitted, Netted, Textile, and Pile Fabrics in the Piece, Comprised of Rayon, or in Substantial Part of Rayon Combined With Cotton, Wool, Silk, Nylon, and Other Synthetic Fibers.
First use May 18, 1955.

SN 310. Congoleum-Nairn Inc., Kearny, N. J. Filed Jan. 9, 1956.

LOOMWEVE

For Plain or Flat Woven Floor Coverings of the Nature of Fiber Rugs.
First use at least as early as Oct. 21, 1955.

CLASS 44

SN 686,131. William H. Adams, Fort Lauderdale, Fla. Filed Apr. 25, 1955.

REST-O-CRAT

For Vibratory Massage Chairs.
First use Nov. 24, 1954.

SN 691,457. John B. Flaherty Co., Inc., New York, N. Y. Filed July 18, 1955.

FLARICO

For Athletic Supporter.
First use June 22, 1935.

SN 699,728. Johnson & Johnson, New Brunswick, N. J. Filed Dec. 9, 1955.

SURGIROL

Owner of Reg. Nos. 306,367, 525,045, and others.
For Surgical Dressings, Pads, Padding and Colostomy Dressings.
First use Nov. 2, 1955.

SN 700,090. Cutter Laboratories, Berkeley, Calif. Filed Dec. 16, 1955.

Saftiflex

Owner of Reg. Nos. 551,531, 554,598, and 443,523.
For Flexible Sterile Plastic Container for the Collection and/or Transportation and Administration of Blood and Intravenous Fluids.
First use November 1954.

SN 700,199. Dade Reagents, Inc., Miami, Fla. Filed Dec. 19, 1955.

CATH-URINE

For Sterile Disposable Plastic Catheter Within a Plastic Bag for the Collection of Urine From the Female.
First use Nov. 17, 1955.

SN 700,330. Rex Cutlery Corporation, New York, N. Y. Filed Dec. 20, 1955.

VASSAR

For Manicure Implements—Namely, Toenail Nippers, Manicure Nippers, Cuticle Nippers, Manicure Scissors, Nail Files, Pedicure Scissors, Pushers, Tweezers for All Purposes, Blackhead Extractors, and Nose Scissors.
First use November 1955.

CLASS 46

SN 630,965. Universal Match Corporation, d. b. a. Schutter Candy Co., Chicago, Ill.; said Universal Match Corporation to said Schutter Candy Company, Chicago, Ill. Filed June 9, 1952.

BIT-O-COCONUT

The word "Coconut" is disclaimed apart from the mark as shown and used. The drawing is lined for red and blue.
Owner of Reg. Nos. 201,022 and 341,816.
For Candy.
First use May 22, 1952.

SN 652,012. Chunky Chocolate Corp., also known as Chunky Chocolate Corporation, Brooklyn, N. Y. Filed Aug. 19, 1953.

SWEET'n LOW

For Candy.
First use on or about June 16, 1953.

SN 670,130. Super Valu Stores, Inc., Hopkins, Minn. Filed July 16, 1954.

SUPER VALU

Owner of Reg. No. 340,502.
For Fresh Fruits and Vegetables, Cheese, Fresh Eggs, Unshelled Nuts, Salted and Unsalted Nutmeats, Bulk Baked Beans, Potato Salads, Coleslaw, and Fresh Poultry.
First use August 1942.

SN 677,469. Wisconsin Alumni Research Foundation, Madison, Wis. Filed Nov. 29, 1954.

Cransweets

For Preserved Cranberries.
First use Aug. 18, 1954.

SN 681,361. Kuner-Empson Company, Brighton, Colo. Filed Feb. 9, 1955.

KETCH-O-PAK

For Individual Servings of Catsup.
First use on or about Jan. 12, 1955.

SN 685,319. Swift & Company, Chicago, Ill. Filed Apr. 11, 1955.

EMBLEM

For Shortening Made From Animal Fats or Vegetable Fats or Combinations Thereof.
First use Mar. 24, 1955.

SN 686,283. H. L. Dickinson, Cincinnati, Ohio. Filed Apr. 26, 1955.

FROST'-KOOLER

For Milk Drinks Consisting of Flavored Milk Drinks With Soda Water.
First use June 5, 1952.

SN 689,173. Shopwell Foods, Inc., Pelham Manor, N. Y., now by consolidation, Daitch Crystal Dairies, Inc., Dover, Del. Filed June 8, 1955

Sally Shopwell

For Tea, Coffee, Oleomargarine, Fresh Eggs, Frozen Orange Juice, Preserves, Salad Dressing, Mayonnaise, Food Flavoring Extracts.
First use Aug. 1, 1951.

SN 689,174. Shopwell Foods, Inc., Pelham Manor, N. Y., now by consolidation Daitch Crystal Dairies, Inc., Dover, Del. Filed June 8, 1955.

Sally Shopwell

For Tea, Coffee, Fresh Eggs, Salad Dressing, Mayonnaise, Frozen Orange Juice, Oleomargarine.
First use Aug. 1, 1951.

SN 692,249. Milk Producers Association of Central California, Modesto, Calif. Filed Aug. 1, 1955.

DARI-VALLEY dv

For Evaporated Milk and Butter.
First use Apr. 7, 1955, on evaporated milk.

SN 692,345. Palm Terrace Fruit Company, Mount Dora, Fla. Filed Aug. 2, 1955.

Tyre's Queen

Owner of Reg. No. 556,453.
For Fresh Citrus Fruits.
First use Dec. 6, 1952.

SN 692,979. Washington Creamery New York Corp., New York, N. Y. Filed Aug. 12, 1955.

MONTAUK

For Frozen Poultry—Namely, Turkey and Other Fowl.
First use July 22, 1955.

SN 693,134. The Frito Company, Dallas, Tex. Filed Aug. 16, 1955.

Ask For "Tah-cups"

Ta-cups

The words 'Ask for "Tah-Cups"' are claimed only in association with the mark shown.
For Corn Masa Pastry Shells.
First use June 7, 1955.

SN 693,666. Dakota Maid Products Co., Fargo, N. Dak. Filed Aug. 25, 1955.

PAUL-MARK

For Fruit Preserves and Table Syrups.
First use July 1, 1954.

SN 693,685. Frank B. Lim, d. b. a. M-F Trading Company, San Francisco, Calif. Filed Aug. 25, 1955.

VARSITY

For Canned Seafood—Namely, Canned Crab.
First use May 15, 1955.

SN 693,867. Swift & Company, Chicago, Ill. Filed Aug. 29, 1955.

BAKEALL

Owner of Reg. No. 122,623.
For Shortening Made From Animal Fats or Vegetable Fats or Combinations Thereof.
First use September 1952.

SN 694,884. Hickory Smoked Cheese Corp., New York, N. Y. Filed Sept. 19, 1955.

TYRO LETTE

For Cheese Bars.
First use Apr. 25, 1952.

SN 695,378. Atalanta Trading Corporation, New York, N. Y. Filed Sept. 27, 1955.

MEC

For Canned Ham.
First use Aug. 18, 1954.

SN 695,380. Atalanta Trading Corporation, New York, N. Y. Filed Sept. 27, 1955.

SIEGFRIED

For Canned Ham.
First use Mar. 4, 1954.

SN 696,409. Bluhill Foods, Inc., Denver, Colo. Filed Oct. 14, 1955. Sec. 2(f).

Gold Box

Owner of Reg. Nos. 409,123 and 509,174.
For Cheese.
First use on or about Jan. 2, 1943.

SN 696,487. Ambrosia Chocolate Company, Milwaukee, Wis. Filed Oct. 17, 1955.

TIXIES

For Candy, and More Particularly Milk Chocolate With Nuts.
First use 1908 on chocolate candy.

SN 696,719. Nalley's, Inc., Tacoma, Wash. Filed Oct. 19, 1955.

PRAISE

For Salad Dressing.
First use Aug. 18, 1955.

SN 696,720. National Licorice Company, Brooklyn, N. Y. Filed Oct. 19, 1955.

ASTORIAS

For Candy.
First use about October 1898.

SN 696,891. Abe M. Katz, Corpus Christi, Tex. Filed Oct. 21, 1955.

BLUE BABY

For Fresh Fruits and Fresh Vegetables.
First use Dec. 11, 1936.

SN 696,924. W. G. White & Co., Winston-Salem, N. C. Filed Oct. 21, 1955.

All Day

For Coffee.
First use Oct. 1, 1955.

SN 697,110. F. H. Peavey & Company, d. b. a. King Midas Feed Mills, Minneapolis, Minn. Filed Oct. 25, 1955.

LASS-O-TONE

For Animal Feed—Namely, Livestock Feed.
First use April 1952.

SN 697,186. Penn Fruit Co., Inc., d. b. a. Penn Fruit Company and Penn Fruit Co., Philadelphia, Pa. Filed Oct. 26, 1955.

Penn Special

Owner of Reg. No. 604,537.
For Fresh Eggs.
First use on or about Nov. 1, 1954.

SN 697,327. Seligman Candy Co., Oakland, Calif. Filed Oct. 28, 1955.

RUFF-NECK

For Candy.
First use Oct. 13, 1955.

SN 697,437. Waples-Platter Company, Fort Worth, Tex. Filed Oct. 10, 1955.

WESTERN GOLD

For Apple Butter, Apple Jelly, Canned Blackeyed Peas, Canned Brown Beans, Canned Chili Con Carne, Cocoanut, Canned Hominy, Canned Mexican Style Beans, Canned Pork and Beans, Olive Oil, Canned Red Kidney Beans, Rice, Pickled Relish Spread for Sandwiches, Salad Dressing, Canned Spaghetti, Strawberry Preserves, Canned Tamales, Tea, and Vinegar.
First use July 18, 1938.

SN 697,461. Paul F. Beich Company, Bloomington, Ill. Filed Nov. 1, 1955.

KATYDIDS

For Candy.
First use Oct. 18, 1955.

SN 697,484. Leaf Brands, Inc., Chicago, Ill. Filed Nov. 1, 1955.

BRASS BAND

For Candy.
First use Oct. 15, 1954.

SN 697,688. John Morrell & Co., Ottumwa, Iowa. Filed Nov. 4, 1955.

HASTY TASTY

Owner of Reg. No. 274,903.
For Smoked Ham.
First use Aug. 12, 1955.

SN 698,254. Winter Garden Citrus Products Cooperative, Winter Garden, Fla. Filed Nov. 14, 1955.

WHOLE SUN

Owner of Reg. Nos. 393,941 and 620,037.
For Dried Citrus Pulp, and Citrus Molasses as a Feed or Food.
First use in the year 1945 on dried citrus pulp.

SN 698,400. Bremner Biscuit Company, Louisville, Ky. Filed Nov. 17, 1955.

ARISTOCRAT

For Crackers.
First use Oct. 26, 1955.

SN 698,742. Tri-Valley Packing Association, San Francisco, Calif. Filed Nov. 22, 1955.

Cock O'THE Walk

Owner of Reg. No. 137,962.
For Canned Fruits, Canned Vegetables, Canned Fruit Juices, and Canned Vegetable Juices.
First use Mar. 1, 1920, on canned fruits and vegetables.

SN 698,818. Antony Worham Limited, London, England. Filed Nov. 23, 1955.

Tudor Queen

Owner of British Reg. No. 720,528, dated Aug. 4, 1953.
For Canned Meats—Namely, Ox Tongue and Pork Luncheon Meat.

SN 698,862. M. D. Green Rice Milling Co., San Francisco, Calif. Filed Nov. 25, 1955.

DIAMANTE

The Spanish word "Diamante" means "diamond."
For Rice.
First use Dec. 20, 1950.

SN 698,893. McDaniel & Sons, Inc., Somerton, Ariz. Filed Nov. 25, 1955.

Choosy

For Fresh Melons and Fresh Vegetables.
First use June 2, 1953, on fresh melons.

SN 698,903. Oceano Packing Co., Oceano, Calif. Filed Nov. 25, 1955.

PAGO

For Fresh Vegetables.
First use May 15, 1946.

SN 699,100. Safeway Stores, Incorporated, Oakland, Calif. Filed Nov. 29, 1955.

SUNNYBANK

For Oleomargarine.
First use Dec. 18, 1938.

SN 699,167. Safeway Stores, Incorporated, Oakland, Calif. Filed Nov. 30, 1955.

Berkshire

For Cheese.
First use Nov. 11, 1942.

SN 699,179. Williamson Candy Company, Chicago, Ill. Filed Nov. 30, 1955.

BIG ALARM

For Candy.
First use January 1930.

SN 700,929. The Pearl Coffee & Grocery Co., Inc., Akron, Ohio. Filed Dec. 9, 1955.

DIANA

Owner of Reg. No. 569,407.
For Coffee.
First use 1926.

CLASS 47

SN 682,608. Widmer's Wine Cellars, Inc., Naples, N. Y. Filed Mar. 1, 1955. Sec. 2(f).

CANANDAIGUA LAKE

Owner of Reg. Nos. 601,743, 601,745, and others.
For Wine.
First use Oct. 21, 1941.

CLASS 48

SN 686,904. Hampden Brewing Company, Willimansett, Mass. Filed May 5, 1955.

"Premium 12"

For Beer.
First use Feb. 25, 1955.

CLASS 50

SN 652,387. W. Goebel, Porzellanfabrik Oeslau und Wilhelmsfeld, Oeslau bei Coburg, Bavaria, Germany. Filed Aug. 27, 1953. Sec. 2(f) as to "Hummel" and "M. I. Hummel."



The words "The Original Figures" are disclaimed apart from the mark as shown.
For Ceramic Figurines.
First use Apr. 5, 1951.

CLASS 51

SN 661,233. Shulton, Inc., New York, N. Y. Filed Feb. 17, 1954.

THIOBIPHENE

For Anti-Bactericidal Ingredient for Use in a Deodorant Stick.
First use Dec. 31, 1953.

SN 669,489. Shulton, Inc., Clifton, N. J. Filed July 6, 1954.

ISOPHYL

For Lubricating Ingredient for Use in an Electric Shave Lotion.
First use May 31, 1954.

SN 680,915. Texize Chemicals, Inc., Greenville, S. C. Filed Feb. 1, 1955.

Denti-Kiss

For Tooth Paste.
First use Jan. 12, 1955.

SN 683,524. Henry Hall Marshall, d. b. a. Consultants' Laboratories, Bedminster, N. J., to Chandler-Marshall Laboratories, Millburn, N. J. Filed Mar. 15, 1955.

Lymphex

For Medicated Bath Powder.
First use June 2, 1952.

SN 684,979. Société à Responsabilité Limitée Dite: Balenciaga, Paris, France, to Balenciaga Parfums, Inc., New York, N. Y. Filed Apr. 5, 1955.

QUADRILLE

Owner of French Reg. No. 424,631, dated Dec. 24, 1952 (Paris); Natl. Inst. No. 3,365; and U. S. Reg. No. 364,544.
For Perfumes, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Rouge, Lipsticks, Dusting Powder, Sachet, Cold Creams, Cosmetic Lotion for the Skin and Hair, Powder and Rouge Compacts.

SN 695,594. Alexandra de Markoff Sales Corporation, New York, N. Y. Filed Sept. 30, 1955.

Alexandra de Markoff

Owner of Reg. Nos. 280,660, 508,525, and others.
For Eye-Brow Pencils, Cosmetic Eye Creams, Personal Deodorants, Sun Tan Preparations, and Make-Up Kits Consisting of Skin Creams and Lotions, Lipstick, Rouge, Face Powder, Eye Cream, Deodorant, Eye Shadow, Mascara, Foundation Cream, and Tissues.
First use June 22, 1949, on eye cream, deodorant, sun tan preparations, and make up kits.

SN 696,105. Bett-Stylo Cosmetic Mfg., Inc., Detroit, Mich. Filed Oct. 10, 1955.

BETT-STYLO

For Hair Rinse, Hair Dressing, Cosmetic Skin Lotions and Face Creams, Facial Powder, Lipsticks, Nail Polish and Perfume.
First use Nov. 2, 1953.

SN 696,120. Charles of the Ritz, Inc., New York, N. Y. Filed Oct. 10, 1955.

RITZ

Owner of Reg. No. 535,714.
For Rouge and Cosmetic Skin Creams.
First use since the year 1925.

SN 699,321. Richard Hudnut, New York, N. Y. Filed Dec. 2, 1955.

ROYAL TREATMENT

For Face Cream.
First use Oct. 15, 1955.

CLASS 52

SN 689,182. Tesco Chemicals, Inc., Atlanta, Ga. Filed June 8, 1955.

SNO-FLO

For Non-Sudsing Laundry Detergent.
First use in or about 1949.

SN 689,855. New Process Chemical Co., Inc., San Francisco, Calif. Filed June 20, 1955.

Nu Proco

Owner of Reg. No. 426,285.
For Preparation for Cleaning Tanks; Bilge Emulsifier—Namely, an Oil Emulsifying Degreaser; Degreasing Compound; Fuel Oil Heater Solvent; Evaporator Descaler; Oil Remover and Sludge Solvent; Oil De-Emulsifier Used for Cleaning Oil Spills on Decks, Piers, and the Like; Carbon Remover; Tank Stripper; Oil Remover; Dry Soot and Scale Remover; All-Purpose Cleaner That Emulsifies and Acts as a Germicide; Non-Toxic, Non-Explosive Emulsifying Degreaser; Single Purpose Fuel Oil Treatment Which Dissolve and Removes Sludge in Tanks, Suctions Lines, Preheaters and Oil Systems.
First use August 1954.

SN 694,242. Magnuson Products Corporation, Brooklyn, N. Y. Filed Sept. 6, 1955.



The words "For Quality Plus" and "Cleaners Lead" are disclaimed apart from the mark shown.
For Cleaning Compounds for Cleaning Machinery, Building Interiors and Exteriors, Railroad Equipment, Cloth Material.
First use Jan. 2, 1928.

SN 696,950. Colgate-Palmolive Company, Jersey City, N. J. Filed Oct. 24, 1955.

Spree

Owner of Reg. No. 439,560.
For Household Cleanser.
First use Apr. 27, 1955.

SN 698,789. La Marick Beauty Products, Inc., Charlotte, N. C. Filed Nov. 23, 1955.

La Marick
SPUN SILK

Owner of Reg. No. 612,774.
For Shampoos.
First use Aug. 15, 1954.

SN 698,794. Rachlin Sales Company, Inc., Philadelphia, Pa. Filed Nov. 23, 1955.

LIFEGARD

For Rug and Upholstery Shampoo.
First use Oct. 3, 1955.

SERVICE MARKS

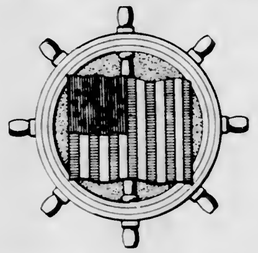
CLASS 100

SN 671,469. H. C. Schloer, Inc., d. b. a. Modern Design, Division of H. C. Schloer, Inc., Vestal, N. Y. Filed Aug. 10, 1954.



No claim is made to the words "Modern" and "Design" apart from the mark as shown.
For Engineering, Design and Drafting Services in Designing and Preparing Drawings for Special Purpose Machinery, New Products, and the Tools and Machines Required in the Production of the Latter Rendered to Others.
First use in the year 1943.

SN 678,829. United States Power Squadrons, Englewood, N. J. Filed Dec. 22, 1954. COLLECTIVE MARK.



The mark comprises a button having thereon a flag with a fouled anchor in a red field and alternate blue and white vertical stripes which flag is surmounted on a steering wheel.
Owner of Reg. No. 271,254.
For Services by the Members of the Organization for Encouraging the Study of the Science of Navigation; the Exercise of a High Standard of Skill in Handling Yachts as Well as Cooperation With the Agencies of the United States Government Charged With the Enforcement of the Laws and Regu-

lations Pertaining to Navigation; and for Stimulating Interest in Activities Tending to the Upbuilding of the Navy, Coast Guard, and Merchant Marine.
First use March 1916.

SN 683,144. Sears, Roebuck and Co., Chicago, Ill. Filed Mar. 9, 1955. Sec. 2(f).

SEARS

For Raw Fur Marketing Service.
First use as early as the year 1930.

CLASS 101

SN 676,194. Hospital Food Management, Inc., Philadelphia, Pa. Filed Nov. 8, 1954.

HOSPITAL FOOD MANAGEMENT, INC.
HFM

For Managing and Operating Food Service Facilities Provided by Hospitals.
First use July 6, 1954.

SN 686,992. Top Value Enterprises, Inc., Dayton, Ohio, by change of name from National Enterprises, Inc. Filed May 6, 1955. Sec. 2(f).

TOP VALUE

For Sales Promotion of the Goods of Others Through the Medium of Trading Stamps Which Are Redeemable in Merchandise or Cash Premiums.
First use May 5, 1955.

SN 688,742. James R. Meade, d. b. a. Associated Sales Engineers, Richboro, Pa. Filed June 2, 1955.

QUALIFIED MANUFACTURERS SEAL OF ACCEPTANCE

For Services Comprising the Promotion and Sale of Goods and Services of Others in the Metal Manufacturing Industry.
First use February 1954.

CLASS 105

SN 675,364. Robert W. Cannon, Nome, Alaska. Filed Oct. 25, 1954.

"Q"

For Conducting Sight-Seeing Tours by Cab, Bus, and Train.
First use May 1, 1952.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

629,307. LAMBEST. Prouvost Lefebvre of Rhode Island, Inc. SN 677,604. Pub. 4–10–56. Filed 12–1–54.

629,308. MOVIL M AND DESIGN. Polymer Industrie Chimiche S. P. A. CONSOLIDATED CERTIFICATE. SN 679,814, pub. 1–24–56, filed 10–11–54, Cl. 1; SN 679,816, pub. 3–27–56, filed 10–11–54, Cl. 42; SN 679,815, pub. 3–27–56, filed 10–11–54, Cl. 43.

629,309. HG AND DESIGN. House & Garden Nurseries. SN 680,602. Pub. 4–10–56. Filed 1–27–55.

629,310. EXPANSO-SEAL. Western Peat Company Limited. SN 683,004. Pub. 4–10–56. Filed 3–7–55.

629,311. GLASBORD. Kemlite Corporation. SN 689,496. Pub. 4–10–56. Filed 6–14–55.

629,312. PAN TAN. Atlantic Sponge & Chamois Corp. SN 691,349. Pub. 4–10–56. Filed 7–15–55.

629,313. KATTELAK. The Griess-Pfleger Tanning Co. SN 691,690. Pub. 4–10–56. Filed 7–21–55.

CLASS 2

629,314. JIFFY BY NEELY. Clarence L. Neely, d. b. a. Neely Manufacturing Company, to Neely Manufacturing Co. SN 661,031. Pub. 4–10–56. Filed 2–12–54.

629,315. DESIGN OF BLUE CIRCULAR VENTILATOR CAP. Butler Manufacturing Company. SN 664,585. Pub. 4–10–56. Filed 4–15–54.

629,316. REPRESENTATION OF BLUE DOME SHAPED BELL. Butler Manufacturing Company. SN 664,586. Pub. 4–10–56. Filed 4–15–54.

629,317. YOUR PET IS THIRSTY TOO! DOGGIE-THIRST AND DESIGN. Jack B. Ewing. SN 685,895. Pub. 4–10–56. Filed 4–20–55.

629,318. PLASTUBE. Paragon Molding Company. SN 687,976. Pub. 4–10–56. Filed 5–20–55.

629,319. PICNICRYTE. New York Shipbuilding Corporation, d. b. a. Nesco. Division of New York Shipbuilding Corporation. SN 689,858. Pub. 4–10–56. Filed 6–20–55.

629,320. BEVERAGERYTE. New York Shipbuilding Corporation, d. b. a. Nesco, Division of New York Shipbuilding Corporation. SN 689,859. Pub. 4–10–56. Filed 6–20–55.

629,321. GALRYTE. New York Shipbuilding Corporation, d. b. a. Nesco, Division of New York Shipbuilding Corporation. SN 689,860. Pub. 4–10–56. Filed 6–20–55.

629,322. COOLRYTE. New York Shipbuilding Corporation, d. b. a. Nesco, Division of New York Shipbuilding Corporation. SN 689,861. Pub. 4–10–56. Filed 6–20–55.

629,323. DRINK-A-PLENTY. Malt-A-Plenty, Inc. SN 693,256. Pub. 4–10–56. Filed 8–17–55.

629,324. DAIRY ISLE. Commissary Corporation. SN 693,311. Pub. 4–10–56. Filed 8–18–55.

629,325. ACF. ACF Industries, Incorporated. SN 699,538. Pub. 4–10–56. Filed 12–7–55.

CLASS 3

629,326. GLAMOUR LEAD. Sussex Manufacturing Corp. SN 697,863. Pub. 4–10–56. Filed 11–7–55.

629,327. A TEDRO ORIGINAL. Tedro Fifth Ave. Ltd. SN 698,932. Pub. 4–10–56. Filed 11–25–55.

CLASS 4

629,328. POLI-WAX. Western Auto Supply Company. SN 696,479. Pub. 4–10–56. Filed 10–14–55.

629,329. WIN-TONE. Windsor Wax Company, Inc. SN 696,611. Pub. 4–10–56. Filed 10–17–55.

CLASS 5

629,330. EGA. The Borden Company. SN 692,116. Pub. 4–10–56. Filed 7–29–55.

629,331. PLYAMUL. Reichhold Chemicals, Inc. SN 696,260. Pub. 4–10–56. Filed 10–11–55.

CLASS 6

629,332. ORTHO. California Spray-Chemical Corporation. SN 667,500. Pub. 2–14–56. Filed 6–2–54.

629,333. RUHRCHEMIE. Ruhrchemie Aktiengesellschaft. SN 672,182. Pub. 4–10–56. Filed 8–24–54.

629,334. "HANSEN'S" ETC. AND DESIGN. Chr. Hansen's Laboratory, Inc. SN 683,881. Pub. 4–10–56. Filed 3–21–55.

629,335. DOUGLASDUN DEVIL'S-FIRE AND DESIGN. Norman D. Dunning, d. b. a. Douglasdun Company. SN 685,822. Pub. 4–10–56. Filed 4–19–55.

629,336. FUL-SCAT. The Fuller Brush Company. SN 686,048. Pub. 4–10–56. Filed 4–22–55.

629,337. HALLCO. The C. P. Hall Company. SN 688,239. Pub. 4–10–56. Filed 5–25–55.

629,338. VASOFLAVINE. Allied Chemical & Dye Corporation. SN 688,496. Pub. 4–10–56. Filed 5–31–55.

629,339. ULTRAMID L. Ultra Chemical Works, Inc. SN 690,582. Pub. 4–10–56. Filed 6–30–55.

629,340. BREAXIT. Humble Oil & Refining Company. SN 692,469. Pub. 4–10–56. Filed 8–4–55.

629,341. LYTRON. Monsanto Chemical Company. SN 692,947. Pub. 4–10–56. Filed 8–12–55.

629,342. ALCOZYME. Wallerstein Company, Inc. SN 692,977. Pub. 4–10–56. Filed 8–12–55.

629,343. IMPRINT. Imperial Paper and Color Corporation. SN 693,249. Pub. 4–10–56. Filed 8–17–55.

629,344. IMPERSE. Imperial Paper and Color Corporation. SN 693,250. Pub. 4–10–56. Filed 8–17–55.

629,345. IMPAD. Imperial Paper and Color Corporation. SN 693,251. Pub. 4–10–56. Filed 8–17–55.

629,346. ALITRILE. General Mills, Inc. SN 693,375. Pub. 4–10–56. Filed 8–19–55.

CLASS 7

629,347. CUSTOM-CRAFT. Wright Sales Company, Inc. SN 700,932. Pub. 4–10–56. Filed 12–23–55.

CLASS 8

629,348. FILTER-PLUS. The Reiss-Premier Corporation, to S. M. Frank and Co., Inc. SN 677,810. Pub. 4–10–56. Filed 12–6–54.

629,349. INSTALITE. Alfred Robbins Organization, Inc. SN 680,803. Pub. 4–10–56. Filed 1–31–55.

629,350. SUPREME. Supreme Merchandise Co. SN 683,635. Pub. 2–14–56. Filed 3–16–55.

629,351. PAN CONDENSER. Pan Condenser Co. Inc. SN 690,187. Pub. 4–10–56. Filed 6–24–55.

629,352. SMOTEX. R. O. C. McMullen. SN 690,724. Pub. 4–10–56. Filed 7–5–55.

629,353. CORDEY AND DESIGN. Cordey China Company. SN 412. Pub. 4–10–56. Filed 1–10–56.

CLASS 9

629,354. SABLE. J. L. Galef & Son, Inc. SN 691,993. Pub. 4–10–56. Filed 7–27–55.

CLASS 10

629,355. INSTANT PEAT MOSS. Western Peat Company Limited. SN 683,005. Pub. 4–10–56. Filed 3–7–55.

629,356. QUESTEX. Victor Chemical Works. SN 693,709. Pub. 4–10–56. Filed 8–25–55.

CLASS 11

629,357. REXON. William Recht Co., Inc. SN 693,273. Pub. 4–10–56. Filed 8–17–55.

CLASS 12

629,358. ROOF SHIELD. The Lubrizol Corporation. SN 658,538. Pub. 4-10-56. Filed 12-24-53.

629,359. FUL-SPLINE. Eugene F. Gaines. SN 658,777. Pub. 4-10-56. Filed 12-30-53.

629,360. PRUDENTIAL SILVER STAR PRODUCTS AND DESIGN. William Isenberg. SN 668,099. Pub. 4-10-56. Filed 6-11-54.

629,362. MOVE-A-BOUT AND DESIGN. Central Texas Iron Works. SN 676,867. Pub. 4-10-56. Filed 11-18-54.

629,361. MICROFLEX. Glass Fibers, Inc., to L. O. F. Glass Fibers Company. SN 673,442. Pub. 4-10-56. Filed 9-20-54.

629,363. DESIGN OF RED STRIPE. Wheeling Corrugating Company. SN 677,616. Pub. 4-10-56. Filed 12-1-54.

629,364. STEELACOUSTIC. The Celotex Corporation. SN 683,662. Pub. 4-10-56. Filed 3-17-55.

629,365. SECUR-SEAL. Security Sash & Screen Company. SN 684,240. Pub. 4-10-56. Filed 3-25-55.

629,366. MOKÉ. Douglas Fir Plywood Association. SN 684,286. Pub. 4-10-56. Filed 3-28-55.

629,367. HASKO-MOLD AND DESIGN. Haskelite Manufacturing Corporation. SN 684,303. Pub. 4-10-56. Filed 3-28-55.

629,368. HASKO-STRUCT AND DESIGN. Haskelite Manufacturing Corporation. SN 684,305. Pub. 4-10-56. Filed 3-28-55.

629,369. PLAWALL. Ted W. Lewis. SN 692,245. Pub. 4-10-56. Filed 8-1-55.

629,370. LIFETIME DAY-LITE AND DESIGN. Newton Manufacturing Corporation. SN 694,328. Pub. 4-10-56. Filed 9-7-55.

629,371. BU-T-PLY. E. M. Cummings Veneers, Inc. SN 696,019. Pub. 4-10-56. Filed 10-7-55.

629,372. DRY LUMBER ALWAYS UNDER COVER AND DESIGN. Isador S. Turover. SN 696,275. Pub. 4-10-56. Filed 10-11-55.

629,373. VEN-O-WOOD. The Long-Bell Lumber Company. SN 698,621. Pub. 4-10-56. Filed 11-21-55.

CLASS 13

629,374. OVALSTRAPPING. Ovalstrapping, Inc. SN 650,458. Pub. 4-10-56. Filed 7-17-53.

629,375. S. The Singer Manufacturing Company. CONSOLIDATED CERTIFICATE. SN 669,932, pub. 9-13-55, filed 7-13-54, Cl. 13; SN 669,927, pub. 12-27-55, filed 7-13-54, Cl. 15; SN 669,935, pub. 6-28-55, filed 7-13-54, Cl. 21; SN 669,928, pub. 3-20-56, filed 7-13-54, Cl. 22; SN 669,926, pub. 6-28-55, filed 7-13-54, Cl. 23; SN 669,934, pub. 12-20-55, filed 7-13-54, Cl. 24; SN 669,933, pub. 12-20-55, filed 7-13-54, Cl. 25; SN 669,929, pub. 1-3-56, filed 7-13-54, Cl. 32; SN 669,930, pub. 12-27-55, filed 7-13-54, Cl. 40; SN 669,931, pub. 6-28-55, filed 7-13-54, Cl. 43.

629,376. DE SPHINX. Naamloze Vennootschap Kristal-, Glas- en Aardewerkfabrieken "de Sphinx" voorheen Petrus Regout & Co. SN 672,592. Pub. 4-10-56. Filed 9-1-54.

629,377. SWIVEL HEAD. Liberty Hardware Mfg. Corp. SN 677,069. Pub. 4-10-56. Filed 11-22-54.

629,378. JURID. Jurid Werke Aktiengesellschaft. SN 679,911. Pub. 4-10-56. Filed 1-14-55.

629,379. SKINNER AND DESIGN. The Skinner Irrigation Company. SN 682,301. Pub. 4-10-56. Filed 2-24-55.

629,380. WICHITA. Wichita Clutch Company, Inc. SN 687,156. Pub. 4-10-56. Filed 5-9-55.

629,381. HAMMERLOK. Columbus McKinnon Chain Corporation. SN 695,889. Pub. 4-10-56. Filed 10-5-55.

629,382. SUNBEAM. Sunbeam Corporation. SN 697,048. Pub. 4-10-56. Filed 10-24-55.

629,383. CUBI-TRAC. ADC Cubicle Track Corporation. SN 697,259. Pub. 4-10-56. Filed 10-28-55.

629,384. "TUBECRAFT." Francis Caird (Canada) Limited. SN 697,272. Pub. 4-10-56. Filed 10-28-55.

629,385. "WONDER SLIDE." Milton Seidner. SN 697,502. Pub. 4-10-56. Filed 11-1-55.

CLASS 15

629,375. CONSOLIDATED CERTIFICATE. See Class 13.

629,386. VERSILUBE. General Electric Company. SN 696,230. Pub. 4-10-56. Filed 10-11-55.

CLASS 16

629,387. NEO-FLECK. Reliance Varnish Company, Inc. SN 694,452. Pub. 4-10-56. Filed 9-9-55.

CLASS 17

629,388. REMBRANDT VAN RIJN AND DESIGN. Rembrandt Tobacco Corporation (Overseas) Limited. SN 677,988. Pub. 4-10-56. Filed 12-8-54.

CLASS 18

629,389. TROPHYSAN. L'Equilibre Biologique (Association Technique Pharmaceutique et Equilibre Biologique Reunis) Societe Anonyme. SN 679,734. Pub. 4-10-56. Filed 1-11-55.

629,390. TV EZE AND REPRESENTATION OF AN EYE. Leland S. Collins, d. b. a. Greenville Optical. SN 680,939. Pub. 4-10-56. Filed 2-2-55.

629,391. AUXILODERM H. Paraderm Laboratories, Inc. SN 681,196. Pub. 4-10-56. Filed 2-7-55.

629,392. PL. Paraderm Laboratories, Inc. SN 681,197. Pub. 4-10-56. Filed 2-7-55.

629,393. AUXILODERM C. Paraderm Laboratories, Inc. SN 681,198. Pub. 4-10-56. Filed 2-7-55.

629,394. AUXILODENT. Paraderm Laboratories, Inc. SN 681,199. Pub. 4-10-56. Filed 2-7-55.

629,395. TESLIN AND DESIGN. Jacob Tesman, d. b. a. Tesman Drug Company. SN 683,454. Pub. 4-10-56. Filed 3-14-55.

629,396. TIDAN. American Cyanamid Company. SN 687,908. Pub. 4-10-56. Filed 5-20-55.

629,397. VIGORAMIN. Consolidated Midland Corporation. SN 691,671. Pub. 4-10-56. Filed 7-21-55.

629,398. INFANTOVIT. Consolidated Midland Corporation. SN 691,672. Pub. 4-10-56. Filed 7-21-55.

629,399. MULVITOL. Consolidated Midland Corporation. SN 691,673. Pub. 4-10-56. Filed 7-21-55.

629,400. LIVITOL. Consolidated Midland Corporation. SN 691,674. Pub. 4-10-56. Filed 7-21-55.

629,401. TABLAMS. Olin Mathieson Chemical Corporation. SN 692,257. Pub. 4-10-56. Filed 8-1-55.

629,402. ALFLOTRACE. Merck & Co., Inc. SN 692,625. Pub. 4-10-56. Filed 8-8-55.

629,403. STREPTOSUL. Merck & Co., Inc. SN 692,627. Pub. 4-10-56. Filed 8-8-55.

629,404. SOUDERS. Royal Souders, Inc. CONSOLIDATED CERTIFICATE. SN 692,686, pub. 3-20-56, filed 8-18-55, Cl. 18; SN 692,685, pub. 1-17-56, filed 8-18-55, Cl. 46.

629,405. VI-TAL 22. Keystone Laboratories, Inc., d. b. a. Vi-Tal 22 Co. SN 692,719. Pub. 4-10-56. Filed 8-9-55.

629,406. BIPROSEP. The S. E. Massengill Company. SN 692,727. Pub. 4-10-56. Filed 8-9-55.

629,407. 222. Charles E. Frosst & Co. SN 693,038. Pub. 4-10-56. Filed 8-15-55.

629,408. 282. Charles E. Frosst & Co. SN 693,039. Pub. 4-10-56. Filed 8-15-55.

629,409. 292. Charles E. Frosst & Co. SN 693,040. Pub. 4-10-56. Filed 8-15-55.

629,410. ETHAMIDE. The Upjohn Company. SN 693,216. Pub. 4-10-56. Filed 8-16-55.

629,411. PRONTO-SAN. Manuel Santos, d. b. a. Tosan Drug Co. SN 693,401. Pub. 4-10-56. Filed 8-19-55.

629,412. CHAN-O-CAPS. Mac Distributors. SN 693,470. Pub. 4-10-56. Filed 8-22-55.

629,413. SLEEPY TIME. Carter Products, Inc. SN 693,525. Pub. 4-10-56. Filed 8-23-55.

629,414. ASKEF. M. Gancel Co., Inc. SN 693,672. Pub. 4-10-56. Filed 8-25-55.

629,415. INTRABILEX. E. Fougera & Co., Inc. SN 693,741. Pub. 4-10-56. Filed 8-26-55.

629,416. CHICK'N TEE. The Gland-O-Lac Company. SN 693,744. Pub. 4-10-56. Filed 8-26-55.

629,417. A AND DESIGN. Abbott Laboratories. SN 694,033. Pub. 4-10-56. Filed 9-1-55.

629,418. KETRANE. Chas. Pfizer & Co., Inc. SN 694,088. Pub. 4-10-56. Filed 9-1-55.

629,419. PFIZERPEN. Chas. Pfizer & Co., Inc. SN 694,089. Pub. 4-10-56. Filed 9-1-55.

CLASS 19

629,420. WEBASTO. Wilhelm Baier K. G. Webasto-Werk. SN 677,926. Pub. 4-10-56. Filed 12-8-54.

629,421. DARLING AND DESIGN. Darling Carriage Co., Inc. SN 686,431. Pub. 4-10-56. Filed 4-28-55.

629,422. PACKAGED POWER. Talco Engineering Company, Inc. SN 687,905. Pub. 4-10-56. Filed 5-19-55.

629,423. COBRA. Railroad Friction Products Corporation. CONSOLIDATED CERTIFICATE. SN 697,931, pub. 4-3-56, filed 11-8-55, Cl. 19; SN 697,932, pub. 4-3-56, filed 11-8-55, Cl. 23.

629,424. SERVALL. Koenig Iron Works, Inc. SN 699,237. Pub. 4-10-56. Filed 12-1-55.

629,425. PETERBILT. Peterbilt Motors Company. SN 699,244. Pub. 4-10-56. Filed 12-1-55.

629,426. FAIRBANKS-MORSE. Fairbanks, Morse & Co. SN 699,304. Pub. 4-10-56. Filed 12-2-55.

CLASS 21

629,375. CONSOLIDATED CERTIFICATE. See Class 13.

629,427. WHIRLBEATER. The A. C. Gilbert Company. SN 659,470. Pub. 4-10-56. Filed 1-14-54.

629,428. BI-FIDELITY. Roland Radio Corporation. SN 677,447. Pub. 4-10-56. Filed 11-29-54.

629,429. DUNK-IT. The Eagle-Picher Company. SN 694,706. Pub. 4-10-56. Filed 9-15-55.

629,430. V. P. Thomas A. Edison, Incorporated. SN 698,022. Pub. 4-10-56. Filed 11-10-55.

629,431. HY/LOW. Stevens Products, Inc. SN 700,928. Pub. 4-10-56. Filed 12-8-55.

CLASS 22

629,375. CONSOLIDATED CERTIFICATE. See Class 13.

629,432. "SHRIMP-FIDDY." Lawrence C. Ryan. SN 663,682. Pub. 4-10-56. Filed 3-31-54.

629,433. B LUCKEE. B-Luckee Enterprises, Inc. SN 676,458. Pub. 4-10-56. Filed 11-12-54.

629,434. MITCHELL. Charles Garcia & Co., Inc. SN 681,152. Pub. 4-10-56. Filed 2-7-55.

629,435. LET'S FACE IT! Hassenfeld Bros., Incorporated. SN 682,799. Pub. 4-10-56. Filed 3-4-55.

629,436. ZIG ZAGGLE. Hassenfeld Bros., Incorporated. SN 682,801. Pub. 4-10-56. Filed 3-4-55.

629,437. SPOT-A-CAR. Hassenfeld Bros., Incorporated. SN 682,802. Pub. 4-10-56. Filed 3-4-55.

629,438. FLIP-A-LID. Hassenfeld Bros., Incorporated. SN 682,803. Pub. 4-10-56. Filed 3-4-55.

629,439. LILI THE WALKING DOLL. Fortune Toys Inc. SN 684,652. Pub. 4-10-56. Filed 3-31-55.

629,440. KIT CARSON. Louis Marx & Company, Inc. SN 685,198. Pub. 4-10-56. Filed 4-8-55.

629,441. THE STRING THING. Robert J. Walker, d. b. a. Walker Products. SN 685,788. Pub. 4-10-56. Filed 4-18-55.

629,442. SPACE SPIDER. Robert J. Walker, d. b. a. Walker Products. SN 685,789. Pub. 4-10-56. Filed 4-18-55.

629,443. NEST A HOOK. Marshal L. Shepherd. SN 686,923. Pub. 4-10-56. Filed 5-5-55.

629,444. FROG. International Model Aircraft Limited. SN 686,980. Pub. 4-10-56. Filed 5-6-55.

629,445. GNO GNO AND DESIGN. Gertrude M. Moesch. SN 687,313. Pub. 4-10-56. Filed 5-11-55.

629,446. QUATRO AND DESIGN. Jaymar Specialty Company. SN 687,597. Pub. 4-10-56. Filed 5-16-55.

629,447. JO-HAN. Jo-Han Models Inc. SN 692,476. Pub. 4-10-56. Filed 8-4-55.

629,448. MOONBALL. Alfred G. Rickerfor, to Frank W. Manning. SN 692,642. Pub. 4-10-56. Filed 8-8-55.

CLASS 23

629,375. CONSOLIDATED CERTIFICATE. See Class 13.

629,423. CONSOLIDATED CERTIFICATE. See Class 19.

629,449. TOPLINE. Anthony Arau, d. b. a. Anthony Arau & Company. SN 676,164. Pub. 4-10-56. Filed 11-8-54.

629,450. WHISPERING POWER. Outboard, Marine & Manufacturing Company. SN 676,829. Pub. 4-10-56. Filed 11-17-54.

629,451. WIKOMI. J. O. Hinken, d. b. a. Wikomi Manufacturing Co. SN 678,635. Pub. 4-10-56. Filed 12-20-54.

629,452. GYRADISC. Nordberg Manufacturing Company. SN 679,858. Pub. 4-10-56. Filed 1-13-55.

629,453. CUPOLINOR. International Minerals and Chemical Corporation. SN 681,168. Pub. 4-10-56. Filed 2-7-55.

629,454. SWITCH-O-MATIC. The Petersen Oven Company. SN 681,200. Pub. 4-10-56. Filed 2-7-55.

629,455. MULTIPUMP. The Denison Engineering Company. SN 681,839. Pub. 4-10-56. Filed 2-17-55.

629,456. FLEXIFEED. New Jersey Machine Corporation. SN 682,173. Pub. 4-10-56. Filed 2-23-55.

629,457. THE NONE BETTER PUSHOE. None Better Pushoe Co. SN 683,305. Pub. 4-10-56. Filed 3-11-55.

629,458. E. The Elmco Corporation. SN 683,671. Pub. 4-10-56. Filed 3-17-55.

629,459. KARBIDE KING ELECTRO-TRIM AND DESIGN. DeLuxe Saw and Tool Co. SN 686,162. Pub. 4-10-56. Filed 4-25-55.

629,460. RADI-ALL GRIND AND DESIGN. DeLuxe Saw and Tool Co. SN 686,163. Pub. 4-10-56. Filed 4-25-55.

629,461. KARBIDE KING. DeLuxe Saw and Tool Co. SN 686,164. Pub. 4-10-56. Filed 4-25-55.

629,462. KARBIDE KING AND DESIGN. DeLuxe Saw and Tool Co. SN 686,165. Pub. 4-10-56. Filed 4-25-55.

629,463. SANDY HILL ROTOFORMER. The Sandy Hill Iron & Brass Works. SN 689,873. Pub. 4-10-56. Filed 6-20-55.

629,464. ABBEY ETNA. Abbey Etna Company. SN 695,201. Pub. 4-10-56. Filed 9-23-55.

629,465. DESIGN OF 2 UNICORNS. Per Gunnar Brundell. SN 697,354. Pub. 4-10-56. Filed 10-31-55.

629,466. VACUPAK. Vac-U-Pak Corporation. SN 698,249. Pub. 4-10-56. Filed 11-14-55.

629,467. FUSON. The Meyercord Co. SN 698,294. Pub. 4-10-56. Filed 11-15-55.

629,468. VIBRO-TAMPER AND DESIGN. The International Vibration Company. SN 699,501. Pub. 4-10-56. Filed 12-6-55.

629,469. CTM AND DESIGN. The Cleveland Twist Drill Company. SN 699,620. Pub. 4-10-56. Filed 12-8-55.

629,470. MUD D-GASSER. Salt Water Control Inc. SN 699,662. Pub. 4-10-56. Filed 12-8-55.

629,471. SWACO AND DESIGN. Salt Water Control Inc. SN 699,663. Pub. 4-10-56. Filed 12-8-55.

629,472. LARK. Outboard, Marine & Manufacturing Company. SN 699,822. Pub. 4-10-56. Filed 12-12-55.

CLASS 24

629,375. CONSOLIDATED CERTIFICATE. See Class 13.

CLASS 25

629,375. CONSOLIDATED CERTIFICATE. See Class 13.

CLASS 26

629,473. BOURNS TRIMPOT AND DESIGN. Bourns Laboratories, Inc. SN 682,864. Pub. 4-10-56. Filed 3-7-55.

629,474. BOURNS TRIMR AND DESIGN. Bourns Laboratories, Inc. SN 682,865. Pub. 4-10-56. Filed 3-7-55.

629,475. SESCOPE AND DESIGN. Harry H. Pierson. SN 683,134. Pub. 4-10-56. Filed 3-9-55.

629,476. FXR. F-R Machine Works, Inc. SN 689,826. Pub. 4-10-56. Filed 6-20-55.

629,477. HI-WEIGH. B-I-F Industries, Inc. SN 694,407. Pub. 4–10–56. Filed 9–9–55.

629,478. KNIGHT. Allied Radio Corporation. SN 697,659. Pub. 4–10–56. Filed 11–4–55.

629,479. MINERALIGHT. Ultra-Violet Products, Inc. SN 697,868. Pub. 4–10–56. Filed 11–7–55.

629,480. UNITED ELECTRODYNAMICS. United Geophysical Corporation. SN 697,870. Pub. 4–10–56. Filed 11–7–55.

629,481. "RAYALARM" AND DESIGN. Rayalarm, Inc. SN 698,079. Pub. 4–10–56. Filed 11–10–55.

629,482. VAPOR-TEMP. Blue M Electric Company. SN 698,129. Pub. 4–10–56. Filed 11–14–55.

629,483. MIRACOLOR. Dynacolor Corporation. SN 698,146. Pub. 4–10–56. Filed 11–14–55.

629,484. COPYFLO. The Haloid Company. SN 698,162. Pub. 4–10–56. Filed 11–14–55.

629,485. SUPER-M. Eastman Kodak Company. SN 698,273. Pub. 4–10–56. Filed 11–15–55.

CLASS 27

629,486. SWISS MISS. Sheffield Merchandise, Inc. SN 695,502. Pub. 4–10–56. Filed 9–28–55.

629,487. CYMA NAVY STAR. Tavannes Watch Co., S. A. SN 697,719. Pub. 4–10–56. Filed 11–4–55.

629,488. AAA AND DESIGN. The American Automobile Association (Incorporated). SN 698,761. Pub. 4–10–56. Filed 11–23–55.

629,489. NICOLET. Bayer, Pretzfelder & Mills, Inc. SN 699,469. Pub. 4–10–56. Filed 12–6–55.

629,490. JUPITER. The Lux Clock Manufacturing Company, Inc. SN 700,462. Pub. 4–10–56. Filed 12–22–55.

629,491. ZEUS. The Lux Clock Manufacturing Company, Inc. SN 700,463. Pub. 4–10–56. Filed 12–22–55.

629,492. GENIE. The Lux Clock Manufacturing Company, Inc. SN 700,464. Pub. 4–10–56. Filed 12–22–55.

629,493. WREN. The Lux Clock Manufacturing Company, Inc. SN 700,465. Pub. 4–10–56. Filed 12–22–55.

CLASS 28

629,494. "IMPORTS OF IMPORT" INTERAMERICAN AND DESIGN. Interamerican Importing Company. SN 685,711. Pub. 4–10–56. Filed 4–18–55.

629,495. RONI'S MENEHUNES OF HAWAII. Ronald H. Heidreich. SN 698,035. Pub. 4–10–56. Filed 11–10–55.

629,496. SILVER WIND. The International Silver Company. SN 698,615. Pub. 4–10–56. Filed 11–21–55.

629,497. GLORY-GLO. U. S. Diamond Ring Corp. SN 698,744. Pub. 4–10–56. Filed 11–22–55.

629,498. GLORY-LOCK. U. S. Diamond Ring Corp. SN 698,745. Pub. 4–10–56. Filed 11–22–55.

629,499. RAMÉ OF CALIFORNIA AND DESIGN. Silvel Mfg. Co. SN 698,923. Pub. 4–10–56. Filed 11–25–55.

629,500. STARILIAN. Starilian Lapidaries, Inc. SN 698,929. Pub. 4–10–56. Filed 11–25–55.

629,501. CONVERTIPEARL. Elmer Ellsworth and Son. SN 698,963. Pub. 4–10–56. Filed 11–28–55.

629,502. COROCRAFT. Coro, Inc. SN 699,296. Pub. 4–10–56. Filed 12–2–55.

629,503. FIDELITY. Louvic Watch, Inc. SN 700,243. Pub. 4–10–56. Filed 12–19–55.

CLASS 29

629,504. SPIN WASH AND DESIGN. Empire Brushes, Inc. SN 699,211. Pub. 4–10–56. Filed 12–1–55.

629,505. EDGAR DEGAS. M. Grumbacher, Inc. SN 699,316. Pub. 4–10–56. Filed 12–2–55.

629,506. LUCILLE. Sammie L. Roberts, d. b. a. Jackson Broom & Mop Company. SN 699,983. Pub. 4–10–56. Filed 12–14–55.

629,507. BOBWHITE. W. A. Ballinger & Co. SN 700,006. Pub. 4–10–56. Filed 12–15–55.

CLASS 31

629,508. FRAM AND DESIGN. Fram Corporation. SN 690,152. Pub. 4–10–56. Filed 6–24–55.

629,509. LP AND DESIGN. Servel, Inc. SN 268. Pub. 4–10–56. Filed 1–6–56.

CLASS 32

629,375. CONSOLIDATED CERTIFICATE. See Class 13.

629,510. INFANSEAT. Alfred J. Ouellette. SN 671,520. Pub. 4–10–56. Filed 8–11–54.

629,511. REPRESENTATION OF A SPRING FOR A MATTRESS. Eclipse Sleep Products, Inc. SN 676,617. Pub. 4–10–56. Filed 11–15–54.

629,512. CONSTRUCT-O-PROP ETC. AND DESIGN. Paul E. Freeman, d. b. a. Construct-O-Prop Industries. SN 686,823. Pub. 4–10–56. Filed 5–4–55.

629,513. PERFECTION. Perfection Mattress & Spring Co. SN 690,093. Pub. 4–10–56. Filed 6–23–55.

629,514. FORMI-COVER AND DESIGN. Robert J. Gallagher, d. b. a. Little Creek Flooring Company. SN 693,986. Pub. 4–10–56. Filed 8–31–55.

629,515. POSTURE-QUILT. Worcester Bedding Company. SN 697,068. Pub. 4–10–56. Filed 10–24–55.

629,516. ANGEL WING. Educational Toy Company. SN 698,510. Pub. 4–10–56. Filed 11–18–55.

629,517. AIREX. Lonza Electric and Chemical Works Ltd. SN 698,529. Pub. 4–10–56. Filed 11–18–55.

CLASS 34

629,518. VULCANOR. McNaulin, Inc. SN 688,950. Pub. 4–10–56. Filed 6–6–55.

629,519. DOLE. The Dole Valve Company. SN 699,140. Pub. 4–10–56. Filed 11–30–55.

CLASS 35

629,520. PATRICIAN. Pennsylvania Tire Company. SN 668,920. Pub. 4–10–56. Filed 6–25–54.

629,521. WILDCAT AND DESIGN. Johns-Manville Corporation. SN 688,329. Pub. 4–10–56. Filed 5–26–55.

629,522. HALCO. The Cleveland Gasket and Manufacturing Company. SN 697,669. Pub. 4–10–56. Filed 11–4–55.

629,523. CLEGACO. The Cleveland Gasket and Manufacturing Company. SN 697,670. Pub. 4–10–56. Filed 11–4–55.

629,524. CADDY MASTER. The Goodyear Tire & Rubber Company. SN 697,789. Pub. 4–10–56. Filed 11–7–55.

629,525. IMPERIAL. Imperial Belting Company. SN 698,170. Pub. 4–10–56. Filed 11–14–55.

629,526. INNERLOCKED. Imperial Belting Company. SN 698,283. Pub. 4–10–56. Filed 11–15–55.

629,527. HY X DUTY WITHIN TWO CIRCLES. Schwitzer-Cummins Company, now Schwitzer Corporation. SN 698,376. Pub. 4–10–56. Filed 11–16–55.

629,528. UNI-TEX. Lewis Morrell Robbins, d. b. a. L. M. Robbins Co. SN 699,166. Pub. 4–10–56. Filed 11–30–55.

CLASS 36

629,529. DOLLYANNA RECORDS AND DESIGN. Dollyanna Publishers Inc. SN 693,447. Pub. 4–10–56. Filed 8–22–55.

629,530. RONEL. Harold O. Kaltchuck, d. b. a. Boulevard Recording Studio. SN 693,680. Pub. 4–10–56. Filed 8–25–55.

CLASS 37

629,531. "ANOTHER MAPLE LEAF SHIPMENT" "NON-SLIP" AND DESIGN. Maple Leaf Manufacturing Co., Inc. SN 658,295. Pub. 4–10–56. Filed 12–21–53.

629,532. WITEFLOS AND DESIGN. Jackson C. E. Glass, d. b. a. Mill Agents & Distributors. SN 680,753. Pub. 4–10–56. Filed 1–31–55.

629,533. PIG PEN. Rubicon, Inc. SN 685,930. Pub. 4–10–56. Filed 4–20–55.

629,534. FILTOVENT BAG. St. Regis Paper Company. SN 686,095. Pub. 4–10–56. Filed 4–22–55.

629,535. LEE'S LUMINESCENT VELLUM. Lee Paper Company. SN 687,297. Pub. 4–10–56. Filed 5–11–55.

629,536. NOAH'S ARK. United Crayon Co., Inc. SN 687,427. Pub. 4–10–56. Filed 5–12–55.

629,537. DURAHYDE. The Chandler Mfg. Co. Incorporated. SN 688,128. Pub. 4–10–56. Filed 5–24–55.

629,538. STANSEAL. Standard Packaging Corporation. SN 689,177. Pub. 4–10–56. Filed 6–8–55.

629,539. OLD NANTUCKET BOND. The Alling & Cory Company. SN 689,332. Pub. 4–10–56. Filed 6–13–55.

629,540. VITA-COLOR. American Pencil Company, Inc. SN 692,297. Pub. 4–10–56. Filed 8–2–55.

629,541. FLO-COLOR. American Pencil Company, Inc. SN 692,298. Pub. 4–10–56. Filed 8–2–55.

629,542. DUPLIQUIK. Eureka Specialty Printing Company. SN 692,385. Pub. 4–10–56. Filed 8–3–55.

629,543. EASY-OFF. Binney & Smith Inc. SN 692,891. Pub. 4–10–56. Filed 8–12–55.

629,544. E-Z-OFF. Binney & Smith Inc. SN 692,892. Pub. 4–10–56. Filed 8–12–55.

629,545. CHAPEL BELL STATIONERY AND DESIGN. The Green Company, Inc. SN 693,045. Pub. 4–10–56. Filed 8–15–55.

629,546. KOLLECT-VELOPE. The Wolf Detroit Envelope Company. SN 693,288. Pub. 4–10–56. Filed 8–17–55.

629,547. FUTURAMA. Cory Corporation. SN 693,312. Pub. 4–10–56. Filed 8–18–55.

CLASS 38

629,548. YOUR CHURCH AND DESIGN. The Religious Publishing Company. SN 681,944. Pub. 4–10–56. Filed 2–18–55.

629,549. YPO. Young Presidents' Organization, Inc. SN 686,123. Pub. 4–10–56. Filed 4–22–55.

629,550. ENTERPRISE. Young Presidents' Organization, Inc. SN 686,124. Pub. 4–10–56. Filed 4–22–55.

629,551. PLASTILAC. The Nevins Company. SN 686,474. Pub. 4–10–56. Filed 4–28–55.

629,552. LUSTERLAC. The Nevins Company. SN 686,475. Pub. 4–10–56. Filed 4–28–55.

CLASS 39

629,553. LOFTIES BY LAWRENCE AND DESIGN. Lofties Knitting Mills, Inc. SN 673,034. Pub. 4–10–56. Filed 9–10–54.

629,554. LADY MILLS AND DESIGN. Manchester Hosiery Mills. SN 673,362. Pub. 4–10–56. Filed 9–17–54.

629,555. WARM BAK. D. M. Studner. SN 674,108. Pub. 4–10–56. Filed 9–30–54.

629,556. LOOPER. Ramey Short Corporation. SN 676,334. Pub. 4–10–56. Filed 11–9–54.

629,557. STARLIGHTER. The Joseph & Feiss Company. SN 679,733. Pub. 4–10–56. Filed 1–11–55.

629,558. LONGEVITEX. Chadbourn Hosiery Mills, Incorporated, now Chadbourn Gotham, Inc. SN 681,068. Pub. 4–10–56. Filed 2–4–55.

629,559. BRUSH MASTER AND DESIGN. Saf-T-Bak, Inc. SN 683,996. Pub. 4–10–56. Filed 3–22–55.

629,560. TREKKA. Woodfords (Leicester) Limited. SN 685,418. Pub. 4–10–56. Filed 4–12–55.

629,561. MILANO. Cluett, Peabody & Co., Inc. SN 686,955. Pub. 4–10–56. Filed 5–6–55.

629,562. AND ASK'D HIS WAY TO NORWICH AND DESIGN. Norwich Mills, Inc. SN 687,316. Pub. 4–10–56. Filed 5–11–55.

629,563. THE SPEEDWAY SHIRT BY CISCO AND DESIGN. Cisco, Inc. SN 687,676. Pub. 4–10–56. Filed 5–17–55.

629,564. GAY BABY SLEEPER. Chevette, Inc. SN 687,765. Pub. 4–10–56. Filed 5–18–55.

629,565. TURN-TO. I. C. Isaacs & Company, Incorporated. SN 690,083. Pub. 2–14–56. Filed 6–23–55.

629,566. CLEVER GIRL. J. J. Newberry Co. SN 691,880. Pub. 4–10–56. Filed 7–25–55.

629,567. CLEVER-STYLE. J. J. Newberry Co. SN 691,882. Pub. 4–10–56. Filed 7–25–55.

629,568. BELLAROMANINA. Danfra Ltd. SN 693,124. Pub. 4–10–56. Filed 8–16–55.

629,569. CAT EYE. Hollywood Silk Products, Inc. SN 693,146. Pub. 4–10–56. Filed 8–16–55.

629,570. REFS. Milsan Mills, Inc. SN 693,173. Pub. 4–10–56. Filed 8–16–55.

629,571. ROYAL-HALL. Robert Hall Clothes, Inc. SN 693,320. Pub. 4–10–56. Filed 8–18–55.

629,572. BEAVERINA. Sportleigh Hall, Inc. SN 693,345. Pub. 4–10–56. Filed 8–18–55.

629,573. POINTELLE. The Bernhard Altmann Corporation. SN 693,353. Pub. 4–10–56. Filed 8–19–55.

629,574. POINTELLES. The Bernhard Altmann Corporation. SN 693,354. Pub. 4–10–56. Filed 8–19–55.

629,575. MARINA DEL MAR AND DESIGN. Western Miss, Inc. SN 693,511. Pub. 4–10–56. Filed 8–22–55.

629,576. QUALI-TIE. Howard Stores Corporation. SN 693,604. Pub. 4–10–56. Filed 8–24–55.

629,577. TORINO. Regal Shirt Corporation. SN 693,700. Pub. 4–10–56. Filed 8–25–55.

629,578. PLEATEES. Dutchess Underwear Corporation. SN 693,721. Pub. 4–10–56. Filed 8–18–55.

629,579. DUFFELEG. Dutchess Underwear Corporation. SN 693,722. Pub. 4–10–56. Filed 8–18–55.

629,580. SCOOTER SET AND DESIGN. The Associated Merchandising Corporation. SN 694,039. Pub. 4–10–56. Filed 9–1–55.

629,581. SANDPIPERS. Branigan, Green & Company. SN 694,408. Pub. 4–10–56. Filed 9–9–55.

629,582. GEORGE CARMEL. George Carmel, Inc. SN 694,412. Pub. 4–10–56. Filed 9–9–55.

629,583. TURNABOUT. Cobblers Incorporated. SN 698,584. Pub. 4–10–56. Filed 11–21–55.

629,584. BAI-JAMAS. Vesta Underwear Company. SN 698,665. Pub. 4–10–56. Filed 11–21–55.

629,585. HOLSTERALL. Big Giant Mfg. Co., to International Jean Co., Inc. SN 698,684. Pub. 4–10–56. Filed 11–22–55.

629,586. BOBBIE-Q. Sue A. Mathlews. SN 698,712. Pub. 4–10–56. Filed 11–22–55.

629,587. "DAILY DOUBLE." Union Manufacturing Company. SN 698,743. Pub. 4–10–56. Filed 11–22–55.

629,588. AMERICAN LOOK. Hollywood-Maxwell Co. SN 698,872. Pub. 4–10–56. Filed 11–25–55.

629,589. LIGHT-FANTASTIC. Peter Pan Foundations, Inc. SN 698,906. Pub. 4–10–56. Filed 11–25–55.

629,590. DUMORE. The Rhoades Glove Company. SN 698,917. Pub. 4–10–56. Filed 11–25–55.

629,591. GOOD-VAL. R. Hoffman, Inc. SN 698,979. Pub. 4–10–56. Filed 11–28–55.

629,592. GREEN STAR AND DESIGN. H. L. Green Company, Inc. SN 699,071. Pub. 4–10–56. Filed 11–29–55.

629,593. HBH HILLMOOR AND DESIGN. Hiller Bros. & Hiller, Inc. SN 699,075. Pub. 4–10–56. Filed 11–29–55.

629,594. GROWING LEGS! AND DESIGN. H. H. Cutler Company. SN 699,138. Pub. 4–10–56. Filed 11–30–55.

629,595. ROLLERETTE SEVEN-ELEVEN. Pliantform Foundations, Inc. SN 699,245. Pub. 4–10–56. Filed 12–1–55.

629,596. NEOCUSHION. The Bearfoot Sole Company, Inc. SN 699,284. Pub. 4–10–56. Filed 12–2–55.

629,597. GLUVTITE. S. Capezio, Inc. SN 699,291. Pub. 4–10–56. Filed 12–2–55.

629,598. PEETS. Clifford W. Cross, Sr., d. b. a. Midwest Shoe Specialty Company. SN 699,297. Pub. 4–10–56. Filed 12–2–55.

629,599. MARILYKE. Marylike Fashion Center, Inc. SN 699,411. Pub. 4–10–56. Filed 12–5–55.

629,600. TROPICALE. Well-Kalter Manufacturing Co. SN 699,447. Pub. 4–10–56. Filed 12–5–55.

629,601. LIRA. International Shoe Company. SN 699,726. Pub. 4–10–56. Filed 12–9–55.

CLASS 40

629,375. CONSOLIDATED CERTIFICATE. See Class 13.

629,602. BOLTA. The General Tire & Rubber Company. SN 690,454. Pub. 4–10–56. Filed 6–29–55.

CLASS 41

629,603. SLIDE-O-MATIC. D. Klein & Son. SN 686,461. Pub. 4–10–56. Filed 4–28–55.

CLASS 42

629,308. CONSOLIDATED CERTIFICATE. See Class 1.

629,604. KOOL-SPRAY. M. M. Scher & Sons, Inc. SN 665,067. Pub. 9–7–54. Filed 4–22–54.

629,605. WINTERKING. Chatham Manufacturing Company. SN 689,987. Pub. 4–10–56. Filed 6–22–55.

629,606. WUNDA TWEED AND DESIGN. Belrug Mills of South Carolina. SN 693,001. Pub. 4–10–56. Filed 8–15–55.

629,607. WUNDA ROYAL. Belrug Mills of South Carolina. SN 693 002. Pub. 4–10–56. Filed 8–15–55.

629,608. FLEECETEX. I. B. Kleinert Rubber Company. SN 693,753. Pub. 4–10–56. Filed 8–26–55.

629 609. ACETANA. Courtaulds Limited. SN 693,975. Pub. 4–10–56. Filed 8–31–55.

629,610. PARK ROW. Mohawk Carpet Mills, Inc. SN 694,076. Pub. 4–10–56. Filed 9–1–55.

629,611. ROYALNYL. Mohawk Carpet Mills, Inc. SN 694,077. Pub. 4–10–56. Filed 9–1–55.

629,612. PRESIDIO. Mohawk Carpet Mills, Inc. SN 694,078. Pub. 4–10–56. Filed 9–1–55.

629,613. TAMARACK. Mohawk Carpet Mills, Inc. SN 694,079. Pub. 4–10–56. Filed 9–1–55.

629 614. CLAMSHELL. J. P. Stevens & Co., Inc. SN 694,751. Pub. 4–10–56. Filed 9–15–55.

629,615. DYNACHROME. The Apponaug Company. SN 697,661. Pub. 4–10–56. Filed 11–4–55.

629,616. STRATFORD. Kuhn, Blum & Co., Inc. SN 697,735. Pub. 4–10–56. Filed 11–3–55.

629,617. ORGANDELUXE AND DESIGN. Berkshire Hathaway, Inc. SN 697 756. Pub. 4–10–56. Filed 11–7–55.

629,618. GAELIC STRIPES Dan River Mills, Incorporated. SN 697,763. Pub. 4–10–56. Filed 11–7–55.

629,619. DAN FLEK. Dan River Mills, Incorporated. SN 697,764. Pub. 4–10–56. Filed 11–7–55.

629,620. HERD-RIDER. Erwin Mills, Inc. SN 697,905. Pub. 4–10–56. Filed 11–8–55.

629,621. WINDGUARD. Erwin Mills, Inc. SN 697,921. Pub. 4–10–56. Filed 11–8–55.

629,622. NOBLECRAFT. National Merchandising Corporation. SN 697,923. Pub. 4–10–56. Filed 11–8–55.

629,623. CARESS. Pepperell Manufacturing Company. SN 697,929. Pub. 4–10–56. Filed 11–8–55.

629,624. TALENT-SET. Indian Head Mills, Inc. SN 698,169. Pub. 4–10–56. Filed 11–14–55.

629,625. POROUSAIL. Kordell Sportswear, Inc. SN 698,288. Pub. 4–10–56. Filed 11–15–55.

CLASS 43

629,308. CONSOLIDATED CERTIFICATE. See Class 1.

629,375. CONSOLIDATED CERTIFICATE. See Class 13.

629,626. ESTRONYL. Eastman Kodak Company. SN 765. Pub. 4–10–56. Filed 1–16–56.

CLASS 44

629,627. DUAL-PURPOSE. Davol Rubber Company. SN 675,134. Pub. 4–10–56. Filed 10–20–54.

629,628. NU-VEIN. Surgical Appliance Industries, Inc. SN 695,189. Pub. 4–10–56. Filed 9–22–55.

629,629. SERENA. Personal Products Corporation. SN 696,374. Pub. 4–10–56. Filed 10–13–55.

629,630. ALUMAFOAM. Connecticut Bandage Mills, Inc. SN 696,504. Pub. 4–10–56. Filed 10–17–55.

629,631. AMIFLO. Mead Johnson & Company. SN 696,567. Pub. 4–10–56. Filed 10–17–55.

629,632. AMIFILTER. Mead Johnson & Company. SN 696,568. Pub. 4–10–56. Filed 10–17–55.

629,633. AGRI-TOX. Willson Products Inc. SN 696,614. Pub. 4–10–56. Filed 10–17–55.

629,634. SHADOW-ENZ. Youngs Rubber Corporation. SN 696,683. Pub. 4–10–56. Filed 10–18–55.

629,635. SOMBRAS. Youngs Rubber Corporation. SN 696,684. Pub. 4–10–56. Filed 10–18–55.

629,636. VISION-EAR. Nichols & Clark, Inc. SN 696,794. Pub. 4–10–56. Filed 10–20–55.

629,637. SAKS-FIFTH AVENUE. Saks & Company. SN 696,839. Pub. 4–10–56. Filed 10–20–55.

CLASS 45

629 638. CHASER. The Chaser Co., to Jamie S. Chase, d. b. a. The Chaser Company. SN 652,837. Pub. 4–10–56. Filed 9–8–53.

629,639. BABEE TREAT. Earle G. Jackson. SN 698,879. Pub. 4–10–56. Filed 11–25–55.

629 640. FRESCO ROYAL. Standard Brands Incorporated. SN 700,823. Pub. 4–10–56. Filed 12–29–55.

CLASS 46

629,404. CONSOLIDATED CERTIFICATE. See Class 18.

629,641. REPRESENTATION OF A BOTTLE. McIlhenny Company. SN 625,748. Pub. 4–10–56. Filed 2–29–52.

629,642. HOOD-CREST. S. A. Muirhead, d. b. a. Muirhead Canning Company. SN 657,164. Pub. 2–1–55. Filed 11–30–53.

629,643. MISS UNIVERS. Marques, Neves & Companhia, Limitada. SN 665,289. Pub. 4–10–56. Filed 4–27–54.

629,644. ISLE-TROP TROPICAL FRUIT CALAVO AND DESIGN. Calavo, Inc., now by merger Calavo Growers of California. SN 669,736. Pub. 4–10–56. Filed 7–12–54.

629,645. SAVOY. Walter S. Morton. SN 672,175. Pub. 4–10–56. Filed 8–24–54.

629 646. SAVOY AND DESIGN. Walter S. Morton. SN 672,176. Pub. 4–10–56. Filed 8–24–54.

629,647. BRILL'S BAKE-LITE. H. C. Brill Company, Inc. SN 673 967. Pub. 4–10–56. Filed 9–29–54.

629,648. PEPITO PIMIENTO ETC. AND DESIGN. Ventura Farms Frozen Foods, Inc. SN 676,282. Pub. 4–10–56. Filed 11–8–54.

629,649. THE CAKE MASTERS AND DESIGN. Cakemasters, Inc., d. b. a. The Cake Masters. SN 679,756. Pub. 4–10–56. Filed 1–12–55.

629,650. COUNTRY KITCHEN. American Bakers Cooperative, Inc. SN 680,348. COLLECTIVE MARK. Pub. 4–10–56. Filed 1–24–55.

629,651. OVEN DELITE. New Standard Baking Company. SN 680,895. Pub. 4–10–56. Filed 2–1–55.

629,652. FASCUP AND DESIGN. Victor Mancini, d. b. a. Victor Mancini Enterprises. SN 680,961. Pub. 4–10–56. Filed 2–2–55.

629,653. MASTER MIX. Central Soya Company, Inc. SN 681,905. Pub. 4–10–56. Filed 2–18–55.

629,654. NIEMEIJERS CLUB COFFEE AND DESIGN. Theodorus Niemeijer Ltd. SN 688,845. Pub. 4–10–56. Filed 6–3–55.

629,655. "THE CANDY GARDEN." Loft Candy Corporation. SN 688,946. Pub. 4–10–56. Filed 6–6–55.

629,656. SU-PUR VIGO-RADE. D. A. Stickell & Sons, Inc. SN 691,098. Pub. 4–10–56. Filed 7–11–55.

629,657. BLUE RIDGE VIGO-RADE. D. A. Stickell & Sons, Inc. SN 691,099. Pub. 4–10–56. Filed 7–11–55.

629,658. PAR-T-GUM AND DESIGN. Irene R. Hayden. SN 692,843. Pub. 4–10–56. Filed 8–11–55.

629,659. DUTCH TREAT. D. E. Winebrenner Company, Inc. SN 692,988. Pub. 4–10–56. Filed 8–12–55.

629,660. PUG. Lykes Bros. Inc. SN 692,990. Pub. 4–10–56. Filed 7–28–55.

629,661. DAZZLE. Lykes Bros. Inc. SN 692,992. Pub. 4–10–56. Filed 7–28–55.

629,662. FAVORITE. Vivienne M. Coan, d. b. a. Animal Foods Company. SN 693,019. Pub. 4–10–56. Filed 8–15–55.

629,663. MILEAGE. Staley Milling Company. SN 694,265. Pub. 4–10–56. Filed 9–6–55.

629,664. GOLD MEDAL. American Laboratories, Incorporated. SN 694,347. Pub. 4–10–56. Filed 9–8–55.

629,665. PLYMOUTH. Piggly Wiggly Corporation. SN 694,504. Pub. 4–10–56. Filed 9–12–55.

629,666. MAGIC COLORS. Philadelphia Chewing Gum Corporation. SN 694,662. Pub. 4–10–56. Filed 9–14–55.

629,667. PINK OWL. Philadelphia Chewing Gum Corporation. SN 694,663. Pub. 4–10–56. Filed 9–14–55.

629,668. SWELL. Philadelphia Chewing Gum Corporation. SN 694,664. Pub. 4–10–56. Filed 9–14–55.

629,669. ZERO CAL. Fred A. Blust, d. b. a. Reed Products Company. SN 694,849. Pub. 4–10–56. Filed 9–19–55.

629,670. GARDEN GEMS AND DESIGN. Ark-Homa Farms Frozen Foods, Inc. SN 694,949. Pub. 4–10–56. Filed 9–20–55.

629,671. HIDE-A-WAY EGGS. Brock Candy Company. SN 694,960. Pub. 4–10–56. Filed 9–20–55.

CLASS 47

629,672. TEARS OF JOY. Santa Fe Vintage Co., to Di Giorgio Fruit Corporation. SN 699,004. Pub. 4–10–56. Filed 11–28–55.

CLASS 48

629,673. OLD STYLE LAGER AND DESIGN. G. Heileman Brewing Co. SN 634,536. Pub. 4–10–56. Filed 8–27–52.

629,674. RATHSKELLER. A. Gettelman Brewing Co. SN 691,030. Pub. 4–10–56. Filed 7–11–55.

CLASS 49

629,675. BULLFIGHTER. Kobrand Corporation. SN 693,153. Pub. 4–10–56. Filed 8–16–55.

629,676. DON COSSACK BRAND. M. S. Walker, Inc. SN 698,941. Pub. 4–10–56. Filed 11–25–55.

CLASS 50

629,677. FLAKIES. Erwin Dranoff. SN 654,724. Pub. 4–10–56. Filed 10–14–53.

629,678. DAY-N-NIGHT AND DESIGN. Wendell C. Spear, d. b. a. Spear Engineering Company. SN 660,360. Pub. 4–10–56. Filed 1–20–54.

629,679. Y-RETTES AND DESIGN. The Freedman-Mathews Corporation. SN 675,379. Pub. 4–10–56. Filed 10–25–54.

629,680. STIC-A-PIC. Eva Cooper. SN 677,140. Pub. 4–10–56. Filed 11–23–54.

629,681. HO-BEAU STICK. Production and Marketing Company. SN 687,106. Pub. 4–10–56. Filed 5–9–55.

629,682. PRIDE-CO AND DESIGN. Milton P. Niersbach, d. b. a. Pride of Petaluma Brooder Stove Co. SN 692,156. Pub. 4–10–56. Filed 7–29–55.

629,683. ANCHOR AND DESIGN. Anchor Supply Company, Inc. SN 693,425. Pub. 4–10–56. Filed 8–22–55.

629,684. VAMP-GRIP AND DESIGN. Wald Industries, Inc., to Willis K. Zehmer. SN 695,663. Pub. 4–10–56. Filed 9–30–55.

629,685. SMOKY MOUNTAIN ETC. AND DESIGN. David Kemp, d. b. a. New York Drop Cloth Mfg. Co. SN 695,920. Pub. 4–10–56. Filed 10–5–55.

629,686. FLIGHT DECK. Gilbert M. Dunn. SN 696,222. Pub. 4–10–56. Filed 10–11–55.

629,687. CORDEY AND DESIGN. Cordey China Company. SN 414. Pub. 4–10–56. Filed 1–10–56.

CLASS 51

629,688. LEPRECHAUN. Muriel R. Keeley. SN 676,637. Pub. 4–10–56. Filed 11–15–54.

629,689. MADELEINE DE MARTEL. Robert Miles Sherman, d. b. a. The Special Preparations Company. SN 678,676. Pub. 4–10–56. Filed 12–20–54.

629,690. MIST DE PARIS. Coty, Inc. SN 681,414. Pub. 4–10–56. Filed 2–10–55.

629,691. MOON SONG. Coty, Inc. SN 681,415. Pub. 4–10–56. Filed 2–10–55.

629,692. PEARLS OF PARIS. Coty, Inc. SN 681,416. Pub. 4–10–56. Filed 2–10–55.

629,693. PREFERRED STOCK. Coty, Inc. SN 681,421. Pub. 4–10–56. Filed 2–10–55.

629,694. VERY. Carter Products, Inc. SN 693,527. Pub. 4–10–56. Filed 8–23–55.

629,695. NOTEL. A. W. Curtis Laboratories, Inc. SN 693,811. Pub. 4–10–56. Filed 8–29–55.

629,696. ORAL 51 AND DESIGN. The Albur Company. SN 694,180. Pub. 4–10–56. Filed 9–6–55.

629,697. BONFIRE. Charles of the Ritz, Inc. SN 694,197. Pub. 4–10–56. Filed 9–6–55.

629,698. COPADENT. Copa Products, Inc. SN 694,641. Pub. 4–10–56. Filed 9–14–55.

629,699. IDEAL. Grove Laboratories, Inc. SN 695,303. Pub. 4–10–56. Filed 9–26–55.

CLASS 52

629,700. TINTABIT. Clairol Incorporated. SN 673,080. Pub. 4–10–56. Filed 9–13–54.

629,701. PHOSTEEM. Neilson Chemical Company. SN 676,903. Pub. 4–10–56. Filed 11–18–54.

629,702. DH. The Gillette Company. SN 697,908. Pub. 4–10–56. Filed 11–8–55.

Service Marks

CLASS 100

629,703. K WITHIN A CIRCLE. Kiwanis International. SN 648,863. COLLECTIVE MARK. Pub. 4–10–56. Filed 6–16–53.

629,704. NID ETC. AND DESIGN. National Institute of Drycleaning, Inc. SN 663,935. Pub. 4–10–56. Filed 4–5–54.

629,705. LITTLE NICK AND DESIGN. C & C Super Corporation. SN 679,207. Pub. 4–10–56. Filed 12–31–54.

629,706. LIGNACRAFT. Lignacraft. SN 680,084. Pub. 4–10–56. Filed 1–18–55.

629,707. IAM AND DESIGN. Institute of Appliance Manufacturers. SN 680,149. Pub. 4–10–56. Filed 1–19–55.

629,708. SHERATON ETC. Sheraton Corporation of America. SN 683,146. Pub. 4–10–56. Filed 3–9–55.

629,709. AVIGNONE FRERES. Pietro V. Orcino, d. b. a. Pierre V. Orcino and Avignone Freres. SN 687,721. Pub. 4–10–56. Filed 5–17–55.

629,710. DESIGN OF BRIDGE WITHIN WREATH. Pietro V. Orcino, d. b. a. Pierre V. Orcino and Avignone Freres. SN 687,723. Pub. 4–10–56. Filed 5–17–55.

CLASS 101

629,711. BLUE PRINT COMPANY AND DESIGN. Blue Print Company, Inc. SN 671,877. Pub. 4–10–56. Filed 8–18–54.

629,712. TELECOMPUTING. Telecomputing Corporation. SN 678,277. Pub. 4–10–56. Filed 12–13–54.

629,713. THE NATIONAL MOTEL SHOW AND DESIGN. The National Motel Shows. SN 681,188. Pub. 4–10–56. Filed 2–7–55.

CLASS 103

629,714. DEL DE LAVAL. The De Laval Separator Company. SN 661,265. Pub. 4–10–56. Filed 2–18–54.

629,715. COC. The Hammarlund Manufacturing Company, Inc. SN 674,813. Pub. 4–10–56. Filed 10–14–54.

629,716. MANU-MINE AND DESIGN. Manu-Mine Research & Development Co. SN 680,007. Pub. 4–10–56. Filed 1–17–55.

629,717. THEATER AND DESIGN. Ace Dewey, Inc. SN 682,376. Pub. 4–10–56. Filed 2–28–55.

CLASS 105

629,718. REPRESENTATION OF A TRAVELING TURTLE. Shinderman Management Corporation. SN 675,594. Pub. 4–10–56. Filed 10–27–54.

CLASS 106

629,719. VELVELANE. Velveray Corporation. SN 663,703. Pub. 4–10–56. Filed 3–31–54.

629,720. VERVEL. Velveray Corporation. SN 663,705. Pub. 4–10–56. Filed 3–31–54.

629,721. GENTRY. Attleboro Dyeing & Finishing Corp. SN 667,492. Pub. 4–10–56. Filed 6–2–54.

629,722. EVERDURE. Angus Snead Macdonald Corporation, d. b. a. Everdure, Inc. SN 685,596. Pub. 4–10–56. Filed 4–15–55.

629,723. ADPC LOCKED-IN WITH THE GLAZEMASTER AND DESIGN. Associated Dye & Print Co. Inc. SN 686,799. Pub. 4–10–56. Filed 5–4–55.

CLASS 107

629,724. ORIENTEERING. Bjorn Kjellstrom, d. b. a. American Orienteering Service. SN 647,503. Pub. 4–10–56. Filed 5–22–53.

629,725. PATCHES. Jarrett Spotswood Lickle. SN 666,477. Pub. 4–10–56. Filed 5–17–54.

629,726. IT MAKES SENSE. Toni Ames. SN 678,757. Pub. 4–10–56. Filed 12–22–54.

629,727. SING A SONG. Charity Bailey and Eunice Holsaert, d. b. a. Sing A Song Company. SN 684,191. Pub. 4–10–56. Filed 3–25–55.

629,728. DUCKPINS AND DOLLARS. Bertram H. Claster, d. b. a. Bert Claster Television Productions. SN 690,430. Pub. 4–10–56. Filed 6–29–55.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 7

629,729. Stenson Twine Company, Minneapolis, Minn. SN 674,294. Filed P. R. 10–4–54. Am. S. R. 12–16–55.

Superior

For Baler Twine and Binder Twine.
First use on or about Sept. 23, 1954.

CLASS 9

629,730. Gerald R. Douglas, Charleston, W. Va. SN 674,040. Filed P. R. 9–22–54. Am. S. R. 4–24–56.

ULTRARIFLED

For Rifle Barrels.
First use Oct. 7, 1953.

CLASS 16

629,731. The Patterson-Sargent Company, Cleveland, Ohio. SN 679,602. Filed P. R. 1–7–55. Am. S. R. 4–16–56.

CLEARSPAR

For Varnish.
First use Nov. 12, 1954.

CLASS 23

629,732. The Patterson Foundry & Machine Co., East Liverpool, Ohio. SN 686,515. Filed P. R. 5–5–55. Am. S. R. 3–30–56.

THOROBLENDER

For Industrial and Commercial Blenders for the Mixing and Blending of All Types of Materials Such as Minerals, Chemicals (Both Organic and Inorganic) in Either a Dry or Slop Condition.
First use Dec. 28, 1953.

629,733. Royal Sewing Machine Corp., Brooklyn, N. Y. SN 688,965. Filed P. R 6–6–55. Am. S. R. 4–17–56.

Baldwin

For Sewing Machines.
First use Feb. 23, 1955.

629,734. Vandervell Products Limited, London, England. SN 698,388. Filed P. R. 11–16–55. Am. S. R. 3–23–56.

VANDERVELL

Owner of British Reg. No. 714,362, dated Jan. 28, 1953.
For Bearings and Bushes Being Parts of Machines.

CLASS 28

629,735. National Chain Company, Providence, R. I. SN 693,999. Filed P. R. 8–31–55. Am. S. R. 1–17–56.

"BEAUTY IN JEWELRY IS NATIONAL"

For Jewelry Chain.
First use Jan. 10, 1955.

CLASS 29

629,736. Manhattan Brush Co., Inc., New York, N. Y. SN 675,808. Filed 11–1–54.

Handi-Man

For Brushes for Use by Painters.
First use Sept. 14, 1953.

629,737. Red & White Corporation, Chicago, Ill. SN 676,911. Filed P. R. 11–18–54. Am. S. R. 2–16–56.

SUPER-DUPER

For Brooms.
First use Nov. 5, 1954.

CLASS 32

629,738. Accurate Kitchen Cabinets, Inc., Brooklyn, N. Y. SN 683,011. Filed P. R. 3–8–55. Am. S. R. 3–21–56.

Beauty

For Unassembled, Unfinished and Adjustable Kitchen Cabinets Made of Wood.
First use Apr. 28, 1954.

629,739. Foam Rubber Center Ltd., Passaic, N. J. SN 691,125. Filed P. R. 7–12–55. Am. S. R. 4–11–56.

FOAM RUBBER

For Couches, Sectional Sofas, Beds, Chairs, Tables, Stools, Benches, Headboards.
First use Aug. 2, 1952.

629,740. Revlon, Inc., New York, N. Y. SN 3,454. Filed 2–27–56.

"READY RETAILER"

For Display Container for Packaged Goods.
First use Nov. 1, 1949.

CLASS 34

629,741. Essick Manufacturing Company, Los Angeles, Calif. SN 683,034. Filed 3–8–55.

COMFORT SELECTOR

For Window Adaptors for Use With Evaporative Coolers or Other Air Conditioning Apparatus.
First use September 1952.

CLASS 37

629,742. West Disinfecting Company, Long Island City, N. Y. SN 675,186. Filed P. R. 10–20–54. Am. S. R. 12–19–55.

WEST FANFOLD

For Paper Towels.
First use Oct. 8, 1954.

629,743. West Disinfecting Company, Long Island City, N. Y. SN 675,189. Filed P. R. 10–20–54. Am. S. R. 12–19–55.

FANFOLD

For Paper Towels.
First use Oct. 8, 1954.

CLASS 38

629,744. Broadcasting Publications, Inc., Washington, D. C. SN 661,258. Filed P. R. 2–18–54. Am. S. R. 3–22–56.

COLORCASTING

For Section or Column of a Periodical Publication.
First use Feb. 1, 1954.

629,745. Max O. Cullen, Chicago, Ill. SN 674,808. Filed P. R. 10–14–54. Am. S. R. 3–26–56.

FOODS of the Week

For Periodical.
First use on or about Sept. 1, 1954.

629,746. Woodrow W. Hodge, d. b. a. Zodiac Turf Prediction Co., Chicago, Ill. SN 674,819. Filed P. R. 10–14–54. Am. S. R. 3–9–56.

HORSASTROLOGY GUIDE

For Periodical Publication.
First use Oct. 5, 1954.

629,747. Harry L. Woodruff, d. b. a. The Certified Gemologist Publishing Company, Washington, D. C. SN 676,777. Filed P. R. 11–16–54. Am. S. R. 2–2–56.

The Certified Gemologist

For Publication Issued at Regular Intervals.
First use Oct. 1, 1954.

629,748. United Press Associations, New York, N. Y. SN 677,015. Filed P. R. 11–19–54. Am. S. R. 2–3–56.

NEWSFAX

For Pictures and Printed or Typewritten Matter Reproduced by Mechanical or Other Means Explanatory of the Accompanying Pictures by Wire Photo or Facsimile Transmission.
First use Oct. 12, 1954.

629,749. The Penton Publishing Company, Cleveland, Ohio. SN 678,252. Filed P. R. 12–13–54. Am. S. R. 12–22–55.

Metalworking Week

For Publication Published Weekly or From Time to Time.
First use Dec. 6, 1954.

CLASS 39

629,750. The Hagerstown Rubber Company, Hagerstown, Md. SN 672,656. Filed P. R. 9–2–54. Am. S. R. 1–24–56.

SUPER-WEAR

For Rubber Soles, Taps and Heels.
First use Aug. 7, 1940.

629,751. Craft Shoe Mfg. Co., Inc., Philadelphia, Pa., to Samuel Koster, Philadelphia, Pa. SN 677,142. Filed P. R. 11–23–54. Am. S. R. 8–31–55.

Koster

For Ladies' Shoes.
First use December 1952.

629,752. Bayard Shirt Corporation, New York, N. Y. SN 677,859. Filed P. R. 12–7–54. Am. S. R. 12–21–55.

BAYARD

For Men's and Boys' Sport and Dress Shirts.
First use Nov. 19, 1954.

629,753. Katz Underwear Company, Honesdale, Pa. SN 679,166. Filed P. R. 12–30–54. Am. S. R. 2–14–56.

Nite-Shirts

For Women's Nightgowns and Pajamas.
First use Dec. 7, 1954.

CLASS 42

629,754. Maclennan & Maclennan Limited, Stornoway, Isle of Lewis, Outer Hebrides, Scotland. SN 670,365. Filed P. R. 7–21–54. Am. S. R. 5–16–55.

CROFTERS' HANDWOVEN
HARRIS TWEED
HAND LOOMED
ON
THE ISLE OF LEWIS & HARRIS
HEBRIDES - SCOTLAND
MACLENNAN & MACLENNAN LTD.

For Textile Piece Goods of Wool, Wool Worsted or Hair.
First use 1932.

629,755. Harry D Cooper & Co., Inc. Boston, Mass. SN 677,768. Filed P. R. 12–6–54. Am. S. R. 10–14–55.

ENGLISH VERILITE

For Woolens and Worsteds in the Piece and by the Yard.
First use Mar. 20, 1953.

CLASS 45

629,756. Redi-Aid Products, Inc., Wadley, Ga., now Collins Corporation of Georgia. SN 678,814. Filed P. R. 12–22–54. Am. S. R. 11–25–55.

REDI-AID

For Flavoring Bases Used in the Making of Soft Drinks.
First use Sept. 1, 1952.

CLASS 46

629,757. Greater New York Restaurant and Luncheonette Suppliers Association, Brooklyn, N. Y. SN 654,120. COLLECTIVE MARK. Filed P. R. 10–2–53. Am. S. R. 6–8–55.



For Foods—Namely, Vegetable Shortening, Cheese, Apple Butter, Creamery Butter, Peanut Butter, Fresh and Frozen Eggs, Pickles, Jam, Dehydrated Soup Mixes, Sweet Relish, Canned Fish, Catsup, Fresh and Canned Deciduous and Citrus Fruit Juices, Jellies, Tea Bags, Powder for Making Hot Chocolate, Mayonnaise, Canned Chicken, Vinegar, Marmalade, Canned and Fresh Tomatoes, Horse Radish, Poultry Seasoning, Spices, Lard, Cooking Oil, Waffle Mixes, Mustard, Oleomargarine, Smoked Fish.
First use Aug. 14, 1953.

629,758. Dubuque Packing Company, Dubuque, Iowa. SN 669,100. Filed P. R. 6–29–54. Am. S. R. 4–5–56.

THAT'S THE MEAT FOR ME

For Fresh Canned, Smoked, and Cooked Meat Products—Namely, Bacon, Ham, Smoked Pork Jowl Square, Pork Shoulder, Picnic and Bologna.
First use Jan. 15, 1947.

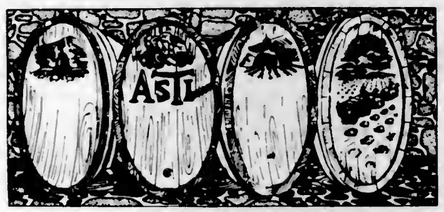
629,759. Kellogg Company, Battle Creek, Mich. SN 688,936. Filed P. R. 6–6–55. Am. S. R. 12–30–55.

Kellogg's
SUGAR
FROSTED FLAKES

For Cereal Breakfast Foods.
First use Nov. 29, 1951.

CLASS 47

629,760. Italian Swiss Colony, San Francisco, Calif. SN 669,442. Filed P. R. 7–6–54. Am. S. R. 3–12–56.



For Wines.
First use July 1950; and first use as to "Asti" in 1912.

CLASS 48

629,761. Eugene F. West, New York, N. Y. SN 677,467. Filed P. R. 11–29–54. Am. S. R. 3–26–56.



For Beer.
First use Nov. 23, 1954.

629,762. Eugene F. West, New York, N. Y. SN 677,473. Filed P. R. 11–29–54. Am. S. R. 3–26–56.



For Beer.
First use Nov. 23, 1954.

629,763. B. Fischer & Co., Inc., New York, N. Y. SN 677,774. Filed P. R. 12–6–54. Am. S. R. 11–4–55.

FISCHER'S

For Beer.
First use Aug. 9, 1954.

629,764. John Labatt Limited, London, Ontario, Canada. SN 678,237. Filed 12–27–55.



Owner of Canadian Reg. No. 100,797, dated June 10, 1955, and U. S. Reg. Nos. 57,040, 561,057, and others.
For Ale.

629,765. John Labatt Limited, London, Ontario, Canada. SN 678,238. Filed 12–27–55.



Owner of Canadian Reg. No. 100,866, dated June 24, 1955, and U. S. Reg. Nos. 57,040, 577,210, and others.
For Beer.

CLASS 49

629,766. D. E. Williams Limited, Tullamore, Ireland. SN 675,345. Filed P. R. 10–22–54. Am. S. R. 2–28–56.

Tullamore Dew

For Irish Whiskey.
First use 1902.

CLASS 52

629,767. International Supply Company, d. b. a. Quick-Klean Company, Cambridge, Mass. SN 673,356. Filed 9–17–54.

QUICK-KLEAN

For Cleaning Composition in the Form of a Paste and a Powder To Remove Dirt, Grease, Oil, Acid, Paint and Stains From the Person, Linoleum, Woodwork, Household Appliances and Automobile Tires.
First use May 1904.

TRADEMARK REGISTRATIONS RENEWED

107,653. HALLMARK. Cl. 37. 12–14–15.
108,272. THANKSGIVING AND DESIGN. Cl. 46. 1–25–16.
109,097. HOVALCO. Cl. 13. 3–21–16.
109,796. VELOGEN. Cl. 6. 4–18–16.
110,079. PEPSODENT. Cl. 6. 5–2–16.
110,334. ROYAL. Cl. 35. 5–16–16.
110,997. SEPTIGYN AND DESIGN. Cl. 18. 6–20–16.
111,405. NUXATED IRON. Cl. 6. 7–11–16.
111,752. IT'S THE WHEAT AND DESIGN. Cl. 46. 8–1–16.
111,854. TITEFLEX. Cl. 35. 8–8–16.
111,898. GOLDCROSS AND DESIGN. Cl. 46. 8–8–16.
112,210. POLHEMUS. Cl. 42. 8–22–16.
328,604. H. T. LAX. Cl. 18. 10–1–35.
329,260. TOP-NOTCH. Cl. 22. 10–22–35.
331,665. DUROBAR. Cl. 21. 1–14–36.
331,881. TOKEN. Cl. 52. 1–21–36.
332,175. DESIGN OF SHIELD. Cl. 17. 2–4–36.
332,566. TRI-COLOR. Cl. 38. 2–18–36.
332,867. PIONEER. Cl. 46. 3–3–36.
332,997. FORT ORANGE IN DIAMOND DESIGN. Cl. 37. 3–10–36.
333,052. DUART. Cl. 51. 3–10–36.
333,090. DESIGN OF GREEN TRIANGLE. Cl. 18. 3–10–36.
333,152. BIG CHIEF AND DESIGN. Cl. 46. 3–10–36.
333,153. BIG CHIEF. Cl. 46. 3–10–36.
333,160. ROSEITE. Cl. 26. 3–10–36.
333,175. MEL-BRO. Cl. 46. 3–10–36.
333,253. KENMORE. Cl. 23. 3–10–36.
333,343. HARTOL PRODUCTS. Cl. 15. 3–17–36.
333,422. TEEN STYLE. Cl. 39. 3–24–36.
333,433. LITTLEST REBEL. Cl. 39. 3–24–36.
333,439. MOORLANE AND DESIGN WITHIN CIRCLES. Cl. 26. 3–24–36.
333,464. ATREOL. Cl. 15. 3–24–36.
333,631. VASELINE CAMPHOR ICE AND DESIGN. Cl. 6. 3–31–36.
333,687. REWARD. Cl. 52. 3–31–36.
333,688. GAYLA. Cl. 4. 3–31–36.
333,768. PHILADELPHIA PHILLIES AND DESIGN. Cl. 17. 4–7–36.
333,818. ETERNA. Cl. 16. 4–7–36.
333,898. LAMGORA. Cl. 39. 4–14–36.
334,051. CHM. Cl. 42. 4–21–36.
334,146. EVA CREPE. Cl. 42. 4–21–36.
334,318. MOLAS-O-CUBES. Cl. 46. 4–28–36.
334,417. ORMIG. Cl. 23. 5–5–36.
334,794. GARDEN CLUB. Cl. 49. 5–12–36.
334,795. SPIROTALLIC. Cl. 35. 5–12–36.
334,810. NOBILITY. Cl. 37. 5–12–36.
334,811. JUBILEE. Cl. 37. 5–12–36.
334,818. SPECTROPURE. Cl. 44. 5–12–36.
334,873. DI-CALATOR. Cl. 26. 5–19–36.
335,412. FANTOM-FAST. Cl. 24. 6–2–36.
335,415. WEBSTERETTES. Cl. 17. 6–2–36.
335,416. WEBSTERETTES AND DESIGN. Cl. 17. 6–2–36.
335,948. GYMLOH. Cl. 16. 6–16–36.
335,949. GAS-O-CIDE. Cl. 6. 6–16–36.

336,039. THE GLORIES OF THE GARDEN. Cl. 38. 6-23-36.
336,396. FLARE-FIT. Cl. 39. 7-7-36.
336,459. ALPHABET. Cl. 18. 7-7-36.
336,516. DE L'AVAL AND DESIGN. Cl. 23. 7-7-36.
336,518. BETABION. Cl. 6. 7-7-36.
336,565. OITIOIL. Cl. 16. 7-7-36.
336,566. CICOIL. Cl. 16. 7-7-36.
336,623. ENDECO WITHIN DIAMOND DESIGN. Cl. 46. 7-14-36.
336,697. OSMOSE. Cl. 6. 7-14-36.
336,963. VICKS. Cl. 44. 7-21-36.
337,023. LA VIE EN FLEURS. Cl. 51. 7-28-36.
337,115. DIESELINE. Cl. 15. 7-28-36.
337,220. TROPICANA. Cl. 42. 8-4-36.
337,249. KITCHEN-MAID. Cl. 42. 8-4-36.
337,271. EVERY WEEK. Cl. 38. 8-4-36.
337,293. EDEN PARK. Cl. 49. 8-4-36.
337,571. TAPACAN. Cl. 48. 8-11-36.
337,573. CORROSIRON. Cl. 23. 8-11-36.
337,576. REX-ROY. Cl. 17. 8-11-36.
337,613. GREEN ARROW AND DESIGN. Cl. 52. 8-11-36.
337,692. AIR-SET. Cl. 11. 8-18-36.
337,793. DEFIANCE. Cl. 21. 8-18-36.
337,885. PLAY SAFE. Cl. 22. 8-25-36.
337,892. WINTHROP BD AND DESIGN. Cl. 12. 8-25-36.
337,961. BRAZIL OITICICA S. A. E. U. B. AND TREE DESIGN. Cl. 16. 8-25-36.
337,972. GATEWAY TOURS. Cl. 38. 8-25-36.
338,034. MAJOR HOOPLE (PORTRAIT). Cl. 38. 8-25-36.
338,046. ESTEEM. Cl. 46. 8-25-36.
338,074. SECRETARIAL. Cl. 44. 8-25-36.
338,087. WOLF'S HEAD AND DESIGN. Cl. 15. 8-25-36.
338,235. FLOATING POWER. Cl. 19. 9-1-36.
338,268. BRANDY OF FLOWERS. Cl. 6. 9-1-36.

TRADEMARK REGISTRATIONS CANCELED

Section 8

36,255. QUEEN BRAND ETC. AND DESIGN. Cl. 1. 4-16-01.
75,839. THE "DAVEN-O". Cl. 32. 11-23-09.
112,264. YORK STATE. Cl. 46. 8-29-16.
175,868. SILVERCRAFT AND DESIGN. Cl. 28. 11-13-23.
199,624. BISHOP'S MOVE TOBACCO AND DESIGN. Cl. 17 6-16-25.
259,853. BABY ROCHESTER AND REPRESENTATION OF A BABY. Cl. 39. 8-13-29.
263,805. TOKALON. Cl. 37. 11-12-29.
264,788. WICKFIELD AND DESIGN. Cl. 39. 12-3-29.
267,838. PETROBENZOL. Cl. 6. 3-4-30.
355,951. GRANT'S TONJON AND DESIGN. Cl. 18. 4-5-38.
384,416. BUCKINGHAM ROYAL VAT. Cl. 49. 1-21-41.
393,042. TARGET AND DESIGN. Cl. 52. 1-27-42.
404,176. KLICX AUTO WASH. Cl. 52. 11-9-43.
422,317. TARGET AND DESIGN. Cl. 4. 7-16-46.
425,246. TARGET AND DESIGN. Cl. 4. 11-12-46.
431,416. GOBS-O-SUDS. Cl. 52. 7-22-47.
433,509. TELETROL. Cl. 21. 10-14-47.
436,745. AUTOMEGA AND DESIGN. Cl. 26. 2-17-48.
442,770. SUPER CYCLONE. Cl. 22. 5-31-49.
443,143. PLASTICOL. Cl. 42. 7-26-49.
443,314. DIXIE DOODE. Cl. 39. 8-30-49.
500,099. HART'S 77. Cl. 4. 4-13-48.
505,525. TRUE SHAPE. Cl. 39. 1-4-49.
507,594. EN-AR-CO. Cl. 21. 3-15-49.
514,331. PMCO AND DESIGN. Cl. 14. 8-30-49.
515,242. BUTTE. Cl. 37. 9-20-49.
516,581. GILTA. Cl. 4. 10-18-49.
516,613. REST AND DESIGN. Cl. 6. 10-18-49.
517,286. LANO-LIFE. Cl. 55. 11-1-49.
517,519. ACE CLASS GUIDE. Cl. 38. 11-8-49.
517,687. GRIP-TITE. Cl. 19. 11-15-49.
517,854. MUSTAD. Cl. 13. 11-22-49.
518,993. EVERYBODY'S. Cl. 46. 12-20-49.
519,122. DYNAVAR. Cl. 27. 12-20-49.
519,234. FOODLAND. Cl. 4. 12-27-49.
519,295. FOODLAND. Cl. 24. 12-27-49.
520,869. C AND DESIGN. Cl. 31. 2-7-50.
520,903. COLSEDRON. Cl. 18. 2-7-50.
521,716. KEEPSAKE. Cl. 46. 3-7-50.
521,721. BENZOCOM. Cl. 6. 3-7-50.
521,733. WEARWELL. Cl. 22. 3-7-50.
521,736. WESTINGHOUSE MERCHANDISER. Cl. 21. 3-7-50.
521,739. SKILCRAFT PRODUCT OF BLIND CRAFTSMEN AND DESIGN. Cl. 39. 3-7-50.
521,746. APPLETON BOLTED CHAIRS BUILT FOR SERVICE AND DESIGN. Cl. 32. 3-7-50.
521,751. BAEXOL. Cl. 46. 3-7-50.
521,754. SPEED-O-CATOR. Cl. 26. 3-7-50.
521,757. NEWS PARADE. Cl. 26. 3-7-50.
521,760. TEAL. Cl. 37. 3-7-50.
521,767. AMCO. Cl. 26. 3-7-50.
521,768. CAUFE. Cl. 49. 3-7-50.
521,773. WAXSHEEN. Cl. 37. 3-7-50.
521,774. KRA-DEL-PAK AND DESIGN. Cl. 32. 3-7-50.
521,778. "BOTANIZED". Cl. 39. 3-7-50.
521,779. FINCH COLORFAX AND DESIGN. Cl. 37. 3-7-50.
521,782. SNUB-R-GRIP. Cl. 21. 3-7-50.
521,785. HI FRIEND AND DESIGN. Cl. 46. 3-7-50.
521,800. PLEASANT PASTIMES PACKAGE. Cl. 46. 3-7-50.
521,802. N. TURK AND DESIGN. Cl. 39. 3-7-50.
521,803. MARINE GUARD. Cl. 39. 3-7-50.
521,814. LENGYEL. Cl. 51. 3-7-50.
521,818. JOHN HAMILTON AND DESIGN. Cl. 39. 3-7-50.
521,823. HUSH-O MATIC. Cl. 21. 3-7-50.
521,825. MAID OF HONOR. Cl. 32. 3-7-50.
521,826. STATIONERY THAT SMILES AND DESIGN. Cl. 37. 3-7-50.
521,827. N AND BOW DESIGN. Cl. 23. 3-7-50.
521,830. DESIGN OF A ROOSTER. Cl. 20. 3-7-50.
521,831. DESIGN OF A ROOSTER. Cl. 21. 3-7-50.
521,838. HARVEST BELLE AND DESIGN. Cl. 46. 3-7-50.
521,846. GOLDEN RULE. Cl. 17. 3-7-50.
521,848. SWEETHEART. Cl. 23. 3-7-50.
521,849. TIBBETTS BROOK. Cl. 45. 3-7-50.
521,850. TOM, DICK AND HARRY. Cl. 39. 3-7-50.
521,854. STEWART WARNER. Cl. 21. 3-7-50.
521,859. POLAR. Cl. 32. 3-7-50.
521,860. LEEDS. Cl. 37. 3-7-50.
521,862. WORKMAN. Cl. 37. 3-7-50.
521,867. KIDSIE WHEAT. Cl. 46. 3-7-50.
521,868. LANDMARK. Cl. 46. 3-7-50.
521,876. MOORE'S AND DESIGN. Cl. 2. 3-7-50.
521,880. KOR-CHEES AND DESIGN. Cl. 46. 3-7-50.
521,883. A DAL CREATION. Cl. 39. 3-7-50.
521,885. RESERVITT AND DESIGN. Cl. 21. 3-7-50.
521,888. SITROUX. Cl. 39. 3-7-50.
521,889. W AND DOUBLE DIAMOND DESIGN. Cl. 23. 3-7-50.
521,892. CORDUROBE. Cl. 39. 3-7-50.
521,894. MAL-FORD. Cl. 39. 3-7-50.
521,896. TOPCRAFT. Cl. 39. 3-7-50.
521,899. CERES. Cl. 23. 3-7-50.
521,900. NO BLIND. Cl. 23. 3-7-50.
521,903. OMAR DEVIL'S FOOD MIX AND DESIGN. Cl. 46. 3-7-50.
521,904. OMAR WHITE CAKE MIX AND DESIGN. Cl. 46. 3-7-50.
521,910. CORDON NATIONAL. Cl. 47. 3-7-50.
521,913. "FLEX-EASE". Cl. 32. 3-7-50.
521,917. FRIGIDMIST FRUIT & VEGETABLE MOIST-AIR-IZER AND DESIGN. Cl. 32. 3-7-50.
521,919. LAZYA RANCH LA AND DESIGN. Cl. 46. 3-7-50.
521,921. G GRAEMERE LAMP CORP. CHICAGO AND DESIGN. Cl. 21. 3-7-50.
521,923. PETITOU. Cl. 39. 3-7-50.
521,925. STEMCO. Cl. 39. 3-7-50.
521,926. BILTWELL. Cl. 23. 3-7-50.
521,927. CAPRICE. Cl. 46. 3-7-50.
521,928. X-BAR. Cl. 46. 3-7-50.
521,934. PUREAIRE. Cl. 32. 3-7-50.
521,937. DICKISOLE. Cl. 39. 3-7-50.
521,938. DESIGN OF ANT. Cl. 39. 3-7-50.
521,939. ANTSY PANTS AND ANT. Cl. 39. 3-7-50.

521,940. RADI-JON. Cl. 21. 3-7-50.
521,943. APCO. Cl. 39. 3-7-50.
521,949. 10° BELOW AND DESIGN. Cl. 39. 3-7-50.
521,950. SPHINX AND DESIGN. Cl. 46. 3-7-50.
521,953. "HAT-OGENIC". Cl. 39. 3-7-50.
521,954. TRADEMARK DESIGN FOR RUBBER BOOT. Cl. 39. 3-7-50.
521,955. FIRE BALL. Cl. 21. 3-7-50.
521,962. OXFORD AND DESIGN. Cl. 4. 3-7-50.
521,966. KNIGHT AND HORSE DESIGN. Cl. 32. 3-7-50.
521,967. DICALITE. Cl. 6. 3-7-50.
521,968. Z-BRA. Cl. 39. 3-7-50.
521,971. CUPEX. Cl. 37. 3-7-50.
521,975. BLUE RIDGE. Cl. 37. 3-7-50.
521,979. KEYTROL. Cl. 21. 3-7-50.
521,982. GLOSS O MATIC THE HUB TO HOUSE CLEANING AND DESIGN. Cl. 52. 3-7-50.
521,986. PEN-NETTS. Cl. 37. 3-7-50.
521,991. ANNIVERSARY. Cl. 37. 3-7-50.
522,001. DERRY-FABS. Cl. 39. 3-7-50.
522,002. DERRY FADS OF FASHION. Cl. 39. 3-7-50.
522,003. DERRY-KNITS. Cl. 39. 3-7-50.
522,004. DERRY-TEX. Cl. 39. 3-7-50.
522,006. BUNNY ROOT OLD FASHIONED AND DESIGN. Cl. 45. 3-7-50.
522,010. THE MARKSMAN. Cl. 17. 3-7-50.
522,011. PROVIDER. Cl. 46. 3-7-50.
522,012. LE GARDE. Cl. 39. 3-7-50.
522,014. PRESSMASTER. Cl. 37. 3-7-50.
522,019. ONYX. Cl. 37. 3-7-50.
522,021. COW GIRL. Cl. 39. 3-7-50.
522,030. HUMPHREYS'. Cl. 18. 3-7-50.
522,033. TOMAHAWK. Cl. 2. 3-7-50.
522,035. MODERN MOTOR MAGIC AND DESIGN. Cl. 103. 3-7-50.
522,036. VELOURA-GLO. Cl. 106. 3-7-50.
522,037. WILDROOT SHAMPOO AND DESIGN. Cl. 52. 3-7-50.
522,039. SIGNATURE CARRERE. Cl. 51. 3-7-50.
522,041. THRICE A WEEK. Cl. 51. 3-7-50.
522,042. TWICE A DAY. Cl. 51. 3-7-50.
522,043. EXACT-O-PULL. Cl. 23. 3-7-50.
522,046. WATERMAN'S BLUE BLACK INK AND DESIGN. Cl. 11. 3-7-50.
522,047. KEMRY AND DESIGN. Cl. 39. 3-7-50.
522,048. PRESSON. Cl. 38. 3-7-50.
522,050. PULPCRAFT. Cl. 2. 3-7-50.
522,056. DIET-MIX. Cl. 46. 3-7-50.
522,057. WEAR WELL. Cl. 19. 3-7-50.
522,061. CAR-DOOR CARRIER AND DESIGN. Cl. 19. 3-7-50.
522,062. RED D MIX. Cl. 12. 3-7-50.
522,063. GOLDEN HAND BANANAS AND DESIGN. Cl. 46. 3-7-50.
522,064. KLEEN-PAK. Cl. 23. 3-7-50.
522,065. MASSAGE MASTER AND DESIGN. Cl. 44. 3-7-50.
522,068. ESMOND. Cl. 21. 3-7-50.
522,070. KARTIT. Cl. 19. 3-7-50.
522,071. ROLL-ON. Cl. 21. 3-7-50.
522,073. PRETTY PACKAGE. Cl. 51. 3-7-50.
522,075. SUPER SHINE. Cl. 4. 3-7-50.
522,077. NANCY GAYLE'S. Cl. 46. 3-7-50.
522,081. CAFARELLI WITH THE LOOK OF A HAND MADE AND DESIGN. Cl. 39. 3-7-50.
522,083. MRS. BUCHWALD'S. Cl. 46. 3-7-50.
522,084. FLORBALL. Cl. 22. 3-7-50.
522,086. THE CRYSTAL THAT SINGS AND DESIGN. Cl. 33. 3-7-50.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

194,107. 1 PLUS 1 AND DESIGN. Cl. 16. 1-13-25. The Lowe Brothers Company, Dayton, Ohio. Amended to appear:

ONE PLUS ONE

521,044. LIN-O-PLAST. Cl. 5. 2-14-50. Archer-Daniels-Midland Company, Minneapolis, Minn. and Cleveland, Ohio. Amended: In the certificate, lines 4 and 15-16, and in the heading to the registration, "doing business as The Werner G. Smith Company," is deleted, and in the statement, lines 4, 5, and 6, "as The Werner G. Smith Company, a division of Archer-Daniels-Midland Company," is deleted.

534,108. HYDROFOL. Cl. 6. 11-28-50. Archer-Daniels-Midland Company, Minneapolis, Minn. and Cleveland, Ohio. Amended: In the certificate, lines 4 and 15-16, and in the heading to the registration, "doing business as The Werner G. Smith Company," is deleted, and in the statement, lines 4, 5 and 6, "as The Werner G. Smith Company, a division of Archer-Daniels-Midland Company," is deleted.

553,977. ARAFOLD. Cl. 39. 1-22-52. Cluett, Peabody & Co., Inc., Troy, N. Y. Corrected: In column 2, line 6, of the printed copy of the registration, "1905" should be *1950*.

609,942. CARRIAGE TRADE. Cl. 39. 8-2-55. Dave Baer Hosiery Mill, Inc., Rock Hill, S. C. Amended: In column 2, line 2, of the printed copy of the registration, first occurrence, "Sept. 7, 1954" is deleted and *March 1, 1954 by Union Manufacturing Company, applicant's predecessor* is inserted in lieu thereof, and in same line 2 and line 3, second occurrence, "Sept. 7, 1954" is deleted and *March 1, 1954 by said predecessor* is inserted in lieu thereof.

615,717. K-FLO. Cl. 23. 11-8-55. Flo-Mix Fertilizers Corporation, Houma, La. Corrected: In the certificate, lines 2 and 13, and in line 1 of the printed copy of the registration, ", Inc." should be *Corporation*.

615,718. PHOS-FLO. Cl. 23. 11-8-55. Flo-Mix Fertilizers Corporation, Houma, La. Corrected: In the certificate, lines 2 and 13, and in line 1 of the printed copy of the registration, ", Inc." should be *Corporation*.

617,695. K-FLO. Cl. 10. 12-20-55. Flo-Mix Fertilizers Corporation, Houma, La. Corrected: In the certificate, lines 2 and 13, and in line 1 of the printed copy of the registration, ", Inc." should be *Corporation*.

617,696. PHOS-FLO. Cl. 10. 12-20-55. Flo-Mix Fertilizers Corporation, Houma, La. Corrected: In the certificate, lines 2 and 13, and in line 1 of the printed copy of the registration, ", Inc." should be *Corporation*.

626,336. R & G. Cl. 46. 5-1-56. R. & G. Distributors, Inc., New York, N. Y. Corrected: In column 2, line 2, of the printed copy of the registration, "July 1, 1950" should be *July 1, 1930*.

TRADEMARK REGISTRATIONS—NEW CERTIFICATES

New Certificates issued under sections 7(c), 7(f), 7(g) of the Trademark Act of 1946 for the unexpired term of the original registrations.

541,026. PENTRYL. Cl. 18. The Maltine Company. 4-17-51. New Cert. Sec. 7(c), to Merck & Co., Inc., Rahway, N. J., 6-26-56.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 12

273,090. July 22, 1930. The Mosaic Tile Company, Zanesville, Ohio. Pub. by registrant.

GRANITEX

For Ceramic Cap, Wall, Floor, and Ceiling Tiles.

CLASS 13

108,548. Feb. 15, 1916. Crampton-Farley Brass Co., Kansas City, Mo. Pub. by Crampton-Farley Manufacturing Company, Kansas City, Mo.

SIGNET

For Floor Drains and Traps.

CLASS 23

335,229. May 26, 1936. Nicholson File Company, Providence, R. I. Pub. by registrant.

NICHOLSON

The terms "Swiss Pattern Files," "Trademark," and "Providence, R. I., U. S. A." are disclaimed.
For Files and Rasps.

CLASS 37

333,413. June 2, 1936. Valley Forge Envelope & Paper Company, Philadelphia, Pa. Pub. by Ogden Brothers, Philadelphia, Pa.

Hunt Club

For Printing and Writing Papers.

CLASS 39

329,864. Nov. 12, 1935. Straus, Royer, & Strass, Inc., Baltimore, Md. Pub. by Susquehanna Waist Company, Upland, Pa.

LIMITED EDITION

For Women's, Misses', and Children's Blouses, Shirts, and Middies.

CLASS 46

291,716. Feb. 23, 1932. Vienna Sausage Manufacturing Company, Chicago, Ill. Pub. by registrant.



For Sausages—Namely, Vienna Style Sausages, Coney Island Style Frankfurters, Hungarian Style Sausages, Roumanian Ring (Garlic), Ring Bolognas, Thick Bolognas, Long Bolognas, Knock Wurst, Liverwurst, Extra Fresh Salami, Medium Hard Salami, Hard Salami, Square Salami (Pressed).

351,868. Nov. 9, 1937. Fall River Canning Company, Fall River, Wis. Pub. by registrant.

Upper Deck

For Canned Vegetables.

379,735. July 23, 1940. Wallace H. Strowd, Nashville, Tenn. Pub. by Chas. Pfizer & Co., Inc., Brooklyn, N. Y.

BI-CAP

For Product Composed of Wheat Germ and Other Ingredients, To Be Mixed With White Flour and Other Baking Preparations.

CLASS 49

92,728. July 22, 1913. Sheffield Dentifrice Co., New London, Conn., and New York, N. Y. Pub. by Charles Jacquin et Cie., Inc., Philadelphia, Pa.

CREME YVETTE



No claim is made to the words "Creme" and "Company."
For Cordial.

435 863. Jan. 13, 1948. Charles Jacquin et Cie., Inc., Philadelphia, Pa. Pub. by registrant.

JACQUIN

For Brandy, Gin, Rum, and Alcoholic Cordial and Liqueurs.

CLASS 51

335,588. June 9, 1936. Wernet Dental Mfg. Company, Brooklyn, N. Y. Pub. by Wernet Dental Mfg. Co. Inc., Jersey City, N. J.

POLIDENT

For Preparation for Cleaning, Washing, and Polishing Natural and Artificial Dentures.

LIST OF REGISTRANTS OF TRADEMARKS

ACF Industries, Inc., New York, N. Y. 629,325, pub. 4–10–56. Cl. 2.
ADC Cubicle Track Corp., Allentown, Pa. 629,383, pub. 4–10–56. Cl. 13.
A. P. W. Paper Co., Inc., Albany, to A. P. W. Products Co., Inc., New York, N. Y. 332,997, ren. 3–10–56. Cl. 37.
A. P. W. Products Co., Inc.: *See*—
A. P. W. Paper Co., Inc.
Abbey Etna Co., Toledo, Ohio. 629,464, pub. 4–10–56. Cl. 23.
Abbott Laboratories, North Chicago, Ill. 629,417, pub. 4–10–56. Cl. 18.
Abraham & Straus, Inc., Brooklyn, N. Y., to Federated Department Stores, Inc., Cincinnati, Ohio. 521,926, canc. Cl. 23.
Accurate Kitchen Cabinets, Inc., Brooklyn, N. Y. 629,738. Cl. 32.
Ace Dewey, Inc., Industrial City, Mo. 629,717, pub. 4–10–56. Cl. 103.
Ace School of Handicapping, Los Angeles, Calif. 517,519, canc. Cl. 38.
Advance Furniture Mfg. Co., Chicago, Ill. 521,966, canc. Cl. 32.
Aisenstein, Louis, & Bros., Inc.: *See*—
United Jewelers Inc., The.
Akin, Lee, & Son, Mission, Tex. 521,919, canc. Cl. 46.
Albur Co., The, Memphis, Tenn. 629,696, pub. 4–10–56. Cl. 51.
Allied Chemical & Dye Corp., New York, N. Y. 629,338, pub. 4–10–56. Cl. 6.
Allied Radio Corp., Chicago, Ill. 629,478, pub. 4–10–56. Cl. 26.
Alling & Cory Co., The, Rochester, N. Y. 629,539, pub. 4–10–56. Cl. 37.
All Star Products, Inc.: *See*—
American Steel Package Co., The.
Alphabet Dietary Corp.: *See*—
Walsh, Michael J.
Altmann, Bernhard, Corp., The, New York, N. Y. 629,573–4, pub. 4–10–56. Cl. 39.
American Automobile Association, The, (Inc.), Washington, D. C. 629,488, pub. 4–10–56. Cl. 27.
American Bakers Cooperative, Inc., Ithaca, N. Y. 629,650, pub. 4–10–56. Cl. 46.
American Blueprint Corp., Inc., New York, N. Y. 521,767, canc. Cl. 26.
American Cyanamid Co., New York, N. Y. 629,396, pub. 4–10–56. Cl. 18.
American Education Press Inc.: *See*—
Every Week Publishing Corp.
American Laboratories, Inc., Richmond, Va. 629,664, pub. 4–10–56. Cl. 46.
American Orienteering Service: *See*—
Kjellstrom, Bjorn.
American Pencil Co., Inc., Lewisburg, Tenn. 629,540–1, pub. 4–10–56. Cl. 37.
American Steel Package Co., The, to All Star Products, Inc., Defiance, Ohio. 337,793, ren. 8–18–56. Cl. 21.
Ames, Toni, Chicago, Ill. 629,726, pub. 4–10–56. Cl. 107.
Anchor Supply Co., Inc., Evansville, Ind. 629,683, pub. 410–56. Cl 50.
Anderson-Prichard Oil Corp., Oklahoma City, Okla. 267,838, canc. Cl. 6.
Animal Foods Co.: *See*—
Coan, Vivienne M.
Apco Mfg. Co., Chicago, Ill. 521,943, canc. Cl. 39.
Appleton Chair Corp., Appleton, Wis. 521,746, canc. Cl. 32.
Apponaug Co., The, Apponaug, R. I. 629,615, pub. 4–10–56. Cl. 42.
Arau, Anthony, d. b. a. Anthony Arau & Co., Whitman, Mass. 629,449 pub. 4–10–56. Cl. 23.
Arau, Anthony, & Co.: *See*—
Arau, Anthony.
Archer-Daniels-Midland Co., Minneapolis, Minn., and Cleveland, Ohio. 521,044. Am. 7(d). Cl. 5.
Archer-Daniels-Midland Co., Minneapolis, Minn., and Cleveland, Ohio. 534,108. Am. 7(d). Cl. 6.
Ark-Homa Farms Frozen Foods, Inc., Fort Smith, Ark. 629,670, pub. 4–10–56. Cl. 46.
Armour and Co., Chicago, Ill. 521,733, canc. Cl. 22.
Aronsohn, S. J., Inc., New York, N. Y. 337,220, ren. 8–4–56. Cl. 42.
Asquith Associates, Inc., Boston, Mass. 522,068, canc. Cl. 21.
Associated Dye & Print Co. Inc., Paterson, N. J. 629,723, pub. 4–10–56. Cl. 106.
Associated Merchandising Corp., The, New York, N. Y. 629,580, pub. 4–10–56. Cl. 39.
Atlantic Refining Co., The, Philadelphia, Pa. 333,464, ren. 3–24–56. Cl. 15.
Atlantic Sponge & Chamois Corp., New York, N. Y. 629,312, pub. 4–10–56. Cl. 1.
Attleboro Dyeing & Finishing Corp., Seekonk, Mass. 629,721, pub. 4–10–56. Cl. 106.
Avco Mfg. Corp., Cincinnati, Ohio. 520,869, canc. Cl. 31.
Avignone Freres: *See*—
Orcino, Pietro V.
Ayer, Harriet Hubbard, Inc., New York, N. Y. 522,073, canc. Cl. 51.
B-I-F Industries, Inc., Providence, R. I. 629,477, pub. 4–10–56. Cl. 26.
B-Luckee Enterprises, Inc., Pittsburgh, Pa. 629,433, pub. 4–10–56. Cl. 22.
Baer, Dave, Hosiery Mill, Inc., Rock Hill, S. C. 609,942. Am. 7(d). Cl. 39.
Baier, Wilhelm, K. G. Webasto-Werk, Stockdorf-Munich, Germany. 629,420, pub. 4–10–56. Cl. 19.
Bailey, Charity, and E. Holsaert, d. b. a. Sing A Song Co., New York, N. Y. 629,727, pub. 4–10–56. Cl. 107.
Baker & Co., Inc., Newark, N. J. 334,818, ren. 5–12–56. Cl. 44.
Ballinger, W. A., & Co., San Francisco, Calif. 629,507, pub. 4–10–56. Cl. 29.
Baron, Lawrence, Inc., Yonkers, N. Y. 521,849, canc. Cl. 45.
Bayard Shirt Corp., New York, N. Y. 629,752. Cl. 39.
Bayer, Pretzfelder & Mills, Inc., New York, N. Y. 629,489, pub. 4–10–56. Cl. 27.
Bayuk Cigars Inc.: *See*—
Webster Eisenlohr, Inc.
Bayuk Cigars Inc., Philadelphia, Pa. 332,175, ren. 2–4–56. Cl. 17.
Bayuk Cigars Inc., Philadelphia, Pa. 333,768, ren. 4–7–56. Cl. 17.
Bayuk Cigars Inc., Philadelphia, Pa. 337,576, ren. 8–11–56. Cl. 17.
Bearfoot Sole Co., Inc., The, Wadsworth, Ohio. 629,596, pub. 4–10–56. Cl. 39.
Beckman-Dawson Roofing Co., to The Flintkote Co., New York, N. Y. 337 892, ren. 8–25–56. Cl. 12.
Belrug Mills of South Carolina, Greenville, S. C. 629,606–7, pub. 4–10–56. Cl. 42.
Bendix Aviation Corp., Detroit, Mich. 521,823, canc. Cl. 21.
Berkshire Hathaway, Inc., Providence, R. I. 629,617, pub. 4–10–56. Cl. 42.
Bienaime Inc.: *See*—
Bienaime, Societe Anonyme, Neuilly-Sur-Seine.
Bienaime, Societe Anonyme, Neuilly-Sur-Seine, Seine, France, to Bienaime Inc., New York, N. Y. 337,023, ren. 7–28–56. Cl. 51.
Big Giant Mfg. Co., to International Jean Co., Inc., Chicago, Ill. 629,585, pub. 4–10–56. Cl. 39.
Binney & Smith Inc., New York, N. Y. 629,543–4, pub. 4–10–56. Cl. 37.
Blau, L., & Sons, Inc., Long Island, N. Y. 517,286, canc. Cl. 55.
Blue Buckle Overall Co., Inc., Lynchburg, Va., now by change of name Universal Overall Co., Inc., to Blue Ridge Manufacturers, Inc. 443,314, canc. Cl. 39.
Blue M Electric Co., Blue Island, Ill. 629,482, pub. 4–10–56. Cl. 26.
Blue Print Co., Inc., New York, N. Y. 629,711, pub. 4–10–56. Cl. 101.
Blue Ridge Mfg. Co.: *See*—
Blue Ridge Spread Co.
Blue Ridge Manufacturers, Inc.: *See*—
Blue Buckle Overall Co., Inc.
Blue Ridge Spread Co., d. b. a. Blue Ridge Mfg. Co., Dalton, Ga. 521,892, canc. Cl. 39.
Blust, Fred A., d. b. a. Reed Products Co., St. Louis, Mo. 629,669, pub. 4–10–56. Cl. 46.
Borden Co., The, New York, N. Y. 629,330, pub. 4–10–56. Cl. 5.
Botany Mills, Inc., Passaic, N. J. 521,778, canc. Cl. 39.
Bottlers Franchise Associates, Inc., Providence, R. I. 522,006, canc. Cl. 45.
Boulevard Recording Studio: *See*—
Kaltchuck, Harold O.
Bourns Laboratories, Inc., Riverside, Calif. 629,473–4, pub. 4–10–56. Cl. 26.
Bowen, Alfred J., Beloit, Wis. 521,827, canc. Cl. 23.
Bowman, Nancy G., Newport, Ky. 522,077, canc. Cl. 46.
Bown, Gene L., Portland, Oreg. 521,826, canc. Cl. 37.
Braden, Raymond S., d. b. a. Tru-Auto Parts Co., Los Angeles, Calif. 517,687, canc. Cl. 19.
Branigan, Green & Co., Baltimore, Md. 629,581, pub. 4–10–56. Cl. 39.
Brasil Oiticica S. A., Rio de Janeiro, Brazil. 336,565–6, ren. 7–7–56. Cl. 16.
Brazil Oiticica S. A., Rio de Janeiro, Brazil. 337,961, ren. 8–25–56. Cl. 16.
Brill, H. C., Co., Inc., Newark, N. J. 629,647, pub. 4–10–56. Cl. 46.
Broadcasting Publications, Inc., Washington, D. C. 629,744. Cl. 38.
Brock Candy Co., Chattanooga, Tenn. 629,671, pub. 4–10–56. Cl. 46.
Brundell, Per Gunnar, Gavle, Sweden. 629,465, pub. 4–10–56. Cl. 23.
Buchwald, Eva, Baltimore, Md. 522,083, canc. Cl. 46.
Butler Mfg. Co., Kansas City, Mo. 629,315, pub. 4–10–56. Cl. 2.
Butler Mfg. Co., Kansas City, Mo. 629,316, pub. 4–10–56. Cl. 2.
C & C Super Corp., New York, N. Y. 629,705, pub. 4–10–56. Cl. 100.
Caird, Francis (Canada) Ltd., Toronto, Ontario, Canada. 629,384, pub. 4–10–56. Cl. 13.
Cake Masters, The: *See*—
Cakemasters, Inc.
Cakemasters, Inc., d. b. a. The Cake Masters, New York, N. Y. 629,649, pub. 4–10–56. Cl. 46.
Calavo Growers of California: *See*—
Calavo Inc.
Calavo Inc., Los Angeles, Calif., now by merger Calavo Growers of California. 629,644, pub. 4–10–56. Cl. 46.

Calhoun, Clay J., d. b. a. Heartland Trading Co., New Orleans, La. 521,899, canc. Cl. 23.
California Forms, Inc., Hollywood, Calif. 521,968, canc. Cl. 39.
California Spray-Chemical Corp., Wilmington, Del. 629,332, pub. 2–14–56. Cl. 6.
Capezio, S., Inc., New York, N. Y. 629,597, pub. 4–10–56. Cl. 39.
Caprice Confections Co., New York, N. Y. 521,927, canc. Cl. 46.
Carmel, George, Inc., New York, N. Y. 629,582, pub. 4–10–56. Cl. 39.
Carrère, Maurice B., Paris, France. 522,039, canc. Cl. 51.
Carter Products, Inc., New York, N. Y. 629,413, pub. 4–10–56. Cl. 18.
Carter Products, Inc., New York, N. Y. 629,694, pub. 4–10–56. Cl. 51.
Celotex Corp., The, Chicago, Ill. 629,364, pub. 4–10–56. Cl. 12.
Central Soya Co., Inc., Fort Wayne, Ind. 629,653, pub. 4–10–56. Cl. 46.
Central Texas Iron Works, Waco, Tex. 629,362, pub. 4–10–56. Cl. 12.
Certified Gemologist Publishing Co., The: *See*—
Woodruff, Harry L.
Chadbourn Gotham, Inc.: *See*—
Chadbourn Hosiery Mills, Inc.
Chadbourn Hosiery Mills, Inc., Charlotte, N. C., now Chadbourn Gotham, Inc. 629,558, pub. 4–10–56. Cl. 39.
Chandler Mfg. Co. Inc., The, East Taunton, Mass. 629,537, pub. 4–10–56. Cl. 37.
Charles of the Ritz, Inc., New York, N. Y. 629,697, pub. 4–10–56. Cl. 51.
Chase, Jamie S.: *See*—
Chaser Co., The.
Chaser Co., The, to Jamie S. Chase, d. b. a. The Chaser Co., Memphis, Tenn. 629,638, pub. 4–10–56. Cl. 45.
Chatham Mfg. Co., Elkin, N. C. 629,605, pub. 4–10–56. Cl. 42.
Chemical Mfg. and Distributing Co.: *See*—
Schaad, Carl E.
Chemical Mfg. & Distributing Co., Easton, Pa. 422,317, canc. Cl. 4 and 52.
Chemical Mfg. & Distributing Co., Easton, Pa. 425,246, canc. Cl. 4.
Chemical Mfg. & Distributing Co., Easton, Pa. 431,416, canc. Cl. 52.
Chemical Specialties Inc., Oakland, Calif. 500,099, canc. Cl. 4.
Chesebrough Mfg. Co., Consolidated, to Chesebrough-Pond's Inc., New York, N. Y. 333,631, ren. 3–31–56. Cl. 6.
Chesebrough-Pond's Inc.: *See*—
Chesebrough Mfg. Co., Consolidated.
Chevette, Inc., New York, N. Y. 629,564, pub. 4–10–56. Cl. 39.
Chrysler Corp., Highland Park, Mich. 338,235, ren. 9–1–56. Cl. 19.
Cisco, Inc., New York, N. Y. 629,563, pub. 4–10–56. Cl. 39.
Clairol Inc., New York, N. Y. 629,700, pub. 4–10–56. Cl. 52.
Claster, Bertram H., d. b. a. Bert Claster Television Productions, Baltimore, Md. 629,728, pub. 4–10–56. Cl. 107.
Claster, Bert, Television Productions: *See*—
Claster, Bertram H.
Cleveland Gasket and Mfg. Co., The, Cleveland, Ohio. 629,522–3, pub. 4–10–56. Cl. 35.
Cleveland Twist Drill Co., The, Cleveland, Ohio. 629,469, pub. 4–10–56. Cl. 23.
Clothiers Corp., Chicago, Ill. 264,788, canc. Cl. 39.
Clover Farm Stores Corp., Cleveland, Ohio. 519,234, canc. Cl. 4.
Clover Farm Stores Corp., Cleveland, Ohio. 519,295, canc. Cl. 24.
Cluett, Peabody & Co., Inc., Troy, N. Y. 553,977, cor. Cl. 39.
Cluett, Peabody & Co., Inc., Troy, N. Y. 629,561, pub. 4–10–56. Cl. 39.
Coan, Vivienne M., d. b. a. Animal Foods Co., San Jose, Calif. 629,662, pub. 4–10–56. Cl. 46.
Cobblers Inc., Los Angeles, Calif. 629,583, pub. 4–10–56. Cl. 39.
Cohen, Harry, Seattle, Wash. 337,249, ren. 8–4–56. Cl. 42.
Cohen, Weenen & Co., London, England. 199,624, canc. Cl. 17.
Cohn-Hall-Marx Co., to United Merchants and Manufacturers, Inc., New York, N. Y. 334,051, ren. 4–21–56. Cl. 42.
Cohn-Hall-Marx Co., to United Merchants and Manufacturers, Inc., New York, N. Y. 334,146, ren. 4–21–56. Cl. 42.
Cohn, Jacob V., Detroit, Mich. 521,803, canc. Cl. 39.
Colgate-Palmolive Co.: *See*—
Colgate-Palmolive-Peet Co.
Colgate-Palmolive-Peet Co., to Colgate-Palmolive Co., Jersey City, N. J. 337,613, ren. 8–11–56. Cl. 52.
Collins Corp. of Georgia: *See*—
Redi-Aid Products, Inc.
Collins Leland S., d. b. a. Greenville Optical, Greenville, Pa. 629,390, pub. 4–10–56. Cl. 18.
Colonial Candy Corp., The, Morgantown, W. Va. 521,928, canc. Cl. 46.
Colorado Milling & Elevator Co., The, d. b. a. Salt Lake Flour Mills, Denver, Colo., and Salt Lake City, Utah. 521,838, canc. Cl. 46.
Columbus Coated Fabrics Corp., Columbus, Ohio. 443,143, canc. Cl. 42.
Columbus McKinnon Chain Corp., Tonawanda, N. Y. 629,381, pub. 4–10–56. Cl. 13.
Commissary Corp., Wooster, Ohio. 629,324, pub. 4–10–56. Cl. 2.
Connecticut Bandage Mills, Inc., Bridgeport, Conn. 629,630, pub. 4–10–56. Cl. 44.
Consolidated Lemon and Orange Co.: *See*—
Sunny Hills Ranch, Inc.
Consolidated Midland Corp., Katonah, N. Y. 629,397–400, pub. 4–10–56. Cl. 18.
Construct-O-Prop Industries: *See*—
Freeman, Paul E.
Cook, Christine E., d. b. a. Crowell Chemical Co., Carlstadt, N. J. 521,962, canc. Cl. 4.
Cooper, Eva, New York, N. Y. 629,680, pub. 4–10–56. Cl. 50.
Cooper, Harry D., & Co., Inc., Boston, Mass. 629,755. Cl. 42.
Copa Products, Inc., Beverly Hills, Calif. 629,698, pub. 4–10–56. Cl. 51.
Cordey China Co., Trenton, N. J. 629,353, pub. 4–10–56. Cl. 8.
Cordey China Co., Trenton, N. J. 629,687, pub. 4–10–56. Cl. 50.
Coro, Inc., New York, N. Y. 629,502, pub. 4–10–56. Cl. 28.
Cory Corp., Chicago, Ill. 629,547, pub. 4–10–56. Cl. 37.
Cory, Inc., New York, N. Y. 629,690–3, pub. 4–10–56. Cl. 51.
Courtaulds Ltd., London, England. 629,609, pub. 4–10–56. Cl. 42.
Craft Shoe Mfg. Co., Inc., to S. Koster, Philadelphia, Pa. 629,751. Cl. 39.
Craftint Mfg. Co., The: *See*—
Devoe & Raynolds Co., Inc.
Crampton-Farley Brass Co., by Crampton-Farley Mfg. Co., Kansas City, Mo. 108,548, 12(c) pub. 6–26–56. Cl. 13.
Crampton-Farley Mfg. Co.: *See*—
Crampton-Farley Brass Co.
Crookes Laboratories, Inc., New York, N. Y. 520,903, canc. Cl. 18.
Cross, Clifford W., Sr., d. b. a. Midwest Shoe Specialty Co., Des Moines, Iowa. 620,598, pub. 4–10–56. Cl. 39.
Crowell Chemical Co.: *See*—
Cook, Christine E.
Cullen, Max O., Chicago, Ill. 629,745. Cl. 38.
Cummings, E. M., Veneers, Inc., New Albany, Ind. 629,371, pub. 4–10–56. Cl. 12.
Curtis, A. W., Laboratories, Inc., Detroit, Mich. 629,695, pub. 4–10–56. Cl. 51.
Cutler, H. H., Co., Grand Rapids, Mich. 629,594, pub. 4–10–56. Cl. 39.
Dae Health Laboratories, Detroit, Mich., to Morgan Products Corp., New York, N. Y. 111,405, ren. 7–11–56. Cl. 6.
Dakota Enterprise, Inc., Bismarck, N. Dak. 516,613, canc. Cl. 6.
Dal Robes, Inc., New York, N. Y. 521,883, canc. Cl. 39.
Danfra Ltd., New Haven, Conn. 629,568, pub. 4–10–56. Cl. 39.
Dan River Mills, Inc., Danville, Va. 629,618–19, pub. 4–10–56. Cl. 42.
Darling Carriage Co., Inc., New York, N. Y. 629,421, pub. 4–10–56. Cl. 19.
Davol Rubber Co., Providence, R. I. 629,627, pub. 4–10–56. Cl. 44.
Delster Concentrator Co., The, Fort Wayne, Ind. 521,900, canc. Cl. 23.
De Laval Separator Co., The, Poughkeepsie, N. Y. 629,714, pub. 4–10–56. Cl. 103.
De Laval Steam Turbine Co., Trenton, N. J. 336,516, ren. 7–7–56. Cl. 23.
DeLuxe Saw and Tool Co., Louisville, Ky. 629,459–62, pub. 4–10–56. Cl. 23.
Denison Engineering Co., The, Columbus, Ohio. 629,455, pub. 4–10–56. Cl. 23.
Devoe & Raynolds Co., Inc., New York, N. Y., to The Craftint Mfg. Co., Cleveland, Ohio. 333,818, ren. 4–7–56. Cl. 16.
Diane Creations, Inc., New York, N. Y. 522,081, canc. Cl. 39.
Dickinson, Albert, Co., The, Chicago, Ill. 36,255, canc. Cl. 1.
Di Giorgio Fruit Corp.: *See*—
Santa Fe Vintage Co.
Dixie Wax Paper Co., Dallas, Tex., and Memphis, Tenn. 521,773, canc. Cl. 37.
Dixie Wholesale Co., Inc.: *See*—
Stokely Brothers & Co.
Dole Valve Co., The, Chicago, Ill. 629,519, pub. 4–10–56. Cl. 34.
Dollyanna Publishers Inc., Atlantic City, N. J. 629,529, pub. 4–10–56. Cl. 36.
Dorman, N., & Co., to N. Dorman & Co., Inc. (N. Y.), New York, N. Y. 336 623, ren. 7–14–56. Cl. 46.
Dorman, N., & Co., Inc. (N. Y.): *See*—
Dorman, N., & Co.
Douglas Fir Plywood Association, Tacoma, Wash. 629,366, pub. 4–10–56. Cl. 12.
Douglas, Gerald R., Charleston, W. Va. 629,730. Cl. 9.
Douglasdun Co.: *See*—
Dunning, Norman D.
Dranoff, Erwin, Philadelphia, Pa. 629,677, pub. 4–10–56. Cl. 50.
Duart Mfg. Co. Ltd., San Francisco, Calif. 333,052, ren. 3–10–56. Cl. 51.
Dubuque Packing Co., Dubuque, Iowa. 629,758. Cl. 46.
Dungeness Sales Co., Inc., Seattle, Wash. 522,011, canc. Cl. 46.
Dunn, Gilbert M., Penacook, N. H. 629,686, pub. 4–10–56. Cl. 50.
Dunning, Norman D., d. b. a. Douglasdun Co., Somerville, Va. 629,335, pub. 4–10–56. Cl. 6.
Dutchess Underwear Corp., New York, N. Y. 629,578–9, pub. 4–10–56. Cl. 39.
Dynacolor Corp., Brockport, N. Y. 629,483, pub. 4–10–56. Cl. 26.
Eagle-Picher Co., The, Cincinnati, Ohio. 629,429, pub. 4–10–56. Cl. 21.
Eastman Kodak Co., Rochester, N. Y. 629,485, pub. 4–10–56. Cl. 26.
Eastman Kodak Co., Rochester, N. Y. 629,626, pub. 4–10–56. Cl. 43.

Eclipse Sleep Products, Inc., Brooklyn, N. Y. 629,511, pub. 4–10–56. Cl. 32.
Edison, Thomas A., Inc., West Orange, N. J. 629,430, pub. 4–10–56. Cl. 21.
Educational Toy Co., Minneapolis, Minn. 629,516, pub. 4–10–56. Cl. 32.
Elmco Corp., The, Salt Lake City, Utah. 629,458, pub. 4–10–56. Cl. 23.
Ellsworth, Elmer, and Son, Tulsa, Okla. 629,501, pub. 4–10–56. Cl. 28.
Empire Brushes, Inc., Port Chester, N. Y. 629,504, pub. 4–10–56. Cl. 29.
Empire State Pickling Co., Phelps, N. Y. 112,264, canc. Cl. 46.
Erwin Mills, Inc., Durham, N. C. 629,620–1, pub. 4–10–56. Cl. 42.
Essick Mfg. Co., Los Angeles, Calif. 629,741. Cl. 34.
Eunice Holsaert: *See*—
Bailey, Charity, and Eunice Holsaert.
Eureka Specialty Printing Co., Scranton, Pa. 629,542, pub. 4–10–56. Cl. 37.
Everdure, Inc.: *See*—
Macdonald, Angus Snead, Corp.
Every Week Publishing Corp., New York, N. Y., to American Education Press, Inc., Columbus, Ohio, to Wesleyan University, Middletown, Conn. 337,271, ren. 8–4–56. Cl. 38.
Ewing, Jack B., Albuquerque, N. Mex. 629,317, pub. 4–10–56. Cl. 2.
F-R Machine Works, Inc., Woodside, N. Y. 629,476, pub. 4–10–56. Cl. 26.
Fairbanks, Morse & Co., Chicago, Ill. 629,426, pub. 4–10–56. Cl. 19.
Fall River Canning Co., Fall River, Wis. 351,868, 12(c) pub. 6–26–56. Cl. 46.
Falls Paper & Power Co., Oconto Falls, Wis. 521,760, canc. Cl. 37.
Farber Brothers, New York, N. Y. 175,868, canc. Cl. 28.
Federal Mill, Inc., Lockport, N. Y. 521,950, canc. Cl. 46.
Federal Telephone and Radio Corp., Clifton, N. J. 521,885, canc. Cl. 21.
Federated Department Stores, Inc.: *See*—
Abraham & Straus, Inc.
Finch Telecommunications, Inc., Passaic, N. J. 521,779, canc. Cl. 37.
Fischer, B., & Co., Inc., New York, N. Y. 629,763. Cl. 48.
Flintkote Co., The: *See*—
Beckman-Dawson Roofing Co.
Flo-Mix Fertilizers Corp., Houma, La. 615,717–18, cor. Cl. 23.
Flo-Mix Fertilizers Corp., Houma, La. 617,695–6, cor. Cl. 10.
Florball Inc., Salem, Conn. 522,084, canc. Cl. 22.
Foam Rubber Center Ltd., Passaic, N. J. 629,739. Cl. 32.
Fortune Toys Inc., Brooklyn, N. Y. 629,439, pub. 4–10–56. Cl. 22.
Fougera, E., & Co., Inc., New York, N. Y. 629,415, pub. 4–10–56. Cl. 18.
Fox River Paper Co., to Fox River Paper Corp., Appleton, Wis. 334,810–11, ren. 5–12–56. Cl. 37.
Fox River Paper Corp.: *See*—
Fox River Paper Co.
Fram Corp., Providence, R. I. 629,508, pub. 4–10–56. Cl. 31.
Frank, S. M., and Co., Inc.: *See*—
Reiss-Premier Corp., The.
Freedman-Mathews Corp., The, Milwaukee, Wis. 629,679, pub. 4–10–56. Cl. 50.
Freeman, Paul E., d. b. a. Construct-O-Prop Industries, Tallahassee, Fla. 629,512, pub. 4–10–56. Cl. 32.
Frosst, Charles E., & Co., Montreal, Quebec, Canada. 629,407–9, pub. 4–10–56. Cl. 18.
Fuller Brush Co., The, Hartford, Conn. 629,336, pub. 4–10–56. Cl. 6.
Gaines, Eugene F., Joplin, Mo. 629,359, pub. 4–10–56. Cl. 12.
Galanter, Archie, Brooklyn, N. Y. 516,581, canc. Cl. 4.
Galef, J. L., & Son, Inc., New York, N. Y. 629,354, pub. 4–10–56. Cl. 9.
Gallagher, Robert J., d. b. a. Little Creek Flooring Co., Harlingen, Tex. 629,514, pub. 4–10–56. Cl. 32.
Gancel, M., Co., Inc., New York, N. Y. 629,414, pub. 4–10–56. Cl. 18.
Ganns, Paulo, Niterol, Brazil. 521,768, canc. Cl. 49.
Garcia, Charles, & Co., Inc., New York, N. Y. 629,434, pub. 4–10–56. Cl. 22.
Gardella, Lena, Brooklyn, N. Y. 522,012, canc. Cl. 39.
Gardner Mfg. Co.: *See*—
National Electric Screen Co.
General Electric Co., Schenectady, N. Y. 629,386, pub. 4–10–56. Cl. 15.
General Ice Cream Corp., Schenectady, N. Y. 333,152–3, ren. 3–10–56. Cl. 46.
General Mills, Inc., Minneapolis, Minn. 629,346, pub. 4–10–56. Cl. 6.
General Tire & Rubber Co., The, Akron, Ohio. 629,602, pub. 4–10–56. Cl. 40.
Gettelman, A., Brewing Co., Milwaukee, Wis. 629,674, pub. 4–10–56. Cl. 48.
Gilbert, A. C., Co., The, New Haven, Conn. 629,427, pub. 4–10–56. Cl. 21.
Gillette Co., The, Boston, Mass. 629,702, pub. 4–10–56. Cl. 52.
Gimbel Brothers, Inc., New York, N. Y. 521,868, canc. Cl. 46.
Gland-O-Lac Co., The, Omaha, Nebr. 629,416, pub. 4–10–56. Cl. 18.
Glass Fibers, Inc., to L. O. F. Glass Fibers Co., Toledo, Ohio. 629,361, pub. 4–10–56. Cl. 12.
Glass, Jackson C. E., d. b. a. Mill Agents & Distributors, Oakland, Calif. 629,532, pub. 4–10–56. Cl. 37.
Goodyear Tire & Rubber Co., The, Akron, Ohio. 629,524, pub. 4–10–56. Cl. 35.
Graemere Lamp Corp., Chicago, Ill. 521,921, canc. Cl. 21.
Grant Co.: *See*—
Whiteside, Grant T.
Greater New York Restaurant and Luncheonette Suppliers Association, Brooklyn, N. Y. 629,757. Cl. 46.
Great Lakes Carbon Corp., New York, N. Y. 521,967, canc. Cl. 6.
Great Western Athletic Goods Co., to Wilson Sporting Goods Co., Chicago, Ill. 329,260, ren. 10–22–55. Cl. 22.
Green Co., Inc., The, Kansas City, Mo. 629,545, pub. 4–10–56. Cl. 37.
Green, H. L., Co., Inc., New York, N. Y. 629,592, pub. 4–10–56. Cl. 39.
Green, Robert M., & Sons, Inc., Philadelphia, Pa. 521,859, canc. Cl. 32.
Greenbros. Inc., Cincinnati, Ohio, to Charles Jacquin et Cie, Inc., Philadelphia, Pa. 334,794, ren. 5–12–56. Cl. 49.
Greenbros. Inc., Cincinnati, Ohio, to Charles Jacquin et Cie, Inc., Philadelphia, Pa. 337,293, ren. 8–4–56. Cl. 49.
Greenville Optical: *See*—
Collins, Leland S.
Griess-Pfleger Tanning Co., The, Waukegan, Ill. 629,313, pub. 4–10–56. Cl. 1.
Grove Laboratories, Inc., St. Louis, Mo. 629,699, pub. 4–10–56. Cl. 51.
Grumbacher, M., Inc., New York, N. Y. 629,505, pub. 4–10–56. Cl. 29.
Hagerstown Rubber Co., The, Hagerstown, Md. 629,750. Cl. 39.
Hales & Hunter Co., Chicago, Ill. 332,867, ren. 3–3–56. Cl. 46.
Haley and Raskob Enterprises, Inc., Richmond, Calif. 521,982, canc. Cl. 52.
Hall, C. P., Co., The, Akron, Ohio. 629,337, pub. 4–10–56. Cl. 6.
Hall, Robert, Clothes, Inc., New York, N. Y. 629,571, pub. 4–10–56. Cl. 39.
Haloid Co., The, Rochester, N. Y. 629,484, pub. 4–10–56. Cl. 26.
Hamilton Watch Co., Lancaster, Pa. 519,122, canc. Cl. 27.
Hammarlund Mfg. Co., Inc., The, New York, N. Y. 629,715, pub. 4–10–56. Cl. 103.
Handman, Maurice, d. b. a. Maurella Products Co., New York, N. Y. 521,814, canc. Cl. 51.
Hansen's, Chr., Laboratory, Inc., Little Falls, N. Y. 629,334, pub. 4–10–56. Cl. 6.
Hartford, Charles E., Savannah, Ga. 522,075, canc. Cl. 4.
Hartol Petroleum Corp.: *See*—
Hartol Products Corp.
Hartol Products Corp., to Hartol Petroleum Corp., New York, N. Y. 333,343, ren. 3–17–56. Cl. 15.
Haskelite Mfg. Corp., Grand Rapids, Mich. 629,367–8, pub. 4–10–56. Cl. 12.
Hassenfeld Bros., Inc., Central Falls, R. I. 629,435–8, pub. 4–10–56. Cl. 22.
Hayden, Irene R., New York, N. Y. 629,658, pub. 4–10–56. Cl. 46.
Hartland Trading Co.: *See*—
Calhoun, Clay J.
Helleman, G., Brewing Co., La Crosse, Wis. 629,673, pub. 4–10–56. Cl. 48.
Heldreich, Ronald H., Honolulu, Hawaii. 629,495, pub. 4–10–56. Cl. 28.
Hiller Bros. & Hiller, Inc., New York, N. Y. 629,593, pub. 4–10–56. Cl. 39.
Hinken, J. O., d. b. a. Wikomi Mfg. Co., Litchfield, Ill. 629,451, pub. 4–10–56. Cl. 23.
Hodge, Woodrow W., d. b. a. Zodiac Turf Prediction Co., Chicago, Ill. 629,746. Cl. 38.
Hoffman, R., Inc., Brooklyn, N. Y. 629,591, pub. 4–10–56. Cl. 39.
Hollywood-Maxwell Co., Los Angeles, Calif. 629,588, pub. 4–10–56. Cl. 39.
Hollywood Silk Products, Inc., Los Angeles, Calif. 629,569, pub. 4–10–56. Cl. 39.
Homestead Valve Mfg. Co., Coraopolis, Pa. 109,097, ren. 3–21–56. Cl. 13.
Honey Bee Co., Chicago, Ill. 521,880, canc. Cl. 46.
House & Garden Nurseries, Levittown, Pa. 629,309, pub. 4–10–56. Cl. 1.
Howard Stores Corp., Brooklyn, N. Y. 629,576, pub. 4–10–56. Cl. 39.
Huffman Full Fashioned Mills, Inc., Morganton, N. C. 505 525, canc. Cl. 39.
Humble Oil & Refining Co., Houston, Tex. 629,340, pub. 4–10–56. Cl. 6.
Humphreys Medicine Co. Inc., New York, N. Y. 522,030, canc. Cl. 18.
Hunt, Horace A., Chicago, Ill. 433,509, canc. Cl. 21.
Illinois Athletic Club, The, Chicago, Ill. 332,566, ren. 2–18–56. Cl. 38.
Imperial Belting Co., Chicago, Ill. 629,525–6, pub. 4–10–56. Cl. 35.
Imperial Paper and Color Corp., Glens Falls, N. Y. 629,343–5, pub. 4–10–56. Cl. 6.
Indian Head Mills, Inc., New York, N. Y. 629,624, pub. 4–10–56. Cl. 42.
Institute of Appliance Manufacturers, Washington, D. C. 629,707, pub. 4–10–56. Cl. 100.
Interamerican Importing Co., Peoria, Ill. 629,494, pub. 4–10–56. Cl. 28.
International Jean Co., Inc.: *See*—
Big Giant Mfg. Co.
International Milling Co.: *See*—
Midland Flour Milling Co., The.
International Minerals and Chemical Corp., Chicago, Ill. 629,453, pub. 4–10–56. Cl. 23.
International Model Aircraft Ltd., Merton, London, England. 629,444, pub. 4–10–56. Cl. 22.

International Shoe Co., St. Louis, Mo. 629,601, pub. 4–10–56. Cl. 39.
International Silver Co., The, Meriden, Conn. 629,496, pub. 4–10–56. Cl. 28.
International Supply Co., d. b. a. Quick-Klean Co., Cambridge, Mass. 629,767. Cl. 52.
International Vibration Co., The, Cleveland, Ohio. 629,468, pub. 4–10–56. Cl. 23.
Isaacs, I. C., & Co., Inc., Baltimore, Md. 629,565, pub. 2–14–56. Cl. 39.
Isenberg, William, Los Angeles, Calif. 629,360, pub. 4–10–56. Cl. 12.
Italian Swiss Colony, San Francisco, Calif. 629,760. Cl. 47.
Jackson Broom & Mop Co.: *See*—
Roberts, Sammie L.
Jackson, Earle G., Houston, Tex. 629,639, pub. 4–10–56. Cl. 45.
Jacquin, Charles, et Cie., Inc.: *See*—
Greenbros, Inc.
Sheffield Dentifrice Co.
Jacquin, Charles, et Cie., Inc., Philadelphia, Pa. 435,863, 12(c) pub. 6–26–56. Cl. 49.
Jaymar Specialty Co., Brooklyn, N. Y. 629,446, pub. 4–10–56. Cl. 22.
Jewel Tea Co., Inc., Barrington, Ill. 521,867, canc. Cl. 46.
Jo-Han Models Inc., Detroit, Mich. 629,447, pub. 4–10–56. Cl. 22.
Johns-Manville Corp., New York, N. Y. 629,521, pub. 4–10–56. Cl. 35.
Johns-Manville Corp., New York, N. Y. 334,795, ren. 5–12–56. Cl. 35.
Joseph & Feiss Co., The, Cleveland, Ohio. 629,557, pub. 4–10–56. Cl. 39.
Jurid Werke Aktiengesellschaft, Dusseldorf-Grafenberg, Germany. 629,378, pub. 4–10–56. Cl. 13.
Kaltchuck, Harold O., d. b. a. Boulevard Recording Studio, Chicago, Ill. 629,530, pub. 4–10–56. Cl. 36.
Katz Underwear Co., Honesdale, Pa. 629,753. Cl. 39.
Kearney, James R., Corp., St. Louis, Mo. 521,782, canc. Cl. 21.
Keeley, Muriel R., New York, N. Y. 629,688, pub. 4–10–56. Cl. 51.
Kellogg Co., Battle Creek, Mich. 629,759. Cl. 46.
Kellogg, R. R., Imprinted Advertising, Inc., Los Angeles, Calif. 522,048, canc. Cl. 38.
Kelp Laboratories: *See*—
Walsh, Michael J.
Kemlite Corp., Joliet, Ill. 629,311, pub. 4–10–56. Cl. 1.
Kemp, David, d. b. a. New York Drop Cloth Mfg. Co., Long Island City, N. Y. 629,685, pub. 4–10–56. Cl. 50.
Keystone Laboratories, Inc., d. b. a. Vi-Tal 22 Co., Memphis, Tenn. 629,405, pub. 4–10–56. Cl. 18.
Keystone Lamp Mfg. Corp., Slatington, Pa. 521,979, canc. Cl. 21.
Killgore, Charles, Co., Inc., Yonkers, N. Y. 522,056, canc. Cl. 46.
Kiwanis International, Chicago, Ill. 629,703, pub. 4–10–56. Cl. 100.
Kjellstrom, Bjorn, d. b. a. American Orienteering Service, New York, N. Y. 629,724, pub. 4–10–56. Cl. 107.
Klein, D., & Son, New York, N. Y. 629,603, pub. 4–10–56. Cl. 41.
Kleinert, I. B., Rubber Co., New York, N. Y. 629,608, pub. 4–10–56. Cl. 42.
Kobrand Corp., New York, N. Y. 629,675, pub. 4–10–56. Cl. 49.
Koenig Iron Works, Inc., Houston, Tex. 629,424, pub. 4–10–56. Cl. 19.
Kordell Sportswear, Inc., New York, N. Y. 629,625, pub. 4–10–56. Cl. 42.
Koster, Samuel: *See*—
Craft Shoe Mfg. Co., Inc.
Krider Nurseries, Inc., The, Middlebury, Ind. 336,039, ren. 6–23–56. Cl. 38.
Kuhn, Blum & Co., Inc., Philadelphia, Pa. 629,616, pub. 4–10–56. Cl. 42.
L. O. F. Glass Fibers Co.: *See*—
Glass Fibers, Inc.
Labatt, John, Ltd., London, Ontario, Canada. 629,764–5. Cl. 48.
Lee Paper Co., Vicksburg, Mich. 629,535, pub. 4–10–56. Cl. 37.
Lehigh Products Co.: *See*—
Young, Rose.
L'Equilibre Biologique (Association Technique Pharmaceutique et Equilibre Biologique Reunis) Societe Anonyme, Commentry (Allier), France. 629,389, pub. 4–10–56. Cl. 18.
Lever Brothers Co.: *See*—
Pensodent Co., The.
Lever Brothers Co., New York, N. Y. 331,881, ren. 1–21–56. Cl. 52.
Lever Brothers Co., New York, N. Y. 333,687, ren. 3–31–56. Cl. 52.
Lever Brothers Co., New York, N. Y. 333,688, ren. 3–31–56. Cl. 4.
Levey, Harry, Bethpage, N. Y. 337,885, ren. 8–25–56. Cl. 22.
Levine, Max, d. b. a. Max Levine & Co., New York, N. Y. 521,949, canc. Cl. 39.
Levine, Max, & Co.: *See*—
Levine, Max.
Lewis, Ted W., Fort Worth, Tex. 629,369, pub. 4–10–56. Cl. 12.
Liberty Hardware Mfg. Corp., Long Island City, N. Y. 629,377, pub. 4–10–56. Cl. 13.
Lickle, Jarrett S., New Hope, Pa. 629,725, pub. 4–10–56. Cl. 107.
Lignacraft, Binghamton, N. Y. 629,706, pub. 4–10–56. Cl. 100.
Lincoln Engineering Co., St. Louis, Mo. 522,064, canc. Cl. 23.
Lippi, O., & Co.: *See*—
Lippi, Otto.
Lippi, Otto, d. b. a. O. Lippi & Co., San Francisco, Calif. 522,063, canc. Cl. 46.
Little Creek Flooring Co.: *See*—
Gallagher, Robert J.
Loft Candy Corp., Long Island City, N. Y. 521,800, canc. Cl. 46.
Loft Candy Corp., Long Island City, N. Y. 629,655, pub. 4–10–56. Cl. 46.
Lofties Knitting Mills, Inc., Brooklyn, N. Y. 629,553, pub. 4–10–56. Cl. 39.
Long-Bell Lumber Co., The, Longview, Wash. 629,373, pub. 4–10–56. Cl. 12.
Lonza Electric and Chemical Works Ltd., Basel, Switzerland. 629,517, pub. 4–10–56. Cl. 32.
Lord Sanford Shirt Co. Inc., Brooklyn, N. Y. 521,894, canc. Cl. 39.
Louvic Watch, Inc., New York, N. Y. 629,503, pub. 4–10–56. Cl. 28.
Lowe Brothers Co., The, Dayton, Ohio. 194,107. Am. 7(d). Cl. 16.
Lubrizol Corp., The, Wickliffe, Ohio. 629,358, pub. 4–10–56. Cl. 12.
Lux Clock Mfg. Co., Inc., The, Waterbury, Conn. 629,490–3, pub. 4–10–56. Cl. 27.
Lykes Bros. Inc., Tampa, Fla. 629,660–1, pub. 4–10–56. Cl. 46.
M. B. S. Mfg. Corp., New York, N. Y. 521,850, canc. Cl. 39.
M. W. Corp., Houston, Tex. 521,754, canc. Cl. 26.
Mac Distributors, Robbins, Ill. 629,412, pub. 4–10–56. Cl. 18.
Macdonald, Angus Snead, Corp., d. b. a. Everdure, Inc., Orange, Va. 629,722, pub. 4–10–56. Cl. 106.
Maclennan & Maclennan Ltd., Stornoway, Isle of Lewis, Outer Hebrides, Scotland. 629,754. Cl. 42.
Malt-A-Plenty, Inc., Tulsa, Okla. 629,323, pub. 4–10–56. Cl. 2.
Maltine Co., The, to Merck & Co., Inc., Rahway, N. J. 541,026, new cert. Cl. 18.
Manchester Hosiery Mills, Manchester, N. H. 629,554, pub. 4–10–56. Cl. 39.
Mancini, Victor, d. b. a. Victor Mancini Enterprises, Cleveland, Ohio. 629 652, pub. 4–10–56. Cl. 46.
Mancini, Victor, Enterprises: *See*—
Mancini, Victor.
Manhattan Brush Co., Inc., New York, N. Y. 629,736. Cl. 29.
Manning, Frank W.: *See*—
Rickerfor, Alfred G.
Manning, Joseph P., Co., Boston, Mass. 522,010, canc. Cl. 17.
Manu-Mine Research & Development Co., Mohnton, Pa. 629,716, pub. 4–10–56. Cl. 103.
Maple Leaf Mfg. Co., Inc., Holyoke, Mass. 629,521, pub. 4–10–56. Cl. 37.
Marques, Neves & Companhia, Limitada, Matosinhos, Portugal. 629,643, pub. 4–10–56. Cl. 46.
Marx, Louis, & Co., Inc., New York, N. Y. 629,440, pub. 4–10–56. Cl. 22.
Marylike Fashion Center, Inc., Bartelso, Ill. 629,599, pub. 4–10–56. Cl. 39.
Massengill, S. E., Co., The, Bristol, Tenn. 629,406, pub. 4–10–56. Cl. 18.
Mathiews, Sue A., Summit, N. J. 629,586, pub. 4–10–56. Cl. 39.
Maurelia Products Co.: *See*—
Handman, Maurice.
Max Furs, Inc., New York, N. Y. 521,923, canc. Cl. 39.
Maxwell, Leo, Co., Inc., Oklahoma City, Okla. 521,913, canc. Cl. 32.
McAfee, Clifton M., Wichita, Kans. 521,917, canc. Cl. 32.
McIlhenny Co., New Iberia, La. 629,641, pub. 4–10–56. Cl. 46.
McMullen, R. O. C., Portland, Oreg. 629,352, pub. 4–10–56. Cl. 8.
McNaulin, Inc., Milwaukee, Wis. 629,518, pub. 4–10–56. Cl. 34.
Mead Johnson & Co., Evansville, Ind. 629,631–2, pub. 4–10–56. Cl. 44.
Merck & Co., Inc.: *See*—
Maltine Co., The.
Merck & Co., Inc., Rahway, N. J. 336,518, ren. 7–7–56. Cl. 6.
Merck & Co., Inc., Rahway, N. J. 629,402–3, pub. 4–10–56. Cl. 18.
Meseroll & Borowsky, Philadelphia, Pa. 522,065, canc. Cl. 44.
Mevercord Co., The, Chicago, Ill. 629,467, pub. 4–10–56. Cl. 23.
Midland Chemical Laboratories, Inc., Dubuque, Iowa. 335,948, ren. 6–16–56. Cl. 16.
Midland Chemical Laboratories, Inc., Dubuque, Iowa. 335,949, ren. 6–16–56. Cl. 6.
Midland Flour Milling Co., The, also d. b. a. Slater Mill and Elevator Co., North Kansas City, Mo., to International Milling Co., Minneapolis, Minn. 521,785, canc. Cl. 46.
Mid-West Refineries, Inc., Grand Rapids, Mich. 507,594, canc. Cl. 21.
Midwest Shoe Specialty Co.: *See*—
Cross, Clifford W., Sr.
Mill Agents & Distributors: *See*—
Glass, Jackson C. E.
Milsan Mills, Inc., Lebanon, Pa. 629,570, pub. 4–10–56. Cl. 39.
Milwaukee Lace Paper Co., Milwaukee, Wis. 521,991, canc. Cl. 37.
Mishawaka Rubber and Woolen Mfg. Co., Mishawaka, Ind. 521,954, canc. Cl. 39.
Mister Short Co., The, Chicago, Ill. 521,938–9, canc. Cl. 39.

Modern Carpet Sweeper Co., Inc., New York, N. Y. 521,848, canc. Cl. 23.
Moesch, Gertrude M., Buffalo, N. Y. 629,445, pub. 4–10–56. Cl. 22.
Mohawk Carpet Mills, Inc., Amsterdam, N. Y. 629,610–13, pub. 4–10–56. Cl. 42.
Monsanto Chemical Co., St. Louis, Mo. 629,341, pub. 4–10–56. Cl. 6.
Montana Flour Mills Co., Great Falls, Mont. 111,752, ren. 8–1–56. Cl. 46.
Montana Flour Mills Co., Great Falls, Mont. 111,898, ren. 8–8–56. Cl. 46.
Montana Flour Mills Co., Great Falls, Mont. 334,318, ren. 4–28–56. Cl. 46.
Montgomery Brothers, San Francisco, Calif. 521,940, canc. Cl. 21.
Moore-Day Motors, Inc., Washington, D. C. 522,035, canc. Cl. 103.
Moore, William S., d. b. a. Moore's of Ohio, Newark, Ohio. 521,876, canc. Cl. 2.
Moore's of Ohio: *See*—
Moore, William S.
Moorlane Co., Tulsa, Okla. 333,439, ren. 3–24–56. Cl. 26.
Morehouse, Silas A., Glendale, Calif. 521,971, canc. Cl. 37.
Morgan Products Corp.: *See*—
Dae Health Laboratories.
Van Horn & Sawtell.
Morton, Walter S., Chicago, Ill. 629,645–6, pub. 4–10–56. Cl. 46.
Mosaic Tile Co., The, Zanesville, Ohio. 273,090, 12(c) pub. 6–26–56. Cl. 12.
Mount Vernon-Woodberry Mills, Inc., Baltimore, Md. 112,210, ren. 8–22–56. Cl. 42.
Muirhead Canning Co.: *See*—
Muirhead, S. A.
Muirhead, S. A., d. b. a. Muirhead Canning Co., The Dalles, Oreg. 629,642, pub. 2–1–55. Cl. 46.
Mustad, O., & Son, Oslo, Norway. 517,854, canc. Cl. 13.
NEA Service, Inc., Cleveland, Ohio. 338,034, ren. 8–25–56. Cl. 38.
Naamloze Vennootschap Kristal-, Glas en Aardewerkfabrieken "de Sphinx" Voorheen Petrus Regout & Co., Maastricht, Netherlands. 629,376, pub. 4–10–56. Cl. 13.
National Chain Co., Providence, R. I. 629,735. Cl. 28.
National Electric Screen Co., Chicago, Ill., to Gardner Mfg. Co., Horicon, Wis. 331,665, ren. 1–14–56. Cl. 21.
National Industries for the Blind, New York, N. Y. 521,739, canc. Cl. 39.
National Institute of Drycleaning, Inc., Silver Spring, Md. 629,704, pub. 4–10–56. Cl. 100.
National Marking Machine Co., The, Cincinnati, Ohio. 335,412, ren. 6–2–56. Cl. 24.
National Merchandising Corp., New York, N. Y. 629,622, pub. 4–10–56. Cl. 42.
National Motel Shows, The, Philadelphia, Pa. 629,713, pub. 4–10–56. Cl. 101.
Neely, Clarence L., d. b. a. Neely Mfg. Co., to Neely Mfg. Co., Corydon, Iowa. 629,314, pub. 4–10–56. Cl. 2.
Neely Mfg. Co.: *See*—
Neely, Clarence L.
Nelson Chemical Co., Detroit, Mich. 629,701, pub. 4–10–56. Cl. 52.
Neisner Bros. Inc., Rochester, N. Y. 259,853, canc. Cl. 39.
Nesco, Division of New York Shipbuilding Corp.: *See*—
New York Shipbuilding Corp.
Nevins Co., The, Clifton, N. J. 629,551–2, pub. 4–10–56. Cl. 38.
Newberry, J. J., Co., New York, N. Y. 629,566, pub. 4–10–56. Cl. 39.
Newberry, J. J., Co., New York, N. Y. 629,567, pub. 4–10–56. Cl. 39.
New Era Optical Co., Chicago, Ill. 333,160, ren. 3–10–56. Cl. 26.
New Jersey Machine Corp., Hoboken, N. J. 629,456, pub. 4–10–56. Cl. 23.
New Standard Baking Co., Philadelphia, Pa. 629,651, pub. 4–10–56. Cl. 46.
Newton Mfg. Corp., Newton, Mass. 629,370, pub. 4–10–56. Cl. 12.
New York Drop Cloth Mfg. Co.: *See*—
Kemp, David.
New York Shipbuilding Corp., d. b. a. Nesco, Division of New York Shipbuilding Corp., Milwaukee, Wis. 629,319–22, pub. 4–10–56. Cl. 2.
Nichols & Clark, Inc., Hathorne, Mass. 629,636, pub. 4–10–56. Cl. 44.
Nicholson File Co., Providence, R. I. 335,229, 12(c) pub. 6–26–56. Cl. 23.
Niemeijer, Theodorus, Ltd., Groningen, Netherlands. 629,654, pub. 4–10–56. Cl. 46.
Niersbach, Milton P., d. b. a. Pride of Petaluma Brooder Stove Co., Petaluma, Calif. 629,682, pub. 4–10–56. Cl. 50.
None Better Pushoe Co., Santa Ana, Calif. 629,457, pub. 4–10–56. Cl. 23.
Norwich Mills Inc., Norwich, N. Y. 629,562, pub. 4–10–56. Cl. 39.
Nordberg Mfg. Co., Milwaukee, Wis. 629,452, pub. 4–10–56. Cl. 23.
Northam Warren Corp., Stamford, Conn. 338,074, ren. 8–25–56. Cl. 44.
Ogden Brothers: *See*—
Valley Forge Envelope & Paper Co.
Ohio Advertising Display Co., The, Cincinnati, Ohio. 521,955, canc. Cl. 21.
Olin Mathieson Chemical Corp., New York, N. Y. 629,401, pub. 4–10–56. Cl. 18.
Omar, Inc., Omaha, Nebr. 521,903–4, canc. Cl. 46.
Orcino, Pierre V.: *See*—
Orcino, Pietro V.
Orcino, Pietro V., d. b. a. Pierre V. Orcino and Avignone Freres, Washington, D. C. 629,709–10, pub. 4–10–56. Cl. 100.
Ormig Corp., New York, N. Y., to "Ormig" Organisationsmittel G. m. b. H., Berlin, Germany. 334,417, ren. 5–5–56. Cl. 23.
"Ormig" Organisationsmittel G. m. b. H.: *See*—
Ormig Corp.
Osmose Corp. of America, to Osmose Wood Preserving Co. of America, Inc., Buffalo, N. Y. 336,697, ren. 7–14–56. Cl. 6.
Osmose Wood Preserving Co. of America, Inc.: *See*—
Osmose Corp. of America.
Ouellette, Alfred J., St. Paul, Minn. 629,510, pub. 4–10–56. Cl. 32.
Outboard, Marine & Mfg. Co., Waukegan, Ill. 629,450, pub. 4–10–56. Cl. 23.
Outboard, Marine & Mfg. Co., Waukegan, Ill. 629,472, pub. 4–10–56. Cl. 23.
Ovalstrapping, Inc., Hoquiam, Wash. 629,374, pub. 4–10–56. Cl. 13.
Owen, D. T., Co., The, East Cleveland, Ohio. 75,839, canc. Cl. 32.
Oxford Mfg. Co., Inc., d. b. a. Topcraft Co., Atlanta, Ga. 521,896, canc. Cl. 39.
Oxford Paper Co., New York, N. Y. 522,014, canc. Cl. 37.
Pabst Brewing Co.: *See*—
Premier-Pabst Corp.
Pacific Foundry Co., Ltd., San Francisco, Calif. 337,573, ren. 8–11–56. Cl. 23.
Packers' Laboratory, The: *See*—
Poling, Robert.
Palmer Candy Co.: *See*—
Palmer, Winogene E., Edward C. Palmer, and William B. Palmer, Jr.
Palmer, Edward C.: *See*—
Palmer, Winogene E., Edward C. Palmer, and William B. Palmer, Jr.
Palmer, William B.: *See*—
Palmer, Winogene E., Edward C. Palmer, and William B. Palmer, Jr.
Palmer, William B., Jr.: *See*—
Palmer, Winogene E., Edward C. Palmer, and William B. Palmer, Jr.
Palmer, Winogene E., Edward C. Palmer, and William B. Palmer, Jr., trustees of the estate of William B. Palmer, d. b. a. Palmer Candy Co., Sioux City, Iowa. 521,716, canc. Cl. 46.
Pan Condenser Co. Inc., Brooklyn, N. Y. 629,351, pub. 4–10–56. Cl. 8.
Paraderm Laboratories, Inc., Boston, Mass. 629,391–4, pub. 4–10–56. Cl. 18.
Paraffine Companies, Inc., The, San Francisco, Calif. 521,830, canc. Cl. 20.
Paraffine Companies, Inc., The, San Francisco, Calif. 521,831, canc. Cl. 21.
Paragon Molding Co., Melrose Park, Ill. 629,318, pub. 4–10–56. Cl. 2.
Parsons Co., The, Detroit, Mich., to Parsons Corp. 521,934, canc. Cl. 32.
Parsons Corp: *See*—
Parsons Co., The.
Patou, Jean, Inc., New York, N. Y. 338,268, ren. 9–1–56. Cl. 6.
Patterson Foundry & Machine Co., The, East Liverpool, Ohio. 629,732. Cl. 23.
Patterson-Sargent Co., The, Cleveland, Ohio. 629,731. Cl. 16.
Peerless Paper Mills, Inc., The, Oaks, Pa. 263,805, canc. Cl. 37.
Pennsylvania Tire Co., Mansfield, Ohio. 629,520, pub. 4–10–56. Cl. 35.
Penton Publishing Co., The, Cleveland, Ohio. 629,749. Cl. 38.
Peper, Christian, Tobacco Co., d. b. a. John E. Tuckett and Son, St. Louis, Mo. 521,846, canc. Cl. 17.
Pepperell Mfg. Co., Boston, Mass. 629,623, pub. 4–10–56. Cl. 42.
Pepsodent Co., The, Chicago, Ill., to Lever Brothers Co., New York, N. Y. 110,079, ren. 5–2–56. Cl. 6.
Perfection Mattress & Spring Co., Birmingham, Ala. 629,513, pub. 4–10–56. Cl. 32.
Personal Products Corp., New Brunswick Township, New Brunswick, N. J. 629,629, pub. 4–10–56. Cl. 44.
Peter Pan Foundations, Inc., New York, N. Y. 629,589, pub. 4–10–56. Cl. 39.
Peterbilt Motors Co., Oakland, Calif. 629,425, pub. 4–10–56. Cl. 19.
Petersen Oven Co., The, Franklin Park, Ill. 629,454, pub. 4–10–56. Cl. 23.
Pettibone Mulliken Corp., Chicago, Ill. 514,331, canc. Cl. 14.
Pfaelzer Brothers, Inc., Chicago, Ill. 333,175, ren. 3–10–56. Cl. 46.
Pfizer, Chas., & Co., Inc.: *See*—
Strowd, Wallace H.
Pfizer, Chas., & Co. Inc., Brooklyn, N. Y. 629,418–19, pub. 4–10–56. Cl. 18.
Philadelphia Chewing Gum Corp., Havertown, Pa. 629,666–8, pub. 4–10–56. Cl. 46.
Pierson, Harry H., Miami, Fla. 629,475, pub. 4–10–56. Cl. 26.
Piggly Wiggly Corp., Jacksonville, Fla. 629,665, pub. 4–10–56. Cl. 46.
Pliantform Foundations, Inc., New York, N. Y. 629,595, pub. 4–10–56. Cl. 39.
Poling, Robert, d. b. a. The Packers' Laboratory, Boston, Mass. 521,751, canc. Cl. 46.
Polymer Industrie Chimiche S. P. A., Milan, Italy, 629,308. Pub. 1–24–56, Cl. 1; pub. 3–27–56, Cl. 42; pub. 3–27–56, Cl. 43. (Consolidated certificate, Classes 1, 42 and 43.)
Premier-Pabst Corp., Peoria Heights, to Pabst Brewing Co., Chicago, Ill. 337,571, ren. 8–11–56. Cl. 48.

Pride of Petaluma Brooder Stove Co.: *See*—
Niersbach, Milton P.
Production and Marketing Co., Newton, Conn. 629,681, pub. 4–10–56. Cl. 50.
Prouvost Lefebvre of Rhode Island, Inc., Woonsocket, R. I. 629,307, pub. 4–10–56. Cl. 1.
Quick-Klean Co.: *See*—
International Supply Co.
R. & G. Distributors, Inc., New York, N. Y. 626,336, cor. Cl. 46.
Railroad Friction Products Corp., Wilmerding, Pa. 629,423. Pub. 4–3–56, Cl. 19; pub. 4–3–56, Cl. 23. (Consolidated certificate, Classes 19 and 23.)
Ramey Short Corp., Philadelphia, Pa. 629,556, pub. 4–10–56. Cl. 39.
Rayalarm, Inc., Chicago, Ill. 629,481, pub. 4–10–56. Cl. 26.
Ready Mixed Concrete Co., Kansas City, Mo. 522,062, canc. Cl. 12.
Recht, William, Co., Inc., New York, N. Y. 629,357, pub. 4–10–56. Cl. 11.
Red & White Corp., Chicago, Ill. 629,737. Cl. 29.
Redi-Aid Products, Inc., Wadley, Ga., now Collins Corp. of Georgia. 629,756. Cl. 45.
Reed Products Co.: *See*—
Blust, Fred A.
Regal Shirt Corp., New York, N. Y. 629,577, pub. 4–10–56. Cl. 39.
Reichhold Chemicals, Inc., Detroit, Mich. 629,331, pub. 4–10–56. Cl. 5.
Relsa-Premier Corp., The, West New York, N. J., to S. M. Frank and Co., Inc., New York, N. Y. 629,348, pub. 4–10–56. Cl. 8.
Reliance Laboratories: *See*—
Spicer, R. D., Jr.
Reliance Varnish Co., Inc., Louisville, Ky. 629,387, pub. 4–10–56. Cl. 16.
Religious Publishing Co., The, Greenwich, Conn. 629,548, pub. 4–10–56. Cl. 38.
Rembrandt Tobacco Corp. (Overseas) Ltd., Stellenbosch, Cape Province, Union of South Africa. 629,388, pub. 4–10–56. Cl. 17.
Revlon, Inc., New York, N. Y. 629,740. Cl. 32.
Rhoades Glove Co., The, Columbus, Ohio. 629,590, pub. 4–10–56. Cl. 39.
Richmond-Chase Co., San Jose, Calif. 518,993, canc. Cl. 46.
Rickerfor, Alfred G., to Frank W. Manning, New Orleans, La. 629,448, pub. 4–10–56. Cl. 22.
Robbins, Alfred, Organization, Inc., New York, N. Y. 629,349, pub. 4–10–56. Cl. 8.
Robbins and Huber, Inc., Cincinnati, Ohio. 522,070, canc. Cl. 19.
Robbins, L. M., Co.: *See*—
Robbins, Lewis M.
Robbins, Lewis M., d. b. a. L. M. Robbins Co., Haddonfield, N. J. 629,528, pub. 4–10–56. Cl. 35.
Roberts, Sammie L., d. b. a. Jackson Broom & Mop Co., Jackson, Tenn. 629,506, pub. 4–10–56. Cl. 29.
Roland Radio Corp., Mount Vernon, N. Y. 629,428, pub. 4–10–56. Cl. 21.
Rosenau Bros., Inc., to Rosenau Brothers, Inc., Philadelphia, Pa. 333,422, ren. 3–24–56. Cl. 39.
Rosenau Bros., Inc., to Rosenau Brothers, Inc., Philadelphia, Pa. 333,433, ren. 3–24–56. Cl. 39.
Rosenau Brothers, Inc.: *See*—
Rosenau Bros., Inc.
Royal Sewing Machine Corp., Brooklyn, N. Y. 629,733. Cl. 23.
Royal Souders, Inc., Dayton, Ohio. 629,404. Pub. 1–17–56, Cl. 46; pub. 3–20–56, Cl. 18. (Consolidated certificate, Classes 18 and 46.)
Rubicon, Inc., New York, N. Y. 629,533, pub. 4–10–56. Cl. 37.
Ruhrchemie Aktiengesellschaft, Oberhausen-Holten, North Rhine-Westphalia, Germany. 629,333, pub. 4–10–56. Cl. 6.
Ryan, Lawrence C., Daytona Beach, Fla. 629,432, pub 4–10–56. Cl. 22.
S. R. L. Mfg. Co., Los Angeles, Calif. 522,047, canc. Cl. 39.
Saf-T-Bak, Inc., Altoona, Pa. 629,559, pub. 4–10–56. Cl. 39.
St. Regis Paper Co., New York, N. Y. 629,534, pub. 4–10–56. Cl. 37.
Saks & Co., New York, N. Y. 629,637, pub. 4–10–56. Cl. 44.
Salt Lake Flour Mills: *See*—
Colorado Milling & Elevator Co., The.
Salt Water Control Inc., Fort Worth, Tex. 629,470–1, pub. 4–10–56. Cl. 23.
Sampson-Katzenberg, New York, N. Y. 521,937, canc. Cl. 39.
Sandy Hill Iron & Brass Works, The, Hudson Falls, N. Y. 629,463, pub. 4–10–56. Cl. 23.
Santa Fe Vintage Co., Los Angeles, to Di Giorgio Fruit Corp., San Francisco, Calif. 629,672, pub. 4–10–56. Cl. 47.
Santos, Manuel, d. b. a. Tosan Drug Co., New York, N. Y. 629,411, pub. 4–10–56. Cl. 18.
Schaad, Carl E., d. b. a. Chemical Mfg. and Distributing Co., Easton, Pa. 393,042, canc. Cl. 52.
Schaad, Carl E., d. b. a. Chemical Mfg. and Distributing Co., Easton, Pa. 404,176, canc. Cl. 52.
Scher, M. M., & Sons, Inc., Baltimore, Md. 629,604, pub. 9–7–54. Cl. 42.
Schettler, Theodore W., Jr., Cleveland, Ohio. 521,774, canc. Cl. 32.
Schleicher, F. Grant: *See*—
Schleicher, Francis G.
Schleicher, Francis G., d. b. a. F. Grant Schleicher, to W. D. Wilson Printing Ink Co. Ltd., Long Island City, N. Y. 337,692, ren. 8–18–56. Cl. 11.
Schmidt, H. H., Glove Co., Inc., New York, N. Y. 522,001–4, canc. Cl. 39.
Schulte, D. A., Inc., New York, N. Y. 521,860, canc. Cl. 37.
Schwitzer Corp.: *See*—
Schwitzer-Cummins Co.
Schwitzer-Cummins Co., Indianapolis, Ind., now Schwitzer Corp. 629,527, pub. 4–10–56. Cl. 35.
Sears, Roebuck and Co., Chicago, Ill. 333,253, ren. 3–10–56. Cl. 23.
Sears, Roebuck and Co., Chicago, Ill. 521,825, canc. Cl. 32.
Season Skipper, Inc.: *See*—
Shane, C. B., Corp.
Security Sash & Screen Co., Detroit, Mich. 629,365, pub. 4–10–56. Cl. 12.
Seidner, Milton, Arcadia, Calif. 629,385, pub. 4–10–56. Cl. 13.
Selby Shoe Co., The, Portsmouth, Ohio. 336,396, ren. 7–7–56. Cl. 39.
Septigyn Co., The, to M. G. Thompson, also known as Mrs. O. J. Thompson, trading as The O. J. Thompson Co., Dallas, Tex. 110,997, ren. 6–20–56. Cl. 18.
Servel, Inc., Evansville, Ind. 629,509, pub. 4–10–56. Cl. 31.
Shane, C. B., Corp., Chicago, Ill., to Season Skipper, Inc., Cleveland, Ohio. 333,898, ren. 4–14–56. Cl. 39.
Sheffield Dentifrice Co., New London, Conn., and New York, N. Y., by Charles Jacquin et Cie., Inc., Philadelphia, Pa. 92,728, 12(c) pub. 6–26–56. Cl. 49.
Sheffield Merchandise, Inc., New York, N. Y. 629,486, pub. 4–10–56. Cl. 27.
Shell Oil Co., San Francisco, Calif., to Shell Oil Co., New York, N. Y. 337,115, ren. 7–28–56. Cl. 15.
Shepherd, Marshall L., Myrtle Beach, S. C. 629,443, pub. 4–10–56. Cl. 22.
Sheraton Corp. of America, Boston, Mass. 629,708, pub. 4–10–56. Cl. 100.
Sherman, Robert M., d. b. a. The Special Preparations Co., New York, N. Y. 629,689, pub. 4–10–56. Cl. 51.
Shinderman Management Corp., Chicago, Ill. 629,718, pub. 4–10–56. Cl. 105.
Sigman, A., & Son, Philadelphia, Pa. 521,818, canc. Cl. 39.
Silvel Mfg. Co., Los Angeles, Calif. 629,499, pub. 4–10–56. Cl. 28.
Simmon Brothers, Inc., Long Island City, N. Y. 436,745, canc. Cl. 26.
Simmons Tours, Inc., New York, N. Y. 337,972, ren. 8–25–56. Cl. 38.
Sing A Song Co.: *See*—
Bailey, Charity, and Eunice Holsaert.
Singer Mfg. Co., The, Elizabeth, N. J. 629,375. Pub. 6–28–55, Cl. 23; pub. 6–28–55, Cl. 43; pub. 6–28–55, Cl. 21; pub. 9–13–55, Cl. 13; pub. 12–20–55, Cl. 25; pub. 12–20–55, Cl. 24; pub. 12–27–55, Cl. 15; pub. 12–27–55, Cl. 40; pub. 1–3–56, Cl. 32; pub. 3–20–56, Cl. 22. (Consolidated certificate, Classes 13, 15, 21, 22, 23, 24, 25, 32, 40, and 43.)
Sitroux, Inc., New York, N. Y. 521,888, canc. Cl. 39.
Skinner Irrigation Co., The, Troy, Ohio. 629,379, pub. 4–10–56. Cl. 13.
Slater Mill and Elevator Co.: *See*—
Midland Flour Milling Co., The.
Smith, Kline & French Laboratories, Philadelphia, Pa. 333,090, ren. 3–10–56. Cl. 18.
Societe Anonyme Marne & Champagne, Epernay, France. 521,910, canc. Cl. 47.
Society Club Hats Corp., New York, N. Y. 521,953, canc. Cl. 39.
Southern Advance Bag & Paper Co. Inc., Bangor, Maine, and Boston, Mass. 515,242, canc. Cl. 37.
Southern Advance Bag & Paper Co. Inc., Bangor, Maine, and Boston, Mass. 522,033, canc. Cl. 2.
Spicer, R. D., Jr., d. b. a. Reliance Laboratories, San Diego, Calif. 522,041–2, canc. Cl. 51.
Spear Engineering Co.: *See*—
Spear, Wendell C.
Spear, Wendell C., d. b. a. Spear Engineering Co., Colorado Springs, Colo. 629,678, pub. 4–10–56. Cl. 50.
Special Preparations Co., The: *See*—
Sherman, Robert M.
Sportleigh Hall, Inc., New York, N. Y. 629,572, pub. 4–10–56. Cl. 39.
Staley Milling Co., North Kansas City, Mo. 629,663, pub. 4–10–56. Cl. 46.
Standard Brands Inc., New York, N. Y. 629,640, pub. 4–10–56. Cl. 45.
Standard Packaging Corp., Chicago, Ill. 629,538, pub. 4–10–56. Cl. 37.
Stanley Greetings, Inc., Dayton, Ohio. 521,986, canc. Cl. 37.
Starillian Lapidaries, Inc., New York, N. Y. 629,500, pub. 4–10–56. Cl. 28.
Stedman Mfg. Co., Asheboro, N. C. 521,925, canc. Cl. 39.
Stenson Twine Co., Minneapolis, Minn. 629,729. Cl. 7.
Stevens, J. P., & Co., Inc., New York, N. Y. 629,614, pub. 4–10–56. Cl. 42.
Stevens Products, Inc., East Orange, N. J. 629,431, pub. 4–10–56. Cl. 21.
Stewart-Warner Corp., Chicago, Ill. 521,854, canc. Cl. 21.
Stickell, D. A., & Sons, Inc., Hagerstown, Md. 629,656–7, pub. 4–10–56. Cl. 46.
Stokeley Brothers & Co., Newport, Tenn., to Dixie Wholesale Co., Inc., Atlanta, Ga. 108,272, ren. 1–25–56. Cl. 46.
Straus, Royer, & Strass, Inc., Baltimore, Md., by Susquehanna Waist Co., Upland, Pa. 329,864, 12(c) pub. 6–26–56. Cl. 39.
Strowd, Wallace H., Nashville, Tenn., by Chas. Pfizer & Co., Inc., Brooklyn, N. Y. 379,735, 12(c) pub. 6–26–56. Cl. 46.
Studner, D. M., New York, N. Y. 629,555, pub. 4–10–56. Cl. 39.
Sunbeam Corp., Chicago, Ill. 629,382, pub. 4–10–56. Cl. 13.
Sunny Hills Citrus Assn.: *See*—
Sunny Hills Ranch, Inc.
Sunny Hills Ranch, Inc., d. b. a. Sunny Hills Citrus Assn., Fullerton, to Consolidated Lemon and Orange Co., Pomona, Calif. 338,046, ren. 8–25–56. Cl. 46.
Susquehanna Waist Co.: *See*—
Straus, Royer, & Strass, Inc.

Super-Cyclone, Inc., Glendale, Calif. 442,770, canc. Cl. 22.
Superior Moire Co., Inc., North Bergen, N. J. 522,036, canc. Cl. 106.
Supreme Merchandise Co., New York, N. Y. 629,350, pub. 2–14–56. Cl. 8.
Surgical Appliance Industries, Inc., Cincinnati, Ohio. 629,628, pub. 4–10–56. Cl. 44.
Sussex Mfg. Corp., New York, N. Y. 629,326, pub. 4–10–56. Cl. 3.
Talco Engineering Co., Inc., Hamden, Conn. 629,422, pub. 4–10–56. Cl. 19.
Tavannes Watch Co., S. A., Tavannes, Switzerland. 629,487, pub. 4–10–56. Cl. 27.
Tedro Fifth Ave. Ltd., Tuckahoe, N. Y. 629,327, pub. 4–10–56. Cl. 3.
Telecomputing Corp., Burbank, Calif. 629,712, pub. 4–10–56. Cl. 101.
Tesman Drug Co.: *See*—
Tesman, Jacob.
Tesman, Jacob, d. b. a. Tesman Drug Co., Philadelphia, Pa. 629,395, pub. 4–10–56. Cl. 18.
Thompson, Mrs. O. J.: *See*—
Septigyn Co., The.
Thompson, Myra G.: *See*—
Septigyn Co., The.
Thompson, O. J., Co., The: *See*—
Septigyn Co., The.
Titeflex, Inc.: *See*—
Titeflex Metal Hose Corp.
Titeflex Metal Hose Corp., New York, N. Y., and Newark, N. J., to Titeflex, Inc., Newark, N. J. 111,854, ren. 8–8–56. Cl. 35.
Topcraft Co.: *See*—
Oxford Mfg. Co., Inc.
Tosan Drug Co.: *See*—
Santos, Manuel.
Tru-Auto Parts Co.
Braden, Raymond S.
Tuckett, John E., and Son: *See*—
Peper, Christian, Tobacco Co.
Tugliglowicz, Joseph, Maplewood, to K. Tuliglowicz, Newark, N. J. 328,604, ren. 10–1–55. Cl. 18.
Tuliglowicz, Katherine: *See*—
Tuliglowicz, Joseph.
Turk, Nathan, Van Nuys, Calif. 521,802, canc. Cl. 39.
Turover, Isador S., Bethesda, Md. 629,372, pub. 4–10–56. Cl. 12.
Ultra Chemical Works, Inc., Paterson, N. J. 629,339, pub. 4–10–56. Cl. 6.
Ultra-Violet Products, Inc., San Gabriel, Calif. 629,479, pub. 4–10–56. Cl. 26.
Union Mfg. Co., Frederick, Md. 629,587, pub. 4–10–56. Cl. 39.
United Crayon Co., Inc., Brooklyn, N. Y. 629,536, pub. 4–10–56. Cl. 37.
United Geophysical Corp., Pasadena, Calif. 629,480, pub. 4–10–56. Cl. 26.
United Jewelers Inc., The, to Louis Aisenstein & Bros., Inc., New York, N. Y. 107,653, ren. 12–14–55. Cl. 37.
United Merchants and Manufacturers, Inc.: *See*—
Cohn-Hall Marx Co.
United Press Associations, New York, N. Y. 629,748. Cl. 38.
U. S. Diamond Ring Corp., New York, N. Y. 629,497–8, pub. 4–10–56. Cl. 28.
United States Rubber Co.: *See*—
United States Tire Co.
United States Tire Co., New York, N. Y., to United States Rubber Co., Passaic, N. J. 110,334, ren. 5–16–56. Cl. 35.
United World Films, Inc., New York, N. Y. 521,757, canc. Cl. 26.
Universal Overall Co., Inc.: *See*—
Blue Buckle Overall Co., Inc.
Upjohn Co., The, Kalamazoo, Mich. 629,410, pub. 4–10–56. Cl. 18.
Vac-U-Pak Corp., San Francisco, Calif. 629,466, pub. 4–10–56. Cl. 23.
Val St. Lambert Glass Co., Inc., New York, N. Y. 522,086, canc. Cl. 33.
Valley Forge Envelope & Paper Co., by Ogden Brothers, Philadelphia, Pa. 335,413, 12(c) pub. 6–26–56. Cl. 37.
Vanderyell Products Ltd., Acton, London, England. 629,734. Cl. 23.
Van Horn & Sawtell, to Morgan Products Corp., New York, N. Y. 109,796, ren. 4–18–56. Cl. 6.
Van Pelt & Brown, Inc., Richmond, Va. 521,721, canc. Cl. 6.
Velveray Corp., New York, N. Y. 629,719–20, pub. 4–10–56. Cl. 106.
Ventura Farms Frozen Foods, Inc., Oxnard, Calif. 629,648, pub. 4–10–56. Cl. 46.
Vesta Underwear Co., Pawtucket, R. I. 629,584, pub. 4–10–56. Cl. 39.
Vick Chemical Co., Wilmington, Del. 336,963, ren. 7–21–56. Cl. 44.
Victor Chemical Works, Chicago, Ill. 629,356, pub. 4–10–56. Cl. 10.
Vienna Sausage Mfg. Co., Chicago, Ill. 291,716, 12(c) pub. 6–26–56. Cl. 46.
Vi-Tal 22 Co.: *See*—
Keystone Laboratories, Inc.
Wagar, Harold K., Takoma Park, Md. 522,043, canc. Cl. 23.
Wald Industries, Inc., to W. K. Zehmer, Huntingdon, Pa. 629,684, pub. 4–10–56. Cl. 50.
Walker, M. S., Inc., Boston, Mass. 629,676, pub. 4–10–56. Cl. 49.
Walker Products: *See*—
Walker, Robert J.
Walker, Robert J., d. b. a. Walker Products, Berkeley, Calif. 629,441–2, pub. 4–10–56. Cl. 22.
Wallerstein Co., Inc., New York, N. Y. 629,342, pub. 4–10–56. Cl. 6.
Walsh, Michael J., Los Angeles, Calif. 334,873, ren. 5–19–56. Cl. 26.
Walsh, Michael J., d. b. a. Kelp Laboratories, San Diego, to Alphabet Dietary Corp., Los Angeles, Calif. 336,459, ren. 7–7–56. Cl. 18.
Waterman, L. E., Co., New York, N. Y. 522,046, canc. Cl. 11.
Webster Eisenlohr, Inc., New York, N. Y., to Bayuk Cigars Inc., Philadelphia, Pa. 335,415–16, ren. 6–2–56. Cl. 17.
Weil-Kalter Mfg. Co., St. Louis, Mo. 629,600, pub. 4–10–56. Cl. 39.
Wells Lamont Corp., Chicago, Ill. 522,021, canc. Cl. 39.
Wenzel, H., Tent & Duck Co., St. Louis, Mo. 522,061, canc. Cl. 19.
Wernet Dental Mfg. Co., Brooklyn, N. Y., by Wernet Dental Mfg. Co. Inc., Jersey City, N. J. 335,588, 12(c) pub. 6–26–56. Cl. 51.
Wernet Dental Mfg. Co. Inc.: *See*—
Wernet Dental Mfg. Co.
Wesleyan University: *See*—
Every Week Publishing Corp.
West Disinfecting Co., Long Island City, N. Y. 629,742–3. Cl. 37.
West, Eugene F., New York, N. Y. 629,761–2. Cl. 48.
West Shore Wine & Liquor Co., Inc., New York, N. Y. 384,416, canc. Cl. 49.
Western Auto Supply Co., Kansas City, Mo. 629,328, pub. 4–10–56. Cl. 4.
Western Lithograph Co., Los Angeles, Calif. 522,071, canc. Cl. 21.
Western Miss, Inc., Los Angeles, Calif. 629,575, pub. 4–10–56. Cl. 39.
Western Peat Co. Ltd., Lulu Island, British Columbia, Canada. 629,310, pub. 4–10–56. Cl. 1.
Western Peat Co. Ltd., Lulu Island, British Columbia, Canada. 629,355, pub. 4–10–56. Cl. 10.
Westinghouse Electric Corp., East Pittsburgh, Pa. 521,736, canc. Cl. 21.
Wheeling Corrugating Co., Wheeling, W. Va. 629,363, pub. 4–10–56. Cl. 12.
Whitaker Mfg. Co., The, Chicago, Ill. 521,889, canc. Cl. 23.
Whitehall Mfg. Co., Inc., Atlanta, Ga. 522,057, canc. Cl. 19.
Whiteside, Grant T., d. b. a. Grant Co., Washington C. H., Ohio. 355,951, canc. Cl. 18.
White-Washburne Co., Inc., Hinsdale, N. H. 522,019, canc. Cl. 37.
Wichita Clutch Co., Inc., Wichita Falls, Tex. 629,380, pub. 4–10–56. Cl. 13.
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Hinken, J. O.
Wildroot Co., Inc., Buffalo, N. J. 522,037, canc. Cl. 52.
Williams, D. E., Ltd., Tullamore, Ireland. 629,766. Cl. 49.
Willson Products Inc., Reading, Pa. 629,633, pub. 4–10–56. Cl. 44.
Wilson Sporting Goods Co.: *See*—
Great Western Athletic Goods Co.
Wilson, W. D., Printing Ink Co. Ltd.: *See*—
Schleicher, Francis G.
Windsor Wax Co., Inc., Hoboken, N. J. 629,329, pub. 4–10–56. Cl. 4.
Winebrenner, D. E., Co., Inc., Hanover, Pa. 629,659, pub. 4–10–56. Cl. 46.
Wolf Detroit Envelope Co., The, Detroit, Mich. 629,546, pub. 4–10–56. Cl. 37.
Wolf's Head Oil Refining Co.: *See*—
Wolverine-Empire Refining Co.
Wolverine-Empire Refining Co., New York, N. Y., to Wolf's Head Oil Refining Co., Oil City, Pa. 338,087, ren. 8–25–56. Cl. 15.
Woodfords (Leicester) Ltd., Leicester, England. 629,560, pub. 4–10–56. Cl. 39.
Woodruff, Harry L., d. b. a. The Certified Gemologist Publishing Co., Washington, D. C. 629,747. Cl. 38.
Worcester Bedding Co., Worcester, Mass. 629,515, pub. 4–10–56. Cl. 32.
Workman Mfg. Co., The, Chicago, Ill. 521,862, canc. Cl. 37.
Wortendyke Mfg. Co., Richmond, Va. 521,975, canc. Cl. 37.
Wright Sales Co., Inc., Cleveland, Ohio. 629,347, pub. 4–10–56. Cl. 7.
Young Presidents' Organization, Inc., New York, N. Y. 629,549–50, pub. 4–10–56. Cl. 38.
Young, Rose, d. b. a. Lehigh Products Co., New York, N. Y. 522,050, canc. Cl. 2.
Youngs Rubber Corp., New York, N. Y. 629,634–5, pub. 4–10–56. Cl. 44.
Zehmer, Willis K.: *See*—
Wald Industries, Inc.
Zodiac Turf Prediction Co.: *See*—
Hodge, Woodrow W.

U. S. GOVERNMENT PRINTING OFFICE: O—1956

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